



Antero  
Hiley Unit 1H  
Doddridge County WV  
Northing: 14272670.50  
Easting: 1690523.71  
As Drilled

**WELL DETAILS:** Hiley Unit 1H

+N/-S	+E/-W	Northing	Ground Level: 824.0	Easting	Latitude	Longitude	Slot
0.0	0.0	14272670.50		1690523.71	39° 18' 14.389 N	80° 49' 22.327 W	

**PROJECT DETAILS:** Doddridge County WV

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: Zone 17N (84 W to 78 W)  
System Datum: Mean Sea Level

**REFERENCE INFORMATION**

Coordinate (N/E) Reference: Well Hiley Unit 1H, Grid North  
Surface (V/S) Reference: Patterson 347, CL 824 + KB 25 @ 849 Surf  
Section (V/S) Reference: SKI - (0.0N, 0.0E)  
Measured Depth Reference: Patterson 347, CL 824 + KB 25 @ 849 Surf  
Calculation Method: Minimum Curvature

Genis Lightfoot  
13:14, March 03 2015  
Scientific Drilling  
11220 NW 10th Street  
Yukon, OK, 73099

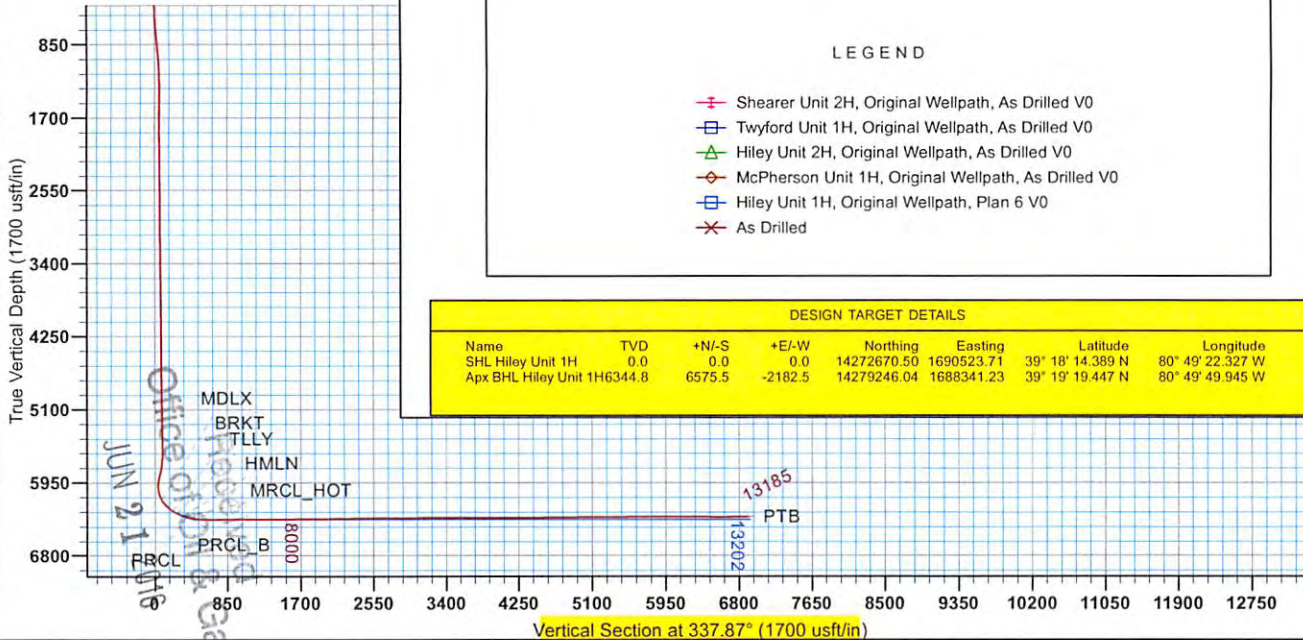


**LEGEND**

- Shearer Unit 2H, Original Wellpath, As Drilled V0
- Twyford Unit 1H, Original Wellpath, As Drilled V0
- Hiley Unit 2H, Original Wellpath, As Drilled V0
- McPherson Unit 1H, Original Wellpath, As Drilled V0
- Hiley Unit 1H, Original Wellpath, Plan 6 V0
- As Drilled

**DESIGN TARGET DETAILS**

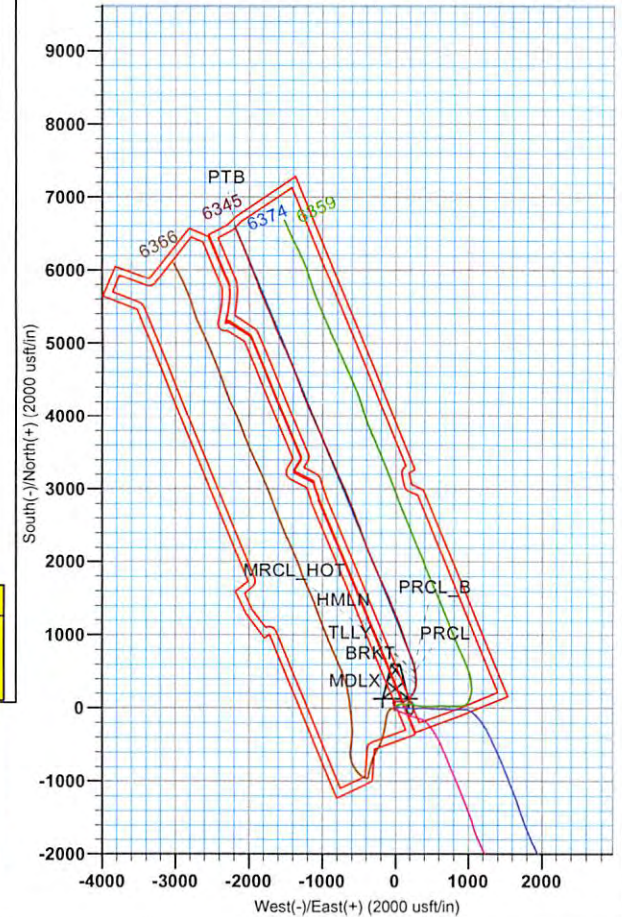
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Hiley Unit 1H	0.0	0.0	0.0	14272670.50	1690523.71	39° 18' 14.389 N	80° 49' 22.327 W
Apx BHL Hiley Unit 1H6344.8	6575.5	-2182.5	14279246.04	1688341.23	39° 19' 19.447 N	80° 49' 49.945 W	



To convert Magnetic North to Grid, Subtract 8.57°  
To convert True North to Grid, Subtract 0.11°

Azimuths to Grid North  
True North: -0.11°  
Magnetic North: -8.57°

Magnetic Field  
Strength: 52224.9nT  
Dip Angle: 66.85°  
Date: 10/31/2014  
Model: BGGM2014





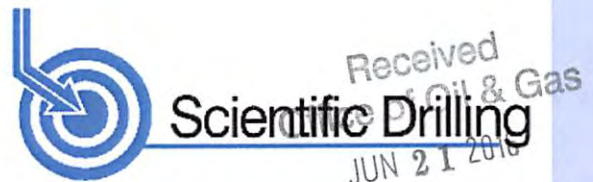
# Antero

Doddridge County WV  
Diane Davis Pad: Shearer/Hiley/McPherson/Twyford  
Hiley Unit 1H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

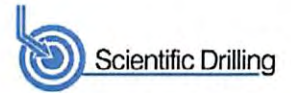
03 March, 2015



07/22/2016



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

<b>Project</b>	Doddridge County WV, McClellan District		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 17N (84 W to 78 W)		

<b>Site</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyford		
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<b>Site Position:</b>		<b>Northing:</b>	14,272,631.37 usft	<b>Latitude:</b>	39° 18' 14.002 N
<b>From:</b>	Map	<b>Easting:</b>	1,690,515.37 usft	<b>Longitude:</b>	80° 49' 22.435 W
<b>Position Uncertainty:</b>	2.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.11 °

<b>Well</b>	Hiley Unit 1H, Marcellus				
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<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,272,670.50 usft	<b>Latitude:</b>	39° 18' 14.389 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,690,523.71 usft	<b>Longitude:</b>	80° 49' 22.327 W
<b>Position Uncertainty</b>	2.0 usft		<b>Wellhead Elevation:</b>	849.0 usft	<b>Ground Level:</b>	824.0 usft

<b>Wellbore</b>	Original Wellpath				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	10/31/2014	-8.46	66.85	52,225

<b>Design</b>	As Drilled				
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<b>Audit Notes:</b>					
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<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	337.87

<b>Survey Program</b>	Date 3/3/2015				
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From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
112.0	5,239.0	Survey #6 Def Gyro to KOP (Original Well)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
5,311.0	13,185.0	Survey #7 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1

<b>Survey</b>									
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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00
112.0	0.11	54.47	112.0	0.1	0.1	0.0	0.10
137.0	0.07	96.42	137.0	0.1	0.1	0.0	0.30
162.0	0.08	31.35	162.0	0.1	0.1	0.0	0.32
187.0	0.04	83.59	187.0	0.1	0.2	0.0	0.26
212.0	0.03	9.83	212.0	0.1	0.2	0.0	0.17
237.0	0.06	357.14	237.0	0.1	0.2	0.0	0.13
262.0	0.03	358.42	262.0	0.2	0.2	0.1	0.12
287.0	0.05	349.32	287.0	0.2	0.2	0.1	0.08
312.0	0.10	359.04	312.0	0.2	0.2	0.1	0.21
337.0	0.11	0.64	337.0	0.2	0.2	0.2	0.04

Received  
Office of Oil & Gas  
JUN 21 2016



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

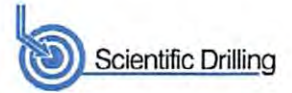
Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
362.0	0.20	7.49	362.0	0.3	0.2	0.2	0.37
387.0	0.24	4.30	387.0	0.4	0.2	0.3	0.17
412.0	0.43	358.97	412.0	0.6	0.2	0.4	0.77
437.0	0.97	353.18	437.0	0.9	0.2	0.7	2.18
462.0	1.10	355.00	462.0	1.3	0.1	1.2	0.54
487.0	1.08	350.97	487.0	1.8	0.1	1.6	0.32
512.0	1.56	322.00	512.0	2.3	-0.2	2.2	3.23
537.0	2.36	315.22	537.0	2.9	-0.8	3.0	3.33
562.0	2.92	313.95	561.9	3.7	-1.6	4.0	2.25
587.0	3.88	318.85	586.9	4.8	-2.6	5.4	4.01
612.0	4.05	319.68	611.8	6.1	-3.7	7.1	0.72
637.0	4.41	324.83	636.8	7.6	-4.9	8.8	2.09
662.0	4.89	330.27	661.7	9.3	-5.9	10.8	2.61
687.0	4.97	331.00	686.6	11.2	-7.0	13.0	0.41
712.0	5.04	332.40	711.5	13.1	-8.0	15.1	0.56
737.0	5.15	332.27	736.4	15.0	-9.1	17.3	0.44
762.0	5.21	331.99	761.3	17.0	-10.1	19.6	0.26
787.0	5.21	332.48	786.2	19.0	-11.2	21.8	0.18
812.0	5.24	332.97	811.1	21.1	-12.2	24.1	0.22
837.0	5.22	332.33	836.0	23.1	-13.3	26.4	0.25
862.0	5.28	333.05	860.9	25.1	-14.3	28.7	0.36
887.0	5.30	334.54	885.8	27.2	-15.3	31.0	0.56
912.0	5.03	334.59	910.7	29.2	-16.3	33.2	1.08
937.0	4.92	335.44	935.6	31.2	-17.2	35.4	0.53
962.0	4.23	336.24	960.5	33.0	-18.0	37.4	2.77
987.0	3.98	337.74	985.4	34.7	-18.7	39.2	1.09
1,012.0	3.85	337.82	1,010.4	36.2	-19.4	40.9	0.52
1,037.0	3.41	339.97	1,035.3	37.7	-19.9	42.4	1.84
1,062.0	3.35	341.87	1,060.3	39.1	-20.4	43.9	0.51
1,087.0	2.98	342.62	1,085.2	40.4	-20.8	45.3	1.49
1,112.0	2.59	343.05	1,110.2	41.6	-21.2	46.5	1.56
1,137.0	2.46	344.06	1,135.2	42.6	-21.5	47.6	0.55
1,162.0	2.03	343.71	1,160.2	43.6	-21.8	48.6	1.72
1,187.0	1.74	344.77	1,185.2	44.4	-22.0	49.4	1.17
1,212.0	1.47	344.96	1,210.1	45.0	-22.2	50.1	1.08
1,237.0	1.34	345.44	1,235.1	45.6	-22.3	50.7	0.52
1,262.0	1.31	346.33	1,260.1	46.2	-22.5	51.3	0.15
1,287.0	1.20	346.91	1,285.1	46.7	-22.6	51.8	0.44
1,312.0	1.10	348.23	1,310.1	47.2	-22.7	52.3	0.41
1,337.0	0.94	347.86	1,335.1	47.7	-22.8	52.7	0.64
1,362.0	0.81	350.09	1,360.1	48.0	-22.9	53.1	0.54
1,387.0	0.85	353.35	1,385.1	48.4	-22.9	53.5	0.25
1,412.0	0.77	352.78	1,410.1	48.7	-23.0	53.8	0.32
1,437.0	0.55	351.87	1,435.1	49.0	-23.0	54.1	0.88

Received  
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JUN 21 2016



EOW Completion Report



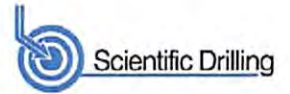
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
1,462.0	0.47	355.82	1,460.1	49.2	-23.0	54.3	0.35	
1,487.0	0.54	355.56	1,485.1	49.5	-23.1	54.5	0.28	
1,512.0	0.48	353.52	1,510.1	49.7	-23.1	54.7	0.25	
1,537.0	0.61	357.15	1,535.1	49.9	-23.1	54.9	0.54	
1,562.0	0.65	1.05	1,560.1	50.2	-23.1	55.2	0.23	
1,587.0	0.64	6.13	1,585.1	50.5	-23.1	55.5	0.23	
1,612.0	0.66	8.29	1,610.1	50.8	-23.1	55.7	0.13	
1,637.0	0.59	6.35	1,635.1	51.0	-23.0	55.9	0.29	
1,662.0	0.62	11.46	1,660.1	51.3	-23.0	56.2	0.25	
1,687.0	0.68	7.23	1,685.1	51.6	-22.9	56.4	0.31	
1,712.0	0.60	12.38	1,710.1	51.8	-22.9	56.6	0.39	
1,737.0	0.63	16.13	1,735.1	52.1	-22.8	56.9	0.20	
1,762.0	0.49	10.89	1,760.1	52.3	-22.8	57.1	0.60	
1,787.0	0.45	6.06	1,785.1	52.5	-22.7	57.2	0.23	
1,812.0	0.43	3.45	1,810.1	52.7	-22.7	57.4	0.11	
1,837.0	0.40	2.46	1,835.1	52.9	-22.7	57.6	0.12	
1,862.0	0.38	351.58	1,860.1	53.1	-22.7	57.7	0.31	
1,887.0	0.33	343.69	1,885.1	53.2	-22.7	57.9	0.28	
1,912.0	0.27	353.14	1,910.1	53.4	-22.8	58.0	0.31	
1,937.0	0.31	354.42	1,935.1	53.5	-22.8	58.1	0.16	
1,962.0	0.32	352.12	1,960.1	53.6	-22.8	58.3	0.06	
1,987.0	0.29	351.58	1,985.1	53.8	-22.8	58.4	0.12	
2,012.0	0.23	341.71	2,010.1	53.9	-22.8	58.5	0.30	
2,037.0	0.29	351.30	2,035.1	54.0	-22.9	58.6	0.30	
2,062.0	0.16	331.94	2,060.1	54.1	-22.9	58.7	0.60	
2,087.0	0.27	336.65	2,085.1	54.2	-22.9	58.8	0.45	
2,112.0	0.26	347.52	2,110.1	54.3	-23.0	58.9	0.20	
2,137.0	0.27	337.67	2,135.1	54.4	-23.0	59.0	0.19	
2,162.0	0.28	339.05	2,160.1	54.5	-23.1	59.2	0.05	
2,187.0	0.31	329.64	2,185.1	54.6	-23.1	59.3	0.23	
2,212.0	0.31	358.59	2,210.1	54.7	-23.1	59.4	0.62	
2,237.0	0.29	342.39	2,235.1	54.9	-23.2	59.5	0.35	
2,262.0	0.26	0.59	2,260.1	55.0	-23.2	59.7	0.37	
2,287.0	0.33	346.67	2,285.1	55.1	-23.2	59.8	0.40	
2,312.0	0.39	0.11	2,310.1	55.3	-23.2	59.9	0.41	
2,337.0	0.25	4.55	2,335.1	55.4	-23.2	60.1	0.57	
2,362.0	0.11	20.29	2,360.1	55.5	-23.2	60.1	0.59	
2,387.0	0.28	4.49	2,385.1	55.6	-23.2	60.2	0.71	
2,412.0	0.28	352.81	2,410.1	55.7	-23.2	60.3	0.23	
2,437.0	0.37	342.45	2,435.1	55.8	-23.2	60.4	0.43	
2,462.0	0.37	339.21	2,460.1	56.0	-23.3	60.6	0.08	
2,487.0	0.39	340.91	2,485.1	56.1	-23.3	60.8	0.09	
2,512.0	0.35	358.41	2,510.1	56.3	-23.4	60.9	0.48	
2,537.0	0.44	342.07	2,535.1	56.4	-23.4	61.2	0.57	
2,562.0	0.14	332.90	2,560.1	56.6	-23.4	61.2	1.21	

Received  
Office of Oil & Gas  
JUN 21 2016



EOW Completion Report



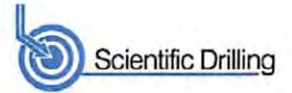
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
2,587.0	0.22	359.57	2,585.1	56.6	-23.4	61.3	0.46
2,612.0	0.25	349.85	2,610.1	56.7	-23.5	61.4	0.20
2,637.0	0.19	344.83	2,635.1	56.8	-23.5	61.5	0.25
2,662.0	0.36	338.22	2,660.1	56.9	-23.5	61.6	0.69
2,687.0	0.29	347.58	2,685.1	57.1	-23.6	61.8	0.35
2,712.0	0.27	335.97	2,710.1	57.2	-23.6	61.9	0.24
2,737.0	0.31	341.05	2,735.1	57.3	-23.6	62.0	0.19
2,762.0	0.37	321.47	2,760.1	57.4	-23.7	62.1	0.52
2,787.0	0.37	312.26	2,785.1	57.6	-23.8	62.3	0.24
2,812.0	0.41	312.96	2,810.1	57.7	-24.0	62.5	0.16
2,837.0	0.35	303.99	2,835.1	57.8	-24.1	62.6	0.34
2,862.0	0.32	300.17	2,860.1	57.9	-24.2	62.7	0.15
2,887.0	0.33	312.50	2,885.1	57.9	-24.3	62.8	0.28
2,912.0	0.37	320.00	2,910.1	58.1	-24.4	63.0	0.24
2,937.0	0.33	317.73	2,935.1	58.2	-24.5	63.1	0.17
2,962.0	0.38	318.93	2,960.1	58.3	-24.6	63.3	0.20
2,987.0	0.35	329.93	2,985.1	58.4	-24.7	63.4	0.30
3,012.0	0.42	337.36	3,010.1	58.6	-24.8	63.6	0.34
3,037.0	0.47	334.72	3,035.1	58.7	-24.9	63.8	0.22
3,062.0	0.51	327.01	3,060.1	58.9	-25.0	64.0	0.31
3,087.0	0.58	317.79	3,085.1	59.1	-25.1	64.2	0.45
3,112.0	0.55	319.37	3,110.1	59.3	-25.3	64.5	0.14
3,137.0	0.53	310.39	3,135.1	59.5	-25.5	64.7	0.35
3,162.0	0.48	306.67	3,160.1	59.6	-25.6	64.9	0.24
3,187.0	0.44	311.95	3,185.1	59.7	-25.8	65.0	0.23
3,212.0	0.46	315.84	3,210.1	59.9	-25.9	65.2	0.15
3,237.0	0.47	333.23	3,235.1	60.0	-26.0	65.4	0.56
3,262.0	0.58	325.95	3,260.1	60.2	-26.2	65.6	0.51
3,287.0	0.59	323.03	3,285.1	60.4	-26.3	65.9	0.13
3,312.0	0.57	317.68	3,310.1	60.6	-26.5	66.1	0.23
3,337.0	0.70	314.79	3,335.1	60.8	-26.7	66.4	0.54
3,362.0	0.48	308.41	3,360.1	61.0	-26.8	66.6	0.92
3,387.0	0.47	318.93	3,385.1	61.1	-27.0	66.8	0.35
3,412.0	0.45	326.49	3,410.1	61.3	-27.1	67.0	0.26
3,437.0	0.62	327.99	3,435.1	61.5	-27.2	67.2	0.68
3,462.0	0.70	321.96	3,460.1	61.7	-27.4	67.5	0.42
3,487.0	0.62	315.94	3,485.1	61.9	-27.6	67.8	0.42
3,512.0	0.53	314.41	3,510.1	62.1	-27.8	68.0	0.37
3,537.0	0.46	327.37	3,535.0	62.3	-27.9	68.2	0.53
3,562.0	0.52	332.96	3,560.0	62.5	-28.0	68.4	0.31
3,587.0	0.66	339.19	3,585.0	62.7	-28.1	68.7	0.62
3,612.0	0.62	329.97	3,610.0	63.0	-28.2	69.0	0.44
3,637.0	0.66	322.33	3,635.0	63.2	-28.4	69.2	0.38
3,662.0	0.58	324.66	3,660.0	63.4	-28.6	69.5	0.34

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JUN 21 2016



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
3,687.0	0.52	344.91	3,685.0	63.6	-28.7	69.7	0.81	
3,712.0	0.67	340.87	3,710.0	63.9	-28.7	70.0	0.62	
3,737.0	0.68	321.87	3,735.0	64.1	-28.9	70.3	0.89	
3,762.0	0.60	337.51	3,760.0	64.4	-29.0	70.6	0.77	
3,787.0	0.75	336.29	3,785.0	64.6	-29.1	70.8	0.60	
3,812.0	0.55	330.82	3,810.0	64.9	-29.3	71.1	0.84	
3,837.0	0.62	346.02	3,835.0	65.1	-29.3	71.4	0.68	
3,862.0	0.79	333.87	3,860.0	65.4	-29.5	71.7	0.90	
3,887.0	0.59	342.66	3,885.0	65.7	-29.6	72.0	0.90	
3,912.0	0.75	347.88	3,910.0	66.0	-29.6	72.3	0.68	
3,937.0	0.74	346.15	3,935.0	66.3	-29.7	72.6	0.10	
3,962.0	0.79	340.66	3,960.0	66.6	-29.8	72.9	0.35	
3,987.0	0.75	344.04	3,985.0	66.9	-29.9	73.3	0.24	
4,012.0	0.81	341.44	4,010.0	67.3	-30.0	73.6	0.28	
4,037.0	0.77	345.41	4,035.0	67.6	-30.1	73.9	0.27	
4,062.0	0.58	348.97	4,060.0	67.9	-30.2	74.2	0.78	
4,087.0	0.73	346.19	4,085.0	68.2	-30.2	74.5	0.61	
4,112.0	0.54	348.14	4,110.0	68.4	-30.3	74.8	0.76	
4,137.0	0.54	353.15	4,135.0	68.7	-30.3	75.0	0.19	
4,162.0	0.56	356.13	4,160.0	68.9	-30.4	75.3	0.14	
4,187.0	0.48	359.50	4,185.0	69.1	-30.4	75.5	0.34	
4,212.0	0.57	10.12	4,210.0	69.3	-30.4	75.7	0.53	
4,237.0	0.64	8.90	4,235.0	69.6	-30.3	75.9	0.28	
4,262.0	0.57	12.04	4,260.0	69.9	-30.3	76.1	0.31	
4,287.0	0.67	13.76	4,285.0	70.1	-30.2	76.3	0.41	
4,312.0	0.58	15.08	4,310.0	70.4	-30.1	76.6	0.36	
4,337.0	0.62	5.52	4,335.0	70.6	-30.1	76.8	0.43	
4,362.0	0.73	3.09	4,360.0	70.9	-30.1	77.0	0.45	
4,387.0	0.71	355.90	4,385.0	71.3	-30.1	77.3	0.37	
4,412.0	0.76	353.78	4,410.0	71.6	-30.1	77.6	0.23	
4,437.0	0.65	356.83	4,435.0	71.9	-30.1	77.9	0.46	
4,462.0	0.63	354.32	4,460.0	72.2	-30.1	78.2	0.14	
4,487.0	0.58	0.40	4,485.0	72.4	-30.2	78.4	0.33	
4,512.0	0.52	2.08	4,510.0	72.7	-30.2	78.7	0.25	
4,537.0	0.53	357.86	4,535.0	72.9	-30.2	78.9	0.16	
4,562.0	0.40	8.32	4,560.0	73.1	-30.1	79.1	0.62	
4,587.0	0.43	358.04	4,585.0	73.3	-30.1	79.2	0.32	
4,612.0	0.48	6.15	4,610.0	73.5	-30.1	79.4	0.33	
4,637.0	0.39	21.39	4,635.0	73.7	-30.1	79.6	0.58	
4,662.0	0.49	18.98	4,660.0	73.8	-30.0	79.7	0.41	
4,687.0	0.55	17.96	4,685.0	74.1	-29.9	79.9	0.24	
4,712.0	0.56	17.98	4,710.0	74.3	-29.9	80.1	0.04	
4,737.0	0.60	20.57	4,735.0	74.5	-29.8	80.3	0.19	
4,762.0	0.62	24.43	4,760.0	74.8	-29.7	80.4	0.18	

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JUN 2 10 23 2016



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
4,787.0	0.55	19.68	4,785.0	75.0	-29.6	80.6	0.34
4,812.0	0.64	16.86	4,810.0	75.2	-29.5	80.8	0.38
4,837.0	0.53	12.08	4,835.0	75.5	-29.4	81.0	0.48
4,862.0	0.63	6.94	4,860.0	75.7	-29.4	81.2	0.45
4,887.0	0.67	8.36	4,885.0	76.0	-29.4	81.5	0.17
4,912.0	0.71	12.93	4,910.0	76.3	-29.3	81.7	0.27
4,937.0	0.58	10.00	4,935.0	76.6	-29.3	82.0	0.54
4,962.0	0.55	10.00	4,960.0	76.8	-29.2	82.2	0.12
4,987.0	0.49	15.48	4,985.0	77.1	-29.2	82.4	0.31
5,012.0	0.42	17.38	5,010.0	77.3	-29.1	82.5	0.29
5,037.0	0.71	4.95	5,035.0	77.5	-29.1	82.7	1.25
5,062.0	0.48	16.12	5,060.0	77.7	-29.0	83.0	1.03
5,087.0	0.54	11.02	5,085.0	78.0	-29.0	83.1	0.30
5,112.0	0.51	8.98	5,110.0	78.2	-28.9	83.3	0.14
5,137.0	0.63	8.80	5,135.0	78.4	-28.9	83.5	0.48
5,162.0	0.48	8.55	5,160.0	78.7	-28.9	83.7	0.60
5,187.0	0.76	26.61	5,185.0	78.9	-28.8	83.9	1.35
5,212.0	0.91	2.21	5,210.0	79.3	-28.7	84.2	1.53
5,237.0	0.77	11.68	5,235.0	79.6	-28.6	84.6	0.79
5,239.0	0.76	12.58	5,237.0	79.7	-28.6	84.6	0.78
5,311.0	0.57	31.31	5,308.9	80.4	-28.3	85.2	0.40
5,374.0	0.70	4.87	5,371.9	81.1	-28.2	85.7	0.50
5,468.0	0.93	2.37	5,465.9	82.4	-28.1	86.9	0.25
5,531.0	1.30	359.12	5,528.9	83.6	-28.1	88.1	0.60
5,562.0	1.19	352.46	5,559.9	84.3	-28.1	88.7	0.59
5,594.0	2.56	73.88	5,591.9	84.8	-27.5	88.9	8.30
5,625.0	6.35	84.74	5,622.8	85.2	-25.1	88.4	12.47
5,657.0	10.75	85.05	5,654.4	85.6	-20.4	87.0	13.75
5,688.0	15.00	82.71	5,684.7	86.4	-13.5	85.1	13.81
5,720.0	17.83	84.46	5,715.3	87.4	-4.5	82.6	8.98
5,751.0	20.13	86.05	5,744.7	88.2	5.5	79.6	7.60
5,782.0	22.70	89.67	5,773.5	88.6	16.8	75.7	9.32
5,814.0	25.50	93.59	5,802.7	88.2	29.9	70.4	10.07
5,845.0	28.08	97.24	5,830.4	86.9	43.8	64.0	9.87
5,876.0	31.23	95.35	5,857.3	85.2	59.0	56.7	10.60
5,907.0	34.13	93.81	5,883.4	83.9	75.7	49.2	9.73
5,939.0	34.77	89.99	5,909.8	83.3	93.8	41.8	7.04
5,970.0	33.81	80.99	5,935.4	84.6	111.2	36.5	16.63
6,001.0	33.56	73.79	5,961.2	88.4	127.9	33.7	12.90
6,033.0	34.04	66.99	5,987.9	94.3	144.7	32.9	11.91
6,064.0	35.09	58.13	6,013.4	102.4	160.2	34.5	16.55
6,095.0	36.13	52.79	6,038.6	112.7	175.1	38.4	10.57
6,127.0	37.56	47.93	6,064.2	124.9	189.8	44.2	10.14
6,158.0	39.85	42.61	6,088.4	138.6	203.6	51.7	13.02

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JUN 21 2016





EOW Completion Report



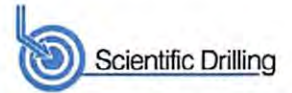
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
6,189.0	41.80	38.29	6,111.9	154.0	216.7	61.0	11.07	
6,221.0	44.16	35.03	6,135.3	171.5	229.7	72.3	10.13	
6,240.0	45.66	32.30	6,148.7	182.7	237.2	79.9	12.85	
<b>MDLX</b>								
6,252.0	46.64	30.65	6,157.1	190.0	241.7	85.0	12.85	
6,283.0	49.32	26.46	6,177.8	210.3	252.7	99.6	13.25	
6,315.0	52.08	21.51	6,198.1	232.9	262.7	116.8	14.75	
6,346.0	53.55	17.47	6,216.8	256.2	270.9	135.2	11.41	
6,378.0	54.16	12.68	6,235.7	281.1	277.6	155.8	12.24	
6,409.0	56.00	7.16	6,253.5	306.1	282.0	177.3	15.76	
6,440.0	58.56	4.64	6,270.2	332.1	284.7	200.4	10.72	
6,451.0	59.81	3.53	6,275.9	341.5	285.4	208.8	14.32	
<b>BRKT</b>								
6,472.0	62.23	1.48	6,286.0	359.8	286.2	225.5	14.32	
6,503.0	65.49	359.28	6,299.7	387.7	286.3	251.2	12.29	
6,513.0	66.26	358.06	6,303.8	396.8	286.1	259.8	13.53	
<b>TLLY</b>								
6,535.0	68.00	355.44	6,312.3	417.0	285.0	278.9	13.53	
6,566.0	70.95	354.95	6,323.2	445.9	282.5	306.7	9.63	
6,597.0	72.84	352.07	6,332.8	475.2	279.2	335.0	10.73	
<b>HMLN</b>								
6,623.0	74.75	351.55	6,340.1	499.9	275.6	359.3	7.59	
<b>MRCL_HOT</b>								
6,629.0	75.19	351.43	6,341.6	505.7	274.8	364.9	7.59	
6,641.0	76.04	349.99	6,344.6	517.1	272.9	376.2	13.57	
<b>PRCL</b>								
6,660.0	77.39	347.74	6,349.0	535.3	269.3	394.4	13.57	
6,691.0	79.22	345.19	6,355.3	564.8	262.2	424.4	9.99	
6,695.0	79.36	345.05	6,356.0	568.6	261.2	428.3	4.91	
<b>PRCL_B</b>								
6,722.0	80.28	344.08	6,360.8	594.2	254.2	454.7	4.91	
6,754.0	80.99	343.26	6,366.0	624.5	245.3	486.1	3.36	
6,785.0	83.18	341.18	6,370.3	653.7	235.9	516.7	9.70	
6,815.0	86.10	338.49	6,373.1	681.8	225.6	546.5	13.21	
6,847.0	88.33	336.90	6,374.6	711.3	213.5	578.5	8.56	
6,941.0	89.90	337.25	6,376.1	797.9	176.9	672.5	1.71	
7,035.0	90.27	339.86	6,375.9	885.4	142.5	766.5	2.80	
7,129.0	90.47	344.08	6,375.3	974.7	113.4	860.2	4.49	
7,224.0	91.31	340.22	6,373.8	1,065.1	84.3	954.9	4.16	
7,318.0	90.64	337.69	6,372.2	1,152.8	50.6	1,048.9	2.78	
7,412.0	88.76	337.36	6,372.7	1,239.7	14.6	1,142.9	2.03	
7,506.0	89.50	336.63	6,374.2	1,326.2	-22.1	1,236.8	1.11	
7,600.0	89.06	337.56	6,375.3	1,412.8	-58.7	1,330.8	1.09	
7,694.0	89.40	337.95	6,376.6	1,499.8	-94.3	1,424.8	0.55	
7,788.0	91.14	336.42	6,376.2	1,586.4	-130.7	1,518.8	2.46	

Record Office of Oil & Gas



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
7,879.0	90.20	334.78	6,375.1	1,669.3	-168.3	1,609.7	2.08
7,970.0	90.54	335.33	6,374.5	1,751.8	-206.7	1,700.6	0.71
8,061.0	90.70	338.09	6,373.5	1,835.4	-242.7	1,791.6	3.04
8,153.0	91.48	335.62	6,371.8	1,919.9	-278.8	1,883.5	2.81
8,243.0	89.66	337.13	6,370.9	2,002.4	-314.9	1,973.5	2.63
8,335.0	91.85	337.86	6,369.7	2,087.4	-350.1	2,065.5	2.51
8,425.0	91.48	340.01	6,367.1	2,171.3	-382.4	2,155.4	2.42
8,517.0	90.67	339.18	6,365.3	2,257.5	-414.5	2,247.4	1.26
8,607.0	92.29	339.86	6,363.0	2,341.8	-446.0	2,337.3	1.95
8,699.0	90.87	340.00	6,360.5	2,428.2	-477.5	2,429.2	1.55
8,791.0	91.34	338.75	6,358.7	2,514.3	-509.9	2,521.1	1.45
8,883.0	89.56	340.10	6,358.0	2,600.4	-542.3	2,613.1	2.43
8,977.0	89.50	340.08	6,358.7	2,688.8	-574.3	2,707.0	0.07
9,071.0	90.03	337.63	6,359.1	2,776.4	-608.2	2,801.0	2.67
9,165.0	90.20	337.07	6,358.9	2,863.2	-644.4	2,895.0	0.62
9,260.0	90.60	338.26	6,358.3	2,951.1	-680.5	2,990.0	1.32
9,354.0	90.81	335.71	6,357.1	3,037.6	-717.2	3,084.0	2.72
9,448.0	89.43	335.92	6,356.9	3,123.3	-755.7	3,177.9	1.48
9,542.0	90.27	335.64	6,357.2	3,209.0	-794.3	3,271.8	0.94
9,636.0	90.91	336.55	6,356.2	3,295.0	-832.4	3,365.8	1.18
9,729.0	89.40	336.62	6,356.0	3,380.3	-869.3	3,458.8	1.63
9,823.0	90.34	338.06	6,356.2	3,467.0	-905.5	3,552.8	1.83
9,918.0	88.45	338.31	6,357.2	3,555.2	-940.8	3,647.7	2.01
10,012.0	88.82	337.56	6,359.4	3,642.3	-976.1	3,741.7	0.89
10,106.0	90.94	337.65	6,359.6	3,729.2	-1,012.0	3,835.7	2.26
10,200.0	89.90	334.56	6,358.9	3,815.2	-1,050.0	3,929.6	3.47
10,294.0	90.40	336.11	6,358.7	3,900.6	-1,089.3	4,023.6	1.73
10,388.0	90.64	336.69	6,357.8	3,986.7	-1,126.9	4,117.5	0.67
10,482.0	90.20	336.86	6,357.1	4,073.1	-1,164.0	4,211.5	0.50
10,576.0	89.83	335.73	6,357.1	4,159.2	-1,201.7	4,305.5	1.26
10,671.0	90.70	339.20	6,356.7	4,246.9	-1,238.1	4,400.4	3.77
10,765.0	89.87	337.57	6,356.2	4,334.3	-1,272.8	4,494.4	1.95
10,859.0	91.81	339.31	6,354.8	4,421.7	-1,307.3	4,588.4	2.77
10,953.0	91.61	339.20	6,352.0	4,509.5	-1,340.6	4,682.3	0.24
11,047.0	89.70	338.54	6,350.9	4,597.2	-1,374.5	4,776.3	2.15
11,141.0	90.03	336.26	6,351.2	4,684.0	-1,410.6	4,870.3	2.45
11,235.0	91.14	337.66	6,350.2	4,770.5	-1,447.4	4,964.3	1.90
11,329.0	91.11	337.36	6,348.4	4,857.3	-1,483.3	5,058.3	0.32
11,423.0	89.97	334.65	6,347.5	4,943.2	-1,521.5	5,152.2	3.13
11,518.0	90.54	334.94	6,347.0	5,029.1	-1,562.0	5,247.1	0.67
11,612.0	88.86	336.28	6,347.5	5,114.7	-1,600.8	5,341.0	2.29
11,706.0	91.21	340.24	6,347.5	5,202.0	-1,635.6	5,435.0	4.90
11,800.0	90.84	340.09	6,345.8	5,290.4	-1,667.5	5,528.9	0.42
11,894.0	90.77	339.49	6,344.5	5,378.6	-1,700.0	5,622.8	0.64
11,988.0	88.73	332.29	6,344.9	5,464.4	-1,738.4	5,716.7	7.96



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Hiley Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Site:</b>	Diane Davis Pad: Shearer/Hiley/McPherson/Twyf	<b>MD Reference:</b>	Patterson 347: GL 824' + KB 25' @ 849.0usft
<b>Well:</b>	Hiley Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
12,082.0	89.87	337.28	6,346.0	5,549.4	-1,778.4	5,810.5	5.44
12,176.0	90.47	340.00	6,345.8	5,636.9	-1,812.6	5,904.5	2.96
12,270.0	90.13	339.02	6,345.3	5,725.0	-1,845.5	5,998.4	1.10
12,364.0	89.63	337.32	6,345.5	5,812.2	-1,880.5	6,092.4	1.89
12,458.0	90.30	340.14	6,345.5	5,899.8	-1,914.6	6,186.4	3.08
12,552.0	90.00	339.12	6,345.3	5,987.9	-1,947.3	6,280.4	1.13
12,646.0	89.46	339.05	6,345.7	6,075.7	-1,980.8	6,374.4	0.58
12,740.0	89.03	337.24	6,347.0	6,163.0	-2,015.8	6,468.3	1.98
12,835.0	89.93	338.60	6,347.8	6,251.0	-2,051.5	6,563.3	1.72
12,929.0	91.01	338.50	6,347.0	6,338.5	-2,085.9	6,657.3	1.15
13,023.0	90.64	338.21	6,345.7	6,425.8	-2,120.6	6,751.3	0.50
13,117.0	90.20	337.40	6,345.0	6,512.9	-2,156.1	6,845.3	0.98
13,128.0	90.20	337.25	6,345.0	6,523.0	-2,160.3	6,856.3	1.36
13,185.0	90.15	337.00	6,344.8	6,575.5	-2,182.5	6,913.3	0.45

PTB

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,240.0	6,148.7	182.7	237.2	MDLX
6,451.0	6,275.9	341.5	285.4	BRKT
6,513.0	6,303.8	396.8	286.1	TLLY
6,597.0	6,332.8	475.2	279.2	HMLN
6,623.0	6,340.1	499.9	275.6	MRCL_HOT
6,641.0	6,344.6	517.1	272.9	PRCL
6,695.0	6,356.0	568.6	261.2	PRCL_B
13,185.0	6,344.8	6,575.5	-2,182.5	PTB

Checked By: _____	Approved By: _____	Date: _____
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