



Jay-Bee Oil & Gas

Tyler County
Curly PAD
Curly 1

Wellbore #1

Design: Wellbore #1

QES Survey Report

19 April, 2018

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WV Department of
Environmental Protection



Quintana Energy Services

11390 FM 830
Willis, TX 77318
Phone: (936) 856-4332
Fax: (936) 856-8678



Survey Certification Sheet

Company	Job Number	Date
Jay-Bee Oil & Gas, Inc.	AM-180356	5/30/2018

Lease	Well Name	County & State
N/A	Curly #1	Tyler County, WV

API No.	Survey Depth Range	Survey Type
47-095-02445	535 feet to 14056 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
Click here to enter text.	Adam Ball / Steve Spicer

Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by Quintana Energy Services (QES). This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

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**Christopher
Hughes**

Digitally signed by Christopher Hughes
DN: cn=Christopher Hughes, o=QES,
ou=compliance,
email=chrish@qeslp.com, c=US
Date: 2019.06.17 15:18:08 -05'00'

Christopher Hughes
MWD Compliance Manager
Quintana Energy Services



Survey Report



Company:	Jay-Bee Oil & Gas	Local Co-ordinate Reference:	Well Curly 1
Project:	Tyler County	TVD Reference:	WELL @ 1144.0usft (Patterson #581)
Site:	Curly PAD	MD Reference:	WELL @ 1144.0usft (Patterson #581)
Well:	Curly 1	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Tyler County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	West Virginia Northern Zone		

Site	Curly PAD				
Site Position:		Northing:	354,137.79 usft	Latitude:	39° 27' 49.958 N
From:	Map	Easting:	1,574,078.09 usft	Longitude:	80° 53' 49.560 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.89 °

Well	Curly 1					
Well Position	+N/-S	0.0 usft	Northing:	354,137.79 usft	Latitude:	39° 27' 49.958 N
	+E/-W	0.0 usft	Easting:	1,574,078.09 usft	Longitude:	80° 53' 49.560 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	1,123.4 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/2/2018	-8.52	66.66	51,939.94424808

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0		156.81

Survey Program	Date	4/19/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
50.0	535.0	Gyro (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
607.0	14,056.0	QES MWD Surveys (Wellbore #1)	OWSG MWD - Standard	OWSG MWD - Standard	

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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
50.0	0.56	67.59	50.0	0.1	0.2	0.0	1.12	1.12	0.00	
100.0	1.19	82.83	100.0	0.3	1.0	0.1	1.33	1.26	30.48	
150.0	1.06	100.50	150.0	0.2	1.9	0.5	0.74	-0.26	35.34	
200.0	1.07	127.66	200.0	-0.1	2.8	1.2	1.00	0.02	54.32	
250.0	0.49	116.04	250.0	-0.5	3.3	1.8	1.20	-1.16	-23.24	
300.0	0.47	137.20	300.0	-0.8	3.7	2.1	0.35	-0.04	42.32	
350.0	0.53	186.75	350.0	-1.1	3.8	2.5	0.85	0.12	99.10	
400.0	0.26	214.63	400.0	-1.5	3.7	2.8	0.65	-0.54	55.76	
450.0	0.22	193.05	450.0	-1.7	3.6	2.9	0.20	-0.08	-43.16	



Survey Report



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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
500.0	0.24	258.52	500.0	-1.8	3.5	3.0	0.50	0.04	130.94
Gyro Tie-In @ 535.0' MD / 535.0' TVD									
535.0	0.35	196.17	535.0	-1.9	3.4	3.1	0.91	0.31	-178.14
607.0	0.59	330.94	607.0	-1.8	3.1	2.9	1.21	0.33	187.18
701.0	6.34	357.06	700.8	3.8	2.6	-2.5	6.19	6.12	27.79
796.0	8.01	358.81	795.0	15.7	2.2	-13.6	1.77	1.76	1.84
890.0	3.88	351.70	888.5	25.4	1.6	-22.7	4.45	-4.39	-7.56
985.0	0.86	19.71	983.4	29.2	1.4	-26.3	3.31	-3.18	29.48
1,079.0	0.42	37.87	1,077.4	30.2	1.8	-27.0	0.51	-0.47	19.32
1,174.0	0.76	35.37	1,172.4	31.0	2.4	-27.5	0.36	0.36	-2.63
1,269.0	0.62	41.15	1,267.4	31.9	3.1	-28.1	0.16	-0.15	6.08
1,363.0	0.46	7.23	1,361.4	32.6	3.5	-28.6	0.37	-0.17	-36.09
1,458.0	0.41	344.06	1,456.4	33.3	3.5	-29.3	0.19	-0.05	-24.39
1,553.0	0.31	322.17	1,551.4	33.9	3.2	-29.9	0.18	-0.11	-23.04
1,648.0	0.17	79.34	1,646.4	34.1	3.2	-30.1	0.44	-0.15	123.34
1,743.0	0.29	109.22	1,741.4	34.0	3.6	-29.9	0.17	0.13	31.45
1,837.0	2.77	43.61	1,835.3	35.6	5.3	-30.6	2.83	2.64	-69.80
1,931.0	6.24	30.56	1,929.0	41.7	9.5	-34.5	3.83	3.69	-13.88
2,025.0	9.82	28.65	2,022.1	53.1	16.0	-42.5	3.82	3.81	-2.03
2,120.0	14.26	27.98	2,115.0	70.5	25.3	-54.9	4.68	4.67	-0.71
2,215.0	17.50	30.80	2,206.3	93.2	38.1	-70.6	3.50	3.41	2.97
2,310.0	15.45	33.15	2,297.4	116.0	52.4	-86.0	2.27	-2.16	2.47
2,407.0	13.32	29.66	2,391.4	136.5	65.0	-99.9	2.37	-2.20	-3.60
2,502.0	12.07	33.07	2,484.1	154.4	75.8	-112.1	1.53	-1.32	3.59
2,597.0	11.34	35.42	2,577.1	170.3	86.6	-122.4	0.92	-0.77	2.47
2,691.0	11.36	37.52	2,669.3	185.2	97.6	-131.8	0.44	0.02	2.23
2,786.0	12.63	43.98	2,762.2	200.1	110.5	-140.4	1.94	1.34	6.80
2,881.0	14.47	43.44	2,854.5	216.2	125.9	-149.1	1.94	1.94	-0.57
2,976.0	15.83	45.52	2,946.2	233.9	143.3	-158.5	1.54	1.43	2.19
3,070.0	17.24	44.60	3,036.3	252.8	162.3	-168.5	1.53	1.50	-0.98
3,165.0	16.83	38.11	3,127.2	273.6	180.6	-180.4	2.05	-0.43	-6.83
3,260.0	16.10	32.75	3,218.3	295.5	196.2	-194.4	1.77	-0.77	-5.64
3,354.0	16.63	32.78	3,308.5	317.8	210.6	-209.2	0.56	0.56	0.03
3,448.0	15.81	28.97	3,398.7	340.3	224.1	-224.6	1.43	-0.87	-4.05
3,543.0	15.29	29.36	3,490.3	362.6	236.5	-240.1	0.56	-0.55	0.41
3,638.0	14.61	32.95	3,582.0	383.5	249.1	-254.4	1.21	-0.72	3.78
3,732.0	14.11	35.58	3,673.1	402.8	262.3	-267.0	0.87	-0.53	2.80
3,827.0	13.94	31.68	3,765.3	421.9	275.0	-279.6	1.01	-0.18	-4.11
3,922.0	14.31	30.46	3,857.4	441.8	287.0	-293.1	0.50	0.39	-1.28
4,017.0	14.70	34.29	3,949.4	461.9	299.7	-306.5	1.09	0.41	4.03
4,112.0	15.27	40.20	4,041.2	481.4	314.6	-318.6	1.72	0.60	6.22
4,207.0	16.73	42.43	4,132.5	501.0	331.9	-329.9	1.67	1.54	2.35
4,301.0	18.32	42.08	4,222.1	522.0	350.9	-341.6	1.70	1.69	-0.37



Survey Report



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Survey									
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4,399.0	18.65	39.19	4,315.1	545.6	371.1	-355.4	0.99	0.34	-2.95
4,494.0	18.80	37.50	4,405.0	569.5	390.0	-369.9	0.59	0.16	-1.78
4,589.0	18.82	33.38	4,495.0	594.4	407.8	-385.8	1.40	0.02	-4.34
4,683.0	18.18	28.42	4,584.1	620.0	423.1	-403.3	1.81	-0.68	-5.28
4,778.0	14.89	19.99	4,675.2	644.5	434.3	-421.4	4.28	-3.46	-8.87
4,873.0	11.51	12.47	4,767.7	665.2	440.6	-438.0	3.98	-3.56	-7.92
4,968.0	8.67	2.51	4,861.2	681.7	442.9	-452.2	3.50	-2.99	-10.48
5,063.0	5.52	346.73	4,955.5	693.3	442.2	-463.1	3.87	-3.32	-16.61
5,157.0	4.02	316.97	5,049.1	700.1	438.9	-470.7	3.03	-1.60	-31.66
5,252.0	3.28	285.65	5,144.0	703.2	434.0	-475.5	2.20	-0.78	-32.97
5,346.0	1.68	262.16	5,237.9	703.8	430.1	-477.6	1.98	-1.70	-24.99
5,441.0	1.39	143.63	5,332.9	702.7	429.4	-476.8	2.78	-0.31	-124.77
5,536.0	0.88	122.09	5,427.8	701.3	430.7	-475.1	0.69	-0.54	-22.67
5,630.0	0.03	169.18	5,521.8	700.9	431.3	-474.5	0.91	-0.90	50.10
5,725.0	0.92	344.42	5,616.8	701.6	431.1	-475.2	1.00	0.94	184.46
5,819.0	1.03	244.79	5,710.8	702.0	430.1	-475.9	1.59	0.12	-105.99
5,866.0	1.50	255.30	5,757.8	701.7	429.1	-476.0	1.11	1.00	22.36
5,914.0	3.10	164.50	5,805.8	700.3	428.9	-474.8	7.21	3.33	-189.17
5,961.0	6.90	151.80	5,852.6	696.6	430.5	-470.7	8.37	8.09	-27.02
6,009.0	10.90	152.60	5,900.0	690.0	434.0	-463.3	8.34	8.33	1.67
6,056.0	14.50	158.80	5,945.9	680.5	438.2	-453.0	8.18	7.66	13.19
6,104.0	17.10	159.50	5,992.0	668.3	442.8	-440.0	5.43	5.42	1.46
6,151.0	19.60	158.70	6,036.6	654.5	448.1	-425.2	5.35	5.32	-1.70
6,199.0	22.10	157.40	6,081.5	638.7	454.5	-408.1	5.30	5.21	-2.71
6,246.0	24.70	158.70	6,124.6	621.4	461.5	-389.4	5.64	5.53	2.77
6,294.0	27.10	157.60	6,167.8	601.9	469.3	-368.5	5.10	5.00	-2.29
6,341.0	29.40	156.20	6,209.2	581.4	478.0	-346.2	5.09	4.89	-2.98
6,389.0	31.80	158.50	6,250.5	558.9	487.4	-321.8	5.56	5.00	4.79
6,436.0	34.90	161.00	6,289.8	534.7	496.3	-296.0	7.21	6.60	5.32
6,484.0	39.20	161.60	6,328.1	507.3	505.6	-267.2	8.99	8.96	1.25
6,531.0	43.50	163.50	6,363.3	477.6	514.9	-236.3	9.53	9.15	4.04
6,579.0	48.00	163.70	6,396.8	444.7	524.6	-202.2	9.38	9.38	0.42
6,626.0	52.60	164.40	6,426.8	409.9	534.5	-166.3	9.85	9.79	1.49
6,674.0	58.40	164.00	6,454.0	371.9	545.3	-127.1	12.10	12.08	-0.83
6,721.0	63.30	163.60	6,476.9	332.5	556.7	-86.4	10.45	10.43	-0.85
6,769.0	68.00	163.80	6,496.7	290.5	569.0	-43.0	9.80	9.79	0.42
6,816.0	72.10	162.70	6,512.7	248.2	581.7	0.9	9.00	8.72	-2.34
6,863.0	75.90	162.90	6,525.7	205.0	595.1	45.9	8.10	8.09	0.43
6,910.0	79.30	162.50	6,535.8	161.2	608.7	91.5	7.28	7.23	-0.85
6,958.0	81.90	161.60	6,543.6	116.2	623.3	138.7	5.72	5.42	-1.88
7,005.0	85.10	160.20	6,548.9	72.1	638.6	185.2	7.42	6.81	-2.98
7,053.0	87.50	160.70	6,552.0	26.9	654.6	233.0	5.11	5.00	1.04
7,147.0	90.20	161.60	6,553.9	-62.0	685.0	326.7	3.03	2.87	0.96

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7,242.0	90.60	162.40	6,553.3	-152.3	714.4	421.3	0.94	0.42	0.84
7,337.0	88.60	162.40	6,553.9	-242.9	743.1	515.9	2.11	-2.11	0.00
7,432.0	88.20	161.80	6,556.6	-333.3	772.3	610.4	0.76	-0.42	-0.63
7,527.0	88.60	159.50	6,559.2	-422.9	803.7	705.2	2.46	0.42	-2.42
7,621.0	91.60	163.80	6,559.1	-512.0	833.3	798.8	5.58	3.19	4.57
7,716.0	91.70	164.20	6,556.3	-603.3	859.5	893.0	0.43	0.11	0.42
7,811.0	90.60	163.80	6,554.4	-694.6	885.7	987.3	1.23	-1.16	-0.42
7,906.0	90.30	163.00	6,553.7	-785.7	912.8	1,081.6	0.90	-0.32	-0.84
8,000.0	89.80	163.00	6,553.6	-875.6	940.3	1,175.1	0.53	-0.53	0.00
8,095.0	90.50	163.80	6,553.3	-966.6	967.4	1,269.5	1.12	0.74	0.84
8,189.0	88.70	161.90	6,554.0	-1,056.4	995.1	1,362.9	2.78	-1.91	-2.02
8,284.0	88.70	162.90	6,556.1	-1,146.9	1,023.9	1,457.4	1.05	0.00	1.05
8,379.0	90.20	161.50	6,557.1	-1,237.4	1,052.9	1,552.0	2.16	1.58	-1.47
8,473.0	90.50	162.40	6,556.5	-1,326.7	1,082.0	1,645.6	1.01	0.32	0.96
8,568.0	89.20	160.20	6,556.7	-1,416.7	1,112.5	1,740.3	2.69	-1.37	-2.32
8,663.0	88.60	160.30	6,558.6	-1,506.1	1,144.6	1,835.1	0.64	-0.63	0.11
8,757.0	90.80	160.70	6,559.1	-1,594.7	1,175.9	1,928.9	2.38	2.34	0.43
8,852.0	90.20	159.80	6,558.2	-1,684.1	1,208.0	2,023.8	1.14	-0.63	-0.95
8,946.0	89.70	159.30	6,558.3	-1,772.2	1,240.9	2,117.7	0.75	-0.53	-0.53
9,041.0	89.90	160.70	6,558.6	-1,861.5	1,273.4	2,212.5	1.49	0.21	1.47
9,136.0	89.80	161.00	6,558.9	-1,951.2	1,304.5	2,307.3	0.33	-0.11	0.32
9,231.0	88.50	160.90	6,560.3	-2,041.0	1,335.5	2,402.0	1.37	-1.37	-0.11
9,325.0	88.70	160.30	6,562.6	-2,129.6	1,366.8	2,495.8	0.67	0.21	-0.64
9,420.0	89.10	160.90	6,564.4	-2,219.2	1,398.3	2,590.5	0.76	0.42	0.63
9,514.0	88.20	160.40	6,566.6	-2,307.9	1,429.4	2,684.3	1.10	-0.96	-0.53
9,609.0	89.10	161.50	6,568.9	-2,397.7	1,460.4	2,779.0	1.50	0.95	1.16
9,704.0	90.40	162.40	6,569.3	-2,488.0	1,489.9	2,873.6	1.66	1.37	0.95
9,798.0	90.60	162.80	6,568.5	-2,577.7	1,518.0	2,967.2	0.48	0.21	0.43
9,893.0	89.60	163.80	6,568.3	-2,668.7	1,545.3	3,061.6	1.49	-1.05	1.05
9,987.0	89.70	163.60	6,568.9	-2,758.9	1,571.7	3,154.9	0.24	0.11	-0.21
10,082.0	89.80	165.30	6,569.3	-2,850.4	1,597.1	3,249.0	1.79	0.11	1.79
10,176.0	89.20	163.10	6,570.1	-2,940.8	1,622.7	3,342.2	2.43	-0.64	-2.34
10,271.0	89.20	160.90	6,571.4	-3,031.2	1,652.1	3,436.8	2.32	0.00	-2.32
10,366.0	89.30	161.80	6,572.7	-3,121.2	1,682.5	3,531.5	0.95	0.11	0.95
10,461.0	89.70	162.50	6,573.5	-3,211.6	1,711.6	3,626.1	0.85	0.42	0.74
10,555.0	87.70	160.20	6,575.6	-3,300.6	1,741.6	3,719.8	3.24	-2.13	-2.45
10,650.0	88.80	160.20	6,578.5	-3,390.0	1,773.8	3,814.6	1.16	1.16	0.00
10,745.0	88.50	159.20	6,580.8	-3,479.0	1,806.7	3,909.4	1.10	-0.32	-1.05
10,840.0	90.30	158.90	6,581.8	-3,567.8	1,840.7	4,004.3	1.92	1.89	-0.32
10,934.0	89.30	157.00	6,582.1	-3,654.9	1,876.0	4,098.3	2.28	-1.06	-2.02
11,028.0	89.90	158.80	6,582.8	-3,742.0	1,911.4	4,192.3	2.02	0.64	1.91
11,122.0	89.50	160.40	6,583.2	-3,830.1	1,944.1	4,286.2	1.75	-0.43	1.70
11,218.0	90.10	162.90	6,583.6	-3,921.2	1,974.3	4,381.8	2.68	0.63	2.60
11,312.0	90.90	162.40	6,582.8	-4,010.9	2,002.4	4,475.3	1.00	0.85	-0.53

WV Department of Environmental Protection



Survey Report



Company:	Jay-Bee Oil & Gas	Local Co-ordinate Reference:	Well Curly 1
Project:	Tyler County	TVD Reference:	WELL @ 1144.0usft (Patterson #581)
Site:	Curly PAD	MD Reference:	WELL @ 1144.0usft (Patterson #581)
Well:	Curly 1	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,407.0	91.80	165.30	6,580.5	-4,102.1	2,028.8	4,569.6	3.20	0.95	3.05	
11,502.0	89.40	164.00	6,579.5	-4,193.7	2,053.9	4,663.7	2.87	-2.53	-1.37	
11,597.0	88.30	162.40	6,581.4	-4,284.6	2,081.4	4,758.1	2.04	-1.16	-1.68	
11,692.0	90.10	164.50	6,582.8	-4,375.7	2,108.4	4,852.4	2.91	1.89	2.21	
11,787.0	90.20	165.00	6,582.5	-4,467.3	2,133.4	4,946.5	0.54	0.11	0.53	
11,881.0	89.60	164.50	6,582.7	-4,558.0	2,158.1	5,039.6	0.83	-0.64	-0.53	
11,976.0	89.10	164.50	6,583.8	-4,649.6	2,183.5	5,133.7	0.53	-0.53	0.00	
12,071.0	89.30	164.60	6,585.1	-4,741.1	2,208.8	5,227.9	0.24	0.21	0.11	
12,165.0	90.20	164.50	6,585.5	-4,831.7	2,233.9	5,321.0	0.96	0.96	-0.11	
12,260.0	89.30	163.00	6,585.9	-4,922.9	2,260.5	5,415.3	1.84	-0.95	-1.58	
12,355.0	90.20	162.00	6,586.3	-5,013.5	2,289.0	5,509.8	1.42	0.95	-1.05	
12,450.0	89.20	159.80	6,586.8	-5,103.3	2,320.1	5,604.6	2.54	-1.05	-2.32	
12,545.0	89.40	161.60	6,588.0	-5,192.9	2,351.5	5,699.3	1.91	0.21	1.89	
12,639.0	88.50	160.60	6,589.7	-5,281.8	2,381.9	5,793.1	1.43	-0.96	-1.06	
12,734.0	88.30	158.00	6,592.4	-5,370.7	2,415.5	5,887.9	2.74	-0.21	-2.74	
12,828.0	91.40	160.10	6,592.6	-5,458.4	2,449.1	5,981.8	3.98	3.30	2.23	
12,923.0	91.00	160.10	6,590.6	-5,547.7	2,481.4	6,076.7	0.42	-0.42	0.00	
13,018.0	89.40	158.30	6,590.3	-5,636.6	2,515.2	6,171.6	2.54	-1.68	-1.89	
13,113.0	89.00	159.70	6,591.6	-5,725.2	2,549.2	6,266.5	1.53	-0.42	1.47	
13,207.0	89.70	161.40	6,592.7	-5,813.9	2,580.5	6,360.3	1.96	0.74	1.81	
13,302.0	87.60	158.00	6,594.9	-5,902.9	2,613.5	6,455.1	4.21	-2.21	-3.58	
13,396.0	88.10	157.30	6,598.4	-5,989.8	2,649.2	6,549.0	0.91	0.53	-0.74	
13,491.0	90.20	160.50	6,599.8	-6,078.4	2,683.4	6,643.9	4.03	2.21	3.37	
13,586.0	91.30	163.60	6,598.6	-6,168.7	2,712.6	6,738.5	3.46	1.16	3.26	
13,680.0	89.50	162.00	6,597.9	-6,258.5	2,740.4	6,832.0	2.56	-1.91	-1.70	
13,775.0	89.90	162.40	6,598.4	-6,349.0	2,769.5	6,926.6	0.60	0.42	0.42	
13,869.0	90.20	163.80	6,598.4	-6,438.9	2,796.8	7,020.0	1.52	0.32	1.49	
13,963.0	89.40	163.40	6,598.7	-6,529.1	2,823.3	7,113.4	0.95	-0.85	-0.43	
14,004.0	89.30	164.00	6,599.2	-6,568.4	2,834.8	7,154.1	1.48	-0.24	1.46	
TD @ 14056.0' MD / 6599.8' TVD										
14,056.0	89.30	164.00	6,599.8	-6,618.4	2,849.2	7,205.6	0.00	0.00	0.00	

WV Department of Environmental Protection

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
535.0	535.0	-1.9	3.4	Gyro Tie-In @ 535.0' MD / 535.0' TVD	
14,056.0	6,599.8	-6,618.4	2,849.2	TD @ 14056.0' MD / 6599.8' TVD	

Checked By: _____ Approved By: _____ Date: _____