



Jay-Bee Oil & Gas

Pleasants County

P2 Pad

P2N2

Wellbore #1

Design: Wellbore #1

QES Survey Report

30 August, 2017

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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-170903	9/6/2017

Lease	Well Name	County & State
N/A	P2N2	Pleasants County, WV

API No.	Survey Depth Range	Survey Type
47-073-02564	520 feet to 14050 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
N/A	Adam Ball

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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.

Christopher Hughes

Christopher Hughes
MWD Compliance Manager
Quintana Energy Services

Digitally signed by Christopher Hughes
DN: cn=Christopher Hughes, o=QES,
ou=compliance,
email=chris@qeslp.com, c=US
Date: 2017.09.06 22:11:09 -05'00'



Survey Report



Company:	Jay-Bee Oil & Gas	Local Co-ordinate Reference:	Well P2N2
Project:	Pleasants County	TVD Reference:	well @ 732.8usft (Nomac #81)
Site:	P2 Pad	MD Reference:	well @ 732.8usft (Nomac #81)
Well:	P2N2	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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Project	Pleasants County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	West Virginia Northern Zone		

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Site	P2 Pad		
Site Position:		Northing:	344,470.06 usft
From:	Lat/Long	Easting:	1,532,823.36 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 26' 7.746 N
		Longitude:	81° 2' 33.414 W
		Grid Convergence:	-0.98 °

Well	P2N2					
Well Position	+N/-S	0.0 usft	Northing:	344,467.68 usft	Latitude:	39° 26' 7.726 N
	+E/-W	0.0 usft	Easting:	1,532,845.70 usft	Longitude:	81° 2' 33.129 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	712.2 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/14/2017	-8.39	66.71	52,018.01352399

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		338.29

Survey Program	Date	8/30/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
520.0	14,050.0	MWD Surveys (Wellbore #1)	MWD default	MWD - Standard	

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	
First MWD Survey @ 520.0' MD / 520.0' TVD										
520.0	1.10	318.80	520.0	3.8	-3.3	4.7	0.21	0.21	0.00	
615.0	2.84	347.56	614.9	6.7	-4.4	7.9	2.05	1.83	30.27	
710.0	1.73	355.19	709.8	10.5	-5.0	11.6	1.21	-1.17	8.03	
805.0	0.44	121.37	804.8	11.7	-4.8	12.7	2.13	-1.36	132.82	
900.0	0.97	155.42	899.8	10.8	-4.2	11.6	0.69	0.56	35.84	
994.0	0.10	113.29	993.8	10.0	-3.8	10.7	0.96	-0.93	-44.82	
1,089.0	0.19	63.18	1,088.8	10.1	-3.6	10.7	0.16	0.09	-52.75	
1,184.0	0.16	146.34	1,183.8	10.0	-3.3	10.6	0.25	-0.03	87.54	
1,279.0	0.26	135.30	1,278.8	9.8	-3.1	10.2	0.11	0.11	-11.62	



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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)
1,373.0	0.12	34.31	1,372.8	9.7	-2.9	10.1	0.33	-0.15	-107.44
1,468.0	0.25	122.70	1,467.8	9.7	-2.7	10.0	0.29	0.14	93.04
1,563.0	0.28	133.39	1,562.8	9.4	-2.3	9.6	0.06	0.03	11.25
1,658.0	0.20	113.50	1,657.8	9.2	-2.0	9.3	0.12	-0.08	-20.94
1,753.0	0.36	94.85	1,752.8	9.1	-1.6	9.0	0.19	0.17	-19.63
1,817.0	0.49	99.02	1,816.8	9.0	-1.1	8.8	0.21	0.20	6.52
1,874.0	0.38	128.02	1,873.8	8.9	-0.7	8.5	0.43	-0.19	50.88
1,938.0	0.25	17.78	1,937.8	8.9	-0.5	8.4	0.82	-0.20	-172.25
2,033.0	0.14	128.71	2,032.8	9.0	-0.4	8.5	0.34	-0.12	116.77
2,127.0	0.29	265.96	2,126.8	8.9	-0.5	8.5	0.43	0.16	146.01
2,222.0	6.11	29.41	2,221.6	13.3	1.7	11.7	6.60	6.13	129.95
2,317.0	10.12	29.32	2,315.7	25.0	8.3	20.1	4.22	4.22	-0.09
2,412.0	13.09	29.28	2,408.7	41.6	17.7	32.2	3.13	3.13	-0.04
2,507.0	16.66	27.19	2,500.5	63.1	29.2	47.9	3.80	3.76	-2.20
2,602.0	16.98	37.10	2,591.5	86.3	43.8	64.0	3.03	0.34	10.43
2,697.0	19.20	41.53	2,681.8	109.1	62.5	78.2	2.75	2.34	4.66
2,791.0	19.52	41.69	2,770.4	132.4	83.2	92.2	0.35	0.34	0.17
2,886.0	20.32	39.11	2,859.8	157.0	104.1	107.4	1.25	0.84	-2.72
2,981.0	19.30	37.52	2,949.1	182.3	124.1	123.5	1.21	-1.07	-1.67
3,076.0	18.98	40.47	3,038.9	206.5	143.7	138.7	1.07	-0.34	3.11
3,171.0	20.29	41.31	3,128.4	230.6	164.6	153.4	1.41	1.38	0.88
3,265.0	21.62	36.46	3,216.2	256.8	185.6	169.9	2.32	1.41	-5.16
3,360.0	20.14	31.33	3,304.9	284.8	204.6	189.0	2.47	-1.56	-5.40
3,455.0	18.10	35.51	3,394.7	310.8	221.6	206.8	2.58	-2.15	4.40
3,550.0	18.72	36.30	3,484.8	335.1	239.2	222.9	0.70	0.65	0.83
3,647.0	17.68	43.20	3,577.0	358.4	258.5	237.4	2.47	-1.07	7.11
3,742.0	18.59	37.54	3,667.3	380.9	277.6	251.2	2.09	0.96	-5.96
3,837.0	19.53	37.62	3,757.0	405.5	296.6	267.1	0.99	0.99	0.08
3,932.0	20.12	38.03	3,846.4	431.0	316.3	283.4	0.64	0.62	0.43
4,027.0	17.99	36.34	3,936.2	455.7	335.1	299.4	2.32	-2.24	-1.78
4,122.0	18.64	37.44	4,026.4	479.5	353.0	314.9	0.77	0.68	1.16
4,217.0	19.86	39.59	4,116.1	504.0	372.5	330.5	1.49	1.28	2.26
4,311.0	21.86	41.02	4,203.9	529.5	394.2	346.2	2.20	2.13	1.52
4,406.0	20.78	36.09	4,292.4	556.5	415.7	363.3	2.20	-1.14	-5.19
4,500.0	22.35	37.19	4,379.8	584.2	436.3	381.4	1.72	1.67	1.17
4,595.0	21.07	38.86	4,468.1	611.9	458.0	399.1	1.50	-1.35	1.76
4,690.0	20.98	39.66	4,556.8	638.3	479.5	415.6	0.32	-0.09	0.84
4,784.0	19.92	34.77	4,644.9	664.4	499.4	432.5	2.14	-1.13	-5.20
4,879.0	19.25	41.03	4,734.4	689.5	518.9	448.7	2.32	-0.71	6.59
4,974.0	20.26	41.20	4,823.8	713.7	540.0	463.3	1.06	1.06	0.18
5,069.0	18.82	36.30	4,913.3	738.4	560.0	478.9	2.30	-1.52	-5.16
5,163.0	18.20	33.70	5,021.4	768.1	580.7	498.8	0.91	-0.54	-2.28
5,277.0	18.70	32.10	5,110.6	793.0	596.9	516.0	0.76	0.53	-1.70



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5,324.0	17.40	27.60	5,155.3	805.7	604.1	525.0	4.05	-2.77	-9.57
5,372.0	18.50	16.70	5,200.9	819.3	609.6	535.7	7.35	2.29	-22.71
5,419.0	19.00	13.10	5,245.5	833.9	613.5	547.8	2.68	1.06	-7.66
5,467.0	21.30	10.20	5,290.5	850.1	616.8	561.6	5.22	4.79	-6.04
5,514.0	24.00	8.60	5,333.9	868.0	619.8	577.1	5.89	5.74	-3.40
5,562.0	27.10	7.30	5,377.2	888.5	622.6	595.1	6.56	6.46	-2.71
5,609.0	31.20	1.90	5,418.2	911.3	624.4	615.7	10.36	8.72	-11.49
5,657.0	34.40	355.30	5,458.6	937.2	623.7	640.0	9.99	6.67	-13.75
5,704.0	38.10	349.50	5,496.5	964.7	620.0	667.0	10.73	7.87	-12.34
5,751.0	42.90	346.00	5,532.2	994.5	613.4	697.1	11.30	10.21	-7.45
5,798.0	47.90	343.50	5,565.2	1,026.8	604.6	730.3	11.29	10.64	-5.32
5,846.0	51.90	341.80	5,596.1	1,061.8	593.7	766.9	8.76	8.33	-3.54
5,893.0	55.80	340.10	5,623.9	1,097.7	581.3	804.8	8.80	8.30	-3.62
5,940.0	60.20	338.90	5,648.8	1,135.0	567.3	844.6	9.61	9.36	-2.55
5,987.0	65.80	337.50	5,670.1	1,173.9	551.7	886.5	12.21	11.91	-2.98
6,035.0	69.80	337.10	5,688.2	1,214.9	534.6	930.9	8.37	8.33	-0.83
6,082.0	73.40	336.70	5,703.1	1,255.9	517.1	975.5	7.70	7.66	-0.85
6,130.0	78.20	337.60	5,714.8	1,298.7	499.0	1,022.0	10.16	10.00	1.88
6,177.0	81.20	337.40	5,723.2	1,341.5	481.3	1,068.3	6.40	6.38	-0.43
6,225.0	85.40	336.70	5,728.8	1,385.3	462.7	1,115.9	8.87	8.75	-1.46
6,272.0	88.60	336.60	5,731.3	1,428.4	444.1	1,162.8	6.81	6.81	-0.21
6,319.0	89.80	336.50	5,731.9	1,471.5	425.4	1,209.8	2.56	2.55	-0.21
6,366.0	89.30	336.50	5,732.3	1,514.6	406.7	1,256.8	1.06	-1.06	0.00
6,414.0	89.10	336.40	5,733.0	1,558.6	387.5	1,304.7	0.47	-0.42	-0.21
6,508.0	88.40	335.80	5,735.0	1,644.6	349.5	1,398.6	0.98	-0.74	-0.64
6,603.0	93.10	337.00	5,733.8	1,731.6	311.4	1,493.6	5.11	4.95	1.26
6,697.0	91.90	334.80	5,729.7	1,817.3	273.1	1,587.4	2.66	-1.28	-2.34
6,792.0	91.10	334.80	5,727.2	1,903.2	232.7	1,682.2	0.84	-0.84	0.00
6,887.0	91.50	334.70	5,725.0	1,989.1	192.1	1,777.0	0.43	0.42	-0.11
6,982.0	90.80	333.10	5,723.1	2,074.4	150.4	1,871.7	1.84	-0.74	-1.68
7,077.0	90.60	332.20	5,722.0	2,158.8	106.7	1,966.2	0.97	-0.21	-0.95
7,172.0	90.50	331.90	5,721.1	2,242.7	62.2	2,060.6	0.33	-0.11	-0.32
7,267.0	90.80	331.10	5,720.0	2,326.2	16.9	2,154.9	0.90	0.32	-0.84
7,361.0	90.10	331.60	5,719.3	2,408.7	-28.2	2,248.3	0.92	-0.74	0.53
7,457.0	89.60	331.60	5,719.5	2,493.1	-73.9	2,343.6	0.52	-0.52	0.00
7,551.0	89.40	332.00	5,720.3	2,576.0	-118.3	2,437.0	0.48	-0.21	0.43
7,646.0	90.40	331.10	5,720.5	2,659.5	-163.5	2,531.3	1.42	1.05	-0.95
7,740.0	89.90	330.50	5,720.2	2,741.5	-209.4	2,624.5	0.83	-0.53	-0.64
7,835.0	91.30	332.10	5,719.2	2,824.9	-255.0	2,718.8	2.24	1.47	1.68
7,930.0	92.40	333.80	5,716.2	2,909.4	-298.2	2,813.3	2.13	1.16	1.79
8,025.0	92.10	333.30	5,712.5	2,994.4	-340.5	2,907.9	0.61	-0.32	-0.53
8,119.0	92.00	333.30	5,709.1	3,078.3	-382.7	3,001.5	0.11	-0.11	0.00
8,214.0	91.50	332.70	5,706.2	3,162.9	-425.8	3,096.1	0.82	-0.53	-0.63



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8,309.0	90.90	332.60	5,704.2	3,247.3	-469.4	3,190.6	0.64	-0.63	-0.11
8,404.0	90.60	331.90	5,703.0	3,331.4	-513.7	3,285.1	0.80	-0.32	-0.74
8,498.0	89.80	331.70	5,702.6	3,414.2	-558.1	3,378.5	0.88	-0.85	-0.21
8,593.0	89.50	331.80	5,703.2	3,497.9	-603.0	3,472.8	0.33	-0.32	0.11
8,687.0	90.60	332.10	5,703.1	3,580.8	-647.2	3,566.3	1.21	1.17	0.32
8,782.0	91.90	333.10	5,701.1	3,665.2	-690.9	3,660.8	1.73	1.37	1.05
8,876.0	91.70	332.90	5,698.1	3,748.9	-733.6	3,754.3	0.30	-0.21	-0.21
8,971.0	91.30	333.00	5,695.6	3,833.5	-776.8	3,848.9	0.43	-0.42	0.11
9,066.0	90.60	332.20	5,694.0	3,917.8	-820.5	3,943.4	1.12	-0.74	-0.84
9,161.0	90.10	332.40	5,693.5	4,001.9	-864.7	4,037.9	0.57	-0.53	0.21
9,255.0	89.50	331.80	5,693.8	4,085.0	-908.6	4,131.3	0.90	-0.64	-0.64
9,350.0	90.60	331.00	5,693.7	4,168.4	-954.1	4,225.6	1.43	1.16	-0.84
9,445.0	90.50	330.70	5,692.8	4,251.3	-1,000.4	4,319.8	0.33	-0.11	-0.32
9,539.0	91.90	331.10	5,690.8	4,333.5	-1,046.1	4,413.0	1.55	1.49	0.43
9,634.0	92.10	330.90	5,687.5	4,416.5	-1,092.1	4,507.2	0.30	0.21	-0.21
9,729.0	92.50	330.50	5,683.7	4,499.3	-1,138.6	4,601.3	0.60	0.42	-0.42
9,824.0	89.80	330.70	5,681.8	4,582.0	-1,185.2	4,695.4	2.85	-2.84	0.21
9,918.0	89.70	330.30	5,682.2	4,663.8	-1,231.5	4,788.5	0.44	-0.11	-0.43
10,013.0	90.30	332.90	5,682.2	4,747.4	-1,276.7	4,882.9	2.81	0.63	2.74
10,108.0	90.80	333.70	5,681.3	4,832.2	-1,319.3	4,977.5	0.99	0.53	0.84
10,203.0	90.80	334.20	5,680.0	4,917.6	-1,361.1	5,072.2	0.53	0.00	0.53
10,297.0	90.70	333.90	5,678.7	5,002.1	-1,402.2	5,166.0	0.34	-0.11	-0.32
10,392.0	90.30	334.10	5,677.9	5,087.5	-1,443.8	5,260.7	0.47	-0.42	0.21
10,487.0	90.20	333.90	5,677.5	5,172.9	-1,485.5	5,355.4	0.24	-0.11	-0.21
10,582.0	89.80	333.70	5,677.5	5,258.1	-1,527.4	5,450.2	0.47	-0.42	-0.21
10,677.0	90.40	333.30	5,677.3	5,343.1	-1,569.8	5,544.8	0.76	0.63	-0.42
10,772.0	90.50	333.30	5,676.6	5,428.0	-1,612.5	5,639.5	0.11	0.11	0.00
10,867.0	91.20	334.00	5,675.2	5,513.1	-1,654.7	5,734.1	1.04	0.74	0.74
10,961.0	90.60	332.20	5,673.7	5,596.9	-1,697.2	5,827.7	2.02	-0.64	-1.91
11,056.0	90.20	331.70	5,673.0	5,680.8	-1,741.9	5,922.1	0.67	-0.42	-0.53
11,151.0	90.20	331.50	5,672.7	5,764.3	-1,787.0	6,016.5	0.21	0.00	-0.21
11,246.0	90.30	332.30	5,672.3	5,848.1	-1,831.8	6,110.9	0.85	0.11	0.84
11,340.0	91.40	333.80	5,670.9	5,931.9	-1,874.4	6,204.5	1.98	1.17	1.60
11,435.0	92.20	333.60	5,667.9	6,017.0	-1,916.4	6,299.1	0.87	0.84	-0.21
11,530.0	92.30	333.20	5,664.2	6,101.9	-1,959.0	6,393.7	0.43	0.11	-0.42
11,625.0	90.40	331.60	5,661.9	6,186.1	-2,002.9	6,488.2	2.61	-2.00	-1.68
11,720.0	90.50	329.70	5,661.2	6,268.9	-2,049.5	6,582.3	2.00	0.11	-2.00
11,815.0	90.20	331.00	5,660.6	6,351.4	-2,096.5	6,676.4	1.40	-0.32	1.37
11,910.0	91.10	331.50	5,659.5	6,434.7	-2,142.2	6,770.7	1.08	0.95	0.53
12,005.0	90.50	330.60	5,658.2	6,517.8	-2,188.2	6,864.9	1.14	-0.63	-0.95
12,099.0	90.30	329.70	5,657.5	6,599.4	-2,235.0	6,958.0	0.98	-0.21	-0.96
12,194.0	90.30	331.40	5,657.0	6,682.1	-2,281.7	7,052.1	1.79	0.00	1.79
12,289.0	90.80	330.40	5,656.1	6,765.1	-2,327.9	7,146.3	1.18	0.53	-1.05
12,384.0	90.80	331.20	5,654.8	6,848.0	-2,374.2	7,240.5	0.84	0.00	0.84



Survey Report



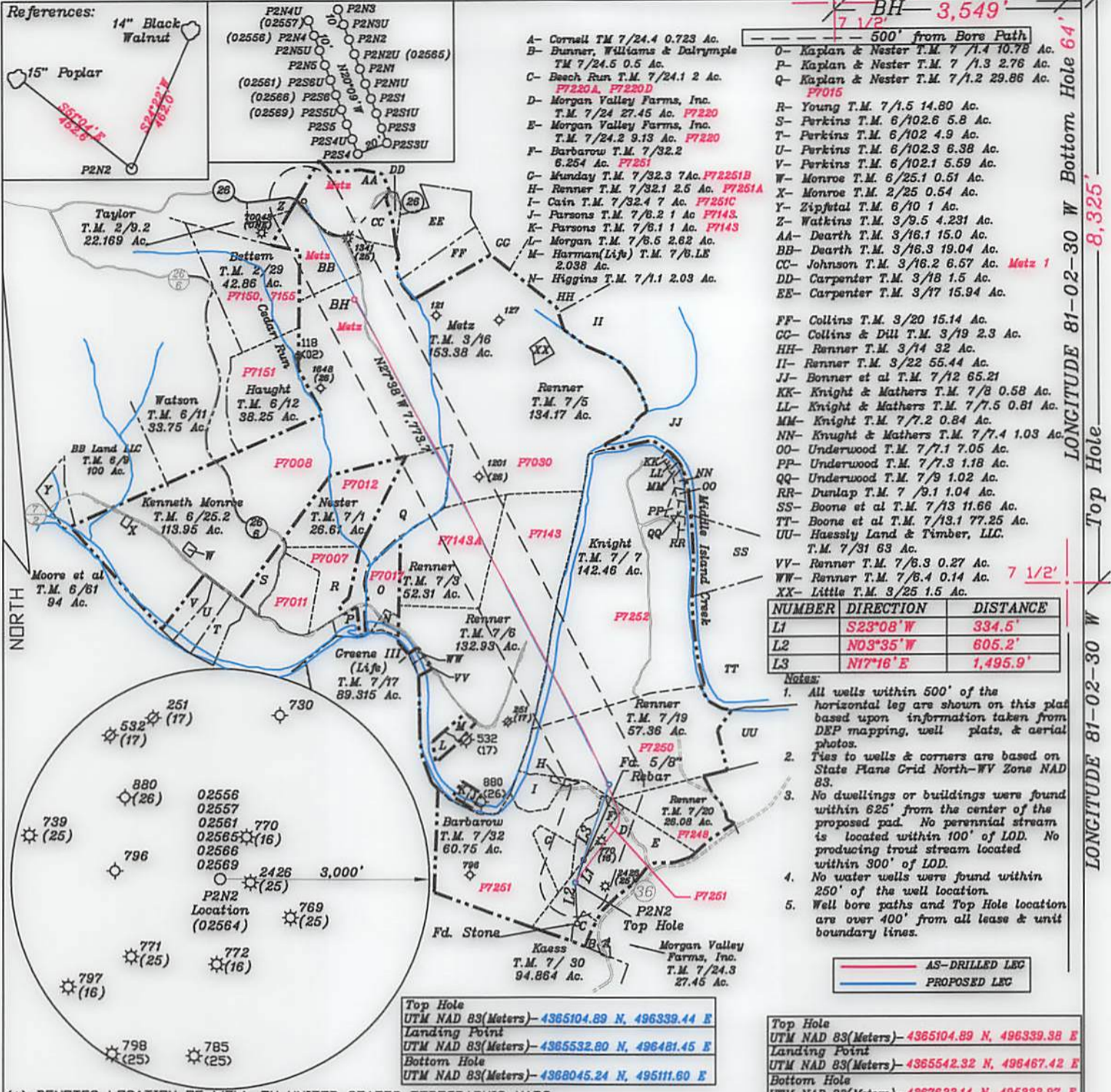
Company:	Jay-Bee Oil & Gas	Local Co-ordinate Reference:	Well P2N2
Project:	Pleasants County	TVD Reference:	well @ 732.8usft (Nomac #81)
Site:	P2 Pad	MD Reference:	well @ 732.8usft (Nomac #81)
Well:	P2N2	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
12,479.0	90.80	333.10	5,653.5	6,932.0	-2,418.6	7,334.9	2.00	0.00	2.00
12,574.0	90.90	331.80	5,652.1	7,016.2	-2,462.5	7,429.4	1.37	0.11	-1.37
12,669.0	90.80	333.80	5,650.7	7,100.7	-2,505.9	7,524.0	2.11	-0.11	2.11
12,764.0	90.90	332.40	5,649.3	7,185.4	-2,548.9	7,618.6	1.48	0.11	-1.47
12,858.0	91.10	333.50	5,647.6	7,269.1	-2,591.6	7,712.2	1.19	0.21	1.17
12,953.0	91.20	334.50	5,645.7	7,354.5	-2,633.3	7,806.9	1.06	0.11	1.05
13,048.0	91.00	332.90	5,643.9	7,439.6	-2,675.4	7,901.5	1.70	-0.21	-1.68
13,142.0	90.90	331.30	5,642.3	7,522.7	-2,719.3	7,995.0	1.71	-0.11	-1.70
13,237.0	91.00	329.40	5,640.7	7,605.2	-2,766.3	8,089.1	2.00	0.11	-2.00
13,332.0	91.10	333.50	5,639.0	7,688.6	-2,811.7	8,183.3	4.32	0.11	4.32
13,426.0	91.00	331.80	5,637.3	7,772.1	-2,854.9	8,276.9	1.81	-0.11	-1.81
13,521.0	90.90	330.60	5,635.7	7,855.3	-2,900.7	8,371.1	1.27	-0.11	-1.26
13,616.0	90.90	329.00	5,634.2	7,937.4	-2,948.4	8,465.1	1.68	0.00	-1.68
13,711.0	90.80	332.30	5,632.8	8,020.2	-2,995.0	8,559.2	3.47	-0.11	3.47
13,806.0	90.80	331.80	5,631.5	8,104.1	-3,039.5	8,653.6	0.53	0.00	-0.53
13,901.0	90.80	330.40	5,630.2	8,187.3	-3,085.4	8,747.9	1.47	0.00	-1.47
13,995.0	90.70	328.90	5,628.9	8,268.4	-3,132.9	8,840.8	1.60	-0.11	-1.60
TD @ 14050.0' MD / 5628.3' TVD									
14,050.0	90.70	328.90	5,628.3	8,315.5	-3,161.3	8,895.1	0.00	0.00	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
520.0	520.0	3.8	-3.3	First MWD Survey @ 520.0' MD / 520.0' TVD
14,050.0	5,628.3	8,315.5	-3,161.3	TD @ 14050.0' MD / 5628.3' TVD

RECEIVED
Office of Oil and Gas
JUN 15 2018

WV Department of
Environmental Protection



NUMBER	DIRECTION	DISTANCE
L1	S23°08'W	334.5'
L2	N03°35'W	605.2'
L3	N17°16'E	1,495.9'

- Notes:**
- All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
 - Ties to wells & corners are based on State Plane Grid North-WV Zone NAD 83.
 - No dwellings or buildings were found within 625' from the center of the proposed pad. No perennial stream is located within 100' of LOD. No producing trout stream located within 300' of LOD.
 - No water wells were found within 250' of the well location.
 - Well bore paths and Top Hole location are over 400' from all lease & unit boundary lines.

AS-DRILLED LEC
PROPOSED LEC

Top Hole	UTM NAD 83(Meters)- 4365104.89 N, 496339.44 E
Landing Point	UTM NAD 83(Meters)- 4365532.80 N, 496481.45 E
Bottom Hole	UTM NAD 83(Meters)- 4368045.24 N, 495111.60 E
Top Hole	UTM NAD 83(Meters)- 4365104.89 N, 496339.38 E
Landing Point	UTM NAD 83(Meters)- 4365542.32 N, 496467.42 E
Bottom Hole	UTM NAD 83(Meters)- 4367622.14 N, 495333.97 E

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION GPS
submeter unit

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) David J. Jackson
 R.P.E. _____ P.S. 708



STATE OF WEST VIRGINIA
 Division of Environmental Protection
 OFFICE OF OIL AND GAS

DATE February 9, 2018
 OPERATOR'S WELL NO. P2N2
 API WELL NO. _____

WELL TYPE: OIL X GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF 'GAS') PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION: ELEVATION 712.4' WATER SHED Middle Island Creek
 DISTRICT Union COUNTY Pleasants
 QUADRANGLE Bens Run 7 1/2'

SURFACE OWNER Morgan Valley Farms, Inc. ACREAGE 27.451 Ac.
 OIL & GAS ROYALTY OWNER Morgan Valley Farms, Inc. LEASE ACREAGE 102.777 Ac.
 LEASE NO. P7220

PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE DR _____
 STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ASDRILLED

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 5,735'; TMD = 14,050'
 WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda
 ADDRESS 1720 Route 22 E, Union, NJ 07083 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337

LONGITUDE 81-05-30 W 8'32.2" 84.1' Bottom Hole 84.1' Top Hole

0	Kaplan & Nestor T.M. 7 1/4 10.78 Ac.
1	Kaplan & Nestor T.M. 7 1/4 2.78 Ac.
2	Kaplan & Nestor T.M. 7 1/4 28.88 Ac.
3	Young T.M. 7 1/4 14.80 Ac.
4	Parsons T.M. 6 1/2 2.8 Ac.
5	Parsons T.M. 6 1/2 4.8 Ac.
6	Parsons T.M. 6 1/2 2.88 Ac.
7	Parsons T.M. 6 1/2 2.88 Ac.
8	Parsons T.M. 6 1/2 2.88 Ac.
9	Parsons T.M. 6 1/2 2.88 Ac.
10	Parsons T.M. 6 1/2 2.88 Ac.
11	Parsons T.M. 6 1/2 2.88 Ac.
12	Parsons T.M. 6 1/2 2.88 Ac.
13	Parsons T.M. 6 1/2 2.88 Ac.
14	Parsons T.M. 6 1/2 2.88 Ac.
15	Parsons T.M. 6 1/2 2.88 Ac.
16	Parsons T.M. 6 1/2 2.88 Ac.
17	Parsons T.M. 6 1/2 2.88 Ac.
18	Parsons T.M. 6 1/2 2.88 Ac.
19	Parsons T.M. 6 1/2 2.88 Ac.
20	Parsons T.M. 6 1/2 2.88 Ac.
21	Parsons T.M. 6 1/2 2.88 Ac.
22	Parsons T.M. 6 1/2 2.88 Ac.
23	Parsons T.M. 6 1/2 2.88 Ac.
24	Parsons T.M. 6 1/2 2.88 Ac.
25	Parsons T.M. 6 1/2 2.88 Ac.
26	Parsons T.M. 6 1/2 2.88 Ac.
27	Parsons T.M. 6 1/2 2.88 Ac.
28	Parsons T.M. 6 1/2 2.88 Ac.
29	Parsons T.M. 6 1/2 2.88 Ac.
30	Parsons T.M. 6 1/2 2.88 Ac.
31	Parsons T.M. 6 1/2 2.88 Ac.
32	Parsons T.M. 6 1/2 2.88 Ac.
33	Parsons T.M. 6 1/2 2.88 Ac.
34	Parsons T.M. 6 1/2 2.88 Ac.
35	Parsons T.M. 6 1/2 2.88 Ac.
36	Parsons T.M. 6 1/2 2.88 Ac.
37	Parsons T.M. 6 1/2 2.88 Ac.
38	Parsons T.M. 6 1/2 2.88 Ac.
39	Parsons T.M. 6 1/2 2.88 Ac.
40	Parsons T.M. 6 1/2 2.88 Ac.
41	Parsons T.M. 6 1/2 2.88 Ac.
42	Parsons T.M. 6 1/2 2.88 Ac.
43	Parsons T.M. 6 1/2 2.88 Ac.
44	Parsons T.M. 6 1/2 2.88 Ac.
45	Parsons T.M. 6 1/2 2.88 Ac.
46	Parsons T.M. 6 1/2 2.88 Ac.
47	Parsons T.M. 6 1/2 2.88 Ac.
48	Parsons T.M. 6 1/2 2.88 Ac.
49	Parsons T.M. 6 1/2 2.88 Ac.
50	Parsons T.M. 6 1/2 2.88 Ac.

NUMBER	DIRECTION	DISTANCE
1.1	232°08'W	334.5'
1.2	103°35'W	602.5'
1.3	117°18'E	148.8'

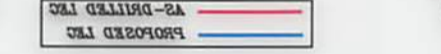
1. All wells within 500' of the horizontal leg are shown on this plan based upon information taken from DEP mapping, well plates & aerial photos.

2. This to wells & corners are based on State Plane Grid North-WV Zone NAD 83.

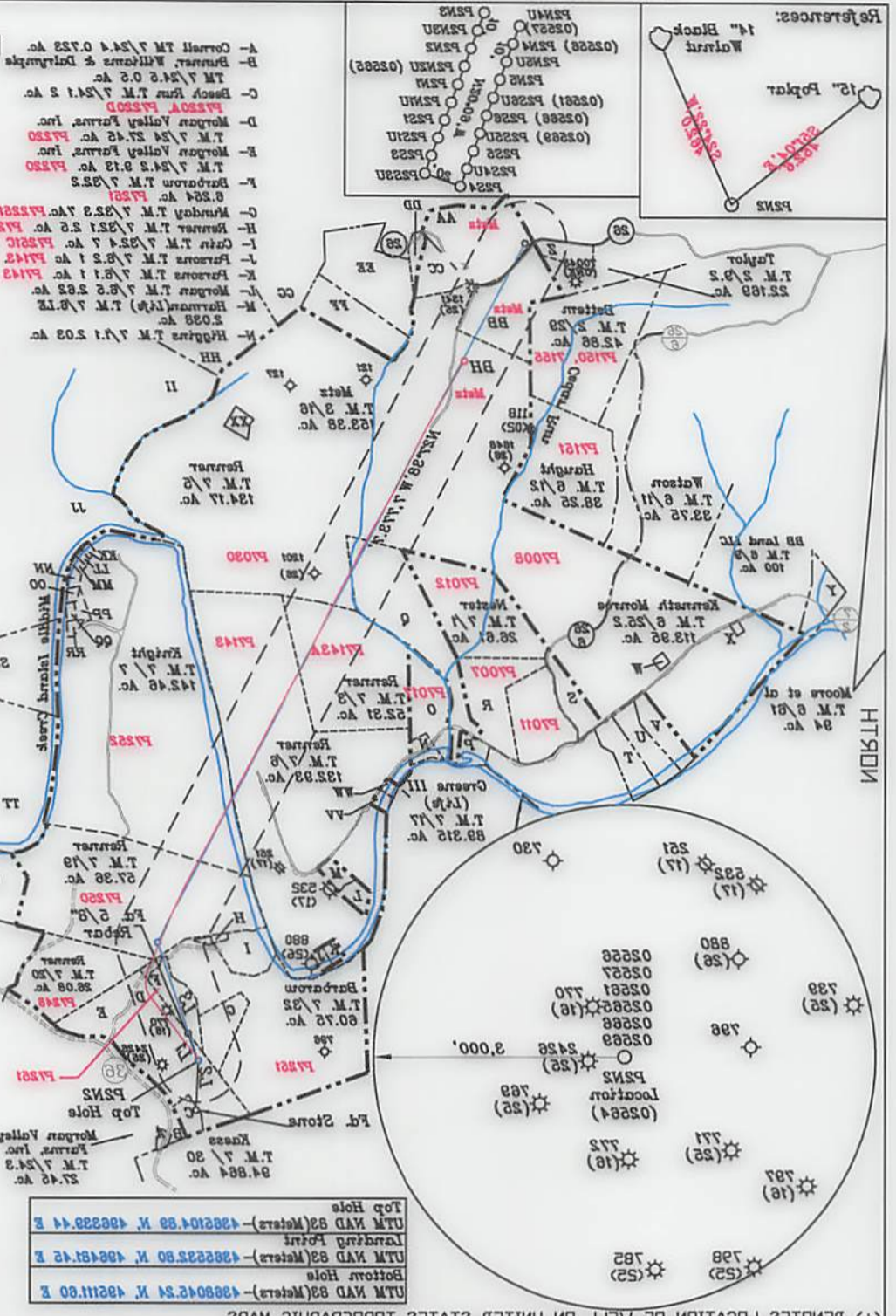
3. No dwellings or buildings were found within 625' from the center of the proposed pad. No potential streams located within 100' of LOD. No producing from streams located within 300' of LOD.

4. No water wells were found within 250' of the well location.

5. Well bore paths and Top Hole location are over 400' from all lease & unit boundary lines.



UTM NAD 83 (Meters) - 4867821.14 N 486332.87 E	Bottom Hole
UTM NAD 83 (Meters) - 486545.32 N 48647.42 E	Landing Point
UTM NAD 83 (Meters) - 486232.80 N 48649.42 E	Landing Point
UTM NAD 83 (Meters) - 486104.88 N 48632.44 E	Top Hole



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES OF ENVIRONMENTAL PROTECTION.

(SIGNED) *David Jackson*

R.P.E. R.2. 708

FILE NO.	1
DRAWING NO.	1
SCALE	1" = 2000'
MINIMUM DEGREE OF ACCURACY	1 in 500
PROVEN SOURCE OF ELEVATION	GPS
Submeter unit	

STATE OF WEST VIRGINIA
Division of Environmental Protection
OFFICE OF OIL AND GAS

DATE February 9, 2018
OPERATOR'S WELL NO. PSNS
API WELL NO. 0264

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 712.4' WATER SHED Middle Island Creek
DISTRICT Union
QUADRANGLE Bears Run 7 1/2'
SURFACE OWNER Morgan Valley Farms, Inc.
DIL & GAS ROYALTY OWNER Morgan Valley Farms, Inc.
LEASE NO. P220

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) **AS DRILLED**

PLUG AND ABANDON CLEAN OUT AND REPLUG
TARGET FORMATION Marcellus
ESTIMATED DEPTH TVD = 5735'; TMD = 14050'
DESIGNATED AGENT Randy Broda
WELL OPERATOR Jay-Bee Oil & Gas, Inc.
ADDRESS 2270 Route 22 E Union, NJ 07083
ADDRESS 3270 Shields Hill Rd, Cairo, WV 26837