

Jay Bee Oil & Gas



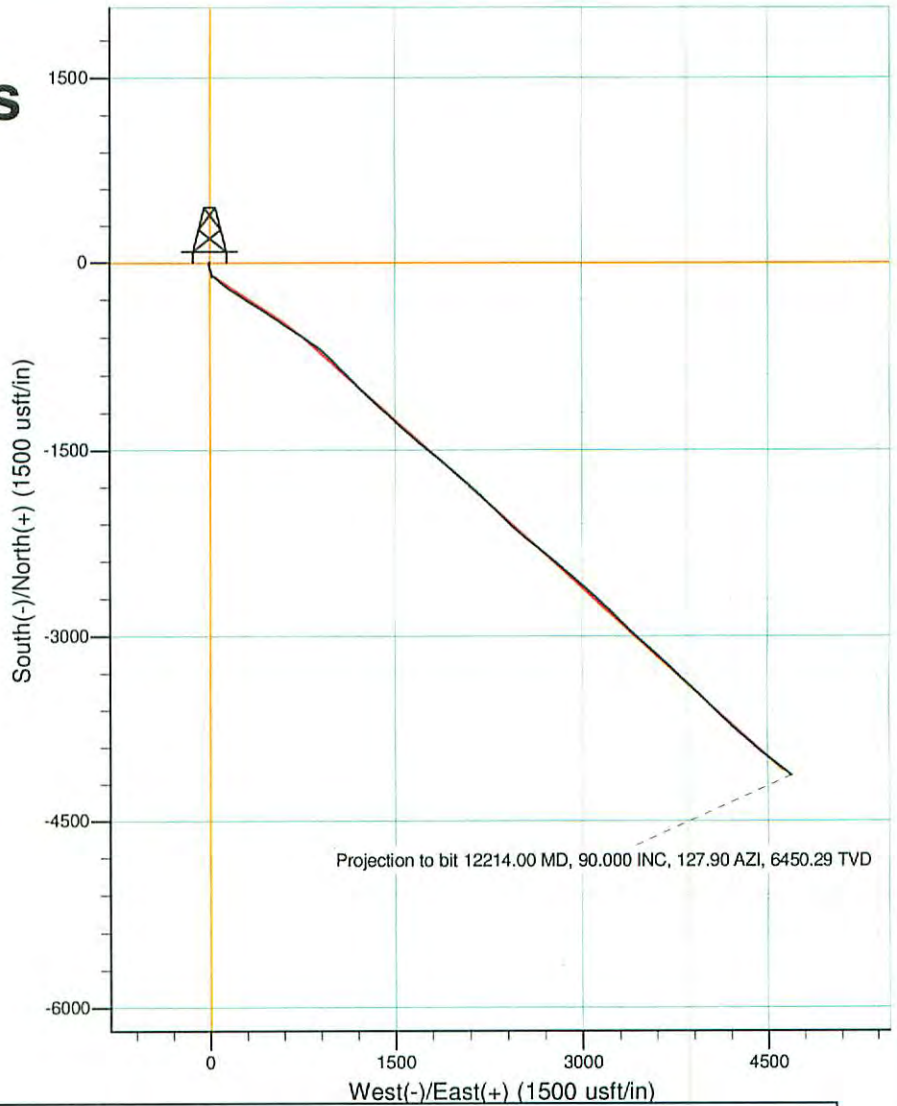
Azimuths to Grid North
 True North: 0.83°
 Magnetic North: -6.73°

 Magnetic Field
 Strength: 52577.0snT
 Dip Angle: 67.08°
 Date: 08/19/2013
 Model: USER DEFINED

PROJECT DETAILS: Tyler County, WV

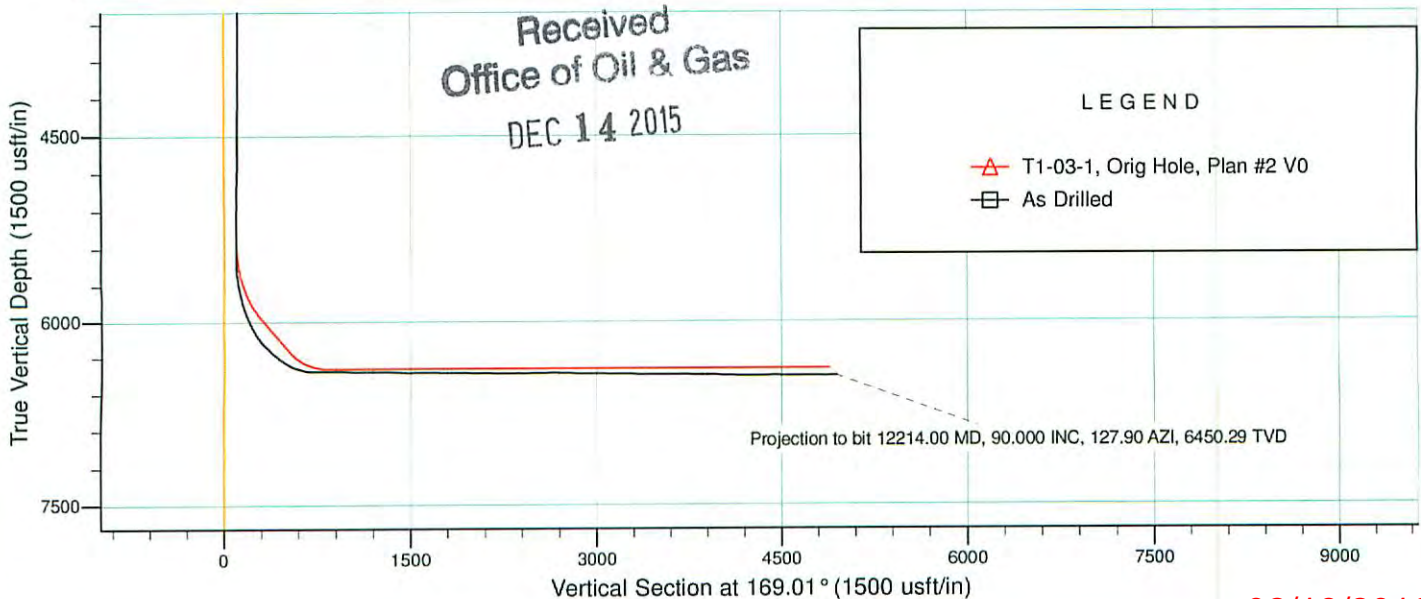
Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: West Virginia Northern Zone

 System Datum: Mean Sea Level



WELL DETAILS: T1-03-1

			Ground Level:	723.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	348143.0283	1600856.6709	39° 26' 54.690 N	80° 48' 7.029 W	



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LEGEND

- △ T1-03-1, Orig Hole, Plan #2 V0
- As Drilled

Jay Bee Oil & Gas

Tyler County, WV

T1-03 Pad

T1-03-1

Orig Hole

Design: As Drilled

Standard Survey Report

13 September, 2013

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Directional Drilling Contractors, LLC.

An Archer Company

02/19/2016

Directional Drilling Contractors

Survey Report



Company: Jay Bee Oil & Gas	Local Co-ordinate Reference: Well T1-03-1	Well T1-03-1
Project: Tyler County, WV	TVD Reference: Well @ 723.00usft	Well @ 723.00usft
Site: T1-03 Pad	MD Reference: Well @ 723.00usft	Well @ 723.00usft
Well: T1-03-1	North Reference: Grid	Grid
Wellbore: Orig Hole	Survey Calculation Method: Minimum Curvature	Minimum Curvature
Design: As Drilled	Database: EDM 5000.1 Single User Db	EDM 5000.1 Single User Db

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

Site	T1-03 Pad		
Site Position:	Northing:	348,143.0371 usft	Latitude: 39° 26' 54.690 N
From: Lat/Long	Easting:	1,600,856.6711 usft	Longitude: 80° 48' 7.029 W
Position Uncertainty:	0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: -0.83 °

Well	T1-03-1			
Well Position	+N/-S	0.00 usft	Northing: 348,143.0283 usft	Latitude: 39° 26' 54.690 N
	+E/-W	0.00 usft	Easting: 1,600,856.6709 usft	Longitude: 80° 48' 7.029 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level: 723.00 usft

Wellbore	Orig Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	08/19/13	-7.56	67.08	52,577

Design	As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	169.01	

Survey Program	Date 09/13/13			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	5,350.00	Javins GYRO (Orig Hole)	NS-GYRO-MS	North sensing gyrocompassing m/s
5,381.00	12,214.00	MWD (Orig Hole)	MWD	MWD - Standard

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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)
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1.070	224.68	99.99	-0.66	-0.66	0.53	1.07	1.07	0.00
200.00	2.100	225.88	199.95	-2.60	-2.63	2.05	1.03	1.03	1.20
300.00	2.250	218.06	299.88	-5.42	-5.15	4.34	0.33	0.15	-7.82
400.00	0.940	204.58	399.84	-7.72	-6.71	6.30	1.35	-1.31	-13.48
500.00	1.370	193.09	499.82	-9.63	-7.32	8.06	0.49	0.43	-11.49
600.00	2.260	175.50	599.77	-12.76	-7.43	11.11	1.04	0.89	-17.59
700.00	3.180	172.86	699.66	-17.47	-6.93	15.83	0.93	0.92	-2.64
800.00	3.610	167.11	799.48	-23.30	-5.89	21.75	0.55	0.43	-5.75
900.00	3.750	162.05	899.28	-29.48	-4.18	28.14	0.35	0.14	-5.06

Directional Drilling Contractors

Survey Report



Company: Jay Bee Oil & Gas
Project: Tyler County, WV
Site: T1-03 Pad
Well: T1-03-1
Wellbore: Orig Hole
Design: As Drilled

Local Co-ordinate Reference: Well T1-03-1
TVD Reference: Well @ 723.00usft
MD Reference: Well @ 723.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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 Office of Oil & Gas
 DEC 14 2015

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)
1,000.00	4.060	157.25	999.04	-35.85	-1.80	34.85	0.45	0.31	-4.80
1,100.00	4.060	154.06	1,098.79	-42.30	1.12	41.74	0.23	0.00	-3.19
1,200.00	4.000	155.13	1,198.55	-48.65	4.13	48.54	0.10	-0.06	1.07
1,300.00	3.590	164.83	1,298.33	-54.83	6.42	55.05	0.76	-0.41	9.70
1,400.00	3.610	164.73	1,398.13	-60.89	8.07	61.31	0.02	0.02	-0.10
1,500.00	3.230	164.84	1,497.95	-66.65	9.63	67.26	0.38	-0.38	0.11
1,600.00	3.230	162.55	1,597.79	-72.05	11.22	72.87	0.13	0.00	-2.29
1,700.00	3.540	162.57	1,697.62	-77.69	12.98	78.74	0.31	0.31	0.02
1,800.00	3.930	163.87	1,797.41	-83.93	14.86	85.22	0.40	0.39	1.30
1,900.00	4.170	163.00	1,897.16	-90.69	16.88	92.25	0.25	0.24	-0.87
2,000.00	4.120	166.40	1,996.89	-97.66	18.78	99.45	0.25	-0.05	3.40
2,100.00	3.260	167.68	2,096.69	-103.93	20.24	105.88	0.86	-0.86	1.28
2,200.00	1.950	169.31	2,196.58	-108.38	21.16	110.43	1.31	-1.31	1.63
2,300.00	1.290	142.14	2,296.54	-110.94	22.16	113.13	1.00	-0.66	-27.17
2,400.00	0.400	116.78	2,396.53	-111.99	23.17	114.35	0.94	-0.89	-25.36
2,500.00	0.420	245.86	2,496.53	-112.30	23.14	114.65	0.74	0.02	129.08
2,600.00	0.450	282.48	2,596.53	-112.36	22.43	114.58	0.27	0.03	36.62
2,700.00	0.760	251.00	2,696.52	-112.49	21.42	114.51	0.44	0.31	-31.48
2,800.00	0.660	241.79	2,796.51	-112.98	20.28	114.77	0.15	-0.10	-9.21
2,900.00	0.550	247.09	2,896.51	-113.44	19.33	115.04	0.12	-0.11	5.30
3,000.00	0.240	176.83	2,996.51	-113.84	18.90	115.35	0.52	-0.31	-70.26
3,100.00	0.230	148.63	3,096.51	-114.22	19.02	115.75	0.11	-0.01	-28.20
3,200.00	0.150	180.94	3,196.50	-114.52	19.12	116.06	0.13	-0.08	32.31
3,300.00	0.140	191.37	3,296.50	-114.77	19.09	116.30	0.03	-0.01	10.43
3,400.00	0.130	156.00	3,396.50	-114.99	19.12	116.53	0.08	-0.01	-35.37
3,500.00	0.190	194.68	3,496.50	-115.26	19.12	116.79	0.12	0.06	38.68
3,600.00	0.030	139.06	3,596.50	-115.44	19.09	116.96	0.17	-0.16	-55.62
3,700.00	0.480	349.97	3,696.50	-115.04	19.04	116.56	0.51	0.45	-149.09
3,800.00	0.650	11.45	3,796.50	-114.08	19.08	115.62	0.27	0.17	21.48
3,900.00	0.660	37.01	3,896.49	-113.06	19.54	114.71	0.29	0.01	25.56
4,000.00	0.580	32.22	3,996.49	-112.17	20.15	113.96	0.10	-0.08	-4.79
4,100.00	0.870	357.56	4,096.48	-110.98	20.39	112.84	0.51	0.29	-34.66
4,200.00	0.630	325.54	4,196.47	-109.77	20.05	111.58	0.47	-0.24	-32.02
4,300.00	0.230	5.28	4,296.47	-109.12	19.76	110.88	0.48	-0.40	39.74
4,400.00	0.300	44.23	4,396.47	-108.73	19.96	110.54	0.19	0.07	38.95
4,500.00	0.270	348.66	4,496.46	-108.31	20.09	110.16	0.27	-0.03	-55.57
4,600.00	0.610	24.15	4,596.46	-107.60	20.26	109.49	0.42	0.34	35.49
4,700.00	0.650	41.62	4,696.46	-106.69	20.86	108.71	0.20	0.04	17.47
4,800.00	0.960	22.48	4,796.45	-105.49	21.56	107.66	0.41	0.31	-19.14
4,900.00	1.000	320.85	4,896.43	-104.04	21.33	106.20	1.00	0.04	-61.63
5,000.00	1.110	336.33	4,996.42	-102.47	20.39	104.48	0.30	0.11	15.48
5,100.00	1.150	323.24	5,096.40	-100.78	19.40	102.63	0.26	0.04	-13.09
5,200.00	0.180	23.45	5,196.39	-99.84	18.86	101.60	1.07	-0.97	60.21

Directional Drilling Contractors
Survey Report



Company: Jay Bee Oil & Gas
Project: Tyler County, WV
Site: T1-03 Pad
Well: T1-03-1
Wellbore: Orig Hole
Design: As Drilled

Local Co-ordinate Reference: Well T1-03-1
TVD Reference: Well @ 723.00usft
MD Reference: Well @ 723.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
5,300.00	0.250	84.00	5,296.39	-99.67	19.14	101.49	0.23	0.07	60.55
5,350.00	0.250	96.97	5,346.39	-99.67	19.35	101.53	0.11	0.00	25.94
5,381.00	0.100	301.90	5,377.39	-99.66	19.40	101.53	1.11	-0.48	-500.23
5,425.00	0.100	87.30	5,421.39	-99.64	19.40	101.51	0.43	0.00	330.45
5,470.00	0.200	126.90	5,466.39	-99.69	19.51	101.58	0.31	0.22	88.00
5,514.00	0.400	164.70	5,510.39	-99.88	19.61	101.79	0.62	0.45	85.91
5,559.00	3.000	140.80	5,555.36	-100.95	20.39	102.98	5.87	5.78	-53.11
5,603.00	6.300	132.50	5,599.21	-103.47	22.90	105.94	7.63	7.50	-18.86
5,647.00	10.500	130.40	5,642.73	-107.70	27.74	111.01	9.57	9.55	-4.77
5,691.00	13.200	127.70	5,685.79	-113.37	34.77	117.92	6.26	6.14	-6.14
5,736.00	15.300	125.80	5,729.40	-119.99	43.65	126.11	4.78	4.67	-4.22
5,780.00	16.400	127.50	5,771.73	-127.17	53.29	134.99	2.71	2.50	3.86
5,824.00	17.600	132.00	5,813.81	-135.40	63.16	144.96	4.05	2.73	10.23
5,869.00	19.000	132.30	5,856.53	-144.88	73.63	156.26	3.12	3.11	0.67
5,913.00	23.100	131.10	5,897.59	-155.38	85.44	168.82	9.37	9.32	-2.73
5,958.00	26.400	130.60	5,938.45	-167.70	99.69	183.63	7.35	7.33	-1.11
6,002.00	29.200	128.40	5,977.37	-180.73	115.53	199.44	6.78	6.36	-5.00
6,047.00	32.300	124.30	6,016.04	-194.33	134.07	216.33	8.31	6.89	-9.11
6,091.00	34.800	122.60	6,052.71	-207.72	154.37	233.34	6.07	5.68	-3.86
6,136.00	38.700	122.30	6,088.76	-222.16	177.08	251.85	8.68	8.67	-0.67
6,180.00	42.600	122.30	6,122.13	-237.48	201.31	271.50	8.86	8.86	0.00
6,225.00	47.100	123.20	6,154.03	-254.65	227.99	293.44	10.10	10.00	2.00
6,270.00	51.500	123.60	6,183.37	-273.43	256.46	317.30	9.80	9.78	0.89
6,315.00	54.200	122.80	6,210.54	-293.06	286.47	342.30	6.16	6.00	-1.78
6,340.00	55.110	122.63	6,225.00	-304.08	303.63	356.39	3.68	3.64	-0.68
6,359.00	55.800	122.50	6,235.78	-312.51	316.82	367.17	3.68	3.63	-0.68
6,404.00	57.900	120.90	6,260.38	-332.30	348.87	392.71	5.54	4.67	-3.56
6,448.00	61.100	121.00	6,282.71	-351.79	381.38	418.04	7.28	7.27	0.23
6,492.00	63.300	122.30	6,303.23	-372.22	414.51	444.41	5.64	5.00	2.95
6,537.00	64.800	123.20	6,322.92	-394.11	448.54	472.38	3.79	3.33	2.00
6,569.96	65.020	122.98	6,336.90	-410.40	473.55	493.15	0.90	0.67	-0.67
6,581.00	65.100	122.90	6,341.56	-415.85	481.95	500.09	0.98	0.72	-0.72
6,626.00	69.100	123.80	6,359.06	-438.64	516.56	529.06	9.08	8.89	2.00
6,670.00	73.200	124.10	6,373.28	-461.89	551.10	558.47	9.34	9.32	0.68
6,715.00	76.000	123.30	6,385.23	-485.95	587.19	588.98	6.45	6.22	-1.78
6,759.00	78.800	124.70	6,394.82	-509.97	622.78	619.33	7.08	6.36	3.18
6,804.00	81.300	123.50	6,402.60	-534.81	659.48	650.72	6.15	5.56	-2.67
6,848.00	84.600	122.30	6,408.00	-558.53	696.14	680.98	7.97	7.50	-2.73
6,893.00	86.900	123.00	6,411.33	-582.73	733.92	711.95	5.34	5.11	1.56
6,937.00	90.200	123.60	6,412.45	-606.88	770.68	742.66	7.62	7.50	1.36
6,982.00	89.600	123.50	6,412.52	-631.75	808.18	774.22	1.35	-1.33	-0.22
7,026.00	89.800	122.40	6,412.75	-655.68	845.11	804.76	2.54	0.45	-2.50
7,071.00	89.800	125.90	6,412.91	-680.94	882.34	836.65	7.78	0.00	7.78

Directional Drilling Contractors

Survey Report



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Well: T1-03-1
Wellbore: Orig Hole
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7,115.00	90.200	130.30	6,412.91	-708.08	916.96	869.89	10.04	0.91	10.00
7,160.00	90.400	133.90	6,412.68	-738.25	950.34	905.87	8.01	0.44	8.00
7,204.00	90.100	134.90	6,412.48	-769.03	981.78	942.08	2.37	-0.68	2.27
7,249.00	88.600	134.00	6,412.99	-800.54	1,013.90	979.13	3.89	-3.33	-2.00
7,290.00	88.400	134.70	6,414.07	-829.19	1,043.20	1,012.84	1.78	-0.49	1.71
7,335.00	88.300	134.70	6,415.36	-860.83	1,075.18	1,050.00	0.22	-0.22	0.00
7,379.00	89.700	135.30	6,416.13	-891.94	1,106.28	1,086.47	3.46	3.18	1.36
7,424.00	89.500	135.00	6,416.45	-923.84	1,138.02	1,123.83	0.80	-0.44	-0.67
7,468.00	89.200	135.40	6,416.94	-955.06	1,169.02	1,160.39	1.14	-0.68	0.91
7,512.00	90.000	134.70	6,417.25	-986.20	1,200.11	1,196.88	2.42	1.82	-1.59
7,557.00	89.900	134.20	6,417.29	-1,017.71	1,232.23	1,233.94	1.13	-0.22	-1.11
7,601.00	89.800	134.20	6,417.41	-1,048.38	1,263.77	1,270.07	0.23	-0.23	0.00
7,645.00	90.100	131.40	6,417.44	-1,078.28	1,296.05	1,305.56	6.40	0.68	-6.36
7,690.00	90.200	131.10	6,417.33	-1,107.95	1,329.89	1,341.14	0.70	0.22	-0.67
7,734.00	87.700	131.90	6,418.13	-1,137.10	1,362.83	1,376.03	5.97	-5.68	1.82
7,779.00	87.800	131.40	6,419.90	-1,166.98	1,396.43	1,411.77	1.13	0.22	-1.11
7,824.00	88.300	131.50	6,421.43	-1,196.75	1,430.14	1,447.42	1.13	1.11	0.22
7,868.00	90.100	132.50	6,422.05	-1,226.19	1,462.83	1,482.55	4.68	4.09	2.27
7,912.00	90.500	133.20	6,421.82	-1,256.11	1,495.09	1,518.08	1.83	0.91	1.59
7,957.00	90.800	133.60	6,421.30	-1,287.03	1,527.79	1,554.66	1.11	0.67	0.89
8,002.00	90.500	133.30	6,420.79	-1,317.97	1,560.45	1,591.26	0.94	-0.67	-0.67
8,046.00	89.900	131.30	6,420.64	-1,347.58	1,592.99	1,626.53	4.75	-1.36	-4.55
8,090.00	89.500	131.10	6,420.87	-1,376.56	1,626.10	1,661.30	1.02	-0.91	-0.45
8,135.00	89.500	131.00	6,421.26	-1,406.12	1,660.03	1,696.77	0.22	0.00	-0.22
8,179.00	89.400	130.40	6,421.69	-1,434.81	1,693.39	1,731.30	1.38	-0.23	-1.36
8,223.00	89.500	130.20	6,422.11	-1,463.26	1,726.95	1,765.63	0.51	0.23	-0.45
8,267.00	89.700	129.70	6,422.42	-1,491.52	1,760.68	1,799.79	1.22	0.45	-1.14
8,312.00	89.500	130.10	6,422.73	-1,520.38	1,795.20	1,834.71	0.99	-0.44	0.89
8,356.00	89.600	130.20	6,423.08	-1,548.75	1,828.83	1,868.97	0.32	0.23	0.23
8,401.00	89.500	129.90	6,423.43	-1,577.71	1,863.27	1,903.96	0.70	-0.22	-0.67
8,445.00	89.000	130.60	6,424.00	-1,606.13	1,896.85	1,938.27	1.95	-1.14	1.59
8,489.00	88.700	132.40	6,424.89	-1,635.28	1,929.80	1,973.16	4.15	-0.68	4.09
8,533.00	88.500	132.10	6,425.96	-1,664.86	1,962.36	2,008.40	0.82	-0.45	-0.68
8,578.00	89.400	131.20	6,426.79	-1,694.76	1,995.98	2,044.16	2.83	2.00	-2.00
8,622.00	89.400	132.00	6,427.25	-1,723.97	2,028.88	2,079.11	1.82	0.00	1.82
8,665.00	89.700	131.30	6,427.59	-1,752.54	2,061.01	2,113.28	1.77	0.70	-1.63
8,709.00	89.400	131.60	6,427.93	-1,781.67	2,093.99	2,148.16	0.96	-0.68	0.68
8,753.00	89.700	131.40	6,428.28	-1,810.82	2,126.94	2,183.06	0.82	0.68	-0.45
8,798.00	89.700	132.60	6,428.51	-1,840.93	2,160.38	2,218.99	2.67	0.00	2.67
8,842.00	90.300	135.10	6,428.51	-1,871.41	2,192.11	2,254.96	5.84	1.36	5.68
8,886.00	90.400	134.80	6,428.24	-1,902.50	2,223.25	2,291.41	0.72	0.23	-0.68
8,931.00	90.200	134.10	6,428.01	-1,934.01	2,255.37	2,328.47	1.62	-0.44	-1.56
8,975.00	89.900	134.30	6,427.97	-1,964.68	2,286.91	2,364.60	0.82	-0.68	0.45
9,020.00	89.800	134.70	6,428.09	-1,996.22	2,319.01	2,401.68	0.92	-0.22	0.89

Directional Drilling Contractors

Survey Report



Company: Jay Bee Oil & Gas
Project: Tyler County, WV
Site: T1-03 Pad
Well: T1-03-1
Wellbore: Orig Hole
Design: As Drilled

Local Co-ordinate Reference: Well T1-03-1
TVD Reference: Well @ 723.00usft
MD Reference: Well @ 723.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Received
Office of Oil & Gas
DEC 14 2015

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)
9,064.00	90.000	134.50	6,428.16	-2,027.12	2,350.34	2,437.98	0.64	0.45	-0.45
9,109.00	90.900	134.20	6,427.81	-2,058.57	2,382.52	2,474.99	2.11	2.00	-0.67
9,154.00	90.800	135.20	6,427.14	-2,080.22	2,414.50	2,512.16	2.23	-0.22	2.22
9,198.00	91.300	133.50	6,426.34	-2,120.98	2,445.96	2,548.34	4.03	1.14	-3.86
9,242.00	91.300	130.60	6,425.34	-2,150.43	2,478.62	2,583.49	6.59	0.00	-6.59
9,287.00	90.500	130.30	6,424.63	-2,179.63	2,512.86	2,618.67	1.90	-1.78	-0.67
9,331.00	90.400	129.80	6,424.28	-2,207.94	2,546.54	2,652.88	1.16	-0.23	-1.14
9,376.00	88.800	129.70	6,424.60	-2,236.71	2,581.13	2,687.72	3.56	-3.56	-0.22
9,420.00	88.900	129.20	6,425.48	-2,264.66	2,615.10	2,721.64	1.16	0.23	-1.14
9,464.00	88.500	129.20	6,426.48	-2,292.46	2,649.19	2,755.43	0.91	-0.91	0.00
9,507.00	88.400	128.70	6,427.64	-2,319.48	2,682.62	2,788.32	1.19	-0.23	-1.16
9,551.00	88.500	128.10	6,428.84	-2,346.81	2,717.09	2,821.71	1.38	0.23	-1.36
9,596.00	88.900	128.40	6,428.86	-2,374.66	2,752.42	2,855.79	1.11	0.89	0.67
9,640.00	88.900	129.30	6,430.70	-2,402.25	2,786.68	2,889.41	2.05	0.00	2.05
9,684.00	89.200	129.40	6,431.43	-2,430.15	2,820.70	2,923.28	0.72	0.68	0.23
9,728.00	90.200	131.00	6,431.66	-2,458.55	2,854.30	2,957.56	4.29	2.27	3.64
9,773.00	90.500	131.90	6,431.39	-2,488.33	2,888.03	2,993.23	2.11	0.67	2.00
9,817.00	89.200	131.10	6,431.50	-2,517.49	2,920.98	3,028.13	3.47	-2.95	-1.82
9,862.00	89.100	131.10	6,432.17	-2,547.07	2,954.89	3,063.63	0.22	-0.22	0.00
9,906.00	89.400	130.50	6,432.74	-2,575.81	2,988.19	3,098.20	1.52	0.68	-1.36
9,951.00	89.300	130.10	6,433.25	-2,604.92	3,022.51	3,133.31	0.92	-0.22	-0.89
9,995.00	89.600	132.20	6,433.68	-2,633.87	3,055.64	3,168.05	4.82	0.68	4.77
10,040.00	89.500	131.80	6,434.03	-2,663.98	3,089.08	3,203.98	0.92	-0.22	-0.89
10,084.00	89.200	131.30	6,434.53	-2,693.16	3,122.01	3,238.91	1.33	-0.68	-1.14
10,128.00	88.600	132.60	6,435.37	-2,722.57	3,154.72	3,274.01	3.25	-1.36	2.95
10,172.00	88.600	132.80	6,436.45	-2,752.40	3,187.05	3,309.45	0.45	0.00	0.45
10,217.00	89.200	134.60	6,437.31	-2,783.48	3,219.58	3,346.17	4.22	1.33	4.00
10,261.00	89.800	134.50	6,437.70	-2,814.35	3,250.93	3,382.44	1.38	1.36	-0.23
10,306.00	90.000	135.30	6,437.78	-2,846.11	3,282.81	3,419.70	1.83	0.44	1.78
10,351.00	89.300	135.00	6,438.05	-2,878.01	3,314.54	3,457.07	1.69	-1.56	-0.67
10,395.00	89.500	134.20	6,438.51	-2,908.91	3,345.87	3,493.37	1.87	0.45	-1.82
10,440.00	90.400	134.20	6,438.55	-2,940.28	3,378.13	3,530.31	2.00	2.00	0.00
10,484.00	90.200	133.30	6,438.32	-2,970.70	3,409.91	3,566.24	2.10	-0.45	-2.05
10,529.00	90.300	131.90	6,438.12	-3,001.16	3,443.04	3,602.45	3.12	0.22	-3.11
10,573.00	90.600	132.40	6,437.78	-3,030.69	3,475.66	3,637.66	1.33	0.68	1.14
10,618.00	89.300	132.00	6,437.82	-3,080.91	3,508.99	3,673.68	3.02	-2.89	-0.89
10,662.00	88.400	131.30	6,438.70	-3,080.15	3,541.86	3,708.65	2.59	-2.05	-1.59
10,707.00	88.500	132.00	6,439.92	-3,120.04	3,575.47	3,744.40	1.57	0.22	1.56
10,751.00	89.100	132.60	6,440.84	-3,149.65	3,608.01	3,779.67	1.93	1.36	1.36
10,795.00	89.900	132.90	6,441.22	-3,179.52	3,640.32	3,815.14	1.94	1.82	0.68
10,840.00	90.600	132.90	6,441.03	-3,210.15	3,673.28	3,851.50	1.56	1.56	0.00
10,884.00	89.500	133.30	6,440.99	-3,240.21	3,705.41	3,887.14	2.66	-2.50	0.91
10,929.00	89.000	133.70	6,441.58	-3,271.18	3,738.05	3,923.76	1.42	-1.11	0.89

Directional Drilling Contractors

Survey Report



Company: Jay Bee Oil & Gas
 Project: Tyler County, WV
 Site: T1-03 Pad
 Well: T1-03-1
 Wellbore: Orig Hole
 Design: As Drilled

Local Co-ordinate Reference: Well T1-03-1
 TVD Reference: Well @ 723.00usft
 MD Reference: Well @ 723.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Received
 Office of Oil & Gas
 DEC 14 2015

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)
10,973.00	88.800	133.50	6,442.42	-3,301.52	3,769.91	3,959.62	0.64	-0.45	-0.45
11,017.00	88.200	133.50	6,443.57	-3,331.80	3,801.81	3,995.42	1.36	-1.36	0.00
11,062.00	88.600	133.00	6,444.83	-3,362.62	3,834.58	4,031.92	1.42	0.89	-1.11
11,106.00	88.500	132.90	6,445.94	-3,392.59	3,866.77	4,067.48	0.32	-0.23	-0.23
11,151.00	88.600	132.80	6,447.08	-3,423.18	3,899.75	4,103.80	0.31	0.22	-0.22
11,195.00	89.400	133.40	6,447.85	-3,453.24	3,931.87	4,139.43	2.27	1.82	1.36
11,239.00	90.300	134.80	6,447.97	-3,483.86	3,963.47	4,175.51	3.78	2.05	3.18
11,284.00	90.300	134.40	6,447.73	-3,515.46	3,995.51	4,212.64	0.89	0.00	-0.89
11,329.00	89.400	134.20	6,447.85	-3,546.89	4,027.72	4,249.63	2.05	-2.00	-0.44
11,373.00	89.700	133.90	6,448.19	-3,577.48	4,059.34	4,285.69	0.96	0.68	-0.68
11,418.00	89.900	133.90	6,448.35	-3,608.68	4,091.76	4,322.50	0.44	0.44	0.00
11,462.00	90.500	133.50	6,448.20	-3,639.08	4,123.57	4,358.40	1.64	1.36	-0.91
11,507.00	90.800	133.50	6,447.69	-3,670.05	4,156.21	4,395.03	0.67	0.67	0.00
11,551.00	90.000	132.30	6,447.38	-3,700.00	4,188.44	4,430.57	3.28	-1.82	-2.73
11,596.00	89.800	133.10	6,447.46	-3,730.52	4,221.52	4,466.84	1.83	-0.44	1.78
11,640.00	89.900	132.00	6,447.57	-3,760.28	4,253.93	4,502.22	2.51	0.23	-2.50
11,685.00	89.900	132.10	6,447.65	-3,790.42	4,287.34	4,538.18	0.22	0.00	0.22
11,729.00	90.100	132.00	6,447.65	-3,819.89	4,320.02	4,573.34	0.51	0.45	-0.23
11,774.00	89.700	131.10	6,447.73	-3,849.73	4,353.69	4,609.06	2.19	-0.89	-2.00
11,818.00	89.400	131.10	6,448.08	-3,878.66	4,386.85	4,643.77	0.68	-0.68	0.00
11,862.00	89.100	130.60	6,448.65	-3,907.43	4,420.13	4,678.36	1.33	-0.68	-1.14
11,907.00	89.000	129.70	6,449.40	-3,936.44	4,454.52	4,713.40	2.01	-0.22	-2.00
11,951.00	89.400	129.10	6,450.01	-3,964.37	4,488.52	4,747.29	1.64	0.91	-1.36
11,995.00	89.800	128.50	6,450.32	-3,991.94	4,522.81	4,780.89	1.64	0.91	-1.36
12,040.00	89.800	128.80	6,450.48	-4,020.04	4,557.95	4,815.18	0.67	0.00	0.67
12,084.00	90.000	128.50	6,450.55	-4,047.52	4,592.31	4,848.71	0.82	0.45	-0.68
12,128.00	90.400	127.60	6,450.40	-4,074.64	4,626.86	4,881.94	2.24	0.91	-2.05
12,159.00	90.000	127.90	6,450.29	-4,093.62	4,651.47	4,905.24	1.61	-1.29	0.97
12,213.00	90.000	127.90	6,450.29	-4,126.79	4,694.08	4,945.92	0.00	0.00	0.00
Projection to bit 12214.00 MD, 90.000 INC, 127.90 AZI, 6450.29 TVD									
12,214.00	90.000	127.90	6,450.29	-4,127.41	4,694.87	4,946.68	0.00	0.00	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,213.00	6,450.29	-4,126.79	4,694.08	Projection to bit 12214.00 MD, 90.000 INC, 127.90 AZI, 6450.29 TVD

Checked By: _____ Approved By: _____ Date: _____