



Jay-Bee Oil & Gas

Tyler County

Larry Pad

Larry 3

Wellbore #1

Design: Wellbore #1

QES Survey Report

11 September, 2018

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Survey Report



Company:	Jay-Bee Oil & Gas	Local Co-ordinate Reference:	Well Larry 3
Project:	Tyler County	TVD Reference:	well @ 734.0usft (Patterson #581)
Site:	Larry Pad	MD Reference:	well @ 734.0usft (Patterson #581)
Well:	Larry 3	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	Larry Pad				
Site Position:		Northing:	358,188.64 usft	Latitude:	39° 28' 30.707 N
From:	Map	Easting:	1,578,758.47 usft	Longitude:	80° 52' 50.681 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.88 °

Well	Larry 3					
Well Position	+N/-S	0.0 usft	Northing:	358,217.43 usft	Latitude:	39° 28' 30.992 N
	+E/-W	0.0 usft	Easting:	1,578,766.89 usft	Longitude:	80° 52' 50.579 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	713.4 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/17/2018	-8.55	66.64	51,903.87317353

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	188.46	

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Survey Program	Date	9/11/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
30.0	316.0	Ves Gyros (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
373.0	513.0	QES MWD Surveys (Wellbore #1)	OWSG MWD - Standard	OWSG 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	
30.0	0.42	16.33	30.0	0.1	0.0	-0.1	1.40	1.40	0.00	
60.0	0.19	355.90	60.0	0.3	0.1	-0.3	0.84	-0.77	-68.10	
90.0	0.23	155.90	90.0	0.3	0.1	-0.3	1.38	0.13	533.33	
120.0	0.58	178.89	120.0	0.0	0.1	-0.1	1.26	1.17	76.63	
150.0	1.12	180.64	150.0	-0.4	0.1	0.4	1.80	1.80	5.83	
180.0	1.50	184.62	180.0	-1.1	0.1	1.1	1.30	1.27	13.27	
210.0	1.85	183.95	210.0	-2.0	0.0	1.9	1.17	1.17	-2.23	
240.0	2.02	186.39	240.0	-3.0	-0.1	2.9	0.63	0.57	8.13	
270.0	2.25	193.38	269.9	-4.1	-0.3	4.1	1.16	0.77	23.30	



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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)	
300.0	2.23	201.21	299.9	-5.2	-0.6	5.2	1.02	-0.07	26.10	
OH Gyro Tie-In @ 316.0' MD / 315.9' TVD										
316.0	2.03	203.22	315.9	-5.7	-0.9	5.8	1.33	-1.25	12.56	
373.0	1.37	204.34	372.9	-7.3	-1.5	7.4	1.16	-1.16	1.96	
421.0	1.79	282.22	420.9	-7.6	-2.5	7.9	4.19	0.88	162.25	
OH TD @ 513.0' MD / 512.8' TVD										
513.0	2.00	330.00	512.8	-5.9	-4.7	6.6	1.68	0.23	51.93	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
316.0	315.9	-5.7	-0.9	OH Gyro Tie-In @ 316.0' MD / 315.9' TVD	
513.0	512.8	-5.9	-4.7	OH TD @ 513.0' MD / 512.8' TVD	

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