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Office of Oil and Gas
JUL 28 2025
WV Department of
Environmental Protection

MWD Survey Report

Client: Jay-Bee Oil & Gas Inc.
Field: McElroy
Well: Bashful 4H
UWI/API: 47-095-02880

Thursday, August 22, 2024 18:06:40

• Job Location & Elevation

Latitude	39°28'23.219" N	Longitude	80°43'15.442" W
Rig Type	land	Log Measured From	DrillFloor
Rig Floor Above GL	27.70 ft	Ground Level Above MSL	1202.00 ft
Depth Source	27.70 Driller depth		

• Tie In Point

TIP_MD	0.00 ft	TIP_NORTHING	0.00 ft
TIP_INC	0.00 deg	TIP_EASTING	0.00 ft
TIP_AZIM	0.00 deg	TIP_ROAZ	339.43 deg
TIP_TVD	0.00 ft	NORTH_REF	GridNorth

• MWD Survey Reference Criteria

Run 1			
Geomag Model	HDGM 2024	Calculation Date	13-Aug-2024
Location G	999.32 mgn	Magnetic dec (+E/W-)	-7.90 deg
Location B	51491.93 nT	Grid convergence (+E/W-)	-0.78 deg
Magnetic Dip	66.20 deg	GTotal az corr (+E/W-)	-7.12 deg

Survey List									
MD	Incl	Azim	TVD	V Sec	N/-S	E/-W	DLS	CLOSURE DISTANCE	CLOSURE AZIMUTH
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(deg/100ft)	(ft)	(deg)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.70	0.00	0.78	27.70	0.00	0.00	0.00	0.00	0.00	0.00
77.70	1.53	13.94	77.69	0.55	0.65	0.16	3.06	0.67	13.94
127.70	1.13	8.44	127.68	1.53	1.78	0.39	0.84	1.83	12.46
177.70	1.25	357.50	177.67	2.48	2.82	0.44	0.51	2.85	8.93
227.70	1.11	22.66	227.66	3.35	3.81	0.61	1.06	3.86	9.03
277.70	1.12	8.18	277.65	4.13	4.74	0.86	0.56	4.82	10.30
327.70	1.12	342.50	327.64	5.05	5.69	0.78	1.00	5.74	7.85
377.70	0.88	327.97	377.63	5.91	6.48	0.43	0.69	6.49	3.83
499.00	0.75	209.88	498.93	6.32	6.58	-0.46	1.15	6.60	356.04
591.00	1.84	240.54	590.90	5.71	5.33	-2.04	1.36	5.71	339.04
684.00	2.75	254.21	683.83	5.67	3.99	-5.49	1.14	6.79	306.02
776.00	3.42	257.81	775.69	6.25	2.81	-10.30	0.76	10.67	285.27
868.00	3.27	262.38	867.54	7.24	1.88	-15.58	0.33	15.69	276.89
961.00	2.23	260.90	960.43	8.19	1.25	-19.99	1.12	20.03	273.57
1053.00	1.01	260.83	1052.39	8.71	0.83	-22.56	1.33	22.58	272.12
1146.00	0.47	263.60	1145.38	8.96	0.66	-23.75	0.58	23.76	271.59
1238.00	0.37	245.01	1237.38	9.03	0.49	-24.39	0.18	24.40	271.16

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1330.00	0.33	245.31	1329.38	8.99	0.26	-24.90	0.04	24.91	270.59
1423.00	0.07	330.24	1422.38	9.03	0.19	-25.18	0.36	25.18	270.44
1515.00	0.39	13.59	1514.38	9.34	0.55	-25.13	0.37	25.14	271.25
1608.00	0.86	16.17	1607.37	10.16	1.53	-24.86	0.51	24.91	273.51
1701.00	1.36	31.52	1700.35	11.40	3.14	-24.09	0.62	24.29	277.42
1794.00	0.90	34.47	1793.34	12.50	4.68	-23.10	0.50	23.57	281.45
1887.00	0.62	2.81	1886.33	13.38	5.78	-22.66	0.53	23.39	284.32
1979.00	1.53	306.07	1978.31	14.86	7.00	-23.63	1.41	24.65	286.51
2072.00	2.29	294.83	2071.26	17.22	8.52	-26.32	0.91	27.66	287.93
2164.00	2.11	281.60	2163.19	19.43	9.63	-29.65	0.58	31.17	287.99
2257.00	2.04	269.52	2256.13	20.91	9.96	-32.98	0.48	34.45	286.80
2349.00	2.15	264.97	2348.07	21.94	9.79	-36.34	0.22	37.63	285.08
2439.00	2.35	257.88	2438.00	22.66	9.26	-39.82	0.38	40.88	283.09
2533.00	2.39	260.92	2531.92	23.33	8.54	-43.64	0.14	44.47	281.08
2625.00	0.75	252.24	2623.88	23.75	8.06	-46.11	1.80	46.81	279.91
2718.00	1.07	120.54	2716.88	23.10	7.43	-45.94	1.79	46.54	279.19
2810.00	1.79	107.08	2808.85	21.55	6.57	-43.83	0.86	44.32	278.53
2903.00	1.58	105.00	2901.81	19.92	5.81	-41.20	0.24	41.61	278.03
2995.00	1.30	94.16	2993.78	18.75	5.41	-38.93	0.42	39.31	277.91
3088.00	1.34	79.19	3086.76	18.12	5.54	-36.81	0.37	37.23	278.55
3180.00	1.32	63.75	3178.73	18.04	6.21	-34.81	0.39	35.36	280.11
3273.00	1.18	56.45	3271.71	18.36	7.21	-33.05	0.23	33.83	282.31
3365.00	1.09	45.53	3363.69	18.93	8.35	-31.63	0.25	32.72	284.78
3458.00	1.09	26.05	3456.67	19.90	9.76	-30.61	0.40	32.13	287.68
3550.00	1.02	8.62	3548.66	21.21	11.36	-30.11	0.36	32.18	290.67
3642.00	1.07	0.63	3640.64	22.73	13.03	-29.98	0.17	32.68	293.49
3735.00	0.58	2.58	3733.63	23.97	14.36	-29.94	0.53	33.21	295.63

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3827.00	1.07	197.57	3825.63	23.72	14.01	-30.18	1.78	33.28	294.90
3920.00	1.76	197.58	3918.60	21.92	11.82	-30.88	0.74	33.06	290.95
4012.00	1.69	192.47	4010.56	19.67	9.15	-31.60	0.18	32.89	286.15
4104.00	1.55	187.72	4102.52	17.44	6.59	-32.06	0.21	32.73	281.62
4197.00	1.97	216.02	4195.48	15.45	4.05	-33.17	1.02	33.41	276.97
4290.00	3.34	238.40	4288.38	14.05	1.34	-36.41	1.82	36.44	272.11
4382.00	4.98	251.42	4380.14	13.68	-1.34	-42.48	2.05	42.50	268.20
4475.00	6.42	257.60	4472.68	14.55	-3.74	-51.39	1.68	51.52	265.84
4567.00	7.00	261.75	4564.05	16.48	-5.65	-61.96	0.82	62.21	264.79
4659.00	7.31	264.44	4655.33	19.19	-7.02	-73.33	0.50	73.67	264.53
4752.00	8.37	265.97	4747.46	22.65	-8.07	-85.97	1.16	86.35	264.64
4844.00	9.85	271.38	4838.30	27.50	-8.35	-100.52	1.86	100.87	265.25
4938.00	11.24	270.58	4930.71	33.81	-8.06	-117.72	1.49	118.00	266.08
5030.00	12.03	266.62	5020.82	39.88	-8.54	-136.26	1.22	136.52	266.41
5123.00	13.92	265.63	5111.44	45.87	-9.96	-157.09	2.05	157.40	266.37
5215.00	14.69	265.63	5200.59	52.21	-11.69	-179.75	0.84	180.13	266.28
5308.00	13.26	261.86	5290.83	57.80	-14.10	-202.07	1.82	202.56	266.01
5400.00	13.61	261.82	5380.32	62.39	-17.14	-223.23	0.38	223.89	265.61
5493.00	15.15	266.77	5470.40	68.36	-19.38	-246.20	2.12	246.96	265.50
5585.00	15.63	267.93	5559.10	75.88	-20.50	-270.58	0.62	271.36	265.67
5678.00	15.99	268.67	5648.59	84.08	-21.25	-295.91	0.44	296.67	265.89
5770.00	16.07	268.42	5737.01	92.40	-21.90	-321.31	0.11	322.05	266.10
5862.00	15.57	267.48	5825.52	100.37	-22.79	-346.37	0.61	347.12	266.24
5955.00	14.48	265.45	5915.34	107.44	-24.26	-370.43	1.30	371.22	266.25
6008.00	13.34	263.86	5966.79	110.79	-25.44	-383.12	2.27	383.96	266.20
6101.00	14.70	269.25	6057.02	117.47	-26.75	-405.58	2.03	406.47	266.23
6193.00	14.54	268.57	6146.04	125.22	-27.19	-428.81	0.25	429.67	266.37

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6285.00	14.63	268.93	6235.07	132.88	-27.69	-451.97	0.14	452.82	266.49
6378.00	14.71	269.15	6325.04	140.79	-28.09	-475.52	0.11	476.35	266.62
6470.00	14.78	271.32	6414.01	149.10	-27.99	-498.93	0.61	499.72	266.79
6563.00	17.98	295.16	6503.33	163.82	-21.61	-523.82	7.93	524.26	267.64
6655.00	24.52	300.87	6589.03	188.95	-5.76	-553.09	7.46	553.12	269.40
6748.00	31.09	306.71	6671.26	224.29	18.53	-588.95	7.64	589.25	271.80
6840.00	38.28	314.33	6746.90	270.17	52.71	-628.45	9.11	630.66	274.79
6933.00	45.42	322.96	6816.19	328.14	99.38	-669.10	9.85	676.44	278.45
7025.00	51.83	331.78	6877.03	395.55	157.52	-706.01	10.01	723.37	282.58
7118.00	60.08	334.81	6929.06	472.10	226.34	-740.52	9.28	774.33	287.00
7210.00	67.00	337.26	6970.03	554.27	301.57	-773.90	7.88	830.58	291.29
7302.00	73.46	340.18	7001.14	640.78	382.20	-805.26	7.63	891.36	295.39
7395.00	77.15	341.02	7024.74	730.70	467.04	-835.13	4.06	956.86	299.22
7487.00	79.85	340.58	7043.08	820.82	552.17	-864.78	2.98	1026.03	302.56
7579.00	87.32	338.28	7053.35	912.17	637.69	-896.89	8.49	1100.48	305.41
7672.00	88.58	340.60	7056.68	1005.10	724.70	-929.53	2.83	1178.65	307.94
7764.00	88.69	339.72	7058.87	1097.07	811.22	-960.74	0.97	1257.42	310.18
7857.00	88.47	338.46	7061.18	1190.04	898.06	-993.93	1.37	1339.55	312.10
7949.00	90.03	338.29	7062.38	1282.01	983.58	-1027.82	1.71	1422.62	313.74
8042.00	90.48	339.37	7061.97	1375.00	1070.30	-1061.40	1.26	1507.36	315.24
8135.00	90.28	340.07	7061.36	1468.00	1157.54	-1093.63	0.78	1592.46	316.63
8228.00	90.94	340.85	7060.37	1560.98	1245.18	-1124.72	1.10	1677.94	317.91
8320.00	91.17	340.63	7058.68	1652.94	1332.02	-1155.06	0.35	1763.07	319.07
8413.00	90.94	340.59	7056.97	1745.90	1419.73	-1185.93	0.25	1849.88	320.13
8505.00	90.91	341.93	7055.49	1837.84	1506.84	-1215.48	1.45	1935.96	321.11
8598.00	90.51	341.26	7054.34	1930.77	1595.07	-1244.85	0.84	2023.34	322.03
8690.00	90.44	341.30	7053.58	2022.72	1682.20	-1274.37	0.09	2110.41	322.85

8783.00	90.32	341.51	7052.97	2115.66	1770.34	-1304.03	0.26	2198.77	323.62
8875.00	90.25	341.20	7052.51	2207.60	1857.51	-1333.44	0.35	2286.57	324.33
8968.00	90.40	341.53	7051.98	2300.55	1945.64	-1363.16	0.39	2375.65	324.98
9060.00	90.50	341.38	7051.25	2392.49	2032.86	-1392.42	0.20	2464.01	325.59
9153.00	90.48	341.71	7050.46	2485.42	2121.07	-1421.86	0.35	2553.55	326.16
9245.00	89.75	341.19	7050.28	2577.36	2208.29	-1451.13	0.96	2642.41	326.69
9338.00	89.72	341.14	7050.70	2670.32	2296.31	-1481.15	0.07	2732.55	327.18
9430.00	89.97	341.03	7050.95	2762.28	2383.34	-1510.97	0.29	2821.94	327.63
9523.00	90.15	340.27	7050.85	2855.26	2471.09	-1541.79	0.85	2912.62	328.04
9615.00	90.42	340.55	7050.38	2947.24	2557.76	-1572.64	0.43	3002.55	328.41
9708.00	90.44	340.33	7049.69	3040.23	2645.39	-1603.77	0.24	3093.57	328.77
9800.00	90.35	340.31	7049.05	3132.21	2732.01	-1634.75	0.09	3183.76	329.10
9892.00	90.71	340.76	7048.20	3224.19	2818.75	-1665.41	0.63	3273.98	329.42
9985.00	90.38	341.85	7047.31	3317.14	2906.84	-1695.21	1.22	3365.04	329.75
10077.00	90.26	341.25	7046.79	3409.07	2994.11	-1724.33	0.66	3455.14	330.06
10170.00	90.25	340.78	7046.37	3502.04	3082.05	-1754.59	0.51	3546.49	330.35
10262.00	90.28	340.76	7045.95	3594.01	3168.91	-1784.88	0.03	3637.01	330.61
10355.00	89.75	341.26	7045.93	3686.97	3256.85	-1815.15	0.78	3728.52	330.87
10447.00	90.12	340.54	7046.03	3778.94	3343.79	-1845.25	0.88	3819.14	331.11
10540.00	89.85	342.18	7046.05	3871.89	3431.90	-1874.98	1.79	3910.69	331.35
10632.00	90.00	341.46	7046.17	3963.81	3519.31	-1903.68	0.80	4001.19	331.59
10725.00	90.43	342.75	7045.82	4056.70	3607.81	-1932.25	1.46	4092.66	331.83
10817.00	90.45	346.25	7045.11	4148.32	3696.45	-1956.83	3.80	4182.45	332.10
10909.00	90.95	346.06	7043.99	4239.68	3785.77	-1978.84	0.59	4271.75	332.40
11002.00	89.88	347.34	7043.32	4331.93	3876.27	-2000.23	1.80	4361.93	332.71
11095.00	90.33	346.41	7043.15	4424.14	3966.84	-2021.34	1.11	4452.15	333.00
11187.00	90.40	346.09	7042.56	4515.49	4056.20	-2043.20	0.36	4541.75	333.26

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11280.00	90.95	346.42	7041.46	4607.82	4146.54	-2065.30	0.69	4632.41	333.52
11372.00	90.64	346.13	7040.18	4699.16	4235.90	-2087.12	0.47	4722.17	333.77
11465.00	90.54	345.78	7039.23	4791.55	4326.11	-2109.69	0.39	4813.11	334.00
11557.00	90.35	347.43	7038.51	4882.82	4415.60	-2131.01	1.81	4902.93	334.24
11650.00	90.45	346.35	7037.86	4975.03	4506.18	-2152.10	1.16	4993.71	334.47
11742.00	90.43	345.89	7037.16	5066.40	4595.49	-2174.17	0.51	5083.85	334.68
11835.00	90.46	345.90	7036.43	5158.81	4685.68	-2196.83	0.04	5175.10	334.88
11927.00	90.40	345.79	7035.74	5250.23	4774.88	-2219.33	0.13	5265.45	335.07
12020.00	90.45	346.32	7035.05	5342.61	4865.14	-2241.75	0.57	5356.77	335.26
12112.00	89.93	345.54	7034.74	5434.01	4954.38	-2264.11	1.01	5447.21	335.44
12205.00	90.42	345.33	7034.45	5526.50	5044.39	-2287.50	0.58	5538.82	335.61
12297.00	90.18	345.39	7033.96	5618.01	5133.40	-2310.76	0.27	5629.51	335.77
12389.00	89.33	346.45	7034.35	5709.42	5222.63	-2333.14	1.48	5720.09	335.93
12482.00	89.65	345.74	7035.18	5801.78	5312.90	-2355.49	0.84	5811.65	336.09
12574.00	89.52	345.31	7035.86	5893.26	5401.98	-2378.48	0.48	5902.42	336.24
12667.00	89.74	345.77	7036.46	5985.73	5492.03	-2401.70	0.54	5994.21	336.38
12759.00	89.56	345.10	7037.02	6077.22	5581.07	-2424.84	0.75	6085.08	336.52
12852.00	89.58	346.42	7037.72	6169.65	5671.21	-2447.72	1.42	6176.89	336.65
12945.00	89.09	347.84	7038.80	6261.80	5761.86	-2468.43	1.61	6268.35	336.81
13037.00	89.47	345.08	7039.96	6353.09	5851.29	-2489.97	3.02	6359.05	336.95
13130.00	90.31	345.55	7040.14	6445.60	5941.25	-2513.54	1.03	6451.08	337.07
13222.00	90.17	346.19	7039.76	6537.02	6030.47	-2536.00	0.71	6542.01	337.19
13315.00	90.11	346.81	7039.53	6629.31	6120.90	-2557.71	0.67	6633.80	337.32
13407.00	89.97	343.73	7039.47	6720.82	6209.86	-2581.10	3.35	6724.91	337.43
13500.00	90.40	345.37	7039.17	6813.45	6299.50	-2605.87	1.82	6817.20	337.53
13593.00	90.52	345.11	7038.43	6905.97	6389.43	-2629.57	0.31	6909.37	337.63
13685.00	90.59	344.76	7037.54	6997.54	6478.26	-2653.48	0.39	7000.63	337.73

13778.00	90.47	344.92	7036.68	7090.12	6568.02	-2677.80	0.22	7092.92	337.82
13870.00	90.25	345.06	7036.10	7181.69	6656.88	-2701.63	0.28	7184.21	337.91
13963.00	90.23	346.84	7035.70	7274.08	6747.09	-2724.21	1.91	7276.30	338.01
14055.00	90.28	345.88	7035.30	7365.41	6836.49	-2745.91	1.04	7367.34	338.12
14178.00	90.29	345.10	7034.68	7487.72	6955.56	-2776.74	0.64	7489.34	338.24
14241.00	90.25	345.03	7034.38	7550.41	7016.43	-2792.98	0.13	7551.89	338.29
14333.00	90.06	345.66	7034.13	7641.92	7105.44	-2816.26	0.72	7643.20	338.38
14426.00	90.08	346.24	7034.01	7734.32	7195.66	-2838.84	0.63	7735.40	338.47
14518.00	90.02	345.70	7033.93	7825.72	7284.91	-2861.15	0.59	7826.63	338.56
14611.00	89.61	345.57	7034.23	7918.18	7375.00	-2884.23	0.47	7918.93	338.64
14703.00	89.59	345.32	7034.87	8009.67	7464.04	-2907.35	0.27	8010.28	338.72
14796.00	89.65	346.12	7035.48	8102.10	7554.17	-2930.28	0.86	8102.59	338.80
14888.00	89.52	345.61	7036.15	8193.52	7643.38	-2952.75	0.57	8193.90	338.88
15073.00	90.10	345.44	7036.77	8377.47	7822.51	-2998.98	0.33	8377.68	339.02
15165.00	90.09	345.68	7036.61	8468.95	7911.60	-3021.92	0.25	8469.09	339.10
15257.00	90.32	344.96	7036.29	8560.46	8000.60	-3045.24	0.82	8560.55	339.16
15350.00	90.11	345.40	7035.94	8652.99	8090.50	-3069.03	0.52	8653.04	339.23
15442.00	89.90	345.94	7035.94	8744.44	8179.64	-3091.80	0.63	8744.47	339.29
15535.00	89.63	347.71	7036.32	8836.67	8270.19	-3113.00	1.92	8836.67	339.37
15627.00	89.91	346.24	7036.69	8927.87	8359.81	-3133.74	1.63	8927.87	339.45
15720.00	89.73	348.09	7036.98	9020.02	8450.49	-3154.40	2.00	9020.03	339.53
15765.00	89.79	347.10	7037.17	9064.56	8494.43	-3164.07	2.20	9064.59	339.57
15800.00	89.79	347.10	7037.30	9099.25	8528.55	-3171.88	0.01	9099.29	339.60

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