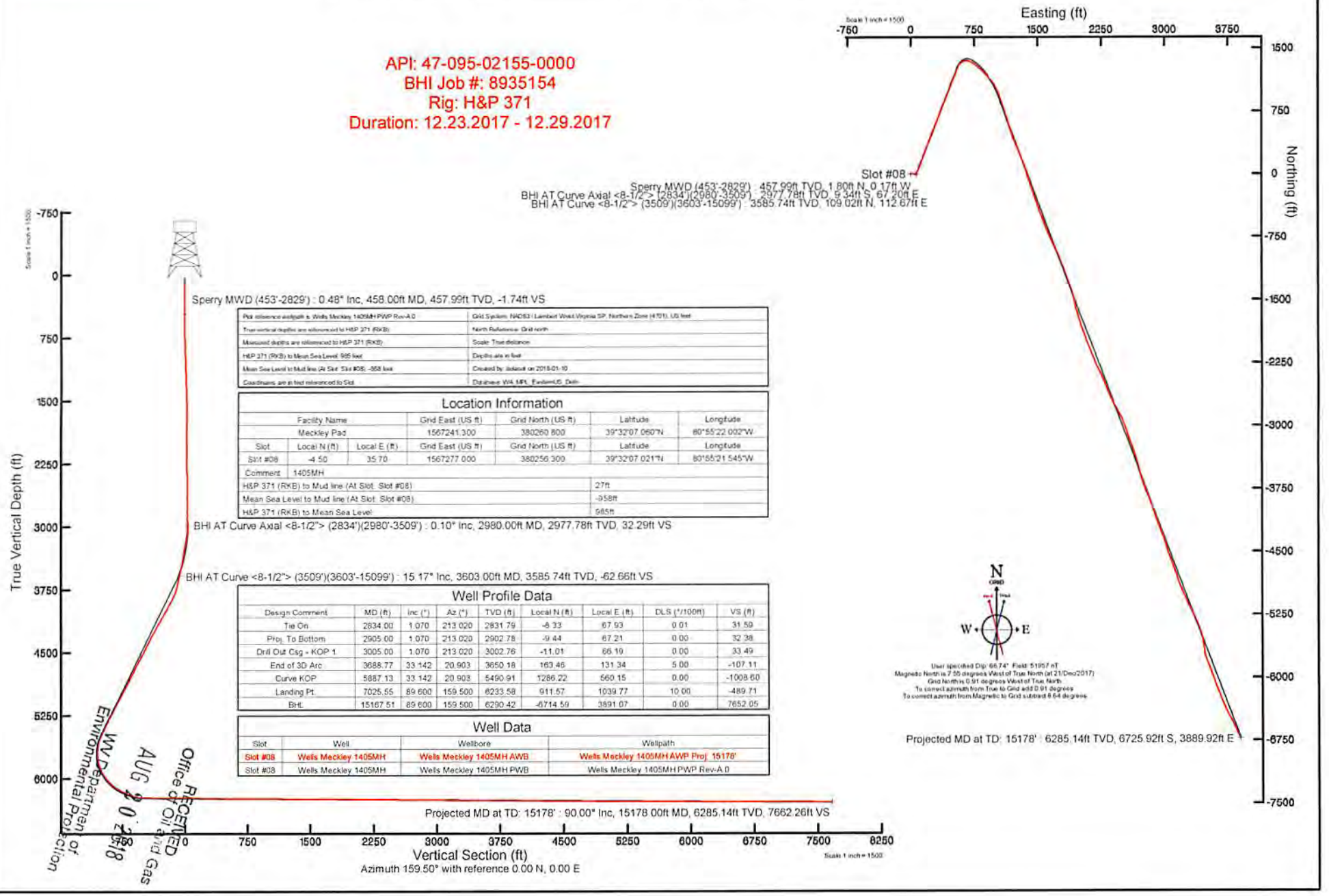
BLUE RIDGE MOUNTAIN RESOURCES

Location: Tyler County, WV
Field: Tyler
Facility: Meckley Pad
Slot: Slot #08
Well: Wells Meckley 1405MH
Wellbore: Wells Meckley 1405MH PWB

API: 47-095-02155-0000
BHI Job #: 8935154
Rig: H&P 371
Duration: 12.23.2017 - 12.29.2017



Plot reference wellpath is Wells Meckley 1405MH PWP Rev-A.0	Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet
True vertical depths are referenced to H&P 371 (RKB)	North Reference: Grid north
Measured depths are referenced to H&P 371 (RKB)	Scale: True distance
H&P 371 (RKB) to Mean Sea Level: 985 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: Slot #08): -958 feet	Created by: dalland on 2018-01-10
Coordinates are in feet referenced to Slot	Database: WA_MPL_EasternUS_Def

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Meckley Pad			1567241.300	380260.800	39°32'07.060"N	80°55'22.002"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #08	-4.50	35.70	1567277.000	380256.300	39°32'07.021"N	80°55'21.545"W
Comment	1405MH					
H&P 371 (RKB) to Mud line (At Slot: Slot #08)					27ft	
Mean Sea Level to Mud line (At Slot: Slot #08)					-958ft	
H&P 371 (RKB) to Mean Sea Level					985ft	

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2834.00	1.070	213.020	2831.79	-8.33	67.93	0.01	31.59
Proj. To Bottom	2905.00	1.070	213.020	2902.78	-9.44	67.21	0.00	32.38
Drill Out Csg - KOP 1	3005.00	1.070	213.020	3002.76	-11.01	66.19	0.00	33.49
End of 3D Arc	3688.77	33.142	20.903	3650.18	163.46	131.34	5.00	-107.11
Curve KOP	5887.13	33.142	20.903	5490.91	1286.22	560.15	0.00	-1008.60
Landing Pt.	7025.55	89.600	159.500	6233.58	911.57	1039.77	10.00	-489.71
BHL	15167.51	89.600	159.500	6290.42	-6714.59	3891.07	0.00	7652.05

Well Data

Slot	Well	Wellbore	Wellpath
Slot #08	Wells Meckley 1405MH	Wells Meckley 1405MH AWB	Wells Meckley 1405MH AWP Proj. 15178'
Slot #08	Wells Meckley 1405MH	Wells Meckley 1405MH PWB	Wells Meckley 1405MH PWP Rev-A.0

02/15/2019

ACTUAL WELLPATH REPORT (CSV version)
Prepared by Baker Hughes
Software System: WellArchitect® 5.1

REFERENCE WELLPATH IDENTIFICATION
Operator BLUE RIDGE MOUNTAIN RESOURCES
Area Tyler County, WV
Field Tyler
Facility Meckley Pad
Slot Slot #03
Well Wells Meckley 1405MH
Wellbore Wells Meckley 1405MH AWB
Wellpath Wells Meckley 1405MH AWP Proj: 15178'
Sidetrack (none)

REPORT SETUP INFORMATION
Projection NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet
North Refe Grid
Scale 0.999942
Convergen 0.91° West
Software S WellArchitect® 5.1
User Delaset
Report Ger 10/Jan/2018 at 11:46
DataBase/T WA_MPL_EasternUS_Defn/ev1120.xml

WELLPATH	Local North [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Locatio	-4.5	35.7	1567277	380256.3	39°32'07.0	80°55'21.545"W
Facility Ref			1567241	380260.8	39°32'07.0	80°55'22.002"W
Field Refer			600000	0	38°24'00.3	84°16'35.572"W

WELLPATH DATUM
Calculation Minimum curvature
Horizontal Slot
Vertical Re H&P 371 (RKB)
MD Refere H&P 371 (RKB)
Field Vertic Mean Sea Level
H&P 371 (F 27.00ft
H&P 371 (F 985.00ft
H&P 371 (F 27.00ft
Section Ori N 0.00, E 0.00 ft
Section Azi 159.50°

WELLPATH DATA * = interpolated/extrapolated station

	MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dis [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
*	0	0	354.56	0	0	0	0	1567277	380256.3	39°32'07.0	80°55'21.5	0	0	0	0	0	
	27	0	354.56	27	0	0	0	1567277	380256.3	39°32'07.0	80°55'21.5	0	0	0	0	0	
	458	0.48	354.56	457.99	-1.74	1.8	-0.17	1567277	380258.1	39°32'07.0	80°55'21.5	1.81	354.56	0.11	0.11	-1.26	Sperry MWD (453'-2829')
	550	3.56	92.46	549.98	-1.63	2.13	1.04	1567278	380258.4	39°32'07.0	80°55'21.5	2.37	26.132	1.84	1.17	106.41	
	642	2.92	95.53	641.91	-0.11	1.85	4.63	1567282	380258.2	39°32'07.0	80°55'21.4	4.98	68.234	1.48	1.48	3.34	
	735	3.34	93.88	734.77	2.05	1.44	9.69	1567287	380257.7	39°32'07.0	80°55'21.4	9.79	81.569	0.46	0.45	-1.77	
	827	3.78	94.96	826.59	4.46	0.99	15.38	1567292	380257.3	39°32'07.0	80°55'21.3	15.42	86.309	0.48	0.48	1.17	
	914	3.83	93.38	913.4	6.87	0.57	21.14	1567298	380256.9	39°32'07.0	80°55'21.2	21.15	88.447	0.13	0.06	-1.82	
	1002	4.18	90.81	1001.19	9.22	0.35	27.28	1567304	380256.7	39°32'07.0	80°55'21.1	27.28	89.255	0.45	0.4	-2.92	
	1089	4.37	86.39	1087.95	11.34	0.52	33.76	1567311	380256.8	39°32'07.0	80°55'21.1	33.76	89.12	0.44	0.22	-5.08	
	1176	4.93	84.58	1174.66	13.27	1.08	40.79	1567318	380257.4	39°32'07.0	80°55'21.0	40.8	88.483	0.67	0.64	-2.08	
	1263	4.39	91.05	1261.37	15.47	1.37	47.84	1567325	380257.7	39°32'07.0	80°55'20.9	47.86	88.357	0.87	0.62	7.44	
	1351	4.4	96.07	1349.11	18.22	0.95	54.56	1567332	380257.3	39°32'07.0	80°55'20.8	54.57	88.999	0.44	0.01	5.7	
	1438	2.76	104.02	1435.94	20.9	0.09	59.92	1567337	380256.4	39°32'07.0	80°55'20.7	59.92	89.911	1.97	-1.89	9.14	
	1525	1.26	123.31	1522.89	22.85	0.94	62.75	1567340	380255.4	39°32'07.0	80°55'20.7	62.75	90.858	1.87	-1.72	22.17	
	1612	0.5	143.55	1609.87	23.99	-1.77	63.77	1567341	380254.5	39°32'07.0	80°55'20.7	63.8	91.59	0.93	-0.87	23.26	
	1700	0.55	171.58	1697.87	24.77	-2.5	64.06	1567341	380253.8	39°32'07.0	80°55'20.7	64.11	92.232	0.29	0.06	31.85	
	1787	0.2	165.04	1784.87	25.33	-3.06	64.16	1567341	380253.2	39°32'07.0	80°55'20.7	64.24	92.727	0.4	-0.4	-7.52	
	1874	0.38	114.11	1871.87	25.69	-3.32	64.47	1567341	380253	39°32'06.9	80°55'20.7	64.55	92.949	0.34	0.21	-58.54	
	1961	0.49	103.99	1958.87	26.1	-3.53	65.09	1567342	380252.8	39°32'06.9	80°55'20.7	65.19	93.103	0.15	0.13	-11.63	
	2049	0.68	98.93	2046.86	26.57	-3.7	65.97	1567343	380252.6	39°32'06.9	80°55'20.7	66.07	93.211	0.22	0.22	-5.75	
	2136	0.67	101.45	2133.86	27.09	-3.88	66.93	1567344	380252.4	39°32'06.9	80°55'20.6	67.09	93.317	0.04	-0.01	2.9	
	2223	0.7	87.96	2220.85	27.53	-3.96	68.01	1567345	380252.3	39°32'06.9	80°55'20.6	68.12	93.336	0.19	0.03	-15.51	
	2311	0.67	70.69	2308.84	27.71	-3.77	69.03	1567346	380252.5	39°32'06.9	80°55'20.6	69.13	93.13	0.24	-0.03	19.62	
	2398	0.56	75.13	2395.84	27.76	-3.5	69.92	1567347	380252.8	39°32'06.9	80°55'20.6	70.01	92.864	0.14	-0.13	5.1	
	2485	0.31	169.68	2482.84	28.04	-3.62	70.38	1567347	380252.7	39°32'06.9	80°55'20.6	70.47	92.945	0.76	-0.29	108.68	
	2573	0.76	198.89	2570.83	28.72	-4.41	70.23	1567347	380251.9	39°32'06.9	80°55'20.6	70.37	93.59	0.58	0.51	33.19	
	2660	1.02	209.85	2657.82	29.66	-5.62	69.66	1567347	380250.7	39°32'06.9	80°55'20.6	69.88	94.616	0.36	0.3	12.6	
	2747	1.07	213.68	2744.81	30.63	-6.97	68.82	1567346	380249.3	39°32'06.9	80°55'20.6	69.17	95.784	0.1	0.06	4.4	
	2834	1.07	213.02	2831.79	31.59	-8.33	67.93	1567345	380248	39°32'06.9	80°55'20.6	68.44	96.99	0.01	0	-0.76	
	2980	0.1	4.64	2977.78	32.29	-9.34	67.2	1567344	380247	39°32'06.9	80°55'20.6	67.84	97.917	0.79	0.66	103.85	BHI AT Curve Axial <8 1/2"> (2934')(2980'-3509')
	3037	3.29	10.58	3034.75	30.84	-7.69	67.5	1567345	380248.6	39°32'06.9	80°55'20.6	67.94	96.497	5.6	5.6	10.42	
	3132	10.74	9.57	3128.97	20.83	3.74	69.47	1567346	380260	39°32'07.0	80°55'20.6	69.58	86.921	7.84	7.84	-1.06	
	3226	13.47	21.57	3220.89	5.12	22.56	74.96	1567352	380278.9	39°32'07.2	80°55'20.5	78.28	73.248	3.94	2.9	12.77	
	3320	14.83	35.58	3312.06	-9.73	42.53	85.99	1567363	380298.8	39°32'07.4	80°55'20.4	95.93	63.68	3.91	1.45	14.9	
	3414	15.35	22.91	3402.85	-25.48	61.78	97.83	1567375	380320.1	39°32'07.6	80°55'20.3	116.79	56.897	3.55	0.55	-13.48	
	3509	13.96	15.51	3494.76	-43.89	86.41	105.79	1567383	380342.7	39°32'07.8	80°55'20.2	136.6	50.758	2.45	-1.46	-7.79	
	3603	15.17	18.22	3585.74	-62.66	109.02	112.67	1567390	380365.3	39°32'08.1	80°55'20.1	156.78	45.943	1.48	1.29	2.88	BHI AT Curve <8 1/2"> (3509')(3603'-15099')
	3697	16.62	21.34	3676.15	-82.27	133.23	121.41	1567398	380389.5	39°32'08.3	80°55'20.0	180.25	42.343	1.79	1.54	3.32	
	3791	23.47	19.41	3764.4	-106.67	163.44	132.53	1567410	380419.7	39°32'08.6	80°55'19.8	210.42	39.039	7.32	7.29	-2.05	
	3886	32.13	16.22	3848.36	-141.5	205.62	145.9	1567423	380461.9	39°32'09.0	80°55'19.7	252.13	35.359	9.25	9.12	-3.16	
	3980	36.72	22.03	3925.9	-182.28	255.71	163.44	1567440	380512	39°32'09.5	80°55'19.5	303.48	32.585	6	4.88	6.18	
	4074	36.76	22.62	4001.22	-223.52	307.73	184.8	1567462	380564	39°32'10.0	80°55'19.2	358.95	30.986	0.38	0.04	0.63	
	4168	35.73	19.89	4077.04	-264.96	359.5	204.96	1567482	380615.8	39°32'10.6	80°55'19.0	411.81	29.688	2.04	-1.1	-2.9	
	4262	36.68	17.81	4152.89	-307.9	412.05	222.88	1567500	380668.3	39°32'11.1	80°55'18.7	468.47	28.41	1.65	1.01	-2.21	
	4356	36.06	20	4228.58	-350.97	464.78	240.93	1567518	380721.1	39°32'11.6	80°55'18.5	523.51	27.402	1.53	-0.66	2.33	
	4450	35.52	23.09	4304.84	-391.78	515.9	261.11	1567538	380772.2	39°32'12.1	80°55'18.3	578.21	26.845	2.01	-0.57	3.29	
	4544	35.37	23.63	4381.42	-431.09	565.94	282.72	1567560	380822.2	39°32'12.6	80°55'18.0	632.63	26.545	0.37	-0.16	0.57	
	4639	35.09	22.36	4459.02	-470.84	616.38	304.13	1567581	380872.7	39°32'13.1	80°55'17.7	687.33	26.262	0.83	-0.29	-1.34	
	4733	34.72	19.1	4536.12	-511.28	666.67	323.17	1567600	380922.9	39°32'13.6	80°55'17.5	740.87	25.862	2.02	-0.39	-3.47	
	4827	33.29	18.69	4614.04	-551.9	716.41	340.2	1567617	380972.7	39°32'14.1	80°55'17.3	793.08	25.401	1.54	-1.52	-0.44	
	4922	34.29	20.95	4692.99	-592.17	766.1	358.12	1567635	381022.4	39°32'14.6	80°55'17.1	845.67	25.054	1.69	1.05	2.38	
	5016	35.6	24.01	4770.05	-631.53	815.83	378.72	1567656	381072.1	39°32'15.1	80°55'16.8	899.45	24.902	2.33	1.39	3.26	
	5111	35.7	24.47	4847.25	-670.86	866.31	401.46	1567678	381122.6	39°32'15.6	80°55'16.5	954.81	24.863	0.3	0.11	0.48	
	5205	35.18	20.83	4923.84	-710.6	916.59	422.45	1567699	381172.8	39°32'16.1	80°55'16.3	1009.26	24.745	2.31	0.55	-3.87	
	5300	34.94	18.15	5001.61	-752.4	968.02	440.66	1567718	381224.3	39°32'16.6	80°55'16.1	1063.6	24.476	1.64	-0.25	-2.82	
	5394	34.73	23.01	5078.78	-792.85	1018.26	459.51	1567736	381274.5	39°32'17.1	80°55'15.8	1117.14	24.288	2.96	-0.22	5.17	
	5488	34.35	21.79	5156.21	-831.89	1067.53	479.82	1567757	381323.8	39°32'17.6	80°55'15.6	1170.41	24.202	0.84	-0.4	-1.3	
	5582	34.16	20.19	5233.81	-871.62	1117.05	498.82	1567776	381373.3	39°32'18.1	80°55'15.4	1223.37	24.063	0.96	0.01	-1.7	
	5677	33.94	22.24	5312.43	-911.43	1166.76	518.11	1567795	381423	39°32'18.6	80°55'15.1	1276.63	23.944	1.29	0.44	2.16	

5771	33 9	20 53	5390.44	-950.48	1215.6	537.24	1567814	381471.8	39°32'19.1	80°55'14.9	1329.03	23.843	1.02	-0 04	-1 82	
5865	32 66	19 69	5469.02	-989 63	1264.03	554 98	1567832	381520 3	39°32'19 5	80°55'14 7	1350 5	23.704	1.41	-1.32	-0 89	
5960	23 09	31 02	5552.96	-1020 89	1304.25	573 27	1567850	381560 5	39°32'19 9	80°55'14 4	1424 68	23 727	11.47	-10 07	11 93	
6054	25 51	54 06	5638 82	-1037 79	1332	599 22	1567876	381588 2	39°32'20 2	80°55'14 1	1460 58	24 221	10 34	2 57	24 51	
6148	23 81	75 93	5724 42	-1041 05	1348 53	634 09	1567911	381604 8	39°32'20 4	80°55'13 7	1490 16	25 183	9 82	-1 81	23 27	
6242	25 32	94 43	5810 04	-1030 45	1351 59	672 59	1567950	381607 8	39°32'20 4	80°55'13 2	1509 7	26 456	8 31	1 61	19 68	
6336	31 92	116 05	5892 73	-1003 84	1339 08	715 12	1567992	381595 3	39°32'20 3	80°55'12 6	1518 07	28 104	12 96	7 02	23	
6431	38 96	126 87	5970 15	-960 35	1310 06	761 68	1568039	381566 3	39°32'20 0	80°55'12 0	1515 4	30 174	9 9	7 41	11 39	
6525	46 92	132 95	6038 94	-904 64	1268 86	810 55	1568088	381525 1	39°32'19 6	80°55'11 4	1505 65	32 571	9 54	8 47	6 47	
6619	55 79	135 45	6097 59	-838 3	1217 66	861 05	1568140	381473 9	39°32'19 1	80°55'10 7	1492 5	35 328	9 66	9 44	2 66	
6713	62 77	138 14	6145 59	-763 78	1158 76	918 29	1568195	381415	39°32'18 6	80°55'10 0	1478 5	38 396	7 82	7 43	2 86	
6507	67 02	144 22	6185 49	-683 02	1092 45	971 54	1568248	381348 7	39°32'17 9	80°55'09 3	1461 96	41 647	7 4	4 52	6 47	
6901	74 93	154 66	6216 19	-595 71	1016 01	1016 44	1568293	381272 3	39°32'17 2	80°55'08 7	1437 16	45 012	13 45	8 41	11 31	
6995	89 38	159 93	6228 99	-502 93	930 34	1052 21	1568329	381186 6	39°32'16 3	80°55'08 3	1404 52	48 518	16 34	15 37	5 61	
7089	89 66	161 48	6229 78	-403 96	841 63	1083 27	1568360	381097 9	39°32'15 5	80°55'07 8	1371 79	52 155	1 68	0 3	1 65	
7184	89 6	162 31	6230 39	-314 05	751 33	1112 79	1568390	381007 6	39°32'14 6	80°55'07 4	1342 68	55 974	0 88	-0 06	0 87	
7278	89 54	162 51	6231 1	-220 17	661 73	1141 19	1568418	380918	39°32'13 7	80°55'07 1	1319 17	59 892	0 22	-0 06	0 21	
7372	89 63	164 29	6231 78	-126 39	571 65	1168 05	1568445	380827 9	39°32'12 8	80°55'06 7	1300 43	63 922	1 9	0 1	1 89	
7466	89 57	162 36	6232 43	-32 61	481 61	1195 02	1568472	380737 9	39°32'11 9	80°55'06 3	1288 42	68 05	2 05	-0 06	-2 05	
7560	89 35	157 1	6233 32	61 35	393 47	1227 57	1568505	380649 8	39°32'11 1	80°55'05 9	1289 09	72 228	5 6	-0 23	-5 6	
7654	89 48	156 35	6234 28	155 24	307 12	1264 71	1568542	380563 4	39°32'10 2	80°55'05 4	1301 47	76 35	0 81	0 14	-0 8	
7748	88 98	159 34	6235 54	249 18	220 08	1300 15	1568577	380476 4	39°32'09 3	80°55'04 9	1318 65	80 392	3 22	-0 53	3 18	
7842	88 89	161 79	6237 29	343 14	131 46	1331 42	1568608	380387 8	39°32'08 5	80°55'04 5	1337 9	84 361	2 61	-0 1	2 61	
7937	89 05	162 21	6239	438 01	41 13	1360 78	1568638	380297 4	39°32'07 6	80°55'04 1	1361 4	88 269	0 47	0 17	0 44	
8031	89 17	161 83	6240 46	531 93	-48 27	1389 79	1568667	380208	39°32'06 7	80°55'03 7	1390 63	91 989	0 42	0 13	-0 4	
8125	89 57	160 28	6241 49	625 89	-137 17	1420 3	1568697	380119 1	39°32'05 8	80°55'03 3	1426 91	95 517	1 7	0 43	-1 65	
8219	89 63	161 18	6242 15	719 85	-225 9	1451 32	1568728	380030 4	39°32'05 0	80°55'02 9	1468 8	98 847	0 96	0 06	0 96	
8314	89 57	161 76	6242 81	814 8	-315 93	1481 51	1568758	379940 3	39°32'04 1	80°55'02 5	1514 84	102 04	0 61	-0 06	0 61	
8408	89 48	160 28	6243 59	908 76	-404 86	1512 03	1568789	379851 5	39°32'03 2	80°55'02 1	1565 35	104 989	1 58	-0 1	-1 57	
8502	89 72	158 57	6244 25	1002 76	-492 86	1545 12	1568822	379763 5	39°32'02 3	80°55'01 7	1621 82	107 692	1 84	0 26	-1 82	
8596	89 85	158 74	6244 6	1096 75	-580 41	1579 33	1568856	379675 9	39°32'01 5	80°55'01 2	1682 61	110 179	0 23	0 14	0 18	
8691	89 88	158 9	6244 82	1191 74	-668 99	1613 66	1568891	379587 4	39°32'00 6	80°55'00 8	1746 83	112 518	0 17	0 03	0 17	
8785	89 63	155 99	6245 23	1285 67	-755 79	1649 71	1568927	379500 6	39°31'59 8	80°55'00 3	1814 59	114 614	3 11	-0 27	-3 1	
8879	89 75	154 2	6245 74	1379 39	-841 05	1689 29	1568966	379415 3	39°31'58 9	80°54'59 8	1887 03	116 467	1 91	0 13	-1 9	
8973	89 85	154 02	6246 06	1472 97	-925 61	1730 33	1569007	379330 7	39°31'58 1	80°54'59 2	1962 35	118 144	0 22	0 11	-0 19	
9067	89 78	158 55	6246 37	1566 8	-1011 65	1768 13	1569045	379244 7	39°31'57 3	80°54'58 7	2037 09	119 776	4 82	-0 07	4 82	
9161	89 57	158 93	6246 9	1660 79	-1099 25	1802 21	1569079	379157 1	39°31'56 4	80°54'58 3	2111	121 381	0 46	-0 22	0 4	
9255	89 45	160 23	6247 7	1754 78	-1187 34	1835 01	1569112	379069	39°31'55 5	80°54'57 8	2185 64	122 905	1 39	-0 13	1 38	
9350	89 48	158 61	6248 59	1849 77	-1276 27	1868 4	1569145	378980 1	39°31'54 7	80°54'57 4	2262 69	124 336	1 71	0 03	-1 71	
9444	89 38	161 8	6249 53	1943 75	-1364 7	1900 23	1569177	378891 7	39°31'53 8	80°54'57 0	2339 5	125 685	3 4	-0 11	3 39	
9539	89 2	167 47	6250 71	2038 32	-1456 26	1925 39	1569202	378800 1	39°31'52 9	80°54'56 6	2414 03	127 102	5 97	-0 19	5 97	
9633	89 26	166 99	6251 97	2131 46	-1547 93	1946 16	1569223	378709 5	39°31'52 0	80°54'56 3	2486 69	128 458	0 51	0 06	0 51	
9727	89 54	163 5	6252 95	2224 97	-1638 81	1970 1	1569247	378617 6	39°31'51 1	80°54'56 0	2562 61	129 755	3 72	0 3	-3 71	
9821	89 69	162 6	6253 58	2318 78	-1728 72	1997 5	1569274	378527 7	39°31'50 2	80°54'55 7	2641 68	130 874	0 97	0 16	-0 96	
9916	89 6	161 83	6254 17	2413 67	-1819 18	2026 52	1569303	378437 2	39°31'49 3	80°54'55 3	2723 27	131 914	0 82	-0 09	-0 81	
10010	89 54	161 25	6254 88	2507 61	-1908 34	2056 28	1569333	378348 1	39°31'48 4	80°54'54 9	2805 36	132 863	0 62	-0 06	-0 62	
10104	89 48	159 28	6255 68	2601 6	-1996 81	2088 02	1569365	378259 6	39°31'47 6	80°54'54 4	2889 13	133 721	2 1	-0 06	-2 1	
10199	89 63	158 52	6256 42	2696 59	-2085 44	2122 22	1569399	378171	39°31'46 7	80°54'54 0	2975 37	134 499	0 82	0 16	-0 8	
10293	89 51	157 5	6257 13	2790 55	-2172 59	2157 41	1569434	378083 8	39°31'45 8	80°54'53 5	3061 8	135 201	1 09	-0 13	-1 09	
10387	89 48	157 03	6257 95	2884 48	-2259 29	2193 74	1569471	377997 2	39°31'45 0	80°54'53 0	3149 11	135 843	0 5	-0 03	0 5	
10481	89 45	155 52	6258 83	2978 32	-2345 34	2231 56	1569508	377911 1	39°31'44 1	80°54'52 5	3237 35	136 424	1 61	-0 03	-1 61	
10575	89 57	155 92	6259 64	3072 11	-2431 02	2270 21	1569547	377825 4	39°31'43 3	80°54'52 0	3326 21	136 959	0 44	0 13	0 43	
10670	89 63	159 4	6260 3	3167 05	-2518 87	2306 31	1569583	377737 6	39°31'42 4	80°54'51 6	3415 23	137 522	3 66	0 06	3 66	
10764	89 42	157 29	6261 08	3261 02	-2606 23	2341	1569618	377650 2	39°31'41 6	80°54'51 1	3503 24	138 069	2 26	-0 22	-2 24	
10359	89 57	152 95	6261 92	3355 71	-2692 39	2380 95	1569658	377564 1	39°31'40 7	80°54'50 6	3594 15	138 513	4 57	0 16	-4 57	
10952	89 42	149 38	6262 74	3447 71	-2773 84	2425 8	1569703	377482 6	39°31'39 9	80°54'50 0	3684 93	138 829	3 84	-0 16	-3 84	
11047	89 45	150 41	6263 67	3541 38	-2856 02	2473 45	1569750	377400 5	39°31'39 1	80°54'49 4	3778 2	139 106	1 03	0 03	1 03	
11141	89 48	158 23	6264 55	3634 92	-2940 67	2514 15	1569791	377315 8	39°31'38 3	80°54'48 8	3868 91	139 471	8 32	0 03	8 32	
11235	89 42	163 55	6265 46	3728 85	-3029 45	2544 91	1569822	377227	39°31'37 4	80°54'48 4	3956 53	139 968	5 66	-0 06	5 66	
11329	89 6	159 89	6266 26	3822 76	-3118 69	2574 39	1569851	377137 5	39°31'36 6	80°54'48 0	4043 97	140 461	3 9	0 19	-3 89	
11423	89 57	159 69	6266 94	3916 76	-3206 9	2606 86	1569884	377049 6	39°31'35 7	80°54'47 6	4132 79	140 893	0 22	-0 03	-0 21	
11518	89 51	160 56	6267 7	4011 75	-3296 24	2639 15	1569916	376960 3	39°31'34 8	80°54'47 2	4222 6	141 317	0 92	-0 06	0 92	
11612	89 51	164 44	6268 51	4105 6	-3385 87	2667 41	1569944	376870 6	39°31'33 9	80°54'46 8	4310 36	141 769	4 13	0	4 13	
11706	89 45	166 41	6269 36	4199 09	-3476 83	2691 07	1569968	376779 7	39°31'33 0	80°54'46 5	4396 61	142 26	2 1	-0 06	2 1	
11801	89 66	164 38	6270 1	4293 58	-3568 76	2715 02	1569992	376687 8	39°31'32 1	80°54'46 1	4484 12	142 737	2 15	0 22	-2 14	
11895	89 38	161 87	6270 89	4387 38	-3658 7	2742 3	1570019	376597 8	39°31'31 2	80°54'45 8	4572 34	143 147	2 69	-0 3	-2 67	
11989	89 6	158 33	6271 72	4481 35	-3747 07	2774 29	1570051	376509 5	39°31'30 4	80°54'45 3	4662 32	143 484	3 77	0 23	-3 77	
12083	89 57	157 5	6272 4	4575 31	-3834 17	2809 63	1570086	376422 4	39°31'29 5	80°54'44 9	4753 41	143 766	0 88	-0 03	-0 88	
12178	89 63	158 91	6273 07	4670 28	-3922 37	2844 9	1570122	376334 2	39°31'28 7	80°54'44 4	4845 46	144 047	1 49	0 06	1 48	
12272	89 51	163 04	6273 77	4764 23	-4011 22	2875 54	1570152	376245 3	39°31'27 8	80°54'44 0	4935 44	144 364	4 4	-0 13	4 39	
12367	89 35	161 31	6274 72	4859 12	-4101 65	2904 62	1570181	376154 9	39°31'26 9	80°54'43 6	5025 96	144 695	1 83	-0 17	-1 82	
12461	89 38	158 96	6275 76	4953 1	-4190 04	2936 55	1570213	376066 5	39°31'26 0	80°54'43 2	5116 62	144 976	2 5	0 03	-2 5	
12555	89 66	157 58	6276 55	5047 07	-4277 36	2971 35	1570248	375979 2	39°31'25 2	80°54'42 7	5203 14	145 213	1 5	0 3	-1 47	
12649	89 45	163 21	6277 28	5141 02	-4365 87	3002 88	1570280	375890 7	39°31'24 3	80°54'42 3	5298 88	145 479	5 99	-0 22	5 99	
12744	89 57	163 4	6278 09	5235 81	-4456 86	3030 17	1570307	375799 7	39°31'23 4	80°54'41 9	5389 39	145 789	0 24	0 13	0 2	
12838	89 97	159 36	6278 47	5329 74	-4545 92	3060 18	1570337	375710 7	39°31'22 5	80°54'41 5	5479 97	146 053	4 32	0 43	-4 3	
12932	90 4	158 97	6278 16	5423 73	-4633 78	3093 61	1570370	375622 8	39°31'21 7	80°54'41 1	5571 56	146 272	0 62	0 46	-0 41	
13026	89 69	161 48	6278 09	5517 72	-4722 22	3125 41	1570402	375534 4	39°31'20 8	80°54'40 7	5662 83	146 501	2 77	-0 76	2 67	
13120	89 72	161 45	6278 57	5611 66	-4811 35	3155 29	1570432	375445 2	39°31'19 9	80°54'40 3	5753 69	146 743	0 05	0 03	-0 03	
13214	89 78	159 14	6278 98	5705 65	-4899 84	3186 98	1570464	375356 8	39°31'19 0	80°54'39 8	5845 11	146 959	2 46	0 06	-2 46	
13308	89 82	157 16	6279 31	5799 61	-4987 08	3221 97	1570499	375269 5	39°31'18 2	80°54'39 4	5937 34	147 135	2 11	0 04	-2 11	
13402	89 78	156 03	6279 64	5893 49	-5073 34	3259 31	1570536	375183 3	39°31'17 3	80°54'38 9	6030 08	147 282	1 2	-0 04	-1 2	
13496	89 72	154 5	6280 05	5987 23	-5158 71	3298 64	1570575	375097 9	39°31'16 5	80°54'38 4	6123 18	147 404	1 63	-0 06	-1 63	
13590	89 82	154 12	6280 43	6080 85	-5243 42	3339 38	1570616	375013 2	39°31'15 7	80°54'37 8	6216 51	147 508	0 42	0 11	0 4	
13685	89 6	156 93	6280 91	6175 61	-5329 88	3378 74	1570656	374926 7	39°31'14 8	80°54'37 3	6310 58	147 628	2 97	-0 23	2 96	
13779	89 63	159 37	6281 54	6269 57	-5417 11	3413 72	1570691	374839 5	39°31'14 0	80°54'36 8	6403 02	147 782	2 6	0 03	2 6	
13873	89 72	165 84	6282 03	6363 38	-5506 77	3441 81	1570719	374749 9	39°31'13 1	80°54'36 5	6493 83	147 994	6 88	0 1	6 88	
13967	90 22	172 5	6282 12	6455 99	-5599 04	3459 46	1570736	374657 6	39°31'12 2	80°54'36 2	6581 57	148 289	7 11	0 53	7 09	
14062	89 75	171 21	6282 15	6548 79	-5693 03	3472 92	1570750	374563 6	39°31'11 3	80°54'36 0	6668 76	148 616	1 45	-0 49	-1 36	
14156	89 75	159 83	6282 56	6642 11	-5783 95	3496 34	1570773	374472 7	39°31'10 4	80°54'35 7	6758 59	148 847	12 05	0	-12 05	
14251	89 82	159 88	6282 92	6737 11	-5872 87	3529 8	1570507	374383 8	39°31'09 5	80°54'35 3	6852 01	148 993	1 06	0 07	-1 05	
14345	89 91	160 36	6283 14	6831 11	-5960 98	3562 53	1570339	374295 7	39°31'08 6	80°54'34 8	6944 42	149 136	1 58	0 1	1 57	
14440	90	161 16	6283 21	6926 09	-6050 67	3593 84	1570371	374206	39°31'07 7	80°54'34 4	7037 49	149 292	0 85	0 09	0 84	
14534	89 94	157 54	6283 26	7020 07	-6138 62	3626 93	1570904	374118 1	39°31'06 9	80°54'34 0	7130 05	149 423	3 85	-0 06	-3 85	
14628	89 94	158 54	6283 36	7114 04	-6225 8	3662 13	1570939	374030 9	39°31'06 0	80°54'33 5	7223	149 535	1 06	0	1 06	
14722	89 72	158 43	6283 64	7208 02	-6313 24	3696 62	1570973	373943 4	39°31'05 2	80°54'33 1	7313 88	149 65	0 27	0 23	-0 14	
14816	89 66	155 49	6284 15	7301 92	-6399 73	3733 42	1571010	373857	39°31'04 3	80°54'32 6	7409 11	149 742	3 11	0 06	-3 11	
14910	89 75	150 86	6284 63	7395 32	-6483 59	3775 83	1571053	373773 1	39°31'03 5	80°54'32 0	7502 92	149 785	4 93	0 1	4 93	
15005	89 82	154 12	6284 99	7489 6	-6567 83	3819 7	1571096	373688 9	39°31'02 7	80°54'31 4	7597 8	149 819	3 43	0 07	3 43	
15099	90	156 77	6285 14	7583 35	-6653 32	3858 76	1571136	373603 4	39°31'01 8	80°54'30 9	7691 34	149 887	2 83	0 19	2 82	
15178	90	156 77	6285 14	7662 26	-6725 92	3889 92	1571167	373530 8	39°31'01 1	80°54'30 5	7769 78	149 957	0	0	0	Projected MD at TD: 15178'

HOLE AND CASING SECTIONS Ref Wellbore: Wells Meckley 1405MH AWB Ref Wellpath: Wells Meckley 1405MH AWP Proj: 15178'

String/Diar	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Condu	27	100	73	27	100	0	0	0.05	0
17.5in Ope	100	400	300	100	400	0.05	0	1.35	0.13

13.375in C	27	400	373	27	400	0	0	1.35	-0.13
12.25in Op	400	2882.22	2482.22	400	2880.01	1.35	-0.13	-8.95	67.52
9.625in Cas	27	2882.22	2855.22	27	2880.01	0	0	-8.95	67.52
8.5in Open	2882.22	15177	12294.78	2880.01	6285.14	-8.95	67.52	-6725	3889.53
5.5in Casin	27	15177	15150	27	6285.14	0	0	6725	3889.53

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [ft]	Grid North [US ft]	Latitude [US ft]	Longitude	Shape	Comment
1405MHLI	6233.58	911.57	1039.77	1568317	381167.8	39°32'16.1	80°55'08.4	point	
1405MHBI	6290.42	-6714.59	3891.07	1571168	373542.1	39°31'01.2	80°54'10.5	point	

WELLPATH COMPOSITION Ref Wellbore: Wells Meckley 1405MH AWB Ref Wellpath: Wells Meckley 1405MH AWP Proj: 15178'

Log Name/	Start MD [ft]	End MD [ft]	Pos Unc Model
01_Sperry	27	2834	ISCWSA MWD, Rev. 4 (Standard)
02_BH AT (	2834	3509	BHI AutoTrak Curve (Axial)
03_BH AT (	3509	15099	BHI AutoTrak Curve (Short)
Projection	15099	15178	Blind Drilling (std)

COMMENTS

Wellpath general comments
API: 47 095-02155-0000
BHI Job #: 8935154
Rig: H&P 371
Duration: 12.23.2017 - 12.29.2017
Sperry MWD (4'-2829')
BHI AT Curve Axial <8 1/2> (2834'-2950'-3509'
BHI AT Curve <8-1/2> (3509'-3601'-15099'
Projected MD at TD: 15178'