BIT # 21   SMITH F2   BIT DIAMETER : 12.25 inch   NOZZ 16/16/16

MUD RHEOLOGICAL PARAMETERS : PV = 13 YP = 14 GEL = 5

466523

Time	Measured feet	Vertcl feet	Lagged feet	ROP ft/h	WOB klbs	RPM rpm	TORQ ftlb	PRESS psi	FLOW IN gpm	PIT VOL bbls	DENS IN	DENS OUT	TEMP IN	TEMP OUT	RES IN	RES OUT	GAS	DCG	NORM	PF	ECD	FRAC	FEET	TIME	COST
14:0	8228.1	8225.1	8170.0	47.7	34.6	94	3400	1923	530	572	9.2	9.6	87.7	103.4	.84	.81	7	1.22	1.49	10.6	9.3	16.2	335.1	8.57	184
14:2	8229.6	8225.1	8170.0	47.7	31.4	95	3300	1919	538	572	9.2	9.5	87.6	103.3	.84	.81	7	1.22	1.49	10.6	9.3	16.2	335.1	8.59	184
14:3	8230.1	8227.1	8170.0	35.6	33.2	96	3400	1919	539	574	9.2	9.5	87.6	103.2	.84	.82	7	1.28	1.49	10.6	9.3	16.1	337.1	8.61	183
14:5	8231.4	8228.4	8171.0	31.5	34.8	93	3400	1914	539	577	9.2	9.3	87.5	102.8	.84	.83	7	1.33	1.49	9.8	9.3	16.1	338.4	8.65	183
14:6	8232.2	8229.1	8171.0	36.6	35.0	93	3500	1919	530	578	9.2	9.3	87.4	102.6	.84	.82	7	1.29	1.49	10.1	9.3	16.1	339.1	8.67	183
14:8	8233.0	8230.0	8172.0	27.3	33.6	93	3600	1919	534	579	9.2	9.3	87.3	103.0	.85	.82	7	1.38	1.49	9.5	9.3	15.9	340.0	8.69	183
14:9	8234.1	8231.1	8172.0	98.7	34.0	103	3400	1923	534	579	9.2	9.3	87.3	103.0	.84	.81	7	1.03	1.49	10.2	9.3	16.1	341.1	8.70	182
14:10	8235.3	8232.3	8172.0	56.1	36.2	95	3400	1919	534	585	9.2	9.3	87.2	102.9	.84	.81	7	1.10	1.49	10.2	9.3	16.1	342.3	8.72	182
14:11	8236.8	8232.3	8175.0	56.1	.0	0	-200	1876	539	585	9.2	9.3	87.2	102.4	.84	.81	7	1.10	1.49	10.2	9.3	16.1	342.3	8.74	182
14:20	8237.4	8233.8	8179.0	75.5	33.2	87	3100	1933	539	607	9.2	9.3	86.7	102.4	.85	.82	7	1.06	1.49	10.2	9.3	16.1	343.8	8.79	181
14:20	8238.0	8234.4	8179.0	13.9	32.8	88	3100	1919	539	605	9.2	9.2	86.7	102.6	.85	.82	7	1.52	1.49	10.2	9.3	16.1	344.4	8.80	181
14:22	8239.1	8236.1	8181.0	41.2	31.9	89	3100	1923	539	599	9.2	9.2	86.7	101.9	.85	.82	7	1.23	1.49	10.5	9.3	16.2	346.1	8.83	181
14:24	8240.1	8237.1	8181.0	35.8	31.9	87	3200	1923	534	575	9.2	9.2	86.5	102.4	.85	.82	7	1.26	1.49	10.3	9.3	16.1	347.1	8.86	181
14:25	8241.1	8237.1	8183.0	35.8	36.4	87	3200	1914	534	591	9.2	9.2	86.5	102.4	.85	.82	7	1.26	1.49	10.3	9.3	16.1	347.1	8.88	181
14:26	8242.2	8239.2	8183.0	119.5	33.9	86	3400	1919	524	591	9.2	9.3	86.6	102.5	.85	.81	7	.95	1.49	10.2	9.3	16.1	349.2	8.89	180
14:27	8243.2	8239.2	8183.0	119.5	36.0	86	3400	1919	543	589	9.2	9.3	86.6	102.4	.85	.83	7	.95	1.49	10.2	9.3	16.1	349.2	8.92	180
14:28	8244.2	8241.2	8186.0	104.5	35.2	88	3200	1914	539	589	9.2	9.2	86.5	102.6	.85	.82	7	.84	1.49	10.2	9.3	16.1	351.2	8.93	179
14:30	8245.0	8242.0	8186.0	21.7	35.0	88	3100	1919	537	585	9.2	9.2	86.7	103.3	.84	.82	7	1.43	1.49	10.2	9.3	16.1	352.0	8.96	179
14:32	8246.7	8242.0	8189.0	21.7	31.8	89	3200	1919	536	583	9.2	9.2	86.8	103.4	.84	.83	7	1.43	1.49	10.2	9.3	16.1	352.0	9.00	179
14:33	8247.3	8244.0	8189.0	24.1	34.3	88	3200	1919	534	581	9.2	9.2	86.9	103.4	.84	.82	7	1.38	1.49	9.4	9.3	15.9	354.0	9.01	179
14:34	8248.3	8244.0	8191.0	24.1	31.6	89	3300	1919	534	581	9.2	9.3	87.0	103.4	.84	.82	7	1.38	1.49	9.4	9.3	15.9	354.0	9.02	179
14:35	8249.7	8245.3	8191.0	92.7	36.7	89	3300	1919	534	581	9.2	9.2	87.0	103.1	.84	.82	7	1.02	1.49	10.2	9.3	16.1	355.3	9.04	178
14:37	8250.0	8247.0	8193.0	14.5	33.4	89	3100	1919	537	579	9.2	9.2	87.1	103.3	.84	.82	7	1.54	1.49	10.2	9.3	16.1	357.0	9.07	178
14:37	8251.0	8247.0	8193.0	14.5	32.7	88	3100	1914	534	581	9.2	9.2	87.3	103.0	.84	.83	7	1.54	1.49	10.2	9.3	16.1	357.0	9.08	178
14:39	8252.0	8249.0	8193.0	30.2	29.3	90	3100	1919	539	581	9.2	9.2	87.3	102.6	.84	.83	7	1.31	1.49	9.9	9.3	16.1	359.0	9.12	177
14:41	8253.4	8250.4	8195.0	54.3	32.6	88	3300	1919	534	577	9.2	9.2	87.4	103.0	.84	.83	7	1.13	1.49	10.2	9.3	16.1	360.4	9.14	177
14:42	8254.3	8251.1	8195.0	35.4	32.4	86	3300	1923	539	581	9.2	9.2	87.4	103.2	.84	.83	7	1.27	1.49	10.3	9.3	16.1	361.1	9.16	177
14:43	8255.0	8252.0	8197.0	39.8	30.8	74	3000	1919	534	583	9.2	9.2	87.6	103.0	.84	.83	7	1.22	1.49	10.6	9.3	16.2	362.0	9.18	177
14:46	8256.1	8252.0	8199.0	39.8	33.1	87	3100	1914	533	587	9.2	9.2	87.7	102.7	.84	.83	7	1.22	1.49	10.6	9.3	16.2	362.0	9.23	177
14:47	8257.2	8254.2	8199.0	80.1	34.5	88	3000	1919	539	585	9.2	9.2	87.8	102.9	.84	.83	7	1.06	1.49	10.2	9.3	16.1	364.2	9.24	176
14:50	8258.3	8255.3	7328.0	22.5	35.9	88	3200	1919	539	585	9.2	9.2	87.9	102.7	.84	.84	7	1.40	1.49	10.2	9.3	16.1	365.3	9.29	176
14:51	8259.2	8256.2	7328.0	62.8	35.9	89	3400	1923	543	587	9.2	9.2	87.9	102.7	.84	.83	7	1.13	1.49	10.2	9.3	16.1	366.2	9.30	176
14:52	8260.3	8257.3	8193.0	78.0	34.7	88	3300	1914	538	585	9.2	9.2	88.0	102.8	.84	.83	7	1.05	1.49	10.2	9.3	16.1	367.3	9.32	175
14:53	8261.2	8258.0	8193.0	36.6	36.7	88	3300	1914	533	585	9.2	9.2	88.0	102.3	.84	.84	7	1.29	1.49	10.1	9.3	16.1	368.2	9.34	175
14:55	8262.0	8259.0	8204.0	28.9	30.8	88	3100	1919	539	583	9.2	9.2	88.1	102.6	.84	.84	7	1.33	1.49	9.8	9.3	16.0	369.0	9.37	175
14:57	8263.1	8260.1	8204.0	26.2	29.0	88	3100	1919	534	585	9.2	9.2	88.2	102.5	.84	.84	7	1.33	1.49	9.8	9.3	16.0	370.1	9.41	175
14:59	8264.0	8260.1	8207.0	26.2	29.0	87	3200	1923	534	581	9.2	9.2	88.3	102.6	.84	.84	7	1.33	1.49	9.8	9.3	16.0	370.1	9.44	175
15:0	8265.3	8262.3	8207.0	74.5	27.3	88	3100	1923	539	579	9.2	9.2	88.4	102.7	.84	.84	7	1.01	1.49	10.2	9.3	16.1	372.3	9.46	174
15:2	8266.4	8262.3	8210.0	74.5	24.7	88	3200	1928	534	579	9.2	9.2	88.4	102.5	.84	.84	7	1.01	1.49	10.2	9.3	16.1	372.3	9.49	174
15:4	8267.0	8264.0	8211.0	20.3	24.3	87	3100	1919	534	581	9.2	9.2	88.4	102.6	.84	.84	7	1.33	1.49	9.8	9.3	16.0	374.0	9.52	174
15:6	8268.7	8265.2	8211.0	25.1	23.2	87	3100	1923	534	581	9.2	9.2	88.5	103.0	.84	.83	7	1.26	1.49	10.4	9.3	16.2	375.2	9.57	174
15:7	8269.1	8266.1	8213.0	250.4	24.7	89	3100	1923	543	581	9.2	9.2	88.5	103.0	.84	.83	7	.68	1.49	10.2	9.3	16.1	376.1	9.57	174
15:19	8270.0	8267.0	8218.0	8.8	35.3	89	3500	1929	527	587	9.2	9.2	88.8	101.7	.84	.84	7	1.57	1.49	10.2	9.3	16.1	377.0	9.60	174
15:21	8271.0	8268.0	8218.0	42.8	32.0	90	3400	1929	521	581	9.3	9.3	88.9	102.2	.84	.84	7	1.21	1.49	10.7	9.3	16.2	378.0	9.70	174
15:23	8272.3	8269.3	8221.0	39.0	29.4	91	3200	1925	520	577	9.2	9.3	88.9	102.4	.84	.84	7	1.25	1.49	10.4	9.3	16.2	379.3	9.73	174
15:24	8273.2	8270.2	8221.0	56.6	34.8	92	3400	1925	525	576	9.2	9.2	88.9	102.5	.84	.84	7	1.14	1.49	10.2	9.3	16.1	380.2	9.75	174
15:26	8274.3	8271.3	8223.0	32.2	34.4	91	3300	1900	530	574	9.2	9.3	88.9	103.0	.84	.83	7	1.31	1.49	10.0	9.3	16.1	381.3	9.78	173
15:28	8275.1	8271.3	8223.0	32.2	35.4	92	3400	1909	534	574	9.3	9.3	88.9	103.0	.84	.84	7	1.31	1.49	10.0	9.3	16.1	381.3	9.81	173
15:28	8276.1	8273.1	8223.0	195.4	31.2	92	3400	1905	530	574	9.2	9.3	89.0	103.0	.84	.84	7	.02	1.49	10.2	9.3	16.1	383.1	9.82	173