* BIT # 24   SMITH F3   BIT DIAMETER : 8.50 inch   NOZZ 13/13/13   MUD RHEOLOGICAL PARAMETERS : PV = 14 YP = 12 GEL = 4

| TIME | DEPTHS MEASURED | VERTCL | LAGGED | DRILLING PARAMETERS ROP | WOB | RPM | TORQ | PRESS | FLOW IN | PIT VOL | DENSITY IN | OUT | MUD PARAMETERS TEMPERATURE IN | OUT | RESISTIVITY IN | OUT | GAS DCS | NORM | OVERPRESSURE SURVEY PF | ECD | FRAC | ACCUMULATED ON BIT FEET | TIME | COST |
Hr:mn	feet	feet	feet	ft/h	klbs	rpm	ftlb	psi	gpm	bbls	ppg	ppg	degF	degF	ohm	ohm	unit		ppg	ppg	ppg	feet	DHr	$
D 9: 7	9040.2	9030.0	8192.0	8182.	33.1	62	1000	1459	343	430	8.9	9.0	57.4	90.1	1.02	.70	7	-2.39	1.56	10.0	8.9	16.3	.0	.00	852
D 9: 8	9041.2	9031.1	8192.0	129.7	32.5	62	1000	1468	338	442	8.9	9.0	57.4	90.0	1.02	.71	7	1.06	1.56	10.0	8.9	16.3	1.1	.01	24454
D 9:11	9042.5	9032.4	8187.0	26.9	33.5	65	1700	1492	338	462	8.9	9.0	57.2	89.6	1.04	.70	7	1.54	1.56	10.0	8.9	16.3	2.4	.06	10970
D 9:13	9043.3	9033.2	8187.0	19.1	31.9	63	1700	1515	338	406	8.9	9.0	57.2	89.1	1.04	.71	7	1.65	1.56	10.0	8.9	16.3	3.2	.10	8334
D 9:15	9044.1	9033.2	8187.0	19.1	30.5	64	1700	1529	343	512	8.9	9.0	57.1	89.2	1.05	.71	7	1.65	1.56	10.0	8.9	16.3	3.2	.14	8334
D 9:17	9045.2	9035.1	8187.0	44.5	33.8	0	-200	1501	343	510	8.9	9.0	57.3	89.2	1.04	.71	7	1.38	1.56	9.8	8.9	16.3	5.1	.16	5266
D 11:22	9047.0	9036.9	9045.0	30.1	37.2	78	2100	1145	321	542	9.0	8.6	70.7	90.9	.79	.97	7	1.46	1.56	10.0	9.0	16.3	6.9	.22	3927
D 11:23	9047.5	9037.4	9045.0	24.7	34.3	76	2100	1145	316	542	9.0	8.7	70.9	91.0	.80	.96	7	1.66	1.56	10.0	9.0	16.3	7.4	.24	3678
D 11:24	9048.6	9038.5	9045.0	37.8	27.1	77	2000	1149	316	542	8.9	8.6	70.9	91.2	.80	.96	7	1.39	1.56	9.8	9.0	16.3	8.5	.27	3195
D 11:26	9049.4	9039.3	9045.0	39.7	27.3	76	2000	1154	316	542	9.0	8.7	71.1	90.6	.80	.97	7	1.38	1.56	9.9	9.0	16.3	9.3	.29	2936
D 11:26	9050.1	9040.0	9045.0	59.4	30.6	3	300	1149	321	542	8.9	8.7	71.1	90.4	.80	.97	7	1.30	1.56	10.4	9.0	16.4	10.0	.30	2752
D 11:38	9051.3	9041.2	9045.0	33.9	28.1	74	2000	1173	321	540	9.0	8.7	71.9	90.4	.82	.93	7	1.29	1.56	10.6	9.0	16.4	11.2	.33	2453
D 11:38	9052.0	9041.9	9045.0	196.1	28.8	75	2900	1173	321	540	9.0	8.7	71.8	90.4	.82	.93	7	.92	1.56	10.0	9.0	16.3	11.9	.33	2306
D 11:45	9053.1	9043.0	9045.0	8.9	31.1	75	3000	1192	316	536	9.1	9.2	72.2	90.6	.83	.88	7	1.83	1.56	10.0	9.1	16.3	13.0	.45	2151
D 11:48	9054.1	9044.0	9045.0	20.2	20.6	76	3000	1187	316	538	9.1	9.2	72.7	91.0	.83	.88	7	1.58	1.56	10.0	9.1	16.3	14.0	.50	2014
D 11:51	9055.2	9045.1	9045.0	20.3	30.2	76	3100	1192	321	538	9.1	9.2	72.8	91.2	.84	.86	7	1.57	1.56	10.0	9.1	16.3	15.1	.56	1874
D 11:52	9056.0	9045.9	9045.0	56.5	31.2	77	3000	1192	316	540	9.1	9.2	72.9	91.3	.84	.86	7	1.30	1.56	10.4	9.1	16.4	15.9	.57	1782
D 11:54	9057.1	9047.0	9045.0	43.3	32.1	77	3100	1192	316	538	9.1	9.2	73.1	91.5	.84	.84	6	1.42	1.56	9.6	9.1	16.2	17.0	.60	1674
D 11:57	9058.5	9048.4	9045.0	28.3	30.7	76	3100	1215	316	538	9.1	9.2	73.4	91.5	.84	.83	6	1.50	1.56	10.0	9.1	16.3	18.4	.64	1560
D 11:58	9059.1	9048.4	9045.0	28.3	30.1	76	3100	1215	316	536	9.1	9.2	73.4	91.5	.84	.83	6	1.50	1.56	10.0	9.1	16.3	18.4	.67	1560
D 12: 0	9060.3	9050.2	9045.0	46.4	30.4	76	3200	1215	320	538	9.1	9.2	73.6	91.7	.84	.82	7	1.34	1.56	10.1	9.1	16.3	20.2	.70	1426
D 12: 1	9061.1	9050.7	9045.0	46.4	27.6	76	3100	1215	321	536	9.1	9.2	73.6	91.6	.84	.83	7	1.34	1.56	10.1	9.1	16.3	20.2	.72	1426
D 12: 3	9062.2	9052.1	9045.0	33.7	32.1	74	3200	1215	316	536	9.1	9.2	73.8	91.3	.84	.81	7	1.45	1.56	9.4	9.1	16.2	22.1	.75	1315
D 12: 6	9063.5	9053.4	9045.0	30.9	29.1	77	3200	1210	321	536	9.1	9.2	74.0	91.8	.84	.81	6	1.47	1.56	10.0	9.1	16.3	23.4	.80	1250
D 12: 8	9064.7	9054.6	9045.0	35.6	29.7	76	3100	1215	321	534	9.1	9.2	74.2	91.7	.84	.80	7	1.42	1.56	9.6	9.1	16.2	24.6	.83	1194
D 12: 9	9065.6	9055.5	9045.0	45.9	29.6	76	3200	1215	316	536	9.1	9.2	74.2	91.9	.84	.80	6	1.35	1.56	10.1	9.1	16.3	25.5	.85	1154
D 12:10	9066.4	9056.3	9045.0	47.6	29.6	76	3200	1215	316	536	9.1	9.2	74.3	91.9	.84	.80	6	1.33	1.56	10.2	9.1	16.4	26.3	.87	1120
D 12:12	9067.4	9057.3	9045.0	31.4	31.7	75	3200	1135	307	536	9.1	9.2	74.4	91.5	.84	.80	6	1.47	1.56	10.0	9.1	16.3	27.3	.90	1085
D 12:13	9068.0	9057.9	9045.0	26.3	29.1	74	3200	1135	307	536	9.1	9.2	74.5	91.4	.84	.80	6	1.51	1.56	10.0	9.1	16.3	27.9	.92	1062
D 12:15	9069.3	9059.2	9045.0	36.2	33.5	76	3200	1131	307	536	9.1	9.2	74.6	91.6	.83	.80	6	1.44	1.56	9.5	9.1	16.2	29.2	.95	1022
D 12:18	9070.4	9060.3	9045.0	28.9	32.1	76	3100	1126	312	536	9.1	9.2	74.7	91.6	.83	.80	6	1.52	1.56	10.0	9.1	16.3	30.3	1.00	987
D 12:20	9071.3	9061.2	9045.0	31.7	31.0	74	3100	1126	307	536	9.1	9.2	74.9	92.0	.83	.79	6	1.50	1.56	10.0	9.1	16.3	31.2	1.02	963
D 12:21	9072.2	9062.1	9045.0	33.0	32.1	74	3200	1126	312	534	9.1	9.2	75.0	91.8	.83	.79	6	1.47	1.56	10.0	9.1	16.3	32.1	1.05	940
D 12:22	9073.2	9062.1	9045.0	33.0	28.9	74	3200	1126	307	534	9.1	9.2	75.1	91.5	.83	.80	6	1.47	1.56	10.0	9.1	16.3	32.1	1.07	940
D 12:24	9074.3	9064.2	9045.0	37.2	33.5	75	3200	1121	312	534	9.1	9.2	75.1	91.6	.83	.79	6	1.41	1.56	9.7	9.1	16.2	34.2	1.10	887
D 12:26	9075.2	9065.1	9045.0	32.4	31.7	74	3200	1126	312	534	9.1	9.2	75.2	91.9	.83	.80	6	1.49	1.56	10.0	9.1	16.3	35.1	1.13	867
D 12:27	9076.1	9066.0	9045.0	34.1	31.0	76	3300	1121	307	534	9.1	9.2	75.3	92.0	.83	.79	6	1.45	1.56	9.4	9.1	16.2	36.0	1.16	848
D 12:30	9077.5	9067.5	9045.0	29.2	31.1	77	3100	1116	307	532	9.1	9.2	75.5	92.7	.82	.79	6	1.51	1.56	10.0	9.1	16.3	37.5	1.21	820
D 12:32	9078.2	9067.5	9045.0	29.2	29.7	74	3200	1116	312	534	9.1	9.2	75.6	92.9	.82	.79	6	1.51	1.56	10.0	9.1	16.3	37.5	1.22	820
D 12:33	9079.2	9068.1	9045.0	33.8	28.9	75	3100	1004	307	532	9.1	9.2	75.6	91.8	.82	.79	6	1.44	1.56	9.5	9.1	16.2	38.1	1.25	808
D 12:52	9080.2	9070.1	9050.0	8.2	27.3	80	3200	1154	316	522	9.1	9.2	76.5	93.3	.81	.83	6	1.70	1.56	10.0	9.1	16.3	40.1	1.37	781
D 12:54	9081.5	9071.4	9050.0	36.6	28.4	79	3200	1145	316	520	9.1	9.2	76.6	93.1	.81	.83	6	1.40	1.56	9.7	9.1	16.3	41.4	1.41	766
D 12:56	9082.5	9072.4	9050.0	36.1	28.4	78	3300	1149	316	518	9.1	9.2	76.6	92.9	.81	.84	6	1.41	1.56	9.7	9.1	16.3	42.4	1.43	744
D 12:57	9083.2	9073.1	9050.0	31.3	29.1	81	3400	1149	316	516	9.1	9.2	76.7	93.1	.81	.83	6	1.46	1.56	9.3	9.1	16.2	43.1	1.46	733
D 12:59	9084.2	9073.1	9051.0	31.3	27.7	79	3300	1145	316	516	9.1	9.2	76.8	93.5	.81	.83	6	1.46	1.56	9.3	9.1	16.2	43.1	1.48	733
D 13: 1	9085.4	9075.3	9052.0	31.0	29.3	79	3300	1149	316	516	9.1	9.2	76.8	93.2	.81	.83	6	1.44	1.56	9.5	9.1	16.2	45.3	1.52	704
D 13: 3	9086.5	9076.4	9052.0	42.6	28.3	79	3300	1145	316	514	9.1	9.2	76.9	93.3	.81	.84	6	1.36	1.56	10.0	9.1	16.3	46.4	1.55	689
D 13: 4	9087.0	9077.0	9052.0	50.6	28.5	80	3300	1145	316	512	9.1	9.2	76.9	93.5	.81	.84	6	1.30	1.56	10.5	9.1	16.4	47.0	1.56	682
D 13: 6	9088.0	9077.9	9053.0	21.2	27.3	78	3300	1145	316	514	9.1	9.2	77.1	93.2	.81	.85	6	1.55	1.56	10.0	9.1	16.3	47.9	1.61	671