

TIME	DEPTH m	ROP m/hr	TORQUE		RPM AVG	WOB AVG	PUMP PRES	RFRNS		MW lb/gal		FLOW/MIN		TEMP (C)		PVT	THIS BIT			COST		EST TW	DKC	NK	NKB	ECD	EST	
			AVG	MAX				IN	OUT	IN	OUT	IN	OUT	IN	OUT		REVS	m	hrs	INST	RUN						FM	PR
0311	1039.4	19.2	1.50	1.50	101	19.5	2530	1025.0	8.98	9.20	761	0	27.3	32.8	377	71961	621	12.8	296	114	4.88	1.13	.98	1.11	8.85	8.70	DK	
0312	1040.3	35.8	1.79	1.79	98	22.6	2490	1025.5	8.98	9.20	751	0	27.3	32.8	364	72036	622	12.8	134	114	4.89	1.01	.85	1.11	8.87	8.70	D	
0312	1040.6	36.5	1.64	1.64	98	19.8	2520	1025.7	9.00	9.11	758	0	27.5	32.7	358	72076	622	12.9	142	114	4.89	.97	.82	1.11	8.87	8.70	D	
0314	1041.5	32.9	1.72	1.72	98	19.4	2510	1026.5	9.00	9.11	761	0	27.5	32.7	337	72215	623	12.9	175	114	4.89	.99	.84	1.11	8.89	8.70	D	
0315	1041.8	22.8	1.59	1.59	98	18.9	2510	1026.9	9.00	9.11	761	0	27.5	32.7	336	72290	624	12.9	211	114	4.90	1.07	.92	1.11	8.89	8.70	D	
0315	1042.1	44.3	2.05	2.05	98	21.1	2590	1027.1	9.00	9.11	761	0	27.5	32.7	338	72331	624	12.9	117	114	4.90	.93	.78	1.11	8.89	8.70	D	
0316	1042.4	22.4	1.83	1.83	97	18.9	2550	1027.5	9.00	9.13	760	0	27.3	32.7	339	72403	624	12.9	206	114	4.90	1.07	.92	1.11	8.90	8.70	D	
0317	1042.7	16.2	1.70	1.70	97	19.4	2540	1028.3	9.00	9.13	759	0	27.3	32.7	343	72517	625	12.9	235	114	4.91	1.16	1.01	1.11	8.90	8.70	D	
0318	1043.0	29.2	1.68	1.68	98	18.8	2520	1028.7	9.00	9.13	759	0	27.3	32.7	344	72574	625	12.9	172	114	4.91	1.01	.86	1.11	8.90	8.70	D	
0318	1043.3	27.1	1.54	1.54	98	19.9	2530	1029.1	9.03	9.15	762	0	27.2	32.9	345	72639	625	12.9	174	114	4.92	1.04	.89	1.11	8.91	8.70	D	
0319	1043.6	34.4	1.56	1.56	98	20.6	2520	1029.4	9.03	9.15	761	0	27.2	32.9	347	72691	625	13.0	189	114	4.92	.99	.83	1.11	8.91	8.70	D	
0320	1043.9	17.9	1.71	1.71	98	19.4	2540	1029.8	9.03	9.15	760	0	27.2	32.9	352	72786	626	13.0	248	114	4.92	1.14	.98	1.11	8.91	8.70	D	
0320	1044.3	23.9	1.59	1.59	98	20.5	2520	1030.3	9.03	9.15	761	0	27.2	32.9	355	72862	626	13.0	234	115	4.93	1.08	.92	1.11	8.91	8.70	D	
0321	1044.5	25.9	1.78	1.78	98	20.2	2500	1030.6	9.01	9.08	762	0	27.2	33.1	357	72921	626	13.0	163	115	4.93	1.05	.90	1.11	8.91	8.70	D	
0322	1044.9	38.9	1.67	1.67	98	20.2	2500	1030.8	9.01	9.08	762	0	27.2	33.1	361	72966	627	13.0	129	115	4.93	.95	.80	1.11	8.91	8.70	D	
0322	1045.2	36.2	1.65	1.65	98	21.8	2480	1031.2	9.01	9.08	762	0	27.2	33.1	362	73018	627	13.0	138	115	4.94	.99	.83	1.11	8.91	8.70	D	
0322	1045.5	46.8	1.66	1.66	98	20.4	2490	1031.4	9.01	9.08	762	0	27.2	33.1	364	73057	627	13.0	143	115	4.94	.91	.76	1.11	8.91	8.70	D	
0323	1045.8	30.1	1.50	1.50	98	20.7	2490	1031.7	9.06	9.07	763	0	26.9	33.3	366	73106	628	13.0	160	115	4.94	1.02	.87	1.11	8.91	8.70	D	
0324	1046.1	29.1	1.66	1.66	97	19.5	2490	1032.1	9.06	9.07	762	0	26.9	33.3	368	73163	628	13.0	151	115	4.95	1.01	.86	1.11	8.91	8.70	D	
0325	1047.0	55.2	1.64	1.64	98	20.2	2470	1032.7	9.15	9.02	764	0	27.3	33.5	374	73325	629	13.1	92	115	4.95	.86	.71	1.11	8.92	8.70	D	
0326	1047.3	30.9	1.58	1.58	98	18.5	2480	1032.7	9.15	9.02	764	0	27.3	33.5	375	73381	629	13.1	148	115	4.96	.99	.84	1.11	8.92	8.70	D	
0326	1047.6	36.7	1.60	1.60	97	20.3	2480	1032.7	9.15	9.02	764	0	27.3	33.5	377	73426	629	13.1	124	115	4.96	.97	.81	1.11	8.92	8.70	D	
0327	1047.9	22.6	1.53	1.53	98	18.4	2460	1032.7	9.15	9.02	764	0	27.3	33.5	378	73509	630	13.1	217	115	4.96	1.06	.91	1.11	8.93	8.70	D	
0328	1048.2	29.7	1.59	1.59	98	20.4	2460	1032.8	9.21	9.01	764	0	27.4	33.4	378	73562	630	13.1	174	115	4.97	1.02	.87	1.11	8.93	8.70	D	
0328	1048.5	39.6	1.69	1.69	97	20.8	2470	1033.1	9.21	9.01	764	0	27.4	33.4	378	73605	630	13.1	121	115	4.97	.95	.80	1.11	8.93	8.70	D	
in survey.																												
0414	1050.4	55.0	1.52	1.52	99	16.4	2370	1039.1	9.08	9.06	749	0	27.8	33.6	358	73671	632	13.1	95	115	4.97	.82	.68	1.11	8.92	8.70	D	
0415	1050.7	34.4	1.65	1.65	99	16.3	2370	1039.4	9.08	9.06	757	0	27.8	33.6	352	73719	632	13.1	173	115	4.97	.93	.79	1.11	8.93	8.70	D	
0415	1051.0	24.4	1.44	1.44	101	13.1	2370	1039.8	9.03	9.08	759	0	28.4	31.1	343	73786	633	13.1	187	115	4.98	.97	.83	1.11	8.95	8.70	D	
0416	1051.3	44.3	1.63	1.63	98	17.1	2360	1040.0	9.03	9.08	759	0	28.4	31.1	337	73827	633	13.2	117	115	4.98	.88	.73	1.11	8.95	8.70	D	
0416	1051.6	50.8	1.49	1.49	98	15.4	2370	1040.2	9.03	9.08	759	0	28.4	31.1	332	73866	633	13.2	109	115	4.98	.83	.68	1.11	8.95	8.70	D	
0417	1051.9	24.4	1.57	1.57	98	15.8	2390	1040.5	9.03	9.08	760	0	28.4	31.1	332	73922	634	13.2	160	115	4.98	1.00	.86	1.11	8.95	8.70	D	
0417	1052.2	25.0	1.58	1.58	98	16.4	2390	1040.7	8.95	9.25	762	0	28.0	31.6	333	73970	634	13.2	149	115	4.99	1.00	.86	1.11	8.95	8.70	D	
0418	1052.5	44.4	1.52	1.52	98	17.2	2390	1040.9	8.95	9.25	763	0	28.0	31.6	335	74013	634	13.2	103	115	4.99	.88	.73	1.11	8.95	8.70	D	
0418	1052.8	21.2	1.54	1.54	98	16.8	2390	1041.1	8.95	9.25	763	0	28.0	31.6	338	74088	635	13.2	213	115	4.99	1.05	.90	1.11	8.95	8.70	D	
0419	1053.1	33.5	1.54	1.54	99	15.6	2400	1041.3	8.91	9.45	764	0	27.7	32.2	339	74146	635	13.2	165	115	5.00	.93	.78	1.11	8.95	8.70	D	
0419	1053.4	58.0	1.80	1.80	99	17.7	2400	1041.3	8.91	9.45	765	0	27.7	32.2	340	74169	635	13.2	69	115	5.00	.82	.67	1.11	8.97	8.70	D	
0420	1053.7	37.5	1.52	1.52	98	17.4	2390	1041.4	8.91	9.45	765	0	27.7	32.2	341	74215	635	13.2	120	115	5.00	.92	.77	1.11	8.97	8.70	D	
0420	1054.3	36.6	1.63	1.63	98	16.3	2380	1041.6	8.91	9.45	765	0	27.7	32.2	345	74295	636	13.2	137	115	5.00	.91	.77	1.11	8.98	8.70	D	
0421	1054.6	34.0	1.61	1.61	98	16.8	2380	1041.7	8.91	9.45	765	0	27.7	32.2	346	74342	636	13.2	132	115	5.00	.93	.79	1.11	8.98	8.70	D	
0421	1055.0	59.0	1.61	1.61	98	17.3	2380	1041.8	8.90	9.50	765	0	27.6	32.2	348	74378	637	13.2	100	115	5.00	.81	.66	1.11	9.00	8.70	D	
0422	1055.2	26.0	1.61	1.61	98	17.7	2390	1041.8	8.90	9.50	765	0	27.6	32.2	350	74427	637	13.3	146	115	5.01	1.01	.86	1.11	9.00	8.70	D	
0422	1055.5	36.1	1.56	1.56	98	14.9	2390	1041.8	8.90	9.50	766	0	27.6	32.2	351	74480	637	13.3	125	115	5.01	.89	.75	1.11	9.00	8.70	D	
0423	1055.8	23.7	1.67	1.67	97	16.4	2380	1041.8	8.90	9.50	767	0	27.6	32.2	353	74548	638	13.3	183	115	5.01	1.01	.86	1.11	9.01	8.70	D	
0423	1056.1	55.6	1.69	1.69	98	14.6	2390	1041.9	8.93	9.52	767	0	27.5	32.9	355	74581	638	13.3	109	115	5.02	.79	.65	1.11	9.03	8.70	D	
0424	1056.5	25.1	1.46	1.46	98	15.3	2400	1042.3	8.93	9.52	766	0	27.5	32.9	358	74655	638	13.3	195	115	5.02	.98	.84	1.11	9.03	8.70	D	
0424	1056.8	36.6	1.56	1.56	98	15.0	2380	1042.5	8.93	9.52	767	0	27.5	32.9	359	74693	639	13.3	132	115	5.02	.89	.74	1.11	9.03	8.70	D	
0425	1057.1	30.8	1.67	1.67	98	16.7	2380	1042.8	8.93	9.52	766	0	27.5	32.9	360	74747	639	13.3	203	115	5.02	.95	.80	1.12	9.03	8.70	D	
0426	1057.4	31.0	1.52	1.52	97	15.9	2380	1043.1	8.89	9.57	766	0	27.5	32.8	362	74800	639	13.3	155	115	5.03	.94	.79	1.11	9.03	8.70	D</	