

COMPANY Ferguson FARM Cooper WELL NO. 1
 SEC. TWP. RGE. LOC. COUNTY SEWARD STATE KAN.
 CONTRACTOR Sage SIZE HOLE 7 $\frac{7}{8}$ DRILL PIPE 4 $\frac{1}{2}$
 REMARKS: SIZE PUMP LINERS 5 $\frac{3}{4}$ LENGTH STROKE 14"

DATE 11-9-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2600	01 17	2	
02	19	2	
03	22	3	
04	24	2	
05	27	3	
06	29	2	
07	31	2	
08	34	3	
09	37	3	
2610	40	3	
11	43	3	
12	46	3	
13	49	3	
14	52	3	
15	54	2	
16	57	3	
17	10:00	3	
18	3	3	
19	5	2	
2620	7	2	
21	9	2	
22	11	2	
23	13	2	
24	15	2	
25	18	2	conn.
26	23	2	
27	25	2	
28	27	2	
29	29	2	
2630	31	2	
31	33	2	
32	35	2	
33	37	2	
34	39	2	
35	41	2	
36	43	2	
37	46	3	
38	48	2	
39	50	2	
2640	52	2	
41	54	2	
42	56	2	
43	59	3	
44	11:01	2	
45	4	3	
46	6	2	
47	9	3	
48	11	2	
49	14	3	
2650	17	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2650	51 20	3	
52	23	3	
53	25	2	
54	27	2	
55	29	2	
56	32	3	
57	11:31 40	2	Conn.
58	42	2	
59	45	3	
2660	47	2	
61	49	2	
62	52	3	
63	55	3	
64	58	3	
65	12:00	2	
66	2	2	
67	5	3	
68	7	2	
69	9	2	
2670	11	2	
71	14	3	
72	16	2	
73	18	2	
74	20	2	
75	22	2	
76	24	2	
77	26	2	
78	28	2	
79	30	2	
2680	32	2	
81	33	1	
82	35	2	
83	36	1	
84	38	2	
85	40	2	
86	41	1	
87	43	2	
88	12:49 49	2	Conn.
89	51	2	
2690	53	2	
91	54	1	
92	56	2	
93	58	2	
94	1:00	2	
95	1	1	
96	3	2	
97	4	1	
98	6	2	
99	8	2	
2700	11	3	

COMPANY Ferguson FARM Cooper WELL NO. 1
 SEC. TWP. RGE. LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR SAGE SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2700	1:11		
01	14	3	
02	17	3	
03	20	3	
04	22	2	
05	25	3	
06	27	2	
07	30	3	
08	32	3	
09	36	3	
2710	39	3	
11	42	3	
12	45	3	
13	48	3	
14	50	2	
15	52	2	
16	54	2	
17	56	2	
18	59	3	
19	2:04	6	Conc.
2720	9	3	
21	11	2	
22	13	2	
23	14	1	
24	16	2	
25	18	2	
26	20	2	
27	21	1	
28	22	1	
29	23	1	
2730	24	1	
31	25	1	
32	26	1	
33	27	1	
34	28	1	
35	29	1	
36	30	1	
37	32	2	
38	33	1	
39	35	2	
2740	36	1	
41	38	2	
42	40	2	
43	41	1	
44	42	1	
45	45	3	
46	47	2	
47	49	2	
48	51	2	
49	53	2	
2750	58	1	Conc.

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2750	2:58		
51	59	1	
52	3:00	1	
53	1	1	
54	2	1	
55	3	1	
56	4	1	
57	5	1	
58	6	1	
59	7	1	
2760	8	1	
61	9	1	
62	10	1	
63	10 1/2	1/2	
64	11	1/2	
65	12	1	
66	13	1	
67	14	1	
68	15	1	
69	16	1	
2770	17	1	
71	18	1	
72	19	1	
73	20	1	
74	23	3	
75	28	2	
76	27	2	
77	29	2	
78	31	2	
79	34	2	
2780	36	2	
81	3:40	41	Conc.
82	42	1	
83	43	1	
84	45	2	
85	46	1	
86	47	1	
87	48	1	
88	49	1	
89	51	2	
2790	53	2	
91	55	2	
92	57	2	
93	59	2	
94	4:00	1	
95	3	3	
96	5	2	
97	7	2	
98	10	3	
99	13	3	
2800	16	3	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR SAGE SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2800	4:16	3	
01	19	3	
2	21	2	
3	23	2	
4	26	3	
5	28	2	
6	30	2	
7	32	2	
8	34	2	
9	36	2	
2810	38	2	
11	40	2	
12	44	2	Conn.
13	48	2	
14	50	2	
15	51	1	
16	52	1	
17	54	2	
18	56	2	
19	59	3	
2820	5:02	3	
21	4	2	
22	6	2	
23	8	2	
24	10	2	
25	12	2	
26	15	3	
27	18	3	
28	21	3	
29	23	2	
2830	26	3	
31	30	4	
32	33	3	
33	36	3	
34	39	3	
35	42	3	
36	44	2	
37	47	3	
38	50	3	
39	53	3	
2840	55	2	
41	58	3	
42	6:00	2	
43	6:04	2	Conn.
44	8	2	
45	11	3	
46	14	3	
47	17	3	
48	21	4	
49	24	3	
2850	27	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2850	6:27	4	
51	31	4	
52	34	3	
53	36	2	
54	39	3	
55	42	3	
56	43	3	
57	48	3	
58	51	3	
59	54	3	
2860	57	3	
61	7:01	4	
62	04	3	
63	08	4	
64	12	4	
65	15	3	
66	17 1/2	2 1/2	
67	22	4 1/2	
68	25	3	
69	27	2	
2870	30 1/2	3 1/2	
71	33 1/2	3	
72	36 1/2	3	
73	39 1/2	3	Conn. Serv. Rig.
74	5 55	3	
75	58	3	
76	8:01	3	
77	04	3	
78	07	3	
79	10	3	
2880	13	3	
81	16	3	
82	18	2	
83	20 1/2	2 1/2	
84	23	2 1/2	
85	24 1/2	1 1/2	
86	26	1 1/2	
87	27	1	
88	29	2	
89	31	2	
2890	33	2	
91	36	3	
92	38	2	
93	40	2	
94	43	3	
95	46	3	
96	50	4	
97	53	3	
98	56	3	
99	59	3	
2900	9:01 1/2	2 1/2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-10-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2900 01	01 1/2 03	1 1/2	
02	4 1/2	1 1/2	
03	07 1/2	3 1/2	
04	13 1/2	2 1/2	Conn
05	18	2	
06	20	2	
07	22	2	
08	25	3	
09	26 1/2	1 1/2	
2910	28 1/2	2	
11	30	1 1/2	
12	32 1/2	2 1/2	
13	36	3 1/2	
14	38 1/2	2 1/2	
15	41 1/2	3	
16	44	2 1/2	
17	47	3	
18	50	3	
19	53	3	
2920	56	3	
21	58 1/2	2 1/2	
22	100 1/2	2	
23	03	2 1/2	
24	05	2	
25	08	3	
26	11	3	
27	14	3	
28	17	3	
29	20	3	
2930	21 1/2	1 1/2	
31	23	1 1/2	
32	25	2	
33	27	2	
34	28	1	Conn.
35	31 1/2	1 1/2	
36	35	2	
37	38	3	
38	39	1	
39	40	1	
2940	41	1	
41	42	1	
42	43	1	
43	45 1/2	2 1/2	
44	49	3 1/2	
45	51	2	
46	53	2	
47	56	3	
48	59	3	
49	11:01	2	
2950	04	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
2950 51	11:04 07	3	
52	10	3	
53	12 1/2	2 1/2	
54	15	2 1/2	
55	17 1/2	2 1/2	
56	20	2 1/2	
57	23	3	
58	26	3	
59	28 1/2	2 1/2	
2960	30 1/2	2	
61	33	2 1/2	
62	35	2	
63	37 1/2	2 1/2	
64	39 1/2	2	
65	42	2 1/2	Conn. Jetted
66	54	2	Shale Pit
67	56	2	
68	58 1/2	2 1/2	
69	1:01	2 1/2	
2970	04 1/2	3 1/2	
71	08	3 1/2	
72	11	3	
73	13	2	
74	15	2	
75	18	3	
76	20	2	
77	23	3	
78	26 1/2	3 1/2	
79	30	3 1/2	
2980	33	3	
81	36	3	
82	39	3	
83	42	3	
84	42 1/2	1 1/2	
85	43	1 1/2	
86	44	1	
87	45	1	
88	46	1	
89	47	1	
2990	50	3	
91	51	1	
92	52 1/2	1	
93	53	1 1/2	
94	55 1/2	2 1/2	
95	57	1 1/2	Conn.
96	1:00 1/2	2 1/2	
97	05	2 1/2	
98	07	2 1/2	
99	10	2 1/2	
3000	12	2	

COMPANY Ferguson Oil Co. FARM Hooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: 11-10-69 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3000	01:11	12	
01	15	3	
02	19	4	
03	22	3	
04	24	2	
05	26 1/2	2 1/2	
06	29	2 1/2	
07	30 1/2	1 1/2	
08	33	2 1/2	
09	36	3	
3010	39	3	
11	42	3	
12	45	3	
13	46 1/2	1 1/2	
14	47 1/2	1	
15	48 1/2	1	
16	49 1/2	1	
17	50 1/2	1	
18	52	1 1/2	
19	53	1	
3020	54	1	
21	56	2	
22	57	1	
23	58	1	
24	2:00	2	
25	2:02	2	conn.
26	2:05 1/2	2 1/2	
27	10	2 1/2	
28	12	2	
29	15	3	
3030	18	3	
31	21	3	
32	25	4	
33	28	3	
34	31	3	
35	34	3	
36	36	2	
37	39	3	
38	42	3	
39	44	2	
3040	45	3	
41	46	1	
42	48	2	
43	50	2	
44	53	3	
45	56	3	
46	58 1/2	2 1/2	
47	3:02	3 1/2	
48	3:08	3	
49	11	3	
3050	14	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3056	51	17	
51	17	3	
52	20	3	
53	23	3	
54	26	3	
55	29	3	
56	3:35	3	conn.
57	41	3	
58	44	3	
59	48	4	
3060	51	3	
61	3:54	2	
62	57	1	
63	59	2	
64	4:00	1	
65	2	2	
66	4	2	
67	6 1/2	2 1/2	
68	7	1 1/2	
69	8	1	
3070	9	1	
71	1:15 1/2	1 1/2	
72	16 1/2	1 1/2	
73	17	1 1/2	
74	19	2	
75	22	3	
76	25	3	
77	28	3	
78	30 1/2	2 1/2	
79	34	3 1/2	
3080	37	3	
81	40	3	
82	43	3	
83	46	3	
84	49	3	
85	52	3	
86	54 1/2	2 1/2	
87	4:59	1	conn.
88	1	1	
89	2	1	
3090	3	1	
91	3 1/2	1 1/2	
92	4 1/2	1	
93	6	1 1/2	
94	6 1/2	1 1/2	
95	7	1 1/2	
96	7 1/2	1 1/2	
97	8	1 1/2	
98	9	1	
99	10	1	
3100	11	1	

COMPANY Ferguson OilFARM CooperWELL NO. 1SEC. 7 TWP. 33 RGE. 33 LOC.COUNTY SewardSTATE Ks.CONTRACTOR SageSIZE HOLE 7 $\frac{7}{8}$ DRILL PIPE 4 $\frac{1}{2}$

REMARKS:

SIZE PUMP LINERS 5 $\frac{3}{4}$ LENGTH STROKE 143120
3086
34DATE 11-10-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3100	5:11		
1	12	1	
2	13	1	
3	13 $\frac{1}{2}$	$\frac{1}{2}$	
4	14	$\frac{1}{2}$	
5	15	1	
6	15 $\frac{1}{2}$	$\frac{1}{2}$	
7	17	1 $\frac{1}{2}$	
8	18	1	
9	19 $\frac{1}{2}$	1 $\frac{1}{2}$	
3110	21 $\frac{1}{2}$	2	
11	23	1 $\frac{1}{2}$	
12	24	1	
13	25	1	
14	25 $\frac{1}{2}$	$\frac{1}{2}$	
15	27	1 $\frac{1}{2}$	
16	29	7	
17	30	1	
18	31	1	
19	31 $\frac{1}{2}$	1 $\frac{1}{2}$	conn.
3120	37	$\frac{1}{2}$	
21	38	1	
22	40	2	
23	42	2	
24	45	3	
25	49	4	
26	52	3	
27	55	3	
28	58	3	
29	6:01 $\frac{1}{2}$	3 $\frac{1}{2}$	
3130	4	2 $\frac{1}{2}$	
31	6	2	
32	8	2	
33	9	1	
34	11	2	
35	13 $\frac{1}{2}$	2 $\frac{1}{2}$	
36	16	2 $\frac{1}{2}$	
37	20 $\frac{1}{2}$	4 $\frac{1}{2}$	
38	24	3 $\frac{1}{2}$	
39	28	4	
3140	31	3	
41	35	4	
42	38	3	
43	41 $\frac{1}{2}$	3 $\frac{1}{2}$	
44	45 $\frac{1}{2}$	4	
45	50 $\frac{1}{2}$	4 $\frac{1}{2}$	
46	55	4 $\frac{1}{2}$	
47	59	4	
48	7:03	4	
49	6	3	
3150	10	4	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3150	7:14	3	Conn.
51	25 $\frac{1}{2}$	3 $\frac{1}{2}$	
52	29	3 $\frac{1}{2}$	
53	32 $\frac{1}{2}$	3 $\frac{1}{2}$	
54	36	3 $\frac{1}{2}$	
55	40	4	
56	43	3	
57	46	3	
58	49 $\frac{1}{2}$	3 $\frac{1}{2}$	
59	52	2 $\frac{1}{2}$	
3160	55	3	
61	57 $\frac{1}{2}$	2 $\frac{1}{2}$	
62	8:00	2 $\frac{1}{2}$	
63	2	2	
64	5	3	
65	8	3	
66	12	4	
67	15 $\frac{1}{2}$	3 $\frac{1}{2}$	
68	19	3 $\frac{1}{2}$	
69	23	4	
3170	27 $\frac{1}{2}$	4 $\frac{1}{2}$	
71	31	3 $\frac{1}{2}$	
72	35 $\frac{1}{2}$	4 $\frac{1}{2}$	
73	39	3 $\frac{1}{2}$	
74	43	4	
75	47	4	
76	50 $\frac{1}{2}$	3 $\frac{1}{2}$	pump
77	9:00	3 $\frac{1}{2}$	
78	3	3	
79	5	2	
3180	8	3	
81	9:15	3	Conn.
82	18	3	
83	21 $\frac{1}{2}$	3 $\frac{1}{2}$	
84	23	1 $\frac{1}{2}$	
85	24 $\frac{1}{2}$	1 $\frac{1}{2}$	
86	26	1 $\frac{1}{2}$	
87	27	1	
88	28	1	
89	29	1	
3190	30	1	
91	30 $\frac{1}{2}$	$\frac{1}{2}$	
92	31	1	
93	32	1	
94	33	1	
95	34	1	
96	35	1	
97	37	2	
98	40	3	
99	42	2	
3200			

COMPANY Ferguson OilFARM CooperWELL NO. 1SEC. 7 TWP. 33 RGE. 33 LOC.COUNTY SewardSTATE KsCONTRACTOR SageSIZE HOLE 7 7/8 DRILL PIPE 4 1/2

REMARKS:

SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14DATE 11-10-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3200	19:42	2	
2	47	3	
3	50	3	
4	52 1/2	2 1/2	
5	55	2 1/2	
6	57	2	
7	10:00	3	
8	2	2	
9	5	3	
3210	7	2	
11	10	3	
120:14	16	2	Conn.
13	18	2	
14	20	2	
15	23	3	
16	27 1/2	4	
17	30	3	
18	33	3	
19	36	3	
3220	39	3	
21	42	3	
22	46	4	
23	49	3	
24	50 1/2	1 1/2	
25	53 1/2	3	
26	58	4 1/2	
27	11:03	5	
28	6	3	
29	11	5	
3230	15	4	
31	18	3	
32	22	4	
33	24	2	
34	25	1	
35	26	1	
36	28	2	
37	29	1	
38	31	2	
39	32	1	
3240	33	1	
41	35	2	
42	36	1	
4311:42	43	1	Conn.
44	45	2	
45	46	1	
46	47	1	
47	48	1	
48	49	1	
49	50	1	
3250	52	2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3250	51	54	2
52	56	2	
53	58	2	
54	12:01	3	
55	4	3	
56	6	2	
57	8	2	
58	10	2	
59	11	1	
3260	12	2	
61	15	2	
62	16	1	
63	18	2	
64	20	2	
65	23	3	
66	26	3	
67	29	3	
68	31	2	
69	33	2	
3270	34	1	
71	35	1	
72	36	1	
7312:41	42	1	Conn.
74	43	1	
75	44	1	
76	45	1/2	
77	45	1/2	
78	46	1	
79	47	1	
3280	48	1	
81	49	1	
82	51	2	
83	52	2	
84	55	2	
85	57	2	
86	59	2	
87	1:02	3	
88	4	2	
89	7	3	
3290	10	3	
91	13	3	
92	16	3	
93	19	3	
94	22	3	
95	25	3	
96	27	2	
97	30	3	
98	34	4	
99	37	3	
3300	41	4	

COMPANY Ferguson
FARM Cooper
WELL NO. 1

SEC. 7 TWP. 33 RGE. 33 LOC.
COUNTY Seward
STATE KANSAS

CONTRACTOR SAGE
SIZE HOLE 7 7/8
DRILL PIPE 4 1/2

REMARKS:
SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3300			
1	1:41	4	
2	50	5	
3	54	4	
4	58	4	
5	2:03	3	Conn. Pump.
6	11	3	
7	15	4	
8	18	3	
9	21	3	
3310	24	3	
11	27	3	
12	31	4	
13	34	3	
14	37	3	
15	41	4	
16	44	3	
17	48	4	
18	52	4	
19	56	4	
3320	59	3	
21	3:04	5	
22	8	4	
23	12	4	
24	16	4	
25	20	4	
26	24	4	
27	28	4	
28	32	4	
29	36	4	
3330	38	2	
31	40	2	
32	41	1	
33	43	2	
34	45	2	
35	48	3	
36	3:23	3	Conn.
37	58	2	
38	4:01	2	
39	4	3	
3340	7	3	
41	10	3	
42	12	2	
43	14	2	
44	17	3	
45	20	3	
46	23	3	
47	25	2	
48	26	1	
49	27	1	
3350	28	1	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3350			
51	4:28	1 1/2	
52	29	1 1/2	
53	30	1	
54	31	1	
55	33	2	
56	34	1	
57	35	1	
58	36	1	
59	37	1	
3360	40	3	
61	43	3	
62	46	3	
63	49	3	
64	52	3	
65	4:57	2	Conn.
66	5:00	1	
67	4	3	
68	7	3	
69	9	2	
3370	12	3	
71	15	3	
72	19	4	
73	22	3	
74	25	3	
75	29	4	
76	32	3	
77	34	2	
78	35	1	
79	37	2	
3380	38	1	
81	39	1	
82	41	2	
83	44	3	
84	48	4	
85	57	3	
86	54	3	
87	58	4	
88	6:01	3	
89	5	4	
3390	8	3	
91	12	4	
92	17	5	
93	21	4	
94	25	4	
95	6:31	2	Conn.
96	37	4	
97	40	3	
98	43	3	
99	46	3	
3400	6:50	4	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC 17 TWP. 33 RGE 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR SAGE Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: Bit #2 5-8802411 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-11-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3400	6:50		
1	53	3	
2	56	3	
3	7:00	4	
4	03	3	
5	06	3	
6	09 1/2	3 1/2	
7	13	3 1/2	
8	16 1/2	3 1/2	
9	20 1/2	4	
3410	24	3 1/2	
11	27 1/2	3 1/2	
12	31 1/2	4	
13	35	3 1/2	
14	41	6	
15	45	4	
16	49	4	
17	53	4	
18	56	3	
19	57	1	
3420	58	1	
21	59	1	
22	8:00	1	
23	01 1/2	1 1/2	
24	02 1/2	1	
25	03 1/2	1	
26	04 1/2	1	Conn. S. Serv. Rig. To The Shale Pit
27	21	1 1/2	
28	23	2	
29	26	3	
3430	28	2	
31	30	2	
32	32 1/2	2 1/2	
33	34 1/2	2	
34	36	1 1/2	
35	38 1/2	2 1/2	
36	40 1/2	2	
37	42 1/2	2	
38	44 1/2	2	
39	47	2 1/2	
3440	48 1/2	1 1/2	
41	50	1 1/2	
42	52 1/2	2 1/2	
43	55	2 1/2	
44	57	2	
45	59	2	
46	9:01	2	
47	03	2	
48	05	2	
49	07	2	
3450	09	2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3450	9:04		
51	11	2	
52	13	2	
53	16	3	
54	18	2	Conn.
55	9:24 1/2	1	
56	27	2	
57	30	3	
58	32 1/2	2 1/2	
59	35	2 1/2	
3460	38	3	
61	41	3	
62	43 1/2	2 1/2	
63	46	2 1/2	
64	48 1/2	2 1/2	
65	51	2 1/2	
66	52	1	
67	54	2	
68	56	2	
69	58 1/2	2 1/2	
3470	10:00	1 1/2	
71	01	1	
72	03 1/2	2 1/2	
73	05	1 1/2	
74	7 1/2	2 1/2	
75	10	2 1/2	
76	12 1/2	2 1/2	
77	15 1/2	3	
78	18	2 1/2	
79	21	3	
3480	24	3	
81	27	3	
82	30	3	
83		1/4	
84	30 1/2	1/4	
85	32	1 1/2	
86	36 1/2	2 1/2	Conn
87	41	2	
88	43	2	
89	46 1/2	3 1/2	
3490	49 1/2	3	
91	52 1/2	3	
92	56	3	
93	59 1/2	3 1/2	
94	11:03	3 1/2	
95	06	3	
96	08	2	
97	09	1	
98	10	1	
99	11	1	
3500	12	1	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: Bit #25-88C 2411 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-11-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3500	01 11 12	1	
01	13	1	
02	14	1	
03	16	2	
04	18	2	
05	19	1	
06	21	2	
07	23	2	
08	25	2	
09	27 1/2	2 1/2	
3510	30	2 1/2	
11	33	3	
12	34	1	
13	36	2	
14	37 1/2	1 1/2	
15	38 1/2	1	
16	40	1 1/2	
17	41 1/2	1 1/2	Conn.
18	42 1/2	1 1/2	
19	48	1	
3520	49	1	
21	50	1	
22	51	1	
23	52	1	
24	54	2	
25	56 1/2	2 1/2	
26	57 1/2	1	
27	58 1/2	1	
28	59 1/2	1	
29	1 20 1/2	1 1/2	
3530	02	1 1/2	
31	03 1/2	1 1/2	
32	05	1 1/2	
33	07	2	
34	09 1/2	2 1/2	
35	11 1/2	2	
36	14	2 1/2	
37	16 1/2	2 1/2	
38	19 1/2	3	
39	22	2 1/2	
3540	24	2	
41	26 1/2	2 1/2	
42	29 1/2	3	
43	32	2 1/2	
44	34 1/2	2	
45	36 1/2	2 1/2	
46	39	2 1/2	Conn.
47	41 1/2	3	
48	50	3	
49	52	2	
3550	54 1/2	2 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3550	51 12 54 1/2	1 1/2	
51	55	1 1/2	
52	55 1/2	1 1/2	
53	56	1 1/2	
54	56 3/4	3/4	
55	57 1/2	3/4	
56	58 1/2	1	
57	1 02	3 1/2	
58	05 1/2	3 1/2	
59	9 1/2	4	
3560	13 1/2	4	
61	15	1 1/2	
62	16 1/2	1 1/2	
63	17 1/2	1	
64	19	1 1/2	
65	20	1	
66	21		
67	23	2	
68	24 1/2	1 1/2	
69	26	1 1/2	
3570	28	2	
71	30	2	
72	32	2	
73	33 1/2	1 1/2	
74	35 1/2	2	
75	37	1 1/2	
76	39	2	Conn.
77	42 1/2	1	
78	46	2	
79	47 1/2	1 1/2	
3580	49	1 1/2	
81	51	2	
82	53	2	
83	54 1/2	1 1/2	
84	56	1 1/2	
85	58	2	
86	1 00	2	
87	01 1/2	1 1/2	
88	03	1 1/2	
89	05	2	
3590	06	1	
91	08	2	
92	10	2	
93	11	1	
94	12 1/2	1 1/2	
95	13 1/2	1	
96	15	1 1/2	
97	16 1/2	1 1/2	
98	17 1/2	1	
99	20	2 1/2	
3600	22	2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #1 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS B.T. #2 5-88 02411 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-11-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3600	01 21 21	1 1/2	
02	26	2 1/2	
03	27	1	
04	28	1	
05	29 1/2	1 1/2	
06	30 1/2	1	
07	31	1/2	Conn.
08	32	1	
09	33	1	
3610	34	1	
11	40	1	
12	41	1	
13	42 1/2	1 1/2	
14	44 1/2	2	
15	46 1/2	2	
16	48	1 1/2	
17	50	2	
18	53	3	
19	55 1/2	2 1/2	
3620	57	1 1/2	
21	58	1	
22	59	1	
23	3:00	1	
24	01	1	
25	02	1	
26	03	1	
27	04 1/2	1 1/2	
28	05	1/2	
29	06	1	
3630	07 1/2	1 1/2	
31	09 1/2	2	
32	10 1/2	1	
33	12	1 1/2	
34	13	2	
35	14	1	
36	15	1	
37	16 1/2	1 1/2	Conn. Sero. Rig.
38	17 1/2	2	
39	18 1/2	3	put on New Air
3640	46	2 1/2	Compression Belt.
41	49	3	
42	50 1/2	1 1/2	
43	52	1 1/2	
44	53 1/2	1 1/2	
45	55	1 1/2	
46	56	1	
47	57 1/2	1 1/2	
48	58 1/2	1	
49	59 1/2	1	
3650	460 1/2	1	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3650	51 40 1/2	1	
52	02 1/2	1	
53	03 1/2	1	
54	04 1/2	1	
55	05 1/2	1	
56	07	1 1/2	
57	09	2	
58	11	2	
59	12 1/2	1 1/2	
3660	13	1 1/2	
61	13 1/2	1 1/2	
62	14	1 1/2	
63	14 1/2	1 1/2	
64	15	1 1/2	
65	15 1/2	1 1/2	
66	16	1 1/2	
67	16 1/2	1 1/2	
68	17	1 1/2	
69	4:18	1	Conn.
3670	23	1	
71	24	1	
72	25	1	
73	26	1	
74	27	1	
75	28	1	
76	29	1	
77	29 1/2	1 1/2	
78	30	1 1/2	
79	30 1/2	1 1/2	
3680	31	1 1/2	
81	31 3/4	3/4	
82	32 1/2	3/4	
83	33 1/2	1	
84	35	1 1/2	
85	36	1	
86	36 1/2	1	
87	37	1	
88	4:39	2	
89	41	2	
3690	42	1	
91	42 3/4	3/4	
92	43 1/2	3/4	
93	45	1 1/2	
94	46	1	
95	46 3/4	3/4	
96	47 1/4	1 1/2	
97	48	3/4	
98	50	2	
99	51	1	Conn.
3700	52 1/2	1 1/2	

COMPANY Ferguson Oil Co. FARM Coopen WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: BIT #2-5-88 @ 2411 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-11-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3700	01 45 56	1/2	
02	56 1/2	1/2	
03	57 1/2	1/2	
04	59 1/2	1/4	
05	57 1/2	1/4	
06	58 1/2	1/2	
07	58 1/2	1/2	
08	59 1/2	1/2	
09	59 1/2	1/2	
3710	55 00	1/2	
11	00 1/2	1/2	
12	01 1/2	1/2	
13	01 1/2	1/2	
14	02 1/2	1/2	
15	02 1/4	1/4	
16	02 1/2	1/4	
17	03 1/2	1/2	
18	04 1/2	1	
19	07 1/2	3	
3720	09 1/2	2 1/2	
21	13 1/2	3 1/2	
22	16 1/2	3 1/2	
23	19 1/2	2 1/2	
24	23 1/2	4	
25	26 1/2	3	
26	29 1/2	3	
27	32 1/2	3	
28	35 1/2	3	
29	37 1/2	2	Conn.
3730	41 1/2	3	
31	47 1/2	2 1/2	
32	50 1/2	3	
33	53 1/2	3	
34	55 1/2	2	
35	59 1/2	2	
36	61 01	4	
37	04 1/2	3	
38	05 1/2	1 1/2	
39	06 1/2	1	
3740	07 1/2	1	
41	08 1/2	1	
42	10 1/2	2	
43	11 1/2	1	
44	12 1/2	1	
45	13 1/2	1/2	
46	13 1/2	1/2	
47	14 1/2	1/2	
48	15 1/2	1	
49	17 1/2	2	
3750	21 1/2	4	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3756	01 21	3	
52	28 1/2	4	
53	32 1/2	4	
54	35 1/2	3	
55	36 1/2	1	
56	37 1/2	1	
57	38 1/2	1	
58	39 1/2	1	
59	40 1/2	1	
3760	42 1/2	2	Conn.
61	48 1/2	2	
62	51 1/2	3	
63	55 1/2	4	
64	58 1/2	3	
65	01 01	3	
66	03 1/2	2 1/2	
67	06 1/2	2 1/2	
68	07 1/2	1 1/2	
69	10 1/2	2 1/2	
3770	11 1/2	1	
71	11 1/2	1/2	
72	12 1/2	1/2	
73	13 1/2	1	
74	14 1/2	1	
75	15 1/2	1	
76	17 1/2	2	
77	18 1/2	1	
78	19 1/2	1	
79	21 1/2	2	
3780	23 1/2	2	
81	25 1/2	2	
82	26 1/2	1 1/2	
83	28 1/2	1 1/2	
84	30 1/2	2	
85	33 1/2	3	
86	36 1/2	3	
87	39 1/2	3	
88	42 1/2	3	
89	45 1/2	3	
3790	48 1/2	3	
91	51 1/2	3	Conn.
92	56 1/2	2	
93	00 00	2	
94	03 1/2	3	
95	06 1/2	3	
96	10 1/2	4 1/2	
97	15 1/2	4 1/2	
98	20 1/2	5	
99	24 1/2	4	
3800	28 1/2	4	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: Bit #2 5-88 @ 2411 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-11-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3800	01 08	32	
02	36	4	
03	40	4	
04	44	4	
05	49	5	
06	52 1/2	3 1/2	
07	56 1/2	4	
08	9:01 1/2	4	
09	05	5	
3810	09	11	
11	13	4	
12	16	3	
13	19 1/2	3 1/2	
14	23	3 1/2	
15	26 1/2	3 1/2	
16	29 1/2	3	
17	33	2 1/2	
18	37	4	
19	41	4	
3820	45	11	
21	48 1/2	3 1/2	
22	52	3 1/2	
23	55	3	Conn.
24	58	4	Conn.
25	1:02	4 1/2	
26	1:13	4 1/2	
27	1:16 1/2	3 1/2	
28	21	4 1/2	
29	25	4	
3830	29	4	
31	33	4	
32	36	3	
33	41	5	
34	44	3	
35	46	2	
36	47	1	
37	49	2	
38	51	2	
39	53	2	
3840	56	3	
41	59	3	
42	11:02	3	
43	6	4	
44	12	6	
45	18	6	
46	23	5	
47	29	6	
48	33	4	
49	39	6	
3850	45	6	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3850	11:45	50	
51	50	5	
52	54	4	
53	59	5	Conn.
54	12:08	4	
55	12	4	
56	16	4	
57	22	6	
58	27	5	
59	32	5	
3860	34	2	
61	37	3	
62	39	2	
63	40	1	
64	42	2	
65	46	4	
66	51	5	
67	55	4	
68	1:00	5	
69	5	5	
3870	9	4	
71	14	5	
72	20	6	
73	25	5	
74	30	5	
75	34	4	
76	38	4	
77	43	5	
78	49	6	
79	54	5	
3880	59	5	
81	2:04	5	
82	9	5	
83	14	5	
84	19	5	
85	2:24	4	Conn.
86	32	4	
87	38	6	
88	43	5	
89	49	6	
3890	55	6	
91	3:01	6	
92	7	6	
93	13	6	
94	19	6	
95	26	7	
96	32	6	
97	39	7	
98	45	6	
99	51	6	
3900	58	7	

COMPANY Ferguson FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY SEWARD STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE 11-12-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3900 1	3:58 4:04	4	
2	11	7	
3	16	7	
4	23	7	
5	29	6	
6	34	5	
7	39	5	
8	43	4	
9	48	5	
3910 10	52 52	4	
11	57	5	
12	5:02 5:02	5	
13	06	4	
14	11	5	
15	15	4	
16	5:21 25	4	Conn.
17	30	5	
18	34	4	
19	39	5	
3920 20	44 44	5	
21	49	5	
22	53	4	
23	58	5	
24	6:03 6:03	5	
25	09	6	
26	14	5	
27	19	5	
28	24	5	
29	30	6	
3930 30	35 35	5	
31	41	6	
32	47	6	
33	54	7	
34	7:01 7:01	7	
35	08	7	
36	15	7	
37	23	8	
38	30	7	
39	38	8	
3940 40	45 45	7	
41	52	7	
42	57 1/2 5 1/2	5 1/2	
43	8:02 1/2 8:02 1/2	5	
44	08	5 1/2	
45	14	6	
46	19	5	
47	24 24	5	Conn. Serv. Rig.
48	38 1/2 42 1/2	4	
49	47	4 1/2	
3950 50	51 51	4	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
3950 51	8:51 8:55	4	
52	9:00	5	
53	05	5	
54	10	5	
55	16	6	
56	22	6	
57	27	5	
58	34	4	Trip - New B.T.S. 4 1/2"
59	1:08 1/2 1:08 1/2	1 1/2	
3960 60	10 10	1 1/2	
61	11	1	
62	12 1/2 12 1/2	1 1/2	
63	13 1/2 13 1/2	1	
64	15	1 1/2	
65	16 1/2 16 1/2	1 1/2	
66	18	1 1/2	
67	19	1	
68	20 1/2 20 1/2	1 1/2	
69	22 1/2 22 1/2	2	
3970 70	24 24	1 1/2	
71	25	1	
72	27	2	
73	28 1/2 28 1/2	1 1/2	
74	30	1 1/2	
75	31 1/2 31 1/2	1 1/2	
76	33 1/2 33 1/2	2	
77	35	1 1/2	Conn.
78	1:40 41	1	
79	42	1	
3980 80	43 43	1	
81	44	1	
82	45 1/2 45 1/2	1 1/2	
83	47	1 1/2	
84	48 1/2 48 1/2	1 1/2	
85	50	1 1/2	
86	51 1/2 51 1/2	1 1/2	
87	53	1 1/2	
88	54	1	
89	55	1	
3990 90	57 57	2	
91	58 1/2 58 1/2	1 1/2	
92	2:00	1 1/2	
93	01	1	
94	2 1/2	1 1/2	
95	4 1/2	2	
96	6 1/2 6 1/2	2	
97	8 1/2	2	
98	10	1 1/2	
99	11	1	
4000 100	12 1/2 12 1/2	1 1/2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Dr. & B. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: BIT #3 54TJ 03958 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-12-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4000	2:12	1	
01	13 1/2	1	
02	14 1/2	1	
03	15	1/2	
04	16	1	
05	17	1	
06	18	1	
07	19	1	Conn.
08	20 1/4	1 1/2	
09	25	1	
4010	25 1/2	1/2	
11	26 1/4	1	
12	27 1/2	1	
13	28 1/2	1	
14	30	1 1/2	
15	32	2	
16	34	2	
17	36	2	
18	37 1/2	1 1/2	
19	39 1/2	2	
4020	42	2 1/2	
21	44	2	
22	46	2	
23	47 1/2	1 1/2	
24	50	3	
25	52	2	
26	54	2	
27	56	2	
28	58	2	
29	3:00	2	
4030	2	2	
31	4	2	
32	6	2	
33	7 1/2	1 1/2	
34	9	1 1/2	
35	11	2	
36	13	2	
37	15	2	
38	17	2	
39	18 1/2	2	Conn.
4040	27	2	
41	29	2	
42	31	2	
43	33	2	
44	35 1/2	2 1/2	
45	38 1/2	3	
46	41	2 1/2	
47	43 1/2	2 1/2	
48	46	2 1/2	
49	49	3	
4050	51	2	Call Bill

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4050	3:53 1/2	2 1/2	
51	56	2 1/2	
52	56	2 1/2	
53	59	3	
54	4:01 1/2	2 1/2	
55	4 1/2	3	
56	8	3 1/2	
57	10	2	
58	13 1/2	3 1/2	
59	17	3 1/2	
4060	21	4	
61	24	3	
62	27	3	
63	30	3	
64	33	3	
65	36	3	
66	39	3	
67	41 1/2	2 1/2	
68	44	2 1/2	
69	47	3	
4070	4:53 1/2	2	Conn.
71	56	2	
72	57 1/2	1 1/2	
73	6:00	2 1/2	
74	03 1/2	3 1/2	
75	05 1/2	2	
76	07 1/2	2	
77	09 1/2	2	
78	11 1/2	2	
79	12 1/2	1	
4080	14	1 1/2	
81	15 1/2	1 1/2	
82	16 1/2	1	
83	17 1/2	1	
84	19	1 1/2	
85	21 1/2	2 1/2	
86	24	2 1/2	
87	26	2	
88	27 1/2	1 1/2	
89	29	1 1/2	
4090	31	2	
91	33	2	
92	35	1	
93	35 1/2	1/2	
94	36	1	
95	37	1	
96	38	1	
97	39	1	
98	40	1	
99	44 1/2	1	Conn
4100	46	1	

COMPANY Freeman Oil FARM Cooper WELL NO. 1
 SEC. TWP. RGE. LOC. COUNTY Seward STATE Ks.
 CONTRACTOR Sage SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE 11-12-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4100	5:46	1 1/2	
01	48	1/2	
2	49	1	
3	50	1	
4	52	2	
5	54	2	
6	57	3	
7	6:00	3	
8	2	2	
9	4	2	
4110	7	3	
11	9	2	
12	12	3	
13	14	2	
14	17	3	
15	20	3	
16	22	2	
17	25	3	
18	28	3	
19	31	3	
4120	33	2	
21	35	2	
22	38 1/2	3 1/2	
23	41 1/2	3	
24	43	1 1/2	
25	45	2	
26	47	2	
27	49	2	
28	51	2	
29	53	2	
4130	54 1/2	1 1/2	
31	7:00	1	conn.
32	2	2	
33	3 1/2	1 1/2	
34	5	1 1/2	
35	7	2	
36	8 1/2	1 1/2	
37	10	1 1/2	
38	11	1	
39	13	2	
4140	15 1/2	2 1/2	
41	18	2 1/2	
42	20 1/2	2 1/2	
43	23	2 1/2	
44	26	3	
45	29 1/2	3 1/2	
46	33	3 1/2	
47	36 1/2	3 1/2	
48	39	3 1/2	
49	43 1/2	3 1/2	
4150			

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4150	7:43 1/2	3 1/2	
51	51	4	
52	54	3	
53	58 1/2	4 1/2	
54	8:01 1/2	3	
55	3	1 1/2	
56	5	2	
57	6 1/2	1 1/2	
58	8	1 1/2	
59	9	1	
4160	10	1	
61	12	1	
62	17	1	conn.
63	19	2	
64	20	1	
65	22	2	
66	23	1	
67	24	1	
68	25	1	
69	26	1	
4170	27	1	
71	28 1/2	1 1/2	
72	30 1/2	2	
73	33 1/2	3	
74	38 1/2	4 1/2	Call Bill
4175	41	3	
76	45	4	
77	50	5	
78	53	5	
79	9:00	5	
4180	05 1/2	5 1/2	
81	07 1/2	5 1/2	
82	9	1 1/2	
83	10	1	
84	11 1/2	1 1/2	
85		1	
86		1	
87		1	
88		1	
89		1	
4190		1	
91	20	1	
92	24	4	
93	32	4 1/2	conn.
94	37	5	
95	41 1/2	4 1/2	
96	43 1/2	2	
97	45 1/2	2	
98	47	1 1/2	
99	49	2	Stop
4200			

COMPANY

SEC. 7 TWP. 33. RGE. 23 LOC.

CONTRACTOR

REMARKS:

FARM

COUNTY

SIZE HOLE

SIZE PUMP LINERS

WELL NO. 1

STATE

DRILL PIPE

LENGTH STROKE

DATE 11-12-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4200	9:49	2	
1	51	2	
2	52 1/2	1 1/2	
3	54	1 1/2	
4	56	2	
5	57 1/2	1 1/2	
6	10:00	2 1/2	
7	5	5 1/2	
8	10	5	
9	12 1/2	2 1/2	
4210	14 1/2	2	
11	16 1/2	2	
12	18 1/2	2	
13	22 1/2	4	
14	25 1/2	3	Core samples @ 4214'
15	11:38	4 1/2	
16	43	3	
17	48 1/2	3 1/2	
18	52 1/2	3 1/2	
19	56 1/2	4	
4220	12:00	4	
21	04	4	
22	08	4	
23	11	3	
24	15	4	Conn.
25	12:22	2	
26	49	5	bit locked Run Bit #4
27	49	2	
28	50	1	
29	51	1	
4230	53	2	
31	53 1/2	1 1/2	
32	54	1 1/2	
33	54 1/2	1 1/2	
34	55	1 1/2	
35	56	1	
36	57	1	
37	58	1	
38	59	1	
39	5:00	1	
4240	2	2	
41	3	1	
42	5	2	
43	8	3	
44	11	2	
45	15	4	
46	16	1	
47	19	3	
48	23	4	
49	26	3	
4250	31	5	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4250	5:31	3	
51	34	3	
52	36	2	
53	37	1	
54	41	4	
55	44	3	Conn.
56	5:52	3	
57	5	3	
58	9	4	
59	12	3	
4260	14	2	
61	16	2	
62	19	3	
63	21	2	
64	23	2	
65	25	2	
66	27	2	
67	30	3	
68	32	2	
69	34	2	
4270	36	2	
71	38	2	
72	40	2	
73	41 1/2	1 1/2	
74	43 1/2	2	
75	45	1 1/2	
76	47	2	
77	49 1/2	2 1/2	
78	51 1/2	2	
79	54	2 1/2	
4280	56	2	
81	59	3	
82	7:01	2	
83	03	2	
84	05	2	
85	08	3	
86	10 1/2	2 1/2	Conn. Sene. Rig.
87	2:27	1 1/2	
88	29	2	
89	31	2	
4290	32 1/2	1 1/2	
91	34 1/2	2	
92	36 1/2	1 1/2	
93	39 1/2	1 1/2	
94	39 1/2	2	
95	41	1 1/2	
96	43	2	
97	45	2	
98	46 1/2	1 1/2	
99	49	2 1/2	
4300	51 1/2	2 1/2	Wake Bill in Campers

COMPANY Ferguson FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: BIT #4 SAT-J 04226 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-13-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4300 01	7:51 1/2 54	2 1/2	
02	57	3	
03	8:00	3	
04	02	2	
05	04	2	
06	07	3	
07	10 1/2	3 1/2	
08	13	2 1/2	
09	15	2	
4310	18	3	
11	21	3	
12	23	2	
13	25	2	
14	27	2	
15	29	2	
16	31	2	conn
17	8:30 3/4 39	3	
18	42 1/2	3 1/2	
19	46	3 1/2	
4320	49	3	
21	52	3	
22	55	3	
23	57	2	
24	9:00	3	
25	02	2	
26	03 1/2	1 1/2	
27	06	2 1/2	
28	10	4	
29	13 1/2	3 1/2	
4330	18	4 1/2	
31	24	6	
32	30 1/2	6 1/2	
33	36	5 1/2	
34	42	6	
35	50	8	
36	58	8	
37	10:06	8	
38	12 1/2	6 1/2	
39	19	6 1/2	
4340	26	7	
41	31	5	
42	38 1/2	7 1/2	
43	44	5 1/2	
44	49	5	
45	56	7	
46	11:01	5	
47	05 1/2	4 1/2	conn.
48	09 1/2	3	
49	15	3	
4350	17 1/2	2 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4350 51	11:17 1/2 20 1/2	2	
52	24	3 1/2	
53	29	5	
54	35	6	
55	41	6	
56	48	7	
57	57 1/2	9 1/2	
58	12:07	9 1/2	
59	19	12	
4360	29	10	
61	32	8	
62	46	9	
63	53	7	
64	1:05 1/2	12 1/2	
65	14	8 1/2	
66	21	7	
67	26 1/2	5 1/2	
68	33	6 1/2	
69	39	6	
4370	45	6	
71	54	9	
72	2:03	9	
73	11	8	
74	20	9	
75	28	8	
76	35	7	
77	40 1/2	5 1/2	
78	47	6 1/2	conn.
79	53 1/2 55	3	conn.
4380	58	3	
81	3:02	4	
82	05 1/2	3 1/2	
83	09 1/2	4	
84	13	3 1/2	
85	18	5	
86	24	6	Circ.
87	5:17 1/2 5:19	2	D.B. #1 BIT #5 @ 5:15 AM.
88	21	2	
89	23	2	
4390	27	4	
91	35	8	
92	43	8	
93	50	7	
94	58	8	
95	6:05	7	
96	10	5	
97	16	6	
98	22	6	
99	28	6	
4400	34	6	

COMPANY Ferguson Oil Co. FARM 1100 per WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4400	01:06	34	
01	06	40	
02	49	9	
03	57	8	
04	7:05	8	
05	12	7	
06	19	7	
07	27	8	
08	34	7	
09	41	7	Conn. & Serv. Rig.
4410	48	8	
11	07	7	
12	14	7	
13	18 1/2	4 1/2	
14	22	3 1/2	
15	26	4	
16	30 1/2	4 1/2	
17	33 1/2	3	
18	35 1/2	2	
19	38	2 1/2	
4420	40	2	
21	43	3	
22	45 1/2	2 1/2	
23	48	2 1/2	
24	54	6	
25	9:00	6	
26	04	4	
27	08	4	
28	11	3	
29	15 1/2	4 1/2	
4430	21	5 1/2	
31	26	5	
32	32	6	
33	37 1/2	5 1/2	
34	43	5 1/2	
35	47	4	
36	52	5	
37	56	4	Conn.
38	10:00	6	
39	19	4	
4440	21	1 1/2	
41	26	3	
42	28	2	
43	31	3	
44	34 1/2	3 1/2	
45	38	3 1/2	
46	40 1/2	2 1/2	
47	42 1/2	2	
48	45	2 1/2	
49	49	4	
4450	54	5	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4450	10:54	3	
51	10:57	3	
52	11:03	6	
53	10	7	
54	17	7	
55	24	7	
56	30 1/2	6 1/2	
57	37 1/2	7	
58	44	6 1/2	
59	50 1/2	6 1/2	
4460	57	6 1/2	
61	12:03	6	
62	09	6	
63	16	7	
64	25	9	
65	31 1/2	6 1/2	
66	38	6 1/2	
67	42	4	Conn.
68	45 1/2	5	
69	57	5	
4470	1:03	6	
71	08	6	
72	13 1/2	4 1/2	
73	15	1 1/2	
74	17	2	
75	19	2	
76	25	6	
77	32	7	
78	36 1/2	4 1/2	
79	41 1/2	5	
4480	45	3 1/2	
81	50	5	
82	56	6	
83	59	3	
84	2:01 1/2	2 1/2	
85	03	1 1/2	
86	05	2	
87	08	3	
88	14	6	
89	20	6	
4490	24 1/2	4 1/2	
91	29	4 1/2	
92	34	5	
93	39	5	
94	44	5	
95	50	6	
96	55	5	
97	3:01	6	
98	6	5	
99	11	5	
4500	11 1/2	2	Conn. Tail Bit

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: Bit # 5- S-88 04386 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-14-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4500	01:18	20 1/2	
02	23	2 1/2	
03	26 1/2	3	
04	29 1/2	3	
05	31 1/2	2	
06	33 1/2	2	
07	38	4 1/2	
08	43	5	
09	48 1/2	5 1/2	
4510	53	4 1/2	
11	57	4	
12	4:01	4	
13	05	4 1/2	
14	08 1/2	3 1/2	
15	12 1/2	4	
16	15 1/2	3	
17	18	2 1/2	
18	21	3	
19	23	2	
4520	25	2	
21	5:12 1/2	2	
22	16 1/2	2	
23	18	1 1/2	
24	20	2	
25	21 1/2	1 1/2	
26	23 1/2	2	
27	25	1 1/2	
28	27	2	
29	28 1/2	1 1/2	
4530	30	1 1/2	
31	5:37 1/2	1 1/2	
32	39	2	
33	41	2	
34	43	2	
35	44 1/2	1 1/2	
36	46	1 1/2	
37	47	1	
38	49	2	
39	51	2	
4540	52 1/2	1 1/2	
41	54 1/2	2	
42	56 1/2	2	
43	58 1/2	2	
44	6:01	2 1/2	
45	2 1/2	1 1/2	
46	4 1/2	2	
47	6 1/2	2	
48	8 1/2	2	
49	11	2 1/2	
4550	14	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4550	8:14	4 1/2	
51	18 1/2	4 1/2	
52	24	5 1/2	
53	28	4	
54	34	6	
55	39 1/2	5 1/2	
56	45	5 1/2	
57	50	5	
58	54	4	
59	7:00 1/2	6 1/2	
4560	6	5 1/2	
61	11 1/2	5 1/2	
62	1:25 1/2	4	conn.-rig
63	32 1/2	3 1/2	
64	36 1/2	4	
65	40	3 1/2	
66	41 1/2	4 1/2	
67	49	4 1/2	
68	54 1/2	5 1/2	
69	59 1/2	5	
4570	8:03 1/2	4	
71	8 1/2	5	
72	13 1/2	5	
73	18	4 1/2	
74	22	4	
75	26	4	
76	31	5	
77	35 1/2	4 1/2	
78	40	4 1/2	
79	43 1/2	3 1/2	
4580	48	4 1/2	
81	50 1/2	2 1/2	
82	53	2 1/2	
83	55	2	
84	58	3	
85	9:00 1/2	2 1/2	
86	4 1/2	4	
87	9	4 1/2	
88	13	4	
89	18 1/2	5 1/2	
4590	23 1/2	5	
91	28 1/2	5	
92	34	5 1/2	
93	38	4	
94	9:42 1/2	2 1/2	conn.
95	47 1/2	2 1/2	
96	50	2 1/2	
97	51 1/2	1 1/2	
98	54	2 1/2	
99	56 1/2	2 1/2	
4600	10:00	3 1/2	Full Bit

COMPANY Ferguson OilFARM CooperWELL NO. 1SEC. 7 TWP. 33 RGE. 23 LOC.COUNTY SewardSTATE Ks.CONTRACTOR SageSIZE HOLE 7 7/8DRILL PIPE 4 1/2

REMARKS:

SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14DATE 11-14-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4600 01	10:00 7	7	
2	11	4	
3	16 1/2	5 1/2	
4	21 1/2	5	
5	26 1/2	5	
6	32	5 1/2	
7	36 1/2	4 1/2	
8	41	4 1/2	
9	46	5	
4610	51	5	
11	55+	4	
12	11:01	6	
13	6	5	
14	11	5	
15	16	5	Water Bill in Campers
16	21 1/2	5 1/2	
17	26	4 1/2	
18	31	5	
19	36	5	
4620	40	4	
21	45+	3	
22	46+	3	
23	49	3	
24	53	4	
25	13:46	3	Conn. sen. Rig
26	11	5	
27	17	6	
28	23	6	
29	27	4	
4630	31	4	Stop Circ. Samples.
31	1:28	9	
32	43	7	
33	53 1/2	8 1/2	
34	2:02	8 1/2	
35	10	8	
36	20	10	
37	29	9	
38	38	9	
39	47	9	
4640	55	8	
41	3:01	6	
42	4	3	
43	8	4	
44	11+	3	
45	14	3	
46	17	3	
47	19	2	
	22	3	
	27	5	
	11	4	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4650 51	3:31 34	3	
52	39	5	
53	42	3	
54	46	4	
55	51	5	
56	3:54	7	Conn.
57	11	7	
58	17 1/2	6 1/2	
59	24+	6 1/2	
4660	31	7	
61	39	8	
62	46	7	
63	52	6	
64	57	5	
65	5:02	5	
66	7	5	
67	12	5	
68	19	7	
69	27	8	
4670	34+	7	
71	41	7	
72	48	7	
73	55	7	
74	6:02	7	
75	9 1/2	7 1/2	
76	19	9 1/2	
77	26 1/2	7 1/2	
78	34	7 1/2	
79	40 1/2	7 1/2	
4680	49	7 1/2	
81	56 1/2	7 1/2	
82	7:03 1/2	8	
83	11 1/2	8	
84	18 1/2	7	
85	24	7	
86	41 1/2	7 1/2	
87	48	6 1/2	
88	54	6	
89	8:00	6	
4690	07 1/2	7 1/2	
91	13	5 1/2	
92	20	7	
93	26	6	
94	31 1/2	5 1/2	
95	38	6 1/2	
96	45	7	
97	53	8	
98	9:00	7	
99	05	5	
4700	10	5	

COMPANY Ferguson Oil Co.
SEC. 7 TWP. 33 RGE. 33 LOC.
CONTRACTOR Sage Drilling Co. Rig #3
REMARKS: BIT #5 58804386

FARM Cooper
COUNTY Seward
STATE KANSAS
SIZE HOLE 7 7/8"
SIZE PUMP LINERS 5 3/4"

WELL NO. 1
LENGTH STROKE 14"

DATE 11-15-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4700 01	9:10 15	5	
02	20 1/2	5 1/2	
03	26	5 1/2	
04	31 1/2	5 1/2	
05	37 1/2	6	
06	42	4 1/2	
07	44 1/2	2 1/2	
08	46 1/2	2	
09	40	1 1/2	
4710	50 1/2	2 1/2	
11	53 1/2	3	
12	55	1 1/2	
13	57	2	
14	10:00	3	
15	01 1/2	1 1/2	
16	04	2 1/2	Conn.
17	10 1/2	4	
18	20	4	
19	24	4	
4720	29	5	
21	33 1/2	4 1/2	
22	38 1/2	5	
23	43	4 1/2	
24	48	5	
25	52	4	
26	56 1/2	4 1/2	
27	11:01	4 1/2	
28	06	5	
29	10	4	
4730	14	4	
31	17	3	
32	21	4	
33	25	4	
34	29	4	
35	33	4	
36	38	5	
37	42	4	
38	46 1/2	4 1/2	
39	50 1/2	4	
4740	54	3 1/2	
41	58	4	
42	12:01 1/2	3 1/2	
43	05	3 1/2	
44	09	4	
45	12 1/2	3 1/2	
46	16	3 1/2	
47	20	4	Conn. Jetted shale
48	34 1/2	5	P.T.
49	45	5	
4750	51	6	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4750 51	12:51 56 1/2	5 1/2	
52	1:02	5 1/2	
53	07	5	
54	13	6	
55	20	7	
56	25	5	
57	32	7	
58	36	4	
59	43	7	
4760	49	6	
61	55	6	
62	2:01	4	
63	7 1/2	6 1/2	
64	14	6 1/2	
65	20	6	
66	26 1/2	6 1/2	
67	33 1/2	7	
68	42	8 1/2	
69	47 1/2	5 1/2	
4770	54	6 1/2	
71	3:01	7	
72	8 1/2	7 1/2	
73	14 1/2	6	
74	21	6 1/2	
75	27	6	
76	33	6	
77	39	6	
78	3:46 1/2	5 1/2	Conn.
79	57	5 1/2	
4780	4:00 1/2	6 1/2	
81	09	5 1/2	
82	15 1/2	6 1/2	
83	21	6 1/2	
84	27	6	
85	33	6	
86	39	6	
87	45	6	
88	51 1/2	6 1/2	
89	56 1/2	5	
4790	5:00 1/2	6 1/2	
91	10	7	
92	15 1/2	5 1/2	
93	22	6 1/2	
94	28 1/2	6 1/2	
95	35	6 1/2	
96	42	7	
97	49	7	
98	56	7	
99	6:00 1/2	6 1/2	
4800	9	6 1/2	

ROTARY DRILLING TIME SHEET # 503
KANSAS BLUE PRINT CO., WICHITA, KAN.

COMPANY Freeman OilFARM CooperWELL NO. 1SEC. 7 TWP. 33 RGE. 33 LOC.COUNTY Seward STATE Ks.CONTRACTOR SageSIZE HOLE 7 7/8 DRILL PIPE 4 1/2

REMARKS:

SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14DATE 11-15-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4800	6:04	8	
1	6:17	8	
2	24 1/2	7 1/2	
3	31	6 1/2	
4	37 1/2	6 1/2	
05	44	6 1/2	
6	51	7	
7	57	6	
8	7:03 1/2	6 1/2	
9	7:07 1/2	1 1/2	conn.
4810	11 1/2	2 1/2	Call Bill
11	13 1/2	2 1/2	
12	16	2 1/2	
13	18	2	
14	24	6	
15	31	7	
16	37 1/2	6 1/2	
17	44	6 1/2	
18	50	6	
19	55	5	
4820	8:00	5	
21	4 1/2	4 1/2	
22	10	5 1/2	
23	15	5	
24	20	5	
25	26 1/2	6 1/2	
26	32 1/2	6	
27	38 1/2	6	
28	45	6 1/2	
29	52	7	
4830	57 1/2	3 1/2	
31	9:02	4 1/2	
32	5 1/2	3 1/2	
33	7 1/2	2 1/2	
34	9 1/2	2	
35	12 1/2	3	
36	17	4 1/2	
37	21	4	
38	24	3	
39	30	6	
4840	9:33 1/2	4	conn.
41	44 1/2	5	
42	50 1/2	6	
43	55	4 1/2	
44	59 1/2	4 1/2	
45	10:04	4 1/2	
46	9	5	
47	15	6	
48	19 1/2	4 1/2	
49	24	4 1/2	
4850	28 1/2	4 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4850	10:28 1/2	4 1/2	
51	33	4 1/2	
52	38 1/2	5 1/2	
53	43 1/2	5	
54	49	5 1/2	
55	54	5	
56	11:00	6	
57	5	5	
58	11	6	
59	17	6	
4860	22	5	
61	27	5	
62	33	6	
63	38	5	
64	44	6	
65	48	4	
66	53	5	
67	58	5	
68	12:03	5	
69	8 1/2	5 1/2	
4870	15	6 1/2	Conn.
71	12:20	4	
72	30	6	
73	35	5	
74	40	5	
75	46	6	Call Bill
76	51	5	
77	57	6	
78	1:02 1/2	5 1/2	
79	8	5 1/2	
4880	14 1/2	6 1/2	
81	21	6 1/2	
82	28	7	
83	35 1/2	7 1/2	
84	42	6 1/2	
85	48 1/2	6 1/2	
86	55	6 1/2	
87	2:02	7	
88	09	7	
89	14	5	
4890	16	2	
91	17	1	
92	18	1	
93	19	1	
94	20	1	
95	21	1	
96	21 1/2	1 1/2	
97	22	1 1/2	Circ. Samples
98		1 1/2	
99		1 1/2	
4900		1 1/2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY SEWARD STATE KANSAS
 CONTRACTOR Sage Oil Co. Rig #3 SIZE HOLE 7 7/8 DRILL PIPE 4 1/2"
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14"

DATE 11-16-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4900 01		1/2	conn
		1/2	
		1	
		1/2	
05		1/2	
		1/2	
	3:26	1/2	
	27	1	
	30	3	
10	32	2	
11	35	3	
12	39	4	
13	44	5	
14	49	5	
15	54	5	
16	59	5	
17	4:04	5	
18	8 1/2	4 1/2	
19	14 1/2	6	
4920	21	6 1/2	
21	27	6	
22	33 1/2	6 1/2	
23	39	5 1/2	
24	45 1/2	6	
25	51	6	
26	57 1/2	6 1/2	
27	5:04	6 1/2	
28	10	6	
29	14 1/2	1 1/2	
4930	14 1/2	2 1/2	
31	19	5	
32	24	5	
33	31	7	Conn.
34	5:38 1/2	6	
35	51	7	
36	6:00	9	
37	10	10	
38	20	10	
39	30	10	
4940	40	10	
41	50	10	
42	58	8	
43	7:06	8	
44	14	8	
45	21 1/2	7 1/2	
46	29	7 1/2	
47	37	8	
48	45	8	
49	53	8	
4950	8:00	7	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
4950 51	8:00 10	10	
52	18	8	
53	26	8	
54	34	8	
55	41	7	
56	49	8	
57	57	8	
58	9:06	9	
59	13	7	
4960	20	7	
61	26	6	
62	33	7	
63	39	6	
64	45	6	
65	51	6	Conn. Serv. Rig.
66	10:09 1/2	6	Jettied shale pit.
67	20	5	
68	25 1/2	5 1/2	
69	32	6 1/2	
4970	39	7	
71	44	5	
72	50	6	
73	56	6	
74	11:01	5	
75	07 1/2	6	
76	14	6 1/2	
77	20	6	
78	26 1/2	6 1/2	
79	34	7 1/2	
4980	42	8	
81	49	7	
82	54	5	
83	12:00	6	
84	06	6	
85	12	6	
86	17	5	
87	22	5	
88	28	6	
89	34 1/2	6 1/2	
4990	40	5 1/2	Coil Bill
91	46	6	
92	51	5	
93	57	6	
94	11:02	5	
95	08	6	Conn.
96	18 1/2	3 1/2	
97	21 1/2	4 1/2	
98	26 1/2	5	
99	31 1/2	5	
5000	36	4 1/2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. TWP. RGE. LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE 11-16-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5000	01:30	4	
02	45	5	
03	51 1/2	6 1/2	Bit # @ 5030
04	56 1/2	5	
05	2:03	6 1/2	
06	10	7	
07	18	8	
08	25 1/2	7 1/2	
09	31	5 1/2	
5010	37 1/2	6 1/2	
11	44	6 1/2	
12	51	7	
13	58	7	
14	3:03 1/2	5 1/2	
15	10	6 1/2	
16	15 1/2	5 1/2	
17	21 1/2	6	
18	28	6 1/2	
19	34	6	
5020	49	5	
21	44 1/2	5 1/2	
22	49 1/2	5	
23	53	3 1/2	
24		1/2	
25		1/2	
26	54 1/2	1/2	Conn.
27		1/2	
28		1/2	
29		1/2	
5030	4:05	1/2	Stop Circ.
31	25 1/2	1/2	
32	26	1/2	
33	26 1/2	1/2	
34	27 1/2	1 1/2	
35	28	1/2	
36	28 1/4	1/4	
37	28 1/2	1/4	
38	29	1/2	
39	30	1/2	
5040	30 1/2	1/2	
41	31	1/2	
42	31 3/4	3/4	
43	32 1/2	3/4	
44	33	1/2	
45	33 1/2	1/2	
46	34 1/4	3/4	
47	35	3/4	
48	35 1/2	1/2	
49	36 1/2	1	
5050	38	1 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5050	42	2	
52	50 1/2	8 1/2	
53	58	7 1/2	
54	7:07	9	
55	15 1/2	8 1/2	
56	24	8 1/2	
57	30 1/2	6 1/2	Conn. Seward Rig
58	44 1/2	2 1/2	
59	49 1/2	2 1/2	
5060	54	4 1/2	
61	8:00	6	
62	05	5	
63	08	3	
64	11 1/2	3 1/2	
65	18	6 1/2	
66	23 1/2	4 1/2	
67	28 1/2	5	
68	33	4 1/2	
69	38 1/2	5 1/2	
5070	44 1/2	6	
71	50	5 1/2	
72	56	6	
73	9:01 1/2	5 1/2	
74	07	5 1/2	
75	12	5	
76	18	6	
77	23	5	
78	28	5	
79	32	4	
5080	36	4	
81	41	5	
82	45	4	
83	49	4	
84	53	4	
85	57 1/2	4 1/2	
86	10:02	4 1/2	
87	07	5	
88	11	4	Conn.
89	19	4	
5090	24	5	
91	29	5	
92	34	5	
93	39 1/2	5 1/2	
94	43 1/2	4	
95	48	4 1/2	
96	53 1/2	5 1/2	
97	59	5 1/2	
98	11:05	6	
99	10	5	
5100	15	5	Call Bill

COMPANY Ferguson Oil Co.FARM CooperWELL NO. 1SEC. 7 TWP. 33 RGE. 33 LOC.COUNTY SewardSTATE KANSASCONTRACTOR Sage Drilling Co. Rig #3SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"REMARKS: Bit # 5-8805030SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"DATE 11-17-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5100	11:15	1 1/2	
01	26 1/2	5	
02	32	5 1/2	
03	38	6	
04	43	5	
05	48	5	
06	54	6	
07	59	5	
08	12:04 1/2	5 1/2	
09	09 1/2	5	
5110	14 1/2	5	
11	20 1/2	6	
12	25	4 1/2	
13	31	6	
14	36	5	
15	42	6	
16	46 1/2	4 1/2	
17	51 1/2	5	Conn.
18	1:01 1/2	4	
19	10	4 1/2	
5120	15	5	
21	18	3	
22	24	6	
23	28	4	
24	33	5	
25	37 1/2	4 1/2	
26	42	4 1/2	
27	46	4	
28	51	5	
29	56	5	
5130	2:01	5	
31	06	5	
32	11	5	
33	15 1/2	4 1/2	
34	21	5 1/2	
35	27 1/2	6 1/2	
36	34	6 1/2	
37	38	4	
38	43 1/2	5 1/2	
39	49	5 1/2	
5140	54	5	
41	3:01	7	
42	36	6 1/2	
43	40	3	
44	46	3	
45	50 1/2	3 1/2	
46	54	3 1/2	
47	56 1/2	2 1/2	
48	30	4 1/2	
49	36	6	Conn.
5150	3:43 1/2	3 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5150	3:46 1/2	6 1/2	
52	56 1/2	3 1/2	
53	4:01 1/2	5	
54	5	4 1/2	
55	9	4	
56	12	3	
57	15	3	
58	20	5	
59	25 1/2	5 1/2	
5160	30	4 1/2	
61	36	6	
62	41	5	
63	47	6	
64	51 1/2	4 1/2	
65	56	4 1/2	
66	5:01	5	
67	6 1/2	5 1/2	
68	11 1/2	5	
69	17	5 1/2	
5170	21	4	
71	26	5	
72	30 1/2	4 1/2	
73	35	4 1/2	
74	49	4	
75	43 1/2	4 1/2	
76	48	4 1/2	
77	53	5	
78	56	3	
79	59	3	
5180	6:01 1/2	2 1/2	
81	3	1 1/2	
82	6:09 1/2	2	Conn.
83	12	2 1/2	
84	15	3	
85	18	3	
86	20 1/2	2 1/2	
87	23	2 1/2	
88	25 1/2	2 1/2	
89	30	4 1/2	
5190	34	A	
91	36	2 1/2	
92	40	4	
93	43	3	
94	47	4	
95	50 1/2	3 1/2	
96	54	3 1/2	
97	56 1/2	2 1/2	
98	7:00	3 1/2	
99	4	4	
5200	9	5	

COMPANY Ferguson Oil
SEC. 7 TWP. 33 RGE. 33 LOC.
CONTRACTOR Sage
REMARKS:

FARM Cooper WELL NO. 1
COUNTY Seward STATE Ks
SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

DATE 11-17-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5200 1	17:01 13	4	
2	17 1/2	4 1/2	
3	23	5 1/2	
4	27	4	
5	32	5	
6	37 1/2	5 1/2	
7	43 1/2	6	
8	49 1/2	6	
9	54 1/2	5	
5210 10	08:00 00	5 1/2	
11	11 1/2	5	clock corr.
12	27	5	
13	33 1/2	4	conn.
14	42	6	
15	48	6	
16	53 1/2	5 1/2	
17	9:00	6 1/2	
18	4 1/2	4 1/2	
19	10	5 1/2	
5220 20	15 1/2 15 1/2	5 1/2	
21	21	5 1/2	
22	27	6	
23	32	5	
24	37 1/2	5 1/2	
25	43	5 1/2	
26	48	5	
27	51 1/2	3 1/2	
28	54	3 1/2	
29	57 1/2	3 1/2	
5230 30	10:02 10:02	4 1/2	
31	6	4	
32	10 1/2	4 1/2	
33	15 1/2	5	
34	22	6 1/2	
35	28	6	
36	33	5	Horn
37	39	6	
38	44	5	
39	50	6	
5240 40	55 55	5	
41	11:01	6	Conn.
42	11:04	3	
43	14	5	
44	19	5	
45	24	5	
46	29	5	
47	34	5	
48	41	7	
49	47	6	
5250 50	53 53	6	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5250 51	11:53 12:00	7	
52	6	6	
53	14	8	
54	20 1/2	6 1/2	
55	25	4 1/2	
56	31	6	
57	37	6	
58	42	5	
59	48	6	
5260 60	53 53	5	
61	59	6	
62	1:05	6	
63	11	6	
64	17	6	
65	23 1/2	6 1/2	
66	29	5 1/2	
67	34 1/2	4 1/2	
68	40	5 1/2	
69	46	6	
5270 70	51 51	5	
71	57	6	
72	2:02	5	
73	2:08	5	
74	17	4	
75	22	5	
76	27	5	
77	32 1/2	5 1/2	
78	38	5 1/2	
79	43	5	
5280 80	48 48	5	
81	53	5	
82	58	5	
83	3:04	6	
84	9	5	
85	13 1/2	4 1/2	
86	18 1/2	5	
87	23 1/2	5	
88	30	6 1/2	
89	36	6	
5290 90	41 41	5	
91	47	6	
92	53 1/2	6 1/2	
93	4:00	6 1/2	
94	5	5	
95	11	6	
96	16	5	
97	21 1/2	5 1/2	
98	27	5 1/2	
99	33	6	
5300 100	38 38	5	

COMPANY Ferguson Oil Co.

SEC. 7 TWP. 33 RGE. 33 LOC.

CONTRACTOR SAGE

REMARKS: BIT #6-5-88 @ 5030

FARM Cooper

COUNTY Seward STATE KANSAS

SIZE HOLE 7 7/8 DRILL PIPE 4 1/2

SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

WELL NO. 1

DATE 11-18-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5300	14:38		
1	43	5	
2	48 1/2	5 1/2	
3	55	6 1/2	Conn
4	5:01 5 1/2	4 1/2	
5	10 1/2	5	
6	16	5 1/2	
7	22	6	
8	27	5	
9	32	6	
5310	38	5	
11	44	6	
12	50	6	
13	56	6	
14	6:02	6	
15	7 1/2	5 1/2	
16	13 1/2	6	
17	19	5 1/2	
18	25	6	
19	31	6	
5320	36 1/2	5 1/2	
21	44	7 1/2	
22	51	7	
23	57 1/2	6 1/2	
24	7:05	7 1/2	
25	12	7	
26	20	8	
27	27	7	
28	34 1/2	7 1/2	
29	40 1/2	6	
5330	46 1/2	6	
31	52	5 1/2	
32	59 1/2	5	
33	8:00	3	
34	06	6	Conn. & Rig
35	12 1/2	2 1/2	
36	38	5 1/2	
37	43	5	
38	49	6	
39	55	6	
5340	9:01	6	
41	07	6	
42	12 1/2	5 1/2	
43	17	4 1/2	
44	22	5	
45	27	5	
46	32	5	
47	37	5	
48	42	5	
49	47	5	
5350	51 1/2	4 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5350	9:51 1/2		
51	57	5 1/2	
52	10:02 1/2	5 1/2	
53	08	5 1/2	
54	12	4	
55	17	5	
56	21 1/2	4 1/2	
57	27	5 1/2	
58	31	4	
59	35	4	
5360	38 1/2	3 1/2	
61	42	3 1/2	
62	46	4	
63	50 1/2	4 1/2	Conn.
64	10:07 1/2	3	
65	16	5 1/2	
66	20	4	
67	25	5	
68	30	5	
69	36 1/2	6 1/2	
5370	41	4 1/2	
71	48	7	
72	52	4	
73	57	5	
74	12:02 1/2	5 1/2	
75	08	5 1/2	
76	13	5	
77	18 1/2	5 1/2	
78	25	6 1/2	
79	32	7	
5380	36	4	
81	42	6	
82	47	5	
83	54 1/2	7 1/2	
84	1:01	6 1/2	
85	08	7	
86	14	6	
87	20	6	
88	25	5	
89	30	5	
5390	35	5	
91	40	5	
92	46	6	
93	51 1/2	5 1/2	Conn.
94	55 59	3 1/2	
95	2:03	4	
96	07 1/2	4 1/2	
97	12 1/2	5	
98	18	5 1/2	
99	23 1/2	5 1/2	
5400	27 1/2	4	

ROTARY DRILLING TIME SHEET - 505
KANSAS BLUE PRINT CO., WICHITA, KAN.

COMPANY *Ferguson Oil Co.*

FARM

*Cooper*WELL NO. *1*SEC. *7* TWP. *33* RGE. *33* LOC.

COUNTY

Seward

STATE

*KANSAS*CONTRACTOR *Sage Drilling Co. Rig #3*SIZE HOLE *7 7/8"*DRILL PIPE *4 1/2"*REMARKS: *Bit #6-5-88 05830*SIZE PUMP LINERS *5 3/4"* LENGTH STROKE *14"*DATE *11-18-69*

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5400 01	2:27 32	4 1/2	
02	37	5	
03	42	5	
04	46	4	
05	49	3	
06	53 1/2	4 1/2	
07	57	3 1/2	
08	3:00	3	
09	2	2	
5410	6	4	
11	11	5	
12	14 1/2	3 1/2	
13	19 1/2	5	
14	25	5 1/2	
15	29 1/2	4 1/2	
16	34	4 1/2	
17	37	3	
18	41 1/2	4 1/2	
19	46	4 1/2	
5420	50 1/2	4 1/2	
21	55	4 1/2	
22	59 1/2	4 1/2	
23	1:03 1/2	4	
24	8	4 1/2	
25	12 1/2	3 1/2	conn.
26	22	4 1/2	
27	27	5	
28	31	4	
29	35 1/2	4 1/2	
5430	40	4 1/2	
31	45	5	
32	50	5	
33	54	4	
34	59	5	
35	5:03 1/2	4 1/2	
36	8 1/2	5	
37	14	5 1/2	
38	18 1/2	4 1/2	
39	23 1/2	5	
5440	28	4 1/2	
41	32 1/2	4 1/2	
42	36	3 1/2	
43	40	4	
44	44	4	
45	47	3	
46	50 1/2	3 1/2	
47	56	5 1/2	
48	6:02 1/2	6 1/2	
49	8	5 1/2	
5450	14 1/2	6 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5450 51	6:14 1/2 19	4 1/2	
52	24 1/2	5 1/2	
53	30	5 1/2	
54	36	6	
55	41	5	
56	45	4	
57	6:50 1/2	53	2 1/2 conn.
58	56	3	
59	58 1/2	2 1/2	
5460	7:00 1/2	2	
61	2 1/2	2	
62	6	3 1/2	
63	10 1/2	4 1/2	
64	16 1/2	6	
65	22	5 1/2	
66	27	5	
67	32	5	
68	36	4	
69	40	4	
5470	43 1/2	3 1/2	
71	46 1/2	3	
72	50 1/2	4	
73	53	2 1/2	
74	56	3	
75	58	2	
76	8:00	2	
77	8:13 1/2	1 1/2	clock corr.
78	16 1/2	3	
79	22	5 1/2	
5480	26	4	
81	30	4	
82	32 1/2	2 1/2	
83	36	3 1/2	
84	39	3	
85	43 1/2	4 1/2	
86	46	2 1/2	
87	49 1/2	3 1/2	
88	5:00 1/2	3 1/2	
89	2	2	
5490	5	3	
91	8 1/2	3 1/2	
92	12	4	
93	15 1/2	3 1/2	
94	19	3 1/2	
95	23	4	
96	26	3	
97	30	4	
98	33 1/2	3 1/2	
99	39	5 1/2	
5500	43	4	

COMPANY Ferguson O.I. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE Ks.
 CONTRACTOR Sage SIZE HOLE 7 7/8 DRILL PIPE 4 1/2
 REMARKS: SIZE PUMP LINERS 5 3/4 LENGTH STROKE 14

5606
38

DATE 11-18-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5500	19:43		
1	19:47	4	
2	50	3	
3	52	2	
4	54	2	
5	56 1/2	2 1/2	
6	59 1/2	3	
7	10:02	2 1/2	
8	53		
9	8	3	
5510	11	3	
11	14	3	
12	16	2	
13	18 1/2	2 1/2	
14	20	1 1/2	
15	22	2	
16	27	5	
17	33	6	
18	10:38	4 3	conn.
19	45	4	
5520	48 1/2	4 1/2	
21	53	3 1/2	
22	56	3	
23	11:00	4	
24	2	2	
25	4	2	
26	7	3	
27	11	4	
28	14	3	
29	16	2	
5530	19	3	
31	21	2	
32	23	2	
33	25	2	
34	27	2	
35	30	3	
36	35	5	
37	39 1/2	4 1/2	
38	44	4 1/2	
39	49	5	
5540	55	6	
41	12:00	5	
42	5	5	
43	10	5	
44	16	6	
45	22	6	
46	26	4	
47	30	4	
48	36	6	
49	41 1/2	5 1/2	CONN.
5550	12:48	3	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5550	12:48		
51	54	3	
52	58 1/2	4 1/2	
53	1:01	2 1/2	
54	4 1/2	3 1/2	
55	8	3 1/2	
56	9 1/2	1 1/2	
57	11	1 1/2	
58	14	3	
59	18	4	
5560	23 1/2	5 1/2	Call Bill
61	29	5 1/2	
62	33	4	
63	36	3	
64	38	2	
65	41	3	
66	50	9	
67	57	7	
68	2:01	4	
69	3	2	
5570	5	2	
71	7	2	
72	8 1/2	1 1/2	
73	10 1/2	2	
74	16	5 1/2	
75	22	6	
76	26	4	
77	29	3	
78	35	6	
79	37 1/2	2 1/2	
5580	41	3 1/2	Call ^{DO NOT} Bill-624-2257
81	2:41	3	
82	56	6	
83	3:01	5	
84	4	3	
85	6	2	
86	11	5	
87	14	3	
88	18	4	
89	23 1/2	5 1/2	
5590	27	3 1/2	
91	32 1/2	5 1/2	
92	38	5 1/2	
93	43	5	
94	49	6	
95	54	5	
96	4:00	6	
97	4	4	
98	9	5	
99	13 1/2	4 1/2	
5600	18	4 1/2	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR SAGE Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"
 REMARKS: Bit #6 S-88 05030 SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14'

DATE 11-19-69

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5600	4:18		
1	22	4	
2	28	6	
3	35	7	
4	40	5	
5	44 1/2	4 1/2	
6	50	5 1/2	
7	54	4	
8	56	2	
9	58	2	
5610	59 1/2	1 1/2	
11	5:01 1/2	2 1/2	Conn.
12	5:08 1/2	3 1/2	
13	17	5 1/2	
14	22	5	
15	27	5	
16	32	5	
17	37 1/2	5 1/2	
18	42	4 1/2	
19	47	5	
5620	52	5	
21	57	5	
22	6:02	5	
23	05	3	
24	07	2	
25	09 1/2	2 1/2	
26	11 1/2	2 1/2	
27	14 1/2	3	
28	19	4 1/2	
29	22 1/2	3 1/2	
5630	25 1/2	3	
31	29	3 1/2	
32	32	3	
33	36	4	
34	39	3	
35	43	4	
36	46 1/2	3 1/2	
37	49 1/2	3	
38	52	2 1/2	
39	55	3	
5640	58	3	
41	7:00 1/2	2 1/2	
42	03	2 1/2	Conn. C.F.S. 30 min.
43	7:33 1/2	3	
44	7:41 1/2	3	
45	7:44 1/2	2 1/2	
46	5	3	
47	47	2 1/2	
48	49 1/2	2 1/2	
49	51 1/2	2	
5650	54	2 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5650	1:54	3 1/2	
51	57 1/2	3 1/2	
52	8:00 1/2	3	
53	03 1/2	3	
54	08 1/2	5	Circ. 1/min
55	20 1/2	3	
56	27 1/2	4 1/2	
57	31 1/2	4	
58	36	4 1/2	
59	40 1/2	4 1/2	
5660	45	4 1/2	
61	49	4	
62	55 1/2	6 1/2	
63	9:00 1/2	5	
64	05 1/2	5	
65	10	4 1/2	
66	14	4	
67	19	5	
68	23 1/2	4 1/2	
69	28	4 1/2	
5670	33 1/2	5 1/2	Circ. DST #3
71	2:11 1/2	2 1/2	
72	17 1/2	4	
73	23	5 1/2	Conn.
74	2:37 1/2	3	
75	41	4	
76	46	5	
77	50 1/2	4 1/2	
78	56	5 1/2	
79	3:02	4	
5680	9	7	
81	15	6	
82	21	6	
83	27 1/2	6 1/2	
84	34	6 1/2	
85	39	5	
86	45	6	
87	51	6	
88	55 1/2	4 1/2	
89	4:00 1/2	5	
5690	5	4 1/2	
91	10	5	
92	15	5	
93	19 1/2	4 1/2	
94	24	4 1/2	
95	30	6	
96	35	5	
97	39 1/2	4 1/2	
98	46	6 1/2	
99	50 1/2	4 1/2	
5700	54 1/2	4	

COMPANY Ferguson Oil Co. FARM Cooper WELL NO. 1
 SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS
 CONTRACTOR Sage Drilling Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/4"
 REMARKS: SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5700 01	4:54 59	4 1/2	
02	5:03 1/2	4 1/2	
03	8	4 1/2	Conn.
04	5:13 18	5	
05	22	4	
06	27	5	
07	31	4	
08	35	4	
09	39	4	
5710	43	4	
11	47 1/2	4 1/2	
12	53	5 1/2	
13	58	5	
14	6:02	4	
15	7	5	
16	12	5	
17	20	8	
18	25 1/2	5 1/2	
19	32 1/2	7	
5720	39 1/2	7	
21	46 1/2	7	
22	52 1/2	6	
23	56 1/2	4	
24	7:00	3 1/2	
25	04	4	
26	10	6	
27	17	7	
28	24	7	
29	28	4	
5730	33	5	Circ. DST
31	6:49 49	3	Circ 30 MIN After
32	55	6	Test Before Drig Aged.
33	2:01	6	
34	7	6	Conn.
35	2:13 18	5	
36	24	6	
37	32	8	
38	41	9	
39	49	8	
5740	58	9	
41	3:06 1/2	8 1/2	
42	13 1/2	7	
43	20 1/2	7	
44	27	6 1/2	
45	34 1/2	7 1/2	
46	41 1/2	7	
47	49	7 1/2	
48	57	8	
49	4:05	8	Get up
5750	12	7	Wake Bit in Camper

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5750 51	4:12 18	6	
52	24 1/2	6 1/2	
53	30 1/2	8	
54	37 1/2	6	
55	43 1/2	6	
56	51 1/2	8	
57	5:00 1/2	9	
58	08	7 1/2	
59	14	6	
5760	21	7	
61	28 1/2	7 1/2	
62	34 1/2	6	
63	40 1/2	6	
64	45 1/2	5	
65	51 1/2	6	Conn.
66	5:38 38	7	
67	12 1/2	7 1/2	
68	20	7 1/2	
69	24 1/2	4 1/2	
5770	30	5 1/2	
71	37	7	
72	45	8	
73	53	8	
74	7:01	8	
75	09	8	
76	17	8	
77	24	7	
78	31	7	
79	36 1/2	5 1/2	
5780	42	5 1/2	
81	46 1/2	4 1/2	
82	50	3 1/2	
83	55 1/2	5 1/2	
84	8:00	4 1/2	
85	04	4	
86	08	4	
87	12	4	
88	15 1/2	3 1/2	
89	19 1/2	4	
5790	22 1/2	3	
91	26	3 1/2	
92	30	4	
93	34	4	
94	38	4	
95	42	4	
96	46 1/2	4 1/2	Conn. & Serv. Rig.
97	8:59 02	3	
98	06	4	
99	11 1/2	5 1/2	
5802	16	4 1/2	

COMPANY Ferguson oil Co. FARM Cooper WELL NO. 1

SEC. 7 TWP. 33 RGE. 33 LOC. COUNTY Seward STATE KANSAS

CONTRACTOR Sage Drlg. Co. Rig #3 SIZE HOLE 7 7/8" DRILL PIPE 4 1/2"

REMARKS: SIZE PUMP LINERS 5 3/4" LENGTH STROKE 14"

DATE

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5800 01	9:16 18	2	
02	21 1/2	3 1/2	
03	24 1/2	3	
04	29	4 1/2	
05	33	4	CATCH 5' samples
06	36 1/2	3 1/2	
07	41 1/2	4	
08	45	3 1/2	
09	49 1/2	4	
5810	53	4	Call Bill
11	57 1/2	4 1/2	
12	10:02 1/2	5	
13	07 1/2	5	
14	10	2 1/2	
15	11	1	
16	13	2	
17	15	2	
18	16 1/2	1 1/2	
19	18	1 1/2	
5820	19 1/2	1 1/2	
21	22	2 1/2	
22	28 1/2	1 1/2	
23	28	3 1/2	1 min off
24	29 1/2	1 1/2	
25	33 1/2	4	
26	41 1/2	7 1/2	
27	45 1/2	4	Conn.
28	52 1/2 59	6 1/2	
29	11:04 1/2	5 1/2	
5830	10	5 1/2	
31	15 1/2	5 1/2	
32	24	8 1/2	
33	30 1/2	6 1/2	
34	33	2 1/2	
35	34 1/2	1 1/2	
36	36 1/2	2	
37	38 1/2	2	
38	41	2 1/2	
39	43	2	
5840	45	2	
41	47 1/2	2 1/2	
42	50	2 1/2	
43	53 1/2	3 1/2	
44	55 1/2	2	
45	58 1/2	3	
46	12:01	2 1/2	
47	05	4	
48	08	3	
49	11 1/2	3 1/2	
5850	17	5 1/2	

DEPTH	TIME O'CLOCK	MIN.	REMARKS
5850 51	12:17 21 1/2	4 1/2	
52	26 1/2	5	
53	30	3 1/2	
54	35	5	
55	39 1/2	4 1/2	
56	43 1/2	4	
57	49 1/2	6	
58	55	5 1/2	Conn.
59	10:04 04	3 1/2	
5860	08	4	Don't stop
61	12 1/2	4 1/2	
62	15 1/2	3	
63	18	2 1/2	
64	21	3	
65	24	3	
66	27	3	
67	33 1/2	6 1/2	
68	42	8 1/2	
69	50	8	
5870	2:00	10	
71	11	11	
72	23	12	
73	33	10	T.D.
74			
75			
76			
77			
78			
79			
5880			
81			
82			
83			
84			
85			
86			
87			
88			
89			
5890			
91			
92			
93			
94			
95			
96			
97			
98			
99			
5900			

ROTARY DRILLING TIME SHEET - 505
KANSAS BLUE PRINT CO., WICHITA, KAN.