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WILLIAM R. ATKINSON

Geologist

P. O. Box 1142

Phone MAin 4-1673

14 West Second Street

Res. Ph. MAin 4-2257

LIBERAL, KANSAS 67901

GEOLOGICAL REPORT

Ferguson Oil Co.

#1-7 Cooper
SW SE Sec. 7-33S-33W
Seward County, Kansas

by

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GEOLOGICAL REPORT

Ferguson Oil Co.
#1-7 Cooper
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Seward County, Kansas
Evalyn Field

Commencement Date: 11/6/69
Completion Date: 11/22/69
Elevation: 2843 K.B.
2833 G.L.
Total Depth: 5873 Driller
5872 Great Guns
Contractor: Sage Drilling Co., Rig #3
Electrical Surveys: Great Guns Sonic, SP Gamma Guard Neutron,
Caliper
Casing: Surface: 8 5/8" @ 1582'
Production: None
Special Equipment: Baroid Gas Detecting Equipment from approxi-
mately 4000' to T.D.

FORMATION TOPS AND STRUCTURAL COMPARISONS

	Ferguson Oil Co. #1-7 Cooper, SW SE Sec. 7-33S-33W	Ferguson Oil Co. #1-18 Freeman 1250' fr N & E Lines Sec. 18-33S-33W	Relative Position
Winfield	2662 (+181)	2698 (+182)	1' low
Wrexford	2878 (-35)	2913 (-33)	2' low
Heebner Shale	4180 (-1337)	4216 (-1336)	1' low
Toronto	4204 (-1361)	4240 (-1360)	1' low
Lansing	4324 (-1481)	4353 (-1473)	8' low
Freeman Producing Zone	4378 (-1535)	4408 (-1528)	7' low
Kansas City	4618 (-1775)	4648 (-1768)	7' low
Hodges	4813 (-1970)	4853 (-1973)	3' high
Checkerboard	4873 (-2030)	4909 (-2029)	1' low
Marmaton	5018 (-2175)	5056 (-2176)	1' high
Cherokee	5222 (-2379)	5264 (-2384)	5' high
Morrow Shale	5604 (-2761)	5644 (-2764)	3' high
Upper Morrow Sand Zone	5650 (-2807)	5690 (-2810)	3' high
(Relative Position - None Developed)			
Lower Morrow Sand	5811 (-2968)	5870 (-2990)	22' high
Chester	5825 (-2982)	5882 (-3002)	20' high
Total Depth	5873 (-3030)	6230 (-3350)	

SAMPLE DESCRIPTIONS
And DRILL STEM TESTS

Toronto - 4204
4204-4224

Light to medium gray and tan, fine to medium crystalline, calcitic, chalky, slightly fossiliferous limestone. Poor to good small vug, pinpoint and intercrystalline porosity. A 5 unit methane gas increase was logged from 4207-4212 and a 2 unit increase from 4213-4218. Very slight mineral fluorescence which displayed no cut was logged.

Due to the small gas show from the zone, it was judged unworthy of testing. Sonic and Guard log calculations indicated the zone to have 12% porosity and 72% water saturation from 4208-4210 and 15% porosity with 70% water saturation from 4212-4216.

Lansing - 4324
4378-4388

White to light gray and tannish-gray, fine to medium crystalline, rough textured, faintly oolitic, chalky limestone. Very small vug and intercrystalline porosity and some interoolitic and scattered oolitic porosity. Trace of milky gray-white oolitic, sharp chert. A few pieces displayed good fluorescence with a very slight cut, but no free oil and only a very light oil stain in dry samples. A 1 unit methane gas increase was logged from the zone.

Because of the proximity of this well to the #1-18 Freeman, where this zone is productive, the zone was drill stem tested in spite of the lack of favorable shows.

D.S.T. #1 4374-4386 (no depth correction necessary)

Open 45 minutes with fair blow.

Shutin 30 minutes.

Open 45 minutes with fair blow.

No gas to surface.

Shutin 45 minutes.

Recovered 5 feet slightly oil and gas cut mud, 90 feet muddy water and 270 feet salt water.

ISIP 1176 in 30 minutes.

IFP 11-94 office readings.

FPF 125-182 office readings.

FSIP 1190 in 45 minutes.

NH 2105-2100

BHT 118°

Resistivity of bottom sample of recovered water was .035 ohm-meters @ 100°.

Mud system filtrate at time of drilling zone was approximately .145 ohm-meters @ 100°.

Kansas City - 4618

4618-4626 Grayish tan, fine crystalline, calcitic limestone with poor to no visible porosity. No shows, no gas increase.

Checkerboard - 4873

4888-4906 Gray and tan, dense to fine crystalline, oolitic limestone. Small to large oolites. Fair oolitic porosity. Poor matrix porosity between oolites. No show of oil, no fluorescence. One unit methane gas increase from 4888-4897, where drilling was suspended and samples circulated out of hole.

Marmaton - 5018

5021-5028 Tan, fine crystalline, oolitic-oolitic limestone with good oolitic porosity and good intercrystalline matrix porosity between oolites. Slight fluorescence, no cut, no show of oil. One unit methane gas increase.

The decision was made to test this zone because of the favorable log characteristics of the same zone in the nearby #1-18 Freeman.

D.S.T. #2 5021-5028 corrected log depths
(5023-5030 reported depths)

Open 30 minutes with weak blow,

Shut in 30 minutes,

Open 30 minutes with weak blow,

Shut in 30 minutes.

Recovered 180 feet muddy salt water with no shows.

ISIP 1570 in 30 minutes office readings.

IPP 11-37

FFP 49-82

FSIP 1560 in 30 minutes

HH 2368-2343

EHT 131°

Resistivity of recovered water .045 ohm meters at 100°.

Resistivity of mud system filtrate approximately .23 at 100°.

Morrow - 5604

Upper Morrow Sand Zone - 5650

5650-5667 Samples from this interval were nearly all dark gray and black fissile shale, but a few clusters of fine to medium grained, poorly sorted, angular, tightly lime cemented quartz sand were logged. The sand clusters contained no to very poor visible porosity and no show of oil. Approximately 2 to 3 units of methane gas was logged from the zone.

Drill stem test #3 was run to evaluate the interval.

D.S.T. #3 5613-5667 corrected log depths.
(5616-5670 reported depths)

Open 30 minutes with weak blow which died after 20 minutes.

Shutin 30 minutes.

Open 30 minutes with no blow. Flushed tool after 10 minutes, with a few bubbles for 4 minutes and then dead.

Shutin 30 minutes.

Recovered 10 feet mud with no shows.

ISIP 69 in 30 minutes. Field readings.

IFP 63-63

FPF 63-84

PSIP 84 in 30 minutes.

After drilling below D.S.T. #3, an increase of white, fine to medium grained, angular, phosphatic, limey, quartz sandstone which had some poor visible porosity in a few clusters was logged from approximately 5670-5676. A 16 unit methane gas increase was logged from the top 2 or 3 feet of this interval.

The decision was made to drill ahead to the approximate position of any possible Middle Morrow Sands and run another drill stem test.

At 5694-5698, 5712-5716 and 5722-5726, three intervals of light to dark gray and tan to brown, coarsely chunky, coarsely fossiliferous, chalky, sandy, glauconitic, tight limestone with no shows and no visible porosity were logged. No gas increases were logged from these intervals.

Drill Stem Test No. 4 was run at this point.

D.S.T. #4 5613-5727 corrected log depths.
(5616-5730 reported depths)

Open 30 minutes with very weak blow for 27 minutes and died.

Shutin 30 minutes.

Open 1 hour with weak blow which died in 5 minutes.

Flushed tool after 15 and 35 minutes with a few bubbles and then dead.

Shutin 45 minutes.

Recovered 90 feet mud with no shows.

ISIP 122 in 30 minutes. Field Readings.

IFP 105-109

FPF 109-147

PSIP 189 in 45 minutes.
HM 2853-2853
HRT 1290

Lower Morrow Sand - 5811

5811-5822 White, fine grained, angular, limey, slightly glauconitic, clay filled quartz sand with no visible porosity and no shows. Some of the sand clusters were fairly soft and friable, were not tightly lime cemented, but what potential pore space there was between the individual quartz grains was completely filled with soft, chalk white clay material. A few large pieces of this material with imbedded quartz grains were noted in the samples. These pieces appeared similar to chalk, but would not dissolve in Hcl acid. This zone is not believed to have any effective porosity despite the relatively high porosity values displayed by the sonic and neutron logs of the hole.

Mississippian Chester - 5825

5825-5830 Gray, tan, and brown, dense, sublithographic to medium crystalline, coarsely fossiliferous, faintly oolitic, slightly chalky limestone. No visible porosity. No shows.

5830-5846 Black shale and soft brown shale or claystone.

5846-5858 Tan, very chalky, oolitic limestone as above with tan subtranslucent, fossiliferous, sharp chert.

5858-5866 Gray shale and brown claystone.

5866-58733 Medium to dark gray, mottled, fossiliferous, medium crystalline, very chalky limestone with no visible porosity and no shows.

Due to the negative results of the four drill stem tests and lack of any favorable shows, the #1-7 Cooper was plugged and abandoned as a dry hole.

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Geologist

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 SW SE Sec. 7-33S-33W
 Seward County, Kansas

DRILLING TIME

Drilling time by 1 ft. intervals from 2600 ft. to total depth.

2600-2610	2	-	2	-	3	-	2	-	3	-	2	-	2	-	3	-	3	-	3
-2620	3	-	3	-	3	-	3	-	2	-	3	-	3	-	3	-	2	-	2
-2630	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2
-2640	2	-	2	-	2	-	2	-	2	-	2	-	3	-	2	-	2	-	2
-2650	2	-	2	-	3	-	2	-	3	-	2	-	3	-	2	-	3	-	3
-2660	3	-	3	-	2	-	2	-	2	-	3	-	3	-	2	-	3	-	3
-2670	2	-	3	-	3	-	3	-	2	-	2	-	3	-	2	-	2	-	2
-2680	3	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2
-2690	1	-	2	-	1	-	2	-	2	-	1	-	2	-	2	-	2	-	2
-2700	1	-	2	-	2	-	2	-	1	-	2	-	1	-	2	-	2	-	3
2700-2710	3	-	3	-	3	-	2	-	3	-	2	-	3	-	3	-	3	-	3
-2720	3	-	3	-	3	-	2	-	2	-	2	-	2	-	3	-	2	-	3
-2730	2	-	2	-	1	-	2	-	2	-	2	-	1	-	1	-	1	-	1
-2740	1	-	1	-	1	-	1	-	1	-	1	-	2	-	1	-	2	-	1
-2750	2	-	2	-	1	-	1	-	3	-	2	-	2	-	2	-	2	-	1
-2760	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-2770	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-2780	1	-	1	-	1	-	3	-	2	-	2	-	2	-	2	-	3	-	2
-2790	1	-	1	-	1	-	2	-	1	-	1	-	1	-	1	-	2	-	2
-2800	2	-	2	-	2	-	1	-	3	-	2	-	2	-	3	-	3	-	3
2800-2810	3	-	2	-	2	-	3	-	2	-	2	-	2	-	2	-	2	-	2
-2820	2	-	2	-	2	-	2	-	1	-	1	-	2	-	2	-	3	-	3
-2830	2	-	2	-	2	-	2	-	2	-	3	-	3	-	3	-	2	-	3
-2840	4	-	3	-	3	-	3	-	3	-	2	-	3	-	3	-	3	-	2
-2850	3	-	2	-	2	-	2	-	3	-	3	-	3	-	4	-	3	-	3
-2860	4	-	3	-	2	-	3	-	3	-	3	-	3	-	3	-	3	-	3
-2870	4	-	3	-	4	-	4	-	3	-	2	-	4	-	3	-	2	-	3
-2880	3	-	3	-	3	-	3	-	3	-	3	-	3	-	3	-	3	-	3
-2890	3	-	2	-	2	-	2	-	1	-	1	-	1	-	2	-	2	-	2
-2900	3	-	2	-	2	-	3	-	3	-	4	-	3	-	3	-	3	-	2
2900-2910	1	-	1	-	3	-	2	-	2	-	2	-	3	-	1	-	2	-	2
-2920	1	-	2	-	3	-	2	-	3	-	2	-	3	-	3	-	3	-	3
-2930	2	-	2	-	2	-	2	-	3	-	3	-	3	-	3	-	3	-	1
-2940	1	-	2	-	2	-	1	-	1	-	2	-	3	-	1	-	1	-	1
-2950	1	-	1	-	2	-	3	-	2	-	2	-	3	-	3	-	2	-	3
-2960	3	-	3	-	2	-	2	-	2	-	2	-	3	-	3	-	2	-	2
-2970	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	3
-2980	3	-	3	-	2	-	2	-	3	-	2	-	3	-	3	-	3	-	3
-2990	3	-	3	-	3	-	1	-	1	-	1	-	1	-	1	-	1	-	3
-3000	1	-	1	-	1	-	2	-	1	-	2	-	2	-	2	-	2	-	2

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 #1-7 Cooper
 SW SE Sec. 7-338-33W
 Seward County, Kansas
 Drilling Time

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3000-3010	3	4	3	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3
-3020	3	3	1 $\frac{1}{2}$	1	1	1	1	1 $\frac{1}{2}$	1	1
-3030	2	1	1	2	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	3
-3040	3	4	3	3	3	2	3	3	2	3
-3050	1	2	2	3	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3	3	3
-3060	3	3	3	3	3	3	3	3	4	3
-3070	2	1	2	1	2	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1
-3080	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	3	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3
-3090	3	3	3	3	3	2 $\frac{1}{2}$	1	1	1	1
-3100	2 $\frac{1}{2}$	1	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1	1
3100-3110	1	1	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	2
-3120	1 $\frac{1}{2}$	1	1	2 $\frac{1}{2}$	1 $\frac{1}{2}$	2	1	1	1 $\frac{1}{2}$	2 $\frac{1}{2}$
-3130	1	2	2	3	4	3	3	3	3 $\frac{1}{2}$	2 $\frac{1}{2}$
-3140	2	2	1	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3
-3150	4	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	3	4
-3160	3	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3	3	3 $\frac{1}{2}$	2 $\frac{1}{2}$
-3170	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	3	4	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4
-3180	4 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	4	4	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3	2
-3190	3	3	3	3 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1
-3200	1	1 $\frac{1}{2}$	1	1	1	1	1	2	3	2
3200-3210	2	3	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	3	2	3	2
-3220	3	2	2	2	3	4	3	3	3	3
-3230	3	4	3	1 $\frac{1}{2}$	3	4 $\frac{1}{2}$	5	3	5	4
-3240	3	4	2	1	1	2	1	2	1	1
-3250	2	1	1	2	1	1	1	1	1	2
-3260	2	2	2	3	3	2	2	2	1	2
-3270	2	1	2	2	3	3	3	2	2	1
-3280	1	1	1	1	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	1
-3290	1	2	2	2	2	2	3	2	3	3
-3300	3	3	3	3	3	2	3	4	3	4
3300-3310	4	5	4	4	3	3	4	3	3	3
-3320	3	4	3	3	4	3	4	4	4	3
-3330	5	4	4	4	4	4	4	4	4	2
-3340	2	1	2	2	3	3	2	3	3	3
-3350	3	2	2	3	3	3	2	1	1	1
-3360	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	1	2	1	1	1	1	3
-3370	3	3	3	3	2	1	3	3	2	3
-3380	3	4	3	3	4	3	2	1	2	1
-3390	1	2	3	4	3	3	4	3	4	3
-3400	4	5	4	4	2	4	3	3	3	4
3400-3410	3	3	4	3	3	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3 $\frac{1}{2}$
-3420	3 $\frac{1}{2}$	4	3 $\frac{1}{2}$	6	4	4	4	3	1	1
-3430	1	1	1 $\frac{1}{2}$	1	1	1	1 $\frac{1}{2}$	2	3	2
-3440	2	2 $\frac{1}{2}$	2	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	2	2 $\frac{1}{2}$	1 $\frac{1}{2}$
-3450	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	2	2	2	2	2

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3450-3460	3	-	2	-	3	-	2	-	1	-	2	-	3	-	2 1/2	-	2 1/2	-	3
-3470	3	-	2 1/2	-	2 1/2	-	2 1/2	-	2 1/2	-	1	-	2	-	2	-	2 1/2	-	1 1/2
-3480	1	-	2 1/2	-	1 1/2	-	2 1/2	-	2 1/2	-	2 1/2	-	3	-	2 1/2	-	3	-	3
-3490	3	-	3	-	1 1/2	-	1 1/2	-	1 1/2	-	2 1/2	-	2	-	2	-	3 1/2	-	3
-3500	3	-	3	-	3 1/2	-	3 1/2	-	3	-	2	-	1	-	1	-	1	-	1
3500-3510	1	-	1	-	2	-	2	-	1	-	2	-	2	-	2	-	2 1/2	-	2 1/2
-3520	3	-	1	-	2	-	1 1/2	-	1	-	1 1/2	-	1 1/2	-	1 1/2	-	1	-	1
-3530	1	-	1	-	1	-	2	-	2 1/2	-	1	-	1	-	1	-	1	-	1 1/2
-3540	1 1/2	-	1 1/2	-	2	-	2 1/2	-	2	-	2 1/2	-	2 1/2	-	3	-	2 1/2	-	2
-3550	2 1/2	-	3	-	2 1/2	-	2	-	2 1/2	-	2 1/2	-	3	-	3	-	2	-	2 1/2
-3560	1 1/2	-	1 1/2	-	1 1/2	-	3/4	-	3/4	-	1	-	3 1/2	-	3 1/2	-	4	-	4
-3570	1 1/2	-	1 1/2	-	1	-	1 1/2	-	1	-	1	-	2	-	1 1/2	-	1 1/2	-	2
-3580	2	-	2	-	1 1/2	-	2	-	1 1/2	-	2	-	1	-	2	-	1 1/2	-	1 1/2
-3590	2	-	2	-	1 1/2	-	1 1/2	-	2	-	2	-	1 1/2	-	1 1/2	-	2	-	1
-3600	2	-	2	-	1	-	1 1/2	-	1	-	1 1/2	-	1 1/2	-	1	-	2 1/2	-	2
3600-3610	1 1/2	-	2 1/2	-	1	-	1	-	1 1/2	-	1	-	1 1/2	-	1	-	1	-	1
-3620	1	-	1	-	1 1/2	-	2	-	2	-	1 1/2	-	2	-	3	-	2 1/2	-	1 1/2
-3630	1	-	1	-	1	-	1	-	1	-	1	-	1 1/2	-	1 1/2	-	1	-	1 1/2
-3640	2	-	1	-	1 1/2	-	2	-	1	-	1	-	1 1/2	-	2	-	3	-	2 1/2
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-3660	1	-	1	-	1	-	1	-	1	-	1 1/2	-	2	-	2	-	1 1/2	-	1 1/2
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-3690	3/4	-	3/4	-	1	-	1 1/2	-	1	-	1	-	1	-	2	-	2	-	1
-3700	3/4	-	3/4	-	1 1/2	-	1	-	3/4	-	1 1/2	-	3/4	-	2	-	1	-	1 1/2
3700-3710	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2
-3720	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1 1/2	-	1	-	3	-	2 1/2
-3730	3 1/2	-	3 1/2	-	2 1/2	-	4	-	3	-	3	-	3	-	3	-	2	-	3
-3740	2 1/2	-	3	-	3	-	2	-	2	-	4	-	3	-	1 1/2	-	1	-	1
-3750	1	-	2	-	1	-	1	-	1 1/2	-	1 1/2	-	1 1/2	-	1	-	2	-	4
-3760	3	-	4	-	4	-	3	-	1	-	1	-	1	-	1	-	1	-	2
-3770	2	-	3	-	4	-	3	-	3	-	2 1/2	-	2 1/2	-	1 1/2	-	2 1/2	-	1
-3780	1 1/2	-	1 1/2	-	1	-	1	-	1	-	2	-	1	-	1	-	2	-	2
-3790	2	-	1 1/2	-	1 1/2	-	2	-	3	-	3	-	3	-	3	-	3	-	3
-3800	3	-	2	-	2	-	3	-	3	-	4 1/2	-	4 1/2	-	5	-	4	-	4
3800-3810	4	-	4	-	4	-	4	-	5	-	3 1/2	-	4	-	4	-	5	-	4
-3820	4	-	3	-	3 1/2	-	3 1/2	-	3 1/2	-	3	-	3 1/2	-	4	-	4	-	4
-3830	3 1/2	-	3 1/2	-	3	-	4	-	4 1/2	-	4 1/2	-	3 1/2	-	4 1/2	-	4	-	4
-3840	4	-	3	-	5	-	3	-	2	-	1	-	2	-	2	-	2	-	3
-3850	3	-	3	-	4	-	6	-	6	-	5	-	6	-	4	-	6	-	6
-3860	5	-	4	-	5	-	4	-	4	-	4	-	6	-	5	-	5	-	2
-3870	3	-	2	-	1	-	2	-	4	-	5	-	4	-	5	-	5	-	4
-3880	5	-	6	-	5	-	5	-	4	-	4	-	5	-	6	-	5	-	5
-3890	5	-	5	-	5	-	5	-	4	-	4	-	6	-	5	-	6	-	6
-3900	6	-	6	-	6	-	6	-	7	-	6	-	7	-	6	-	6	-	7

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3900-3910	4	-	7	-	7	-	7	-	6	-	5	-	5	-	4	-	5	-	4
-3920	5	-	5	-	4	-	5	-	4	-	4	-	5	-	4	-	5	-	5
-3930	5	-	4	-	5	-	5	-	6	-	5	-	5	-	5	-	6	-	5
-3940	6	-	6	-	7	-	7	-	7	-	7	-	8	-	7	-	8	-	7
-3950	7	-	5	-	5	-	5	-	6	-	5	-	5	-	4	-	4	-	4
-3960	4	-	5	-	5	-	5	-	6	-	6	-	5	-	4	-	1	-	1
-3970	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	2	-	1
-3980	1	-	2	-	1	-	1	-	1	-	2	-	1	-	1	-	1	-	1
-3990	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	2
-4000	1	-	1	-	1	-	1	-	2	-	2	-	2	-	1	-	1	-	1

Trip @ 3958

4000-4010	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-4020	1	-	1	-	1	-	1	-	2	-	2	-	2	-	1	-	2	-	2
-4030	2	-	2	-	1	-	3	-	2	-	2	-	2	-	2	-	2	-	2
-4040	2	-	2	-	1	-	1	-	2	-	2	-	2	-	2	-	2	-	2
-4050	2	-	2	-	2	-	2	-	3	-	2	-	2	-	2	-	3	-	2
-4060	2	-	2	-	3	-	2	-	3	-	3	-	2	-	3	-	3	-	4
-4070	3	-	3	-	3	-	3	-	3	-	3	-	2	-	2	-	3	-	2
-4080	2	-	1	-	2	-	3	-	2	-	2	-	2	-	2	-	1	-	1
-4090	1	-	1	-	1	-	1	-	2	-	2	-	2	-	1	-	1	-	2
-4100	2	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1

4100-4110	1	-	1	-	1	-	2	-	2	-	3	-	3	-	2	-	2	-	2
-4120	3	-	2	-	3	-	2	-	3	-	3	-	2	-	3	-	3	-	3
-4130	2	-	2	-	3	-	3	-	1	-	2	-	2	-	2	-	2	-	2
-4140	1	-	1	-	2	-	1	-	1	-	2	-	1	-	1	-	1	-	2
-4150	2	-	2	-	2	-	2	-	3	-	3	-	3	-	3	-	3	-	3
-4160	3	-	4	-	3	-	4	-	3	-	1	-	2	-	1	-	1	-	1
-4170	1	-	1	-	1	-	2	-	1	-	2	-	1	-	1	-	1	-	1
-4180	1	-	1	-	2	-	3	-	4	-	3	-	4	-	5	-	5	-	5
-4190	5	-	2	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-4200	1	-	1	-	4	-	4	-	5	-	4	-	2	-	2	-	1	-	2

4200-4210	2	-	1	-	1	-	2	-	1	-	2	-	5	-	5	-	2	-	2
-4220	2	-	2	-	4	-	3	-	4	-	3	-	3	-	3	-	4	-	4
-4230	4	-	4	-	3	-	4	-	2	-	5	-	2	-	1	-	1	-	2
-4240	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	2
-4250	1	-	2	-	3	-	2	-	4	-	1	-	3	-	4	-	3	-	5
-4260	3	-	2	-	1	-	4	-	3	-	3	-	3	-	4	-	3	-	2
-4270	2	-	3	-	2	-	2	-	2	-	2	-	3	-	2	-	2	-	2
-4280	2	-	2	-	1	-	2	-	1	-	2	-	2	-	2	-	2	-	2
-4290	3	-	2	-	2	-	2	-	3	-	2	-	1	-	2	-	2	-	1
-4300	2	-	1	-	1	-	2	-	1	-	2	-	2	-	1	-	2	-	2

Trip @ 4226

4300-4310	2	-	3	-	3	-	2	-	2	-	3	-	3	-	2	-	2	-	3
-4320	3	-	2	-	2	-	2	-	2	-	2	-	3	-	3	-	3	-	3
-4330	3	-	3	-	2	-	3	-	2	-	1	-	2	-	4	-	3	-	4
-4340	6	-	6	-	5	-	6	-	8	-	8	-	8	-	6	-	6	-	7
-4350	5	-	7	-	5	-	5	-	7	-	5	-	4	-	3	-	3	-	2

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4350-4360	2	-	3½	-	5	-	6	-	6	-	7	-	9½	-	9½	-	12	-	10
-4370	8	-	9	-	7	-	12½	-	8½	-	7	-	5½	-	6½	-	6	-	6
-4380	9	-	9	-	8	-	9	-	8	-	7	-	5½	-	6½	-	3	-	3
-4390	4	-	3½	-	4	-	3½	-	5	-	6	-	2	-	2	-	2	-	4
-4400	8	-	8	-	7	-	8	-	7	-	5	-	6	-	6	-	6	-	6

Trip # 4387
 D.S.T. #1 4386

4400-4410	6	-	9	-	8	-	8	-	7	-	7	-	8	-	7	-	7	-	8
-4420	7	-	7	-	4½	-	3½	-	4	-	4½	-	3	-	2	-	2½	-	2
-4430	3	-	2½	-	2½	-	6	-	6	-	4	-	4	-	3	-	4½	-	5½
-4440	5	-	6	-	5½	-	5½	-	4	-	5	-	4	-	6	-	4	-	1½
-4450	3	-	2	-	3	-	3½	-	3½	-	2½	-	2	-	2½	-	4	-	5
-4460	3	-	6	-	7	-	7	-	7	-	6½	-	7	-	6½	-	6½	-	6½
-4470	6	-	6	-	7	-	9	-	6½	-	6½	-	4	-	5	-	5	-	6
-4480	6	-	4½	-	1½	-	2	-	2	-	6	-	7	-	4½	-	5	-	3½
-4490	5	-	6	-	3	-	2½	-	1½	-	2	-	3	-	6	-	6	-	4½
-4500	4½	-	5	-	5	-	5	-	6	-	5	-	6	-	5	-	5	-	2

4500-4510	2	-	2½	-	3	-	3	-	2	-	2	-	4½	-	5	-	5½	-	4½
-4520	4	-	4	-	4	-	3½	-	4	-	3	-	2½	-	3	-	2	-	2
-4530	2	-	2	-	1½	-	2	-	1½	-	2	-	1½	-	2	-	1½	-	1½
-4540	1½	-	2	-	2	-	2	-	1½	-	1½	-	1	-	2	-	2	-	1½
-4550	2	-	2	-	2	-	2½	-	1½	-	2	-	2	-	2	-	2½	-	3
-4560	4½	-	5½	-	4	-	6	-	5½	-	5½	-	5	-	4	-	6½	-	5½
-4570	5½	-	4	-	3½	-	4	-	3½	-	4½	-	4½	-	5½	-	5	-	4
-4580	5	-	5	-	4½	-	4	-	4	-	5	-	4½	-	4½	-	3½	-	4½
-4590	2½	-	2½	-	2	-	3	-	2½	-	4	-	4½	-	4	-	5½	-	5
-4600	5	-	5½	-	4	-	2½	-	2½	-	2½	-	1½	-	2½	-	2½	-	3½

4600-4610	7	-	4	-	5½	-	5	-	5	-	5½	-	4½	-	4½	-	5	-	5
-4620	4	-	6	-	5	-	5	-	5	-	5½	-	4½	-	5	-	5	-	4
-4630	3	-	3	-	3	-	4	-	3	-	5	-	6	-	6	-	4	-	4
-4640	9	-	7	-	8½	-	8½	-	8	-	10	-	9	-	9	-	9	-	8
-4650	6	-	3	-	4	-	3	-	3	-	3	-	2	-	3	-	5	-	4
-4660	3	-	5	-	3	-	4	-	5	-	7	-	7	-	6½	-	6½	-	7
-4670	8	-	7	-	6	-	5	-	5	-	5	-	5	-	7	-	8	-	7
-4680	7	-	7	-	7	-	7	-	7½	-	9½	-	7½	-	7½	-	7½	-	7½
-4690	7½	-	8	-	8	-	7	-	7	-	7½	-	6½	-	6	-	6	-	7½
-4700	5½	-	7	-	6	-	5½	-	6½	-	7	-	8	-	7	-	5	-	5

4700-4710	5	-	5½	-	5½	-	5½	-	6	-	4½	-	2½	-	2	-	1½	-	2½
-4720	3	-	1½	-	2	-	3	-	1½	-	2½	-	4	-	4	-	4	-	5
-4730	4½	-	5	-	4½	-	5	-	4	-	4½	-	4½	-	5	-	4	-	4
-4740	3	-	4	-	4	-	4	-	4	-	5	-	4	-	4½	-	4	-	3½
-4750	4	-	3½	-	3½	-	4	-	3½	-	3½	-	4	-	5	-	5	-	6
-4760	5½	-	5½	-	5	-	6	-	7	-	5	-	7	-	4	-	7	-	6
-4770	6	-	6	-	6½	-	6½	-	6	-	6½	-	7	-	8½	-	5½	-	6½
-4780	7	-	7½	-	6	-	6½	-	6	-	6	-	6	-	5½	-	5½	-	6½
-4790	5½	-	6½	-	6½	-	6	-	6	-	6	-	6	-	6½	-	5	-	6½
-4800	7	-	5½	-	6½	-	6½	-	6½	-	7	-	7	-	7	-	6½	-	6½

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4800-4810	8	-	7½	-	6½	-	6½	-	6½	-	7	-	6	-	6½	-	1½	-	2½
-4820	2½	-	2½	-	2	-	6	-	7	-	6½	-	6½	-	6	-	5	-	5
-4830	4½	-	5½	-	5	-	5	-	6½	-	6	-	6	-	6½	-	7	-	5½
-4840	4½	-	3½	-	2½	-	2	-	3	-	4½	-	4	-	3	-	6	-	4
-4850	5	-	6	-	4½	-	4½	-	4½	-	5	-	6	-	4½	-	4½	-	4½
-4860	4½	-	5½	-	5	-	5½	-	5	-	6	-	5	-	6	-	6	-	5
-4870	5	-	6	-	5	-	6	-	4	-	5	-	5	-	5	-	5½	-	6½
-4880	4	-	6	-	5	-	5	-	6	-	5	-	6	-	5½	-	5½	-	6½
-4890	6½	-	7	-	7½	-	6½	-	6½	-	6½	-	7	-	7	-	5	-	2
-4900	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
4900-4910	½	-	½	-	1	-	½	-	½	-	½	-	½	-	1	-	3	-	2
-4920	3	-	4	-	5	-	5	-	5	-	5	-	5	-	4½	-	6	-	6½
-4930	6	-	6½	-	5½	-	6	-	6	-	6½	-	6½	-	6	-	1½	-	2½
-4940	5	-	5	-	7	-	6	-	7	-	9	-	10	-	10	-	10	-	10
-4950	10	-	8	-	8	-	8	-	7½	-	7½	-	8	-	8	-	8	-	7
-4960	10	-	8	-	8	-	8	-	7	-	8	-	8	-	9	-	7	-	7
-4970	6	-	7	-	6	-	6	-	6	-	6	-	5	-	5½	-	6½	-	7
-4980	5	-	6	-	6	-	5	-	6	-	6½	-	6	-	6½	-	7½	-	6
-4990	7	-	5	-	6	-	6	-	6	-	5	-	5	-	6	-	6½	-	5½
-5000	6	-	5	-	6	-	5	-	6	-	3½	-	4½	-	5	-	5	-	4½
5000-5010	4	-	5	-	6½	-	5	-	6½	-	7	-	8	-	7½	-	5½	-	6½
-5020	6½	-	7	-	7	-	5½	-	6½	-	5½	-	6	-	6½	-	6	-	5
-5030	5½	-	5	-	3½	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-5040	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
-5050	1	-	3/4	-	3/4	-	1	-	1	-	3/4	-	3/4	-	1	-	1	-	1½
-5060	2	-	8½	-	7½	-	9	-	8½	-	8½	-	6½	-	2½	-	2½	-	4½
-5070	6	-	5	-	3	-	3½	-	6½	-	4½	-	5	-	4½	-	5½	-	6
-5080	5½	-	6	-	5½	-	5½	-	5	-	6	-	5	-	5	-	4	-	4
-5090	5	-	4	-	4	-	4	-	4½	-	4½	-	5	-	4	-	4	-	5
-5100	5	-	5	-	5½	-	4	-	4½	-	5½	-	5½	-	6	-	5	-	5
5100-5110	6½	-	5	-	5½	-	6	-	5	-	5	-	6	-	5	-	5½	-	5
-5120	5	-	6	-	4½	-	6	-	5	-	6	-	4½	-	5	-	4	-	4½
-5130	5	-	3	-	6	-	4	-	5	-	4½	-	4½	-	4	-	5	-	5
-5140	5	-	5	-	5	-	4½	-	5½	-	6½	-	6½	-	4	-	5½	-	5½
-5150	5	-	7	-	7	-	6½	-	3	-	3	-	5	-	4½	-	6	-	3½
-5160	6½	-	3½	-	5	-	4½	-	4	-	3	-	3	-	5	-	5½	-	4½
-5170	6	-	5	-	6	-	4½	-	4½	-	5	-	5½	-	5	-	5½	-	4
-5180	5	-	4½	-	4½	-	4	-	4½	-	4½	-	5	-	3	-	3	-	2½
-5190	1½	-	2	-	2½	-	3	-	3	-	2½	-	2½	-	2½	-	4½	-	4
-5200	2	-	4	-	3	-	4	-	3½	-	3½	-	2½	-	3½	-	4	-	5
5200-5210	4	-	4½	-	5½	-	4	-	5	-	5½	-	6	-	6	-	5	-	5½
-5220	5	-	5	-	4	-	6	-	6	-	5½	-	6½	-	4½	-	5½	-	5½
-5230	5½	-	6	-	5	-	5½	-	5½	-	5	-	3½	-	3½	-	3½	-	4½
-5240	4	-	4½	-	5	-	6½	-	6	-	5	-	6	-	5	-	6	-	5
-5250	6	-	3	-	5	-	5	-	5	-	5	-	5	-	7	-	6	-	6

Bit @ 5030
 D.S.T. #2 5030

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5250-5260	7	-	6	-	8	-	6 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	6	-	6	-	5	-	6	-	5
-5270	6	-	6	-	6	-	6	-	6 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	6	-	5
-5280	6	-	5	-	5	-	4	-	5	-	5	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5	-	5
-5290	5	-	5	-	6	-	5	-	4 $\frac{1}{2}$	-	5	-	5	-	6 $\frac{1}{2}$	-	6	-	5
-5300	6	-	6 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	5	-	6	-	5	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	6	-	5
5300-5310	5	-	5 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	5 $\frac{1}{2}$	-	6	-	5	-	6	-	5
-5320	6	-	6	-	6	-	6	-	5 $\frac{1}{2}$	-	6	-	5 $\frac{1}{2}$	-	6	-	6	-	5 $\frac{1}{2}$
-5330	7 $\frac{1}{2}$	-	7	-	6 $\frac{1}{2}$	-	7 $\frac{1}{2}$	-	7	-	8	-	7	-	7 $\frac{1}{2}$	-	6	-	6
-5340	5 $\frac{1}{2}$	-	5	-	3	-	6	-	2 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5	-	6	-	6	-	6
-5350	6	-	5 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	5	-	5	-	5	-	5	-	5	-	4 $\frac{1}{2}$
-5360	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4	-	5	-	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4	-	4	-	3 $\frac{1}{2}$
-5370	3 $\frac{1}{2}$	-	4	-	4 $\frac{1}{2}$	-	3	-	5 $\frac{1}{2}$	-	4	-	5	-	5	-	6 $\frac{1}{2}$	-	4 $\frac{1}{2}$
-5380	7	-	4	-	5	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5	-	5 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	7	-	4
-5390	6	-	5	-	7 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	7	-	6	-	6	-	5	-	5	-	5
-5400	5	-	6	-	5 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	4	-	4 $\frac{1}{2}$	-	5	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4
5400-5410	4 $\frac{1}{2}$	-	5	-	5	-	4	-	3	-	4 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	3	-	2	-	4
-5420	5	-	3 $\frac{1}{2}$	-	5	-	5 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	3	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$
-5430	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	4	-	4 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	4	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$
-5440	5	-	5	-	4	-	5	-	4 $\frac{1}{2}$	-	5	-	5 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	4 $\frac{1}{2}$
-5450	4 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	4	-	4	-	3	-	3 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	6 $\frac{1}{2}$
-5460	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	6	-	5	-	4	-	2 $\frac{1}{2}$	-	3	-	2 $\frac{1}{2}$	-	2
-5470	2	-	3 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	6	-	5 $\frac{1}{2}$	-	5	-	5	-	4	-	4	-	3 $\frac{1}{2}$
-5480	3	-	4	-	2 $\frac{1}{2}$	-	3	-	2	-	2	-	1 $\frac{1}{2}$	-	3	-	5 $\frac{1}{2}$	-	4
-5490	4	-	2 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	3	-	4 $\frac{1}{2}$	-	2 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	2	-	3
-5500	3 $\frac{1}{2}$	-	4	-	3 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	4	-	3	-	4	-	3 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4
5500-5510	4	-	3	-	2	-	2	-	2 $\frac{1}{2}$	-	3	-	2 $\frac{1}{2}$	-	3	-	3	-	3
-5520	3	-	2	-	2 $\frac{1}{2}$	-	1 $\frac{1}{2}$	-	2	-	5	-	6	-	3	-	4	-	4 $\frac{1}{2}$
-5530	3 $\frac{1}{2}$	-	3	-	4	-	2	-	2	-	3	-	4	-	3	-	2	-	3
-5540	2	-	2	-	2	-	2	-	3	-	5	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	6
-5550	5	-	5	-	5	-	6	-	6	-	4	-	4	-	6	-	5 $\frac{1}{2}$	-	3
-5560	3	-	4 $\frac{1}{2}$	-	2 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	1 $\frac{1}{2}$	-	1 $\frac{1}{2}$	-	3	-	4	-	5 $\frac{1}{2}$
-5570	5 $\frac{1}{2}$	-	4	-	3	-	2	-	3	-	9	-	7	-	4	-	2	-	2
-5580	2	-	1 $\frac{1}{2}$	-	2	-	5 $\frac{1}{2}$	-	6	-	4	-	3	-	6	-	2 $\frac{1}{2}$	-	3 $\frac{1}{2}$
-5590	3	-	6	-	5	-	3	-	2	-	5	-	3	-	4	-	5 $\frac{1}{2}$	-	3 $\frac{1}{2}$
-5600	5 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5	-	6	-	5	-	6	-	4	-	5	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$
5600-5610	4	-	6	-	7	-	5	-	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4	-	2	-	2	-	1 $\frac{1}{2}$
-5620	2 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	5	-	5	-	5	-	5 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5	-	5
-5630	5	-	5	-	3	-	2	-	2 $\frac{1}{2}$	-	2	-	3	-	4 $\frac{1}{2}$	-	3 $\frac{1}{2}$	-	3
-5640	3 $\frac{1}{2}$	-	3	-	4	-	3	-	4	-	3 $\frac{1}{2}$	-	3	-	2 $\frac{1}{2}$	-	3	-	3
-5650	2 $\frac{1}{2}$	-	2 $\frac{1}{2}$	-	3	-	3	-	2 $\frac{1}{2}$	-	3	-	2 $\frac{1}{2}$	-	2 $\frac{1}{2}$	-	2	-	2 $\frac{1}{2}$
-5660	3 $\frac{1}{2}$	-	3	-	3	-	5	-	3	-	4 $\frac{1}{2}$	-	4	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$
-5670	4	-	6 $\frac{1}{2}$	-	5	-	5	-	4 $\frac{1}{2}$	-	4	-	5	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$
-5680	2 $\frac{1}{2}$	-	4	-	5 $\frac{1}{2}$	-	3	-	4	-	5	-	4 $\frac{1}{2}$	-	5 $\frac{1}{2}$	-	4	-	7
-5690	6	-	6	-	6 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	5	-	6	-	6	-	4 $\frac{1}{2}$	-	5	-	4 $\frac{1}{2}$
-5700	5	-	5	-	4 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	6	-	5	-	4 $\frac{1}{2}$	-	6 $\frac{1}{2}$	-	4 $\frac{1}{2}$	-	4

D.S.T. #3 5670

Ferguson Oil Co.
 #1-7 Cooper
 SW SE Sec. 7-33S-33W
 Seward County, Kansas
 Drilling Time

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5700-5710	4 1/2	4 1/2	4 1/2	5	4	5	4	4	4	4
-5720	4 1/2	5 1/2	5	4	5	5	8	5 1/2	7	7
-5730	7	6	4	3 1/2	4	6	7	7	4	5
-5740	3	6	6	6	5	6	8	9	8	9
-5750	8 1/2	7	7	6 1/2	7 1/2	7	7 1/2	8	8	7
-5760	6	6 1/2	7	6	6	8	9	7 1/2	6	7
-5770	7 1/2	6	6	5	6	7	7 1/2	7 1/2	4 1/2	5 1/2
-5780	7	8	8	8	8	8	7	7	5 1/2	5 1/2
-5790	4 1/2	3 1/2	5 1/2	4 1/2	4	4	4	3 1/2	4	3
-5800	3 1/2	4	4	4	4	4 1/2	3	4	5 1/2	4 1/2
5800-5810	2	3 1/2	3	4 1/2	4	3 1/2	4	3 1/2	4	4
5820	4 1/2	5	5	2 1/2	1	2	2	1 1/2	1 1/2	1 1/2
-5830	2 1/2	1 1/2	3 1/2	1 1/2	4	7 1/2	4	6 1/2	5 1/2	5 1/2
-5840	5 1/2	8 1/2	6 1/2	2 1/2	1 1/2	2	2	2 1/2	2	2
-5850	2 1/2	2 1/2	3 1/2	2	3	2 1/2	4	3	3 1/2	5 1/2
-5860	4 1/2	5	3 1/2	5	4 1/2	4	6	5 1/2	3 1/2	4
-5870	4 1/2	3	2 1/2	3	3	3	6 1/2	8 1/2	8	10
-5873	11	12	10							

D.S.T. #4 5730

T.D. 5873