

RICHARD B. SCHMIDT

1219 COLLEGE AVENUE
TOPEKA, KANSAS 66604

PETROLEUM EXPLORATION CONSULTANT

September 30, 1970

EHRlich DRILLING COMPANY

Wilson, Kansas

Operator

THIEROLF # 1, the exact center of
the Northwest Quarter of the North-
west Quarter of the Northeast Quarter
[NE $\frac{1}{4}$] of Section 31, Township 6 South,
Range 6 West of the 6 th P. M.,
MITCHELL COUNTY, KANSAS

GENERAL:

Contractor: EHRlich DRILLING COMPANY, Wilson, Kansas

Rotary Drilling: Surface to 3754 feet

Spudded & set surface casing: August 27, 1969

Under surface casing drilling commenced: August 29, 1969

Drilling completed: September 12, 1969

Total depth: 3754 feet

CASING:

Surface pipe: 210 feet of 8 - 5/8ths inch cemented
with 100 sacks of common cement.

Production pipe: None

ELEVATIONS:

Ground level after dirt work: 1478

Derrick floor: 1481

Rotary bushing: 1483

Rotary bushing elevation and measurements used.

DRILL STEM TESTS: None

CORES: None

ELECTRIC LOGS: None

G E O L O G I C A L D A T A

Ten foot drilling samples were saved and examined wet from 1800 to 1910 feet; 2100 to 2120 feet; 2260 to the total depth of 3754 feet.

One foot drilling time was retained from 1,000 to 3754 feet.

FORMATION TOPS	BY SAMPLES & TIME LOG		
Winfield	1003	+	480
Towanda lime	1060		
Ft. Riley lime	1114	+	369
Neva lime	1466	+	17
Foraker lime	1566	-	43
Root shale	1816		
Stotler lime	1845		
Dover lime of Russell County and not KGS type log	1854		
Tarkio lime	1908		
Howard lime	2024		
Topeka lime	2090	-	607
Queen Hill shale	2286		
HEEBNER SHALE	2369	-	886
Toronto lime	2392		
Iatan	2464	-	981
LANGING LIME	2484	-	1001
Bonner Springs shale	2535		
KANSAS CITY LIME	2560		
Iola lime	2624		
Base of the Hertha lime	2790		
Pawnee lime	2898		
Cherokee Section	2941	-	1458
MISSISSIPPIAN			
= Osage	3158	-	1675
= Fern Glen	3263		
= Gilmore City	3310	-	1827
CHATTANOOGA SHALE [Kinderhook shale]	3374	-	1891
HUNTON	3423	-	1940
Maquoketa shale [Sylvan]	3568		
VIOLA [Kimmswick]	3605	-	2122
TOTAL DEPTH	3754	-	2271

ZONES OF INTEREST

WABUNSEE SAND [1808 to 1820]

At 1810 feet, recovered light green fine grain sandstone, friable;
at 1820 feet, recovered light gray fine micaceous sand clusters, friable.

At 1860 feet, recovered light and dark gray shales with medium gray siltstone. This compares to the First Tarkio Sand Section lithologically of Russell County,, Kansas.

At 1890 feet, recovered red, and medium and light gray shales. This compares to the Second Tarkio Sand Section lithologically of Russell County, Kansas. It should be noted that the drilling mud did not have high viscosity, therefore, the samples were not too clean.

LANGING LIME [2484] - 1001

At 2500 feet, recovered white small grain oolitic to sub-oolitic lime; dense off-white fossiliferous and crystalline limestone and light tan cherty in part. The time log shows this to be the 10 foot zone or the top part of the Stanton lime of the Central Kansas Uplift from 2489 to 2494 feet and porous in part.

At 2519 to 2531 feet, recovered soft white crystalline lime, fair fractured porosity; white chalky and cherty limestone - dense. White dense and gray crystalline lime. The time log shows this to be the 40 foot zone or the Plattsburg lime of the Central Kansas Uplift.

KANSAS CITY LIME [2560]

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At 2580 feet, after circulating one hour, recovered soft white to light tan oolitic and oolitic limestone and porosity; not very contiguous; 40 % part oolitic and about 60 % oolitic.

At 2590 feet, after circulating one hour, recovered small and medium grained light tan and white oolitic limestone.

At 2605 feet, after circulating one hour, recovered soft, light tan oolitic and oolitic limestone with oolitic porosity.

The time log shows this large massive section of 35 feet of oolitic and oolitic limestone and porosity from 2573 to 2608 feet or the Wyandotte lime or the 80 to 120 foot zone of the Central Kansas Uplift.

At 2670 feet, recovered soft dense tan limestone; light tan oolitic limestone - not fully developed into good porosity. The time log shows this to be the Drum limestone or the 180 foot zone from 2649 to 2661 feet.

At 2740 feet, after circulating one hour, recovered mixed gray and white dense limestone; gray to tan fossiliferous limestone; white-fine porous crystalline limestone; white chalky limestone; The time log shows this to be the Dennis lime zone at 2706 to 2714 feet.

At 2760 feet, recovered dense small grain oolitic limestone. Dense white and gray limestone. The time log shows this to be the Swope limestone zone from 2756 to 2742 feet.

At 2795 feet, after circulating one hour, recovered white, tan, and gray oolitic limestone; white dense crystalline limestone - - porous white oolitic limestone. The time log shows this to be the Hertha limestone zone from 2782 to 2794 feet.

PLEASANTON SECTION [2799]

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At 2830 feet, recovered very hard dense light rose colored sand clusters; some red cemented to pyrite clusters and orange quartz sand. The time log shows this to be from 2814 to 2826 feet and may be lithologically comparable to the Hepler sand of Eastern Kansas.

CHEROKEE SECTION [2941]

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At 2990 feet, recovered dense light green fine grain sand clusters. The time log indicates that this sand came from the area of 2959 to 2976 feet and may be lithologically comparable to the Bartlesville of Eastern Kansas, even though Wallace Lee in the Kansas Geological Survey Bulletin # 121, STRATIGRAPHY AND STRUCTURAL DEVELOPMENT OF THE SALINA BASIN AREA, 1956, p. 87, says, " In the Saline Basin, the sandstone and coal beds so characteristic of the Cherokee - - - are not represented - - - ."

MISSISSIPPIAN

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- WARSAW FORMATION [3126]

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At 3140 feet, after circulating one hour, recovered, medium grain-translucent sand clusters, fairly friable; white soft claystone with black shale. It appears that this Basal Pennsylvanian Sand, comparable in position to the Burgess of Eastern Kansas came from the area of 3118 to 3126 feet. It should be noted that the drilling mud at this depth was not in good shape for clean samples as there were considerable cavings from up-the-hole.

- OSAGE FORMATION [3158]

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At 3200 feet after circulating one hour and after very rough drilling from 3196 to 3198 feet, recovered dense white dolomite; dense white cherty limestone; light dense gray dolomite. This is the Keokuk zone of 3188 to 3196 feet.

- BURLINGTON FORMATION [3227]

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At 3236 feet, after circulating one hour and very rough drilling from 3228 to 3233 feet, recovered snow white vitreous chert; light tan crystalline vuggy dolomite.

- FERN GLEN FORMATION [3263]

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At 3280 feet, recovered some dense white dolomite; some vuggy snow white vitreous chert.

- SEDALIA DOLOMITE [3356]

=====

At 3362 feet, after circulating one hour, recovered light tan-dense dolomite, some pin-point porosity; fine grain light buff sucrose dolomite.

HUNTON FORMATION [3423]

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At 3508 feet, after circulating one hour, recovered white and tan chert; some porous white sucrose dolomite; white and tan chert; white chalky to cherty limestone. This is the zone from 3490 to 3500 feet.

At 3548 feet after circulating one hour, recovered light tan and off-white dense dolomite; fine light tan sucrose clean dolomite, fine grain.

At 3574 feet, after circulating one hour, recovered light tan sucrosic dolomite; some dense pink dolomite, some darker tan dolomite with chert. This is the zone from 3542 to 3562 feet.

VIOLA FORMATION [3605]

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At 3690 feet, recovered white crystalline dolomite with fair to good porosity and cherty in part. This is the porous zone from 3672 to 3697 feet.

At 3750 feet, recovered light tan cherty dolomite - some good porosity. This is the porous zone from 3719 to 3736 feet.

DRILLING WAS TERMINATED AT 3754 FEET DUE TO THE DECISION OF THE OPERATOR.

Submitted by:

Richard B. Schmidt

RICHARD B. SCHMIDT

1219 COLLEGE AVENUE
TOPEKA, KANSAS 66604

PETROLEUM EXPLORATION CONSULTANT

September 30, 1971

CLAIR GILLIN

Box 914

Shawnee Mission, Kansas 66201

Operator

THIEROLF # 1, the exact center of
the Northwest Quarter of the North-
west Quarter of the Northeast Quarter
[NE $\frac{1}{4}$] of Section 31, Township 6 South,
Range 6 West of the 6 th P. M.,
MITCHELL COUNTY, KANSAS

GENERAL:

Contractor: Sterling Drilling Company
Sterling, Kansas
Rotary Drilling: 3754 to 4275 feet
Spudded & set surface casing: By re-drilling 8/17/71
Under surface casing drilling commenced:
Drilling completed: August 22, 1971, at 4:17 a. m.
Total depth: 4275 feet

CASING:

Surface pipe: 210 feet of 8 - 5/8th inch cemented
with 100 sacks by prior operator
Production pipe:
none

ELEVATIONS:

Ground level after dirt work:
Derrick floor:
Rotary bushing: 1487 feet above sea level
Rotary bushing elevation and measurements used.

DRILL STEM TESTS: None

CORES: None

ELECTRIC LOGS: None

This was a wild-cat deepening test well from
3754 to the total depth of 4275 feet

G E O L O G I C A L D A T A

Ten foot drilling samples were saved and examined wet from 3754 to 3875 feet; five foot drilling samples were saved and examined wet from 3875 to the total depth of 4275 feet.

One foot drilling time was retained from 3754 feet to the total depth of 4275 feet. It should be noted that the kelly bushing elevation was 4 feet higher than the drilling rig of Ehrlich Drilling Company for a new elevation of 1487 feet above sea level.

FORMATION TOPSBY SAMPLES & TIME LOG

Simpson shale	3858	-	2370
SIMPSON SAND	3914	-	2427
Base of Simpson sand	3921	-	2434
ARBUCKLE DOLOMITE	3940	-	2453
REAGAN SAND	4190	-	2703
Total depth of the well	4275	-	2788

ZONES OF INTEREST

SIMPSON SAND [3914] - 2427

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At 3921 feet, after circulating $1\frac{1}{2}$ hours, recovered an abundance of small and medium grain, most well rounded-translucent sand clusters-fairly friable. There is no question that this is the St. Peter Sand zone from 3914 to 3922 feet. This zone contained good inter-grain porosity and probably would yield fluid on a drill-stem-test. It appears to be typical of the Simpson sand producing zone south and west of the Central Kansas Uplift. There was absolutely no evidence observed of any shows of free oil, gas, odor or light staining in this zone.

ARBUCKLE FORMATION [3940] - 2453

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At 3944 feet, after circulating $1\frac{1}{2}$ hours and after very rough drilling at 3940 to 3944 feet, recovered light tan and light pink dense dolomite, some medium crystalline porosity; some white medium granular dolomite & porosity.

At 3955 feet, after circulating one hour, recovered off-white and very light tan crystalline dolomite; off-white sucrosic dolomite; white vitreous sharp chert. This is the zone from 3946 to 3954 feet.

At 3970 feet, after circulating one hour, recovered a more dense and darker tan dolomite with about 10 % sucrosic dolomite. This is the zone from 3962 to 3971 feet.

At 3980 feet, recovered traces of white small grain oolitic chert; medium grain dolomite, excellent porosity. Without circulating, these are probably from the zone of 3962 to 3971 feet.

At 4015 feet, recovered light tan medium grain crystalline dolomite, some vuggy and coarser grained than from above.

At 4030 feet, recovered light tan and white medium crystalline dolomite, some sucrosic with traces of medium grain translucent sand grains imbedded therein.

.At 4035 feet, lost all of the drilling mud. After new mud was mixed and pumped into the well, about 100 barrels of clear water with a light sulfur smell preceded the mud circulation into the first two pits. The well was losing mud thereafter from 4035 to 4060 feet and the sample cuttings from this interval consisted mostly of cavings.

At 4110 feet, recovered dense light buff and gray crystalline dolomite, some vuggy.

At 4120 feet, recovered more of the last same but more medium sand grains imbedded in the buff dolomite. This is a porous zone from 4103 to 4119 feet.

At 4180 feet, recovered white medium grain crystalline dolomite with transparent sand grains imbedded in the dolomite, with medium crystalline porosity. This is the zone from 4064 to 4075 feet.

REAGAN FORMATION [4190] - 2703 =====

At 4208 feet, after circulating 40 minutes, recovered white and light gray dense dolomite ; light gray fine grain dolomitic sandstone.

At 4210 feet, more of the last above plus traces of transparent fine grain cemented sandstone clusters.

At 4225 feet, recovered transparent medium grain cemented calcareous sandstone clusters. This is the second evidence of REAGAN SAND; however the drilling time log indicates the top is at 4190 feet. A zone of fair to good porosity was found at 4214 to 4227 feet.

At 4250 feet, recovered dense translucent, sub-rounded, small to medium grain, some frosted REAGAN SAND, some friable. The same was recovered to the total depth of 4275 feet. Another zone of fair porosity was encountered from 4231 to 4247 feet.

STRUCTURAL COMPARISONS

Comparisons are made to the following test holes in MITCHELL COUNTY, KANSAS:

FORMATION	GILLIN - Thierolf No. 1, NW, NW, NE $\frac{1}{4}$ 31, 6S-6W.	MURFIN - Wessling No. 1, SE, SE, NE $\frac{1}{4}$ 35, 6S - 7 W.	GILLIN - Hartman No. 1, C SW NW $\frac{1}{4}$ 17, 6S - 6 W.
Topeka lime	- 607	- all sub-sea	- 581
Heebner shale	- 886	- 941 measurements	- 860
LANSING LIME	- 1001	- 1102	- 976
MISSISSIPPIAN	- 1643	- 1686	- 1610
Gilmore City	- 1827	-	- 1804
Chattanooga Sh	- 1891	- 1934	- 1854
HUNTON	- 1940	- 1974	- 1890
VIOLA	- 2122	- 2086	- 2110
Simpson Shale	- 2370	- 2384	- 2360
ARBUCKLE	- 2453	- 2494	- 2445
REAGAN SAND	- 2703	- 2756	- not reached
Granite wash	- not reached	- 2925	- not reached

C O N C L U S I O N S

There never were any shows of live free oil, gas or live staining or petroleum type odors observed by me during the drilling of this well and all the samples examined. I spent many, many hours in actual well site examination and found NO EVIDENCE of free oil, gas or staining of free oil.

Structurally, your well is lower than the GILLIN - Hartman dry hole $2\frac{1}{2}$ miles north of this hole but higher than the MURFIN - Wessling dry hole $1\frac{1}{2}$ miles west and nearly $\frac{1}{2}$ mile south of this hole.

The structural datum from this hole verifys that seismic conclusions are good indicators of high and lows for the general area.

It is my opinion that higher structure will be found east and northeast of this hole. A down-dip or reversal should be encountered for a structural trap even though the area has possibilities for strata traps.

R E C O M M E N D A T I O N S

Due to the complete absence of any shows of free oil, gas, stainings or odors of petroleum, it is recommended that the Thierolf test well as legally described on page one of this report be plugged and abandoned as a DRY HOLE.

Respectfully submitted by:

Richard B. Schmidt,
Petroleum Exploration Consultant,
AB & BBA

RBS:jr

DRILLING TIME LOG

EHRlich DRILLING COMPANY, Wilson, Kansas 67490

Thierolf # 1, the exact center of the NW $\frac{1}{4}$, NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 31,
Township 6 South, Range 6 West, MITCHELL COUNTY, KANSAS.

Depth	Minutes per foot																				Remarks	
1000 - 1020	3	4	4	4	3	4	4	3	3	3	4	4	4	3	2	2	3	3	2	2	2	8/30/1969
1021 - 1040	2	2	2	2	2	1	2	2	1	3	2	2	2	1	2	2	1	2	2	1		
1041 - 1060	2	1	2	1	4	3	2	4	2	2	2	2	3	3	3	2	3	3	3	3		
1061 - 1080	5	5	3	2	1	2	2	3	1	2	2	2	3	2	2	3	4	5	2	2		
1081 - 1100	2	4	2	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		
1101 - 1120	1	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1		
1121 - 1140	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1		
1141 - 1160	1	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		
1161 - 1180	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	2	3	2	2	2	3	3	3	3		
1181 - 1200	3	3	3	3	4	4	2	2	2	2	2	2	2	2	3	1	2	1	1	3		
1201 - 1220	1	1	2	1	1	2	3	4	3	3	3	3	3	4	3	3	3	2	1	1		
1221 - 1240	1	2	2	2	2	2	3	4	4	4	4	3	2	1	2	2	1	1	2	3		
1241 - 1260	3	3	3	1	3	1	3	3	4	2	3	3	3	2	1	1	2	3	3	6		
1261 - 1280	6	6	8	5	5	4	3	4	4	6	6	5	7	8	8	9	6	6	9	6		
1281 - 1300	7	8	11	7	8	7	8	7	7	13	7	8	7	7	11	11	6	7	5	8		
1301 - 1320	7	2	6	10	8	9	6	9	10	11	11	13	12	14	14	1	2	2	1	2	8/31/1969, trip @ 1315	
1321 - 1340	2	1	1	2	1	2	2	3	3	3	2	4	2	4	2	2	2	2	2	2		
1341 - 1360	2	2	2	2	2	3	2	1	2	1	1	1	2	2	3	2	3	3	3	2		
1361 - 1380	2	2	2	2	3	3	2	1	3	2	2	3	3	2	3	4	8	5	4	5		
1381 - 1400	4	3	3	3	4	2	1	2	1	1	2	1	1	4	2	1	2	2	4	2		
1401 - 1420	3	2	4	3	3	4	3	3	2	3	2	3	1	2	2	1	2	2	1	1		
1421 - 1440	1	$\frac{1}{2}$	$\frac{1}{2}$	1	3	2	2	2	3	2	1	2	1	1	1	1	1	1	1	1		
1441 - 1460	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
1461 - 1480	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	2	2	2	2	1	1	1	2	4	3	4	4	2	2	2		
1481 - 1500	2	2	2	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1		
1501 - 1520	1	3	3	4	2	3	3	3	2	3	2	2	1	3	2	3	1	2	1	1		
1521 - 1540	2	3	2	1	1	1	1	1	1	1	1	2	2	2	1	1	3	3	3	2		
1541 - 1560	1	4	5	6	4	6	5	3	3	2	2	5	3	3	4	3	3	3	2	2		
1561 - 1580	2	2	1	1	1	1	2	2	2	2	1	1	1	2	2	2	2	2	7	3		
1581 - 1600	3	4	3	3	1	3	3	3	3	2	3	2	1	1	1	1	2	2	1	1		
1601 - 1620	3	2	2	2	2	2	2	3	2	2	3	2	3	4	2	4	1	2	1	1		
1621 - 1640	2	2	1	2	1	1	1	1	1	5	3	2	2	2	3	5	5	4	4	4		
1641 - 1660	3	5	2	4	6	4	4	3	3	2	2	2	2	2	2	3	2	2	2	3		
1661 - 1680	3	2	2	2	2	4	2	2	1	1	1	2	2	2	2	8	2	5	2	2		
1681 - 1700	1	1	1	9	3	3	3	3	2	2	2	2	3	2	2	1	2	2	3	3	9/1/1969	
1701 - 1720	2	1	1	2	2	2	2	2	1	2	5	5	3	2	2	2	4	4	5	4		
1721 - 1740	3	3	2	3	2	2	1	2	1	1	3	2	3	2	2	1	2	2	3	3		
1741 - 1760	3	2	2	1	2	3	3	2	3	1	3	1	2	2	1	1	1	2	2	2		
1761 - 1780	2	2	1	2	1	2	2	1	2	3	5	4	1	3	3	2	2	3	2	2		
1781 - 1800	2	1	2	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1	3	2	2	1	2	2	1	1		
1801 - 1820	1	1	1	1	2	2	1	1	2	3	2	3	2	1	2	1	1	1	1	2		
1821 - 1840	1	2	2	2	1	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2		
1841 - 1860	2	2	2	1	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3		
1861 - 1880	4	4	2	5	4	3	4	5	3	2	4	2	2	2	2	1	2	2	4	4		
1881 - 1900	2	2	1	2	2	1	1	2	2	2	1	1	2	1	1	2	2	1	2	1		
1901 - 1920	1	2	2	2	2	1	1	3	6	3	5	3	4	3	3	2	2	3	5	4		
1921 - 1940	3	3	3	5	2	3	4	3	5	3	4	2	2	2	3	1	2	3	5	3		
1941 - 1960	2	1	2	4	3	3	3	5	2	4	2	2	2	2	3	1	2	3	4	4		
1961 - 1980	4	3	2	3	2	2	2	2	2	2	1	2	1	2	1	2	2	2	2	2		
1981 - 2000	1	1	1	3	3	3	4	4	3	3	4	3	2	1	3	2	2	2	2	2		

Depth	Minutes per foot																				Remarks
2001 - 2020	1	1	1	1	2	1	1	1	2	2	2	1	1	1	1	2	1	1	$\frac{1}{2}$	$\frac{1}{2}$	
2021 - 2040	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2	1	2	2	1	1	1	1	1	2	1	1	1	1	1	
2041 - 2060	2	2	2	2	2	1	2	2	1	2	2	4	4	2	3	3	2	3	2	3	
2061 - 2080	2	3	3	2	2	2	1	1	1	1	1	2	1	2	1	2	2	2	2	2	
2081 - 2100	2	2	2	3	2	1	2	1	3	2	4	5	5	6	5	3	3	8	2	3	
2101 - 2120	2	3	2	2	2	3	4	3	4	4	4	4	4	3	5	4	3	2	3	2	Cir 1 hr @ 2110
2121 - 2140	4	2	2	3	3	3	3	5	8	5	4	4	4	2	5	5	7	7	2	7	9/2/1969
2141 - 2160	9	7	7	6	2	4	4	4	6	6	7	7	6	7	5	7	3	2	4	4	Vis. 34
2161 - 2180	5	4	4	4	5	7	8	10	5	5	7	9	9	8	8	9	11	10	9	4	
2181 - 2200	18	7	6	10	9	10	7	7	8	12	9	8	11	9	9	8	11	14	5	2	Vis. 35
2201 - 2220	1	2	4	3	5	4	4	4	2	2	1	3	5	5	8	4	5	5	6	3	Vis. 32
2221 - 2240	5	3	2	6	6	3	2	2	2	3	4	7	9	6	4	6	6	10	8	4	
2241 - 2260	4	3	2	2	1	2	2	4	4	5	6	5	4	6	2	3	6	5	5	5	
2261 - 2280	5	5	10	7	8	8	9	10	4	5	6	5	5	8	8	9	10	8	7	10	Vis. 30
2281 - 2300	6	6	6	8	5	3	3	3	3	4	6	5	4	6	4	3	6	5	4	3	Trip @ 2295 Vis 28
2301 - 2320	2	2	2	1	2	3	2	4	3	2	3	4	5	4	5	2	3	4	2	2	Vis 39, SR 2305 & 2309
2321 - 2340	5	5	4	6	5	6	8	6	6	6	2	2	3	2	1	1	1	3	2	1	Rough 2343 to 2354
2341 - 2360	3	2	1	3	1	1	2	1	2	1	2	1	1	3	3	3	2	3	1	2	Cir. 1 hr@ 2355 Lost 6" mud
2361 - 2380	3	1	3	2	2	3	3	3	3	2	2	7	10	4	5	4	2	4	5	5	9/3/1969 @ 2326
2381 - 2400	4	6	3	3	3	3	4	3	3	3	3	2	6	4	2	2	3	4	6	5	
2401 - 2420	3	2	4	5	5	3	3	3	2	3	4	4	4	4	3	3	3	3	2	3	Vis. 42
2421 - 2440	3	2	2	1	3	2	2	2	1	2	2	1	1	2	2	3	3	3	7	7	Vis 39
2441 - 2460	4	2	4	4	2	4	4	3	4	4	3	4	3	3	3	3	3	3	3	3	Lost 6" mud 2448
2461 - 2480	3	3	3	3	6	6	2	4	4	5	5	5	5	5	5	5	5	4	2	4	
2481 - 2500	2	2	2	1	2	3	7	6	5	5	6	5	6	5	8	6	5	4	4	3	Vis 41@ 2483
2501 - 2520	3	4	3	5	8	5	8	4	3	4	4	3	5	10	10	12	12	9	7	6	
2521 - 2540	3	7	5	9	7	8	5	5	4	3	8	7	11	10	4	3	5	3	4	3	
2541 - 2560	5	6	3	12	5	8	6	7	10	12	7	7	9	8	6	4	5	10	8	5	
2561 - 2580	4	5	4	6	4	3	3	7	3	3	5	5	2	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	SR@ 2577-78 Circ. 1 hr. @ 2580
2581 - 2600	$1\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	Circ@ 2590 1 hr. SR@ 2592-2601
2601 - 2620	1	1	3	3	3	2	3	3	5	6	8	6	7	4	4	5	5	8	4	7	Circ@ 2605 1 hr.
2621 - 2640	9	9	9	5	2	5	10	9	6	6	5	5	5	4	5	3	5	2	2	2	Vis 37
2641 - 2660	2	2	2	2	3	7	6	9	7	7	7	5	4	5	6	7	5	3	5	4	
2661 - 2680	7	10	9	5	6	8	9	9	9	10	13	11	12	12	11	11	11	11	10	6	Circ. 1 hr@ 2662
2681 - 2700	15	8	6	2	4	3	6	3	4	2	2	6	3	4	5	1	1	Correction@ 82	85	Trip @ 2682 + circ. 1hr	
2701 - 2720	5	4	5	5	7	4	2	2	5	5	3	3	4	5	7	5	4	3	1	2	
2721 - 2740	1	1	1	2	3	3	5	4	3	1	2	2	1	2	2	4	2	2	3	3	Cir 1 hr@ 2740 Vis. 37
2741 - 2760	3	5	5	4	4	5	5	4	4	5	5	3	4	4	4	5	8	8	6	7	
2761 - 2780	8	8	6	9	8	8	3	4	9	6	4	5	1	2	3	6	6	7	6	6	
2781 - 2800	11	8	4	5	7	5	5	2	2	1	2	3	2	5	6	4	6	5	7	5	Cir 1 hr@ 2795
2801 - 2820	2	5	6	5	3	2	6	6	8	8	5	10	10	7	3	2	5	5	5	2	
2821 - 2840	2	2	3	3	3	5	9	5	4	4	5	9	2	4	0	5	9	4	3	2	
2841 - 2860	5	4	4	4	4	3	3	5	8	3	3	6	3	4	3	5	4	4	4	4	
2861 - 2880	5	5	4	4	9	5	5	5	6	9	11	8	8	3	6	6	6	11	19		
2881 - 2900	8	6	3	7	3	3	7	5	7	8	8	7	9	6	6	5	6	3	8	7	8
2901 - 2920	13	13	8	7	13	15	27	12	13	7	7	3	8	4	2	2	7	2	11	21	
2921 - 2940	3	4	3	2	3	4	4	2	3	4	5	5	5	5	5	4	5	5	4		R @ 2929-30 9/5/1969
2941 - 2960	4	5	5	9	2	4	3	4	5	4	4	4	5	5	7	8	7	7	2	2	Vis. 38
2961 - 2980	2	2	3	2	3	1	2	2	5	5	5	2	3	3	4	4	6	6	4	5	
2981 - 3000	3	2	5	7	3	4	2	6	6	8	9	5	2	3	7	5	5	5	4	4	R@ 2995-96 Vis. 38
3001 - 3020	3	3	6	4	4	4	4	6	6	5	8	5	2	4	6	4	4	1	2	5	
3021 - 3040	4	4	5	6	4	4	4	5	5	6	5	4	3	4	6	6	3	2	2	3	Vis. 35
3041 - 3060	6	6	9	6	10	10	5	12	3	5	3	4	4	4	4	4	3	4	5	3	SR 3054 - 58
3061 - 3080	3	4	3	3	2	3	4	5	4	4	5	5	5	4	3	4	5	4	5	6	SR 3061-62
3081 - 3100	4	4	4	4	6	8	7	7	9	6	4	4	7	5	5	3	5	5	4	1	Vs. 38 9/6/1969
3101 - 3120	5	5	5	6	4	5	5	2	5	7	6	7	6	4	5	5	8	5	3	3	
3121 - 3140	4	2	3	1	2	2	5	6	3	4	4	5	3	3	4	6	6	6	4	6	Cir. 1 hr@ 3140
3141 - 3160	3	2	3	3	2	6	6	4	4	4	4	3	3	3	2	3	2	2	1	1	Vis. 37
3161 - 3180	1	1	1	3	5	4	5	3	1	3	5	2	1	1	1	2	2	1	4	6	SR 3162-63 Circ. 1 hr@ 3171
3181 - 3200	4	3	5	5	4	4	8	4	3	2	3	2	2	2	2	1	4	2	2	1	R 3198, VR 3199 to 3201