

SAMPLE ANALYSIS REPORT

MALLARD DRLG. ETAL

1 CLARK

SE SE NE, SEC. 18-19S-2W

McPHERSON COUNTY, KANSAS

BY

HARRY H. EMMERICH

TOMLINSON, KATHOL & EMMERICH

CONSULTING GEOLOGISTS

216 EAST WATERMAN

PHONE AMHERST 7-3062

WICHITA, KANSAS

November 18, 1953

Mr. Sam Pack
514 W-K-H Building
Wichita, Kansas

Subject: Mallard Drlg. Etal # 1 Clark
SE SE NE, Sec. 18-19S-2W
McPherson County, Kansas

Dear Sir:

The following is a sample analysis report of the above captioned well.

The well was under geological supervision from 2350 feet to 2397 feet and from 2953 feet to 3075 feet, rotary total depth. Samples were examined from 155 feet to 3075 feet, rotary total depth.

All tops and zones of porosity are based on kelly bushing measurements.

The following formation tops were determined from sample examination:

Elevation 15 19 KB

	<u>Sample Tops</u>	<u>Electric Log Tops</u>
Top Lansing	2343 -824	2341 -822
Top Mississippi Chert	3021 -1502	3019 -1500
Top Mississippi Dolomite	3072 -1553	3068 -1549
Rotary Total Depth	3075 -1556	3071 -1552

Structural Comparison:

The top of the Mississippian in # 1 Clark is structurally 57 feet lower than in Ogden etal # 1 Chindberg, a producer 1/2 mile west and 1 location north.

Zones of porosity and staining:

Douglas Sand Section:

2152 - 2234 Sand, light gray fine angular porous slightly micaceous and calcareous, no staining.

Lansing-Kansas City Section:

- 2348 - 2360 Limestone, white to light gray oolocast, good porosity, no shows.
- 2412 - 2416 Limestone, tan slightly oolitic fossiliferous,
2419 - 2423 fair intercrystalline porosity, no staining.
2424 - 2429
- 2451 - 2490 Limestone, tan very porous oolcast, no staining.
- 2615 - 2622 Limestone, tan fine crystalline slightly oolitic, slight porosity, no staining.
- 2672 - 2680 Limestone, tan very porous oolcasts, no staining.

Mississippian Section:

- 3021 - 3072 Chert, white tripolitic porous, no shows.
- 3072 - 3075 Dolomite, tan to buff fine crystalline to sucrose dolomitic limestone to dolomite, slightly glauconitic, slightly oolitic, no shows.

Due to the low structural position of the # 1 Clark and the lack of shows of oil or gas, it was recommended by the undersigned that it be plugged and abandoned at the total depth of 3075 feet.

Very truly yours,

TOMLINSON-KATHOL & EMMERICH

By: Harry H. Emmerich
Harry H. Emmerich

FACTS PERTINENT TO THE DRILLING
OF THE

MALLARD DRLG. ETAL # 1 CLARK
SE SE NE, SEC. 18-19S-2W
McPHERSON COUNTY, KANSAS

Contractor - Mallard Drlg. Co.

Drillers: J. W. Brucker
P. E. Plouffe
Guy Folck

Tool Pusher - Jerry Plouffe

Spud Date 10/9/53
155' 8-5/8" Surf. Csg.

Date of RTD 11/16/53
No oil string run.

TOTAL FOOTAGE DRILLED PER DAY
Under Surf. 7 P.M. 11/10/53

735	feet	deep	@	8 A.M.	11/11/53
1740	"	"	"	"	11/12/53
2110	"	"	"	"	11/13/53
2525	"	"	"	"	11/14/53
2810	"	"	"	"	11/15/53
3075	"	"	"	"	11/16/53

TYPE & NUMBER OF ROTARY BITS, FOOTAGE PER BIT

Bit	# 1	Hughes	7-7/8	W-7	155 - 1040
	# 2	Hughes	7-7/8	OSC	1040 - 1920
	# 3	Hughes	7-7/8	OWS	1920 - 2405
	# 4	Hughes	7-7/8	W-7	2405 - 2735
	# 5	Hughes	7-7/8	OWS	2735 - 3075

DRILLING TIMESE SE NE
Section 18-19S-2WMallard Drlg. Etal
1 ClarkElevation 1519 KB
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DEPTH	MINUTES	REMARKS
1' Intervals		

2000	4-3-5-5-4/4-4-4-4-4	
10	2-2-1-4-4/4-4-4-4-4	2014 Conn
20	4-3-3-3-2/3-3-3-2-3	
30	3-3-3-5-6/5-4-4-4-4	
40	4-4-4-5-4/4-3-3-4-5	2045 Conn
50	4-1-2-1-1/1-2-1-2-4	
60	7-4-6-3-2/3-4-4-4-4	
70	4-3-4-3-5/4-4-4-4-4	2076 Conn
80	4-4-4-4-4/5-5-5-5-5	
90	6-6-5-4-5/4-4-6-5-5	
2100	4-5-5-5-4/3-2-2-2-2	2106 Conn
10	7-8-4-2-2/3-2-2-2-3	
20	4-3-3-2-2/2-2-3-2-2	
30	2-2-2-2-3/7-6-3-2-1	2135 Conn
40	2-2-2-1-1/2-2-1-1-1	
50	2-2-2-1-1/1-1-1-1-1	
60	1-1-1-1-1/1-1-1-1-1	
70	1-1-1-1-1/1-1-1-1-1	
80	1-1-1-1-1/1-1-1-1-1	
90	1-1-1-1-1/1-1-1-1-1	
2200	1-1-1-1-1/1-1-1-1-1	
10	1-1-1-1-2/1-1-1-1-1	
20	1-1-1-1-1/1-1-1-1-1	
30	1-1-1-1-2/2-3-2-3-3	
40	2-3-2-3-3/2-3-3-3-2	
50	3-3-2-2-2/3-3-3-2-3	2257 Conn
60	4-2-2-3-3/3-3-3-2-2	
70	3-2-3-2-3/2-4-2-3-3	
80	2-3-4-3-3/2-2-3-3-5	
90	4-5-3-3-4/2-3-3-4-3	
2300	3-3-3-3-3/3-3-4-3-3	
10	3-3-3-4-4/3-4-3-3-3	2315 Conn
20	3-3-3-3-3/3-4-3-3-3	
30	3-3-3-3-3/3-3-4-3-3	
40	4-3-3-5-5/5-6-6-3-3	
50	3-1-1-1-1/1-1-1-1-2	
60	5-5-5-5-4/6-6-6-7-5	
70	5-5-5-5-4/5-4-4-4-4	2379 Conn
80	4-6-6-5-3/3-4-4-6-6	
90	6-5-6-5-5/5-5-5-4-5	

DRILLING TIMESE SE NE
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DEPTH	MINUTES	REMARKS
1' Intervals		

2400	5-6-6-7-7-/7-5-5-5-5	2405 Trip, 2410 Conn
10	5-5-3-4-2/4-4-5-5-4	
20	3-4-4-5-4/2-4-4-3-5	
30	6-5-4-5-7/6-4-5-5-4	2440 Conn
40	4-3-3-3-2/2-2-2-2-2	
50	3- $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ /1- $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$	
60	$\frac{1}{2}$ -3-3-3-3/3-3-3-3-3	
70	$\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ - $\frac{1}{2}$ /1-1-1-2-1	2471 Conn
80	1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -1-1-1/3-1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -2-1	
90	4-2-2-1-1/1-1-1-1-1	
2500	2-2-3-4-4/4-4-5-5-5	2502 Conn
10	6-6-5-7-7/7-5-6-6-6	
20	6-5-6-6-6/7-7-6-9-9	
30	6-5-5-4-4/3-4-4-2-2	2532 Conn
40	3-2-4-3-2/1-6-5-5-6	
50	5-6-8-7-5/6-5-5-5-6	
60	6-6-4-4-2/3-3-6-6-5	2562 Conn
70	4-6-5-5-4/3-3-5-5-4	
80	4-5-6-7-6/8-5-4-6-7	
90	6-5-4-4-5/5-5-5-4-4	
2600	4-3-4-2-3/3-3-3-4-5	
10	4-4-4-5-5/2-2-1-1-1	
20	2-2-4-3-3/4-4-5-4-4	
30	3-4-5-4-6/6-5-6-5-5	
40	6-5-6-7-8/9-8-7-6-7	
50	6-7-6-6-5/7-6-5-7-7	2654 Conn
60	5-3-2-2-3/4-4-6-4-4	
70	5-6-2-2-2/1-1-2-2-2	
80	4-4-5-5-6/7-6-7-7-6	2685 Conn
90	6-5-5-5-5/5-5-4-3-3	
2700	3-5-6-7-6/5-3-6-5-6	
10	9-8-8-6-6-/5-5-6-5-5	2715 Conn
20	4-5-5-5-6/6-6-6-5-5	
30	5-6-5-6-6/8-9-6-4-4	2737 Trip
40	3-3-3-3-3/4-4-2-3-3	2746 Conn
50	3-4-3-3-4/4-2-4-4-3	
60	3-3-3-3-3/4-5-5-4-4	
70	4-5-5-4-4/4-4-4-4-4	2776 Conn
80	3-4-4-4-3/3-3-4-4-3	
90	3-3-3-3-4/4-4-4-4-4	

DRILLING TIME

SE SE NE
Section 18-19S-2W

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1 Clark

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DEPTH	MINUTES	REMARKS
1' Intervals		

2800	5-5-5-4-4/5-5-3-4-5	2807 Conn
10	5-5-4-5-5/5-4-5-4-5	
20	4-4-5-4-4/6-4-4-3-3	
30	2-2-2-2-3/3-4-3-3-3	2838 Conn
40	3-4-4-3-3/4-4-4-3-4	
50	3-4-4-5-4/3-4-3-3-4	
60	7-4-4-3-4/7-4-6-3-4	2866 Conn
70	4-5-4-5-5/4-5-4-3-6	
80	3-4-3-4-5/7-6-5-6-5	
90	3-2-5-5-3/4-5-5-5-6	
2900	5-4-4-4-3/4-3-4-4-2	
10	4-3-3-3-4/3-2-4-3-2	
20	3-4-5-5-3/3-3-3-3-4	
30	5-5-5-5-4/3-3-4-4-4	
40	4-6-5-5-4/4-6-6-6-6	
50	6-7-6-6-4/4-4-3-3-3	
60	3-4-6-4-5/6-6-6-7-7	
70	7-6-7-5-4/4-5-5-5-5	
80	6-5-7-6-5/5-5-4-5-5	2988 Conn
90	6-5-5-6-4/5-5-5-4-4	
3000	4-4-4-4-4/4-4-2-3-5	
10	4-5-3-3-4/4-4-4-4-3	
20	4-2-2-2-2/2-2-4-4-2	
30	3-3-3-3-10/4-4-5-5-6	
40	9-2-1-1-1/2-2-1-2-2	3045 Circ, 3049 Conn
50	2-2-3-5-4/3-3-3-4-3	
60	6-3-3-3-2/5-8-4-2-2	
70	6-8-17-19-21/	