

C. R. SULLIVAN
CONSULTING GEOLOGIST
670 FOURTH NAT'L BANK BLDG.
WICHITA, KANSAS

OFFICE: HOBART 4-6366
RES.: PARKVIEW 2-4123

MULL DRILLING CO., INC.

#2 KERLEY

SW NE NW, SECTION 1-30S-1W

SUMNER COUNTY, KANSAS

By

C. R. SULLIVAN

C. R. SULLIVAN
CONSULTING GEOLOGIST
870 FOURTH NAT'L BANK BLDG.
WICHITA, KANSAS

OFFICE: HOBART 4-6366
RES.: PARKVIEW 2-4123

February 9, 1960

MULL DRILLING CO., INC.
#2 Kerley
SW NE NW, Section 1-30S-1W
Sumner County, Kansas

Elevation: 1248 (K.B.)
Spud: 1-26-60
Completed: Abandoned as dry hole on 2-7-1960.
Casing: 8-5/8" Surface at 350'/400 sx
Drill Stem Tests: #1, 3831-37 (Simpson) - No recovery.
Details in lithologic log.
Electrical Survey: No electric log run.

<u>Formation</u>	<u>Geological Tops</u>
Base Stalnaker Sand	2620 (Drilling time)
Kansas City	2794 (-1546)
Base Kansas City	3021 (-1773)
Cherokee	3286 (-2038)
Mississippian	3375 (-2127)
Kinderhook	3737 (-2489)
Chattanooga	3768 (-2520)
Simpson	3830 (-2582)
Total Depth	3860 (-2612)

STRUCTURE

Datum top Simpson -2582, eleven feet lower than #1 Kerley, northeast diagonal offset which produces from the Simpson.

OIL SHOWS

No shows were observed in the Kansas City or Mississippian Section.

(1) SIMPSON 3830-3837.

The top four feet of this section was small grained to medium grained porous sand carrying a good oil stain and odor, the bottom three feet being a very fine-grain tight glauconitic sand with no stain but having good odor and fluorescence. A drill-stem test of the zone showed no fluid of any kind, indicating a lack of permeability. A small-grain to medium grain sand was encountered at 3842 on drilling deeper, but carried no show, apparently being water bearing.

Recommendation was made to abandon the test as a dry hole.


C. R. SULLIVAN

MULL DRILLING CO., INC.
#2 KERLEY
SW NE NW, Section 1-30S-1W
Sumner County, Kansas

Page - 3 -

<u>DEPTH</u>	<u>DESCRIPTION</u>
<u>Base STALNAKER SAND 2620 (Drilling Time)</u>	
2750-2794	Gray shale.
<u>Top KANSAS CITY 2794</u>	
2794-2841	Brownish-white finely crystalline lime.
2841-2860	Brownish-white finely crystalline lime, gray chert.
2860-2888	Buff finely crystalline lime, traces oolitic and oolitic lime.
2888-2896	Buff slightly cherty lime.
2896-2903	Brownish-white porous oolitic lime, no show.
2903-2905	Black shale to gray shale.
2905-2920	Buff finely crystalline lime, streaks of shale.
2920-2928	Brownish oolitic to oolitic lime, no show.
2928-2962	White finely crystalline to chalky lime - cherty.
2962-2971	Brownish-white oolitic lime, no show.
2971-2974	Gray shale.
2974-2981	Brownish-white semi-dense lime.
2981-2993	Gray shale.
2993-3021	Brownish-white finely crystalline lime.
<u>Base KANSAS CITY 3021</u>	
3021-3040	Gray shale.
3040-3049	Same - trace of buff finely crystalline lime.
<u>Top MARMATON 3049</u>	
3049-3065	Buff white finely crystalline lime, slightly cherty lime.

<u>DEPTH</u>	<u>DESCRIPTION</u>
3065-3078	Gray shale.
3078-3085	Buff finely crystalline lime.
3085-3095	Gray shale.
3095-3105	Buff finely crystalline lime.
3105-3115	Gray shale.
3115-3120	Buff finely crystalline lime.
3120-3130	Gray shale.
3130-3150	White semi-dense lime.
3150-3165	Brownish-white finely crystalline lime.
3165-3175	Gray shale.
3175-3186	Brownish-white finely crystalline lime.
3186-3195	Gray to greenish-gray shale.
3195-3205	Buff finely crystalline lime.
3205-3215	Gray to black carbonaceous shale.
3215-3225	Grayish-white finely crystalline lime.
3225-3245	Maroon to gray to black shale.
3245-3286	Buff finely crystalline lime.
<u>Top CHEROKEE 3286 (?)</u>	
3286-3315	Gray to greenish-gray shale to maroon shale.
3315-3320	White finely crystalline lime.
3320-3325	Same - Some gray to slightly tinted chert.
3325-3375	Various colored shales, traces of lime?

Top MISSISSIPPIAN 3375

<u>DEPTH</u>	<u>DESCRIPTION</u>
3375-3387	Buff glassy to milky to mottled semi-translucent chert.
3387-3440	Buff crystalline dolomitic slightly cherty lime.
3440-3480	Grayish-white dolomitic lime, grayish-white mottled chert.
3480-3560	Grayish-white slightly cherty dolomitic lime to finely sucrosic dolomite.
3560-3655	Buff brown finely crystalline dolomitic lime.
3655-3665	Grayish-brown medium crystalline cherty lime.
3665-3685	Buff white medium crystalline lime, slightly cherty.
3685-3690	Buff white medium crystalline lime.
3690-3695	Same - mottled gray chert.
3695-3713	Buff cherty dolomitic lime.
3713-3725	Buff finely sucrosic cherty glauconitic dolomite to dolomitic lime.
3725-3737	Same - increase in glauconite.
<u>Top KINDERHOOK 3737</u>	
3737-3745	Green shale.
3745-3753	Same - trace of gray dense lime.
3753-3768	White dense argillaceous lime.
<u>Top CHATTANOOGA 3768</u>	
3768-3795	Black shale.
3795-3830	Black to brownish-black shale.
<u>Top SIMPSON 3830</u>	
3830-3834	White small grained to medium grained porous sand, good odor and fluorescence, light stain?

<u>DEPTH</u>	<u>DESCRIPTION</u>
3834-3837	White very fine grained glauconitic sand, good fluorescence, tight, partly shaly?
	<u>DRILL STEM TEST #1</u> , 3831-3837, open 30 minutes, no blow. Flushed tool twice after opened five minutes. No result. Recovered three feet mud. Flow Pressure: 0# - 0#. Bottom Hole Pressure (30"): 1157# - 24#.
3837-3842	Green shale, traces of glassy fine grained sand.
3842-3850 (Circ)	Small grained to medium grained porous sand, no stain or odor.
3850-60	White small grained to medium grained porous sand, many loose sand grains, trace green shale, no stain or odor.

Mull Drilling Co., Inc.
 #2 Kerley (Cont.)

<u>DEPTH</u>	<u>ONE FOOT DRILLING TIME</u>	<u>REMARKS</u>
3060-3070	5-5-4-6-4-5-5-5-4-5	
3070-3080	4-4-4-3-2-3-2-3-4-2	
3080-3090	3-3-3-3-3-2-3-3-4-4	
3090-3100	4-3-4-5-4-3-3-3-3-5	
3100-3110	3-3-4-4-8-5-5-5-6-5	
3110-3120	4-5-3-3-3-4-5-4-4-5	
3120-3130	4-5-5-4-4-4-4-5-4-5	
3130-3140	4-5-4-5-5-6-6-6-5-4	
3140-3150	3-5-6-5-6-7-6-4-5-5	
3150-3160	5-5-7-5-4-7-7-6-5-4	
3160-3170	5-5-4-5-5-5-4-5-4-4	
3170-3180	4-4-6-6-6-4-5-3-3-2	
3180-3190	2-5-5-5-4-6-9-6-5-5	
3190-3200	4-4-5-5-6-6-5-6-5-6	
3200-3210	6-6-6-6-6-7-5-5-4-5	
3210-3220	4-4-5-5-4-5-5-4-4-4	
3220-3230	5-5-5-7-8-9-10-9-7-8	
3230-3240	7-7-6-5-4-5-5-5-6-7	
3240-3250	7-6-6-6-6-5-6-6-6-7	
3250-3260	6-6-7-6-5-7-7-8-10-10	
3260-3270	9-10-8-7-7-5-5-4-4-5	Trip @ 3262
3270-3280	6-5-4-4-4-4-5-4-4-4	
3280-3290	3-3-4-4-5-4-2-2-1-2	
3290-3300	2-2-2-2-1-2-2-3-2-3	
3300-3310	2-3-4-3-4-3-3-5-5-6	
3310-3320	6-5-5-5-5-5-6-6-4-6	
3320-3330	6-5-5-6-6-4-3-3-3-4	
3330-3340	3-2-3-3-2-3-4-4-4-5	
3340-3350	4-4-4-5-5-5-4-4-3-4	
3350-3360	4-4-3-3-5-6-10-6-4-4	
3360-3370	6-6-7-6-4-4-4-4-3-4	
3370-3380	3-1-3-3-4-6-4-4-5-5	
3380-3390	4-3-3-2-2-3-2-11-10-10	
3390-3400	10-8-9-7-8-8-10-10-8-10	
3400-3410	9-13-13-14-15-15-15-13-12-11	
3410-3420	11-12-10-11-11-13-12-14-13-13	
3420-3430	13-16-12-14-15-17-8-8-7-6	Trip @ 3426
3430-3440	6-5-5-5-5-5-5-5-5-5	
3440-3450	5-3-4-4-4-4-5-6-5-5	
3450-3460	5-5-5-5-4-3-4-4-6-6	
3460-3470	5-5-5-5-5-5-7-5-5-5	
3470-3480	5-5-3-3-2-5-5-3-3-3	
3480-3490	3-6-3-3-3-3-4-4-4-3	
3490-3500	4-6-6-6-7-7-7-7-6-7	
3500-3510	7-7-7-5-6-6-6-5-5-6	
3510-3520	6-7-7-7-6-6-6-4-4-3	
3520-3530	3-6-6-6-5-6-8-6-7-7	
3530-3540	8-7-7-5-6-6-5-7-8-9	
3540-3550	7-6-8-9-11-11-11-12-11-11	

Mull Drilling Co., Inc.
 #2 Kerley (Cont.)

<u>DEPTH</u>	<u>ONE FOOT DRILLING TIME</u>	<u>REMARKS</u>
3550-3560	10-9-9-12-11-10-10-10-12-11	
3560-3570	12-13-12-13-12-14-14-13-14-13	
3570-3580	14-15-17-12-10-10-7-6-5-5	Trip @ 3573
3580-3590	6-7-6-7-6-5-5-4-4-6	
3590-3600	6-7-6-5-6-4-4-5-5-6	
3600-3610	6-6-7-5-5-5-5-6-7-8	
3610-3620	7-7-7-6-7-10-7-7-6-7	
3620-3630	6-7-6-7-8-6-7-7-7-7	
3630-3640	6-8-8-7-8-8-7-7-8-8	
3640-3650	7-7-9-10-7-7-7-6-8-9	
3650-3660	9-9-8-9-6-7-8-9-8-9	
3660-3670	12-10-12-12-10-7-7-8-7-7	Trip @ 3663
3670-3680	6-9-9-10-7-7-8-9-7-7	
3680-3690	7-7-7-8-8-8-7-6-7-6	
3690-3700	4-4-4-4-5-4-4-4-3-4	
3700-3710	6-7-7-6-6-7-4-3-3-3	
3710-3720	3-3-3-4-4-3-3-3-3-2	
3720-3730	2-2-2-3-3-3-4-3-4-5	
3730-3740	5-5-6-3-4-3-4-6-8-10	
3740-3750	11-6-7-7-7-7-7-6-8-8	
3750-3760	8-7-7-10-10-12-7-8-7-6	Trip @ 3756
3760-3770	6-5-6-6-5-6-7-6-5-4	
3770-3780	3-4-3-3-3-4-4-4-3-4	
3780-3790	4-3-4-3-3-3-3-4-3-3	
3790-3800	4-4-4-4-3-4-4-3-3-3	
3800-3810	4-4-3-3-4-3-4-4-3-4	
3810-3820	3-3-3-3-3-4-3-4-3-3	
3820-3830	3-3-3-3-3-4-3-3-3-4	
3830-3840	5-5-5-3-2-3-3-4-5-6	
3840-3850	5-5-7-6-6-6-5-3-5-8	
3850-3860	5-5-5-5-4-5-5-5-6-9	