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1656 NORTH CLARENCE
WICHITA, KANSAS

A. D. ALLISON & CO., INC.

#3 HETHERINGTON

NW SW SE, SECTION 15-26S-4E

BUTLER COUNTY, KANSAS

By

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October 30, 1958

A. D. ALLISON & CO., INC.
#3 HETHERINGTON
NW SW SE, SECTION 15-26S-4E
Butler County, Kansas

Elevation: 1317 D.F. 1319 R.B.

<u>DEPTH</u>	<u>DESCRIPTION</u>
	<u>Top KANSAS CITY 2016 -697</u>
	<u>Base KANSAS CITY 2192 -795</u>
	<u>Top (Solid) MARMATON 2333 -936</u>
	<u>Base MARMATON 2384 -987</u>
2384-2423	Mostly gray-green some maroon shales, traces of gray-green medium fine sandstone in lower portion.
2423-2425	Gray-green shale, few rounded clear sand grains. Circulated 30 minutes, no odor or stain.
2425-2427	Big increase in free rounded sand grains, some pale green shale, fine rounded sand inclusions.

DIAMOND CORE #1, 2427-2450. Full recovery. 6-1/8" head.

<u>Depth</u>	<u>Drilling time in minutes</u>	
2427-28	11)	2427-37 Pale green and green and maroon mottled shale.
2428-29	14)	
2429-30	14)	
2430-31	14)	
2431-32	14)	
2432-33	15)	
2433-34	13)	
2434-35	15)	
2435-36	15)	
2436-37	15)	

Top VIOLA 2437.

Diamond Core #1 (Cont.)

<u>Depth</u>	<u>Time</u>	<u>Description</u>
2437-38	20)	2437-39 Angular irregular sized chert fragments with thin shale partings bleeding oil.
2438-39	16)	
2439-40	5)	2439-41 Rotten unconsolidated chert fragments bleeding oil.
2440-41	5)	

Top SIMPSON SAND 2441

2441-42	18)	2441-43 Mottled fused quartz with splotches of tightly cemented stained sand.
2442-43	15)	
2443-44	14	2443-44.8 Tan firm cemented sand, good odor.
2444-45	8)	2444.8-45.2 Hard spotted stained sand.
2445-46	8)	2445.2-46.8 Tan even stained firm sand.
2446-47	11)	2446.8-47.2 White hard silty barren sand.
2447-48	9)	2447.2-50 Rich tan stained friable sand.
2448-49	7)	
2449-50	10)	

DIAMOND CORE #2, 2450-71. Full recovery.

2450-51	6)	2450-53 Rich tan stained friable sand.
2451-52	8)	
2452-53	9)	
2453-54	9	2453-53.4 Light stained cemented sandstone.
2454-55	9	2453.4-54.6 Rich tan stained firm sandstone.
		2454.6-55 Light tan stained tightly cemented sandstone.
		2455-55.4 Rich tan stained sand.
		2455.4-55.6 Light tan stained tight sandstone.
2455-56	8	2455.6-56.4 Rich tan stained sand.
		2456.4-56.8 Light tan mottled tight cemented sand.
		2456-57 9) 2456.8-59.2 Rich tan stained friable sand.
2457-58	6)	2459.2-59.6 Light tan semi-quartzitic sand.
2458-59	5)	
2459-60	12)	2459.6-60.6 Rich tan stained sand.
		2460.6-61.2 Lighter tan stained sandstone.
		2461.2-62.4 Rich tan stained sand hairline vertical fracture.
2461-62	7)	
2462-63	15)	2462.4-65.6 Green sandy shale.
2463-64	5)	
2464-65	3)	

Diamond Core #2 (Cont.)

<u>Depth</u>	<u>Time</u>	<u>Description</u>
2465-66	4)	2465.6-69 Light tan cemented sand with light green shaly splotches.
2466-67	8)	
2467-68	9)	
2468-69	10)	
2469-70	11)	2469-71 Green hard sandy shale with a saturated clean sand 2" wide at bottom to zero at 2470, very thin shale parting at the contact.
2470-71	9)	

DIAMOND CORE #3, 2471-2494. Full recovery.

2471-87	Mostly gray green silty sandy shale.
2487-90	Mostly gray green medium grained tightly cemented glauconitic sandstone.
2490-94	Gray green silty sandy shale.

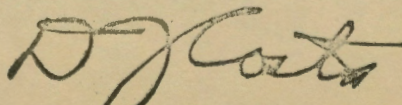
Note: The sand wedge found in the bottom one foot of Core #2 was not present in Core #3. The sandy zone found from 2487-90 could represent a phase of the second sand zone.

Drilled ahead with rotary from 2494.

2494-2498	Gray-green to green waxy shale, some sandy.
2498-2504	Grayish white very fine grained slightly glauconitic and very finely phosphatic sandstone.
2504-2511	Gray green medium grained sandy shale.
2511-2515	Fine to medium grained sandstone with very fine black dead oil specks.

Top ARBUCKLE 2515 -1196.

2515-2523	Mostly grayish white very finely crystalline dolomite, trace free oil wet samples.
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