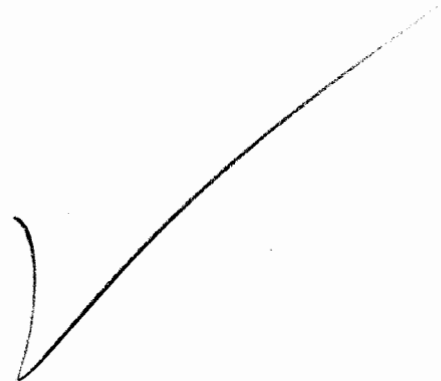


27-24-21E

September 24, 1951



Mr. M. C. Colt
Iola, Kansas

Dear Sir:

Attached hereto are the results of effective permeability tests made on the Cable Tool core taken from the Grubaugh Lease, Well No. 5-A-0, Allen County, Kansas, and submitted to our laboratory on September 20, 1951.

Very truly yours,

OIL FIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:pac

c.c.

Grubaugh 5-A-0

TWP 24-5 RGE 21E SEC 27

LOGCompany M. C. Colt K. B. Project Lease Grubaugh Well No. 5-A-0

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
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696.30 - 699.00	- Laminated sandy shale.
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699.00 - 706.30	- Gray shale.
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706.30 - 708.50	- Laminated sandy shale.
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708.50 - 709.00	- Gray shale.
-----------------	---------------

709.00 - 710.55	- Laminated sandy shale.
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710.55 - 710.75	- Hard sandstone.
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710.75 - 711.20	- Brown fine grained micaceous sandstone.
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711.20 - 715.40	- Brown medium grained micaceous sandstone.
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715.40 - 730.45	- Dark brown medium grained micaceous sandstone.
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730.45 - 730.65	- Hard conglomeratic sandstone.
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730.65 - 731.45	- Dark carbonaceous sandstone.
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731.45 - 731.85	- Brown fine grained slightly carbonaceous micaceous sandstone.
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731.85 - 732.30	- Coal.
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Oil Field Research Laboratories

SHOT RECOMMENDATION

Company M. C. Colt K. B. Project Lease Grubaugh Well No. 5-A-0

<u>Depth Interval, Feet</u>	<u>Feet of Sand</u>	<u>Size of Shell Inches</u>	<u>Qts./Ft.</u>	<u>Total Quarts</u>
716.5 - 730.0	13.5	3 $\frac{1}{2}$	2.0	27.0

Recommended Packer Setting 711.5 feet.

Note: Plug hole back to 731.5 feet.

OIL FIELD RESEARCH LABORATORIES
CHANUTE, KANSAS

RESULTS OF EFFECTIVE PERMEABILITY TESTS

TABLE I

Company <u>M.C. Colt, K.B. Project</u>		Lease <u>Grubaugh</u>		Well No. <u>5-A-0</u>
Sample No.	Depth Ft.	Effective Permeability Millidarcys	Feet of Sand Ft.	Cum. Ft.
1	710.80	0.225	0.45	0.45
2	711.80	11.22	0.95	1.40
3A	712.55	9.83	0.95	2.35
4	713.50	21.73	1.00	3.35
5	714.66	13.71	1.30	4.65
6	715.55	1.84	0.60	5.25
7	716.50	9.94	0.90	6.15
8	717.35	4.80	0.95	7.10
9	718.35	32.10	1.15	8.25
10	719.50	59.42	1.05	9.30
11	720.65	49.54	1.05	10.35
12	721.50	30.01	1.00	11.35
13	722.70	90.35	1.05	12.40
14	723.60	52.54	0.80	13.20
15	724.35	17.54	0.95	14.15
16	725.45	17.24	1.10	15.25
17	726.45	5.84	1.00	16.25
18	727.50	122.40	0.85	17.10
19	728.25	37.06	0.80	17.90
20	729.05	2.89	1.10	19.00
21	730.40	25.61	0.70	19.70
22	731.10	0.573	0.80	20.50

Oil Field Research Laboratories

SUMMARY OF PERMEABILITY & POROSITY TESTS

TABLE II A

Company	M. C. Colt, K. B. Project	Lease	Grubaugh	Well No.	5-A-0
Depth Interval, Feet	Feet of Core Analyzed	Average Air Permeability, Millidarcys	Average Effective Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Porosity
710.75-717.85	7.10	-	10.46	-	-
717.85-731.45	13.40	-	38.43	-	-
711.50-731.50	19.75	-	29.65	-	-