

Telephone
Forest 3-6201

M. B. ARMER
710 Petroleum Building
Wichita 2, Kansas

December 6, 1954

Mr. M. B. Armer
Armer Drilling Company
710 Petroleum Building
Wichita, Kansas

Re: Armer Drilling Company, et al
#1 Robbins - NE NE NE
Sec. 21-27S-15W
Pratt County, Kansas

Dear Mr. Armer:

In regard to the above captioned well the following zones of porosity, shows of oil and gas, and formation tops were noted:

ELEVATIONS: 2075 Ground
2078 Derrick Floor
2081 Kelly Pushing - measurements are from K.B.

<u>Geological Tops</u>	<u>Datum</u>	<u>Datum - Electric Log Tops</u>
HEEBNER	3845 (-1764)	3840 (-1759)
TORONTO	3864 (-1783)	3863 (-1782)
DOUGLAS	3889 (-1808)	3890 (-1809)
BROWN LIME	4001 (-1920)	4001 (-1920)
LANSING-KANSAS CITY	4018 (-1935)	4024 (-1943)
BASE LANSING-K.C.	4322 (-2241)	4320 (-2239)
DZ SAND & SHALE	4464 (-2383)	4462 (-2381)
MISSISSIPPI	4497 (-2416)	4494 (-2413)
KINDERHOOK SAND	4542 (-2461)	4542 (-2461)
VIOLA	4603 (-2522)	4600 (-2519)
SIMPSON SHALE	4681 (-2600)	4684 (-2603)
SIMPSON SAND	4707 (-2626)	4705 (-2624)
ARBUCKLE	4776 (-2695)	4777 (-2696)
T.D. - Driller's	4815 (-2734)	4815 (-2734)

ZONES OF POROSITY AND OIL SHOWS - LANSING-KANSAS CITY

4050-58 Soft buff vugular chalky lime with very slight trace of light spotted stain. Trace of live oil, fair odor, poor vugular porosity (6-8%)

D.S.T. #1 - 4035-59 - Open one hour - fair, diminishing to weak blow. Recovered 2580' gas in drill pipe - 170' heavily gas cut and slightly oil cut mud - 240' heavily oil and gas cut mud and 90' muddy gassy oil and 90' salt water.
Shut in 20 minutes - IFF 0# - FFP 180# - BHP 1125#

4111-16 Buff vugular and oolitic lime with fresh light gray chert. No shows, fair to good vugular porosity (12%).

- h138-50 Soft cream granular lime, slightly chalky, with much fresh gray chert - no shows present, fair porosity.
- h173-78 Gray oolastic lime, poorly developed, with poor show spotted stain live oil - slight odor, fair to good oolastic porosity. (14 to 17%)
- D.S.T. #2 - h168-84 - Open one hour - weak blow 25 minutes. Recovered 6' mud with trace of oil specks. Shut in 1/2 hour - IFP 15# - FFP 15# - BHP 25#
- h196-99 Buff fine crystalline chalky lime - no shows or odor, poor to fair porosity (9%)
- h204-07 Buff to white vugular and fossiliferous lime with possible very slight trace of spotted stain - no odor, poor vugular porosity (7%)
- h244-49 Cream crystalline chalky lime with a very slight trace of light spotted stain, trace of live oil, no odor, poor to ~~light~~ fair porosity (9%)
- h259-61 &
h263-68 White vugular chalky lime with poor show of dark spotted stain (50% residual stain) trace of live oil, slight odor, fair vugular porosity. (13-16%)
- D.S.T. #3 - h241-69 - Open one hour, fair steady blow throughout. Recovered 300' gas in drill pipe, 95' gas cut mud with trace of oil. Shut in 1/2 hour - IFP 75# - FFP 95# - BHP 1215#.

BASAL PENNSYLVANIAN SANDS

- h472-75 &
h479-81 Light tan, medium to coarse, sub-rounded sand grains in clusters with trace of gray fine to medium grained sand clusters, very slight trace of light live oil and stain, no odor, poor to fair porosity - top sand 7% - bottom sand 18%.
- D.S.T. #4 - h463-90 - Open one hour and 44 minutes, very strong blow, gas to surface in 70 seconds, gauged 472# for 48 minutes 5,802,687 C.F.G. with 5 gallons distillate. Shut in 1/2 hour - IFP 280# - FFP 679# - BHP 1514#.

MISSISSIPPIAN

Bone white fresh and tripolitic cherts with scattered traces of light brown oil stain, no live oil, no odor, trace of pin point and vugular porosity in tripolitic chert.

- D.S.T. #5 - h499-4534 - Open 1 hour, strong blow. Recovered 50' watery mud - Shut in 1/2 hour - IFP 0# - FFP 0# - BHP 750#.

KINDERHOOK SANDS

Soft light tan, fine to medium, rounded to sub-rounded even grained sand clusters with fair to good show of light live oil, fair to good odor, fair porosity - top sand 12% - bottom sand

- D.S.T. #6 - h538-58 - Open one hour - weak blow 38 minutes. Recovered 90' mud - Shut in 1/2 hour - IFP 0# - FFP 0# - BHP 100#.

VIOLA

Bone white fresh and tripolitic cherts with white to buff coarse crystalline lime and brown medium crystalline dolomite, dolomite sandy in part, no shows, no odor, porosity average 11%.

SIMPSON SHALE

Grayish green and green waxy shales, sandy in part.

SAND

Sharp clean quartz clusters and white calcareous cemented large grained sand clusters, no shows, no odor, poor porosity. (6-10%)

ARBUCKLE

Pink, buff and brown medium to coarse crystalline dolomite with trace of fine crystalline and sucrosic dolomite, no shows, no odor, fair to good inter-crystalline and vugular porosity.

D.S.T. #7 - 4778-90 - Open 3/4 hour, weak blow 32 minutes. Recovered 30' mud, slightly watery. Shut in 15 minutes - IFP 12# - FFP 27# - BHP 838#.

STRUCTURAL COMPARISON

Lansing-K.C.	Arbuckle	Dry Holes
32' lower	30' higher	Sec. 6-27S-15W
31' lower	65' lower	Sec. 12-27S-15W
10' higher	1' lower	Sec. 25-27S-15W
3' higher	71' higher	Sec. 19-27S-15W
101' higher	153' higher	Sec. 31-27S-15W

PRODUCTIVE ZONES

Lansing-Kansas City, 4250-55, should be further tested.

Pennsylvanian Conglomerate Sand, 4472-75, and 4478-82, should be further tested.

Kinderhook Sand, 4542-46, 4553-56, and possibly 4532-40, should be further tested.

Respectfully submitted,

/s/ Stanton Cox
Stanton Cox

SC/rk

M. B. ARMER

ROBBINS NO. 1

NE NE NE, Sec. 21-27S-15W
Pratt County, Kansas

DEPTH	TIME	REMARKS
1040 - 1100	6-6-6-7-5-5-5-2-2-4-5-4-5	5' drilling time - Conn. 1075
1100 - 1150	4-2-3-5-5-5-5-4-4-6	Conn. 1110 - Conn. 1140
1150 - 1200	5-6-3-6-6-3-6-5-4-5	Conn. 1170 - Conn. 1200
1200 - 1250	6-4-6-7-6-5-5-6-5-7	Conn. 1230
1250 - 1300	7-4-2-3-5-4-4-4-5-5	Conn. 1260 - Conn. 1290
1300 - 1350	7-7-3-3-4-6-5-8-8-8	Conn. 1315 - Conn. & Trip 1350
1350 - 1400	5-4-3-2-2-2-5-5-5-5	Conn. 1380
1400 - 1450	5-3-3-5-5-5-4-6-5-4	Hard & Rough 1415 - Conn. 1415
1450 - 1500	4-4-5-5-5-4-4-4-5-5	Conn. 1445 - Conn. 1475 - Conn. 1505
1500 - 1550	5-4-3-5-4-4-4-5-5-4	Conn. 1535
1550 - 1600	3-5-4-4-4-4-4-5-4-4	Conn. 1565 - Conn. 1595
1600 - 1650	5-5-5-5-6-5-4-4-4-4	Conn. 1630
1650 - 1700	3-4-3-4-5-5-5-5-6-5	Conn. 1660 - Conn. 1690
1700 - 1750	4-5-4-4-4-4-4-5-4-4	Conn. 1720 - Conn. 1750
1750 - 1800	4-4-4-4-5-4-3-5-6-8	Conn. 1780
1800 - 1850	9-8-6-6-7-8-12-17-4-3	Conn. 1810 - R 1835 - Conn. & trip
1850 - 1900	3-3-3-2-2-4-6-4-6-7	1840. Conn. 1870 - Conn. 1900
1900 - 1950	6-4-3-3-3-3-3-4-3	Conn. 1930
1950 - 2000	3-3-3-3-3-3-3-4-7	Conn. 1960 - Conn. 1990
2000 - 2050	13-9-10-13-20-21-17-12-14-21	Conn. 2025
2050 - 2100	10-11-17-16-19-24-9-8-16-19	Conn. 2055 - Conn. 2090
2100 - 2150	16-12-13-13-14-11-23-21-15-17	Conn. 2120 - Conn. 2150
2150 - 2200	13-16-12-18-18-15-15-21-20-9	Conn. 2180 - Trip 2240
2200 - 2250	11-17-18-19-20-10-17-20-11-12	Conn. 2217
2250 - 2300	14-15-15-10-6-6-7-11-15-15	Conn. 2270 - Conn. 2300
2300 - 2350	15-15-18-15-15-17-14-22-30-23	Conn. 2330
2350 - 2400	21-21-22-28-27-30-29-31-34-35	Conn. 2360 - Conn. 2390
2400 - 2450	32-25-30-24-32-6-9-10-10-10	Conn. 2420 - Trip 2425
2450 - 2500	9-7-8-5-5-5-7-14-33-36	Conn. 2455 - Conn. 2485
2500 - 2550	40-35-30-39-23-16-28-26-25-21	Conn. 2540
2550 - 2600	35-29-32-31-12-14-27-44-35-13	Conn. 2570 - Trip 2595 - Conn. 2600
2600 - 2650	12-10-11-16-12-11-13-10-15-11	Conn. 2630
2650 - 2700	11-12-13-12-12-16-17-17-18-18	Conn. 2665 - Conn. 2695
2700 - 2750	18-21-17-19-20-22-16-9-14-15	Conn. 2730
2750 - 2800	10-15-22-20-17-17-18-19-22-21	Conn. 2760 - Conn. 2790
2800 - 2850	21-16-13-25-30-18-19-15-15-19	Conn. 2820 - Conn. 2850
2850 - 2900	19-26-16-24-28-27-15-9-7-4	Conn. 2880
2900 - 2950	7-20-21-22-22-10-16-25-20-22	Conn. 2910 - Conn. 2940
2950 - 3000	21-23-22-22-19-18-20-20-21-21	Conn. 2970
3000 - 3010	5-4-3-3-3-5-5-4-5-4	1' drilling time - Conn. 3002
20	5-5-5-4-4-4-4-4-5-4	
30	3-4-4-4-4-3-3-2-2-2	Trip 3025
40	2-2-2-2-2-1-2-1-2-2	Conn. 3033
50	2-3-3-4-3-3-3-3-2-1	
60	1-2-3-2-2-2-3-3-4-2	
70	2-4-4-3-3-2-4-4-4-4	
80	4-4-3-3-4-4-4-3-3-3	
90	1-1-1-1-2-2-2-3-4-4	
3090 - 3100	3-3-4-3-3-3-3-4-4-3	Conn. 3095

3100 - 3110	1-3-3-3-1-3-3-1-3-3	
20	3-3-2-3-3-2-3-1-1	
30	3-2-2-2-2-1-1-1-2-2	Conn. 31 25
40	2-1-1-1-1-1-2-3-5-5	
50	1-1-1-1-1-1-1-1-1-1	
60	1-1-1-1-1-1-1-1-1-5	
70	1-1-1-1-5-1-1-1-1-1	
80	1-1-3-3-1-1-1-1-1-3	
90	3-1-3-3-3-1-5-1-5-5	Conn. 3185
3200	5-5-5-5-6-1-1-1-5-1	
3200 - 3210	5-5-5-5-5-5-5-5-5-5	
20	1-1-1-1-1-1-1-1-1-5	Conn. 3216
30	1-3-3-2-3-1-1-5-1-3	
40	1-3-3-3-2-2-3-1-5-1	
50	1-1-1-1-3-3-3-3-1-6	Conn. 3246
60	5-5-6-5-5-1-1-5-1-1	
70	1-3-1-5-5-5-5-7-5-5	
80	1-5-3-3-1-1-3-3-1-5	Conn. 3277
90	5-7-5-1-1-6-7-7-6-6	
3300	7-5-5-5-5-3-3-2-3-2	
3300 - 3310	2-3-3-5-6-6-6-5-5-5	Conn. 3306
20	1-1-5-7-5-1-1-5-1-3	
30	3-1-3-3-3-2-2-2-1-5	Trip 3330
40	3-3-3-1-1-3-3-3-1-10	Conn. 3337
50	6-6-1-1-3-3-6-6-6-6	
60	5-5-5-5-5-6-6-1-5-6	
70	1-1-1-3-1-1-3-3-3-1	Conn. 3368
80	1-1-6-5-1-1-1-1-3-3	
90	1-3-3-1-6-1-3-5-1-3	
3400	3-3-1-5-3-1-2-3-2-2	Conn. 3399
3400 - 3410	2-2-2-2-1-2-2-2-2-1	
20	5-3-2-3-3-3-3-5-6	
30	1-7-6-1-3-1-2-2-3-3	Conn. 3428
40	1-1-1-1-1-1-3-3-1-1	
50	5-6-8-7-8-7-5-5-6-1	
60	1-1-3-3-1-3-3-3-3-1	Conn. 3459
70	5-5-1-5-5-1-1-1-1-5	
80	1-3-2-2-3-2-3-3-5-5	
90	5-5-5-1-3-3-3-3-2-2	
3500	1-1-1-2-2-2-2-6-6-6	
3500 - 3510	5-5-1-1-3-3-2-2-1-1	
20	1-2-1-1-1-1-1-2-1-2	
30	1-1-1-2-1-1-2-1-3-3	Conn. 3521
40	2-2-3-2-1-1-1-2-2-2	
50	2-2-3-3-3-1-3-3-2-2	
60	1-1-2-3-5-5-6-2-1-1	Conn. 3551
70	1-2-2-2-2-1-5-6-5-1	
80	1-3-1-5-5-7-1-2-2-1	
90	1-2-2-2-2-2-2-2-3-3	Conn. 3582
3600	5-5-9-13-8-10-8-7-5-5	

3600 - 3610	10-7-9-10-9-5-5-5-4-4	
20	3-4-5-4-2-2-2-4-3-3	Conn. 3613
30	4-5-5-4-4-3-4-4-4-3	
40	3-2-3-2-3-3-5-6-6-7	
50	6-7-8-5-4-3-3-3-3-3	Trip 3643 - Conn. 3645
60	3-4-5-5-2-1-2-1-2-1	
70	2-2-2-3-4-5-5-5-6-7	
80	5-4-4-3-4-4-4-5-4-6	Conn. 3676
90	3-1-2-3-4-5-6-4-4-4	
3700	3-3-3-2-3-2-2-3-4-2	
3700 - 3710	3-3-3-2-2-3-2-1-2-2	Conn. 3707
20	2-2-2-2-2-3-2-3-3-3	
30	3-2-2-4-4-3-2-3-2-2	
40	1-2-2-3-3-2-1-2-2-1	Conn. 3736
50	1-2-1-2-3-4-6-7-6-6	
60	5-4-4-2-2-2-2-2-2-3	
70	3-3-2-3-2-1-1-2-2-3	Conn. 3764
80	2-2-2-3-3-2-2-3-2-2	
90	3-3-3-2-3-3-2-3-2-3	
3800	2-2-2-2-2-2-2-2-2-2	Conn. 3795
3800 - 3810	2-2-2-2-2-2-3-3-1-1	
20	1-1-1-2-1-2-1-2-2-2	
30	2-2-2-2-2-4-4-3-3-3	
40	2-2-3-2-2-3-4-5-5-7	
50	4-4-8-8-10-5-5-4-3-2	
60	3-6-9-7-5-4-4-4-4-4	Conn. 3857
70	5-3-3-3-6-8-7-6-6-7	
80	7-6-6-5-5-7-6-6-9-8	
90	9-8-6-6-7-7-7-7-8-3	
3900	2-3-4-4-2-3-3-4-4-4	
3900 - 3910	4-5-4-4-4-4-3-4-3-4	
20	3-4-4-4-3-4-4-4-4-4	Conn. 3918
30	3-3-3-3-2-3-3-3-2-2	
40	3-3-3-3-4-4-4-4-4-3	
50	3-3-3-2-2-4-4-4-4-3	Conn. 3948
60	2-2-2-2-3-3-3-4-6-6	
70	6-7-6-6-7-6-5-5-6-6	
80	6-7-6-7-6-6-6-7-6-6	Conn. 3980
90	6-7-6-7-6-6-6-7-5-7	
4000	6-8-8-7-6-6-5-7-6-6	
4000 - 4010	6-8-10-10-8-10-8-9-12-10	
20	10-12-9-10-12-5-6-5-6-6	Conn. 4011 - Trip 4015
30	4-5-3-4-4-4-3-3-5-5	
40	5-5-5-5-7-6-6-6-5-7	Conn. 4040
50	7-7-6-4-5-4-4-3-4-3	
60	2-3-3-3-3-2-2-5-6-5	Circ. 4059
70	4-5-6-9-12-13-10-7-8-3	Conn. 4040 - SR 4070
80	2-2-3-4-5-4-4-5-6-7	Conn. 4072
90	6-9-11-10-7-8-10-10-11	
4100	9-11-11-10-8-10-12-10-11-10	

4100 - 4110	10-9-13-11-11-9-9-10-15-14	Conn. 4102
20	4-5-4-3-2-3-5-9-7-10	Circ. 4119
30	8-11-6-4-3-7-10-11-9-9	
40	8-5-10-16-13-9-8-6-7-4	
50	7-9-6-5-4-6-4-4-4-7	
60	6-8-13-16-12-10-11-11-12-14	
70	16-17-18-18-14-16-15-18-14-10	Conn. 4162
80	6-6-11-12-13-16-3-1-1-1	
90	4-2-8-15-9-10-9-9-7-8	Circ. 4184
4200	7-6-4-6-5-6-5-5-4-5	
4200 - 4210	8-7-7-8-6-6-6-7-9-6	
20	7-7-8-7-4-8-7-4-8-8	
30	10-10-10-8-6-8-7-6-6-5	Conn. 4223
40	5-4-5-5-7-7-9-9-8-7	
50	10-9-9-6-5-4-8-6-8-10	
60	10-9-7-6-6-5-6-8-5-4	Conn. 4254
70	2-3-4-5-5-4-5-8-7-6	Circ. 4269
80	8-8-8-7-9-8-7-9-9-10	
90	8-7-7-8-9-6-6-7-6-6	Conn. 4285
4300	5-5-5-7-8-8-7-7-7-7	
4300 - 4310	8-7-8-9-9-8-8-9-10	
20	10-9-8-8-10-8-7-8-8-10	Conn. 4310
30	10-9-7-4-5-8-15-10-7-5	
40	8-9-10-12-8-9-9-8-9-8	
50	9-9-8-8-7-10-7-5-5-9	Conn. 4348
60	10-12-9-11-14-11-13-12-8-10	
70	8-8-10-8-9-9-9-7-7-9	
80	7-8-7-9-7-8-6-8-8-10	Conn. 4378
90	10-9-10-10-9-8-8-9-9-10	
4400	10-9-8-6-7-6-6-8-7-10	SR 4392-95 - SR 4397
4400 - 4410	11-12-14-12-11-11-10-11-10-12	Conn. 4409
20	10-12-10-13-7-7-9-8-8-8	
30	10-10-10-10-10-10-9-8-7-7	
40	8-10-10-9-9-10-6-8-9-7	Conn. 4439
50	7-7-8-10-10-10-10-9-10-10	
60	10-12-13-12-11-13-15-13-12-10	
70	10-14-12-10-9-9-8-8-7-6	Conn. 4470
80	6-14-9-11-6-9-8-11-11-13	
90	10-16-9-8-11-11-10-9-9-10	Circ. 4490
4500	9-4-6-5-7-7-7-5-4-4	
4500 - 4510	4-5-3-3-3-4-3-4-4-5	Conn. 4501 - SR 4503-04
20	3-4-4-4-4-4-6-4-4-4	Circ. 4513
30	4-6-6-4-4-6-8-9-9-7	
40	9-13-10-14-13-13-10-12-12-11	Circ. 4534 - Circ. 4535
50	11-10-7-5-5-4-5-5-5-10	
60	15-16-7-7-8-7-8-12-6-7	
70	5-5-5-5-6-9-9-5-4-2	Conn. 4563
80	1-1-6-3-3-3-3-4-6-6	
90	5-5-6-5-7-5-9-13-12-9	
4600	11-15-15-14-15-13-13-15-15-15-	Conn. 4594

4600 - 4610 16-17-17-15-16-15-17-18-19-19
 20 21-26-9-9-8-9-10-10-9-9
 30 8-9-10-9-8-8-8-9-8-9
 40 10-8-8-9-11-10-10-10-10-11
 50 7-9-11-10-11-11-13-12-11-12
 60 10-13-13-16-18-15-15-20-19-18
 70 16-17-16-16-16-15-16-17-14-15
 80 14-14-16-14-14-16-16-17-15-15
 90 16-9-8-7-7-6-7-11-10-9
 4700 9-9-10-7-8-9-9-8-9-9

Conn. 4624

Conn. 4655

Trip 4681 - Conn. 4687

4700 - 4710 8-7-8-7-6-7-8-5-4-3
 20 8-5-2-2-5-5-4-4-3-4
 30 6-5-8-7-7-11-13-18-10-12
 40 16-18-11-11-9-10-10-7-11-17
 50 19-17-21-27-25-8-8-7-6-7
 60 7-8-8-9-7-7-6-6-9-9
 70 7-10-11-10-8-6-7-8-11-12
 80 11-9-9-8-8-9-7-7-4-4
 90 3-3-3-5-5-3-3-4-5-6
 4800 3-7-8-10-7-8-9-15-9-6

Conn. 4718

Circ. & Trip 4745 - Conn. 4748

Circ. 4770

Circ. 4780 - Conn. 4780

Circ. 4784

4800 - 4810 5-6-3-5-9-9-8-8-7-5
 15 7-7-8-9-8

Conn. 4810