24-23-16E

March 8, 1951

Susmic Oil Company
P. O. Box 1894
Wichita, Kansas

Attention: Mr. O. A. Sutton

Gentlemen:

Enclosed herewith is the report of the partial analysis of the Cable Tool core taken from the Maynard Lease, Well No. 9, Woodson County, Kansas, and submitted to our laboratory on February 22, 1951.

In calculating the recovery for the area represented by this core, an allowance was made for oil lost during coring, and it was assumed that the true water saturation of the sand is 20 percent and that the well was drilled in virgin territory.

Very truly yours,

OIL FIELD RESEARCH LABORATORIES

Clayton A. Nattier

CAN:bb
c.c. to Mr. G. M. Smith

Maynard 9

SUSHIO OIL COMPANY

CORE ANALYSIS REPORT

MAYNARD LEASE WELL NO. 9

WOODSON COUNTY, KANSAS

OIL FIELD RESEARCH LABORATORIES

CHANUTE, KANSAS

MARCH 8, 1951

Oil Field Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Susmio Oil Company Lease Maynard Well No. 9

Location 220' West of East Line and 60' North of South Line, N½, SW¼.

Section 24 Twp. 23S Rge. 16E County Woodson State Kansas

Name of Sand	Squirrel
Top of Core	937.35
Bottom of Core	959.45
Top of Sand	943.30
Bottom of Pay Sand	953.65
Total Feet of Permeable Sand	12.30

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.

Average Effective Permeability Millidarcys	7.48
Average Percent Porosity	22.37
Average Percent Oil Saturation	40.05
Average Percent Water Saturation	-
Average Oil Content, Bbls./A. Ft.	684.
Total Oil Content, Bbls./Acre	8,418.
Average Percent Oil Recovery by Laboratory Flooding Tests	6.26
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	111.
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	936.
Total Calculated Oil Recovery, Bbls./Acre	3,100.
Packer Setting, Feet	
Viscosity, Centipoises @	
A. P. I. Gravity, degrees @ 60 °F	

OIL FIELD RESEARCH LABORATORIES
CHANUTE, KANSAS

LOG

Company Susmic Oil Company Lease Maynard Well No. 9

Depth Interval, Feet	Description
937.35 - 942.30	According to log, gray shale (Discarded at well).
942.30 - 943.30	Gray shale.
943.30 - 944.73	Dark brown fine grained micaceous calcareous sandstone.
944.73 - 945.35	Brown fine grained laminated micaceous shaley sandstone.
945.35 - 945.80	Dark brown fine grained micaceous sandstone.
945.80 - 946.35	Brown fine grained micaceous shaley sandstone.
946.35 - 947.10	Brown fine grained finely laminated micaceous shaley sandstone.
947.10 - 947.63	Gray sandy shale.
947.63 - 954.87	Dark brown fine grained micaceous sandstone.
954.87 - 955.13	Laminated shaley sandstone.
955.13 - 956.05	Laminated sandstone and shale.
956.05 - 956.75	Dark brown fine grained laminated micaceous shaley sandstone.
956.75 - 957.93	Dark brown fine grained micaceous sandstone.
957.93 - 959.45	Gray sandy shale.

Oil Field Research Laboratories

RESULTS OF SATURATION TESTS

TABLE III

Company Susmio Oil Company Lease Maynard Well No. 9

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content, Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water	Total		Ft.	Cum. Ft.	
F -1	943.36	18.4	38.2	-	-	646	0.70	0.70	453
F -2	944.56	20.4	46.2	-	-	732	0.73	1.43	535
F -3	945.72	25.9	39.2	-	-	768	1.00	2.43	768
4	946.85	21.4	43.9	35.6	79.5	730	0.75	3.18	548
F -5	947.86	21.3	42.5	-	-	702	0.67	3.85	471
F -6	948.87	25.0	36.3	-	-	704	1.10	4.95	774
F -7	949.93	22.7	35.7	-	-	629	1.10	6.05	691
F -8	951.06	22.2	37.8	-	-	651	1.10	7.15	716
F -9	952.07	23.2	32.3	-	-	582	1.00	8.15	582
F-10	953.03	22.9	44.8	-	-	663	1.05	9.20	695
F-11	954.25	20.0	48.8	-	-	758	1.22	10.42	910
F-13	956.23	25.3	40.9	-	-	805	0.70	11.12	564
F-14	957.23	21.1	36.8	-	-	603	1.18	12.30	711
								Total- -	- 8,418

Oil Field Research Laboratories

SUMMARY OF SATURATION TESTS

TABLE IV

Company Sunnio Oil Company Lease Maynard Well No. 9

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbls./A. Ft.	Total Oil Content Bbls./Acre
943.30-953.65	9.20	22.63	39.25	-	678	6,233
953.65-957.93	3.10	21.61	42.42	-	705	2,185
943.30-957.93	12.30	22.37	40.05	-	684	8,418

Oil Field Research Laboratories

RESULTS OF LABORATORY FLOODING TESTS

TABLE V

Company Suemic Oil Company Lease Maynard Well No. 9

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc*	Effective Permeability, Millidarcys **	Initial Fluid Production Pressure Lbs./Sq. In.
			Percent	Bbls./A. Ft.	Percent	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
1	943.36	18.4	38.2	646	2.1	30	36.1	55.2	516	11	0.332	30
2	944.56	20.4	46.2	732	9.2	146	37.0	52.3	586	46	1.24	20
3	945.72	25.9	39.2	768	3.8	76	35.4	57.7	692	249	34.41	10
5	947.86	21.3	42.5	702	6.3	104	36.2	59.6	598	59	3.21	20
6	948.87	25.0	36.3	704	6.9	134	29.4	62.5	570	131	7.96	15
7	949.93	22.7	35.7	629	7.8	137	27.9	61.2	492	137	7.01	15
8	951.06	22.2	37.8	651	4.9	84	32.9	62.1	567	40	1.46	25
9	952.07	23.2	32.3	582	7.2	130	25.1	60.1	452	198	5.73	15
10	953.03	22.9	44.8	797	7.5	134	37.3	57.3	663	38	1.58	25
11	954.25	20.0	48.8	756	0.0	0	48.8	43.2	758	2	1.14	45
13	956.23	25.3	40.9	805	0.0	0	40.9	45.5	805	202	Fractured	10
14	957.23	21.1	36.8	603	0.0	0	36.8	58.6	603	29	0.970	25

Notes: cc - cubic centimeter
* - Volume of water recovered at the time of maximum oil recovery.
** - Determined by passing water through sample which still contains residual oil.

Oil Field Research Laboratories

SUMMARY OF LABORATORY FLOODING TESTS

TABLE VI

Company Susmio Oil Company Lease Maynard Well No. 9

Depth Interval, Feet	943.30 - 953.65
Feet of Core Analyzed	8.45
Average Percent Porosity	22.73
Average Percent Original Oil Saturation	38.86
Average Percent Oil Recovery	6.26
Average Percent Residual Oil Saturation	32.60
Average Percent Residual Water Saturation	59.10
Average Percent Total Residual Fluid Saturation	91.70
Average Original Oil Content, Bbls./A. Ft.	682.
Average Oil Recovery, Bbls./A. Ft.	111.
Average Residual Oil Content, Bbls./A. Ft.	571.
Total Original Oil Content, Bbls./Acre	5760.
Total Oil Recovery, Bbls./Acre	936.
Total Residual Oil Content, Bbls./Acre	4824.
Average Effective Permeability, Millidarcys	7.48
Average Initial Fluid Production Pressure, p.s.i.	19.4

NOTE: Only those samples which recovered oil were used in calculating the above averages.