

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company James E. Russell Petroleum, Inc. Lease C. McGhee Well No. 2

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	739.5	14.2	23	59	82	253	0.52	1.0	1.0	253	0.52
2	742.6	17.2	29	33	62	387	3.3	0.6	1.6	232	1.98
3	743.5	18.5	27	38	65	388	2.4	1.0	2.6	388	2.40
4	744.5	16.7	30	41	71	389	1.1	1.0	3.6	389	1.10
5	745.5	14.1	28	56	84	306	0.80	1.0	4.6	306	0.80
6	746.4	17.4	27	45	72	365	2.8	1.0	5.6	365	2.80
7	747.5	14.5	31	50	81	349	11.	0.6	6.2	209	6.60
8	748.5	14.3	25	59	84	277	4.8	1.4	7.6	388	6.72
9	749.5	17.9	45	26	71	625	4.1	1.0	8.6	625	4.10
10	750.4	17.2	27	44	71	360	2.0	1.0	9.6	360	2.00
11	751.5	17.5	37	36	73	502	2.6	0.7	10.3	352	1.82
12	752.5	16.7	41	34	75	531	3.2	0.9	11.2	478	2.88
13	753.5	17.9	28	39	67	389	6.3	1.7	12.9	661	10.71
14	754.4	17.6	41	35	76	560	9.4	0.7	13.6	392	6.58
15	755.5	15.2	29	50	79	342	4.8	1.0	14.6	342	4.80
16	756.5	14.6	29	53	82	329	0.75	1.0	15.6	329	0.75
17	757.4	16.5	40	34	74	512	4.2	0.5	16.1	256	2.10
18	759.7	14.5	24	63	87	271	1.8	0.7	16.8	190	1.26
19	760.7	14.0	35	50	85	380	1.7	1.0	17.8	380	1.70
20	761.6	12.9	28	62	90	280	0.36	1.0	18.8	280	0.36
21	762.5	14.3	43	41	84	477	1.0	0.6	19.4	286	0.60
22	765.5	11.6	27	69	96	243	Imp.	0.8	20.2	194	0.00
23	766.5	17.4	47	30	77	634	4.3	1.2	21.4	760	5.16
24	767.5	15.9	63	21	84	777	3.4	1.0	22.4	777	3.40
25	768.3	13.7	55	38	93	585	3.8	1.0	23.4	585	3.80
26	769.5	17.1	61	24	85	809	7.5	0.8	24.2	646	6.00
27	770.5	15.2	61	25	86	719	0.82	1.2	25.4	862	0.98
28	771.5	16.1	59	27	86	737	4.1	1.0	26.4	737	4.10
29	772.5	15.7	66	26	92	804	2.7	1.0	27.4	804	2.70
30	773.5	16.0	68	27	95	844	Imp.	1.0	28.4	844	0.00
31	774.5	14.8	53	33	86	609	1.0	0.7	29.1	426	0.70

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company James E. Russell Petroleum, Inc. Lease C. McGhee Well No. 2

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.
			%	Bbls./A. Ft.	%	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
1	739.5	14.0	23	250	0	0	23	60	250	0	Imp.	-
2	742.6	17.2	28	374	0	0	28	36	374	0	Imp.	-
3	743.5	18.0	27	376	0	0	27	60	376	6	0.20	50
4	744.5	17.0	31	408	0	0	31	42	408	0	Imp.	-
5	745.5	14.0	27	294	0	0	27	58	294	0	Imp.	-
6	746.4	17.1	27	358	0	0	27	57	358	4	0.20	50
7	747.5	14.6	31	351	0	0	31	56	351	0	Imp.	-
8	748.5	14.4	26	290	0	0	26	62	290	0	Imp.	-
9	749.5	18.4	45	642	12	171	33	59	471	14	0.30	40
10	750.4	16.8	28	364	0	0	28	71	364	0	Imp.	-
11	751.5	17.7	36	494	0	0	36	37	494	0	Imp.	-
12	752.5	16.7	41	531	0	0	41	38	531	0	Imp.	-
13	753.5	18.0	30	418	0	0	30	40	418	0	Imp.	-
14	754.4	17.2	41	547	8	107	33	60	440	0	0.02	50
15	755.5	15.6	29	351	0	0	29	67	351	0	0.02	50
16	756.5	14.6	28	317	0	0	28	55	317	0	Imp.	-
17	757.4	16.6	41	528	0	0	41	36	528	0	Imp.	-
18	759.7	14.3	24	266	0	0	24	64	266	0	Imp.	-
19	760.7	14.0	35	380	0	0	35	51	380	0	Imp.	-
20	761.6	13.2	27	276	0	0	27	63	276	0	Imp.	-
21	762.5	14.3	40	444	0	0	40	46	444	0	Imp.	-
22	765.5	11.3	26	228	0	0	26	70	228	0	Imp.	-
23	766.5	17.4	47	634	0	0	47	32	634	0	Imp.	-
24	767.5	16.3	63	796	25	316	38	50	480	3	0.20	50
25	768.3	13.8	54	577	0	0	54	39	577	0	Imp.	-
26	769.5	17.1	62	821	0	0	62	26	821	0	Imp.	-
27	770.5	15.2	61	719	0	0	61	27	719	0	Imp.	-
28	771.5	16.0	58	719	0	0	58	27	719	0	Imp.	-
29	772.5	15.9	65	801	0	0	65	28	801	0	Imp.	-
30	773.5	16.3	67	847	0	0	67	29	847	0	Imp.	-
31	774.5	15.0	54	628	0	0	54	34	628	0	Imp.	-

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.