

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

30' of 15 (in 3 parts)

LR 222



Samples from Miami Oil Producers, Incorporated Federal 427-1A well drilled in NW1/4NW1/4
(729 feet S/N 571 feet E/W) of sec 3, T 11 S, R 16 E, Duchesne County, Utah

Elev. of M.b. 4868?

Surface elevation 6,918 feet

Sample number		Run No.	Yield of product				Gal per ton		Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Spent shale	Gas + loss					
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
SBR68-4741	300- 330						No oil				
SBR68-4742	330- 360						Trace				
SBR68-4743	360- 390						No oil				
SBR68-4744	390- 420						Trace				
SBR68-4745-50	420- 600						No oil				
SBR68-4751-52	600- 660						Trace				
SBR68-4753	660- 690						b				
SBR68-4754-55	690- 750						Trace				
SBR68-4756-63	750- 990						No oil				
SBR68-4764	990-1020	31174	0.0	1.7	97.9	0.4	No oil	4.1		None	
SBR68-4765	1020-1050	31175	.8	1.9	96.7	.6	2.0a	4.6		None	
SBR68-4766	1050-1080	31176	2.4	2.3	93.6	1.7	6.4	5.5	0.909	None	
SBR68-4767	1080-1110	31177	1.3	1.1	96.3	1.3	3.4a	2.6		None	
SBR68-4768	1110-1140	31178	1.7	1.9	95.8	.6	4.3a	4.6		None	
SBR68-4769	1140-1170	31179	.9	1.9	95.5	1.7	2.4a	4.6		None	
SBR68-4770	1170-1200	31180	1.6	1.9	95.7	.8	4.2a	4.6		None	
SBR68-4771	1200-1230	31181	1.0	2.1	95.3	1.6	2.7a	5.0		None	
SBR68-4772	1230-1260	31182	1.4	2.8	94.6	1.2	3.7a	6.7		None	
SBR68-4773	1260-1290	31183	1.0	2.0	96.6	.4	2.5a	4.8		None	
SBR68-4774	1290-1320	31184	.9	2.2	96.2	.7	2.3a	5.3		None	
SBR68-4775	1320-1350	31185	.6	1.8	95.5	2.1	1.6a	4.3		None	
SBR68-4776	1350-1380	31186	.8	1.8	96.1	1.3	2.1a	4.3		None	
SBR68-4777	1380-1410	31187	.6	1.9	96.2	1.3	1.6a	4.6		None	
SBR68-4778	1410-1440	31188	.7	1.5	96.1	1.7	1.9a	3.6		None	
SBR68-4779	1440-1470	31189	.8	1.5	96.1	1.6	2.1a	3.6		None	
SBR68-4780	1470-1500	31190	1.1	3.9	91.5	3.5	2.9a	9.3		None	
SBR68-4781	1500-1530	31191	.1	2.1	96.8	1.0	.3a	5.0		None	
SBR68-4782	1530-1560	31192	1.1	2.2	96.1	.6	2.8a	5.3		None	
SBR68-4783	1560-1590	31193	.7	2.1	96.5	.7	1.8a	5.0		None	
SBR68-4784	1590-1620	31194	.7	2.2	96.3	.8	1.8a	5.3		None	

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-4131P, Sheet No. 1 of 7 sheets June 21, 1968

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface Elevation 6,918 feet

Sample number			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Gal per ton						
			Oil	Water	Spent Shale	Gas + loss	Oil ^{1/}	Water			
Laramie	Their	Run No.	Oil	Water	Shale	loss	Oil ^{1/}	Water			
SBR68-4785	1620-1650	31195	0.9	2.1	96.2	0.8	2.2a	5.0		None	
SBR68-4786	1650-1680	31196	.7	2.2	96.3	.8	1.8a	5.3		None	
SBR68-4787	1700-1710	31197	1.3	2.2	95.3	1.2	3.4a	5.3		None	
SBR68-4788	1710-1720	31198	2.3	2.2	94.4	1.1	6.0	5.3	0.931	None	
SBR68-4789	1720-1730	31199	2.3	2.1	94.3	1.3	5.9	5.0	.930	None	
SBR68-4790	1730-1740	31200	2.3	2.2	94.2	1.3	5.9	5.3	.920	None	
SBR68-4791	1740-1750	31201	2.0	2.0	94.2	1.8	5.2a	4.8		None	
SBR68-4792	1750-1760	31202	2.3	2.1	94.7	.9	5.9	5.0	.929	None	
SBR68-4793	1760-1770	31203	1.7	1.4	95.3	1.6	4.3a	3.4		None	
SBR68-4794	1770-1780	31204	1.9	1.8	95.2	1.1	5.0a	4.3		None	
SBR68-4795	1780-1790	31205	1.7	1.6	95.8	.9	4.3a	4.0		None	
SBR68-4796	1790-1800	31206	1.9	1.6	95.3	1.2	5.0a	3.8		None	
SBR68-4797	1800-1810	31207	2.2	1.9	94.8	1.1	5.7	4.6	.915	None	
SBR68-4798	1810-1820	31208	2.1	1.7	95.0	1.2	5.5	4.1	.922	None	
SBR68-4799	1820-1830	31209	1.7	1.7	95.8	.8	4.5a	4.1		None	
SBR68-4800	1830-1840	31210	1.5	1.8	95.9	.8	4.0a	4.3		None	
SBR68-4801	1840-1850	31211	1.7	1.9	94.4	2.0	4.4a	4.6		None	
SBR68-4802	1850-1860	31212	2.2	1.7	95.0	1.1	5.6	4.1	.925	None	
SBR68-4803	1860-1870	31213	1.1	1.6	95.8	1.5	3.0a	3.8		None	
SBR68-4804	1870-1880	31214	1.4	1.9	95.6	1.1	3.7a	4.6		None	
SBR68-4805	1880-1890	31215	2.4	2.0	94.5	1.1	6.3	4.8	.924	None	
SBR68-4806	1890-1900	31216	2.0	1.9	94.9	1.2	5.2a	4.6		None	
SBR68-4807	1900-1910	31217	2.0	1.8	95.0	1.2	5.3a	4.3		None	
SBR68-4808	1910-1920	31218	2.0	1.6	95.0	1.4	5.1a	3.8		None	
SBR68-4809	1920-1930	31219	2.3	1.5	95.3	.9	5.9	3.6	.923	None	
SBR68-4810	1930-1940	31220	1.9	1.8	95.1	1.2	5.0a	4.3		None	
SBR68-4811	1940-1950	31221	1.2	1.9	96.2	.7	3.1a	4.6		None	
SBR68-4812	1950-1960	31222	1.4	1.7	96.3	.6	3.6a	4.1		None	
SBR68-4813	1960-1970	31223	1.3	1.8	95.1	1.8	3.4a	4.3		None	
SBR68-4814	1970-1980	31224	.6	1.7	96.5	1.2	1.6a	4.1		None	

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface Elevation 6,918 feet

Sample number			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Spent shale	Gas + loss	Gal per ton				
			Oil	Water			Oil ^{1/}	Water			
Laramie	Their	Run No.	Oil	Water	Spent shale	Gas + loss	Oil ^{1/}	Water			
SBR68-4815	1980-1990	31225	0.8	1.8	96.6	0.8	2.0a	4.3		None	
SBR68-4816	1990-2000	31226	.9	2.4	96.2	.5	2.3a	5.8		None	
SBR68-4817	2000-2010	31227	1.4	1.6	95.2	1.8	3.5a	3.8		None	
SBR68-4818	2010-2020	31228	2.7	1.8	94.8	.7	7.2	4.3	0.907	None	
SBR68-4819	2020-2030	31229	1.4	1.5	95.7	1.4	3.5a	3.6		None	
SBR68-4820	2030-2040	31230	1.5	1.4	96.8	.3	4.0a	3.4		None	
SBR68-4821	2040-2050	31231	1.3	1.7	96.5	.5	3.4a	4.1	M.b.?	None	
SBR68-4822	2050-2060	31232	6.2	1.5	90.7	1.6	16.3	3.6	.915	None	
SBR68-4823	2060-2070	31233	3.5	1.1	94.0	1.4	9.2	2.8	.914	None	
SBR68-4824	2070-2080	31234	5.8	1.5	91.4	1.3	15.1	3.6	.913	None	
SBR68-4825	2080-2090	31235	3.6	1.2	94.1	1.1	9.3	2.9	.921	None	
SBR68-4826	2090-2100	31236	5.8	1.1	91.6	1.5	14.9	2.6	.923	None	
SBR68-4827	2100-2110						b				
SBR68-4828	2110-2120						c				
SBR68-4829-30	2120-2140						b				
SBR68-4831	2140-2150	31237	.3	1.4	97.4	.9	.8a	3.4		None	
SBR68-4832	2150-2160	31238	.4	2.4	96.7	.5	.9a	5.8		None	
SBR68-4833	2160-2170	31239	.6	2.1	96.2	1.1	1.6a	5.0		None	
SBR68-4834	2170-2180	31240	1.9	3.3	93.2	1.6	4.9a	8.0		None	
SBR68-4835	2180-2190	31241	2.0	2.5	93.6	1.9	5.2	6.0	.930	None	
SBR68-4836	2190-2200	31242	2.0	3.2	93.2	1.6	5.2	7.5	.925	None	
SBR68-4837	2200-2210	31243	4.1	.8	94.0	1.1	10.6	2.0	.919	None	
SBR68-4838	2210-2220	31244	4.5	.9	93.0	1.6	11.8	2.2	.921	None	
SBR68-4839	2220-2230	31245	4.3	.8	93.1	1.8	11.1	2.0	.923	None	
SBR68-4840	2230-2240	31246	4.3	.7	93.2	1.8	11.1	1.8	.923	None	
SBR68-4841	2240-2250	31247	4.5	.8	91.2	3.5	11.7	2.0	.919	None	
SBR68-4942	2250-2260	31248	2.5	2.7	91.9	2.9	6.5	6.5	.931	None	
SBR68-4843	2260-2270	31249	2.4	2.6	92.0	3.0	6.2	6.2	.933	None	
SBR68-4844	2270-2280	31250	2.0	3.7	92.1	2.2	5.2a	8.9		None	
SBR68-4845	2280-2290	31251	1.7	1.3	94.4	2.6	4.5a	3.1		None	

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-4131P, Sheet No. 3 of 7 sheets June 21, 1968

OIL SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface Elevation 6,918 feet

Sample number		Run No.	Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Spent shale	Gas + loss	Gal per ton				
			Oil	Water			Oil ^{1/}	Water			
Laramie	Their										
SBR68-4846	2290-2300	31252	2.3	1.9	94.9	0.9	6.0	4.6	0.919	None	
SBR68-4847	2300-2310	31253	.8	3.2	94.3	1.7	2.1a	7.7		None	
SBR68-4848	2310-2320	31254	.6	2.9	93.7	2.8	1.6a	6.9		None	
SBR68-4849	2320-2330	31255	.7	2.7	95.3	1.3	1.8a	6.4		None	
SBR68-4850	2330-2340	31256	.6	2.4	95.3	1.7	1.6a	5.8		None	
SBR68-4851	2340-2350	31261	.2	2.6	96.0	1.2	.4a	6.2		None	
SBR68-4852	2350-2360	31262	.5	1.7	96.5	1.3	1.3a	4.1		None	
SBR68-4853	2360-2370	31263	.3	2.2	96.9	.6	.8a	5.3		None	
SBR68-4854	2370-2380	31264	.4	2.2	96.5	.9	1.1a	5.3		None	
SBR68-4855	2380-2390	31265	.5	2.3	96.5	.7	1.3a	5.5		None	
SBR68-4856	2390-2400	31266	.9	2.0	96.4	.7	2.3a	4.8		None	
SBR68-4857	2400-2410	31267	1.0	1.8	96.6	.6	2.5a	4.4		None	
SBR68-4858	2410-2420	31268	.8	2.0	96.2	1.0	2.2a	4.8		None	
SBR68-4859	2420-2430	31269	1.1	.7	98.0	.2	2.8a	1.8		None	
SBR68-4860	2430-2440	31270	.4	1.7	97.2	.7	1.0a	4.1		None	
SBR68-4861	2440-2450						b				
SBR68-4862	2450-2460						Trace				
SBR68-4863	2460-2470						b				
SBR68-4864	2470-2480						Trace				
SBR68-4865	2480-2490						b				
SBR68-4866	2490-2500						c				
SBR68-4867	2500-2510						Trace				
SBR68-4868	2510-2520						b				
SBR68-4869	2520-2530						c				
SBR68-4870	2530-2540						Trace				
SBR68-4871-73	2540-2570						b				
SBR68-4874	2570-2580						Trace				
SBR68-4875	2580-2590						c				
SBR68-4876	2590-2600						b				
SBR68-4877	2600-2610						Trace				

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-4131P, Sheet No. 4 of 7 sheets June 21, 1968

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface elevation 6,918 feet

Sample number		Run No.	Yield of product				Specific Gravity of oil at 60°/60° F		Properties of spent shale	Remarks
Laramie	Their		Weight percent		Spent shale	Gas + loss	Gal per ton		Tendency to coke	
			Oil	Water			Oil- ¹ / ₂	Water		
SBR68-4878	2610-2620						b			
SBR68-4879	2620-2630						c			
SBR68-4880-82	2630-2660						No oil			
SBR68-4883-84	2660-2680						Trace			
SBR68-4885	2680-2690						b			
SBR68-4886	2690-2700						Trace			
SBR68-4887-88	2700-2720						No oil			
SBR68-4889-90	2720-2740						Trace			
SBR68-4891-96	2740-2800						b			
SBR68-4897-98	2800-2820						Trace			
SBR68-4899	2820-2830	31271	1.1	1.2	97.0	0.7	2.9a	2.9	None	
SBR68-4900	2830-2840	31272	.6	.9	97.9	.6	1.7a	2.0	None	
SBR68-4901	2840-2850						b			
SBR68-4902-04	2850-2880						Trace			
SBR68-4905-10	2880-2940						b			
SBR68-4911	2940-2950						Trace			
SBR68-4912	2950-2960						b			
SBR68-4913	2970-2980						No oil			
SBR68-4914	2990-3000						No oil			
SBR68-4915-18	3100-3140						No oil			
SBR68-4919	3140-3150						Trace			
SBR68-4920-25	3160-3220						No oil			
SBR68-4926-27	3220-3240						Trace			
SBR68-4928-31	3240-3280						No oil			
SBR68-4932-36	3290-3340						No oil			
SBR68-4937-38	3340-3360						Trace			
SBR68-4939-5002	3360-4000						No oil			
SBR68-5003	4000-4010						Trace			
SBR68-5004-10	4010-4080						No oil			
SBR68-5011	4080-4090						Trace			

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-4131P, Sheet No. 5 of 7 sheets June 21, 1968

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface elevation 6,918 feet

Sample number		Run No.	Yield of product				Gal per ton		Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Spent shale	Gas + loss	Oil ^{1/}	Water			
Laramie	Their	Oil	Water								
SBR68-5012-13	4090-4110						No oil				
SBR68-5014	4110-4120						Trace				
SBR68-5015	4120-4130						b				
SBR68-5016	4130-4140						No oil				
SBR68-5017	4140-4150						c				
SBR68-5018-19	4150-4170						No oil				
SBR68-5020-22	4170-4200						b				
SBR68-5023	4200-4210						c				
SBR68-5024-25	4210-4230						Trace				
SBR68-5026	4230-4240						b				
SBR68-5027	4240-4250	31273	0.8	0.7	97.0	1.5	2.2a	1.6		None	
SBR68-5028	4250-4260	31274	1.8	1.5	95.8	.9	4.8a	3.6		None	
SBR68-5029	4260-4270	31275	1.9	.9	95.6	1.6	5.0a	2.2		None	
SBR68-5030	4270-4280	31276	2.7	1.2	95.2	.9	7.3	2.9	0.889	None	
SBR68-5031	4280-4290	31277	3.0	.5	94.8	1.7	7.8	1.3	.901	None	
SBR68-5032	4290-4300	31278	.8	.8	97.9	.5	2.0a	1.9		None	
SBR68-5033	4300-4310	31279	.4	1.0	98.2	.4	1.0a	2.4		None	
SBR68-5034	4310-4320						c				
SBR68-5035	4320-4330						b				
SBR68-5036	4330-4340						Trace				
SBR68-5037-38	4340-4360						No oil				
SBR68-5039-41	4360-4390						c				
SBR68-5042-43	4390-4410						b				
SBR68-5044	4410-4420	31280	1.3	.7	97.6	.4	3.5a	1.7		None	
SBR68-5045-49	4420-4470						No oil				
SBR68-5050	4470-4480						Trace				
SBR68-5051	4480-4490						b				
SBR68-5052	4490-4500	31281	2.1	.9	96.0	1.0	5.6	2.3	.897	None	
SBR68-5053	4500-4510	31282	1.4	.5	97.2	.9	3.6a	1.3		None	
SBR68-5054	4510-4520						b				

See footnote at end of table.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Federal 427-1A well (Con.)

Surface elevation 6,918 feet

Surface elevation 8,918 feet

Sample number		Yield of product					Gal per ton		Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
		Run No.	Weight percent		Spent shale	Gas + loss					
Laramie	Their		Oil	Water			Oil ^{1/}	Water			
SBR68-5055-58	4520-4560						Trace				
SBR68-5059-5100	4560-4980						No oil				
SBR68-5101	4980-4990	31283	0.3	1.1	96.1	2.5	0.7a	2.8		None	
SBR68-5102	4990-5000	31284	1.5	.5	96.5	1.5	4.0a	1.2		None	
SBR68-5103	5000-5010	31285	.4	1.0	97.0	1.6	1.0a	2.4		None	
SBR68-5104	5010-5020	31286	.7	.9	97.5	.9	1.8a	2.2		None	
SBR68-5105-07	5020-5050						b				
SBR68-5108	5050-5060						No oil				
SBR68-5109-11	5060-5090						Trace				
SBR68-5112-13	5090-5110						b				
SBR68-5114	5110-5120						c				
SBR68-5115	5120-5130						b				
SBR68-5116-17	5130-5150						No oil				
SBR68-5118	5150-5160						Trace				
SBR68-5119-31	5160-5285						No oil				

^{1/} "a"--indicates specific gravity estimated as 0.92. Oil yields were estimated by a rapid test-tube method: "No oil," "Trace", "b"--less than 1 gal oil/ton, "c"--1 to 3 gal oil/ton.

Drill cutting samples received August 31, 1967; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-4131P, Sheet No. 7 of 7 sheets June 21, 1968