

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well drilled
in NW1/4NW1/4 (810 feet S/N 655 feet E/W) of sec 30, T 10 S, R 17 E,
Duchesne County, Utah

25' of 15

Elev. of M.B. 4229

Surface elevation 6,289 feet

Sample number		Run No.	Yield of product					Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent		Spent shale	Gas + loss	Gal per ton		Tendency to coke		
			Oil	Water			Oil ^{1/}			Water	
Laramie	Their										
SBR68-4367-74	450- 690						No Oil				
SBR68-4375-76	720- 780						Trace				
SBR68-4377	780- 810						No Oil				
SBR68-4378-80	810- 900						Trace				
SBR68-4381-82	900- 960						No Oil				
SBR68-4383-84	990-1050						No Oil				
SBR68-4385-88	1050-1170						c				
SBR68-4389	1170-1200						b				
SBR68-4390	1200-1230						c				
SBR68-4391	1230-1260						b				
SBR68-4392	1260-1290						c				
SBR68-4393	1290-1320	31096	0.5	3.9	93.9	1.7	1.4a	9.3		None	
SBR68-4394	1320-1350	31097	.9	4.7	92.8	1.6	2.4a	11.2		None	
SBR68-4395	1350-1380	31098	.6	2.7	95.8	.9	1.6a	6.5		None	
SBR68-4396	1380-1410	31099	.6	2.6	96.0	.8	1.6a	6.2		None	
SBR68-4397	1410-1440	31100	2.5	2.6	93.9	1.0	6.6	6.2	0.914	None	
SBR68-4398	1440-1470	31101	2.2	2.0	95.2	.6	5.8a	4.8		None	
SBR68-4399	1470-1500	31102	1.5	2.3	95.6	.6	4.0a	5.5		None	
SBR68-4400	1500-1530	31103	.9	1.7	97.1	.3	2.3a	4.1		None	
SBR68-4401	1530-1560	31104	.8	1.6	96.9	.7	2.0a	3.8		None	
SBR68-4402	1560-1590	31105	.8	1.4	96.5	1.3	2.0a	3.4		None	
SBR68-4403	1590-1620	31106	.8	2.5	96.4	.3	2.1a	6.0		None	
SBR68-4404	1620-1650	31107	.5	1.5	96.6	1.4	1.3a	3.6		None	
SBR68-4405	1650-1680	31108	1.4	2.1	96.3	.2	3.7a	5.0		None	
SBR68-4406	1680-1710	31109	2.0	1.8	95.4	.8	5.2a	4.3		None	
SBR68-4407	1710-1740	31110	2.0	2.0	95.3	.7	5.3a	4.8		None	
SBR68-4408	1740-1770	31111	1.5	2.1	96.0	.4	4.0a	5.0		None	
SBR68-4409	1770-1800	31112	3.1	4.1	89.4	3.4	8.0a	9.9		None	
SBR68-4410	1800-1830	31113	3.3	5.4	86.9	4.4	8.6a	13.1		None	
SBR68-4411	1830-1860	31114	2.5	3.8	90.2	3.5	6.5a	9.2		None	

See footnote at end of table.

Drill cutting samples received August 10, 1967; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well (Con.)

Surface elevation 6,289 feet

Surface elevation 6,289 feet

Sample number		Run No.	Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent		Spent shale	Gas + loss	Gal per ton			Tendency to coke		
			Oil	Water			Oil ^{1/}	Water				
Laramie	Their											
SBR68-4412	1860-1890	31115	3.1	4.6	86.8	5.5	8.0a	11.1		None		
SBR68-4413	1890-1920	31116	2.5	1.5	93.6	2.4	6.5a	3.6		None		
SBR68-4414	1920-1950	31117	2.0	2.1	93.7	2.2	5.3a	5.0		None		
SBR68-4415	1950-1980	31118	1.9	1.3	95.3	1.5	5.0a	3.1		None		
SBR68-4416	1980-2000	31119	.5	1.5	97.0	1.0	1.3a	3.6		None		
SBR68-4417	2000-2010	31120	.6	1.9	97.0	.5	1.5a	4.6		None		
SBR68-4418	2010-2020	31121	.7	1.7	97.0	.6	1.7a	4.1		None		
SBR68-4419	2020-2030	31122	1.1	1.8	96.2	.9	2.9a	4.3		None		
SBR68-4420	2030-2040	31123	2.2	1.3	95.7	.8	5.7	3.1	0.915	None		
SBR68-4421	2040-2050	31124	1.5	1.9	95.5	1.1	3.9a	4.6		None		
SBR68-4422	2050-2060	31125	2.5	1.4	95.3	.8	6.6	3.2	.917	None		
SBR68-4423	2060-2070	31126	8.6	1.0	88.7	1.7	22.7	2.3	.908	None		
SBR68-4424	2070-2080	31127	6.2	.4	91.0	2.4	16.4	1.1	.902	None		
SBR68-4425	2080-2090	31128	4.1	.9	93.4	1.6	10.8	2.2	.914	None		
SBR68-4426	2090-2100	31129	2.9	1.0	95.1	1.0	7.6	2.3	.913	None		
SBR68-4427	2100-2110	31130	3.9	1.1	93.9	1.1	10.1	2.6	.914	None		
SBR68-4428	2110-2120	31131	1.2	1.0	96.8	1.0	3.0a	2.4		None		
SBR68-4429	2120-2130	31132	1.8	1.1	96.6	.5	4.7a	2.6		None		
SBR68-4430-35	2130-2190						b					
SBR68-4436	2190-2200						d					
SBR68-4437	2200-2210	31133	2.3	1.1	95.6	1.0	6.0	2.6	.909	None		
SBR68-4438	2210-2220	31134	2.1	1.1	95.8	1.0	5.7	2.6	.900	None		
SBR68-4439	2220-2230	31135	2.0	1.3	96.0	.7	5.2a	3.1		None		
SBR68-4440	2230-2240	31136	2.3	1.5	95.4	.8	6.1	3.6	.895	None		
SBR68-4441	2240-2250	31137	2.0	1.1	95.8	1.1	5.3a	2.6		None		
SBR68-4442	2250-2260	31138	2.4	1.4	95.3	.9	6.3	3.4	.907	None		
SBR68-4443	2260-2270	31139	2.2	1.3	95.3	1.2	5.9	3.1	.907	None		
SBR68-4444	2270-2280	31140	2.4	.8	95.4	1.4	6.3	3.0	.908	None		
SBR68-4445	2280-2290	31141	1.9	.9	95.2	2.0	4.9a	2.3		None		
SBR68-4446	2290-2300	31142	1.8	1.4	95.8	1.0	4.8a	3.4		None		

See footnote at end of table.

Drill cutting samples received August 10, 1967; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well (Con.)

Surface elevation 6,289 feet

Surface elevation 6,269 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F		Properties of spent shale		Remarks
			Weight percent		Spent shale	Gas + loss			Gal per ton		
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
SBR68-4447	2300-2310	31143	2.1	1.4	95.4	1.1	5.6a	3.4		None	
SBR68-4448	2310-2320	31144	1.9	1.6	95.5	1.0	5.0a	3.7		None	
SBR68-4449-50	2320-2340						b				
SBR68-4451-52	2340-2360						c				
SBR68-4453	2360-2370	31145	.7	1.7	96.9	.7	1.8a	4.0		None	
SBR68-4454	2370-2380	31146	.6	1.9	96.8	.7	1.4a	4.6		None	
SBR68-4455	2380-2390	31147	.8	1.6	96.8	.8	2.0a	4.0		None	
SBR68-4456	2390-2400	31148	.5	1.8	96.9	.8	1.4a	4.2		None	
SBR68-4457	2400-2410	31149	.5	2.1	96.5	.9	1.2a	5.0		None	
SBR68-4458	2410-2420	31150	1.0	1.6	96.3	1.1	2.5a	3.8		None	
SBR68-4459	2420-2430	31151	.9	1.5	96.4	1.2	2.3a	3.6		None	
SBR68-4460	2430-2440	31152	.4	1.5	97.4	.7	1.0a	3.6		None	
SBR68-4461	2440-2450	31153	.4	1.4	98.1	.1	1.0a	3.4		None	
SBR68-4462	2450-2460						c				
SBR68-4463-64	2460-2480						b				
SBR68-4465-66	2480-2500						c				
SBR68-4467	2500-2510						b				
SBR68-4468-69	2510-2530						c				
SBR68-4470	2530-2540	31154	.8	1.5	97.0	.7	2.0a	3.6		None	
SBR68-4471	2540-2550	31155	.7	1.2	95.9	2.2	1.9a	2.9		None	
SBR68-4472	2550-2560	31156	.8	1.6	97.0	.6	2.1a	3.8		None	
SBR68-4473	2560-2570	31157	.8	1.7	96.8	.7	2.2a	4.1		None	
SBR68-4474	2570-2580	31158	.4	1.8	97.1	.7	1.1a	4.3		None	
SBR68-4475-77	2580-2610						c				
SBR68-4478	2610-2620						b				
SBR68-4479-85	2620-2690						c				
SBR68-4486	2690-2700						Trace				
SBR68-4487	2710-2720						Trace				
SBR68-4488-89	2720-2740						No Oil				
SBR68-4490-91	2740-2760						b				

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Drill cutting samples received August 10, 1967; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well (Con.)

Surface elevation 6,289 feet

Surface elevation 6,185 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					
Laramie	Their		Oil	Water					Oil ¹ / Water		
SBR68-4492	2760-2770						Trace				
SBR68-4493-96	2770-2810						c				
SBR68-4497-98	2810-2830						b				
SBR68-4499-4500	2830-2850						c				
SBR68-4501-03	2850-2880						b				
SBR68-4504	2880-2890						No Oil				
SBR68-4505	2890-2900						Trace				
SBR68-4506	2900-2910						b				
SBR68-4507	2910-2920						c				
SBR68-4508-09	2920-2940						b				
SBR68-4510-11	2940-2960						No Oil				
SBR68-4512	2960-2970						Trace				
SBR68-4513-16	2970-3010						No Oil				
SBR68-4517	3010-3020						b				
SBR68-4518	3020-3030						Trace				
SBR68-4519-20	3030-3050						b				
SBR68-4521-22	3050-3070						Trace				
SBR68-4523-25	3070-3100						c				
SBR68-4526-28	3100-3130						b				
SBR68-4529-31	3130-3160						c				
SBR68-4532	3160-3170						b				
SBR68-4533	3170-3180						Trace				
SBR68-4534-35	3180-3200						No Oil				
SBR68-4536	3200-3210						c				
SBR68-4537-39	3210-3240						No Oil				
SBR68-4540	3240-3250						Trace				
SBR68-4541-43	3250-3280						No Oil				
SBR68-4544-45	3280-3300						b				
SBR68-4546-47	3300-3320						Trace				
SBR68-4548-50	3320-3350						b				

See footnote at end of table.

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Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well (Con.)

Surface elevation 6,289 feet

Surface elevation 6,129 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			
SBR68-4551-63	3350-3480						No Oil				
SBR68-4564	3480-3490						Trace				
SBR68-4565-72	3490-3570						No Oil				
SBR68-4573	3570-3580						b				
SBR68-4574	3580-3590						Trace				
SBR68-4575-77	3590-3620						No Oil				
SBR68-4578	3620-3630						Trace				
SBR68-4579	3630-3640						No Oil				
SBR68-4580	3640-3650						b				
SBR68-4581-86	3650-3710						No Oil				
SBR68-4587-88	3710-3730						Trace				
SBR68-4589-93	3730-3780						No Oil				
SBR68-4594-95	3780-3800						b				
SBR68-4596-98	3800-3830						Trace				
SBR68-4599	3830-3840						No Oil				
SBR68-4600	3840-3850						b				
SBR68-4601	3850-3860						No Oil				
SBR68-4602	3860-3870						Trace				
SBR68-4603-12	3870-3970						No Oil				
SBR68-4613-14	3970-3990						Trace				
SBR68-4615-16	3990-4010						No Oil				
SBR68-4617	4010-4020						c				
SBR68-4618-20	4020-4050						Trace				
SBR68-4621	4050-4060						No Oil				
SBR68-4622	4060-4070						Trace				
SBR68-4623-25	4070-4100						b				
SBR68-4626-27	4100-4120						Trace				
SBR68-4628-38	4120-4230						No Oil				
SBR68-4639	4230-4240						b				
SBR68-4640	4240-4250	31159	1.1	1.5	96.4	1.0	2.8a	3.6	None		

See footnote at end of table.

Drill cutting samples received August 10, 1967; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Miami Oil Producers, Incorporated Miami-Federal 399-1 well (Con.)

Surface elevation 6,289 feet

Surface elevation 8,285 feet

Sample number		Run No.	Yield of product					Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent			Gal per ton			Tendency to		
			Oil	Water	Spent shale	Gas + loss	Oil ^{1/}			Water	
Laramie	Their										
SBR68-4641	4250-4260	31160	1.3	1.7	96.0	1.0	3.3a	4.1		None	
SBR68-4642	4260-4270	31161	1.4	1.5	96.3	.8	3.8a	3.5		None	
SBR68-4643	4270-4280	31162	2.8	1.1	94.2	1.9	7.3	2.8	0.906	None	
SBR68-4644	4280-4290	31163	2.8	1.3	93.9	2.0	7.6	3.1	.894	None	
SBR68-4645	4290-4300	31164	3.2	1.5	93.7	1.6	8.5	3.6	.891	None	
SBR68-4646	4300-4310	31165	2.6	1.6	94.5	1.3	6.9	3.8	.891	None	
SBR68-4647	4310-4320	31166	.4	1.1	97.2	1.3	1.2a	2.5		None	
SBR68-4648-49	4320-4340						b				
SBR68-4650-52	4340-4370						c				
SBR68-4653	4370-4380						Trace				
SBR68-4654-55	4380-4400						c				
SBR68-4656	4400-4410	31167	1.8	1.3	96.2	.7	4.7a	3.1		None	
SBR68-4657	4410-4420	31168	.4	1.3	97.0	1.3	1.1a	3.1		None	
SBR68-4658-59	4420-4440						Trace				
SBR68-4660-62	4440-4470						No Oil				
SBR68-4663	4470-4480						c				
SBR68-4664	4480-4490	31169	.8	1.3	97.3	.6	2.0a	3.1		None	
SBR68-4665	4490-4500	31170	3.0	1.4	94.5	1.1	7.9	3.4	.890	None	
SBR68-4666	4500-4510	31171	.6	1.6	97.4	.4	1.5a	3.8		None	
SBR68-4667	4510-4520	31172	.4	1.7	97.2	.7	1.1a	4.1		None	
SBR68-4668	4520-4530	31173	.4	1.3	97.3	1.0	1.2a	3.1		None	
SBR68-4669	4530-4540						b				
SBR68-4670-71	4540-4560						Trace				
SBR68-4672-84	4560-4690						No Oil				
SBR68-4685-89	4690-4740						Trace				
SBR68-4690-92	4740-4770						No Oil				
SBR68-4693	4770-4780						c				
SBR68-4694-4711	4780-4960						No Oil				
SBR68-4712-17	4960-5020						c				
SBR68-4718-23	5020-5080						Trace				

See footnote at end of table.

Drill cutting samples received August 10, 1967; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

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Surface elevation 6,289 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	Gas +			
Laramie	Their		Oil	Water	shale	loss	Oil ^{1/}	Water	
SBR68-4724-25	5080-5100						c		
SBR68-4726-27	5100-5120						Trace		
SBR68-4728	5120-5130						b		
SBR68-4729	5130-5140						Trace		
SBR68-4730-40	5140-5250						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, "d"--3 + gal oil/ton but sample insufficient for assay.

Drill cutting samples received August 10, 1967; Assays made on air-dried samples