

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Marathon Oil Company's Marathon-Government 1-33 Well drilled in the NE1/4SW1/4
(1,780 feet N/S, 1,970 feet E/W) of sec 33, T 14 N, R 99 W, Sweetwater County, Wyoming

Kelly bushing elevation 7,404 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
SBR74-9412	1190-1220						No oil			
SBR74-9413	1220-1250						b			
SBR74-9414	1250-1280						Trace			
SBR74-9415	1280-1310	94487	0.6	3.2	94.8	1.4	1.5a	7.6		None
SBR74-9416	1310-1340	94488	.9	2.5	94.7	1.9	2.4a	6.0		None
SBR74-9417	1340-1370	94489	.9	3.0	95.0	1.1	2.3a	7.2		None
SBR74-9418	1370-1400	94490	2.0	3.2	93.9	.9	5.2a	7.7		None
SBR74-9419	1400-1430	94491	1.7	3.5	94.0	.8	4.4a	8.4		None
SBR74-9420	1430-1460	94492	1.4	3.4	94.4	.8	3.6a	8.1		None
SBR74-9421	1460-1490	94493	1.5	3.0	94.5	1.0	4.0a	7.2		None
SBR74-9422	1490-1520	94494	3.0	3.1	93.1	.8	8.0	7.4	0.901	None
SBR74-9423	1520-1550	94495	2.7	3.5	92.8	1.0	7.3	8.4	.892	None
SBR74-9424	1550-1580	94496	2.1	2.9	93.8	1.2	5.8	7.0	.885	None
SBR74-9425	1580-1610	94497	1.1	3.0	95.0	.9	2.8a	7.3		None
SBR74-9426	1610-1640	94498	.2	3.3	95.3	1.2	.6a	7.9		None
SBR74-9427	1640-1670	94499	.1	1.8	97.8	.3	.2a	4.3		None
SBR74-9428	1730-1760	94500	1.2	3.8	93.8	1.2	3.1a	9.1		None
SBR74-9429-31	1790-1880						c			
SBR74-9432	1880-1910						b			
SBR74-9433-6	2050-2090						c			
SBR74-9437	2090-2100	94501	1.3	3.4	94.6	.7	3.4a	8.1		None
SBR74-9438	2100-2110	94502	1.5	3.4	94.3	.8	3.9a	8.1		None
SBR74-9439	2110-2120	94503	1.4	3.7	93.9	1.0	3.6a	8.9		None
SBR74-9440	2120-2130	94504	1.3	3.8	93.8	1.1	3.5a	9.1		None
SBR74-9441	2130-2140	94505	1.5	3.6	93.8	1.1	3.9a	8.6		None
SBR74-9442	2140-2150	94506	1.2	3.9	94.0	.9	3.0a	9.3		None
SBR74-9443	2150-2160	94507	1.1	3.9	93.8	1.2	2.9a	9.4		None
SBR74-9444	2160-2170	94508	1.1	3.2	95.1	.6	2.7a	7.8		None
SBR74-9445	2170-2180	94509	.0	1.9	98.0	.1	No oil	4.5		None
SBR74-9446-9	2180-2220						c			

See footnote at end of table.

Drill cutting samples received April 9, 1974; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Marathon Oil Company's Marathon-Government 1-33 Well (con.)

Kelly bushing elevation 7,404 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			
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil ^{1/}	Water	coke		
SBR74-9450	2220-2230	94510	0.2	3.0	96.2	0.6	0.6a	7.2	None		
SBR74-9451	2230-2240	94511	1.1	2.4	95.5	1.0	3.0a	5.8	None		
SBR74-9452	2240-2250	94512	1.5	2.5	95.1	.9	3.9a	6.0	None		
SBR74-9453	2250-2260	04513	.7	2.8	95.9	.6	1.9a	6.7	None		
SBR74-9454	2260-2270	94514	.6	2.0	96.8	.6	1.4a	4.8	None		
SBR74-9455	2270-2280	94515	.3	2.5	96.5	.7	.8a	6.0	None		
SBR74-9456	2280-2290	94516	.3	3.2	95.5	1.0	.8a	7.7	None		
SBR74-9457	2290-2300	94517	.7	2.3	96.2	.8	1.8a	5.5	None		
SBR74-9458	2300-2310	94518	2.2	3.0	93.1	1.7	5.4	7.2	0.970	None	
SBR74-9459	2310-2320	94519	.5	3.2	95.3	1.0	1.2a	7.7	None		
SBR74-9460	2320-2330	94520	.2	2.5	97.1	.2	.4a	6.0	None		
SBR74-9461	2330-2340	94521	.1	2.5	96.7	.7	.2a	6.0	None		
SBR74-9462	2340-2350	94522	.1	2.5	96.9	.5	.1a	6.1	None		
SBR74-9463	2350-2360	94523	17.0	1.3	75.4	6.3	39.0	3.1	1.044	Heavy	Coal?
SBR74-9464	2360-2370	94524	6.7	3.1	86.6	3.6	15.7	7.4	1.021	Medium	Coal?
SBR74-9465	2370-2380	94525	.5	4.0	94.4	1.1	1.2a	9.6	None		
SBR74-9466-8	2380-2410						c				

^{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 April 9, 1974; assays made on air-dried samples