

0' of 30
30' of 25
305' of 15 (30' - 250' + 25' + 30')

44189

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well drilled in SE 1/4, SW 1/4 of Sec. 7, T. 10S., R. 20E., Uintah County, Utah

Surface elevation 4,941 feet

Surface elevation 4,541 feet

marker 244

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				
Laramie	Their		Oil	Water					Oil	Water	
SBR61-6479	940- 950	74294	0.6	2.1	96.6	0.7	1.7a	5.0			None
SBR61-6480	950- 960	74295	1.0	2.3	96.2	.5	2.6a	5.4			None
SBR61-6481	960- 970	74296	1.1	2.2	96.2	.5	2.9a	5.3			None
SBR61-6482	970- 980	74297	1.3	1.8	96.2	.7	3.5a	4.3			None
SBR61-6483	980- 990	74298	1.2	1.8	95.7	1.3	3.2a	4.3			None
SBR61-6484	990-1000	74299	.7	1.1	98.2	.0	1.9a	2.6			None
SBR61-6485	1000-1010	74300	.7	1.3	97.7	.3	1.8a	3.2			None
SBR61-6486	1010-1020	74301	.6	1.4	97.9	.1	1.6a	3.4			None
SBR61-6487	1020-1030	74302	1.0	1.3	97.4	.3	2.5a	3.1			None
SBR61-6488	1030-1040	74303	1.6	1.5	96.4	.5	4.2a	3.6			None
SBR61-6489	1040-1050	74304	1.5	1.4	96.6	.5	3.9a	3.4			None
SBR61-6490	1050-1060	74305	1.7	1.6	96.0	.7	4.5a	3.8			None
SBR61-6491	1060-1070	74306	1.8	1.5	96.0	.7	4.7a	3.6			None
SBR61-6492	1070-1080	74307	1.5	1.6	96.6	.3	3.9a	3.8			None
SBR61-6493	1080-1090	74308	4.0	1.8	93.4	.8	10.7	4.3	0.906		None
SBR61-6494	1090-1100	74309	3.1	1.8	94.3	.8	8.3	4.3	.897		None
SBR61-6495	1100-1110	74310	2.9	2.0	94.7	.4	7.9	4.8	.895		None
SBR61-6496	1110-1120	74311	2.3	2.1	94.8	.8	6.1	5.0	.902		None
SBR61-6497	1130-1140	74312	1.9	2.4	95.0	.7	5.0a	5.8			None
SBR61-6498	1140-1150	74313	1.7	1.9	95.5	.9	4.5a	4.6			None
SBR61-6499	1150-1160	74314	.8	1.5	96.6	1.1	2.2a	3.6			None
SBR61-6500	1160-1170	74315	1.6	2.2	95.8	.4	4.2a	5.2			None
SBR61-6501	1170-1180	74316	1.6	1.9	96.2	.3	4.2a	4.6			None
SBR61-6502	1180-1190	74317	1.3	1.7	96.0	1.0	3.3a	4.2			None
SBR61-6503	1190-1200	74318	1.6	1.7	96.1	.6	4.1a	4.1			None
SBR61-6504	1200-1210	74319	1.4	1.6	96.7	.3	3.7a	3.8			None
SBR61-6505	1210-1220	74320	1.8	2.0	95.7	.5	4.7a	4.8			None
SBR61-6506	1220-1230	74321	1.7	2.0	95.7	.6	4.4a	4.8			None
SBR61-7507	1230-1240	74322	1.5	1.7	96.4	.4	4.0a	4.1			None
SBR61-7508	1240-1250	74323	1.8	1.9	95.8	.5	4.7a	4.6			None

a - Specific gravity estimated due to insufficient oil

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 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
Laramie	Their		Oil	Water					Oil	Water	
SBR61-6509	1250-1260	74324	1.9	1.7	96.3	0.1	4.9a	4.0	0.914	None	
SBR61-6510	1260-1270	74325	1.8	1.8	96.1	.3	4.7a	4.3		None	
SBR61-6511	1270-1280	74326	1.5	2.0	96.3	.2	4.0a	4.8		None	
SBR61-6512	1280-1290	74327	2.0	1.6	96.2	.2	5.1a	3.8		None	
SBR61-6513	1290-1300	74328	2.6	1.6	95.4	.4	6.9	3.8	.922	None	
SBR61-6514	1300-1310	74329	1.8	.7	97.4	.1	4.8a	1.6		None	
SBR61-6515	1310-1320	74330	2.3	.6	96.8	.3	6.1	1.4		None	
SBR61-6516	1320-1330	74331	1.5	.6	97.8	.1	4.0a	1.4		None	
SBR61-6517	1330-1340	74335	2.7	.6	96.4	.3	6.9	1.4	.923	None	
SBR61-6518	1340-1350	74336	2.6	.7	96.2	.5	6.8	1.7		.925	None
SBR61-6519	1350-1360	74337	2.6	.5	96.2	.7	6.6	1.3	.924	None	
SBR61-6520	1360-1370	74338	2.7	.7	96.2	.4	7.1	1.7		.916	None
SBR61-6521	1370-1380	74339	3.1	.6	96.0	.3	8.0	1.6	.920	None	
SBR61-6522	1380-1390	74340	3.9	.5	95.2	.4	10.3	1.1		.915	None
SBR61-6523	1390-1400	74341	8.0	.3	91.2	.5	21.0	.7	.916	Slight	
SBR61-6524	1400-1410	74342	4.6	.2	94.8	.4	12.2	.5		.916	Slight
SBR61-6525	1410-1420	74343	3.9	1.1	94.8	.2	10.1	2.6	.926	None	
SBR61-6526	1420-1430	74344	3.3	.5	95.6	.6	8.6	1.1		.927	None
SBR61-6527	1430-1440	74345	4.8	.5	94.4	.3	12.4	1.1	.928	None	
SBR61-6528	1440-1450	74346	4.0	.5	95.5	.0	10.4	1.1		.925	None
SBR61-6529	1450-1460	74347	2.9	1.3	95.1	.7	7.5	3.1	.927	None	
SBR61-6530	1460-1470	74348	3.0	1.1	95.3	.6	7.7	2.6		.927	None
SBR61-6531	1470-1480	74349	3.2	1.1	95.1	.6	8.1	2.8	.926	None	
SBR61-6532	1480-1490										
SBR61-6533	1490-1500	74350	2.7	1.4	94.6	1.3	7.1	3.3	.929	None	
SBR61-6534	1500-1510	74351	3.0	.7	95.3	1.0	7.8	1.7		.921	None
SBR61-6535	1510-1520	74352	3.1	1.1	94.3	1.5	8.1	2.6	.921	None	
SBR61-6536	1520-1530	74353	3.0	1.1	94.8	1.1	7.8	2.6		.921	None
SBR61-6537	1530-1540	74354	2.7	.7	95.5	1.1	6.9	1.7	.925	None	
SBR61-6538	1540-1550	75355	2.7	.6	95.9	.8	7.0	1.3		.922	None

a - Specific gravity estimated due to insufficient oil

assay - Sample contained more than 3.0 gallons of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501P, Sheet No. 2 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

			Yield of product						Specific gravity of oil at 60°/60° F.	Properties of spent shale Tendency to coke	Remarks
Sample number		Run No.	Weight percent		Spent shale	Gas + loss	Gal. per ton				
Laramie	Their		Oil	Water			Oil	Water			
SBR61-6539	1550-1560	74356	2.8	0.5	95.8	0.9	7.2	1.3	.925	None	
SBR61-6540	1560-1570	74357	3.3	1.0	94.6	1.1	8.5	2.4	.924	None	
SBR61-6541	1570-1580	74358	3.2	1.4	94.4	1.0	8.3	3.5	.925	None	
SBR61-6542	1580-1590	74359	2.9	.9	95.0	1.2	7.5	2.2	.924	None	
SBR61-6543	1590-1600	74360	3.3	1.0	95.6	.1	8.6	2.3	.924	None	
SBR61-6544	1600-1610	74361	2.6	.5	96.1	.8	6.6	1.3	.925	None	
SBR61-6545	1610-1620	74362	2.6	.8	96.2	.4	6.9	1.8	.922	None	
SBR61-6546	1620-1630	74363	3.2	.7	95.5	.6	8.3	1.8	.918	None	
SBR61-6547	1630-1640	74364	3.3	.8	94.9	1.0	8.7	1.8	.921	None	
SBR61-6548	1640-1650	74365	3.3	.7	95.0	1.0	8.5	1.8	.921	None	
SBR61-6549	1650-1660	74366	3.1	.8	95.0	1.1	8.2	1.8	.919	None	
SBR61-6550	1660-1670	74367	3.2	1.0	94.7	1.1	8.3	2.4	.925	None	
SBR61-6551	1670-1680	74368	3.1	.9	94.9	1.1	8.1	2.0	.923	None	
SBR61-6552	1680-1690	74369	3.3	.8	95.0	.9	8.5	1.9	.922	None	
SBR61-6553	1740-1750	74370	3.3	.7	95.3	.7	8.7	1.6	.918	None	
SBR61-6554	1750-1760	74371	3.2	.8	95.6	.4	8.2	1.9	.918	None	
SBR61-6555	1760-1770	74372	3.1	.8	95.5	.6	8.1	2.0	.917	None	
SBR61-6556	1770-1780	74373	2.7	1.1	95.6	.6	7.1	2.6	.917	None	
SBR61-6557	1780-1790	74374	3.1	1.2	95.1	.6	8.0	2.9	.915	None	
SBR61-6558	1800-1810	74375	3.9	.9	94.2	1.0	10.1	2.3	.919	None	
SBR61-6559	1810-1820	74376	4.2	1.0	94.0	.8	11.0	2.4	.919	None	
SBR61-6560	1820-1830	74377	4.6	1.0	93.6	.8	12.2	2.3	.912	None	
SBR61-6561	1830-1840	74378	5.5	.7	92.8	1.0	14.4	1.8	.908	None	
SBR61-6562	1840-1850	74379	6.9	.8	91.0	1.3	18.2	1.9	.909	None	
SBR61-6563	1850-1860	74380	3.5	1.7	94.5	.3	9.3	4.1	.905	None	
SBR61-6564	1860-1870	74381	4.3	2.2	93.3	.2	11.2	5.3	.910	None	
SBR61-6565	1870-1880	74382	4.8	.8	93.5	.9	12.5	2.0	.917	None	
SBR61-6566	1880-1890	74383	7.2	.7	90.9	1.2	18.8	1.8	.913	None	
SBR61-6567	1890-1900	74384	4.6	1.0	93.7	.7	12.1	2.4	.913	None	
SBR61-6568	1910-1920	74385	5.3	.6	93.1	1.0	13.9	1.4	.917	None	

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501P, Sheet No. 3 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

			Yield of product				Specific gravity		Properties of	
			Weight percent		Gal. per ton		of oil at		spent shale	
Sample number	Run				Spent	Gas +			60°/60° F.	Tendency to
Laramie	Their	No.	Oil	Water	shale	loss	Oil	Water		coke
SBR61-6569	1920-1930	74386	5.7	0.5	92.5	1.3	14.9	1.3	0.914	None
SBR61-6570	1940-1950	74387	3.6	.6	95.0	.8	9.5	1.3	.915	None
SBR61-6571	1950-1960	74388	6.2	1.1	90.7	2.0	16.3	2.6	.911	None
SBR61-6572	1960-1970	74389	9.5	.9	87.6	2.0	25.0	2.2	.910	None
SBR61-6573	1970-1980	74390	6.1	.7	92.4	.8	16.1	1.7	.912	None
SBR61-6574	1980-1990	74391	9.6	.9	88.0	1.5	25.4	2.2	.905	None
SBR61-6575	1990-2000	74392	5.8	.7	92.1	1.4	15.3	1.7	.908	None
SBR61-6576	2000-2010	74393	10.4	.6	86.9	2.1	27.4	1.4	.905	None
SBR61-6577	2010-2020	74394	9.2	.7	88.3	1.8	24.3	1.7	.903	None
SBR61-6578	2020-2030	74395	9.1	.5	88.2	2.2	24.1	1.2	.906	None
SBR61-6579	2030-2040	74396	7.7	.7	90.0	1.6	20.3	1.7	.906	None
SBR61-6580	2040-2050	74397	4.3	1.0	93.0	1.2	12.7	2.4	.909	None
SBR61-6581	2050-2060	74398	3.0	.8	94.8	1.4	7.8	1.9	.914	None
SBR61-6582	2060-2070	74399	2.4	1.0	96.0	.6	6.5	2.4	.896	None
SBR61-6583	2070-2080	74400	.8	1.4	97.2	.6	2.2a	3.2		None
SBR61-6584	2080-2090	74401	.2	2.4	96.9	.5	.4a	5.9		None
SBR61-6585-89	2090-2140						1.0 B			
SBR61-6590	2140-2150	74402	.8	1.3	97.2	.7	2.1a	3.1		None
SBR61-6591	2150-2160	74403	3.7	1.2	94.1	1.0	9.3	2.9	.899	None
SBR61-6592	2160-2170	74404	3.7	1.1	94.0	1.2	9.9	2.6	.899	
SBR61-6593	2170-2180	74405	3.9	1.0	93.3	1.3	10.5	2.4	.892	None
SBR61-6594	2180-2190	74406	2.8	.8	95.5	.9	7.4	1.9	.896	None
SBR61-6595	2190-2200	74407	5.7	1.4	91.3	1.6	15.1	3.5	.902	None
SBR61-6596	2200-2210	74408	5.5	1.1	92.0	1.4	14.6	2.5	.906	None
SBR61-6597	2210-2220	74409	5.4	1.2	92.1	1.3	14.2	2.9	.909	None
SBR61-6598	2220-2230	74410	2.7	1.5	95.0	.8	7.2	3.5	.908	None
SBR61-6599	2230-2240	74411	1.9	.7	97.0	.4	4.8a	1.7		None
SBR61-6600-08	2240-2330						1.0 B			
SBR61-6609	2330-2340	74412	1.5	1.6	96.7	.2	3.8a	3.8		None
SBR61-6610	2340-2350	74413	2.4	1.6	95.4	.6	6.2	3.8	.916	None

a - Specific gravity estimated due to insufficient oil.

b - Less than 1.0 gallon of oil per ton of shale.

Drill cutting samples received January 11, 1961; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

			Yield of product				Specific gravity		Properties of	
Sample number		Run	Weight percent		Spent	Gas +	Gal. per ton		of oil at	spent shale
Laramie	Their	No.	Oil	Water	shale	loss	Oil	Water	60°/60° F.	Tendency to
										coke
										Remarks
SBR61-6611	2350-2360	74414	3.6	1.5	94.2	0.7	9.5	3.7	0.904	None
SBR61-6612	2360-2370	74415	2.9	2.0	94.5	.6	7.6	4.8	.908	None
SBR61-6613	2370-2380	74416	1.6	1.9	96.2	.3	4.0a	4.6		None
SBR61-6614	2380-2390	74417	1.6	1.8	96.0	.6	4.1a	4.4		None
SBR61-6615	2390-2400	74418	1.6	1.1	96.8	.5	4.1a	2.6		None
SBR61-6616	2400-2410	74419	1.9	1.1	96.4	.6	5.0a	2.6		None
SBR61-6617	2410-2420	74420	1.1	.7	97.6	.6	2.8a	1.7		None
SBR61-6618	2420-2430	74421	1.3	.9	97.2	.6	3.3a	2.3		None
SBR61-6619	2430-2440	74422	2.0	1.3	96.0	.7	5.1a	3.1		None
SBR61-6620	2440-2450	74423	.8	1.2	97.4	.6	2.1a	2.8		None
SBR61-6621	2450-2460	74424	1.6	1.1	96.6	.7	4.1a	2.6		None
SBR61-6622	2460-2470	74425	2.2	1.0	95.9	.9	5.8	2.5	.896	None
SBR61-6623	2470-2480	74426	2.0	1.1	96.0	.9	5.1a	2.6		None
SBR61-6624	2480-2490	74427	2.6	1.4	95.1	.9	7.0	3.4	.896	None
SBR61-6625	2490-2500	74428	2.5	1.5	95.3	.7	6.6	3.6	.896	None
SBR61-6626	2500-2510	74429	3.0	2.5	93.8	.7	8.0	6.0	.893	None
SBR61-6627	2510-2520	74430	2.1	1.6	95.6	.7	5.6	3.8	.893	None
SBR61-6628	2520-2530	74431	.9	.7	98.1	.3	2.3a	1.7		None
SBR61-6629	2530-2540	74432	.7	.8	98.2	.3	1.8a	2.0		None
SBR61-6630	2540-2550	74433	.7	1.3	97.8	.2	1.7a	3.1		None
SBR61-6631-32	2550-2570						1.0 B			
SBR61-6633	2570-2580						Trace			
SBR61-6634-35	2580-2600						1.0 B			
SBR61-6636	2600-2610						Trace			
SBR61-6637	2610-2620						1.0 B			
SBR61-6638	2620-2630						2.0 c			
SBR61-6639	2630-2640						No oil			
SBR61-6640	2640-2650	74434	1.8	1.3	96.3	.6	4.7a	3.2		None
SBR61-6641	2650-2660	74435	2.4	2.6	94.2	.8	6.3	6.2	.899	None
SBR61-6642	2660-2670	74436	1.3	2.4	95.8	.5	3.5a	5.6		None

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

c - More than 1.0 but less than 3.0 gallons of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501P, Sheet No. 5 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

			Yield of product						Specific gravity of oil at 60°/60° F.	Properties of spent shale	
Sample number		Run No.	Weight percent		Spent shale	Gas + loss	Gal. per ton			Tendency to coke	Remarks
Laramie	Their		Oil	Water			Oil	Water			
SBR61-6643	2670-2680	74437	1.8	2.2	95.3	0.7	4.7a	5.3		None	
SBR61-6644	2680-2690	74438	1.5	2.3	95.8	.4	4.0a	5.4		None	
SBR61-6645	2690-2700	74439	1.2	2.3	96.0	.5	3.0a	5.6		None	
SBR61-6646	2700-2710	74440	4.3	1.9	93.0	.3	11.5	4.4	0.899	None	
SBR61-6647	2710-2720	74441	3.2	1.4	94.6	.8	8.5	3.2	.899	None	
SBR61-6648	2720-2730	74442	4.0	1.7	93.4	.9	10.8	4.0	.898	None	
SBR61-6649	2730-2740	74443	1.2	1.9	96.3	.6	3.1a	4.4		None	
SBR61-6650	2740-2750	74444	1.3	1.7	96.2	.8	3.3a	4.2		None	
SBR61-6651	2750-2760	74445	1.7	1.8	95.7	.8	4.5a	4.3		None	
SBR61-6652	2760-2770	74446	1.6	1.5	96.3	.6	4.3a	3.6		None	
SBR61-6653	2770-2780	74447	1.3	1.2	96.8	.7	3.3a	2.9		None	
SBR61-6654	2780-2790	74448	1.3	1.0	97.1	.6	3.4a	2.4		None	
SBR61-6655	2790-2800	74449	1.2	1.3	97.0	.5	3.0a	3.1		None	
SBR61-6656-58	2800-2830						1.0 B				
SBR61-6659-60	2830-2850						No oil				
SBR61-6661-63	2850-2880						1.0 B				
SBR61-6664-65	2880-2900						No oil				
SBR61-6666	2900-2910						1.0 B				
SBR61-6667	2910-2920						No oil				
SBR61-6668	2920-2930						Trace				
SBR61-6669-70	2930-2950						No oil				
SBR61-6671	2950-2960						Trace				
SBR61-6672-73	2960-2980						No oil				
SBR61-6674-75	2980-3000						Trace				
SBR61-6676-78	3000-3030						No oil				
SBR61-6679-80	3030-3050						1.0 B				
SBR61-6681-82	3050-3070						Trace				
SBR61-6683-35	3070-3100						No oil				
SBR61-6686	3100-3110						1.0 B				
SBR61-6687	3110-3120						No oil				

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501P, Sheet No. 6 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

Surface elevation 4,241 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	Water	
SBR61-6688-89	3120-3140						Trace				
SBR61-6690	3140-3150						No oil				
SBR61-6691-94	3150-3190						Trace				
SBR61-6695-96	3190-3210						No oil				
SBR61-6697	3210-3220						1.0 B				
SBR61-6698-6701	3220-3260						No oil				
SBR61-6702	3260-3270	74450	1.5	2.5	95.2	0.8	3.9a	6.0		None	
SBR61-6703	3270-3280	74451	1.1	1.2	96.8	.9	2.8a	2.9		None	
SBR61-6704	3280-3290	74452	1.4	2.6	95.9	.1	3.5a	6.2		None	
SBR61-6705	3290-3300	74453	3.6	2.8	92.5	1.1	9.8	6.7	0.885	None	
SBR61-6706-09	3300-3340						Trace				
SBR61-6710-11	3340-3360						No oil				
SBR61-6712	3360-3370						Trace				
SBR61-6713	3370-3380						1.0 B				
SBR61-6714	3380-3390						Trace				
SBR61-6715-17	3390-3420						No oil				
SBR61-6718	3420-3430						1.0 B				
SBR61-6719	3430-3440						Trace				
SBR61-6720	3440-3450						No oil				
SBR61-6721	3450-3460						Trace				
SBR61-6722	3460-3470						No oil				
SBR61-6723	3470-3480						Trace				
SBR61-6724-25	3480-3500						No oil				
SBR61-6726	3500-3510						Trace				
SBR61-6727	3510-3520						No oil				
SBR61-6728	3520-3530						1.0 B				
SBR61-6729-30	3530-3550						No oil				
SBR61-6731	3550-3560						Trace				
SBR61-6732	3560-3570						1.0 B				
SBR61-6733	3570-3580						Trace				

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501B, Sheet No. 7 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit well (Con.)

Surface elevation 4,941 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	Water
SBR61-b734	3580-3590						No oil			
SBR61-b735	3590-3600						1.0 B			
SBR61-b736	3600-3610						Trace			
SBR61-b737	3610-3620						1.0 B			
SBR61-b738	3620-3630	74454	0.8	1.7	96.8	0.7	2.0a	4.1	None	
SBR61-b739	3630-3640	74455	.8	1.4	97.8	.0	2.0a	3.4	None	
SBR61-b740	3640-3650	74456	1.4	1.5	96.5	.6	3.3a	3.6	None	
SBR61-b741	3650-3660	74457	1.7	1.3	96.7	.3	4.3a	3.1	None	
SBR61-b742	3660-3670	74458	1.4	1.4	96.8	.4	3.7a	3.4	None	
SBR61-b743-44	3670-3690						1.0 B			
SBR61-b745	3690-3700						Trace			
SBR61-b746	3700-3710						No oil			
SBR61-b747	3710-3720						3.0 c			
SBR61-b748	3720-3730						Trace			
SBR61-b749	3730-3740						3.0 c			
SBR61-b750	3740-3750						No oil			
SBR61-b751-53	3750-3780						3.0 c			
SBR61-b754	3780-3790						Trace			
SBR61-b755	3790-3800						1.0 B			
SBR61-b756	3800-3810						No oil			
SBR61-b757-58	3810-3830						1.0 B			
SBR61-b759	3830-3840						3.0 c			
SBR61-b760	3840-3850						1.0 B			
SBR61-b761-62	3850-3870						3.0 c			
SBR61-b763-64	3870-3890									
SBR61-b765	3890-3900	74459	.8	2.0	96.9	.3	2.1a	4.8	None	
SBR61-b766	3900-3910	74460	1.0	2.0	96.6	.4	2.6a	4.8	None	
SBR61-b767	3910-3920	74461	.8	2.1	96.7	.4	2.1a	5.0	None	
SBR61-b768	3920-3930						1.0 B			
SBR61-b769-73	3930-3930						3.0 c			

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

c - More than 1.0 but less than 3.0 gallons of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie (Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501B, Sheet No. 8 of 10 sheets Aug 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 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		Gal. per ton						
			Laramie	Their	Oil	Water	Spent shale	Gas + loss	Oil	Water	
SBR61-6774-75	3980-4000						Trace				
SBR61-6776	4000-4010						No oil				
SBR61-6777	4010-4020						1.0 B				
SBR61-6778-79	4020-4040						Trace				
SBR61-6780	4040-4050	74462	2.2	2.0	94.9	0.9	5.9	4.8	0.880	None	
SBR61-6781	4050-4060	74487	2.6	1.8	94.5	1.1	7.1	4.3	.862	None	
SBR61-6782	4060-4070	74488	1.7	1.6	95.8	.9	4.4a	3.8		None	
SBR61-6783	4070-4080	74489	2.0	1.9	95.0	1.1	5.6	4.6	.875	None	
SBR61-6784	4080-4090	74490	5.3	1.8	91.5	1.4	14.6	4.4	.870	None	
SBR61-6785	4090-4100	74491	5.5	2.2	91.4	.9	15.0	5.2	.883	None	
SBR61-6786	4100-4110	74492	4.7	1.9	92.2	1.2	12.8	4.6	.886	None	
SBR61-6787	4110-4120	74493	4.4	1.7	92.8	1.1	12.0	4.1	.885	None	
SBR61-6788	4120-4130	74494	2.6	1.9	94.7	.8	7.0	4.6	.885	None	
SBR61-6789	4130-4140	74495	1.6	2.1	95.6	.7	4.1a	5.2		None	
SBR61-6790	4140-4150	74496	.6	2.6	96.0	.8	1.6a	6.2		None	
SBR61-6791	4150-4160	74497	1.6	2.2	95.2	1.0	4.3a	5.3		None	
SBR61-6792	4160-4170	74498	1.8	2.2	95.1	.9	4.8a	5.2		None	
SBR61-6793	4170-4180	74499	2.0	2.5	94.4	1.1	5.1a	6.0		None	
SBR61-6794	4180-4190	74500	2.3	2.1	94.4	1.2	6.2	5.0	.877	None	
SBR61-6795	4190-4200	74501	1.5	2.1	95.4	1.0	3.9a	5.0		None	
SBR61-6796	4200-4210	74502	1.6	3.6	93.8	1.0	4.3a	8.6		None	
SBR61-6797	4210-4220	74503	2.0	2.3	94.8	.9	5.3a	5.5		None	
SBR61-6798	4220-4230	74504	2.9	2.2	94.0	.9	7.9	5.3	.887	None	
SBR61-6799	4230-4240	74505	4.1	2.2	92.4	1.3	11.0	5.3	.893	None	
SBR61-6800	4240-4250	74506	3.4	2.0	93.2	1.4	9.2	4.8	.883	None	
SBR61-6801	4250-4260	74507	3.1	2.0	94.2	.7	8.5	4.8	.884	None	
SBR61-6802	4260-4270	74508	1.3	2.7	95.3	.7	3.4a	6.5		None	
SBR61-6803	4270-4280	74509	.7	2.9	95.8	.6	1.8a	7.0		None	
SBR61-6804	4280-4290	74510	1.1	2.5	96.0	.4	2.9a	5.9		None	
SBR61-6805	4290-4300	74511	.5	3.0	96.0	.5	1.3a	7.2		None	

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501P, Sheet No. 9 of 10 sheets August 22, 1961

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's No. 1 Island Unit Well (Con.)

Surface elevation 4,941 feet

		Yield of product					Specific gravity		Properties of		
		Weight percent		Spent shale	Gas + loss	Gal. per ton		of oil at 60°/60° F.	spent shale	Tendency to coke	Remarks
Sample number	Run No.	Oil	Water			Oil	Water				
Laramie	Their										
SBR61-6300-09	4300-4340					1.0 B					
SBR61-6310-11	4340-4360					3.0 c					
SBR61-6312-14	4360-4390					1.0 B					
SBR61-6315	4390-4400					Trace					
SBR61-6316	4400-4410					1.0 B					
SBR61-6317-19	4410-4440					Trace					
SBR61-6320	4440-4450					No oil					
SBR61-6321-27	4450-4520					Trace					
SBR61-6328-31	4520-4560					No oil					
SBR61-6332	4560-4570					Trace					
SBR61-6833-36	4570-4610					No oil					
SBR61-6837	4610-4620	74512	2.5	2.1	94.5	.9	6.8	5.2	0.869	None	
SBR61-6833	4620-4630	74513	2.7	1.7	94.3	.8	7.5	4.1	.870	None	
SBR61-6839	4630-4640	74514	2.4	1.7	95.2	.7	6.5	4.1	.871	None	
SBR61-6840	4640-4650	74515	2.5	1.5	95.3	.7	6.4	3.6	.921	None	
SBR61-6841	4650-4660	74516	1.7	1.2	96.2	.9	4.4a	2.9		None	
SBR61-6842	4660-4670	74517	.7	1.5	96.7	1.1	1.3a	3.6		None	
SBR61-6843-46	4670-4710					1.0 B					
SBR61-6847-48	4710-4730					3.0 c					
SBR61-6849-51	4740-4770					Trace					
SBR61-6852	4770-4780					No oil					
SBR61-6853	4780-4790					Trace					
SBR61-6854	4790-4800					No oil					
SBR61-6855-57	4810-4840					No oil					
SBR61-6858	4850-4860					No oil					
SBR61-6859-60	4860-4880					Trace					
SBR61-6861	4880-4890					No oil					
SBR61-6862	4890-4900					Trace					

a - Specific gravity estimated due to insufficient oil

b - Less than 1.0 gallon of oil per ton of shale

c - More than 1.0 but less than 3.0 gallons of oil per ton of shale

Drill cutting samples received January 11, 1961; assays made on air-dried samples

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SBR-3501B, Sheet No. 10 of 10 sheets August 22, 1961