

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Buckhorn Canyon Unit Well No. 1 drilled in the NW1/4SW1/4  
(1,980 feet N/S, 664 feet E/W) of sec 20, T 24 N, R 109 W, Sweetwater County, Wyoming

Surface elevation 6,414 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent		Gas + loss	Gal per ton		Tendency to coke		
Laramie	Their		Oil	Water		shale			Oil <sup>1</sup> / Water	
SBR72-10630-2	50- 65						No Oil			
SBR72-10633	65- 70						Trace			
SBR72-10634-6	70- 85						No Oil			
SBR72-10637	85- 90						Trace			
SBR72-10638	90- 95						b			
SBR72-10639-54	95-175						No Oil			
SBR72-10655	175-180	77762	0.3	2.4	96.0	1.3	0.8a	5.8		None
SBR72-10656	180-185	77763	1.5	2.3	94.9	1.3	3.9a	5.5		None
SBR72-10657	185-190	77764	1.6	2.8	94.5	1.1	4.2a	6.7		None
SBR72-10658	190-195	77765	1.8	2.3	94.8	1.1	4.8a	5.5		None
SBR72-10659	195-200	77766	1.7	2.0	95.0	1.3	4.5a	4.8		None
SBR72-10660	200-205	77767	3.5	1.6	93.0	1.9	9.1	3.8	0.915	None
SBR72-10661	205-210	77768	4.6	2.1	91.7	1.6	12.1	5.0	.908	None
SBR72-10662	210-215	77769	3.1	1.7	91.9	3.3	8.1	4.1	.911	None
SBR72-10663	215-220	77770	1.5	1.1	96.3	1.1	3.9a	2.6		None
SBR72-10664	220-225	77771	2.3	1.5	95.3	.9	6.1	3.6	.913	None
SBR72-10665	225-230	77772	2.4	1.4	95.2	1.0	6.2	3.4	.913	None
SBR72-10666	230-235	77773	.0	.4	97.9	1.6	No Oil	1.1		None
SBR72-10667	235-240	77774	.8	.8	97.8	.6	2.0a	2.0		None
SBR72-10668	240-245	77775	.7	.7	98.2	.4	1.7a	1.8		None
SBR72-10669	245-250	77776	.7	.7	98.1	.5	1.7a	1.8		None
SBR72-10670	250-255	77777	.7	.9	97.8	.6	1.8a	2.2		None
SBR72-10671	255-260	77778	.8	1.0	97.6	.6	2.0a	2.4		None
SBR72-10672	260-265	77779	2.2	1.4	95.4	1.0	5.8	3.4	.922	None
SBR72-10673	265-270	77780	2.1	1.5	95.5	.9	5.5	3.6	.918	None
SBR72-10674	270-275	77781	2.9	1.1	94.9	1.1	7.6	2.6	.916	None
SBR72-10675	275-280	77782	2.8	1.4	94.9	.9	7.3	3.4	.914	None
SBR72-10676	280-285	77783	4.0	.7	94.2	1.1	10.6	1.7	.914	None
SBR72-10677	285-290	77784	3.5	.5	94.4	1.6	9.3	1.1	.916	None
SBR72-10678	290-295	77785	3.5	.3	94.3	1.9	9.2	.7	.913	None

See footnote at end of table.

Drill cutting samples received May 5, 1971; Assays made on air-dried samples

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Samples from Mountain Fuel Supply Company's Buckhorn Canyon Unit Well No. 1 (con.)

Surface elevation 6,414 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 coke			
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil <sup>1</sup> /	Water			
SBR72-10679	295-300	77786	4.0	0.5	93.5	2.0	10.4	1.2	0.918	None	
SBR72-10680	300-305	77787	2.8	.6	95.6	1.0	7.4	1.4	.913	None	
SBR72-10681	305-310	77788	3.4	.7	94.7	1.2	8.9	1.8	.907	None	
SBR72-10682	310-315	77789	9.1	.8	87.3	2.8	23.8	1.8	.915	Slight	
SBR72-10683	315-320	77790	9.6	.8	86.6	3.0	25.1	2.0	.914	Slight	
SBR72-10684	320-325	77791	7.5	1.1	89.1	2.3	19.4	2.6	.922	None	
SBR72-10685	325-330	77792	6.8	1.2	90.0	2.0	17.7	2.9	.915	None	
SBR72-10686	330-335	77793	5.7	.8	91.9	1.6	15.0	1.9	.910	None	
SBR72-10687	335-340	77794	5.6	.5	92.3	1.6	14.7	1.3	.900	None	
SBR72-10688	340-345	77795	4.0	.5	94.2	1.3	10.6	1.2	.910	None	
SBR72-10689	345-350	77796	4.5	.4	93.9	1.2	11.7	1.0	.912	None	
SBR72-10690	350-355	77797	5.1	.7	92.4	1.8	13.4	1.7	.913	None	
SBR72-10691	355-360	77798	5.4	.7	92.1	1.8	14.1	1.8	.913	None	
SBR72-10692	360-365	77799	5.4	.7	92.3	1.6	14.3	1.7	.911	None	
SBR72-10693	365-370	77800	5.1	.8	92.5	1.6	13.5	1.9	.910	None	
SBR72-10694	370-375	77801	4.5	.6	93.3	1.6	11.8	1.4	.913	None	
SBR72-10695	375-380	77802	4.5	.8	93.3	1.4	11.9	1.8	.912	None	
SBR72-10696	380-385	77803	4.9	.7	92.7	1.7	12.9	1.7	.915	None	
SBR72-10697	385-390	77804	5.5	.7	92.1	1.7	14.3	1.7	.913	None	
SBR72-10698	390-395	77805	3.3	.7	95.1	.9	8.6	1.8	.913	None	
SBR72-10699	395-400	77806	2.8	.7	94.4	1.1	7.5	1.7	.915	None	
SBR72-10700	400-405	77807	2.8	.8	95.4	1.0	7.3	1.9	.916	None	
SBR72-10701	405-410	77808	2.7	.8	95.5	1.0	7.1	1.8	.915	None	
SBR72-10702	410-415	77809	3.6	1.3	93.7	1.4	9.3	3.1	.916	None	
SBR72-10703	415-420	77810	3.4	1.0	94.0	1.6	8.8	2.4	.914	None	
SBR72-10704	420-425	77811	3.7	1.0	93.6	1.7	9.8	2.4	.911	None	
SBR72-10705	425-430	77812	3.6	1.4	93.5	1.5	9.5	3.3	.909	None	
SBR72-10706	430-435	77813	1.9	1.4	95.3	1.4	4.9a	3.4		None	
SBR72-10707	435-440	77814	2.2	1.2	95.5	1.1	5.7	2.9	.922	None	
SBR72-10708	440-445	77815	2.4	.7	94.9	2.0	6.1	1.8	.919	None	

See footnote at end of table.

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			Weight percent		Gal per ton			Tendency to		
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil	Water	coke	
SBR72-10709	445-450	77816	2.9	1.1	94.3	1.7	7.6	2.6	0.921	None
SBR72-10710	450-455	77817	3.1	1.1	93.1	2.7	8.0	2.6	.916	None
SBR72-10711	455-460	77818	4.1	1.4	93.4	1.1	10.7	3.4	.916	None
SBR72-10712	460-465	77819	3.4	1.5	94.1	1.0	8.9	3.6	.914	None
SBR72-10713	465-470	77820	3.2	1.6	93.9	1.3	8.4	3.8	.918	None
SBR72-10714	470-475	77821	3.7	1.6	93.6	1.1	9.6	3.8	.919	None
SBR72-10715	475-480	77822	3.6	1.5	93.7	1.2	9.3	3.6	.917	None
SBR72-10716	480-485	77823	2.9	1.6	94.5	1.0	7.6	3.8	.915	None
SBR72-10717	485-490	77824	2.9	1.6	94.3	1.2	7.7	3.8	.911	None
SBR72-10718	490-495	77825	3.3	1.7	92.7	2.3	8.6	4.1	.924	None
SBR72-10719	495-500	77826	3.4	2.1	93.0	1.5	8.9	5.0	.915	None

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.

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