

280' of 15 ✓  
L.R. 2.09

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 drilled in  
SE1/4NW1/4SW1/4 of sec. 1, T. 10 S., R. 19 E., Uintah County, Utah

Kelly Bushing elevation 5,003 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			
SBR64-2653-54	400- 460						No oil				
SBR64-2655	460- 490						Trace				
SBR64-2656	490- 520						b				
SBR64-2657-61	520- 670						c				
SBR64-2662-63	670- 730						No oil				
SBR64-2664	730- 760						Trace				
SBR64-2665-79	760-1070						c				
SBR64-2680-85	1080-1140						c				
SBR64-2686	1140-1150	95003	0.3	1.3	97.4	1.0	0.9a	3.1		None	
SBR64-2687	1150-1160	95004	1.0	1.5	96.9	.6	2.6a	3.6		None	
SBR64-2688	1160-1170	95005	1.2	1.3	96.7	.8	3.1a	3.0		None	
SBR64-2689-94	1170-1230						c				
SBR64-2695	1230-1240	94968	.6	1.6	97.1	.7	1.7a	3.8		None	
SBR64-2696	1240-1250	94969	1.6	1.3	96.3	.8	4.1a	3.1		None	
SBR64-2697	1250-1260	94970	1.9	1.6	95.8	.7	5.0a	3.8		None	
SBR64-2698	1260-1270	94971	1.4	1.5	95.9	1.2	3.6a	3.6		None	
SBR64-2699-2700	1270-1290						c				
SBR64-2701	1290-1300	94972	1.3	1.7	96.3	.7	3.5a	4.1		None	
SBR64-2702	1300-1310	94973	1.9	1.1	96.3	.7	5.0a	2.6		None	
SBR64-2703	1310-1320	94974	1.2	1.2	96.2	1.4	3.1a	2.9		None	
SBR64-2704	1320-1330	94975	1.4	1.7	96.3	.6	3.5a	4.1		None	
SBR64-2705	1330-1340	94976	1.3	1.6	96.5	.6	3.4a	3.8		None	
SBR64-2706	1340-1350	94977	1.3	1.6	96.3	.8	3.3a	3.8		None	
SBR64-2707	1350-1360	94978	1.0	1.6	96.8	.6	2.5a	3.8		None	
SBR64-2708	1360-1370	94979	.9	1.3	97.0	.8	2.4a	3.1		None	
SBR64-2709	1370-1380	94980	1.2	1.7	96.5	.6	3.1a	4.1		None	
SBR64-2710	1380-1390	94981	1.7	1.4	96.0	.9	4.5a	3.4		None	
SBR64-2711	1390-1400	94982	1.6	1.6	96.0	.8	4.1a	3.8		None	
SBR64-2712	1400-1410	94983	1.6	1.2	96.0	1.2	4.2a	2.9		None	
SBR64-2713	1410-1420	94984	1.4	1.4	96.2	1.0	3.8a	3.4		None	

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 feet

			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
Sample number		Run No.	Weight percent		Spent shale	Gas + loss	Gal. per ton			Tendency to		
Laramie	Their		Oil	Water			Oil 1/2	Water				
SBR64-2714	1420-1430	94985	1.5	0.8	96.5	1.2	3.8a	1.9		None		
SBR64-2715	1430-1440	94986	1.3	1.6	96.2	.9	3.4a	3.8		None		
SBR64-2716	1440-1450	94987	1.5	1.3	96.0	1.2	3.9a	3.1		None		
SBR64-2717	1450-1460	94988	1.2	1.6	96.3	.9	3.2a	3.8		None		
SBR64-2718	1460-1470	94989	1.1	1.3	96.3	1.3	2.8a	3.1		None		
SBR64-2719	1470-1480	94990	1.8	1.6	95.8	.8	4.8a	3.8		None		
SBR64-2720	1480-1490	94991	2.3	1.3	95.6	.8	6.1	3.1	0.898	None		
SBR64-2721	1490-1500	94992	1.8	1.6	95.8	.8	4.6a	3.8		None		
SBR64-2722	1500-1510	94993	2.0	1.0	96.0	1.0	5.2	2.4	.929	None		
SBR64-2723	1510-1520	94994	1.8	1.1	96.2	.9	4.6a	2.6		None		
SBR64-2724	1520-1530	94995	1.6	1.2	96.4	.8	4.1a	2.9		None		
SBR64-2725	1530-1540	94996	2.4	.8	95.5	1.3	6.3	1.9	.916	None		
SBR64-2726	1540-1550	94997	4.1	1.2	93.2	1.5	10.6	2.9	.916	None		
SBR64-2727	1550-1560	94998	2.2	1.6	94.8	1.4	5.6	3.8	.919	None		
SBR64-2728	1560-1570	94999	2.0	1.2	95.7	1.1	5.3	2.9	.918	None		
SBR64-2729	1570-1580	95000	1.6	1.2	96.2	1.0	4.1a	2.9		None		
SBR64-2730	1580-1590	95001	2.3	1.2	95.6	.9	5.8	2.9	.929	None		
SBR64-2731	1590-1600	95002	3.0	.7	95.1	1.2	7.9	1.7	.917	None		
SBR64-2732	1600-1610	95006	2.4	1.0	95.8	.8	6.4	2.3	.917	None		
SBR64-2733	1610-1620	95007	1.8	.8	96.1	1.3	4.7a	1.8		None		
SBR64-2734	1620-1630	95008	1.9	.8	96.2	1.1	5.0a	1.9		None		
SBR64-2735	1630-1640	95009	2.3	.8	95.9	1.0	6.2	1.9	.901	None		
SBR64-2736	1640-1650	95010	1.9	.6	95.4	2.1	5.0a	1.4		None		
SBR64-2737	1650-1660	95011	2.1	1.2	95.7	1.0	5.4	2.9	.913	None		
SBR64-2738	1660-1670	95012	2.0	.8	96.1	1.1	5.1a	1.9		None		
SBR64-2739	1670-1680	95013	1.8	1.2	95.9	1.1	4.6a	2.9		None		
SBR64-2740	1680-1690	95014	2.0	.9	95.9	1.2	5.1a	2.3		None		
SBR64-2741	1690-1700	95015	4.4	.4	93.8	1.4	11.5	1.0	.917	None		
SBR64-2742	1700-1710	95016	4.4	.6	93.8	1.2	11.5	1.3	.916	None		
SBR64-2743	1710-1720	95017	3.9	.6	94.4	1.1	10.3	1.3	.911	None		

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 feet

			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
Sample number		Run No.	Weight percent		Spent shale	Gas + loss	Gal. per ton			Tendency to coke		
Laramie	Their		Oil	Water			Oil <sup>1</sup> / <sub>Water</sub>					
SBR64-2744	1720-1730	95018	3.7	0.7	94.6	1.0	9.7	1.7	0.913	None		
SBR64-2745	1730-1740	95019	2.5	1.0	95.3	1.2	6.6	2.5	.911	None		
SBR64-2746	1740-1750	95020	3.4	1.1	94.1	1.4	8.8	2.8	.916	None		
SBR64-2747	1750-1760	95021	2.3	.2	96.0	1.5	6.1	.5	.916	None		
SBR64-2748	1760-1770	95022	2.7	.5	95.5	1.3	7.2	1.1	.914	None		
SBR64-2749	1770-1780	95023	1.4	.1	97.5	1.0	3.5a	.2		None		
SBR64-2750	1780-1790	95024	4.8	.4	93.2	1.6	12.5	.8	.920	None		
SBR64-2751	1790-1800	95025	2.9	.2	95.4	1.5	7.4	.6	.919	None		
SBR64-2752	1800-1810	95026	3.1	.4	95.3	1.2	8.1	.8	.925	None		
SBR64-2753	1810-1820	95027	3.1	.3	95.7	.9	8.1	.7	.925	None		
SBR64-2754	1820-1830	95028	3.0	.6	95.3	1.1	7.9	1.4	.928	None		
SBR64-2755	1830-1840	95029	3.4	.1	95.2	1.3	8.8	.4	.925	None		
SBR64-2756	1840-1850	95030	3.8	.4	94.4	1.4	9.8	1.0	.927	None		
SBR64-2757	1850-1860	95031	3.5	.4	95.0	1.1	8.9	1.1	.935	None		
SBR64-2758	1860-1870	95032	3.3	.4	94.9	1.4	8.5	1.0	.925	None		
SBR64-2759	1870-1880	95033	3.2	.3	95.5	1.0	8.3	.7	.925	None		
SBR64-2760	1880-1890	95034	3.0	.3	95.6	1.1	7.6	.8	.932	None		
SBR64-2761	1890-1900						d					
SBR64-2762	1900-1910	95035	3.8	.4	94.7	1.1	9.7	1.0	.930	None		
SBR64-2763	1910-1920	95036	3.4	.4	95.1	1.1	8.9	.8	.925	None		
SBR64-2764	1920-1930	95037	3.3	.4	95.6	.7	8.6	.8	.925	None		
SBR64-2765	1930-1940	95038	3.3	.4	95.3	1.0	8.6	1.0	.926	None		
SBR64-2766	1940-1950	95039	3.7	.1	95.0	1.2	9.6	.1	.930	None		
SBR64-2767	1950-1960	95047	3.8	.1	94.9	1.2	9.8	.2	.928	None		
SBR64-2768	1960-1970	95040	4.1	.1	94.6	1.2	10.6	.2	.925	None		
SBR64-2769	1970-1980	95041	4.4	.3	94.0	1.3	11.4	.7	.927	None		
SBR64-2770	1980-1990	95042	6.2	.3	91.8	1.7	16.2	.6	.921	None		
SBR64-2771	1990-2000	95043	6.8	.4	91.1	1.7	17.6	1.0	.918	None		
SBR64-2772	2000-2010	95044	10.2	.7	86.7	2.4	26.6	1.7	.918	None		
SBR64-2773	2010-2020	95045	5.1	.4	92.6	1.9	13.2	1.0	.923	None		

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 feet

			Yield of product						Specific gravity of oil at 60° /60° F	Properties of spent shale		Remarks
Sample number		Run No.	Weight percent		Spent shale	Gas + loss	Gal. per ton			Tendency to coke		
			Oil	Water			Oil <sup>1/</sup>	Water				
Laramie	Their											
SBR64-2774	2020-2030	95046	3.4	0.8	94.9	0.9	8.8	1.8	0.924	None		
SBR64-2775	2030-2040	95048	3.4	.7	94.6	1.3	8.7	1.7	.924	None		
SBR64-2776	2040-2050	95049	3.1	1.0	94.7	1.2	8.1	2.4	.921	None		
SBR64-2777	2050-2060	95050	2.7	1.2	94.8	1.3	6.9	2.9	.922	None		
SBR64-2778	2060-2070	95051	3.2	.8	95.0	1.0	8.3	1.9	.923	None		
SBR64-2779	2070-2080	95052	2.8	1.0	95.4	.8	7.4	2.4	.922	None		
SBR64-2780	2080-2090	95053	3.4	.7	94.8	1.1	8.8	1.8	.922	None		
SBR64-2781	2090-2100	95054	4.5	.8	93.6	1.1	11.7	2.0	.920	None		
SBR64-2782	2100-2110	95055	3.5	.8	94.5	1.2	9.1	1.9	.919	None		
SBR64-2783	2110-2120	95056	3.8	.9	94.2	1.1	10.0	2.2	.920	None		
SBR64-2784	2120-2130	95057	4.1	.5	93.8	1.6	10.8	1.1	.919	None		
SBR64-2785	2130-2140	95058	4.2	1.0	93.3	1.5	11.0	2.5	.917	None		
SBR64-2786	2140-2150	95059	4.2	.8	93.4	1.6	10.9	2.0	.911	None		
SBR64-2787	2150-2160	95060	4.3	.9	93.1	1.7	11.2	2.2	.917	None		
SBR64-2788	2160-2170	95061	8.7	.6	88.4	2.3	22.9	1.4	.909	None		
SBR64-2789	2170-2180	95062	11.9	.4	85.3	2.4	31.5	1.0	.905	Slight		
SBR64-2790	2180-2190	95063	10.4	.4	87.2	2.0	27.5	1.0	.905	Slight		
SBR64-2791	2190-2200	95064	7.0	.6	90.6	1.8	18.3	1.6	.918	None		
SBR64-2792	2200-2210	95065	6.5	.7	91.1	1.7	17.2	1.6	.910	None		
SBR64-2793	2210-2220	95066	9.5	.4	88.1	2.0	25.1	.8	.908	None		
SBR64-2794	2220-2230	95067	6.8	.9	90.7	1.6	18.0	2.2	.909	None		
SBR64-2795	2230-2240	95068	4.7	1.0	93.0	1.3	12.4	2.3	.912	None		
SBR64-2796	2240-2250	95069	3.0	1.2	94.9	.9	8.0	2.9	.911	None		
SBR64-2797	2250-2260	95070	2.3	1.2	95.4	1.1	6.0	3.0	.911	None		
SBR64-2798	2260-2270	95071	1.8	1.3	96.1	.8	4.8a	3.1		None		
SBR64-2799	2270-2280	95072	1.5	1.2	96.3	1.0	3.9a	2.8		None		
SBR64-2800	2280-2290	95073	1.5	1.2	96.8	.5	3.9a	2.9		None		
SBR64-2801	2290-2300	95074	1.5	1.3	96.7	.5	4.0a	3.0		None		
SBR64-2802	2300-2310	95075	.1	.4	99.0	.5	.3a	1.0		None		
SBR64-2803	2310-2320	95076	.3	.6	98.7	.4	.7a	1.6		None		

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 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 <sup>1/</sup>			Water	
Laramie	Their										
SBR64-2804	2320-2330	95077	3.7	0.7	94.5	1.1	9.6	1.7	0.913	None	
SBR64-2805	2330-2340	95078	6.1	.9	91.6	1.4	16.2	2.0	.907	None	
SBR64-2806	2340-2350	95079	4.7	.7	93.2	1.4	12.4	1.6	.911	None	
SBR64-2807	2350-2360	95080	5.8	.7	92.0	1.5	15.4	1.7	.907	None	
SBR64-2808	2360-2370	95081	7.1	.6	90.7	1.6	18.5	1.6	.913	None	
SBR64-2809	2370-2380	95082	4.2	.4	93.9	1.5	11.1	.8	.915	None	
SBR64-2810	2380-2390	95083	2.0	1.1	96.2	.7	5.2a	2.8		None	
SBR64-2811	2390-2400	95084	5.0	1.0	92.8	1.2	12.9	2.4	.922	None	
SBR64-2812	2400-2410	95085	2.2	1.1	95.8	.9	5.7	2.6	.920	None	
SBR64-2813-24	2410-2530						c				
SBR64-2825	2530-2540	95086	1.5	1.0	96.9	.6	3.9a	2.5		None	
SBR64-2826	2540-2550	95087	3.5	1.0	94.1	1.4	9.2	2.3	.908	None	
SBR64-2827	2550-2560	95088	3.9	1.1	92.8	2.2	10.4	2.6	.904	None	
SBR64-2828	2560-2570	95089	2.9	.7	95.4	1.0	7.6	1.8	.905	None	
SBR64-2829-30	2570-2590						c				
SBR64-2831	2590-2600	95090	1.7	.7	96.9	.7	4.4a	1.8		None	
SBR64-2832	2600-2610	95091	1.4	.6	97.0	1.0	3.7a	1.3		None	
SBR64-2833	2610-2620	95092	1.5	1.0	96.4	1.1	3.9a	2.3		None	
SBR64-2834	2620-2630	95093	1.4	.7	96.7	1.2	3.8a	1.7		None	
SBR64-2835	2630-2640	95094	3.3	1.0	94.4	1.3	8.7	2.5	.909	None	
SBR64-2836	2640-2650	95095	2.8	.8	95.1	1.3	7.3	1.9	.911	None	
SBR64-2837	2650-2660	95096	2.9	1.2	94.8	1.1	7.7	2.8	.910	None	
SBR64-2838	2660-2670	95097	2.6	1.3	94.9	1.2	7.0	3.0	.904	None	
SBR64-2839	2670-2680	95098	2.5	1.6	94.9	1.0	6.6	3.7	.909	None	
SBR64-2840	2680-2690	95099	4.3	1.6	93.3	.8	11.2a	3.8		None	
SBR64-2841	2690-2700	95100	3.4	2.1	93.6	.9	8.7a	5.0		None	
SBR64-2842	2700-2710	95101	3.6	1.6	93.8	1.0	9.5	3.8	.898	None	
SBR64-2843	2710-2720	95102	1.4	1.0	96.8	.8	3.7a	2.4		None	
SBR64-2844-48	2720-2770						c				
SBR64-2849	2770-2780						b				

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

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Kelly Bushing elevation 5,003 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		
			Oil	Water	Spent shale	Gas + loss	Oil <sup>1/</sup>	Water				
Laramie	Their											
SBR64-2850-52	2780-2810						c					
SBR64-2853	2810-2820	95103	0.6	1.7	96.9	0.8	1.4a	4.1		None		
SBR64-2854	2820-2830	95104	1.9	1.1	95.9	1.1	5.0a	2.6		None		
SBR64-2855	2830-2840	95105	2.1	.6	96.0	1.3	5.6	1.3	0.920	None		
SBR64-2856	2840-2850	95106	1.9	1.2	96.1	.8	4.8a	2.9		None		
SBR64-2857	2850-2860	95107	2.4	1.7	95.0	.9	6.2	4.1	.903	None		
SBR64-2858	2860-2870	95108	2.2	1.8	95.1	.9	5.8	4.3	.902	None		
SBR64-2859	2870-2880	95109	3.6	1.6	93.8	1.0	9.4	3.8	.905	None		
SBR64-2860	2880-2890	95110	3.9	1.6	93.4	1.1	10.1	3.8	.916	None		
SBR64-2861	2890-2900	95111	3.4	.9	94.0	1.7	9.1	2.2	.904	None		
SBR64-2862	2900-2910	95112	5.2	1.1	92.1	1.6	13.7	2.5	.909	None		
SBR64-2863	2910-2920	95113	5.1	1.0	92.2	1.7	13.3	2.5	.911	None		
SBR64-2864	2920-2930	95114	2.9	1.7	94.3	1.1	7.7	4.1	.910	None		
SBR64-2865	2930-2940	95115	2.5	1.3	94.7	1.5	6.7	3.0	.908	None		
SBR64-2866	2940-2950	95116	2.0	1.4	95.6	1.0	5.1a	3.5		None		
SBR64-2867	2950-2960	95117	1.0	1.1	97.0	.9	2.6a	2.8		None		
SBR64-2868	2960-2970	95118	1.5	1.0	95.9	1.6	4.0a	2.4		None		
SBR64-2869	2970-2980	95119	.7	1.3	97.3	.7	1.9a	3.0		None		
SBR64-2870	2980-2990	95120	2.7	1.2	94.5	1.6	7.1	2.8	.915	None		
SBR64-2871	2990-3000	95121	.6	1.5	96.9	1.0	1.6a	3.6		None		
SBR64-2872	3000-3010	95122	.4	1.6	97.3	.7	1.1a	3.8		None		
SBR64-2873	3010-3020						b					
SBR64-2874	3020-3030						c					
SBR64-2875	3030-3040	95123	.4	.9	97.8	.9	.9a	2.3		None		
SBR64-2876	3040-3050	95124	.9	.5	97.9	.7	2.4a	1.2		None		
SBR64-2877	3050-3060	95125	.4	1.0	98.3	.3	1.1a	2.3		None		
SBR64-2878	3060-3070	95126	.5	1.1	97.8	.6	1.4a	2.6		None		
SBR64-2879	3070-3080	95127	.3	1.0	97.8	.9	.8a	2.4		None		
SBR64-2880-81	3080-3100						c					
SBR64-2882	3100-3110						Trace					

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 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					
			Oil	Water			Gal. per ton Oil <sup>1/</sup> Water				
Laramie	Their										
SBR64-2883	3110-3120						c				
SBR64-2884-85	3120-3140						b				
SBR64-2886	3140-3150	95128	0.1	1.5	97.4	1.0	0.3a	3.5		None	
SBR64-2887	3150-3160	95129	.4	.9	97.2	1.5	1.0a	2.3		None	
SBR64-2888	3160-3170						b				
SBR64-2889	3170-3180	95130	3.1	1.5	95.2	.2	8.1	3.6	0.907	None	
SBR64-2890	3180-3190	95131	1.2	1.2	96.1	1.5	3.2a	2.9		None	
SBR64-2891	3190-3200	95135	1.3	1.2	97.4	.1	3.3a	3.0		None	
SBR64-2892-96	3200-3250						c				
SBR64-2897-99	3250-3280						b				
SBR64-2900	3280-3290						c				
SBR64-2901	3290-3300	95132	.5	.9	97.8	.8	1.4a	2.0		None	
SBR64-2902	3300-3310	95133	.4	.7	97.8	1.1	1.2a	1.7		None	
SBR64-2903-04	3320-3340						c				
SBR64-2905	3340-3350	95134	.5	1.2	97.8	.5	1.4a	2.9		None	
SBR64-2906	3350-3360	95136	.4	1.2	98.1	.3	1.0a	2.9		None	
SBR64-2907	3360-3370	95137	.2	1.1	98.5	.2	.5a	2.6		None	
SBR64-2908-09	3370-3390						Trace				
SBR64-2910-14	3390-3440						No oil				
SBR64-2915	3450-3460						c				
SBR64-2916	3460-3470						b				
SBR64-2917	3470-3480	95138	1.9	1.1	96.2	.8	5.1a	2.6		None	
SBR64-2918	3480-3490	95139	5.4	1.4	92.2	1.0	14.5	3.2	.900	None	
SBR64-2919	3490-3500	95140	5.1	1.2	92.1	1.6	13.5	2.9	.904	None	
SBR64-2920	3500-3510	95141	4.2	1.4	93.4	1.0	11.3	3.4	.899	None	
SBR64-2921	3510-3520	95142	2.2	1.3	95.7	.8	6.0	3.1	.900	None	
SBR64-2922-23	3520-3540						c				
SBR64-2924	3540-3550	95143	1.6	1.3	96.3	.8	4.1a	3.2		None	
SBR64-2925	3550-3560	95144	1.6	1.3	95.6	1.5	4.3a	3.1		None	
SBR64-2926	3560-3570	95145	1.6	.9	95.8	1.7	4.2a	2.2		None	

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 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	Ther		Oil	Water	Spent shale	Gas + loss	Oil <sup>1/</sup>	Water			
SBR64-2927-29	3570-3600						c				
SBR64-2930-32	3600-3630						No oil				
SBR64-2933	3630-3640						b				
SBR64-2934	3640-3650						c				
SBR64-2935-36	3650-3670						b				
SBR64-2937	3670-3680						No oil				
SBR64-2938	3680-3690	95146	0.9	1.3	97.3	0.5	2.4a	3.0		None	
SBR64-2939-40	3690-3710						b				
SBR64-2941-43	3710-3740						c				
SBR64-2944	3740-3750						b				
SBR64-2945-67	3750-3980						c				
SBR64-2968	3980-3990	95147	.2	.9	98.6	.3	.6a	2.0		None	
SBR64-2969	3990-4000	95148	1.2	1.4	96.2	1.2	3.1a	3.4		None	
SBR64-2970	4000-4010	95149	2.3	1.4	95.4	.9	6.1a	3.4		None	
SBR64-2971	4010-4020	95150	.8	2.8	95.0	1.4	2.1a	6.7		None	
SBR64-2972-73	4020-4040						c				
SBR64-2974	4040-4050	95151	.3	1.4	97.9	.4	.7a	3.4		None	
SBR64-2975	4050-4060	95152	.6	1.6	97.0	.8	1.7a	3.7		None	
SBR64-2976	4060-4070	95153	1.8	1.3	96.0	.9	4.6a	3.2		None	
SBR64-2977-84	4070-4150						c				
SBR64-2985-88	4150-4190						b				
SBR64-2989	4190-4200						c				
SBR64-2990	4200-4210	95154	.4	1.2	98.0	.4	1.1a	2.9		None	
SBR64-2991	4210-4220	95155	.7	1.7	96.9	.7	1.9a	4.1		None	
SBR64-2992	4220-4230	95156	.6	1.6	97.1	.7	1.4a	4.0		None	
SBR64-2993	4230-4240						c				
SBR64-2994	4240-4250	95157	.6	1.5	96.9	1.0	1.7a	3.6		None	
SBR64-2995	4250-4260	95158	.5	1.9	96.9	.7	1.4a	4.4		None	
SBR64-2996	4260-4270	95159	.8	1.4	96.4	1.4	2.2a	3.2		None	
SBR64-2997	4270-4280						Trace				

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 feet

Kelly Bushing elevation 3,005 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 <sup>1/</sup>	Water	
SBR64-2998	4280-4290						b				
SBR64-2999	4290-4300	95160	3.0	1.2	94.6	1.2	7.8a	3.0		None	
SBR64-3000	4300-4310	95161	3.5	1.1	94.3	1.1	9.2a	2.6		None	
SBR64-3001	4310-4320	95162	3.1	1.2	94.8	.9	8.0a	3.0		None	
SBR64-3002	4320-4330	95163	4.1	1.3	93.2	1.4	11.1	3.1	0.877	None	
SBR64-3003	4330-4340	95164	4.3	1.2	92.7	1.8	11.5	2.9	.884	None	
SBR64-3004	4340-4350	95165	4.0	1.0	93.2	1.8	10.8	2.4	.893	None	
SBR64-3005	4350-4360	95166	1.4	1.5	96.0	1.1	3.8a	3.6		None	
SBR64-3006	4360-4370	95167	.9	1.2	96.3	1.6	2.4a	2.8		None	
SBR64-3007	4370-4380	95168	.9	1.5	96.3	1.3	2.2a	3.6		None	
SBR64-3008	4380-4390	95169	2.2	1.4	94.5	1.9	6.0	3.2	.889	None	
SBR64-3009	4390-4400	95170	2.3	1.5	95.1	1.1	6.3	3.6	.883	None	
SBR64-3010	4400-4410	95171	2.6	1.5	95.0	.9	7.1	3.6	.880	None	
SBR64-3011	4410-4420	95172	3.2	1.4	94.1	1.3	8.7	3.4	.886	None	
SBR64-3012	4420-4430	95173	2.4	1.1	95.3	1.2	6.6	2.6	.889	None	
SBR64-3013	4430-4440	95174	2.0	1.3	95.7	1.0	5.5	3.1	.890	None	
SBR64-3014	4440-4450	95175	6.2	1.2	90.8	1.8	16.5	2.9	.898	None	
SBR64-3015	4450-4460	95176	7.2	1.1	89.5	2.2	19.3	2.6	.900	None	
SBR64-3016	4460-4470	95177	6.6	1.3	90.0	2.1	17.7	3.1	.898	None	
SBR64-3017	4470-4480	95178	5.2	1.3	91.5	2.0	13.9	3.0	.899	None	
SBR64-3018	4480-4490	95179	1.4	1.3	96.3	1.0	3.5a	3.2		None	
SBR64-3019-29	4490-4600						c				
SBR64-3030-32	4600-4630						Trace				
SBR64-3033	4630-4640	95180	3.9	1.6	92.9	1.6	10.4	4.0	.894	None	
SBR64-3034	4640-4650	95181	4.2	1.7	92.9	1.2	11.3	4.0	.896	None	
SBR64-3035	4650-4660	95182	1.8	2.0	95.5	.7	4.6a	4.8		None	
SBR64-3036-49	4660-4800						c				
SBR64-3050-51	4800-4820						Trace				
SBR64-3052	4820-4830						c				
SBR64-3053-54	4830-4850						b				

See footnotes at end of table.

Drill cutting samples received October 22, 1963; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Island Unit No. 7 (con.)

Kelly Bushing elevation 5,003 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
Laramie	Their		Weight percent		Spent shale	Gas + loss	Oil <sup>1/</sup>	Water			
SBR64-3055-57	4850-4880						c				
SBR64-3058	4880-4890	95183	1.2	0.6	97.0	1.2	3.0a	1.6		None	
SBR64-3059	4890-4900	95184	.9	.9	97.1	1.1	2.4a	2.3		None	
SBR64-3060	4900-4910	95185	.8	.7	97.3	1.2	2.1a	1.7		None	
SBR64-3061-63	4910-4940						c				
SBR64-3064	4940-4950	95186	.8	1.6	96.9	.7	2.0a	3.8		None	
SBR64-3065	4950-4960	95187	.7	1.2	97.1	1.0	1.8a	2.8		None	
SBR64-3066	4960-4970	95188	.9	1.4	96.9	.8	2.2a	3.4		None	
SBR64-3067-68	4970-4990						c				
SBR64-3069-70	4990-5010						b				
SBR64-3071	5010-5020	95189	2.7	1.4	94.7	1.2	7.2	3.4	0.892	None	
SBR64-3072	5020-5030	95190	1.9	1.2	95.0	1.9	5.0a	2.9		None	
SBR64-3073-74	5030-5050						c				
SBR64-3075-77	5050-5080						b				
SBR64-3078-79	5080-5100						No oil				
SBR64-3080	5100-5110						b				
SBR64-3081-82	5110-5130						Trace				
SBR64-3083-84	5130-5150						No oil				
SBR64-3085-86	5150-5170						c				
SBR64-3087-89	5170-5200						Trace				
SBR64-3090	5200-5210						b				
SBR64-3091-93	5210-5240						Trace				
SBR64-3094-3109	5240-5400						No oil				
SBR64-3110	5400-5410						c				
SBR64-3111-18	5410-5490						No oil				
SBR64-3119	5490-5500						b				
SBR64-3120-23	5500-5540						No oil				
SBR64-3124-28	5540-5590						Trace				
SBR64-3129	5590-5600						b				
SBR64-3130-38	5600-5700						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 October 22, 1963; assays made on air-dried samples