

U 55

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole drilled  
1050-foot FEL, 700 feet FNL of sec. 3, T 12 S, R 24 E, Uintah County, Utah

Surface elevation: 6,137 feet

Surface elevation: 6,137 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				
			Oil	Water			Oil-1/	Water			
Laramie	Their										
SBR76-1810	10.0-11.7	16303	0.1	2.6	96.4	0.9	0.4a	6.2	0.926	None	
SBR76-1811	11.7-12.7	16306	1.0	2.3	96.1	.6	2.7a	5.5		None	
SBR76-1812	12.7-14.0	16307	.0	2.5	96.3	1.2	.1a	6.0		None	
SBR76-1813	14.0-15.0	16308	.7	2.2	96.7	.4	1.8a	5.3		None	
SBR76-1814	15.0-16.0	16309	.1	2.6	96.2	1.1	.3a	6.2		None	
SBR76-1815	16.0-17.0	16310	.1	2.9	95.9	1.1	.2a	7.0		None	
SBR76-1816	17.0-18.0	16311	.2	2.6	96.5	.7	.6a	6.2		None	
SBR76-1817	18.0-19.0	16312	.6	2.6	95.5	1.3	1.5a	6.2		None	
SBR76-1818	19.0-20.0	16313	.5	2.3	96.1	1.1	1.4a	5.5		None	
SBR76-1819	20.0-21.0	16314	.1	3.4	95.6	.9	.3a	8.1		None	
SBR76-1820	21.0-23.0	16315	.5	2.0	96.7	.3	1.4a	4.8		None	
SBR76-1821	23.0-25.0	16316	.3	1.8	97.2	.7	.9a	4.3		None	
SBR76-1822	25.0-27.0	16317	.4	1.6	97.2	.7	1.1a	3.9		None	
SBR76-1823	27.0-29.0	16318	.5	1.7	97.0	.8	1.3a	4.1		None	
SBR76-1824	29.0-32.0	16319	.2	1.3	97.4	1.1	.6a	3.1		None	
SBR76-1825	32.0-34.0	16320	.1	1.6	96.9	1.4	.3a	3.8		None	
SBR76-1826	34.0-35.4	16321	.3	1.8	97.3	.6	.8a	4.3		None	
SBR76-1827	35.4-36.4	16322	1.4	1.9	96.2	.5	3.5a	4.6		None	
SBR76-1828	36.4-37.7	16323	2.0	1.7	95.8	.5	5.1a	4.1		None	
SBR76-1829	37.7-38.9	16324	1.4	1.3	96.3	1.0	3.5a	3.1		None	
SBR76-1830	38.9-40.2	16325	.7	2.0	96.6	.7	1.7a	4.8		None	
SBR76-1831	40.2-41.3	16326	.4	1.7	97.3	.6	1.1a	4.1		None	
SBR76-1832	41.3-42.5	16327	.5	.7	97.0	1.8	1.2a	1.7		None	
SBR76-1833	42.5-43.5	16328	2.0	1.6	95.8	.6	5.1a	3.8		None	
SBR76-1834	43.5-44.5	16329	2.3	1.4	95.3	1.0	5.8	3.4	0.943	None	
SBR76-1835	44.5-45.7	16330	2.3	1.5	95.7	.5	5.9	3.6	.939	None	
SBR76-1836	45.7-46.9	16331	2.0	1.0	95.5	1.5	5.2a	2.4	0.920	None	
SBR76-1837	46.9-48.4	16332	1.8	1.1	95.7	1.4	4.6a	2.6		None	
SBR76-1838	48.4-49.4	16333	1.2	1.7	96.6	.5	3.1a	4.0		None	
SBR76-1839	49.4-50.4	16334	1.1	1.5	96.7	.7	2.7a	3.6		None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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											
SBR76-1840	50.4-51.5	16335	1.3	1.7	96.4	0.6	3.3a	4.1	0.920	None		
SBR76-1841	51.5-52.6	16336	1.3	1.2	96.1	1.4	3.3a	3.0		None		
SBR76-1842	52.6-53.6	16389	.8	.9	97.2	1.1	2.1a	2.2		None		
SBR76-1843	53.6-54.6	16342	1.1	1.1	97.4	.4	2.8a	2.6		None		
SBR76-1844	54.6-55.6	16343	1.0	1.4	97.1	.5	2.7a	3.4		None		
SBR76-1845	55.6-56.6	16344	.9	1.2	97.3	.6	2.3a	2.9		None		
SBR76-1846	56.6-57.6	16345	1.1	1.3	97.2	.4	2.9a	3.1		None		
SBR76-1847	57.6-58.6	16346	1.1	1.3	97.0	.6	3.0a	3.1		None		
SBR76-1848	58.6-59.6	16347	1.2	1.8	96.1	.9	3.2a	4.3		None		
SBR76-1849	59.6-60.6	16348	.5	1.5	96.8	1.2	1.3a	3.5		None		
SBR76-1850	60.6-61.6	16349	1.4	1.5	96.0	1.1	3.8a	3.6		None		
SBR76-1851	61.6-62.6	16350	1.3	1.6	96.2	.9	3.3a	3.8		None		
SBR76-1852	62.6-63.6	16351	1.2	1.4	96.6	.8	3.2a	3.4		None		
SBR76-1853	63.6-64.7	16352	1.0	1.4	96.4	1.2	2.5a	3.4		None		
SBR76-1854	64.7-65.8	16353	.9	1.6	96.7	.8	2.5a	3.8		None		
SBR76-1855	65.8-67.3	16354	1.6	1.5	96.2	.7	4.2a	3.6		None		
SBR76-1856	67.3-68.5	16355	1.4	1.0	96.5	1.1	3.7a	2.4		None		
SBR76-1857	68.5-69.9	16356	1.8	1.6	96.2	.4	4.6a	3.8		None		
SBR76-1858	69.9-71.5	16357	1.8	1.1	96.0	1.1	4.7a	2.6		None		
SBR76-1859	71.5-72.5	16358	1.7	1.5	96.3	.5	4.4a	3.6		None		
SBR76-1860	72.5-73.6	16359	2.0	1.5	95.8	.7	5.2	3.6	0.918	None		
SBR76-1861	73.6-74.7	16360	1.4	1.3	96.3	1.0	3.8a	3.1	0.920	None		
SBR76-1862	74.7-75.7	16361	1.0	1.0	97.0	1.0	2.7a	2.4		None		
SBR76-1863	75.7-77.1	16362	1.9	1.3	95.9	.9	4.9a	3.1		None		
SBR76-1864	77.1-78.2	16363	2.4	1.2	95.3	1.1	6.1	2.9	.929	None		
SBR76-1865	78.2-79.6	16364	2.2	1.2	95.5	1.1	5.6	2.9	.922	None		
SBR76-1866	79.6-80.8	16365	2.2	.9	95.9	1.0	5.6	2.2	.927	None		
SBR76-1867	80.8-82.1	16366	2.8	1.0	95.0	1.1	7.1	2.4	.934	None		
SBR76-1868	82.1-83.4	16367	2.5	1.1	95.0	1.4	6.5	2.6	.940	None		
SBR76-1869	83.4-84.4	16368	1.7	1.3	96.2	.8	4.6a	3.1	.920	None		

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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			Gal per ton					
			Oil	Water	Spent shale	Gas + loss	Oil <sup>1/</sup>	Water			
Laramie	Their										
SBR76-1870	84.4-85.4	16369	2.3	1.1	95.4	1.2	5.9	2.6	0.947	None	
SBR76-1871	85.4-86.4	16370	2.0	1.8	95.3	.9	5.1a	4.3	.920	None	
SBR76-1872	86.4-87.4	16371	1.9	1.7	95.6	.8	4.8a	4.1		None	
SBR76-1873	87.4-88.4	16372	1.4	1.2	96.6	.8	3.6a	2.9		None	
SBR76-1874	88.4-89.4	16373	1.4	1.7	96.3	.6	3.7a	4.2		None	
SBR76-1875	89.4-90.4	16374	1.6	1.6	95.8	1.0	4.1a	3.7		None	
SBR76-1876	90.4-91.4	16375	1.0	.9	96.0	2.1	2.6a	2.3		None	
SBR76-1877	91.4-92.4	16376	1.7	1.7	96.0	.6	4.5a	4.1		None	
SBR76-1878	92.4-93.4	16377	1.0	1.1	97.4	.5	2.6a	2.6		None	
SBR76-1879	93.4-94.4	16378	1.0	1.0	97.3	.7	2.5a	2.4		None	
SBR76-1880	94.4-95.5	16379	.8	1.1	97.0	1.1	2.0a	2.5		None	
SBR76-1881	95.5-96.6	16380	1.1	1.3	96.4	1.2	2.8a	3.1		None	
SBR76-1882	96.6-97.7	16381	2.1	1.5	95.4	1.0	5.5	3.6	.933	None	
SBR76-1883	97.7-98.7	16382	1.9	1.1	95.9	1.1	5.0a	2.6	.920	None	
SBR76-1884	98.7-99.8	16383	1.2	.9	97.3	.6	3.3a	2.1		None	
SBR76-1885	99.8-101.3	16384	1.8	1.1	95.6	1.5	4.8a	2.5		None	
SBR76-1886	101.3-102.3	16385	2.9	1.5	94.8	.8	7.5	3.6	.937	None	
SBR76-1887	102.3-103.3	16386	3.0	1.3	94.5	1.2	7.7	3.1	.943	None	
SBR76-1888	103.3-104.3	16387	3.0	1.5	94.9	.6	7.6	3.6	.941	None	
SBR76-1889	104.3-105.4	16388	2.1	1.7	95.5	.7	5.3	4.1	.937	None	
SBR76-1890	105.4-106.4	16390	1.9	2.0	95.5	.6	5.0a	4.8	.920	None	
SBR76-1891	106.4-107.4	16391	1.8	1.6	95.9	.7	4.6a	3.8		None	
SBR76-1892	107.4-108.4	16392	1.7	1.8	96.1	.4	4.4a	4.3		None	
SBR76-1893	108.4-109.4	16393	1.6	2.0	95.8	.6	4.1a	4.8		None	
SBR76-1894	109.4-110.4	16394	2.1	1.3	96.0	.6	5.6a	3.1		None	
SBR76-1895	110.4-111.4	16395	2.7	.9	95.9	.5	7.1	2.2	.929	None	
SBR76-1896	111.4-112.4	16396	2.8	.8	95.2	1.2	7.1	1.9	.930	None	
SBR76-1897	112.4-113.4	16397	2.4	1.2	95.4	1.0	6.3	2.8	.932	None	
SBR76-1898	113.4-114.4	16398	2.6	1.3	94.9	1.2	6.6	3.1	.933	None	
SBR76-1899	114.4-115.4	16399	2.4	1.7	95.1	.8	6.2	4.1	.934	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

# CIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 feet			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale	Remarks
Sample number		Run No.	Weight percent				Gal per ton			Tendency to coke	
			Oil	Water	Spent shale	Gas + loss	Oil <sup>1/</sup>	Water			
Laramie	Their	Oil							Water	Spent shale	Gas + loss
SBR76-1900	115.4-116.4	16400	2.0	1.6	95.4	1.0	5.2	3.8	0.930	None	
SBR76-1901	116.4-117.4	16401	1.7	2.1	95.5	.7	4.4a	5.0	.920	None	
SBR76-1902	117.4-118.4	16402	1.8	1.8	96.0	.4	4.6a	4.3		None	
SBR76-1903	118.4-119.5	16403	1.7	1.5	95.7	1.1	4.4a	3.6		None	
SBR76-1904	119.5-120.5	16404	1.8	1.6	95.7	.9	4.8a	3.8		None	
SBR76-1905	120.5-121.5	16405	1.8	1.2	96.3	.7	4.6a	2.9		None	
SBR76-1906	121.5-122.5	16406	1.4	1.5	96.3	.8	3.7a	3.6		None	
SBR76-1907	122.5-123.5	16407	1.8	1.2	96.0	1.0	4.8a	2.9		None	
SBR76-1908	123.5-124.7	16408	2.7	1.3	94.8	1.2	7.0	3.1	.936	None	
SBR76-1909	124.7-125.8	16409	2.8	1.1	94.9	1.2	7.1	2.6	.937	None	
SBR76-1910	125.8-126.9	16410	2.6	1.6	94.9	.9	6.7	3.9	.935	None	
SBR76-1911	126.9-128.0	16411	2.1	1.6	95.5	.8	5.4	3.8	.930	None	
SBR76-1912	128.0-129.0	16412	2.0	1.5	95.8	.7	5.2	3.5	.929	None	
SBR76-1913	129.0-130.0	16413	2.2	1.8	95.2	.8	5.6	4.2	.930	None	
SBR76-1914	130.0-131.0	16414	2.4	1.0	95.6	1.0	6.1	2.5	.929	None	
SBR76-1915	131.0-132.0	16415	2.8	1.2	94.4	1.6	7.3	2.8	.933	None	
SBR76-1916	132.0-133.0	16416	2.6	1.5	95.1	.8	6.7a	3.6	.920	None	
SBR76-1917	133.0-134.0	16417	2.4	1.7	95.0	.9	6.3	4.1	.932	None	
SBR76-1918	134.0-135.0	16418	2.4	1.5	95.0	1.1	6.3	3.6	.935	None	
SBR76-1919	135.0-136.0	16419	2.8	1.1	94.5	1.6	7.2	2.6	.932	None	
SBR76-1920	136.0-137.0	16420	2.9	1.2	94.6	1.3	7.2	2.9	.949	None	
SBR76-1921	137.0-138.0	16421	2.9	1.5	95.0	.6	7.3	3.6	.939	None	
SBR76-1922	138.0-139.0	16422	2.1	1.5	94.7	1.7	5.3	3.6	.932	None	
SBR76-1923	139.0-140.0	16423	1.0	.7	96.5	1.8	2.7a	1.7	.920	None	
SBR76-1924	140.0-141.3	16424	1.5	1.8	96.0	.7	3.8a	4.3		None	
SBR76-1925	141.3-142.6	16425	1.0	1.4	96.8	.8	2.6a	3.4		None	
SBR76-1926	142.6-143.7	16426	1.3	1.2	96.8	.7	3.4a	2.9		None	
SBR76-1927	143.7-145.0	16427	8.6	1.0	87.5	2.9	22.4	2.3	.924	None	
SBR76-1928	145.0-146.0	16428	2.6	.9	95.1	1.4	6.6	2.2	.933	None	
SBR76-1929	146.0-147.0	16429	2.3	1.8	94.9	1.0	5.9	4.3	.931	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

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Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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				
			Oil	Water			Oil <sup>1/</sup>	Water			
Laramie	Their										
SBR76-1930	147.0-148.0	16430	2.0	1.8	94.8	1.4	5.3	4.3	0.932	None	
SBR76-1931	148.0-149.1	16431	1.9	2.2	94.9	1.0	5.0a	5.3	.920	None	
SBR76-1932	149.1-150.2	16432	1.8	1.1	95.6	1.5	4.6a	2.8	↓	None	
SBR76-1933	150.2-151.3	16433	4.1	1.0	93.8	1.1	10.5	2.4	.926	None	
SBR76-1934	151.3-152.6	16434	7.2	.6	90.4	1.8	18.9	1.4	.910	None	
SBR76-1935	152.6-153.1	16435	15.6	1.2	80.1	3.1	40.8	2.9	.919	None	
SBR76-1936	153.1-154.0	16436	4.5	.6	93.7	1.2	11.8	1.4	.919	None	
SBR76-1937	154.0-154.7	16437	3.2	.6	94.5	1.7	8.2	1.4	.924	None	
SBR76-1938	154.7-155.2	16438	3.4	1.2	94.9	.5	9.0	2.9	.909	None	
SBR76-1939	155.2-156.3	16439	3.1	1.2	94.5	1.2	8.1	2.9	.923	None	
SBR76-1940	156.3-157.4	16440	2.6	1.0	95.6	.8	6.7	2.4	.923	None	
SBR76-1941	157.4-158.4	16441	1.9	.7	96.8	.6	5.1a	1.7	.920	None	
SBR76-1942	158.4-159.4	16442	3.6	.6	95.0	.8	9.5	1.4	.908	None	
SBR76-1943	159.4-160.7	16443	9.2	.8	88.0	2.0	24.1	1.9	.918	None	
SBR76-1944	160.7-161.7	16444	4.0	.4	94.5	1.1	10.4	1.0	.929	None	
SBR76-1945	161.7-162.7	16445	2.7	.4	96.0	.8	7.1	1.0	.932	None	
SBR76-1946	162.7-163.8	16446	2.3	.5	96.3	.9	5.8	1.2	.930	None	
SBR76-1947	163.8-165.0	16447	2.5	.3	96.7	.5	6.3	.7	.931	None	
SBR76-1948	165.0-166.0	16448	2.9	.3	96.3	.5	7.7	.7	.913	None	
SBR76-1949	166.0-167.4	16449	2.8	.3	96.4	.5	7.3	.7	.924	None	
SBR76-1950	167.4-168.4	16450	7.1	.5	90.8	1.6	18.5	1.2	.919	None	
SBR76-1951	168.4-169.4	16451	2.9	.2	95.5	1.4	7.6	.5	.923	None	
SBR76-1952	169.4-170.4	16452	2.1	.3	96.7	.9	5.2	.7	.940	None	
SBR76-1953	170.4-171.4	16453	1.8	.2	97.0	1.0	4.7a	.5	.920	None	
SBR76-1954	171.4-172.4	16454	1.6	.2	97.7	.5	4.1a	.5	↓	None	
SBR76-1955	172.4-173.4	16455	2.2	.1	97.1	.6	5.7a	.2	↓	None	
SBR76-1956	173.4-174.4	16456	2.4	.3	96.6	.7	6.3	.7	.923	None	
SBR76-1957	174.4-175.6	16457	6.5	.5	91.3	1.7	17.0	1.2	.917	None	
SBR76-1958	175.6-176.8	16458	7.1	.7	90.6	1.6	18.4	1.7	.918	None	
SBR76-1959	176.8-177.9	16459	6.9	.6	91.0	1.5	18.0	1.4	.916	None	

See footnote at end of table.

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Surface elevation: 6,137 feet

Surface elevation: 6,137 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 <sup>1/</sup>	Water			
SBR76-1960	177.9-178.9	16460	2.7	0.4	96.1	0.8	7.1	1.0	0.926	None	
SBR76-1961	178.9-180.1	16461	2.1	.4	96.9	.6	5.5	1.0	.927	None	
SBR76-1962	180.1-181.2	16462	1.8	.3	97.3	.6	4.8a	.7	.926	None	
SBR76-1963	181.2-182.5	16463	1.2	.3	97.6	.9	3.1a	.7		None	
SBR76-1964	182.5-183.7	16464	1.1	.5	97.6	.8	2.8a	1.2		None	
SBR76-1965	183.7-184.8	16465	1.2	.5	97.9	.4	3.0a	1.2		None	
SBR76-1966	184.8-185.9	16466	1.3	.4	97.5	.8	3.4a	1.0		None	
SBR76-1967	185.9-186.8	16467	1.9	.5	97.1	.5	5.1a	1.1		None	
SBR76-1968	186.8-187.8	16468	8.9	.4	88.2	2.5	23.2	1.0	.923	None	
SBR76-1969	187.8-189.1	16469	2.4	.3	96.7	.6	6.3	.7	.932	None	
SBR76-1970	189.1-190.0	16470	1.2	.2	97.2	1.4	3.1a	.5	.926	None	
SBR76-1971	190.0-191.0	16471	.6	.0	98.1	1.3	1.6a	.0		None	
SBR76-1972	191.0-192.2	16472	1.8	.4	97.3	.5	4.7a	1.0		None	
SBR76-1973	192.2-193.3	16473	1.6	.5	97.2	.7	4.1a	1.2		None	
SBR76-1974	193.3-194.7	16474	.7	.4	98.4	.5	1.7a	1.0		None	
SBR76-1975	194.7-195.7	16475	1.5	.2	96.9	1.4	3.9a	.5		None	
SBR76-1976	195.7-197.4	16476	1.8	.8	96.3	1.1	4.7a	1.9		None	
SBR76-1977	197.4-198.4	16477	1.8	1.1	96.5	.6	4.8a	2.6		None	
SBR76-1978	198.4-199.4	16478	2.2	.5	96.0	1.3	5.7	1.2	.921	None	
SBR76-1979	199.4-200.5	16479	1.7	.6	97.0	.7	4.5a	1.4	.926	None	
SBR76-1980	200.5-201.6	16480	2.8	.2	95.6	1.4	7.3	.5	.923	None	
SBR76-1981	201.6-202.6	16481	12.4	1.1	84.1	2.4	32.2	2.6	.921	None	
SBR76-1982	202.6-204.4	16533	2.4	.3	95.9	1.4	6.2	.7	.928	None	
SBR76-1983	204.4-205.5	16483	3.0	.5	95.8	.7	7.6	1.2	.929	None	
SBR76-1984	205.5-207.0	16484	2.9	.5	95.6	1.0	7.5	1.2	.922	None	
SBR76-1985	207.0-208.0	16485	2.5	.3	95.7	1.5	6.6	.7	.929	None	
SBR76-1986	208.0-209.0	16486	3.3	.5	95.3	.9	8.6	1.2	.932	None	
SBR76-1987	209.0-210.3	16487	3.2	.5	94.5	1.8	8.2	1.2	.928	None	
SBR76-1988	210.3-211.6	16488	2.8	.5	95.9	.8	7.3	1.2	.928	None	
SBR76-1989	211.6-212.6	16581	2.2	.4	96.3	1.1	5.6	1.0	.929	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 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 <sup>1/</sup>	Water	coke	
SBR76-1990	212.6-214.0	16490	3.8	0.5	94.9	0.8	9.7	1.2	None	
SBR76-1991	214.0-215.4	16491	4.1	.5	94.6	.8	10.6	1.2	None	
SBR76-1992	215.4-216.7	16492	3.4	.2	95.2	1.2	8.7	.5	None	
SBR76-1993	216.7-217.8	16493	3.6	.3	95.0	1.1	9.3	.7	None	
SBR76-1994	217.8-219.2	16494	4.2	.4	94.2	1.2	10.7	1.0	None	
SBR76-1995	219.2-220.5	16495	4.3	.5	94.2	1.0	11.1	1.2	None	
SBR76-1996	220.5-221.7	16496	2.4	.6	96.2	.8	6.2	1.4	None	
SBR76-1997	221.7-222.7	16497	2.6	.7	96.2	.5	6.7	1.7	None	
SBR76-1998	222.7-223.9	16498	2.8	.5	96.0	.7	7.4	1.2	None	
SBR76-1999	223.9-225.0	16499	3.2	.4	94.9	1.5	8.3	1.0	None	
SBR76-2000	225.0-226.3	16500	5.2	.4	93.2	1.2	13.6	1.0	None	
SBR76-2001	226.3-227.2	16501	3.4	.3	94.9	1.4	8.9	.7	None	
SBR76-2002	227.2-228.6	16557	2.4	.5	96.5	.6	6.3	1.2	None	
SBR76-2003	228.6-230.2	16503	2.6	.6	96.2	.6	6.8	1.4	None	
SBR76-2004	230.2-231.3	16504	3.7	.5	94.1	1.7	9.5	1.2	None	
SBR76-2005	231.3-232.8	16505	3.8	.3	94.6	1.3	9.9	.7	None	
SBR76-2006	232.8-233.8	16506	4.3	.7	94.0	1.0	11.0	1.7	None	
SBR76-2007	233.8-234.7	16507	3.9	.7	94.4	1.0	10.1	1.7	None	
SBR76-2008	234.7-236.2	16508	3.7	.5	94.7	1.1	9.6	1.2	None	
SBR76-2009	236.2-237.6	16509	3.8	.5	94.7	1.0	9.8	1.2	None	
SBR76-2010	237.6-239.4	16510	3.6	.4	95.1	.9	9.3	1.0	None	
SBR76-2011	239.4-240.5	16511	3.8	.3	94.6	1.3	9.7	.7	None	
SBR76-2012	240.5-242.0	16512	3.5	.7	95.1	.7	9.0	1.6	None	
SBR76-2013	242.0-243.0	16513	3.9	.4	94.8	.9	10.2	1.0	None	
SBR76-2014	243.0-244.0	16556	2.8	.7	95.7	.8	7.4	1.7	None	
SBR76-2015	244.0-245.0	16515	3.6	.5	95.0	.9	9.4	1.2	None	
SBR76-2016	245.0-246.0	16516	3.3	.3	94.8	1.6	8.5	.7	None	
SBR76-2017	246.0-247.0	16517	3.1	.6	95.4	.9	8.2	1.4	None	
SBR76-2018	247.0-248.0	16518	6.6	.4	90.6	2.4	17.1	.9	None	
SBR76-2019	248.0-249.0	16519	2.2	.2	95.6	2.0	5.7	.5	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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 <sup>1/</sup>	Water	
SBR76-2020	249.0-250.0	16520	3.2	0.6	95.3	0.9	8.3	1.4	0.927	None	
SBR76-2021	250.0-251.0	16521	2.4	.8	96.0	.8	6.2	1.9	.921	None	
SBR76-2022	251.0-252.5	16522	2.6	.7	95.5	1.2	6.9	1.7	.916	None	
SBR76-2023	252.5-253.5	16523	3.6	.4	94.2	1.8	9.2	1.0	.932	None	
SBR76-2024	253.5-254.5	16524	3.4	.4	95.0	1.2	8.8	1.0	.928	None	
SBR76-2025	254.5-255.5	16525	3.8	.6	94.9	.7	9.7	1.4	.930	None	
SBR76-2026	255.5-257.0	16526	2.5	.9	95.8	.8	6.4	2.2	.923	None	
SBR76-2027	257.0-258.0	16527	2.4	1.0	96.1	.5	6.3	2.4	.921	None	
SBR76-2028	258.0-259.0	16528	2.5	.4	95.5	1.6	6.4	1.0	.928	None	
SBR76-2029	259.0-260.0	16529	2.8	.7	95.6	.9	7.2	1.7	.924	None	
SBR76-2030	260.0-261.0	16530	2.9	.4	95.5	1.2	7.5	1.0	.926	None	
SBR76-2031	261.0-262.0	16531	6.5	.7	91.3	1.5	16.7	1.7	.925	None	
SBR76-2032	262.0-263.0	16532	2.6	.9	95.7	.8	6.7	2.2	.927	None	
SBR76-2033	263.0-264.0	16534	2.6	1.0	95.5	.9	6.8	2.4	.926	None	
SBR76-2034	264.0-265.0	16535	2.1	1.1	95.3	1.5	5.4	2.6	.923	None	
SBR76-2035	265.0-266.0	16536	2.2	.9	96.1	.8	5.7	2.3	.922	None	
SBR76-2036	266.0-267.0	16537	2.3	1.0	95.8	.9	5.9	2.3	.923	None	
SBR76-2037	267.0-268.0	16538	2.6	1.4	94.7	1.3	6.7	3.4	.924	None	
SBR76-2038	268.0-269.0	16539	2.1	1.4	95.6	.9	5.5	3.3	.925	None	
SBR76-2039	269.0-270.0	16540	2.0	1.1	95.7	1.2	5.1	2.6	.923	None	
SBR76-2040	270.0-271.0	16541	2.2	1.1	95.6	1.1	5.7	2.6	.920	None	
SBR76-2041	271.0-272.0	16542	2.1	1.1	95.7	1.1	5.5	2.6	.922	None	
SBR76-2042	272.0-273.0	16543	2.4	1.3	95.6	.7	6.2	3.0	.922	None	
SBR76-2043	273.0-274.0	16544	2.7	.8	95.6	.9	7.0	1.9	.925	None	
SBR76-2044	274.0-275.0	16545	2.4	1.2	95.7	.7	6.1	2.9	.922	None	
SBR76-2045	275.0-276.0	16546	2.0	1.1	96.4	.5	5.1a	2.6	.920	None	
SBR76-2046	276.0-277.0	16547	1.6	.8	96.2	1.4	4.2a	2.0	.920	None	
SBR76-2047	277.0-278.5	16548	3.0	.8	95.5	.7	7.8	1.9	.921	None	
SBR76-2048	278.5-279.6	16549	8.7	.6	88.5	2.2	22.7	1.4	.923	None	
SBR76-2049	279.6-280.5	16550	3.0	.9	95.1	1.0	7.7	2.2	.925	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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				
			Oil	Water			Oil <sup>1/</sup>	Water			
Laramie	Their										
SBR76-2050	280.5-281.5	16551	2.2	1.2	94.9	1.7	5.8	2.9	0.923	None	
SBR76-2051	281.5-282.5	16552	2.3	1.1	95.9	.7	6.1a	2.6	.920	None	
SBR76-2052	282.5-283.5	16553	2.0	1.0	96.2	.8	5.3	2.4	.919	None	
SBR76-2053	283.5-284.6	16554	2.6	.9	95.7	.8	6.9	2.2	.916	None	
SBR76-2054	284.6-285.4	16555	10.8	.9	86.3	2.0	28.1	2.2	.917	None	
SBR76-2055	285.4-286.3	16558	3.7	.6	94.6	1.1	9.7	1.4	.928	None	
SBR76-2056	286.3-287.3	16559	3.0	.9	94.7	1.4	7.6	2.2	.930	None	
SBR76-2057	287.3-288.3	16560	2.5	1.2	95.5	.8	6.5	2.9	.932	None	
SBR76-2058	288.3-289.6	16561	2.6	1.4	95.2	.8	6.8	3.4	.932	None	
SBR76-2059	289.6-290.7	16562	4.1	.8	94.0	1.1	10.5	1.9	.934	None	
SBR76-2060	290.7-292.0	16563	3.6	.9	94.9	.6	9.3	2.1	.931	None	
SBR76-2061	292.0-293.0	16564	2.0	1.5	95.3	1.2	5.1	3.6	.924	None	
SBR76-2062	293.0-294.0	16565	1.8	1.8	95.7	.7	4.6a	4.3	.920	None	
SBR76-2063	294.0-295.0	16566	2.2	1.5	95.2	1.1	5.8	3.6	.922	None	
SBR76-2064	295.0-296.0	16567	2.0	.7	95.0	2.3	5.1	1.7	.925	None	
SBR76-2065	296.0-297.1	16568	3.1	1.2	94.8	.9	8.1	2.9	.925	None	
SBR76-2066	297.1-298.3	16569	5.8	.9	91.9	1.4	14.9	2.3	.929	None	
SBR76-2067	298.3-299.3	16570	2.9	1.2	95.5	.4	7.4	2.9	.930	None	
SBR76-2068	299.3-301.1	16571	1.7	1.0	96.1	1.2	4.5a	2.4	.920	None	
SBR76-2069	301.1-302.1	16572	3.3	.5	95.3	.9	8.5	1.2	.925	None	
SBR76-2070	302.1-303.1	16573	2.9	1.2	95.4	.5	7.6	2.9	.922	None	
SBR76-2071	303.1-304.1	16574	3.8	1.0	94.2	1.0	10.0	2.4	.920	None	
SBR76-2072	304.1-305.1	16575	4.8	1.4	92.8	1.0	12.5	3.4	.915	None	
SBR76-2073	305.1-306.1	16576	2.9	.6	95.1	1.4	7.5	1.4	.916	None	
SBR76-2074	306.1-307.8	16577	2.1	1.4	95.7	.8	5.5	3.5	.921	None	
SBR76-2075	307.8-309.0	16578	8.8	1.1	87.9	2.2	23.0	2.6	.922	None	
SBR76-2076	309.0-310.0	16579	2.9	1.0	95.4	.7	7.4	2.4	.929	None	
SBR76-2077	310.0-311.0	16580	2.1	1.0	96.0	.9	5.5	2.5	.924	None	
SBR76-2078	311.0-312.7	16582	2.7	1.1	95.5	.7	7.0	2.6	.920	None	
SBR76-2079	312.7-314.0	16583	5.7	1.0	91.6	1.7	14.9	2.4	.917	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Sample number		Run No.	Yield of product						Specific gravity of oil at 60°/60° F	Properties of		Remarks
			Weight percent				Gal per ton			spent shale		
			Oil	Water	Spent shale	Gas + loss	Oil	Water		Tendency to coke		
Laramie	Their											
SBR76-2080	314.0-315.0	16584	3.5	1.1	94.4	1.0	9.2	2.7	0.918		None	
SBR76-2081	315.0-316.0	16585	2.7	1.5	95.1	.7	7.0	3.6	.914		None	
SBR76-2082	316.0-317.0	16586	3.4	1.4	93.8	1.4	8.7	3.4	.920		None	
SBR76-2083	317.0-318.3	16587	7.7	1.2	89.5	1.6	20.0	2.9	.919		None	
SBR76-2084	318.3-320.0	16588	2.9	.9	94.6	1.6	7.6	2.2	.922		None	
SBR76-2085	320.0-321.3	16589	3.7	.7	94.2	1.4	9.5	1.7	.928		None	
SBR76-2086	321.3-322.8	16590	4.2	.8	93.6	1.4	11.0	1.9	.924		None	
SBR76-2087	322.8-323.8	16591	5.0	1.3	92.4	1.3	13.1	3.1	.920		None	
SBR76-2088	323.8-324.8	16592	4.2	.8	93.7	1.3	10.8	1.9	.925		None	
SBR76-2089	324.8-326.1	16593	4.7	.7	93.1	1.5	12.2	1.7	.927		None	
SBR76-2090	326.1-327.2	16594	4.4	.8	93.4	1.4	11.5	1.9	.925		None	
SBR76-2091	327.2-328.4	16595	4.6	.5	93.3	1.6	11.8	1.1	.928		None	
SBR76-2092	328.4-329.3	16596	4.9	.8	92.9	1.4	12.8	1.9	.924		None	
SBR76-2093	329.3-330.8	16597	4.1	.8	93.4	1.7	10.9	1.9	.911		None	
SBR76-2094	330.8-332.2	16598	4.6	1.4	91.9	2.1	12.0	3.5	.912		None	
SBR76-2095	332.2-333.4	16599	4.1	1.6	92.8	1.5	10.9	3.8	.912		None	
SBR76-2096	333.4-334.4	16600	5.0	1.6	92.2	1.2	13.0	3.8	.917		None	
SBR76-2097	334.4-335.4	16601	4.9	1.3	92.0	1.8	12.9	3.1	.915		None	
SBR76-2098	335.4-336.4	16602	6.0	1.4	90.9	1.7	15.7	3.4	.916		None	
SBR76-2099	336.4-337.7	16603	5.1	1.5	91.7	1.7	13.4	3.5	.917		None	
SBR76-2100	337.7-339.4	16604	8.8	1.2	87.8	2.2	23.1	2.9	.915		None	
SBR76-2101	339.4-341.0	16605	7.6	1.3	88.9	2.2	20.1	3.1	.911		None	
SBR76-2102	341.0-342.0	16606	4.8	1.5	92.3	1.4	12.6	3.6	.913		None	
SBR76-2103	342.0-343.0	16607	3.5	1.1	93.9	1.5	9.2	2.6	.912		None	
SBR76-2104	343.0-344.2	16608	5.0	1.1	92.5	1.4	13.3	2.6	.906		None	
SBR76-2105	344.2-345.7	16609	2.7	1.7	94.4	1.2	7.2	4.1	.912		None	
SBR76-2106	345.7-346.6	16610	3.8	1.6	93.3	1.3	9.9	3.8	.913		None	
SBR76-2107	346.6-347.5	16611	9.7	1.2	86.8	2.3	25.4	2.9	.915		None	
SBR76-2108	347.5-349.0	16612	3.8	1.1	93.3	1.8	10.1	2.6	.911		None	
SBR76-2109	349.0-350.7	16613	2.6	1.4	95.0	1.0	6.7	3.4	.915		None	

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 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				
			Oil	Water			Oil <sup>1/</sup>	Water			
Laramie	Their										
SBR76-2110	350.7-352.5	16614	4.9	1.3	92.0	1.8	13.0	3.1	0.912	None	
SBR76-2111	352.5-354.0	16615	1.2	1.0	94.9	2.9	3.2a	2.4	.920	None	
SBR76-2112	354.0-355.4	16616	2.8	2.1	94.0	1.1	7.3	5.0	.913	None	
SBR76-2113	355.4-356.4	16617	2.3	1.6	95.0	1.1	6.0	3.8	.914	None	
SBR76-2114	356.4-357.6	16618	7.8	1.5	89.3	1.4	20.5	3.6	.907	None	
SBR76-2115	357.6-359.0	16619	2.6	1.5	93.9	2.0	6.8	3.6	.916	None	
SBR76-2116	359.0-360.1	16620	2.8	1.6	93.7	1.9	7.4	3.8	.916	None	
SBR76-2117	360.1-361.1	16621	2.2	2.0	94.9	.9	5.8	4.8	.920	None	
SBR76-2118	361.1-362.2	16622	6.3	1.5	89.5	2.7	16.5	3.6	.920	None	
SBR76-2119	362.2-363.2	16623	3.0	1.9	94.2	.9	7.7	4.6	.926	None	
SBR76-2120	363.2-364.3	16624	2.0	1.4	94.5	2.1	5.2a	3.4	.920	None	
SBR76-2121	264.3-365.8	16625	3.0	2.2	93.3	1.5	7.7	5.3	.926	None	
SBR76-2122	365.8-366.7	16626	7.5	1.4	88.2	2.9	19.5	3.4	.923	None	
SBR76-2123	366.7-368.0	16627	3.0	1.6	94.2	1.2	8.0	3.8	.919	None	
SBR76-2124	368.0-369.4	16628	3.2	1.7	93.7	1.4	8.5	4.1	.913	None	
SBR76-2125	369.4-370.6	16629	10.4	1.7	84.6	3.3	27.0	4.1	.921	None	
SBR76-2126	370.6-372.2	16700	2.4	1.3	95.1	1.2	6.3	3.1	.920	None	
SBR76-2127	372.2-373.7	16701	2.4	2.2	94.6	.8	6.1	5.3	.920	None	
SBR76-2128	373.7-374.8	16632	4.1	2.0	93.0	.9	10.7	4.8	.922	None	
SBR76-2129	374.8-375.8	16633	3.4	2.2	93.7	.7	8.8	5.3	.924	None	
SBR76-2130	375.8-376.5	16634	4.0	1.9	92.8	1.3	10.4	4.6	.918	None	
SBR76-2131	376.5-377.6	16635	10.1	1.5	86.2	2.2	26.5	3.6	.915	None	
SBR76-2132	377.6-378.5	16636	3.3	1.4	93.9	1.4	8.6	3.4	.916	None	
SBR76-2133	378.5-380.0	16637	.9	1.6	96.8	.7	2.3a	3.8	.920	None	
SBR76-2134	380.0-381.0	16638	2.4	2.1	94.7	.8	6.2	4.9	.921	None	
SBR76-2135	381.0-382.0	16639	5.0	1.7	92.3	1.0	13.1	4.0	.919	None	
SBR76-2136	382.0-383.0	16640	3.3	1.6	94.3	.8	8.6	3.8	.918	None	
SBR76-2137	383.0-384.6	16641	3.5	2.0	93.9	.6	9.2	4.7	.919	None	
SBR76-2138	384.6-385.6	16642	6.4	2.4	90.4	.8	16.9	5.8	.912	None	Half "tar sand"
SBR76-2139	385.6-386.7	16643	3.0	1.3	94.4	1.3	7.8	3.1	.925	None	

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 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			Gal per ton				Tendency to coke		
			Oil	Water	Spent shale	Gas + loss	Oil <sup>1/</sup>	Water				
SBR76-2140	386.7-388.0	16644	3.0	1.2	95.3	0.5	7.9	2.9	0.922	None		
SBR76-2141	388.0-389.0	16645	2.9	1.1	94.7	1.3	7.6	2.6	.928	None		
SBR76-2142	389.0-390.4	16646	5.1	2.3	91.6	1.0	13.4	5.5	.918	None		
SBR76-2143	390.4-391.4	16647	4.0	2.4	93.0	.6	10.3	5.8	.924	None		
SBR76-2144	391.4-392.3	16648	3.7	2.2	93.0	1.1	9.4	5.3	.929	None		
SBR76-2145	392.3-393.4	16649	4.6	1.6	92.2	1.6	11.9	3.8	.927	None		
SBR76-2146	393.4-394.6	16650	3.7	1.6	93.8	.9	9.8	3.8	.921	None		
SBR76-2147	394.6-395.6	16651	4.3	2.4	92.4	.9	11.1	5.8	.918	None		
SBR76-2148	395.6-397.3	16652	3.4	2.0	93.6	1.0	8.8	4.8	.925	None		
SBR76-2149	397.3-398.5	16653	3.6	1.4	93.7	1.3	9.5	3.4	.920	None		
SBR76-2150	398.5-399.5	16654	2.8	1.4	95.2	.6	7.4	3.4	.919	None		
SBR76-2151	399.5-400.8	16655	1.5	1.4	96.1	1.0	3.8a	3.4	.920	None		
SBR76-2152	400.8-402.5	16656	3.6	1.5	92.6	2.3	9.5	3.6	.915	None		
SBR76-2153	402.5-404.2	16657	3.5	2.3	93.0	1.2	9.1	5.5	.925	None		
SBR76-2154	404.2-405.4	16699	4.0	2.0	92.9	1.1	10.4	4.8	.922	None		
SBR76-2155	405.4-406.3	16659	7.6	2.9	88.3	1.2	20.3	7.0	.906	None	"tar sand"	
SBK76-2156	406.3-407.3	16660	7.8	2.8	87.6	1.8	20.6	6.7	.907	None	"tar sand"	
SBR76-2157	407.3-408.4	16661	5.1	.9	92.8	1.2	13.5	2.2	.916	None		
SBR76-2158	408.4-409.4	16662	3.2	1.0	95.0	.8	8.2	2.3	.923	None		
SBR76-2159	409.4-410.3	16663	1.5	.5	96.1	1.9	4.0a	1.2	.920	None		
SBR76-2160	410.3-412.0	16664	4.0	1.0	94.2	.8	10.5	2.3	.924	None		
SBR76-2161	412.0-413.0	16665	2.6	1.3	95.2	.9	6.4	3.1	.925	None		
SBR76-2162	413.0-414.0	16666	2.7	1.2	95.0	1.1	7.0	2.9	.924	None		
SBR76-2163	414.0-415.0	16667	2.7	.7	95.1	1.5	7.0	1.7	.923	None		
SBR76-2164	415.0-416.0	16668	2.3	.8	95.8	1.1	6.0	1.9	.924	None		
SBR76-2165	416.0-417.0	16669	4.8	1.0	92.0	2.2	12.4	2.4	.919	None		
SBR76-2166	417.0-418.2	16670	4.0	.9	93.4	1.7	10.4	2.2	.924	None		
SBR76-2167	418.2-419.0	16671	13.9	1.0	82.6	2.5	35.8	2.5	.927	None		
SBR76-2168	419.0-420.0	16672	3.8	.6	93.9	1.7	10.0	1.4	.924	None		
SBR76-2169	420.0-421.0	16673	4.9	1.1	92.5	1.5	12.8	2.6	.922	None		

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 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											
SBR76-2170	421.0-422.3	16674	5.0	0.7	92.4	1.9	13.2	1.7	0.920	None		
SBR76-2171	422.3-423.3	16675	9.6	1.0	87.1	2.3	25.2	2.4	.917	None		
SBR76-2172	423.3-424.4	16676	5.1	.8	92.5	1.6	13.4	1.9	.914	None		
SBR76-2173	424.4-425.2	16677	12.8	.9	82.5	3.8	33.6	2.2	.916	None		
SBR76-2174	425.2-426.2	16678	3.4	.9	94.8	.9	8.9	2.2	.920	None		
SBR76-2175	426.2-427.5	16679	1.9	.9	96.4	.8	4.9a	2.2	.920	None		
SBR76-2176	427.5-429.2	16680	1.6	.6	97.1	.7	4.1a	1.4	.920	None		
SBR76-2177	429.2-430.9	16681	2.3	.7	96.3	.7	5.9	1.7	.928	None		
SBR76-2178	430.9-432.6	16682	1.4	.9	96.8	.9	3.5a	2.2	.920	None		
SBR76-2179	432.6-434.0	16683	.7	.8	97.2	1.3	1.8a	1.9		None		
SBR76-2180	434.0-435.3	16684	.9	.6	97.3	1.2	2.2a	1.4		None		
SBR76-2181	435.3-436.3	16685	4.5	1.2	92.4	1.9	12.0	2.9	.903	None		
SBR76-2182	436.3-437.4	16686	4.2	1.1	93.0	1.7	11.1	2.6	.906	None		
SBR76-2183	437.4-438.7	16687	10.3	2.2	85.3	2.2	27.3	5.3	.906	None		
SBR76-2184	438.7-440.1	16688	5.0	1.5	91.6	1.9	13.2	3.6	.907	None		
SBR76-2185	440.1-441.7	16689	3.5	1.7	93.9	.9	9.2	4.1	.910	None		
SBR76-2186	441.7-443.4	16690	9.7	1.8	86.4	2.1	25.4	4.3	.916	None		
SBR76-2187	443.4-444.7	16691	9.5	.7	86.9	2.9	25.0	1.7	.909	None		
SBR76-2188	444.7-445.7	16692	17.5	1.8	77.6	3.1	46.4	4.3	.904	None		
SBR76-2189	445.7-446.5	16693	8.4	.7	88.7	2.2	22.5	1.7	.894	None		
SBR76-2190	446.5-447.5	16694	6.7	1.3	90.1	1.9	17.7	3.1	.907	None		
SBR76-2191	447.5-448.7	16695	5.0	1.0	92.6	1.4	13.1	2.4	.914	None		
SBR76-2192	448.7-449.7	16696	4.4	.8	93.5	1.3	11.4	1.9	.919	None		
SBR76-2193	449.7-450.8	16702	8.2	.9	89.2	1.7	21.5	2.2	.909	None		
SBR76-2194	450.8-452.0	16703	4.0	.6	93.9	1.5	10.5	1.4	.911	None		
SBR76-2195	452.0-453.1	16704	4.7	1.0	93.2	1.1	12.3	2.4	.913	None		
SBR76-2196	453.1-454.1	16705	4.0	1.8	93.0	1.2	10.7	4.3	.911	None		
SBR76-2197	454.1-455.5	16706	3.8	.9	93.7	1.6	10.1	2.2	.913	None		
SBR76-2198	455.5-456.6	16707	2.9	.7	95.7	.7	7.5	1.7	.910	None		
SBR76-2199	456.6-457.9	16708	4.2	.6	93.4	1.8	11.1	1.4	.906	None		

See footnote at end of table.

Core samples received February 3, 1976; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 feet			Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
Sample number		Run No.	Weight percent				Gal per ton			Tendency to coke		
			Oil	Water	Spent shale	Gas + loss	Oil	Water				
Laramie	Their											
SBR76-2200	457.9-459.2	16709	5.1	0.6	93.2	1.1	13.4	1.4	0.909	None		
SBR76-2201	459.2-460.9	16710	10.7	.8	86.3	2.2	28.3	1.9	.906	None		
SBR76-2202	460.9-462.0	16711	6.0	.2	91.2	2.6	16.0	.5	.904	None		
SBR76-2203	462.0-463.0	16712	10.4	.9	86.7	2.0	27.6	2.2	.908	None		
SBR76-2204	463.0-464.3	16713	13.6	.7	83.2	2.5	35.7	1.7	.915	Slight		
SBR76-2205	464.3-465.8	16714	27.3	1.2	67.2	4.3	72.7	2.9	.900	Heavy		
SBR76-2206	465.8-466.9	16715	22.6	.9	70.7	5.8	59.9	2.2	.905	Heavy		
SBR76-2207	466.9-468.0	16716	20.8	.8	73.2	5.2	55.1	1.9	.906	Moderate		
SBR76-2208	468.0-469.1	16717	10.1	.9	86.9	2.1	26.5	2.2	.918	None		
SBR76-2209	469.1-470.1	16718	7.4	.3	89.9	2.4	19.3	.7	.915	None		
SBR76-2210	470.1-471.4	16719	13.8	.8	82.9	2.5	36.0	1.9	.921	None		
SBR76-2211	471.4-472.9	16720	6.1	.3	91.6	2.0	15.9	.7	.916	None		
SBR76-2212	472.9-474.0	16721	6.7	.5	91.5	1.3	17.7	1.2	.915	None		
SBR76-2213	474.0-475.0	16722	6.9	.4	91.4	1.3	18.2	.9	.907	None		
SBR76-2214	475.0-476.3	16723	12.2	1.0	84.6	2.2	32.4	2.4	.900	None		
SBR76-2215	476.3-477.4	16724	17.3	.9	78.9	2.9	45.6	2.2	.909	None		
SBR76-2216	477.4-478.8	16725	6.4	.4	91.3	1.9	16.9	1.0	.912	None		
SBR76-2217	478.8-479.6	16726	13.6	.8	83.0	2.6	36.2	1.9	.905	None		
SBR76-2218	479.6-481.0	16727	6.2	.6	91.6	1.6	16.4	1.4	.906	None		
SBR76-2219	481.0-482.3	16728	5.1	.7	92.8	1.4	13.3	1.7	.911	None		
SBR76-2220	482.3-483.9	16729	12.3	1.0	84.0	2.7	32.5	2.4	.906	None		
SBR76-2221	483.9-484.9	16772	2.8	.3	95.0	1.9	7.4	.7	.915	None		
SBR76-2222	484.9-485.7	16731	4.6	.5	93.5	1.4	12.2	1.2	.911	None		
SBR76-2223	485.7-486.8	16732	6.8	.5	90.7	2.0	18.0	1.2	.906	None		
SBR76-2224	486.8-487.8	16733	14.4	.9	81.4	3.3	38.0	2.1	.913	None		
SBR76-2225	487.8-488.8	16734	10.7	.5	86.6	2.2	28.7	1.2	.894	None		
SBR76-2226	488.8-490.0	16735	7.8	.4	89.8	2.0	20.9	1.0	.898	None		
SBR76-2227	490.0-490.8	16736	13.0	.7	83.5	2.8	34.5	1.7	.902	None		
SBR76-2228	490.8-492.2	16737	7.4	.6	90.4	1.6	19.5	1.4	.904	None		
SBR76-2229	492.2-493.7	16738	4.3	.4	94.4	.9	11.3	1.0	.909	None		

Core samples received February 3, 1976; assays made on air-dried samples

# OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from the United States Geological Survey's CRU-1 corehole

Surface elevation: 6,137 feet

Surface elevation: 6,137 feet			Yield of product						Specific gravity of oil at 60°/60° F	Properties of	Remarks
Sample number		Run No.	Weight percent				Gal per ton			spent shale	
			Oil	Water	Spent shale	Gas + loss	Oil	Water		Tendency to coke	
Laramie	Thier										
SBR76-2230	493.7-495.2	16739	4.6	0.3	93.1	2.0	12.2	0.7	0.908	None	
SBR76-2231	495.2-496.5	16740	5.9	.8	91.9	1.4	15.6	1.9	.914	None	
SBR76-2232	496.5-497.8	16741	2.4	.4	95.9	1.3	6.4	1.0	.919	None	

1/ "a"--indicates specific gravity estimated as 0.92.

Core samples received February 3, 1976; assays made on air-dried samples