

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Federal Geological Survey's core hole No. 15, located in the SW <sup>1</sup>/<sub>4</sub>, Sec. 26, T. 12 S., R. 18 E.,  
U. S. Naval Oil-Shale Reserve No. 2 Uintah County, Utah

Starting elevation (approximate) 5,980'

Sample number	Laramie	Their	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	Oil	Water			
				Oil	Water							
SBR55-620		29.9-30.9	36243	0.3	1.4	97.7	0.6	0.8a	3.4	0.899	None	
SBR55-621		30.9-32.8	36244	2.6	2.2	94.0	1.2	6.9	5.3		None	
SBR55-622		32.8-33.8 <sup>1.0</sup>	36245	.7	1.7	96.7	.9	1.9a <sup>1.9</sup>	4.1		None	
SBR55-623		33.8-35.8 <sup>2.0</sup>	36246	.6	1.4	97.9	.1	1.5a <sup>3.0</sup>	3.4		None	
SBR55-624		35.8-39.0 <sup>3.2</sup>	36247	1.2	2.7	96.1	.0	2.9a <sup>9.3</sup>	6.5		None	
SBR55-625		39.0-40.2 <sup>1.2</sup>	36248	10.0	2.4	85.8	1.8	26.3 <sup>51.0</sup>	5.8	.906	None	
SBR55-626		40.2-41.6 <sup>1.4</sup>	36249	3.3	1.3	95.1	.3	8.6 <sup>12.0</sup>	3.1	.906	None	
SBR55-627		41.6-44.0 <sup>2.4</sup>	36250	2.6	1.2	96.0	.2	6.9 <sup>14.6</sup>	2.9	.906	None	
SBR55-628		44.0-47.8 <sup>3.8</sup>	36251	1.9	1.9	95.8	.4	4.9a <sup>18.6</sup>	4.6		None	
SBR55-629		47.8-49.3 <sup>1.5</sup>	36252	7.8	1.3	90.1	.8	20.5 <sup>30.7</sup>	3.0	.916	None	
SBR55-630		49.3-51.6 <sup>2.3</sup>	36253	7.4	1.3	90.3	1.0	19.3 <sup>44.4</sup>	3.1	.912	None	
SBR55-631		51.6-52.9 <sup>1.3</sup>	36254	13.2	1.1	83.9	1.8	35.0 <sup>45.5</sup>	2.6	.904	None	
SBR55-632		52.9-54.0 <sup>1.1</sup>	36255	5.6	1.0	92.7	.7	14.9 <sup>16.4</sup>	2.3	.905	None	
SBR55-633		54.0-62.0 <sup>8.0</sup>	36256	1.5	1.1	97.0	.4	3.8a <sup>30.4</sup>	2.6		None	
SBR55-634		62.0-63.3 <sup>1.3</sup>	36257	3.4	1.0	94.9	.7	8.9 <sup>11.6</sup>	2.4	.922	None	
SBR55-635		63.3-66.9 <sup>3.6</sup>	36258	1.3	1.2	97.3	.2	3.4a <sup>12.2</sup>	2.9		None	
SBR55-636		66.9-68.2 <sup>1.3</sup>	36259	3.1	1.0	95.2	.7	8.1 <sup>10.5</sup>	2.4	.911	None	
SBR55-637		68.2-69.2 <sup>1.0</sup>	36260	11.0	1.1	86.2	1.7	28.5 <sup>28.5</sup>	2.6	.922	None	
SBR55-638		69.2-72.2 <sup>3.0</sup>	36261	6.2	1.4	91.2	1.2	16.4 <sup>24.2</sup>	3.4	.910	None	
SBR55-639		72.2-76.0 <sup>3.8</sup>	36262	4.3	1.1	94.0	.6	11.2 <sup>42.6</sup>	2.6	.913	None	
SBR55-640		76.0-77.8 <sup>1.8</sup>	36263	12.3	1.3	84.6	1.8	32.3 <sup>58.1</sup>	3.1	.911	None	
SBR55-641		77.8-78.6 <sup>.8</sup>	36264	11.5	.7	86.2	1.6	30.2 <sup>24.2</sup>	1.7	.908	Slight	
SBR55-642		78.6-80.6 <sup>2.0</sup>	36265	22.4	1.2	72.8	3.6	59.3 <sup>18.6</sup>	2.9	.906	Slight	
SBR55-643		80.6-82.6 <sup>2.0</sup>	36266	16.9	.9	79.5	2.7	44.7 <sup>8.4</sup>	2.2	.904	None	
SBR55-644		82.6-83.7 <sup>1.1</sup>	36267	18.3	1.1	77.9	2.7	48.1 <sup>22.9</sup>	2.6	.910	None	
SBR55-645		83.7-86.2 <sup>2.5</sup>	36268	5.7	.7	92.6	1.0	14.7 <sup>32.7</sup>	1.7	.922	None	
SBR55-646		86.2-87.6 <sup>1.4</sup>	36269	8.2	.6	89.8	1.4	21.1 <sup>28.5</sup>	1.4	.927	None	
SBR55-647		87.6-90.5 <sup>2.9</sup>	36270	5.0	.3	93.6	1.1	13.0 <sup>37.7</sup>	.7	.921	None	
SBR55-648		90.5-92.5 <sup>2.0</sup>	36271	12.3	1.0	84.4	2.3	32.4 <sup>44.8</sup>	2.4	.908	None	
SBR55-649		92.5-95.0 <sup>2.5</sup>	36272	3.9	.9	94.0	1.2	10.6 <sup>24.7</sup>	2.2	.889	None	

a-estimated

Core samples received January 25, 1955; assays made on air-dried samples.

Petroleum and Oil-Shale Experiment Station, Laramie, Wyoming, Illustration No. S.B.R.-1497P

February 24, 1955

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U. S. Naval Oil-Shale Reserve No. 2 Uintah County, Utah

Starting elevation (approximate) 5,980'

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	Thier		Oil	Water	Spent shale	Gas + loss	Oil	Water			
SBR55-650	95.0-96.2 <sup>1.2</sup>	36273	8.9	0.9	88.5	1.7	23.6 <sup>28.3</sup>	2.2	0.902	None	
SBR55-651	96.2-96.9 <sup>1.7</sup>	36274	3.5	.2	95.3	1.0	9.2 <sup>6.4</sup>	.5	.915	None	
SBR55-652	96.9-98.2 <sup>1.3</sup>	36275	2.2	.1	97.2	.5	5.5 <sup>2.1</sup>	.2	11.2 8.6	None	
SBR55-653	98.2-99.3 <sup>1.1</sup>	36276	2.4	.3	96.4	.9	6.4 <sup>7.0</sup>	.6		.908	None
SBR55-654	99.3-101.5 <sup>2.2</sup>	36277	9.2	.7	89.4	.7	23.7 <sup>52.1</sup>	1.7	.924	None	
SBR55-655	101.5-103.6 <sup>2.1</sup>	36278	2.1	1.2	96.3	.4	5.6 <sup>11.4</sup>	2.8	.921	Miss 31.4	None
SBR55-656	135.0-137.2 <sup>2.2</sup>	36279	1.4	1.4	97.0	.2	3.5 <sup>2.7</sup>	3.4		None	
SBR55-657	137.2-141.1 <sup>3.9</sup>	36280	8.1	.5	90.3	1.1	21.6 <sup>34.2</sup>	1.2	.899	None	
SBR55-658	141.1-143.6 <sup>2.5</sup>	36281	7.5	.7	90.8	1.0	20.0 <sup>58.0</sup>	1.7	.894	None	
SBR55-659	143.6-146.9 <sup>3.3</sup>	36282	3.2	1.0	95.1	.7	8.4 <sup>27.7</sup>	2.5	.905	None	
SBR55-660	146.9-149.4 <sup>2.5</sup>	36283	1.4	.4	97.9	.3	3.6 <sup>9.0</sup>	1.0		None	
SBR55-661	149.4-150.0 <sup>.4</sup>	36284	3.1	1.2	95.4	.3	8.0 <sup>7.8</sup>	2.9	.919	None	
SBR55-662	150.0-150.9 <sup>.9</sup>	36285	8.9	1.3	88.3	1.5	22.9 <sup>20.4</sup>	1.1	.927	None	
SBR55-663	150.9-152.4	36286	2.7	.6	96.4	.3	7.0	1.6	.914	None	
SBR55-664	152.4-153.4	36287	1.6	.2	98.0	.2	4.0 <sup>a</sup>	.6		None	
SBR55-665	153.8-155.4	36288	2.9	.6	96.0	.5	7.8	1.3	.895	None	
SBR55-666	155.4-156.4	36289	3.7	.5	95.4	.4	9.8	1.2	.895	None	
SBR55-667	156.4-161.4	36290	.9	1.2	97.8	.1	2.1 <sup>a</sup>	2.9		None	
SBR55-668	161.4-162.3	36291	12.0	.9	85.5	1.6	31.3	2.2	.918	None	
SBR55-669	162.3-165.4	36292	2.2	1.1	96.0	.7	5.9	2.5	.912	None	
SBR55-670	165.4-166.6	36293	8.1	1.0	89.6	1.3	20.9	2.4	.923	None	

a-Estimated

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Petroleum and Oil-Shale Experiment Station, Laramie, Wyoming, Illustration No. S.B.R.-1498P February 24, 1955