

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 drilled in the NE1/4SW1/4NW1/4
(1,760 feet S/N 1,225 feet E/W) of sec 25, T 23 N, R 109 W, Sweetwater County, Wyoming

Surface elevation 6,353 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 ^{1/}
SBR72-11448-54	0- 35						No Oil		
SBR72-11455	35 - 40						Trace		
SBR72-11456	40 - 45	78188	0.1	2.6	97.0	0.3	0.3a	6.2	None
SBR72-11457	45 - 50						Trace		
SBR72-11458-59	50 - 60						No Oil		
SBR72-11460	60 - 65						Trace		
SBR72-11461-63	65 - 80						No Oil		
SBR72-11464	80 - 85						Trace		
SBR72-11465-73	85 - 130						No Oil		
SBR72-11474	130 - 135	78189	.0	2.6	97.2	.2	No Oil	6.2	None
SBR72-11475	135 - 140	78190	.0	1.8	97.3	.9	.1a	4.3	None
SBR72-11476-525	140 - 390						No Oil		
SBR72-11526	390 - 395	78191	.0	2.0	97.8	.2	No Oil	4.7	None
SBR72-11527	395 - 400	78192	.2	2.5	96.8	.5	.5a	6.0	None
SBR72-11528	402.0-403.0	78193	1.7	2.9	94.6	.8	4.5a	7.0	None
SBR72-11529	403.0-404.0	78194	1.6	2.9	94.8	.7	4.1a	7.0	None
SBR72-11530	404.0-405.0	78195	1.6	3.0	94.5	.9	4.2a	7.2	None
SBR72-11531	405.0-406.0	78196	1.4	3.2	94.0	1.4	3.8a	7.7	None
SBR72-11532	406.0-407.0	78197	1.5	3.1	93.7	1.7	3.9a	7.4	None
SBR72-11533	407.0-408.0	78198	1.6	3.4	93.4	1.6	4.2a	8.1	None
SBR72-11534	408.0-409.0	78199	2.3	3.0	93.2	1.5	6.2	7.2	0.876
SBR72-11535	409.0-410.1	78200	1.6	3.4	93.7	1.3	4.2a	8.1	None
SBR72-11536	410.1-411.3	78201	2.2	3.0	93.1	1.7	6.0	7.2	.875
SBR72-11537	411.3-412.3	78202	2.4	2.7	93.9	1.0	6.5	6.5	.875
SBR72-11538	412.3-413.4	78203	1.3	2.9	94.2	1.6	3.4a	7.0	None
SBR72-11539	413.4-414.5	78204	1.4	3.5	93.9	1.2	3.5a	8.4	None
SBR72-11540	414.5-415.5	78205	1.2	2.3	94.9	1.6	3.2a	5.5	None
SBR72-11541	415.5-416.5	78206	1.8	2.7	93.9	1.6	4.7a	6.5	None
SBR72-11542	416.5-417.6	78207	2.4	2.9	93.3	1.4	6.4	7.0	.892
SBR72-11543	417.6-418.6	78208	2.2	3.2	93.7	.9	5.9	7.7	.903

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ¹ /	Water	coke	
SBR72-11544	418.6-419.6	78209	2.6	3.2	92.6	1.6	6.8	7.7	None	
SBR72-11545	419.6-420.3	78210	.8	1.5	97.4	.3	2.0a	3.6	None	
SBR72-11546	420.3-421.1	78211	1.8	3.3	93.9	1.0	4.7a	7.9	None	
SBR72-11547	421.6-422.8	78212	.3	3.0	95.9	.8	.8a	7.2	None	
SBR72-11548	422.8-424.0	78213	3.6	2.9	95.9	.6	1.6a	7.0	None	
SBR72-11549	424.0-425.4	78214	.7	3.1	95.6	.6	1.8a	7.4	None	
SBR72-11550	425.4-427.1	78215	.2	2.7	96.9	.2	.5a	6.5	None	
SBR72-11551	427.1-428.7	78216	.0	2.3	97.1	.6	.1a	5.5	None	
SBR72-11552	428.7-429.7	78217	.1	2.9	96.4	.6	.4a	7.0	None	
SBR72-11553	429.7-430.8	78218	.2	2.5	97.2	.1	.5a	6.0	None	
SBR72-11554	430.8-431.8	78219	.0	2.2	97.6	.2	.1a	5.3	None	
SBR72-11555	431.8-433.4	78220	.0	2.4	97.2	.4	.1a	5.8	None	
SBR72-11556	433.4-434.5	78221	3.4	2.9	95.9	.8	1.1a	7.8	None	
SBR72-11557	434.5-435.5	78222	.8	3.0	95.5	.7	2.2a	7.2	None	
SBR72-11558	435.5-436.9	78223	.4	2.7	96.2	.7	.9a	6.5	None	
SBR72-11559	436.9-437.7	78224	2.7	2.6	93.6	1.1	7.2	6.2	.911	None
SBR72-11560	437.7-438.4	78225	1.7	.9	96.9	.5	4.5a	2.2	None	
SBR72-11561	438.4-439.4	78226	3.2	1.9	93.8	1.1	8.5	4.6	.912	None
SBR72-11562	439.4-440.4	78227	1.4	2.0	95.8	.8	3.6a	4.8	None	
SBR72-11563	440.4-441.1	78228	.0	2.5	96.7	.8	.1a	6.0	None	
SBR72-11564	441.1-442.8	78229	1.0	2.8	95.6	.6	2.5a	6.7	None	
SBR72-11565	442.8-443.9	78230	2.7	1.2	95.4	.7	7.1	2.9	.907	None
SBR72-11566	443.9-445.8	78231	2.8	2.3	93.4	1.5	7.5	5.5	.915	None
SBR72-11567	445.8-447.5	78232	2.7	2.0	94.3	1.0	7.1	4.8	.915	None
SBR72-11568	447.5-448.0	78233	2.2	1.9	93.9	2.0	5.6	4.6	.917	None
SBR72-11569	448.0-449.2	78234	2.8	2.0	94.2	1.0	7.4	4.8	.915	None
SBR72-11570	449.2-450.3	78235	1.7	2.5	95.1	.7	4.4a	6.0	None	
SBR72-11571	450.3-451.4	78236	3.1	2.7	93.1	1.1	8.0	6.5	.916	None
SBR72-11572	451.4-452.5	78237	1.8	2.9	93.3	1.0	7.2	7.0	.923	None
SBR72-11573	452.5-453.5	78238	4.1	2.0	92.4	1.5	10.6	4.8	.920	None

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ¹ /	Water	coke		
SBR72-11574	453.5-454.5	78239	4.9	1.0	91.9	2.2	13.0	2.4	0.908	None	
SBR72-11575	454.5-456.2	78240	6.3	2.0	89.9	1.8	16.6	4.8	.901	None	
SBR72-11576	456.2-457.5	78241	5.5	2.4	90.5	1.6	14.2	5.8	.924	None	
SBR72-11577	457.5-458.5	78242	6.2	2.6	89.6	1.6	16.0	6.2	.927	None	
SBR72-11578	458.5-459.7	78243	4.2	2.6	92.3	.9	10.9	6.2	.917	None	
SBR72-11579	459.7-461.1	78244	4.6	2.5	91.1	1.8	11.9	6.0	.919	None	
SBR72-11580	461.1-462.2	78245	6.8	2.2	88.5	2.5	17.9	5.3	.905	None	
SBR72-11581	462.2-463.5	78246	8.3	1.1	88.3	2.3	21.7	2.8	.913	None	
SBR72-11582	463.5-464.6	78247	2.0	2.3	94.5	1.2	5.2	5.5	.921	None	
SBR72-11583	464.6-465.6	78248	9.3	2.5	85.6	2.6	24.8	6.0	.899	None	
SBR72-11584	465.6-467.0	78249	4.2	2.0	92.0	1.8	11.0	4.8	.913	None	
SBR72-11585	467.0-468.0	78250	7.9	1.9	87.8	2.4	20.9	4.6	.903	None	
SBR72-11586	468.0-469.4	78251	7.0	1.3	89.3	2.4	18.3	3.1	.910	None	Top of Wilkins Peak
SBR72-11587	469.4-470.8	78252	7.6	1.6	88.5	2.3	19.9	3.8	.914	None	
SBR72-11588	470.8-471.8	78253	6.6	1.2	90.0	2.2	17.4	2.9	.912	None	
SBR72-11589	471.8-472.8	78254	5.5	1.9	91.0	1.6	14.3	4.6	.921	None	
SBR72-11590	472.8-473.8	78255	3.4	.8	94.8	1.0	9.0	1.9	.917	None	
SBR72-11591	473.8-474.8	78256	1.5	1.5	96.4	.6	3.9a	3.6		None	
SBR72-11592	474.8-476.0	78257	11.0	1.8	84.2	3.0	28.8	4.3	.914	None	
SBR72-11593	476.0-477.1	78258	11.5	2.5	83.0	3.0	30.4	6.0	.911	None	
SBR72-11594	477.1-478.0	78259	5.9	2.6	89.7	1.8	15.4	6.2	.916	None	
SBR72-11595	478.0-479.3	78260	1.3	3.2	94.7	.8	3.3a	7.7		None	
SBR72-11596	479.3-480.5	78261	1.3	1.6	96.4	.7	3.4a	3.7		None	
SBR72-11597	480.5-481.6	78286	2.5	1.0	95.7	.8	6.7	2.4	.914	None	
SBR72-11598	481.6-483.8	78287	1.3	1.9	95.6	1.2	3.4a	4.6		None	Rubble
SBR72-11599	502.0-503.4	78288	.5	.9	98.1	.5	1.4a	2.2		None	
SBR72-11600	503.4-504.8	78289	.8	1.0	97.7	.6	2.0a	2.4		None	
SBR72-11601	504.8-506.5	78290	1.6	1.0	96.7	.7	4.3a	2.4		None	
SBR72-11602	506.5-508.0	78291	3.4	1.6	93.6	1.4	9.1	3.8	.912	None	
SBR72-11603	508.0-509.1	78268	5.0	1.9	91.0	2.1	13.2	4.6	.913	None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

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Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 feet

Sample number		Run No.	Yield of product				Specific gravity		Properties of spent shale		Remarks
			Weight percent		Gal per ton		of oil at 60°/60° F		Tendency to		
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil ¹ /	Water	coke		
SBR72-11604	509.1-510.6	78269	8.2	3.0	85.8	3.0	21.6	7.2	0.912	None	
SBR72-11605	510.6-511.6	78270	2.7	1.8	94.4	1.1	7.1	4.3	.915	None	
SBR72-11606	511.6-512.2	78271	.1	4.1	95.5	.4	.1a	9.7		None	
SBR72-11607	512.2-514.1	78272	1.7	.7	96.3	1.3	4.5a	1.7		None	
SBR72-11608	514.1-515.1	78273	2.9	1.1	94.5	1.5	7.5	2.6	.916	None	
SBR72-11609	515.1-516.9	78274	4.8	1.7	92.0	1.5	12.6	4.1	.918	None	
SBR72-11610	516.9-517.9	78275	9.1	2.2	85.1	3.6	23.9	5.3	.910	None	
SBR72-11611	517.9-518.9	78276	6.7	1.9	88.6	2.8	17.6	4.6	.912	None	
SBR72-11612	518.9-520.0	78277	4.4	1.9	92.1	1.6	11.7	4.6	.905	None	
SBR72-11613	520.0-521.0	78278	6.2	1.2	90.9	1.7	16.4	2.9	.902	None	
SBR72-11614	521.0-522.0	78279	5.7	1.6	91.1	1.6	15.2	3.8	.902	None	
SBR72-11615	522.0-523.2	78280	2.9	1.4	94.4	1.3	7.6	3.4	.913	None	
SBR72-11616	523.2-524.4	78281	2.9	.7	95.1	1.3	7.5	1.7	.914	None	
SBR72-11617	524.4-525.6	78282	3.3	.7	94.8	1.2	8.7	1.7	.905	None	
SBR72-11618	525.6-526.6	78283	7.2	1.2	89.7	1.9	19.1	2.9	.902	None	
SBR72-11619	526.6-528.3	78284	3.3	1.2	94.4	1.1	8.9	2.9	.903	None	
SBR72-11620	528.3-529.8	78285	20.3	2.7	71.9	5.1	54.1	6.5	.901	Moderate	
SBR72-11621	529.8-531.2	78292	19.7	1.9	73.1	5.3	51.9	4.6	.910	Moderate	
SBR72-11622	531.2-531.9	78293	5.8	.8	91.4	2.0	15.4	1.8	.901	None	
SBR72-11623	531.9-532.9	78294	2.3	.9	95.7	1.1	6.2	2.2	.901	None	
SBR72-11624	532.9-534.0	78295	5.3	.7	92.3	1.7	13.8	1.8	.914	None	
SBR72-11625	534.0-535.0	78296	5.1	.8	92.5	1.6	13.4	1.9	.909	None	
SBR72-11626	535.0-536.3	78297	3.4	.6	94.8	1.2	9.0	1.3	.908	None	
SBR72-11627	536.3-538.0	78298	1.6	.4	97.2	.8	4.3a	.8		None	
SBR72-11628	538.0-539.0	78299	2.9	.3	95.5	1.3	7.6	.8	.905	None	
SBR72-11629	539.0-539.5	78300	7.2	.7	89.8	2.3	19.0	1.8	.908	None	
SBR72-11630	539.5-540.1	78301	12.5	1.1	82.5	3.9	33.6	2.6	.890	None	
SBR72-11631	540.1-541.1	78302	14.0	1.3	80.9	3.8	37.8	3.1	.889	None	
SBR72-11632	541.1-542.1	78303	4.9	.6	93.0	1.5	13.1	1.4	.891	None	
SBR72-11633	542.1-543.1	78304	3.4	.4	95.1	1.1	9.1	1.0	.903	None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

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Surface elevation 6,353 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 ^{1/}	Water		
SBR72-11634	543.1-544.4	78305	9.1	0.8	87.8	2.3	24.4	1.9	0.890	None	
SBR72-11635	544.4-545.7	78306	14.1	1.5	81.3	3.1	37.8	3.6	.890	None	
SBR72-11636	545.7-547.0	78307	7.3	.7	89.9	2.1	19.3	1.8	.902	None	
SBR72-11637	547.0-548.9	78308	2.2	.5	96.3	1.0	5.7	1.2	.909	None	
SBR72-11638	548.9-549.7	78309	3.1	.5	95.4	1.0	8.3	1.1	.906	None	
SBR72-11639	549.7-550.8	78310	14.4	1.6	80.9	3.1	38.7	3.8	.893	Moderate	
SBR72-11640	550.8-551.9	78311	13.4	1.5	81.3	3.8	36.2	3.6	.891	Moderate	
SBR72-11641	551.9-553.8	78312	1.8	.5	96.4	1.3	4.7a	1.2		None	
SBR72-11642	553.8-555.0	78313	14.8	1.9	79.9	3.4	39.4	4.6	.900	Moderate	
SBR72-11643	555.0-556.1	78314	12.6	1.3	83.6	2.5	33.5	3.1	.897	Slight	
SBR72-11644	556.1-556.6	78315	4.4	.7	93.1	1.8	11.5	1.8	.911	None	
SBR72-11645	556.6-557.7	78316	1.3	.5	97.2	1.0	3.3a	1.3		None	
SBR72-11646	557.7-559.0	78317	2.3	.5	96.1	1.1	5.9	1.2	.918	None	
SBR72-11647	559.0-560.5	78318	1.1	.6	97.4	.9	2.9a	1.3		None	
SBR72-11648	560.5-561.9	78319	3.5	.6	94.3	1.6	9.3	1.3	.913	None	
SBR72-11649	561.9-563.0	78320	17.8	1.7	76.2	4.3	47.5	4.1	.898	Moderate	
SBR72-11650	563.0-564.1	78321	19.7	2.2	73.1	5.0	52.7	5.3	.894	Moderate	
SBR72-11651	564.1-565.1	78322	7.4	4.3	86.1	2.2	19.7	10.3	.897	Slight	
SBR72-11652	565.1-566.5	78323	1.9	.4	96.4	1.3	5.0	.8	.910	None	
SBR72-11653	566.5-567.6	78324	2.1	.5	96.0	1.4	5.5	1.2	.909	None	
SBR72-11654	567.6-568.6	78325	4.6	.9	92.6	1.9	12.3	2.2	.905	None	
SBR72-11655	568.6-570.0	78326	10.5	1.8	84.9	2.8	27.9	4.3	.899	None	
SBR72-11656	570.0-571.4	78327	10.7	1.8	84.2	3.3	28.5	4.3	.901	None	
SBR72-11657	571.4-572.4	78328	7.5	1.9	85.7	4.9	19.8	4.4	.911	None	
SBR72-11658	572.4-573.9	78329	2.7	.8	94.4	2.1	7.2	1.9	.914	None	
SBR72-11659	573.9-575.7	78330	17.2	2.1	76.6	4.1	45.6	5.0	.903	Slight	
SBR72-11660	575.7-576.4	78331	7.8	1.4	88.0	2.8	20.6	3.4	.906	None	
SBR72-11661	576.4-577.4	78332	2.5	1.2	95.2	1.1	6.6	2.9	.910	None	
SBR72-11662	577.4-578.5	78333	8.8	1.2	87.3	2.7	23.3	2.9	.907	Slight	
SBR72-11663	578.5-579.8	78334	11.3	1.5	84.4	2.8	29.7	3.6	.907	None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

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Surface elevation 6,353 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	Spent shale	Gas + loss	Oil ¹ / Water	Water				
SBR72-11664	580.0-580.5	78335	8.6	1.3	87.4	2.7	23.0	3.1	.898	None	
SBR72-11665	580.5-581.5	78336	3.8	.9	93.3	2.0	10.3	2.2	.899	None	
SBR72-11666	581.5-582.5	78337	1.9	.7	96.5	.9	5.0	1.7	.897	None	
SBR72-11667	582.5-584.2	78338	6.0	1.4	90.8	1.8	15.7	3.4	.912	None	
SBR72-11668	584.2-585.2	78339	1.2	1.3	96.4	1.1	3.1a	3.1		None	Main Tuff
SBR72-11669	585.2-586.2	78340	4.7	1.0	92.2	2.1	12.2	2.4	.918	None	
SBR72-11670	586.2-587.2	78341	1.9	.3	96.2	1.5	5.0	.7	.914	None	
SBR72-11671	587.2-588.3	78342	1.9	.6	96.0	1.5	5.1	1.4	.914	None	
SBR72-11672	588.3-589.3	78343	3.6	.5	94.0	1.9	9.5	1.2	.907	None	
SBR72-11673	589.3-590.7	78344	5.7	.7	91.4	2.2	15.0	1.7	.903	None	
SBR72-11674	590.7-591.9	78345	3.8	.5	93.4	2.3	10.1	1.2	.906	None	
SBR72-11675	591.9-592.9	78346	2.9	.8	94.9	1.4	7.7	1.8	.911	None	
SBR72-11676	592.9-594.0	78347	3.8	.9	93.5	1.8	10.0	2.2	.916	None	
SBR72-11677	594.0-595.0	78348	3.4	1.1	93.7	1.8	9.0	2.6	.918	None	
SBR72-11678	595.0-596.5	78349	2.0	.6	95.8	1.6	5.2	1.4	.908	None	
SBR72-11679	596.5-598.0	78350	3.4	1.5	93.3	1.8	9.0	3.6	.918	None	
SBR72-11680	598.0-599.5	78351	2.0	1.2	95.5	1.3	5.3	2.8	.914	None	
SBR72-11681	599.5-600.4	78352	2.4	.9	95.5	1.2	6.2	2.3	.917	None	
SBR72-11682	600.4-601.8	78353	2.3	.8	95.7	1.2	6.0	1.9	.914	None	
SBR72-11683	601.8-602.8	78354	4.1	.7	93.8	1.4	10.9	1.7	.891	None	
SBR72-11684	602.8-603.8	78355	7.6	1.0	89.0	2.4	20.4	2.4	.890	None	
SBR72-11685	603.8-604.8	78356	8.8	1.5	86.9	2.8	23.8	3.6	.890	None	
SBR72-11686	604.8-606.0	78357	7.9	1.7	87.5	2.9	20.9	4.1	.901	None	
SBR72-11687	606.0-607.1	78358	5.4	1.6	90.8	2.2	14.4	3.8	.903	None	
SBR72-11688	607.1-608.9	78359	1.8	1.0	95.8	1.4	4.7a	2.4		None	
SBR72-11689	608.9-610.0	78360	2.0	1.0	97.7	1.3	5.2	2.4	.916	None	
SBR72-11690	610.0-611.0	78361	3.3	1.0	94.2	1.5	8.7	2.4	.908	None	
SBR72-11691	611.0-612.1	78362	6.3	1.2	90.4	2.1	16.8	2.9	.895	None	
SBR72-11692	612.1-613.5	78363	9.1	1.7	86.3	2.9	24.2	4.1	.899	None	
SBR72-11693	613.5-614.8	78364	5.6	.8	91.0	2.6	14.8	2.0	.905	None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ¹ /	Water	coke		
SBR72-11694	614.8-615.8	78365	4.6	0.8	92.5	2.1	12.0	1.9	0.912	None
SBR72-11695	615.8-617.0	78366	3.5	.5	94.7	1.3	9.1	1.2	.913	None
SBR72-11696	617.0-618.0	78367	3.9	.7	94.0	1.4	10.3	1.6	.914	None
SBR72-11697	618.0-619.1	78368	4.2	.7	93.4	1.7	11.1	1.6	.911	None
SBR72-11698	619.1-620.2	78369	2.7	.6	95.3	1.4	7.1	1.4	.915	None
SBR72-11699	620.2-621.2	78370	2.2	.5	96.0	1.3	5.8	1.2	.915	None
SBR72-11700	621.2-622.9	78371	1.2	.4	97.1	1.3	3.2a	1.0		None
SBR72-11701	622.9-624.0	78372	1.3	.5	96.6	1.6	3.5a	1.1		None
SBR72-11702	624.0-625.2	78373	1.9	.6	96.1	1.4	5.1a	1.4		None
SBR72-11703	625.2-626.8	78374	5.6	1.8	91.3	1.3	14.9	4.3	.900	None
SBR72-11704	626.8-627.8	78375	11.2	1.8	84.5	2.5	29.9	4.3	.898	None
SBR72-11705	627.8-628.8	78376	12.8	1.3	81.9	4.0	34.2	3.1	.895	None
SBR72-11706	628.8-629.9	78634	7.0	5.0	85.8	2.2	18.6	12.0	.901	None
SBR72-11707	629.9-631.1	78635	6.5	3.3	87.7	2.5	17.2	7.9	.902	None
SBR72-11708	631.1-632.1	78379	2.6	.8	94.8	1.8	7.0	1.8	.909	None
SBR72-11709	632.1-633.1	78380	2.6	.6	95.9	1.5	5.1a	1.4		None
SBR72-11710	633.1-633.6	78381	6.8	.7	90.0	2.5	17.9	1.7	.910	None
SBR72-11711	633.6-635.0	78382	8.1	1.1	88.2	2.6	21.5	2.6	.908	None
SBR72-11712	635.0-636.1	78383	12.5	1.6	82.8	3.1	32.8	3.8	.911	None
SBR72-11713	636.1-637.1	78384	10.7	2.3	83.7	3.3	28.3	5.5	.910	None
SBR72-11714	637.1-638.0	78385	2.6	.9	95.1	1.4	6.9	2.0	.913	None
SBR72-11715	638.0-639.7	78386	1.5	.4	97.2	.9	4.0a	1.0		None
SBR72-11716	639.7-640.7	78387	13.2	1.2	82.2	3.4	34.8	2.9	.907	None
SBR72-11717	640.7-641.8	78388	14.7	1.8	74.2	4.3	38.8	4.3	.905	None
SBR72-11718	641.8-642.8	78389	12.7	1.8	81.5	4.0	33.4	4.3	.909	None
SBR72-11719	642.8-643.8	78390	15.8	2.6	77.8	3.8	41.6	6.2	.909	None
SBR72-11720	643.8-645.0	78391	3.2	.9	94.2	1.7	8.2	2.3	.921	None
SBR72-11721	645.0-646.5	78392	1.3	1.1	96.7	.9	3.5a	2.6		None
SBR72-11722	646.5-647.5	78393	7.8	1.6	87.9	2.7	20.6	3.8	.911	None
SBR72-11723	647.5-648.6	78394	13.1	1.3	82.1	3.5	34.8	3.1	.903	None

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines ' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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		Spent shale			Oil ¹ /	Water
SBR72-11724	648.6-649.6	78395	14.1	1.3	80.9	3.7	37.2	3.1	0.906	None
SBR72-11725	649.6-650.6	78396	14.0	1.5	80.4	4.1	36.9	3.6	.906	None
SBR72-11726	650.6-651.7	78398	6.8	.8	89.3	3.1	18.0	1.8	.911	None
SBR73- 451	651.7-652.7	78817	2.6	1.0	94.7	1.7	6.9	2.3	.915	None
SBR73- 452	652.7-653.9	78818	2.2	.7	96.2	.9	5.8	1.7	.916	None
SBR73- 453	653.9-654.9	78819	14.7	2.2	79.2	3.9	39.0	5.3	.906	None
SBR73- 454	654.9-655.9	78820	17.4	1.7	78.4	2.5	45.9	4.1	.907	None
SBR73- 455	655.9-656.9	78821	11.3	1.7	86.2	.8	29.9	4.1	.906	None
SBR73- 456	656.9-657.5	78822	6.5	1.3	92.0	.2	17.3	3.1	.908	None
SBR73- 457	657.5-658.5	78823	5.1	1.1	93.5	.3	13.4	2.6	.916	None
SBR73- 458	658.5-659.7	78967	1.2	.6	97.1	1.1	3.0a	1.6		None
SBR73- 459	659.7-660.9	78968	.9	.4	97.9	.8	2.2a	1.1		None
SBR73- 460	660.9-661.4	78969	8.7	.8	88.2	2.3	22.8	1.9	.911	None
SBR73- 461	661.4-662.4	78827	14.4	1.2	83.2	1.2	38.0	2.9	.909	None
SBR73- 462	662.4-663.0	78828	10.0	.9	88.5	.6	26.4	2.2	.911	None
SBR73- 463	663.0-664.2	78868	7.3	1.1	88.5	3.1	19.1	2.6	.913	None
SBR73- 464	664.2-665.2	78970	1.0	.6	97.5	.9	2.6a	1.6		None
SBR73- 465	665.2-666.4	78994	.3	.8	98.4	.5	.8a	2.0		None
SBR73- 466	666.4-667.5	78832	1.0	.7	77.4	.9	2.6a	1.8		None
SBR73- 467	667.5-668.7	78833	.9	.4	97.7	1.0	2.3a	1.1		None
SBR73- 468	668.7-669.9	78834	.5	.7	98.2	.6	1.3a	1.8		None
SBR73- 469	669.9-670.9	78835	1.1	.5	97.6	.8	2.9a	1.2		None
SBR73- 470	670.9-672.1	78836	8.7	1.2	87.5	2.6	22.8	2.8	.917	None
SBR73- 471	672.1-673.5	78837	1.2	.9	96.9	1.0	3.2a	2.0		None
SBR73- 472	673.5-674.9	78838	2.0	.8	96.3	.9	5.1a	2.0		None
SBR72- 473	674.9-675.7	78839	8.0	1.2	88.7	2.1	21.2	2.9	.899	None
SBR73- 474	678.9-680.4	78840	8.1	1.8	87.3	2.8	21.4	4.3	.902	None
SBR73- 475	680.4-682.1	78841	5.6	1.7	90.4	2.3	14.8	4.1	.907	None
SBR73- 476	682.1-683.1	78842	1.1	1.4	96.6	.9	2.8a	3.4		None
SBR73- 477	683.1-683.7	78843	8.4	1.4	87.3	2.9	21.9	3.4	.912	None

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ₁ /	Water			
SBR73-478	683.7-684.6	78844	9.8	1.0	86.1	3.1	25.6	2.4	0.915	None	
SBR73-479	684.6-685.3	78845	8.5	1.2	87.5	2.8	22.4	2.9	.911	None	
SBR73-480	685.3-686.3	78846	5.9	1.4	90.5	2.2	15.5	3.4	.913	None	
SBR73-481	686.3-687.3	78847	3.6	1.6	92.8	2.0	9.4	3.8	.916	None	
SBR73-482	687.3-689.2	78848	.8	1.2	96.7	1.3	2.1a	3.0		None	
SBR73-483	689.2-690.2	78849	1.1	.5	97.3	1.1	2.8a	1.3		None	
SBR73-484	690.2-691.2	78850	.4	1.0	97.9	.7	.9a	2.4		None	
SBR73-485	691.2-692.2	78851	3.3	.9	93.7	2.1	8.7	2.2	.922	None	
SBR73-486	692.2-693.8	78852	.0	2.3	96.5	1.2	Trace	5.5		None	
SBR73-487	693.8-694.8	78853	.1	6.6	92.4	.9	.1a	15.8		None	
SBR73-488	694.8-695.8	78854	6.5	1.1	90.2	2.2	17.1	2.6	.913	None	
SBR73-489	695.8-696.8	78856	5.4	.7	91.3	2.6	13.9	1.8	.921	None	
SBR73-490	696.8-698.2	78857	6.9	1.4	88.7	3.0	18.0	3.4	.918	None	
SBR73-491	698.2-699.0	78858	4.2	1.1	92.8	1.9	10.9	2.6	.917	None	
SBR73-492	699.0-700.0	78859	2.7	.9	95.0	1.4	7.1	2.3	.908	None	
SBR73-493	700.0-700.9	78860	11.8	1.7	83.6	2.9	31.4	4.1	.901	None	
SBR73-494	700.9-701.9	78861	9.3	1.5	86.6	2.6	24.8	3.6	.898	None	
SBR73-495	701.9-702.9	78862	8.2	1.1	88.3	2.4	21.7	2.6	.904	None	
SBR73-496	702.9-703.4	78863	5.7	1.0	91.0	2.3	15.1	2.4	.914	None	
SBR73-497	703.4-704.5	78864	2.2	1.3	94.8	1.7	5.8	3.1	.914	None	
SBR73-498	704.5-706.0	78865	1.8	.9	95.6	1.7	4.6	2.3	.921	None	
SBR73-499	706.0-707.9	78866	.8	1.3	97.2	.7	2.0a	3.1		None	
SBR73-500	707.9-708.9	78867	6.2	1.3	90.7	1.8	16.2	3.1	.908	None	
SBR73-501	708.9-709.9	78869	3.9	1.2	93.0	1.9	10.4	2.9	.906	None	
SBR73-502	709.9-710.9	78870	1.5	1.5	95.8	1.2	3.9a	3.6		None	
SBR73-503	710.9-711.9	78871	2.8	1.6	93.8	1.8	7.3	3.8	.915	None	
SBR73-504	711.9-713.2	78872	.7	1.5	96.8	1.0	1.8a	3.6		None	
SBR73-505	713.2-714.2	78873	.8	4.0	94.0	1.2	2.0a	9.6		None	
SBR73-506	714.2-715.8	78874	.1	8.4	90.5	1.0	.1a	20.2		None	
SBR73-507	715.8-716.8	78875	.1	4.4	94.2	1.3	.4a	10.5		None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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					
		Oil	Water	Spent shale	Gas + loss	Oil ¹ /	Water			
Laramie	Their									
SBR73-508	716.8-717.8	78876	0.0	1.5	98.0	0.5	Trace	3.5	None	
SBR73-509	717.8-718.8	78877	.0	.7	98.5	.8	Trace	1.7	None	
SBR73-510	718.8-720.0	78878	6.6	1.7	89.1	2.6	17.5	4.1	0.901	
SBR73-511	720.0-721.3	78879	7.1	2.3	88.0	2.6	18.6	5.5	.906	
SBR73-512	721.3-722.3	78880	1.6	1.4	95.8	1.2	4.2a	3.5	None	
SBR73-513	722.3-723.3	78881	4.8	2.2	91.1	1.9	12.6	5.3	.911	
SBR73-514	723.3-724.6	78882	4.7	2.0	91.6	1.7	12.3	4.8	.912	
SBR73-515	724.6-725.6	78883	4.5	2.3	91.3	1.9	11.9	5.5	.913	
SBR73-516	725.6-726.6	78884	4.1	2.2	91.9	1.8	10.7	5.3	.917	
SBR73-517	726.6-727.6	78885	4.5	2.5	91.1	1.9	11.7	6.0	.915	
SBR73-518	727.6-729.3	78886	1.3	1.2	96.6	.9	3.4a	2.9	None	
SBR73-519	729.3-730.4	78887	2.1	1.7	95.2	1.0	5.6	4.1	.911	
SBR73-520	730.4-731.1	78888	13.5	2.0	81.2	3.3	35.4	4.8	.912	
SBR73-521	731.1-732.2	78889	1.6	1.4	96.1	.9	4.1a	3.4	None	
SBR73-522	732.2-733.4	78890	1.4	1.2	96.7	.7	3.6a	2.9	None	
SBR73-523	733.4-734.3	78891	13.4	2.8	80.7	3.1	35.3	6.7	.911	
SBR73-524	734.3-735.1	78892	5.2	2.0	91.0	1.8	13.7	4.8	.914	
SBR73-525	735.1-736.9	78893	.1	1.6	98.0	.3	.3a	3.8	None	
SBR73-526	736.9-737.6	78894	4.5	2.8	91.3	1.4	11.7	6.7	.921	
SBR73-527	737.6-738.5	78895	3.7	1.8	93.1	1.4	9.6	4.3	.913	
SBR73-528	738.5-739.4	78896	.6	2.4	96.3	.7	1.6a	5.8	None	
SBR73-529	739.4-740.5	78897	.1	1.4	98.2	.3	.3a	3.4	None	
SBR73-530	740.5-741.6	78898	.1	1.2	98.4	.3	.2a	2.9	None	
SBR73-531	741.6-742.7	78899	.0	1.2	98.2	.6	.1a	2.9	None	
SBR73-532	742.7-743.8	78900	15.4	1.7	79.0	3.9	40.6	4.1	.912	
SBR73-533	743.8-744.4	78901	6.8	1.8	89.4	2.0	17.7	4.3	.913	
SBR73-534	744.4-746.2	78902	3.2	1.2	94.4	1.2	8.4	2.9	.916	
SBR73-535	746.2-747.2	78903	4.2	1.1	93.3	1.4	11.0	2.6	.916	
SBR73-536	747.2-748.9	78904	.9	.7	97.4	1.0	2.4a	1.6	None	
SBR73-537	748.9-750.5	78905	4.3	1.5	92.5	1.7	11.2	3.6	.918	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ¹ /	Water	coke	
SBR73-538	750.5-751.1	78906	0.5	1.5	97.4	0.6	1.3a	3.6	None	
SBR73-539	751.1-752.6	78907	.1	1.2	98.3	.4	.1a	2.9	None	
SBR73-540	752.6-754.1	78908	.0	1.4	98.1	.5	.1a	3.4	None	
SBR73-541	754.1-755.4	78909	.1	1.2	98.4	.3	.1a	2.9	None	
SBR73-542	755.4-756.4	78910	3.2	1.6	93.8	1.4	8.4	4.0	0.903	
SBR73-543	756.4-758.0	78911	.0	.6	99.1	.3	Trace	1.5	None	
SBR73-544	758.0-760.0	78912	.0	.6	99.0	.4	Trace	1.5	None	
SBR73-545	760.0-764.0	78913	.0	.9	98.6	.5	Trace	2.3	None	
SBR73-546	764.0-767.6	78914	.0	.7	98.9	.4	No Oil	1.7	None	
SBR73-547	767.6-770.0	78915	.0	1.3	98.6	.1	Trace	3.0	None	
SBR73-548	770.0-772.0	78916	.0	1.1	98.5	.4	No Oil	2.8	None	
SBR73-549	772.0-774.0	78917	.0	1.5	98.0	.5	No Oil	3.7	None	
SBR73-550	774.0-777.0	78918	.0	1.2	98.2	.6	No Oil	3.0	None	
SBR73-551	777.0-781.0	78919	.0	1.0	98.6	.4	No Oil	2.4	None	
SBR73-552	781.0-782.2	78920	.0	1.3	98.4	.3	Trace	3.0	None	
SBR73-553	782.2-783.2	78921	2.9	1.6	94.3	1.2	7.5	3.8	.916	
SBR73-554	783.2-784.5	78922	.4	.9	97.2	.5	1.0a	4.6	None	
SBR73-555	784.5-785.8	78923	.2	1.7	97.5	.6	.4a	4.1	None	
SBR73-556	785.8-787.3	78924	2.1	3.5	93.1	1.3	5.6	8.4	.905	
SBR73-557	787.3-788.4	78925	.7	.5	95.0	3.8	1.7a	1.2	None	
SBR73-558	788.4-789.9	78926	1.8	1.8	95.1	1.3	4.7a	4.3	None	
SBR73-559	789.9-790.9	78927	4.1	2.2	92.2	1.5	10.8	5.3	.904	
SBR73-560	790.9-791.9	78928	1.8	1.9	95.3	1.0	4.7a	4.6	None	
SBR73-561	791.9-792.9	78929	1.3	2.4	95.7	.6	3.4a	5.8	None	
SBR73-562	792.9-793.8	78930	7.0	2.4	88.7	1.9	18.0	5.8	.897	
SBR73-563	793.8-794.9	78931	1.8	1.7	95.5	1.0	4.6a	4.1	None	
SBR73-564	794.9-795.4	78932	2.6	2.0	94.4	1.0	6.8	4.8	.915	
SBR73-565	796.0-797.0	78933	3.3	1.8	93.5	1.4	8.7	4.3	.917	
SBR73-566	797.0-798.4	78934	.9	1.9	96.6	.6	2.3a	4.6	None	
SBR73-567	798.4-800.0	78935	1.7	1.4	96.2	.7	4.4a	3.4	None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ¹ / _{Water}					
SBR73-568	800.0-801.5	78936	3.5	2.3	92.7	1.5	9.2	5.4	0.921	None	
SBR73-569	801.5-802.5	78937	3.2	2.3	93.3	1.2	8.4	5.5	.920	None	
SBR73-570	802.5-803.5	78938	10.3	3.0	84.1	2.6	27.3	7.2	.906	None	
SBR73-571	803.5-804.5	78939	.8	1.8	96.4	1.0	2.1a	4.3		None	
SBR73-572	804.5-805.4	78940	12.2	2.2	83.1	2.5	32.0	5.3	.913	None	
SBR73-573	805.4-806.3	78941	1.5	2.3	95.4	.8	3.9a	5.5		None	
SBR73-574	806.3-807.0	78942	8.5	1.8	87.8	1.9	22.5	4.3	.904	None	
SBR73-575	807.0-808.0	78943	1.6	1.3	96.0	1.1	4.0a	3.1		None	
SBR73-576	808.0-809.0	78944	.3	1.1	97.8	.8	.8a	2.8		None	
SBR73-577	809.0-809.9	78945	2.3	1.8	95.0	.9	6.1	4.3	.911	None	
SBR73-578	809.9-811.1	78946	8.5	2.3	86.9	2.3	22.3	5.5	.910	None	
SBR73-579	811.1-812.6	78947	2.1	2.0	94.7	1.2	5.4	4.8	.909	None	
SBR73-580	812.6-813.6	78948	2.4	2.2	93.9	1.5	6.4	5.3	.912	None	
SBR73-581	814.1-815.0	78949	2.9	2.7	93.4	1.0	7.7	6.5	.909	None	
SBR73-582	815.0-816.7	78950	6.2	2.3	89.9	1.6	16.4	5.5	.907	None	
SBR73-583	816.7-818.0	78951	.9	1.5	96.9	.7	2.3a	3.7		None	
SBR73-584	818.0-818.9	78952	4.7	2.1	91.8	1.4	12.4	5.0	.909	None	
SBR73-585	818.9-819.4	78953	3.0	1.4	94.2	1.4	7.7	3.4	.916	None	
SBR73-586	819.4-821.1	78954	.8	2.6	95.8	.8	2.0a	6.2		None	
SBR73-587	821.1-821.6	78955	7.2	2.2	88.7	1.9	18.8	5.3	.919	None	
SBR73-588	821.6-822.3	78956	2.8	1.5	94.5	1.2	7.4	3.6	.915	None	
SBR73-589	822.3-824.1	78957	.1	1.9	97.5	.5	.3a	4.7		None	
SBR73-590	824.1-825.1	78958	6.9	2.0	89.1	2.0	18.1	4.8	.907	None	
SBR73-591	825.1-826.7	78959	1.9	.9	95.9	1.3	4.9	2.3	.911	None	
SBR73-592	826.7-827.8	78960	6.0	1.8	90.1	2.1	15.8	4.3	.914	None	
SBR73-593	827.8-828.9	78961	3.7	2.3	92.6	1.4	9.8	5.5	.914	None	
SBR73-594	828.9-830.3	78962	7.8	2.1	88.3	1.8	20.5	5.0	.910	None	
SBR73-595	830.3-831.0	78963	5.2	2.2	91.3	1.3	13.7	5.3	.902	None	
SBR73-596	831.0-832.0	78964	.1	2.2	97.3	.4	.3a	5.3		None	
SBR73-597	832.0-833.2	78965	.0	2.5	97.3	.2	No Oil	6.0		None	

See footnote at end of table.

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from U. S. Bureau of Mines' Wyoming Corehole No. 6 (con.)

Surface elevation 6,353 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 ^{1/} /	Water	coke	
SBR73-593	833.2-834.0	78966	0.1	1.1	98.6	0.2	0.1a	2.7	None	
SBR73-190	834.0-839.0	78518	.9	1.2	97.0	.9	2.3a	3.0	None	
SBR73-191	839.0-844.0						Trace			
SBR73-192-3	844.0-854.0						No Oil			
SBR73-194-6	854.0-864.0						Trace			
SBR73-197	869.0-874.0	78519	.1	.7	98.9	.3	.3a	1.6	None	

^{1/} "a"--indicates specific gravity estimated as 0.92. Oil yields were estimated by a rapid test-tube method: "No oil," "Trace."

Drill cutting and core samples received September 28, 1972; Assays made on air-dried samples

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January 29, 1973