

201' of 15
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OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line, 2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 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	Water		coke
SBR59-6236	50 -52	64073	1.0	1.0	97.6	0.4	2.5a	2.4		None		
SBR59-6237	52 -54	64074	1.0	1.0	97.4	.6	2.6a	2.4		None		
SBR59-6238	54 -56	64075	1.0	1.0	97.2	.8	2.7a	2.3		None		
SBR59-6239	56 -58	64076	.9	1.1	97.4	.6	2.2a	2.6		None		
SBR59-6240	58 -60	64077	1.2	1.4	97.0	.4	3.1a	3.4		None		
SBR59-6241	60 -62.6	64078	1.6	1.4	96.8	.2	4.0a	3.4		None		
SBR59-6242	62.6-64.0	64079	7.8	1.4	89.2	1.6	20.2	3.4	0.927	None		
SBR59-6243	64.0-66.0	64080	2.5	1.2	95.8	.5	6.4	2.8	.939	None		
SBR59-6244	66.0-67.0	64082	2.0	1.0	96.5	.5	5.1	2.4	.942	None		
SBR59-6245	67.0-70.0	64083	1.1	1.3	97.1	.5	2.9a	3.1		None		
SBR59-6246	70.0-72.4	64084	1.4	1.4	96.4	.8	3.6a	3.5		None		
SBR59-6247	72.4-74.0	64081	.0	2.6	97.0	.4	.1a	6.2		None		
SBR59-6248	74.0-76.0	64085	1.5	.9	97.1	.5	4.0a	2.0		None		
SBR59-6249	76.0-77.6	64086	.8	.9	98.0	.3	2.0a	2.2		None		
SBR59-6250	77.6-80.0	64087	2.6	.7	96.1	.6	6.8	1.6	.935	None		
SBR59-6251	80.0-82.0	64088	2.2	1.1	96.0	.7	5.6	2.6	.937	None		
SBR59-6252	82.0-84.0	64089	2.4	1.2	95.8	.6	6.0	2.9	.940	None		
SBR59-6253	84.0-86.0	64090	2.1	.8	96.3	.8	5.3	1.9	.932	None		
SBR59-6254	86.0-87.0	64091	8.8	.6	88.6	2.0	22.8	1.4	.924	Slight		
SBR59-6255	87.0-90.0	64092	3.3	.3	95.8	.6	8.4	.7	.932	None		
SBR59-6256	90.0-92.0	64093	2.3	.5	96.7	.5	6.0	1.1	.940	None		
SBR59-6257	92.0-94.0	64094	2.6	.3	96.2	.9	6.7	.7	.942	None		
SBR59-6258	94.0-96.0	64095	3.1	.4	95.7	.8	7.7	1.0	.948	None		
SBR59-6259	96.0-97.8	64096	3.0	.5	95.8	.7	7.5	1.3	.949	None		
SBR59-6260	97.8-99.0	64097	3.4	.6	95.4	.6	8.7	1.3	.944	None		
SBR59-6261	99.0-100.0	64098	3.4	1.0	94.7	.9	8.4	2.4	.953	None		
SBR59-6262	100.0-102.0	64099	2.8	.5	95.9	.8	7.1	1.2	.945	None		
SBR59-6263	102.0-104.0	64100	3.1	.8	95.4	.7	7.8	1.9	.948	None		
SBR59-6264	104.0-106.0	64101	3.8	.9	94.2	1.1	9.7	2.0	.946	None		
SBR59-6265	106.0-107.0	64102	3.2	1.0	95.0	.8	8.1	2.4	.946	None		

a - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 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	Water	
SBR59-6266	107.0-108.0	64103	4.2	1.0	93.5	1.3	10.7	2.3	.953	None	
SBR59-6267	108.0-109.0	64104	4.7	.8	93.2	1.3	11.8	2.0	.948	None	
SBR59-6268	109.0-110.0	64105	4.8	.9	93.1	1.2	12.2	2.2	.949	None	
SBR59-6269	110.0-111.0	64106	3.2	.9	94.8	1.1	8.1	2.0	.948	None	
SBR59-6270	111.0-112.0	64107	2.7	.4	95.7	1.2	6.9	.8	.938	None	
SBR59-6271	112.0-113.0	64108	2.8	.3	95.9	1.0	7.3	.7	.932	None	
SBR59-6272	113.0-114.5	64109	2.8	.4	96.2	.6	7.0	1.0	.934	None	
SBR59-6273	114.5-116.0	64110	3.8	.6	94.9	.7	9.6	1.4	.940	None	
SBR59-6274	116.0-117.0	64111	4.9	.7	93.6	.8	12.6	1.7	.938	None	
SBR59-6275	117.0-118.0	64112	5.3	.4	93.4	.9	13.5	1.1	.931	None	
SBR59-6276	118.0-119.0	64113	2.7	.2	96.4	.7	6.9	.6	.934	None	
SBR59-6277	119.0-120.0	64114	1.5	.2	97.9	.4	4.0a	.4		None	
SBR59-6278	120.0-122.0	64115	2.7	.2	96.2	.9	7.0	.5	.934	None	
SBR59-6279	122.0-124.0	64116	3.5	.5	95.1	.9	8.8	1.3	.942	None	
SBR59-6280	124.0-126.0	64117	4.0	.5	94.2	1.3	10.1	1.3	.946	None	
SBR59-6281	126.0-128.0	64118	3.9	.5	94.0	1.6	9.9	1.2	.955	None	
SBR59-6282	128.0-130.0	64119	3.4	.5	95.1	1.0	8.6	1.2	.948	None	
SBR59-6283	130.0-132.0	64120	3.8	.6	94.5	1.1	9.7	1.3	.943	None	
SBR59-6284	132.0-134.0	64121	3.6	.4	94.8	1.2	9.1	1.1	.942	None	
SBR59-6285	134.0-136.0	64122	4.0	.6	94.3	1.1	10.3	1.4	.935	None	
SBR59-6286	136.0-138.0	64123	3.9	.3	94.0	1.8	9.9	.6	.949	None	
SBR59-6287	138.0-140.0	64124	3.1	.9	94.5	1.5	7.9	2.2	.943	None	
SBR59-6288	140.0-142.0	64125	3.4	.7	94.8	1.1	8.8	1.6	.936	None	
SBR59-6289	142.0-143.0	64126	3.0	.8	95.1	1.1	7.6	1.9	.937	None	
SBR59-6290	143.0-144.0	64127	6.4	.6	91.2	1.8	16.6	1.6	.922	None	
SBR59-6291	144.0-145.0	64128	4.2	.8	93.8	1.2	11.1	1.8	.909	None	
SBR59-6292	145.0-146.5	64129	2.8	.6	95.3	1.3	7.1	1.6	.936	None	
SBR59-6293	146.5-147.5	64130	1.7	.6	96.5	1.2	4.5a	1.3		None	
SBR59-6294	147.5-150.0	64131	4.0	.6	93.9	1.5	10.2	1.6	.937	None	
SBR59-6295	150.0-152.0	64132	3.5	.9	94.2	1.4	8.9	2.2	.944	None	

a - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assays made on air-dried samples.

Lara: Petroleum Research Center, Laramie, Wyoming, IL Iteration No. SER-2992P

January 25, 1960

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 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	Water	
SBR60- 1	152.0-154.0	64133	2.6	0.7	95.9	0.8	6.7	1.7	0.931	None	
SBR60- 2	154.0-155.0	64134	2.7	.7	95.7	.9	7.0	1.6	.935	None	
SBR60- 3	155.0-157.0	64135	2.7	.4	96.0	.9	7.0	1.0	.931	None	
SBR60- 4	157.0-158.0	64136	6.4	.8	91.4	1.4	16.4	1.9	.930	None	
SBR60- 5	158.0-160.0	64137	2.8	.6	95.8	.8	7.0	1.6	.935	None	
SBR60- 6	160.0-162.0	64138	2.4	.7	96.0	.9	6.2	1.6	.933	None	
SBR60- 7	162.0-164.0	64139	2.3	.8	95.9	1.0	5.9	2.0	.933	None	
SBR60- 8	164 -166	64140	2.3	.9	95.8	1.0	5.8	2.3	.936	None	
SBR60- 9	166 -168	64141	2.4	.9	95.9	.8	6.2	2.2	.935	None	
SBR60-10	168 -170	64142	2.7	.8	95.8	.7	7.0	1.8	.936	None	
SBR60-11	170 -172	64143	1.9	.9	96.6	.6	4.8a	2.2		None	
SBR60-12	172 -174	64144	3.0	.9	95.1	1.0	7.6	2.3	.933	None	
SBR60-13	174 -175	64145	7.7	.8	89.8	1.7	19.7	2.0	.931	None	
SBR60-14	175 -176	64146	2.6	.9	95.7	.8	6.7	2.0	.938	None	
SBR60-15	176 -178	64147	2.5	1.0	95.7	.8	6.5	2.3	.933	None	
SBR60-16	178 -180	64148	2.4	1.0	95.7	.9	6.2	2.3	.931	None	
SBR60-17	180 -181	64149	8.2	1.0	89.1	1.7	21.0	2.4	.931	None	
SBR60-18	181 -182	64150	3.6	1.2	94.3	.9	9.0	2.9	.957	None	
SBR60-19	182 -184	64151	2.9	1.4	95.2	.5	7.4	3.4	.948	None	
SBR60-20	184 -186	64152	2.9	1.1	95.2	.8	7.4	2.6	.948	None	
SBR60-21	186 -188	64153	4.1	.8	94.4	.7	10.5	1.9	.943	None	
SBR60-22	188 -190	64154	2.0	1.2	96.4	.4	5.1a	2.9		None	
SBR60-23	190 -192	64155	2.8	1.1	95.5	.6	7.0	2.6	.943	None	
SBR60-24	192 -194	64156	3.9	1.1	94.1	.9	9.8	2.6	.942	None	
SBR60-25	194 -195	64157	6.8	1.1	90.4	1.7	17.2	2.6	.941	None	
SBR60-26	195 -196	64158	2.9	.8	95.3	1.0	7.3	2.0	.946	None	
SBR60-27	196 -198	64159	2.4	.8	95.9	.9	6.1	1.9	.942	None	
SBR60-28	198 -200	64160	4.2	.6	94.2	1.0	10.7	1.6	.938	None	
SBR60-29	200 -202	64161	4.4	.7	93.9	1.0	11.2	1.8	.929	None	
SBR60-30	202 -204	64162	3.7	.7	94.7	.9	9.4	1.8	.930	None	

a - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assays made on air-dried samples.

Lar: Petroleum Research Center, Laramie, Wyoming, I stration No. SBR-2993P

January 25, 19

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 feet

Sample number			Run No.	Yield of product				Gal. per ton		Specific gravity of oil at 60°/60° F.	Properties of spent shale		Remarks
				Weight percent		Spent shale	Gas + loss				Tendency to coke		
Laramie	Their			Oil	Water					Oil	Water		
SBR60-31	204	-206	64163	3.5	0.7	94.7	1.1	8.9	1.7	0.932	None		
SBR60-32	206	-207	64164	10.3	1.3	86.0	2.4	26.4	3.1	.933	None		
SBR60-33	207	-208	64165	3.7	.9	94.4	1.0	9.4	2.0	.945	None		
SBR60-34	208	-210	64166	2.6	.7	95.9	.8	6.5	1.7	.944	None		
SBR60-35	210	-211	64167	3.0	1.3	94.9	.8	7.9a	3.0		None		
SBR60-36	211	-212	64168	5.1	.9	92.9	1.1	13.0	2.2	.939	None		
SBR60-37	212	-213	64169	6.7	1.1	90.6	1.6	17.2	2.6	.938	None		
SBR60-38	213	-214	64170	3.3	1.0	94.7	1.0	8.6	2.4	.933	None		
SBR60-39	214	-215	64171	3.6	.9	94.5	1.0	9.3	2.2	.936	None		
SBR60-40	215	-216.6	64172	4.6	1.0	93.2	1.2	11.9	2.4	.931	None		
SBR60-41	216.6	-218.0	64173	6.5	.9	91.0	1.6	16.6	2.3	.933	None		
SBR60-42	218.0	-220	64174	3.4	.9	95.0	.7	8.7	2.2	.943	None		
SBR60-43	220	-222	64175	4.4	.6	93.6	1.4	11.1	1.4	.946	None		
SBR60-44	222	-224	64176	5.0	1.0	92.9	1.1	12.9	2.4	.934	None		
SBR60-45	224	-226	64177	5.5	1.2	92.0	1.3	14.2	2.9	.933	None		
SBR60-46	226	-228	64178	5.2	.7	92.4	1.7	13.3	1.7	.940	None		
SBR60-47	228	-230	64179	4.6	.6	93.4	1.4	11.9	1.3	.938	None		
SBR60-48	230	-232	64180	5.4	.3	92.6	1.2	13.8	1.9	.936	None		
SBR60-49	232	-234	64181	4.9	.3	93.3	1.0	12.6	1.9	.926	None		
SBR60-50	234	-236	64182	4.8	1.3	92.3	1.6	12.6	3.1	.920	None		
SBR60-51	236	-238	64183	4.6	1.3	92.8	1.3	12.1	3.1	.920	None		
SBR60-52	238	-240	64184	5.0	1.0	92.8	1.2	12.9	2.4	.925	None		
SBR60-53	240	-242	64185	3.9	1.3	93.5	1.3	10.0	3.2	.929	None		
SBR60-54	242	-244	64186	6.3	1.4	90.4	1.9	16.3	3.4	.922	None		
SBR60-55	244	-246	64187	7.7	1.3	88.7	2.3	20.2	3.1	.920	None		
SBR60-56	246	-247	64188	10.2	1.6	85.5	2.7	26.4	3.8	.921	None		
SBR60-57	247	-248	64189	5.8	.9	92.0	1.3	15.0	2.2	.922	None		
SBR60-58	248	-250	64190	6.0	1.1	91.4	1.5	15.6	2.6	.919	None		
SBR60-59	250	-252	64191	4.6	1.2	93.0	1.2	12.0	2.9	.922	None		
SBR60-60	252	-254	64192	3.0	1.3	94.9	.3	7.8	3.1	.924	None		

a - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyoming; Ill pration No. SBR-2994P

January 25, 19

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11, S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Wahogany marker 393.2 feet

Sample number	Laramie	Thick	Run No.	Yield of product				Cal. per ton		Specific gravity of oil at 50°/50°F.	Properties of spent shale			Hydrogen	Remarks	Sum
				Weight percent	Spent shale	Gas +	Loss	Oil	Water		Tendency to	coke	4x5g			
SBR60-51	254	-254.8	64193	4.7	1.1	93.0	1.2	12.4	2.6	0.919	None					
SBR60-62	254.8	-255.8	64194	9.3	1.7	86.9	2.1	24.0	4.1	.926	None					
SBR60-63	255.8	-257.0	64195	4.1	1.6	93.1	1.2	10.6	3.8	.926	None					
SBR60-64	257	-258	64196	3.1	1.3	94.7	.9	8.0	3.1	.928	None					
SBR60-65	258	-260	64197	3.9	1.1	94.0	1.0	10.1	2.6	.926	None					
SBR60-66	260	-262	64198	2.0	1.0	94.9	.7	7.3	3.8	.924	None					
SBR60-67	262	-264	64199	2.9	1.8	94.2	1.1	7.5	4.3	.926	None					
SBR60-68	264	-266	64200	2.8	1.3	95.0	.9	7.2	3.1	.927	None					
SBR60-69	266	-267	64201	7.0	1.7	89.6	1.7	13.1	4.1	.927	None	42.17				
SBR60-70	267	-268	64202	3.1	1.8	94.1	1.0	8.0	4.3	.928	None	20.16				
SBR60-71	268	-270	64203	3.4	1.5	94.0	1.1	8.7	3.7	.926	None	43.50				
SBR60-72	270	-272	64204	2.7	1.6	94.6	.9	7.0	3.7	.933	None	35.56				
SBR60-73	272	-273	64205	6.9	1.2	90.0	1.9	17.9	3.0	.924	None	41.71				
SBR60-74	273	-274	64206	3.5	1.5	94.1	.9	9.0	3.5	.938	None	22.50				
SBR60-75	274	-276	64207	2.6	1.6	95.0	.8	6.6	3.8	.938	None	33.66				
SBR60-76	276	-277.6	64208	3.1	1.2	94.8	.9	8.0	2.9	.935	None	32.24				
SBR60-77	277.6	-278.6	64209	9.0	1.0	87.6	1.8	23.2	3.7	.933	None	52.20	2.25			52.20
SBR60-78	278.6	-280.0	64210	4.3	1.2	93.6	.9	11.0	2.8	.935	None	37.84	5.69			
SBR60-79	280.0	-282.0	64211	3.5	1.1	94.4	1.0	9.0	2.8	.927	None	45.00	10.69			
SBR60-80	282.0	-283.3	64212	4.4	1.1	92.2	2.3	11.2	2.8	.933	None	35.84	13.89			
SBR60-81	283.3	-284.1	64213	15.3	1.7	79.5	3.5	39.6	4.1	.925	None	63.74	15.50			
SBR60-82	284.1	-285.9	64214	3.1	1.4	94.8	.7	7.9	3.4	.938	None	35.87	20.04			
SBR60-83	285.9	-286.9	64215	2.9	1.3	94.9	.9	7.5	3.1	.933	None	18.90	22.56			
SBR60-84	286.9	-288	64216	4.0	1.2	94.0	.8	10.2	2.9	.931	None	27.85	25.29			
SBR60-85	288	-289	64217	2.5	1.3	95.4	.8	6.4	3.1	.934	None	16.38	27.85			
SBR60-86	289	-290	64218	4.0	1.4	93.7	.9	10.2	3.4	.927	None	25.30	30.33			
SBR60-87	290	-292	64219	4.7	1.3	92.5	1.5	12.2	3.1	.925	None	59.54	35.21			
SBR60-88	292	-293	64220	3.6	1.9	93.3	1.2	9.3	4.6	.928	None	23.25	37.71			
SBR60-89	293	-294.3	64221	4.5	1.0	93.0	1.5	11.7	2.4	.926	None	37.89	40.88			
SBR60-90	294.3	-295	64222	13.5	1.8	81.1	3.6	78.1	4.3	.923	None	50.89	42.33	472.82		

Core samples received October 21, 1959; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 feet

Sample number		Run No.	Yield of product					Specific gravity of oil at 60°/60°F.	Properties of spent shale		Remarks	Cum		
			Weight percent		Spent shale	Gas + loss	Gal. per ton		Tendency to coke	ft x sq ft x sq ft				
Laramie	Ther		Oil	Water							Oil	Water		
SBR60-91	295-296.4	64223	3.5	1.1	91.1	1.3	9.1	2.6	0.918	3.50	None	31.85	4523	510.61
SBR60-92	296.4-298.4	64224	1.4	.9	96.8	.9	3.7	2.2	.924	5.22	None	19.31	5105	529.96
SBR60-93	298.4-300.0	64225	5.7	.9	91.7	1.7	14.7	2.3	.926	3.82	None	56.15		
SBR60-94	300.0-302.0	64226	4.1	1.2	93.2	1.5	10.7	2.9	.926	4.92	None	52.64		
SBR60-95	302.0-304.1	64227	4.1	1.2	93.2	1.5	10.5	2.9	.934	5.17	None	54.28		
SBR60-96	304.1-304.9	64228	1.7	1.2	93.2	.9	4.3	10.1		2.09	None	7.98		
SBR60-97	304.9-306.0	64229	5.1	.7	93.2	1.0	13.0	1.7	.934	2.66	None	34.56		
SBR60-98	306.0-308	64230	3.4	1.2	91.8	.6	8.7	2.8	.936	5.02	None	43.67		
SBR60-99	308-310	64231	3.7	.8	93.8	1.7	9.6	1.9	.935	4.96	None	47.62		
SBR60-100	310-311	64232	5.3	1.0	92.9	.8	13.5	2.4	.934	2.41	None	32.54		
SBR60-101	311-312	64233	3.6	2.0	93.8	.6	9.1	4.8	.941	2.50	None	22.75		
SBR60-102	312-314	64234	4.5	1.0	93.6	.9	11.6	2.4	.935	4.90	None	56.84		
SBR60-103	314-316	64235	4.7	.7	93.7	.9	11.9	1.7	.940	4.88	None	50.07		
SBR60-104	316-318	64236	4.5	.8	93.7	1.0	11.6	1.8	.932	4.90	None	56.84		
SBR60-105	318-320	64237	4.8	1.4	92.9	.9	12.3	3.4	.930	4.88	None	60.02		
SBR60-106	320-322	64238	4.8	.9	93.2	1.1	12.4	2.2	.933	4.88	None	60.51		
SBR60-107	322-324	64239	4.5	.9	93.7	.9	11.5	2.2	.931	4.97	None	56.35		
SBR60-108	324-326	64240	4.8	.9	93.1	1.2	12.4	2.2	.930	4.88	None	60.51		
SBR60-109	326-328	64241	2.6	.5	96.3	.6	6.6	1.3	.928	5.17	None	33.66		
SBR60-110	328-330	64242	4.7	.8	93.4	1.1	12.1	2.0	.930	4.88	None	59.05		
SBR60-111	330-332	64243	4.2	.6	91.2	1.0	10.6	1.4	.934	4.72	None	52.15		
SBR60-112	332-333	64244	3.9	.9	91.1	.8	10.0	2.0	.938	4.49	None	24.80		
SBR60-113	333-334.3	64245	5.5	.9	92.6	1.0	14.0	2.2	.939	3.12	None	43.68		
SBR60-114	334.3-336.0	64246	1.4	3.8	94.5	.3	3.6	9.1		4.44	None	15.98		
SBR60-115	336.0-337	64247	4.7	.7	93.5	1.1	12.2	1.6	.929	4.44	None	29.77		
SBR60-116	337-338	64248	4.9	.5	93.6	1.0	12.6	1.3	.928	4.44	None	30.74		
SBR60-117	338-339	64249	5.6	.6	92.5	1.3	14.6	1.3	.925	2.37	None	34.89		
SBR60-118	339-340	64250	6.1	.7	91.9	1.3	15.9	1.7	.927	2.37	None	37.52		
SBR60-119	340-341	64251	6.7	.9	90.8	1.6	17.4	2.0	.926	2.37	None	40.72		
SBR60-120	341-342	64252	4.3	.6	93.0	1.3	11.1	1.4	.934	2.46	None	27.31	158.19	1722.60

a - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60°F.		Properties of spent shale		Tendency to	4x59 coke	4x59 coke	Remarks	Avg. %	
			Weight percent		Gal. per ton											
Laramie	Thair		Oil	Water	Spent shale	Gas + loss	Oil	Water								
SBR60-121	342-343	64253	3.4	0.7	95.0	0.9	8.8	2.56	1.6	0.936	2.50	None	22.00	160.69	1744.60	
SBR60-122	343-344	64254	3.0	.8	95.3	.9	7.7	2.52	1.8	.936	2.52	None	17.40	163.21	1764.00	
SBR60-123	344-345	64255	4.9	.4	93.8	.9	2.7	2.42	.8	.931	2.42	None	30.73	162.62	1794.73	
SBR60-124	345-346	64256	5.2	.3	93.5	1.0	3.5	2.41	.7	.920	2.41	None	32.54			
SBR60-125	346-347	64257	2.8	.7	95.7	.8	7.1	2.54	1.8	.935	2.54	None	18.03			
SBR60-126	347-348	64258	2.8	.7	95.7	.8	7.1	2.54	1.7	.933	2.54	None	18.03			
SBR60-127	348-349.1	64259	3.5	.7	94.7	1.1	9.1	2.50	1.7	.937	2.75	None	25.02			
SBR60-128	349.1-350.1	64260	2.2	.6	96.3	.9	5.7	2.57	1.4	.936	2.57	None	14.65			
SBR60-129	350.1-351.5	64261	5.7	.5	92.0	1.8	4.7	2.40	1.3	.928	3.36	None	49.39			
SBR60-130	351.5-352.5	64262	4.6	.6	93.9	.9	1.9	2.44	1.4	.932	2.44	None	29.04			
SBR60-131	352.5-353.5	64263	3.4	.5	95.0	1.1	6.6	2.50	1.3	.931	2.50	None	21.50			
SBR60-132	353.5-354.5	64264	4.2	.5	94.1	1.2	0.8	2.46	1.2	.923	2.46	None	26.57			
SBR60-133	354.5-355.6	64265	12.0	.8	84.6	2.6	0.9	2.13	1.9	.928	2.13	None	65.82			
SBR60-134	355.6-356.6	64266	4.5	.6	93.6	1.3	1.7	2.44	1.4	.933	2.44	None	28.55			
SBR60-135	356.6-357.6	64267	5.0	.7	92.9	1.4	2.9	2.42	1.7	.932	2.42	None	31.22			
SBR60-136	357.6-358.6	64268	5.4	.4	92.9	1.3	3.8	2.44	1.1	.930	2.44	None	33.67			
SBR60-137	358.6-359.6	64269	5.2	.4	93.0	1.4	3.5	2.41	1.0	.925	2.41	None	32.53			
SBR60-138	359.6-361.0	64270	9.1	.7	88.2	2.0	23.6	2.24	1.8	.923	3.14	None	74.10			
SBR60-139	361.0-362.0	64271	5.6	.5	92.5	1.4	4.6	2.40	1.2	.922	2.40	None	35.04			
SBR60-140	362.0-363.5	64272	9.7	1.0	87.1	2.2	5.4	2.21	2.4	.919	3.31	None	24.17			
SBR60-141	363.5-364.5	64273	2.9	.4	95.7	1.0	7.3	2.54	1.1	.938	2.54	None	18.54			
SBR60-142	364.5-365.5	64274	4.6	.3	93.7	1.4	1.7	2.44	.8	.934	2.44	None	28.55			
SBR60-143	365.5-367.5	64275	1.5	.4	97.3	.8	3.9	2.61	1.0		5.22	None	20.36			2481.3
SBR60-144	367.5-369.5	64276	2.3	.6	96.2	.9	6.1	2.56	1.4		5.12	None	31.23			
SBR60-145	369.5-371.5	64277	1.5	.5	97.3	.7	3.8	2.61	1.2		5.22	None	19.83			
SBR60-146	371.5-374.3	64278	1.1	.9	97.3	.7	2.9	2.63	2.0		7.36	None	21.34			
SBR60-147	374.3-375.6	64279	6.2	.8	91.6	1.4	16.3	2.30	1.8	.915	3.07	None	50.04			
SBR60-148	375.6-376.5	64280	4.5	.9	93.7	1.0	11.8	2.44	1.6	.920	2.44	None	28.79			
SBR60-149	376.5-377.6	64281	14.1	1.4	81.3	3.2	7.1	2.05	3.4	.912	2.05	Medium	76.05	248.03	2709.2	
SBR60-150	377.6-379.6	64282	8.9	.9	91.8	1.4	15.6	2.37	2.3	.917	4.74	None	73.00	250.09	2782.2	

4 - Specific gravity estimated due to insufficient oil.

Core samples received October 21, 1959; assay made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 1 1/2 feet West of East line
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,335.5 feet

manometer marker 323.2 feet

Sample number		Run No.	Yield of product					Specific gravity of oil at 60°/60°F.		Properties of spent shale Tendency to Flare		ft x sq ft x sq ft x sq				
			Weight percent		Spent shale	Gas + loss	Gal. per ton									
Laramie	Thin		Oil	Water					Oil	Water						
SBR60-151	379.6-381.0	64283	4.2	1.2	93.6	1.0	10.8	1.4	2.9	2.46	.925	3.44	None	37.15	253.57	2871.38
SBR60-152	381 -382	64284	6.5	1.2	87.2	1.7	21.9	1.0	4.6	2.26	.932	2.26	None	49.49	255.79	2868.87
SBR60-153	382 -383	64285	10.6	1.2	84.7	3.5	27.4	1.0	2.9	2.18	.922	2.18	Slight	59.73	257.97	2928.60
SBR60-154	383 -384	64286	8.3	.8	89.2	1.7	21.6	1.0	2.9	2.27	.921	2.27	Slight	49.03	260.24	2977.12
SBR60-155	384 -384.9	64287	11.9	1.1	84.8	2.2	31.4	0.9	2.6	2.12	.909	1.91	Slight	59.97	262.15	3037.60
SBR60-156	384.9-386.2	64288	16.5	1.8	70.8	2.9	43.3	1.3	4.3	1.97	.915	2.56	Slight	110.83	264.71	3148.45
SBR60-157	386.2-387.2	64289	9.6	1.3	87.4	1.7	25.5	1.0	3.1	2.21	.904	2.21	Slight	56.35	266.92	3204.80
SBR60-158	387.2-388.2	64290	7.3	1.4	89.5	1.8	19.1	1.0	3.4	2.31	.915	2.31	None	44.12	269.23	3248.12
SBR60-159	388.2-389.7	64291	5.1	1.1	92.5	1.3	13.1	1.5	2.8	2.42	.927	3.63	None	47.55	272.26	3296.47
SBR60-160	389.7-391.2	64292	7.3	1.2	89.9	1.6	18.3	1.5	2.7	2.31	.925	3.46	None	65.03	276.72	3361.52
SBR60-161	391.2-393.2	64293	4.4	.6	93.9	1.1	11.4	2.0	1.6	2.45	.925	4.90	None	55.81	281.22	3417.38
SBR60-162	393.2-395.2	64294	3.5	1.2	94.2	1.1	9.1	2.0	2.9	2.50	.923	5.00	None	45.50	286.22	3462.88
SBR60-163	395.2-396.4	64295	3.9	.6	94.6	.9	10.1	1.2	1.4	2.48	.913	2.48	None	30.10	289.20	3492.98
SBR60-164	396.4-397.4	64296	4.6	.5	94.0	.9	12.1	1.0	1.1	2.44	.917	2.44	None	29.52	291.64	3522.50
SBR60-165	397.4-398.4	64297	15.1	1.6	80.2	3.1	39.4	1.0	3.8	2.02	.920	2.02	None	79.59	293.66	3602.09
SBR60-166	398.4-399.4	64298	7.1	1.2	90.1	1.6	18.8	1.0	2.8	2.31	.912	2.31	None	43.73	295.97	3645.52
SBR60-167	399.4-400.6	64299	6.8	.9	90.7	1.6	18.0	1.0	2.0	2.33	.908	2.33	None	41.94	298.70	3687.46
SBR60-168	400.4-401.6	64300	10.5	1.2	86.1	2.2	27.4	1.2	2.9	2.18	.914	2.62	None	71.79	300.92	3759.22
SBR60-169	401.6-402.4	64301	18.5	1.4	76.7	3.4	47.9	0.8	3.4	1.91	.925	1.53	Medium	73.29	302.45	3832.54
SBR60-170	402.4-403.5	64302	10.6	1.3	86.2	1.9	27.6	1.1	3.0	2.18	.923	2.40	Slight	66.24	304.85	3848.18
SBR60-171	403.5-404.4	64303	24.8	1.9	68.6	4.7	65.7	0.9	4.6	1.72	.906	1.55	Heavy	101.83	306.40	4000.63
SBR60-172	404.4-405.4	64304	18.3	1.3	77.0	3.4	48.4	1.0	3.1	1.91	.905	1.91	Medium	92.44	308.31	4093.05
SBR60-173	405.4-406.4	64305	29.3	2.7	62.2	5.8	77.8	1.0	6.5	1.60	.903	1.60	Heavy	124.48	309.91	4217.53
SBR60-174	406.4-407.4	64306	26.9	2.8	64.1	6.2	70.9	1.0	6.6	1.66	.911	1.66	Heavy	117.69	311.57	4335.22
SBR60-175	407.4-408.5	64307	20.8	1.8	23.7	3.7	54.7	1.1	4.3	1.84	.909	2.02	Slight	110.49	313.29	4445.71
SBR60-176	408.5-409.5	64308	17.0	1.4	76.9	3.9	46.9	1.0	3.4	1.93	.908	1.93	Slight	90.52	315.52	4536.23
SBR60-177	409.5-410.5	64309	18.5	1.3	75.5	4.7	46.1	1.0	3.1	1.91	.922	1.91	Slight	91.87	317.43	4628.10
SBR60-178	410.5-412.0	64310	7.6	1.2	89.5	1.7	19.9	1.5	2.9	2.30	.916	3.45	None	68.66	320.88	4696.70
SBR60-179	412.0-413.0	64311	17.8	1.1	77.6	3.2	46.0	1.0	3.4	1.94	.925	1.94	Slight	89.24	322.82	4786.00
SBR60-180	413.0-414.2	64312	6.6	.8	91.4	1.5	17.3	1.2	1.9	2.34	.920	2.81	None	48.61	325.63	4834.61

Core samples received October 21, 1959; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60°F				Properties of spent shale		Remarks			
Their			Weight percent		Spent shale	Gas + loss	Gal. per ton		Tendency to coke							
Laramie	Ther		Oil	Water			Oil	Water								
SBR60-181	414.2-415.4	64313	19.6	1.2	75.8	3.4	51.3	1.2	2.9	1.870	.914	2.24	Slight	114.91	327.87	4449.5
SBR60-182	415.4-416.2	64314	14.0	1.4	81.8	2.8	37.1	0.8	3.4	2.05	.903	1.64	Slight	60.84	329.51	5010.36
SBR60-183	416.2-417.2	64315	16.3	1.6	79.0	3.1	42.7	1.0	3.8	1.98	.916	1.98	Slight	84.55	331.49	5094.91
SBR60-184	417.2-418.6	64316	6.7	1.5	90.5	1.3	18.0	1.4	3.6	2.33	.895	3.26	None	52.48	334.75	5153.74
SBR60-185	418.6-419.6	64317	11.9	1.4	80.9	2.8	39.1	1.0	3.2	2.02	.915	2.02	Slight	78.98	336.77	5234.7
SBR60-186	419.6-421.9	64318	6.7	1.1	90.7	1.5	17.5	2.3	2.6	2.34	.921	5.38	None	94.15	342.15	5325.7
SBR60-187	421.9-423.0	64319	17.0	1.9	77.7	3.4	43.8	1.1	4.6	1.76	.932	2.16	Slight	94.64	344.31	5421.3
SBR60-188	423.0-426.0	64320	4.6	1.2	92.9	1.3	11.9	3.0	2.9	2.44	.923	7.32	None	87.11	351.63	5515.8
SBR60-189	426.0-427.0	64321	7.3	1.1	89.8	1.8	19.1	1.0	2.6	2.31	.915	2.31	None	44.12	353.94	5621.1
SBR60-190	427.0-428.0	64322	14.4	1.5	81.1	3.0	37.7	1.0	3.7	2.04	.916	2.04	Slight	76.91	355.98	5748.64
SBR60-191	428.0-430.0	64323	10.2	1.1	86.6	2.1	27.2	2.0	2.6	2.19	.901	4.23	None	119.14	360.36	5873.66
SBR60-192	430.0-432.0	64324	10.9	1.4	85.3	2.4	28.8	2.0	3.4	2.16	.911	4.32	Slight	124.42	364.68	5973.66
SBR60-193	432.0-436.6	64325	5.6	.3	92.1	1.5	14.4	4.6	2.0	2.39	.923	10.99	None	158.26	375.67	6031.32
SBR60-194	436.6-437.4	64326	10.2	1.5	86.0	2.3	26.1	0.8	3.6	2.20	.932	1.76	Slight	45.94	377.43	6071.2
SBR60-195	437.4-438.5	64327	3.8	.9	94.0	1.3	9.8	1.1	2.3	2.48	.925	2.73	None	26.75	380.16	6104.0
SBR60-196	438.5-440.0	64328	3.1	.9	94.6	1.4	8.1	1.5	2.2	2.52	.927	3.78	None	30.42	383.94	6134.63
SBR60-197	440.0-441.4	64329	2.1	.6	96.4	.9	5.4	1.4	1.4	2.57	.926	3.60	None	19.44	387.54	6184.01
SBR60-198	441.4-443.8	64330	5.5	1.5	91.6	1.4	14.3	2.4	3.6	2.39	.914	5.74	None	82.08	393.28	6226.15
SBR60-199	443.8-445.0	64331	4.3	.8	93.7	1.2	11.1	1.2	1.9	2.46	.919	2.95	None	32.75	396.23	6268.9
SBR60-200	445.0-446.0	64332	12.5	1.1	84.0	2.4	32.4	1.0	2.6	2.11	.925	2.11	Slight	68.36	398.34	6337.2
SBR60-201	446.0-448.2	64333	3.4	.4	95.0	1.2	8.8	2.2	1.1	2.50	.916	5.50	None	48.40	403.84	6383.6
SBR60-202	450.0-451.0	64334	6.5	1.0	90.8	1.7	17.1	1.0	2.3	2.35	.915	2.35	None	40.19	406.19	6425.8
SBR60-203	451.0-452.0	64335	13.7	1.2	82.5	2.6	35.6	1.0	3.0	2.07	.923	2.07	Slight	73.69	408.26	6499.5
SBR60-204	452.0-456.0	64336	2.3	.9	95.9	.9	5.9	4.0	2.2	2.56	.927	10.24	None	60.42	418.50	6559.96
SBR60-205	456.0-457.0	64337	7.7	1.1	89.5	1.7	20.0	1.0	2.5	2.29	.924	2.29	None	45.80	420.19	6625.71
SBR60-206	457.0-458.5	64338	6.4	3.8	88.8	1.0	16.2	1.5	0.2	2.36	.945	3.54	None	57.35	424.33	6663.11
SBR60-207	458.5-460	64339	7.2	1.1	90.0	1.7	18.5	1.5	2.8	2.32	.924	3.48	None	64.22	427.81	6707.4
SBR60-208	460-462	64340	3.0	1.0	94.7	1.3	7.7	2.0	2.4	2.52	.933	5.04	None	38.81	432.85	6766.2
SBR60-209	462-464	64341	3.1	.7	95.2	1.0	8.0	2.0	1.6	2.52	.935	5.04	None	40.32	437.87	6806.6
SBR60-210	464-467	64342	2.5	1.1	95.4	1.0	6.3	3.0	2.6	2.56	.934	7.68	None	48.28	445.57	6855.0

Core samples received October 21, 1959; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Skyline Oil Company's Skyline-Robertson core hole No. 3, drilled 143 feet West of East line,
2,411 feet North of South line, Sec. 3, T. 11 S., R. 25 E., Uintah County, Utah

Surface elevation 6,338.5 feet

Mahogany marker 393.2 feet

Sample number		Run No.	Yield of product				Gal. per ton		Specific gravity of oil at 60°/60°F.	Properties of	Remarks
			Weight percent		Spent	Gas +				spent shale	
Laramie	Thair		Oil	Water	Shale	loss	Oil	Water		coke	
SRR60-211	457-458	64343	3.2	1.2	94.3	1.3	8.2	2.9	0.931	None	

Core samples received October 21, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. 3000P

January 25, 1960