

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19 corehole drilled in the
SE1/4SE1/4 of sec. 19, T 21 N, R 107 W, Sweetwater County, Wyoming

Surface elevation: 6,823 feet

Kelly Bushing elevation: 6,829 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	Gal per ton				
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
	736.2-771.5										
SBR76-10541	771.5-772.5	23607	0.8	1.8	96.7	0.7	2.1a	4.3		None	
SBR76-10542	772.5-773.5	23608	.3	1.7	97.2	.8	.7a	4.1		None	
SBR76-10543	773.5-774.5	23609	2.3	2.8	93.4	1.5	6.2	6.7	0.910	None	
SBR76-10544	774.5-775.5	23610	3.2	2.8	92.3	1.7	8.6	6.7	.903	None	
SBR76-10545	775.5-776.6	23611	3.8	2.5	91.9	1.8	9.8	6.0	.920	None	
SBR76-10546	776.6-777.6	23612	4.2	2.0	91.9	1.9	11.0	4.8	.922	None	
SBR76-10547	777.6-778.6	23613	2.6	1.8	94.6	1.0	6.9	4.3	.908	None	
SBR76-10548	778.6-779.6	23614	2.8	1.7	93.9	1.6	7.2	4.1	.925	None	
SBR76-10549	779.6-780.8	23615	4.9	2.2	91.2	1.7	12.4	5.3	.942	None	
SBR76-10550	780.8-781.8	23616	.0	1.8	97.5	.7	.1a	4.3		None	
SBR76-10551	781.8-782.8	23617	.0	1.4	97.7	.9	Trace	3.4		None	
SBR76-10552	782.8-784.0	23618	.3	3.0	95.4	1.3	.7a	7.2		None	
SBR76-10553	784.0-786.0	23619	.0	2.0	97.7	.3	Trace	4.7		None	
	786.0-852.9										
SBR76-10554	852.9-855.4	23620	.0	1.5	98.0	.5	Trace	3.5		None	
SBR76-10555	855.4-856.1	23621	2.3	2.5	94.7	.5	6.1	6.0	.898	None	
SBR76-10556	856.1-857.2	23622	.0	3.2	96.0	.8	Trace	7.6		None	
SBR76-10557	857.2-858.6	23623	.1	1.0	98.4	.5	.2a	2.4		None	
SBR76-10558	858.6-860.0	23624	.4	2.6	95.8	1.2	1.1a	6.2		None	
SBR76-10559	860.0-864.0	23625	.0	2.7	96.9	.4	No oil	6.4		None	
SBR76-10560	864.0-867.2	23626	.0	2.1	97.1	.8	No oil	5.0		None	
SBR76-10561	867.2-868.8	23627	.0	1.8	97.3	.9	Trace	4.3		None	
SBR76-10562	868.8-870.5	23628	.3	2.9	96.1	.7	.7a	7.0		None	
	870.5-1004.0										
SBR76-10563	1004.0-1006.2	23629	2.2	2.9	93.4	1.5	5.7	7.0	.925	None	
	1006.2-1020.1										
SBR76-10564	1020.1-1022.3	23630	.3	1.1	98.1	.5	.7a	2.6		None	
SBR76-10565	1022.3-1023.7	23631	4.6	1.8	92.2	1.4	12.3	4.3	.902	None	
SBR76-10566	1023.7-1024.8	23632	3.2	1.4	93.9	1.5	8.5	3.4	.893	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	Gal per ton				
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
SBR76-10567	1024.8-1025.8	23633	2.6	1.3	94.3	1.8	6.9	3.1	0.910	None	
SBR76-10568	1025.8-1027.0	23634	2.4	2.5	94.1	1.0	6.1	6.0	.927	None	
SBR76-10569	1027.0-1029.6	23635	.3	3.3	94.5	1.9	.9a	7.9		None	
SBR76-10570	1029.6-1031.4	23636	.4	1.5	97.1	1.0	1.0a	3.6		None	
SBR76-10571	1031.4-1032.7	23637	4.1	2.0	92.4	1.5	10.8	4.8	.906	None	
SBR76-10572	1032.7-1033.8	23638	3.6	1.8	93.4	1.2	9.6	4.3	.897	None	
SBR76-10573	1033.8-1034.8	23639	3.1	2.1	93.2	1.6	8.0	5.0	.921	None	
SBR76-10574	1034.8-1036.0	23640	1.7	2.4	94.7	1.2	4.4a	5.8		None	
SBR76-10575	1036.0-1037.2	23641	2.8	2.4	92.6	2.2	7.3	5.8	.913	None	
SBR76-10576	1037.2-1038.2	23642	2.7	1.8	93.8	1.7	7.2	4.3	.901	None	
SBR76-10577	1038.2-1039.2	23643	2.8	2.4	93.7	1.1	7.6	5.8	.896	None	
SBR76-10578	1039.2-1040.2	23644	2.6	2.8	93.6	1.0	6.8	6.7	.895	None	
SBR76-10579	1040.2-1041.5	23649	1.7	2.7	94.6	1.0	4.5a	6.5		None	
SBR76-10580	1041.5-1042.7	23650	2.2	2.3	94.2	1.3	5.8	5.5	.899	None	
SBR76-10581	1042.7-1044.0	23651	3.7	2.2	92.2	1.9	9.9	5.3	.902	None	
SBR76-10582	1044.0-1045.3	23652	4.7	1.8	91.8	1.7	12.6	4.3	.902	None	
SBR76-10583	1045.3-1046.4	24781	3.0	2.4	92.9	1.7	7.8	5.8	.916	None	
SBR76-10584	1046.4-1047.5	23654	2.9	1.7	93.6	1.8	7.6	4.1	.912	None	
SBR76-10585	1047.5-1048.6	23655	2.7	2.9	92.8	1.6	7.1	7.0	.904	None	
SBR76-10586	1048.6-1049.9	23656	5.3	2.2	90.0	2.5	14.0	5.3	.916	None	
SBR76-10587	1049.9-1051.1	23657	7.5	1.7	88.3	2.5	19.8	4.1	.910	None	
SBR76-10588	1051.1-1052.1	23658	9.3	1.6	86.5	2.6	25.0	3.8	.898	None	
SBR76-10589	1052.1-1053.1	23659	5.6	1.7	90.7	2.0	14.8	4.1	.903	None	
SBR76-10590	1053.1-1054.1	23660	5.6	1.6	90.9	1.9	14.8	3.8	.904	None	
SBR76-10591	1054.1-1055.1	23661	5.9	1.4	90.7	2.0	15.5	3.4	.914	None	
SBR76-10592	1055.1-1056.1	23662	5.1	1.0	91.3	2.6	13.5	2.4	.913	None	
SBR76-10593	1056.1-1057.1	23663	5.4	1.1	91.8	1.7	14.3	2.6	.906	None	
SBR76-10594	1057.1-1057.6	23664	.4	2.9	95.6	1.1	1.1a	7.0		None	
SBR76-10595	1057.6-1059.3	23665	5.6	2.3	90.2	1.9	14.6	5.5	.914	None	
SBR76-10596	1059.3-1060.3	23666	6.8	3.1	87.3	2.8	18.1	7.4	.896	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

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Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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		
SBR76-10597	1060.3-1061.3	23667	6.0	1.1	90.9	2.0	15.7	2.6	0.916	None		
SBR76-10598	1061.3-1062.4	23668	8.3	1.3	88.5	1.9	21.8	3.1	.909	None		
SBR76-10599	1062.4-1063.6	23669	7.7	1.7	88.8	1.8	20.4	4.1	.903	None		
SBR76-10600	1063.6-1064.7	23670	6.4	1.3	91.0	1.3	17.0	3.1	.897	None		
SBR76-10601	1064.7-1065.8	23671	8.1	2.2	87.0	2.7	21.5	5.3	.908	None	Top Wilkins Peak	
SBR76-10602	1065.8-1067.0	23672	7.5	2.2	88.0	2.3	19.8	5.3	.908	None		
SBR76-10603	1067.0-1068.2	23673	9.0	2.4	85.9	2.7	23.9	5.8	.907	None		
SBR76-10604	1068.2-1069.8	23674	5.7	1.4	90.6	2.3	15.1	3.4	.903	None		
SBR76-10605	1069.8-1070.8	23675	4.2	2.0	91.4	2.4	11.1	4.8	.905	None		
SBR76-10606	1070.8-1072.5	23676	.4	6.5	92.3	.8	1.1a	15.6		None		
SBR76-10607	1072.5-1073.0	23677	11.4	2.3	82.3	4.0	30.0	5.5	.912	None		
SBR76-10608	1073.0-1074.0	23678	13.6	2.6	79.8	4.0	35.8	6.2	.911	None	IL 13	
SBR76-10609	1074.0-1075.1	23679	11.2	2.2	82.6	4.0	29.1	5.3	.918	None		
SBR76-10610	1075.1-1076.4	23680	7.3	3.0	86.1	3.6	19.3	7.2	.911	None		
SBR76-10611	1076.4-1077.6	23681	4.2	3.4	89.8	2.6	11.2	8.1	.903	None		
SBR76-10612	1077.6-1079.0	23682	1.2	3.5	94.2	1.1	3.0a	8.4		None		
SBR76-10613	1079.0-1080.3	23683	2.3	2.9	93.5	1.3	6.1	7.0	.903	None		
SBR76-10614	1080.3-1081.3	23684	3.3	1.6	93.4	1.7	8.7	3.8	.908	None		
SBR76-10615	1081.3-1082.5	23685	3.6	2.0	93.1	1.3	9.5	4.8	.904	None		
SBR76-10616	1082.5-1083.8	23686	2.6	1.8	94.3	1.3	7.0	4.3	.906	None		
SBR76-10617	1083.8-1085.0	23687	1.4	2.8	94.8	1.0	3.8a	6.7		None		
SBR76-10618	1085.0-1086.2	23688	1.2	3.4	94.7	.7	3.0a	8.1		None		
SBR76-10619	1086.2-1087.5	23689	1.6	3.0	91.0	4.4	4.2a	7.2		None		
SBR76-10620	1087.5-1088.5	23690	1.7	1.6	95.5	1.2	4.5a	3.8		None		
SBR76-10621	1088.5-1089.5	23691	2.6	2.5	93.7	1.2	6.9	5.9	.905	None		
SBR76-10622	1089.5-1090.5	23692	3.1	2.3	93.2	1.4	8.1	5.5	.906	None		
SBR76-10623	1090.5-1091.7	23693	4.6	2.2	91.2	2.0	12.2	5.3	.907	None		
SBR76-10624	1091.7-1092.9	23694	4.1	2.3	91.7	1.9	11.0	5.5	.907	None		
SBR76-10625	1092.9-1094.0	23695	3.5	2.4	91.8	2.3	9.2	5.8	.908	None		
SBR76-10626	1094.0-1095.0	23696	4.2	2.8	91.3	1.7	11.0	6.7	.913	None		

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

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Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	
SBR76-10627	1095.0-1096.0	23697	3.8	3.0	92.0	1.2	10.1	7.2	None	
SBR76-10628	1096.0-1097.0	23698	6.0	2.6	89.1	2.3	15.9	6.2	None	
SBR76-10629	1097.0-1098.2	23699	5.9	2.4	89.6	2.1	15.7	5.8	None	
SBR76-10630	1098.2-1099.3	23700	4.1	2.2	92.4	1.3	10.7	5.3	None	
SBR76-10631	1099.3-1100.5	23701	3.6	2.0	92.7	1.7	9.5	4.8	None	
SBR76-10632	1100.5-1101.6	23702	2.5	1.5	94.4	1.6	6.6	3.6	None	
SBR76-10633	1101.6-1102.7	23703	5.6	2.4	89.7	2.3	14.9	5.8	None	
SBR76-10634	1102.7-1103.7	23704	9.7	2.8	83.7	3.8	25.5	6.7	None	
SBR76-10635	1103.7-1104.7	23705	10.2	3.1	83.1	3.6	27.0	7.4	None	
SBR76-10636	1104.7-1105.7	23706	11.4	3.6	80.8	4.2	30.2	8.6	None	
SBR76-10637	1105.7-1106.9	23707	8.1	2.9	85.8	3.2	21.5	7.0	None	
SBR76-10638	1106.9-1108.0	23708	2.5	1.8	94.6	1.1	6.5	4.3	None	
SBR76-10639	1108.0-1109.0	23709	1.7	1.5	95.0	1.8	4.6a	3.6	None	
SBR76-10640	1109.0-1110.6	23710	2.6	1.7	93.7	2.0	6.8	4.1	None	
SBR76-10641	1110.6-1112.4	23711	7.4	2.6	87.3	2.7	19.4	6.2	None	
SBR76-10642	1112.4-1113.5	23712	12.9	2.7	80.2	4.2	34.1	6.5	None	
SBR76-10643	1113.5-1114.7	23713	9.7	2.8	83.0	4.5	25.3	6.7	None	
SBR76-10644	1114.7-1115.5	23714	10.1	2.4	83.8	3.7	26.7	5.8	None	
SBR76-10645	1115.5-1116.7	23715	8.4	2.2	85.9	3.5	22.1	5.3	None	
SBR76-10646	1116.7-1118.0	23716	6.1	2.0	89.6	2.3	16.0	4.8	None	
SBR76-10647	1118.0-1119.0	23717	5.1	1.9	91.3	1.7	13.4	4.6	None	
SBR76-10648	1119.0-1120.0	23718	4.7	2.0	91.4	1.9	12.5	4.8	None	
SBR76-10649	1120.0-1121.0	23719	5.9	2.0	89.8	2.3	15.6	4.8	None	
SBR76-10650	1121.0-1122.0	23720	6.3	1.4	90.1	2.2	16.8	3.5	None	
SBR76-10651	1122.0-1123.0	23721	4.2	1.9	92.1	1.8	11.1	4.6	None	
SBR76-10652	1123.0-1124.0	23722	2.7	1.4	94.2	1.7	7.0	3.4	None	
SBR76-10653	1124.0-1125.0	23723	3.2	1.1	93.8	1.9	8.5	2.6	None	
SBR76-10654	1125.0-1126.0	23724	2.6	2.3	94.2	.9	6.8	5.5	None	
SBR76-10655	1126.0-1127.0	23725	1.1	3.8	93.2	1.9	3.0a	9.1	None	
SBR76-10656	1127.0-1128.0	23726	3.7	1.0	94.2	1.1	9.7	2.4	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

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Surface elevation: 6,823 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		
SBR76-10657	1128.0-1129.1	23727	6.0	1.2	90.6	2.2	15.9	2.9	0.900	None		
SBR76-10658	1129.1-1130.0	23728	3.7	1.2	93.0	2.1	9.8	2.9	.902	None		
SBR76-10659	1130.7-1131.8	23729	2.2	1.5	94.9	1.4	5.8	3.6	.899	None		
SBR76-10660	1131.8-1132.9	23730	3.1	1.0	94.3	1.6	8.3	2.4	.903	None		
SBR76-10661	1132.9-1133.9	23731	15.7	1.9	77.2	5.2	41.6	4.6	.905	Slight		
SBR76-10662	1133.9-1134.9	23732	18.1	2.0	74.7	5.2	48.4	4.8	.899	Slight		
SBR76-10663	1134.9-1135.9	23733	13.6	1.8	81.2	3.4	36.3	4.3	.897	None		
SBR76-10664	1135.9-1137.0	23734	6.0	1.4	90.3	2.3	15.8	3.4	.902	None		
SBR76-10665	1137.0-1138.1	23735	3.7	3.1	90.8	2.4	10.0	7.4	.899	None		
SBR76-10666	1138.1-1139.1	23736	1.9	1.1	95.8	1.2	4.9a	2.6		None		
SBR76-10667	1139.1-1140.2	23737	3.6	1.2	87.7	7.5	9.5	2.9	.911	None		
SBR76-10668	1140.2-1141.2	23738	4.7	1.2	91.6	2.5	12.3	2.9	.915	None		
SBR76-10669	1141.2-1142.2	23739	3.2	1.1	93.2	2.5	8.5	2.6	.913	None		
SBR76-10670	1142.2-1143.2	23740	2.9	1.4	93.8	1.9	7.6	3.4	.915	None		
SBR76-10671	1143.2-1144.2	23741	1.4	2.6	94.9	1.1	3.7a	6.2		None		
SBR76-10672	1144.2-1145.3	23742	1.0	2.5	95.1	1.4	2.6a	6.0		None		
SBR76-10673	1145.3-1146.3	23743	.7	2.0	95.6	1.7	1.8a	4.8		None		
SBR76-10674	1146.3-1147.4	23744	1.4	1.0	96.1	1.5	3.7a	2.4		None		
SBR76-10675	1147.4-1148.4	23745	2.7	.8	95.6	.9	7.1	1.9	.911	None		
SBR76-10676	1148.4-1149.7	23746	10.4	1.5	85.1	3.0	27.5	3.6	.904	None		
SBR76-10677	1149.7-1150.3	23747	14.0	1.8	80.0	4.2	37.2	4.3	.903	None		
SBR76-10678	1150.3-1151.4	23748	3.4	1.0	94.4	1.2	9.1	2.4	.901	None		
SBR76-10679	1151.4-1152.5	23749	2.9	.9	93.9	2.3	7.6	2.1	.915	None		
SBR76-10680	1152.5-1153.5	23750	1.9	.3	96.8	1.0	4.9a	.7		None		
SBR76-10681	1153.5-1154.5	23751	4.2	1.0	93.1	1.7	11.0	2.4	.911	None		
SBR76-10682	1154.5-1155.7	23752	9.4	1.5	86.1	3.0	24.8	3.6	.910	None		
SBR76-10683	1155.7-1157.1	23753	11.7	1.6	83.9	2.8	31.0	3.8	.906	None		
SBR76-10684	1157.1-1157.6	23754	7.0	1.2	90.1	1.7	19.2	3.0	.875	None	Layered tuff	
SBR76-10685	1157.6-1158.1	23755	9.1	1.3	86.2	3.4	24.0	3.1	.905	None		
SBR76-10686	1158.1-1159.1	23756	5.8	1.1	90.7	2.4	15.4	2.6	.907	None		

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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		
SBR76-10687	1159.1-1160.1	23757	4.9	1.0	92.0	2.1	13.0	2.4	0.910	None
SBR76-10688	1160.1-1161.1	23758	1.9	.8	95.5	1.8	5.0a	2.0		None
SBR76-10689	1161.1-1162.2	23759	1.9	.9	95.9	1.3	5.0a	2.2		None
SBR76-10690	1162.2-1163.2	23760	1.9	.8	96.1	1.2	5.0a	1.9		None
SBR76-10691	1163.2-1164.3	23761	2.0	.8	95.4	1.8	5.3	1.9	.912	None
SBR76-10692	1164.3-1165.4	23762	3.2	.6	95.1	1.1	8.6	1.4	.905	None
SBR76-10693	1165.4-1167.3	23763	11.3	1.0	83.2	4.5	30.0	2.4	.906	Slight
SBR76-10694	1167.3-1167.8	23764	4.8	1.0	92.2	2.0	12.7	2.4	.909	None
SBR76-10695	1167.8-1168.2	23765	2.2	.8	95.8	1.2	5.7	1.9	.907	None
SBR76-10696	1169.0-1169.8	23766	1.6	1.1	95.6	1.7	4.2a	2.6		None
SBR76-10697	1169.8-1170.8	23767	.7	.9	97.1	1.3	1.8a	2.2		None
SBR76-10698	1170.8-1171.8	23768	.8	.8	97.5	.9	2.0a	1.9		None
SBR76-10699	1171.8-1172.8	23769	2.0	.7	95.8	1.5	5.3	1.7	.910	None
SBR76-10700	1172.8-1174.5	23770	14.1	1.4	80.1	4.4	37.3	3.4	.906	None
SBR76-10701	1174.5-1175.5	23771	4.4	.9	91.5	3.2	11.4	2.2	.912	None
SBR76-10702	1175.5-1176.5	23772	2.2	1.1	94.9	1.8	5.8	2.6	.908	None
SBR76-10703	1176.5-1177.7	23773	.7	1.6	96.3	1.4	1.8a	3.7		None
SBR76-10704	1177.7-1179.0	23774	.6	1.6	97.0	.8	1.5a	3.8		None
SBR76-10705	1179.0-1180.4	23775	3.0	1.6	93.8	1.6	7.7	3.8	.918	None
SBR76-10706	1180.4-1181.5	23779	1.6	1.8	95.2	1.4	4.1a	4.3		None
SBR76-10707	1181.5-1182.6	23780	.3	1.7	97.0	1.0	.8a	4.1		None
SBR76-10708	1182.6-1183.6	23818	.1	1.1	97.3	1.5	.3a	2.6		None
SBR76-10709	1183.6-1184.7	23819	.3	1.4	96.7	1.6	.7a	3.4		None
SBR76-10710	1184.7-1185.7	23820	1.4	1.8	96.1	.7	3.8a	4.3		None
SBR76-10711	1185.7-1186.9	23821	20.0	2.3	71.1	6.6	52.6	5.5	.911	Slight
SBR76-10712	1187.0-1188.3	23822	17.0	2.2	76.7	4.1	45.2	5.3	.904	Slight
SBR76-10713	1188.3-1189.0	23823	6.1	1.8	89.2	2.9	16.1	4.3	.913	None
SBR76-10714	1189.0-1190.0	23824	2.7	1.5	94.0	1.8	7.1	3.6	.915	None
SBR76-10715	1190.0-1191.3	23825	1.0	1.9	96.0	1.1	2.6a	4.6		None
SBR76-10716	1191.3-1192.8	23826	2.2	2.0	94.8	1.0	5.7	4.8	.902	None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	
SBR76-10717	1192.8-1194.0	23827	2.0	1.9	94.7	1.4	5.4	4.6	0.912	None
SBR76-10718	1194.0-1195.0	23828	3.4	1.7	92.9	2.0	8.9	4.1	.910	None
SBR76-10719	1195.0-1196.3	23829	6.0	1.7	89.4	2.9	15.8	4.1	.905	None
SBR76-10720	1196.3-1197.3	23830	7.0	1.6	88.7	2.7	18.8	3.8	.901	None
SBR76-10721	1197.6-1198.8	23831	3.7	1.6	92.2	2.5	9.8	3.8	.907	None
SBR76-10722	1250.0-1251.1	23832	1.3	1.0	96.4	1.3	3.3a	2.5		None
SBR76-10723	1251.1-1252.1	23833	1.9	1.4	95.1	1.6	4.8a	3.4		None
SBR76-10724	1252.1-1253.2	23834	1.6	1.3	95.4	1.7	4.2a	3.1		None
SBR76-10725	1253.2-1254.2	23835	2.0	1.4	94.9	1.7	5.3	3.3	.913	None
SBR76-10726	1254.2-1255.2	23836	3.8	1.4	92.5	2.3	10.1	3.4	.911	None
SBR76-10727	1255.2-1256.3	23837	5.3	1.1	91.1	2.5	14.2	2.6	.902	None
SBR76-10728	1256.3-1257.3	23838	6.7	1.7	88.0	3.6	17.9	4.1	.903	None
SBR76-10729	1257.3-1258.3	23839	3.5	1.5	92.6	2.4	9.2	3.6	.909	None
SBR76-10730	1258.3-1259.3	23840	3.0	1.2	93.8	2.0	7.8	2.9	.916	None
SBR76-10731	1259.3-1260.4	23841	4.2	1.5	92.1	2.2	11.1	3.6	.910	None
SBR76-10732	1260.4-1261.4	23842	4.1	1.4	92.5	2.0	10.7	3.4	.910	None
SBR76-10733	1261.4-1262.4	23843	4.0	1.7	92.2	2.1	10.7	4.1	.907	None
SBR76-10734	1262.4-1263.4	23847	3.2	1.3	93.7	1.8	8.3	3.1	.908	None
SBR76-10735	1263.4-1264.4	23848	2.7	1.2	94.6	1.5	7.1	2.9	.905	None
SBR76-10736	1264.4-1265.4	23849	2.7	1.1	95.0	1.2	7.0	2.6	.908	None
SBR76-10737	1265.4-1266.4	23850	2.3	2.0	94.3	1.4	6.1	4.8	.909	None
SBR76-10738	1266.4-1267.4	23851	2.0	2.2	94.2	1.6	5.4	5.3	.903	None
SBR76-10739	1267.4-1268.5	23852	1.4	2.1	95.3	1.2	3.7a	5.0		None
SBR76-10740	1268.5-1269.7	23853	1.1	1.1	96.8	1.0	2.9a	2.6		None
SBR76-10741	1269.7-1271.0	23854	1.1	1.2	95.0	2.7	2.9a	2.9		None
SBR76-10742	1271.0-1272.0	23855	1.8	1.4	95.5	1.3	4.6a	3.4		None
SBR76-10743	1272.0-1273.0	23856	1.9	.5	96.4	1.2	5.0a	1.2		None
SBR76-10744	1273.0-1274.0	23857	1.9	1.0	95.2	1.9	5.0a	2.4		None
SBR76-10745	1274.0-1275.1	23858	4.5	1.3	92.6	1.6	11.8	3.1	.911	None
SBR76-10746	1275.1-1276.2	23859	7.6	1.0	88.1	3.3	20.2	2.4	.904	None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	
SBR76-10747	1276.4-1277.4	23860	13.2	1.7	80.7	4.4	35.0	4.1	None	
SBR76-10748	1277.4-1278.4	23861	13.5	1.5	81.6	3.4	36.1	3.6	None	
SBR76-10749	1278.4-1279.4	23862	12.3	1.6	82.0	4.1	32.8	3.8	None	
SBR76-10750	1279.4-1280.2	23863	4.8	1.1	92.1	2.0	12.6	2.6	None	
SBR76-10751	1280.2-1281.5	23864	2.5	1.2	94.5	1.8	6.6	2.9	None	
SBR76-10752	1281.5-1282.8	23865	1.8	.9	95.7	1.6	4.7a	2.2	None	
SBR76-10753	1282.8-1283.8	23866	2.1	.7	95.0	2.2	5.6	1.7	None	
SBR76-10754	1283.8-1284.8	23867	7.7	1.1	87.8	3.4	20.3	2.6	None	
SBR76-10755	1284.8-1286.5	23868	12.4	1.6	82.7	3.3	32.7	3.8	None	
SBR76-10756	1286.5-1287.3	23869	8.1	1.2	87.4	3.3	21.4	2.9	None	
SBR76-10757	1287.3-1288.4	23870	2.3	.7	95.4	1.6	6.2	1.7	None	
SBR76-10758	1288.4-1289.5	23871	1.8	1.0	95.5	1.7	4.7a	2.4	None	
SBR76-10759	1289.5-1290.5	23872	1.4	.7	96.6	1.3	3.5a	1.7	None	
SBR76-10760	1290.5-1291.5	23873	1.3	.6	97.2	.9	3.4a	1.4	None	
SBR76-10761	1291.5-1292.1	23874	4.7	1.2	91.5	2.6	12.4	2.9	None	
SBR76-10762	1292.1-1293.2	23875	12.8	1.6	81.7	3.9	33.9	3.8	None	
SBR76-10763	1293.2-1294.4	23876	14.9	1.8	79.5	3.8	39.4	4.3	None	
SBR76-10764	1294.4-1295.6	23877	15.7	1.8	78.2	4.3	41.6	4.3	None	
SBR76-10765	1295.6-1296.6	23878	3.0	.9	94.5	1.6	8.1	2.2	None	
SBR76-10766	1296.6-1298.0	23879	1.9	.7	95.8	1.6	4.9a	1.7	None	
SBR76-10767	1298.0-1299.5	23924	1.2	1.1	96.4	1.3	3.2a	2.6	None	
SBR76-10768	1299.5-1300.7	23881	1.0	1.3	96.3	1.4	2.6a	3.1	None	
SBR76-10769	1300.7-1301.8	23882	1.2	.7	96.7	1.4	3.2a	1.7	None	
SBR76-10770	1301.8-1302.8	23883	4.9	1.5	91.5	2.1	12.9	3.5	None	
SBR76-10771	1302.8-1303.8	23884	9.5	1.6	85.3	3.6	25.1	3.8	None	
SBR76-10772	1304.0-1305.1	23885	10.5	1.3	85.6	2.6	27.7	3.1	None	
SBR76-10773	1305.1-1306.1	23886	4.0	1.1	92.0	2.9	10.6	2.6	None	
SBR76-10774	1306.1-1307.2	23887	2.6	.9	94.8	1.7	6.7	2.2	None	
SBR76-10775	1307.2-1308.2	23888	4.9	1.0	92.5	1.6	12.9	2.4	None	
SBR76-10776	1310.0-1311.0	23889	14.0	2.0	79.6	4.5	36.6	4.7	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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			
SBR76-10777	1311.0-1312.0	23890	16.3	2.0	77.2	4.5	43.0	4.9	0.909	None	
SBR76-10778	1312.0-1312.7	23891	7.0	1.7	88.2	3.1	18.5	4.1	.906	None	
SBR76-10779	1312.7-1314.2	23892	3.8	1.7	91.5	3.0	10.0	4.1	.914	None	
SBR76-10780	1314.2-1315.2	23893	1.3	1.3	95.4	2.0	3.4a	3.1		None	
SBR76-10781	1315.2-1316.2	23894	.6	.7	97.0	1.7	1.5a	1.7		None	
SBR76-10782	1316.2-1317.2	23895	1.2	1.0	96.0	1.8	3.1a	2.4		None	
SBR76-10783	1317.2-1318.2	23896	1.3	.7	96.1	1.9	3.3a	1.7		None	
SBR76-10784	1318.2-1318.9	23901	6.7	1.0	90.3	2.0	17.6	2.4	.911	None	
SBR76-10785	1318.9-1319.4	23902	15.0	1.2	78.9	4.9	39.9	2.9	.905	None	
SBR76-10786	1319.6-1320.1	23903	7.4	1.6	86.1	4.9	19.5	3.8	.909	None	
SBR76-10787	1320.3-1320.8	23904	7.5	1.8	87.1	3.6	19.7	4.3	.910	None	
SBR76-10788	1320.8-1322.0	23905	6.3	2.0	87.6	4.1	16.7	4.8	.905	None	
SBR76-10789	1322.0-1323.0	23906	1.4	1.5	95.6	1.5	3.8a	3.6		None	
SBR76-10790	1323.0-1324.0	23907	.3	1.3	96.5	1.9	.9a	3.1		None	
SBR76-10791	1324.0-1325.0	23908	.3	1.8	96.0	1.9	.9a	4.3		None	
SBR76-10792	1325.0-1326.0	23909	.4	2.0	96.6	1.0	1.0a	4.8		None	
SBR76-10793	1326.0-1327.0	23910	.4	2.5	93.7	3.6	.9a	5.9		None	
SBR76-10794	1327.0-1328.0	23911	1.4	1.8	94.7	2.1	3.7a	4.2		None	
SBR76-10795	1328.0-1329.1	23912	1.1	1.6	95.5	1.9	2.8a	3.7		None	
SBR76-10796	1329.1-1330.3	23913	.4	1.5	96.8	1.3	.9a	3.6		None	
SBR76-10797	1330.3-1331.6	23914	.3	1.0	97.1	1.6	.8a	2.4		None	
SBR76-10798	1331.6-1332.9	23915	.6	1.0	96.3	2.1	1.5a	2.4		None	
SBR76-10799	1332.9-1333.9	23916	2.5	1.0	93.8	2.7	6.4	2.4	.915	None	
SBR76-10800	1333.9-1334.9	23917	12.8	1.6	81.5	4.1	33.6	3.8	.911	None	
SBR76-10801	1334.9-1335.9	23918	4.5	1.7	91.1	2.7	11.9	4.1	.914	None	
SBR76-10802	1335.9-1337.3	23919	1.3	1.5	95.7	1.5	3.4a	3.6		None	
SBR76-10803	1337.3-1338.6	23920	3.4	1.8	92.2	2.6	9.2	4.3	.884	None	
SBR76-10804	1338.6-1340.0	23921	12.4	1.5	82.5	3.6	33.5	3.6	.890	None	
SBR76-10805	1340.0-1341.2	23922	5.9	2.2	88.7	3.2	15.8	5.3	.898	None	
SBR76-10806	1341.2-1342.2	23923	3.7	1.9	91.6	2.8	9.6	4.6	.908	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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		
SBR76-10807	1342.2-1343.2	23925	1.8	1.9	94.1	2.2	4.6a	4.6		None
SBR76-10808	1343.2-1344.2	23926	.9	2.0	95.3	1.8	2.3a	4.8		None
SBR76-10809	1344.2-1345.5	23927	7.3	2.1	87.0	3.6	19.4	5.0	0.902	None
SBR76-10810	1345.5-1346.8	23928	7.2	2.0	96.5	4.3	19.0	4.8	.902	None
SBR76-10811	1346.8-1348.3	23929	4.8	2.5	88.7	4.0	12.8	6.0	.905	None
SBR76-10812	1348.3-1349.6	23930	2.2	1.7	93.7	2.4	5.7	4.1	.912	None
SBR76-10813	1349.6-1350.6	23931	.6	3.9	93.1	2.4	1.6a	9.3		None
SBR76-10814	1350.6-1351.6	23932	1.6	1.2	95.8	1.4	4.2a	2.8		None
SBR76-10815	1351.6-1352.9	23933	9.7	2.1	85.2	3.0	25.7	5.0	.909	None
SBR76-10816	1352.9-1354.3	23934	4.7	2.1	88.3	4.9	12.3	5.0	.916	None
SBR76-10817	1354.3-1355.3	23935	.9	2.5	94.7	1.9	2.4a	6.0		None
SBR76-10818	1355.3-1356.3	23984	.0	7.6	90.3	2.1	Trace	18.3		None
SBR76-10819	1356.3-1357.3	23937	.0	9.1	87.9	3.0	Trace	21.9		None
SBR76-10820	1357.3-1358.6	23938	.4	4.5	93.9	1.2	1.0a	10.8		None
SBR76-10821	1358.6-1359.9	23939	2.8	1.3	93.3	2.6	7.4	3.1	.918	None
SBR76-10822	1359.9-1361.9	23940	.1	4.1	94.2	1.6	.2a	9.8		None
SBR76-10823	1361.9-1363.9	23941	.0	5.6	91.0	3.4	.1a	13.4		None
SBR76-10824	1363.9-1365.9	23942	.0	7.7	90.0	2.3	Trace	18.5		None
SBR76-10825	1365.9-1367.0	23943	1.3	6.0	89.5	3.2	3.4a	14.4		None
SBR76-10826	1367.0-1368.0	23944	3.7	2.4	90.8	3.1	9.8	5.8	.912	None
SBR76-10827	1368.0-1370.0	23945	.0	4.4	94.6	1.0	Trace	10.5		None
SBR76-10828	1370.0-1372.0	23946	.0	8.9	88.1	3.0	Trace	21.2		None
SBR76-10829	1372.0-1374.5	23947	.0	11.3	86.5	2.2	Trace	27.1		None
SBR76-10830	1374.5-1376.7	23948	.0	10.0	86.2	3.8	Trace	24.0		None
SBR76-10831	1376.7-1378.2	23949	.1	7.0	89.3	3.6	.4a	16.8		None
SBR76-10832	1378.2-1379.7	23950	.1	7.0	89.2	3.7	.3a	16.8		None
SBR76-10833	1379.7-1380.7	23951	.1	6.0	92.0	1.9	.2a	14.4		None
SBR76-10834	1380.7-1381.8	23952	5.8	1.8	89.8	2.6	15.2	4.3	.910	None
SBR76-10835	1381.8-1383.0	23983	5.4	1.8	89.7	3.1	14.2	4.3	.916	None
SBR76-10836	1383.0-1384.2	23954	4.4	2.0	91.5	2.1	11.6	4.8	.912	None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	Gal per ton				
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
SBR76-10837	1384.2-1385.4	24008	4.7	1.9	91.4	2.0	12.5	4.6	0.908	None	
SBR76-10838	1385.4-1386.6	23956	4.8	2.3	89.7	3.2	12.5	5.5	.913	None	
SBR76-10839	1386.6-1387.6	23957	3.8	2.3	92.0	1.9	9.9	5.5	.913	None	
SBR76-10840	1387.6-1388.6	23958	2.7	2.1	90.9	4.3	7.2	4.9	.915	None	
SBR76-10841	1388.6-1389.6	23959	1.1	2.0	95.2	1.7	2.9a	4.8		None	
SBR76-10842	1389.6-1391.0	23960	9.6	1.9	85.1	3.4	25.4	4.6	.906	None	
SBR76-10843	1391.0-1392.5	23961	8.7	2.0	86.5	2.8	23.3	4.8	.895	None	
SBR76-10844	1392.5-1393.2	23962	4.3	1.3	91.5	2.9	11.4	3.1	.905	None	
SBR76-10845	1393.2-1394.5	23963	2.3	2.1	92.4	3.2	6.1	5.0	.904	None	
SBR76-10846	1394.5-1395.5	23964	.2	7.8	88.9	3.1	.6a	18.7		None	
SBR76-10847	1395.5-1396.6	23965	1.9	3.2	93.2	1.7	5.0a	7.7		None	
SBR76-10848	1396.6-1397.6	23966	2.0	2.3	94.2	1.5	5.2	5.5	.907	None	
SBR76-10849	1397.6-1399.0	23967	.8	2.9	94.4	1.9	2.2a	7.0		None	
SBR76-10850	1399.0-1400.9	23968	.4	3.1	94.2	2.3	1.2a	7.4		None	
SBR76-10851	1400.9-1401.9	23969	.8	2.3	94.8	2.1	2.2a	5.5		None	
SBR76-10852	1401.9-1402.6	23970	9.4	1.6	84.4	4.6	24.7	3.8	.911	None	
SBR76-10853	1402.6-1404.3	23971	2.7	2.6	92.0	2.7	7.2	6.2	.904	None	
SBR76-10854	1404.3-1405.6	23972	.3	7.0	90.6	2.1	.9a	16.8		None	
SBR76-10855	1405.6-1407.3	23973	2.0	2.2	93.7	2.1	5.3	5.3	.910	None	
SBR76-10856	1407.3-1409.0	23974	.0	6.2	90.1	3.7	Trace	14.9		None	
SBR76-10857	1409.0-1411.0	23975	.0	9.2	87.8	3.0	Trace	22.1		None	
SBR76-10858	1411.0-1412.2	23976	1.7	4.0	92.0	2.3	4.4a	9.6		None	
SBR76-10859	1412.2-1414.0	23977	.0	7.3	90.5	2.2	.1a	17.5		None	
SBR76-10860	1414.0-1416.0	23978	.0	11.6	86.1	2.3	Trace	27.7		None	
SBR76-10861	1416.0-1417.4	23979	.0	11.5	86.5	2.0	Trace	27.6		None	
SBR76-10862	1417.4-1419.2	23980	.1	7.0	91.3	1.6	.4a	16.8		None	
SBR76-10863	1419.2-1420.6	23981	.0	7.4	90.7	1.9	Trace	17.7		None	
SBR76-10864	1420.6-1421.8	23982	.1	7.0	91.1	1.8	.4a	16.8		None	
SBR76-10865	1421.8-1422.9	23985	.1	3.8	95.2	.9	.2a	9.1		None	
SBR76-10866	1422.9-1424.2	23986	.1	3.0	95.9	1.0	.1a	7.2		None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	
SBR76-10867	1424.2-1425.7	23987	0.1	2.7	96.1	1.1	0.2a	6.5	None	
SBR76-10868	1429.0-1430.0	23988	.0	5.5	92.7	1.8	.1a	13.2	None	
SBR76-10869	1430.0-1431.5	23989	8.8	2.2	85.6	3.4	23.5	5.3	0.900	None
SBR76-10870	1431.5-1433.2	23990	6.8	2.3	87.5	3.4	18.2	5.4	.904	None
SBR76-10871	1433.2-1434.3	23991	1.7	2.6	93.5	2.2	4.3a	6.2		None
SBR76-10872	1434.3-1435.3	23992	.9	3.7	93.6	1.8	2.2a	8.9		None
SBR76-10873	1435.3-1436.3	23993	2.7	1.5	94.4	1.4	7.1	3.6	.911	None
SBR76-10874	1436.3-1437.4	23994	6.1	2.4	88.3	3.2	16.0	5.8	.906	None
SBR76-10875	1437.4-1438.4	23995	4.9	2.2	89.4	3.5	12.9	5.3	.910	None
SBR76-10876	1438.4-1439.4	23996	4.3	2.2	90.4	3.1	11.2	5.3	.908	None
SBR76-10877	1439.4-1440.4	23997	3.7	2.3	90.7	3.3	9.6	5.5	.909	None
SBR76-10878	1440.4-1441.5	23998	3.1	2.0	90.5	4.4	8.2	4.8	.913	None
SBR76-10879	1441.5-1442.5	23999	5.0	2.3	90.0	2.7	13.3	5.5	.910	None
SBR76-10880	1442.5-1443.6	24000	2.4	1.9	93.2	2.5	6.2a	4.6		None
SBR76-10881	1443.6-1444.8	24001	1.4	2.1	94.8	1.7	3.7a	5.0		None
SBR76-10882	1444.8-1446.1	24002	3.5	1.7	93.8	1.0	9.2	4.1	.911	None
SBR76-10883	1446.1-1446.6	24003	13.9	2.0	79.9	4.2	36.4	4.8	.913	None
SBR76-10884	1446.6-1447.6	24004	.9	3.1	94.0	2.0	2.3a	7.4		None
SBR76-10885	1447.6-1449.6	24005	.5	3.3	95.5	.7	1.3a	7.9		None
SBR76-10886	1449.6-1451.0	24006	.1	4.6	94.1	1.2	.1a	11.0		None
SBR76-10887	1451.0-1452.3	24007	.4	5.0	93.0	1.6	1.1a	12.0		None
SBR76-10888	1452.3-1453.8	24009	2.1	2.3	94.1	1.5	5.5	5.5	.905	None
SBR76-10889	1453.8-1454.3	24010	12.3	2.1	81.6	4.0	32.3	4.9	.912	None
SBR76-10890	1454.3-1455.0	24011	5.4	1.7	89.1	3.8	14.2	4.1	.910	None
SBR76-10891	1455.0-1457.0	24012	.5	3.9	93.0	2.6	1.3a	9.3		None
SBR76-10892	1457.0-1459.0	24013	.1	4.0	94.6	1.3	.2a	9.6		None
SBR76-10893	1459.0-1461.0	24014	.0	6.6	92.2	1.2	Trace	15.9		None
SBR76-10894	1461.0-1462.2	24015	.0	8.7	90.2	1.1	Trace	20.9		None
SBR76-10895	1462.2-1463.4	24016	4.3	2.4	90.5	2.8	11.3	5.7	.916	None
SBR76-10896	1463.4-1464.5	24017	1.6	3.5	93.2	1.7	4.2a	8.3		None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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		
SBR76-10897	1464.5-1465.6	24018	0.0	7.3	90.9	1.8	Trace	17.4	None	
SBR76-10898	1465.6-1466.7	24019	.0	6.8	92.1	1.1	Trace	16.2	None	
SBR76-10899	1466.7-1467.7	24020	.0	3.1	96.4	.5	Trace	7.4	None	
SBR76-10900	1467.7-1468.8	24021	.5	3.2	95.2	1.1	1.3a	7.7	None	
SBR76-10901	1468.8-1470.0	24022	.0	4.6	94.7	.7	Trace	11.1	None	
SBR76-10902	1470.0-1472.1	24023	.0	6.4	92.4	1.2	Trace	15.5	None	
SBR76-10903	1472.1-1474.2	24024	.0	7.0	90.9	2.1	.1a	16.8	None	
SBR76-10904	1474.2-1475.2	24025	.2	6.8	91.1	1.9	.5a	16.3	None	
SBR76-10905	1475.2-1477.0	24027	14.8	2.4	77.2	5.6	38.7	5.8	0.916	
SBR76-10906	1477.0-1480.0	24028	2.8	3.1	91.9	2.2	7.4	7.4	.906	
SBR76-10907	1480.0-1481.9	24029	3.1	2.0	93.2	1.7	8.1	4.8	.910	
SBR76-10908	1481.9-1483.6	24030	1.4	2.2	94.0	2.4	3.7a	5.3		
SBR76-10909	1483.6-1484.8	24031	.0	5.9	92.0	2.1	Trace	14.1	None	
SBR76-10910	1484.8-1486.0	24032	.0	8.1	90.4	1.5	Trace	19.4	None	
SBR76-10911	1486.0-1487.1	24033	.0	8.7	89.5	1.8	Trace	20.9	None	
SBR76-10912	1487.1-1489.0	24034	5.7	2.5	88.3	3.5	15.1	5.9	.913	
SBR76-10913	1488.6-1490.7	24035	.3	4.5	94.2	1.0	.7a	10.8	None	Footage adjustment
SBR76-10914	1490.7-1494.0	24036	.2	2.8	95.5	1.5	.5a	6.7	None	
SBR76-10915	1494.0-1496.0	24037	.0	5.0	93.5	1.5	Trace	12.1	None	
SBR76-10916	1496.0-1497.4	24038	.0	4.3	94.3	1.4	Trace	10.2	None	
SBR76-10917	1497.4-1498.2	24039	.0	6.7	91.0	2.3	Trace	16.2	None	
SBR76-10918	1498.2-1499.4	24040	2.4	2.1	93.5	2.0	6.4	5.0	.902	
SBR76-10919	1499.4-1501.0	24041	2.3	3.1	92.5	2.1	6.1	7.4	.903	
SBR76-10920	1501.0-1502.0	24042	.1	5.0	93.5	1.4	.3a	12.0	None	
SBR76-10921	1502.0-1505.0	24043	.1	1.8	96.7	1.4	.3a	4.2	None	
SBR76-10922	1505.0-1509.0	24044	.0	1.6	97.0	1.4	Trace	3.9	None	
SBR76-10923	1509.0-1513.5	24045	.0	1.8	96.8	1.4	Trace	4.3	None	
SBR76-10924	1513.5-1515.0	24046	.0	1.5	97.3	1.2	Trace	3.6	None	
SBR76-10925	1515.0-1516.0	24047	.2	2.9	95.4	1.5	.5a	7.0	None	
SBR76-10926	1516.0-1517.5	24048	1.9	5.6	89.9	2.6	4.8a	13.4	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	
SBR76-10927	1517.5-1518.5	24049	3.6	2.4	90.9	3.1	9.5	5.7	None	
SBR76-10928	1518.5-1521.0	24050	.5	4.1	93.9	1.5	1.2a	9.8	None	
SBR76-10929	1521.0-1523.0	24051	.1	3.9	94.0	2.0	.2a	9.3	None	
SBR76-10930	1523.0-1524.0	24052	.1	7.1	91.3	1.5	.2a	17.0	None	
SBR76-10931	1524.0-1525.2	24053	.7	6.9	91.3	1.1	1.8a	16.5	None	
SBR76-10932	1525.2-1526.5	24054	4.4	2.3	91.2	2.1	11.6	5.4	.907	None
SBR76-10933	1526.5-1528.5	24055	3.3	2.2	92.7	1.8	8.5	5.3	.915	None
SBR76-10934	1528.5-1529.5	24056	4.5	2.3	90.3	2.9	11.7	5.4	.913	None
SBR76-10935	1529.5-1530.6	24057	3.6	2.2	92.2	2.0	9.5	5.3	.909	None
SBR76-10936	1530.6-1531.6	24058	4.5	2.2	90.2	3.1	11.9	5.3	.903	None
SBR76-10937	1531.6-1532.6	24059	3.0	2.0	91.7	3.3	8.0	4.8	.910	None
SBR76-10938	1532.6-1533.6	24060	1.5	2.3	93.4	2.8	3.8a	5.5	None	None
SBR76-10939	1533.6-1534.3	24061	8.0	2.0	86.8	3.2	21.3	4.8	.901	None
SBR76-10940	1534.3-1535.6	24062	4.4	2.2	91.1	2.3	11.7	5.3	.899	None
SBR76-10941	1535.6-1536.9	24063	1.3	3.2	93.2	2.3	3.4a	7.7	None	None
SBR76-10942	1536.9-1537.9	24064	1.3	3.7	92.9	2.1	3.3a	8.9	None	None
SBR76-10943	1537.9-1538.9	24065	6.4	2.2	88.1	3.3	17.1	5.3	.905	None
SBR76-10944	1538.9-1540.4	24066	2.8	2.8	91.6	2.8	7.4	6.7	.905	None
SBR76-10945	1540.4-1543.0	24067	.2	3.3	94.6	1.9	.6a	7.9	None	None
SBR76-10946	1543.0-1543.8	24068	1.3	4.0	92.9	1.8	3.3a	9.6	None	None
SBR76-10947	1543.8-1545.2	24069	.4	4.8	93.1	1.7	1.1a	11.5	None	None
SBR76-10948	1545.2-1546.2	24070	.5	2.6	95.6	1.3	1.4a	6.1	None	None
SBR76-10949	1546.2-1547.4	24071	12.5	2.5	79.9	5.1	33.0	6.0	.906	None
SBR76-10950	1548.0-1549.3	24072	1.9	1.7	93.8	2.6	4.8a	4.1	None	None
SBR76-10951	1549.3-1550.3	24073	14.2	3.0	77.3	5.5	37.6	7.2	.906	None
SBR76-10952	1550.3-1550.9	24074	2.3	1.7	93.8	2.2	6.0	4.1	.914	None
SBR76-10953	1550.9-1552.0	24075	12.2	2.6	79.9	5.3	32.0	6.2	.916	None
SBR76-10954	1552.0-1553.0	24076	13.6	2.6	79.5	4.3	35.8	6.2	.913	None
SBR76-10955	1553.0-1553.5	24077	7.4	3.0	86.2	3.4	19.4	7.2	.910	None
SBR76-10956	1554.0-1554.8	24078	1.9	2.2	92.7	3.2	5.0a	5.3	None	None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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	Gal per ton				
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
SBR76-10957	1554.8-1555.8	24079	0.6	2.2	95.6	1.6	1.4a	5.3		None	
SBR76-10958	1555.8-1557.0	24080	.9	2.6	95.0	1.5	2.2a	6.2		None	
SBR76-10959	1557.0-1558.1	24081	2.4	2.2	92.5	2.9	6.4	5.3	0.916	None	
SBR76-10960	1558.1-1558.8	24082	8.4	2.2	86.5	2.9	22.1	5.4	.915	None	
SBR76-10961	1558.8-1559.8	24083	1.8	2.9	93.1	2.2	4.6a	7.0		None	
SBR76-10962	1559.8-1560.9	24084	2.4	2.3	93.3	2.0	6.2	5.5	.913	None	
SBR76-10963	1560.9-1562.3	24085	7.5	2.9	86.9	2.7	19.8	7.0	.911	None	
SBR76-10964	1562.3-1564.0	24086	1.0	1.3	96.3	1.4	2.5a	3.1		None	
SBR76-10965	1564.0-1566.0	24087	.6	3.2	94.5	1.7	1.4a	7.7		None	
SBR76-10966	1566.0-1568.0	24088	1.2	2.2	95.4	1.2	3.2a	5.3		None	
SBR76-10967	1568.0-1569.5	24089	7.6	2.2	88.1	2.1	20.2	5.3	.904	None	
SBR76-10968	1569.5-1571.0	24090	1.7	2.2	95.0	1.1	4.5a	5.3		None	
SBR76-10969	1571.0-1572.0	24091	3.7	2.4	92.3	1.6	9.7	5.8	.912	None	
SBR76-10970	1572.0-1573.0	24092	3.5	2.4	92.5	1.6	9.2	5.8	.909	None	
SBR76-10971	1573.0-1574.0	24093	4.7	2.5	91.0	1.8	12.4	6.0	.910	None	
SBR76-10972	1574.0-1575.0	24094	5.1	2.2	91.1	1.6	13.4	5.3	.908	None	
SBR76-10973	1575.0-1576.0	24095	2.5	2.0	94.2	1.3	6.5	4.8	.912	None	
SBR76-10974	1576.0-1577.2	24096	.9	1.9	96.2	1.0	2.4a	4.6		None	
SBR76-10975	1577.2-1578.5	24097	7.3	2.2	89.0	1.5	19.2	5.3	.909	None	
SBR76-10976	1578.5-1580.0	24098	1.1	2.4	95.8	.7	2.9a	5.8		None	
SBR76-10977	1580.0-1582.6	24099	.0	2.3	96.1	1.6	.1a	5.5		None	
SBR76-10978	1582.6-1585.2	24100	.2	3.0	95.9	.9	.5a	7.2		None	
SBR76-10979	1585.2-1586.8	24101	1.3	2.8	95.1	.8	3.4	6.7	.904	None	
SBR76-10980	1586.8-1588.2	24102	3.3	2.3	92.6	1.8	8.6	5.5	.910	None	
SBR76-10981	1588.2-1590.0	24103	.2	3.0	96.1	.7	.5a	7.2		None	
SBR76-10982	1590.0-1591.8	24104	.3	3.4	95.3	1.0	.9a	8.1		None	
SBR76-10983	1591.8-1592.7	24105	11.0	2.7	83.4	2.9	29.2	6.5	.906	None	
SBR76-10984	1592.7-1593.7	24782	1.9	2.4	94.3	1.4	5.0a	5.8		None	
SBR76-10985	1593.7-1595.2	24107	.3	2.7	94.9	2.1	.8a	6.5		None	
SBR76-10986	1595.2-1596.3	24108	9.1	2.4	95.5	3.0	24.0	5.8	.907	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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		
SBR76-10987	1596.3-1597.3	24109	2.8	1.9	94.0	1.3	7.4	4.6	0.910	None		
SBR76-10988	1597.3-1598.4	24110	2.9	2.0	93.5	1.6	7.7	4.8	.908	None		
SBR76-10989	1598.4-1599.8	24111	4.7	2.4	91.0	1.9	12.2	5.8	.916	None		
SBR76-10990	1599.8-1600.8	24112	8.0	2.8	86.6	2.6	20.9	6.7	.915	None		
SBR76-10991	1600.8-1601.8	24113	7.6	2.3	87.5	2.6	19.9	5.5	.915	None		
SBR76-10992	1601.8-1602.5	24114	7.0	2.3	87.6	3.1	18.2	5.5	.917	None		
SBR76-10993	1602.5-1603.5	24115	2.0	2.2	94.8	1.0	5.3	5.3	.914	None		
SBR76-10994	1603.5-1605.0	24116	.0	4.0	95.3	.7	Trace	9.5		None		
SBR76-10995	1605.0-1606.1	24117	.1	5.1	94.4	.4	.2a	12.2		None		
SBR76-10996	1606.1-1607.1	24118	.9	2.8	95.7	.6	2.4a	6.7		None		
SBR76-10997	1607.1-1607.9	25010	7.1	2.9	86.4	3.6	18.9	7.0	.902	None		
SBR76-10998	1607.9-1610.0	24120	.9	2.3	95.9	.9	2.5a	5.5		None		
SBR76-10999	1610.0-1612.0	24121	.1	2.8	96.8	.3	.2a	6.7		None		
SBR76-11000	1612.0-1613.0	24122	.5	3.2	95.3	1.0	1.3a	7.7		None		
SBR76-11001	1613.0-1613.7	24123	2.2	3.8	91.8	2.2	5.9	9.1	.904	None		
SBR76-11002	1613.7-1614.2	24124	1.8	1.7	95.9	.6	4.8a	4.1		None		
SBR76-11003	1614.2-1614.8	24125	6.6	2.7	88.9	1.8	17.6	6.5	.905	None		
SBR76-11004	1614.8-1615.3	24126	2.9	1.9	93.7	1.5	7.7	4.6	.911	None		
SBR76-11005	1615.3-1616.0	24127	.0	3.3	96.0	.7	No oil	7.9		None		
SBR76-11006	1616.0-1619.0	24128	1.7	2.9	94.8	.6	4.5a	7.0		None		
SBR76-11007	1619.0-1622.0	24129	.0	5.4	93.8	.8	Trace	13.0		None		
SBR76-11008	1622.0-1623.1	24130	.9	2.8	95.1	1.2	2.4a	6.7		None		
SBR76-11009	1623.1-1624.2	24131	10.0	2.4	84.8	2.8	26.3	5.8	.910	None		
SBR76-11010	1624.2-1625.2	24132	2.2	1.6	95.3	.9	5.7	3.8	.907	None		
SBR76-11011	1625.2-1626.9	24133	.5	1.8	96.7	1.0	1.3a	4.3		None		
SBR76-11012	1626.9-1628.5	24134	1.4	1.8	95.6	1.2	3.6a	4.3		None		
SBR76-11013	1628.5-1629.8	24135	3.4	2.0	93.4	1.2	9.1	4.8	.896	None		
SBR76-11014	1629.8-1631.0	24136	2.8	2.1	93.9	1.2	7.4	5.0	.901	None		
SBR76-11015	1631.0-1632.0	24137	5.0	2.3	91.0	1.7	13.4	5.5	.902	None		
SBR76-11016	1632.0-1633.0	24138	3.5	2.1	93.1	1.3	9.1	5.0	.909	None		

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to	Remarks	
			Weight percent		Gal per ton					
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil $\frac{1}{2}$	Water	coke	
SBR76-11017	1633.0-1634.0	24139	2.3	1.7	94.9	1.1	6.0	4.1	None	
SBR76-11018	1634.0-1635.0	24140	1.2	1.8	96.3	.7	3.2a	4.3	None	
SBR76-11019	1635.0-1636.0	24141	2.9	1.9	94.0	1.2	7.8	4.6	None	.897
SBR76-11020	1636.0-1637.0	24142	2.2	1.8	94.9	1.1	5.9	4.3	None	.910
SBR76-11021	1637.0-1638.0	24143	.0	4.1	95.6	.3	No oil	9.9	None	
SBR76-11022	1638.0-1639.0	24144	.0	4.1	95.5	.4	No oil	9.7	None	
SBR76-11023	1639.0-1640.1	24145	1.0	2.3	96.0	.7	2.7a	5.5	None	
SBR76-11024	1640.1-1641.1	24146	5.2	1.8	91.3	1.7	13.8	4.3	None	.907
SBR76-11025	1641.1-1642.3	24147	.9	1.2	97.0	.9	2.3a	2.9	None	
SBR76-11026	1642.3-1643.3	24148	.6	2.3	96.5	.6	1.5a	5.5	None	
SBR76-11027	1643.3-1644.3	24149	2.0	1.7	95.4	.9	5.4	4.0	None	.888
SBR76-11028	1644.3-1645.0	24150	2.1	2.2	93.5	2.2	5.5	5.2	None	.905
SBR76-11029	1645.0-1646.5	24151	.2	3.2	96.0	.6	.6a	7.7	None	
SBR76-11030	1646.5-1647.9	24152	1.5	1.8	95.9	.8	3.8a	4.3	None	
SBR76-11031	1647.9-1649.5	24153	1.0	2.1	96.4	.5	2.7a	5.0	None	
SBR76-11032	1649.5-1651.2	24154	1.1	1.1	95.8	2.0	2.9a	2.6	None	
SBR76-11033	1651.2-1652.4	24155	.2	1.1	97.5	1.2	.5a	2.6	None	
SBR76-11034	1652.4-1653.6	24156	.9	1.6	96.1	1.4	2.2a	3.8	None	
SBR76-11035	1653.6-1654.8	24157	.6	2.2	96.5	.7	1.5a	5.3	None	
SBR76-11036	1654.8-1656.0	24158	.4	3.0	95.8	.8	1.0a	7.2	None	
SBR76-11037	1656.0-1657.0	24159	.5	1.6	97.1	.8	1.2a	3.8	None	
SBR76-11038	1657.0-1658.0	24160	1.4	1.6	96.1	.9	3.7a	3.8	None	
SBR76-11039	1658.0-1659.3	24161	1.2	1.6	96.0	1.2	3.0a	3.8	None	
SBR76-11040	1659.3-1660.6	24162	.6	1.9	95.9	1.6	1.5a	4.6	None	
SBR76-11041	1660.6-1662.6	24163	.1	1.8	97.4	.7	.3a	4.3	None	
SBR76-11042	1662.6-1664.6	24164	.1	2.1	97.5	.3	.2a	4.9	None	
SBR76-11043	1664.6-1665.8	24165	1.3	2.6	95.1	1.0	3.3a	6.2	None	
SBR76-11044	1665.8-1667.0	24166	3.5	2.9	92.2	1.4	9.3	7.0	None	.897
SBR76-11045	1667.0-1668.0	24167	2.0	2.6	93.9	1.5	5.3	6.2	None	.914
SBR76-11046	1668.0-1669.0	24168	1.7	2.7	94.4	1.2	4.4a	6.5	None	

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 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 ^{1/}	Water
SBR76-11047	1669.0-1670.0	24169	2.3	2.7	93.8	1.2	6.0	6.5	0.905	None
SBR76-11048	1670.0-1671.3	24170	2.6	2.8	92.9	1.7	6.8	6.7	.901	None
SBR76-11049	1671.3-1672.6	24171	3.2	2.8	92.0	2.0	8.4	6.9	.900	None
SBR76-11050	1672.6-1673.9	24172	2.1	2.4	94.4	1.1	5.5	5.8	.900	None
SBR76-11051	1673.9-1674.5	24173	3.1	2.0	93.4	1.5	8.3	4.8	.900	None
SBR76-11052	1674.5-1675.7	24174	6.5	2.5	88.1	2.9	17.2	6.0	.902	None
SBR76-11053	1675.7-1676.5	24175	1.7	1.9	95.1	1.3	4.4a	4.6		None
SBR76-11054	1676.5-1677.5	24176	1.0	2.6	95.1	1.3	2.7a	6.2		None
SBR76-11055	1677.5-1678.2	24177	4.6	3.0	90.7	1.7	12.2	7.2	.902	None
SBR76-11056	1678.2-1679.0	24178	1.1	1.5	96.2	1.2	2.9a	3.6		None
SBR76-11656	1679.0-1679.7	24305	5.6	2.0	90.7	1.7	14.7	4.8	.911	None
SBR76-11657	1679.7-1680.4	24306	3.4	1.5	92.3	2.8	9.1	3.6	.898	None
SBR76-11658	1680.4-1681.9	24307	5.0	3.2	90.2	1.6	13.3	7.7	.905	None
SBR76-11659	1682.0-1682.8	24308	2.5	2.3	94.3	.9	6.5	5.5	.916	None
SBR76-11660	1682.8-1684.5	24309	1.4	1.4	96.6	.6	3.7a	3.4		None
SBR76-11661	1684.5-1685.5	24310	3.0	2.2	94.1	.7	7.8	5.3	.907	None
SBR76-11662	1685.5-1686.5	24311	5.3	2.8	90.1	1.8	14.2	6.7	.901	None
SBR76-11663	1686.5-1687.5	24312	3.7	3.0	89.4	3.9	9.7	7.2	.906	None
SBR76-11664	1687.5-1688.2	24313	.9	2.0	96.7	.4	2.3a	4.8		None
SBR76-11665	1688.2-1689.4	24314	8.6	3.0	86.3	2.1	22.5	7.2	.914	None
SBR76-11666	1689.4-1690.8	24315	2.4	3.3	91.8	2.5	6.3	7.9	.913	None
SBR76-11667	1690.8-1692.5	24316	5.7	3.6	89.3	1.4	14.9	8.6	.916	None
SBR76-11668	1692.5-1693.5	24317	7.0	3.4	87.7	1.9	18.1	8.1	.923	None
SBR76-11669	1693.5-1694.6	24318	4.1	2.3	91.6	2.0	10.7	5.5	.917	None
SBR76-11670	1694.6-1695.9	24392	5.3	2.1	91.2	1.4	13.8	5.0	.918	None
SBR76-11671	1695.9-1697.6	24320	5.9	3.3	89.5	1.3	15.1	7.9	.931	None
SBR76-11672	1697.6-1698.6	24321	4.1	2.3	91.9	1.7	10.5	5.5	.937	None
SBR76-11673	1698.6-1699.7	24322	5.3	2.8	90.1	1.8	13.7	6.7	.929	None
SBR76-11674	1699.7-1700.6	24323	2.2	.4	96.6	.8	5.8	1.0	.905	None
SBR76-11675	1700.6-1701.4	24324	7.4	2.4	88.0	2.2	19.1	5.8	.930	None

See footnote at end of table.

Core samples received June 26, 1970; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Union Pacific Railroad Company's Blue Rim No. 44-19

Surface elevation: 6,823 feet

Sample number		Run No.	Yield of product						Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent			Gal per ton				Tendency to	coke	
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil ^{1/}	Water				
SBR76-11676	1701.4-1702.7	24325	5.0	1.6	91.9	1.5	12.7	3.8	0.935	None		
SBR76-11677	1702.7-1704.0	24326	6.3	1.9	89.3	2.5	16.1	4.6	.940	None		
SBR76-11678	1702.0-1703.5	24327	6.2	4.0	87.9	1.9	15.9	9.6	.940	None	Footage adjustment	
SBR76-11679	1703.5-1704.0	24328	1.8	1.3	95.8	1.1	4.6a	3.1		None		
SBR76-11680	1704.0-1704.9	24329	2.4	3.0	93.2	1.4	6.4	7.2	.913	None		
SBR76-11681	1704.9-1705.9	24333	3.0	3.2	92.6	1.2	7.7	7.7	.915	None		
SBR76-11682	1705.9-1706.8	24334	2.2	3.3	92.5	2.0	5.9	7.9	.906	None		
SBR76-11683	1706.8-1707.8	24335	5.6	2.9	89.7	1.8	14.6	7.0	.917	None		
SBR76-11684	1707.8-1710.0	24336	.2	1.5	97.2	1.1	.4a	3.6		None		
SBR76-11685	1710.0-1714.0	24337	.0	1.7	97.6	.7	No oil	4.2		None		
SBR76-11686	1714.0-1718.0	24338	.0	2.3	96.6	1.1	No oil	5.4		None		
SBR76-11687	1718.0-1720.8	24339	.0	2.8	95.9	1.3	Trace	6.8		None		
SBR76-11688	1720.8-1721.5	24340	.0	3.7	95.8	.5	Trace	8.8		None		
SBR76-11689	1721.5-1723.0	24341	.0	1.8	97.7	.5	Trace	4.3		None		
SBR76-11690	1723.0-1724.5	24342	.0	2.3	96.9	.8	Trace	5.5		None		
SBR76-11691	1724.5-1725.6	24343	.2	2.9	96.5	.4	.4a	7.0		None		
SBR76-11692	1725.6-1726.6	24344	2.1	2.2	94.1	1.6	5.6	5.3	.906	None	Top Tipton Member?	
SBR76-11693	1726.6-1728.0	24345	2.6	2.3	93.7	1.4	6.9	5.5	.901	None		
SBR76-11694	1728.0-1729.5	24346	2.5	1.9	94.0	1.6	6.7	4.6	.896	None		
SBR76-11695	1729.5-1730.4	24347	.5	2.4	95.9	1.2	1.3a	5.8		None		
SBR76-11696	1730.4-1731.1	24348	3.1	2.8	92.4	1.7	8.1	6.7	.909	None		
SBR76-11697	1731.1-1732.0	24349	.9	4.5	93.9	.7	2.3a	10.8		None		
SBR76-11698	1732.0-1740.0	24350	.0	.7	99.1	.2	No oil	1.6		None	Top New Fork Tongue	
SBR76-11699	1740.0-1750.0	24351	.0	1.5	98.1	.4	No oil	3.5		None		
SBR76-11700	1750.0-1757.0	24352	.0	.9	98.6	.5	No oil	2.2		None		
SBR76-11701	1757.0-1759.0	24353	.0	1.8	97.7	.5	No oil	4.4		None		

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

Core samples received June 26, 1970; assays made on air-dried samples