

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Davis Oil Company's Fred-Federal No. 1 well drilled in SW1/4NW1/4 (1980 feet S/N 1980 feet E/W) of sec 30, T 17 N, R 99 W, Sweetwater County, Wyoming

Kelly Bushing elevation 7,233 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	Weent shale	Gas + loss	Oil <sup>1/</sup>	Water	coke	
SBR70-4911	0- 10	51277	0.0	3.1	95.5	1.4	No Oil	7.4	None	
SBR70-4912	10- 20	51278	.0	3.3	95.2	1.5	No Oil	8.0	None	
SBR70-4913	20- 30	51279	.0	3.4	94.4	2.2	No Oil	8.1	None	
SBR70-4914	30- 40	51280	.0	3.1	94.3	2.6	No Oil	7.5	None	
SBR70-4915	40- 50	51281	.0	5.6	93.0	1.4	No Oil	13.5	None	
SBR70-4916	50- 60	51282	.0	4.8	94.2	1.0	Trace	11.4	None	
SBR70-4917	60- 70	51283	.0	3.6	94.7	1.7	No Oil	8.6	None	
SBR70-4918	70- 80	51342	.0	4.5	94.4	1.1	No Oil	10.7	None	
SBR70-4919	80- 85	51343	.0	3.8	94.8	1.4	No Oil	9.1	None	
SBR70-4920	85- 90	51344	.0	3.4	95.0	1.6	No Oil	8.1	None	
SBR70-4921	90- 95	51345	.0	3.3	94.6	2.1	No Oil	7.8	None	
SBR70-4922	95-100	51346	.0	4.4	95.0	.6	No Oil	10.4	None	
SBR70-4923	100-105	51347	.0	5.0	93.8	1.2	Trace	12.0	None	
SBR70-4924	105-110	51348	.0	3.6	95.4	1.0	No Oil	8.5	None	
SBR70-4925	110-115	51349	.0	4.0	95.4	.6	No Oil	9.7	None	
SBR70-4926	115-120	51350	.0	3.7	95.7	.6	No Oil	8.8	None	
SBR70-4927	120-125	51351	.0	2.8	95.0	2.2	No Oil	6.6	None	
SBR70-4928	125-130	51352	.0	2.6	95.3	2.1	No Oil	6.3	None	
SBR70-4929	130-135	51353	.0	3.6	95.5	.9	No Oil	8.7	None	
SBR70-4930	135-140	51354	.0	3.5	95.2	1.3	No Oil	8.4	None	
SBR70-4931	140-145	51355	.0	2.9	96.4	.7	No Oil	6.9	None	
SBR70-4968	145-150	51392	.0	3.0	96.4	.6	No Oil	7.1	None	
SBR70-4969	150-155	51393	.0	3.1	96.3	.6	No Oil	7.4	None	
SBR70-4970	155-160	51394	.0	2.3	96.0	1.7	No Oil	5.5	None	
SBR70-4971	160-165	51395	.0	3.5	95.1	1.4	No Oil	8.5	None	
SBR70-4972	165-170	51396	.0	2.6	95.1	2.3	No Oil	6.2	None	
SBR70-4973	170-175	51397	.2	3.4	95.2	1.2	0.4a	8.3	None	
SBR70-4974	175-180	51398	1.2	3.5	93.6	1.7	3.1a	8.3	None	
SBR70-4975	180-185	51399	.2	1.4	96.7	1.7	.5a	3.3	None	
SBR70-4976	185-190	51400	1.9	2.5	94.3	1.3	4.9a	6.0	None	

See footnote at end of table.

Drill cutting samples received May 15, 1970; Assays made on air-dried samples

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Kelly Bushing elevation 7,233 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 <sup>1/</sup>	Water			
SBR70-4977	190-195	51401	1.3	3.1	94.5	1.1	3.4a	7.5	None	
SBR70-4978	195-200	51402	1.2	2.7	94.6	1.5	3.0a	6.5	None	
SBR70-4979	200-205	51403	.9	3.2	95.0	.9	2.4a	7.7	None	
SBR70-4980	205-210	51404	.5	2.1	96.5	.9	1.4a	5.0	None	
SBR70-4981	210-215	51405	1.0	2.0	96.3	.7	2.6a	4.8	None	
SBR70-4982	215-220	51406	.5	.6	96.5	.4	1.2a	6.2	None	
SBR70-4983	220-225	51407	1.0	2.5	95.8	.7	2.6a	6.1	None	
SBR70-4984	225-230	51408	.3	2.8	96.7	.2	.8a	6.7	None	
SBR70-4985	230-235	51409	.4	2.7	96.3	.6	1.0a	6.4	None	
SBR70-4986	235-240	51410	.3	2.7	96.3	.7	.8a	6.6	None	
SBR70-4987	240-245	51411	.1	2.5	96.6	.8	.2a	5.9	None	
SBR70-4988	245-250	51412	.4	2.7	94.9	2.0	1.0a	6.5	None	
SBR70-4989	250-255	51413	.1	2.7	96.4	.8	.2a	6.6	None	
SBR70-4990	255-260	51414	.1	2.8	96.5	.6	.2a	6.7	None	
SBR70-4991	260-265	51415	.2	2.4	96.7	.7	.6a	5.8	None	
SBR70-4992	265-270	51416	.1	2.5	96.7	.7	.3a	6.0	None	
SBR70-4993	270-275	51417	5.1	2.2	90.5	2.2	13.3	5.3	0.919	None
SBR70-4994	275-280	51418	4.2	2.2	91.6	2.0	11.0	5.3	.918	None
SBR70-4995	280-285	51419	3.8	2.3	91.8	2.1	9.9	5.5	.918	None
SBR70-4996	290-295	51420	4.6	3.1	90.4	1.9	11.9	7.4	.915	None
SBR70-4997	295-300	51421	4.0	3.6	90.7	1.7	10.4	8.6	.906	None
SBR70-4998	300-305	51422	2.8	3.5	92.0	1.7	7.2a	8.3		None
SBR70-4999	305-310	51423	3.2	2.7	92.2	1.9	8.4	6.5	.905	None
SBR70-5000	310-315	51424	3.4	3.4	91.3	1.9	8.9	8.1	.909	None
SBR70-5001	315-320	51425	3.3	4.2	91.0	1.5	8.7	10.1	.907	None
SBR70-5002	320-325	51426	3.4	4.4	90.5	1.7	9.0	10.5	.901	None
SBR70-5003	325-330	51427	3.4	4.0	90.8	1.8	9.1	9.6	.903	None
SBR70-5004	330-335	51428	3.2	3.9	91.4	1.5	8.6	9.3	.899	None
SBR70-5005	335-340	51429	3.3	3.4	93.9	.4	6.0a	8.1		None
SBR70-5006	340-345	51430	2.3	3.2	92.6	1.9	6.0a	7.6		None

See footnote at end of table.

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Laramie	Their		Oil	Water					Oil <sup>1/</sup>	Water
SBR70-5007	345-350	51431	2.4	3.8	92.2	1.6	6.4	9.1	0.891	None
SBR70-5008	350-355	51432	2.5	3.6	92.1	1.8	6.7	8.7	.899	None
SBR70-5009	355-360	51433	3.2	3.5	91.5	1.8	8.4	8.4	.909	None
SBR70-5010	360-365	51434	3.1	3.8	91.5	1.6	8.0	9.0	.919	None
SBR70-5011	365-370	51435	2.6	2.8	92.6	2.0	6.8	6.7	.925	None
SBR70-5012	370-375	51436	4.2	3.8	90.0	2.0	11.2	9.1	.900	None
SBR70-5013	375-380	51437	3.3	4.5	90.0	2.2	8.9	10.7	.896	None
SBR70-5014	380-385	51438	3.8	4.1	90.0	2.1	10.1	9.8	.903	None
SBR70-5015	385-390	51439	4.2	4.0	89.7	2.1	11.4	9.6	.895	None
SBR70-5016	390-395	51440	4.4	4.6	88.0	3.0	11.7	11.1	.896	None
SBR70-5017	395-400	51441	3.6	4.6	89.4	2.4	9.3	11.0	.925	None

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

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