

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3A-1 drilled in NW1/4SE1/4NW1/4
of sec 15, T 18 N, R 106 W, Sweetwater County, Wyoming

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}	
OSCR-RS3A-1	29.9-30.9	12223	0.0	2.7	96.4	0.9	No oil	6.4	None	
	30.9-31.9	12224	.0	2.4	96.3	1.3	No oil	5.7	None	
	31.9-32.2	12225	.0	2.2	96.4	1.4	No oil	5.4	None	
	32.2-32.8	12226	1.9	2.7	93.9	1.5	4.9a	6.5	None	
	32.8-33.0	12227	1.2	1.4	95.9	1.5	3.2a	3.4	None	
	33.0-33.4	12228	.2	2.0	96.3	1.5	.4a	4.8	None	
	33.4-33.7	12229	1.1	1.0	96.1	1.8	2.8a	2.4	None	
	33.7-34.1	12230	.2	.7	97.1	2.0	.6a	1.7	None	
	34.1-35.0	12231	.5	1.0	97.0	1.5	1.2a	2.4	None	
	35.0-36.0	12232	.1	2.0	96.2	1.7	.2a	4.9	None	
	36.0-36.2	10348	.0	3.0	96.6	.4	No oil	7.1	None	
	36.0-37.1	12233	.0	2.9	95.4	1.7	No oil	7.0	None	
	37.1-38.1	12234	.0	3.0	95.4	1.6	No oil	7.3	None	
	37.4-37.6	10347	.0	3.2	96.2	.6	Trace	7.5	None	
	38.1-38.6	12235	.5	2.1	96.9	.5	1.2a	5.0	None	
	38.6-39.4	12236	2.2	1.7	95.2	.9	5.8	4.1	0.919	None
	39.4-39.9	12237	5.5	1.9	91.5	1.1	14.2	4.6	.922	None
	39.9-40.3	12238	4.1	1.8	92.9	1.2	10.7	4.3	.923	None
	40.3-40.9	12239	4.3	.9	93.6	1.2	11.4	2.0	.907	None
	40.5-40.6	10247	5.5	2.4	90.3	1.8	14.5	5.8	.908	None
	40.7-40.8	10248	4.1	1.5	93.0	1.4	10.8	3.6	.907	None
	40.9-41.5	12240	5.4	.8	92.7	1.1	14.2	1.8	.909	None
	41.3-41.5	10249	5.7	1.4	91.3	1.6	15.0	3.4	.905	None
	41.5-41.7	12241	3.2	.8	94.7	1.3	8.3	1.9	.917	None
	41.7-42.7	12242	5.0	1.2	92.3	1.5	13.1	2.9	.905	None
	42.7-43.7	12243	4.3	1.1	93.2	1.4	11.2	2.6	.908	None
	43.7-44.1	12244	4.9	.8	93.0	1.3	12.8	1.8	.917	None
	44.1-45.1	12245	3.9	.8	94.1	1.2	10.1	1.8	.923	None
	45.1-46.1	12246	3.1	.8	95.0	1.1	7.9	2.0	.923	None
	46.4-46.6	10250	5.8	3.4	89.0	1.8	15.3	8.3	.904	None

See footnotes at end of table.

Core samples received January 1966; assays made on as received basis

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs well No. 3A-1 (con.)

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	
OSCR-RS3A-1	46.1-47.1	12247	3.1	0.8	95.3	0.8	8.1	1.8	0.927	None	
	47.1-48.1	12248	4.2	1.2	93.5	1.1	11.0	2.9	.923	None	
	48.1-49.1	12249	3.7	1.2	93.7	1.4	9.5	2.9	.924	None	
	49.1-49.6	12250	2.3	1.2	95.4	1.1	5.9	2.9	.926	None	
	49.6-49.7	12251	1.3	.6	97.8	.3	3.5a	1.3		None	
	49.7-50.7	12252	4.4	1.2	93.0	1.4	11.5	3.0	.921	None	
	50.7-51.7	12253	3.9	1.3	93.8	1.0	10.2	3.1	.920	None	
	51.7-52.3	12254	5.9	1.1	91.2	1.8	15.4	2.6	.914	None	
	52.3-53.3	12255	5.7	2.0	90.5	1.8	15.0	4.8	.911	None	
	53.3-53.5	10251	1.8	1.2	95.0	2.0	4.6a	2.9		None	
	53.3-54.3	12256	7.4	1.9	88.8	1.9	19.5	4.6	.905	None	
	54.3-55.3	12257	6.9	2.0	89.2	1.9	18.2	4.8	.909	None	
	55.3-56.0	12258	4.6	1.5	92.4	1.5	12.2	3.6	.911	None	
	56.0-57.0	12259	3.0	1.2	94.3	1.5	8.0	2.9	.915	None	
	57.0-57.9	12260	1.9	.8	96.1	1.2	4.8a	1.9		None	
	57.9-58.9	12261	.9	.6	97.9	.6	2.4a	1.4		None	
	58.9-59.9	12262	.9	1.3	97.1	.7	2.4a	3.0		None	
	59.9-60.9	12263	.9	1.3	97.0	.8	2.2a	3.2		None	
	60.9-61.3	12266	3.0	.9	95.1	1.0	7.7	2.2	.925	None	
	61.3-62.0	12264	9.6	1.5	86.3	2.6	24.9	3.6	.923	None	
	62.0-63.0	12265	15.2	1.7	80.1	3.0	39.6	4.1	.921	None	
	62.6-62.8	10252	13.6	2.6	81.0	2.8	35.5	6.2	.920	None	
	63.0-63.4	12267	12.2	1.5	84.3	2.0	31.7	3.6	.920	None	

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

Core samples received January 1966; assays made on as received basis

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3A-1 (con.) drilled in NW1/4SE1/4NW1/4
of sec 15, T 18 N, R 106 W, Sweetwater County, Wyoming

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											
OSCR-RS3A-1	63.5-63.9	13894	6.0	1.4	90.4	2.2	15.7	3.4	0.914	None	
	63.9-64.9	13895	4.8	1.2	92.4	1.6	12.5	2.9	.927	None	
	64.9-65.2	13896	3.2	1.6	94.0	1.2	8.3	3.8	.928	None	
	65.2-66.2	13897	2.5	1.6	94.1	1.8	6.6	3.8	.928	None	
	66.2-67.2	13898	1.1	1.5	96.8	.6	2.9a	3.6		None	
	67.2-68.0	13899	1.0	1.2	97.7	.1	2.6a	2.9		None	
	68.0-69.0	13900	1.4	.9	97.6	.1	3.6a	2.2		None	
	69.0-70.0	13901	1.1	1.2	97.6	.1	2.9a	2.8		None	
	70.0-70.4	13902	1.2	1.3	97.2	.3	3.1a	3.1		None	
	70.4-71.4	13903	5.9	1.5	91.1	1.5	15.5	3.6	.918	None	
	71.4-72.4	13904	5.0	1.6	92.0	1.4	13.0	4.0	.921	None	
	72.4-73.4	13905	7.0	1.8	89.3	1.9	18.2	4.3	.920	None	
	73.4-74.4	13906	6.7	1.5	90.5	1.3	17.4	3.6	.922	None	
	74.4-75.4	13907	7.3	1.6	89.6	1.5	18.9	3.8	.924	None	
	75.4-75.8	13908	3.1	1.5	94.4	1.0	7.9	3.6	.930	None	
	75.8-76.8	13909	.9	1.7	96.9	.5	2.3a	4.2		None	
	76.8-77.8	13910	.5	1.8	97.5	.2	1.2a	4.3		None	
	77.8-78.0	13911	.3	1.7	97.6	.4	.8a	4.1		None	
	78.0-78.5	13912	.4	1.4	98.1	.1	1.2a	3.4		None	
	78.5-79.5	13913	.3	1.9	97.6	.2	.8a	4.6		None	
	79.5-80.5	13914	.0	2.4	97.3	.3	Trace	5.8		None	
	80.5-81.6	13915	.0	3.0	96.8	.2	Trace	7.2		None	
	83.5-84.5	13731	.2	2.7	96.9	.2	.6a	6.5		None	
	84.5-84.8	13732	.7	1.0	98.1	.2	1.8a	2.4		None	
	84.8-85.2	13733	.6	.9	98.2	.3	1.6a	2.2		None	
	85.2-85.5	13734	2.7	2.0	94.5	.8	7.1	4.7	.922	None	
	85.5-86.4	13735	6.1	2.2	90.0	1.7	15.9	5.3	.922	None	
	86.4-86.9	13736	8.5	2.5	87.0	2.0	22.0	6.0	.926	None	
	86.4-88.0	13737	7.9	2.5	87.4	2.2	20.6	5.9	.922	None	
	88.0-89.1	13738	8.9	2.2	86.8	2.1	23.2	5.4	.916	None	

See footnotes at end of table.

Core samples received January 1966; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3A-1 (con.)

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		
OSCR-RS3A-1	89.1- 90.1	13739	3.1	2.0	93.9	1.0	8.0	4.8	0.929	None
	90.1- 90.4	13740	2.8	2.0	94.5	.7	7.3	4.8	.931	None
	90.4- 91.4	13741	.4	.8	98.8	.0	1.0a	1.9		None
	91.4- 92.4	13742	.2	1.1	98.4	.3	.4a	2.8		None
	92.4- 93.4	13743	.1	1.6	98.2	.1	.3a	3.8		None
	93.4- 94.4	13744	.1	1.1	98.2	.6	.2a	2.6		None
	94.4- 95.3	13745	.5	.3	98.5	.7	1.4a	.7		None
	95.3- 96.4	13746	1.9	1.4	95.6	1.1	5.0a	3.4		None
	96.4- 97.4	13747	7.1	1.5	89.3	2.1	18.5	3.6	.922	None
	97.4- 98.2	13748	7.4	2.1	88.3	2.2	19.4	5.0	.918	None
	98.2- 99.3	13749	12.7	2.5	82.2	2.6	32.3	6.0	.939	None
	99.3- 99.5	13750	9.0	1.9	85.9	3.2	22.9	4.6	.937	None
	99.5- 99.7	13751	12.7	1.7	82.0	3.6	32.5	4.1	.937	None
	99.7- 99.9	13752	9.2	2.6	85.8	2.4	23.7	6.2	.929	None
	99.9-100.9	13753	11.8	2.5	83.0	2.7	30.2	6.0	.936	None
	100.9-101.9	13754	11.6	2.4	83.9	2.1	30.2	5.8	.917	None
	102.0-102.2	13757	8.3	2.5	86.9	2.3	21.7	6.0	.916	None
	102.2-102.7	13758	10.5	2.2	84.8	2.5	27.3	5.3	.920	None
	102.7-102.9	13759	3.6	1.4	93.4	1.6	9.3	3.4	.921	None
	102.9-103.9	13760	7.6	1.9	88.4	2.1	19.9	4.6	.919	None
	103.9-104.2	13761	7.2	1.6	89.1	2.1	18.8	3.8	.918	None
	104.2-105.2	13762	4.3	1.4	92.7	1.6	11.3	3.4	.905	None
	105.2-106.2	13763	6.4	2.4	89.8	1.4	16.7	5.8	.910	None
	106.2-107.2	13764	5.5	2.5	89.7	2.3	14.6	6.0	.910	None
	107.2-108.3	13765	4.5	2.8	90.2	2.5	11.8	6.6	.915	None
	108.3-109.3	13766	7.2	2.6	87.9	2.3	18.6	6.2	.925	None
	109.3-110.2	13767	8.3	2.6	86.6	2.5	21.6	6.2	.925	None
	110.2-110.5	13768	7.2	3.1	86.8	2.9	18.7	7.3	.926	None
	110.5-111.1	13769	6.7	2.6	88.1	2.6	17.2	6.2	.930	None
	111.1-112.1	13770	8.6	2.9	85.8	2.7	22.0	7.0	.932	None

See footnotes at end of table.

Core samples received January 1966; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3A-1 (con.)

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			
OSCR-RS3A-1	112.1-113.1	13771	5.0	2.6	90.8	1.6	12.8	6.2	0.941	None	
	113.1-114.2	13772	5.3	2.6	89.7	2.4	13.5	6.2	.944	None	
	114.2-114.4	13773	3.1	5.0	89.1	2.8	8.0	12.0	.936	None	
	114.4-114.5	13774	4.4	2.7	91.0	1.9	11.0	6.5	.946	None	
	114.5-114.8	13775	7.4	2.0	88.3	2.3	19.0	4.8	.933	None	
	114.8-115.9	13776	9.6	2.3	85.0	3.1	24.8	5.5	.924	None	
	115.9-116.9	13777	8.3	2.5	86.8	2.4	21.3	6.0	.931	None	
	116.9-117.2	13778	12.3	3.1	81.0	3.6	31.9	7.3	.925	None	
	117.2-118.2	13779	7.5	2.4	88.3	1.8	19.0	5.8	.941	None	
	118.2-119.2	13780	8.5	2.4	87.2	1.9	21.6	5.8	.947	None	
	119.2-120.2	13781	6.2	2.4	89.5	1.9	15.6	5.8	.952	None	
	120.2-121.3	13782	9.1	2.4	85.9	2.6	23.3	5.8	.933	None	
	121.3-121.4	13783	3.5	5.3	89.4	1.8	9.1a	12.6		None	
	121.4-122.4	13784	12.1	1.5	83.5	2.9	31.4	3.6	.921	None	
	122.4-123.4	13785	12.1	1.6	83.6	2.7	31.7	3.8	.912	None	
	123.4-123.8	13786	12.3	1.0	82.9	3.8	32.3	2.4	.912	None	
	123.8-124.8	13787	12.1	1.8	82.9	3.2	31.8	4.3	.914	None	
	124.8-125.8	13788	13.1	2.0	82.0	2.9	34.4	4.8	.914	None	
	125.8-126.0	13789	7.1	2.6	88.3	2.0	18.7	6.2	.917	None	
	126.0-126.1	13790	6.7	3.6	89.0	.7	17.3a	8.7		None	
	126.1-126.5	13791	7.7	2.6	88.0	1.7	20.3	6.2	.907	None	

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

Core samples received January 1966; assays made on air-dried samples