

# OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Surface

Elevation 6,038 feet

Mahogany Marker

5880.3

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F.		Properties of spent shale		Remarks
Laramie	Their		Weight percent		Spent shale	Gas + loss	Gal. per ton		Tendency to	coke	
		Oil	Water	Oil			Water				
SHR59-3195	15.4-16.6	61844	2.6	3.4	92.8	1.2	6.9	8.1	0.905	None	
SHR59-3196	16.6-18.6	61845	.1	2.5	96.8	.6	.2a	6.0		None	
SHR59-3197	18.6-19.6	61846	.5	2.3	96.5	.7	1.4a	5.5		None	
SHR59-3198	19.6-20.6	61847	.4	2.5	96.5	.6	1.0a	6.0		None	
SHR59-3199	20.6-22.0	61848	1.1	2.6	95.7	.6	2.7a	6.2		None	
SHR59-3200	22.0-23.0	61849	2.7	2.7	93.5	1.1	7.1	6.5	.921	None	
SHR59-3201	23.0-25.0	61850	1.1	3.5	94.3	1.1	2.9a	8.4		None	
SHR59-3202	25.0-26.6	61851	1.0	3.7	94.2	1.1	2.6a	8.9		None	
SHR59-3203	26.6-28.4	61852	3.3	2.5	93.0	1.2	8.7	6.0	.914	None	
SHR59-3204	29.0-30.0	61853	.9	4.3	93.4	1.4	2.3a	10.4		None	
SHR59-3205	30.0-31.0	61854	.7	5.0	93.7	.6	1.7a	12.0		None	
SHR59-3206	31.0-32.0	61855	1.0	5.2	92.9	.9	2.7a	12.5		None	
SHR59-3207	32.0-32.8	61856	4.3	2.9	91.8	1.0	11.4	7.0	.909	None	
SHR59-3208	32.8-34.5	61857	4.7	.9	93.6	.8	12.3	2.2	.909	None	
SHR59-3209	34.5-35.5	61858	3.3	2.2	93.4	1.1	8.7	5.3	.913	None	
SHR59-3210	35.5-36.5	61859	3.5	2.0	93.5	1.0	9.2	4.8	.920	None	
SHR59-3211	36.5-37.5	61860	4.7	1.9	92.0	1.4	12.3	4.6	.919	None	
SHR59-3212	37.5-38.5	61861	4.4	1.9	92.8	.9	11.5	4.6	.918	None	
SHR59-3213	38.5-39.5	61872	5.5	1.7	91.8	1.0	14.4	4.1	.915	None	
SHR59-3214	39.5-40.5	61873	2.9	1.5	94.9	.7	7.6	3.6	.919	None	
SHR59-3215	40.5-41.5	61874	2.1	1.4	95.7	.8	5.4	3.4	.924	None	
SHR59-3216	41.5-42.5	61875	1.1	1.3	97.1	.5	2.8a	3.1		None	
SHR59-3217	42.5-43.5	61876	1.4	1.5	96.4	.7	3.6a	3.6		None	
SHR59-3218	43.5-44.5	61877	3.2	1.7	94.1	1.0	8.4	4.1	.923	None	
SHR59-3219	44.5-45.5	61878	3.4	1.5	94.2	.9	8.9	3.5	.925	None	
SHR59-3220	45.5-46.5	61879	1.4	1.6	96.6	.4	3.6a	3.8		None	
SHR59-3221	46.5-47.5	61880	1.0	1.5	97.0	.5	2.7a	3.6		None	
SHR59-3222	47.5-48.5	61881	1.5	1.6	96.2	.7	3.9a	3.8		None	
SHR59-3223	48.5-49.7	61882	1.3	1.9	96.1	.7	3.4a	4.6		None	
SHR59-3224	49.7-51.7	61883	.4	.6	98.3	.7	1.1a	1.4		None	

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyoming

Illustration No. SHR-2786P August 5, 1959

2230 B

55' of 15 gal.  
20' of 25 gal.  
12' of 30 gal.

# OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Surface

Elevation 6,038 feet

Sample number		Run No.	Yield of product				Specific gravity		Properties of spent shale		Remarks
			Weight percent		Spent shale	Gas + loss	Gal. per ton		of oil at 60°/60° F.	Tendency to	
Laramie	Thier		Oil	Water							Oil
SHR59-3225	51.7-53.7	61884	0.7	1.0	97.7	0.6	1.84	2.4			
SHR59-3226	53.7-55.0	61885	2.9	1.7	94.6	.8	7.4	4.1	.921		
SHR59-3227	55.0-56.0	61886	3.7	1.5	93.7	1.1	9.7	3.6	.921		
SHR59-3228	56.0-57.0	61887	3.7	1.9	93.4	1.0	9.7	4.6	.923		
SHR59-3229	57.0-58.0	61888	1.9	1.7	95.7	.7	5.0	4.1			
SHR59-3230	58.0-59.0	61889	1.8	1.5	96.1	.6	4.6	3.6			
SHR59-3231	59.0-60.0	61890	1.7	1.3	96.2	.8	4.5	3.1			
SHR59-3232	60.0-61.0	61891	2.0	1.6	95.8	.6	5.1	3.8			
SHR59-3233	61.0-62.0	61892	2.3	1.5	95.4	.8	5.9	3.6	.921		
SHR59-3234	62.0-63.0	61893	6.8	1.9	90.0	1.3	17.8	4.6	.919		
SHR59-3235	63.0-64.0	61894	2.9	1.4	95.0	.7	7.5	3.4	.926		
SHR59-3236	64.0-65.0	61895	3.1	1.6	94.5	.8	7.9	3.8	.925		
SHR59-3237	65.0-66.0	61896	3.1	1.6	94.6	.7	8.1	3.8	.926		
SHR59-3238	66.0-67.0	61897	3.0	2.0	94.3	.7	7.7	4.8	.924		
SHR59-3239	67.0-68.0	61898	3.0	2.1	94.0	.9	7.7	5.2	.925		
SHR59-3240	68.0-69.0	61899	2.7	2.2	94.3	.8	6.9	5.3	.921		
SHR59-3241	69.0-70.0	61900	4.8	1.9	92.1	1.2	12.5	1.0 4.7	2.43 .917		
SHR59-3242	70.0-71.4	61901	7.8	2.2	88.3	1.7	20.3	1.4 5.3	.915		
SHR59-3243	71.4-72.4	61902	3.7	1.6	94.0	.7	9.6	1.0 3.8	2.48 .917		
SHR59-3244	72.4-73.4	61903	4.2	1.6	93.2	1.0	10.9	1.0 3.8	.921		
SHR59-3245	73.4-74.8	61904	4.0	1.3	93.4	1.3	10.5	1.4 3.1	.917		
SHR59-3246	74.8-75.8	61905	9.4	1.7	87.2	1.7	24.8	1.0 4.1	.910		
SHR59-3247	75.8-77.2	61906	3.5	1.5	94.0	1.0	9.2	1.4 3.6	.917		
SHR59-3248	77.2-79.0	61907	.9	1.3	97.5	.3	2.4	1.8 3.1			
SHR59-3249	79.0-81.0	61908	1.0	1.3	97.1	.6	2.5	2.0 3.1			
SHR59-3250	81.0-83.0	61909	.5	1.7	97.4	.4	1.3	2.0 4.1			
SHR59-3251	83.0-84.0	61910	1.6	.2	97.7	.5	4.3	1.0 .4			
SHR59-3252	84.0-85.0	61911	2.3	.5	96.4	.8	6.0	1.0 1.2	.922		
SHR59-3253	85.0-86.5	61912	2.5	1.1	95.5	.9	6.4	1.5 2.6	.921		
SHR59-3254	86.5-88.0	61913	.6	.2	98.6	.6	1.5	1.5 .6			

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyo. ), Illustration No. SHR-2787P August 5, 1959 )

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Surface

Elevation 6,038 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 coke		
Laramie	Thief	Oil	Water	Spent shale	Gas + loss	Oil	Water	Spent shale	Tendency to coke	Remarks
SHR59-3255	88.0-90.0	61914	0.6	0.2	98.7	0.5	1.5	0.6	None	
SHR59-3256	90.0-92.0	61915	.3	.3	98.7	.7	.7	.8	None	
SHR59-3257	92.0-94.0	61916	.3	.2	98.8	.7	.9	.5	None	
SHR59-3258	94.0-95.8	61917	.4	.3	98.8	.5	.9	.8	None	
SHR59-3259	95.8-96.8	61919	1.0	1.5	97.1	.4	2.6	3.6	None	
SHR59-3260	96.8-97.8	61920	3.4	2.5	93.1	1.0	9.0	6.0	0.908	
SHR59-3261	97.8-99.8	61921	.8	1.5	97.3	.4	2.1	3.6	None	
SHR59-3262	99.8-101.0	61922	.9	2.2	96.2	.7	2.3	5.3	None	
SHR59-3263	101.0-102.0	61923	2.3	2.8	94.0	.9	6.0	6.7	.911	
SHR59-3264	102.0-103.3	61924	5.8	1.7	90.1	2.4	15.4	4.0	.911	
SHR59-3265	103.3-104.5	61925	8.3	1.9	87.5	2.3	21.8	4.7	.911	
SHR59-3266	104.5-105.5	61927	2.8	1.2	95.1	.9	7.3	2.9	.919	
SHR59-3267	105.5-106.5	61928	2.0	1.9	95.2	.9	5.2	4.6	.921	
SHR59-3268	106.5-108.2	61929	2.4	1.3	95.3	1.0	6.2	3.1	.916	
SHR59-3269	108.2-109.2	61930	1.8	1.7	95.5	1.0	4.8	4.1	.917	
SHR59-3270	109.2-110.2	61931	2.0	2.0	95.1	.9	5.1	4.8	.925	
SHR59-3271	110.2-111.2	61932	2.7	2.4	93.9	1.0	7.0	1.0 5.8 2.54	.923 2.54	None 17.78
SHR59-3272	111.2-112.2	61933	3.9	2.3	92.8	1.0	10.3	1.0 5.5 2.48	.916 2.48	None 25.54 2.48
SHR59-3273	112.2-113.2	61934	7.7	1.5	89.5	1.3	20.2	1.0 3.6 2.29	.916 2.29	None 46.26 4.77
SHR59-3274	113.2-114.2	61935	6.9	1.5	89.8	1.8	18.0	1.0 3.6 2.33	.920 2.33	None 41.94 7.10
SHR59-3275	114.2-115.2	61936	5.8	1.6	91.5	1.1	15.0	1.0 3.8 2.38	.921 2.38	None 35.70 9.48
SHR59-3276	115.2-116.2	61937	12.0	1.6	84.6	1.8	31.8	1.0 3.8 2.12	.901 2.12	None 67.42 11.60
SHR59-3277	116.2-117.2	61938	13.4	1.5	82.8	2.3	35.5	1.0 3.6 2.08	.903 2.08	None 73.84 13.68
SHR59-3278	117.2-118.3	61939	6.0	1.1	91.6	1.3	15.9	1.1 2.8 2.34	.901 2.60	None 41.34 16.28
SHR59-3279	118.3-120.0	61940	2.8	1.6	94.6	1.0	7.4	1.7 3.8 2.53	.917 4.30	None 31.82 20.58
SHR59-3280	120.0-122.0	61941	2.5	1.3	95.5	.7	6.4	2.0 3.1 2.55	.921 5.10	None 32.64 25.68
SHR59-3281	122.0-124.0	61942	1.5	.7	97.3	.5	4.0	1.6	None	
SHR59-3282	124.0-126.0	61943	1.5	.7	97.2	.6	3.8	1.7	None	
SHR59-3283	126.0-128.0	61944	1.8	.8	96.9	.5	4.6	1.9	None	
SHR59-3284	128.0-130.0	61945	4.4	.7	94.0	.9	11.3	1.8	.923	None

11' of 15 gal

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SHR-2788P August 5, 1959

1408  
322

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Surface  
 Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Elevation 6,038 feet

Sample number	Run No.	Yield of product				Specific gravity		Properties of spent shale				ft x 59	ft x 59 x gal		
		Weight percent		Spent shale	Gas + loss	Gal. per ton		of oil at 60°/60° F.	Tendency to	coke					
		Oil	Water			Oil	Water								
Laramie	Thair														
SHR59-3285	130.0-132.0	61946	1.4	0.5	97.6	0.5	3.64	1.2					None		
SHR59-3286	132.0-134.0	61947	1.2	.6	97.9	.3	3.04	1.4					None		
SHR59-3287	134.0-136.0	61948	1.9	.6	96.9	.6	4.94	1.4					None		
SHR59-3288	136.0-138.0	61949	.8	.5	98.3	.4	2.04	1.3					None		
SHR59-3289	138.0-140.0	61950	.8	.8	98.0	.4	2.24	1.9					None		
SHR59-3290	140.0-142.0	61951	.2	1.7	97.9	.2	.64	4.0					None		
SHR59-3291	142.0-144.0	61952	.6	1.2	97.6	.6	1.74	2.9					None		
SHR59-3292	144.0-146.0	61953	.8	1.6	97.2	.4	2.04	3.8					None		
SHR59-3293	146.0-148.0	61954	.7	.9	97.7	.7	1.94	2.2					None		
SHR59-3294	148.0-149.0	61955	1.9	1.2	96.3	.6	4.84	2.9	2.50		2.50		None	14.08	
SHR59-3295	149.0-150.2	61956	3.0	1.4	94.5	1.1	8.0	1.2	3.2	2.51	.902	3.01	None	24.08	
SHR59-3296	150.2-151.2	61957	3.3	.8	95.0	.9	8.7	1.0	1.8	2.50	.914	2.50	None	21.75	
SHR59-3297	151.2-152.2	61958	10.1	1.2	86.9	1.8	26.5	1.0	2.9	2.20	.913	2.20	None	58.30	2.20
SHR59-3298	152.2-153.2	61959	7.0	1.5	89.7	1.8	18.4	1.0	3.6	2.32	.909	2.32	None	42.69	4.52
SHR59-3299	153.2-154.7	61960	5.8	1.0	91.6	1.6	15.5	1.5	2.4	2.37	.904	3.55	None	55.02	8.07
SHR59-3300	154.7-155.7	61961	11.6	1.4	85.0	2.0	30.4	1.0	3.4	2.14	.912	2.14	None	65.06	10.21
SHR59-3301	155.7-156.7	61962	9.8	1.1	87.1	2.0	25.9	1.0	2.6	2.20	.904	2.20	None	56.98	12.41
SHR59-3302	156.7-157.7	61963	16.6	1.6	78.3	3.5	44.0	1.0	3.8	1.96	.903	1.96	Slight	86.24	14.37
SHR59-3303	157.7-159.0	61964	25.6	2.5	66.7	5.2	68.1	1.3	6.0	1.70	.899	2.21	Medium	150.50	16.58
SHR59-3304	159.0-160.1	61965	15.2	1.3	80.8	2.7	40.7	1.1	3.1	1.99	.894	2.19	Slight	89.13	18.77
SHR59-3305	160.1-161.1	61966	18.5	1.4	76.9	3.2	48.6	1.0	3.2	1.90	.913	1.90	Slight	92.34	20.67
SHR59-3306	161.1-162.1	61967	5.5	1.1	91.4	2.0	14.3	1.0	2.6	2.40	.925	2.40	None	34.32	23.07
SHR59-3307	162.1-163.1	61968	4.7	1.0	92.9	1.4	12.3	1.0	2.3	2.43	.921	2.43	None	29.89	25.50
SHR59-3308	163.1-164.1	61969	5.8	.8	91.7	1.7	15.1	1.0	1.9	2.38	.914	2.38	None	35.94	27.88
SHR59-3309	164.1-165.1	61970	7.5	.7	90.0	1.8	19.5	1.0	1.8	2.30	.917	2.30	None	44.85	30.18
SHR59-3310	165.1-166.5	61971	4.5	.5	93.8	1.2	11.6	1.4	1.1	2.44	.925	3.42	None	39.67	33.60
SHR59-3311	166.5-167.5	61972	5.8	.4	92.2	1.6	15.2	1.0	1.0	2.38	.916	2.38	None	36.18	35.98
SHR59-3312	167.5-168.9	61973	13.6	1.5	82.4	2.5	36.0	1.4	3.6	2.06	.904	2.89	Slight	103.68	38.86
SHR59-3313	168.9-170.2	61974	4.6	.8	93.6	1.0	12.5	1.3	1.9	2.43	.881	3.16	None	39.50	42.02
SHR59-3314	170.2-171.2	61975	5.5	1.0	92.0	1.5	14.9	1.0	2.4	2.38	.883	2.38	None	35.46	44.40

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyo. Illustration No. SHR-2789P August 5, 1959

# OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Surface  
Elevation 6,038 feet

Sample number		Run No.	Yield of product				Specific gravity		Properties of spent shale		Remarks	flxsg	flxsg			
			Weight percent		Gas + loss	Gal. per ton		of oil at 60°/60° F.	Tendency to							
Laramie	Thier		Oil	Water		shale				Oil	Water	sp	60°/60° F.	flxsg, coke	flxsg, coke	flxsg, coke
SER59-3315	171.2-172.6	61976	7.2	1.3	90.0	1.5	19.1	1.4	3.1	2.31	0.901	3.23	None	61.69	47.63	1157.44
SER59-3316	172.6-174.1	61977	1.8	.2	97.3	.7	4.6	1.5	.6	2.59		3.89	None	17.89	51.52	1175.33
SER59-3317	174.1-175.3	61978	4.7	1.2	92.7	1.4	12.3	1.2	2.9	2.43	.919	2.92	None	25.92	54.44	1211.25
SER59-3318	175.3-176.3	61979	7.9	1.3	88.8	2.0	20.6	1.0	3.1	2.29	.916	2.29	None	47.17	56.73	1258.42
SER59-3319	176.3-177.5	61980	2.7	1.5	94.5	1.3	7.0	1.2	3.6	2.54	.916	3.05	None	21.35	59.78	1279.77
SER59-3320	177.5-178.5	61981	1.4	2.0	95.8	.8	3.7	1.0	4.8	2.61		2.61	None	9.66	62.39	1289.43
SER59-3321	178.5-180.0	61982	2.3	.2	96.9	.6	6.1	1.5	.5	2.56	.910	3.84	None	22.42	66.23	1312.85
SER59-3322	180.0-181.0	61983	1.5	.9	97.0	.6	3.9	1.0	2.3	2.61		2.61	None	10.18	68.84	1323.03
SER59-3323	181.0-182.0	61984	7.1	1.6	89.9	1.4	18.7	1.0	3.8	2.31	.906	2.31	None	43.20	71.15	1366.23
SER59-3324	182.0-183.0	61985	12.3	1.4	84.5	1.8	33.2	1.0	3.2	2.10	.891	2.10	None	69.72	73.25	1435.95
SER59-3325	183.0-184.0	61986	8.0	1.0	89.3	1.7	21.7	1.0	2.3	2.27	.888	2.27	None	49.26	75.52	1485.21
SER59-3326	184.0-185.0	61987	6.4	1.1	91.2	1.3	16.9	1.0	2.6	2.35	.906	2.35	None	39.72	77.87	1524.93
SER59-3327	185.0-186.0	61988	5.8	1.3	91.6	1.3	15.3	1.0	3.1	2.38	.904	2.38	None	36.41	80.25	1561.34
SER59-3328	186.0-187.5	61989	7.4	1.5	89.7	1.4	19.7	1.5	3.6	2.30	.899	3.45	None	67.96	83.70	1629.30
SER59-3329	187.5-188.5	61998	4.0	1.3	93.5	1.2	10.5	1.0	3.1	2.47	.909	2.47	None	25.94	86.17	1655.24
SER59-3330	188.5-189.8	61999	2.4	1.4	95.4	.8	6.2	1.3	3.4	2.56	.919	3.33	None	20.65	89.50	1675.89
SER59-3331	189.8-190.8	62000	.8	.5	98.1	.6	2.0	1.0	1.3	2.66		2.66	None	5.32	92.16	1681.21
SER59-3332	190.8-192.0	62001	1.2	.6	97.5	.7	3.0	1.2	1.4	2.63		3.16	None	9.48	95.32	1690.69
SER59-3333	192.0-193.8	62002	2.0	1.2	96.0	.8	5.3	1.8	2.9	2.58	.917	4.61	None	24.43	99.93	1715.12
SER59-3334	193.8-195.3	62003	9.1	1.5	87.5	1.9	23.8	1.5	3.6	2.23	.918	3.35	None	79.73	103.28	1794.85
SER59-3335	195.3-196.3	62004	2.8	1.3	94.8	1.1	7.2	1.0	3.1	2.54	.923	2.54	None	18.29		
SER59-3336	196.3-198.0	62005	2.0	.3	97.0	.7	5.2	1.7	.8	2.58	.926	4.39	None	22.82		
SER59-3337	198.0-199.0	62006	1.6	.3	97.9	.2	4.1	1.0	.8	2.61		2.61	None	10.70		
SER59-3338	199.0-200.0	62007	1.5	.6	97.5	.4	4.0	1.0	1.4	2.61		2.61	None	10.44		
SER59-3339	200.0-201.0	62008	2.0	.3	97.3	.4	5.2	1.0	.7	2.58	.917	2.58	None	13.42		
SER59-3340	201.0-202.0	62009	2.6	.8	96.0	.6	7.1	1.0	1.9	2.54	.899	2.54	None	18.02		
SER59-3341	202.0-203.0	62010	5.0	1.2	92.8	1.0	13.2	1.0	3.0	2.41	.909	2.41	None	31.81		
SER59-3342	203.0-204.0	62011	2.7	.6	96.1	.6	7.3	1.0	1.4	2.54	.896	2.54	None	18.54		
SER59-3343	204.0-205.0	62012	.6	.8	98.3	.3	1.6		1.8				None			
SER59-3344	205.0-206.7	62013	.6	1.2	98.0	.2	1.5		3.0				None			

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyo., Illustration No. SER-2790P August 5, 1959

# OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from H. M. Byllesby and Company, Inc. Pinon core hole drilled 1312 feet S. 66° 30' W. from N 1/4 corner of Sec. 14, T. 13 S., R. 20 E., Uintah County, Utah

Surface

Elevation 6,038 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	Thief		Oil	Water					Oil		Water
SER59-3345	208.6-210.0	62014	0.5	1.5	97.8	0.2	1.2a	3.6	0.902 .915	None	
SER59-3346	210.0-212.0	62015	1.0	2.3	96.2	.5	2.6a	5.5		None	
SER59-3347	212.0-214.0	62016	.6	2.1	96.8	.5	1.7a	5.0		None	
SER59-3348	214.0-215.0	62017	2.5	1.3	95.6	.6	6.6	3.1		None	
SER59-3349	215.0-216.2	62018	10.5	1.5	86.0	2.0	27.5	3.6	.915	None	
SER59-3350	216.2-218.0	62019	1.8	1.4	96.0	.8	4.7a	3.4		None	
SER59-3351	218.0-220.0	62020	1.0	1.5	96.9	.6	2.7a	3.6		None	
SER59-3352	220.0-221.9	62021	2.2	1.4	95.5	.9	5.8	3.4	.903	None	
SER59-3353	221.9-222.7	62022	13.3	1.6	82.7	2.4	34.8	3.8	.913	None	
SER59-3354	222.7-223.8	62023	.1	1.8	97.8	.3	.2a	4.4		None	
SER59-3355	223.8-225.0	62024	1.1	1.8	96.6	.5	2.9a	4.3		None	
SER59-3356	225.0-226.0	62025	6.3	1.7	90.9	1.1	16.6	4.2	.907	None	
SER59-3357	226.0-227.0	62026	6.6	1.6	90.5	1.3	17.3	3.8	.907	None	
SER59-3358	227.0-228.5	62027	2.2	1.7	95.4	.7	5.8	4.1	.913	None	
SER59-3359	228.5-230.5	62028	.7	.1	98.8	.4	1.9a	.2		None	
SER59-3360	230.5-233.0	62029	.4	.6	98.8	.2	1.1a	1.4		None	
SER59-3361	233.0-235.0	62030	.2	.6	99.1	.1	.5a	1.4		None	
SER59-3362	235.0-237.0	62031	.1	.8	99.0	.1	.2a	1.9		None	
SER59-3363	237.0-239.0	62032	.2	.6	99.1	.1	.4a	1.6		None	
SER59-3364	239.0-241.0	62033	.1	.6	99.3	.0	.2a	1.4		None	
SER59-3365	241.0-243.0	62034	.0	1.0	98.9	.1	No oil	2.4		None	
SER59-3366	243.0-245.0	62035	.0	.9	98.7	.4	No oil	2.2		None	
SER59-3367	245.0-247.0	62036	.7	.6	98.3	.4	1.9a	1.3		None	
SER59-3368	247.0-249.0	62037	.0	1.2	98.6	.2	No oil	3.0		None	
SER59-3369	249.0-251.0	62038	.8	.2	98.9	.1	2.2a	.4		None	
SER59-3370	251.0-253.0	62039	.0	1.0	98.8	.2	No oil	2.3		None	

a - Specific gravity estimated due to insufficient oil

Core samples received May 8, 1959; assays made on air-dried samples.

Laramie Petroleum Research Center, Laramie, Wyoming, Illustration No. SER-2791P August 5, 1959