

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

4105
473

SW 1/4

Samples from ERDA/LERC's Southern Uinta Basin Corehole 5 drilled in the
NE1/4SW1/4SE1/4 (3002.5 feet S 32°53'35" W of E 1/4 corner) of sec 35, T 13 S, R 22 E, S.L.M., Uintah County, Utah

2500' FEL, 900' FSL

1631' FEL, 119' FSL

Surface elevation: 6,727 feet

| | | | Yield of product | | | | | | Specific gravity of oil at 60°/60° F | Properties of spent shale Tendency to coke | Remarks |
|---------------|-----------|---------|------------------|-------|-------------|------------|-------------------|-------|--------------------------------------|---|---------|
| Sample number | | Run No. | Weight percent | | Spent shale | Gas + loss | Gal per ton | | | | |
| | | | Oil | Water | | | Oil ^{1/} | Water | | | |
| Laramie | Their | | | | | | | | | | |
| SBR76-29 | 0.5-2.0 | 14675 | 1.1 | 0.9 | 97.5 | 0.5 | 3.0a | 2.2 | .920 | None | |
| SBR76-30 | 2.0-3.0 | 14716 | .3 | 1.2 | 98.0 | .5 | .7a | 2.9 | | None | |
| SBR76-31 | 3.0-4.0 | 14677 | .4 | 1.3 | 97.5 | .8 | 1.2a | 3.1 | | None | |
| SBR76-32 | 4.0-5.0 | 14678 | .1 | 1.3 | 97.8 | .8 | .4a | 3.1 | | None | |
| SBR76-33 | 5.0-6.0 | 14679 | .3 | 1.1 | 98.0 | .6 | .7a | 2.6 | | None | |
| SBR76-34 | 6.0-7.0 | 14680 | .6 | 1.2 | 97.8 | .4 | 1.5a | 2.9 | | None | |
| SBR76-35 | 7.0-8.0 | 14681 | .6 | 1.0 | 97.5 | .9 | 1.6a | 2.4 | | None | |
| SBR76-36 | 8.0-9.0 | 14682 | .4 | .8 | 97.7 | 1.1 | 1.0a | 1.9 | | None | |
| SBR76-37 | 9.0-10.4 | 14683 | .8 | .7 | 98.0 | .5 | 2.0a | 1.7 | | None | |
| SBR76-38 | 10.4-11.4 | 14684 | 1.1 | .8 | 97.0 | 1.1 | 2.8a | 1.9 | | None | |
| SBR76-39 | 11.4-12.7 | 14685 | 4.1 | 1.5 | 92.5 | 1.9 | 10.9 | 3.6 | 0.902 | None | |
| SBR76-40 | 12.7-13.9 | 14686 | 2.4 | 1.2 | 95.4 | 1.0 | 6.4 | 2.9 | .904 | None | |
| SBR76-41 | 13.9-15.0 | 14687 | 2.5 | 1.4 | 94.8 | 1.3 | 6.8 | 3.4 | .902 | None | |
| SBR76-42 | 15.0-16.0 | 14688 | 6.9 | 1.8 | 89.1 | 2.2 | 18.4 | 4.3 | .902 | None | |
| SBR76-43 | 16.0-17.0 | 14722 | 13.9 | 1.8 | 81.2 | 3.1 | 36.6 | 4.3 | .912 | None | |
| SBR76-44 | 17.0-18.0 | 14690 | 4.5 | 1.2 | 92.2 | 2.1 | 12.0 | 2.9 | .909 | None | |
| SBR76-45 | 18.0-19.0 | 14691 | 3.6 | 1.5 | 93.1 | 1.8 | 9.6 | 3.6 | .910 | None | |
| SBR76-46 | 19.0-20.0 | 14692 | 3.2 | 1.1 | 93.9 | 1.8 | 8.5 | 2.6 | .907 | None | |
| SBR76-47 | 20.0-21.4 | 14693 | 2.7 | .8 | 95.6 | .9 | 7.0 | 1.9 | .916 | None | |
| SBR76-48 | 21.4-22.7 | 14694 | 3.7 | 2.2 | 93.4 | .7 | 9.7 | 5.3 | .920 | None | |
| SBR76-49 | 22.7-23.7 | 14695 | 6.2 | 1.1 | 89.2 | 3.5 | 16.0 | 2.6 | .929 | None | |
| SBR76-50 | 23.7-24.7 | 14696 | 7.1 | .8 | 88.6 | 3.5 | 18.5 | 1.9 | .920 | None | |
| SBR76-51 | 24.7-25.8 | 14697 | 7.0 | 1.2 | 90.3 | 1.5 | 18.1 | 2.9 | .924 | None | |
| SBR76-52 | 25.8-26.9 | 14699 | 9.9 | 1.4 | 86.6 | 2.1 | 26.5 | 3.4 | .898 | None | |
| SBR76-53 | 26.9-28.2 | 14769 | 17.7 | 1.3 | 77.9 | 3.1 | 46.7 | 3.1 | .910 | None | |
| SBR76-54 | 28.2-29.2 | 14702 | 9.0 | .9 | 88.4 | 1.7 | 24.3 | 2.2 | .892 | None | |
| SBR76-55 | 29.2-30.2 | 14703 | 5.8 | 1.2 | 91.4 | 1.6 | 15.5 | 2.9 | .902 | None | |
| SBR76-56 | 30.2-31.2 | 14704 | 4.7 | 1.2 | 92.8 | 1.3 | 12.4 | 2.9 | .910 | None | |
| SBR76-57 | 31.2-32.4 | 14705 | 2.8 | .6 | 94.9 | 1.7 | 7.3 | 1.5 | .916 | None | |
| SBR76-58 | 32.4-33.6 | 14706 | 2.5 | 1.0 | 95.5 | 1.0 | 6.5 | 2.4 | .922 | None | |

See footnote at end of table.

Core samples received October 2, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's Southern Uinta Basin Corehole 5

Surface elevation: 6,727 feet

| | | | Yield of product | | | | | | Specific gravity of oil at 60°/60° F | Properties of | | Remarks |
|---------------|-----------|---------|------------------|-------|-------------|------------|-------------------|-------|--------------------------------------|------------------|--|---------|
| Sample number | | Run No. | Weight percent | | Spent shale | Gas + loss | Gal per ton | | | Tendency to coke | | |
| | | | Oil | Water | | | Oil ^{1/} | Water | | | | |
| Laramie | Their | | | | | | | | | | | |
| SBR76-59 | 33.6-34.8 | 14707 | 2.5 | 0.8 | 96.0 | 0.7 | 6.4 | 1.9 | 0.923 | None | | |
| SBR76-60 | 34.8-36.5 | 14711 | 6.2 | .9 | 91.2 | 1.7 | 16.2 | 2.2 | .919 | None | | |
| SBR76-61 | 36.5-38.0 | 14712 | 2.0 | .3 | 95.5 | 2.2 | 5.2a | .7 | .920 | None | | |
| SBR76-62 | 38.0-39.0 | 14713 | 1.9 | .9 | 96.3 | .9 | 4.9a | 2.3 | .920 | None | | |
| SBR76-63 | 39.0-40.0 | 14714 | 2.1 | 1.0 | 96.0 | .9 | 5.6 | 2.4 | .916 | None | | |
| SBR76-64 | 40.0-41.0 | 14715 | 2.3 | .9 | 96.0 | .8 | 6.2 | 2.2 | .915 | None | | |
| SBR76-65 | 41.0-42.0 | 14717 | 1.9 | 1.1 | 95.4 | 1.6 | 5.1a | 2.6 | .920 | None | | |
| SBR76-66 | 42.0-43.0 | 14718 | 3.1 | 2.1 | 93.7 | 1.1 | 8.1 | 5.0 | .918 | None | | |
| SBR76-67 | 43.0-44.0 | 14719 | 2.5 | .9 | 95.4 | 1.2 | 6.7 | 2.2 | .915 | None | | |
| SBR76-68 | 44.0-45.0 | 14720 | 1.7 | .4 | 96.5 | 1.4 | 4.5a | 1.0 | .920 | None | | |
| SBR76-69 | 45.0-46.0 | 14721 | 1.9 | .6 | 96.5 | 1.0 | 4.9a | 1.4 | .920 | None | | |
| SBR76-70 | 46.0-47.0 | 14723 | 3.7 | 1.2 | 94.1 | 1.0 | 9.8 | 2.9 | .913 | None | | |
| SBR76-71 | 47.0-48.0 | 14724 | 5.6 | .5 | 92.3 | 1.6 | 14.7 | 1.2 | .914 | None | | |
| SBR76-72 | 48.0-48.8 | 14725 | 16.5 | 1.1 | 78.7 | 3.7 | 43.0 | 2.6 | .920 | None | | |
| SBR76-73 | 48.8-50.4 | 14726 | 7.7 | .6 | 89.5 | 2.2 | 20.4 | 1.4 | .910 | None | | |
| SBR76-74 | 50.4-52.1 | 14727 | 10.9 | .5 | 86.1 | 2.5 | 28.8 | 1.2 | .912 | None | | |
| SBR76-75 | 52.1-53.2 | 14728 | 22.6 | 1.2 | 71.4 | 4.8 | 59.9 | 2.9 | .905 | None | | |
| SBR76-76 | 53.2-54.3 | 14805 | 23.2 | .9 | 69.4 | 6.5 | 61.4 | 2.2 | .906 | Slight | | |
| SBR76-77 | 54.3-55.4 | 14730 | 21.8 | 1.1 | 72.1 | 5.0 | 57.3 | 2.6 | .910 | Slight | | |
| SBR76-78 | 55.4-55.9 | 14731 | 11.8 | .5 | 85.7 | 2.0 | 31.3 | 1.2 | .899 | None | | |
| SBR76-79 | 55.9-56.9 | 14732 | 20.4 | 1.2 | 74.3 | 4.1 | 53.5 | 2.9 | .912 | None | | |
| SBR76-80 | 56.9-58.0 | 14733 | 6.2 | .8 | 91.2 | 1.8 | 16.2 | 1.9 | .922 | None | | |
| SBR76-81 | 58.0-59.3 | 14734a | 6.7 | .5 | 91.4 | 1.4 | 17.5 | 1.2 | .911 | None | | |
| SBR76-82 | 59.3-59.8 | 14734b | 13.5 | .9 | 82.9 | 2.7 | 35.3 | 2.2 | .919 | None | | |
| SBR76-83 | 59.8-60.9 | 14735 | 5.4 | .5 | 92.5 | 1.6 | 14.1 | 1.2 | .919 | None | | |
| SBR76-84 | 60.9-62.0 | 14736 | 6.0 | .3 | 91.3 | 2.4 | 15.6 | .7 | .919 | None | | |
| SBR76-85 | 62.0-63.2 | 14737 | 17.7 | 1.4 | 77.8 | 3.1 | 46.2 | 3.4 | .917 | None | | |
| SBR76-86 | 63.2-65.0 | 14738 | 5.8 | 1.1 | 91.8 | 1.3 | 15.3 | 2.6 | .910 | None | | |
| SBR76-87 | 65.0-65.5 | 14739 | 13.6 | 1.3 | 82.7 | 2.4 | 35.6 | 3.1 | .912 | None | | |
| SBR76-88 | 65.5-66.2 | 14740 | 4.9 | .7 | 93.0 | 1.4 | 12.8 | 1.7 | .914 | None | | |

See footnote at end of table.

Core samples received October 2, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's Southern Uinta Basin Corehole 5

Surface elevation: 6,727 feet

| | | | Yield of product | | | | | | Specific gravity of oil at 60°/60° F | Properties of | Remarks |
|---------------|-------------|---------|------------------|-------|-------------|------------|-------------------|-------|--------------------------------------|---------------|---------|
| Sample number | | Run No. | Weight percent | | Spent shale | Gas + loss | Gal per ton | | | Tendency to | |
| | | | Oil | Water | | | Oil ^{1/} | Water | | | |
| Laramie | Their | | | | | | | | | coke | |
| SBR76-89 | 66.2-67.3 | 14741 | 3.5 | 0.7 | 95.0 | 0.8 | 9.2 | 1.7 | 0.907 | None | |
| SBR76-90 | 67.3-68.3 | 14742 | 11.0 | .9 | 84.2 | 3.9 | 28.5 | 2.2 | .926 | None | |
| SBR76-91 | 68.3-69.7 | 14743 | 1.9 | .7 | 94.9 | 2.5 | 5.0a | 1.7 | .920 | None | |
| SBR76-92 | 69.7-70.9 | 14744 | 3.2 | .3 | 95.9 | .6 | 8.7 | .7 | .901 | None | |
| SBR76-93 | 70.9-72.1 | 14745 | 3.6 | .8 | 94.7 | .9 | 9.6 | 1.9 | .910 | None | |
| SBR76-94 | 72.1-73.1 | 14746 | 8.9 | 1.0 | 88.4 | 1.7 | 23.8 | 2.4 | .895 | None | |
| SBR76-95 | 73.1-74.2 | 14747 | 7.0 | .7 | 89.9 | 2.4 | 18.3 | 1.7 | .910 | None | |
| SBR76-96 | 74.2-75.7 | 14748 | 7.6 | 1.1 | 89.3 | 2.0 | 20.2 | 2.6 | .907 | None | |
| SBR76-97 | 75.7-76.9 | 14749 | 5.4 | 1.3 | 92.2 | 1.1 | 14.4 | 3.1 | .900 | None | |
| SBR76-98 | 76.9-78.0 | 14750 | 3.6 | 1.0 | 94.4 | 1.0 | 9.3 | 2.4 | .919 | None | |
| SBR76-99 | 78.0-79.3 | 14751 | 1.1 | .3 | 97.7 | .9 | 3.0a | .7 | .920 | None | |
| SBR76-100 | 79.3-80.4 | 14752 | 2.1 | .3 | 96.0 | 1.6 | 5.4a | .7 | .920 | None | |
| SBR76-101 | 80.4-81.5 | 14753 | 6.3 | 1.4 | 90.6 | 1.7 | 16.3 | 3.4 | .920 | None | |
| SBR76-102 | 81.5-82.5 | 14754 | 2.8 | .8 | 94.4 | 2.0 | 7.3 | 1.9 | .920 | None | |
| SBR76-103 | 82.5-83.5 | 14755 | 1.4 | .6 | 97.2 | .8 | 3.6a | 1.4 | .920 | None | |
| SBR76-104 | 83.5-85.5 | 14756 | .1 | .3 | 99.0 | .6 | .3a | .7 | | None | |
| SBR76-105 | 85.5-87.7 | 14757 | .3 | .0 | 98.6 | 1.1 | .9a | .0 | | None | |
| SBR76-106 | 87.7-89.8 | 14758 | .4 | .4 | 98.8 | .4 | 1.0a | 1.0 | | None | |
| SBR76-107 | 89.8-90.8 | 14759 | .7 | .2 | 97.5 | 1.6 | 1.8a | .5 | | None | |
| SBR76-108 | 90.8-92.0 | 14760 | 3.4 | .9 | 94.8 | .9 | 8.8a | 2.2 | | None | |
| SBR76-109 | 92.0-92.8 | 14761 | 6.5 | 1.1 | 90.5 | 1.9 | 7.2 | 2.6 | .903 | None | |
| SBR76-110 | 92.8-93.5 | 14762 | 3.3 | .6 | 95.3 | .8 | 9.0 | 1.4 | .883 | None | |
| SBR76-111 | 93.5-94.7 | 14763 | 1.3 | .8 | 97.4 | .5 | 3.5a | 1.8 | .920 | None | |
| SBR76-112 | 94.7-96.0 | 14764 | .4 | 1.0 | 97.5 | 1.1 | 1.1a | 2.4 | | None | |
| SBR76-113 | 96.0-97.0 | 14765 | .6 | 1.6 | 97.1 | .7 | 1.6a | 3.8 | | None | |
| SBR76-114 | 97.0-98.4 | 14766 | .8 | 2.1 | 96.4 | .7 | 2.2a | 5.0 | | None | |
| SBR76-115 | 98.4-99.4 | 14767 | 1.2 | 1.0 | 96.5 | 1.3 | 3.0a | 2.4 | | None | |
| SBR76-116 | 99.4-100.6 | 14770 | 2.4 | 1.1 | 95.7 | .8 | 6.3 | 2.6 | .910 | None | |
| SBR76-117 | 100.6-101.9 | 14771 | 11.0 | 1.1 | 85.2 | 2.7 | 29.0 | 2.6 | .913 | None | |
| SBR76-118 | 101.9-103.0 | 15009 | 3.3 | 1.1 | 94.5 | 1.1 | 8.6 | 2.6 | .918 | None | |

See footnote at end of table.

Core samples received October 2, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's Southern Uinta Basin Corehole 5

Surface elevation: 6,727 feet

| Surface elevation: 6,727 feet | | | Yield of product | | | | | | Specific gravity of oil at 60°/60° F | Properties of spent shale | | Remarks |
|-------------------------------|-------------|---------|------------------|-------|-------------|------------|-------------------|-------|--------------------------------------|---------------------------|----------|---------|
| Sample number | | Run No. | Weight percent | | Spent shale | Gas + loss | Gal per ton | | | Tendency to coke | | |
| | | | Oil | Water | | | Oil ^{1/} | Water | | | | |
| Laramie | Their | | | | | | | | | | | |
| SBR76-119 | 103.0-104.0 | 14773 | 1.0 | 1.2 | 96.9 | 0.9 | 2.5a | 2.9 | .920 | None | | |
| SBR76-120 | 104.0-106.0 | 14774 | .7 | 1.8 | 96.8 | .7 | 1.8a | 4.3 | ↓ | None | | |
| SBR76-121 | 106.0-107.5 | 14775 | 1.1 | 1.5 | 96.5 | .9 | 2.8a | 3.6 | ↓ | None | | |
| SBR76-122 | 107.5-108.5 | 14776 | 1.0 | 1.8 | 96.6 | .6 | 2.7a | 4.3 | ↓ | None | | |
| SBR76-123 | 108.5-109.5 | 14777 | 3.1 | 1.2 | 94.5 | 1.2 | 8.1 | 2.9 | 0.912 | None | | |
| SBR76-124 | 109.5-110.5 | 14778 | 9.9 | 1.7 | 86.3 | 2.1 | 25.8 | 4.1 | .919 | None | | |
| SBR76-125 | 110.5-111.5 | 14779 | 1.4 | .8 | 97.3 | .5 | 3.6a | 1.9 | .920 | None | | |
| SBR76-126 | 111.5-112.4 | 14780 | 1.9 | 1.5 | 95.5 | 1.1 | 4.9a | 3.6 | .920 | None | | |
| SBR76-127 | 112.4-113.0 | 14781 | 5.7 | 1.6 | 91.4 | 1.3 | 15.1 | 3.8 | .914 | None | | |
| SBR76-128 | 113.0-114.4 | 14782 | 1.9 | 2.9 | 94.7 | .5 | 5.1a | 7.0 | .920 | None | | |
| SBR76-129 | 114.4-115.1 | 14783 | 4.2 | 2.2 | 92.5 | 1.1 | 10.9 | 5.3 | .914 | None | | |
| SBR76-130 | 115.1-116.1 | 14784 | .2 | .3 | 98.4 | 1.1 | .6a | .7 | .920 | None | | |
| SBR76-131 | 116.1-117.1 | 14785 | 1.7 | .7 | 96.9 | .7 | 4.5a | 1.7 | ↓ | None | | |
| SBR76-132 | 117.1-118.3 | 14786 | .6 | .7 | 98.3 | .4 | 1.6a | 1.7 | ↓ | None | | |
| SBR76-133 | 118.3-119.6 | 14787 | .3 | 1.1 | 98.3 | .3 | .7a | 2.6 | ↓ | None | | |
| SBR76-134 | 119.6-121.3 | 14788 | 3.0 | .4 | 95.5 | 1.1 | 7.8 | 1.0 | .921 | None | Tar sand | |
| SBR76-135 | 121.3-122.5 | 14789 | 3.0 | .2 | 96.2 | .6 | 7.9 | .5 | .913 | None | Tar sand | |
| SBR76-136 | 122.5-123.7 | 14790 | 2.2 | .2 | 96.3 | 1.3 | 5.9 | .5 | .918 | None | Tar sand | |
| SBR76-137 | 123.7-124.7 | 14791 | 5.0 | .4 | 92.1 | 2.5 | 13.1 | 1.0 | .919 | None | | |
| SBR76-138 | 124.7-126.0 | 14792 | 2.4 | .8 | 96.0 | .8 | 6.3 | 1.9 | .903 | None | | |
| SBR76-139 | 126.0-127.2 | 14793 | 3.0 | .7 | 95.2 | 1.1 | 2.9 | 1.7 | .902 | None | | |
| SBR76-140 | 127.2-128.3 | 14794 | 9.2 | 1.0 | 87.6 | 2.2 | 24.7 | 2.4 | .894 | None | | |
| SBR76-141 | 128.3-129.3 | 14795 | 3.1 | 1.1 | 93.6 | 2.2 | 8.2 | 2.6 | .897 | None | | |
| SBR76-142 | 129.3-130.4 | 14796 | 1.9 | .5 | 96.0 | 1.6 | 4.9a | 1.2 | .920 | None | | |
| SBR76-143 | 130.4-131.3 | 14797 | 3.4 | 1.2 | 94.4 | 1.0 | 9.0 | 2.9 | .900 | None | | |
| SBR76-144 | 131.3-132.7 | 14798 | .2 | .5 | 98.5 | .8 | .6a | 1.2 | .920 | None | | |
| SBR76-145 | 132.7-133.9 | 14799 | 1.9 | .6 | 96.7 | .8 | 5.1a | 1.4 | .920 | None | | |
| SBR76-146 | 133.9-134.6 | 14800 | 3.6 | 1.1 | 93.1 | 2.2 | 9.5 | 2.6 | .907 | None | | |
| SBR76-147 | 134.6-135.6 | 14801 | 1.9 | 1.1 | 95.7 | 1.3 | 5.0a | 2.6 | .920 | None | | |
| SBR76-148 | 135.6-137.2 | 14802 | 1.4 | .4 | 96.9 | 1.3 | 3.8a | 1.0 | .920 | None | | |

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

Core samples received October 2, 1975; assays made on air-dried samples