

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's White Mountain Corehole No. 6 drilled in the  
NW1/4SE1/4SE1/4 of sec. 21, T 19 N, R 106 W, Sweetwater County, Wyoming

Surface elevation 7,330 feet

| Sample number |               | Run<br>No. | Yield of product |       |                           |               | Specific<br>gravity<br>of oil at<br>60°/60° F | Properties of<br>spent shale |       | Remarks |
|---------------|---------------|------------|------------------|-------|---------------------------|---------------|-----------------------------------------------|------------------------------|-------|---------|
|               |               |            | Weight percent   |       | Gal per ton               |               |                                               | Tendency to                  |       |         |
| Laramie       | Their         |            | Oil              | Water | Spent<br>shale            | Gas +<br>loss | Oil <sup>1/</sup>                             | Water                        | coke  |         |
| SBR75-        | 240.0-338.7   |            |                  |       | BARREN ROCK - NOT SAMPLED |               |                                               |                              |       |         |
| SBR75-22209   | 338.7-340.0   | 14162      | 0.7              | 1.2   | 96.6                      | 1.5           | 1.7a                                          | 2.9                          | None  |         |
| SBR75-22210   | 340.0-341.2   | 14163      | .5               | 1.1   | 98.1                      | .3            | 1.3a                                          | 2.6                          | None  |         |
| SBR75-22211   | 341.2-342.6   | 14164      | .0               | 2.3   | 97.4                      | .3            | .1a                                           | 5.5                          | None  |         |
| SBR75-22212   | 342.6-343.7   | 14171      | .1               | 2.2   | 96.5                      | 1.2           | .2a                                           | 5.3                          | None  |         |
| SBR75-22213   | 343.7-345.0   | 14172      | .0               | 2.6   | 96.9                      | .5            | .1a                                           | 6.2                          | None  |         |
| SBR75-22214   | 345.0-345.8   | 14173      | 3.0              | 2.0   | 93.2                      | 1.8           | 7.8                                           | 4.7                          | 0.913 | None    |
| SBR75-22215   | 345.8-347.4   | 14174      | 5.4              | 1.6   | 91.1                      | 1.9           | 14.5                                          | 3.7                          | .897  | None    |
| SBR75-22216   | 347.4-348.0   | 14175      | 5.1              | 2.0   | 90.7                      | 2.2           | 13.7                                          | 4.7                          | .902  | None    |
| SBR75-22217   | 348.0-349.0   | 14176      | 5.6              | 1.1   | 90.4                      | 2.9           | 14.8                                          | 2.6                          | .901  | None    |
| SBR75-22218   | 349.0-350.0   | 14177      | 5.6              | 2.3   | 90.2                      | 1.9           | 14.7                                          | 5.5                          | .911  | None    |
| SBR75-22219   | 350.0-351.0   | 14178      | 6.3              | 1.9   | 88.7                      | 3.1           | 16.5                                          | 4.6                          | .915  | None    |
| SBR75-22220   | 351.0-352.1   | 14179      | 6.2              | 2.4   | 89.3                      | 2.1           | 16.2                                          | 5.8                          | .917  | None    |
| SBR75-22221   | 352.1-353.0   | 14180      | 5.7              | 2.3   | 89.8                      | 2.2           | 14.8                                          | 5.5                          | .921  | None    |
| SBR75-22222   | 353.0-354.0   | 14181      | 6.8              | 2.5   | 88.5                      | 2.2           | 17.7                                          | 6.0                          | .917  | None    |
| SBR75-22223   | 354.0-355.0   | 14182      | 7.5              | 2.5   | 87.1                      | 2.9           | 19.5                                          | 6.0                          | .925  | None    |
| SBR75-22224   | 355.0-356.2   | 14183      | 7.9              | 2.5   | 86.2                      | 3.4           | 20.2                                          | 6.0                          | .938  | None    |
| SBR75-22225   | 356.2-357.5   | 14184      | 11.7             | 1.9   | 83.0                      | 3.4           | 30.2                                          | 4.6                          | .931  | None    |
| SBR75-22226   | 357.5-358.6   | 14185      | 13.7             | 2.2   | 80.1                      | 4.0           | 35.1                                          | 5.3                          | .938  | None    |
| SBR75-22227   | 358.6-359.5   | 14186      | 15.1             | 1.9   | 78.1                      | 4.9           | 38.6                                          | 4.7                          | .940  | None    |
| SBR75-22228   | 359.5-360.4   | 14187      | 13.4             | 2.5   | 79.8                      | 4.3           | 34.1                                          | 6.0                          | .941  | None    |
| SBR75-22229   | 360.4-361.4   | 14188      | 13.8             | 2.6   | 79.3                      | 4.3           | 35.2                                          | 6.2                          | .937  | None    |
| SBR75-22230   | 361.4-362.4   | 14189      | 13.0             | 2.5   | 80.5                      | 4.0           | 33.4                                          | 6.0                          | .930  | None    |
| SBR75-22231   | 362.4-363.4   | 14190      | 11.6             | 2.8   | 81.1                      | 4.5           | 29.7                                          | 6.7                          | .936  | None    |
| SBR75-22232   | 363.40-364.35 | 14191      | 11.2             | 2.6   | 82.3                      | 3.9           | 28.6                                          | 6.2                          | .940  | None    |
| SBR75-22233   | 364.35-365.60 | 14192      | 7.3              | 1.8   | 88.8                      | 2.1           | 18.9                                          | 4.3                          | .921  | None    |
| SBR75-22234   | 365.6-366.9   | 14193      | 7.1              | 1.6   | 89.3                      | 2.0           | 18.6                                          | 3.8                          | .912  | None    |
| SBR75-22235   | 366.9-368.3   | 14194      | 10.4             | 2.3   | 84.2                      | 3.1           | 27.0                                          | 5.5                          | .923  | None    |
| SBR75-22236   | 368.3-369.3   | 14195      | 8.6              | 2.4   | 85.9                      | 3.1           | 22.4                                          | 5.8                          | .924  | None    |
| SBR75-22237   | 369.3-370.6   | 14196      | 8.2              | 2.6   | 87.3                      | 1.9           | 21.4                                          | 6.2                          | .922  | None    |

See footnote at end of table.

Core samples received September 19, 1975; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's White Mountain Corehole No. 6

Surface elevation 7,330 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 <sup>1/</sup> | Water | coke                                 |                           |  |         |
| SBR75-22238   | 370.6-371.6   | 14197   | 5.5              | 1.8   | 90.7        | 2.0         | 14.3              | 4.3   | 0.924                                | None                      |  |         |
| SBR75-22239   | 371.6-372.8   | 14198   | 7.8              | 2.0   | 87.4        | 2.8         | 20.3              | 4.8   | .927                                 | None                      |  |         |
| SBR75-22240   | 372.8-373.7   | 14199   | 3.2              | 1.9   | 93.1        | 1.8         | 8.4               | 4.6   | .903                                 | None                      |  |         |
| SBR75-22241   | 373.7-374.8   | 14200   | 1.6              | 2.1   | 95.0        | 1.3         | 4.0a              | 5.0   |                                      | None                      |  |         |
| SBR75-22242   | 374.8-376.0   | 14201   | 2.3              | 1.9   | 94.6        | 1.2         | 6.2               | 4.6   | .909                                 | None                      |  |         |
| SBR75-22243   | 376.0-377.1   | 14202   | 1.4              | 1.3   | 96.0        | 1.3         | 3.7a              | 3.1   |                                      | None                      |  |         |
| SBR75-22244   | 377.1-378.1   | 14203   | 1.5              | 1.0   | 95.6        | 1.9         | 3.9a              | 2.5   |                                      | None                      |  |         |
| SBR75-22245   | 378.1-379.2   | 14204   | 2.8              | 1.4   | 94.5        | 1.3         | 7.3               | 3.4   | .917                                 | None                      |  |         |
| SBR75-22246   | 379.2-380.7   | 14205   | 2.7              | .7    | 95.0        | 1.6         | 7.0               | 1.7   | .920                                 | None                      |  |         |
| SBR75-22247   | 380.7-381.7   | 14206   | 2.5              | 1.1   | 95.0        | 1.4         | 6.6               | 2.6   | .921                                 | None                      |  |         |
| SBR75-22248   | 381.7-382.9   | 14207   | 5.7              | 1.3   | 90.7        | 2.3         | 15.0              | 3.1   | .917                                 | None                      |  |         |
| SBR75-22249   | 382.9-384.0   | 14208   | 9.6              | 1.8   | 84.6        | 4.0         | 25.2              | 4.4   | .911                                 | None                      |  |         |
| SBR75-22250   | 384.0-385.0   | 14209   | 8.0              | 1.6   | 86.2        | 4.2         | 20.9              | 3.8   | .914                                 | None                      |  |         |
| SBR75-22251   | 385.0-386.5   | 14210   | 4.1              | .7    | 92.9        | 2.3         | 10.9              | 1.7   | .907                                 | None                      |  |         |
| SBR75-22252   | 386.5-387.9   | 14211   | 6.7              | 1.1   | 89.8        | 2.4         | 17.7              | 2.6   | .911                                 | None                      |  |         |
| SBR75-22253   | 387.9-388.7   | 14212   | 7.0              | .9    | 90.1        | 2.0         | 18.4              | 2.2   | .910                                 | None                      |  |         |
| SBR75-22254   | 388.7-389.9   | 14213   | 6.5              | 1.0   | 90.6        | 1.9         | 17.1              | 2.4   | .904                                 | None                      |  |         |
| SBR75-22255   | 389.9-390.8   | 14214   | 4.5              | .9    | 92.3        | 2.3         | 12.1              | 2.2   | .903                                 | None                      |  |         |
| SBR75-22256   | 390.8-391.8   | 14215   | 3.9              | 1.0   | 93.4        | 1.7         | 10.3              | 2.4   | .913                                 | None                      |  |         |
| SBR75-22257   | 391.8-392.8   | 14216   | 5.2              | .8    | 92.3        | 1.7         | 13.7              | 1.9   | .913                                 | None                      |  |         |
| SBR75-22258   | 392.8-394.0   | 14217   | 4.4              | 1.0   | 93.1        | 1.5         | 11.4              | 2.4   | .918                                 | None                      |  |         |
| SBR75-22259   | 394.0-394.8   | 14218   | 4.0              | 1.0   | 93.6        | 1.4         | 10.5              | 2.4   | .912                                 | None                      |  |         |
| SBR75-22260   | 394.80-395.75 | 14219   | 5.5              | 1.1   | 91.0        | 2.4         | 14.5              | 2.6   | .905                                 | None                      |  |         |
| SBR75-22261   | 395.75-396.70 | 14220   | 3.8              | 1.1   | 93.8        | 1.3         | 10.3              | 2.6   | .896                                 | None                      |  |         |
| SBR75-22262   | 396.7-397.7   | 14221   | 6.0              | .7    | 92.0        | 1.3         | 15.8              | 1.7   | .918                                 | None                      |  |         |
| SBR75-22263   | 397.7-398.9   | 14222   | 4.6              | .5    | 94.0        | .9          | 12.0              | 1.2   | .924                                 | None                      |  |         |
| SBR75-22264   | 398.9-399.9   | 14223   | 6.5              | 1.0   | 90.6        | 1.9         | 17.1              | 2.4   | .915                                 | None                      |  |         |
| SBR75-22265   | 399.9-401.0   | 14224   | 5.9              | .8    | 91.2        | 2.1         | 15.5              | 1.9   | .909                                 | None                      |  |         |
| SBR75-22266   | 401.0-402.0   | 14225   | 6.4              | 1.1   | 90.7        | 1.8         | 16.9              | 2.6   | .910                                 | None                      |  |         |
| SBR75-22267   | 402.0-403.0   | 14226   | 5.9              | .8    | 91.1        | 2.2         | 15.4              | 1.9   | .915                                 | None                      |  |         |

See footnote at end of table.

Core samples received September 19, 1975; assays made on air-dried samples

## OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from ERDA/LERC's White Mountain Corehole No. 6

Surface elevation 7,330 feet

| Sample number |             | Run No. | Yield of product |       |             |            | Specific gravity of oil at 60°/60° F | Properties of spent shale<br>Tendency to coke | Remarks           |             |
|---------------|-------------|---------|------------------|-------|-------------|------------|--------------------------------------|-----------------------------------------------|-------------------|-------------|
|               |             |         | Weight percent   |       | Spent shale | Gas + loss |                                      |                                               |                   | Gal per ton |
| Laramie       | Their       |         | Oil              | Water |             |            |                                      |                                               | Oil <sup>1/</sup> | Water       |
| SBR75-22268   | 403.0-404.2 | 14227   | 8.8              | 1.0   | 88.3        | 1.9        | 23.0                                 | 2.4                                           | 0.914             | None        |
| SBR75-22269   | 404.2-405.2 | 14228   | 8.4              | 1.2   | 88.2        | 2.2        | 22.0                                 | 2.9                                           | .914              | None        |
| SBR75-22270   | 405.2-406.1 | 14229   | 6.9              | 1.0   | 90.5        | 1.6        | 18.0                                 | 2.4                                           | .920              | None        |
| SBR75-22271   | 406.1-407.1 | 14230   | 6.2              | .7    | 91.5        | 1.6        | 16.5                                 | 1.7                                           | .906              | None        |
| SBR75-22272   | 407.1-408.5 | 14231   | 5.3              | .8    | 91.5        | 2.4        | 13.9                                 | 1.9                                           | .919              | None        |
| SBR75-22273   | 408.5-409.8 | 14232   | 6.0              | .7    | 91.6        | 1.7        | 15.7                                 | 1.7                                           | .912              | None        |
| SBR75-22274   | 409.8-410.9 | 14233   | 3.8              | 1.4   | 92.5        | 2.3        | 10.1                                 | 3.4                                           | .912              | None        |
| SBR75-22275   | 410.9-412.1 | 14234   | .5               | 2.1   | 96.7        | .7         | 1.2a                                 | 5.0                                           |                   | None        |

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

Core samples received September 19, 1975; assays made on air-dried samples