



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

CN0675

COMPANY GULF MINERAL RESOURCES COMPANY FILE NO. RP-2-OSA-148
WELL BONANZA NO. 13 DATE 10-2-73 ENGRS. MOHL
FIELD WILDCAT FORMATION PARACHUTE ELEV. 6300'GL
COUNTY UINTAH STATE UTAH DRG. FLD. AIR-MIST CORES. DIAMOND 3"
LOCATION 2300'FNL 1175'FWL REMARKS *SAMPLE NOT AVAILABLE FOR ASSAY,
SEC. 15-T12S-R24E SEE SUPPLEMENTAL REPORT.

U145

OIL SHALE ASSAY

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|---------------|-------------|---------|-------|----------------------|---------|-------|-------------------|---------------------|------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 1 | 341.8-42.3 | 11.5 | 4.4 | .916 | 2.2 | 0.9 | 93.5 | 1.2 | NIL | |
| 2 | 42.3-43.2 | 11.9 | | | | | | | | * |
| 3 | 43.2-44.5 | 21.5 | 8.1 | .906 | 2.6 | 1.1 | 88.9 | 1.9 | NIL | |
| 4 | 44.5-46.0 | 15.4 | 5.8 | .899 | 2.4 | 1.0 | 91.4 | 1.8 | NIL | |
| 5 | 46.0-47.0 | 25.4 | 9.5 | .898 | 3.6 | 1.5 | 86.5 | 2.5 | NIL | |
| 6 | 47.0-47.6 | 6.0 | | | | | | | | * |
| 7 | 47.6-49.0 | 4.4 | 1.7 | .916 | 2.6 | 1.1 | 95.8 | 1.4 | NIL | |
| 8 | 49.0-50.5 | 3.1 | 1.2 | .913 | 1.9 | 0.8 | 96.7 | 1.3 | NIL | |
| 9 | 50.5-52.0 | 7.0 | 2.7 | .924 | 1.7 | 0.7 | 94.7 | 1.9 | NIL | |
| 10 | 52.0-53.5 | 3.5 | 1.3 | .907 | 2.4 | 1.0 | 95.7 | 2.0 | NIL | |
| 11 | 53.5-55.0 | 2.0 | 0.7 | .897 | 2.6 | 1.1 | 96.4 | 1.8 | NIL | |
| 12 | 55.0-55.8 | 2.1 | | | | | | | | * |
| 13 | 55.8-57.0 | 11.3 | 4.2 | .897 | 3.6 | 1.5 | 91.8 | 2.5 | NIL | |
| 14 | 57.0-58.3 | 12.1 | 4.5 | .897 | 2.9 | 1.2 | 92.1 | 2.2 | NIL | |
| 15 | 58.3-59.1 | 30.3 | | | | | | | | * |
| 16 | 59.1-60.5 | 14.3 | 5.6 | .936 | 2.4 | 1.0 | 91.6 | 1.8 | NIL | |
| 17 | 60.5-61.5 | 11.7 | 4.5 | .914 | 1.9 | 0.8 | 93.2 | 1.6 | NIL | |
| 18 | 61.5-62.5 | 10.4 | 4.0 | .924 | 3.6 | 1.5 | 93.2 | 1.3 | NIL | |
| 19 | 62.5-63.3 | 16.9 | | | | | | | | * |
| 20 | 63.3-64.5 | 27.1 | 10.3 | .915 | 2.4 | 1.0 | 86.2 | 2.5 | NIL | |
| 21 | 64.5-65.5 | 27.6 | 10.4 | .904 | 2.2 | 0.9 | 86.5 | 2.2 | NIL | |
| 22 | 65.5-66.4 | 45.6 | 17.1 | .897 | 3.6 | 1.5 | 77.7 | 3.8 | NIL | |
| 23 | 66.4-67.3 | 29.3 | | | | | | | | * |
| 24 | 67.3-69.0 | 18.4 | 7.0 | .909 | 2.4 | 1.0 | 90.2 | 1.8 | NIL | |
| 25 | 69.0-70.5 | 10.2 | 3.9 | .916 | 1.7 | 0.7 | 93.6 | 1.8 | NIL | |
| 26 | 70.5-72.0 | 19.3 | 7.3 | .910 | 2.2 | 0.9 | 89.8 | 2.0 | NIL | |
| mm 27 | 72.0-73.5 | 10.5 | 4.0 | .923 | 1.7 | 0.7 | 93.4 | 1.9 | NIL | |
| 28 | 73.5-75.2 | 10.2 | 3.9 | .917 | 2.4 | 1.0 | 93.4 | 1.7 | NIL | |
| 29 | 75.2-75.9 | 8.1 | | | | | | | | * |
| 30 | 75.9-77.5 | 8.8 | 3.4 | .917 | 2.4 | 1.0 | 93.7 | 2.0 | NIL | |
| 31 | 77.5-78.5 | 11.6 | 4.5 | .920 | 1.9 | 0.8 | 92.5 | 2.2 | NIL | |

OIL SHALE ASSAY

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|---------------|-------------|---------|-------|----------------------|---------|-------|-------------------|---------------------|------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 32 | 378.5-79.5 | 32.7 | 12.4 | .911 | 3.1 | 1.3 | 83.4 | 2.9 | NIL | |
| 33 | 79.5-81.0 | 19.0 | 7.2 | .903 | 1.9 | 0.8 | 89.9 | 2.1 | NIL | |
| 34 | 81.0-82.6 | 23.6 | 9.0 | .910 | 1.9 | 0.8 | 87.8 | 2.4 | NIL | |
| 35 | 82.6-83.4 | 35.5 | | | | | | | | * |
| 36 | 83.4-85.0 | 49.6 | 18.5 | .893 | 3.1 | 1.3 | 76.0 | 4.3 | HIGH | |
| 37 | 85.0-86.5 | 59.4 | 22.4 | .905 | 4.3 | 1.8 | 66.1 | 9.7 | HIGH | |
| 38 | 86.5-88.0 | 49.2 | 18.5 | .898 | 3.6 | 1.5 | 74.0 | 6.1 | HIGH | |
| 39 | 88.0-89.5 | 41.2 | 15.8 | .919 | 3.4 | 1.4 | 79.5 | 3.3 | SLIGHT | |
| 40 | 89.5-91.0 | 22.4 | 8.4 | .905 | 1.4 | 0.6 | 88.9 | 2.1 | NIL | |
| 41 | 91.0-92.5 | 26.4 | 10.0 | .910 | 2.2 | 0.9 | 86.6 | 2.5 | NIL | |
| 42 | 92.5-93.8 | 11.4 | 4.3 | .913 | 1.2 | 0.5 | 93.6 | 1.6 | NIL | |
| 43 | 93.8-94.6 | 14.1 | | | | | | | | * |
| 44 | 94.6-96.0 | 36.7 | 13.7 | .898 | 2.4 | 1.0 | 82.3 | 3.0 | NIL | |
| 45 | 96.0-97.5 | 22.0 | 8.3 | .904 | 1.7 | 0.7 | 89.2 | 1.8 | NIL | |
| 46 | 97.5-99.0 | 25.1 | 9.5 | .905 | 1.9 | 0.8 | 87.2 | 2.5 | NIL | |
| 47 | 399.0-00.5 | 12.3 | 4.7 | .918 | 1.2 | 0.5 | 93.2 | 1.6 | NIL | |
| 48 | 400.5-02.0 | 12.6 | 4.8 | .915 | 1.2 | 0.5 | 92.8 | 1.9 | NIL | |
| 49 | 02.0-03.0 | 21.4 | 8.2 | .923 | 1.9 | 0.8 | 88.9 | 2.1 | NIL | |
| 50 | 03.0-04.5 | 11.7 | 4.5 | .916 | 1.4 | 0.6 | 92.9 | 2.0 | NIL | |
| 51 | 04.5-05.6 | 10.2 | 3.9 | .927 | 1.2 | 0.5 | 94.2 | 1.4 | NIL | |
| 52 | 05.6-06.5 | 12.1 | | | | | | | | * |
| 53 | 06.5-07.5 | 7.3 | 2.8 | .926 | 5.3 | 2.2 | 93.3 | 1.7 | NIL | |
| 54 | 07.5-08.5 | 26.9 | 10.3 | .920 | 2.6 | 1.1 | 85.9 | 2.7 | NIL | |
| 55 | 08.5-10.0 | 7.2 | 2.7 | .916 | 1.9 | 0.8 | 94.9 | 1.6 | NIL | |
| 56 | 10.0-11.0 | 22.5 | 8.7 | .922 | 2.4 | 1.0 | 88.3 | 2.1 | NIL | |
| 57 | 11.0-12.3 | 5.3 | 2.1 | .930 | 2.2 | 0.9 | 95.2 | 1.8 | NIL | |
| 58 | 12.3-13.1 | | | | | | | | | * |
| 59 | 13.1-14.5 | 14.1 | 5.5 | .927 | 5.3 | 2.2 | 90.8 | 1.5 | NIL | |
| 60 | 14.5-16.0 | 7.3 | 2.8 | .925 | 3.4 | 1.4 | 93.6 | 2.2 | NIL | |
| 61 | 16.0-17.5 | 5.5 | 2.1 | .922 | 2.4 | 1.0 | 93.8 | 3.1 | NIL | |
| 62 | 17.5-19.0 | 6.5 | 2.5 | .926 | 2.2 | 0.9 | 93.7 | 2.9 | NIL | |
| 63 | 19.0-20.0 | 7.1 | 2.8 | .927 | 1.9 | 0.8 | 94.8 | 1.7 | NIL | |
| 64 | 20.0-21.0 | 13.8 | 5.3 | .925 | 1.9 | 0.8 | 91.9 | 2.0 | SLIGHT | |
| 65 | 21.0-22.5 | 4.2 | 1.6 | .925 | 2.2 | 0.9 | 95.6 | 1.9 | NIL | |
| 66 | 22.5-23.8 | 10.1 | 3.9 | .922 | 3.1 | 1.3 | 92.6 | 2.2 | NIL | |
| 67 | 23.8-24.7 | 7.4 | | | | | | | | * |
| 68 | 24.7-26.0 | 11.9 | 4.5 | .903 | 2.2 | 0.9 | 92.2 | 2.4 | NIL | |
| 69 | 26.0-27.5 | 10.0 | 3.8 | .914 | 1.9 | 0.8 | 93.3 | 2.1 | NIL | |

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* Estimated

OIL SHALE ASSAY

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|---------------|-------------|---------|-------|----------------------|---------|-------|-------------------|---------------------|------------------|-----------------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 71 | 128.9-29.8 | 6.9 | | | | | | | | * |
| 72 | 29.8-31.0 | 5.2 | 2.0 | .922 | 1.7 | 0.7 | 95.7 | 1.6 | NIL | |
| 73 | 31.0-32.3 | 6.8 | 2.6 | .918 | 1.9 | 0.8 | 94.4 | 2.2 | NIL | |
| 74 | 32.3-32.9 | 7.7 | | | | | | | | * |
| 75 | 32.9-34.5 | 7.4 | 2.8 | .912 | 3.6 | 1.5 | 93.1 | 2.6 | NIL | |
| 76 | 34.5-35.5 | 5.8 | 2.2 | .899 | 3.6 | 1.5 | 93.7 | 2.6 | NIL | |
| 77 | 35.5-37.1 | 5.4 | 2.1 | .922 | 1.9 | 0.8 | 94.5 | 2.6 | NIL | |
| 78 | 37.1-38.0 | 6.2 | | | | | | | | * |
| 79 | 38.0-39.0 | 12.0 | 4.6 | .911 | 1.9 | 0.8 | 92.4 | 2.2 | NIL | |
| 80 | 39.0-40.0 | 12.9 | 4.9 | .911 | 4.8 | 2.0 | 90.3 | 2.8 | NIL | |
| 81 | 40.0-41.5 | 8.7 | 3.3 | .916 | 4.8 | 2.0 | 89.9 | 4.8 | NIL | |
| 82 | 41.5-43.0 | 7.7 | 3.0 | .928 | 5.0 | 2.1 | 91.4 | 3.5 | NIL | |
| 83 | 43.0-44.0 | 12.3 | 4.7 | .914 | 6.0 | 2.5 | 89.5 | 3.3 | NIL | |
| 84 | 44.0-45.5 | 10.4 | 4.0 | .928 | 2.4 | 1.0 | 90.0 | 5.0 | NIL | Bituminous Sand |
| 85 | 45.5-47.0 | 1.8 | 0.7 | .914 | 3.1 | 1.3 | 95.0 | 3.0 | NIL | |
| 86 | 47.0-48.5 | 0.0 | 0.0 | | 4.3 | 1.8 | 96.3 | 1.9 | NIL | |
| 87 | 48.5-50.0 | 0.0 | 0.0 | | 5.6 | 2.4 | 94.9 | 2.8 | NIL | |
| 88 | 50.0-51.0 | 0.0 | 0.0 | | 5.6 | 2.4 | 95.3 | 2.4 | NIL | |
| 89 | 51.0-52.5 | 5.0 | 1.9 | .919 | 2.4 | 1.0 | 95.6 | 1.5 | NIL | |
| 90 | 52.5-54.0 | 8.3 | 3.2 | .919 | 1.2 | 0.5 | 95.3 | 1.0 | NIL | |
| 91 | 54.0-55.5 | 8.6 | 3.3 | .923 | 1.2 | 0.5 | 95.2 | 1.0 | NIL | |
| 92 | 55.5-57.0 | 10.0 | 3.8 | .916 | 1.2 | 0.5 | 94.6 | 1.1 | NIL | |
| 93 | 57.0-58.5 | 6.5 | 2.5 | .920 | 2.6 | 1.1 | 94.8 | 1.6 | NIL | |
| 94 | 58.5-60.0 | 6.2 | 2.4 | .915 | 2.9 | 1.2 | 94.6 | 1.8 | NIL | |
| 95 | 60.0-61.5 | 8.1 | 3.1 | .914 | 1.2 | 0.5 | 95.2 | 1.2 | NIL | |
| 96 | 61.5-63.0 | 4.5 | 1.7 | .914 | 2.9 | 1.2 | 95.0 | 2.1 | NIL | |
| 97 | 63.0-64.0 | 2.5 | 1.0 | .910 | 3.6 | 1.5 | 95.8 | 1.8 | NIL | |
| 98 | 64.0-65.5 | 0.0 | 0.0 | | 4.7 | 2.0 | 95.3 | 2.8 | NIL | |
| 99 | 65.5-67.0 | 0.0 | 0.0 | | 5.1 | 2.1 | 93.5 | 4.4 | NIL | |
| 100 | 67.0-68.5 | 0.0 | 0.0 | | 5.4 | 2.3 | 93.4 | 4.3 | NIL | |
| 101 | 68.5-70.0 | 0.0 | 0.0 | | 5.9 | 2.5 | 93.4 | 4.2 | NIL | |
| 102 | 70.0-71.5 | 0.0 | 0.0 | | 6.8 | 2.8 | 93.2 | 4.0 | NIL | |
| 103 | 71.5-73.0 | 5.6 | 2.1 | .918 | 1.9 | 0.8 | 95.6 | 1.5 | NIL | |
| 104 | 73.0-74.5 | 0.0 | 0.0 | | 3.6 | 1.5 | 94.5 | 4.0 | NIL | |
| 105 | 74.5-76.3 | 0.0 | 0.0 | | 5.2 | 2.2 | 94.0 | 3.8 | NIL | |

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

COMPANY GULF MINERAL RESOURCES COMPANY FILE NO. RP-2-OSA-148
WELL BONANZA NO. 13 DATE 12-12-73 ENGRS RM
FIELD WILDCAT FORMATION PARACHUTE ELEV. 6300'GL
COUNTY UTAH STATE UTAH DRLG. FLD. AIR-MIST CORES DIAMOND 3"
LOCATION 2300'FNL 1175'FWL REMARKS SUPPLEMENTAL TABULATION
SEC 15-T12S-R24E

OIL SHALE ASSAY

CN# 0675

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|------------------|----------------|---------|-------|----------------------------|---------|-------|-------------------------|---------------------------|------------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 2 | 342.3-43.2 | 11.9 | 4.5 | .915 | 1.7 | 0.7 | 90.9 | 3.9 | NIL | |
| 15 | 358.3-59.1 | 30.3 | 11.4 | .904 | 2.6 | 1.1 | 82.3 | 5.2 | SLIGHT | |
| 19 | 362.5-63.3 | 16.9 | 6.5 | .926 | 3.4 | 1.4 | 88.3 | 3.8 | NIL | |
| 23 | 366.4-67.3 | 29.3 | 11.0 | .904 | 2.4 | 1.0 | 83.5 | 4.5 | SLIGHT | |
| 35 | 382.6-83.4 | 35.5 | 13.6 | .920 | 2.2 | 0.9 | 80.5 | 5.0 | SLIGHT | |
| 43 | 393.8-94.6 | 14.1 | 5.3 | .905 | 1.4 | 0.6 | 90.1 | 4.0 | NIL | |
| 52 | 405.6-06.5 | 12.1 | 4.6 | .913 | 1.9 | 0.8 | 90.7 | 3.9 | NIL | |
| 67 | 423.8-24.7 | 7.4 | 2.8 | .909 | 2.2 | 0.9 | 92.0 | 4.3 | NIL | |
| 71 | 428.9-29.8 | 6.9 | 2.7 | .923 | 1.7 | 0.7 | 92.5 | 4.1 | NIL | |
| 74 | 432.3-32.9 | 7.7 | 3.0 | .920 | 1.4 | 0.6 | 92.2 | 4.2 | NIL | |
| 78 | 437.1-38.0 | 6.2 | 2.4 | .916 | 3.4 | 1.4 | 92.0 | 4.2 | NIL | |

SUPPLEMENTAL TABULATION

Still some missing



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

COMPANY GULF MINERAL RESOURCES COMPANY
WELL BONANZA NO. 13
FIELD WILDCAT
COUNTY Uintah STATE UTAH
LOCATION 2300' FNL 1175' FWL
SEC 15-T12S-R24E
DATE 2-25-74
FORMATION PARACHUTE
DRLG. FLD. AIR-MIST
REMARKS SUPPLEMENTAL TABULATION NO. 2
FILE NO. RP-2-OSA-148
ENGNS RG
ELEV. 6300' GL
CORRS DIAMOND 3"

OIL SHALE ASSAY

CNP 0675

| Sample Number | Depth, Feet | OIL | | OH Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|------------------|----------------|---------|-------|---------------------------|---------|-------|-------------------------|---------------------------|------------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 5 | 347.0-47.6 | 6.0 | 2.4 | .945 | 1.7 | 0.7 | 95.3 | 1.6 | NIL | |
| 12 | 355.0-55.8 | 2.1 | 0.9 | .995 | 2.2 | 0.9 | 96.8 | 1.4 | NIL | |
| 29 | 375.2-75.9 | 8.1 | 3.3 | .965 | 1.2 | 0.5 | 93.9 | 2.3 | NIL | |

SUPPLEMENTAL TABULATION NO. 2



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

COMPANY GULF MINERAL RESOURCES COMPANY FILE NO. RP-2-OSA-148
WELL BONANZA NO. 13 DATE 12-12-73 ENGRS. RM
FIELD WILDCAT FORMATION PARACHUTE ELEV. 6300'GL
COUNTY UTAH STATE UTAH DRUG. FLD. AIR-MIST COPIES DIAMOND 3"
LOCATION 2300'FNL 1175'FWL REMARKS SUPPLEMENTAL TABULATION
SEC 15-T12S-R24E

OIL SHALE ASSAY

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|------------------|----------------|---------|-------|----------------------------|---------|-------|-------------------------|---------------------------|------------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 2 | 342.3-43.2 | 11.9 | 4.5 | .915 | 1.7 | 0.7 | 90.9 | 3.9 | NIL | |
| 15 | 358.3-59.1 | 30.3 | 11.4 | .904 | 2.6 | 1.1 | 82.3 | 5.2 | SLIGHT | |
| 19 | 362.5-63.3 | 16.9 | 6.5 | .926 | 3.4 | 1.4 | 88.3 | 3.8 | NIL | |
| 23 | 366.4-67.3 | 29.3 | 11.0 | .904 | 2.4 | 1.0 | 83.5 | 4.5 | SLIGHT | |
| 35 | 382.6-83.4 | 35.5 | 13.6 | .920 | 2.2 | 0.9 | 80.5 | 5.0 | SLIGHT | |
| 43 | 393.8-94.6 | 14.1 | 5.3 | .905 | 1.4 | 0.6 | 90.1 | 4.0 | NIL | |
| 52 | 405.6-06.5 | 12.1 | 4.6 | .913 | 1.9 | 0.8 | 90.7 | 3.9 | NIL | |
| 67 | 423.8-24.7 | 7.4 | 2.8 | .909 | 2.2 | 0.9 | 92.0 | 4.3 | NIL | |
| 71 | 428.9-29.8 | 6.9 | 2.7 | .923 | 1.7 | 0.7 | 92.5 | 4.1 | NIL | |
| 74 | 432.3-32.9 | 7.7 | 3.0 | .920 | 1.4 | 0.6 | 92.2 | 4.2 | NIL | |
| 78 | 437.1-38.0 | 6.2 | 2.4 | .916 | 3.4 | 1.4 | 92.0 | 4.2 | NIL | |

SUPPLEMENTAL TABULATION



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Petroleum Reservoir Engineering

COMPANY GULF MINERAL RESOURCES COMPANY
WELL BONANZA NO. 13
FIELD WILDCAT
COUNTY UTAH
LOCATION 2300' FNL 1175' FWL
SEC 15-T12S-R24E
DATE 2-25-74
FORMATION PARACHUTE
DRLG. FLD. AIR-MIST
REMARKS SUPPLEMENTAL TABULATION NO. 2
FILE NO. RP-2-OSA-148
ENGRS RG
ELEV. 6300' GL
CORES DIAMOND 3"

OIL SHALE ASSAY

| Sample Number | Depth, Feet | OIL | | Oil Specific Gravity | WATER | | Spent Shale Wt. % | Gas Plus Loss Wt. % | Tendency to Coke | REMARKS |
|------------------|----------------|---------|-------|----------------------------|---------|-------|-------------------------|---------------------------|------------------------|---------|
| | | Gal/Ton | Wt. % | | Gal/Ton | Wt. % | | | | |
| 5 | 347.0-47.6 | 6.0 | 2.4 | .945 | 1.7 | 0.7 | 95.3 | 1.6 | NIL | |
| 12 | 355.0-55.8 | 2.1 | 0.9 | .995 | 2.2 | 0.9 | 96.8 | 1.4 | NIL | |
| 29 | 375.2-75.9 | 8.1 | 3.3 | .965 | 1.2 | 0.5 | 93.9 | 2.3 | NIL | |

SUPPLEMENTAL TABULATION NO. 2

412.3 — 413.1