

K E R O G E N A N A L Y S I S

FCR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 20 | 2.485 | 7.7 | 7.7 | | | | | |
| 21 | 2.470 | 9.4 | 17.1 | | | | | |
| 22 | 2.410 | 15.9 | 33.0 | | | | | |
| 23 | 2.335 | 23.8 | 56.8 | | | | | |
| 24 | 2.285 | 28.9 | 85.7 | | | | | |
| 25 | 2.255 | 32.0 | 117.7 | | | | | |
| 26 | 2.300 | 27.4 | 145.1 | | | | | |
| 27 | 2.360 | 21.2 | 166.3 | | | | | |
| 28 | 2.335 | 23.8 | 190.0 | | | | | |
| 29 | 2.285 | 28.9 | 219.0 | | | | | |
| 30 | 2.285 | 28.9 | 247.9 | | | | | |
| 31 | 2.255 | 27.9 | 275.8 | | | | | |
| 32 | 2.330 | 24.3 | 300.1 | | | | | |
| 33 | 2.350 | 22.2 | 322.4 | | | | | |
| 34 | 2.325 | 24.8 | 347.2 | | | | | |
| 35 | 2.315 | 25.5 | 373.1 | | | | | |
| 36 | 2.360 | 21.2 | 394.2 | | | | | |
| 37 | 2.385 | 18.5 | 412.8 | | | | | |
| 38 | 2.385 | 18.5 | 431.3 | | | | | |
| 39 | 2.390 | 18.0 | 449.4 | | | | | |
| 40 | 2.285 | 18.5 | 467.9 | | | | | |
| 41 | 2.400 | 17.0 | 484.9 | | | | | |
| 42 | 2.415 | 15.3 | 500.2 | | | | | |
| 43 | 2.415 | 15.3 | 515.6 | | | | | |
| 44 | 2.455 | 11.0 | 526.6 | | | | | |
| 45 | 2.450 | 11.6 | 538.1 | | | | | |
| 46 | 2.435 | 13.2 | 551.3 | | | | | |
| 47 | 2.390 | 18.0 | 569.4 | | | | | |
| 48 | 2.395 | 17.5 | 586.8 | | | | | |
| 49 | 2.395 | 17.5 | 604.3 | | | | | |
| 50 | 2.425 | 14.3 | 618.6 | | | | | |
| 51 | 2.310 | 26.4 | 645.0 | | | | | |
| 52 | 2.340 | 23.3 | 668.3 | | | | | |
| 53 | 2.410 | 15.5 | 684.1 | | | | | |
| 54 | 2.400 | 17.0 | 701.1 | | | | | |
| 55 | 2.400 | 17.0 | 718.0 | | | | | |
| 56 | 2.390 | 18.0 | 736.1 | | | | | |
| 57 | 2.380 | 19.1 | 755.1 | | | | | |
| 58 | 2.380 | 19.1 | 774.2 | | | | | |
| 59 | 2.370 | 20.1 | 794.4 | | | | | |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 60 | 2.365 | 20.7 | 20.7 | 2.292 | 28.2 | 28.2 | 24.4 | 24.4 |
| 61 | 2.360 | 21.2 | 41.8 | 2.292 | 28.2 | 56.4 | 24.7 | 49.1 |
| 62 | 2.355 | 21.7 | 63.6 | 2.303 | 27.1 | 83.5 | 24.4 | 73.6 |
| 63 | 2.375 | 19.6 | 83.2 | 2.302 | 27.2 | 110.8 | 23.4 | 97.0 |
| 64 | 2.400 | 17.0 | 100.1 | 2.302 | 27.2 | 138.0 | 22.1 | 119.1 |
| 65 | 2.410 | 15.9 | 116.0 | 2.300 | 27.4 | 165.4 | 21.6 | 140.7 |
| 66 | 2.365 | 20.7 | 136.7 | 2.316 | 25.8 | 191.1 | 23.2 | 163.9 |
| 67 | 2.355 | 21.7 | 158.4 | 2.321 | 25.3 | 216.4 | 23.5 | 187.4 |
| 68 | 2.360 | 21.2 | 179.6 | 2.320 | 25.4 | 241.8 | 23.3 | 210.7 |
| 69 | 2.420 | 14.8 | 194.4 | 2.318 | 25.5 | 267.3 | 20.2 | 230.8 |
| 70 | 2.420 | 14.8 | 209.2 | 2.346 | 22.7 | 290.0 | 18.7 | 249.6 |
| 71 | 2.395 | 17.5 | 226.7 | 2.376 | 19.5 | 309.5 | 18.5 | 268.1 |
| 72 | 2.415 | 15.3 | 242.0 | 2.396 | 17.4 | 326.8 | 16.4 | 284.4 |
| 73 | 2.425 | 14.3 | 256.3 | 2.355 | 21.7 | 348.5 | 18.0 | 302.4 |
| 74 | 2.430 | 13.7 | 270.0 | 2.334 | 23.9 | 372.4 | 18.8 | 321.2 |
| 75 | 2.415 | 15.3 | 285.4 | 2.321 | 25.3 | 397.7 | 20.3 | 341.5 |
| 76 | 2.405 | 16.4 | 301.8 | 2.308 | 26.6 | 424.3 | 21.5 | 363.1 |
| 77 | 2.405 | 16.4 | 318.2 | 2.311 | 26.3 | 450.6 | 21.3 | 384.4 |
| 78 | 2.415 | 15.3 | 333.6 | 2.367 | 20.5 | 471.0 | 17.9 | 402.3 |
| 79 | 2.440 | 12.7 | 346.2 | 2.392 | 17.8 | 488.8 | 15.2 | 417.5 |
| 80 | 2.495 | 6.6 | 352.8 | 2.429 | 13.8 | 502.7 | 10.2 | 427.8 |
| 81 | 2.515 | 4.4 | 357.2 | 2.471 | 9.3 | 512.0 | 6.8 | 434.6 |
| 82 | 2.500 | 6.1 | 363.3 | 2.496 | 6.5 | 518.5 | 6.3 | 440.9 |
| 83 | 2.495 | 6.6 | 369.9 | 2.513 | 4.6 | 523.1 | 5.6 | 446.5 |
| 84 | 2.510 | 4.9 | 374.8 | 2.508 | 5.2 | 528.2 | 5.1 | 451.5 |
| 85 | 2.510 | 4.9 | 379.8 | 2.468 | 9.6 | 537.8 | 7.3 | 458.8 |
| 86 | 2.480 | 8.3 | 388.1 | 2.432 | 13.5 | 551.4 | 10.9 | 469.7 |
| 87 | 2.460 | 10.5 | 398.5 | 2.409 | 16.0 | 567.3 | 13.2 | 482.9 |
| 88 | 2.450 | 11.6 | 410.1 | 2.383 | 18.8 | 586.1 | 15.2 | 498.1 |
| 89 | 2.450 | 11.6 | 421.7 | 2.374 | 19.7 | 605.8 | 15.6 | 513.7 |
| 90 | 2.455 | 11.0 | 432.7 | 2.379 | 19.2 | 625.0 | 15.1 | 528.8 |
| 91 | 2.460 | 10.5 | 443.2 | 2.396 | 17.4 | 642.4 | 13.9 | 542.8 |
| 92 | 2.485 | 7.7 | 450.9 | 2.422 | 14.6 | 657.0 | 11.2 | 553.9 |
| 93 | 2.510 | 4.9 | 455.8 | 2.444 | 12.2 | 669.2 | 8.6 | 562.5 |
| 94 | 2.535 | 2.1 | 458.0 | 2.449 | 11.7 | 680.9 | 6.9 | 569.4 |
| 95 | 2.525 | 3.3 | 461.2 | 2.470 | 9.4 | 690.2 | 6.3 | 575.7 |
| 96 | 2.515 | 4.4 | 465.6 | 2.492 | 6.9 | 697.2 | 5.7 | 581.4 |
| 97 | 2.560 | 0.0 | 465.6 | 2.510 | 4.9 | 702.1 | 2.5 | 583.9 |
| 98 | 2.570 | 0.0 | 465.6 | 2.523 | 3.5 | 705.6 | 1.7 | 585.6 |
| 99 | 2.575 | 0.0 | 465.6 | 2.523 | 3.5 | 709.1 | 1.7 | 587.4 |
| 100 | 2.525 | 3.3 | 468.9 | 2.462 | 10.3 | 719.4 | 6.8 | 594.1 |
| 101 | 2.485 | 7.7 | 476.6 | 2.419 | 14.9 | 734.3 | 11.3 | 605.5 |
| 102 | 2.445 | 12.1 | 488.7 | 2.388 | 18.2 | 752.5 | 15.2 | 620.6 |
| 103 | 2.395 | 17.5 | 506.2 | 2.357 | 21.5 | 774.0 | 19.5 | 640.1 |
| 104 | 2.365 | 20.7 | 526.9 | 2.314 | 26.0 | 800.0 | 23.3 | 663.5 |
| 105 | 2.375 | 19.6 | 546.5 | 2.281 | 29.3 | 829.4 | 24.5 | 687.9 |
| 106 | 2.400 | 17.0 | 563.4 | 2.311 | 26.3 | 855.6 | 21.6 | 709.5 |
| 107 | 2.410 | 15.9 | 579.3 | 2.386 | 18.4 | 874.1 | 17.2 | 726.7 |
| 108 | 2.415 | 15.3 | 594.7 | 2.426 | 14.2 | 888.2 | 14.8 | 741.4 |
| 109 | 2.415 | 7.7 | 602.4 | 2.447 | 11.9 | 900.1 | 9.8 | 751.3 |

K E R O G E N A N A L Y S I S

F O R

T H E C L E V E L A N D C L I F F S I R O N C O M P A N Y - W E L L X - 2

| DEPTH | D E N S I T Y L O G | | | V E L O C I T Y L O G | | | D E N S I T Y A N D V E L O C I T Y | |
|-------|-----------------------|---------|--------------|-------------------------|---------|--------------|---|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 110 | 2.550 | 0.4 | 602.9 | 2.477 | 8.6 | 908.7 | 4.5 | 755.8 |
| 111 | 2.565 | 0.0 | 602.9 | 2.502 | 5.8 | 914.6 | 2.9 | 758.7 |
| 112 | 2.540 | 1.6 | 604.4 | 2.533 | 2.4 | 916.9 | 2.0 | 760.7 |
| 113 | 2.515 | 4.4 | 608.8 | 2.542 | 1.4 | 918.3 | 2.9 | 763.5 |
| 114 | 2.500 | 6.1 | 614.9 | 2.550 | 0.4 | 918.7 | 3.3 | 766.8 |
| 115 | 2.530 | 2.7 | 617.6 | 2.542 | 1.4 | 920.1 | 2.0 | 768.8 |
| 116 | 2.570 | 0.0 | 617.6 | 2.524 | 3.4 | 923.5 | 1.7 | 770.5 |
| 117 | 2.575 | 0.0 | 617.6 | 2.520 | 3.8 | 927.3 | 1.9 | 772.4 |
| 118 | 2.560 | 0.0 | 617.6 | 2.537 | 1.9 | 929.2 | 1.0 | 773.4 |
| 119 | 2.560 | 0.0 | 617.6 | 2.555 | 0.0 | 929.2 | 0.0 | 773.4 |
| 120 | 2.555 | 0.0 | 617.6 | 2.550 | 0.4 | 929.7 | 0.2 | 773.6 |
| 121 | 2.535 | 2.1 | 619.7 | 2.546 | 0.9 | 930.6 | 1.5 | 775.1 |
| 122 | 2.535 | 2.1 | 621.9 | 2.533 | 2.4 | 932.9 | 2.3 | 777.4 |
| 123 | 2.545 | 1.0 | 622.9 | 2.524 | 3.4 | 936.3 | 2.2 | 779.6 |
| 124 | 2.530 | 2.7 | 625.6 | 2.515 | 4.4 | 940.7 | 3.5 | 783.2 |
| 125 | 2.525 | 3.3 | 628.5 | 2.524 | 3.4 | 944.1 | 3.3 | 786.5 |
| 126 | 2.525 | 3.3 | 632.1 | 2.524 | 3.4 | 947.5 | 3.3 | 789.8 |
| 127 | 2.525 | 3.3 | 635.4 | 2.515 | 4.4 | 951.9 | 3.8 | 793.6 |
| 128 | 2.505 | 5.5 | 640.9 | 2.494 | 6.7 | 958.6 | 6.1 | 799.8 |
| 129 | 2.495 | 6.6 | 647.5 | 2.481 | 8.2 | 966.8 | 7.4 | 807.1 |
| 130 | 2.500 | 6.1 | 653.6 | 2.481 | 8.2 | 974.9 | 7.1 | 814.3 |
| 131 | 2.490 | 7.2 | 660.8 | 2.485 | 7.7 | 982.6 | 7.4 | 821.7 |
| 132 | 2.495 | 6.6 | 667.4 | 2.494 | 6.7 | 989.4 | 6.7 | 828.4 |
| 133 | 2.525 | 3.3 | 670.7 | 2.512 | 4.7 | 994.1 | 4.0 | 832.4 |
| 134 | 2.545 | 1.0 | 671.7 | 2.512 | 4.7 | 998.8 | 2.9 | 835.2 |
| 135 | 2.560 | 0.0 | 671.7 | 2.516 | 4.3 | 1003.1 | 2.1 | 837.4 |
| 136 | 2.540 | 1.6 | 673.3 | 2.516 | 4.3 | 1007.4 | 2.9 | 840.3 |
| 137 | 2.530 | 2.7 | 676.0 | 2.525 | 3.3 | 1010.6 | 3.0 | 843.3 |
| 138 | 2.550 | 0.4 | 676.4 | 2.547 | 0.8 | 1011.4 | 0.6 | 843.9 |
| 139 | 2.545 | 1.0 | 677.4 | 2.555 | 0.0 | 1011.4 | 0.5 | 844.4 |
| 140 | 2.530 | 2.7 | 680.1 | 2.542 | 1.4 | 1012.8 | 2.0 | 846.5 |
| 141 | 2.515 | 4.4 | 684.5 | 2.547 | 0.8 | 1013.6 | 2.6 | 849.1 |
| 142 | 2.515 | 4.4 | 688.9 | 2.573 | 0.0 | 1013.6 | 2.2 | 851.2 |
| 143 | 2.520 | 3.8 | 692.7 | 2.577 | 0.0 | 1013.6 | 1.9 | 853.2 |
| 144 | 2.525 | 3.3 | 696.0 | 2.577 | 0.0 | 1013.6 | 1.6 | 854.8 |
| 145 | 2.525 | 3.3 | 699.3 | 2.564 | 0.0 | 1013.6 | 1.6 | 856.4 |
| 146 | 2.525 | 3.3 | 702.6 | 2.560 | 0.0 | 1013.6 | 1.6 | 858.1 |
| 147 | 2.505 | 5.5 | 708.1 | 2.564 | 0.0 | 1013.6 | 2.8 | 860.8 |
| 148 | 2.530 | 2.7 | 710.8 | 2.577 | 0.0 | 1013.6 | 1.4 | 862.2 |
| 149 | 2.540 | 1.6 | 712.3 | 2.577 | 0.0 | 1013.6 | 0.8 | 862.0 |
| 150 | 2.540 | 1.6 | 713.9 | 2.577 | 0.0 | 1013.6 | 0.8 | 862.8 |
| 151 | 2.540 | 1.6 | 715.5 | 2.577 | 0.0 | 1013.6 | 0.8 | 864.5 |
| 152 | 2.525 | 3.3 | 718.8 | 2.581 | 0.0 | 1013.6 | 1.6 | 866.2 |
| 153 | 2.525 | 3.3 | 722.1 | 2.590 | 0.0 | 1013.6 | 1.6 | 867.8 |
| 154 | 2.510 | 4.9 | 727.0 | 2.564 | 0.0 | 1013.6 | 2.5 | 870.3 |
| 155 | 2.505 | 5.5 | 732.5 | 2.568 | 0.0 | 1013.6 | 2.8 | 871.0 |
| 156 | 2.500 | 6.1 | 734.1 | 2.573 | 0.0 | 1013.6 | 0.8 | 871.8 |
| 157 | 2.500 | 6.1 | 737.9 | 2.573 | 0.0 | 1013.6 | 1.9 | 872.7 |
| 158 | 2.500 | 6.1 | 737.9 | 2.573 | 0.0 | 1013.6 | 1.9 | 872.7 |
| 159 | 2.500 | 6.1 | 737.9 | 2.573 | 0.0 | 1013.6 | 1.9 | 872.7 |
| 160 | 2.500 | 6.1 | 737.9 | 2.573 | 0.0 | 1013.6 | 1.9 | 872.7 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 160 | 2.495 | 6.6 | 756.1 | 2.503 | 5.7 | 1022.6 | 6.2 | 889.3 |
| 161 | 2.455 | 11.0 | 767.1 | 2.499 | 6.2 | 1028.8 | 8.6 | 897.9 |
| 162 | 2.415 | 15.3 | 782.5 | 2.499 | 6.2 | 1034.9 | 10.8 | 908.7 |
| 163 | 2.370 | 20.1 | 802.6 | 2.503 | 5.7 | 1040.7 | 12.9 | 921.6 |
| 164 | 2.470 | 9.4 | 812.0 | 2.533 | 2.4 | 1043.0 | 5.9 | 927.5 |
| 165 | 2.500 | 6.1 | 818.0 | 2.551 | 0.3 | 1043.4 | 3.2 | 930.7 |
| 166 | 2.500 | 6.1 | 824.1 | 2.577 | 0.0 | 1043.4 | 3.0 | 933.7 |
| 167 | 2.500 | 6.1 | 830.2 | 2.581 | 0.0 | 1043.4 | 3.0 | 936.8 |
| 168 | 2.470 | 9.4 | 839.5 | 2.547 | 0.8 | 1044.1 | 5.1 | 941.8 |
| 169 | 2.475 | 8.8 | 848.4 | 2.507 | 5.3 | 1049.4 | 7.1 | 948.9 |
| 170 | 2.465 | 9.9 | 858.3 | 2.481 | 8.2 | 1057.6 | 9.0 | 957.9 |
| 171 | 2.435 | 13.2 | 871.5 | 2.442 | 12.4 | 1070.0 | 12.8 | 970.8 |
| 172 | 2.390 | 18.0 | 889.5 | 2.416 | 15.2 | 1085.3 | 16.6 | 987.4 |
| 173 | 2.355 | 21.7 | 911.2 | 2.407 | 16.2 | 1101.5 | 19.0 | 1006.3 |
| 174 | 2.340 | 23.3 | 934.5 | 2.416 | 15.2 | 1116.7 | 19.3 | 1025.6 |
| 175 | 2.335 | 23.8 | 958.3 | 2.451 | 11.5 | 1128.2 | 17.6 | 1043.2 |
| 176 | 2.420 | 14.8 | 973.1 | 2.454 | 6.7 | 1134.9 | 10.8 | 1054.0 |
| 177 | 2.465 | 9.9 | 983.0 | 2.547 | 0.8 | 1135.7 | 5.4 | 1059.3 |
| 178 | 2.465 | 9.9 | 992.9 | 2.543 | 1.2 | 1136.9 | 5.6 | 1064.9 |
| 179 | 2.455 | 11.0 | 1004.0 | 2.539 | 1.7 | 1138.6 | 6.4 | 1071.3 |
| 180 | 2.475 | 8.8 | 1012.8 | 2.535 | 2.1 | 1140.8 | 5.5 | 1076.8 |
| 181 | 2.490 | 7.2 | 1020.0 | 2.548 | 0.7 | 1141.4 | 3.9 | 1080.7 |
| 182 | 2.500 | 6.1 | 1026.0 | 2.518 | 4.1 | 1145.5 | 5.1 | 1085.8 |
| 183 | 2.445 | 12.1 | 1038.1 | 2.458 | 10.7 | 1156.2 | 11.4 | 1097.2 |
| 184 | 2.350 | 22.2 | 1060.4 | 2.407 | 16.2 | 1172.4 | 19.2 | 1116.4 |
| 185 | 2.280 | 29.4 | 1089.8 | 2.342 | 23.1 | 1195.5 | 26.3 | 1142.6 |
| 186 | 2.305 | 26.9 | 1116.7 | 2.306 | 26.7 | 1222.2 | 26.8 | 1169.4 |
| 187 | 2.305 | 26.9 | 1143.6 | 2.328 | 24.5 | 1246.7 | 25.7 | 1195.1 |
| 188 | 2.310 | 26.4 | 1170.0 | 2.323 | 25.0 | 1271.7 | 25.7 | 1220.8 |
| 189 | 2.320 | 25.3 | 1195.3 | 2.312 | 26.1 | 1297.9 | 25.7 | 1246.6 |
| 190 | 2.335 | 23.8 | 1219.1 | 2.318 | 25.5 | 1323.4 | 24.7 | 1271.2 |
| 191 | 2.310 | 26.4 | 1245.5 | 2.309 | 26.5 | 1349.9 | 26.4 | 1297.7 |
| 192 | 2.275 | 29.9 | 1275.4 | 2.287 | 28.7 | 1378.6 | 29.3 | 1327.0 |
| 193 | 2.275 | 29.9 | 1305.4 | 2.276 | 29.8 | 1408.4 | 29.9 | 1356.9 |
| 194 | 2.285 | 28.9 | 1334.3 | 2.272 | 30.3 | 1438.7 | 29.6 | 1386.5 |
| 195 | 2.290 | 28.4 | 1362.7 | 2.276 | 29.8 | 1468.5 | 29.1 | 1415.6 |
| 196 | 2.295 | 27.9 | 1390.6 | 2.291 | 28.3 | 1496.8 | 28.1 | 1443.7 |
| 197 | 2.295 | 27.9 | 1418.5 | 2.290 | 28.5 | 1525.3 | 28.2 | 1471.9 |
| 198 | 2.310 | 26.4 | 1444.5 | 2.310 | 26.4 | 1551.7 | 26.4 | 1498.3 |
| 199 | 2.310 | 26.4 | 1471.3 | 2.330 | 24.3 | 1575.9 | 25.3 | 1523.6 |
| 200 | 2.315 | 25.9 | 1497.1 | 2.361 | 21.1 | 1597.0 | 23.5 | 1547.1 |
| 201 | 2.340 | 23.3 | 1520.4 | 2.408 | 16.1 | 1613.1 | 19.7 | 1566.8 |
| 202 | 2.410 | 15.9 | 1536.3 | 2.463 | 10.1 | 1623.3 | 13.0 | 1579.8 |
| 203 | 2.515 | 4.4 | 1540.7 | 2.514 | 4.5 | 1627.8 | 4.4 | 1584.2 |
| 204 | 2.555 | 0.0 | 1540.7 | 2.560 | 0.0 | 1627.8 | 0.0 | 1584.2 |
| 205 | 2.560 | 0.0 | 1540.7 | 2.599 | 0.0 | 1627.8 | 0.0 | 1584.2 |
| 206 | 2.560 | 0.0 | 1540.7 | 2.603 | 0.0 | 1627.8 | 0.0 | 1584.2 |
| 207 | 2.530 | 2.7 | 1542.4 | 2.606 | 0.0 | 1627.8 | 1.4 | 1584.2 |
| 208 | 2.470 | 0.4 | 1542.4 | 2.531 | 2.6 | 1630.4 | 6.0 | 1584.2 |
| 209 | 2.470 | 17.7 | 1542.4 | 2.367 | 18.3 | 1634.7 | 17.9 | 1584.2 |

K E R O G E N A N A L Y S I S

F O R

T H E C L E V E L A N D C L I F F S I R O N C O M P A N Y - W E L L X - 2

| DEPTH | D E N S I T Y L O G | | | V E L O C I T Y L O G | | | D E N S I T Y A N D V E L O C I T Y | |
|-------|-----------------------|---------|--------------|-------------------------|---------|--------------|---|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 210 | 2.310 | 26.4 | 1596.6 | 2.199 | 37.5 | 1686.2 | 31.9 | 1641.4 |
| 211 | 2.185 | 38.9 | 1635.5 | 1.821 | 71.3 | 1757.5 | 55.1 | 1696.5 |
| 212 | 2.055 | 51.1 | 1686.6 | 1.700 | 80.8 | 1838.2 | 65.9 | 1762.4 |
| 213 | 1.965 | 59.2 | 1745.8 | 1.800 | 72.9 | 1911.2 | 66.1 | 1828.5 |
| 214 | 1.805 | 72.6 | 1818.4 | 1.598 | 56.2 | 1967.4 | 64.4 | 1892.9 |
| 215 | 1.745 | 77.3 | 1895.7 | 2.189 | 38.5 | 2005.8 | 57.9 | 1950.7 |
| 216 | 1.665 | 83.4 | 1979.0 | 2.305 | 26.9 | 2032.7 | 55.1 | 2005.9 |
| 217 | 1.660 | 83.7 | 2062.8 | 2.397 | 17.3 | 2050.0 | 50.5 | 2056.4 |
| 218 | 1.995 | 56.5 | 2119.3 | 2.441 | 12.5 | 2062.5 | 34.5 | 2090.9 |
| 219 | 2.410 | 15.5 | 2135.2 | 2.477 | 8.6 | 2071.1 | 12.2 | 2103.1 |
| 220 | 2.480 | 8.3 | 2143.4 | 2.473 | 9.0 | 2080.2 | 8.7 | 2111.8 |
| 221 | 2.345 | 22.8 | 2166.2 | 2.449 | 11.7 | 2091.9 | 17.2 | 2129.0 |
| 222 | 2.265 | 31.0 | 2197.1 | 2.470 | 9.4 | 2101.2 | 20.2 | 2149.2 |
| 223 | 2.220 | 35.4 | 2232.6 | 2.468 | 9.6 | 2110.8 | 22.5 | 2171.7 |
| 224 | 2.210 | 36.4 | 2269.0 | 2.437 | 13.0 | 2123.8 | 24.7 | 2196.4 |
| 225 | 2.160 | 41.3 | 2310.3 | 2.424 | 14.4 | 2138.2 | 27.8 | 2224.2 |
| 226 | 2.070 | 49.7 | 2360.0 | 2.403 | 16.6 | 2154.8 | 33.2 | 2257.4 |
| 227 | 1.970 | 58.7 | 2418.8 | 2.395 | 17.5 | 2172.3 | 38.1 | 2295.5 |
| 228 | 1.940 | 61.3 | 2480.1 | 2.380 | 19.1 | 2191.4 | 40.2 | 2335.7 |
| 229 | 2.290 | 28.4 | 2508.5 | 2.298 | 27.6 | 2219.0 | 28.0 | 2363.7 |
| 230 | 2.355 | 21.7 | 2530.2 | 2.115 | 45.6 | 2264.5 | 33.6 | 2397.4 |
| 231 | 2.290 | 28.4 | 2558.6 | 1.598 | 56.2 | 2320.8 | 42.3 | 2439.7 |
| 232 | 2.170 | 40.3 | 2599.0 | 2.059 | 50.7 | 2371.5 | 45.5 | 2485.2 |
| 233 | 2.100 | 47.0 | 2645.9 | 2.270 | 30.4 | 2401.9 | 38.7 | 2523.9 |
| 234 | 2.150 | 42.2 | 2688.1 | 2.389 | 18.1 | 2420.0 | 30.2 | 2554.1 |
| 235 | 2.320 | 25.3 | 2713.5 | 2.503 | 5.7 | 2425.8 | 15.5 | 2569.6 |
| 236 | 2.395 | 17.5 | 2731.0 | 2.628 | 0.0 | 2425.8 | 8.7 | 2578.4 |
| 237 | 2.475 | 8.8 | 2739.8 | 2.570 | 0.0 | 2425.8 | 4.4 | 2582.8 |
| 238 | 2.350 | 22.2 | 2762.0 | 2.553 | 0.1 | 2425.9 | 11.2 | 2593.9 |
| 239 | 2.355 | 21.7 | 2783.8 | 2.615 | 0.0 | 2425.9 | 10.9 | 2604.8 |
| 240 | 2.270 | 30.4 | 2814.2 | 2.581 | 0.0 | 2425.9 | 15.2 | 2620.0 |
| 241 | 2.145 | 42.7 | 2856.9 | 2.521 | 3.7 | 2429.6 | 23.2 | 2642.2 |
| 242 | 2.010 | 55.2 | 2912.1 | 2.481 | 8.2 | 2437.7 | 31.7 | 2674.9 |
| 243 | 1.870 | 67.3 | 2979.4 | 2.432 | 13.5 | 2451.3 | 40.4 | 2715.3 |
| 244 | 1.955 | 60.0 | 3039.4 | 2.393 | 17.7 | 2469.0 | 38.9 | 2754.2 |
| 245 | 2.230 | 34.4 | 3073.8 | 2.384 | 18.7 | 2487.6 | 26.6 | 2780.7 |
| 246 | 2.210 | 36.4 | 3110.3 | 2.412 | 15.7 | 2503.3 | 26.0 | 2806.8 |
| 247 | 2.225 | 34.9 | 3145.2 | 2.394 | 17.6 | 2520.9 | 26.3 | 2832.0 |
| 248 | 2.490 | 7.2 | 3152.4 | 2.424 | 14.4 | 2535.3 | 10.8 | 2843.8 |
| 249 | 2.525 | 3.3 | 3155.6 | 2.478 | 8.5 | 2543.8 | 5.9 | 2849.7 |
| 250 | 2.470 | 9.4 | 3165.0 | 2.465 | 9.9 | 2553.7 | 9.7 | 2859.3 |
| 251 | 2.425 | 14.3 | 3179.3 | 2.404 | 16.5 | 2570.2 | 15.4 | 2874.7 |
| 252 | 2.415 | 15.3 | 3194.6 | 2.349 | 22.3 | 2592.5 | 18.8 | 2892.6 |
| 253 | 2.365 | 20.7 | 3215.3 | 2.304 | 27.0 | 2619.5 | 23.8 | 2917.4 |
| 254 | 2.220 | 35.4 | 3250.7 | 2.348 | 22.4 | 2642.0 | 28.9 | 2944.4 |
| 255 | 2.150 | 42.2 | 3293.0 | 2.341 | 23.2 | 2665.1 | 32.7 | 2971.1 |
| 256 | 2.155 | 37.9 | 3330.9 | 2.328 | 24.5 | 2689.7 | 31.2 | 3001.4 |
| 257 | 2.150 | 37.2 | 3364.7 | 2.348 | 22.4 | 2712.1 | 13.1 | 3014.5 |
| 258 | 2.150 | 37.2 | 3399.0 | 2.342 | 24.1 | 2736.3 | 15.4 | 3029.9 |
| 259 | 2.150 | 37.2 | 3434.2 | 2.340 | 22.4 | 2758.7 | 17.7 | 3047.6 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 260 | 2.445 | 12.1 | 3365.0 | 2.399 | 17.1 | 2775.8 | 14.6 | 3070.4 |
| 261 | 2.480 | 8.3 | 3373.3 | 2.378 | 19.3 | 2795.1 | 13.8 | 3084.2 |
| 262 | 2.470 | 9.4 | 3382.6 | 2.356 | 21.6 | 2816.7 | 15.5 | 3099.6 |
| 263 | 2.470 | 9.4 | 3392.0 | 2.379 | 19.2 | 2835.8 | 14.3 | 3113.9 |
| 264 | 2.450 | 11.6 | 3403.6 | 2.370 | 20.1 | 2856.0 | 15.8 | 3129.8 |
| 265 | 2.415 | 15.3 | 3418.9 | 2.318 | 25.5 | 2881.5 | 20.4 | 3150.2 |
| 266 | 2.375 | 19.6 | 3438.5 | 2.292 | 28.2 | 2909.7 | 23.9 | 3174.1 |
| 267 | 2.345 | 22.8 | 3461.3 | 2.297 | 27.7 | 2937.4 | 25.2 | 3199.4 |
| 268 | 2.285 | 28.9 | 3490.2 | 2.314 | 26.0 | 2963.4 | 27.5 | 3226.8 |
| 269 | 2.220 | 35.4 | 3525.7 | 2.298 | 27.6 | 2991.0 | 31.5 | 3258.3 |
| 270 | 2.300 | 27.4 | 3553.1 | 2.306 | 26.7 | 3017.8 | 27.1 | 3285.4 |
| 271 | 2.385 | 18.5 | 3571.6 | 2.373 | 19.8 | 3037.6 | 19.2 | 3304.6 |
| 272 | 2.445 | 12.1 | 3583.7 | 2.437 | 13.0 | 3050.6 | 12.5 | 3317.1 |
| 273 | 2.415 | 15.3 | 3599.1 | 2.473 | 9.0 | 3059.6 | 12.2 | 3329.3 |
| 274 | 2.380 | 19.1 | 3618.1 | 2.486 | 7.6 | 3067.2 | 13.3 | 3342.7 |
| 275 | 2.300 | 27.4 | 3645.5 | 2.394 | 17.6 | 3084.8 | 22.5 | 3365.2 |
| 276 | 2.260 | 31.5 | 3677.0 | 2.368 | 20.3 | 3105.2 | 25.9 | 3391.1 |
| 277 | 2.405 | 16.4 | 3693.4 | 2.428 | 13.9 | 3119.1 | 15.2 | 3406.3 |
| 278 | 2.440 | 12.7 | 3706.1 | 2.486 | 7.6 | 3126.7 | 10.1 | 3416.4 |
| 279 | 2.415 | 15.3 | 3721.4 | 2.499 | 6.2 | 3132.9 | 10.8 | 3427.2 |
| 280 | 2.420 | 14.8 | 3736.2 | 2.480 | 8.3 | 3141.2 | 11.5 | 3438.7 |
| 281 | 2.410 | 15.9 | 3752.1 | 2.446 | 12.0 | 3153.2 | 13.9 | 3452.6 |
| 282 | 2.435 | 13.2 | 3765.3 | 2.450 | 11.6 | 3164.8 | 12.4 | 3465.0 |
| 283 | 2.415 | 15.3 | 3780.7 | 2.452 | 11.3 | 3176.1 | 13.3 | 3476.4 |
| 284 | 2.410 | 15.9 | 3796.5 | 2.421 | 14.7 | 3190.8 | 15.3 | 3493.7 |
| 285 | 2.395 | 17.5 | 3814.0 | 2.394 | 17.6 | 3208.4 | 17.5 | 3511.2 |
| 286 | 2.465 | 9.9 | 3824.0 | 2.430 | 13.7 | 3222.1 | 11.8 | 3523.0 |
| 287 | 2.375 | 19.6 | 3843.6 | 2.447 | 11.9 | 3234.0 | 15.7 | 3538.8 |
| 288 | 2.285 | 28.9 | 3872.5 | 2.435 | 13.2 | 3247.2 | 21.1 | 3559.8 |
| 289 | 2.280 | 29.4 | 3901.9 | 2.436 | 13.1 | 3260.3 | 21.3 | 3581.1 |
| 290 | 2.395 | 17.5 | 3919.4 | 2.504 | 5.6 | 3265.9 | 11.6 | 3592.7 |
| 291 | 2.470 | 9.4 | 3928.8 | 2.502 | 5.8 | 3271.8 | 7.6 | 3600.3 |
| 292 | 2.480 | 8.3 | 3937.1 | 2.499 | 6.2 | 3277.9 | 7.2 | 3607.5 |
| 293 | 2.455 | 11.0 | 3948.1 | 2.480 | 8.3 | 3286.2 | 9.6 | 3617.1 |
| 294 | 2.450 | 11.6 | 3959.6 | 2.464 | 10.0 | 3296.2 | 10.8 | 3627.9 |
| 295 | 2.510 | 4.9 | 3964.6 | 2.462 | 10.3 | 3306.5 | 7.6 | 3635.5 |
| 296 | 2.495 | 6.6 | 3971.2 | 2.476 | 8.7 | 3315.2 | 7.7 | 3643.2 |
| 297 | 2.440 | 12.7 | 3983.9 | 2.436 | 13.1 | 3328.3 | 12.9 | 3656.1 |
| 298 | 2.405 | 16.4 | 4000.3 | 2.450 | 11.6 | 3339.9 | 14.0 | 3670.1 |
| 299 | 2.380 | 19.1 | 4019.4 | 2.464 | 10.0 | 3349.9 | 14.6 | 3684.6 |
| 300 | 2.335 | 23.8 | 4043.2 | 2.435 | 13.2 | 3363.1 | 18.5 | 3703.1 |
| 301 | 2.370 | 20.1 | 4063.3 | 2.449 | 11.7 | 3374.8 | 15.9 | 3719.0 |
| 302 | 2.435 | 13.2 | 4076.5 | 2.440 | 12.7 | 3387.4 | 12.9 | 3731.9 |
| 303 | 2.410 | 15.9 | 4092.4 | 2.440 | 12.7 | 3400.1 | 14.3 | 3745.2 |
| 304 | 2.325 | 24.8 | 4117.2 | 2.466 | 9.8 | 3409.9 | 17.3 | 3760.5 |
| 305 | 2.260 | 31.5 | 4148.7 | 2.514 | 4.5 | 3414.4 | 18.0 | 3771.5 |
| 306 | 2.185 | 38.9 | 4187.5 | 2.480 | 8.3 | 3422.6 | 23.6 | 3784.1 |
| 307 | 2.140 | 43.2 | 4230.7 | 2.475 | 8.8 | 3431.5 | 26.0 | 3797.1 |
| 308 | 2.315 | 25.9 | 4256.6 | 2.440 | 12.7 | 3444.1 | 19.3 | 3810.1 |
| 309 | 2.315 | 26.0 | 4280.5 | 2.389 | 26.5 | 3460.5 | 26.7 | 3826.8 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHC-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 310 | 2.190 | 38.4 | 4321.8 | 2.340 | 23.3 | 3493.9 | 30.8 | 3907.9 |
| 311 | 2.030 | 53.4 | 4375.2 | 2.410 | 15.9 | 3509.8 | 34.6 | 3942.5 |
| 312 | 1.940 | 61.3 | 4436.5 | 2.347 | 22.5 | 3532.3 | 41.9 | 3984.4 |
| 313 | 1.850 | 68.9 | 4505.5 | 2.263 | 31.1 | 3563.5 | 50.0 | 4034.5 |
| 314 | 2.065 | 50.2 | 4555.7 | 2.230 | 34.5 | 3597.9 | 42.3 | 4076.8 |
| 315 | 2.205 | 36.9 | 4592.6 | 2.297 | 27.7 | 3625.7 | 32.3 | 4109.1 |
| 316 | 2.220 | 35.4 | 4628.0 | 2.390 | 18.0 | 3643.7 | 26.7 | 4135.9 |
| 317 | 2.180 | 39.4 | 4667.4 | 2.406 | 16.3 | 3660.0 | 27.8 | 4163.7 |
| 318 | 2.180 | 39.4 | 4706.7 | 2.380 | 19.1 | 3679.1 | 29.2 | 4192.9 |
| 319 | 2.225 | 34.9 | 4741.6 | 2.400 | 17.0 | 3696.0 | 25.9 | 4218.8 |
| 320 | 2.310 | 26.4 | 4768.0 | 2.449 | 11.7 | 3707.7 | 19.0 | 4237.9 |
| 321 | 2.390 | 18.0 | 4786.0 | 2.498 | 6.3 | 3714.0 | 12.2 | 4250.0 |
| 322 | 2.480 | 8.3 | 4794.3 | 2.525 | 3.3 | 3717.3 | 5.8 | 4255.8 |
| 323 | 2.480 | 8.3 | 4802.6 | 2.487 | 7.5 | 3724.8 | 7.9 | 4263.7 |
| 324 | 2.525 | 3.3 | 4805.9 | 2.492 | 6.9 | 3731.7 | 5.1 | 4268.8 |
| 325 | 2.505 | 5.5 | 4811.4 | 2.506 | 5.4 | 3737.1 | 5.5 | 4274.2 |
| 326 | 2.455 | 11.0 | 4822.4 | 2.486 | 7.6 | 3744.7 | 9.3 | 4283.5 |
| 327 | 2.450 | 11.6 | 4833.9 | 2.432 | 13.5 | 3758.2 | 12.5 | 4296.1 |
| 328 | 2.500 | 6.1 | 4840.0 | 2.450 | 11.6 | 3769.8 | 8.8 | 4304.9 |
| 329 | 2.520 | 3.8 | 4843.8 | 2.498 | 6.3 | 3776.1 | 5.1 | 4309.9 |
| 330 | 2.470 | 9.4 | 4853.2 | 2.498 | 6.3 | 3782.4 | 7.8 | 4317.8 |
| 331 | 2.445 | 12.1 | 4865.3 | 2.492 | 6.9 | 3789.3 | 9.5 | 4327.3 |
| 332 | 2.515 | 4.4 | 4869.7 | 2.499 | 6.2 | 3795.5 | 5.3 | 4332.6 |
| 333 | 2.545 | 1.0 | 4870.7 | 2.539 | 1.7 | 3797.2 | 1.4 | 4333.9 |
| 334 | 2.560 | 0.0 | 4870.7 | 2.517 | 4.2 | 3801.4 | 2.1 | 4336.0 |
| 335 | 2.575 | 0.0 | 4870.7 | 2.534 | 2.3 | 3803.6 | 1.1 | 4337.1 |
| 336 | 2.555 | 0.0 | 4870.7 | 2.534 | 2.3 | 3805.9 | 1.1 | 4338.3 |
| 337 | 2.540 | 1.6 | 4872.3 | 2.525 | 3.3 | 3809.1 | 2.4 | 4340.7 |
| 338 | 2.545 | 1.0 | 4873.3 | 2.508 | 5.2 | 3814.3 | 3.1 | 4343.8 |
| 339 | 2.550 | 0.4 | 4873.7 | 2.508 | 5.2 | 3819.5 | 2.8 | 4346.6 |
| 340 | 2.540 | 1.6 | 4875.3 | 2.517 | 4.2 | 3823.7 | 2.9 | 4349.5 |
| 341 | 2.565 | 0.0 | 4875.3 | 2.517 | 4.2 | 3827.8 | 2.1 | 4351.5 |
| 342 | 2.570 | 0.0 | 4875.3 | 2.513 | 4.6 | 3832.4 | 2.3 | 4353.8 |
| 343 | 2.545 | 1.0 | 4876.3 | 2.469 | 9.5 | 3841.9 | 5.3 | 4359.1 |
| 344 | 2.540 | 1.6 | 4877.9 | 2.447 | 11.9 | 3853.8 | 6.7 | 4365.8 |
| 345 | 2.535 | 2.1 | 4880.1 | 2.452 | 11.3 | 3865.2 | 6.7 | 4372.6 |
| 346 | 2.530 | 2.7 | 4882.8 | 2.478 | 8.5 | 3873.6 | 5.6 | 4378.2 |
| 347 | 2.475 | 8.8 | 4891.6 | 2.474 | 8.9 | 3882.6 | 8.9 | 4387.0 |
| 348 | 2.505 | 5.5 | 4897.1 | 2.482 | 8.1 | 3890.6 | 6.8 | 4393.8 |
| 349 | 2.595 | 0.0 | 4897.1 | 2.500 | 6.1 | 3896.7 | 3.0 | 4396.9 |
| 350 | 2.595 | 0.0 | 4897.1 | 2.517 | 4.2 | 3900.9 | 2.1 | 4398.9 |
| 351 | 2.585 | 0.0 | 4897.1 | 2.526 | 3.2 | 3904.0 | 1.6 | 4400.5 |
| 352 | 2.575 | 0.0 | 4897.1 | 2.526 | 3.2 | 3907.2 | 1.6 | 4402.1 |
| 353 | 2.595 | 0.0 | 4897.1 | 2.513 | 4.6 | 3911.8 | 2.3 | 4404.4 |
| 354 | 2.595 | 0.0 | 4897.1 | 2.513 | 4.6 | 3916.4 | 2.3 | 4406.7 |
| 355 | 2.595 | 0.0 | 4897.1 | 2.513 | 4.6 | 3921.0 | 2.3 | 4409.0 |
| 356 | 2.600 | 0.0 | 4897.1 | 2.517 | 4.2 | 3925.2 | 2.1 | 4411.1 |
| 357 | 2.600 | 0.0 | 4897.1 | 2.521 | 3.7 | 3928.9 | 1.9 | 4413.1 |
| 358 | 2.610 | 0.0 | 4897.1 | 2.513 | 4.6 | 3933.5 | 2.3 | 4415.1 |
| 359 | 2.615 | 0.0 | 4897.1 | 2.508 | 5.2 | 3938.7 | 2.6 | 4417.1 |

K E R O G E N A N A L Y S I S

FGR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. |
| 360 | 2.605 | 0.0 | 4897.1 | 2.495 | 6.6 | 3945.3 | 3.3 | 4421. |
| 361 | 2.590 | 0.0 | 4897.1 | 2.508 | 5.2 | 3950.5 | 2.6 | 4423. |
| 362 | 2.590 | 0.0 | 4897.1 | 2.504 | 5.6 | 3956.1 | 2.8 | 4426. |
| 363 | 2.565 | 0.0 | 4897.1 | 2.465 | 9.9 | 3966.0 | 5.0 | 4431. |
| 364 | 2.550 | 0.4 | 4897.5 | 2.447 | 11.9 | 3977.9 | 6.2 | 4437. |
| 365 | 2.525 | 3.3 | 4900.8 | 2.447 | 11.9 | 3989.8 | 7.6 | 4445. |
| 366 | 2.500 | 6.1 | 4906.9 | 2.439 | 12.8 | 4002.6 | 9.4 | 4454. |
| 367 | 2.455 | 11.0 | 4917.9 | 2.426 | 14.2 | 4016.7 | 12.6 | 4467. |
| 368 | 2.465 | 9.9 | 4927.8 | 2.456 | 10.9 | 4027.6 | 10.4 | 4477. |
| 369 | 2.555 | 0.0 | 4927.8 | 2.478 | 8.5 | 4036.1 | 4.2 | 4481. |
| 370 | 2.565 | 0.0 | 4927.8 | 2.421 | 14.7 | 4050.8 | 7.4 | 4489. |
| 371 | 2.550 | 0.4 | 4928.3 | 2.421 | 14.7 | 4065.5 | 7.6 | 4496. |
| 372 | 2.530 | 2.7 | 4931.0 | 2.447 | 11.9 | 4077.4 | 7.3 | 4504. |
| 373 | 2.495 | 6.6 | 4937.6 | 2.447 | 11.9 | 4089.3 | 9.3 | 4513. |
| 374 | 2.460 | 10.5 | 4948.1 | 2.452 | 11.3 | 4100.7 | 10.9 | 4524. |
| 375 | 2.520 | 3.8 | 4951.9 | 2.478 | 8.5 | 4109.2 | 6.2 | 4530. |
| 376 | 2.585 | 0.0 | 4951.9 | 2.504 | 5.6 | 4114.8 | 2.8 | 4533. |
| 377 | 2.600 | 0.0 | 4951.9 | 2.495 | 6.6 | 4121.4 | 3.3 | 4536. |
| 378 | 2.590 | 0.0 | 4951.9 | 2.500 | 6.1 | 4127.4 | 3.0 | 4539. |
| 379 | 2.575 | 0.0 | 4951.9 | 2.500 | 6.1 | 4133.5 | 3.0 | 4542. |
| 380 | 2.550 | 0.4 | 4952.3 | 2.500 | 6.1 | 4139.6 | 3.3 | 4545. |
| 381 | 2.545 | 1.0 | 4953.3 | 2.500 | 6.1 | 4145.6 | 3.5 | 4549. |
| 382 | 2.555 | 0.0 | 4953.3 | 2.500 | 6.1 | 4151.7 | 3.0 | 4552. |
| 383 | 2.575 | 0.0 | 4953.3 | 2.500 | 6.1 | 4157.7 | 3.0 | 4555. |
| 384 | 2.580 | 0.0 | 4953.3 | 2.500 | 6.1 | 4163.8 | 3.0 | 4558. |
| 385 | 2.610 | 0.0 | 4953.3 | 2.504 | 5.6 | 4169.4 | 2.8 | 4561. |
| 386 | 2.625 | 0.0 | 4953.3 | 2.495 | 6.6 | 4176.0 | 3.3 | 4564. |
| 387 | 2.585 | 0.0 | 4953.3 | 2.474 | 8.9 | 4185.0 | 4.5 | 4569. |
| 388 | 2.550 | 0.4 | 4953.8 | 2.456 | 10.9 | 4195.9 | 5.7 | 4574. |
| 389 | 2.545 | 1.0 | 4954.8 | 2.456 | 10.9 | 4206.8 | 6.0 | 4580. |
| 390 | 2.530 | 2.7 | 4957.5 | 2.456 | 10.9 | 4217.7 | 6.8 | 4587. |
| 391 | 2.495 | 6.6 | 4964.1 | 2.465 | 9.9 | 4227.6 | 8.3 | 4595. |
| 392 | 2.465 | 9.9 | 4974.1 | 2.474 | 8.9 | 4236.5 | 9.4 | 4605. |
| 393 | 2.530 | 2.7 | 4976.8 | 2.491 | 7.1 | 4243.6 | 4.9 | 4610. |
| 394 | 2.600 | 0.0 | 4976.8 | 2.517 | 4.2 | 4247.8 | 2.1 | 4612. |
| 395 | 2.575 | 0.0 | 4976.8 | 2.526 | 3.2 | 4250.9 | 1.6 | 4613. |
| 396 | 2.565 | 0.0 | 4976.8 | 2.495 | 6.6 | 4257.5 | 3.3 | 4617. |
| 397 | 2.540 | 1.6 | 4978.3 | 2.465 | 9.9 | 4267.5 | 5.8 | 4622. |
| 398 | 2.540 | 1.6 | 4979.9 | 2.447 | 11.9 | 4279.3 | 6.7 | 4629. |
| 399 | 2.530 | 2.7 | 4982.6 | 2.439 | 12.8 | 4292.1 | 7.7 | 4637. |
| 400 | 2.495 | 6.6 | 4989.2 | 2.434 | 13.3 | 4305.4 | 10.0 | 4647. |
| 401 | 2.485 | 7.7 | 4997.0 | 2.439 | 12.8 | 4318.2 | 10.2 | 4657. |
| 402 | 2.530 | 2.7 | 4999.7 | 2.460 | 10.5 | 4328.6 | 6.6 | 4664. |
| 403 | 2.535 | 2.1 | 5001.8 | 2.404 | 16.5 | 4345.1 | 9.3 | 4673. |
| 404 | 2.515 | 4.4 | 5006.2 | 2.404 | 16.5 | 4361.7 | 10.5 | 4683. |
| 405 | 2.460 | 10.5 | 5016.7 | 2.404 | 16.5 | 4378.2 | 13.5 | 4697. |
| 406 | 2.400 | 17.0 | 5033.6 | 2.408 | 16.1 | 4394.3 | 16.5 | 4712. |
| 407 | 2.435 | 12.2 | 5046.8 | 2.434 | 13.3 | 4407.6 | 13.2 | 4727. |
| 408 | 2.560 | 1.6 | 5058.4 | 2.482 | 8.1 | 4415.6 | 4.8 | 4731. |
| 409 | 2.565 | 0.0 | 5062.4 | 2.504 | 5.6 | 4421.3 | 2.8 | 4735. |

K E R O G E N A N A L Y S I S

F O R

T H E C L E V E L A N D C L I F F S I R O N C O M P A N Y - W E L L X - 2

| DEPTH | D E N S I T Y L O G | | | V E L O C I T Y L O G | | | D E N S I T Y A N D V E L O C I T Y | |
|-------|-----------------------|---------------|-------------------------|-------------------------|---------------|-------------------------|---|-------------------------|
| | R H O - B | G A L / T O N | A C C U M . Y I E L D | R H O - B | G A L / T O N | A C C U M . Y I E L D | G A L / T O N | A C C U M . Y I E L D |
| 410 | 2.550 | 0.4 | 5048.8 | 2.465 | 9.9 | 4431.2 | 5.2 | 4739.9 |
| 411 | 2.540 | 1.6 | 5050.4 | 2.439 | 12.8 | 4443.9 | 7.2 | 4747.1 |
| 412 | 2.515 | 4.4 | 5054.8 | 2.443 | 12.3 | 4456.3 | 8.4 | 4755.4 |
| 413 | 2.480 | 8.3 | 5063.1 | 2.447 | 11.9 | 4468.1 | 10.1 | 4765.5 |
| 414 | 2.440 | 12.7 | 5075.7 | 2.434 | 13.3 | 4481.4 | 13.0 | 4778.5 |
| 415 | 2.455 | 11.0 | 5086.8 | 2.443 | 12.3 | 4493.8 | 11.7 | 4790.1 |
| 416 | 2.505 | 5.5 | 5092.3 | 2.430 | 13.7 | 4507.5 | 9.6 | 4799.8 |
| 417 | 2.490 | 7.2 | 5099.4 | 2.395 | 17.5 | 4525.0 | 12.3 | 4812.1 |
| 418 | 2.455 | 11.0 | 5110.4 | 2.404 | 16.5 | 4541.5 | 13.8 | 4825.9 |
| 419 | 2.425 | 14.3 | 5124.7 | 2.404 | 16.5 | 4558.0 | 15.4 | 4841.3 |
| 420 | 2.385 | 18.5 | 5143.3 | 2.421 | 14.7 | 4572.7 | 16.6 | 4857.9 |
| 421 | 2.490 | 7.2 | 5150.4 | 2.465 | 9.9 | 4582.7 | 8.5 | 4866.4 |
| 422 | 2.530 | 2.7 | 5153.1 | 2.491 | 7.1 | 4589.7 | 4.9 | 4871.3 |
| 423 | 2.530 | 2.7 | 5155.8 | 2.500 | 6.1 | 4595.8 | 4.4 | 4875.7 |
| 424 | 2.530 | 2.7 | 5158.5 | 2.500 | 6.1 | 4601.8 | 4.4 | 4880.1 |
| 425 | 2.510 | 4.9 | 5163.5 | 2.482 | 8.1 | 4609.9 | 6.5 | 4886.6 |
| 426 | 2.490 | 7.2 | 5170.7 | 2.443 | 12.3 | 4622.2 | 9.7 | 4896.3 |
| 427 | 2.470 | 9.4 | 5180.0 | 2.426 | 14.2 | 4636.4 | 11.8 | 4908.1 |
| 428 | 2.455 | 11.0 | 5191.0 | 2.421 | 14.7 | 4651.1 | 12.9 | 4921.0 |
| 429 | 2.450 | 11.6 | 5202.6 | 2.413 | 15.6 | 4666.6 | 13.6 | 4934.5 |
| 430 | 2.480 | 8.3 | 5210.9 | 2.413 | 15.6 | 4682.2 | 11.9 | 4946.4 |
| 431 | 2.500 | 6.1 | 5216.9 | 2.421 | 14.7 | 4696.9 | 10.4 | 4956.8 |
| 432 | 2.485 | 7.7 | 5224.7 | 2.487 | 7.5 | 4704.4 | 7.6 | 4964.4 |
| 433 | 2.500 | 6.1 | 5230.7 | 2.513 | 4.6 | 4709.0 | 5.3 | 4969.8 |
| 434 | 2.515 | 4.4 | 5235.1 | 2.504 | 5.6 | 4714.6 | 5.0 | 4974.8 |
| 435 | 2.515 | 4.4 | 5239.5 | 2.500 | 6.1 | 4720.7 | 5.2 | 4980.0 |
| 436 | 2.495 | 6.6 | 5246.1 | 2.500 | 6.1 | 4726.7 | 6.3 | 4986.3 |
| 437 | 2.490 | 7.2 | 5253.3 | 2.478 | 8.5 | 4735.2 | 7.8 | 4994.2 |
| 438 | 2.500 | 6.1 | 5259.3 | 2.452 | 11.3 | 4746.6 | 8.7 | 5002.9 |
| 439 | 2.495 | 6.6 | 5266.0 | 2.426 | 14.2 | 4760.8 | 10.4 | 5013.2 |
| 440 | 2.485 | 7.7 | 5273.7 | 2.404 | 16.5 | 4777.3 | 12.1 | 5025.4 |
| 441 | 2.485 | 7.7 | 5281.4 | 2.395 | 17.5 | 4794.8 | 12.6 | 5038.0 |
| 442 | 2.485 | 7.7 | 5289.1 | 2.378 | 19.3 | 4814.0 | 13.5 | 5051.5 |
| 443 | 2.465 | 9.9 | 5299.0 | 2.386 | 18.4 | 4832.5 | 14.2 | 5065.7 |
| 444 | 2.470 | 9.4 | 5308.4 | 2.395 | 17.5 | 4850.0 | 13.4 | 5079.1 |
| 445 | 2.470 | 9.4 | 5317.8 | 2.395 | 17.5 | 4867.5 | 13.4 | 5092.5 |
| 446 | 2.485 | 7.7 | 5325.5 | 2.391 | 17.9 | 4885.4 | 12.8 | 5105.3 |
| 447 | 2.460 | 10.5 | 5336.0 | 2.378 | 19.3 | 4904.7 | 14.9 | 5120.2 |
| 448 | 2.455 | 11.0 | 5347.0 | 2.365 | 20.7 | 4925.3 | 15.8 | 5136.1 |
| 449 | 2.425 | 14.3 | 5361.3 | 2.338 | 23.5 | 4948.8 | 18.9 | 5155.0 |
| 450 | 2.405 | 16.4 | 5377.7 | 2.302 | 27.2 | 4976.1 | 21.8 | 5176.8 |
| 451 | 2.395 | 17.5 | 5395.2 | 2.280 | 29.4 | 5005.5 | 23.5 | 5206.2 |
| 452 | 2.370 | 20.1 | 5415.3 | 2.244 | 33.1 | 5038.6 | 26.6 | 5226.8 |
| 453 | 2.330 | 24.3 | 5439.6 | 2.212 | 36.3 | 5074.8 | 30.3 | 5257.1 |
| 454 | 2.400 | 17.0 | 5456.6 | 2.205 | 37.0 | 5111.8 | 27.0 | 5284.1 |
| 455 | 2.405 | 16.4 | 5473.0 | 2.217 | 35.7 | 5147.5 | 26.1 | 5310.1 |
| 456 | 2.415 | 15.3 | 5488.3 | 2.255 | 32.0 | 5179.5 | 23.7 | 5339.8 |
| 457 | 2.405 | 7.7 | 5496.1 | 2.291 | 28.3 | 5207.8 | 18.0 | 5361.7 |
| 458 | 2.400 | 7.2 | 5503.3 | 2.352 | 22.0 | 5229.8 | 12.9 | 5374.7 |
| 459 | 2.400 | 7.2 | 5510.5 | 2.395 | 17.5 | 5247.3 | 9.8 | 5384.5 |

K E R O G E N' A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 460 | 2.575 | 0.0 | 5502.0 | 2.415 | 15.3 | 5262.7 | 7.7 | 5382.2 |
| 461 | 2.570 | 0.0 | 5502.0 | 2.400 | 17.0 | 5279.6 | 8.5 | 5390.7 |
| 462 | 2.435 | 13.2 | 5515.2 | 2.412 | 15.7 | 5295.3 | 14.4 | 5405.2 |
| 463 | 2.480 | 8.3 | 5523.5 | 2.420 | 14.8 | 5310.1 | 11.5 | 5416.7 |
| 464 | 2.510 | 4.9 | 5528.4 | 2.373 | 19.8 | 5329.9 | 12.4 | 5429.1 |
| 465 | 2.470 | 9.4 | 5537.8 | 2.367 | 20.5 | 5350.4 | 14.9 | 5444.0 |
| 466 | 2.415 | 15.3 | 5553.2 | 2.360 | 21.2 | 5371.5 | 18.3 | 5462.3 |
| 467 | 2.360 | 21.2 | 5574.4 | 2.346 | 22.7 | 5394.2 | 21.9 | 5484.2 |
| 468 | 2.355 | 21.7 | 5596.1 | 2.350 | 22.2 | 5416.4 | 22.0 | 5506.1 |
| 469 | 2.480 | 8.3 | 5604.3 | 2.368 | 20.3 | 5436.8 | 14.3 | 5520.4 |
| 470 | 2.515 | 4.4 | 5608.7 | 2.394 | 17.6 | 5454.3 | 11.0 | 5531.4 |
| 471 | 2.520 | 3.8 | 5612.5 | 2.402 | 16.7 | 5471.1 | 10.3 | 5541.7 |
| 472 | 2.500 | 6.1 | 5618.6 | 2.402 | 16.7 | 5487.8 | 11.4 | 5553.1 |
| 473 | 2.475 | 8.8 | 5627.4 | 2.415 | 15.3 | 5503.2 | 12.1 | 5565.2 |
| 474 | 2.470 | 9.4 | 5636.8 | 2.380 | 19.1 | 5522.3 | 14.2 | 5579.4 |
| 475 | 2.510 | 4.9 | 5641.8 | 2.384 | 18.7 | 5540.9 | 11.8 | 5591.2 |
| 476 | 2.510 | 4.9 | 5646.7 | 2.406 | 16.3 | 5557.2 | 10.6 | 5601.9 |
| 477 | 2.490 | 7.2 | 5653.9 | 2.393 | 17.7 | 5574.9 | 12.4 | 5614.3 |
| 478 | 2.485 | 7.7 | 5661.6 | 2.359 | 21.3 | 5596.2 | 14.5 | 5628.8 |
| 479 | 2.490 | 7.2 | 5668.8 | 2.363 | 20.9 | 5617.1 | 14.0 | 5642.8 |
| 480 | 2.490 | 7.2 | 5675.9 | 2.372 | 19.9 | 5637.0 | 13.5 | 5656.4 |
| 481 | 2.450 | 11.6 | 5687.5 | 2.359 | 21.3 | 5658.3 | 16.4 | 5672.8 |
| 482 | 2.385 | 18.5 | 5706.0 | 2.341 | 23.2 | 5681.4 | 20.9 | 5693.7 |
| 483 | 2.500 | 6.1 | 5712.1 | 2.376 | 19.5 | 5700.9 | 12.8 | 5706.4 |
| 484 | 2.530 | 2.7 | 5714.8 | 2.406 | 16.3 | 5717.3 | 9.5 | 5715.9 |
| 485 | 2.500 | 6.1 | 5720.9 | 2.397 | 17.3 | 5734.5 | 11.7 | 5727.6 |
| 486 | 2.485 | 7.7 | 5728.6 | 2.363 | 20.9 | 5755.4 | 14.3 | 5741.9 |
| 487 | 2.480 | 8.3 | 5736.9 | 2.363 | 20.9 | 5776.3 | 14.6 | 5756.5 |
| 488 | 2.455 | 11.0 | 5747.9 | 2.372 | 19.9 | 5796.2 | 15.5 | 5771.9 |
| 489 | 2.375 | 19.6 | 5767.5 | 2.372 | 19.9 | 5816.1 | 19.8 | 5791.7 |
| 490 | 2.385 | 18.5 | 5786.0 | 2.363 | 20.9 | 5837.0 | 19.7 | 5811.4 |
| 491 | 2.475 | 8.8 | 5794.8 | 2.389 | 18.1 | 5855.1 | 13.5 | 5824.9 |
| 492 | 2.490 | 7.2 | 5802.0 | 2.410 | 15.9 | 5871.0 | 11.5 | 5836.4 |
| 493 | 2.480 | 8.3 | 5810.3 | 2.376 | 19.5 | 5890.5 | 13.9 | 5850.3 |
| 494 | 2.440 | 12.7 | 5822.9 | 2.367 | 20.5 | 5910.9 | 16.6 | 5866.8 |
| 495 | 2.410 | 15.9 | 5838.8 | 2.367 | 20.5 | 5931.4 | 18.2 | 5885.0 |
| 496 | 2.335 | 23.8 | 5862.6 | 2.363 | 20.9 | 5952.3 | 22.3 | 5907.3 |
| 497 | 2.415 | 15.3 | 5878.0 | 2.354 | 21.8 | 5974.1 | 18.6 | 5925.9 |
| 498 | 2.455 | 11.0 | 5889.0 | 2.354 | 21.8 | 5995.9 | 16.4 | 5942.3 |
| 499 | 2.450 | 11.6 | 5900.5 | 2.376 | 19.5 | 6015.4 | 15.5 | 5957.9 |
| 500 | 2.430 | 13.7 | 5914.3 | 2.350 | 22.2 | 6037.6 | 18.0 | 5975.8 |
| 501 | 2.390 | 18.0 | 5932.3 | 2.300 | 27.4 | 6065.0 | 22.7 | 5998.5 |
| 502 | 2.335 | 23.8 | 5956.1 | 2.300 | 27.4 | 6092.3 | 25.6 | 6024.1 |
| 503 | 2.265 | 31.0 | 5987.0 | 2.341 | 23.2 | 6115.5 | 27.1 | 6051.2 |
| 504 | 2.400 | 17.0 | 6004.0 | 2.389 | 18.1 | 6133.6 | 17.5 | 6068.7 |
| 505 | 2.510 | 4.9 | 6008.9 | 2.432 | 13.5 | 6147.1 | 9.2 | 6077.9 |
| 506 | 2.515 | 4.4 | 6013.3 | 2.462 | 10.3 | 6157.4 | 7.3 | 6085.3 |
| 507 | 2.525 | 3.3 | 6016.6 | 2.475 | 8.8 | 6166.2 | 6.0 | 6091.3 |
| 508 | 2.530 | 2.7 | 6019.3 | 2.467 | 9.7 | 6175.9 | 6.2 | 6097.5 |
| 509 | 2.500 | 6.1 | 6025.3 | 2.475 | 8.8 | 6184.7 | 7.4 | 6104.9 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 510 | 2.460 | 10.5 | 6035.8 | 2.462 | 10.3 | 6195.0 | 10.4 | 6115.3 |
| 511 | 2.450 | 11.6 | 6047.4 | 2.441 | 12.5 | 6207.5 | 12.1 | 6127.4 |
| 512 | 2.450 | 11.6 | 6058.9 | 2.458 | 10.7 | 6218.2 | 11.1 | 6138.5 |
| 513 | 2.430 | 13.7 | 6072.7 | 2.402 | 16.7 | 6234.9 | 15.2 | 6153.7 |
| 514 | 2.405 | 16.4 | 6089.1 | 2.350 | 22.2 | 6257.2 | 19.3 | 6173.0 |
| 515 | 2.370 | 20.1 | 6109.2 | 2.332 | 24.1 | 6281.3 | 22.1 | 6195.2 |
| 516 | 2.290 | 28.4 | 6137.6 | 2.332 | 24.1 | 6305.5 | 26.3 | 6221.5 |
| 517 | 2.260 | 31.5 | 6169.1 | 2.336 | 23.6 | 6329.1 | 27.6 | 6249.0 |
| 518 | 2.455 | 11.0 | 6180.1 | 2.363 | 20.9 | 6350.0 | 15.9 | 6265.0 |
| 519 | 2.495 | 6.6 | 6186.7 | 2.454 | 11.1 | 6361.1 | 8.9 | 6273.8 |
| 520 | 2.510 | 4.9 | 6191.7 | 2.446 | 12.0 | 6373.1 | 8.5 | 6282.3 |
| 521 | 2.510 | 4.9 | 6196.6 | 2.384 | 18.7 | 6391.8 | 11.8 | 6294.1 |
| 522 | 2.455 | 11.0 | 6207.6 | 2.388 | 18.2 | 6410.0 | 14.6 | 6308.7 |
| 523 | 2.400 | 17.0 | 6224.6 | 2.401 | 16.8 | 6426.8 | 16.9 | 6325.6 |
| 524 | 2.380 | 19.1 | 6243.7 | 2.402 | 16.7 | 6443.6 | 17.9 | 6343.5 |
| 525 | 2.460 | 10.5 | 6254.1 | 2.423 | 14.5 | 6458.1 | 12.5 | 6356.0 |
| 526 | 2.465 | 9.9 | 6264.1 | 2.453 | 11.2 | 6469.3 | 10.6 | 6366.6 |
| 527 | 2.435 | 13.2 | 6277.2 | 2.461 | 10.4 | 6479.6 | 11.8 | 6378.4 |
| 528 | 2.420 | 14.8 | 6292.1 | 2.448 | 11.8 | 6491.4 | 13.3 | 6391.6 |
| 529 | 2.380 | 19.1 | 6311.1 | 2.453 | 11.2 | 6502.7 | 15.2 | 6406.8 |
| 530 | 2.415 | 15.3 | 6326.5 | 2.457 | 10.8 | 6513.5 | 13.1 | 6419.9 |
| 531 | 2.445 | 6.6 | 6333.1 | 2.474 | 8.9 | 6522.4 | 7.8 | 6427.6 |
| 532 | 2.525 | 3.3 | 6336.4 | 2.496 | 6.5 | 6528.9 | 4.9 | 6432.5 |
| 533 | 2.510 | 4.9 | 6341.3 | 2.509 | 5.1 | 6533.9 | 5.0 | 6437.5 |
| 534 | 2.485 | 7.7 | 6349.0 | 2.483 | 7.9 | 6541.9 | 7.8 | 6445.4 |
| 535 | 2.480 | 8.3 | 6357.3 | 2.478 | 8.5 | 6550.4 | 8.4 | 6453.8 |
| 536 | 2.445 | 12.1 | 6369.4 | 2.478 | 8.5 | 6558.9 | 10.3 | 6464.1 |
| 537 | 2.410 | 15.9 | 6385.3 | 2.483 | 7.9 | 6566.8 | 11.9 | 6476.0 |
| 538 | 2.410 | 15.9 | 6401.2 | 2.474 | 8.9 | 6575.8 | 12.4 | 6488.4 |
| 539 | 2.475 | 8.8 | 6410.0 | 2.466 | 9.8 | 6585.6 | 9.3 | 6497.7 |
| 540 | 2.500 | 6.1 | 6416.1 | 2.474 | 8.9 | 6594.5 | 7.5 | 6505.2 |
| 541 | 2.500 | 6.1 | 6422.1 | 2.504 | 5.6 | 6600.1 | 5.8 | 6511.0 |
| 542 | 2.500 | 6.1 | 6428.2 | 2.504 | 5.6 | 6605.7 | 5.8 | 6516.9 |
| 543 | 2.505 | 5.5 | 6433.7 | 2.500 | 6.1 | 6611.8 | 5.8 | 6522.6 |
| 544 | 2.495 | 6.6 | 6440.3 | 2.504 | 5.6 | 6617.4 | 6.1 | 6528.8 |
| 545 | 2.505 | 5.5 | 6445.8 | 2.500 | 6.1 | 6623.5 | 5.8 | 6534.5 |
| 546 | 2.530 | 2.7 | 6448.5 | 2.500 | 6.1 | 6629.5 | 4.4 | 6538.9 |
| 547 | 2.490 | 7.2 | 6455.7 | 2.483 | 7.9 | 6637.5 | 7.6 | 6546.5 |
| 548 | 2.470 | 9.4 | 6465.1 | 2.474 | 8.9 | 6646.4 | 9.2 | 6555.6 |
| 549 | 2.490 | 7.2 | 6472.2 | 2.478 | 8.5 | 6654.9 | 7.8 | 6563.5 |
| 550 | 2.475 | 8.8 | 6481.0 | 2.478 | 8.5 | 6663.4 | 8.7 | 6572.1 |
| 551 | 2.480 | 8.3 | 6489.3 | 2.457 | 10.8 | 6674.2 | 9.5 | 6581.7 |
| 552 | 2.490 | 7.2 | 6496.5 | 2.453 | 11.2 | 6685.4 | 9.2 | 6590.9 |
| 553 | 2.500 | 6.1 | 6502.5 | 2.470 | 9.4 | 6694.8 | 7.7 | 6598.6 |
| 554 | 2.450 | 11.6 | 6514.1 | 2.478 | 8.5 | 6703.3 | 10.0 | 6608.6 |
| 555 | 2.455 | 11.0 | 6525.1 | 2.474 | 8.9 | 6712.2 | 10.0 | 6618.6 |
| 556 | 2.515 | 4.4 | 6529.5 | 2.483 | 7.9 | 6720.2 | 6.2 | 6624.8 |
| 557 | 2.525 | 3.3 | 6532.8 | 2.496 | 6.5 | 6726.7 | 4.9 | 6631.6 |
| 558 | 2.510 | 4.9 | 6537.7 | 2.491 | 7.1 | 6733.7 | 6.0 | 6637.0 |
| 559 | 2.510 | 4.9 | 6542.2 | 2.470 | 9.4 | 6743.1 | 8.3 | 6643.1 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 560 | 2.470 | 9.4 | 6554.3 | 2.474 | 8.9 | 6752.0 | 9.2 | 6653.1 |
| 561 | 2.450 | 11.6 | 6565.8 | 2.483 | 7.9 | 6760.0 | 9.8 | 6662.8 |
| 562 | 2.500 | 6.1 | 6571.9 | 2.478 | 8.5 | 6768.5 | 7.3 | 6670.1 |
| 563 | 2.510 | 4.9 | 6576.8 | 2.478 | 8.5 | 6777.0 | 6.7 | 6676.8 |
| 564 | 2.505 | 5.5 | 6582.3 | 2.483 | 7.9 | 6784.9 | 6.7 | 6683.6 |
| 565 | 2.460 | 10.5 | 6592.8 | 2.478 | 8.5 | 6793.4 | 9.5 | 6693.0 |
| 566 | 2.455 | 11.0 | 6603.8 | 2.474 | 8.9 | 6802.3 | 10.0 | 6703.0 |
| 567 | 2.365 | 20.7 | 6624.5 | 2.478 | 8.5 | 6810.8 | 14.6 | 6717.6 |
| 568 | 2.380 | 19.1 | 6643.6 | 2.487 | 7.5 | 6818.3 | 13.3 | 6730.9 |
| 569 | 2.455 | 11.0 | 6654.6 | 2.495 | 6.6 | 6825.0 | 8.8 | 6739.7 |
| 570 | 2.470 | 9.4 | 6663.9 | 2.474 | 8.9 | 6833.9 | 9.2 | 6748.8 |
| 571 | 2.455 | 11.0 | 6675.0 | 2.461 | 10.4 | 6844.2 | 10.7 | 6759.5 |
| 572 | 2.445 | 12.1 | 6687.1 | 2.440 | 12.7 | 6856.9 | 12.4 | 6771.9 |
| 573 | 2.430 | 13.7 | 6700.8 | 2.431 | 13.6 | 6870.5 | 13.7 | 6785.6 |
| 574 | 2.425 | 14.3 | 6715.1 | 2.435 | 13.2 | 6883.7 | 13.7 | 6799.3 |
| 575 | 2.425 | 14.3 | 6729.3 | 2.448 | 11.8 | 6895.5 | 13.0 | 6812.3 |
| 576 | 2.415 | 15.3 | 6744.7 | 2.469 | 9.5 | 6905.0 | 12.4 | 6824.8 |
| 577 | 2.490 | 7.2 | 6751.9 | 2.495 | 6.6 | 6911.6 | 6.9 | 6831.6 |
| 578 | 2.495 | 6.6 | 6758.5 | 2.517 | 4.2 | 6915.8 | 5.4 | 6837.0 |
| 579 | 2.505 | 5.5 | 6764.0 | 2.504 | 5.6 | 6921.4 | 5.6 | 6842.6 |
| 580 | 2.510 | 4.9 | 6768.9 | 2.483 | 7.9 | 6929.3 | 6.4 | 6849.0 |
| 581 | 2.505 | 5.5 | 6774.4 | 2.487 | 7.5 | 6936.8 | 6.5 | 6855.5 |
| 582 | 2.490 | 7.2 | 6781.6 | 2.487 | 7.5 | 6944.3 | 7.3 | 6862.9 |
| 583 | 2.500 | 6.1 | 6787.7 | 2.491 | 7.1 | 6951.4 | 6.6 | 6869.4 |
| 584 | 2.520 | 3.8 | 6791.5 | 2.508 | 5.2 | 6956.5 | 4.5 | 6873.9 |
| 585 | 2.510 | 4.9 | 6796.4 | 2.504 | 5.6 | 6962.1 | 5.3 | 6879.2 |
| 586 | 2.500 | 6.1 | 6802.5 | 2.474 | 8.9 | 6971.1 | 7.5 | 6886.7 |
| 587 | 2.470 | 9.4 | 6811.9 | 2.465 | 9.9 | 6981.0 | 9.7 | 6896.4 |
| 588 | 2.440 | 12.7 | 6824.5 | 2.478 | 8.5 | 6989.5 | 10.6 | 6906.9 |
| 589 | 2.420 | 14.8 | 6839.3 | 2.461 | 10.4 | 6999.9 | 12.6 | 6919.5 |
| 590 | 2.425 | 14.3 | 6853.6 | 2.452 | 11.3 | 7011.2 | 12.8 | 6932.3 |
| 591 | 2.425 | 14.3 | 6867.9 | 2.422 | 14.6 | 7025.8 | 14.4 | 6946.8 |
| 592 | 2.375 | 19.6 | 6887.5 | 2.396 | 17.4 | 7043.2 | 18.5 | 6965.3 |
| 593 | 2.335 | 23.8 | 6911.3 | 2.387 | 18.3 | 7061.5 | 21.1 | 6986.3 |
| 594 | 2.260 | 31.5 | 6942.7 | 2.370 | 20.1 | 7081.6 | 25.8 | 7012.1 |
| 595 | 2.250 | 32.5 | 6975.2 | 2.361 | 21.1 | 7102.7 | 26.8 | 7038.9 |
| 596 | 2.400 | 17.0 | 6992.1 | 2.374 | 19.7 | 7122.4 | 18.3 | 7057.2 |
| 597 | 2.420 | 14.8 | 7006.9 | 2.422 | 14.6 | 7137.0 | 14.7 | 7071.9 |
| 598 | 2.410 | 15.9 | 7022.8 | 2.396 | 17.4 | 7154.4 | 16.6 | 7088.5 |
| 599 | 2.395 | 17.5 | 7040.3 | 2.353 | 21.9 | 7176.3 | 19.7 | 7108.2 |
| 600 | 2.360 | 21.2 | 7061.5 | 2.348 | 22.4 | 7198.8 | 21.8 | 7130.1 |
| 601 | 2.310 | 26.4 | 7087.9 | 2.340 | 23.3 | 7222.0 | 24.8 | 7154.9 |
| 602 | 2.260 | 31.5 | 7119.3 | 2.282 | 29.2 | 7251.2 | 30.3 | 7185.2 |
| 603 | 2.305 | 26.9 | 7146.2 | 2.282 | 29.2 | 7280.4 | 28.0 | 7212.2 |
| 604 | 2.355 | 21.7 | 7167.9 | 2.309 | 26.5 | 7306.9 | 24.1 | 7237.3 |
| 605 | 2.320 | 25.3 | 7193.2 | 2.348 | 22.4 | 7329.4 | 23.9 | 7261.2 |
| 606 | 2.295 | 27.9 | 7221.2 | 2.383 | 18.8 | 7348.1 | 23.3 | 7284.6 |
| 607 | 2.385 | 18.5 | 7239.7 | 2.426 | 14.2 | 7362.3 | 16.4 | 7300.9 |
| 608 | 2.525 | 3.3 | 7243.0 | 2.469 | 9.5 | 7371.8 | 6.4 | 7307.3 |
| 609 | 2.520 | 3.8 | 7246.8 | 2.491 | 7.1 | 7378.8 | 5.4 | 7312.7 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 510 | 2.460 | 10.5 | 6035.8 | 2.462 | 10.3 | 6195.0 | 10.4 | 6115.3 |
| 511 | 2.450 | 11.6 | 6047.4 | 2.441 | 12.5 | 6207.5 | 12.1 | 6127.4 |
| 512 | 2.450 | 11.6 | 6058.9 | 2.458 | 10.7 | 6218.2 | 11.1 | 6138.5 |
| 513 | 2.430 | 13.7 | 6072.7 | 2.402 | 16.7 | 6234.9 | 15.2 | 6153.7 |
| 514 | 2.405 | 16.4 | 6089.1 | 2.350 | 22.2 | 6257.2 | 19.3 | 6173.0 |
| 515 | 2.370 | 20.1 | 6109.2 | 2.332 | 24.1 | 6281.3 | 22.1 | 6195.2 |
| 516 | 2.290 | 28.4 | 6137.6 | 2.332 | 24.1 | 6305.5 | 26.3 | 6221.5 |
| 517 | 2.260 | 31.5 | 6169.1 | 2.336 | 23.6 | 6329.1 | 27.6 | 6249.0 |
| 518 | 2.455 | 11.0 | 6180.1 | 2.363 | 20.9 | 6350.0 | 15.9 | 6265.0 |
| 519 | 2.495 | 6.6 | 6186.7 | 2.454 | 11.1 | 6361.1 | 8.9 | 6273.8 |
| 520 | 2.510 | 4.9 | 6191.7 | 2.446 | 12.0 | 6373.1 | 8.5 | 6282.3 |
| 521 | 2.510 | 4.9 | 6196.6 | 2.384 | 18.7 | 6391.8 | 11.8 | 6294.1 |
| 522 | 2.455 | 11.0 | 6207.6 | 2.388 | 18.2 | 6410.0 | 14.6 | 6308.7 |
| 523 | 2.400 | 17.0 | 6224.6 | 2.401 | 16.8 | 6426.8 | 16.9 | 6325.6 |
| 524 | 2.380 | 19.1 | 6243.7 | 2.402 | 16.7 | 6443.6 | 17.9 | 6343.5 |
| 525 | 2.460 | 10.5 | 6254.1 | 2.423 | 14.5 | 6458.1 | 12.5 | 6356.0 |
| 526 | 2.465 | 9.9 | 6264.1 | 2.453 | 11.2 | 6469.3 | 10.6 | 6366.6 |
| 527 | 2.435 | 13.2 | 6277.2 | 2.461 | 10.4 | 6479.6 | 11.8 | 6378.4 |
| 528 | 2.420 | 14.8 | 6292.1 | 2.448 | 11.8 | 6491.4 | 13.3 | 6391.6 |
| 529 | 2.380 | 19.1 | 6311.1 | 2.453 | 11.2 | 6502.7 | 15.2 | 6406.8 |
| 530 | 2.415 | 15.3 | 6326.5 | 2.457 | 10.8 | 6513.5 | 13.1 | 6419.9 |
| 531 | 2.455 | 6.6 | 6333.1 | 2.474 | 8.9 | 6522.4 | 7.8 | 6427.6 |
| 532 | 2.525 | 3.3 | 6336.4 | 2.496 | 6.5 | 6528.9 | 4.9 | 6432.5 |
| 533 | 2.510 | 4.9 | 6341.3 | 2.509 | 5.1 | 6533.9 | 5.0 | 6437.5 |
| 534 | 2.485 | 7.7 | 6349.0 | 2.483 | 7.9 | 6541.9 | 7.8 | 6445.4 |
| 535 | 2.480 | 8.3 | 6357.3 | 2.478 | 8.5 | 6550.4 | 8.4 | 6453.8 |
| 536 | 2.445 | 12.1 | 6369.4 | 2.478 | 8.5 | 6558.9 | 10.3 | 6464.1 |
| 537 | 2.410 | 15.9 | 6385.3 | 2.483 | 7.9 | 6566.8 | 11.9 | 6476.0 |
| 538 | 2.410 | 15.9 | 6401.2 | 2.474 | 8.9 | 6575.8 | 12.4 | 6488.4 |
| 539 | 2.475 | 8.8 | 6410.0 | 2.466 | 9.8 | 6585.6 | 9.3 | 6497.7 |
| 540 | 2.500 | 6.1 | 6416.1 | 2.474 | 8.9 | 6594.5 | 7.5 | 6505.2 |
| 541 | 2.500 | 6.1 | 6422.1 | 2.504 | 5.6 | 6600.1 | 5.8 | 6511.0 |
| 542 | 2.500 | 6.1 | 6428.2 | 2.504 | 5.6 | 6605.7 | 5.8 | 6516.9 |
| 543 | 2.505 | 5.5 | 6433.7 | 2.500 | 6.1 | 6611.8 | 5.8 | 6522.6 |
| 544 | 2.495 | 6.6 | 6440.3 | 2.504 | 5.6 | 6617.4 | 6.1 | 6528.8 |
| 545 | 2.505 | 5.5 | 6445.8 | 2.500 | 6.1 | 6623.5 | 5.8 | 6534.5 |
| 546 | 2.530 | 2.7 | 6448.5 | 2.500 | 6.1 | 6629.5 | 4.4 | 6538.9 |
| 547 | 2.490 | 7.2 | 6455.7 | 2.483 | 7.9 | 6637.5 | 7.6 | 6546.5 |
| 548 | 2.470 | 9.4 | 6465.1 | 2.474 | 8.9 | 6646.4 | 9.2 | 6555.6 |
| 549 | 2.490 | 7.2 | 6472.2 | 2.478 | 8.5 | 6654.9 | 7.8 | 6563.5 |
| 550 | 2.475 | 8.8 | 6481.0 | 2.478 | 8.5 | 6663.4 | 8.7 | 6572.1 |
| 551 | 2.480 | 8.3 | 6489.3 | 2.457 | 10.8 | 6674.2 | 9.5 | 6581.7 |
| 552 | 2.490 | 7.2 | 6496.5 | 2.453 | 11.2 | 6685.4 | 9.2 | 6590.9 |
| 553 | 2.500 | 6.1 | 6502.5 | 2.470 | 9.4 | 6694.8 | 7.7 | 6598.6 |
| 554 | 2.450 | 11.6 | 6514.1 | 2.478 | 8.5 | 6703.3 | 10.0 | 6608.6 |
| 555 | 2.455 | 11.0 | 6525.1 | 2.474 | 8.9 | 6712.2 | 10.0 | 6618.6 |
| 556 | 2.515 | 4.4 | 6529.5 | 2.483 | 7.9 | 6720.2 | 6.2 | 6624.8 |
| 557 | 2.525 | 3.3 | 6532.8 | 2.496 | 6.5 | 6726.7 | 4.9 | 6631.6 |
| 558 | 2.510 | 4.9 | 6537.7 | 2.491 | 7.1 | 6733.7 | 6.0 | 6638.4 |
| 559 | 2.450 | 7.2 | 6544.0 | 2.470 | 9.4 | 6743.1 | 6.3 | 6645.2 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 610 | 2.500 | 6.1 | 7252.9 | 2.551 | 0.3 | 7379.2 | 3.2 | 7315.9 |
| 611 | 2.500 | 6.1 | 7258.9 | 2.548 | 0.7 | 7379.8 | 3.4 | 7319.3 |
| 612 | 2.525 | 3.3 | 7262.2 | 2.556 | 0.0 | 7379.8 | 1.6 | 7320.9 |
| 613 | 2.525 | 3.3 | 7265.5 | 2.565 | 0.0 | 7379.8 | 1.6 | 7322.6 |
| 614 | 2.525 | 3.3 | 7268.7 | 2.543 | 1.2 | 7381.1 | 2.3 | 7324.8 |
| 615 | 2.550 | 0.4 | 7269.2 | 2.547 | 0.8 | 7381.9 | 0.6 | 7325.4 |
| 616 | 2.530 | 2.7 | 7271.9 | 2.530 | 2.7 | 7384.6 | 2.7 | 7328.2 |
| 617 | 2.510 | 4.9 | 7276.8 | 2.478 | 8.5 | 7393.1 | 6.7 | 7334.9 |
| 618 | 2.485 | 7.7 | 7284.5 | 2.400 | 17.0 | 7410.0 | 12.3 | 7347.2 |
| 619 | 2.460 | 10.5 | 7295.0 | 2.369 | 20.2 | 7430.3 | 15.4 | 7362.6 |
| 620 | 2.380 | 19.1 | 7314.1 | 2.308 | 26.6 | 7456.9 | 22.9 | 7385.4 |
| 621 | 2.335 | 23.8 | 7337.9 | 2.281 | 29.3 | 7486.2 | 26.6 | 7412.0 |
| 622 | 2.245 | 33.0 | 7370.8 | 2.261 | 31.4 | 7517.6 | 32.2 | 7444.1 |
| 623 | 2.235 | 34.0 | 7404.8 | 2.266 | 30.9 | 7548.4 | 32.4 | 7476.6 |
| 624 | 2.335 | 23.8 | 7428.6 | 2.292 | 28.2 | 7576.7 | 26.0 | 7502.6 |
| 625 | 2.385 | 18.5 | 7447.1 | 2.343 | 23.0 | 7599.6 | 20.8 | 7523.3 |
| 626 | 2.370 | 20.1 | 7467.3 | 2.318 | 25.5 | 7625.1 | 22.8 | 7546.1 |
| 627 | 2.280 | 29.4 | 7496.7 | 2.312 | 26.1 | 7651.3 | 27.8 | 7573.9 |
| 628 | 2.215 | 35.9 | 7532.6 | 2.266 | 30.9 | 7682.2 | 33.4 | 7607.3 |
| 629 | 2.185 | 38.9 | 7571.5 | 2.146 | 42.6 | 7724.8 | 40.8 | 7648.1 |
| 630 | 2.180 | 39.4 | 7610.8 | 2.086 | 48.3 | 7773.1 | 43.8 | 7691.9 |
| 631 | 2.205 | 36.9 | 7647.8 | 2.080 | 48.8 | 7821.9 | 42.9 | 7734.8 |
| 632 | 2.145 | 42.7 | 7690.5 | 2.109 | 46.1 | 7868.0 | 44.4 | 7779.2 |
| 633 | 2.105 | 46.5 | 7737.0 | 2.116 | 45.4 | 7913.4 | 46.0 | 7825.1 |
| 634 | 2.205 | 36.9 | 7773.9 | 2.240 | 33.4 | 7946.8 | 35.2 | 7860.3 |
| 635 | 2.320 | 25.3 | 7799.2 | 2.314 | 26.0 | 7972.8 | 25.7 | 7886.0 |
| 636 | 2.380 | 19.1 | 7818.3 | 2.348 | 22.4 | 7995.3 | 20.8 | 7906.7 |
| 637 | 2.400 | 17.0 | 7835.3 | 2.366 | 20.6 | 8015.8 | 18.8 | 7925.5 |
| 638 | 2.410 | 15.9 | 7851.1 | 2.391 | 17.9 | 8033.7 | 16.9 | 7942.4 |
| 639 | 2.400 | 17.0 | 7868.1 | 2.404 | 16.5 | 8050.3 | 16.7 | 7959.1 |
| 640 | 2.405 | 16.4 | 7884.5 | 2.400 | 17.0 | 8067.2 | 16.7 | 7975.8 |
| 641 | 2.435 | 13.2 | 7897.7 | 2.413 | 15.6 | 8082.8 | 14.4 | 7990.2 |
| 642 | 2.435 | 13.2 | 7910.9 | 2.439 | 12.8 | 8095.5 | 13.0 | 8003.1 |
| 643 | 2.440 | 12.7 | 7923.5 | 2.478 | 8.5 | 8104.0 | 10.6 | 8013.7 |
| 644 | 2.435 | 13.2 | 7936.7 | 2.482 | 8.1 | 8112.1 | 10.6 | 8024.3 |
| 645 | 2.400 | 17.0 | 7953.7 | 2.435 | 13.2 | 8125.3 | 15.1 | 8039.4 |
| 646 | 2.350 | 22.2 | 7975.5 | 2.361 | 21.1 | 8146.4 | 21.7 | 8061.1 |
| 647 | 2.300 | 27.4 | 8003.3 | 2.287 | 28.7 | 8175.1 | 28.1 | 8089.1 |
| 648 | 2.210 | 36.4 | 8039.7 | 2.251 | 32.3 | 8207.4 | 34.4 | 8123.5 |
| 649 | 2.120 | 45.1 | 8084.8 | 2.196 | 37.8 | 8245.2 | 41.4 | 8164.9 |
| 650 | 2.135 | 43.7 | 8128.5 | 2.171 | 40.2 | 8285.4 | 41.9 | 8206.9 |
| 651 | 2.195 | 37.9 | 8166.4 | 2.184 | 39.0 | 8324.4 | 38.4 | 8249.3 |
| 652 | 2.205 | 36.9 | 8203.3 | 2.147 | 42.5 | 8356.9 | 39.7 | 8285.0 |
| 653 | 2.145 | 42.7 | 8246.0 | 2.066 | 50.1 | 8417.0 | 46.4 | 8331.4 |
| 654 | 2.045 | 52.0 | 8298.0 | 1.955 | 60.0 | 8477.0 | 56.0 | 8387.5 |
| 655 | 1.975 | 58.3 | 8358.3 | 1.821 | 71.3 | 8548.3 | 64.8 | 8452.2 |
| 656 | 1.905 | 64.3 | 8420.6 | 1.671 | 82.9 | 8631.2 | 73.6 | 8528.8 |
| 657 | 1.845 | 70.3 | 8489.5 | 1.639 | 85.3 | 8716.5 | 77.2 | 8604.1 |
| 658 | 1.785 | 76.6 | 8562.6 | 1.681 | 82.2 | 8788.7 | 77.4 | 8686.3 |
| 659 | 1.725 | 82.9 | 8640.5 | 1.646 | 69.2 | 8860.0 | 71.3 | 8767.6 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 660 | 1.755 | 76.5 | 8712.4 | 1.848 | 69.1 | 8937.0 | 72.8 | 8824.6 |
| 661 | 1.715 | 79.4 | 8792.0 | 1.970 | 58.8 | 8995.8 | 69.2 | 8893.8 |
| 662 | 1.755 | 79.4 | 8868.5 | 1.944 | 61.0 | 9056.8 | 68.8 | 8962.6 |
| 663 | 1.985 | 41.3 | 8925.9 | 2.029 | 53.5 | 9110.3 | 55.4 | 9018.0 |
| 664 | 2.095 | 34.9 | 8973.4 | 2.115 | 45.6 | 9155.8 | 46.5 | 9064.5 |
| 665 | 2.210 | 26.4 | 9009.8 | 2.165 | 40.8 | 9196.6 | 38.6 | 9103.1 |
| 666 | 2.225 | 34.9 | 9044.7 | 2.255 | 32.0 | 9228.6 | 33.5 | 9136.6 |
| 667 | 2.160 | 41.3 | 9086.0 | 2.251 | 32.3 | 9260.9 | 36.8 | 9173.4 |
| 668 | 2.100 | 47.0 | 9133.0 | 2.184 | 39.0 | 9299.9 | 43.0 | 9216.3 |
| 669 | 2.185 | 38.9 | 9171.8 | 2.142 | 43.0 | 9342.9 | 41.0 | 9257.3 |
| 670 | 2.240 | 33.5 | 9205.3 | 2.153 | 42.0 | 9384.9 | 37.7 | 9295.0 |
| 671 | 2.175 | 39.8 | 9245.1 | 2.111 | 46.0 | 9430.9 | 42.9 | 9337.9 |
| 672 | 2.085 | 48.4 | 9293.5 | 2.026 | 53.8 | 9484.6 | 51.1 | 9389.0 |
| 673 | 2.030 | 53.4 | 9346.9 | 2.030 | 53.4 | 9538.0 | 53.4 | 9442.3 |
| 674 | 2.090 | 47.9 | 9394.8 | 2.038 | 52.6 | 9590.6 | 50.3 | 9492.6 |
| 675 | 2.195 | 37.9 | 9432.6 | 2.045 | 52.0 | 9642.7 | 45.0 | 9537.6 |
| 676 | 2.255 | 32.0 | 9464.6 | 2.140 | 43.2 | 9685.8 | 37.6 | 9575.1 |
| 677 | 2.260 | 31.5 | 9496.1 | 2.240 | 33.4 | 9719.2 | 32.4 | 9607.6 |
| 678 | 2.275 | 29.9 | 9526.0 | 2.270 | 30.4 | 9749.6 | 30.2 | 9637.7 |
| 679 | 2.335 | 23.8 | 9549.8 | 2.286 | 28.8 | 9778.5 | 26.3 | 9664.0 |
| 680 | 2.380 | 19.1 | 9568.9 | 2.317 | 25.6 | 9804.1 | 22.4 | 9686.4 |
| 681 | 2.365 | 20.7 | 9589.5 | 2.312 | 26.1 | 9830.2 | 23.4 | 9709.8 |
| 682 | 2.320 | 25.3 | 9614.9 | 2.286 | 28.8 | 9859.1 | 27.1 | 9736.9 |
| 683 | 2.280 | 29.4 | 9644.3 | 2.286 | 28.8 | 9887.9 | 29.1 | 9766.0 |
| 684 | 2.270 | 30.4 | 9674.7 | 2.291 | 28.3 | 9916.2 | 29.4 | 9795.4 |
| 685 | 2.385 | 18.5 | 9693.3 | 2.302 | 27.2 | 9943.5 | 22.9 | 9818.3 |
| 686 | 2.415 | 15.3 | 9708.6 | 2.342 | 23.1 | 9966.5 | 19.2 | 9837.5 |
| 687 | 2.385 | 18.5 | 9727.2 | 2.362 | 21.0 | 9987.5 | 19.8 | 9857.3 |
| 688 | 2.370 | 20.1 | 9747.3 | 2.341 | 23.2 | 10010.7 | 21.7 | 9878.9 |
| 689 | 2.355 | 21.7 | 9769.0 | 2.290 | 28.5 | 10039.1 | 25.1 | 9904.0 |
| 690 | 2.320 | 25.3 | 9794.4 | 2.258 | 31.6 | 10070.7 | 28.5 | 9932.5 |
| 691 | 2.260 | 31.5 | 9825.8 | 2.203 | 37.1 | 10107.8 | 34.3 | 9966.7 |
| 692 | 2.265 | 31.0 | 9856.8 | 2.140 | 43.2 | 10151.0 | 37.1 | 10003.8 |
| 693 | 2.300 | 27.4 | 9884.2 | 2.123 | 44.8 | 10195.8 | 36.1 | 10039.9 |
| 694 | 2.310 | 26.4 | 9910.5 | 2.147 | 42.5 | 10238.3 | 34.4 | 10074.3 |
| 695 | 2.290 | 28.4 | 9939.0 | 2.171 | 40.2 | 10278.5 | 34.3 | 10108.6 |
| 696 | 2.290 | 28.4 | 9967.4 | 2.177 | 39.7 | 10318.2 | 34.1 | 10142.7 |
| 697 | 2.335 | 23.8 | 9991.2 | 2.234 | 34.0 | 10352.2 | 28.9 | 10171.6 |
| 698 | 2.405 | 16.4 | 10007.6 | 2.303 | 27.1 | 10379.3 | 21.8 | 10193.4 |
| 699 | 2.440 | 12.7 | 10020.2 | 2.334 | 23.9 | 10403.2 | 18.3 | 10211.6 |
| 700 | 2.455 | 11.0 | 10031.3 | 2.312 | 26.1 | 10429.3 | 18.6 | 10230.2 |
| 701 | 2.450 | 11.6 | 10042.8 | 2.339 | 23.4 | 10452.7 | 17.5 | 10247.7 |
| 702 | 2.420 | 14.8 | 10057.6 | 2.369 | 20.2 | 10472.9 | 17.5 | 10265.2 |
| 703 | 2.400 | 17.0 | 10074.6 | 2.373 | 19.8 | 10492.8 | 18.4 | 10283.6 |
| 704 | 2.430 | 13.7 | 10088.3 | 2.399 | 17.1 | 10509.8 | 15.4 | 10299.0 |
| 705 | 2.490 | 7.2 | 10095.5 | 2.429 | 13.8 | 10523.7 | 10.5 | 10309.5 |
| 706 | 2.470 | 9.4 | 10104.9 | 2.455 | 11.0 | 10534.7 | 10.2 | 10319.7 |
| 707 | 2.470 | 9.4 | 10114.2 | 2.442 | 12.4 | 10547.1 | 10.9 | 10330.6 |
| 708 | 2.470 | 9.4 | 10123.6 | 2.429 | 13.8 | 10560.9 | 11.6 | 10342.2 |
| 709 | 2.445 | 12.1 | 10135.7 | 2.447 | 11.9 | 10572.8 | 12.0 | 10354.2 |

K E R O G E N A N A L Y S I S

F O R

T H E C L E V E L A N D C L I F F S I R O N C O M P A N Y - W E L L X - 2

| DEPTH | D E N S I T Y L O G | | | V E L O C I T Y L O G | | | D E N S I T Y A N D V E L O C I T Y | |
|-------|-----------------------|---------|--------------|-------------------------|---------|--------------|---|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 710 | 2.430 | 13.7 | 10149.4 | 2.404 | 16.5 | 10589.4 | 15.1 | 10369.3 |
| 711 | 2.470 | 13.7 | 10158.8 | 2.391 | 17.9 | 10607.3 | 13.6 | 10383.0 |
| 712 | 2.450 | 13.6 | 10170.4 | 2.412 | 15.7 | 10622.9 | 13.6 | 10396.6 |
| 713 | 2.395 | 13.5 | 10187.9 | 2.412 | 15.7 | 10638.6 | 16.6 | 10413.1 |
| 714 | 2.385 | 13.5 | 10206.4 | 2.386 | 18.4 | 10657.0 | 18.5 | 10431.6 |
| 715 | 2.440 | 12.7 | 10219.1 | 2.347 | 22.5 | 10679.6 | 17.6 | 10449.2 |
| 716 | 2.430 | 13.7 | 10232.8 | 2.312 | 26.1 | 10705.7 | 19.9 | 10466.2 |
| 717 | 2.355 | 21.7 | 10254.5 | 2.312 | 26.1 | 10731.8 | 23.9 | 10493.1 |
| 718 | 2.290 | 28.4 | 10282.9 | 2.343 | 23.0 | 10754.8 | 25.7 | 10518.8 |
| 719 | 2.255 | 32.0 | 10314.9 | 2.347 | 22.5 | 10777.4 | 27.3 | 10546.0 |
| 720 | 2.345 | 22.8 | 10337.6 | 2.352 | 22.0 | 10799.4 | 22.4 | 10566.4 |
| 721 | 2.510 | 4.9 | 10342.6 | 2.455 | 11.0 | 10810.4 | 8.0 | 10576.4 |
| 722 | 2.490 | 7.2 | 10349.7 | 2.481 | 8.2 | 10818.6 | 7.7 | 10584.1 |
| 723 | 2.500 | 6.1 | 10355.8 | 2.425 | 14.3 | 10832.8 | 10.2 | 10594.2 |
| 724 | 2.485 | 7.7 | 10363.5 | 2.391 | 17.9 | 10850.7 | 12.8 | 10607.0 |
| 725 | 2.440 | 12.7 | 10376.2 | 2.373 | 19.8 | 10870.6 | 16.2 | 10623.3 |
| 726 | 2.355 | 21.7 | 10397.9 | 2.356 | 21.6 | 10892.2 | 21.7 | 10644.9 |
| 727 | 2.305 | 26.5 | 10424.8 | 2.334 | 23.9 | 10916.1 | 25.4 | 10670.3 |
| 728 | 2.430 | 13.7 | 10438.5 | 2.328 | 24.5 | 10940.6 | 19.1 | 10689.4 |
| 729 | 2.505 | 5.5 | 10444.0 | 2.391 | 17.9 | 10958.5 | 11.7 | 10701.2 |
| 730 | 2.555 | 0.0 | 10444.0 | 2.442 | 12.4 | 10970.9 | 6.2 | 10707.4 |
| 731 | 2.585 | 0.0 | 10444.0 | 2.477 | 8.6 | 10979.5 | 4.3 | 10711.7 |
| 732 | 2.600 | 0.0 | 10444.0 | 2.494 | 6.7 | 10986.2 | 3.4 | 10715.0 |
| 733 | 2.625 | 0.0 | 10444.0 | 2.498 | 6.3 | 10992.5 | 3.1 | 10718.2 |
| 734 | 2.610 | 0.0 | 10444.0 | 2.503 | 5.7 | 10998.3 | 2.9 | 10721.0 |
| 735 | 2.575 | 0.0 | 10444.0 | 2.503 | 5.7 | 11004.0 | 2.9 | 10723.9 |
| 736 | 2.575 | 0.0 | 10444.0 | 2.503 | 5.7 | 11009.7 | 2.9 | 10726.8 |
| 737 | 2.580 | 0.0 | 10444.0 | 2.494 | 6.7 | 11016.4 | 3.4 | 10730.1 |
| 738 | 2.570 | 0.0 | 10444.0 | 2.481 | 8.2 | 11024.6 | 4.1 | 10734.2 |
| 739 | 2.580 | 0.0 | 10444.0 | 2.477 | 8.6 | 11033.2 | 4.3 | 10738.5 |
| 740 | 2.575 | 0.0 | 10444.0 | 2.481 | 8.2 | 11041.4 | 4.1 | 10742.6 |
| 741 | 2.560 | 0.0 | 10444.0 | 2.485 | 7.7 | 11049.1 | 3.9 | 10746.5 |
| 742 | 2.565 | 0.0 | 10444.0 | 2.494 | 6.7 | 11055.8 | 3.4 | 10749.8 |
| 743 | 2.535 | 2.1 | 10446.1 | 2.494 | 6.7 | 11062.5 | 4.4 | 10754.3 |
| 744 | 2.505 | 5.5 | 10451.6 | 2.503 | 5.7 | 11068.3 | 5.6 | 10759.9 |
| 745 | 2.480 | 8.3 | 10459.9 | 2.516 | 4.3 | 11072.5 | 6.3 | 10766.1 |
| 746 | 2.475 | 8.8 | 10468.7 | 2.516 | 4.3 | 11076.8 | 6.6 | 10772.7 |
| 747 | 2.480 | 8.3 | 10477.0 | 2.511 | 4.8 | 11081.7 | 6.6 | 10779.2 |
| 748 | 2.480 | 8.3 | 10485.3 | 2.511 | 4.8 | 11086.5 | 6.6 | 10785.8 |
| 749 | 2.505 | 5.5 | 10490.8 | 2.516 | 4.3 | 11090.8 | 4.9 | 10790.7 |
| 750 | 2.535 | 2.1 | 10492.9 | 2.520 | 3.8 | 11094.6 | 3.0 | 10793.7 |
| 751 | 2.525 | 3.3 | 10496.2 | 2.529 | 2.8 | 11097.4 | 3.0 | 10796.7 |
| 752 | 2.535 | 2.1 | 10498.4 | 2.529 | 2.8 | 11100.2 | 2.5 | 10799.2 |
| 753 | 2.560 | 0.0 | 10498.4 | 2.529 | 2.8 | 11103.0 | 1.4 | 10800.6 |
| 754 | 2.570 | 0.0 | 10498.4 | 2.529 | 2.8 | 11105.9 | 1.4 | 10803.6 |
| 755 | 2.580 | 0.0 | 10498.4 | 2.524 | 3.4 | 11109.2 | 1.7 | 10808.7 |
| 756 | 2.595 | 0.0 | 10498.4 | 2.529 | 2.8 | 11112.1 | 1.4 | 10812.1 |
| 757 | 2.585 | 0.0 | 10498.4 | 2.546 | 0.9 | 11113.0 | 0.9 | 10815.8 |
| 758 | 2.585 | 0.0 | 10498.4 | 2.550 | 0.4 | 11113.4 | 0.2 | 10816.1 |
| 759 | 2.595 | 0.0 | 10498.4 | 2.550 | 0.4 | 11113.4 | 0.2 | 10816.1 |

K E R O G E N A N A L Y S I S

FOR

THE CLEVELAND CLIFFS IRON COMPANY-WELL X-2

| DEPTH | DENSITY LOG | | | VELOCITY LOG | | | DENSITY AND VELOCITY | |
|-------|-------------|---------|--------------|--------------|---------|--------------|----------------------|--------------|
| | RHO-B | GAL/TON | ACCUM. YIELD | RHO-B | GAL/TON | ACCUM. YIELD | GAL/TON | ACCUM. YIELD |
| 760 | 2.605 | 0.0 | 10498.4 | 2.550 | 0.4 | 11114.3 | 0.2 | 10806.2 |