

APPENDIX E

WEST MEREENIE 27 GAS PEAK TABLE

APPENDIX E: WEST MEREEINIE 27 CUTTINGS GAS PEAKS & BACKGROUND

| <i>Formation @ drilled TD @ time of gas peak</i> | <i>Gas Type</i> | <i>Depth (m)</i> | <i>BG %</i> | <i>C1 ppm</i> | <i>C2 ppm</i> | <i>C3 ppm</i> | <i>iC4 ppm</i> | <i>nC4 ppm</i> | <i>iC5 ppm</i> | <i>nC5 ppm</i> |
|--|-----------------|------------------|-----------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Upper Stairway Sandstone | BG | 718-770 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Upper Stairway Sandstone | BG | 770-800 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middle Stairway Sandstone | BG | 800-841 | 1.90 | 10493 | 1557 | 502 | 70 | 140 | 39 | 49 |
| Middle Stairway Sandstone | BG | 841-954 | 3.20 | 18396 | 2698 | 881 | 111 | 248 | 64 | 79 |
| Lower Stairway Sandstone 2 | BG | 954-960 | 2.10 | 12763 | 1865 | 610 | 78 | 173 | 43 | 54 |
| Lower Stairway Sandstone 2 | BG | 960-1000 | 2.00 | 12396 | 11806 | 588 | 70 | 163 | 43 | 47 |
| Horn Valley Siltstone | BG | 1000-1045 | 1.90 | 11685 | 1833 | 610 | 78 | 186 | 45 | 64 |
| Horn Valley Siltstone | BG | 1045-1063 | 1.85 | 11275 | 1727 | 551 | 65 | 153 | 39 | 50 |
| Pacoota P1 | BG | 1063-1128 | 1.98 | 11665 | 1739 | 567 | 68 | 160 | 38 | 38 |
| Pacoota P1 | BG | 1128-1180 | 2.16 | 12661 | 1921 | 668 | 81 | 198 | 48 | 48 |
| Pacoota P1 | BG | 1180-1185 | 7.76 | 43939 | 8186 | 3433 | 378 | 1125 | 288 | 288 |
| Pacoota P1 | FG Peak | 1187 | 98.80 | 613129 | 140089 | 53745 | 5852 | 15395 | 3766 | 3766 |
| Pacoota P1 | FG Peak | 1208 | 49.00 | 276764 | 51877 | 20682 | 2206 | 7215 | 1774 | 1774 |
| Pacoota P1 | FG Peak | 1209 | 82.10 | 365156 | 73625 | 28133 | 3102 | 9421 | 2344 | 2344 |
| Pacoota P2 | BG | 1185-1230 | 48.10 | 255985 | 50817 | 19652 | 2141 | 6547 | 1599 | 1599 |
| Pacoota P2 | BG | 1230-1253 | 71.70 | 367293 | 72346 | 27791 | 3047 | 9336 | 2288 | 2829 |
| Pacoota P2 | BG | 1253-1264 | 70.40 | 371445 | 72892 | 27960 | 3065 | 9322 | 2261 | 2799 |
| Pacoota P2 | FG Peak | 1190.5 | 7.60 | 613406 | 143701 | 53940 | 5954 | 15485 | 3804 | 4769 |
| Pacoota P2 | FG Peak | 1209 | 58.00 | 596499 | 130667 | 48969 | 5422 | 14323 | 3556 | 4499 |
| Pacoota P2 | FG Peak | 1227 | 72.00 | 425584 | 83757 | 32314 | 3539 | 10474 | 2578 | 3183 |
| Pacoota P2 | FG Peak | 1237 | 70.00 | 409394 | 81235 | 30979 | 3384 | 10187 | 2522 | 3091 |
| Pacoota P2 | FG Peak | 1241.5 | 70.00 | 376120 | 74261 | 28376 | 3116 | 9629 | 2370 | 2939 |

APPENDIX E: WEST MEREEINIE 27 CUTTINGS GAS PEAKS & BACKGROUND (cont'd)

| <i>Formation @ drilled TD@ time of gas peak</i> | <i>Gas Type</i> | <i>Depth (m)</i> | <i>BG %</i> | <i>C1 ppm</i> | <i>C2 ppm</i> | <i>C3 ppm</i> | <i>iC4 ppm</i> | <i>nC4 ppm</i> | <i>iC5 ppm</i> | <i>nC5 ppm</i> |
|---|-----------------|------------------|-----------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Pacoota P2 | FG Peak | 1246 | 70.00 | 380575 | 74706 | 29135 | 3208 | 9655 | 2354 | 2808 |
| Pacoota P2 | FG Peak | 1253.5 | 72.00 | 418097 | 83732 | 31833 | 3546 | 10340 | 2499 | 3089 |
| Pacoota P2 | FG Peak | 1258 | 65.50 | 454316 | 91389 | 34792 | 3845 | 11084 | 2709 | 3392 |
| Pacoota P2 | BG | 1264-1289 | 57.80 | 395353 | 73544 | 20325 | 1886 | 5262 | 1202 | 1610 |
| Pacoota P2 | CG | 1268.5 | 64.00 | 654487 | 109889 | 31899 | 2778 | 8596 | 1764 | 2141 |
| Pacoota P2 | CG | 1287.5 | 50.00 | 656503 | 114068 | 35922 | 3518 | 9737 | 2229 | 2606 |
| Pacoota P2 | FG Peak | 1276 | 65.00 | 438931 | 65214 | 20026 | 1914 | 5458 | 1086 | 1441 |
| Pacoota P2 | FG Peak | 1283 | 44.50 | 435267 | 65149 | 20264 | 1959 | 5788 | 1253 | 1662 |
| Pacoota P2 | BG | 1289 | 21.20 | 163148 | 24046 | 7376 | 711 | 1949 | 481 | 699 |
| Pacoota P2 | Pumps Off | 1289 | 73.00 | 547773 | 84346 | 21169 | 1661 | 5003 | 976 | 1346 |
| Pacoota P2 | BG | 1289-1292 | 0.24 | 640 | 123 | 55 | 15 | 28 | 41 | |
| Pacoota P2 | BG | 1289-1292 | 0.24 | 640 | 123 | 55 | 15 | 28 | 41 | |
| Pacoota P3 | BG | 1294-1313 | 10.00 | 78198 | 14600 | 5999 | 663 | 2017 | 537 | 763 |
| Pacoota P3 | FG | 1313-1336 | 10.00 | 325119 | 63881 | 2406 | 2644 | 8454 | 2095 | 2524 |
| Pacoota P3 | FG | 1336-1342 | 29.00 | 172722 | 30632 | 11798 | 1207 | 3678 | 888 | 1219 |
| Pacoota P3 | FG | 1342-1356 | 39.40 | 230667 | 41299 | 15669 | 1644 | 5180 | 1230 | 1680 |
| Pacoota P3 | BG | 1356-1359 | 44.00 | 267687 | 48945 | 18329 | 1929 | 6073 | 1364 | 1877 |
| Pacoota P3 | BG | 1359-1367 | 50.00 | 290670 | 53355 | 19953 | 2105 | 6767 | 1652 | 2123 |

APPENDIX E: WEST MEREENIE 27 FLOW DIVERSION GAS PEAKS

| Formation @ drilled TD @ time of gas peak | Flow Diversion Gas Peaks at Connections (Gas peak recorded at connections when flow is diverted from hole to by-pass line) | | | | | | | | | |
|--|---|-------|------|-----------|-----------|-----------|------------|------------|------------|------------|
| | Depth (m) | TG % | BG % | C1 ppm | C2 ppm | C3 ppm | iC4 ppm | nC4 ppm | iC5 ppm | nC5 ppm |
| Upper Stairway Sandstone | 825 | 12.44 | 3.14 | 75229 | 10703 | 3637 | 394 | 1062 | 303 | 252 |
| Middle Stairway Sandstone | 836 | 10.10 | 2.86 | 62467 | 8877 | 3029 | 327 | 860 | 256 | 231 |
| | 845 | 11.60 | 2.84 | 71759 | 10487 | 3535 | 398 | 1002 | 312 | 261 |
| | 855 | 17.80 | 2.60 | 106201 | 15605 | 5275 | 558 | 147 | 468 | 388 |
| | 861 | 10.30 | 2.52 | 63867 | 9057 | 3169 | 360 | 915 | 276 | 243 |
| | 874 | 10.20 | 2.44 | 64563 | 9149 | 3067 | 337 | 852 | 256 | 225 |
| | 883 | 8.94 | 2.48 | 55821 | 7967 | 2677 | 292 | 750 | 229 | 200 |
| | 893 | 8.56 | 2.40 | 53772 | 7617 | 2580 | 288 | 729 | 219 | 196 |
| | 903 | 8.32 | 2.38 | 51311 | 7349 | 2475 | 278 | 703 | 214 | 185 |
| | 913 | 8.84 | 2.44 | 56362 | 8051 | 2681 | 292 | 770 | 230 | 202 |
| | 922 | 6.88 | 2.20 | 43977 | 6436 | 2094 | 235 | 592 | 191 | 163 |
| | 932 | 7.24 | 2.20 | 46927 | 6766 | 2240 | 247 | 635 | 201 | 170 |
| | 941 | 7.14 | 2.16 | 46403 | 6779 | 2175 | 239 | 606 | 193 | 162 |
| | 950 | 3.43 | 2.04 | 21213 | 3052 | 1001 | 119 | 280 | 84 | 68 |
| | 960 | 3.58 | 2.02 | 22421 | 3128 | 1050 | 121 | 290 | 89 | 73 |
| Lower Stairway Sandstone | 971 | 4.16 | 1.92 | 25508 | 3608 | 1183 | 133 | 318 | 95 | 78 |
| | 980.5 | 3.56 | 1.96 | 22228 | 3121 | 1038 | 120 | 279 | 80 | 68 |
| | 980.5 | 3.56 | 1.96 | 22228 | 3121 | 1038 | 120 | 279 | 80 | 68 |
| | 989.5 | 3.48 | 2.00 | 21863 | 3171 | 1032 | 119 | 286 | 88 | 67 |
| | 999 | 3.48 | 2.00 | 21733 | 3206 | 1020 | 119 | 277 | 81 | 69 |
| | 1009 | 8.36 | 2.00 | 56956 | 8077 | 2548 | 251 | 693 | 207 | 166 |
| | 1018 | 5.50 | 2.10 | 35083 | 5118 | 1614 | 172 | 445 | 132 | 108 |
| | 1028 | 9.32 | 2.00 | 63839 | 8977 | 2975 | 301 | 809 | 250 | 202 |

APPENDIX E: WEST MEREENIE 27 FLOW DIVERSION GAS PEAKS (cont'd)

| <i>Formation @ drilled TD @ time of gas peak</i> | <i>Depth (m)</i> | <i>TG %</i> | <i>BG %</i> | <i>C1 ppm</i> | <i>C2 ppm</i> | <i>C3 ppm</i> | <i>iC4 ppm</i> | <i>nC4 ppm</i> | <i>iC5 ppm</i> | <i>nC5 ppm</i> |
|--|------------------|-------------|-------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Horn Valley Siltstone | 1037 | 9.34 | 2.00 | 63278 | 9318 | 2957 | 302 | 823 | 244 | 220 |
| | 1047 | 4.30 | 1.88 | 26358 | 3718 | 1243 | 134 | 334 | 105 | 80 |
| | 1056 | 9.08 | 1.92 | 61751 | 8677 | 2471 | 323 | 839 | 242 | 218 |
| | 1062.5 | 100.00 | 2.00 | 672327 | 123913 | 37071 | 3791 | 10302 | 2482 | 2901 |
| | 1075.5 | 4.76 | 2.00 | 29512 | 4226 | 1345 | 136 | 343 | 95 | 78 |
| | 1085.5 | 4.36 | 1.80 | 27040 | 3957 | 1273 | 133 | 340 | 94 | 79 |
| | 1095 | 4.92 | 1.80 | 31978 | 4682 | 1462 | 150 | 379 | 116 | 86 |
| | 1101.5 | 4.94 | 1.70 | 22021 | 3358 | 1253 | 144 | 364 | 117 | 99 |
| | 1104.5 | 3.98 | 1.90 | 25948 | 3836 | 1175 | 126 | 307 | 73 | 117 |
| | 1114 | 4.50 | 1.80 | 25111 | 3742 | 1197 | 132 | 322 | 79 | 102 |
| Pacoota P1 | 1124 | 2.12 | 1.70 | 12465 | 1868 | 638 | 77 | 184 | 44 | 54 |
| | 1143 | 2.86 | 1.70 | 18363 | 2749 | 879 | 100 | 241 | 57 | 72 |
| | 1152 | 2.64 | 1.64 | 17542 | 2014 | 894 | 102 | 188 | 60 | 71 |
| | 1162 | 1.76 | 1.72 | 106821 | 1575 | 530 | 621 | 149 | 33 | 51 |
| | 1170 | 2.00 | 1.80 | 122181 | 1775 | 600 | 71 | 173 | 37 | 53 |
| | 1180.5 | 7.78 | 2.40 | 44507 | 8184 | 3461 | 393 | 1186 | 216 | 413 |
| | 1190.5 | 100.00 | 7.60 | 613406 | 14370 | 53940 | 5954 | 15485 | 3804 | 4769 |
| | 1209.5 | 100.00 | 8.00 | 637280 | 145614 | 54461 | 6115 | 15994 | 4253 | 5649 |
| Pacoota P2 | 1227 | 81.90 | 60.00 | 425584 | 83757 | 32314 | 3539 | 10474 | 2578 | 3183 |
| | 1237 | 81.50 | 60.00 | 409394 | 81235 | 30979 | 3384 | 10187 | 2522 | 3091 |
| | 1246 | 91.00 | 68.00 | 482685 | 100452 | 38132 | 4238 | 11883 | 2960 | 3660 |
| | 1258 | 84.80 | 64.00 | 454315 | 91389 | 34792 | 3845 | 11084 | 2709 | 3392 |
| Pacoota P3 | 1311 | 62.00 | 10.00 | 336445 | 64185 | 24233 | 2617 | 8506 | 2101 | 2523 |
| | 1340 | 74.60 | 29.00 | 410200 | 75169 | 28316 | 2970 | 9278 | 2196 | 2706 |
| | 1350 | 84.40 | 39.40 | 467223 | 90588 | 33307 | 3615 | 10554 | 2516 | 3108 |
| | 1353.5 | 79.00 | 39.40 | 434325 | 81552 | 30659 | 3232 | 9821 | 2347 | 2856 |
| | 1359 | 78.40 | | 373888 | 69856 | 25530 | 2692 | 8276 | 2010 | 2449 |
| | 1367 | 65.40 | | 373888 | 69856 | 25530 | 2692 | 8276 | 2010 | 2449 |