



APPENDIX 4 FROM WCR  
SAMPLE DESCRIPTION  
BOGGY CREEK - 1  
W1053

# **APPENDIX-4**

## Sample Description



SHOWS

WELL: BOGGY CREEK #1    DATE: 25/12/91    GEOLOGIST: V. AKBARI    PAGE: 2 OF 29

| DEPTH (m) | %   | SAMPLE DESCRIPTION   | GAS   |    |    |    |    | FLUOR |     |
|-----------|-----|--|-------|----|----|----|----|-------|-----|
|           |     |  | TOTAL | C1 | C2 | C3 | C4 | NAT.  | CUT |
| 320 - 355 | 100 | MARL, grey - dk. grey - olive grey, soft, rarely carbonaceous glauconitic, very fossiliferous, predominantly bryozoa, echinoid debris and shell fragments.   |       |    |    |    |    |       |     |
| 355 - 435 | 100 | MARL as above  |       |    |    |    |    |       |     |
| 435 - 440 | 80  | CALCARENITE, reddish - brn- orange, some white, pinkish, loosely consolidated - friable, bioclastic predominantly bryozoa, shell fragments, and foraminifera |       |    |    |    |    |       |     |
|           | 20  | MARL as above  |       |    |    |    |    |       |     |
| 440 - 470 | 100 | CALCARENITE as above   |       |    |    |    |    |       |     |
| 470 - 480 | 80  | MARL, dark grey - olive grey, very soft, rarely glauconitic  |       |    |    |    |    |       |     |
|           | 20  | CALCARENITE as above   |       |    |    |    |    |       |     |
| 480 - 510 | 90  | MARL as above; very pyritic, abd. pyrite nodules   |       |    |    |    |    |       |     |
|           | 10  | CALCARENITE as above   |       |    |    |    |    |       |     |
| 510 - 530 | 100 | MARL as above, rarely pyritic  |       |    |    |    |    |       |     |
| 530 - 540 | 100 | SAND, white - translucent, fine - medium - coarse grained, dom. c. grained, rounded - sub-rounded, dom. sub-rounded, quartz; poorly sorted, no cement.       |       |    |    |    |    |       |     |

GAS AND FUEL EXPLORATION N.I.

WELL: BOGGY CREEK #1    DATE: 25/12/91    GEOLOGIST: V. AKBARI    PAGE: 3 OF 29

SHOWS

| DEPTH (m) | %   | SAMPLE DESCRIPTION  | GAS   |    |    |    | FLUOR |      |     |
|-----------|-----|---|-------|----|----|----|-------|------|-----|
|           |     |   | TOTAL | C1 | C2 | C3 | C4    | NAT. | CUT |
| 540 - 550 | 50  | SAND, as above  |       |    |    |    |       |      |     |
|           | 50  | MARL, dark reddish - brown, soft, very glauconitic, abd.        |       |    |    |    |       |      |     |
|           |     | dark green glauconite nodules                                   |       |    |    |    |       |      |     |
| 550 - 560 | 70  | MARL as above   |       |    |    |    |       |      |     |
|           | 10  | SAND as from 540 - 550  |       |    |    |    |       |      |     |
|           | 20  | CALCARENITE   |       |    |    |    |       |      |     |
| 560 - 570 | 95  | MARL as above   |       |    |    |    |       |      |     |
|           | 5   | SAND as above   |       |    |    |    |       |      |     |
| 570 - 580 | 90  | SAND, off white, brownish-translucent, fine-med.-c. - vc        |       |    |    |    |       |      |     |
|           |     | grained, dom. med-c grained sub-rounded-rounded                 |       |    |    |    |       |      |     |
|           |     | dominantly sub-rounded, poorly - moderately sorted quartz,      |       |    |    |    |       |      |     |
|           |     | friable, no cement  |       |    |    |    |       |      |     |
|           | 10  | MARL as above   |       |    |    |    |       |      |     |
| 580 - 590 | 100 | SAND as above   |       |    |    |    |       |      |     |
| 590 - 640 | 100 | SAND, brownish - translucent, m.-c. - v.c, dom. c. grained,     |       |    |    |    |       |      |     |
|           |     | rounded - sub-rounded, poorly-moderately sorted Quartz, friable |       |    |    |    |       |      |     |
|           |     | with no cement, becoming finer and well sorted with depth       |       |    |    |    |       |      |     |

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SHOWS

| DEPTH (m) | %  | SAMPLE DESCRIPTION   | GAS   |    |    |    | FLUOR |      |     |
|-----------|----|--|-------|----|----|----|-------|------|-----|
|           |    |  | TOTAL | C1 | C2 | C3 | C4    | NAT. | CUT |
| 640 - 660 | 80 | SAND, white, greyish - translucent, sugary, fine-med. occ. c, dom. med., sub-angular - sub-rounded, dom. sub-angular moderately sorted Qtz, loose with no cement |       |    |    |    |       |      |     |
| 660 - 670 | 30 | MARL, dark grey, carbonaceous, v. soft & dispersive<br>MARL, as above, with abd. silty carbonaceous material   |       |    |    |    |       |      |     |
| 670 - 680 | 60 | SAND as above<br>SAND as above   |       |    |    |    |       |      |     |
| 680 - 685 | 60 | MARL as above<br>CLAYSTONE, dark brown, greyish - brown, carbonaceous, very soft, dispersive   |       |    |    |    |       |      |     |
|           | 40 | CLAYSTONE, dark brown, greyish - brown, carbonaceous, very soft, dispersive  |       |    |    |    |       |      |     |
|           | 40 | SAND, white, greyish, translucent, sugary, f.-med., occ. coarse dom. med., SA-SR, dom. SA, mod. sorted Qtz, friable with no cement                               |       |    |    |    |       |      |     |
| 685 - 690 | 80 | SAND as above  |       |    |    |    |       |      |     |
| 690 - 715 | 40 | CLAYSTONE as above<br>CLAYSTONE as above   |       |    |    |    |       |      |     |
|           | 60 | SAND as above  |       |    |    |    |       |      |     |

GAS AND FUEL EXPLORATION N.L.

SHOWS

WELL: BOGGY CREEK #1 DATE: 25/12/91 GEOLOGIST: V. AKBARI PAGE: 5 OF 29

| DEPTH (m) | %  | SAMPLE DESCRIPTION   | GAS   |    |    |    |    | FLUOR |     |
|-----------|----|--|-------|----|----|----|----|-------|-----|
|           |    |  | TOTAL | C1 | C2 | C3 | C4 | NAT.  | CUT |
| 715 - 730 | 70 | SAND as above  | Nil   |    |    |    |    |       |     |
|           | 30 | CLAYSTONE as above   |       |    |    |    |    |       |     |
| 730 - 745 | 20 | CLAYSTONE as above   | "     |    |    |    |    |       |     |
|           | 80 | SAND as above  |       |    |    |    |    |       |     |
| 745 - 755 | 70 | SAND as above  | "     |    |    |    |    |       |     |
|           | 30 | CLAYSTONE as above   |       |    |    |    |    |       |     |
| 755 - 770 | 20 | CLAYSTONE as above   | "     |    |    |    |    |       |     |
|           | 80 | SAND as above  |       |    |    |    |    |       |     |
| 770 - 790 | 80 | CLAYSTONE, dark grey - brownish silty, v. pyritic, rare<br>glauc., very soft, dispersive | "     |    |    |    |    |       |     |
|           | 20 | SAND as from 680 - 685   |       |    |    |    |    |       |     |
| 790 - 810 | 80 | SAND " " "   | "     |    |    |    |    |       |     |
|           | 20 | CLAYSTONE as above   |       |    |    |    |    |       |     |
| 810 - 820 | 30 | CLAYSTONE as above   | "     |    |    |    |    |       |     |
|           | 70 | SAND as above  |       |    |    |    |    |       |     |
| 820 - 845 | 40 | SAND as above  | "     |    |    |    |    |       |     |
|           | 60 | CLAYSTONE as above   |       |    |    |    |    |       |     |













GAS AND FUEL EXPLORATION N.L.

SHOWS

| WELL: BOGGY CREEK #1 |    | DATE: 28/12/91  | GEOLOGIST: V. AKBARI | PAGE: 12 OF 29 | GAS   |    |    |    | FLUOR |      |     |
|----------------------|----|---|----------------------|----------------|-------|----|----|----|-------|------|-----|
| DEPTH (m)            | %  | SAMPLE DESCRIPTION  |                      |                | TOTAL | C1 | C2 | C3 | C4    | NAT. | CUT |
| 1220 - 1225          | 50 | SANDSTONE as from 1165 - 1175   |                      |                | Nil   | -  | -  | -  | -     | -    | -   |
|                      | 50 | CLAYSTONE " " - "   |                      |                |       |    |    |    |       |      |     |
| 1225 - 1230          | 30 | CLAYSTONE " " - "   |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      | 70 | SANDSTONE " " - "   |                      |                |       |    |    |    |       |      |     |
| 1230 - 1235          | 60 | SANDSTONE " " - "   |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      | 40 | CLAYSTONE " " - "   |                      |                |       |    |    |    |       |      |     |
| 1235 - 1240          | 70 | CLAYSTONE " " - "   |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      | 30 | SANDSTONE " " - "   |                      |                |       |    |    |    |       |      |     |
| 1240 - 1245          | 70 | SANDSTONE, off white, greyish fine-medium, dom. f., poorly -<br>mod. sorting, A-SA, dom. A, Qtz, rare lithics, hard-mod.<br>hard, well cemented with calc. cement, no visual porosity |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      | 30 | CLAYSTONE, dark grey-brownish, silty carb, soft & dispersive  |                      |                |       |    |    |    |       |      |     |
| 1245 - 1250          | 80 | CLAYSTONE as from 1240 - 1245   |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      | 20 | SANDSTONE " " - "   |                      |                |       |    |    |    |       |      |     |
| 1250 - 1260          | 70 | SANDSTONE, off white, - colorless, translucent, v.f.-c,<br>dom. c, poorly sorted, SA-SR, dom. SR Qtz, rare pyrite rare<br>lithics, unconsolidated good intergranular porosity         |                      |                | "     | -  | -  | -  | -     | -    | -   |
|                      |    |   |                      |                |       |    |    |    |       |      |     |
|                      |    |   |                      |                |       |    |    |    |       |      |     |





SHOWS

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| DEPTH (m)   | %   | SAMPLE DESCRIPTION   | GAS   |    |    |    | FLUOR |      |     |
|-------------|-----|--|-------|----|----|----|-------|------|-----|
|             |     |  | TOTAL | C1 | C2 | C3 | C4    | NAT. | CUT |
| 1350 - 1360 | 90  | CLAYSTONE, dark grey-brownish, silty, carbonaceous, soft, dispersive   | Nil   | -  | -  | -  | -     | -    | -   |
|             | 10  | SANDSTONE colorless - translucent, f.-c. dom. medium grained poorly sorted, A-SA, dom. SA Qtz, unconsolidated                                      |       |    |    |    |       |      |     |
|             |     | good intergranular porosity  |       |    |    |    |       |      |     |
| 1360 - 1365 | 80  | SILTY CLAYSTONE as from 1350 - 1360  | "     | -  | -  | -  | -     | -    | -   |
|             | 20  | SANDSTONE " " " - "  |       |    |    |    |       |      |     |
| 1365 - 1370 | 60  | SILTY CLAYSTONE " " " - "  | "     | -  | -  | -  | -     | -    | -   |
|             | 40  | SANDSTONE, light greyish-brown, v.f.-f., dom. f., well sorted, SA-SR, dom. SR Qtz, rare lithics hard-firm, well calc. cemented, no visual porosity |       |    |    |    |       |      |     |
| 1370 - 1380 | 10  | SANDSTONE as from 1365 - 1370  | "     | -  | -  | -  | -     | -    | -   |
|             | 90  | CLAYSTONE " " " - "  |       |    |    |    |       |      |     |
| 1380 - 1385 | 100 | CLAYSTONE " " " - "  | "     | -  | -  | -  | -     | -    | -   |
| 1385 - 1390 | 60  | CLAYSTONE " " " - "  | "     | -  | -  | -  | -     | -    | -   |
|             | 40  | SANDSTONE, off white-translucent, f.-vc., dom. medium, poorly sorted, SA-SR, dom. SR. Qtz, rare colored lithics,                                   |       |    |    |    |       |      |     |













WELL: BOGGY CREEK #1 DATE: 03/01/92 GEOLOGIST: A. TABASSI PAGE: 22 OF 29

SHOWS

| DEPTH (m)   | %   | SAMPLE DESCRIPTION  | GAS   |       |     |    |    | FLUOR |     |  |
|-------------|-----|---|-------|-------|-----|----|----|-------|-----|--|
|             |     |   | TOTAL | C1    | C2  | C3 | C4 | NAT.  | CUT |  |
| 1700 - 1702 | 100 | SILTSTONE as above  |       |       |     |    |    |       |     |  |
| 1702 - 1705 | 100 | SANDSTONE, lt. grey to lt. brn grey, friable, mod hard in part, vf.-c., dom. med, SA-SR, poorly sorted quartz, com. white arg. mtx, mod calc. cmt, tr dolomite and silica cmt, occ. silt. lam, com. black coally particle, poor-fair vis $\emptyset$ no fluor.    | 5.3   | 940   | 35  | 12 | TR |       |     |  |
| 1705 - 1710 | 80  | SANDSTONE as above dom. med, abundant arg. mtx, poor vis. $\emptyset$   | 33    | 6100  | 180 | 45 | 18 |       |     |  |
| 1710 - 1715 | 20  | SILTSTONE as above grading into Claystone in part   | 29    | 5300  | 140 | 35 | 12 |       |     |  |
| 1715 - 1720 | 90  | SANDSTONE as above  | 28    | 5200  | 140 | 30 | 9  |       |     |  |
| 1720 - 1725 | 80  | SANDSTONE, lt-med. grey, friable, occ firm, fine, SA-SR well sorted qtz, abundant off white arg. (Kaolinitic) matrix, com. non-dispersive Kaolinite grains, trace lithics, rare altered felds (?) rare coally particles, fair-poor vis $\emptyset$ interbd. with; | 62    | 11718 | 268 | 72 | 25 |       |     |  |







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SHOWS

GAS

FLUOR

| DEPTH (m)   | %  | SAMPLE DESCRIPTION  | TOTAL | GAS  |     |    |    | FLUOR |     |
|-------------|----|---|-------|------|-----|----|----|-------|-----|
|             |    |   |       | C1   | C2  | C3 | C4 | NAT.  | CUT |
|             | 80 | SILTY CLAYSTONE, lt. grey to lt. green grey, med. grey in part, disp. in part very arenaceous, com. multi-col.    |       |      |     |    |    |       |     |
|             |    | volcanolithics, sub-fis in part, tr. carb. det.   |       |      |     |    |    |       |     |
| 1795 - 1800 | 30 | SANDSTONE as above dom. med, com. disp. arg. mtx, fair $\phi$   | 23    | 4158 | 160 | 60 | 15 |       |     |
|             | 70 | SILTY CLAYSTONE as above  |       |      |     |    |    |       |     |
| 1800 - 1805 | 30 | SANDSTONE as per 1795 - 1800  | 11    | 1984 | 90  | 18 | 3  |       |     |
|             | 70 | SILTY CLAYSTONE as above  |       |      |     |    |    |       |     |
| 1805 - 1810 | 30 | SANDSTONE as per 1795 - 1800  | 22    | 4101 | 122 | 29 | 16 |       |     |
|             | 70 | SILTY CLAYSTONE as above  |       |      |     |    |    |       |     |
| 1810 - 1815 | 10 | SANDSTONE as per 1795 - 1800  | 5.6   | 1040 | 40  | 15 | 2  |       |     |
|             | 90 | CLAYSTONE, lt.-med. brn grey, lt. olive grey in part, soft-firm disp. in part, blocky in part, tr-com. multi-col. |       |      |     |    |    |       |     |
|             |    | lithic, rare f. carb. det,  |       |      |     |    |    |       |     |
| 1815 - 1820 | 10 | SANDSTONE as per 1795 - 1800  | 9.1   | 1420 | 51  | 27 | 5  |       |     |
|             | 90 | CLAYSTONE as above  |       |      |     |    |    |       |     |
| 1820 - 1825 | 25 | SANDSTONE as per 1795 - 1800  | 12    | 2490 | 46  | 24 | 4  |       |     |
|             | 75 | CLAYSTONE as above  |       |      |     |    |    |       |     |





