

Appendix B - 44

Sampling Details

Site 44 - Marshall Creek

Marshal Creek Sampling Record

Water Sampling Record

Sample: 44-W1 Coordinates: B2+30, 0+75 Date: September 06, 1996

Location: North end of west (large) pond.

Clarity: Clear Water Temperature: 10°C pH: 8.5

Comments: Silt bottom. Smell of hydrocarbons. Barrels, tire and lumber visible in pond. Grass and rhubarb visible along shallow edge. Close to 44-S4

Sample: 44-W2 Coordinates: B1+80, 0+50 Date: September 06, 1996

Location: South end of west (large) pond, near confluence with Dezadeash River.

Clarity: Clear Water Temperature: 10°C pH: 8.4

Comments: Silt bottom. Grasses on pond edge along with conifers and small vegetation. Close to 44-S10.

Sample: 44-W3 Coordinates: B2+00, 0+20 Date: September 06, 1996

Location: On Dezadeash, west of western (large) pond outlet. Water 6" deep with drop off 1 metre off shore.

Clarity: Clear Water Temperature: 10°C pH: 8.4

Comments: Bottom 80% silt, gravel and stone 20%.

Sample: 44-W4 Coordinates: B1+40, 0+80 Date: September 06, 1996

Location: On Dezadeash River, just prior to promontory that separates the marsh area and the main river channel. Adjacent to a small bank indentation that is filled with garbage.

Clarity: Moderate green/gray Water Temperature: 10°C pH: 8.2

Comments: The pH in the indentation was 8.2.

Sample: 44-W5 Coordinates: B0+90, 1+40 Date: September 06, 1996

Location: On marsh adjacent to the Dezadeash River.

Clarity: Clear Water Temperature: 9°C pH: 8.4

Comments: Shallow silt bottom with drop off into centre.

Sample: 44-W6

Coordinates: B2+30, 0+98

Date: September 06, 1996

Location: East (small) pond, north west side.

Clarity: Moderate

Water Temperature: 9°C

pH: 8.8

Comments: Taken amidst swamp grass.

Sample: 44-W7

Coordinates: B1+45, 0+90

Date: September 06, 1996

Location: In Test Pit # 2 (44-TP2).

Comments: Taken at same depth as 44-S7.

Sample: 44-W8

Coordinates: B2+20, 1+06

Date: September 06, 1996

Location: East (small) pond, north west side.

Comments: Taken in the middle of the pond.

Sample: 44-W9

Coordinates: B2+20, 0+95

Date: September 06, 1996

Location: East (small) pond, north west side.

Comments: Taken in the middle of the pond.

Test Pit Sampling Record

Sample: 44-TP1

Coordinates: B1+75, 0+75

Date: September 06, 1996

Location: 4 metres south of the west (large) pond, 4 metres away from the Dezadeash River.

Ground Description: Gravel from the surface to the 1.75 metre depth, where groundwater was found.

Sample Profile: See 44-S6

Sample: 44-TP2

Coordinates: B1+45, 0+96

Date: September 06, 1996

Location: Equidistant from the west (large) pond and the marsh, 4 metres away from the Dezadeash River.

Ground Description: Gravel from the surface to the 1.75 metre depth.

Sample Profile: See 44-S7 and 44-W7.

Soil Sampling Record

Sample: 44-S1 Coordinates: B2+40, 0+60 Date: September 06, 1996

Location: 5 metres north of west (large) pond.

Sample Profile: Light grey, fine soil/gravel. Sample depth 1.5 feet.

Sample: 44-S2 Coordinates: B2+35, 0+45 Date: September 06, 1996

Location: 5 metres north of west (large) pond.

Sample Profile: 10 cm organic layer. Wet grey fine clay. Hitting solid (possibly rock) at 6".

Comment: 2nd auger hole. 80% stones and 20% grey fine clay. Water seeping in at 1.5 foot level.

Sample: 44-S3 Coordinates: B1+65, 0+50 Date: September 06, 1996

Location: On south side of channel joining west (large) pond and Dezadeash pond. Near 44-W2.

Sample Profile: Fine grey clay - wet.

Sample: 44-S4 Coordinates: B2+35, 0+75 Date: September 06, 1996

Location: North end of west (large) pond. Near 44-W2.

Ground Description: Grasses growing, smell of hydrocarbons.

Sample Profile: Sample 6". Silt grey clay first 2". Sand clay down to 6".

Sample: 44-S5 Coordinates: B1+80, 0+65 Date: September 07, 1996

Location: Between 44-TP1 and west (large) pond.

Ground Description: Grass, some debris.

Sample Profile: Sample depth 8 inches. Wet gravel, black fine silt.

Sample: 44-S6 Coordinates: B1+75, 0+70 Date: September 07, 1996

Location: 4 metres south of the west (large) pond, 4 metres away from the Dezadeash River.

Ground Description: Gravel from the surface to the 1.75 metre depth, where groundwater was found.

Sample Profile: Bottom of 44-TP1

Sample: 44-S7 Coordinates: B1+45,0+90 Date: September 07, 1996

Location: Equidistant from the west (large) pond and the marsh, 4 metres away from the Dezadeash River.

Ground Description: Gravel from the surface to the 1.75 metre depth.

Sample Profile: See 44-W7. Bottom of 44-TP2. Mostly gravel.

Sample: 44-S8 Coordinates: B2+15, 0+90 Date: September 07, 1996

Location: Taken from small (east) pond on the west side, at the end of the beaver trail connecting both ponds.

Sample Profile: Water saturated sample taken at water level: fine silt, pebbles, sand, grey in colour. 5% of the sample was rock. This was discarded. Sample depth was 0 - 6 inches.

Sample: 44-S9 Coordinates: B2+55, 0+98 Date: September 07, 1996

Location: Taken from small (east) pond on the north side on the bank. Bank height was approx. 2 inches above the pond water level.

Sample Profile: 1" active layer, sample silty gravel, taken from 2-8" depth.

Sample: 44-S10 Coordinates: B1+75, 0+50 Date: September 07, 1996

Location: Confluence between the large (west) pond and the Dezadeash River. Taken from the NE side of the channel, 4 inches below the water surface and 0.5 meters from the pond bank.

Sample Profile: Very fine grey silt.

Comment: The first sample attempt was taken 0.25 metres further towards the river. The sample contained a piece of glass and an old spring. This sample was discarded.

Sample: 44-S11 Coordinates: B0+90, 1+00 Date: September 07, 1996

Location: Promontory between the main river channel and the marsh downstream from the beaver dam. Sample taken on the marsh side.

Sample Profile: Taken from 4-10 inches depth. Very fine silt/grey clay, very moist, 5% trace of plant matter.

Comment: Stick used to remove sample from auger, stick broke into sample. 50% of sample discarded due to small size of sample bag.

Sample: 44-S12

Coordinates: B1+40, 0+90

Date: September 07, 1996

Location: Adjacent to 39-TP2.

Sample Profile: Gravel/grey sand mix. 60% of sample was gravel and it was not discarded. Sample not moist.

Comment: Sample fell out of auger into sample hole. Removed and bagged by hand. 5 mm moss covering sample site, along with scattered debris.

Sample: 44-S13

Coordinates: B1+20, 1+25

Date: September 07, 1996

Location: Mound of dry grey sand within poplar forest.

Ground Description: Mound of dry grey sand 2.5 metres in diameter. Poplar trees growing around the edge, 40 cm to 1 m. in height. These plants have white spots and brown spots on their leaves.

Sample Profile: Depth taken was 8 inches to 14 inches. Dry grey sand with 5% trace of plant material.

Sample: 44-S14

Coordinates: B1+25, 1+75

Date: September 07, 1996

Location: Mound of dry grey sand within poplar forest, about 50 metres further in than 44-S13

Adjacent Vegetation: Tall poplars, 8 metres high but very little underbrush.

Ground Description: Metal debris, scattered. Includes cans, bottles, small car parts.

Sample Profile: 1 inch surface layer of dead leaves. 2 inches - 6 inches grey silty clay.

Sample: 44-S15

Coordinates: B0+75, 2+25

Date: September 07, 1996

Location: Mound of dry grey sand within poplar forest, about 50 metres away from the beaver pond marsh.

Ground Description: No vegetation on mound. Mound diameter is 2 metres, with lots of buried metal - cans, wheel rims etc.

Sample Profile: Grey silty clay, 2" -8" sample depth.

Comment: The mound was dug into with a shovel. Buried can and a broken concrete block were found.

Sample: 44-S16

Coordinates: B1+49, 1+45

Date: September 07, 1996

Location: Depression with lots of surface debris. Close to upside down abandoned car.

Adjacent Vegetation:

Ground Description: Depression 30 cm deep and 2 metres in diameter. Extensive small garbage: oil + pop cans, glass, small miscellaneous: filing cabinet.

Sample Profile: 0" to 4 " composed of debris and leaves cleared by shovel. 4" to 9" grey silty clay.

Appendix C - 30

Field Laboratory Data

Site 30 - Burwash Landing

PETROCHEM: TOTAL HYDROCARBON (RESPONSE FACTOR 5)

| SITE | DATE | TIME | TEMP | SOIL / WATER | SAMPLE CODE | READING (ppm) | COMMENT |
|------|----------|------|------|--------------|-------------|---------------|--|
| 30 | 5-Sep-96 | 7:00 | 9.8 | soil | 30-1 | 99 (658) | * temperature calibration off, over time |
| 30 | 5-Sep-96 | 7:00 | 9.8 | soil | 30-2 | 440 (371) | * temperature calibration off, over time |
| 30 | 5-Sep-96 | 7:00 | 9.8 | soil | 30-3 | 256 | * temperature calibration off, over time |
| 30 | 5-Sep-96 | 7:00 | 9.8 | soil | 30-4 | 143 | * temperature calibration off, over time |
| 30 | 5-Sep-96 | 7:00 | 9.8 | soil | 30-5 | 291 | * temperature calibration off, over time |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-6 | 212 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-7 | 475 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-8 | 323 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-9 | 429 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-10 | 2 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-11 | 8 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-12 | 155 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-13 | 23 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-14 | 78 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-15 | 644 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-16 | 72 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-17 | EEEE | * sample concentration higher than test range |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-1 | 564 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-2 | 318 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-3 | 234 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-4 | 154 | |
| 30 | 5-Sep-96 | 7:30 | 9.8 | soil | 30-5 | 317 | |
| 30 | 7-Sep-96 | 7:00 | 8 | soil | 30-BL | 11 | *background level @ site 30 |
| 30 | 7-Sep-96 | 7:00 | 8 | soil | 30-19 | 198 | |
| 30 | 7-Sep-96 | 7:00 | 8 | soil | 30-24 | 37 | |
| 30 | 7-Sep-96 | 7:00 | 8 | soil | 30-21 | 0 | |
| 30 | 7-Sep-96 | 7:00 | 8 | soil | 30-23 | 114 | |
| 30 | 8-Sep-96 | 9:00 | 16.1 | soil | 30-17 | EEEE | *1g sample used, sample concentration too high |
| 30 | 8-Sep-96 | 9:00 | 16.1 | soil | 30-23 | 112 | |

DTECH ANALYSIS AT SITE 30: POLYCYCLIC AROMATIC HYDROCARBONS (PAH's)

| DATE | TEMP | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | *concentration exceeds CCME |
|-----------|------|--------------|-------------|-------------|-------------|--------------|--|
| 06-Sep-96 | 8 | soil | 30-1 | 460 | LO | < 0.6 ppm | |
| 06-Sep-96 | 8 | soil | 30-7 | 384 | LO | < 0.6 ppm | |
| 06-Sep-96 | 8 | soil | 30-15 | 434 | LO | < 0.6 ppm | |
| 06-Sep-96 | 8 | soil | 30-17 | 462 | 79% | > 25 ppm | * very high concentration, exceeds BCMOE |
| 07-Sep-96 | 7 | water | 30-w1 | 410 | 1% | 8 ppb | * concentration approaches CCME |
| 07-Sep-96 | 7 | water | 30-w2 | 394 | 2% | 10.4 ppb | *concentration may exceed CCME |
| 08-Sep-96 | 16.2 | soil | 30-23 | 346 | 54% | 8 ppm | *concentration may exceed CCME |

DTECH ANNALYSIS AT SITE 30: POLYCHLORINATED BIPHENYLS (PCB's)

| DATE | TEMP (DEG C) | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | COMMENT |
|-----------|--------------|--------------|-------------|-------------|-------------|--------------|-----------------------------|
| 06-Sep-96 | 12 | soil | 30-2 | 462 | LO | < 0.5 ppm | |
| 06-Sep-96 | 12 | soil | 30-5 | 338 | LO | < 0.5 ppm | |
| 06-Sep-96 | 12 | soil | 30-8 | 339 | LO | < 0.5 ppm | |
| 06-Sep-96 | 12 | soil | 30-17 | 298 | 13% | 0.65 ppm | *concentration exceeds CCME |
| 08-Sep-96 | 18.8 | soil | 30-23 | 360 | LO | < 0.5 ppm | |
| 08-Sep-96 | 18.8 | soil | 30-6 | 339 | LO | < 0.5 ppm | |
| 08-Sep-96 | 18.8 | soil | 30-19 | 343 | LO | < 0.5 ppm | |
| 08-Sep-96 | 15.7 | soil | 30-15 | 314 | LO | < 0.5 ppm | |

Appendix C - 39

Field Laboratory Data

Site 39 - Kathleen River Crossing

PETROCHEM : TOTAL HYDROCARBON (RESPONSE FACTOR 5)

| SITE | DATE | TIME | TEMP | SOIL / WATER | SAMPLE CODE | READING (ppm) | COMMENT |
|------|----------|------|------|-----------------|-------------|------------------|------------------------|
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-1 | 0 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-2 | 593 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-3 | 1893 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-5 | 7 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-6 | | *39-6 too much organic |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-8 | 0 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-9 | 232 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-10 | 14 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-11 | 1081 | |
| 39 | 7-Sep-96 | 5:45 | 23 | soil | 39-1 | 9 | |
| 39 | 7-Sep-96 | 4:30 | 23 | soil | 39-4 | 363 | |
| 39 | 7-Sep-96 | 5:45 | 23 | soil | 39-7 | 224 | |
| 39 | 8-Sep-96 | 9:00 | 16.1 | soil | 39-3 | 875 | |

DTECH ANALYSIS : POLYCYCLIC AROMATIC HYDROCARBONS (PAH's)

| DATE | TEMP | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | COMMENT |
|-----------|------|--------------|-------------|-------------|-------------|--------------|--------------------------------|
| 08-Sep-96 | 16.2 | soil | 39-2 | 363 | 2% | 0.64 ppm | *concentration exceeds CCME |
| 08-Sep-96 | 16.2 | soil | 39-3 | 377 | LO | < 0.6 ppm | *concentration may exceed CCME |
| 08-Sep-96 | 16.2 | soil | 39-10 | 389 | 3% | 0.66 ppm | *concentration may exceed CCME |

DTECH ANALYSIS : POLYCHLORINATED BIPHENYLS (PCB's)

| DATE | TEMP (DEG C) | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | COMMENT |
|-----------|--------------|--------------|-------------|-------------|-------------|--------------|---------|
| 08-Sep-96 | 18.8 | soil | 39-2 | 340 | LO | < 0.5 ppm | |
| 08-Sep-96 | 16.5 | soil | 39-3 | 343 | LO | < 0.5 ppm | |
| 08-Sep-96 | 16.5 | soil | 39-11 | 344 | LO | < 0.5 ppm | |

Appendix C - 44

Field Laboratory Data

Site 44 - Marshall Creek

PETROCHEM : TOTAL HYDROCARBON (RESPONSE FACTOR 5)

| SITE | DATE | TIME | TEMP | SOIL / WATER | SAMPLE CODE | READING (ppm) | COMMENT |
|------|----------|------|------|-----------------|-------------|------------------|---------|
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-1 | 285 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-2 | 109 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-3 | 35 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-4 | 12 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-5 | 288 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-6 | 0 | |
| 44 | 7-Sep-96 | 5:45 | 23 | soil | 44-7 | 0 | |
| 44 | 7-Sep-96 | 7:00 | 8 | soil | 44-8 | 117 | |
| 44 | 7-Sep-96 | 7:00 | 8 | soil | 44-9 | 98 | |
| 44 | 7-Sep-96 | 7:00 | 8 | soil | 44-10 | 108 | |
| 44 | 7-Sep-96 | 7:00 | 8 | soil | 44-11 | 61 | |
| 44 | 7-Sep-96 | 7:00 | 8 | soil | 44-12 | 18 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-13 | 230 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-14 | 107 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-15 | 185 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-16 | 63 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-17 | 69 | |
| 44 | 8-Sep-96 | 9:00 | 16.1 | soil | 44-5 | 386 | |

DTECH ANALYSIS : POLYCYCLIC AROMATIC HYDROCARBONS (PAH's)

| DATE | TEMP | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | COMMENT |
|-----------|------|--------------|-------------|-------------|-------------|--------------|--------------------------------|
| 07-Sep-96 | 7 | water | 44-w8 | 394 | 3% | 12.6 ppb | *concentration exceeds CCME |
| 07-Sep-96 | 7 | water | 44-w9 | 380 | LO | <8 ppb | *concentration may exceed CCME |
| 08-Sep-96 | 16.2 | soil | 44-5 | 398 | LO | < 0.6 ppm | |
| 08-Sep-96 | 16.2 | soil | 44-10 | 400 | LO | < 0.6 ppm | |
| 08-Sep-96 | 16.2 | soil | 44-8 | 398 | LO | < 0.6 ppm | |
| 08-Sep-96 | 16.2 | soil | 44-13 | 406 | 1% | 0.62 | *concentration may exceed CCME |

DTECH ANALYSIS: POLYCHLORINATED BIPHENYLS (PCB's)

| DATE | TEMP (DEG C) | SOIL / WATER | SAMPLE CODE | REFER- ENCE | READING (%) | ACTUAL (ppm) | COMMENT |
|-----------|--------------|--------------|-------------|-------------|-------------|--------------|---------|
| 08-Sep-96 | 16.5 | soil | 44-4 | 335 | LO | < 0.5 ppm | |
| 08-Sep-96 | 16.5 | soil | 44-16 | 356 | LO | < 0.5 ppm | |
| 08-Sep-96 | 15.7 | soil | 44-14 | 342 | LO | < 0.5 ppm | |
| 08-Sep-96 | 15.7 | soil | 44-15 | 337 | LO | < 0.5 ppm | |
| 08-Sep-96 | 15.7 | soil | 44-2 | 331 | LO | < 0.5 ppm | |