



## **GEOLOGICAL SURVEY OF CANADA**

### **OPEN FILE 5320**

---

# **Geochemistry and physical properties of till in northernmost Manitoba (NTS 54E,F,K,L,M; 64I,J,K,N,O,P)**

---

L.A. Dredge and S.J. Pehrsson

2006



Natural Resources  
Canada

Ressources naturelles  
Canada

Canada

GEOLOGICAL SURVEY OF CANADA

OPEN FILE 5320

Geochemistry and physical properties of till in  
northernmost Manitoba (NTS 54E,F,K,L,M;  
64I,J,K,N,O,P)

L.A. Dredge and S.J. Pehrsson

ldredge@nrcan.gc.ca  
pehrsson@nrcan.gc.ca

2006

©Her Majesty the Queen in Right of Canada 2006  
Available from  
Geological Survey of Canada  
601 Booth Street  
Ottawa, Ontario K1A 0E8

Dredge, L.A., and Pehrsson, S.J.  
2006: Geochemistry and physical properties of till in northernmost Manitoba  
Geological Survey of Canada, Open File 5320.

A contribution to the Flin Flon Project (TGI-III)  
Open files are products that have not gone through the GSC formal publication process.



## TABLE OF CONTENTS

ABSTRACT.....	1
INTRODUCTION.....	1
NATURE OF THE AREA.....	2
BEDROCK GEOLOGY.....	2
QUATERNARY GEOLOGY.....	8
METHODS.....	10
ELEMENT CONCENTRATIONS.....	12
REGIONAL DISTRIBUTIONS.....	16
ACKNOWLEDGEMENTS.....	32
REFERENCES.....	32
FIGURES	
1. Location of the study area. a) General location; b) Place names.....	3
2. Bedrock geology (Manitoba Geological Survey, 1979 and 2006).....	5
3. Ice flow during the Wisconsin Glaciation.....	9
4. Location of sample sites.....	11
5. Frequency histograms for each element.....	13
6. Distribution of nickel.....	17
7. Distribution of chromium.....	18
8. Distribution of cobalt.....	19
9. Distribution of copper.....	21
10. Distribution of zinc.....	23
11. Distribution of lead.....	24
12. Distribution of uranium.....	25
13. Distribution of molybdenum.....	26
14. Distribution of manganese.....	28
15. Distribution of arsenic.....	29
16. Gold in the Seal River area.....	30
17. Distribution of iron.....	31
TABLES	
1. Descriptive statistics.....	15
APPENDICES	
A1. Site locations.....	36
A2. Physical properties of samples.....	64
A3. Lithologic data for tills.....	96
A4. Till geochemistry.....	123

## **Abstract**

Archived samples of surface tills in northernmost Manitoba have been analysed for eleven elements (As, Co, Cu, Cr, Fe, Mo, Mn, Ni, Pb, U, Zn) in order to establish regional background geochemistry. The report interprets the geographic distribution of elements and indicates sites of interest for understanding the geology of the area or for mineral exploration. Matrix carbonate contents and clast lithologies of the till show the limits of two major ice domains and aid the interpretation of ice flow patterns. Water contents and Atterberg limits of samples collected are also included in the report.

## **Introduction**

Four hundred and twenty samples from the uppermost till sheet in northern Manitoba, collected over an area of about 125 000 km<sup>2</sup>, have been analysed for a suite of eleven elements. The results provide estimates of background values characteristic of the region, and indicate a few areas where more detailed geochemical sampling may be of interest for understanding the geologic architecture of the area, or for mineral exploration. Till sampling is important in this region because outcrop is scarce: extensive areas are drift-covered with till, postglacial lake and marine sediments, and peat.

This report releases archival till data collected during mapping projects in the 1970s and 1980s, and presents them in digital form, with location coordinates (Appendices 1-4). Carbonate and textural data, which assist in the interpretation of the geochemical results, are also presented here. Because no additional regional till sampling has been done for this area, we intend to re-analyse some of the archived till samples for a broader suite of elements, and will release the results as a separate report later. No additional data will be available for NTS 64 I, J and 54 M, however, because the archived samples are missing.

## **Nature of the area**

The area considered for this study lies in northernmost Manitoba, between latitudes 58° and 60° N (the Nunavut border) (Fig. 1). The land rises from Hudson Bay in the east to about 500m at the Saskatchewan border in the west. The eastern and southernmost parts of the area, which were covered by postglacial lakes and seas, form extensive, relatively flat areas, covered with organic deposits, chiefly peat bogs. The remaining area is a gently undulating landscape of till plains, rock outcrops and small lakes. The main rivers in the area are the Churchill River and its tributaries, Little Churchill and Little Beaver Rivers, which are deeply incised through glacial deposits into bedrock, the North and South Knife Rivers, and Seal River farther north. The southwestern part of the area lies within the boreal forest, in continuous and discontinuous permafrost, northern areas are characterized by open woodland and continuous permafrost, and the lowlands near Hudson Bay south of Churchill have continuous permafrost in extensive peatlands.

## **Bedrock geology**

Field mapping and interpretation of the bedrock geology at a regional 1:250 000 scale has been undertaken by David Schledewitz and colleagues at the Manitoba Geological Survey (Schledewitz, 1978, 1986; Schledewitz et al., 2000-2002; Manitoba Geological Survey 1979 and 2006). Recent, detailed revisions of the geology are available for local areas (e.g. Anderson et al., 2005), but the earlier work is the only regional survey to date, and forms the basis of this report.

The area lies within the Archean-Paleoproterozoic Hearne domain of the Churchill province of the Canadian Shield, and the Paleozoic Hudson Platform. Although largely undated, granitoid complexes of presumed Archean age in the Hearne consist of granodiorite and related gneiss (Fig. 2 unit 19a) into which small gabbro bodies (unit 29a) have been intruded, and a hypersthene-bearing granite body east of Nejanilini Lake. Preliminary U-Pb dating of similar granite in southern Nunavut has yielded an age of ca. 2.5 Ga (van Breeman, pers. comm.).



Figure 1a. Location of the study area. General location

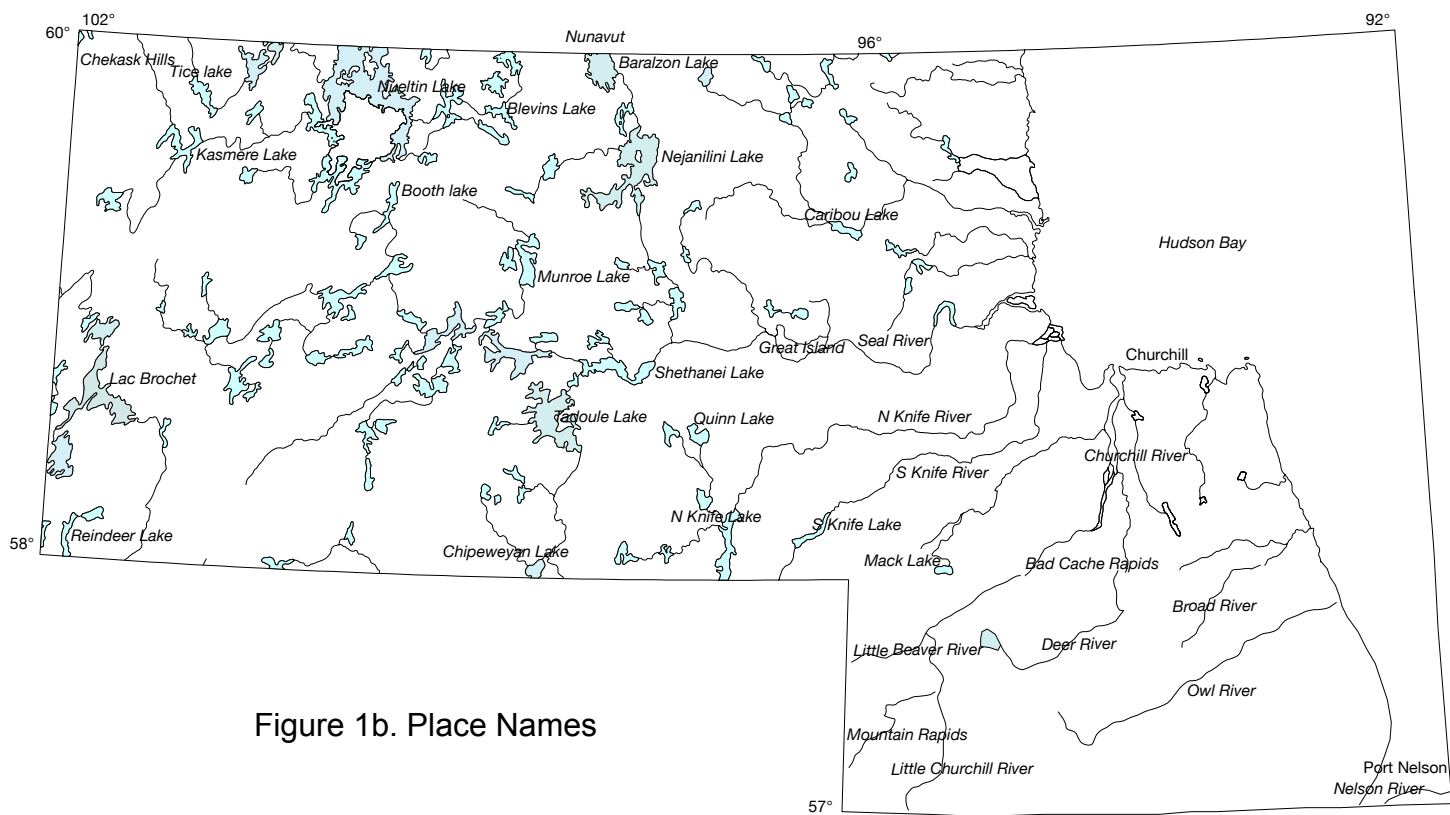


Figure 1b. Place Names



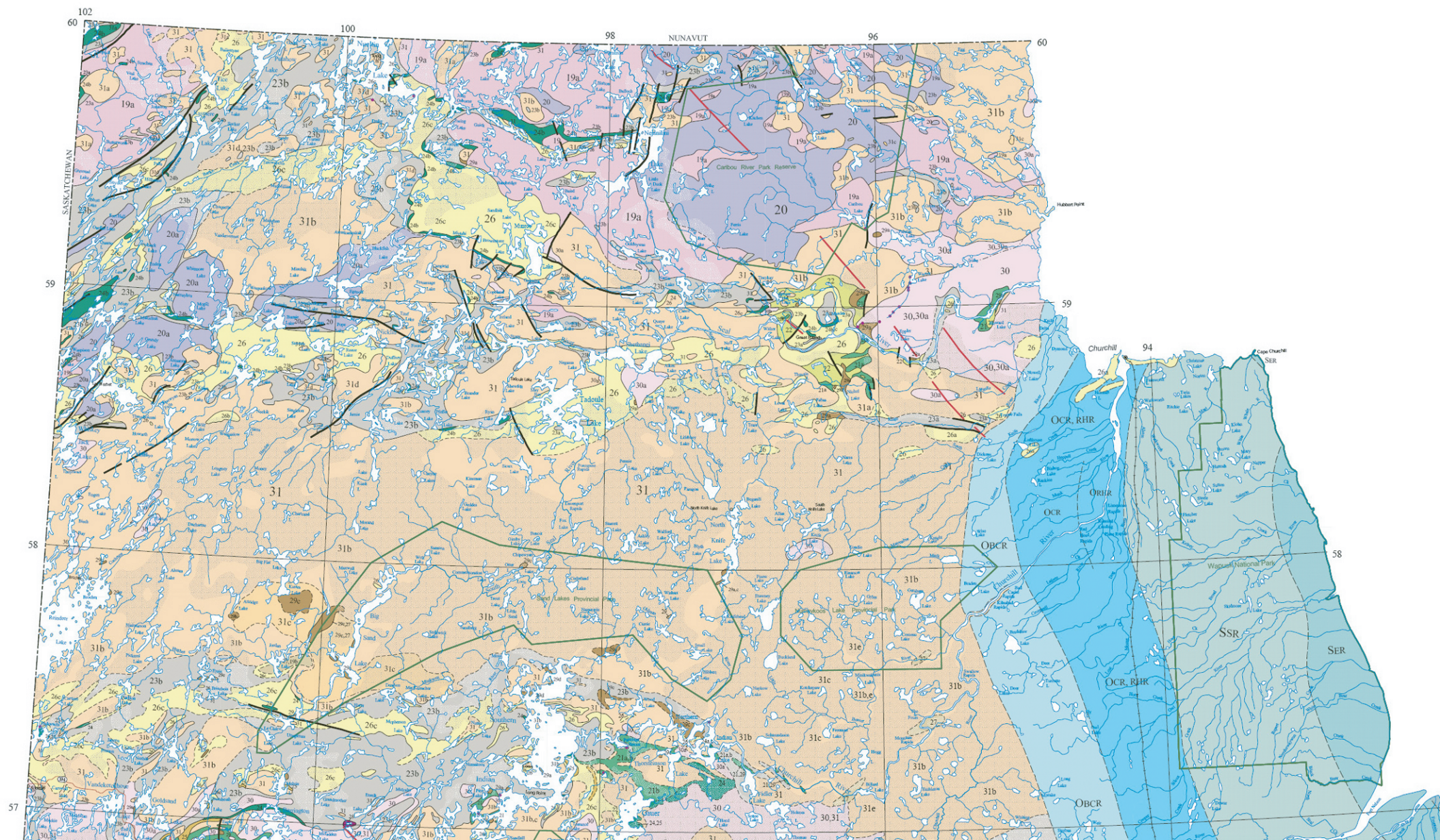


Figure 2. Bedrock geology (Manitoba Geological Survey, 1979 and 2006)



PHANEROZOIC

Cenozoic	
Tertiary	
Paleocene	
T <sub>TM</sub>	Turtle Mountain Formation (~158m): Goodlands Member: bentonitic carbonaceous sand, silt and clay; thin lignite beds. Peace Garden Member: grey silty shale and minor sand.
Mesozoic	
Cretaceous	
Upper Cretaceous	
K <sub>B</sub>	Boissevain Formation (30-42m): greenish-grey sandstone; minor shale, in part kaolinitic.
K <sub>RM</sub> <div><div>c</div><div>o</div><div>m</div></div>	Riding Mountain Formation (285-340m): Coulter Member (c): soft grey bentonitic clayey siltstone and shale. Odanah Member (o): hard grey siliceous shale. Millwood Member (m): soft greenish bentonitic shale.
K <sub>VR</sub>	Vermilion River Formation (50-190m): Morden Member: black carbonaceous shale. Boyne Member: grey calcareous speckled shale and carbonaceous shale. Pembina Member: thinly interbedded carbonaceous shale, bentonite, and bentonitic shale.
K <sub>F</sub>	Favel Formation (15-45m): calcareous speckled shale (Second Specks); minor limestone, bentonite and oil shale.
Upper and Lower Cretaceous	
K <sub>A</sub>	Ashville Formation (55-115m): dark grey carbonaceous shale, in part bituminous; minor sand, silt and bentonite. (Local occurrence of thick bar-type sandstone in subsurface: Ashville or Viking Sand).
Lower Cretaceous	
K <sub>SR</sub>	Swan River Formation (0-105m): sandstone, in places glauconitic; kaolinitic shale, minor lignite. May include some non-marine Jurassic beds in the north. Also includes channel &/or karst fill within Palaeozoic outcrop belt. Locally missing from outcrop sequence due to non-deposition.
Jurassic	
J	Amaranth Formation: red argillaceous dolomitic siltstone and sandstone overlain by gypsum or anhydrite. Reston Formation: limestone and dolomite, shale interbeds. Melita Formation: fine-grained sandstone, variegated shale, minor limestone. Total Jurassic thickness 0-280m.
Paleozoic	
Permian (?)	
P	St. Martin Complex (0-300m): carbonate breccia (fragments Ordovician to Devonian), polymictic breccia, granitic micro-breccia, trachyandesite. Comprises crater fill in crypto-explosion (meteorite impact?) structure.
Devonian	
Upper and Middle Devonian	
D <sub>SR</sub>	Souris River Formation (65-95m): sequence of basal red shale (First Red Beds), argillaceous micrite, high-Ca micritic limestone, and upper dolomite in northern area; complex facies of limestone and dolomite to the south.
Middle Devonian	
D <sub>DB</sub>	Dawson Bay Formation (45-60m): sequence of basal red shale (Second Red Beds); bituminous dolomite grading upward to micritic limestone to brachiopod biomicrite (high-Ca); red to grey fossiliferous calcareous shale; highly fossiliferous coral stromatoporoid limestone (high-Ca), locally dolomitized.
D <sub>W</sub> / D <sub>EP</sub>	Elm Point Formation: high-Ca limestone biomicrite (platform facies). Winnipegosis Formation: Lower Member: dolomitized platform facies (grades laterally to D <sub>EP</sub> ). Upper Member: thin inter-reef bituminous laminates or thick reefal carbonates (D <sub>W</sub> ). Total thickness 12-105m.
D <sub>A</sub>	Ashern Formation (5-12m): dolomitic shale and argillaceous dolomite, red to greenish grey; local basal breccia.

Silurian	
S	Interlake Group (50-105m): Fisher Branch (FB), Inwood (I), Moose Lk (ML), Atikameg (A), East Arm (EA) and Cedar Lake (CL) formations: micritic, fossiliferous, stromatolitic and biostromal dolomites with several sandy/argillaceous marker beds.

Ordovician (and Lower Silurian)	
O <sub>s</sub>	Stonewall Formation (10-20m): dolomite, fine grained, sparsely fossiliferous, in part conglomeratic. Medial sandy argillaceous marker may define Ordovician-Silurian boundary.
Upper Ordovician	
O <sub>SM</sub> <div><div>gw</div><div>sp</div></div>	Stony Mountain Formation (35-45m): Gunn and Penitentiary members (gp): calcareous shale, fossiliferous limetone and argillaceous dolomite. Gunton and William members (gw): nodular dolomite and sandy argillaceous dolomite.
O <sub>RR</sub> <div><div>fg</div><div>s</div><div>ch</div><div>ds</div></div>	Red River Formation (45-150m): Dog Head Member (dh): mottled dolomitic limestone; passes northward to dolomite. Cat Head Member (ch): cherty dolomite; passes southward to mottled limestone. Selkirk Member (s): mottled dolomitic limestone and limestone; passes northward to dolomite Fort Garry Member (fg): massive to laminated dolomite; minor argillaceous dolomite and high-Ca limestone; in part cherty.
O <sub>W</sub>	Winnipeg Formation (0-60m): basal sandstone overlain by complex sequence of quartzose sandstone and shale.

HUDSON BAY BASIN AREA

D <sub>MR</sub>	Moose River Formation (~50m): fine-to med-grained dolomite limestone, argillite limestone and argillite dolomite; minor anhydrite, chert, red shale.
D <sub>K</sub>	Kwataboahegan Formation (~45m): limestone, med-to dark-brown, fossiliferous, bituminous, partly reefal; minor dolomite.
Lower Devonian	
D <sub>STR</sub>	Stooping River Formation (~80m): aphanitic to finely crystalline limestone, sparsely fossiliferous; minor argillite limestone and dolomite.
D <sub>KR</sub>	Kenogami River Formation (~10m): Upper Member (u): finely crystalline to aphanitic limestone; thin interbeds argillite silty sandy dolomite.
Silurian	
S <sub>KR</sub>	Kenogami River Formation (~200m): Lower Member (l): dolomite, slightly calcareous and argillite; some limestone and dolomite limestone; minor anhydrite Middle Member (m): red-brown to green-grey calcareous argillite sandy siltstone and silty shale; minor sandstone; some gypsum.
S <sub>AT</sub>	Attawapiskat Formation (30-60m): limestone, crypto-crystalline to calcarenitic and oolitic, in part reefal, vuggy. Interfingers laterally with S <sub>KR</sub> .
S <sub>ER</sub>	Ekwam River Formation (~45m): limestone, skeletal calcarenites; in part argillaceous and dolomitic.
S <sub>SR</sub>	Seyern River Formation (~235m): limestone, dolomitic limestone and dolomite, very fine grained, fucoidal; in part algal bioclastic and pelletal; minor anhydrite and shale.
Ordovician (and Lower Silurian)	
O <sub>RHR</sub>	Red Head Rapids Formation (~25m): dolomite, thin-bedded microcrystalline; in part silty and argillaceous.
Upper Ordovician	
O <sub>CR</sub>	Churchill River Group (~145m): Caution Creek and Chasm Creek formations: limestone, slightly to moderately dolomitic and argillaceous, microcrystalline, variably bioclastic; minor shale, dolomite, chert and anhydrite.
O <sub>BCR</sub>	Bad Cache Rapids Group (~70m): Portage Chute Formation: thin basal sandstone-shale member; limestone, mottled, slightly dolomitic and argillaceous, variably fossiliferous; considerable nodular chert and siliceous limestone. Surprise Creek Formation: microcrystalline dolomite, slightly bioclastic, prominent bituminous lamination; some anhydrite and salt clasts.

SYMBOLS

	Geological boundary (defined or approximate)		Estimated limit of structural disturbance: Phanerozoic Lake St. Martin, Denbeigh (Denby) and Highrock Lake structures
	Geological boundary - Precambrian (gradational, inferred from aeromagnetic signature and trend)		Limit of Hudsonian tectonic overprint on the Superior Province (defined or approximate; inferred from aeromagnetic signature)
	Geological boundary - Phanerozoic (estimated; sub-surface projected to bedrock where thickness of overburden exceeds 15 metres; subcrop)		Superior Boundary Zone margins under Phanerozoic cover extrapolated from aeromagnetic trends, etc.
	Fault		Structure contour on Precambrian basement beneath Phanerozoic cover. Contour interval: 100m

PRECAMBRIAN

Proterozoic	
32	Diabase dykes (Mackenzie swarm), known, and interpreted from aeromagnetic anomalies.

CHURCHILL PROVINCE

Intrusive Rocks	
31	Granite, granodiorite and tonalite: (31a) fluorite granite; (31b) porphyritic granite and pegmatite; (31c) hypersthene-bearing porphyritic granite-monzonite; (31d) leucogranite-leucotonalite; (31e) hornblende granite-syenite.
30	Tonalite-granodiorite: (30a) tonalite-granodiorite gneiss; (30b) quartz-eye tonalite.
29	Mafic to intermediate rocks: (29a) gabbro; (29b) anorthositic gabbro; (29c) diorite; (29d) tonalite-diorite; (29e) hypersthene-bearing tonalite-diorite, enderbite.
28	Ultramafic rocks (28a) peridotite-pyroxenite; (28b) serpentinite; (28c) hornblende-hornblende peridotite and pyroxenite.
Metamorphic and Metasedimentary Rocks	
27	Migmatite, agmatite and gneiss complex.
26	Arkose-, arenite-, and quartzite-derived gneiss and migmatite (Sickle Group, Missi Group and Sickle Metamorphic Suite): (26a) orthoquartzite and minor conglomerate (includes Churchill quartzite and Great Island quartzite of possibly younger age); (26b) arkose, feldspathic wacke, conglomerate and quartzite; (26c) arkosic gneiss and migmatite, local arkosic wacke; (26d) felsic gneiss of unknown derivation.
25	Metaconglomerate with minor arkosic gneiss.
24	Amphibolite and mafic gneiss: (24a) calc-silicate gneiss and interlayered amphibolite; (24b) calc-silicate rocks, local quartzite and/or marble; (24c) iron formation.
23	Greywacke- and mudstone-derived gneiss and migmatite (Amisk Group and Wasekwan Group in part; Nokomis Group and Burntwood River Metamorphic Suite: (23a) greywacke, argillite, slate and metagreywacke, local minor grit and conglomerate; (23b) psammitic and semi-pelitic gneiss, pelitic schist and migmatite.
Metavolcanic Rocks (includes Amisk and Wasekwan Groups and Great Island volcanic rocks)	

22	Felsic metavolcanic rocks, flows and pyroclastic deposits: (22a) rhyolite; (22b) dacite.
21	Mafic and intermediate metavolcanic flows, pyroclastic deposits and associated metasediments; local ultramafic flows: (21a) andesite; (21b) basalt; (21c) ultramafic flows.

Archean and Inferred Archean	
20	Charnockite-mangerite and derived granitoid gneiss: (20a) remobilized granite and granitoid orthogneiss.
19	Granitoid complexes: (19a) grey, foliated granodiorite and granodioritic gneiss; (19b) enderbite and pyroxene-granulites and abundant local supracrustal rafts.

SUPERIOR PROVINCE AND SUPERIOR BOUNDARY ZONE

Proterozoic	
18	Granite, granodiorite: (18a) granodiorite with inclusions of unit (15).
17	Metasedimentary and mafic/ultramafic metavolcanic rocks, serpentinitized peridotite, serpentinite, pyroxenite and mafic/ultramafic differentiated intrusions of the Fox River belt and Ospwagan Group (17a) shale, dolomitic limestone, siltstone, sandstone, iron formation; (17b) basalt and komatiite; (17c) iron formation.
16	Amphibolite.
15	Layered migmatitic gneiss derived from units (4) to (9), aplite and pegmatite: (15a) transitional zone containing migmatitic gneiss and rocks of units (4) to (9).
14	Mafic/ultramafic and diabase dykes (Molson swarm), known, and interpreted from aeromagnetic anomalies.

Archean	
Late Intrusive Rocks	
13	Granite, minor granodiorite.
12	Granodiorite, minor tonalite and migmatite.
Late Metasedimentary and Metavolcanic Rocks (Oxford Lake Group, Island Lake Series, San Antonio Formation)	
11	Greywacke, conglomerate, arkose, arenite.
10	Mafic and felsic fragmental volcanic rocks, porphyritic mafic to felsic flows, derived sediments.
Metamorphosed Early Intrusive Rocks, Gneisses and Migmatites	
9	Migmatitic gneiss containing tonalite (8) and amphibolite (5).
8	Tonalite, minor granodiorite, granite, related gneiss: (8a) tonalitic and granodioritic gneiss, migmatitic gneiss, augen-gneiss; inclusions of units (5) and (6); (8b) undifferentiated granitic rocks.
7	Felsic granulites with minor gabbro and anorthosite: enderbite, opdalite, charnockite, and related gneiss; inclusions of units (5a) and (6).
6	Metasedimentary gneiss.
5	Amphibolite: (5a) mafic and minor ultramafic granulite, banded iron formation, quartzite, and calc-silicate rocks.
4	Gabbro, gabbronorite: (4a) diorite; (4b) anorthosite.

Early Metavolcanic and Metasedimentary Rocks (Rice Lake Group, Hayes River Group)	
3	Greywacke, mudstone, conglomerate, arkose, banded iron formation.
2	Felsic to intermediate, mainly pyroclastic volcanic rocks; some flows, minor intrusive and sedimentary rocks.
1	Basalt, minor andesite, minor sedimentary and mafic intrusive rocks; ultramafic rocks (serpentinite, serpentinitized peridotite, pyroxenite) and differentiated ultramafic/mafic intrusions.
Ultramafic Rocks (associated with units 1, 4, 17, 21 and 28)	

•	Serpentinitized peridotite, serpentinite, pyroxenite.
◦	Serpentinitized peridotite, serpentinite, pyroxenite, under Phanerozoic cover, known from diamond drill hole intersections and interpreted from aeromagnetic anomalies
▲	Differentiated mafic/ultramafic intrusions (small, large)
	As above, under Phanerozoic cover. Known from diamond drill hole intersections and interpreted from aeromagnetic anomalies
	Extensive drift-covered areas with little or no bedrock exposure; geology inferred almost entirely from aeromagnetic signature and trend



A reconnaissance Sm-Nd study of plutonic rocks in the Nejanilini map sheet indicates involvement of Mesoarchean crust in the genesis of these units (Anderson et al., 2005), consistent with results from U-Pb and Sm-Nd isotopic studies of the Hearne in NE Saskatchewan (Harper et al., 2004).

Metasedimentary and metavolcanic rocks of presumed Paleoproterozoic age occur throughout the map area. These include mafic and felsic volcanic rocks around Great Island/Seal River (units 21 and 22), as well as the Fox River sills, which occur directly south of the Nelson River (south of the map area). Present reconnaissance-scale mapping, combined with the lack of U-Pb age dating makes it uncertain as to whether some of the metasedimentary and metavolcanic rocks could be of Archean age. Given the continuation of the regional east to northeast structural grain of the Hearne domain out into Hudson Bay and up towards the Archean Kaminak greenstone belt of Nunavut, it would be reasonable to assume that the map area includes some undifferentiated Archean greenstones.

Greywacke- and pelite-derived paragneiss and migmatite are major constituents of the Wollaston and Seal River groups (unit 23). Arkosic gneiss (unit 26), and slivers of calc-silicate rocks including quartzite and marble (unit 24b) occur in these and other parts of the area. Late Paleoproterozoic plutons (unit 31) of granite and granodiorite constitute the Chipewyan/Wathaman batholith and Hudson granite suites, collectively ranging in age from ca. 1.86-1.80 Ga. Porphyritic granite, fluorite-bearing granite, granite gneiss and pegmatite occur in the northeast and are interpreted to include the younger 1.75 Ga Nueltin granite suite, which is predominant to the north in Nunavut (van Breeman et al., 2005).

Paleozoic rocks of the Hudson Platform occupy the southeast part of the map area and overlie Precambrian basement. These consist chiefly of limestone and dolomite of the Ordovician Red Head Rapids and Bad Cache Rapids formations, as well as the Silurian Severn River and Echoing River formations (Sanford et al.,



1979). Paleozoic units containing limestone and red shale occur east of the map area under Hudson Bay.

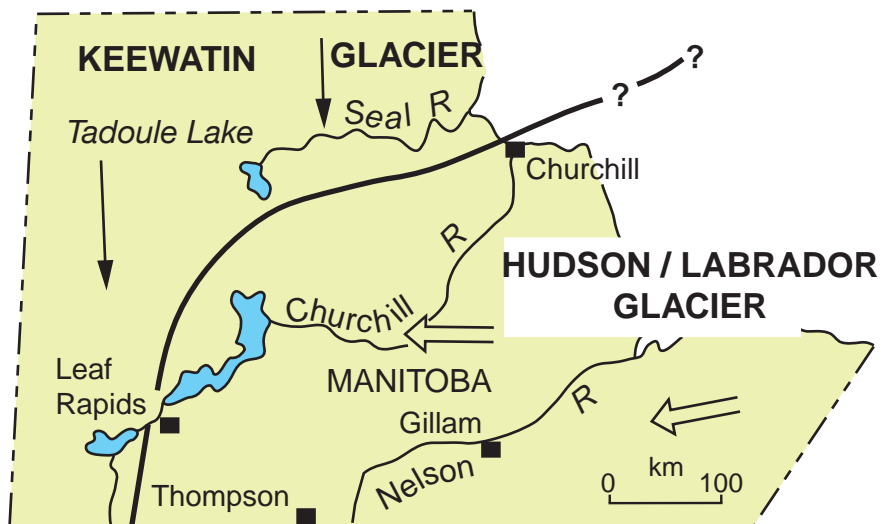
### **Quaternary geology**

The Quaternary geology of the area has been interpreted on a regional scale from air photos, field observations, and sample analyses. Preliminary maps at 1:250 000, and A-series maps at 1:500 000 are presently available in hard copy (Dredge et al., 1986, 1992), and digital maps with accompanying interpretations of surficial geology and glacial history are in preparation for release at a later date. A brief summary of Late Wisconsin ice flow events is presented here as a context for interpreting the till geochemistry, textural, and carbonate data.

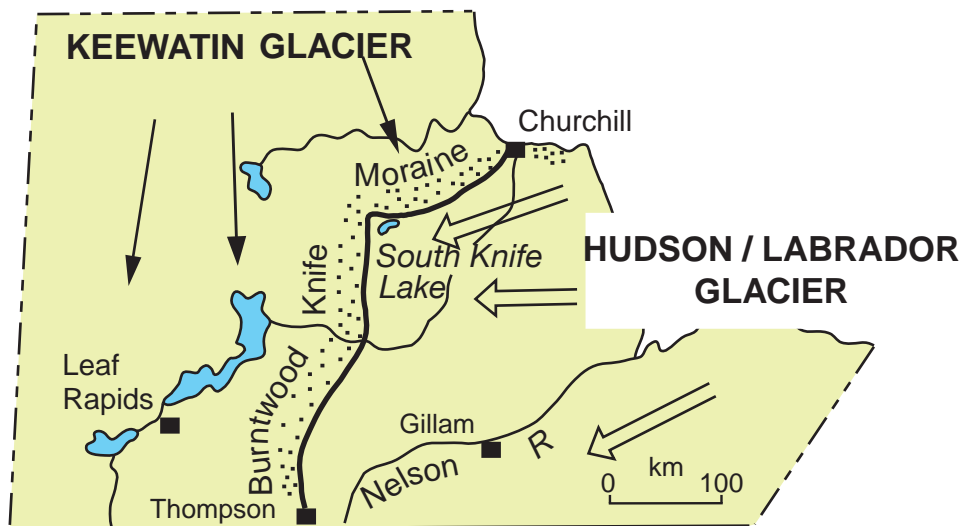
Evidence from northern Manitoba indicates that this region was continuously covered by glacial ice during the entire Wisconsin Glaciation, but that the area lies within the zone of convergence of ice flowing southward from a centre in Keewatin, and ice flowing westward from or across Hudson Bay. The last known position of the confluence is marked by sandy interlobate moraine, and is shown on Fig 3 . Till of Keewatin provenance tends to have a sandy, non-calcareous matrix, while that of Labradorean/Hudsonian provenance is silty and calcareous (Appendix 2, 3). The Keewatin till varies in thickness from <1 m to >5m, while the Hudsonian till sheet, consisting of multiple tills, is up to 40 m thick.

South of the Seal River, till is covered by glaciolacustrine sediments, and below elevations of about 140-180 m, glaciomarine deposits are common in the east.

The composition of the till is a product of bedrock source character, direction of glacial transport and distance of transport. The surface till, the material sampled for this report, may be a product of reworking from multiple ice flow events, but its composition most closely reflects the late-glacial ice flow patterns, which have been determined from striae and glacial landforms. For the relatively thin tills of northern (Keewatin) provenance, much of the surface till most likely reflects



Stage 1. Extent of Keewatin and Hudson / Labrador ice early in the last glaciation



Stage 2. Keewatin and Hudson ice at the time of deglaciation

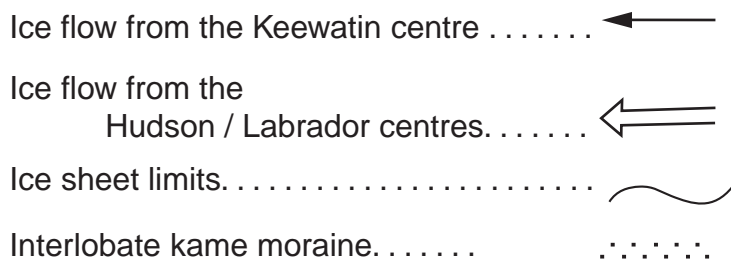


Figure 3. Ice flow during the Wisconsin Glaciation

recent ice flow events. In areas of bouldery till with ribbed moraine, the drift may have been carried for fairly short distances. Consequently, geochemical values in those areas may reflect concentrations in nearby bedrock. Garnet dispersal trains from garnetiferous gneiss outcrops in the northwest suggest a glacial transport distance of between 1 and 5 km (Dredge, 1981) for the last ice movements within the sandy, northern provenance till. In contrast, silty tills of eastern provenance probably contain more components inherited from underlying tills and also more far-travelled material. Element values determined from the sampled upper zones of the silty till may reflect average concentrations from local to distant easterly sources. The distribution of carbonate in till indicates that there has been some transport of material for distances of >50 km beyond the Paleozoic carbonate shelf. Also, clasts of red shale in some till units indicate transport westward from bedrock sources beneath Hudson Bay.

## **Methods**

Samples for physical and geochemical characterization of the area were collected during the course of mapping in 1977, 1978, 1979, and 1980. Samples are distributed fairly evenly across the area, as shown on Fig 4. Where the ground was unfrozen and till was the surface deposit, till samples were collected from hand-dug pits. Sampling was done from the C horizon in podzol soils, generally from depths between 0.5 and 1.0 m below the surface. Where the ground was permafrozen, surface tills were sampled using a Hoffer probe, a hand held augering and coring device that can be screwed into the ground by brute force to a depth of several metres. In frozen terrain beneath thick peat, glaciolacustrine clay, or marine deposits, the upper till was sampled using a power driven coring device with a 10 cm bore. Subsurface tills were sampled in sections exposed along rivers, but only the surface tills are shown in the geochemistry maps accompanying this report.

In the laboratory, analytical procedures for geochemical samples followed the methods of the GSC Sedimentology Lab described by Girard et al (2004). The

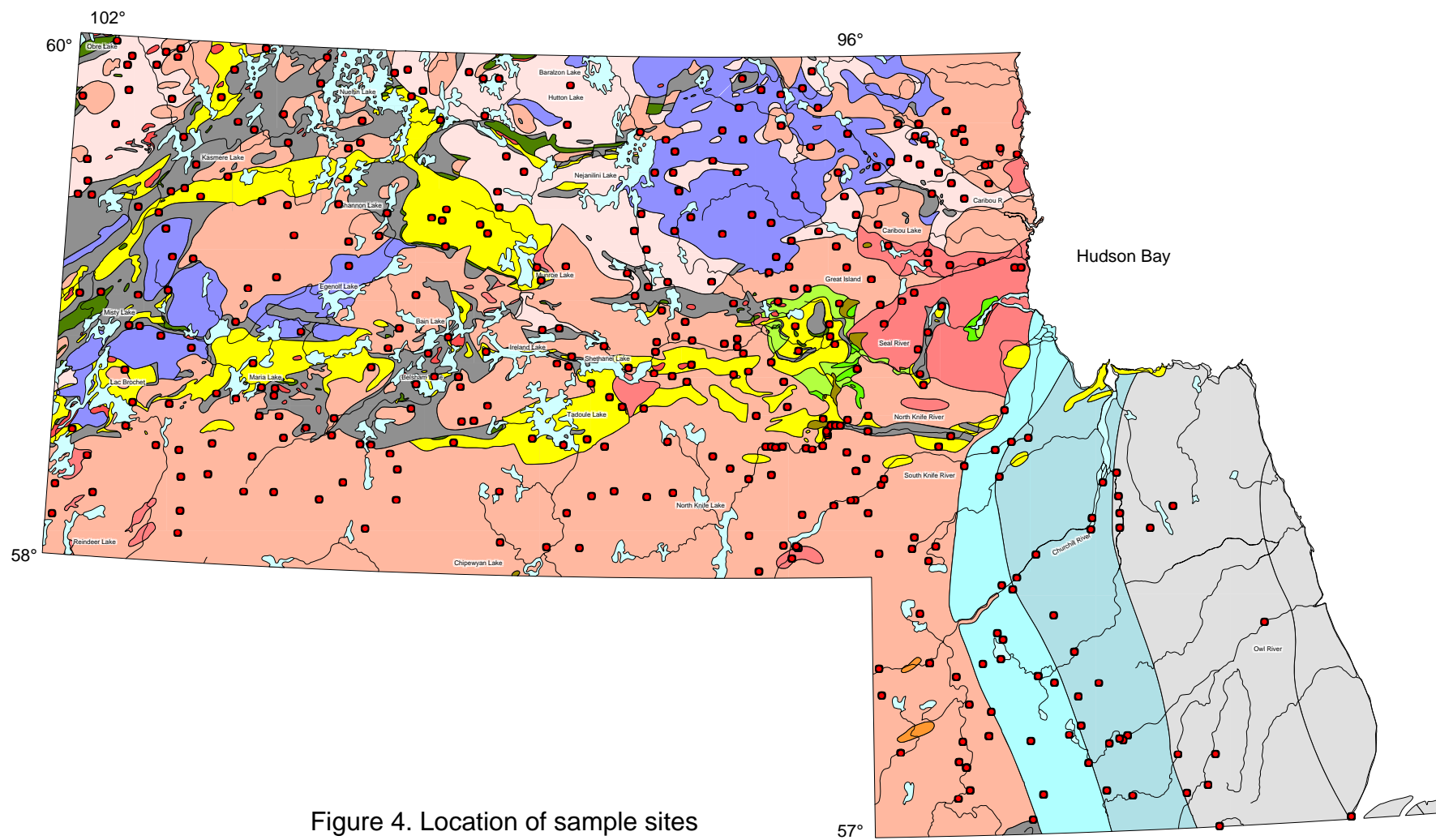


Figure 4. Location of sample sites

bulk samples were sieved, and the <2 um fractions were separated by centrifugation. This fraction was analyzed for copper, lead, zinc, cobalt, nickel, chromium, molybdenum, manganese, iron, arsenic and uranium at Bondar-Clegg Laboratories, Ottawa. Base metals were analyzed using atomic absorption techniques after LaForte reverse aqua regia extraction, arsenic values were derived using colourimetric standards, and uranium values were determined by fluorometric methods. In addition, the <63um fraction of six samples from an area between Seal River and North Knife River were analysed for gold using neutron activation techniques. The analytical results are presented in Appendix 4.

Till texture results (Appendix 2) were obtained by sieving the samples to 0.063 mm, and using a hydrometer to determine the silt and clay content in the <0.063 mm fraction. The carbonate results reported here (Appendix 3) were determined by total digestion of sample aliquots of the silt + clay fraction using a Chittick apparatus. Separate samples were collected for pebble counts. The 1 to 4 cm size fraction was used to determine the percentages of Precambrian and Paleozoic clasts shown in Appendix 3. The percentages are based on counts of 100 pebbles. Procedures for determining water contents and Atterberg limits are described in Girard et al. (2005).

### **Element Concentrations**

Figure 5 shows frequency distributions of concentrations for each element. Minimum, mean, and maximum values are indicated on Table 1. Anomalies, or elevated values, are here defined as those lying at or beyond the 99th percentile of the frequency distribution, because that percentile corresponds to outliers on some of the frequency histograms. For the region, the boundary between regional background and anomalous values by this criterion is 18 ppm for uranium, 164 ppm for zinc, 11 ppm for molybdenum, 33 ppm for cobalt, 81 ppm for copper, 1450 ppm for manganese, 93 ppm for nickel, 135 ppm for chromium, 47 ppm for lead, 29 ppm for arsenic and 7.7% for iron. These cut-offs may differ if tills of northern and eastern provenance were considered separately, or if the

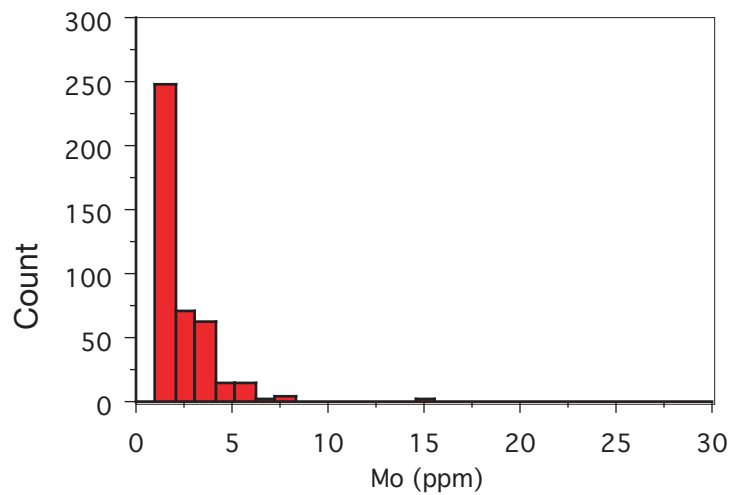
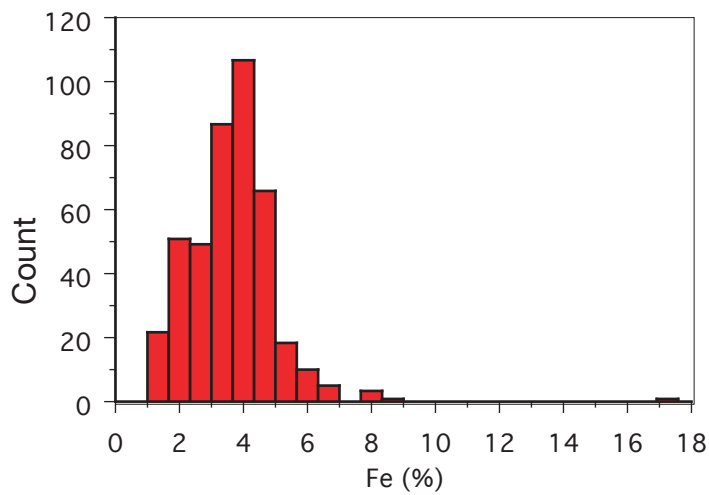
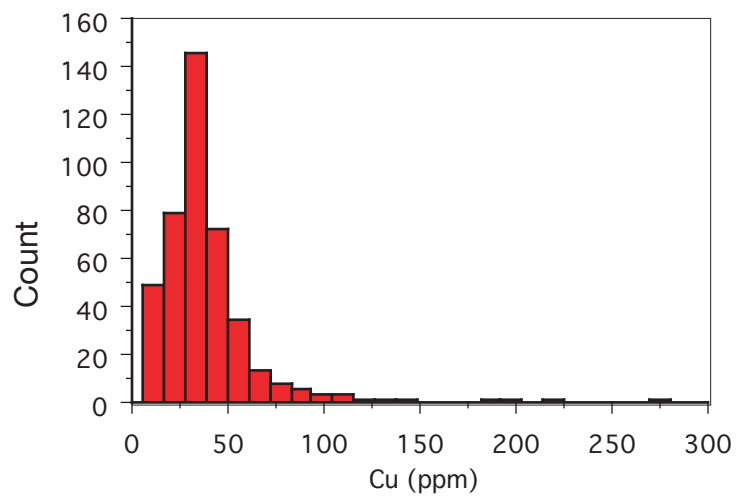
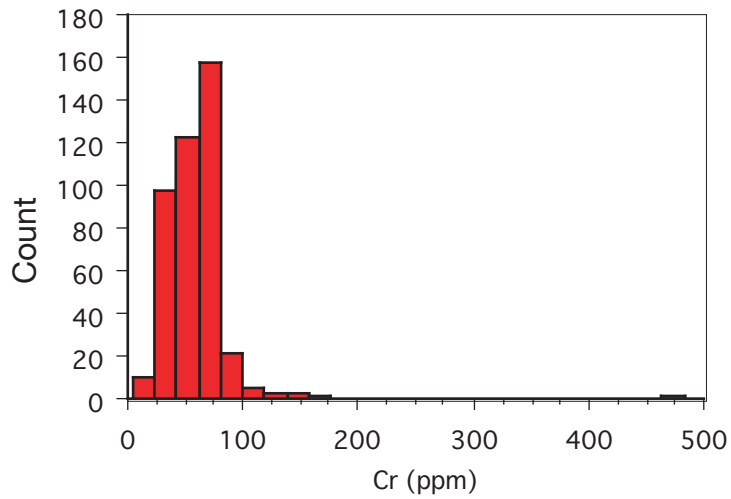
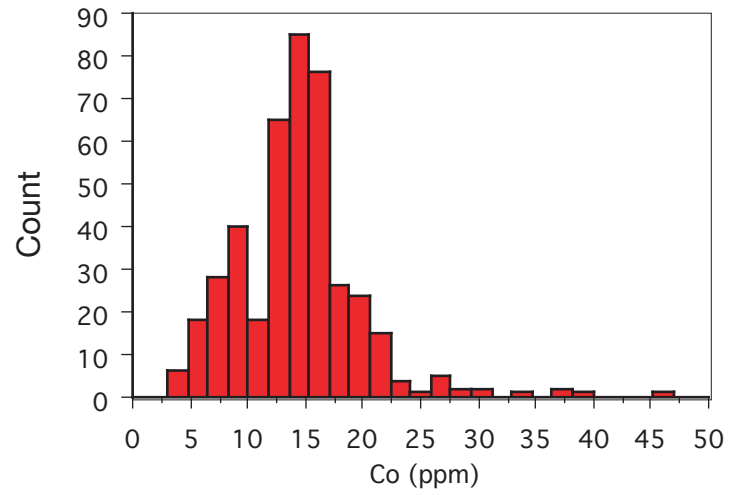
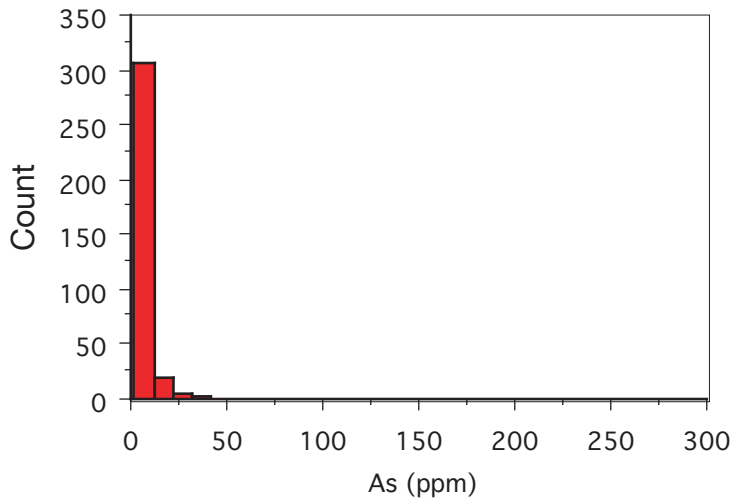


Figure 5 Frequency histograms for each element

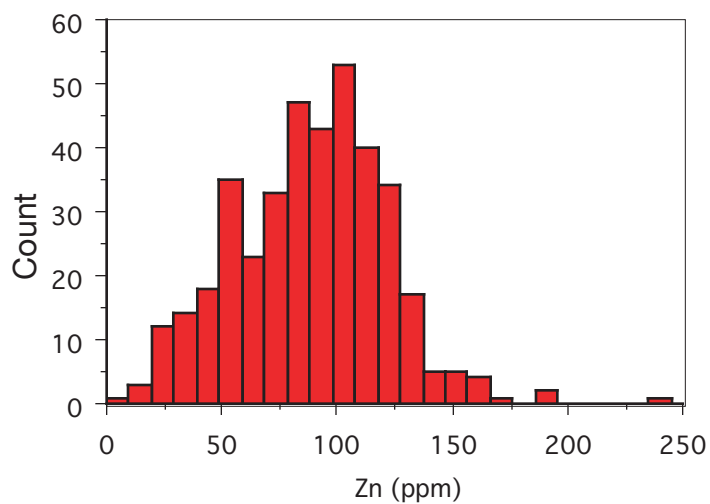
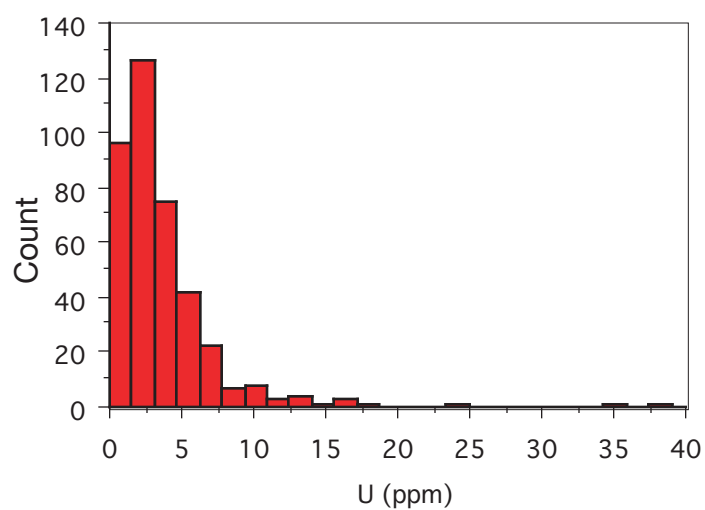
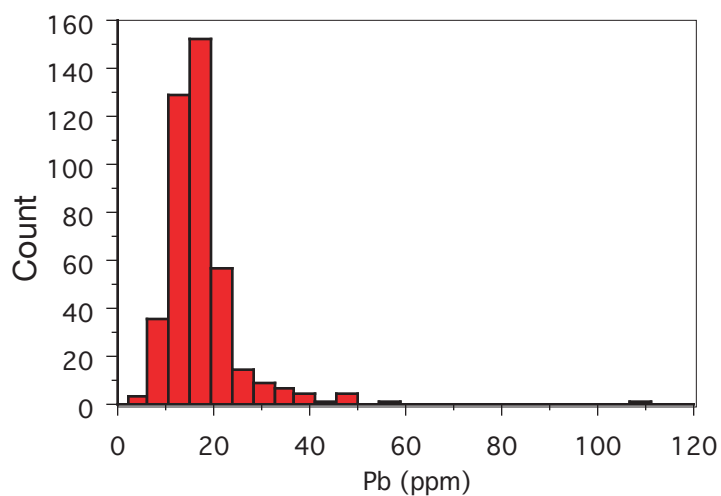
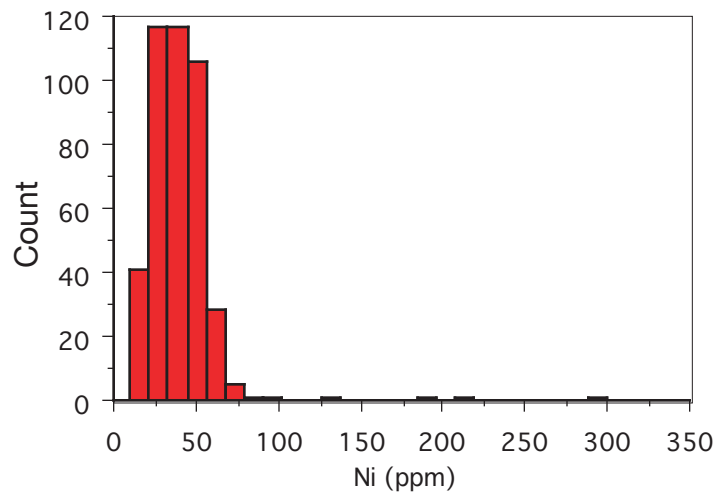
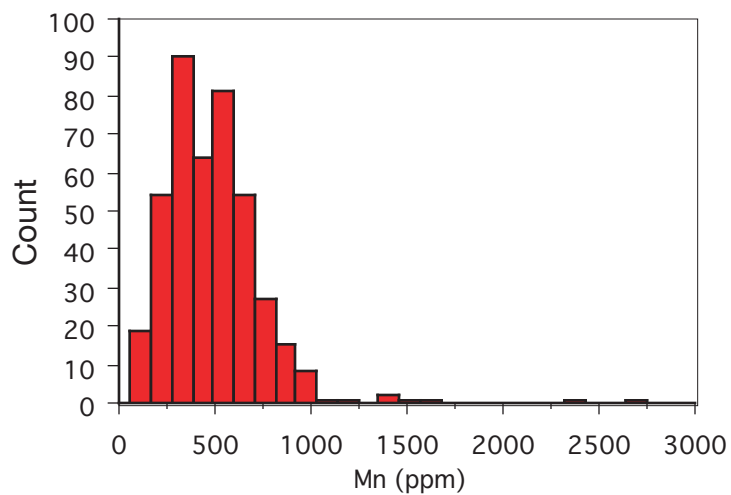


Figure 5 (continued) Frequency histograms for each element

### Descriptive Statistics

	Mean	Std. Dev.	Count	Minimum	Maximum	Coef. Var.	Skewness	Kurtosis	Median	Mode
As (ppm)	0.3	0.4	15	0.1	1.5	1.3	2.9	7.3	0.2	0.1
AsC (ppm)	4.7	1.4	15	3	8	0.3	0.6	-0.1	5	.
new As	6.5	14.2	334	2	252	2.19	15.56	266.9	5	5
Cd (ppm)	0.4	0.2	14	0.2	1	0.5	2.3	5	0.3	0.3
Co (ppm)	17.9	6.6	16	12	39	0.4	2.2	4.5	16	16
Cu (ppm)	38.1	26.8	420	6	280	0.7	4.1	25.9	34	34
Cr (ppm)	58	28.8	420	4	483	0.5	8	112.7	56	70
Fe (%)	3.6	1.4	420	1	17.6	0.4	2.6	23.5	3.7	3.6
Mo (ppm)	2.7	2.2	420	1	27	0.8	5	43	2	2
Mn (ppm)	492.3	266.4	420	60	2750	0.5	2.9	18.5	460	700
Ni (ppm)	40	22.2	420	10	300	0.6	5.9	57.3	38	30
Pb (ppm)	17.6	8.2	420	2	111	0.5	4.6	41.7	16	17
U (ppm)	3.8	3.8	391	0	39	1	4.4	30.4	2.9	1.4
Zn (ppm)	87.6	33.3	391	0	245	0.4	0.2	0.9	90	100

### Percentiles

	10th	25th	50th	75th	90th	95th	97th	99th	100th
As (ppm)	0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.5	1.5
AsC (ppm)	3	3.2	5	5.8	6	15	22	29	252
new As	2	4.0	5	7	10	15	22	29	252
Cd (ppm)	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	1.0
Co (ppm)	13.1	14	16	19.5	23.9	23	27	33	47
Cu (ppm)	15	25	34	43	60	81	98	140	280
Cr (ppm)	32.5	42	56	70	78	88	93	135	483
Fe (%)	2.0	2.7	3.7	4.3	4.9	5.6	6.2	7.7	17.6
Mo (ppm)	1	2	2	3	4	6	7	11	27
Mn (ppm)	228	322	460	605	755	875	950	1450	2750
Ni (ppm)	22	28	38	48	56	62	65	93	300
Pb (ppm)	11	14	16	19	24	32	39	47	111
U (ppm)	1	1.6	2.9	4.6	7	10.2	12.6	18.5	39
Zn (ppm)	44	65	90	110	125	135	153	164	245

**Table 1. Descriptive statistics**



region were divided into individual 1:250 000 scale map sheets, where bedrock variations could be discerned more closely.

### **Regional distributions**

The location and concentrations of elements are shown as proportional dot maps in Figures 6-17. The maps show quartile values to the 95<sup>th</sup> percentile with elevated values above the 95<sup>th</sup> and 99<sup>th</sup> percentiles shown as stars. Background means for uranium and molybdenum are generally higher in sandy northern provenance till than in silty till of eastern provenance that has crossed rocks of the Paleozoic platform, whereas zinc and manganese mean values are higher in the silty till. Means for the remaining elements are similar. Most anomalous values are within the sandy till or silty till west of the Shield margin.

Source rocks which would account for the distribution of elements shown on the accompanying maps are not always apparent from the regional scale maps; thus, the interpretations below are preliminary and should be viewed with caution. It is apparent, however, that the geochemical signature at a number of sites suggests unmapped mafic and ultramafic bodies in some areas, which would be of interest for understanding the geological evolution of the area and for exploration.

**Nickel, chromium and cobalt** (Fig. 6-8) are covariant statistically and in area distribution. High concentrations associated with the Wollaston metasediments in the northwest could derive from komatiites and norites known from just northwest and north of the Manitoba/Nunavut/Saskatchewan border in both Archean and Paleoproterozoic protoliths. High concentrations southwest of Baralzon Lake (near Hutton Lake) may derive from mafic dykes and sills, although none are presently mapped in that area: presently known mafic bodies lie to the south, down-ice. High values in the northeast, north of Seal River, might be associated with local gabbro sources. Some of the highest concentrations of Ni (300 ppm) correspond to small peridotite-serpentinite bodies known to lie east of Great



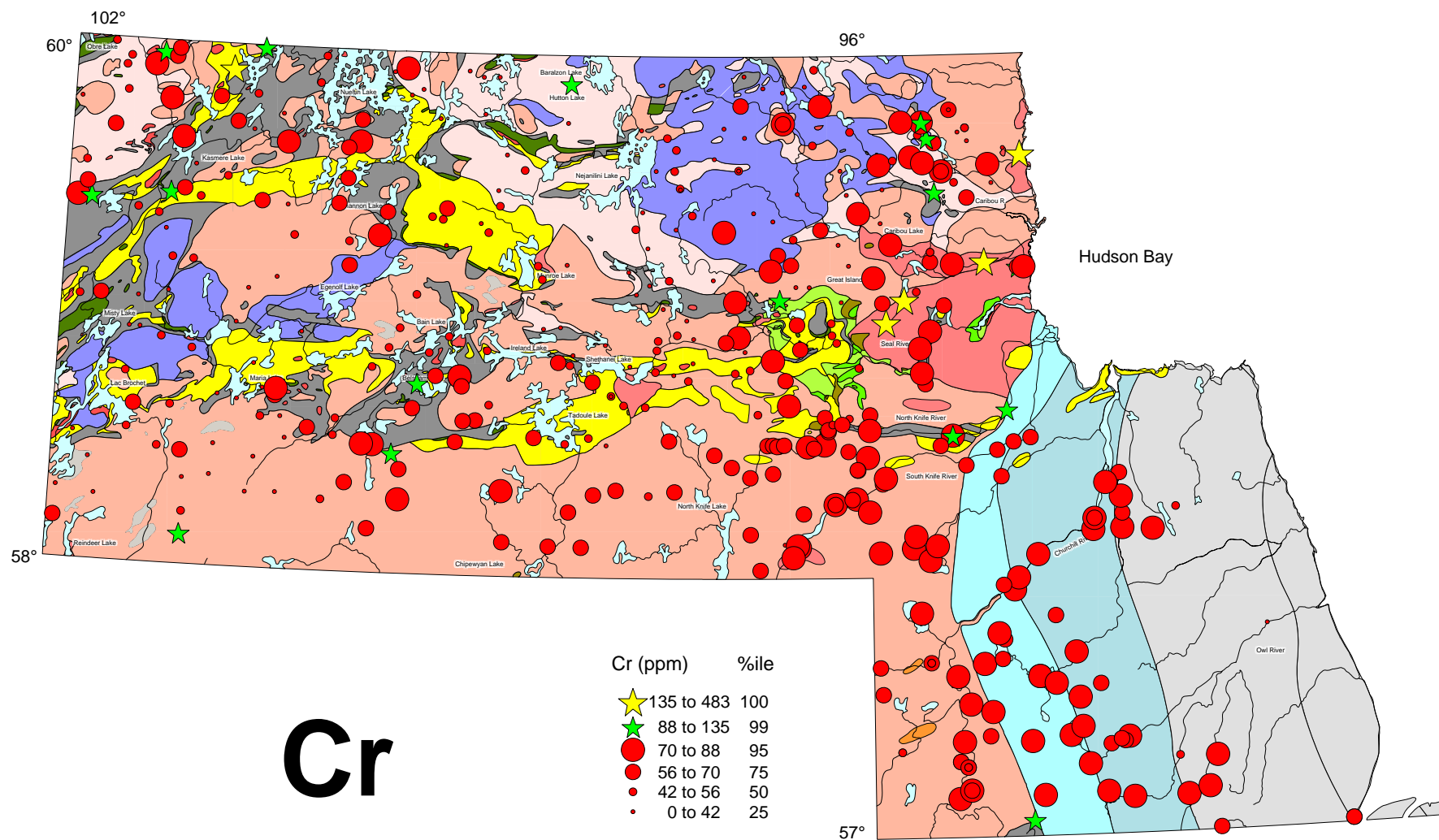


Figure 7. Distribution of chromium in till

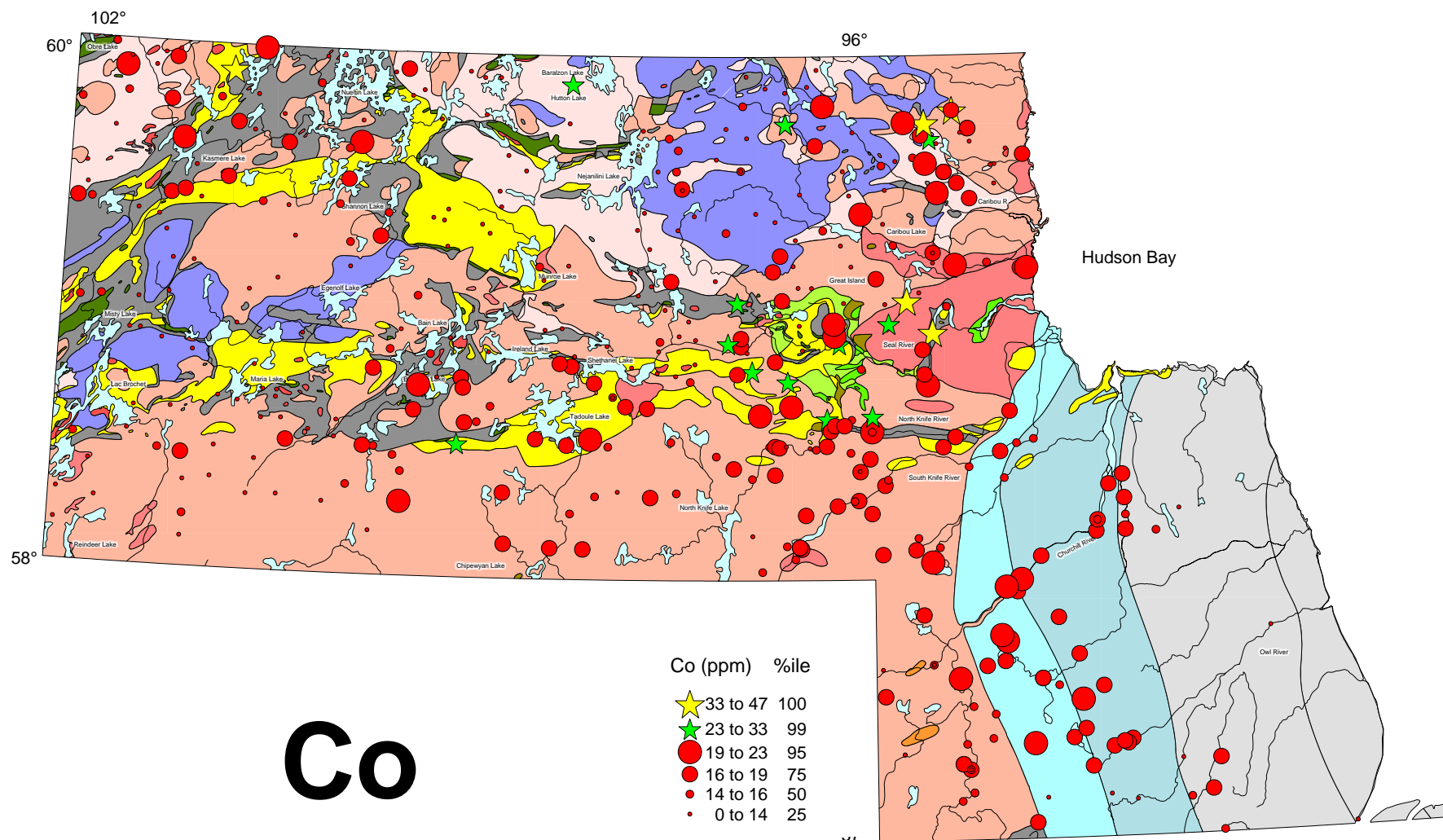


Figure 8. Distribution of cobalt in till

Island, and for Ni (200 ppm) – Cr (483 ppm) to sites farther northeast, north of Caribou River. This suggests that there may be other unmapped ultramafics in those areas as well.

Sources for nickel, chromium and cobalt south of the North Knife River are more problematical. Several source areas are possibilities: 1) They could be the result of southern ice flow from the Great Island volcanics, followed by reworking by westwardly-flowing ice; 2) There could be unknown sources from the centre of Hudson Bay; 3) High nickel concentrations over greywacke units in the south could derive from unmapped ultramafic intrusions in greywacke, in a similar fashion to those of the Rottenstone domain in northern Saskatchewan; 4) Other possible sources of elevated concentrations in the east include old ice flows from the Fox Sills, or mafic rocks along the Owl River shear zone.

There is a moderate statistical and spatial covariation of **copper** (Fig. 9) with cobalt, chromium and iron ( $r > 0.5$ ) and slight correlation between copper and zinc ( $r = 0.4$ ). Highest copper concentrations of  $> 250$  ppm in the northwest near Kasmere Lake and nearby Putahow Lake are found over the Wollaston Group and may derive from sediment-hosted and stratabound Cu-occurrences and deposits as recognized in the Wollaston Group in northern Saskatchewan. In the central area, sources include Paleoproterozoic sediments and paragneiss that may correlate with the Wollaston Group or have formed in similar depositional settings. High concentrations of copper are also found at Hutton Lake. Co-variance with cobalt and iron in the northeast suggests that copper could also be present in Archean metavolcanic rocks in the Great Island area and unmapped mafic bodies near Caribou Lake and north of Caribou River, where Cu concentrations range from 180 – 225 ppm. Somewhat elevated concentrations in the southeast have possible sources in the Paleozoic sedimentary sequences there.

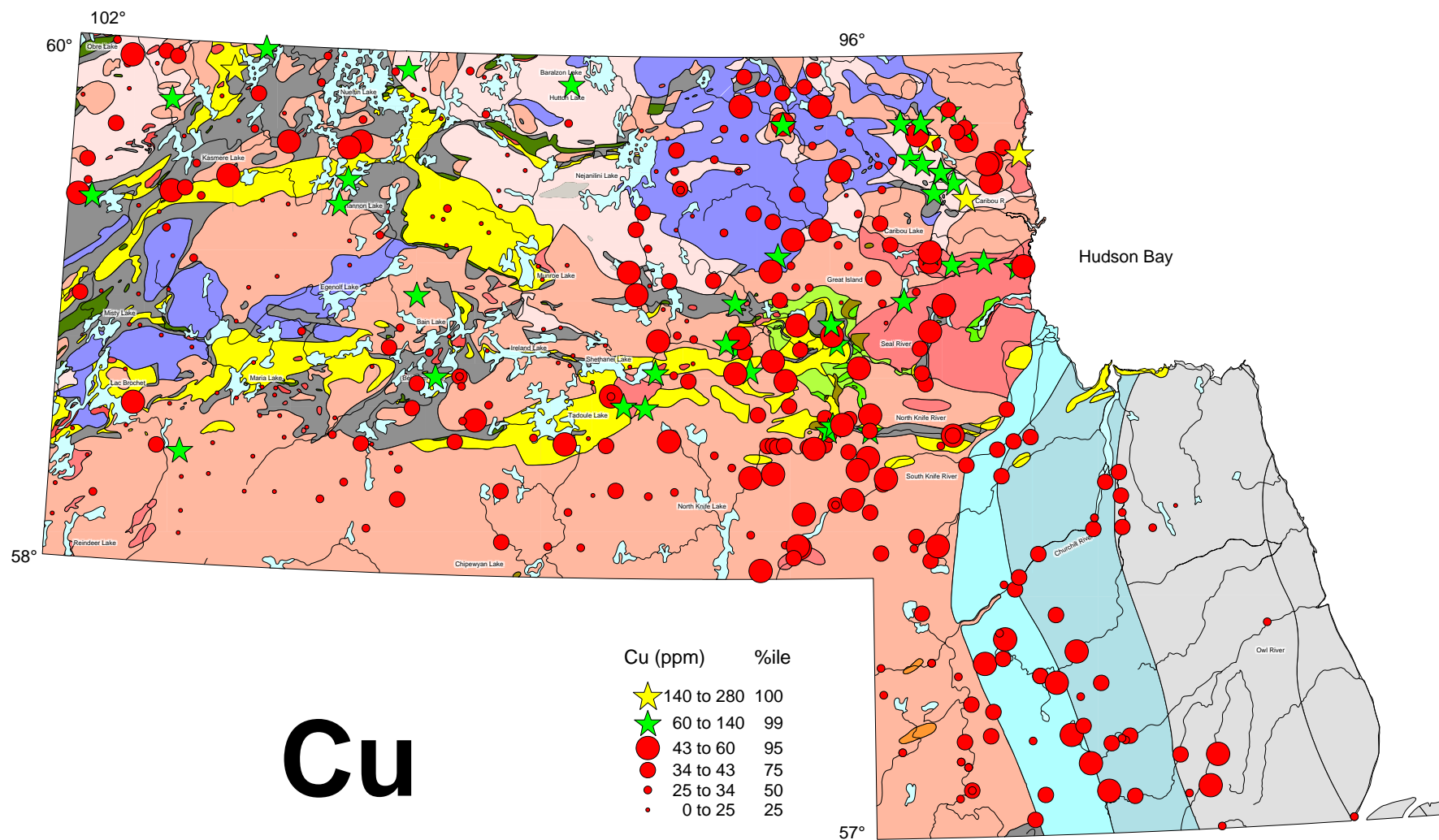


Figure 9. Distribution of copper in till

**Zinc** (Fig. 10) correlates with copper in the northeast in areas presently mapped as granitoid bodies. The zinc could derive from unmapped mafic bodies in that area. There is also potential for VMS occurrences where high zinc concentrations are found associated with copper in till over the Great Island and Seal R Group volcanic rocks. Similar associations are found in the Archean Kaminak greenstone belt of the Hearne in Nunavut. Zinc concentrations are also high at Hutton Lake. In the northwest and near Tadoule Lake in the south, some areas with relatively high zinc levels lie within, and probably derive from, the underlying Paleoproterozoic metasediments, esp. where associated with Pb. Relatively high zinc concentrations in the south probably derive from Mississippi Valley type sediment-hosted deposits from the carbonate platform.

The highest **lead** (Fig. 11) concentrations (to 111 ppm) in the north and central areas lie near known anomalies that are associated with Paleoproterozoic platforms and basins, particularly in the Wollaston basin and along Seal River. There is some association of lead with uranium in the Paleoproterozoic sediments, and in the northeast near porphyritic granitoid rocks and pegmatite.

High concentrations of **uranium** (Fig. 12) in till (>20 ppm) and in peat deposits (Coker and DiLabio, 1979) overlie the Wollaston belt in the northwest, and are probably an extension of the uraniferous deposits and occurrences in the Wollaston belt of Saskatchewan. The latter occurrences are known to be both polymetallic, stratabound U-type and locally remobilized younger < 1.8 Ga unconformity-U deposits. Sites in the northeast with U>10 ppm, in the Caribou River area, are more likely associated with granite and pegmatite bodies there (Nueltin granites) and correspond generally to areas with a high radiometric signature. Other anomalously high concentrations overlie some areas of the Chipewyan batholith.

Generally, **molybdenum** (Fig. 13) concentrations are higher in the Paleoproterozoic plutonic rocks of this area, especially the granites of the



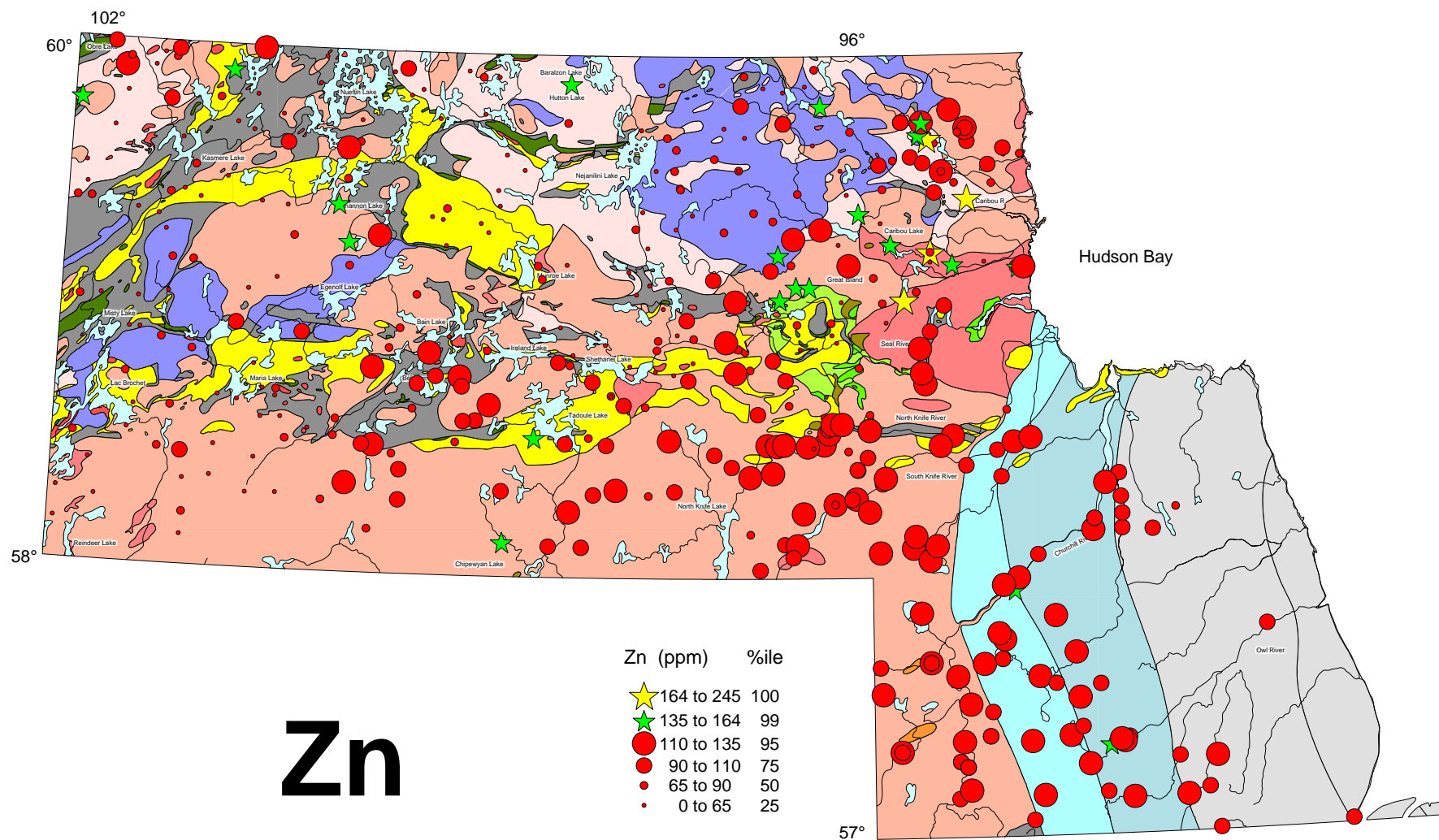


Figure 10. Distribution of zinc in till



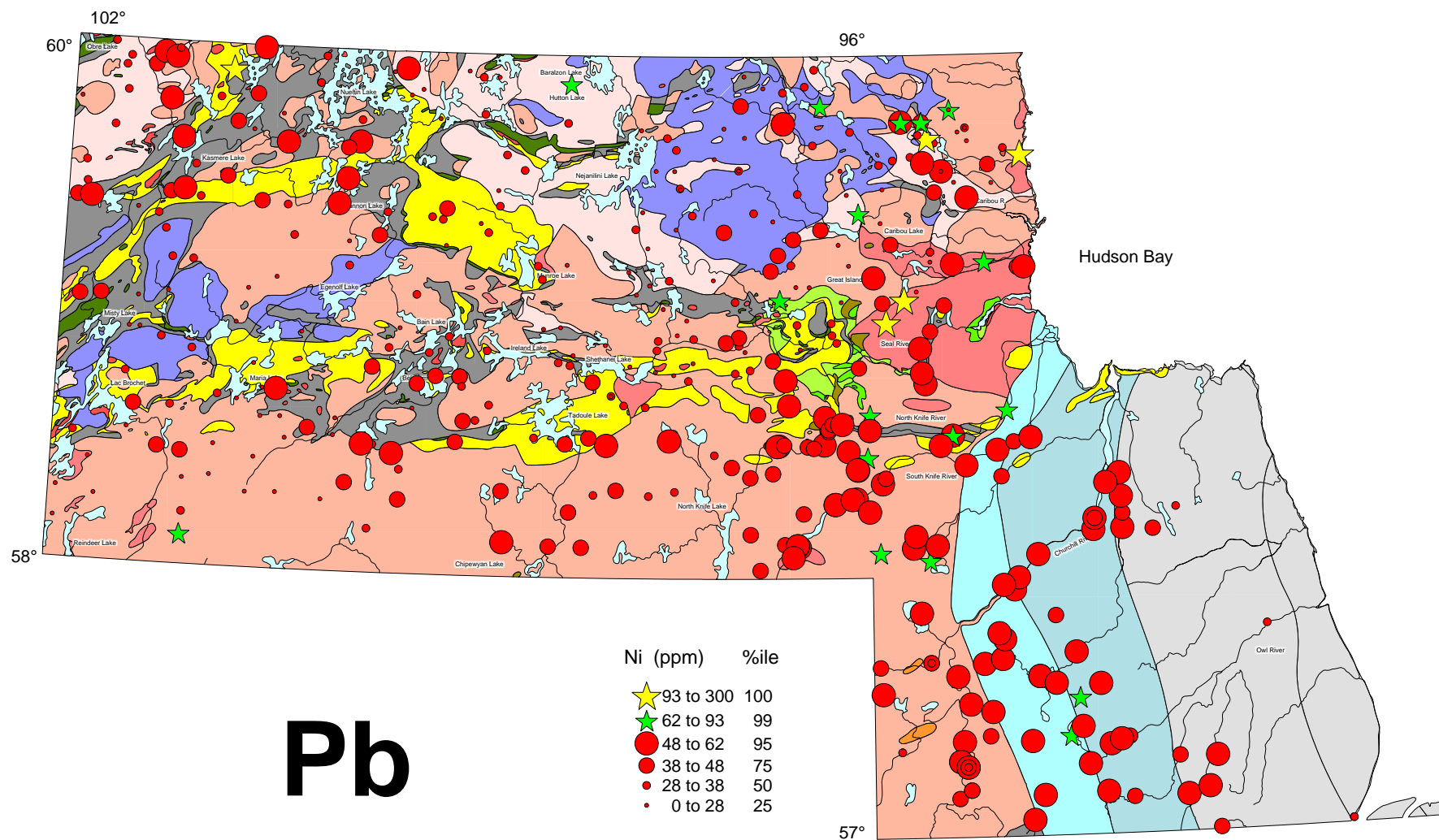


Figure 11. Distribution of lead in till

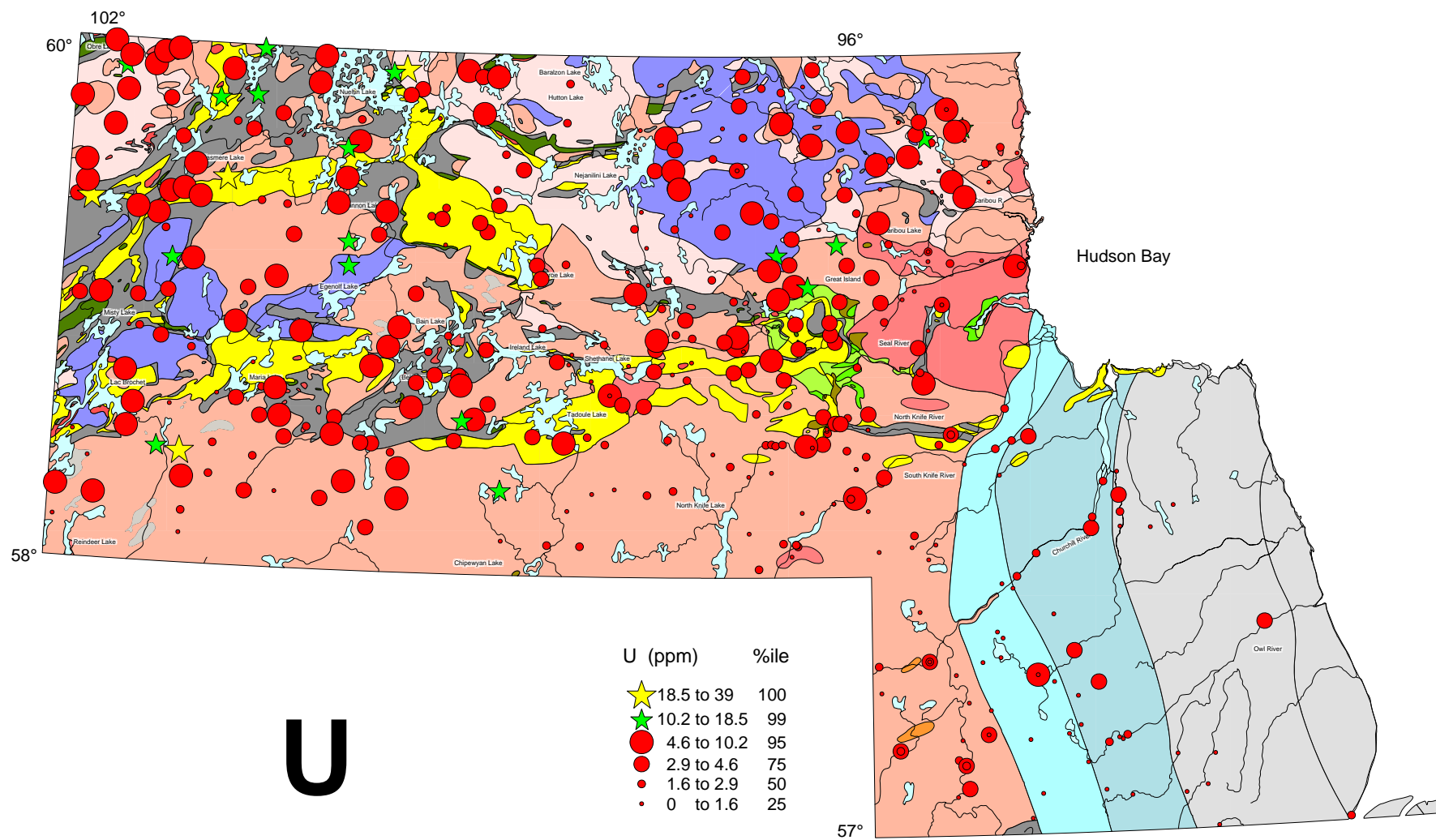


Figure 12. Distribution of uranium in till



Chipewyan batholith in the south part of the map area, and the Nueltin granite and pegmatite in the northeast. Some of the highest concentrations, however, overlie Paleoproterozoic sedimentary sequences, particularly the basin facies. These sequences are known to host minor polymetallic Cu-Pb-Mo-U occurrences and are regionally elevated in these elements. In Nunavut, regional elevations in Mo-U have been useful in differentiating Archean from Paleoproterozoic sedimentary sequences.

**Manganese** (Fig. 14) occurs in both high and low concentrations throughout this area, but has statistically slightly higher mean values (655 ppm vs 490 ppm) in the silty tills from the carbonate platform than for the northern provenance till. It may be associated with siderite in the platform carbonates. However, concentrations exceed 2000 ppm at some sites near Great Island on Seal River within the Keewatin provenance till. There is a spatial correlation of manganese with other metallic elements in the Caribou River area.

**Arsenic** (Fig. 15) highs are prominent in the volcanic rocks around Great Island, and spread southward to the North Knife River. Other areas with arsenic anomalies occur in Paleoproterozoic metapelites in other parts of the area. Arsenic is co-variant at high concentrations with iron, copper, chromium, cobalt and nickel, suggestive of some arsenide mineralization. **Gold** (Fig. 16) was not analysed on a regional basis, but rather was restricted to the area around and south of Great Island, where arsenic concentrations were high (Dredge and Nielsen, 1986; Nielsen, 1987; and Fig. 16). At some of the sites, gold concentrations were in the background range for till (5-10 ppb) in this area, but in two localities, concentrations of 40-87 ppb were identified. These values in till are significant for mineral exploration.

**Iron** (Fig. 17) occurrences of interest include those around Great Island, in combination with gold, as described above, and in the northeast, where they could indicate mafic bodies within the plutons there. Copper-iron-gold (IOCG?)

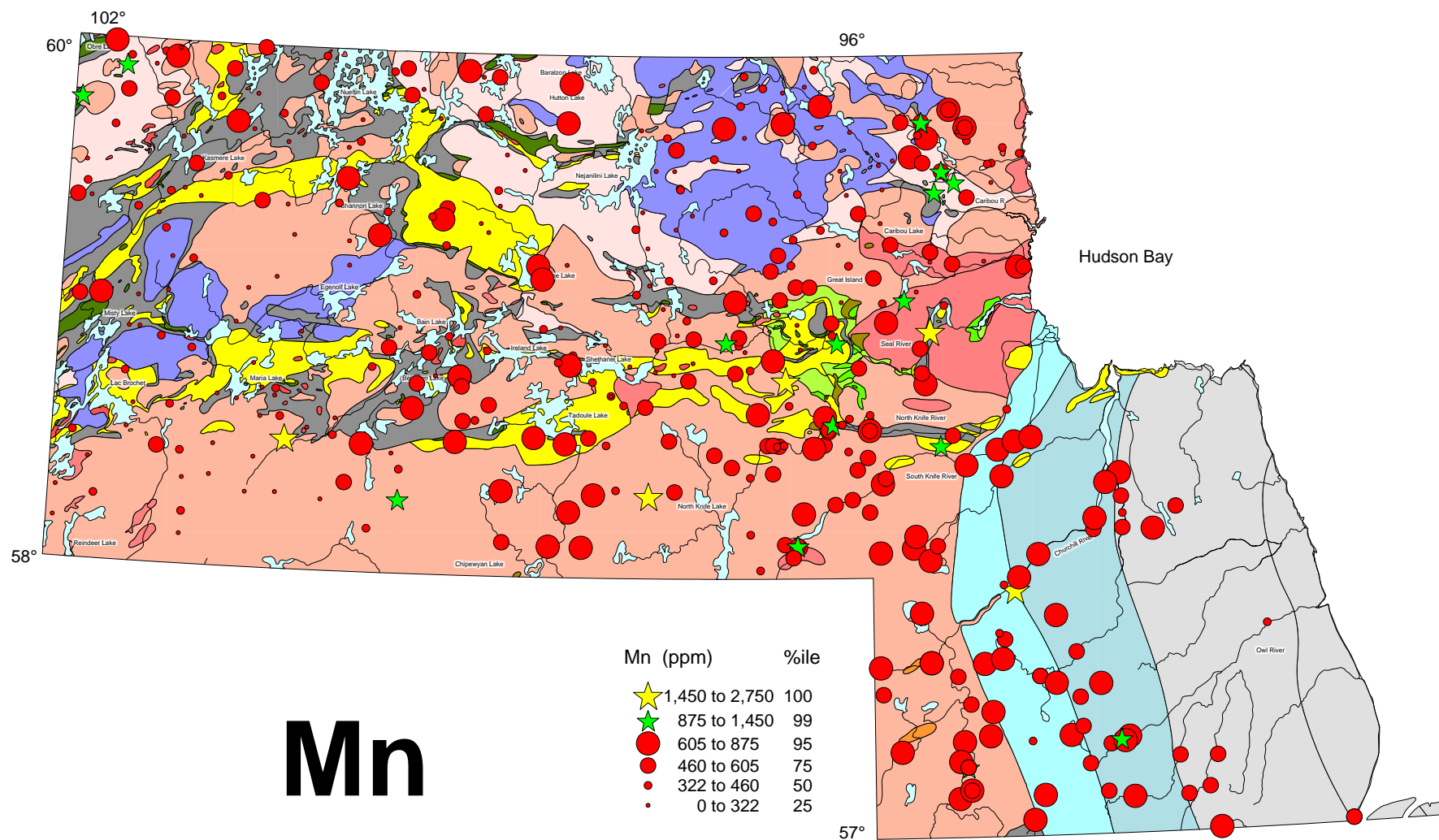


Figure 14. Distribution of manganese in till



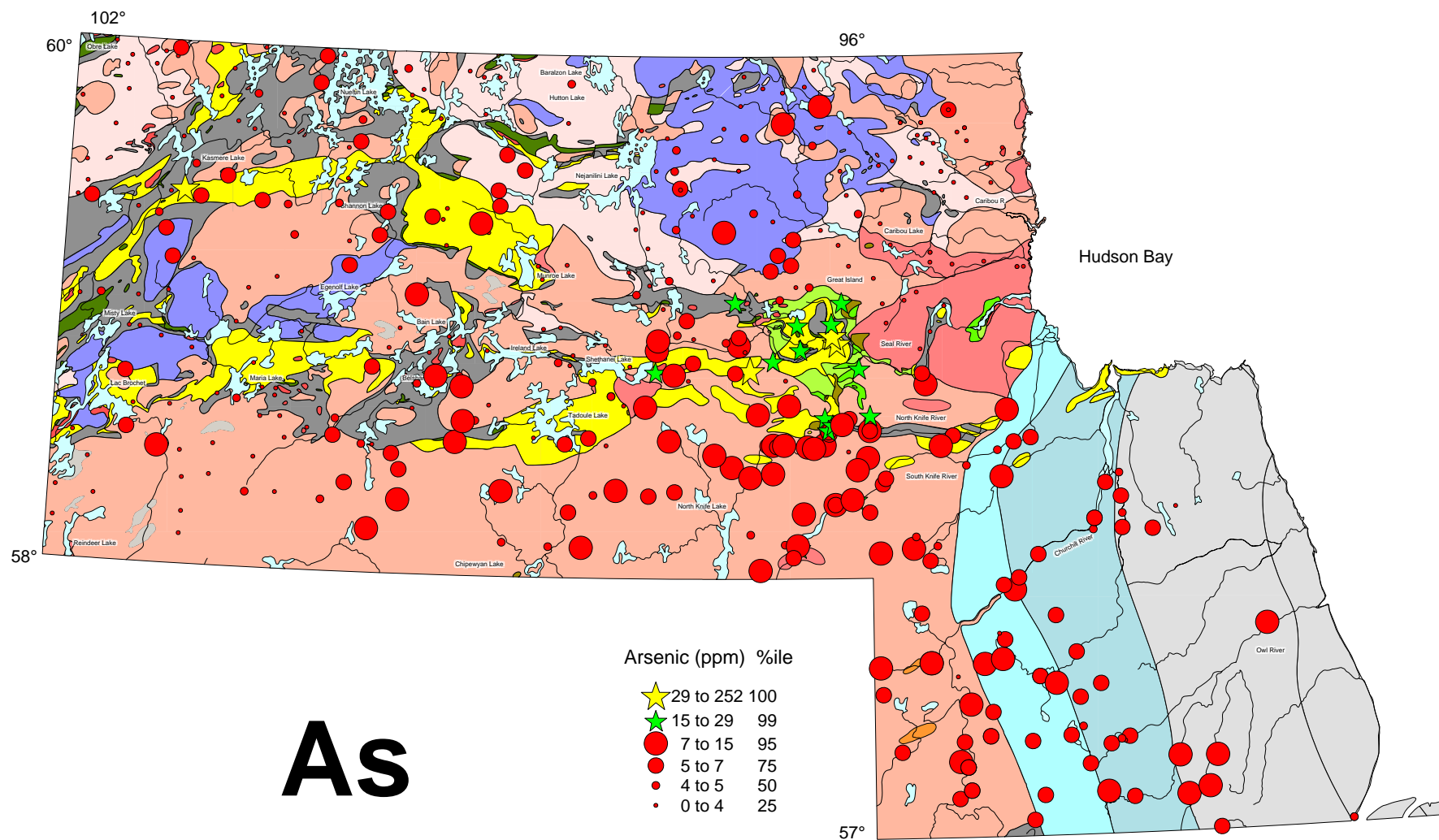


Figure 15. Distribution of arsenic in till

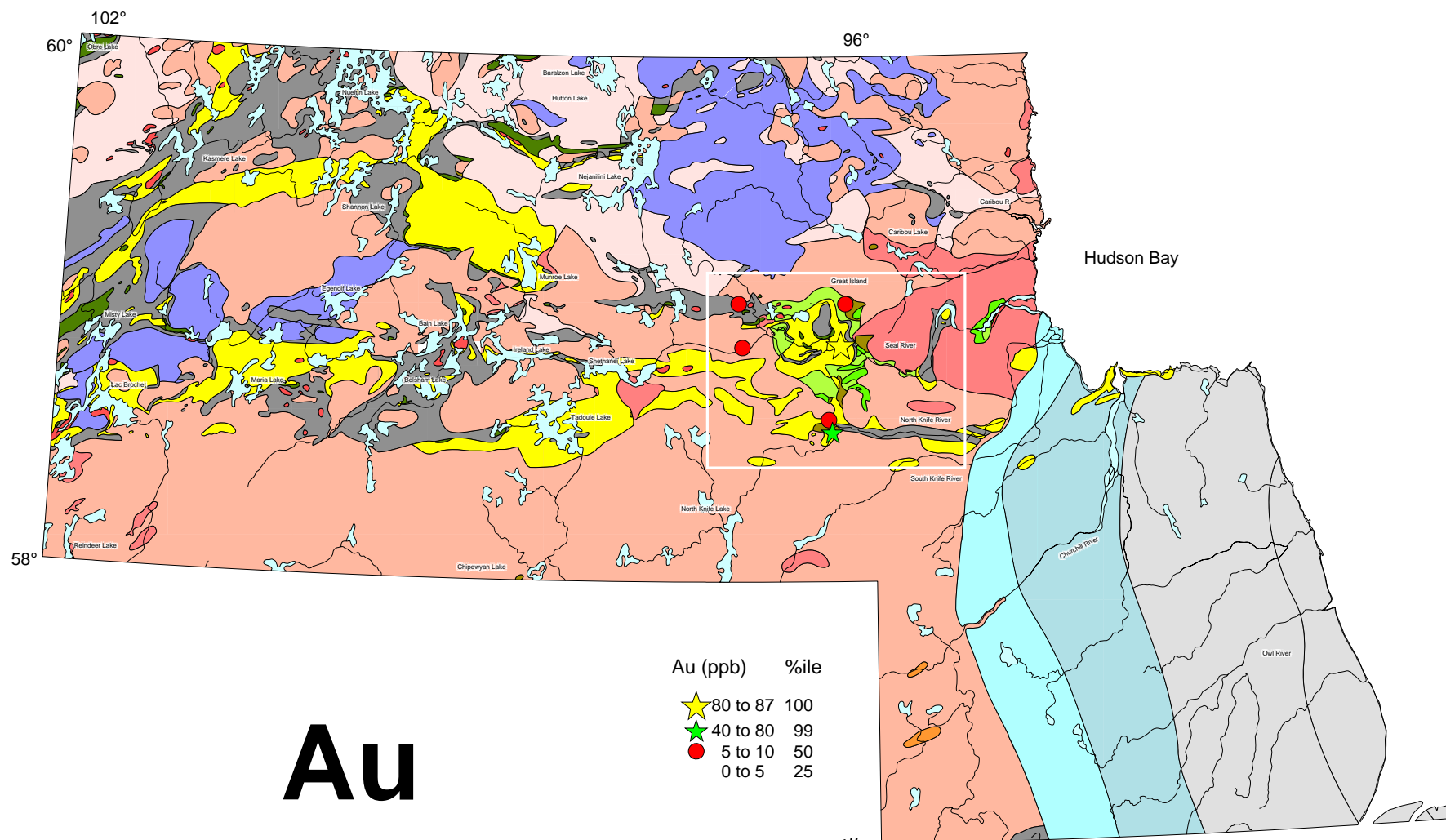


Figure 16. Gold in the Seal River area

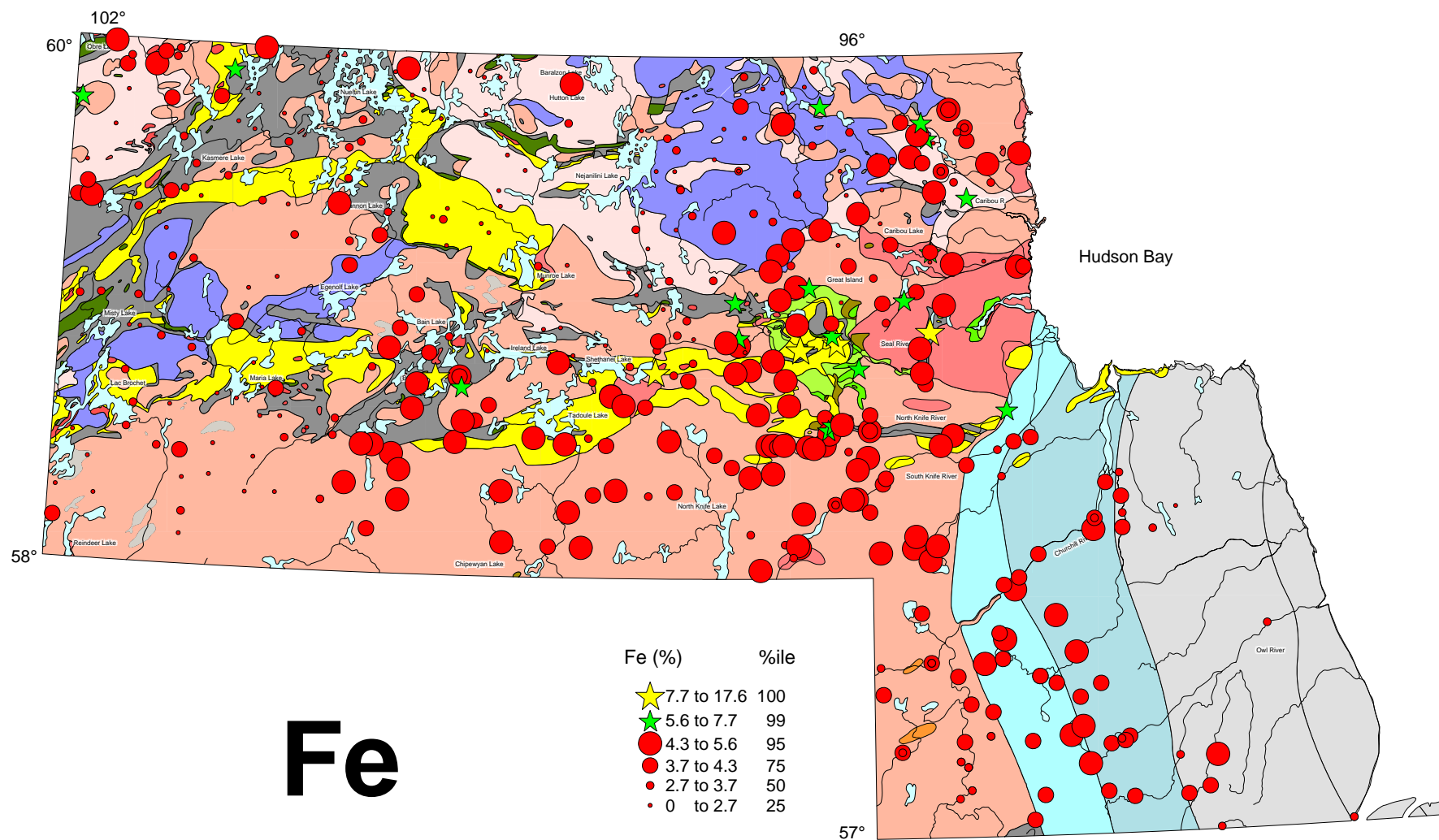


Figure 17. Distribution of iron in till



combinations around Great Island and the east end of Shethanei Lake may warrant additional study. Iron highs also occur in places within the metapelites of the Wollaston and Seal River belts.

There are a number of areas that have multi-element 'anomalies' (Dredge, 1982, 1983 and this report). Some are in regions, such as the Wollaston basin, for which the geology and mineral potential is already known. Other anomalies suggest that there are unmapped, as well as known, mafic bodies within the map area, which may be potential targets for exploration as well as sites for possible geologic re-interpretation. The main areas with multi-element anomalies appear to be:

- 1) the north part of the Wollaston basin, which has Fe- Ni- Cr- Zn- Cu- Mo anomalies. Uranium anomalies also occur in the till around the Wollaston basin.
- 2) an area southwest of Baralzon Lake near Hutton Lake, having a Co-Cr-Zn-Ni-Cu-Mn anomaly.
- 3) the area around Great Island, where Au-As-Fe-Cu-Co occur together. There may also be some potential for IOCG deposits.
- 4) the northeast area around Caribou River, which has Cu-Ni-Zn-Cr-Fe-Co-Mn-Mo anomalies, suggestive of mafic or ultramafic bodies similar to those found northeast of Great Island. This area also has uranium anomalies that probably derive from the granitic plutons.

### **Acknowledgements**

We would like to acknowledge the assistance of Matt Pyne with preparation of the digital basemaps, and Isabelle McMartin for critical review of the manuscript. This report is part of the Flin Flon project in the TGI-III program.

### **References**

Anderson, S.D., Böhm, C.O. and Matile, G.L.D. 2005: Bedrock and surficial geological field investigations in the Nejanilini Lake area, northern Manitoba

(parts of NTS 64P5, 12 and 13); in Report of Activities 2005, Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, p. 92–103.

Coker, W.B., and DiLabio, R.N.W. 1979. Initial geochemical results and exploration significance of two uraniferous peat bogs, Kasmere Lake, Manitoba. Geological Survey of Canada, paper 79-1B: 199-206.

Dredge, L.A. 1981. Trace elements in till and esker sediments in northwestern Manitoba. Geological Survey of Canada, Paper 81-1A: 377-381.

Dredge, L. A. 1982. Trace element concentrations from overburden samples in northeastern Manitoba. Geological Survey of Canada, Paper 82-1A: 427-231.

Dredge, L. A. 1983. Uranium and base metal concentrations in till samples from northern Manitoba. Geological Survey of Canada, Paper 83-1B: 303-307.

Dredge, L.A. and Nielsen, E. 1986. Gold concentrations in till, Great Island, northern Manitoba. Geological Survey of Canada, Paper 86-1A,: 779-782.

Dredge, L. A. and Nixon, F.M. 1992. Glacial and environmental geology of northeastern Manitoba. Geological Survey of Canada, Memoir 432, 80p.

Dredge, L.A., Nixon, F.M. and Richardson, R.J. 1986. Quaternary geology and geomorphology of northwestern Manitoba. Geological Survey of Canada, Memoir 418, 38p.

Girard, I., Klassen, R.A., and Lafranboise, R.R. 2004. Sedimentology laboratory manual, Terrain Sciences Division. Geological Survey of Canada, Open File 4823, CD-Rom.

Harper, C.T. and van Breeman, O. 2004. Progress report on U-Pb SHRIMP zircon geochronology and Sm-Nd isotope geochemistry of the Phelps Lake area, northeast Saskatchewan. in Summary of Investigations 2004, v. 2, Saskatchewan Geological Survey Miscellaneous Report 2004-4-2 Paper A-6, CD-ROM.

Manitoba Geological Survey. 2006. Geology map of Manitoba. scale 1:1 000 000. Based on Manitoba Geological Services, 1979, Geological map of Manitoba, scale 1:1 000 000, Map 79-2.

Nielsen, E. 1987. Till geochemistry of the Seal River area east of Great Island Manitoba. Manitoba Energy and Mines, Open file report OF-87-1, 28p.

Sanford, B.V., Grant, A.C., Wade, J.A., and Barss, M.S. 1979. Geology of eastern Canada and adjacent areas. Geological Survey of Canada, Map 1401A, scale 1:2 000 000.

Schledewitz, D.C.P. 1978. Whiskey Jack Lake. Mineral Resources Division map GR80-9-1, scale 1:250 000. NTS 64K.

Schledewitz, D.C.P. 1978. Tadoule Lake. Mineral Resources Division map GR80-9-2, scale 1:250 000. NTS 64J.

Schledewitz, D.C.P. 1978. Shethanei Lake. Mineral Resources Division map GR80-9-3, scale 1:250 000. NTS 64I.

Schledewitz, D.C.P. 1978. Churchill. Mineral Resources Division map GR80-9-4, scale 1:250 000. NTS 54L.

Schledewitz, D.C.P. 1978. Caribou River. Mineral Resources Division map GR80-9-5, scale 1:250 000. NTS 54M.

Schledewitz, D.C.P. 1978. Nejanilini Lake. Mineral Resources Division map GR80-9-6, scale 1:250 000. NTS 64P.

Schledewitz, D.C.P. 1978. Munroe Lake. Mineral Resources Division map GR80-9-7, scale 1:250 000. NTS 64O.

Schledewitz, D.C.P. 1978. Kasmere Lake. Mineral Resources Division map GR80-9-8, scale 1:250 000. NTS 64N.

Schledewitz, D.C.P. 1986. Geology of the Cochrane and Seal River area. Manitoba Energy and Mines Geological Services. Geology Report GR80-9, 139p.

Schledewitz, D.C.P., Weber, W., Lamb, C.F., and Thomas, K.A. 2000. Manitoba industry, trade and mines. Kasmere Lake, Geological Survey bedrock geology compilation map 64N, scale 1:250 000.

Schledewitz, D.C.P., Weber, W., Lamb, C.F., and Thomas, K.A. 2001. Manitoba industry, trade and mines. Munroe Lake, Geological Survey bedrock geology compilation map 64O, scale 1:250 000.

Schledewitz, D.C.P., Weber, W., Lamb, C.F., and Thomas, K.A. 2002. Manitoba industry, trade and mines. Nejaniline Lake, Geological Survey bedrock geology compilation map 64P, scale 1:250 000.

Van Breeman, O., Peterson, T.D. and Sandeman, H.A. 2005. U-Pb zircon geochronology and Nd isotope geochemistry of Proterozoic granitoids in the western Churchill Province: intrusive age pattern and Archean source domains. Canadian Journal of Earth Sciences: 42 – 3, p 339-377.

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54E	25/6/4	78DU	29	356417	6388298	15	27	silty till
54E	25/6/5	78DU	30	380258	6371098	15	27	lacustrine clay
54E	25/6/6	78DU		424462	6359641	15	27	
54E	25/6/7	78DU	31	417112	6382208	15	27	silty till
54E	28/6/1	78DU		403392	6428612	15	27	
54E	28/6/2	78DU	43	401259	6426929	15	27	
54E	28/6/3	78DU		399325	6421468	15	27	
54E	28/6/4	78DU		409095	6414325	15	27	
54E	28/6/5	78DU		403798	6410072	15	27	
54E	28/6/6	78DU	45	399183	6412693	15	27	stony marine deposits
54E	28/6/6	78DU	46	399183	6412693	15	27	marine sand
54E	28/6/8	78DU	47	382783	6424167	15	27	marine deposits
54E	28/6/8	78DU	48	382783	6424167	15	27	sandy till
54E	28/6/6	78DU	53	399183	6412693	15	27	marine sand
54E	28/6/6	78DU	54	399183	6412693	15	27	
54E	28/6/7	78DU		384580	6404221	15	27	
54E	2/7/1	78DU	87	391942	6369339	15	27	lacustrine clay
54E	2/7/2	78DU	88	403232	6360788	15	27	silty till
54E	2/7/3	78DU	89	404256	6362769	15	27	silty till
54E	2/7/4	78DU	90	408485	6364339	15	27	silty till
54E	2/7/5	78DU	91	410719	6348257	15	27	
54E	2/7/5	78DU	92	410719	6348257	15	27	
54E	2/7/6	78DU	93	420101	6356271	15	27	
54E	2/7/6	78DU	94	420101	6356271	15	27	
54E	4/7/1	78DU	98	429500	6433000	15	27	peat bog
54E	4/7/1	78DU	99	429500	6433000	15	27	marine clay
54E	4/7/1	78DU	101	429500	6433000	15	27	silty till
54E	9/7/1	78DU	138	378706	6370365	15	27	lacustrine clay
54E	9/7/2	78DU	139	391402	6386662	15	27	silty till
54E	9/7/2	78DU	140	391402	6386662	15	27	
54E	9/7/2	78DU	141	391402	6386662	15	27	silty till
54E	9/7/2	78DU	143	391402	6386662	15	27	silty till
54E	9/7/3	78DU	145	400352	6389311	15	27	lacustrine clay
54E	9/7/4	78DU	147	407431	6396190	15	27	silty till
54E	9/7/4	78DU	148	407431	6396190	15	27	alluvium
54E	10/7/1	78DU	149	349137	6416521	15	27	lacustrine clay
54E	10/7/2	78DU	150	342546	6416138	15	27	silty till
54E	10/7/3	78DU	151	338379	6414982	15	27	
54E	10/7/4	78DU	152	327229	6423268	15	27	lacustrine clay
54E	10/7/5	78DU	153	324584	6414462	15	27	lacustrine clay
54E	10/7/6	78DU	154	331838	6419770	15	27	glaciofluvial
54E	10/7/6	78DU	155	331838	6419770	15	27	silty till
54E	10/7/6	78DU	156	331838	6419770	15	27	silty till
54E	10/7/6	78DU	157	331838	6419770	15	27	silty till
54E	10/7/6	78DU	158	331838	6419770	15	27	sandy till
54E	10/7/7	78DU	159	333231	6405871	15	27	lacustrine clay
54E	10/7/8	78DU	160	384802	6429197	15	27	lacustrine clay
54E	10/7/8	78DU	161	384808	6429178	15	27	silty till
54E	11/7/10	78DU	175	384802	6429197	15	27	silty till
54E	12/7/1	78DU	176	360818	6427622	15	27	lacustrine clay
54E	12/7/1	78DU	177	360818	6427622	15	27	silty till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54E	12/7/2	78DU	178	364852	6425501	15	27	silty till
54E	12/7/3	78DU	179	356536	6403334	15	27	silty till
54E	13/7/1	78DU	183	367170	6404282	15	27	lacustrine clay
54E	13/7/2	78DU	184	368140	6393169	15	27	silty till
54E	13/7/3	78DU	185	375952	6394805	15	27	silty till
54E	13/7/3	78DU	186	375952	6394805	15	27	marine sand
54E	13/7/3	78DU	187	375952	6394805	15	27	peat
54E	13/7/3	78DU	188	375952	6394805	15	27	peat
54E	13/7/3	78DU	189	375952	6394805	15	27	peat
54E	13/7/3	78DU	190	375952	6394805	15	27	peat
54E	13/7/3	78DU	191	375952	6394805	15	27	peat
54E	13/7/3	78DU	192	375952	6394805	15	27	peat
54E	13/7/3	78DU	193	375952	6394805	15	27	peat
54E	13/7/3	78DU	194	375952	6394805	15	27	peat
54E	13/7/4	78DU	195	377333	6403152	15	27	silty till
54E	13/7/5	78DU	196	375071	6405897	15	27	silty till
54E	13/7/6	78DU	197	372673	6413057	15	27	lacustrine clay
54E	13/7/7	78DU	198	377131	6413420	15	27	silty till
54E	13/7/8	78DU	199	378190	6426372	15	27	silty till
54E	14/7/1	78DU		429508	6418124	15	27	
54E	14/7/2	78DU		428140	6398901	15	27	
54E	14/7/3	78DU	201	438433	6386763	15	27	marine sand
54E	14/7/4	78DU	202	421458	6376748	15	27	
54E	14/7/5	78DU	203	408013	6376852	15	27	silty till
54E	14/7/6	78DU		400869	6376336	15	27	
54E	14/7/7	78DU	204	398193	6383351	15	27	silty till
54E	14/7/8	78DU	205	388503	6381189	15	27	lacustrine clay
54E	14/7/9	78DU	206	388619	6389261	15	27	silty till
54E	14/7/10	78DU	207	400938	6400620	15	27	
54E	19/7/1	78DU	254	423737	6415724	15	27	peat bog
54E	19/7/1	78DU	255	423737	6415724	15	27	peat bog
54E	21/7/1	78DU	295	361306	6376225	15	27	silty till
54E	21/7/2	78DU	296	370531	6372517	15	27	silty till
54E	21/7/3	78DU	297	357641	6360362	15	27	lacustrine clay
54E	21/7/3	78DU	298	357641	6360362	15	27	silty till
54E	21/7/4	78DU	299	359000	6361200	15	27	silty till
54E	21/7/4	78DU	300	359000	6361200	15	27	silty till
54E	21/7/4	78DU	301	359000	6361200	15	27	
54E	21/7/4	78DU	302	359000	6361200	15	27	
54E	21/7/4	78DU	304	359000	6361200	15	27	
54E	21/7/5	78DU	306	355544	6351971	15	27	lacustrine clay
54E	21/7/5	78DU	307	355544	6351971	15	27	silty till
54E	21/7/5	78DU	308	355544	6351971	15	27	silty till
54E	21/7/6	78DU	309	358533	6349449	15	27	silty till
54E	21/7/6	78DU	310	358547	6349500	15	27	
54E	21/7/6	78DU	311	358547	6349500	15	27	silty till
54E	21/7/6	78DU	312	358547	6349500	15	27	silty till
54E	21/7/6	78DU	313	358547	6349500	15	27	silty till
54E	21/7/6	78DU	314	358547	6349500	15	27	
54E	21/7/6	78DU	315	358547	6349500	15	27	shells
54E	21/7/7	78DU	316	368925	6362220	15	27	shells

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54E	21/7/7	78DU	317	368925	6362220	15	27	silty till
54E	21/7/7	78DU	318	368925	6362220	15	27	silty till
54E	21/7/8	78DU	319	375800	6361000	15	27	silty till
54E	21/7/8	78DU	320	375800	6361000	15	27	lacustrine clay
54E	21/7/9	78DU	321	380844	6358755	15	27	
54E	21/7/10	78DU	323	386644	6359158	15	27	silty till
54E	24/7/1	78DU	347	345429	6394783	15	27	silty till
54E	24/7/1	78DU	348	345429	6394783	15	27	
54E	24/7/1	78DU	349	345429	6394783	15	27	silty till
54E	24/7/1	78DU	350	345429	6394783	15	27	
54E	24/7/1	78DU	351	345429	6394783	15	27	silty till
54E	24/7/2	78DU	352	342194	6392962	15	27	
54E	24/7/3	78DU	353	330171	6395376	15	27	lacustrine clay
54E	24/7/4	78DU	354	323702	6393871	15	27	silty till
54E	24/7/4	78DU	355	323702	6393871	15	27	
54E	24/7/5	78DU	356	324235	6382405	15	27	silty till
54E	24/7/6	78DU	357	328331	6376657	15	27	lacustrine clay
54E	24/7/7	78DU	358	333589	6373303	15	27	lacustrine clay
54E	24/7/8	78DU		322444	6363340	15	27	
54E	24/7/9	78DU	359	330855	6357377	15	27	silty till
54E	24/7/9	78DU	360	330855	6357377	15	27	
54E	24/7/9	78DU	361	330855	6357377	15	27	silty till
54E	24/7/6	78DU	362	330855	6357377	15	27	
54E	24/7/9	78DU	363	330855	6357377	15	27	silty till
54E	24/7/9	78DU	364	330855	6357377	15	27	
54E	24/7/9	78DU	365	330825	6357237	15	27	shells
54E	24/7/10	78DU		328413	6352780	15	27	
54E	24/7/11	78DU	366	347565	6363984	15	27	lacustrine clay
54E	26/7/1	78DU	383	390713	6335898	15	27	silty till
54E	26/7/1	78DU	385	390713	6335898	15	27	silty till
54E	26/7/1	78DU	386	390713	6335898	15	27	lacustrine clay
54E	26/7/2	78DU	387	385708	6325480	15	27	silty till
54E	26/7/3	78DU	388	390538	6322315	15	27	silty till
54E	26/7/4	78DU	389	399566	6334227	15	27	lacustrine clay
54E	26/7/5	78DU	390	412909	6337201	15	27	silty till
54E	26/7/6	78DU	392	417851	6336080	15	27	silty till
54E	26/7/7	78DU	393	423803	6322739	15	27	silty till
54E	26/7/8	78DU		437629	6326775	15	27	
54E	26/7/9	78DU	394	428779	6333261	15	27	silty till
54E	28/7/1	78DU	410	355527	6343058	15	27	
54E	28/7/2	78DU	411	335362	6343249	15	27	lacustrine clay
54E	28/7/3	78DU	412	331946	6329009	15	27	lacustrine clay
54E	28/7/4	78DU	413	332402	6323927	15	27	lacustrine clay
54E	28/7/3	78DU	414	342745	6326890	15	27	silty till
54E	28/7/5	78DU	415	342745	6326890	15	27	
54E	28/7/5	78DU	416	342745	6326890	15	27	shells
54E	28/7/6	78DU		356894	6328238	15	27	
54E	28/7/7	78DU	417	354296	6336235	15	27	silty till
54E	28/7/7	78DU	418	354296	6336235	15	27	
54E	28/7/7	78DU	419	354296	6336235	15	27	silty till
54E	28/7/7	78DU	420	354296	6336235	15	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54E	28/7/8	78DU	422	359522	6339512	15	27	marine sand
54E	28/7/8	78DU	423	359522	6339512	15	27	silty till
54E	28/7/8	78DU	425	359522	6339512	15	27	silty till
54E	28/7/8	78DU	426	359522	6339512	15	27	
54E	28/7/8	78DU	427	359522	6339512	15	27	silty till
54E	28/8/9	78DU	428	367308	6334749	15	27	lacustrine clay
54E	31/7/2	78DU		423737	6415724	15	27	
54E	31/7/3	78DU	451	428051	6359010	15	27	
54E	31/7/3	78DU	452	428051	6359010	15	27	
54E	31/7/3	78DU	453	428051	6359010	15	27	silty till
54E	31/7/4	78DU	454	426057	6357247	15	27	silty till
54E	31/7/4	78DU	455	426057	6357247	15	27	
54E	31/7/4	78DU	456	426057	6357247	15	27	silty till
54E	31/7/4	78DU	457	426057	6357247	15	27	
54E	31/7/5	78DU	458	424579	6358072	15	27	silty till
54E	31/7/5	78DU	459	424579	6358072	15	27	silty till
54E	31/7/6	78DU	460	418633	6366182	15	27	
54E	31/7/7	78DU	461	413075	6363649	15	27	marine clay
54E	31/7/7	78DU	462	413075	6363649	15	27	silty till
54E	CD130			345538	6395766	15	27	
54E	CD131			338684	6368853	15	27	
54E	CD133			354224	6336161	15	27	
54E	CD134			420317	6356350	15	27	
54E	CD136			422921	6359200	15	27	
54E	CD137			344953	6369396	15	27	
54E	CD149			429594	6359138	15	27	
54E	CDG147			393322	6388420	15	27	
54E	CDG148			397793	6387702	15	27	
54E	CDG149			400086	6388923	15	27	
54E	CDG150			402136	6389669	15	27	
54E	CDG151			402293	6389230	15	27	
54E	CDG152			402580	6389476	15	27	
54E	CDG153			403600	6390265	15	27	
54E	CDG154			407013	6392070	15	27	
54E	CDG155			407761	6393120	15	27	
54E	CDG156			407858	6393589	15	27	
54E	CDG157			407759	6394249	15	27	
54E	CDG158			407411	6396224	15	27	
54E	CDG159			408791	6396567	15	27	
54E	CDG160			412885	6400069	15	27	
54E	CDG161			413888	6399760	15	27	
54E	CDG162			416026	6402003	15	27	
54E	CDG163			426472	6416332	15	27	
54E	CDG164			426953	6420751	15	27	
54F	26/6/3	78DU	34	478627	6413912	15	27	stony marine deposits
54F	26/6/4	78DU	35	505955	6344345	15	27	marine clay
54F	26/6/5	78DU	36	465090	6349057	15	27	silty till
54F	26/6/6	78DU		446623	6377304	15	27	
54F	1/7/1	78DU	77	498074	6426771	15	27	stony marine deposits
54F	1/7/1	78DU	78	498061	6426752	15	27	
54F	1/7/2	78DU	79	502500	6426000	15	27	stony marine deposits



NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54F	1/7/3	78DU	80	502633	6415484	15	27	
54F	1/7/4	78DU	81	489266	6403986	15	27	
54F	1/7/4	78DU	82	489266	6403986	15	27	shells
54F	1/7/4	78DU	83	489266	6403986	15	27	shells
54F	1/7/4	78DU	84	489266	6403986	15	27	
54F	1/7/5	78DU		478183	6408595	15	27	
54F	1/7/6	78DU	85	478322	6414953	15	27	marine clay
54F	1/7/7	78DU	86	476986	6418887	15	27	peat bog
54F	1/7/8	78DU		481044	6421553	15	27	
54F	15/7/1	78DU	208	499251	6400207	15	27	
54F	15/7/2	78DU	209	513820	6387075	15	27	stony marine deposits
54F	15/7/3	78DU	210	503503	6383088	15	27	stony marine deposits
54F	15/7/4	78DU	211	496844	6387601	15	27	
54F	15/7/5	78DU	212	486783	6390562	15	27	
54F	15/7/6	78DU	213	486698	6393260	15	27	marine sand
54F	15/7/7	78DU	214	478611	6394487	15	27	shells
54F	15/7/7	78DU	216	478611	6394487	15	27	marine clay
54F	15/7/7	78DU	217	478611	6394487	15	27	silty till
54F	15/7/7	78DU	218	478611	6394487	15	27	silty till
54F	15/7/8	78DU	219	480185	6401508	15	27	
54F	22/7/1	78DU	324	461299	6422983	15	27	
54F	22/7/2	78DU	325	459763	6410820	15	27	peat bog
54F	22/7/2	78DU	326	459763	6410820	15	27	peat bog
54F	22/7/2	78DU	327	459763	6410820	15	27	peat bog
54F	22/7/3	78DU		457425	6393774	15	27	
54F	22/7/4	78DU	328	467678	6384128	15	27	stony marine deposits
54F	22/7/4	78DU	329	467678	6384128	15	27	shells
54F	22/7/4	78DU	330	467678	6384128	15	27	stony marine deposits
54F	22/7/5	78DU		463734	6381151	15	27	
54F	22/7/6	78DU	332	447283	6383007	15	27	silty till
54F	22/7/7	78DU		448532	6398854	15	27	
54F	22/7/8	78DU	333	446549	6428193	15	27	marine clay
54F	23/7/2	78DU	334	451385	6372363	15	27	marine clay
54F	23/7/3	78DU	336	454917	6370720	15	27	marine clay
54F	23/7/3	78DU	337	454879	6370732	15	27	marine clay
54F	23/7/3	78DU	338	454917	6370720	15	27	marine clay
54F	23/7/1	78DU	339	446562	6372351	15	27	peat
54F	23/7/1	78DU	340	446574	6372383	15	27	peat
54F	23/7/1	78DU	341	446574	6372383	15	27	silty till
54F	23/7/1	78DU	342	446574	6372383	15	27	silty till
54F	23/7/4	78DU	343	459785	6365896	15	27	marine clay
54F	23/7/5	78DU	344	452752	6354762	15	27	
54F	23/7/6	78DU	345	449073	6349747	15	27	silty till
54F	23/7/7	78DU	346	445025	6350596	15	27	
54F	27/7/1	78DU		445348	6323354	15	27	
54F	27/7/2	78DU	395	453116	6326231	15	27	peat
54F	27/7/3	78DU	396	451921	6333089	15	27	silty till
54F	27/7/4	78DU	398	461149	6335915	15	27	sandy till
54F	27/7/5	78DU		462075	6326193	15	27	
54F	27/7/7	78DU	399	465047	6318260	15	27	silty till
54F	27/7/7	78DU	401	465047	6318260	15	27	shells

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54F	27/7/8	78DU	404	472418	6320492	15	27	marine clay
54F	27/7/6	78DU	405	461991	6323645	15	27	peat
54F	27/7/6	78DU	406	461991	6323645	15	27	peat
54F	27/7/6	78DU	407	461991	6323645	15	27	marine clay
54F	27/7/6	78DU	408	461991	6323645	15	27	silty till
54F	27/7/9	78DU	409	468659	6331997	15	27	
54F	29/7/1	78DU	429	480124	6320343	15	27	marine clay
54F	29/7/2	78DU	430	483786	6333724	15	27	marine clay
54F	29/7/3	78DU	431	487409	6327622	15	27	
54F	29/7/4	78DU	432	497475	6323933	15	27	
54F	29/7/5	78DU	433	502425	6333245	15	27	
54F	29/7/6	78DU	434	506126	6335484	15	27	
54F	29/7/7	78DU		515561	6335958	15	27	
54F	29/7/8	78DU	435	521461	6318939	15	27	stony marine deposits
54F	29/7/8	78DU	436	521461	6318939	15	27	marine sand
54F	29/7/8	78DU	437	521461	6318939	15	27	silty till
54F	29/7/8	78DU	438	521461	6318939	15	27	
54F	29/7/8	78DU	439	521461	6318939	15	27	silty till
54F	29/7/8	78DU	440	521461	6318939	15	27	
54F	29/7/8	78DU	441	521461	6318939	15	27	silty till
54F	29/7/8	78DU	442	521461	6318939	15	27	
54F	30/7/2	78DU	444	490717	6348239	15	27	marine sand
54F	30/7/3	78DU	445	509658	6334613	15	27	marine sand
54F	30/7/4A	78DU	447	502198	6352308	15	27	
54F	30/7/5	78DU	448	518975	6363380	15	27	
54F	30/7/6	78DU	449	530599	6372117	15	27	marine sand
54F	30/7/7	78DU	450	520264	6368807	15	27	
54F	CD145			493711	6405029	15	27	
54F	CD146			481446	6396763	15	27	
54F	CD147			477159	6389672	15	27	
54F	CD148			461569	6379338	15	27	
54K	18/6/1	78DU		442888	6512743	15	27	
54K	19/6/1	78DU		453799	6498871	15	27	
54K	19/6/2	78DU		452295	6501292	15	27	
54K	19/6/3	78DU		443706	6513710	15	27	
54K	22/6/4	78DU		445667	6513766	15	27	
54K	24/6/1	78DU	20	442390	6510988	15	27	
54K	24/6/1	78DU	21	442403	6510995	15	27	
54K	24/6/2	78DU		450823	6513482	15	27	
54K	26/6/1	78DU		442539	6479209	15	27	
54K	26/6/2	78DU	33	453846	6453811	15	27	peat bog
54K	3/7/3	78DU		449358	6507463	15	27	
54K	20/7/8	78DU	290	447709	6489797	15	27	
54K	20/7/10	78DU	294	457398	6509767	15	27	
54K	20/7/11	78DU		470040	6512431	15	27	
54K	25/7/1	78DU	367	451845	6502972	15	27	
54K	25/7/2	78DU	370	457887	6491117	15	27	
54K	25/7/3	78DU	372	466127	6486522	15	27	
54K	25/7/3	78DU	373	466095	6486496	15	27	
54K	25/7/4	78DU	377	477014	6490071	15	27	
54K	25/7/5	78DU	378	482230	6496159	15	27	

## Appendix 1. Site locations

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54K	25/7/7	78DU		479149	6507545	15	27	
54K	25/7/8	78DU	380	474142	6502086	15	27	
54K	25/7/9	78DU	381	458374	6499921	15	27	
54K	1/8/1	78DU	470	501358	6442265	15	27	
54K	1/8/2	78DU		461019	6439671	15	27	
54K	1/8/3	78DU	471	442935	6446959	15	27	silty till
54K	1/8/4	78DU	473	453218	6455846	15	27	silty till
54K	1/8/5	78DU	474	450766	6462483	15	27	
54K	1/8/6	78DU	475	465949	6467616	15	27	silty till
54K	1/8/7	78DU	476	453525	6473375	15	27	
54K	1/8/8	78DU		452951	6475852	15	27	
54K	3/8/1	78DU	477	482080	6477752	15	27	marine sandi
54K	3/8/2	78DU	478	487979	6479488	15	27	
54K	3/8/3	78DU	479	493407	6481225	15	27	marine sandi
54K	3/8/4	78DU	481	494030	6454640	15	27	
54K	3/8/5	78DU	482	476513	6447329	15	27	marine sandi
54K	3/8/6	78DU	483	475931	6442145	15	27	stony marine deposits
54K	3/8/7	78DU	484	484209	6463062	15	27	sandy till
54K	3/8/8	78DU	485	479208	6467970	15	27	
54K	3/8/9	78DU	486	465602	6481241	15	27	
54K	3/8/10	78DU	487	464709	6494740	15	27	
54K	3/8/11	78DU	489	473762	6496436	15	27	
54K	3/8/12	78DU	490	481990	6490546	15	27	
54K	3/8/13	78DU	491	491136	6491222	15	27	
54K	3/8/13	78DU	492	491137	6491209	15	27	
54K	3/8/14	78DU	493	490023	6508114	15	27	
54K	3/8/15	78DU	494	487802	6508516	15	27	
54K	3/8/16	78DU	495	483591	6504904	15	27	
54K	3/8/17	78DU	496	472346	6506955	15	27	
54K	3/8/18	78DU	497	462508	6508448	15	27	
54K	3/8/19	78DU	498	458206	6506782	15	27	
54K	3/8/20	78DU	499	445859	6502749	15	27	
54K	3/8/21	78DU	500	447788	6498060	15	27	
54K	3/8/21	78DU	501	447743	6498040	15	27	
54K	3/8/21	78DU	502	447749	6498071	15	27	
54K	3/8/21	78DU	503	447749	6498066	15	27	
54K	3/8/21	78DU	504	447749	6498066	15	27	
54K	5/8/6	78DU	520	443554	6514193	15	27	
54K	5/8/7	78DU		447789	6513126	15	27	
54k	5/8/8	78DU	521	452560	6513131	15	27	
54K	5/8/9	78DU	522	447570	6511503	15	27	
54K	8/8/1	78DU	532	451765	6499620	15	27	
54K	8/8/2	78DU		453106	6497457	15	27	
54K	8/8/3	78DU		453453	6499019	15	27	
54K	8/8/4	78DU	533	452252	6497487	15	27	
54K	8/8/5	78DU	534	451529	6502132	15	27	
54L	25/6/1	78DU	26	386000	6509500	15	27	shells
54L	25/6/1	78DU	27	386000	6509500	15	27	stony marine deposits
54L	25/6/3	78DU	28	357000	6438500	15	27	silty till
54L	29/6/2	78DU	56	386500	6536000	15	27	marine clay
54L	29/6/4	78DU	57	371000	6542000	15	27	marine clay

## Appendix 1. Site locations

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54L	29/6/5	78DU	58	353100	6536100	15	27	sandy till
54L	29/6/6	78DU	59	334600	6540800	15	27	sandy till
54L	29/6/9	78DU	62	387000	6529000	15	27	shells
54L	29/6/9	78DU	63	387000	6529000	15	27	silty till
54L	29/6/9	78DU	64	387000	6529000	15	27	shells
54L	29/6/9	78DU	65	387000	6529000	15	27	silty till
54L	30/6/1	78DU	67	402500	6517000	15	27	marine clay
54L	30/6/2	78DU	68	349820	6513800	15	27	sandy till
54L	30/6/4	78DU	71	348620	6518500	15	27	silty till
54L	30/6/5	78DU	72	384000	6512000	15	27	marine clay
54L	30/6/6	78DU	73	376000	6495000	15	27	
54L	30/6/9	78DU	74	383800	6501000	15	27	silty till
54L	30/6/8	78DU	75	383800	6501000	15	27	silty till
54L	30/6/9	78DU	76	383800	6501000	15	27	stony marine deposits
54L	4/7/2	78DU	102	430000	6445000	15	27	marine sand
54L	4/7/2	78DU	103	430000	6448000	15	27	silty till
54L	4/7/3	78DU	105	430400	6454200	15	27	silty till
54L	4/7/4	78DU	108	430000	6461500	15	27	silty till
54L	4/7/4	78DU	109	430200	6461400	15	27	silty till
54L	4/7/5	78DU	110	429980	6471500	15	27	silty till
54L	4/7/5	78DU	112	423900	6467600	15	27	stony marine deposits
54L	4/7/7	78DU	113	423900	6467600	15	27	silty till
54L	4/7/7	78DU	114	423900	6467600	15	27	silty till
54L	6/7/1	78DU	120	436500	6461000	15	27	marine sand
54L	6/7/3	78DU	122	417500	6448000	15	27	marine clay
54L	6/7/3	78DU	123	417600	6447900	15	27	silty till
54L	6/7/3	78DU	124	417600	6447900	15	27	silty till
54L	6/7/5	78DU	126	393600	6438600	15	27	marine sand
54L	6/7/5	78DU	127	393600	6438600	15	27	silty till
54L	6/7/5	78DU	128	393600	6438600	15	27	silty till
54L	7/7/1	78DU	129	360200	6491200	15	27	silty till
54L	7/7/1	78DU	130	360200	6491200	15	27	lacustrine clay
54L	7/7/1	78DU	131	360200	6491200	15	27	silty till
54L	7/7/2	78DU	132	360500	6497500	15	27	glaciofluvial
54L	7/7/4	78DU	133	334500	6493000	15	27	marine clay
54L	11/7/1	78DU	163	361500	6450000	15	27	marine clay
54L	11/7/2	78DU	164	342100	6449000	15	27	silty till
54L	11/7/3	78DU	165	325500	6588000	15	27	silty till
54L	11/7/4	78DU	166	326600	6442800	15	27	silty till
54L	11/7/5	78DU	167	340800	6444000	15	27	silty till
54L	11/7/6	78DU	168	347600	6438400	15	27	silty till
54L	11/7/7	78DU	169	351000	6444500	15	27	silty till
54L	11/7/7	78DU	170	351000	6444500	15	27	silty till
54L	11/7/7	78DU	171	351000	6444500	15	27	lacustrine clay
54L	11/7/8	78DU	173	369500	6432500	15	27	lacustrine clay
54L	11/7/9	78DU	174	375500	6440000	15	27	marine clay
54L	16/7/2	78DU	222	354800	6487100	15	27	sandy till
54L	16/7/5	78DU	225	326000	6480000	15	27	lacustrine clay
54L	16/7/8	78DU	231	379900	6472700	15	27	silty till
54L	16/7/8	78DU	233	379900	6472700	15	27	shells
54L	18/7/1	78DU	247	401000	6498000	15	27	marine clay

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54L	18/7/8	78DU	248	379500	6489500	15	27	sandy till
54L	18/7/9	78DU	249	393500	6474000	15	27	stony marine deposits
54L	18/7/12	78DU	250	418400	6471600	15	27	silty till
54L	18/7/12	78DU	251	418400	6471600	15	27	silty till
54L	18/7/12	78DU	252	418400	6471600	15	27	
54L	18/7/12	78DU	253	418400	6471600	15	27	
54L	19/7/2	78DU	256	329200	6472200	15	27	lacustrine clay-Mc
54L	19/7/2	78DU	257	329200	6472200	15	27	silty till
54L	19/7/3	78DU	259	330600	6474500	15	27	silty till
54L	19/7/3	78DU	261	330600	6474500	15	27	silty till
54L	19/7/4	78DU	263	332000	6477000	15	27	lacustrine clay
54L	19/7/4	78DU	264	332000	6477000	15	27	lacustrine clay
54L	19/7/5	78DU	265	332500	6481000	15	27	silty till
54L	19/7/5	78DU	266	332500	6481000	15	27	silty till
54L	19/7/5	78DU	267	332500	6481000	15	27	silty till
54L	19/7/6	78DU	269	373500	6482000	15	27	shells
54L	19/7/7	78DU	270	365200	6478200	15	27	silty till
54L	19/7/7	78DU	271	365200	6478200	15	27	
54L	19/7/8	78DU	272	378800	6484100	15	27	silty till
54L	19/7/8	78DU	273	378800	6484100	15	27	
54L	19/7/9	78DU	274	385900	6487200	15	27	silty till
54L	19/7/9	78DU	275	385900	6487200	15	27	silty till
54L	19/7/10	78DU	276	393200	6488600	15	27	silty till
54L	31/7/8	78DU	463	418400	6452600	15	27	marine clay
54L	31/7/8	78DU	464	418400	6452600	15	27	silty till
54L	31/7/8	78DU	465	418400	6452600	15	27	silty till
54L	31/7/8	78DU	466	418400	6452600	15	27	marine sand
54L	31/7/8	78DU	467	418400	6452600	15	27	
54L	31/7/8	78DU	468	418400	6452600	15	27	silty till
54L	12/8/2	77DU	510	329064	6493740	15	27	marine clay
54L	12/8/2	77DU	511	329064	6493740	15	27	
54L	13/8/1	77DU	512	335596	6494218	15	27	silty till
54L	13/8/1	77DU	513	335596	6494218	15	27	
54L	13/8/1	77DU	514	335596	6494218	15	27	lacustrine clay
54L	13/8/1	77DU	515	335596	6494218	15	27	lacustrine clay
54L	13/8/1	77DU	516	335596	6494218	15	27	
54L	17/8/2	77DU	517	359926	6491007	15	27	
54L	17/8/1	77DU	518	358219	6490829	15	27	sandy till
54L	18/8/2	77DU	519	357652	6490999	15	27	marine clay
54M	21/6/3	77DU	18	366596	6630085	15	27	bouldery till
54M	21/6/4	77DU		364510	6588015	15	27	
54M	21/6/5	77DU	21	359659	6546808	15	27	alluvium
54M	21/6/5	77DU	22	359659	6546808	15	27	
54M	21/6/6	77DU		342819	6556917	15	27	
54M	6/7/1	77DU	200	366740	6556505	15	27	marine sand
54M	6/7/2	77DU	201	364201	6564250	15	27	sandy till
54M	6/7/3	77DU	202	377774	6564686	15	27	marine clay
54M	6/7/4	77DU		379397	6554751	15	27	
54M	6/7/5	77DU	203	391782	6561567	15	27	stony marine deposits
54M	6/7/5	77DU	204	391782	6561567	15	27	sandy till
54M	6/7/6	77DU	205	394503	6561502	15	27	stony marine deposits

## Appendix 1. Site locations

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54M	6/7/6	77DU	206	394503	6561502	15	27	stony marine deposits
54M	6/7/7	77DU		388538	6554243	15	27	
54M	6/7/8	77DU		393192	6545101	15	27	
54M	9/7/1	77DU	226	366961	6599065	15	27	sandy till
54M	9/7/1	77DU	227	366961	6599065	15	27	
54M	9/7/2	77DU	228	382857	6598033	15	27	marine sand
54M	9/7/3	77DU		376414	6594572	15	27	
54M	9/7/4	77DU	229	376115	6592886	15	27	marine sand
54M	9/7/5	77DU	230	372069	6592223	15	27	marine sand
54M	9/7/6	77DU	231	358331	6595243	15	27	glaciofluvial
54M	9/7/7	77DU	232	358734	6578976	15	27	
54M	9/7/8	77DU	234	363187	6575237	15	27	shells
54M	9/7/8	77DU	235	363187	6575237	15	27	shells
54M	9/7/8	77DU	236	363187	6575237	15	27	shells
54M	9/7/8	77DU	237	363187	6575237	15	27	shells
54M	10/7/1	77DU	238	335373	6608126	15	27	stony marine deposits
54M	10/7/2	77DU		337783	6610400	15	27	
54M	10/7/3	77DU	239	341452	6609698	15	27	sandy till
54M	10/7/4	77DU	240	348976	6610775	15	27	sandy till
54M	11/7/1	77DU	241	338388	6574013	15	27	stony marine deposits
54M	11/7/2	77DU	242	334608	6583337	15	27	bouldery till
54M	11/7/3	77DU	244	354054	6607997	15	27	
54M	11/7/3	77DU	245	354066	6607971	15	27	glaciofluvial
54M	11/7/4	77DU	246	356344	6618433	15	27	bouldery till
54M	11/7/5	77DU	247	352698	6619990	15	27	stony marine deposits
54M	11/7/6	77DU	248	354473	6625366	15	27	sandy till
54M	11/7/6	77DU	249	354473	6625366	15	27	sandy till
54M	11/7/7	77DU	250	345732	6625822	15	27	marine sand
54M	11/7/7	77DU	251	345802	6625800	15	27	sandy till
54M	11/7/8	77DU	252	336258	6597693	15	27	sandy till
54M	21/7/1	77DU		395265	6615010	15	27	
54M	21/7/2	77DU	323	388616	6612621	15	27	marine sand
54M	21/7/3	77DU	324	395631	6609767	15	27	marine sand
54M	21/7/4	77DU	325	388196	6601294	15	27	stony marine deposits
54M	21/7/5	77DU	326	383427	6606249	15	27	sandy till
54M	21/7/6	77DU	328	381778	6605959	15	27	stony marine deposits
54M	21/7/6	77DU	329	381778	6605959	15	27	marine clay
54M	21/7/8	77DU	330	361816	6604020	15	27	sandy till
54M	21/7/8	77DU	331	361816	6604020	15	27	sandy till
54M	21/7/8	77DU	332	361816	6604020	15	27	sandy till
54M	21/7/9	77DU	333	373509	6616428	15	27	sandy till
54M	21/7/10	77DU	334	373009	6622032	15	27	sandy till
54M	21/7/10	77DU	336	373034	6622019	15	27	sandy till
54M	21/7/11	77DU	337	369681	6620382	15	27	sandy till
54M	21/7/12	77DU		364119	6614099	15	27	
54M	21/7/13	77DU	338	359330	6616203	15	27	marine clay
54M	28/7/1	77DU	403	330341	6560202	15	27	sandy till
54M	28/7/1	77DU	404	330341	6560202	15	27	marine sand
54M	28/7/2	77DU		342493	6559747	15	27	
54M	28/7/3	77DU		346454	6559010	15	27	
54M	28/7/4	77DU		345049	6566131	15	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
54M	28/7/5	77DU	405	354816	6565647	15	27	marine sand
54M	28/7/6	77DU	406	355162	6569890	15	27	stony marine deposits
54M	28/7/6	77DU	407	355162	6569890	15	27	stony marine deposits
54M	28/7/7	77DU		353180	6557236	15	27	
54M	28/7/8	77DU	408	348265	6553304	15	27	sandy till
54M	28/7/9	77DU	410	342830	6550046	15	27	sandy till
54M	28/7/10	77DU	411	333501	6549151	15	27	sandy till
64I	20/6/1	77DU	1	582167	6526653	14	27	
64I	20/6/2	77DU	2	600250	6492895	14	27	peat
64I	20/6/2	77DU	3	600250	6492895	14	27	peat
64I	20/6/3	77DU	4	561119	6462644	14	27	lacustrine sand
64I	20/6/3	77DU	5	561119	6462644	14	27	lacustrine sand
64I	20/6/4	77DU	6	612050	6459800	14	27	silty till
64I	20/6/4	77DU	7	612050	6459800	14	27	silty till
64I	20/6/5	77DU	8	655587	6456324	14	27	lacustrine clay
64I	20/6/5	77DU	9	655587	6456324	14	27	lacustrine clay
64I	20/6/6	77DU	11	669293	6465789	14	27	lacustrine clay
64I	20/6/6	77DU	12	669293	6465789	14	27	silty till
64I	20/6/7	77DU		657448	6497337	14	27	
64I	22/6/1	77DU		617442	6443057	14	27	
64I	22/6/2	77DU	23	623522	6438750	14	27	sandy till
64I	22/6/2	77DU	25	623522	6438750	14	27	lacustrine sand
64I	22/6/3	77DU	26	639345	6445451	14	27	glaciofluvial
64I	22/6/3	77DU	27	639345	6445451	14	27	glaciofluvial
64I	22/6/4	77DU	28	645540	6444451	14	27	sandy till
64I	22/6/4	77DU	29	645540	6444451	14	27	lacustrine clay
64I	22/6/5	77DU	30	629190	6434143	14	27	silty till
64I	22/6/10	77DU	31	624498	6449254	14	27	sandy till
64I	22/6/11	77DU	32	628419	6444574	14	27	lacustrine clay
64I	22/6/12	77DU	33	644750	6445181	14	27	silty till
64I	22/6/12	77DU	34	644750	6445181	14	27	silty till
64I	22/6/13	77DU	35	643111	6439981	14	27	lacustrine clay
64I	22/6/13	77DU	37	643111	6439981	14	27	sandy till
64I	22/6/13	77DU	38	643111	6439981	14	27	sandy till
64I	22/6/14	77DU		640085	6450011	14	27	
64I	23/6/1	77DU	39	647705	6477517	14	27	lacustrine clay
64I	23/6/2	77DU	41	651800	6485000	14	27	lacustrine clay
64I	23/6/3	77DU	42	669286	6478342	14	27	silty till
64I	23/6/3	77DU	44	669286	6478342	14	27	silty till
64I	23/6/4	77DU	45	660304	6463204	14	27	silty till
64I	23/6/4	77DU	46	660304	6463204	14	27	silty till
64I	23/6/10	77DU	47	646818	6464946	14	27	lacustrine clay
64I	23/6/11	77DU	48	649702	6466267	14	27	glaciofluvial
64I	23/6/12	77DU	50	667519	6465546	14	27	silty till
64I	23/6/12	77DU	51	667519	6465546	14	27	silty till
64I	23/6/12	77DU	52	667519	6465546	14	27	
64I	23/6/13	77DU	53	655117	6478638	14	27	lacustrine clay
64I	24/6/1	77DU	54	650824	6534532	14	27	alluvium
64I	24/6/2	77DU	55	652751	6535415	14	27	
64I	24/6/3	77DU		635985	6535830	14	27	
64I	25/6/1	77DU	56	588021	6505181	14	27	sandy till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64I	25/6/1	77DU	57	588021	6505181	14	27	sandy till
64I	25/6/2	77DU	58	588451	6488260	14	27	sandy till
64I	25/6/2	77DU	58	588451	6488260	14	27	peat
64I	25/6/2	77DU	59	588451	6488260	14	27	peat
64I	25/6/3	77DU	60	605101	6492404	14	27	lacustrine sand
64I	25/6/4	77DU		604003	6507995	14	27	
64I	25/6/2	77DU	61	588451	6488260	14	27	
64I	25/6/2	77DU	62	588459	6488209	14	27	lacustrine clay
64I	25/6/3	77DU	63	605101	6492404	14	27	lacustrine clay
64I	26/6/1	77DU	64	562894	6533957	14	27	glaciofluvial
64I	26/6/1	77DU	65	562894	6533957	14	27	glaciofluvial
64I	26/6/2	77DU	66	560138	6528294	14	27	sandy till
64I	26/6/3	77DU	68	570891	6519542	14	27	
64I	26/6/3	77DU	69	570891	6519542	14	27	sandy till
64I	26/6/4	77DU	70	584172	6517832	14	27	sandy till
64I	26/6/5	77DU	71	582499	6530808	14	27	sandy till
64I	26/6/1	77DU	72	562894	6533957	14	27	lacustrine sand
64I	26/6/2	77DU	73	560138	6528294	14	27	sandy till
64I	26/6/3	77DU	74	570891	6519542	14	27	sandy till
64I	26/6/4	77DU	75	584172	6517832	14	27	sandy till
64I	26/6/4	77DU	76	584172	6517832	14	27	sandy till
64I	26/6/5	77DU	77	582564	6530730	14	27	sandy till
64I	1/7/1	77DU	129	616285	6493614	14	27	silty till
64I	1/7/1	77DU	130	616285	6493614	14	27	silty till
64I	1/7/2	77DU	131	630654	6498814	14	27	sandy till
64I	1/7/2	77DU	132	630654	6498814	14	27	sandy till
64I	1/7/3	77DU	133	626034	6500526	14	27	sandy till
64I	1/7/4	77DU	134	644348	6495698	14	27	lacustrine clay
64I	1/7/5	77DU	135	639234	6504686	14	27	sandy till
64I	1/7/6	77DU	136	624081	6505809	14	27	silty till
64I	2/7/1	77DU	137	563147	6506697	14	27	sandy till
64I	2/7/2	77DU	139	561769	6486743	14	27	sandy till
64I	2/7/2	77DU	140	561769	6486743	14	27	sandy till
64I	2/7/2	77DU	141	561769	6486743	14	27	sandy till
64I	2/7/2B	77DU	142	561698	6485533	14	27	lacustrine sand
64I	2/7/2B	77DU	143	561698	6485533	14	27	sandy till
64I	2/7/3	77DU	144	568667	6502763	14	27	sandy till
64I	2/7/3	77DU	146	568667	6502763	14	27	sandy till
64I	2/7/4	77DU	147	581257	6487095	14	27	sandy till
64I	2/7/4	77DU	148	581226	6487068	14	27	sandy till
64I	2/7/5	77DU	149	577871	6502328	14	27	lacustrine clay
64I	2/7/5	77DU	150	577871	6502328	14	27	sandy till
64I	2/7/6	77DU	151	595727	6507934	14	27	lacustrine sand
64I	2/7/7	77DU		597792	6512816	14	27	
64I	5/7/1	77DU	187	607662	6521757	14	27	lacustrine sand
64I	5/7/2	77DU	188	595965	6514057	14	27	sandy till
64I	5/7/3	77DU	189	589813	6516547	14	27	lacustrine sand
64I	5/7/3	77DU	190	589684	6516304	14	27	sandy till
64I	5/7/4	77DU	191	597714	6521664	14	27	sandy till
64I	5/7/4	77DU	192	597714	6521664	14	27	sandy till
64I	5/7/5	77DU	193	601712	6526604	14	27	sandy till



NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64I	5/7/6	77DU	194	611534	6530805	14	27	sandy till
64I	5/7/7	77DU		610425	6533337	14	27	
64I	5/7/8	77DU	195	590663	6533380	14	27	sandy till
64I	5/7/8	77DU	196	590663	6533380	14	27	sandy till
64I	5/7/9	77DU	197	593089	6536201	14	27	sandy till
64I	5/7/10	77DU	198	594501	6539766	14	27	sandy till
64I	5/7/1	77DU	199	601306	6539462	14	27	sandy till
64I	8/7/1	77DU	225	624829	6539464	14	27	marine sand
64I	14/7/1	77DU		670731	6509705	14	27	
64I	14/7/2	77DU	253	673257	6504498	14	27	sandy till
64I	14/7/3	77DU	254	673930	6502141	14	27	sandy till
64I	14/7/3	77DU	255	673856	6501908	14	27	sandy till
64I	14/7/4	77DU		674150	6498352	14	27	
64I	14/7/5	77DU	256	665093	6499999	14	27	sandy till
64I	14/7/5	77DU	257	665093	6499999	14	27	marine sandi
64I	14/7/6	77DU	258	660032	6502164	14	27	sandy till
64I	14/7/7	77DU		658348	6493665	14	27	
64I	14/7/8	77DU	259	654664	6500185	14	27	sandy till
64I	14/7/8	77DU	261	654669	6500221	14	27	sandy till
64I	14/7/9	77DU	262	652085	6493774	14	27	lacustrine clay
64I	14/7/9	77DU	263	652150	6493744	14	27	lacustrine clay
64I	15/7/1	77DU	264	672888	6444890	14	27	lacustrine sand
64I	15/7/2	77DU	265	674622	6432852	14	27	lacustrine clay
64I	15/7/3	77DU	266	669834	6438131	14	27	lacustrine clay
64I	15/7/4	77DU	268	656057	6446772	14	27	lacustrine clay
64I	15/7/4	77DU	269	656057	6446772	14	27	lacustrine clay
64I	15/7/5	77DU	270	654696	6455626	14	27	lacustrine clay
64I	15/7/5	77DU	271	654742	6455686	14	27	lacustrine sand
64I	15/7/6	77DU	272	651848	6452517	14	27	lacustrine clay
64I	15/7/7	77DU		674987	6456463	14	27	
64I	15/7/8	77DU	273	646906	6458833	14	27	sandy till
64I	15/7/8	77DU	274	646906	6458833	14	27	sandy till
64I	15/7/9	77DU	275	641192	6495946	14	27	lacustrine sand
64I	17/7/1	77DU	289	615553	6477696	14	27	lacustrine sand
64I	17/7/1	77DU	290	615553	6477696	14	27	sandy till
64I	17/7/2	77DU	291	620117	6479251	14	27	lacustrine clay
64I	17/7/2	77DU	292	620117	6479251	14	27	glaciofluvial
64I	17/7/3	77DU	293	623616	6473536	14	27	lacustrine clay
64I	17/7/3	77DU	294	623616	6473536	14	27	sandy till
64I	17/7/3	77DU	296	623616	6473536	14	27	silty till
64I	17/7/3	77DU	297	623616	6473536	14	27	silty till
64I	17/7/4	77DU	298	618522	6472185	14	27	lacustrine clay
64I	17/7/5	77DU	299	617727	6466538	14	27	sandy till
64I	17/7/5	77DU	300	617727	6466538	14	27	sandy till
64I	17/7/6	77DU	301	638855	6462447	14	27	lacustrine clay
64I	17/7/7	77DU	302	633271	6465184	14	27	silty till
64I	17/7/7	77DU	303	633271	6465184	14	27	lacustrine clay
64I	17/7/8	77DU	304	633200	6470200	14	27	lacustrine clay
64I	17/7/9	77DU	305	633230	6475447	14	27	sandy till
64I	17/7/9	77DU	307	633268	6475549	14	27	sandy till
64I	17/7/10	77DU	308	633500	6482800	14	27	lacustrine clay

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64I	18/7/1	77DU	309	666431	6531333	14	27	stony marine deposits
64I	18/7/2	77DU	310	668484	6521742	14	27	sandy till
64I	18/7/3	77DU		664873	6518805	14	27	
64I	18/7/4	77DU	311	658734	6532166	14	27	sandy till
64I	18/7/4	77DU	312	658768	6532122	14	27	Alluvium
64I	18/7/5	77DU	313	655314	6526744	14	27	sandy till
64I	18/7/6	77DU	315	656624	6535335	14	27	sandy till
64I	20/7/1	77DU		654116	6533622	14	27	
64I	20/7/2	77DU		668163	6538473	14	27	
64I	20/7/3	77DU	319	656124	6540473	14	27	stony marine deposits
64I	20/7/3	77DU	320	656560	6540669	14	27	sandy till
64I	20/7/4	77DU		654218	6532392	14	27	
64I	20/7/5	77DU	321	653924	6533840	14	27	Alluvium
64I	20/7/5	77DU	322	653924	6533840	14	27	Alluvium
64I	20/7/6	77DU		648154	6538041	14	27	
64I	29/7/1	77DU	412	622140	6519338	14	27	sandy till
64I	29/7/2	77DU	414	615839	6517801	14	27	sandy till
64I	29/7/3	77DU	415	619760	6527078	14	27	sandy till
64I	29/7/4	77DU	416	617080	6529655	14	27	sandy till
64I	29/7/4	77DU	417	617080	6529655	14	27	sandy till
64I	29/7/5	77DU	418	597248	6532053	14	27	sandy till
64I	29/7/5	77DU	419	597248	6532053	14	27	sandy till
64I	29/7/5	77DU	420	597248	6532053	14	27	sandy till
64I	29/7/5	77DU	421	597248	6532053	14	27	sandy till
64I	29/7/5	77DU	422	597248	6532053	14	27	lacustrine clay
64I	29/7/5	77DU	423	597248	6532053	14	27	sandy till
64I	29/7/6	77DU	424	616939	6533153	14	27	sandy till
64I	29/7/6	77DU	425	616939	6533153	14	27	sandy till
64I	29/7/7	77DU	426	615807	6540614	14	27	sandy till
64I	29/7/8	77DU		627378	6536353	14	27	
64I	29/7/9	77DU	427	624874	6530845	14	27	sandy till
64I	29/7/10	77DU	428	631790	6523688	14	27	sandy till
64I	29/7/10	77DU	429	631790	6523688	14	27	sandy till
64I	29/7/11	77DU	430	637409	6515378	14	27	sandy till
64I	29/7/12	77DU	431	643291	6528891	14	27	silty till
64I	29/7/13	77DU	432	641548	6539316	14	27	sandy till
64I	31/7/1	77DU	443	565416	6477294	14	27	lacustrine sand
64I	31/7/1	77DU	444	565416	6477294	14	27	lacustrine clay
64I	31/7/2	77DU	445	566334	6466471	14	27	sandy till
64I	31/7/3	77DU	446	580333	6464444	14	27	lacustrine sand
64I	31/7/4	77DU	447	591451	6466547	14	27	sandy till
64I	31/7/5	77DU	448	607996	6482677	14	27	sandy till
64I	31/7/5	77DU	449	607996	6482677	14	27	lacustrine clay
64I	3/8/1	77DU	456	627522	6476090	14	27	
64I	3/8/2	77DU		627739	6476914	14	27	
64I	3/8/3	77DU		627330	6477535	14	27	
64I	3/8/4	77DU		627341	6478807	14	27	
64I	3/8/5	77DU	457	627591	6478980	14	27	
64I	4/8/1	77DU		627689	6479744	14	27	
64I	4/8/2	77DU		628106	6480102	14	27	
64I	4/8/3	77DU	458	627385	6480079	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64I	4/8/3	77DU	459	627385	6480079	14	27	
64I	4/8/3	77DU	460	627385	6480079	14	27	
64I	4/8/3	77DU	461	627513	6480058	14	27	
64I	4/8/4	77DU		628066	6480573	14	27	
64I	4/8/5	77DU		628419	6481523	14	27	
64I	4/8/6	77DU		628547	6483777	14	27	
64I	4/8/7	77DU		628460	6484541	14	27	
64I	5/8/1	77DU	462	630506	6487448	14	27	
64I	5/8/1	77DU	463	630506	6487448	14	27	
64I	5/8/1	77DU	464	630636	6487470	14	27	
64I	5/8/1	77DU	465	630617	6487451	14	27	
64I	5/8/2	77DU		631439	6487712	14	27	
64I	6/8/1	77DU	466	632864	6487698	14	27	
64I	6/8/1	77DU	467	632864	6487698	14	27	
64I	6/8/1	77DU	468	632864	6487698	14	27	
64I	6/8/2	77DU	470	634713	6487205	14	27	
64I	7/8/1	77DU	471	635474	6487369	14	27	
64I	7/8/1	77DU	472	635474	6487369	14	27	
64I	7/8/2	77DU	473	637631	6487831	14	27	
64I	7/8/2	77DU	474	637631	6487831	14	27	
64I	7/8/3	77DU	475	638752	6488542	14	27	
64I	7/8/4	77DU	476	639831	6489176	14	27	
64I	7/8/11	77DU		635632	6487300	14	27	
64I	8/8/1	77DU		642348	6487930	14	27	
64I	8/8/3	77DU	477	645774	6485389	14	27	
64I	8/8/3	77DU	478	645021	6484886	14	27	
64I	8/8/3	77DU	479	645774	6485389	14	27	
64I	8/8/5	77DU		646309	6486268	14	27	
64I	8/8/6	77DU		646154	6486512	14	27	
64I	8/8/7	77DU	482	645669	6487111	14	27	
64I	8/8/8	77DU		647331	6486874	14	27	
64I	8/8/9	77DU	484	647749	6487392	14	27	
64I	8/8/9	77DU	485	647749	6487392	14	27	silty till
64I	8/8/9	77DU	486	647749	6487392	14	27	
64I	8/8/9	77DU	487	647749	6487392	14	27	
64I	9/8/1	77DU	489	650394	6486873	14	27	
64I	9/8/2	77DU		652151	6487743	14	27	
64I	9/8/4	77DU		654783	6487741	14	27	
64I	9/8/5	77DU	491	654857	6488433	14	27	silty till
64I	9/8/6	77DU		655621	6489952	14	27	
64I	9/8/7	77DU		656313	6491519	14	27	
64I	9/8/8	77DU	492	656752	6493236	14	27	silty till
64I	9/8/9	77DU		656931	6494248	14	27	
64I	9/8/10	77DU	493	656381	6494233	14	27	silty till
64I	9/8/12	77DU	494	656308	6494983	14	27	
64I	9/8/11	77DU	495	656617	6495186	14	27	
64I	9/8/12	77DU	496	656760	6494900	14	27	
64I	9/8/13	77DU		656675	6496125	14	27	
64I	9/8/14	77DU	497	657687	6497445	14	27	
64I	10/8/1	77DU	498	659270	6498313	14	27	
64I	9/8/14	77DU	499	658100	6497306	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64I	10/8/3	77DU	500	659985	6497491	14	27	
64I	10/8/4	77DU	501	661300	6497934	14	27	
64I	10/8/5	77DU	502	662133	6497440	14	27	silty till
64I	10/8/6	77DU	503	662901	6497798	14	27	
64I	11/8/1	77DU		669987	6496672	14	27	
64I	11/8/2	77DU	504	672551	6496386	14	27	
64I	11/8/3	77DU		673857	6495882	14	27	
64I	12/8/1	77DU	505	673936	6495218	14	27	
64I	12/8/1	77DU	506	673936	6495218	14	27	silty till
64I	12/8/1	77DU	507	673936	6495218	14	27	silty till
64I	12/8/1	77DU	508	673936	6495218	14	27	
64I	12/8/1	77DU	509	673936	6495218	14	27	silty till
64I	16/7/4	78DU	224	323500	6483800	15	27	sandy till
64I	16/7/6	78DU	228	323000	6460500	15	27	silty till
64I	16/7/6	78DU	229	323000	6460500	15	27	silty till
64I	17/7/5	80DU	299	618020	6466362	14	27	
64J	4/7/1	80DU	8	471193	6451087	14	27	sandy till
64J	4/7/2	80DU	9	546285	6456662	14	27	sandy till
64J	4/7/2	80DU	10	546317	6456637	14	27	lacustrine clay
64J	4/7/3	80DU	11	536905	6462446	14	27	lacustrine clay
64J	4/7/4	80DU	13	509836	6524553	14	27	sandy till
64J	4/7/5	80DU		447635	6481039	14	27	
64J	4/7/6	80DU	15	445843	6493986	14	27	lacustrine clay
64J	5/7/8	80DU		480599	6457904	14	27	
64J	6/7/2	80DU	24	461835	6483378	14	27	lacustrine clay
64J	6/7/1	80DU		454463	6482163	14	27	
64J	6/7/2	80DU	25	461829	6483340	14	27	
64J	6/7/3	80DU	27	470081	6479738	14	27	lacustrine clay
64J	6/7/4	80DU		473780	6479474	14	27	
64J	6/7/5	80DU	28	473426	6472936	14	27	sandy till
64J	6/7/6	80DU	30	476526	6468267	14	27	
64J	6/7/7	80DU	31	494699	6468728	14	27	
64J	6/7/9	80DU	32	473318	6460079	14	27	sandy till
64J	6/7/10	80DU		460182	6460679	14	27	
64J	6/7/11	80DU	33	442933	6455709	14	27	
64J	8/7/1	80DU	43	452967	6438410	14	27	lacustrine clay
64J	8/7/1	80DU	44	452967	6438410	14	27	lacustrine clay
64J	8/7/1	80DU	47	452967	6438410	14	27	lacustrine clay
64J	8/7/2	80DU	48	453867	6440990	14	27	
64J	8/7/3	80DU		451925	6431101	14	27	
64J	8/7/4A	80DU		476473	6434190	14	27	
64J	8/7/4B	80DU		479536	6440039	14	27	
64J	8/7/4C	80DU		487146	6439210	14	27	
64J	8/7/5	80DU		489961	6439001	14	27	
64J	8/7/6	80DU	49	488660	6450565	14	27	
64J	8/7/7	80DU	50	460420	6447407	14	27	
64J	8/7/8	80DU	51	445732	6447322	14	27	
64J	8/7/9	80DU	52	450353	6466794	14	27	sandy till
64J	9/7/1	80DU	53	511152	6501440	14	27	
64J	9/7/2	80DU	54	510448	6508949	14	27	
64J	9/7/3	80DU	55	517344	6501818	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64J	9/7/4	80DU	56	554054	6488424	14	27	lacustrine clay
64J	9/7/4	80DU	57	554054	6488424	14	27	sandy till
64J	9/7/5	80DU	58	544071	6485643	14	27	sandy till
64J	9/7/6	80DU	59	530693	6487966	14	27	
64J	9/7/7	80DU	60	509373	6485534	14	27	
64J	9/7/8	80DU	61	505483	6494706	14	27	sandy till
64J	12/7/12B	80DU		475735	6503828	14	27	
64J	14/7/1	80DU	84	513342	6448381	14	27	lacustrine clay
64J	14/7/1	80DU	85	513342	6448381	14	27	lacustrine clay
64J	14/7/2	80DU	86	519543	6444253	14	27	lacustrine clay
64J	14/7/3	80DU	87	518242	6443147	14	27	silty till
64J	14/7/3	80DU	88	518242	6443147	14	27	lacustrine clay
64J	14/7/4	80DU	89	517785	6440210	14	27	
64J	14/7/5	80DU	91	525682	6435819	14	27	
64J	14/7/5	80DU	92	525682	6435819	14	27	
64J	14/7/6	80DU	93	538098	6441844	14	27	
64J	14/7/7	80DU	94	552179	6441748	14	27	lacustrine clay
64J	14/7/7	80DU	95	552179	6441748	14	27	sandy till
64J	14/7/8	80DU	97	545770	6434062	14	27	lacustrine sand
64J	14/7/9	80DU	98	519131	6434152	14	27	lacustrine clay
64J	14/7/9	80DU	99	519131	6434152	14	27	lacustrine clay
64J	16/7/1	80DU	113	556737	6464238	14	27	
64J	16/7/2	80DU		532070	6456758	14	27	
64J	16/7/2A	80DU		535672	6454700	14	27	
64J	16/7/3	80DU	115	533593	6469261	14	27	lacustrine clay
64J	16/7/4	80DU	117	521901	6464872	14	27	lacustrine clay
64J	16/7/5	80DU	118	517263	6464922	14	27	sandy till
64J	16/7/6	80DU	119	507502	6461052	14	27	sandy till
64J	16/7/7	80DU	120	526783	6477334	14	27	
64J	16/7/8	80DU	121	534768	6476949	14	27	
64J	16/7/9	80DU	122	543805	6474087	14	27	sandy till
64J	16/7/10	80DU	123	509223	6473446	14	27	
64J	17/7/1A	80DU		446347	6521348	14	27	
64J	17/7/1B	80DU		449784	6531972	14	27	
64J	17/7/1C	80DU		459798	6532984	14	27	
64J	17/7/2	80DU	125	472394	6533241	14	27	sandy till
64J	17/7/3	80DU	127	467946	6524761	14	27	sandy till
64J	17/7/4	80DU	128	485135	6523110	14	27	lacustrine clay
64J	17/7/5	80DU	129	493490	6530135	14	27	
64J	17/7/6	80DU	130	504301	6517697	14	27	
64J	17/7/7	80DU	133	498367	6513224	14	27	
64J	17/7/8	80DU	134	488119	6513205	14	27	sandy till
64J	17/7/8	80DU	135	488119	6513205	14	27	lacustrine clay
64J	17/7/9B	80DU		446467	6512805	14	27	
64J	28/7/1A	80DU		504865	6526338	14	27	
64J	28/7/1B	80DU		508031	6526592	14	27	
64J	28/7/1C	80DU		517175	6529639	14	27	
64J	28/7/1D	80DU		520229	6532610	14	27	
64J	28/7/2	80DU	153	533542	6534434	14	27	sandy till
64J	28/7/3	80DU	154	540819	6535328	14	27	
64J	28/7/4	80DU	156	546496	6523547	14	27	sandy till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64J	28/7/5	80DU	157	555057	6512384	14	27	
64J	28/7/6	80DU		549894	6510842	14	27	
64J	28/7/7	80DU	158	545251	6519249	14	27	
64J	28/7/8	80DU	159	540264	6520336	14	27	
64J	28/7/9	80DU		516236	6518312	14	27	
64J	28/7/10	80DU	160	442751	6505461	14	27	lacustrine clay
64J	28/7/10A	80DU		448899	6514261	14	27	
64J	28/7/11	80DU	161	460951	6516395	14	27	
64J	28/7/11A	80DU		466725	6515458	14	27	
64J	28/7/11B	80DU		475987	6515743	14	27	
64J	28/7/12	80DU	162	480288	6509771	14	27	
64J	28/7/12B	80DU		455536	6495542	14	27	
64J	1/8/13	80DU	184	444896	6486843	14	27	
64J	1/8/14	80DU		446704	6485471	14	27	
64J	1/8/15	80DU	185	457152	6483447	14	27	sandy till
64J	5/8/1	80DU		449337	6506181	14	27	
64J	5/8/2	80DU		453069	6509128	14	27	
64J	6/8/6	80DU		481166	6485701	14	27	
64J	6/8/7	80DU		486614	6484539	14	27	
64J	6/8/8	80DU		494720	6482777	14	27	
64J	6/8/9	80DU	241	497116	6485309	14	27	
64J	6/8/10	80DU		492405	6491422	14	27	
64J	6/8/11	80DU	242	495988	6498617	14	27	
64J	7/8/1	80DU	243	500283	6494286	14	27	sandy till
64J	7/8/1	80DU	244	500283	6494286	14	27	sandy till
64J	7/8/2	80DU	245	499303	6509062	14	27	sandy till
64J	7/8/2	80DU	246	499303	6509062	14	27	lacustrine clay
64J	7/8/3	80DU	247	478791	6498980	14	27	
64J	7/8/4	80DU		455918	6503317	14	27	
64K	20/6/1	80DU		432743	6488841	14	27	
64K	20/6/2	80DU		432061	6488910	14	27	
64K	20/6/3	80DU	1	433925	6489776	14	27	sandy till
64K	22/6/1	80DU		435338	6489791	14	27	
64K	22/6/2	80DU	2	437648	6490857	14	27	
64K	22/6/3	80DU		435371	6491012	14	27	
64K	3/7/1	80DU	3	368805	6491234	14	27	
64K	13/7/2	80DU	5	392544	6468747	14	27	sandy till
64K	3/7/3	80DU	6	411290	6476632	14	27	sandy till
64K	3/7/4	80DU	7	424379	6485119	14	27	sandy till
64K	5/7/1	80DU	16	420912	6461843	14	27	sandy till
64K	5/7/2	80DU	16A	418800	6430200	14	27	sandy till
64K	5/7/3	80DU	19	410146	6439383	14	27	
64K	5/7/4	80DU	20	394397	6460396	14	27	
64K	5/7/5	80DU	21	398388	6479053	14	27	sandy till
64K	5/7/7	80DU	22	413772	6494081	14	27	
64K	5/7/8	80DU	23	419833	6503006	14	27	
64K	5/7/9	80DU		428925	6522708	14	27	
64K	7/7/1	80DU		429772	6503867	14	27	
64K	7/7/2	80DU		424012	6530326	14	27	
64K	7/7/3	80DU	34	415284	6530067	14	27	
64K	7/7/4	80DU		400404	6526827	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64K	7/7/5	80DU		400404	6526827	14	27	
64K	7/7/6	80DU	36	386994	6535869	14	27	
64K	7/7/7	80DU	37	383907	6522414	14	27	sandy till
64K	7/7/8	80DU		393342	6511486	14	27	
64K	7/7/9	80DU	40	403559	6501338	14	27	sandy till
64K	7/7/10	80DU		406483	6502190	14	27	
64K	7/7/11	80DU	41	422242	6494264	14	27	bouldery till
64K	7/7/11	80DU	42	422242	6494264	14	27	bouldery till
64K	7/7/12	80DU		424229	6489389	14	27	
64K	10/7/1	80DU	62	381194	6452641	14	27	sandy till
64K	10/7/2	80DU		376749	6461290	14	27	
64K	10/7/3	80DU	64	381089	6467139	14	27	sandy till
64K	10/7/4	80DU	66	379933	6478689	14	27	sandy till
64K	10/7/5	80DU	67	381133	6478657	14	27	
64K	10/7/6	80DU	68	375225	6498154	14	27	bouldery till
64K	10/7/7	80DU	69	395252	6503166	14	27	
64K	10/7/8	80DU	70	414331	6506233	14	27	
64K	10/7/9	80DU		424130	6489033	14	27	
64K	13/7/1	80DU	72	423763	6473218	14	27	
64K	13/7/2	80DU	75	412424	6461238	14	27	
64K	13/7/3	80DU	76	408065	6461652	14	27	sandy till
64K	13/7/4	80DU		401601	6450818	14	27	
64K	13/7/5	80DU	79	430680	6440992	14	27	
64K	13/7/6	80DU	81	433235	6446273	14	27	
64K	13/7/7	80DU		432903	6453247	14	27	
64K	13/7/8	80DU		437644	6452324	14	27	
64K	13/7/9	80DU	82	436282	6456441	14	27	
64K	13/7/10	80DU	83	440406	6459346	14	27	sandy till
64K	13/7/11	80DU		432984	6461484	14	27	
64K	13/7/12	80DU		430010	6462284	14	27	
64K	15/7/1	80DU	100	340781	6475223	14	27	sandy till
64K	15/7/2	80DU	101	327451	6462886	14	27	sandy till
64K	15/7/3	80DU	104	326556	6449905	14	27	
64K	15/7/4	80DU	105	343635	6459644	14	27	sandy till
64K	15/7/5	80DU	106	346587	6480036	14	27	
64K	15/7/6	80DU		352766	6488606	14	27	
64K	15/7/7	80DU	109	380471	6443129	14	27	sandy till
64K	15/7/8	80DU		363807	6463910	14	27	
64K	15/7/9	80DU	110	370000	6480400	14	27	sandy till
64K	15/7/10	80DU	111	356874	6488372	14	27	sandy till
64K	19/7/1	80DU		436640	6489763	14	27	
64K	28/7/1	80DU	164	430378	6507753	14	27	Alluvium
64K	1/8/1	80DU		368734	6491690	14	27	
64K	1/8/2	80DU		363322	6485178	14	27	
64K	1/8/3	80DU	174	334127	6486456	14	27	sandy till
64K	1/8/4	80DU		330533	6493502	14	27	
64K	1/8/5	80DU		332205	6528096	14	27	
64K	1/8/6	80DU		334867	6533355	14	27	
64K	1/8/7	80DU	176	357006	6531327	14	27	
64K	1/8/10	80DU		366251	6519522	14	27	
64K	2/8/13	80DU		427439	6514463	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64K	2/8/14	80DU		434935	6513827	14	27	
64K	2/8/15	80DU	196	440409	6508241	14	27	
64K	1/8/8	80DU	177	361549	6531106	14	27	sandy till
64K	1/8/9	80DU	178	370735	6527119	14	27	sandy till
64K	1/8/11	80DU	180	355865	6512206	14	27	sandy till
64K	1/8/12	80DU	181	359545	6498345	14	27	
64K	1/8/12	80DU	182	359513	6498320	14	27	sandy till
64K	1/8/12	80DU	183	359513	6498320	14	27	
64K	6/8/1	80DU	233	433386	6523206	14	27	lacustrine clay
64K	6/8/2	80DU	234	430522	6530553	14	27	sandy till
64K	6/8/3	80DU	235	402499	6533975	14	27	bouldery till
64K	6/8/4	80DU	236	410414	6516601	14	27	sandy till
64K	6/8/4	80DU	237	410414	6516601	14	27	
64K	6/8/5	80DU	238	420153	6506036	14	27	sandy till
64N	2/8/1	80DU		435279	6569106	14	27	
64N	2/8/2	80DU	188	426322	6571676	14	27	
64N	2/8/3	80DU		417673	6577538	14	27	
64N	2/8/4	80DU		409747	6571993	14	27	
64N	2/8/5	80DU	189	398064	6571549	14	27	lacustrine clay
64N	2/8/6	80DU		398078	6574039	14	27	
64N	2/8/7	80DU		394213	6577716	14	27	
64N	2/8/8	80DU	190	397306	6596045	14	27	
64N	2/8/9	80DU	191	412195	6585899	14	27	
64N	2/8/10	80DU	192	423131	6584597	14	27	sandy till
64N	2/8/11	80DU	193	429297	6583066	14	27	
64N	3/8/2	80DU	197	407986	6616266	14	27	
64N	3/8/3	80DU		415567	6623036	14	27	
64N	3/8/4	80DU	198	420363	6623271	14	27	
64N	3/8/5	80DU		420873	6634016	14	27	
64N	3/8/6	80DU	199	412038	6651099	14	27	
64N	3/8/7	80DU		422463	6645352	14	27	
64N	3/8/8	80DU		427554	6646134	14	27	
64N	3/8/9	80DU		428843	6649127	14	27	
64N	3/8/10	80DU	201	438406	6647994	14	27	lacustrine clay
64N	3/8/10B	80DU	204	438300	6647900	14	27	sandy till
64N	3/8/11	80DU		430309	6644179	14	27	
64N	3/8/12	80DU	205	427988	6641760	14	27	
64N	3/8/13	80DU	206	435801	6636843	14	27	lacustrine clay
64N	3/8/13	80DU	207	435844	6636804	14	27	
64N	3/8/14	80DU	208	433773	6631009	14	27	
64N	8/8/1	80DU		353322	6617270	14	27	
64N	8/8/2	80DU	249	348784	6616932	14	27	sandy till
64N	8/8/3	80DU		338422	6616277	14	27	
64N	8/8/4	80DU		331189	6614045	14	27	
64N	8/8/5	80DU		331770	6615304	14	27	
64N	8/8/6	80DU	252	334302	6628762	14	27	sandy till
64N	8/8/7	80DU		339295	6652954	14	27	
64N	8/8/8	80DU	253	348282	6652473	14	27	sandy till
64N	8/8/9	80DU	254	353067	6642499	14	27	bouldery till
64N	8/8/10	80DU	255	345288	6639415	14	27	
64N	8/8/11	80DU	257	354006	6631781	14	27	



NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64N	8/8/12	80DU	258	345346	6627668	14	27	
64N	8/8/14	80DU		350848	6625147	14	27	
64N	8/8/15	80DU	259	363563	6622846	14	27	sandy till
64N	8/8/16	80DU		362960	6627103	14	27	
64N	9/8/1	80DU		384280	6572725	14	27	
64N	9/8/2	80DU	265	371560	6573116	14	27	
64N	9/8/3	80DU	266	368307	6579714	14	27	
64N	9/8/4	80DU	267	359479	6582122	14	27	
64N	9/8/5	80DU		344762	6578086	14	27	
64N	9/8/6	80DU	268	339481	6586416	14	27	bouldery till
64N	9/8/7	80DU	269	333558	6586712	14	27	bouldery till
64N	9/8/8	80DU	270	337574	6592528	14	27	
64N	9/8/9	80DU		352224	6591062	14	27	
64N	9/8/10	80DU		361798	6592560	14	27	
64N	9/8/11	80DU		375324	6592002	14	27	
64N	9/8/12	80DU	271	373229	6588940	14	27	sandy till
64N	9/8/13	80DU	272	379064	6590404	14	27	
64N	9/8/14	80DU	273	385950	6587128	14	27	sandy till
64N	11/8/7	80DU	294	419365	6553610	14	27	
64N	11/8/8	80DU	295	413974	6550383	14	27	
64N	11/8/9	80DU		416927	6546952	14	27	
64N	11/8/10	80DU		418598	6543789	14	27	
64N	12/8/1	80DU	296	369367	6648310	14	27	bouldery till
64N	12/8/2	80DU	297	374412	6646367	14	27	sandy till
64N	12/8/3	80DU		375620	6649872	14	27	
64N	12/8/4	80DU	298	375620	6649872	14	27	bouldery till
64N	12/8/5	80DU	300	398841	6641770	14	27	
64N	12/8/6	80DU	301	409280	6631411	14	27	sandy till
64N	12/8/7	80DU		401806	6633173	14	27	
64N	12/8/8	80DU	302	393561	6629789	14	27	
64N	12/8/9	80DU	303	372489	6628582	14	27	
64N	12/8/10	80DU	305	365546	6642903	14	27	
64N	12/8/11	80DU		362891	6642098	14	27	
64N	12/8/12A	80DU	306	354973	6646374	14	27	
64N	12/8/13	80DU		353054	6642480	14	27	
64N	12/8/14	80DU		392502	6608020	14	27	
64N	13/8/1	80DU		429505	6618448	14	27	
64N	13/8/2	80DU	307	422670	6611207	14	27	
64N	13/8/3	80DU	308	416778	6611974	14	27	
64N	13/8/4	80DU	310	411111	6596181	14	27	lacustrine clay
64N	13/8/5	80DU	312	401021	6619448	14	27	bouldery till
64N	13/8/5	80DU	313	401021	6619448	14	27	bouldery till
64N	13/8/6	80DU		392069	6596528	14	27	
64N	14/8/13	80DU	322	383648	6600842	14	27	silty till
64N	14/8/14	80DU	323	377951	6612285	14	27	sandy till
64N	14/8/15	80DU	324	370735	6605346	14	27	
64N	14/8/16	80DU	325	363110	6605437	14	27	sandy till
64N	14/8/17	80DU		350646	6604159	14	27	
64N	14/8/18	80DU	326	337084	6601610	14	27	sandy till
64N	15/8/1	80DU	327	409833	6568672	14	27	
64N	15/8/2	80DU		390980	6567683	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64N	15/8/3	80DU	328	383583	6560405	14	27	silty till
64N	15/8/4	80DU		383969	6558071	14	27	
64N	15/8/5	80DU	329	374684	6561082	14	27	sandy till
64N	15/8/6	80DU	330	362615	6567368	14	27	lacustrine clay
64N	15/8/7	80DU		337313	6562917	14	27	
64N	15/8/8	80DU	331	335604	6544591	14	27	
64N	15/8/9	80DU	332	344621	6545249	14	27	sandy till
64N	15/8/10	80DU		348099	6551199	14	27	
64N	15/8/11	80DU	334	360536	6544376	14	27	
64N	15/8/12	80DU	335	373276	6546685	14	27	
64N	15/8/13	80DU		386066	6553139	14	27	
64N	15/8/14	80DU	336	407383	6548550	14	27	lacustrine clay
64N	15/8/14	80DU	337	407383	6548550	14	27	sandy till
64O	26/7/1	80DU	136	462779	6572920	14	27	
64O	26/7/2	80DU		466224	6583258	14	27	
64O	26/7/3	80DU	139	475676	6587483	14	27	
64O	26/7/4	80DU	140	491040	6584753	14	27	
64O	26/7/5	80DU	141	489454	6580042	14	27	
64O	26/7/6	80DU	142	491165	6568943	14	27	
64O	26/7/7	80DU	143	484853	6581046	14	27	sandy till
64O	27/7/1	80DU		529216	6544926	14	27	
64O	27/7/2	80DU	144	538859	6549323	14	27	sandy till
64O	27/7/3	80DU	146	542819	6562004	14	27	
64O	27/7/4	80DU		539369	6560316	14	27	
64O	27/7/5	80DU	147	530504	6561228	14	27	
64O	27/7/6	80DU	149	515439	6565180	14	27	
64O	27/7/7	80DU		509648	6566685	14	27	
64O	27/7/8	80DU	150	523946	6544192	14	27	
64O	27/7/9	80DU		523558	6542938	14	27	
64O	27/7/10	80DU		503637	6544271	14	27	
64O	27/7/11	80DU		501415	6541597	14	27	
64O	28/7/1	80DU	167	449744	6569655	14	27	bouldery till
64O	29/7/2	80DU	168	472472	6596882	14	27	lacustrine sand
64O	29/7/3	80DU	169	474691	6632597	14	27	sandy till
64O	29/7/4	80DU		486216	6628716	14	27	
64O	29/7/5	80DU	170	505797	6603994	14	27	sandy till
64O	29/7/6	80DU	171	508718	6561097	14	27	sandy till
64O	29/7/7	80DU	172	527761	6562360	14	27	
64O	27/7/8	80DU	173	532431	6555596	14	27	
64O	2/8/12	80DU	195	444966	6585682	14	27	lacustrine clay
64O	4/8/1	80DU	209	515953	6608258	14	27	
64O	4/8/1	80DU	211	515953	6608251	14	27	
64O	4/8/2	80DU	212	523683	6601906	14	27	
64O	4/8/3	80DU	214	531616	6608307	14	27	
64O	4/8/4	80DU	215	540015	6598079	14	27	sandy till
64O	4/8/4	80DU	216	540238	6598009	14	27	sandy till
64O	4/8/5	80DU	218	535000	6610800	14	27	sandy till
64O	5/8/3	80DU		465159	6635358	14	27	
64O	5/8/4	80DU	220	467202	6642347	14	27	
64O	5/8/5	80DU	221	472742	6643891	14	27	bouldery till
64O	5/8/6	80DU		482859	6644337	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64O	5/8/7	80DU	222	487042	6641820	14	27	
64O	5/8/8	80DU	223	499006	6643591	14	27	
64O	5/8/9	80DU	224	505100	6641113	14	27	bouldery till
64O	5/8/10	80DU	225	511862	6641321	14	27	
64O	5/8/11	80DU	226	522171	6641831	14	27	sandy till
64O	5/8/12	80DU		525513	6643488	14	27	
64O	5/8/13	80DU		539197	6639405	14	27	
64O	5/8/14	80DU	227	542457	6639274	14	27	
64O	5/8/15	80DU		537103	6630138	14	27	
64O	5/8/16	80DU		535065	6628552	14	27	
64O	5/8/17	80DU	228	506241	6625319	14	27	sandy till
64O	5/8/18	80DU	229	503674	6632826	14	27	
64O	5/8/19	80DU		506947	6634999	14	27	
64O	5/8/20	80DU	230	479549	6635190	14	27	
64O	5/8/21	80DU	231	476473	6636607	14	27	lacustrine clay
64O	8/8/A	80DU	260	465753	6582577	14	27	
64O	8/8/B	80DU	261	465753	6582577	14	27	
64O	8/8/C	80DU	262	465804	6582545	14	27	bouldery till
64O	8/8/D	80DU	263	465804	6582545	14	27	
64O	8/8/E	80DU	264	465804	6582545	14	27	
64O	10/8/1	80DU	274	503144	6573518	14	27	
64O	10/8/2	80DU	275	508967	6574953	14	27	
64O	10/8/3	80DU		528315	6570749	14	27	
64O	10/8/4	80DU	276	552770	6585782	14	27	sandy till
64O	10/8/5	80DU	277	543333	6597203	14	27	
64O	10/8/6	80DU	279	534285	6592023	14	27	sandy till
64O	10/8/7	80DU	280	512713	6592995	14	27	sandy till
64O	10/8/8	80DU	282	513589	6586330	14	27	sandy till
64O	10/8/9	80DU	284	505684	6578745	14	27	
64O	11/8/1	80DU	285	479127	6547722	14	27	bouldery till
64O	11/8/2	80DU	286	491481	6548651	14	27	sandy till
64O	11/8/3	80DU	287	499292	6560436	14	27	lacustrine clay
64O	11/8/3	80DU	288	499292	6560436	14	27	sandy till
64O	11/8/4	80DU	289	461830	6566701	14	27	sandy till
64O	11/8/5	80DU	290	459265	6558851	14	27	lacustrine clay
64O	11/8/5	80DU	291	459265	6558851	14	27	
64O	11/8/6	80DU	293	450151	6559344	14	27	
64O	11/8/11	80DU		465228	6553094	14	27	
64O	11/8/12	80DU		462503	6548682	14	27	
64O	14/8/1	80DU		468727	6600844	14	27	
64O	14/8/2	80DU		479564	6603002	14	27	
64O	14/8/3	80DU		490077	6598695	14	27	
64O	14/8/4	80DU		488593	6606177	14	27	
64O	14/8/5	80DU	315	487261	6622926	14	27	
64O	14/8/6	80DU		475812	6623421	14	27	
64O	14/8/7	80DU	316	465860	6622752	14	27	lacustrine clay
64O	14/8/8	80DU	317	453954	6621459	14	27	
64O	14/8/10	80DU	319	453477	6612129	14	27	
64O	14/8/11	80DU	320	448466	6609536	14	27	
64O	14/8/12	80DU	321	448493	6596356	14	27	
64P	21/6/1	77DU	13	610450	6637529	14	27	glaciofluvial

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64P	21/6/2	77DU	15	632980	6624866	14	27	Alluvium
64P	21/6/2	77DU	17	632980	6624866	14	27	shells
64P	21/6/7	77DU	23A	642838	6575443	14	27	
64P	27/6/1	77DU	78	590022	6589120	14	27	sandy till
64P	27/6/2	77DU	79	590060	6589121	14	27	sandy till
64P	27/6/2	77DU	80	590220	6595487	14	27	sandy till
64P	27/6/2	77DU	81	590220	6595487	14	27	Alluvium
64P	27/6/2	77DU	82	590220	6595487	14	27	
64P	27/6/3	77DU	83	600720	6591779	14	27	sandy till
64P	27/6/3	77DU	84	600728	6591735	14	27	sandy till
64P	27/6/3	77DU	85	600728	6591735	14	27	lacustrine clay
64P	27/6/3	77DU	86	600728	6591735	14	27	alluvium
64P	27/6/4	77DU	87	609833	6588156	14	27	lacustrine sand
64P	27/6/5	77DU	88	599644	6586274	14	27	sandy till
64P	27/6/5	77DU	89	599636	6586312	14	27	sandy till
64P	27/6/5	77DU	90	599636	6586312	14	27	lacustrine clay
64P	27/6/6	77DU	91	595544	6584609	14	27	bouldery till
64P	27/6/6	77DU	92	595544	6584609	14	27	lacustrine sand
64P	27/6/7	77DU	93	605270	6583888	14	27	glaciofluvial
64P	27/6/7	77DU	94	605270	6583888	14	27	glaciofluvial
64P	27/6/7	77DU	95	605270	6583888	14	27	lacustrine clay
64P	27/6/8	77DU	96	588797	6578399	14	27	sandy till
64P	27/6/8	77DU	97	588797	6578399	14	27	sandy till
64P	27/6/9	77DU	99	609226	6577833	14	27	sandy till
64P	27/6/10	77DU	100	610711	6574757	14	27	lacustrine sand
64P	28/6/1	77DU	101	641596	6648174	14	27	marine clay
64P	28/6/2	77DU	103	645372	6648346	14	27	sandy till
64P	28/6/2	77DU	104	645372	6648346	14	27	sandy till
64P	28/6/3	77DU	105	648519	6644275	14	27	sandy till
64P	28/6/4	77DU	106	645950	6643692	14	27	sandy till
64P	28/6/5	77DU	107	641611	6641029	14	27	sandy till
64P	28/6/5	77DU	108	641611	6641009	14	27	sandy till
64P	28/6/6	77DU	109	646872	6635040	14	27	bouldery till
64P	28/6/7	77DU	110	648496	6632914	14	27	sandy till
64P	28/6/8	77DU		658106	6650592	14	27	
64P	28/6/9	77DU	111	658661	6641314	14	27	
64P	28/6/10	77DU	112	664143	6638686	14	27	marine sand
64P	28/6/11	77DU		652259	6632006	14	27	
64P	29/6/1	77DU	113	636036	6619942	14	27	sandy till
64P	29/6/2	77DU	115	628106	6615810	14	27	bouldery till
64P	29/6/3	77DU	116	623289	6617677	14	27	sandy till
64P	29/6/4	77DU	118	618945	6616788	14	27	sandy till
64P	29/6/5	77DU	119	616796	6618417	14	27	bouldery till
64P	29/6/5	77DU	120	616796	6618417	14	27	bouldery till
64P	29/6/6	77DU	121	614868	6614102	14	27	sandy till
64P	29/6/7	77DU	123	614500	6604200	14	27	sandy till
64P	29/6/8	77DU	124	629437	6609848	14	27	sandy till
64P	29/6/8	77DU	125	629437	6609848	14	27	sandy till
64P	29/6/9	77DU	126	634845	6613335	14	27	sandy till
64P	29/6/10	77DU	127	638945	6612446	14	27	sandy till
64P	29/6/11	77DU	128	641650	6601328	14	27	sandy till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64P	3/7/1	77DU	152	645970	6596353	14	27	sandy till
64P	3/7/2	77DU	154	655632	6594723	14	27	marine sand
64P	3/7/2	77DU	155	655637	6594768	14	27	marine sand
64P	3/7/2	77DU	156	655637	6594768	14	27	sandy till
64P	3/7/3	77DU	157	660915	6595376	14	27	bouldery till
64P	3/7/4	77DU	158	667829	6592109	14	27	marine sand
64P	3/7/5	77DU	159	658093	6588558	14	27	sandy till
64P	3/7/6	77DU	160	654691	6588259	14	27	stony marine deposits
64P	3/7/7	77DU	161	650332	6580153	14	27	marine sand
64P	3/7/7B	77DU	162	650332	6581153	14	27	sandy till
64P	3/7/8	77DU	163	645091	6580485	14	27	marine clay
64P	3/7/9	77DU	164	665530	6583624	14	27	marine sand
64P	3/7/10	77DU		662605	6575384	14	27	
64P	3/7/11	77DU	165	658074	6573997	14	27	sandy till
64P	3/7/11	77DU	167	658074	6573997	14	27	bouldery till
64P	4/7/1	77DU	168	582911	6591665	14	27	sandy till
64P	4/7/2	77DU	169	568285	6591516	14	27	lacustrine sand
64P	4/7/2	77DU	170	568285	6591516	14	27	lacustrine clay
64P	4/7/2	77DU	171	568285	6591516	14	27	lacustrine sand
64P	4/7/3	77DU	172	559755	6586328	14	27	sandy till
64P	4/7/4	77DU	173	564616	6585562	14	27	sandy till
64P	4/7/5	77DU	175	569612	6583875	14	27	sandy till
64P	4/7/5	77DU	176	569612	6583875	14	27	sandy till
64P	4/7/6	77DU	177	574187	6582178	14	27	glaciofluvial
64P	4/7/7	77DU		576067	6581287	14	27	
64P	4/7/8	77DU	178	574347	6585428	14	27	sandy till
64P	4/7/8	77DU	179	574347	6585428	14	27	sandy till
64P	4/7/9	77DU	180	567302	6577905	14	27	sandy till
64P	4/7/10	77DU	182	571633	6578058	14	27	sandy till
64P	4/7/10	77DU	183	571633	6578058	14	27	sandy till
64P	4/7/10	77DU	184	571633	6578058	14	27	sandy till
64P	4/7/11	77DU		583095	6575316	14	27	
64P	4/7/12	77DU	185	577042	6570038	14	27	lacustrine sand
64P	4/7/12	77DU	186	577042	6570038	14	27	sandy till
64P	7/7/1	77DU		620725	6568924	14	27	
64P	7/7/2	77DU	207	628369	6568991	14	27	sandy till
64P	7/7/3	77DU	208	632517	6568755	14	27	sandy till
64P	7/7/4	77DU	210	632150	6566851	14	27	sandy till
64P	7/7/5	77DU		635545	6567342	14	27	
64P	8/7/1	77DU	211	638203	6564659	14	27	sandy till
64P	8/7/1	77DU	212	638203	6564659	14	27	lacustrine clay
64P	8/7/1	77DU	213	638203	6564659	14	27	sandy till
64P	8/7/1	77DU	214	638203	6564659	14	27	marine sand
64P	8/7/1	77DU	215	638203	6564659	14	27	sandy till
64P	8/7/2	77DU	71A	637517	6562572	14	27	
64P	8/7/3	77DU	216	629630	6561960	14	27	sandy till
64P	8/7/4	77DU	217	628253	6557204	14	27	sandy till
64P	8/7/5	77DU	218	634861	6557733	14	27	sandy till
64P	8/7/6	77DU	220	640568	6555413	14	27	sandy till
64P	8/7/7	77DU	221	633884	6549754	14	27	silty till
64P	8/7/7	77DU	222	633884	6549754	14	27	sandy till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64P	8/7/8	77DU	223	637526	6549583	14	27	sandy till
64P	8/7/9	77DU		641064	6550896	14	27	
64P	8/7/10	77DU	224	640060	6547323	14	27	sandy till
64P	8/7/12	77DU		628764	6542433	14	27	
64P	16/7/2	77DU	276	661515	6622308	14	27	bouldery till
64P	16/7/2	77DU	277	661515	6622308	14	27	sandy till
64P	16/7/3	77DU	278	648426	6625280	14	27	marine sand
64P	16/7/4	77DU		647989	6624083	14	27	
64P	16/7/5	77DU	279	645826	6616094	14	27	sandy till
64P	16/7/5	77DU	280	645826	6616094	14	27	sandy till
64P	16/7/6	77DU	281	649192	6612133	14	27	sandy till
64P	16/7/2	77DU	282	652479	6611540	14	27	sandy till
64P	16/7/8	77DU	283	651659	6610726	14	27	sandy till
64P	16/7/9	77DU		650923	6611709	14	27	
64P	16/7/10	77DU	284	655341	6610473	14	27	sandy till
64P	16/7/11	77DU	285	639806	6610267	14	27	sandy till
64P	16/7/12	77DU		645594	6608895	14	27	
64P	16/7/13	77DU	286	657892	6605589	14	27	sandy till
64P	16/7/13	77DU	287	657892	6605589	14	27	sandy till
64P	16/7/14	77DU	288	649811	6603048	14	27	sandy till
64P	19/7/1	77DU	316	628431	6549020	14	27	silty till
64P	19/7/1	77DU	318	628431	6549020	14	27	lacustrine sand
64P	19/7/1	77DU	317A	628431	6549020	14	27	
64P	19/7/1	77DU	317B	628431	6549020	14	27	
64P	22/7/1	77DU	339	643819	6568000	14	27	sandy till
64P	22/7/2	77DU	340	648128	6568434	14	27	sandy till
64P	22/7/3	77DU	341	662751	6565216	14	27	sandy till
64P	22/7/3	77DU	342	662795	6565231	14	27	marine sand
64P	23/7/1	77DU		665619	6566180	14	27	
64P	23/7/2	77DU	343	661180	6559796	14	27	marine sand
64P	23/7/2	77DU	344	661168	6559770	14	27	sandy till
64P	23/7/2	77DU	345	661168	6559770	14	27	stony marine deposits
64P	22/7/3	77DU	346	662795	6565231	14	27	sandy till
64P	23/7/4	77DU	347	646315	6555559	14	27	sandy till
64P	23/7/4	77DU	348	646315	6555559	14	27	sandy till
64P	23/7/5	77DU		653008	6554947	14	27	
64P	23/7/6	77DU	349	660591	6556780	14	27	sandy till
64P	23/7/7	77DU	350	660104	6549566	14	27	sandy till
64P	23/7/8	77DU	351	653735	6545317	14	27	marine sand
64P	23/7/9	77DU	352	646048	6545172	14	27	sandy till
64P	23/7/10	77DU	353	642734	6575669	14	27	glaciofluvial
64P	23/7/11	77DU	354	638824	6575677	14	27	sandy till
64P	23/7/12	77DU		631980	6576252	14	27	
64P	23/7/13	77DU	355	621790	6574205	14	27	sandy till
64P	23/7/14	77DU	356	618431	6572674	14	27	sandy till
64P	24/7/2	77DU		618844	6596911	14	27	
64P	24/7/3	77DU	357	625113	6596757	14	27	lacustrine clay
64P	24/7/4	77DU	358	628844	6594015	14	27	lacustrine sand
64P	24/7/5	77DU	359	632155	6594733	14	27	sandy till
64P	24/7/6	77DU	360	640029	6595166	14	27	sandy till
64P	24/7/6	77DU	361	640029	6595166	14	27	sandy till

NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64P	24/7/7	77DU		634583	6588957	14	27	
64P	24/7/8	77DU	362	637239	6587250	14	27	sandy till
64P	24/7/9	77DU	363	629947	6583109	14	27	bouldery till
64P	24/7/10	77DU	364	627871	6585206	14	27	sandy till
64P	24/7/11	77DU	365	621637	6586384	14	27	sandy till
64P	24/7/12	77DU		616457	6582975	14	27	
64P	24/7/13	77DU		617061	6581004	14	27	
64P	8/7/1	77DU	366	638203	6564659	14	27	lacustrine clay
64P	8/7/1	77DU	367	638203	6564659	14	27	lacustrine clay
64P	8/7/1	77DU	368	638203	6564659	14	27	lacustrine clay
64P	8/7/1	77DU	369	638203	6564659	14	27	lacustrine clay
64P	25/7/1	77DU	370	586431	6566731	14	27	sandy till
64P	25/7/1	77DU	371	586431	6566731	14	27	sandy till
64P	25/7/1	77DU	372	586431	6566731	14	27	sandy till
64P	25/7/2	77DU	373	587653	6558070	14	27	sandy till
64P	25/7/2	77DU	375	587653	6558070	14	27	sandy till
64P	25/7/3	77DU	376	605509	6567612	14	27	sandy till
64P	25/7/4	77DU	377	599410	6555645	14	27	sandy till
64P	25/7/5	77DU	378	605291	6557246	14	27	sandy till
64P	25/7/6	77DU	379	614882	6548207	14	27	sandy till
64P	25/7/7	77DU	380	604837	6549516	14	27	sandy till
64P	25/7/8	77DU	381	602480	6546655	14	27	sandy till
64P	25/7/9	77DU	382	596098	6544197	14	27	sandy till
64P	25/7/10	77DU	383	607415	6558541	14	27	glaciofluvial
64P	25/7/11	77DU		610966	6556029	14	27	
64P	27/7/1	77DU	384	607937	6622075	14	27	sandy till
64P	27/7/2	77DU	385	583459	6620958	14	27	sandy till
64P	27/7/3	77DU	386	580646	6619510	14	27	sandy till
64P	27/7/3	77DU	387	580588	6619534	14	27	sandy till
64P	27/7/4	77DU	388	572858	6620275	14	27	sandy till
64P	27/7/5	77DU	390	583951	6617290	14	27	sandy till
64P	27/7/6	77DU	391	600393	6615306	14	27	sandy till
64P	27/7/6	77DU	392	600393	6615306	14	27	sandy till
64P	27/7/7	77DU	393	604213	6608941	14	27	sandy till
64P	27/7/8	77DU	394	587894	6612353	14	27	sandy till
64P	27/7/8	77DU	395	587913	6612341	14	27	sandy till
64P	27/7/9	77DU	396	581758	6612353	14	27	lacustrine clay
64P	27/7/9	77DU	397	581729	6612288	14	27	sandy till
64P	27/7/10	77DU	398	579568	6603162	14	27	sandy till
64P	27/7/11	77DU	399	587470	6603328	14	27	sandy till
64P	27/7/11	77DU	400	587470	6603328	14	27	sandy till
64P	27/7/12	77DU	401	604690	6603887	14	27	lacustrine sand
64P	27/7/13	77DU	402	590200	6595512	14	27	sandy till
64P	27/7/14	77DU		571829	6597211	14	27	
64P	30/7/1	77DU	433	557856	6562978	14	27	lacustrine sand
64P	30/7/2	77DU	434	556942	6554113	14	27	glaciofluvial
64P	30/7/3	77DU		556860	6556658	14	27	
64P	30/7/4	77DU		561154	6547232	14	27	
64P	30/7/5	77DU	435	572742	6550199	14	27	sandy till
64P	30/7/6	77DU	436	569165	6559694	14	27	sandy till
64P	30/7/7	77DU	437	572018	6563250	14	27	sandy till



NTS	Site	Yr	Sample	East	North	Zone	NAD	Material
64P	30/7/7	77DU	438	572018	6563250	14	27	sandy till
64P	30/7/8	77DU	439	578207	6554261	14	27	sandy till
64P	30/7/9	77DU	440	584325	6544392	14	27	sandy till
64P	30/7/10	77DU	441	586501	6556554	14	27	sandy till
64P	30/7/10	77DU	442	586501	6556554	14	27	sandy till
64P	2/8/1	77DU	450	614690	6631913	14	27	sandy till
64P	2/8/2	77DU	451	615752	6644575	14	27	sandy till
64P	2/8/3	77DU	452	615670	6651259	14	27	sandy till
64P	2/8/4	77DU	453	634443	6644817	14	27	lacustrine sand
64P	2/8/5	77DU	454	632373	6638172	14	27	sandy till
64P	2/8/6	77DU	455	623937	6639770	14	27	bouldery till
64P	2/8/7	77DU		621157	6638464	14	27	
64P	2/8/8	77DU		619143	6632428	14	27	

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54E	25/6/4	78DU	29	356417	6388298	15	27	1	33	41	25	18				
54E	25/6/5	78DU	30	380258	6371098	15	27	1	10	22	67	>47	47	24		
54E	25/6/6	78DU		424462	6359641	15	27									
54E	25/6/7	78DU	31	417112	6382208	15	27	3	35	43	19	12	23	14		
54E	28/6/1	78DU		403392	6428612	15	27									
54E	28/6/2	78DU	43	401259	6426929	15	27									
54E	28/6/3	78DU		399325	6421468	15	27									
54E	28/6/4	78DU		409095	6414325	15	27									
54E	28/6/5	78DU		403798	6410072	15	27									
54E	28/6/6	78DU	45	399183	6412693	15	27	4	43	37	16	13	19	13		
54E	28/6/6	78DU	46	399183	6412693	15	27	18	69	13	0					
54E	28/6/8	78DU	47	382783	6424167	15	27	2	23	46	29					
54E	28/6/8	78DU	48	382783	6424167	15	27	21	48	22	9					
54E	28/6/6	78DU	53	399183	6412693	15	27	4	43	39	14	>20	20	13		
54E	28/6/6	78DU	54	399183	6412693	15	27	3	43	38	16	>20	20	13		
54E	28/6/7	78DU		384580	6404221	15	27									
54E	2/7/1	78DU	87	391942	6369339	15	27	2	30	44	24	15	21	13		
54E	2/7/2	78DU	88	403232	6360788	15	27	3	36	41	20	16				
54E	2/7/3	78DU	89	404256	6362769	15	27	2	31	43	24					
54E	2/7/4	78DU	90	408485	6364339	15	27	2	33	41	24	18	22	14		
54E	2/7/5	78DU	91	410719	6348257	15	27	3	39	38	20	>20	20	14		
54E	2/7/5	78DU	92	410719	6348257	15	27	3	13	73	11	>25	25	15		
54E	2/7/6	78DU	93	420101	6356271	15	27	3	42	34	20					
54E	2/7/6	78DU	94	420101	6356271	15	27	3	12	65	20					
54E	4/7/1	78DU	98	429500	6433000	15	27					436			0.251	0.047
54E	4/7/1	78DU	99	429500	6433000	15	27	0	14	71	15					
54E	4/7/1	78DU	101	429500	6433000	15	27	3	41	53	12	27				
54E	9/7/1	78DU	138	378706	6370365	15	27	3	29	38	30	13	22	14		
54E	9/7/2	78DU	139	391402	6386662	15	27	2	30	45	23	>23	23	15		
54E	9/7/2	78DU	140	391402	6386662	15	27	3	32	43	22					
54E	9/7/2	78DU	141	391402	6386662	15	27	3	32	43	22	>23	23	14		
54E	9/7/2	78DU	143	391402	6386662	15	27	2	36	45	17	>21	21	15		
54E	9/7/3	78DU	145	400352	6389311	15	27	1	26	33	40	20	26	15		
54E	9/7/4	78DU	147	407431	6396190	15	27	3	48	36	13					
54E	9/7/4	78DU	148	407431	6396190	15	27	0	86	14	0					
54E	10/7/1	78DU	149	349137	6416521	15	27	2	32	39	27	>26	26	15		
54E	10/7/2	78DU	150	342546	6416138	15	27	2	34	40	24					
54E	10/7/3	78DU	151	338379	6414982	15	27									
54E	10/7/4	78DU	152	327229	6423268	15	27	3	45	28	24	15				
54E	10/7/5	78DU	153	324584	6414462	15	27	2	41	30	27	>24	24	14		
54E	10/7/6	78DU	154	331838	6419770	15	27	15	85	0	0					
54E	10/7/6	78DU	155	331838	6419770	15	27	3	46	35	16	14				
54E	10/7/6	78DU	156	331838	6419770	15	27					15				
54E	10/7/6	78DU	157	331838	6419770	15	27					17				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54E	10/7/6	78DU	158	331838	6419770	15	27	3	45	31	21	18	29	15		
54E	10/7/7	78DU	159	333231	6405871	15	27	2	34	37	27	18	23	15		
54E	10/7/8	78DU	160	384802	6429197	15	27	0	3	57	39	22	33	18		
54E	10/7/8	78DU	161	384808	6429178	15	27	3	33	41	23	>23	23	13		
54E	11/7/10	78DU	175	384802	6429197	15	27	3	34	41	22					
54E	12/7/1	78DU	176	360818	6427622	15	27	0	15	41	45	79				
54E	12/7/1	78DU	177	360818	6427622	15	27	4	31	40	25					
54E	12/7/2	78DU	178	364852	6425501	15	27	2	28	40	30					
54E	12/7/3	78DU	179	356536	6403334	15	27	2	43	33	22	30	25	14		
54E	13/7/1	78DU	183	367170	6404282	15	27	1	31	44	24	56				
54E	13/7/2	78DU	184	368140	6393169	15	27	3	55	26	16	19	19	12		
54E	13/7/3	78DU	185	375952	6394805	15	27	3	32	42	23	20	20	13		
54E	13/7/3	78DU	186	375952	6394805	15	27	0	99	0	1					
54E	13/7/3	78DU	187	375952	6394805	15	27									
54E	13/7/3	78DU	188	375952	6394805	15	27									
54E	13/7/3	78DU	189	375952	6394805	15	27									
54E	13/7/3	78DU	190	375952	6394805	15	27									
54E	13/7/3	78DU	191	375952	6394805	15	27									
54E	13/7/3	78DU	192	375952	6394805	15	27									
54E	13/7/3	78DU	193	375952	6394805	15	27									
54E	13/7/3	78DU	194	375952	6394805	15	27									
54E	13/7/4	78DU	195	377333	6403152	15	27	3	38	39	20	>21	21	14		
54E	13/7/5	78DU	196	375071	6405897	15	27	1	34	42	23	15				
54E	13/7/6	78DU	197	372673	6413057	15	27	2	40	35	22	27				
54E	13/7/7	78DU	198	377131	6413420	15	27	3	32	42	23	38				
54E	13/7/8	78DU	199	378190	6426372	15	27	3	38	37	22	>23	23	15		
54E	14/7/1	78DU		429508	6418124	15	27									
54E	14/7/2	78DU		428140	6398901	15	27									
54E	14/7/3	78DU	201	438433	6386763	15	27	3	36	49	12					
54E	14/7/4	78DU	202	421458	6376748	15	27									
54E	14/7/5	78DU	203	408013	6376852	15	27	3	32	44	21	21	21	16		
54E	14/7/6	78DU		400869	6376336	15	27									
54E	14/7/7	78DU	204	398193	6383351	15	27	2	28	46	24	14	24	16		
54E	14/7/8	78DU	205	388503	6381189	15	27	0	29	57	14					
54E	14/7/9	78DU	206	388619	6389261	15	27	1	32	37	30	>28	28	18		
54E	14/7/10	78DU	207	400938	6400620	15	27									
54E	19/7/1	78DU	254	423737	6415724	15	27					529			0.248	0.039
54E	19/7/1	78DU	255	423737	6415724	15	27					718			0.254	0.031
54E	21/7/1	78DU	295	361306	6376225	15	27	4	29	42	25	18	24	14		
54E	21/7/2	78DU	296	370531	6372517	15	27	2	27	45	26	>25	25	16		
54E	21/7/3	78DU	297	357641	6360362	15	27	0	4	13	83	>55	55	29		
54E	21/7/3	78DU	298	357641	6360362	15	27	2	26	43	29					
54E	21/7/4	78DU	299	359000	6361200	15	27	3	28	43	26	>26	26	14		
54E	21/7/4	78DU	300	359000	6361200	15	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54E	21/7/4	78DU	301	359000	6361200	15	27	3	34	40	23	29	18	11		
54E	21/7/4	78DU	302	359000	6361200	15	27									
54E	21/7/4	78DU	304	359000	6361200	15	27									
54E	21/7/5	78DU	306	355544	6351971	15	27	0	0	8	92	44	60	29		
54E	21/7/5	78DU	307	355544	6351971	15	27	2	25	43	30	18				
54E	21/7/5	78DU	308	355544	6351971	15	27	3	25	46	26	26	25	14		
54E	21/7/6	78DU	309	358533	6349449	15	27	2	27	46	25	13	26	15		
54E	21/7/6	78DU	310	358547	6349500	15	27									
54E	21/7/6	78DU	311	358547	6349500	15	27	1	22	49	28	14	26	15		
54E	21/7/6	78DU	312	358547	6349500	15	27	3	39	43	15	9	21	15		
54E	21/7/6	78DU	313	358547	6349500	15	27	3	45	39	13	10	20	15		
54E	21/7/6	78DU	314	358547	6349500	15	27									
54E	21/7/6	78DU	315	358547	6349500	15	27									
54E	21/7/7	78DU	316	368925	6362220	15	27									
54E	21/7/7	78DU	317	368925	6362220	15	27	2	30	46	22					
54E	21/7/7	78DU	318	368925	6362220	15	27	3	28	44	25					
54E	21/7/8	78DU	319	375800	6361000	15	27	2	27	48	23	15	22	15		
54E	21/7/8	78DU	320	375800	6361000	15	27	0	20	26	54	26	39	22		
54E	21/7/9	78DU	321	380844	6358755	15	27									
54E	21/7/10	78DU	323	386644	6359158	15	27	2	27	45	26					
54E	24/7/1	78DU	347	345429	6394783	15	27	2	26	40	32	>32	32	18		
54E	24/7/1	78DU	348	345429	6394783	15	27									
54E	24/7/1	78DU	349	345429	6394783	15	27	3	33	45	19	>24	24	15		
54E	24/7/1	78DU	350	345429	6394783	15	27									
54E	24/7/1	78DU	351	345429	6394783	15	27	2	36	43	19	>23	23	16		
54E	24/7/2	78DU	352	342194	6392962	15	27									
54E	24/7/3	78DU	353	330171	6395376	15	27	0	7	17	76	>31	31	17		
54E	24/7/4	78DU	354	323702	6393871	15	27	3	30	45	22					
54E	24/7/4	78DU	355	323702	6393871	15	27									
54E	24/7/5	78DU	356	324235	6382405	15	27	2	33	34	31	21				
54E	24/7/6	78DU	357	328331	6376657	15	27	2	30	44	24	>24	24	14		
54E	24/7/7	78DU	358	333589	6373303	15	27	2	22	35	41	>43	43	27		
54E	24/7/8	78DU		322444	6363340	15	27									
54E	24/7/9	78DU	359	330855	6357377	15	27	2	35	44	19	>24	24	15		
54E	24/7/9	78DU	360	330855	6357377	15	27									
54E	24/7/9	78DU	361	330855	6357377	15	27	3	31	44	22	>26	26	16		
54E	24/7/6	78DU	362	330855	6357377	15	27									
54E	24/7/9	78DU	363	330855	6357377	15	27	3	30	46	21	>27	27	16		
54E	24/7/9	78DU	364	330855	6357377	15	27									
54E	24/7/9	78DU	365	330825	6357237	15	27									
54E	24/7/10	78DU		328413	6352780	15	27									
54E	24/7/11	78DU	366	347565	6363984	15	27	0	2	11	87	59	51	32		
54E	26/7/1	78DU	383	390713	6335898	15	27	2	26	46	26	>26	26	14		
54E	26/7/1	78DU	385	390713	6335898	15	27	2	23	46	29	>29	29	15		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54E	26/7/1	78DU	386	390713	6335898	15	27	0	2	53	45					
54E	26/7/2	78DU	387	385708	6325480	15	27	2	27	47	24	>22	22	14		
54E	26/7/3	78DU	388	390538	6322315	15	27	2	20	46	32					
54E	26/7/4	78DU	389	399566	6334227	15	27	0	7	57	36					
54E	26/7/5	78DU	390	412909	6337201	15	27	3	33	43	21					
54E	26/7/6	78DU	392	417851	6336080	15	27	3	29	47	21	>22	22	15		
54E	26/7/7	78DU	393	423803	6322739	15	27	4	47	41	8					
54E	26/7/8	78DU		437629	6326775	15	27									
54E	26/7/9	78DU	394	428779	6333261	15	27	4	35	49	12					
54E	28/7/1	78DU	410	355527	6343058	15	27									
54E	28/7/2	78DU	411	335362	6343249	15	27	2	23	41	34	84	33	18		
54E	28/7/3	78DU	412	331946	6329009	15	27	3	28	47	22	18	23	13		
54E	28/7/4	78DU	413	332402	6323927	15	27	0	6	15	79					
54E	28/7/3	78DU	414	342745	6326890	15	27	2	26	47	25	>26	26	16		
54E	28/7/5	78DU	415	342745	6326890	15	27									
54E	28/7/5	78DU	416	342745	6326890	15	27									
54E	28/7/6	78DU		356894	6328238	15	27									
54E	28/7/7	78DU	417	354296	6336235	15	27	2	26	46	26	>24	24	15		
54E	28/7/7	78DU	418	354296	6336235	15	27									
54E	28/7/7	78DU	419	354296	6336235	15	27	3	37	39	21	>22	22	15		
54E	28/7/7	78DU	420	354296	6336235	15	27									
54E	28/7/8	78DU	422	359522	6339512	15	27	0	100	0	0					
54E	28/7/8	78DU	423	359522	6339512	15	27	2	26	49	23	>24	24	14		
54E	28/7/8	78DU	425	359522	6339512	15	27	3	37	45	15					
54E	28/7/8	78DU	426	359522	6339512	15	27									
54E	28/7/8	78DU	427	359522	6339512	15	27	3	24	42	32					
54E	28/8/9	78DU	428	367308	6334749	15	27	0	9	16	75	38	49	29		
54E	31/7/2	78DU		423737	6415724	15	27									
54E	31/7/3	78DU	451	428051	6359010	15	27	2	36	46	17					
54E	31/7/3	78DU	452	428051	6359010	15	27									
54E	31/7/3	78DU	453	428051	6359010	15	27	3	30	45	22					
54E	31/7/4	78DU	454	426057	6357247	15	27	3	33	42	22					
54E	31/7/4	78DU	455	426057	6357247	15	27									
54E	31/7/4	78DU	456	426057	6357247	15	27	2	33	44	21					
54E	31/7/4	78DU	457	426057	6357247	15	27									
54E	31/7/5	78DU	458	424579	6358072	15	27	3	43	38	16	11	20	13		
54E	31/7/5	78DU	459	424579	6358072	15	27	2	32	42	24	>25	25	14		
54E	31/7/6	78DU	460	418633	6366182	15	27									
54E	31/7/7	78DU	461	413075	6363649	15	27	4	27	46	23	28	30	18		
54E	31/7/7	78DU	462	413075	6363649	15	27	3	25	47	25	32	25	17		
54E	CD130			345538	6395766	15	27									
54E	CD131			338684	6368853	15	27									
54E	CD133			354224	6336161	15	27									
54E	CD134			420317	6356350	15	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54E	CD136			422921	6359200	15	27									
54E	CD137			344953	6369396	15	27									
54E	CD149			429594	6359138	15	27									
54E	CDG147			393322	6388420	15	27									
54E	CDG148			397793	6387702	15	27									
54E	CDG149			400086	6388923	15	27									
54E	CDG150			402136	6389669	15	27									
54E	CDG151			402293	6389230	15	27									
54E	CDG152			402580	6389476	15	27									
54E	CDG153			403600	6390265	15	27									
54E	CDG154			407013	6392070	15	27									
54E	CDG155			407761	6393120	15	27									
54E	CDG156			407858	6393589	15	27									
54E	CDG157			407759	6394249	15	27									
54E	CDG158			407411	6396224	15	27									
54E	CDG159			408791	6396567	15	27									
54E	CDG160			412885	6400069	15	27									
54E	CDG161			413888	6399760	15	27									
54E	CDG162			416026	6402003	15	27									
54E	CDG163			426472	6416332	15	27									
54E	CDG164			426953	6420751	15	27									
54F	26/6/3	78DU	34	478627	6413912	15	27	4	25	56	15	12	18	15		
54F	26/6/4	78DU	35	505955	6344345	15	27	9	48	37	6					
54F	26/6/5	78DU	36	465090	6349057	15	27	4	46	42	8					
54F	26/6/6	78DU		446623	6377304	15	27									
54F	1/7/1	78DU	77	498074	6426771	15	27	0	9	76	15	128				
54F	1/7/1	78DU	78	498061	6426752	15	27	4	37	50	9					
54F	1/7/2	78DU	79	502500	6426000	15	27	1	33	49	17					
54F	1/7/3	78DU	80	502633	6415484	15	27	9	48	38	5					
54F	1/7/4	78DU	81	489266	6403986	15	27	0	27	62	11					
54F	1/7/4	78DU	82	489266	6403986	15	27									
54F	1/7/4	78DU	83	489266	6403986	15	27									
54F	1/7/4	78DU	84	489266	6403986	15	27	4	24	50	22					
54F	1/7/5	78DU		478183	6408595	15	27									
54F	1/7/6	78DU	85	478322	6414953	15	27	3	20	60	17	14	19	14		
54F	1/7/7	78DU	86	476986	6418887	15	27					673			0.236	0.031
54F	1/7/8	78DU		481044	6421553	15	27									
54F	15/7/1	78DU	208	499251	6400207	15	27									
54F	15/7/2	78DU	209	513820	6387075	15	27	0	7	75	18					
54F	15/7/3	78DU	210	503503	6383088	15	27	4	51	37	8					
54F	15/7/4	78DU	211	496844	6387601	15	27									
54F	15/7/5	78DU	212	486783	6390562	15	27									
54F	15/7/6	78DU	213	486698	6393260	15	27	6	62	26	6					
54F	15/7/7	78DU	214	478611	6394487	15	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54F	15/7/7	78DU	216	478611	6394487	15	27	2	32	53	13	13	19	15		
54F	15/7/7	78DU	217	478611	6394487	15	27	2	32	44	21	10	22	14		
54F	15/7/7	78DU	218	478611	6394487	15	27	2	31	45	22	8	22	15		
54F	15/7/8	78DU	219	480185	6401508	15	27									
54F	22/7/1	78DU	324	461299	6422983	15	27									
54F	22/7/2	78DU	325	459763	6410820	15	27					548			0.236	0.037
54F	22/7/2	78DU	326	459763	6410820	15	27					543			0.238	0.037
54F	22/7/2	78DU	327	459763	6410820	15	27					784			0.238	0.027
54F	22/7/3	78DU		457425	6393774	15	27									
54F	22/7/4	78DU	328	467678	6384128	15	27	5	66	24	5					
54F	22/7/4	78DU	329	467678	6384128	15	27									
54F	22/7/4	78DU	330	467678	6384128	15	27	2	75	17	6					
54F	22/7/5	78DU		463734	6381151	15	27									
54F	22/7/6	78DU	332	447283	6383007	15	27	4	37	39	20	44	21	13		
54F	22/7/7	78DU		448532	6398854	15	27									
54F	22/7/8	78DU	333	446549	6428193	15	27	1	12	68	19	69				
54F	23/7/2	78DU	334	451385	6372363	15	27	1	15	70	14	14	20	17		
54F	23/7/3	78DU	336	454917	6370720	15	27	1	17	72	10					
54F	23/7/3	78DU	337	454879	6370732	15	27	0	6	73	21					
54F	23/7/3	78DU	338	454917	6370720	15	27	0	28	63	9					
54F	23/7/1	78DU	339	446562	6372351	15	27					840			0.239	0.026
54F	23/7/1	78DU	340	446574	6372383	15	27					415			0.24	0.047
54F	23/7/1	78DU	341	446574	6372383	15	27	3	48	37	12	28	18	15		
54F	23/7/1	78DU	342	446574	6372383	15	27	3	40	44	13	20	17	14		
54F	23/7/4	78DU	343	459785	6365896	15	27					144				
54F	23/7/5	78DU	344	452752	6354762	15	27									
54F	23/7/6	78DU	345	449073	6349747	15	27	4	47	42	7	9	14	12		
54F	23/7/7	78DU	346	445025	6350596	15	27									
54F	27/7/1	78DU		445348	6323354	15	27									
54F	27/7/2	78DU	395	453116	6326231	15	27					800				
54F	27/7/3	78DU	396	451921	6333089	15	27	3	39	41	17					
54F	27/7/4	78DU	398	461149	6335915	15	27	3	60	27	10					
54F	27/7/5	78DU		462075	6326193	15	27									
54F	27/7/7	78DU	399	465047	6318260	15	27	2	28	47	23					
54F	27/7/7	78DU	401	465047	6318260	15	27	2	31	46	21					
54F	27/7/8	78DU	404	472418	6320492	15	27	0	57	43	0					
54F	27/7/6	78DU	405	461991	6323645	15	27					667			0.228	0.029
54F	27/7/6	78DU	406	461991	6323645	15	27					656			0.228	0.023
54F	27/7/6	78DU	407	461991	6323645	15	27	1	24	57	18					
54F	27/7/6	78DU	408	461991	6323645	15	27					27				
54F	27/7/9	78DU	409	468659	6331997	15	27									
54F	29/7/1	78DU	429	480124	6320343	15	27	0	7	72	21	103				
54F	29/7/2	78DU	430	483786	6333724	15	27	0	4	76	20					
54F	29/7/3	78DU	431	487409	6327622	15	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54F	29/7/4	78DU	432	497475	6323933	15	27									
54F	29/7/5	78DU	433	502425	6333245	15	27									
54F	29/7/6	78DU	434	506126	6335484	15	27									
54F	29/7/7	78DU		515561	6335958	15	27									
54F	29/7/8	78DU	435	521461	6318939	15	27	0	8	72	20					
54F	29/7/8	78DU	436	521461	6318939	15	27	0	67	33	0					
54F	29/7/8	78DU	437	521461	6318939	15	27	3	27	53	17					
54F	29/7/8	78DU	438	521461	6318939	15	27									
54F	29/7/8	78DU	439	521461	6318939	15	27	2	34	43	21					
54F	29/7/8	78DU	440	521461	6318939	15	27									
54F	29/7/8	78DU	441	521461	6318939	15	27	2	32	45	21					
54F	29/7/8	78DU	442	521461	6318939	15	27									
54F	30/7/2	78DU	444	490717	6348239	15	27	5	45	50	0					
54F	30/7/3	78DU	445	509658	6334613	15	27	9	64	27	0					
54F	30/7/4A	78DU	447	502198	6352308	15	27									
54F	30/7/5	78DU	448	518975	6363380	15	27					197				
54F	30/7/6	78DU	449	530599	6372117	15	27	2	24	65	9	17	19	17		
54F	30/7/7	78DU	450	520264	6368807	15	27					115				
54F	CD145			493711	6405029	15	27									
54F	CD146			481446	6396763	15	27									
54F	CD147			477159	6389672	15	27									
54F	CD148			461569	6379338	15	27									
54K	18/6/1	78DU		442888	6512743	15	27									
54K	19/6/1	78DU		453799	6498871	15	27									
54K	19/6/2	78DU		452295	6501292	15	27									
54K	19/6/3	78DU		443706	6513710	15	27									
54K	22/6/4	78DU		445667	6513766	15	27									
54K	24/6/1	78DU	20	442390	6510988	15	27									
54K	24/6/1	78DU	21	442403	6510995	15	27									
54K	24/6/2	78DU		450823	6513482	15	27									
54K	26/6/1	78DU		442539	6479209	15	27									
54K	26/6/2	78DU	33	453846	6453811	15	27					447			0.535	0.098
54K	3/7/3	78DU		449358	6507463	15	27									
54K	20/7/8	78DU	290	447709	6489797	15	27									
54K	20/7/10	78DU	294	457398	6509767	15	27									
54K	20/7/11	78DU		470040	6512431	15	27									
54K	25/7/1	78DU	367	451845	6502972	15	27									
54K	25/7/2	78DU	370	457887	6491117	15	27									
54K	25/7/3	78DU	372	466127	6486522	15	27									
54K	25/7/3	78DU	373	466095	6486496	15	27									
54K	25/7/4	78DU	377	477014	6490071	15	27									
54K	25/7/5	78DU	378	482230	6496159	15	27									
54K	25/7/7	78DU		479149	6507545	15	27									
54K	25/7/8	78DU	380	474142	6502086	15	27									



NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54K	25/7/9	78DU	381	458374	6499921	15	27									
54K	1/8/1	78DU	470	501358	6442265	15	27									
54K	1/8/2	78DU		461019	6439671	15	27									
54K	1/8/3	78DU	471	442935	6446959	15	27	3	37	45	15					
54K	1/8/4	78DU	473	453218	6455846	15	27	4	38	47	11	12	15	12		
54K	1/8/5	78DU	474	450766	6462483	15	27									
54K	1/8/6	78DU	475	465949	6467616	15	27	3	34	51	12					
54K	1/8/7	78DU	476	453525	6473375	15	27									
54K	1/8/8	78DU		452951	6475852	15	27									
54K	3/8/1	78DU	477	482080	6477752	15	27	3	24	56	17	18	26	19		
54K	3/8/2	78DU	478	487979	6479488	15	27									
54K	3/8/3	78DU	479	493407	6481225	15	27	3	37	43	17	>18	18	12		
54K	3/8/4	78DU	481	494030	6454640	15	27									
54K	3/8/5	78DU	482	476513	6447329	15	27	5	47	41	7					
54K	3/8/6	78DU	483	475931	6442145	15	27	4	34	51	11	>14	14	12		
54K	3/8/7	78DU	484	484209	6463062	15	27	8	56	32	4					
54K	3/8/8	78DU	485	479208	6467970	15	27									
54K	3/8/9	78DU	486	465602	6481241	15	27									
54K	3/8/10	78DU	487	464709	6494740	15	27									
54K	3/8/11	78DU	489	473762	6496436	15	27									
54K	3/8/12	78DU	490	481990	6490546	15	27									
54K	3/8/13	78DU	491	491136	6491222	15	27									
54K	3/8/13	78DU	492	491137	6491209	15	27									
54K	3/8/14	78DU	493	490023	6508114	15	27									
54K	3/8/15	78DU	494	487802	6508516	15	27									
54K	3/8/16	78DU	495	483591	6504904	15	27									
54K	3/8/17	78DU	496	472346	6506955	15	27									
54K	3/8/18	78DU	497	462508	6508448	15	27									
54K	3/8/19	78DU	498	458206	6506782	15	27									
54K	3/8/20	78DU	499	445859	6502749	15	27									
54K	3/8/21	78DU	500	447788	6498060	15	27									
54K	3/8/21	78DU	501	447743	6498040	15	27									
54K	3/8/21	78DU	502	447749	6498071	15	27									
54K	3/8/21	78DU	503	447749	6498066	15	27									
54K	3/8/21	78DU	504	447749	6498066	15	27									
54K	5/8/6	78DU	520	443554	6514193	15	27									
54K	5/8/7	78DU		447789	6513126	15	27									
54k	5/8/8	78DU	521	452560	6513131	15	27									
54K	5/8/9	78DU	522	447570	6511503	15	27									
54K	8/8/1	78DU	532	451765	6499620	15	27									
54K	8/8/2	78DU		453106	6497457	15	27									
54K	8/8/3	78DU		453453	6499019	15	27									
54K	8/8/4	78DU	533	452252	6497487	15	27									
54K	8/8/5	78DU	534	451529	6502132	15	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54L	25/6/1	78DU	26	386000	6509500	15	27									
54L	25/6/1	78DU	27	386000	6509500	15	27	1	11	73	15	>37	37	29		
54L	25/6/3	78DU	28	357000	6438500	15	27	1	43	30	26					
54L	29/6/2	78DU	56	386500	6536000	15	27	3	30	50	17					
54L	29/6/4	78DU	57	371000	6542000	15	27	3	30	50	17	66				
54L	29/6/5	78DU	58	353100	6536100	15	27	17	69	12	2					
54L	29/6/6	78DU	59	334600	6540800	15	27	9	50	39	2	9				
54L	29/6/9	78DU	62	387000	6529000	15	27									
54L	29/6/9	78DU	63	387000	6529000	15	27	0	12	74	14					
54L	29/6/9	78DU	64	387000	6529000	15	27									
54L	29/6/9	78DU	65	387000	6529000	15	27	2	28	41	29					
54L	30/6/1	78DU	67	402500	6517000	15	27	9	30	52	9	103	29	23		
54L	30/6/2	78DU	68	349820	6513800	15	27	4	50	39	9					
54L	30/6/4	78DU	71	348620	6518500	15	27	2	39	44	15					
54L	30/6/5	78DU	72	384000	6512000	15	27	0	28	52	19	82				
54L	30/6/6	78DU	73	376000	6495000	15	27									
54L	30/6/9	78DU	74	383800	6501000	15	27	4	26	48	22					
54L	30/6/8	78DU	75	383800	6501000	15	27									
54L	30/6/9	78DU	76	383800	6501000	15	27	1	34	45	19	>27	27	20		
54L	4/7/2	78DU	102	430000	6445000	15	27	0	42	49	9					
54L	4/7/2	78DU	103	430000	6448000	15	27	2	28	46	24	8	24	15		
54L	4/7/3	78DU	105	430400	6454200	15	27	3	4	73	20	>20	20	14		
54L	4/7/4	78DU	108	430000	6461500	15	27	4	31	48	17	12	23	15		
54L	4/7/4	78DU	109	430200	6461400	15	27	3	39	40	18	11	18	13		
54L	4/7/5	78DU	110	429980	6471500	15	27	3	48	39	10					
54L	4/7/5	78DU	112	423900	6467600	15	27	3	40	43	14					
54L	4/7/7	78DU	113	423900	6467600	15	27	3	31	48	18					
54L	4/7/7	78DU	114	423900	6467600	15	27	3	35	43	19					
54L	6/7/1	78DU	120	436500	6461000	15	27	10	87	2	1					
54L	6/7/3	78DU	122	417500	6448000	15	27	2	33	45	20					
54L	6/7/3	78DU	123	417600	6447900	15	27	2	33	41	23					
54L	6/7/3	78DU	124	417600	6447900	15	27	2	36	42	20					
54L	6/7/5	78DU	126	393600	6438600	15	27	3	30	44	23	15				
54L	6/7/5	78DU	127	393600	6438600	15	27	3	40	38	19					
54L	6/7/5	78DU	128	393600	6438600	15	27	3	33	42	22					
54L	7/7/1	78DU	129	360200	6491200	15	27	1	26	67	6	10				
54L	7/7/1	78DU	130	360200	6491200	15	27	0	20	76	4	17				
54L	7/7/1	78DU	131	360200	6491200	15	27	1	26	57	16	17	20	16		
54L	7/7/2	78DU	132	360500	6497500	15	27									
54L	7/7/4	78DU	133	334500	6493000	15	27	0	15	68	17	32				
54L	11/7/1	78DU	163	361500	6450000	15	27	0	19	60	21					
54L	11/7/2	78DU	164	342100	6449000	15	27	2	35	32	31					
54L	11/7/3	78DU	165	325500	6588000	15	27	2	41	34	23	15	22	14		
54L	11/7/4	78DU	166	326600	6442800	15	27	2	35	26	37					

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54L	11/7/5	78DU	167	340800	6444000	15	27	2	39	34	25	13	21	13		
54L	11/7/6	78DU	168	347600	6438400	15	27	2	48	30	23	15	20	13		
54L	11/7/7	78DU	169	351000	6444500	15	27	2	37	41	20					
54L	11/7/7	78DU	170	351000	6444500	15	27	2	35	41	22					
54L	11/7/7	78DU	171	351000	6444500	15	27	2	44	34	20					
54L	11/7/8	78DU	173	369500	6432500	15	27	3	43	33	21					
54L	11/7/9	78DU	174	375500	6440000	15	27	2	40	39	19					
54L	16/7/2	78DU	222	354800	6487100	15	27	6	49	39	4					
54L	16/7/5	78DU	225	326000	6480000	15	27	0	35	55	10	14	18	16		
54L	16/7/8	78DU	231	379900	6472700	15	27	3	35	43	19					
54L	16/7/8	78DU	233	379900	6472700	15	27									
54L	18/7/1	78DU	247	401000	6498000	15	27	0	10	75	15					
54L	18/7/8	78DU	248	379500	6489500	15	27	23	70	6	1					
54L	18/7/9	78DU	249	393500	6474000	15	27	2	46	50	2					
54L	18/7/12	78DU	250	418400	6471600	15	27	3	30	50	17	>20	20	14		
54L	18/7/12	78DU	251	418400	6471600	15	27	3	35	46	21	9	22	14		
54L	18/7/12	78DU	252	418400	6471600	15	27									
54L	18/7/12	78DU	253	418400	6471600	15	27									
54L	19/7/2	78DU	256	329200	6472200	15	27	1	32	46	21	14	20	14		
54L	19/7/2	78DU	257	329200	6472200	15	27	3	39	40	18	11	20	14		
54L	19/7/3	78DU	259	330600	6474500	15	27	3	32	39	26	11	25	15		
54L	19/7/3	78DU	261	330600	6474500	15	27	3	41	39	17	9	21	13		
54L	19/7/4	78DU	263	332000	6477000	15	27	0	3	64	33	21	29	20		
54L	19/7/4	78DU	264	332000	6477000	15	27	0	1	90	9	21				
54L	19/7/5	78DU	265	332500	6481000	15	27	3	43	33	21	7	22	14		
54L	19/7/5	78DU	266	332500	6481000	15	27									
54L	19/7/5	78DU	267	332500	6481000	15	27	2	39	41	18	>22	22	13		
54L	19/7/6	78DU	269	373500	6482000	15	27									
54L	19/7/7	78DU	270	365200	6478200	15	27	2	36	41	21	>19	19	10		
54L	19/7/7	78DU	271	365200	6478200	15	27									
54L	19/7/8	78DU	272	378800	6484100	15	27	3	37	39	21	>19	19	12		
54L	19/7/8	78DU	273	378800	6484100	15	27									
54L	19/7/9	78DU	274	385900	6487200	15	27	3	40	38	19					
54L	19/7/9	78DU	275	385900	6487200	15	27	2	40	38	20					
54L	19/7/10	78DU	276	393200	6488600	15	27	3	35	39	23					
54L	31/7/8	78DU	463	418400	6452600	15	27	0	48	39	13	>18	18	16		
54L	31/7/8	78DU	464	418400	6452600	15	27	2	32	43	23	>21	21	12		
54L	31/7/8	78DU	465	418400	6452600	15	27	3	34	42	21	>22	22	12		
54L	31/7/8	78DU	466	418400	6452600	15	27									
54L	31/7/8	78DU	467	418400	6452600	15	27	0	100	0	0					
54L	31/7/8	78DU	468	418400	6452600	15	27	2	32	44	22	>25	25	14		
54L	12/8/2	77DU	510	329064	6493740	15	27	0	11	70	19					
54L	12/8/2	77DU	511	329064	6493740	15	27									
54L	13/8/1	77DU	512	335596	6494218	15	27	0	25	57	17					

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54L	13/8/1	77DU	513	335596	6494218	15	27									
54L	13/8/1	77DU	514	335596	6494218	15	27	0	0	94	6					
54L	13/8/1	77DU	515	335596	6494218	15	27	0	6	77	17					
54L	13/8/1	77DU	516	335596	6494218	15	27									
54L	17/8/2	77DU	517	359926	6491007	15	27									
54L	17/8/1	77DU	518	358219	6490829	15	27	23	65	12	0					
54L	18/8/2	77DU	519	357652	6490999	15	27	0	1	89	10					
54M	21/6/3	77DU	18	366596	6630085	15	27	10	54	34	2	6				
54M	21/6/4	77DU		364510	6588015	15	27									
54M	21/6/5	77DU	21	359659	6546808	15	27	0	20	68	12	52				
54M	21/6/5	77DU	22	359659	6546808	15	27	0	3	83	14	39				
54M	21/6/6	77DU		342819	6556917	15	27									
54M	6/7/1	77DU	200	366740	6556505	15	27	65	34	1	0	1				
54M	6/7/2	77DU	201	364201	6564250	15	27	5	43	38	12	9	16	13		
54M	6/7/3	77DU	202	377774	6564686	15	27	4	89	7	0	22				
54M	6/7/4	77DU		379397	6554751	15	27									
54M	6/7/5	77DU	203	391782	6561567	15	27	9	60	29	1	8				
54M	6/7/5	77DU	204	391782	6561567	15	27	0	3	89	7	31				
54M	6/7/6	77DU	205	394503	6561502	15	27	0	5	58	36	34	31	18		
54M	6/7/6	77DU	206	394503	6561502	15	27	6	90	4	0	7				
54M	6/7/7	77DU		388538	6554243	15	27									
54M	6/7/8	77DU		393192	6545101	15	27									
54M	9/7/1	77DU	226	366961	6599065	15	27	8	67	24	1	12				
54M	9/7/1	77DU	227	366961	6599065	15	27									
54M	9/7/2	77DU	228	382857	6598033	15	27	3	48	49	0	7				
54M	9/7/3	77DU		376414	6594572	15	27									
54M	9/7/4	77DU	229	376115	6592886	15	27	18	81	1	0	7				
54M	9/7/5	77DU	230	372069	6592223	15	27	6	47	34	13	10				
54M	9/7/6	77DU	231	358331	6595243	15	27	7	78	15	0					
54M	9/7/7	77DU	232	358734	6578976	15	27									
54M	9/7/8	77DU	234	363187	6575237	15	27									
54M	9/7/8	77DU	235	363187	6575237	15	27									
54M	9/7/8	77DU	236	363187	6575237	15	27									
54M	9/7/8	77DU	237	363187	6575237	15	27									
54M	10/7/1	77DU	238	335373	6608126	15	27	3	67	26	4	8				
54M	10/7/2	77DU		337783	6610400	15	27									
54M	10/7/3	77DU	239	341452	6609698	15	27	6	52	41	1	6				
54M	10/7/4	77DU	240	348976	6610775	15	27	6	66	28		12				
54M	11/7/1	77DU	241	338388	6574013	15	27	0	19	68	13	21				
54M	11/7/2	77DU	242	334608	6583337	15	27	10	64	26	0	12				
54M	11/7/3	77DU	244	354054	6607997	15	27	5	53	42	0	14				
54M	11/7/3	77DU	245	354066	6607971	15	27	6	76	18	0	8				
54M	11/7/4	77DU	246	356344	6618433	15	27	8	64	28	0	7				
54M	11/7/5	77DU	247	352698	6619990	15	27	7	55	37	1	5				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
54M	11/7/6	77DU	248	354473	6625366	15	27	4	76	20	0	5				
54M	11/7/6	77DU	249	354473	6625366	15	27	7	64	29	0	10				
54M	11/7/7	77DU	250	345732	6625822	15	27	5	60	34	1	15				
54M	11/7/7	77DU	251	345802	6625800	15	27	10	70	19	1	11				
54M	11/7/8	77DU	252	336258	6597693	15	27	4	53	41	2	9				
54M	21/7/1	77DU		395265	6615010	15	27									
54M	21/7/2	77DU	323	388616	6612621	15	27	95	3	2	0	8				
54M	21/7/3	77DU	324	395631	6609767	15	27	4	95	1	0	6				
54M	21/7/4	77DU	325	388196	6601294	15	27	12	55	25	8	6				
54M	21/7/5	77DU	326	383427	6606249	15	27	36	35	28	1	11				
54M	21/7/6	77DU	328	381778	6605959	15	27	0	27	73	0					
54M	21/7/6	77DU	329	381778	6605959	15	27	0	29	67	4					
54M	21/7/8	77DU	330	361816	6604020	15	27	12	65	21	2	8				
54M	21/7/8	77DU	331	361816	6604020	15	27	12	84	4	0	4				
54M	21/7/8	77DU	332	361816	6604020	15	27	4	79	17	0	6				
54M	21/7/9	77DU	333	373509	6616428	15	27	9	51	41	1	6				
54M	21/7/10	77DU	334	373009	6622032	15	27	13	69	18	0	4				
54M	21/7/10	77DU	336	373034	6622019	15	27	16	73	11	0	6				
54M	21/7/11	77DU	337	369681	6620382	15	27	10	45	42	3	7				
54M	21/7/12	77DU		364119	6614099	15	27									
54M	21/7/13	77DU	338	359330	6616203	15	27	0	16	75	9	17				
54M	28/7/1	77DU	403	330341	6560202	15	27	5	55	38	3	8				
54M	28/7/1	77DU	404	330341	6560202	15	27	8	88	4	0	3				
54M	28/7/2	77DU		342493	6559747	15	27									
54M	28/7/3	77DU		346454	6559010	15	27									
54M	28/7/4	77DU		345049	6566131	15	27									
54M	28/7/5	77DU	405	354816	6565647	15	27	36	60	4	0	5				
54M	28/7/6	77DU	406	355162	6569890	15	27	6	55	33	6	12				
54M	28/7/6	77DU	407	355162	6569890	15	27	4	46	47	3	13				
54M	28/7/7	77DU		353180	6557236	15	27									
54M	28/7/8	77DU	408	348265	6553304	15	27	5	48	45	2	9				
54M	28/7/9	77DU	410	342830	6550046	15	27	20	78	2	0	4				
54M	28/7/10	77DU	411	333501	6549151	15	27	9	42	45	4	10				
64I	20/6/1	77DU	1	582167	6526653	14	27	76	7	7	0					
64I	20/6/2	77DU	2	600250	6492895	14	27					562				
64I	20/6/2	77DU	3	600250	6492895	14	27					563				
64I	20/6/3	77DU	4	561119	6462644	14	27	1	71	28	0					
64I	20/6/3	77DU	5	561119	6462644	14	27	3	97	0	0					
64I	20/6/4	77DU	6	612050	6459800	14	27	3	45	38	14	13	20	14		
64I	20/6/4	77DU	7	612050	6459800	14	27	4	46	37	13	10	18	13		
64I	20/6/5	77DU	8	655587	6456324	14	27	0	2	65	33	21	31	21		
64I	20/6/5	77DU	9	655587	6456324	14	27	0	6	61	33	24	29	18		
64I	20/6/6	77DU	11	669293	6465789	14	27	1	38	41	20	16	23	13		
64I	20/6/6	77DU	12	669293	6465789	14	27	3	39	38	20	12	24	13		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	20/6/7	77DU		657448	6497337	14	27									
64I	22/6/1	77DU		617442	6443057	14	27									
64I	22/6/2	77DU	23	623522	6438750	14	27	24	75	1	0	1				
64I	22/6/2	77DU	25	623522	6438750	14	27	5	71	24	0					
64I	22/6/3	77DU	26	639345	6445451	14	27	1	33	60	24	16	25	17		
64I	22/6/3	77DU	27	639345	6445451	14	27	0	88	12	0	23				
64I	22/6/4	77DU	28	645540	6444451	14	27	3	54	32	11	11				
64I	22/6/4	77DU	29	645540	6444451	14	27	0	2	69	29	37	49	38		
64I	22/6/5	77DU	30	629190	6434143	14	27	3	54	33	10	9	18	14		
64I	22/6/10	77DU	31	624498	6449254	14	27	3	49	34	14	8	15	13		
64I	22/6/11	77DU	32	628419	6444574	14	27	3	25	38	34	22	31	16		
64I	22/6/12	77DU	33	644750	6445181	14	27	4	39	46	11					
64I	22/6/12	77DU	34	644750	6445181	14	27	3	38	48	11	13				
64I	22/6/13	77DU	35	643111	6439981	14	27	0	29	58	13					
64I	22/6/13	77DU	37	643111	6439981	14	27	1	50	13	8	64				
64I	22/6/13	77DU	38	643111	6439981	14	27	7	90	3	0					
64I	22/6/14	77DU		640085	6450011	14	27									
64I	23/6/1	77DU	39	647705	6477517	14	27	1	14	57	28	22	31	22		
64I	23/6/2	77DU	41	651800	6485000	14	27	0	3	74	33	18	26	17		
64I	23/6/3	77DU	42	669286	6478342	14	27	4	48	38	40	10				
64I	23/6/3	77DU	44	669286	6478342	14	27	2	42	47	9	12				
64I	23/6/4	77DU	45	660304	6463204	14	27	3	48	33	16	8				
64I	23/6/4	77DU	46	660304	6463204	14	27	6	84	10	0	4				
64I	23/6/10	77DU	47	646818	6464946	14	27	0	52	44	4	9				
64I	23/6/11	77DU	48	649702	6466267	14	27	0	6	83	11	20				
64I	23/6/12	77DU	50	667519	6465546	14	27	2	36	41	21	13	24	15		
64I	23/6/12	77DU	51	667519	6465546	14	27	1	12	63	24	19	25	17		
64I	23/6/12	77DU	52	667519	6465546	14	27	4	43	43	10	12	16	13		
64I	23/6/13	77DU	53	655117	6478638	14	27	0	6	49	45	26	37	23		
64I	24/6/1	77DU	54	650824	6534532	14	27	12	87	1	0					
64I	24/6/2	77DU	55	652751	6535415	14	27									
64I	24/6/3	77DU		635985	6535830	14	27									
64I	25/6/1	77DU	56	588021	6505181	14	27	27	52	18	3	6				
64I	25/6/1	77DU	57	588021	6505181	14	27	11	79	10	0	3				
64I	25/6/2	77DU	58	588451	6488260	14	27	17	69	12	2					
64I	25/6/2	77DU	58	588451	6488260	14	27					1772				
64I	25/6/2	77DU	59	588451	6488260	14	27					608				
64I	25/6/3	77DU	60	605101	6492404	14	27	0	95	5	0					
64I	25/6/4	77DU		604003	6507995	14	27									
64I	25/6/2	77DU	61	588451	6488260	14	27	9	84	7	0	18				
64I	25/6/2	77DU	62	588459	6488209	14	27	2	43	32	23	13				
64I	25/6/3	77DU	63	605101	6492404	14	27	3	43	37	17	11	19	13		
64I	26/6/1	77DU	64	562894	6533957	14	27					3				
64I	26/6/1	77DU	65	562894	6533957	14	27	39	59	2	0	2				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	26/6/2	77DU	66	560138	6528294	14	27	7	64	29	0	5				
64I	26/6/3	77DU	68	570891	6519542	14	27									
64I	26/6/3	77DU	69	570891	6519542	14	27	5	65	28	2	5				
64I	26/6/4	77DU	70	584172	6517832	14	27	8	64	24	4	14				
64I	26/6/5	77DU	71	582499	6530808	14	27	3	75	22	0	6				
64I	26/6/1	77DU	72	562894	6533957	14	27	0	84	16	0	20				
64I	26/6/2	77DU	73	560138	6528294	14	27	1	58	39	2	9				
64I	26/6/3	77DU	74	570891	6519542	14	27	4	60	34	2	7				
64I	26/6/4	77DU	75	584172	6517832	14	27	9	55	27	9	12				
64I	26/6/4	77DU	76	584172	6517832	14	27	9	72	15	4	9				
64I	26/6/5	77DU	77	582564	6530730	14	27	4	59	34	3	9				
64I	1/7/1	77DU	129	616285	6493614	14	27	1	33	56	10	14	20	17		
64I	1/7/1	77DU	130	616285	6493614	14	27	1	41	50	8	16				
64I	1/7/2	77DU	131	630654	6498814	14	27	4	53	35	8	11				
64I	1/7/2	77DU	132	630654	6498814	14	27	5	57	35	3	11				
64I	1/7/3	77DU	133	626034	6500526	14	27	5	57	35	3	11				
64I	1/7/4	77DU	134	644348	6495698	14	27	0	6	60	34	21	31	20		
64I	1/7/5	77DU	135	639234	6504686	14	27	10	66	24	0	9				
64I	1/7/6	77DU	136	624081	6505809	14	27	2	28	50	20	15	23	16		
64I	2/7/1	77DU	137	563147	6506697	14	27	20	66	12	1	15				
64I	2/7/2	77DU	139	561769	6486743	14	27	4	64	32	0	6				
64I	2/7/2	77DU	140	561769	6486743	14	27	4	64	31	2	7				
64I	2/7/2	77DU	141	561769	6486743	14	27	4	65	26	3	6				
64I	2/7/2B	77DU	142	561698	6485533	14	27	21	55	22	0	6				
64I	2/7/2B	77DU	143	561698	6485533	14	27	3	76	51	0	15				
64I	2/7/3	77DU	144	568667	6502763	14	27	3	55	42	0	8				
64I	2/7/3	77DU	146	568667	6502763	14	27	6	60	29	3	16				
64I	2/7/4	77DU	147	581257	6487095	14	27	3	37	49	8	13	18	13		
64I	2/7/4	77DU	148	581226	6487068	14	27	4	54	29	10	9				
64I	2/7/5	77DU	149	577871	6502328	14	27	2	56	42	0	9				
64I	2/7/5	77DU	150	577871	6502328	14	27	10	67	19	2	11				
64I	2/7/6	77DU	151	595727	6507934	14	27	4	49	36	10	11				
64I	2/7/7	77DU		597792	6512816	14	27									
64I	5/7/1	77DU	187	607662	6521757	14	27	0	54	43	1	15				
64I	5/7/2	77DU	188	595965	6514057	14	27	4	62	28	4	8				
64I	5/7/3	77DU	189	589813	6516547	14	27	4	77	18	0	7				
64I	5/7/3	77DU	190	589684	6516304	14	27	13	70	17	0	4				
64I	5/7/4	77DU	191	597714	6521664	14	27	1	47	49	1	15				
64I	5/7/4	77DU	192	597714	6521664	14	27	4	63	29	2	8				
64I	5/7/5	77DU	193	601712	6526604	14	27	11	66	18	4	8				
64I	5/7/6	77DU	194	611534	6530805	14	27	5	76	19	0	7				
64I	5/7/7	77DU		610425	6533337	14	27									
64I	5/7/8	77DU	195	590663	6533380	14	27	6	61	30	10	7				
64I	5/7/8	77DU	196	590663	6533380	14	27	4	56	36	1	8				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	5/7/9	77DU	197	593089	6536201	14	27	5	74	21	0	5				
64I	5/7/10	77DU	198	594501	6539766	14	27	4	66	26	3	8				
64I	5/7/1	77DU	199	601306	6539462	14	27	5	65	25	3	6				
64I	8/7/1	77DU	225	624829	6539464	14	27	6	93	1	0	2				
64I	14/7/1	77DU		670731	6509705	14	27									
64I	14/7/2	77DU	253	673257	6504498	14	27	12	72	16	0					
64I	14/7/3	77DU	254	673930	6502141	14	27	8	60	32	0	8				
64I	14/7/3	77DU	255	673856	6501908	14	27	6	69	25	0	8				
64I	14/7/4	77DU		674150	6498352	14	27									
64I	14/7/5	77DU	256	665093	6499999	14	27	6	72	19	3	8				
64I	14/7/5	77DU	257	665093	6499999	14	27	2	28	63	7	17	22	19		
64I	14/7/6	77DU	258	660032	6502164	14	27	8	69	20	2	8				
64I	14/7/7	77DU		658348	6493665	14	27									
64I	14/7/8	77DU	259	654664	6500185	14	27	9	68	20	0	8				
64I	14/7/8	77DU	261	654669	6500221	14	27	13	78	9	0	9				
64I	14/7/9	77DU	262	652085	6493774	14	27	1	24	62	11	16	23	18		
64I	14/7/9	77DU	263	652150	6493744	14	27	0	35	59	4	25				
64I	15/7/1	77DU	264	672888	6444890	14	27	4	39	47	19	17	21	13		
64I	15/7/2	77DU	265	674622	6432852	14	27	4	32	42	22	15	26	15		
64I	15/7/3	77DU	266	669834	6438131	14	27	3	35	41	21	16	24	14		
64I	15/7/4	77DU	268	656057	6446772	14	27	47	29	13	11	4	32	21		
64I	15/7/4	77DU	269	656057	6446772	14	27	0	33	51	16	16	22	15		
64I	15/7/5	77DU	270	654696	6455626	14	27	1	23	52	24	29	34	28		
64I	15/7/5	77DU	271	654742	6455686	14	27	2	97	1	0	3				
64I	15/7/6	77DU	272	651848	6452517	14	27	0	9	46	45	25	38	23		
64I	15/7/7	77DU		674987	6456463	14	27									
64I	15/7/8	77DU	273	646906	6458833	14	27	5	81	10	0	6				
64I	15/7/8	77DU	274	646906	6458833	14	27	4	59	32	5	11				
64I	15/7/9	77DU	275	641192	6495946	14	27	3	20	61	16	13	23	18		
64I	17/7/1	77DU	289	615553	6477696	14	27	0	69	31	0	16				
64I	17/7/1	77DU	290	615553	6477696	14	27	32	38	23	5	10				
64I	17/7/2	77DU	291	620117	6479251	14	27	1	29	47	21	17	24	16		
64I	17/7/2	77DU	292	620117	6479251	14	27	1	85	14	0	6				
64I	17/7/3	77DU	293	623616	6473536	14	27	1	49	38	10	13	17	13		
64I	17/7/3	77DU	294	623616	6473536	14	27	5	56	28	8	13				
64I	17/7/3	77DU	296	623616	6473536	14	27	0	27	50	21	16	23	16		
64I	17/7/3	77DU	297	623616	6473536	14	27	2	40	50	6	11				
64I	17/7/4	77DU	298	618522	6472185	14	27	2	39	49	8	12	16	14		
64I	17/7/5	77DU	299	617727	6466538	14	27	3	88	9	0	4				
64I	17/7/5	77DU	300	617727	6466538	14	27	4	44	44	8	12				
64I	17/7/6	77DU	301	638855	6462447	14	27	2	27	51	17	15	22	17		
64I	17/7/7	77DU	302	633271	6465184	14	27	4	38	43	15	15	20	15		
64I	17/7/7	77DU	303	633271	6465184	14	27	5	29	56	10	15	22	15		
64I	17/7/8	77DU	304	633200	6470200	14	27	2	24	53	21	14	21	16		



NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	17/7/9	77DU	305	633230	6475447	14	27	6	62	27	5	10				
64I	17/7/9	77DU	307	633268	6475549	14	27	10	58	27	5	7				
64I	17/7/10	77DU	308	633500	6482800	14	27	3	25	60	15	13	21	16		
64I	18/7/1	77DU	309	666431	6531333	14	27	0	63	33	4	21				
64I	18/7/2	77DU	310	668484	6521742	14	27	19	66	15	0	5				
64I	18/7/3	77DU		664873	6518805	14	27									
64I	18/7/4	77DU	311	658734	6532166	14	27	10	49	38	3	12				
64I	18/7/4	77DU	312	658768	6532122	14	27	0	98	2	0					
64I	18/7/5	77DU	313	655314	6526744	14	27	8	54	38	0	9				
64I	18/7/6	77DU	315	656624	6535335	14	27	6	67	27	0	8				
64I	20/7/1	77DU		654116	6533622	14	27									
64I	20/7/2	77DU		668163	6538473	14	27									
64I	20/7/3	77DU	319	656124	6540473	14	27	10	50	37	3	12				
64I	20/7/3	77DU	320	656560	6540669	14	27	9	89	2	0	4				
64I	20/7/4	77DU		654218	6532392	14	27									
64I	20/7/5	77DU	321	653924	6533840	14	27	0	54	42	4	35				
64I	20/7/5	77DU	322	653924	6533840	14	27	0	25	67	8	53				
64I	20/7/6	77DU		648154	6538041	14	27									
64I	29/7/1	77DU	412	622140	6519338	14	27	9	44	44	3	100	0			
64I	29/7/2	77DU	414	615839	6517801	14	27	3	62	35	0	8				
64I	29/7/3	77DU	415	619760	6527078	14	27					5				
64I	29/7/4	77DU	416	617080	6529655	14	27	7	62	20	11	13				
64I	29/7/4	77DU	417	617080	6529655	14	27	6	62	21	11	13				
64I	29/7/5	77DU	418	597248	6532053	14	27	10	69	24	2					
64I	29/7/5	77DU	419	597248	6532053	14	27	2	93	5	0					
64I	29/7/5	77DU	420	597248	6532053	14	27	0	47	53	0					
64I	29/7/5	77DU	421	597248	6532053	14	27	3	49	44	4	10				
64I	29/7/5	77DU	422	597248	6532053	14	27	2	22	67	9	12				
64I	29/7/5	77DU	423	597248	6532053	14	27	5	64	26	5	7				
64I	29/7/6	77DU	424	616939	6533153	14	27	6	72	18	4	8				
64I	29/7/6	77DU	425	616939	6533153	14	27	5	64	21	10	9				
64I	29/7/7	77DU	426	615807	6540614	14	27	6	60	22	12	16	28	20		
64I	29/7/8	77DU		627378	6536353	14	27									
64I	29/7/9	77DU	427	624874	6530845	14	27	5	65	30	0	6				
64I	29/7/10	77DU	428	631790	6523688	14	27	5	49	68	8	12				
64I	29/7/10	77DU	429	631790	6523688	14	27	2	48	43	7	13				
64I	29/7/11	77DU	430	637409	6515378	14	27	11	79	10	0	6				
64I	29/7/12	77DU	431	643291	6528891	14	27	5	30	59	6	20				
64I	29/7/13	77DU	432	641548	6539316	14	27	11	62	25	2	11				
64I	31/7/1	77DU	443	565416	6477294	14	27	0	89	11	0	6				
64I	31/7/1	77DU	444	565416	6477294	14	27	2	45	40	13	15	19	14		
64I	31/7/2	77DU	445	566334	6466471	14	27	3	53	31	13	13	8	5		
64I	31/7/3	77DU	446	580333	6464444	14	27	5	73	22	0	12				
64I	31/7/4	77DU	447	591451	6466547	14	27	10	58	24	8	8				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	31/7/5	77DU	448	607996	6482677	14	27	3	58	39	0	9				
64I	31/7/5	77DU	449	607996	6482677	14	27	3	53	36	7	16				
64I	3/8/1	77DU	456	627522	6476090	14	27									
64I	3/8/2	77DU		627739	6476914	14	27									
64I	3/8/3	77DU		627330	6477535	14	27									
64I	3/8/4	77DU		627341	6478807	14	27									
64I	3/8/5	77DU	457	627591	6478980	14	27	19	79	2	0					
64I	4/8/1	77DU		627689	6479744	14	27									
64I	4/8/2	77DU		628106	6480102	14	27									
64I	4/8/3	77DU	458	627385	6480079	14	27	5	47	36	12					
64I	4/8/3	77DU	459	627385	6480079	14	27	2	35	46	17					
64I	4/8/3	77DU	460	627385	6480079	14	27	12	76	12	0					
64I	4/8/3	77DU	461	627513	6480058	14	27	0	99	1	0					
64I	4/8/4	77DU		628066	6480573	14	27									
64I	4/8/5	77DU		628419	6481523	14	27									
64I	4/8/6	77DU		628547	6483777	14	27									
64I	4/8/7	77DU		628460	6484541	14	27									
64I	5/8/1	77DU	462	630506	6487448	14	27	4	31	60	0					
64I	5/8/1	77DU	463	630506	6487448	14	27	19	68	13	0					
64I	5/8/1	77DU	464	630636	6487470	14	27	9	85	6						
64I	5/8/1	77DU	465	630617	6487451	14	27	0	72	28	0					
64I	5/8/2	77DU		631439	6487712	14	27									
64I	6/8/1	77DU	466	632864	6487698	14	27	3	34	50	13					
64I	6/8/1	77DU	467	632864	6487698	14	27	7	75	18	0					
64I	6/8/1	77DU	468	632864	6487698	14	27	10	58	28	4					
64I	6/8/2	77DU	470	634713	6487205	14	27	2	45	33	20					
64I	7/8/1	77DU	471	635474	6487369	14	27	1	8	61	30					
64I	7/8/1	77DU	472	635474	6487369	14	27	8	68	20	4					
64I	7/8/2	77DU	473	637631	6487831	14	27	2	17	54	27					
64I	7/8/2	77DU	474	637631	6487831	14	27	3	47	35	15					
64I	7/8/3	77DU	475	638752	6488542	14	27	2	34	29	25					
64I	7/8/4	77DU	476	639831	6489176	14	27	8	74	15	3					
64I	7/8/11	77DU		635632	6487300	14	27									
64I	8/8/1	77DU		642348	6487930	14	27									
64I	8/8/3	77DU	477	645774	6485389	14	27	0	17	64	19					
64I	8/8/3	77DU	478	645021	6484886	14	27	3	53	26	18					
64I	8/8/3	77DU	479	645774	6485389	14	27	0	98	2	0					
64I	8/8/5	77DU		646309	6486268	14	27									
64I	8/8/6	77DU		646154	6486512	14	27									
64I	8/8/7	77DU	482	645669	6487111	14	27	0	84	16	0					
64I	8/8/8	77DU		647331	6486874	14	27									
64I	8/8/9	77DU	484	647749	6487392	14	27	1	11	66	22					
64I	8/8/9	77DU	485	647749	6487392	14	27	3	23	40	34					
64I	8/8/9	77DU	486	647749	6487392	14	27	2	24	40	34					

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64I	8/8/9	77DU	487	647749	6487392	14	27	18	91	11	0					
64I	9/8/1	77DU	489	650394	6486873	14	27	2	56	40	2					
64I	9/8/2	77DU		652151	6487743	14	27									
64I	9/8/4	77DU		654783	6487741	14	27									
64I	9/8/5	77DU	491	654857	6488433	14	27	6	37	37	20					
64I	9/8/6	77DU		655621	6489952	14	27									
64I	9/8/7	77DU		656313	6491519	14	27									
64I	9/8/8	77DU	492	656752	6493236	14	27	3	48	34	15					
64I	9/8/9	77DU		656931	6494248	14	27									
64I	9/8/10	77DU	493	656381	6494233	14	27	7	67	19	7					
64I	9/8/12	77DU	494	656308	6494983	14	27	8	73	19	0					
64I	9/8/11	77DU	495	656617	6495186	14	27	8	38	40	24					
64I	9/8/12	77DU	496	656760	6494900	14	27	10	81	9	0					
64I	9/8/13	77DU		656675	6496125	14	27									
64I	9/8/14	77DU	497	657687	6497445	14	27	15	69	16	0					
64I	10/8/1	77DU	498	659270	6498313	14	27	9	44	41	6					
64I	9/8/14	77DU	499	658100	6497306	14	27	12	61	22	5					
64I	10/8/3	77DU	500	659985	6497491	14	27	8	54	32	6					
64I	10/8/4	77DU	501	661300	6497934	14	27	8	38	37	19					
64I	10/8/5	77DU	502	662133	6497440	14	27	5	27	40	28					
64I	10/8/6	77DU	503	662901	6497798	14	27	30	67	3	0					
64I	11/8/1	77DU		669987	6496672	14	27									
64I	11/8/2	77DU	504	672551	6496386	14	27	5	57	31	7					
64I	11/8/3	77DU		673857	6495882	14	27									
64I	12/8/1	77DU	505	673936	6495218	14	27	4	36	36	24					
64I	12/8/1	77DU	506	673936	6495218	14	27	1	24	62	13					
64I	12/8/1	77DU	507	673936	6495218	14	27	4	33	38	25					
64I	12/8/1	77DU	508	673936	6495218	14	27	13	77	10	0					
64I	12/8/1	77DU	509	673936	6495218	14	27	3	38	35	24					
64I	16/7/4	78DU	224	323500	6483800	15	27	4	54	33	9					
64I	16/7/6	78DU	228	323000	6460500	15	27	2	27	41	30	17	23	15		
64I	16/7/6	78DU	229	323000	6460500	15	27	3	46	36	15					
64I	17/7/5	80DU	299	618020	6466362	14	27									
64J	4/7/1	80DU	8	471193	6451087	14	27	2	68	26	4					
64J	4/7/2	80DU	9	546285	6456662	14	27	2	68	26	4					
64J	4/7/2	80DU	10	546317	6456637	14	27	0	19	34	47	20	27	17		
64J	4/7/3	80DU	11	536905	6462446	14	27	0	7	49	44	26	36	25		
64J	4/7/4	80DU	13	509836	6524553	14	27	9	66	24	1					
64J	4/7/5	80DU		447635	6481039	14	27									
64J	4/7/6	80DU	15	445843	6493986	14	27	0	3	37	60					
64J	5/7/8	80DU		480599	6457904	14	27									
64J	6/7/2	80DU	24	461835	6483378	14	27	0	49	35	16					
64J	6/7/1	80DU		454463	6482163	14	27									
64J	6/7/2	80DU	25	461829	6483340	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64J	6/7/3	80DU	27	470081	6479738	14	27	0	27	38	35					
64J	6/7/4	80DU		473780	6479474	14	27									
64J	6/7/5	80DU	28	473426	6472936	14	27	7	64	26	3					
64J	6/7/6	80DU	30	476526	6468267	14	27									
64J	6/7/7	80DU	31	494699	6468728	14	27									
64J	6/7/9	80DU	32	473318	6460079	14	27	10	75	12	3					
64J	6/7/10	80DU		460182	6460679	14	27									
64J	6/7/11	80DU	33	442933	6455709	14	27									
64J	8/7/1	80DU	43	452967	6438410	14	27	1	27	59	13					
64J	8/7/1	80DU	44	452967	6438410	14	27	3	54	29	14					
64J	8/7/1	80DU	47	452967	6438410	14	27	3	53	30	14					
64J	8/7/2	80DU	48	453867	6440990	14	27									
64J	8/7/3	80DU		451925	6431101	14	27									
64J	8/7/4A	80DU		476473	6434190	14	27									
64J	8/7/4B	80DU		479536	6440039	14	27									
64J	8/7/4C	80DU		487146	6439210	14	27									
64J	8/7/5	80DU		489961	6439001	14	27									
64J	8/7/6	80DU	49	488660	6450565	14	27									
64J	8/7/7	80DU	50	460420	6447407	14	27									
64J	8/7/8	80DU	51	445732	6447322	14	27									
64J	8/7/9	80DU	52	450353	6466794	14	27	7	59	30	4					
64J	9/7/1	80DU	53	511152	6501440	14	27									
64J	9/7/2	80DU	54	510448	6508949	14	27									
64J	9/7/3	80DU	55	517344	6501818	14	27									
64J	9/7/4	80DU	56	554054	6488424	14	27	6	68	25	1					
64J	9/7/4	80DU	57	554054	6488424	14	27	3	73	23	1					
64J	9/7/5	80DU	58	544071	6485643	14	27	6	64	28	2					
64J	9/7/6	80DU	59	530693	6487966	14	27									
64J	9/7/7	80DU	60	509373	6485534	14	27									
64J	9/7/8	80DU	61	505483	6494706	14	27	8	64	44	4					
64J	12/7/12B	80DU		475735	6503828	14	27									
64J	14/7/1	80DU	84	513342	6448381	14	27	0	38	19	42					
64J	14/7/1	80DU	85	513342	6448381	14	27	2	30	47	31					
64J	14/7/2	80DU	86	519543	6444253	14	27	0	13	27	60	62	39	22		
64J	14/7/3	80DU	87	518242	6443147	14	27	4	63	25	8					
64J	14/7/3	80DU	88	518242	6443147	14	27	0	32	29	39					
64J	14/7/4	80DU	89	517785	6440210	14	27									
64J	14/7/5	80DU	91	525682	6435819	14	27									
64J	14/7/5	80DU	92	525682	6435819	14	27									
64J	14/7/6	80DU	93	538098	6441844	14	27									
64J	14/7/7	80DU	94	552179	6441748	14	27	3	51	48	8					
64J	14/7/7	80DU	95	552179	6441748	14	27	4	63	28	5					
64J	14/7/8	80DU	97	545770	6434062	14	27	6	78	16	0					
64J	14/7/9	80DU	98	519131	6434152	14	27	0	32	31	37	29	31	20		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64J	14/7/9	80DU	99	519131	6434152	14	27	0	63	23	14					
64J	16/7/1	80DU	113	556737	6464238	14	27	1	40	51	8					
64J	16/7/2	80DU		532070	6456758	14	27									
64J	16/7/2A	80DU		535672	6454700	14	27									
64J	16/7/3	80DU	115	533593	6469261	14	27	1	37	43	19					
64J	16/7/4	80DU	117	521901	6464872	14	27	0	12	36	52					
64J	16/7/5	80DU	118	517263	6464922	14	27	2	54	43	11					
64J	16/7/6	80DU	119	507502	6461052	14	27	8	82	10	0					
64J	16/7/7	80DU	120	526783	6477334	14	27									
64J	16/7/8	80DU	121	534768	6476949	14	27									
64J	16/7/9	80DU	122	543805	6474087	14	27	5	77	18	0					
64J	16/7/10	80DU	123	509223	6473446	14	27									
64J	17/7/1A	80DU		446347	6521348	14	27									
64J	17/7/1B	80DU		449784	6531972	14	27									
64J	17/7/1C	80DU		459798	6532984	14	27									
64J	17/7/2	80DU	125	472394	6533241	14	27	17	61	21	1					
64J	17/7/3	80DU	127	467946	6524761	14	27	8	64	26	0					
64J	17/7/4	80DU	128	485135	6523110	14	27	4	46	47	3					
64J	17/7/5	80DU	129	493490	6530135	14	27									
64J	17/7/6	80DU	130	504301	6517697	14	27									
64J	17/7/7	80DU	133	498367	6513224	14	27									
64J	17/7/8	80DU	134	488119	6513205	14	27	11	69	19	1					
64J	17/7/8	80DU	135	488119	6513205	14	27	0	11	86	3					
64J	17/7/9B	80DU		446467	6512805	14	27									
64J	28/7/1A	80DU		504865	6526338	14	27									
64J	28/7/1B	80DU		508031	6526592	14	27									
64J	28/7/1C	80DU		517175	6529639	14	27									
64J	28/7/1D	80DU		520229	6532610	14	27									
64J	28/7/2	80DU	153	533542	6534434	14	27	4	62	31	2					
64J	28/7/3	80DU	154	540819	6535328	14	27									
64J	28/7/4	80DU	156	546496	6523547	14	27	3	44	47	6					
64J	28/7/5	80DU	157	555057	6512384	14	27									
64J	28/7/6	80DU		549894	6510842	14	27									
64J	28/7/7	80DU	158	545251	6519249	14	27									
64J	28/7/8	80DU	159	540264	6520336	14	27									
64J	28/7/9	80DU		516236	6518312	14	27									
64J	28/7/10	80DU	160	442751	6505461	14	27	4	51	44	1					
64J	28/7/10A	80DU		448899	6514261	14	27									
64J	28/7/11	80DU	161	460951	6516395	14	27									
64J	28/7/11A	80DU		466725	6515458	14	27									
64J	28/7/11B	80DU		475987	6515743	14	27									
64J	28/7/12	80DU	162	480288	6509771	14	27									
64J	28/7/12B	80DU		455536	6495542	14	27									
64J	1/8/13	80DU	184	444896	6486843	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64J	1/8/14	80DU		446704	6485471	14	27									
64J	1/8/15	80DU	185	457152	6483447	14	27	7	68	24	1					
64J	5/8/1	80DU		449337	6506181	14	27									
64J	5/8/2	80DU		453069	6509128	14	27									
64J	6/8/6	80DU		481166	6485701	14	27									
64J	6/8/7	80DU		486614	6484539	14	27									
64J	6/8/8	80DU		494720	6482777	14	27									
64J	6/8/9	80DU	241	497116	6485309	14	27									
64J	6/8/10	80DU		492405	6491422	14	27									
64J	6/8/11	80DU	242	495988	6498617	14	27									
64J	7/8/1	80DU	243	500283	6494286	14	27	4	55	36	5					
64J	7/8/1	80DU	244	500283	6494286	14	27	9	73	17	1					
64J	7/8/2	80DU	245	499303	6509062	14	27	3	58	31	8					
64J	7/8/2	80DU	246	499303	6509062	14	27	3	52	41	4					
64J	7/8/3	80DU	247	478791	6498980	14	27									
64J	7/8/4	80DU		455918	6503317	14	27									
64K	20/6/1	80DU		432743	6488841	14	27									
64K	20/6/2	80DU		432061	6488910	14	27									
64K	20/6/3	80DU	1	433925	6489776	14	27	6	70	24	1					
64K	22/6/1	80DU		435338	6489791	14	27									
64K	22/6/2	80DU	2	437648	6490857	14	27									
64K	22/6/3	80DU		435371	6491012	14	27									
64K	3/7/1	80DU	3	368805	6491234	14	27									
64K	13/7/2	80DU	5	392544	6468747	14	27	9	75	16	1					
64K	3/7/3	80DU	6	411290	6476632	14	27	6	64	29	1					
64K	3/7/4	80DU	7	424379	6485119	14	27	5	67	27	1					
64K	5/7/1	80DU	16	420912	6461843	14	27	5	67	27	1					
64K	5/7/2	80DU	16A	418800	6430200	14	27	9	76	15	1					
64K	5/7/3	80DU	19	410146	6439383	14	27									
64K	5/7/4	80DU	20	394397	6460396	14	27									
64K	5/7/5	80DU	21	398388	6479053	14	27	5	70	24	1					
64K	5/7/7	80DU	22	413772	6494081	14	27									
64K	5/7/8	80DU	23	419833	6503006	14	27									
64K	5/7/9	80DU		428925	6522708	14	27									
64K	7/7/1	80DU		429772	6503867	14	27									
64K	7/7/2	80DU		424012	6530326	14	27									
64K	7/7/3	80DU	34	415284	6530067	14	27									
64K	7/7/4	80DU		400404	6526827	14	27									
64K	7/7/5	80DU		400404	6526827	14	27									
64K	7/7/6	80DU	36	386994	6535869	14	27									
64K	7/7/7	80DU	37	383907	6522414	14	27	6	55	34	4					
64K	7/7/8	80DU		393342	6511486	14	27									
64K	7/7/9	80DU	40	403559	6501338	14	27	7	59	33	1					
64K	7/7/10	80DU		406483	6502190	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64K	7/7/11	80DU	41	422242	6494264	14	27	8	63	28	1					
64K	7/7/11	80DU	42	422242	6494264	14	27	8	63	28	1					
64K	7/7/12	80DU		424229	6489389	14	27									
64K	10/7/1	80DU	62	381194	6452641	14	27	6	68	23	3					
64K	10/7/2	80DU		376749	6461290	14	27									
64K	10/7/3	80DU	64	381089	6467139	14	27	6	68	24	2					
64K	10/7/4	80DU	66	379933	6478689	14	27	11	51	36	2					
64K	10/7/5	80DU	67	381133	6478657	14	27									
64K	10/7/6	80DU	68	375225	6498154	14	27	6	71	22	1					
64K	10/7/7	80DU	69	395252	6503166	14	27									
64K	10/7/8	80DU	70	414331	6506233	14	27									
64K	10/7/9	80DU		424130	6489033	14	27									
64K	13/7/1	80DU	72	423763	6473218	14	27									
64K	13/7/2	80DU	75	412424	6461238	14	27									
64K	13/7/3	80DU	76	408065	6461652	14	27	8	67	24	1					
64K	13/7/4	80DU		401601	6450818	14	27									
64K	13/7/5	80DU	79	430680	6440992	14	27									
64K	13/7/6	80DU	81	433235	6446273	14	27									
64K	13/7/7	80DU		432903	6453247	14	27									
64K	13/7/8	80DU		437644	6452324	14	27									
64K	13/7/9	80DU	82	436282	6456441	14	27									
64K	13/7/10	80DU	83	440406	6459346	14	27	6	63	28	3					
64K	13/7/11	80DU		432984	6461484	14	27									
64K	13/7/12	80DU		430010	6462284	14	27									
64K	15/7/1	80DU	100	340781	6475223	14	27	6	64	29	1					
64K	15/7/2	80DU	101	327451	6462886	14	27	9	68	22	1					
64K	15/7/3	80DU	104	326556	6449905	14	27									
64K	15/7/4	80DU	105	343635	6459644	14	27	5	60	34	1					
64K	15/7/5	80DU	106	346587	6480036	14	27									
64K	15/7/6	80DU		352766	6488606	14	27									
64K	15/7/7	80DU	109	380471	6443129	14	27	6	71	28	1					
64K	15/7/8	80DU		363807	6463910	14	27									
64K	15/7/9	80DU	110	370000	6480400	14	27	18	72	9	1					
64K	15/7/10	80DU	111	356874	6488372	14	27	8	64	26	2					
64K	19/7/1	80DU		436640	6489763	14	27									
64K	28/7/1	80DU	164	430378	6507753	14	27	1	27	68	5					
64K	1/8/1	80DU		368734	6491690	14	27									
64K	1/8/2	80DU		363322	6485178	14	27									
64K	1/8/3	80DU	174	334127	6486456	14	27	9	70	30	1					
64K	1/8/4	80DU		330533	6493502	14	27									
64K	1/8/5	80DU		332205	6528096	14	27									
64K	1/8/6	80DU		334867	6533355	14	27									
64K	1/8/7	80DU	176	357006	6531327	14	27									
64K	1/8/10	80DU		366251	6519522	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64K	2/8/13	80DU		427439	6514463	14	27									
64K	2/8/14	80DU		434935	6513827	14	27									
64K	2/8/15	80DU	196	440409	6508241	14	27									
64K	1/8/8	80DU	177	361549	6531106	14	27	8	70	20	1					
64K	1/8/9	80DU	178	370735	6527119	14	27	9	57	31	3					
64K	1/8/11	80DU	180	355865	6512206	14	27	10	68	20	2					
64K	1/8/12	80DU	181	359545	6498345	14	27									
64K	1/8/12	80DU	182	359513	6498320	14	27	8	70	21	1					
64K	1/8/12	80DU	183	359513	6498320	14	27									
64K	6/8/1	80DU	233	433386	6523206	14	27	0	8	75	17					
64K	6/8/2	80DU	234	430522	6530553	14	27	13	67	18	2					
64K	6/8/3	80DU	235	402499	6533975	14	27	21	61	16	2					
64K	6/8/4	80DU	236	410414	6516601	14	27	6	68	25	1					
64K	6/8/4	80DU	237	410414	6516601	14	27									
64K	6/8/5	80DU	238	420153	6506036	14	27	6	62	31	1					
64N	2/8/1	80DU		435279	6569106	14	27									
64N	2/8/2	80DU	188	426322	6571676	14	27									
64N	2/8/3	80DU		417673	6577538	14	27									
64N	2/8/4	80DU		409747	6571993	14	27									
64N	2/8/5	80DU	189	398064	6571549	14	27	5	67	27	1					
64N	2/8/6	80DU		398078	6574039	14	27									
64N	2/8/7	80DU		394213	6577716	14	27									
64N	2/8/8	80DU	190	397306	6596045	14	27									
64N	2/8/9	80DU	191	412195	6585899	14	27									
64N	2/8/10	80DU	192	423131	6584597	14	27	11	59	28	2					
64N	2/8/11	80DU	193	429297	6583066	14	27									
64N	3/8/2	80DU	197	407986	6616266	14	27									
64N	3/8/3	80DU		415567	6623036	14	27									
64N	3/8/4	80DU	198	420363	6623271	14	27									
64N	3/8/5	80DU		420873	6634016	14	27									
64N	3/8/6	80DU	199	412038	6651099	14	27									
64N	3/8/7	80DU		422463	6645352	14	27									
64N	3/8/8	80DU		427554	6646134	14	27									
64N	3/8/9	80DU		428843	6649127	14	27									
64N	3/8/10	80DU	201	438406	6647994	14	27	1	27	72	1					
64N	3/8/10B	80DU	204	438300	6647900	14	27	10	66	23	1					
64N	3/8/11	80DU		430309	6644179	14	27									
64N	3/8/12	80DU	205	427988	6641760	14	27									
64N	3/8/13	80DU	206	435801	6636843	14	27	0	15	75	10					
64N	3/8/13	80DU	207	435844	6636804	14	27									
64N	3/8/14	80DU	208	433773	6631009	14	27									
64N	8/8/1	80DU		353322	6617270	14	27									
64N	8/8/2	80DU	249	348784	6616932	14	27	4	49	46	1					
64N	8/8/3	80DU		338422	6616277	14	27									



NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64N	8/8/4	80DU		331189	6614045	14	27									
64N	8/8/5	80DU		331770	6615304	14	27									
64N	8/8/6	80DU	252	334302	6628762	14	27	4	43	48	5					
64N	8/8/7	80DU		339295	6652954	14	27									
64N	8/8/8	80DU	253	348282	6652473	14	27	17	55	27	1					
64N	8/8/9	80DU	254	353067	6642499	14	27	14	71	14	1					
64N	8/8/10	80DU	255	345288	6639415	14	27									
64N	8/8/11	80DU	257	354006	6631781	14	27									
64N	8/8/12	80DU	258	345346	6627668	14	27									
64N	8/8/14	80DU		350848	6625147	14	27									
64N	8/8/15	80DU	259	363563	6622846	14	27	8	67	24	1					
64N	8/8/16	80DU		362960	6627103	14	27									
64N	9/8/1	80DU		384280	6572725	14	27									
64N	9/8/2	80DU	265	371560	6573116	14	27									
64N	9/8/3	80DU	266	368307	6579714	14	27									
64N	9/8/4	80DU	267	359479	6582122	14	27									
64N	9/8/5	80DU		344762	6578086	14	27									
64N	9/8/6	80DU	268	339481	6586416	14	27	15	74	10	1					
64N	9/8/7	80DU	269	333558	6586712	14	27	15	74	10	0					
64N	9/8/8	80DU	270	337574	6592528	14	27									
64N	9/8/9	80DU		352224	6591062	14	27									
64N	9/8/10	80DU		361798	6592560	14	27									
64N	9/8/11	80DU		375324	6592002	14	27									
64N	9/8/12	80DU	271	373229	6588940	14	27	10	44	41	5					
64N	9/8/13	80DU	272	379064	6590404	14	27									
64N	9/8/14	80DU	273	385950	6587128	14	27	9	59	30	2					
64N	11/8/7	80DU	294	419365	6553610	14	27									
64N	11/8/8	80DU	295	413974	6550383	14	27									
64N	11/8/9	80DU		416927	6546952	14	27									
64N	11/8/10	80DU		418598	6543789	14	27									
64N	12/8/1	80DU	296	369367	6648310	14	27	12	68	19	1					
64N	12/8/2	80DU	297	374412	6646367	14	27	7	64	27	2					
64N	12/8/3	80DU		375620	6649872	14	27									
64N	12/8/4	80DU	298	375620	6649872	14	27	13	53	32	2					
64N	12/8/5	80DU	300	398841	6641770	14	27									
64N	12/8/6	80DU	301	409280	6631411	14	27	11	62	26	1					
64N	12/8/7	80DU		401806	6633173	14	27									
64N	12/8/8	80DU	302	393561	6629789	14	27									
64N	12/8/9	80DU	303	372489	6628582	14	27									
64N	12/8/10	80DU	305	365546	6642903	14	27									
64N	12/8/11	80DU		362891	6642098	14	27									
64N	12/8/12A	80DU	306	354973	6646374	14	27									
64N	12/8/13	80DU		353054	6642480	14	27									
64N	12/8/14	80DU		392502	6608020	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64N	13/8/1	80DU		429505	6618448	14	27									
64N	13/8/2	80DU	307	422670	6611207	14	27									
64N	13/8/3	80DU	308	416778	6611974	14	27									
64N	13/8/4	80DU	310	411111	6596181	14	27	9	56	33	2					
64N	13/8/5	80DU	312	401021	6619448	14	27	15	64	20	1					
64N	13/8/5	80DU	313	401021	6619448	14	27	19	47	31	2					
64N	13/8/6	80DU		392069	6596528	14	27									
64N	14/8/13	80DU	322	383648	6600842	14	27	9	54	35	2					
64N	14/8/14	80DU	323	377951	6612285	14	27	8	61	29	2					
64N	14/8/15	80DU	324	370735	6605346	14	27									
64N	14/8/16	80DU	325	363110	6605437	14	27	8	74	17	1					
64N	14/8/17	80DU		350646	6604159	14	27									
64N	14/8/18	80DU	326	337084	6601610	14	27	10	54	34	2					
64N	15/8/1	80DU	327	409833	6568672	14	27									
64N	15/8/2	80DU		390980	6567683	14	27									
64N	15/8/3	80DU	328	383583	6560405	14	27	6	45	35	14					
64N	15/8/4	80DU		383969	6558071	14	27									
64N	15/8/5	80DU	329	374684	6561082	14	27	15	46	38	1					
64N	15/8/6	80DU	330	362615	6567368	14	27	2	23	67	8					
64N	15/8/7	80DU		337313	6562917	14	27									
64N	15/8/8	80DU	331	335604	6544591	14	27									
64N	15/8/9	80DU	332	344621	6545249	14	27	8	52	39	1					
64N	15/8/10	80DU		348099	6551199	14	27									
64N	15/8/11	80DU	334	360536	6544376	14	27									
64N	15/8/12	80DU	335	373276	6546685	14	27									
64N	15/8/13	80DU		386066	6553139	14	27									
64N	15/8/14	80DU	336	407383	6548550	14	27	0	0	71	29					
64N	15/8/14	80DU	337	407383	6548550	14	27	13	65	51	1					
64O	26/7/1	80DU	136	462779	6572920	14	27									
64O	26/7/2	80DU		466224	6583258	14	27									
64O	26/7/3	80DU	139	475676	6587483	14	27									
64O	26/7/4	80DU	140	491040	6584753	14	27									
64O	26/7/5	80DU	141	489454	6580042	14	27									
64O	26/7/6	80DU	142	491165	6568943	14	27									
64O	26/7/7	80DU	143	484853	6581046	14	27	8	71	20	2					
64O	27/7/1	80DU		529216	6544926	14	27									
64O	27/7/2	80DU	144	538859	6549323	14	27	0	65	32	3					
64O	27/7/3	80DU	146	542819	6562004	14	27									
64O	27/7/4	80DU		539369	6560316	14	27									
64O	27/7/5	80DU	147	530504	6561228	14	27									
64O	27/7/6	80DU	149	515439	6565180	14	27									
64O	27/7/7	80DU		509648	6566685	14	27									
64O	27/7/8	80DU	150	523946	6544192	14	27									
64O	27/7/9	80DU		523558	6542938	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64O	27/7/10	80DU		503637	6544271	14	27									
64O	27/7/11	80DU		501415	6541597	14	27									
64O	28/7/1	80DU	167	449744	6569655	14	27	5	61	29	4					
64O	29/7/2	80DU	168	472472	6596882	14	27	0	92	7	1					
64O	29/7/3	80DU	169	474691	6632597	14	27	4	63	32	2					
64O	29/7/4	80DU		486216	6628716	14	27									
64O	29/7/5	80DU	170	505797	6603994	14	27	6	70	24	1					
64O	29/7/6	80DU	171	508718	6561097	14	27	6	67	25	2					
64O	29/7/7	80DU	172	527761	6562360	14	27									
64O	27/7/8	80DU	173	532431	6555596	14	27									
64O	2/8/12	80DU	195	444966	6585682	14	27	1	18	65	17					
64O	4/8/1	80DU	209	515953	6608258	14	27									
64O	4/8/1	80DU	211	515953	6608251	14	27									
64O	4/8/2	80DU	212	523683	6601906	14	27									
64O	4/8/3	80DU	214	531616	6608307	14	27									
64O	4/8/4	80DU	215	540015	6598079	14	27	4	69	27	1					
64O	4/8/4	80DU	216	540238	6598009	14	27	4	64	31	1					
64O	4/8/5	80DU	218	535000	6610800	14	27	6	76	17	1					
64O	5/8/3	80DU		465159	6635358	14	27									
64O	5/8/4	80DU	220	467202	6642347	14	27									
64O	5/8/5	80DU	221	472742	6643891	14	27	11	69	20	1					
64O	5/8/6	80DU		482859	6644337	14	27									
64O	5/8/7	80DU	222	487042	6641820	14	27									
64O	5/8/8	80DU	223	499006	6643591	14	27									
64O	5/8/9	80DU	224	505100	6641113	14	27	7	70	23	0					
64O	5/8/10	80DU	225	511862	6641321	14	27									
64O	5/8/11	80DU	226	522171	6641831	14	27	4	61	32	3					
64O	5/8/12	80DU		525513	6643488	14	27									
64O	5/8/13	80DU		539197	6639405	14	27									
64O	5/8/14	80DU	227	542457	6639274	14	27									
64O	5/8/15	80DU		537103	6630138	14	27									
64O	5/8/16	80DU		535065	6628552	14	27									
64O	5/8/17	80DU	228	506241	6625319	14	27	0	55	39	6					
64O	5/8/18	80DU	229	503674	6632826	14	27									
64O	5/8/19	80DU		506947	6634999	14	27									
64O	5/8/20	80DU	230	479549	6635190	14	27									
64O	5/8/21	80DU	231	476473	6636607	14	27	0	49	46	5					
64O	8/8/A	80DU	260	465753	6582577	14	27									
64O	8/8/B	80DU	261	465753	6582577	14	27									
64O	8/8/C	80DU	262	465804	6582545	14	27	8	72	20	0					
64O	8/8/D	80DU	263	465804	6582545	14	27									
64O	8/8/E	80DU	264	465804	6582545	14	27									
64O	10/8/1	80DU	274	503144	6573518	14	27									
64O	10/8/2	80DU	275	508967	6574953	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64O	10/8/3	80DU		528315	6570749	14	27									
64O	10/8/4	80DU	276	552770	6585782	14	27	3	66	31	1					
64O	10/8/5	80DU	277	543333	6597203	14	27									
64O	10/8/6	80DU	279	534285	6592023	14	27	3	70	25	2					
64O	10/8/7	80DU	280	512713	6592995	14	27	0	80	19	1					
64O	10/8/8	80DU	282	513589	6586330	14	27	11	71	17	1					
64O	10/8/9	80DU	284	505684	6578745	14	27									
64O	11/8/1	80DU	285	479127	6547722	14	27	4	68	27	1					
64O	11/8/2	80DU	286	491481	6548651	14	27	7	78	18	2					
64O	11/8/3	80DU	287	499292	6560436	14	27	0	60	37	3					
64O	11/8/3	80DU	288	499292	6560436	14	27	3	53	38	5					
64O	11/8/4	80DU	289	461830	6566701	14	27	5	51	40	4					
64O	11/8/5	80DU	290	459265	6558851	14	27	0	1	64	35					
64O	11/8/5	80DU	291	459265	6558851	14	27									
64O	11/8/6	80DU	293	450151	6559344	14	27									
64O	11/8/11	80DU		465228	6553094	14	27									
64O	11/8/12	80DU		462503	6548682	14	27									
64O	14/8/1	80DU		468727	6600844	14	27									
64O	14/8/2	80DU		479564	6603002	14	27									
64O	14/8/3	80DU		490077	6598695	14	27									
64O	14/8/4	80DU		488593	6606177	14	27									
64O	14/8/5	80DU	315	487261	6622926	14	27									
64O	14/8/6	80DU		475812	6623421	14	27									
64O	14/8/7	80DU	316	465860	6622752	14	27	0	52	45	3					
64O	14/8/8	80DU	317	453954	6621459	14	27									
64O	14/8/10	80DU	319	453477	6612129	14	27									
64O	14/8/11	80DU	320	448466	6609536	14	27									
64O	14/8/12	80DU	321	448493	6596356	14	27									
64P	21/6/1	77DU	13	610450	6637529	14	27	11	88	1	0	4				
64P	21/6/2	77DU	15	632980	6624866	14	27	0	99	1						
64P	21/6/2	77DU	17	632980	6624866	14	27									
64P	21/6/7	77DU	23A	642838	6575443	14	27									
64P	27/6/1	77DU	78	590022	6589120	14	27	7	77	11	5	22				
64P	27/6/2	77DU	79	590060	6589121	14	27	3	50	42	5	7				
64P	27/6/2	77DU	80	590220	6595487	14	27	4	57	39	0	7				
64P	27/6/2	77DU	81	590220	6595487	14	27	0	96	4	0	4				
64P	27/6/2	77DU	82	590220	6595487	14	27									
64P	27/6/3	77DU	83	600720	6591779	14	27	7	50	39	4	8				
64P	27/6/3	77DU	84	600728	6591735	14	27	5	60	31	4	9				
64P	27/6/3	77DU	85	600728	6591735	14	27	4	49	40	7	10				
64P	27/6/3	77DU	86	600728	6591735	14	27	3	50	39	8	8				
64P	27/6/4	77DU	87	609833	6588156	14	27	10	84	6	0	3				
64P	27/6/5	77DU	88	599644	6586274	14	27	6	83	11	0	4				
64P	27/6/5	77DU	89	599636	6586312	14	27	2	76	22	0	4				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64P	27/6/5	77DU	90	599636	6586312	14	27	1	98	1	0	21				
64P	27/6/6	77DU	91	595544	6584609	14	27	10	76	14	0	10				
64P	27/6/6	77DU	92	595544	6584609	14	27	0	95	5	0	6				
64P	27/6/7	77DU	93	605270	6583888	14	27	9	86	5	0	3				
64P	27/6/7	77DU	94	605270	6583888	14	27	0	55	44	1	12				
64P	27/6/7	77DU	95	605270	6583888	14	27	4	57	37	2	9				
64P	27/6/8	77DU	96	588797	6578399	14	27	5	58	33	4	8				
64P	27/6/8	77DU	97	588797	6578399	14	27	7	83	9	1	14				
64P	27/6/9	77DU	99	609226	6577833	14	27	20	46	31	3	11				
64P	27/6/10	77DU	100	610711	6574757	14	27	5	80	15	0	9				
64P	28/6/1	77DU	101	641596	6648174	14	27	1	77	22	0	9				
64P	28/6/2	77DU	103	645372	6648346	14	27	27	41	29	3	8				
64P	28/6/2	77DU	104	645372	6648346	14	27	7	63	20	0	7				
64P	28/6/3	77DU	105	648519	6644275	14	27	5	55	37	3	7				
64P	28/6/4	77DU	106	645950	6643692	14	27	6	55	38	1	7				
64P	28/6/5	77DU	107	641611	6641029	14	27	4	70	26	0					
64P	28/6/5	77DU	108	641611	6641009	14	27	2	84	14	0	4				
64P	28/6/6	77DU	109	646872	6635040	14	27	11	76	13	0	3				
64P	28/6/7	77DU	110	648496	6632914	14	27	28	43	29	0	12				
64P	28/6/8	77DU		658106	6650592	14	27									
64P	28/6/9	77DU	111	658661	6641314	14	27									
64P	28/6/10	77DU	112	664143	6638686	14	27	1	98	1	0	2				
64P	28/6/11	77DU		652259	6632006	14	27									
64P	29/6/1	77DU	113	636036	6619942	14	27	4	56	37	3	7				
64P	29/6/2	77DU	115	628106	6615810	14	27	4	63	60	3	8				
64P	29/6/3	77DU	116	623289	6617677	14	27	4	79	17	0	9				
64P	29/6/4	77DU	118	618945	6616788	14	27	4	64	32	0	10				
64P	29/6/5	77DU	119	616796	6618417	14	27	5	55	36	4	9				
64P	29/6/5	77DU	120	616796	6618417	14	27	34	48	48	0	10				
64P	29/6/6	77DU	121	614868	6614102	14	27	6	79	15	0	6				
64P	29/6/7	77DU	123	614500	6604200	14	27	5	60	35	0	7				
64P	29/6/8	77DU	124	629437	6609848	14	27	3	73	24	0	8				
64P	29/6/8	77DU	125	629437	6609848	14	27	5	66	27	2	9				
64P	29/6/9	77DU	126	634845	6613335	14	27	5	61	31	3	13				
64P	29/6/10	77DU	127	638945	6612446	14	27					12				
64P	29/6/11	77DU	128	641650	6601328	14	27	9	68	20	3	9				
64P	3/7/1	77DU	152	645970	6596353	14	27	4	50	39	6	9				
64P	3/7/2	77DU	154	655632	6594723	14	27	6	81	13	0	5				
64P	3/7/2	77DU	155	655637	6594768	14	27	2	50	45	1	16				
64P	3/7/2	77DU	156	655637	6594768	14	27	5	64	28	3	13				
64P	3/7/3	77DU	157	660915	6595376	14	27	9	57	31	3					
64P	3/7/4	77DU	158	667829	6592109	14	27	31	68	1	0	3				
64P	3/7/5	77DU	159	658093	6588558	14	27	9	58	32	0	7				
64P	3/7/6	77DU	160	654691	6588259	14	27	6	51	35	7	17				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64P	3/7/7	77DU	161	650332	6580153	14	27	20	78	2	0	2				
64P	3/7/7B	77DU	162	650332	6581153	14	27	2	42	47	7	8				
64P	3/7/8	77DU	163	645091	6580485	14	27	0	14	72	12	15	19	17		
64P	3/7/9	77DU	164	665530	6583624	14	27	17	80	3	0					
64P	3/7/10	77DU		662605	6575384	14	27									
64P	3/7/11	77DU	165	658074	6573997	14	27	10	64	26	0	5				
64P	3/7/11	77DU	167	658074	6573997	14	27	7	64	29	0	7				
64P	4/7/1	77DU	168	582911	6591665	14	27	4	58	33	3	6				
64P	4/7/2	77DU	169	568285	6591516	14	27	0	98	2	0	15				
64P	4/7/2	77DU	170	568285	6591516	14	27	21	0	27	71	21				
64P	4/7/2	77DU	171	568285	6591516	14	27	3	81	16	0	8				
64P	4/7/3	77DU	172	559755	6586328	14	27	5	51	42	1	8				
64P	4/7/4	77DU	173	564616	6585562	14	27	5	67	24	2	7				
64P	4/7/5	77DU	175	569612	6583875	14	27	8	67	24	0	9				
64P	4/7/5	77DU	176	569612	6583875	14	27	2	70	26	0	10				
64P	4/7/6	77DU	177	574187	6582178	14	27	5	73	22	0	4				
64P	4/7/7	77DU		576067	6581287	14	27									
64P	4/7/8	77DU	178	574347	6585428	14	27	4	58	37	0	8				
64P	4/7/8	77DU	179	574347	6585428	14	27	4	69	27	0	14				
64P	4/7/9	77DU	180	567302	6577905	14	27	4	65	29	2	8				
64P	4/7/10	77DU	182	571633	6578058	14	27	6	63	28	1	5				
64P	4/7/10	77DU	183	571633	6578058	14	27	5	66	29	0	5				
64P	4/7/10	77DU	184	571633	6578058	14	27	6	69	22	1	8				
64P	4/7/11	77DU		583095	6575316	14	27									
64P	4/7/12	77DU	185	577042	6570038	14	27	3	60	35	0	14				
64P	4/7/12	77DU	186	577042	6570038	14	27	4	63	30	10	5				
64P	7/7/1	77DU		620725	6568924	14	27									
64P	7/7/2	77DU	207	628369	6568991	14	27	5	66	28	0	6				
64P	7/7/3	77DU	208	632517	6568755	14	27	5	66	28	0	6				
64P	7/7/4	77DU	210	632150	6566851	14	27	3	53	38	5	9				
64P	7/7/5	77DU		635545	6567342	14	27									
64P	8/7/1	77DU	211	638203	6564659	14	27	3	46	47	2					
64P	8/7/1	77DU	212	638203	6564659	14	27	3	36	35	25	18	27	14		
64P	8/7/1	77DU	213	638203	6564659	14	27	4	56	26	12	10	17	14		
64P	8/7/1	77DU	214	638203	6564659	14	27	4	77	19	0	9				
64P	8/7/1	77DU	215	638203	6564659	14	27	9	60	26	5	9				
64P	8/7/2	77DU	71A	637517	6562572	14	27									
64P	8/7/3	77DU	216	629630	6561960	14	27	5	55	35	5	9				
64P	8/7/4	77DU	217	628253	6557204	14	27	6	74	20	0	7				
64P	8/7/5	77DU	218	634861	6557733	14	27	5	69	25	3	12				
64P	8/7/6	77DU	220	640568	6555413	14	27	4	62	31	5	11				
64P	8/7/7	77DU	221	633884	6549754	14	27	3	39	41	19	13				
64P	8/7/7	77DU	222	633884	6549754	14	27	5	66	29	0	16				
64P	8/7/8	77DU	223	637526	6549583	14	27	8	77	15	0	3				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64P	8/7/9	77DU		641064	6550896	14	27									
64P	8/7/10	77DU	224	640060	6547323	14	27	13	79	8	0	3				
64P	8/7/12	77DU		628764	6542433	14	27									
64P	16/7/2	77DU	276	661515	6622308	14	27	8	58	34	0	12				
64P	16/7/2	77DU	277	661515	6622308	14	27	6	57	34	3	40				
64P	16/7/3	77DU	278	648426	6625280	14	27	0	59	27	14	20				
64P	16/7/4	77DU		647989	6624083	14	27									
64P	16/7/5	77DU	279	645826	6616094	14	27	4	57	37	2	10				
64P	16/7/5	77DU	280	645826	6616094	14	27	3	48	43	3	7				
64P	16/7/6	77DU	281	649192	6612133	14	27	3	78	19	0	14				
64P	16/7/2	77DU	282	652479	6611540	14	27	13	67	21	0	7				
64P	16/7/8	77DU	283	651659	6610726	14	27	4	51	40	5					
64P	16/7/9	77DU		650923	6611709	14	27									
64P	16/7/10	77DU	284	655341	6610473	14	27	12	67	20	10	10				
64P	16/7/11	77DU	285	639806	6610267	14	27	3	54	40	1	11				
64P	16/7/12	77DU		645594	6608895	14	27									
64P	16/7/13	77DU	286	657892	6605589	14	27	4	69	27	0	7				
64P	16/7/13	77DU	287	657892	6605589	14	27	7	60	33	0	11				
64P	16/7/14	77DU	288	649811	6603048	14	27	4	73	23	0	7				
64P	19/7/1	77DU	316	628431	6549020	14	27	3	66	28	3	8				
64P	19/7/1	77DU	318	628431	6549020	14	27	1	49	39	11	13				
64P	19/7/1	77DU	317A	628431	6549020	14	27									
64P	19/7/1	77DU	317B	628431	6549020	14	27									
64P	22/7/1	77DU	339	643819	6568000	14	27	9	66	25	0	6				
64P	22/7/2	77DU	340	648128	6568434	14	27	6	60	32	2	8				
64P	22/7/3	77DU	341	662751	6565216	14	27	6	72	22	0	12				
64P	22/7/3	77DU	342	662795	6565231	14	27	9	88	3	0	3				
64P	23/7/1	77DU		665619	6566180	14	27									
64P	23/7/2	77DU	343	661180	6559796	14	27	10	88	2	0	3				
64P	23/7/2	77DU	344	661168	6559770	14	27	6	59	31	4	12				
64P	23/7/2	77DU	345	661168	6559770	14	27	8	58	28	6	16				
64P	22/7/3	77DU	346	662795	6565231	14	27	10	72	18	0	9				
64P	23/7/4	77DU	347	646315	6555559	14	27	8	38	48	6	12				
64P	23/7/4	77DU	348	646315	6555559	14	27	7	57	30	6	8				
64P	23/7/5	77DU		653008	6554947	14	27									
64P	23/7/6	77DU	349	660591	6556780	14	27	8	65	24	3	9				
64P	23/7/7	77DU	350	660104	6549566	14	27	13	65	20	2	10				
64P	23/7/8	77DU	351	653735	6545317	14	27	13	82	5	0	4				
64P	23/7/9	77DU	352	646048	6545172	14	27	6	53	32	9	10				
64P	23/7/10	77DU	353	642734	6575669	14	27	0	95	5	0	14				
64P	23/7/11	77DU	354	638824	6575677	14	27	8	50	33	9	8				
64P	23/7/12	77DU		631980	6576252	14	27									
64P	23/7/13	77DU	355	621790	6574205	14	27	5	72	22	1	11				
64P	23/7/14	77DU	356	618431	6572674	14	27	6	65	27	2	9				

NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64P	24/7/2	77DU		618844	6596911	14	27									
64P	24/7/3	77DU	357	625113	6596757	14	27	0	18	76	4	19				
64P	24/7/4	77DU	358	628844	6594015	14	27	3	74	22	1	4				
64P	24/7/5	77DU	359	632155	6594733	14	27	4	57	36	3	6				
64P	24/7/6	77DU	360	640029	6595166	14	27	4	55	38	3	6				
64P	24/7/6	77DU	361	640029	6595166	14	27	3	53	41	3	8				
64P	24/7/7	77DU		634583	6588957	14	27									
64P	24/7/8	77DU	362	637239	6587250	14	27	4	60	34	2	7				
64P	24/7/9	77DU	363	629947	6583109	14	27	12	82	5	1	9				
64P	24/7/10	77DU	364	627871	6585206	14	27	3	57	37	3	6				
64P	24/7/11	77DU	365	621637	6586384	14	27	6	71	23	0	8				
64P	24/7/12	77DU		616457	6582975	14	27									
64P	24/7/13	77DU		617061	6581004	14	27									
64P	8/7/1	77DU	366	638203	6564659	14	27	3	35	42	20	16				
64P	8/7/1	77DU	367	638203	6564659	14	27	2	35	44	19	13				
64P	8/7/1	77DU	368	638203	6564659	14	27	3	35	42	20	22				
64P	8/7/1	77DU	369	638203	6564659	14	27	2	34	44	20	15				
64P	25/7/1	77DU	370	586431	6566731	14	27	6	82	12	0	10				
64P	25/7/1	77DU	371	586431	6566731	14	27	6	70	23	1	8				
64P	25/7/1	77DU	372	586431	6566731	14	27	4	64	29	3	8				
64P	25/7/2	77DU	373	587653	6558070	14	27	4	65	29	2	10				
64P	25/7/2	77DU	375	587653	6558070	14	27	6	67	27	0	6				
64P	25/7/3	77DU	376	605509	6567612	14	27	4	72	24	0	10				
64P	25/7/4	77DU	377	599410	6555645	14	27	6	65	26	3	9				
64P	25/7/5	77DU	378	605291	6557246	14	27	2	53	27	18	17	27	19		
64P	25/7/6	77DU	379	614882	6548207	14	27	8	65	24	3	9				
64P	25/7/7	77DU	380	604837	6549516	14	27	8	60	22	10	10				
64P	25/7/8	77DU	381	602480	6546655	14	27	5	62	27	6	6				
64P	25/7/9	77DU	382	596098	6544197	14	27	5	65	27	3	9				
64P	25/7/10	77DU	383	607415	6558541	14	27	3	70	23	4	10				
64P	25/7/11	77DU		610966	6556029	14	27									
64P	27/7/1	77DU	384	607937	6622075	14	27	5	63	31	1	8				
64P	27/7/2	77DU	385	583459	6620958	14	27	4	50	43	3	11				
64P	27/7/3	77DU	386	580646	6619510	14	27	7	62	30	1	8				
64P	27/7/3	77DU	387	580588	6619534	14	27	4	61	33	2	14				
64P	27/7/4	77DU	388	572858	6620275	14	27	5	67	27	1	9				
64P	27/7/5	77DU	390	583951	6617290	14	27	5	55	34	6	6				
64P	27/7/6	77DU	391	600393	6615306	14	27	4	64	32	0	9				
64P	27/7/6	77DU	392	600393	6615306	14	27	4	57	39	0	13				
64P	27/7/7	77DU	393	604213	6608941	14	27	3	55	39	3	5				
64P	27/7/8	77DU	394	587894	6612353	14	27	3	55	39	3	9				
64P	27/7/8	77DU	395	587913	6612341	14	27	4	69	27	0	10				
64P	27/7/9	77DU	396	581758	6612353	14	27	2	54	44	0	10				
64P	27/7/9	77DU	397	581729	6612288	14	27	5	55	39	2	6				



NTS	Site	Yr	Sample	East	North	Zone	NAD	Texture				Atterberg Limits			Peat density (g/cc)	
								2-4 mm	.063-2mm	.004-.063mm	<.004mm	w%	WL	WP	bulk density	dry density
64P	27/7/10	77DU	398	579568	6603162	14	27	4	54	40	2	6				
64P	27/7/11	77DU	399	587470	6603328	14	27	5	52	39	4	13				
64P	27/7/11	77DU	400	587470	6603328	14	27	6	53	36	5	7				
64P	27/7/12	77DU	401	604690	6603887	14	27	3	73	24	0	8				
64P	27/7/13	77DU	402	590200	6595512	14	27	5	47	45	3	14				
64P	27/7/14	77DU		571829	6597211	14	27									
64P	30/7/1	77DU	433	557856	6562978	14	27	4	73	23	0	18				
64P	30/7/2	77DU	434	556942	6554113	14	27	7	90	3	0	4				
64P	30/7/3	77DU		556860	6556658	14	27									
64P	30/7/4	77DU		561154	6547232	14	27									
64P	30/7/5	77DU	435	572742	6550199	14	27	3	57	38	2	7				
64P	30/7/6	77DU	436	569165	6559694	14	27	6	70	24	0	8				
64P	30/7/7	77DU	437	572018	6563250	14	27	4	63	33	0	7				
64P	30/7/7	77DU	438	572018	6563250	14	27	5	74	21	0	4				
64P	30/7/8	77DU	439	578207	6554261	14	27	3	63	34	0	5				
64P	30/7/9	77DU	440	584325	6544392	14	27	5	63	35	2	12				
64P	30/7/10	77DU	441	586501	6556554	14	27	5	63	32	0	8				
64P	30/7/10	77DU	442	586501	6556554	14	27	4	55	39	2	10				
64P	2/8/1	77DU	450	614690	6631913	14	27	3	41	47	9	7				
64P	2/8/2	77DU	451	615752	6644575	14	27	4	48	42	6	9				
64P	2/8/3	77DU	452	615670	6651259	14	27	3	52	39	6	8				
64P	2/8/4	77DU	453	634443	6644817	14	27	0	97	3	0	3				
64P	2/8/5	77DU	454	632373	6638172	14	27	3	51	43	3	8				
64P	2/8/6	77DU	455	623937	6639770	14	27	5	52	39	4	7				
64P	2/8/7	77DU		621157	6638464	14	27									
64P	2/8/8	77DU		619143	6632428	14	27									

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54E	25/6/4	78DU	29	356417	6388298	15	27	31		
54E	25/6/5	78DU	30	380258	6371098	15	27	18		
54E	25/6/6	78DU		424462	6359641	15	27			
54E	25/6/7	78DU	31	417112	6382208	15	27	30		
54E	28/6/1	78DU		403392	6428612	15	27			
54E	28/6/2	78DU	43	401259	6426929	15	27			
54E	28/6/3	78DU		399325	6421468	15	27			
54E	28/6/4	78DU		409095	6414325	15	27			
54E	28/6/5	78DU		403798	6410072	15	27			
54E	28/6/6	78DU	45	399183	6412693	15	27	17		
54E	28/6/6	78DU	46	399183	6412693	15	27			
54E	28/6/8	78DU	47	382783	6424167	15	27	28		
54E	28/6/8	78DU	48	382783	6424167	15	27	19		
54E	28/6/6	78DU	53	399183	6412693	15	27	22		
54E	28/6/6	78DU	54	399183	6412693	15	27	21		
54E	28/6/7	78DU		384580	6404221	15	27			
54E	2/7/1	78DU	87	391942	6369339	15	27	34		
54E	2/7/2	78DU	88	403232	6360788	15	27	29		
54E	2/7/3	78DU	89	404256	6362769	15	27	27		
54E	2/7/4	78DU	90	408485	6364339	15	27	29		
54E	2/7/5	78DU	91	410719	6348257	15	27	39	41	59
54E	2/7/5	78DU	92	410719	6348257	15	27	40		
54E	2/7/6	78DU	93	420101	6356271	15	27	38		
54E	2/7/6	78DU	94	420101	6356271	15	27	38	14	86
54E	4/7/1	78DU	98	429500	6433000	15	27			
54E	4/7/1	78DU	99	429500	6433000	15	27	31		
54E	4/7/1	78DU	101	429500	6433000	15	27	27		
54E	9/7/1	78DU	138	378706	6370365	15	27	32		
54E	9/7/2	78DU	139	391402	6386662	15	27	30	44	56
54E	9/7/2	78DU	140	391402	6386662	15	27			
54E	9/7/2	78DU	141	391402	6386662	15	27	32		
54E	9/7/2	78DU	143	391402	6386662	15	27	28		
54E	9/7/3	78DU	145	400352	6389311	15	27	21		
54E	9/7/4	78DU	147	407431	6396190	15	27	12	74	26
54E	9/7/4	78DU	148	407431	6396190	15	27			
54E	10/7/1	78DU	149	349137	6416521	15	27	24		
54E	10/7/2	78DU	150	342546	6416138	15	27	28		
54E	10/7/3	78DU	151	338379	6414982	15	27			
54E	10/7/4	78DU	152	327229	6423268	15	27	9		
54E	10/7/5	78DU	153	324584	6414462	15	27	13		
54E	10/7/6	78DU	154	331838	6419770	15	27			
54E	10/7/6	78DU	155	331838	6419770	15	27	15		
54E	10/7/6	78DU	156	331838	6419770	15	27			
54E	10/7/6	78DU	157	331838	6419770	15	27			
54E	10/7/6	78DU	158	331838	6419770	15	27	16		
54E	10/7/7	78DU	159	333231	6405871	15	27	18		
54E	10/7/8	78DU	160	384802	6429197	15	27	32		
54E	10/7/8	78DU	161	384808	6429178	15	27	27		
54E	11/7/10	78DU	175	384802	6429197	15	27	31		
54E	12/7/1	78DU	176	360818	6427622	15	27			
54E	12/7/1	78DU	177	360818	6427622	15	27	10		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54E	12/7/2	78DU	178	364852	6425501	15	27	23		
54E	12/7/3	78DU	179	356536	6403334	15	27	3		
54E	13/7/1	78DU	183	367170	6404282	15	27	10		
54E	13/7/2	78DU	184	368140	6393169	15	27	6		
54E	13/7/3	78DU	185	375952	6394805	15	27	32		
54E	13/7/3	78DU	186	375952	6394805	15	27			
54E	13/7/3	78DU	187	375952	6394805	15	27			
54E	13/7/3	78DU	188	375952	6394805	15	27			
54E	13/7/3	78DU	189	375952	6394805	15	27			
54E	13/7/3	78DU	190	375952	6394805	15	27			
54E	13/7/3	78DU	191	375952	6394805	15	27			
54E	13/7/3	78DU	192	375952	6394805	15	27			
54E	13/7/3	78DU	193	375952	6394805	15	27			
54E	13/7/3	78DU	194	375952	6394805	15	27			
54E	13/7/4	78DU	195	377333	6403152	15	27	26		
54E	13/7/5	78DU	196	375071	6405897	15	27	16		
54E	13/7/6	78DU	197	372673	6413057	15	27	6		
54E	13/7/7	78DU	198	377131	6413420	15	27	24		
54E	13/7/8	78DU	199	378190	6426372	15	27	20		
54E	14/7/1	78DU		429508	6418124	15	27			
54E	14/7/2	78DU		428140	6398901	15	27			
54E	14/7/3	78DU	201	438433	6386763	15	27			
54E	14/7/4	78DU	202	421458	6376748	15	27			
54E	14/7/5	78DU	203	408013	6376852	15	27	27		
54E	14/7/6	78DU		400869	6376336	15	27			
54E	14/7/7	78DU	204	398193	6383351	15	27	32		
54E	14/7/8	78DU	205	388503	6381189	15	27	26		
54E	14/7/9	78DU	206	388619	6389261	15	27	11		
54E	14/7/10	78DU	207	400938	6400620	15	27			
54E	19/7/1	78DU	254	423737	6415724	15	27			
54E	19/7/1	78DU	255	423737	6415724	15	27			
54E	21/7/1	78DU	295	361306	6376225	15	27	27		
54E	21/7/2	78DU	296	370531	6372517	15	27	31		
54E	21/7/3	78DU	297	357641	6360362	15	27	10		
54E	21/7/3	78DU	298	357641	6360362	15	27	24		
54E	21/7/4	78DU	299	359000	6361200	15	27	31	60	40
54E	21/7/4	78DU	300	359000	6361200	15	27		46	54
54E	21/7/4	78DU	301	359000	6361200	15	27	21	48	52
54E	21/7/4	78DU	302	359000	6361200	15	27		31	69
54E	21/7/4	78DU	304	359000	6361200	15	27		17	83
54E	21/7/5	78DU	306	355544	6351971	15	27	30		
54E	21/7/5	78DU	307	355544	6351971	15	27	34		
54E	21/7/5	78DU	308	355544	6351971	15	27	34		
54E	21/7/6	78DU	309	358533	6349449	15	27	34	45	55
54E	21/7/6	78DU	310	358547	6349500	15	27		38	62
54E	21/7/6	78DU	311	358547	6349500	15	27	29	26	74
54E	21/7/6	78DU	312	358547	6349500	15	27	32	50	50
54E	21/7/6	78DU	313	358547	6349500	15	27	24	44	56
54E	21/7/6	78DU	314	358547	6349500	15	27		21	79
54E	21/7/6	78DU	315	358547	6349500	15	27			
54E	21/7/7	78DU	316	368925	6362220	15	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54E	21/7/7	78DU	317	368925	6362220	15	27	36		
54E	21/7/7	78DU	318	368925	6362220	15	27	36	20	80
54E	21/7/8	78DU	319	375800	6361000	15	27	30		
54E	21/7/8	78DU	320	375800	6361000	15	27	6		
54E	21/7/9	78DU	321	380844	6358755	15	27			
54E	21/7/10	78DU	323	386644	6359158	15	27	23		
54E	24/7/1	78DU	347	345429	6394783	15	27	36		
54E	24/7/1	78DU	348	345429	6394783	15	27		7	93
54E	24/7/1	78DU	349	345429	6394783	15	27	40	46	54
54E	24/7/1	78DU	350	345429	6394783	15	27		8	92
54E	24/7/1	78DU	351	345429	6394783	15	27	33	27	73
54E	24/7/2	78DU	352	342194	6392962	15	27			
54E	24/7/3	78DU	353	330171	6395376	15	27	9		
54E	24/7/4	78DU	354	323702	6393871	15	27	40	16	84
54E	24/7/4	78DU	355	323702	6393871	15	27		7	93
54E	24/7/5	78DU	356	324235	6382405	15	27	5		
54E	24/7/6	78DU	357	328331	6376657	15	27	27		
54E	24/7/7	78DU	358	333589	6373303	15	27	20		
54E	24/7/8	78DU		322444	6363340	15	27			
54E	24/7/9	78DU	359	330855	6357377	15	27	36	37	63
54E	24/7/9	78DU	360	330855	6357377	15	27		4	96
54E	24/7/9	78DU	361	330855	6357377	15	27	43		
54E	24/7/6	78DU	362	330855	6357377	15	27		6	94
54E	24/7/9	78DU	363	330855	6357377	15	27	43	14	86
54E	24/7/9	78DU	364	330855	6357377	15	27		13	87
54E	24/7/9	78DU	365	330825	6357237	15	27			
54E	24/7/10	78DU		328413	6352780	15	27			
54E	24/7/11	78DU	366	347565	6363984	15	27	14		
54E	26/7/1	78DU	383	390713	6335898	15	27	35		
54E	26/7/1	78DU	385	390713	6335898	15	27	36		
54E	26/7/1	78DU	386	390713	6335898	15	27	38		
54E	26/7/2	78DU	387	385708	6325480	15	27	34		
54E	26/7/3	78DU	388	390538	6322315	15	27	28		
54E	26/7/4	78DU	389	399566	6334227	15	27	36		
54E	26/7/5	78DU	390	412909	6337201	15	27	39	50	50
54E	26/7/6	78DU	392	417851	6336080	15	27	33		
54E	26/7/7	78DU	393	423803	6322739	15	27	23		
54E	26/7/8	78DU		437629	6326775	15	27			
54E	26/7/9	78DU	394	428779	6333261	15	27	36		
54E	28/7/1	78DU	410	355527	6343058	15	27			
54E	28/7/2	78DU	411	335362	6343249	15	27	28		
54E	28/7/3	78DU	412	331946	6329009	15	27	35		
54E	28/7/4	78DU	413	332402	6323927	15	27	8		
54E	28/7/3	78DU	414	342745	6326890	15	27	35	44	56
54E	28/7/5	78DU	415	342745	6326890	15	27		44	56
54E	28/7/5	78DU	416	342745	6326890	15	27			
54E	28/7/6	78DU		356894	6328238	15	27			
54E	28/7/7	78DU	417	354296	6336235	15	27	35	33	67
54E	28/7/7	78DU	418	354296	6336235	15	27		31	69
54E	28/7/7	78DU	419	354296	6336235	15	27	30	30	70
54E	28/7/7	78DU	420	354296	6336235	15	27		20	80

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54E	28/7/8	78DU	422	359522	6339512	15	27			
54E	28/7/8	78DU	423	359522	6339512	15	27	36	49	51
54E	28/7/8	78DU	425	359522	6339512	15	27	41	49	51
54E	28/7/8	78DU	426	359522	6339512	15	27		8	92
54E	28/7/8	78DU	427	359522	6339512	15	27	26		
54E	28/8/9	78DU	428	367308	6334749	15	27	9		
54E	31/7/2	78DU		423737	6415724	15	27			
54E	31/7/3	78DU	451	428051	6359010	15	27		22	78
54E	31/7/3	78DU	452	428051	6359010	15	27		41	59
54E	31/7/3	78DU	453	428051	6359010	15	27	43	32	68
54E	31/7/4	78DU	454	426057	6357247	15	27	35	54	46
54E	31/7/4	78DU	455	426057	6357247	15	27	42	33	67
54E	31/7/4	78DU	456	426057	6357247	15	27		24	76
54E	31/7/4	78DU	457	426057	6357247	15	27		25	75
54E	31/7/5	78DU	458	424579	6358072	15	27	21	74	26
54E	31/7/5	78DU	459	424579	6358072	15	27	39	40	60
54E	31/7/6	78DU	460	418633	6366182	15	27			
54E	31/7/7	78DU	461	413075	6363649	15	27	33		
54E	31/7/7	78DU	462	413075	6363649	15	27	29		
54E	CD130			345538	6395766	15	27			
54E	CD131			338684	6368853	15	27			
54E	CD133			354224	6336161	15	27			
54E	CD134			420317	6356350	15	27			
54E	CD136			422921	6359200	15	27			
54E	CD137			344953	6369396	15	27			
54E	CD149			429594	6359138	15	27			
54E	CDG147			393322	6388420	15	27			
54E	CDG148			397793	6387702	15	27			
54E	CDG149			400086	6388923	15	27			
54E	CDG150			402136	6389669	15	27			
54E	CDG151			402293	6389230	15	27			
54E	CDG152			402580	6389476	15	27			
54E	CDG153			403600	6390265	15	27			
54E	CDG154			407013	6392070	15	27			
54E	CDG155			407761	6393120	15	27			
54E	CDG156			407858	6393589	15	27			
54E	CDG157			407759	6394249	15	27			
54E	CDG158			407411	6396224	15	27			
54E	CDG159			408791	6396567	15	27			
54E	CDG160			412885	6400069	15	27			
54E	CDG161			413888	6399760	15	27			
54E	CDG162			416026	6402003	15	27			
54E	CDG163			426472	6416332	15	27			
54E	CDG164			426953	6420751	15	27			
54F	26/6/3	78DU	34	478627	6413912	15	27	57		
54F	26/6/4	78DU	35	505955	6344345	15	27			
54F	26/6/5	78DU	36	465090	6349057	15	27			
54F	26/6/6	78DU		446623	6377304	15	27			
54F	1/7/1	78DU	77	498074	6426771	15	27	55		
54F	1/7/1	78DU	78	498061	6426752	15	27	52		
54F	1/7/2	78DU	79	502500	6426000	15	27	55		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54F	1/7/3	78DU	80	502633	6415484	15	27	52		
54F	1/7/4	78DU	81	489266	6403986	15	27		0	100
54F	1/7/4	78DU	82	489266	6403986	15	27			
54F	1/7/4	78DU	83	489266	6403986	15	27			
54F	1/7/4	78DU	84	489266	6403986	15	27	48		
54F	1/7/5	78DU		478183	6408595	15	27			
54F	1/7/6	78DU	85	478322	6414953	15	27	50		
54F	1/7/7	78DU	86	476986	6418887	15	27			
54F	1/7/8	78DU		481044	6421553	15	27			
54F	15/7/1	78DU	208	499251	6400207	15	27			
54F	15/7/2	78DU	209	513820	6387075	15	27	51		
54F	15/7/3	78DU	210	503503	6383088	15	27	37		
54F	15/7/4	78DU	211	496844	6387601	15	27			
54F	15/7/5	78DU	212	486783	6390562	15	27			
54F	15/7/6	78DU	213	486698	6393260	15	27			
54F	15/7/7	78DU	214	478611	6394487	15	27			
54F	15/7/7	78DU	216	478611	6394487	15	27	33		
54F	15/7/7	78DU	217	478611	6394487	15	27	39		
54F	15/7/7	78DU	218	478611	6394487	15	27	35		
54F	15/7/8	78DU	219	480185	6401508	15	27			
54F	22/7/1	78DU	324	461299	6422983	15	27			
54F	22/7/2	78DU	325	459763	6410820	15	27			
54F	22/7/2	78DU	326	459763	6410820	15	27			
54F	22/7/2	78DU	327	459763	6410820	15	27			
54F	22/7/3	78DU		457425	6393774	15	27			
54F	22/7/4	78DU	328	467678	6384128	15	27	30		
54F	22/7/4	78DU	329	467678	6384128	15	27			
54F	22/7/4	78DU	330	467678	6384128	15	27	21		
54F	22/7/5	78DU		463734	6381151	15	27			
54F	22/7/6	78DU	332	447283	6383007	15	27	32		
54F	22/7/7	78DU		448532	6398854	15	27			
54F	22/7/8	78DU	333	446549	6428193	15	27	39		
54F	23/7/2	78DU	334	451385	6372363	15	27	47		
54F	23/7/3	78DU	336	454917	6370720	15	27	38		
54F	23/7/3	78DU	337	454879	6370732	15	27	39	50	50
54F	23/7/3	78DU	338	454917	6370720	15	27			
54F	23/7/1	78DU	339	446562	6372351	15	27			
54F	23/7/1	78DU	340	446574	6372383	15	27			
54F	23/7/1	78DU	341	446574	6372383	15	27	25		
54F	23/7/1	78DU	342	446574	6372383	15	27	32		
54F	23/7/4	78DU	343	459785	6365896	15	27			
54F	23/7/5	78DU	344	452752	6354762	15	27			
54F	23/7/6	78DU	345	449073	6349747	15	27	33		
54F	23/7/7	78DU	346	445025	6350596	15	27			
54F	27/7/1	78DU		445348	6323354	15	27			
54F	27/7/2	78DU	395	453116	6326231	15	27			
54F	27/7/3	78DU	396	451921	6333089	15	27			
54F	27/7/4	78DU	398	461149	6335915	15	27			
54F	27/7/5	78DU		462075	6326193	15	27			
54F	27/7/7	78DU	399	465047	6318260	15	27	36	5	95
54F	27/7/7	78DU	401	465047	6318260	15	27	35		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54F	27/7/8	78DU	404	472418	6320492	15	27			
54F	27/7/6	78DU	405	461991	6323645	15	27			
54F	27/7/6	78DU	406	461991	6323645	15	27			
54F	27/7/6	78DU	407	461991	6323645	15	27	51		
54F	27/7/6	78DU	408	461991	6323645	15	27			
54F	27/7/9	78DU	409	468659	6331997	15	27			
54F	29/7/1	78DU	429	480124	6320343	15	27	39		
54F	29/7/2	78DU	430	483786	6333724	15	27			
54F	29/7/3	78DU	431	487409	6327622	15	27			
54F	29/7/4	78DU	432	497475	6323933	15	27			
54F	29/7/5	78DU	433	502425	6333245	15	27			
54F	29/7/6	78DU	434	506126	6335484	15	27			
54F	29/7/7	78DU		515561	6335958	15	27			
54F	29/7/8	78DU	435	521461	6318939	15	27	47		
54F	29/7/8	78DU	436	521461	6318939	15	27			
54F	29/7/8	78DU	437	521461	6318939	15	27	48		
54F	29/7/8	78DU	438	521461	6318939	15	27		10	90
54F	29/7/8	78DU	439	521461	6318939	15	27	29	47	53
54F	29/7/8	78DU	440	521461	6318939	15	27		27	73
54F	29/7/8	78DU	441	521461	6318939	15	27	33	68	32
54F	29/7/8	78DU	442	521461	6318939	15	27		41	59
54F	30/7/2	78DU	444	490717	6348239	15	27			
54F	30/7/3	78DU	445	509658	6334613	15	27			
54F	30/7/4A	78DU	447	502198	6352308	15	27			
54F	30/7/5	78DU	448	518975	6363380	15	27			
54F	30/7/6	78DU	449	530599	6372117	15	27	47		
54F	30/7/7	78DU	450	520264	6368807	15	27			
54F	CD145			493711	6405029	15	27			
54F	CD146			481446	6396763	15	27			
54F	CD147			477159	6389672	15	27			
54F	CD148			461569	6379338	15	27			
54K	18/6/1	78DU		442888	6512743	15	27			
54K	19/6/1	78DU		453799	6498871	15	27			
54K	19/6/2	78DU		452295	6501292	15	27			
54K	19/6/3	78DU		443706	6513710	15	27			
54K	22/6/4	78DU		445667	6513766	15	27			
54K	24/6/1	78DU	20	442390	6510988	15	27			
54K	24/6/1	78DU	21	442403	6510995	15	27			
54K	24/6/2	78DU		450823	6513482	15	27			
54K	26/6/1	78DU		442539	6479209	15	27			
54K	26/6/2	78DU	33	453846	6453811	15	27			
54K	3/7/3	78DU		449358	6507463	15	27			
54K	20/7/8	78DU	290	447709	6489797	15	27			
54K	20/7/10	78DU	294	457398	6509767	15	27			
54K	20/7/11	78DU		470040	6512431	15	27			
54K	25/7/1	78DU	367	451845	6502972	15	27			
54K	25/7/2	78DU	370	457887	6491117	15	27			
54K	25/7/3	78DU	372	466127	6486522	15	27			
54K	25/7/3	78DU	373	466095	6486496	15	27			
54K	25/7/4	78DU	377	477014	6490071	15	27			
54K	25/7/5	78DU	378	482230	6496159	15	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54K	25/7/7	78DU		479149	6507545	15	27			
54K	25/7/8	78DU	380	474142	6502086	15	27			
54K	25/7/9	78DU	381	458374	6499921	15	27			
54K	1/8/1	78DU	470	501358	6442265	15	27			
54K	1/8/2	78DU		461019	6439671	15	27			
54K	1/8/3	78DU	471	442935	6446959	15	27	39		
54K	1/8/4	78DU	473	453218	6455846	15	27	46		
54K	1/8/5	78DU	474	450766	6462483	15	27			
54K	1/8/6	78DU	475	465949	6467616	15	27	37		
54K	1/8/7	78DU	476	453525	6473375	15	27		18	82
54K	1/8/8	78DU		452951	6475852	15	27			
54K	3/8/1	78DU	477	482080	6477752	15	27	47		
54K	3/8/2	78DU	478	487979	6479488	15	27			
54K	3/8/3	78DU	479	493407	6481225	15	27	46		
54K	3/8/4	78DU	481	494030	6454640	15	27			
54K	3/8/5	78DU	482	476513	6447329	15	27			
54K	3/8/6	78DU	483	475931	6442145	15	27	52		
54K	3/8/7	78DU	484	484209	6463062	15	27	44		
54K	3/8/8	78DU	485	479208	6467970	15	27			
54K	3/8/9	78DU	486	465602	6481241	15	27		6	94
54K	3/8/10	78DU	487	464709	6494740	15	27			
54K	3/8/11	78DU	489	473762	6496436	15	27			
54K	3/8/12	78DU	490	481990	6490546	15	27			
54K	3/8/13	78DU	491	491136	6491222	15	27			
54K	3/8/13	78DU	492	491137	6491209	15	27			
54K	3/8/14	78DU	493	490023	6508114	15	27			
54K	3/8/15	78DU	494	487802	6508516	15	27			
54K	3/8/16	78DU	495	483591	6504904	15	27			
54K	3/8/17	78DU	496	472346	6506955	15	27			
54K	3/8/18	78DU	497	462508	6508448	15	27			
54K	3/8/19	78DU	498	458206	6506782	15	27			
54K	3/8/20	78DU	499	445859	6502749	15	27			
54K	3/8/21	78DU	500	447788	6498060	15	27			
54K	3/8/21	78DU	501	447743	6498040	15	27			
54K	3/8/21	78DU	502	447749	6498071	15	27			
54K	3/8/21	78DU	503	447749	6498066	15	27			
54K	3/8/21	78DU	504	447749	6498066	15	27			
54K	5/8/6	78DU	520	443554	6514193	15	27			
54K	5/8/7	78DU		447789	6513126	15	27			
54k	5/8/8	78DU	521	452560	6513131	15	27			
54K	5/8/9	78DU	522	447570	6511503	15	27			
54K	8/8/1	78DU	532	451765	6499620	15	27			
54K	8/8/2	78DU		453106	6497457	15	27			
54K	8/8/3	78DU		453453	6499019	15	27			
54K	8/8/4	78DU	533	452252	6497487	15	27			
54K	8/8/5	78DU	534	451529	6502132	15	27			
54L	25/6/1	78DU	26	386000	6509500	15	27			
54L	25/6/1	78DU	27	386000	6509500	15	27	14		
54L	25/6/3	78DU	28	357000	6438500	15	27	4		
54L	29/6/2	78DU	56	386500	6536000	15	27	14		
54L	29/6/4	78DU	57	371000	6542000	15	27	14		



NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54L	29/6/5	78DU	58	353100	6536100	15	27	3		
54L	29/6/6	78DU	59	334600	6540800	15	27	5		
54L	29/6/9	78DU	62	387000	6529000	15	27			
54L	29/6/9	78DU	63	387000	6529000	15	27	5		
54L	29/6/9	78DU	64	387000	6529000	15	27			
54L	29/6/9	78DU	65	387000	6529000	15	27	18	57	43
54L	30/6/1	78DU	67	402500	6517000	15	27	36		
54L	30/6/2	78DU	68	349820	6513800	15	27	23		
54L	30/6/4	78DU	71	348620	6518500	15	27	20		
54L	30/6/5	78DU	72	384000	6512000	15	27	0		
54L	30/6/6	78DU	73	376000	6495000	15	27	12		
54L	30/6/9	78DU	74	383800	6501000	15	27	5		
54L	30/6/8	78DU	75	383800	6501000	15	27			
54L	30/6/9	78DU	76	383800	6501000	15	27	22		
54L	4/7/2	78DU	102	430000	6445000	15	27			
54L	4/7/2	78DU	103	430000	6448000	15	27	37	30	70
54L	4/7/3	78DU	105	430400	6454200	15	27	56	23	77
54L	4/7/4	78DU	108	430000	6461500	15	27	39	36	64
54L	4/7/4	78DU	109	430200	6461400	15	27	25	64	36
54L	4/7/5	78DU	110	429980	6471500	15	27	36	23	77
54L	4/7/5	78DU	112	423900	6467600	15	27	47		
54L	4/7/7	78DU	113	423900	6467600	15	27	31		
54L	4/7/7	78DU	114	423900	6467600	15	27	34		
54L	6/7/1	78DU	120	436500	6461000	15	27			
54L	6/7/3	78DU	122	417500	6448000	15	27	26		
54L	6/7/3	78DU	123	417600	6447900	15	27	26	35	65
54L	6/7/3	78DU	124	417600	6447900	15	27	25	69	31
54L	6/7/5	78DU	126	393600	6438600	15	27	35		
54L	6/7/5	78DU	127	393600	6438600	15	27	25	49	51
54L	6/7/5	78DU	128	393600	6438600	15	27	33	27	73
54L	7/7/1	78DU	129	360200	6491200	15	27	27		
54L	7/7/1	78DU	130	360200	6491200	15	27	18	74	26
54L	7/7/1	78DU	131	360200	6491200	15	27	16	84	16
54L	7/7/2	78DU	132	360500	6497500	15	27		94	6
54L	7/7/4	78DU	133	334500	6493000	15	27	9		
54L	11/7/1	78DU	163	361500	6450000	15	27	11		
54L	11/7/2	78DU	164	342100	6449000	15	27	7		
54L	11/7/3	78DU	165	325500	6588000	15	27	5		
54L	11/7/4	78DU	166	326600	6442800	15	27	7		
54L	11/7/5	78DU	167	340800	6444000	15	27	6		
54L	11/7/6	78DU	168	347600	6438400	15	27	4		
54L	11/7/7	78DU	169	351000	6444500	15	27	23		
54L	11/7/7	78DU	170	351000	6444500	15	27	20		
54L	11/7/7	78DU	171	351000	6444500	15	27	17		
54L	11/7/8	78DU	173	369500	6432500	15	27	15		
54L	11/7/9	78DU	174	375500	6440000	15	27	21		
54L	16/7/2	78DU	222	354800	6487100	15	27	2		
54L	16/7/5	78DU	225	326000	6480000	15	27	16		
54L	16/7/8	78DU	231	379900	6472700	15	27	27	35	65
54L	16/7/8	78DU	233	379900	6472700	15	27			
54L	18/7/1	78DU	247	401000	6498000	15	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54L	18/7/8	78DU	248	379500	6489500	15	27			
54L	18/7/9	78DU	249	393500	6474000	15	27			
54L	18/7/12	78DU	250	418400	6471600	15	27	52	17	83
54L	18/7/12	78DU	251	418400	6471600	15	27	25	58	42
54L	18/7/12	78DU	252	418400	6471600	15	27		19	81
54L	18/7/12	78DU	253	418400	6471600	15	27		12	88
54L	19/7/2	78DU	256	329200	6472200	15	27	28		
54L	19/7/2	78DU	257	329200	6472200	15	27	20	39	61
54L	19/7/3	78DU	259	330600	6474500	15	27	20		
54L	19/7/3	78DU	261	330600	6474500	15	27	14	100	0
54L	19/7/4	78DU	263	332000	6477000	15	27	26		
54L	19/7/4	78DU	264	332000	6477000	15	27	46		
54L	19/7/5	78DU	265	332500	6481000	15	27	10	62	39
54L	19/7/5	78DU	266	332500	6481000	15	27		74	26
54L	19/7/5	78DU	267	332500	6481000	15	27	16	79	21
54L	19/7/6	78DU	269	373500	6482000	15	27			
54L	19/7/7	78DU	270	365200	6478200	15	27	24	41	59
54L	19/7/7	78DU	271	365200	6478200	15	27		35	65
54L	19/7/8	78DU	272	378800	6484100	15	27	23	43	57
54L	19/7/8	78DU	273	378800	6484100	15	27		25	75
54L	19/7/9	78DU	274	385900	6487200	15	27	22		
54L	19/7/9	78DU	275	385900	6487200	15	27	23	67	33
54L	19/7/10	78DU	276	393200	6488600	15	27	22	43	57
54L	31/7/8	78DU	463	418400	6452600	15	27	17		
54L	31/7/8	78DU	464	418400	6452600	15	27	31		
54L	31/7/8	78DU	465	418400	6452600	15	27	29	55	45
54L	31/7/8	78DU	466	418400	6452600	15	27		34	66
54L	31/7/8	78DU	467	418400	6452600	15	27			
54L	31/7/8	78DU	468	418400	6452600	15	27	37	48	52
54L	12/8/2	77DU	510	329064	6493740	15	27	18		
54L	12/8/2	77DU	511	329064	6493740	15	27			
54L	13/8/1	77DU	512	335596	6494218	15	27	17		
54L	13/8/1	77DU	513	335596	6494218	15	27			
54L	13/8/1	77DU	514	335596	6494218	15	27	22		
54L	13/8/1	77DU	515	335596	6494218	15	27	27		
54L	13/8/1	77DU	516	335596	6494218	15	27			
54L	17/8/2	77DU	517	359926	6491007	15	27			
54L	17/8/1	77DU	518	358219	6490829	15	27	19	96	4
54L	18/8/2	77DU	519	357652	6490999	15	27	26		
54M	21/6/3	77DU	18	366596	6630085	15	27	2	100	0
54M	21/6/4	77DU		364510	6588015	15	27			
54M	21/6/5	77DU	21	359659	6546808	15	27			
54M	21/6/5	77DU	22	359659	6546808	15	27	5		
54M	21/6/6	77DU		342819	6556917	15	27			
54M	6/7/1	77DU	200	366740	6556505	15	27			
54M	6/7/2	77DU	201	364201	6564250	15	27	5		
54M	6/7/3	77DU	202	377774	6564686	15	27	4		
54M	6/7/4	77DU		379397	6554751	15	27			
54M	6/7/5	77DU	203	391782	6561567	15	27	2		
54M	6/7/5	77DU	204	391782	6561567	15	27	4		
54M	6/7/6	77DU	205	394503	6561502	15	27	12		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54M	6/7/6	77DU	206	394503	6561502	15	27			
54M	6/7/7	77DU		388538	6554243	15	27			
54M	6/7/8	77DU		393192	6545101	15	27			
54M	9/7/1	77DU	226	366961	6599065	15	27	2		
54M	9/7/1	77DU	227	366961	6599065	15	27			
54M	9/7/2	77DU	228	382857	6598033	15	27	1		
54M	9/7/3	77DU		376414	6594572	15	27			
54M	9/7/4	77DU	229	376115	6592886	15	27			
54M	9/7/5	77DU	230	372069	6592223	15	27	5		
54M	9/7/6	77DU	231	358331	6595243	15	27	1		
54M	9/7/7	77DU	232	358734	6578976	15	27			
54M	9/7/8	77DU	234	363187	6575237	15	27			
54M	9/7/8	77DU	235	363187	6575237	15	27			
54M	9/7/8	77DU	236	363187	6575237	15	27			
54M	9/7/8	77DU	237	363187	6575237	15	27			
54M	10/7/1	77DU	238	335373	6608126	15	27	2		
54M	10/7/2	77DU		337783	6610400	15	27			
54M	10/7/3	77DU	239	341452	6609698	15	27	2		
54M	10/7/4	77DU	240	348976	6610775	15	27	1		
54M	11/7/1	77DU	241	338388	6574013	15	27	7		
54M	11/7/2	77DU	242	334608	6583337	15	27	2	100	0
54M	11/7/3	77DU	244	354054	6607997	15	27	3		
54M	11/7/3	77DU	245	354066	6607971	15	27			
54M	11/7/4	77DU	246	356344	6618433	15	27	2		
54M	11/7/5	77DU	247	352698	6619990	15	27	2		
54M	11/7/6	77DU	248	354473	6625366	15	27	1		
54M	11/7/6	77DU	249	354473	6625366	15	27	2		
54M	11/7/7	77DU	250	345732	6625822	15	27	1		
54M	11/7/7	77DU	251	345802	6625800	15	27	2		
54M	11/7/8	77DU	252	336258	6597693	15	27	2		
54M	21/7/1	77DU		395265	6615010	15	27			
54M	21/7/2	77DU	323	388616	6612621	15	27	2		
54M	21/7/3	77DU	324	395631	6609767	15	27			
54M	21/7/4	77DU	325	388196	6601294	15	27	4		
54M	21/7/5	77DU	326	383427	6606249	15	27	2	100	0
54M	21/7/6	77DU	328	381778	6605959	15	27			
54M	21/7/6	77DU	329	381778	6605959	15	27	3		
54M	21/7/8	77DU	330	361816	6604020	15	27	2		
54M	21/7/8	77DU	331	361816	6604020	15	27	1		
54M	21/7/8	77DU	332	361816	6604020	15	27	1		
54M	21/7/9	77DU	333	373509	6616428	15	27	2		
54M	21/7/10	77DU	334	373009	6622032	15	27	2	100	0
54M	21/7/10	77DU	336	373034	6622019	15	27	1		
54M	21/7/11	77DU	337	369681	6620382	15	27	2		
54M	21/7/12	77DU		364119	6614099	15	27			
54M	21/7/13	77DU	338	359330	6616203	15	27	2		
54M	28/7/1	77DU	403	330341	6560202	15	27	2		
54M	28/7/1	77DU	404	330341	6560202	15	27	1		
54M	28/7/2	77DU		342493	6559747	15	27			
54M	28/7/3	77DU		346454	6559010	15	27			
54M	28/7/4	77DU		345049	6566131	15	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
54M	28/7/5	77DU	405	354816	6565647	15	27			
54M	28/7/6	77DU	406	355162	6569890	15	27	3		
54M	28/7/6	77DU	407	355162	6569890	15	27	2		
54M	28/7/7	77DU		353180	6557236	15	27			
54M	28/7/8	77DU	408	348265	6553304	15	27	3		
54M	28/7/9	77DU	410	342830	6550046	15	27			
54M	28/7/10	77DU	411	333501	6549151	15	27	4		
64I	20/6/1	77DU	1	582167	6526653	14	27	11		
64I	20/6/2	77DU	2	600250	6492895	14	27			
64I	20/6/2	77DU	3	600250	6492895	14	27			
64I	20/6/3	77DU	4	561119	6462644	14	27			
64I	20/6/3	77DU	5	561119	6462644	14	27		100	0
64I	20/6/4	77DU	6	612050	6459800	14	27	21		
64I	20/6/4	77DU	7	612050	6459800	14	27	21		
64I	20/6/5	77DU	8	655587	6456324	14	27	8		
64I	20/6/5	77DU	9	655587	6456324	14	27	16		
64I	20/6/6	77DU	11	669293	6465789	14	27	20	47	53
64I	20/6/6	77DU	12	669293	6465789	14	27	17	61	39
64I	20/6/7	77DU		657448	6497337	14	27			
64I	22/6/1	77DU		617442	6443057	14	27			
64I	22/6/2	77DU	23	623522	6438750	14	27		100	0
64I	22/6/2	77DU	25	623522	6438750	14	27		66	44
64I	22/6/3	77DU	26	639345	6445451	14	27	6	100	0
64I	22/6/3	77DU	27	639345	6445451	14	27			
64I	22/6/4	77DU	28	645540	6444451	14	27	11	76	24
64I	22/6/4	77DU	29	645540	6444451	14	27	8		
64I	22/6/5	77DU	30	629190	6434143	14	27	15		
64I	22/6/10	77DU	31	624498	6449254	14	27	3		
64I	22/6/11	77DU	32	628419	6444574	14	27	27		
64I	22/6/12	77DU	33	644750	6445181	14	27	23		
64I	22/6/12	77DU	34	644750	6445181	14	27			
64I	22/6/13	77DU	35	643111	6439981	14	27	13		
64I	22/6/13	77DU	37	643111	6439981	14	27	14		
64I	22/6/13	77DU	38	643111	6439981	14	27	11		
64I	22/6/14	77DU		640085	6450011	14	27			
64I	23/6/1	77DU	39	647705	6477517	14	27	10		
64I	23/6/2	77DU	41	651800	6485000	14	27	23		
64I	23/6/3	77DU	42	669286	6478342	14	27	14	72	28
64I	23/6/3	77DU	44	669286	6478342	14	27	16		
64I	23/6/4	77DU	45	660304	6463204	14	27	31		
64I	23/6/4	77DU	46	660304	6463204	14	27			
64I	23/6/10	77DU	47	646818	6464946	14	27	7		
64I	23/6/11	77DU	48	649702	6466267	14	27	6		
64I	23/6/12	77DU	50	667519	6465546	14	27	5		
64I	23/6/12	77DU	51	667519	6465546	14	27	29		
64I	23/6/12	77DU	52	667519	6465546	14	27	21		
64I	23/6/13	77DU	53	655117	6478638	14	27	8		
64I	24/6/1	77DU	54	650824	6534532	14	27			
64I	24/6/2	77DU	55	652751	6535415	14	27			
64I	24/6/3	77DU		635985	6535830	14	27			
64I	25/6/1	77DU	56	588021	6505181	14	27	2	100	0

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64I	25/6/1	77DU	57	588021	6505181	14	27	1		
64I	25/6/2	77DU	58	588451	6488260	14	27	3		
64I	25/6/2	77DU	58	588451	6488260	14	27			
64I	25/6/2	77DU	59	588451	6488260	14	27			
64I	25/6/3	77DU	60	605101	6492404	14	27			
64I	25/6/4	77DU		604003	6507995	14	27			
64I	25/6/2	77DU	61	588451	6488260	14	27			
64I	25/6/2	77DU	62	588459	6488209	14	27	5		
64I	25/6/3	77DU	63	605101	6492404	14	27	6		
64I	26/6/1	77DU	64	562894	6533957	14	27	1		
64I	26/6/1	77DU	65	562894	6533957	14	27			
64I	26/6/2	77DU	66	560138	6528294	14	27	1	100	0
64I	26/6/3	77DU	68	570891	6519542	14	27			
64I	26/6/3	77DU	69	570891	6519542	14	27	2	100	0
64I	26/6/4	77DU	70	584172	6517832	14	27	2		
64I	26/6/5	77DU	71	582499	6530808	14	27	2	100	0
64I	26/6/1	77DU	72	562894	6533957	14	27			
64I	26/6/2	77DU	73	560138	6528294	14	27	1	100	0
64I	26/6/3	77DU	74	570891	6519542	14	27	2		
64I	26/6/4	77DU	75	584172	6517832	14	27	3	100	0
64I	26/6/4	77DU	76	584172	6517832	14	27	3	100	0
64I	26/6/5	77DU	77	582564	6530730	14	27	1	100	0
64I	1/7/1	77DU	129	616285	6493614	14	27	4		
64I	1/7/1	77DU	130	616285	6493614	14	27	7		
64I	1/7/2	77DU	131	630654	6498814	14	27	2	100	0
64I	1/7/2	77DU	132	630654	6498814	14	27	2		
64I	1/7/3	77DU	133	626034	6500526	14	27	2		
64I	1/7/4	77DU	134	644348	6495698	14	27	12		
64I	1/7/5	77DU	135	639234	6504686	14	27	2		
64I	1/7/6	77DU	136	624081	6505809	14	27	5		
64I	2/7/1	77DU	137	563147	6506697	14	27	2	100	0
64I	2/7/2	77DU	139	561769	6486743	14	27	2		
64I	2/7/2	77DU	140	561769	6486743	14	27	2		
64I	2/7/2	77DU	141	561769	6486743	14	27	1		
64I	2/7/2B	77DU	142	561698	6485533	14	27	1		
64I	2/7/2B	77DU	143	561698	6485533	14	27			
64I	2/7/3	77DU	144	568667	6502763	14	27	3	100	0
64I	2/7/3	77DU	146	568667	6502763	14	27	3		
64I	2/7/4	77DU	147	581257	6487095	14	27	4		
64I	2/7/4	77DU	148	581226	6487068	14	27	2		
64I	2/7/5	77DU	149	577871	6502328	14	27	2		
64I	2/7/5	77DU	150	577871	6502328	14	27	2		
64I	2/7/6	77DU	151	595727	6507934	14	27	8		
64I	2/7/7	77DU		597792	6512816	14	27			
64I	5/7/1	77DU	187	607662	6521757	14	27	2		
64I	5/7/2	77DU	188	595965	6514057	14	27			
64I	5/7/3	77DU	189	589813	6516547	14	27		100	0
64I	5/7/3	77DU	190	589684	6516304	14	27	2	100	0
64I	5/7/4	77DU	191	597714	6521664	14	27	4		
64I	5/7/4	77DU	192	597714	6521664	14	27	3		
64I	5/7/5	77DU	193	601712	6526604	14	27	3		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64I	5/7/6	77DU	194	611534	6530805	14	27	5	100	0
64I	5/7/7	77DU		610425	6533337	14	27			
64I	5/7/8	77DU	195	590663	6533380	14	27	2		
64I	5/7/8	77DU	196	590663	6533380	14	27	2		
64I	5/7/9	77DU	197	593089	6536201	14	27	5		
64I	5/7/10	77DU	198	594501	6539766	14	27	2		
64I	5/7/1	77DU	199	601306	6539462	14	27	3		
64I	8/7/1	77DU	225	624829	6539464	14	27	1		
64I	14/7/1	77DU		670731	6509705	14	27			
64I	14/7/2	77DU	253	673257	6504498	14	27	5	100	0
64I	14/7/3	77DU	254	673930	6502141	14	27	2		
64I	14/7/3	77DU	255	673856	6501908	14	27	2	100	0
64I	14/7/4	77DU		674150	6498352	14	27			
64I	14/7/5	77DU	256	665093	6499999	14	27	1		
64I	14/7/5	77DU	257	665093	6499999	14	27	10		
64I	14/7/6	77DU	258	660032	6502164	14	27	1		
64I	14/7/7	77DU		658348	6493665	14	27			
64I	14/7/8	77DU	259	654664	6500185	14	27	1	100	0
64I	14/7/8	77DU	261	654669	6500221	14	27		100	0
64I	14/7/9	77DU	262	652085	6493774	14	27	9		
64I	14/7/9	77DU	263	652150	6493744	14	27	5		
64I	15/7/1	77DU	264	672888	6444890	14	27	13		
64I	15/7/2	77DU	265	674622	6432852	14	27	24		
64I	15/7/3	77DU	266	669834	6438131	14	27	23	59	41
64I	15/7/4	77DU	268	656057	6446772	14	27	22		
64I	15/7/4	77DU	269	656057	6446772	14	27	23		
64I	15/7/5	77DU	270	654696	6455626	14	27	8		
64I	15/7/5	77DU	271	654742	6455686	14	27		100	0
64I	15/7/6	77DU	272	651848	6452517	14	27	8		
64I	15/7/7	77DU		674987	6456463	14	27			
64I	15/7/8	77DU	273	646906	6458833	14	27	2	100	0
64I	15/7/8	77DU	274	646906	6458833	14	27	14		
64I	15/7/9	77DU	275	641192	6495946	14	27	13		
64I	17/7/1	77DU	289	615553	6477696	14	27	4		
64I	17/7/1	77DU	290	615553	6477696	14	27	3	100	0
64I	17/7/2	77DU	291	620117	6479251	14	27	7		
64I	17/7/2	77DU	292	620117	6479251	14	27			
64I	17/7/3	77DU	293	623616	6473536	14	27	8		
64I	17/7/3	77DU	294	623616	6473536	14	27	10	83	17
64I	17/7/3	77DU	296	623616	6473536	14	27	5		
64I	17/7/3	77DU	297	623616	6473536	14	27	4		
64I	17/7/4	77DU	298	618522	6472185	14	27	17		
64I	17/7/5	77DU	299	617727	6466538	14	27		100	0
64I	17/7/5	77DU	300	617727	6466538	14	27	1		
64I	17/7/6	77DU	301	638855	6462447	14	27	18		
64I	17/7/7	77DU	302	633271	6465184	14	27	11		
64I	17/7/7	77DU	303	633271	6465184	14	27	9		
64I	17/7/8	77DU	304	633200	6470200	14	27	17		
64I	17/7/9	77DU	305	633230	6475447	14	27	5	75	25
64I	17/7/9	77DU	307	633268	6475549	14	27	15		
64I	17/7/10	77DU	308	633500	6482800	14	27	17		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64I	18/7/1	77DU	309	666431	6531333	14	27			
64I	18/7/2	77DU	310	668484	6521742	14	27	2	100	0
64I	18/7/3	77DU		664873	6518805	14	27			
64I	18/7/4	77DU	311	658734	6532166	14	27	4	100	0
64I	18/7/4	77DU	312	658768	6532122	14	27			
64I	18/7/5	77DU	313	655314	6526744	14	27		100	0
64I	18/7/6	77DU	315	656624	6535335	14	27	2	100	0
64I	20/7/1	77DU		654116	6533622	14	27			
64I	20/7/2	77DU		668163	6538473	14	27			
64I	20/7/3	77DU	319	656124	6540473	14	27	3	100	0
64I	20/7/3	77DU	320	656560	6540669	14	27			
64I	20/7/4	77DU		654218	6532392	14	27			
64I	20/7/5	77DU	321	653924	6533840	14	27			
64I	20/7/5	77DU	322	653924	6533840	14	27	8		
64I	20/7/6	77DU		648154	6538041	14	27			
64I	29/7/1	77DU	412	622140	6519338	14	27	4		
64I	29/7/2	77DU	414	615839	6517801	14	27	5		
64I	29/7/3	77DU	415	619760	6527078	14	27	1	100	0
64I	29/7/4	77DU	416	617080	6529655	14	27	3	100	0
64I	29/7/4	77DU	417	617080	6529655	14	27	3	100	0
64I	29/7/5	77DU	418	597248	6532053	14	27	3	100	0
64I	29/7/5	77DU	419	597248	6532053	14	27			
64I	29/7/5	77DU	420	597248	6532053	14	27			
64I	29/7/5	77DU	421	597248	6532053	14	27	2	100	0
64I	29/7/5	77DU	422	597248	6532053	14	27	2		
64I	29/7/5	77DU	423	597248	6532053	14	27	2	100	0
64I	29/7/6	77DU	424	616939	6533153	14	27	3	100	0
64I	29/7/6	77DU	425	616939	6533153	14	27	3	100	0
64I	29/7/7	77DU	426	615807	6540614	14	27	6		
64I	29/7/8	77DU		627378	6536353	14	27			
64I	29/7/9	77DU	427	624874	6530845	14	27	2	100	0
64I	29/7/10	77DU	428	631790	6523688	14	27	4	100	0
64I	29/7/10	77DU	429	631790	6523688	14	27	4	100	0
64I	29/7/11	77DU	430	637409	6515378	14	27	3	100	0
64I	29/7/12	77DU	431	643291	6528891	14	27	5	100	0
64I	29/7/13	77DU	432	641548	6539316	14	27	2		
64I	31/7/1	77DU	443	565416	6477294	14	27			
64I	31/7/1	77DU	444	565416	6477294	14	27	5		
64I	31/7/2	77DU	445	566334	6466471	14	27	4		
64I	31/7/3	77DU	446	580333	6464444	14	27	1	100	0
64I	31/7/4	77DU	447	591451	6466547	14	27	3	100	0
64I	31/7/5	77DU	448	607996	6482677	14	27	12	93	7
64I	31/7/5	77DU	449	607996	6482677	14	27	2		
64I	3/8/1	77DU	456	627522	6476090	14	27			
64I	3/8/2	77DU		627739	6476914	14	27			
64I	3/8/3	77DU		627330	6477535	14	27			
64I	3/8/4	77DU		627341	6478807	14	27			
64I	3/8/5	77DU	457	627591	6478980	14	27			
64I	4/8/1	77DU		627689	6479744	14	27			
64I	4/8/2	77DU		628106	6480102	14	27			
64I	4/8/3	77DU	458	627385	6480079	14	27	12	88	12

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64I	4/8/3	77DU	459	627385	6480079	14	27	16	62	38
64I	4/8/3	77DU	460	627385	6480079	14	27	9	98	2
64I	4/8/3	77DU	461	627513	6480058	14	27	4		
64I	4/8/4	77DU		628066	6480573	14	27			
64I	4/8/5	77DU		628419	6481523	14	27			
64I	4/8/6	77DU		628547	6483777	14	27			
64I	4/8/7	77DU		628460	6484541	14	27			
64I	5/8/1	77DU	462	630506	6487448	14	27	5	75	25
64I	5/8/1	77DU	463	630506	6487448	14	27	10	95	5
64I	5/8/1	77DU	464	630636	6487470	14	27			
64I	5/8/1	77DU	465	630617	6487451	14	27			
64I	5/8/2	77DU		631439	6487712	14	27			
64I	6/8/1	77DU	466	632864	6487698	14	27	3	86	14
64I	6/8/1	77DU	467	632864	6487698	14	27	5	100	0
64I	6/8/1	77DU	468	632864	6487698	14	27	8		
64I	6/8/2	77DU	470	634713	6487205	14	27	11	93	7
64I	7/8/1	77DU	471	635474	6487369	14	27	9		
64I	7/8/1	77DU	472	635474	6487369	14	27	8	96	4
64I	7/8/2	77DU	473	637631	6487831	14	27	18	0	100
64I	7/8/2	77DU	474	637631	6487831	14	27	10	57	43
64I	7/8/3	77DU	475	638752	6488542	14	27	4	80	20
64I	7/8/4	77DU	476	639831	6489176	14	27	5		
64I	7/8/11	77DU		635632	6487300	14	27			
64I	8/8/1	77DU		642348	6487930	14	27			
64I	8/8/3	77DU	477	645774	6485389	14	27	15		
64I	8/8/3	77DU	478	645021	6484886	14	27	7	100	0
64I	8/8/3	77DU	479	645774	6485389	14	27			
64I	8/8/5	77DU		646309	6486268	14	27			
64I	8/8/6	77DU		646154	6486512	14	27			
64I	8/8/7	77DU	482	645669	6487111	14	27	2		
64I	8/8/8	77DU		647331	6486874	14	27			
64I	8/8/9	77DU	484	647749	6487392	14	27	23		
64I	8/8/9	77DU	485	647749	6487392	14	27	13		
64I	8/8/9	77DU	486	647749	6487392	14	27	13		
64I	8/8/9	77DU	487	647749	6487392	14	27			
64I	9/8/1	77DU	489	650394	6486873	14	27	9	97	3
64I	9/8/2	77DU		652151	6487743	14	27			
64I	9/8/4	77DU		654783	6487741	14	27			
64I	9/8/5	77DU	491	654857	6488433	14	27	13	83	17
64I	9/8/6	77DU		655621	6489952	14	27			
64I	9/8/7	77DU		656313	6491519	14	27			
64I	9/8/8	77DU	492	656752	6493236	14	27	9	85	15
64I	9/8/9	77DU		656931	6494248	14	27			
64I	9/8/10	77DU	493	656381	6494233	14	27	11	98	2
64I	9/8/12	77DU	494	656308	6494983	14	27	13	97	3
64I	9/8/11	77DU	495	656617	6495186	14	27	17	96	4
64I	9/8/12	77DU	496	656760	6494900	14	27	2		
64I	9/8/13	77DU		656675	6496125	14	27			
64I	9/8/14	77DU	497	657687	6497445	14	27	5	100	0
64I	10/8/1	77DU	498	659270	6498313	14	27	11		
64I	9/8/14	77DU	499	658100	6497306	14	27	13	68	32



NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64I	10/8/3	77DU	500	659985	6497491	14	27	8	100	0
64I	10/8/4	77DU	501	661300	6497934	14	27	9	90	10
64I	10/8/5	77DU	502	662133	6497440	14	27	7	100	0
64I	10/8/6	77DU	503	662901	6497798	14	27			
64I	11/8/1	77DU		669987	6496672	14	27			
64I	11/8/2	77DU	504	672551	6496386	14	27	12	69	31
64I	11/8/3	77DU		673857	6495882	14	27			
64I	12/8/1	77DU	505	673936	6495218	14	27	16	82	18
64I	12/8/1	77DU	506	673936	6495218	14	27	16		
64I	12/8/1	77DU	507	673936	6495218	14	27	17	25	75
64I	12/8/1	77DU	508	673936	6495218	14	27	11	96	4
64I	12/8/1	77DU	509	673936	6495218	14	27	16		
64I	16/7/4	78DU	224	323500	6483800	15	27	7		
64I	16/7/6	78DU	228	323000	6460500	15	27	13		
64I	16/7/6	78DU	229	323000	6460500	15	27	20		
64I	17/7/5	80DU	299	618020	6466362	14	27			
64J	4/7/1	80DU	8	471193	6451087	14	27			
64J	4/7/2	80DU	9	546285	6456662	14	27			
64J	4/7/2	80DU	10	546317	6456637	14	27	5		
64J	4/7/3	80DU	11	536905	6462446	14	27	5		
64J	4/7/4	80DU	13	509836	6524553	14	27	1		
64J	4/7/5	80DU		447635	6481039	14	27			
64J	4/7/6	80DU	15	445843	6493986	14	27	5		
64J	5/7/8	80DU		480599	6457904	14	27			
64J	6/7/2	80DU	24	461835	6483378	14	27	3		
64J	6/7/1	80DU		454463	6482163	14	27			
64J	6/7/2	80DU	25	461829	6483340	14	27			
64J	6/7/3	80DU	27	470081	6479738	14	27	4		
64J	6/7/4	80DU		473780	6479474	14	27			
64J	6/7/5	80DU	28	473426	6472936	14	27			
64J	6/7/6	80DU	30	476526	6468267	14	27			
64J	6/7/7	80DU	31	494699	6468728	14	27			
64J	6/7/9	80DU	32	473318	6460079	14	27			
64J	6/7/10	80DU		460182	6460679	14	27			
64J	6/7/11	80DU	33	442933	6455709	14	27			
64J	8/7/1	80DU	43	452967	6438410	14	27	3		
64J	8/7/1	80DU	44	452967	6438410	14	27			
64J	8/7/1	80DU	47	452967	6438410	14	27	2		
64J	8/7/2	80DU	48	453867	6440990	14	27			
64J	8/7/3	80DU		451925	6431101	14	27			
64J	8/7/4A	80DU		476473	6434190	14	27			
64J	8/7/4B	80DU		479536	6440039	14	27			
64J	8/7/4C	80DU		487146	6439210	14	27			
64J	8/7/5	80DU		489961	6439001	14	27			
64J	8/7/6	80DU	49	488660	6450565	14	27			
64J	8/7/7	80DU	50	460420	6447407	14	27			
64J	8/7/8	80DU	51	445732	6447322	14	27			
64J	8/7/9	80DU	52	450353	6466794	14	27			
64J	9/7/1	80DU	53	511152	6501440	14	27			
64J	9/7/2	80DU	54	510448	6508949	14	27			
64J	9/7/3	80DU	55	517344	6501818	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64J	9/7/4	80DU	56	554054	6488424	14	27	1		
64J	9/7/4	80DU	57	554054	6488424	14	27			
64J	9/7/5	80DU	58	544071	6485643	14	27			
64J	9/7/6	80DU	59	530693	6487966	14	27			
64J	9/7/7	80DU	60	509373	6485534	14	27			
64J	9/7/8	80DU	61	505483	6494706	14	27			
64J	12/7/12B	80DU		475735	6503828	14	27			
64J	14/7/1	80DU	84	513342	6448381	14	27	5		
64J	14/7/1	80DU	85	513342	6448381	14	27			
64J	14/7/2	80DU	86	519543	6444253	14	27	13		
64J	14/7/3	80DU	87	518242	6443147	14	27	7		
64J	14/7/3	80DU	88	518242	6443147	14	27	4		
64J	14/7/4	80DU	89	517785	6440210	14	27			
64J	14/7/5	80DU	91	525682	6435819	14	27			
64J	14/7/5	80DU	92	525682	6435819	14	27			
64J	14/7/6	80DU	93	538098	6441844	14	27			
64J	14/7/7	80DU	94	552179	6441748	14	27			
64J	14/7/7	80DU	95	552179	6441748	14	27	2		
64J	14/7/8	80DU	97	545770	6434062	14	27			
64J	14/7/9	80DU	98	519131	6434152	14	27	5		
64J	14/7/9	80DU	99	519131	6434152	14	27			
64J	16/7/1	80DU	113	556737	6464238	14	27			
64J	16/7/2	80DU		532070	6456758	14	27			
64J	16/7/2A	80DU		535672	6454700	14	27			
64J	16/7/3	80DU	115	533593	6469261	14	27	3		
64J	16/7/4	80DU	117	521901	6464872	14	27	7		
64J	16/7/5	80DU	118	517263	6464922	14	27	3		
64J	16/7/6	80DU	119	507502	6461052	14	27			
64J	16/7/7	80DU	120	526783	6477334	14	27			
64J	16/7/8	80DU	121	534768	6476949	14	27			
64J	16/7/9	80DU	122	543805	6474087	14	27			
64J	16/7/10	80DU	123	509223	6473446	14	27			
64J	17/7/1A	80DU		446347	6521348	14	27			
64J	17/7/1B	80DU		449784	6531972	14	27			
64J	17/7/1C	80DU		459798	6532984	14	27			
64J	17/7/2	80DU	125	472394	6533241	14	27	4		
64J	17/7/3	80DU	127	467946	6524761	14	27			
64J	17/7/4	80DU	128	485135	6523110	14	27	2		
64J	17/7/5	80DU	129	493490	6530135	14	27			
64J	17/7/6	80DU	130	504301	6517697	14	27			
64J	17/7/7	80DU	133	498367	6513224	14	27			
64J	17/7/8	80DU	134	488119	6513205	14	27			
64J	17/7/8	80DU	135	488119	6513205	14	27	2		
64J	17/7/9B	80DU		446467	6512805	14	27			
64J	28/7/1A	80DU		504865	6526338	14	27			
64J	28/7/1B	80DU		508031	6526592	14	27			
64J	28/7/1C	80DU		517175	6529639	14	27			
64J	28/7/1D	80DU		520229	6532610	14	27			
64J	28/7/2	80DU	153	533542	6534434	14	27			
64J	28/7/3	80DU	154	540819	6535328	14	27			
64J	28/7/4	80DU	156	546496	6523547	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64J	28/7/5	80DU	157	555057	6512384	14	27			
64J	28/7/6	80DU		549894	6510842	14	27			
64J	28/7/7	80DU	158	545251	6519249	14	27			
64J	28/7/8	80DU	159	540264	6520336	14	27			
64J	28/7/9	80DU		516236	6518312	14	27			
64J	28/7/10	80DU	160	442751	6505461	14	27	2		
64J	28/7/10A	80DU		448899	6514261	14	27			
64J	28/7/11	80DU	161	460951	6516395	14	27			
64J	28/7/11A	80DU		466725	6515458	14	27			
64J	28/7/11B	80DU		475987	6515743	14	27			
64J	28/7/12	80DU	162	480288	6509771	14	27			
64J	28/7/12B	80DU		455536	6495542	14	27			
64J	1/8/13	80DU	184	444896	6486843	14	27			
64J	1/8/14	80DU		446704	6485471	14	27			
64J	1/8/15	80DU	185	457152	6483447	14	27	1		
64J	5/8/1	80DU		449337	6506181	14	27			
64J	5/8/2	80DU		453069	6509128	14	27			
64J	6/8/6	80DU		481166	6485701	14	27			
64J	6/8/7	80DU		486614	6484539	14	27			
64J	6/8/8	80DU		494720	6482777	14	27			
64J	6/8/9	80DU	241	497116	6485309	14	27			
64J	6/8/10	80DU		492405	6491422	14	27			
64J	6/8/11	80DU	242	495988	6498617	14	27			
64J	7/8/1	80DU	243	500283	6494286	14	27			
64J	7/8/1	80DU	244	500283	6494286	14	27			
64J	7/8/2	80DU	245	499303	6509062	14	27	2		
64J	7/8/2	80DU	246	499303	6509062	14	27	2		
64J	7/8/3	80DU	247	478791	6498980	14	27			
64J	7/8/4	80DU		455918	6503317	14	27			
64K	20/6/1	80DU		432743	6488841	14	27			
64K	20/6/2	80DU		432061	6488910	14	27			
64K	20/6/3	80DU	1	433925	6489776	14	27	1		
64K	22/6/1	80DU		435338	6489791	14	27			
64K	22/6/2	80DU	2	437648	6490857	14	27			
64K	22/6/3	80DU		435371	6491012	14	27			
64K	3/7/1	80DU	3	368805	6491234	14	27			
64K	13/7/2	80DU	5	392544	6468747	14	27	1		
64K	3/7/3	80DU	6	411290	6476632	14	27	1		
64K	3/7/4	80DU	7	424379	6485119	14	27	1		
64K	5/7/1	80DU	16	420912	6461843	14	27			
64K	5/7/2	80DU	16A	418800	6430200	14	27	1		
64K	5/7/3	80DU	19	410146	6439383	14	27			
64K	5/7/4	80DU	20	394397	6460396	14	27			
64K	5/7/5	80DU	21	398388	6479053	14	27	1		
64K	5/7/7	80DU	22	413772	6494081	14	27			
64K	5/7/8	80DU	23	419833	6503006	14	27			
64K	5/7/9	80DU		428925	6522708	14	27			
64K	7/7/1	80DU		429772	6503867	14	27			
64K	7/7/2	80DU		424012	6530326	14	27			
64K	7/7/3	80DU	34	415284	6530067	14	27			
64K	7/7/4	80DU		400404	6526827	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64K	7/7/5	80DU		400404	6526827	14	27			
64K	7/7/6	80DU	36	386994	6535869	14	27			
64K	7/7/7	80DU	37	383907	6522414	14	27	2		
64K	7/7/8	80DU		393342	6511486	14	27			
64K	7/7/9	80DU	40	403559	6501338	14	27	1		
64K	7/7/10	80DU		406483	6502190	14	27			
64K	7/7/11	80DU	41	422242	6494264	14	27	1		
64K	7/7/11	80DU	42	422242	6494264	14	27			
64K	7/7/12	80DU		424229	6489389	14	27			
64K	10/7/1	80DU	62	381194	6452641	14	27	1		
64K	10/7/2	80DU		376749	6461290	14	27			
64K	10/7/3	80DU	64	381089	6467139	14	27	1		
64K	10/7/4	80DU	66	379933	6478689	14	27	2		
64K	10/7/5	80DU	67	381133	6478657	14	27			
64K	10/7/6	80DU	68	375225	6498154	14	27	1		
64K	10/7/7	80DU	69	395252	6503166	14	27			
64K	10/7/8	80DU	70	414331	6506233	14	27			
64K	10/7/9	80DU		424130	6489033	14	27			
64K	13/7/1	80DU	72	423763	6473218	14	27			
64K	13/7/2	80DU	75	412424	6461238	14	27			
64K	13/7/3	80DU	76	408065	6461652	14	27	1		
64K	13/7/4	80DU		401601	6450818	14	27			
64K	13/7/5	80DU	79	430680	6440992	14	27			
64K	13/7/6	80DU	81	433235	6446273	14	27			
64K	13/7/7	80DU		432903	6453247	14	27			
64K	13/7/8	80DU		437644	6452324	14	27			
64K	13/7/9	80DU	82	436282	6456441	14	27			
64K	13/7/10	80DU	83	440406	6459346	14	27	1		
64K	13/7/11	80DU		432984	6461484	14	27			
64K	13/7/12	80DU		430010	6462284	14	27			
64K	15/7/1	80DU	100	340781	6475223	14	27	1		
64K	15/7/2	80DU	101	327451	6462886	14	27	1		
64K	15/7/3	80DU	104	326556	6449905	14	27			
64K	15/7/4	80DU	105	343635	6459644	14	27	1		
64K	15/7/5	80DU	106	346587	6480036	14	27			
64K	15/7/6	80DU		352766	6488606	14	27			
64K	15/7/7	80DU	109	380471	6443129	14	27	1		
64K	15/7/8	80DU		363807	6463910	14	27			
64K	15/7/9	80DU	110	370000	6480400	14	27	1		
64K	15/7/10	80DU	111	356874	6488372	14	27	2		
64K	19/7/1	80DU		436640	6489763	14	27			
64K	28/7/1	80DU	164	430378	6507753	14	27	2		
64K	1/8/1	80DU		368734	6491690	14	27			
64K	1/8/2	80DU		363322	6485178	14	27			
64K	1/8/3	80DU	174	334127	6486456	14	27	1		
64K	1/8/4	80DU		330533	6493502	14	27			
64K	1/8/5	80DU		332205	6528096	14	27			
64K	1/8/6	80DU		334867	6533355	14	27			
64K	1/8/7	80DU	176	357006	6531327	14	27			
64K	1/8/10	80DU		366251	6519522	14	27			
64K	2/8/13	80DU		427439	6514463	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64K	2/8/14	80DU		434935	6513827	14	27			
64K	2/8/15	80DU	196	440409	6508241	14	27			
64K	1/8/8	80DU	177	361549	6531106	14	27	1		
64K	1/8/9	80DU	178	370735	6527119	14	27	2		
64K	1/8/11	80DU	180	355865	6512206	14	27	1		
64K	1/8/12	80DU	181	359545	6498345	14	27	4		
64K	1/8/12	80DU	182	359513	6498320	14	27	1		
64K	1/8/12	80DU	183	359513	6498320	14	27	3		
64K	6/8/1	80DU	233	433386	6523206	14	27	3		
64K	6/8/2	80DU	234	430522	6530553	14	27	1		
64K	6/8/3	80DU	235	402499	6533975	14	27	3		
64K	6/8/4	80DU	236	410414	6516601	14	27	1		
64K	6/8/4	80DU	237	410414	6516601	14	27			
64K	6/8/5	80DU	238	420153	6506036	14	27	1		
64N	2/8/1	80DU		435279	6569106	14	27			
64N	2/8/2	80DU	188	426322	6571676	14	27			
64N	2/8/3	80DU		417673	6577538	14	27			
64N	2/8/4	80DU		409747	6571993	14	27			
64N	2/8/5	80DU	189	398064	6571549	14	27	1		
64N	2/8/6	80DU		398078	6574039	14	27			
64N	2/8/7	80DU		394213	6577716	14	27			
64N	2/8/8	80DU	190	397306	6596045	14	27	2		
64N	2/8/9	80DU	191	412195	6585899	14	27			
64N	2/8/10	80DU	192	423131	6584597	14	27	2		
64N	2/8/11	80DU	193	429297	6583066	14	27			
64N	3/8/2	80DU	197	407986	6616266	14	27			
64N	3/8/3	80DU		415567	6623036	14	27			
64N	3/8/4	80DU	198	420363	6623271	14	27			
64N	3/8/5	80DU		420873	6634016	14	27			
64N	3/8/6	80DU	199	412038	6651099	14	27			
64N	3/8/7	80DU		422463	6645352	14	27			
64N	3/8/8	80DU		427554	6646134	14	27			
64N	3/8/9	80DU		428843	6649127	14	27			
64N	3/8/10	80DU	201	438406	6647994	14	27	1		
64N	3/8/10B	80DU	204	438300	6647900	14	27	1		
64N	3/8/11	80DU		430309	6644179	14	27			
64N	3/8/12	80DU	205	427988	6641760	14	27			
64N	3/8/13	80DU	206	435801	6636843	14	27	3		
64N	3/8/13	80DU	207	435844	6636804	14	27			
64N	3/8/14	80DU	208	433773	6631009	14	27			
64N	8/8/1	80DU		353322	6617270	14	27			
64N	8/8/2	80DU	249	348784	6616932	14	27	1		
64N	8/8/3	80DU		338422	6616277	14	27			
64N	8/8/4	80DU		331189	6614045	14	27			
64N	8/8/5	80DU		331770	6615304	14	27			
64N	8/8/6	80DU	252	334302	6628762	14	27	2		
64N	8/8/7	80DU		339295	6652954	14	27			
64N	8/8/8	80DU	253	348282	6652473	14	27	2		
64N	8/8/9	80DU	254	353067	6642499	14	27			
64N	8/8/10	80DU	255	345288	6639415	14	27			
64N	8/8/11	80DU	257	354006	6631781	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64N	8/8/12	80DU	258	345346	6627668	14	27			
64N	8/8/14	80DU		350848	6625147	14	27			
64N	8/8/15	80DU	259	363563	6622846	14	27	1		
64N	8/8/16	80DU		362960	6627103	14	27			
64N	9/8/1	80DU		384280	6572725	14	27			
64N	9/8/2	80DU	265	371560	6573116	14	27			
64N	9/8/3	80DU	266	368307	6579714	14	27			
64N	9/8/4	80DU	267	359479	6582122	14	27			
64N	9/8/5	80DU		344762	6578086	14	27			
64N	9/8/6	80DU	268	339481	6586416	14	27	1		
64N	9/8/7	80DU	269	333558	6586712	14	27	3		
64N	9/8/8	80DU	270	337574	6592528	14	27			
64N	9/8/9	80DU		352224	6591062	14	27			
64N	9/8/10	80DU		361798	6592560	14	27			
64N	9/8/11	80DU		375324	6592002	14	27			
64N	9/8/12	80DU	271	373229	6588940	14	27	2		
64N	9/8/13	80DU	272	379064	6590404	14	27			
64N	9/8/14	80DU	273	385950	6587128	14	27	1		
64N	11/8/7	80DU	294	419365	6553610	14	27			
64N	11/8/8	80DU	295	413974	6550383	14	27			
64N	11/8/9	80DU		416927	6546952	14	27			
64N	11/8/10	80DU		418598	6543789	14	27			
64N	12/8/1	80DU	296	369367	6648310	14	27	1		
64N	12/8/2	80DU	297	374412	6646367	14	27	1		
64N	12/8/3	80DU		375620	6649872	14	27			
64N	12/8/4	80DU	298	375620	6649872	14	27	3		
64N	12/8/5	80DU	300	398841	6641770	14	27			
64N	12/8/6	80DU	301	409280	6631411	14	27	1		
64N	12/8/7	80DU		401806	6633173	14	27			
64N	12/8/8	80DU	302	393561	6629789	14	27			
64N	12/8/9	80DU	303	372489	6628582	14	27			
64N	12/8/10	80DU	305	365546	6642903	14	27			
64N	12/8/11	80DU		362891	6642098	14	27			
64N	12/8/12A	80DU	306	354973	6646374	14	27			
64N	12/8/13	80DU		353054	6642480	14	27			
64N	12/8/14	80DU		392502	6608020	14	27			
64N	13/8/1	80DU		429505	6618448	14	27			
64N	13/8/2	80DU	307	422670	6611207	14	27			
64N	13/8/3	80DU	308	416778	6611974	14	27			
64N	13/8/4	80DU	310	411111	6596181	14	27	2		
64N	13/8/5	80DU	312	401021	6619448	14	27	1		
64N	13/8/5	80DU	313	401021	6619448	14	27			
64N	13/8/6	80DU		392069	6596528	14	27			
64N	14/8/13	80DU	322	383648	6600842	14	27	1		
64N	14/8/14	80DU	323	377951	6612285	14	27	2		
64N	14/8/15	80DU	324	370735	6605346	14	27			
64N	14/8/16	80DU	325	363110	6605437	14	27	1		
64N	14/8/17	80DU		350646	6604159	14	27			
64N	14/8/18	80DU	326	337084	6601610	14	27	1		
64N	15/8/1	80DU	327	409833	6568672	14	27			
64N	15/8/2	80DU		390980	6567683	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64N	15/8/3	80DU	328	383583	6560405	14	27	2		
64N	15/8/4	80DU		383969	6558071	14	27			
64N	15/8/5	80DU	329	374684	6561082	14	27	2		
64N	15/8/6	80DU	330	362615	6567368	14	27			
64N	15/8/7	80DU		337313	6562917	14	27			
64N	15/8/8	80DU	331	335604	6544591	14	27			
64N	15/8/9	80DU	332	344621	6545249	14	27	1		
64N	15/8/10	80DU		348099	6551199	14	27			
64N	15/8/11	80DU	334	360536	6544376	14	27			
64N	15/8/12	80DU	335	373276	6546685	14	27	3		
64N	15/8/13	80DU		386066	6553139	14	27			
64N	15/8/14	80DU	336	407383	6548550	14	27	4		
64N	15/8/14	80DU	337	407383	6548550	14	27	1		
64O	26/7/1	80DU	136	462779	6572920	14	27			
64O	26/7/2	80DU		466224	6583258	14	27			
64O	26/7/3	80DU	139	475676	6587483	14	27			
64O	26/7/4	80DU	140	491040	6584753	14	27			
64O	26/7/5	80DU	141	489454	6580042	14	27			
64O	26/7/6	80DU	142	491165	6568943	14	27			
64O	26/7/7	80DU	143	484853	6581046	14	27			
64O	27/7/1	80DU		529216	6544926	14	27			
64O	27/7/2	80DU	144	538859	6549323	14	27	1		
64O	27/7/3	80DU	146	542819	6562004	14	27			
64O	27/7/4	80DU		539369	6560316	14	27			
64O	27/7/5	80DU	147	530504	6561228	14	27			
64O	27/7/6	80DU	149	515439	6565180	14	27			
64O	27/7/7	80DU		509648	6566685	14	27			
64O	27/7/8	80DU	150	523946	6544192	14	27			
64O	27/7/9	80DU		523558	6542938	14	27			
64O	27/7/10	80DU		503637	6544271	14	27			
64O	27/7/11	80DU		501415	6541597	14	27			
64O	28/7/1	80DU	167	449744	6569655	14	27			
64O	29/7/2	80DU	168	472472	6596882	14	27			
64O	29/7/3	80DU	169	474691	6632597	14	27			
64O	29/7/4	80DU		486216	6628716	14	27			
64O	29/7/5	80DU	170	505797	6603994	14	27	1		
64O	29/7/6	80DU	171	508718	6561097	14	27	1		
64O	29/7/7	80DU	172	527761	6562360	14	27			
64O	27/7/8	80DU	173	532431	6555596	14	27			
64O	2/8/12	80DU	195	444966	6585682	14	27			
64O	4/8/1	80DU	209	515953	6608258	14	27			
64O	4/8/1	80DU	211	515953	6608251	14	27			
64O	4/8/2	80DU	212	523683	6601906	14	27			
64O	4/8/3	80DU	214	531616	6608307	14	27			
64O	4/8/4	80DU	215	540015	6598079	14	27	1		
64O	4/8/4	80DU	216	540238	6598009	14	27	1		
64O	4/8/5	80DU	218	535000	6610800	14	27	1		
64O	5/8/3	80DU		465159	6635358	14	27			
64O	5/8/4	80DU	220	467202	6642347	14	27			
64O	5/8/5	80DU	221	472742	6643891	14	27			
64O	5/8/6	80DU		482859	6644337	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64O	5/8/7	80DU	222	487042	6641820	14	27			
64O	5/8/8	80DU	223	499006	6643591	14	27			
64O	5/8/9	80DU	224	505100	6641113	14	27			
64O	5/8/10	80DU	225	511862	6641321	14	27			
64O	5/8/11	80DU	226	522171	6641831	14	27	1		
64O	5/8/12	80DU		525513	6643488	14	27			
64O	5/8/13	80DU		539197	6639405	14	27			
64O	5/8/14	80DU	227	542457	6639274	14	27			
64O	5/8/15	80DU		537103	6630138	14	27			
64O	5/8/16	80DU		535065	6628552	14	27			
64O	5/8/17	80DU	228	506241	6625319	14	27			
64O	5/8/18	80DU	229	503674	6632826	14	27			
64O	5/8/19	80DU		506947	6634999	14	27			
64O	5/8/20	80DU	230	479549	6635190	14	27			
64O	5/8/21	80DU	231	476473	6636607	14	27	1		
64O	8/8/A	80DU	260	465753	6582577	14	27			
64O	8/8/B	80DU	261	465753	6582577	14	27			
64O	8/8/C	80DU	262	465804	6582545	14	27			
64O	8/8/D	80DU	263	465804	6582545	14	27			
64O	8/8/E	80DU	264	465804	6582545	14	27			
64O	10/8/1	80DU	274	503144	6573518	14	27			
64O	10/8/2	80DU	275	508967	6574953	14	27			
64O	10/8/3	80DU		528315	6570749	14	27			
64O	10/8/4	80DU	276	552770	6585782	14	27	1		
64O	10/8/5	80DU	277	543333	6597203	14	27			
64O	10/8/6	80DU	279	534285	6592023	14	27	1		
64O	10/8/7	80DU	280	512713	6592995	14	27			
64O	10/8/8	80DU	282	513589	6586330	14	27			
64O	10/8/9	80DU	284	505684	6578745	14	27			
64O	11/8/1	80DU	285	479127	6547722	14	27			
64O	11/8/2	80DU	286	491481	6548651	14	27	1		
64O	11/8/3	80DU	287	499292	6560436	14	27	2		
64O	11/8/3	80DU	288	499292	6560436	14	27	1		
64O	11/8/4	80DU	289	461830	6566701	14	27	2		
64O	11/8/5	80DU	290	459265	6558851	14	27	3		
64O	11/8/5	80DU	291	459265	6558851	14	27	2		
64O	11/8/6	80DU	293	450151	6559344	14	27			
64O	11/8/11	80DU		465228	6553094	14	27			
64O	11/8/12	80DU		462503	6548682	14	27			
64O	14/8/1	80DU		468727	6600844	14	27			
64O	14/8/2	80DU		479564	6603002	14	27			
64O	14/8/3	80DU		490077	6598695	14	27			
64O	14/8/4	80DU		488593	6606177	14	27			
64O	14/8/5	80DU	315	487261	6622926	14	27			
64O	14/8/6	80DU		475812	6623421	14	27			
64O	14/8/7	80DU	316	465860	6622752	14	27	1		
64O	14/8/8	80DU	317	453954	6621459	14	27			
64O	14/8/10	80DU	319	453477	6612129	14	27			
64O	14/8/11	80DU	320	448466	6609536	14	27			
64O	14/8/12	80DU	321	448493	6596356	14	27			
64P	21/6/1	77DU	13	610450	6637529	14	27			



NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64P	21/6/2	77DU	15	632980	6624866	14	27			
64P	21/6/2	77DU	17	632980	6624866	14	27			
64P	21/6/7	77DU	23A	642838	6575443	14	27			
64P	27/6/1	77DU	78	590022	6589120	14	27	2		
64P	27/6/2	77DU	79	590060	6589121	14	27	1		
64P	27/6/2	77DU	80	590220	6595487	14	27	1	100	0
64P	27/6/2	77DU	81	590220	6595487	14	27			
64P	27/6/2	77DU	82	590220	6595487	14	27			
64P	27/6/3	77DU	83	600720	6591779	14	27	1		
64P	27/6/3	77DU	84	600728	6591735	14	27	1		
64P	27/6/3	77DU	85	600728	6591735	14	27	3		
64P	27/6/3	77DU	86	600728	6591735	14	27			
64P	27/6/4	77DU	87	609833	6588156	14	27			
64P	27/6/5	77DU	88	599644	6586274	14	27	1		
64P	27/6/5	77DU	89	599636	6586312	14	27			
64P	27/6/5	77DU	90	599636	6586312	14	27	1		
64P	27/6/6	77DU	91	595544	6584609	14	27	1		
64P	27/6/6	77DU	92	595544	6584609	14	27	1		
64P	27/6/7	77DU	93	605270	6583888	14	27			
64P	27/6/7	77DU	94	605270	6583888	14	27			
64P	27/6/7	77DU	95	605270	6583888	14	27			
64P	27/6/8	77DU	96	588797	6578399	14	27			
64P	27/6/8	77DU	97	588797	6578399	14	27	1	100	0
64P	27/6/9	77DU	99	609226	6577833	14	27	2		
64P	27/6/10	77DU	100	610711	6574757	14	27	1		
64P	28/6/1	77DU	101	641596	6648174	14	27			
64P	28/6/2	77DU	103	645372	6648346	14	27	1	100	0
64P	28/6/2	77DU	104	645372	6648346	14	27	1		
64P	28/6/3	77DU	105	648519	6644275	14	27	1		
64P	28/6/4	77DU	106	645950	6643692	14	27	1		
64P	28/6/5	77DU	107	641611	6641029	14	27	1		
64P	28/6/5	77DU	108	641611	6641009	14	27	2		
64P	28/6/6	77DU	109	646872	6635040	14	27			
64P	28/6/7	77DU	110	648496	6632914	14	27	2		
64P	28/6/8	77DU		658106	6650592	14	27			
64P	28/6/9	77DU	111	658661	6641314	14	27			
64P	28/6/10	77DU	112	664143	6638686	14	27			
64P	28/6/11	77DU		652259	6632006	14	27			
64P	29/6/1	77DU	113	636036	6619942	14	27	1	96	4
64P	29/6/2	77DU	115	628106	6615810	14	27	1		
64P	29/6/3	77DU	116	623289	6617677	14	27	1	100	0
64P	29/6/4	77DU	118	618945	6616788	14	27	2		
64P	29/6/5	77DU	119	616796	6618417	14	27	1		
64P	29/6/5	77DU	120	616796	6618417	14	27	2		
64P	29/6/6	77DU	121	614868	6614102	14	27	2	100	0
64P	29/6/7	77DU	123	614500	6604200	14	27	2		
64P	29/6/8	77DU	124	629437	6609848	14	27	2		
64P	29/6/8	77DU	125	629437	6609848	14	27	1		
64P	29/6/9	77DU	126	634845	6613335	14	27	2		
64P	29/6/10	77DU	127	638945	6612446	14	27			
64P	29/6/11	77DU	128	641650	6601328	14	27	1	100	0

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64P	3/7/1	77DU	152	645970	6596353	14	27	2	100	0
64P	3/7/2	77DU	154	655632	6594723	14	27			
64P	3/7/2	77DU	155	655637	6594768	14	27	2		
64P	3/7/2	77DU	156	655637	6594768	14	27	1		
64P	3/7/3	77DU	157	660915	6595376	14	27	1		
64P	3/7/4	77DU	158	667829	6592109	14	27			
64P	3/7/5	77DU	159	658093	6588558	14	27	1		
64P	3/7/6	77DU	160	654691	6588259	14	27	5		
64P	3/7/7	77DU	161	650332	6580153	14	27			
64P	3/7/7B	77DU	162	650332	6581153	14	27	4		
64P	3/7/8	77DU	163	645091	6580485	14	27	4		
64P	3/7/9	77DU	164	665530	6583624	14	27			
64P	3/7/10	77DU		662605	6575384	14	27			
64P	3/7/11	77DU	165	658074	6573997	14	27	2	100	0
64P	3/7/11	77DU	167	658074	6573997	14	27	2		
64P	4/7/1	77DU	168	582911	6591665	14	27	2		
64P	4/7/2	77DU	169	568285	6591516	14	27			
64P	4/7/2	77DU	170	568285	6591516	14	27	3	1	
64P	4/7/2	77DU	171	568285	6591516	14	27			
64P	4/7/3	77DU	172	559755	6586328	14	27	1	100	0
64P	4/7/4	77DU	173	564616	6585562	14	27	1	100	0
64P	4/7/5	77DU	175	569612	6583875	14	27	1		
64P	4/7/5	77DU	176	569612	6583875	14	27	1		
64P	4/7/6	77DU	177	574187	6582178	14	27			
64P	4/7/7	77DU		576067	6581287	14	27			
64P	4/7/8	77DU	178	574347	6585428	14	27	1		
64P	4/7/8	77DU	179	574347	6585428	14	27			
64P	4/7/9	77DU	180	567302	6577905	14	27	1	100	0
64P	4/7/10	77DU	182	571633	6578058	14	27	1		
64P	4/7/10	77DU	183	571633	6578058	14	27	1		
64P	4/7/10	77DU	184	571633	6578058	14	27	3		
64P	4/7/11	77DU		583095	6575316	14	27			
64P	4/7/12	77DU	185	577042	6570038	14	27	1		
64P	4/7/12	77DU	186	577042	6570038	14	27	1		
64P	7/7/1	77DU		620725	6568924	14	27			
64P	7/7/2	77DU	207	628369	6568991	14	27	2	100	0
64P	7/7/3	77DU	208	632517	6568755	14	27	2	100	0
64P	7/7/4	77DU	210	632150	6566851	14	27	4		
64P	7/7/5	77DU		635545	6567342	14	27			
64P	8/7/1	77DU	211	638203	6564659	14	27	2		
64P	8/7/1	77DU	212	638203	6564659	14	27	16		
64P	8/7/1	77DU	213	638203	6564659	14	27	4		
64P	8/7/1	77DU	214	638203	6564659	14	27			
64P	8/7/1	77DU	215	638203	6564659	14	27	3		
64P	8/7/2	77DU	71A	637517	6562572	14	27			
64P	8/7/3	77DU	216	629630	6561960	14	27	3		
64P	8/7/4	77DU	217	628253	6557204	14	27	1		
64P	8/7/5	77DU	218	634861	6557733	14	27	3	100	0
64P	8/7/6	77DU	220	640568	6555413	14	27	5		
64P	8/7/7	77DU	221	633884	6549754	14	27	6		
64P	8/7/7	77DU	222	633884	6549754	14	27	7		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64P	8/7/8	77DU	223	637526	6549583	14	27	1		
64P	8/7/9	77DU		641064	6550896	14	27			
64P	8/7/10	77DU	224	640060	6547323	14	27	1		
64P	8/7/12	77DU		628764	6542433	14	27			
64P	16/7/2	77DU	276	661515	6622308	14	27	2		
64P	16/7/2	77DU	277	661515	6622308	14	27	2		
64P	16/7/3	77DU	278	648426	6625280	14	27	4		
64P	16/7/4	77DU		647989	6624083	14	27			
64P	16/7/5	77DU	279	645826	6616094	14	27	2		
64P	16/7/5	77DU	280	645826	6616094	14	27	2		
64P	16/7/6	77DU	281	649192	6612133	14	27	1		
64P	16/7/2	77DU	282	652479	6611540	14	27	1		
64P	16/7/8	77DU	283	651659	6610726	14	27	2		
64P	16/7/9	77DU		650923	6611709	14	27			
64P	16/7/10	77DU	284	655341	6610473	14	27	1		
64P	16/7/11	77DU	285	639806	6610267	14	27	2		
64P	16/7/12	77DU		645594	6608895	14	27			
64P	16/7/13	77DU	286	657892	6605589	14	27	1		
64P	16/7/13	77DU	287	657892	6605589	14	27	1		
64P	16/7/14	77DU	288	649811	6603048	14	27	1		
64P	19/7/1	77DU	316	628431	6549020	14	27	2		
64P	19/7/1	77DU	318	628431	6549020	14	27			
64P	19/7/1	77DU	317A	628431	6549020	14	27			
64P	19/7/1	77DU	317B	628431	6549020	14	27			
64P	22/7/1	77DU	339	643819	6568000	14	27	2		
64P	22/7/2	77DU	340	648128	6568434	14	27	2		
64P	22/7/3	77DU	341	662751	6565216	14	27	1		
64P	22/7/3	77DU	342	662795	6565231	14	27			
64P	23/7/1	77DU		665619	6566180	14	27			
64P	23/7/2	77DU	343	661180	6559796	14	27			
64P	23/7/2	77DU	344	661168	6559770	14	27	2		
64P	23/7/2	77DU	345	661168	6559770	14	27	3		
64P	22/7/3	77DU	346	662795	6565231	14	27	1		
64P	23/7/4	77DU	347	646315	6555559	14	27	3		
64P	23/7/4	77DU	348	646315	6555559	14	27	2		
64P	23/7/5	77DU		653008	6554947	14	27			
64P	23/7/6	77DU	349	660591	6556780	14	27	1		
64P	23/7/7	77DU	350	660104	6549566	14	27	2		
64P	23/7/8	77DU	351	653735	6545317	14	27			
64P	23/7/9	77DU	352	646048	6545172	14	27	2		
64P	23/7/10	77DU	353	642734	6575669	14	27			
64P	23/7/11	77DU	354	638824	6575677	14	27	3		
64P	23/7/12	77DU		631980	6576252	14	27			
64P	23/7/13	77DU	355	621790	6574205	14	27	1		
64P	23/7/14	77DU	356	618431	6572674	14	27	1		
64P	24/7/2	77DU		618844	6596911	14	27			
64P	24/7/3	77DU	357	625113	6596757	14	27			
64P	24/7/4	77DU	358	628844	6594015	14	27	1		
64P	24/7/5	77DU	359	632155	6594733	14	27	1		
64P	24/7/6	77DU	360	640029	6595166	14	27	2		
64P	24/7/6	77DU	361	640029	6595166	14	27	1		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64P	24/7/7	77DU		634583	6588957	14	27			
64P	24/7/8	77DU	362	637239	6587250	14	27	1		
64P	24/7/9	77DU	363	629947	6583109	14	27	1		
64P	24/7/10	77DU	364	627871	6585206	14	27	1		
64P	24/7/11	77DU	365	621637	6586384	14	27	1		
64P	24/7/12	77DU		616457	6582975	14	27			
64P	24/7/13	77DU		617061	6581004	14	27			
64P	8/7/1	77DU	366	638203	6564659	14	27			
64P	8/7/1	77DU	367	638203	6564659	14	27			
64P	8/7/1	77DU	368	638203	6564659	14	27			
64P	8/7/1	77DU	369	638203	6564659	14	27			
64P	25/7/1	77DU	370	586431	6566731	14	27			
64P	25/7/1	77DU	371	586431	6566731	14	27	1		
64P	25/7/1	77DU	372	586431	6566731	14	27	1		
64P	25/7/2	77DU	373	587653	6558070	14	27	1	100	0
64P	25/7/2	77DU	375	587653	6558070	14	27			
64P	25/7/3	77DU	376	605509	6567612	14	27			
64P	25/7/4	77DU	377	599410	6555645	14	27	1		
64P	25/7/5	77DU	378	605291	6557246	14	27	4		
64P	25/7/6	77DU	379	614882	6548207	14	27	2		
64P	25/7/7	77DU	380	604837	6549516	14	27	3		
64P	25/7/8	77DU	381	602480	6546655	14	27	2		
64P	25/7/9	77DU	382	596098	6544197	14	27	2		
64P	25/7/10	77DU	383	607415	6558541	14	27			
64P	25/7/11	77DU		610966	6556029	14	27			
64P	27/7/1	77DU	384	607937	6622075	14	27	1		
64P	27/7/2	77DU	385	583459	6620958	14	27	2		
64P	27/7/3	77DU	386	580646	6619510	14	27	1		
64P	27/7/3	77DU	387	580588	6619534	14	27	1		
64P	27/7/4	77DU	388	572858	6620275	14	27	1	100	0
64P	27/7/5	77DU	390	583951	6617290	14	27	2		
64P	27/7/6	77DU	391	600393	6615306	14	27	2		
64P	27/7/6	77DU	392	600393	6615306	14	27	2		
64P	27/7/7	77DU	393	604213	6608941	14	27	1		
64P	27/7/8	77DU	394	587894	6612353	14	27	1		
64P	27/7/8	77DU	395	587913	6612341	14	27	2		
64P	27/7/9	77DU	396	581758	6612353	14	27			
64P	27/7/9	77DU	397	581729	6612288	14	27	1		
64P	27/7/10	77DU	398	579568	6603162	14	27	1		
64P	27/7/11	77DU	399	587470	6603328	14	27	1		
64P	27/7/11	77DU	400	587470	6603328	14	27	2		
64P	27/7/12	77DU	401	604690	6603887	14	27			
64P	27/7/13	77DU	402	590200	6595512	14	27	2		
64P	27/7/14	77DU		571829	6597211	14	27			
64P	30/7/1	77DU	433	557856	6562978	14	27			
64P	30/7/2	77DU	434	556942	6554113	14	27			
64P	30/7/3	77DU		556860	6556658	14	27			
64P	30/7/4	77DU		561154	6547232	14	27			
64P	30/7/5	77DU	435	572742	6550199	14	27	1		
64P	30/7/6	77DU	436	569165	6559694	14	27	2		
64P	30/7/7	77DU	437	572018	6563250	14	27	4		

NTS	Site	Yr	Sample	East	North	Zone	NAD	Carbonate (%)	Pebble Lithology	
									%PC	%Pal
64P	30/7/7	77DU	438	572018	6563250	14	27	1		
64P	30/7/8	77DU	439	578207	6554261	14	27	1		
64P	30/7/9	77DU	440	584325	6544392	14	27	1		
64P	30/7/10	77DU	441	586501	6556554	14	27	4		
64P	30/7/10	77DU	442	586501	6556554	14	27	2		
64P	2/8/1	77DU	450	614690	6631913	14	27	3		
64P	2/8/2	77DU	451	615752	6644575	14	27	2		
64P	2/8/3	77DU	452	615670	6651259	14	27	1		
64P	2/8/4	77DU	453	634443	6644817	14	27			
64P	2/8/5	77DU	454	632373	6638172	14	27	2		
64P	2/8/6	77DU	455	623937	6639770	14	27	2		
64P	2/8/7	77DU		621157	6638464	14	27			
64P	2/8/8	77DU		619143	6632428	14	27			

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
54E	25/6/4	78DU	29	356417	6388298	15	27	2	22	29	70	4.0	2	570	58	17	1.2	120	
54E	25/6/7	78DU	31	417112	6382208	15	27	5	19	35	64	3.7	2	730	50	17	2.9	100	
54E	28/6/8	78DU	48	382783	6424167	15	27	14	17	40	74	5.5	2	1600	55	20	0.6	135	
54E	28/6/6	78DU	53	399579	6412203	15	27	6	17	39	63	4.4	2	700	47	18	1.3	115	
54E	7/2/02	78DU	88	403232	6360788	15	27	5	18	44	72	4.9	2	615	65	15	0.8	120	
54E	7/2/04	78DU	90	408485	6364339	15	27	4	17	39	76	4.4	1	550	55	16	0.8	105	
54E	7/2/05	78DU	91	410719	6348257	15	27	6	16	54	84	4.6	2	520	48	16	0.8	115	
54E	7/2/06	78DU	94	420101	6356271	15	27	6	16	36	64	4.0	2	500	50	17	2.1	135	
54E	7/9/02	78DU	139	391402	6386662	15	27	6	17	35	74	4.0	2	540	50	17	7.0	109	
54E	7/9/02	78DU	143	391402	6386662	15	27	6	16	40	74	4.2	3	580	52	18	1.5	120	
54E	7/9/04	78DU	147	407431	6396190	15	27	6	17	45	70	4.6	2	480	48	17	3.1	130	
54E	7/10/02	78DU	150	342546	6416138	15	27	6	18	40	74	4.0	2	760	55	15	1.2	112	
54E	7/10/08	78DU	161	384808	6429178	15	27	6	20	39	73	4.1	3	765	55	17	2.5	120	
54E	13/7/2	78DU	184	368140	6393169	15	27	9	17	54	82	5.4	2	610	60	16	1.3	119	
54E	13/7/3	78DU	185	375952	6394805	15	27	7	17	36	68	3.8	2	700	50	17	1.3	105	
54E	13/7/4	78DU	195	377333	6403152	15	27	6	20	47	69	4.3	4	600	56	17	1.0	120	
54E	13/7/5	78DU	196	375071	6405897	15	27	3	20	27	70	3.9	2	440	56	18	0.7	115	
54E	13/7/8	78DU	199	378190	6426372	15	27	6	21	26	66	3.8	2	445	60	20	0.7	128	
54E	14/7/5	78DU	203	408013	6376852	15	27	5	22	33	78	4.2	2	480	64	12	1.1	120	
54E	14/7/7	78DU	204	398193	6383351	15	27	7	15	43	72	4.0	2	625	58	19	0.7	95	
54E	21/7/1	78DU	295	361306	6376225	15	27	7	15	34	80	4.0	2	525	58	16	0.6	110	
54E	21/7/2	78DU	296	370531	6372517	15	27	6	14	40	72	3.8	2	750	50	16	1.0	105	
54E	21/7/4	78DU	299	357641	6360362	15	27	5	14	38	70	3.7	2	775	56	16	0.8	110	
54E	21/7/5	78DU	307	355544	6351971	15	27	6	17	32	66	3.6	2	925	54	17	1.0	100	
54E	21/7/5	78DU	308	355544	6351971	15	27	7	17	31	68	3.6	2	745	50	16	1.9	105	
54E	21/7/6	78DU	309	358533	6349449	15	27	6	13	33	68	3.4	3	600	48	16	1.7	100	
54E	21/7/6	78DU	311	358547	6349500	15	27	6	16	33	68	3.6	2	900	48	16	2.1	105	
54E	21/7/6	78DU	312	358547	6349500	15	27	6	14	32	50	3.4	2	600	38	16	2.9	93	
54E	21/7/6	78DU	313	358547	6349500	15	27	6	11	32	46	3.4	2	600	34	13	2.2	95	
54E	21/7/7	78DU	317	368925	6362220	15	27	5	10	28	54	3.2	2	480	32	13	2.9	93	
54E	21/7/8	78DU	319	368925	6362220	15	27	5	14	36	66	3.6	1	650	46	12	0.9	95	
54E	21/7/10	78DU	323	386644	6359158	15	27	5	22	30	80	4.0	2	450	60	13	1.1	110	
54E	24/7/1	78DU	347	345429	6394783	15	27	4	15	28	56	3.7	2	760	38	17	3.4	116	
54E	24/7/1	78DU	349	345429	6394783	15	27	8	13	27	42	2.8	3	600	38	17	2.3	93	
54E	24/7/1	78DU	351	345429	6394783	15	27	7	13	26	44	3.0	2	610	32	17	1.4	100	
54E	24/7/4	78DU	354	323702	6393871	15	27	7	13	30	60	3.5	2	610	40	16	1.9	105	
54E	21/7/5	78DU	356	324235	6382405	15	27	6	16	32	66	3.9	2	535	56	15	1.4	120	
54E	24/7/9	78DU	359	330855	6357377	15	27	5	10	28	48	3.0	3	670	36	17	2.1	100	
54E	24/7/9	78DU	361	330855	6357377	15	27	4	10	28	50	3.7	3	535	36	17	3.2	120	
54E	26/7/1	78DU	385	390713	6335898	15	27	5	13	36	70	3.9	2	670	50	15	1.2	120	
54E	26/7/2	78DU	387	385708	6325480	15	27	6	18	38	88	3.8	2	645	54	16	1.0	100	
54E	26/7/6	78DU	392	417851	6336080	15	27	7	13	43	84	4.2	4	550	50	17	0.9	100	
54E	26/7/9	78DU	394	428779	6333261	15	27	5	13	39	78	3.7	4	745	46	19	1.2	110	
54E	28/7/7	78DU	417	354296	6336235	15	27	6	14	32	74	3.4	3	700	40	12	1.0	95	
54E	28/7/8	78DU	423	359522	6339512	15	27	6	14	34	76	3.6	3	850	44	13	1.7	93	
54E	28/7/8	78DU	427	359522	6339512	15	27	6	14	31	58	3.3	3	575	44	13	2.9	110	
54E	31/7/3	78DU	451	428051	6359010	15	27	6	16	36	70	3.7	3	700	46	17	1.9	100	
54E	31/7/4	78DU	454	426057	6357247	15	27	2	16	32	64	3.7	3	750	46	17	0.9	115	
54E	31/7/5	78DU	458	424579	6358072	15	27	4	17	31	62	3.4	3	945	54	16	1.1	110	
54F	26/6/5	78DU	36	465090	6349057	15	27	8	18	51	70	4.3	2	515	57	17	0.9	120	
54F	7/1/04	78DU	84	489266	6403986	15	27	7	13	33	37	2.8	2	380	36	16	2.9	95	
54F	23/7/6	78DU	345	449073	6349747	15	27	8	12	36	54	3.6	2	525	40	17	1.1	95	
54F	27/7/3	78DU	396	451921	6333089	15	27	9	15	30	82	4.0	2	500	50	17	0.9	110	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
54F	27/7/4	78DU	398	461149	6335915	15	27	12	16	49	80	4.1	5	490	54	20	1.1	100	
54F	27/7/7	78DU	399	465047	6318260	15	27	5	15	27	66	3.2	4	725	44	14	0.9	95	
54F	29/7/8	78DU	437	521461	6318939	15	27	4	11	27	56	3.0	4	525	36	15	1.4	87	
54F	29/7/8	78DU	439	521461	6318939	15	27	4	11	30	64	3.2	3	560	34	17	2.2	93	
54K	8/1/03	78DU	471	442935	6446959	15	27	5	15	29	70	3.6	4	790	46	19	1.5	105	
54K	8/1/04	78DU	473	453218	6455846	15	27	2	11	22	50	2.6	3	550	34	14	0.9	85	
54L	29/6/5	78DU	58	353100	6536100	15	27		47	52	80	8.1	6	2400	43	32		95	
54L	29/6/6	78DU	59	334600	6540800	15	27	3	28	17	142	3.4	1	700	300	14	2.1	55	
54L	29/6/9	78DU	65	348440	6529000	15	27		18	42	74	4.5	2	580	53	17	4.5	110	
54L	30/6/2	78DU	68	349820	6513800	15	27	8	22	40	64	4.2	4	800	55	22	5.0	110	
54L	30/6/4	78DU	71	348620	6518500	15	27	5	19	40	70	4.5	2	520	54	18	1.7	120	
54L	30/6/9	78DU	74	383800	6501000	15	27	7	17	35	92	6.2	2	370	63	11	2.8	85	
54L	7/4/02	78DU	103	430000	6448000	15	27	5	17	40	80	3.9	2	590	50	15	1.4	108	
54L	7/4/03	78DU	105	430400	6454200	15	27	4	14	29	56	3.2	4	450	44	17	2.5	99	
54L	7/4/04	78DU	109	430200	6461400	15	27	5	16	39	72	3.8	2	480	50	17	3.7	105	
54L	7/4/05	78DU	110	429980	6471500	15	27	4	16	34	69	3.6	2	660	50	17	1.5	105	
54L	7/4/07	78DU	114	423900	6467600	15	27	5	18	38	70	3.9	1	660	52	17	2.5	110	
54L	7/6/03	78DU	123	417600	6447900	15	27	4	18	40	80	4.5	2	590	55	17	3.2	115	
54L	7/6/05	78DU	128	393600	6438600	15	27	5	19	39	76	4.0	2	700	55	16	1.6	108	
54L	7/7/01	78DU	129	360200	6491200	15	27	5	16	45	72	4.3	2	60	53	22	2.9	100	
54L	7/7/01	78DU	131	360200	6491200	15	27	5	18	35	89	4.7	3	540	63	22	2.8	122	
54L	7/11/02	78DU	164	342100	6449000	15	27	4	15	34	83	4.6	2	610	55	16	1.6	125	
54L	7/11/03	78DU	165	325500	6588000	15	27	4	20	25	84	4.4	2	540	63	20	1.6	135	
54L	7/11/04	78DU	166	326600	6442800	15	27	7	17	38	78	4.9	3	650	62	20	1.5	130	
54L	7/11/05	78DU	167	340800	6444000	15	27	7	17	28	82	4.5	2	660	58	18	1.0	130	
54L	7/11/06	78DU	168	347600	6438400	15	27	6	20	38	80	4.8	2	760	68	19	0.8	130	
54L	7/11/07	78DU	170	351000	6444500	15	27	4	14	45	70	4.4	2	470	48	19	1.2	119	
54L	16/7/2	78DU	222	354800	6487100	15	27	12	16	27	56	4.4	1	950	56	19	1.9	110	
54L	16/7/4	78DU	224	323500	6483800	15	27	8	16	43	70	4.3	1	545	64	20	1.9	105	
54L	16/7/6	78DU	228	323000	6460500	15	27	5	17	36	70	4.0	2	550	52	17	1.0	110	
54L	16/7/8	78DU	231	379900	6472700	15	27	8	15	34	64	3.6	2	700	40	17	1.2	100	
54L	18/7/12	78DU	250	418400	6471600	15	27	5	10	26	48	2.6	3	700	34	19	1.4	85	
54L	19/7/2	78DU	257	329200	6472200	15	27	5	16	36	64	3.8	2	850	52	19	2.4	105	
54L	19/7/3	78DU	261	330600	6474500	15	27	6	14	43	70	4.2	2	475	44	19	2.9	110	
54L	19/7/7	78DU	270	365200	6478200	15	27	4	15	35	62	3.8	2	700	48	9	1.0	105	
54L	19/7/8	78DU	272	378800	6484100	15	27	4	16	37	64	3.6	2	775	50	15	1.9	100	
54L	19/7/9	78DU	275	385900	6487200	15	27	5	14	34	64	3.7	3	625	46	15	2.2	110	
54L	19/7/10	78DU	276	393200	6488600	15	27	5	15	36	68	4.0	2	775	56	17	3.0	110	
54L	31/7/8	78DU	464	418400	6452600	15	27	5	17	31	70	3.8	4	925	48	16	0.3	95	
54L	31/7/8	78DU	465	418400	6452600	15	27	5	14	27	60	3.0	4	750	38	16	1.8	90	
54M	21/6/3	77DU	18	366596	6630085	15	27	6	39	68	62	4.5	3	730	62	14	5.2	68	
54M	21/6/3	77DU	18	366596	6630085	15	27		16	35	34	4	6	575	21	11	1.3	130	
54M	21/6/5	77DU	21	359659	6546808	15	27		14	45	41	1.9	2	225	21	8	3.6	80	
54M	21/6/5	77DU	22	359659	6546808	15	27		15	43	67	4.3	5	335	38	12	1.4	105	
54M	7/6/02	77DU	201	364201	6564250	15	27		20	100	82	5.3	3	565	57	17	2.8	160	
54M	7/6/03	77DU	202	377774	6564686	15	27		15	123	169	2	15	115	62	8		39	
54M	7/6/05	77DU	203	391782	6561567	15	27		19	65	67	5.2	3	700	40	21	6.5	135	
54M	7/6/05	77DU	204	391782	6561567	15	27		14	36	88	3.3	5	380	38	10	3.6	100	
54M	7/6/06	77DU	205	394503	6561502	15	27		20	45	71	3.9	2	460	52	21	2.6	115	
54M	7/9/01	77DU	226	366961	6599065	15	27		17	74	44	3.3	5	875	25	18	4.6	83	
54M	7/9/02	77DU	228	382857	6598033	15	27		11	44	37	2.8	4	225	20	14	1.3	83	
54M	7/9/05	77DU	230	372069	6592223	15	27		16	140	67	6	5	580	48	20	5.6	188	
54M	7/9/06	77DU	231	358331	6595243	15	27		22	104	101	4.4	4	1200	39	28		97	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
54M	7/10/01	77DU	238	335373	6608126	15	27		15	30	72	4.3	3	270	36	14	5.3	100	
54M	7/10/03	77DU	239	341452	6609698	15	27		10	30	50	2.7	3	210	30	11	2	73	
54M	7/10/04	77DU	240	348976	6610775	15	27		15	105	75	4.3	4	730	35	16	5.1	90	
54M	7/11/01	77DU	241	338388	6574013	15	27		15	40	77	4.1	6	480	44	21	2.3	138	
54M	7/11/02	77DU	242	334608	6583337	15	27		7	39	31	2.5	4	200	16	16	7.7	55	
54M	7/11/03	77DU	244	354054	6607997	15	27		21	137	74	4.1	4	550	49	11	1.3	90	
54M	7/11/04	77DU	246	356344	6618433	15	27		27	225	101	6.3	8	750	93	24	13.3	245	
54M	7/11/05	77DU	247	352698	6619990	15	27		16	48	44	4.4	6	390	29	10	3.3	135	
54M	7/11/06	77DU	248	354473	6625366	15	27		23	88	70	3.1	7	540	38	10		111	
54M	7/11/06	77DU	249	354473	6625366	15	27		38	108	105	6	15	970	85	17	4.2	153	
54M	7/11/07	77DU	250	345732	6625822	15	27		17	91	53	3.2	5	378	52	10		103	
54M	7/11/07	77DU	251	345802	6625800	15	27		21	81	76	4.2	8	551	70	19	0	95	
54M	7/11/08	77DU	252	336258	6597693	15	27		10	33	35	2.5	2	200	25	10	1.1	65	
54M	21/7/2	77DU	323	388616	6612621	15	27		12	40	36	2.6	5	340	29	17	2.6	103	
54M	21/7/3	77DU	324	395631	6609767	15	27		19	187	483	4.5	6	323	194	13		78	
54M	21/7/5	77DU	326	383427	6606249	15	27		10	52	32	2.6	3	350	24	13		68	
54M	21/7/6	77DU	329	381778	6605959	15	27		11	45	80	4.8	11	375	43	18	2.5	90	
54M	21/7/8	77DU	332	361816	6604020	15	27		18	70	67	3.4	4	1021	26	19		71	
54M	21/7/8	77DU	332	361816	6604020	15	27		18	198	73	3.9	4	541	48	20		110	
54M	21/7/9	77DU	333	373509	6616428	15	27		12	54	34	4.1	8	411	17	33		96	
54M	21/7/10	77DU	335	373009	6622032	15	27		18	60	50	4.1	4	650	37	34	10.5	125	
54M	21/7/10	77DU	336	373034	6622019	15	27		16	40	52	3.2	3	570	25	21	3.6	95	
54M	21/7/11	77DU	337	369681	6620382	15	27		10	35	35	3.4	6	300	25	14	6.4	84	
54M	21/7/13	77DU	338	359330	6616203	15	27		8	37	68	1.9	6	190	28	21	2.3	65	
54M	28/7/1	77DU	403	330341	6560202	15	27		16	35	75	3.6	4	570	48	15	4.1	84	
54M	28/7/5	77DU	405	354816	6565647	15	27		7	55	64	2.6	7	146	25	36		56	
54M	28/7/6	77DU	406	355162	6569890	15	27		16	74	54	5.8	4	575	36	15	1.8	175	
54M	28/7/6	77DU	407	355162	6569890	15	27		13	44	47	3.7	3	550	35	13	1.5	88	
54M	28/7/8	77DU	408	348265	6553304	15	27		10	28	43	3.8	2	275	27	8		68	
54M	28/7/9	77DU	409	342830	6550046	15	27		33	88	135	5.9	4	1040	213	22		164	
54M	28/7/10	77DU	411	333501	6549151	15	27		12	33	65	3.8	3	385	43	13	3.1	73	
64I	20/6/1	77DU	1	582167	6526653	14	27	7	10	22	42	2.9	2	200	30	14	3.1	65	
64I	20/6/6	77DU	12	669293	6465789	14	27	19	18	38	74	4.4	1	445	52	20	7.6	120	
64I	22/6/3	77DU	27	639345	6445451	14	27	4	15	30	4	3.2	1	500	46	13	1.6	96	
64I	22/6/4	77DU	28	645540	6444451	14	27	3	16	32	62	3.2	2	580	47	13	1.8	76	
64I	22/6/4	77DU	28	645629	6444476	14	27	15	18	46	70	4.6	1	590	48	19	1.5	100	
64I	22/6/5	77DU	30	629190	6434143	14	27	9	14	53	62	4.9	1	440	44	17	1.6	100	
64I	22/6/10	77DU	31	624498	6449254	14	27	4	13	28	61	3.4	1	420	40	12	1.2	82	
64I	22/6/12	77DU	33	644750	6445181	14	27	5	14	32	49	3.1	1	480	41	14	1.7	79	
64I	22/6/12	77DU	34	644750	6445181	14	27	5	16	36	69	3.8	1	460	48	14	0.9	86	
64I	22/6/12	77DU	34	644750	6445181	14	27	8	18	51	74	5.1	1	1000	58	23	2.4	120	
64I	22/6/13	77DU	36	643111	6439981	14	27	6	14	34	74	3.6	1	460	54	11	0.8	104	
64I	23/6/2	77DU	41	665200	6486000	14	27	3	15	34	60	3.3	2	450	49	11	1.6	85	
64I	23/6/3	77DU	42	669286	6478342	14	27	13	13	56	68	4.5	1	535	50	18	1.5	100	
64I	23/6/3	77DU	43	669520	6478116	14	27	5	17	31	65	3.8	1	360	55	14	0.7	104	
64I	23/6/4	77DU	45	660304	6463204	14	27	12	15	34	70	3.7	1	440	48	19	1.4	110	
64I	23/6/4	77DU	46	660304	6463204	14	27	6	16	32	60	3.4	1	480	51	15	1.1	85	
64I	23/6/12	77DU	51	667519	6465546	14	27	11	15	43	68	4.4	1	590	52	17	2.2	100	
64I	6/5/02	77DU	62	588459	6488209	14	27	8	14	45	66	4.4	1	500	52	17	1.9	128	
64I	26/6/2	77DU	66	560138	6528294	14	27	2	7	19	24	1.6	1	150	18	10	2.6	45	
64I	26/6/3	77DU	69	570825	6519432	14	27		6	24	36	3.2	5	140	18	20		60	
64I	26/6/4	77DU	75	581825	6517386	14	27	19	5	81	44	17.6	27	160	10	33	3.8	50	
64I	26/6/5	77DU	77	582564	6530730	14	27	7	14	46	54	3.7	3	520	30	20	6.0	70	



NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
64I	7/1/03	77DU	133	626034	6500526	14	27	8	21	36	52	4.7	3	750	38	20	1.9	94	
64I	7/1/05	77DU	135	639234	6504686	14	27	8	20	35	72	5.1	1	410	48	14	1.6	80	
64I	9/2/01	77DU	137	563147	6506697	14	27	4	14	58	52	4.7	3	330	30	15	5.8	78	
64I	2/7/2B	77DU	142	561698	6485533	14	27	3	15	68	40	4.0	1	420	48	13	2.0	93	
64I	7/2/03	77DU	144	568667	6502763	14	27	3	17	60	50	5.2	3	410	34	15	3.3	90	
64I	9/2/01	77DU	146	563145	6506569	14	27	4	6	27	39	4.3	3	200	16	18	1.4	47	
64I	7/2/05	77DU	150	577871	6502328	14	27	8	16	60	44	4.2	2	460	36	24	3.1	75	
64I	7/5/02	77DU	188	595965	6514057	14	27	3	14	34	44	3.8	1	500	33	12	1.7	95	
64I	7/5/03	77DU	190	589684	6516304	14	27	9	6	31	28	3.0	1	180	22	15	1.0	30	
64I	7/5/04	77DU	192	597714	6521664	14	27	5	12	23	35	3.2	2	260	24	111	0.5	53	
64I	7/5/06	77DU	194	611534	6530805	14	27	4	27	60	64	4.9	1	875	46	18	3.5	110	
64I	7/5/08	77DU	196	590663	6533380	14	27	4	12	28	46	3.4	1	290	24	16	2.6	64	
64I	7/5/10	77DU	198	594501	6539766	14	27	5	9	23	34	3.5	2	390	14	14	4.0	90	
64I	14/7/3	77DU	255	673856	6501908	14	27	16	25	51	62	3.9	1	325	64	28	4.0	83	
64I	14/7/5	77DU	256	665093	6499999	14	27	6	14	41	42	2.7	1	400	32	13	2.5	45	
64I	14/7/8	77DU	259	654664	6500185	14	27	19	30	37	62	3.9	1	615	52	18	3.0	70	9
64I	15/7/8	77DU	274	646906	6458833	14	27	9	16	54	66	4.7	1	825	42	16	1.2	120	
64I	17/7/1	77DU	290	615553	6477696	14	27	7	16	31	62	4.2	1	560	46	17	1.7	97	
64I	17/7/3	77DU	294	623616	6473536	14	27	13	15	56	64	4.9	1	430	46	20	1.5	125	
64I	17/7/9	77DU	307	633268	6475549	14	27	9	16	49	58	4.4	1	570	42	18	1.4	120	
64I	18/7/2	77DU	310	668484	6521742	14	27	18	14	45	54	6.4	5	540	46	28	2.3	80	
64I	18/7/4	77DU	311	658734	6532166	14	27	252	27	106	42	7.7	2	900	37	29	3.6	54	87
64I	18/7/6	77DU	315	656624	6535335	14	27	32	20	43	44	6.4	3	340	30	2	4.0	50	
64I	20/7/3	77DU	319	656124	6540473	14	27	17	21	63	44	4.2	1	510	36	14	3.6	78	
64I	29/7/1	77DU	412	622140	6519338	14	27	40	24	79	54	5.5	2	415	34	16	3.5	84	
64I	29/7/2	77DU	414	615839	6517801	14	27	6	18	43	54	4.6	1	575	36	18	3.3	125	
64I	29/7/3	77DU	415	619760	6527078	14	27		8	34	30	2.2	1	300	19	34		72	
64I	29/7/4	77DU	416	617080	6529655	14	27	7	17	78	48	5.2	2	350	30	18	5.9	100	5
64I	29/7/5	77DU	418	597676	6531945	14	27	3	13	32	40	2.5	1	515	28	10	1.8	80	
64I	29/7/6	77DU	425	616939	6533153	14	27	5	17	55	78	5.9	1	600	40	18	8.1	195	
64I	29/7/10	77DU	428	631790	6523688	14	27	23	17	46	72	4.9	1	760	42	18	6.0	105	
64I	29/7/11	77DU	430	637409	6515378	14	27		31	52	68	4.8	2	2750	52	15	3.1	105	
64I	29/7/12	77DU	431	643291	6528891	14	27	17	12	42	56	8.4	6	300	24	14	3.0	50	
64I	29/7/13	77DU	432	641548	6539316	14	27	22	13	44	60	4.8	2	300	30	16	3.0	85	
64I	31/7/2	77DU	445	566334	6466471	14	27	7	12	39	66	4.3	1	400	46	18	0.8	110	
64I	31/7/3	77DU	446	580333	6464444	14	27	5	18	26	44	3.2	2	1500	34	18	2.1	75	
64I	31/7/4	77DU	447	591451	6466547	14	27	6	14	28	56	4.2	1	550	32	18	2.2	100	
64I	31/7/5	77DU	448	607996	6482677	14	27	8	15	28	56	4.2	1	575	36	17	0.9	105	
64I	8/5/01	77DU	462	630506	6487448	14	27	6	14	34	58	4.4	1	500	36	14	1.8	115	
64I	8/6/01	77DU	466	632912	6487678	14	27	8	16	34	64	4.4	3	570	40	18	2.2	90	
64I	8/6/02	77DU	470	634713	6487205	14	27	5	16	40	66	4.0	2	450	48	17	2.1	110	
64I	8/7/01	77DU	471	635474	6487369	14	27	6	15	38	68	4.2	2	590	56	18	1.4	100	
64I	8/7/02	77DU	474	637631	6487831	14	27	7	12	42	56	4.4	2	400	46	18	2.2	123	
64I	8/8/09	77DU	485	647749	6487392	14	27	7	13	38	72	4.6	2	375	44	22	6.4	120	
64I	8/9/01	77DU	489	650394	6486873	14	27	8	14	53	56	4.5	2	700	38	20	1.2	0	
64I	8/9/05	77DU	491	654857	6488433	14	27	8	16	40	76	4.4	1	550	58	16	4.4	120	
64I	8/9/08	77DU	492	656752	6493236	14	27	5	13	34	50	4.3	2	350	36	17	2.6	125	
64I	8/9/10	77DU	493	656381	6494233	14	27	5	13	21	56	3.3	1	560	38	13	1.0	80	
64I	8/9/12	77DU	494	656308	6494983	14	27	16	16	65	62	6.0	2	600	46	18	1.2	95	42
64I	8/9/14	77DU	499	658100	6497306	14	27	24	19	65	48	6.7	3	975	44	22	1.5	115	
64I	8/10/03	77DU	500	659985	6497491	14	27		9	32	32	2.2	2	245	24	13	3.2	34	
64I	8/10/05	77DU	502	662133	6497440	14	27	7	17	49	64	4.6	2	400	48	24	4.1	125	
64I	8/12/01	77DU	507	673936	6495218	14	27	5	15	39	72	4.2	1	550	56	18	1.3	128	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
64I	8/12/01	77DU	508	673936	6495218	14	27	11	22	67	68	4.4	1	850	52	20	0.7	110	
64J	7/4/02	80DU	9	546285	6456662	14	27	5	15	29	62	4.3	1	620	39	14	1.4	120	
64J	7/4/04	80DU	13	509836	6524553	14	27	2	10	20	43	2.2	2	325	29	16	3.2	78	
64J	7/4/06	80DU	14	445753	6494031	14	27	4	11	14	42	2.7	2	310	25	16	3.0	72	
64J	7/6/02	80DU	25	461829	6483340	14	27	3	14	24	72	4.4	2	315	33	16	3.8	120	
64J	7/6/03	80DU	26	470081	6479738	14	27	6	14	15	93	4.6	4	285	53	20	1.8	83	
64J	7/6/05	80DU	29	473426	6472936	14	27	6	14	30	64	5.0	4	365	36	24	5.6	100	
64J	7/6/09	80DU	32	473318	6460079	14	27	14	21	34	71	4.9	4	1400	43	23	4.6	90	
64J	7/8/07	80DU	50	460420	6447407	14	27	7	12	25	58	3.8	4	330	34	22	4.4	71	
64J	7/8/09	80DU	52	450353	6466794	14	27	5	14	26	68	4.7	3	520	40	23	8.5	112	
64J	7/9/01	80DU	53	511152	6501440	14	27	3	14	26	54	3.9	2	540	33	14	3.4	112	
64J	7/9/04	80DU	57	554054	6488424	14	27	5	22	24	50	3.6	3	590	42	17	1.6	85	
64J	7/9/05	80DU	58	544071	6485643	14	27	6	18	46	51	4.7	2	660	43	20	4.6	98	
64J	7/9/06	80DU	59	530693	6487966	14	27	3	18	27	62	5.3	5	865	35	18	4.5	150	
64J	7/9/08	80DU	61	505483	6494706	14	27	4	14	44	66	4.2	8	400	37	28	6.3	98	
64J	14/7/3	80DU	87	518242	6443147	14	27	4	18	41	66	4.3	4	535	48	17	1.3	138	
64J	14/7/6	80DU	93	538098	6441844	14	27	4	18	26	60	4.0	4	645	40	16	2.5	98	
64J	14/7/7	80DU	95	552179	6441748	14	27	7	16	30	67	4.7	4	720	43	16	2.5	100	
64J	16/7/1	80DU	113	556737	6464238	14	27	4	15	23	56	3.8	2	860	37	14	0.7	105	
64J	16/7/5	80DU	118	517263	6464922	14	27	7	16	36	74	4.9	2	700	38	21	10.2	105	
64J	17/7/2	80DU	125	472394	6533241	14	27	2	8	25	54	3.7	6	255	25	32	5.6	80	
64J	17/7/3	80DU	126	467946	6524761	14	27	3	14	35	54	4.3	5	580	36	20	5.7	88	
64J	17/7/4	80DU	128	485135	6523110	14	27	2	15	28	53	3.8	4	520	32	14	2.2	113	
64J	17/7/5	80DU	129	493490	6530135	14	27	3	12	15	47	2.7	4	450	30	14	2.2	52	
64J	17/7/7	80DU	131	498367	6513224	14	27	3	18	34	72	4.9	4	740	40	14	3.6	160	
64J	17/7/7	80DU	133	498367	6513224	14	27	4	17	29	70	4.1	4	650	39	14	1.4	130	
64J	17/7/8	80DU	134	488119	6513205	14	27	12	13	98	67	7.9	16	280	44	40	4.1	92	
64J	28/7/2	80DU	153	533542	6534434	14	27	2	9	14	33	1.9	3	340	22	11	2.6	55	
64J	28/7/3	80DU	154	540819	6535328	14	27		9	10	34	1.8	3	315	22	10	1.2	50	
64J	28/7/4	80DU	155	546458	6523572	14	27		10	14	36	2.0	2	370	25	12		40	
64J	28/7/5	80DU	157	555057	6512384	14	27	4	16	24	63	3.6	3	450	43	13	1.0	100	
64J	28/7/7	80DU	158	545251	6519249	14	27	3	16	19	42	2.5	2	640	30	11	1.4	69	
64J	28/7/8	80DU	159	540264	6520336	14	27	4	17	21	62	4.3	4	420	35	18	3.0	90	
64J	28/7/11	80DU	161	460951	6516395	14	27	6	19	14	50	3.6	4	400	42	22	6.0	125	
64J	28/7/12	80DU	162	480288	6509771	14	27	4	20	37	102	4.8	4	470	40	16	2.9	90	
64J	8/1/13	80DU	184	444896	6486843	14	27	5	13	28	43	3.2	3	450	25	12	5.3	69	
64J	8/1/15	80DU	185	457152	6483447	14	27	4	17	40	70	4.8	2	640	52	12	3.7	93	
64J	8/6/09	80DU	241	497116	6485309	14	27	9	26	37	69	5.0	3	820	44	20	3.7	88	
64J	8/7/01	80DU	243	500283	6494286	14	27	13	17	32	62	5.0	2	580	38	23	10.2	90	
64J	8/7/02	80DU	245	499303	6509062	14	27	11	17	33	69	6.0	2	520	35	24	7.7	100	
64J	8/7/03	80DU	248	478500	6499200	14	27	3	18	36	66	5.1	2	740	24	12	5.4	85	
64K	20/6/3	80DU	1	433925	6489776	14	27		10	12	56	2.1	4	300	38	12	2.0	60	
64K	13/7/2	80DU	5	392544	6468747	14	27	2	4	7	22	1.2	2	140	16	9	1.9	18	
64K	7/3/03	80DU	6	411290	6476632	14	27	2	7	8	26	1.4	4	235	20	14	1.7	32	
64K	7/3/04	80DU	7	424379	6485119	14	27		16	14	30	2.9	4	1450	26	11	4.0	70	
64K	7/5/01	80DU	16	420912	6461843	14	27		3	6	23	1.0	1	150	16	7	1.4	17	
64K	7/5/06	80DU	21	393988	6481918	14	27	2	6	8	22	1.0	1	165	18	14	1.7	23	
64K	7/5/07	80DU	22	413772	6494081	14	27	3	5	8	46	2.5	3	90	25	19	2.9	30	
64K	7/5/08	80DU	23	419833	6503006	14	27		7	12	56	2.3	3	253	33	23		47	
64K	7/7/07	80DU	37	383907	6522414	14	27	3	12	19	48	2.7	2	360	30	15	2.0	70	
64K	7/7/09	80DU	40	403559	6501338	14	27	4	8	10	29	1.9	2	270	18	15	4.4	35	
64K	7/7/11	80DU	41	422242	6494264	14	27	3	7	10	38	2.6	3	325	21	18	6.5	49	
64K	7/10/01	80DU	62	381194	6452641	14	27	3	14	18	44	3.1	2	370	28	12	2.5	85	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
64K	7/10/03	80DU	64	381089	6467139	14	27	3	5	6	28	1.5	3	130	22	12	5.9	26	
64K	7/10/04	80DU	66	379933	6478689	14	27	3	18	90	57	4.1	4	380	46	40	39.0	93	
64K	7/10/06	80DU	68	375161	6498162	14	27		12	15	53	2.6	4	333	32	29		66	
64K	7/10/07	80DU	69	395252	6503166	14	27		7	24	38	1.5	3	175	30	10		35	
64K	7/10/08	80DU	71	414331	6506233	14	27	2	5	9	22	1.0	4	170	23	10	1.6	26	
64K	13/7/3	80DU	76	408065	6461652	14	27	4	7	11	36	2.2	4	230	25	13	3.1	49	
64K	13/7/10	80DU	83	440406	6459346	14	27	4	12	25	43	2.9	4	320	25	13	3.2	65	
64K	15/7/1	80DU	100	340781	6475223	14	27		6	8	35	2.3	4	200	20	14		36	
64K	15/7/2	80DU	101	327451	6462886	14	27		3	15	32	1.2	3	95	20	7	5.2	12	
64K	15/7/3	80DU	104	326556	6449905	14	27		4	10	64	4.1	6	130	24	17		35	
64K	15/7/4	80DU	105	343635	6459644	14	27	3	11	33	40	2.3	4	330	25	16	6.3	52	
64K	15/7/7	80DU	109	380471	6443129	14	27		5	14	93	1.9	5	164	74	11		27	
64K	15/7/9	80DU	110	370000	6480500	14	27	14	14	34	53	2.8	5	530	38	35	15.6	70	
64K	15/7/10	80DU	111	356874	6488372	14	27	6	7	11	50	3.1	3	200	20	14	4.9	39	
64K	5/1/03	80DU	174	334127	6486456	14	27		15	17	40	2.2	2	450	30	19		65	
64K	8/1/07	80DU	176	357006	6531327	14	27	2	10	13	31	1.8	2	225	20	9	1.4	30	
64K	8/1/08	80DU	177	361549	6531106	14	27	2	7	10	29	1.6	2	175	24	9	1.8	33	
64K	8/1/09	80DU	178	370735	6527119	14	27	3	12	24	43	2.9	2	345	28	12	4.1	75	
64K	8/1/11	80DU	180	355865	6512206	14	27	5	12	20	44	2.7	2	345	32	12	4.6	65	
64K	8/1/12	80DU	182	359513	6498320	14	27		9	55	58	2.8	5	260	38	15	7.6	50	
64K	3/6/02	80DU	234	430522	6530553	14	27	2	12	32	38	3.1	4	290	24	23	8.1	95	
64K	8/6/03	80DU	235	402499	6533975	14	27	3	4	15	39	4.0	4	150	13	23	6.6	95	
64K	8/6/14	80DU	236	410414	6516601	14	27	2	7	6	22	1.0	2	165	16	11	1.5	27	
64K	8/6/05	80DU	238	420153	6506036	14	27		7	23	82	3.9	7	360	53	46	5.8	76	
64N	8/2/02	80DU	188	426322	6571676	14	27	4	12	16	50	2.9	2	300	30	17	3.4	72	
64N	8/2/08	80DU	190	397306	6596045	14	27	6	16	47	50	3.1	2	340	40	26	35.0	50	
64N	8/2/09	80DU	191	412195	6585899	14	27	5	15	19	57	3.6	2	500	40	12	2.8	53	
64N	8/2/10	80DU	192	423131	6584597	14	27	4	12	8	41	1.9	2	260	28	12	2.6	40	
64N	8/3/02	80DU	197	407986	6616266	14	27	2	10	26	28	1.8	2	250	24	12	3.6	30	
64N	8/3/04	80DU	198	420363	6623271	14	27	2	10	21	36	2.1	2	370	24	14	3.6	45	
64N	8/3/06	80DU	199	412038	6651099	14	27	3	21	72	100	5.4	4	480	57	39	14.4	120	
64N	8/3/10	80DU	204	438200	6648200	14	27	5	13	25	54	2.4	2	340	36	22	5.1	50	
64N	8/3/13	80DU	207	435844	6636804	14	27	6	15	29	48	2.2	2	560	35	24	5.0	55	
64N	8/8/02	80DU	249	348784	6616932	14	27	2	12	38	57	2.4	2	345	36	12	5.1	60	
64N	8/8/06	80DU	252	334302	6628762	14	27		15	18	30	5.6	2	890	20	26	9.0	153	
64N	8/8/08	80DU	253	348282	6652473	14	27	3	15	31	48	4.3	4	680	29	23	6.9	92	
64N	8/8/09	80DU	254	353067	6642499	14	27	3	20	30	50	3.8	4	880	29	48	10.7	120	
64N	8/8/11	80DU	256	353987	6631807	14	27	3	14	20	50	2.4	2	520	35	15	5.5	45	
64N	8/9/02	80DU	265	371560	6573116	14	27	5	13	27	40	2.0	1	340	30	10	2.6	39	
64N	8/9/03	80DU	266	368307	6579714	14	27	4	10	20	49	2.2	3	255	33	12	5.6	30	
64N	8/9/04	80DU	267	359479	6582122	14	27	2	11	18	52	3.0	2	380	26	12	5.2	42	
64N	8/9/06	80DU	268	339481	6586416	14	27	5	14	91	89	4.5	4	265	60	42	24.0	85	
64N	8/9/07	80DU	269	333558	6586712	14	27	2	19	52	70	3.7	2	540	47	21	4.1	68	
64N	8/9/08	80DU	270	337574	6592528	14	27	3	11	33	65	3.7	3	340	35	23	7.5	59	
64N	8/9/12	80DU	271	373229	6588940	14	27	2	16	50	88	4.2	2	340	45	20	9.0	80	
64N	8/9/13	80DU	272	379064	6590404	14	27	29	17	39	63	3.2	4	310	55	20	4.8	58	
64N	8/9/14	80DU	273	385950	6587128	14	27	5	12	30	42	2.2	2	270	33	30	9.3	40	
64N	8/11/07	80DU	294	419365	6553610	14	27	2	7	12	28	1.9	3	180	18	18	4.8	50	
64N	8/12/01	80DU	296	369367	6648310	14	27	3	12	41	92	4.0	3	400	50	19	5.5	63	
64N	8/12/02	80DU	297	374412	6646367	14	27	3	18	34	67	3.1	3	610	50	15	2.7	70	
64N	8/12/04	80DU	298	375620	6649872	14	27	5	12	22	56	3.1	4	250	30	47	6.0	93	
64N	8/12/05	80DU	299	398841	6641770	14	27	3	37	280	142	6.7	6	530	137	31	8.1	145	
64N	8/12/06	80DU	301	409280	6631411	14	27	4	10	36	54	2.2	2	240	40	32	11.0	40	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
64N	8/12/08	80DU	302	393561	6629789	14	27		15	13	68	3.9	3	325	34	36	16.3	70	
64N	8/12/09	80DU	303	372489	6628582	14	27	2	18	85	72	4.1	3	500	50	19	3.5	90	
64N	8/12/10	80DU	305	365546	6642903	14	27	2	6	24	70	4.3	6	265	42	15	4.6	55	
64N	12/8/12A	80DU	306	354973	6646374	14	27	2	10	44	44	2.9	2	340	28	15	6.3	80	
64N	13/8/2	80DU	307	422670	6611207	14	27	3	17	59	72	3.4	2	310	57	18	2.6	97	
64N	13/8/5	80DU	312	401021	6619448	14	27	3	17	23	56	2.6	1	650	40	18	2.8	62	
64N	14/8/13	80DU	322	383648	6600842	14	27	4	10	30	38	2.7	2	590	30	25	7.4	80	
64N	14/8/14	80DU	323	377951	6612285	14	27	2	20	13	76	3.5	2	300	50	19	3.8	40	
64N	14/8/18	80DU	326	337084	6601610	14	27		13	39	44	2.6	1	280	36	19	9.9	55	
64N	15/8/3	80DU	328	383583	6560405	14	27	2	12	27	55	3.5	2	380	30	15	5.2	80	
64N	15/8/5	80DU	329	374684	6561082	14	27	5	12	21	48	3.0	3	285	34	29	13.5	82	
64N	15/8/8	80DU	331	335604	6544591	14	27	2	14	39	50	2.7	3	570	40	16	4.4	72	
64N	15/8/9	80DU	332	344621	6545249	14	27	4	14	22	62	2.8	3	650	45	20	5.8	40	
64N	15/8/11	80DU	334	360536	6544376	14	27		9	14	38	2.8	2	310	23	10	4.4	60	
64N	15/8/12	80DU	335	373276	6546685	14	27	2	6	11	32	1.5	3	140	26	9	3.7	27	
64N	15/8/14	80DU	337	407383	6548550	14	27	3	8	13	36	2.2	3	180	26	14	3.5	50	
64O	26/7/1	80DU	137	462627	6572481	14	27	5	18	32	82	4.2	4	700	45	25	3.1	110	
64O	26/7/4	80DU	140	491040	6584753	14	27	3	13	30	58	2.4	3	500	40	12	2.4	79	
64O	26/7/5	80DU	141	489454	6580042	14	27	2	11	22	46	3.0	4	660	28	16	3.7	59	
64O	26/7/6	80DU	142	491165	6568943	14	27	3	8	11	30	1.5	4	340	24	10	1.5	34	
64O	26/7/7	80DU	143	484853	6581046	14	27	5	13	16	50	2.1	4	380	33	13	2.6	48	
64O	27/7/3	80DU	146	542819	6562004	14	27	2	7	12	28	1.5	2	240	21	8	2.5	30	
64O	27/7/5	80DU	147	530504	6561228	14	27	3	14	22	46	2.9	3	670	28	11	3.6	72	
64O	27/7/1	80DU	167	449744	6569655	14	27	3	15	21	42	3.6	4	300	25	48	10.3	140	
64O	29/7/3	80DU	169	474691	6632597	14	27	3	11	19	38	2.2	2	460	25	16	2.9	50	
64O	27/7/8	80DU	173	532431	6555596	14	27	3	10	13	42	2.4	2	720	28	14	4.4	65	
64O	8/2/12	80DU	194	444966	6585682	14	27	4	14	62	56	4.7	6	360	48	39	7.5	140	
64O	8/4/01	80DU	211	515953	6608251	14	27	5	9	14	40	1.5	2	260	34	10	1.7	25	
64O	8/4/02	80DU	212	523683	6601906	14	27	5	10	19	42	1.8	2	300	34	14	3.1	38	
64O	8/4/06	80DU	219	541600	6622500	14	27	2	13	32	39	2.7	2	780	34	12	2.8	80	
64O	8/5/04	80DU	220	467202	6642347	14	27	2	9	26	38	2.3	2	360	20	20	11.6	60	
64O	8/5/05	80DU	221	472742	6643891	14	27	4	19	61	78	4.6	6	460	48	32	18.5	108	
64O	8/5/08	80DU	223	499006	6643591	14	27	2	13	29	27	2.0	2	665	19	20	5.9	42	
64O	8/5/09	80DU	224	505100	6641113	14	27	2	8	20	32	2.4	4	310	29	19	4.2	73	
64O	8/5/10	80DU	225	511862	6641321	14	27	2	9	24	28	1.9	3	570	25	18	5.2	50	
64O	8/5/14	80DU	227	542457	6639274	14	27	4	28	67	120	5.3	2	840	72	10	2.7	150	
64O	8/5/17	80DU	228	506241	6625319	14	27		10	30	36	2.1	2	520	30	17	5.8	60	
64O	8/5/20	80DU	230	479549	6635190	14	27	2	8	16	33	1.6	2	235	24	11	3.1	42	
64O	8/8/04	80DU	262	465804	6582545	14	27	6	14	16	62	3.0	2	324	37	23	4.6	58	
64O	8/10/02	80DU	275	508967	6574953	14	27		6	10	48	1.6	3	210	35	10	4.0	25	
64O	8/10/07	80DU	280	512713	6592995	14	27	5	8	22	30	1.8	2	340	24	9	1.8	28	
64O	8/10/08	80DU	282	513589	6586330	14	27	6	6	14	46	1.6	2	260	28	9	3.8	22	
64O	8/10/09	80DU	284	505684	6578745	14	27	7	6	8	24	1.3	1	220	18	9	3.7	20	
64O	8/11/01	80DU	285	479127	6547722	14	27	7	14	67	53	4.2	4	360	35	56	4.3	85	
64O	8/11/06	80DU	292	450151	6559344	14	27	5	11	22	57	3.7	4	270	32	23	10.3	80	
64O	14/8/5	80DU	315	487261	6622926	14	27		8	9	30	1.5	1	220	20	12		30	
64O	14/8/8	80DU	317	453954	6621459	14	27	4	12	31	59	3.2	2	225	34	19	2.4	52	
64O	14/8/10	80DU	319	453477	6612129	14	27	6	20	45	79	3.0	2	410	48	4	5.3	80	
64O	8/4/11	80DU	320	448466	6609536	14	27	3	15	58	60	3.6	3	300	40	22	12.9	115	
64O	14/8/12	80DU	321	448493	6596356	14	27		19	66	68	2.9	2	640	60	25	4.7	80	
64P	21/6/2	77DU	14	632980	6624866	14	27	3	24	43	71	4.5	1	670	61	17	4.6	102	
64P	21/6/2	77DU	17	632980	6624866	14	27	8	23	60	68	4.7	3	700	57	16	5.3	91	
64P	27/6/2	77DU	80	590000	6596000	14	27	5	16	40	50	3.6	2	390	28	21	5.7	85	

NTS	Site	Yr	Sample	East	North	Zone	NAD	AsC (ppm)	Co (ppm)	Cu (ppm)	Cr (ppm)	Fe (%)	Mo (ppm)	Mn (ppm)	Ni (ppm)	Pb (ppm)	U (ppm)	Zn (ppm)	(Au) ppb
Detection limit								2	1	1	2	0.1	1	1	2	2	0.1	1	1
64P	27/6/6	77DU	91	595544	6584609	14	27		9	24	50	3.1	2	285	28	15	1.5	50	
64P	27/6/8	77DU	97	588797	6578399	14	27	4	7	24	33	2.2	1	130	20	8	1.6	50	
64P	27/6/9	77DU	99	609226	6577833	14	27	7	15	30	70	4.8	3	370	44	19	3.4	75	
64P	28/6/2	77DU	103	645372	6648346	14	27	3	12	42	48	3.0	1	350	34	12	4.0	75	
64P	28/6/5	77DU	108	641611	6641009	14	27		10	40	32	1.9	1	230	30	16		52	
64P	28/6/7	77DU	110	648496	6632914	14	27	10	21	58	78	5.6	1	850	64	22	4.3	135	
64P	29/6/5	77DU	119	616796	6618417	14	27	4	11	31	37	2.2	2	280	24	19	1.9	55	
64P	29/6/7	77DU	123	614724	6604390	14	27		14	31	44	3.2	2	295	34	16	4.5	70	
64P	29/6/7	77DU	125	614724	6604390	14	27		6	20	18	1.0	1	210	16	10	0.9	20	
64P	7/3/03	77DU	157	660915	6595376	14	27		12	20	30	2.2	1	280	24	15	3.9	50	
64P	3/7/7B	77DU	162	650332	6580153	14	27	3	15	51	66	4.6	1	420	44	15	0.9	110	
64P	7/3/11	77DU	167	658074	6573997	14	27	2	7	28	30	2.2	1	280	18	40	16.4	60	
64P	7/4/08	77DU	178	574347	6585428	14	27		10	34	34	1.7	1	242	19	7		34	
64P	7/4/10	77DU	182	571633	6578058	14	27		11	36	42	3.0	1	355	34	12	2.2	80	
64P	7/4/12	77DU	186	577042	6570038	14	27	2	9	28	33	2.1	1	260	25	18	1.5	55	
64P	7/7/03	77DU	208	632517	6568755	14	27	5	17	61	64	4.9	2	470	46	19	11.5	135	
64P	7/8/01	77DU	211	638203	6564659	14	27	5	12	25	60	3.5	1	350	37	16	3.0	80	
64P	7/5/03	77DU	216	629630	6561960	14	27	6	19	52	76	4.4	2	540	46	15	5.4	100	
64P	7/8/06	77DU	220	640568	6555413	14	27	2	13	28	40	4.3	1	480	26	22	5.8	157	
64P	7/8/07	77DU	221	633884	6549754	14	27	4	17	40	90	4.8	1	480	76	21	6.2	150	
64P	16/7/2	77DU	277	661515	6622308	14	27	3	13	33	48	3.4	3	275	32	12	7.7	70	
64P	16/7/5	77DU	280	645826	6616094	14	27	4	16	30	44	2.7	1	385	30	12	6.5	50	
64P	16/7/13	77DU	287	657892	6605589	14	27		7	51	41	2.5	1	147	26	15		53	
64P	22/7/3	77DU	341	662751	6565216	14	27		11	31	35	3.9	3	330	24	12	3.8	130	
64P	23/7/4	77DU	347	646315	6555559	14	27	4	12	28	40	6.3	2	460	24	18	12.6	160	
64P	23/7/7	77DU	350	660104	6549566	14	27	19	4	18	15	2.4	1	240	10	2	3.5	60	7
64P	23/7/11	77DU	354	638824	6575677	14	27	5	13	52	50	4.5	1	440	42	12	3.5	127	
64P	24/7/6	77DU	361	640029	6595166	14	27	4	12	35	35	3.2	1	400	30	16	4.1	65	
64P	24/7/9	77DU	363	629947	6583109	14	27	3	13	37	32	3.0	1	430	26	12	4.3	68	
64P	24/7/11	77DU	365	621637	6586384	14	27	4	13	36	37	3.2	2	515	33	14	6.4	80	
64P	25/7/5	77DU	378	605291	6557246	14	27	2	9	35	22	3.5	1	350	13	16	1.9	100	
64P	25/7/6	77DU	379	614882	6548207	14	27	25	27	74	84	6.4	4	750	34	16	2.6	120	8
64P	27/7/1	77DU	384	607937	6622075	14	27		7	26	24	2.0	1	625	15	9		40	
64P	27/7/4	77DU	388	572858	6620275	14	27		6	17	20	1.0	1	200	14	8	1.5	23	
64P	27/7/5	77DU	390	583951	6617290	14	27	3	14	22	50	3.1	2	415	30	14	6.6	70	
64P	27/7/7	77DU	393	604213	6608941	14	27	2	12	33	34	2.3	1	340	24	14	1.8	65	
64P	27/7/8	77DU	394	587894	6612353	14	27	4	14	38	48	3.2	1	550	30	16	4.2	80	
64P	27/7/10	77DU	398	579568	6603162	14	27	3	6	24	28	1.8	1	275	16	16	3.4	40	
64P	27/7/11	77DU	399	587470	6603328	14	27	4	14	29	52	1.8	1	275	26	17	5.9	78	
64P	27/7/13	77DU	402	590200	6595512	14	27	2	11	27	36	3.0	1	400	22	14	9.4	80	
64P	30/7/5	77DU	435	572742	6550199	14	27	4	10	45	36	2.2	1	350	24	16	7.0	47	
64P	30/7/6	77DU	436	569165	6559694	14	27		12	50	40	2.5	1	300	24	16		57	
64P	30/7/8	77DU	439	578207	6554261	14	27		9	20	30	1.8	1	250	16	10	1.2	45	
64P	30/7/9	77DU	440	584325	6544392	14	27		9	19	34	2.1	1	300	18	14	1.9	50	
64P	30/7/10	77DU	441	586501	6556554	14	27	4	16	40	50	3.0	1	375	32	20	2.2	75	
64P	8/2/01	77DU	450	614690	6631913	14	27	3	14	50	64	3.7	1	440	40	18	4.4	93	
64P	8/2/02	77DU	451	615752	6644575	14	27	3	12	35	40	3.0	2	400	26	14	2.9	73	
64P	8/2/05	77DU	454	632373	6638172	14	27	2	11	36	34	2.3	1	300	30	12	2.7	45	
64P	8/2/06	77DU	455	623937	6639770	14	27	3	12	38	38	2.5	1	350	24	18	2.4	55	