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Nuinsco Resources Limited

Rainy River Project

WORK REPORT

1996 Reverse Circulation Drill Data

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RAINY RIVER PROJECT

1996 Reverse Circulation Drill Program

WORK REPORT - DRILL DATA

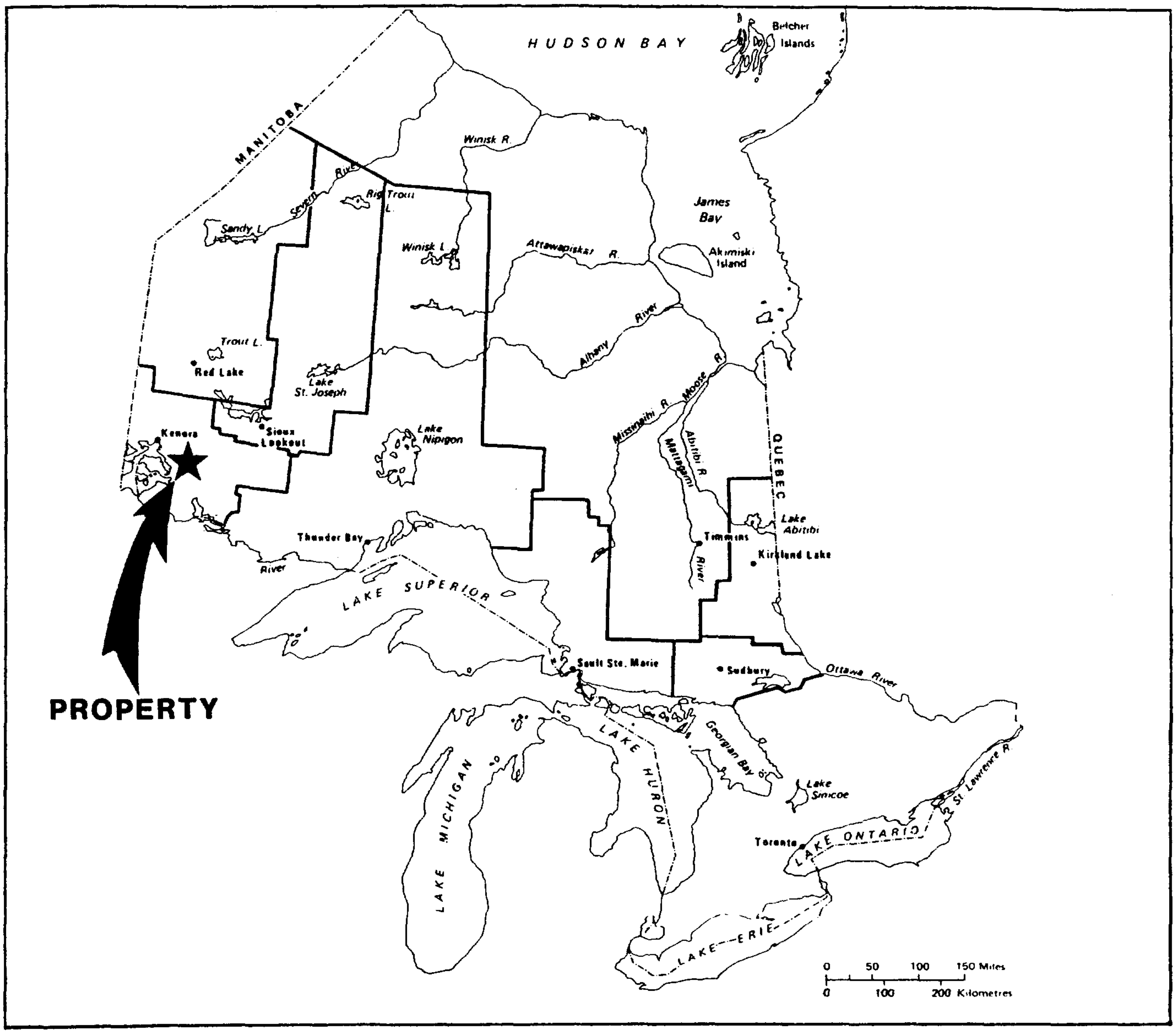
1. INTRODUCTION

From January 21 to March 26, 1996, Nuinsco Resources Limited ("Nuinsco") conducted an exploratory reverse circulation drilling program on a group of properties in the Rainy River district, northwestern Ontario as a follow-up to the Company's 1995 reverse circulation drill program. This drill project involved both heavy mineral geochemical sampling of Quaternary glacigenic overburden (mainly till) and chip sampling of the top 1.5 m of the underlying Archean-age rock formations of the Rainy River Greenstone Belt.

Most of the properties tested by drilling were previously relatively unexplored since the bedrock is covered by deep, glacial and lacustrine overburden. Interest by Nuinsco in the area began with the discovery of a strong gold grain anomaly made in 1988 by Ontario Geological Survey (Bajc, 1991a, b). This drill hole (rotasonic drill hole No. F-88-11) prompted Nuinsco to acquire a large land package of claims and optioned patents lands across the Rainy River district.

The properties targeted for reverse circulation drilling previously in 1995 and in 1996 are Crown Lands staked by the Company and patented lands held under option agreements. The claims cover essentially all of the Crown land in an area of the Rainy River Greenstone Belt which extends from Richardson Township to the Lake of the Woods, northwestern Ontario.

The terrain is flat with very few rock outcrops due to the presence of the thick Quaternary cover. The reverse circulation drill method is ideally suited to such conditions as it can quickly map out the bedrock geology and simultaneously detect any potential zones of bedrock mineralization via the ore mineral dispersal trains found in the till. One hundred and eleven reconnaissance holes (Nos. RR-96-212 to 320) were drilled, four of which had to be re-drilled. A total of 2,689.6 metres were drilled and 340 till samples and 124 bedrock samples were collected. This work report, however, only summarizes the results of those holes which can be filed for assessment credits.



Nuinsco Resources Limited
RAINY RIVER GOLD PROJECT
REGIONAL LOCATION MAP

Figure 1

2.0 LOCATION AND ACCESS

The claims and optioned patented land comprising the Rainy River project are located in NW Ontario in the MNR Administrative District of Rainy River, Kenora Mining Division (Figure 1). This area is located near both the border with Manitoba and the boundary with Minnesota. The nearest population center is Fort Frances, 50 km to the southeast. The villages of Emo and Nestor Falls are about 25 km to the south and north respectively. The properties are centered by latitude 48° 45'N to 49° 00'N and longitude 93° 46'W and 94° 36'W and lie within N.T.S. maps 52 C/13 and 52 D/16.

The Nuinsco Resources land position consists of a series of discontinuous blocks lying in an arcuate east-west band of some 60km length (Figure 2). The land position is located in the townships of Senn, Menary, Potts, Richardson, Tait, Sifton, Pattullo, Nelles, Blue, Pratt, Spohn, and Attwood and Curran.

Access to most of the claim groups are attained via the numerous all weather, secondary, provincial highways (gravel) and township roads which lead off of paved highways 11 and 71. These routes traverse the region and provide excellent ingress to all of the claims and patents.

3.0 PHYSIOGRAPHY

The Rainy River region is located within the Severn Upland of the Canadian Shield. Generally the Precambrian surface, and the overlying Palaeozoic and Mesozoic strata, dip at a very low angle to the southwest into the Williston Basin (Bajc, 1991). Physiographically the landscape on which the Nuinsco properties are situated can be divided into two distinct domains (Figure 3) separated by a sharp northwest-southeast trending break - the site of the Rainy Lake - Lake of the Woods Moraine. This moraine traverses Rowe, Menary, Potts, and Fleming Townships. To the north and east of the moraine, in the Beadle Lake and Off Lake-Burditt Lake areas, the Precambrian highland is only sparsely covered by glacial drift and is characterized by extensive outcrop exposure. This area has been subjected to only one of the most recent glacial advances (the Whiteshell - from the northeast) because of the elevated topography which prevented the advance of other glacial lobes from the west. Glacial drift attains significant thickness only in very local areas. It displays few signs of intense weathering (Bajc, 1991b). Relief is controlled by bedrock geology with the supracrustal sequences displaying positive relief relative to the batholithic complexes. This relief can attain 90m.

The broad lowland, reduced to a peneplain during Cretaceous time has been subject to either two or three late-Wisconsinan glacial events. In this lowland outcrop ranges from 5-40%, thick drift blankets bedrock surfaces and saprolites are commonly observed in boreholes. Topography is low and undulating, drainage is poor, and peatland is common. It is in these lowlands that the 1995 and 1996 reverse circulation drill programs were carried out.

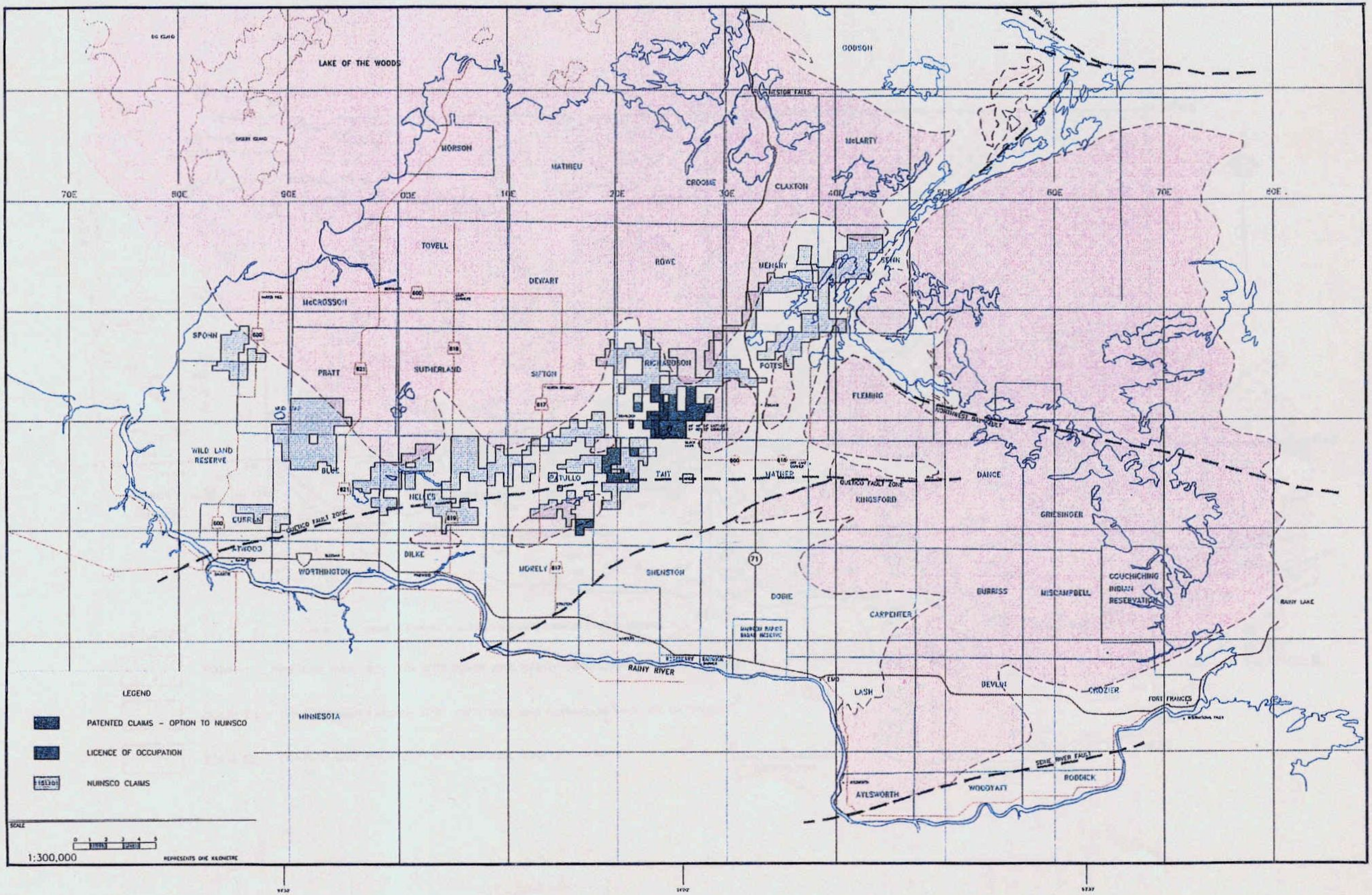


Figure 2 – Location of the Nuinsco Properties in the Rainy River Greenstone Belt.
Source: Cover of Nuinsco Resources Ltd. 1994 Annual Report

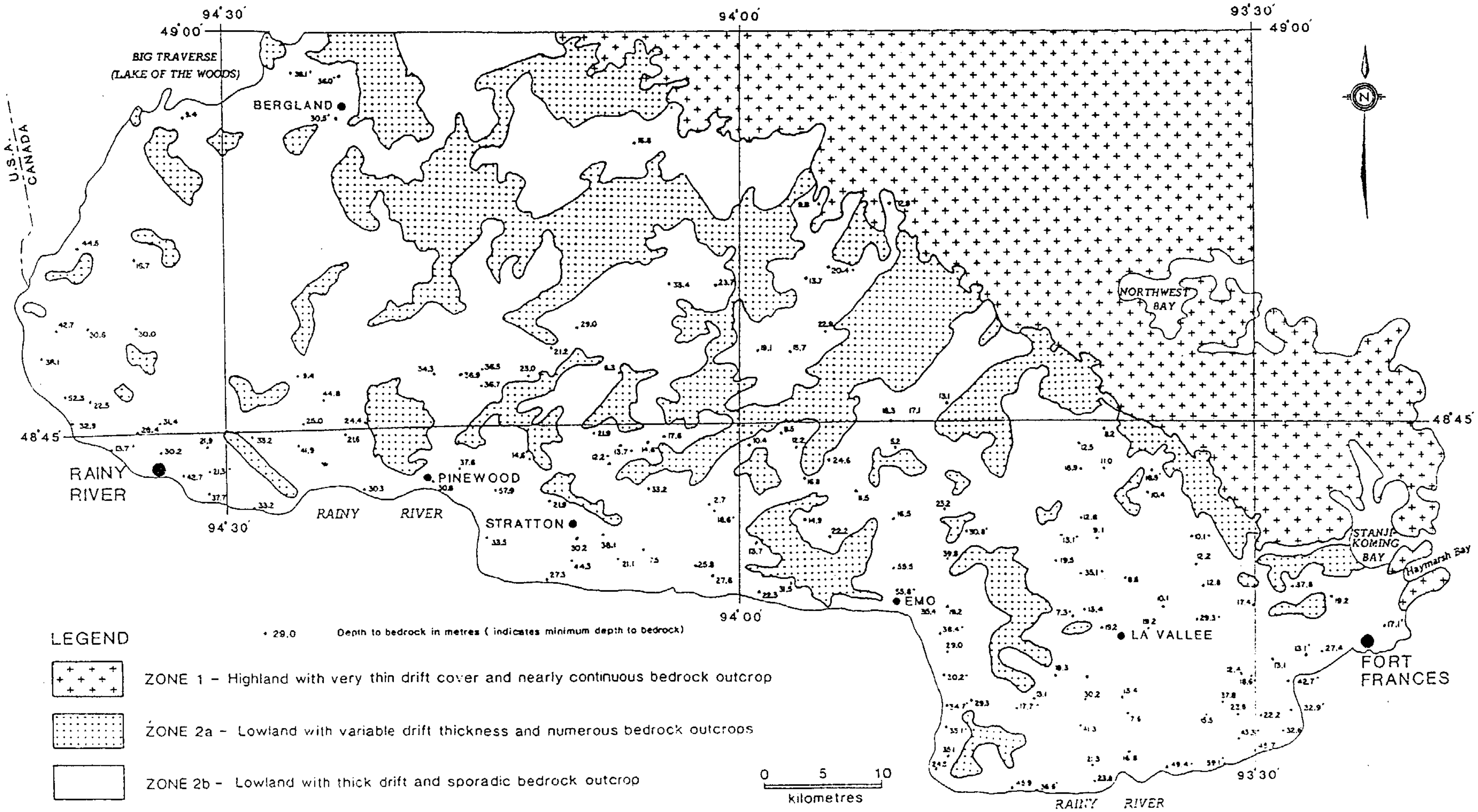


Figure 3: Physiography of the Rainy River District (Bajc, 1991)

4.0 REGIONAL GEOLOGICAL SETTING

The geological framework of the Rainy River greenstone belt is based mainly on the interpretation of aeromagnetic maps due to the paucity of outcrop data and thick overburden. Recent mapping by Johns in 1988, in conjunction with the OGS rotasonic drilling program, located only a few outcrops with a disproportionate number being on resistant, Proterozoic-age diabase dykes. The regional-scale, east-west trending dextral shear zone, the Quetico Fault, is well-known from exposures east of the project area beyond the Lake Agassiz clay belt has generally been interpreted to bend southwestward following a concordant magnetic low through the Rainy River Greenstone Belt. However, the fault is regionally discordant and could equally well be extended due west through the Richardson area where considerable magnetic disruption is evident.

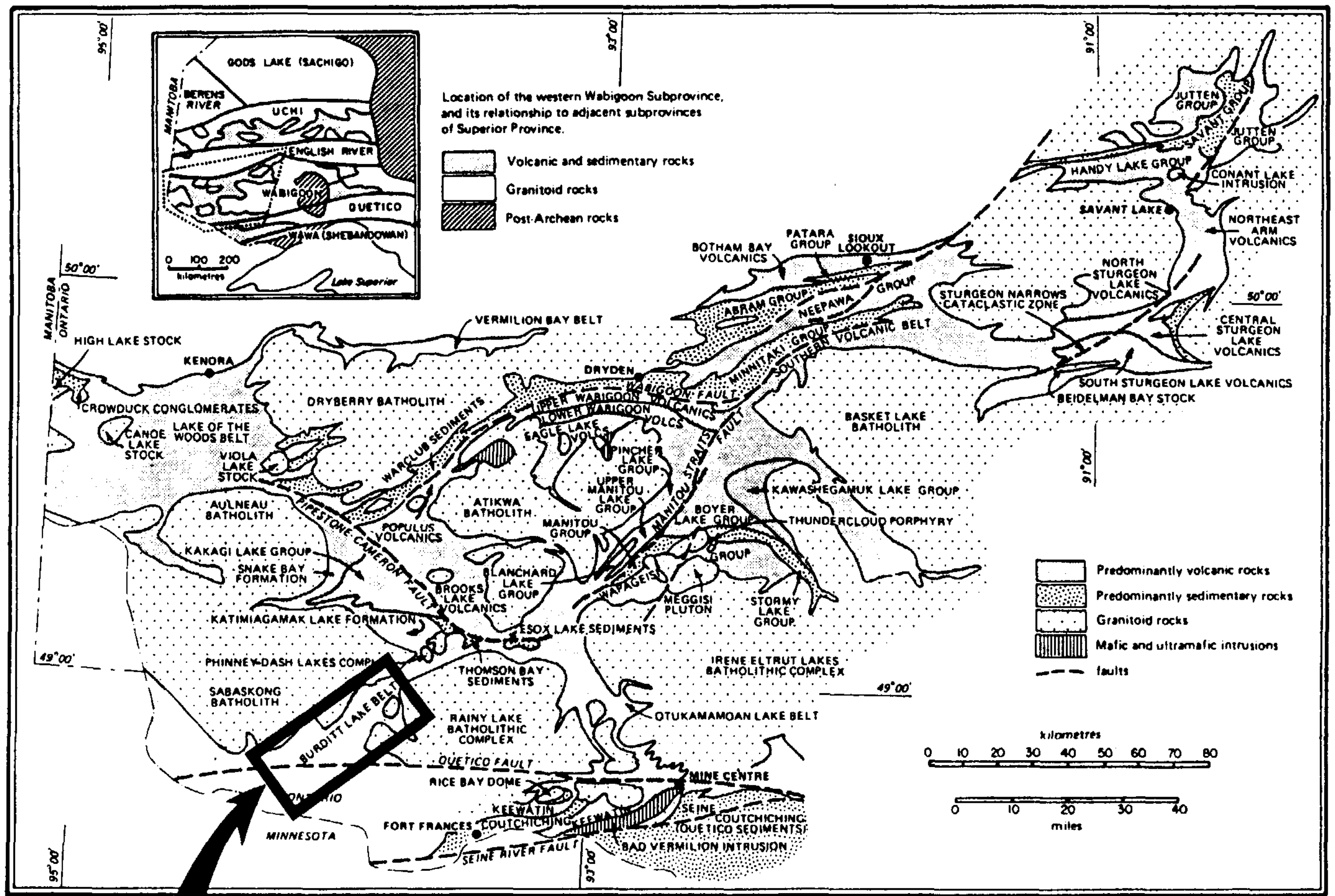
Nuinsco's properties northeast of Richardson Township on the east side of the Sabaskong Batholith are beyond the clay belt and thus were not targeted for reverse circulation drilling in either of the 1995 or 1996 drilling programs.

Although the bedrock geology of the 1995 project area is poorly understood, the Quaternary geology has been interpreted by the 1986-88 OGS surficial mapping and rotasonic drilling programs (Bajc) and from similar programs in adjoining areas of Minnesota and Manitoba. In Late Wisconsinan time when most and perhaps all of the Quaternary sediments were deposited, the area lay on the suture zone between Labradorean and Keewatin ice domes. This resulted in deposition of a till layer of northeastern provenance which is in direct contact with bedrock and useful for sampling. This till is followed by a layer of exotic till of western provenance.

The suture zone was not stationary and meltdown of both ice masses occured in Lake Agassiz, resulting in local repetition of till layers and interdigitation with thin to thick layers of glaciolacustrine clay, silt and sands. The eastward encroachment of both the Keewatin ice and Lake Agassiz was mediated by the low-lying topography of the Rainy River Greenstone Belt relative to the adjoining granitoid batholiths of Ontario and Minnesota.

4.1 <u>Bedrock Geology</u>

Nuinsco's land holdings are in the eastern Rainy River Greenstone Belt in the western part of the Archean-age Wabigoon Subprovince of the Canadian Shield (Figure 4). The Wabigoon Subprovince is a 900 km long east-west trending belt composed of metavolcanic and subordinate metasedimentary rocks (greenstone belts) surrounded and intruded by granitoid batholiths. The western Wabigoon region consists of interconnected greenstone belts surrounding elliptical to ovoid batholiths. Each greenstone belt typically comprises several tectonically bounded assemblages consisting of komatiitic to calc-alkalic volcanic sequences surmounted by clastic and minor chemical sediments. The granitoid domes impart a synformal structural character to the supracrustal rocks and the central axial zones of



RAINY RIVER
DISTRICT

REGIONAL GEOLOGY
WESTERN WABIGOON SUBPROVINCE AND ITS MARGINS

Figure 4

many of these synformal belts are characterized by long sinuous shear/fault zones. The larger, crustal-scale Quetico Fault in part forms the southern boundary of the Wabigoon Subprovince and in part cross-cuts both supracrustal and plutonic assemblages of the western Wabigoon region.

The bedrock geology of Rainy River Greenstone Belt is poorly understood due to limited outcrop exposure and by the lack of past mineral exploration. In general, the belt is delimited by the Sabaskong Batholith in the north and the Rainy Lake Batholithic Complex in the east. A thin septum of supracrustal rocks separates the batholiths in the area of Nuinsco's northeastern properties and connects the Rainy River Greenstone Belt with the Kakagi-Rowan Lakes Greenstone Belt north of the batholiths. The Rainy River Belt continues into southeastern Manitoba and northwestern Minnesota where it is ultimately overlain by unmetamorphosed Paleozoic to Mesozoic sedimentary rocks of the Western Sedimentary Basin. Table 1 (next page) summarizes the lithological units within the project area.

The northern part of the project area is underlain by plutonic rocks of the multi-phase, pretectonic to syntectonic Sabaskong Batholith. Johns (1988) has proposed that the supracrustal rocks south of the Sabaskong Batholith consist of a "lower mafic unit" --dominantly basaltic -- conformably overlain by an "upper diverse unit" comprising bedded and interdigitated mafic to intermediate debris flows and intermediate pyroclastics, together with sedimentary wacke and reworked tuff derived from intermediate volcanic detritus. Several post-tectonic stocks intrude the supracrustal rocks including the Black Hawk Stock. Northwest trending Proterozoic quartz diabase dykes of the Kenora - Fort Frances swarm cut all rock types.

Regional metamorphic grade is regarded as being generally of greenschist to low-mid amphibolite facies (although higher grades are noted by Johns in the west and Fletcher and Irvine in the south and west). Metamorphic grade, particularly adjacent to the late-post tectonic stocks may attain upper amphibolite with possible local partial remelting of the host rocks.

Structurally, the region is complex and very few of the structural elements have been solved. Evidence of stratigraphic facing comes dominantly from the presence of pillows. In the extreme north, the metavolcanic succession has been folded around the Sabaskong Batholith into the east-northeast trending Nightjar Anticline which is paired with the Slender Lake Syncline to the southeast. The Helena-Pipestone Lake Fault extends south to Dad Lake and in the north approaches the trace of the Pipestone-Cameron Fault. Continuing to the south the metavolcanic stratigraphy of the Offlake-Burditt Lake area are considered to form a southeasterly facing homoclinal sequence between the Sabaskong Batholith and the Burditt Lake Stock and the Fleming Township Tronjhemites. Farther to the west the metavolcanic-metasedimentary stratigraphy has been folded about the north-south axes of the southward plunging Deerlock Syncline which is paired with an unnamed anticline in Richardson Township. South of this area Johns (1988) has inferred the presence of a complex fold pattern, showing several anticline-syncline pairs which strike northeast curving to the east. Fletcher and Irvine

Table 1

LITHOLOGIC UNITS

PHANEROZOIC

(A) Pleistocene and Recent

till, sand, gravel, clay, organic debris

------Unconformity------

PRECAMBRIAN

(B) Proterozoic

-Mafic Intrusive Rocks
-Diabase dykes

------Intrusive Contact------

(C) Archean

-Intermediate to Felsic, Intrusive Rocks

Equigranular trondhjemite, granitic dykes, equigranular monzonite and intrusive breccia

------Intrusive Contact------

-Felsic Metavolcanic Rocks

Medium grained to porphyritic rhyolite and dacite, quartz feldspar porphyry dykes

-Mafic to Intermediate Metavolcanic Rocks

Fine to medium grained basalt and andesite, gabbro, pillowed basalt, porphyritic basalt, pillowed and porphyritic basalt, pillowed variolitic basalt, spherulitic basalt, tuff, tuff breccia, and lapilli tuff

(1954) infer the presence of three folds, two anticlines and a syncline with east to northeast striking axes - as with those mapped by Johns.

The southern part of the project area is transacted by the Quetico Fault, although the surface trace of the fault is only conjectured towards the west. The fault is traceable for over 200 km and in part defines the southern boundary of the Wabigoon Subprovince which lies to the east of the project area. Dextral transcurrent offsets are interpreted to be the major movement, estimated to be up to 128 km. A southerly splay from the Quetico is interpreted to strike northeast passing near the village of Stratton.

Well defined penetrative deformation is commonly observed on a regional scale. At the margins of intrusive bodies foliation/schistocity can be very strongly developed, striking tangentially to the contact of the intrusion.

Cretaceous sediments occupy the Red River Valley and are observable in Manitoba, Minnesota, and North Dakota where they blanket older sediments that fringe the Williston Basin (Bajc, 1991b). In the Rainy River region no exposures of Cretaceous age have been documented, however an outlier of Cretaceous marine clay has been noted 65km south of Fort Frances, suggesting a more extensive pre-existing presence (Bajc,1991b). Middle Cretaceous, non-marine, fossiliferous, clastic sediments have been encountered in an O.G.S. borehole 7.5 km northwest of Rainy River. Composed primarily of white to buff colored, moderately sorted, silica sand and gravel, this occurrence is located in a protected hollow, down-ice from prominent bedrock highlands.

4.2 Quaternary Geology

The surficial and subsurface Quaternary geology of the Rainy River area has been thoroughly summarized by Bajc (1991 a,b).

Although the majority of the deposits are of Late Wisconsinan age, the stratigraphy is extremely complex because two disparate superimposed ice masses advanced through the Lake Agassiz basin. The earliest deposits are related to southwesterly ice advance of the Rainy lobe of the Labradorean ice mass. Superimposed and in part contemporaneous ice of the St. Louis sublobe (DesMoines lobe) of the Keewatin ice mass moved eastward into the Rainy River area in the lowland corresponding to the Rainy River Greenstone Belt. Bajc (1991a) identified five till units and five glaciolacustrine sediment packages in the Fort Frances - Rainy River area recording minor oscillations in the frontal positions of both the Labradorean and Keewatin ice masses during meltdown. Striae measurements indicate ice flow azimuths of $210 \pm 10°$ for the Labradorean ice and $090 \pm 20°$ for the Keewatin ice (Bajc, 1991a).

Quaternary sediments intersected in the reverse circulation drill holes comprise till and Lake Agassiz sediments from both the Labradorean and Keewatin events. Labradorean till rests on bedrock in > 90 percent of the drill holes and was the principal sampling horizon. Its thickness ranges from < 1 to > 20 metres and is sympathetic to bedrock topography with thin till on bedrock highs and thicker till containing interlayers of ice contact glaciofluvial sand/gravel and embryonic Lake Agassiz clay-silt-sand in bedrock depressions. The simultaneous deposition of thin unlayered till on bedrock highs and thick layered till and sediments in depressions requires that; (a) the ice was grounded on the bedrock highs but rested on its own debris in the bedrock lows, perhaps due to the greater buoyancy of the deeper water in these lows, and (b) the position of the ice front fluctuated back and forth while forward ice flow was continuous.

The Labradorean till is typically sandy. A clay component is present only in areas where the till overrode Lake Agassiz sediments, especially in bedrock depressions, or soft saprolitic bedrock. Layers of Lake Agassiz sediments in the till also tend to be sandier than those above the till, reflecting deposition closer to the receding ice front. The till clasts are a distinctly Archean assemblage of volcanics, sediments and granitoids with the proportions varying according to the underlying geology. Sheared chloritic to sericitic clasts resembling the sheared volcanics of the Richardson Township gold area form a small (<5 percent) but conspicuous proportion of the clast population where sheared bedrock was rarely encountered, and the till concentrates from this area are often so pyritic that panning was required to permit observation of gold grains. This, in addition to magnetic evidence, strongly supports the westward extension of the Quetico Fault past Richardson Township.

The Labradorean till and associated sediments are overlain by the Keewatin-derived package comprising layers of Lake Agassiz glaciolacustrine clay-silt (± sand) and clayey till. This sequence is capped by Holocene-age peat and organic deposits. The Keewatin sequence typically comprises a layer of till sandwiched between two layers of soft glaciolacustrine clay ± sand. On a map scale, the Keewatin till forms a relatively continuous unit but the underlying and the overlying clay layers are locally absent. On a detailed scale, more complex interlayering of the till and sediments probably occurs.

The Keewatin package ranges up to at least 45 metres in thickness and the till member typically forms > 50 percent of the section. The Keewatin till is clay-rich and stone-poor. In many of the deeper holes, it becomes so clayey down-hole that pebbles and grit are virtually non-existent. In these holes the till may be recognized by its dull grey colour and massive appearance. In many of the earlier holes, this material was logged as Lake Agassiz sediments but the sediments are normally varved with grit-free grey clay and beige silt varves being recognizable. The Keewatin till was deposited by thin, buoyant glacial ice that slid across the Lake Agassiz bottom sediments and had extremely limited contact with bedrock, consequently the till is unsuitable for heavy mineral sampling. Clasts in the till are dominantly unmetamorphosed, westerly-derived, Paleozoic to Mesozoic carbonates and Archean granitoids.

5.0 REVERSE CIRCULATION DRILLING WORK PROGRAM

5.1 Drilling Pattern

The gold dispersal train in Richardson Township is so large that the the OGS intersected it in 1988 while drilling holes 2 to 4 km apart. Typically, however, gold dispersal trains are only about 500 m long although almost as wide, especially if ice flow is at right angles to the mineralization as would probably be the case for any mineralization related to the Quetico Fault.

A NW-SE traverse orientation pattern for the holes was used for the 1996 reconnaissance drilling so as to obliquely cross the E-W trending bedrock stratigraphy while squarely intercepting any dispersal trains in the SW transported Labradorean till. Most traverses were 1 to 1.5 km apart. A separation this great could easily allow short dispersal trains from small gold deposits to slip undetected between traverses but the main goal in 1996 was to locate and test large structures. Hole spacing along the traverses averaged 300 m (in contrast to 400 m in the 1995 reverse circulation program). Any train crossed by a traverse would probably be intersected in only one or two drill holes.

Table 2 summarizes the location and depths of all of the drill holes (including those not submitted for assessment credits) and the number of samples collected. Appendix I presents the details of the drill hole logs submitted for work credit.

5.2 Methodolgy, Personnel and Costs

Bradley Brothers Limited of Timmins, Ontario supplied the reverse circulation drill and Overburden Drilling Management (ODM) of Nepean, Ontario supported by Nuinsco's consultants managed the program. ODM's field crew consisted of a geologist and assistant, supplemented as needed by a navigator to lay out the drill holes. The geology crews were rotated every three weeks. Participating geologists were Don Holmes, Peter Collins, Llyle Duchene and Valerie Ansell with assistance from Stuart Averill. Nuinsco's two geologists, George Archibald and Paul Jones directed the entire program.

The drill was mounted and enclosed on a Nodwell muskeg tractor for off-road mobility and all-weather operation. Temporary winter roads were cleared and packed to the drill sites with a wide-tracked D-6 bulldozer.

A reverse circulation drill string consists of two coaxial pipes and a tricone bit. Air and water are injected between the pipes to the bit and clay to pebble-sized sediment particles and cm-sized cuttings of boulders and bedrock are flushed instantly through the center pipe to surface where they are logged

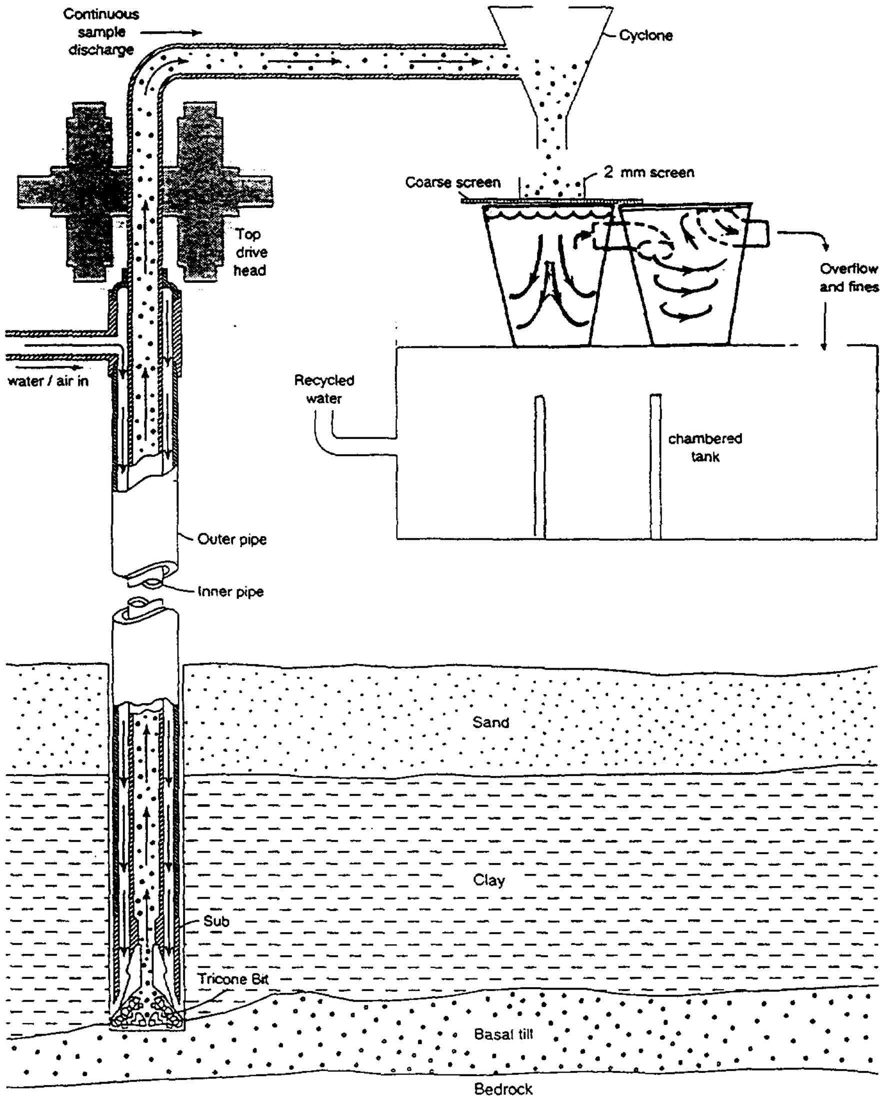


Figure 5 ; Schematic Diagram of a Reverse Circulation Drilling System

HOLE	TARGET	METRES DRILLED		HOLE DEPTH	SAMPLES COLLECTED	
NUMBER	NUMBER	OVERBURDEN	BEDROCK	(m)	OVERBURDEN	BEDROCK
RR-96						
212	4	10.0	1.7	11.7	1	1
213	4	28.6	1.4	30.0	1	1
214	4	33.0	2.0	35.0	2	1
215	4	30.6	1.9	32.5	4	1
216	4	20.0	1.7	21.7	1	1
217	2	44.4	2.1	46.5	5	1
218	2	33.0	1.5	34.5	3	1
219*	2	19.5	0.0	19.5	2	0
219A	2	20.8	1.4	22.2	4	1
220	2	14.3	1.7	16.0	2	1
221	2	10.8	1.7	12.5	1	1
222	2	5.1	1.4	6.5	1	1
223	2	13.5	2.0	15.5	5	1
224	2	13.3	1.7	15.0	1	1
225	2	23.7	1.3	25.0	6	2
226	2	21.3	1.3	22.6	5	1
227	2	24.8	1.7	26.5	7	1
228	2	9.7	1.8	11.5	4	1
229	1	25.8	1.7	27.5	5	1
230*	1	29.0	0.0	29.0	1	0
230A	1	28.7	1.3	30.0	2	1
231	1	25.5	1.5	27.0	2	1
232	1	10.8	1.2	12.0	3	1
233	1	19.1	1.9	21.0	3	1
234	16	38.7	26.7	65.4	3	0
235	16	41.4	5.1	46.5	3	1
236	11 ext.	4.1	1.4	5.5	1	1
237	11 ext.	4.7	1.3	6.0	1	1
238	11 ext.	9.7	1.3	11.0	1	1
239	11	13.4	1.5	14.9	3	1
240	13	26.0	1.0	27.0	2	1
241	11	12.4	1.6	14.0	2	1
242	11	5.6	1.5	7.1	1	1
243	11	2.4	1.6	4.0	2	2
244	11	18.7	1.5	20.2	3	1
245	11	15.0	1.9	16.9	0	3
246	11	22.4	1.4	23.8	4	2
247	11	33.1	1.4	34.5	4	1
248	11	42.3	1.7	44.0	4	2
249	11	27.5	1.5	29.0	2	1
250	11	35.4	1.1	36.5	3	1
251	11	27.7	1.5	29.2	4	2
252	11	19.1	1.0	20.1	0	1
253	11	9.8	1.4	11.2	1	1
254	11	19.2	1.8	21.0	1	2
255	11	15.5	1.3	16.8	3	2
256	11	17.4	1.8	19.2	1	3
257	11	24.5	1.3	25.8	4	1
258	11	19.1	1.4	20.5	1	1
259	11	13.8	1.5	15.3	0	1
260	11	17.8	1.2	19.0	1	1
261	11	26.0	1.5	27.5	5	1
262	12	31.2	1.8	33.0	7	1
263	12	28.5	1.9	30.4	1	2
264	12	26.3	2.0	28.3	3	1
265	12	28.0	1.7	29.7	5	1
266	12	26.4	1.6	28.0	4	1
267	5	36.0	1.5	37.5	6	1

HOLE	TARGET	METRES DRILLED		HOLE DEPTH	SAMPLES COLLECTED	
NUMBER	NUMBER	OVERBURDEN	BEDROCK	(m)	OVERBURDEN	BEDROCK
RR-96						
268	6 ext.	25.0	1.5	26.5	4	1
269	6 ext.	37.2	1.3	38.5	12	1
270	6 ext.	21.0	1.5	22.5	0	1
271	6 ext.	28.0	1.5	29.5	2	1
272	6 ext.	62.3	1.2	63.5	18	1
273	6	52.0	1.5	53.5	6	1
274	6	34.0	2.0	36.0	3	1
275	6	17.0	2.0	19.0	1	1
276	8	45.8	1.4	47.2	8	1
277	8	27.0	1.5	28.5	6	1
278	10	21.2	1.3	22.5	2	1
279	10	26.9	2.1	29.0	5	1
280	7	18.4	2.3	20.7	4	2
281	7	20.3	1.7	22.0	4	1
282	7	17.4	1.4	18.8	3	1
283	9	26.5	1.2	27.7	4	1
284	9	32.5	1.5	34.0	1	1
285	9	36.8	0.7	37.5	5	1
286	9	30.5	1.0	31.5	4	1
287	3	33.8	1.5	35.3	3	1
288	3	29.4	1.6	31.0	3	1
289	3	32.5	1.5	34.0	2	1
290	3	31.0	1.5	32.5	1	1
291	3	28.6	1.4	30.0	1	1
292	3	29.8	1.7	31.5	3	1
293	3	25.7	1.1	26.8	1	1
294*	3	11.0	0.0	11.0	3	0
294A	3	18.1	1.4	19.5	5	1
295	3	8.1	1.4	9.5	2	1
296	3	9.8	1.2	11.0	3	1
297	3	16.2	1.3	17.5	2	1
298	6	24.8	1.7	26.5	3	1
299	6	23.2	1.6	24.8	4	1
300	6	17.4	2.1	19.5	1	1
301	6	43.8	1.2	45.0	5	1
302	6	15.8	1.5	17.3	0	1
303	6	32.2	1.8	34.0	0	1
304	23	15.4	1.5	16.9	2	1
305	23	18.6	1.4	20.0	9	1
306	23	5.6	2.9	8.5	3	1
307	22	0.2	1.3	1.5	1	1
307A	22	6.2	1.0	7.2	1	1
308	22	7.4	1.4	8.8	1	1
309	22	3.2	1.1	4.3	0	1
310	24	11.2	2.3	13.5	2	1
311	24	12.5	1.0	13.5	3	1
312	24	7.7	1.5	9.2	0	1
312A	24	15.0	1.4	16.4	2	1
313	20	18.6	1.4	20.0	4	1
314*	19	5.8	1.2	7.0	0	1
314A	19	5.8	0.1	5.9	1	0
315	25	24.7	3.1	27.8	3	1
316	25	23.3	3.1	26.4	2	2
317	25	21.9	1.6	23.5	1	1
318	25	29.4	1.6	31.0	2	1
319	25	22.7	1.3	24.0	3	1
320	14	33.0	1.5	34.5	9	1
111		2488.3	201.3	2689.6	340	124

* Redrilled for technical rather than geological reasons; original holes and metres not included in project totals.

TABLE 2 - DRILLING AND SAMPLING STATISTICS

and bulk samples weighing 8 to 10 kg are collected (see Figure 6). ***Appendix I*** details the drill hole logs.

In its Nepean laboratory, ODM relogged the bedrock chip samples in more detail by binocular microscope, prepared heavy mineral concentrates from the 340 bulk till and related overburden samples using shaking table preconcentration followed by heavy liquid sink-float separations (specific gravity 3.3), counted and measured any observed gold grains and classified them according to degree of wear (pristine, modified, reshaped), micropanned the concentrates, mainly those showing more than 5 to 7 gold grains but also many with excessive gold-obscuring pyrite and some with high concentrations of native Cu grains, and calculated rough gold values based on the observed gold grains (refer to Figure 7, lab procedures). The results of this work is presented in **Appendix II.**

Representative subsamples of bedrock and whole till concentrates were analyzed for gold, arsenic, copper, zinc and silver by Activation Laboratories Ltd.; whole rock compositions were also determined for the unweathered bedrock (and some of the saprolite) samples. Gold and arsenic were determined by the instrumental neutron activation (INA) method which preserves the concentrate for further study as needed. However a 3 g subsample was consumed analyzing Cu, Zn, Ag, Ni, Cd, and Mn by the inductively coupled plasma (ICP) wet chemical method which has a better detection limit than INA for these elements (refer to ***Appendix III*** - Bedrock Analyses and ***Appendix IV*** - Heavy Mineral Analyses).

Using the assumptions that hole depth would average 25 m and four overburden samples and one bedrock sample would be obtained from each hole, ODM had prepared a working budget of $383,157 for the 1996 project. This budget covered all expected contract work including project planning, hole layout, road preparation, drilling, field supervision, logging and sampling, heavy mineral processing, sample analysis, data interpretation and preparation of a comprehensive report complete with maps and drill sections. The actual drilling and analytical costs for the 111 holes amounted to $331,378.11 plus $36,415.56 support costs or $16.75/meter drilled.

6.0 RESULTS OF WORK

6.1 Bedrock Stratigraphy

Lithologic descriptions of the reverse circulation bedrock chip samples are tabulated and presented in the ***Appendix V*** (Binocular Logs - Bedrock Chips).

In the following text each basement lithology is described in detail using data from the binocular logs. The descriptions are of the primary rock types and exclude a description of the incipient saprolitic weathering which has affected even the freshest-looking basement rocks in the project area. The

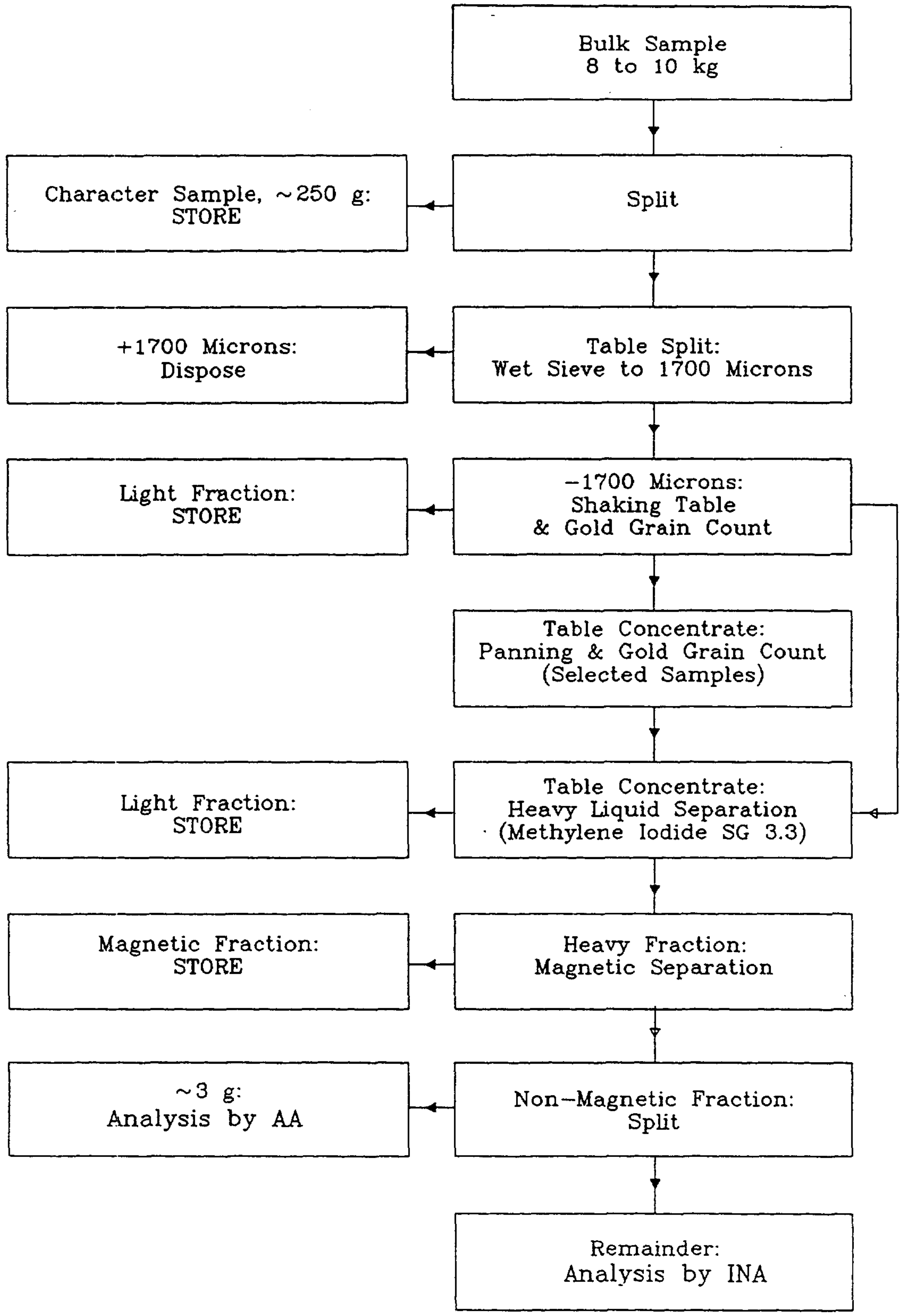


Figure 6 ; Overburden Sample Processing Flow Sheet

effects of this weathering on the whole rock geochemistry are not yet fully understood. The descriptions are essentially unchanged from that described in the 1995 Reverse Circulation drill report as no new lithologies were intersected.

6.1.1 Komatiite

Komatiitic volcanic rocks are located throughout the Rainy River greenstone belt. Each intersection occurs within 1.5 km of a granitoid intrusive body. The rocks are massive, coarse grained (0.5 mm), spinifex textured rock composed of serpentinized to talcose olivine and 15 percent chlorite. This rock unit is characterized by high MgO (25 percent), low Al_2O_3 (7 percent), and low SiO_2 (45 percent).

6.1.2 Basalt

Basalt was intersected throughout the drill area. As previously mentioned in the regional context, both tholeiitic and calc-alkalic basalts are present. The tholeiitic basalts are high-Fe to high-Mg varieties with the high-Mg field defined by an approximate 1:1 to 2:1 ratio of Fe_2O_3 to MgO and the high-Fe field by a 2:1 to 3:1 ratio. Silica contents are consistently below 52 percent. As the tholeiitic basalts frequently occur near granitoid bodies, they are typically of mid-greenschist to amphibolite metamorphic grade and composed chiefly (70-75 percent) of variably chloritized, lineated actinolite and hornblende and 25-30 percent cloudy crystalline to granoblastic plagioclase. Plagioclase phenocrysts or microphenocrysts are uncommon. Shear-related alteration is negligible.

Calc-alkalic basalts were not segregated in binocular logging but do differ texturally and mineralogically from the tholeiitic basalts in two respects: (1) they are often weakly plagioclase microphyric and (2) their mafic mineral (chlorite, actinolite, pyroxene) content is lower (typically 35 to 50 versus 70 percent) and plagioclase is correspondingly higher. These features are often reflected in high SiO_2 (55-62 percent) and low MgO + Fe_2O_3 contents (<13 percent versus >18 percent in tholeiitic basalts).

As most of the calc-alkalic basalts are not near granitoid bodies they commonly display lower greenschist facies metamorphism. Where the basalt is schistose, the local presence of plagioclase phenocrysts may impart a greywacke-like appearance. Even with the greenschist facies metamorphism, calcite is rare. Other alteration minerals related to shearing (pyrite, tourmaline, etc.) occur only locally.

6.1.3 Andesite

Andesite was intersected as flows which are are characterized by a very fine-grained (<0.1 mm), quenched volcanic texture and invariably contain 5-25 percent plagioclase phenocrysts from 0.5-3.0 mm in size. Quartz phenocrysts occur locally but concentrations do not exceed 5 percent. SiO_2 contents typically range from 62-70 percent, overlapping with both the calc-alkalic basalts and dacites of the Richardson area. Total Fe_2O_3 + MgO contents rarely exceed 10 percent in unaltered samples. Groundmass mineralogy is typically 70:30 to 80:20 plagioclase + quartz versus chlorite + sericite. Where quartz is discernible from plagioclase, the quartz content is typically 15 percent. Where sheared or strongly foliated, the porphyritic andesite is converted to an augen schist resembling tuff.

In the sheared western tholeiitic andesites the original plagioclase phenocrysts have been dismembered although up to 5 percent quartz phenocrysts do survive. These samples have SiO_2 contents similar to the calc-alkalic andesite but slightly higher Fe_2O_3 (6-10 percent). They are depleted in MgO, Na_2O and CaO, apparently due to the combined effects of shearing and incipient saprolitization.

6.1.4 Rhyolite

Felsic volcanic rocks (rhyolite) are present in numerable holes (refer to Appendix V). All samples are pale buff-grey in colour, moderately to strongly sheared and sericitic and weakly to strongly quartz and plagioclase-phyric. The Richardson felsic volcanics contain no more quartz phenocrysts (maximum 3-5 percent) than the intermediate (dacitic) volcanics to the north. However, the felsic rock samples here all contain 69-77 percent SiO_2 and plot as rhyolite on the Jensen diagram, suggesting that the quartz phenocryst content has been reduced by tectonic dismembering. Shear-related alteration appears to be predominantly sericite with a trace to 3 percent disseminated pyrite. It apparently has little effect on SiO_2, Al_2O_3, Fe_2O_3, MgO or Na_2O content.

6.1.5 Clastic Sedimentary Rocks

Greywacke and siltstone were intersected across the drill area at various stratigraphic levels in the mafic and intermediate volcanic sequences. Greywacke intersections are typically composed of an unsorted fine to medium grained (0.1-0.3 mm) sand containing 10-20 percent quartz, 60-70 percent pale undifferentiated plagioclase and lithic grains and about 20 percent green-grey matrix chlorite and pale grey sericite (possibly, in part, bleached chlorite). Near pluton margins, amphibolite facies metamorphism has produced a biotite schist composed of a colourless granoblastic felsic groundmass and biotite.

Siltstone is finer grained (<0.1 mm), fissile to semi-fissile and may display a fine chip scale lamination/bedding defined by colour and compositional variations. Thin siltstone beds sometimes occur within greywacke intersections. Siltstone intersections appear to have the same general composition as greywacke but with slightly more (20-30 percent) matrix chlorite and sericite. Both the greywacke and siltstone plot dominantly in the calc-alkalic field suggesting derivation from the intermediate volcanics.

6.1.6 Gabbro

Gabbro is a minor rock type in the Rainy River supracrustals. It is a coarse grained (0.5-5.0 mm), moderately foliated to massive rock with a subhedral granitic texture. The bedrock chips are composed of cloudy plagioclase and augite showing varying degrees of alteration to chlorite, actinolite and hornblende

6.1.7 Feldspar Porphyry, Quartz Feldspar Porphyry

Isolated bodies of subvolcanic feldspar porphyry were intersected in only a few of the drill holes. The feldspar porphyry is composed of a fine-grained (0.1-0.3 mm), interlocking to granular-sugary feldspathic to quartzo-feldspathic groundmass with <30 percent chlorite replacing biotite. Subhedral to euhedral plagioclase phenocrysts to 5 mm in size comprise 20-70 percent of the porphyry. All intersections are weakly foliated indicating they are synvolcanic. The porphyry samples plot as calc-alkalic andesite to rhyolite.

6.1.8 Tonalite

Tonalite was intersected as part of small to large stocks and is particularly common at the west end of the greenston belt. It is commonly massive but may be very weakly flow foliated. It is coarse grained and hypidiomorphic and the samples have a fairly constant composition of 40-50 percent plagioclase, 25-30 percent quartz and 20-30 percent mafic minerals with variably chloritized hornblende outstripping chloritized biotite. Up to 10 percent secondary epidote is commonly present. On a Jensen diagram the samples plot predominantly in the calc-alkalic andesite field. Weathering of these rocks is reflected by lower Fe_2O_3 (1.5-3 versus 3-5 percent) and MgO (0.5-1 versus 1.5-3 percent).

Several tonalite intersections differ from the other tonalites in being gneissic like the trondhjemite. They also contain slightly more plagioclase (60 percent) and less quartz (15 percent) than typical tonalites.

6.1.9 Trondhjemite

Trondhjemite is a foliated to gneissic rock with abundant pegmatite. Several intersections contain basalt (amphibolite) xenoliths. Small massive pyrite xenoliths were intersected, thus enhancing the possibility of massive sulphide mineralization in the komatiite horizons rimming the northwestern granitoid plutons.

The trondhjemite samples typically display a grain size of 0.3-1.5 mm with the texture varying from finely granitoid (hypidiomorphic) to polygonal granular (granoblastic). They are typically composed of 55-60 percent white plagioclase, 30-35 percent quartz and $\leq$10 percent biotite.

Pegmatite segregations cutting the trondhjemite are massive, coarse grained (2-10 mm) and composed entirely of quartz and perthite. The trondhjemite $\pm$ pegmatite samples plot mostly near the Al_2O_3 apex on the Jensen diagram reflecting the low proportion of mafic minerals and common occurrence of pegmatite.

6.1.10 Quartz Monzonite

Quartz monzonite is a minor rock type in the Rainy River District and occurs only near the Sabaskong Batholith/supracrustal contact. This intrusion probably forms a narrow, late, marginal phase of the batholith. The sample is composed essentially of pink, hematite-stained feldspar (60-65 percent) and quartz (35 percent) with 1-2 percent combined chlorite and sericite.

6.1.11 Diabase

Proterozoic diabase dykes are fine to medium grained (0.5-2.0 mm) with a distinct diabasic texture characterized by unoriented plagioclase laths separated by interstitial pyroxene. The samples are unmetamorphosed but weakly weathered and consist of about 50-55 percent plagioclase, 40-45 percent green to brown augite and 2-5 percent ilmenite. The diabase from holes 32 and 35 contains 1 to 2 percent interstitial quartz and that from hole 171 contains 5 percent disseminated magnetite. The diabase samples have an iron-rich tholeiitic affinity and plot in the Jensen basalt and andesite fields.

6.2 Bedrock Geochemistry

Bedrock base and precious metal analyses are presented in Appendices III and IV. Gold values are commonly <5 ppb with occasional spikes of 10 to 45 ppb. Values $\geq$20 ppb are rare and are too low and isolated to be of exploration significance.

Silver and arsenic commonly occur at or near their respective minimum detection limits of 0.2 and 2 ppm. Arsenic values exceeding 20 ppm have been found to be good indicators of major shear zones in the Abitibi Belt (e.g. Cadillac - Larder Lake Break, Casa-Berardi Fault). Arsenic may similarly define the Quetico Fault as weak spikes of 15-53 ppm occur in four of the eight strongly sheared felsic to intermediate volcanic samples in the project area.

Copper and zinc background levels range up to 75 ppm. Copper background is typically lowest in the granitoid rocks (<30 ppm) while zinc remains fairly constant in all rock types. Two features are obvious with regards to the anomalous copper values: (1) most of the elevated values occur in saprolitized supracrustal rocks, and (2) copper values can, in many samples, be traced to grains of native copper occurring in the saprolite.

6.3 Heavy Mineral Gold Geochemistry

Overburden Drilling Management (ODM) has considerable experience in testing gold dispersal train anomalies in tills, including many from gold deposits in the Abitibi Subprovince. Most are caused by liberated native gold grains in the till matrix, not by gold encapsulated in other minerals. Even if a majority of the gold is held in other minerals, such as in pyrite as in the tills overlying Richardson Township, highly anomalous amounts of visible gold are liberated due to the effects of glacial milling. These gold grains are dominantly silt-sized (<63 microns wide) but still qualify as visible gold because they are discernible with a simple binocular microscope. The trains are typically relatively short (in the order of 500 to 1000 m long) which results in the gold grains remaining pristine to moderately modified unlike the fully reshaped grains constituting most of the regional background gold grain population of the till.

To be considered as anomalous by ODM experience, a sample must contain at least 10 of the pristine to modified grains. An anomaly must also be of sufficient strength to suggest source mineralization of a significant grade and size. Assay strength is, however, dependent on concentrate size as well as source grade and size. If the till contains a normal abundance of heavy minerals, which is indicated by a laboratory concentration factor of about 350:1, a concentrate assay >1000 ppb or 1 g/t from a sample near the mid-point of the train is potentially significant because the source mineralization will probably have about the same grade. This handy rule reflects the fact that dilution of gold ore by unmineralized rock at the mid-point of a train is also about 350:1 and reconcentrating the gold in the laboratory simply cancels the dilution. If heavy minerals are unusually abundant, anomalies <1000 ppb may be significant whereas in undersized concentrates only anomalies much greater than 1000 ppb are of interest. One way of avoiding this variability is to normalize all samples to a 350:1 concentration factor. A better way, if all of the gold is visible, is to evaluate anomalies on the basis of the gold grain counts which are not dependent on concentrate size.

Several studies have shown that gold values calculated by ODM from the number of gold grains observed and their sizes closely match the actual gold assays obtained when the concentrates are analyzed. A plot of the calculated values versus the assays is very useful for assessing anomalies. If all of the grains are observed and none are removed from the concentrates prior to analysis, the samples will plot along the 45° slope. If grains are removed or lost or if the largest grains fail to enter the analytical aliquot when the concentrate is split before analysis, the samples will plot above the 45° slope. When grains are overlooked during processing or if most of the gold in the concentrate is hidden within another mineral (i.e. encapsulated), the samples will plot below the 45° slope.

The background concentration of reshaped gold grains in most of the project area is 1 to 7 grains/sample, with only occasional spikes over 10 grains/sample. The lowest values are over the largest granitoid plutons.

6.4 Cu-Zn-Ag-As in Heavy Mineral Concentrates

Normally heavy mineral copper values ≥800 ppm are considered anomalous because they indicate the presence of chalcopyrite or other copper minerals in the concentrates. Lower copper values between 200 and 800 ppm are generally due to copper ions held in pyrite. Zinc and silver also follow this pattern. Silver is normally sympathetic to copper, zinc or gold.

The Rainy River concentrates produced numerous weak anomalies, essentially all of which are copper anomalies which are related to native copper in the tills. In Richardson Township consistently elevated levels of copper, zinc, arsenic and silver are also present. The native copper anomalies overprint a regional Cu background that approaches 300 ppm over supracrustal rocks and is <100 ppm over granitoid stocks. Background zinc and arsenic levels are also highest over the supracrustal rocks (50-200 ppm versus <75 ppm). Silver ranges from less than the 0.2 ppm detection limit to distinctly anomalous concentrations of 4-10 ppm (4 to 10 g/t) which correlate weakly with the native copper anomalies. In contrast, any coincidence of gold with copper is accidental, resulting from the high incidence of both gold and copper anomalies in the till.

7. CONCLUSIONS

The 1996 reverse circulation drilling was performed in a relatively unexplored portion of the Rainy River Greenstone Belt. The main objective was to test the overlying Labradorean till for dispersed mineralization. Deposits of any type were sought but the emphasis was on gold due to the proximity to the Quetico Fault. The lack of major shear deformation/alteration on all properties except Richardson indicates that the Quetico Fault is on the Richardson property, not further south as previously thought. This potentially explains the presence of gold in the Richardson area and greatly enhances its potential for discovery of a gold deposit in this Township.

The local occurrence of native copper grains in the saprolite and their widespread occurrence and local high concentrations in the till that there must have been a copper mineralizing event across the Rainy River greenstone belt.

Table 3 (next page) summarizes the allowable expenditures associated with the drilling programme. Table 4 (next page) compiles the drill hole data (total meters drilled) associated with each claim and the dates drilled. Tables 5 and 6 summarize the ownership of the patents and work applied to both the patents and mining claims.

8. RECOMMENDATIONS

Several weak till anomalies of copper and gold have been outlined by the 1996 reverse circulation drill campaign. These anomalies all lie in areas covered by moderate to deep overburden which will require alternate exploration techniques to define drill targets. Follow-up IP surveys and diamond drill holes are recommended in the south eastern portion of Richardson Township adjacent to the regional Quetico Fault system.

Respectfully submitted,

Paul Jones, BSc.
Project Geologist
July 22, 1996

Table 3 Statement of Expenditures *

Dates of Drilling:	January 21 - March 26th, 1996
Number of Holes:	111
Total (metres):	2,689.6 m

(A) DIRECT DRILL COSTS

Bradley Brothers	188,979.00
Overburden Drilling	127,754.28**
ACT Labs (assaying)	11,643.49
Plowing access roads	3,001.34
	331,378.11

Total Direct Drilling Costs/meter = $123.21

(B) SUPERVISION AND SUPPORT COSTS

Paul Jones; 13 days x $300/day (Senior Geologist)		3,900
George Archibald, 38 days x $500/day (Project Manager, Nuinsco VP Explor.)		19,000
truck		2,327.88
field office	rent	1,400.00
	ph/supplies/heating	2,165.46
expenses (food, travel)		7,457.22
report costs		165.00
		36,415.56

Total Support Costs/meter = $13.54

TOTAL DRILL COSTS/METER = $136.75

* Exclusive of GST
** Includes field supervision, logging, sampling, sample shipping, sample processing.

Table 4 Total Footage (meters) per Claim

Township	Claim Parcel	RC Drill Hole Numbers	Dates Drilled	Total Meters Drilled
Richardson	# 10746	278, 279	March 9	51.5
	# 13514	276, 277	March 7,8	75.7
	# 5483	283, 284, 285	March 10, 11	99.2
	# 17392	281, 282	March 10	40.8
	# 22496	286	March 11	31.5
	# 4259	280	March 9, 19	20.7
Tait	1161602	212, 213, 214, 215, 216	Jan. 21 - 23	130.9
	# 17112	268, 269, 270	March 3, 4	87.5
	# 17117	271, 272	March 4, 5	93.0
Pattullo	# 14975	302, 303	March 17, 18	51.3
	1161583	301	March 16, 17	45.0
	1161584	298, 299, 300	March 15, 16	70.8
	1178048	273, 274, 275	March 6, 7	108.5
	1150136	235	Feb. 13	46.5
Nelles	1178028	234	Feb. 11	65.4
	1178036	314, 313, 314 A	March 22	32.9
Sifton	1178055	243, 244	Feb. 16, 17	24.2
	1150141	248, 249, 256, 257, 260	Feb 20 - 28	137.0
	1150142	250, 251, 252, 262, 263, 264, 265, 266	Feb 20 - March 2	235.2
Blue	# 4097	307, 307A	March 20	8.7
	#48R	308, 309	March 20	13.1
	# 4942	304	March 19	16.9
	# 5132	305, 306	March 19, 20	28.5
	# 12610	310, 311, 312, 312A	March 21	52.6
	1150139	318, 319	March 23	55.0
Atwood/ Curran	1161611	315, 316, 317	March 23, 24	77.7

CERTIFICATE OF QUALIFICATIONS

PAUL JONES

I, Paul Latimer Jones resident at 27 Briarmoor Crescent, Ottawa, Ontario, Canada, K1T 3G7, do hereby certify that:

1: I am a Consulting Geologist, since 1986.

2: I am graduate of Carleton University, Ottawa, 1982, with a B.Sc. (Hons.) in Geology.

3: I have been engaged in the study and practice of my profession since 1978.

4: I am a registered Fellow of the Geological Association of Canada.

5: This report is based upon onsite supervision of Nuinsco Resources Limited Reverse Circulation Drilling Exploration Program in the district of Rainy River.

Dated at Emo, this 22nd day of July, 1996.

Paul Jones, B.Sc.
July 22, 1996

Table 5 Ownership

Township	Con./Section	Lot	Parcel	Owner	Date of Option	Acres
Richardson	2	N1/2, 10	#10746	Croswell, K.A.	2/6/96	159.0
	1	E1/2, N1/2, 11	#13514	Munro, C.J	9/3/92	78.91
	2	S1/2, S1/2, 8	#5483	Georgeson, F.	5/2/92	76.58
	1	W1/2, S1/2, 8	#17392	Baghdasarian, V.	6/30/94	80.00
	2	N1/2, S1/2, 8	#22496	ARDA	7/1/93	79.25
	1	N1/2, 8	#4259	ARDA	7/1/93	157.27
Tait	31	NE 1/4	#17112	Leblanc, R.	1/16/96	153.0
	31	NW 1/4	#17117	Leblanc, R.	1/16/96	148.0
Pattullo	36	SW 1/4	#14975	Johnson Estate	3/13/95	164.0
Blue	23	SW 1/4	#4097	Nuinsco Res.	8/95	164.0
	14	pt NW 1/4	#48R	Johnson, C.	11/9/95	14.0
	27	SE 1/4	#4942	Johnson, L.C.	11/9/95	162.0
	26	SW 1/4	#5132	Johnson, R.	11/9/95	158.0
	35	SE 1/4	#12610	Robinson, D.	2/20/96	162.0

Table 6 Work Applied on Mining Claims and Patents

Mining Claims	Township	Meters Drilled	Assessment Credits
1161602	Tait	130.9	$17,900.58
1161583	Pattullo	45.0	$6,153.75
1161584	Pattullo	70.8	$9,681.90
1178048	Pattullo	108.5	$14,837.38
1150136	Pattullo	46.5	$6,358.88
1178028	Nelles	65.4	$8,943.45
1178036	Nelles	32.9	$4,499.08
1178055	Sifton	24.2	$3,309.35
1150141	Sifton	137.0	$18,734.75
1150142	Sifton	235.2	$32,163.60
1150139	Blue	55.0	$7,521.25
1161611	Curran	77.7	$10,625.48

Patents	Township	Meters Drilled	Assessment Credits
10746	Richardson	51.5	$7,042.63
13514	Richardson	75.7	$10,351.98
5483	Richardson	99.2	$13,565.60
17392	Richardson	40.8	$5,579.40
22496	Richardson	31.5	$4,307.63
4259	Richardson	20.7	$2,830.73
17112	Tait	87.5	$11,965.63
17117	Tait	93.0	$12,717.75
14975	Pattullo	51.3	$7,015.28
4097	Blue	8.7	$1,189.73
48R	Blue	13.1	$1,791.43
4942	Blue	16.9	$2,311.08
5132	Blue	28.5	$3,897.38
12610	Blue	52.6	$7,193.05

Table 6 Work Applied on Mining Claims and Patents

Mining Claims	Township	Meters Drilled	Assessment Credits
1161602	Richardson	130.9	$17,900.58
1161583	Tait	45.0	$6,153.75
1161584	Tait	70.8	$9,681.90
1178048	Tait	108.5	$14,837.38
1150136	Tait	46.5	$6,358.88
1178028	Nelles	65.4	$8,943.45
1178036	Nelles	32.9	$4,499.08
1178055	Sifton	24.2	$3,309.35
1150141	Sifton	137.0	$18,734.75
1150142	Sifton	235.2	$32,163.60
1150139	Blue	55.0	$7,521.25
1161611	Curran	77.7	$10,625.48

Patents	Township	Meters Drilled	Assessment Credits
10746	Richardson	51.5	$7,042.63
13514	Richardson	75.7	$10,351.98
5483	Richardson	99.2	$13,565.60
17392	Richardson	40.8	$5,579.40
22496	Richardson	31.5	$4,307.63
4259	Richardson	20.7	$2,830.73
17112	Tait	87.5	$11,965.63
17117	Tait	93.0	$12,717.75
14975	Pattullo	51.3	$7,015.28
4097	Blue	8.7	$1,189.73
48R	Blue	13.1	$1,791.43
4942	Blue	16.9	$2,311.08
5132	Blue	28.5	$3,897.38
12610	Blue	52.6	$7,193.05

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APPENDIX I

Reverse Circulation Drill Hole Logs

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 21 19 96

HOLE NO RR-96-212 LOCATION Site #5 ELEVATION 1130'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. C071107 BIT FOOTAGE 0.0 - 11.

SHIFT HOURS ____ TO ____

MOVE TO HOLE 8:15 - 10:30 Set up 10:30 - 11:30

DRILL 11:30 - 1:00

TOTAL HOURS ____

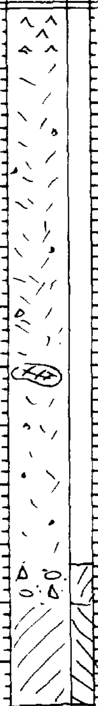
MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS ____

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0.0 - 0.5 Organics - peat
1				0.5 - 9.3 Keewatin Till
2				light ochre - beige to grey (4.0m)
3				very slightly gritty clay with
				occasional small pebble or granule
4				(mainly limestone & sandstone)
5				(6.0 - 6.3) small granite boulder
6				(6.3 - 9.3) clay Till + clay:
7				till as above with occasional
				non gritty clay seam
8				
9				9.3 - 10.6 Labradorean Till
10			01	Sandy till: grey silt
				to fine sand matrix. Small
11			02 BdL	cobble clasts 70% Volcanics /
				Sediments; 30% granitoids.
12				
13				10.0 - 11.7 Bedrock
				- green
14				- very fine to fine grained
				- Foliated
15				- carbonatized; 10-15%
16				disseminated + stringer
				calcite
17				- no visible sulphides
18				~~[illegible]~~ mafic volcanic
19				11.7 E.O.H.
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 21 19 96

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-213 LOCATION Site #4 ELEVATION 1130'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71107 BIT FOOTAGE 11.7-

MOVE TO HOLE 1:00 - 1:15

DRILL 1:15 - 5:00

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.5 organics - peat. 1.5 - 9.0 Lake Agassiz Sediments grey nongritty slightly compact clay. 9.0 - Layered Keewatin Till & Lake Agassiz Sediments grey v. slightly gritty clay matrix. occasional nongritty clay seam. rare granule & pebble clasts: mainly limestone, & sandstone. - below 15.0 m clay + clay till very slightly gritty to non gritty clay. v.rare small granule - pebble clasts.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 21 19 96

HOLE NO RC-96-#213 LOCATION Site #4 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

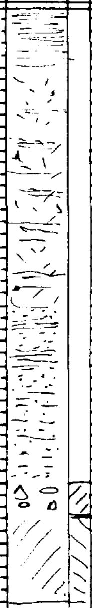
MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				(20.0 – 21.0) clay: grey non gritty slightly compact clay.
22				(21.0 – 25.0) clay till + clay: similar to 15.0 – 20.0
23				(25.0 – 28.0) Sand + clay: mainly poorly sorted very fine grading to fine grained sand with lesser nongritty clay/silt interbeds
24				
25				
26				28.0 – 28.6 Labradorean Till
27				unsorted grey silt to fine sand matrix. Pebble and cobble sized clasts of composition: 70% Volcanics & sediments; 30% granitoids.
28			01	
29			02	28.6 – 30.0 Bedrock
30				- medium green
31				- fine grained
32				- strong foliation v. weakly sheared i.e. presence of slip planes in places (v minor) (FeO stains)
33				10-15% disseminated; stringer calcite. Trace of disseminated pyrite. Trace hematite stain along calcite stringers in places
34				
35				
36				Basalt
37				30.0 E.O.H.
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 21, 22 19 96

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-214 LOCATION Site # 3 ELEVATION 1130'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71107 BIT FOOTAGE 41.7-76

MOVE TO HOLE 5:00 - 5:30 Jan 21 hrs

DRILL 8:45 - 1:30 + warmup.

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 21st 5:30 - 6:45 pm 7:30 - 8:45 22nd

MOVE TO NEXT HOLE

Pg 1 of

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 2.0 organics - peat moss 2.0 - 8.0 <u>Lake Agassiz Sediments</u> mainly grey with occasional organic rich layer (khaki-beige) non gritty clay. 8.0 - <u>Layered Keewatin Till + Lake agassiz Sediments.</u> (8.0 - 10.0) grey slightly gritty to gritty clay rich matrix Few small granule / pebble sized clasts mainly limestone & sandstone - lesser granite (10.0 - 17.6) Clay till / clay: as above with fewer clasts less grit and interfingering with non gritty clay layers (17.6 - 18.2) pebbly sand: mainly sorted fine to medium grained sand. granule & pebble clasts Dominantly sandstone / limestone. as in till. (18.2 - 29.5) clay till / clay similar to 10.0 - 17.6

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 21,22 19 96

HOLE NO RR-96-P14 LOCATION Site #3 ELEVATION 1130

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS

______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS

______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				(29.5-31.0) mainly grey poorly sorted (silty) v.f. grained sand with occasional clay layers.
22				31.0 - 33.0 Labradorean Till
23				grey silt to fine sand matrix. (Matrix supported).
24				Cobble clasts of composition:
25				70% Volcanics & Meta sediments;
26				30% granitoids
27				at intervals 31.8 - 32.0 & 32.4 - 32.7 there is abundant reddish brown clay-rock powder lumps probable saprolite.
28				32.7 - clay till: gradually clay rich matrix (grey to greenish beige rock powder) fewer till clasts. Becomes more compact down interval. Below 33.0 extremely compact - no clasts visible - saprolitic bedrock.
29				
30				
31				
32			01	* at ~33.0 m pull 5 rods to loosen up hole (too much torque) at 33.4 bit plugged pull rods & unplug bit - trip down.
33			02	
34			03 Bdk.	33.0 - 35.0 Bedrock
35				To 34.3 green and rusty (limonitic) rock powder-clay with ~5% competent volcanic rock chips and occasional hematized quartz fragment
36				below 34.3 increase in rock chips still weathered for the most part - weakly foliated with 3% qz/calcite stringers,
37				- some O.B. contamination in sample
38				Weathered basalt.
39				35.0 E.O.H.
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 22,23 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RL-96-215 LOCATION Site # 2 ELEVATION 1132'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71107 BIT FOOTAGE 76.7

MOVE TO HOLE 1:30 - 1:50

DRILL 1:50 - 5:40 PM (22nd) 8:30 - 11:15 (23rd) + warm up (very cold -38

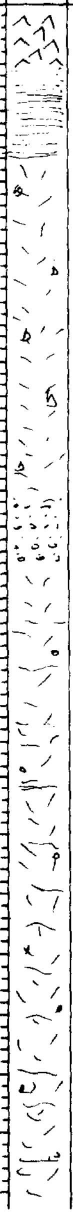
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 5:40 - 6:45 (22nd) 7:30 - 8:30 (23rd)

MOVE TO NEXT HOLE

Pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 Organics - peat moss 1.0 - 2.6 Lake Agassiz Sediments grey, with occasional brownish organic rich layer. non gritty clay. 2.6 - 24.6 Layered Keewatin Till and Lake Agassiz Sediments (2.6 - 8.6) grey, slightly gritty, clay rich till. Sparse pebble clasts mainly sandstone (8.6 - 9.4) glacio fluvial: pebbly sand. sorted fine to med. grained sand. Granule & pebble clasts of composition: 60% unmetamorphosed sandstone / limestone : 40% volcanics & granitoids *Wood chips are present. (9.4 - 24.6) clay till / clay: negligeable grit to non gritty clay. Very sparse sediment clasts as above.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Jan 22, 23 19 96

HOLE NO RR-96-215 LOCATION ______ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–40			01 (25), 02 (26.3), 03 (27.7), 04 (30), 05 (31.7)	see below

24.6 – 30.6 Labradorean Till

beige - light ochre (due to reworked saprolite) silt to fine sand matrix. Ochre rock powder - clay lumps in places.

Cobble sized clasts of composition: 70% Volcanics & Sediments; 30% granitoids. *Many of the clasts are strongly sheared up to 4% disseminated pyr. in some chips

(25.5 – 28.4) mainly reddish ochre (hematized) clay lumps clay rich matrix. Cobble clasts of composition: 60% Volcanics & seds; 40% granitoids at 28.0 strongly sheared felsic volcanic, cobble with 1-2% diss. pyr.

(28.4 – 29.2) boulder - granitoid felsic

(29.2 – 30.3) Till: clast supported cobbles of composition 85% granitoids 15% volcanics & sediments. Very little sand matrix.

(30.3 – 30.6) Till: similar to 25.5 - 28.4 again with sheared volcanic clasts present.

30.6 – 32.5 Bedrock

reddish ochre (occasional light ochre wisps in clay) saprolite - ferric zone. No rock chips present.

Saprolite

32.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

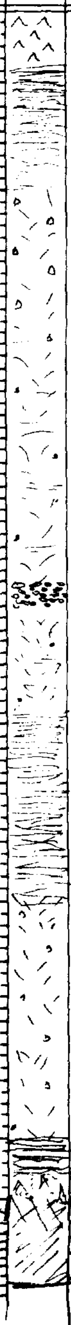
DATE Jan 23 19 96

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-216 LOCATION Site #1 ELEVATION 1133'
GEOLOGIST D Collins DRILLER R Legault BIT NO. C871107 BIT FOOTAGE 109.2
MOVE TO HOLE 11:00-11:15
DRILL 11:15 - 1:00
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–21			01, 02	0.0 - 0.8 Organics - Peatmoss

0.0 - 0.8 Organics - Peatmoss

0.5 - 3.0 Lake Agassiz Sediments

charcoal grey to beige (below 1.7m) organic rich clay.

3.0 - 19.6 Layered Keewatin Till + Lake Agassiz Sediments

(3.0 - 5.0) beige to grey gritty clay rich matrix. Small pebble sized clasts mainly unmeta. Sandstone & limestone ; 20% Volc./meta seds./granitoids.

(5.0 - 9.6) very slightly gritty to non-gritty in places. Rare clasts composition as above

(9.6 - 10.0) gravel : bed of rounded subrounded granule & pebble clasts. 70% rounded SS & limestone ; 30% volcanics & granitoids.

(10.0 - 11.8) Similar to 5.0-10.0 (clay/clay till)

(11.8 - 14.8) clay : grey nongritty clay → no clasts

(14.8 - 19.0) clay/clay till : similar to 5.0-10.0m .. (in places clay quite gritty with increase in clast carbonate content.

19.6-20.0 Labradorean Till

Thin horizon of till? more like bedrock rubble. 95% mafic volcanic cobbles ; 5% granitoids. Very little grey-green silt to fine sand matrix.
*Sample 01 undersized.

20.0 - 21.7 Bedrock - basalt
- medium green
- fine grained, foliated
- minor mafic chlorite
- 1% disseminated calcite
- below 21.4m up to 10% qtz/carb. veinlets in places
- no visible sulphides

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 11 1996

SHIFT HOURS 7:30 TO 7:00

TOTAL HOURS 11½

CONTRACT HOURS 11½

HOLE NO RR-96-234 LOCATION Site 104 ELEVATION Flat bog

GEOLOGIST Averill DRILLER Legault BIT NO. CB71133 BIT FOOTAGE 21.0-86.

MOVE TO HOLE Float move 8:30-11:00 (2 trips); walk Nodwell 11:00-11:45

DRILL 11:45-6:00; leave rods overnite @ 46.0 Feb 11; Feb 12 — 8:00-5:45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Standby for float 8:00-8:30 Feb 11; travel 7:30-8:30 and 5:45-6:45 Feb 12

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0-3.0 No return; ice in bit; assume mostly peat 3.0-12.5 AGASSIZ SEDIMENTS Clay. Uniform mixed. grey, no varves or sand except few grains 12.1-12.5 Note: Thick surface clay explains flat peat bog versus rolling farmland with surface till in Denholm-Black Hawk area. 12.5-30.5 KEEWATIN TILL Unsorted, clayey, grey. Fairly gritty but ≤1% ls. pebbles + granules. Colour is slightly beige-grey (grey being primary colour of clay, beige being primary colour of silt and sand component)

Page 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-234 LOCATION ________ ELEVATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				
22				
23				
24				
25				
26				
27				
28				
29				≈30.5-35.1 (rods temporarily plugged so exact upper cont act unknown)
30				AGASSIZ SEDIMENTS
31				Uniform grey clay as upper section. No varves or sand grains.
32				
33				
34				35.1-38.7 <u>LABRADOREAN TILL</u>
35			RR-96 234-01	Cobbly, clast supported, unsorted. Matrix grey-beige fine silty sand.
36				35.5-35.7 Granitic gneiss boulder (not sampled)
37			02	35.1-35.5 and 35.7-36.5 clasts are subequal granitic + volc./sed.; trace shale.
38			03 (and +10 bag)	36.5-38.7 Volc/sed component jumps to 70%, half of which show slight to rarely strong supergene weathering, usually oxidation, rarely blue reduced colours. <u>Shale</u> jumps to 3-5%; variously light grey, lesser dark green, maroon, but falls to zero last half metre. Cobbly, not clast-supp. Collected extra +10 pebble bag.
39			04 Shale	
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Page 3

DATE ________ 19 __

HOLE NO RR-96-234 LOCATION ________ ELEVATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

SHIFT HOURS ________ TO ________

MOVE TO HOLE ________

DRILL ________

TOTAL HOURS ________

MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

CONTRACT HOURS ________

OTHER ________

MOVE TO NEXT HOLE ________

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
			04 shale (cont'd)
41			05 shale
42			06 shale
43			07 shale
44			08 shale
45			09 shale
46			10 shale
47	q.v.		11
48			12
			13
49			14
50			15
51			
52			16
53			17
54			
55			18
56			19
57			
58			20
59			
60			21

DESCRIPTIVE LOG

38.7-45. SHALE

Green 38.7-40.2, mostly ground to green clay with only your small shale chips (applies to entire shale section). 5-10 cm grey cryptocrystalline q.v. at 40.0; special vial of sample collected.

40.2-43. Variegated green and khaki shale but still mostly grey

43.1-43.7 Strong red-ochre oxidation superimposed on green shale

43.7-44.2 Grey with minor red-ochre oxidation zones

44.2-45.3 Red-ochre oxidation superimposed on grey + green shale

Note: All samples were returned more as clay lumps and sparse coherent cuttings although recovery was always >50%. Collected only the +10 lumps + cuttings except took a bulk sample of:
a) Samples 11 to 14 combined
b) Samples 17 and 18 combined
c) Samples 19 and 20 combined
d) Samples 20 + 21 combined

45.3-48.1 REDBED SANDSTONE + SHALE

45.3-45.7 Fine fissile red sandstone with interlayered grey to mostly red shale

45.7-46.5 Very red fine fissile sandstone, mostly returned ~~as~~ mixed in lumps of clay milled from shale indicating fissile sand/shale interlayering although sandstone chips are fully clay-cemented too.
Left words over the Feb 11 @ 46.0 m
Collected special vial of redbeds @ 46.0

46.5-48.1 As above, brick red shaley or clay-altered fine fissile sandstone with grey cryptocrystalline 10 cm q.v. in green reduced envelope at 47.2 (special sample vial collected)

48.1-48.7 Blue reduced shale, no native Cu.

48.7-49.7 Redbed fissile shaley sandstone, variably red to dark brown, interleaved with blue reduced shale.

49.7-50.2 Blue reduced shale, No Native Cu.

Note: It is only the sandstone zones that are oxidized red (i.e. red beds); the shales are green, blue + gray reduced/primary colours with local red or brown overprinting.

50.2-51.3 Variegated blue + brown shale.

51.3-51.7 Interbedded brown siltstone + metallic grey shale

51.7-52.2 Metallic grey shale.

52.2-61.2 DOMINANTLY REDBED SANDSTONE

52.2-55.2 Shaley or clay-altered red sandstone, fine, locally with primary green colour evident (i.e. mottled rock). Sand grains attain sufficient size (med. sand 0.2-0.3 mm) to observe greywacke comp. - and all are fissile - raising possibility of saprolitized basement greywacke rather than Jurassic redbed sediment. However all cuttings are very uniform with no evidence of metamorphic elongation or qtz veinlets, etc. and texture is similar to that in most Proterozoic wacke except for fissility which may be result of clay infilling/alteration & sediment loading. Also red alt is controlled by sediment size (sand), they are evidently by primary permeability.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

Page 4

DATE ________ 19 __

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-234 LOCATION ________ ELEVATION ________
GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________
MOVE TO HOLE ________
DRILL ________
MECHANICAL DOWN TIME ________
DRILLING PROBLEMS ________
OTHER ________
MOVE TO NEXT HOLE ________

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			22	55.2-55.5 Grey shale with brown mottling probably controlled by permeable silty layers
61	Unconformity?			
62			23	55.5-61.2 Shaley or clay-altered red sandstone as 52.2-55.2. Sand grains locally increase to 0.2-0.3 mm reducing fissility. Primary green colour preserved 57.2-57.4 and several narrower zones thereafter. Oxidation generally lightens in this section, is often more yellow-ochre than red-ochre. Coherent rock cuttings remain sparse and rock seems to break either along fissility planes or around sand grains; however by 61.0 m chips seem lineated and can no longer be broken along fissility planes by finger pressure suggesting basement greywacke/siltstone. Collected special vial of sandstone cuttings spanning section.
63				
64			24	61.2-61.4 Green and red shaley or clayey zone, possibly saprolite.
65				61.4-65.4 ARCHEAN BASEMENT
66				Many green cuttings in drill-milled clay, initially green to ≈62. m, then pale khaki, then grey by 64.3 with very few coherent cuttings.
67				SILTSTONE/GREYWACKE
8				Medium grey-green cuttings.
9				Well fol. to semi-schistose; if weathered might seem fissile as in above red bed sandstone, and might break around instead of through sand grains.
10				Fine sandy to silty texture; individual grains rarely resolvable. Chloritized.
11				No qtz veinlets or coarse grained metamorphic segregations that would serve to distinguish from fissile red bed sandstone.
12				Left rods at 65.4 overnight Feb. 12, checked cuttings by binoc. microscope, determined hole had reached basement, pulled rods Feb 13.
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 13 1996

SHIFT HOURS
____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-235 LOCATION Site 105 ELEVATION as hole 23

GEOLOGIST Ansell DRILLER Legault BIT NO. 71131 BIT FOOTAGE 0-46

MOVE TO HOLE 9:30-11:00

DRILL 11:00 - 3:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel: 7:30-8:30; pull rods Hole 234 8:30-9:30

MOVE TO NEXT HOLE 3:15-4:30 move out to road for float 8:00 am tomorrow

NEWBIT

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–4				0-4.1 Organics: Peat
4–12				4.1-12.7 Lake Agassiz Sediments clay: grey, massive, uniform, no grit or pebbles. No variation in colour, no varves.
12–20				12.7-28.9 Keewatin Till clayey grey matrix, unsorted with abundant grit and 1-2% limestone pebbles. Exact upper contact is uncertain - rod plugged. 14.6-16.8 no noticeable grit or pebbles may be clay seam or till with very sparse pebbles. Exact location uncertain - rods plugged below 16.8, clay till as above.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-235 LOCATION ____________ ELEVATION ______

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ____________

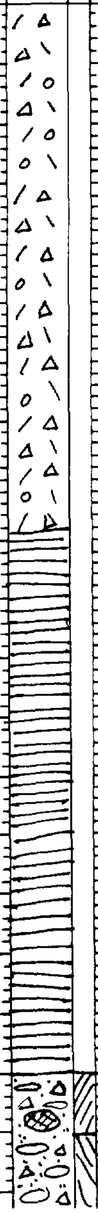
DRILL ____________

MECHANICAL DOWN TIME ____________

DRILLING PROBLEMS ____________

OTHER ____________

MOVE TO NEXT HOLE ____________

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21 – 40			RR-96: 01, 02	28.9-38.0 Lake Agassiz Sediments clay: grey, massive, uniform no silt or pebbles as above. exact position of contact uncertain because of delayed return. 38.0-41.3 Labradorean Till unsorted grey-beige matrix, some blue-green granules, matrix silt to sand, a few cobbles initially, drilling smooth, cobbles increasing in frequency below 38.7 but till remains matrix-supported down hole to bedrock. No shale clasts. 80/20: volcanics/ granitoids. Some light green sheared clasts - appear to be chlorite- sericite schist. 5% diabase clasts. 38.7-38.9: basalt boulder.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-235 LOCATION ______ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
41			AR-96-03	41.3: Saprolitic blue clay - may be rock flour.
				41.4: Bedrock :
42				-46.5 chlorite sericite schist - material very soft - return is clumps of rock flour with undetermined proportion of chlorite to sericite. A -10 mesh sample taken to illustrate fine grained nature of return & to provide sample for native copper determination.
43			Bedrock -10	
44				
45				
46				
47	EOH			
48				Occasional quartz grains to 5mm were observed, some with tourmaline alteration. Mafic content <40%. Several of the more competent chips have strained and flattened feldspar and quartz grains.
49				
50				
51				
52				
53				
54				The bedrock drilled easily, therefore 5.2m were sampled in an attempt to obtain identifiable chips.
55				
56				
57				May be sheared equivalent of
58				Sample of selected chips taken throughout section.
59				
60				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 16 19 96

SHIFT HOURS 2:00 TO 4:00

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO RR-96-243 LOCATION Site # 43 ELEVATION 1200'

GEOLOGIST A. IVANOFF DRILLER Legault BIT NO. CB1132 BIT FOOTAGE 48.1-51

MOVE TO HOLE 1:15 to 2:00 New: 71127 New: 0-1m

DRILL 2:00 to 3:45

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER Drill bit # 1132 had been replaced by CB71127 after 3 meters.

MOVE TO NEXT HOLE In order to sample more of the Labradorean Till we redrilled 5 meters east from this hole. The results of this second hole is Loged on Page 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG

Sample Nos.: RR-96-243-01, 01, 02, 03, 02

0-1.4 KEEWATIN TILL

- Chocolate brown to oxidized light ochre
- very gritty and clayey matrix
- Sparse, small limestone pebble clasts

1.4-2.4 LABRADOREAN TILL

← when sampling RR-96-243-01 the may have been some keewatint contamination from the top of the sampling interval.

- fine sand grey-beige matrix
- very little matrix return throughout (may be due to washing)
- clast supported cobbly Till
- volcanic clasts are dominant.

← Only 1/4 of a sample bag was recovered for sample 243-01

1.6-2.1 Volcanic Boulder
- dark green-black basalt
- not sampled ~1.7-2.1

2.1-2.4 cobbly till
95% mafic volcanics
5% granitoids

2.4-4.0 BEDROCK

- dark green to black, aphanitic rock
- melanocratic, massive
- fine disseminated sulfides (pyrite)
- no signs of weathering

BASALTIC Rock

← Some small metal chips from drill bit was recovered along with the sample return. (very Indurated rock)

3.1-3.4
- still aphanitic
- seems to be slightly bleached
- good foliation
- appears to be weakly sheared
- Slightly more disseminated sulphides
- Sparse oxidizing mineral (hematite) on some foliation planes

← at 3 meters, the rods were pulled and the drill bit was replaced. New Bit: CB 71127

3.7-4.0
- Sparse oxidizing (yellow-red) staining on cleavage? planes.
<1% felsic phenos (feldspar?)
- Calcite veining at 3.8 (effervecent in HCl)

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb. 16 19 96

HOLE NO RR-96-243B LOCATION Site # 43 ELEVATION

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE 1.0-3.4

SHIFT HOURS
______ TO ______

MOVE TO HOLE

DRILL 3:45 to 4:30

TOTAL HOURS
______

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS
______

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	
0–2.3		1–2.3	243B 01	0-2.3 KEEWATIN TILL - oxidized light ochre matrix - sparse grit. - mixed limestone and volcanic pebble clasts. <2% l's; <2% volcanics	Re-drilled 5 meters east from the original hole (#243) in order to sample more of the Labradorean till.
2.3–2.4				2.3-2.4 Bedrock - Same as what was logged on page 1	

Note:
Unfortunatly no Labradorean Till was intercepted in this second hole. However, due to the few volcanic pebble clasts found in the Keewatin Till (probable mixing with a pre-existing Labradorean Till), a Sample (243B-01) was taken from the Keewatin Till.

Depth scale: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/02/1996

HOLE NO RR-96-244 LOCATION Site 44 ELEVATION ~~1140~~ 1165

GEOLOGIST Ansell DRILLER Legault BIT NO. BIT FOOTAGE

SHIFT HOURS ____ TO ____

MOVE TO HOLE

DRILL 8:30-12:00

TOTAL HOURS

MECHANICAL DOWN TIME

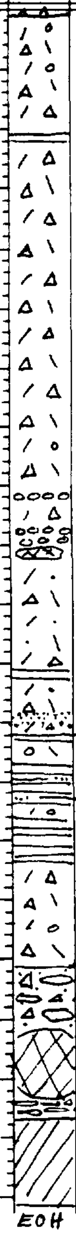
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE 12:00-12:30

pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20			RR-96-244 01, 02, no sample, 03, 04	see below

EOH

0-0.1 Organics top soil

0.1- Keewatin Till: unsorted, silty clay matrix, oxidized beige to 1.8, slate grey beneath; abundant grit, 5% limestone pebbles, decreasing downhole to coarse grit, <1% pebbles by 1.9

2.1-2.2 clay seam: uniform grey clay, no silt, grit or pebbles

2.2-7.4: uniform grey clay + beige silt matrix with very sparse grit and pebbles

7.4-16.1 Intercalated Keewatin Till and Lake Agassiz Sediments

coarsens downhole to pebbly seams at 8.2 and 8.8

9.1-9.2: tonalitic cobble (ice rafted)

9.2-12.2: character of till changes abruptly below tonalite cobble: matrix now a mixture of 60% clay, 10% silt and 30% fine/very fine sand with 7% limestone pebbles, abundant grit and some limestone cobbles. No volcanic or granitic clasts or matrix. Drills slowly. Clay seams at 11.1 and 12.2; very sandy seam between 11.8 and 12.0 consisting of medium to coarse moderately sorted limestone sand (lacustrine) minor till seams at

12.6-14.4: unsorted matrix is >95% clay, little silt, very sparse occasional grit and pebbles. Some beige mottling indicates possible varves. Probably Lake Agassiz sediments.

14.4-16.1: typical Keewatin till with 1% limestone pebbles

Note: The sequence between 7.4 and 14.4 appears to represent dynamic interaction between Lake Agassiz and the Keewatin Lobe.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-244 LOCATION Site 44 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG						

16.1 - 18.7 Labradorean Till
- unsorted grey silt and fine sand matrix with minor beige silt
- matrix supported
- clasts 90:10 / volcanics : granitoid some granitic pebbles; 2% feldspar-phyric basalt clasts with massive sulphide veining (to 4mm wide)
- basalt cobbles, one with pyrite veining; trace of Quartz vein material with pyrite and tourmaline
- some sheared but unbleached basalt clasts with pyrite cubes to 10mm

17.2 - 18.3 basalt boulder
- dark green sheared basalt with chloritized pyroxene in felsic groundmass
- pervasive calcite alteration of plagioclase
- calcite veinlets with disseminated pyrite
- pervasive and fracture-related hematite staining.

18.3 - 18.7 basal till : matrix as above clasts to 95% sheared basalt quickly becoming basal rubble of very local derivation.

18.7 - 20.2 Bedrock
- dark green sheared basalt with chloritized pyroxene in felsic groundmass
- minor calcite alteration of groundmass feldspar
∴ far less extensive alteration than that of boulder.
- trace of calcite veining
- 1% disseminated pyrite, minor pyrite stringers
- pervasive hematite staining, some hematite alteration of py

19.4 : slight, temporary increase in calcite veining

20.2 minor Keewatin contamination

Hole making water : plugged with one log

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 20/2 19 96

HOLE NO RR-96-248 LOCATION Site 59 ELEVATION ~~1120~~ 1140

GEOLOGIST Ansell DRILLER Legault BIT NO. 71122 BIT FOOTAGE 0-44.0

SHIFT HOURS ______ TO ______

MOVE TO HOLE 10:30-10:45

DRILL 10:45-1:30

TOTAL HOURS ______

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS ______

OTHER

MOVE TO NEXT HOLE 1:30-1:45

pg 1 of 3 New Bit

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0-3.9: Organics: very little return - mostly peat 3.9-5.1: Keewatin Till uniform, unsorted gritty slate grey clayey matrix with silt and sparse limestone pebbles No oxidized zone in till 5.1-6.1 Keewatin Till and Lake Agassiz Sediments return consisted of 2 components: soft, oxidized brown clay and moderately sorted silt and fine sand / few pebbles. - appeared to be ice-rafted clay and pebbles interlayered with beige lacustrine silt and sand 6.1-9.0 Lake Agassiz Sediments uniform dense massive grey clay with minor silt. No grit or pebbles 9.0-38.9 Keewatin Till 9.0-10.9 very sandy till with grey clay and beige silt matrix. Sample taken at 9.5m was washed to remove clay. The coarser material which remained consisted of 5% grey, unsorted silt + fine sand commonly found as matrix in Labradorean till, plus small volcanic clasts and granitoid pebbles. The remainder was silt to med sand-sized beige carbonate and 2% limestone pebbles. The till changed gradually downhole to typical Keewatin Till by 10.9.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

1140

DATE Feb 20 19 96

HOLE NO RR-96-249 LOCATION Site # 58 ELEVATION ~~H20~~

GEOLOGIST A. IVANOFF DRILLER Legault BIT NO. 71122 BIT FOOTAGE 44.0-7

SHIFT HOURS ____ TO ____

MOVE TO HOLE 1:30 to 1:45

DRILL 2:15 to 4:00

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER ~~Hole was Plugged.~~

MOVE TO NEXT HOLE 4:00 to 4:30

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	
1–20				0-1.4 ORGANICS 0-0.6 - roots 0.6-1.4 - Peat 1.4-24.0 KEEWATIN TILL - gritty, clay rich, brown-grey matrix - minor granules of limestone clasts 4.0-7.0 - fine to medium size sand in a clayey grey-beige matrix - very good grit - <2% limestone pebble clasts. 7.0-22.0 Layered Keewatin Till and Sediments - clayey matrix throughout - very small occasional pebble (limestone) clasts. - rare, small pebble volcanic clasts - layering alternates between clay/silt (sparse grit) and fine sand/medium sand (good grit) matrix with corresponding color change from medium-grey to grey-beige, with the occasional non-gritty clay layer. 22.0-24.0 - very soft clayey matrix - very sparse limestone pebble clasts	Note Groundwater flow up hole after drilling was complete. Hole was Plugged.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 20 1996

HOLE NO RR-96-249 LOCATION Site #58 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

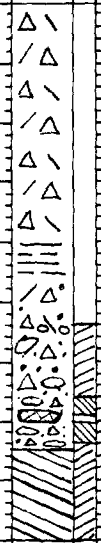
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–40			RR-96 249 01, 02, 02, 03	see below

24.0-24.5 AGASSIS SEDIMENTS
- medium-grey clay/silt matrix
- soft, non-gritty
- no evidence of varves.

← at 22.5m Pipe Clogged. 5min delay to unplug pipe

24.5-25.4 KEEWATIN TILL
- clayey, grey beige, matrix
- < 5% limestone, large pebble clasts
- < 1% volcanic pebble clasts

25.4-27.5 LABRADOREAN TILL
- grey-beige silt/fine sand matrix
- matrix supported

clast { ~ 70% volcanics (wide variation of volcanic clasts)
- 20% sheared volcanics, porphyry, dacites, andesites)
~ 30% granitoids and metasediments

26.6-26.8 - 80% Volcanic to 20 granitoid clast proportions.
- < 1% quartz
- good matrix
- near clast supported

26.8-27.0 - melanocratic, volcanic Boulder
- high traces of calcite and coarse pyrite

27.0-27.3 - poor matrix return
- cobble supported
- 95/5 volcanic to granitic clast ratio.

27.3-27.5 transitional till to bedrock
- volcanic (basalt) is dominant
- dark grey-black foliated volcanic clasts.

27.5-29.0 BEDROCK
- fine grain, weakly foliated, dark green to black volcanic rock.
- traces of disseminated pyrite
- mineral lineation and lamination.
- white calcite in micro veins and groundmass.

28.0-29.0 - < 2mm wide calcite veins (fractured system in bedrock?)
- no visible sulphides
- Strong foliation
- weakly bleached

Sheared Basalt.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 20/2 1996 to 21/2/96

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO RR-96-250 LOCATION Site 57 ELEVATION ~~1120~~ 1140

GEOLOGIST Ansell DRILLER Legault BIT NO. 71122 BIT FOOTAGE 730-1

MOVE TO HOLE 4:30 - 4:45

DRILL 4:45 - 5:30 ; 9:00 - 10:45

MECHANICAL DOWN TIME ½ hr maintainance on pump

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 10:45 - 11:00

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0-4.1 Organics: peat
				4.1 - 5.6 Keewatin Till
				section from 4.1 to 9.9 has similar elements to those in hole 248 no oxidized zone, till matrix is uniform gritty grey clay and silt with 1% limestone pebbles and sparse grit
			"K-till"	5.6 - 7.9 Keewatin Till plus Labradorean-type material
				This material is very similar to that occuring between 9.0 - 10.9 in hole 248 i.e. that is a beige, sandy matrix with coarse volcanic sand and beige limestone sand 1% limestone pebbles. took sample labelled "Keewatin till"
				7.9 - 9.9 Lake Agassiz Sediments
				uniform massive grey clay with minor silt no grit or pebbles
				9.9 - 27.4 Keewatin Till
				typical Keewatin with uniform slate grey clayey matrix with silt, sparse grit and <1% limestone pebbles.
				27.4 - 28.0 Keewatin Till plus Labradorean-type material as at 5.6 - 7.9

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ______ 19 __	HOLE NO RR-96-250 LOCATION ______ ELEVATION ______
	GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
SHIFT HOURS	MOVE TO HOLE ______
______ TO ______	DRILL ______
TOTAL HOURS	MECHANICAL DOWN TIME ______
______	DRILLING PROBLEMS ______
CONTRACT HOURS	OTHER ______
______	MOVE TO NEXT HOLE ______

pg 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–31			RR-96-250	28.0–29.1 Lake Agassiz Sediments uniform slate grey clay with minor silt, no grit or pebbles. 29.1–31.4 Keewatin Till as above (9.9–27.4) 31.4–35.4 Labradorean Till and Glaciolacustrine Sediments 31.4–32.9: moderately sorted beige silt to fine sand containing at least 30% beige carbonate sand with occasional pebbly seams. 32.9–35.2: intercalated till and sand - local traces of unsorted grey silt-fine sand matrix with granules of granitoids and volcanics cobbles at 32.0 and 34.0 35.2–35.4: unsorted grey silt to fine sand matrix with clasts of 90/10 volcanics/granitoids, trace of green phyllite.
32			01	
34			02	
35			03	35.4–36.5 Bedrock - sheared dark green basalt - slightly to moderately schistose - feldspar phyric (< to 1.0 mm) - no visible pyrite - minor carbonate alteration of both groundmass and phyric feldspar - pyroxene replaced by chlorite - minor quartz veining (2-3mm) with patchy carbonate
36			04	
37	EOH			

Hole making water - plugged with 1 log

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 21 19 96

HOLE NO RR-96-251 LOCATION Site # 56 ELEVATION 11~~20~~ 40

GEOLOGIST A. IVANOFF DRILLER Legault BIT NO. ______ BIT FOOTAGE 109.5-138.

SHIFT HOURS
______ TO ______

MOVE TO HOLE 10:45 to 11:00

DRILL 11:00 to 12:45

TOTAL HOURS
______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS
______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG

0-2.0 Organics - roots & peat

2.0-17.1 KEEWATIN TILL

- light ochre to beige oxidized matrix
- very gritty
- sparse, small pebble, limestone clast
- occasional, rounded, volcanic pebble clast.

6.3-11.6 - grey-beige, reduced, clayey matrix
- good grit, dense
- very sparse limestone pebble clasts
- visible, limestone, coarse sand ~5%
- occasional volcanic or granitic granule

11.6-17.1 - medium-grey, soft clay matrix
- very sparse grit
- occasional, very small, limestone pebble clast (angular shape)

17.1-21.6 AGASSIS SEDIMENTS

- medium-grey clay/silt matrix
- occasional sparse grit layer
- rare light-beige silt sand varves

21.6-23.8 KEEWATIN TILL

- light grey-beige fine sand/silt matrix
- < 1% irregular (angular) limestone pebble clasts
- very good grit

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb. 21 1996

HOLE NO RR-96-251 LOCATION Site #56 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

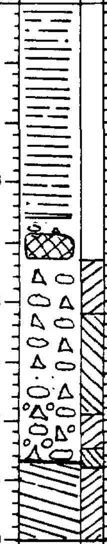
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–20 (scale)			RR-96 251 01, 02, 03, 04, 05	see below

23.8-27.7 LABRADOREAN TILL

- fine sand matrix (grey-green)
- 60:40 volcanics to granitic ratio
- matrix supported

23.8-24.3 - coarse grained pink granitoid Boulder (qtz Monzonite or Granite)

at 24.6 - sheared cobbles
- <5% white quartz

25.2-27.0 - little return on fine sandy (grey-green) matrix (may be due to high amount of water being used during drilling)
- clay (gritty) lumps of ground up rock
- 70:30 volcanic to granitic clast ratio
- some 20% sheared sericite/chlorite cobble clasts.
- near cobble supported.

27.0-27.4 - excellent grey-beige fine sand matrix
- near cobble clast supported to clast supported
- <5% white quartz in return

27.4-27.7 - enrichment up to 90% in intermediate volcanics
- mottled red oxidation on most volcanic clasts.

27.7-29.2 BEDROCK

- dark green fine-grained volcanic
- weakly foliated; lineation of slender dark green mineral (amphibole?)
- Sparse rusty pyrites (Fe oxides psudomorph after pyrite) <2mm size.
- not calcareous (no reaction with HCl)
- intercepted a clear qtz vein (<2cm) at 28.2 m
- becoming more bleached at 28.3
- micro qtz veins with oxide staining at 28.5 m.
- intercepted a second qtz vein (~5% qtz in return) at 29.0 m
- light green (seems to have an intermediate alteration envelope around qtz veins)

Weakly sheared Basalt.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 21/02 1996

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-252 LOCATION Site 267 ELEVATION ~~1120~~ 1140

GEOLOGIST Averill DRILLER Lepault BIT NO. 7/122 BIT FOOTAGE 29.2-49

MOVE TO HOLE 1:30 - 1:45

DRILL 1:45 - 3:00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 3:00 - 3:30

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–3.6	^^			0-3.6 Organics: peat
3.6–7.8	?			3.6-7.8: no +10 return water very silty, small amount of sand in scoop and in #1 bucket. May be Lake Agassiz silt.
7.8–19.1	/ Δ			7.8-19.1 Keewatin Till very uniform slate grey clayey matrix with silt sparse grit. <1% limestone pebbles. No volcanic or granitic material. NO LABRADOREAN TILL
19.1–20.1			RR-96 252 01	19.1-20.1 Bedrock - dark green basalt with recrystallized groundmass - medium amphibolite facies : clots of black amphibole to 2mm in green felsic groundmass - some compositional banding with variable felsic/mafic ratio - pervasive calcite? alteration of feldspar - lineation of amphibole crystals - no visible sulphides.
20	EOH			

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 22 1996

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-256 LOCATION Site #54 ELEVATION _____

GEOLOGIST A. IVANOFF DRILLER Legault BIT NO. 71118 BIT FOOTAGE 0-19.2

MOVE TO HOLE 12:00 to 12:30

DRILL 12:30 to 2:00

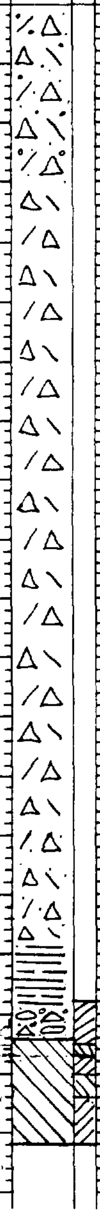
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER New Rock Bit

MOVE TO NEXT HOLE 2:15 to 2:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	New Rock Bit #CB71118



Depth: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Sample no.: RR-96-256-01, 02 *, 03, 04, 03

02 sample ... bulk ...

0-15.8 KEEWATIN TILL

- very gritty; clay/silt matrix
- mixed, chocolate brown and light ochre, small, till lumps
- abundant limestone pebble clasts (~20%)

3.0-14.3 - charcol grey-beige clayey matrix
- thick, compact.
- Sparse to very sparse (at base) limestone pebble clast

14.3-15.8 - lighter grey-beige due to moderate grit content
- softer clayey matrix

15.8-16.8 AGASSIZ SEDIMENTS

- medium-grey clay rich matrix
- poor grit, no varves.
- soft, smooth to touch.

16.8-17.4 LABRADOREAN TILL ← needed to wash twice to collect a good size sample.

- fine sand, grey-beige matrix
- Pebbly (rounded) to cobbly clasts
- clast supported
- 80% volcanics clast (70% of these are strongly sheared, dark green and 30% are massive felsic to intermediate - dacites? & andesites?)
- 20% granitoid clasts (granite, greywackes, monzonite?)
- traces of saprolitic rock.
- <1% qtz and <1% limestone clasts

17.4-19.2 BEDROCK

17.4-17.7 - Saprolitized schist, light green rock flour
- 1/4 bag sample (256-02) - no vials

17.7-18.0 - dark green, well foliated, fine-grained volcanic chips.
- <2% felsic volcanics & granitoids (contamination or basal rubble?)

18.0-18.4 → 60% volcanic as in 17.7-18.0 and 40% saprolitic material

18.4-19.2 → no saprolite
→ Strongly foliated, sheared, dark green volcanic rock.

Note: - interval 17.7-19.2 sampled in one bedrock bag RR-96-256-03
- sample 256-04 is a vial sample (no bag)

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 22/02 1996

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-257 LOCATION Site 53 ELEVATION 40 1135

GEOLOGIST Averill DRILLER Legault BIT NO. 7111B BIT FOOTAGE 19.2-

MOVE TO HOLE 2:30 – 3:00

DRILL 3:00 – 4:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 4:30–5:00

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0–0.6 Organics: marsh
1				0.6–6.0 Keewatin Till plus Labradorean-type material
2				unsorted oxidized beige clayey matrix, changing downhole to slate grey by 4.0, plus silt lithic sand with some volcanics and 2% limestone pebbles lithic sand content decreases downhole and disappears by 6.0
7				6.0–17.6 Keewatin Till uniform compact slate grey clayey matrix with minor silt <1% limestone pebbles. -below 11.0 limestone pebbles are very sparse with occasional granules.
12				17.6–20.1 Lake Agassiz Sediments uniform grey clay and calcareous silt, no grit or pebbles.
15				20.1–20.96 Lake Agassiz Sediments -interbedded grey clay and fine grey green lithic sand with beige carbon... with 50/50 volcanic/granitoid pebbles grading downhole to Labradorean till by 20.9
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-257 LOCATION ________ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
			RR-96-257
21			01
22			02
23			03
24			04
25			05
26			
27			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

DESCRIPTIVE LOG

20.9 - 24.5 Labradorean Till / Glaciolacustrine Sedimen

- unsorted beige silt and fine sand matrix with occasional volcanic cobbles and exotic granite pebbles
- clast composition: 50/50: volcanics/granitoids
- changes down hole to sorted fine grey sand with rounded pebble seams between 21.6 & 22.0
- back to unsorted grey silt and coarse sand comprised of 50/50 volcanics/granitoids plus pebbles and cobbles some sheared volcanics
- 22.6-23.0 light-green sheared volcanic clasts, little natural matrix, pyrite cubes > 1 mm

23.0-23.8 Boulder light green sheared volcanic

23.8-24.5: unsorted grey silt and fine sand matrix with 90/10 volcanics/granitoids the volcanics are 70/30: light green sheared volcanic/basalt

24.5-25.8 Bedrock

- highly sheared green basalt
- stretched and lineated feldspars
- mafics very fine grained
- disseminated pyrite to 2%
- quartz veins at 25.0 & 25.4

Hole making water - plugged with 1 log.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 29 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-260 LOCATION Site # 52 ELEVATION 1140'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO 5871118 BIT FOOTAGE 78.8-97.8

MOVE TO HOLE 5:30-6:00 28th setup

DRILL 8:00 - 10:30 + walk in from road

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–1				0.0 - 0.8 m Organics - peat moss
1–17				0.8 - 17.6 Keewatin Till
				beige - ochre (oxidized) gritty clay rich matrix. 5-10% pebble clast component mainly limestone & sandstone. by 3.5 m the till is an unoxidized grey
				4.0 - 17.6 Till is very slightly gritty with sparse pebble clasts as above
17–17.8			01	17.6 - 17.8 Labradorean Till
				very thin till layer overlying bedrock. Grey silt to fine sand matrix. Clast composition 70% mafic volcanics; 30% Granitoids. * sample 01 is well undersized (surprise!) washed hole several times to obtain sample; thus 40% of clasts in sample are Keewatin till derived
17.8–19			02	17.8 - 19.0 Bedrock
				- dark green
				- medium grained
				- weakly foliated
				unsheared
				- main mafics chlorite + hornblende
				- equigranular interlocking texture
				- non calcareous
				- no visible sulphides
20				Basalt

19.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 29th March 1 19 96

SHIFT HOURS
_____ TO _____

TOTAL HOURS
_____

CONTRACT HOURS
_____

HOLE NO RL-96-262 LOCATION Site #8 Copper Fallow ELEVATION 1125

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. GB7 1118 BIT FOOTAGE 125.3 -15

MOVE TO HOLE 1:30 - 3:00

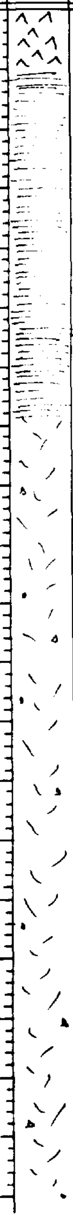
DRILL 3:00 - 5:45 Pm 8:55 - 11:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Travel 5:45 - 6:30 Travel 7:30 - 8:55 Am

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 organics - peat moss 1.0 - 6.8 Lake Agassiz Sediments grey & grey brown (organic rich in places), non gritty, clay. Very slightly compact below 3.5 m. 6.8 - 21.5 Keewatin Till beige slightly oxidized gritty clay rich matrix. ~5% pebbly clasts mainly limestone & sandstone with a few granitoids below till is very slightly gritty to non gritty in places. Very few small pebble granule sized clasts. further till is grey in colour.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Feb 29, March 1 1996

HOLE NO RR-96-262 LOCATION Site #8 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

___ TO ___

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

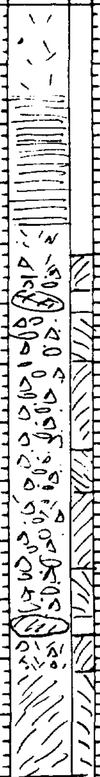
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
21			
22			
23			
24			01
25			02
26			03
27			04
28			05
29			06
30			← EOH Feb 29th
31			07
32			08
33			
34			
35			
36			
37			
38			
39			
40			



DESCRIPTIVE LOG

21.5 – 23.7 Lake Agassiz Sediments

clay grey non gritty appears to be varved in places.

23.7 – 24.1 Keewatin Till

Thin horizon of clay till similar to 6.8–8.5 m

24.1 – 31.2 Labradorean Till

(24.1 – 24.5) clay till : 60% green blue to khaki gritty clay lumps with silt to fine sand matrix. clast composition: 65% mafic volcanics 35% granitoids

(24.5 – 24.8) Sandy till : grey beige silt to fine sand matrix. Cobble sized clasts of composition: 65% mafic volcanics & metaseds ; 35% granitoids

(24.8 – 25.2) Boulder - basalt

(25.2 – 28.2) Sandy till : similar to 24.5–24.8. Many of the mafic volcanic clasts are well foliated / some are also clay altered.

(28.2 – 29.4) Till : alternates between very clay rich matrix (for brief intervals) with silt to fine sand matrix. The clay rich segments are gritty greenish-blue lumps that occur with clasts of differing lithology ; thus they are not clay altered clasts but part of matrix. Overall clast composition is 75% volcanics 25% Granitoids.

(29.4 – 30.2) Sandy till : of similar composition to 28.2–29.4 ; some of the volcanic clasts appear to be cleaved below 30.0 m

(30.2 – 30.6) boulder - clay altered basalt (blue green clay lumps & occ. qtz fragments.

(30.6 – 31.2) Till : matrix mainly blue green clay lumps Simultaneous return or clasts of varied lithologies : 70% volc./seds ; 30% granitoids

31.2 – 33.0 Bedrock

mainly blue-green clay few competent basalt chips below 11.6 m also occasional limonitic coloured clay (yellow...

- placed competent chips directly in vials

- qtz veins & fractures between 32.5–32.7

Protolith - Basalt.

33.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 1 19 96

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-263 LOCATION Site #10 ELEVATION ____

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

MECHANICAL DOWN TIME ____

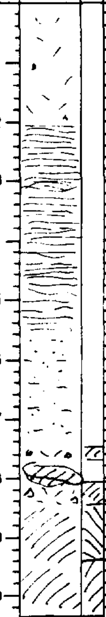
DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



Depth scale: 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

Sample No.: Tr 01 (27.6), 01 (28.2), 02 (29.0), 03 (29.9)

22.0 - 27.5 LAKE AGASSIZ SEDS

(22.0 - 25.7) clay & Silt: grey, smooth nongritty clay with occasional silty varves.

(25.7 - 27.5) grey, poorly sorted (silty) very fine to fine grained sand.

27.5 - Labradorean Till

mixed rusty ochre ~~cla~~ & bluish green clay lump matrix

Small cobble clasts of composition: 70% volcanics & sediments; 30% Granitoids.

(27.7 - 28.0) boulder - basalt

(28.0 - 28.5) Till as before: observed coarse grained pyrrhotite in couple of metased? clasts.

* washed interval several times to obtain a sample; there may be some mixing with glaciolacustrine seds overlying - in sample #01

28.5 - 30.4 Bedrock

- ochre (rusty brown) and pale - medium green.
- dominantly rusty clay lumps though there are chips mainly ochre with strong foliation. most of the chips return occurred in first half metre.
- sampled twice for assay comparison.
- hematite stain below 29.7 m

protolith - basalt. (clay altered)

* sampled combined fines from Boxes 02 & 03; bagged for possible table run.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 1 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-264 LOCATION Site # 11 ELEVATION 1125'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71118 BIT FOOTAGE 188.6-210

MOVE TO HOLE 2:30-2:45

DRILL 2:45-4:30

MECHANICAL DOWN TIME 4:30-6:00 mechanic checked motor to

DRILLING PROBLEMS change rpm's - no luck.

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0.0 - 3.0 Organics - Peat Moss 3.0 - 6.5 Lake Agassiz Sediments clay / silt : grey, smooth non gritty clay with silt varves. There are occasional brownish grey organic rich layers 6.5 - 20.0 Keewatin Till beige-ochre gritty clay rich matrix. ~5% pebble clasts mainly limestone & sandstone below 9.5m till matrix is very slightly gritty & even fewer clasts present.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 1 1996

HOLE NO RR-96-264 LOCATION Site #11 ELEVATION

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. BIT FOOTAGE

SHIFT HOURS

_____ TO _____

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21, 22				20.0 - 22.4 Lake Agassiz Sediments clay/silt grey, smooth, nongritty clay and silt (varved)
23, 24, 25, 26			01 02 03	22.4 - 26.3 Labradorean Till grey beige, silt to fine sand matrix. Cobble clasts of composition: 75% mafic volcanics & metasediments; 25% Granitoids
27, 28			04 Qtz vein, seperate vial	26.3 - 28.8 Bedrock - almost exclusively greenish white rock powder lumps, with approximately 1% quartz veinlets in form of chips other than 27.7 - 28.0 - soft micaceous to talcy or clay altered probable protolith - mafic volcanic (27.7 - 28.0) quartz vein, vialed seperately non calcareous, non mineralized 28.8 E.O.H.
29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 2 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RL-96-265 LOCATION Site # 9 ELEVATION 1125'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71118 BIT FOOTAGE 216.9

MOVE TO HOLE 9:30-10:30 + clean mud tanks)

DRILL 10:30 - 1:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 organics peat moss 1.0 - 6.5 Lake Agassiz Sediments initially beige-ochre oxidized to grey, smooth, non gritty clay. 6.5 Keewatin Till beige-grey gritty clay rich matrix. 5-10% pebble clasts composed mainly of limestone & sandstone. (8.5 - 15.8) clay till: very slightly gritty to nongritty clay rich matrix. Very few small pebble, granule clasts as above. (15.8 - 16.2) sand: sorted, beige fine grained sand bed. (16.2 - 17.2) clay Till + sand: clay till as before interbedded with poorly sorted & sorted beige fine grained sand. (does not appear to be till matrix). (17.2 - 19.0) clay till similar to 8.5 - 15.8. 19.0 - 21.8 Lake Agassiz Seds clay grey smooth non gritty clay and silt varves.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 2 19 96

HOLE NO RR-96-265 LOCATION Site # 9 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS

______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

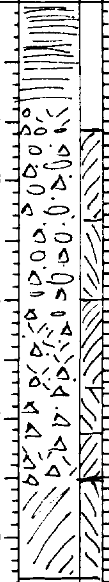
CONTRACT HOURS

______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
21			
22			
23			01
24			02
25			
26			03
27			04
28			05
29			06
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			



DESCRIPTIVE LOG

21.8 – 22.2 <u>Keewatin Till</u>
clay till similar to 8.5-15.8

22.2 – 28.0 <u>Labradorean Till</u>
at very beginning of interval for ~15 cm there was abundant khaki clay lumps. Thereafter, grey silt to fine sand matrix supported till. Cobble clasts composed of 70% mafic volcanics lime ta cads; 30% granitoids. many of the mafic volcanics are well foliated - weakly sheared often with qtz veinlets. (barren)

(25.3 – 26.4) <u>clay rich matrix</u> khaki · brown blue-green gritty clay lumps. Fewer clasts of similar composition to above.

(26.4 – 27.3) sandy matrix supported till as in 22.2-25.3

(27.3 – 28.0) <u>clay till</u> similar to 25.3-26.4 + drilled few saprolite clay cobbles in addition to matrix clay.

29.0 – 29.7 <u>Bedrock</u>

(28.0 – 28.6) pale grey white saprolitic rock clay

28.6 – 29.7 pl. grey ish green slightly consolidated rock chips (clay altered) v. weakly foliated, appear to have clastic texture with relict qtz / plag sand? no visible sulphides, non calcareous. Greywacke or mafic vol.

29.7 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 2 19 96
HOLE NO RC-96-266 LOCATION 10m west of site #7 ELEVATION 1122'
GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CR71118 BIT FOOTAGE 246.6-274.

SHIFT HOURS
______ TO ______
MOVE TO HOLE 1:30-1:45
DRILL 1:45 - 4:00

TOTAL HOURS
MECHANICAL DOWN TIME
DRILLING PROBLEMS

CONTRACT HOURS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0.0 - 1.2 Organics Peatmoss
1				1.2 - 7.0 <u>Lake Agassiz Sediments</u>
2				grey & grey brown (organic rich) soft non gritty clay
3				7.0 - 20.5 <u>Keewatin Till</u>
4				grey gritty clay matrix
5				few small pebble clasts mainly limestone & sandstone
6				(8.3 - 20.5) very slightly gritty to non gritty clay matrix
7				v few clasts as above
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 2 19 96

HOLE NO RR-96-266 LOCATION 10m west site #7 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2 of 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
21			
22			
23			01
24			02
25			
26			03
26			04
27			05
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

DESCRIPTIVE LOG

20.5 - 22.0 Lake Agassiz Sediments

varved grey smooth non gritty clay & silt

22.0 - 26.4. Labradorean Till

grey silt to fine sand with up to 40% khaki gritty clay lumps matrix. Cobble sized clasts of composition: 70% mafic volcanics & meta seds; 30% granitoids.

24.5 - 26.0 sandy till matrix as above with clay lumps. Till near clast supported in places.
- below 25.0 there are a few sheared & mineralized till clasts mainly volcanic. observed native copper in one basalt clast (unstained).

26.4 - 28.0 Bedrock

- medium green
- fine to medium grained
- poorly foliated
- unsheared
- inequigranular interlocking text
- main mafic chlorite
- Tr. disseminated pyr.
- Tr. diss magnetite
- non calcareous

Basalt.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 3 19 96

HOLE NO RR-96-268 LOCATION Site # 66 ELEVATION 1122

GEOLOGIST P. Collin DRILLER R. Legault BIT NO. C071134 BIT FOOTAGE 37.5-64.

SHIFT HOURS
____ TO ____

MOVE TO HOLE 12:00 - 12:15

DRILL 12:15 - 3:15

TOTAL HOURS

MECHANICAL DOWN TIME

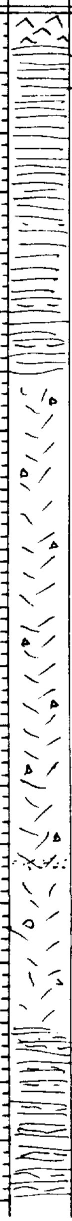
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0.0-0.5 organics peat moss 0.5-6.0 Lake Agassiz Sediments initially beige ochre to grey brown (organic rich) slightly gritty clay with silt varves. clay is grey below 4.5 m 6.0-20.0 Keewatin Till beige to grey beige gritty clay matrix. Few pebble clasts mainly limestone & sandstone (8.0 - 17.0) clay till very slightly gritty matrix sparse pebble clasts as above clay non gritty in places. (14.2 - 14.2) Sorted beige sand bed. (medium grained) 17.0-20.0 Lake Agassiz Sediments varved grey soft non gritty clay & silt

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 3 19 96

HOLE NO RR-96-268 LOCATION Site #6C ELEVATION ______

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. SB71134 BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

MOVE TO HOLE ______

DRILL ______

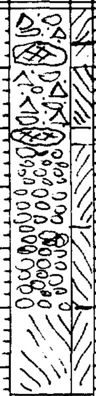
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			01	20.0 - 25.0 Labradorean Till
21			02	grey silt to fine sand matrix. Cobbly near clast supported of composition:
22				50% volcanics & sediments; 50% Granitoids.
23			03	boulders at 20.7 - 21.0 tonalite
24			04	22.0 - 22.2 basalt
25			05	22.2 - 25.0 gravel: well washed no matrix. Subrounded pebbles also cobble clasts of composition 60% granitoids 40% volcanics & seds. abundant return on clasts some of which are sheared & mineralized. abundant -10 mesh cutting in sample #03
26				25.0 - 26.5 Bdk
27				- dominantly khaki & bluegreen clay lumps
28				- 10% competent chips (clay altered)
29				- dark grey green
30				- weakly porphyritic texture plag. phenos in fine g.m.
31				- Trace disseminated sulphide?
32				- main mafic chlorite
33				Basalt.
34				26.5 E.O.H.
35				
36				
37				
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 3,4 19 96

HOLE NO RR-96-269 LOCATION Site # 65 ELEVATION 1122

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. SB71134 BIT FOOTAGE 64.0-102

SHIFT HOURS

______ TO ______

MOVE TO HOLE 3:15-3:30

DRILL 3:30 - 5:45 3rd 8:30-11:15 (4th)

TOTAL HOURS

MECHANICAL DOWN TIME

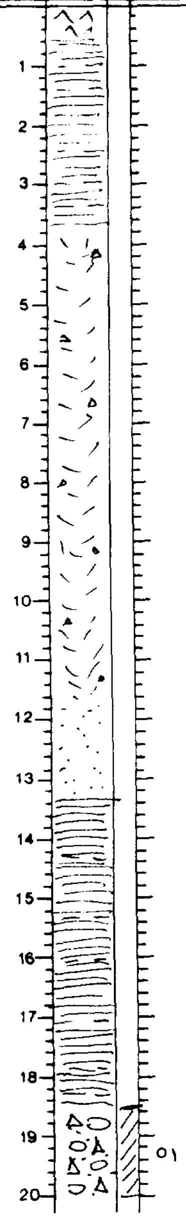
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES / GRAPHIC LOG / INTERVAL / SAMPLE NO.	DESCRIPTIVE LOG



0.0 - 0.5 organics - Rootmass

0.5 - 3.7 Lake Agassiz Sediments

initially olive to grey below 1.5 m, smooth non gritty clay & silt varves.

3.7 - 11.8 Keewatin Till

grey gritty clay rich matrix. 5% pebble clasts mainly limestone & sandstone.

6.0 - 11.8 clay till: very slightly gritty sparse pebble clasts

11.8 - 18.5 Lake Agassiz Seds

(11.8 - 13.3) sand: beige poorly sorted (silty) fine grained sand

(13.3 - 18.5) clay: grey, smooth non gritty clay. Silt varves near bottom of interval.

18.5 - 37.2 Labradorean Till

grey beige silt to fine sand matrix. Cobble clasts of composition: 55% Volcanics & sediments; 45% granitoids

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 3 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-269 LOCATION Site #65 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

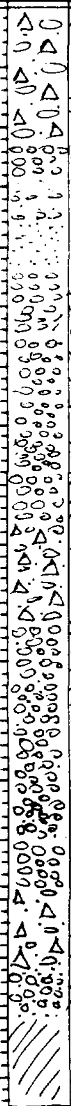
DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21			02	
22			03	
23				
24			04	
25				
26			05	
27				
28			06	
29				
30			07	
31			08	
32				
33			09	
34				
35			10	
36			11	
37			12	
38			13	
39				
40				

22.3 - 23.0 gravel: well washed (no matrix) subrounded to rounded pebbles & cobbles clast composition: 50% volcanics and sediments; 50% granitoids

23.0 - 23.7 gravel & sand: gravel beds of similar clast composition to above with sorted coarse & medium sand interbeds. volcanic component contains felsic & intermediate clasts as well as mafic.

23.7 - 24.3 sand: beige, sorted fine grained sand.

24.3 - 28.7 gravel: dominantly well rounded peanut shaped pebbles well washed little matrix occasional sorted sand bed. clast composition: 50/50 as above

28.7 - 30.3 Till: cobble clast supported, yet still return on matrix silt to fine sand. Clast composition: 55% volcanics & sediments; 45% granitoids. sulphides visible in some clasts and in matrix

30.3 - 34.8 gravel: similar to 23.0 - 23.7 with ~60% volcanics/sed; mostly well washed occasional coarse sand matrix. yet also slightly unsorted matrix in places.

34.8 - 36.2 Till: good unsorted beige matrix supported till. silty fine sand rare clay lumps. More angular clasts, pebbles & cobbles of composition 50% volcanics & seds; 50% granitoids

36.2 - 37.2 sand & gravel: sorted coarse sand matrix (beds) with rounded granule & pebble clasts of similar composition.

37.2 - 38.5 Bedrock

(37.2 - 37.8) mainly blue green rock clay lumps (saprolite)

(37.8 -) competent rock chips mainly med green. Some ochre-rusty ~~clay~~ fractured - fine grained, clay altered, no visible sulphide probable protolith

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4 19 96

SHIFT HOURS
____ TO ____

TOTAL HOURS
____

CONTRACT HOURS
____

HOLE NO RR-96-270 LOCATION Site #64 ELEVATION 1122'

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. C871134 BIT FOOTAGE 102.5-125

MOVE TO HOLE 11:15 - 11:30

DRILL 12:15 - 1:30

MECHANICAL DOWN TIME 11:30 - 12:15 adjust throttle cable.

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20				0.0 - 0.8 <u>Organics</u> 0.8 - 3.8 <u>Lake Agassiz Sediments</u> initially rusty grey (oxidized) to grey smooth n. gritty clay. 3.8 - 19.0 <u>Keewatin Till</u> grey gritty clay rich matrix 5% pebble clasts mainly limestone / sandstone. (6.7 - 19.0) very slightly gritty clay matrix (non gritty in places) Sparse small pebbles as above

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4 19 96

HOLE NO RR-96-270 LOCATION Site # 64 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS

______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS

______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				19.0 - 21.0 Lake Agassiz Sediments
22			01	clay/silt/sand : mainly greenish grey smooth nongritty clay & silt varves. Below 20.0m there are inbeds of poorly sorted very fine grained sand c occasional dropstone
23				
24				21.0 - 22.5 Bedrock
25				- mainly dark green & olive green clay lumps (saprolite)
26				- below 20.5 return on competent chips - dark green, well foliated, medium grained, chloritic, hematized in places below 22.0m
27				- unsheared, no visible sulphides noncalcareous.
28				Mafic Volcanic.
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4 1996

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-271 LOCATION site #63 ELEVATION 1122'

GEOLOGIST P. Collins DRILLER K. Legault BIT NO. CB71134 BIT FOOTAGE 125.0-153

MOVE TO HOLE 1:30 - 1:45

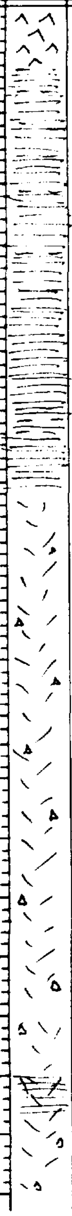
DRILL 1:45 - 3:~~00~~15

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 organics peat moss 1.0 - 8.0 Lake Agassiz Seds initially rusty grey (oxidized) & brown swirly clay to grey (2m) smooth, nongritty clay & silt varves. 8.0 - 22.0 Keewatin Till grey beige gritty clay rich matrix. Pebble clasts of composition limestone & sandstone occasional granitoid. 13.0 - 22.0 very slightly gritty to nongritty massive clay matrix Very sparse pebble clasts as above

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4 1996

HOLE NO RR-96-271 LOCATION Site #63 ELEVATION ____

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

SHIFT HOURS ____ TO ____

MOVE TO HOLE ____

DRILL ____

TOTAL HOURS ____

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

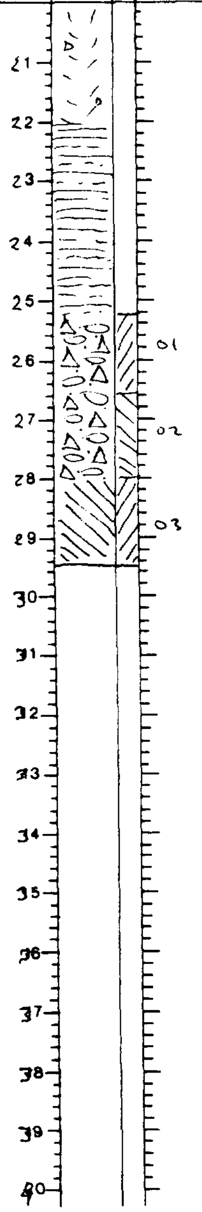
CONTRACT HOURS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



22.0 - 25.2 <u>Lake Agassiz Sediments</u>

pale greenish gray clay with silty varves. occasional dropstone.

25.2 - 28.0 <u>Labradorean Till</u>

near clast supported. Gray beige silt to fine sand matrix Cobble clasts of composition: 50% Volcanics & Sediments; 50% granitoids below 26.3 clast composition changes to 65% volcanics 35% granitoids. Many of volcanic clasts are sheared.

28.0 - 29.5 <u>Bedrock</u>

- medium green
- fine grained, weakly clay altered.
- strong fabric
  moderate to strongly sheared.
- chlorite - sericite along slip planes
- epidotized in places
- Tr. disseminated sulphides
- non calcareous

<u>sheared basalt</u>

29.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4, 5 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-272 LOCATION Site #62 ELEVATION 1122'

GEOLOGIST P. Collins DRILLER R. Lage BIT NO. CB71119 BIT FOOTAGE 0.0 - 63.

MOVE TO HOLE 3:15-3:30 (4th)

DRILL 3:30 - 5:45 (4th) 8:10 - 6:00 pm March 5th

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

New bit. Pg 1 of 4

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.3 Organics - Peat 1.3 - 8.0 Lake Agassiz Sediments grey, smooth, nongritty clay & silt (rare) 8.0 - 20.0 Keewatin Till grey beige, gritty clay-rich matrix. 5-10% pebbly clasts mainly limestone & sandstone (10.0 - 20.0) very slightly gritty to nongritty clay rich matrix. Sparse pebble clasts as above.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4 19 96

HOLE NO RR-96-272 LOCATION Site #62 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

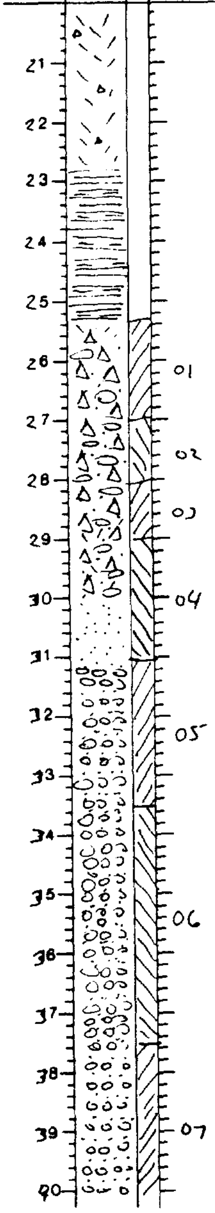
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



22.8 - 25.3 Lake agassiz Seds

greenish pale grey, smooth nongritty clay with silt varves.

25.3 - 62.8 Labradorean Till & Glaciofluvial Sediments

cobble clast supported till. Little silt to fine sand matrix. Clast composition 60% volcanics sediments / 40% Granitoids.

* - initial 0.2 m there is green blue (khaki gritty clay in matrix up to 40%.

(27.0 - 28.8) abundant return of clasts & matrix. Pervasive oxidation of clasts which imparts ochre silt to fine sand matrix. Cobble clast composition 50% volc/sed, 50% granitoids.

(28.8 - 30.2) till as above with ~5% gritty khaki clay lumps in matrix

(30.2 - 31.2) sand: sorted coarse grained sand.

(31.2 - 41.0) sand & gravel:

bedded sorted medium to coarse grained sand & gravel. Pebble & cobble clasts of composition: 50% volcanics/sed, 50% granitoids.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE *March 4,5* 19 *96*

HOLE NO *RR-96-272* LOCATION *Site #62* ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

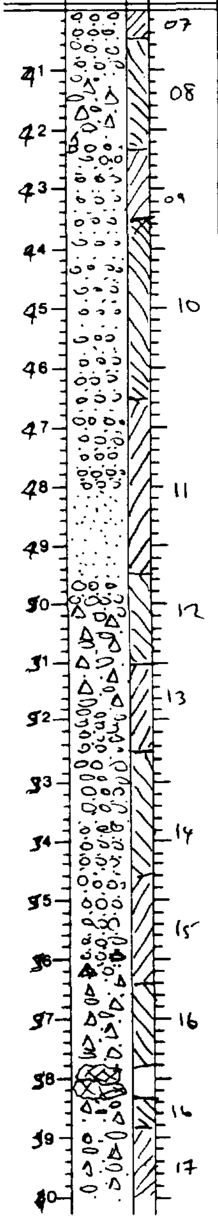
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 3

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



(41.0-42.2) Till? slightly unsorted matrix - coarse biased yet retains silt to fine sand fraction. Mainly cobble clasts of similar composition to gravel.

(42.2-48.0) Sand & gravel: very similar to 31.2-41.0 m. Slightly unsorted matrix in places. Observed occasional felsic (sheared) volcanic clast probably derived from east Richardson Area.

(48.0-49.4) Sand: variably sorted & poorly sorted fine grained sand

(49.4-50.0) sand & gravel: Cobbly gravel with clast composition 65% v/s 35% granitoids. Increase in locally derived material (mafic volcanics).

(50.0-51.8) till? slightly sorted silt deficient matrix. Cobbly clasts of composition: 65% mafic volcanics & sediments; 35% granitoids

(51.8-55.8) Sand & gravel: well sorted medium to coarse sand and Cobbly clasts of composition: 50% v/s 50% Granitoids

(55.8-57.8) till: good unsorted matrix gray silt to fine sand. Cobble clasts of similar composition to above.

(57.8-58.2) boulder: saprolite

(58.2-58.4) boulder: trondjhemite

(58.4- till: good till similar to 55.8-57.8 & occasional saprolite cobble.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 4,5 19 96

HOLE NO RR-96-272 LOCATION Site #62 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 4

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
61			17	62.3 - 63.5 Bedrock - Saprolite
62			18	→ pale blue green rock clay
63			19	- sulphuric ~~stomach~~ to clay
				- by 63.5 bit badly plugged ∴ pull rods } extract clay
				probable protolith. basalt.
64				63.5 E.O.H.
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 6 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-273 LOCATION Site #40 ELEVATION 1122

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71142 BIT FOOTAGE 0.0-53

MOVE TO HOLE 8:20 - 9:30 (+ unplug bit & lost rod, set up.

DRILL 9:30 - 4:15

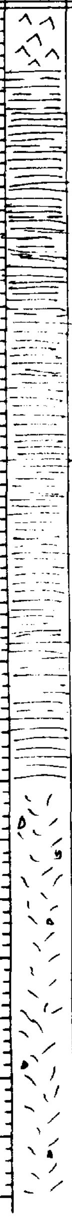
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

New bit

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 organics peat 1.0 - 13.0 Lake Agassiz Sediments initially olive to grey (unoxidized) smooth, non gritty clay with silt varves. 13.0 - 35.0 Keewatin Till grey beige gritty clay rich matrix. Up to 20% pebble clasts in places, mainly limestone & sandstone with 10% fine sand in matrix. 15.0 - 35.0 Soft very slightly gritty to non gritty clay matrix sparse pebble clasts as above.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 6 1996

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-273 LOCATION Site #40 ELEVATION ____

GEOLOGIST P.C DRILLER R.L. BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG						
21										
22				35.0-40.2 Lake Agassiz Sediments varved pale grey to greenish grey nongritty clay and silt. -rare thin clay till seams in places.						
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 6 19 96

HOLE NO RR-96-273 LOCATION Site #40 ELEVATION ____

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

SHIFT HOURS ____ TO ____

MOVE TO HOLE ____

DRILL ____

TOTAL HOURS ____

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

CONTRACT HOURS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg 3

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
41			01	40.2 – 52.0 Labradorean Till and glacioFluvial Sediments
42			02	(40.2 – 41.0) Till: initial 0.3 m has up to 40% green-blue clay (gritty) in matrix. Thereafter, matrix is silt to fine sand. Cobble clasts of composition 50% volcanics & seds 50% granitoids.
43				
44				
45			03	(41.0 –) Sand & gravel: sorted medium & coarse grained sand with pebble & cobble gravel beds. Clast composition similar to above. Small pebbles are mainly rounded & subrounded. – below 42.5 gravel is now cobble clast supported v. slow drilling.
46				
47				
48			04	(43.0 – 43.3) boulder – tonalite
49				45.0 – 51.0 Sand & gravel similar to 41.0 – 42.5 clast composition changes to 60% granitoids
50				
51			05	51.0 – 52.0 Till: slightly sorted fine & medium sand matrix with up to 15% saprolitic clay lumps. Cobbly clasts composition: 60% Volcanics & Sediments; 40% granitoids.
52			06	
53			07	52.0 – 53.5 Bedrock
54				– abundant rock clay lumps blue green & olive rusty green
55				– chips are medium green & oxidized → fractured.
56				– well foliated, ~~med~~ up to 1.0 mm quartz eyes – weakly sheared? (phenos?)
57				– clastic like texture may be due to clay alteration & plag phenos. (porphyritic)
58				– 0.3% v. finely disseminated sulphides
59				Basalt? or greywacke.
60				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 6, 7 19 96

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-274 LOCATION Site # 41 ELEVATION 1122

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71142 BIT FOOTAGE 53.5 - 8

MOVE TO HOLE 4:15 - 4:30

DRILL 4:30 - 5:45 6th 8:25 - 10:00 7th.

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0.0 - 1.0 - Organics Peat moss
1				1.0 - 10.0 Lake Agassiz Sediment
2				varved grey nongritty smooth clay & silt.
3				
4				10.0 - 28.0 Keewatin Till
5				grey gritty clay silt matrix ~5% pebble clasts mainly limestone & sandstone.
6				
7				(11.5 -) very slightly gritty to non gritty clay silt matrix v. sparse pebble, granules as above.
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 6-7 1996

HOLE NO RR-96-274 LOCATION Site #4R ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

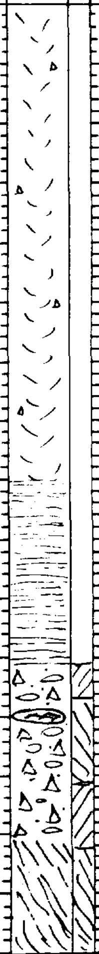
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg. 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				28.0 - 31.1 Lake Agassiz Sediments
22				varved pale greenish grey, nongritty smooth clay & silt.
23				31.1 - 34.0 Labradorean Till
24				grey beige silt to fine sand matrix, Cobble sized clasts of composition:
25				60% Volcanics & sediments; 40% Granitoids. ~15% of volcanics are sheared, some mineralized.
26				
27				(31.8 - 32.1) boulder - intermediate felsic volc. weakly mineralized.
28				
29				34.0 - 36.0 Bedrock
30				- bleached pale green & white
31			01 ← EOH 6th	- strongly sheared
32			02	- chlorite - sericite alteration along slip planes some weakly hematized
33			03	- 5-7% qtz veinlets
34				- Tr. finely disseminated pyrite
35			04	- 1% carbonate fertly?
36				- ~~weakly~~ porphyritic texture plagioclase phenocrysts.
				Altered mafic volcanic
17				36.0 E.O.H.
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 7 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-275 LOCATION Site # 42 ELEVATION 1122

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71142 BIT FOOTAGE 89.5-10

MOVE TO HOLE 10:00 - 10:15

DRILL 10:15 - 11:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 11:15 - 3:00

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–1				0.0 - 0.5 organics - Peat
1–2				0.5 - 6.8 Lake Agassiz Sediments
2–3				initially beige - ochre (sandy) to grey nongritty clay & silt (varved)
4				6.8 - 1 Keewatin Till
5–6				grey beige, gritty, clay matrix with 5-10% pebbly clasts Matrix slightly sandy in places.
7–8				(10.0 - 15.4) very slightly gritty to non gritty clay matrix. Rare pebble clasts as above.
9–11				(15.4 - 16.2) Lake Agassiz Sediments clay / silt : pale greenish grey nongritty clay / silt.
12				16.2 - 1 .0 Labradorean Till
13–16				grey beige silt to fine sand matrix. Cobble & clasts of composition: 70% volcanics / Seds; 30% granitoids. Many of the volcanics are sheared and some are mineralized.
16–17			01	1 .0 - 19.0 Bedrock porphyritic
17–18			02	- mottled medium green / white - moderately foliated - weakly cleaved; presence of slip planes some of which are hematized.
18–19	Qtz vein		vialed separately 02	- generally ~5-7% qtz veins apart from 18.0-18.5 which is strictly qtz vein - smoky in places with tourmaline? (vialed separately)
19–20				- Strongly porphyritic, chloritic groundmass plagioclase phenocrysts (up to 3mm) - 0.2-0.3 finely disseminated sulphides Feldspar Porphyry

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 7&9 96

HOLE NO RR-96-276 LOCATION site #36 ELEVATION 1198

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. 5871142 BIT FOOTAGE 108.5-1

SHIFT HOURS ____ TO ____

MOVE TO HOLE 11:15 - 3:00 7th

DRILL 3:30 - 5:45 (7th) PM 8:00 - 12:00 (8th)

TOTAL HOURS ____

MECHANICAL DOWN TIME 3:00 - 3:30 work on throttle

DRILLING PROBLEMS ____

CONTRACT HOURS ____

OTHER ____

MOVE TO NEXT HOLE ____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG						
1				0.0 - 1.0 organics - peat moss						
2				1.0 - 7.0 Lake Agassiz Sediments grey, non gritty, clay & silt varves						
3				7.0 - 32.4 Keewatin Till						
4				grey beige gritty clay rich matrix Pebble clasts (5-10%) of composition limestone & sandstone. occasional granite clast. minor silt to fine sand matrix in places.						
5										
6				12.5-32.4 very slightly gritty clay rich matrix. rare pebble clasts as above.						
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 7 19 96

HOLE NO RR-96-27C LOCATION ______ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS
______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS
______

MECHANICAL DOWN TIME ______

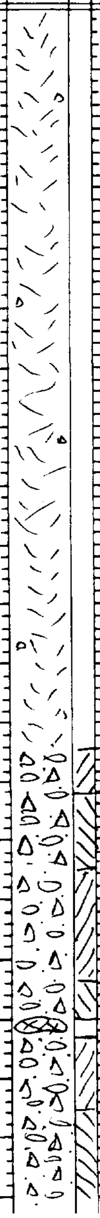
DRILLING PROBLEMS ______

CONTRACT HOURS
______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2



DEPTH IN METRES	SAMPLE NO.	DESCRIPTIVE LOG
21		32.4 - 45.8 Labradorean Till + <u>Glaciofluvial sediments</u> grey beige silt to fine sand matrix. Cobble clasts of composition: 55% Volcanics & sediments; 45% granitoids
22		(33.5 - 40.4) abundant sample return. Matrix slightly sorted & coarse biased. Clast composition as above.
23		- below 35.5 m clast composition is 55% granitoids 45% volcanics & seds. Till modified by glacio fluvial processes. Evidenced by occasional sorted fine, med & coarse sand; though only for brief intervals. Till matrix ~~sup~~ - supported & very sandy.
24		36.9 - 37.2 boulder - mafic volcanic very hard.
25		
26		
27		
28		
29		
30		
31		
32		
33	01	
34	02	
35	03	
36	04 ← EOH (7m)	
37		
38	05	
39	06	
40		

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 7,8 19 96

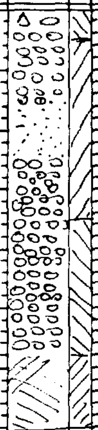
SHIFT HOURS
____ TO ____

TOTAL HOURS
____

CONTRACT HOURS
____

HOLE NO RR-96-276 LOCATION ____ ELEVATION ____
GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
			06
41			
42			07
43			
44			08
45			
46			09
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			



DESCRIPTIVE LOG

40.4 - 41.3 gravel : sorted coarse sand matrix. Sub-rounded pebbles 50% volcanics & sediments ; 50% granitoids (some volcanics are sheared).

41.3 - 42.4 sand : beige sorted fine g. sand.

42.4 - 45.8 Sand & gravel : sorted medium and coarse grained sand with pebble & cobble gravel interbeds. clasts similar to 40.4-41.3

45.8 - 47.2 Bedrock

- medium green
- fine grained
- moderately well foliated
- few slip planes
- main mafic pyroxene - chlorite
- 5-7% disseminated calcite

at 46.4 chips are grey brown with Tr. pyrite & calcite veinlets

Basalt.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 8 1996

HOLE NO RR-96-277 LOCATION Site # 37 ELEVATION 1151

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71136 BIT FOOTAGE 0.0-2

SHIFT HOURS

_____ TO _____

MOVE TO HOLE 12:00-12:15

DRILL 12:15 - 4:30

TOTAL HOURS

MECHANICAL DOWN TIME

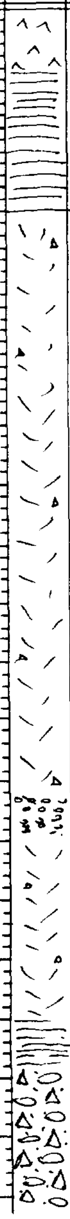
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE 4:30 - 5:45

New bit.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20		18–20	01, 02	0.0 - 1.0 organics - Peatmoss 1.0 - 3.4 Lake agassiz Sediments beige - light ochre to grey below 2m nongritty clay. 3.4 - 5.0 Keewatin Till grey beige gritty clay rich matrix. 5-10% pebble clasts mainly limestone & sandstone. (5.0 -) very slightly gritty to non gritty clay rich matrix. <3% pebble clasts mainly limestone & sand stone (13.3 - 13.8) glaciofluvial seds: sorted beige fine sand with pebble / granules 90% limestone & unmetam. seds; 10% granitoid 17.0 - 17.8 Lake Agassiz Sediments varved pale greenish grey non gritty clay & silt. 17.8 - 26.9 Labradorean till sandy matrix supported till beige - grey silt to fine sand. slightly sorted in places. Abundant return on sample. Pebble & cobble clasts of composition: 45% volcanics/seds, 55% granitoids.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 18 1996

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-277 LOCATION ____ ELEVATION ____

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21			02	21.5 - 22.4 Till as above but clast composition 60% Volcanics / Seds ; 40% granitoids.
22			03	(22.0 - 22.3) boulder basalt.
23			04	22.4 - 26.8 Till very sandy appears modified by glaciofluvial processes. Occasional sorted medium to coarse grained sand bed. Cobbly clasts of composition 50% volc/seds ; 50% granitoids
24			05	below 23.0 m till increasingly stony up to 80% granitoids in places.
25				
26			06	
27				26.8 - 27.0 80% greenish brown gritty clay lumps in matrix. Grades to nongritty slightly gritty saprolite clay by 27.0 m
28			07	27.0 - 28.5 Bedrock - Saprolite
29				26.9 - 27.3 brownish green clay
30				27.3 - 28.2 olive green clay with minute greenish rock chips?
31				28.2 - 28.5 Fe stained reddish orange clay.
32				
33				
34				
35				
36				
37				
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 9 1996
HOLE NO RR-96-278 LOCATION Site # 38 ELEVATION 1149
GEOLOGIST P.Collins DRILLER R.Legault BIT NO. SB71136 BIT FOOTAGE 28.5-5

SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

MOVE TO HOLE 4:30 - 5:45 (8th)
DRILL 8:10 - 10:30 (9th)
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0.0 - 0.5 Organics. Peat moss.
1				0.5 – 19.1 Keewatin Till
2				beige - light ochre slightly gritty to 3m; thereafter greyer very slightly gritty to non gritty clay rich matrix. few pebble clast mainly limestone & sandstone.
5–6				19.1-~~19.2~~ Labradorean Till
6–8				grey beige silt to fine sand matrix. ~~cobble~~/pebble clasts ~60% granitoid 40% volcanics & seds. ~~very~~ ~~A~~
9–10				(19.2-19.4) boulder - monzogite
10				(19.4-20.2) good unsorted matrix supported till as in (19.1-19.2)
19			01	
20			01	

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 9 1996

SHIFT HOURS
_______ TO _______

TOTAL HOURS
____

CONTRACT HOURS
____

HOLE NO RR-96-278 LOCATION Site # 38 ELEVATION _______
GEOLOGIST _______ DRILLER _______ BIT NO. _______ BIT FOOTAGE _______
MOVE TO HOLE _______
DRILL _______
MECHANICAL DOWN TIME _______
DRILLING PROBLEMS _______
OTHER _______
MOVE TO NEXT HOLE _______

Pg. 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			01	20.2 - 21.2 glacio fluvial sediments:
			02	cobbly gravel beds of composition
1				80% granitoids. 20% volcanics/
			03	sediments with inter beds of
2				sorted fine, medium & coarse
3				sand beds.
4				21.2 - 22.5 Bedrock
				- pink & greenish grey
5				- porphyritic texture.
				mainly plag + few qtz
6				phenocrysts in fine-groundmass
7				(qtz. feldspathic).
				- sheared
8				presence of slip planes
				up to 0.5% disseminated
9				pyr. + pyrrhotite?
				- 5% disseminated calcite
10				qtz. feldspar porphyry.
11				22.5 E.O.H.
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 9 1996

HOLE NO RR-96-279 LOCATION site #39 ELEVATION 114

GEOLOGIST P. Collins DRILLER R. Lejault BIT NO. C871136 BIT FOOTAGE 51.0-

SHIFT HOURS

_____ TO _____

MOVE TO HOLE 10:30 - 10:45

DRILL 10:45 - 1:30

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			01, 02	0.0 - 1.0 organics: peat moss 1.0 - 17.0 Keewatin Till beige to light ochre gritty clay rich matrix - ~5% pebble clasts mainly limestone & sandstone. (17.0 - 19.0) grey, very slightly gritty to non gritty clay matrix. rare pebble clasts as above 17.0 - 19.0 Lake Agassiz Sediments pale greenish grey non gritty clay & silt varves. Also interbeds of grey very fine grained sand 19.0 - 26.9 Labradorean Till (19.0-19.4) unsorted grey silt to fine sand matrix. Cobble clasts of composition: 60% granitoids; 40% Volcanics & sediments. (19.4 - 21.8) glaciofluvial Sediments Sand & gravel: well washed rounded pebble & cobble gravel of clast composition: 80% granitoids; 20% Volcanics & sediments. Interbeds of sorted coarse grained sand.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 9 19 96

HOLE NO RR-96-279 LOCATION Site #39 ELEVATION ____

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

SHIFT HOURS ____ TO ____

MOVE TO HOLE ____

DRILL ____

TOTAL HOURS ____

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

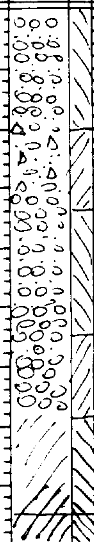
CONTRACT HOURS ____

OTHER ____

MOVE TO NEXT HOLE ____

Pg. 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.
21			02
22			
23			03
24			04
25			
26			05
27			
28			06
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			



DESCRIPTIVE LOG

21.8 - 23.0 till? certainly modified yet return on unsorted matrix. Also clast composition changes to 50% volc/seds 50% granitoids

23.0 - 26.9 Sand & gravel: similar to 19.4 - 21.8 below 25.0m volcanic/sediment component gradually increases to 75% by 26.5m, and is gradually more clast supported.

26.9 - 29.0 Bedrock

- dark green
- medium grained
- weakly foliated
- unsheared
- equigranular interlocking texture
- main mafic is chlorite + pxn.
- 3% pillow selvage
- 1% disseminated calcite
- trace sulphides disseminated pyrite

Basalt.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 9, 1996

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO RR-96-280 LOCATION site #35 ELEVATION 1146

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. S371136 BIT FOOTAGE 80.0-

MOVE TO HOLE 1:30-3:15 (9th) partway & 5:15-5:45 (9th)

DRILL 8:10 - 10:15

MECHANICAL DOWN TIME 3:15-5:15 mechanic installed part for motor to

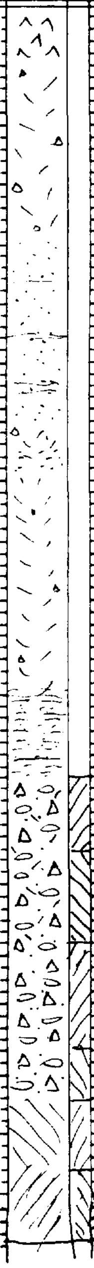
DRILLING PROBLEMS increase RPM's

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG

Depth in metres: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20



Sample No.: 01, 02, 03, 04, 05, 06

0.0 - 1.0 organics peat moss

1.0 - 18.4 Layered Keewatin Till & Lake Agassiz sediments.

beige-ochre gritty clay rich matrix ~5% pebble clasts mainly limestone & sandstone.

(3.8 - 7.0) sand: mainly grey beige poorly sorted very fine and fine grained sand with occasional grey clay partings.

(7.0 - 7.3) clay till: similar to 1.0 - 3.8 only unoxidized grey

(7.3 - 7.8) sand: as at 3.8 - 7.0

(7.8 - 11.5) clay till: very slightly gritty to non gritty grey clay matrix with rare small pebbles as above.

(11.5 - 13.0) clay/silt/sand: varved pale greenish grey clay & silt with interbeds of poorly sorted fine grained sand.

13.0 - 18.4 Labradorean Till

grey beige silt to fine sand with 5% - 10% gritty khaki coloured clay lumps in matrix. Cobble clasts of composition: 60% granitoids; 40% volcanics & sediments

(16.0 - 18.4) Till: sandy matrix - no clay lumps. Also clast composition changes to 60% volcanics & seds (few felsic, intermediate & mafic volcanics some of which are sheared, few mineralized) 40% granitoids.

18.4 - 19.6 Bedrock 05 or boulder!

pale greenish grey & rusty ochre moderate to strongly sheared sericite schist friable chips. Below 18.9 m mainly rusty ochre chips (fracturing), non calcareous, no visible sulphides.

altered. int. to felsic vol.

(19.6 - 20.7) Bedrock 06 altered int. ... vo...

at 19.6 m - return on rusty cl... lumps which gradually become grey greenish + rusty ochre, then return on pluish green to grey green rock chips. Thus transition rusty stage between 05 & 06, means 05 probably legitimate bedrock.

chips are fine grained, sheared, fragme... slip planes chlorite-sericite alterati... 0.3% disseminated cubic pyrite possibly Tr. arsenopyr., 1-2% qtz

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 10 1996

HOLE NO RR-96-281 LOCATION Site # 33 ELEVATION 1151

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71136 BIT FOOTAGE 100.7 - 12

SHIFT HOURS

____ TO ____

MOVE TO HOLE 10:15 - 10:35

DRILL 10:35 - 12:00

TOTAL HOURS

MECHANICAL DOWN TIME

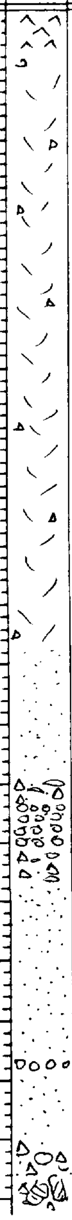
DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			01 (13.5), 02 (16), 03 (18.5), 04 (20)	see below

0.0 - 0.7 organis Peat Moss

0.7 - 10.8 Keewatin Till

beige olive to grey beige gritty clay rich matrix. ~5% pebble clasts mainly limestone / sandstone

(4.0 - 10.8) very slightly gritty to non gritty grey clay rich matrix. Rare pebble clasts similar to above.

10.8 - 12.8 Lake Agassiz Sediments

grey poorly sorted (silty) fine grained sand (glaciolacustrine member)

12.8 - 20.3 Labradorean Till + glacio fluvial Sediments

(12.8 - 13.3) good unsorted till matrix with cobble / pebbles of composition 60% volcanics / sediments (mainly sheared volc.) 40% granitoids

(13.3 - 14.0) sand & gravel: abrupt change to well sorted coarse grained sand with pebbly gravel beds of composition 60% granitoids 40 volc / seds

(14.0 - 14.7) Till similar to 12.8 - 13.3

(14.7 - 17.6) sand: well sorted black & beige (abundant mafic grains) fine grained sand.

(17.6 - 17.8) gravel: cobble gravel bed.

(17.8 - 19.0) sand: similar to 14.7 - 17.6

(19.0 - 20.3) till: clast supported very little unsorted silt to fine sand matrix. By 19.7 till very rubbly with 90% local sheared mafic volcanics 10% granitoids + seds.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 10 1996

HOLE NO RR-96-281 LOCATION Site #33 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG						
			04	20.3 - 22.0 Bedrock						
21			05	-dark bluish green						
				- fine grained						
22				- well foliated; mod sheared						
				abundant chloritized slip planes						
23				- equigranular interlocking text.						
24				- at 21.0 - 22.0 up to 15%						
				quartz veinlets						
25				- non calcareous						
26				Mafic Volcanic.						
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 10 19 96

SHIFT HOURS
_____ TO _____

TOTAL HOURS
_____

CONTRACT HOURS
_____

HOLE NO RR-96-282 LOCATION Site #34 ELEVATION 1149

GEOLOGIST P. Collins DRILLER R. Legault BIT NO CB71136 BIT FOOTAGE 122.7 -

MOVE TO HOLE 12:00 - 12:15

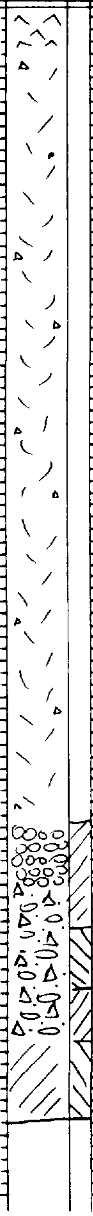
DRILL 12:15 - 1:45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			01 (14.5), 02 (16), 03 (17), 04 (18)	see below

0.0 - 0.7 Organics - Peat moss

0.7 - 13.7 Keewatin Till

beige to light ochre gritty clay rich matrix. Few pebble clasts mainly limestone & siltstone

(3.5 - 13.7) very slightly gritty to non-gritty grey clay rich matrix. Rare pebble clasts as above.

13.7 - 17.4 Labradorean Till + glaciofluvial sediments

(13.7 - 14.8) gravel: well washed pebble & cobble clasts of composition: 70% granitoids; 30% volcanics & seds.
- rods chugging down.

(14.8 - 17.4) abrupt change to unsorted silt to fine sand matrix cobble clasts of composition: 55% volcanics & metaseds (many volcanics are sheared & mineralized up to 3% pyrite in some chips).
abundant sulphides in till matrix.

17.4 - 18.8 Bedrock

- dark green
- fine grained
- moderately well foliated weakly sheared?
- equigranular interlocking text.
- main mafic is chlorite
- 0.3% disseminated pyr.
- up to 12% disseminated calcite
- 2-3% qtz ± carb. stringers below 18.0 m

Basalt

18.8 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 10 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-283 LOCATION Site #29 ELEVATION 1146

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. C071136 BIT FOOTAGE 141.5 -

MOVE TO HOLE 1:45 - 3:00

DRILL 3:00 - 5:15

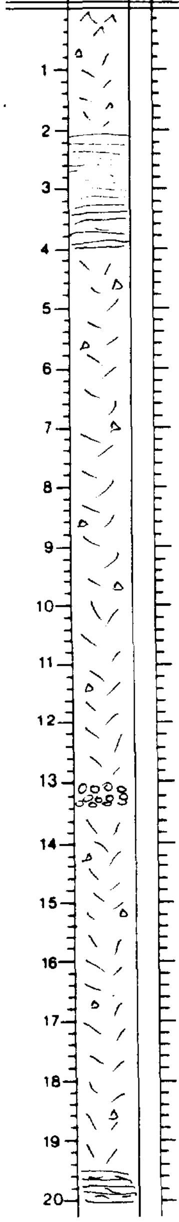
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 5:15 - 5:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0.0 - 0.5 Organics peat

0.5 - 2.0 Layered Keewatin Till & Lake Agassiz Seds

(0.5-2.0) beige to light ochre gritty clay rich matrix : 5% pebble clasts mainly limestone & siltstone.

(2.0-4.0) clay : grey smooth nongritty.

(4.0 - 7.0) clay till : similar to 0.1-2.0

(7.0 - 13.0) clay till : grey, very slightly gritty to nongritty clay matrix. Rare pebble clasts mainly limestone.

(13.0-13.4) glaciofluvial sediments : pebbly gravel bed ; 90% of clasts are limestone & siltstone ; 10% granitoids.

(13.4 -19.5) clay till : similar to 7.0 to 13.0

(19.5 - 20.6) clay/silt : pale grey green non gritty clay & silt varves.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 10 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-283 LOCATION Site # 30 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				(20.6 - 21.0) clay till : similar to 7.0-13.0
22				(21.0 - 23.0) sand : glaciolacustrine poorly sorted (silty) grey fine grained sand.
23			01	23.0 - 26.5 Labradorean Till
24			02	Cobble clast supported till. Little silt to fine sand matrix. Abundant -10 mesh cuttings, abundant v fine sulphide grains in matrix.
25			03	
26			04	Clast composition 50% sheared volcanics many of which are mineralized. ~50% Granitoids / Sediments.
27			05	
28				26.5-27.7 Bedrock
29				- buff grey green
30				- weakly porphyritic texture 2-3% blue qtz eyes
31				- aphanitic groundmass
32				- sheared ; sericitic slip planes
33				- 0.5-0.7 % disseminated pyr.
34				- noncalcareous
				Intermediate Volcanic.
35				27.7 E.O.H.
36				
37				
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 1996

HOLE NO RR-96-284 LOCATION Site # 30 ELEVATION 1146

GEOLOGIST P. Collins DRILLER R. Legault BIT NO CB31146 BIT FOOTAGE 0.0 - 34.

SHIFT HOURS

MOVE TO HOLE 5:15 - 5:45 (10th)

____ TO ____

DRILL 8:00 - 10:00

TOTAL HOURS

MECHANICAL DOWN TIME

____

DRILLING PROBLEMS

CONTRACT HOURS

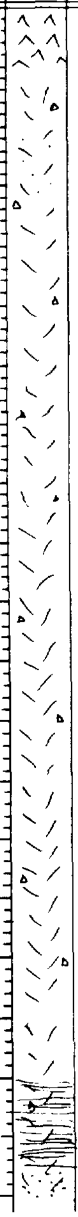
OTHER Travel 7:25 - 8:00 (11th)

____

MOVE TO NEXT HOLE

New bit + sub

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 Organics Peat moss 1.0 - 18.0 Keewatin Till (1.0 - 5.0) beige to light olive gritty clay rich matrix minor sandy between 2 & 3 metres. 5 to 10% pebble clasts mainly limestone. (5.0 - 18.0) grey very slightly gritty to non gritty clay matrix. Few pebble clasts as above. 18.0 - 32.5 Lake Agassiz Sediments (18.0 - 19.6) clay? pale greenish grey non gritty clay though did observe 3 limestone clasts. (19.6 - 21.8) Sand glaciolacustrine member. Poorly sorted (silty) fine grained sand.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 19 96

HOLE NO RP-96-284 LOCATION Site #30 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21				[21.8 - 27.6] glaciofluvial sediments:
				(21.8-27.6) mainly well sorted medium and coarse grained sand with occasional pebbly gravel beds - clasts dominantly granitoids.
22 – 29				(27.6 - 28.2) gravel : pebbly gravel generally well washed 60% Granitoids 40% volcanics & seds.
				(28.2-30.0) sand : well sorted fine to medium grained sand.
				(30.0-32.5) gravel : mainly granule & pebble clasts (subrounded to rounded) 70% of which are granitoids. Sorted medium & coarse sand "matrix".
30 – 31			01	32.5 - 34.0 Bedrock
32 – 33			02	- pale to med green and rusty ochre along fracture planes
				- porphyritic texture: plag & blue qtz phenos in finer g.mass.
				- strong foliation to schistose
				- moderately sheared - chlorite sericite alteration
34				- non calcareous
				- fracture zone at 33.5 - 33.7 with ochre-rusty, hematized and blue green rock chips as well as ~3% qtz veinlets
				- no visible sulphides
				intermediate volc.
35 – 40				34.0 E.o.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS _____

CONTRACT HOURS _____

HOLE NO RR-96-285 LOCATION Site # 31 ELEVATION 1152

GEOLOGIST P. Collins DRILLER R. Legault BIT NO C871196 BIT FOOTAGE 34.0 - 7

MOVE TO HOLE 10:00 - 10:15

DRILL 10:15 - 1:30

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0.0 - 1.0 organics - Peat moss 1.0 - 26.0 Layered Lake Agassiz Seds and Keewatin Till (1.0 - 2.4) beige to light ochre gritty clay matrix. Few pebble clasts mainly limestone. (2.4 - 8.0) sand & clay: mainly poorly sorted fine grained sand with occasional non gritty clay layer. (8.0 - 23.0) clay till: slightly gritty to non gritty (in places) clay matrix. Few pebble clasts as above.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 19 96

HOLE NO RR-96-285 LOCATION ______ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

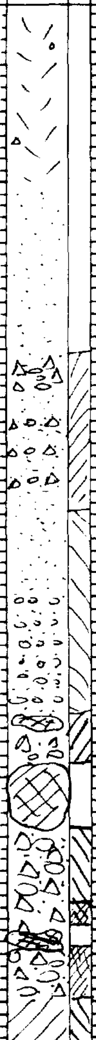
DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–26				(23.0 - 26.0) glaciolacustrine member (GLM) poorly sorted grey fine grained sand. (26.0 - 26.4) till: Labradorean Till + Lake agassiz Seds good unsorted silt to fine sand matrix. Pebble & cobble clasts of approx. composition: 50% granitoids 50% volc/seds This interval may be gravel with cave in but unlikely. (26.4 - 27.5) GLM sand as at 23.0-26.0 (27.5 - 27.6) till! very thin horizon. (27.6 - 28.0) GLM Sand as at 23.0-26.0 (28.0 - 28.1) till? very thin horizon. (28.1 - 29.0) GLM sand as at 23.0-26.0
27			01	(29.0 - 31.9) GLM + GLF (glaciofluvial) marker alternates between grey poorly sorted fine sand and well sorted fine, medium & coarse sand beds. below 30.0 m there is the occasional pebbly gravel bed ~80% granitoid clasts.
30			02	as approach end of interval volcanic component increases to 60% with pebble & cobble clasts. (31.9 - 32.2) boulder - basalt
32			03	(32.2 - 32.7) till? sandy yet slightly unsorted matrix. Cobble clasts 65% volc/sed; 35% granitoids. (32.7 - 33.8) boulder - basalt
34			04	(33.8 - 35.6) till: slightly sorted & coarse biased matrix. Cobble clasts as in 32.2 - 32.7.
35			05	
36			05	(35.6 - 35.9) boulder - granite
37			06	(35.9 - 36.8) till: similar to above
38–40			pull rods too much torque.	36.8 - 37.5 BdL? - qtz feld. porphyry. or intermediate volc. - pinkish green (hematite stain) - mod. well foliated; weakly cleaved. - chloritic slip planes, tr. sulphides - porphyritic texture; blue qtz & plag phenos in qtz-feldspar + chlorite gm. 1-2% disseminated calcite; 1% qtz veinlets. 37.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 1996

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO RR-96-286 LOCATION Site #32 ELEVATION 1149

GEOLOGIST P. Collin DRILLER R. Legault BIT NO. CB71146 BIT FOOTAGE 71.5-103

MOVE TO HOLE 1:30 - 1:45

DRILL 1:45 - 3:30

MECHANICAL DOWN TIME

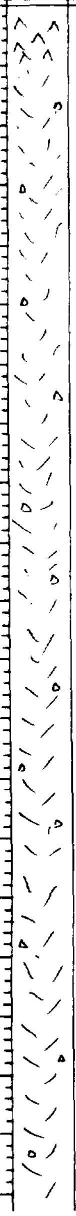
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 3:30 - 6:50

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0.0 - 1.0 Organics peat moss

1.0 - 22.0 Keewatin Till

beige-light ochre to grey beige gritty clay matrix unsorted f. sand in places between 5 & 8 metres. 5% pebble clasts mainly limestone.

(8.5 - 22.0) grey very slightly gritty to non gritty clay matrix Rare pebble clasts as above.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 11 19 96

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO RL-96-286 LOCATION Site #32 ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				22.0 - 23.8 Lake agassiz Sediments
21				(22.0 - 23.0) clay/silt: pale greenish grey clay & silt.
22				(23.0 - 23.8) sand: mainly grey poorly sorted glaciolacustrine fine grained sand. Though there are a couple of lis[t]one clasts (possibly dropstones)
23				
24				23.8 - 30.5' Labradorean Till + glaciofluvial Sediments (G&FM)
25			01	(23.8 - 24.1) boulder - granite
26				(24.1 - 25.0) till: unsorted grey beige silt to fine sand matrix. Cobble clasts ~60% Granitoids; 40% Vblc/seds.
27			02	(25.0 - 28.3) gravel: rounded pebbly gravel (well washed - no sand) clast composition: 50 volc/seds/50 granitoids
28				
29			03	(28.3 - 30.0) Sand & gravel: sorted medium & coarse sand matrix cobbly gravel 55% Volcanics/seds 45% granitoids.
30			04	
31			05	(30.0 - 30.5) till: slightly sorted silt to fine sand matrix. Near clast supported till of clast composition 55% Volc/Seds; 45% Granitoids
32				
33				
34				30.5 - 31.5 Bedrock
35				- pale to med. green
36				- well foliated; few slip planes
37				- weakly porphyritic texture
38				- main mafic is chlorite
39				- 1% disseminated calcite
30				- no visible sulphides
				intermediate volcanic.
				31.5 E.O.H

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 15, 16 1996

HOLE NO RR-96-298 LOCATION Site # 99 ELEVATION 1135

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71120 BIT FOOTAGE 46.5 - 73.

SHIFT HOURS ______ TO ______

MOVE TO HOLE 12:15 - 4:15 Float move + 5 km move for drill

DRILL 4:15 - 5:30 (15 ft) 8:30 - 10:30 (16 ft)

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

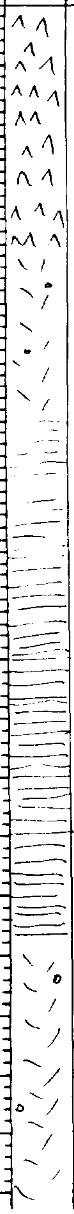
CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

0.0 - 4.0 Organics - Peat Moss

4.0 - 7.0 Keewatin Till ?
initially blue grey gritty to grey beige clay matrix.

7.0 - 15.7 Lake Agassiz Sediments
gradational contact to grey smooth nongritty clay

15.7 - 20.5 Keewatin Till
grey beige gritty clay rich matrix (good grit) 5-7% pebble clasts mainly limestone + granitoids.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 15/16 19 96

HOLE NO RR-96-298 LOCATION Site # ELEVATION

GEOLOGIST P.C DRILLER R.L. BIT NO. BIT FOOTAGE

SHIFT HOURS

TO

MOVE TO HOLE

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–40			01, 02, 03, ← EOH (15 m), 04	

20.5-21.8 Lake Agassiz Sediments

pale greenish grey non gritty clay

21.8- 24.8 Labradorean Till

grey beige silt to fine sand matrix cobble clasts of composition 65% volcanics & sediments (some of which are sheared) / 35% granitoids (there are a few limestone clasts in the upper part of interval).

below 24.0 - many of volcanic clasts are veined

24.8 - 26.5 Bedrock

- medium to dark green
- fine grained
- clay altered in places (green clay lumps)
- moderately well foliated
- main mafic is chlorite, hornblende?
- equigranular interlocking texture
- non calcareous
- no visible sulphides

Basalt

26.5 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16 19 96

HOLE NO RR-96-299 LOCATION Site # 100 ELEVATION 1130

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71147 BIT FOOTAGE 0.0 - 2

SHIFT HOURS

____ TO ____

MOVE TO HOLE 10:30 - 10:45

DRILL 10:45 - 1:00

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

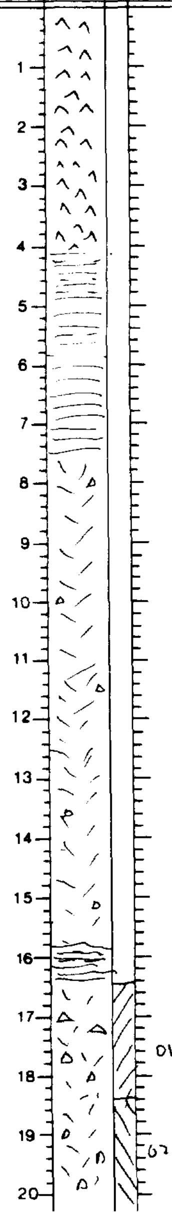
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

New bit

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0.0 - 4.0 Organics Peat moss

4.0 - 7.6 Lake Agassiz Sediments
initially blue grey silty to grey non gritty (below 5.0 m), smooth clay.

7.6 - 15.8 Keewatin Till
grey beige gritty clay matrix 5-7% small pebble clasts mainly limestone; few granitoids
(12.0 - 15.8) grey very slightly gritty clay. Rare pebbles as above
at 14.6 - 14.8 beige gritty clay till with numerous pebble clasts - limestone.

15.8 - 16.4 Lake Agassiz Seds
pale greenish grey non gritty clay & silt varves.

16.4 - 23.2 Labradorean Till
grey beige silt to fine sand + up to 65% khaki gritty clay matrix
Small cobble clasts of composition 60% volcanics & sediments; 40% granitoids.
(20. - 23.2) till: sandy matrix supported - coarse biased in places increase also in cobbly clasts of similar composition to above.
Some volcanics appear to have fairly strong fabric - weak to mod. sheared.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16 19 96

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RL-96-299 LOCATION Site # ______ ELEVATION ______
GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL ______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER ______
MOVE TO NEXT HOLE ______

Pg 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			02	23.2-24.8 Bedrock
21			03	- grey green
22				- very fine to fine grained - well foliated; weakly sheared
23			04	- presence of slip planes
24			05	- up to 2% sulphides as dissemination, discontinuous stringers and smeared along slip planes.
25				- non calcareous
26				- occasional grey silty band.
27				Int v.lc. + siltstone
28				24.8 E.O.H.
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-300 LOCATION Site # 101 ELEVATION 1130

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71147 BIT FOOTAGE 24.8-

MOVE TO HOLE 1:00-1:15

DRILL 1:15-2:15

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1 – 20			01, 02	

0.0 - 4.0 organics - peat moss

1.0 - 7.0 Lake Agassiz Sediments

clay : grey non gritty smooth clay with silt varves.

7.0 - 15.3 Keewatin Till

grey beige gritty clay matrix. 5% small pebble clasts mainly limestone

(9.5 - 11.0) clay till : very slightly gritty grey clay matrix. Rare pebble clasts as above.

(11.0 - 14.8) glaciofluvial sediments

sand - well sorted beige (from limestone component) medium grained sand occasional v thin pebbly bed.

(14.8 - 15.3) clay till : similar to 9.5 - 11.0

15.3 - 15.8 Lake Agassiz Sediments

pale greenish grey non gritty clay & silt varves.

15.8 - 17.4 Labradorean Till

grey beige silt to fine sand matrix supported till. (sulphides in matrix). Cobble clasts mainly 60% Volcanics & seds (some of which are mineralized)

17.0 - 17.4 gravel : absolutely no matrix, mainly pebble & granule clasts some well rounded. Clast composition 50 Volc/seds ; 50 granitoids

17.4 - 19.5 Bedrock - mafic volcanic

- med green
- fine & medium grained
- inequigranular interlocking texture
- well foliated, weakly sheared
- subschistose in places - chlorite - sericite
- 5% disseminated calcite, no visible sulphides.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16/17 1996

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-301 LOCATION Site #98 ELEVATION 1135

GEOLOGIST P. Collins DRILLER Rlegault BIT NO. CB71147 BIT FOOTAGE 44.3-

MOVE TO HOLE 2:15 - 2:45

DRILL 2:45 - 5:30 (16th) 1:00 - 2:30 (17th)

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Standby 8:00 - 1:00 plug holes making water near

MOVE TO NEXT HOLE Black Hawk, Gary Teeples property

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0.0 – 4.0 organics Peat moss
1				4.0 – 15.8 Lake agassiz Sediments
2				clay: grey, smooth non gritty clay, rare silt varves.
3				
4				15.8 – 35.5 Keewatin Till
5				grey beige, gritty clay matrix few pebble clasts mainly limestone
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16/17 19 96

HOLE NO RR-96-301 LOCATION Site # ELEVATION

GEOLOGIST DRILLER BIT NO. CB71147 BIT FOOTAGE

SHIFT HOURS

MOVE TO HOLE

TO

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

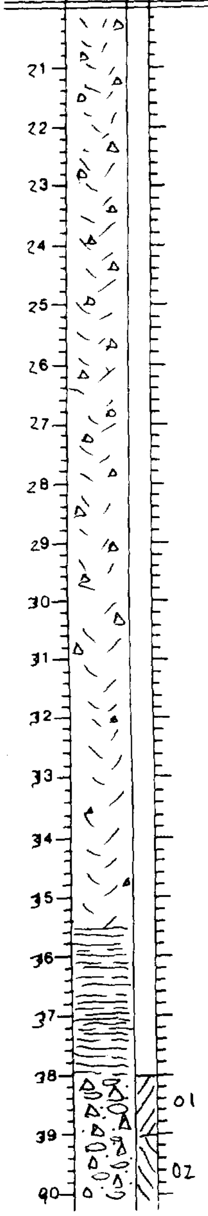
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg 2.

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



(20.5 - 31.0) <u>clay till</u> as above with ~15% limestone clasts. {v.good grit to matrix occasional granitoid pebble

(31.0 - 35.5) <u>clay till</u>: very slightly gritty to non gritty clay matrix Very few pebble clasts as above

35.5 - 38.0 <u>Lake Agassiz Sediments</u>

pale greenish grey, smooth non gritty clay & silt

38.0 - 43.8 <u>Labradorean Till</u>

grey beige silt to fine sand matrix. Cobble sized clasts of composition: 65% volcanics & sediments; 35% granitoids.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 16, 17 1996

HOLE NO RL-96-301 LOCATION ______ ELEVATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS ______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

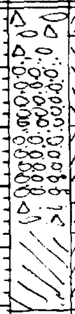
DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

Pg 3

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			02	40.8 - 43.3 glacio fluvial sediments; sand & gravel; mainly sorted medium & coarse sand with granule & pebbly interbeds clast composition: 50% volc/seds; 50 granitoids. There are a few sheared volcanic clasts some of which are mineralized.
41			03	
42				
43			04	43.3 - 43.8 Till: appears to be till - unsorted silt to fine sand matrix. Cobbly clasts of composition: 70% volcanics/seds; 30% Granitoids.
			05	
44			06	43.8 - 45.0 Bedrock
45				- pale to medium green
46				- medium grained
47				- strongly foliated-lineated perhaps weakly sheared - weakly sericitized slip planes?
48				- fractured, many of chips are rusty ochre stained
49				- inequigranular interlocking texture - appears near clastic
50				- non calcareous, no visible sulphides.
51				Basalt
52				45.0 E.O.H.
53				
54				
55				
56				
57				
58				
59				
60				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 17 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-302 LOCATION Site #96 ELEVATION 1135

GEOLOGIST P.Collins DRILLER R.Legault BIT NO. CR7114Z BIT FOOTAGE 88.3-105

MOVE TO HOLE 2:30 - 3:15

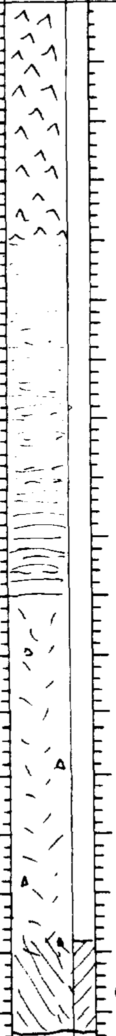
DRILL 3:15 - 4:45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 4:45 - 5:15

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20 (scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)			01	0.0 - 4.0 organics - Peat moss.

0.0 - 4.0 organics - Peat moss.

4.0 - 9.8 Lake Agassiz Sediments

grey non gritty ~~gr~~ clay with silt varves.

9.8 - 15.8 Keewatin Till

grey beige gritty clay rich matrix -5% pebble clasts mainly limestone.

(13.0 - 15.8) grey, very slightly gritty to non gritty clay matrix very few small pebbles as above

No Labradorean Till

15.8 - 17.3 Bedrock

- pale to medium green
- fine grained
- foliated
- inequigranular interlocking text.
- very hard siliceous
- 0.3 - 1 finely disseminated py.
- non calcareous

Int to felsic Volc.

17.3 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 18 19 96

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-303 LOCATION Site# 97 ELEVATION 1130

GEOLOGIST P. Collins DRILLER R. Legault BIT NO. CB71147 BIT FOOTAGE 1056-139[illegible]

MOVE TO HOLE 4:45-5:15 (17 km)

DRILL 8:30 - 11:~~05~~ (18 ft)

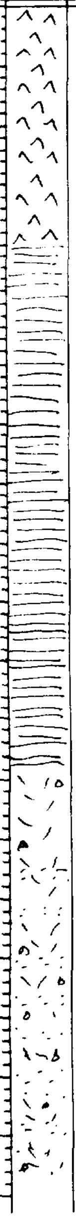
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE Move to road for float 11:~~05~~ - 12:30 (4 km)

Float at 1:30

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0.0 - 4.0. Organics : Peat moss 4.0 - 12.7 Lake Agassiz Sediments grey, non gritty, smooth clay 12.7 - 28.2 Keewatin Till + Lake Agassiz ~~glaciolacut~~ glaciofluvial Sediments grey beige, gritty clay rich matrix. 5% pebble clasts mainly limestone. (14.0 - 20.0) clay till ~~as~~ above perhaps with fewer clasts; interbedded with poorly sorted v fine to fine grey beige sand (no clasts) (does not appear to be part of till matrix as clay v. slightly gritty

Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE March 18 1996

HOLE NO RR-96-303 LOCATION Site #97 ELEVATION

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

SHIFT HOURS

MOVE TO HOLE

TO

DRILL

TOTAL HOURS

MECHANICAL DOWN TIME

DRILLING PROBLEMS

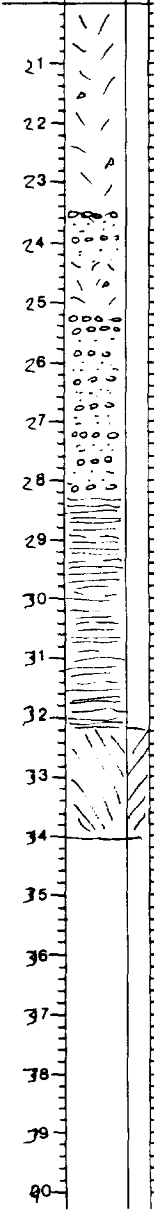
CONTRACT HOURS

OTHER

MOVE TO NEXT HOLE

Pg. 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



SAMPLE NO.: 01 (at 33 m)

20.0 - 23.5 clay till: very slightly gritty to nongritty clay matrix. Few pebble clasts mainly limestone. at 23.0 m granitoid cobble.

23.5 - 24.2 pebbly sand: mainly beige slightly unsorted fine grained sand with occasional limestone pebbly bed.

24.2 - 25.3 clay till: similar to 20.0 - 23.5 m

25.3 - 28.2 sand & gravel: interbeds of beige slightly unsorted fine grained sand and pebbly gravel interbeds. Clast composition: 65% limestone + unmetamorphosed sediments; 25% pink granitoids; & 10% metaseds to volc.

28.2 - 32.2 Lake Agassiz Seds

pale greenish grey, soft, nongritty clay & silt. Observed a couple of limestone clast in interval & (dropstones?)

Few pebble clasts before bedrock mainly limestone

32.2 - 34.0 Bedrock unable to wash down any sample → as basalt

- pale & med green
- very fine & fine grained
- clay altered; silty texture in places
- & well foliated
- fractured
- 2-3 % qtz + calcite veinlets below 32.7
- 1 % dissem. calcite
- minor mafic chlorite

34.0 E.O.H.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 18-19/03 1996

SHIFT HOURS
_____ TO _____

TOTAL HOURS
_____

CONTRACT HOURS
_____

HOLE NO RR-96-304 LOCATION Site 114 / trgt 23 ELEVATION 1130

GEOLOGIST Ansell DRILLER Legault BIT NO. 71147 BIT FOOTAGE 139.6-156

MOVE TO HOLE 1:30-3:30: Float move / 3:30-5:30: drill stuck;

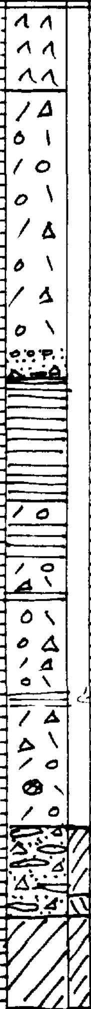
DRILL 10:00 - 11:45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER float D5 8:00-9:00; pull drill out: 9:00-9:30

MOVE TO NEXT HOLE 11:45 - 1:15

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			RR-96 304: 01 02 03	(see below)

0-1.4 : Organics: peat

1.4-5.8 : Lake Agassiz Sediments
medium grey, massive clay
no grit, silt or pebbles

1.6-5.8 Keewatin Till
unsorted, oxidized beige grading downhole to slate grey by 4.6, very gritty silt matrix, with minor clay, coarse lithic sand and up to 5% pebbles consisting of limestone and rounded granitoids (Marchand ?)

5.8-8.3 Lake Agassiz Sediments
5.8-6.0 : beige silt + fine sand, few pebbles
6.0-6.2 : debris or Keewatin till (as above)
6.2-8.3 : massive, uniform grey clay, no grit or pebbles, little silt, some soft layers

8.3-13.9 Lake Agassiz Sediments + Keewatin Till
uniform grey clay, as above, interbedded with grey clayey till with no pebbles, sparse grit and coarse lithic sand comprised of limestone some granitoids and volcanics

11.1-13.1 : Keewatin Till as above, no Agassiz component.
13.1-13.3 : basalt boulder
13.3-13.9 Keewatin Till, as above

13.9-15.4 : Labradorean Till
unsorted, grey fine-medium sand matrix, near clast supported, cobbly; 25/75 volcanics/granitoids, locally 40/60 with occasional trace of sediments; gneissified granite component increasing down hole

15.4-16.9 Bedrock : Quartz monzonite
- interlocking, granular, medium grained
70% { Quartz : 10% feldspar 60% (20% Ksp : 40% Nasp)
30% Biotite : 25% epidote 5%
no sulphides, no calcite

16.9 EOH

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 19/03 1996

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-305 LOCATION Site 112/~~Targ~~ 23 ELEVATION 1130

GEOLOGIST Ansell DRILLER Legault BIT NO. 71143 BIT FOOTAGE 0 - 20.0

MOVE TO HOLE 11:15 - 1:15

DRILL 1:15 - 1:45

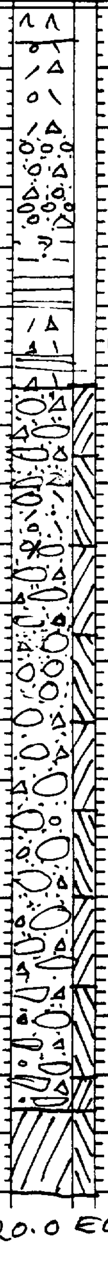
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 4:45 - 5:15

New bit, new Sa

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			RR-96-305-01 … 10	0-0.6 Organics: peat
				0.6-3.9 Keewatin Till
				0.6-2.1 oxidized beige, unsorted silty matrix with abundant grit + lithic sand, volcanic, granitic, limestone pebbles to 5%.
				2.1-3.9 sandy till, unsorted beige fine sand-silt matrix (70% carbonate) + assorted pebbles: 50/25/25: limestone/volcanic/granitoid.
				3.9-4.5 drill plugged: minor clayey return
				4.5-6.3 Interbedded Lake Agassiz + Keewatin Till uniform grey clay layers alternating with unsorted clayey Keewatin Till with sparse pebbles, some grit.
				6.3-18.6 Labradorean Till
				6.3-8.6: unsorted grey beige silt to fine sand matrix 25/75: volcanics/granitoid, trace sediments
				8.6-10.3: matrix finer than above, some clay between 8.6 + 9.2, below 8.9 matrix unsorted grey silt-fine sand cobbles; clasts 40/60: volcanics & granitoids
				10.3-15.9 unsorted beige & grey beige fine to medium sand matrix, trace of sulphides; cobbly near clast supported; matrix finer downhole (10.3-10.7: may be moderately sorted sand-gravel) clast composition 10/90: volcanics/granitoids granitoids very weathered to 15.9; trace sulphides
				15.9-18.6 unsorted grey silt & fine sand matrix, granitoids unweathered; clasts 30/70 & locally 10/90 volcanics & granitoids (some gneissified granite fragments) by 17.4 clasts increasingly mafic to 90/10 by 18.0
20.0 EOH				18.6-20.0 Bedrock: dark green to black basalt weakly foliated with volcanic texture; pyroxene (to altered to black) amphibole in chloritized felsic groundmass - quartz eyes to 0.3mm, rare plag phenocrysts - iron stained fractures, trace sulphides -19.1m several &lips of veinlets w epidote + native C

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 20/03 1996

HOLE NO RR-96-306 LOCATION Site 113/Trnst 23 ELEVATION 1130

GEOLOGIST Ansell DRILLER Legault BIT NO. 71141 BIT FOOTAGE 0-8.5

SHIFT HOURS

____ TO ____

MOVE TO HOLE on site

DRILL 8:30-10:00

TOTAL HOURS

MECHANICAL DOWN TIME

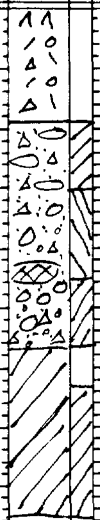
DRILLING PROBLEMS

CONTRACT HOURS

OTHER travel time 7:30-8:30

MOVE TO NEXT HOLE

New bit

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			RR-96 306	0-0.4 Organics top soil
				0.4-1.9 Keewatin Till
			01	unsorted, clay + silt matrix, no pebbles, <1% granules of limestone and granite; oxidized beige matrix to 1.4 slate gray to 1.9
			02	1.9-5.6 Labradorean Till
			03	1.9-4.3 unsorted grey beige silt to fine sand matrix; clast composition 30/70: volcanics/granitoids, no sediments some weathered granite clasts at 1.9m increasing to 90% of granite weathered by 4.1 also weathered and grusified granite fragments present throughout section; cobbly matrix supported, some bleached volcanics
			n/s	4.3-4.6 epidotized granite boulder
				4.6-5.6 good matrix as above decreasing downhole to no natural matrix by 5.6; basalt and granite cobbles
			04	5.6-8.5 Bedrock
				5.6-6.3 grusified granite, weathered in place, no natural matrix, some contamination, material very weathered; drilled very quickly - no sample taken until 6.3
				6.3-8.5: grusified white granodiorite or Quartz monzonite interlocking granular texture, no foliation - 80/20: felsic/mafic (amphibole) - ~5% quartz, some iron stained feldspar phenocrysts, minor epidote

Note: snowy knoll 100 m east, probably outcrop

8.5 m EOH

Hole making water - plugged with 1 bag

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 20/03 1996

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-307 LOCATION Site 120/target 22 ELEVATION 1145
GEOLOGIST Ansell DRILLER Legault BIT NO. 71141 BIT FOOTAGE 8.5-10
MOVE TO HOLE 10:00 - 11:00
DRILL 11:00 - 12:00
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER pit sample : RR-96-307-01 as 2 bags
MOVE TO NEXT HOLE 12:30 - 12:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			01	
			N/S	0-0.2 Soil + Keewatin Till
1			02	took pit sample : 2 bags
				consists of silt, sand, gravel
2				some humus.
3				0.2-1.5 Bedrock
				0.2-0.6 no return
4				0.6-1.5 Buff coloured felsic
5				volcanic - tuff or rhyolite
				very fine grained felsic grains
6				in felsic matrix some
7				layering evident py
				tr 1% pyrite as patches
8				+ dissiminated grains.
9				EOH: 1.5
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

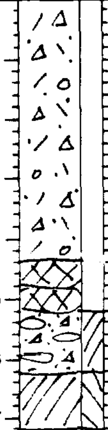
DATE 20/03 1996

SHIFT HOURS
_______ TO _______

TOTAL HOURS
____

CONTRACT HOURS
____

HOLE NO RR-96 307A LOCATION ~200m west of 307 ELEVATION 1155
GEOLOGIST Ansell DRILLER Legault BIT NO. 71141 BIT FOOTAGE 10.0-17.
MOVE TO HOLE 12:30 - 12:45
DRILL 12:45 - 1:45
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 1:45 - 2:15

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–4.4				0-4.4 Keewatin Till compact, unsorted beige silt and fine sand matrix with minor clay, lithic sand, granules and 3% mixed pebbles: limestone, granitoids, volcanics
3			RR-96 307A	
4.4–7.2			N/S	4.4-7.2 Labradorean Till unsorted grey silt and fine sand matrix, cobbly, matrix supported; clasts 30/70 grading downhole to 90/10 volcanics & granitoids
5–6			01	
6.2–7.2			02	6.2-7.2 Bedrock grey tonalite interlocking granular texture 70% : felsics: 10% quartz 60% feldspar 30% : mafics: 10% epidote 20% amphibole no foliation
7.2				7.2 EOH

Depth scale: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 20/03 1996

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-308 LOCATION Site 121 / target 22 ELEVATION 1145
GEOLOGIST Averill DRILLER Legault BIT NO. 71141 BIT FOOTAGE 17.2-26
MOVE TO HOLE 1:45 - 2:30
DRILL 2:30 - 3:30
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 3:30 - 3:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0-0.3 Organics
1				0.3-6.7 Keewatin Till
				0.3-4.0 unsorted clayey silt matrix oxidized beige grading downhole to grey by 2.8, gritty, 2% pebbles, locally to 5%, predominantly limestone with minor granite & volcanic
4				4.0-6.7 Interbedded Keewatin Till and Lake Agassiz Sediments
5			RR-96	
6			308	4.0-5.0 + 5.9-6.3: uniform grey clay, no sand or pebbles, minor silt
7			01	5.0-5.9, 6.3-6.7: grey Keewatin till as above with trace of granitic and volcanic granules
			n/s	
8			02	
9				6.7-7.4 Labradorean Till unsorted grey silt-fine sand matrix, clast composition 50/50 to 90/10: volcanics/granitoids
12				7.4-8.8 Bedrock
13				7.4-7.6 no natural matrix only rock flour, with pink feldspar and grey-green tonalite chips
14				7.6-8.4 grey green tonalite grading to a leucocratic tonalite by 8.4.
16				8.4-8.8 white to grey tonalite interlocking granular texture 10% quartz, 60% feldspar, 25% mafics - mica, amphibole 5% epidote.
19				8.8 EOH
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 21/03 1996

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-311 LOCATION Site 108/Transect 24 ELEVATION 1143

GEOLOGIST Ansell DRILLER Legault BIT NO. 71149 BIT FOOTAGE 13.5-2?

MOVE TO HOLE 12:00 - 12:15

DRILL 12:15 - 1:15

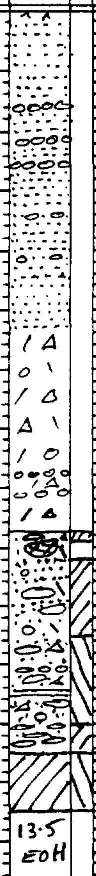
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 1:15 - 1:30

pg 1 of 1

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			RR-96 311 01 n/s 01 02 03 04	see below

0-0.1 Topsoil - sandy loam

0.1-5.3 Glacio-fluvial Sediments
moderately-sorted oxidized beige silica sand and ochre silt with some carbonate (~10%), locally coarsening to pebbly seams. The sand and gravel pit 250m SSW of the hole shows an exposure of 0.5m of fine sand and silt immediately above a stratified pebbly layer. Not enough exposure to determine if material is a beach deposit or esker.

5.3-8.8 Keewatin Till
grey very gritty, silty and clayey matrix, 2% pebbles occasional cobbles predominantly limestone-sandstone with some volcanics and granitoid

8.8-12.5 Labradorean Till
8.8-8.9 unsorted, grey fine silt-sand matrix with trace of grey clay clasts 40/60: volcanics/granite no limestone
8.9-9.2 granite boulder
9.2-10.3: grey till as above with pebbles grading downhole into moderately sorted silt and fine sand with local clay seams
10.3-10.5: grey clayey till similar to Keewatin, above
10.5-12.5: unsorted, grey beige silt-fine sand matrix, matrix supported, trace of grey clay at 11.5 clasts basaltic with granitoids and gneissified granite fragments; increasing gneissified content down hole.

12.5-13.5 Bedrock:
grey-green ... foliated Tonalite

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 21/03 19 96

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-312 LOCATION Site 109/target 24 ELEVATION 1145

GEOLOGIST Ansell DRILLER Legault BIT NO. 7/149 BIT FOOTAGE 270-36

MOVE TO HOLE 1:15 - 1:30

DRILL

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 1:30 - 1:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1	no			0-3.9 no return
2	return			3.9-4.4 Glacio fluvial Sediment oxidized beige silica sand and limestone + granitoid pebbles.
3				
4				4.4-7.7: Kewatin Till unsorted grey clayey matrix with abundant grit and 1-2% pebbles
5				
6				
7			RR-96 312 01	7.7-9.3 Bedrock grey green silicified tonalite
8				
9				9.3 EOH
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 21/03/1996

HOLE NO RR-96312A LOCATION 150m SSE of 311 / target 24 ELEVATION 1143

GEOLOGIST Ansell DRILLER Legault BIT NO. 71149 BIT FOOTAGE 36.3-52

SHIFT HOURS ______ TO ______

MOVE TO HOLE 1:30 - 1:45

DRILL 1:45 - 3:00

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE 3:00 - 5:00

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0	n/r			0-0.8 no return
1				0.8-4.4 Lake Agassiz/Glaciofluvial Sediments
2				poorly & moderately sorted
3				oxidized beige silica sand, ochre silt
4				with interbedded pebbly seams, probable road fill
5				4.4-6.1 Organics
6				wood fragments, probably buried by road building
7				6.1-10.9 Keewatin Till
8				unsorted grey clayey matrix with silt & abundant grit,
9				1-2% pebbles, mostly limestone and sandstone
10				10.9-12.8 Lake Agassiz Sediments
11				uniform grey clay, little silt, no pebbles or grit
12			RR-96 312A	12.8-15.0 Labradorean Till
13			no sample	12.8-13.3 unweathered granite boulder
14			01	13.3-14.6 unsorted grey silt & fine sand matrix; cobbly: some pyritized basalt, 50/50 volcanics/granites
15			02	14.6-15.0 very cobbly, little natural matrix; cobbles: granite, basalt
16			03	15.0-16.4 Bedrock
17				weathered tonalite with diorite dyke 15.4-15.5
18				
19				
20				

16.4 EOH

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

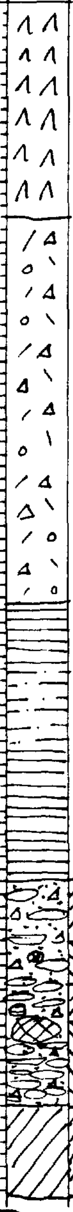
DATE 22/3 19 96

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-313 LOCATION Site 119/Target 20 ELEVATION ~~140~~ 1125
GEOLOGIST Averill DRILLER Legault BIT NO. 71149 BIT FOOTAGE 52-4-7
MOVE TO HOLE 3:00 - 4:45
DRILL 9:45 - 12:15
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 12:15 - 1:30

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			RR-96 313 01, 02, 03, 04, 05	see below

0-3.6 Organics : peat - cedar swamp
3.6 - 10.1 Keewatin Till
3.6-4.4 unsorted, light grey (probably reduced by organic acids) silty-clayey matrix with abundant grit + 2% pebbles: limestone, granite volcanics
4.4 - 5.4 oxidized beige, grading downhole to medium grey by 5.4, otherwise as above
5.5 : granite cobble
pebble, grit content decreasing downhole after 8.0
10.1 - 14.8 Lake Agassiz Sediments
uniform medium grey clay with minor silt, no grit or pebbles, occasional beige silt - probably varves from 11.2-12.6
14.8 - 18.6 Labradorean Till
unsorted, grey beige silt to fine sand matrix trace of pyrite, clast composition : 50/50 volcanics/granitoids some exotic granite some gneissic fragments trace of sediments at top grading downhole to 5/5/90 by bottom (local basalt/granite/greywacke) till cobbly with some pebbles: clast supported slow drilling. Greywacke strongly foliated and moderately lineated
16.6 - 18.6 : little natural matrix : basal till/weathered bedrock
17.1 - 17.5: sheared, amphibolitized greywacke - some [illegible]
at 16.7: trace of quartz vein material with red iron stained wall rock
18.6 - 20.0 Bedrock
greywacke : weakly foliated and lineated lower amphibolite grade
20.0 EOH

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 22/03 1996
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO RR-96-314 LOCATION Target 19 ELEVATION ~~435~~ 112
GEOLOGIST Averill DRILLER Legault BIT NO. 71149 BIT FOOTAGE 72.4-7
MOVE TO HOLE 12:15 - 1:30
DRILL 1:30 - 3:00
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 3:00 - 3:05

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
				0-0.4 Organics peat
1				0.4-5.8 Keewatin Till
2				unsorted clayey silt matrix grading downhole to silty
3				clay matrix, oxidized beige grading downhole to medium
4				grey by 3.6; abundant lithic grit & 2% mixed pebbles
5			RR-96-314	5.8-7.0 Bedrock
6			01	- dark green andesite
7				- black amphibole crystals in light green felsic groundmass
8				- weakly foliated & lineated
9				- slow drilling
10				7.0 EOH
11				Note: andesite outcrop 120 m east of hole
12				
13				See hole 314A Note.
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 22/03 1996

HOLE NO RR-96-314A LOCATION 2' N of 314 / target 19 ELEVATION ~~435~~ 122

GEOLOGIST Ansell DRILLER Legault BIT NO. 71149 BIT FOOTAGE 794-85

SHIFT HOURS ____ TO ____

MOVE TO HOLE 3:00 - 3:05

DRILL 3:05 - 3:30

TOTAL HOURS ____

MECHANICAL DOWN TIME

DRILLING PROBLEMS

CONTRACT HOURS ____

OTHER 3:30 - 4:00 took GT to creek to look for route to target 18

MOVE TO NEXT HOLE 4:00 - 5:30 : to 621 to wait for float

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–6			RR-96 314A 01	0-0.4 Organics peat 0.4-5.8 Keewatin Till unsorted clayey silt matrix grading downhole to silty clay matrix, oxidized beige to 3.6, medium grey below; abundant lithic grit, 2% mixed pebbles
6			n/s	5.8-5.9 Bedrock quinandesite as in RR-96-314 no bedrock sample taken
				EOH 5.9

Note: Since no Labradorean Till was encountered in RR-96-314, and no clean material from Keewatin section was available, RR-96-314A was drilled to obtain a Keewatin sample. Time was short, therefore a quickly taken Keewatin sample was chosen rather than moving and re-drilling for possible Labradorean till.

The terrain between Targets 19 and 18 was checked to see if it was feasible to make a road between them with the Nodwell. Variable snow depth, very uneven and wet ground made the move impractical. Float called.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 23/06 1996

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO RR-96-315 LOCATION Site 126/target 2 ELEVATION 1125

GEOLOGIST Averill DRILLER Legault BIT NO. 71149 BIT FOOTAGE 79.4-107.2

MOVE TO HOLE 10:15 - 10:30

DRILL 10:30 - 1:15

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER Float 8:45 - 10:15

MOVE TO NEXT HOLE 1:15 - 1:30

page 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0–20				0 - 1.4: Organics: peat 1.4 - 1.6 Lake Agassiz Sediments massive, uniform grey clay, no grit or pebbles 1.6 - 11.8 Keewatin Till very gritty clayey silt matrix, oxidized beige grading downhole to medium grey by 3.1, 1% pebbles composed of limestone and sandstone, rounded granite and angular volcanics, locally pebble content decreases to <<1% between 4.9 - 6.8 and at 9.9. 11.1 - 11.8 matrix becomes a silty clay. 11.8 - 19.2 Lake Agassiz Sediments 11.8 - 14.8: sand and gravel: beige, well-sorted fine sand - silt with few pebbles, localized clayey seams; trace of Keewatin Till, as above, at 12.4, 13.1, 13.5 14.8 - 17.8: uniform, slate grey clay no pebbles, grit or silt 17.8 - 19.2 grey clay and beige silt - probably varves 19.2 - 20.9 Keewatin Till - as above with clayey matrix

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-315 LOCATION ____________ ELEVATION ______

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

pg. 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			RR-96 315	20·9 - 24·7 Labradorean Till
21				unsorted silt and fine sand matrix, oxidized beige grading
22			01	downhole to grey beige by 21·4
23				clast composition 30/70: volcanics to granitoids becoming increasingly
24			02	more granitoid with up to
			03	90% of clasts being gneissified
25				granitoid fragments between
26			04	22·0 and 24·0; trace of sediments 20·9 - 21·5; cobbly, some granitic
27				pebbles.
28				24·7 - 27·8 : Bedrock
29				saprolitic greywacke
				① 24·7 - 25·0 rounded beige silica granules
10				② 25·0 - 25·4 white kaolin and chips
11				③ 25·4 - 26·2 beige silica with khaki silt, trace of carbonate
12				④ 26·2 - 26·8 teal coloured, highly weathered chips, trace of
13				quartz veining
14				⑤ 26·8 - 27·2 khaki chips
				⑥ 27·2 - 27·8 khaki clay and chips
15				27·8 EOH
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 23/03 19 96
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO RR-96-316 LOCATION Site 127 / target 25 ELEVATION 1125
GEOLOGIST Ansell DRILLER Legault BIT NO. 71149 BIT FOOTAGE 107.2-1
MOVE TO HOLE 1:15-1:30
DRILL 1:30-3:15
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 3:15-3:30

pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20				0-1.4 Organics peat 1.4-2.2 Lake Agassiz Sediments uniform grey clay, no silt grit or pebbles 2.2-15.5 Keewatin Till very gritty, clayey silt matrix oxidized beige grading downhole to medium grey by 3.7, 1% pebbles consisting of limestone/volcanics + granitoids in a ratio of 80/20 locally <<1% pebbles below 14.5, matrix becomes increasingly clayey 15.5-21.6 Lake Agassiz Sediments 15.5-17.8: uniform grey clay, no silt, sand or pebbles 17.8-21.6: trace of beige silt with clay, probably varves, trace of Keewatin till 20.5-20.7

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO *RR-96-316* LOCATION ____________ ELEVATION ______
GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL ______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER ______
MOVE TO NEXT HOLE ______

DEPTH IN METRES	SAMPLE NO.	DESCRIPTIVE LOG
20	RR-96	21·6 - 23·3 Labradorean Till
21	316	unsorted grey beige silt and fine sand matrix; clast
22	01	composition 40/60: volcanics/
23	02	granitoids, very cobbly from 22·8 - 23·3, very little
24	03	natural matrix
25		23·3 - 26·4 Bedrock
	04	dark green basalt
26		23·3 - 24·8 : unquenched texture
27		no foliation or lineation
		pyroxene phenocrysts altered
28		to black amphibole in very
		fine (<0·1 mm) partly chloritized
29		felsic groundmass, iron staining
30		24·8 - 26·4 strongly foliated and
11		granulated texture, appears
		to be sheared basalt or
12		a sericite chlorite schist
		trace of native Cu
13		26·4 EOH
14		
15		
16		
17		
18		
19		
20		

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 23/03 1996

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO RR-96-317 LOCATION Site 128/Target 25 ELEVATION 1125

GEOLOGIST Ansell DRILLER Legault BIT NO 71145 BIT FOOTAGE 0-23.5

MOVE TO HOLE 3:15 - 3:30

DRILL 3:30 - 4:45

MECHANICAL DOWN TIME

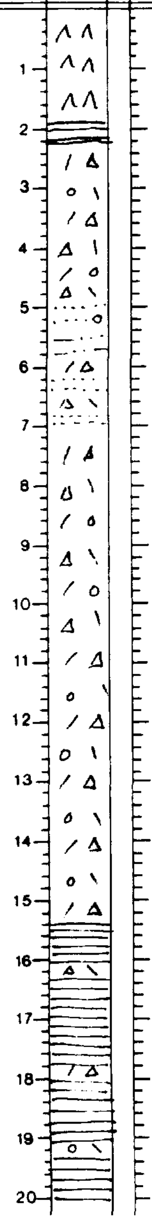
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 4:45 - 5:30

New bit, new sub

DEPTH IN METRES / GRAPHIC LOG / INTERVAL / SAMPLE NO.	DESCRIPTIVE LOG



0-1.9 Organics : peat

1.9-2.2 Lake Agassiz Sediments
uniform grey clay little silt
no grit or pebbles

2.2-5.0 Keewatin Till
very gritty, oxidized beige
clayey silt matrix, 2% of mixed pebbles
consisting of 80/20: sediments/
igneous.

5.0-7.0 Lake Agassiz Sediments/Keewatin Till
moderately sorted, beige silt
and sand, with pebbly seams and
occasional clay, interbedded
with layers of Keewatin till
with clayey grey matrix and <1%
pebbles.

7.0-15.4 Keewatin Till
very gritty with medium grey
clayey silt matrix, 1% mixed
pebbles, as above; below 14.0
matrix becomes a silty clay
and pebbles decrease in
abundance to <<1%

15.4-20.8: Lake Agassiz Sediments
uniform slate grey clay with
little silt, no grit or pebbles
locally interbedded with
Keewatin till as between 7.0-15.4

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-317 LOCATION ____________ ELEVATION ______

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

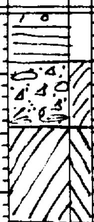
DRILL ________

MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			RR-96 317	20·8 - 21·9 Labradorean Till
21			01	~~greybeige~~ unsorted silt fine sand matrix
				clasts 30/70: volcanic/granitoid
22				cobbly
23			02	trace of khaki clay at 21·5
				21·8 bleached chlorite schist
24				clasts
25				21·9 - 23·5 Bedrock
				green basalt
26				- strongly foliated
27				- matrix chloritized
				- trace of disseminated coarse (±2mm)
28				pyrite cubes
29				22·6-23·5 still strongly foliated
				now schistose
30				minor showing of small pebbles
11				between the two layers
				probably debris as seen in
12				outcrop between interbedded
				volcanics.
13				23·5 EOH
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 24/03 1996
HOLE NO RR-96-318 LOCATION Site 125 Target 125 ELEVATION 1125
GEOLOGIST Ansell DRILLER Legault BIT NO. 71145 BIT FOOTAGE 27.5- 58.5
SHIFT HOURS ___ TO ___
MOVE TO HOLE 4:45 - 5:30 (23/03/96)
DRILL 8:30 - 12:15
TOTAL HOURS
MECHANICAL DOWN TIME 11:00 - 11:20 replace engine on Nodw
DRILLING PROBLEMS
CONTRACT HOURS
OTHER
MOVE TO NEXT HOLE 12:15 - 12:45

pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
0-20				0-1.3 Organics: peat
				1.3-14.6 Keewatin Till
				very gritty clayey silt matrix with 1% limestone and sandstone pebbles and a few cobbles, occasional granitoid pebble and volcanic clast; till is oxidized beige at top of section grading downhole to medium grey by 4.4; locally matrix becomes a silty grey clay (at 10.3, 12.9 and 14.1); grit composition is 80/20 : exotic sediments to more proximal volcanics and granitoids
				14.6-19.1 Lake Agassiz Sediments
				uniform slate grey clay with variable beige silt (probably varves) no grit or pebbles below 17.6 occasional gritty seams either debris flows or ice rafted grit
				19.1 - 22.3 Lake Agassiz / Glaciofluvial Sediments
				moderately sorted fine beige sand, some silt with frequent pebbly seams, pebble composition 80/20 limestone and sandstone / granitoids and volcanics
				clayey Keewatin till layers at 21.4 and 22.3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO RR-96-318 LOCATION ____________ ELEVATION ______
GEOLOGIST ________ DRILLER ________ BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL ______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER ______
MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
21–26				22.3-24.1 Keewatin Till medium grey silty clay matrix, moderately gritty, <1% mixed pebbles: 80/20 limestone, sandstone/ volcanics, granitoids 24.1-27.0 Lake Agassiz Sediments uniform grey clay with silty seams, some medium sand near top - transitional to overlying Keewatin
27			RR-96 318	below 24.5: some khaki silty clay seams increasing downhole may be reworked saprolite.
28			01	
29			02	27.0 - 29.4 Labradorean Till unsorted silt-fine sand matrix, grey-beige in colour, locally becoming grey when drilling basalt cobbles appears to be more of a drilling effect; very cobbly to 27.7 with little natural matrix, some pyritic basalt cobble
30			03	27.1-27.4: fresh granite boulder clast composition 15/85: volcanics/granitoids 27.7: grusified granite debris 85% of +10 28.4-28.9 matrix grey silt, fine sand 5% teal coloured sheared volcanics.
31–40				31.0 EOH

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE 24/03 1996
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO RR-96-319 LOCATION Site 124/Target 25 ELEVATION 1125
GEOLOGIST Ansell DRILLER Legault BIT NO. 71145 BIT FOOTAGE 58.5-82.5
MOVE TO HOLE 12:15 - 12:45
DRILL 12:45 - 300
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 3:30-3:45 to road for float

pg 1 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
1–20			RR-96 319 01 (at 18–20)	0-1.4 Organics: peat + marsh 1.4-12.2 Keewatin Till very gritty clayey silt matrix oxidized beige, grading downhole to medium grey by 4.6, <1% ls pebbles 8.3-8.6: granitic cobble pushing ahead of bit: return consists of clay and cuttings 8.6-9.3: local increase in grit, sand and pebbles - to 5% 9.6, 11.8 localized clay seams 12.2-19.1 Lake Agassiz Sediments uniform slate grey clay with soft, medium grey clay + fine beige silty clay seams, no pebbles or grit, Keewatin till seams to 13.4 19.1-22.7 Labradorean Till unsorted, grey beige fine silt-sand matrix, clast composition 30/70: volcanic/granitoid increasing to 10/90 from 19.3 to 20.4 with gneissified granitic fragments dominating the clasts. cobbly to very cobbly both volcanics and granitoids bleached, sheared volcanic clasts at 19.8

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19 __

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO RR-96-319 LOCATION ________ ELEVATION ________

GEOLOGIST ________ DRILLER ________ BIT NO. ________ BIT FOOTAGE ________

MOVE TO HOLE ________

DRILL ________

MECHANICAL DOWN TIME ________

DRILLING PROBLEMS ________

OTHER ________

MOVE TO NEXT HOLE ________

pg 2 of 2

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			02	quisified granitic material
21				disappears by 24.4 and clast
			03	composition changes to
22				70/90 : volcanics/granitoids
23			04	and matrix changes to grey
				fine sand and silt
24				22.4 vein quartz
				22.7 - 24.0 Bedrock
25				medium green andesite
26				as teal blue clay and
27				small chips no foliation
				or lineation; 30% amphibole in
28				cloudy crystalline plagioclase
29				and chlorite matrix, granular
				no sulphides
30				24.0 EOH
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Nuinsco Resources Limited

Rainy River Project

WORK REPORT

VOL. II

1996 Reverse Circulation Drill Data

52D16SE0012 W9610.00111 RICHARDSON

020

Paul Jones, Bsc.
Senior Project Geologist
Consulting Geologist
July 22, 1996

APPENDIX II

DETAILED GOLD GRAIN COUNTS
CALCULATED VISIBLE GOLD ASSAYS

APPENDIX II

DETAILED GOLD GRAIN COUNTS
CALCULATED VISIBLE GOLD ASSAYS

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996

OVERBURDEN DRILLING MANAGEMENT LIMITED - LABORATORY SAMPLE LOG

ABBREVIATIONS

DATA LOG

Clast:

Size of Clast:
- G: Granules
- P: Pebbles
- C: Cobbles
- BL: Boulder Chips
- BK: Bedrock Chips

% Clast Composition:
- V/S: Volcanics and Sediments
- GR: Granitics
- LS: Limestone
- OT: Other Lithologies (Refer to Footnotes)
- TR: Only Trace Present
- NA: NOT APPLICABLE
- OX: Oxidized

Class:
- BLD: Boulder Chips
- BDK: Bedrock Chips

Matrix:
- S/U: Sorted or Unsorted
- SD: Sand ---------------------------------| F: Fine
- ST: Silt | M: Medium
- CY: Clay | C: Coarse
- OR: Organics

- Y: Fraction Present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction Not Present
- L: Lumps Present

Colour:

B:	Beige	PP:	Purple
GY:	Grey	PK:	Pink
GB:	Grey Beige	OC:	Ochre
GN:	Green		
GG:	Grey Green	L:	Light
BN:	Brown	M:	Medium
BK:	Black	D:	Dark

GOLD LOG

Number of Grains:
- T: Number Found on Shaking Table
- P: Number Found by Panning

Thickness:
- C: Calculated Thickness of Grain (in microns)
- M: Actual Measured Thickness of Grain (in microns)

Remarks:
- % Percentage of HMC (estimated from panning of table concentrate)
- gr. Grains (estimated number)
- uM Microns (1/1000 mm)

- py. Pyrite
- cpy. Chalcopyrite
- aspy. Arsenopyrite
- marc. Marcasite
- L/G. Limonite/Goethite
- sid. Siderite

GOLD CLASSIFICATION
==================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

				NUMBER OF GRAINS									
TOTAL # OF PANNINGS		MEASUREMENT (MICRONS)		RESHAPED		MODIFIED		PRISTINE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
212-01	Y	15 X 15	3 C			1				1			30% pyrite; <0.1% Aspy
		15 X 25	4 C			2				2			~300 grains of native copper.
		25 X 25	5 C			3	1			4			
		25 X 50	8 C	3	1	1				5			
		25 X 75	10 C			2				2			
		50 X 50	10 C			1				1			
		50 X 75	13 C	1						1			
		50 X 125	18 C	1						1			
		75 X 100	50 M	1						1			
		75 X 175	25 C	1						1			
		75 X 200	27 C	1						1			
		75 X 225	25 M	1						1			
		100 X 100	20 C		1					1			
										22	71.7	248	
213-01	Y	15 X 50	7 C	1		1	1			3			10% pyrite
		15 X 75	9 C					1		1			~300 grains of native copper.
		25 X 25	5 C	1		2		1		4			
		25 X 50	8 C	1		2	1	1		5			
		50 X 50	10 C	1		2				3			
		50 X 75	13 C	1						1			
		50 X 100	15 C			1				1			
		125 X 150	27 C			1				1			
										19	26.4	236	
214-01	Y	10 X 75	9 C		1					1			10% pyrite; <0.1% Aspy
		15 X 25	4 C	1	1	1				3			~600 grains of native copper.
		15 X 50	7 C					1		1			
		25 X 25	5 C	2		2				4			
		25 X 50	8 C	3		1				4			
		25 X 75	10 C	1	1					2			
		25 X 100	13 C				1			1			
		25 X 125	15 C	1						1			
		50 X 50	10 C	1	1					2			
		50 X 75	13 C		2	2				4			
		50 X 100	15 C		1					1			
		50 X 125	18 C				1			1			
		75 X 75	15 C				1			1			
		75 X 125	20 C					1		1			
										27	82.1	94	
214-02	Y	15 X 15	3 C			1				1			30% pyrite; Tr. Aspy

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS: RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		25 X 25	5 C			1				1			~4000 grains of native copper.
		25 X 100	13 C				1			1			
		50 X 100	15 C			1				1			
		75 X 75	15 C	1						1			
		75 X 100	18 C			2				2			
		75 X 175	25 C				1			1			
										8	26.2	252	
215-01	Y	15 X 50	7 C	1						1			80% pyrite
		25 X 50	8 C	2						2			~1000 grains of native copper.
		25 X 75	10 C	1		1				2			
		50 X 50	10 C	1						1			
		50 X 100	15 C				1			1			
		75 X 75	15 C			1				1			
		100 X 125	22 C		1					1			
		100 X 150	25 C	1						1			
		125 X 125	25 C	1	1					2			
		125 X 250	36 C	1						1			
										13	85.8	260	
215-02	Y	50 X 75	13 C	1						1			10% pyrite;0.5% siderite;<0.1% Aspy ~10000 grains of native copper.
										1	25.2	15	
215-03	Y	25 X 25	5 C	3						3			20% pyrite;0.5% siderite;<0.1% Aspy
		25 X 100	13 C			1				1			~3000 grains of native copper.
		50 X 50	10 C					1		1			Tr. chalcocite coated pyrite.
		50 X 175	22 C	1						1			
		75 X 100	18 C	1						1			
		75 X 125	20 C			1				1			
										8	46.0	115	
215-04	Y	15 X 15	3 C	1						1			50% pyrite;0.5% siderite;<0.1% Aspy
		15 X 25	4 C		1	1				2			~1000 grains of native copper.
		25 X 25	5 C	2						2			Tr. chalcocite coated pyrite.
		25 X 50	8 C		1					1			
		25 X 75	10 C	1						1			
		50 X 75	13 C	1	1					2			
		50 X 100	15 C	1						1			
										10	44.4	39	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
216-01	Y	10 X 10	2 C	1						1			30% pyrite; <0.1% Aspy
		15 X 50	7 C	1						1			~200 grains of native copper.
		25 X 25	5 C		1	1				2			
		25 X 50	8 C	1						1			
		25 X 75	10 C	1						1			
		25 X 175	20 C		1					1			
		50 X 50	10 C	1		1				2			
		50 X 75	13 C				1			1			
		75 X 75	15 C	1						1			
		100 X 125	22 C		1					1			
		150 X 25	18 C			1				1			
										13	36.9	174	
217-01	Y	15 X 25	4 C	1				1		2			90% pyrite; <0.1% Aspy
		15 X 50	7 C						1	1			
		25 X 25	5 C	3		1				4			
		25 X 50	8 C			2		2		4			
		25 X 75	10 C			1		1		2			
		25 X 100	13 C				1			1			
		50 X 75	13 C	1		1		3		5			
		50 X 100	15 C					1		1			
		75 X 125	20 C		1					1			
		75 X 175	25 C	1						1			
		100 X 150	25 C			1				1			
		175 X 325	125 M			1				1			
										24	140.6	495	
217-02	Y	15 X 15	3 C			4	1	1		6			80% pyrite; <0.1% Aspy
		25 X 25	5 C			5	2			7			
		25 X 50	8 C		1	2	1			4			
		50 X 50	10 C			3				3			
		50 X 100	15 C			2				2			
		50 X 175	22 C			1				1			
		100 X 125	22 C			1				1			
		125 X 175	75 M	1						1			
										25	63.5	304	
217-03	Y	25 X 25	5 C			2				2			60% pyrite; <0.1% Aspy
		25 X 50	8 C					1		1			
		125 X 200	100 M			1				1			
										4	50.1	398	

GOLD CLASSIFICATION
==================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										26	104.5	75	
233-04	Y	15 X 15	3 C	1						1			70% pyrite
		25 X 25	5 C	5	1					6			
		25 X 50	8 C	5	1					6			
		25 X 75	10 C	1						1			
		50 X 50	10 C		1					1			
		50 X 75	13 C		1					1			
										16	195.6	7	
234-01	N	75 X 100	18 C	1						1			
										1	57.6	18	
234-02	N	25 X 50	8 C	2						2			
		50 X 125	18 C	1						1			
		50 X 100	15 C	1						1			
										4	98.9	18	
234-03	N	25 X 50	8 C	2						2			
		75 X 125	20 C	1						1			
		100 X 200	29 C	1						1			
										4	94.7	70	
235-01	Y	NO VISIBLE GOLD											10% pyrite; 25% siderite; Tr. L/G; 1% marc; ~100 grains of native copper (<2 mm)
235-02	N	50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
										2	66.8	8	
235-03	N	25 X 25	5 C	1						1			
										1	47.3	1	
236-01	N	50 X 125	18 C	1						1			
										1	8.4	120	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
240-01	N	15 X 15	3 C	1						1			
		25 X 50	8 C	1						1			
		50 X 100	15 C	1						1			
										3	82.3	9	
240-02	N	15 X 25	4 C	1						1			
		25 X 25	5 C	1						1			
		25 X 50	8 C	2						2			
										4	18.7	11	
241-01	N	25 X 50	8 C	1						1			
		50 X 75	13 C			1				1			
										2	54.4	8	
241-02	N	25 X 75	10 C	1						1			~10 grains of native copper (~25u)
		75 X 175	25 C	1						1			
										2	63.5	49	
242-01	N	75 X 100	18 C	1						1			
		175 X 300	44 C	1						1			
										2	52.5	376	
243-01	N	NO VISIBLE GOLD											
243B-01	N	25 X 50	8 C	1						1			
		50 X 75	13 C	1						1			
										2	10.9	42	
244-01	Y	25 X 25	5 C	1		1	1			3			7% pyrite
		25 X 50	8 C		1		2			3			1 grain of native copper (400X1100x
		25 X 75	10 C		2					2			300u)
		50 X 50	10 C	1						1			
		50 X 75	13 C		1					1			
		50 X 125	18 C		1					1			
		75 X 75	15 C		1					1			
		150 X 275	40 C	1						1			
										13	78.6	210	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS				NUMBER OF GRAINS									
SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
244-02	Y	15 X 25	4 C						1	1			7% pyrite
		25 X 25	5 C	1						1			
										2	57.6	1	
244-03	N	NO VISIBLE GOLD											
246-01	N	NO VISIBLE GOLD											
246-02	N	50 X 75	13 C	1						1			
										1	44.7	8	
246-03	N	NO VISIBLE GOLD											
246-04	Y	50 X 75	13 C		1					1			0.3% pyrite; 50% siderite ~400 grains of native copper (~30
										1	48.0	8	grains are)= 1 mm in size)
247-01	N	NO VISIBLE GOLD											
247-02	N	25 X 25	5 C	1						1			
		25 X 50	8 C	1						1			
		50 X 75	13 C	1						1			
										3	76.6	6	
247-03	N	25 X 50	8 C	2						2			1 grain of native copper
		50 X 100	15 C	1						1			
										3	61.5	13	
247-04	Y	15 X 15	3 C	1						1			7% pyrite
		15 X 25	4 C	1		1				2			~10 grains of native copper ((=50u)
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		75 X 150	22 C	1						1			
										6	53.7	59	
248-01	N	25 X 50	8 C	2						2			
		25 X 75	10 C	1						1			
										3	70.3	5	

GOLD CLASSIFICATION

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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
248-02	N	75 X 125	20 C			1				1			
										1	74.4	20	
248-03	Y	10 X 15	3 C			1				1			30% pyrite
		15 X 25	4 C			1				1			
		25 X 75	10 C	1						1			
		50 X 75	13 C			1				1			
		75 X 100	18 C	1						1			
										5	26.6	60	
249-01	N	NO VISIBLE GOLD											
249-02	N	25 X 75	10 C	1						1			8 grains of native copper ((=250u)
		75 X 150	22 C	1						1			
		125 X 200	31 C	1						1			
										3	40.8	210	
250-01	N	15 X 50	7 C			1				1			
		25 X 50	8 C	2						2			
										3	62.6	3	
250-02	N	25 X 25	5 C	1						1			
										1	49.3	0	
250-03	Y	15 X 25	4 C			1				1			5% pyrite
		15 X 50	7 C			2				2			
		25 X 25	5 C	1						1			
		25 X 50	8 C			1				1			
		25 X 75	10 C	1		1				2			
		25 X 100	13 C	1			1			2			
		50 X 75	13 C	1		1				2			
		50 X 100	15 C	1						1			
		75 X 100	18 C		1					1			
										13	56.3	67	
251-01	N	25 X 50	8 C			1				1			~150 grains of native copper((=250u)
		25 X 75	10 C			1				1			
		50 X 50	10 C	1						1			
		125 X 150	27 C	1						1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	TOTAL # OF PANNINGS PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										4	23.1	186	
251-02	N	15 X 25	4 C			1				1			~50 grains of native copper ((=250u)
		25 X 50	8 C			1				1			
		75 X 100	18 C			1				1			
										3	57.5	19	
251-03	Y	15 X 25	4 C	1						1			5% pyrite
		25 X 25	5 C	1				1		2			
		25 X 50	8 C	1						1			
		25 X 75	10 C			1				1			
		50 X 50	10 C	1						1			
		50 X 75	13 C		1	1				2			
		50 X 150	20 C	1						1			
		75 X 100	18 C		1					1			
										10	44.6	85	
251-04	N	NO VISIBLE GOLD											~40 grains of native copper ((=250u)
253-01	N	15 X 25	4 C			1				1			
		25 X 25	5 C	1						1			
		25 X 50	8 C	1		1				2			
		50 X 75	13 C			1				1			
										5	12.5	46	
254-01	Y	15 X 15	3 C			1				1			5% pyrite; 5% siderite
		15 X 25	4 C	2		2	1	1		6			~1000 grains of native copper
		25 X 25	5 C	4		1		1		6			((=750u)
		25 X 50	8 C	2		1	1			4			
		25 X 75	10 C	2						2			
		50 X 50	10 C	2		1				3			
		50 X 75	13 C		1					1			
		50 X 100	15 C	1						1			
										24	37.8	67	
255-01	Y	15 X 25	4 C	1						1			30% pyrite; 5% siderite
		25 X 25	5 C	2						2			~30 grains of native copper
		50 X 50	10 C	1						1			((=500u)
		50 X 75	13 C	2						2			Many of the pyrite crystals are
		100 X 150	25 C	1						1			covered with chalcocite.

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										7	73.5	53	
255-02	N	50 X 75	13 C	1						1			~200 grains of native copper observed on the table.
										1	30.3	12	
255-03	N	NO VISIBLE GOLD											~2000 grains of native copper (<=750u) Many of the pyrite crystals are covered with chalcocite.
256-01	N	25 X 25	5 C	1						1			~50 grains of native copper
		25 X 50	8 C	1						1			(<=250u)
		50 X 50	10 C	2						2			
										4	28.4	17	
256-02	N	NO VISIBLE GOLD											~300 grains of native copper (<=600u)
257-01	Y	25 X 25	5 C	1						1			4% pyrite; 1% siderite
		25 X 50	8 C			2				2			~50 grains of native copper
		50 X 75	13 C					1		1			(<=250u)
										4	52.4	11	
257-02	N	50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		75 X 100	18 C	1						1			
										3	21.4	74	
257-03	N	NO VISIBLE GOLD											
257-04	N	50 X 75	13 C	1						1			
		50 X 150	20 C	1						1			
		75 X 150	22 C	1						1			
		100 X 125	22 C	1						1			
										4	31.0	197	
258-01	N	15 X 15	3 C			1				1			~50 grains of native copper
		25 X 50	8 C			1				1			(<=100u)
		50 X 100	15 C			1				1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	TOTAL # OF PANNINGS PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										3	38.9	19	
260-01	N	NO VISIBLE GOLD											~50 grains of native copper ((=100u)
261-01	N	50 X 75	13 C	1						1			(0.1% arsenopyrite
		100 X 125	22 C	1						1			
		100 X 150	25 C			1				1			
										3	60.7	89	
261-02	Y	25 X 25	5 C			2	1	1		4			4% pyrite; TR. arspy. (~50 grains of arsenopyrite) ~10 grains of native copper ((=250u)
		25 X 50	8 C			1	1		1	3			
		25 X 75	10 C			2				2			
		50 X 50	10 C			1	2			3			
		50 X 75	13 C				1			1			
		50 X 100	15 C		1					1			
		75 X 75	15 C			1				1			
		75 X 125	20 C			1				1			
		75 X 175	25 C						1	1			
		125 X 125	25 C			1				1			
										18	42.3	242	
261-03	Y	15 X 15	3 C	1		1				2			1% pyrite; TR. arspy. (~200 grains of arsenopyrite ((=100u))
		25 X 25	5 C	1		1	1			3			
		25 X 50	8 C		1	1		1		3			
		25 X 75	10 C		1	2		1		4			
		25 X 100	13 C			2				2			
		50 X 75	13 C	2		3		1		6			
		75 X 100	18 C	2						2			
		75 X 125	20 C	1						1			
										23	56.1	136	
261-04	Y	15 X 25	4 C				1			1			5% pyrite; TR. arspy.(~200 grains of arsenopyrite ((=100u)); 1% sid. ~30 grains of native copper ((=500u)
		15 X 50	7 C				1			1			
		25 X 25	5 C			1	1		1	3			
		25 X 50	8 C		1	3				4			
		25 X 75	10 C			1	1			2			
		25 X 100	13 C			1				1			
		25 X 125	15 C			1				1			
		50 X 50	10 C	1	1	1	1			4			
		50 X 75	13 C	3		2	1		1	7			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	TOTAL # OF PANNINGS PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		50 X 100	15 C			1				1			
		100 X 100	20 C				1			1			
		100 X 175	27 C			1				1			
										27	59.1	190	
261-05	N	25 X 50	8 C	1		1				2			40% pyrite
		50 X 75	13 C	3						3			~200 grains of arsenopyrite (<=100u)
		100 X 100	20 C	1						1			~500 grains of native copper (<=250u)
										6	61.5	45	~10 grains of native copper (300 to 2000u)
262-01	Y	25 X 50	8 C	1						1			5% pyrite; 10% siderite; 1% L/G;
		50 X 100	15 C	1		1				2			TR. arspy. (200 grains of arspy.
		50 X 225	27 C	1						1			(<=200u)
													~2500 grains of native copper
										4	36.2	143	(<=250u)
													~50 grains of native copper (300 to 2000u)
													~50 grains of galena (<=100u)
262-02	Y	25 X 50	8 C			1				1			8% pyrite;5% siderite;TR. arspy.
		25 X 75	10 C	1						1			(~100 grains of arsenopyrite)
		50 X 75	13 C	1						1			~1000 grains of native copper (<=250u)
										3	31.0	21	~100 grains of native copper (250 to 750u)
													~20 grains of galena (<=100u)
262-03	Y	25 X 25	5 C	1						1			5% pyrite; 10% siderite; TR. L/G;
		25 X 75	10 C	1						1			TR. arspy. (~20 grains of arspy.)
		100 X 125	22 C		1					1			~800 grains of native copper (<=250u)
										3	33.0	71	~100 grains of native copper (250 to 750u)
													5 grains of native copper (>750u)
262-04	Y	25 X 50	8 C	1			1			2			5% pyrite;Tr. ars.;10% siderite;
		25 X 75	10 C	1						1			Tr. L/G
													~800 grains of native copper
										3	25.4	14	(<=250u)
													~50 grains of native copper (250 to 750u)

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	TOTAL # OF PANNINGS PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
													5 grains of native copper
													()750u)
262-05	Y	50 X 50	10 C		1	1				2			8% pyrite; 5% siderite;Tr. L/G
		50 X 75	13 C	1						1			~2500 grains of native copper
		75 X 125	20 C	1						1			((=250u)
													~150 grains of native copper
										4	43.0	52	(250 to 750u)
													10 grains of native copper
													()750u)
													1 reshaped (125X150u) grain of
													native silver (confirmed by EDS)
262-06	Y	15 X 25	4 C	1						1			5% pyrite; 5% siderite
		25 X 25	5 C	1						1			~1500 grains of native copper
		25 X 50	8 C	1			1			2			((=250u)
		25 X 75	10 C	1						1			~75 grains of native copper
		50 X 100	15 C		1					1			(250 to 750u)
													5 grains of native copper
										6	42.4	24	()750u)
262-07	Y	25 X 25	5 C			1				1			2% pyrite; 10% siderite
		75 X 125	20 C				1			1			~2000 grains of native copper
													((=250u)
										2	15.2	100	~100 grains of native copper
													(250 to 1000u)
263-01	Y	25 X 50	8 C	1	1					2			1% pyrite; 90% of the pyrite is
		50 X 50	10 C	1						1			chalcocite coated.
		50 X 75	13 C	1						1			~2000 grains of native copper
		50 X 100	15 C	1						1			((250u)
													~100 grains of native copper
										5	39.3	35	(250 to 1000u)
264-01	Y	25 X 25	5 C	4						4			20% pyrite; 5% siderite
		50 X 50	10 C	1						1			~1000 grains of native copper
		50 X 100	15 C	1						1			((250u)
													~200 grains of native copper
										6	44.6	21	(250 to 2000u)
264-02	Y	25 X 25	5 C		1					1			20% pyrite; 5% siderite; TR. arspy.
		25 X 50	8 C		1					1			(~50 grains of arsenopyrite((100u))
		50 X 100	15 C		1					1			~3000 grains of native copper
													((250u)
										3	63.2	12	~400 grains of native copper
													(250 to 2500u)

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS		MEASUREMENT (MICRONS)		NUMBER OF GRAINS: RESHAPED		MODIFIED		PRISTINE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
													There is an unusually high concentration of hematized magnetite crystals.
264-03	Y	25 X 25	5 C	1						1			10% pyrite; 15% siderite; TR. arspy
		50 X 125	18 C	1						1			(~50 grains of arsenopyrite((100u))
													~3000 grains of native copper
										2	53.7	19	((250u)
													~400 grains of native copper (250 to 1500u)
265-01	Y	15 X 15	3 C	1						1			5% pyrite; 10% siderite
		15 X 25	4 C	1		1				2			~2000 grains of native copper
		25 X 25	5 C	1						1			((250u)
		25 X 50	8 C	2						2			~100 grains of native copper
		50 X 50	10 C	1						1			(250 to 1000u)
		50 X 75	13 C	1						1			
		75 X 75	15 C				1			1			
										9	16.9	84	
265-02	Y	25 X 50	8 C			1				1			20% pyrite; 10% siderite
		75 X 100	18 C			1				1			~5000 grains of native copper
													((250u)
										2	30.5	36	~500 grains of native copper
													(250 to 1000u) The 75X100 gold grain is intergrown with pyrite.
265-03	Y	NO VISIBLE GOLD											5% pyrite; 5% siderite ~5000 grains of native copper ((250u) ~200 grains of native copper (250 to 1000u)
265-04	Y	25 X 25	5 C			1				1			5% pyrite; 5% siderite
		25 X 75	10 C			1				1			~5000 grains of native copper
													((250u)
										2	16.6	13	~100 grains of native copper
													(250 to 1000u)
265-05	Y	25 X 25	5 C	1						1			1% pyrite; 10% siderite
		25 X 50	8 C		1					1			~2000 grains of native copper
		75 X 75	15 C	1						1			((250u)
													~100 grains of native copper

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										3	17.0	44	(250 to 1000u)
266-01	Y	75 X 100	18 C			1				1			4% pyrite; 5% siderite
													~1000 grains of native copper
										1	16.1	63	((250u)
													~100 grains of native copper
													(250 to 1000u)
266-02	Y	15 X 15	3 C			1				1			10% pyrite; 10% siderite
		15 X 25	4 C	1						1			~3000 grains of native copper
		25 X 25	5 C	1				1		2			((250u)
													~300 grains of native copper
										4	39.2	2	(250 to 3000u)
266-03	Y	25 X 75	10 C	1	1					2			10% pyrite; 10% siderite
		50 X 50	10 C		1					1			~3000 grains of native copper
		75 X 100	18 C	1						1			((250u)
		100 X 100	20 C	1						1			~300 grains of native copper
													(250 to 3000u)
										5	20.8	148	
266-04	Y	75 X 75	15 C	1						1			1% pyrite; 20% siderite
		75 X 150	50 M	1						1			~1500 grains of native copper
													((250u)
										2	8.2	657	~10 grains of native copper
													(250 to 2000u)
267-01	Y	15 X 25	4 C			2	1			3			30% pyrite; 10% siderite; TR. arspy
		25 X 25	5 C	3		4				7			(~200 grains of arspy.((500u))
		25 X 50	8 C	2	1	4		1		8			~100 grains of native copper
		25 X 100	13 C			1				1			((250u)
		50 X 50	10 C	5						5			~10 grains of native copper
		50 X 75	13 C	2		2	1			5			(250 to 1000u)
		50 X 100	15 C	3						3			
		50 X 125	18 C	1						1			
		75 X 200	27 C		1					1			
		175 X 275	42 C		1					1			
										35	83.6	321	
267-02	Y	15 X 15	3 C	2						2			30% pyrite; 10% siderite
		25 X 25	5 C	2						2			~30 grains of native copper
		25 X 50	8 C	2						2			((250u)
		25 X 100	13 C			1				1			~5 grains of native copper
		50 X 75	13 C			2				2			(250 to 1000u)

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		50 X 125	18 C	1						1			
		75 X 175	25 C	1						1			
		150 X 375	48 C	1						1			
										12	39.7	760	
267-03	Y	25 X 25	5 C			1				1			60% pyrite; 10% siderite; TR. arspy
		25 X 50	8 C			2		1		3			(~200 grains of arspy.((200u))
		50 X 50	10 C					1		1			~300 grains of native copper
		50 X 100	15 C	1	1					2			((250u)
		75 X 100	18 C			1				1			~30 grains of native copper
		75 X 125	20 C	1		1				2			(250 to 1000u)
										10	75.7	76	
267-04	N	50 X 50	10 C	1		1				2			~100 grains of native copper
		50 X 125	18 C			1				1			((250u)
										3	55.5	25	
267-05	N	25 X 25	5 C	1						1			
		25 X 50	8 C	1						1			
		50 X 75	13 C	1						1			
		50 X 125	18 C	1						1			
										4	23.2	64	
267-06	N	25 X 50	8 C	1						1			
										1	4.4	19	
268-01	Y	15 X 75	9 C	1						1			20% pyrite; 20% siderite
		25 X 25	5 C					1		1			~700 grains of native copper
		50 X 75	13 C	1	1					2			((250u)
		50 X 100	15 C		1					1			~30 grains of native copper
		50 X 125	18 C	1	1					2			(250 to 1500u)
										7	35.2	102	
268-02	N	15 X 15	3 C	1						1			~250 grains of native copper
		25 X 25	5 C	1						1			((250u)
		25 X 50	8 C	1						1			
										3	36.5	3	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
269-06	N	25 X 50	8 C	2						2			~30 grains of native copper
		50 X 75	13 C	2						2			(<250u)
		175 X 375	50 C	1						1			
										5	54.8	536	
269-07	Y	25 X 25	5 C	1						1			60% pyrite
		25 X 50	8 C	1				1		2			~50 grains of native copper
		25 X 75	10 C	1						1			(<750u)
		50 X 50	10 C	1						1			
		50 X 75	13 C		1					1			
										6	63.2	15	
269-08	N	NO VISIBLE GOLD											~50 grains of native copper (<250u)
269-09	Y	25 X 50	8 C			1	1			2			20% pyrite; 20% siderite
		25 X 100	13 C			1				1			The pyrite is very tarnished.
													1 grain of native copper
										3	45.7	12	(1000X2000u)
269-10	Y	15 X 15	3 C		1					1			60% pyrite; TR. arspy.; ~100 grains
		25 X 25	5 C		2					2			of arspy. (<100u); 5% siderite
		25 X 75	10 C			1			1	2			~100 grains of native copper
		25 X 100	13 C				1			1			(<250u)
		50 X 50	10 C			2		1	1	4			~10 grains of native copper
		50 X 75	13 C		1	2				3			(250 to 1500u)
		50 X 100	15 C		1	2				3			
		75 X 75	15 C		1					1			
										17	69.0	76	
269-11	Y	15 X 15	3 C						1	1			15% pyrite; 20% siderite
		15 X 25	4 C				1		1	2			~200 grains of native copper
		15 X 50	7 C		1				1	2			(<250u)
		25 X 25	5 C				1			1			
		25 X 50	8 C		1		3		1	5			
		25 X 75	10 C		1					1			
		25 X 100	13 C						1	1			
		75 X 125	20 C		1					1			
										14	87.7	30	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
269-12	Y	25 X 50	8 C			2				2			15% pyrite; 20% siderite
													~50 grains of native copper
										2	28.8	6	(<250u)
271-01	Y	15 X 50	7 C		1		1			2			50% pyrite
		25 X 25	5 C	1		1				2			~500 grains of native copper
		25 X 50	8 C	1						1			(<250u)
		50 X 50	10 C	1		2				3			~300 grains of native copper
		100 X 125	22 C	1						1			(250 to 2500u)
		100 X 150	25 C	1						1			
										10	49.9	117	
271-02	Y	15 X 75	9 C					1		1			50% pyrite
		25 X 50	8 C	1		1				2			~500 grains of native copper
		25 X 75	10 C		2	1				3			(<250u)
		25 X 100	13 C		1		1			2			~300 grains of native copper
		50 X 100	15 C		1					1			(250 to 1000u)
		75 X 100	18 C		1					1			~100 grains of galena (<100u)
										10	32.2	102	
272-01	Y	25 X 50	8 C	2						2			10% pyrite; TR. arspy. (~30 grains
		25 X 75	10 C	1						1			of arspy. (<250u)); 5% siderite
		50 X 50	10 C	1		1				2			~1000 grains of native copper
		50 X 75	13 C			1				1			(<250u)
		75 X 150	22 C			1				1			~100 grains of native copper
													(250 to 1000u)
										7	61.7	52	
272-02	Y	50 X 75	13 C	1				1		2			10% pyrite; 5% siderite
		50 X 100	15 C	1						1			~300 grains of native copper
		50 X 150	20 C	1						1			(<250u)
		100 X 150	25 C	1						1			~30 grains of native copper
		125 X 125	25 C	1						1			(250 to 750u)
		175 X 300	44 C	1						1			
										7	42.6	643	
272-03	Y	25 X 25	5 C	1		1				2			5% pyrite
		25 X 50	8 C	1		1				2			~100 grains of native copper
		50 X 75	13 C			1				1			(<250u)
		75 X 75	15 C	1						1			
		75 X 100	18 C	1						1			
		75 X 150	22 C	1						1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	 P	MODIFIED T	 P	PRISTINE T	 P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										8	51.0	85	
272-04	N	25 X 25	5 C	1						1			
		25 X 50	8 C	1						1			
		75 X 100	18 C	1						1			
		100 X 125	22 C	1						1			
		150 X 200	34 C	1						1			
										5	42.7	257	
272-05	Y	125 X 200	75 M		1					1			10% pyrite
										1	16.7	889	
272-06	Y	15 X 25	4 C	3		1				4			10% pyrite
		15 X 50	7 C			1				1			
		25 X 25	5 C			1				1			
		50 X 75	13 C	1						1			
		75 X 75	15 C		1					1			
		75 X 100	18 C	1						1			
		100 X 200	29 C	1						1			
		300 X 375	59 C	1						1			
										11	17.7	3272	
272-07	Y	75 X 125	20 C		1					1			10% pyrite
										1	16.7	90	
272-08	N	50 X 75	13 C	2						2			
										2	11.3	66	
272-09	N	25 X 25	5 C	1						1			
		50 X 75	13 C	1						1			
		50 X 150	20 C	1						1			
		75 X 125	20 C	1						1			
										4	24.2	140	
272-10	N	50 X 50	10 C	2						2			
										2	27.7	14	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
272-11	Y	25 X 25	5 C	1						1			5% pyrite
		25 X 50	8 C	1						1			
		50 X 50	10 C	1						1			
										3	33.6	9	
272-12	Y	15 X 15	3 C					1		1			5% pyrite
		25 X 50	8 C	1		1				2			
		50 X 50	10 C	1						1			
		50 X 75	13 C	1	1					2			
		75 X 100	18 C		1					1			
		100 X 100	20 C		1					1			
		150 X 175	31 C		1					1			
										9	35.5	278	
272-13	N	25 X 50	8 C	1						1			
										1	40.6	2	
272-14	N	25 X 25	5 C			1				1			~50 grains of native copper
		50 X 50	25 M	1						1			(<250u)
		50 X 125	18 C	1						1			
		75 X 175	25 C	1						1			
										4	23.9	184	
272-15	N	50 X 75	13 C	1						1			
										1	31.6	12	
272-16	Y	50 X 50	10 C	1						1			3% pyrite; 30% siderite
		50 X 100	15 C	1						1			~20 grains of native copper
													(<500u)
										2	49.9	17	~50 grains of galena (<100u)
272-17	Y	25 X 50	8 C		1	3				4			5% pyrite; 5% siderite
		25 X 75	10 C	1						1			~50 grains of native copper
		50 X 50	10 C	2	1	1				4			(<250u)
		50 X 75	13 C	1		1				2			~20 grains of native copper
		50 X 100	15 C	1						1			(250 to 750u)
		75 X 75	15 C	2						2			
		150 X 175	75 C	1						1			
										15	30.0	627	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
272-18	Y	25 X 25	5 C			1				1			10% pyrite; 5% siderite
		25 X 50	8 C	2	1	2				5			~300 grains of native copper
		25 X 75	10 C	1		1				2			(<250u)
		25 X 100	13 C	1						1			~100 grains of native copper
													(250 to 2000u)
										9	31.0	38	
273-01	Y	25 X 50	8 C	1						1			15% pyrite
		75 X 75	15 C					1		1			~100 grains of native copper
		100 X 100	20 C	1						1			(<250u)
													~50 grains of native copper
										3	26.4	84	(250 to 1000u)
273-02	Y	10 X 25	4 C			1				1			4% pyrite; 3% marcasite
		15 X 15	3 C			1		1		2			1 large grain of brass removed
		25 X 25	5 C	1						1			
		50 X 50	10 C			2				2			
		75 X 150	22 C	1						1			
										7	30.6	83	
273-03	N	NO VISIBLE GOLD											
273-04	N	175 X 225	38 C	1						1			~100 grains of native copper
													(<250u)
										1	8.0	1425	
273-05	Y	25 X 50	8 C	1						1			7% pyrite
		50 X 50	10 C	2						2			~20 grains of native copper
		75 X 100	18 C	1						1			(<250u)
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			
										6	26.5	192	
273-06	Y	50 X 75	13 C		1					1			1% pyrite; 20% siderite
		125 X 200	31 C	1						1			~10 grains of native copper
													(25 to 250u)
										2	11.3	585	
274-01	Y	15 X 25	4 C			1	1	1		3			20% pyrite; TR. arspy.;~100 grains
		25 X 25	5 C	2		2				4			of arspy.; 1% siderite; <0.1% L/G
		25 X 50	8 C	2						2			~500 grains of native copper
		50 X 50	10 C	1						1			(<250u)

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		50 X 75	13 C	2						2			~100 grains of native copper
		50 X 100	15 C	1						1			(250 to 1000u)
		75 X 75	15 C	1						1			~100 grains of galena ((=600u)
		75 X 10	9 C	1						1			
		100 X 125	22 C	1						1			
										16	44.9	106	
274-02	Y	25 X 25	5 C	2						2			15% pyrite; 2% siderite
		25 X 50	8 C			1				1			~300 grains of native copper
		25 X 75	10 C			1				1			((250u)
		50 X 50	10 C			1				1			~50 grains of native copper
		75 X 100	18 C	1						1			(250 to 1000u)
		100 X 150	25 C	1						1			
		150 X 175	31 C		1					1			
		175 X 175	34 C	1						1			
										9	45.2	407	
274-03	Y	15 X 25	4 C	1						1			25% pyrite
		25 X 25	5 C	1						1			~100 grains of native copper
		25 X 50	8 C		1					1			((250u)
		50 X 75	13 C	1						1			~50 grains of native copper
		50 X 125	18 C	1						1			(250 to 2500u)
		100 X 150	25 C	1						1			
		150 X 325	44 C	1						1			
										7	48.6	475	
275-01	N	50 X 50	10 C	1						1			~100 grains of native copper
		50 X 75	13 C	1						1			((250u)
		75 X 75	15 C	1						1			
		100 X 175	27 C	1						1			
										4	25.5	197	
276-01	Y	15 X 25	4 C	1						1			20% pyrite
		25 X 25	5 C	1						1			
		25 X 50	8 C	2	1			1		4			
		50 X 50	10 C					1		1			
		50 X 75	13 C	1						1			
		50 X 125	18 C	1						1			
		75 X 125	20 C	1						1			
		75 X 150	22 C		1					1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										11	51.3	108	
276-02	Y	25 X 75	10 C	1						1			20% pyrite
		50 X 75	13 C	3						3			~25 grains of native copper
		50 X 125	18 C	1						1			(250 to 2000u)
		75 X 75	15 C	1						1			
		75 X 150	22 C	1						1			
										7	55.4	92	
276-03	Y	15 X 15	3 C	1						1			25% pyrite; TR. arspy. (~200 grains
		15 X 75	9 C	1						1			of arspy. ((=100u))
		25 X 25	5 C	2					1	3			~10 grains of native copper
		25 X 50	8 C	3						3			(250 to 1000u)
		25 X 100	13 C	1						1			
		50 X 75	13 C	1	1					2			
		50 X 100	15 C	1	1					2			
		75 X 150	22 C		1					1			
		75 X 250	31 C	1						1			
		100 X 100	20 C		1					1			
		200 X 225	40 C	1						1			
										17	60.9	432	
276-04	Y	15 X 50	7 C	2						2			20% pyrite; TR. arspy. (~500 grains
		25 X 25	5 C	1	1	1				3			of arspy. ((=100u))
		25 X 50	8 C	1		2				3			~10 grains of native copper
		25 X 75	10 C	2		1	3			6			(250 to 1500u)
		50 X 50	10 C	1			2			3			
		50 X 75	13 C	3			1			4			
		50 X 100	15 C	1			1			2			
		75 X 75	15 C	1						1			
		75 X 100	18 C				1			1			
		75 X 125	20 C				1			1			
		125 X 225	34 C		1					1			
										27	59.5	266	
276-05	Y	25 X 25	5 C	2	1	1				4			25% pyrite; TR. arspy. (~200 grains
		25 X 50	8 C	5						5			of arspy. ((=100u))
		50 X 50	10 C	1	1					2			
		50 X 75	13 C	3						3			
										14	81.9	25	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
276-06	N	25 X 75	10 C			2				2			
										2	73.4	5	
276-07	Y	10 X 50	6 C			1				1			60% pyrite; TR. arspy. (~50 grains of arspy. ((=100u))
		25 X 50	8 C			1				1			1 grain of native silver 75X75u (reshaped)
		50 X 75	13 C	2		1				3			
		50 X 100	15 C		1					1			
		125 X 200	31 C			1				1			
		175 X 275	42 C	1						1			
		200 X 225	40 C	1						1			
										9	75.0	503	
276-08	Y	25 X 25	5 C	1		1				2			60% pyrite
		25 X 50	8 C	2		1				3			
		25 X 175	20 C						1	1			
		50 X 75	13 C			1	1			2			
		50 X 100	15 C	2		1				3			
		50 X 125	18 C			1				1			
		75 X 75	15 C			1				1			
		75 X 175	25 C	1						1			
										14	67.1	134	
277-01	N	25 X 50	8 C	1						1			
		50 X 100	15 C	1						1			
										2	56.1	13	
277-02	Y	15 X 75	9 C		1					1			5% pyrite
		25 X 25	5 C	3						3			
		25 X 50	8 C	1						1			
		25 X 75	10 C	1						1			
		50 X 50	10 C			1				1			
		50 X 75	13 C	1		1				2			
		75 X 75	15 C		1					1			
		75 X 100	18 C	3						3			
										13	60.1	85	
277-03	N	25 X 25	5 C	1						1			
		25 X 50	8 C	1						1			
		50 X 75	13 C	1						1			
		75 X 175	25 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

		MEASUREMENT (MICRONS)		NUMBER OF GRAINS									
				RESHAPED		MODIFIED		PRISTINE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
		100 X 125	22 C	1						1			
										5	41.2	133	
277-04	Y	25 X 50	8 C	3						3			20% pyrite; 2% siderite
		50 X 75	13 C		1					1			
		50 X 150	20 C	1						1			
		75 X 100	18 C		1					1			
		75 X 150	22 C		1					1			
										7	49.0	107	
277-05	Y	15 X 25	4 C	1						1			10% pyrite; TR. arspy. (~100 grains of arspy. ((400u))
		25 X 50	8 C	1	1					2			
		25 X 75	10 C	1						1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	2	1					3			
		50 X 100	15 C	1						1			
		100 X 200	29 C						1	1			
										10	45.6	159	
277-06	Y	15 X 25	4 C			1				1			3% pyrite
		25 X 50	8 C	2						2			
		25 X 100	13 C	1						1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		100 X 100	20 C		1					1			
										8	40.5	80	
278-01	Y	15 X 50	7 C			1				1			8% pyrite; TR. arspy. (~200 grains of arspy. ((=300u)) ~100 grains of galena ((=100u)
		25 X 25	5 C			1				1			
		25 X 75	10 C	1						1			
		25 X 175	20 C			1				1			
		50 X 50	10 C		1					1			
		50 X 75	13 C			1				1			
		50 X 100	15 C			1				1			
		50 X 125	50 M			1				1			
		75 X 75	50 M			1				1			
		75 X 125	20 C		1			1		2			
		75 X 150	22 C			1				1			
										12	76.7	171	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS				NUMBER OF GRAINS									
		MEASUREMENT (MICRONS)		RESHAPED		MODIFIED		PRISTINE		TOTAL	NON	CALC V.G.	
SAMPLE #	PANNED										MAG	ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
278-02	Y	25 X 25	5 C			1				1			4% pyrite; TR. arspy. (~100 grains
		25 X 50	8 C		1		1			2			of arspy. ((=300u))
		25 X 75	10 C				1			1			~100 grains of galena ((=100u)
		25 X 100	13 C		1					1			One grain of native silver 100X150
		75 X 125	20 C	1				1		2			(reshaped)
		75 X 175	25 C	1						1			
		100 X 175	75 M			1				1			
		150 X 175	25 M			1				1			
										10	34.8	639	
279-01	N	25 X 75	10 C	1						1			
		50 X 100	15 C	1						1			
		75 X 200	27 C	1						1			
										3	39.0	119	
279-02	N	25 X 25	5 C			1				1			
		50 X 75	13 C			1				1			
		100 X 125	22 C	1						1			
		100 X 200	29 C			1				1			
										4	26.2	285	
279-03	Y	25 X 50	8 C			1				1			12% pyrite
		25 X 75	10 C	1						1			
		50 X 50	10 C	1		1				2			
		50 X 75	13 C	1						1			
		50 X 100	15 C	2	1					3			
		75 X 125	20 C	1						1			
										9	34.9	128	
279-04	N	100 X 175	27 C			1				1			
										1	12.0	319	
279-05	N	100 X 100	20 C	1						1			
										1	16.5	91	
280-01	N	50 X 125	18 C	1						1			
		125 X 150	27 C	1						1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										2	48.4	100	
280-02	Y	15 X 15	3 C	1						1			20% pyrite
		15 X 50	7 C	1						1			
		25 X 25	5 C				1		1	2			
		25 X 50	8 C		1	1				2			
		25 X 75	10 C	2	1	1				4			
		50 X 50	10 C		1					1			
		50 X 75	13 C		1					1			
		50 X 100	15 C				1			1			
		75 X 100	18 C				1			1			
										14	71.6	45	
280-03	Y	15 X 50	7 C		1	2				3			15% pyrite;2% siderite
		25 X 25	5 C	1		4		1		6			~200 grains of native copper
		25 X 50	8 C	2	1	4				7			(<=500u)
		25 X 75	10 C	1	1	2				4			One grain of native silver 75X125
		25 X 100	13 C	1						1			(reshaped)
		50 X 50	10 C			2				2			
		50 X 75	13 C		1					1			
		50 X 125	18 C	1						1			
										25	73.5	52	
280-04	Y	15 X 15	3 C			2				2			15% pyrite; 5% siderite
		25 X 25	5 C	2		10				12			~100 grains of native copper
		25 X 50	8 C	3		9				12			(<=500u)
		25 X 75	10 C			2				2			~1% of all pyrite grains are
		50 X 50	10 C	6		3		1		10			chalcocite coated.
		50 X 75	13 C	4		2				6			
		50 X 75	50 M			1				1			
		50 X 100	15 C	1						1			
		50 X 125	18 C	1						1			
		75 X 75	15 C	1	1					2			
		75 X 100	18 C	1						1			
										50	107.6	104	
281-01	Y	15 X 15	3 C	2						2			15% pyrite
		25 X 25	5 C	2		11				13			
		5 X 50	6 C	6		3		1		10			
		25 X 75	10 C	1		1				2			
		25 X 100	13 C			1				1			
		50 X 50	10 C	5		6				11			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		50 X 75	13 C	3		2	1			6			
		50 X 125	50 M	1						1			
		100 X 100	50 M			1				1			
										47	59.1	209	
281-02	Y	15 X 15	3 C	1		3				4			8% pyrite
		25 X 25	5 C	1		3				4			
		25 X 50	8 C	2						2			
		50 X 50	10 C			1				1			
		50 X 150	20 C	1						1			
		75 X 100	18 C	1						1			
		75 X 125	20 C						1	1			
										14	95.4	47	
281-03	Y	15 X 15	3 C			2				2			20% pyrite
		15 X 25	4 C			1				1			
		25 X 25	5 C		1					1			
		25 X 50	8 C	1	3	3				7			
		25 X 75	10 C	3						3			
		50 X 50	10 C			1				1			
		50 X 75	13 C			1				1			
		50 X 100	15 C	1		1				2			
		50 X 125	18 C	1						1			
		75 X 75	15 C			1				1			
		100 X 175	27 C	1						1			
										21	75.9	112	
281-04	Y	10 X 10	2 C			1				1			70% pyrite
		15 X 15	3 C	2		4				6			
		25 X 25	5 C	1		11				12			
		25 X 50	8 C	4		18				22			
		25 X 75	10 C	4		1	1			6			
		25 X 100	13 C	1						1			
		50 X 50	10 C	5		3		1		9			
		50 X 75	13 C	4		1	1	1		7			
		50 X 100	15 C			1				1			
		50 X 125	18 C	1						1			
		75 X 75	15 C	1		2				3			
		75 X 100	18 C	1						1			
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			
		175 X 325	46 C	1						1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	TOTAL # OF PANNINGS PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										73	103.3	367	
282-01	Y	15 X 25	4 C	1						1			30% pyrite
		15 X 150	17 C			1				1			
		25 X 25	5 C		1	4				5			
		25 X 50	8 C			4				4			
		50 X 50	10 C	1						1			
										12	36.9	41	
282-02	Y	25 X 25	5 C	1						1			70% pyrite
		25 X 50	8 C	1		3				4			
		25 X 75	10 C	1		1	1			3			
		50 X 75	13 C	1						1			
		50 X 125	18 C			1	2			3			
										12	63.4	68	
282-03	Y	15 X 15	3 C			1				1			70% pyrite
		25 X 25	5 C	5		4				9			
		25 X 50	8 C	3		2				5			
		25 X 75	10 C	1						1			
		25 X 25	5 C			1				1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		75 X 100	18 C		1					1			
		100 X 100	20 C	1						1			
										21	38.3	102	
283-01	Y	15 X 25	4 C	1		1				2			70% pyrite
		25 X 25	5 C	6		2				8			
		25 X 50	8 C	4		8		1		13			
		50 X 50	10 C			1				1			
		50 X 75	13 C		1	1		1		3			
		50 X 100	15 C		1					1			
		50 X 125	18 C				1			1			
		75 X 125	20 C				1			1			
		75 X 150	22 C	1						1			
										31	99.1	79	
283-02	Y	15 X 15	3 C			4	1			5			90% pyrite
		25 X 25	5 C	7		13				20			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		25 X 50	8 C	10		9		1		20			
		25 X 75	10 C			2				2			
		50 X 50	10 C	5		6				11			
		50 X 75	13 C	2		1				3			
		50 X 100	15 C	1		3	1			5			
		50 X 125	18 C	1		1				2			
		75 X 75	15 C					1		1			
		75 X 100	18 C	3						3			
		125 X 250	36 C			1				1			
		175 X 250	100 M			1				1			
										74	108.6	534	
283-03	Y	15 X 15	3 C				5			5			90% pyrite
		15 X 25	4 C				2		1	3			The 1250 X 2250 X 875 was
		15 X 50	7 C				1			1			encapsulated. Calculated ppb
		25 X 25	5 C	1		3	3			7			without this nugget is 138.
		25 X 50	8 C		1	5	4	1	1	12			This large grain has inclusions of
		25 X 75	10 C	1	1	1	5			8			chalcopyrite, sphalerite, and
		50 X 50	10 C			1	1			2			chalcocite (confirmed by EDS).
		50 X 75	13 C	1	1	1	2			5			
		50 X 200	25 C				1			1			
		75 X 100	18 C			1	1			2			
		75 X 150	22 C				1			1			
		100 X 125	22 C				1			1			
		1250 X 2250	875 M				1			1			
										49	102.9	195451	
283-04	Y	10 X 10	2 C			1				1			70% pyrite
		15 X 15	3 C	2		4				6			
		25 X 25	5 C	1		11				12			
		25 X 50	8 C	4		18				22			
		25 X 75	10 C	4		1	1			6			
		25 X 100	13 C	1						1			
		50 X 50	10 C	5		3		1		9			
		50 X 75	13 C	1		1	1	1		4			
		50 X 100	15 C			1				1			
		50 X 125	18 C	1						1			
		75 X 75	15 C	1		2				3			
		75 X 100	18 C	1						1			
		100 X 100	20 C	1						1			
		100 X 125	22 C	1						1			
		175 X 325	46 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

NUINSCO\RR961JUL.WR2

TOTAL # OF PANNINGS 1

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
283-4	Y	25 X 25	5 C	1	1	8	2	2		14			90% pyrite
		25 X 50	8 C	3		6		3		12			
		25 X 75	10 C	1	1	3	1			6			
		25 X 100	13 C		1		1			2			
		50 X 50	10 C	2		1				3			
		50 X 75	13 C	3		2	1	1		7			
		50 X 100	15 C	1						1			
		50 X 150	20 C						1	1			
		75 X 75	15 C					1		1			
		75 X 125	20 C				1			1			
										48	96.7	111	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										70	96.7	380	
284-01	Y	25 X 50	8 C	2	1					3			5% pyrite
		25 X 100	13 C			1				1			1 grain of native silver 50X175
		50 X 75	13 C	1						1			(reshaped)
		50 X 100	15 C			2				2			
										7	20.2	112	
285-01	Y	15 X 15	3 C	2		1				3			3% pyrite; TR. arspy.(~100 grains
		15 X 25	4 C	3		2		1		6			of arspy. ((=100u))
		15 X 50	7 C	1		1				2			2 grains of native silver 50X100,
		25 X 25	5 C	5		2				7			75X100 (reshaped)
		25 X 50	8 C	2				1		3			
		25 X 75	10 C			2		1		3			
		25 X 125	15 C			1				1			
		50 X 50	10 C	2		1				3			
		50 X 75	13 C	2						2			
		50 X 100	15 C	1						1			
		50 X 125	18 C	1		1				2			
		100 X 100	20 C						1	1			
		125 X 150	27 C			1				1			
										35	40.7	274	
285-02	Y	15 X 25	4 C			2				2			3% pyrite; TR. arspy.(~200 grains
		25 X 25	5 C			1				1			of arspy. ((=500u))
		25 X 50	8 C	3		5		1		9			A pristine gold grain is attached
		25 X 75	10 C			2		1		3			to pyrite (25X75; mounted)
		50 X 50	10 C	4						4			~50 grains of cobaltite ((=200u)
		50 X 75	13 C	1						1			(confirmed by EDS)
		75 X 75	15 C					1		1			
		75 X 100	18 C	2						2			
		125 X 175	29 C	1						1			
										24	60.7	166	
285-03	Y	25 X 50	8 C		1			1		2			10% pyrite
		25 X 75	10 C	1						1			A pristine gold grain is attached
		25 X 125	15 C						1	1			to pyrite (25X125; mounted)
		50 X 75	13 C					1		1			
		75 X 100	18 C	1			1			2			
		75 X 125	20 C	1		1				2			
		100 X 175	27 C				1			1			
		100 X 200	29 C		1					1			

GOLD CLASSIFICATION
==================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		125 X 175	29 C		1					1			
										12	59.3	339	
285-04	Y	10 X 10	2 C			1				1			5% pyrite
		15 X 15	3 C			1				1			
		25 X 25	5 C	3						3			
		25 X 50	8 C	4		3				7			
		50 X 50	10 C			2				2			
										14	39.9	26	
285-05	Y	25 X 25	5 C			1				1			5% pyrite
		25 X 50	8 C	2		2	1			5			
		50 X 50	10 C	2						2			
		50 X 75	13 C	2						2			
		50 X 100	15 C	1						1			
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
										13	49.2	96	
286-01	Y	25 X 25	5 C			1				1			5% pyrite
		25 X 50	8 C	1		2		1		4			~1000 grains of cobaltite ((=100u)
		50 X 75	13 C						1	1			
		75 X 75	15 C	1						1			
										7	18.9	72	
286-02	Y	15 X 25	4 C					1		1			5% pyrite
		15 X 75	9 C	1						1			~100 grains of cobaltite ((=100u)
		25 X 25	5 C					1		1			2 grains of native silver (25X50
		25 X 50	8 C			1				1			modified; 100X150 reshaped)
		25 X 75	10 C	1		1		1		3			
		50 X 125	18 C			1				1			
										8	24.7	75	
286-03	Y	15 X 25	4 C	1						1			20% pyrite
		25 X 25	5 C	1						1			~200 grains of cobaltite ((=300u)
		25 X 75	10 C			1				1			
		50 X 75	13 C	1		1				2			
		100 X 125	22 C	1						1			
		125 X 175	29 C		1					1			
		125 X 250	75 M				1			1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

	TOTAL # OF PANNINGS	MEASUREMENT (MICRONS)		NUMBER OF GRAINS									
				RESHAPED		MODIFIED		PRISTINE		TOTAL	NON MAG	CALC V.G. ASSAY	
SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
		200 X 450	100 M		1					1			
										9	38.5	2780	
286-04	N	50 X 75	13 C			1				1			
										1	17.1	22	
287-01	N	50 X 100	15 C	1						1			
		75 X 75	15 C	1						1			
										2	20.7	62	
287-02	N	NO VISIBLE GOLD											
287-03	Y	25 X 50	8 C	1						1			20% pyrite; TR. arspy. (~10 grains
		50 X 75	13 C	1						1			of arspy. ((=500u))
										2	43.7	10	
288-01	N	25 X 50	8 C	1		1				2			
		50 X 100	15 C			1				1			
										3	39.3	20	
288-02	N	25 X 50	8 C			1				1			
										1	23.6	3	
288-03	Y	15 X 25	4 C	1						1			12% pyrite; TR. arspy. (~10 grains
		25 X 25	5 C	2		1		1		4			of arspy. ((=500u))
		25 X 100	13 C	1						1			
		50 X 100	15 C	1						1			
		75 X 75	15 C	1						1			
		75 X 100	18 C				1			1			
										9	33.3	83	
289-01	N	NO VISIBLE GOLD											
289-02	Y	75 X 75	15 C		1					1			35% pyrite; TR. arspy. (~20 grains
		75 X 100	18 C		1					1			of arspy. ((=500u))
		175 X 175	34 C				1			1			
										3	31.4	299	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED	MEASUREMENT (MICRONS)		NUMBER OF GRAINS							NON MAG	CALC V.G. ASSAY	
				RESHAPED		MODIFIED		PRISTINE		TOTAL			
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P		GMS	PPB	REMARKS
RR-96													
290-01	N	25 X 50	8 C	2						2			
										2	22.9	7	
291-01	N	50 X 50	10 C	1						1			
										1	34.7	6	
292-01	N	25 X 25	5 C	2						2			
		50 X 50	10 C	1						1			
		50 X 75	13 C	2						2			
										5	28.2	35	
292-02	N	NO VISIBLE GOLD											
292-03	N	75 X 125	20 C	1						1			
										1	29.3	51	
293-01	Y	25 X 50	8 C		1					1			10% pyrite; TR. arspy. (~100 grains of arspy. ((=200u))
		50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
										4	14.1	91	
294-01	N	50 X 75	13 C	1		1				2			
		50 X 125	18 C	1						1			
										3	34.7	51	
294-02	N	25 X 50	8 C			1				1			
		75 X 100	18 C	1						1			
										2	30.3	36	
294-03	N	NO VISIBLE GOLD											
294-04	Y	25 X 50	8 C		1					1			10% pyrite; TR. arspy. (~100 grains of arspy. ((=500u))
		50 X 75	13 C		1					1			~1000 grains of cobaltite ((=100u)
										2	34.0	13	
294A-01	N	50 X 75	13 C	1						1			~20% staurolite (confirmed by EDS)

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										1	18.1	21	
294A-02	N	NO VISIBLE GOLD											
294A-03	N	NO VISIBLE GOLD											
294A-04	N	25 X 25	5 C	1						1			
										1	18.8	1	
294A-05	N	NO VISIBLE GOLD											
295-01	N	NO VISIBLE GOLD											
295-02	N	NO VISIBLE GOLD											
296-01	N	25 X 50	8 C	1						1			
										1	58.9	1	
296-02	N	100 X 125	22 C	1						1			
										1	63.6	33	
296-03	N	NO VISIBLE GOLD											
297-01	N	75 X 100	18 C	1						1			
										1	36.1	28	
297-02	N	50 X 100	15 C	1						1			
										1	23.9	27	
298-01	N	100 X 125	22 C	1						1			~400 grains of native copper
		225 X 225	42 C	1						1			(<=250u)
										2	45.5	399	
298-02	N	15 X 50	7 C	1						1			~1000 grains of native copper
		25 X 50	8 C	1						1			(<=250u)
		125 X 150	27 C	1						1			
										3	37.1	107	

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
298-03	Y	25 X 25	5 C		1					1			5% pyrite; 5% siderite
		25 X 50	8 C		1					1			~1000 grains of native copper
		25 X 75	10 C	1						1			(<=250u)
		50 X 75	13 C	1						1			~20 grains of native copper
		50 X 175	22 C	1						1			(250 to 2000u)
		100 X 150	25 C	1						1			
		150 X 175	31 C	1						1			
										7	25.2	473	
299-01	Y	25 X 50	8 C			1	1			2			10% pyrite; 10% siderite
		25 X 75	10 C			1				1			~500 grains of native copper
		125 X 150	27 C			1				1			(<=250u)
													~50 grains of native copper
										4	37.1	113	
299-02	N	25 X 50	8 C			1				1			~1000 grains of native copper
		75 X 150	22 C			1				1			(<=250u)
		100 X 100	20 C			1				1			~50 grains of native copper
													(250 to 2000u)
										3	56.1	66	
299-03	Y	25 X 50	8 C			2				2			50% pyrite; 10% siderite
		25 X 75	10 C				1			1			~1000 grains of native copper
		50 X 75	13 C	1						1			(<=250u)
		50 X 100	15 C	1						1			~100 grains of native copper
		50 X 150	20 C			1	1			2			(250 to 2000u)
		75 X 175	25 C				1			1			
		100 X 300	50 M			1				1			
										9	69.9	318	
299-04	Y	15 X 25	4 C			1				1			60% pyrite; 5% siderite
		15 X 50	7 C			3	1			4			~200 grains of native copper
		25 X 25	5 C			1	1			2			(<=250u)
		25 X 50	8 C		1	1				2			~20 grains of native copper
		25 X 75	10 C			1				1			(250 to 2000u)
		25 X 100	13 C			1				1			
		25 X 150	18 C		1					1			
		50 X 50	10 C		1	5				6			
		50 X 75	13 C		1	1			1	3			
		50 X 100	15 C			1				1			
		50 X 125	18 C			2	1			3			
		75 X 125	20 C			1				1			

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		125 X 175	29 C	1						1			
		125 X 200	31 C			1				1			
										28	67.0	308	
300-01	N	25 X 50	8 C	1						1			
		50 X 75	13 C	1						1			
		100 X 125	22 C			1				1			
										3	69.8	37	
301-01	Y	25 X 25	5 C			2				2			40% pyrite; 10% siderite
		25 X 50	8 C	1		1				2			~200 grains of native copper
		25 X 75	10 C			1				1			((=250u)
		25 X 100	13 C	3						3			~200 grains of native copper
		50 X 75	13 C	1		1	1			3			(250 to 2000u)
		75 X 100	18 C	1		1				2			
		75 X 125	20 C			1				1			
		150 X 175	31 C		1					1			
		175 X 325	46 C			1				1			
										16	48.5	703	
301-02	N	50 X 100	15 C	1						1			
										1	95.2	7	
301-03	Y	25 X 50	8 C			2				2			30% pyrite; 4% siderite
		50 X 150	50 M				1			1			~200 grains of native copper
		75 X 75	15 C					1		1			((=250u)
		100 X 100	20 C				1			1			~10 grains of native copper
													(250 to 2000u)
										5	46.7	130	1 copper nugget 1375X2275X1150 R.
301-04	N	25 X 50	8 C			1				1			~200 grains of native copper
		50 X 50	25 M			1				1			((=250u)
		75 X 150	22 C	1						1			
										3	28.8	93	
301-05	Y	25 X 25	5 C		2	2				4			15% pyrite;10% siderite; Tr. arspy.
		25 X 50	8 C			1				1			(~40 grains of arspy. ((=1000u))
		25 X 75	10 C	1		1				2			(0.1% L/G
		50 X 50	10 C	1						1			1% of pyrite is chalcocite coated
		75 X 250	31 C			1				1			1 grain of native silver (100X125R)

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		175 X 225	25 M	1						1			~200 grains of native copper (<=250u)
										10	45.0	322	
304-01	Y	25 X 25	5 C			1				1			3% pyrite
		25 X 50	8 C			1		1		2			~20 grains of native copper
		50 X 50	10 C	1						1			(<=250u)
										4	22.4	17	
304-02	N	25 X 25	5 C	1						1			~10 grains of native copper (<=250u)
										1	14.5	2	
305-01	N	25 X 25	5 C			2				2			
		100 X 100	20 C	1						1			
										3	14.2	109	
305-02	N	25 X 50	8 C	1						1			
										1	5.0	16	
305-03	N	NO VISIBLE GOLD											
305-04	N	NO VISIBLE GOLD											
305-05	N	25 X 25	5 C	1		1				2			
		25 X 50	8 C	1						1			
										3	51.0	3	
305-06	N	15 X 25	4 C			1				1			
		25 X 50	8 C			1				1			
										2	33.7	3	
305-07	N	25 X 25	5 C	1						1			
										1	48.0	1	
305-08	N	NO VISIBLE GOLD											
305-09	N	25 X 25	5 C	1						1			~20 grains of native copper (<=250u)

GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
										1	31.1	1	
306-01	Y	15 X 25	4 C			1				1			Tr. pyrite (~100 grains of pyrite)
		25 X 25	5 C	1				1		2			
		25 X 50	8 C			1				1			
		25 X 75	10 C	1						1			
		50 X 50	10 C	1		1				2			
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		75 X 75	15 C	1						1			
		75 X 125	20 C	1						1			
		75 X 175	25 C	1						1			
										12	32.9	206	
306-02	Y	15 X 25	4 C					1		1			No sulphides.
		25 X 25	5 C	1		2		1		4			~50 grains of native copper
		25 X 50	8 C			1			1	2			(<=250u)
		25 X 100	13 C				1			1			
		50 X 100	15 C		1					1			
										9	50.6	25	
306-03	N	15 X 15	3 C			1				1			
		25 X 25	5 C	2						2			
										3	19.3	3	
307-01A	N	25 X 50	8 C	1						1			
										1	17.1	5	
307-01B	N	25 X 25	5 C			1				1			
		25 X 50	8 C	1						1			
										2	12.9	8	
307A-01	Y	15 X 15	3 C			1		1		2			4% pyrite
		15 X 25	4 C			1				1			~10 grains of molydenite
		25 X 25	5 C			1				1			
		25 X 50	8 C			1				1			
										5	59.4	2	
308-01	N	15 X 15	3 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
		25 X 25	5 C			2				2			
		25 X 50	8 C	1						1			
										4	39.0	3	
310-01	Y	25 X 25	5 C	1						1			10% pyrite
		25 X 50	8 C	3		3		2		8			
		25 X 75	10 C			1				1			
		50 X 50	10 C	2		1				3			
		50 X 75	13 C	1						1			
		75 X 125	20 C	1						1			
										15	30.2	110	
311-01	N	15 X 15	3 C	2						2			
		15 X 50	7 C			1				1			
		25 X 50	8 C			1				1			
										4	42.8	3	
311-02	Y	25 X 25	5 C	1		3				4			3% pyrite
		50 X 50	10 C	1		1				2			
		50 X 75	13 C	1						1			
										7	54.6	16	
311-03	N	25 X 25	5 C			1				1			
		25 X 50	8 C	1						1			
										2	39.5	3	
312A-01	Y	15 X 15	3 C			1				1			3% pyrite
		25 X 25	5 C	2		1				3			
		25 X 50	8 C			1				1			
		50 X 75	13 C	1						1			
										6	19.3	28	
312A-02	N	50 X 50	10 C	1						1			
		50 X 75	13 C	1						1			
										2	18.9	30	
313-01	N	NO VISIBLE GOLD											

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	P	MODIFIED T	P	PRISTINE T	P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
313-02	N	15 X 25	4 C			1				1			~50 grains of native copper (<=250u)
		50 X 75	13 C	1						1			
										2	27.8	14	
313-03	N	NO VISIBLE GOLD											~20 grains of native copper (<=250u)
313-04	N	NO VISIBLE GOLD											~15 grains of native copper (<=250u)
315-01	N	50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
										2	78.4	13	
315-02	Y	25 X 25	5 C	1						1			4% pyrite; 10% siderite
		25 X 50	8 C	4						4			~80 grains of native copper (<=250u)
		50 X 75	13 C	1						1			~10 grains of native copper
		50 X 100	15 C	1						1			(250 to 1000u)
		50 X 150	20 C	1						1			
		125 X 150	27 C	1						1			
										9	52.9	126	
315-03	Y	25 X 25	5 C	1						1			0.2% pyrite; 50% siderite
		50 X 75	13 C	1						1			~25 grains of native copper (<=250u)
										2	43.6	9	
316-01	Y	15 X 50	7 C	1	1					2			1% pyrite; 10% siderite
		25 X 50	8 C	2						2			
		25 X 75	10 C	1						1			
		50 X 50	10 C	1						1			
		50 X 75	13 C	2						2			
										8	63.4	22	
316-02	N	50 X 50	10 C	1						1			~100 grains of native copper
		75 X 100	18 C	1						1			(<=250u)
										2	27.4	44	
317-01	N	25 X 50	8 C	1						1			~10 grains of native copper (<=250u)
		100 X 100	20 C	1						1			
										2	66.6	24	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

TOTAL # OF PANNINGS

SAMPLE #	PANNED Y/N	MEASUREMENT (MICRONS) DIAMETER	THICKNESS	NUMBER OF GRAINS RESHAPED T	RESHAPED P	MODIFIED T	MODIFIED P	PRISTINE T	PRISTINE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
RR-96													
318-01	N	25 X 50	8 C	2						2			
		50 X 50	10 C	2						2			
		75 X 100	18 C	1						1			
										5	57.3	27	
318-02	N	25 X 25	5 C	1						1			
		25 X 75	10 C	1						1			
		50 X 50	10 C	2						2			
										4	104.2	6	
319-01	N	75 X 75	15 C	1						1			
										1	61.3	10	
319-02	N	25 X 25	5 C			1				1			
		25 X 50	8 C	1						1			
										2	93.5	1	
319-03	Y	25 X 50	8 C	2						2			15% pyrite; 20% siderite
		50 X 75	13 C	1						1			
		50 X 100	15 C	1						1			
		100 X 125	22 C	1						1			
										5	55.7	59	
320-01	Y	15 X 25	4 C	1		1				2			1% pyrite
		25 X 25	5 C	3		1				4			
		25 X 50	8 C	4		2				6			
		25 X 75	10 C	1						1			
		50 X 50	10 C	1						1			
		50 X 75	25 M	2						2			
										16	55.5	44	
320-02	Y	25 X 25	5 C	1						1			1% pyrite
		25 X 50	8 C	2						2			
		50 X 125	18 C	1						1			
		75 X 175	25 C	1						1			
										5	48.6	84	

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					DESCRIPTION												CLASS
						M. I. CONC			CLAST					MATRIX							
	TABLE+2 SPLIT	** CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	SIZE	% V/S	% GR	% LS	% QTZ	S/U	SD	ST	CY	COLOUR SD	COLOUR CY	OR	
RR-96																					
212-01	9.2	1.5	7.7	448.8	367.6	81.2	71.7	9.5	P	95	5	0	NA	U	+	Y	Y	GG	GG		TILL
213-01	6.7	0.8	6.0	364.8	334.3	30.5	26.4	4.1	P	95	5	0	NA	U	-	+	Y	GG	GG		TILL
214-01	7.9	1.2	6.7	513.5	420.1	93.4	82.1	11.3	P	70	28	TR	2	U	-	+	+	GG	LOC		TILL
214-02	9.5	3.0	6.5	309.0	278.3	30.7	26.2	4.5	P	95	5	0	TR	U	Y	Y	+	GG	LOC		TILL
215-01	7.2	1.5	5.8	326.5	232.1	94.4	85.8	8.6	C	80	18	0	2	U	Y	-	+	GG	OC		TILL
215-02	5.9	1.2	4.7	385.7	357.1	28.6	25.2	3.4	C	70	28	0	2	U	Y	-	+	B	OC		TILL
215-03	8.3	1.2	7.1	369.8	319.7	50.1	46.0	4.1	C	60	37	0	3	U	Y	Y	+	BN	OC		TILL
215-04	9.0	2.0	7.0	262.5	208.5	54.0	44.4	9.6	C	40	60	0	NA	U	Y	Y	+	BN	OC		TILL
216-01	4.1	1.0	3.2	284.8	245.4	39.4	36.9	2.5	C	95	5	0	NA	U	Y	Y	Y	GN	GN		TILL+BDK
217-01	9.4	2.1	7.3	642.3	489.3	153.0	140.6	12.4	C	60	40	0	NA	U	+	-	-	GY	GY		TILL
217-02	7.9	2.8	5.1	289.2	221.4	67.8	63.5	4.3	C	20	80	0	NA	U	+	-	-	GY	GY		TILL+GRAV
217-03	9.6	4.0	5.7	282.7	226.6	56.1	50.1	6.0	C	25	75	0	NA	S	C	-	N	B	-		GRAV
217-04	8.8	3.9	5.0	319.6	251.8	67.8	64.3	3.5	C	25	75	0	NA	S	C	-	N	B	-		GRAV
217-05	9.4	4.1	5.3	329.1	263.5	65.6	61.2	4.4	C	90	5	0	5	S	C	-	-	B	B		GRAV+BDK
218-01	8.9	1.1	7.8	393.1	285.5	107.6	97.7	9.9	C	60	40	0	NA	U	+	Y	Y	GB	GB		TILL
218-02	9.7	2.7	7.0	444.4	368.4	76.0	71.0	5.0	C	90	5	0	5	U	+	Y	-	GB	B		TILL
218-03	8.9	2.1	6.9	293.0	253.3	39.7	35.1	4.6	C	95	5	0	NA	U	+	Y	-	GB	B		TILL
219-01	9.0	4.5	4.5	168.4	137.5	30.9	26.6	4.3	C	98	2	0	NA	U	Y	Y	Y	GB	B		TILL
219-02	9.7	3.1	6.7	308.1	258.4	49.7	38.0	11.7	C	95	3	0	2	U	+	Y	-	GB	B		TILL
219A-01	8.4	2.6	5.8	249.2	199.0	50.2	41.5	8.7	C	95	5	0	NA	U	+	Y	Y	GB	GB		TILL
219A-02	9.0	3.6	5.4	239.9	218.8	21.1	17.4	3.7	C	95	5	0	NA	U	+	Y	-	GB	GB		TILL
219A-03	9.1	4.9	4.2	245.4	218.0	27.4	22.8	4.6	C	95	5	0	NA	U	+	Y	-	GB	GB		TILL
219A-04	9.1	3.2	5.9	131.2	87.6	43.6	39.2	4.4	C	98	2	0	NA	U	+	Y	-	GB	GB		TILL
220-01	9.7	1.2	8.5	425.5	348.2	77.3	71.4	5.9	C	98	2	0	NA	U	+	Y	-	GB	B		TILL
220-02	8.5	2.2	6.4	186.2	141.5	44.7	38.6	6.1	C	75	25	0	NA	U	+	Y	-	B	B		TILL
221-01	5.8	1.3	4.5	276.5	250.9	25.6	23.4	2.2	C	70	30	0	NA	U	Y	Y	+	GB	GB		TILL
222-01	9.3	1.6	7.7	293.7	217.0	76.7	64.2	12.5	C	60	40	0	NA	U	Y	Y	+	GB	GB		TILL
223-01	6.9	1.7	5.3	264.7	236.4	28.3	13.8	14.5	C	50	20	30	NA	U	Y	Y	+	GB	GB		TILL
223-02	8.8	2.5	6.3	320.1	219.7	100.4	85.6	14.8	C	70	30	0	NA	U	Y	Y	+	GB	GB		TILL
223-03	8.7	2.0	6.7	301.2	206.2	95.0	82.7	12.3	C	95	5	0	NA	U	Y	Y	+	GB	GB		TILL
223-04	8.5	2.0	6.5	481.4	374.6	106.8	98.6	8.2	C	100	TR	0	NA	U	Y	Y	+	GB	GB		TILL
223-05	9.7	3.3	6.5	322.1	245.2	76.9	67.3	9.6	C	98	2	0	NA	U	Y	Y	+	GB	GB		TILL
224-01	1.6	0.2	1.4	94.8	90.3	4.5	3.8	0.7	P	98	0	2	NA	U	Y	Y	+	GB	GB		TILL
225-01	9.5	1.5	8.1	387.3	307.0	80.3	65.1	15.2	P	60	40	0	NA	U	Y	Y	-	GB	GB		TILL
225-02	9.0	1.1	7.9	547.3	472.5	74.8	59.5	15.3	C	50	50	0	NA	U	+	Y	-	GB	GB		TILL
225-03	8.7	1.1	7.6	277.1	206.2	70.9	53.9	17.0	C	40	60	0	NA	U	+	Y	-	GB	GB		TILL
225-04	8.0	1.1	7.0	304.6	242.9	61.7	51.3	10.4	C	50	50	0	NA	U	+	Y	-	GB	GB	Y	TILL
225-05	7.9	0.7	7.2	285.4	231.3	54.1	43.8	10.3	C	50	50	0	NA	U	+	Y	-	GB	GB		TILL
225-06	6.6	0.7	5.9	206.2	150.5	55.7	44.3	11.4	C	70	30	0	NA	U	+	Y	-	GY	GY		TILL
226-01	10.0	1.8	8.2	249.9	193.1	56.8	35.5	21.3	C	20	80	0	NA	U	+	Y	-	GB	GB		TILL
226-02	9.6	1.5	8.1	315.7	253.3	62.4	40.8	21.6	C	20	80	0	NA	U	+	Y	-	GB	GB		TILL
226-03	8.3	0.8	7.5	299.5	225.6	73.9	51.7	22.2	C	10	90	0	NA	U	+	Y	-	GB	GB		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE+2 SPLIT	CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	MATRIX S/U	SD	ST	CY	COLOUR SD	COLOUR CY	OR	CLASS
RR-96																					
226-04	8.9	1.4	7.5	346.9	277.1	69.8	52.6	17.2	C	20	80	0	NA	U	+	Y	-	GB	GB		TILL
226-05	10.5	0.5	10.0	257.9	175.6	82.3	62.4	19.9	C	50	50	0	NA	U	Y	Y	Y	GB	GB		TILL
227-01	3.5	0.6	2.9	290.2	259.3	30.9	25.7	5.2	C	70	30	0	NA	U	+	Y	Y	GB	GB		TILL
227-02	10.8	1.2	9.7	312.1	205.8	106.3	93.1	13.2	P	65	35	0	NA	U	Y	Y	Y	GB	GB		TILL
227-03	7.6	1.0	6.6	283.1	228.6	54.5	40.8	13.7	C	50	50	0	NA	U	Y	Y	Y	GB	GB		TILL
227-04	10.4	1.3	9.1	418.3	338.4	79.9	65.0	14.9	C	40	60	0	NA	U	Y	Y	Y	GB	GB		TILL
227-05	10.8	1.4	9.5	244.9	138.2	106.7	80.3	26.4	C	40	60	0	NA	U	+	Y	Y	GB	GB		TILL
227-06	7.4	1.2	6.2	329.7	277.7	52.0	38.7	13.3	C	80	20	0	NA	U	+	Y	-	GB	GB		TILL
227-07	6.7	1.0	5.7	140.7	104.8	35.9	26.6	9.3	C	65	35	0	NA	U	+	Y	-	GB	GB		TILL
228-01	10.1	0.9	9.2	351.7	282.5	69.2	47.7	21.5	C	35	65	0	NA	U	+	-	-	GB	GB		TILL
228-02	10.2	0.7	9.5	287.7	236.0	51.7	41.6	10.1	C	20	80	0	NA	U	+	-	-	GB	GB		TILL
228-03	5.7	0.6	5.1	292.2	235.3	56.9	46.7	10.2	C	35	65	0	NA	U	+	-	-	GB	GB		TILL
228-04	6.5	0.8	5.7	257.5	213.0	44.5	34.6	9.9	C	70	30	0	NA	U	+	-	-	GY	GB		TILL
229-01	10.1	1.0	9.1	584.8	354.6	230.2	213.6	16.6	P	60	40	0	NA	U	Y	Y	Y	GY	GB		TILL
229-02	10.6	4.0	6.6	398.4	289.4	109.0	86.8	22.2	C	40	60	0	NA	U	Y	Y	Y	GB	GB		TILL
229-03	10.1	0.5	9.6	323.8	244.5	79.3	66.0	13.3	C	50	50	0	NA	U	Y	Y	Y	GB	GB		TILL
229-04	9.8	0.9	8.9	324.8	250.5	74.3	57.9	16.4	C	50	50	0	NA	U	Y	Y	Y	GY	GY		TILL
229-05	7.2	0.6	6.6	272.9	196.1	76.8	61.8	15.0	C	70	30	TR	NA	U	Y	Y	Y	GB	GB		TILL
230-01	5.5	0.9	4.6	340.3	291.2	49.1	37.3	11.8	C	40	60	0	NA	U	+	Y	Y	GB	GB		TILL
230-01A	9.1	1.3	7.8	366.6	235.7	130.9	113.0	17.9	C	40	60	0	NA	U	+	Y	Y	GB	GB		TILL
230-02A	5.7	0.3	5.4	183.0	118.1	64.9	52.2	12.7	C	40	60	0	NA	U	+	Y	Y	GB	GB		TILL
231-01	7.6	0.7	6.9	415.2	287.3	127.9	117.2	10.7	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
231-02	7.6	1.2	6.4	305.2	188.7	116.5	105.6	10.9	C	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
232-01	9.0	1.8	7.2	268.6	195.8	72.8	65.2	7.6	P	95	5	0	NA	U	+	Y	-	GB	GB		TILL
232-02	9.1	2.1	7.0	209.3	135.5	73.8	61.2	12.6	C	98	2	0	NA	U	Y	Y	Y	GB	GB		TILL
232-03	3.8	0.6	3.2	216.0	190.4	25.6	22.4	3.2	C	98	2	0	NA	U	Y	Y	Y	GB	GB		TILL
233-01	5.7	0.7	5.1	193.7	135.1	58.6	51.8	6.8	P	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
233-02	9.0	0.7	8.3	421.5	299.0	122.5	107.2	15.3	C	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
233-03	8.8	0.7	8.2	390.6	267.4	123.2	104.5	18.7	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
233-04	8.4	0.3	8.2	368.7	157.9	210.8	195.6	15.2	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
234-01	6.7	1.1	5.7	274.3	197.0	77.3	57.6	19.7	C	80	20	0	NA	U	Y	Y	Y	GB	GB		TILL
234-02	8.6	1.3	7.3	369.6	258.1	111.5	98.9	12.6	C	70	30	0	NA	U	Y	Y	Y	GB	GB		TILL
234-03	9.05	0.6	8.5	337.0	228.7	108.3	94.7	13.6	P	80	20	0	NA	U	Y	Y	Y	GB	GB		TILL
235-01	3.0	0.4	2.6	185.6	153.4	32.2	30.4	1.8	P	70	30	0	NA	U	+	Y	-	GB	GB		TILL
235-02	5.8	0.4	5.4	266.1	194.0	72.1	66.8	5.3	C	90	10	0	NA	U	+	Y	-	GG	GB		TILL
235-03	3.4	0.4	3.0	236.0	186.2	49.8	47.3	2.5	C	85	15	0	NA	U	Y	Y	-	GG	GB		TILL
236-01	4.8	0.2	4.6	177.6	166.9	10.7	8.4	2.3	P	5	45	50	NA	S	M,F	Y	+	B	B		SAND
236-01B	4.8	0.1	4.7	161.2	143.1	18.1	16.8	1.3	P	5	80	15	NA	S	M,F	-	+	B	B	Y	SAND
237-01	7.4	0.7	6.7	320.9	281.4	39.5	34.0	5.5	C	70	30	0	NA	U	Y	Y	Y	GG	GB		TILL
238-01	9.0	1.0	8.0	284.4	240.5	43.9	36.0	7.9	C	80	20	0	NA	U	Y	Y	Y	GB	GB		TILL
239-01	9.0	0.8	8.2	381.1	301.8	79.3	68.8	10.5	C	90	10	0	NA	U	+	Y	Y	GB	GB		TILL
239-02	9.3	0.9	8.4	369.6	287.6	82.0	71.1	10.9	C	90	10	0	NA	U	+	Y	Y	GB	GG		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE+2 SPLIT	■■ CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	S/U	MATRIX SD	ST	CY	COLOUR SD	CY	OR	CLASS
RR-96																					
239-03	8.5	0.2	8.3	404.2	322.2	82.0	71.1	10.9	C	95	5	0	NA	U	+	-	-	GN	GN		TILL
240-01	8.5	0.4	8.2	296.2	201.0	95.2	82.3	12.9	C	95	5	0	NA	U	+	Y	Y	GB	GB		TILL
240-02	4.0	0.5	3.5	255.1	233.0	22.1	18.7	3.4	C	90	10	0	NA	U	+	Y	-	GG	GB		TILL+BDK
241-01	8.0	1.0	7.1	260.5	195.5	65.0	54.4	10.6	C	30	70	0	NA	U	+	Y	-	B	B		TILL
241-02	8.2	0.9	7.3	382.9	306.3	76.6	63.5	13.1	C	30	70	0	NA	U	+	Y	-	GB	GB		TILL
242-01	9.6	1.2	8.4	344.6	283.4	61.2	52.5	8.7	C	20	80	0	NA	U	+	Y	-	GB	GB		TILL
243-01	1.7	0.1	1.6	161.8	134.2	27.6	24.8	2.8	C	90	10	0	NA	U	Y	Y	Y	GG	GN		TILL+BDK
243B-01	4.5	0.3	4.2	121.2	107.4	13.8	10.9	2.9	C	35	25	40	NA	U	-	Y	+	B	B		TILL
244-01	8.5	0.4	8.2	265.0	166.2	98.8	78.6	20.2	C	95	5	0	QTZ	U	+	Y	-	GY	GY		TILL
244-02	6.0	0.4	5.6	281.7	206.8	74.9	57.6	17.3	C	100	TR	0	NA	U	+	Y	-	GY	GY		TILL
244-03	8.0	0.7	7.3	236.9	156.3	80.6	65.4	15.2	C	100	TR	0	NA	U	+	Y	Y	GG	GN		TILL
246-01	6.7	0.5	6.3	390.9	339.6	51.3	43.8	7.5	C	90	10	0	NA	U	+	Y	-	GB	GB		TILL
246-02	9.4	1.0	8.4	467.0	410.9	56.1	44.7	11.4	C	90	10	0	NA	U	+	Y	-	GB	GB		TILL
246-03	2.8	0.2	2.6	266.2	256.2	10.0	8.9	1.1	C	95	5	0	QTZ	U	Y	-	-	GG	GN		TILL+BLDR
246-04	7.7	0.8	6.9	199.2	146.8	52.4	48.0	4.4	C	95	5	0	QTZ	U	Y	Y	-	GG	GN		TILL
247-01	5.5	0.5	5.1	371.4	332.3	39.1	30.8	8.3	P	80	20	0	NA	U	Y	Y	-	GB	GB		TILL
247-02	9.2	0.8	8.5	425.5	331.2	94.3	76.6	17.7	C	85	15	0	NA	U	+	Y	-	GB	GB		TILL
247-03	8.3	0.8	7.5	310.4	233.3	77.1	61.5	15.6	C	80	20	0	NA	U	+	Y	-	GB	GB		TILL
247-04	9.5	1.1	8.4	470.2	400.6	69.6	53.7	15.9	C	80	20	0	NA	U	Y	Y	Y	GG	GG		TILL
248-01	8.5	0.9	7.6	441.9	352.8	89.1	70.3	18.8	C	70	30	0	NA	U	+	Y	Y	GY	GY		TILL
248-02	8.2	0.9	7.3	547.7	453.9	93.8	74.4	19.4	C	90	10	0	NA	U	Y	Y	Y	GY	GG		TILL
248-03	2.8	0.3	2.5	195.7	166.5	29.2	26.6	2.6	C	95	5	0	NA	U	Y	+	+	GG	GG		TILL
249-01	5.9	0.6	5.3	453.6	407.4	46.2	37.7	8.5	C	75	25	0	NA	U	+	Y	Y	GY	GY		TILL
249-02	9.0	1.0	8.0	325.8	275.9	49.9	40.8	9.1	C	90	10	0	NA	U	+	Y	Y	GY	GY		TILL
250-01	8.6	0.1	8.5	347.8	273.9	73.9	62.6	11.3	C	80	20	0	NA	U	Y	+	+	GY	GY		TILL
250-02	9.5	0.3	9.2	289.5	229.0	60.5	49.3	11.2	C	90	10	0	NA	U	Y	+	+	GY	GY		TILL
250-03	8.0	0.8	7.2	325.6	256.7	68.9	56.3	12.6	C	95	5	0	NA	U	Y	Y	Y	GY	GG		TILL
251-01	3.9	0.3	3.6	272.7	244.7	28.0	23.1	4.9	C	60	40	0	NA	U	Y	Y	Y	GG	GG		TILL
251-02	8.0	0.8	7.2	404.8	335.1	69.7	57.5	12.2	C	65	35	0	NA	U	Y	+	Y	GG	GG		TILL
251-03	9.0	0.9	8.1	365.7	311.2	54.5	44.6	9.9	C	70	30	0	NA	U	Y	Y	Y	GG	GG		TILL
251-04	2.7	0.2	2.5	247.6	238.0	9.6	7.9	1.7	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
253-01	6.0	0.1	6.0	265.7	250.0	15.7	12.5	3.2	P	50	20	30	NA	U	-	+	+	GG	GB		CLAY TILL
254-01	7.4	0.7	6.7	337.7	293.5	44.2	37.8	6.4	C	95	5	0	NA	U	Y	+	+	GG	GN		TILL
255-01	10.4	0.9	9.5	408.3	317.1	91.2	73.5	17.7	C	85	15	0	NA	U	+	Y	Y	GG	GG		TILL
255-02	6.8	0.5	6.4	211.7	171.4	40.3	30.3	10.0	C	80	20	0	NA	U	+	Y	Y	GG	GG		TILL
255-03	5.8	0.2	5.7	494.5	388.4	106.1	96.5	9.6	C	95	5	0	NA	U	+	Y	Y	GG	GG		TILL
256-01	8.3	1.1	7.3	254.4	219.6	34.8	28.4	6.4	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
256-02	1.3	0.1	1.2	87.6	83.2	4.4	4.2	0.2	C	100	TR	0	TR	U	Y	Y	Y	GN	GN		TILL+BDK
257-01	9.1	0.2	8.9	229.9	163.7	66.2	52.4	13.8	C	95	5	0	NA	U	+	-	-	GB	GB		TILL
257-02	9.5	1.6	8.0	246.3	219.6	26.7	21.4	5.3	C	60	40	0	TR	U	+	-	-	GB	GB		TILL
257-03	4.7	0.2	4.5	284.3	270.8	13.5	11.7	1.8	C	100	0	0	NA	U	Y	Y	Y	GY	GY		TILL+BLD
257-04	8.5	0.4	8.2	245.2	210.2	35.0	31.0	4.0	C	100	0	0	NA	U	Y	Y	Y	GY	GY		TILL+BDK

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE+2 MM SPLIT	CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	MATRIX S/U	SD	ST	CY	COLOUR SD	CY	OR	CLASS
RR-96																					
269-06	10.5	4.5	6.0	317.4	254.9	62.5	54.8	7.7	C	95	5	0	NA	U	+	Y	-	GB	GB		TILL
269-07	10.2	2.5	7.7	469.4	398.1	71.3	63.2	8.1	C	90	10	0	NA	U	+	Y	-	GG	GG		TILL
269-08	9.5	3.2	6.3	316.0	278.4	37.6	33.3	4.3	C	90	10	TR	NA	U	+	Y	-	GG	B		TILL
269-09	10.5	4.2	6.3	253.8	201.8	52.0	45.7	6.3	C	90	10	0	NA	U	+	Y	-	GY	B		TILL
269-10	9.9	1.2	8.7	373.9	295.3	78.6	69.0	9.6	C	90	10	0	NA	U	+	Y	-	GG	GG		TILL
269-11	10.0	1.2	8.8	454.8	354.9	99.9	87.7	12.2	C	60	40	0	NA	U	+	Y	-	GG	GB		TILL
269-12	9.9	1.6	8.3	488.3	456.6	31.7	28.8	2.9	C	80	20	0	NA	U	+	-	-	GB	GB		TILL
271-01	9.8	2.4	7.4	450.1	388.3	61.8	49.9	11.9	C	70	30	0	NA	U	+	Y	-	GY	GY		TILL
271-02	9.5	2.2	7.3	371.8	332.0	39.8	32.2	7.6	C	95	5	TR	NA	U	+	Y	-	GN	GN		TILL
272-01	10.0	1.4	8.7	392.7	315.5	77.2	61.7	15.5	C	95	5	TR	NA	U	+	Y	-	GB	GB		TILL
272-02	10.4	1.7	8.7	343.7	291.5	52.2	42.6	9.6	C	70	30	0	NA	U	+	Y	-	B	GB		TILL
272-03	9.8	1.1	8.7	368.3	307.7	60.6	51.0	9.6	C	80	20	0	NA	U	+	Y	-	GB	B		TILL
272-04	9.9	0.6	9.3	504.6	446.8	57.8	42.7	15.1	P	60	40	0	NA	S	M,C	-	NA	GB	NA		SAND
272-05	10.8	4.1	6.7	366.8	346.6	20.2	16.7	3.5	C	85	15	0	NA	U	+	Y	-	GB	GB		TILL
272-06	10.5	2.6	7.9	358.9	337.3	21.6	17.7	3.9	P	75	25	0	NA	S	M,C	-	NA	GB	NA		SAND+GRAV
272-07	10.4	2.6	7.8	366.7	346.1	20.6	16.7	3.9	P	75	25	0	NA	U	+	Y	-	GB	GB		TILL
272-08	10.6	3.2	7.4	390.3	376.0	14.3	11.3	3.0	C	65	35	0	NA	U	+	Y	-	GY	GB		TILL
272-09	9.5	2.2	7.3	394.0	364.9	29.1	24.2	4.9	P	70	30	0	NA	U	+	Y	-	GB	GB		TILL
272-10	10.6	2.9	7.7	479.3	445.0	34.3	27.7	6.6	C	65	35	0	NA	U	+	Y	-	GB	GB		TILL
272-11	10.5	2.1	8.5	555.9	516.4	39.5	33.6	5.9	C	70	30	0	NA	U	+	Y	-	GB	GB		TILL
272-12	10.7	2.9	7.8	449.7	404.5	45.2	35.5	9.7	C	70	30	0	NA	U	+	Y	-	GG	GB		TILL
272-13	10.6	2.6	8.0	354.1	303.6	50.5	40.6	9.9	C	70	30	0	NA	U	+	Y	-	GG	GB		TILL
272-14	10.6	4.0	6.7	370.4	337.2	33.2	23.9	9.3	C	80	20	0	NA	U	+	Y	-	GG	GB		TILL
272-15	10.8	3.3	7.5	357.4	318.8	38.6	31.6	7.0	C	75	25	0	NA	U	+	Y	-	GY	GB		TILL
272-16	10.4	1.1	9.4	405.5	347.2	58.3	49.9	8.4	C	80	20	0	NA	U	+	Y	-	GY	GB		TILL
272-17	8.9	1.5	7.5	376.8	340.6	36.2	30.0	6.2	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
272-18	10.7	2.5	8.3	477.5	439.4	38.1	31.0	7.1	C	80	20	0	NA	U	Y	Y	Y	GY	GY		TILL
273-01	8.8	2.8	6.1	344.4	311.8	32.6	26.4	6.2	C	70	30	0	NA	U	Y	Y	Y	B	GYGN		TILL
273-02	9.8	3.0	6.9	251.7	213.0	38.7	30.6	8.1	C	70	30	0	NA	U	+	-	-	GB	GB		TILL
273-03	9.1	2.7	6.4	304.6	292.7	11.9	9.4	2.5	G	65	35	0	NA	S	M,C	-	NA	B	NA		SAND+GRAV
273-04	10.2	3.5	6.7	400.9	390.9	10.0	8.0	2.0	G	65	35	0	NA	S	M,C	-	NA	GB	NA		SAND+GRAV
273-05	9.9	2.9	7.1	426.0	394.9	31.1	26.5	4.6	C	70	30	0	NA	U	+	Y	-	GB	GB		TILL
273-06	4.3	0.6	3.7	168.2	155.3	12.9	11.3	1.6	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
274-01	10.2	2.7	7.5	314.2	258.9	55.3	44.9	10.4	C	95	5	0	NA	U	+	-	-	GY	GY		TILL
274-02	9.4	2.5	6.9	424.3	370.0	54.3	45.2	9.1	C	95	5	0	NA	U	+	Y	-	GY	GG		TILL
274-03	10.5	2.5	8.0	388.5	330.5	58.0	48.6	9.4	C	95	5	0	NA	U	+	Y	-	GG	GG		TILL
275-01	7.7	1.8	5.9	353.7	319.6	34.1	25.5	8.6	C	98	2	0	NA	U	Y	Y	-	GG	GB		TILL
276-01	10.8	3.0	7.8	384.4	318.4	66.0	51.3	14.7	C	80	20	0	NA	U	+	Y	-	GB	GB		TILL
276-02	10.8	4.4	6.4	340.9	267.4	73.5	55.4	18.1	C	75	25	0	NA	U	+	Y	-	GY	GG		TILL
276-03	10.2	2.0	8.2	431.8	349.7	82.1	60.9	21.2	C	65	35	0	NA	U	Y	Y	-	GY	GG		TILL
276-04	11.0	2.7	8.3	441.8	354.7	87.1	59.5	27.6	C	75	25	0	NA	U	Y	Y	Y	GB	GB		TILL
276-05	9.3	1.3	8.1	265.8	167.4	98.4	81.9	16.5	C	65	35	0	NA	U	+	Y	-	GB	GB		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG. WET) TABLE+2 SPLIT	■■ CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	MATRIX S/U	SD	ST	CY	COLOUR SD	CY	OR	CLASS
RR-96																					
276-06	9.7	0.8	9.0	305.6	216.9	88.7	73.4	15.3	C	45	55	0	NA	U	+	Y	-	GB	GB		TILL
276-07	9.9	2.8	7.1	334.7	251.1	83.6	75.0	8.6	C	55	45	0	NA	U	+	Y	-	GB	GB		TILL
276-08	9.7	3.5	6.2	312.8	234.3	78.5	67.1	11.4	C	65	35	0	NA	U	+	Y	-	GB	GB		TILL
277-01	10.8	2.5	8.3	239.6	171.0	68.6	56.1	12.5	C	65	35	0	NA	U	Y	Y	Y	GB	GB		TILL
277-02	10.3	2.1	8.2	222.6	149.6	73.0	60.1	12.9	C	65	35	0	NA	U	+	Y	Y	GB	GB		TILL
277-03	10.7	3.1	7.6	213.4	163.3	50.1	41.2	8.9	C	70	30	0	NA	U	+	Y	Y	GB	GB		TILL
277-04	11.0	4.0	7.0	298.1	238.2	59.9	49.0	10.9	C	60	40	0	NA	U	+	Y	Y	GB	GB		TILL
277-05	10.8	4.1	6.7	256.4	200.6	55.8	45.6	10.2	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
277-06	9.8	2.2	7.6	360.8	312.1	48.7	40.5	8.2	C	85	15	0	NA	U	Y	Y	Y	GY	B		TILL
278-01	10.0	1.6	8.5	374.6	280.7	93.9	76.7	17.2	C	65	35	0	NA	U	Y	Y	Y	GY	GB		TILL
278-02	9.8	3.1	6.7	272.9	225.0	47.9	34.8	13.1	C	40	60	0	NA	U	+	Y	-	GY	GY		TILL
279-01	10.2	2.6	7.6	321.1	272.4	48.7	39.0	9.7	C	50	50	0	NA	U	+	Y	-	GY	GY		TILL
279-02	10.5	1.9	8.6	268.7	232.3	36.4	26.2	10.2	C	50	50	0	NA	U	+	Y	-	GY	GY		TILL
279-03	10.0	3.3	6.7	297.8	251.5	46.3	34.9	11.4	C	60	40	0	NA	S	C	-	-	B	B		SAND+GRAV
279-04	9.5	3.9	5.6	424.0	406.9	17.1	12.0	5.1	C	65	35	0	NA	S	C	-	-	B	B		SAND+GRAV
279-05	9.7	2.8	6.9	224.1	191.9	32.2	16.5	15.7	C	95	5	0	NA	S	C	-	-	GG	GG		SAND+GRAV
280-01	8.9	1.5	7.4	276.6	212.6	64.0	48.4	15.6	C	50	50	0	NA	U	Y	Y	Y	GY	GB		TILL
280-02	10.0	2.2	7.8	283.2	195.5	87.7	71.6	16.1	C	50	50	0	NA	U	Y	Y	Y	GB	GB		TILL
280-03	9.3	2.4	6.9	334.4	246.1	88.3	73.5	14.8	C	70	30	0	NA	U	Y	Y	Y	GB	GB		TILL
280-04	9.9	2.8	7.1	447.8	325.4	122.4	107.6	14.8	C	75	25	0	NA	U	Y	Y	Y	GG	GB		TILL
281-01	9.4	2.0	7.4	315.5	244.2	71.3	59.1	12.2	C	75	25	0	NA	U	Y	Y	Y	GB	GB		TILL
281-02	7.9	0.1	7.8	432.2	311.3	120.9	95.4	25.5	P	85	15	0	NA	S	M	-	-	GB	GB		SAND
281-03	8.0	1.7	6.4	234.3	134.7	99.6	75.9	23.7	C	70	30	0	NA	U	Y	Y	Y	GB	GB		TILL
281-04	9.0	2.3	6.8	515.1	392.4	122.7	103.3	19.4	C	100	TR	0	NA	U	Y	Y	Y	GG	GN		TILL
282-01	6.3	2.6	3.7	252.3	210.0	42.3	36.9	5.4	C	60	40	0	NA	U	Y	Y	Y	GB	GB		TILL
282-02	10.0	3.8	6.3	293.6	217.6	76.0	63.4	12.6	C	75	25	0	NA	U	Y	Y	Y	GB	GB		TILL
282-03	4.6	0.8	3.8	140.9	94.5	46.4	38.3	8.1	C	80	20	0	NA	U	Y	Y	Y	GG	GG		TILL
283-01	10.0	3.0	7.0	367.8	259.1	108.7	99.1	9.6	C	90	10	0	NA	U	Y	Y	Y	GY	GB		TILL
283-02	10.0	4.1	5.9	392.3	273.9	118.4	108.6	9.8	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
283-03	9.9	3.7	6.2	341.3	230.6	110.7	102.9	7.8	C	90	10	0	NA	U	Y	Y	Y	GY	GB		TILL
~~283-04~~	~~9.6~~	~~1.3~~	~~8.3~~	~~313.9~~	~~207.8~~	~~106.1~~	~~96.7~~	~~9.4~~	~~C~~	~~95~~	~~5~~	~~0~~	~~NA~~	~~U~~	~~+~~	~~Y~~	~~Y~~	~~GB~~	~~B~~		~~TILL~~
284-01	9.7	4.5	5.2	338.8	313.5	25.3	20.2	5.1	P	30	70	0	NA	U	Y	Y	-	GB	B		TILL
285-01	8.9	1.0	7.9	268.9	218.5	50.4	40.7	9.7	C	45	55	0	NA	U	+	Y	-	GB	GB		SAND+TILL
285-02	9.8	0.8	9.0	508.0	433.3	74.7	60.7	14.0	C	65	35	0	NA	U	+	Y	-	GB	GB		SAND+GRAV
285-03	9.3	0.5	8.8	439.4	358.9	80.5	59.3	21.2	C	80	20	0	NA	U	+	Y	-	GY	GB		TILL
285-04	9.8	3.9	5.9	272.0	196.2	75.8	39.9	35.9	C	70	30	0	NA	U	Y	Y	Y	GG	GG		TILL
285-05	9.9	2.5	7.4	279.0	227.5	51.5	49.2	2.3	C	60	40	0	NA	U	Y	Y	Y	GB	GB		TILL
286-01	10.7	4.5	6.2	380.3	356.4	23.9	18.9	5.0	C	30	70	0	NA	U	Y	Y	Y	GY	GB		TILL
286-02	9.1	2.6	6.5	397.7	367.7	30.0	24.7	5.3	C	50	50	0	NA	U	Y	Y	Y	GB	GB		TILL
286-03	10.0	2.8	7.2	498.6	448.5	50.1	38.5	11.6	C	70	30	0	NA	U	Y	Y	-	GB	GB		TILL
286-04	9.3	2.9	6.4	431.1	408.2	22.9	17.1	5.8	C	95	5	0	NA	S	+	-	-	GY	GY		GRAVEL
287-01	10.2	2.1	8.1	309.5	284.0	25.5	20.7	4.8	C	90	10	0	NA	U	Y	Y	Y	GY	GY		TILL

NUINSCO\RR961JUL.WR2
TOTAL # OF SAMPLES IN THIS REPORT = 1

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE SPLIT	+2 mm CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC: CONC. TOTAL	NON MAG	MAG	DESCRIPTION: CLAST SIZE	% V/S	% GR	% LS	% OT	MATRIX S/U	SD	ST	CY	COLOUR SD	COLOUR CY	OR	CLASS
RR-96 283-4	9.6	1.3	8.3	313.9	207.8	106.1	96.7	9.4	C	95	5	0	NA	U	+	Y	Y	GB	B		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE+2 ■■ SPLIT	CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	MATRIX S/U	SD	ST	CY	COLOUR SD	CY	OR	CLASS
RR-96																					
287-02	10.0	1.8	8.2	430.0	380.0	50.0	44.2	5.8	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
287-03	9.8	2.3	7.5	341.0	287.4	53.6	43.7	9.9	C	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
288-01	10.5	2.3	8.3	210.9	163.5	47.4	39.3	8.1	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
288-02	10.3	3.0	7.3	228.2	199.4	28.8	23.6	5.2	C	90	10	0	NA	U	Y	Y	Y	GB	GB		TILL
288-03	9.8	1.9	7.9	229.9	190.4	39.5	33.3	6.2	C	95	5	0	NA	U	+	Y	Y	GB	GB		TILL
289-01	10.2	3.5	6.7	183.3	147.0	36.3	30.6	5.7	C	99	1	0	NA	U	Y	Y	Y	GB	GB		TILL
289-02	9.9	2.4	7.6	272.9	236.5	36.4	31.4	5.0	C	90	10	0	NA	U	+	Y	-	GB	GB		TILL
290-01	10.1	3.1	7.0	281.9	253.5	28.4	22.9	5.5	C	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
291-01	10.7	3.3	7.4	334.8	293.6	41.2	34.7	6.5	C	85	15	0	NA	U	Y	Y	Y	GB	GB		TILL
292-01	10.6	4.2	6.4	190.7	157.4	33.3	28.2	5.1	C	95	5	0	NA	U	Y	Y	Y	GB	GB		TILL
292-02	10.4	3.5	6.9	309.6	274.5	35.1	28.6	6.5	C	90	10	0	NA	U	Y	Y	Y	GY	GB		TILL
292-03	10.5	2.6	7.9	226.3	191.8	34.5	29.3	5.2	C	90	10	0	NA	U	+	Y	-	GB	GB		SANDY TILL
293-01	10.3	3.4	6.9	341.8	324.8	17.0	14.1	2.9	C	100	0	0	NA	U	Y	Y	Y	GY	GB		TILL
294-01	11.0	3.6	7.4	192.4	144.5	47.9	34.7	13.2	C	90	10	0	NA	U	+	-	-	GY	GY		TILL
294-02	11.3	3.7	7.7	304.7	264.8	39.9	30.3	9.6	C	85	15	0	NA	U	+	-	-	GY	GY		TILL
294-03	9.8	2.6	7.2	262.5	221.8	40.7	31.0	9.7	C	85	15	0	NA	U	+	-	-	GY	GY		TILL
294-04	10.4	2.5	8.0	230.3	184.4	45.9	34.0	11.9	C	99	1	0	NA	U	+	Y	Y	GY	GY		TILL+BDK
294A-01	7.3	3.0	4.3	230.1	207.1	23.0	18.1	4.9	C	99	1	0	NA	U	+	-	Y	GY	GY		TILL
294A-02	10.0	3.9	6.1	405.1	383.2	21.9	17.0	4.9	C	85	15	0	NA	U	+	Y	-	GY	GY		TILL
294A-03	9.3	2.2	7.1	327.4	294.8	32.6	30.6	2.0	C	70	30	0	NA	U	+	Y	Y	GG	GG		TILL
294A-04	10.1	3.1	7.0	189.1	168.4	20.7	18.8	1.9	C	90	10	0	NA	U	+	Y	-	GG	GG		TILL
294A-05	3.6	1.1	2.5	262.2	245.9	16.3	15.4	0.9	C	100	TR	0	NA	U	Y	Y	-	GY	GY		TILL+BDK
295-01	9.7	3.2	6.5	235.1	170.1	65.0	55.1	9.9	C	85	15	0	NA	U	+	Y	-	GB	GB		TILL
295-02	9.9	2.2	7.7	233.9	150.0	83.9	71.5	12.4	C	95	5	0	NA	U	+	Y	-	GB	GB		TILL
296-01	7.7	1.9	5.8	275.2	203.5	71.7	58.9	12.8	C	70	30	0	NA	U	+	Y	Y	B	B		TILL
296-02	10.2	2.8	7.4	330.7	252.2	78.5	63.6	14.9	C	50	50	0	NA	U	+	Y	Y	B	B		TILL
296-03	10.8	4.0	6.8	306.0	239.8	66.2	49.7	16.5	C	65	35	0	NA	U	+	Y	Y	B	GB		TILL
297-01	10.8	3.4	7.4	194.9	147.4	47.5	36.1	11.4	C	95	5	0	NA	U	+	Y	Y	B	B		TILL
297-02	10.3	4.5	5.8	270.0	241.5	28.5	23.9	4.6	C	90	10	0	NA	U	+	Y	-	GB	GB		TILL
298-01	10.9	2.9	8.0	323.0	266.8	56.2	45.5	10.7	C	90	10	TR	NA	U	+	Y	Y	GB	GG		TILL
298-02	10.4	2.0	8.4	328.4	281.0	47.4	37.1	10.3	C	85	15	TR	NA	U	+	Y	Y	GB	GG		TILL
298-03	9.0	2.0	7.0	255.8	223.7	32.1	25.2	6.9	C	90	10	0	NA	U	Y	Y	Y	GB	GG		TILL
299-01	6.0	0.8	5.2	335.8	291.8	44.0	37.1	6.9	C	70	30	0	NA	U	Y	Y	Y	GB	GG		TILL
299-02	10.0	1.5	8.5	317.2	250.7	66.5	56.1	10.4	C	70	30	0	NA	U	Y	Y	Y	GG	GG		TILL
299-03	10.5	2.3	8.2	369.7	284.6	85.1	69.9	15.2	C	80	20	0	NA	U	Y	Y	Y	GB	GG		TILL
299-04	10.1	3.6	6.6	267.4	185.3	82.1	67.0	15.1	C	60	40	0	NA	U	Y	Y	Y	GB	GB		TILL
300-01	11.0	4.6	6.4	428.2	349.3	78.9	69.8	9.1	C	70	30	0	NA	U	Y	Y	Y	GB	B		TILL
301-01	10.2	2.6	7.7	382.8	323.4	59.4	48.5	10.9	C	80	20	TR	NA	U	Y	Y	Y	GB	GB		TILL
301-02	9.7	1.4	8.3	397.4	284.0	113.4	95.2	18.2	C	80	20	TR	NA	U	Y	Y	Y	GB	GB		TILL
301-03	10.1	2.3	7.8	327.2	273.6	53.6	46.7	6.9	C	70	30	0	NA	U	Y	Y	Y	GG	GB		TILL
301-04	10.0	4.0	6.0	199.3	164.1	35.2	28.8	6.4	C	70	30	TR	NA	U	+	Y	-	GG	GB		TILL
301-05	9.8	1.5	8.3	422.2	370.8	51.4	45.0	6.4	C	85	15	0	NA	U	Y	Y	Y	GG	GG		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET) TABLE SPLIT	+2 ■■ CHIPS	TABLE FEED	WEIGHT (GRAMS DRY) TABLE CONC	M.I. LIGHTS	M. I. CONC CONC. TOTAL	NON MAG	MAG	DESCRIPTION CLAST SIZE	% V/S	GR	LS	QTZ	MATRIX S/U	SD	ST	CY	COLOUR SD	CY	OR	CLASS
RR-96																					
304-01	7.5	1.1	6.5	313.3	283.6	29.7	22.4	7.3	C	40	60	0	NA	U	+	Y	-	GG	GY		TILL
304-02	4.0	0.5	3.5	186.1	168.4	17.7	14.5	3.2	C	20	80	0	NA	U	+	Y	-	GG	GG		TILL
305-01	5.1	0.6	4.5	293.0	275.2	17.8	14.2	3.6	C	10	90	0	NA	U	Y	Y	Y	GY	GB		TILL
305-02	5.0	0.6	4.4	226.2	218.8	7.4	5.0	2.4	C	30	70	0	NA	U	+	Y	-	GB	GB		TILL
305-03	10.1	0.9	9.2	416.6	377.3	39.3	30.4	8.9	C	30	70	0	NA	U	+	Y	-	B	B		TILL
305-04	9.5	0.6	8.9	419.2	357.5	61.7	46.7	15.0	C	15	85	0	NA	U	+	Y	-	B	B		TILL
305-05	10.1	0.7	9.5	395.0	330.1	64.9	51.0	13.9	C	20	80	0	NA	U	+	-	-	B	B		TILL
305-06	9.9	0.9	9.0	321.0	275.7	45.3	33.7	11.6	C	20	80	0	NA	S	M,C	-	N	B	NA		SAND+GRAV
305-07	9.8	0.9	9.0	397.0	336.4	60.6	48.0	12.6	C	15	85	0	NA	S	M,C	-	N	B	NA		SAND+GRAV
305-08	9.6	0.6	9.0	411.0	361.4	49.6	39.5	10.1	C	15	85	0	NA	U	+	Y	-	GB	GB		TILL
305-09	6.7	0.5	6.2	446.6	405.1	41.5	31.1	10.4	C	60	40	0	NA	U	Y	Y	-	GG	GN		TILL
306-01	6.6	0.4	6.3	343.0	303.8	39.2	32.9	6.3	C	50	50	0	NA	U	Y	Y	Y	GG	GG		TILL
306-02	9.3	0.5	8.8	334.5	275.6	58.9	50.6	8.3	C	40	60	0	NA	U	Y	Y	-	B	B		TILL
306-03	4.2	0.3	4.0	201.4	180.2	21.2	19.3	1.9	C	5	95	0	NA	U	+	Y	-	GNB	LGN		TILL
307-01A	7.6	2.1	5.6	283.0	265.7	17.3	17.1	0.2	C	30	70	0	NA	U	Y	Y	Y	OC	OC		TILL
307-01B	8.2	1.7	6.5	268.7	255.7	13.0	12.9	0.1	C	10	90	0	NA	U	Y	Y	Y	OC	OC		TILL
307A-01	9.5	0.4	9.1	410.8	338.6	72.2	59.4	12.8	C	70	30	0	NA	U	Y	Y	Y	GB	GB		TILL
308-01	5.2	0.5	4.7	267.0	190.7	76.3	39.0	37.3	C	80	20	0	NA	U	Y	Y	Y	GY	GY		TILL
310-01	7.6	0.6	7.0	379.9	344.4	35.5	30.2	5.3	C	40	60	0	NA	U	Y	Y	Y	GB	GB		TILL
311-01	9.6	1.1	8.5	319.1	265.8	53.3	42.8	10.5	C	40	40	20	NA	U	Y	Y	Y	B	GB		TILL
311-02	8.4	0.9	7.6	330.1	270.9	59.2	54.6	4.6	C	10	90	0	NA	U	Y	Y	Y	GB	GB		TILL
311-03	3.6	0.2	3.4	272.6	230.9	41.7	39.5	2.2	C	5	95	0	NA	U	+	Y	-	GB	GB		TILL
312A-01	4.2	0.7	3.6	256.5	234.9	21.6	19.3	2.3	C	40	60	0	NA	U	Y	Y	Y	GG	GG		TILL
312A-02	2.3	0.5	1.9	223.1	201.6	21.5	18.9	2.6	C	30	70	0	NA	U	Y	Y	Y	GB	GB		TILL
313-01	9.6	1.1	8.5	336.2	295.3	40.9	32.6	8.3	C	50	50	0	NA	U	+	Y	-	GB	GB		TILL
313-02	8.9	0.4	8.5	298.6	264.7	33.9	27.8	6.1	C	80	20	0	NA	U	Y	Y	Y	GB	GB		TILL
313-03	4.7	0.2	4.5	131.2	124.0	7.2	5.7	1.5	C	90	10	0	NA	U	Y	Y	Y	GG	GG		TILL
313-04	6.5	0.8	5.7	403.5	385.7	17.8	15.9	1.9	C	95	5	0	NA	U	Y	Y	-	GG	GG		TILL
315-01	9.3	0.2	9.1	316.2	225.1	91.1	78.4	12.7	C	15	85	0	NA	U	Y	Y	-	B	B		TILL
315-02	10.1	0.7	9.4	378.6	314.4	64.2	52.9	11.3	C	15	85	0	NA	U	Y	Y	-	GB	GB		TILL
315-03	4.7	0.2	4.5	355.2	304.4	50.8	43.6	7.2	C	10	90	0	NA	S	Y	-	-	GB	GB		SAND
316-01	9.6	0.5	9.1	394.9	316.7	78.2	63.4	14.8	C	55	45	0	NA	U	+	Y	-	GB	GB		SANDY TILL
316-02	4.3	0.3	4.0	327.5	293.2	34.3	27.4	6.9	C	60	40	0	NA	U	Y	Y	-	GG	GG		TILL
317-01	9.4	0.5	8.9	327.5	247.2	80.3	66.6	13.7	C	50	50	0	NA	U	+	Y	-	GB	GB		TILL
318-01	9.7	1.3	8.4	339.2	269.3	69.9	57.3	12.6	C	40	60	0	NA	U	Y	Y	Y	GB	GB		TILL
318-02	3.3	0.4	2.9	273.9	167.4	106.5	104.2	2.3	C	60	40	0	NA	U	Y	Y	Y	GG	GN		TILL
319-01	9.5	0.6	8.9	448.4	375.7	72.7	61.3	11.4	C	40	60	0	NA	U	+	Y	-	GB	GB		TILL
319-02	9.8	1.3	8.5	517.7	306.8	210.9	93.5	117.4	C	40	60	0	NA	U	+	Y	-	GY	GY		SANDY TILL
319-03	9.6	1.7	7.9	376.7	304.7	72.0	55.7	16.3	C	30	70	0	NA	S	+	-	-	GY	GY		SAND+GRAV
320-01	9.2	0.1	9.1	306.2	239.5	66.7	55.5	11.2	C	20	80	0	NA	S	M	Y	-	GB	GB		SAND
320-02	9.1	0.2	8.9	236.2	178.1	58.1	48.6	9.5	C	20	80	0	NA	S	+	Y	-	GB	GB		SAND
320-03	7.1	0.4	6.7	425.7	375.3	50.4	43.6	6.8	C	25	75	0	NA	U	+	Y	-	GB	GB		SANDY TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					DESCRIPTION												CLASS
						M. I. CONC			CLAST					MATRIX							
	TABLE SPLIT	+2 mm CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	SIZE	% V/S	% GR	% LS	% QTZ	S/U	SD	ST	CY	COLOUR SD	COLOUR CY	OR	
RR-96																					
320-04	8.6	0.7	7.9	353.3	289.5	63.8	53.6	10.2	C	40	60	0	NA	U	+	Y	-	GB	GB		SANDY TILL
320-05	9.2	0.4	8.8	236.1	175.6	60.5	50.1	10.4	C	60	40	0	NA	U	+	Y	-	GB	GB		SANDY TILL
320-06	8.9	0.3	8.6	407.3	337.9	69.4	60.5	8.9	C	70	30	0	NA	S	+	Y	-	GB	GB		SAND
320-07	9.0	1.1	7.9	389.5	325.5	64.0	49.2	14.8	C	50	50	0	NA	U	+	Y	-	GB	GB		SANDY TILL
320-08	10.1	0.6	9.5	409.9	296.6	113.3	94.6	18.7	C	60	40	0	NA	U	+	Y	-	GB	GB		SANDY TILL
320-09	9.9	0.4	9.5	464.8	375.7	89.1	75.4	13.7	C	40	60	0	NA	U	+	Y	-	GB	GB		TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
212-01	22	11	11	0	71.7	248	237	11	0
213-01	19	5	11	3	26.4	236	27	199	9
214-01	27	16	9	2	82.1	94	39	35	19
214-02	8	1	7	0	26.2	252	24	227	0
215-01	13	10	3	0	85.8	260	243	17	0
215-02	1	1	0	0	25.2	15	15	0	0
215-03	8	5	2	1	46.0	115	70	41	4
215-04	10	9	1	0	44.4	39	39	0	0
216-01	13	9	4	0	36.9	174	130	43	0
217-01	24	7	8	9	140.6	495	35	445	16
217-02	25	2	22	1	63.5	304	201	103	0
217-03	4	0	3	1	50.1	398	0	396	2
217-04	5	3	1	1	64.3	1	0	0	0
217-05	3	2	1	0	61.2	57	23	35	0
218-01	8	5	0	3	97.7	7	6	0	1
218-02	1	0	1	0	71.0	9	0	9	0
218-03	5	3	2	0	35.1	57	37	21	0
219-01	3	3	0	0	26.6	40	40	0	0
219-02	5	3	2	0	38.0	12	9	3	0
219A-01	4	3	1	0	41.5	58	54	5	0
219A-02	2	0	2	0	17.4	48	0	48	0
219A-03	5	3	2	0	22.8	14	13	1	0
219A-04	6	4	2	0	39.2	92	86	6	0
220-01	3	3	0	0	71.4	48	48	0	0
220-02	3	3	0	0	38.6	6	6	0	0
221-01	1	0	1	0	23.4	3	0	3	0
222-01	4	3	1	0	64.2	10	5	6	0
223-01	0	0	0	0	13.8	0	0	0	0
223-02	12	10	1	1	85.6	20	13	2	4
223-03	4	4	0	0	82.7	12	12	0	0
223-04	1	1	0	0	98.6	2	2	0	0
223-05	4	4	0	0	67.3	41	41	0	0
224-01	0	0	0	0	3.8	0	0	0	0
225-01	10	8	2	0	65.1	547	531	16	0
225-02	10	10	0	0	59.5	176	176	0	0
225-03	5	4	1	0	53.9	41	29	12	0
225-04	3	3	0	0	51.3	22	22	0	0
225-05	1	1	0	0	43.8	4	4	0	0
225-06	5	5	0	0	44.3	46	46	0	0
226-01	1	1	0	0	35.5	108	108	0	0
226-02	6	4	2	0	40.8	13	12	1	0
226-03	11	9	2	0	51.7	55	46	9	0
226-04	4	4	0	0	52.6	18	18	0	0
226-05	4	4	0	0	62.4	46	46	0	0
227-01	2	2	0	0	25.7	1	1	0	0
227-02	21	18	3	0	93.1	280	279	1	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
227-03	5	5	0	0	40.8	1561	1561	0	0
227-04	10	10	0	0	65.0	106	106	0	0
227-05	4	4	0	0	80.3	29	29	0	0
227-06	4	4	0	0	38.7	145	145	0	0
227-07	5	5	0	0	26.6	283	283	0	0
228-01	2	2	0	0	47.7	6	6	0	0
228-02	3	1	2	0	41.6	53	24	29	0
228-03	2	2	0	0	46.7	62	62	0	0
228-04	0	0	0	0	34.6	0	0	0	0
229-01	5	5	0	0	213.6	87	87	0	0
229-02	10	10	0	0	86.8	40	40	0	0
229-03	10	10	0	0	66.0	373	373	0	0
229-04	5	5	0	0	57.9	380	380	0	0
229-05	1	1	0	0	61.8	1	1	0	0
230-01	1	1	0	0	37.3	17	17	0	0
230-01A	6	2	3	1	113.0	87	84	2	1
230-02A	4	3	1	0	52.2	8	7	2	0
231-01	8	5	3	0	117.2	23	16	6	0
231-02	2	1	1	0	105.6	4	2	2	0
232-01	12	4	7	1	65.2	62	38	21	3
232-02	13	13	0	0	61.2	30	30	0	0
232-03	2	2	0	0	22.4	25	25	0	0
233-01	5	5	0	0	51.8	16	16	0	0
233-02	14	7	3	4	107.2	49	11	32	6
233-03	26	13	11	2	104.5	75	55	19	1
233-04	16	16	0	0	195.6	7	7	0	0
234-01	1	1	0	0	57.6	18	18	0	0
234-02	4	4	0	0	98.9	18	18	0	0
234-03	4	4	0	0	94.7	70	70	0	0
235-01	0	0	0	0	30.4	0	0	0	0
235-02	2	2	0	0	66.8	8	8	0	0
235-03	1	1	0	0	47.3	1	1	0	0
236-01	1	1	0	0	8.4	120	120	0	0
236-01B	0	0	0	0	16.8	0	0	0	0
237-01	9	9	0	0	34.0	85	85	0	0
238-01	3	3	0	0	36.0	11	11	0	0
239-01	7	6	1	0	68.8	162	156	5	0
239-02	13	10	3	0	71.1	85	82	3	0
239-03	4	4	0	0	71.1	12	12	0	0
240-01	3	3	0	0	82.3	9	9	0	0
240-02	4	4	0	0	18.7	11	11	0	0
241-01	2	1	1	0	54.4	8	1	7	0
241-02	2	2	0	0	63.5	49	49	0	0
242-01	2	2	0	0	52.5	376	376	0	0
243-01	0	0	0	0	24.8	0	0	0	0
243B-01	2	2	0	0	10.9	42	42	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
244-01	13	9	4	0	78.6	210	207	3	0
244-02	2	1	0	1	57.6	1	0	0	0
244-03	0	0	0	0	65.4	0	0	0	0
246-01	0	0	0	0	43.8	0	0	0	0
246-02	1	1	0	0	44.7	8	8	0	0
246-03	0	0	0	0	8.9	0	0	0	0
246-04	1	1	0	0	48.0	8	8	0	0
247-01	0	0	0	0	30.8	0	0	0	0
247-02	3	3	0	0	76.6	6	6	0	0
247-03	3	3	0	0	61.5	13	13	0	0
247-04	6	5	1	0	53.7	59	59	0	0
248-01	3	3	0	0	70.3	5	5	0	0
248-02	1	0	1	0	74.4	20	0	20	0
248-03	5	2	3	0	26.6	60	45	15	0
249-01	0	0	0	0	37.7	0	0	0	0
249-02	3	3	0	0	40.8	210	210	0	0
250-01	3	2	1	0	62.6	3	3	1	0
250-02	1	1	0	0	49.3	0	0	0	0
250-03	13	6	7	0	56.3	67	46	20	0
251-01	4	2	2	0	23.1	186	174	12	0
251-02	3	0	3	0	57.5	19	0	19	0
251-03	10	7	2	1	44.6	85	72	13	1
251-04	0	0	0	0	7.9	0	0	0	0
253-01	5	2	3	0	12.5	46	8	37	0
254-01	24	14	8	2	37.8	67	55	11	1
255-01	7	7	0	0	73.5	53	53	0	0
255-02	1	1	0	0	30.3	12	12	0	0
255-03	0	0	0	0	96.5	0	0	0	0
256-01	4	4	0	0	28.4	17	17	0	0
256-02	0	0	0	0	4.2	0	0	0	0
257-01	4	1	2	1	52.4	11	0	3	7
257-02	3	3	0	0	21.4	74	74	0	0
257-03	0	0	0	0	11.7	0	0	0	0
257-04	4	4	0	0	31.0	197	197	0	0
258-01	3	0	3	0	38.9	19	0	19	0
260-01	0	0	0	0	10.9	0	0	0	0
261-01	3	2	1	0	60.7	89	41	48	0
261-02	18	1	14	3	42.3	242	15	156	71
261-03	23	9	11	3	56.1	136	81	43	12
261-04	27	6	19	2	59.1	190	27	156	7
261-05	6	5	1	0	61.5	45	44	1	0
262-01	4	3	1	0	36.2	143	126	18	0
262-02	3	2	1	0	31.0	21	18	3	0
262-03	3	3	0	0	33.0	71	71	0	0
262-04	3	2	1	0	25.4	14	11	3	0
262-05	4	3	1	0	43.0	52	48	4	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains Total	Reshaped	Modified	Pristine	Non-Mag Weight	Calculated PPB Visible Gold Total	Reshaped	Modified	Pristine
RR-96									
262-06	6	5	1	0	42.4	24	22	2	0
262-07	2	0	2	0	15.2	100	0	100	0
263-01	5	5	0	0	39.3	35	35	0	0
264-01	6	6	0	0	44.6	21	21	0	0
264-02	3	3	0	0	63.2	12	12	0	0
264-03	2	2	0	0	53.7	19	19	0	0
265-01	9	7	2	0	16.9	84	46	39	0
265-02	2	0	2	0	30.5	36	0	36	0
265-03	0	0	0	0	7.3	0	0	0	0
265-04	2	0	2	0	16.6	13	0	13	0
265-05	3	3	0	0	17.0	44	44	0	0
266-01	1	0	1	0	16.1	63	0	63	0
266-02	4	2	1	1	39.2	2	1	0	1
266-03	5	5	0	0	20.8	148	148	0	0
266-04	2	2	0	0	8.2	657	657	0	0
267-01	35	19	15	1	83.6	321	297	23	1
267-02	12	9	3	0	39.7	760	732	28	0
267-03	10	3	5	2	75.7	76	37	36	4
267-04	3	1	2	0	55.5	25	3	22	0
267-05	4	4	0	0	23.2	64	64	0	0
267-06	1	1	0	0	4.4	19	19	0	0
268-01	7	6	0	1	35.2	102	101	0	1
268-02	3	3	0	0	36.5	3	3	0	0
268-03	9	1	2	6	56.9	24	1	18	4
268-04	4	4	0	0	69.5	328	328	0	0
269-01	3	1	2	0	45.6	7	1	6	0
269-02	9	4	5	0	57.6	149	143	7	0
269-03	5	3	1	1	40.5	28	27	0	1
269-04	2	0	2	0	91.7	1	0	1	0
269-05	5	2	2	1	58.7	87	85	1	1
269-06	5	5	0	0	54.8	536	536	0	0
269-07	6	5	0	1	63.2	15	14	0	1
269-08	0	0	0	0	33.3	0	0	0	0
269-09	3	0	3	0	45.7	12	0	12	0
269-10	17	6	8	3	69.0	76	25	43	8
269-11	14	4	5	5	87.7	30	21	3	6
269-12	2	0	2	0	28.8	6	0	6	0
271-01	10	6	4	0	49.9	117	108	9	0
271-02	10	6	3	1	32.2	102	77	20	4
272-01	7	4	3	0	61.7	52	9	44	0
272-02	7	6	0	1	42.6	643	634	0	9
272-03	8	5	3	0	51.0	85	76	9	0
272-04	5	5	0	0	42.7	257	257	0	0
272-05	1	1	0	0	16.7	889	889	0	0
272-06	11	8	3	0	17.7	3272	3266	5	0
272-07	1	1	0	0	16.7	90	90	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
272-08	2	2	0	0	11.3	66	66	0	0
272-09	4	4	0	0	24.2	140	140	0	0
272-10	2	2	0	0	27.7	14	14	0	0
272-11	3	3	0	0	33.6	9	9	0	0
272-12	9	7	1	1	35.5	278	275	2	0
272-13	1	1	0	0	40.6	2	2	0	0
272-14	4	3	1	0	23.9	184	183	1	0
272-15	1	1	0	0	31.6	12	12	0	0
272-16	2	2	0	0	49.9	17	17	0	0
272-17	15	10	5	0	30.0	627	600	27	0
272-18	9	5	4	0	31.0	38	26	12	0
273-01	3	2	0	1	26.4	84	60	0	24
273-02	7	2	4	1	30.6	83	70	13	0
273-03	0	0	0	0	9.4	0	0	0	0
273-04	1	1	0	0	8.0	1425	1425	0	0
273-05	6	6	0	0	26.5	192	192	0	0
273-06	2	2	0	0	11.3	585	585	0	0
274-01	16	11	4	1	44.9	106	104	2	0
274-02	9	6	3	0	45.2	407	397	10	0
274-03	7	7	0	0	48.6	475	475	0	0
275-01	4	4	0	0	25.5	197	197	0	0
276-01	11	9	0	2	51.3	108	103	0	5
276-02	7	7	0	0	55.4	92	92	0	0
276-03	17	16	0	1	60.9	432	432	0	0
276-04	27	14	13	0	59.5	266	184	82	0
276-05	14	13	1	0	81.9	25	24	0	0
276-06	2	0	2	0	73.4	5	0	5	0
276-07	9	5	4	0	75.0	503	413	90	0
276-08	14	6	7	1	67.1	134	65	47	22
277-01	2	2	0	0	56.1	13	13	0	0
277-02	13	11	2	0	60.1	85	75	9	0
277-03	5	5	0	0	41.2	133	133	0	0
277-04	7	7	0	0	49.0	107	107	0	0
277-05	10	9	0	1	45.6	159	51	0	108
277-06	8	7	1	0	40.5	80	80	0	0
278-01	12	3	8	1	76.7	171	25	126	20
278-02	10	4	5	1	34.8	639	139	456	43
279-01	3	3	0	0	39.0	119	119	0	0
279-02	4	1	3	0	26.2	285	81	204	0
279-03	9	7	2	0	34.9	128	120	8	0
279-04	1	0	1	0	12.0	319	0	319	0
279-05	1	1	0	0	16.5	91	91	0	0
280-01	2	2	0	0	48.4	100	100	0	0
280-02	14	8	5	1	71.6	45	18	27	0
280-03	25	10	14	1	73.5	52	34	18	0
280-04	50	20	29	1	107.6	104	64	39	2

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
281-01	47	20	26	1	59.1	209	91	118	1
281-02	14	6	7	1	95.4	47	28	3	16
281-03	21	11	10	0	75.9	112	84	28	0
281-04	73	27	44	2	103.3	367	309	52	5
282-01	12	3	9	0	36.9	41	6	35	0
282-02	12	4	8	0	63.4	68	11	58	0
282-03	21	13	8	0	38.3	102	95	8	0
283-01	31	14	15	2	99.1	79	37	38	5
283-02	74	29	43	2	108.6	534	68	459	7
283-03	49	6	40	3	102.9	195451	12	195437	2
~~283-04~~	~~70~~	~~24~~	~~44~~	~~2~~	~~96.7~~	~~380~~	~~319~~	~~56~~	~~6~~
284-01	7	4	3	0	20.2	112	31	82	0
285-01	35	19	12	4	40.7	274	78	152	44
285-02	24	11	10	3	60.7	166	137	14	15
285-03	12	6	3	3	59.3	339	213	107	18
285-04	14	7	7	0	39.9	26	10	16	0
285-05	13	9	4	0	49.2	96	90	5	0
286-01	7	2	3	2	18.9	72	38	10	24
286-02	8	2	3	3	24.7	75	13	52	9
286-03	9	6	3	0	38.5	2780	2252	528	0
286-04	1	0	1	0	17.1	22	0	22	0
287-01	2	2	0	0	20.7	62	62	0	0
287-02	0	0	0	0	44.2	0	0	0	0
287-03	2	2	0	0	43.7	10	10	0	0
288-01	3	1	2	0	39.3	20	2	18	0
288-02	1	0	1	0	23.6	3	0	3	0
288-03	9	6	2	1	33.3	83	52	31	1
289-01	0	0	0	0	30.6	0	0	0	0
289-02	3	2	1	0	31.4	299	53	246	0
290-01	2	2	0	0	22.9	7	7	0	0
291-01	1	1	0	0	34.7	6	6	0	0
292-01	5	5	0	0	28.2	35	35	0	0
292-02	0	0	0	0	28.6	0	0	0	0
292-03	1	1	0	0	29.3	51	51	0	0
293-01	4	4	0	0	14.1	91	91	0	0
294-01	3	2	1	0	34.7	51	40	11	0
294-02	2	1	1	0	30.3	36	33	3	0
294-03	0	0	0	0	31.0	0	0	0	0
294-04	2	2	0	0	34.0	13	13	0	0
294A-01	1	1	0	0	18.1	21	21	0	0
294A-02	0	0	0	0	17.0	0	0	0	0
294A-03	0	0	0	0	30.6	0	0	0	0
294A-04	1	1	0	0	18.8	1	1	0	0
294A-05	0	0	0	0	15.4	0	0	0	0
295-01	0	0	0	0	55.1	0	0	0	0
295-02	0	0	0	0	71.5	0	0	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

NUINSCO\RR961JUL.WR2

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
283-4	48	14	26	8	96.7	111	33	48	29

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
296-01	1	1	0	0	58.9	1	1	0	0
296-02	1	1	0	0	63.6	33	33	0	0
296-03	0	0	0	0	49.7	0	0	0	0
297-01	1	1	0	0	36.1	28	28	0	0
297-02	1	1	0	0	23.9	27	27	0	0
298-01	2	2	0	0	45.5	399	399	0	0
298-02	3	3	0	0	37.1	107	107	0	0
298-03	7	7	0	0	25.2	473	473	0	0
299-01	4	0	4	0	37.1	113	0	113	0
299-02	3	0	3	0	56.1	66	0	66	0
299-03	9	2	7	0	69.9	318	15	304	0
299-04	28	5	22	1	67.0	308	98	204	6
300-01	3	2	1	0	69.8	37	7	30	0
301-01	16	7	9	0	48.5	703	182	521	0
301-02	1	1	0	0	95.2	7	7	0	0
301-03	5	0	4	1	46.7	130	0	116	14
301-04	3	1	2	0	28.8	93	74	19	0
301-05	10	5	5	0	45.0	322	176	146	0
304-01	4	1	2	1	22.4	17	9	5	4
304-02	1	1	0	0	14.5	2	2	0	0
305-01	3	1	2	0	14.2	109	106	3	0
305-02	1	1	0	0	5.0	16	16	0	0
305-03	0	0	0	0	30.4	0	0	0	0
305-04	0	0	0	0	46.7	0	0	0	0
305-05	3	2	1	0	51.0	3	2	0	0
305-06	2	0	2	0	33.7	3	0	3	0
305-07	1	1	0	0	48.0	1	1	0	0
305-08	0	0	0	0	39.5	0	0	0	0
305-09	1	1	0	0	31.1	1	1	0	0
306-01	12	8	3	1	32.9	206	196	9	1
306-02	9	2	4	3	50.6	25	13	10	2
306-03	3	2	1	0	19.3	3	3	0	0
307-01A	1	1	0	0	17.1	5	5	0	0
307-01B	2	1	1	0	12.9	8	6	2	0
307A-01	5	0	4	1	59.4	2	0	2	0
308-01	4	2	2	0	39.0	3	2	1	0
310-01	15	8	5	2	30.2	110	84	21	5
311-01	4	2	2	0	42.8	3	0	3	0
311-02	7	3	4	0	54.6	16	11	5	0
311-03	2	1	1	0	39.5	3	2	1	0
312A-01	6	3	3	0	19.3	28	22	6	0
312A-02	2	2	0	0	18.9	30	30	0	0
313-01	0	0	0	0	32.6	0	0	0	0
313-02	2	1	1	0	27.8	14	13	0	0
313-03	0	0	0	0	5.7	0	0	0	0
313-04	0	0	0	0	15.9	0	0	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample No.	Number of Visible Gold Grains				Non-Mag Weight	Calculated PPB Visible Gold			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
RR-96									
315-01	2	2	0	0	78.4	13	13	0	0
315-02	9	9	0	0	52.9	126	126	0	0
315-03	2	2	0	0	43.6	9	9	0	0
316-01	8	8	0	0	63.4	22	22	0	0
316-02	2	2	0	0	27.4	44	44	0	0
317-01	2	2	0	0	66.6	24	24	0	0
318-01	5	5	0	0	57.3	27	27	0	0
318-02	4	4	0	0	104.2	6	6	0	0
319-01	1	1	0	0	61.3	10	10	0	0
319-02	2	1	1	0	93.5	1	1	0	0
319-03	5	5	0	0	55.7	59	59	0	0
320-01	16	12	4	0	55.5	44	41	4	0
320-02	5	5	0	0	48.6	84	84	0	0
320-03	3	3	0	0	43.6	5	5	0	0
320-04	15	14	0	1	53.6	89	86	0	4
320-05	9	9	0	0	50.1	67	67	0	0
320-06	11	8	3	0	60.5	119	111	8	0
320-07	2	2	0	0	49.2	170	170	0	0
320-08	17	14	3	0	94.6	66	64	2	0
320-09	10	7	3	0	75.4	371	367	5	0

APPENDIX III

ACTLABS BEDROCK ANALYSES

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9752
Work Order: 9854
Invoice Date: 21-FEB-96
Date Submitted: 30-JAN-96
Your Reference: RR-96
Account Number: 758

OVERBURDEN DRILLING MNGT
107-15 CAPELLA COURT
EPEAN, ONTARIO
2E 7X1
CANADA
TTENTION: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

EPORT 9752 - AU, AS - INAA
9752B - AQUA REGIA - ICP
9752C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

per DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 9854 Report: 9752

Sample description	AU PPB	AS PPM	Mass g
RR-96-212-02	<5	<2	31.88
RR-96-213-02	<5	<2	30.29
RR-96-214-03	<5	4	23.09
RR-96-215-05	17	<2	17.81
RR-96-216-02	<5	<2	29.31
RR-96-217-06	<5	4	24.63
RR-96-218-04	<5	4	28.05

Activation Laboratories Ltd. Work Order: 9854 Report: 9752C

SAMPLE #	SiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	TOTAL	Ba	Sr	Y	Sc	Zr	Be	V
	%	%	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM
RR-96-212-02	46.10	13.87	12.74	0.25	3.29	12.26	2.53	0.08	1.12	0.12	7.95	100.31	21	92	25	42	56	< 1	293
RR-96-213-02	45.52	13.03	11.57	0.24	4.60	13.88	1.05	0.26	0.61	0.07	8.17	99.00	59	119	17	38	39	< 1	204
RR-96-214-03	51.55	14.59	10.52	0.20	7.39	9.01	2.69	0.58	0.62	0.07	3.58	100.78	88	124	16	38	39	< 1	200
RR-96-215-05	56.69	16.97	16.27	0.17	0.88	0.23	0.02	0.66	1.44	0.06	7.55	100.94	50	12	7	55	95	< 1	303
RR-96-216-02	55.51	15.23	11.12	0.26	5.66	6.18	2.01	0.45	0.67	0.08	3.70	100.87	62	95	18	45	42	< 1	225
RR-96-217-06	75.75	13.93	1.12	0.01	0.34	0.70	4.10	1.84	0.27	0.12	1.15	99.33	1305	464	5	6	70	< 1	43
RR-96-218-04	74.10	15.45	0.81	<0.01	0.32	0.89	4.53	2.33	0.28	0.14	1.09	99.93	2370	747	5	5	86	< 1	47

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9708
Work Order: 9857
Invoice Date: 18-FEB-96
Date Submitted: 31-JAN-96
Your Reference: RR-96
Account Number: 758

)VERBURDEN DRILLING MNGMT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
:2E 7X1
CANADA
ATTENTION: REMY/ STU AVERILL

CERTIFICATE OF ANALYSIS

REPORT 9708 - AU, AS - INAA
9708B - AQUA REGIA - ICP
9708C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

J. Brech

per DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 9857 Report: 9708

Sample description	AU PPB	AS PPM	Mass g
RR-96-219A-05	<5	<2	27.08
RR-96-220-03	<5	<2	25.94
RR-96-221-02	<5	<2	29.39
RR-96-222-02	18	9	31.79
RR-96-223-06	<5	77	29.64

Activation Laboratories Ltd. Work Order No. 9857 Report No. 9708B

SAMPLE	Ag	Cu	Ni	Zn
	ppm	ppm	ppm	ppm
RR-96-219A-05	0.4	333	37	104
RR-96-220-03	-0.2	14	12	31
RR-96-221-02	0.3	105	52	56
RR-96-222-02	0.5	77	55	69
RR-96-223-06	0.2	8	10	33

Negative values indicate less than the detection limit

Activation Laboratories Ltd. Work Order: 9857 Report: 9708C

SAMPLE #	SiO_2	Al_2O_3	Fe_2O_3	MnO	MgO	CaO	Na_2O	K_2O	TiO_2	P_2O_5	LOI	TOTAL	Ba	Sr	Y	Sc	Zr	Be	V
	%	%	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM
RR-96-219A-05	58.01	17.35	9.26	0.26	2.64	3.73	0.27	3.40	0.76	0.08	3.85	99.61	667	149	11	51	51	< 1	262
RR-96-220-03	69.64	14.80	3.62	0.07	0.91	2.42	3.95	2.22	0.31	0.13	1.96	100.02	679	452	7	7	101	< 1	45
RR-96-221-02	49.94	15.99	9.16	0.23	4.38	8.53	1.32	0.42	0.68	0.08	7.37	98.09	159	101	18	44	46	1	224
RR-96-222-02	45.74	11.77	16.39	0.49	3.56	10.89	0.79	0.42	0.51	0.05	8.34	98.94	168	113	21	43	37	< 1	198
RR-96-223-06	67.75	15.25	3.62	0.04	0.83	2.00	4.71	2.76	0.30	0.28	1.66	99.19	1026	707	10	5	118	1	40

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9826
Work Order: 9986
Invoice Date: 04-MAR-96
Date Submitted: 16-FEB-96
Your Reference: RR-96
Account Number: 758

OVERBURDEN DRILLING MANAGEMENT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1
CANADA
ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 9826 - INAA
9826B - AQUA REGIA - ICP
9826C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 9986   Report: 9826

Sample description	AU PPB	AS PPM	Mass g
RR-96-224-02	<5	<2	32.74
RR-96-225-07	<5	<2	30.56
RR-96-225-08	<5	3	33.16
RR-96-226-06	8	<2	30.40
RR-96-227-08	<5	5	30.59
RR-96-228-05	<5	10	29.34
RR-96-229-05	<5	3	29.12
RR-96-230-03	<5	4	31.94
RR-96-231-03	<5	9	30.79
RR-96-232-04	<5	<2	35.03
RR-96-233-05	11	110	28.65

Activation Laboratories Ltd. Work Order No. 9986 Report No. 9826B

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-224-02	0.4	97	40	36	-0.5	1920	-2
RR-96-225-07	0.5	48	26	120	-0.5	749	-2
RR-96-225-08	0.3	80	20	71	-0.5	307	-2
RR-96-226-06	-0.2	65	12	35	-0.5	188	-2
RR-96-227-08	-0.2	19	24	21	-0.5	51	-2
RR-96-228-05	-0.2	64	59	73	-0.5	405	3
RR-96-229-05	0.3	44	17	13	-0.5	31	4
RR-96-230-03	0.2	26	23	81	-0.5	252	2
RR-96-231-03	-0.2	31	82	3	-0.5	15	-2
RR-96-232-04	-0.2	4	19	26	-0.5	255	2
RR-96-233-05	0.8	44	61	13	-0.5	22	3

Negative values indicate less than the detection limit

Activation Laboratories Ltd.   Work Order: 9986   Report: 9826C

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	LOI %	TOTAL %	Ba PPM	Sr PPM	Y PPM	Sc PPM	Zr PPM	Be PPM	V PPM
RR-96-224-02	40.24	11.62	18.02	0.48	5.94	12.56	0.64	0.22	0.48	0.04	9.46	99.68	54	52	19	37	39	< 1	184
RR-96-225-08	66.99	15.60	3.17	0.05	0.94	3.64	5.55	1.42	0.30	0.09	1.35	99.10	256	435	4	6	80	< 1	42
RR-96-226-06	71.37	15.74	2.13	0.03	0.67	2.05	4.70	2.12	0.35	0.09	1.04	100.29	427	538	4	5	84	< 1	46
RR-96-227-08	70.56	16.59	0.89	<0.01	0.41	2.10	5.99	1.06	0.45	0.11	0.82	98.97	678	568	4	7	94	< 1	50
RR-96-228-05	60.99	19.28	6.43	0.10	2.33	1.61	3.00	2.87	0.67	0.15	2.71	100.14	529	402	12	21	112	1	160
RR-96-229-05	71.46	17.51	1.00	<0.01	0.56	2.46	4.46	1.69	0.42	0.07	1.26	100.91	654	880	4	6	90	< 1	81
RR-96-230-03	68.19	15.40	5.60	0.10	0.43	3.29	3.40	2.37	0.31	0.13	0.83	100.04	897	771	9	14	95	< 1	70
RR-96-231-03	75.86	14.77	0.78	<0.01	0.09	0.32	1.81	1.92	0.38	0.18	1.91	98.02	1764	356	5	7	75	< 1	74
RR-96-232-04	69.11	16.32	4.10	0.06	1.04	3.90	2.62	0.96	0.41	0.14	1.53	100.17	886	1237	7	7	96	< 1	61
RR-96-233-05	69.34	12.71	8.17	<0.01	0.20	0.54	0.46	0.96	0.45	<0.01	6.83	99.59	527	343	4	7	71	< 1	66

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9877
Work Order: 10015
Invoice Date: 22-MAR-96
Date Submitted: 21-FEB-96
Your Reference: RR-96
Account Number: 756

OVERBURDEN DRILLING MNGMNT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1
CANADA
ATTENTION: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 9877 - AU, AS - INAA
9877B - AQUA REGIA - ICP
9877C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

per Jasmin Breck

DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 10015 Report: 9877

Sample description	AU PPB	AS PPM	Mass g
RR-96-234-04	<5	<2	15.80
RR-96-234-05	<5	6	18.15
RR-96-234-06	18	4	17.83
RR-96-234-07	<5	2	20.78
RR-96-234-08	<5	<2	20.83
RR-96-234-09	<5	6	22.80
RR-96-234-10	<5	5	26.29
RR-96-234-11	<5	2	27.88
RR-96-234-12	<5	4	25.92
RR-96-234-13	<5	<2	20.71
RR-96-234-14	8	3	19.16
RR-96-234-15	<5	3	17.60
RR-96-234-16	<5	3	21.23
RR-96-234-17	<5	4	26.08
RR-96-234-18	<5	7	23.30
RR-96-234-19	<5	7	23.12
RR-96-234-20	<5	5	24.37
RR-96-234-21	<5	6	23.18
RR-96-234-22	<5	2	24.18
RR-96-234-23	<5	<2	22.94
RR-96-234-24	<5	<2	22.01

SAMPLE	Ag	Cu	Ni	Zn
	ppm	ppm	ppm	ppm
RR-96-234-04	0.2	27	41	124
RR-96-234-05	-0.2	36	42	77
RR-96-234-06	-0.2	38	66	100
RR-96-234-07	-0.2	23	47	90
RR-96-234-08	-0.2	25	47	97
RR-96-234-09	-0.2	21	54	92
RR-96-234-10	-0.2	10	34	70
RR-96-234-11	-0.2	8	29	70
RR-96-234-12	-0.2	22	33	72
RR-96-234-13	-0.2	21	33	89
RR-96-234-14	-0.2	17	44	82
RR-96-234-15	0.2	3200	35	82
RR-96-234-16	-0.2	34	47	79
RR-96-234-17	-0.2	16	34	81
RR-96-234-18	-0.2	31	34	79
RR-96-234-19	-0.2	16	30	70
RR-96-234-20	-0.2	21	27	68
RR-96-234-21	-0.2	17	29	65
RR-96-234-22	-0.2	17	30	61
RR-96-234-23	-0.2	13	27	74
RR-96-234-24	-0.2	20	35	84

Negative values indicate less than the detection limit

Activation Laboratories Ltd. Work Order: 10015 Report: 9877C

SAMPLE #	SiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	TOTAL	Ba	Sr	Y	Sc	Zr	Be	V
	%	%	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM
RR-96-234-04	68.79	17.07	4.05	0.15	0.95	0.53	1.97	2.23	0.44	0.08	3.80	100.05	513	290	11	10	123	1	74
RR-96-234-07	63.93	19.13	5.86	0.03	1.70	0.48	0.97	2.23	0.57	0.17	5.26	100.33	597	352	11	15	133	1	108
RR-96-234-10	64.80	18.40	4.78	0.04	1.58	0.84	3.65	1.19	0.50	0.19	4.90	100.88	294	361	8	10	104	1	77
RR-96-234-13	66.13	18.95	3.77	0.04	1.69	0.70	2.25	1.91	0.55	0.21	4.57	100.76	548	334	11	13	135	1	104
RR-96-234-17	62.46	18.97	5.03	0.05	1.99	0.93	4.07	1.20	0.53	0.24	5.39	100.84	374	405	10	11	111	< 1	85
RR-96-234-20	62.97	18.41	5.42	0.06	2.19	0.73	3.96	1.24	0.52	0.18	4.10	99.78	1447	439	10	11	122	< 1	80
RR-96-234-24	62.67	19.47	5.26	0.05	2.27	0.60	1.54	2.70	0.60	0.19	4.76	100.11	866	467	11	16	142	1	129

ACTLABS ACTIVATION LABORATORIES LTD

Invoice No.:	9886
Work Order:	10039
Invoice Date:	13-MAR-96
Date Submitted:	23-FEB-96
Your Reference:	RR-96
Account Number:	758

OVERBURDEN DRILLING MNGT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1
CANADA
ATTENTION: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 9886 - INAA
9886B - AQUA REGIA - ICP
9886C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

Jasmin Brech
per DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 10039   Report: 9886

Sample description	AU PPB	AS PPM	Mass g
RR-96-235-04	<5	<2	19.21
RR-96-236-02	<5	<2	26.61
RR-96-237-02	<5	<2	32.79
RR-96-238-02	<5	<2	34.69
RR-96-239-04	<5	<2	34.86
RR-96-240-03	<5	<2	34.87
RR-96-241-03	5	<2	27.66
RR-96-242-02	<5	<2	30.03
RR-96-243-02	<5	<2	34.72
RR-96-244-04	<5	<2	35.20
RR-96-245-01	<5	<2	32.94
RR-96-245-02	<5	<2	33.57
RR-96-245-03	<5	<2	36.36

Activation Laboratories Ltd. Work Order No. 10039 Report No. 9886B

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-235-04	-0.2	32	20	45	-0.5	311	3
RR-96-236-02	-0.2	9	13	32	-0.5	110	4
RR-96-237-02	-0.2	106	63	10	-0.5	161	-2
RR-96-238-02	-0.2	99	32	79	-0.5	812	3
RR-96-239-04	0.2	48	23	38	-0.5	378	-2
RR-96-240-03	0.2	39	25	17	-0.5	675	-2
RR-96-241-03	0.2	16	34	48	-0.5	259	-2
RR-96-242-02	0.2	24	32	32	-0.5	189	-2
RR-96-243-02	-0.2	24	55	27	-0.5	243	-2
RR-96-244-04	-0.2	60	28	48	-0.5	380	-2
RR-96-245-01	-0.2	58	9	51	-0.5	383	-2
RR-96-245-02	0.2	39	8	33	-0.5	401	-2
RR-96-245-03	-0.2	63	6	44	-0.5	220	-2

Negative values indicate less than the detection limit

Activation Laboratories Ltd. Work Order: 10039 Report: 9886C

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	LOI %	TOTAL %	Ba PPM	Sr PPM	Y PPM	Sc PPM	Zr PPM	Be PPM	V PPM
RR-96-235-04	68.81	16.85	3.42	0.04	0.69	0.36	3.47	2.13	0.36	0.02	3.29	99.43	812	527	5	8	110	< 1	400
RR-96-236-02	68.60	16.06	2.41	0.03	1.48	1.26	5.55	3.58	0.21	0.12	1.09	100.38	1010	449	4	3	90	1	35
RR-96-237-02	47.10	13.06	12.62	0.21	10.47	12.30	1.36	0.35	0.63	0.05	2.10	100.24	68	148	14	35	37	< 1	208
RR-96-238-02	44.51	12.79	15.00	0.19	4.59	8.26	2.93	0.29	1.31	0.10	9.30	99.26	42	152	23	34	75	< 1	202
RR-96-239-04	50.69	13.66	16.70	0.23	5.10	8.06	2.35	0.25	1.84	0.20	1.79	100.87	37	152	38	36	128	2	274
RR-96-240-03	52.82	14.48	11.63	0.24	5.43	10.11	1.86	0.48	0.68	0.06	2.54	100.33	66	88	16	40	38	1	237
RR-96-241-03	59.95	17.66	6.14	0.08	2.88	5.21	5.43	1.57	0.48	0.22	1.25	100.87	855	1180	10	9	115	1	91
RR-96-242-02	61.49	16.89	4.97	0.08	3.21	5.10	5.17	2.28	0.41	0.20	1.07	100.85	1055	1014	9	10	83	1	83
RR-96-243-02	50.72	12.87	19.09	0.26	3.93	7.52	2.83	0.17	2.38	0.35	0.42	100.53	38	115	52	38	161	1	180
RR-96-244-04	46.92	14.16	17.73	0.25	5.92	7.86	2.58	0.34	2.03	0.22	2.56	100.56	41	129	33	40	101	1	361
RR-96-245-03	49.35	12.55	19.13	0.27	4.79	6.65	3.82	0.61	2.37	0.22	0.52	100.28	157	96	38	42	121	2	381

ACTLABS ACTIVATION LABORATORIES LTD

Invoice No.:	9940
Work Order:	10069
Invoice Date:	15-MAR-96
Date Submitted:	29-FEB-96
Your Reference:	RR-96
Account Number:	758

OVERBURDEN DRILLING MNGMT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1

ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 9940 - AU, AS - INAA
9940B - AQUA REGIA - ICP
9940C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

Jasmer Breck
for DR. ERIC L. HOFFMAN

1336 SANDHILL DRIVE, ANCASTER, ONTARIO, CANADA L9G 4V5 • TEL: 905-648-9611 • FAX: 905-648-9613

Activation Laboratories Ltd. Work Order: 10069 Report: 9940

Sample description	AU PPB	AS PPM	Mass g
RR-96-246-05	104	<2	24.14
RR-96-246-06	55	2	29.07
RR-96-247-05	<5	<2	33.90
RR-96-248-04	15	3	23.44
RR-96-248-05	<5	3	28.43
RR-96-248-06	11	4	31.95
RR-96-249-03	<5	<2	32.88
RR-96-250-04	<5	<2	31.84
RR-96-251-05	<5	<2	31.13
RR-96-252-01	<5	<2	30.04
RR-96-253-02	<5	<2	30.22
RR-96-254-02	<5	<2	25.61
RR-96-254-03	18	<2	32.30
RR-96-255-04	<5	<2	31.41
RR-96-255-05	<5	<2	35.54
RR-96-256-03	<5	<2	26.23
RR-96-257-05	<5	<2	24.26
RR-96-257-06	<5	<2	22.76

Activation Laboratories Ltd.   Work Order: 10069   Report: 9940C

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	LOI %	TOTAL %	Ba PPM	Sr PPM	Y PPM	Sc PPM	Zr PPM	Be PPM	V PPM
RR-96-246-06	49.17	15.13	14.12	1.35	4.67	4.51	0.54	0.39	0.64	0.08	9.36	99.96	56	88	41	40	44	< 1	210
RR-96-247-05	57.14	15.29	6.58	0.09	2.25	6.31	3.22	1.23	0.50	0.14	4.92	97.68	231	395	10	16	80	< 1	117
RR-96-248-05	55.64	15.13	13.94	0.19	6.23	1.71	2.01	0.24	0.92	0.08	4.47	100.55	90	119	19	46	64	1	292
RR-96-248-06	63.20	12.75	11.19	0.17	4.44	2.55	1.82	0.15	0.68	0.09	3.41	100.45	55	146	16	33	47	< 1	224
RR-96-249-03	59.27	15.97	5.13	0.10	2.47	5.71	4.42	2.46	0.45	0.24	3.60	99.82	1103	755	11	12	108	1	103
RR-96-250-04	59.33	14.43	5.75	0.12	3.47	6.30	4.79	0.33	0.55	0.17	5.16	100.40	128	670	10	15	78	< 1	107
RR-96-251-05	54.99	17.04	9.55	0.14	4.41	6.08	4.09	1.07	0.82	0.38	2.38	100.94	594	655	20	32	77	1	250
RR-96-252-01	50.62	14.87	7.64	0.17	3.26	11.60	2.89	1.43	0.65	0.24	7.28	100.64	584	790	16	27	70	1	195
RR-96-253-02	49.33	15.71	8.83	0.17	3.90	10.94	2.64	1.11	0.67	0.24	7.17	100.72	565	686	16	28	72	1	199
RR-96-254-03	54.44	15.90	11.51	0.15	6.41	2.95	3.46	0.13	0.88	0.55	4.22	100.60	45	105	19	33	44	< 1	231
RR-96-255-04	46.06	17.07	12.77	0.20	6.12	10.20	3.20	0.13	0.88	0.08	4.13	100.84	50	230	20	33	47	< 1	270
RR-96-255-05	48.23	15.55	12.74	0.18	6.99	9.98	3.28	0.09	0.90	0.07	2.61	100.62	31	195	21	39	52	2	239
RR-96-256-03	51.50	15.69	13.05	0.15	7.93	3.53	2.93	0.16	1.03	0.11	4.51	100.61	40	136	20	36	57	2	249
RR-96-257-05	64.52	9.81	6.23	0.10	2.23	6.91	1.55	0.63	0.29	0.08	7.13	99.49	110	267	8	11	50	< 1	73

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.:	10079
Work Order:	10186
Invoice Date:	04-APR-96
Date Submitted:	14-MAR-96
Your Reference:	RR-96
Account Number:	756

OVERBURDEN DRILLING MNGT LTD
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1

ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 10079 - AU, AS - INAA
10079B - AQUA REGIA - ICP
10079C - MAJOR ELEMENTS FUSION - ICP

CERTIFIED BY :

per Jasmer Brech
DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 10186   Report: 10079

Sample description	AU PPB	AS PPM	Mass g
RR-96-258-02	<5	<2	26.39
RR-96-259-01	<5	<2	30.53
RR-96-260-02	<5	<2	29.60
RR-96-261-06	<5	<2	28.98
RR-96-262-08	<5	<2	22.16
RR-96-263-02	8	<2	26.92
RR-96-263-03	8	3	25.46
RR-96-264-04	<5	<2	16.14
RR-96-265-06	<5	<2	23.49
RR-96-266-05	<5	<2	28.59
RR-96-267-07	<5	<2	24.77
RR-96-268-05	<5	<2	21.86

Activation Laboratories Ltd. Work Order No. 10186 Report No. 10079B

SAMPLE	Ag	Cu	Ni	Pb
	ppm	ppm	ppm	ppm
RR-96-258-02	-0.2	80	54	13
RR-96-259-01	-0.2	80	94	10
RR-96-260-02	-0.2	26	128	10
RR-96-261-06	-0.2	55	83	10
RR-96-262-08	-0.2	64	44	19
RR-96-263-02	-0.2	52	31	11
RR-96-263-03	-0.2	5	38	20
RR-96-264-04	-0.2	9	24	9
RR-96-265-06	0.3	11	37	24
RR-96-266-05	-0.2	39	16	6
RR-96-267-07	-0.2	23	34	6
RR-96-268-05	-0.2	16	41	13

Negative values indicate less than the detection limit

Activation Laboratories Ltd. Work Order: 10186 Report: 10079C

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	LOI %	TOTAL %	Ba PPM	Sr PPM	Y PPM	Sc PPM	Zr PPM	Be PPM	V PPM
RR-96-258-02	48.77	13.75	12.94	0.22	2.38	8.48	2.13	0.57	1.90	0.19	7.77	99.07	116	142	26	35	92	2	343
RR-96-259-01	46.15	16.22	14.09	0.19	7.13	9.59	2.22	0.43	0.95	0.08	3.32	100.38	74	135	19	37	49	< 1	275
RR-96-260-02	46.45	14.70	13.54	0.20	9.35	10.58	1.91	0.10	0.74	0.06	2.84	100.46	15	113	16	37	37	< 1	225
RR-96-261-06	48.33	15.93	13.39	0.16	6.88	9.04	2.85	0.14	0.98	0.09	2.98	100.76	28	203	20	36	56	< 1	258
RR-96-262-08	49.62	19.43	13.09	0.12	3.79	1.64	0.29	3.77	1.01	0.45	7.50	100.73	523	198	48	40	97	1	207
RR-96-263-02	55.84	14.48	9.64	0.15	4.20	3.34	1.81	1.83	0.66	0.27	5.99	98.20	616	553	12	25	78	1	200
RR-96-263-03	50.09	13.88	12.78	0.17	10.69	1.05	0.86	0.75	0.75	0.33	9.26	100.62	283	153	8	31	74	1	204
RR-96-264-04	58.72	23.85	5.44	0.02	0.78	0.13	0.10	2.66	0.61	0.01	8.07	100.40	966	25	2	12	137	2	93
RR-96-265-06	53.53	19.14	11.46	1.22	1.54	0.69	0.10	0.97	0.87	0.10	9.67	99.29	217	76	13	31	92	1	187
RR-96-266-05	52.75	15.48	9.64	0.15	6.02	8.40	2.08	1.88	0.70	0.26	2.25	99.61	617	691	16	31	81	1	221
RR-96-267-07	67.37	15.50	3.27	0.08	1.51	1.68	4.48	1.97	0.32	0.12	3.07	99.38	707	460	6	7	80	< 1	63
RR-96-268-05	66.30	16.25	4.39	0.03	1.93	0.84	3.87	2.41	0.46	0.15	3.23	99.84	431	363	7	9	107	< 1	76

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10102
Work Order: 10215
Invoice Date: 12-APR-96
Date Submitted: 20-MAR-96
Your Reference: RR-96
Account Number: 756

OVERBURDEN DRILLING MNGT
107-15 CAPELLA COURT
MO, ONTARIO
..2E 7X1
CANADA
.TTENTION: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

EPORT 10101 - AU, AS - INAA
10101B - AQUA REGIA - ICP

CERTIFIED BY :

DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 10215   Report: 10102

Sample description	AU PPB	AS PPM	Mass g
RR-96-269-13	<5	<2	21.56
RR-96-270-01	<5	<2	26.34
RR-96-271-03	<5	<2	30.09
RR-96-272-19	7	2	23.07
RR-96-273-07	<5	6	24.73
RR-96-274-04	<5	6	27.56
RR-96-275-02	<5	4	30.86
RR-96-276-09	<5	<2	33.25

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10102B
Work Order: 10215
Invoice Date: 09-MAY-96
Date Submitted: 12-APR-96
Your Reference: INV.10102
Account Number: 1553

OVERBURDEN DRILLING MANAGEMENT
107 - 15 CAPELLA COURT
NEPEAN, ON
K2E 7X1

ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

WHOLE ROCK - FUSION ICP

CERTIFIED BY :

per DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order:10215 Report:10102C

SAMPLE #	SiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	LOI	TOTAL	Ba ppm	Sr ppm	Y ppm	Sc ppm	Zr ppm	Be ppm	V ppm
RR-96-269-13	51.01	22.41	13.35	0.02	0.85	0.92	0.10	0.25	1.14	0.49	9.50	100.04	131	68	24	49	102	2	449
RR-96-270-01	55.95	14.59	10.73	0.08	3.51	4.75	1.48	1.96	0.81	0.31	6.08	100.25	452	665	17	34	78	1	252
RR-96-271-03	69.65	15.87	2.91	0.03	1.26	1.56	6.18	1.40	0.29	0.10	1.70	100.95	590	886	5	6	81	1	54
RR-96-272-19	59.29	17.63	6.12	0.14	2.35	3.68	1.38	2.01	0.56	0.12	6.47	99.74	497	170	10	18	85	< 1	110
RR-96-273-07	64.59	16.55	4.73	0.09	1.73	2.64	3.65	1.87	0.44	0.11	3.80	100.20	470	422	8	11	74	1	92
RR-96-274-04	72.68	14.32	2.06	0.04	0.97	0.92	4.72	2.47	0.18	0.07	1.55	99.98	1008	351	4	5	59	1	42
RR-96-275-02	79.23	9.65	2.41	0.10	1.18	1.60	3.49	0.63	0.19	0.07	1.58	100.14	251	343	5	5	55	< 1	35
RR-96-276-09	49.12	13.62	12.91	0.24	3.10	10.53	2.03	0.59	1.00	0.08	6.21	99.43	132	138	24	36	65	1	275

ACTLABS ACTIVATION LABORATORIES LTD

Invoice No.: 10222
Work Order: 10299
Invoice Date: 19-APR-96
Date Submitted: 01-APR-96
Your Reference: RR-96
Account Number: 756

OVERBURDEN DRILLING MNGMT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1

ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 10222 - AU, AS - INAA
10222B - WHOLE ROCK - FUSION - ICP
10222C - AQUA REGIA - ICP

CERTIFIED BY :

DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 10299 Report: 10222

Sample description	AU PPB	AS PPM	Mass g
RR-96-277-07	<5	<2	24.91
RR-96-278-03	<5	<2	27.56
RR-96-279-06	<5	4	27.27
RR-96-280-05	<5	<2	20.01
RR-96-280-06	<5	3	23.18
RR-96-281-05	<5	<2	25.75
RR-96-282-04	<5	<2	27.78
RR-96-283-05	<5	3	33.05
RR-96-284-02	<5	<2	28.74
RR-96-285-06	<5	<2	32.91
RR-96-286-05	<5	<2	27.65
RR-96-287-04	<5	<2	30.46
RR-96-288-04	<5	<2	28.35
RR-96-289-03	<5	<2	25.66
RR-96-290-02	<5	3	27.07
RR-96-291-02	<5	2	26.80
RR-96-292-04	<5	7	31.55
RR-96-293-02	<5	<2	31.01
RR-96-294A-06	<5	<2	28.64
RR-96-295-03	<5	<2	30.35
RR-96-296-04	<5	<2	30.44
RR-96-297-03	<5	2	33.06
RR-96-298-04	<5	<2	27.50
RR-96-299-05	<5	7	25.11
RR-96-300-02	<5	<2	26.91
RR-96-301-06	<5	<2	26.19
RR-96-302-01	<5	<2	30.22
RR-96-303-01	<5	<2	22.33

Activation Laboratories Ltd.   Work Order: 10299   Report: 10222B

SAMPLE #	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	MnO %	MgO %	CaO %	Na_2O %	K_2O %	TiO_2 %	P_2O_5 %	LOI %	TOTAL %	Ba PPM	Sr PPM	Y PPM	Sc PPM	Zr PPM	Be PPM	V PPM
RR-96-277-07	48.49	18.78	13.52	0.16	2.53	1.14	0.09	0.90	0.85	0.07	11.98	98.50	186	89	10	48	57	< 1	202
RR-96-278-03	69.52	14.40	1.86	0.05	0.65	2.12	5.79	3.12	0.19	0.08	2.47	100.23	457	347	11	3	151	< 1	23
RR-96-279-06	47.19	15.51	11.31	0.17	6.54	9.04	1.29	0.19	0.86	0.07	6.84	99.01	235	266	17	33	50	< 1	227
RR-96-280-05	69.30	9.81	9.51	0.46	0.28	0.50	1.53	0.77	0.24	0.11	5.51	98.02	238	220	4	5	67	< 1	38
RR-96-280-06	62.58	11.56	13.55	0.70	1.22	1.02	0.98	1.11	1.47	0.20	6.11	100.49	365	126	27	32	93	1	278
RR-96-281-05	56.50	15.07	14.10	0.19	2.60	0.68	1.03	0.93	1.63	0.17	5.59	98.50	201	150	26	34	84	1	260
RR-96-282-04	43.35	13.95	14.16	0.19	3.68	7.39	1.76	1.17	1.86	0.19	10.32	98.01	237	227	28	35	92	1	317
RR-96-283-05	63.84	14.27	3.40	0.06	1.48	4.01	4.07	1.31	0.35	0.09	6.22	99.09	420	412	5	6	81	< 1	48
RR-96-284-02	65.79	15.21	3.21	0.04	1.15	2.72	4.42	1.11	0.33	0.11	4.22	98.32	430	451	4	6	83	< 1	48
RR-96-285-06	65.61	14.39	3.41	0.12	1.20	3.53	5.08	1.28	0.33	0.10	4.00	99.05	397	423	5	6	82	1	48
RR-96-286-05	64.87	14.31	3.31	0.05	1.43	4.26	4.22	1.27	0.34	0.10	5.23	99.39	385	453	6	6	81	< 1	51
RR-96-287-04	66.54	16.08	3.31	0.05	1.24	3.20	4.25	1.52	0.36	0.09	1.20	97.83	536	613	6	8	91	1	59
RR-96-288-04	66.77	15.81	3.16	0.04	1.22	3.12	4.21	1.95	0.34	0.09	0.95	97.67	673	733	6	7	92	< 1	51
RR-96-289-03	65.78	16.00	4.13	0.06	1.42	2.24	3.06	2.81	0.45	0.13	2.12	98.21	725	417	8	11	101	1	81
RR-96-290-02	66.02	15.82	4.35	0.06	2.21	3.00	3.27	2.33	0.47	0.16	1.42	99.11	568	675	8	12	114	1	88
RR-96-291-02	66.20	16.34	4.22	0.06	1.57	3.09	3.60	2.01	0.48	0.11	1.29	98.96	534	483	8	12	101	< 1	88
RR-96-292-04	64.28	16.39	5.09	0.08	1.61	3.64	2.92	2.45	0.56	0.12	1.46	98.59	418	471	9	14	108	< 1	108
RR-96-293-02	66.76	16.96	3.59	0.03	1.44	2.23	4.80	2.39	0.36	0.09	1.02	99.69	713	461	5	7	89	1	54
RR-96-294A-06	61.87	17.42	6.40	0.07	2.28	2.59	2.72	3.27	0.56	0.14	1.27	98.58	831	561	13	17	106	2	117
RR-96-295-03	65.95	14.86	6.03	0.07	2.62	2.70	3.56	1.99	0.54	0.14	1.09	99.55	634	397	13	13	131	1	97
RR-96-296-04	66.67	16.47	3.16	0.07	1.21	4.73	3.42	2.31	0.43	0.10	1.39	99.95	664	843	8	11	87	1	80
RR-96-297-03	67.77	16.15	3.19	0.05	0.87	3.64	4.58	1.44	0.35	0.11	1.50	99.65	489	608	6	7	83	< 1	54
RR-96-298-04	52.19	15.78	10.66	0.16	5.71	6.82	2.97	2.03	0.81	0.29	2.57	100.00	706	623	18	37	76	1	251
RR-96-299-05	70.24	15.24	3.25	0.04	1.74	1.35	3.93	2.33	0.35	0.16	1.98	100.60	664	549	7	7	111	< 1	55
RR-96-300-02	66.74	14.60	3.72	0.09	1.65	2.75	4.51	1.51	0.37	0.13	3.55	99.61	403	386	7	8	109	< 1	55
RR-96-301-06	66.99	15.01	3.68	0.07	1.54	2.82	4.87	1.47	0.32	0.11	1.92	98.78	570	622	7	9	77	< 1	62
RR-96-302-01	59.09	15.22	5.44	0.11	3.17	7.63	4.16	1.00	0.47	0.14	2.45	98.88	286	764	11	15	89	< 1	97
RR-96-303-01	67.23	15.42	3.81	0.09	1.11	3.22	3.16	2.61	0.38	0.24	2.87	100.11	972	575	10	9	115	1	68

Activation Laboratories Ltd. Work Order No. 10299 Report No. 10222C

SAMPLE	Ag	Cu	Ni	Zn
	ppm	ppm	ppm	ppm
RR-96-277-07	-0.2	113	141	131
RR-96-278-03	0.3	8	5	306
RR-96-279-06	-0.2	116	89	64
RR-96-280-05	-0.2	162	4	45
RR-96-280-06	-0.2	121	38	113
RR-96-281-05	-0.2	46	45	114
RR-96-282-04	-0.2	116	55	107
RR-96-283-05	-0.2	29	13	44
RR-96-284-02	-0.2	6	12	91
RR-96-285-06	-0.2	5	10	97
RR-96-286-05	-0.2	7	13	31
RR-96-287-04	-0.2	18	21	43
RR-96-288-04	-0.2	22	17	48
RR-96-289-03	-0.2	19	35	62
RR-96-290-02	-0.2	36	42	63
RR-96-291-02	-0.2	22	34	58
RR-96-292-04	-0.2	39	41	65
RR-96-293-02	-0.2	15	18	56
RR-96-294A-06	0.2	47	55	86
RR-96-295-03	-0.2	41	53	80
RR-96-296-04	-0.2	9	32	46
RR-96-297-03	0.2	30	22	52
RR-96-298-04	-0.2	61	21	80
RR-96-299-05	-0.2	21	19	46
RR-96-300-02	-0.2	9	20	58
RR-96-301-06	-0.2	21	33	62
RR-96-302-01	0.2	31	48	60
RR-96-303-01	-0.2	36	12	45

Negative values indicate less than the detection limit
99999 indicates greater than 10%, the working range of the instrument

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10237
Work Order: 10342
Invoice Date: 22-APR-96
Date Submitted: 04-APR-96
Your Reference: RR-96
Account Number: N006

)VERBURDEN DRILLING MANAGEMENT
107-15 CAPELLA COURT
NEPEAN, ON
(2E 7X1

ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

AU, AS - INAA
10237B - AQUA REGIA - ICP
10237C - WHOLE ROCK - FUSION - ICP

CERTIFIED BY :

Sylvia Alvarez
per DR. ERIC L. HOFFMAN

1336 SANDHILL DRIVE, ANCASTER, ONTARIO, CANADA L9G 4V5 • TEL: 905-648-9611 • FAX: 905-648-9613

Activation Laboratories Ltd. Work Order: 10342 Report: 10237

Sample description	AU PPB	AS PPM	Mass g
RR-96-304-03	<5	<2	26.15
RR-96-305-10	8	<2	35.19
RR-96-306-04	<5	<2	27.56
RR-96-307-02	<5	<2	30.35
RR-96-307A-02	<5	<2	30.95
RR-96-308-02	<5	<2	33.98
RR-96-309-01	10	<2	35.03
RR-96-310-02	<5	<2	28.73
RR-96-311-04	<5	<2	27.50
RR-96-312-01	<5	<2	31.58
RR-96-312A-03	<5	<2	29.22
RR-96-313-05	<5	<2	29.35
RR-96-314-01	<5	<2	31.15
RR-96-315-04	<5	<2	27.76
RR-96-316-03	<5	5	34.61
RR-96-316-04	5	<2	28.97
RR-96-317-02	<5	<2	24.98
RR-96-318-03	<5	<2	20.59
RR-96-319-04	<5	<2	22.51
RR-96-320-10	<5	20	31.98

SAMPLE	Ag	Cu	Ni	Zn
	ppm	ppm	ppm	ppm
RR-96-304-03	-0.2	11	10	47
RR-96-305-10	-0.2	65	9	23
RR-96-306-04	-0.2	7	13	67
RR-96-307-02	-0.2	33	2	3
RR-96-307A-02	-0.2	52	15	47
RR-96-308-02	-0.2	11	15	30
RR-96-309-01	-0.2	59	14	7
RR-96-310-02	-0.2	4	1	12
RR-96-311-04	-0.2	5	19	41
RR-96-312-01	-0.2	6	22	30
RR-96-312A-03	-0.2	12	27	50
RR-96-313-05	-0.2	34	54	55
RR-96-314-01	-0.2	21	38	51
RR-96-315-04	-0.2	47	15	19
RR-96-316-03	-0.2	136	104	31
RR-96-316-04	-0.2	53	110	42
RR-96-317-02	-0.2	70	86	46
RR-96-318-03	-0.2	37	35	73
RR-96-319-04	-0.2	46	27	119
RR-96-320-10	-0.2	70	46	56

Negative values indicate less than the detection limit
99999 indicates greater than 10%, the working range of the instrument

Activation Laboratories Ltd. Work Order: 10342 Report: 10237C

SAMPLE #	SiO_2	Al_2O_3	Fe_2O_3	MnO	MgO	CaO	Na_2O	K_2O	TiO_2	P_2O_5	LOI	TOTAL	Ba	Sr	Y	Sc	Zr	Be	V
	%	%	%	%	%	%	%	%	%	%	%	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM
RR-96-304-03	66.60	15.91	3.00	0.04	1.29	3.46	5.39	2.13	0.36	0.19	0.90	99.28	970	904	5	5	88	2	52
RR-96-305-10	48.95	12.42	18.09	0.23	5.34	9.22	2.62	0.59	1.41	0.07	0.62	99.56	84	132	20	53	53	2	806
RR-96-306-04	68.46	15.61	1.97	0.04	0.61	2.10	4.49	4.14	0.21	0.09	1.16	98.88	1480	623	4	3	66	2	24
RR-96-307-02	74.08	13.94	1.51	0.02	0.24	2.11	3.66	3.51	0.08	0.04	0.69	99.89	1046	252	5	1	57	< 1	4
RR-96-307A-02	66.68	16.26	3.76	0.05	1.66	3.73	4.78	1.66	0.41	0.15	1.01	100.14	984	798	6	7	100	1	64
RR-96-308-02	67.85	15.85	2.84	0.04	1.24	3.48	5.08	1.77	0.28	0.08	0.45	98.96	785	872	5	5	77	1	46
RR-96-309-01	51.64	14.37	9.93	0.17	8.19	11.39	2.05	0.34	0.45	0.05	1.06	99.62	46	98	12	50	30	< 1	216
RR-96-310-02	75.00	13.53	0.92	0.02	0.35	0.86	4.73	2.46	0.06	0.06	0.60	98.59	798	186	4	1	48	1	< 1
RR-96-311-04	65.85	16.31	2.64	0.03	1.45	3.65	6.07	1.69	0.23	0.12	0.66	98.70	1058	1108	4	5	97	1	42
RR-96-312-01	65.48	16.27	2.97	0.04	1.66	3.55	6.04	1.53	0.29	0.15	1.21	99.20	865	932	4	6	89	< 1	49
RR-96-312A-03	66.07	15.47	3.17	0.07	1.93	3.73	5.31	1.93	0.30	0.17	1.33	99.47	965	948	6	7	93	1	54
RR-96-313-05	63.34	15.65	5.19	0.07	2.88	4.45	5.27	1.19	0.49	0.18	1.69	100.39	331	614	8	14	101	< 1	87
RR-96-314-01	57.33	16.81	8.60	0.13	3.85	7.90	2.92	0.58	0.68	0.10	1.94	100.83	277	540	13	19	62	< 1	130
RR-96-315-04	65.75	9.77	11.44	0.83	0.83	1.04	0.26	0.97	0.64	0.06	7.95	99.52	388	54	8	22	86	1	161
RR-96-316-03	47.97	13.70	10.47	0.18	9.58	10.08	2.23	0.19	0.51	0.03	3.85	98.78	40	126	12	42	24	< 1	203
RR-96-316-04	46.29	12.50	9.05	0.18	8.44	8.97	1.45	0.07	0.49	0.04	10.72	98.19	9	33	12	40	31	< 1	179
RR-96-317-02	45.76	12.18	9.38	0.24	5.23	12.68	2.54	0.14	0.55	0.05	12.19	100.94	52	147	12	33	29	< 1	185
RR-96-318-03	63.31	14.78	3.86	0.45	1.33	3.07	3.09	0.56	0.74	0.19	6.55	97.93	175	277	13	11	136	< 1	96
RR-96-319-04	66.29	14.85	6.00	0.37	1.68	0.58	1.16	1.78	0.51	0.07	5.43	98.70	249	145	12	9	123	< 1	66
RR-96-320-10	49.44	13.98	11.78	0.41	4.18	8.25	0.64	0.30	0.65	0.06	9.30	98.98	168	71	15	47	43	< 1	255

APPENDIX IV

ACTLABS HEAVY MINERAL ANALYSES

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9876
Work Order: 10014
Invoice Date: 07-MAR-96
Date Submitted: 21-FEB-96
Your Reference: RR-96
Account Number: 758

OVERBURDEN DRILLING MANAGEMENT
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1
CANADA
ATTN: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

REPORT 9876 - AU, AS - INAA
9876B - AQUA REGIA - ICP

CERTIFIED BY :

J. Brech

per DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 10014   Report: 9876

Sample description	AU PPB	AS PPM	Mass g
RR-96 212-01	1350	220	66.00
RR-96 213-01	608	290	24.00
RR-96 214-01	525	230	62.00
RR-96 214-02	1160	270	24.00
RR-96 215-01	605	140	66.00
RR-96 215-02	630	350	23.00
RR-96 215-03	902	800	43.00
RR-96 215-04	1350	250	42.00
RR-96 216-01	1330	310	34.00
RR-96 217-01	1160	370	71.00
RR-96 217-02	918	430	61.00
RR-96 217-03	799	480	48.00
RR-96 217-04	810	440	62.00
RR-96 217-05	561	380	59.00
RR-96 218-01	302	280	59.00
RR-96 218-02	274	330	68.00
RR-96 218-03	578	390	33.00
RR-96 219-01	325	500	24.00
RR-96 219-02	1400	470	35.00
RR-96 219A-01	766	390	39.00
RR-96-219A-02	200	440	16.00
RR-96 219A-03	321	530	20.00
RR-96 219A-04	427	520	37.00
RR-96-220-01	336	1000	69.00
RR-96-220-02	285	3300	38.00
RR-96-221-01	313	680	21.00
RR-96-222-01	166	380	62.00
RR-96-223-01	90	350	12.00
RR-96-223-02	174	260	70.00
RR-96-223-03	165	280	66.00
RR-96-223-04	79	210	68.00
RR-96-223-05	140	410	65.00
RR-96-225-01	368	140	63.00
RR-96-225-02	158	180	57.00
RR-96-225-03	101	180	51.00
RR-96-225-04	52	150	49.00
RR-96-225-05	352	130	41.00
RR-96-225-06	93	150	42.00
RR-96-226-01	592	97	33.00
RR-96-226-02	182	110	38.00
RR-96-226-03	114	100	50.00
RR-96-226-04	267	130	51.00
RR-96-226-05	93	220	60.00
RR-96-227-01	73	340	24.00
RR-96-227-02	593	1100	66.00

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-227-02	0.5	92	203	167	-0.5	813	33
RR-96-227-03	0.7	157	100	54	-0.5	904	22
RR-96-227-04	0.6	152	95	46	-0.5	1270	30
RR-96-227-05	0.4	122	81	49	-0.5	798	19
RR-96-227-06	0.5	258	200	266	-0.5	1340	40
RR-96-227-07	1.0	407	176	92	-0.5	994	43
RR-96-228-01	0.9	248	86	50	-0.5	1110	31
RR-96-228-02	0.8	172	69	130	-0.5	932	21
RR-96-228-03	1.9	153	73	32	-0.5	1160	22
RR-96-228-04	0.7	187	155	43	-0.5	967	32
RR-96-229-01	-0.2	63	178	296	-0.5	278	43
RR-96-229-02	0.7	99	97	235	-0.5	671	28
RR-96-229-03	1.4	145	111	530	-0.5	853	48
RR-96-229-04	0.8	214	138	130	-0.5	1640	30
RR-96-229-05	0.9	268	211	367	-0.5	1230	34
RR-96-230-01	2.9	136	152	224	-0.5	2130	64
RR-96-230-01A	3.0	119	129	563	-0.5	1500	72
RR-96-230-02A	3.1	171	141	217	-0.5	1230	57
RR-96-231-01	2.4	124	132	451	-0.5	1900	69
RR-96-231-02	2.6	156	157	1420	-0.5	1870	320
RR-96-232-01	3.5	216	127	295	-0.5	2080	90
RR-96-232-02	1.9	218	129	232	-0.5	2010	38
RR-96-232-03	2.0	149	128	166	-0.5	2600	42
RR-96-233-01	2.0	144	91	210	-0.5	1740	34
RR-96-233-02	2.4	152	121	192	-0.5	1740	41
RR-96-233-03	2.3	161	124	228	-0.5	1570	41
RR-96-233-04	1.1	156	136	124	-0.5	1040	44
RR-96-234-01	1.7	400	130	114	-0.5	5920	32
RR-96-234-02	1.6	453	140	114	-0.5	7950	50
RR-96-234-03	1.2	311	93	107	-0.5	7490	32

Negative values indicate less than the detection limit

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.:	10011
Work Order:	10090
Invoice Date:	02-APR-96
Date Submitted:	04-MAR-96
Your Reference:	RR-96
Account Number:	756

OVERBURDEN DRILLING
107-15 CAPELLA COURT
NAPEAN, ONTARIO
K2E 7X1
CANADA
ATTENTION: REMY HUNEAULT

CERTIFICATE OF ANALYSIS

AU, AS - INAA
10011B - AQUA REGIA - ICP

CERTIFIED BY :

Sylvia Alvarez

per DR. ERIC L. HOFFMAN

1336 SANDHILL DRIVE, ANCASTER, ONTARIO, CANADA L9G 4V5 • TEL: 905-648-9611 • FAX: 905-648-9613

Activation Laboratories Ltd.   Work Order: 10090   Report: 10011

Sample description	AU PPB	AS PPM	Mass g
RR-96-235-01	50	130	28.00
RR-96-235-02	54	100	63.00
RR-96-235-03	34	46	44.00
RR-96-236-01	<6	<2	7.000
RR-96-236-01B	<5	<2	15.00
RR-96-237-01	113	30	31.00
RR-96-238-01	77	65	33.00
RR-96-239-01	210	41	61.00
RR-96-239-02	120	34	59.00
RR-96-239-03	220	31	65.00
RR-96-240-01	69	68	63.00
RR-96-240-02	29	75	15.00
RR-96-241-01	63	3	51.00
RR-96-241-02	65	36	60.00
RR-96-242-01	344	25	49.00
RR-96-243-01	<5	<2	23.00
RR-96-243B-01	73	8	9.000
RR-96-244-01	374	28	58.00
RR-96-244-02	93	30	55.00
RR-96-244-03	124	27	57.00
RR-96-246-01	22	40	41.00
RR-96-246-02	95	49	42.00
RR-96-246-03	23	59	7.000
RR-96-246-04	21	25	46.00
RR-96-247-01	381	82	29.00
RR-96-247-02	92	55	63.00
RR-96-247-03	98	75	59.00

Activation Laboratories Ltd. Work Order No. 10090 Report No. 10011B

SAMPLE	Ag	Cd	Cu	Mn	Ni	Pb	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-235-01	13.4	2.1	4920	20500	100	64	160
RR-96-235-02	5.1	1.8	3850	13400	113	36	126
RR-96-235-03	3.6	1.9	907	15100	72	39	152
RR-96-236-01	0.6	0.5	15	499	42	16	34
RR-96-236-01B	1.1	-0.5	171	845	16	25	23
RR-96-237-01	1.3	0.9	457	1160	81	34	37
RR-96-238-01	1.2	-0.5	418	1030	64	4	44
RR-96-239-01	1.2	0.7	442	859	73	8	73
RR-96-239-02	1.8	-0.5	578	1150	65	4	81
RR-96-239-03	1.2	1.0	457	971	68	8	80
RR-96-240-01	0.8	1.4	207	680	91	13	105
RR-96-240-02	1.1	1.6	520	1300	202	22	178
RR-96-241-01	0.8	0.5	29	410	28	9	23
RR-96-241-02	0.9	0.6	114	638	48	7	17
RR-96-242-01	2.5	-0.5	188	1150	75	34	22
RR-96-243-01	1.4	-0.5	114	765	14	-2	29
RR-96-243B-01	1.8	-0.5	41	1080	20	6	25
RR-96-244-01	1.4	-0.5	522	1220	60	4	82
RR-96-244-02	1.2	-0.5	460	947	62	7	56
RR-96-244-03	0.9	-0.5	240	2030	42	13	34
RR-96-246-01	1.6	-0.5	345	1370	80	3	56
RR-96-246-02	1.5	-0.5	258	1300	61	10	42
RR-96-246-03	7.4	1.0	2020	15300	105	27	157
RR-96-246-04	3.9	1.2	1140	18200	53	15	127
RR-96-247-01	1.2	0.6	336	904	60	5	66
RR-96-247-02	1	0.7	388	800	58	3	69
RR-96-247-03	1	0.8	222	672	50	4	40

Negative values indicate less than the detection limit

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 9748
Work Order: 9803
Invoice Date: 19-FEB-96
Date Submitted: 22-JAN-96
Your Reference: PO#574
Account Number: 758

)VERBURDEN DRILLING MNGT LTD
107-15 CAPELLA COURT
NEPEAN, ONTARIO
(2E 7X1
CANADA
ATTENTION: STU AVERILL

CERTIFICATE OF ANALYSIS

NI - AQUA REGIA - ICP

CERTIFIED BY :

J. Buck

per DR. ERIC L. HOFFMAN

1336 SANDHILL DRIVE, ANCASTER, ONTARIO, CANADA L9G 4V5 • TEL: 905-648-9611 • FAX: 905-648-9613

Activation Laboratories Ltd. Work Order No. 9803 Report No. 9748

SAMPLE	Ni
	ppm
RR-95-07-01	58
RR-95-07-02	35
RR-95-07-03	119
RR-95-07-04	70
RR-95-07-05	50
RR-95-07-06	32
RR-95-07-07	21
RR-95-07-08	20
RR-95-07-09	23
RR-95-07-10	20
RR-95-07-11	60
RR-95-07-12	130
RR-95-07-13	140
RR-95-07-14	130
RR-95-08-01	50
RR-95-08-02	60
RR-95-08-03	60
RR-95-08-04	50
RR-95-08-05	50
RR-95-08-06	80
RR-95-08-07	30
RR-95-08-08	90
RR-95-08-09	80
RR-95-08-10	220
RR-95-08-11	190
RR-95-08-12	190
RR-95-09-01	120
RR-95-09-02	80
RR-95-09-03	30
RR-95-09-04	50
RR-95-09-05	60
RR-95-09-06	60
RR-95-09-07	60
RR-95-09-08	70
RR-95-09-09	60
RR-95-09-10	790
RR-95-09-11	80
RR-95-09-12	70
RR-95-09-13	80
RR-95-09-14	67
RR-95-09-15	105
RR-95-09-16	76
RR-95-09-17	120
RR-95-09-18	123
RR-95-09-19	81

Negative values indicate less than the detection limit

SAMPLE	Ni
	ppm
RR-95-09-20	62
RR-95-10-01	104
RR-95-10-02	69
RR-95-10-03	67
RR-95-10-04	12
RR-95-10-05	83
RR-95-14-01	72
RR-95-14-02	72
RR-95-14-03	90
RR-95-14-04	80
RR-95-14-05	77
RR-95-14-06	80
RR-95-14-07	88
RR-95-14-08	83
RR-95-14-09	79
RR-95-15-01	83
RR-95-15-02	68
RR-95-15-03	50
RR-95-15-04	37
RR-95-15-05	34
RR-95-16-01	63
RR-95-16-02	86
RR-95-16-03	81
RR-95-16-04	86
RR-95-16-05	66
RR-95-16-06	37
RR-95-16-07	32
RR-95-16-08	71
RR-95-16-09	42
RR-95-16-10	44
RR-95-16-11	38
RR-95-16-12	57
RR-95-17-01	57
RR-95-18-01	51
RR-95-18-02	53
RR-95-18-03	48
RR-95-18-04	49
RR-95-19-01	58
RR-95-19-02	45
RR-95-19-03	42
RR-95-19-04	44
RR-95-19-05	31
RR-95-25-01	192
RR-95-26-01	71
RR-95-26-02	60

Negative values indicate less than the detection limit

SAMPLE	Ni
	ppm
RR-95-26-03	84
RR-95-26-04	60
RR-95-26-05	58
RR-95-26-06	53
RR-95-26-07	51
RR-95-26-08	59
RR-95-27-01	89
RR-95-27-02	38
RR-95-27-03	43
RR-95-27-04	30
RR-95-27-05	36
RR-95-27-06	31
RR-95-27-07	40
RR-95-27-08	49
RR-95-27-09	50
RR-95-33-01	103
RR-95-33-02	94
RR-95-33-03	117
RR-95-33-04	117
RR-95-34-01	83
RR-95-34-02	73
RR-95-34-03	68
RR-95-35-02	94
RR-95-35-03	93
RR-95-35-04	74
RR-95-35-05	90
RR-95-35-06	89
RR-95-35-07	58
RR-95-47-02	77
RR-95-47-03	67
RR-95-48-01	79
RR-95-48-02	55
RR-95-48-03	54
RR-95-54-01	137
RR-95-54-02	159
RR-95-55-01	91
RR-95-55-02	92
RR-95-55-03	72
RR-95-56-01	93
RR-95-56-02	51
RR-95-56-03	6
RR-95-56-04	119
RR-95-56-05	206
RR-95-57-01	60
RR-95-57-02	59

Negative values indicate less than the detection limit

SAMPLE	Ni
	ppm
RR-95-57-03	59
RR-95-57-04	50
RR-95-58-01	67
RR-95-58-02	82
RR-95-58-03	72
RR-95-58-04	60
RR-95-58-05	55
RR-95-58-06	77
RR-95-58A-01	64
RR-95-58A-02	71
RR-95-59-01	60
RR-95-59-02	30
RR-95-59-03	34
RR-95-59-04	37
RR-95-65-01	119
RR-95-65-02	165
RR-95-66-01	126
RR-95-66-02	158
RR-95-67-01	50
RR-95-67-02	55
RR-95-76-01	86
RR-95-76-02	73
RR-95-76-03	68
RR-95-76-04	78
RR-95-76-05	72
RR-95-77-01	65
RR-95-77-02	64
RR-95-77-03	71
RR-95-77-04	45
RR-95-77-05	76
RR-95-77-06	55
RR-95-78-01	80
RR-95-78-02	91
RR-95-78-03	160
RR-95-78-04	107
RR-95-78-05	75
RR-95-79-01	47
RR-95-79-02	37
RR-95-79-03	57
RR-95-79-04	44
RR-95-79-05	31
RR-95-80-01	33
RR-95-97-01	48
RR-95-97-02	22
RR-95-98-01	52

Negative values indicate less than the detection limit

SAMPLE	Ni ppm
RR-95-104-01	22
RR-95-104-02	22
RR-95-105-01	33
RR-95-105-02	16
RR-95-105-03	26
RR-95-116-01	75
RR-95-116-02	43
RR-95-116-03	42
RR-95-116-04	74
RR-95-117-01	30
RR-95-117-02	27
RR-95-117-03	17
RR-95-117-04	63
RR-95-117-05	65
RR-95-117-06	77
RR-95-117-07	119
RR-95-118-01	125
RR-95-119-01	56
RR-95-141-01	49
RR-95-141-02	48
RR-95-141-03	31
RR-95-141-04	51
RR-95-141-05	37
RR-95-141-06	44
RR-95-141-07	40
RR-95-141-08	44
RR-95-141-09	26
RR-95-141-10	90
RR-95-142-01	45
RR-95-142-02	45
RR-95-142-03	42
RR-95-142-04	38
RR-95-142-05	41
RR-95-142-06	40
RR-95-142-07	37
RR-95-142-08	53
RR-95-142-09	34
RR-95-143-01	54
RR-95-143-02	52
RR-95-144-01	46
RR-95-144-02	82
RR-95-144-03	56
RR-95-144-04	31
RR-95-145-01	35
RR-95-145-02	35

Negative values indicate less than the detection limit

SAMPLE	Ni
	ppm
RR-95-145-03	74
RR-95-145-04	45
RR-95-146-01	44
RR-95-146-02	42
RR-95-146-03	11
RR-95-146-04	11
RR-95-146-05	15
RR-95-146-06	34
RR-95-146-07	34
RR-95-158-01	43
RR-95-159-01	26
RR-95-163-01	25
RR-95-163-02	21
RR-95-163-03	12
RR-95-163-04	18
RR-95-163-05	27
RR-95-163-06	10
RR-95-163-07	25
RR-95-164-01	14
RR-95-164-02	20
RR-95-164-03	13
RR-95-165-01	26
RR-95-165-02	30
RR-95-165-03	22
RR-95-165-04	12
RR-95-168-01	36
RR-95-168-02	24
RR-95-168-03	20
RR-95-168-04	26
RR-95-168-05	22
RR-95-168-06	22
RR-95-168-07	66
RR-95-168-08	27
RR-95-168-09	21
RR-95-168-10	18
RR-95-168-11	28
RR-95-168-12	12
RR-95-169-01	23
RR-95-169-02	18
RR-95-169-03	21
RR-95-169-04	18
RR-95-169-05	63
RR-95-172-01	29
RR-95-172-02	32
RR-95-173-01	23

Negative values indicate less than the detection limit

SAMPLE	Ni ppm
RR-95-173-02	50
RR-95-174-01	31
RR-95-174-02	30
RR-95-174-03	48
RR-95-174-04	21
RR-95-174-05	19
RR-95-175-01	39
RR-95-175-02	36
RR-95-175-03	33
RR-95-175-04	30
RR-95-175-05	28
RR-95-175-06	29
RR-95-175-07	25
RR-95-176-01	32
RR-95-176-02	34
RR-95-176-03	44
RR-95-176-04	24
RR-95-176-05	29
RR-95-176-06	30
RR-95-177-01	26
RR-95-177-02	35
RR-95-177-03	39
RR-95-177-04	28
RR-95-178-01	69
RR-95-178-02	65
RR-95-178-03	57
RR-95-179-01	31
RR-95-179-02	39
RR-95-180-01	34
RR-95-180-02	29
RR-95-180-03	29
RR-95-180-04	32
RR-95-180-05	27
RR-95-184-01	363
RR-95-185-01	57
RR-95-185-02	62
RR-95-185-03	47
RR-95-185-04	53
RR-95-185-05	49
RR-95-185-06	78
RR-95-185-07	46
RR-95-185-08	48
RR-95-186-01	85
RR-95-187-01	41
RR-95-187-02	36

Negative values indicate less than the detection limit

SAMPLE	Ni
	ppm
RR-95-187-03	37
RR-95-199-01	50
RR-95-199-02	101
RR-95-199-03	79
RR-95-199-04	76
RR-95-199-05	87
RR-95-202-01	64
RR-95-202-02	80

Negative values indicate less than the detection limit

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10214
Work Order: 10298
Invoice Date: 17-APR-96
Date Submitted: 01-APR-96
Your Reference: RR-96
Account Number: 756

OVERBURDEN DRILLING MNGT LTD.
107-15 CAPELLA COURT
NEPEAN, ONTARIO
K2E 7X1
CANADA
ATTENTION: MR. STU AVERILL

CERTIFICATE OF ANALYSIS

AU, AS - INAA
.0214B - AQUA REGIA - ICP

CERTIFIED BY :

Sylvia Alvarez
per
DR. ERIC L. HOFFMAN

Activation Laboratories Ltd.   Work Order: 10298   Report: 10214

Sample description	AU PPB	AS PPM	Mass g
RR-96 269-06	1340	240	52.00
RR-96 269-07	727	220	61.00
RR-96 269-08	1030	470	32.00
RR-96 269-09	420	180	44.00
RR-96 269-10	850	210	66.00
RR-96 269-11	407	150	60.00
RR-96 269-12	690	230	27.00
RR-96 271-01	648	190	48.00
RR-96 271-02	1210	290	30.00
RR-96 272-01	170	82	59.00
RR-96 272-02	1120	26	40.00
RR-96 272-03	177	54	49.00
RR-96 272-04	328	140	40.00
RR-96 272-05	652	100	15.00
RR-96 272-06	3580	160	16.00
RR-96 272-07	312	100	15.00
RR-96 272-08	515	170	10.00
RR-96 272-09	250	110	22.00
RR-96 272-10	168	81	26.00
RR-96 272-11	322	70	31.00
RR-96 272-12	401	170	34.00
RR-96 272-13	234	87	39.00
RR-96 272-14	681	130	22.00
RR-96 272-15	98	110	30.00
RR-96 272-16	137	42	48.00
RR-96 272-17	1270	160	28.00
RR-96 272-18	769	160	29.00
RR-96 273-01	299	270	25.00
RR-96 273-02	337	140	29.00
RR-96 273-03	153	160	8.000
RR-96 273-04	2430	300	6.000
RR-96 273-05	471	130	24.00
RR-96 273-06	1180	95	10.00
RR-96 274-01	397	150	43.00
RR-96 274-02	659	170	44.00
RR-96 274-03	858	180	47.00
RR-96 275-01	237	83	24.00
RR-96 276-01	374	130	50.00
RR-96 276-02	329	110	54.00
RR-96 276-03	927	150	59.00
RR-96 276-04	650	150	57.00
RR-96 276-05	1940	170	58.00
RR-96 276-06	422	180	55.00
RR-96 276-07	1580	200	62.00
RR-96 276-08	1310	260	65.00

Activation Laboratories Ltd.   Work Order: 10298   Report: 10214

Sample description	AU PPB	AS PPM	Mass g
RR-96 277-01	188	71	54.00
RR-96 277-02	151	64	58.00
RR-96 277-03	172	67	39.00
RR-96 277-04	231	69	47.00
RR-96 277-05	229	110	44.00
RR-96 277-06	267	100	39.00
RR-96 278-01	169	44	56.00

SAMPLE	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	Ba	Be	Bi	Ca	Co	Cr	Fe	K	Mg	Na	P	Sb	Sc	Sn	Sr	Ti	V	W	Y	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RR-96 269-06	3.4	1.8	664	3590	3	117	37	463	0.58	244	11	-1	-10	0.96	254	48	13.70	0.02	0.23	0.03	978	-5	10	-10	59	0.74	109	-10	14	15
RR-96 269-07	3.8	-0.5	909	6200	4	127	52	315	0.64	326	8	-1	-10	0.80	299	55	15.50	0.03	0.27	0.04	669	10	11	-10	46	0.47	121	-10	9	18
RR-96 269-08	3.4	1.1	1300	7120	3	126	56	401	0.35	371	6	-1	-10	0.51	286	41	15.80	0.02	0.20	0.02	583	18	10	-10	29	0.25	89	-10	5	11
RR-96 269-09	2.8	1.6	604	5410	5	99	44	392	0.77	206	16	-1	-10	1.05	169	153	13.80	0.03	0.27	0.04	908	-5	13	-10	81	0.72	201	-10	17	18
RR-96 269-10	121	2.2	922	6880	3	117	55	498	0.47	284	9	-1	-10	0.81	236	52	14.80	0.02	0.23	0.02	892	-5	11	-10	50	0.55	123	-10	13	13
RR-96 269-11	1.7	2.1	619	6950	3	75	34	418	0.87	141	23	-1	-10	1.32	138	60	12.20	0.03	0.31	0.03	979	-5	15	-10	94	0.77	130	-10	21	13
RR-96 269-12	2.5	1.2	727	11000	3	90	44	253	0.64	289	9	-1	-10	0.97	209	42	14.10	0.05	0.38	0.03	656	6	17	-10	43	0.50	111	-10	19	11
RR-96 271-01	3.1	2.8	903	7188	4	127	47	313	0.82	222	30	-1	-10	1.35	276	59	18.40	0.03	0.30	0.03	736	-5	12	-10	92	0.80	116	-10	28	21
RR-96 271-02	3.4	0.6	2680	5690	4	122	105	387	0.48	232	6	-1	-10	0.79	337	41	14.70	0.02	0.22	0.02	761	6	10	-10	53	0.40	116	-10	11	22
RR-96 272-01	1.8	0.9	1630	3960	2	70	13	99	1.17	102	20	-1	-10	1.78	123	71	9.64	0.03	0.29	0.04	1210	-5	16	-10	133	1.61	155	-10	33	24
RR-96 272-02	0.4	-0.5	218	1690	2	29	6	49	1.04	40	14	-1	34	1.43	39	84	7.91	0.02	0.24	0.03	915	-5	13	-10	98	1.39	165	-10	27	17
RR-96 272-03	1.0	1.0	323	3831	5	54	-2	83	1.90	96	19	-1	50	2.50	107	131	13.10	0.03	0.40	0.06	821	-5	23	-10	172	2.56	260	-10	45	42
RR-96 272-04	0.8	1.1	417	6620	2	78	13	98	0.72	153	16	-1	-10	1.02	216	55	11.20	0.02	0.30	0.02	484	-5	12	-10	43	0.99	131	-10	23	10
RR-96 272-05	0.6	0.7	518	6190	6	76	15	104	1.31	149	18	-1	13	1.64	169	77	11.40	0.03	0.37	0.04	455	-5	18	-10	89	2.01	182	-10	35	22
RR-96 272-06	0.9	-0.5	442	2540	3	91	16	90	0.73	247	15	-1	10	0.86	226	83	12.00	0.02	0.23	0.02	360	-5	10	-10	42	1.49	165	-10	21	14
RR-96 272-07	0.8	0.7	594	3020	3	86	12	90	0.75	169	17	-1	13	1.01	194	85	11.10	0.02	0.25	0.02	447	-5	10	-10	49	1.45	162	-10	23	16
RR-96 272-08	0.9	0.9	575	2530	3	95	8	104	0.82	229	16	-1	14	1.10	201	91	10.90	0.02	0.22	0.03	437	-5	11	-10	67	1.86	157	-10	27	20
RR-96 272-09	0.6	0.7	310	2730	2	59	-2	67	0.88	83	16	-1	28	1.24	135	71	9.12	0.02	0.27	0.03	365	-5	10	-10	67	1.89	139	-10	25	13
RR-96 272-10	1.4	-0.5	298	2240	2	57	-2	60	0.88	79	15	-1	40	1.31	112	57	8.38	0.02	0.25	0.03	355	-5	10	-10	75	1.86	122	-10	27	14
RR-96 272-11	0.6	-0.5	221	3020	2	57	5	52	1.28	104	16	-1	33	1.76	99	67	8.75	0.02	0.30	0.04	367	-5	15	-10	116	1.97	145	-10	34	17
RR-96 272-12	0.7	-0.5	131	2440	2	57	-2	42	1.01	129	15	-1	28	1.28	138	65	9.29	0.02	0.24	0.03	498	-5	14	-10	80	1.80	130	-10	31	20
RR-96 272-13	0.5	-0.5	135	3060	3	58	-2	60	1.43	108	18	-1	29	1.85	95	73	8.80	0.02	0.34	0.04	435	-5	17	-10	114	1.94	148	-10	38	17
RR-96 272-14	0.6	0.6	271	2280	5	74	-2	51	0.70	138	16	-1	29	0.97	128	60	9.07	0.02	0.24	0.02	400	-5	9	-10	47	1.61	113	-10	20	13
RR-96 272-15	0.7	-0.5	218	2470	4	54	-2	44	0.79	128	15	-1	26	1.16	105	71	8.76	0.02	0.23	0.02	527	-5	10	-10	68	1.63	127	-10	26	17
RR-96 272-16	0.8	0.6	272	18400	2	42	64	96	0.87	49	41	1	-10	1.68	82	38	10.50	0.05	0.52	0.03	518	-5	16	-10	74	0.92	95	-10	53	13
RR-96 272-17	1.7	-0.5	911	8960	2	69	49	135	0.86	169	24	-1	-10	1.46	177	54	10.70	0.03	0.34	0.03	823	-5	15	-10	79	1.25	108	-10	35	16
RR-96 272-18	5.9	0.8	583	12300	2	60	59	122	0.86	104	31	-1	-10	1.46	116	55	10.90	0.04	0.40	0.03	612	-5	16	-10	74	1.09	111	-10	38	13
RR-96 273-01	3.3	-0.5	3260	6180	3	124	37	174	0.62	216	10	-1	-10	0.86	368	42	14.40	0.02	0.28	0.02	509	-5	11	-10	37	0.67	122	-10	18	11
RR-96 273-02	0.7	-0.5	846	2800	13	76	11	58	0.75	173	16	-1	-10	0.92	137	44	11.60	0.03	0.32	0.03	515	-5	9	-10	40	1.26	107	-10	20	10
RR-96 273-03	1.2	0.6	1100	3950	3	106	26	67	0.76	198	14	-1	-10	0.95	241	55	12.20	0.02	0.27	0.02	536	-5	12	-10	45	1.02	118	-10	27	15
RR-96 273-04	1.1	1.1	825	3790	3	103	23	95	0.69	235	17	-1	-10	0.85	243	65	12.30	0.02	0.25	0.02	461	-5	11	-10	40	0.79	144	-10	25	12
RR-96 273-05	1.0	0.6	640	7640	4	76	23	94	0.69	99	24	-1	-10	1.16	150	47	10.30	0.03	0.33	0.02	601	-5	13	-10	53	0.83	108	-10	31	11
RR-96 273-06	3.5	2.2	620	12800	3	70	48	85	1.01	89	38	1	19	1.91	112	48	10.00	0.04	0.39	0.03	1110	-5	20	-10	113	1.41	111	-10	64	20
RR-96 274-01	2.5	2.3	1650	3460	2	108	154	139	0.50	153	14	-1	-10	1.00	271	46	12.10	0.02	0.23	0.02	1060	-5	8	-10	51	0.58	101	-10	15	11
RR-96 274-02	1.5	0.8	1070	5870	3	110	38	227	0.58	184	11	-1	-10	0.96	312	52	14.00	0.02	0.25	0.02	531	-5	9	-10	47	0.68	128	-10	15	11
RR-96 274-03	1.4	0.6	926	5210	3	104	35	224	0.52	201	16	-1	-10	0.86	247	90	13.70	0.02	0.24	0.02	720	-5	9	-10	44	0.52	172	-10	16	11
RR-96 275-01	1.3	0.8	1060	4240	2	87	12	69	0.90	77	27	-1	11	1.70	231	49	10.40	0.02	0.30	0.03	935	-5	12	-10	102	1.34	128	-10	27	14
RR-96 276-01	1.0	0.6	486	2110	2	64	3	116	1.27	127	17	-1	19	1.93	182	69	9.94	0.02	0.26	0.04	751	-5	16	-10	137	1.75	139	-10	41	21
RR-96 276-02	0.9	-0.5	427	1960	2	64	3	95	0.93	129	13	-1	18	1.46	180	64	9.81	0.02	0.23	0.03	734	-5	12	-10	94	1.45	137	-10	31	16
RR-96 276-03	1.1	-0.5	411	2360	2	82	-2	158	0.86	200	13	-1	27	1.27	291	43	11.10	0.02	0.25	0.02	456	-5	11	-10	68	1.59	103	-10	29	13
RR-96 276-04	1.3	0.6	1300	1960	2	78	-2	102	0.73	148	13	-1	-10	1.16	279	50	10.60	0.02	0.22	0.03	441	-5	9	-10	62	1.56	119	-10	24	11
RR-96 276-05	2.2	1.1	350	1920	2	80	21	269	0.83	209	15	-1	-10	1.36	181	66	11.30	0.02	0.22	0.03	950	-5	10	-10	97	1.13	112	-10	26	13
RR-96 276-06	2.0	2.1	354	2280	3	88	25	379	0.82	185	17	-1	-10	1.39	172	61	11.60	0.02	0.23	0.03	1340	-5	9	-10	108	0.87	94	-10	26	14
RR-96 276-07	4.2	2.6	597	1750	2	98	52	432	0.52	230	10	-1	-10	0.85	242	35	13.30	0.02	0.18	0.02	601	-5	6	-10	53	0.51	79	-10	14	9
RR-96 276-08	4.0	2.5	586	1770	2	115	78	465	0.52	320	7	-1	-10	0.77	298	42	13.80	0.02	0.18	0.03	534	-5	6	-10	50	0.73	84	-10	11	10

Negative values indicate less than the detection limit
99999 indicates greater than 10%, the working range of the instrument

Activation Laboratories Ltd. Work Order No. 10298 Report No. 10214B

SAMPLE	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	Ba	Be	Bi	Ca	Co	Cr	Fe	K	Mg	Na	P	Sb	Sc	Sn	Sr	Ti	V	W	Y	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RR-96 277-01	0.6	-0.5	269	2540	2	48	-2	56	1.17	82	14	-1	26	1.74	98	63	8.28	0.02	0.27	0.04	794	-5	15	-10	117	1.57	124	-10	38	17
RR-96 277-02	0.5	0.6	244	1260	2	47	6	49	0.85	84	13	-1	-10	1.35	108	66	8.08	0.02	0.21	0.03	1100	-5	11	-10	92	0.71	113	-10	28	14
RR-96 277-03	0.5	1.3	336	1130	2	50	9	62	0.81	49	13	-1	-10	1.27	111	90	9.30	0.02	0.19	0.03	915	-5	10	-10	88	0.80	153	-10	27	16
RR-96 277-04	1.0	-0.5	397	2310	2	50	-2	61	1.03	73	15	-1	18	1.59	105	47	7.83	0.03	0.32	0.04	697	-5	11	-10	89	1.19	99	-10	32	10
RR-96 277-05	0.6	0.8	357	2920	2	53	-2	66	0.89	181	22	-1	17	1.41	109	56	8.25	0.02	0.24	0.03	1010	-5	12	-10	90	1.33	107	-10	31	14
RR-96 277-06	0.6	-0.5	455	2840	5	64	9	55	0.96	86	33	-1	14	1.45	103	61	8.53	0.02	0.25	0.04	916	-5	12	-10	96	1.17	112	-10	31	14
RR-96 278-01	1.0	-0.5	266	1250	-2	63	-2	61	1.02	62	17	-1	21	1.61	98	51	7.39	0.04	0.32	0.04	956	-5	12	-10	97	1.16	97	-10	28	10

Negative values indicate less than the detection limit
99999 indicates greater than 10%, the working range of the instrument

Activation Laboratories Ltd. Work Order: 10214 Report: 10101

Sample description	AU PPB	AS PPM	Mass g
247-04	160	79	51.00
248-01	61	41	64.00
248-02	58	54	66.00
248-03	118	180	25.00
249-01	242	92	36.00
249-02	496	160	39.00
250-01	41	34	60.00
250-02	57	45	47.00
250-03	200	51	54.00
251-01	449	100	21.00
251-02	120	57	57.00
251-03	217	63	42.00
251-04	18	77	6.000
253-01	302	73	11.00
254-01	259	160	35.00
255-01	210	65	63.00
255-02	122	90	28.00
255-03	26	90	57.00
256-01	171	140	26.00
256-02	29	84	3.000
257-01	124	53	50.00
257-02	205	150	19.00
257-03	594	200	10.00
257-04	292	100	29.00
258-01	207	73	37.00
260-01	680	55	9.000
261-01	162	68	58.00
261-02	650	110	40.00
261-03	267	120	54.00
261-04	400	110	57.00
261-05	105	130	59.00
262-01	302	120	35.00
262-02	197	150	29.00
262-03	252	110	31.00
262-04	156	110	24.00
262-05	196	100	41.00
262-06	111	92	40.00
262-07	20	50	14.00
263-01	97	120	37.00
264-01	84	130	42.00
264-02	91	71	61.00
264-03	20	85	51.00
265-01	81	82	15.00
265-02	42	120	28.00
265-03	23	99	6.000

Activation Laboratories Ltd.   Work Order: 10214   Report: 10101

Sample description	AU PPB	AS PPM	Mass g
265-04	100	94	15.00
265-05	6	39	15.00
266-01	155	140	15.00
266-02	549	100	36.00
266-03	373	140	18.00
266-04	1400	140	7.000
267-01	449	150	70.00
267-02	675	210	35.00
267-03	674	200	60.00
267-04	494	190	51.00
267-05	112	53	18.00
267-06	650	150	3.500
268-01	341	120	31.00
268-02	2890	150	32.00
268-03	1970	360	52.00
268-04	1230	300	65.00
269-01	638	110	44.00
269-02	325	140	55.00
269-03	738	300	38.00
269-04	253	110	58.00
269-05	776	340	56.00

SAMPLE	Ag	Cd	Cu	Mn	Ni	Pb	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-247.04	0.4	1.4	308	763	69	12	56
RR-96-248-01	0.4	2.0	436	1220	78	12	214
RR-96-248-02	0.5	4.3	653	2710	97	17	246
RR-96-248-03	2.1	6.8	1560	11200	320	49	203
RR-96-249-01	0.7	1.7	809	1210	100	15	72
RR-96-249-02	0.5	2.4	569	1020	118	34	81
RR-96-250-01	0.4	1.6	374	1650	57	15	66
RR-96-250-02	0.5	2.2	474	1280	61	8	58
RR-96-250-03	0.5	2.2	400	1160	60	10	53
RR-96-251-01	1.0	1.6	1300	11600	84	34	103
RR-96-251-02	0.8	1.9	1030	4640	71	19	80
RR-96-251-03	8.5	1.8	881	4790	72	43	74
RR-96-251-04	0.6	8.2	908	2610	53	38	61
RR-96-253-01	1.8	2.4	417	1600	60	23	131
RR-96-254-01	0.9	2.9	2940	5210	98	23	141
RR-96-255-01	1.0	2.1	1040	4940	75	18	132
RR-96-255-02	1.0	2.0	1110	2780	94	16	73
RR-96-255-03	0.4	2.0	1820	780	61	-2	27
RR-96-256-01	1.4	3.5	4360	3090	120	46	148
RR-96-256-02	25.0	2.5	4630	1250	72	24	100
RR-96-257-01	0.5	2.0	622	1770	74	14	53
RR-96-257-02	1.6	1.7	928	2630	111	13	68
RR-96-257-03	1.6	2.2	879	2570	186	11	70
RR-96-257-04	1.3	1.9	829	1010	165	12	138
RR-96-258-01	0.5	1.5	673	889	104	7	74
RR-96-260-01	0.6	1.4	765	1240	48	54	107
RR-96-261-01	0.5	1.6	343	1560	64	16	55
RR-96-261-02	0.9	2.1	343	1160	76	20	66
RR-96-261-03	1.1	1.4	630	1340	77	15	55
RR-96-261-04	0.6	2.1	872	1310	75	16	58
RR-96-261-05	0.9	2.5	2460	1860	99	17	61
RR-96-262-01	1.2	2.5	2640	10700	87	39	120
RR-96-262-02	1.2	3.0	3350	9320	102	31	187
RR-96-262-03	1.2	1.9	4310	10800	93	45	115
RR-96-262-04	1.5	1.7	3150	6610	83	29	178
RR-96-262-05	13.5	7.4	5630	12500	83	46	125
RR-96-262-06	2.2	4.1	6920	12300	83	33	113
RR-96-262-07	1.6	2.4	6120	17800	58	37	107
RR-96-263-01	1.0	1.7	2650	6300	70	17	91
RR-96-264-01	1.5	2.4	6740	10800	96	34	131
RR-96-264-02	3.6	4.6	3630	8150	90	54	101
RR-96-264-03	6.1	49.5	4520	8660	92	47	155
RR-96-265-01	1.5	3.2	5400	7810	89	46	123
RR-96-265-02	0.9	8.2	4340	5610	116	15	82
RR-96-265-03	1.6	3.3	5990	8590	154	43	119

Negative values indicate less than the detection limit

SAMPLE	Ag	Cd	Cu	Mn	Ni	Pb	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96-265-04	1.6	3.1	8020	9580	93	35	125
RR-96-265-05	6.1	6.9	2930	35100	56	37	105
RR-96-266-01	6.3	2.6	4170	8360	113	39	140
RR-96-266-02	1.3	4.2	4110	7500	120	32	123
RR-96-266-03	4.2	2.9	6250	8160	101	44	172
RR-96-266-04	1.6	3.0	5000	11700	88	48	115
RR-96-267-01	2.0	3.9	810	5490	89	42	246
RR-96-267-02	7.4	5.3	2480	8850	104	46	331
RR-96-267-03	3.2	5.4	1390	9610	111	56	300
RR-96-267-04	3.3	4.1	889	4790	86	37	190
RR-96-267-05	0.5	2.5	222	1140	49	25	52
RR-96-267-06	0.9	7.6	1310	3550	51	29	75
RR-96-268-01	1.0	2.9	1000	5850	88	67	125
RR-96-268-02	2.2	3.7	1730	7000	96	42	190
RR-96-268-03	4.2	4.5	2000	3920	115	43	292
RR-96-268-04	4.5	3.9	1310	4880	124	45	346
RR-96-269-01	1.7	3.3	1040	6150	97	28	201
RR-96-269-02	1.4	3.3	1070	5430	97	33	261
RR-96-269-03	3.1	5.7	785	4340	99	40	286
RR-96-269-04	3.0	4.9	632	6710	88	40	517
RR-96-269-05	5.7	4.1	1770	5630	124	55	312

Negative values indicate less than the detection limit

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10342
Work Order: 10454
Invoice Date: 03-MAY-96
Date Submitted: 22-APR-96
Your Reference: RR-96
Account Number: 1553

OVERBURDEN DRILLING MNGT LTD
107 - 15 CAPELLA COURT
NEPEAN, ON
K2E 7X1

ATTN: STU AVERILL

CERTIFICATE OF ANALYSIS

AU, AS - INAA
10342B - AQUA REGIA - ICP

CERTIFIED BY :

Sylvia Alvares
per DR. ERIC L. HOFFMAN

1336 SANDHILL DRIVE, ANCASTER, ONTARIO, CANADA L9G 4V5 • TEL: 905-648-9611 • FAX: 905-648-9613

Activation Laboratories Ltd. Work Order: 10454 Report: 10342

Sample description	AU PPB	AS PPM	Mass g
RR-96 278-02	977	190	33.00
RR-96 279-01	476	210	37.00
RR-96 279-02	716	490	25.00
RR-96 279-03	469	170	33.00
RR-96 279-04	54	110	11.00
RR-96 279-05	1740	65	15.00
RR-96 280-01	625	150	46.00
RR-96 280-02	451	160	55.00
RR-96 280-03	277	110	56.00
RR-96 280-04	340	100	54.00
RR-96 281-01	613	130	57.00
RR-96 281-02	136	43	55.00
RR-96 281-03	868	95	56.00
RR-96 281-04	1070	170	54.00
RR-96 282-01	1190	200	35.00
RR-96 282-02	947	210	60.00
RR-96 282-03	994	170	36.00
RR-96 283-01	702	280	61.00
RR-96 283-02	1790	350	63.00
RR-96 283-03	1240	330	60.00
RR-96 283-04	1050	240	58.00
RR-96 284-01	537	180	19.00
RR-96 285-01	527	110	38.00
RR-96 285-02	315	96	58.00
RR-96 285-03	397	110	57.00
RR-96 285-04	185	130	37.00
RR-96 285-05	344	100	47.00
RR-96 286-01	342	270	17.00
RR-96 286-02	439	220	23.00
RR-96 286-03	4080	250	37.00
RR-96 286-04	1880	280	16.00
RR-96 287-01	127	280	18.00
RR-96 287-02	297	250	42.00
RR-96 287-03	106	180	41.00
RR-96 288-01	221	210	38.00
RR-96 288-02	142	220	21.00
RR-96 288-03	424	200	31.00
RR-96 289-01	202	220	28.00
RR-96 289-02	594	200	29.00
RR-96 290-01	132	180	21.00
RR-96 291-01	142	220	32.00
RR-96 292-01	224	240	26.00
RR-96 292-02	489	210	27.00
RR-96 292-03	190	170	28.00
RR-96 293-01	196	220	13.00

Activation Laboratories Ltd. Work Order: 10454 Report: 10342

Sample description	AU PPB	AS PPM	Mass g
RR-96 294-01	233	230	32.00
RR-96 294-02	195	350	28.00
RR-96 294-03	86	340	29.00
RR-96 294-04	252	330	32.00
RR-96 294A-01	57	330	17.00
RR-96 294A-02	108	21	16.00

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96 278-02	7.8	478	95	97	0.9	1770	101
RR-96 279-01	0.4	535	71	94	1.4	2930	20
RR-96 279-02	0.9	849	131	86	1.9	2260	24
RR-96 279-03	0.4	279	54	58	1.0	1570	12
RR-96 279-04	0.2	504	58	53	1.6	1850	17
RR-96 279-05	2.7	457	37	43	0.5	1400	21
RR-96 280-01	3.6	669	73	163	3.1	2860	32
RR-96 280-02	2.1	800	74	207	2.6	5230	24
RR-96 280-03	1.9	550	55	148	1.7	4590	19
RR-96 280-04	5.5	679	49	180	2.7	5520	18
RR-96 281-01	1.5	435	67	239	2.5	1990	20
RR-96 281-02	0.3	277	52	87	1.4	988	26
RR-96 281-03	1.6	405	61	222	2.9	1510	21
RR-96 281-04	2.3	534	74	281	3.1	2600	25
RR-96 282-01	3.4	492	86	176	2.9	1370	21
RR-96 282-02	3.0	401	92	143	1.0	1260	25
RR-96 282-03	2.5	706	94	195	1.3	2180	28
RR-96 283-01	6.2	865	113	948	10.3	3030	36
RR-96 283-02	9.8	1010	98	1170	19.6	2920	47
RR-96 283-03	7.5	805	109	1020	10.5	2390	44
RR-96 283-04	4.2	587	73	575	5.1	2130	26
RR-96 284-01	2.7	635	105	146	2.2	1550	27
RR-96 285-01	1.5	429	75	103	1.5	1490	17
RR-96 285-02	0.7	451	75	96	2.0	1500	14
RR-96 285-03	0.8	657	77	89	7.5	1920	8
RR-96 285-04	-0.2	689	63	105	1.7	3120	15
RR-96 285-05	0.6	599	71	95	1.5	2410	11
RR-96 286-01	1.1	816	130	115	3.2	2130	20
RR-96 286-02	2.1	1430	127	138	2.5	1730	26
RR-96 286-03	1.1	690	107	136	1.8	2560	17
RR-96 286-04	1.5	890	110	123	2.2	1710	21
RR-96 287-01	0.6	470	138	94	0.8	2050	32
RR-96 287-02	-0.2	267	114	71	1.3	1340	26
RR-96 287-03	0.3	234	86	50	1.5	1370	24
RR-96 288-01	1.0	419	147	79	1.8	1140	30
RR-96 288-02	0.8	337	119	69	1.7	2150	26
RR-96 288-03	0.5	292	98	64	1.0	1870	26
RR-96 289-01	1.0	478	141	104	2.2	1700	37
RR-96 289-02	0.6	324	128	85	1.8	1100	33
RR-96 290-01	0.8	438	130	198	1.4	1930	84
RR-96 291-01	0.9	437	145	212	2.0	2320	93
RR-96 292-01	0.8	542	128	103	2.6	1720	28
RR-96 292-02	0.5	332	135	65	0.9	1350	25
RR-96 292-03	0.5	420	123	75	1.0	2310	30
RR-96 293-01	0.9	409	184	72	1.8	1600	33

Negative values indicate less than the detection limit

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR-96 294-01	0.7	438	121	69	1.1	1290	21
RR-96 294-02	0.7	385	122	76	2.2	1100	26
RR-96 294-03	1.0	523	119	109	3.4	1750	34
RR-96 294-04	0.6	378	126	72	3.7	1110	25
RR-96 294A-01	1.2	281	192	85	2.5	1400	31
RR-96 294A-02	2.0	76.3	110	51	1.4	2980	28

Negative values indicate less than the detection limit

ACTLABS

ACTIVATION LABORATORIES LTD

Invoice No.: 10657
Work Order: 10775
Invoice Date: 25-JUN-96
Date Submitted: 06-JUN-96
Your Reference: RR-96
Account Number: 1553

OVERBURDEN DRILLING MNGT. LTD.
107 - 15 CAPELLA COURT
NEPEAN, ON
K2E 7X1

ATTN: STU AVERILL

CERTIFICATE OF ANALYSIS

AU, AS - INAA
10657B - AQUA REGIA - ICP

CERTIFIED BY :

per Judy Young
DR. ERIC L. HOFFMAN

Activation Laboratories Ltd. Work Order: 10775 Report: 10657

Sample description	AU PPB	AS PPM	Mass g
RR-96 294A-03	23	5	28.00
RR-96 294A-04	217	35	17.00
RR-96 294A-05	83	160	14.00
RR-96 295-01	77	160	53.00
RR-96 295-02	66	140	57.00
RR-96 296-01	46	84	56.00
RR-96 296-02	56	67	55.00
RR-96 296-03	49	67	47.00
RR-96 297-01	56	160	34.00
RR-96 297-02	670	270	21.00
RR-96 298-01	546	110	42.00
RR-96 298-02	236	81	35.00
RR-96 298-03	369	110	21.00
RR-96 299-01	371	170	35.00
RR-96 299-02	450	140	52.00
RR-96 299-03	1120	180	56.00
RR-96 299-04	459	200	60.00
RR-96 300-01	612	220	55.00
RR-96 301-01	765	160	45.00
RR-96 301-02	309	130	56.00
RR-96 301-03	407	180	44.00
RR-96 301-04	1460	370	26.00
RR-96 301-05	784	250	42.00
RR-96 304-01	94	22	20.00
RR-96 304-02	12	8	12.00
RR-96 305-01	230	16	12.00
RR-96 305-02	15	43	3.000
RR-96 305-03	7	11	28.00
RR-96 305-04	74	5	44.00
RR-96 305-05	25	<2	48.00
RR-96 305-06	7	<2	30.00
RR-96 305-07	358	11	43.00
RR-96 305-08	67	16	35.00
RR-96 305-09	52	15	28.00
RR-96 306-01	55	<2	30.00
RR-96 306-02	75	2	47.00
RR-96 306-03	58	6	17.00
RR-96 307-01A	69	<2	15.00
RR-96 307-01B	16	<2	11.00
RR-96 307A-01	35	13	55.00
RR-96 308-01	146	11	37.00
RR-96 310-01	590	14	28.00
RR-96 311-01	81	31	40.00
RR-96 311-02	62	4	50.00
RR-96 311-03	<5	4	37.00

Activation Laboratories Ltd. Work Order: 10775 Report: 10657

Sample description	AU PPB	AS PPM	Mass g
RR-96 312A-01	425	45	17.00
RR-96 312A-02	76	37	17.00
RR-96 313-01	63	22	30.00
RR-96 313-02	39	15	25.00
RR-96 313-03	6	28	4.000
RR-96 313-04	9	34	14.00
RR-96 315-01	26	13	57.00
RR-96 315-02	195	24	50.00
RR-96 315-03	34	18	40.00
RR-96 316-01	30	18	55.00
RR-96 316-02	58	29	25.00
RR-96 317-01	73	18	56.00
RR-96 318-01	81	26	55.00
RR-96 318-02	<5	99	60.00
RR-96 319-01	27	18	54.00
RR-96 319-02	7	13	55.00
RR-96 319-03	74	19	51.00
RR-96 320-01	86	28	50.00
RR-96 320-02	65	28	45.00
RR-96 320-03	105	29	40.00
RR-96 320-04	234	41	50.00
RR-96 320-05	205	30	47.00
RR-96 320-06	204	33	57.00
RR-96 320-07	462	75	47.00
RR-96 320-08	182	77	63.00
RR-96 320-09	319	60	56.00

SAMPLE	Ag	Cu	Ni	Zn	Cd	Mn	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
294A-03	-0.2	26	21	21	0.8	1040	10
294A-04	0.2	107	94	49	0.8	3340	23
294A-05	0.3	415	408	63	-0.7	6282	52
295-01	0.2	265	121	86	-0.5	2310	25
295-02	0.4	195	95	107	-0.5	2710	27
296-01	-0.2	214	60	52	-0.5	650	15
296-02	-0.2	196	57	49	-0.5	460	19
296-03	-0.2	246	54	55	1.5	628	19
297-01	0.2	253	113	216	-0.5	3200	36
297-02	0.6	464	150	177	-0.5	2960	49
298-01	0.4	1270	91	157	-0.5	3960	42
298-02	0.4	6430	84	87	-0.5	3820	37
298-03	1.4	3370	86	87	-0.5	4090	53
299-01	1.5	2430	113	193	-0.5	6930	58
299-02	1.4	2510	93	218	-0.5	7040	54
299-03	1.3	3800	97	177	-0.5	4080	49
299-04	2.1	904	135	275	-0.5	3060	44
300-01	3.9	884	111	626	-0.5	5730	70
301-01	1.9	2190	108	238	-0.5	4020	56
301-02	0.9	576	84	289	-0.5	4230	39
301-03	0.7	1120	125	292	-0.5	5300	67
301-04	2.7	987	117	371	-0.5	3750	63
301-05	11.1	1890	116	244	-0.5	4920	67
304-01	1.1	670	84	38	-0.5	1520	23
304-02	0.3	294	70	30	-0.5	1030	24
305-01	-0.2	181	67	35	-0.5	1790	25
305-02	0.2	1040	114	57	-0.5	1770	29
305-03	1.1	199	51	29	0.7	1140	16
305-04	-0.2	43	25	20	-0.5	713	13
305-05	-0.2	35	26	16	-0.5	655	15
305-06	-0.2	26	25	20	-0.5	584	13
305-07	-0.2	108	43	19	-0.5	911	11
305-08	0.2	197	61	26	1.4	1030	18
305-09	0.5	7520	44	56	-0.5	1120	24
306-01	1.2	159	28	17	0.7	610	12
306-02	0.2	172	24	12	0.5	443	11
306-03	-0.2	105	32	19	-0.5	487	19
307-01A	-0.2	28	14	15	0.6	937	18
307-01B	-0.2	41	14	17	0.7	847	15
307A-01	2.1	716	90	34	-0.5	2830	13
308-01	-0.2	1060	90	37	-0.5	1750	7
310-01	0.2	542	163	87	-0.5	1100	31
311-01	0.2	401	96	64	-0.5	1240	40
311-02	0.5	144	45	26	0.5	624	12
311-03	0.4	44	21	16	-0.5	746	11

Negative values indicate less than the detection limit

APPENDIX V

BINOCULAR LOGS - BEDROCK CHIP SAMPLES

APPENDIX V

BINOCULAR LOGS - BEDROCK CHIP SAMPLES

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996

Nuinsco

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-96 212-02	pale green	poorly foliated; 1% calcite veinlets	0.1	equigranular, interlocking	plag - 45 % chlorite - 40%	12% calcite - pervasive	0.05% very fine disseminated pyrite; possibly a trace of chalcopyrite	—	Basalt
213-02	pale grey green (bleached) - local faint red hematite stain	moderately well foliated; 2 % calcite ± qz stringers, some with a trace of tourmaline	variable 0.1 - 0.5 (chip to chip variation)	equigranular, interlocking	plag. - 45 pyx. - 30-35% chlorite - 15%	10-12% calcite - in stringers & disseminated	NIL	0.1% tourmaline with calcite stringers	Basalt
214-03	pale green; beige local oxidation	competent chips are massive and variably weathered	0.2-0.4	equigranular, interlocking	plag - 60% partly chloritized pyroxene (medium green) - 40%	—	Nil	—	Basalt
215-05	Abundant Rock Flour (grey-beige) "Competent" chips are small, oxidized and highly clay altered - original mineralogy destroyed. A few grains of limonite/goethite (encrustation) have survived. Protolith assumed to be basalt. Traces of siderite Majority of Sample Ground to brown (oxidized) clay/rock Flour							completely	Saprolite
216-02	pale grey green; bleached (clay altered)	well foliated with a few schistose/weakly sheared rock chips	0.1-0.2	equigranular; interlocking; variably hard to soft (clay altered)	50:50 plag versus pale green pyroxene (partly chloritized)	1% calcite - disseminated (not present in all chips)	Nil	—	Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-96 231-03	bleached pale - white with hint of reddish hematite stain.	Quenched. Only weakly foliated but extensively fractured and crushed by strong shearing (phenocryst - destructive)	Quartz Phenos: 0.5-2.0mm G.mass: <0.1mm	weakly porphyritic 1% clear quartz phenocrysts in a hard fine quartzo-feldspathic groundmass; most phenocrysts diffuse due to shear crushing	phenos 5-7% qtz G.mass: quartzo-feldspathic with 10-15% sericite	Nil	0.5% pyrite as finely disseminated and smeared along fractures (epigenetic)	Tr. finely disseminated magnetite.	Rhyolite.
232-04	pale grey green	poorly foliated, weakly sheared (alignment of mafics, minor slip planes)	Qtz Phenos: 0.5-1.0mm Plag phenos ≤3mm groundmass 0.05-0.2	porphyritic; fine, inequigranular quartzo-feldspathic groundmass with ~10% anhedral quartz phenocrysts (dominantly blue)	quartzo feldspathic groundmass 3% plag phenos 3-5% qz phenos chlorite - 8-10% (after biotite) -- possible trace of chloritized hornblende	0.5% calcite coating fractures	Trace finely disseminated pyrite	0.1% fine patchy beige leucoxene rutile	INTERMED. VOLC. (ANDESITE)
233-05	white to grey green to brown (weathered)	schistose; moderately strong ductile shearing. Parts ground to white to green saprolitic clay		sample ranges from white qzo-feldspathic sericite schist to grey green, more chloritic and less sheared material with rare quartz phenocrysts (2%) and common pyrite	quartzo-Feldspathic - 15% sericite - 10% chlorite	Nil	8% pyrite -- dominantly in more chloritic parts of sample as semi-massive concentrations	No Fe/Ti oxides	Sericite to chlorite schist (probably dacite)
234-		See Separate Sheet							
235-04	off-white	moderately foliated to sub schistose; may be moderately sheared (brittle?) but difficult to determine; some siderite ± qz veining. Majority of sample ground to grey-blue saprolitic clay -- description of competent chips only	groundmass 0.05(?) phenocrysts 1-4mm (Mesozoic)	surviving chips are hard, quartzo feldspathic and fine grained with <10% anhedral, clear quartz phenocrysts and possibly a few indistinct feldspar phenocrysts	quartzo-feldspathic groundmass; <10% qz. phenos; 20-25% sericite, typically along foliation planes; 2% grey green chlorite	no alteration carbonate - rods but beige siderite + qz is present, resulting from saprolite development	Nil	No Fe/Ti oxides	Saprolite + Rhyolite

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
241-03	Mottled pink-white & green-black (weak hematite stain)	massive unsheared	0.5-5.0mm	hypidiomorphic inequigranular	plag: 45-50% qtz: 20% hb: 20% (locally chloritized) biot: 1-2% epidote ? %	1% disseminated calcite	Nil	0.5-1% beige leucoxene (after sphene)	Tonalite
242-02	Mottled pink-white & green-black (weak hematite stain)	massive unsheared	1.0-6.0mm	hypidiomorphic inequigranular	plag: 45-50% qtz: 15-20% hb: 25% (locally chloritized) biot: 2-3% epidote: 5 %	Tr. disseminated calcite	Nil	Tr. beige leucoxene (after sphene)	Tonalite.
243-02	dark green to black	poor to moderate foliation 10% leucocratic chips may be relict pillow selvages 3-5% quartz + calcite veinlets	0.05-0.1 plag pheno 0.3-0.6mm	weakly plag phyric recrystallized amphibolite facies metamorphism (sugary plag. & hornblende)	plag: 30% hornblende: 65-70% (partly chloritized)	Tr. calcite as dissemination 3% in veinlets	0.2% disseminated & stringer pyrite	2-3% disseminated magnetite	Basalt (amphibolite.)
243-03	dark green to black	poor to moderately well foliated 1-2% calcite + quartz veinlets Few slip planes	.05-0.15mm plag phenos 0.3-0.6mm	weakly plag phyric recrystallized amphibolite facies metamorphism (sugary plag & hornblende)	plag: 30% hb: 50% chl: 15%	Tr. disseminated calcite & in veinlets	0.3% disseminated and smeared along fracture plane Tr. disseminated pyrrhotite	2-3% disseminated magnetite	Basalt (amphibolite)
244-04	dark green	unquenched well foliated locally schistose. 1-2% quartz + calcite veinlets Few slip planes (hematized)	0.1-0.2mm	foliation overprinting equigranular interlocking texture.	plag: 40% hb: 20% Chl.: 30-35%	2% calcite along fracture planes and in veinlets.	Tr. cubic pyrite along fracture planes.	.2% disseminated ilmenite (non magnetic).	Basalt (amphibolite?)

Numsco

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-95 248-04	medium green	schistose; unsheared, but there appears to be transposition of mineral grains into foliation planes	0.1	equigranular; interlocking; rock is soft and chlorite-mica altered; may be slightly micro-porphyritic with respect to plag.	plag (micaceous) – 65% chlorite – 35%	Nil	Tr. coarse pyrite cubes	No Fe/Ti oxides	Basalt (similar to 247-05)
	Much of Sample Ground to pale blue-green non-calcareous clay								
248-05		Similar to 248-04, but moderately sheared with ~ 10% chloritic shear planes; 0.5% pyrite cubes							Basalt
248-06		Similar to 248-05, but with 5-10% clear to cloudy vein quartz + plag (albite?); minor sericite or fine muscovite in sheared chips and marginal to veins; 0.5-1% pyrite cubes to 2 mm							Basalt
249-03	grey green	moderately well foliated; 2-4% quartz-calcite veinlets	groundmass 0.05-0.1mm phenocrysts 0.5-1.2 mm	quenched; porphyritic with < 5% cloudy indistinct plag. phenos; coarse hornblende (chloritized) also appears to form euhedral local phenocrysts (2-4%)	feldspathic groundmass (may in part be metamorphically recrystallized?); 5% plag phenos; 2-4% hornblende phenos; 15-20% chlorite (± biotite)	2% calcite in veinlets; 2% calcite as disseminations	0.05% pyrite - finely disseminated; local pyrite cubes to 1mm in veinlets	No Fe/Ti oxides	Andesite (amphibolitized ?)
250-04	medium green	well foliated - very weakly sheared -- minor slip planes	0.1-0.4	inequigranular, interlocking; groundmass typically 0.1mm but microporphyritic with respect to plag (to 0.4mm)	15-20% plag-micro-phenocrysts; <1% quartz micro-phenocrysts; groundmass 60:40 plag : chloritized pyroxene	2% calcite - disseminated	faint trace finely disseminated pyrite	0.1% ilmenite disseminated; trace leucoxene	Andesite (micro-porphyritic)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-95 251-05	grey-green (minor red weathering)	moderately foliated; unsheared; weakly defined lineation of mafic minerals; 2% veinlet qz unquenched	0.05-0.3 phenos. to ~1mm	inequigranular, interlocking; weakly micro-porphyritic with subhedral plag to 1mm (5%) and patchy anhedral chloritized mafic minerals to 0.7mm; weak epidote alteration	plag - 50-60% chlorite - 25-30% chloritized pyx - 5-10% (incipient metamorphic recrystallization)	Nil	Nil	0.1% red, earthy hematite pseudomorphs of pyrite	Basalt (similar to 250-04)
252-01	medium green (to pale green - bleached)	well foliated and lineated (effects of weak shearing); unquenched; 1-2% calcite + qz stringers along fractures	~0.1; mafic (chlorite) clots to 0.8mm (5% of sample)	inequigranular, interlocking; dark green anhedral chlorite suggestive of original pyroxene phenocrysts; partially saussuritized	plag - 60 (epidote altered) chlorite - 15-20% partly chloritized pyroxene - 15-20%	2% calcite, in stringers, and as disseminations	very faint trace finely disseminated pyrite	No Fe/Ti oxides	Basalt
253-02	pale grey green	well foliated and lineated (effects of weak (-moderate?) shearing; may possess a few calcite/qz filled amygdales Similar to 252-01	groundmass 0.1-0.15mm phenos 0.5-1.0mm (locally to 2mm)	inequigranular, interlocking groundmass with ~5% chloritized subhedral pyroxene phenocrysts; partially saussuritized	plag - 50-55% (epidote altered) chlorite - 15-20 partly chloritized pyroxene - 15-20	7% disseminated calcite	very faint trace disseminated pyrite	<0.5% very fine beige leucoxene	Basalt
254-02	Much of sample ground to green, non-calcareous saprolitic clay - minor rock chips similar to 254-03								Saprolite + Basalt
254-03	green	poorly foliated; unsheared; unquenched -local clay/mica alteration; drill logs indicates barren white qz vein <0.1m thick	0.1-0.3	equigranular and interlocking; fairly coarse grain size with cloudy anhedral plag and anhedral partly chloritized mafic minerals	plag - 60% chlorite - 25-30% chloritized pyroxene - 10-15%	Nil	Nil	0.5-1.0% beige leucoxene	Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-96 255-04	dark green with pale green (bleached) areas Similar to 255-05 but more bleaching, surface weathering	moderately well foliated; minor slip planes; sometimes coated w. fibrous chrysotile; 1-2% chrysotile/carbonate veinlets	0.1-0.3	equigranular, interlocking; bleached and epidote altered locally (marginal to fractures ??)	plag - 40 % (partly epidote altered) chlorite - 55% (1-2% chrysotile with vein carbonate (at margins) & locally lining foliation planes	5% Fe/Mg carbonate - associated with chrysotile in veinlets and in bleached, epidotized portions of sample.	0.5% coarse disseminated pyrite cubes	No Fe/Ti oxides	Basalt
255-05	dark green	poorly to unfoliated; unsheared; unquenched <1% carbonate stringers	0.15 to 0.4mm	fairly coarse, equigranular and interlocking texture; anhedral plag. and chlorite (after pyroxene)	plag - 50% (weak epidote alteration) chlorite - 30-35% partly chloritized pyroxene - 15-20%	<1% calcite ± Fe/Mg carbonate in stringers	trace finely disseminated pyrite	0.5% fine ilmenite	Basalt
256-02	Sample Ground to light green saprolitic clay								Saprolite + Basalt
256-03	green ~5% Overburden Contamination	strongly foliated to schistose due to moderate shearing; locally laminated; unquenched	<0.05 to 0.2mm	grain size variations reflect degree of shearing -- coarser chips are less sheared with an equigranular, interlocking volcanic texture; shearing (ductile) result in a fine grained rock dominated by chlorite	plag - 50 % (partly sericitized where sheared) chlorite - 50%	Nil	Nil	No Fe/Ti oxides	Basalt
256-04	Similar to 256-03 but parts of sample ground to green saprolitic(?) clay								Basalt (+ Saprolite)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-96 257-05	pale grey green (bleached?)	strong foliation (+ lineation?) due to moderate to strong ductile shearing; quenched almost a fissile appearance	<0.05 to aphanitic	very finely interlocking; looks intermediate but lack of plag or qz phenos suggests bleached basalt	too fine and light coloured to differentiate plag and mafic minerals except for 5-10% chlorite; appears feldspathic	7% poorly reactive Fe/Mg carbonate -- disseminated and lining foliation planes	0.1% pyrite -- fine disseminated cubes	No Fe/Ti oxides	Basalt (sheared)
257-06	white to clear	Massive vein material probably representing calcite; no associated sulfides			5% of sample 257-05 :- 80/20 quartz versus				Vein Quartz-Calcite
258-02	dark green to black	well foliated and lineated; unsheared; 3-4% qz-calcite stringers parallel to foliation	0.1	equigranular & interlocking; in part, metamorphically recrystallized	plag :- 40-45 % chlorite :- 20 % pyroxene/actinolite :- 30% - weak epidote alteration of plag.	7% calcite :- in veinlets with qz and disseminated	0.1-0.2% disseminated pyrite as fine (0.1mm) to coarse (0.5mm) cubes	No Fe/Ti oxides	Basalt
259-01	pale green & white	very poorly foliated but with a weak lineation of mineral constituents	0.15-0.3	unquenched; equigranular & interlocking; subhedral to anhedral plag and mafics	plag :- 60-65% chlorite and chloritized pyroxene :- 35-40% trace quartz -- weathered	0.5% calcite - local disseminations	Nil	No Fe/Ti oxides	Basalt
	Competent chips but plag. is locally soft & clay altered								
260-02	pale green to white	massive to very weakly foliated	0.2-0.4	equigranular, interlocking to poorly diabasic with randomly oriented plag. laths enclosing interstitial chloritized pyroxene	plag :- 55% pyroxene :- 15% chloritized pyroxene :- 30%	Nil	Nil	0.3% pale beige leucoxene	Basalt
	Similar to 259-01 but unweathered								

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
RR-96 261-06	medium green Vaguely	poorly foliated; unsheared similar to 259-01	0.15-0.4mm , 260-02	unquenched; equigranular and interlocking; anhedral plag & mafics; local weathering; epidote alteration	plag :— 55-60% (weak epidote alteration) chlorite / chloritized pyroxene :— 40-45%	local trace of calcite	Nil	trace leucoxene	Basalt
262-08	medium green & pale rusty green (weath'd chips)	well foliated, weakly lineated - stretched grains. 3% qtz veinlets	0.1-0.2mm [~1/3 of	Quenched; soft clay altered chips; yet still distinguishable equigranular interlocking texture. sample is noncalcareous grey-	plag: 55% (clay altered) chlorite : 45% (clay altered) green clay]	Nil	Trace disseminated pyrite	trace leucoxene	Basalt + saprolite
263-02	pale green and beige (weathered rock chips)	well foliated to sub schistose · weakly sheared?	0.1-0.3mm [~1/2 of	unquenched; soft clay altered chips inequigranular interlocking sample is green-brown	plag: 55% (clay altered) chlorite: 45% (clay altered) non calcareous	clay.]	Nil	Tr. patchy hematite	Basalt + Saprolite
263-03	brownish-green & red (hematite) weathered rock chips	Sub schistose to schistose (weakly sheared?)	0.1-0.3mm [Majority	unquenched; soft clay altered chips inequigranular interlocking of sample is green-	Plag: 45% (clay altered) chlorite : 50-55% brown non calcar	Tr. Fe bearing carbonate eous clay]	Nil	3-4% hematite stain (patchy & along fracture planes) Tr. beige leucoxene.	Basalt + saprolite
264-04	Pale green	well foliated weak to moderately sheared. Hole intersected 30cm thick white quartz crystalline vein with trace siderite (possibly mesozoic) comprising 20% of sample	0.05-0.1mm	quenched: soft clay altered chips. equigranular interlocking [Majority of sample	Plag: 60% chlorite/sericite: 40% (clay altered) is pale grey green	Nil noncalcareous clay]	Nil	Trace leucoxene	Basalt + saprolite

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
265-06	medium green & beige (weathered rock chips)	unquenched Poorly foliated.	0.1-0.3mm [~ 1/2	inequigranular interlocking chips are mainly competent locally clay altered of sample is grey-	plag: 55% chlorite: 45% (clay altered)) green non cal	Nil careous clay]	Nil	Tr. beige leucoxene	Basalt. + saprolite
266-05	medium green	Poorly foliated Few slip planes	Gmass. ≤ 0.1mm Phenos. 0.2-0.6mm	porphyritic: subhedral and euhedral pyroxene and plag phenocrysts with equigranular interlocking groundmass.	phenos pyroxene: 15% plagioclase: 3-5% 80% groundmass - 35% pyroxene variably chlorite - 65% undiff plag + qtz	Nil	Nil	Tr. native copper as disseminations	Basalt
267-07	beige-white & green (weathered)	Quenched moderately foliated v.weakly sheared chlorite + sericite slip planes [2/3 weakly calcareou	Gmass. ≤ 0.1mm phenos: 0.3-0.8mm s pale gr	dominantly microporphyritic porphyritic not overtly as many of plag phenos are equigranular. Fine recrystallized quartzo-feldspathi groundmass. ey clay]	phenos. plag.: 35% quartz: 2% Gmass: 80% undifferentiated plag & quartz; 20% chlorite/se	2-3% calcite as disseminations in groundmass. - - - - - - - ri. (after biotite);	Nil.	Tr. leucoxene	Intermediate Volcanic (Andesite) + saprolite
268-05	rusty brown & medium green.	Quenched schistose. Moderately sheared, Pervasive chlorite + sericite slip planes. [1/2 of sample is. green	Gmass. ≤ 0.1mm phenos. 0.4-2.0mm brown no	porphyritic: plag. and quartz phenos (subhedral + anhedral) enclosed by fine granular groundmass. largely masked due to shearing n calcareous clay]	phenos plag: 25% qtz: 4-5% G.mass: qtzo-feldspathic with 25-30% chlorite variably sericite	Nil	Nil	0.5-1% goethite after pyrite (variably cubic)	Intermediate Volcanic (Andesite - Sheared) + saprolite
269-13	pale rusty & grey green (weathered chips)	Quenched well foliated & lineated. 1-2% nodular siderite mainly along fracture planes. (due to influence of mesozoic weathering)	≤ 0.1mm [1/2 of	equigranular interlocking. Chips are soft. and extensively clay altered. sample is brown-green	plag: 55% (clay altered) chlorite: 45% (clay altered)) non calcareous	1-2% siderite mainly along fracture planes clay]	Nil	Trace leucoxene	Basalt + saprolite

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
270-01	yellow-brown, red & green (limonite & hematite stain) due to weathering	Sub schistose v weakly sheared presence of slip planes chloritic variably hematitic - due to weathering	Groundmass: 0.1 mm phenos: 0.3-0.5mm	v. weakly plag phyric (micro phyric) with equigranular interlocking groundmass.	plag: 55 % chlorite: 45 %	Nil	Nil	No Fe/Ti oxides	Basalt + Saprolite
271-03	beige-white and green	schistose moderately to strongly sheared abundant chlorite & sericite slip planes. Few mylonitized seams aphanitic groundmass with stretched plagioclase phenos.	Groundmass ≤ 0.1 phenos. 0.5-3.0mm	Strongly porphyritic. fine quartzo-feldspathic groundmass enclosing subhedral & anhedral (stretched) plagioclase phenocrysts	phenos: plag: 20-25% groundmass: quartzo-feldspathic 15% chlorite/sericite (after biotite)	Nil	Nil	Trace leucoxene	Int. Volcanic Andesite (sheared)
272-19		Sample consists entir (emitted sul	ely of phur	blue-green moderately stench while drilling)	calcareous	clay			Saprolite
273-07	green-brown (weathered chips)	subschistose well foliated weakly sheared; chloritic slip planes weakly sericitized local stretching of plag phenocrysts [2/3 of sample is	groundmass ≤ 0.05 mm phenos. 0.5-1.5mm brown -	porphyritic: subhedral plag. and quartz phenos with fine quartzo-feldspathic groundmass (near aphanitic) green clay-non calcareous]	phenos: plag: 25% qtz: 2% g.mass: qtz and feldspathic with ~30% chlorite ± sericite (after biotite)	Nil	Nil	0.3% limonitic pseudomorphs (cubic after pyrite) as disseminations.	Intermediate Volcanic (Andesite)
274-04	Pale greenish grey & white	moderately sheared abundance of schistose sericitized slip planes. Local stretching of phenos 3-4% quartz veinlets	groundmass ≤ 0.05 phenos 0.5-2.5mm	porphyritic: Subhedral plag & quartz phenos with near aphanitic (tectonic) quartzo-feldspathic groundmass	phenos: plag: 20% qtz: 5% groundmass: qtz-feldspathic ± 30% sericite + chlorite (after biotite)	0.5% patchily disseminated FeMg carbonate	Nil	Nil	Intermediate Volcanic (Dacite) Sheared

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
275-02	mottled white and medium green	moderately well foliated v. weakly sheared few mildly sericitized slip planes. Hole intersected ½ metre barren white crystalline qtz vein (arch.)	g.mass <0.1mm Phenos. 0.5-3.5mm	strongly porphyritic. Subhedral & locally euhedral plag. phenos enclosed by equigranular interlocking groundmass	phenos. plag 20% qtz 1% Gmass. 30% chlorite 3% sericite 3% epidote	1% calcite mainly finely dissem. in periphery of plag. phenos.	Trace of disseminated pyrite	No Fe/Ti oxides	Intermediate Volcanic (Andesite)
276-09	85% medium green 15% grey brown chips	Quenched: poorly foliated; few chloritized slip planes. 1% qtz + calcite mainly associated with brownish biotitic chips (well foliated)	0.05-0.15	equigranular interlocking texture. locally plagphyric (weakly).	60-65% plag. 35%-40% chlorite variably biotite (brown chips)	4% calcite as dissemination ≤0.5% associated with quartz veinlets	1% pyrite + pyrrhotite as dissemin. pyrrh. mainly associated with biotitic chips	No Fe/Ti oxides.	Basalt
277-07		olive green to oxidized chips	brownish <2mm	non calcareous, and few qtz vein	clay Few sur chips.	viving small	clay altered		Saprolite
278-03	pale pink-red and white (hematite stain)	poorly foliated V. weakly sheared. few sericitic slip planes. 1% qtz + calcite veinlets	Gmass. ≤0.05mm phenos 1-4mm	strongly porphyritic. Subhedral plag. phenos (sometimes zoned) enclosed by near aphanitic tectonic groundmass	phenos plag: 25% G.mass: (75%) 85% undifferentiated qtz & plag. 15% biotite & sericite	1% Fe/Mg carbonate mainly occurring along microfractures & slip planes. Trace calcite assoc. with qtz veinlets	0.5% course pyrite associated with plag. phenos	2% peppered magnetite (mainly octahedral crystals) associated with hematite stained groundmass Trace beige leucoxene after sphene	Feldspar Porphyry
279-06	mottled med. green and white	moderately well foliated few slip planes. ~3% leucocratic chips may be infilled selvages.	0.1-0.2	mainly equigranular interlocking. Locally weakly porphyritic Plagioclase is saussuritized	plag: 65-70% qtz: 2% blue chlorite: 25-30%	3% calcite as dissemination	Trace dissem. pyrite	No Fe/Ti oxides	Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
280-05	white to beige (oxidized)	schistose; lineated. weakly to moderately sheared	0.05mm phenos to 1.2mm	porphyritic - 5% anhedral clear qz. phenos in a very fine qz-plag-sericite groundmass	5% qz. phenos; undifferentiated plag + qz groundmass 20% white sericite	faint trace disseminated calcite	Nil	trace brown to black acicular tourmaline	Rhyolite (sericite schist)
280-06	green to brown (oxidized & weathered) & bleached	well foliated; weakly sheared; ~10% pale vein material or silicified host rock; some highly oxidized chips appear to represent primary qz-carb. vein material (10%)	0.05 to 0.1mm	vague equigranular interlocking volcanic texture	undifferentiated plag ± qz - chlorite - 25%	Nil	1-2% pyrite -- fine to coarse (0.5mm) disseminated cubes, principally in silicified, veined portions of sample	—	Basalt (possibly Andesite)
281-05	dark brownish green	strong foliation, lineation weakly sheared. sericitized slip planes 5-7% quartz veinlets	0.1mm	quenched. equigranular interlocking	plag: 50% chlorite + sericite: 50%	Nil	Trace disseminated pyr.	Trace disseminated ilmenite.	Basalt
282-04	medium green & patchy beige	well foliated weakly sheared few slip planes weakly sericitized 1% quartz veinlets	0.05-0.15 mm	Quenched, equigranular interlocking. Chips pocked with beige sericite	plag: 50-55% chlorite: 40% sericite: 5%	4% disseminated calcite	Trace disseminated pyrrhotite + pyrite	2% magnetite as disseminations locally concentrated (up to 5% in some chips)	Basalt.
283-05	pale grey white (bleached)	well foliated moderately sheared with sericitized slip planes and 1% qtz-py. veinlets; plag. phenos bleached but not comminuted	groundmass 0.3-0.5; patchily comminuted phenos to 2.5mm	Porphyritic. 10% blue and clear qtz phenos in sugary qtz-feldspathic groundmass	phenos: qtz 7% plag ± 10% (vague due to bleaching) G.mass: indistinct qtz-feldspathic 10% sericite Tr. chloritoid	0.5% disseminated calcite	0.5-1.0% finely disseminated pyrite (locally coarse grained)	0.3% tourmaline needles as disseminations. 0.2% yellow felted rutile	Quartz Porphyry or Rhyolite (sheared)

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
284-02	Pale gray green & rusty yellow (weathered chips)	well foliated to subschistose weakly sheared -sericitized slip planes 1% qtz veinlets.	Gmass. 0.2-0.4 phenos to 3mm	Porphyritic: 10% blue and clear quartz phenos in sugary quartzo-feldspathic groundmass	phenos: quartz: 15% plag: 5% indistin gmass: qtzo-feldspath with 15% chlorite 5% sericite	1% disseminated calcite	Trace disseminated pyrite	0.5% tourmaline needles mainly occurring along shear planes Trace diss. magnetite Trace specular hematite	Quartz-Feldspar Porphyry
285-06	medium green and pink red (hematite) stain	moderately well foliated schistose shear planes (sericitized) weakly sheared. 2% quartz veinlets	G. mass 0.2-0.5mm phenos. to 2.0mm	porphyritic: subhedral plag and blue + clear quartz phenos with equigranular interlocking groundmass.	phenos plag: 35% qtz: 10% gmass: (55%) qtzo-feldspathic 25% chlorite 5% sericite	Tr. disseminated calcite	Nil	2% disseminated specular hematite	Qtz feldspar porphyry
286-05	pale green	moderately well foliated; minor sericitic slips -- weakly sheared	G. Mass 0.1-0.2 Phenos 0.5-2mm	Porphyritic; 15% subhedral plag and 5-7% anhedral clear (to blue) qz phenos. in a fine equigranular quartzo-feldspathic groundmass	phenos plag - 15% qz - 5-7% G. Mass quartzo-feldspathic chlorite - 8-10% sericite - 2-3%	5% calcite - disseminated	Nil	Nil	Dacite (porphyritic) (not significantly different than 284, 285)
287-04	Medium grey-brown	Clastic. No discernible bedding. Weakly foliated. Unsheared.	Mostly 0.25-0.5	Medium sandy with sparse (2%) coarse sand (0.5-2.0 mm) grit and rare granules (2-4 mm) and small pebbles (>4mm)	10% colourless to blue qtz. sand grains 80% plagioclase and leucocratic lithic volc sand grains (differentiable only where coarse) 10% biotite	Nil	Nil	No Fe/Ti oxide	Greywacke
288-04	Medium grey-brown	Clastic rare silty beds (1%) weakly foliated weakly sheared; few chloritized, rusty pyritic slip planes.	Mainly 0.2-0.5mm	Medium sandy rare silty beds (1%) Sparse coarse sand (1%) 0.5-2.0mm - random not bedded.	10% colourless & blue quartz 75% plagioclase & leucocratic lithic volcanic grains 15% biotite	Nil	Tr. pyrite mainly associated with slip planes	No Fe/Ti oxides	Greywacke

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
294A-06	medium to dark brownish grey	Fissile well foliated to sub schistose unsheared	mainly 0.05-0.1mm	Metamorphic texture. weakly porphyroblastic (1% pink almandine) mainly fine recrystallized sugary undifferentiated qtz + feldspar.	1% garnet porphyroblasts 70% qtz + feldspar sugary 25-30% biotite	Nil	0.5% pyrite laminae (thinly painted on possible bedding planes). Tr. pyrrhotite	No Fe/Ti oxides	SILTSTONE (fine biotite schist)
295-03	medium to dark grey	poorly foliated. rare thin (<0.3mm) mylonite seams Clastic; no visible bedding	0.1-0.3	fine sandy, poorly sorted, patchily recrystallized 2 sugary	92 - 20% plag/lithics -- 60% (undifferentiated) biotite - 20%	Nil	0.4% disseminated pyrite locally pyrrhotite)	No Fe/Ti oxides	Greywacke (biotite schist)
296-04	medium brownish grey	Clastic no discernible bedding weakly foliated unsheared	mainly 0.2-0.5mm	medium sandy texture.	10% colourless & blue qtz sand. 70% undifferentiated plag & leuco-lithics 20% biotite	4% disseminated calcite	Nil	No Fe/Ti oxides	Greywacke (biotite schist)
297-03	pale & medium brownish grey	clastic no discernible bedding moderately foliated weakly sheared; v. few sericitized slip planes	mainly 0.3-0.6	medium sandy; occasional coarse sand grain to 1.2mm; partially recrystallized	10% colourless to blue qtz 70% undiff. plag; leucocratic - lithics 15% biotite	5% disseminated & thinly veined calcite	0.3% disseminated pyrrhotite	No Fe/Ti oxides	Greywacke.
298-04	medium green	unquenched weakly foliated unsheared	0.1-0.25	equigranular interlocking	70-75% plag 35-40% chloritized pyroxene/actinolite	Tr. locally concentrated calcite	Tr. disseminated pyrite	No Fe/Ti oxides	Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
299-05	pale grey; bleached in part	clastic: locally fissile-bedded. well foliated, distinct lineation in places unsheared	0.1-0.2 silty-muddy layers <0.05mm	mainly fine sandy with darker silty beds (5% of chips); mafic poor — very weakly silicified(??)	10% colourless qtz sand 80-85% plag sand 5-10% chlorite variably sericite	Nil	2% primary pyrite mainly as thin films painted on bedding planes	No Fe/Ti oxides	Greywacke + siltstone
300-02	pale grey green	clastic: no discernible bedding. Well foliated weakly to moderately sheared few schistose chlorite-sericite slip planes.	0.1-0.8mm	poorly sorted fine & medium sandy	20% colourless to blue qtz sand 50-55% plag. sand 20% chlorite variably ~~sm~~ sericite	7% disseminated calcite	Nil	trace leucoxene	Greywacke
301-06	pale green-beige (weathered)	well to moderately foliated: weakly sheared - transposed phenocrysts	<0.5mm; phenos 0.1-0.3	plag. micro-porphyritic; ~20% sub- to anhedral plag. phenos. in a very fine feldspathic matrix - lack of qz, euhedral nature of some phenos (plag) suggests volcanic	phenos plag - 12-20% groundmass feldspathic, <5% visible chlorite, 1% sericite	faint trace disseminated calcite	Nil	No Fe/Ti oxides	Andesite
302-01	pale grey, bleached	poorly foliated, unsheared	0.1-0.5	granular, sandy sedimentary texture	plag + lithics ~65% (undifferentiated) qz - 15-20% chlorite ± sericite - 5-7%	7% calcite disseminated	0.5% pyrite finely disseminated	No Fe/Ti oxides	Greywacke
303-01	medium green, bleached in part & weathered	well foliated; 2% qz- veinlets	0.05-0.1mm	equigranular and interlocking; moderately soft & clay altered	50:50 clay altered plag versus chlorite ± chloritized pyx.	1%, or less, calcite with qz. veinlets	Nil	No Fe/Ti oxides	Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
304-03	mottled green & pink white (weak Fe stain)	massive unsheared	0.5-3.0 mm	hypidiomorphic mafics chloritized	plag: 45 qtz: 30-35 hb + biot: 20% (chloritized) epidote 5-7%	Nil	Nil	1% beige leucoxene (after sphene)	Tonalite
305-10	dark green to black	unquenched moderately well foliated and lineated. 1% mm scale drusy qz + calcite stringers w. epidotized margins	0.3-0.6 mm	weakly plag. phyric recrystallized amphibolite facies metamorphism	plag: 30% hornblende: 70%	Nil	Nil	No Fe/Ti oxides Trace native Cu in stringers	Basalt (amphibolite)
306-04	mottled green and white	massive to weakly foliated in places (greisified)	1-3 mm	hypidiomorphic mafics are chloritized	plag: 45-50 qtz: 30 hb + biotite: 15 (chloritized) epidote: 5	1% disseminated calcite	Nil	1% beige leucoxene after sphene.	Tonalite
307-01	beige pink (hematite stained)	quenched well foliated v weakly sheared weakly microfractured	G.mass aphanitic phenos: to 1.5 mm	v. weakly plag and quartz phyric aphanitic quartzo-feldspathic groundmass	Phenos: plag: <1% qz - 1-2% Gmass: qtz.-feldspathic with 5-10% sericite	Trace calcite infilling microfractures Tr. hornblende	Trace disseminated pyrite	No Fe/Ti oxide	Rhyolite
307A-02	mottled green and pink white (v. weak hematite stain)	massive unsheared	0.6-3.0 mm	hypidiomorphic	plag: 45% qtz: 30% biot + chlorite: 20% epidote: 5%	Nil	Nil	Tr. disseminated copper	Tonalite

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
308-02	mottled pale & dark green and white	coarse granitoid moderately well foliated gneissic: mafic rich versus mafic poor bands	0.6-3.5mm	hypidiomorphic	plag: 40%-45% qtz: 30% hornblende: 5% biotite: 10-15% epidote: 7%	Tr. disseminated calcite	Trace disseminated pyrite	0.5% beige leucoxene after sphene	Tonalite
309-01	mottled dark green to black & white	Unquenched poorly foliated unsheared	0.3-0.6	equigranular interlocking. Lower amphibolite facies metamorphism (recrystallized) plag / hornblende	plag: 45% hb: 30% chlorite + actinolite: 25%	Trace disseminated calcite	Nil	Nil	Basalt (amphibolite)
310-02	pink to pale green	very strong planar foliation but not schistose; sheared (moderate to strong) and mylonitized Similar to RR-95-99	G Mass 0.05-0.1mm surviving qz to 0.6mm -03	hard, qzo-feldspathic sugary (mylonitized) groundmass; a few relict qz grains or phenos; minor grain size variations & compositions may define a poor bedding or may be structural features	qzo-feldspathic (hard) chlorite - 1-2% muscovite - 0.5% as coarse flakes lining foliation planes 0.5% <u>tourmaline</u>;	possible trace of <u>chloritoid</u> Nil	faint trace pyrite lining foliation planes	trace fine beige disseminated leucoxene	Greywacke/siltstone (sheared) (possibly very strongly sheared tonalite)
311-04	mottled dark green and white (minor pink hematite staining)	poorly foliated; unsheared	0.5-5mm	inequigranular hypidiomorphic	plag - 40% qz - 25% chlorite - 20-25% (variably after hornblende or biotite) epidote - 8-10%	Nil	Nil	1% sphene, partly or wholly replaced by leucoxene	Tonalite
312-01	mottled green and pinkish white	well to moderately foliated; <u>poorly sheared</u> -- closely spaced slip planes; minor mylonitization	0.5-4mm	hypidiomorphic	plag - 50% qz - 25% chlorite - 20% (variably after hornblende) epidote - 5%	Nil	Nil	0.5% leucoxene	Tonalite

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
312A-03	mottled dark green to pink white (minor hematite staining)	well foliated - weakly sheared and mylonitized resulting in crushing & reduction in grain size	0.1 (mylonitized) to 0.3 (primary)	hypidiomorphic overprinted locally by shearing / mylonitization	plag - 40-50% qz - 25-30% chlorite - 15-20% epidote - 5%	Nil	Nil	1% pale beige leucoxene after sphene	Tonalite (weakly sheared)
313-05	pale to medium green - weathered	Quenched strongly foliated to sub schistose; strongly lineated	Gmass 0.05-0.15 phenos 0.3-1.0mm	weakly plag. phyric (augens in places) in fine quartzo-feldspathic groundmass	plag: 75 % chlorite: 25 %	Nil	Nil	No Fe/Ti oxides	Andesite (Amphibolite)
314-01	medium green	Unquenched moderately well foliated, lineated unsheared	0.1-0.2	inequigranular; interlocking partly saussuritized; weakly metamorphically recrystallized plag., hornblende & actinolite	plag: 65 % hornblende + actinolite: 25 % chlorite: <5 % epidote - 5-7%	Nil	Nil	No Fe/Ti oxides	Andesite
315-04	Surviving "chips" are 95% combined beige, nodular siderite and associated clear quartz often with attached white kaolinitic clay; traces of marcasite. ~5% of chips are beige (oxidized) to pale grey green, very soft and clay altered displaying a primary foliation / schistosity. Primary composition appears to be feldspathic - chlorite but overprinted by Jurassic weathering. Protolith probably basalt. Much of sample ground to grey-white kaolinitic clay								Saprolite - minor foliated, clay altered Basalt(??) chips
316-03	green	massive to very poorly foliated; unsheared; unquenched	0.15-0.5	inequigranular, interlocking volcanic texture; mafics coarser than plag.	plag - 45% pyroxene - 50% (green partly to completely chloritized) qz - <1%	3% calcite disseminated	0.5% pyrite - disseminated		Basalt

SAMPLE NUMBER	COLOUR	STRUCTURE	GRAIN SIZE (mm)	TEXTURE	MINERALOGY				NAME
					Silicates	Carbonates	Sulphides	Other	
316-04	pale grey green (weak bleaching)	schistose; moderately sheared; several % carbonate veinlets but sample pervasively carbonatized	<0.1mm	relict equigranular, interlocking volcanic texture overprinted by strong fabric and carbonate development; may be vaguely plag. micro-phyric	plag - 55-60% chlorite - 25-30% (grey to pale & dark green -- probably includes some sericite)	12-15% calcite - pervasive	Nil	—	Basalt (sheared)
317-02	medium green	unquenched schistose; weakly sheared; mildly sericitized slip planes. : Trace tourmaline	0.1-0.2	relict equigranular interlocking volcanic texture overprinted by	plag 45-50% chlorite: 40% (variably sericite) tourmaline: Tr.	15% calcite pervasive	Nil	No Fe/Ti oxides	Basalt (weakly sheared)
318-03	bleached; pale grey green } rusty (weathered chips)	schistose; strongly sheared - sericite schist Bleached	0.05-0.15 plag phenos to 1.2mm	relict equigranular interlocking volcanic texture overprinted by strong fabric; indistinctly plag. phyric (10% + stretched phenocrysts)	plag: 50%-55% sericite: 30% chlorite: 5% Tr. tourmaline	10% Fe/Mg carbonate 5% calcite.	Trace disseminated pyrite.	Trace disseminated magnetite & fine disseminated hematite. Tr. rutile	Andesite (sheared) (sericite schist)
319-04	pale grey to medium green (weathered)	unquenched well foliated v. weakly sheared few schistose chlorite + sericite slip planes (sample mainly blue-green rock clay - non calcareous	0.1-0.2	equigranular interlocking some chips are clay altered with attached siderite nodules due to Mesozoic weathering.	plag: 55% (completely clay altered) chlorite: 40-45% (variably sericite)	Nil	Nil	No Fe/Ti oxides	Basalt(?) + saprolite
320-10	medium grey to green	(finely foliated to sub-schistose; moderately sheared - producing a local near banded appearance 5% calcite + qz veinlets	0.05-0.1	relict equigranular & interlocking texture; overprinted by strong fabric and carbonate development; some chips display a fine banding reminiscent of siltstone but is probably structural	undifferentiated plag ± qz chlorite (green to grey, may include some pale sericite)	5-10% calcite veins & disseminations 10% Fe-carb disseminated	5% pyrite -- mostly as local fine grained semi massive concentrations in foliated, veined chips; some as "smears" along foliation		Basalt (sheared, carbonatized, pyritic)

APPENDIX VI

DRILL HOLE SECTIONS

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996

LEGEND

Quaternary Stratigraphy

HOLOCENE
[5] Organics (peat)
PLEISTOCENE
LATE WISCONSINAN
[4] Keewatin Till
[3] Lake Agassiz Sediments
3c – glaciolacustrine clay member
3b – glaciolacustrine sand member
3a – glaciofluvial member
[2] Embryonic (Labradorean) Lake Agassiz Sediments
2c – glaciolacustrine clay member
2b – glaciolacustrine sand member
2a – glaciofluvial member
[1] Labradorean Till

Sediment Varieties

P	Peat
C	clay,silt
S	Sand
G	Gravel
ST	Sand-silt till, clay subordinate
CT	Clay till

Symbols

Quaternary/bedrock unconformity
Interglacial unconformity
Quaternary unit boundary
Quaternary sub-unit boundary

Geochemistry

ST Sand-silt till interval with 5 gold grains, 130 ppb Au, 78 ppb As, 465 ppm Cu, 54 ppm Zn and 43 ppm Ni in the nonmagnetic mineral fraction (SG > 3.3); "–" = less than detection limit

Bedrock Lithologies

CRETACEOUS
[14] Gravel, silica sand
JURASSIC/CRETACEOUS
[13] Shale
MESOZOIC/PRECAMBRIAN
[12] Saprolite
PROTEROZOIC
[11] Diabase
ARCHEAN
Plutonic Rocks
[10] Quartz monzonite
[9] Trondhjemite and associated pegmatite
[8] Tonalite
Subvolcanic Intrusives and Dykes
[7] Feldspar porphyry, quartz-feldspar porphyry
[6] Gabbro
[5] Clastic sedimentary rocks
5a – greywacke; 5b – siltstone/mudstone
Volcanic Rocks
[4] Rhyolite
[3] Andesite, dacite
[2] Basalt
[1] Komatiite

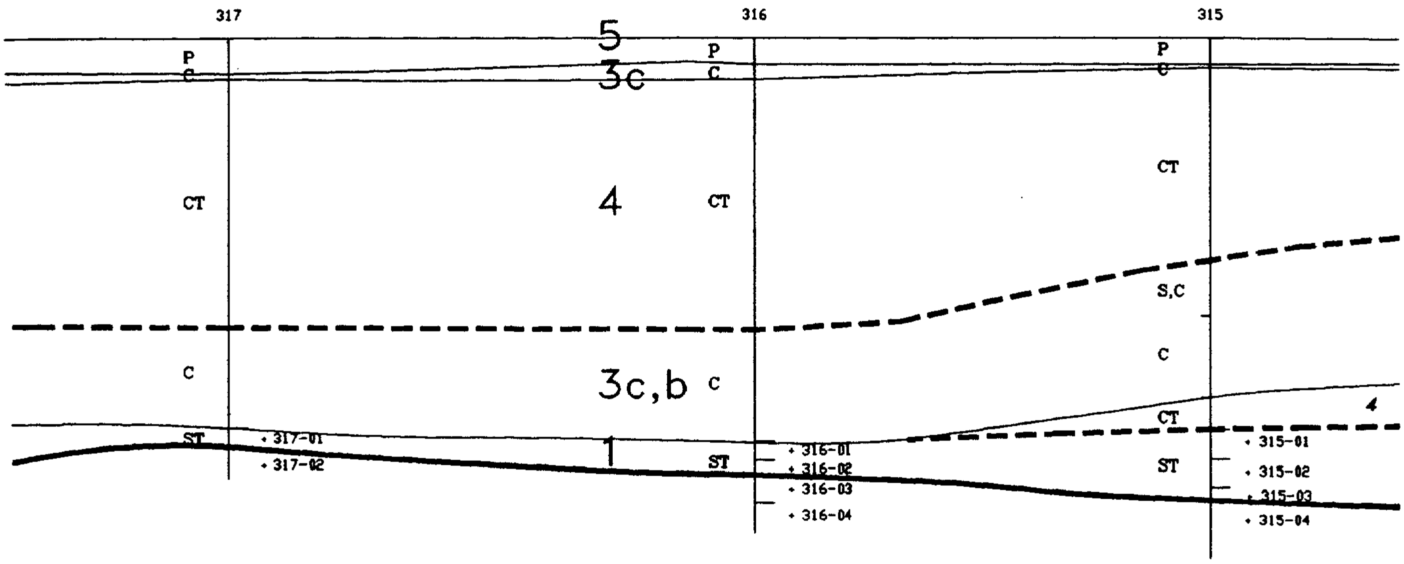
Scale

Horizontal = 1:5,000
Vertical = 1:400

NUINSCO RESOURCES LIMITED
RAINY RIVER PROJECT, ONTARIO

REVERSE CIRCULATION DRILL SECTIONS

OVERBURDEN DRILLING MANAGEMENT LIMITED
JULY, 1996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315
5
3c
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3c,b
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P
C
CT
S,C
ST
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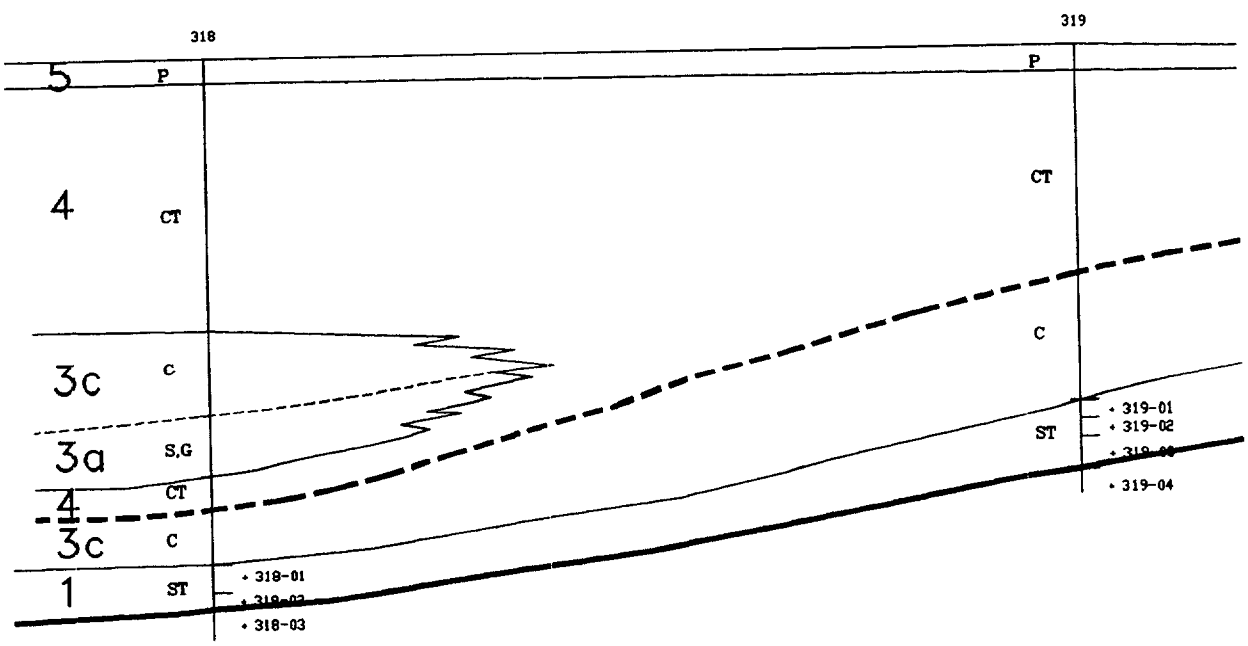
317-02
316-01
316-02
316-03
316-04
315-01
315-02
315-03
315-04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P
4
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3c
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S,G
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CT
3c
C
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ST
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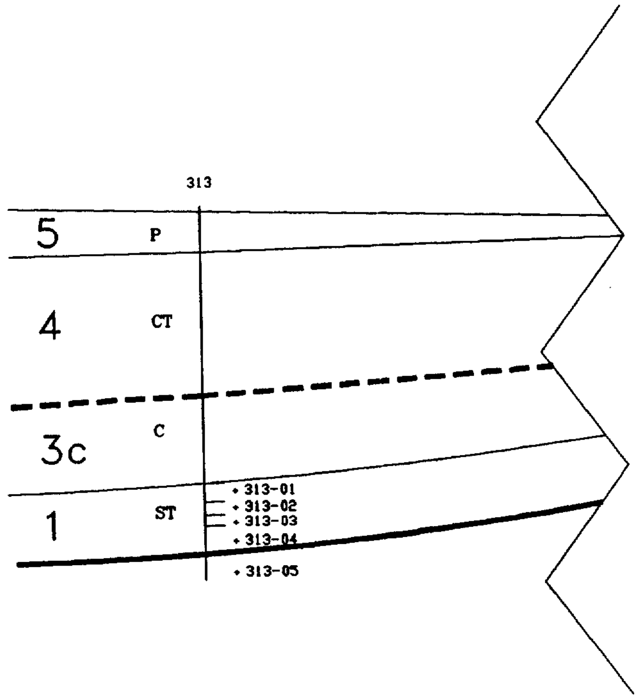
318-03
319-01
319-02
319-04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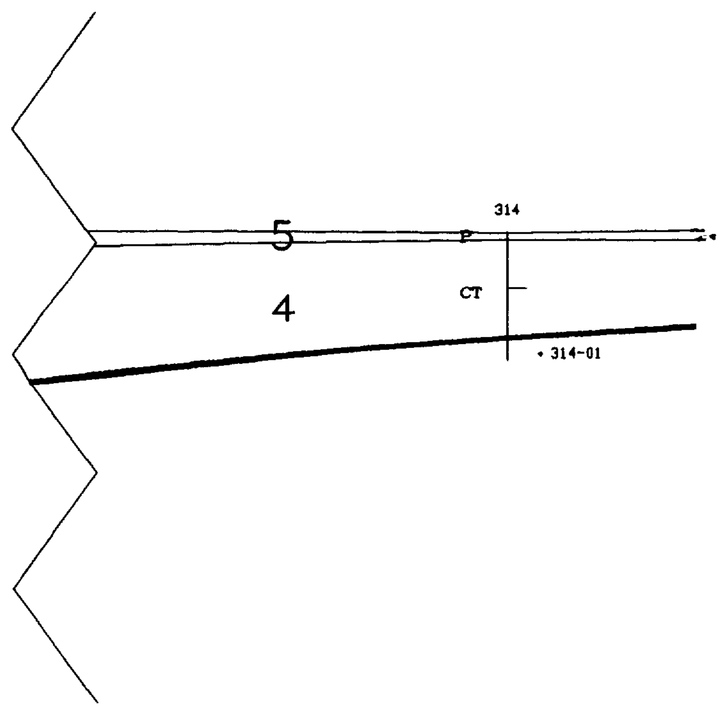
313-02
313-03
313-04
313-05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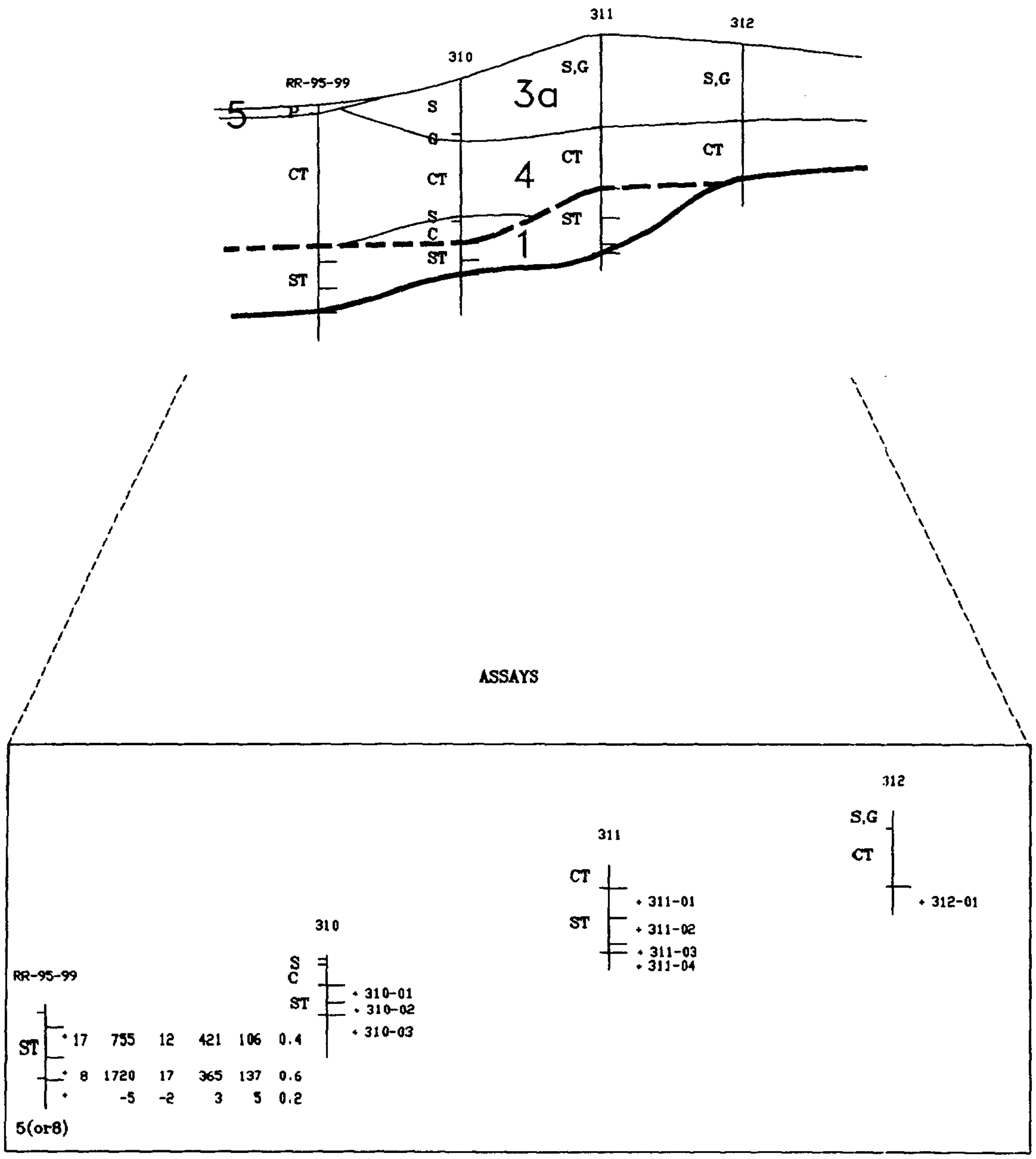
4
CT
314-01


311
312
310
RR-95-99
S,G
S,G
3a
5
P
S
G
CT
CT
CT
CT
4
S
C
ST
ST
ST
1
ASSAYS
312
S,G
CT
+ 312-01
311
CT
+ 311-01
ST
+ 311-02
+ 311-03
+ 311-04
310
S
C
ST
+ 310-01
+ 310-02
+ 310-03
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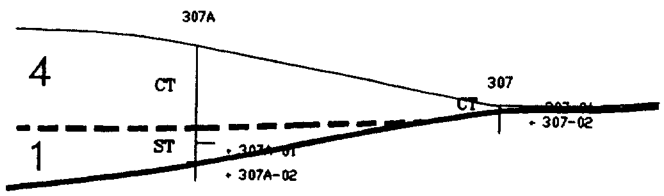
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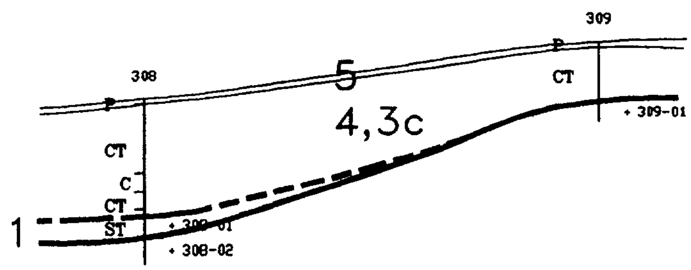
CT
307-01
+ 307-02
1
ST
+ 307A-01
+ 307A-02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+ 309-01
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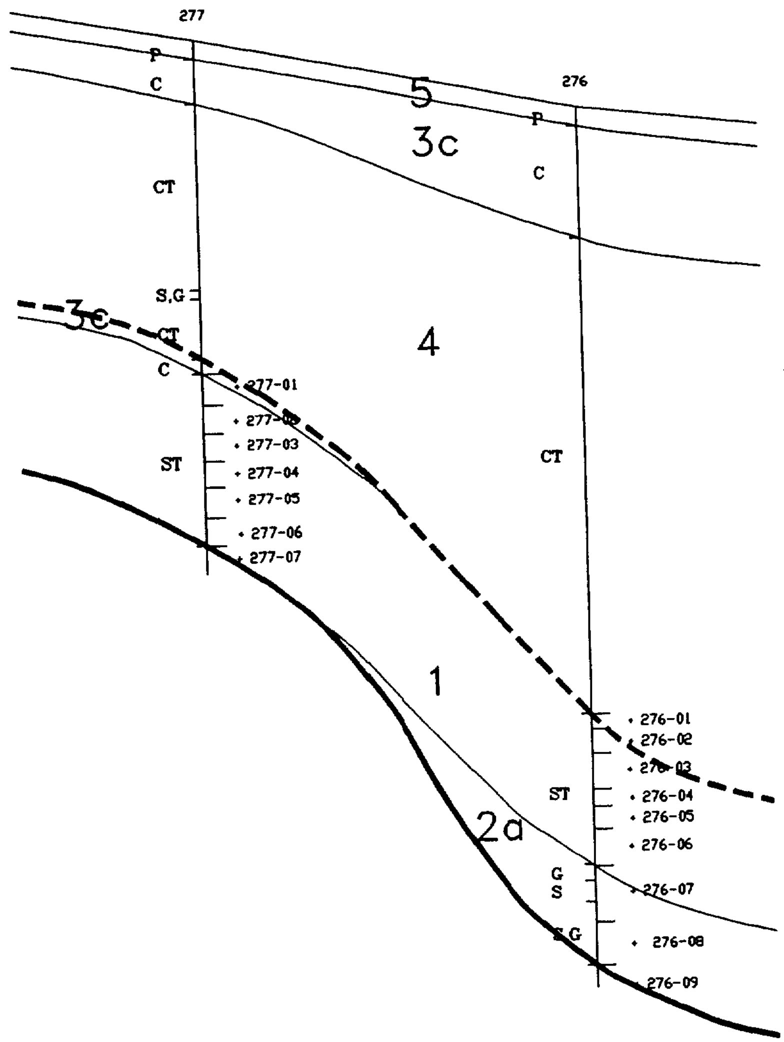
CT
C
CT
1
ST
+ 308-01
+ 308-02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276-07
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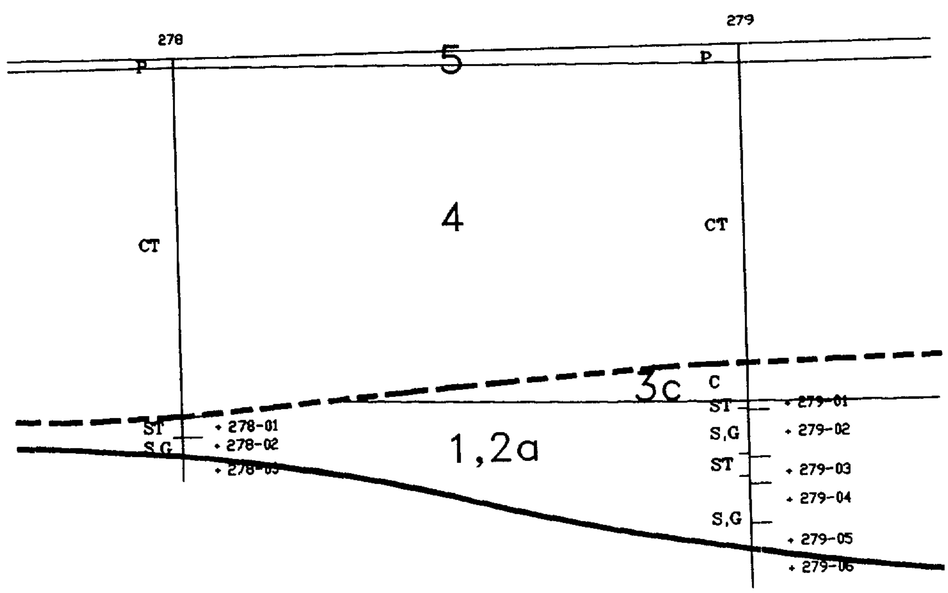
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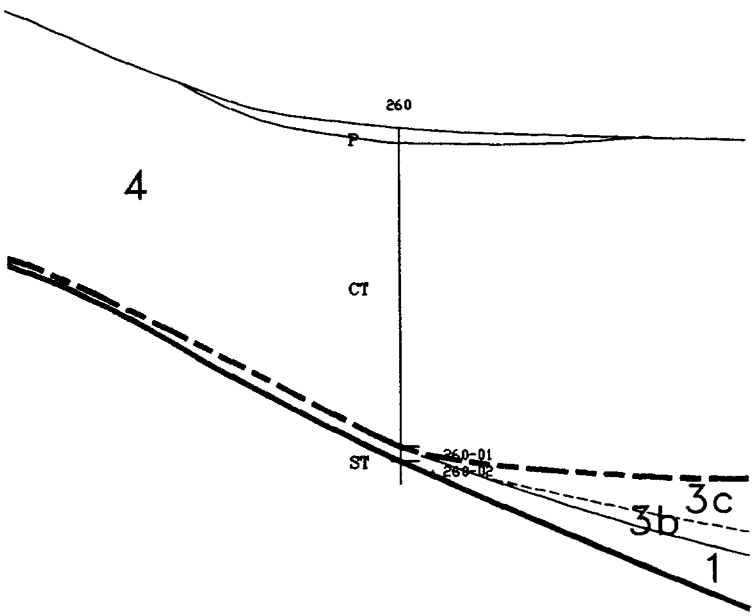
279-05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3b
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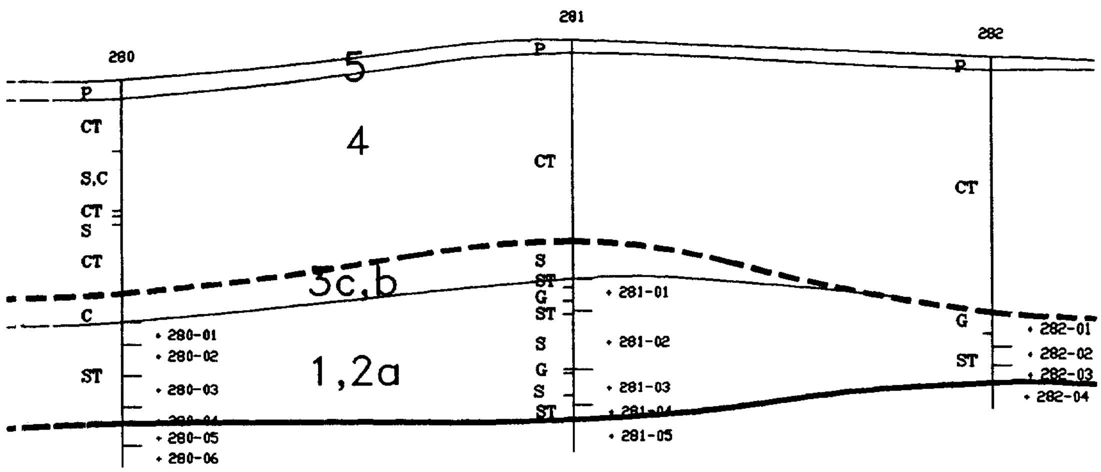
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CT
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CT
CT
S,C
CT
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CT
S
ST
3c,b
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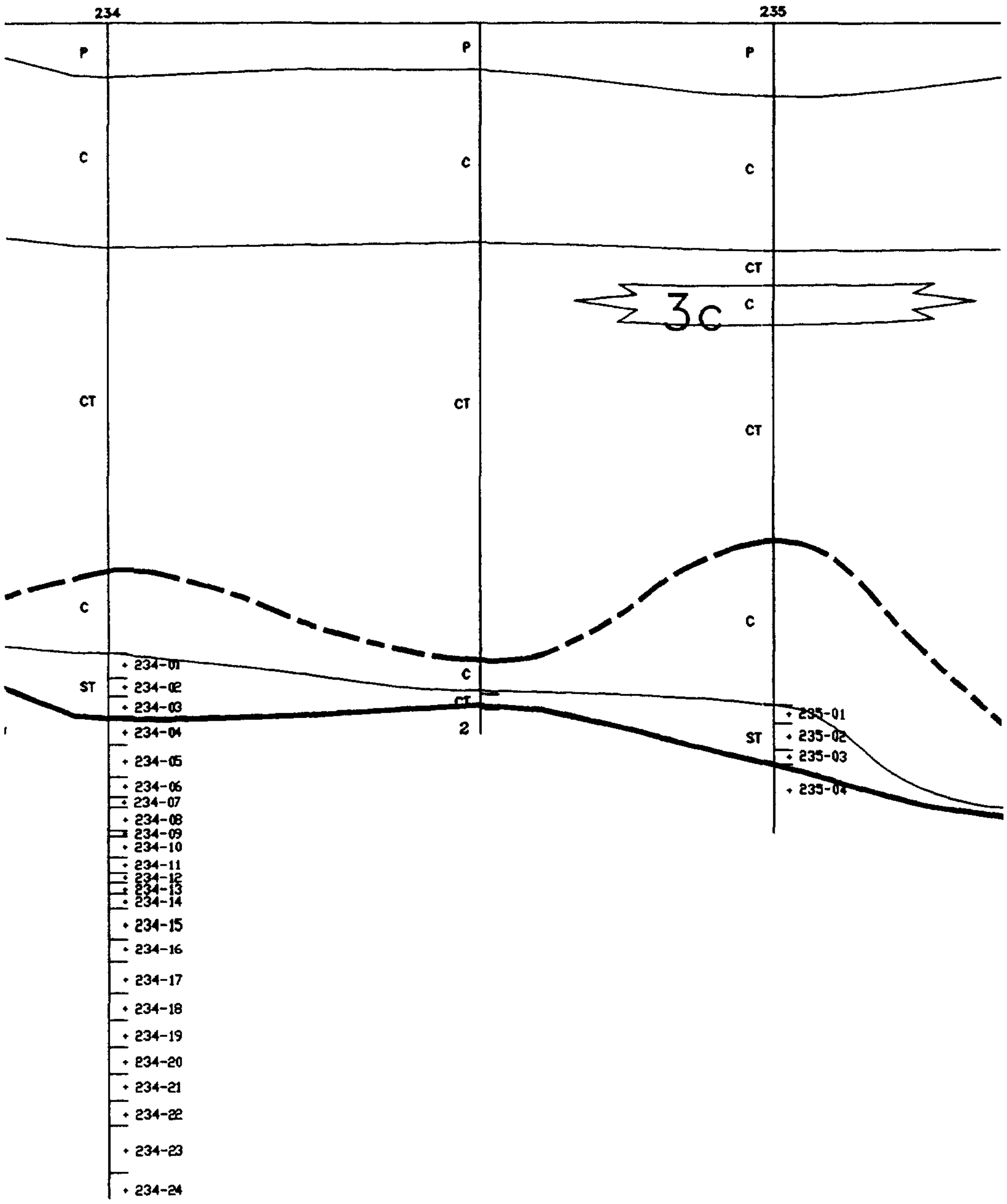
+ 281-01
G
C
+ 280-01
+ 280-02
S
+ 281-02
+ 282-01
+ 282-02
ST
1,2a
G
ST
+ 280-03
S
+ 281-03
+ 282-03
+ 282-04
ST
+ 281-04
+ 280-05
+ 281-05
+ 280-06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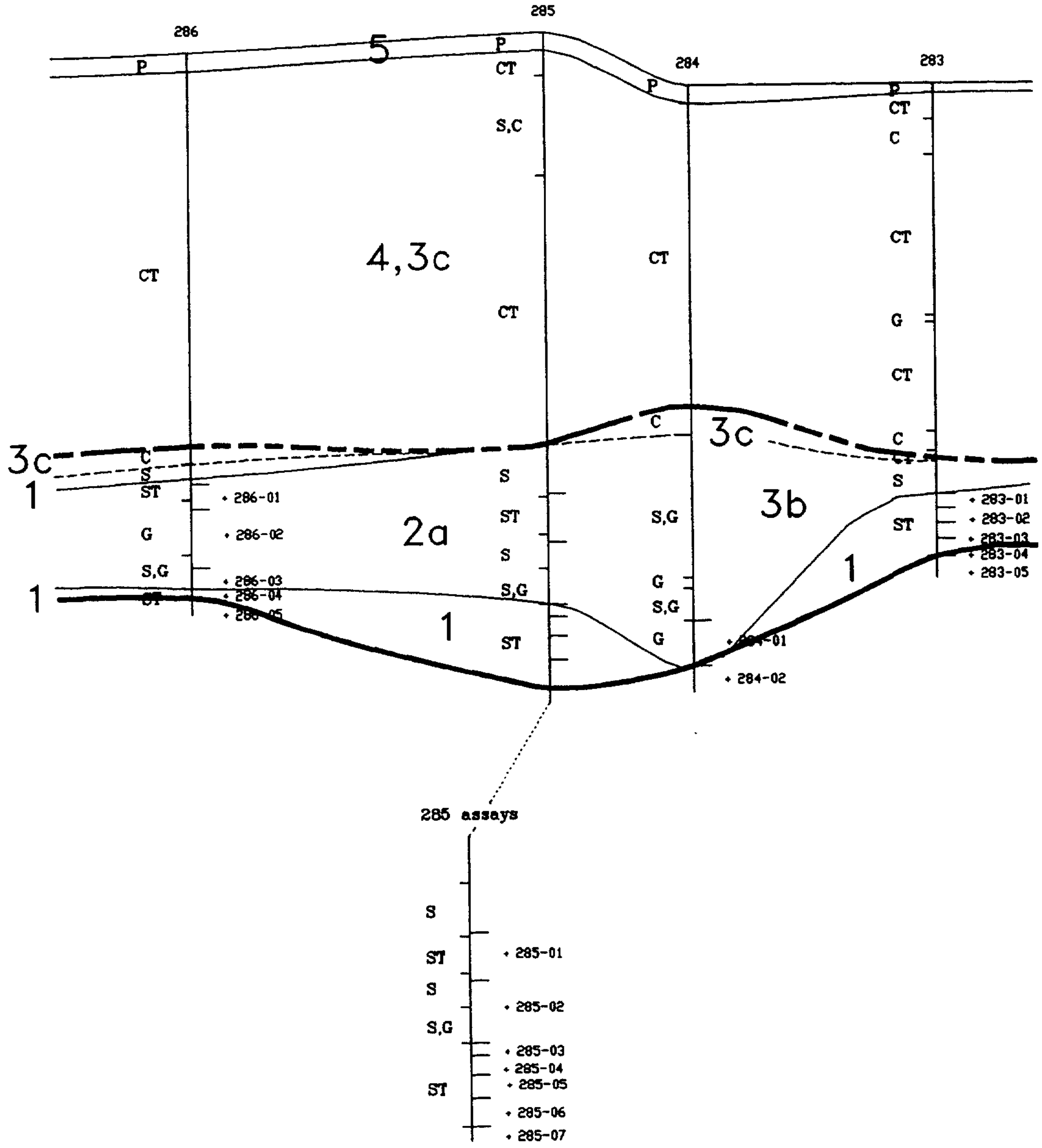

286
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S,C
4,3c
CT
C
3c
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ST
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S,G
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3b
+ 286-01
+ 286-02
+ 286-03
+ 286-04
+ 286-05
+ 284-01
+ 284-02
+ 283-01
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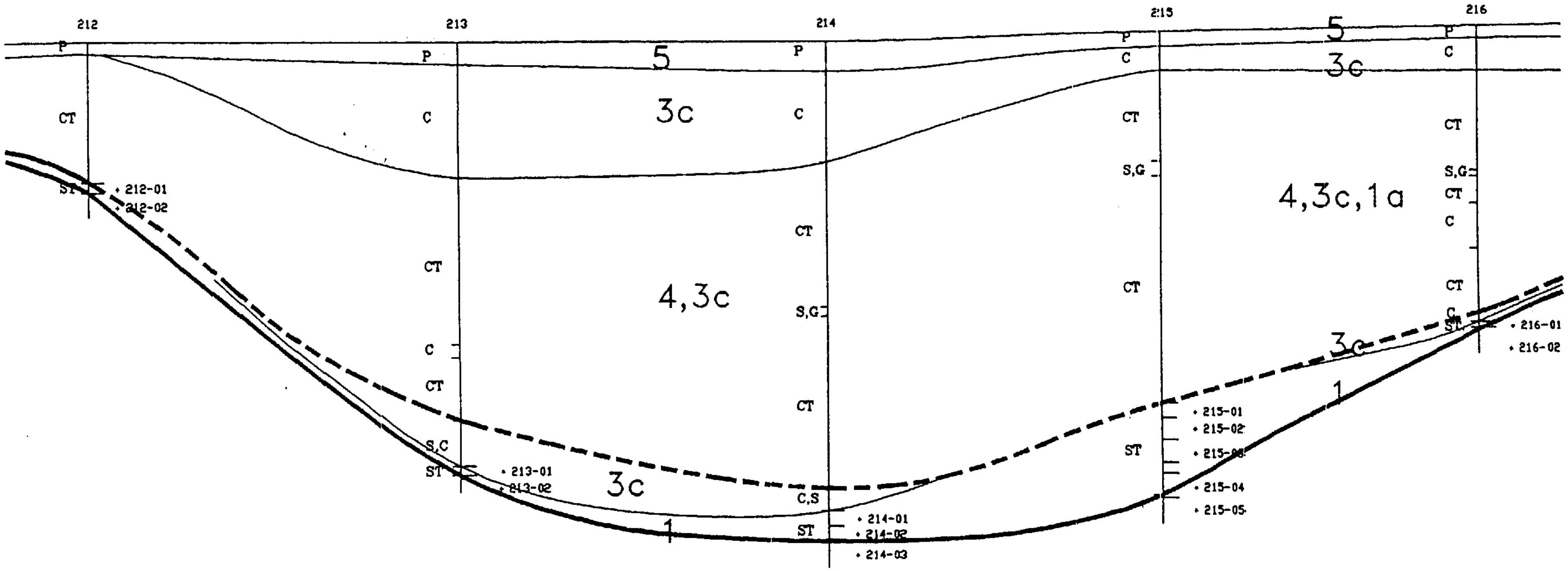
+ 285-06
+ 285-07



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S,C
C,S
212-01
212-02
213-01
213-02
214-01
214-02
214-03
215-01
215-02
215-04
215-05
216-01
216-02

NUINSCO RESOURCES LIMITED

Richardson Township Project

(March/April 1996, Diamond Drilling)

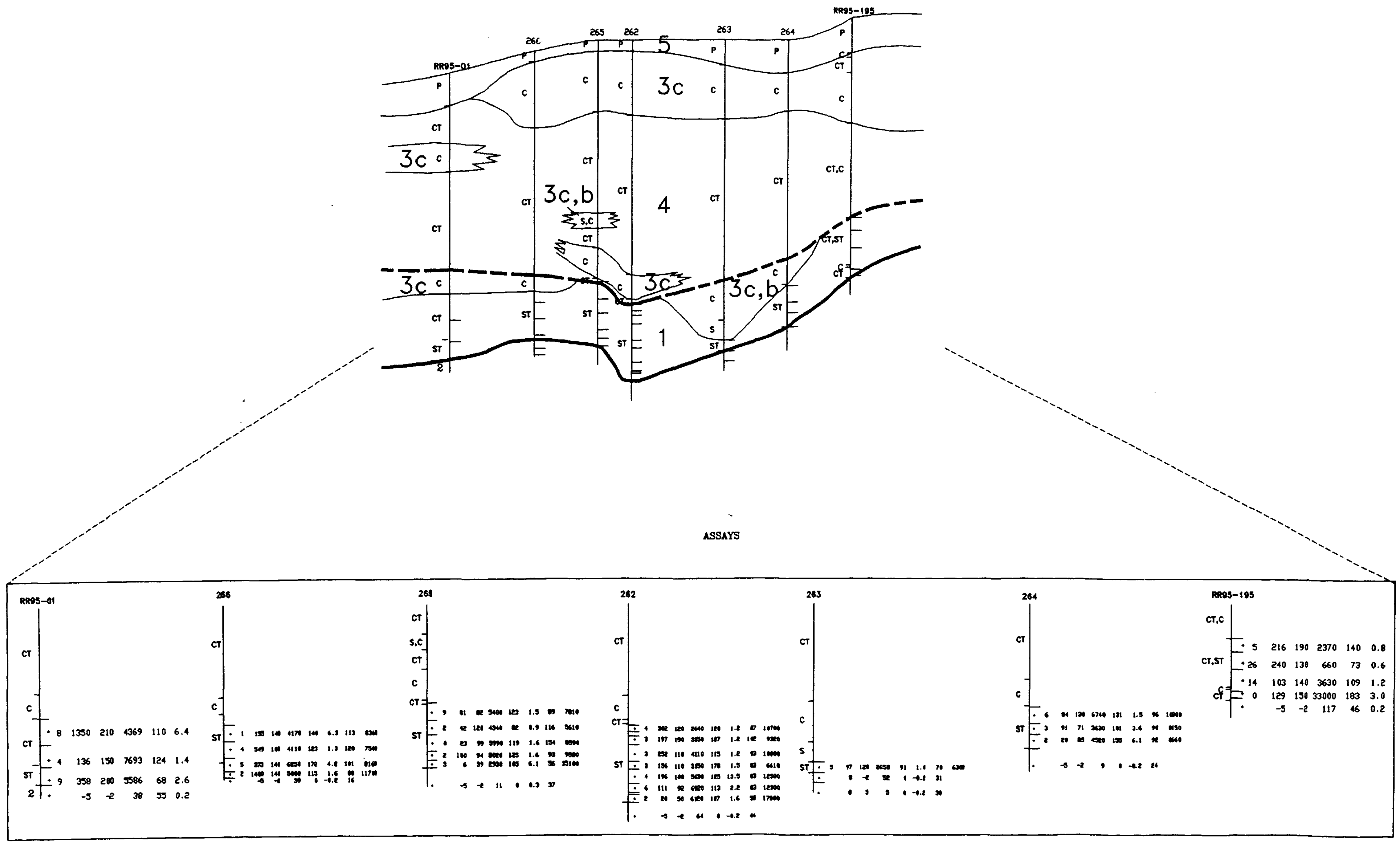
Rainy River District
Kenora Mining Division
N.T.S. 52 C/13 and 52D/16

Paul Jones
Project Geologist

POCKET

EXPLORATION DATA

DIAMOND DRILL HOLE SECTIONS



RR95-01
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264
RR95-195
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3c
4
3c,b
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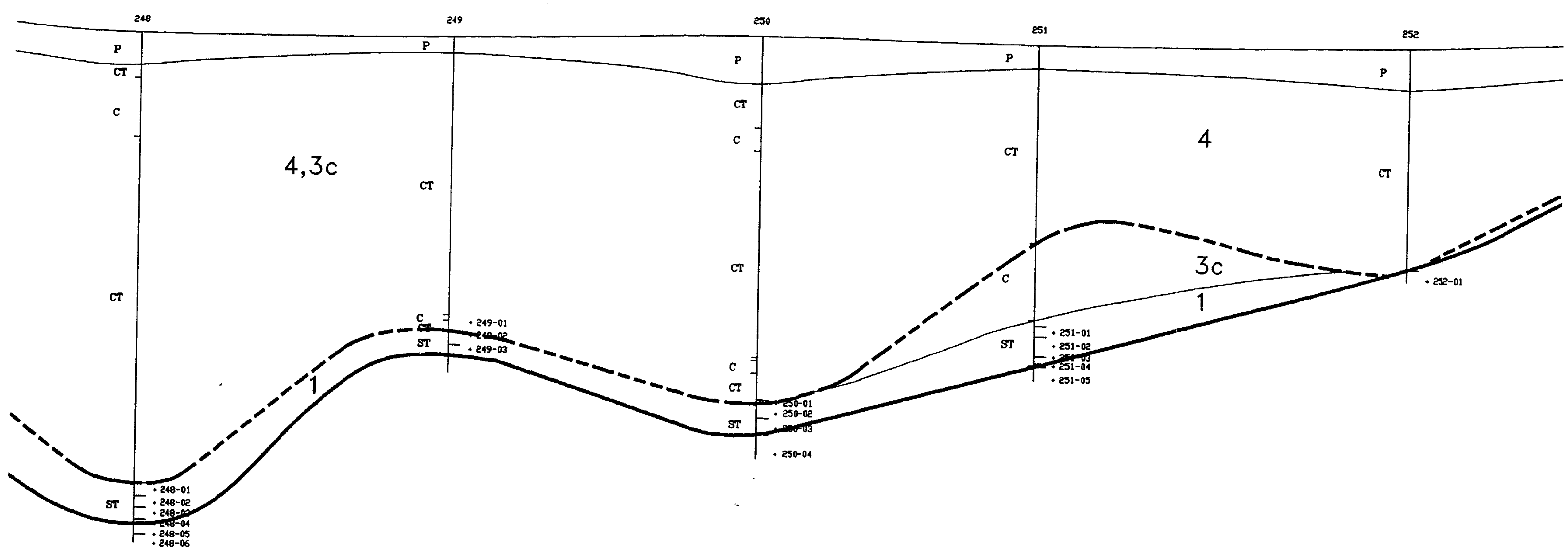
4 136 150 7693 124 1.4
9 358 280 5586 68 2.6
-5 -2 38 55 0.2
5 216 190 2370 140 0.8
26 240 130 660 73 0.6
14 103 140 3630 109 1.2
0 129 150 33000 183 3.0
-5 -2 117 46 0.2



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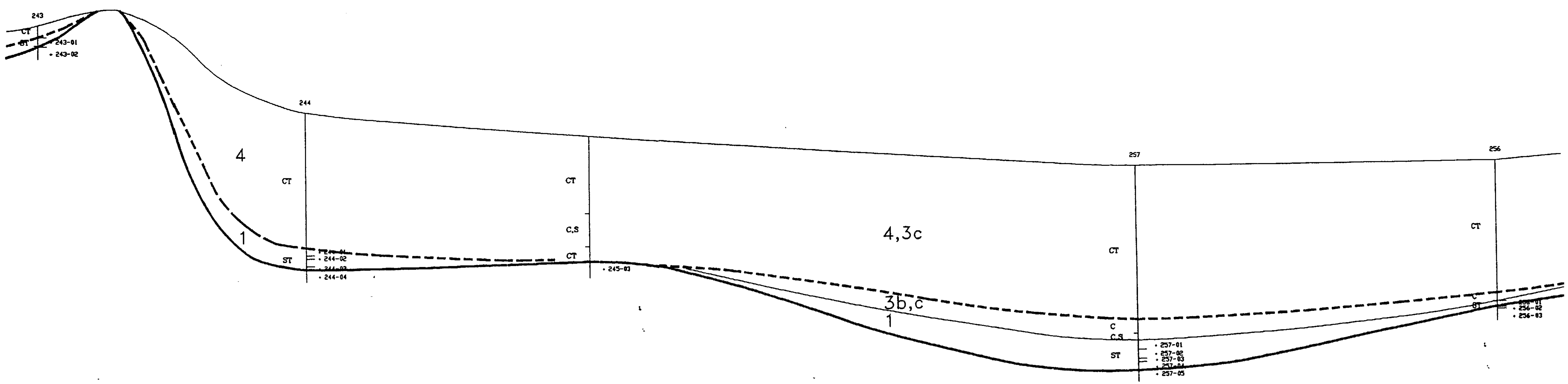
252-01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C,S
CT
245-03
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C,S
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257-05
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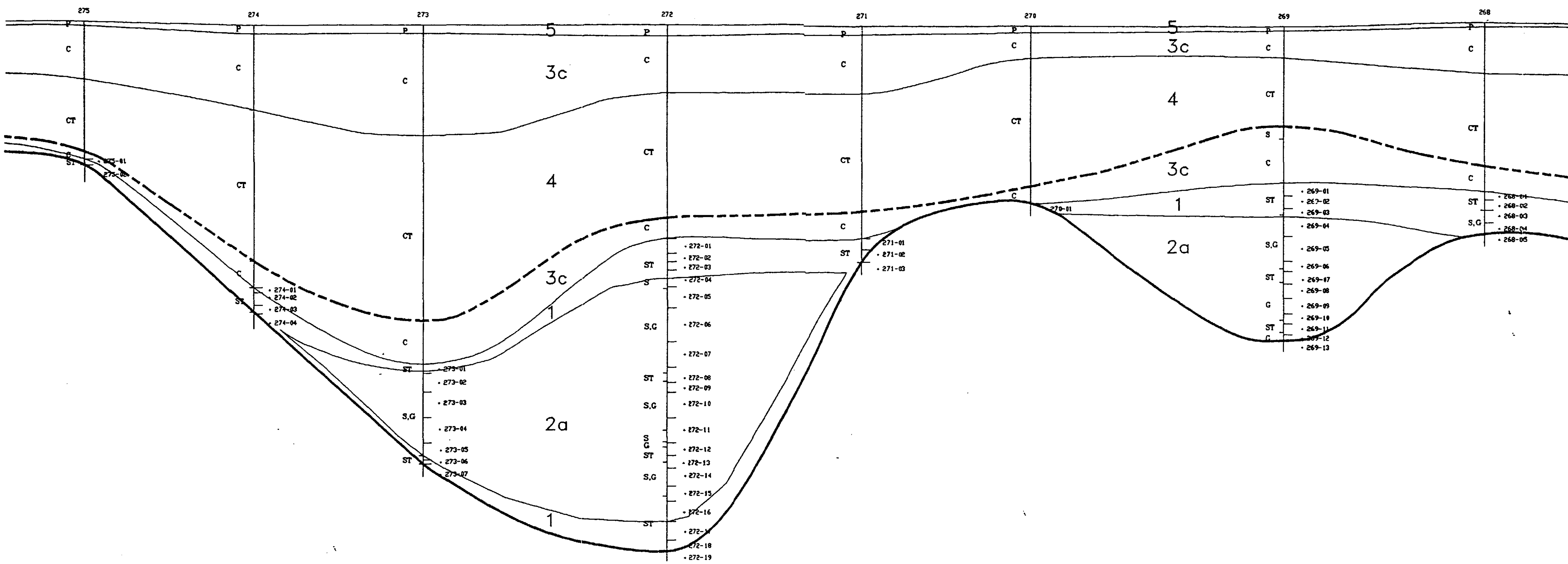
256-02
256-03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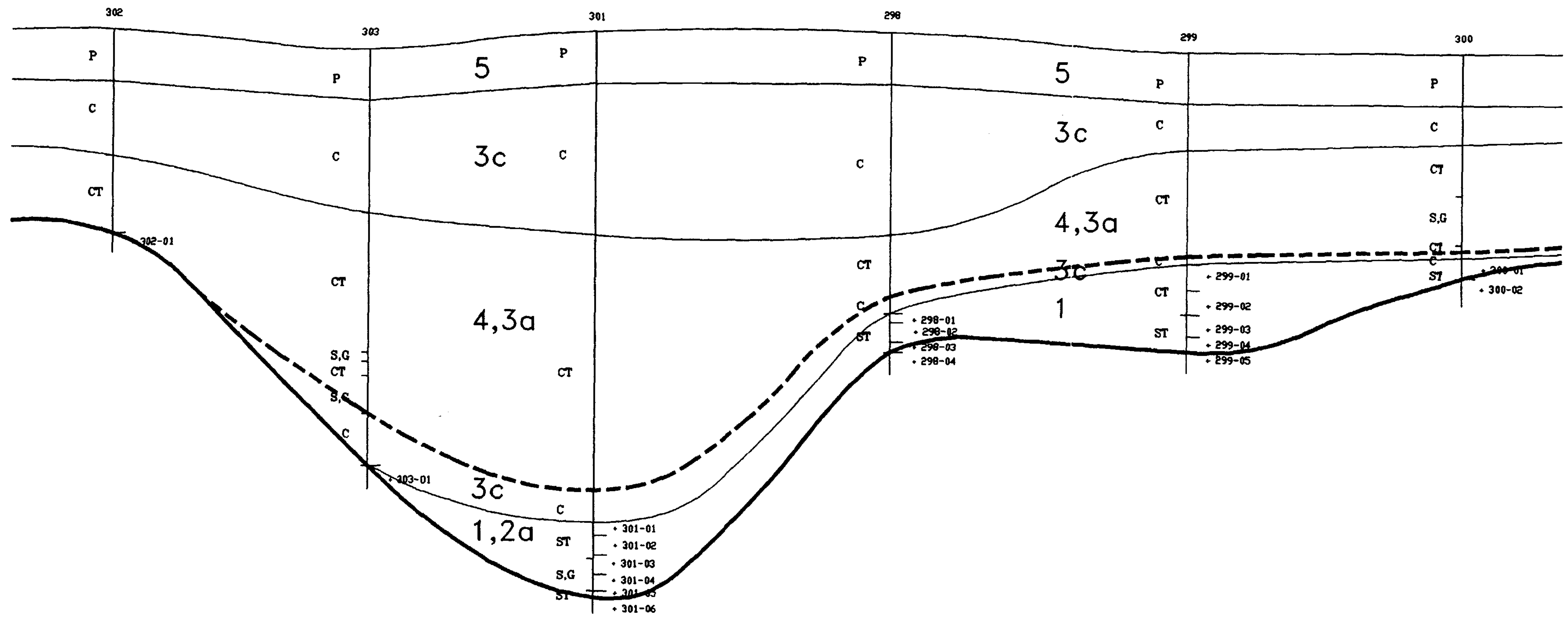
3c
4
2a
1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299
300
P
C
CT
5
3c
4,3a
1,2a
1
S,G
ST
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303-01
301-01
301-02
301-03
301-04
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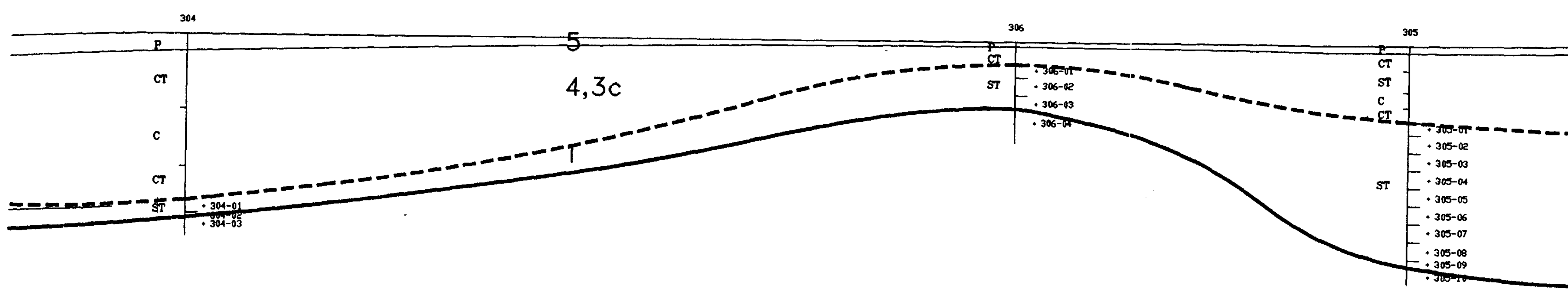
300-01
300-02


304
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P
CT
C
ST
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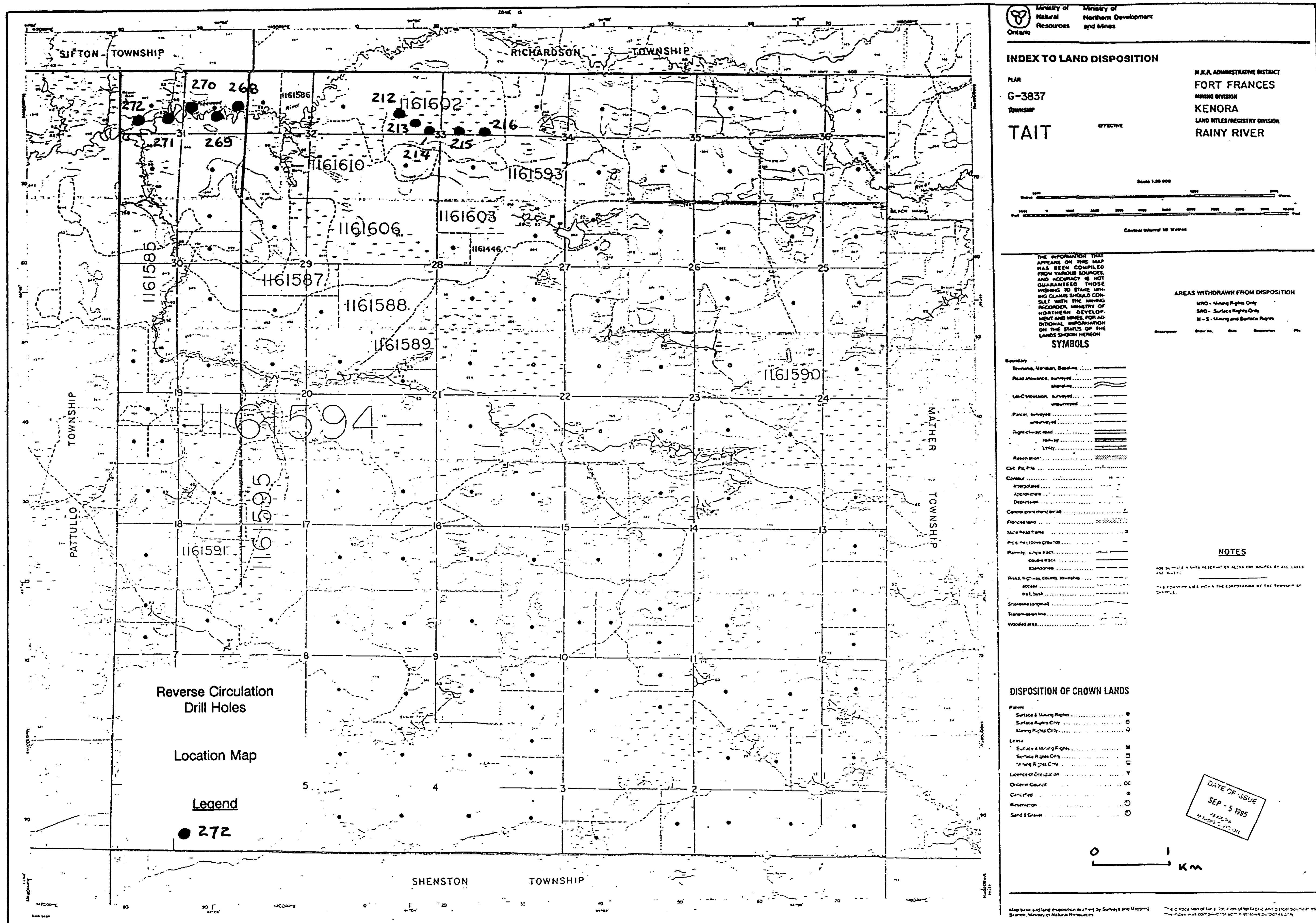
4,3c
1
304-01
304-03
306-01
306-02
306-03
306-04
305-01
305-02
305-03
305-04
305-05
305-06
305-07
305-08
305-09

MAP POCKET

LOCATION MAPS
REVERSE CIRCULATION DRILL HOLE COLLARS

Rainy River Project
Work Report
1996 Reverse Circulation Drill Data
Paul Jones, Project Geologist
July 22, 1996



Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario
INDEX TO LAND DISPOSITION
PLAN
G-3837
TOWNSHIP
TAIT
M.N.R. ADMINISTRATIVE DISTRICT
FORT FRANCES
MINING DIVISION
KENORA
LAND TITLES/REGISTRY DIVISION
RAINY RIVER
SIFTON TOWNSHIP
RICHARDSON TOWNSHIP
PATTULLO TOWNSHIP
MATHER TOWNSHIP
SHENSTON TOWNSHIP
1161586
1161602
1161610
1161593
1161606
1161603
1161446
1161585
1161587
1161588
1161589
1161590
1161594
1161595
1161591
272
270
268
271
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212
213
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215
216
Reverse Circulation
Drill Holes
Location Map
Legend
272
AREAS WITHDRAWN FROM DISPOSITION
SYMBOLS
NOTES
DISPOSITION OF CROWN LANDS
DATE OF ISSUE
SEP - 5 1995
0
1
KM

TAIT TWP.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

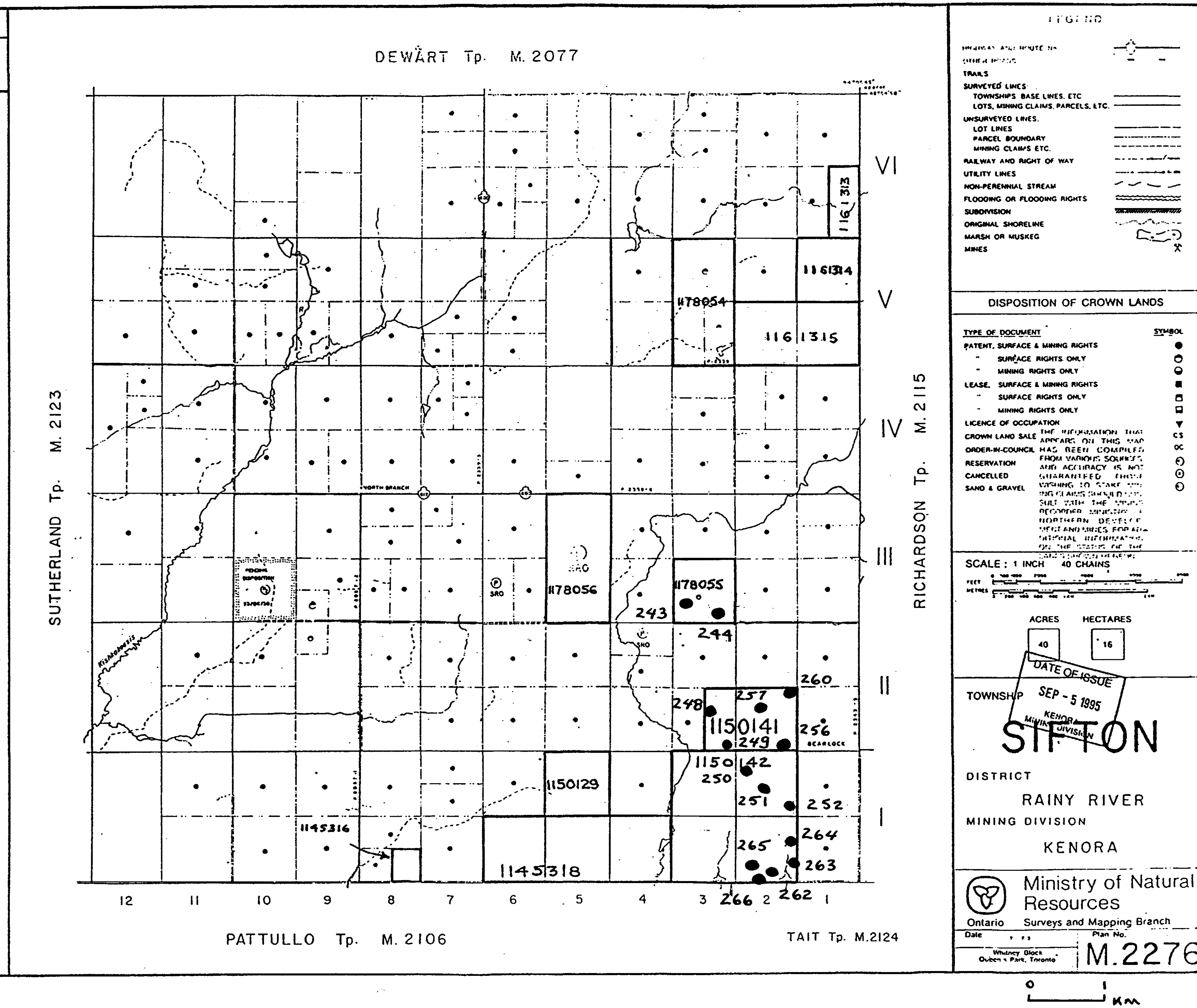
Ⓢ - reserved for reforestation purposes. 8 Mar '55 File. 11261

Reverse Circulation Drill Holes

Location Map

Legend

● 243



NOTES

400' surface rights reservation along the shores of all lakes and rivers.

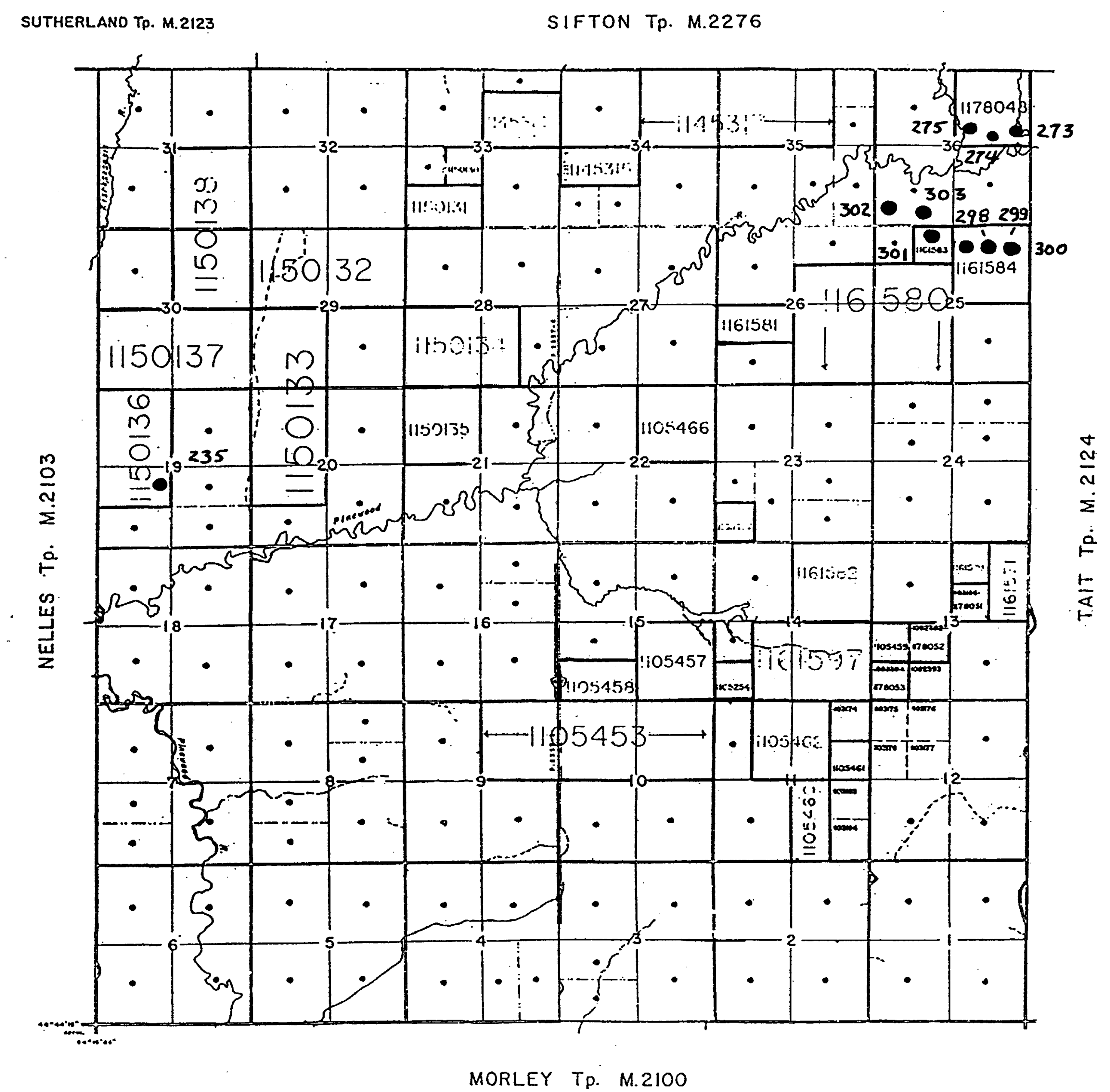
This Township lies within the Corporation of the Township of Morley

Reverse Circulation Drill Holes

Location Map

Legend

● 303



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT — SYMBOL

PATENT, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LEASE, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LICENCE OF OCCUPATION
CROWN LAND SALE — C.S.
ORDER-IN-COUNCIL — OC
RESERVATION
CANCELLED
SAND & GRAVEL

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

SCALE: 1 INCH = 40 CHAINS

ACRES 40 HECTARES 16

DATE OF ISSUE
SEP - 5 1995
KENORA MINING DIVISION

TOWNSHIP

PATTULLO

DISTRICT

RAINY RIVER

MINING DIVISION

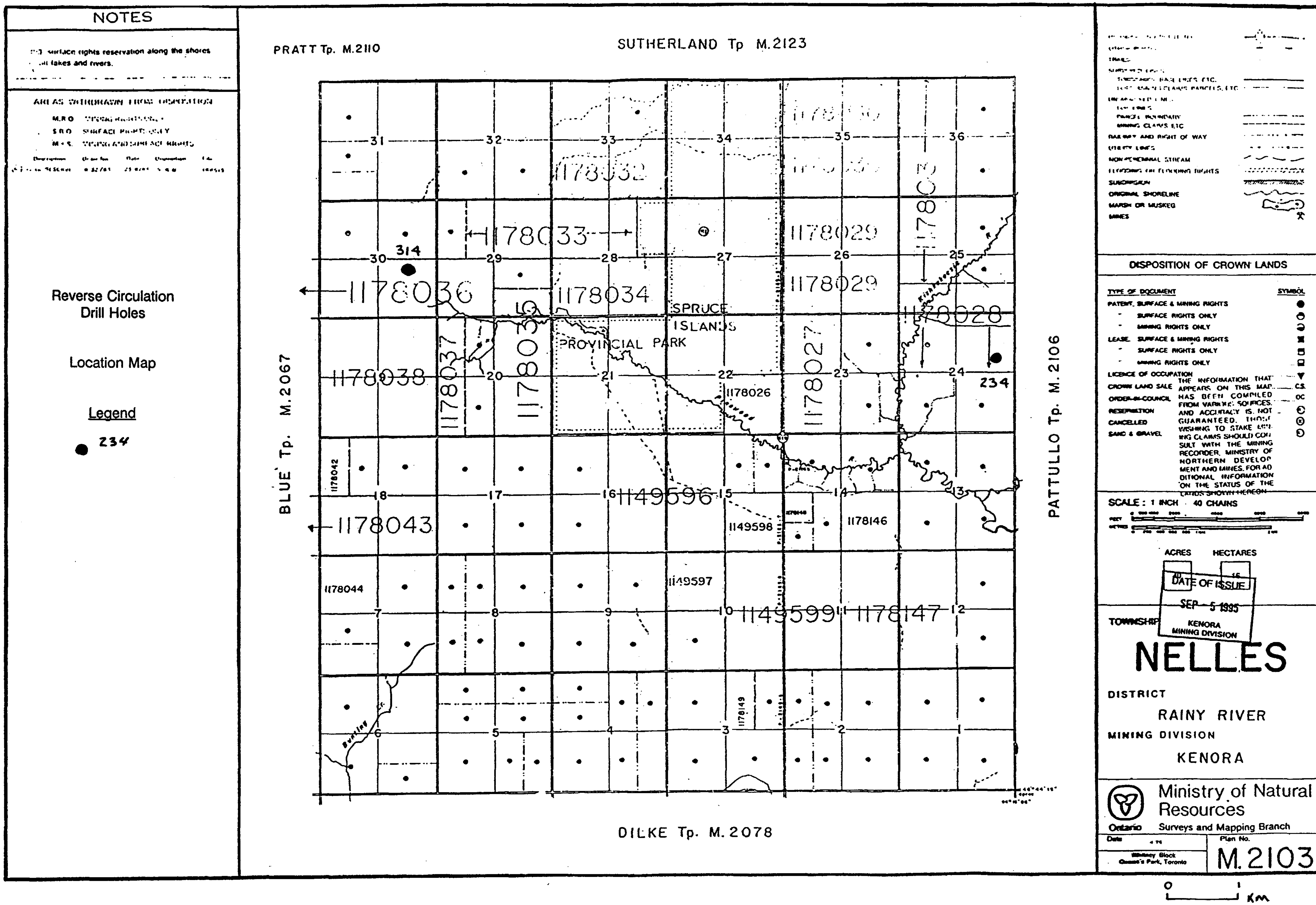
KENORA

Ministry of Natural Resources
Ontario
Surveys and Mapping Branch

Date
Whitney Block Queen's Park, Toronto

Plan No.
M.2106

0 1 KM


NOTES
Reverse Circulation Drill Holes
Location Map
Legend
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PRATT Tp. M.2110
SUTHERLAND Tp M.2123
BLUE Tp. M.2067
PATTULLO Tp. M.2106
DILKE Tp. M.2078
314
1178036
1178033
1178032
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1178043
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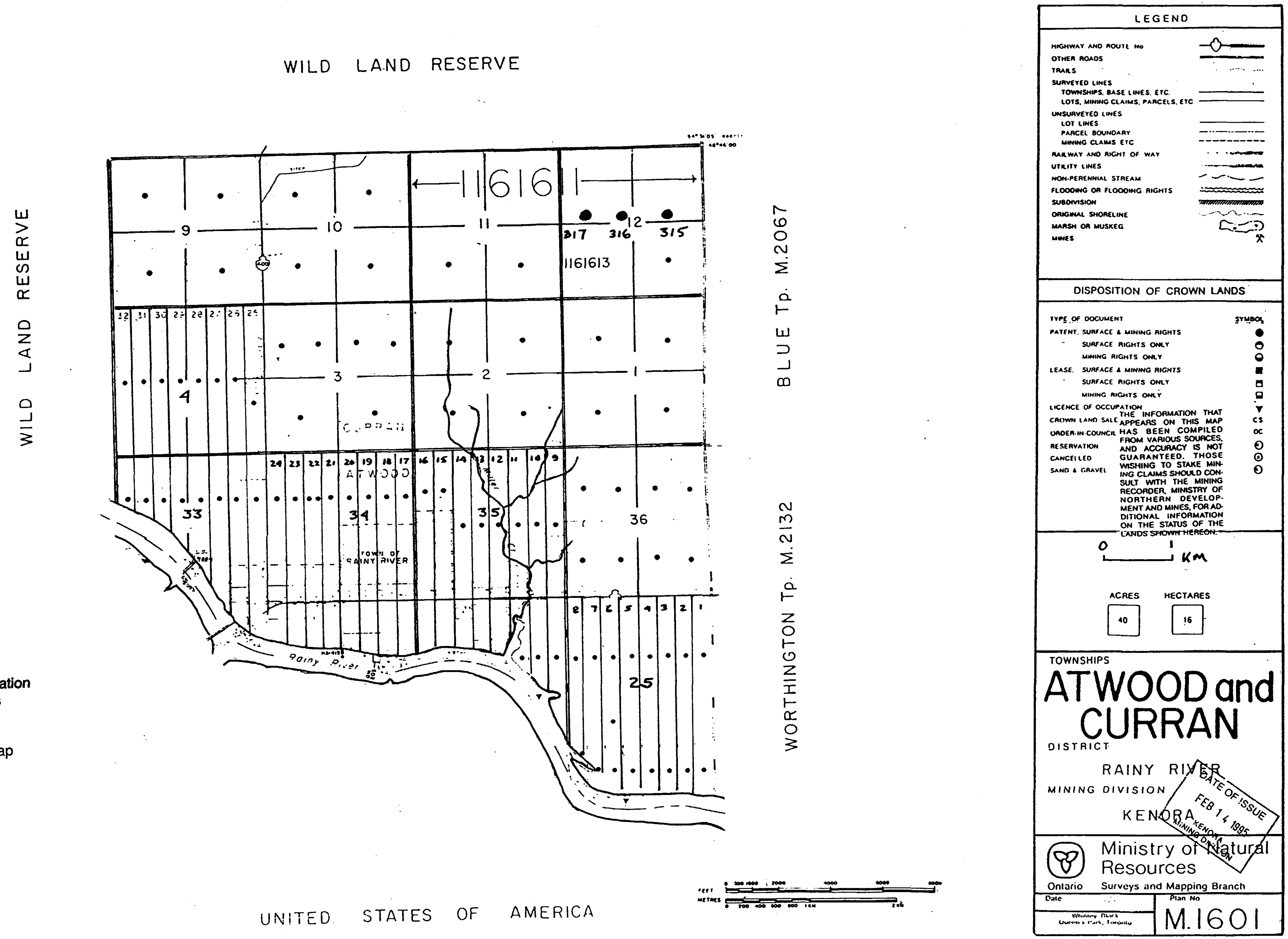
1178147
1178149
SPRUCE ISLANDS PROVINCIAL PARK
DISPOSITION OF CROWN LANDS
SCALE: 1 INCH = 40 CHAINS
ACRES
HECTARES
DATE OF ISSUE
SEP - 5 1995
KENORA MINING DIVISION
TOWNSHIP
NELLES
DISTRICT
RAINY RIVER
MINING DIVISION
KENORA
Ministry of Natural Resources
Ontario
Surveys and Mapping Branch
Whitney Block
Queen's Park, Toronto
M.2103
0
1
Km

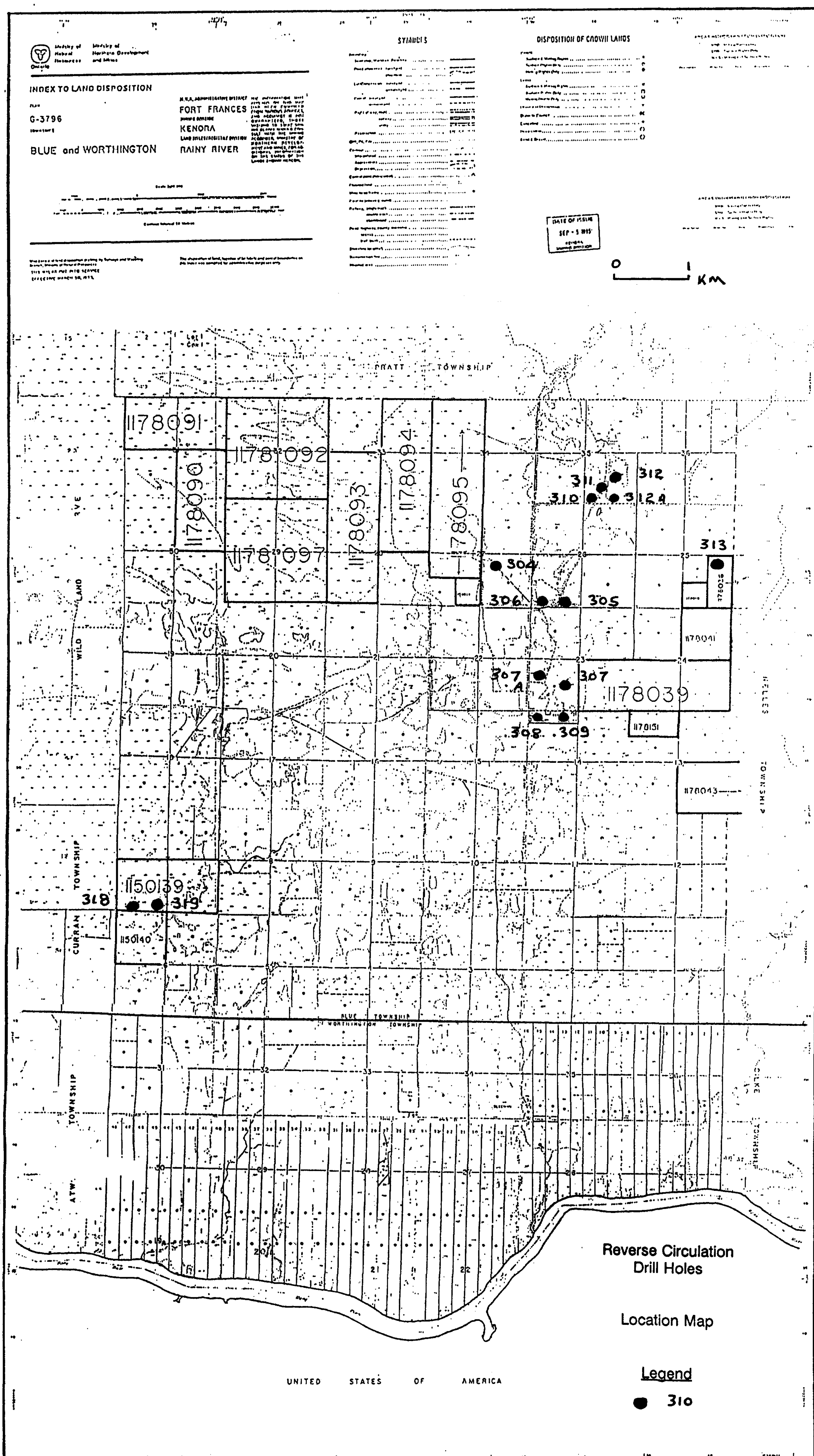
Reverse Circulation Drill Holes

Location Map

<u>Legend</u>

● 317





INDEX TO LAND DISPOSITION
G-3796
BLUE and WORTHINGTON
FORT FRANCES
KENORA
RAINY RIVER
SYMBOLS
DISPOSITION OF CROWN LANDS
0 1 KM
PRATT TOWNSHIP
HELLES TOWNSHIP
WILD LAND
CURRAN TOWNSHIP
ATW. TOWNSHIP
GILKE TOWNSHIP
BLUE TOWNSHIP
WORTHINGTON TOWNSHIP
1178091
1178092
1178090
1178093
1178094
1178095
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1150140
1178043
1170151
1178041
313
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310
312A
304
305
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307A
308
309
318
319
UNITED STATES OF AMERICA
Reverse Circulation
Drill Holes
Location Map
Legend
310

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

This Township lies within the Corporation of the Township of Chapple.

Ⓡ W-K-43/93 SRBMR JUNE 4/93

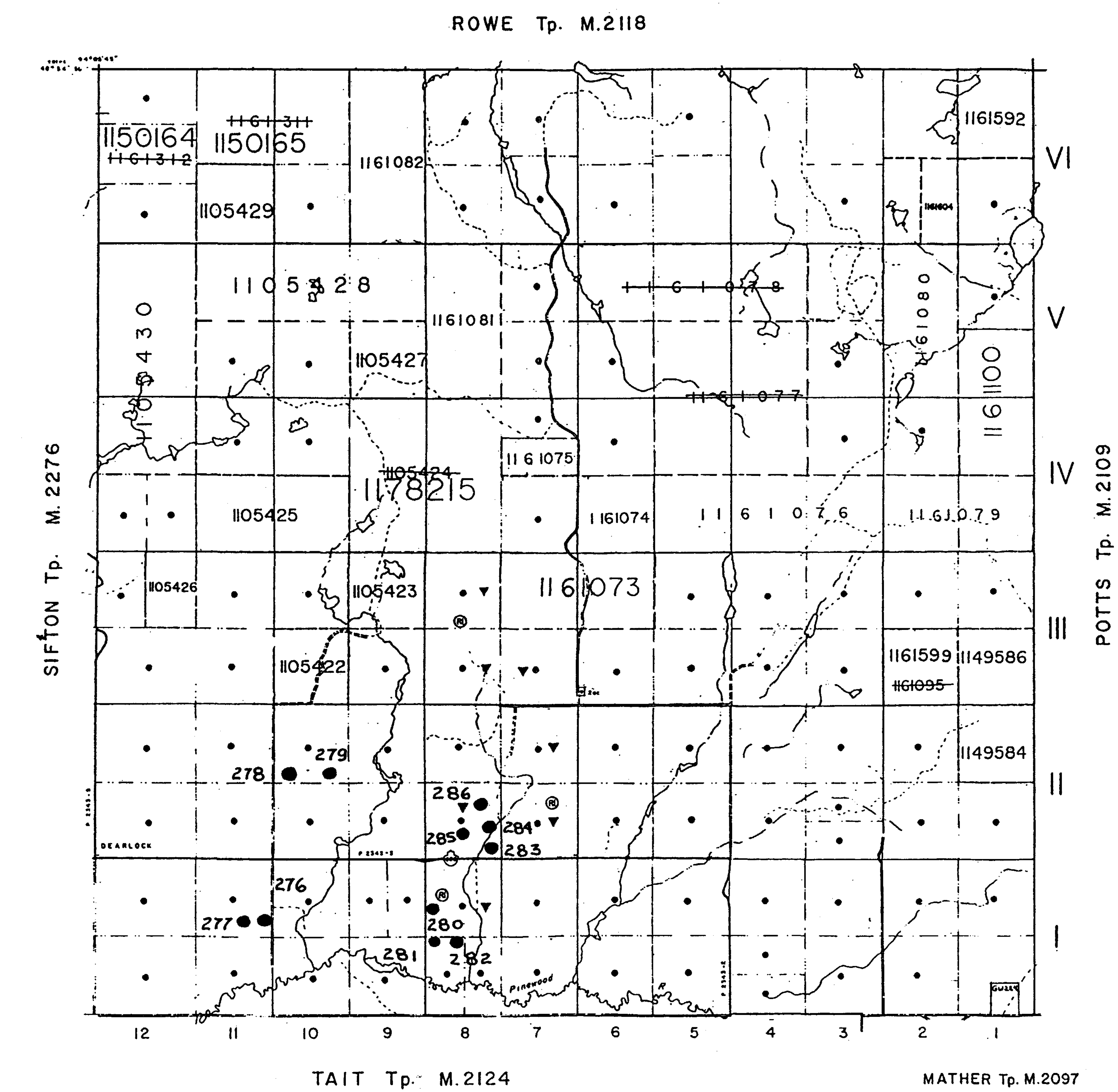
Reverse Circulation Drill Holes

Location Map

Legend

● 279

0 — 1 KM



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES ETC
LOTS, MINING CLAIMS, PARCELS ETC
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DATE OF ISSUE
JAN - 5 1996
KENORA
MINING DIVISION

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT — SYMBOL

PATENT: SURFACE & MINING RIGHTS; SURFACE RIGHTS ONLY; MINING RIGHTS ONLY
LEASE: SURFACE & MINING RIGHTS; SURFACE RIGHTS ONLY; MINING RIGHTS ONLY
LICENCE OF OCCUPATION
CROWN LAND SALE
ORDER-IN-COUNCIL
RESERVATION
CANCELLED
SAND & GRAVEL

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

SCALE: 1 INCH = 40 CHAINS

ACRES 40 | HECTARES 16

TOWNSHIP

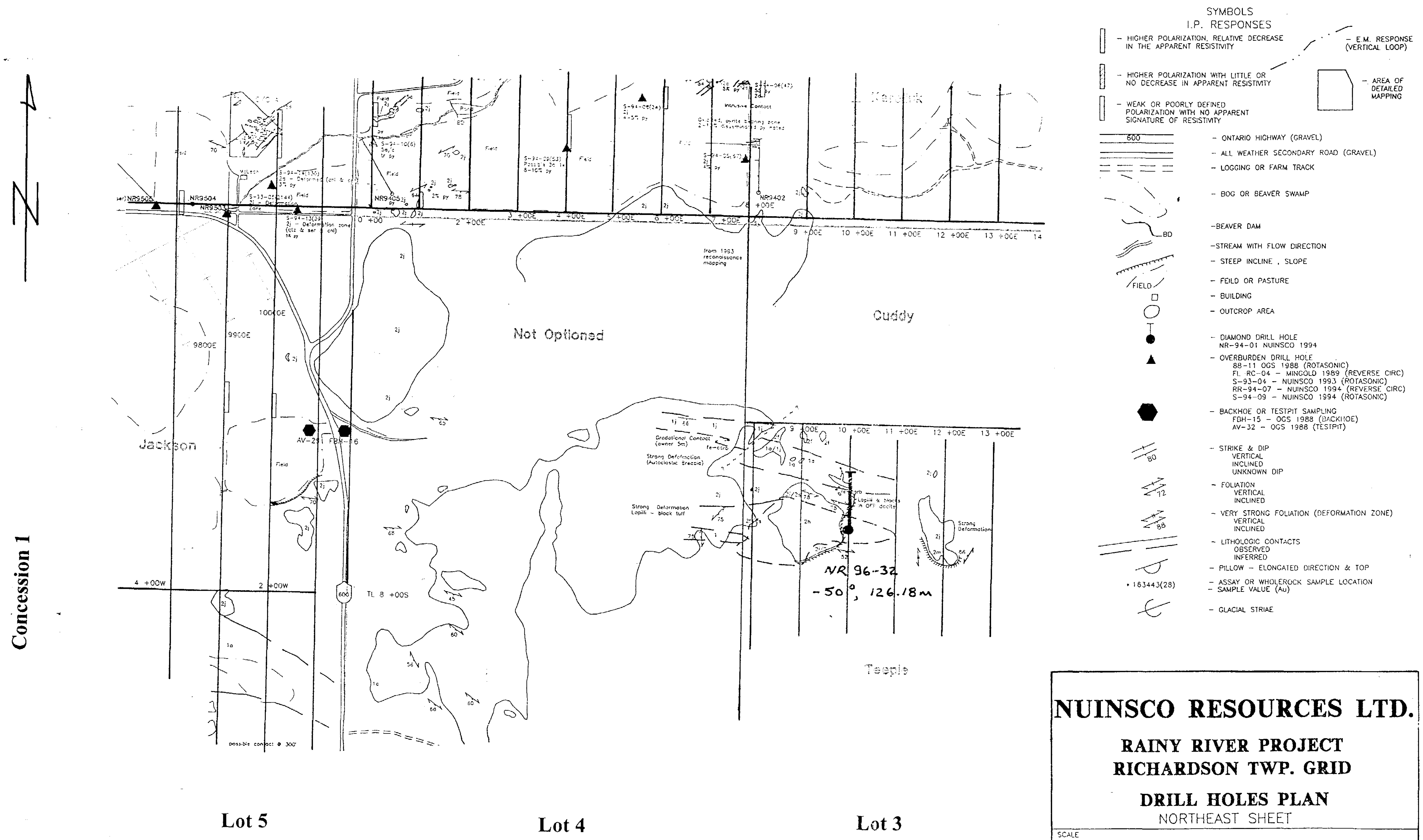
RICHARDSON

DISTRICT
RAINY RIVER

MINING DIVISION
KENORA

Ontario — Ministry of Natural Resources
Surveys and Mapping Branch

M.2115



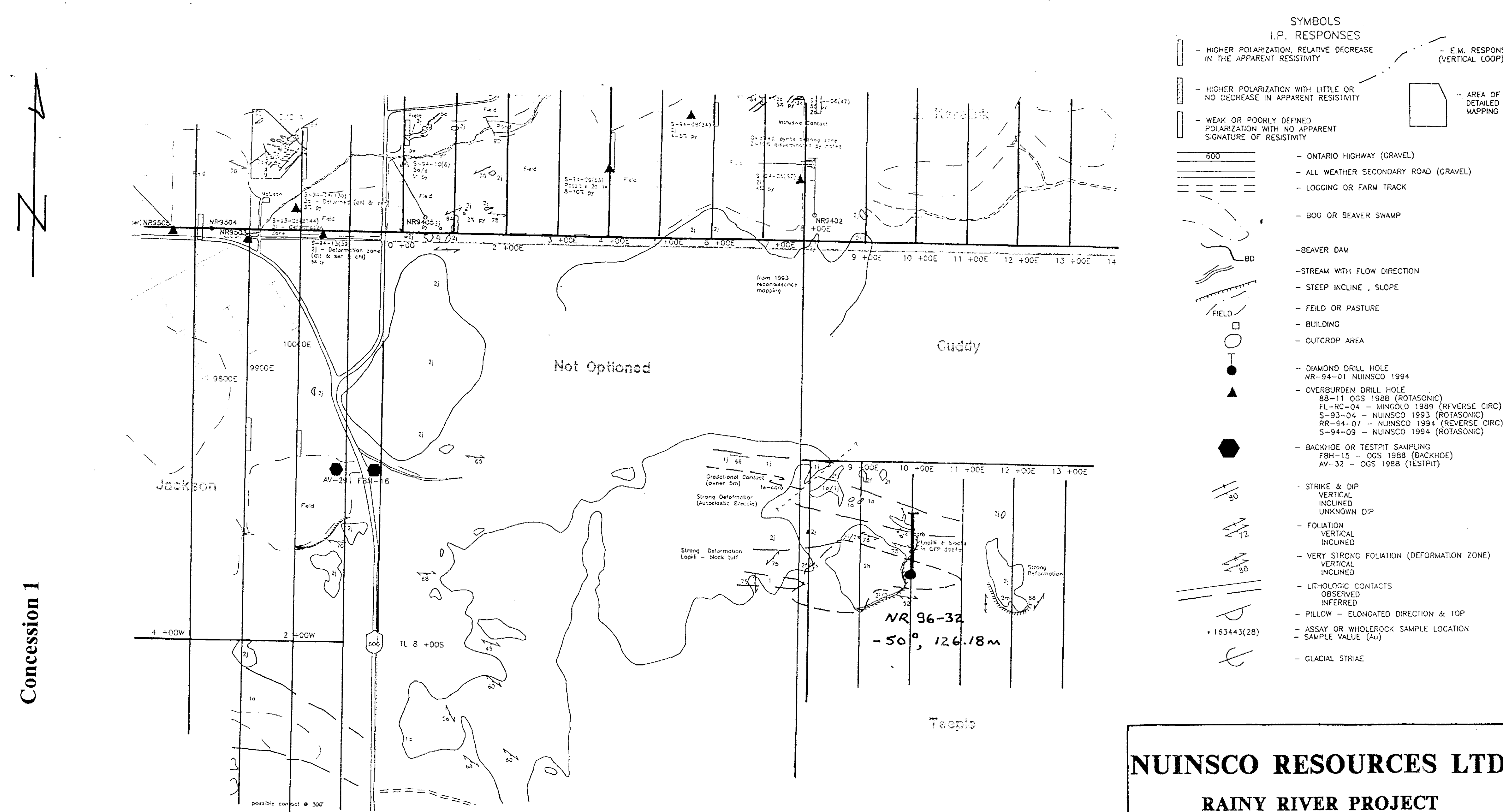
NUINSCO RESOURCES LTD.

RAINY RIVER PROJECT
RICHARDSON TWP. GRID

DRILL HOLES PLAN
NORTHEAST SHEET

SCALE

0 100 200 300 400 500 600 meters



Lot 5

Lot 4

Lot 3

NUINSCO RESOURCES LTD.

RAINY RIVER PROJECT
RICHARDSON TWP. GRID

DRILL HOLES PLAN
NORTHEAST SHEET

SCALE

0 100 200 300 400 500 600 meters

Ministry of Northern Development and Mines
ntario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9610.00111

ERLIS

sonal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, ibury, Ontario, P3E 6A5, telephone (705) 670-7264.

structions: - Please type or print and submit in duplicate
- Refer to the Mining Act ... r consult the Mining Recorder.
- A separate copy of this
- Technical reports and m
- A sketch, showing the c

52D16SE0012 W9610.00111 RICHARDSON

900

corded Holder(s): NUINSCO RESOURCES	Client No.: 176866
dress: 908 THE EAST MALL, ETOBICOKE	Telephone No.: 416 626-0470
ing Division: KENORA / Township/Area: RICHARDSON, TAIT, PATTULLO, NELLES, SIFTON, BLUE, CURRAN	M or G Plan No.
ates Work erformed From: JAN 21/96	To: MARCH 26/96

rk Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	
Physical Work, Including Drilling	Reverse Circulation Drilling
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

tal Assessment Work Claimed on the Attached Statement of Costs $ 232,475

te: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

rsons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Overburden Drilling Management	Nepean, Ont
Bradley Bros.	Noranda, Quebec
Paul Jones	RR#2, Emo Ont (Nuinsco Res.)
George Archibald	RR#2, Emo Ont (Nuinsco Res)

tach a schedule if necessary)

rtification of Beneficial Interest * **See Note No. 1 on reverse side**

	Date	Recorded Holder or Agent (Signature)
certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	July 26/96	Paul Jones

rtification of Work Report

certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

ame and Address of Person Certifying: Paul Jones		
elepone No.: 416.626.0470.	Date: May 21, 1996	Certified By (Signature): X Paul Jones

or Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
232,475	July 31/96	[signature]	JUL 31 1996 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM
	Deemed Approval Date: Oct. 29, 1996	Date Approved: Oct. 29, 1996	
	Date Notice for Amendments Sent		

1 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1161602	8	17,900	0.00	0.00	17,900.00
	1161583	1	6,153	0.00	0.00	6,153.00
	1161584	4	9,681	0.00	0.00	9,681.00
	1178048	4	14,837	0.00	0.00	14,837.00
	1150136	6	6,358	0.00	0.00	6,358.00
	1178028	12	8,943	0.00	0.00	8,943.00
	1178036	14	4,499	0.00	0.00	4,499.00
	1178055	4	3,309	0.00	0.00	3,309.00
	1150141	6	18,734	0.00	0.00	18,734.00
	1150142	16	32,163	0.00	0.00	32,163.00
	1150139	8	7,521	0.00	0.00	7,521.00
	1161611	16	10,625	0.00	0.00	10,625.00
	Total Number of Claims: 12		Total Value Work Done: 140,723	Total Value Work Applied: 0.00	Total Assigned From: 0.00	Total Reserve: 140,723

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature [signature]	Date July 26/96

1 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units ha	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	N½, 10. CON. 2 RICHARDSON (10746)	64.34	7042	0.00	0.00	7,042
	E½ N½ 11. CON. 1 RICHARDSON (13514)	31.93	10351	0.00	0.00	10,351
	S½, S½ 8, CON. 2 RICHARDSON (5483)	30.99	13,565	0.00	0.00	13,565
	W½, S½ 8. CON. 1 RICHARDSON (17392)	32.37	5,579	0.00	0.00	5,579
	N½ S½ 8, CON 2 RICHARDSON (22496)	32.07	4,307	0.00	0.00	4,307
	N½ 8, CON 1 RICHARDSON (4259)	63.64	2,830	0.00	0.00	2,830
	NE ¼, SECT 31 TAIT (17112)	61.92	11,965	0.00	0.00	11,965
	NW ¼, SECT 31 TAIT (17117)	59.89	12,717	0.00	0.00	12,717
	SW¼, SECT 36 PATTULLO (14975)	66.37	7,015	0.00	0.00	7,015
	SW ¼, SECT 23 BLUE (4097)	66.37	1,189	0.00	0.00	1,189
	pt NW ¼, SECT 14 BLUE (48R)	5.67	1,791	0.00	0.00	1,791
	SE ¼, SECT 27 BLUE (4942)	65.56	2,311	0.00	2,311	0.00
	SW¼, SECT 26 BLUE (5132)	63.94	3,897	0.00	3897	0.00
	SE¼, SECT 35 BLUE (12610)	65.56	7,193	0.00	0.00	7,193
	1178110	16		1,307		
	1178095	14		3972		
	1178094	12		929		
	Total Number		Total Value Work 91,752	Total Value 6,208	Total Assigned 6,208	Total Reserve 85,544

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

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2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
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Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date

NEW FILE SUBMISSIONS

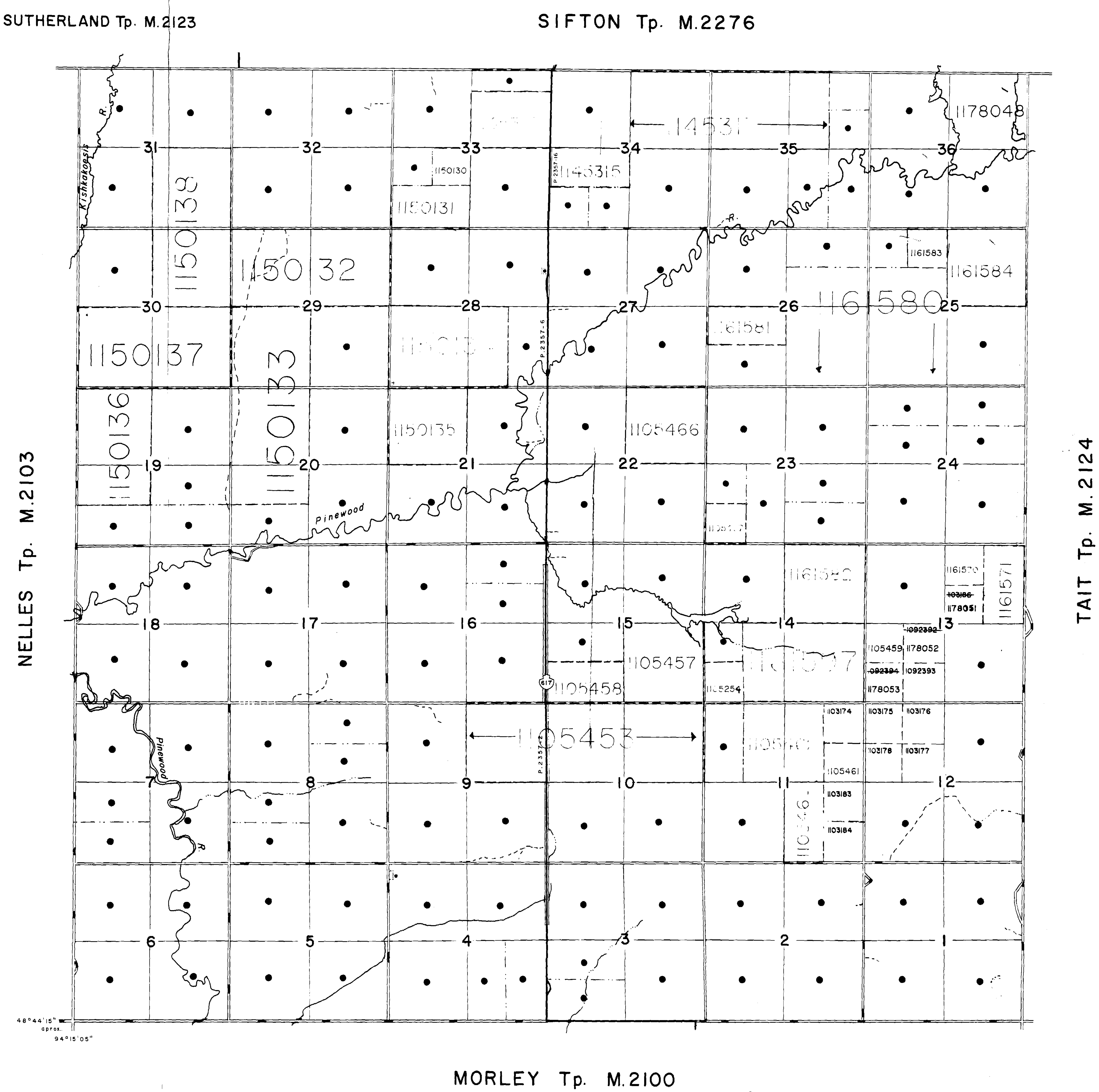
File Number	
OMIP	OPAP
Claim Holder	NUINSO RESOURCES LIMITED
Township	RICHARDSON / TAIT / PATULLO / NELLES / SIFTON / BLUE / CURRAN
Mining Division	KENORA
Report of Work #	W9610.00111
Survey	POVERB
Shelved	03-3
INFO Client Number	176866

Notes

NOTES

...rights reservation along the shores ...nd rivers.

...nship lies within the ... of the Township of Morley



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◓
" MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	⬒
" MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	ⓧ
SAND & GRAVEL	Ⓢ

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

SCALE : 1 INCH = 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000
METRES 0 200 400 600 800 1 KM 2 KM

ACRES	HECTARES
40	16

DATE OF ISSUE
JAN 16 1997
KENORA MINING DIVISION

TOWNSHIP

PATTULLO

DISTRICT

RAINY RIVER

MINING DIVISION

KENORA

52D10SE0012 W9610.00111 RICHARDSON

200

Date 7 7 5

Whitney Block
Queen's Park, Toronto

Plan No.

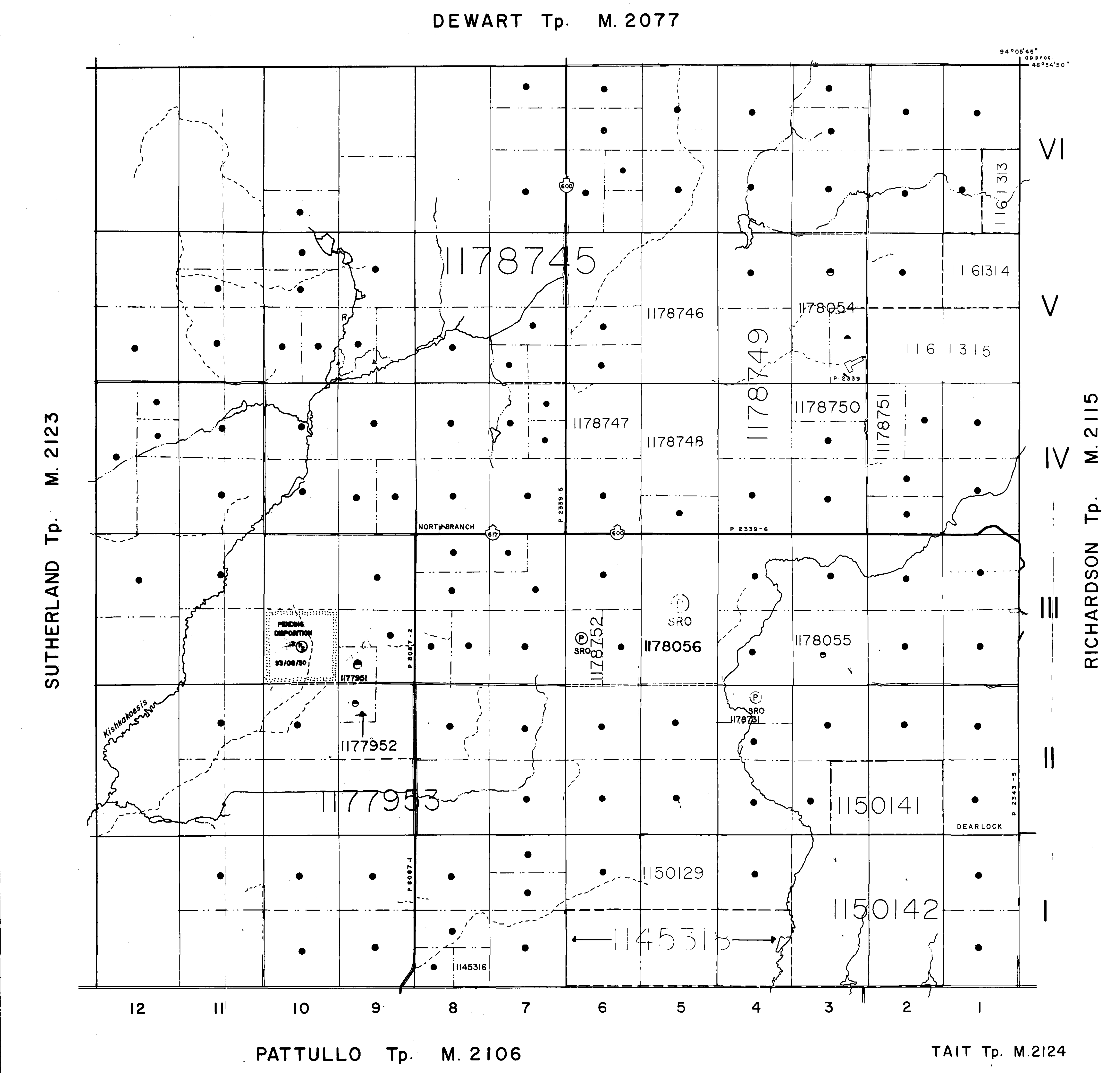
M.2106

OTES

;servation along the shores
;.

ESERVES

/orestation purposes. 8 Mar'55



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◓
" MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	⬒
" MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	⊗
SAND & GRAVEL	Ⓢ

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SCALE : 1 INCH = 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000
METRES 0 200 400 600 800 1 KM 2 KM

ACRES	HECTARES
40	16

DATE OF ISSUE
JAN 1 6 1997
KENORA MINING DIVISION

TOWNSHIP

SIFTON

DISTRICT
RAINY RIVER
MINING DIVISION
KENORA

52D16SE0012 W9610.00111 RICHARDSON

210

Date 7.. 75

Plan No.
M.2276

Whitney Block
Queen's Park, Toronto

c as linen
x 1185

NOTES

...face rights reservation along the shores ...es and rivers.

...S WITHDRAWN FROM ... DISPOSITION

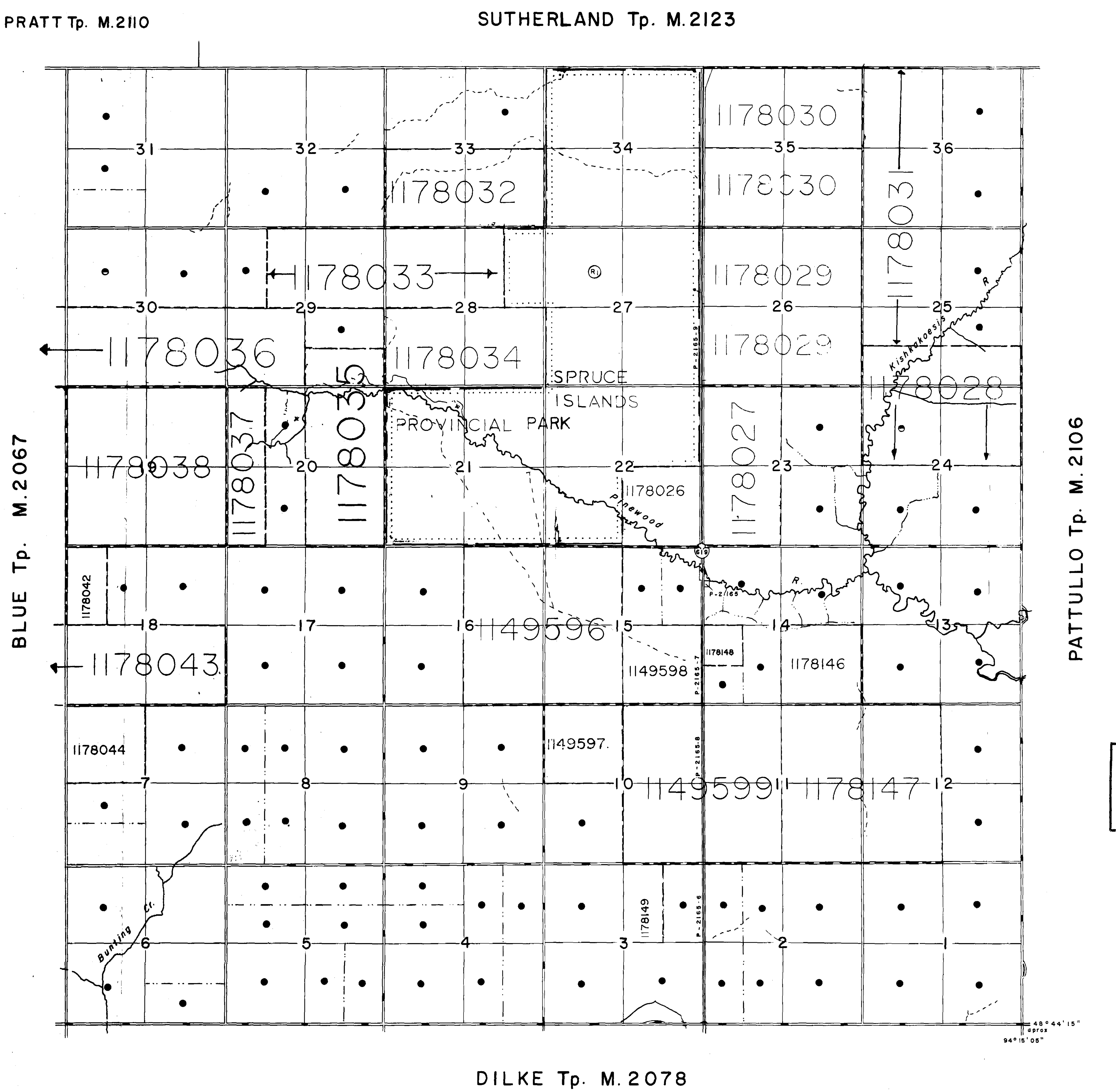
R.O. – MINING RIGHTS ONLY

R.O. – SURFACE RIGHTS ONLY

+S. – MINING AND SURFACE RIGHTS

...on	Order No.	...	...	File
...ERVE	W.32/83	23/8/83	S. & M.	188515

Effective as Longer Feb 27/85



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT — SYMB...

PATENT, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LEASE, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LICENCE OF OCCUPATION
CROWN LAND SALE
ORDER-IN-COUNCIL
RESERVATION
CANCELLED
SAND & GRAVEL

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SCALE: 1 INCH – 40 CHAINS

FEET 0 500 1000 2000 4000 6000
METRES 0 200 400 600 800 1 KM 2 KM

ACRES 40 — HECTARES 16

DATE OF ISSUE
JAN 16 1997
TOWNSHIP
KENORA
MINING DIVISION

NELLES

DISTRICT
RAINY RIVER
MINING DIVISION
KENORA

52D16SE0012 W9610.00111 RICHARDSON

220

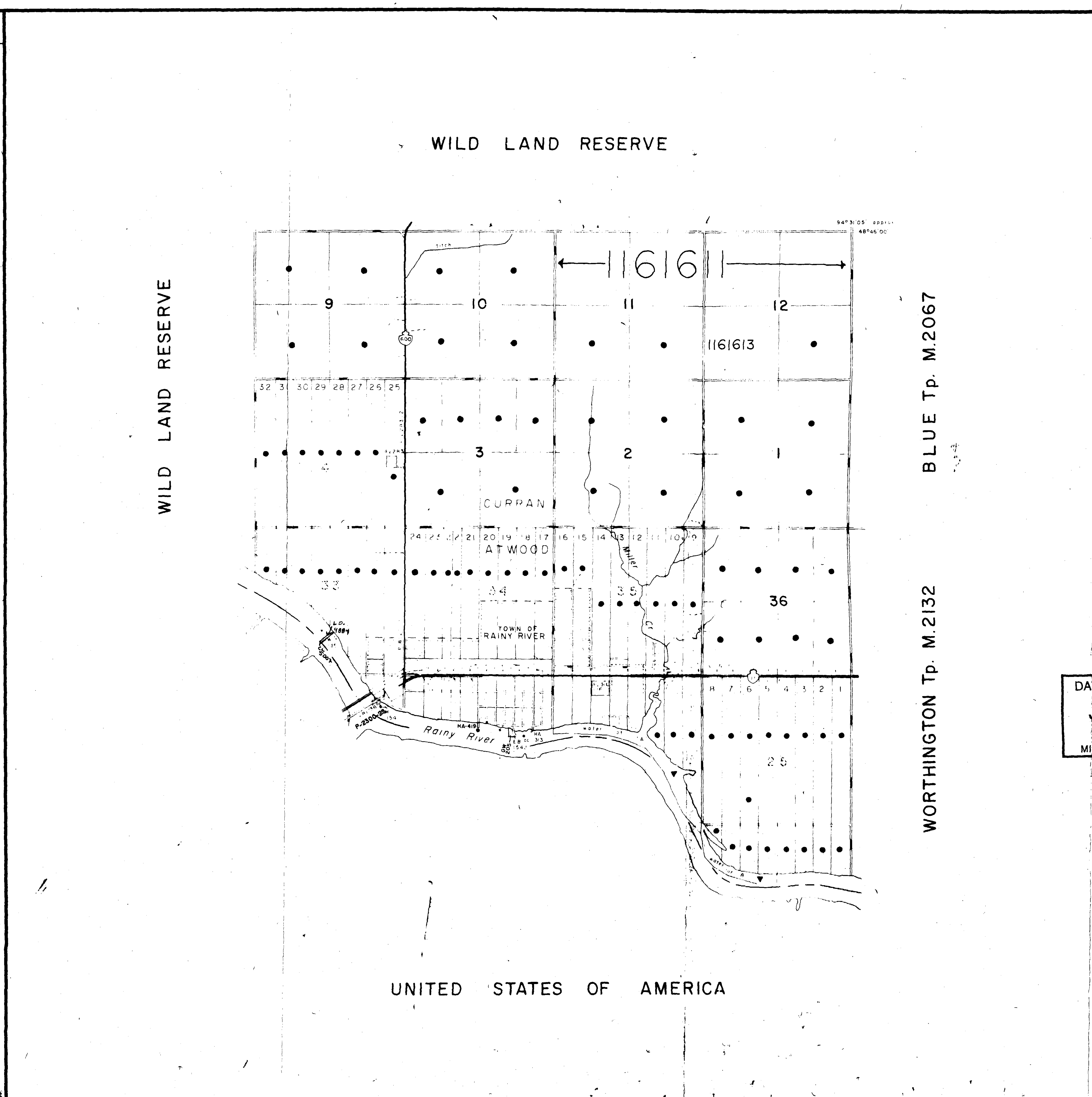
Date 4 75

Whitney Block
Queen's Park, Toronto

Plan No.
M.210...

ong the shores

Sections 25,
Rainy River Range.



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
SURFACE RIGHTS ONLY	◒
MINING RIGHTS ONLY	◓
LEASE, SURFACE & MINING RIGHTS	■
SURFACE RIGHTS ONLY	⬒
MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	CS
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	Ⓒ
SAND & GRAVEL	Ⓢ

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DATE OF ISSUE
JAN 16 1997
KENORA
MINING DIVISION

ACRES	HECTARES
40	16

TOWNSHIPS
ATWOOD and CURRAN

DISTRICT
RAINY RIVER
MINING DIVISION
KENORA

52D16SE0012 W9610.00111 RICHARDSON

230

Date
Whitney Block
Queen's Park, Toronto

Plan No.
M.1601

Ministry of Natural Resources — Ministry of Northern Development and Mines — Ontario

INDEX TO LAND DISPOSITION

PLAN
G-3796

TOWNSHIPS
BLUE and WORTHINGTON

M.N.R. ADMINISTRATIVE DISTRICT
FORT FRANCES

MINING DIVISION
KENORA

LAND TITLES/REGISTRY DIVISION
RAINY RIVER

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DATE OF ISSUE
JAN 16 1997
KENORA MINING DIVISION

Scale 1:20 000

Contour Interval 10 Metres

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

THIS MYLAR PUT INTO SERVICE EFFECTIVE MARCH 30, 1995.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

SYMBOLS

- Boundary
  - Township, Meridian, Baseline
  - Road allowance; surveyed
  - shoreline
  - Lot/Concession; surveyed
  - unsurveyed
  - Parcel; surveyed
  - unsurveyed
  - Right-of-way; road
  - railway
  - utility
  - Reservation
- Cliff, Pit, Pile
- Contour
  - Interpolated
  - Approximate
  - Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
  - double track
  - abandoned
- Road; highway, county, township
  - access
  - trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

DISPOSITION OF CROWN LANDS

- Patent
  - Surface & Mining Rights
  - Surface Rights Only
  - Mining Rights Only
- Lease
  - Surface & Mining Rights
  - Surface Rights Only
  - Mining Rights Only
- Licence of Occupation
- Order-in-Council — OC
- Cancelled
- Reservation
- Sand & Gravel

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

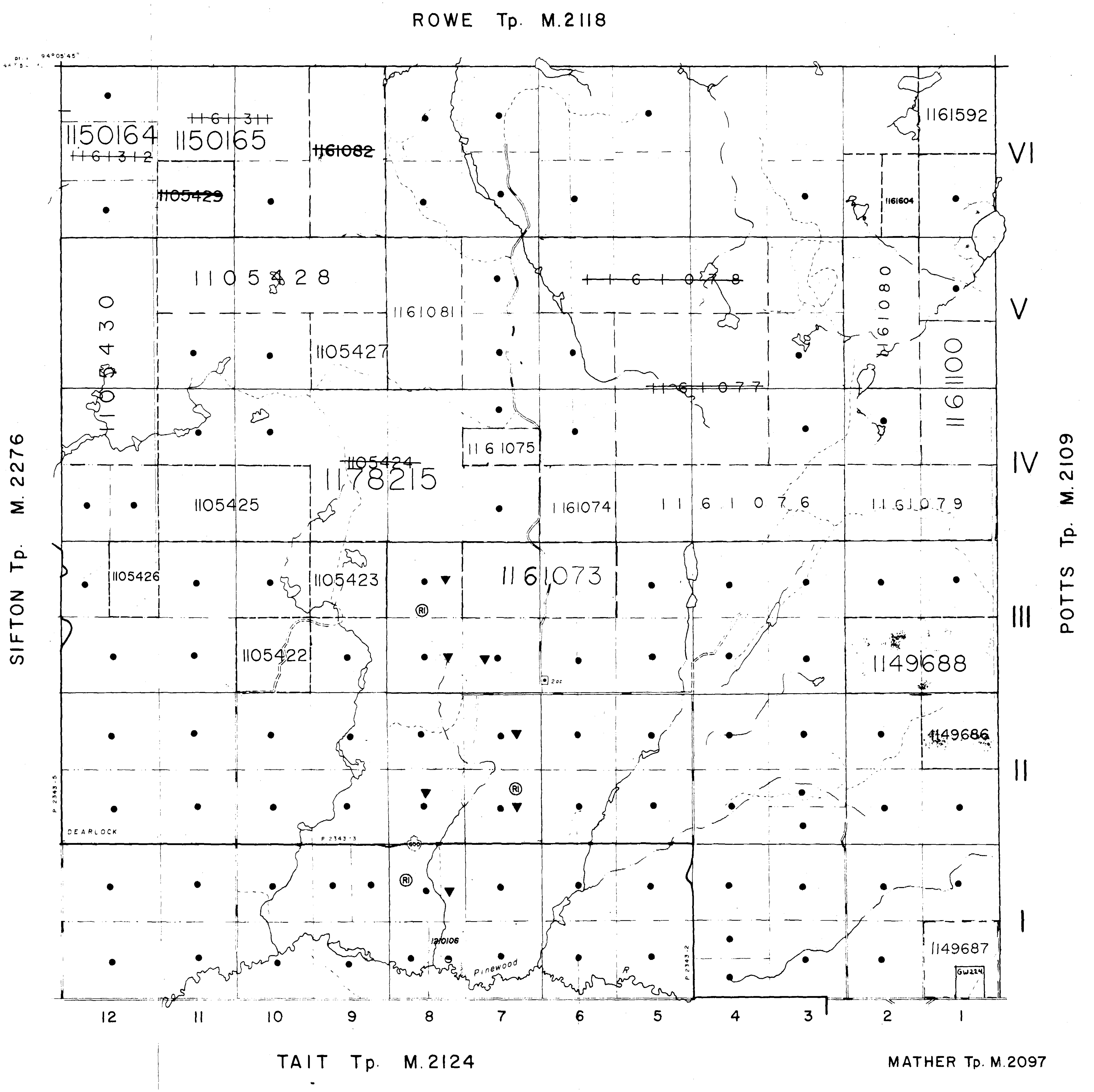
Description	Order No.	Date	Disposition	File

NOTES

e rights reservation along the shores and rivers.

wnship lies within the ion of the Township of Chopple.

5 SR&MR JUNE 4/93
NWR MRO JAN. 26/96 195150-TO FILE #
5 NWR MRO MAY 9/96 195150.



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES ETC
LOTS, MINING CLAIMS, PARCELS ETC
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT — SYMBOL

PATENT SURFACE & MINING RIGHTS
SURFACE RIGHTS ONLY
MINING RIGHTS ONLY
LEASE SURFACE & MINING RIGHTS
SURFACE RIGHTS ONLY
MINING RIGHTS ONLY
LICENCE OF OCCUPATION
CROWN LAND SALE — CS
ORDER-IN-COUNCIL — OC
RESERVATION
CANCELLED
SAND & GRAVEL

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SCALE: 1 INCH = 40 CHAINS

ACRES 40 — HECTARES 16

DATE OF ISSUE
JAN 16 1997
KENORA
MINING DIVISION

TOWNSHIP

RICHARDSON

DISTRICT

RAINY RIVER

MINING DIVISION

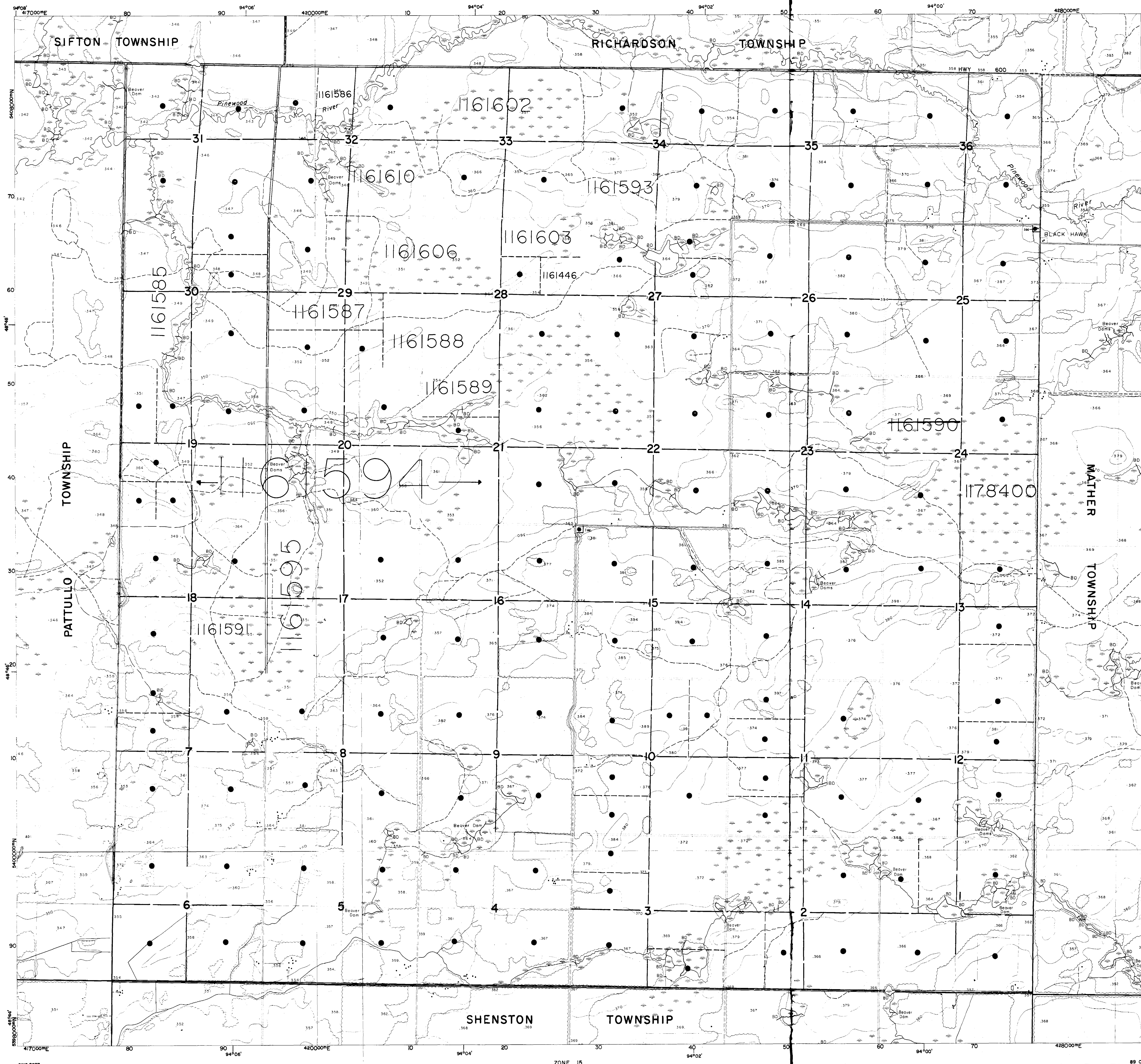
KENORA

Ontario
Ministry of Natural Resources
Surveys and Mapping Branch

Date — Plan No.

Whitney Block, Queen's Park, Toronto

M.2115



Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario

52D16SE0012 W9610.00111 RICHARDSON

260

3837

INDEX TO LAND DISPOSITION

PLAN
G-3837

TOWNSHIP
TAIT

EFFECTIVE

M.N.R. ADMINISTRATIVE DISTRICT
FORT FRANCES

MINING DIVISION
KENORA

LAND TITLES/REGISTRY DIVISION
RAINY RIVER

DATE OF ISSUE
JAN 16 1997
KENORA
MINING DIVISION

Scale 1:20 000

Metres 1000 0 1000 2000 Metres

Feet 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres

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SYMBOLS

Boundary
- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way; road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour 20
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File

NOTES

400' SURFACE RIGHTS RESERVATION ALONG THE SHORES OF ALL LAKES AND RIVERS.

THIS TOWNSHIP LIES WITHIN THE CORPORATION OF THE TOWNSHIP OF CHAPPLE.

TAIT TWP.

DISPOSITION OF CROWN LANDS

Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

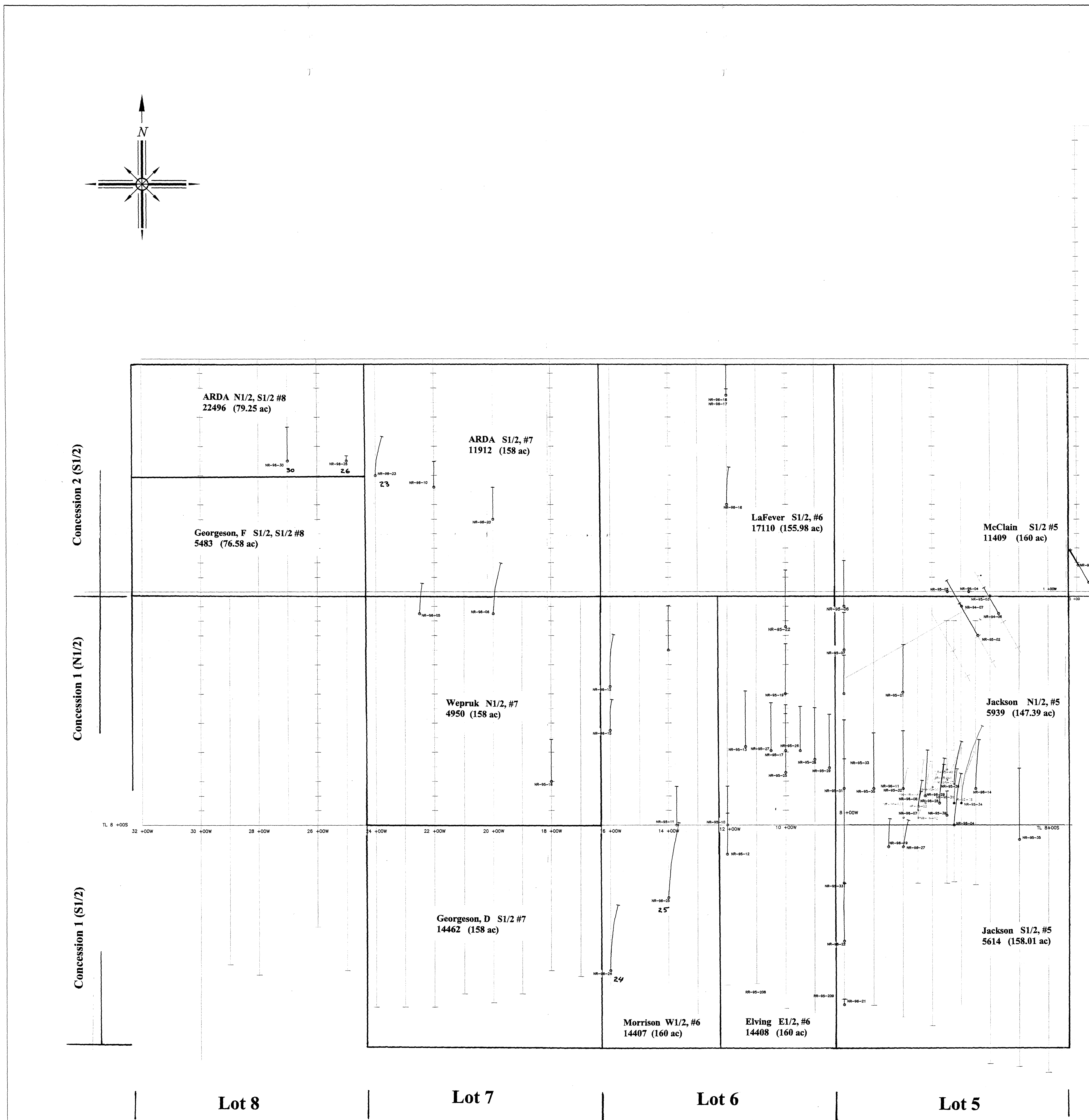
Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

- Licence of Occupation
- Order-in-Council OC
- Cancelled
- Reservation
- Sand & Gravel

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

G-3837



RAINY RIVER PROJECT
RICHARDSON TWP. GRID
DRILL HOLE PLAN

SCALE 0 100 200 300 400 500 600 meters

1:5000

MAPPED BY: P.L.J., G.F.A.

DATE: 05/10/96

AutoCAD FILE NAME: NU-R1-D1.DWG

270

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
gal	galena
gar	garnet
intrus	intrusive
int	intermediate
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

0 25m

Nuinsco Resources Limited

Rainy River Project

SECTION 2700W

Richardson Twp.

Cu, Zn

DATE: 98/05/14 SCALE: 1/500

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
gal	galena
gar	garnet
intrus	intrusive
int	intermediate
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited

Rainy River Project

SECTION 1000E

Richardson Twp.

Au, Ag

DATE: 96/06/17 | SCALE: 1/500

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
gal	galena
gar	garnet
intrus	intrusive
intintermediate	
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

300

Nuinsco Resources Limited

Rainy River Project

SECTION 1000E

Richardson Twp.

Cu, Zn

DATE: 96/06/17 SCALE: 1/500

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
gal	galena
gar	garnet
intrus	intrusive
int	intermediate
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited

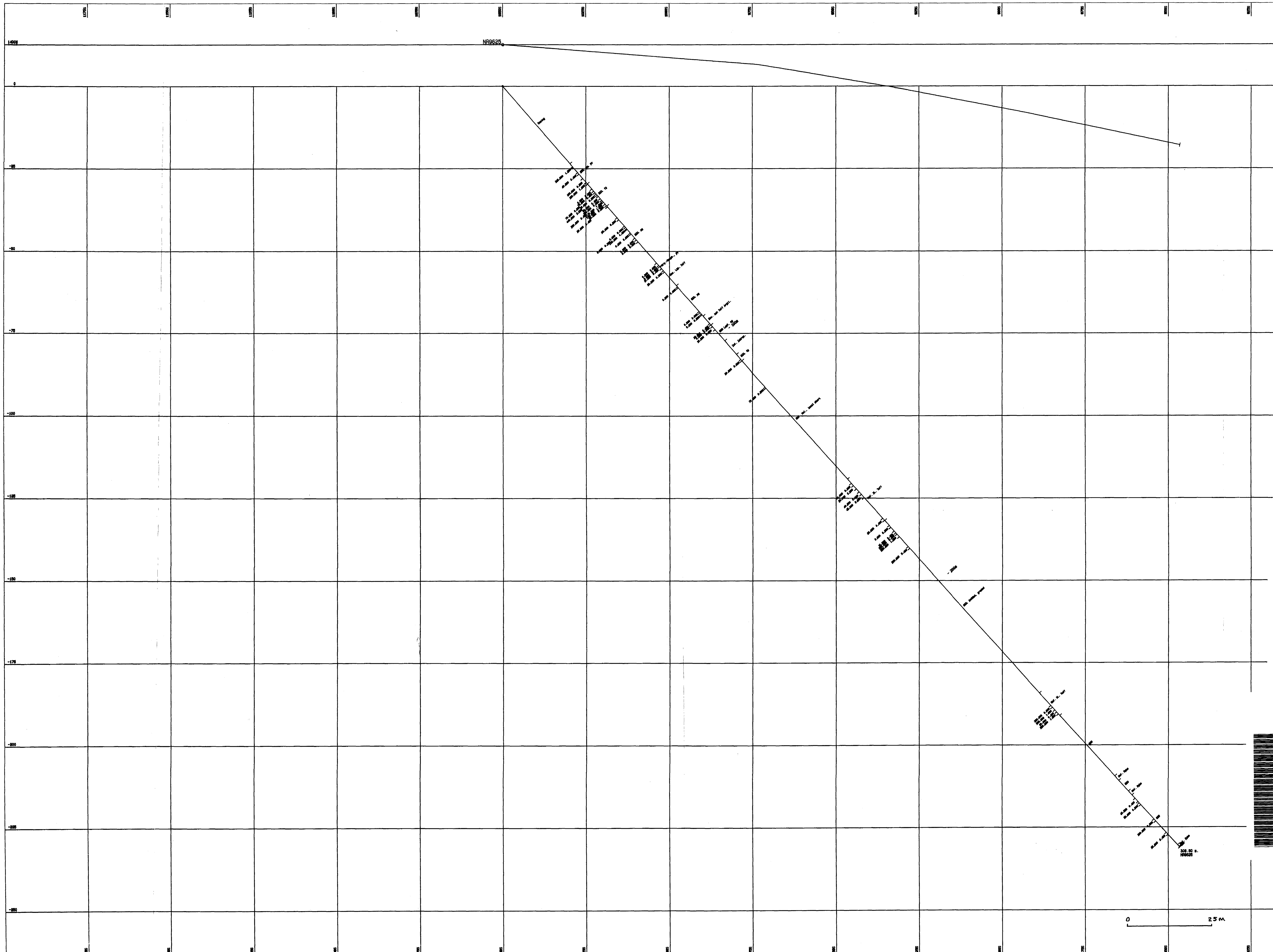
Rainy River Project

SECTION 1400W

Richardson Twp.

Cu, Zn

DATE: 96/06/14 | SCALE: 1/500



Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
gal	galena
gar	garnet
intrus	intrusive
int	intermediate
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

320

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Nuinsco Resources Limited

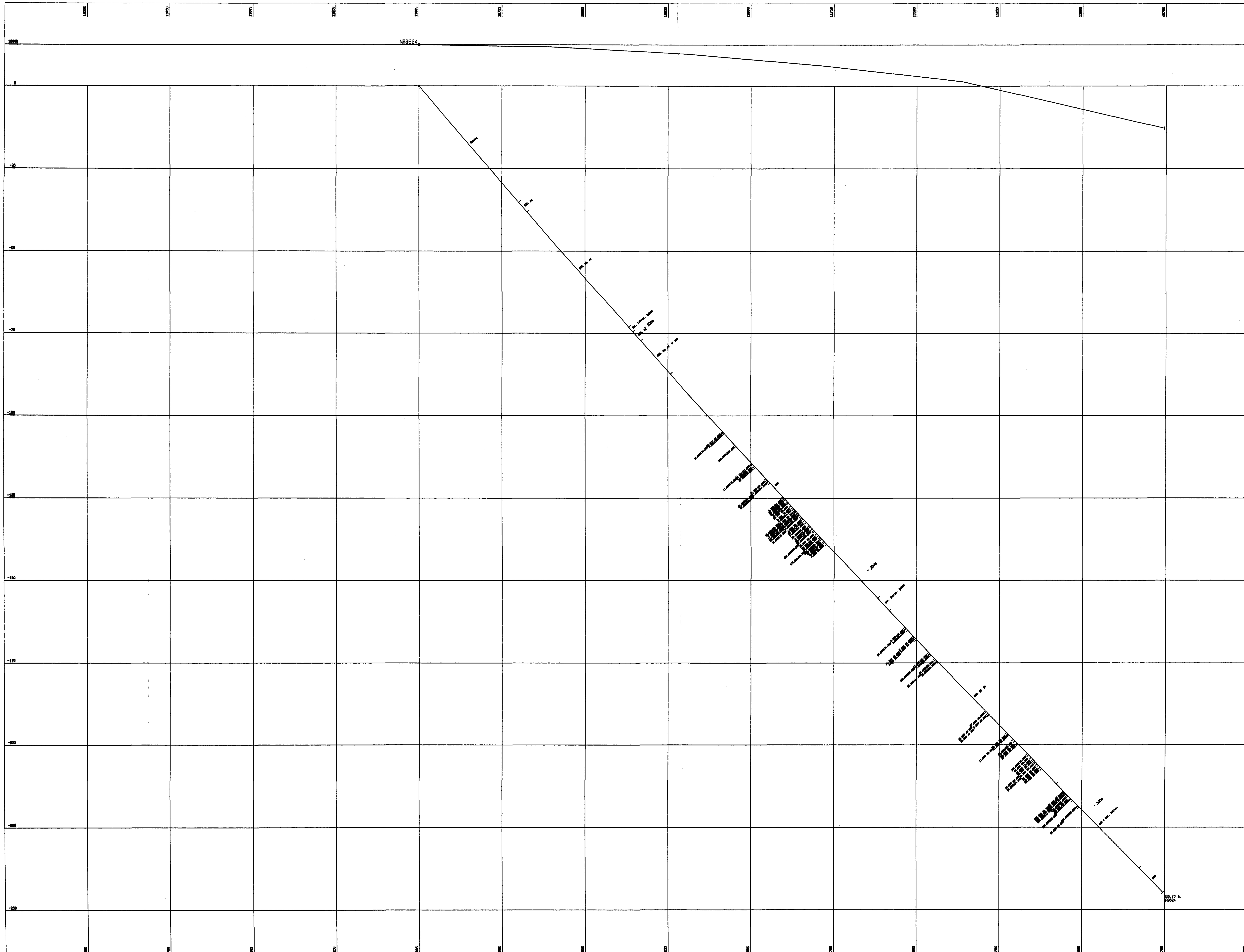
Rainy River Project

SECTION 1400W

Richardson Twp.

Au, Ag

DATE: 96/06/14 | SCALE: 1/500



Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
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kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

0 25 m

Nuinsco Resources Limited

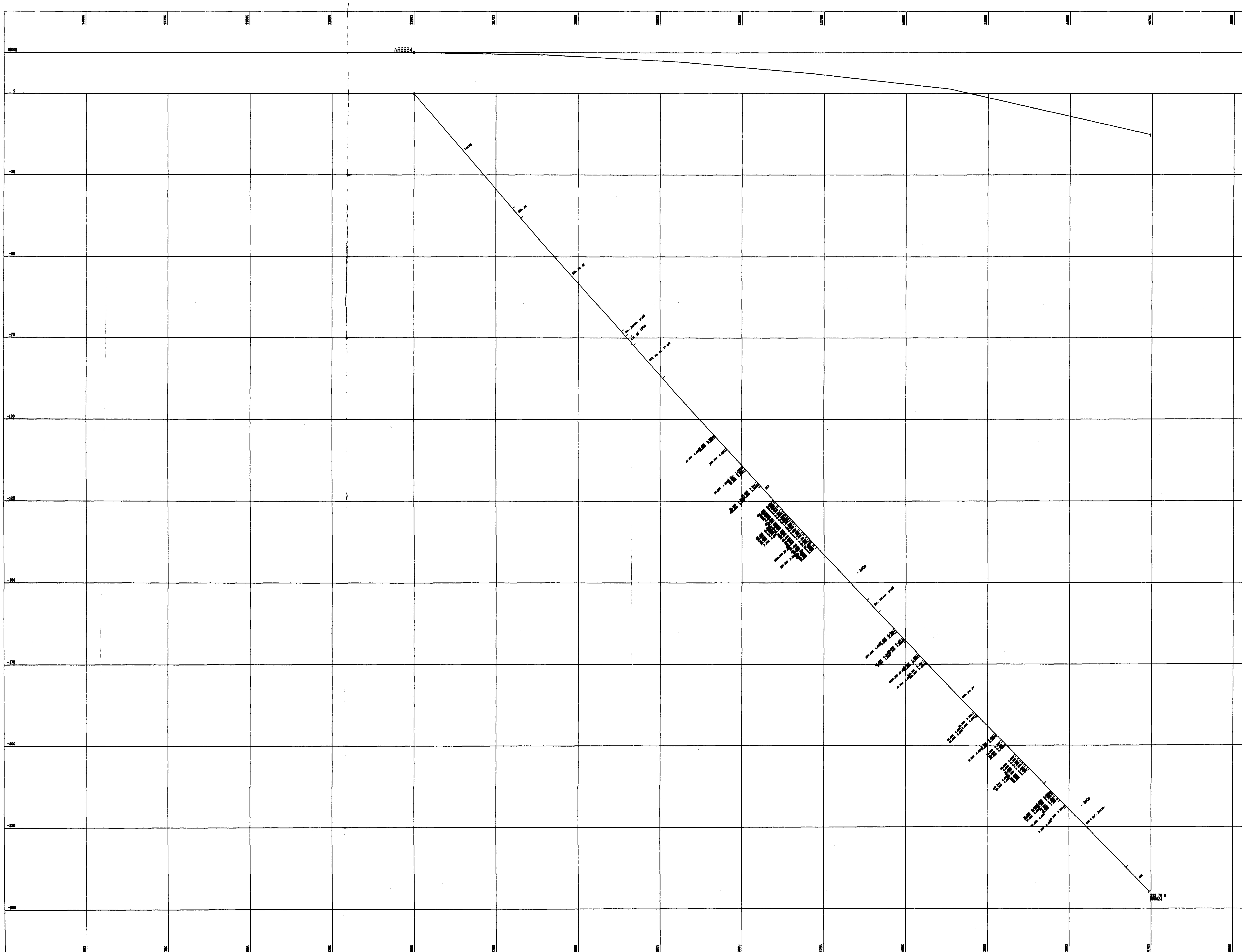
Rainy River Project

SECTION 1600W

Richardson Twp.

Cu, Zn

DATE: 96/06/14 SCALE: 1/500



Abbreviations

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Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
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kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

340

0 25m

Nuinsco Resources Limited

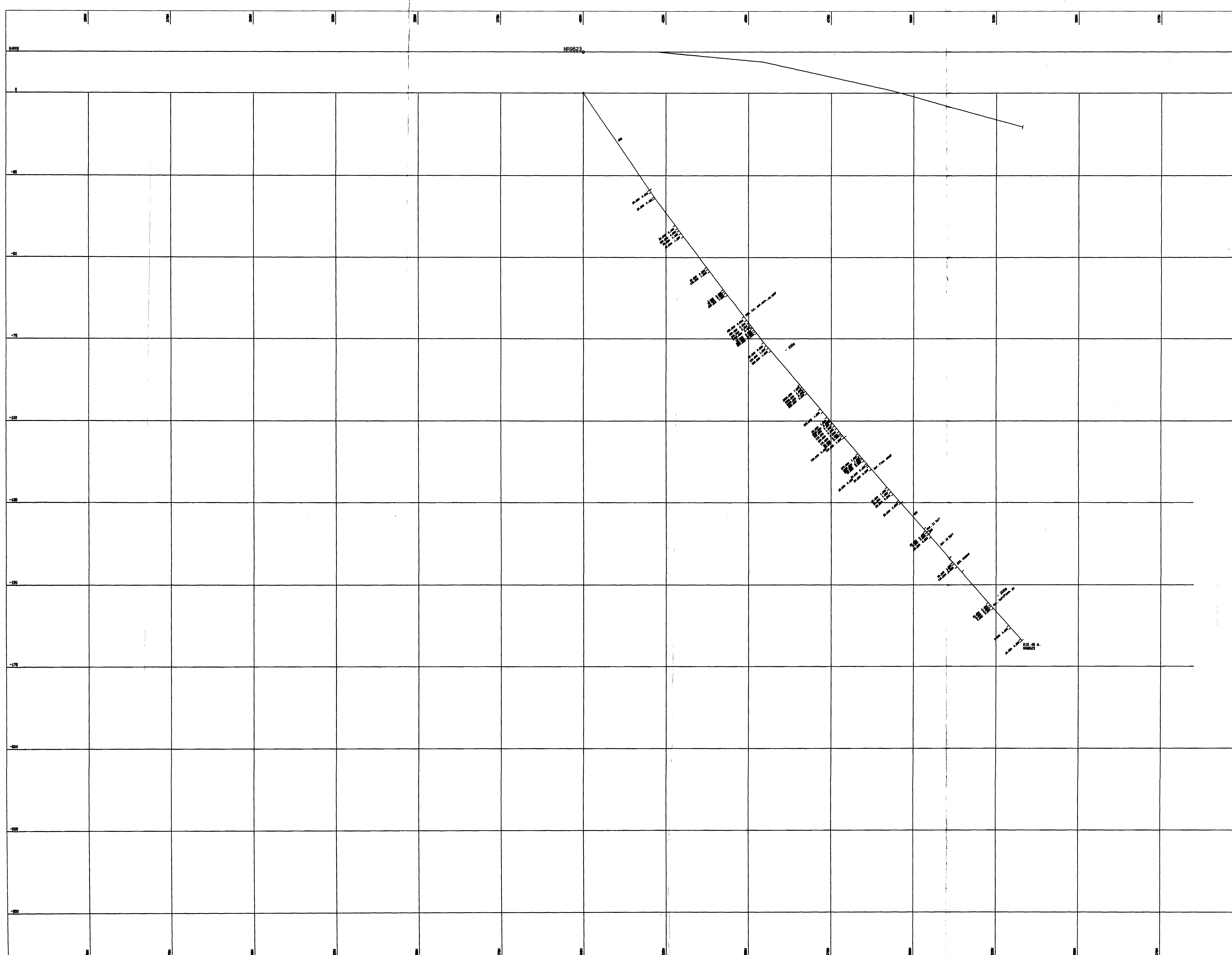
Rainy River Project

SECTION 1600W

Richardson Twp.

Au, Ag

DATE: 96/06/14 SCALE: 1/500



Abbreviations

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Au	gold
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chl-biot	chlorite-biotite
contam	contaminated
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QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

52D16SE0012 W9610.00111 RICHARDSON

350

0 25 m

Nuinsco Resources Limited

Rainy River Project

SECTION 2400W

Richardson Twp.

Au, Ag

DATE: 96/06/14 | SCALE: 1/500

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
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mg-cg	medium-coarse grained
MUM	mafic-ultramafic
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porph	porphyritic
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QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited

Rainy River Project

SECTION 2400W

Richardson Twp.

Cu, Zn

DATE: 96/06/14 | SCALE: 1/500

Abbreviations

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cpy	chalcopyrite
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kom	komatiite
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QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited

Rainy River Project

SECTION 2500W

Richardson Twp.

Au, Ag

DATE: 96/06/14 | SCALE: 1/500

Abbreviations

amph	amphibole
Au	gold
asp	arsenopyrite
bx	breccia
chl-biot	chlorite-biotite
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mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
poss	possibly
porph	porphyritic
py	pyrite
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

380

Nuinsco Resources Limited

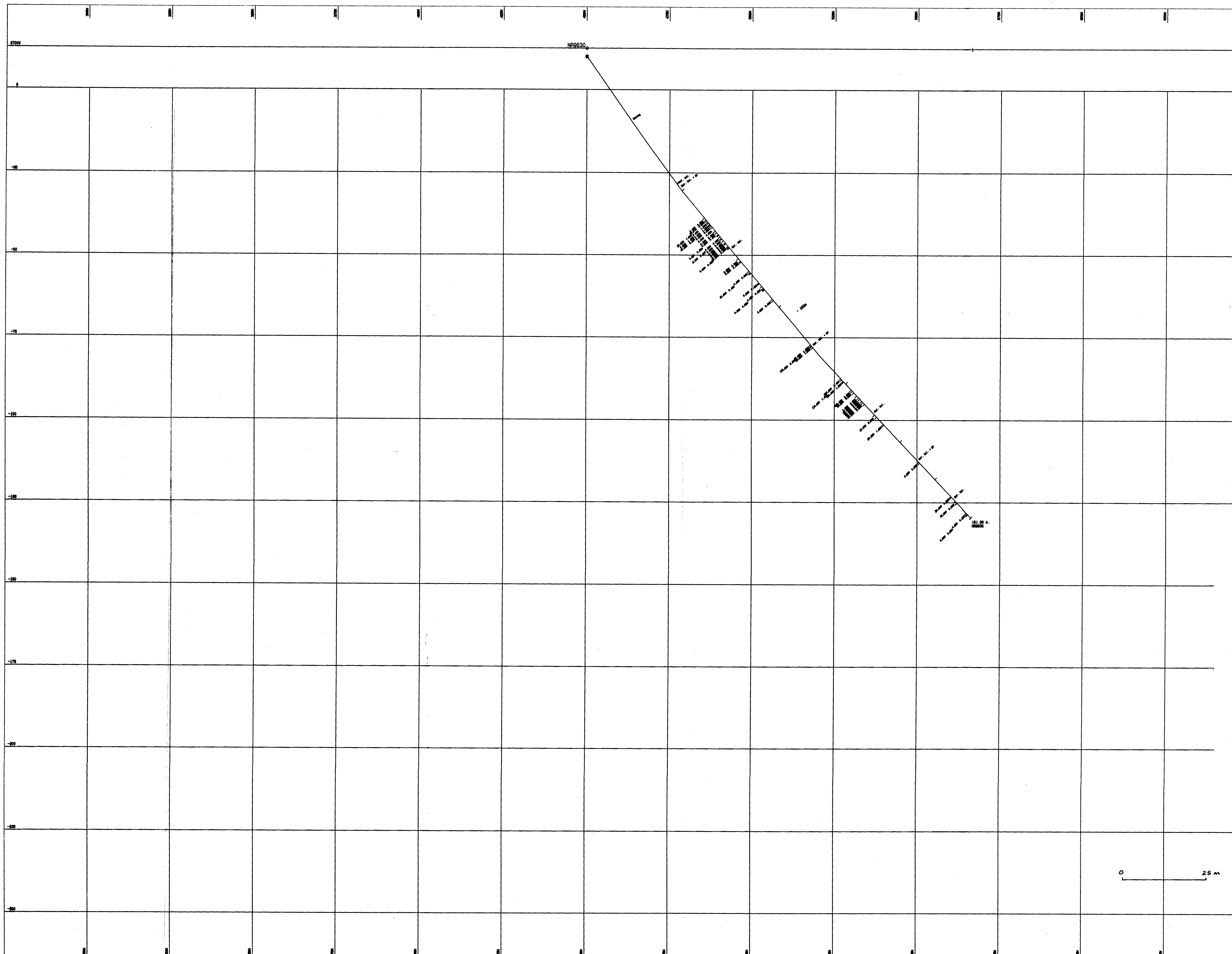
Rainy River Project

SECTION 2500W

Richardson Twp.

Cu, Zn

DATE: 96/06/14 | SCALE: 1/500



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chl-biot	chlorite-biotite
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QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
sap	saprolite
sed	sedimentary
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

390

Nuinsco Resources Limited

Rainy River Project

SECTION 2700W

Richardson Twp.

Au, Ag

DATE: 96/06/14 | SCALE: 1/500