

Geological Report

on the

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EAST CASE PEGMATITE PROPERTY

Claims # L-1248450, L-1248451

**Steele Township, District of Cochrane, NE Ontario
Larder Lake Mining Division (Kirkland Lake), Claim Sheet G3571**

**NTS Map Sheet 32 E/4
49° 02' N 79°55' W**

A preliminary assessment was made of the tantalum potential of the East Case Pegmatite. In June of 2001 grab samples were taken for Ta analysis and the pegmatite was briefly prospected. In August a channel sample 16.6m long was sawn across the full width of the dike and analyzed in 1m sections for Ta and other elements. Feldspar and mica pairs from 4 channel samples were submitted for multielement analysis.

From the unsuccessful prospecting, the low levels of Ta in grab and channel samples, and from the unencouraging trace element patterns in the feldspars and micas, it is concluded that the East Case Pegmatite is less evolved than the other Case Pegmatites, and likely has no potential for economic amounts of tantalum.

Dates of work
**June 13th, August 29th, Sept 5th, Sept 8th
2001**

Work was done on behalf of, and
reported for assessment purposes
to

**NAVIGATOR EXPLORATION CORP.
Vancouver, Canada**

by

**P.C. LeCouteur, Ph.D, P.Eng (BC)
Vancouver, Canada
April 24, 2002**

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SUMMARY

1 Objective

The objective of Navigator's 2001 program was to make a preliminary estimate of the tantalum potential of the East Case Pegmatite by geological mapping, prospecting, channel sampling, and rock and mineral geochemistry.

2 Location, access, ownership

The East Case Property is located about 80 km East of Cochrane, in Steele Township, NE Ontario. It lies within the Larder Lake Mining Division. Road access is from the towns of Cochrane or Iroquois Falls. The property consists of 7 staked claims totalling 25 units, and the registered 100% owner is Navigator Exploration Corp of Vancouver. The East Case Property covers a pegmatite referred to here as the East Case Dike, and is one of several pegmatites collectively known as the "Case Pegmatites".

3 Geology

The Case Pegmatites were first reported in 1962, and have been explored by various groups for several commodities since then. The 3 principal Case pegmatites, which lie on the adjoining Case Property, are named the North, Main and South Case pegmatites. The Main and North pegmatites are somewhat similar geologically, being quite well-zoned beryl-muscovite-spodumene-quartz-albite-K'spar pegmatites that contain columbite. The South pegmatite is only weakly zoned, lacks spodumene, and has been partly albitized. All these dikes are hosted by granodioritic rocks of the Case Batholith, to which they may be genetically related. The East Case Dike is hosted, probably conformably, by fine-grained biotite-garnet metasediments and is steep-dipping, up to 19 m wide, and persists in an EW direction for a least 750 m and possibly 1,200 m.

4 Work

Seven grab samples of rocks scattered along the length of the East Pegmatite were analyzed for Ta and Nb in June, 2001. In August a channel sample was cut from wall to wall across the pegmatite and whole rock samples were analyzed in 1m sections for Ta and Nb by XRF, and also by multielement methods. Feldspar and muscovite samples were picked from 4 channel samples and analyzed for trace and major elements.

5 Results

The East Case Pegmatite is somewhat similar to the South Case Pegmatite, being poorly zoned, lacking spodumene, and having some geochemical trace element similarities. However, beryl and columbite-tantalite, both present in the South Dike, were not seen in the East Pegmatite, although this may be because of poorer exposure. Grab samples of rocks show weakly anomalous Ta values (< 68 ppm Ta) along the pegmatite. Channel samples from the single sawn section also show weak Ta values (< 69 ppm Ta). Geochemical analysis of feldspar-muscovite pairs suggest low potential for economic Ta when compared with pegmatites elsewhere.

6 Conclusions

From the weak Ta values obtained both along and across the pegmatite body, from the apparent lack of columbite-tantalite in outcrops, and from an unfavourable evaluation of Ta potential from trace elements in feldspar-mica pairs, it appears the East Case Pegmatite has low potential for Ta.

7 Recommendations

It is recommended that no further work be done on the East Case Pegmatite.

1.0 INTRODUCTION

Three pegmatites collectively called the “Case Pegmatites” were first described by Lumbers (1962), in a report on the geology of Steele, Bonis and Scapa Townships for the Ontario Geological Survey. Lumbers recognized the Main Case Pegmatite was a complex pegmatite containing columbite-tantalite, beryl, and spodumene, and noted it was potentially of some economic interest. Presumably as a result of this report, the Case Pegmatites were staked in 1962, and the property has been intermittently held by various owners since then. It has been considered for a number of commodities, including mica, feldspar, Li, Ta, Be, and Cs.

A dike to the east of the 3 principal Case pegmatites is here referred to as the East Case Pegmatite. This was also mapped by Lumbers in 1962, and has apparently been under claim at times since then, but very little exploration has been done on it. Navigator Exploration Corp. acquired the East Case Property in 2001 with the objective of making a preliminary evaluation of the tantalum potential. Work on the East Case Dike occupied only a few days work, and was done at the same time as a larger program of exploration for Ta on the adjoining Case Property for Platinova A/S (Le Couteur, 2002).

2.0 PROPERTY LOCATION AND DESCRIPTION

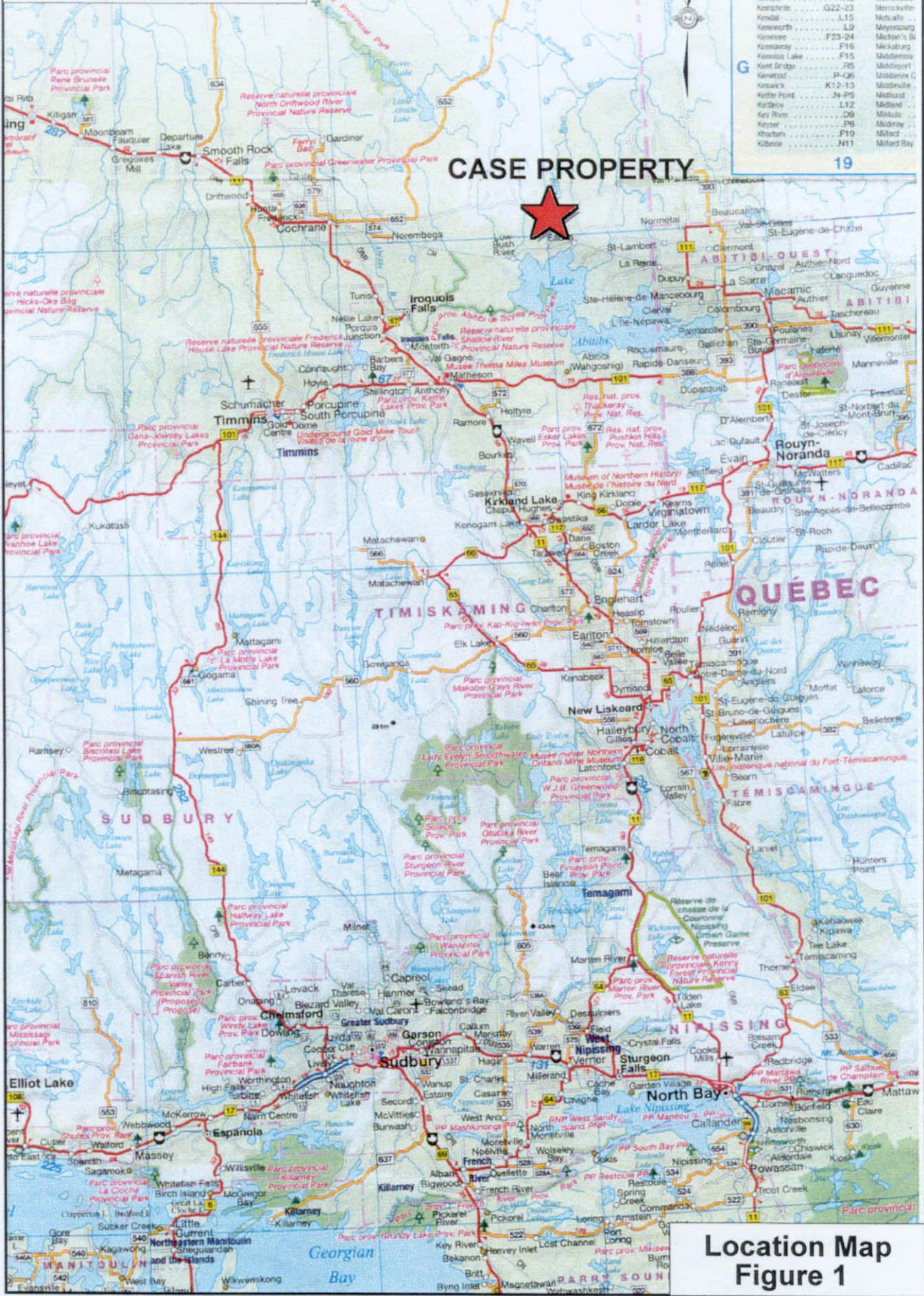
2.1 LOCATION AND ACCESS

The East Case Property is located (fig. 1) about 80 km East of the town of Cochrane in Steele Township, NE Ontario, about 10 km North of Lake Abitibi, close to the Ontario-Quebec border. It is covered by NTS sheet 32 E/4, and is located at about latitude 49° 02' N and longitude 79° 55' W.

Access by road is about 92 km north of the town of Iroquois Falls, or 91km east from Cochrane, and also from the east through Quebec, all via the “southern branch” of the major gravel-surfaced “Translimit Road”. Directions from the western end of the Translimit Rd are: 43 km to the South Branch of the Translimit Rd (right fork), 11 km to side road (left turn) access to a hilltop telecommunications tower, 1.2 km up the access road to a right turn onto a bush road to the property, 2.8 km to the pegmatites. The last 2.3 km, ending on the outcrop of the Main Case pegmatite, requires a vehicle with good ground clearance, preferably with 4-wheel drive. The East Case Pegmatite lies about 400m SE of the road-end and can be reached on foot along old cut lines and across a beaver dam to a prominent pegmatite outcrop on the east side of the beaver pond.

0 100
kilometers

Abitibi	K-1-10	Messin
Alder Bridge	H17-18	Montfort
Alton Place	E-19	Norbert
Amos	F13	Norville
Arnprior	H8	Norville
Asbestos	G22-23	Norville
Ashcroft	J-15	Norville
Ashton	L-9	Norville
Astoria	F23-24	Norville
Athol	F16	Norville
Atteridgeville	F15	Norville
Aurora	R-5	Norville
Aurora	P-06	Norville
Aurora	K12-13	Norville
Aurora	N-P5	Norville
Aurora	L12	Norville
Aurora	J-9	Norville
Aurora	P-6	Norville
Aurora	F19	Norville
Aurora	J-11	Norville



Location Map
Figure 1

2.2 CLAIMS

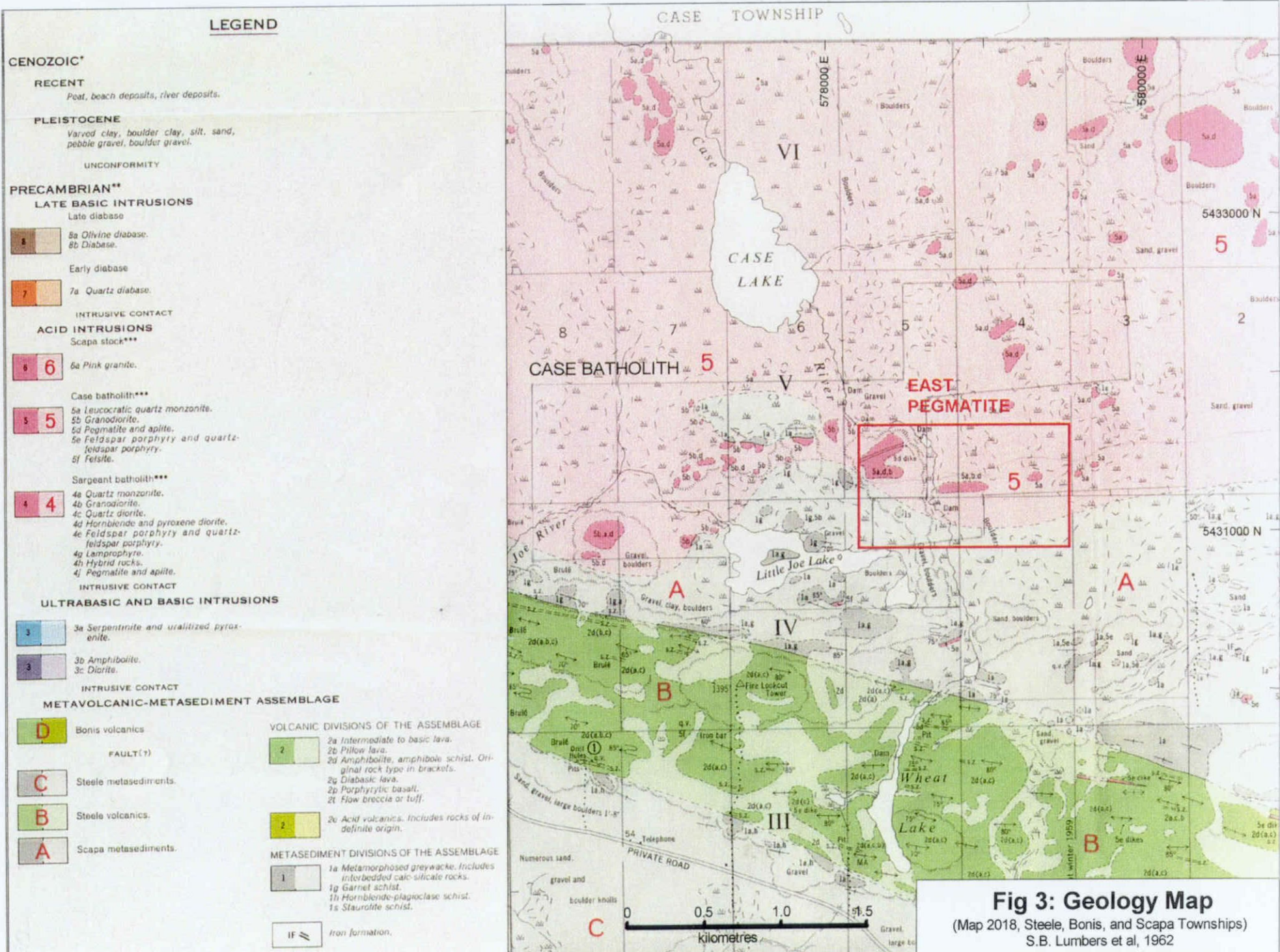
As detailed in table 1, the property consists of 7 staked claims totalling 25 units, which were originally recorded in the names of P.R.Coad, J.R.Horne, D.J. McCormack and J.R. Reddick, each with a 25% share. Ownership was later transferred to Navigator Exploration Corp., currently registered as the 100 % owner. These claims, and some adjoining claims which cover the principal Case Pegmatites to the west, are shown in fig 2.

The property lies within the Larder Lake Mining Division, and is administered from the Kirkland Lake Regional Geologist's office of the Ontario Ministry of Northern Development and Mines.

Table 1 List of claims, Case Property

<u>Claim No</u>	<u>Units</u>	<u>Recorded</u>	<u>Due date</u>	<u>Work req'd</u>
L-1167032	8	June 11,2001	June 11, 2003	\$400
L-1248444	1	June 11,2001	June 11, 2003	\$400
L-1248445	1	June 11,2001	June 11, 2003	\$400
L-1248448	12	June 11,2001	June 11, 2003	\$400
L-1248449	1	June 11,2001	June 11, 2003	\$400
L-1248450	1	June 11,2001	June 11, 2003	\$400
<u>L-1248451</u>	<u>1</u>	<u>June 11,2001</u>	<u>June 11, 2003</u>	<u>\$400</u>

The East Case Pegmatite lies principally within claims L-1248450 and L-1248451, and the work reported here was confined to these 2 claims.



3.0 PROPERTY HISTORY

The Case Pegmatites were first reported by Lumbers (1962) and part of his map is reproduced in figure 3. No assessment work appears to have been filed on the East Case Pegmatite, and it seems to have received very little exploration attention, judging from the very minor surface disturbance- a few small and shallow pits. However, the property was covered by a block of 10 patent leases which expired, and the ground was restaked at the first opportunity in June of 2001. The property consists of 9 of the previous lease areas and 2 larger claims which were added. The property was acquired in 2001 from the stakers by Navigator Exploration Corp. The subsequent limited exploration program reported here, consisting of mapping, prospecting, grab and channel-sampling of outcrops was carried out over a total of 4 days scattered between June 13th and September 8th. The objective of this work was to make a preliminary assessment of the tantalum potential of the East Case Pegmatite.

4 GEOLOGY

4.1 REGIONAL GEOLOGY

The principal Case Pegmatites occur south of Case Lake within granodiorite and quartz monzonite of the Case Batholith, a large (80 km E-W and 50 km N-S) granitic batholith of Archean age (OGS Map 2543, 1991), near its southern margin. The region is covered by ODM Map 2018 of Lumbers (1962), part of which is reproduced as figure 3 and includes a table of lithologies. The Case Batholith here intrudes Scapa metasediments, probably mostly metagreywacke, which envelop a belt of metavolcanics (Steele Metavolcanics) about 1.5 km wide south of Little Joe Lake. Much of the property is covered with Pleistocene overburden.

The area has low relief and an average altitude of about 350m ASL. An indication of the low percentage of outcrop is given by figure 3. Occasional glacially-sculpted rock outcrops occur on higher ground, and there are swamps and sluggish streams in lower areas, with little outcrop. There is general coniferous forest cover.

4.2 PROPERTY GEOLOGY

The outcrops of the East Case Dike were mapped by Lumbers (see fig 3), but as leucocratic quartz monzonite, granodiorite, pegmatite and aplitic lithologies which he interpreted to be part of the southern margin of the Case Batholith itself, rather than a discrete pegmatite. In the author's view the outcrops mapped by Lumbers are instead part of an EW-striking subvertical dike that intrudes quartz-biotite-garnet metasediments that are in contact with the batholith. The property map (see figure 3 for area covered, rear pocket for map) shows the reinterpreted boundary between the batholith and metasediments.

The East Case Dike is exposed as rounded, bald, discontinuous outcrops that rise up to 2 m above the surrounding covered ground. It varies from 8 to 19 m wide, although the contacts with the host garnet-biotite-quartz metasediments are poorly exposed. The dike was followed over about 750 m, is probably at least 1.2 km long, and seems to be a subvertical, conformable body. It consists of pegmatite composed largely of grey K-spar, often 10 to 15 cm long and up to 30 cm long, with about 20% quartz, and minor muscovite. There are a few minor ill-defined quartz segregations to 40 cm long. The pegmatite is cut by streaky fine-grained albitic strips up to 20 cm wide that parallel the dike walls, apparently due to late albitization.

5 EXPLORATION

A hand-held GPS was used to locate claim posts, the access road, and other features. Field maps were digitized in *Autocad*, and transferred to *Mapinfo* for manipulation and plotting.

5.1 PROSPECTING

On June 13 the property was briefly prospected but no Be, Li or Ta minerals were seen, although it should be noted that although well exposed, observation of the the pegmatite is hindered because the glacially smoothed surface is difficult to break open with a hammer and is also thinly encrusted with lichen. Seven random grab samples of typical pegmatite scattered along the dike were taken for analyses. These analyses are listed in table 2 and on the property map, and show weakly anomalous Ta values, but no significant Ta mineralization.

Table 2 Ta and Nb analyses of grab samples

Lab number	FIELD Number	Ta(1) ppm	Nb ppm
R0102844	351	20	66
R0102845	352	19	70
R0102846	358	20	137
R0102847	363	5	104
R0102848	366	15	66
R0102849	369	68	217
R0102850	373	41	139

5.2 SAWN-CHANNEL SAMPLING

A single channel sample was sawn across an apparent 16.6 m width of the East Case Pegmatite, approximately perpendicular to the strike of the dike. Sawing and sampling was done by T. Link, using a "Partner" cut-off saw and a water-flushed, hard-matrix (Pearl Abrasive Co. "Supreme"), 14 inch segmented diamond blade. Two parallel cuts were made, about 3 cm deep and 4 to 5 cm apart. Material between the saw cuts was chiseled out and composited in one metre intervals, the average weight of each sample being 4 to 5 kg. Samples, handled only by Link, were placed in plastic bags sealed with cable ties, were aggregated in sealed 5 gallon plastic drums, and shipped directly to XRAL Labs in Toronto via Manitoulin Transport. In the field the channel number was painted on the rock at the 0 m mark on the south side,

marks were cut across the channel with the saw every metre, and metre numbers were painted on the rock beside these sawn marks.

Table 3 Ta and Nb analyses of sawcut SC7

Saw cut section		From m	To m	Interval m	Sample Analysis tag #	Nb	Ta	Ta / Nb
						XRF7 ppm	XRF7 ppm	XRF7 Ratio
						2	5	
SC-7	East Dike	0.00	1.00	1.00	27018	82	43	0.5
SC-7	East Dike	1.00	2.00	1.00	27019	91	48	0.5
SC-7	East Dike	2.00	3.00	1.00	27020	111	42	0.4
SC-7	East Dike	3.00	4.00	1.00	27021	93	46	0.5
SC-7	East Dike	4.00	5.00	1.00	27022	85	32	0.4
SC-7	East Dike	5.00	6.00	1.00	27023	115	69	0.6
SC-7	East Dike	6.00	7.00	1.00	27024	96	30	0.3
SC-7	East Dike	7.00	8.00	1.00	27025	72	28	0.4
SC-7	East Dike	8.00	9.00	1.00	27026	71	24	0.3
SC-7	East Dike	9.00	10.00	1.00	27027	72	23	0.3
SC-7	East Dike	10.00	11.00	1.00	27028	111	37	0.3
SC-7	East Dike	11.00	12.00	1.00	27029	64	18	0.3
SC-7	East Dike	12.00	13.00	1.00	27030	93	28	0.3
SC-7	East Dike	13.00	14.00	1.00	27031	72	25	0.3
SC-7	East Dike	14.00	15.00	1.00	27032	48	21	0.4
SC-7	East Dike	15.00	16.00	1.00	27033	53	18	0.3
SC-7	East Dike	16.00	16.60	0.60	27034	67	31	0.5

Samples were analyzed for Ta and Nb by XRF, and by multi-element ICP-MS techniques at XRAL Labs. Analytical procedures are outlined in Appendix 1.1, analyses are listed in table 3 (Nb and Ta), table 4 (selected elements), on the map (Nb, Ta), and in Appendix 2 (all data, analytical certificates). Results of duplicate analyses of pulps are described in Appendix 1.2, and results of analyzing duplicate samples are reported in Appendix 1.3. These duplicate samples and duplicate analyses were obtained on the adjacent Case Property, but during the same time period and by the same methods as used on the East Case Property.

The channel samples show similar results to the grab sampling, that is weakly anomalous Ta values with no suggestion of significant Ta mineralization, at least in this one section of the dike, which appears to be typical.

Table 4 Selected elements of interest from analyses of saw cut SC7

Interval metre	Sample number	Cr ppm	Ni ppm	Co ppm	Cu ppm	Zn ppm	Bi ppm	Mo ppm	K %	Na %	K/Na ratio	Li ppm	Cs ppm	Rb ppm	Ba ppm	Sr ppm	Ga ppm	Tl ppm	Pb ppm	Be ppm	La ppm	Ce ppm	Mn ppm	P ppm	Nb ppm	Sn ppm	Ta ppm	Th ppm	U ppm	Zr ppm
1.00	27018	34	6	7	4	34	8	2	2.5	3.6	0.69	100	38	947	5	10	34	5	8	11	1	1	612	144	94.4	9	41	2	3	13
1.00	27019	169	3	2	3	40	9	3	3.5	3.9	0.90	169	51	1,030	5	8	34	5	11	18	1	2	1,080	265	119.0	7	45	4	4	14
1.00	27020	135	3	1	3	72	15	2	4.0	3.6	1.13	271	61	1,150	<5	6	31	6	10	10	1	2	880	297	137.0	7	46	4	4	18
1.00	27021	76	4	3	4	64	15	3	2.7	4.3	0.62	151	50	965	5	11	41	5	10	16	2	3	1,030	255	131.0	6	40	6	6	26
1.00	27022	118	3	2	4	80	9	2	1.8	3.9	0.48	258	45	761	5	13	37	4	6	9	1	2	687	251	103.0	8	28	4	4	10
1.00	27023	65	3	3	4	101	15	5	1.6	3.9	0.41	217	51	627	6	17	33	3	5	9	1	2	558	258	123.0	8	59	4	5	8
1.00	27024	91	2	1	3	38	25	3	3.9	3.2	1.22	96	61	1,230	42	45	22	7	11	6	1	1	306	342	125.0	6	35	1	2	5
1.00	27025	111	3	2	4	43	8	4	4.4	3.0	1.48	135	65	1,230	20	21	28	7	11	6	1	1	332	273	86.6	7	27	1	1	6
1.00	27026	28	3	2	4	39	17	1	4.0	3.3	1.22	129	72	993	11	22	32	8	14	6	1	1	359	266	85.3	7	21	2	3	7
1.00	27027	55	3	1	3	17	13	3	5.2	3.0	1.72	73	80	1,210	51	35	27	10	17	5	1	2	483	217	87.6	4	25	3	2	10
1.00	27028	93	5	6	5	32	31	1	2.4	3.7	0.64	170	55	882	<5	10	35	5	8	7	1	2	699	238	137.0	7	36	5	5	15
1.00	27029	88	7	6	5	42	18	12	4.2	2.6	1.64	193	71	1,350	7	6	31	8	11	6	0	1	460	227	77.8	9	18	2	5	6
1.00	27030	106	3	1	4	142	18	3	3.2	3.8	0.83	151	52	818	7	8	32	6	10	7	1	3	567	425	119.0	7	29	4	12	9
1.00	27031	61	3	1	3	115	10	5	3.5	3.2	1.08	100	48	1,000	<5	6	26	5	10	9	1	1	551	230	75.1	5	22	3	4	15
1.00	27032	31	4	1	3	30	3	2	2.3	2.4	0.96	119	42	765	<5	5	26	4	7	6	1	2	384	380	55.2	7	6	1	3	7
1.00	27033	30	3	2	3	50	6	1	2.9	3.5	0.85	88	42	798	<5	6	25	5	9	7	1	1	346	273	55.3	4	15	1	2	3
0.60	27034	138	3	2	3	48	10	3	2.8	3.5	0.81	97	38	781	6	9	30	4	11	8	1	1	517	139	75.9	6	26	2	1	6

Table 5 Selected elements in K-feldspar and muscovite pairs

Sample no	K %	Li ppm	Na %	Be ppm	Cs ppm	Ga ppm	Nb ppm	Pb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Tl ppm	W ppm
27018M	5.28	970	0.39	23	199	220	295	3	2280	144	2	53	20	2
27018F	4.81	12	1.22	3	87	26	5	31	930	3	18	2	21	0
27022M	4.01	1410	0.36	25	213	226	351	2	1560	150	2	39	22	2
27022F	4.37	31	1.69	3	85	22	34	23	797	2	20	18	14	0
27026M	5.32	1360	0.36	23	249	232	357	3	1870	121	2	41	19	3
27026F	6.20	15	1.39	3	116	27	6	29	1070	1	23	2	20	0
27030M	8.60	1320	0.30	21	266	222	344	3	3160	97	2	41	18	4
27030F	4.60	14	1.13	2	112	24	8	24	791	1	11	2	19	0

Note :Sample locations listed in table 2

M=muscovite, F=K-feldspar

5.3 PEGMATITE GEOCHEMISTRY

Multi-element analyses were done on 17 saw-cut samples to determine the overall geochemical character of the East Case Dike. Results for selected elements are reported in table 4, and full analyses are listed in appendix 2. Selected elements from multielement analyses of K-feldspar and muscovite concentrates picked from 4 channel samples are listed in table 5, with full results reported in appendix 2.

Some of the data in table 4 are shown in figures 4 to 6, in comparison with data from the North, Main, and South Case pegmatites (by permission of E.O. Andersen of Platinova A/S). These diagrams show the North and Main dikes have higher and similar Cs, Tl, and Rb values relative to K than the South and East Case dikes, which have similar lower values. These patterns can be interpreted to mean the South and East Dikes are less enriched in elements such as Cs, Tl, Rb, and therefore likely also in Ta and Nb. In figures 7 to 9 profiles for Li, Be and Ta for the 4 pegmatites are compared. Figure 7 shows the low Li content of the South and East dikes (which lack observed spodumene) compared with the North and Main pegmatites (which contain abundant spodumene). Figure 8 shows the low Be content of the East dike , in which no beryl was seen. Figure 9 shows low Ta values in the South and East dikes compared with the Main and North Dikes. It appears the South and East pegmatites are less geochemically evolved than the North and Main pegmatites.

In figures 10 and 11 the four K-spar and muscovite pairs of table 5 are plotted on diagrams that compare the East Case Pegmatite with other pegmatites, and allow an evaluation of its economic potential for Ta. These suggest the East Case Pegmatite is likely a rare-metal pegmatite, perhaps with minor undetected beryl, but is probably relatively primitive and that, although close to the threshold of Ta-bearing pegmatites, it likely lacks Ta in economic amounts. The general lack of zoning, lack of columbite, spodumene (and beryl) in outcrops of the East Case Dike are consistent with this assessment. In addition, geochemical comparisons with the 3 other Case pegmatites show a serial decline in rare-metal enrichment progressing from the North and Main dikes (Ta -Be-Li), to the South Dike (minor Ta, some Be, no Li), to the East Dike (no Ta, Be or Li). This change is also reflected in other trace elements such as Rb, Tl and Cs and is accompanied by a parallel decrease in internal complexity of the pegmatites .

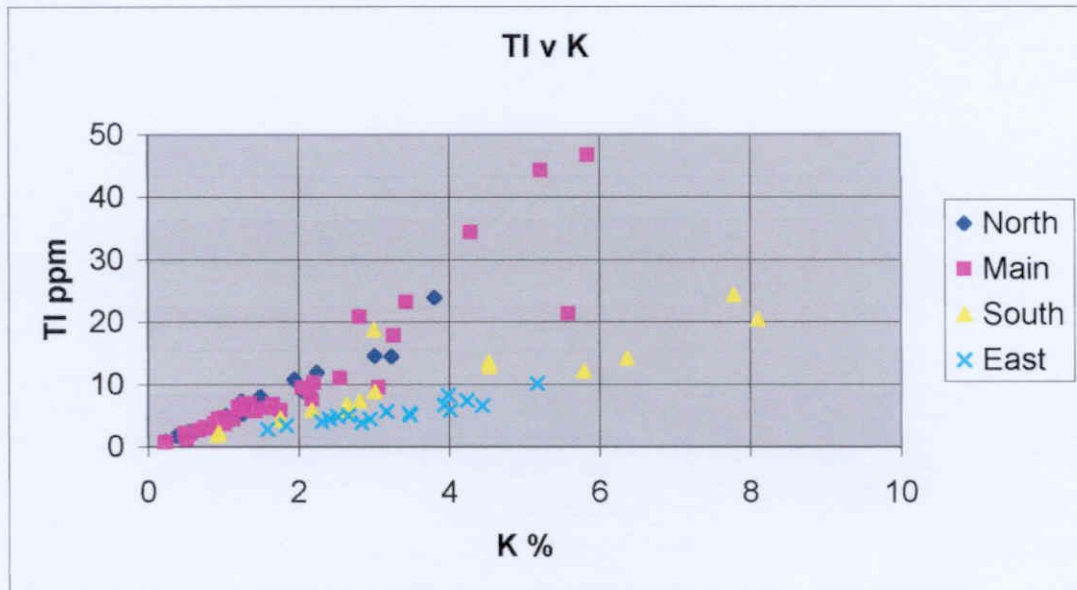


Fig 4 Thallium v potassium. Comparison of the 4 principal Case dikes

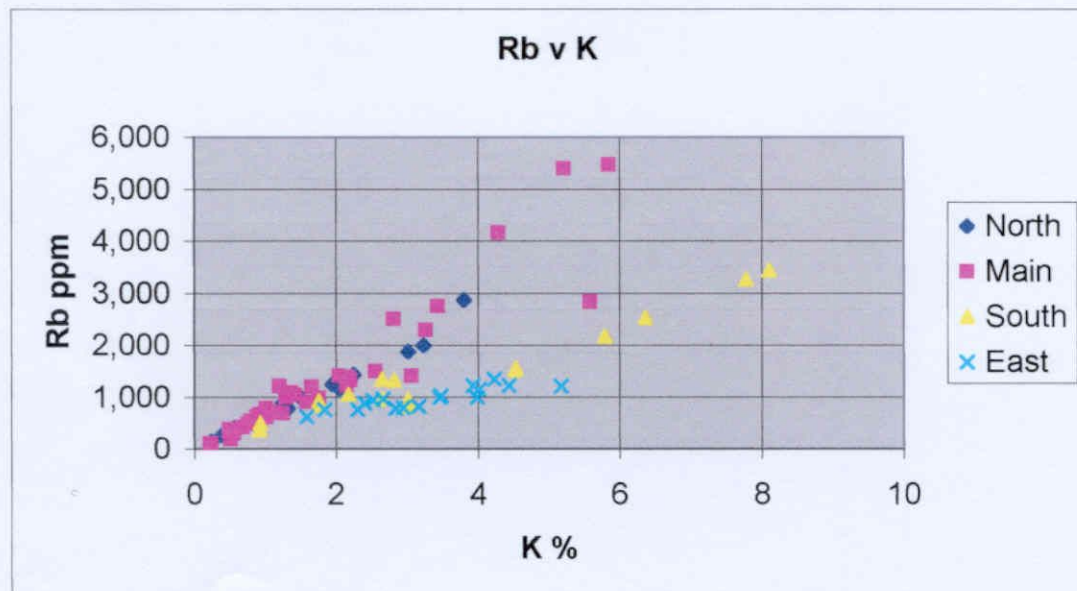


Fig 5 Rubidium v potassium. Comparison of the 4 principal Case dikes

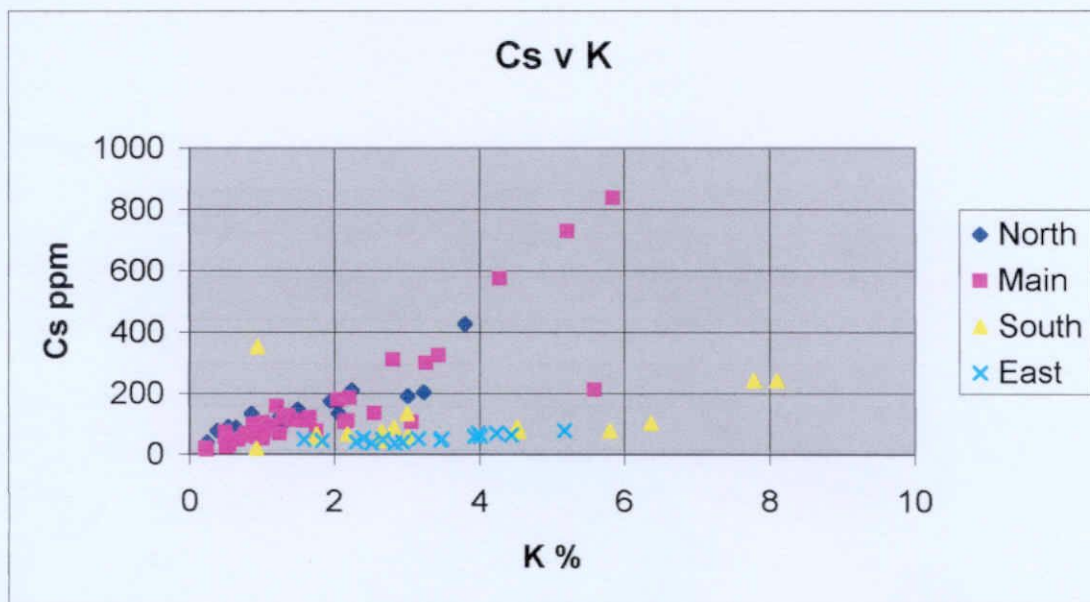


Fig 6 Cesium v potassium. Comparison of the 4 principal Case dikes

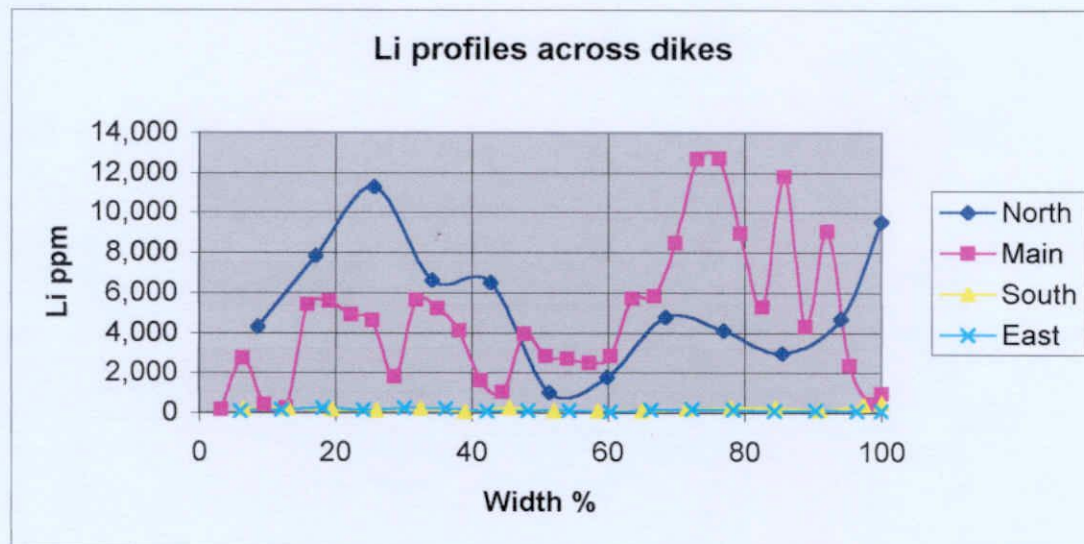


Fig 7 Li profiles. Comparison of the 4 principal Case dikes

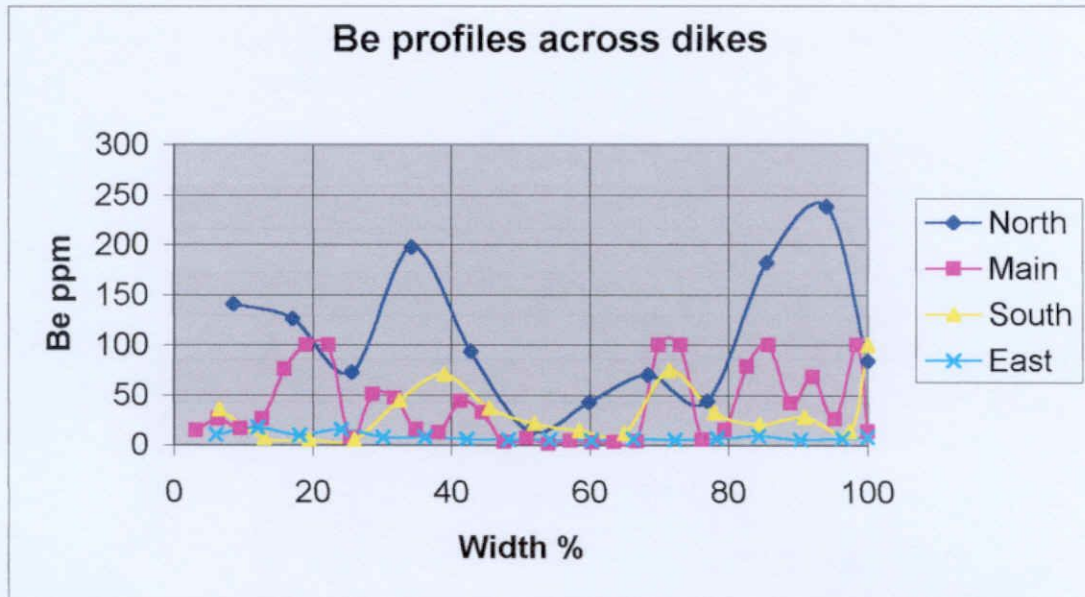


Fig 8 Be profiles. Comparison of the 4 principal Case dikes

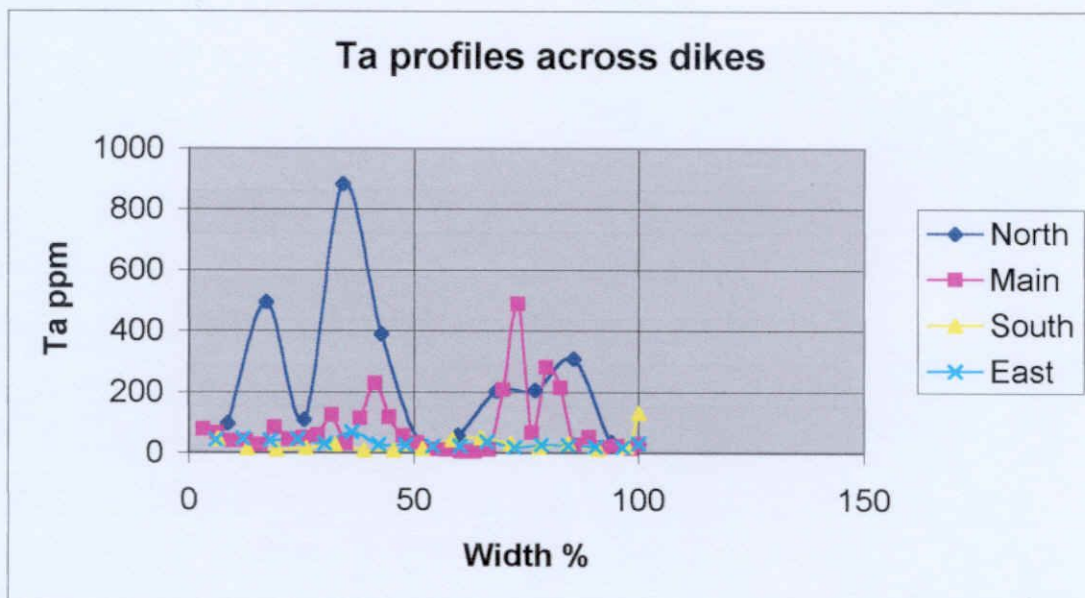


Fig 9 Ta profiles. Comparison of the 4 principal Case dikes

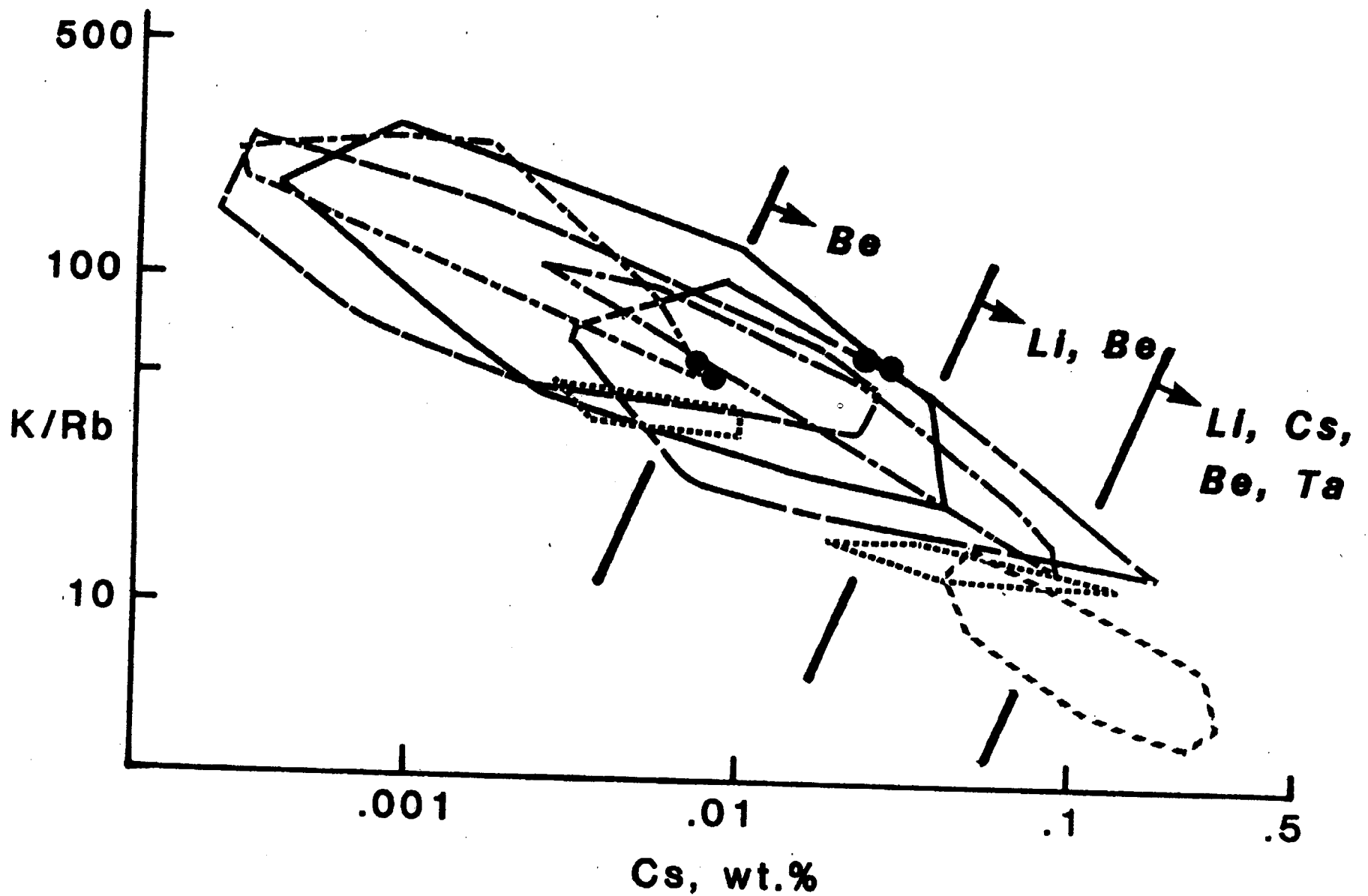


Fig 10 K/Rb v Cs in K feldspar. Four East Case samples compared with pegmatites of the Winnipeg River District (from Trueman and Cerny (1982)). Heavy lines indicate approximate appearance of significant mineralization

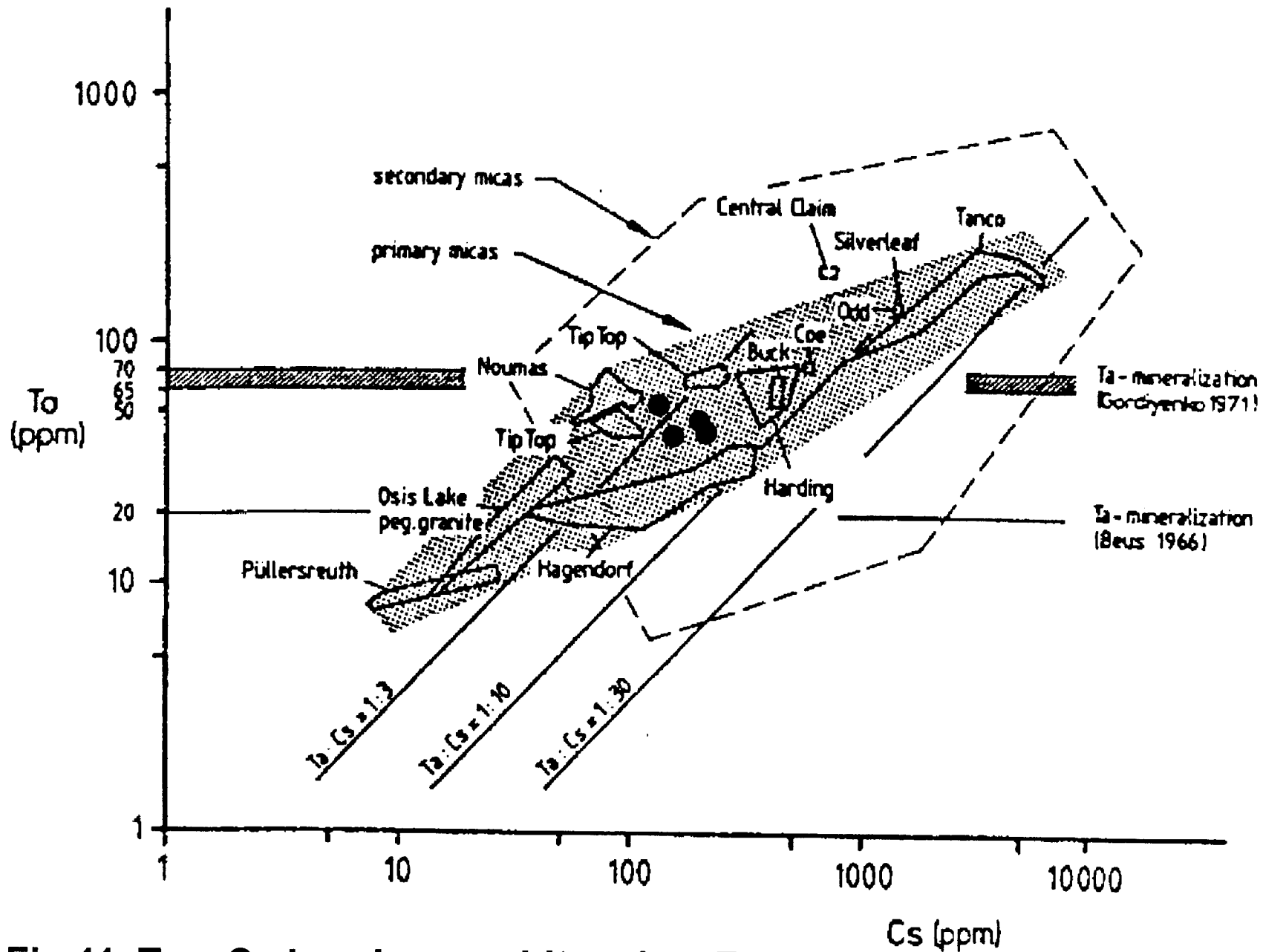


Fig 11 Ta v Cs in primary white mica. Four East Case samples compared with data of Morteani and Gaupp (1989).

6 CONCLUSIONS

1 The North and Main Case dikes are similar, well-zoned, Li-Be-Ta-Nb pegmatites with a succession of similar pegmatite units, strong quartz cores, and similar trace element geochemistry. In contrast, the South Dike is a Be-bearing dike with minor Ta, is only weakly zoned, lacks spodumene and appears less-evolved, containing relatively less of rare metal indicator elements such as Cs, Rb, and Tl. The East Case dike appears to lack beryl, columbite or spodumene, but otherwise has some similarities to the South Dike.

2 That the East Case Pegmatite has little potential for economic Ta is suggested by the lack of observed columbite-tantalite, the only weakly anomalous Ta values in analyses of grab and channel samples, and the unencouraging evaluation of Ta potential from trace elements. It appears to be the least promising of the 4 main known Case pegmatites from an economic point of view.

7 RECOMMENDATIONS

No further work is recommended on the East Case Pegmatite. Although none are known to the author, other pegmatites with better potential may exist on the property, but were not explored for.

8 REFERENCES

- Le Couteur, P.C. 2001* Geological report on the Case Pegmatite Property. Assessment report submitted to Platinova A/S
- Lumbers, S.B. 1962.* Steele, Bonis and Scapa Townships. Geol. Report 8, ODM.
- Morteani, G. and Gaupp, R. 1989* Geochemical evaluation of the tantalum potential of pegmatites. *In* Lanthanides, tantalum and niobium. (Eds P. Moller, P. Černý, and F. Saupé). Spec Pub 7, Society for Geology Applied to Mineral Deposits, pp 303-310.
- Ontario Geological Survey 1991.* Bedrock geology of Ontario, east and central sheet. Ontario Geol Survey Map 2543 Scale 1:1,400,000
- Trueman, D.L. and Černý, P. 1982* Exploration for rare-metal granitic pegmatites. *In* Short Course in granitic pegmatites in science and industry. (ed P. Černý), pp 263-491

9 AUTHOR'S STATEMENT OF QUALIFICATIONS

I, Peter C. LeCouteur of North Vancouver, BC, Canada , do certify that:

- a I am a contract geologist operating as President of Micron Geological Ltd, a geological service company with business address 4900 Skyline Dr, North Vancouver , BC, Canada, V7R 3J3.
- b The work reported here was done for Navigator Exploration Corp., an exploration company with business address at Suite 1300, 409 Granville St., Vancouver , BC, V6C 1T2
- c I have worked as a geologist since 1964, and have been involved in mineral exploration since 1967. I graduated from the University of Auckland (New Zealand) with degrees of B.Sc (1964) and M.Sc. (1967), and from the University of British Columbia(Canada) with a Ph.D (1972).
- d I have been a Fellow (#F1378) of the Geological Association of Canada since 1969, and a Professional Engineer (#10,963) of the Province of British Columbia since 1977.
- e The work reported here was carried out under the general direction of R.Hopkins of Navigator Exploration Corp. I was responsible for geological mapping and sampling, and for supervision of the channel sampling. The information in this report is based on this field work, and on reports acknowledged in the text and listed in the references.
- f I am solely responsible for all sections of this report
- g I am not aware of any material fact which is not reflected in this report.
- h I am not a shareholder of Navigator Exploration Corp.
- i I had no working involvement with the Case Property prior to 2001.
- j This report has been prepared in compliance with Ontario Regulation 6/ 96 of the Mining Act of the Government of Ontario, for the purposes of satisfying the requirements of an assessment report.

Signature dated : 24 April, 2002

A handwritten signature in black ink, appearing to read "P. LeCouteur", is written in a cursive style.

APPENDIX 1

ANALYTICAL METHODS AND CHECKS

APPENDIX 1

A.1.1 Analytical methods

Seven samples sent to TeckCominco Exploration Lab in Vancouver (table 2) were crushed, milled and analyzed by XRF methods on pressed pellets. All other samples were sent to XRAL Laboratories, 1885 Leslie St., Toronto, Ontario, M3B 2M3, for analysis. These were crushed according to procedure **PG205**, and analyzed for Ta and Nb by X-ray fluorescence procedure **XRF7**. The 17 channel samples were also analyzed for 48 elements by ion-coupled plasma method **ICMS80**, after multi-acid dissolution. Original analysis certificates are included as appendix 2. Analytical methods, as reported by XRAL Laboratories, are as follows.

XRAL Quality Control and Methods

a) Internal Quality control procedures

With each batch of 40 samples, we run an analytical blank, an in-house control material (that could be an SRM for low volume operations or unusual matrices) for control of accuracy, and duplicate samples run every twelfth sample for control of precision. These sample duplicates are a measure of both the analytical variance as well as the sample variance. The duplicates are run at the end of a batch so that any instrumental drift can be assessed.). Note that the in-house standards concentrations are the working means as given below. XRAL 02 is a felsic phase of the Nipissing Diabase of north-eastern Ontario. Others are international SRMs from NIST, CANMET, USGS etc.

Element	Mean	Std. Dev.	No. Det.	Reference Material
SiO ₂ %	60.07	0.02	103	XRAL 02 -diabase
Al ₂ O ₃ %	11.01	0.13	103	XRAL 02
Fe ₂ O ₃ %	7.75	0.07	103	XRAL 02
MnO %	0.1656	.002	103	XRAL 02
MgO %	2.680	0.06	103	XRAL 02
CaO %	7.681	0.07	103	XRAL 02
Na ₂ O %	1.48	0.05	103	XRAL 02
K ₂ O %	1.63	0.06	103	XRAL 02
P ₂ O ₅ %	1.54	.002	103	XRAL 02
TiO ₂ %	0.57	.01	103	XRAL 02
LOI %	6.81	0.07	103	XRAL 02
Ag ppm	4.3	0.93	12	SU1a - Ni-Cu-Co ore
As ppm	101.6	8.87	371	Till 4 - till
Ba ppm	292	11.88	121	SO3 - clay soil
Be ppm	2.96	0.206	12	Till 4
Bi ppm	46.48	3.36	12	SO3
Co ppm	5.47	0.41	31	SO3
Cr ppm	27.1	1.63	46	SO3
Cs ppm	1.125	0.09	12	SO3
Cu ppm	16.9	0.94	61	SO3

Ga ppm	6.87	0.35	291	SO3
Ge ppm	33.9	0.71	10	NIST 1633a - coal fly ash
Hf ppm	8.0	0.4	10	Geo PT3 - granite
In ppm	0.16	0.03	10	NIST 1633a
Mo ppm	15.59	0.79	12	Till 4
Nb ppm	14.64	0.59	12	Till 4
Ni ppm	14.35	1.38	80	SO3
Pb ppm	51.7	3.53	345	Till 4
Rb ppm	37.46	2.50	12	SO3
Sb ppm	3.4	0.32	447	XRAL 01 - soil
Sc ppm	4.83	0.09	2	SO3
Sn ppm	14.7	1.29	12	Till 4
Sr ppm	231.7	12.27	5	SO3
Ta ppm	24.0	0.55	12	SGL-a - granite
Tl ppm	0.203	0.01	7	SO3
V ppm	36.98	1.86	6	SO3
W ppm	224.8	6.70	4.0	D2B - diabase
Y ppm	15.0	0.36	239	Till 4
Zn ppm	46.18	2.33	2	SO3
Zr ppm	271	5	10	Geo PT3
La ppm	14.88	0.29	30	SO3
Ce ppm	33.35	0.69	21	SO3
Pr ppm	4.14	0.26	21	SO3
Nd ppm	16.82	0.31	21	SO3
Sm ppm	3.67	0.26	21	SO3
Eu ppm	0.78	0.04	21	SO3
Gd ppm	3.24	0.25	23	SO3
Tb ppm	0.47	0.05	20	SO3
Dy ppm	2.86	0.23	21	SO3
Ho ppm	0.56	0.05	21	SO3
Er ppm	1.69	0.12	21	SO3
Tm ppm	0.23	0.02	22	SO3
Yb ppm	1.62	0.1	21	SO3
Lu ppm	0.22	0.02	22	SO3
U ppm	1.05	0.08	32	SO3
Th ppm	3.52	0.27	31	SO3
Au ppm	0.306	0.014	17	SARM-7 - PGE ore
Pt ppm	3.665	0.133	17	SARM-7
Pd ppm	1.541	0.088	17	SARM-7
Os ppm	0.059	0.015	17	SARM-7
Ir ppm	0.073	0.030	17	SARM-7
Ru ppm	0.425	0.014	17	SARM-7
Rh ppm	0.228	0.014	17	SARM-7
Re ppm	0.001	0.0019	17	SARM-7
CO2 %	46.45	0.27	17	NBS88B - dolomitic limestone
H2O %	0.9385	0.04	34	MRG-1 - gabbro
S %	0.0532	0.003	11	SY3 - syenite

- ii) Our current LIMS, CCLAS, summarizes the QC data at the end of the run showing the percentage variation of the SRM values from the recommended values and the percentage differences between duplicates. If these are acceptable within the precision and accuracy criteria for the method being used, the job is released; if not, the batch is repeated.

- iii) CCLAS is used to set up the control charts for control of accuracy and precision. The system automatically flags warning and action limits. The tolerances can be varied for particular methods and control limits and means can be re-evaluated automatically on a regular basis.

The calculation of analytical precision is based on the techniques developed by Thompson and Howarth. Similar warning and action flags can be set up for these charts. Interpretation of these charts will be done in a standard manner (e.g. J.K. Taylor, Quality Assurance of Chemical Measurements, 1987) to ensure that the analytical process is in control.

b) Sample Preparation:

a Crushing:

Samples and the sample tags are transferred into pans. The sample is crushed through a TM crusher to -2 mm in size. Crushed material is transferred into a clean dry pan. The Jaw Crusher is cleaned using an air gun and wire brush between samples. Chunks of barren silica are also used between samples when there is a possibility of high levels of gold or other metals in samples.

b Riffing:

Crushed samples are split using a Jones riffle to 200 grams. The riffled 200 grams of material is transferred into a labeled plastic vial. Riffle is cleaned using an air gun between the samples.

c Milling:

Milling is done using pot ring and puck made of either hardened chrome steel or mild steel material. Crushed material is transferred into a clean pot and the pot is placed into a vibratory mill for approximately 2 minutes, depending on the sample hardness. Samples are milled to 95% passing 200 mesh or otherwise specified by the client. The pot is air cleaned between samples and wiped out with a cloth. Silica cleaner also is run in between the samples to eliminate any possible cross contamination. The milled sample is transferred back to the labeled plastic vial it was originally taken from.

d Rejects:

All rejects are stored in 4 ml clear polyethylene zip lock bags. Bags are labeled in black marker on both sides with the sample number and the size fraction.

e Sources and levels of contamination from equipment:

Contamination is possible from the pulverizer bowl. It is also possible from a previous sample, but quartz sand washes are used which could introduce trace silica. Other contamination is dust in the air. However, proper ventilation and a clean lab should be adequate precaution. Jewelry could also contaminate but is prohibited in all prep areas.

During the grinding process, the following contaminants may be introduced into the samples. The amount of contaminant is a function of grinding time and hardness of the sample.

Chrome steel mill (hardened steel)

- Fe (up to 0.015%)
- Cr (up to 150 ppm)
- Traces of Mn, Si, C, V

Mild steel mill

- Fe (up to 0.2%)

c) ICMS80 Multielement ICP MS analyses with 4 acid digestion

The following acid digestion procedure is used for Platinova samples:

Hydrofluoric-nitric-perchloric-hydrochloric digestion: Weigh sample (0.25 gm) into a teflon dish. Add 5 ml HNO₃, 10 ml HF and 5 ml HClO₄. Wash the inner wall of the dish with H₂O then heat to fumes, until just dry and cool down. Add 5 ml HCl, 10 ml H₂O and heat to dissolve the salts; and make up to 50 ml. Certified Reference Material (SO-3) is weighed, digested and analyzed with every 46 samples. All major oxides (except Si) and most of the low Z trace elements are analyzed via ICP-ES. The other traces are analyzed via ICP-MS.

XRAL normally uses a Lu internal standard that monitors and compensates for instrumental variations. For this project an alternative element will be evaluated and used as internal standard.

For the ICP-OES and ICP-MS analysis the following general procedures apply. The calibration standards below are made up in the same matrix as the samples:

1. Blank
2. High - 5 ppm 22 elements in high standard: Be, Sc, V, Cr, Mn, Co, Ni, Cu, Zn, As, Sr, Y, Zr, Mo, Cd, Sn, Sb, Ba, La, W, Pb and Bi and REEs.
3. Very High - 50 ppm Na, K, Ca, Mg, Al, Fe, Ti, P
4. Fe 1000 ppm, Ag 1 ppm

Solutions for ICP-OES are normally run on the ARL or Optima 3000.

Solutions for ICP-MS analysis are normally analyzed on a VG Plasma Quad Inductively Coupled Plasma Mass Spectrometer (model PQ2 or PQ3).

On the ICP-MS the elements are determined in a sequential mode on the fast scanning quadrupole mass spectrometer. An internal standard solution is introduced concurrently to monitor fluctuations of the plasma conditions. Te and Pt are used for the REE and In for other elements. Synthetic standards are used to calibrate the instrument and reference materials are analyzed along with the samples to monitor the digestion procedure.

A multi element tuning solution is used in ICP-MS to ensure mass calibration.

Setting up autosampler run: The batch consists of:

- standards
- samples to be analyzed
- drift check solution 5 ppm of Cu, Zn, Co, Ni, Mo, Mn
to be checked every 12 samples and instrument is recalibrated if drift is outside of tolerances in method chart.

Interference problems.

The main interference problems encountered in ICP-OES analysis occur from spectral overlap from major elements such as Fe, Mn, Ca, Mg and high levels of other elements in mineralized samples. These are removed by using inter-element corrections in the instrument software based on running single element solutions. Note that when the interference is large, the precision with which one measures low-level trace elements is reduced. XRAL issues an interference notice and advises use of other techniques.

The other problem is background shifts arising from matrix effects. This is dealt with by doing both peak and background measurements. Blanks and drift control solutions are also run every 10 samples to monitor instrumental drift. Use of an internal reference element (usually Lu) allows one to correct for nebulizer changes and other instrumental problems.

Potential interferences in ICP-MS are as follows:

<i>Element</i>	<i>Potential interference</i>
As	ArCl
Zr	Ar, Fe, Mo
Eu	BaO
Gd	Sm, BaO, CeO, Dy
Dy	CeO, Gd
Er	Dy, Yb
Yb	Er, Lu, Hf
Lu	Yb, Hf
Hf	Yb, Lu
Au	Ta

2. 235 38.

Isobaric interference problems can be minimized in two ways: use of an isotope that has no interference as is done for many of the elements; alternatively an interference correction is calculated based on the intensity of an isotope (of the interfering element) free of interference. These corrections can be done automatically once set up in the instrument software.

Reagent blanks, digestion control materials, and duplicates are used to check that the various corrections applied in the instrument software are working properly.

d) XRF-7 Minor Elements by pressed pellet

Ba, Cs*, Ga, La, Nb, Rb, Sr, Sn, Ta, Th, W, U, Y, Zr

At least 5 gram of sample is required for this analysis. The sample is mixed with a binder then pressed using a Herzog press. Pellets are loaded into the holder of the automatic sample changer of a Philips PW1400 (or PW1404) wavelength dispersive X-ray spectrometer. The 40 mm diameter sample pellets are loaded six to a tray with a total of 10 trays.

Elements are determined in an inert atmosphere employing a rhodium tube; the Compton scatter serves as an internal standard for some elements. For different combinations of requested elements various standard reference materials are inserted with these samples to verify calibration.

For the Navigator samples, as there are insufficient international reference materials in the ranges desired, appropriate in-house standards are used. Values for the elements of interest are determined by a variety of other methods (Neutron activation, ICP, ICP-MS) and consensus values established.

Calibration curves are set up using the latest version of the Philips X40 software. Inter-element corrections are applied to necessary analyte elements. Commonly requested element combinations are programmed to be determined individually or in groups.

NIM-L from Mintek South Africa is used as an international reference standard for Nb and Ta. Other internal pegmatite standards are also used for checks

Significant Interferences in XRF analysis

Element	Significant possible interference
As	Pb
Ce	Ba
Co	Fe
Cr	V
Cs	Ce, Ba
Cu	Ni
Fe	Mn
Ga	Pb
Ge	Rh, Mo
La	Cs
Mn	Cr
Mo	U, Zr
Na	Zn
Nb	U, Y
Ni	Co
P	Zr
Rb	U, Zr
Sn	Sb, K
Sr	Th,
Ta	Nb, Cu, U
Ti	Ba
V	Ti, Ba
W	Zn, Ni
Y	Rb, Pb
Zn	Cu

A1.2 Duplicate analysis of pulps

Table A1 lists all duplicate analysis of pulps performed by XRAL Labs, and the Ta values for these duplicates are compared in fig A1. Note these analyses were done on samples from the adjoining Case Property but submitted at the same time as those from the East Case. There are too few samples from the East Case to indicate sampling or analytical variation.

Table A1 Laboratory duplicate analyses

Sample	Element (XRF7) Duplicate/original Unit	Ta		Nb	
		Dup ppm	Orig ppm	Dup ppm	Orig ppm
27047		644	647	1,100	1,100
27125		270	270	65	65
27137		207	208	89	90
27149		26	25	59	59
27221		22	22	24	24
27233		289	291	73	73
27245		60	60	65	63
27057		127	126	87	89
27069		40	41	89	89
27081		38	37	37	37
27093		18	19	38	38
27105		716	715	218	220
27117		17	17	32	32
27002		45	46	67	66
27014		33	32	75	76
27026		23	24	71	71
23569		30	29	27	26
23581		26	27	45	45
23593		719	719	193	191
27154		28	28	52	52
27166		5	5	2	2
27178		60	60	48	48
27190		29	28	17	17
27202		26	27	54	55
27214		911	910	73	72
23518		30	31	36	36
23530		40	40	38	38
23542		38	38	23	23
23554		53	53	69	70
23566		29	29	39	39
23501		116	116	47	46
23513		77	77	54	54

No of duplicates= 32

Std

*deviation=

Ta=0.67ppm

Nb=0.61ppm

* Method of pooled replicates

A1.3 Analyses of duplicate sawn channel samples

A total of 13m of sawn channel sampling was repeated on the adjacent Case Property by sawing a 3rd cut beside the channel and taking a duplicate sample beside the original. The results are listed in table A2, and the Ta values compared in fig A2. Note comparison also of Ta by XRF and ICMS80. The uncertainty due to sampling is much greater than the analytical uncertainty.

Table A2 Comparison of duplicate sawcut samples

Saw	Lab code	Nb	Ta	Ta
Cut	Unit	XRF7	XRF7	ICMS80
Channel	Det limit	ppm	ppm	ppm
Line		2	5	0.1
W				
m				
From				
To				
Interval				
m				
Analysis				
#				
SC-1		46	116	119
SC-1A		54	77	83
SC-1		250	512	448
SC-1A		236	476	497
SC-1		38	93	81
SC-1A		57	127	162
SC-1		109	461	402
SC-1A		207	1310	1,070
SC-1		98	506	486
SC-1A		57	272	278
SC-2		129	469	426
SC-2A		117	458	439
SC-3		84	88	87
SC-3A		68	80	83
SC-3		23	38	23
SC-3A		23	30	14
SC-3		142	200	160
SC-3A		132	227	207
SC-4		59	21	14
SC-4A		52	21	--
SC-4		54	55	--
SC-4A		50	70	--
SC-5		76	75	--
SC-5A		95	98	--
SC-5		131	201	--
SC-5A		100	155	--

duplicates= 13

*Std dev=

23 ppm 174 ppm

* Method of pooled replicates. Note Ta Std Dev reduces to 38 ppm if 2 worst replicates are rejected

Ta Lab duplicates

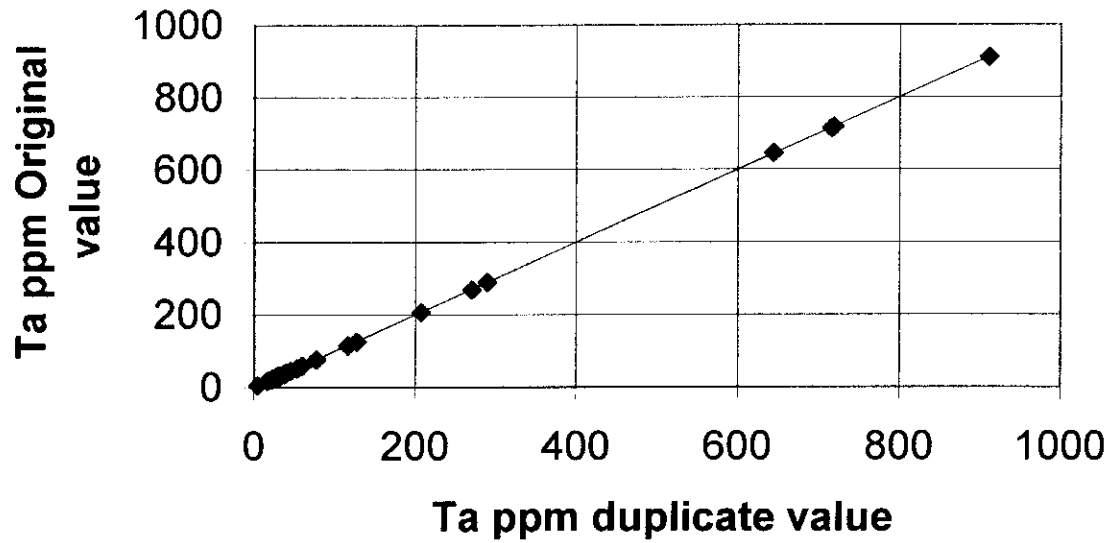


Fig A1 Comparison of analyses of Ta in duplicate pulps

Duplicate saw cuts

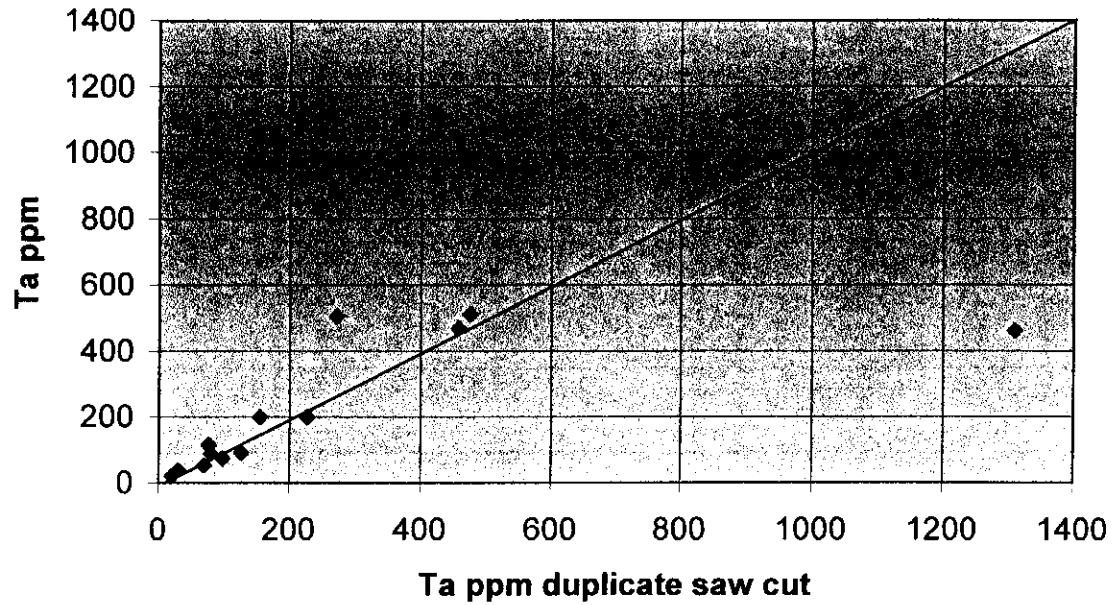


Fig A2 Comparison of analyses of Ta from duplicate samples

APPENDIX 2

ANALYSIS CERTIFICATES

MICRON GEOLOGICAL-X01
SAMPLES:#351-373(SERIES)

teckcominco

Job V01-0244R

Report date: 25 APR 2002

LAB NO	FIELD NUMBER	Ta(1) ppm	Nb ppm
R0102844	351	20	56
R0102845	352	19	70
R0102846	358	20	137
R0102847	363	5	104
R0102848	366	15	56
R0102849	369	68	217
R0102850	373	41	139

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown, results are to follow

ANALYTICAL METHODS

Ta(1) X-Ray fluorescence / pressed pellet
Nb X-Ray fluorescence / pressed pellet

Fred G. Lo

Fred Lo, Chemist I

Exploration Research Laboratory



XRAL Laboratories
A Division of SGS Canada Inc.

1885 Leslie Street
Don Mills, Ontario
Canada M3B 3J4
Telephone (416) 445-5755
Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 066642

To: **Platinova A/S**
Attn: **Jim Pirie**
Suite 1414, Guardian Tower
181 University Avenue
TORONTO
ONTARIO, CANADA M5H 3M7

Date : 11/01/02

Copy 1 to :

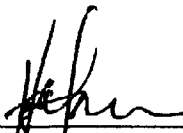
P.O. No. :
Project No. :
No. of Samples : 8 CHIPS
Date Submitted : 14/12/01
Report Comprises : Cover Sheet plus
Pages 1 to 4

Note: Gold not determined due to matrix interference.

Distribution of unused material:

Pulps: Discarded After 90 Days Unless Instructed!!!
Rejects: Discarded After 90 Days Unless Instructed!!!

Certified By :



Dr. Hugh de Souza, General Manager
XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result
*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion



XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 066642

Date: 11/01/02

FINAL

Page 1 of 4

Element.	Al	B	Ca	Cr	Fe	K	Li	Mg	Mn	Na	P	S	Tl	Zn
Method.	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80
Det.Lim.	0.01	10	0.01	1	0.01	0.01	1	0.01	5	0.01	50	0.01	0.01	1
Units.	%	ppm	%	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm
18M	15.9	<10	0.02	205	2.71	5.28	970	0.03	773	0.39	<50	<0.01	0.05	284
18F	8.79	<10	0.04	163	0.43	4.81	12	<0.01	60	1.22	174	<0.01	<0.01	10
22M	15.3	<10	0.01	49	2.94	4.01	1410	0.03	1080	0.36	<50	<0.01	0.06	385
22F	7.76	<10	0.07	219	0.60	4.37	31	<0.01	75	1.69	197	<0.01	<0.01	25
26M	15.4	<10	0.02	163	3.34	5.32	1360	0.03	1050	0.36	59	<0.01	0.06	285
26F	9.20	<10	0.03	135	0.24	6.20	15	<0.01	30	1.39	192	<0.01	<0.01	8
30M	16.4	<10	0.03	228	3.75	8.60	1320	0.04	923	0.30	<50	<0.01	0.08	299
30F	8.47	<10	0.05	85	0.24	4.60	14	<0.01	37	1.13	193	<0.01	<0.01	38
*Dup 18M	15.1	<10	0.02	200	2.54	5.02	923	0.03	731	0.37	<50	<0.01	0.05	263
*Blk BLANK	<0.01	<10	<0.01	<1	<0.01	<0.01	<1	<0.01	<5	<0.01	<50	<0.01	<0.01	<1
*Std SO3	3.26	14	15.6	21	1.62	1.07	10	5.58	577	0.78	507	0.13	0.19	48



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Element. Method. Det.Lim. Units.	Ag ICMS80 0.05 ppm	As ICMS80 0.5 ppm	Au ICMS80 2 ppb	Ba ICMS80 5 ppm	Be ICMS80 0.5 ppm	Bi ICMS80 0.1 ppm	Cd ICMS80 0.1 ppm	Ce ICMS80 0.05 ppm	Co ICMS80 0.1 ppm	Cs ICMS80 0.05 ppm	Cu ICMS80 0.5 ppm	Ga ICMS80 0.1 ppm	Ge ICMS80 0.1 ppm	Hg ICMS80 0.01 ppm	La ICMS80 0.1 ppm	Lu ICMS80 0.01 ppm
18M	<0.05	<0.5	inf	6	22.6	2.7	<0.1	0.48	1.6	199	8.1	220	0.2	0.03	0.2	<0.01
18F	<0.05	<0.5	inf	19	3.1	1.0	<0.1	0.56	1.3	87.1	6.2	25.7	0.4	0.02	0.3	<0.01
22M	<0.05	<0.5	inf	9	24.6	5.7	<0.1	0.41	0.4	213	5.6	226	0.2	0.04	0.2	<0.01
22F	<0.05	<0.5	inf	29	3.1	1.4	<0.1	0.83	1.0	84.9	6.6	21.5	0.2	<0.01	0.5	<0.01
26M	<0.05	<0.5	inf	<5	22.9	3.2	<0.1	0.41	0.8	249	8.6	232	<0.1	0.05	0.2	<0.01
26F	<0.05	<0.5	inf	19	3.0	1.2	<0.1	0.32	0.5	116	5.3	26.6	<0.1	<0.01	0.2	<0.01
30M	0.21	<0.5	inf	6	20.8	1.0	0.1	0.53	0.9	266	11.2	222	0.5	0.09	0.3	<0.01
30F	<0.05	<0.5	inf	22	2.1	1.1	0.1	0.48	0.5	112	6.7	24.4	<0.1	0.01	0.3	<0.01
*Dup 18M	<0.05	<0.5	inf	6	24.2	2.8	<0.1	0.50	1.7	204	7.5	232	0.2	0.04	0.3	<0.01
*Blk BLANK	<0.05	<0.5	inf	<5	<0.5	<0.1	<0.1	<0.05	<0.1	<0.05	<0.5	<0.1	<0.1	<0.01	<0.1	<0.01
*Std SO3	0.61	3.1	inf	259	0.8	<0.1	0.2	33.5	5.3	1.05	16.0	7.1	0.2	0.02	16.0	0.23



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Element. Method. Det. Lim. Units.	Mo ICMS80 0.2 ppm	Nb ICMS80 0.1 ppm	Ni ICMS80 1 ppm	Pb ICMS80 2 ppm	Rb ICMS80 0.2 ppm	Sb ICMS80 0.1 ppm	Sc ICMS80 1 ppm	Sn ICMS80 0.2 ppm	Sr ICMS80 1 ppm	Ta ICMS80 0.1 ppm	Tb ICMS80 0.1 ppm	Th ICMS80 0.1 ppm	Ti ICMS80 0.1 ppm	U ICMS80 0.05 ppm	V ICMS80 1 ppm	W ICMS80 0.05 ppm
18M	2.4	295	8	3	2280	0.1	<1	144	2	52.9	<0.1	0.5	20.3	0.45	6	1.80
18F	4.2	4.8	15	31	930	0.2	<1	2.8	18	2.0	<0.1	0.2	20.5	0.45	<1	0.13
22M	0.9	351	4	2	1560	0.1	<1	150	2	39.2	<0.1	0.6	21.5	0.74	5	2.04
22F	5.3	33.7	19	23	797	0.2	<1	2.4	20	18.2	<0.1	0.4	13.8	0.90	<1	0.21
26M	1.3	357	5	3	1870	0.2	<1	121	2	41.3	<0.1	1.3	19.4	0.56	<1	2.52
26F	2.0	6.0	8	29	1070	<0.1	<1	1.3	23	1.7	<0.1	0.2	19.5	0.21	<1	0.13
30M	4.9	344	15	3	3160	0.5	1	97.1	2	40.8	<0.1	0.2	18.4	0.78	5	3.90
30F	1.9	8.0	8	24	791	<0.1	<1	1.2	11	1.5	<0.1	<0.1	18.7	0.65	<1	0.15
*Dup 18M	2.4	309	8	2	2060	0.1	<1	155	2	56.1	<0.1	0.5	21.9	0.50	6	1.92
*Blk BLANK	<0.2	<0.1	<1	<2	<0.2	<0.1	<1	<0.2	<1	<0.1	<0.1	<0.1	<0.1	<0.05	<1	<0.05
*Std SO3	0.7	5.0	14	11	36.2	0.2	5	1.1	212	0.2	0.5	3.3	0.2	0.92	33	0.68



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Element.	Y	Yb	Zr
Method.	ICMS80	ICMS80	ICMS80
Det. Lim.	1	0.1	1
Units.	ppm	ppm	ppm
18M	<1	<0.1	8
18F	<1	<0.1	5
22M	<1	<0.1	3
22F	<1	<0.1	3
26M	<1	<0.1	3
26F	<1	<0.1	2
30M	<1	<0.1	3
30F	<1	<0.1	1
*Dup 18M	<1	<0.1	9
*Blk BLANK	<1	<0.1	<1
*Std SO3	14	1.3	46



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1885 Leslie Street
Don Mills, Ontario
Canada M3B 3J4
Telephone (416) 445-5755
Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 065169

To: **Platinova A/S**
Attn: **Jim Pirie**
Suite 1414, Guardian Tower
181 University Avenue
TORONTO
ONTARIO, CANADA M5H 3M7

Date : 12/10/01

Copy 1 to :

P.O. No. :
Project No. : CASE
No. of Samples : 33 Rock
Date Submitted : 11/09/01
Report Comprises : Cover Sheet plus
Pages 1 to 10

Please Note:
Gold reported as INF due to sample matrix interference.

Distribution of unused material:
Pulps: Store/Notify Client before discard
Rejects: Store/Notify Client before discard

Certified By :

Dr. Hugh de Souza, General Manager
XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result
*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion



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Element.	Ta	Nb
Method.	XRF7	XRF7
Det.Lim.	5	2
Units.	ppm	ppm
*Std TAN_1	1630	136
*Std PEG1	35	121
*Std PEG2	99	88
27002	46	66
27003	15	63
27004	11	61
27005	16	49
27006	28	79
27007	9	38
27008	9	50
27009	15	48
27010	43	80
27011	50	82
27012	32	56
27013	19	28
27014	32	76
27015	12	40
27016	21	62
27017	129	69
27018	43	82
27019	48	91
27020	42	111
27021	46	93
27022	32	85
27023	69	115
27024	30	96
27025	28	72
27026	24	71
27027	23	72
27028	37	111



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Element.	Ta	Nb
Method.	XRF7	XRF7
Det. Lim.	5	2
Units.	ppm	ppm
27029	18	64
27030	28	93
27031	25	72
27032	21	48
27033	18	53
27034	31	67
*Dup 27002	45	67
*Dup 27014	33	75
*Dup 27026	23	71



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Element. Method. Det. Lim. Units.	Al ICMS80 0.01 %	B ICMS80 10 ppm	Be ICMS80 0.5 ppm	Ca ICMS80 0.01 %	Cr ICMS80 1 ppm	Fe ICMS80 0.01 %	K ICMS80 0.01 %	Li ICMS80 1 ppm	Mg ICMS80 0.01 %	Mn ICMS80 5 ppm	Na ICMS80 0.01 %	P ICMS80 50 ppm	S ICMS80 0.01 %	Ti ICMS80 0.01 %	V ICMS80 1 ppm	Zr ICMS80 1 ppm
27002	7.81	<10	35.6	0.18	67	0.67	1.74	196	0.03	1380	3.61					
27003	7.86	<10	7.1	0.14	115	0.57	3.01	224	0.02	254	2.39	120	<0.01	<0.01	7	15
27004	7.99	<10	5.7	0.08	46	0.48	5.79	175	0.02	257	1.95	183	<0.01	0.01	7	7
27005	8.47	<10	5.8	0.09	55	0.33	4.52	142	0.02	202	2.14	145	<0.01	<0.01	6	3
27006	10.9	<10	44.3	0.19	31	0.56	6.36	238	0.02	1780	3.60	108	<0.01	<0.01	5	4
27007												124	<0.01	0.01	5	33
27008	9.08	<10	71.0	0.04	23	0.16	7.78	76	<0.01	69	1.52	87	<0.01	<0.01	4	3
27009	9.59	<10	36.9	0.11	54	0.44	3.00	240	0.02	304	2.20	85	0.01	0.01	5	5
27010	7.44	<10	21.4	0.07	37	0.28	4.53	95	<0.01	242	2.00	104	<0.01	<0.01	5	5
27011	8.99	<10	14.7	0.20	108	0.29	2.65	98	0.01	382	4.64	84	<0.01	<0.01	4	11
	9.02	<10	12.4	0.22	90	0.34	0.92	81	0.01	1400	5.46	85	<0.01	<0.01	3	15
27012	7.00	<10	74.5	0.17	43	0.47	2.81	198	0.02	647	2.67	55	<0.01	0.01	7	11
27013	5.28	<10	32.5	0.11	332	0.64	2.17	264	0.02	350	1.89	54	<0.01	0.01	14	8
27014	7.07	<10	20.9	0.15	89	0.67	2.64	250	0.03	1710	2.77	64	<0.01	0.02	8	24
27015	8.92	<10	28.0	0.06	83	0.23	8.10	115	<0.01	293	1.83	92	<0.01	<0.01	4	5
27016	5.68	<10	13.9	0.19	263	0.74	1.75	370	0.05	314	2.11	473	<0.01	0.03	12	8
27017	9.47	<10	>100	0.17	209	0.49	0.93	473	0.01	383	5.11	80	<0.01	0.01	9	14
27018	7.74	<10	11.0	0.14	34	0.44	2.51	100	<0.01	612	3.63	144	<0.01	<0.01	5	13
27019	9.01	<10	17.8	0.20	169	0.68	3.48	169	<0.01	1080	3.87	265	<0.01	<0.01	5	14
27020	8.88	<10	10.3	0.20	135	0.76	4.01	271	0.01	880	3.55	297	<0.01	0.01	5	18
27021	8.76	<10	15.8	0.22	76	0.50	2.66	151	<0.01	1030	4.28	255	<0.01	<0.01	3	26
27022	7.91	<10	8.5	0.23	118	0.65	1.83	258	<0.01	687	3.85	251	<0.01	<0.01	5	10
27023	7.89	<10	8.5	0.23	65	0.69	1.58	217	<0.01	558	3.90	258	<0.01	0.01	4	8
*Blk BLANK	<0.01	<10	<0.5	<0.01	<1	<0.01	<0.01	<1	<0.01	<5	<0.01	<50	<0.01	<0.01	<1	<1
*Std SO3	2.91	21	0.9	14.5	27	1.47	1.11	10	5.01	496	0.76	429	0.04	0.18	36	61
27024	7.97	<10	6.2	0.29	91	0.33	3.93	96	<0.01	306	3.22	342	<0.01	<0.01	4	5
27025	8.09	<10	5.9	0.15	111	0.52	4.44	135	<0.01	332	3.00	273	<0.01	<0.01	7	6
27026	8.89	<10	5.7	0.15	28	0.44	3.98	129	<0.01	359	3.27	266	<0.01	<0.01	4	7
27027	9.35	<10	5.4	0.12	55	0.38	5.17	73	<0.01	483	3.01	217	<0.01	<0.01	4	10
27028	7.98	<10	6.6	0.18	93	0.62	2.40	170	<0.01	699	3.73	238	<0.01	<0.01	3	15
27029	7.57	<10	5.5	0.15	88	0.67	4.23	193	<0.01	460	2.58	227	0.01	<0.01	5	6



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Element. Method. Det.Lim. Units.	Al ICMS80 0.01 %	B ICMS80 10 ppm	Be ICMS80 0.5 ppm	Ca ICMS80 0.01 %	Cr ICMS80 1 ppm	Fe ICMS80 0.01 %	K ICMS80 0.01 %	Li ICMS80 1 ppm	Mg ICMS80 0.01 %	Mn ICMS80 5 ppm	Na ICMS80 0.01 %	P ICMS80 50 ppm	S ICMS80 0.01 %	Ti ICMS80 0.01 %	V ICMS80 1 ppm	Zr ICMS80 1 ppm
27030	8.79	<10	6.8	0.24	106	0.58	3.16	151	<0.01	567	3.81	425	<0.01	<0.01	5	9
27031	7.56	<10	9.3	0.15	61	0.51	3.46	100	<0.01	551	3.21	230	<0.01	<0.01	5	15
27032	5.69	<10	5.6	0.17	31	0.48	2.30	119	<0.01	384	2.39	380	<0.01	<0.01	6	7
27033	7.43	<10	7.1	0.21	30	0.44	2.94	88	<0.01	346	3.47	273	<0.01	<0.01	5	3
27034	8.44	<10	8.1	0.18	138	0.58	2.83	97	<0.01	517	3.51	139	<0.01	<0.01	4	6
*Dup 27002	8.15	<10	39.1	0.18	60	0.68	1.91	210	0.03	1520	3.85	110	<0.01	<0.01	7	14
*Dup 27014	7.05	<10	22.8	0.15	77	0.66	2.66	253	0.03	1820	2.81	65	<0.01	0.02	8	24
*Dup 27026	8.23	<10	5.3	0.14	31	0.40	4.42	120	<0.01	340	2.99	232	<0.01	<0.01	4	8
*Blk BLANK	<0.01	<10	<0.5	<0.01	<1	<0.01	<0.01	<1	<0.01	<5	<0.01	<50	<0.01	<0.01	<1	<1
*Std SO3	3.32	29	0.9	>15.0	30	1.69	1.30	9	5.81	588	0.75	488	0.05	0.20	41	64



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Element. Method. Det. Lim. Units.	Ag ICMS80 0.05 ppm	As ICMS80 0.5 ppm	Au ICMS80 2 ppb	Ba ICMS80 5 ppm	Bi ICMS80 0.1 ppm	Cd ICMS80 0.1 ppm	Ce ICMS80 0.05 ppm	Co ICMS80 0.1 ppm	Cs ICMS80 0.05 ppm	Cu ICMS80 0.5 ppm	Ga ICMS80 0.1 ppm	Ge ICMS80 0.1 ppm	Hg ICMS80 0.01 ppm	La ICMS80 0.1 ppm	Lu ICMS80 0.01 ppm	Mo ICMS80 0.2 ppm
27002	0.09	<0.5	Inf	32	0.2	<0.1	0.94	1.5	53.1	4.4	41.1	0.2	<0.01	0.4	<0.01	4.5
27003	<0.05	<0.5	Inf	157	<0.1	<0.1	0.57	0.6	59.0	3.6	28.3	<0.1	<0.01	0.2	<0.01	1.2
27004	<0.05	<0.5	Inf	156	0.1	<0.1	0.39	0.9	77.8	4.1	27.7	0.2	<0.01	0.2	<0.01	3.4
27005	<0.05	<0.5	Inf	207	<0.1	<0.1	0.32	0.6	88.8	3.1	25.3	0.2	0.01	0.2	<0.01	1.6
27006	0.17	<0.5	Inf	195	<0.1	<0.1	1.54	0.6	103	4.0	34.9	0.1	<0.01	1.1	<0.01	3.2
27007	<0.05	<0.5	Inf	228	<0.1	<0.1	0.20	0.4	242	4.0	21.8	0.4	<0.01	0.2	<0.01	0.9
27008	0.43	<0.5	Inf	202	8.5	<0.1	2.00	0.5	133	5.0	31.4	<0.1	0.01	1.2	<0.01	2.4
27009	<0.05	<0.5	Inf	179	<0.1	<0.1	0.30	0.7	74.8	4.6	22.9	<0.1	<0.01	0.2	<0.01	1.1
27010	0.08	<0.5	Inf	78	<0.1	<0.1	0.73	2.2	46.5	5.6	29.6	0.7	0.02	0.4	<0.01	2.7
27011	0.10	<0.5	Inf	24	0.1	<0.1	0.54	3.8	19.0	7.4	34.1	0.1	0.01	0.4	<0.01	0.8
27012	<0.05	0.6	Inf	61	0.2	<0.1	0.78	2.2	87.4	5.8	31.3	0.3	0.02	0.5	<0.01	3.4
27013	<0.05	<0.5	Inf	72	0.6	<0.1	0.73	33.0	67.0	54.7	25.4	0.2	0.19	0.4	0.02	3.4
27014	0.11	<0.5	Inf	99	0.3	<0.1	0.81	6.5	74.5	12.6	34.6	0.1	0.05	0.3	<0.01	1.7
27015	<0.05	<0.5	Inf	109	0.5	<0.1	0.30	3.2	242	6.7	20.3	0.1	0.01	0.2	<0.01	2.9
27016	<0.05	<0.5	Inf	64	<0.1	<0.1	1.17	6.5	66.2	11.9	29.3	0.4	0.05	0.5	<0.01	2.1
27017	0.08	<0.5	Inf	13	<0.1	<0.1	11.7	1.9	352	7.9	34.7	0.2	0.02	6.5	0.02	4.6
27018	0.08	<0.5	Inf	5	8.3	<0.1	1.17	6.9	37.5	3.7	34.2	<0.1	0.01	0.5	<0.01	2.1
27019	0.09	<0.5	Inf	5	9.3	<0.1	2.16	1.8	51.4	3.3	33.9	<0.1	<0.01	1.0	0.02	3.4
27020	0.11	<0.5	Inf	<5	14.9	<0.1	2.29	1.1	61.1	3.3	30.8	0.1	0.01	1.1	0.02	1.5
27021	0.17	<0.5	Inf	5	14.9	<0.1	3.26	3.1	50.1	3.7	41.4	0.1	0.01	1.5	0.03	3.3
27022	0.07	0.6	Inf	5	9.0	<0.1	1.93	1.6	44.9	4.0	36.9	0.1	<0.01	0.9	0.02	1.5
27023	0.07	<0.5	Inf	6	15.4	0.3	2.28	2.8	50.6	4.2	33.1	0.3	0.01	1.1	<0.01	5.1
*Blk BLANK	<0.05	<0.5	Inf	<5	<0.1	<0.1	<0.05	<0.1	<0.05	<0.5	<0.1	<0.1	<0.01	<0.1	<0.01	<0.2
*Std SO3	0.41	2.5	Inf	320	<0.1	0.2	33.2	5.8	1.14	18.2	6.3	0.4	<0.01	15.8	0.22	1.8
27024	0.07	<0.5	Inf	42	24.8	0.2	1.29	0.8	61.2	3.3	21.6	0.2	0.01	0.7	<0.01	3.1
27025	0.05	<0.5	Inf	20	7.7	<0.1	0.88	1.5	64.6	4.1	28.1	0.2	<0.01	0.5	<0.01	4.4
27026	0.07	<0.5	Inf	11	16.5	<0.1	1.07	1.8	71.5	3.9	31.8	0.5	0.01	0.6	0.02	1.1
27027	0.09	<0.5	Inf	51	13.1	<0.1	2.31	1.2	80.2	3.0	27.0	0.1	<0.01	1.2	<0.01	2.9
27028	0.13	<0.5	Inf	<5	31.3	<0.1	2.26	5.5	55.2	4.9	34.7	0.1	0.02	1.0	0.02	1.2
27029	0.07	<0.5	Inf	7	17.8	0.2	0.95	6.3	71.2	4.9	30.7	0.9	0.02	0.4	<0.01	11.7



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Element.	Ag	As	Au	Ba	Bi	Cd	Ce	Co	Cs	Cu	Ga	Ge	Hg	La	Lu	Mo
Method.	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80
Det. Lim.	0.05	0.5	2	5	0.1	0.1	0.05	0.1	0.05	0.5	0.1	0.1	0.01	0.1	0.01	0.2
Units.	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
27030	0.11	<0.5	Inf	7	17.9	0.5	2.63	1.0	52.1	3.5	31.9	0.1	<0.01	1.1	0.02	2.6
27031	0.09	<0.5	Inf	<5	10.1	0.2	1.15	1.3	48.0	3.1	26.1	<0.1	<0.01	0.5	0.02	4.5
27032	0.06	<0.5	Inf	<5	2.9	<0.1	2.42	1.4	41.6	3.1	25.6	0.5	<0.01	0.9	<0.01	2.1
27033	<0.05	<0.5	Inf	<5	6.1	<0.1	1.21	1.9	41.5	3.0	24.6	<0.1	<0.01	0.5	<0.01	1.4
27034	0.07	<0.5	Inf	6	10.4	<0.1	1.03	1.9	37.6	2.6	30.2	0.1	<0.01	0.5	<0.01	3.2
*Dup 27002	0.08	<0.5	Inf	28	0.2	<0.1	0.85	1.3	50.2	3.2	38.8	<0.1	0.01	0.4	<0.01	3.8
*Dup 27014	0.12	<0.5	Inf	94	0.3	<0.1	0.75	6.2	72.8	12.3	36.1	0.1	0.05	0.3	0.02	1.6
*Dup 27026	0.07	<0.5	Inf	11	15.7	<0.1	0.98	1.8	70.6	3.6	30.6	0.4	<0.01	0.5	0.03	1.0
*Blk BLANK	<0.05	<0.5	Inf	<5	<0.1	<0.1	<0.05	<0.1	<0.05	<0.5	<0.1	<0.1	<0.01	<0.1	<0.01	<0.2
*Std SO3	0.38	2.5	Inf	302	<0.1	0.2	35.0	5.5	1.19	16.5	6.5	0.2	<0.01	16.6	0.21	1.7



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Element. Method. Det.Lim. Units.	Nb ICMS80 0.1 ppm	Ni ICMS80 1 ppm	Pb ICMS80 2 ppm	Rb ICMS80 0.2 ppm	Sb ICMS80 0.1 ppm	Sc ICMS80 1 ppm	Sn ICMS80 0.2 ppm	Sr ICMS80 1 ppm	Ta ICMS80 0.1 ppm	Tb ICMS80 0.1 ppm	Th ICMS80 0.1 ppm	Tl ICMS80 0.1 ppm	U ICMS80 0.05 ppm	W ICMS80 0.05 ppm	Y ICMS80 1 ppm	Yb ICMS80 0.1 ppm
27002	88.2	5	4	842	<0.1	<1	32.7	50	52.7	<0.1	2.2	4.4	1.35	0.57	<1	<0.1
27003	69.2	2	9	951	<0.1	<1	16.9	81	15.2	<0.1	0.7	8.9	2.31	0.32	<1	<0.1
27004	67.5	3	12	2170	<0.1	<1	15.1	78	18.0	<0.1	0.6	12.2	1.11	0.36	<1	<0.1
27005	36.3	2	16	1520	<0.1	<1	10.5	104	7.1	<0.1	0.7	13.6	0.43	0.26	<1	<0.1
27006	76.0	2	16	2530	<0.1	<1	15.0	129	24.9	<0.1	20.0	14.2	2.62	0.34	<1	<0.1
27007	7.9	2	24	3260	<0.1	<1	3.4	126	4.7	<0.1	0.3	24.3	0.06	0.21	<1	<0.1
27008	33.7	2	18	821	<0.1	<1	13.1	118	10.5	<0.1	4.9	18.8	0.44	0.34	<1	<0.1
27009	35.2	2	13	1560	<0.1	<1	7.3	84	16.2	<0.1	1.4	12.9	0.28	0.28	<1	<0.1
27010	94.9	3	7	974	<0.1	<1	6.8	71	45.1	<0.1	3.5	5.6	1.98	0.68	<1	<0.1
27011	96.3	3	4	369	<0.1	<1	8.6	57	44.0	<0.1	4.3	1.8	4.25	0.82	<1	<0.1
27012	50.8	3	7	1330	<0.1	<1	15.3	72	24.0	<0.1	2.5	7.4	0.79	0.81	<1	<0.1
27013	56.2	14	8	1060	0.1	<1	17.2	56	17.3	<0.1	2.3	5.9	0.51	9.05	<1	<0.1
27014	83.5	5	8	1350	<0.1	<1	24.2	75	33.7	<0.1	2.4	6.8	0.92	1.94	<1	<0.1
27015	14.1	3	18	3430	<0.1	<1	2.7	67	13.3	<0.1	0.7	20.5	0.32	0.93	<1	<0.1
27016	59.3	5	3	936	<0.1	<1	33.5	57	19.4	<0.1	0.6	4.6	0.30	1.87	<1	<0.1
27017	98.4	3	6	498	<0.1	<1	9.6	70	124	<0.1	11.9	2.4	4.46	0.99	<1	<0.1
27018	94.4	6	8	947	<0.1	<1	9.0	10	40.5	<0.1	2.1	4.9	2.71	0.32	1	<0.1
27019	119	3	11	1030	<0.1	<1	7.3	8	45.0	<0.1	3.5	5.1	3.96	0.34	2	<0.1
27020	137	3	10	1150	0.4	<1	6.5	6	45.7	<0.1	3.9	5.9	4.14	0.60	2	<0.1
27021	131	4	10	965	<0.1	<1	5.9	11	39.9	0.1	6.2	5.1	6.48	0.34	3	0.1
27022	103	3	6	761	<0.1	<1	7.9	13	28.1	0.1	3.6	3.5	4.08	0.35	2	<0.1
27023	123	3	5	627	<0.1	<1	8.3	17	59.1	0.1	4.0	2.9	5.32	0.46	2	<0.1
*Blk BLANK	<0.1	<1	<2	<0.2	<0.1	<1	<0.2	<1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<1	<0.1
*Std SO3	6.2	13	12	36.9	0.2	5	1.0	233	0.5	0.5	3.4	0.2	0.91	0.53	16	1.3
27024	125	2	11	1230	<0.1	<1	5.8	45	34.8	<0.1	1.4	6.7	1.93	0.35	1	<0.1
27025	86.6	3	11	1230	<0.1	<1	6.9	21	27.0	<0.1	1.0	6.6	1.48	0.45	1	<0.1
27026	85.3	3	14	993	<0.1	<1	7.4	22	20.8	<0.1	2.4	8.4	2.82	0.43	1	<0.1
27027	87.6	3	17	1210	<0.1	<1	3.9	35	25.2	<0.1	2.6	10.2	2.36	0.37	2	<0.1
27028	137	5	8	882	<0.1	<1	7.4	10	35.6	0.1	4.5	4.5	4.90	0.58	3	<0.1
27029	77.8	7	11	1350	0.5	<1	8.7	6	18.2	<0.1	1.5	7.5	4.68	1.40	1	<0.1



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Element.	Nb	Ni	Pb	Rb	Sb	Sc	Sn	Sr	Ta	Tb	Th	Tl	U	W	Y	Yb
Method.	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80	ICMS80
Det.Lim.	0.1	1	2	0.2	0.1	1	0.2	1	0.1	0.1	0.1	0.1	0.05	0.05	1	0.1
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
27030	119	3	10	818	<0.1	<1	6.5	8	28.5	0.2	4.0	5.7	12.4	0.57	3	0.1
27031	75.1	3	10	1000	<0.1	<1	5.0	6	22.1	<0.1	2.7	5.4	3.94	0.38	2	<0.1
27032	55.2	4	7	765	<0.1	<1	7.3	5	6.3	0.2	1.2	4.1	2.63	0.31	3	<0.1
27033	55.3	3	9	798	<0.1	<1	4.0	6	15.1	<0.1	1.3	4.5	2.10	0.27	1	<0.1
27034	75.9	3	11	781	<0.1	<1	6.3	9	26.2	<0.1	1.9	3.9	1.44	0.49	1	<0.1
*Dup 27002	80.5	4	3	795	<0.1	<1	28.6	47	43.6	<0.1	2.0	4.0	1.26	0.50	<1	<0.1
*Dup 27014	82.5	5	7	1340	<0.1	<1	21.6	76	27.2	<0.1	2.5	6.4	0.95	2.07	<1	<0.1
*Dup 27026	91.2	3	13	1210	<0.1	<1	7.3	21	28.4	<0.1	2.2	8.0	2.70	0.44	1	<0.1
*Blk BLANK	<0.1	<1	<2	<0.2	<0.1	<1	<0.2	<1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<1	<0.1
*Std SO3	6.6	14	11	38.8	0.2	6	0.7	235	0.5	0.5	3.9	0.2	1.01	0.51	16	1.3



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Element.	Zn
Method.	ICMS80
Det.Lim.	1
Units.	ppm
27002	48
27003	43
27004	26
27005	33
27006	32
27007	5
27008	36
27009	15
27010	19
27011	20
27012	28
27013	84
27014	57
27015	5
27016	51
27017	85
27018	34
27019	40
27020	72
27021	64
27022	80
27023	101
*Blk BLANK	< 1
*Std SO3	52
27024	38
27025	43
27026	39
27027	17
27028	32
27029	42



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Element.	Zn
Method.	ICMS80
Det.Lim.	1
Units.	ppm
27030	142
27031	115
27032	30
27033	50
27034	48
*Dup 27002	45
*Dup 27014	58
*Dup 27026	36
*Blk BLANK	< 1
*Std SO3	52

APPENDIX 3

NAMES AND ADDRESSES OF FIELD PERSONNEL

NAMES AND ADDRESSES OF FIELD PERSONNEL

Geologist

P.C. LeCouteur, 4900 Skyline Drive, North Vancouver, BC, Canada, V7R 3J3

Geo-Technician

T. Link, PO Box 561, Kirkland Lake, Ontario, Canada, P2M 3J5

2015

Date: 2002-JUN-20

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

NAVIGATOR EXPLORATION CORP.
SUITE 1300,
409 GRANVILLE STREET
VANCOUVER, BRITISH COLUMBIA
V6C 1T2 CANADA

Tel: (888) 415-9845
Fax: (877) 670-1555

Submission Number: 2.23538
Transaction Number(s): W0280.00822

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

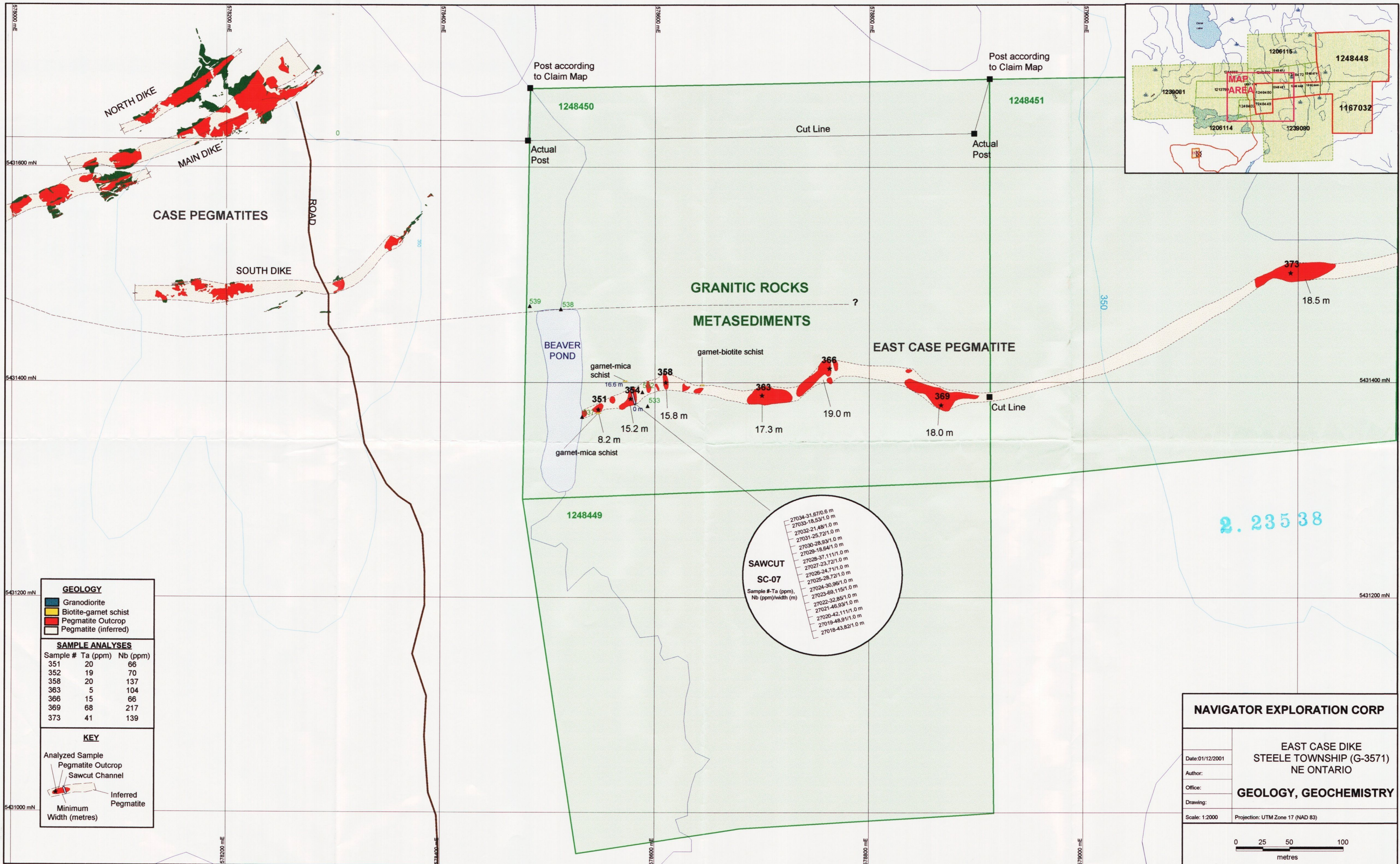
Yours Sincerely,



Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist
Navigator Exploration Corp.
(Claim Holder)

Assessment File Library
Navigator Exploration Corp.
(Assessment Office)

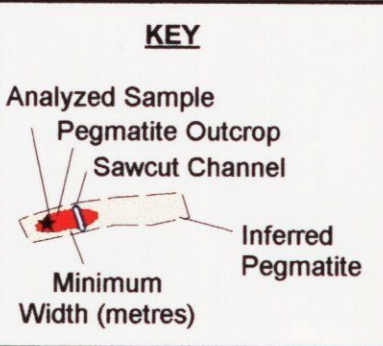


GEOLOGY

- Granodiorite
- Biotite-garnet schist
- Pegmatite Outcrop
- Pegmatite (inferred)

SAMPLE ANALYSES

Sample #	Ta (ppm)	Nb (ppm)
351	20	66
352	19	70
358	20	137
363	5	104
366	15	66
369	68	217
373	41	139



SAWCUT SC-07

Sample #-Ta (ppm), Nb (ppm)/width (m)

27034-31.67/0.6 m
27033-18.53/1.0 m
27032-21.48/1.0 m
27031-25.72/1.0 m
27030-28.93/1.0 m
27029-18.64/1.0 m
27028-37.11/1.0 m
27027-23.72/1.0 m
27026-24.71/1.0 m
27025-28.72/1.0 m
27024-30.96/1.0 m
27023-69.115/1.0 m
27022-32.85/1.0 m
27021-46.93/1.0 m
27020-42.11/1.0 m
27019-48.91/1.0 m
27018-43.82/1.0 m

NAVIGATOR EXPLORATION CORP

Date: 01/12/2001

Author:

Office:

Drawing:

Scale: 1:2000 Projection: UTM Zone 17 (NAD 83)

**EAST CASE DIKE
STEELE TOWNSHIP (G-3571)
NE ONTARIO**

GEOLOGY, GEOCHEMISTRY

0 25 50 100 metres

