42A01SE2010 2.19646 OTTO

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TO: J. E. Tilsley
James E Tilsley and Associates
5 Steeplechase Ave.
Aurora Ont.

DATE: Aug. 22, 1997

2.19646

FROM: H. Veldhuyzen

RE: Evaluation of the Nastek Explorations Ltd. Reed-Robinson property, Kirkland Lake area Ontario

TERMS OF REFERENCE

Evaluate the previous work, sample mineralized exposures and float to determine areas warranting further testing by trenching or drilling.

PREVIOUS WORK REVIEWED

The geological data base is as follows:

a) geological mapping and prospecting
b) geophysical survey - Max-min EM completed on selected lines
c) geophysical survey - walk magnetic survey completed on selected lines
d) geophysical survey on a previous grid - total magnetic field
e) geophysical survey on a previous grid - radiometric survey
f) regional Quaternary Geology map, OGS map P. 2392
g) regional Engineering and Terrain Study maps OGS maps 5230 and 5232

The previous work identified the following positive attributes to the property:

a) two areas that appear to be centres of extensive intense carbonate alteration trending along the regional trend of the Kirkland Lake break,
b) superimposed within the areas of carbonate alteration are later iron carbonate and sericite alteration and sulphide,
c) quartz vein float with dolomite and sericite alteration containing low but definitely anomalous gold values,
d) geophysical surveys indicate structural trends of 060° to 070° with associated with the carbonate alteration.
e) the property is north of the Larder Lake Fault north of which gold mineralization is restricted in the western Kirkland Lake.

Two main areas of interest are identified; the southwestern most part of the property where old trenches containing carbonate altered volcanics with secondary iron carbonate alteration, silicification and disseminated sulphides. The second area is the northeastern part of the

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property where four large mineralized float boulders with low but positive gold assay results are present.WESTERN MINERALIZED OUTCROP AREA (L 11+50 E to 13+50 E; 0+00 N to 0+50 S)

The area contains old hand excavated trenches dating from the 1930's or 1940's on the northern flank of a low magnetic anomaly, coincident weak EM conductor and swamp trending approximately 060° to 070°. The geophysical signature parallels the interpreted trend of the Kirkland Lake Break west of Swastika.

Approach

The alteration zone was tested to determine if it was part of a gold mineralized system by sampling selected samples from the trenches. Sampling did not investigate the centre of the swampy depression, centre of the structural break, envisioned as the loci for higher grade mineralisation.

Work completed

Six (6) large (5 kg) selected samples of different character of mineralized bedrock or heaved boulders were sampled (table 1).

Observations

Trench samples (table 1) were from the northern flank of the geophysical trend where mafic volcanics appear to have been undergone extensive calcium carbonate alteration overprinted by iron carbonate alteration, less extensive iron carbonate with lesser sericite alteration and variable amounts of silicification.

Sample #	location	description
E-O-1	12+16 E, 0+05 N	CaCO3 with Fe carbonate and ankerite alteration with 15% quartz veining, 1-4% pyrite in quartz veinlets, tr-1% in groundmass
E-O-2	13+50 E, 0+50 N	variable carbonate alteration with 1% pyrite (yellowish, disseminated) and minor silicification, possibly minor albitization
E-O-3	13+50 E, 0+45 N	2 mm grey quartz veinlets cross-cutting pale grey- green albite in turn cutting medium grained iron carbonate, host has chlorite alteration with carbonate alteration and 0.5% pyrite, calcium carbonate - dolomite alteration fringing albite alteration

E-O-4	12+20 E, 0+07 S	carbonate alteration cross-cut by 3-5mm anastomosing quartz veinlets in breccia, pyrite 2-5%
E-O-5	12+00 E, 0+27 S	pale grey albite-iron carbonate alteration with 0.5% pyrite cut by 5% very hard cherty stockwork
E-O-6	12+28 E, 0+08 S	albite-iron carbonate alteration with pale grey, hard with 5% dark grey quartz stockwork, has minor hematite veining and disseminated hematite

Table 1 Description of the trench samples taken from the southwest claims.

Discussion

The southwestern claim group (claims 1202472, 120247, 202895) contains two parallel to subparallel geophysical trends trending approximately 090° and 070°.

1) 090° to 085° trending magnetic low identified extends from L 11+00, 3+25 N to 15+00 E, 4+00 N, it does not parallel the Kirkland Lake trend or have bedrock exposures
2) 075° to 060° trending magnetic low identified as extending from L12+00, 0+25 S to 1+25, 15+00 E. this parallel the Kirkland Lake trend and has the trenching of carbonate alteration, silicification and pyritization on its northern flank.

The northern trend (1) is a swampy area lacking outcrop, its proximity to the southern trend has prevented any float derived from this area to be recognized independent of the southern trend as the float would be deposited on the southern mineralized bedrock (2). As such, mineralized float would be overlooked.

The most likely exploration target is the 060° to 070° southern trend which is parallels the Kirkland Lake trend and is mineralized on its northern flank.

Results

assay results

Recommendations (L 11+50 E to 13+50 E; 0+00 N to 0+50 S)

Should any of the samples return a positive gold assay result trenching should investigate the area by two trenches. One from 0+25 N on L 12+00 E to the south extending as far as possible into the swamp to the south as is feasible and a second trench from 0+75 N to as far possible into the swampy areas on line 13+50 E. Large and more samples should be taken from this area.

EASTERN AREA WITH MINERALIZED FLOAT BOULDERS
(L 42+50, 1+75 N to L 45+50 E, 2+10 S)

Four large boulders of weakly mineralized altered and quartz veined material located in Otto township have yielded positive gold assay results. These boulders have been glacially transported from elsewhere and field investigations were to identify if the source of the float could have been from the claim group or a more distal source.

Approach

The approach is two fold. One is to confirm the boulders contain gold mineralization at grades approaching economic levels. By resampling the float for assay The second to determine possible source areas within the claim group based on ice transport directions and previous geophysical and geological data.

Identifying glacial transport direction responsible for float deposition required identifying all Quaternary events as they affected the distribution and prominence of float eroded from a mineralized source.

The till fabrics were determined from locations 3 to 6 metres up and down ice from the principal float boulders, except for the westernmost boulder where only one pit up ice was excavated one metre to the north (table 3).. Three additional pits were excavated to the north of a source area as interpreted from geological mapping and geophysical surveys. These pits also tested the feasibility of trenching and to determine if the float originated farther to the north (suggestive of a source area off the property).

Observations

The float appears to be derived from a gold quartz vein system cross-cutting carbonate alteration with later iron carbonate alteration. This is consistent with the known style of mineralization in the Kirkland Lake Camp and the geological mapping of the centre of claim 475259.. The float varies in size from 2 by 4 metres to 0.5 by 1 metres and is spread over a distance of approximately 225 metres. All the boulders are distinctly different and do not appear to originate from a single large block broken up during transport from a distal source.

Sample #	Location	description
E-O-7	L 46+50E, 3+68 S	carbonate altered volcanic with 5-8% quartz flooding, 3-5 mm iron carbonate and dolomitic veinlets with 2% pyrite, slightly brecciated appearance
E-O-8	L 45+56E, 3+02 S	3 to 30 mm quartz veining in carbonate alteration with dolomite, 10-15% pyrite at the edge of the veining to 3-5% pyrite throughout the sample (1-2 mm), also specular hematite (north end of float)

E-O-9	L 45+56E, 3+02 S	quartz flooding with pyrite 0.5-2.0% (1-2 mm), 3-45 Fe carbonate, weathers more massively than E-O-8, may have specular hematite (south end of float)
E-O-10	L 45+50E, 2+56 S	almost total silicification to greyish to brownish quartz to near cherty texture, 5-7% pyrite throughout, some albite alteration, 3-5% dolomite,
E-O-11	L 44+47E, 4+18 S	calcium carbonate altered with 3-5% disseminated pyrite, 10% dolomite, in part greyish quartz breccia with locally 5-8% pyrite and greenish-yellow albite alteration

Table 2 Description of the mineralized float sample on the northeast grid.

Ice transport directions, Quaternary history

Only the last three of the known four ice transport directions are recognized on the property.

1) northeast origin, predates 12,000 years B. P., unrecognized on the claim group
2) 030° the earliest of the interpreted Late Wisconsinian ice flow directions, the transport direction is recognised only in pit #3 which had no altered pebbles. It is mostly eroded by later ice movements or glaciolacustrine beach erosion. When preserved it is covered later tills. The float boulders are much to large to have been moved by the ice flow direction.
3) 360° interim ice movement as the ice sheet began melting with the centre of the Laurentide ice centre shifting to the north. Deposition occurred near the ice margin, possibly floating. Deposition may have coincided with the esker formation. Identified only in pit # 6 where the highest proportion of altered pebbles was obtained form any of the tills.
4) 330° to 340° is the last and most extensively recognized ice flow direction from both till fabrics and striations on shallow outcrop. The ice flow direction does seem to vary from 340° in the eastern part of the property to 330° in the east central part of the property possibly reflect ice flow moving around local relief and may not be of regional significance. Less local material is incorporated into this till than the other tills reflecting less erosional ability such as found at the edge of grounding ice sheet. Large boulders such as the mineralized float could still be plucked from suitable locations.
5) A last gasp iced movement is reported to have wildly varying directions without continuity (Baker pers. Comm.). This ice movement may have developed striations during local iceberg groundings and as such not reflecting till transport directions.

The ice flow directions are determined by two methods: till fabrics and glacial striations on bedrock representing ice direction for the last erosional phase on the bedrock surface, not the depositional phase of the overlying till or tills. Till fabrics represents a less accurate ice flow direction at the time till deposition by measuring the orientation of long axis of 30 pebbles.

pit #	Location	ice transport direction	stratigraphy
1	44+47 E, 4+18 S	348 (fig 1) 340 (fig 2)	0 - 20 pebbly grey to yellow-brown silt clay 20 - 40 grey clay pebbly flow-till or diamicton 40 - 88 till with sandy outwash at top, blackish to grey brown sand silt matrix , ice shove 88 -110 fine sand grading to coarse near base, water in hole
2	45+56 E, 2+98 S	339 (fig 3)	0 - 74 striation on shallow outcrop, thin reworked outcrop
3	45+54 E, 2+93 S	348 031 (fig 4)	0 - 41 open-worked sandy silt matrix with pebbles containing roots (stria on adjacent outcrop) 41 - 121 pebbles in an imbricated silty sand matrix grey-brown
4	45+50 E, 2+61 S	nil	0 - 32 wave washed boulder from beach, minor sand 32- 81 3-5% pebbles in fine whitish sand 81 -105 light fine sand with pebbles similar to above
5	45+50 E, 2+56 S	nil	0 - 12 peat 12 - 25 massive grey clay 25 - 61 grey varved clay 61 - 70 pebbly sand 70 - 75 matrix supported cobbles, beach
6	42+87 E, 1+83 S	varved? 340 (fig 5) 360 (fig 6)	0 - 10 humus and roots 10 - 39 massive whitish grey clay 39 - 57 light to medium brown sandy silt, open-worked, cobbles 20% 57 - 74 light grey to silty grey sand with subangular to rounded pebbles 74 - 97 light to medium brown sand with 5-8% pebbles 97 - 121 higher proportion of pebbles in a sity sand matrix, grey- brown, better imbricated
7	43+00 E, 3+17 N	330 (fig 7)	0 - 63 rounded to subangular cobbles with yellow-brown silt sand matrix, roots and manganese stain, lag beach 63 - 150 light grey brown sandy matrix to pebbly till, 150 Carbonate altered bedrock
8	43+00 E, 1+91 N	nil	0 - 160 varved clays 160 - 180 sandy silt, artesian water

9	42+33 E, 2+31 N	nil	140 varved clays

Table 3 Description of pits and iced flow directions determined

The till stratigraphy has been seriously altered by subsequent deepwater varved clay deposition and erosion of topographic highs by beach erosion and reworking of the till. This has extracted boulders from the till matrix and concentrated on the high energy portions of the beach environment resulting in boulders sitting on varved clays at the base of slopes (figure 10). .

Results

Assay results of float

The later three ice transport directions; 030°, 360° and 340° are present on the property. The younger till is much more extensive than the older two. In two cases (pits 1 and 3) the mineralized float lies directly on the younger till, hence the float transport direction is 340°.

The last poorly developed till is meltout till or ice shove material which has been extensively reworked by the later glaciofluvial, glaciolacustrine and soil forming processes. ro-glacial environment with some erosion was followed by deepwater sedimentation (varved clays) and subsequent extensive reworking by beach environments during falling water levels, particularly on topographic highs (figure 10).

The ice transport direction is predominately from 340 °. The pebbles from the 030 ° till horizon were not carbonate altered and as such apparently unrelated to the float. The case of both the 360 ° and 340 ° till materials have high proportion of carbonate altered pebbles strongly suggesting a source area to the north to north northwest of the float locations. The proportion of carbonate altered pebbles in the till were less in pit # 7 where till was observed, immediately above a carbonate altered bedrock.

Discussion

Controls on the erosion of the vein float material is enhanced by the orientation of the vein system in the 060 ° trend. Early 030 ° ice transport direction smoothed the vein material in an elongate hump parallel to the vein itself in the 060 ° direction with relatively little erosion. The second ice flow direction of 360 ° was suitably oblique that relatively little of the vein moulded in a 303 ° from the early ice flow direction was eroded. The last ice flow direction of 330 ° to 340 ° was essentially perpendicular to the vein system such that more resistant quartz ridge was plucked or shoved without having to undergoing relatively large amounts of comminution. This latter shoving action transported the comparatively large blocks intact without seriously breaking them apart along joint faces.

From the float and the quantity of altered material in the 360° till, the western end of the target area appears to have been the area of the more interesting float. The target mineralization is a vein network of quartz hosted in calcite and dolomite altered volcanics with secondary iron carbonate and sericite alteration plus or minus albite alteration. Pyrite is anticipated to comprise 2 to 5% of the rock, being more strongly concentrated within the carbonate alteration at the contact of the quartz veining.

Up-ice in the 340° direction trends to a centre of carbonate alteration trending 060 to 070 with a central magnetic low and a flanking EM conductor on the south side of the magnetic low. The lateral extent of the target area appears to be defined by two northwest trending structural breaks limiting the target area between 42+75 E, 1+75N and 45+50 E, 2+10 N.

The glaciolacustrine episodes post till have enhanced the prominence of large boulders in the shore line areas where the large float are found while the areas closer to the source area are in depressions covered by thick > 2 m varved clays which have hidden any larger presumably more numerous float nearer to the source area.

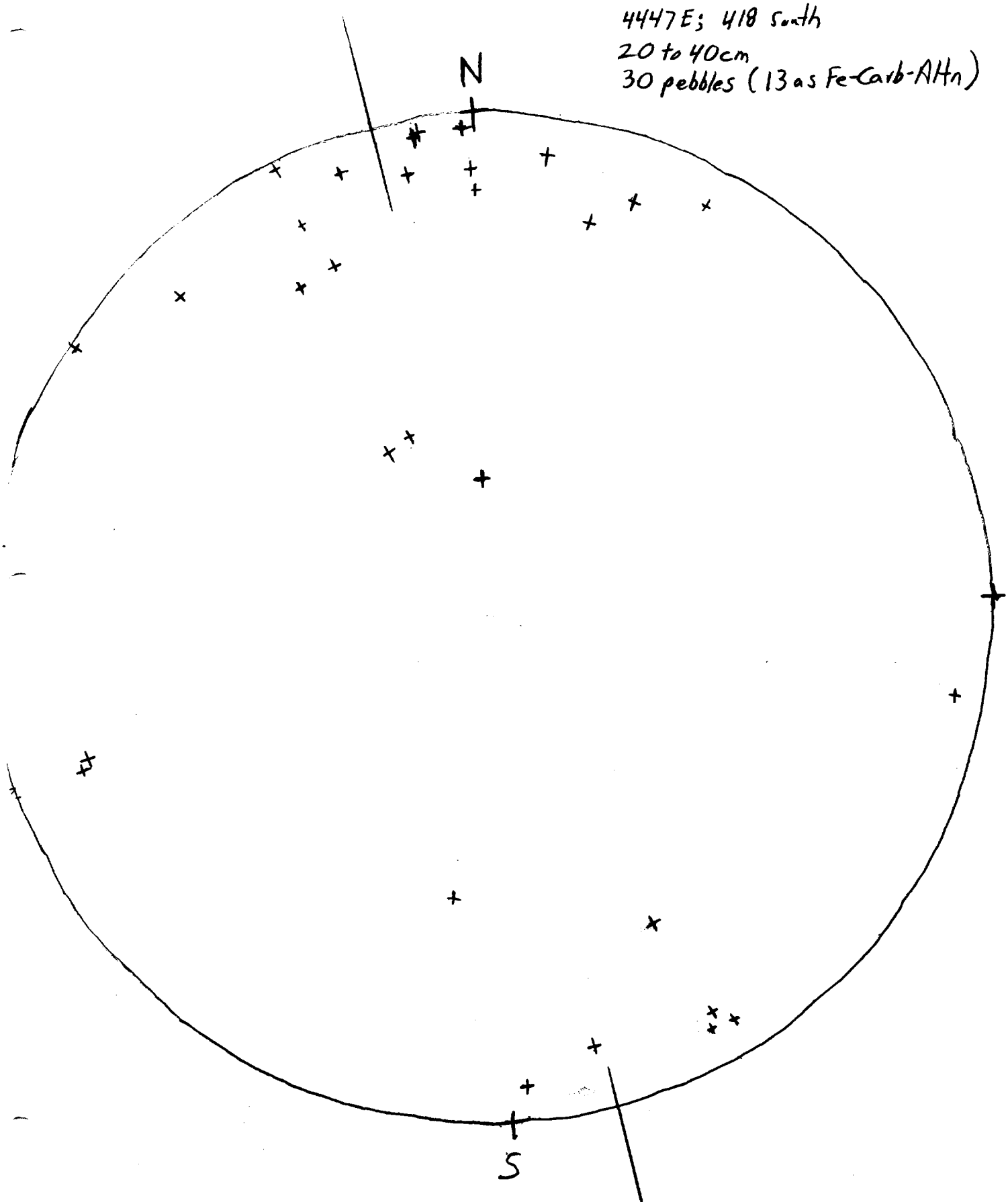
The boulder lags in the area of pit # 7 are recognized as radiometric highs reflecting a greater percentage of syenite boulders which may be locally derived. The very low radiometric areas coincide with deep swamps and areas of varved clay deposition.

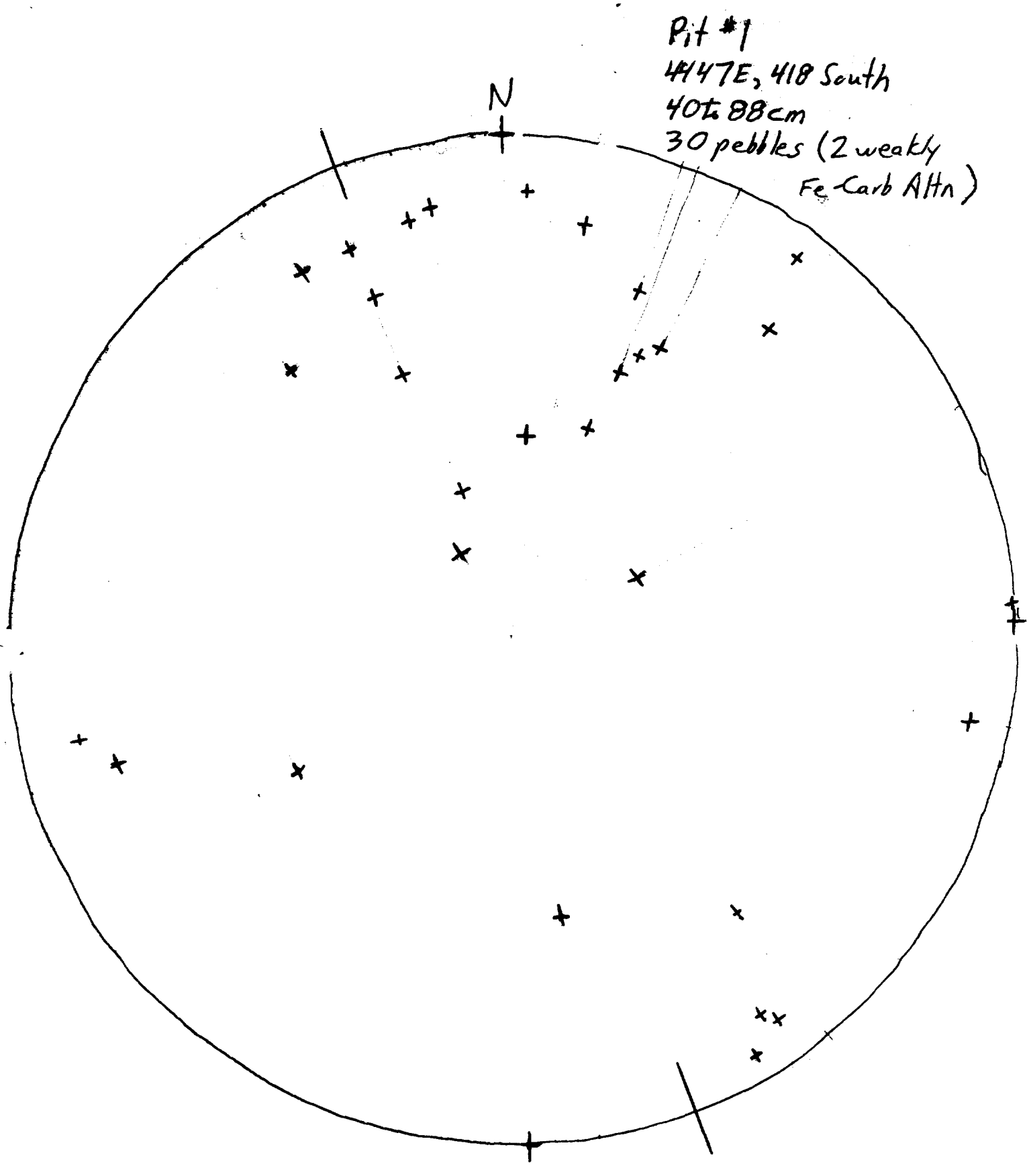
Recommendations

The area underlies a swamp which in turn is underlain by varved clays to a depth of 18 to 20 metres elsewhere in Otto Township, trenching is not considered an option. Drilling is suggested to test the western part of the geophysical target area drilling from 1+80 to 2+65 N 335° at -45° for up to 110 metres. This would test both the extension of the weak conductor and the weak magnetic low

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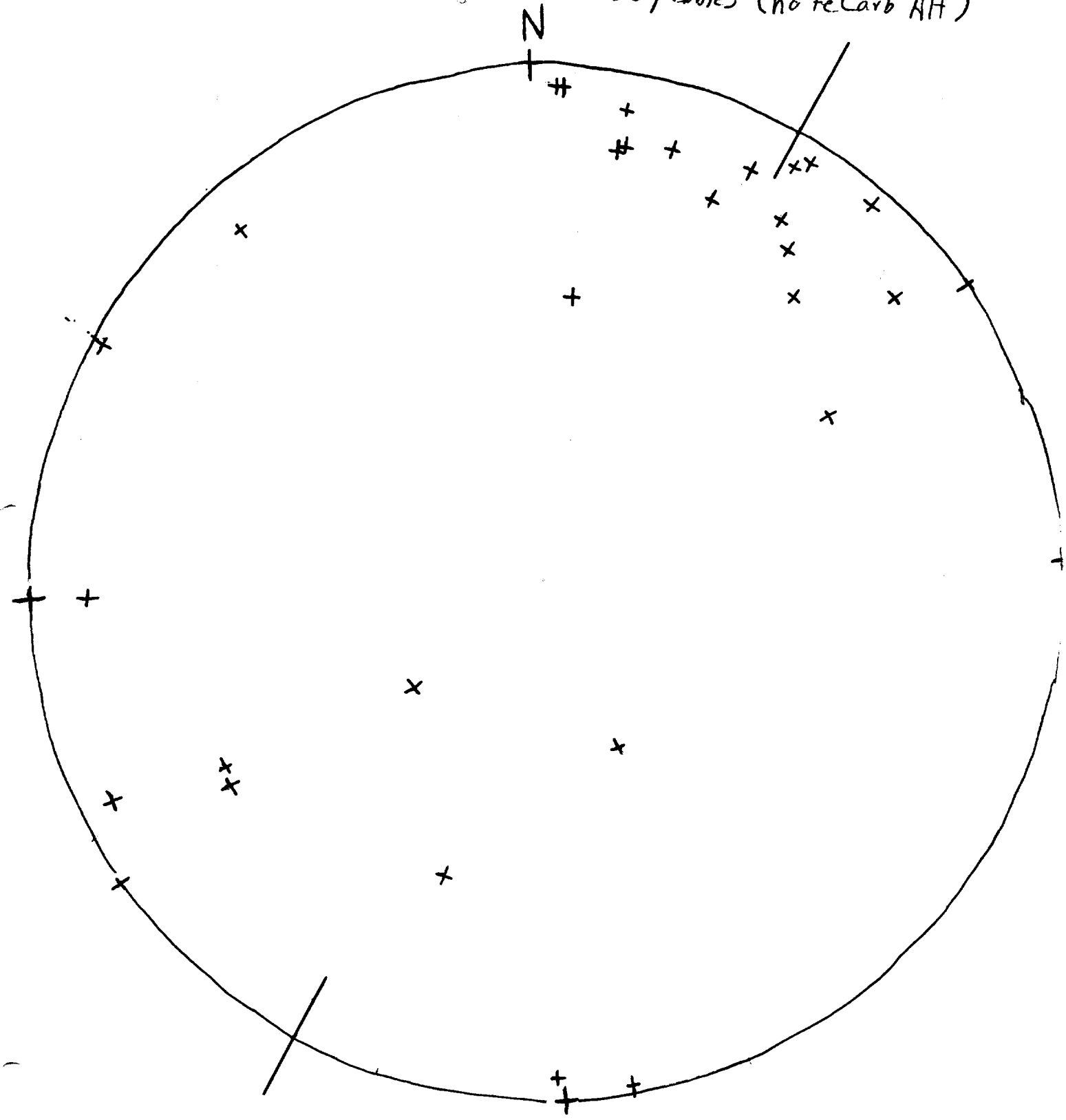
Pit #1
4447E; 418 South
20 to 40cm
30 pebbles (13 as Fe-Carb-AHn)

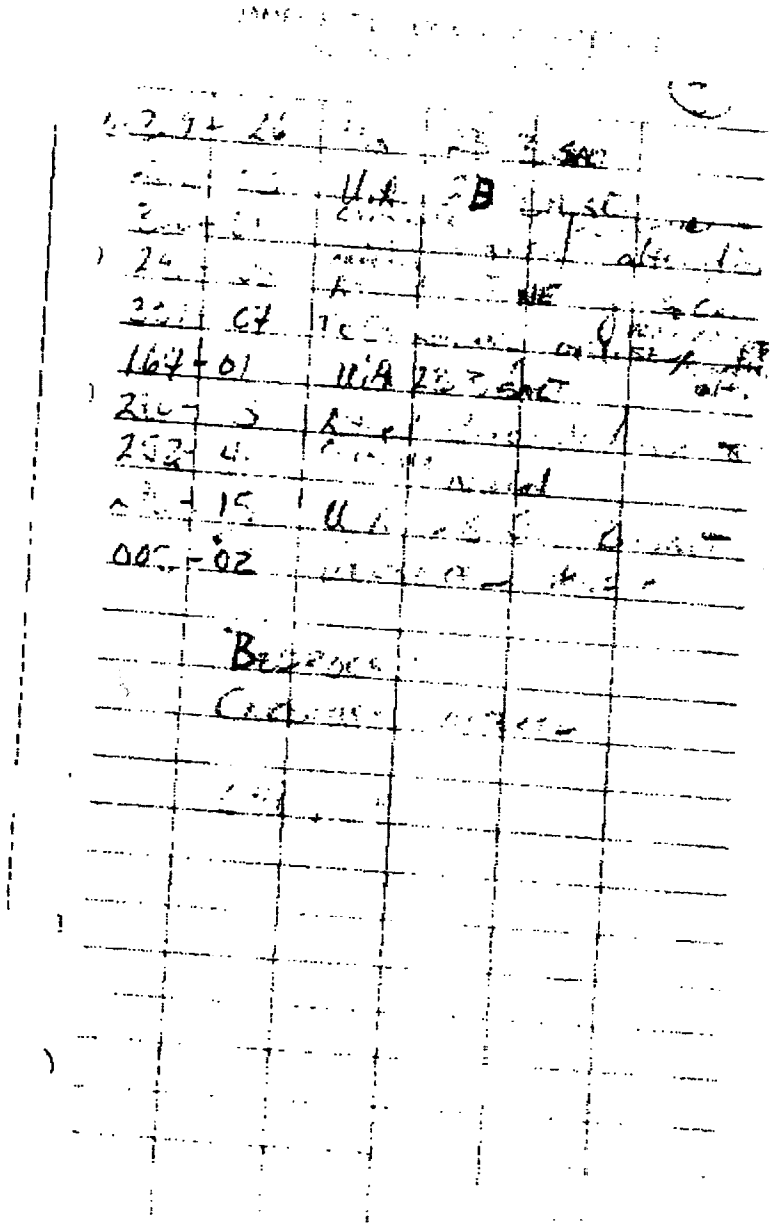


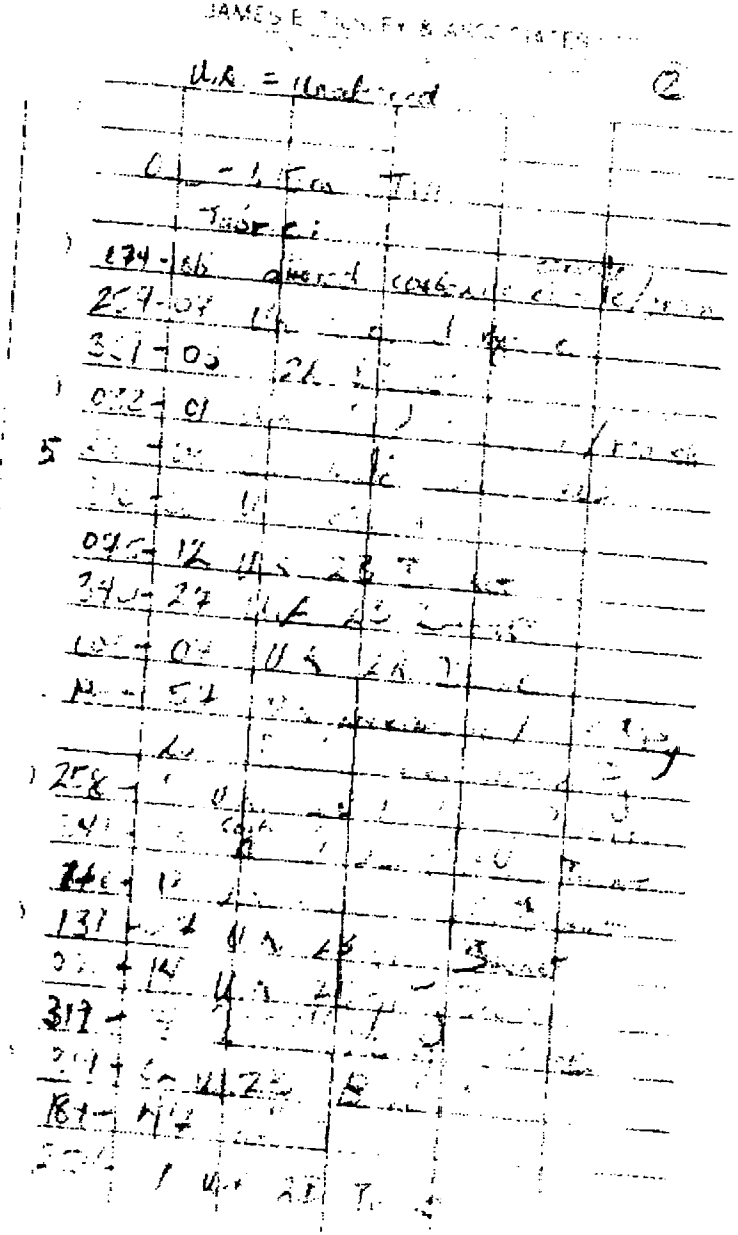


Pit #1
447E, 418 South
40± 88cm
30 pebbles (2 weakly Fe-Carb Altn)

Pit #3
4554E; 29B-South
41 to 121 cm
30 pebbles (no Fe Carb AH)







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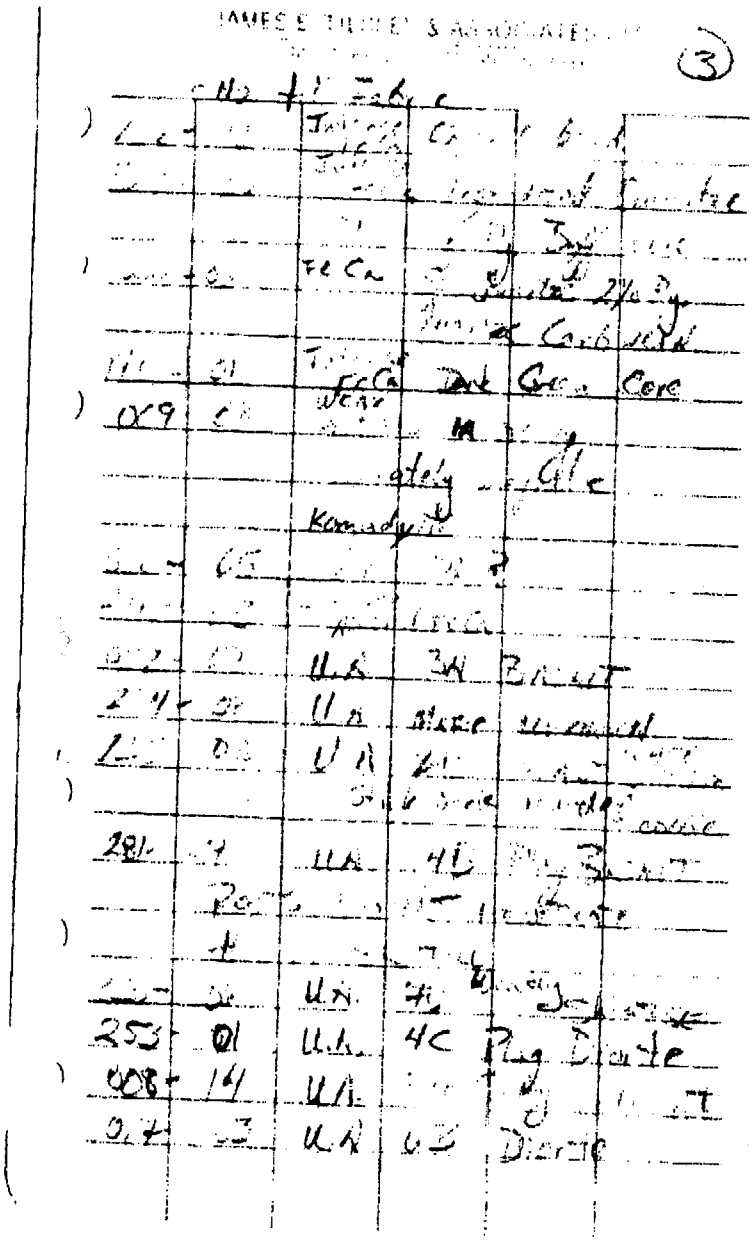
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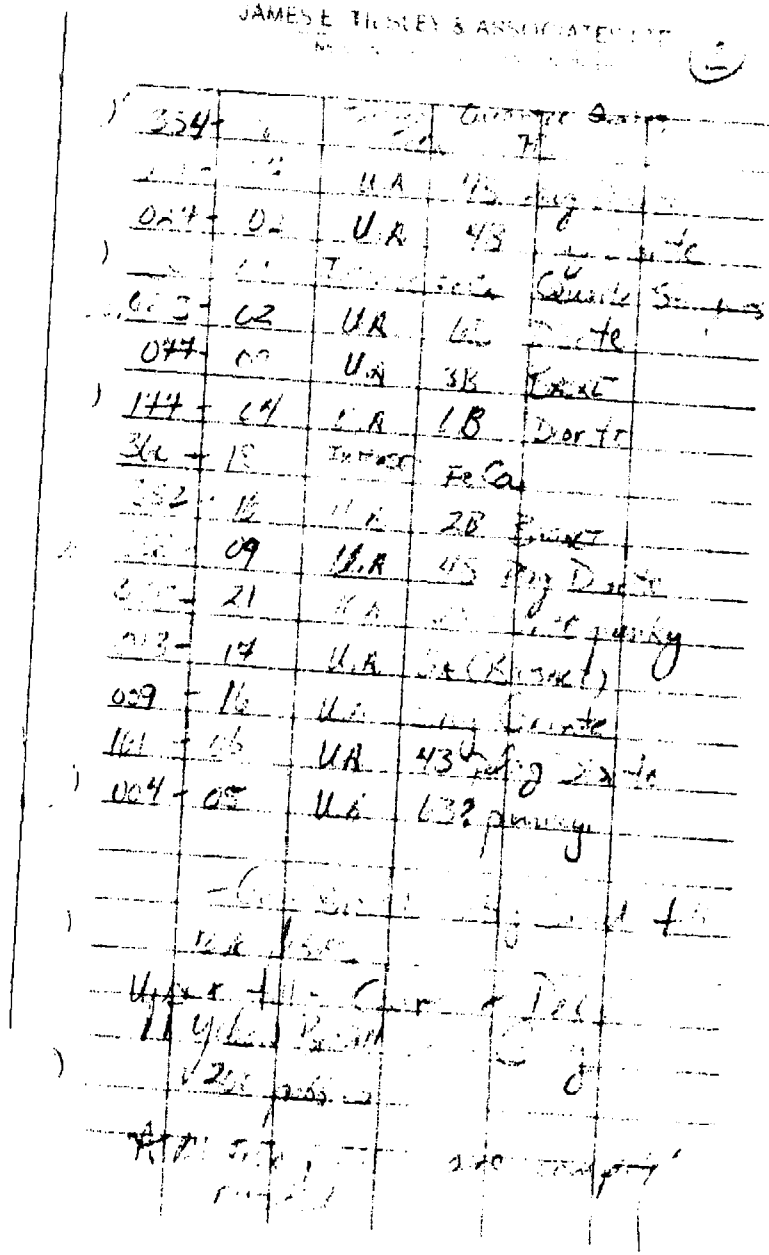
325	12	Intense	FeCa	
341	13	U.A.		Granite
215	03	U.A.	6B	Diorite
341	16	U.A.	4B	1% Py
324	16	Strong	FeCa	
094	07			
041	12	U.A.		Diorite
175	02	U.A.	B	
	42	U.A.	4B	
025	12	U.A.	6B	
341	07	U.A.		
325	11	U.A.	6B	Diorite
254	07	U.A.		
354	10	U.A.	2	Basalt
356	11			

0-22 cm Soil + roots

22-50 cm disturbed upper till - roots - possibly till 20-30%

Tan Brown to yellow Brown





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UA = unaltered

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Line 430 18 47?

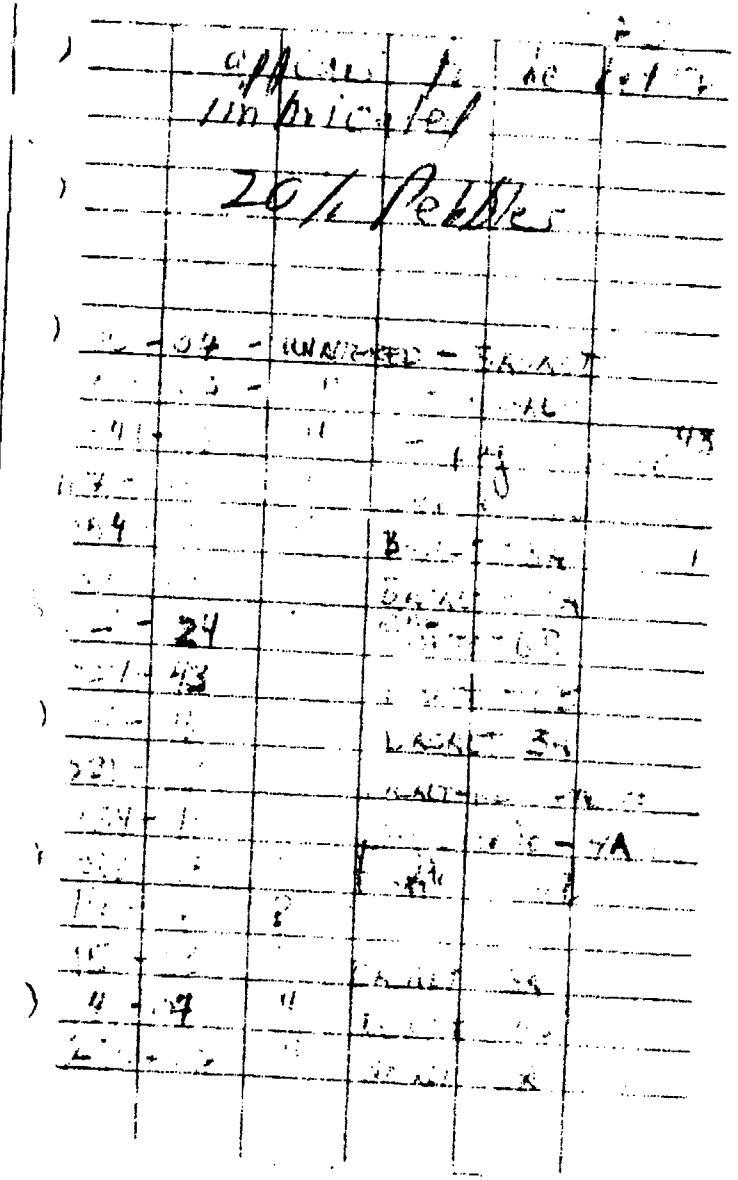
139 - 83	quartz vein	
read is - Bottom to top		
140 - 0-13 cm	light grey brown	
	dense silt to sand.	
	- overlaying	
	2cm	
	PEBBLES + silty SAND	
272 - 03 -	UA.	
1?? - 16 -	Intense Alteration FeCa	2cm Chloritic 4B
031 - 09 -	U.A. - 1A/B - Basalt - 2A	
011 - 13	UA - Diorite - 6B	
310 - 07	UA - Diorite - 6C	
333 - 21	U.A - Red Granite	
280 - 02	U.A Basalt - 2A	
027 - 16	U.A. - White Granite	
007 - 04	Intense Altered FeCa	
203 - 26	U.A. 3A Basalt	
?? - 17	UA. 3A Basalt Trace Py.	Very Fine
341 - 05	Intense FeCa	
058 - 02	U.A. 2A Basalt	
059 - 08	Intense FeCa	
339 - 14	UA. 4A Basalt	

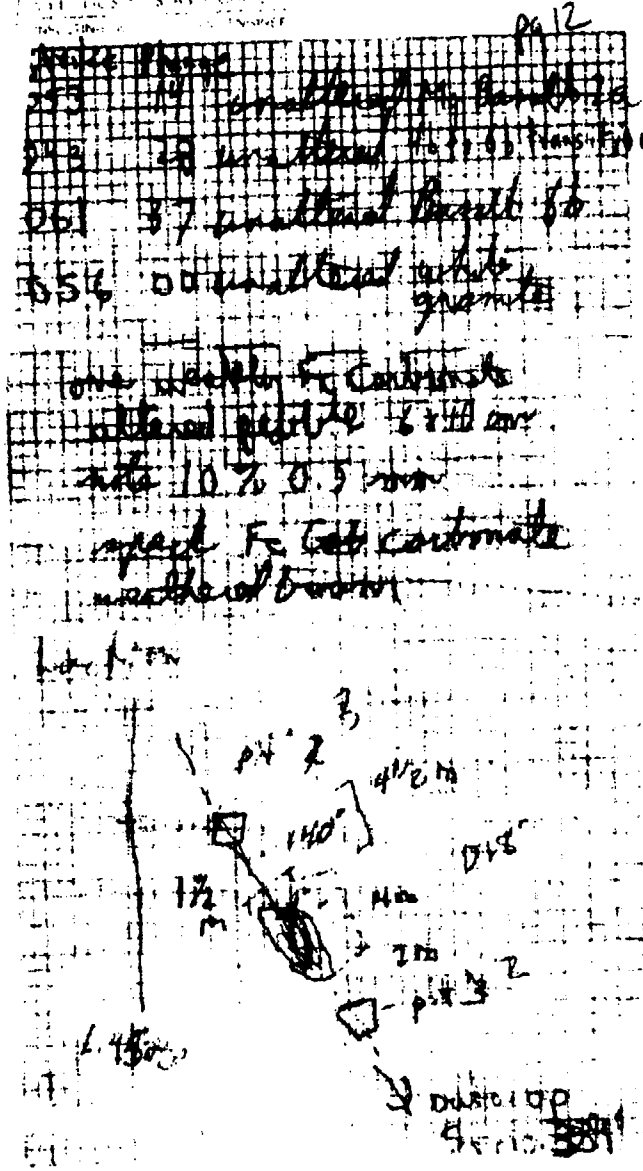
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PG. 1

31 - 6	11	Basalt - 4A
114 - 11	11	Diorite - 6B
075 - 11	11	BASALT 4A
342 - 18	ALTERED - FeCarbonate	
	Black Sh...	?
211 - 13	UNALTERED 4A Basalt Dyke	
012 - 07	11	4A Basalt Dyke
041 - 12	11	6C
2?? - 6	Intense Altered FeCa Basalt	
?? 19	U.A 2A Flow breccia	
13	11	Basalt 6A
193 - 32	1	Basalt 3A
??? - 25	Weak to Intense Alteration	6A?
122 - 11	Unaltered 6b	
	Shistic, Rotten	
271		
181 05	Granite unaltered	

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Strike	Plunge	
035	18	unaltered Red granite
239	27	unaltered 5c Hornblendite phase of diorite
038	22	unaltered fine sediment dark green
034	04	unaltered - epidote stockwork in basalt
011	08	unaltered 6b diorite
003	04	unaltered - 3b basalt fine grained
011	17	unaltered sediment very fine grained
007	44	unaltered - coarse siltstone
003	04	unaltered - insitu weathered punky
018	14	unaltered - diorite 6b
028	12	unaltered diorite 6b
320	11	unaltered Mg basalt 2a
~~188~~ 008	04	with 2 mm Fe Carbonate seam
033	07	unaltered fld porphyry
173	01	weak altered FeCA 6b
242	28	unaltered diorite

August 9, 1997 Pg 10

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LOWER LAYER

Yellow Brown to Grey ~~Tan~~ dense moderately Compacted silty to fine sandy Till with 20% Pebbles

Strike	Plunge	
300	03	Non altered 2a Basalt
159	-61	unaltered 6b diorite
201	-40	unaltered granite
043	-04	unaltered 6a diorite
245	06	crumbly biotite gneiss weathered insitu? (possible Kimberlite) no variation of micaceous texture
161	12	unaltered 2a basalt
831	16	unaltered granite white pink fld
270	12	unaltered Red Granite
233	63	unaltered 3b
025	21	unaltered 3b

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August 9/97
p97

Strike	Plunge	
011	18	Unaltered Pink Granite
025	39	Weak FeCA 1qtz veining Not Typical of Grid Area
339	28	Unaltered 6b transitional 6c

middle unit - pale to Sandy layers
Stay til mafic into
Sand band
mafic
Mafic on unit
South Unit light
Fault
Fault
boulder
sitting on underlying
outcrop

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p96

Strike	Plunge	
341	65	Unaltered Granite
321	32	Unaltered (2a?) Bleached pale grey Fine Grained Alteration or Syenite
151	05	
147	09	Unaltered Bleached 2a
331	74	Unaltered Cherty 2a?
240	48	Unaltered coarse granite
172	43	Unaltered 6b
005	57	Mushy 6b
102	08	Unaltered Mushy 6b
331	18	Unaltered Medgrained white granite
148	12	Unaltered 6b
347	16	Red syenitization
003	12	Unaltered Fine Grained (Fine Syenite?) Prominent Shear Fabric (6b?)
078	06	Chloritic Schist.
041	22	Chloritic Schist.

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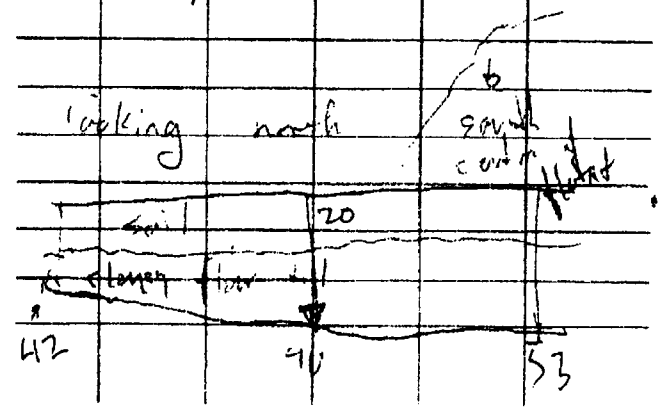
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Lower Unit

Strike	Plunge	
028	36	Weak Fe Ct Light Green Fine Grained
350	14	Broken Stone Not Altered - Med Green argillite
088	0	Fine Grained Grey Unknown Unaltered
338	43	Unaltered 4/6 plag-Diorite
254	18	Unaltered 6b diorite
024	54	Unaltered Bleached Pale Green-Grey (4b?)
023	43	Unaltered 6b diorite
021	28	Unaltered Grey Chert
338	18	Unaltered Red Syenite q.s-3-mm phase
258	13	Unaltered white gneiss.
143	31	Unaltered unknown (chistose hornfel?) dark green V fine grained
064	68	Unaltered 6b diorite

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Strike	Plunge	
318	13	Fe Ct Fine Grained Pale Green
353 (343)	03	Fe Ct Fine Grained
343	08	Not Altered 4b Pale Diorite plagioclase rich
190	43	Lost
330	59	Unaltered (6b?) diorite
		Note Bias to hard Pebbles
338	58	Unaltered 6a
		Looks Like Flow till
336	16	Unaltered 2a (a Bleached 3a)
360	17	Unaltered 6c diorite trace Py
030	09	Unaltered Banded Grey Chert/sediment



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Strike Plung

184 06 Unaltered Gr. Basalt
154 08 Unaltered Gr. Basalt
Rusty
252 04° FeCA Fine Grained
322° 21° FeCA Fine Grained
151 09 weak FeCA Gr. Basalt
178 07 FeCA Basalt Clast (Small)
135 12° FeCA Basalt
353 08 Unaltered Gr. Basalt
326 02 Pale Grey Za. (Ultra Confact.)
281 04 FeCA Fine grained
351 12 Unaltered Gr. Basalt
Basalt with clay filling fractures
169 03 Bleached (Gr.)
253 14° Mushy Black Fine Grained
359° 12° FeCA Fine Grained Clay
009° 08 FeCA of Gr. Basalt
016 21° FeCA Fine Grained
007 14° Unaltered Gr. Basalt

21 samples

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August 9/ 1997
418 S 4447 E
Otto Tp
North Wall of Pit
0-40 cm pebbly grey soil with 10% matrix silt clay grey to yellow brown pebbles subangular-subrounded to rounded shows some gradation below the B. horizon

Strike	Plung		
322°	08°	FeCA	F. Grain

Strike	plung		
153°	11°	FeCA	F. Grained
305°	03°	CaA	F. Grained

Suspect Fine Grained Clay derived from FeCA

358	68°	Round Pebble	
338	26°	weak FeCA - 3% weathered crust	stockwork stringers

August 9/97

152	06	Unaltered Gr Diorite
164	06	Unaltered Gr Diorite
252	11°	FeCA Fine Grained Gr
332	27°	FeCA Fine Grained Gr
151	07	weak FeCA Gr Diorite
178	04	FeCA Diorite dike (small)
135	12°	FeCA Fine Grained Gr
353	04	Unaltered Gr Diorite
336	02	Pale Grey Za (Alm Contact?)
281	01	FeCA Fine grained
357	12	Unaltered Gr Diorite dark weathering Mafics
167	03	Bleached (Gr?)
253	16°	Mashy Black Fine Grained
259°	12°	FeCA Fine Grained 0.5% Py
007°	08	FeCA of Gr Diorite
018	21°	FeCA Fine Grained
021	14°	Unaltered Gr diorite

21 samples

JAMES E. TILSLEY & ASSOCIATES LTD.

42A01SE2010 2.19646 OTTO

020

NASTEK EXPLORATIONS LTD.
Reed-Robinson Property

Eby and Otto Townships
Larder Lake Mining Division
Ontario
September, 1996

2.19648

James E. Tilsley & Associates Ltd.
Consulting Geologists and Engineers
5 Steeplechase Ave.
Aurora, Ontario
Canada L4G 6W5

September 30, 1996

REGISTERED PROFESSIONAL ENGINEER
J.E. Tilsley
PROVINCE OF ONTARIO

J.E. Tilsley, P.Eng.

no work of this report
not work claimed in
August 11, 1999
Submittal



42A01SE2010 2.19646 OTTO

020C

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General Geology - Kirkland Lake Area - (after Jensen, 1978)	follows pg 9
Claims Location and General Geology	follows pg 11
Compilation Map Reed-Robinson Property	in pocket

5 Steeplechase Ave., Aurora, Ontario L4G 6W5 (905) 727 6822 Fax: (905) 841 3029

SUMMARY AND CONCLUSIONS

Magnetic and electromagnetic surveys, prospecting, and reconnaissance geological mapping have been carried out on the Nastek Explorations Ltd. claim group located in Otto and Eby townships, Kirkland Lake area of the Larder Lake Mining Division, northeastern Ontario.

Broad areas of carbonate alteration with disseminated sulphides and quartz veining have been located in both the north and south claim blocks. These zones of alteration frequently occupy topographic lows and appear to follow structural features. This sort of alteration is commonly associated with gold mineralization in the Kirkland Lake area. All such zones warrant stripping, detailed mapping and sampling where topographic conditions permit. Diamond drilling may be required in some areas of swamp and deep overburden cover.

Gold-bearing boulders have been located in the eastern part of the north group. These are carbonate altered with disseminated sulphides and variable intensity of quartz veining. They are from about five hundred kilograms to several tonnes in weight. Three randomly selected boulders were sampled and returned 0.099, 0.495, and 1.337 grams of gold per tonne.

Additional exploration is proposed for the property. The cost of the next phase of activities is estimated to be $166,920.00.

INTRODUCTION

Nastek Explorations Ltd. has acquired a group of thirty claim units in Otto and Eby townships, Kirkland Lake area, Larder Lake Mining Division, under the terms of an option agreement.

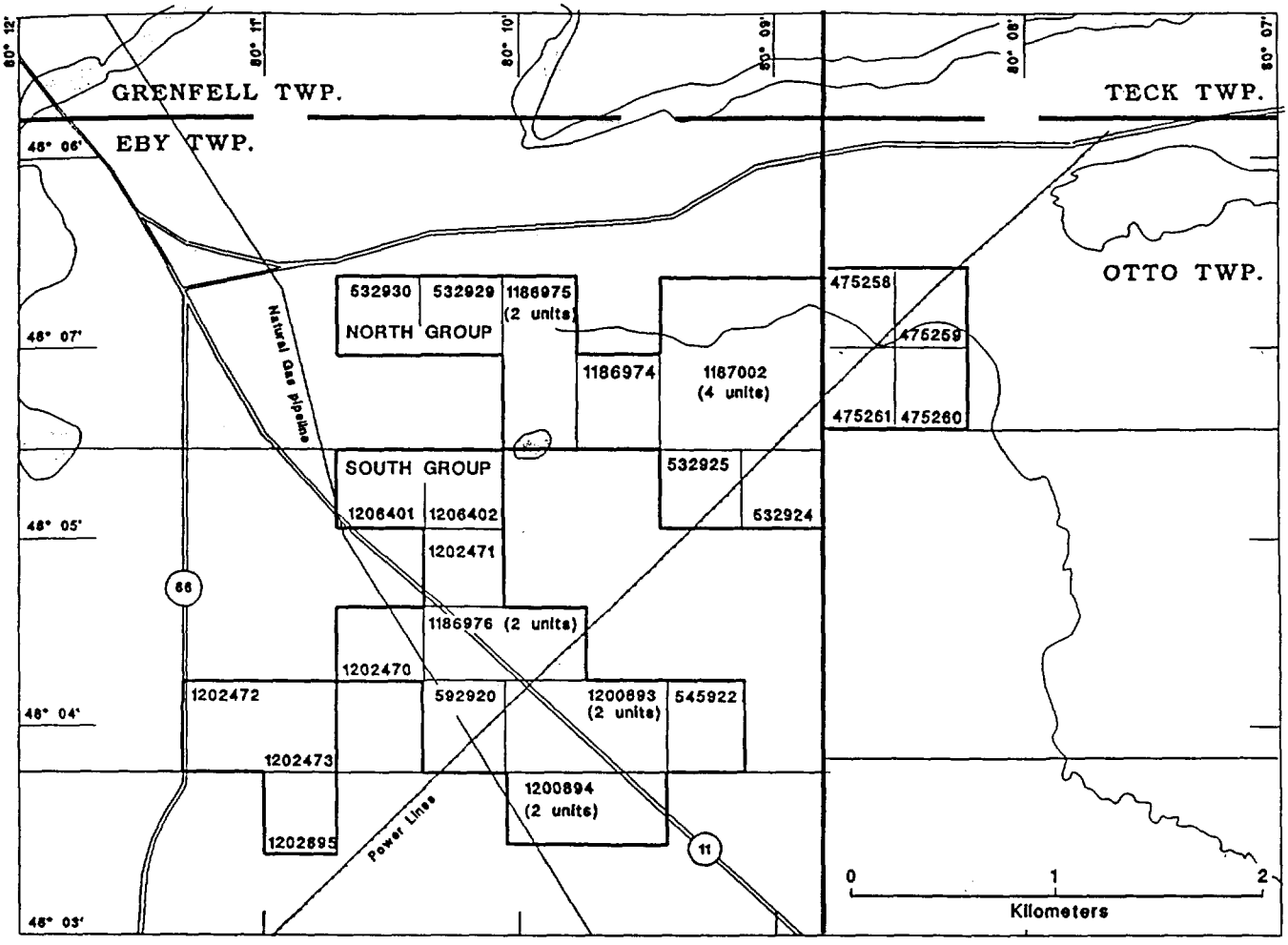
Gold mineralization in the Kirkland Lake area is commonly associated with carbonate alteration and introduction of disseminated sulphides. The Eby-Otto township claims were selected for additional exploration because of the known presence of several zones of this type of alteration.

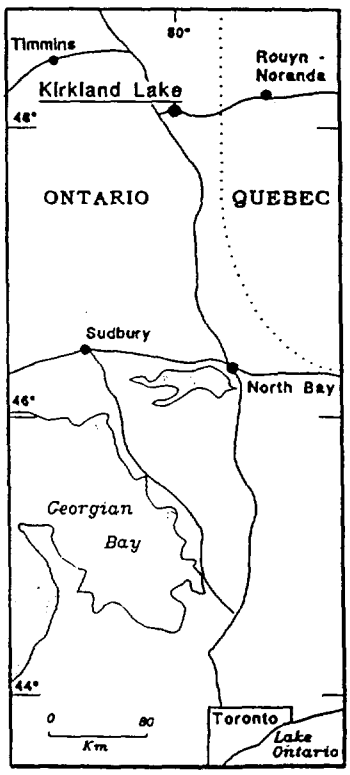
Geophysical surveying, prospecting, and reconnaissance geological mapping completed during the summer of 1996 defined sixteen areas within the claims that warrant stripping, detailed geological mapping, and sampling. The areas located by this work show strong carbonate alteration, quartz veining, and disseminated sulphide mineralization. Mineralized glacial float boulders that carry gold values have been found in the eastern part of the property.

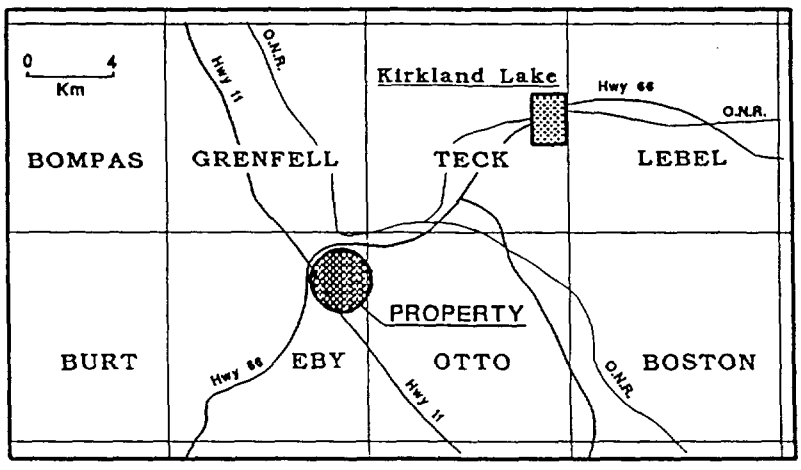
The electromagnetic surveys have also indicated conductive structures beneath overburden cover in areas of lower magnetic response that appear to be related to mineralizing processes and that justify further investigation by trenching and/or diamond drilling.

Exploration data are reviewed and recommendations for additional exploration work are presented.

JAMES E. TILSLEY & ASSOCIATES LTD.







NASTEK EXPLORATIONS LTD.

EBY AND OTTO TOWNSHIPS - LARDER LAKE MINING DIVISION, ONTARIO

REED-ROBINSON PROPERTY

LOCATION MAP

REGISTERED PROFESSIONAL ENGINEER
J. E. TILSLEY
PROVINCE OF ONTARIO

September, 1996

LOCATION AND ACCESS

The claims are located in northwestern Otto and northeastern Eby townships in the Larder Lake Mining Division, Ontario, about 13 kilometers southwest of the town of Kirkland Lake. Kirkland Lake is situated on Highway No. 66, sixteen kilometers east of Highway No. 11, and about 50 kilometers west of the Ontario - Quebec border, 250 kilometers north of the city of North Bay via Highway No. 11 (Trans-Canada Highway, north route) to Cochrane. The property lies in Eby and Otto townships, the north group just south of Highway No. 66 before its junction with Highway No. 11 in Eby Township. The south group is cut by Highway No. 11 in lot 3, concession V and lot 2, concession IV, Eby Township.

The approximate co-ordinates of the claim group are:

48° 05' 00" N; 80° 10' 00" W:

The property can be reached from Kirkland Lake by traveling west on Highway No. 66 about thirteen kilometers toward the junction with Highway No. 11. There are several access trails to the north group extending south from Highway No. 66. The main Kirkland Lake hydro-electric transmission line cuts Highway No. 66 just to the northwest of Vigrass Lake and runs through the Otto Township claims and runs more or less directly southwest to Highway No. 11 in Lot 2, Concession V, Eby Township. The westernmost claim of the south group is bounded by Highway No. 66, south of its junction with Highway No. 11 in Lot 4, Concession V, Eby Township.

Kirkland Lake has twice daily feeder-line air service from Toronto, transit time ranging from 2h15m to over 5h. In addition, there is regular scheduled airline service to North Bay, and to Timmins, which lies 140 kilometers west of Kirkland Lake via highways No. 11 and No. 101, and to Rouyn-Noranda airport some 61 kilometers east of Kirkland Lake.

The Ontario Northland Railway line passes through the northeastern corner of Otto Township.

CLIMATE AND TOPOGRAPHY

The area has warm summers and cool, relatively dry winters. Summer maximum temperatures in the 30°C range are not uncommon during July and August. Winter minimums of -40°C are frequent during the months of December, January, and February.

Total annual snowfall amounts to between 2.4 and 2.7 meters. Snow cover is usual from mid-November through mid-April or early May. Late winter accumulations of snow may approach 1.2m to 1.5m. Total annual precipitation is in the order of 860mm, with slightly over 2,540mm of snow (equivalent to 250mm of rain), and ~600mm falling as rain. The wettest months are September and June, averaging 102mm and 98mm of precipitation, respectively. The driest month is April with an average total precipitation of just less than 50mm.

The topographic relief on the claims is not great, low hummocks and hills rise no more than 15m above the base level of approximately 335m above sea level.

There is less than 40% outcrop within the claims. The intervening areas between outcrop are usually swampy with thick low shrubs and cedars. Drainage is poorly developed with only one intermittent stream, a right bank tributary of the Black River, large enough to be traced within the claims. The Black River drains eventually into the Abitibi River which flows north to James Bay.

VEGETATION

The property supports growth of typical northern Ontario shrubs, bushes, and trees. The low-lying wet areas have alders, willows, cedar and black spruce, while better drained areas (till-covered subcrop) support growth of spruce, poplar, and occasional birch. Parts of the north group have dense cover of young second growth balsam fir which has developed after severe spruce budworm damage about ten years ago. This area has both standing 'widowmaker' and fallen 'kneebreaker' decaying tree trunks which make traversing and working in this section of the property both difficult and hazardous. Open areas along the natural gas pipeline and hydroelectric lines are grassy with small trees and shrubs present as a result of required continuing maintenance of these rights of way.

LOCAL RESOURCES

Mining equipment, supplies, and services are available in Kirkland Lake, Cobalt, and Rouyn-Noranda. There are two well established and reputable assaying offices in Kirkland Lake-Swastika. Skilled mining labour is readily available in the immediate area.

Kirkland Lake has good general medical services and a Regional Hospital. Hardware, groceries, and automotive services can be obtained easily in the area. Light industrial work and heavy equipment maintenance and repair are also possible, with additional support at North Bay, Timmins, and Sudbury, in Ontario, and in Rouyn-Noranda, Quebec.

An electrical power transmission line crosses the property and a gas pipeline passes through the claims more or less parallel to Highway No. 11.

PROPERTY

The property consists of thirty contiguous unpatented mineral claims. Twenty-six are located in concessions IV, V, VI, lots one through four, Eby Township, and four claims in the south half of lot 12, Otto Township.

The north group includes eleven claims with a total of fifteen 16ha (40 English acres) units, as listed below.

Claim No.	Units	Township	Expiry Date
475258	1	Otto	June 1, 2012 Lease
475259	1	Otto	June 1, 2012 Lease
475260	1	Otto	June 1, 2012 Lease
475261	1	Otto	June 1, 2012 Lease
532924	1	Eby	December 1, 2011 Lease
532925	1	Eby	December 1, 2011 Lease
532929	1	Eby	December 1, 2011 Lease

Claim No.	Units	Township	Expiry Date
532930	1	Eby	December 1, 2011 Lease
1186974	1	Eby	January 6, 2001
1186975	2	Eby	January 6, 2001
1187002	4	Eby	January 12, 1998

The south group is made up of twelve claims with a total of fifteen 16ha units.

532920	1	Eby	December 1, 2011
545992	1	Eby	December 1, 2011
1186976	2	Eby	January 12, 1998
1200893	2	Eby	January 12, 1998
1206297	2	Eby	January 14, 1999
1202470	1	Eby	June 27, 1997
1202471	1	Eby	June 27, 1997
1202472	1	Eby	September 21, 1997
1202473	1	Eby	September 21, 1997
1200895	1	Eby	September 21, 1997
1206401	1	Eby	April 16, 1998
1206402	1	Eby	April 16, 1998

HISTORY

The Otto and Eby township claims of Nastek Explorations Ltd. lie about 12 to 15 kilometers west southwest of Kirkland Lake. Gold was discovered at Swastika in 1906, and in Kirkland Lake proper during 1911 by W. H. Wright at the site of what became the Wright-Hargreaves Mine ten years later, in 1921. Production from the "Main Break" structure began first at the Toburn Mine, in 1913. The only gold producer in Kirkland Lake at the present time is the Macassa Mine which began treating ore in October, 1933 and has produced over 2.3 million troy ounces of gold. During the operating life of the Kirkland Lake "camp" over 23 000 000 ounces of gold have been recovered.

There has been prospecting within the area included in the claims throughout the years since first discovery of gold in the area about ninety years ago. The assessment files in the Kirkland Lake office of the Mining Recorder for the Larder Lake Mining Division give few details of work before about 1980, although there are occasional much older overgrown pits and trenches, and one large trench on a quartz vein in claim 1187002. A map in the assessment files of the Kirkland Lake Resident Geologist (KL-2391, Sylvanite Gold Mines Ltd.) shows two shear zones in claim 1100894 were trenched and sampled. These shears are indicated to be 10 to 12 feet, and five feet wide, respectively. Sampling is reported to have returned a value of 0.64 ounces of gold per ton from a five foot sample section from the wider zone. There are no sampling data for the narrower shear zone.

In 1984 James Reed put down ten short diamond drill holes to test a quartz vein on the boundary of claims 475258 and 1187002. 510.5 feet were drilled in claim 1187002 and 350 feet completed in claim 475258. One additional 307 foot diamond drill hole was located in the southeast corner of claim 475260 and put down to test a strong electromagnetic conductor which was found to be caused by graphite. Magnetic and VLF-EM surveying was also recorded on the claims of the north group.

Butte Canyon Resources carried out geological mapping, litho-geochemical sampling, magnetic, and electromagnetic surveys on a total of six claim units that now lie within the south claim group. Three short diamond drill holes (total 320 feet) tested electromagnetic anomalies in claim 1100893 and claim 1100894. All proved to be caused by graphite.

The 1996 program included line cutting, Max-Min electromagnetic surveying, magnetic surveying, prospecting, and reconnaissance geological mapping. Sixteen areas of carbonate alteration, disseminated sulphides, and quartz veining have been defined for stripping, detailed mapping and sampling. Several zones of low magnetic response with associated electromagnetic features warrant more detailed investigation, and perhaps including diamond drilling in those areas where drainage and overburden conditions preclude stripping or trenching.

GENERAL GEOLOGY

The area around Kirkland Lake is underlain by volcanic, sedimentary, and intrusive rocks of the Abitibi Greenstone Belt. The Abitibi Greenstone Belt is the largest such belt in the Canadian Precambrian Shield. It extends for a distance of about 800 kilometers northeasterly through northeastern Ontario and into western Quebec. The belt has a width of approximately 250 miles. The volcanic and related intrusive rocks of this belt are of Archean age. Dating of volcanic units from the belt in the vicinity of Kirkland Lake give apparent absolute ages of 2703 ±2 Ma to 2765 ±42 Ma (Jensen & Langford, 1985, pp 13).

The volcanic rocks of the Abitibi Greenstone Belt were deposited during cycles of volcanism associated with sedimentation and emplacement of plutons. Jensen (1979) suggests that each cycle began with extrusion of komatiitic material followed by tholeiitic, calc-alkalic, and finally, alkalic flows and pyroclastics. Near Kirkland Lake, rocks of the older cycles are found principally in the outer parts of the synclinorium near the limits of the Round Lake Batholith and the Lake Abitibi Batholith. These rocks are referred to as the Lower Supergroup (Jensen, 1979; Jensen and Langford, 1985).

The Upper Supergroup is comprised of komatiitic lavas (Larder Lake Group), followed by tholeiitic rocks of the Kinojevis Group and calc-alkalic rocks of the Blake River Group (Jensen & Langford, op. cit.). Alkalic volcanic rocks of the Timiskaming Group overlie both the Blake River Group and the Kinojevis Group. Each group includes volcanic, sedimentary, and intrusive rocks.

The stratigraphic succession is summarized by Jensen & Langford (1985, op. cit. pp 40), and reproduced as Table 1.

The largest structures in the Kirkland Lake area are the regional synclinal fold, the axis of which trends west-northwest and passes about 16 miles north of the town, and the Destor - Porcupine Fault Zone and the Kirkland Lake - Larder Lake Fault Zone. They are located on the north and south limbs of the syncline respectively.

TABLE 1.

The stratigraphic succession for the Kirkland Lake section of the Abitibi Greenstone Belt reproduced below is taken from Jensen and Langford (1985), OGS MP 123, page 40.

STRATIGRAPHIC SUCCESSION OF THE KIRKLAND LAKE AREA.

SOUTH LIMB OF SYNCLINORIUM

Upper Supergroup

Timiskaming Group
- Volcanic rocks: Mafic, intermediate, felsic trachyte, and K-rich dacite and rhyolite flows and tuffs.
- Sedimentary rocks: Fluvial conglomerate, sandstone, and argillite.
- Intrusions: Stocks and dikes of syenodiorite, syenite, quartz monzonite, and lamprophyre.

Blake River Group
- Volcanic rocks: Calc-alkalic basalt, andesite dacite and rhyolite flows and tuffs.
- Sedimentary rocks: Volcaniclastic slump deposits.
- Intrusion: Stocks and dikes of gabbro, quartz gabbro, hornblende gabbro, diorite, quartz diorite, and subvolcanic rhyolite domes.

Kinojevis Group
- Volcanic rocks: Mg-rich and Fe-rich tholeiitic basalts, and tholeiitic andesite, dacite and rhyolite flows and tuffs.
- Sedimentary rocks: Thin interflow argillite and chert.
- Intrusions: Sills of Mg-rich and Fe-rich gabbro.

Larder Lake Group
- Volcanic rocks: Flows of peridotitic and basaltic komatiite, and Mg-rich tholeiitic basalt, and minor Fe-rich tholeiitic basalt, and minor Fe-rich tholeiitic basalts and interflow rhyolite tuff- breccias.
- Sedimentary rocks: Turbiditic conglomerate, greywacke and argillite, and iron formation chert, limestone, and dolostone.
- Intrusions: Sills and stocks of peridotite, pyroxenite, and gabbro.

Lower Supergroup

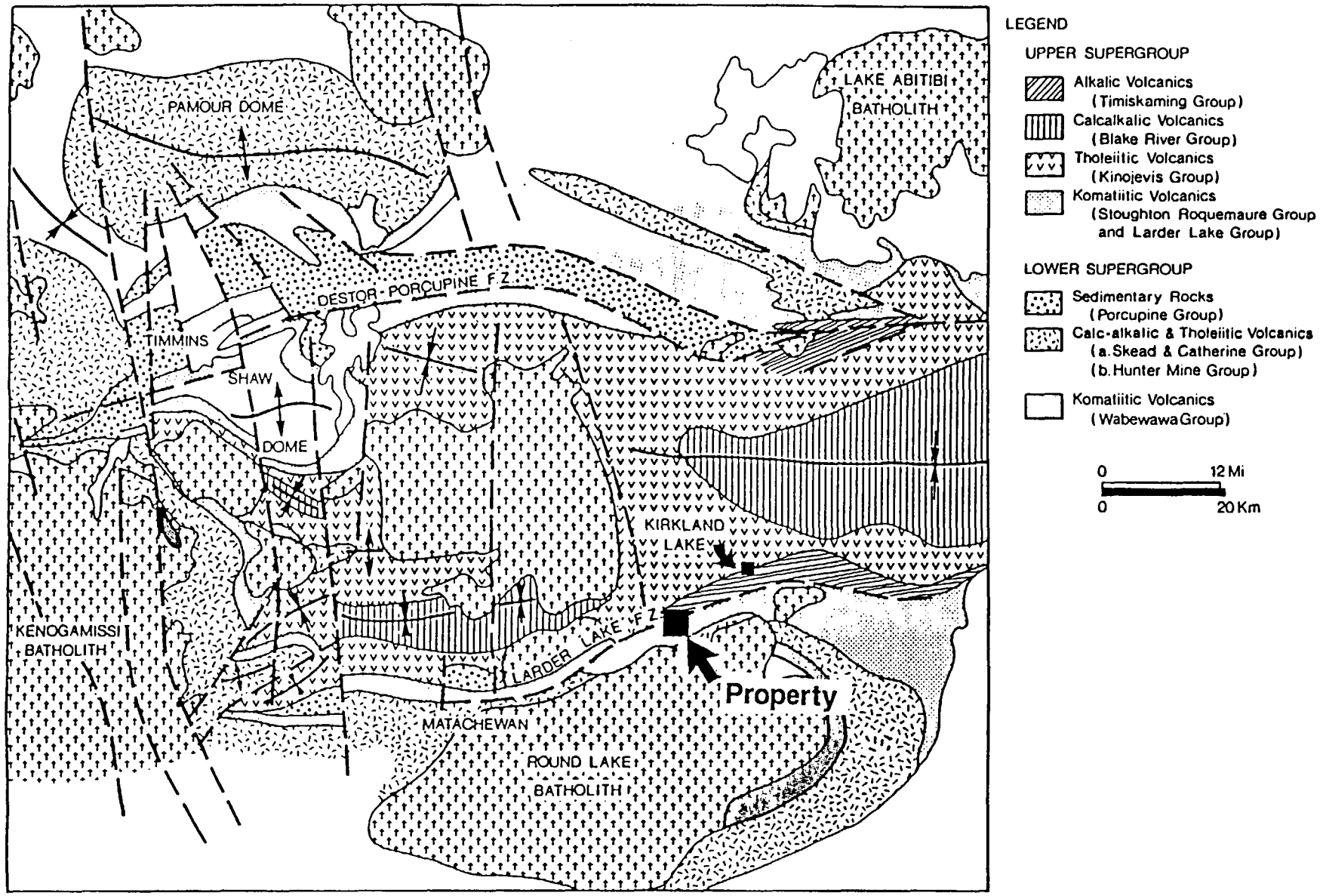
(Unnamed Unit)
- (Conglomerate with trachyte and syenodiorite pebbles).

Skead Group
- Volcanic rocks: Mainly calc-alkalic rhyolite tuff-breccia with some calc-alkalic basalt, andesite and dacite flows and tuff- breccias.
- Sedimentary rocks: Chert and cherty argillite.
- Intrusions: Stocks of feldspar porphyry and quartz diorite.

Catherine Group
- Volcanic rocks: Mg-rich and Fe-rich tholeiitic basalts.
- Sedimentary rocks: Interflow chert.
- Intrusions: (None mapped)

Wabewawa Group
- Volcanic rocks: Peridotitic and basaltic komatiite, Mg-rich tholeiite basalt and minor Fe-rich tholeiitic basalt, and a few interflow rhyolite tuffs.
- Sedimentary rocks: (None mapped)
- Intrusions: Layer sills (possibly flows) of dunite, pyroxenite, and gabbro.

Pacaud Tuffs (Ridler 1970)
- Volcanic rocks: Calc-alkalic andesite, dacite, and rhyolite tuffs.
- Sedimentary rocks: Chert, argillite, iron formation.
- Intrusions: Trondhjemite of Round Lake Batholith.



Geology of the Timmins-Kirkland Lake area (after Jensen 1978).

GEOLOGY OF THE PROPERTY

The claims are underlain by Archean volcanic and intrusive rocks. Volcanic rocks include basalts and andesites that strike generally west-southwest across the property. Dips are usually nearly vertical. The lavas have been intruded by bodies of gabbro and peridotite that have been altered locally to serpentine. The greater part of the north group is underlain by rocks assigned to this category. However, there are strongly conductive zones passing through sections of the 'mafic rocks' that appear to be caused by graphite. This would imply that the mafic rocks may include basic lavas. Further work is required to define relationships in this part of the property.

Algoman intrusives of syenite to trachyte composition occur in the area. Two small elongated bodies are known within the claims, and small dykes of syenite have been noted intruding the volcanics adjacent to the claims of the south group.

The Larder Lake Fault Zone runs in a general east-west direction just north of the property. Several related dislocations are mapped on the property, and several topographic lows within the north group appear to be caused by similar faulting.

Gold deposits in the Kirkland Lake area are often associated with faults and shear zones outside of, but related to the 'Main Break'. As noted earlier, carbonate alteration of both the volcanics and other rocks of the region is frequently observed to accompany gold mineralization. Rather extensive zones of carbonate alteration, often associated with disseminated sulphides and quartz veining have been located on the claims.

Often the carbonate altered rock will weather low, particularly if the alteration is associated with faulting or shearing. Often the only evidence of mineralization will be weak to moderate carbonate alteration in outcrop on the edges of linear topographic depressions, or in glacially transported boulders derived from the low areas and deposited some distance down ice.

Glacially transported boulders of carbonate altered rocks with disseminated sulphides and quartz veining have been located in the Otto Township portion of the property. These boulders are several hundred kilograms to several tonnes in weight. They do not appear to have been moved a great distance. Character samples were taken from three randomly se-

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LEGEND

ARCHEAN

- 1 — Mafic Metavolcanics
- 2 — Acid Metavolcanics
- 3 — Metasediments
- 4 — Mafic and Ultramafic Intrusives
- 5 — Felsic Intrusives
- 6 — Diabase

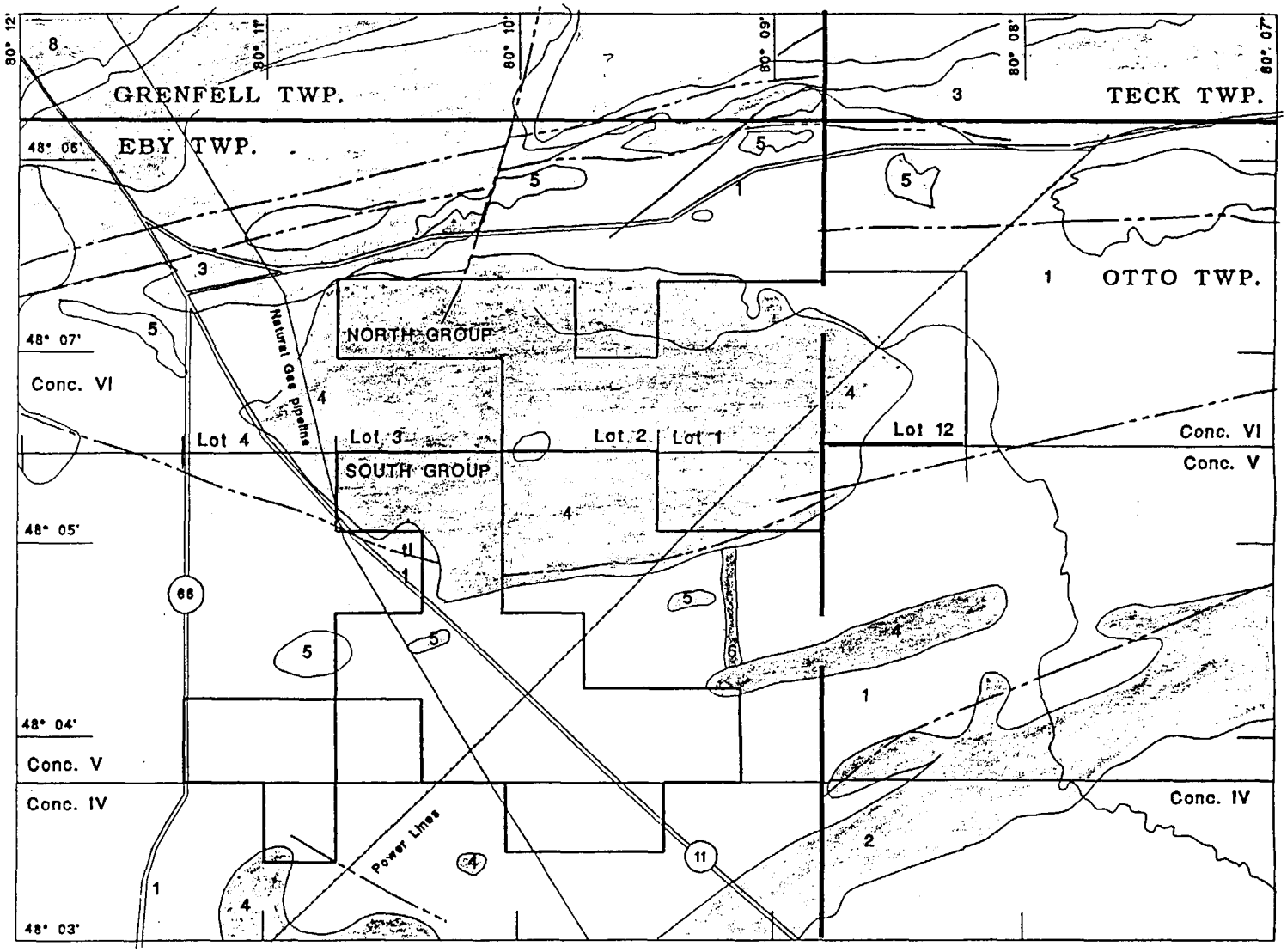
PROTEROZOIC (?)

- 7 — Syenite

HURONIAN

- 8 — Gowganda Sediments

Faults & Lineaments



REGISTERED PROFESSIONAL ENGINEER
J. E. TILSLEY
PROVINCE OF ONTARIO

1 2
Kilometers

NASTEK EXPLORATIONS LTD.

EBY AND OTTO TOWNSHIPS - LARDER LAKE MINING DIVISION, ONTARIO

REED-ROBINSON PROPERTY

CLAIMS LOCATION & GENERAL GEOLOGY

September, 1996

lected boulders. These returned 0.099, 0.495, and 1.337 grams gold per tonne, respectively.

One sample of carbonate altered rock was collected during prospecting in the south group. This returned a gold assay of 0.517g/tonne.

PRODUCTION

There is no record of mineral production from the property.

RESERVES

Data available do not permit calculation of a mineral reserve on the claims.

PROPOSED EXPLORATION

The 1996 work program has defined sixteen locations in which zones of carbonate alteration can be investigated by stripping and trenching.

The source of the auriferous boulders found in claims 475261 and 475281 is a high priority target. Since much of the area in which the suspected source of these boulders lies is covered in overburden, evaluating the effectiveness of deep overburden sampling using a portable system is suggested for those areas of cover too deep to be stripped effectively. Geochemical studies of samples from basal tills in this area is also planned.

General investigation of the causes of the electromagnetic responses in the north and south groups, particularly those that lie in areas of low magnetic response, should include stripping, where possible, detailed prospecting and geological mapping to determine the location of carbonate alteration and disseminated sulphide mineralization that might be related to significant gold enrichment. Further exploration work in the areas of such geophysical responses would depend on results of prospecting, mapping and sampling noted above.

Those areas of possible economic interest that lie beneath wet ground or under deep overburden can be tested most efficiently by diamond drilling.

Since some of the mineralized zones of possible economic interest can be expected to weather low, and since a halo of metallic values often accompanies economic zones, lithogeochemistry of rocks from outcrops along the edges of selected topographic lows is recommended.

ESTIMATED EXPLORATION COSTS

The costs of the next phase of the proposed exploration program are estimated as follow:

Line cutting for detailed mapping and geophysical surveys. 25km @ $400.00/km	10,000.00
Detailed ground geophysical surveys in areas where prospecting shows potentially mineralized structures.	10,000.00
Stripping and trenching	37,500.00
Sampling of mineralization exposed on surface	15,000.00
Sample preparation and assaying	5,000.00
Deep overburden sampling	8,000.00
Geochemical sampling and assaying (lithogeochemistry and till geochemistry)	6,500.00
Pleistocene geology studies as part of boulder tracing	6,500.00

Detailed geological mapping	12,000.00
Preliminary metallurgical testing	3,000.00
Supervision	9,000.00
Evaluation of results	5,750.00
Reporting (incl. drafting, secretarial, printing, binding, et cetera)	5,500.00
Travel, room & board	7,000.00
Vehicle allocation (3 months, incl. fuel, insurance, mileage)	11,750.00
Communications (telephone, courier, postage, shipping, et cetera)	3,500.00
Subtotal	156,000.00
GST	10,920.00
TOTAL	**$166,920.00**

REFERENCES

Cook H.C., 1922; Kenogami, Round, and Larder Lake Areas, Timiskaming District, Ontario, MEMOIR 131 Canada Department of Mines

Lovell, H. L., 1972; Preliminary Geology of Eby and Otto Area, District of Timiskaming Geological Report 99, Ontario Department of Mines

Burrows, A. G., and Hopkins, P. E., 1923; Kirkland Lake Gold Area Ontario Department of Mines, Annual Report, Vol XXXII, Part IV.

Todd, E. W., 1928; Kirkland Lake Gold Area. Ontario Department of Mines, Annual Report, Vol. XXXVII, Part II.

Watson, G. P., and Kerrich, R., 1983; Macassa Mine, Kirkland Lake: Production History, Geology, Gold Ore Types and Hydrothermal Regimes. in The Geology of Gold in Ontario, Ontario Geological Survey Miscellaneous Paper 110, Edited by Colvine, A. C.

Jensen, L. S., and Langford, F. F., 1985: Geology and Petrogenesis of the Archean Abitibi Belt in the Kirkland Lake Area, Ontario; Ontario Geological Survey, Miscellaneous Paper 123,

JAMES E. TILSLEY & ASSOCIATES LTD.

Certificate

I, James E. Tilsley, of the town of Aurora, Province of Ontario, hereby certify:

1. I am a Consulting Geologist and reside at 5 Steeplechase Avenue, Aurora, Ontario.

2. I am a graduate of Acadia University, 1959, B.A., Geology.

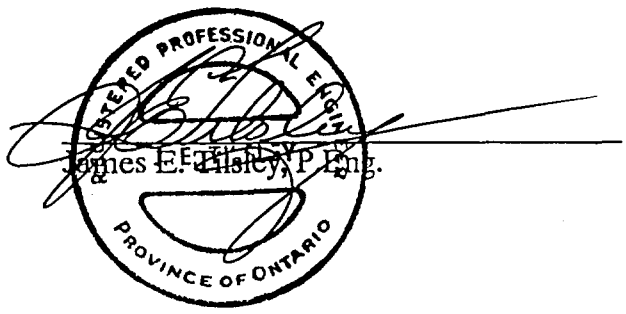
3. I am a member of the Association of Professional Engineers of Ontario, The Association of Professional Engineers of Manitoba, Chartered Engineers (Great Britain), and designated Consulting Engineer, Ontario Association of Professional Engineers, 1975.

4. I have been employed as a geologist since graduation, with consulting groups since 1964, and in private practice since 1980.

5. This report is based on study of records relating to the property as made available from the files of the Office of the Mining Recorder in Kirkland Lake, Ontario, publications of the Geological Survey of Canada, the Ontario Geological Survey, the Ontario Department of Mines, et cetera, a knowledge of the area developed during work programs that I have carried out and/or supervised in the region during the past thirty years, review of geological and geophysical data generated during the 1996 field season and a field inspection of the claims in early September, 1996.

7. I have no interest, direct or indirect, in the properties or securities of Nastek Explorations Ltd., or any affiliates, nor do I expect to receive any such interest.

Dated at Aurora, Ontario this **30th** day of **September, 1996.**



James E. Tilsley, P.Eng.

5 Steeplechase Ave., Aurora, Ontario L4G 6W5 (905) 727 6822 Fax: (905) 841 3029

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Nastek Explorations Ltd.: Eby North Grid

A. INTRODUCTION

During late August-September 1996 Nastek Exploration Ltd. conducted line cutting, geological mapping, magnetic total field-gradient surveying and MaxMin surveying and prepared a technical report on their Eby North property in Eby and Otto townships west of Kirkland Lake Ontario. This supplemental report prepared for assessment purposes accompanies the report titled Nastek Explorations Ltd. Reed-Robinson Property, prepared by James E. Tilsley & Associates Ltd. and dated September 30, 1996.

This report in combination with the report dated September 30, 1996 is intended to be in comprehensive form as required by the Mining Act and Regulations.

2.19646

B. PROPERTY

This property consists of the following eleven claims in Eby Township (Plan # M-345) and Otto Township (Plan #M-379).

532930	-	NW1/4	of	S1/2	of Lot 3, Conc VI,	Eby Tp (1 unit)
532929	-	NE1/4	of	S1/2	of Lot 3, Conc VI,	Eby Tp (1 unit)
1186975	-	W1/2	of	S1/2	of Lot 2, Conc VI,	Eby Tp (2 units)
1186974	-	SE1/4	of	S1/2	of Lot 2, Conc VI,	Eby Tp (1 unit)
1187002	-			S1/2	of Lot 1, Conc VI,	Eby Tp (4 units)
532925	-	NW1/4	of	N1/2	of Lot 1, Conc V,	Eby Tp (1 unit)
532924	-	NE1/4	of	N1/2	of Lot 1, Conc V,	Eby Tp (1 unit)
475258	-	NW1/4	of	S1/2	of Lot 12, Conc VI,	Otto Tp (1 unit)
475259	-	NE1/4	of	S1/2	of Lot 12, Conc VI,	Otto Tp (1 unit)
475261	-	SW1/4	of	S1/2	of Lot 12, Conc VI,	Otto Tp (1 unit)
475260	-	SW1/4	of	S1/2	of Lot 12, Conc VI,	Otto Tp (1 unit)

The Property is centred at Latitude 48°05'30" and Longitude 80°10'00" (UTM Zone: 5326500N, 562500E) of the Kirkland Lake Topographic Sheet 42A/1.

No costs of this Report and work claimed in Aug 11/99 Submittal

C. LOCATION

The property locations are outlined in Figure 1 of the accompanying report dated September 30, 1996.

D. ACCESS

The west end of the claim group is best accessed from Highway 66 at a point 2.3 km east of the intersection of Highways 11 and 66. At this point park at the access road leading north from Highway 66 and walk 400 m at azimuth 180° to the #1 Post of claim 1186975.

The east end of the claim group is best accessed from Highway 66 at a point 3.7 km east of the intersection of Highways 11 and 66. At this point park on the shoulder of the road and walk azimuth 180° 0.55 km to the #4 Post of claim 475258. This is along the surveyed township line dividing Eby and Otto townships.

E. SURVEY DATES AND SUPERVISION

The EM and Magnetometer surveys and line cutting were supervised by the author. All geological mapping was performed by the author. The accompanying report dated September 1996 was prepared by James E. Tilsley and Associates. The grid was cut August 12-Sept 3, 1996. The magnetometer survey was conducted August 27-August 30, 1996 and EM survey was conducted Aug 26, to Sept 3 1996. These surveys were performed as lines became available. The grid was rechained after the geophysics surveys to correct various chainage errors. The EM, mag surveys geology were altered to reflect these chainage errors. The chainage pickets were moved to their proper locations and the original locations were flagged. Both original and final picket locations were noted during geological mapping.

F. DEPOSIT TYPE AND GEOLOGY

See accompanying report dated September 30, 1996.

G. SUMMARY OF PREVIOUS WORK

See accompanying report dated September 30, 1996.

H. LINE CUTTING

A total of 22.097 km were sub-contracted to various parties by Doug Robinson Consulting. The grid is an extension of a previously existing grid. Lines were cut a 100 m spacing with a 25 m station interval.

Lines 3350E, 34+25E, 3525E, 3600E, 3700E, 4000E, 4450, 4550E 4650E and the north part of line 4735E were rechained after the EM survey as 24 and 26 m chains were used randomly to mark 25 m stations resulting in line offsets to 25 meters at the tie lines.

I. MaxMin HORIZONTAL LOOP EM (Terrain) SURVEY

A total of 17.325 km of Maxmin EM surveying was performed. Two frequencies were measured using a 100 m coil separation with readings at a 25 m interval. Terrain corrections were performed by recording a running average % slope of the four station intervals between the coils. The average slope was used to maintain the coils coplanar.

Data of each line was plotted on standard profile plots recording IP and OP curves for each frequency and terrain profile on separate graphs on a line specific sheet. This presentation was used to accommodate multi-frequency data and to accommodate reproduction on standard photocopy machines. Data

was plotted at 1:2500 scale and reproduced at a 0.64X reduction for this report. These profiles can be copied at 1.56X to restore the 1:2500 scale.

For the convenience of the reader and possible future data processing the typed field notes are transposed from measurement location to plotting location.

J. ANOMALIES

Ground EM consisting of MaxMin EM surveys were directed to locating the surface trace and character of conductive formations within the grid area. The following anomalies were identified:

LIST OF ANOMALIES:

Line	Station	Anomaly Description
1800E	262N	Very weak possible anomaly. 3555 Hz only
1900E	286N	Moderate 3555 Hz and weak 888 Hz quadrature phase.
2000E	325N	Moderate 3555 Hz and weak 888 Hz quadrature phase.
2100E	325N	Moderate 3555 Hz and moderate 888 Hz.
2200E	338N	Questionable weak 3555 Hz.
2300E	310N	Questionable weak 3555 Hz.
3350E	078N	Very strong 3500 Hz and 888 Hz conductor. Sulphides or graphite.
	856S	Should be confirmed with 200m cable to minimize topographical effects.
3425E	078N	Strong 3555 Hz weak 888 Hz. Weak conductor or strong structure.
	158S	Weak 3555 Hz. Possible structure or major contact marking conductivity contrast.
	849S	Should be confirmed with 200m cable to minimize topographical effects.
3525E	138N	Moderate 3555 Hz and very weak 888 Hz. Possible broad structure or major

		contact marking conductivity contrast.
3525E	530S	Possible weak conductor under Power line.
3600E	140N	Strong 3555 Hz, moderate 888 Hz. Appears to be strongly conductive, possible narrow.
3700E	840S	Probable strong 3555 Hz, moderate 888 Hz conductor south of line. See 3800E-787S.
3800E	787S	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
3900E	765S	Moderate 3555 Hz, weak 888 Hz. Extension of conductor at 3800e-787S
4000E	815S	Moderate 3555 Hz, weak 888 Hz. Extension of conductor at 3800e-787S
4450E	223N	Moderate 3555 Hz, weak 888 Hz.
	033S	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
4550E	364N	Strong 3500 Hz and 888 Hz. Sulphides or graphite.
	138N	Possible 3500 Hz and 888 Hz.
	104S	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
4650	317N	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
	120N	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
	247S	Very strong 3500 Hz and moderate 888 Hz. Sulphides or graphite. Weaker than 4550E-104S
4735E	357N	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
	117N	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
	016N	Very strong 3500 Hz and 888 Hz. Sulphides or graphite.
	250S	Very strong 3500 Hz and moderate 888 Hz. Sulphides or graphite.

K. MAGNETIC SURVEY

A Scintrex ENVI-MAG was used for blanket coverage of all lines. This instrument was selected because of its ability to give a high density of readings suitable for profiling. This procedure was selected to detect short wavelength and low amplitude negative magnetic anomalies associated with carbonate alteration of magnetite and ferro-magnesium minerals.

Both total magnetic field and magnetic gradient were measured. The magnetic gradient although collected was not processed.

The data was plotted in profile at 1:5000 scale. The data was subsequently contoured using envimap programming.

July-August 1998 all magnetic profile data collected during 1994 and 1998 was processed generating contoured data from data previously processed as profile data. Power line noise was manually removed from the profile data sets. 160 nanoTeslas were added to all the 1996 data to generate a common background. The best profiles of the 1994 and 1996 data sets were merged manually using the smoothest of the data sets and the duplicate data was discarded. Each data of each line was line was then merged into a large XYZ file using word perfect and exported as a single dos file for contouring using the Scintrex Envimap program and plotted as three 1:5000 scale contour maps. The location of MaxMin anomalies were plotted as open circles on these maps. The data was also plotted at 1:10000 scale contour map.

The contour map shows the coarse magnetic trends however the fine detail of the profile data is lost.

Discussion of Magnetic Results

1. 3550E-375S TO 4050E-375S STRUCTURE (STRONG MAGNETIC GRADIENT). A strong magnetic trend north east from 3350E-725S terminates abruptly at 4050E-375S along a prominent south-east trending depression that hosts strong Fe-Carbonate alteration. The magnetic gradients are intense in this feature and the

anomalies are reported as steep sided magnetic lows as the magnetic sensors were saturated and unable to record accurate readings in these strong magnetic gradients. These responses appear as bull-eyes and are treated as strong magnetic highs in the interpretation of this report. This linear feature is similar to that expected from a magnetic diabase dike, however the abrupt termination indicates it may be a volcanic feeder dike. North of 4050E-375S the magnetic and EM trends are west to north west. The prominent altered south-east trending structure that terminates this magnetic trend is an important exploration target. The prominent altered south-east trending structure that terminates this magnetic trend is an important exploration target.

This trend may also reflect the south limb of a fold with the north limb trending northwest to west from 4050E-375S.

3. 3800E-000N TO 4200-300S STRUCTURE WITH MAG LOW SIGNATURE.
This trend is marked by a prominent depression hosting Fe-Carbonate alteration zone. This trend terminates the strong magnetic structure described above in subsection "1". This is also marked by a favourable magnetic low signature. It is unknown if this structure terminates against a 080° structure at 075N or extends to 3265E-360N. This structure may project to the south claim line near 4400E.

3. 4050E-325S TO 4100-350S ALTERATION & MAG LOW
Alteration with a distinct mag low signature may be a significant local structure.

4. 3700E-840S TO 4000E-815S MaxMim ANOMALY
This MaxMin anomaly is within low magnetic relief indicating it is caused by sulphide mineralization or graphite.

5. 2650E-3240S TO 3600E-185N MAGNETIC & TOPOGRAPHIC LINEAMENT
This topographic lineament is marked with a weak magnetic low signature and appears to truncate mag high trends. It may project to the north-east as a weak cross-cutting magnetic high feature possibly a weakly magnetic dike.

6. 1800E-262N TO 2300E-310N EM TREND IN NARROW MAGNETIC LOW
   A maxMin anomaly appears to be in a narrow magnetic low within and along strong magnetic high areas. This nay mark a favourable alteration structure with sulphides and/or graphite.

7. 4000E-400N TO 4650E-247S TOPOGRAPHIC LINEAMENT WITH BREAK IN MAGNETIC TREND
   This appears to be a topographic lineament that marks a break in magnetic trends. A major MaxMin anomaly to the west appears to drag into and follow this lineament. To the Northeast of this lineament stratigraphic trends may drag in the opposite sense indicating the north side may be fault shifted to the south-east. A 250 metre wide mag low north east of this structure and south of the power line appears to be the source of Au float grading to 1.37 g/tonne. This mag low is a high priority gold target located under swampy ground and sandy to clay soils.

L. GEOLOGY

See accompanying report dated September 30, 1996.

The property was mapped in late August and September 1996 and the plotted on 1:5000 scale map and the priority areas were plotted on 1:1000 scale maps. Plotting of the 1:1000 scale maps was completed during August 15-20, 1998. This included field verification of some geological mapping.

Bedrock of the south grid only was sampled. Six samples within Fe-carbonate-sericite-quartz alteration were taken on claims:
1202473 SE 1/4 Lot 4 Conc V and
1202895 NE 1/4 Lot 4 Conc IV. A report by James E. Tisley & Associates Ltd. indicate the best values is 10 ppb Au.

Only float was sampled on the North Grid, the subject of this report. A value of 0.53 grams per ton was reported by James

Tisley & Associates Ltd. in a report dated January 25, 1998. This report does not indicate the location of this sample. However, this report indicates the source of this and other mineralized float located on the southern portion of this group is located under an estimated 10 meters of overburden near the centre of the claims. This target remains untested except by geophysical methods. Favourable EM and magnetic low anomalies are located over this probable source area.

Previous samples include 1358 PPB Au in a 25 cm quartz vein on claim 1186975 (Teck Exploration, 1995) and 19749 PPB Au on claim 475259 (J. Reed, 1994) in gossan north of the probable source of auriferous float as established by James Tisley & Associates Ltd. in a report dated January 25, 1998.

Lines 3700E, 3800E and 3900E were turned slightly at midpoint to reduce convergence.

M. RECOMMENDATIONS

For recommendations refer to the accompanying report dated September 30, 1996 and the accompanying list of recommendations prepared in June 1997 by Douglas Robinson at the request of Nastek Explorations Ltd.

N. LIST OF HOLDER and CO-HOLDERS

Optionee(s)
Nastek Explorations Ltd. and
928364 Ontario Limited both at
Suite 601
347 Bay Street
Toronto, Ontario

in care of
T.H. Bernholtz & Company 416 364 7818
347 Bay Street, Suite 601
Toronto Ontario
M5H 2R7
Attention Bruce Wright

Optionors
Douglas R. Robinson 705 642 9153
Box 218
Swastika, Ontario
P0K 1T0

James D. Reed 705 642 3573
RR #2, Site 3, Box 2
Swastika, Ontario
P0K 1T0

Emmalene L. Reed 705 642 3573
RR #2, Site 3, Box 2
Swastika, Ontario
P0K 1T0

Nathanael E. Reed 705 642 3941
Box 85
Swastika, Ontario
P0K 1T0

Charles E. Reed 705 824 3344
8 Kingsley Court
Guelph, Ontario
N1E 1E3

0. LIST OF REFERENCES

EBY TOWNSHIP

Cooke, H. C.
1922: MEMOIR 131 - Canada Department of Mines; Kenogami, Round, and Larder Lake Areas, Timiskaming District, Ontario.

Lovell, H. L.
1972: Geological Report 99 - Ontario Department of Mines Preliminary Geology of the Eby and Otto Area, District of Temiskaming

Thomson, J. E.
1948: Geology of Teck Township and the Kenogami Lake Area, Kirkland Lake Gold Belt, Ontario Department of Mines Annual Report for 1948, Volume 57, Part 5, 196p.

Map 1946-1 - Kenogami Lake Area; parts of Grenfell and Eby Townships

Map P. 448 - Ontario Department of Mines Preliminary Geological Map No. P. 448; Eby Township.
Scale 1 inch = 1/2 mile

Map P. 903 - Preliminary Map P.903; Kirkland Lake Data Series; Eby Township.
Scale 1 : 15 840

Map P. 2268 - Ontario Geological Survey Preliminary Map P.2268 Kirkland Lake Area; Eby Township; Airborne Electromagnetic Survey.

Map P. 2268 - Ontario Geological Survey Preliminary Map P.2268; Kirkland Lake Area; Eby Township; Airborne Electromagnetic Survey; Total Field Magnetic Survey.
Scale 1 : 20 000

OTTO TOWNSHIP

MEMOIR 131 - Canada Department of Mines
Kenogami, Round, and Larder Lake Areas, Timiskaming District, Ontario, By H. C. Cooke, 1922.

Geological Report 99 - Ontario Department of Mines Preliminary Geology of the Eby and Otto Area, District of Temiskaming By H. L. Lovell, 1972.

Mineral Resources Circular No. 39 - Mineral Resources and Mining Properties in the Kirkland Lake-Larder Lake area. By W. S. Savage, 1964.

Map P. 330 - Ontario Department of Mines Preliminary Geological Map No. P. 330; Otto Township (North Half)
Scale 1 inch = 1000 feet

Map No. 501 - Preliminary Map No. 501; Otto Township and Northern Part of Marquis Township.
Scale 1 inch = 1/4 mile.

Map P. 717 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 717; Geochemical Distribution of Acid Soluble Copper in Felsic Plutonic Rocks; Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Map P. 718 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 718; Geochemical Distribution of Acid Soluble Lead in Felsic Plutonic Rocks. Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Map P. 719 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 719; Geochemical Distribution of Acid Soluble Molybdenum in Felsic Plutonic Rocks. Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Nastek Explorations Ltd.: Eby North Grid

Map P. 2269 - Ontario Geological Survey Preliminary Map P.2269; Kirkland Lake Area; Otto Township; Airborne Electromagnetic Survey.

Map P. 2269 - Ontario Geological Survey Preliminary Map P.2269; Kirkland Lake Area; Otto Township; Airborne Electromagnetic Survey; Total Field Magnetic Survey.
Scale 1 : 20 000

CERTIFICATE

I, Douglas Robinson, of 24 Victoria Avenue Swastika, Ontario, hereby certify that:

1. I am a registered professional Engineer of Ontario engaged in my profession for approximately 20 years.

2. I am a graduate of Queen's University in Kingston Ontario with an Honours Bachelor of Science degree in Geological Engineering and
Northern College, School of Mines in Haileybury, Ontario with a Mining Technician Certificate.

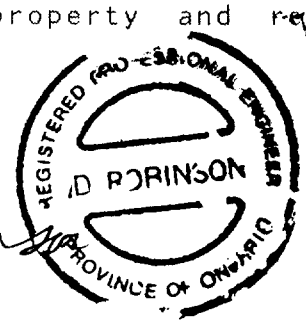
3. I personally supervised the EM and magnetometer surveys claimed in this report.

4. I personally conducted all mapping and sampling claimed in this report.

5. I authored this report.

6. My knowledge of exploration procedures was acquired through 20 years employment in the mining industry.

7. My knowledge of the properties was acquired by personally mapping the property and reviewing MNDM assessment reports.



Douglas Robinson, P. Eng
August 21, 1998.

EBY NORTH GRID: 1996
LIST OF LINES SURVEYED BY MAXMIN EM AND TOPOGRAPHIC MEASUREMENTS.

			EM
Line	From	To	Metres
1600	-50	450	500
1700	-50	475	525
1800	-50	425	475
1900	-25	425	450
2000	-50	425	475
2100	-25	425	450
2200	-50	450	500
2300	-50	475	525
3000	-400	25	425
3100	-450	25	475
3200	-425	0	425
3350	-925	400	1325
3425	-875	375	1250
3525	-875	375	1250
3600	-875	375	1250
3700	-850	0	850
3800	-875	0	875
3900	-875	0	875
4000	-875	0	875
4450	-425	450	875
4550	-425	475	900

Nastek Explorations Ltd.: Eby North Grid

4650	-400	475	875
4735	-425	475	900
		Total EM	17325
		& Topography	
		Measured	
		(Km)	17.325

EBY NORTH GRID: 1996
LIST OF LINES SURVEYED BY TOTAL MAGNETIC FIELD-GRADIOMETER MEASUREMENTS.

			Magnetic Surveys
Line	From	To	Metres
1600	-50	400	450
1700	-50	375	425
1800	-50	350	400
1900	-25	350	375
2000	-50	350	400
2100	-25	375	400
2200	-50	375	425
2300	-50	375	425
3000	-425	25	450
3100	-450	25	475
3200	-425	25	450
3350	-919	386	1305
3425	-864	385	1249
3525	-873	375	1248
3600	-874	375	1249
3700	-925	-275	650
3800(1sec)	-875	-400	475
3800(2sec)	-875	0	875
3900	-875	0	875
4000	-875	0	875

Nastek Explorations Ltd.: Eby North Grid

4450	-425	450	875
4550	-443	469	912
4650	-417	488	905
4735	-425	465	890
000N	1600	2300	700
400N	1600	2300	700
		Total magnetic Surveys	18458
		(Km)	18.458

EBY NORTH GRID: 1996
LIST OF LINES CUT.

Eby North Grid			Lines Cut
Line	From	To	Metres
1600	-50	450	500
1700	-50	475	525
1800	-50	425	475
1900	-25	425	450
2000	-50	425	475
2100	-25	425	450
2200	-50	450	500
2300	-50	475	525
3000	-425	25	450
3100	-450	25	475
3200	-425	25	450
3350	-925	400	1325
3425	-875	385	1260
3525	-875	375	1250
3600	-874	375	1249
3700	-925	0	925
3800	-875	0	875
3900	-875	0	875
4000	-875	0	875
4450	-425	450	875
4550	-443	475	918

Nastek Explorations Ltd.: Eby North Grid

4650	-417	488	905
4735	-425	475	900
000N	1600	2300	700
000N	4350	4735	385
400N	1600	2300	700
400N	3265	4000	735
450N	4350	4735	385
425S	4350	4735	385
425S	3000	3650	650
825S	3350	4000	650
		Lines Cut	22097
		(Km)	22.097

Nastek Explorations Ltd.: Eby North Grid.

	STRIPPING PROPOSAL						
	(Includes 2-3 cu yard back hoe on swamp pads, geologist & helper)						
	Claim 1186975						
	Line	Coord	From	To	Metres	Cost	Description
A	2700E	374N	2670	2730	60	2000	Along Major Quartz vein with 1358 PPB Au value.
B	2700E	347N	300	380	80	3000	Possible Major Deformation zone with alteration
C	2575E	315N	285	325	40	1500	Across alteration Zone.
D	2650E	335N	2575	2775	200	5000	Along Altered deformation zone.
E	2750E	290N	280	300	20	500	Alteration zone
F	2800E	290N	2785	2815	30	500	quartz vein: 10-15 cm
G	2550E	050N	2450	2600	150	4000	Along Altered Deformation Zone with anomalous Au.
H	2600E	000N	2550	2650	100	2000	Along major alteration Zone with intensely altered syenite intrusion.
I	2645E	025S	0	50	50	1000	Across Magor deformation zone

Nastek Explorations Ltd.: Eby North Grid.

J	2675E	023S	10	65	55	1000	Perpendicular Alterationand Major Altered Deformation Zone.
K	2700E	090S	65	90	25	1000	Test for source of alteration in Talus of Target "J".
			Sub Total		810	21500	
	Claim 1187002						
	Line	Coord	From	To	Metres	Cost	Description
A	3900E	375N	3900	3950	50	1000	Along Major Quartz Vein with Anomalous Au.
B	3850E	360N	345	375	30	500	Alteration in Talus.
C	4000E	100N	85	130	45	1000	Alteration at North Edge of MaxMin Conductor.
D	3900E	109N	90	140	50	1000	Crosses Quartz Vein and Alteration.
E	3930E	120N	3900	3950	50	500	Major Quartz Vein.
F	3850E	125N	110	140	30	500	Across alteration Zone.
G	3700E	380N	370	400	30	500	Across Alteration Zone.
H	3620E	310N	285	325	40	500	Across Alteration.
I	3600E	195N	190	125	35	500	Across Alteration.
J	3750E	040N	25	55	30	500	Across Alteration.

Nastek Explorations Ltd.: Eby North Grid.

K	3700E	040S	25	50	25	500	Alteration Zone.
L	3790E	155S	140	180	40	1000	Intense Alteration Zone with Anomalous Au.
M	3970E	100S	90	120	30	500	Alteration Zone.
N	3265E	130S	120	140	20	1000	Isolated Alteration Zone.
				Sub-Tot al	505	9500	
	Claims 475258-59-60-61						
	Line	Coord	From	To	Metres	Cost	Description
A	4100E	255N	160	300	140	5000	Across Several Alteraion Zones with anomalous Au.
B	4150E	190N	160	225	65	2500	Across Several Alteration Zones with Anomalous Au.
C	4200E	"285N	250	300	50	1500	Possible Major Deformation Zone.
D	4310E	380N	360	400	40	1500	Outcrop with 19,749 PPB Au Sample.
E	4150E	130S	75	350	275	5000	Crosses Several Alteration Zones.
F	4100E	290S	190	370	180	3000	Crosses Several Alteration Zones.

Nastek Explorations Ltd.: Eby North Grid.

G	4120E	385S	365	400	35	500	Intense Alteration Zone.
H	4290E	195S	180	205	25	500	Altererd Talus.
J	4660E	377N	365	385	30	1000	Float 1385 PPB Au.
				Sub-total	840	20500	
			TOTAL STRIPPING		2155	51500	
	**********						
			GRID GEOLOGY (Including Drafting)				
				Km	Days	Cost$	
		Geology		4	6	1650	
		Drafting		10.5	4	1100	
		Total			10	2750	
	**********						
		STRIPPING: maping, sampling, drafting					
		Two people			20	10000	
		Strip Drafting			20	5500	
		Total				15500	
	**********						
		IP (25 m "A" Spacing)					
				Line	km		
				1200E	0.85		

				1400E	0.85		
				1600E	0.85		
				2500E	0.725		
				2700E	0.8		
				3425E	1		
				3800E	1.3		
				4000E	1.325		
				4200E	0.6		
				4350E	0.9		
				4450E	0.9		
				4550E	0.9		
	Total				11	11000	
**********							
Assays					2000	24000	
**********							
COST SUMMARY							
Striping proposal				Metres	2155	51500	
Grid geology (including drafting)					10	2750	
Stripping: maping, sampling, drafting						15500	
General Logistics and misc.				Days	15	4125	

Nastek Explorations Ltd.: Eby North Grid.

IP: 25 metre "A" spacing			Km	11	11000	
Assays				2000	24000	
Misc.					4000	
Pump and Hose				?		
TOTAL					108875	

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W9980.00451
Assessment Files Research Imaging

42A01SE2010 2.19646 OTTO 900

y of subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Ac
he assesment work and correspond with the mining land holder. Questions about thi
of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury

RECEIVED AUG 13 1999 10:45 P.M.

Instructions: - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

Name James D. Reed	Client Number 18644
Address RR#3 Site 3, Box 2 Swastika Ontario	Telephone Number 705-642-3573
	Fax Number —
Name	Client Number
Address	Telephone Number
	Fax Number

2.19646

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, surveys, assays and work under section 18 (regs) | Physical: drilling stripping, trenching and associated assays | Rehabilitation

Work Type: Dig Pits, Tracing Glacial Float, Soil Profiling, Geostatistical Pebble Fabric Measurement, Provenance Logging.		Office Use
		Commodity Gold
		Total $ Value of Work Claimed 19,664
Dates Work Performed From 11 (Day) 08 (Month) 97 (Year) To 31 (Day) Sept (Month) 97 (Year)		NTS Reference
Global Positioning System Data (if available)	Township/Area Otto Tp.	Mining Division Larder Lake.
	M or G-Plan Number M-379	Resident Geologist District

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LARDER LAKE
MINING DIVISION
AUG 11 1999
3:05

Please remember to:
- obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name Doug Robinson Consulting	Telephone Number 705-642-9153
Address Box 218 Swastika, Ontario P0K-1T0	Fax Number 705-642-9153
Name H. Veldhuyzen	Telephone Number
Address	Fax Number 514-344-9951
Name J. E. Tilsley & Associates	Telephone Number 905-727-6822
Address 5 Steeplechase Ave Aurora Ont	Fax Number 905-841-3029

4. Certification by Recorded Holder or Agent

I, Douglas Robinson (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent Douglas Robinson		Date 11/08/99
Agent's Address Box 218 Swastika Ontario P0K1T0	Telephone Number 705-642-9153	Fax Number 705-642-915

0241 (03/97)

Deemed Nov 09/99.

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5:55pm
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5. **Work to be recorded and distributed.** Work can only be assigned to claims that are contiguous (adjoining) to the mining and where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

2 19646 W9980.00451

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.		**Number of Claim Units.** For other mining land, list hectares.	**Value of work performed** on this claim or other mining land.	**Value of work applied** to this claim.	**Value of work assigned** to other mining claims.	**Bank.** Value of work to be distributed at a future date
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1						
2	1187002	4	0	0	0	0
3						
4	475258	1	6556	0	0	6556
5	475259	1	0	0	0	0
6	475260	1	9832	0	0	9832
7	475261	1	3276	0	0	3276
8						
9						
10						
11						
12						
13						
14						
15						
Column Totals			19664	0	0	19664

I, Douglas Robinson (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
Douglas Robinson	Aug 11, 1999

6. Instruction for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☒ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

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MINING DIVISION
AUG 11 1999
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Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)
W9980.00151

ersonal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the lining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. uestions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake oad, Sudbury, Ontario, P3E 6B5.

2.19646

Work Type	Units of work Depending on the type of work, list the number of hours/day worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Glacial			
Dig Pits, Tracing Float	23 day	436	10025
by Soil Profiling with			
Geostatistical Pebble	57.25 hr	$115	6601
Fabric Measurements			
Pebble Provenence			
Logging			
Associated Costs (e.g. supplies, mobilization and demobilization).			
Office Supplies			67
GST			1286
Transportation Costs			
Vehicle Rental			700
Gas			135
Food and Lodging Costs			
Hotel			500
Meals			350
		Total Value of Assessment Work	19664

Calculations of Filing Discounts:

18378 Rec

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total $ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Douglas Robinson (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Douglas Robinson (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

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LARDER LAKE
MINING DIVISION
AUG 11 1999
3:05

Signature: Douglas Robinson Date: 8/11/99

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AUG 13 1999
GEOSCIENCE ASSESSMENT OFFICE

12 (03/97)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

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

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

December 21, 1999

JAMES DAVID REED
R.R. #2
SITE 3, BOX 2
SWASTIKA, Ontario
P0K-1T0

Dear Sir or Madam:

Submission Number: 2.19646

Status

Subject: Transaction Number(s): W9980.00451 *Approval After Notice*

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact LUCILLE JEROME by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 14436
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.19646

Date Correspondence Sent: December 21, 1999 **Assessor:** LUCILLE JEROME

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9980.00451	475258	OTTO	Approval After Notice	December 14, 1999

Section:
17 Assays ASSAY

The 45 days outlined in the Notice dated October 28, 1999 have passed.

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet as discussed between Mr. Robinson and Ms. Jerome on November 17, 1999.

The assessment credit is being reduced by $7909.00 The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is $11,755.00.

Correspondence to:
Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Douglas Robinson
SWASTIKA, ONTARIO, CANADA

JAMES DAVID REED
SWASTIKA, Ontario

Correspondence ID: 14436

Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: December 21, 1999

Submission Number: 2.19646

Transaction Number: W9980.00451

Claim Number	Value Of Work Performed
475258	3,900.00
475259	0.00
475260	6,555.00
475261	1,300.00
Total: $	11,755.00

Correspondence ID: 14436

M.379

TECK TP. - M.392

VI

2.19646
ASSAY

V

IV

III

II

I

EBY TP. - M.345

BOSTON TP. - M.332

MARQUIS TP. - M.362

12 11 10 9 8 7 6 5 4 3 2 1

1214034 CL 4614 1219966 CL 4614 1217864 1213818 1211455 1211464 1206112 1206406 1206407 1206408 1206295 CL 9293 CL 5029 CL 7678 Otto Lake Vigras Lake Round Lake Biganche River DANE TOWNSITE Not Open for Staking O.C Jan 10,1911 Rosegrove Beach Gravel Pit No 245 Gravel Pit No 1586 T.C.P.L. R/W T.C.P.L. F/W HWY 11 NOR ONT

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.

THE TOWNSHIP OF OTTO

DISTRICT OF TIMISKAMING

LARDER / LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	● or (P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
PATENTED S.R.O.	●

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

(R) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SEC. 36/80, W.9/86, JAN. 24, 1986
O-L26-90 NR OPENS W9/86 DEC. 14, 1990

* APPLICATION UNDER THE PUBLIC LANDS ACT SEC. 31 (b) OF THE MINING ACT

CL 5029 DISPOSITION OF CROWN LAND
Surface Rights Withdrawn under Sec. 36,
The Mining Act R.S.O. 1980, ORDER NO. W-01/91/ONT.
(Trans Canada Pipeline Right of Way and Buffer Zone particularly 40.25 meters or 132 ft. on either side of centre line of right of way)

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE TIMISKAMING MANAGEMENT UNIT

AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: P.O. BOX 129
SWASTIKA, ONT.
P0K 1T0
705-642-3222

DATE OF ISSUE
APR 01 1999
PROVINCIAL RECORDING OFFICE - SUDBURY

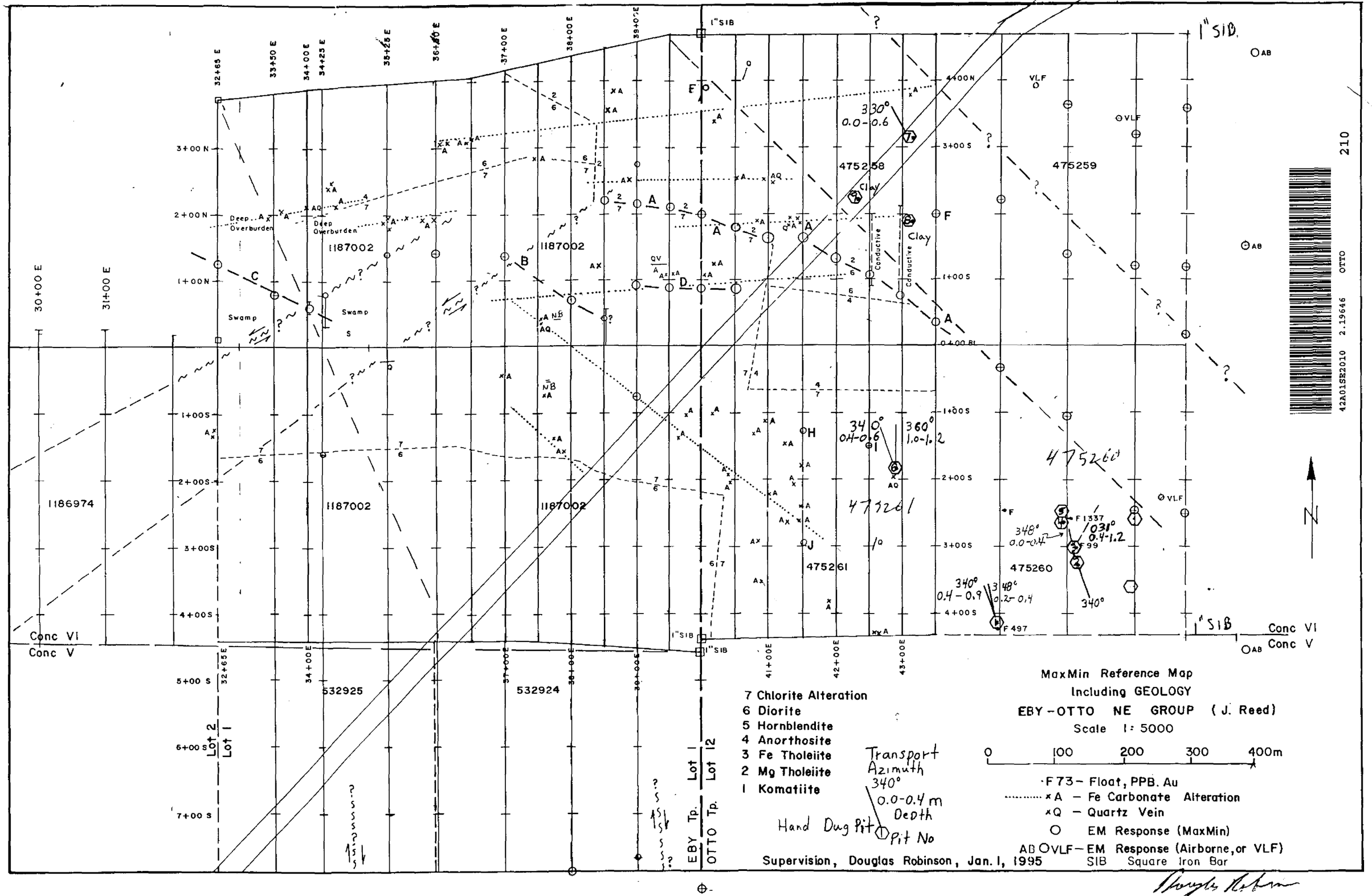
PLAN NO. M-379

MINISTRY OF NORTHERN DEVELOPMENT AND MINES

42A01SE2010 2.19646 OTTO 200

CIRCULATED NOV.3/88
ARCHIVED ON JUNE 01/95

TRIM LINE



7 Chlorite Alteration
6 Diorite
5 Hornblendite
4 Anorthosite
3 Fe Tholeiite
2 Mg Tholeiite
1 Komatiite

Transport Azimuth 340° 0.0-0.4 m Depth

Hand Dug Pit ① Pit No

MaxMin Reference Map
Including GEOLOGY
EBY-OTTO NE GROUP (J. Reed)
Scale 1:5000

0 100 200 300 400m

·F73- Float, PPB. Au
×A - Fe Carbonate Alteration
×Q - Quartz Vein
O EM Response (MaxMin)
AB OVLF- EM Response (Airborne, or VLF)
SIB Square Iron Bar

Supervision, Douglas Robinson, Jan. 1, 1995

Douglas Robinson

42A01SE2010 2.19646 OTTO 210