



31E01SE2003 2.19831 MONMOUTH

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Report of Assessment Work

Physical Assessment
&
Geotechnical Assessment

Mining claim: S.O. 1195060
S1/3, lot 31, con. XVII, Monmouth Township, Haliburton County



2.19831

Prepared and submitted by:
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October 28, 1999
17 pages plus 3 maps

Introduction

Mining claim S.O. 1195060 was staked October 19, 1995 on S1/3 lot 31, con. XVII, Monmouth Township, Haliburton County, by Chris Fouts (licence # A51813). This site is known as the Desmont Mine, and has been explored for molybdenum and uranium in the past. The claim is currently held by the Bancroft & District Chamber of Commerce.

Physical assessment work was carried out on September 17, 1999, for molybdenite and rare earth bearing minerals by the author, with assistance from members of the Walker Mineralogical Club.

A radiometric survey was carried out on August 25, 27, September 4, 28, 29, October 18, 19 & 20, by the author with the assistance of Ryan Grant.

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Location and Access

The mining claim is situated on S1/3 lot 31, con. XVII, Monmouth Township, Haliburton County. Access is by the Cedar Lake Road, north off of the Essonville Road at a point 1.1 km west of Wilberforce, Ontario. This lot is Crown Land. The claim location is shown on figure 1.

The claim location is found on Topographic Map 31E/1 (Wilberforce sheet), Ontario Department of Mines (ODM), Geologic Map 1957b, and ODM Map 2174.

Regional geology

Monmouth Township, Haliburton County, is situated in the Grenville Province of the Canadian Shield. Rocks here date back 1.0 to 1.3 billion years. The region is underlain by marbles and metasediments intruded by granites, gabbros and nepheline syenites. The claim area is underlain by bands of sugary textured, green pyroxenite interbedded with marble, lime-silicates, and micaceous marble, and is cut by small dykes and irregular masses of granite pegmatite. It is reported that certain pyroxenite or diopside-calcite bands contain sparse disseminations of uranothorite, and certain lime-silicate and micaceous marble bands contain sparse disseminations of uraninite. These rocks strike north-northwest and dip 40° - 60° to the east.

Topography

The area is characterized by steep sided hills with an average relief of 50 metres. Numerous small ponds, lakes, creeks and streams are found between hills. Glacial till coverage is extensive limiting bedrock exposure. Thickness is between 30 cm and 1 metre. Drainage is to the south-southeast into the Irondale River, and south into the Trent River system.

The area is well forested, with maple 65%, birch & beech 25%, balsam 5%, with some pine, oak and hemlock. The soil is very sandy and is often rather rusty coloured.

Previous work

Between 1954 and 1955 the Desmont Mining Corporation Limited, (formerly known as Homer Yellowknife Mines Limited), performed stripping and trenching assessment in their exploration of uranium bearing mineralization. Claims were held on lots 25 - 32, con. XVII; and lot 31, con. XVI, Monmouth Township. Lot 31, con. XVII was bulldozed and trenched, and 2,810 feet of diamond drilling was done. Further work was done in 1965 and 1966 in the search for molybdenum. A geochemistry survey and 2,688 feet of diamond drilling was performed by New Far North Exploration Ltd.

The site has been mineral collected in the past decade for various minerals. Sabina (1986) reports occurrences of the following minerals: diopside, actinolite, albite, pyrite, pyrrhotite, calcite, molybdenite, uranothorite, thorianite, apatite, titanite, garnet, serpentine, quartz, K-feldspar, chondrodite, scapolite, marcasite, gypsum, allanite, graphite, stillwellite, hydroxylbastnaesite, monazite, magnetite, goethite, tourmaline, sulphur, perrierite, sphalerite, and ancylite.

The author prospected formerly bulldozed trenches in 1996 and 1997. A number of these trenches showed interesting mineralogy (coarse grained molybdenite, albite, actinolite, diopside, calcite, titanite, and uranothorite), and warranted further investigation. Physical assessment was performed in 1998.

Assessment work

Travelling to the claim from Bancroft each day I worked the following schedule:

August 25 Chris Fouts 8 hrs (9:30 am to 5:30 pm)
 Ryan Grant 8 hrs (9:30 am to 5:30 pm)
 Geophysical assessment - Radiometric survey

August 27 Chris Fouts 8.5 hrs (9:00 am to 5:30 pm)
 Ryan Grant 8.5 hrs (9:00 am to 5:30 pm)
 Geophysical assessment - Radiometric survey

September 4 Chris Fouts 7 hrs (10:00 am to 5:00 pm)
 Ryan Grant 7 hrs (10:00 am to 5:00 pm)
 Geophysical assessment - Radiometric survey

September 17 Chris Fouts 7.5 hrs (9:30 am to 5:00 pm)
 Steve Szilard 6.5 hrs (9:30 am to 4:00 pm)
 Tony Steede 6.5 hrs (9:30 am to 4:00 pm)
 Ray Hainsworth 3 hrs (9:30 am to 12:30 pm)
 Mars Mikell 3 hrs (9:30 am to 12:30 pm)
 Bev Mikell 3 hrs (9:30 am to 12:30 pm)
 Bob Barker 3 hrs (9:30 am to 12:30 pm)
 Sinikka Barker 3 hrs (9:30 am to 12:30 pm)
 Physical assessment - Trenching of calcite veins and bedrock

September 28 Chris Fouts 7.5 hrs (11:30 am to 6:30 pm)
 Geophysical assessment - Radiometric survey

September 29 Chris Fouts 6.5 hrs (9:30 am to 4:00 pm)
 Geophysical assessment - Radiometric survey

October 18 Chris Fouts 7.5 hrs (9:30 am to 5:30 pm)
 Geophysical assessment - Radiometric survey

October 19 Chris Fouts 7 hrs (9:30 am to 5:00 pm)
 Geophysical assessment - Radiometric survey

October 20 Chris Fouts 7 hrs (9:30 am to 5:00 pm)
 Geophysical assessment - Radiometric survey

September 17

Rendezvousing with members of the Walker Mineralogical Club at the Bancroft Mineral Museum in Bancroft we made our way to the Desmont Mine. Arriving at the site at 9:30 am we quickly inspected the Main collecting area (as listed in the Bancroft & District Mineral Collecting Guidebook), listed as Trenches "A" & "B", Figure 2. The Walker Mineralogical Club members present were experienced mineral collectors who had agreed to assist me in locating and identifying any rare earth bearing minerals in the Main collecting area, (Trench "A" & "B" from 1998 assessment). Sabina 1986 lists the following rare earth bearing minerals from this property: uranothorite, uraninite, stillwellite, bastnaesite, hydroxylbastnaesite, thorianite, allanite, monazite, perrierite, and ancylite. In previous years assessment uranothorite has been identified, but no other mineral from the list above has been seen.

Assessment in 1998 seemed to indicate that mineralization of Mo and uranothorite tended to cluster close to calcite veins which cut through the pyroxenite skarn rock. At the Trench "A" and Trench "B" sites, calcite veins in pyroxenite rock are fairly well exposed by previous bulldozing by assessment done in the mid 1950's. Choosing various spots in Trenches "A" & "B" we dug into the trench walls to expose calcite veins and uncover any associated mineralization. The descriptions for each excavation are listed below.

Bob & Sinikka Barker - Site A1

At a site near the west end of Trench "A", on the north side of the trench, the wall was dug into to expose calcite veins and open cavities found in the pyroxenite rock, (see fig. 2). An amount of rock measuring 2 metres wide, 1 metre deep and 40 cm high was removed by crack hammer, chisel and pry bar. The bedrock is green, sugary textured, rock composed of interlocking diopside crystals, which made the rock relatively easy to crack and break up.

The rock grades quickly into white, medium grained marble (crystals 2 - 4 mm across), at a point 5 metres to the west. The pyroxenite rock shows mineralization of small (3 - 5 mm diameter) molybdenite flakes and small, (0.5 - 2 mm), disseminated, poorly formed pyrite crystals, close to veins carrying white and yellow coloured, coarse grained (~ 1 cm), calcite. The calcite veins are discontinuous, and average about 30 cm in length and 10 cm in width. The vein walls show diopside, actinolite, albite and smoky quartz crystals. Diopside crystals are seen 3 mm to 1 cm long, along the calcite - pyroxenite border. Poorly formed, dark green, actinolite crystals, 0.5 to 2 cm long are found in patches along the calcite - pyroxenite border, associated with well developed, white albite crystals, 0.5 to 2.5 cm in size, and poorly developed, smoky quartz crystals, 1 to 2 cm long. The actinolite and smoky quartz show incomplete, somewhat skeletal, growth, with the quartz having a melted appearance as well. There is no readily apparent cause for the smoky condition of the quartz; no radioactives minerals are seen in this area.

Steve Szilard & Tony Steede - Site B1

Located just east of site A1 (see figure 2), an area of rock about 3 m wide, 2 m deep and 60 cm high was removed. As with the description above, calcite veins were examined to look for rare earth bearing minerals.

Discontinuous calcite veins, (about 30 cm in length, 8 cm in width), and calcite patches (about 15 cm across) are found in sugary textured, green diopside rock. Diopside crystals along the calcite-pyroxenite border are small, generally 1 mm to 6 mm in length. The calcite is white to yellow in colour, and coarse grained, (~1 cm). The veins contain well developed, white albite crystals ranging in size from 0.5 cm to 12 cm long. Often the crystals grow from one vein wall to the other. These areas have associated diopside crystals and actinolite blades, (up to 2 cm long), and occasional smoky quartz, (up to 2.5 cm long). The quartz generally exhibits a partly melted look.

Molybdenite flakes, 0.5 cm to 2.5 cm across, are found in the sugary textured pyroxenite within 15 cm of the calcite veins. In small patches the grade reaches about 3 to 5 %, but overall the grade is very low. No rare earth minerals were identified.

Chris Fouts - Site C1

Using hand tools, this spot along the wall was investigated by digging into the soft, sugary textured, green pyroxenite rock, to look for mineral crystals in open and calcite filled veins and patches, (see figure 2). A number of discontinuous veins about 4 to 13 cm wide run into the trench wall, pinching and swelling. The calcite is coarse grained, (2 - 4 cm), and yellow, white and grey in colour. The worked area is 2.5 m wide, 50 cm high and about 1 metre in to the wall.

The veins carry large crystals of various minerals along the walls. Diopside, generally opaque, occasionally occurs as translucent, glassy lustred, well developed crystals up to 12 cm long. Most are about 2 to 3 cm long. White albite crystals occur 1 cm to 10 cm in size, and exhibit good to excellent form. Quartz occurs in milky to smoky colour, as formless patches, 5 cm to 10 across, to poorly developed, melted looking crystals up to 2.5 cm long. Actinolite crystals occur occasionally. They appear as green, translucent, incomplete crystals up to 8 cm long. Small flakes, (1 - 3 mm) of molybdenite and disseminated pyrite occur rarely, close to the vein walls. Rare, glassy green apatite, (up to 1.5 cm) was found on top of diopside crystals.

The bedrock is green, sugary textured, fine grained (1 - 2 mm), pyroxenite, with rusty layers, 2 to 4 cm thick, discontinuously interbedded. These rusty layers show grains of pinkish feldspar. The rust is likely caused by pyrite mineralization, however the pyrite must be very fine grained, as it is not obvious by visual inspection. No rare earth minerals were identified.

Bev & Mars Mikell - Site D1

The west end of Trench "B" was explored. A fairly large calcite vein, (about 50 cm thick) is located in the south trench wall and carries crystals of diopside, feldspar, apatite, pyrite, and molybdenite, (see figure 2). The calcite is coarse grained, (1 to 3 cm), and very rusty and crumbly. In the calcite are found well developed crystals of diopside, (up to 3 cm long), feldspar, (likely albite - up to 3 cm long), and opaque, apple green apatite, (up to 5 cm long). Pyrite occurs as fine grained, disseminated grains, and formless blobs, up to 2 cm long, 5 mm wide. Molybdenite is rare, and occurs as flakes 1 - 2 mm across.

Ray Hainsworth - Site E1

The east end of Trench "B" was investigated, (see figure 2). Specifically, the north side of the trench, checking rubble and boulders that had been removed from the trench by assessment work performed in the 1950's. The rock is green, sugary textured pyroxenite, generally a little tougher, or more competent than the pyroxenite from Trench "A". Occasional calcite veins are seen, but are thinner, shorter, and contain coarse grained, (1 - 3 cm), orange calcite. The rock has fairly abundant amounts of small molybdenite flakes, (1 - 3 mm across), and prismatic, black, glassy lusted uranothorite crystals. Uranothorite crystals are usually 4 to 7 mm in length, 0.5 to 1.5 mm in width and can form up to 10 % of the rock in small concentrated zones about 15 cm across in the pyroxenite rock close to the calcite veins. Often the uranothorite has a thin red staining of hematite around the crystal. Small amounts of smoky quartz is encountered as formless masses about 2 to 10 cm across in pyroxenite. When uranothorite occurs in quartz it often displays a radial fracture pattern.

Other minerals encountered in the calcite veins include diopside, (up to 5 mm long), albite (up to 5 mm), and poorly formed smoky quartz, (up to 5 mm). No rare earth minerals, other than uranothorite, was found.

August 25, 27, September 4, 28, 29, October 18, 19 & 20

A grid was laid out and stations marked using a compass and measuring tape. An east - west base line, (bearing 68°) was created with stations at 30metres +/- apart. Crosslines running perpendicular to the base line from stations along the line were delineated with stations at 30 metre (+/-) distances. The stations were marked by blazes on trees and should be durable enough to survive a number of years so that the grid can be used for geological mapping in future years.

Radiation intensity readings were taken at stations along crossline traverses. Readings were taken using a MacPhar TV-1A three threshold spectrometer. Data was recorded at points designated on the grid laid out previously, and at random points along the traverse when intensities changed significantly. The grid was laid out at 30 m +/- intervals, with traverses running roughly north-south (338°/158°) starting at stations along an east-west (68°/248°) base line.

The spectrometer was used to make a field reconnaissance of the variations in gamma ray intensity over claim SO 1195060.

The spectrometer works by having gamma rays impinge upon a sodium iodide crystal, causing a flash of light, which is detected by photomultiplier tube and converted into an electronic signal, which is measured in counts per minute (cpm). The McPhar TV-1A Spectrometer is capable of distinguishing various energy levels characteristic for radioactive decay by potassium, uranium and thorium. The three channels on the machine have different thresholds for energy, which can distinguish between the energy from the decay of potassium, uranium and thorium.

It is very important to keep in mind various features which can affect the readings of the

spectrometer. Higher counts will be caused by exposed outcrop, roadcuts, cliff or scarpe faces, and high potassium rocks, (such as feldspar and mica). Lower readings are caused by thick soil or overburden, (plus stream alluvium and landslide debris), water, and water soaked soil. Soil thicknesses of one metre or more will practically block all gamma radiation from the bedrock, although the soil may be derived from the bedrock and share the same properties. However, the soil can be altered, (leached or enriched).

Readings for each channel were taken at station points along the grid traverse lines, (every 30 m +/-). Unfortunately, during calibration of the McPhar TV-1A, (which was borrowed from the Bancroft Gem & Mineral Club), it was found that the T2 and T3 channels, (which detected uranium and thorium decay energy levels), were giving very low counts. These channels seem to be still functioning but they appear to be impaired. An inspection of the machine provided no reason for any malfunction. The end result is that the machine could not be used for absolute radiometric values but would function satisfactorily for providing relative gamma ray intensities. Generally, a background radiation reading is obtained by taking some readings in an area at the site which is known not have any radioactive minerals. The variation in the bedrock in the Grenville Province is great, and there are numerous igneous, potassium rich feldspar intrusions. I have decided to work straight from the readings recorded and not subtract background readings since the relative values were my primary concern. The values are plotted on a map of the claim, (see figure 3). I feel that only values over 1000 counts per minute (cpm) have relevance.

Several areas of high radioactivity were outlined. Many of these areas were investigated to some degree in the past, however not all of them were. Areas of extreme intensity (+10,000 cpm) were located in old pits, bulldozed trenches, or exposed rock piles. Thin soil cover, or exposed rock, certainly increased radioactive intensity. These areas should be traversed at a finer grid to define the boundaries of the radioactivity. These zones do not appear to be continuous between the 30 metre grid traverses. The radioactive zones are most likely the areas of rare earth deposition. Once these zones are defined some trenching may be advisable to expose the bedrock.

Crossline +58 was found to drift towards the east as it moved south and north, but this was not noticed when the grid was laid out. Human error was determined to be the cause.

Desmont Mine Assessment

Radiometric Survey Data

(Values in counts per minute)

Crossline 0

Station	T1	T2	T3
0/+219	2000	35	35
0/+189	600	25	20
0/+160	700	15	20
0/+122	700	15	25
0/+100	1000	15	15
0/+85	8000	30	25
0/+80	6000	--	--
0/+67	8500	45	30
0/+58	2000	--	--
0/+48	2500	--	--
0/+44	2500	--	--
0/+30	9000	20	15
0/0	950	15	25
0/-30	700	20	7
0/-45	2000	--	--
0/-58	900	7	30
0/-88	1000	30	20
0/-117	1500	35	20
0/-142	3500	--	--
0/-149	2000	20	30
0/-168	4500	--	--
0/-180	3000	25	20
0/-210	700	35	15
0/-241	1250	35	25
0/-270	1000	30	20
0/-301	800	20	20
0/-331	1500	30	20
0/-363	1000	20	20
0/-393	750	20	30

Crossline -41

Station	T1	T2	T3
-41/+216	600	15	25
-41/+187	700	20	15
-41/+155	800	30	25
-41/+118	800	15	15
-41/+89	900	15	20
-41/+59	650	20	30
-41/+26	800	20	15
-41/0	600	15	25
-41/-30	1000	20	30
-41/-60	850	20	20
-41/-91	1500	40	20
-41/-121	1000	20	30
-41/-151	2000	40	15
-41/-161	2000	--	--
-41/-164	7000	--	--
-41/-181	1500	15	20
-41/-213	2000	40	20
-41/-238	2000	--	--
-41/-243	6500	30	30
-41/-250	2000	--	--
-41/-258	4000	--	--
-41/-261	6000	--	--
-41/-265	8500	40	30
-41/-268	3500	40	30
-41/-270	2500	40	30
-41/-280	2000	--	--
-41/-300	1000	25	25
-41/-332	1000	30	30
-41/-364	1000	25	30
-41/-394	1000	20	15

Crossline -71

Station	T1	T2	T3
-71/+212	500	25	35
-71/+179	500	25	15
-71/+151	600	15	35
-71/+121	700	25	10
-71/+92	850	15	10
-71/+67	600	30	15
-71/+33	600	25	15
-71/0	500	25	20
-71/-29	600	30	20
-71/-59	600	35	10
-71/-90	800	15	15
-71/-115	1000	15	25
-71/-135	2000	--	--
-71/-145	1000	25	25
-71/-175	2500	20	20
-71/-205	1000	30	35
-71/-237	1500	15	15
-71/-248	2500	--	--
-71/-256	2000	30	15
-71/-286	2500	20	15
-71/-305	7000	25	20
-71/-311	1500	20	15
-71/-344	1500	20	15
-71/-377	1500	20	30
-71/-405	1000	15	15
-71/-435	1500	15	20

Crossline -101

Station	T1	T2	T3
-101/+206	800	15	15
-101/+177	800	25	20
-101/+149	600	25	20
-101/+119	750	20	10
-101/+91	700	25	10
-101/+66	800	25	25
-101/+30	600	25	25
-101/0	600	25	20
-101/-29	600	30	15
-101/-58	800	25	30
-101/-89	700	25	35
-101/-119	1500	25	25
-101/-136	3000	20	25
-101/-150	1500	25	10
-101/-172	1500	30	15
-101/-204	1500	30	25
-101/-230	1000	30	20
-101/-270	1000	20	20
-101/-297	1500	25	10
-101/-328	1500	20	30
-101/-358	1000	25	20
-101/-391	1000	25	15
-101/-402	4000	--	--
-101/-443	1500	--	--

Crossline -134

Station	T1	T2	T3
-134/+239	1000	20	25
-134/+209	1000	30	30
-134/+183	750	20	30
-134/+153	700	15	20
-134/+125	1000	30	25
-134/+95	1000	20	25
-134/+61	550	30	10
-134/+28	450	15	30
-134/0	650	15	20
-134/-30	600	25	15
-134/-60	950	35	15
-134/-90	850	15	25
-134/-120	600	25	25
-134/-150	600	20	25
-134/-180	1500	10	25
-134/-210	2500	20	25
-134/-240	4500	45	20
-134/-246	5000	--	--
-134/-249	6000	--	--
-134/-270	6000	40	25
-134/-282	8500	--	--
-134/-300	3000	20	15
-134/-330	3000	35	25

Crossline -167

Station	T1	T2	T3
-167/+201	1000	30	15
-167/+171	1000	35	25
-167/+165	1500	--	--
-167/+158	4000	--	--
-167/+153	5500	--	--
-167/+149	6000	40	20
-167/+147	9500	--	--
-167/+143	20000	--	--
-167/+140	9000	--	--
-167/+138	8000	--	--
-167/+129	7000	--	--
-167/+125	5500	--	--
-167/+119	5500	35	30
-167/+117	8000	--	--
-167/+111	10000	--	--
-167/+106	15000	--	--
-167/+101	8000	--	--
-167/+98	3500	--	--
-167/+90	1500	25	20
-167/+67	1000	--	--
-167/+60	850	20	15
-167/+31	550	20	30
-167/0	750	30	30
-167/-30	550	25	20
-167/-60	400	20	25
-167/-90	850	25	25
-167/-120	450	25	25
-167/-150	750	25	25
-167/-180	750	25	25
-167/-210	850	25	15
-167/-221	1500	--	--
-167/-228	2000	--	--
-167/-240	1000	35	25
-167/-270	800	20	20
-167/-300	850	30	25
-167/-330	600	25	35
-167/-360	550	20	15
-167/-390	600	15	20
-167/-420	600	15	20
-167/-450	800	--	--
-167/-480	800	--	--

Crossline +27

Station	T1	T2	T3
+27/+164	7000	45	25
+27/+160	4000	--	--
+27/+157	1000	--	--
+27/+133	800	25	20
+27/+105	1000	35	15
+27/+89	5000	--	--
+27/+83	5000	--	--
+27/+78	9000	45	20
+27/+72	15000	--	--
+27/+68	15000	--	--
+27/+61	15000	--	--
+27/+47	8500	30	25
+27/+42	6500	--	--
+27/+30	2500	20	20
+27/0	1000	15	15
+27/-29	1500	30	15
+27/-61	950	35	15
+27/-92	950	25	15
+27/-123	500	35	20
+27/-152	750	25	10
+27/-176	2000	--	--
+27/-181	3500	20	10
+27/-182	4000	--	--
+27/-187	1500	--	--
+27/-210	1500	35	15
+27/-239	1000	25	15
+27/-266	1500	35	15
+27/-300	800	15	25
+27/-332	700	20	15
+27/-362	700	--	--
+27/-384	500	--	--

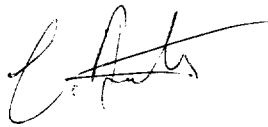
Crossline +58

Station	T1	T2	T3
+58/+192	800	25	35
+58/+158	1000	25	15
+58/+129	1000	20	25
+58/+87	5000	--	--
+58/+73	1000	25	25
+58/+43	1000	25	25
+58/+14	1500	25	10
+58/0	1000	25	25
+58/-32	1000	20	15
+58/-61	1000	20	20
+58/-91	550	15	20
+58/-128	1000	25	15
+58/-155	1000	25	15
+58/-185	1000	20	35
+58/-217	2500	15	25
+58/-248	1500	35	20
+58/-278	1000	20	15
+58/-296	1000	--	--
+58/-300	2000	--	--
+58/-303	5000	--	--
+58/-305	4500	--	--
+58/-308	3000	20	15
+58/-322	3500	--	--
+58/-326	1000	--	--
+58/-338	650	20	20

Recommendations

Assessment done previously (1997 & 1998) suggests that mineralization of molybdenite, radioactives and rare earths occur associated with coarse grained calcite veins which cut the marble/pyroxenite sequence. This radiometric survey outlines various radioactive zones on the claim. Additional radiometric surveys, at a closer spaced grid, should help to delineate the radioactive zones.

Geological mapping of the claim may show a correlation between radioactive intensity and rock type, and should be carried out in the future.



Christopher Fouts
October 28, 1999


References

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- Satterly, J., 1957: Radioactive mineral occurrences in the Bancroft area, Ontario; Ontario Department of Mines, Annual Report, v. 65, pt. 6.
- Sabina, Ann, 1986: Rocks and Minerals for the Collector: Bancroft - Parry Sound area and southern Ontario; Geological Survey of Canada, Miscellaneous Report 39E, 182 p.

Figure 1: Claim location

TOWNSHIP
MONMOUTH

M.N.R. ADMINISTRATIVE DISTRICT
MINDEN
MINING DIVISION
SOUTHERN ONTARIO
LAND TITLES / REGISTRY DIVISION
HALIBURTON

 Ministry of Natural Resources Ministry of Northern Development and Mines
Ontario

Date FEBRUARY, 1987 Number **G-1298**

Figure 1: Claim location

TOWNSHIP

MONMOUTH

M.N.R. ADMINISTRATIVE DISTRICT

MINDEN

MINING DIVISION

SOUTHERN ONTARIO

LAND TITLES / REGISTRY DIVISION

HALIBURTON



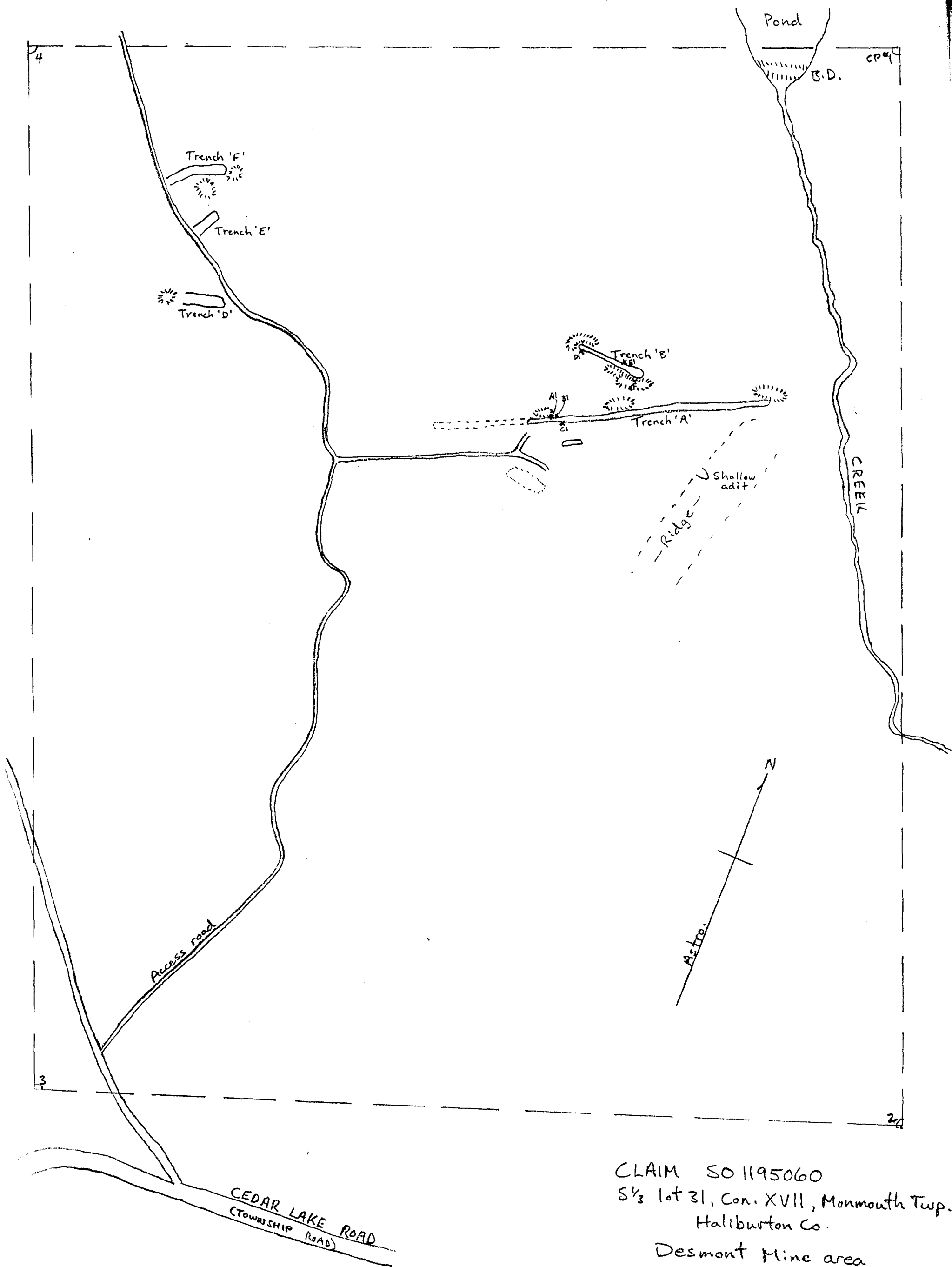
Ontario

Ministry of Natural Resources Ministry of Northern Development and Mines

Date FEBRUARY, 1987

Number

G-1298



- old trenches
- - - - - old bulldozed areas
- A1, B1, C1, D1, E1 Excavation sites

Figure 2: Excavation sites for physical assessment





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) W9990.00056
Assessment Files Research Imaging



31E01SE2003 2.19831 MONMOUTH

900

ity of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the
id to review the assessment work and correspond with the mining land holder.
ning Recorder, Ministry of Northern Development and Mines, 6th Floor,

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

2.19031

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

Name Bancroft + District Chamber of Commerce	Client Number
Address Box 539, 30 Station St.	Telephone Number 613-332-1513
Bancroft, ON K0K-1C0	Fax Number 613-332-2119
Name	Client Number
Address	Telephone Number
	Fax Number

RECORDED

OCT 29 1999

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 Radiometric Survey	Office Use
	Commodity
	Total \$ Value of Work Claimed 2135
Dates Work Performed From 27/8/99 To 20/10/99	NTS Reference
Global Positioning System Data (if available)	Mining Division Southern Ontario
Township/Area Monmouth Twp.	Resident Geologist District Twined
M or G-Plan Number G-1298	

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 Chris Fouts	Telephone Number 613-332-1611
Address RR#1, L'Amable, ON K0K-2L0	Fax Number 613-332-2119
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

RECEIVED

OCT 29 1999

GEOSCIENCE ASSESSMENT
OFFICE

4. Certification by Recorded Holder or Agent

I, Gordon Mackey (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 <i>Gordon Mackey</i>	Date Oct. 28/99
Agent's Address Box 539, Bancroft, ON K0K-1C0	Telephone Number 613-332-1513
	Fax Number 613-332-2119

Dated January 27/2000



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)
W9990 000 516
Assessment Files Research Imaging

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

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

2. 19881

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

Name <u>Bancroft + District Chamber of Commerce</u>	Client Number
Address <u>Box 539, 30 Station St.</u>	Telephone Number <u>613-332-1513</u>
<u>Bancroft, ON K0L-1C0</u>	Fax Number <u>613-332-2119</u>
Name	Client Number
Address	Telephone Number
	Fax Number

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 <u>Trenching</u>	Office Use
	Commodity
	Total \$ Value of Work Claimed
Dates Work Performed From <u>17</u> <u>9</u> <u>99</u> To <u> </u> <u> </u> <u> </u>	NTS Reference
Global Positioning System Data (if available)	Mining Division
Township/Area <u>Monmouth Twp.</u>	Resident Geologist District
M or G-Plan Number <u>G-1298</u>	

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 <u>Chris Fouts</u>	Telephone Number <u>613-332-1611</u>
Address <u>R.R. #1, L'Amable, ON K0L-2L0</u>	Fax Number <u>613-332-2119</u>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

RECEIVED

OCT 29 1999

GEOSCIENCE ASSESSMENT
OFFICE

4. Certification by Recorded Holder or Agent

I, Gordon Mackay (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 <u>Gordon Mackay</u>	Date <u>Oct. 28/99</u>
Agent's Address <u>Box 539, Bancroft, ON K0L 1C0</u>	Telephone Number <u>613-332-1513</u>
	Fax Number <u>613-332-2119</u>

W9990 00056

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

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 SO 1195060	1	2,135	2,135	0	0
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		2,135	2,135	0	0

I, Gordon Mackey (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

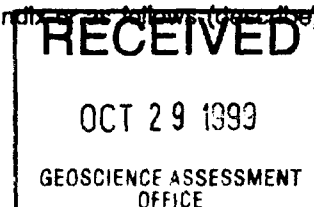
Date

Oct 28/99

6. Instructions 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 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)	



Ministry of
Northern Development
and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)

W 9990.00056

Personal 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 Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2019002

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Physical - Trenching	licensed prospector - 1 day ^{1.5} day	150	150
	unlicensed assistant - 4.5 days	\$75/day \$337.50	337.50
Geotechnical - Random core survey	licensed prospector - 8 days	\$150/day 1200	1200
	unlicensed assistant - 3 days	\$75/day 225	225
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
Travelling to & from the claim and Bancroft		\$40/km 27.54/km	
9 days total 810/km			222.75
Food and Lodging Costs			
Total Value of Assessment Work			\$ 2135.25

Calculations of Filing Discounts:

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 $\times 0.50 =$ 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, Gordon Mackey (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 General Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature Gordon Mackey Date Oct 20/99

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

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

November 19, 1999

Gordon Mackey
BANCROFT & DISTRICT CHAMBER OF COMMERCE
30 STATION STREET
BANCROFT, ONTARIO
K0L-1C0

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

Dear Sir or Madam:

Submission Number: 2.19831

Status

Subject: Transaction Number(s): W9990.00056 Approval

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 STEVE BENETEAU by e-mail at steve.beneteau@ndm.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,



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

Work Report Assessment Results

Submission Number: 2.19831

Date Correspondence Sent: November 19, 1999

Assessor: STEVE BENETEAU

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9990.00056	1195060	MONMOUTH	Approval	November 18, 1999

Section:

14 Geophysical RAD
10 Physical PTRNCH

Correspondence to:

Resident Geologist
Tweed, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Gordon Mackey
BANCROFT & DISTRICT CHAMBER OF COMMERCE
BANCROFT, ONTARIO

Dudley Twp.

LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
- TOWNSHIP, BASE LINES, ETC
- LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES
- LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
SURFACE RIGHTS ONLY	○
MINING RIGHTS ONLY	○
LEASE, SURFACE & MINING RIGHTS	○
SURFACE RIGHTS ONLY	○
MINING RIGHTS ONLY	○
LICENCE OF OCCUPATION	○
ORDER IN COUNCIL	○
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○
LAND ACQUISITION	(A)

SCALE: 1 INCH = 40 CHAINS



NOTES

This Map Is Not To Be Used
—FOR SURVEY PURPOSES—

Original shoreline shown thus: —
FRI shoreline shown thus: —
Patents Map shoreline shown thus: —

For status of summer resort locations shown
thus: —
Please contact Ministry of Natural Resources.

GRAVEL AND SAND

(*) JUN 12, 1986 THE INFORMATION THAT APPEARS ON THIS
MAP HAS BEEN COMPILED FROM VARIOUS
SOURCES, AND ACCURACY IS NOT
GUARANTEED.

NOV 22 1999

THOSE WISHING TO STAKE MINING CLAIMS
SHOULD CONSULT WITH THE MINING RECORDER.
AREAS WITHDRAWN FROM DISPOSITION
STATUS OF THE LANDS SHOWN HEREON.
S.R.O. - SURFACE RIGHTS ONLY
M.S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
SEC 35/90	W-30-89/9b	95/12/21	S.R.O.	195150

THE INFORMATION THAT
APPEARS ON THIS MAP
HAS BEEN COMPILED
FROM VARIOUS SOURCES,
AND ACCURACY IS NOT
GUARANTEED. THOSE
WISHING TO STAKE MIN-
ING CLAIMS SHOULD CON-
SULT WITH THE MINING
RECORDER, MINISTRY OF
NORTHERN DEVELOP-
MENT AND MINES, FOR AD-
DITIONAL INFORMATION
ON THE STATUS OF THE
LANDS SHOWN HEREON.

400' SURFACE RIGHTS RESERVATION AROUND ALL THE
LAKES AND RIVERS

(*) SEC 35/90 W-30-89/94 27/05/94 M.R.O. 195150

TOWNSHIP
MONMOUTH

M.N.R. ADMINISTRATIVE DISTRICT
MINDEN
MINING DIVISION
SOUTHERN ONTARIO
LAND TITLES / REGISTRY DIVISION
HALIBURTON

Ministry of Natural Resources
Ontario
Ministry of Northern Development
and Mines

Date FEBRUARY, 1987
Number
G-1298

2.19831
RAD
PTRNCH
XVII

XVI

XV

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XI

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VII

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III

II

I

Cardiff Twp.

Glamorgan Twp.

Anstruther Twp.



31B01S2003 2.19831 MONMOUTH 200