

**Report on Assessment Work
for Claim #SO1500642**

**Desmont Mine property
Lots 31, Concession 17 , Monmouth Township,
Haliburton County,
Southern Ontario Mining District**

Submitted to the
Ontario Ministry of Northern Development and Mines
Geoscience Assessment Office
993 Ramsey Lake Road
Sudbury, ON

Prepared by: Chris Fouts
May 24, 2015
16 pages

On behalf of the
Corp. of the Municipality of Highlands East

TABLE OF CONTENTS

Summary	3
Introduction	4
Location and Access	4
Regional Geology	5
Property Geology	5
Work Performed	7
Results	8
Health, Safety and Environment	11
Conclusions and Recommendations	11
Acknowledgements	12
References	12
Maps	
Claim location map	5
Regional geology map	6
GPS track map May 3, 2015	16
GPS rack map May 5, 2015	16
Appendix 1 (Photos)	12
Appendix 2 (GPS track maps)	16

SUMMARY

Prospecting assessment work was performed on Claim #1500642, lot 31, concession 17, Monmouth Township, Haliburton County, by Chris Fouts, Ulrike Kullik, Byron Berwick, Don Doell Jr., and Tom McCrae on May 3, 2015. Further assessment, including prospecting, mapping and sampling was performed by Chris Fouts on this claim on May 5, 2015.

Work performed and results are detailed below. Past exploration sites, such the “Main Cut” and “East Cut” and adit, done by Desmond Mining Corp., (and possibly others), were prospected for their geology, mineralogy, and mineral potential. As well, examinations were done to assess their safety and access to the public, (should this be deemed amenable). Further prospecting was done to the north end of the claim to look for other past exploration sites, and to map bedrock outcrops.

Overall, assessment has shown that this claim area holds great potential for development as a public mineral collecting site, administered by the County of Haliburton, or some other publicly orientated tourist organization. Good examples of euhedral diopside, actinolite, feldspar (albite), molybdenite, apatite, titanite, zircon and stillwellite can be recovered from calcite, pyroxenite and granite rock found in old exploration workings, along with examples of coloured calcite, anhedral quartz, pyrite, pyrrhotite, chalcopyrite, tourmaline, chondrodrite, graphite, and phlogopite. An old logging road makes access to the sites relatively simple and easy.

Further assessment should be done to delineate the geology of the rest of the claim to target any other former exploration areas, or potential outcrops.

INTRODUCTION

Southern Ontario mining claim SO 1500642 is 2 units in size and consists of lot 31, concession 17, Monmouth Township, (G-1298), Haliburton County, southern Ontario, and was map staked by Bradley S Wilson (Client # 209191) on June 6, 2013 and is 100% owned by the Corporation of the Municipality of Highlands East, (client # 409713). The claim is very close to the Village of Wilberforce, and was staked and explored in the past by Desmont Mining Corp., and Homer Yellowknife Mining for molybdenite and uranium.

The Corp. of the Municipality of Highlands East has arranged for Chris Fouts to organize, perform and write up assessment work for this claim, by prospecting to further outline the geology, mineralogy, and collecting potential. Financial costs for this has been covered by the Ontario Highlands Tourism Organization, of which the County of Haliburton is a member, and is dedicated to developing earth science related tourism in the Ontario highlands region.

Chris Fouts is an exploration geologist who graduated from the University of Western Ontario in 1986, and has worked for the Ontario Ministry of Northern Development and Mines, the Ontario Geological Survey, and various private exploration companies. As well, he is a licensed prospector (licence # 1008328) and long-time mineral collector, field trip leader, and currently is Vice-president of the Bancroft Gem & Mineral Club.

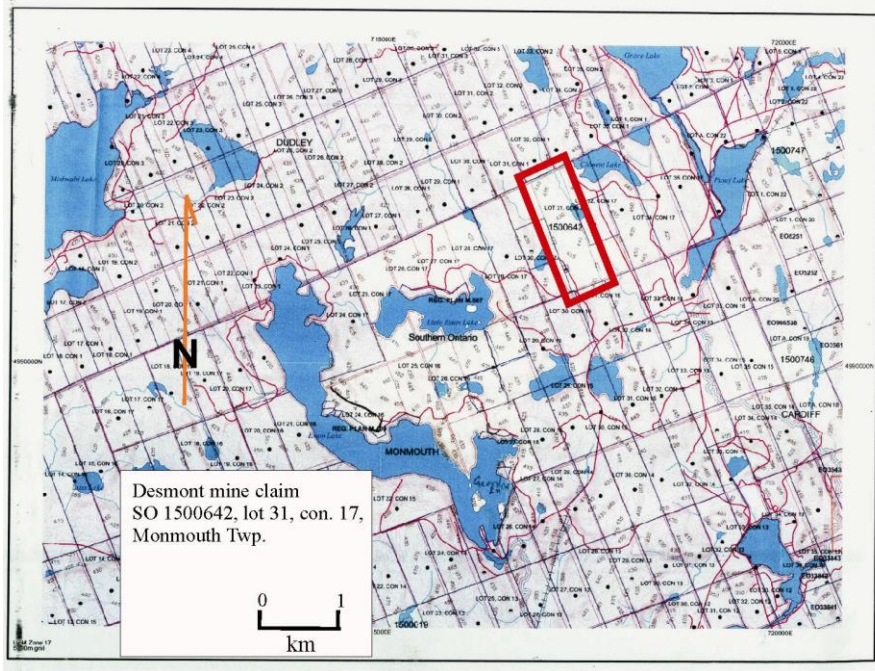
LOCATION and ACCESS

Easy access to the claim is made from county and township roads. From Wilberforce, head west on the Essonville Road for 1.1 km to the Cedar Lake Road, turn right (north) and travel 700 metres to a lane on the right. Just a few meters along this lane is a parking area which can hold about 5 vehicles. The site is on top of a hill, (up and to the right of the parking area), and is accessed along a logging road, and then by trails.

The claim is roughly 1 km W of the Village of Wilberforce, and 85 km N of Peterborough.

The claim has moderate relief with gentle hills. Elevation is between 404.3 and 443.8 metres asl, (1330 and 1460 ft.). Vegetation is juvenile mixed forest composed of mainly maple, with minor amounts of pine, beech, birch and poplar. Few trees reach 12 inches in diameter. The claim area was selectively logged over about 10 years ago, and many tree tops have been dumped into depressions and shallow trenches dug in the past for exploration.

Map 1: Location of claim #SO1500642, Monmouth Township, Haliburton Co.



REGIONAL GEOLOGY

The claim area is located in the Canadian Shield, Grenville Province, south of the Central Metasedimentary Belt Boundary Zone.

“It is a highly metamorphosed terrane comprising granitic, basic, ultramafic and feldspathoidal intrusives and a sedimentary sequence of marbles, calc-silicate gneisses, quartzites and intermediate paragneisses. Granitic rocks are of two distinct ages; the older granites are mappable as large, gneissic and essentially conformable bodies and the younger granites as small, massive, jointed discordant bodies with sharp intrusive contacts, Many of the rocks are nepheline normative.”, (Armstrong & Gittins, 1968).

The bedrock is dominated by highly metamorphosed sediments of sandstones, marbles and shales now expressed as granitic and syenitic gneisses, marbles, quartzites and amphibolites, in excess of 1.1 Ga, and intruded by granitic and syenitic intrusions of about 900 Ma. Skarns, formed by the intrusion of granites and syenites into calcareous sediments, are common throughout the region.

The regional geology is outlined in OGS Preliminary Map P.3526; *Precambrian geology, Wilberforce area*, (Lumbers & Vertolli, 2003).

PROPERTY GEOLOGY

The claim area has extensive overburden with widely spaced outcrops, generally with low, rounded profiles. Overburden is mostly thin, about 15 to 40 cm, but can reach 3.5 meters deep. Most exposure is found on the north and eastern sides of hills or ridges.

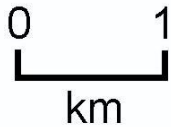
Bedrock on the southern half of the claim is mostly medium green coloured, sugary textured, very friable, pyroxenite (likely diopside). The grain size is between about 0.5 to 1.0 mm across. In the north half of the claim the most common rock type is white, medium grained marble, with fine grained silicate inclusions ranging from 10 to 40%. Grain size ranges from 1 to 5 mm, and inclusions are abundant white and amber mica, abundant diopside, occasional pyrite and graphite, and minor chondrodite.

Regional Geology

Desmont Mine property marked as #7

Map scale 1:50,000

from Lumbers & Vertolli, 2003



24 Fenite:
Highly syenitized rocks developed mainly in alaskitic granite (unit 21); with abundant patches and veinlets of alkali pyroxene and amphibole and local patches of highly fenitized rock (unit 25); original lithology has been largely replaced by nepheline-normative alkali feldspar syenite

Alaskite Suite (1250-1240 Ma)^d

21 Granitic Rocks
21a Gneissic, metaluminous to marginally peraluminous sialite with augen structure and relict igneous textures
21b Unit 21a with laminated structure and a metamorphic fabric
21c Gneissic, leucocratic monzogranite with augen structure and relict igneous textures
21d Gneissic, contaminated, metamorphic to marginally peraluminous alaskite formed by the assimilation and reaction of marble with alaskite magma; these rocks are mainly gneissic biotite-hornblende monzogranite and quartz syenite
21e Gneissic, alkali feldspar syenite and alaskite; minor pyroxene monzonite and fine-grained alaskite dikes; augen texture common, locally relict igneous textures are preserved

Nepheline Syenite Suite (<1290 >1250 Ma)^d

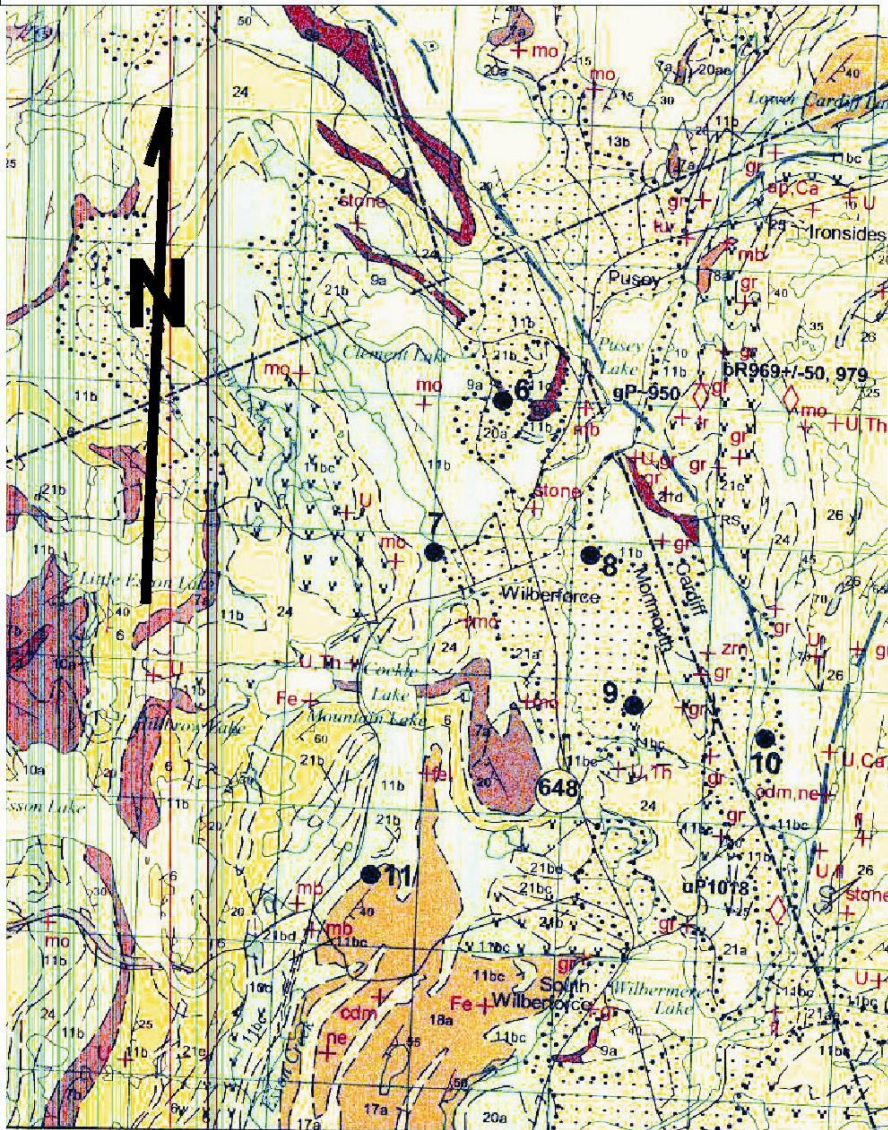
18 Alkalic Syenite
18a Gneissic, leucocratic, potassium feldspar-bearing albite syenite and minor alkali feldspar syenite with augen texture to laminated structure and a metamorphic fabric
18b Gneissic pyroxene and amphibole alkali feldspar syenite; probably formed by the assimilation and reaction of marble with albite syenite magma

METASEDIMENTARY ROCKS (1400-1350 Ma)^f

11 Calcitic Marble
11a Medium- to coarse-grained, grey to white, gneissic calcitic marble containing up to 20% siliceous impurities; locally contains intercalated units of siliceous marble
11b Medium- to coarse-grained, gneissic, siliceous calcitic marble containing 20 to 60% siliceous impurities; commonly contains thin intercalated units of amphibole-rich metasedimentary rocks (unit 9)
11c Light to dark green skarn developed from calcitic marble; dominated by varied mixtures of diopside, amphibole, epidote, titanite, garnet, potassium feldspar, scapolite, calcite and quartz

7 Feldspathic and Quartzose Clastic Metasedimentary Rocks

7a Medium- to coarse-grained, plagioclase-potassium feldspar-quartz gneiss; intercalated orthoquartzite, siliceous marble, amphibole-rich metasedimentary rocks of unit 9 and garnetiferous biotite-plagioclase quartz gneiss common; unit probably derived from fine to coarse arkose and subarkose
7b Diopside-potassium feldspar-quartz gneiss containing 50 to 70% quartz; commonly contains thin units of siliceous, micaceous metasedimentary rocks (unit 8) and rocks of unit 7a; probably derived from calcareous subarkose



Adjoins Ontario Geological Survey Map P.3403, Coe Hill area

The pyroxenite is a skarn formation from the intrusion of white granite into calcareous sediments, (likely limestones). This granite can be seen in some outcrops to the southeast part of the claim. The granite is medium to coarse grained, (2 – 45 mm across), with white feldspar (likely albite), and smoky quartz, with rare black mica. The grain size is quite variable. Rare accessory, 1 – 2 mm sized zircons, titanites and apatites can be found in certain zones of this granite.

Work concentrated on exploration areas outlined by past work done in the 1950's by the Desmont Mining Corp. Certain areas in the green pyroxenite skarn show calcite veins and patches. The calcite is generally coarse grained, and ranges in colour from white to grey, yellow, pink and orange. In, or near, these calcite occurrences can be found zones bearing molybdenite, pyrite, and uranothorite, as well as coarse grained and well developed crystals of diopside, actinolite, albite feldspar, and rare quartz and apatite. Ann Sabina, (1986), lists as having found the following minerals at this site: clinopyroxene, calcite, clinoamphibole, pyrite, molybdenite, marcasite, pyrrhotite, goethite, chondrodite, titanite, quartz, magnetite, plagioclase, k-feldspar, uranothorite, thorianite, tourmaline, apatite, scapolite, graphite, gypsum, serpentine, stillwellite, hydroxylbastnaesite, monazite, allanite, ancylite, garnet, sphalerite, sulphur, chlorite, amber mica, and perrierite.

WORK PERFORMED

May 3, 2015:

Travel to claim site. Work crew consisted of; Chris Fouts (author), a geologist, licensed prospector, long time mineral collector and Vice –president of the Bancroft Gem & Mineral Club, who travelled from his residence to Bancroft (63 km); Mr. Byron Berwick, a long time mineral collector and member of the Kawartha Rock & Fossil Club, travelled from his residence in Trenton, (156 km); Mrs. Ulrike Kullik, long time mineral collector and field trip director for the Kawartha Rock & Fossil Club, who travelled from her residence in Havelock, 96 km), Mr. Don Doell, prospector, long time collector and member of the Kawartha Rock & Fossil Club, who travelled from Peterborough, (101 km); and Mr. Tom McCrae, a relatively new collector/pro prospector, member of the Kawartha Rock & Fossil Club, who travelled from his residence in Belleville, (157 km).

The group met at Agnew's General store in Wilberforce at 9:30 am, and then travelled to the claim, arriving at 10 am. Work consisted of exploring the "Main Trench", dug out by the Desmont Mining Corp., assessing the site for hazards, collecting potential, and mapping the cut. Work here progressed until about noon, when we moved to the vicinity of the adit, east of the "East Trench". Once again, work was performed to assess the safety of the site and possible mineral collecting potential. Mr. McCrae finished work at about 3 pm, while the rest of the group finished at about 4:00 pm, and travelled home. GPS coordinates were recorded at all sites, and a GPS trail was recorded, (see Map 3).

May 5, 2015:

Chris Fouts travelled to the claim, arriving at about 10 am, and travelled northwards along the logging/ATV trail, identifying past trenching and bedrock clearing areas done by the Desmont Mining Corp. By locating such sites they can be assessed for safety, collecting potential, and suitability for public collecting sites. Work proceeded until 4:30 pm, when Mr. Fouts returned home. GPS coordinates mark all such sites located, and a GPS trail is available, (see Map 4)

RESULTS

May 3/15:

Light cloud to overcast, temperature about 10 to 13C. Park in the clearing just off Cedar Lake Road and proceed uphill to "Main Cut". (Parking area – 717462 / 4991070 – All GPS coordinates are for zone 17)

The first 2.5 to 3 hours were spent prospecting the “Main Cut”, (717530 / 4991063). The sides of the cut have slumped in over the past 50 or so years, leaving rubble and dirt covering the bottom of the cut and almost all of the sides. Boulders and rubble in the cut are almost exclusively composed of medium grained even textured, sugary, green pyroxenite skarn. Grain size is about 0.5 to 1 mm. In the pyroxenite is found patches and veinlets of coarse grained calcite ranging in colour from white to grey, pink, yellow and orange, (orange calcite is almost always productive when looking for well developed mineral specimens). In the calcite, along the contact of the pyroxenite, can be found coarse grained crystals of abundant medium green euhedral pyroxene (diopside), minor dark green, euhedral clino-amphibole (actinolite), minor white feldspar (albite), minor anhedral smoky quartz, minor euhedral micros of pyrite, rare clear yellow-green apatite, and rare reddish-brown micros of stillwellite. In the pyroxenite, close to calcite zones can be found minor bluish-silvery coloured, anhedral to euhedral, molybdenite flakes, minor anhedral pyrite, chalcopyrite, and rare pyrrhotite, rusting to goethite; and rare subhedral, glassy to dull lustred, uranothorite, often with thin red hematite haloes.

Cobbles and boulders in the cut and in piles beside the cut were productive for mineral specimens, but the rubble inhibits the further exploration of the bedrock here.

After prospecting the “Main Cut” the group travelled over to the area of the adit, located in a ridge, east of the “East Cut”. Rubble from the adit is on the side of the ridge and along the bottom, under the adit opening. Adit – 717599 / 4991393.

Certain areas on the hillside contained boulders and cobbles of even textured, medium grained pyroxenite skarn with abundant molybdenite flakes, subhedral to euhedral, up to 4 cm across; plus minor anhedral pyrite, pyrrhotite and rare chalcopyrite. Boulders along the bottom of the ridge were both pyroxenite and white granite. The granite is medium to coarse grained, with a variable texture, and is better classified as an “alaskite”, due to no presence of mica. Certain boulders and cobbles of granite contain zones bearing dark brown zircon (up to 2 mm in length), and red to reddish brown titanite, (up to 5 mm across). A few pieces containing pyroxenite and granite together held titanites up to 5 cm across. No coloured calcite was encountered here, and no radioactives were observed.

Finish for the day. Return home.

May 5/15:

Sunny and mild to partly cloudy later in the day. Temperature about 15 to 17C. Park at the cleared parking area off the Cedar Lake Road and proceed uphill along logging road. All UTM coordinates are for Zone 17.

Pt. A: UTM 717480 / 4991170

Flagging on sapling for trail leading east to “Main Cut”

Pt. B: UTM 717443 / 4991333

Flagging for trail leading east to “East Cuts”.

Pt. C: UTM 717370 / 4991389

About 4m to the west side of road is a cut dug by Desmont Mining which is now mostly filled with tree tops from recent logging, and garbage left by some unknown individual, (old bathtub, construction wood, garbage). The cut measures about 8 metres long and 4 metres wide, running roughly ENE. The fill makes it difficult to determine the depth of the cut, but it is estimated at about 2.75 metres. Material from the cut has been piled to the south side of the cut, and upon inspection revealed rubble (pieces from sand sized to 20 cm across), of green pyroxenite, some coarse grained dark green actinolite, some coarse grained yellow to orange calcite, small amounts of anhedral pyrite, and trace amounts of small molybdenite flakes.

For a public collecting site, the garbage must be removed, and the tree tops removed with heavy machinery.. With better exposure the depth and attitude of the cut walls can be assessed for safety and for collecting potential. The dump material looks to be somewhat productive for collecting, and coarse grained orange calcite usually carries interesting specimens.

Pt. D: UTM 717351 / 4991412

Old dug cut located about 2 metres east of road, about 15 metres long and 10 metres wide. Cut is about 1 – 1.5 metres deep and has a lot of tree tops dumped in it. Sides of cut are badly slumped and no bedrock can be seen. What rubble may have been removed from cut is not obvious on site.

Pt. E: UTM 717339 / 4991437

Old cut about 1 metre east of road, about 15 metres long by 7 metres wide and 1 to 3 m deep. Filled with tree tops, leaf litter, saplings, and slumped material from sides of cut. One exposure shows green pyroxenite skarn, with a cg orange calcite vein about 3 cm wide.

Pt. F: UTM 717301 / 4991446

Just about the maximum height of land along road, (land is a little higher by ~1.5 m just east of road). On the road is a bedrock outcrop about 9 m long by 1 m wide. The bedrock is white marble, with grain size between 0.5 to 3.0 mm, containing fragments of green and rusty brown pyroxenite skarn rock. The marble contains about 5 – 10% inclusions of fg brown mica, graphite, orange chondrodite, and minor pyrite. There is some banding or layering in the marble, likely structural foliation from deformation, but it is quite variable within the outcrop. Looks to be generally N-S.

Pt. G: UTM 717232 / 4991537

Outcrop along road, about 4 m long by 1 metre wide. White, medium grained marble, (1-5 mm), with about 5% fg anhedral chondrodite and 1% graphite and mica. Rough N-S trend.

Pt. H: UTM 717229 / 4991545

Old cut about 2 metres east of road, ~16 metres long by 5 metres wide and 3 metres deep. Heavily overgrown with small pine trees, and with heavily slumped cut walls. Boulder in cut shows green pyroxenite with cg yellow calcite carrying cg white feldspar crystals. Exposed bedrock in cut shows sandy green pyroxenite with minor smoky quartz, white feldspar, and white to yellow calcite. Further digging to expose bedrock along cut walls is necessary.

Pt. I: 717239 / 4991562

East end of cut described in Pt. H

Pt. J: 717224 / 4491577

Old cut just east of road, (~2m), ~15 metres long by 1 m wide, and 0.3 to 1 m deep. Badly slumped sides make for little exposure, plus some tree tops from logging hamper part of the area. Some boulders show green pyroxenite with cg yellow calcite and some cg white feldspar. This site shows some promise for collecting and should be assessed for mineral content.

Pt. K: no reading.

Outcrop along road, about 0.5 by 0.5 metres, shows very rusty coated green pyroxenite carrying fg pyrite and possibly pyrrhotite.

Pt. L: 717259 / 4991660

Tire dump, about 9 metres east of road. About 60 – 75 automobile and light truck tires have been dumped here. Most are not too bad a shape, but none have any lustre left on the rubber.

Pt. M: 717248 / 4991671

Outcrop just off the west side of the trail, about 1 by 1 metre in size. Clean white marble, with a grain size of 0.5 – 1 mm; even textured. Area to the west of the road is low lying and wet.

Pt. N: 717254 / 4991683

Outcrop along trail, about 4 m by 1 m. White to slightly pink granite pegmatite (abundant white feldspar and smoky quartz, no mica, rare fg pyrite and fg titanite – alaskite?). Grain size ranges from 0.5 to 5.0 cm across.

No “O” point.

Pt. P: 717241 / 4991703

What looks to be a small pit dug beside the road, (east side), by loggers for the purpose of road building, shows some boulders of green pyroxenite with some white feldspar and white to yellow calcite. Both sides of the road show signs of the overburden being disturbed. A little digging uncovered cobbles and small boulders of coarse grained pyroxene and calcite, (crystals up to 2 cm in size). The dirt here is very red and has abundant fine flakes of phlogopite mica. This area deserves more attention in the form of prospecting.

Pt. Q: 717215 / 4991818

The lay of the land begins to fall away to the north. Just to the west side of the road is an area that has been disturbed within the past 10 years by someone digging into outcrops with hand tools, although there are some good sized boulders to the east side of the trail, so possibly heavy equipment has operated here in the past as well. There is a great range of rock types in the rubble, ranging from green pyroxenite showing fg even texture, to cg, with actinolite and quartz, and marble, fg to cg, white to grey to yellow, with fg pyrite, mica and some graphite. A 2 cm long euhedral albite crystal was found in the dirt and rubble. The outcrops are green fg pyroxenite with no visible accessory minerals. It is not clear what was being dug out here.

Pt. R: 717170 / 4991833

Outcrop along road, about 7 by 5 metres in size, shows cg, crumbly white marble (2 – 6 mm grain size), with about 30% fg silicate inclusions consisting of diopside, mica, minor chondrodite and pyrite.

Between pt.Q and pt. R the land descends quickly about 10 - 15 m, goes through a valley, and then rises about 8 - 12 m to flatten out at pt. R.

Pt. S: 717078 / 4992002

Outcrop along road, about 5 by 1 metre in size, shows white cg crumbly marble similar to Pt. R.

The area around this part of the road is relatively flat and open, and was obviously used as a logging landing during the past logging operations.

Pt. T: 717040 / 4992092

After leaving the log landing at Pt. S the road quickly degenerates and is all but indistinguishable by this point. A lot of saplings are growing up in this area, (3 – 5 cm diameter). The largest white pine tree in the area is just to the right (east) of the trail. The trail is not obvious beyond this point.

Return south to parking area to meet Michael Bainbridge, of the OHTO, Curtis, of the Haliburton County office, and Brent Hagen of the Ontario Ministry of Northern Development & Mines. 2:30 pm

Visited “Main Cut” with group. Determined that the cut is not deep enough to pose a hazard to collectors and that simply cleaning out the cut with a backhoe would not significantly impact the area in any way.

Visited the “East Cut” and things were found to be similar to the “Main Cut”. It was felt that cleaning out the cut of rubble would not impact the landscape or cause a hazard to visitors.

Visited the “Adit”, in the small ridge east of the “East Cut”. There is a very short adit, about 3 m high, 3 m wide and 5 m in length, which descends at an angle of about 25 degrees into a ridge very close to the east edge of the property. It is unknown which company dug the adit, but it is deemed to be too large, and unsafe to allow the public into it. Mr. Hagen stated that the adit needs to be closed off or buried. Burying it would pose some challenge as the adit is located on the west face of a steep ridge, about half way up the ridge face. Heavy machinery would be needed to close the hole, but the face is too steep for machinery to reach it without building a ramp to it. Going above the hole would require much more travel through the bush, and the rubble from the adit is at the bottom of the hill.

To open this claim to public mineral collecting will require the adit be buried or made inaccessible. Some creative thinking will be required to deal with this problem.

Visit old cuts at Pt. C, D & E. As with the “Main cut” and the “East cut”, removing the tree tops, garbage and slumped rubble will not cause any significant impact to the area, and as long as the cuts are not more than 3 m deep and have no steep sides which may pose a hazard to people moving through the bush, then there should be no impediment to using these locations for public mineral collecting.

Finish for the day at 5 pm. Return to Bancroft.

HEALTH, SAFETY and ENVIRONMENT

All individuals performed their work with proper working and safety equipment, (proper footwear, clothing, safety glasses, etc), and no health or safety concerns arose during the course of this work.

RESULTS and CONCLUSIONS

Prospecting work done on May 3 found that the “Main Cut” still shows much potential for mineral collecting. Good examples of green diopside crystals, (up to 2 cm long), dark green actinolite, (up to 1 cm in size), white albite feldspar, (~1 cm high), molybdenite flakes in pyroxenite, (up to 1.5 cm across), uranothorite crystals in pyroxenite, (~2 – 5 mm), clear yellow-green apatite crystals (up to 5 mm long), and micro stillwellite, (up to ~1mm across) were recovered, along with examples of white, grey, pink and orange massive calcite, anhedral smoky quartz, anhedral black tourmaline (dravite?), anhedral pyrite and pyrrhotite. The sides and bottom of the cut are mostly concealed by rubble from the cut sides which has slumped into the cut over the past 50 – 60 years. The cut looks to be only about 2.5 m at its deepest, and would not pose a safety threat if it had the rubble removed. Clearing this away would help collecting by exposing the bedrock to better examination. The rubble dug out from the cut is still productive for collecting.

Checking the rubble removed from the adit revealed abundant molybdenite flakes, with pyrite, in pyroxenite, and white granite containing rare amounts of titanite, (up to 3 cm across), and zircons (up to 2 mm long).

The prospecting work from May 5 located more old cuts done by Desmond Mining further north on the claim, not previously noted. These cuts need to be explored further to assess their geology and mineral contents. The presence of boulders or rubble in these cuts containing coarse grained calcite is a positive sign that mineral specimens are present.

Further prospecting in the claim may uncover interesting outcrops.

The coarse grained calcite zones in the pyroxenite would seem to represent pods of residual liquid which collected after the intrusion of the white granite into calcareous sediments (limestones) at about 1250 Ma to

1240 Ma, (Lumbers & Vertolli, 2003). After the heat of the granite intrusion brought the limestones to a liquid or plastic state, silica rich fluids from the granite permeated the material and reacted with the free calcium forming large areas of even textured calc-silicates (mostly green pyroxenite {diopside}). In the latter stages of formation, pods of residual liquid formed where excess calcite carbonate pooled, along with incompatible elements such as molybdenum, uranium, thorium, and boron. Cooling slowly allowed the development of large crystals of diopside, actinolite, feldspar along the edge of these pods, as well as a home of developing molybdenite and uranothorite crystals. It may be expected that more examples of titanite, zircon, phlogopite and apatite should be found in the calcite pods as well, but experience to date seems to indicate that titanite and zircons are limited to the granite material near the contact with the pyroxenite, not in the calcite.

This property has long been a productive location for mineral collecting enthusiasts. The skarn geology present here hosts a wide variety of mineral species, and specimens here can be relatively large, as is characteristic for this area of the province. The collecting potential for this property is large and wide spread, although due to poor overall bedrock exposure will likely be concentrated on the old exploration workings (trenches & bulldozed areas) done by Desmont Mining Corp. in the 1950's.

As shown by the prospecting on May 3, the "Main Cut" still has plenty of examples of crystals of diopside, molybdenite, feldspar (albite), actinolite, pyrite, and stillwellite, plus massive coloured calcite, smoky quartz, chromium-bearing diopside, amongst others. Digging out the rubble from the "Main Cut" and the "East Cut" should provide ample collecting for the public and a safe environment in which to do so. Digging out the rubble from other, neglected trenches should enhance the experience and viability of the site.

The logging road provides easy and simple access to collecting locations, and will assist with bringing in any heavy equipment to clean up the site.

It is strongly recommended that further prospecting and mapping work be carried out to explore the rest of the claim, and to retain the mining rights here towards developing this claim as a public mineral collecting site.

ACKNOWLEDGEMENTS

The author would like to acknowledge the assistance of Byron Berwick, Ulrike Kullik, Donald Doell, and Tom McCrae for their hard work and dedication to developing mineral collecting. Michael Bainbridge and the Ontario Highlands Tourism Organization must be thanked for their vital financial support for the development of the mineral collecting recreational hobby. Thanks also to the County of Haliburton for promoting recreational geological tourism and developing public mineral collecting sites here and at a number of localities in Haliburton County.

REFERENCES

Armstrong, H.S. and Gittins, J., 1968; Geology of Glamorgan and Monmouth Townships, Haliburton County; Ontario Geological Survey, Open File Report 5021.

Sabina, Ann, 1986: Rocks and Minerals for the Collector; Bancroft – Parry Sound and Southern Ontario; Geological Survey of Canada, Miscellaneous Report 39, 182 p.

Lumbers, S.B. & Vertolli, V.M., 2003: Precambrian geology, Wilberforce area; Ontario Geological Survey, Preliminary Map P.3526, scale 1:50,000, (31E/1).

APPENDIX

Photos from assessment work.



May 3 – Desmont property parking area



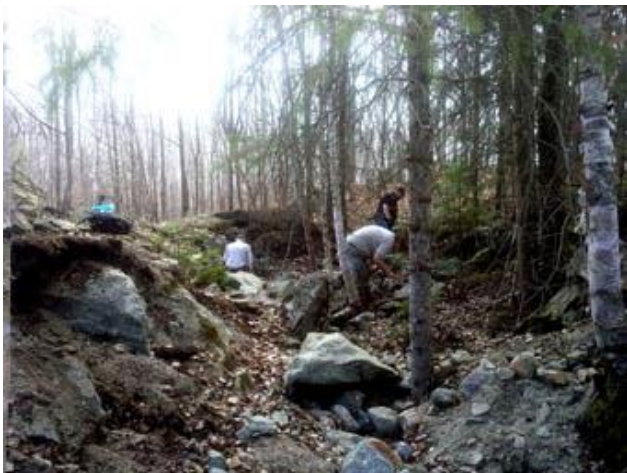
May 3 – “Main cut” of Desmont Mining Corp.



May 13 – “Main cut” – Tom McCrae.



May 3 – “Main cut” - Ulrike checking dumps.



May 3 – “Main cut” – Byron, Don & Tom.



May 3 – “Main cut” – Chris & Ulrike.



May 3 – View from near adit entrance.



May 3 – Looking up towards adit.



May 3 – Near adit – Chris Fouts.



May 3 – Down slope from adit – Tom McCrae.



May 3 – Near adit – Byron Berwick.



May 3 – Near adit – Don Doell with Ulrike Kullik pointing out titanite crystal.



May 3 – Near adit – Don, Ulli & Byron.

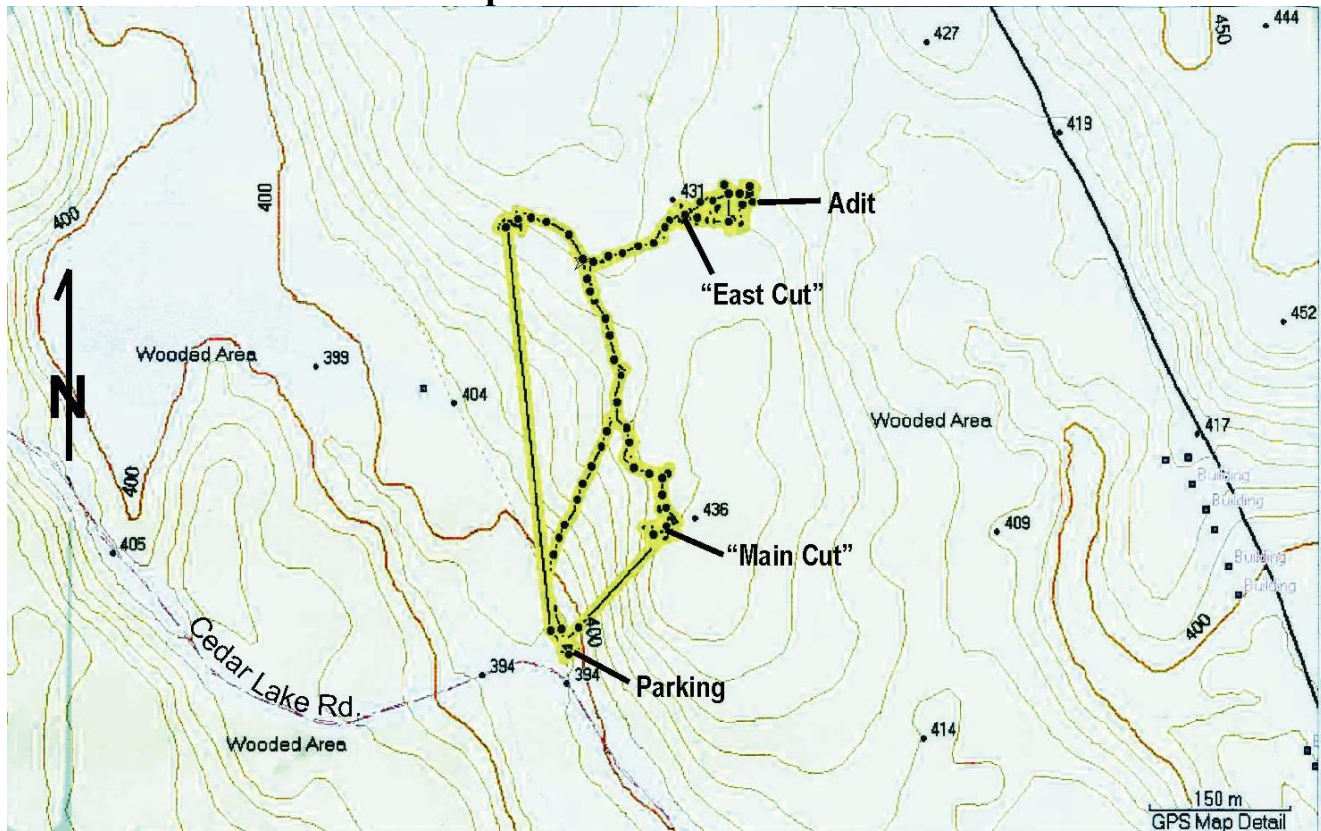


May 5 – Chris & Odin exploring old trenches, (Pt. J).

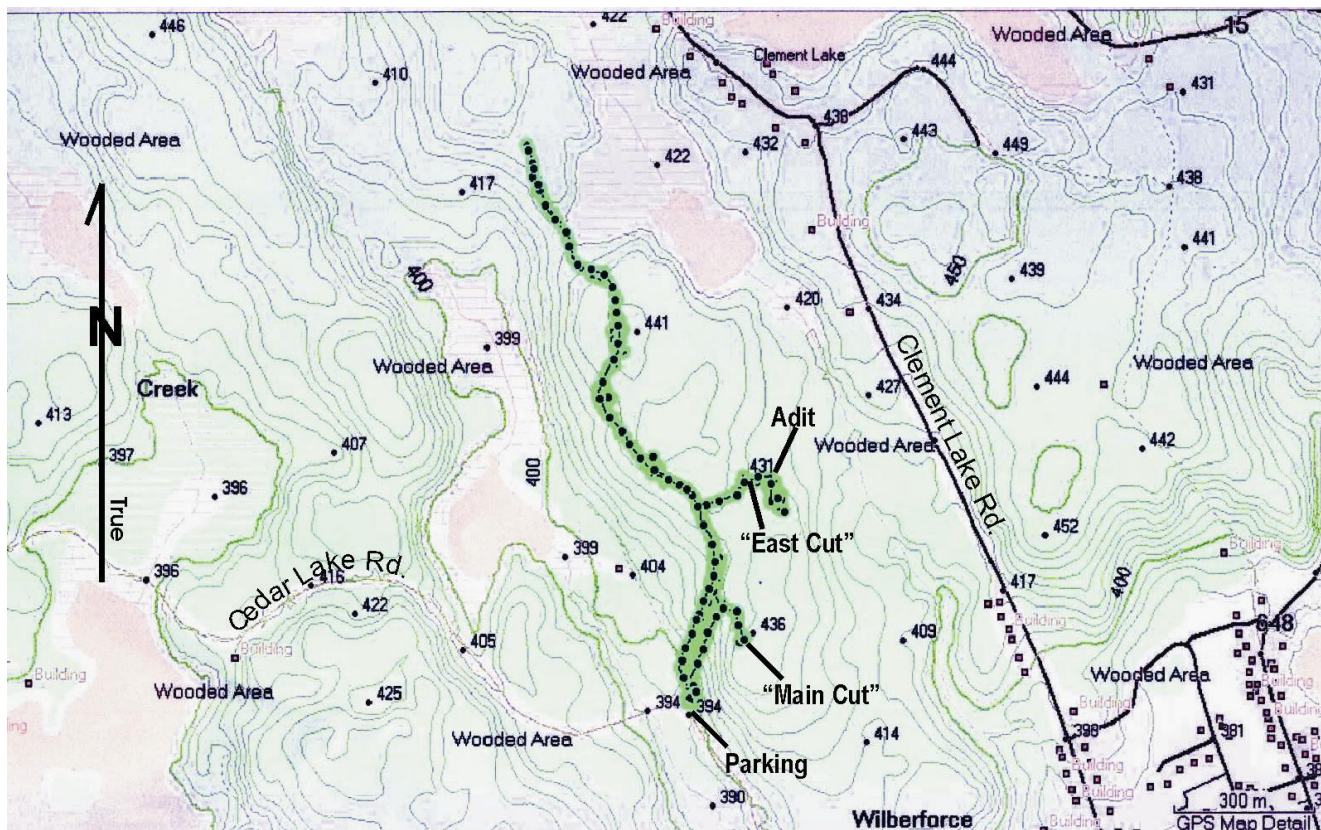


May 5 – Lazy digging assistant, Odin, (Pt. P).

APPENDIX 2: GPS track maps for assessment work.



Map 3: GPS tracks for May 3, 2015-06-03



Map 4: GPS tracks for May 5, 2015