

2.44778

**REPORT OF MAPPING AND SAMPLING OF MINERALIZED EXPOSURES**

**CLAIMS 4240522 AND 4241016**

**YEO TOWNSHIP**

**PORCUPINE MINING DIVISION, ONTARIO**

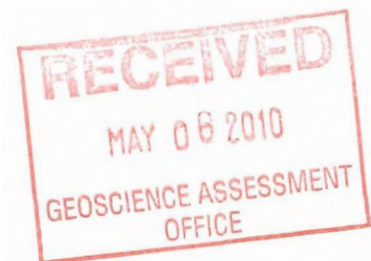
**FOR**

**CROWN MINERALS INC.  
130 ADELAIDE STREET WEST  
SUITE 2700  
TORONTO, ON  
M5H 3P5**

by

Robert M. Kuehnbaum, P.Geol.

May 4, 2010



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## 1. INTRODUCTION

The assessment work discussed in this report was done on April 19, 20, 22 and 23, 2010. In addition, an attempt to access the Property was made by B. Polk on April 4, 2010, but this was unsuccessful due to poor road conditions.

This work was done in the light of recent developments on an adjacent property held by Trelawney Mining and Exploration Inc. ("Trelawney"), including releases of drillhole intercepts of up to 8.20 g/t Au over 107.11 metres and 1.88 g/t Au over 190.66 m (March 3 and April 22, 2010, respectively). Trelawney considers that the mineralization may be in an Archean porphyry-like setting. The objective of this work was to examine or map and resample known occurrences and to improve on previous work by channel sampling with a rock saw.

## 2. LOCATION AND ACCESS:

Access to the property is via Highway 144 between Timmins and Sudbury, On., followed by travel for roughly 5 km westward on the Sultan Industrial road. There, the northbound Chester Road provides direct access to the property about 12 kilometers in. Four-wheel drive capability is recommended for the Chester Road. Numerous trails within the claims were utilized using ATVs. See Figure 1.

## 3. PROPERTY DESCRIPTION:

The mining claims discussed in this report are owned 100% by Crown Minerals Inc. of Toronto. The property consists of two six-unit claims in Yeo Township and a two-unit claim in Chester Township (Figure 2). All of the work reviewed herein was done on the Yeo Township claims. The Crown claims are collectively referred to herein as the "Property".

**TABLE 1. CLAIM STATUS**

<b>Claim</b>	<b>No. of Units</b>	<b>Recording Date</b>	<b>Expiry Date</b>
4240522	6	May 07, 2008	May 07, 2010
4241016	6	May 07, 2008	May 07, 2010
422045	2	Feb 13, 2008	Feb 13, 2011

## 4. PREVIOUS WORK:

Work has occurred sporadically in the Yeo and Chester Twps. since the 1920s. Activity in the region no doubt centered on the gold occurrences and the former Young Shannon Mine to the east of the Property in Chester Twp., an area now held by Trelawney.

The following is a summary of work recorded in the assessment files at the Ministry of Northern Development, Mines and Forestry in Porcupine ON, which fully or partly overlies the present Property.

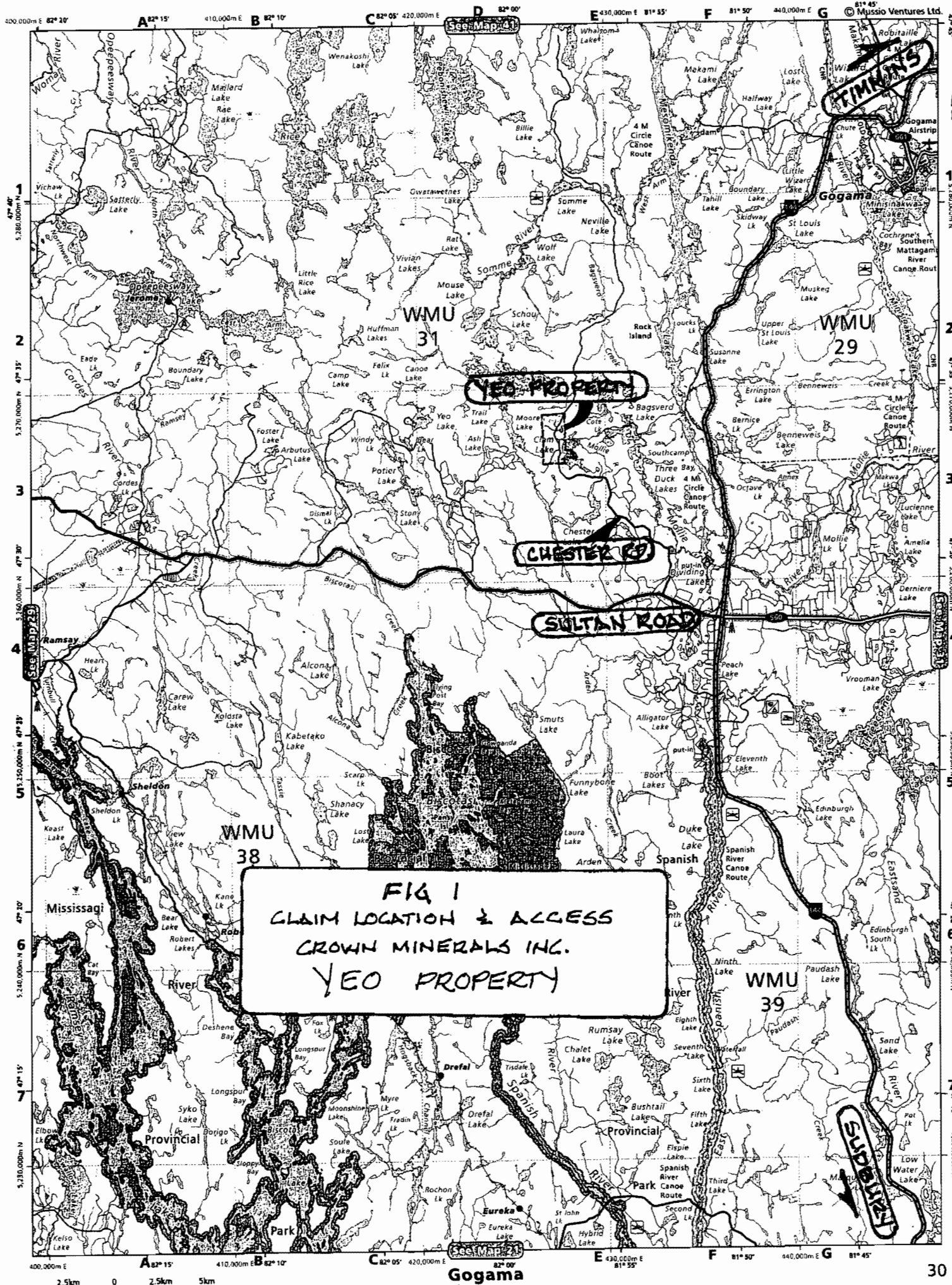


FIG 1  
 CLAIM LOCATION & ACCESS  
 CROWN MINERALS INC.  
 YEO PROPERTY

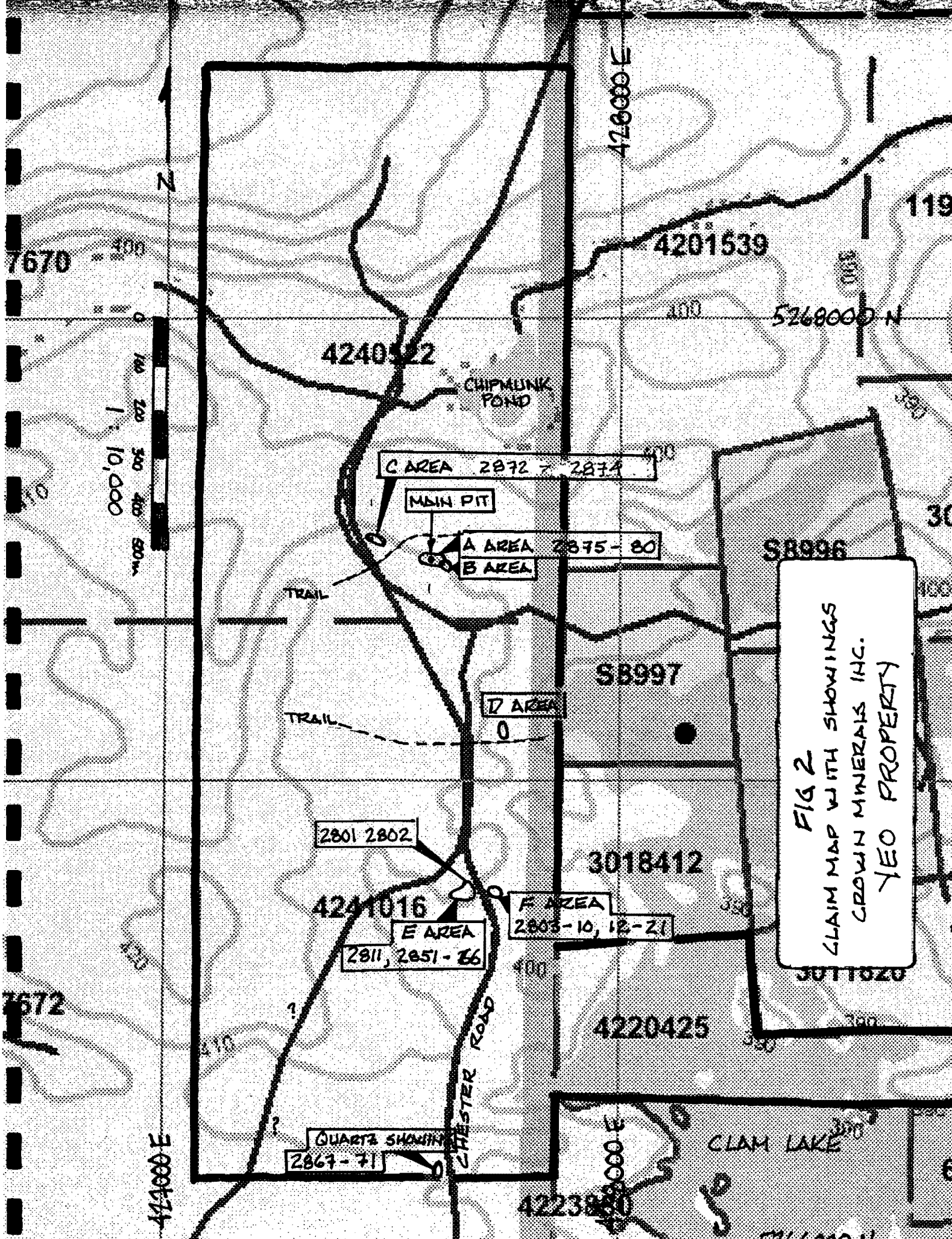


FIG 2  
 CLAIM MAP WITH SHOWINGS  
 CROWN MINERALS INC.  
 YEO PROPERTY

- 1961, Jonsmith Mines, Limited: four drillholes on three claims in Chester and Yeo Townships. Three of those holes were on and just west of a bay of Clam Lake in the southeastern area of the present Property, probably east of the Chester Road. No analytical results were reported (Assessment Report T-2202).
- 1978, Canadian Crest Gold Mines Ltd. / Baxter Minerals Ltd.: Airborne magnetic and radiometric surveys (Assessment Report T-1751).
- 1979, Canadian Crest – Baxter: Power trenching on two claims within the present Property, as well as east on the current Trelawney property. The trenches were in the east-central and southeast areas of the present Property. No analytical results reported (Assessment Report T-1751).
- 1980, Hargor Resources Inc.: Property was covered by regional airborne magnetic and Rexhem-1 electromagnetic surveys (Assessment Report T-2357).
- 1981, Kidd Resources: power stripping near the Chester Road. Only very limited bedrock, along with old pits and trenches, reported. No analytical results given (Assessment Report T-2388).
- 1985, Kidd Resources Ltd.: some power stripping and bedrock washing adjacent to the Chester Road, in locations that are uncertain with respect to the present Property. One of the stripped areas may be the “Quartz” showing discussed in this report. No sampling results reported (Assessment Report T-2388).
- 1987, Chesbar Resources Inc.: systematic exploration on eight claims in Chester and Yeo Twps., five of which are within the areas of the present property. Work included VLF-EM and magnetic surveys on 200-ft (60-m) spaced lines as well as geological mapping. VLF-EM was interpreted to reflect geological contacts such as between tuffaceous rocks and granodiorite in the southern areas of the Chesbar property. Several magnetic highs were interpreted to reflect mineralization; magnetic anomalies tend to parallel the VLF-EM conductors (Assessment Report T-3159 / 2.10900).
- 1988, Chesbar Resources Inc.: four BQ diamond drillholes, totaling 1,341 feet (408.7 metres). Two of the holes were in the vicinity of Chesbar’s “southern zone”, believed to be main outcrop area sampled for this report (stripped areas E and F). A third drillhole undercut the “northern showing” which appears to be the northern area of pits (Area A) sampled by Crown for this report. A fourth hole was drilled on the “Naja zone” which Crown has not located. The holes were modestly sampled (a total of 260 ft or 19%), but analytical results were not given (Assessment Report T-3159)
- 1999, R. Duess: Rock sampling (grabs) in an area corresponding roughly to the southern half of present claim 4240522 and the northernmost part of 4241016 (Assessment report T-4302 / 2.19743). Duess examined six areas of mineralization,



called stripped areas A through F; this report uses the same identifications for the outcrop areas sampled (A, C, D, E and F).

It is uncertain when the pits and trenches described in this report were excavated. The stripped and washed bedrock in stripped areas E and F described herein were not indicated on Chesbar's 1987 and 1988 maps, so stripping may have been done in those areas in the 1990s and the work not filed for assessment. Also, the main pit area (Area A in this report) was not indicated by Chesbar, so the blasting there appears to postdate 1988.

## **5. WORK PERFORMED**

### **5.1 Outcrop Mapping**

Stripped areas E and F were mapped by establishing a cut, chained and picketed east-west baseline from 1+00E to 0+75W. Over the outcrop areas, control lines were run every 10 metres and outcrop marked with spray paint at 5-metre intervals along those lines. The stripped area of the "Quartz showing" was mapped using a topofil-run east west baseline. Both areas were mapped at a scale of 1:200.

### **5.2 Rock Sampling**

Rock samples were taken at a variety of sulphide-mineralized occurrences to confirm the presence of gold, but most work was focussed on stripped areas E and F because of previous high-grade gold in grab samples taken by Duess (1999), and because numerous subparallel fracture sand veins were evident. Although some grab samples were taken in that area, the present work consisted mostly of channel sampling in light of the very recent announcements by Trelawney of long drillhole intercepts of intrusive-hosted low-grade gold mineralization on their adjacent property about 2½ km to the east in Chester Township.

All samples were submitted to Cattarello Assayers Inc. in Timmins for analysis by fire assay – atomic absorption methods; results are reported in parts per billion (ppb) Au. Analytical certificates are included in the Appendix.

### **5.3 Test VLF-EM Survey**

Because Chesbar detected VLF-EM conductors over what is now part of the Crown Property, short test lines were run over the main stripped area to determine if VLF-EM would be suitable for detecting that type of exposed mineralization and/or its associated fractures and shears.

Flagged lines were established from the picketed baseline at 1+00E, 0+25W and 1+00W. Stations were established at 12½-metre intervals for 100 metres on either side (north and south) of the baseline. Readings were taken with a Geonics EM-16 instrument using the station NAA (Cutler, Maine) at 2.4 MHz. All readings were taken facing south.

## **5.4 Field Personnel**

Robert Kuehnbaum and Brian Polk of Timmins did all of the mapping and sampling over a four day period (April 19, 20, 22 and 23). Rock sawing and some of the geophysical work was done by Michael Tremblay of Timmins who was on the Property on April 20 and 23; Steve Chartrand did rock sawing on the Property for one day (April 22).

## **6. REGIONAL AND PROPERTY GEOLOGY**

The Property is situated in the Abitibi Subprovince, specifically in the southeastern extremities of the Swayze Belt where supracrustal rocks comprise a narrow band which continue eastward into the Shining Tree area (Figure 3). This thin wedge is located between the Kenogamissi Batholith to the north and gneisses and granitoid rocks of the Ramsey-Algoma granitoid complex to the south. Within the wedge, the largely sedimentary Ridout Assemblage is inferred to be a temporal and tectonic equivalent of the Timiskaming Assemblage of the Kirkland Lake area. Metavolcanic rocks include basaltic flow rocks, intermediate and felsic, calc-alkalic tuffs and breccias (Jackson and Fyon, 1992).

The Property overlies the western area of a granitoid intrusive body south of the supracrustal rocks. Laird (1932) described a wide variety of rock types, although granodiorite was the most predominant. Based on only a few mapped outcrops, Siragusa (1993a) described the granitic rocks in the area of the claims as medium- to coarse-grained sodic and potassic granitic rocks, locally with mafic xenoliths. Sirgusa referred the granitoid rocks as the "Chester Pluton"; one phase, found in central parts of the pluton, is similar to regional granitic rocks: massive, commonly medium-grained, pink to greyish in colour, and rarely pegmatitic, consisting of microcline, oligoclase, and quartz, with biotite and iron oxides being the common accessory minerals; this is the phase underlying the southern parts of the Yeo Property. Lithologies mapped by Chesbar in 1988 at a scale of 1:2400 include "granodiorite", with minor diorite in the vicinity of their "southern zone" (areas E and F in this report). Migmatitic, dioritic and gneissic rocks lie to the south of the granitoids.

The northern part of the Property is underlain by metavolcanic rocks, including mafic flows, as well as intermediate to felsic tuff, lapilli tuff and metasedimentary rocks. These were not examined in the course of the present work.

## **7. DISCUSSION OF RESULTS**

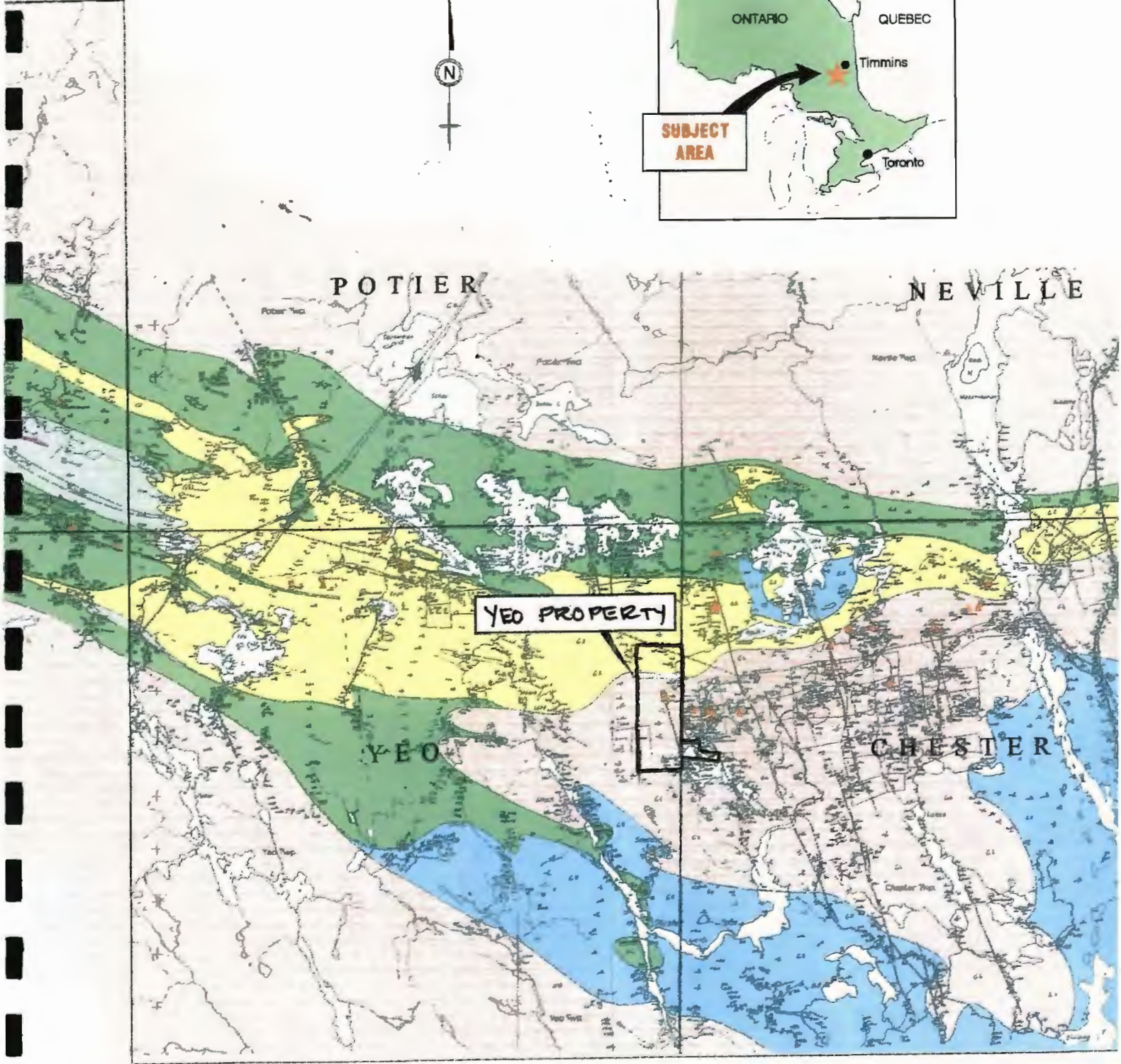
### **7.1 STRIPPED AREAS E AND F**

#### **7.1.1 GEOLOGY**

The geology is best understood in the locale that Duess (1999) referred to as stripped areas E and F, the main focus of the present work. Information is also available from two adjacent Chesbar drillhole logs (B88-14 and B88-21. North-inclined (-45°) BQ



**FIG 3**  
**REGIONAL GEOLOGY**  
**CROWN MINERALS INC.**  
**YEO PROPERTY**



From:  
Srigusa, G.M. 1993, Geology geochemistry and mineralization of the southern margin  
of the Swayze belt; Ontario Geological Survey. Open File Report 5844. 144p.

casing from what is certainly hole B88-21 was located by B. Polk at 427706E / 5266726N just east of Chester Road and just south of the western end outcrop Area F (Figure 4). Chesbar described a 90-foot (27-metre) zone (about 20 metres horizontal width) of granodiorite enveloped on the south by granodiorite breccia and gabbro-diorite, and on the north by gabbro-diorite. Hole B88-14, about 90 metres west of B88-21, intersected a 36-metre (horizontal) wide zone of granodiorite.

The granodiorite on surface is light grey to whitish-coloured; on fresh-cut surfaces, light grey. Except for local areas of fracturing, shearing or alteration, it is fine- to medium-grained and massive. Overall, there is probably considerably less than 5% mafic mineral content.

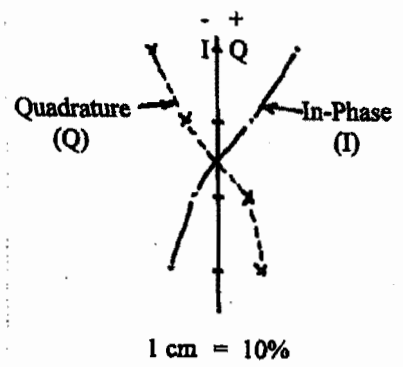
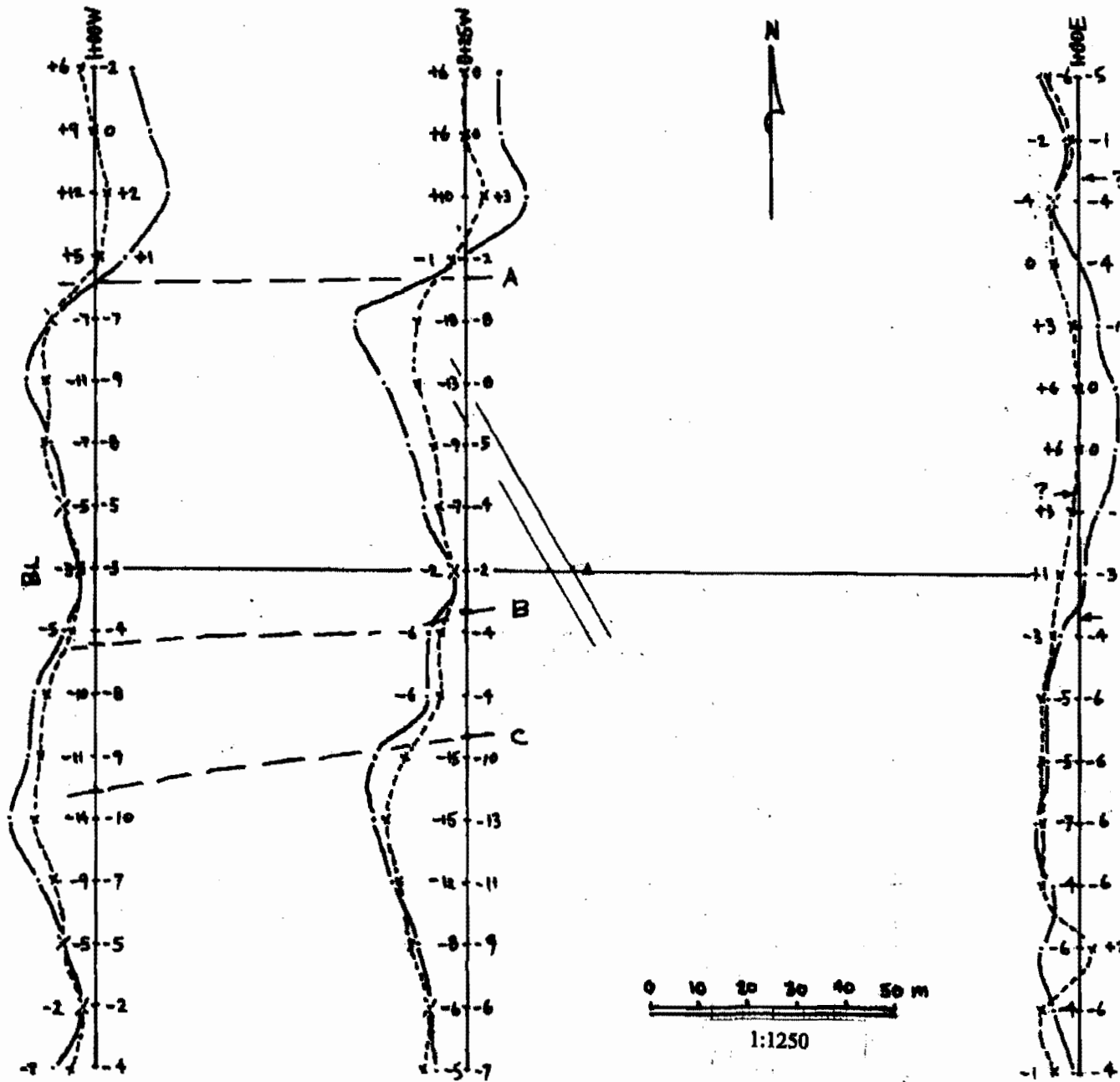
There are scattered, rounded to subrounded, small (2-5 cm) xenoliths of a generally much finer-grained and slightly more mafic material than the granodiorite. Other rocks include: a deformed, very fine-grained biotitic dyke with sheared margins (120°) in the western stripped area; a highly fractured and deformed, chloritic (mafic) dyke (?) in the western stripped area; a 21-foot (6.3-metre) "chloritic dyke / shear", probably similar this unit, was described in Chesbar hole 88B-21.

In the eastern stripped area (F), a 6- to 11-cm "lamprophyre" dyke (attitude 165° / vertical) crosses the entire outcrop. It appears to be late-stage but is nevertheless offset both sinistrally and dextrally, by the limonitic fracture set.

#### 7.1.2 ALTERATION AND MINERALIZATION

The predominant limonitic fractures trend from about 070° to 085° in the western exposure, and from about 040° to 085° in the eastern area. The set is somewhat anastomosing. Rock sawing revealed that the veins and fractures have a variety of dips, from 40° south to 55° north, although most dips are to the south; one subhorizontal quartz veinlet was revealed in a saw-cut. Mostly, the fractures are limonitic and very narrow ( $\pm 1$  mm), but are made more pronounced by limonitic alteration (after sulphides?) in the host-rock. Locally, the fractures have been filled with irregular quartz-pyrite lenses and seams of pyrite. Where veining is present, the granitoid wall rock is locally muscovite-altered and pyritic, up to 10s of centimeters wide. Based on the present sampling and sampling of previous workers, gold mineralization appears to be associated with sulphides.

Based on the Chesbar drillholes, the preponderance, but not all, of the sulphide-quartz mineralization is within the granodiorite; this appears to be the unit exposed in the strippings. Chesbar sampled only 15% of the total core from holes 88B-14 and -21, and did not report results. In the late 1980s, they may not have been considering a bulk-tonnage deposit. In drillholes BB-14 and -21, pyrrhotite and chalcopyrite were noted in addition to the more common pyrite. Pyrite and very minor chalcopyrite were noted during the present study, but not pyrrhotite.



Instrument: Geonics EM-16  
 Transmitter: NAA  
 Frequency: 24.0 KHz  
 Readings taken facing south



Figure 5

Crown Minerals Inc.  
 Yeo Township Property  
 Porcupine Mining Division, Ontario

**TEST VLF-EM SURVEY  
 NAA**

R.M. Kuehnbaum., P.Geo., April, 2010

fractures between 10 and 15 m south of 0+75W on the baseline. Conductor C is unexplained.

The strongest conductor, A, parallels B and C, but is well north of the outcrops of stripped area E. In fact, the east end of conductor A is in a small swampy area, but the west end of the anomaly is in an area of featureless topography.

It is likely that conductors A, B and C are probably not due to sulphide mineralization, but rather current gathering, reflecting fractures and/or shears. If so, broader-scale VLF-EM surveying could possibly be used to identify where fractures are best-developed, i.e. closest-spaced. This would likely require very close-spaced readings. Chesbar's 1987 surveys identified a weak conductor over their "southern zone" (stripped areas E and F). However, because the gold mineralization at areas E and F, as well as other showings sampled and reported herein, is related to sulphides, IP surveying is likely to be the most effective geophysical tool.

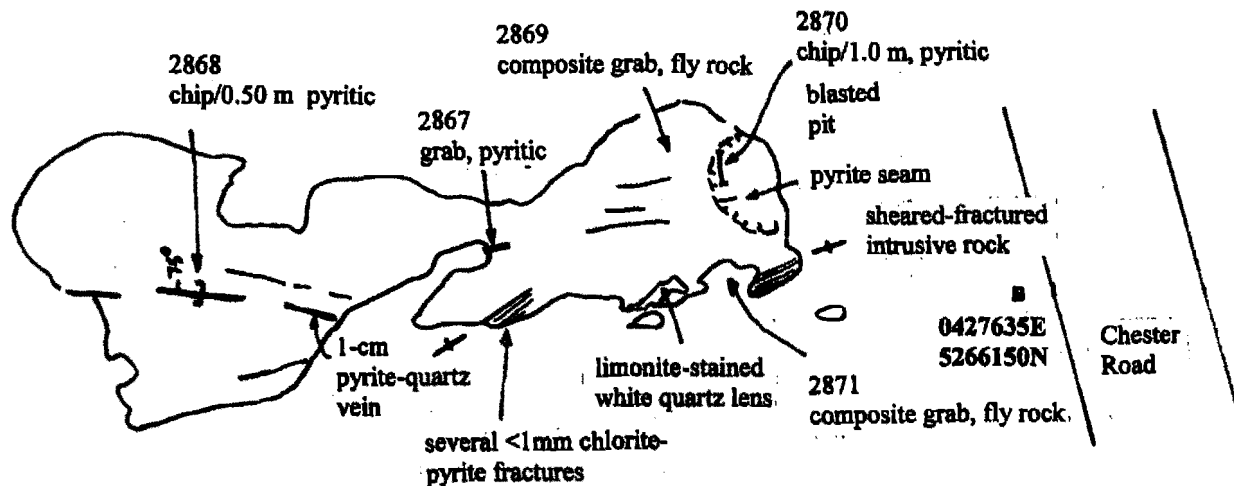
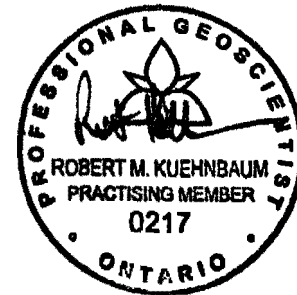
## 7.2 "QUARTZ" SHOWING

Figure 6 is a sketch of the previously-stripped exposure, with fractures, veins and sample locations. Judging by a significant number of blocks of quartz in the vicinity, there was probably a quartz "blow-out" in the blasted pit on the east end of the stripped area. A composite grab of pyritic quartz (2869) contained 750 ppb Au; a composite grab from fly-rock of pyritic, silicified-micaceous granitic rock (2871) contained 818 ppb Au. A grab sample of a 1-cm pyrite seam and surrounding pyritic host rock contained 592 ppb Au. The sampling confirms the elevated gold contents reported by Duess (1999).

## 7.3 AREA A

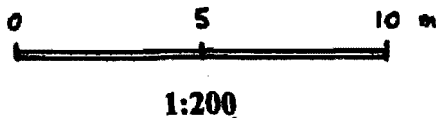
This large stripped area hosts a prominent pit (UTM 427576E, 5267482N, NAD 83). Geology appears similar to outcroppings at areas E and F with generally massive, grey felsic intrusive rocks. Mineralization evidently consists of a large lens of quartz and pyrite. Sampling was limited to a few grab samples of better sulphide-mineralized material; except for possibly sample 2877, all samples are loose material presumed blasted from the pit. The pit appears to be on a similar trend to nearby area C. Assays from this area are good with a high of 18,820 ppb Au from sample 2878; chloritized and silicified felsic intrusive wall rock with 20-25% pyrite and trace chalcopyrite in wispy bands throughout and 10-15% glassy quartz vein material with chlorite and clots of chalcopyrite.

One of Chesbar's four 1988 drillholes, B88-4 (306 ft), was drilled from north to south in this area (exact location in relation to pit unknown). They reported granodiorite, granodiorite breccia and foliated granodiorite, as well as chloritic shearing and a chlorite-biotite dyke. A 114-ft (35-m) interval cut disseminated pyrite (<1 to 2-5%) and zones of quartz veining in brecciated granodiorite. A number of 1-ft to 5-ft (0.3 to 1.5-m) samples were taken (about 42% of the hole), but no analytical results were reported.



Analytical Results

Sample	ppb Au
2867	592
2868	80
2869	750
2870	34
2871	818



- limonitic fracture
- + fracture attitude: inclined; vertical
- 2868 sample number

Figure 6

Crown Minerals Inc. Yeo Township Property Porcupine Mining Division, Ontario
<b>QUARTZ SHOWING          GEOLOGY &amp; SAMPLING PLAN</b>
R.M. Kuehnbaum, P.Geo., April, 2010

#### 7.4 AREA C

The area shows several pits aligned along a fairly competent quartz vein trending at between 80° and 90° (roughly parallel to other zones observed on the property). The vein is up to 60cm wide near Chester Road and hosts 5% vuggy very fine grained pyrite. Only grab samples of better-mineralized material were taken. The five samples taken here returned only low gold contents, with a highest value of 70 ppb Au.

#### 8. CONCLUSIONS AND RECOMMENDATIONS

The work discussed in this Report has confirmed the presence of gold mineralization associated with fracturing, quartz veining and sulphides, and hosted by granitoid rocks, in a number of areas on the Property. Other previously-reported occurrences have yet to be investigated. Although the sampling at Areas E and F was limited mostly to intervals containing sulphides and/or quartz, the local high-grade character of the fractures/veins (including wall rock) and the number of fractures and veins suggests that there may be potential for bulk, low-grade gold mineralization.

More systematic work, including broader channel sampling of Areas E and F and other occurrences, is required on the Property. Thorough geophysical (magnetic and VLF-EM) coverage should be done, as well as geological mapping. The type of mineralization at Areas E and F and elsewhere, should give a response to induced polarization (IP) surveying, and this should be tested. Ultimately, geophysical targets, as well as known occurrences, will require drill testing if warranted.

Respectfully submitted,



Robert M. Kuehnbaum, P.Geo.  
May 4, 2010



TABLE 2.

## Rock Descriptions: Crown Minerals – Yeo Township Claims

Sample Number		ppb Au
<b>Main Stripped Area East of Road (Area F)</b>		
2803	Chip / 70 cm across limonite-stained, fractured, highly altered trondhjemite. Trace pyrite	640
2804	Channel / 1.0m. Unaltered intrusive rock with minor limonite staining; trace pyrite & minor quartz.	1,068
2805	Channel / 1.3 m. 1-cm vertical quartz vein with chloritic margins; 4-cm vuggy quartz vein with 5% blebby pyrite, dipping 65° north; 1-cm quartz veinlet, gossanous with trace pyrite.	26
2806	Channel / 0.50 m. Strongly Fe-stained but weakly mineralized; 0.75-cm chloritic quartz vein; numerous limonitic stringers, broken.	32
2807	Channel / 0.70 m: 4-cm gossany, vuggy quartz vein (dipping 55° north).	333
2808	Channel / 0.70 m. Trondhjemite with 1-cm pyrite seam (dip 80° north); 1-cm gossanous pyrite seam (dip 75° south)	169
2809	Channel / 0.60 m. Includes 20-cm barren, white quartz patch (trending at 160°, dip 40° SW)	14 & 19*
2810	Channel / 1.50 m. Trondhjemite with numerous limonitic fractures ± quartz, dipping 85° south; ~ 1-cm gossanous quartz vein with trace pyrite; 2-cm gossaned pyrite vein (vertical dip).	76
2812	Channel / 0.80 m. Trondhjemite with numerous limonitic fractures; 1.5-cm quartz vein with chlorite & 2% pyrite, rotted. Very broken >5-cm zone with fracture-controlled pyrite (2-3%).	171
2813	Channel / 0.70 m. Trondhjemite with 2-cm gossaned quartz-chlorite veinlet (dip 70° north); numerous limonitic fractures, some flat; 1-cm vertical rotted pyrite veinlet; 2-mm limonitic pyrite seam (dip 80° N).	14
2814	Channel / 0.85 m. Fractured (limonitic) trondhjemite. 4-cm gossanous quartz vein with 5% blebby pyrite (dip 65° S).	8,295
2815	Channel / 0.90 m. Broken, chloritic trondhjemite; limonitic fractures (<1 mm); 0.75-cm gossanous pyrite vein (dip 65° S); 2-cm irregular flat white vuggy barren quartz vein.	775
2816	Channel / 0.70 m. Trondhjemite with numerous limonitic fractures at various orientations; 0.5-cm gossaned quartz veinlets with trace pyrite (dip 85° S).	27
2817	Channel / 0.65 m. Trondhjemite with numerous 1-mm limonitic fractures (dip 65° N); 2-mm quartz veinlets (dip 65° N); broken gossanous quartz veinlet with trace pyrite.	718
2818	Channel / 1.20 m. Includes 1-cm gossanous pyrite-quartz veinlet (dip 85° S); few flat limonitic fractures; Broken >4-cm vuggy quartz-chlorite vein with 2-4% pyrite.	24
2819	Channel / 0.70 m. Dark silicified trondhjemite, a few gossanous, fractured at various angles; minor quartz-chlorite ± pyrite & chalcopyrite over 3 cm. Broken.	283
2820	Channel / 0.60 m. Includes very broken gossanous quartz vein with 2-3% pyrite (dip 50° S).	49
2821	Channel / 1.15 m. Includes 14-cm quartz-chlorite-pyrite zone (dip 75° S); very broken zone.	937

\* lab replicate analyses



TABLE 2 (CONT'D)

Sample Number		ppb Au
<b>Main Stripped Area – West of Road (Area E)</b>		
2811	Chip/0.20 m. Includes ~1 cm fracture filled with pyrite.	2,546
2851	Composite grab – chip across 10-cm zone including highly oxidized, narrow (<1 cm) quartz vein(s) and limonite-stained, micaceous margins with pyrite. Micaceous zone up to 15 cm wide, dipping 60°S.	43
2852	Chip sample across 10-15 cm in two locations ~30 cm apart. Pyritic & micaceous-altered trondhemite. Includes small, vuggy quartz lenses with aggregates of pyrite. Highly limonite-stained.	10,169
2853	Composite grab. Three small vuggy quartz-pyrite lenses along ~1 m interval. Lenses <1 to 15 cm, pyrite up to 50% of lenses.	2,113
2854	Composite grab of pyrite-rich knot in quartz vein.	15,624
2855	Channel / 0.70 m. Includes two fractures & veins: one 3-4 mm oxidized; and 2-cm pyrite-quartz vein. Minor disseminated pyrite in host rock. Vein dips ~75° south.	877
2856	Channel/0.30 m. Includes 3-4 mm rusty pyrite-quartz veinlet, 1 mm pyrite seam & 2-cm pyrite-quartz vein.	164
2857	Channel / 0.40 m. Includes 4-cm pyrite-quartz vein (60-70% pyrite) dipping 65° south & a few <1 mm rusty fractures. Minor clots & disseminations of pyrite in host rock.	9,817
2858	Channel / 0.50 m. Includes a number of irregularly-oriented (steep north and steep south) anastomosing pyrite veinlets & 4-5 cm pyrite patch. Several <1 mm limonitized fractures. Overall 5-10% pyrite. Minor chlorite alteration.	14,529
2859	Channel / 0.60 m. Mostly massive granitic rock. Includes 2-10 mm pyrite (-quartz) vein dipping 55° south; pitted ~3-4 mm limonitic quartz veinlet dipping 50° north. Local patches of pyrite in host rock & a few other ~1 mm limonitic fractures (oxidized veinlets?)	166
2860	Channel / 0.60 m. Includes 1 mm limonitic fracture, 5-8 mm quartz-pyrite vein dipping 70° south & several narrow chlorite-pyrite fractures (<1-3 mm) dipping 65° north	23
2861	Channel / 0.65 m. Includes: 5 cm rotted (limonitized) pyrite patch (vertical); irregular 4-5 cm oxidized (limonitic) pyrite patch (dip ~45° south); and other chloritic fractures & pyrite clots.	82
2862	Channel / 0.55 m. Includes 2-cm patchy quartz-pyrite vein roughly following saw cut & crossing normal trend.	13 & 13*
2863	Channel / 0.30 m (adjacent to 2866). Limonitic-stained zones <1 cm & 4-cm gossanous .....	8
2864	Channel / 0.65 m. <1 to 1 mm limonitic fractures (veinlets?); 1-2 cm pyritic quartz veinlet w chlorite (dipping 55° south); 1-cm vuggy quartz-disseminated pyrite vein (dipping 50° south)	392
2865	Channel / 0.60 m. Several ~1 mm chloritic fractures with minor pyrite; 1 cm oxidized, pitted quartz vein (dipping vertical to 5° north); 1-cm quartz-pyrite veinlet (dipping 45° south)	9
2866	Channel / 1.0 m. Limonitic fractures with local chlorite; two 1-cm white quartz veins w pyritic margins; north end of sample 2-3 cm clots of quartz-pyrite (10-15% pyrite)	8
<b>Small Pit North of East End of Area E – UTM 427632E / 526682N (NAD 83)</b>		
2801	Composite grab of loose pyritic material. Dark, fractured, quartz-flooded trondhemite with seams and disseminations of coarse-grained pyrite.	33
2802	Composite grab as above, outcrop. No distinct veining. * lab replicate analyses	70

TABLE 2 (CONT'D)

Sample Number		ppb Au
<b>Quartz Showing</b>		
2867	Grab of 1-cm pyrite seam and surrounding pyritic host rock. Limonite-stained.	592
2868	Chip/0.50 m. Limonite-stained, pyritic (1-2%) granitic rock with numerous tight (<1 mm) limonitic fractures.	80
2869	Composite grab of pyritic quartz rubble (fly rock) from blasted pit.	750
2870	Chip/1.0 m. Fractured granitic rock with disseminated pyrite and numerous <1 mm limonitic fractures. (attitude 080° / vertical)	34
2871	Composite grab from block of silicified-micaceous granitic rock with disseminated pyrite and irregular 1-2 cm pyrite seam	818
<b>Area C - UTM 427632E / 5266825N (NAD 83)</b>		
2872	Grab. In-situ vein margin, schistose and foliated, silicified and micaceous with only minor vein material. Minor blebby, rotted-oxidized pyrite over 4 cm	11
2873	Grab. Similar to 2872, but with 75% vein material, bullish quartz with minor vugs filled with silvery fine grained pyrite	8
2874	Grab. Selected pyrite-rich quartz from 1 meter boulder in main trench.	13 & 13*
<b>Area A</b>		
2875	Grab. Silicified massive granite with diffuse patches and disseminations of medium grained pyrite. 5-10% pyrite. Very minor quartz vein material.	94
2876	Grab. Similar to 2875, very fine grained, medium grey with increased pyrite. 2 mm quartz veinlet. Patches of pyrite and trace chalcopyrite, fine to medium grained and wispy.	9,140
2877	Grab. Sulphide-rich rock, 50 to 80% very fine grained silvery pyrite in odd soft green grey vuggy altered rock with significant quartz; very broken and fissile	1772
2878	Grab. ½ meter block on south side of pit. Chloritized and silicified, very fine-grained wall rock with bands of pyrite to 20-25%. Quartz vein is rusty, red and white, glassy with chlorite and clots of chalcopyrite. Up to 20% total sulphide.	18,820
2879	Grab. 80% very fine-grained, semi-massive, banded pyrite in chloritic, silicified fine grained wallrock. Very minor quartz stringers.	391
2880	Block at northwest corner of stripped area. 30% coarser banded pyrite as laminae in gossanous medium grained wallrock, trace chalcopyrite.	8,759

\* lab replicate analyses

## REFERENCES

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Siragusa, G.M., 1993b. *Geology, geochemistry and mineralization of the southern margin of the Swayze Belt.* Ontario Geological Survey Open File Report 5844, 144 pp.

## AUTHOR'S CERTIFICATE

To accompany the report entitled "Report Of Mapping And Sampling Of Mineralized Exposures, Claims 4240522 And 4241016, Yeo Township, Porcupine Mining Division, Ontario For Crown Minerals Inc." dated May 4, 2010

I, Robert M. Kuehnbaum, P.Geo., do hereby certify that:

1. I reside at 3101 O'Hagan Drive, Mississauga, Ontario, L5C 2C4, Canada.
2. I graduated from the University of Toronto with a B.Sc. degree in Geology (1971), and a M.Sc. degree in Geology (1973).
3. Since 1974, I have practiced my profession as a geologist in the field of mineral exploration for a total of 33 years, in Canada and internationally. I have been involved in the search for a wide variety of commodities, including base metals (tungsten, copper, nickel) and precious metals, uranium, diamonds and industrial minerals.
4. I am: a registered practicing member of the Association of Professional Geoscientists of Ontario (registration no. 0217); a registered member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (licence no. 31101); and, a registered member of the Association of Professional Engineers and Geoscientists of Saskatchewan (registration no. 10474), Canada. I am also a member of the Society of Economic Geologists and the Prospectors and Developers Association of Canada.
5. I was involved in all aspects of the work reviewed in this report, and was on the Property for four days in April, 2010, on behalf of Crown Minerals Inc.



Robert M. Kuehnbaum, M.Sc., P.Geo.  
May 4, 2010

**APPENDIX**

**ANALYTICAL CERTIFICATES**

**Certificate Of Analysis**



Cattarello Assayers Inc.

Number Of Samples: 51

Client: Crown Minerals Inc.

Job: YEO 48

Type Of Sample: Drill Core

Received Date: 2010-04-26

Processed Date: 2010-04-28

Report Date: 2010-04-29

Test Method: FAAA

Sample ID	AU FA-GEO ppb 5 =====	AU-Dup FA-GEO ppb 5 =====
2801	33	
2802	70	
2803	640	
2804	1068	
2805	26	
2806	32	
2807	333	
2808	169	
2809	14	19
2810	76	
2811	2546	
2812	171	
2813	14	
2814	8295	
2815	775	
2816	27	
2817	718	
2818	24	
2819	283	
2820	49	
2821	937	
2851	43	
2852	10169	
2853	2113	
2854	15624	
2855	877	
2856	164	
2857	9817	
2858	14529	
2859	166	
2860	23	
2861	82	



Approved by Engineer:

*[Signature]*  
Approved By Chief Analyst:

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Certificate Of Analysis

Job: YEO 48



Sample ID	Au FA-GEO ppb 5 =====	Au-Dup FA-GEO ppb 5 =====
2862	13	13
2863	8	
2864	392	
2865	9	
2866	8	
2867	592	
2868	80	
2869	750	
2870	34	
2871	818	
2872	11	
2873	8	
2874	13	13
2875	94	
2876	9140	
2877	1772	
2878	18820	
2879	391	
2880	8759	

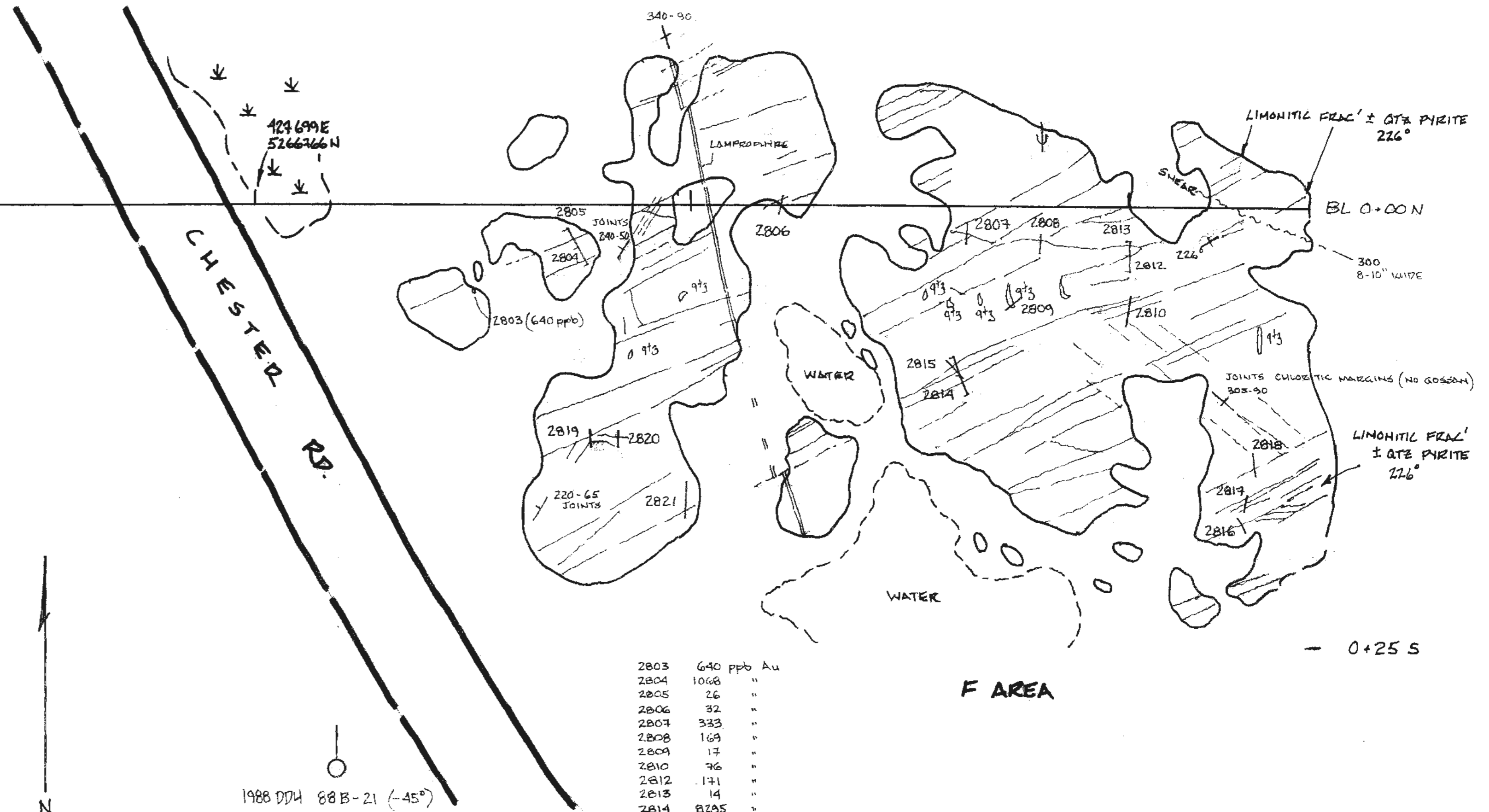
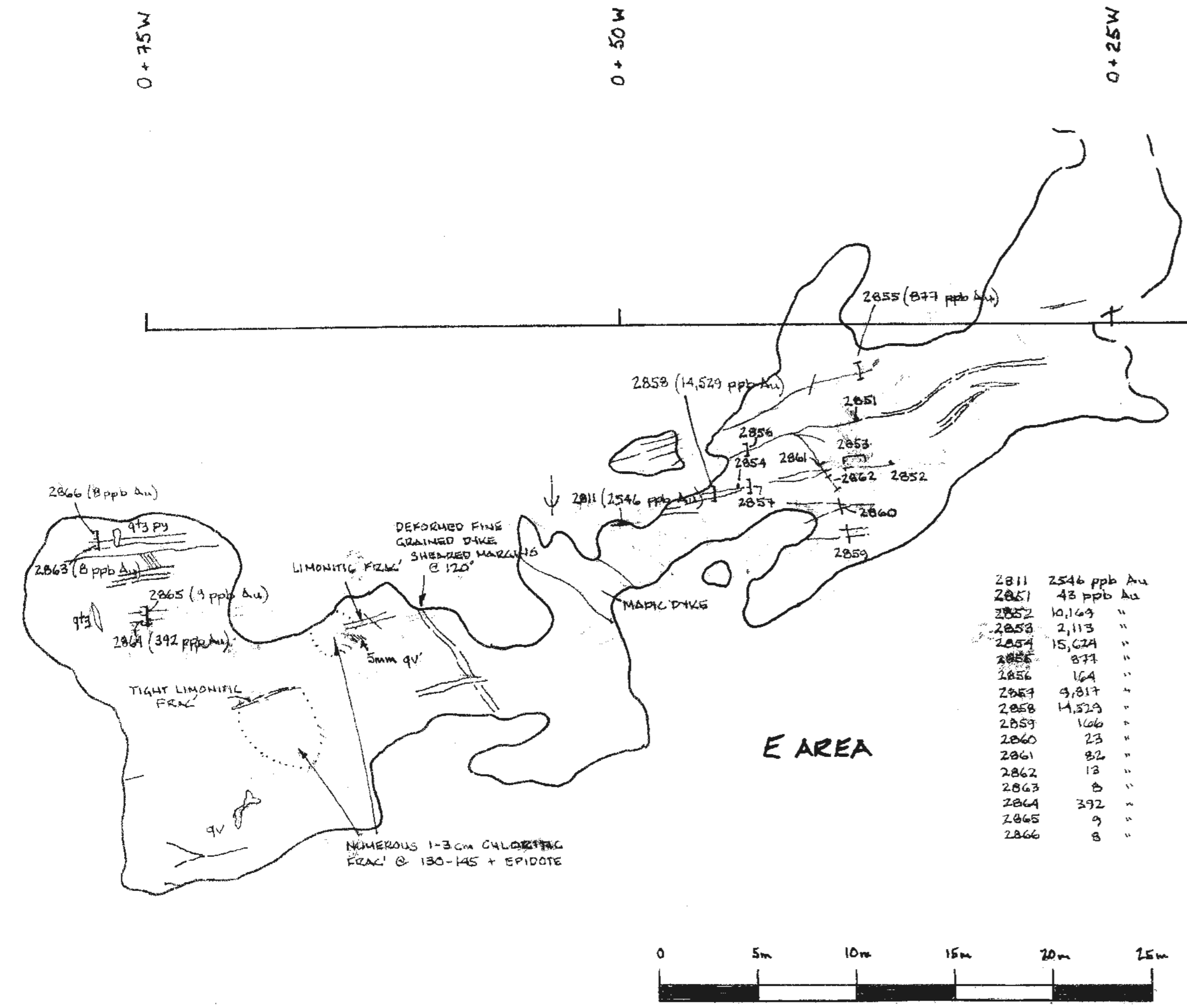
*C. S. Cattarello*  
 REGISTERED PROFESSIONAL ENGINEER  
 C. S. CATTARELLO  
 PROVINCE OF ONTARIO

Approved by Engineer:

*Chris Hacquard*  
 Approved By Chief Analyst:

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**FIG. 4 DETAILED SAMPLING & GEOLOGY E & F**  
CROWN MINERALS INC. - YEO  
POLK GEOLOGICAL      MAY 2010