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# **Assessment Report** On the **Wonderland South Property Kenora Mining Division Northwestern Ontario**

# **Prepared for BESCO International Investment Co. Ltd.**

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P7B 6A5

**October 15th, 2016** 

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#### 1.0 Introduction

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Besco International Investment Co. Ltd. ("Besco"), to locate, identify and examine the granitic rocks on their Wonderland South Property north of Kenora, Ontario. The work was carried out by Clark staff during August and September 2016, and consisted of locating granite outcrops that had been located and described the previous year, and cutting slab samples using a hand held rock saw.

#### 2.0 Property Description and Location

The Wonderland South Property consists of six claims containing 45 units totalling 720 hectares; the claims are listed in Table 1 below. The Property is located in the Wonderland Lake Area of the Kenora Mining Division (Figures 1 and 2). The Property is approximately 45 km by road northeast of Kenora, Ontario, and access to the Property is via Highway 671 (Jones Road) for about 30 km north from Highway 17 to the Lount Lake Road, then northwest on the Lount Lake Rd for about 10 km. At about the 10 km marker on the Lount Lake Rd. the road splits three ways – the left road (heading west) crosses onto the Property in less than 1 km, to the northwest of Red Deer Lake.

**Table 1. Wonderland South Property Claims** 

Claim No. Township		Date Recorded	Due Date	Work Required	Unit Size
3007878	Wonderland Lake Area	May 30, 2005	May 30, 2017	\$400	1
3007879	Wonderland Lake Area	May 30, 2005	May 30, 2017	\$1,600	4
4255060	Wonderland Lake Area	Nov 1, 2010	Nov 1, 2016	\$6,400	16
4255063 Wonderland Lake Area		Nov 1, 2010	Nov 1, 2016	\$6,400	16
4255064	Wonderland Lake Area	Nov 1, 2010	Nov 1, 2016	\$2,800	7
4255067	Wonderland Lake Area	Nov 1, 2010	Nov 1, 2016	\$400	1
Total				\$18,000	45

The Ontario Mining Act requires Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the MNDM. The processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by the Ministry and presented to the Aboriginal communities whose traditional lands will be impacted by the work.

The government of Ontario requires expenditures of \$400 per year per unit for staked claims, prior to expiry, to keep the claims in good standing for the following year. The report must be submitted by the expiry date.

Kenora is a full service community of 15,000 people on the Trans-Canada Highway (Hwy 17) and has a long mining history, mainly in gold mining. Forestry is also an important part of the local economy, although this has decreased somewhat in recent years with the closing of a local mill. Tourism is the other

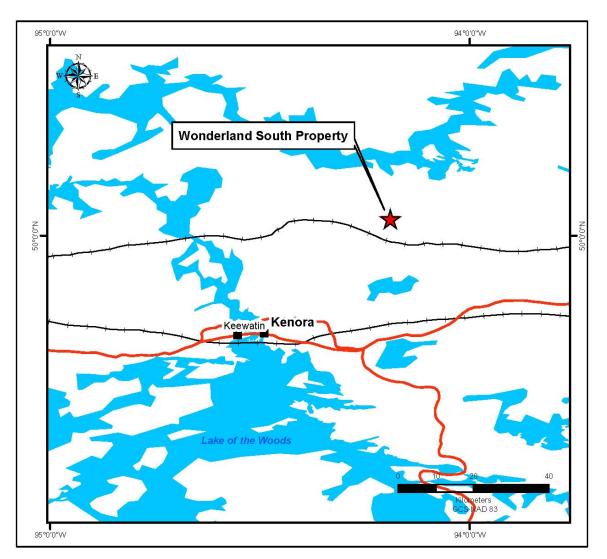
main economic driver. The community is serviced by an airport with flights from Winnipeg and Thunder Bay, and rail service is provided through the community of Redditt, approximately 30 km to the north.

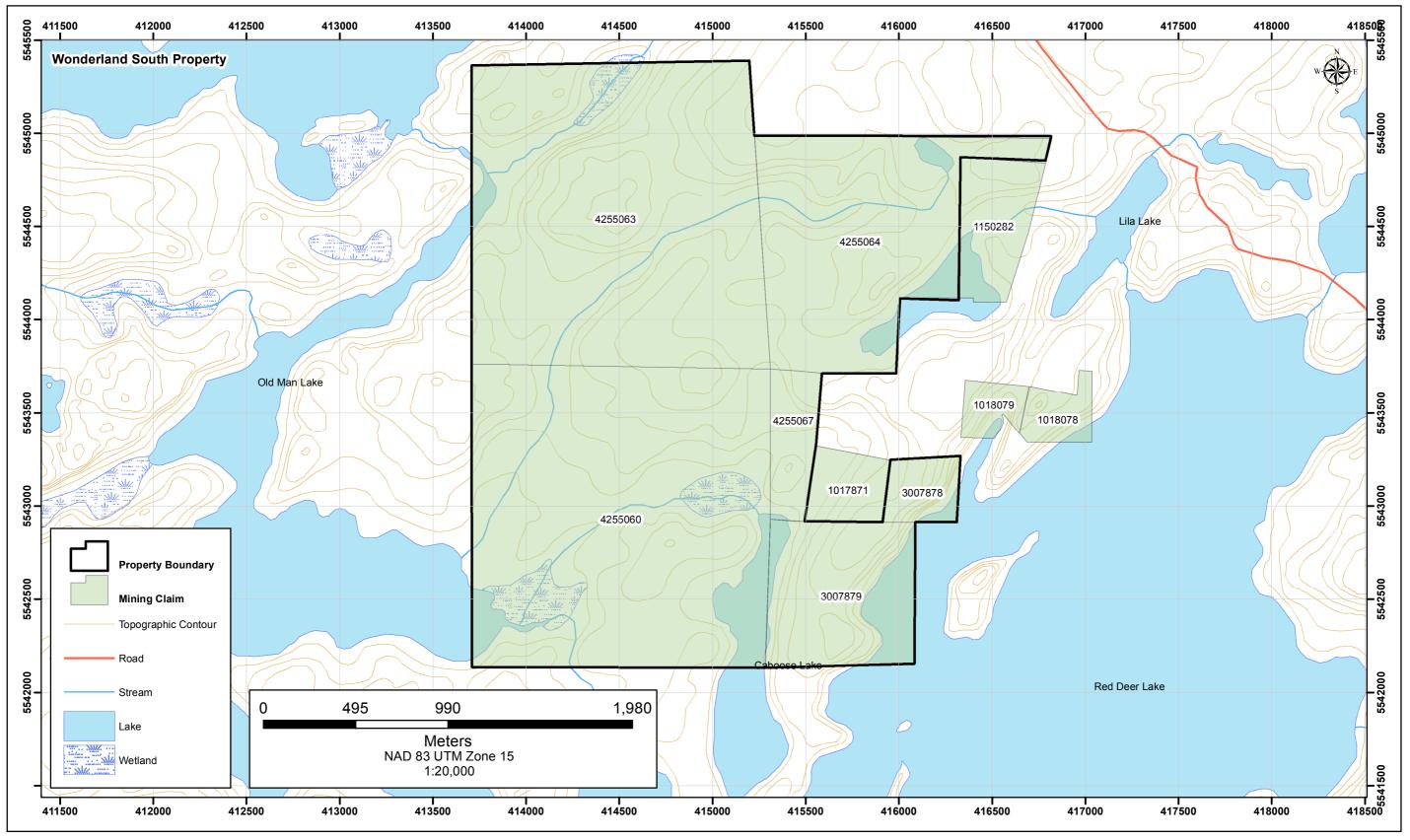
Topography is generally gentle with elevations ranging from 390 to 420 metres above sea level. A mixed forest of mostly spruce, balsam, poplar and birch covers the claims, with swampy vegetation in low-lying areas and local areas of forest blow-down.

Temperatures range from highs of  $35^{\circ}$  C in summer to lows of  $-30^{\circ}$  C in winter, with snow cover between November and May. The best season for exploration is between June and October, although in lake covered or swampy areas exploration activities such as geophysical surveys and diamond drilling might best be conducted after winter freeze up.

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Figure 1. Location Map





#### 3.0 Regional and Property Geology

The following summary of the regional and property geology is taken from Beard's 2007 report on the Property.

The rocks underlying the claim are Archean in age (2.6 to 2.9 billion years old). The Property lies within the Lount Lake Batholith, a large (over 2000 square kilometre) elliptical granitoid batholith that extends from near the Manitoba-Ontario border, eastward to Highway 105. This large batholith lies within the dominantly granitoid domain of the Winnipeg River Subprovince, which in turn lies within the central part of the western Superior Province of the Ontario Archean shield (Beakhouse 1991).

Farrow (1996) describes the Lount Lake Batholith as follows:

The Lount Lake batholith is an intrusive complex incorporating several rock types including gneiss, granodiorite, monzonite and inclusions of metasediments and mafic metavolcanics, and is the largest batholith in the Winnipeg River Subprovince (Breaks and Bond 1993), covering approximately 2500 square kilometres. The rocks are characteristic of the Southern Potassic Plutonic Suite described by Breaks et al. (1978), and are analogous to the granitic suite of Beakhouse (1991). The youngest and least fractured rocks belong to the late-phase, undeformed and unmetamorphosed potassium-enriched suite, which is subdivided into porphyritic granodiorite, younger porphyritic quartz monzonite and youngest massive, equigranular quartz monzonite (Breaks and Bond 1993). Because fracturing is an important criterion in guarry site selections, the most promising prospects generally occur in this younger potassic suite of intrusive rocks.

The Red Deer Lake Brown Granite (Beard 2002) is coarse grained to porphyritic, and is composed of pink potassium feldspar phenocrysts in a fine to medium grained matrix of potassium and plagioclase feldspars, quartz and biotite. While colour and texture varies somewhat across the length of the almost 5 km long intrusive, local sections of relatively homogeneous granite, required for commercial production can be found on the current claims (Beard 2002).

#### 4.0 Exploration History

Because the area has been known to be underlain by granitic rocks, the area has seen little exploration in the past, with all of the previous work in the government files being related to the potential for dimension/building stone.

1991-92: Manex Granit Inc. sampled and tested two small blocks totalling less than one cubic metre for cutting and finishing, and reported that the stone does take and hold a finish (polished, flamed and sand blasted). The stone was shown at trade shows in Japan in September 1991 and in Chicago in June 1992, and while interest was shown in the material, it was noted that potential buyers would like to see the quarry in operation before committing to buying.

1994-96: Manex Granit Inc. conducted further work consisting of stripping and washing, and sampling by drilling and blasting, and flaming. Nine small blocks totalling less than three cubic metres were taken. As of the writing of his report, Corbeil (1996) stated that no further marketing had been done, and while an agreement had been signed with the Grassy Narrows Band to proceed with work, no test quarrying had been done.

2006: Redditt Stones Inc. contracted R. Beard of Northwest Mineral Development services to conduct a program of bulk sampling and market testing to determine the marketability and quarry ability of the stone on claim 3007879. A sub-contractor from Kenora extracted the blocks using a percussion drill and explosives, and twenty blocks were then shipped by truck to Winnipeg, then by container to China. The blocks were slabbed and polished in Xiamen, China, and the resulting slabs provided to potential buyers for market assessment (Beard 2007).

The results of the test marketing was said to be positive, but it was noted that buyers would be more receptive once the quarry becomes established and it is demonstrated that large, regular-shaped blocks can be quarried on a consistent basis (Beard 2007).

During October of 2015 staff from Clark Exploration carried out a program of mapping additional granitic outcrops on the Wonderland South Property. The program was designed to evaluate as many outcrops as possible to provide Besco with a quick method of defining more potential areas on the Property for building stone testing. An excel spreadsheet was designed to list descriptive features of the outcrops, including colour, fractures per square metre, fracture angles where available, grain size, textures, degree of iron staining, sulphide contents, estimated outcrop dimensions, and additional comments. Each outcrop has been given a waypoint number and the corresponding UTM co-ordinates as determined by a hand held GPS unit. At least one photograph was taken at each waypoint location, with the GPS unit included in the photo in order to verify the locations. The information gathered during this program has been reported in

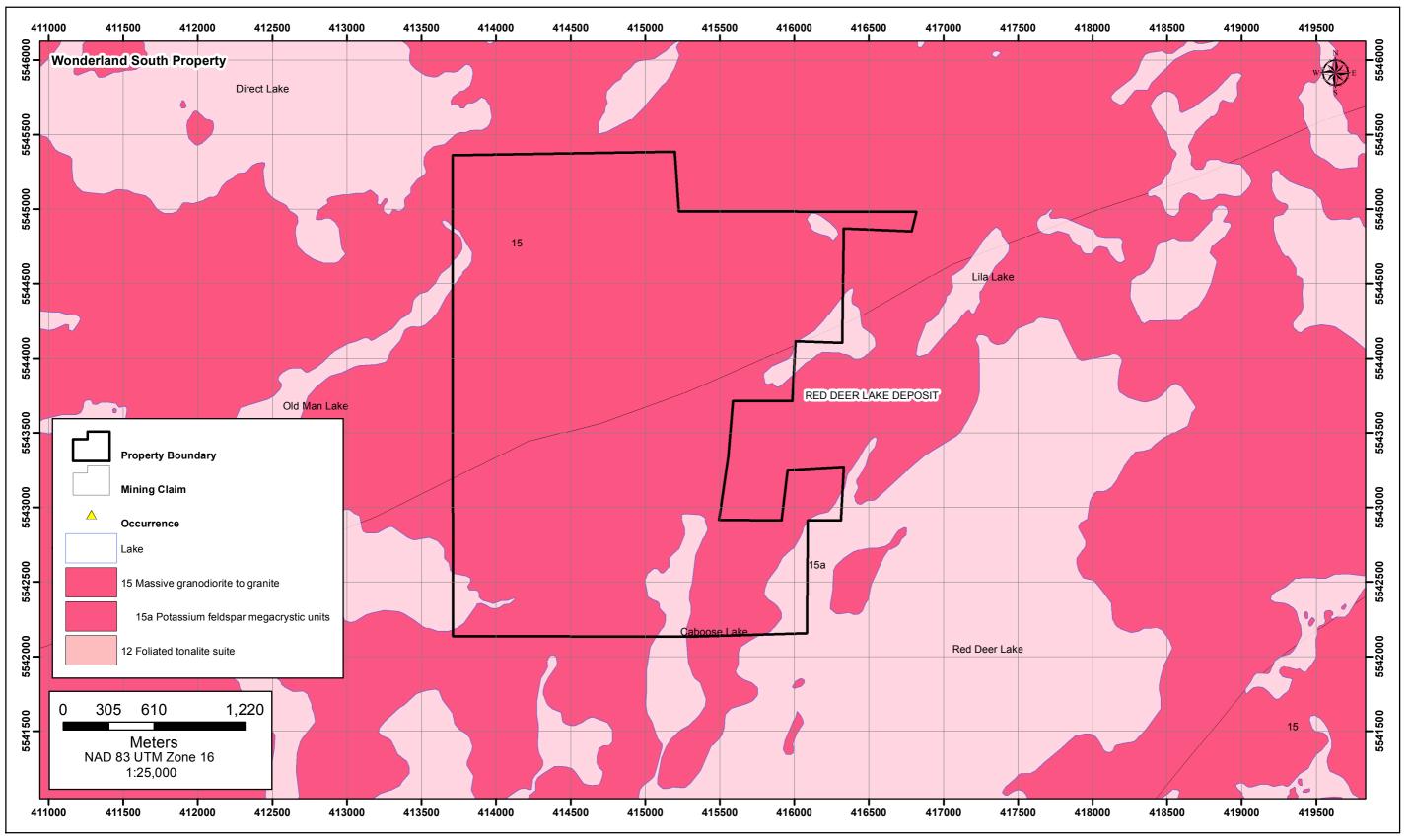
detail in the report "Assessment Report on the Wonderland South Property, Kenora Mining Division, Northwestern Ontario" filed with the MNDM in 2015.

The outcrop areas examined were generally accessible by existing bush roads and trails in order to reduce the costs of accessing the areas for future bulk sampling. During the work program some claim posts, line posts and claim lines were also located and recorded on the GPS; these locations were found to correspond closely to the claim fabric as shown on the MNDM website.

#### 5.0 2016 Program

The exploration program conducted in late summer 2016 consisted of visiting some of the locations of granite outcrop that had been examined and documented the previous year, and cutting slab samples from outcrops that were deemed suitable for marketing. The samples were cut using a portable hand-held rock saw, with samples usually ranging from 3-4 cm in thickness, 20-25 cm in length, and 10-15 cm in depth. Due to water not being readily available at most locations, the water used for cutting was carried to each site in 5 gallon jerry cans, and slowly poured over the saw blade while cutting. At each location two slabs were cut, at right angles to each other, in order to get a sample of the oriented phenocrysts (where applicable) both parallel to and cross-cutting the preferred orientation. Each sample site was photographed with the two slabs positioned next to the spot where they were cut from, along with the GPS to verify the location and date of the sampling (see photos in Appendix IV).

The work was carried out by Des Cullen, P.Geo., of Kaministiquia, Ontario and Craig Maitland of Thunder Bay, Ontario. Work commenced on August 20<sup>th</sup> and was carried out intermittently until September 15<sup>th</sup>. Three other Properties in the area were also examined in and around this time, and the exact days worked on each are broken down in Appendix I, "Daily Log". The time spent on each Property has been split up accordingly for the purpose of filing the assessment work. The workers commuted to and from the Property from Kenora.



#### 6.0 Interpretation and Conclusions

The work program carried out in late summer 2016 has provided a number samples of granite porphyry outcrops with photographs for future reference by Besco. These samples can be further cut and polished in order to display them to potential customers or for possible marketing studies by Besco.

#### 7.0 Recommendations

It is recommended that Besco continue to further examine and analyse outcrops that it deems suitable for market either with more cutting as carried out in this program, or with a drill program, consisting of short, large diameter holes. The holes would only have to be to a depth suitable for quarrying, and the larger diameter core would provide them with large enough samples to allow cutting and polishing to show to potential customers, and also give an indication of the amount of fracturing present. A permit would be required from the MNDM for the drill program.

#### 8.0 References

- Note: Notations listed in the references below in the format "AFRI 52L08SW2002" refer to assessment files archived with the Ontario Ministry of Northern Development and Mines, Kenora Resident Geologist's Office, Kenora, Ontario, and on the MNDM website (www.geologyontario.mndm.gov.on.ca/).
- Beakhouse, G.P. 1991. The Winnipeg River Subprovince, in Geology of Ontario, Special Volume 4, Part 1, p. 279-302.
- Beard, R. 2002. Report on the Red Deer Lake Brown Granite Deposit, Wonderland Lake Area, Kenora District; held by Manex Granite Inc. AFRI 52L01SE2002
- Beard, R. 2007. Assessment Work Report for Industrial Minerals; Red Deer Lake Granite Dimension Stone Deposit, for Redditt Stones Inc. AFRI 20003556.
- Breaks, F.W., Bond, W.D., and Stone, D. 1978. Preliminary geological synthesis of the English River Subprovince, Northwestern Ontario, and its bearing upon mineral exploration; Ontario Geological Survey, Misc. Paper MP 72, 55p. Accompanied by Map P.1971, Scale 1:253440.
- Breaks, F.W. 1991. The English River Subprovince, in Geology of Ontario, Special Volume 4, Part 1, p. 239 – 278.
- Breaks, F.W. and Bond, W.D. 1993. The English River Subprovince An Archean Gneiss Belt: Geology, Geochemistry and Associated Mineralization; Ontario Geological Survey, Open File Report 5846, Volumes 1 and 2, 884p.
- Corbeil, J-C., 1992. Report on Industrial Mineral Marketing Study, Red Deer Lake; for Manex Granit Inc. AFRI 52L01SE8183.
- Corbeil, J-C., 1996. Report on Industrial Mineral Marketing Study, Red Deer Lake; for Manex Granit Inc. AFRI 52L01SE0010.
- Cullen, D. And Clark, J.G. 2015. Assessment Report on the Wonderland North Property, Kenora Mining Division, Northwestern Ontario; prepared for BESCO International Investment Co. Ltd.
- Farrow, D.G. 1996. Potential dimension stone quarry sites in the Kenora, Ignace and Rainy River areas of northwestern Ontario: Ontario Geological Survey, Open File Report 5949, 139p.

#### 9.0 Certificate of qualifications

#### Desmond Cullen

R.R. #2 Kaministiquia, Ontario Canada, P0T 1X0

Telephone: 807-933-4689, Fax: 807-622-4156 Email: des.cullen@sympatico.ca

#### **CERTIFICATE OF QUALIFIED PERSON**

- I, Desmond Cullen, P.Geo. (#0164) do hereby certify that:
  - 1. I am a consulting geologist with Clark Exploration of Thunder Bay, Ontario
  - 2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1988. I have been a consulting geologist since 1988 working extensively in Ontario and also internationally. I have participated in all aspects of gold and base metal exploration from prospecting to resource definition drilling.
  - 3. "Technical Report" refers to the report titled "Assessment Report on the Wonderland South Property, Kenora Mining Division, Northwestern Ontario.", and dated effective October 15th, 2016.
  - 4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0164) and a member Ontario Prospectors Association.
  - 5. I have worked as a Geologist for 26 years since my graduation from university.
  - 6. I worked on the Wonderland South Property during the 2015 work program.
  - 7. I am responsible for the preparation of the entire report.
  - 8. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
  - 9. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

10. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 15<sup>th</sup> Day of October, 2016.

SIGNED	and	SEA	LED

"Desmond Cullen"

Desmond Cullen, P.Geo.

J. Garry Clark 1000 Alloy Drive Thunder Bay, Ontario Canada, P7B 6A5

Telephone: 807-622-3284, Fax: 807-622-4156

Email: gjclark@tbaytel.net

#### **CERTIFICATE OF QUALIFIED PERSON**

- I, J. Garry Clark, P. Geo. (#0245), do hereby certify that:
- 1. I am a consulting geologist with an office at 1000 Alloy Dr., Thunder Bay, Ontario.
- 2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983. I have been a consulting geologist since 1987 working extensively in Ontario and Quebec but also internationally. I have completed all aspects of gold and base metal exploration from prospecting to resource definition drilling.
- 3. "Technical Report" refers to the report titled " Assessment Report on the Wonderland South Property, Kenora Mining Division, Northwestern Ontario", and dated October 15th, 2016.
- 4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0245) and a member Ontario Prospectors Association.
- 5. I have worked as a Geologist for 29 years since my graduation from university.
- 6. I am responsible for the entire Technical Report.
- 7. I am independent of the party or parties (the "issuer" and "vendor") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
- 8. I have had no involvement with the mineral Property that forms the subject of this Technical Report.
- 9. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 15<sup>th</sup> day of October, 2016.

SIGNED

"J. Garry Clark"

J. Garry Clark, P.Geo.

## Appendix I: Daily Log

# Daily Logs – Kenora Project – Besco – August-September 2016

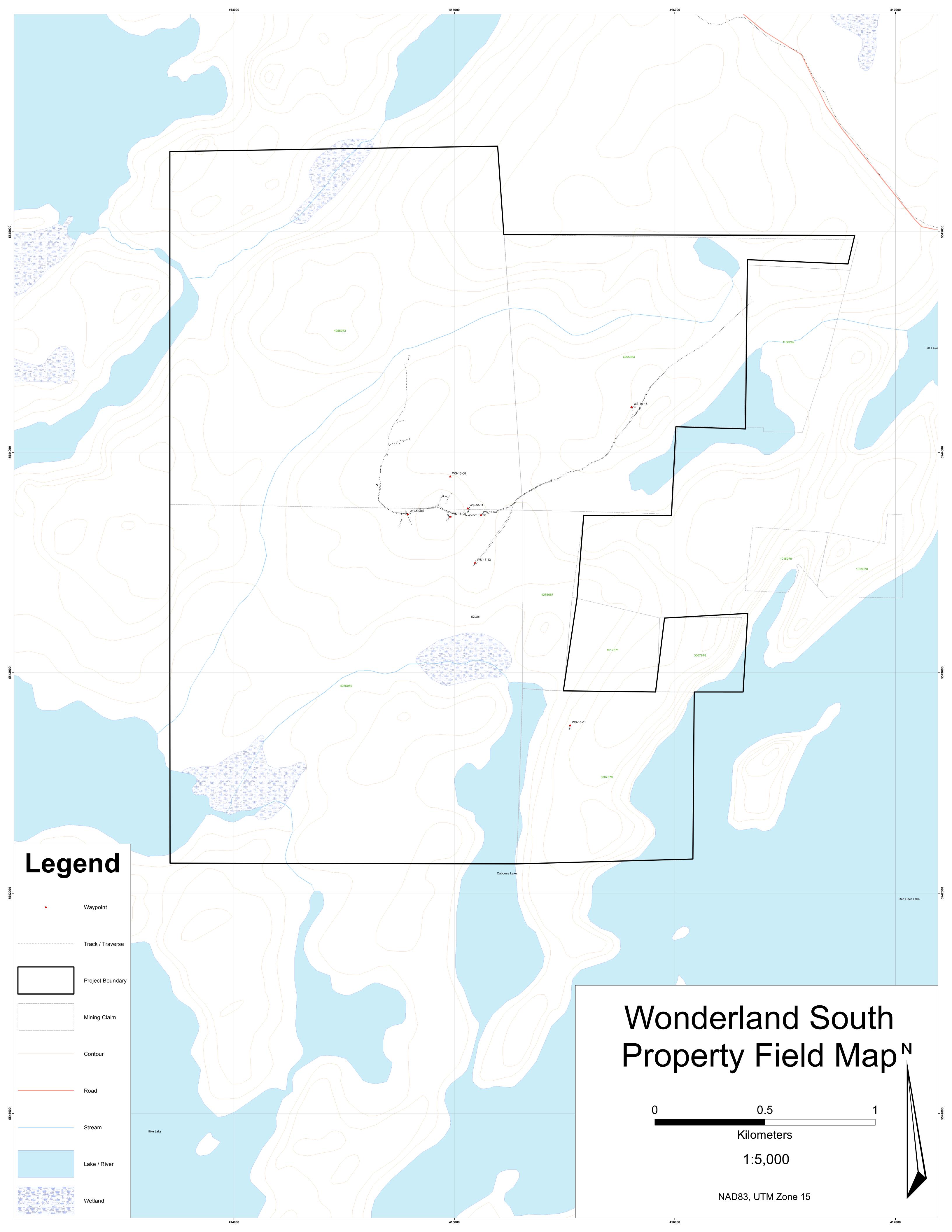
Date	Work Performed	Claims Worked On		
August 20	Drive to Kenora, check into accommodations	Applied half day to Snook Lake and Wonderland South Properties		
August 21	Prospected, mapped and analysed granites on claim 3007282 (Kilgour Property)	3007282		
August 22	Cut slab samples on claim 3007877 adjacent to site of previous Besco bulk sample for comparison with the other cut samples from this program (Wonderland North)	3007877		
August 23	Cut slab samples on claim 4255052 on Wonderland North	4255052		
August 24	Cut slab samples on claims 3007879 and 4255060 on Wonderland South	3007879 and 4255060		
August 25	Raining; brought company representative up to Wonderland North and South and gave tour of previous bulk sampling sites and current samples	3007877, 4255052, 3007879 and 4255060		
August 26 Cut slab samples on claims 4255063 and 4255060 on Wonderland South		4255060 and 4255063		
August 27	Cut slab samples on claim 4255060 on Wonderland South	4255060		
August 28	Cut slab samples on claims 4267320 and 4255073 on Snook Lake Property	4267320 and 4255073		
August 29	Cut slab samples on claim 4255073 on Snook Lake Property	4255073		
August 30	Cut slab samples on claims 4255073 and 4267320 on Snook Lake Property	4267320 and 4255073		
August 31	Cut slab samples on claim 4255052 on Wonderland North	4255052		
September 1 Drive to Thunder Bay		Applied to Wonderland North		
September 6 Drive to Kenora		Applied to Wonderland South		
September 7 Cut slab samples on claim 4255052 on Wonderland North		4255052		
September 8 Rain in morning; cut slab samples on claim 3007877 on Wonderland North, at east end of trail in north part of claim		3007877		

Date	Work Performed	Claims Worked On
September 9	Cut slab samples on claims 4255075 and 4267320 on Snook Lake Property	4255075 and 4267320
September 10	Cut slab samples on claim 4255075 on Snook Lake Property	4255075
September 11	Cut slab samples on claim 4255075 on Snook Lake Property	4255075
September 12	Cut slab samples on claim 4255075 on Snook Lake Property	4255075
September 13	Cut slab samples on claims 4255060 and 4255064 on Wonderland South Property	4255060 and 4255064
September 14	Cut slab samples on claim 4255055 on Wonderland North	4255055
September 15	Drive to Thunder Bay	Applied to Snook Lake

## **Appendix II: Wonderland South Cut Slab Descriptions and Locations**

Waypoint No.	Easting (NAD 83 Zone 15U)	Northing (NAD 83 Zone 15U)	Samples	Photos (all prefixed "GEDC0")	Slab Description
WS-16-01	415525	5542762	WS=16-01 and WS-16-02	428	Samples are adjacent to previous bulk sample for comparison. ~35-40% reddish-orange euhedral feldspar, 5-10mm; 35-40% grey to blue-grey quartz, 2-4mm; 20-25% mafics - looks like predominantly biotite; occasional small rust-coloured splotches with biotite
WS-16-03	415121	5543716	WS=16-03 and WS-16-04	430	~55-60% reddish-orange subhedral feldspar up to 3cm; 20-25% white to grey quartz, 2-5mm; 15-20% mafics - predominantly biotite
WS-16-05	414981	5543708	WS-16-05 and WS-16-06	433, 434	~50-55% reddish-orange feldspar up to 1cm x 2 cm; ~30-35% greyish quartz 2-5mm; ~15-20% mafics 1-3mm; appears to be mainly amphibole and biotite
WS-16-08	414981	5543891	WS-16-07 and WS-16-08	435, 436	~40-45% buff feldspar phenocrysts generally less than 1cm - not as porphyritic; ~30-35% greyish quartz 2-5mm; ~20% mafics, fine grained amphibole and biotite
WS-16-09	414789	5543720	WS-16-09 and WS-16-10	437	Sample is more massive than previously seen - not porphyritic, looks weakly gneissic; ~40-45% reddish-orange feldspar 2-4mm; ~40-45% white to grey quartz 2-4mm; ~10-20% fine grained mafics; trace fine grained iron oxide blebs
WS-16-11	415061	5543746	WS-16-11 and WS-16-12	439	Massive to weakly gneissic reddish-pink granite; occasional feldspar phenocrysts from 1-3cm - feldspar are generally 2-4mm, ~70-75% feldspar; ~15-20% quartz 2-4mm; 5-10% fine grained mafics
WS-16-13	415094	5543500	WS-16-13 and WS-16-14	469	Samples are ~55-60% brownish-orange subhedral to euhedral feldspar phenocrysts up to 2cm - generally about 1cm; 20-25% grey quartz 2-4mm; 15-20% mafics 2-4mm
WS-16-15	415804	5544207	WS-16-15 and WS-16-16	471	Samples are ~55-60% brownish-orange subhedral to euhedral feldspar phenocrysts up to 2cm - generally about 1cm; 20-25% grey quartz 2-4mm; 15-20% mafics 2-4mm; occasional darker, blood red grains associated with feldspar, possibly still feldspar?

**Appendix III: Property Compilation** 



## **Appendix IV: Photos**

The following photos all correspond to the photos listed in the spreadsheet in Appendix II.













