Metallurgical Test Report On Limestone from the Coral Rapids Property

for

CANADIAN OREBODIES INC.

PITT, VALENTINE, TOWNSHIPS

PORCUPINE MINING DIVISION ONTARIO

2.45.461

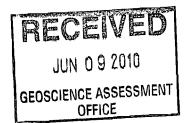
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Metallurgical Test Report Coral Rapids Limestone Project

SUMMARY

Canadian Orebodies Inc. holds Claim 1238781 in Valentine Township and Calim 1223526 in Pitt Township, Ontario comprising a reported high quality limestone deposit. The deposit is of Middle Devonian age and comprises the Upper Abitibi or Kwataboahegan Formation. The deposit is of interest for the production of chemical lime and high brightness calcium carbonate fillers.

The deposit was explored by drilling in September; 2008 along a south to north lime on UTM co-ordinate 452250E and between UTM co-ordinates 55645550 to 5565950 N (NAD 83, Zone 17) to the west of the Abitibi River at Coral Rapids. Exploration work consisted of 518.4 metres of diamond drilling in nine holes (Boissoneault, 2008). Plans and sections for the drill program are reproduced in Appendix 1.

Cartwright Drilling of Goose Bay Labrador conducted the work utilizing a CDI 500 diamond drill and producing BTW wire line core (40 mm in diameter). The program was carried out using helicopter transport out of Cochrane because surface access was not possible at this time.

Pierre C. Robert and Duncan McKinnon took charge of the core samples at the site and delivered them to the core logging and sampling facilities at 159 Kent Avenue in Timmins, Ontario. The core was logged at this location where it is presently being stored (Boissoneault, 2008)

In September, 2009, Don Hains, P.Geo., inspected the available core and selected sections of core from the holes for metallurgical testing at the Metso Minerals, Pyro Division ("Metso") laboratory in Danville, PA. The purpose of the test work was to evaluate the potential of the limestone for production of high quality chemical lime. Two samples consisting of two 20 L pails each were shipped for testing. The weight of the samples were: Sample 1: 38.0 kg., and Sample 2: 30.2 kg.

The samples were processed by Mesto in a muffle furnace and evaluated for the physical properties of the raw stone and calcined lime and analyzed chemically for lime reactivity and chemistry.

The results of the physical and chemical analysis of the raw stone and calcined lime indicate the following:

- Competent stone suitable for use in a rotary kiln for lime production
- Relatively low reactivity lime product, but with acceptable characteristics,
- Low CaO content (75.5% = 65.3%), high SiO₂ (13.11% = 15.85%) high MgO (7.08% 14.17%) in the lime products, indicating a low quality lime product.

It is recommended that no further work be undertaken on the property.

Location and History

The property location and history of exploration o the property are fully described in prior reports (Boissoneault, 2008).

Geology

The geological description of the property is taken from Boissoneault (2008) and reproduced herein:

The Coral Rapids property is located in about the center of the Superior Province of the Precambrian Shield. The property is situated near the deepest part of the Superior Craton and includes the southernmost limit of the Paleozoic and Mesozoic rocks of the Hudson Platform, which overlie the Archean basement. At this location, the Superior Province consists of a broad band of mostly metasedimentary rocks with considerably lesser metavolcanic rocks and their derivatives, referred to as the Quetico subprovince.

"The Coral Rapids property straddles the boundary between the Paleozoic Mesozoic sediments of the Moose River Basin and the metasediments of the Quetico subprovince of the Precambrian Shield. They lie close to the deepest part of the Superior craton (>320 km).

To the south of the boundary, the Quetico metasediments consist of greywackes, quartz arenites and arkoses, and their migmatized derivatives, interbedded in places with mafic metavolcanics. These formations are tightly folded and steeply dipping with a general strike of 70° (N-70°-E) and usually have a gneissic texture. Recrystallization to muscovite granites has occurred in several areas.

To the east, the Quetico rocks lie in fault contact with the high-grade metamorphic rocks of the Kapuskasing Structural Zone (KSZ). These are generally hornblende-pyroxene granulites, intruded by a number of alkalic bodies. The KSZ is considered to be a major thrust fault with 20 km of vertical displacement. A long broad zone of subtle crustal uplift called the "Fraserdale Arch" crosses the region at 55 (N-55 -E) and passes through the midpoint of the Coral Rapids property.

To the north of the boundary, the relatively flat lying sediments of the Moose River Basin lie unconformably upon the Archean basement with their southern edge uplifted upon the northern flank of the Fraserdale Arch. The sedimentary succession on the property is entirely Devonian in age, and consists mainly of limestones with shales and mudstones near the top of the section and arkosic sandstones of the Sextant Formation at the bottom.

At Coral Rapids, the Paleozoic section is about 100 m thick, and the Devonian sedimentary succession from youngest to oldest is as follows:

- (1) Mid Devonian Moose River Formation
- evaporites and evaporitic brecciated carbonates

- (2) Mid Devonian Upper Abitibi (Kwataboahegan) Formation succession of fossiliferous limestones locally bituminous
- (3) Mid Devonian Middle Abitibi (Stooping River) Formation cherty limestones, dolomitic limestones, often fossiliferous
- (4) Early Devonian Sextant Formationpredominantly red arkosic sandstone

Most of these sediments are exposed at Coral Rapids in the cliff face on the west side of Abitibi Canyon which rises to a height of nearly fifteen meters. At this location, the section comprises of two meters of clay, ten meters of Upper Abitibi Formation, three meters of Lower Abitibi Formation, and the top of the Sextant formation. Samples of Upper Abitibi limestone assayed from from 97.45%- 97.76% carbonate with magnesium carbonate averaging 0.73% and impurities averaging less than 2%. This formation extends for some fifteen kilometers to the north and an unknown distance to the west.

The Paleozoic section in the Moose River Basin generally has a slight dip to the north, but at coral Rapids the Abitibi River has cut through the crest of an open anticline at its axis. The sediments, therefore, have a gentle local dip to the southwest and the Upper Abitibi Formation, whose top is eroded at Coral Rapids, should thicken to the west.

A number of alkalic intrusions have taken place in the vicinity. One of these, a carbonitite body of Proterozoic age (1,100 Ma), occurs in Valentine Township to the east of Coral Rapids. An ultramafic intrusion, which has been identified as a lamprophyre, can be seen on the west bank at Coral Rapids and a kimberlitic body occurs along the same bank further to the north.

Sampling

Drill core was inspected and compared to the drill logs prior to sampling. Sampling consisted of splitting the core using a diamond core saw, with half the core returned to the core boxes. Due to the small diameter of the core, it was necessary to combine core from several holes to prepare a sufficient sample size for muffle furnace testing (normal minimum sample size for muffle furnace testing is 50 kg). The following drill core sample intervals were used to develop two composite samples (Table 1):

Table 1
Drill Core Sample Intervals

Sample No.	Drill Holes	Intervals	Sample Weight
	DDH-CR-08-01	30' to 50'.	
1	DDH-CR-08-02	37.6' to 57.4'	38 kg
1	DDH-CR-08-03	30.7' to 69.5'	30 Kg
	DDH-CR-08-04	50.5' to 73.1'	
	DDH-CR-08-05	30.6' to 50.0'	
2	DDH-CR-08-06	27' to 39.6'	30.2 kg
₹	[∠] DDH-CR-08-07	45.8' to 57.4'	<u> </u>
	DDH-CR-08-08	72.9' to 101.2'	

Drill core from DDH-CR-08-09 could not be located and was not used in preparing the samples.

Appendix 2 contains the drill core logs for all the drill holes.

Samples were packed in 4 20L pails, two pails for each sample and shipped by Purolator Courier to the Mesto test facility in Danville, PA.

Test Procedures

Test procedures employed at Metso included the following:

- initial visual inspection of the physical appearance of the samples:
 - amount of free dust
 - amount of adherent dust
 - grain size
 - colour
 - uniformity of sample
 - type of stone

Purpose: general characteristics of the stone; determine if washing is required to remove dust

bulk density determination

Purpose: prepare sized sample (-1"+3/8") and determine bulk density. Uniform size stone required as some test results are influenced by initial sample size

stone abrasion

Purpose: determines resistance to abrasion (fines generation) during materials hanlding

Loss on Ignition (LOI)

Purpose: determine ease of calcination, ash content of calcined product and loss of CO₂ to determine lime content in calcined product

• Breakdown in muffle furnace

Purpose: determine fines generation during calcination

- Lime abrasion test and rotary kiln index (RKI)
 Purpose: determines tendency for stone to decrepitate during calcination
- Loss on Ignition (LQI) of lime
 Purpose: measure of ease of calcination of stone
- Lime reactivity
 Purpose: measure of rate of acid neutralization
- Chemical analysis of stone and lime
 Purpose: provide chemical analysis of feed material and product. Indication of
 purity of stone and lime product

The results of the tests are summarized in Tables 2 and 3, with the full test reports provided as Appendix 3. The overall conclusions from the test work are:

- 1. The raw stone has reasonable structural strength and would not be subject to significant fines generation during materials handling and processing;
- 2. The can be calcined in a standard preheater-rotary kiln system without excessive fines generation and decrepitation;
- 3. The lime product is of low reactivity;
- 4. The lime product is relatively impure, with a high percentage of acid insolubles (SiO₂) and high MgO content.

Recommendations

Based on the results of the calcination test work, it is recommended that no further work be conducted on the property respecting the potential for production of high calcium quicklime.

Table 2

Test	Res	sult	Comments	
1 est	Sample 1	Sample 2	Comments	
Visual	Minimal free	Minimal free	Low dust high calcium	
	and adherent	and adherent	limestone	
	dust, medium	dust, medium		
	grain size,	grain size,		
	uniform, light	uniform, light		
	tan to light	tan to light		
	grey	grey		
Stone Abrasion Index	4.26	3.67	Good mechanical strength.	
			Minimal fines generation	
	2	3	during initial calcination	
Apparent Density	2.35 g/cm ³	2.10 g/cm ³	Somewhat porous limestone	
Stone Loss on Ignition	41.75%	42.19%	High calcium limestone with	
	3	3	impurities	
Apparent density of lime	1.98 g/cm ³	2.34 g/cm ³	As above	
Change in volume (stone to lime) %	-18.25%	-21.71%	As above	
Breakdown in Muffle Furnace	16.77% -3/8"	15.27% -3/8"		
Decrepitation in muffle furnace	Minimal	Minimal	Good properties during	
_	cracking &	cracking &	calcination. Strong stone	
	chipping,	chipping,		
	moderate	moderate		
	_dusting	-dusting		
Rotary Kiln Index (RKI)	19.83	14.94	Required value < 25. Good	
Rouny Rim Index (Ritt)	15.03		stone	
Loss on Ignition of +3/8" Lime	0.30%	0.19%	Required value <1%. Easily	
ENGLO ON ABARTON OF 1010 DAME			calcined stone	
Lime Reactivity (average temp.	2.12 °C/min	2.25 °C/min	Moderate to low reactivity	
rise)	_:== =:=====		lime	

Table 3
Chemical Analysis

		<u></u>				
	Limestone #1		Lime #1	Limestone #2		Lime #2
	reported	calculated	reported	reported	calculated	reported
Al ₂ O ₂ , %	1.100	1.100	2.430	1.960	1.960	3.140
CaO. %	49.240	6.489	75.500	40.790	11.100	65.620
CaCO ₂ , %		76.301			52.991	
Fe ₂ O ₂ , %	0.970	0.970	1.980	1.820	1.820	2.940
K ₂ O, %	0.310	0.310	0.590	0.330	0.330	0.400
MgO, %	3.270	0.000	7.080	8,280	0.000	14.170
MgCO ₃ , %		6.840			17.320	
MnO, %	0.122	0.122	0.205	0.173	0.173	0.292
Na ₂ O, %	0:030	0:030	0.050	0.050	0.050	0:080
P ₂ O ₅ , %	0.040	0.040	0.070	0.040	0.040	0.060
SiO ₂ , %	6.200	6.200	13,110	9.230	9.230	15.850
Š. %	0.090	0.090	0.050	0.170	0.170	0.130
TiO ₂ , %	0.041	0.041	0.093	0.081	0.081	0.118
LOI, %	37.120		0.000	32.340		0.000
others, %	1.467	1.467	-1.158	4.736	4.736	-2.810
	100.000	100.000	100.000	100.000	100.000	100.000

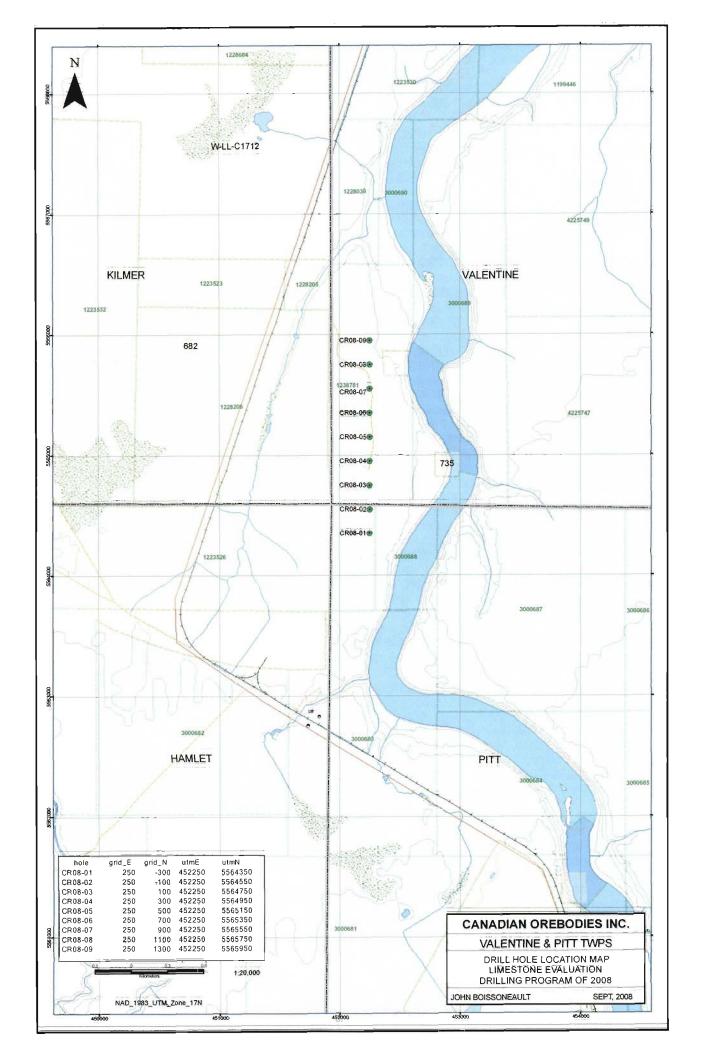
References

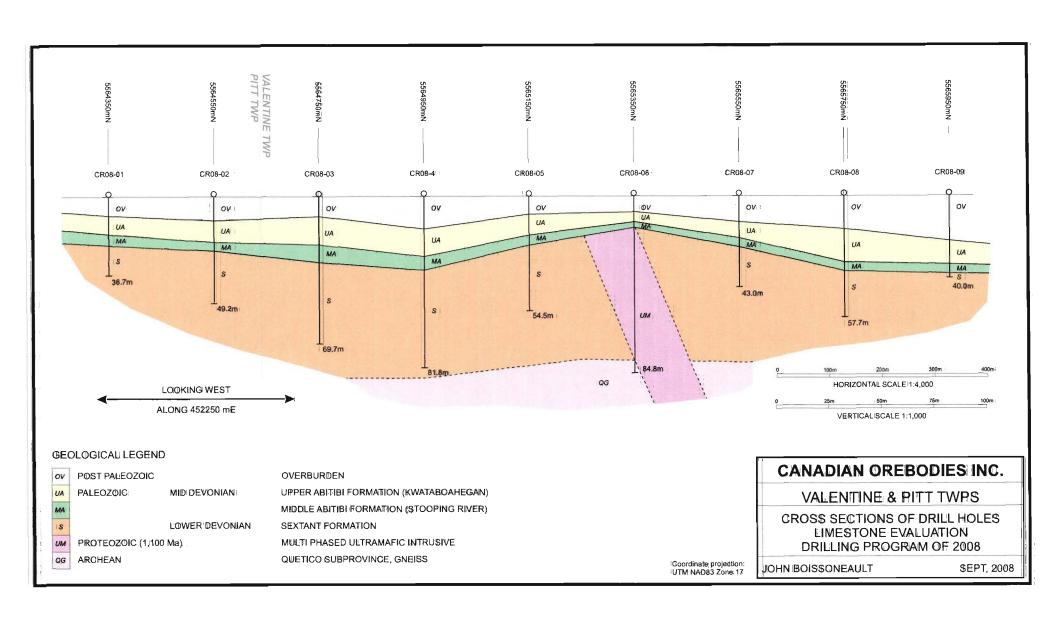
Boissoneault, J. (2008): Diamond Drilling Report 2008 on the Coral Rapids Property for Canadian Orebodies Inc., Pitt & Valentine Townships, Porcupine Mining Division, Sept. 30, 2008



Appendix 1

Plans and Sections for Drill Holes





Appendix 2

Drill Core Logs

Drill Program

Property: Coral Rapids Drill Contractor: Cartwright Drilling

Hole No: CR 08-01 Dip: -90 AZ: Na

UTM: 452250 E 5564350 N (Nad 83, Zone 17) Claim: 1223526 Pitt Twp.

Date Started: Sept. 3, 2008 Date Finished: Sept 4, 2008

Total depth: 36.7 Core size: BTW wire line Logged by: J. Boissoneault

Sept. 18, 2008

Sept. 18, 200

<u>Interval</u> <u>Description</u>

0-8.5m Casing

8.5m-16.5m Upper Abitibi Formation (Kwataboahegan), buff to med grey

calcareous limestone, fine grained, massive sections porous, narrow thinly bedded sections at 80=90 dea (buff grey) generally

fossiliferous.

8.5-15.1 Masssive porous in places, highly calcareous

15.1-16.5 Mainly thinly bedded, conformable gritty mud seam at

16:1m (10cm); beds 1mm=10mm; unconsolidated sediment

deformation.

16.5m - 20.7m Middle Abitibi Formation, (Stooping River), buff grey to dark

greenish grey limestone, fine grained deformed bedding at 80-90 dea with massive sections, dolomitic in places, narrow dark siltstone beds (conformable) from 3cm to 4cm wide at 16.9m,

18.1m, and 19.1m, odd thin carbonaceous seam.

20.7m-36.7m Sextant Formation, mainly ferruginous arkosic sandstone with

partially consolidated sections, medium grained, deep reddish brown with greenish grey areas of reduction and finer grey silty

interbeds, some areas highly hematized.

30,2-33.2 Unconsolidated quartz arenite, immature, angular

fragments of quartz (indicative of proximity of Archean basement).

36.7 End of Hole CR 08-01

Core Recovery: 8.5m - 20.7m - 96% 20.7m - 36.7m - 70%

Drill Program

Property: Coral Rapids Drill Contractor: Cartwright Drilling

Hole No: CR 08-02 Dip: -90 AZ: Na

UTM: 452250 E 5564550 N (Nad 83, Zone 17) Claim: 1223526 Pitt Twp.

Date Started: Sept. 4, 2008

Total depth: 49.2 Core size: BTW wire line

Date Finished: Sept. 4, 2008

Logged by: J. Boissoneault

Sept. 18, 2008

Interval <u>Description</u>

0-10.9m Casing

10.9m-21.2m Upper Abitibi Formation, (Kwataboahegan), buff to brownish grey

limestone, fine grained highly calcareous, some porous sections, generally massive with some thinly bedded sections (1mm-10mm) at 80-90 dca, odd fossil, deformation in some places, conformable gritty mud seams (10cm) at 17.6m, and 20.4m thin carbonaceous

seam at 20.9m.

21.2m-24.2m Middle Abitibi Formation, (Stooping River), buff grey to dark

greenish grey limestone, fine grained, thinly bedded with dark greenish bands (1mm-10mm) deformed in places, reddish brown

oxidized bands (5cm-10cm) at 21.3m, 21.6m and 22.6m (conformable), green mineral (glocanite?) at 23.2m in 10 cm

band. Becoming gritty near the end of section.

24.2m-47.9m Sextant Formation, mainly arkosic sandstones and siltstones.

24.2m – 39.4m Highly ferruginous poorly consolidated arkosic sandstone, deep reddish brown, a few well consolidated sections, much hematization with a few areas of grey-green reduction.

39.4m – 47.9m Finer grained, thinly bedded siltstone, dark grey to black with arkosic sections up to 30cm wide, black carbonaceous

seams and ferruginous bands at 80-90 dca, unconsolidated

sediment deformation, some cross-bedding.

47.9m-49.2m Archean, reconstituted regolithic material

49.2m End of Hole CR 08-02

Core Recovery: 10.9m - 24.2m - 95% 24.2m - 47.9m - 65%

Drill Program

Property: Coral Rapids

Hole No: CR 08-03

UTM: 452250 E 5564750 N (Nad 83, Zone 17)

Date Started: Sept. 5, 2008

Total depth: 69.7m Core size: BTW wire line

Drill Contractor: Cartwright Drilling

Dip: -90 AZ: Na

Claim: 1238781 Valentine Twp. Date Finished: Sept. 5, 2008

Logged by: J. Boissoneault

Sept. 19, 2008

Interval

Description

0m-9.3m

Casing

9.3m-22.6m

Upper Abitibi Formation, (Kwataboahegan), buff to brownish grey fossiliferous limestone, fine grained, generally massive and finely porous throughout with thin bedding (buff-brown) in places (80-90 dca), numerous fossils mainly corals in the upper 3m, highly calcareous, dark gritty bands (1cm-2cm) at 15.4m, 19.8m, and 21.2m, dark brown ferruginous bands (conformable) at 9.4m, 19.8m; and 13.5m; slight deformation in places; fine brecciation intermittent from 18.0m to 22.6m.

22.6m-30.5m

Middle Abitibi Formation, (Stooping River), buff grey greenish grey fine grained limestone, generally well banded (1mm-5mm) at 80-90 dca with massive dolomitic sections, some sediment deformation in places, dark gritty seams (brecciation?), two thin carbonaceous bands at 23.9m, becoming silty near end of section.

30.5m-69.7m

Sextant Formation, highly ferruginous poorly consolidated arkosic sandstone, deep reddish brown, numerous areas of greenish grey reduction, some sections of consolidated pale grey sandstone with hematized areas, and becoming coarser from 36.4 to 45.5m. 64.5m - 69.7m unconsolidated quartz arenite, immature, angular fragments of quartz, poorly sorted.

69.7m

End of Hole CR 08-03

Core Recovery:

9.3m - 30.5m - 97%

30.5m - 69.7m - 45%

Drill Program

Property: Coral Rapids Hole No: CR 08-04

UTM: 452250 E 5564950 N (Nad 83, Zone 17)

Date Started: Sept. 6, 2008

Total depth: 81.8m Core size: BTW wire line

Drill Contractor: Cartwright Drilling

Dip: -90 AZ: Na

Claim: 1238781 Valentine Twp. Date Finished: Sept. 7, 2008

Logged by: J. Boissoneault

Sept. 19, 2008

Interval

Description

0m-14.8m

Casing

14.8m-27.9m

fine

Upper Abitibi Formation, (Kwataboahegan), buff brownish grey grained fossiliferous limestone, massive with porous sections, thin buff-brown banding from 1mm to 10mm wide at 80-90 dca mainly below 20.3m, some sediment deformation in places, odd thin carbonaceous band in lower part of the section, highly calcareous, porous and pale buff coloured above 22.1m, a few thin brecciated

areas.

22.4 – 23.1 – high angle mud seam 75 dca

Note: numerous fossils in upper part of section, mainly corals

(above 18m).

29.7m-33.6m

Middle Abitibi Formation, (Stooping River), buff grey to dark greenish grey limestone, fine grained and generally well banded at 80-90 dca with altering buff grey and dark greenish layering, considerable unconsolidated sediment deformation, more massive dolomitic sections, thin bands of silty material in places, recemented fracturing and brecciation with irregular seams of black material, carbonaceous bands at 29.4m, 30m, and 31.1m, becoming

silty near end of section.

33.6m-69.7m

Sextant Formation, highly ferruginous poorly consolidated arkosic sandstone, generally deep reddish brown with numerous areas of greenish to greenish grey reduction continuous from 33.6m to 34.0m, sections of dark grey to black banded siltstone crossbedded in places, some sediment deformation, black conformable carbonaceous seams 80-90 dca, muddy siliceous beds in lower part, hematized areas at 39m-44.8m, 49.4m-50.9m and 60m-62.7m, becoming coarser, redder, and more arkosic from 66m to

the end of section.

69.7m-72.7m

Reconstituted regolithic material.

CANADIAN OREBODIES INC. Diamond Drill Log

Property: Coral Rapids

Hole: CR08-04 Page 2.

72.7m-81.8m Sextant Formation, dark grey to black siltstone, thinly bedded at

75-80 dca, some cross-bedding, some sediment deformation,

concordant black carbonaceous bands in some places.

 $72.7m \equiv 75.8m \equiv \text{reddish brown}$; highly ferruginous

76.5m - 77.3m - coarse arkosic section

81.8m End of Hole

Core Recovery: 14.8m - 33.6m - 96% 33.6m - 72.7m - 45%

Drill Program

Property: Coral Rapids Hole No: CR 08-05

UTM: 452250 E 5565150 N (Nad 83, Zone 17)

Date Started: Sept. 7, 2008

Total depth: 54.55m Core size: BTW wire line

Drill Contractor: Cartwright Drilling

Dip: -90 AZ: Na

Claim: 1238781 Valentine Twp. Date Finished: Sept. 8, 2008 Logged by: J. Boissoneault

Sept. 23, 2008

<u>Interval</u>

Description

0m-8.9

Casing

8.9m - 18.9m

Upper Abitibi Formation, Kwataboahegan, buff to medium grey fine grained calcareous limestone, massive with thinly bedded sections.

8.9m - 15.5m - massive finely porous section, buff coloured, fossiliferous highly calcareous.

15.5m - 18.9m - thinly bedded (80-90dca) section, buff and greenish grey bands (1-5mm), slight sediment deformation, calcacerous:

13.3m – 13.6m – thin black carbonaceous bands

15.5 = 18.9m = dark greenish grey silty mud seams (3-6cm),

conformable at 15.5m, 17.0m and 18.8m.

18.9m -22.7m

Middle Abitibi Formation, (Stooping River), buff grey to dark greenish grey limestone, fine grained, thinly bedded (1-5mm) at 80-90 dea, massive dolomitic sections, unconsolidated sediment deformation, some brecciation at end of section, 19.7m – 21.5m narrow silty conformable mud seams up to 6cm wide.

22.7m - 45.8m

Sextant Formation, highly ferruginous, partially consolidated arkosic sandstone, med. grained, deep reddish brown, greenish grey areas of reduction, consolidated areas generally hematized. 25.9m – 26.9m – finer grained dark grey silty interbeds and mudstone seams.

36.4m – 37.7m - finer grained dark grey silty interbeds and mudstone seams.

45.8m - 54.5m

Sextant Formation, gritty siltstone with mudstone seams, dark grey, thinly bedded with some unconsolidated sediment deformation, friable.

55.4m

End of Hole CR 08-05

Core Recovery:

8.9m - 45.8m - 95%

45.8m - 54.4m - 75%

Drill Program

Drill Contractor: Cartwright Drilling Property: Coral Rapids

Dip: -90 AZ: Na Hole No: CR 08-06

UTM: 452250 E 5565350 N (Nad 83, Zone 17)

Date Started: Sept. 7, 2008

84.8m Core size: BTW wire line Total depth:

Date Finished: Sept. 9, 2008 Logged by: J. Boissoneault

Claim: 1238781 Valentine Twp.

Sept. 23, 2008

Interval

Description

0m-8.2m

Casing

8.2m = 12.2m

fine

Upper Abitibi Formation, (Kwataboahegan), black to med. grey, grained carbonaceous limestone with buff coloured areas, consists mainly of narrow thinly bedded sections (65-80 dca) with massive intervals, some sediment deformation and brecciation, highly calcareous, thin buff coloured stringers in places (carbonate), thin gritty mud seams at 8.7m - 9.1m, 9.7m - 10.2m, and 11.2m -

11.7m.

12.2m - 14.5m

Middle Abitibi Formation, (Stooping River) black to dark grey, fine grained carbonaceous dolomitic limestone with buff grey areas, thinly bedded sections (70-80 dca) with small massive intervals, some sediment deformation and some brecciation, silty mud seams from 12.7m to 14.1m.

14.5m - 78.2m

Ultramafic Intrusive, Pre-Devonian, multi-phased, probably carbonitite associated, massive, unfoliated and relatively unaltered.

14.5m - 19.8m - fine grained, dark grey to black peridotite, slight serpentization, a few sparcely distributed small blotches of exsolved white carbonate (1-2mm wide), a few white carbonate seams at various core angles.

19.8m - 23.9m - medium grained, dark grey to black peridotite, consists of small mafic grains (augite?) in a finer dark matrix, slight serpentinization, seams of white to grey carbonate at various core angles, low angle fractures sealed with a fine black material. 23.9m - 39.8m - medium grained, grey to black peridotite similar to previous section but with numerous blotches of exsolved white carbonate (1-3mm) making up 15-20% of the volume throughout most of the section, some irregular white carbonate stringers at various core angles.

39.8m – 45.5m – medium grained peridotite, consists of black augite grains up to 2mm wide in a greenish grey massive

Drill Program

Property: Coral Rapids Hole No: CR 08-06

Page 2

Interval

Description

14.5m = 78.2m ct'd

serpentinized matrix; streaks of green serpentinization up to 10cm wide.

45.5m - 52.3m - coarse grained grey to black peridotite with mafic grains in serpentinized matrix, numerous blotches of exsolved white carbonate up to 3mm wide 20% of volume, clear contacts, upper at 30 dca, lower at 20 dca.

52.3m - 61.9m - coarse grained peridotite consisting of large blotches of green serpentine and grains of black augite up to 3mm wide in a greenish grey med. grained serpentinized matrix; lower contact at 25 dca.

61.9m - 65.6m - coarse grained grey to black peridotite, black augite grains in grey serpentinized matrix, large number of exsolved blotches of white carbonate up to 5mm wide along with streaks and seams of carbonate.

65.6m – 78.2m – medium grained dark grey to black ultramafic grading down section to fine grained, small black grains in grey matrix, odd seam of white carbonate some with olivine at various low core angles.

78.2m - 84.8m

Archean basement, coarse grained pegmatitic Quetico gneiss, pink and white feldspar grains up to 2cm wide with black mafic grains (amphibole) up to 1cm wide, intrusive seams and finer grained areas.

84.8m

End of Hole

Core Recovery:

82.m - 14.5m - 94%

14.5m - 84.8m - 99%

Drill Program

Property: Coral Rapids Drill Contractor: Cartwright Drilling

Hole No: CR 08-07 Dip: -90 AZ: Na

UTM: 452250 E 5565550 N (Nad 83, Zone 17) Claim: 1238781 Valentine Twp.

Date Started: Sept. 9, 2008 Date Finished: Sept. 9, 2008

Total depth: 43.0m Core size: BTW wire line Logged by: J. Boissoneault

Sept. 24, 2008

<u>Interval</u> <u>Description</u>

0m - 13.6m Casing

13.6m – 20.9m Upper Abitibi Formation, (Kwataboahegan), buff to brownish grey

fine grained fossiliferous limestone, generally massive with thinly bedded sections (buff-brown) at 80-90 dca, bands from 1-5mm, highly calcareous, considerable sediment deformation, some slight

brecciation in places, odd ferruginous band, dark grey silty mudstone seams at 19.8m – 20m, and 20.2m – 20.5m, low

porosity.

20.9m - 24.3m Middle Abitibi Formation, (Stooping River), buff grey to dark

greenish grey fine grained limestone, well bedded throughout (buff grey-dark greenish grey bands) from 1-10 mm wide, considerable unconsolidated sediment deformation, thin green glocanite seams at 76m = 76.5m, dark silty concordant mudstone bands with buff limestone fragments 21.2m, - 21.4m, 22.5m - 22.9m, and 23.4m = 23.8m; dolomitic sections; odd thin black

carbonaceous band.

24.3m - 43.0m Sextant Formation, highly ferruginous partially consolidated

arkosic sandstone, deep reddish brown, areas of greenish grey reduction numerous from 24.3m = 27.2m, 33.3m = 39.3m, and 40.0m = 41.0m, becoming coarser grained near end, no truly

consolidated core.

43.0 End of Hole CR 08-07

Core Recovery: 13.6m - 24.3m - 95% 24.3m - 43.0m - 55%

Drill Program

Property: Coral Rapids Hole No: CR 08-08

UTM: 452250 E 5565750N (Nad 83, Zone 17)

Date Started: Sept. 10, 2008

Total depth: 57.7m Core size: BTW wire line

Drill Contractor: Cartwright Drilling

Dip: -90 AZ: Na

Claim: 1238781 Valentine Twp. Date Finished: Sept. 10, 2008

Logged by: J. Boissoneault

Sept. 24, 2008

Interval

Description

0m-17.3m

Casing

17.3m = 32.4m

Upper Abitibi Formation, (Kwataboahegan), buff to brownish grey fine grained calcareous limestone.

17.3m - 20.6m - dark grey, relatively coarse, highly fossiliferous,

possibly carbonaceous.

20.6m - 30.0m - buff coloured, generally massive, porous, fossiliferous and highly calcareous, minor bedded intervals (buffbrown) at 80-90 dea bands from 1-10mm, some sediment

deformation, relatively pure.

30.0m - 32.4m - generally bedded (buff-grey) at 80-90, dca, with short buff massive sections, bedding highly deformed with some slight brecciation, dolomitic near end, dark grey silty mudstone seams at 30.3m - 30.4m, 31.5m - 31.6m, and 32.3m - 32.4m, generally highly calcareous.

32.4m - 36.6m

Middle Abitibi Formation, (Stooping River), buff grey to dark grey grained limestone, generally well bedded (buff grey-dark grey) at 70-90 dca, bands from 1-10 mm, considerable unconsolidated sediment deformation, massive dolomitic buff coloured intervals, brecciated in places sometimes with fragments up to 1 cm wide from 34.5m - 36.4m, dark grey mudstone seams some with small limestone fragments, thin irregular fractures cemented with fine black material, odd thin carbonaceous band (<1cm), silty near end of section.

36.6m - 57.6m

Sextant Formation, highly ferruginous partially consolidated arkosic sandstone, deep reddish brown, intermittent areas of greenish grey reduction up to 15 cm wide, some short sections of buff grey well consolidated sandstone, odd thinly banded interval at 70-90 dca, becoming coarser near end of section.

57.7m

End of Hole

Core Recovery:

17.3m - 36.6m - 95%

36.6m - 57.7m - 50%

Drill Program

Property: Coral Rapids

Hole No: CR 08-09

UTM: 452250 E 5565950N (Nad 83, Zone 17)

Date Started: Sept. 11, 2008

Total depth: 40.0m Core size: BTW wire line

Drill Contractor: Cartwright Drilling

Dip: -90 AZ: Na

Claim: 1238781 Valentine Twp. Date Finished: Sept. 11, 2008

Logged by: J. Boissoneault

Sept. 25, 2008

<u>Interval</u>

Description

0m-22.0m

Casing

22.0m - 33.3m

Upper Abitibi Formation, (Kwataboahegan), buff to brownish grey fine grained limestone, highly calcareous.

22.0m - 29.1m - buff coloured generally massive and porous, some buff-brown bedded intervals (1-10mm) at 80-90 dca, some sediment deformation, highly calcareous and relatively pure, two silty mudstone seams (<10cm) at 25.3m and 25.8m. 29.1m - 33.3m - generally bedded (buff-grey) at 70-90 dca, with buff coloured massive intervals, highly deformed with some brecciation (fragments up to 1cm wide), dark silty mudstone seams up to 8cm wide at 29.4m, 29.9m, 30.7m, and 33.2m, section dolomitic near base.

32.6m – 32.9m – highly porous (large coral?)

33.3m - 37.9m

Middle Abitibi Formation, Stooping River, bluff grey to dark greenish grey fine grained limestone, generally well bedded (darkbuff) with bands from 1-10mm, extreme unconsolidated sediment deformation (similar to microfolding), buff coloured massive intervals less dolomitic and relatively calcareous, dark fracture filling seams of black mineral in places, black carbonaceous band (2.5cm) at 33.9m, dark grey silty mudstone seams at 33.4m to 33.6m, and 34.5m to 34.8m, becoming silty near end of section. 34.8m = 35.1m = brecciated area with large buff coloured fragments (1-2cm).

37.9m - 40.0m

Sextant Formation, highly ferruginous partially consolidated arkosic sandstone, deep reddish, brown, med. grained with some incorporated larger fragments, massive, no banding, relatively well consolidated, a few small blotches of greenish grey reduction.

40.0m

End of Hole CR 08-09

Core Recovery:

22.0m - 37.9m - 96%

37.9m - 90.0m - 55%

Appendix 3

Metso Test Reports



LIMESTONE EVALUATION TEST REPORT

CUSTOMER: SOURCE: SAMPLE I.D.: Canadian Orebodies

Unknown Sample #1 DATE: 01/18/10

LOG NO.: 475 CHARGE NO.: 61404

(A) Visual Observations:

Received In: (2) 5 Gallon Buckets

Free Dust: Moderate Adherent Dust: Minimal Grain Size: Medium Color: Light Tan

Uniformity: Uniform
Type of Stone: High Calcium

(B) Unit weight of 1"x3/8" Stone:

69.17 LBS./FT3

(C) Stone Abrasion:

1st 500 rev.:

2.89

2nd 500 rev.:

1.37

INDEX:

4.26

(D) Apparent Density of Stone:

2.35 gms/cm3

(E) Stone Loss on Ignition:

41.75 %

(F) Apparent Density of Lime:

1.98 gms/cm3

(G) Change in volume(stone to lime):

-18.25 %

(H) Calcining Conditions -

Temp: 2100 °F

Time: 90 MIN.

(I) Breakdown in muffle furnace:

16.77 % -3/8"

(J) Decrepitation in muffle furnace:

Minimal Cracking and Chipping with Moderate Dusting

(K) Abrasion of Muffle Furnace Lime:

1st 500 rev.: 11.86 2nd 500 rev: 9:04

00 rev:: 9:04 Index: 20.90

Index: 20.90 R.K.I.: 19.83



LIMESTONE EVALUATION TEST REPORT

CUSTOMER: SOURCE:

SAMPLE I.D.:

Canadian Orebodies

Unknown

Sample #1

DATE: 01/18/10

LOG NO.: 475 CHARGE NO.: 61404

(L) Size Analysis of minus 1/4" Abrasion Mill Lime:

U.S.S. #	%Retained
1/4"	0.00
6	7.00
8	2:10
16	4.20
30	1.00
50	2.30
100	39.80
Pan	43.60

(M) Loss on Ignition of +3/8" Muffle Furnace Lime:

0.30 %

(N) Reactivity of Lime Produced in Muffle Furnace:

Temp. Rise in 30 Sec.:

10.70 Deg C

Temp: Rise in 3 Min.:

13:90 Deg C 20.10 Deg C

Total Temp. Rise:

NA Min.

Time for 40 deg C. Rise:

Total Active Time:

9.50 Min.

Average Temp. Rise:

2.12 Deg C/min

LIME SLAKING TIME - TEMPERATURE COMPARISON Temperature (°C) 85 75 65 55 45 35 25 10 15 5 20 0 Time (minutes)



LIMESTONE EVALUATION TEST REPORT

CUSTOMER:

Canadian Orebodies

DATE: 01/19/10

SOURCE: SAMPLE I.D.: Unknown Sample # 2

LOG NO.: 475 CHARGE NO: 61404

(A) Visual Observations:

Received In: (2) 5 Gallon Buckets

Free Dust: Minimal Adherent Dust: Minimal Grain Size: Medium

Color: Light Tan to Light Grey

Uniformity: Uniform Type of Stone: High Calcium

(B) Unit weight of 1"x3/8" Stone:

71.23 LBS./FT3

(C) Stone Abrasion:

1st 500 rev.:

2.49

2nd 500 rev.:

1.18

INDEX:

3.67

(D) Apparent Density of Stone:

2.10 gms/cm3

(E) Stone Loss on Ignition:

42.19 %

(F) Apparent Density of Lime:

2.34 gms/cm3

(G) Change in volume(stone to lime):

-21.71 %

(H) Calcining Conditions -

Temp: 2100 °F

Time: 90 MIN.

(I) Breakdown in muffle furnace:

15.27 % -3/8"

(J) Decrepitation in muffle furnace:

Minimal Cracking, Chipping and Dusting

(K) Abrasion of Muffle Furnace Lime:

1st 500 rev.:

8.79

2nd 500 rev.:

6:75

Index:

15.53

R.K.I.:

14.94



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LIMESTONE EVALUATION TEST REPORT

CUSTOMER: SOURCE:

SAMPLE I.D.:

Canadian Orebodies

Unknown

Sample # 2

=========

DATE: 01/19/10

LOG NO.: 475

CHARGE NO.: 61404

========

(L) Size Analysis of minus 1/4" Abrasion Mill Lime:

U.S.S. #	%Retained		
1/4"	0:00		
6	12.60		
8	2.80		
16	4.60		
30	1.00		
50	11.60		
. 100	39.40		
Pan	28.00		

(M) Loss on Ignition of +3/8" Muffle Furnace Lime:

0.19 %

(N) Reactivity of Lime Produced in Muffle Furnace:

Temp. Rise in 30 Sec.:

10.60 Deg C

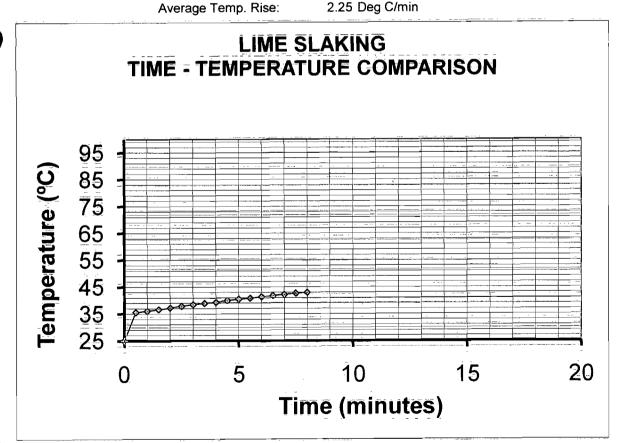
Temp. Rise in 3 Min.:

13:50 Deg C

Total Temp. Rise: Time for 40 deg C. Rise: 18.00 Deg C NA Min.

Total Active Time:

8.00 Min.





Gustomer: Canadian Orebodies

Test No:

S, %

TiO₂, %

LOI, %

others, %

61404

0.090

0.041

37:120

1.467

100.000

Date:

0.170

0.081

4.736

100.000

22=Feb=10

0.130

0.118

0.000

-2.810

100.000

	Limestone #1		Lime #1 Limes		one #2	Lime #2
	reported	calculated	reported	reported	calculated	reported
Al ₂ O ₃ , %	1.100	1.100	2.430	1.960	1.960	3.140
CaO, %	49:240	6.489	75:500	40:790	11.100	65.620
CaCO ₃ , %		76.301			52.991	
Fe₂O₃, %	0.970	0.970	1.980	1.820	1.820	2.940
Κ ₂ O, %	0.310	0.310	0.590	0.330	0.330	0.400
MgO, -%	3.270	0.000	7.080	8.280	0.000	14.170
MgCO ₃ , %		6.840			17.320	
MnO, %	0.122	0.122	0.205	0.173	0.173	0.292
Na ₂ O, %	0.030	0.030	0.050	0.050	0.050	0.090
P ₂ O ₅ , %	0.040	0.040	0.070	0.040	0.040	0.060
SiO ₂ , %	6.200	6.200	13.110	9.230	9.230	15:850
					0.470	0.400

0.050

0.093

0:000

-1.158

100.000

0.090

0.041

1.467

100.000

0.170

0.081

32:340

4.736

100.000