TECHNICAL REPORT AND UPDATED RESOURCE ESTIMATION



NORTH MADSEN PROPERTY, RED LAKE, ONTARIO

PREPARED FOR MEGA PRECIOUS METALS INC. EFFECTIVE DATE: JANUARY 2, 2014 ISSUED DATE: MARCH 27, 2014



DOCUMENT NO. 131-21705-00-REP-02 COPY

WSP Canada SUDBURY OFFICE Unit 2 – 2565 Kingsway, Sudbury, ON, P3B 2G1 Telephone : 705.674.0119 Fax : 705.674.01251 www.wspgroup.com







TECHNICAL REPORT AND UPDATED RESOURCE ESTIMATION ON THE NORTH MADSEN PROPERTY, **RED LAKE, ONTARIO**

EFFECTIVE DATE: JANUARY 2, 2014

Prepared by	Original Document Signed and	Date	
	Stamped by Todd McCracken		March 27, 2014
	Todd McCracken, P. Geo.		
Prepared by	Original Document Signed and	Date	
	Stamped by Marianne Utiger		March 27, 2014
	Marianne Utiger, Eng.		

TM/ WSP Project:



Unit 2 – 2565 Kingsway, Sudbury, ON, P3B 2G1 Telephone : 705.674.0119 · Fax : 705.674.0125





REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY	REVIEWED BY	APPROVED BY	DESCRIPTION OF REVISION
01	Mar 13, 2014	TM	BS	BS	Draft submitted to client for review
02	Mar 26, 2014	TM	BS	BS	Final submitted to client





TABLE OF CONTENTS

	SUM	JMMARY 1		
	1.1	GEOLOGY	1	
	1.2	RESOURCE ESTIMATION	2	
	1.3	METALLURGY	3	
	1.4	RECOMMENDATIONS	4	
		1.4.1 EXPLORATION	4	
~ ~		1.4.2 METALLURGY	4 _	
2.0	INTRO		5	
3.0	RELIA	ANCE ON OTHER EXPERTS	7	
4.0	PROF	PERTY DESCRIPTION AND LOCATION	8	
	4.1	LOCATION	8	
	4.2	MINERAL DISPOSITION	9	
	4.3	TENURE RIGHTS	12	
	4.4	ROYALTIES AND RELATED INFORMATION	12	
	4.5	ENVIRONMENTAL LIABILITIES	12	
	4.6	Permits	12	
	4.7	OTHER RELEVANT FACTORS	13	
5.0	ACCE	ESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE ANI	D	
	PHYS	SIOGRAPHY	14	
	5.1	SITE TOPOGRAPHY, ELEVATION, AND VEGETATION	14	
	5.2			
		AUCE33	14	
	5.3	CLIMATE	14 15	
	5.3 5.4	CLIMATE INFRASTRUCTURE		
6.0	5.3 5.4 HIST(CLIMATE INFRASTRUCTURE		
6.0	5.3 5.4 HIST(6.1	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP		
6.0	5.3 5.4 HIST(6.1 6.2	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES		
6.0	5.3 5.4 HIST(6.1 6.2 6.3	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES		
6.0 7.0	5.3 5.4 HIST(6.1 6.2 6.3 GEOL	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES HISTORICAL PRODUCTION		
6.0 7.0	5.3 5.4 HISTO 6.1 6.2 6.3 GEOL 7.1	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES HISTORICAL PRODUCTION LOGICAL SETTING AND MINERALIZATION		
6.0 7.0	5.3 5.4 HISTC 6.1 6.2 6.3 GEOL 7.1 7.2	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES HISTORICAL PRODUCTION LOGICAL SETTING AND MINERALIZATION REGIONAL GEOLOGY PROJECT GEOLOGY		
6.0 7.0	5.3 5.4 HISTC 6.1 6.2 6.3 GEOL 7.1 7.2 7.3	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES HISTORICAL PRODUCTION LOGICAL SETTING AND MINERALIZATION REGIONAL GEOLOGY PROJECT GEOLOGY MINERALIZATION		
6.0 7.0	5.3 5.4 HISTC 6.1 6.2 6.3 GEOL 7.1 7.2 7.3	CLIMATE INFRASTRUCTURE ORY PRIOR OWNERSHIP HISTORICAL EXPLORATION AND RESOURCE ESTIMATES HISTORICAL PRODUCTION LOGICAL SETTING AND MINERALIZATION REGIONAL GEOLOGY PROJECT GEOLOGY MINERALIZATION 7.3.1 LAVERTY MAIN ZONE		
6.0 7.0	5.3 5.4 HIST(6.1 6.2 6.3 GEOL 7.1 7.2 7.3	CLIMATE INFRASTRUCTURE ORY		





		7.3.5	SOUTH ZONE	. 26
8.0	DEPOS	SIT TYPE	5	.27
	8.1	ARCHEAN	SHEAR-HOST GOLD DEPOSIT	. 27
	8.2	RED LAKE	DISTRICT GOLD DEPOSITS	. 28
9.0	EXPLC	RATION.		.29
10.0	DRILL	ING		.30
10.0	10.1			.30
		10.1.1	SURVEYING	. 36
		10.1.2	CORE LOGGING PROCEDURE	. 36
		10.1.3	SAMPLING APPROACH	. 40
	10.2	QP'S OPI	NION	.41
11.0	SAMP	LE PREP	ARATION, ANALYSES AND SECURITY	.42
	11.1	SAMPLES	PREPARATION	. 42
	11.2	ANALYTIC	AL PROCEDURE	. 42
	11.3	SAMPLE S	ECURITY	. 42
	11.4	QA/QC		. 43
	11.5	QP'S OPI	NION	. 45
12.0	DATA	VERIFICA	TION	.46
	12.1	SITE VISIT		. 46
	12.2	DRILL CO	LLAR VALIDATION	. 46
	12.3	ASSAY VA	LIDATION	. 47
	12.4	DATABASE	VALIDATION	. 47
	12.5	QP'S OPI	NION	. 48
13.0	MINE	RAL PROG	CESSING AND METALLURGICAL TESTING	.49
	13.1	SAMPLE I	NFORMATION	. 49
	13.2	HEAD AN	ALYSIS	. 49
	13.3	GRINDABI	LITY	. 50
	13.4	GRAVITY S		. 50
		13.4.1	GRAVITY SEPARATION RESULTS OF ORIGINAL COMPOSITES	. 50
	13.5	FLOTATIO	V	. 52
	13.6	CYANIDAT	ION	. 53
		13.6.1	CYANIDATION OF LAVERTY MAIN ZONE COMPOSITE	. 53
		13.6.2	CYANIDATION OF VARIABILITY SAMPLES	. 55
14.0	MINE	RAL RESC	OURCE ESTIMATES	.57
	14.1	DATABASE	E	. 57
	14.2	SPECIFIC	GRAVITY	. 57
	14.3	TOPOGRA	РНІС ДАТА	. 58
	14.4	GEOLOGIO	CAL INTERPRETATION	. 59
	14.5	EXPLORAT	ORY DATA ANALYSIS	. 61





		14.5.1 14.5.2	Assays	
	110	14.5.3	COMPOSITING	
	14.6	SPATIAL A	NALYSIS	
	14.7	RESOURCE	E BLOCK MODEL	
	14.8	RESOURCE	E CLASSIFICATION	
	14.9	MINERAL	RESOURCE TABULATION	
	14.10	VALIDATIO	N	
		14.10.1	VISUAL VALIDATION	
		14.10.2	GLOBAL COMPARISON	
	14.11	PREVIOUS	ESTIMATES	
15.0	ADJAC	ENT PRO	PERTIES	
	15.1	HISTORIC	CAL PRODUCTION	
16.0	OTHEF	R RELEVA	NT DATA AND INFORMATION	
17.0	INTER	PRETATIO	ONS AND CONCLUSIONS	
	17.1	GEOLOGY.		
	17.2	METALLUF	RGY	
18.0	RECO	MMENDA	TIONS	
	18.1	PHASE 1	NORTH MADSEN SOUTH AND MAIN ZONES DEFINITION	
	18.2	PHASE 2	NORTH MADSEN DRILLING DEFINITION AND EXPANSION	
	18.3	METALLUF	RGICAL RECOMMENDATIONS	
19.0	REFEF	RENCES		
20.0	CEDTI			
	UERII	FICATE O	F QUALIFIED PERSON	94
	20.1	FICATE O	F QUALIFIED PERSON Cracken, P. Geo	94 94

A P P E N D I C E S

APPENDIX A

 $\mathsf{APPENDIX}\ \mathsf{B}$





LIST OF TABLES

Table 1.1 North Madsen Resource Summary	2
Table 4.1 Property Mineral Leases and Claim Summary	.11
Table 6.1 History of Exploration on the Property	.17
Table 10.1 2012 Diamond Drillhole Collar Summary	.30
Table 10.2 Diamond Drilling Results Summary	.32
Table 12.1 Drill Collar Validation	.46
Table 12.2 Data Validation Summary	.48
Table 13.1 Summary of Head Assays	.49
Table 13.2 Summary of Main Zone Gravity Test Results	.51
Table 13.3 Summary of Variability Samples Gravity Test Results	.51
Table 14.1 North Madsen Database Summary	.57
Table 14.2 Wireless Summary	.60
Table 14.3 Borehole Statistics by Domain	.60
Table 14.4 Capped Drillhole Statistics Summary	.62
Table 14.5 Composite Drillhole Statistics Summary	.63
Table 14.6 Variogram Summary	.64
Table 14.7 Parent Model Summary	.65
Table 14.8 Estimation Criteria Summary	.65
Table 14.9 Measured Resource Cut-Off Table	.67
Table 14.10 Indicated Resource Cut-Off Table	.67
Table 14.11 Inferred Resource Cut-Off Table	.68
Table 14.12 Resource Summary by Zone and Classification	.71
Table 14.13 North Madsen Resource Summary	.71
Table 14.14 Global Statistics Comparison	.77
Table 14.15 Comparison of the 2011 and 2014 Resource Estimate Results	.79
Table 14.16 Comparison of the 2011 and 2014 Resource Estimate	.80
Table 18.1 Phase 1 Exploration Budget	.88
Table 18.2 Exploration Phase 2	.89





LIST OF FIGURES

Figure 4.1 Location Map	9
Figure 4.2 Property Claim Map	. 10
Figure 7.1 Regional Geology	.20
Figure 7.2 Property Geology	.23
Figure 10.1 2012 Diamond Drillhole Location	.31
Figure 10.2 Diamond Drill Section Central Zone (looking west)	.33
Figure 10.3 Diamond Drill Section South Zone (looking west)	.34
Figure 10.4 Diamond Drill Section Buffalo Ext. Qtz-Tourm Zone (looking west)	.34
Figure 10.5 Diamond Drill Section Buffalo Ext. Diss Zone (looking west)	.35
Figure 10.6 Diamond Drill Section Laverty Dyke Zone (looking north)	.35
Figure 10.7 Diamond Drill Section Main Zone (looking West)	.36
Figure 11.1 Blank QA/QC Chart	.44
Figure 11.2 VMS1 Process Performance Chart	.44
Figure 11.3 HGS1 Process Performance Chart	.45
Figure 12.1 Drill Collar Validation	.47
Figure 13.1 Summary of Bond Ball Mill Work Indices	.50
Figure 13.2 Gravity Tailings Rougher Flotation Test Results Summary	.53
Figure 13.3 Summary of Cyanidation Kinetics of Composite 1	.54
Figure 13.4 Summary of Reagent Consumption for Laverty Main Zone Composite	.55
Figure 13.5 Summary of Variability Samples Cyanidation Test Results	.56
Figure 14.1 Topographic DTM	.58
Figure 14.2 Measured Resource Grade Tonnage Curve	.69
Figure 14.3 Indicated Resource Grade Tonnage Curve	.69
Figure 14.4 Inferred Resource Grade Tonnage	.70
Figure 14.5 Laverty Dyke Validation	.73
Figure 14.6 South Zone Validation	.74
Figure 14.7 Buffalo Diss and Qtz-Tourmaline Validation	.75
Figure 14.8 Main Zone Validation	.76
Figure 14.9 Swath Plot Easting	.77
Figure 14.10 Swath Plot Nothing	.78
Figure 14.11 Swath Plot Elevation	.78
Figure 15.1 Adjacent Properties	.81





GLOSSARY

UNITS OF MEASURE

above mean sea level	amsl
acre	ac
ampere	А
annum (year)	а
billion	В
billion tonnes	Bt
billion years ago	Ga
British thermal unit	BTU
Centimetre	cm
cubic centimetre	cm ³
cubic feet per minute	cfm
cubic feet per second	ft³/s
cubic foot	ft ³
cubic inch	in
cubic metre	m³
cubic yard	yd ³
Coefficients of Variation	Cvs
day	d
days per week	d/wk
days per year (annum)	d/a
dead weight tonnes	DWT
decibel adjusted	Ba
decibel	dB
degree	0
degrees Celsius	°C
diameter	Ø
dollar (American)	US\$
dollar (Canadian)	Cdn\$
dry metric tonne	mt
foot	ft
gallon	gal
gallons per minute	gpm
Gigajoule	GJ
Gigapascal	GPA
Gigawatt	GW
Gram	g
grams per litre	g/L
grams per tonne	g/t
greater than	>

amsl	hectare (10,000 m2)ha	
ac	hertzHz	
A	horsepowerhp	
a	hourh	
В	hours per dayh/d	
Bt	hours per weekh/wk	
Ga	hours per yearh/a	
BTU	inch in	
cm	kilo (thousand)k	
cm ³	kilogram kg	
cfm	kilograms per cubic metre kg/m	3
ft ³ /s	kilograms per hour kg/h	
ft ³	kilograms per square metre kg/m	2
in	kilometre km	
m ³	kilometre km	
yd ³	kilometres per hour km/h	
Cvs	kilopascal kPa	
d	kilotonne kt	
d/wk	kilovoltkV	
d/a	kilovolt-amperekVa	
DWT	kilowattkW	
Ва	kilowatt hourkWh	
dB	kilowatt hours per tonne kWh/	t
°	kilowatt hours per year kWh/	а
°C	less than<	
ø	litre L	
US\$	litres per minuteL/m	
Cdn\$	megabytes per second Mb/s	
mt	megapascal Mpa	
ft	megavolt-ampereMva	
gal	megawattMW	
gpm	metrem	
GJ	metres above sea levelmasl	
GPA	metres below sea levelmbsl	
GW	metres per minutem/min	
g	metres per secondm/s	
g/L	micronsµm	
g/t	milligrammg	





milligrams per litre	mg/L
millilitre	mL
millimetre	mm
million	М
million bank cubic metres	Mbm ³
million bank cubic metres per annum	Mbm3/a
million tonnes	Mt
minute (plane angle)	1
minute (time)	min
month	mo
ounce	ΟZ
pascal	Pa
centipoise	mPa∙s
parts per million	ppm
parts per billion	ppb
percent	%
pound(s)	lb
pounds per square inch	psi
revolutions per minute	rpm
second (plane angle)	"
second (time)	S

short ton (2,000 lb)	st
short tons per day	.st/d
short tons per year	.st/y
specific gravity	SG
square centimetre	. cm ²
square foot	.ft ²
square inch	in ²
square kilometre	.km2
square metre	. m²
three-dimensional	3D
tonne (1,000 kg) (metric ton)	t
tonnes per day	.t/d
tonnes per hour	.t/h
tonnes per year	.t/a
tonnes seconds per hour metre cube	d
	.ts/hm ³
volt	. V
week	wk
weight/weight	.w/w
wet metric ton	wmt

ABBREVIATIONS AND ACRONYMS

.ATV
.BWI
.CP
.DTM
.Eng
.F1
.GPS
ID2
Mega
nes
.MNDM
.NI
.NTS
.NN

Net Smelter Royalty	NSR
Ordinary Krig	OK
Professional Geoscientist	P. Geo.
Red Lake Greenstone Belt	RLGB
Semi-Autogenous Grinding	SAG
Specific Gravity	SG
Standard Reference Material	SRM
Qualified Person	QP
Quality Assurance/Quality Control	QA/QC
Universal Transverse Mercator	UTM
WSP Canada	WSP





1.0 SUMMARY

The North Madsen Property (the Property) is a shear-hosted lode gold project located in northwestern Ontario, approximately 450 km northwest of Thunder Bay.

The Property consists of 14 patented claims; totaling 415.8 ha, located at Latitude 51.01° N and Longitude 93.85° W, on map sheet 52N/4 of the National Topography System (NTS). The claims are currently owned 100% by Mega Precious Metals Inc. (Mega).

The Property has seen extensive exploration which started in mid-1920s. To date a total of 275 boreholes and 52 channels have been completed on the Property.

WSP Canada (WSP) has been commissioned to update an existing National Instrument 43-101 (NI 43-101) report with a new resource estimate, which was commissioned in August 2013 by Mega. This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

1.1 GEOLOGY

The Red Lake Greenstone Belt is situated on the southern margin of the North Caribou Terrain. The oldest volcanic rocks are tholeiitic and komatiitic basalts of the Balmer assemblage, which hosts the majority of Red Lake's major gold (Au) deposits.

The Red Lake Greenstone Belt is an east trending and package of volcanic and sedimentary rocks. The Belt displays evidence of two major episodes of deformation, interpreted to be closely linked with extensive hydrothermal activity and gold mineralization.

Mineralization at North Madsen addressed in this report is currently contained within three mineralized zones that are silicified and contain associated gold and sulphide mineralization (arsenopyrite, pyrite and pyrrhotite).

Mineralization in the Main Zone occurs in two distinct forms: structurally hosted within sheared granodiorite, and in quartz-tourmaline veins. Mineralization hosted by sheared granodiorite is present throughout the Main Zone, whereas mineralized quartz-tourmaline veins are only locally common in the eastern half of the Main Zone.





Mineralization in the Laverty Dyke is characterized by very fine grained native gold residing in silicate minerals, and occasionally in trace base metal sulphide minerals.

The majority of the gold is located near the contact between the dyke and the granodiorite, as well as locally in the granodiorite near the dyke.

The Buffalo West Extension mineralization is contained in two separate groups: disseminated throughout the granodiorite, and within quartz-tourmaline veins which are locally common in the granodiorite. Mineralization is restricted to the granodiorite, and is not observed in the Balmer mafic volcanic rocks.

1.2 RESOURCE ESTIMATION

The Property database is up to date, and includes the results from first portion of the 2012 summer drilling program. The borehole database has been validated against the original drill logs and assay certificates. As a result, WSP is of the opinion that using the historic drilling is appropriate for any future resource estimate.

All the procedures implemented by Mega in regards to core logging, sample collection, sample analysis and quality assurance/quality control (QA/QC) meet industry standards. The data quality supports the resources estimate.

The resource estimate was completed on each of the five mineral zones using the ordinary kriging (OK) methodology on a capped and composited borehole dataset consistent with industry standards. Validation of the results was conducted through the use of visual inspection, swath plots and global statistical comparison.

Table 1.1 summarizes the results of the resource estimation.

Zone	Category	Tonnes	Au Grade (g/t)	Ounces
All Zones	Measured Total	16,728,310	1.28	685,891
All Zones	Indicated Total	6,230,600	1.01	202,862
All Zones	Total M&I	22,958,910	1.20	888,752
All Zones	Total Inferred	10,138,000	1.18	383,936

Table 1.1 North Madsen Resource Summary





1.3 METALLURGY

SGS in Lakefield, Ontario conducted metallurgical tests on a single composite from the Laverty Main zone, with a gold grade of 1.06 g/t Au, and variability samples from the Laverty Dyke and Buffalo Extension zones, with gold grades varying from 0.3 to 3.1 g/t Au. Bond ball mill grindability as well as gravity concentration, flotation and cyanidation tests were completed.

The Bond ball mill test results indicate that the BWI's ranged from approximately 15 to 18 kWh/t. These work indexes represent a moderately hard to hard mineral.

Gravity recoveries to a Mozley concentrate for the Laverty Main zone composite ranged from 36 to 72%, increasing with finer grind size. For the Laverty Dyke and Buffalo Extension variability samples, gravity gold recoveries ranged from 7 to 26% and 23 to 48% respectively at a target grind size (P80) of 75 μ m. Data reveals that while gravity concentration may be advantageous for certain zones within the deposit, it may not be beneficial for all zones.

Flotation tests conducted on the Laverty Main zone composite at a particle size of 47 μ m K80 showed that at around 4% feed mass recovery, approximately 93% of the feed gold could be recovered into a combined rougher and Mozley concentrate. Extending the mass recovery to over 16%, increased the cumulative feed gold recovery to over 95%.

Cyanidation tests conducted on the Laverty Main zone composite whole mineral, gravity tailings or flotation tailings indicated that 94% or more of the leach feed gold was extracted into solution after 48 h, the exception being the test conducted on the gravity tailings at a coarse grind size of 127 μ m K80. This corresponds to overall recoveries greater or equal to 93% for flotation tailings, and greater or equal to 95% for whole mineral and gravity tailings.

Whole mineral cyanidation tests conducted on the variability samples showed recoveries greater or equal to 95% except for one Buffalo Extension sample and its related composite for which gold extraction was greater or equal to 90%.

The high mass recovery required to obtain above 95% gold recovery to the flotation concentrate, the overall lower gold recoveries and the slightly higher cyanide consumption make it unlikely that a flotation circuit would be beneficial to the overall flowsheet. Direct cyanidation of the whole mineral or gravity recovery and cyanidation of the gravity tailings provide the best results.





Overall, the samples' response to conventional gold processing methods was excellent. The metallurgical testing and mineral processing section of a preliminary economic assessment of the North Madsen deposit would be strongly supported by SGS's work.

1.4 RECOMMENDATIONS

1.4.1 EXPLORATION

WSP believes further exploration is warranted to advance the project.

PHASE 1 NORTH MADSEN SOUTH AND MAIN ZONES DEFINITION

Phase 1 is designed to improve the viability of the project; it is recommended that Mega undertake a detailed focused surface mapping, trenching and diamond drill program that is focused on improving the definition of the Main Zone and the South Zone.

The program is estimated to cost \$240,000

PHASE 2 NORTH MADSEN DEFINITION AND EXPANSION

Phase 2 of the program will be based upon positive results of the first stage and would start after Phase 1 has been completed. The program would diamond drill the areas identified from the surface work in Phase 1 was well as completing additional metallurgical testing on the Main Zone and Laverty Dyke.

The program is estimated to cost \$624,000.

1.4.2 METALLURGY

The Laverty Main zone accounts for 73% of the resources (measured, indicated and inferred), but only a single composite sample for this zone has been tested. It is thus recommended to conduct gravity recovery as well as whole mineral and gravity tailings cyanidation tests on variability samples from this zone. The results from these tests would provide a better indication whether incorporating a gravity circuit ahead of the leach would be beneficial.





2.0 INTRODUCTION

The Property is a gold-bearing shear system project located approximately 450 km northwest of Thunder Bay in northwestern Ontario. The claims are currently owned 100% by Mega

A significant amount of work has been conducted on the Property since the mid-1920s, with the majority of the work conducted since 1980 by various companies.

To date, Mega has delineated five mineralized zones on the Property through the compilation of the geological surface mapping and diamond drill data.

In August 2013, WSP, then known as GENIVAR, was commissioned by Mega to complete an updated resource estimate and technical report on the North Madsen property.

The object of the report is to:

- prepare a technical report on the project in accordance with NI 43-101,
- summarizing land tenures, exploration history, and drilling
- generate a resource estimate on the Property amenable to an open pit operation.
- provide recommendations and budget for additional work on the Property.

This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

All data reviewed for the report was provided by Mega in digital format, with access to paper reports and logs when requested. The work completed by Mega encompasses exploration, diamond drilling and metallurgical testing. Historical work conducted in the region has been compiled by Mega and was available for review.

Todd McCracken, P.Geo., a co-author of this report, is a professional geologist with 22 years of experience in exploration and operations, including several years working in shear-hosted gold deposits. Mr. McCracken visited the property from September 23 to 24, 2013 inclusive.

Marianne Utiger, Eng., a co-author of this report, is a professional engineer with 14 years of experience in process engineering in the metallurgical, mineral





processing and chemical industries, including several years working on gold ore processing projects. Ms. Utiger did not visit the property.





3.0 RELIANCE ON OTHER EXPERTS

WSP has reviewed and analyzed data and reports provided by Mega, together with publicly available data, drawing its own conclusions augmented by direct field examination.

This report includes technical information, which required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QPs do not consider them to be material.

The QP who prepared this report relied on information provided by experts who are not QPs. The QP believes that it is reasonable to rely on these experts, based on the assumption that the experts have the necessary education, professional designations, and relevant experience on matters relevant to the technical report.

- Todd McCracken, P.Geo., relied upon Glen Kuntz, President and CEO of MEGA for information pertaining to the mining leases as well as the acquisition agreement as disclosed in Section 4.0. The information pertaining to mining leases was confirmed by the Ontario Ministry of Northern Development and Mines (MNDM) and documentation can be generated by the Office of the Surveyor General, Ministry of Natural Resources.
- Marianne Utiger, Eng., relied upon the report authored by SGS Mineral Services titled; An Investigation into the Recovery of Gold from the Red Lake North Madsen Deposit, Report 12411-002, July 5, 2012.





4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

The Property is located in northwest Ontario, near the town Red Lake, approximately 450 km northwest of Thunder Bay and 1,350 km northwest of Toronto. The Property is less than 5 km west of Red Lake (Figure 4.1) and is centered at Latitude 51.01° N and Longitude 93.85° W, on map sheet 52N/4 of the NTS. Most areas of the Property currently have marginal road access (requiring an all-terrain vehicle (ATV or boat), but the Property is less than 1 km from well-established, paved roads. The past producing Howey and Hasaga Gold Mines are located 3 to 4 km east of the Property and the Goldshore Gold Mine is just over 1 km northeast of the Laverty claim block (Figure 4.2). The Buffalo Mine is located less than 0.5 km east of the southern portion of the East My-Ritt claim block. The producing Red Lake Mine and the Campbell Complex (Goldcorp Inc.) are located approximately 10 to 11 km northeast of the Property.





Figure 4.1 Location Map



4.2 MINERAL DISPOSITION

The Property comprises three claims blocks; Laverty, East My-Ritt and Skookum. Laverty consists of six patented claims that cover 56.4 ha. The East My-Ritt consists of eight patented claims that cover 137.4 ha. The Skoohum consists of seven staked mining claims (MRO) that covers 224 ha for a total of 417.8 ha (Table 4.1; Figure 4.2).





Figure 4.2 Property Claim Map







Table 4.1 Property Mineral Leases and Claim Summary

MEGA'S PROPERTY LIST							
Townshin/Area		Claim # (Lease #)	SIZE		-	Claim Holdor	DATES
Township/Area	Claim Type		Hectares	<u>Acres</u>	<u>Units</u>		Due Date
		SKOOKU	M PROPERT	Y, RED LAP	(E		
7 mining claims							
Dome	Staked Mining Claim	4222831	16.000	39.520	1.000	Mega Precious Metals Inc.	6/6/2019
Dome	Staked Mining Claim	4222832	64.000	158.080	4.000	Mega Precious Metals Inc.	6/6/2019
Dome	Staked Mining Claim	4241768	48.000	118.560	3.000	Mega Precious Metals Inc.	8/13/2019
Dome	Staked Mining Claim	4212630	16.000	39.520	1.000	Mega Precious Metals Inc.	6/11/2019
Dome	Staked Mining Claim	4212631	32.000	79.040	2.000	Mega Precious Metals Inc.	1/26/2019
Dome	Staked Mining Claim	4214536	32.000	79.040	2.000	Mega Precious Metals Inc.	1/26/2019
Dome	Staked Mining Claim	4214537 (formerly 4212637)	16.000	39.520	1.000	Mega Precious Metals Inc.	6/11/2019
			224.000	553.280	14.000		
	•	LAVERTY		Y, RED LAK	E	·	
6 patented mining claims	3						
Dome/Heyson	Patented	KRL 5136	10.886	26.900	N/A	Mega Precious Metals Inc.	N/A
Dome/Heyson	Patented	KRL 5137	6.948	17.170	N/A	Mega Precious Metals Inc.	N/A
Dome/Heyson	Patented	KRL 5138	7.689	19.000	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 6979	9.024	22.299	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 6980	6.467	15.980	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 6981	15.431	38.130	N/A	Mega Precious Metals Inc.	N/A
			56.445	139.479			
		EAST MY-R	ITT PROPE	RTY, RED LA	AKE		
8 patented mining claims	6						
Heyson	Patented	KRL 403	7.122	17.599	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 404	11.210	27.701	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 405	23.148	57.200	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 406	19.870	49.100	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 409	20.477	50.600	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	KRL 410	17.078	42.201	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	K 1442	15.742	43.194	N/A	Mega Precious Metals Inc.	N/A
Heyson	Patented	K 1443	20.720	52.040	N/A	Mega Precious Metals Inc.	N/A
			135.367	339.635			





4.3 TENURE RIGHTS

Mega owns 100% option rights on all claims on the Property. All of the claims comprising the Property are in good standing.

Mega closed the acquisition of the Laverty claim block January 26, 2011 and completed the conditions for acquisition for the East My-Ritt claim block on May 6, 2013.

Mega holds 100% of the mineral rights for the staked claims of the Skookum block.

The Property is in a well-established mining district and therefore not encumbered by any provincial or national parks, or other protected areas.

4.4 ROYALTIES AND RELATED INFORMATION

On the Laverty claim block, Mosquito retains a 2% net smelter return (NSR) royalty with the original purchaser, Skybridge, and is granted the right to purchase half within one year of the final closing of the fully vested option agreement for Cdn\$1 million.

On the East My-Ritt claim block, Premier Royalties Inc. retains a 0.5% NSR royalty and jointly retains the right to buy out underlying royalty provisions on a pro-rated basis as may be available for purchase. Underlying royalty provisions include 3% NSR on all eight claims as well as a 10% net profits interest (NPI) on six of the claims.

On the Skookum claim block, underlying royalty provisions include a 2% NSR royalty on one claim of which Mega has the right to purchase 1% for \$400,000 at any time and retains a first right of refusal to purchase the entire or any part of the NSR at all times and a 3% royalty on two claims of which Mega has the right to purchase 1.5% for \$500,000 at any time and retains a first right of refusal to purchase the entire or any part of the NSR at all times

4.5 ENVIRONMENTAL LIABILITIES

There are no known environmental liabilities attached to the Property.

4.6 PERMITS

Permits issued by Provincial and Federal Government ministries are not required in order to execute the advanced exploration activities on the land portion of the properties. Diamond drilling on bodies of frozen water, if undertaken, will require





a permit issued by the MNDM. This permit may be required in future advanced exploration programs. Mega management warrants that the corporation has not received from any government authority any notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits.

4.7 OTHER RELEVANT FACTORS

To WSP's knowledge, there are no additional factors that could affect access, title, or the right to conduct work on the Property.





5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 SITE TOPOGRAPHY, ELEVATION, AND VEGETATION

The Property lies within the Boreal Shield physiographic region. The area around Red Lake is characterized by low topographic relief with glacially sculpted hillocks surrounded by bogs. Bedrock outcrops are scarce due to coverage by glacial till and vegetation.

Over past three years, Mega has stripped large areas of outcrop over the Laverty Dyke and Main zones to expose the geology.

Average elevation on the Property is approximately 365 m above sea level, with a total range in elevation of around 40 m.

Vegetation on the Property is dominated by boreal forest comprising mixed coniferous and deciduous trees as well as thick moss and underbrush. Numerous lakes, creeks, and swamps are present in the region, but the Property is located mainly on land with creeks and swamps present locally. The southeastern corner of the East My-Ritt claim block covers a small lake.

5.2 ACCESS

The Property is located in the Skookum Bay area, approximately 3 km westnorthwest of Red Lake. Access to the Property is via trails extending from the west end of Laverty Road in Red Lake (for the Laverty claim block), or the Buffalo Mine Road (for the East My-Ritt claim block). Not all areas of the Property are road accessible year round due to the presence of bogs and creeks.

The Municipality of Red Lake (which comprises several other small towns, including Balmer Town and Cochenour, approximately 15 km by road north of Red Lake) is accessible year round by paved highways. The town is located at the northern end of Highway 125, which is connected to the Trans-Canada Highway via Highway 105.

Truck transportation provides bulk freight services to and from southern areas of Canada. Red Lake has an airport which is serviced by a scheduled commercial airline with daily flights to Winnipeg, Manitoba, and Thunder Bay, Ontario.





5.3 CLIMATE

Climate conditions are typical of the northern boreal forest, with moderately cold winters and moderately hot summers. Statistically the warmest month is July, with an average daily high temperature of 24°C and a daily low of 14°C. The coldest month is January with an average daily high temperature of -14°C and a daily low of -23°C. The average annual rainfall is 473 mm, with the majority accumulated during the months of May through September. The average annual snowfall is 193 cm with the majority accumulated during November through March (www.weatherspark.com).

If required, exploration activities can be conducted year round with the use of specialized equipment.

5.4 INFRASTRUCTURE

The Municipality of Red Lake has a population of approximately 4,526 (www12.statscan.gc.ca), which can provide a limited pool of manual and skilled labor. Most companies operating in Red Lake offer employees a rotation schedule and therefore the available labor pool is much larger, with airline access to Red Lake connecting through Winnipeg or Thunder Bay. The nearest larger center is Dryden, approximately 225 km by road southeast of Red Lake. The nearest larger cities are Winnipeg, Manitoba, approximately 500 km by road, and Thunder Bay, Ontario, approximately 575 km by road.

The Municipality of Red Lake offers basic living and social amenities, including a hospital and elementary and secondary schools. Both wireless and wire-line telecommunication services are available in Red Lake.

Due to the long history of mining in the region, power lines are present throughout the area and there is a well-established core of mining related services in town.

The Red Lake area contains an abundance of water which could potentially be used for mining operations. The generally level topography in the area would present little difficulty for mining and processing facilities.

Mega owns surface rights for the Laverty portion of the Property, and these rights can be obtained for the East My-Ritt area and Skoohum.





6.0 HISTORY

Exploration in the Red Lake District dates back to the 1920s, with gold production beginning on April 2, 1930 at the Howey Mine (Harron and Puritich, 2010). Gold production has continued uninterrupted since this time, and at the end of 2009 totaled approximately 25,500,500 oz of gold from 55,459,000 t (50,030,100 t) at a recovered grade of 0.46 oz gold per ton (15.6 g/t Au) (Lichtblau et al, 2010). Four of the 29 producers in the camp have yielded over 1 million oz each.

6.1 **PRIOR OWNERSHIP**

The claims comprising the current Laverty, East My-Ritt and Skookum blocks have undergone a long history of ownership which is difficult to track because a large portion of the claims are patented, and therefore do not have to be reported to the Ontario MNDMF. Most records of ownership are indicated when a record of work was filed, and as such there are large gaps of years where no information is available.

The Laverty claims were first staked in 1936 by Dupont-Hodgson Syndicate and Coin Lake Gold Mines Limited. In 1947, the claims were acquired by Laverty Red Lake Mines Ltd., who continued exploration activities into the 1950s. Cochenour Willans Gold Mines Ltd. acquired the claims in 1971. In 1981 Wilanour Resources Ltd. (Wilanour) and Camflo Mines Ltd. optioned the property.

Claims on the East My-Ritt block were first staked in 1925 by Red Lake Mines Ltd., with exploration continuing through the 1930s. The claims were then purchased by an unknown company (Kita, 1998) in the 1940s. In 1980, Wilanour acquired the Property. In 1987, the Property was acquired by Red Lake Buffalo Resources Ltd. In 2003, Wolfden Resources Ltd. and Kinross Gold Corporation obtained rights to the property from Explorer Alliance Corp. Wolfden continued exploration up until 2006.

The Skoohum claims were acquired by Mega from Larry Kenneth Herbert (KRL 4222831 & 4222832) in December 2009, and from

6.2 HISTORICAL EXPLORATION AND RESOURCE ESTIMATES

Table 6.1 briefly summarizes the history of exploration of the Laverty, East My-Ritt and Skoohum claims blocks.





Table 6.1 History of Exploration on the Property

Year	Property	Company	Activities	Historical Resource Estimate
1925- 1932	Buffalo Extension	Buffalo Red Lake Mines Ltd. (Horwood, 1940)	Stripping, trenching and drilling for a total of 180 m.	
1936	East My-Ritt (Adjacent to current claims)	Coin Lake Gold Mines, Ltd. (Jones, 1995, and Smith 1981)	Trenching and drilling for a total of 2,377 m	Inferred: 0.125 - 0.150 Mt at 2.67 g/t, no cut -off stated
1936- 1937	Skookum	Skookum Gold Mines Ltd. (Chastko, L.C., 1972)	Stripping, trenching, diamond drilling and 3 compartment shaft sunk 190 ft (58 m).	
1936- 1938	Laverty	Dupont-Hodgson Gold Mines Ltd. (Horwood, 1940; Jolliffe, 1981)	Trenching, pitting and drilling	
1936- 1938	Laverty	Coin Lake Gold Mines, Ltd. (Harron and Puritch, 2010)	Trenching, pitting and 22 drillholes	
1940's	Buffalo Extension	Unknown Company (Kita, 1988)	Surface Drilling	Inferred: 0.132 Mt at 6.84 g/t, no cut-off stated
1944	Skookum	Clifton Consolidated Gold Mines	Six drillholes totaling 182 m	
1946- 1947	East My-Ritt (Adjacent to current claims)	My-Ritt Red Lake Gold Mines Ltd. (Jones, 1985)	Trenching, prospecting, magnetic survey	
1947- 1951	Laverty	Laverty Red Lake Mines Ltd. (Harron and Puritch, 2010)	Trenching and drilling for a total of 6,036 m.	
1963	Skookum	Cochenour Willans Gold Mines Ltd.	Two diamond drillholes totaling 111 m	
1963	Skookum	Starratt Nickel Mines Ltd.	One diamond drillhole totaling 94 m	
1971	Skookum	Cochenour Willans Gold Mines Ltd.	Three diamond drillholes totaling 527 m	
1971	Laverty	Cochenour Willans Gold Mines Ltd. (Jolliffe, 1981; Harron and Puritch, 2010)	Completed induced polarization (IP) resistivity (RES) survey. Result are considered ambigous	
1971	East My-Ritt (Adjacent to current claims)	Cochenour Willans Gold Mines Ltd. (Jones, 1995)	Very Low Frequency-Electromagnetic (VLF- EM) and IP surveys completed, three drillholes for a total of 527 m	
1980	Buffalo Extension	Wilanour Resources Ltd. (Kita, 1988)	Drilled 54 holes for a total of 6,642 m	Inferred: 0.421 Mt at 4.32 g/t no cut-off stated
1981	Laverty	Wilanour Resources Ltd. And Camflo Mines Ltd. (Gilles, 1982; Harron and Puritch, 2010)	Geological mapping, magnetic and VLF-EM survey, topographic survey. 20 BQ drillholes totaling 2,064 m	
1981	Skookum	C.W .Peterson (Cameron, D.M., 1981 and Seara, J.L., 1981)	13.5 line miles of magnetic and VLF surveys	
1981	Skookum	Gold Fileds Canadian Mining	Eight diamond drillholes totaling 1,242 m	
1983	Skookum	C.W. Peterson	Trenching totaling 578 m	
1984	Skookum	C.W. Peterson	Geological mapping and sampling, eight trenches blasted	
1985	Skookum	C.W. Peterson	Prospecting and trenching	
1986	Skookum	C.W. Peterson	Five trenches totaling 815 yds ³	
1987	Buffalo Extension	Red Lake Buffalo Resources Ltd. (Kita, 1988)	Five drillholes totaling 1,256 m	

*Table continued on next page





1987- 1988	East My-Ritt (Adjacent to current claims)	Chevron (Jones, 1995)	Seven drillholes and IP survey	
1993	Skookum	C.W. Peterson	Geological mapping, sampling, trenching and 2 diamond drillholes totaling 98 m	
2002	East My-Ritt	Wolfden Resources Ltd./Kinross Gold Corporation (Klatt, 2003)	Six drillholes totaling 1,786 m	
2004- 2005	East My-Ritt	Wolfden Resources Ltd. (Toole, 2005)	31 drillholes for a total of 9,530 m	
2006	East My-Ritt	Wolfden Resources Ltd. (Long, 2006)	Four drillholes totaliong 2,964 m	
2009- 2010	Laverty	Mega Precious Metals Inc. (Harron and Puritch, 2010)	138 line Km of airborne EM/magenetic survey, 35 channel totaling 94.6 m, 36 drillholes totaling 6,176 m	Indicated: 0.4 Mt at 2.56 g/t Inferred: 0.03 Mt at 3.32 g/t
2011	Laverty/East My- Ritt	Mega Precious Metals Inc. (McCracken and Harder, 2011)	50 drillholes totaling 13,231 m on the Laverty zone, and 29 drillholes totaling 6,853 m on the East My-Ritt zone	Measured: 19.6 Mt At 1.27 g/t Indicated: 3.8 Mt at 1.08 g/t Inferred: 11.5 Mt at 1.03 g/t Cut-off at 0.5 g/t

Table 6.1 includes historical estimates. In each case, the source and date of the historical estimate is identified. For the resources stated prior to Mega's acquisition of the property, these historical resources are not considered relevant, and no comment is offered on the reliability of the historical estimate. A Qualified Person (QP) has not done sufficient work to classify the historical estimates as current mineral resources, and the issuer is not treating the historical estimates as as current mineral resources. The classifications assign to the resources may not meet current standards.

For the resource estimates completed in 2009 and in 2011 under Mega's ownership, the results are no longer considered current and are superseded by the resource stated in section 14.

6.3 HISTORICAL PRODUCTION

There is no historical production on the Property.





7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The Red Lake Greenstone Belt (RLGB) is approximately 50 km east-west by 75 km north-south, and situated on the southern margin of the North Caribou Terrain (Harron and Puritch, 2010) (Figure 7.1). The oldest volcanic rocks are tholeiitic and komatiitic basalts of the Balmer assemblage, host to the majority of Red Lake's major gold deposits. This extensive mafic/ultramafic lithological unit has a U/Pb age of approximately 2.9 Ga and underlies the central and eastern parts of the greenstone belt (Sanborn-Barrie et al., 2004). Plutonic rocks of Mesoarchean age intruding the Balmer assemblage are typically mafic to ultramafic in composition.

A thick sequence of intermediate to felsic calc-alkaline flows and pyroclastic rocks of the Ball assemblage underlies the northwestern part of the RLGB. The lower part of the sequence (2.94 Ga) is dominated by intermediate volcanic rocks underlain by basalt and komatiite flows. A chert carbonate unit with preserved stromatolitic mounds, and a chert magnetite sulphidic horizon caps this assemblage. The upper part of the Ball assemblage (2.92 Ga) is dominated by felsic to intermediate calc-alkaline volcanic rocks partly intercalated with an overlying basalt unit. The uppermost unit of the Ball assemblage consists of ultramafic flows. Peridotite and gabbro intrusions cut the entire Ball assemblage.

Clastic rocks of the Slate Bay assemblage (2.1 Ga) extend the length of the RLGB, and consist of three main lithologies. A thin basal polymictic conglomerate is succeeded by coarse compositionally mature conglomerate, and cross-bedded quartz arenite. Clasts in the conglomerate dominantly reflect a Ball assemblage provenance. The uppermost lithologies are compositionally immature feldspathic wacke, lithic wacke and mudstone.

Rocks of the Bruce Channel assemblage (2.89 Ga) are deposited on Balmer substrate, and consist of calc-alkaline dacitic to rhyodacitic pyroclastic rocks overlain by clastic sediments and chert-magnetite banded iron formation.

A distinct volcano-sedimentary sequence, the Trout Bay assemblage (2.85 Ga), occurs in the southwestern part of the RLGB. The basal portion of the sequence consists of tholeiitic basalt overlain by clastic rocks with interbedded intermediate tuff and chert-magnetite iron formation. The upper sequence consists of pillowed tholeiitic basalt capped by thinly bedded iron oxide formation and interbedded





siltstone. An extensive system of thick mafic/ultramafic sills with chemical affinities to upper basalts in the Trout Lake assemblage intrudes the older supracrustal rocks. This intrusive activity appears to coincide with the emplacement of the 2.86 to 2.81 Ga Trout Lake Batholith.





Following a 100 million year hiatus after the formation of the Trout Lake assemblage, volcanism was renewed with the onset of extensive calc-alkaline volcanism recorded by the Confederation assemblage. Initial activity in the 2.75 to 2.74 Ga period consists of marine to sub-aerial calc-alkaline intermediate to





mafic volcanic rocks of the McNeely sequence. This sequence is overlain and interstratified with the dominantly tholeiitic Heyson volcanic sequence (2.74 Ga). Plutonic rocks within the assemblage consist of felsic dykes and small porphyry intrusions.

The Huston assemblage consists of coarse and fine clastic detritus, which unconformably overlies the McNeely sequence and underlies the Graves assemblage. Detrital zircons yield a 2.74 Ga age indicating provenance from the Confederation assemblage, and variations in lithofacies indicate marine deposition on a surface with significant topographic relief.

The Graves assemblage (2.73 Ga) is a calc-alkaline sequence consisting of andesitic to dacitic pyroclastic rocks and synvolcanic diorite and tonalite. The Graves assemblage overlies, and is locally transitional with the Huston assemblage suggesting synchronous sedimentation and pyroclastic activity. Plutonic rocks coeval with volcanism represent the first major intermediate to felsic plutonic activity in the RLGB. These tonalitic to granodioritic intrusions yield dates of 2.73 Ga and are widely distributed throughout the RLGB.

The English River assemblage is the youngest supracrustal rock sequence in the RLGB. This pebble conglomerate is widespread and dated at 2.70 Ga, and may have represented a fluvial regime flowing south to beyond the Uchi Subprovince.

Post-volcanic granitoid plutonic rocks were emplaced during three episodes. The oldest event is represented by the 2.73 Ga Graves plutonic suite, followed by a 2.72 Ga event represented by the gold-deposit hosting McKenzie Island and Dome stocks and the Abino granodiorite. The youngest plutonic event (2.70 Ga) is represented by the K-feldspar megacrystic granodiorite Killala-Baird batholith, the Cat Island dyke and post-ore dykes at the Madsen Mine.

The RLGB is east trending and consists predominantly of steeply dipping panels of volcanic and sedimentary rocks. The RLGB displays evidence of two major episodes of deformation, interpreted to be closely linked with extensive hydrothermal activity and gold mineralization. Early non-penetrative deformation appears to have involved overturning (recumbent folding) of the 2.99 Ga Balmer assemblage prior to the onset of Neoarchean volcanism. The main stages of penetrative deformation were imposed after circa 2.74 Ga volcanism (Confederation assemblage). The first major fabric forming event (D1) resulted in the formation of northerly-trending, south plunging F1 folds and associated lineation fabrics. Superimposed on D1 structures are east to northeast-trending D2 structures in the western and central parts of the belt and southeast-trending folds (F2) and fabrics that plunge 45-65° to the southwest in the eastern part of the belt.





Hydrothermal alteration in the RLGB is distributed in regional, zoned alteration envelopes that show a spatial relationship to gold deposits. Calcite carbonatization and weak potassic (incipient chlorite and sericite) is widespread and distal to the gold deposits. Alteration proximal to gold deposits is characterized by ferroan-dolomite alteration, and potassic alteration (sericite, muscovite, fuchsite, amphibole and plagioclase destruction). Proximal alteration zones metamorphosed to amphibolite facies may contain variable amounts of aluminosilicate minerals such as andalusite, staurolite and cordierite as well as garnet, chloritoid, cummingtonite and anthophyllite.

Silicification with associated gold and sulphide mineralization (arsenopyrite, pyrite, and pyrrhotite) postdates most ferroan-dolomite and potassic alteration zones. Also proximal alteration zones are typically barren of gold unless they have been silicified. Silicification is manifested as extension, fault fill quartz veins breccias, and the filling of primary features such as vesicles and interpillow spaces.

The RLGB is one of Canada's top gold-producing districts and the camp is famous for high-grade gold mineralization (greater than 0.5 oz/t Au), such currently being extracted from both the Red Lake and the Campbell complexes. The largest and highest grade deposits are located in the Balmer assemblage and hosted in the middle tholeiitic basalt sequence and associated serpentinized peridotite and talc schist rocks. However gold was also produced from deposits hosted in the granodioritic McKenzie Island and Dome stocks. The gold mineralization on the Bonanza Project, which is in part hosted by clastic sedimentary represent a new mode of occurrence for gold in the area. Common to all three modes of occurrence is structural control related to D2 deformation.

7.2 PROJECT GEOLOGY

All six Laverty claims are underlain by the circa 2.72 Ga Dome Stock, as are four of the six East My-Ritt claims (Sanborn-Barrie et al., 2004). The southeastern margins of claims K1442 and K1443 are underlain by Balmer mafic volcanic rocks. The regional airborne magnetic data clearly shows a subdued magnetic response over the Dome Stock, without a hint of the Laverty Dyke. This is due to the dyke being parallel to the flight direction and between flight lines.

The Dome Stock dominantly comprises porphyritic granodiorite which is texturally massive. Minor areas of the stock are quartz monzonite to granite in composition. The granodiorite is grey to pinkish grey and coarse-grained. In areas of intense shearing and adjacent to quartz veins and dykes, the granodiorite is commonly altered to a dark grey as a result of chloritization and silicification. Detailed geological mapping has discovered additional narrow (8 m by 3 m wide) fine grained magnetic mafic dykes trending east-northeast and north-northwest (i.e., Laverty Dyke). Alteration adjacent to the Laverty Dyke is noted by a darker grey





coloured granodiorite with veinlets of quartz calcite +/- minor amounts of tourmaline (Figure 7.2)

Figure 7.2 Property Geology



The contact of the granodioritic rocks with the carbonized latite is exposed on an outcrop in the southern part of KRL410, and granitic rocks adjacent to the contact are exposed near the southern boundary of claim K1426. The contact on KRL410 is difficult to delineate precisely because both rock types are light-coloured and contain quartz and feldspar, but the latite is grey in colour rather





than pinkish and the country rocks are rusty owing to alteration of carbonate minerals.

The Laverty Dyke trends 340° with a maximum width of about 15 m and a strike length of greater than 300 m. The dyke is massive, medium grained and composed of amphibole and plagioclase in a dark grey fine grained matrix of mafic minerals. The rock is magnetic and contains minor to trace amounts of pyrrhotite and pyrite.

Structural mapping indicates the major fracture directions are north-northwest and east-northeast. The east-northeast fractures are parallel to the mafic dykes and both fracture sets have associated mineralized quartz veins.

The north-northwest fracture set is a preferred direction for shear fractures and faults with dextral offsets. A third set of fractures with sinistral offsets trending northeast is also associated with mineralized quartz veins. The north-northwest direction is the preferred orientation for shear fractures and faults (dextral offset) along with a third major set trending northeast (sinistral offset) which also has associated mineralized quartz veins.

The considerable spread in orientations of the fracture patterns and the number of secondary fractures suggests that the area has undergone stress from more than one direction.

The southeastern corner of the East My-Ritt claim block is underlain by mafic volcanic rocks belonging to the Balmer Assemblage. These rocks are observed in the southeastern-most portion of the Buffalo Extension zone. There are two greenschist-facies mafic volcanic units present, a tholeiitic-komatiitic meta-volcanic unit and a sequence of calc-alkalic meta-volcanic rocks (Kits, 1988). According to regional geology maps, the unconformity between the Balmer and Confederation Assemblages may lie in the southeast corner of the Property under Snib Lake (Sanborne-Barrie et al., 2004).

Structural features present in the southern Balmer mafic volcanic rocks are part of the Flat Lake—Howey Bay Deformation Zone. The lithologies within the Deformation Zone are moderately to strongly sheared and contain zones of massive raft material from other assemblages (Kita, 1988).

7.3 MINERALIZATION

7.3.1 LAVERTY MAIN ZONE

The Laverty Main Zone is located in the northeastern portion of the Laverty claim block, southeast of the Laverty Dyke. It is a southwest-northeast trending zone of mineralization which is characterized by two distinct sections, named the 'West Shear' and the 'East Shear'. The lithology of the Main Zone dominantly





comprises granodiorite belonging to the Dome Stock (Figure 4.2). The granodiorite is moderately to strongly sheared with common faults and fractures. Strongly chloritized mafic to intermediate dykes are also commonly observed across the zone within the granodiorite.

Mineralization in the Main Zone occurs in two distinct forms: structurally hosted within sheared granodiorite, and in quartz-tourmaline veins. Mineralization hosted by the sheared granodiorite is present throughout the Main Zone, whereas mineralized quartz-tourmaline veins are only locally common in the eastern half of the Main Zone.

7.3.2 LAVERTY DYKE

The Laverty Dyke is a mafic dyke which has intruded the granodiorite of the Dome Stock, and is described in more detail in Section 7.2 Property Geology.

Mineralization in the Laverty Dyke is characterized by very fine grained native gold residing in silicate minerals, and occasionally in trace base metal sulphide minerals. The majority of the gold is located near the contact between the dyke and the granodiorite, as well as locally in the granodiorite near the dyke.

The solid used for the resource estimate is based on geology, and is restricted to the contacts of the dyke. There is some mineralization in the granodiorite proximal to the dyke contacts, but the distribution of this mineralization is much less regular.

7.3.3 BUFFALO EXTENSION ZONE

The Buffalo Extension Zone is located in the southern part of the East My-Ritt claim block and primarily comprises granodiorite of the Dome Stock. In the southeastern most corner of the claim block, mafic volcanic rocks of the Balmer Assemblage are present, which are described in more detail in Section 7.2 Property Geology.

The mineralization is contained in two separate groups in the Buffalo Extension Zone: disseminated throughout the granodiorite, and within quartz-tourmaline veins which are locally common in the granodiorite. Mineralization is restricted to the granodiorite, and is not observed in the Balmer mafic volcanic rocks.

Two geology/grade zones were produced for the Buffalo Extension Zone. The Disseminated Zone was built around a semi-continuous zone of sheared granodiorite with an assay cut-off of 0.25 g/t Au. The Quartz-Tourmaline Zone was created around a zone characterized by swarms of quartz-tourmaline veins, and with an assay cut-off 0.25 g/t Au.





7.3.4 CENTRAL ZONE

The Central Zone is located in the north-eastern part of the East My-Ritt claim block (KRL 404) and entirely within the granodiorite of the Dome Stock.

Massive granodiorite is composed primarily of feldspar with secondary quartz and minor amphibole, biotite and pyrite. There are minor mafic dykes throughout the unit with sheared contacts with the granodiorite. Locally the granodiorite is shear or strongly foliated.

Within the sheared and foliated zones, sericite altered zones; quartz veins are present with a few specks of visible gold. The majority of the sulphides are composed of pyrite, but there are rare occurrences of chalcopyrite.

7.3.5 SOUTH ZONE

The South Zone is located in the center portion of the East My-Ritt claim block (KRL 410) and entirely within the granodiorite of the Dome Stock.

Massive granodiorite with locally weakly to moderately foliated seams is composed primarily of feldspar and quartz with minor amphibole, biotite and pyrite. There are minor mafic dykes throughout the unit.

Within the foliated zones are minor chlorite and sericite altered zones with disseminated pyrite.




8.0 **DEPOSIT TYPES**

8.1 ARCHEAN SHEAR-HOST GOLD DEPOSIT

The Red Lake District gold mineralization can broadly be characterized as Orogenic Gold Deposits (Groves et al., 1998) and belong to the class of Archean shear-hosted gold occurrences. This deposit type is referred to as type I01 by the British Columbia Ministry of Energy and Mines Deposit Profiles and as USGS Model 36a. These have the following salient features:

- Tectonic setting: Major transcrustal structural breaks within stable cratonic terrains. May represent remnant terrane collision boundaries.
- Host Rock Types: Granite greenstone belts mafic, ultramafic (komatiitic) and felsic volcanics, intermediate and felsic intrusive rocks, greywacke and shale.
- Deposit Form: Tabular fissure veins in competent host lithologies, veinlets and stringers forming stockworks in less-competent lithologies.
- Texture/Structure: Veins commonly have sharp contacts with wallrocks and exhibit a variety of textures including massive, ribboned or banded stockworks with anastomosing gashes and dilations.
- Ore Mineralogy: Native gold, pyrite, arsenopyrite, galena, sphalerite, chalcopyrite, pyrrhotite, tellurides, scheelite, bismuth, tetrahedrite, stibnite, molybdenite.
- Gangue Mineralogy: Quartz, carbonates, albite, fuchsite, sericite, muscovite, chlorite, tourmaline, graphite.
- Alteration Mineralogy: Silicification, pyritization and potassic alteration generally occur adjacent to veins within broader zones of carbonate alteration with or without ferroan dolomite veins, extending up to tens of meters from veins.
- Ore Controls: Gold-quartz veins occur within zones of intense and pervasive carbonate alteration along second order or later faults marginal to transcrustal breaks; commonly associated with late syncollisional, structurally-controlled intermediate to felsic magmatism.





8.2 RED LAKE DISTRICT GOLD DEPOSITS

The Property is located within the RLGB where the dominant host rocks for mineralization are mafic to ultramafic volcanic rocks. However, deposits are also hosted in a variety of intermediate to felsic volcanic rocks, subvolcanic (intrusive) rocks, and sedimentary rocks (Parker, 2000).

Gold deposits at the Howey, Hasaga, Gold Shore, and Buffalo Mines properties are in close proximity of the mineralization on the Property and provide a gold deposit model for this specific area. The gold mineralization is located in several sets of veins and stringers which are best developed along 040° and 325° trends with steep dips. The veins tend to be distributed throughout the quartz latite lithologies at the Howey and Buffalo Mines. At the Hasaga Mine, the veins are restricted to fracture zones. The veins consist of white quartz with some carbonate and a small amount of orthoclase. Pyrite and sphalerite are the most abundant metallic minerals with small amounts of other sulphides and tellurides. Gold is mainly restricted to the veins and the contained sulphide minerals whereas the wall rocks are practically barren (Ferguson, 1968). Chloritic quartz latite appears as a local alteration adjacent to the veins.

Two styles of gold mineralization are recognized on the Property. The first style is represented by the near surface, steeply dipping north-northwest striking mafic dyke zone. This mineralization is characterized by very fine grained native gold encapsulated in silica and silicate minerals and is occasionally accompanied by trace amounts of base metal sulphide minerals. The alteration accompanying the mineralization appears to be quartz veins and siliceous breccias within a broader calcitic envelope. The second style of gold mineralization is represented by 070° trending, steeply dipping mineralized zones in sheared granodiorite similar to the adjacent Howey, Hasaga, and Gold Shore deposits.

Both styles of gold mineralization have the attributes of quartz-carbonate vein deposits (Robert, 1995) associated with deformation and folding in metamorphosed volcanic, sedimentary, and granitoid rocks. Virtually all gold mineralization has an epigenetic aspect and is structurally controlled in detail, occurring in veins, lenses, fractures, and hinge zones particularly between two rheologically distinct units (Dubé et al., 2002).





9.0 EXPLORATION

Mega has not conducted any surface exploration on the project since 2012. All information related to diamond drilling conducted in the Project is disclosed in Section 10.0 Drilling.





10.0 DRILLING

10.1 DRILLING

Diamond drilling was conducted in 2012 to extend the Central Zone, the South Zone, and the Buffalo Extension Zone. A total of twenty five holes totaling 8,210 m were completed during the 2012 campaign completed from January to May, 2012. Table 10.1 summarizes the collar details of the program. Figure 10.1 shows the borehole locations relative to the various Zones on the Project.

Table 10.1 2012 Diamond Drillhole Collar Summary

Zone	Hole ID	Easting	Northing	Elevation (m)	End of Hole (m)	Azimuth (°)	Dip (°)
Buffalo Ext. Diss/Tourm	MM1201	439707	5650600	365	307.0	342	-45
Buffalo Ext. Diss/Tourm	MM1202	439707	5650600	365	320.0	342	-54
Buffalo Ext. Tourm	MM1203	439707	5650600	365	350.0	342	-65
Buffalo Ext. Tourm	MM1204	439701	5650594	365	356.0	8.9	-45
Buffalo Ext. Tourm	MM1205	439701	5650594	365	407.0	8.9	-64
Buffalo Ext. Tourm	MM1206	439698	5650601	366	290.0	333	-45
Buffalo Ext. Tourm	MM1207	439698	5650601	366	341.0	333	-55
Buffalo Ext. Tourm	MM1208	439698	5650601	366	413.0	333	-64
Buffalo Ext. Diss/Tourm	MM1209	439698	5650601	366	311.0	317	-45
Buffalo Ext. Diss/Tourm	MM1210	439698	5650601	366	366.0	317	-55
Buffalo Ext. Diss/Tourm	MM1211	439698	5650601	366	410.0	317	-62
Buffalo Ext. Diss/Tourm	MM1212	439626	5650559	368	395.0	326	-55
Buffalo Ext. Diss/Tourm	MM1213	439626	5650559	368	429.0	326	-65
Central	MM1214	439933	5651391	375	275.0	335	-58
Central	MM1215	439933	5651391	375	284.0	335	-70
Central	MM1216	439933	5651391	375	251.0	50	-46
Central	MM1217	439933	5651391	375	251.0	290	-50
South	MM1218	439461	5651149	401	216.7	350	-73
South	MM1219	439463	5651154	404	252.0	173	-70
South	MM1220	439463	5651154	404	251.0	117	-50
South	MM1221	439629	5651200	397	203.0	181	-47
Buffalo Ext. Diss/Tourm	MM1222	439701	5650594	365	381.0	326	-53
Buffalo Ext. Diss	MM1223	439701	5650594	365	420.0	326	-55
Buffalo Ext. Diss/Tourm	MM1224	439626	5650559	368	410.3	341	-66
Buffalo Ext. Diss	MM1225	439503	5650473	368	320.0	343	-58





Figure 10.1 2012 Diamond Drillhole Location



Drilling was completed by Forthright Drilling of Temiskaming Shores, Ontario. All holes were NQ in diameter and used a 3 m core barrel.

Table 10.2 summarized the significant intersections from the program.





Table 10.2 Diamond Drilling Results Summary

Hole ID	Zone	From (m)	To (m)	Length (m)	Au (g/t)
MM1201	Buffalo Ext. Diss.	64.0	115.0	51.0	0.8
MM1201	Buffalo Ext. Qtz-Tourm.	178.0	185.2	7.2	1.80
MM1201	Buffalo Ext. Qtz-Tourm.	198.0	202.0	4.0	4.99
MM1201	Buffalo Ext. Diss.	278.0	288.0	10.0	1.30
MM1202	Buffalo Ext. Diss.	136.0	159.0	23.0	0.59
MM1202	Buffalo Ext. Qtz-Tourm.	259.0	262.6	3.6	2.74
MM1203	Buffalo Ext. Qtz-Tourm.	322.0	325.9	3.9	1.08
MM1204	Buffalo Ext. Qtz-Tourm.	311.0	315.0	4.0	1.74
MM1205	Buffalo Ext. Qtz-Tourm.	383.0	387.0	4.0	2.51
MM1206	Buffalo Ext. Qtz-Tourm.	242.0	251.3	9.3	0.83
MM1207	Buffalo Ext. Qtz-Tourm.	202.0	210.0	8.0	3.24
MM1208	Buffalo Ext. Diss.	149.0	172.0	23.0	2.10
MM1208	Buffalo Ext. Qtz-Tourm.	326.5	327.0	0.5	26.95
MM1209					NSV
MM1210	Malard	235.0	242.0	7.0	15.65
MM1211	Buffalo Ext. Diss.	157.0	198.0	41.0	1.17
MM1211	Buffalo Ext. Qtz-Tourm.	371.0	382.2	11.2	1.99
MM1212	Buffalo Ext. Qtz-Tourm.	48.0	71.0	23.0	1.37
MM1212	Buffalo Ext. Diss.	250.0	310.0	60.0	0.23
MM1213	Buffalo Ext. Qtz-Tourm.	237.0	292.6	55.6	3.21
MM1213	Buffalo Ext. Diss.	360.4	413.5	53.1	0.66
MM1214	Central	7.0	70.0	63.0	0.33
MM1215	Central	56.0	161.0	105.0	0.66
MM1216	Central	7.0	20.0	13.0	0.85
MM1217	Central	88.0	120.6	32.6	0.42
MM1218		Abandoned	Hole - brokei	n rods	
MM1219	South	178.0	181.0	3.0	0.96
MM1220					NSV
MM1221	South	17.0	22.0	5.0	0.82
MM1222	Buffalo Ext. Diss.	132.5	204.0	71.5	0.47
MM1222	Buffalo Ext. Qtz-Tourm.	239.0	272.5	33.5	1.09
MM1223	Buffalo Ext. Qtz-Tourm.	133.0	144.0	11.0	0.83
MM1223	Buffalo Ext. Diss.	263.0	289.0	26.0	1.57
MM1224	Buffalo Ext. Diss.	187.0	257.0	70.0	0.76
MM1224	Buffalo Ext. Qtz-Tourm.	367.0	377.5	10.5	0.82
MM1225	Buffalo Ext. Diss.	201.0	300.0	99.0	0.74





Figures 10.2 to 10.6 are examples of typical geological sections from each of the zones targeted during the 2012 diamond drill program.









Figure 10.3 Diamond Drill Section South Zone (looking west)



Figure 10.4 Diamond Drill Section Buffalo Ext. Qtz-Tourm Zone (looking west)







Figure 10.5 Diamond Drill Section Buffalo Ext. Diss Zone (looking west)



Figure 10.6 Diamond Drill Section Laverty Dyke Zone (looking north)







Figure 10.7 Diamond Drill Section Main Zone (looking West)



10.1.1 SURVEYING

COLLAR SURVEY

All drill collars were initially spotted with a hand-held Global Positioning System (GPS).

DOWNHOLE SURVEY

Down-hole surveys were completed using the ReflexIt© tool. Survey readings were collected every 50 m down the hole. Erroneous directional readings were discarded and inclination readings were not affected by the magnetic minerals.

10.1.2 CORE LOGGING PROCEDURE

The following summarizes the methodology followed by Mega for logging drill cores completed on the Property.

- Drill core is delivered to the core logging facility (Figure 10.10) by the diamond drill contractor, typically once a day.
- Lids are removed from core boxes and the boxes are moved into the core shack. Boxes are placed on the core racks in rows of five. Core racks





run the length of the core shack and if necessary, more than 200 m of core can be laid out at one time.

- Run markers and box labels are checked for accuracy.
- Boxes are photographed in the rows of five, as laid out in the core racks.
- The geologist logs the core, recording data directly into a Microsoft Excel template. Core is logged from top to bottom of the hole, continuously.
- Core is logged for lithology, structure and deformation features, alteration, notable minerals (particularly sulphides), and any significant features such as veins or dykes. Specific features recorded include the colour, texture, and mineralogy for any units broken out (from-to depths present for each unit), angles of foliation, veins, and faults, and core condition.
- Multiple geologists logged the core with the project manager (a geologist) being responsible for the overall quality of logging.
- Sample intervals are marked on the box.
- Core boxes are labeled on one end with a metal tag that is marked with hole ID, box number and core interval.
- Logged core boxes are placed in core racks located within the building for cutting by a technician.
- The core is cut in the cutting facility which is attached to the core logging facility (Figure 10.11); procedures described in Section 10.1.3 (Sampling Approach).
- Once cut, the core is temporarily stored outdoors in core racks located in a yard adjacent to the core shack (Figure 10.12). When numerous holes have accumulated in the core yard, the core is stacked on pallets, secured with metal straps, and transported by flat-bed truck to a storage area located approximately 5 km east of Red Lake with access off Highway 105 (Figure 10.13).
- Neither the temporary core yard nor the long term core storage areas are considered secure since they are not surrounding by a fence or have on site security.





Figure 10.10 Core Logging Facility in Red Lake



Figure 10.11 Core Cutting Facility







Figure 10.12 Temporary Core Storage Adjacent to Core Logging Facility



Figure 10.13 Core Storage Area outside of Red Lake







10.1.3 SAMPLING APPROACH

Samples for gold assay analysis were collected from all drill core collected from the Property using the following procedures;

- The minimum sample length is 0.50 m and the maximum sample length is 1.50 m.
- Samples do not cross lithological contacts where the lithological unit is greater than or equal to 0.5 m. Units less than 0.5 m are included within the larger (0.5 to 1.5 m) sample.
- Samples are marked on the box with the red dry markers. Lines and arrows are drawn on the core to denote the start and finish of each sample. A cut line is then drawn down the length of the core to indicate where the core is to be cut. The pre-printed sample tags are placed in the box at the start of each sample interval; two tags are placed in the box, one of which will be stapled to the box, and one of which will be placed in the sample bag.
- The core is cut using a saw with a circular diamond blade. The saw uses fresh water which drains into a sump outside the building.
- The core is cut into even halves with one half placed back into the core box, and the other half placed in a clear plastic sample bag.
- The sample number corresponding with the interval is written on the outside of the sample bag and the sample tag is inserted in the bag. The bag is then secured with a zip tie.
- Quality Assurance/Quality Control (QA/QC) samples are inserted into the sample stream at previously determined intervals. A full description of the QA/QC sampling procedure and program is provided in Section 11.3 QA/QC.
- Up to eight samples bags are placed in rice bags and a record is made of the sample numbers in each rice bag (Figure 10.14). The rice bag is then secured with zip-ties.
- After the sample bags were sealed in the rice bags, they were stored in the core shack until enough samples were accumulated for shipment to Accurassay.
- All samples, including field-inserted standards and blanks, were shipped via truck, using Manitoulin Transport, to Accurassay's main facility in Thunder Bay, Ontario. Accurassay has geochemical accreditation that





conforms to the requirements of CAN P-4E ISO/IEC 17025:2005 and CAN-P-1579.

Figure 10.14 Rice Bag Containing Assay Sample for Shipment



10.2 QP's OPINION

It is WSP's opinion that the drilling and logging procedures put in place by Mega meet acceptable industry standards and that the information can be used for geological and resource modeling





11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SAMPLES PREPARATION

The following is a brief description of the sample preparation at Accurassay (prep code ALP1):

- Samples are sorted into numerical order and then dried.
- Once dried, the material was crushed to 70% passing -8 mesh (2 mm).
- The sample is then split to get a 500 g sample for pulverizing.
- The total 500 g of split sample is pulverized to 90% passing 106 μm.
- Silica abrasive was used to clean between each sample.

At no time was an employee of Mega involved with the preparation of the samples

11.2 ANALYTICAL PROCEDURE

Gold was assayed by fire assay fusion of 50 g with an atomic absorption (AA) finish (Accurassay code ALFA2). The resulting values were reported in parts per billion. If any of the assays returned values above the threshold limits, the sample would be re-assayed using a 50 g fire assay with a gravimetric finish (Accurassay core ALFA7) with the results reported in grams per tonne. The final assay methodology for samples that exceed the gravimetric finish threshold or that contain visible gold was gold pulp metallic (Accurassay core ALPM1).

At no time as an employee of Mega involved in the analytical process.

11.3 SAMPLE SECURITY

The core logging and cutting facility was locked when unoccupied and is considered reasonably secure. Once collected, all samples were stored inside the facility until transferred to the shipping company, which transported the samples directly to Accurassay. A detailed list of all samples included in each shipment is recorded by Mega, and Manitoulin Transport uses bar-coding and scanning to track each shipment. Accurassay also uses bar-coding and scanning





to track each shipment from the time it is received to the delivery of the results to Mega. The chain of custody is considered secure to industry standards.

11.4 QA/QC

A well-established QA/QC program has been in place by Mega in their Red Lake core facility since the start of drilling in Red Lake in 2009.

A blank or Standard Reference Material (SRM) was inserted into the sample stream roughly every 20th sample, and often more frequently. The blanks and standards were inserted in sealed 50 g plastic sachets which were marked with a sample number but not with the name of the standard or its gold grade.

Blanks and standards were purchased from Accurassay in Thunder Bay, Ontario. Two different gold standard samples were used in the drillholes reported here, VMS1 (Au 0.429 \pm 0.032 ppm) and HGS1 (2.784 \pm 0.225 ppm). The blank samples were prepared from silica sand which has a nil gold content.

In addition to the field-inserted QA/QC program, the laboratories operate their own laboratory QA/QC system. The labs insert quality control materials, blanks and duplicates on each analytical run.

BLANKS

A total of 198 blank samples were inserted within the sample stream, which represent approximately 2.4% of the 2012 data set. A total of seven samples or 4% register as failures, which his considered to be three times detection limit. This is considered high by industry standards. In addition, there appears to be a cycles of reasonable results and poor results. Poor results do not necessarily mean failures, just more dispersion with the results. This could be related to different crews operating in the labs during the preparation process. Figure 11.1 displays the result of the Blank QA samples.

STANDARDS

Accuracy is a measure of how close to the expected value the results are, while precision is measure by how reproducible the results are and are reflected in the relative standard deviation.

A total of 176 samples of VMS1 were submitted to Accurassay. The accuracy of the results was 0.4% which is considered good, yet the precision was 7.4%, could use improvement. There was only recorded one failure, which is greater than three times the relative standard deviation. Figure 11.2 displays the results.





Figure 11.1 Blank QA/QC Chart









A total of 177 samples of HGS1 were submitted to Accurassay. The accuracy of the results was 4.7% which is considered fair, yet the precision was 6.5%, could use improvement. There were no recorded failures. Figure 11.3 displays the results.



Figure 11.3 HGS1 Process Performance Chart

11.5 **QP's OPINION**

It is WSP's opinion that the sample preparation and analytical procedures put in place by Mega meet acceptable industry standards and that the information can be used for geological and resource modeling.





12.0 DATA VERIFICATION

12.1 SITE VISIT

Todd McCracken, P.Geol., Geologist with WSP, visited the Property on September 23 to 24, 2013. Mr. McCracken examined the core logging and cutting facilities, core storage areas. Outcrop and drill collar sites at the Central, South and Buffalo Extension areas were reviewed. Geological logs and assay certificates, down-hole survey sheets, and collar survey data were also reviewed, and all data validation was completed.

12.2 DRILL COLLAR VALIDATION

WSP confirmed the locations of 13 drillholes during the site visit. WSP collected the collar locations using either a Garmin Etrex 20 handheld GPS unit. Most collar locations were located within the acceptable error limit of the GPS unit (Table 12.1). Figure 12.1 is an example of the collar validation.

		Mega [Digital Collar I	WSP GPS	Difference			
						Delta		
ZONE	HOLE-ID	LOCATIONX	LOCATIONY	LOCATIONZ	LENGTH	LOCATIONX	LOCATIONY	Distance
Buffalo Ext. Diss/Tourm	MM1201	439707.00	5650600.00	365.00	307			
Buffalo Ext. Diss/Tourm	MM1202	439707.00	5650600.00	365.00	320			
Buffalo Ext. Tourm	MM1203	439707.00	5650600.00	365.00	350			
Buffalo Ext. Tourm	MM1204	439701.00	5650594.00	365.00	356			
Buffalo Ext. Tourm	MM1205	439701.00	5650594.00	365.00	407			
Buffalo Ext. Tourm	MM1206	439699.88	5650597.24	365.79	290			
Buffalo Ext. Tourm	MM1207	439699.90	5650597.18	365.82	341			
Buffalo Ext. Tourm	MM1208	439699.98	5650596.98	365.90	413			
Buffalo Ext. Diss/Tourm	MM1209	439699.39	5650597.60	366.07	311	439699	5650600	2.44
Buffalo Ext. Diss/Tourm	MM1210	439699.54	5650597.57	365.68	366	439699	5650600	2.49
Buffalo Ext. Diss/Tourm	MM1211	439699.68	5650597.34	365.44	410	439699	5650600	2.74
Buffalo Ext. Diss/Tourm	MM1212	439626.84	5650556.35	369.82	395	439629	5650553	3.98
Buffalo Ext. Diss/Tourm	MM1213	439627.00	5650555.70	370.53	429	439629	5650553	3.36
Central	MM1214	439932.94	5651389.28	375.17	275	439929	5651388	4.14
Central	MM1215	439932.99	5651388.95	375.18	284	439929	5651390	4.12
Central	MM1216	439936.42	5651387.82	375.63	251	439929	5651388	7.42
Central	MM1217	439928.96	5651382.34	375.42	251	439928	5651379	3.47
South	MM1218	439461.00	5651149.00	401.00	217	1		
South	MM1219	439462.92	5651148.54	395.94	252	439463	5651151	2.46
South	MM1220	439462.18	5651148.27	395.93	251	1		
South	MM1221	439627.44	5651197.83	395.83	203	439626.00	5651200.00	2.60
Buffalo Ext. Diss/Tourm	MM1222	439698.92	5650591.52	366.23	381	439698	5650592	1.04
Buffalo Ext. Diss	MM1223	439699.02	5650591.39	365.24	420	439698	5650592	1.19
Buffalo Ext. Diss/Tourm	MM1224	439628.12	5650553.80	370.50	410.26	439631	5650554	2.88
Buffalo Ext. Diss	MM1225	439501.12	5650477.65	370.83	320			

Table 12.1 Drill Collar Validation





Figure 12.1 Drill Collar Validation



12.3 Assay Validation

Samples were not collected during the recent site visit to the Project. The author of this report has been involved with this Project since 2011. The results of the 2012 drilling program are similar to the previous drilling campaign by Mega and are within the statistical parameters of the Project.

12.4 DATABASE VALIDATION

The drillhole database was validated against the original drill logs, survey records and assay certificates. The objective was to validate approximately 10% of the database against the original data set with the intention of conducting a more rigorous review if the error rate exceeded 1%. Table 12.2 summarizes the validation numbers. Any inaccuracies noted in the database were corrected and lists of corrections were provided to Mega.





Table 12.2 Data Validation Summary

	Total Number of Records	Number of Records Validated	Number of Errors	Errors Rate	Validation Rate
Drill Collar					
Collar X	25	24	0	0%	96%
Collar Y	25	24	0	0%	96%
Collar Z	25	24	0	0%	96%
Depth	25	24	1	4%	96%
Assay					
Au	8298	8298	528	6%	100%
Lithology					
From	100	100	2	2%	100%
То	100	100	3	3%	100%
Rock Code	100	100	0	0%	100%
Survey					
Distance	177	177	18	10%	100%
Azimuth	177	177	24	14%	100%
Dip	177	177	24	14%	100%

12.5 QP'S OPINION

It is WSP's opinion that the data has been validated to a level that is acceptable industry standards and that the information can be used for geological and resource modeling





13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 SAMPLE INFORMATION

The Red Lake North Madsen gold deposit, in Northern Ontario, provided SGS in Lakefield, Ontario with samples for metallurgical test purposes. Three separate zones were sampled, Laverty Main, Laverty Dyke and Buffalo Extension. Three main composite blends were created to represent each zone: Composites 1, 2 and 3 representing Laverty Main, Buffalo Extension and Laverty Dyke respectively.

Limited test work was performed on Composites 2 and 3. However additional samples representing Laverty Dyke and Buffalo Extension zones were shipped to SGS for testing. Composites of these additional samples were made.

13.2 HEAD ANALYSIS

Table 13.1 shows the head assay results for the 10 samples for which test work was carried out. The gold head grade for the tested samples ranged from 0.3 to 3.1 g/t Au. Samples indicated that Buffalo Extension had the lowest grade and Laverty Dyke had the highest gold content. Sulphide concentrations were low for all samples.

Composite	Zone	Sample Type	Au (g/t)	S(%)
Composite 1	Laverty Main	n/a	1.06	0.02
Composite 2	Buffalo Extension	n/a	1.32	0.26
Composite 3	Laverty Dyke	n/a	3.05	0.07
Laverty Dyke 1	Laverty Dyke	Granodiorite	0.42	0.05
Laverty Dyke 2	Laverty Dyke	Contact	2.25	0.13
Laverty Dyke 3	Laverty Dyke	Dyke	2.36	0.12
Master Laverty Dyke	Laverty Dyke	Blend of 1,2,3	1.15	0.06
Buffalo Extension 4	Buffalo Extension	Disseminated	0.50	0.16
Buffalo Extension 5	Buffalo Extension	Quartz - Tourmaline	0.32	0.10
Master Buffalo Extension	Buffalo Extension	Blend of 4,5	0.37	0.13

Table 13.1 Summary of Head Assays

Notes:

Gold head assays were tested using a screen metallics protocol.

The Master Laverty Dyke and Master Buffalo Extension composites were not blended using a weighted average.





13.3 **GRINDABILITY**

All samples under study were subjected to the Bond ball mill test in order to determine their respective Bond Ball Mill Work Indexes (BWI) for the purpose of categorizing their resistance to grinding. Figure 13.1 summarizes these test results.



Figure 13.1 Summary of Bond Ball Mill Work Indices

The Bond ball mill test results indicate that the BWI's ranged from approximately 15 to 18 kWh/t. Composite 3 (Laverty Dyke) was found to be the softest sample and Laverty Dyke 1 the hardest. These work indexes represent a moderately hard to hard mineral.

13.4 GRAVITY SEPARATION

Gravity separation tests were performed on all three original composites as well as on the seven variability samples representing Laverty Dyke and Buffalo Extension zones. For Composite 1, charge sizes of 2 and 4 kg were used at various grind sizes. For Composites 2 and 3 charge size was 4 kg. Charge size for remaining variability samples representing Laverty Dyke and Buffalo Extension zones was 10 kg. Gravity separation was performed using a Knelson Concentrator followed by a Mozley Table to upgrade the Knelson concentrate.

13.4.1 GRAVITY SEPARATION RESULTS OF ORIGINAL COMPOSITES

Table 13.2 summarizes gravity test results for Composites 1, 2 and 3. Gravity recoveries for Composite 1 ranged from 36 to 72%. Variation in the gold





recoveries, as well as calculated head grades, suggest that coarse gold was present in the samples.

Gravity gold recoveries for Composite 2 (Buffalo Extension) varied from approximately 22% at a grind size of 134 μ m to 37% at a 75 μ m grind size. Recoveries for Composite 3 (Laverty Dyke) ranged from roughly 15 to 26% at the respective grind sizes of 120 and 69 μ m.

The effect of grind size showed some correlation between finer grinding and better gold recovery.

Composite	Feed Size (P80, µm)	Concentrate Mass (%)	Concentrate Au Grade (g/t)	Gravity Recovery (%)
Composite 1	127	0.07	379	36.3
(Laverty Main)	72	0.07	585	44.9
	44	0.06	487	42.2
	119	0.05	609	44.1
	89	0.03	1668	57.6
	47	0.04	1354	71.7
	42	0.09	605	59.8
Composite 2	134	0.05	497	22.0
(Buffalo Extension)	75	0.02	2056	36.7
Composite 3	120	0.18	194	14.6
(Laverty Dyke)	69	0.04	1857	25.9

Table 13.2 Summary of Main Zone Gravity Test Results

13.4.2 GRAVITY SEPARATION RESULTS OF VARIABILITY SAMPLES

Using a target grind size of 75 μ m, gravity tests were performed on the seven variability samples representing the Laverty Dyke and Buffalo Extension zones. Table 13.3 summarizes the results.

Table 13.3 Summary of Variability Samples Gravity Test Results

Composite	Feed Size (P80, µm)	Concentrate Mass (%)	Concentrate Au Grade (g/t)	Gravity Recovery (%)
Laverty Dyke 1	76	0.10	125	24.9
Laverty Dyke 2	74	0.18	270	25.7
Laverty Dyke 3	79	0.25	50	6.7
Master Laverty Dyke	77	0.12	173	17.3
Buffalo Extension 4	70	0.10	96.9	25.4
Buffalo Extension 5	74	0.12	104	48.3
Master Buffalo Extension	69	0.11	104	23.0





Results show gold recoveries ranging from 7 to 26% for Laverty Dyke samples and 23 to 48% for the samples from Buffalo Extension. Data reveals that while gravity concentration may be advantageous on certain zones within the deposit it may not be beneficial for all zones.

No direct correlation between gold recovery by gravity separation and gold head grades were observed.

13.5 FLOTATION

A series of rougher flotation tests were conducted on gravity tailings of Composites 1, 2 and 3. Various feed particle grind sizes were used to study the effect on recovery. Figure 13.2 summarizes the cumulative gold recovery results (including gravity concentrate recovery).

An improvement in gold recovery can be observed for the main zone composites as feed particle size decreases. , The test conducted at a particle size of 47 μ m K80 (Composite 1: F3) showed that at around 4% feed mass recovery, approximately 93% of the feed gold could be recovered into a combined rougher and Mozley concentrate. Extending the mass recovery to over 16%, increased the cumulative feed gold recovery to over 95%.

Two additional flotation tests were conducted on Composite 1 (Laverty Main) at a grind size of 46 and 42 µm respectively to produce flotation concentrate for cyanidation tests. The first one (F4) was performed on whole ore with no prior gravity separation and achieved a gold recovery of 97.6%. The other (F5) was conducted on gravity tails and achieved a cumulative gold recovery of 94.2%. In both cases, mass recovery to achieve this was 16%.





Figure 13.2 Gravity Tailings Rougher Flotation Test Results Summary



13.6 CYANIDATION

In order to evaluate gold amenability to leaching, cyanidation tests were performed on the whole mineral, gravity tailings and flotation concentrate samples. Composite 1 was initially tested to determine optimal conditions. Grind size and reagent concentrations were varied. Two flotation concentrates, one from whole mineral and one from gravity tailings, were treated by a pebble mill re-grind. Since no flotation tests were conducted on Laverty Dyke and Buffalo Extension variability samples, cyanidation tests for these samples were conducted on whole mineral and gravity tailings. Optimized conditions from tests on Composite 1 were used.

13.6.1 CYANIDATION OF LAVERTY MAIN ZONE COMPOSITE

Three tests were performed on each of the two flotation concentrates. Two were performed on whole mineral samples and three with gravity prior to cyanidation for a total of 11 tests. Cyanidation kinetics results are summarized in Figure 13.3.









Excluding the test conducted on the gravity tailings at a coarse grind size of 127 μ m K80, all other tests indicated that 94% or more of the leach feed gold was extracted into solution after 48 h. This corresponds to overall recoveries greater or equal to 95% except for the already mentioned coarse grind gravity tailings and flotation concentrate from test F5 for which overall recovery was around 93%. The kinetic curves indicate that there is still a significant amount of gold that is being recovered after 24 h, the exception being whole mineral cyanidation kinetics, which show no increase in gold extraction between 24 and 48 h. There may be opportunity to increase the rate of gold recovery by investigating the effect of lead nitrate, or sparging air/oxygen throughout the leach test.

Reagent consumption results for samples with a grind size of approximately 45 µm are summarized in Figure 13.4.







Figure 13.4 Summary of Reagent Consumption for Laverty Main Zone Composite

A cyanide concentration variation from 1 to 2 g/l NaCN for flotation concentrate cyanidation showed that an increase in reagent concentration only increased final extraction at 48 h by 1% but did increase initial kinetic response and lead to much higher cyanide consumption. A reduction in concentration for flotation concentrate cyanidation from 1 to 0.5 g/l NaCN showed a much lower gold extraction at 24 h and a slightly lower gold extraction at 48 h.

Cyanide consumption for flotation concentrates with and without prior gravity separation ranged from 0.09 to 0.13 kg/t mineral and 0.10 to 0.12 kg/t mineral respectively at a concentration of 1.0 g/l NaCN. Whole mineral and gravity tailings cyanide consumption ranged from 0.06 to 0.08 kg/t mineral and 0.04 to 0.07 kg/t mineral respectively at a 0.5 g/l NaCN concentration.

Lime consumption for flotation concentrates with and without prior gravity separation ranged from 0.16 to 0.18 kg/t mineral and 0.11 to 0.17 kg/t mineral respectively. Whole mineral and gravity tailings lime consumption ranged from 0.26 to 0.39 kg/t mineral and 0.34 to 0.38 kg/t mineral respectively.

13.6.2 CYANIDATION OF VARIABILITY SAMPLES

Targeting a K80 particle size of 75 μ m, a total of 14 cyanidation tests were conducted on the variability composites, representing the Laverty Dyke and Buffalo Extension zones. This included seven tests on whole mineral samples, and seven tests on gravity tailings samples. The results from these tests are summarized in Figure 13.5. Cyanide consumptions are represented as an





average value between whole mineral and gravity tailings tests, as these were very similar.



Figure 13.5 Summary of Variability Samples Cyanidation Test Results

Results on the variability samples suggest that little variability between given zones exists. It can also be seen that overall gold extraction is very similar for whole mineral and gravity tailings. All whole mineral tests showed recoveries ≥ 95% except the Buffalo Extension 4 sample for which gold extraction was over 90%. The Master Buffalo extension composite which was made up of this sample followed the same trend.

All tests had relatively low cyanide consumptions from 0.03 to 0.06 kg/t for the whole mineral samples and 0.02 to 0.05 kg/t for the gravity tailings samples. Lime consumptions for whole mineral and gravity tailings samples where from 0.37 to 0.51 kg/t and 0.23 to 0.31 kg/t respectively.





14.0 MINERAL RESOURCE ESTIMATES

WSP completed an update to the resource estimation of the North Madsen Project. The effective date of the resource is January 2, 2014.

14.1 DATABASE

Mega maintains all borehole data in an Access database. Header, survey, assays, and lithology tables are saved on individual tabs in the database. The Microsoft[™] Access database provided to WSP was created on September 26, 2013.

The database contains 327 boreholes which is a combination of drillholes and surface trenches. There are over 36,000 assays records in the database. Table 14.1 summarizes the borehole database. Data are expressed in metric units and grid coordinates are in a UTM system.

The resource estimation was conducted using Geovia's[™] Surpac version 6.5.1.

Data Type	No. of Collar	No. of Assay Records	No. of Survey Records	No. of Lithology Records
Borehole	275	35593	1750	2342
Channel	52	434	103	84
Total	327	36027	1853	2426

Table 14.1 North Madsen Database Summary

14.2 SPECIFIC GRAVITY

There is limited specific gravity (SG) data available on the project. A total of 325 granodiorite and 92 dyke bulk density determinations were undertaken utilizing both pycnometer and water displacement techniques by Gord Yule, of Mega.

WSP used an SG of 2.68 for the resource estimate, which is the same number used in previous estimate. An SG of 2.68 is within the accepted range of a granodiorite.

WSP would recommend that Mega collect SG measurements from the various rocks types and grade distributions in order to build up the data set. At a minimum, 2% to 4% of the data set should have SG measurements.





14.3 TOPOGRAPHIC DATA

The topographic digital terrain model (DTM) was generated by using all the drill collars and trench sample elevations in the database (Figure 14.1).

At the current stage of the project and the relative low relief on the Project, this methodology is acceptable.



Figure 14.1 Topographic DTM





14.4 **GEOLOGICAL INTERPRETATION**

Three-dimensional wireframe models of mineralization developed in Datamine by Tetra Tech were retrieved by Mega. The individual zone wireframes were exported from GEMS by Mega into a dxf format, which were then imported by WSP into Surpac. The basic wireframe designs were based on design criteria that included a minimum downhole width of 1.5 m and a minimum grade of 0.2 g/t Au.

Sectional interpretations were reviewed in Geovia[™] Surpac version 5.6.1 software and adjustments made based on the new diamond drill information. Table 14.2 tabulates the solids and associated volumes. The solids were validated in Surpac and no errors were found.

The zones of mineralization interpreted for each area are generally contiguous; however, due to the nature of the mineralization there are portions of the wireframe that have grades less than 0.2 g/t Au, yet are still within the mineralizing trend.

The wireframes extend at depth, well below the deepest diamond drillholes. This is to provide the exploration group with target areas for future exploration. The resource model will not estimate grades into the full volume of the wireframes due to sheer size of some of the wireframes.

The non-assayed intervals were assigned absent value. WSP believes that nonassayed material should not be assigned a zero value, as this does not reflect the true value of the material.





Table 14.2 Wireframe Summary

Wireframe	Identifier	Minimum X	Maximum X	Minimum Y	Maximum Y	Minimum Z	Maximum Z	Volume (m3)
Buffalo Disseminated	11	439,363.86	439,787.58	5,650,475.99	5,650,863.15	-10.00	374.40	23,067,437
Buffalo Qz tourmaline	12	439,401.14	439,778.31	5,650,539.35	5,650,856.18	-10.00	374.40	15,873,609
Laverty Dyke	21	440,479.62	440,688.77	5,652,127.51	5,652,461.28	-15.46	406.78	1,479,568
Laverty Granodiorite	22	440,320.17	440,718.59	5,652,069.91	5,652,482.80	-1.19	390.04	33,497,008
South	31	439,423.76	439,651.93	5,651,036.55	5,651,185.94	150.00	390.00	1,067,226
Main	41	439,838.06	440,650.20	5,651,626.18	5,652,243.34	60.00	380.00	86,828,614
Central	51	439,760.38	440,069.95	5,651,366.65	5,651,550.10	160.00	390.00	5,353,514

Table 14.3 Borehole Statistics by Domain

Wireframe	Zone	Element	No. of Samples	Minimum	Maximum	Mean	St. Deviation
Puffele Discominated	11	Au (g/t)	2,264	0.003	112.080	0.199	2.479
Duilaio Disseminated	11	Length (m)	2,264	0.01	69.00	1.15	1.45
Oz Tourmalina Zana	10	Au (g/t)	6,230	0.003	185.430	0.415	3.199
	12	Length (m)	6,230	0.01	2.00	1.11	0.31
Lovorty Dyko	21	Au (g/t)	1,257	0.003	315.090	1.818	9.101
Laveny Dyke	21	Length (m)	1,257	0.01	1.80	0.82	0.35
Loverty Cropodiarita	22	Au (g/t)	3,924	0.003	18.561	0.222	0.677
Laverty Granoulonite	22	Length (m)	3,924	0.10	120.30	1.45	3.97
South Zono	21	Au (g/t)	761	0.003	43.259	0.483	2.550
South Zone	31	Length (m)	761	0.20	10.00	0.98	0.62
Main Zona	44	Au (g/t)	11,941	0.003	71.330	0.404	1.568
Main Zone	41	Length (m)	11,941	0.10	172.90	1.50	3.87
Control Zono	51	Au (g/t)	1,171	0.000	6.459	0.235	0.506
Central Zone	51	Length (m)	1,171	0.40	2.00	1.07	0.19





14.5 EXPLORATORY DATA ANALYSIS

14.5.1 Assays

The portion of the project included in the mineral resource was sampled by a total of 27,548 gold assays. The assay intervals within each zone were captured using a routine in Surpac that flags the intervals with the wireframes. These intervals were reviewed to ensure all the proper assay intervals were captured prior to proceeding with the next stage of the modeling process. Table 14.3 summarizes the basic statistics for the assays for each of the individual zones.

14.5.2 GRADE CAPPING

Raw assay data for each zone was examined individually to assess the amount of metal that is biased from high grade assays. WSP used a combination of cumulative frequency plots, Parrish analysis using a decile function and the spatial distribution of samples in question.

WSP reviewed the gold grade capping by zones within the project. WSP elected to apply variable caps to the dataset based on the results of the review.

Table 14.4 summarizes the statistics of the borehole data after grade capping was completed. The table indicates that although capping has been applied to some of the zones, the resulting change to the mean grade is not significant.

Appendix A contains the cumulative frequency plots for the various Zones used to assist with the determination of the capping grades.

14.5.3 COMPOSITING

Compositing of all the assay data was completed based on individual statics for the various zones. The process composted downhole intervals honouring the interpretation of the geological solids.

The Main Zone and the Buffalo Zones were composited on 1.0 m interval, while the Laverty Dyke, granodiorite hosting the Laverty Dyke Central and South zones where all composited on 2.0 m intervals.





Table 14.4 Capped Drillhole Statistics Summary

Wireframe	Zone	Element	No. of Samples	Minimum	Maximum	Mean	Std. Deviation	Capped	No. of Samples Capped & % Data Capped
Ruffele Discominated	11	Au (g/t)	2,264	0.003	12.860	0.151	0.723	12.860	4 (0.2%)
Duilaio Disseminateu	11	Length (m)	2,264	0.01	69.00	1.15	1.45		
Oz Tourmalina Zana	10	Au (g/t)	6,230	0.003	7.820	0.312	0.878	7.820	39 (0.6%)
Qz Tournaine zone	12	Length (m)	6,230	0.01	2.00	1.11	0.31		
Laverty Dyke	21	Au (g/t)	1,257	0.003	12.670	1.562	2.094	12.670	7 (0.6%)
	21	Length (m)	1,257	0.01	1.80	0.82	0.35		
Loverty Cropodiarita	22	Au (g/t)	3,924	0.003	18.561	0.222	0.677	N/A	0 (0%)
Laverty Granodionte	22	Length (m)	3,924	0.10	120.30	1.45	3.97		
South Zono	21	Au (g/t)	761	0.003	15.600	0.403	1.593	15.600	4 (0.5%)
South Zone	31	Length (m)	761	0.20	10.00	0.98	0.62		
Main Zana	11	Au (g/t)	11,941	0.003	46.620	0.402	1.489	46.620	1 (0.0%)
	41	Length (m)	11,941	0.10	172.90	1.50	3.87		
Control Zono	51	Au (g/t)	1,171	0.000	6.459	0.235	0.506	N/A	0 (0%)
Central Zone	16	Length (m)	1,171	0.40	2.00	1.07	0.19		




The composite lengths were selected to correspond to approximately to one third the cell size to be used in the modelling process and is the dominate sample length with in the corresponding data sets.

The compositing routine to ensure as much of the captured sample material was included within the composite. The backstitching routine adjusts the composite lengths for each individual borehole in order to compensate for the last sample interval. Table 14.5 summarizes the statistics for the boreholes after capping and compositing.

Wireframe	Identifier	Element	No. of Samples	Minimum	Maximum	Mean	St. Deviation
Puffolo discominated	11	Au (g/t)	2,629	0.003	12.860	0.134	0.596
Dullalo dissertiti aleu	11	Length (m)	2,629	0.01	1.00	0.99	0.09
Oz tourmalina zana	10	Au (g/t)	6,968	0.003	7.820	0.285	0.670
Q2 tournaine zone	12	Length (m)	6,968	0.05	1.00	1.00	0.05
Loverty Duko	- 21	Au (g/t)	513	0.003	10.099	1.527	1.646
Laveny Dyke	21	Length (m)	513	0.32	2.00	1.99	0.11
Loverty Cropodiarita	22	Au (g/t)	2,874	0.003	6.189	0.149	0.403
Laverty Granodionte	22	Length (m)	2,874	0.10	2.00	1.97	0.18
South Zono	21	Au (g/t)	381	0.003	13.879	0.324	1.078
South Zone	31	Length (m)	381	0.10	2.00	1.96	0.22
Main Zono	/1	Au (g/t)	18,018	0.003	46.620	0.291	0.945
	41	Length (m)	18,018	0.01	1.00	1.00	0.06
Control Zono	51	Au (g/t)	628	0.003	3.374	0.222	0.393
	51	Length (m)	628	0.50	2.00	1.99	0.09

Table 14.5 Composite Drillhole Statistics Summary

14.6 SPATIAL ANALYSIS

Variography, using Surpac version 6.5.1 software, was completed for gold globally for all zones. Downhole variograms were used to determine nugget effect and then correlograms were modelled to determine spatial continuity in the zones.

Table 14.6 summarizes results of the variography. Appendix B contains the down hole and correlograms for each of the Zones.





Table 14.6 Variogram Summary

Wireframe	Identifier	Model Type	Nugget	Structure	Sill	Range
Buffalo Disseminated	11	Spherical	0.307343	1	0.694407	90.216
Qz tourmaline zone	12	Spherical	0.412794	1	0.586278	12.929
Laverty Dyke	21	Spherical	0.254675	1	0.741358	32.381
Laverty Granodiorite	22	Spherical	0.494665	1	0.507334	51.952
South Zone	31	Spherical	0.146371	1	0.856466	62.734
Main Zone	41	Spherical	0.443838	1	0.554135	35.33
Central Zone	51	Spherical	0.475696	1	0.522774	79.949

14.7 RESOURCE BLOCK MODEL

Individual block models were established in Surpac for each of the seven subdomains using a parent model as the origin. The model was not rotated.

Drillhole spacing ranges from 15 m to 75 m with the majority of the surface drilling spaced at 50 m spaced sections and 50 m on sections. A block size of 10 x 10 x 10 m was selected in order to accommodate the nature of the mineralization and be amenable for the open pit potential.

Sub-celling of the block model on a $2.5 \times 2.5 \times 2.51$ pattern allows the parent block to be split in each direction to more accurately fill the volume of the wireframes, thus more accurately estimate the tonnes in the resource.

Table 14.7 summarizes details of the parent block models

The interpolations of the zones were completed using the estimation methods: nearest neighbour (NN), inverse distance squared (ID2) and ordinary kriging (OK).

The estimations were designed for three passes. In each pass, a minimum and maximum number of samples were required as well as a maximum number of samples from a borehole in order to satisfy the estimation criteria.

Table 14.8 summarizes the interpolation criteria for the various zones.





Table 14.7 Parent Model Summary

M	Model Minimum Model Maximum Block Size						•	
Х	Y	Z	Х	Y	Z	Х	Y	Z
4,438,839	5,650,125	-100	440,699	5,652,495	400	10 (2.5)	10 (2.5)	10 (2.5)

Table 14.8 Estimation Criteria Summary

	Zone	Data File In	Data Constraint	First Axis Rotation	Second Axis Rotation	Third Axis Rotation	Major	Semi- major factor	Minor factor	Minimum Samples	Maximum Samples	Maximum Key /Borehole
11	Buffalo Disseminated	comp_disseminated_11 .str	inside 111413_disseminated_clipped.d tm, not_inside 111413_qtztourmaline_clipped. dtm	44.58	0	89.74	360 m	3 (120 m)	11 (33 m)	4	15	4
12	Buffalo Qtz- Tourmaline	comp_qtztourmaline_1 2.str	inside 111413_qtztourmaline_clipped. dtm	0	0	89.469	60 m	2 (30 m)	2 (30 m)	4	12	4
21	Laverty Dyke	comp_laverty_21.str	inside	169.06	0	-88.96	140 m	1 (140 m)	5 (28 m)	5	12	0
22	Laverty Granodiorite	comp_lavertygranodior ite_22.str	inside 111813_laverty_granodiorite.dt m, not_inside laverty_quartz_veins.dtm	49.841	0	-89.77	100 m	1 (100 m)	2 (50 m)	3	8	3
31	South	comp_31_au.str	inside 102413_southzone_smoothed.d tm	67.22	0	-89.3	90 m	3 (30 m)	24 (4 m)	4	10	0
41	Main	comp_main_41.str	inside 120313_mainzone_new.dtm	140.44	0	-70.42	140 m	1 (140 m)	3 (47 m)	3	9	2
51	Central	comp_51_au.str	inside 102413_centralzone_smoothed. dtm	68.15	0	56.91	120 m	1 (120 m)	6 (20 m)	5	10	0





14.8 **RESOURCE CLASSIFICATION**

Several factors are considered in the definition of a resource classification:

- NI 43-101 requirements,
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM) guidelines,
- The authors experience with shear hosted gold deposits,
- The authors knowledge of the North Madsen Property
- Spatial continuity based on variography of the assays within the drillholes,
- Drillholes spacing and estimation runs required to estimate the grades in a block.

No environmental, permitting, legal, title, taxation, socio-economic, marketing or other relevant issues are known to WSP that may affect the estimate of mineral resources. Mineral reserves can only be estimated on the basis of an economic evaluation that is used in a Preliminary Feasibility Study or a Feasibility Study of a mineral project; thus, no reserves have been estimated. As per NI 43-101, mineral resources, which are not mineral reserves, do not have to demonstrate economic viability.

14.9 MINERAL RESOURCE TABULATION

The resource reported as of January 2014 has been tabulated in terms of a gold cut-off grade. The mineral resources for each classification at North Madsen are tabulated in Tables 14.9 to Table 14.11 for the Measured, Indicated and Inferred Resources respectively. The resources are tabulated using various cut-off grades up to an upper bound of greater than 1.5 g/t Au.





Table 14.9 Measured Resource Cut-Off Table

Au OK		Au OK	
Cut-off	Tonnes	(g/t)	Ounces
0.1	80,626,090	0.48	1,244,189
0.2	57,048,580	0.62	1,130,840
0.3	39,277,540	0.78	989,735
0.4	28,388,780	0.95	868,629
0.5	21,482,830	1.11	769,338
0.6	16,728,310	1.28	685,891
0.7	12,955,460	1.46	607,408
0.8	10,148,620	1.65	539,987
0.9	8,273,320	1.84	488,922
1	6,886,930	2.02	446,775
1.1	5,889,260	2.18	413,084
1.2	4,986,390	2.37	379,797
1.3	4,314,260	2.54	352,910
1.4	3,744,630	2.73	328,181
1.5	3,309,840	2.89	307,955

Table 14.10 Indicated Resource Cut-Off Table

Au OK		Au OK	
Cut-off	Tonnes	(g/t)	Ounces
0.1	30,745,700	0.41	402,577
0.2	20,131,000	0.55	353,109
0.3	13,601,700	0.69	301,783
0.4	9,832,400	0.82	259,971
0.5	7,777,100	0.92	230,225
0.6	6,230,600	1.01	202,862
0.7	4,839,800	1.12	174,023
0.8	3,869,000	1.21	150,597
0.9	2,926,100	1.33	124,874
1	2,418,600	1.41	109,445
1.1	2,133,700	1.46	99,848
1.2	1,630,200	1.55	81,170
1.3	971,800	1.76	55,126
1.4	734,800	1.90	44,819
1.5	600,900	1.99	38,532





Au OK		Au OK	
Cut-off	Tonnes	(g/t)	Ounces
0.1	45,792,000	0.45	659,724
0.2	28,275,000	0.64	577,568
0.3	19,469,000	0.81	509,183
0.4	14,895,000	0.96	458,806
0.5	11,990,000	1.08	416,464
0.6	10,138,000	1.18	383,936
0.7	8,670,000	1.27	353,257
0.8	7,505,000	1.35	325,218
0.9	5,103,000	1.58	259,656
1	4,529,000	1.66	242,220
1.1	4,141,000	1.72	229,180
1.2	3,753,000	1.78	214,737
1.3	3,222,000	1.87	193,498
1.4	2,533,000	2.00	162,739
1.5	2,327,000	2.05	153,155

Table 14.11 Inferred Resource Cut-Off Table

The corresponding grade-tonnage curves for the various resource categories are displayed in Figure 14.2 to Figure 14.4

Based on the similar gold projects in Canada, a gold price of US\$1,300/oz, an estimated production rate of 1,000 tpd and an exchange rate of 1.10, a cut-off of 0.6 g/t Au was determined to be suitable to tabulate the resources within the various zones and categories.

Table 14.12 summarizes the resource estimate at the 0.6 g/t Au cutoff for each of the mineralized zones. Table 14.13 is a summary of the resource estimate at North Madsen.





Figure 14.2 Measured Resource Grade Tonnage Curve











Figure 14.4 Inferred Resource Grade Tonnage







Table 14.12 Resource Summary by Zone and Classification

Zone	Category	Tonnes	Au Grade (g/t)	Ounces
11 (Buffalo Diss)	Measured	-	0	-
	Indicated	122,800	1.07	4,244
	M&I Subtotal	122,800	1.07	4,244
12 (Buffalo Qtz-Tourm)	Measured	-	0	-
	Indicated	1,622,100	0.97	50,528
	M&I Subtotal	1,622,100	0.97	50,528
21 (Laverty Dyke)	Measured	996,830	1.67	53,520
	Indicated	303,500	1.33	13,014
	M&I Subtotal	1,300,330	1.59	66,534
22 (Laverty Granodiorite)	Measured	477,670	0.98	15,091
	Indicated	422,600	0.91	12,360
	M&I Subtotal	900,270	0.95	27,452
41 (Main)	Measured	15,253,810	1.26	617,279
	Indicated	3,759,600	1.02	122,716
	M&I Subtotal	19,013,410	1.21	739,995
All Zones	Measured Total	16,728,310	1.28	685,891
All Zones	Indicated Total	6,230,600	1.01	202,862
All Zones	Total M&I	22,958,910	1.20	888,752
Zone	Category	Tonnes	Au Grade (g/t)	Ounces
11 (Buffalo Diss)	Inferred	613,000	1.32	25,947
12 (Buffalo Qtz-Tourm)	Inferred	1,489,000	1.15	54,896
21 (Laverty Dyke)	Inferred	676,000	1.52	32,929
22 (Laverty Granodiorite)	Inferred	1,669,000	0.84	45,172
31 (South)	Inferred	272,000	1.25	10,939
41 (Main)	Inferred	4,526,000	1.31	190,928
51 (Central)	Inferred	893,000	0.81	23,126
All Zones	Total Inferred	10,138,000	1.18	383,936

Table 14.13 North Madsen Resource Summary

Zone	Category	Tonnes	Au Grade (g/t)	Ounces
All Zones	Measured Total	16,728,310	1.28	685,891
All Zones	Indicated Total	6,230,600	1.01	202,862
All Zones	Total M&I	22,958,910	1.20	888,752
All Zones	Total Inferred	10,138,000	1.18	383,936





14.10 VALIDATION

The North Madsen models were validated by three methods:

- visual comparison of colour-coded block model grades with composite grades on section and plan
- comparison of the global mean block grades for OK, ID2, NN and composites
- swath plots of the various zones in both plan and section views.

14.10.1 VISUAL VALIDATION

The visual comparisons of block model grades with composite grades for each of the zones show a reasonable correlation between the values. Minor discrepancies were apparent from the sections reviewed; grade smoothing is anticipated in some locations due to the distance between drill samples being broader in some regions (Figure 14.5 to 14.7).





Figure 14.5 Laverty Dyke Validation







Figure 14.6 South Zone Validation







Figure 14.7 Buffalo Diss and Qtz-Tourmaline Validation







Figure 14.8 Main Zone Validation



14.10.2 GLOBAL COMPARISON

The global block model statistics for the OK model were compared to the global inverse distance squared and nearest neighbour model values as well as the composite capped drillhole data. Table 14.14 shows this comparison of the global estimates for the three estimation method calculations. In general, there is agreement between the three models.

There are discrepancies between the models grades and the capped length weighted drill samples. This is due a degree of smoothing apparent when compared to the diamond drill statistics. Comparisons were made using all blocks at a 0% cut-off





Zone		CAPPED DDH W. Mean	OK Mean	ID2 Mean	NN Mean
Buffalo disseminated	11	0.134	0.133	0.126	0.114
Buffalo Qz Tourmaline	12	0.286	0.257	0.254	0.248
Laverty Dyke	21	1.533	1.204	1.228	1.163
Laverty Granodiorite	22	0.147	0.139	0.139	0.159
South Zone	31	0.329	0.311	0.310	0.268
Main Zone	41	0.283	0.381	0.353	0.356
Central Zone	51	0.222	0.214	0.214	0.215

Table 14.14 Global Statistics Comparison

14.10.3 SWATH PLOTS

Swath plots of eastings, northings and elevations were generated for each mineralized zone respectively. These plots are comparing the OK estimates with the NN and ID2 estimates. The plots are illustrated in figures 14.8, 14.9 and 14.10.

Figure 14.9 Swath Plot Easting







Figure 14.10 Swath Plot Nothing



Figure 14.11 Swath Plot Elevation







14.11 PREVIOUS ESTIMATES

In 2011, Mega released the results of a resource estimate for the Laverty Dyke conducted by Tetra Tech (McCracken and Harder, 2011).

WSP reviewed the validity of the resource estimate and under NI 43-101 guidelines considers the results to be historic. A copy of the "Technical Report and Resources Estimate on the North Madsen Property, Red Lake, Ontario." prepared by Tetra Tech is available on SEDAR by searching Mega technical reports.

WSP considers the historical estimate to be relevant yet should no longer be relied upon as new data has become available since the previous estimate. The stated resources classifications are similar to the current standards for Resources classification as outlined be the CIM guidelines.

The issuer is not treating the historical estimate as current mineral resources or mineral reserves as defined in NI 43-101 sections 1.2 and 1.3 and the historical estimate should no longer be relied upon.

Table 14.15 summarizes the results of the previous estimate compared to the current estimate of the same zone. Table 14.16 compares the differences in the model parameters.

	2011 Tetra Tech					:	2014 WSP		
Cut-off					Cut-off				
(g/t)	Category	Tonnage	Au (g/t)	Au (oz)	(g/t)	Category	Tonnage	Au (g/t)	Au (oz)
0.5	Measured	19,638,140	1.27	801,855	0.6	Measured	16,728,310	1.28	685,891
0.5	Indicated	3,837,900	1.08	133,263	0.6	Indicated	6,230,600	1.01	202,862
	Measured +					Measured +			
0.5	Indicated	23,476,040	1.24	935,118	0.6	Indicated	22,958,910	1.20	888,752
0.5	Inferred	11,487,000	1.03	380,396	0.6	Inferred	10,138,000	1.18	383,936

Table 14.15 Comparison of the 2011 and 2014 Resource Estimate Results





Table 14.16 Comparison of the 2011 and 2014 Resource Estimate

Criteria	2014 WSP Model	2011 Tetra Tech Model
Number of Drillholes	327	257
Grade Capping	Cummulative Frequency Plots Main Zone - 46.62 g/t Laverty Dyke - 12.67 g/t Laverty Granodiorite - no cap Buffalo Diss - 12.86 g/t Buffalo Qtz-Tourmaline - 7.82 g/t South zone - 15.60 g/t Central Zone - no cap	Parrish Analysis Main Zone - no cap Laverty Dyke - 12.67 g/t Laverty Granodiorite - no cap Buffalo Diss - 12.68 g/t Buffalo Qtz-Tourmaline - 7.82 g/t
Composite Length	1.0 m (2 Zones) 2.0 m (3 Zones)	1.0 m (1 Zones) 1.5 m (2 Zones)
Cut-off Grade	0.6 g/t Au global	0.5 g/t Au global
Number of Mineralized Zones	5	3
Block Size	10 x 10 x 10 (1,000 m ³)	15 x 15 x 15 (3,375 m ³)
Estimation Method	OK with ID2 and NN validation	OK with ID2 and NN validation





15.0 ADJACENT PROPERTIES

The properties adjacent to the Laverty, East My-Ritt and Skookum claim blocks are illustrated in Figure 15.1. To the knowledge of WSP, no exploration is currently being conducted on adjacent properties, and no recent resource estimates have been completed.

Figure 15.1 Adjacent Properties







On December 13, 2013, Laurentian Goldfields announced that an agreement had been reached with Claude Resources to purchase the Madsen Gold property for CDN\$7.5 million plus shares.

On January 14, 2014, Laurentian Goldfields announced that an agreement had been reached with Sabina Gold and Silver to purchase the Newman-Madsen property. The agreement would be executed upon completion of the Madsen Gold property acquisition.

15.1 HISTORICAL PRODUCTION

Four historical gold mines, the Howey, Hasaga, Goldshore, and Buffalo mines are located near the Property, but not on the claim blocks. None of these mines are currently operating. A brief summary of the historical production from each mine is listed below.

WSP has not verified the accuracy of these production numbers. In each case, the source of the historical data is identified, and no comment is offered on the reliability of the data.

- Howey Mine: produced 421,592 oz of gold from 1930 to 1941 at an average recovered grade of 0.09 oz/t Au (Jones, 1995).
- Hasage Mine: produced 219,320 oz of gold from 1938 to 1952 at an average recovered grade of 0.14 oz/t Au (Jones, 1995).
- Buffalo Red Lake Mine: produced 1,656 oz of gold at an average recovered grade of 0.22 oz/t Au (Jones, 1995).
 - The Buffalo Mine is located less than 0.5 km east of the southern portion of the East My-Ritt claim, and the mineralization strike appears to continue onto MEGA's Property.
- Goldshore Mine: produced 21,100 oz of gold (Lavigne et al. 1986).





16.0 OTHER RELEVANT DATA AND INFORMATION

To WSP's knowledge, there is no additional data or information that would impact the resource estimate presented in this report or affects the recommendations provided.





17.0 INTERPRETATIONS AND CONCLUSIONS

17.1 GEOLOGY

Based on the review of the available information and observations made during the site visit, the author concludes the following, in no particular order of perceived importance:

- The Property is currently held 100% by Mega.
- The Property is analogous to the shear-hosted quartz vein lode gold deposits typical to the Abitibi Belt of eastern Ontario and western Quebec or the Uchi Belt of western Ontario.
- The Property is associated with sheared felsic to intermediate intrusions, as well as minor mafic volcanic flows. Mafic to intermediate dykes are locally common. Varying degrees of alteration are present including chloritization, carbonate, silicification, and sericitization. Quartztourmaline veins are locally common and significant for mineralization.
- Mega has a strong understanding of the regional and local geology to support the interpretation of the mineralized zones on the Property.
- Mineralization is currently defined in several zones of various thickness and strike length, located in several areas of the Property.
- Drilling and sampling procedures, sample preparation and assay protocols are generally conducted in agreement with best practices.
- Verification of the drillhole collars, surveys, assays, drill core and drillhole logs indicates the Mega data is reliable.
- Based on the QA/QC program, the data is sufficiently reliable to support the resource estimate generated on the Property.
- The mineral models have been constructed in conformance to industry standard practices.
- The geological understanding is sufficient to support the resource estimation.





- At a gold cut-off grade of 0.6 g/t Au, the zones contain a Measured Resource of about 16.7 Mt with an average grade of 1.28 g/t Au. An Indicated Resource of about 6.2 Mt with an average grade of 1.01 g/t Au. The Inferred Resource totals 10.1 Mt with an average grade 1.18 g/t Au.
- The specific gravity value used to determine that tonnage was derived from limited samples, which may reflect a lack of precision with respect to the resource tonnages.
- The resource zones at the Property remain open in both the strike and down dip directions. However, current claim boundaries would limit strike expansion potential of the various zones.

17.2 METALLURGY

Three different zones were sampled: Laverty Main, Laverty Dyke and Buffalo Extension, with gold grades varying from 0.3 to 3.1 g/t Au. The Laverty Dyke samples had the highest gold grades while the Buffalo extension samples had the lowest. Sulphide concentrations were low for all samples.

Several variability samples were tested for Laverty Dyke and Buffalo Extension however these zones collectively only account for about 24.2% of the resources (measured, indicated and inferred).

For the Laverty Main zone, which accounts for most of the resources (73%), only a single composite sample was tested. The sample gold grade of 1.06 g/t is slightly lower than the resource grade of 1.23 g/t for this zone.

Ball Mill Work Indexes (BWI) ranged from approximately 15 to 18 kWh/t, representing a moderately hard to hard mineral.

Gravity separation tests were performed using a Knelson Concentrator followed by a Mozley Table to upgrade the Knelson concentrate. Gravity recoveries for the Laverty Main zone ranged from 36 to 72%. Variation in the gold recoveries, as well as calculated head grades, suggest that coarse gold was present in the samples.

Gravity recoveries were lower for the Laverty Dyke and Buffalo Extension zones, ranging from 7 to 26% and 23 to 48% respectively. Data reveals that gravity concentration may not be useful for the Laverty Dyke zone but since Laverty Main accounts for 75% of the resources, incorporating gravity recovery into the flowsheet may be beneficial.

Flotation tests were conducted at various grind sizes, but only tests at 47 μ m conducted on the Laverty Main sample reached cumulative gold recoveries





> 95%. At 4% mass recovery, 93% gold recovery was achieved while at 16% mass recovery, 94.2 to 97.6 % of the gold was recovered. At coarser grind sizes, lower recoveries were achieved.

Cyanidation tests on the Laverty Main zone sample (Composite 1) were conducted on whole ore, flotation concentrates (with and without gravity prior to flotation), and on gravity tailings. Excluding the test conducted on the gravity tailings at a coarse grind size of 127 μ m K80, all other tests indicated that 94% or more of the leach feed gold was extracted into solution after 48 h, resulting in overall gold recoveries of 93% or more.

Results on the variability samples suggest that little variability between given zones exists. It can also be seen that overall gold extraction is very similar for whole mineral and gravity tailings. All whole mineral tests showed recoveries \geq 95% except the Buffalo Extension 4 sample for which gold extraction was over 90%. The Master Buffalo extension composite which was made up of this sample followed the same trend.

Results of cyanidation tests on the variability composites from the Laverty Dyke and Buffalo extension zones suggest that there is not much variability in gold extraction within the given zones. The overall gold recovery for gravity concentration plus cyanidation of the gravity tailings was very similar to the overall gold extraction for cyanidation of the whole mineral. The Laverty Dyke samples performed slightly better than the Buffalo Extension samples, but all cyanidation tests conducted on the whole mineral showed gold extractions over 90%.

Cyanide consumption for the Laverty Main sample was slightly higher for flotation concentrates (0.09 to 0.12 kg/t mineral) than for whole mineral or gravity tailings (0.04 to 0.08 kg/t mineral). Cyanide consumptions for the variability samples ranged from 0.02 to 0.06 kg/t mineral. Lime consumption was lower for flotation concentrates (0.11 to 0.18 kg/t) than for whole mineral or gravity tailings (0.23 to 0.51 kg/t).

The high mass recovery required to obtain above 95% gold recovery to the flotation concentrate, the overall lower gold recoveries and the slightly higher cyanide consumption make it unlikely that a flotation circuit would be beneficial to the overall flowsheet. Direct cyanidation of the whole mineral or gravity recovery and cyanidation of the gravity tailings provide the best results.

Overall, the samples' responses to conventional gold processing methods were excellent. The metallurgical testing and mineral processing section of a preliminary economic assessment of the North Madsen deposit would be strongly supported by SGS's work.





18.0 RECOMMENDATIONS

It is WSP's opinion that additional exploration expenditures are warranted. Two separate exploration programs are proposed. Phase 2 would only be activated based on positive results received from Phase 1.

18.1 Phase **1** North Madsen South and Main Zones Definition

Phase 1 is designed to improve the viability of the project; it is recommended that Mega undertake a detailed focused surface mapping, trenching and diamond drilling program that is focused on improving the definition of the Main Zone and the South Zone.

The principal objectives of the program will be to:

- Extend the current mineralization of the Main Zone west along strike onto the East My-Ritt lease KRL 405.
- Collect surface information near the intersection of the Main Zone and Laverty Dyke Zone
- Complete surface mapping and trenching on the South Zone in order to allow future resource estimations to estimate grades to surface.
- Diamond drill the west extension of the Main Zone and the west extension of South Zone

The program is estimated to cost \$240,000

Table 18.1 summarizes the Phase 1 exploration program proposed.





Table 18.1 Phase 1 Exploration Budget

	Uni	t Rate	No. of Units	Units	Cost
Diamond Drilling - South Zone	\$	85	1100	m	\$ 93,500
Diamond Drilling - Main Zone	\$	85	900	m	\$ 76,500
Labour	\$	600	45	day	\$ 27,000
Transportation and Accommodations	\$	150	45	day	\$ 6,750
Fuel	\$	9	45	day	\$ 405
Analytical (prepare & analyze)	\$	24	1300	samples	\$ 31,200
Administration	\$	50	45	day	\$ 2,250
Program Costs (all in)					\$ 237,605

18.2 Phase 2 North Madsen Drilling Definition and Expansion

Phase 2 of the program will be based upon positive results of the first stage and would start after Phase 1 has been completed.

The objectives of this program will be to:

- Diamond drill the west extension of the Main Zone.
- Diamond drill the west and east extension of the South Zone.
- A metallurgical test program consisting of gravity recovery using a Knelson concentrator as well as whole mineral and gravity tailings cyanidation tests at a 75 microns P80 grind size to be completed on 4 composite samples from the Main Zone and Laverty Dyke Zone

The program is estimated to cost \$624,000.

Table 18.2 summarizes the Phase 2 program proposed.





Table 18.2 Exploration Phase 2

	U	nit Rate	No. of Units	Units	Cost	
Exploration Drilling	\$	85	4,500	m	\$	382,500
Labour	\$	600	80	day	\$	48,000
Transportation and Accommodations	\$	150	80	day	\$	12,000
Fuel	\$	12	80	day	\$	960
Analytical	\$	24	3,000	samples	\$	72,000
Geological	\$	655	80	day	\$	52,400
Operations Support	\$	280	80	day	\$	22,400
Metallurgical Testing - Main Zone & Laverty	\$	40,000	1	program	\$	30,000
Administration	\$	50	80	day	\$	4,000
Program Costs (all in)					\$	624,260

18.3 METALLURGICAL RECOMMENDATIONS

The Laverty Main zone accounts for 73% of the resources (measured, indicated and inferred), but only a single composite sample for this zone has been tested. The first recommendation would thus be to conduct gravity recovery as well as whole mineral and gravity tailings cyanidation tests on variability samples from this zone. This has been included in Phase 2 recommendations.

The results from these tests would provide a better indication whether incorporating a gravity circuit ahead of the leach would be beneficial. As a rule of thumb, when gravity recoveries are in excess of 30% the implementation of a gravity circuit should be considered.

The following tests are recommended in subsequent phases of the project:

- Cyanide leach optimization tests to determine the best grind size, reagent dosage and consumption, and whether oxidation by air/O₂ or addition of lead nitrate could allow to reduce the required leach time
- Further tests to properly size the commination circuit and determine wear, such as:
 - o Laverty Main zone variability sample Bond Ball mill tests
 - o SAG mill commination tests
 - o Crushing tests
 - Abrasion tests





- High pressure grinding roll tests could also be considered as an alternative to SAG milling.
- Tests required to size downstream operations:
 - Thickening tests
 - o Cyanide destruction tests
 - Environmental tests, such as tests to determine whether there are any potential issues with acid mine drainage or arsenic.





19.0 REFERENCES

Cameron, D.M., 1981, Report on the Magnetometr Survey, Skookum Bay -Peterson Property, Dome and Heyson Townships, Red Lake Mining Division, Ontario.

Chastko, L.C., 1972, Report on the Mineral Exploration of the Coin Lake Group, Dome-Heyson Townships of Red Lake, Ontario for Cochenour Willans Gold Mines Ltd.

Dubé, B., 2002, Geology of the Goldcorp Inc. High-grade Zone, Red Lake Mine, Ontario: An update; Current Research 2002-C26, Geol. Surv. Canada, 13 p. Ferguson, S.A., 1968, Northern Part of Heyson Township, District of Kenora, Ont.

Dept. Mines, Geological Report 56, 72 p., Map 2125, Scale 1:12,000

Gillies, R., 1982, Thrall Property, Red Lake District, Report on 1981 Surface Diamond Drill Program for Camflo Mines limited. AFRI # 52N02SW0085

Groves, D.I., Goldfarb, R.J., Gebre-Mariam, M., Hagemann, S.G., and Robert, F., 1998. Orogenic gold deposits: A Proposed Classification in the Context of Their Crustal Distribution and Relationship to Other Gold Deposit Types. Ore Geology Reviews, 13, p. 7-27.

Harron, G. and Puritch, G., 2010, Technical Report on North Madsen Properties Dome and Heyson Townships Red Lake M.D. Ontario, Canada for Mega Precious Metals Inc.

Horwood, H., 1940, O.D.M 49th Annual Report, Part 2.

Jolliffe, T., 1981, Thrall Property: Progress Report on 1981 Exploration Activities and Proposed Diamond Drilling Programme.

Jones, D.,1995, Report on the Property of My-Ritt Red Lake Gold Mines Ltd. in the Red Lake Area, Kenora Mining District, Northwest Ontario for Montclerg Resources Limited., p. 8.

Kita, J., 1988, O.M.E.P Report of Work Done on the Buffalo Property by Red Lake Buffalo Resources Ltd., September 1 to December 31, 1987, and March 1 to May 31, 1988.

Klatt, H., 2003, Summary Report on the 2002 Red Lake-Kinross Drill Program.





Lavigne, M., Hugon, H., Andrews, A., and Durocher, M. 1986. Relationships of Gold Mineralization to Regional Deformation and Alteration in Red Lake Greenstone Belt, Ontario. Gold '86: An International Symposium on the Geology of Gold Deposits.

Lichtblau, A. F., Ravnass, C., Storey, C. C., Lockwood, H.C., Bongfeldt, J. and McDonald, S., 2010, Report of Activities 2009, Resident Geologist Program, Red Lake Regional Resident Geologist Report, Red Lake and Kenora Districts, OGS OFR 6244, 77 p.

Long, M., 2006, 2006 Annual Report of Activities: Newman-Madsen Property, Red Lake, Ontario, Canada.

McCracken, T. and Harder, M., 2011; Technical Report and Resources Estimate on the North Madsen Property, Red Lake, Ontario.

Mega Precious Metals Inc., 2010, Assessment Work Report May 2010, Skookum/East My-Ritt Properties.

Parker, J.R., 2000 Gold Mineralization and Wall-Rock Alteration in the Red Lake Greenstone Belt: a Regional Perspective; in Summary of Field Work and Other Activities; Ontario Geological Survey, Open File Report 6032, p.22-1 – 22-28.

Peterson, C., 1996, Stripping and Trenching Report.

Robert, F., 1995, Quartz-Carbonate Vein Gold; in Geology of Canadian Mineral Deposit Types, Geol. Surv. Can., Geology of Canada, V. 8, p. 350-366

Sanborn-Barrie, M., Skulski, T., and Parker, J., 2004, Geology of the Red Lake Greenstone Belt, Western Superior Province, Ontario; Geol. Surv. Can OF 4592, scale 1:50,000.

Sanborn-Barrie, et. al., 2006, GIS Compilation of Geology and Tectonostratigraphic Assemblages, Western Uchi Subprovince, Western Superior Province, Ontario Geological Survey, MRD-203.

Sears, J. L., 1981, Report on VLF Survey Skookum Bay – Peterson Property, Red Lake Ontario.

SGS Mineral Services, An Investigation into the Recovery of Gold from the Red Lake North Madsen Deposit, Report 12411-002, July 5, 2012

Smith, D., 1981, A Property Evaluation of My-Ritt Red Lake Gold Mines Limited Heyson and Dome Townships, Red Lake Mining Division, Kenora District, Northwestern Ontario for Camflo Mines Limited.





Toole, T., 2005, Summary Report on 2004-2005 Newman-Madsen Drilling Red Lake Area.

http://weatherspark.com/averages/28356/Red-Lake-Ontario-Canada

http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-594/details/page.cfm?Lang=E&Geo1=CSD&Code1=3560042&Geo2=PR&Code2 =35&Data=Count&SearchText=Red%20Lake&SearchType=Begins&SearchPR= 01&B1=All&Custom=





20.0 CERTIFICATE OF QUALIFIED PERSON

20.1 TODD MCCRACKEN, P. GEO.

I, Todd McCracken, P. Geo., of Sudbury, Ontario do hereby certify:

- I am the Manager Geology with WSP Canada Inc. with a business address at 2565 Kingsway, Sudbury, Ontario.
- This certificate applies to the technical report entitled Technical Report and Updated Resource Estimation on the North Madsen Property, Red Lake, Ontario with an effective date of January 2, 2014 (the "Technical Report").
- I am a graduate of the University of Waterloo, Honours B.Sc. in Earth Sciences 1992. I am a member in good standing of Association of Professional Geoscientist of Ontario, License 0631. My relevant experience includes 22 years of experience in exploration and operations, including specific experience in Archean shear-hosted gold. I am a "Qualified Person" for the purposes of National Instrument 43-101 (the "Instrument").
- My most recent personal inspection of the Property was September 23 to 24, 2013, inclusive.
- I am responsible for Sections1.1-1.2, 1.4.1, 2-12, 14-16, 17.1, 18.1-18.2, 19, and 20.1 of the Technical Report.
- I am independent of Mega as defined by Section 1.5 of the Instrument.
- I have prior involvement with the Property that is the subject of the Technical Report. I was a co-author of the 2011 technical report titled "Technical Report and Resources Estimate on the North Madsen Property, Red Lake, Ontario"
- I have read the Instrument and the sections of the Technical Report that I am responsible for have been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information, and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 27 day of March, 2014 at Sudbury, Ontario.

"Original document signed and sealed by Todd McCracken, P. Geo."

Todd McCracken, P. Geo. Manager - Geology WSP Canada Inc.





20.2 MARIANNE UTIGER, ENG.

I, Marianne Utiger, Eng., of Montreal, Quebec do hereby certify:

- I am a Process Engineer with WSP Canada Inc. with a business address at 1600 René-Lévesque Blvd W., 16th Floor, Montréal, Québec H3H 1P9.
- This certificate applies to the technical report entitled Technical Report and Resource Estimate on the North Madsen Property, Red Lake, Ontario with an effective date of January 2, 2014 (the "Technical Report").
- I am a graduate of Chemical Engineering from École Polytechnique de Montréal (1996). I am a member in good standing of the Ordre des Ingénieurs du Québec (OIQ #121018). I have 14 years of experience in process engineering in the metallurgical, mineral processing and chemical industries, including several years working on gold ore processing projects. I am a "Qualified Person" for the purposes of National Instrument 43-101 (the "Instrument").
- I have not visited the project site.
- I am responsible for sections 1.3, 1.4.2, 13.0, 17.2, 18.3 and 20.2.
- I am independent of Mega Precious Metals Inc. as defined by Section 1.5 of the Instrument.
- I have no prior involvement with the Property that is the subject of the Technical Report.
- I have read the Instrument and the sections of the Technical Report that I am responsible for have been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information, and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 27th day of March, 2014 in Montreal, Quebec.

"Original document signed and sealed by Marianne Utiger, Eng."

Marianne Utiger, Eng. Process Engineer WSP Canada Inc.





APPENDIX A














































APPENDIX B



















































































