# TECHICAL REPORT NI 43-101

# Project 81

# 2016 Update

On the

# LUCAS GOLD PROJECT

(Review of the 2012 DIAMOND DRILLING PROGRAM)

Lucas, Duff, Tully Townships Northern Ontario Canada

For

# Noble Mineral Exploration Inc. 2500-120 Adelaide St. West Toronto Ontario Canada M5H 1T1

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November 21<sup>st</sup>, 2016

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#### 1) SUMMARY:

Noble Mineral Exploration Inc., (NOB) is a Toronto based, TSX.V listed company that acquired and staked a number of crown claims within and adjacent to a very large patented land package acquired from Abitibi Bowater Ltd., - Abitibi (now Resolute Forest Products – RFP) in an outright purchase in 2011. Noble commissioned a comprehensive compilation of all the existing data set of all previous exploration activities recovered to-date on the project and completed an Airborne Geophysical Surveys over a large portion of the Project Area, including the Kingsmill Nickel Area and the Lucas Gold Project Area.

Line cutting and a Ground IP surveys were also completed over the Lucas Gold Project and finally a six (6) holes NQ size diamond drill hole program totaling 3059.5m was completed in 2012. This drilling campaign was the subject of a November 2013 Assessment Report filed with the Ministry of Northern Development and Mines.

The 2012, diamond drill program executed by Noble Mineral Exploration Inc., failed in its objectives to identify and locate the historical gold mineralized/resource zone reported by previous operators of this project. This, development was a serious setback in advancing and developing this very promising gold project and was very confusing for the Geologists on the project. The situation could not be explained at the time of 2013 Assessment Report writing, although it was thought at that time that the mineralized gold zone might have been stratigraphic in nature and we missed the gold mineralized zone completely. Noble Minerals Exploration Inc., also investigated possible sample preparation problems/issues with the assaying laboratory, but this exercise did not explain the discrepancy in locating the gold mineralized zone previously reported.

However, in the attempt to definitively resolve the glaring discrepancy with the historical gold mineralized/resource zone not being located in the aforementioned drill program, a "Forensic Review" of the entire project was undertaken by personnel of Noble Mineral Exploration Inc. This review retraced all aspects of the project from inception to the completion of drilling of the Lucas Gold Area. The work zeroed in on the location of Noble's 2012 drill hole collars with respect to the historical drill hole collars and it was found that there were discrepancies in the location of the historical drill hole collars going from one consultant to the other consultant.

In Summary, the objective of the 2012 drilling program to locate the historical gold zone, verify the geology and gold mineralization, and to duplicate the historical gold assay results, failed in its entirety.

#### 2.0 INTRODUCTION AND TERMS OF REFERENCE

The Lucas Gold Project of Noble Mineral Exploration Inc., (Noble) (formerly Ring of Fire Resources Inc.-ROF) was discovered in the early 1960's, by Canico – the exploration arm of International Nickel Company (INCO) of Toronto, Ontario, Canada. A couple of other operators explored this discovery in the early 1970's and 1980's, but due to the depth, low gold tenure, narrow gold intercepts and lack of structurally interpreted continuity of the gold zones, no further exploration was carried out over the project area, however it should be pointed out here that these lands were and are still privately held and are still not subjected to having assessment work carried out over them to be maintained nor for any exploration work carried over this project area to be filed with the Ministry of Norther Development and Mines.

Noble, after acquiring the property from Abitibi Bowater Inc., (Abitibi) (now Resolute Forest Products Inc.) in 2011 carried out a systematic compilation of all existing data, and executed two (2) Airborne Geophysical Surveys over the Lucas Gold Project, which included Magnetics, Electromagnetics, Radiometrics and Differential Magnetics, with follow-up line cutting, ground IP and finally a diamond drilling campaign of six (6), NQ size diamond drill holes totaling 3,059.5m.

Noble acquired the larger patented land package from Abitibi through an outright purchase of the patents, and also staked a number of crown claims within the patented land package. Noble also acquired from Metals Creek Resources a number of crown claims adjacent to the Historical Lucas Gold Mineralized/Resource zone within the patented land package. The entire patented, staked and acquired claims were later named "PROJECT 81" by Noble Mineral Exploration Inc.

Exploration drilling on the Lucas Gold Project within Noble's Project 81, commenced on May 03, 2012 and was completed on June 01, 2012 by NPLH Ontario Inc., – a Timmins based diamond drilling company headed by Daniel Blaquiere. Six (6) NQ size diamond holes totaling 3059.5m were completed in this program. A total of 2840 samples were assayed of which 2472 were drill core samples. The core was logged and sampled in a secure geological facility in Timmins. Drill Core samples for analysis were cut with a diamond core saw, tagged, packaged and transported by Noble personnel to Activation Laboratories Ltd (ACTLABS), Timmins Facility, which was primarily a sample preparation facility at that time. Samples, after preparation in Timmins were shipped to Thunder Bay, Sudbury or Ancaster, Ontario for digestion, processing, analysis and reporting.

The main objective of the 2012 diamond drill program was to identify and locate the historical gold mineralized/resource zone reported by previous operators of this project dating back in the 1980's.

Additional objectives of this drill program were also to test the gold potential of a larger, lower gold grade shear zone horizon that were identified by Noble Exploration Geologists and which is believed to be contained outside of historical narrow gold veins intercepts reported and sought after by the previous operators, and to verify these historical gold intercepts. This Report will not report the Detailed Drill logs and also not report the detailed assaying results, since it is in the opinion of the authors that this information could be misleading and possibly confusing to readers of this report. The 2012 Drilling campaign conducted by Noble Mineral Exploration Inc. was spotted in the wrong location because of the discrepancy in the location of the historical drilling data being plotted in NAD 27 Reference Datum Coordinate System instead of NAD 83 Reference Datum Coordinate System.

## 3.0 DISCLAIMER

In the preparation of this report, the authors have relied on information obtained through a review of published papers, public and private documents, reports and data – and the Ulrich Kretschmar NI43 101 Technical Report on the Project "81" Area dated September 13, 2011.

All sources of information for this report are referenced in Section 20 (References). The results of previous geological, geochemical, or geophysical surveys, or drilling could not be and were not independently verified.

# 4.0 **PROPERTY LOCATION & DESCRIPTION.**

The Lucas Gold Project of Noble Mineral Exploration Inc., lies within the larger, "Project 81" Area which comprises of approximately 72,000 hectares of patented, staked and acquired crown claims. The Lucas Gold Project is located in the Porcupine Mining Division, District of Cochrane, Timmins Area, Northern Ontario, Canada (**Figure1**). Timmins is the nearest major center located within 30km of the Lucas Gold Project which straddles the SE corner of Lucas, the SW corner of Duff and partially the NE corner of Tully Townships. The Lucas Gold Project is centered at approximately 5407500N and 485000E. (**Figure 2**)

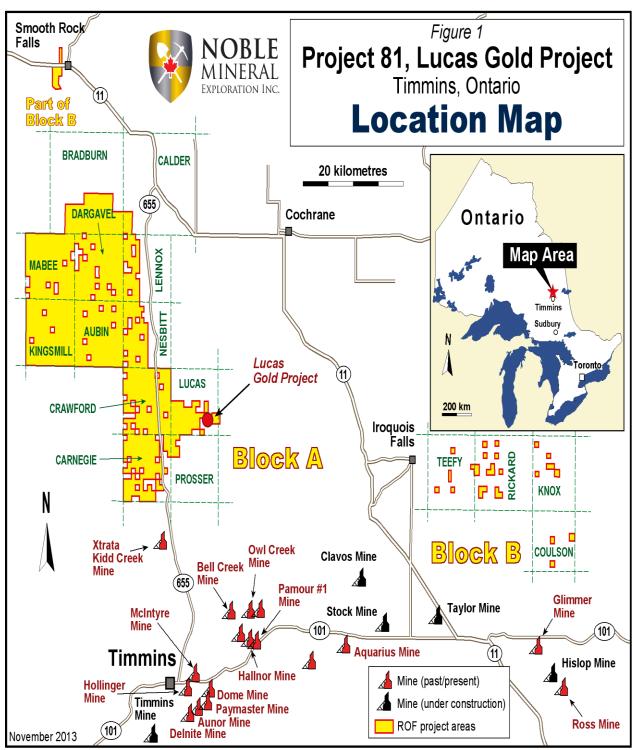


Figure 1- Location Map – Project 81 –Lucas Gold Project



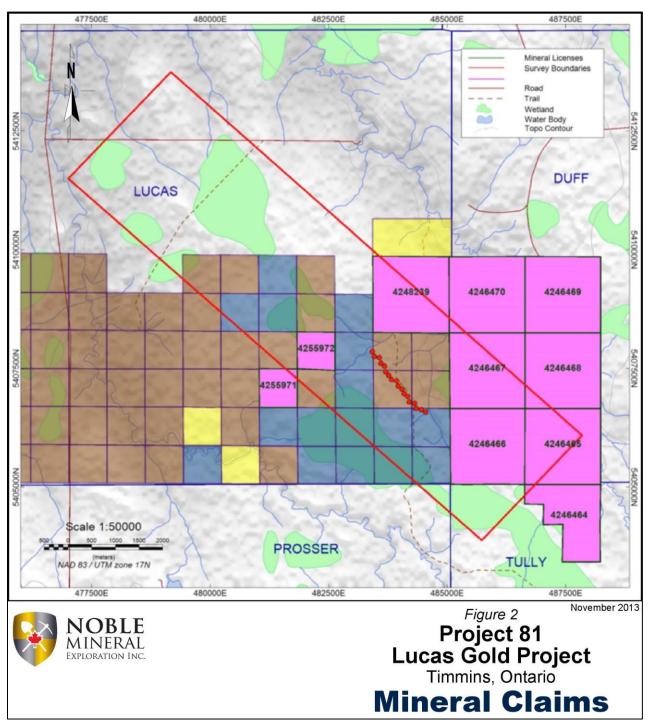


Figure 2 - Lucas Gold Project Location Map showing Geophysical Anomalous Trend & Mineral Claim, Timmins, Ontario, Canada

# 5.0 ACCESS, CLIMATE, INFRASTRUCTURE, PHYSIOLOGY AND ENVIROMENTAL STATUS

#### 5.1 Access

The Lucas Gold Project drilling campaign was a helicopter supported project due to the removal of bridges over navigable and open waterways during the winter months and the unseasonably warm weather months this year. Drill crew changeover and drill core retrieval were accomplished by ferrying personnel, supplies and core boxes from the core logging facility on Hwy-101, west of Timmins to the drill site and vice versa using an A-Star helicopter provided by Abitibi Helicopter Ltd., of La Sarre, Quebec. The property can be reached by Skidoos using old logging roads and crossing smaller creeks that are frozen in the winter and spring months.

# 5.2 Climate

The local climate is typical of northeastern Ontario and northwestern Quebec, and consists of a continental climate with cold winters and short hot summers. The temperature peaks in July with an average of 24° C and an extreme value of 38.9° C recorded June 31, 1998, with above 20° C temperatures running June to August. The low of the year is in January with an average of -23.6° C and an extreme low of -47° C achieved on January 17, 1982, with below 0° C weather running from November till April. There are 183 degree days below 0° C in a year and only 97 degree days above 18° C in a year. The area receives 875.7 mm of precipitation in a year, with 587.4 mm arriving as rain and 288.9 mm as snow. September is the wettest month receiving 97.5 mm of rain and 0.4 mm of snow and April being the driest month only receiving 32.2 mm of rain and 16.6 mm of snow. (Kirkland Lake Airport statistical archives).

The property lies within the Subarctic Climate zone, the largest climate zone in Canada, which knows short, cool summers and long, cold winters, with precipitation mostly in the form of snow (~1 m; www.canadiangeographic.ca/atlas/themes.aspx). Snow squalls occur from October to June, and the frost-free period hardly exceeds 90 days. During the warm spells in the summer, the temperatures can reach 30°°C and higher, and in the depths of winter the temperatures can drop below -40°C occasionally, fieldwork is not permitted due to forest fire danger and the MNR may prevent access during such times. On the Atlas of Canada, the Properties occur in plant-hardiness zone 2a - indicator shrubs for this zone are Siberian pea-tree (Caragana arborescence), Siberian dogwood (Cornus alba 'Sibirica'), European cotoneaster (Cotoneaster integerrima) and silverberry (Elaeanus commutate); indicator trees are European white birch (Betula pendula), white elm (Ulmus Americana) and cranberry viburnum (Viburnum trilobum).

The property is also part of the Boreal Shield eco zone which has relatively low tree growth rates and timber volumes compared with other forested eco zones in Canada (from http://nlwis-snite1.agr.gc.ca/plant00/index.phtml).

Tree species in the Boreal Shield eco zone include white and black spruce (Picea glauca and Picea mariana) balsam fir (Abies balsamea), tamarack (Larix laricina), trembling aspen (Populus tremuloides), white pine (Pinus strobes), red pine (Pinus resinosa), jack pine (Pinus banksiana), maple (Acer rubrum), eastern red cedar (Juniperus virginiana), eastern hemlock (Tsuga Cadensis), paper birch (Betula papyrifera), speckled alder (Alnus rugosai), pin cherry (Prunus pensylvanica), and mountain ash (Sorbus americana). Other plants include ericaceous shrubs, sphagnum moss, willow, Labrador tea, blueberries, feathermoss, cotton grass, sedges, kalmia heath, shield fern, goldenrod, water lilies, horsetails and cattails.

Mammals include moose, black bear, wolf, chipmunk, beaver, muskrat, snowshoe hare, vole, red squirrel, mice, marten, short-tailed weasel, fisher, ermine, mink, river otter, coyote, and red fox. Garter snakes and frogs are also present. Waterfowl are seen on lakes during the icefree season, and fish can be abundant in some lakes and the larger perennial streams. Unlike regions farther south, there is no obvious physical evidence that industrial-source acid rain has stressed the forest environment to any visible degree".

# 5.3 Local Resources and Infrastructure

The city of Timmins has a long history of mining of both VMS and gold deposits dating back to the turn of the 20<sup>th</sup> century. There are a complete range of services and suppliers that are required for mining and exploration available in Timmins, including machine shops, mining equipment, motels, restaurants, and skilled personnel. There is an airport with flights to Toronto and most of the small cities and towns in northern Ontario. Timmins has a population of 30,000+. There are no immediate settlements anywhere near the Lucas Gold Project.

# 5.4 Physiology

The Lucas Gold Project lies within the Abitibi upland physiographic region within the Mattagami Drainage Basin. The area around the drill sites is generally flat, with steep river banks and is covered by dense bush that is mostly second growth soft woods of spruce, balsam fir and poplars. There are also white birch and tamarack in the low lying wet areas. There are few streams so long water lines may have to be used for the drill rigs. The topography is fairly flat with a change in elevation probably less than 7m.

Wild life within the project area includes moose, wolves, foxes, mink, beaver, bears and grouse.

#### **5.5 Environmental Issues**

There are no environmental issues related to this drill site or adjacent to any of the access roads.

# 6.0 **HISTORICAL EXPLORATION:**

The Lucas Township Gold Discovery – Lucas Gold Project was made by Canico in the 1960's with discovery hole - #27063. Canico did not follow up on these results, however McIntyre-Porcupine Ltd., optioned the Lucas Project in the early 1970's and drilled a number of diamond drill hole with diamond drill hole #73-14, returning significant gold assays – **Table 1**. McIntyre-Porcupine dropped this option in the late 1970's, at which time Abitibi-Price Resources was formed to further explore the Lucas Gold Project. A systematic compilation of all existing data was commissioned by Abitibi-Price Inc., and extensive overburden and diamond drilling were undertaken in the early 1980, resulting in a number of gold intercepts. Lucas Gold Resources continued the exploration efforts of Abitibi- Price Inc., with additional diamond drilling totaling approximately 2699 feet in 50 drill hole to the end of 1987.

TABLE 1

Township	Drill Hole	Grade(oz./t)	(g/T)	Interval
Lucas 27063 0.14 oz.		0.14 oz./t	(4.7g/T)	9.2 feet (2.8m)
Lucas	904 73-14	0.117 oz./t	(4.0g/T)	2.1 feet(0.6m)
		0.090 oz./t	(3.1g/T)	4.3 feet (1.3m)

Table 1: Summary of Historical Drill Results – Lucas Gold Project

Noble Mineral Exploration Inc., re-interpretation of the 1970 -1980 drill results, which shed light on a larger, lower grade shear zone style mineralization model that occurred in an interpreted shear zone horizon – **Table 2**.

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Hole ID	From (m)	To (m)	Meters	g/t	Incl. (g/t/m)	Incl. (g/t/m)
L-80-4	94.49	131.52	37.03	2.967	3.08/35.66	4.386/7.62
L-80-8	152.55	166.73	14.17	0.933		
L-80-10	118.41	124.05	5.64	2.547	3.497/3.66	
L-80-11	103.94	109.58	5.64	1.816	2.668/3.50	
L-80-11	129.84	138.99	9.14	3.145		
L-80-12	72.24	82.3	10.06	1.023		
L-80-13	118.87	131.06	12.19	2.778	3.421/9.14	
L-80-14	87.78	106.68	18.9	1.028		
L-80-25	173.13	185.62	12.5	1.149		
L-80-30	165.81	174.65	8.84	3.507		
L-80-36	54.25	59.44	5.18	1.61		
L-80-36	80.16	91.44	11.28	2.679	2.567/7.01	
L-81-36A	54.86	103.63	48.77	1.94	2.321/39.62	
904-73-14	141.91	148.13	6.22	1.174		
904-73-14	160.32	180.69	20.06	1.222		

 Table 2: Summary of Re-Interpreted Historical Drill Hole Results – Lucas Gold

 Project

The Information in the Tables 1 & 2 shows significant open pit mineable anomalous gold concentration **(Assay results are not NI43 101 compliant)** over substantial thickness. With the large increase in gold prices since the 1980's these results suggest the area needed to be revisited with multiyear, systematic exploration programs. Prior to the 2012 drilling program an Airborne Geophysical Electromagnetic and Magnetic survey was conducted by Triumph Services (2011) in a report titled, "Report on the Helicopter-Borne Time Domain Electromagnetic and Magnetic Survey at Project 81 and Lucas.

A second airborne geophysical Survey targeted the Lucas Gold Project only and was done by CMG Airborne titled, "Report on a Helicopter-Borne Magnetic and Radiometric Survey 2011. These two surveys confirmed old magnetic anomalies and electromagnetic conductors identified by Canico and Abitibi-Price Inc.

#### **6.1 Historical Resource:**

There are two reports for the Lucas Gold Resources/Abitibi Price main zone (Lucas Township, Concession 2, Lot 2, Figures 1 & 2, under heading Deposits not Being Mined in the Timmins District that states there is an unclassified deposit of 250,000 tons grading 0.1 ounces per ton gold. http://www.mndm.gov.on.ca/mines/ogs/resgeol/offices/tim\_MD.pdf

The description of the same deposit according the Mineral Deposits Index (MDI) Number MDI42A14SE00005 is as follows: Ore Zone Name: Abitibi-Price or Lucas Gold Resources Main Zone. Year: 1984. Category: Unclassified. Tonnes: 165,300.

Source: T-2496. Comments: Unclassified reserve is 150 000 tons grading 0.12 oz. /t Au.

These published gold resource estimates for the Lucas Gold Project are non NI43-101 compliant, and should not be relied upon except to help focus the exploration and drilling efforts on this project. Neither the authors nor the issuer have done sufficient work to classify these historical resource estimates as current mineral resources or mineral reserves.

# 6.2 Exploration History:

From 1963-66: Abitibi-Price Inc. and Canadian Nickel Company Limited conducted an airborne geophysics survey, and drilled 4 diamond drill holes totalling 1665 ft.

From 1966-72: Abitibi-Price Inc. and Cromarty Exploration conducted additional airborne geophysics surveys, ground geophysical surveys, and data compilation, together with drilling 55 diamond drill holes totalling 37,744 ft.

From 1972-73: McIntyre Porcupine Mines Ltd. carried out additional airborne geophysical surveys and drilled 3 diamond drill holes for 1598 ft.

From 1981-83: Abitibi Price Inc. carried out additional airborne geophysical surveys, ground geophysical surveys, diamond drilling and overburden drilling.

From 1987-89: Lucas Gold Resources Inc. drilled 5 diamond drill holes totalling 5793 ft.

#### 6.3 Gold Association:

Inco drill hole 27063 returned a gold assay intersection of 0.14 oz./t Au over 9.2 ft., and hole 27069A returned a gold assay intersection of 0.027 oz./t Au over 10 ft.

Gold and silver enrichment is confined to sulphide and/or chert-bearing rocks throughout the volcanic sequence. Tuffs in the sequence carry variable gold values ranging from 0.005 to 0.02 oz/t Au, while distinct enrichments are confined to the pyrite-chert chemical sediments. Sections of core from the Main Zone which comprise chert and pyrite with no quartz veins, mostly assay in the range of about 0.01 to 0.08 oz/t Au. Gold is closely associated with pyrite in both the chert-sulphide portions and in the quartz vein stock-works.

#### 6.4 Mineralization:

The mineralization is hosted within a thick sequence of felsic tuffs and lapilli tuffs with a few thin intercalated leucoxene-bearing mafic flows or sills. Narrow finegrained syenitic dikes intrude the felsic volcanic package. Mineralization is found within a series of quartz veins and veinlets that cross-cut a zone of chert, pyrite and some graphite that is found within the felsic metavolcanics. This zone has been interpreted as chemical metasediments. The rocks are strongly foliated and closely spaced fractures are observed in the chert and quartz veins.

#### 7.0 GEOLOGICAL SETTING

#### 7.1 REGIONAL GEOLOGY

The project area forms part of the Abitibi greenstone belt of the Superior Province and is covered by deep glacial till overburden – **Figure 3**. Volcanic rhyolites and andesites are common as are sediments. Exploration targets exist within the rhyolite units, especially for volcanogenic massive sulphide (VMS) deposits. In fact, the Kidd Creek deposit, the largest VMS deposit in North America is located within 30 km of the project area. There is a strong structural control to the Kidd Creek rhyolite dome and mineralization. The same volcanic structures that were responsible for the extrusion of the rhyolite also focused the hydrothermal fluids that ascended through the rhyolite and concentrated the minerals.

In addition to VMS mineralization, several mineralized ultramafic sills (peridodite) offer the potential for nickel deposits. At Kingsmill, for example, historic drilling has yielded low-grade nickel mineralization (i.e. 0.24-0.35% Ni) over widths approaching 500 m although the true thickness of the sills is not well known. While the grade of nickel is relatively low, the sills appear to have been serpentinized and the nickel is in large part are locked up in the silicate minerals. The serpentinized ultramafics are readily identified by their strong magnetic signature although the low-grade nickel is typically not conductive.

The Timmins area has a long history of gold mining with rich gold mineralization found in quartz veins and in some intrusive granite porphyry rocks. Lucas Township and other adjacent townships have very thick glacial till so outcrops are very rare limiting the geological information. Most of the geology was interpreted from airborne magnetic and electromagnetic geophysical surveys that can identify magnetic rock formations and electromagnetic conductors related to massive sulphide formations and graphitic zones. The Lucas property is found to the north of the city of Timmins.

**FIGURE 3** 

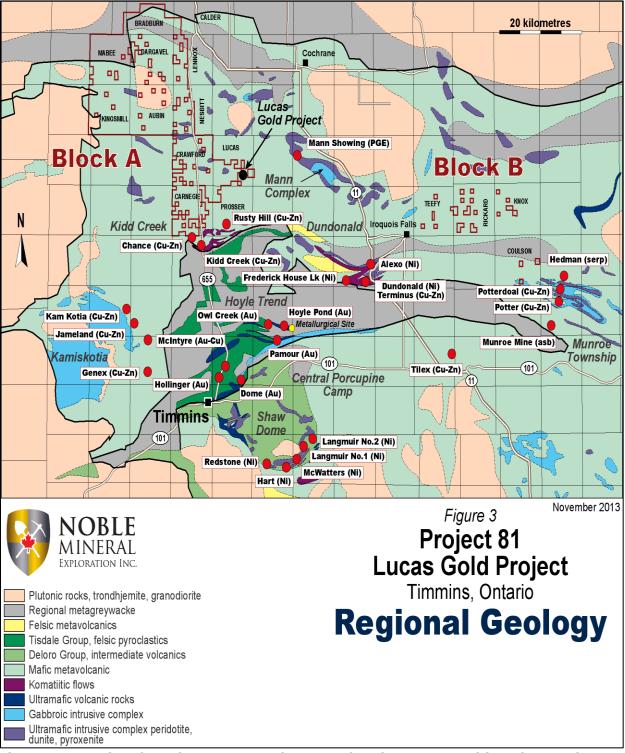
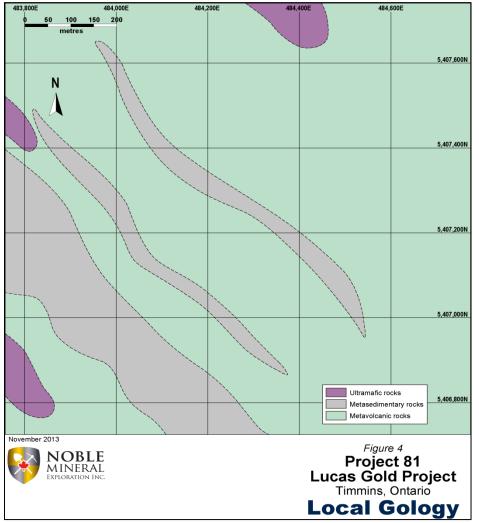


Figure 3 – Regional Geology Map, Project 81, showing Lucas Gold Project and Other Mineral Occurrences in the Kidd-Munroe Assemblage, Timmins Ontario, Canada

# 7.2 LOCAL GEOLOGY

In general, due to the thick overburden, outcrops are rare so the geology is poorly known. The geology in the gold target area consists of felsic to intermediate Tuffs, Quartz Eye Rhyolite, Volcanoclastic Sediments with some sedimentary beds with interbedded cherty layers and some with significant organic matter (graphitic) and pyritic beds within the sediments **Figure 4**. The pyrite beds that can have disseminated to massive pyrite are syngenetic and can be quite extensive. The organic rich beds and massive pyrite are good conductors. The rocks have numerous major faults and the rocks have undergone extensive deformation with micro-folds and some beds exhibiting tearing structures. Rare thin Diabase dykes cut the older rocks.



**FIGURE 4** 

Figure 4 – Local Geology Map, Project "81" Lucas Gold Project, Timmins, Ontario, Canada

## 8.0 **DEPOSIT TYPES**

The main types of gold deposits that might be found in Lucas Township are the following:

- A) Quartz veins and quartz veins with native gold and veins with sulphides such as chalcopyrite, pyrrhotite and pyrite rarely (arsenopyrite),
- B) Quartz stock work,
- C) Gold enriched VMS (syngeneic) like the Quebec Horn Mine, and
- D) Low grade disseminated gold in a porphyry intrusive rock. Most gold mines in this area have high grade gold mineralization, but there are some gold deposits with closely spaced small veins with lower grade gold mineralization in disseminated sulphides within the minor quartz vein and interstitial host rock that can be mined by an open pit method.

## 9.0 MINERALIZATION

The type of gold mineralization found in the Precambrian rocks in the Timmins area are quite simple with the major type native gold both disseminated and as larger masses in quartz veins. The other main form of mineralization is disseminated microscopic gold concentrated in a sulphide mineral such as pyrite. In general, sulphides can act as a collecting agent absorbing gold as it precipitates. There also can be argentum a silver-gold alloy, gold arsenic minerals and as a telluride and rarely other elements. Silver is a common element found in these gold deposits that can reach significant concentration and can contribute to the economics of these deposits as a valuable coproduct.

#### **10.0 EXPLORATION**

Apart from reviewing available data and the relevant scientific literature, to date Noble Minerals has not carried out any prolonged systematic exploration work on this property nor on any adjacent or other properties within the district other than that described in Section 11.0. The results of previous exploration work on this property are summarized, in chronological order, in Section 6.0 (Historical Exploration) of this report. Descriptions of exploration work and results are generally quoted verbatim from their respective authors, and are reproduced in order to illustrate the nature of exploration work conducted on this property, and to illustrate the diligence with which that work was performed.

#### 11.0 DRILLING

## **11.1 Introduction**

Noble Mineral Exploration Inc. commenced drilling on the Lucas Gold Project in Lucas Township on May 3, 2012 and completed 6 NQ size diamond drill holes totaling 3059.5 meters on June 01, 2012. A total of 2840 samples were sent into Actlabs (Timmins) for Gold and trace elements analysis, 2472 were drill core samples and the remainder being blanks, standards and duplicate samples. The Drill Hole Locations and drill hole data are presented and summarized in **Table 3, Table 4, Drill Plan Figure 5, and Cross Sections Figure 6, 7 and 8.** 

Drill Hole	Start	End	Easting	Northing	Dip
LUC-12-01	03-May	09-May	484250	5407100	-55
LUC-12-02	09-May	13-May	484210	5407180	-55
LUC-12-03	13-May	17-May	484210	5407180	-65
LUC-12-04	17-May	23-May	484240	5407350	-55
LUC-12-05	23-May	28-May	484100	5407450	-55
LUC-12-06	28-May	01-Jun	484450	5406900	-55

# TABLE 3 SUMMARY - DRILLING LOCATIONS

#### TABLE 4

#### SUMMARY - DRILL HOLE DATA

Drill Hole #	Azimuth	Depth (m)	Overburden(m)	Drill Core
LUC-12-01	225	545	39	NQ
LUC-12-02	225	447	39	NQ
LUC-12-03	225	486	35	NQ
LUC-12-04	225	574.5	33	NQ
LUC-12-05	225	528	26	NQ
LUC-12-06	225	479	44.6	NQ

**FIGURE 5** 

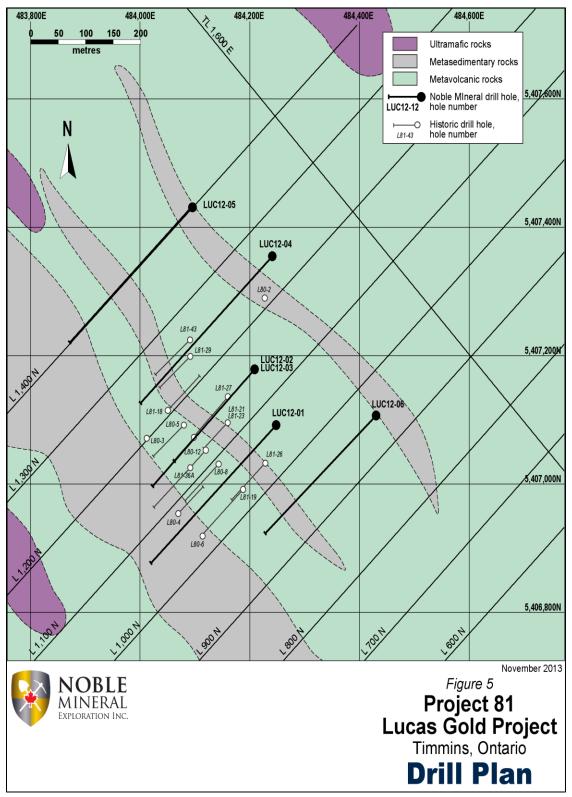


Figure 5: Drill Plan Map, Lucas Gold Project showing NOB 2012 Drill Hole Traces & Historical Drill Hole Traces Locations plotted in NAD 27

# 11.2 Results

# 11.2.1 Drill Hole - LUC 12-01

LUC-12-01 intersected pyritic mineralization in an organic rich zone.

**1.0 Pyrite Mineralized Zone**-The pyrite mineralization occurs together with an organic rich material, which explains the IP anomaly as the conductor. The mineralization varies from semi-massive to massive, blebs and disseminations. A summary of the concentration are as follows:

268.8m-274.0m 25%py, 274.0m- 277.0m 5%py, 277.0m-281.52m 25-30%py, 283.56m-285.4m 20-25%py; 285.4m-302.3m<20%py; 302.3m-311.3m 10-15%py; 311.3m-328.5m 10-15%py with short sections up to 20%py; 328.5m-345.6m5-20%py with 30cm bands of 25-30%py; 345.6m-360.0m 6-15%py; 360.0m-370.4m many 30-40cmbands with >50%py; 379.2m-380.2m>70%py in a carbon rich section; 380.2m-391.7m 10-15%py and 391.7m-398.0m sediments with <10%py.

The gold concentration within this zone was very low, with no result over 25 ppb Au.

# 11.2.2 Drill Hole - LUC 12-02

**LUC-12-02** intersected several pyritic zones with trace gold mineralization. The two most prominent pyrite mineralized zones are described below.

**1.0 Pyrite Mineralized Zone**-133.5m-133.7m10-15% pyrite, 136.0m-137.0m graphitic/carbon sediment with pyrite. Volcanic tuffs grades gradually into volcanoclastic metasediments within this zone.

**2.0 Pyrite Mineralized Zone**- The second more consistent Pyrite Mineralized Zone is an alternating sequence of higher and lower concentration of pyrite throughout. The top of the zone is cut by a diabase dyke from 340.8m-342.0m.

From 342.0 to 343.0 - 10-15% pyrite that increases to 20-30% from 343.0m to 345.0mFrom 345.0m to 351.5m is a "barren" section with occasional thin bands of pyrite. From 351.0m to 360.0m the pyrite concentration is about 5-6% with chert beds coming in at 357.0m. The pyrite concentration increases to 10-15% from 360.0m-366.0m, and drops off from 366.0m-371.0m averaging about 5-8% pyrite. From 371.0m-375.0m there is a great increase in pyrite concentration of up to 60% pyrite present with much higher more massive pyrite occurring form 373.0m-375.0m>95% pyrite. There is also another massive pyrite zone from 375.0m-395.3m, but with a lower pyrite grades estimated to be about 40-50% pyr. It is evident that the pyrite beds have been pulled apart by regional deformation.

**3.0 Gold Assays -** There are two very anomalous gold assays 1287658 (221.0m-222.0m) and 1287560 (222.0m-223.0m) with gold concentrations of 2960ppb Au and 2200 ppb Au respectively occurring in a Quartz Eye Tuff unit above a prominent10cm quartz vein from 223.9m to 224.0m. The Tuff unit however had a low concentration of disseminated pyrite, and the main sulphide zone has several anomalous gold assays that vary from 5 ppb Au to a high of 212 ppb Au. The anomalous values extend into a major fault zone with a concentration of 66 ppb Au.

**FIGURE 6** 

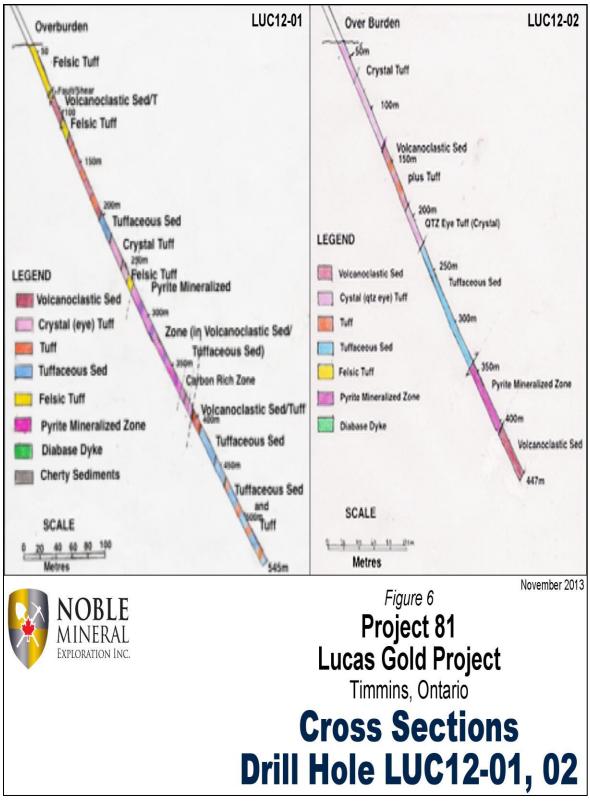


Figure 6: Drill Holes Cross Section – LUC 12-01 & LUC 12-02, Lucas Gold Project

# 11.2.3 Drill Hole - LUC 12-03

**LUC-12-03** was drilled from the same set up as LUC 12-02, at -65<sup>°</sup>. This drill hole intersected two prominent pyritic zones with chert and organic rich rock, and returned the best Gold assays of the entire drill program.

- 1) Pyrite Mineralized Zone-This pyrite mineralized section has much more chert and cherty sediments inter-beds than previously encountered and is interpreted that the cherty units were co-precipitated with the pyrite beds. This zone has undergone severe deformation as evident in the overlying sediments and tuff. The pyrite concentration in the upper part are as follows:345.0m-352.0m 1-3%py; 352.0m-361.0m 3-5%py; 361.0m-369.5m 5-7%py and 369.5m-394.0m15-20%py with a section from 376.0m-379.5m> 50%py; and from 394.0m-406.3m 10-15%py.
- 2) Pyrite Mineralized Zone This section has pyrite that varies from semi-massive to massive and thin bands of pyrite in the leaner parts of the core. The rock appears as a breccia with highly fractured chert and massive fine-grained pyrite. No sphalerite or chalcopyrite was seen, although these elements may be geochemically anomalous in the pyrite. The whole section would average 25-35% pyrite with 413.0m-416.5m 40-50% pyrite; 416.5m-427.75m 15-20% pyrite; 427.75m-431.0m>90% pyrite and 425.0m-426.8m massive pyrite >95% concentration. Foliation 60-70°.
- **3) GOLD ASSAYS** -The best gold mineralization of the entire drill program was obtained in drill hole LUC 12-03 which under-cut drill hole LUC 12-02. The Gold Mineralization was encountered from 243.0m-248.0min Volcanoclastic MetaSediments/Tuff with two very anomalous samples assaying >3000 ppb Au (Metallic Sieve analysis assayed 6.1g/t Au) from 243.0m to 244.0m, and 2660 ppb Au (coarse split reject assayed 1730 ppb Au) from 246.0m to 247.0m. The gold mineralized section is associated with minor, disseminated pyrite mineralization.

There were two other gold mineralized samples of 312ppb Au from 427.0m-428.0m, and 350 ppb Au from 437.0m-438.0m. These gold results occur in Felsic Tuff with no significant pyrite mineralization and/or quartz/chert association.

# 11.2.4 Drill Hole - LUC 12-04

**LUC-12-04** intersected two mineralized pyritic zones. The upper pyrite zone is carbon rich while the lower pyrite zone is thicker with higher concentration of metallic pyrite mineralization.

- 1) Carbon-Pyrite Mineralized Zone -This is a poorly developed carbon-graphite zone with most of the pyrite as large cubes up to 4x4 mm. There is also fine grained wispy pyrite that appears as seams and stretched out patches. The overall concentration is less than 10%py. The sediments have minor carbon and minor hematite staining. From 300.4m-302.0m the core is highly broken and likely represents a later stage fault zone.
- 2) Pyrite Mineralized Zone (480-534m) The Lower Pyrite zone is composed mainly of cherty sediments with intercalated chert beds. A large part of the zone is made up of highly fractured and brecciated pale grey chert, with the pyrite occurring as patches and in places is very segregated forming blebs-rounded

balls and as fracture fillings in the chert. The bottom contact is a major fault/gouge zone composed of pyrite, graphite and fragments of quartz. There is an increase in quartz content towards the lower contact. No sulphides were logged in the quartz.

A more detail description of these zones are as follows. From 480.0m-482.0m2-3%py, 482.0m-484.0m3-5%py, 484.0m-490.0m15-25%py (the mineralization is very fine grained pyrite and pinches and swells in narrow bands). From 490.0m-493.0m 3-5%py in very siliceous rock (chert), 493.0m-501.0m15-20%py, 501.0m-507.0m 6-10%py, 507.0m-512.0m 10-12%py (the pyrite occur as large balls and blebs in chert beds). Some of the pyrite balls and pyrite blebs have thin reaction rims signalling a second generation mineralization and/or alteration of the original pyrite mineralization. The entire section shows strong evidence of plastic deformation. From 512.0m-513.0m<3%py- this is a lean part of the mineralized zone. From 513.0m-514.0m $\rightarrow$ 90%py, 514.0m-518.0m 80%py and >95%py from 516.3m-516.75m The pyrite mineralization in highly fractured and brecciated with chert fragments from 518.0m-525.7m, with20-35%pyand from 525.7m-529.5m>90% pyrite.

**3) GOLD RESULTS** -There are two areas with anomalous gold concentration namely from 128.0m to 137.0m (50ppb Au to 101ppb Au) and 513.0m to 532.0m (110 ppb Au to 668 ppb Au) in Tuffaceous MetaSediments.

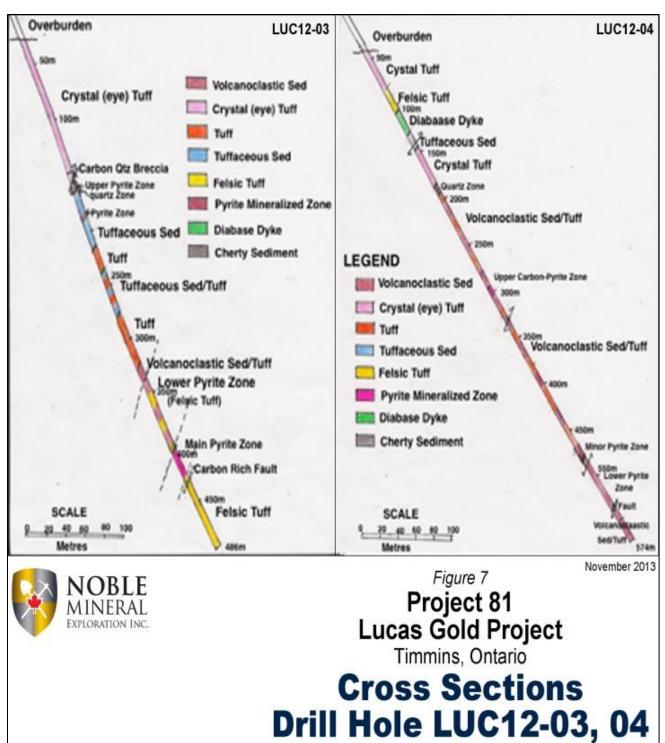


Figure 7: Drill Holes Cross Section LUC 12-03 & LUC 12-04, Lucas Gold Project

## 11.2.5 Drill Hole - LUC 12-05

**LUC-12-05** diamond drill hole encountered two pyrite mineralized zones.

- 1) Pyrite Mineralized Zone- the pyrite mineralized zone occurs within a volcanic tuff and chert horizon. The pyrite mineralization occurs as fine grained pyrite which gradually increases in concentration going down the rock sequence. The pyrite occurs as thin seams, blebs and stringers, from 264.4m to 274.0m from 3-7%py. The core becomes greyish brown sediment from 273.0m to 274.44m with 2-3%py. Chlorite and possibly sericite alteration, dominate this section and the environment is interpreted to be deep-water sedimentation. From 274.44m-279.6m the pyrite mineralized occur as fine grained pyrite and becomes bluish-black in colored due to increase in chert content. The pyrite occurs in the form of cubes and also as fine grain disseminations within bands of 2cm-4cm thickness with 10-15%pyrite content. There is an isolated pyrite band from 278.7m-279.5m that grades 50-60% pyrite and is layered with the chert beds.
- 2) Pyrite Mineralized Zone (419-462m) This pyrite mineralized zone is interpreted as a syngenetic pyrite deposit contemporaneous with the metasediments, with only minor volcanic tuffs horizons. The host rock exhibit minor sericite, chlorite and carbonate alteration throughout. Pyrite Mineralization occurs from 419.0m-426.35mwith 2-3%py and 426.35m-430.0m with 10-20%py. The pyrite is concentrated in very siliceous beds from 430.0m to 441.0m with2-4%py. The pyrite mineralization decreases within a sequence of dark sediments from 430.0m to 441.0m with only 2-4%py content. There is a 30cm bands with 15-25%py and a foliation of 75-80° from 447.0m-452.7m. There is another20cm pyrite band with >50%py from 454.4m to 456.0m. The Pyrite Zone increase in concentration up to 80%py in places. A brecciated section from 456.0m-462.0m only contain<1%py mineralization. Dark cherty sediment highly contorted with many micro folds occur at the base of the pyrite mineralized zone. A fault gouge occurs between 458.2m-458.6m, with a marked local infusion of guartz material – possible due to alteration. A **Diabase Dyke** occurs between 452.7m-454.4m.
- **3) Gold Results** The following are assay results obtained from this section 449.0m-450.0m 297ppb Au, 451.0m-452.0m 309 ppb Au, 452.0m-453.0m 660 ppb Au, and 455.0m-456.0m 1440 ppb Au. The highest concentration of gold occurs with the highest concentration of pyrite. There are two other isolated anomalous values of gold occurring at 103.0m-104.0m of 225 ppb Au and at 112.0m-113.0m of 179 ppb Au. There is a quartz rich zone with disseminated pyrite at 111.6m to 112.9m.

# 11.2.6 Drill Hole - LUC 12-06

**LUC-12-06**encountered 2 pyritic mineralized zones, similar to the mineralized pyrite zones found towards the northwest in drill holes LUC 12-01 to 12-05, but separated by a distinct graphitic sediment horizon.

1) Pyrite Mineralized Zone (107.7m-132.75m)-The section is made up of banded white to black brecciated chert beds with occasional cubes of pyrite aligned to the bedding. There are minor thin (<1cm) bands of massive, fine grained pyrite - the largest band being an erratic shape 4cm-5cm pyrite zone. Hematite staining occurs from 108.7m-109.2m and one such band occur as a porous 8cm band of magnetite with the noted reddish hematite staining and pyrite concentration of <3%py. A fine grained, black, hard carbon and graphite layer occurs from 111.4m-127.4m with a thin band of fine-grained pyrite (>60%py) at 113.5m. The upper contact of the chert/cherty sediments is marked with a 10cm band of>35%py. Extensive brecciation within the black cherty sediments occur at 115.0 to 116.0m

**2)** Graphitic Sediment (127.4m-129.6m) –Shinny, polished black graphite zone with silica and isolated blebs of pyrite. This section is also brecciated, with a large fault/shear zone from 91.6m to 129.6m.

**3)** Pyrite Mineralized Zone (129.6m-131.8m) - Fine grained pyrite that has been brecciated.

**4) Pyrite Mineralized Zone (131.8m- 132.75m)-**This is the lower end of the mineralized zone with massive pyrite in a black silica rich matrix. The black color is probably due to fine grained carbon in the chert.

**5) Gold - Copper Results -** This drill stands because of the gold-copper correlation for the first time in this drill program. This drill hole intersected low grade gold mineralization for 90m to 134m with the highest enrichment located from 11.0m to 116.0m in the pyrite-organic zone. The low concentration of gold starts in the bottom of the Volcanoclastic Sediments and carries on through a Quartz Stock Work Zone and extends through the Pyrite-Organic Sediment Zone.

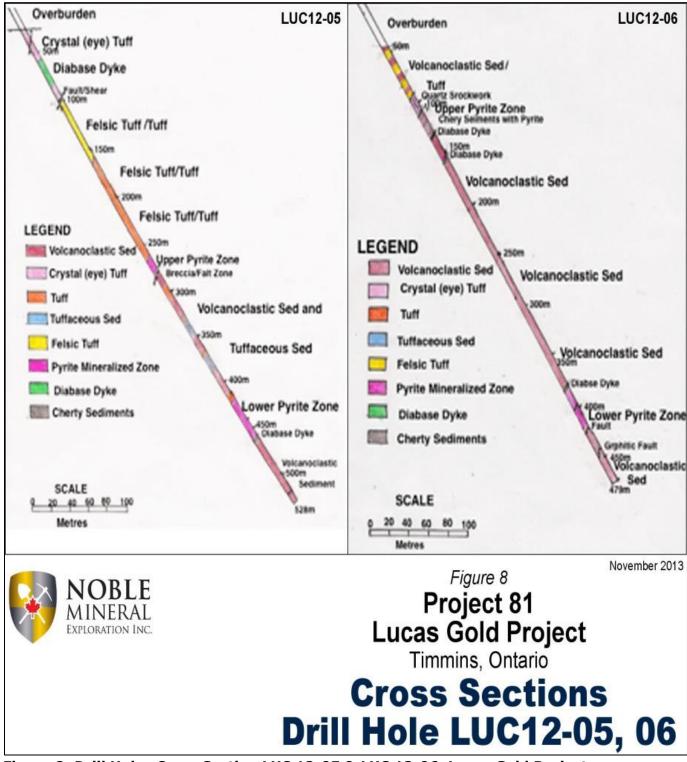


Figure 8: Drill Holes Cross Section LUC 12-05 & LUC 12-06, Lucas Gold Project

#### 11.2.7 Conclusions

In Conclusion, none of the drill holes in the 2012 drilling campaign intersected economic grade and widths of gold and silver mineralization. The Lucas Gold Project, gold mineralized target area had been previously drilled and exhibited economic grade and widths of gold and silver mineralization in cherty-organic rich-pyritic zones. The historical geology has been encountered in this drill campaign, but the gold and silver assays were not duplicated. The significant discrepancy in gold assay results between the 2012 drilling by Noble Mineral Exploration Inc., and historical gold assay results came as a puzzling surprise to the project geologists on site.

#### **11.3 Forensic Review:**

#### **11.3.1 Introduction:**

Noble Mineral Exploration Inc., drilling campaign of 2012 failed to duplicate the very interesting historical gold assays in drill holes that were drilled by McIntyre-Porcupine Mines Ltd and other operators in the 1960s' to 1980s'.

Noble Mineral Exploration Inc., exploration personnel were confused by this development although the geology in large terms was very favourable, and also consistent with the historical drill logs geology and the fact that the IP anomaly was explained by the intersection of a large Pyritic Iron Formation. However, the alteration was not consistent with gold mineralization in an iron formation in the Timmins Camp. The most glaring discrepancy was the non-duplication of the historical gold assay results and as such the historical gold mineralized zone was not located.

Noble undertook a "Forensic Review" of the 2012 drilling campaign, and discovered that the historical drill collar locations were inadvertently, transposed going from one consultant to the other, which led to the drill campaign of 2012 drill collars being spotted in the wrong location. See Figure-9, Figure-10, Figure-11 and Figure-12.

It is believed that the historical drill hole collars were inadvertently and incorrectly transposed from the older NAD 27 Reference Datum Coordinate System to NAD 83 Reference Datum Coordinate System as a function of the computer program, when old coordinate system numbers are used. This should have been flagged and this functionality should have been turned off – this apparently was not the case. As pointed out and for more clarity, the computer program used, had a built-in function to convert the historical drill holes collars from NAD 27 coordinate system to NAD 83 coordinate system automatically, although the drill hole collars were already in the NAD 83 coordinate system

Noble Mineral Exploration Inc. has replotted what they believe are the correct historical drill hole collar locations in Reference Datum NAD 83 coordinate system, together with the Noble's 2012 drill collar locations to illustrate the problem encountered. **See Figures 11, Figure 12, Figure 13 and Figure 14.** 

Noble Mineral Exploration Inc. digitized the entire historical drill logs data base which was plotted on maps in reference Datum of NAD 27. The digitization also converted the entire data set from Reference Datum NAD 27 coordinate system to the modern Reference Datum NAD83 coordinate system.

When this data set was transferred to the Ground Geophysical Company, the historical drill hole collars got transposed back from NAD 83 to NAD 27 inadvertently, resulting in the entire data set at the Ground Geophysical processing centre, being tabulated into the NAD 27 coordinate system and as such the historical drill hole collars were plotted in the wrong location.

It so happened that the ground IP survey outlined a series of very strong parallel IP conductors and Resistivity anomalous traces and the reconverted historical drill hole collars plotted coincidentally between two of these prominent IP anomalies. This scenario geologically was what was expected and as such did not raise any "red flags" at that time. **See Figure 11, and Figure 12**.

#### **11.3.2 Conclusions:**

The 2012 Noble Mineral Exploration Inc., drill campaign failed to locate the historical gold mineralized zone and to duplicate the historical gold assay results published by previous operators, because the drill hole collars were spotted in the wrong locations.

The integrity of the historical drill results is believed to be excellent and accurate, and the Lucas Gold Project requires additional confirmation drilling.

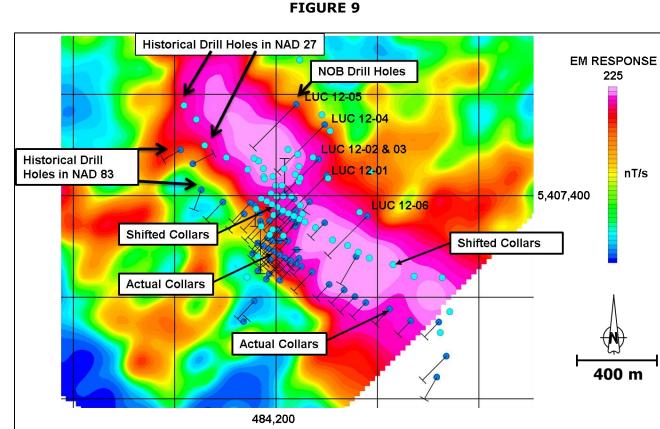


Figure 9: Map Showing NOB 2012 Drill Holes & Historical Drill Hole Traces Plotted in Datum Reference System NAD 27 and NAD 83

**Figure 9** illustrates the mistake uncovered by the Forensic Review - the complete compilation of the drill hole collar locations in both NAD 27 nad NAD 83. Noble 2012 Drill hole collars and trace have been plotted against the Historical drill hole collars and traces in both NAD 27 and NAD 83 together with examples of actual shifted collars. NOB 2012 Drill holes tested the zone outlined by the historical drill holes plotted in NAD 27 coordinate system.

# FIGURE 10

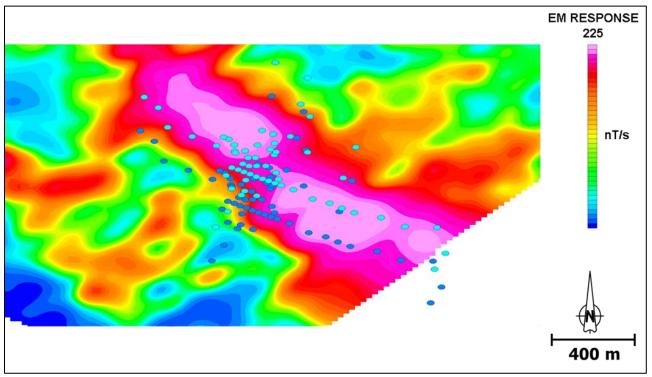


Figure 10: Map Showing Historical Drill Hole Collars plotted in Datum Reference System NAD27 (Light Blue) and NAD 83 (Dark Blue)

**Figure 10** represents a stripped down map depicting the glaring mistake in the collar locations of the historical drill holes in both NAD 27 and NAD 83. NAD 27 historical drill holes are plotted in light blue, while NAD 83 historical drill holes are plotted in dark blue. The correct coordinate system is NAD 83.

**FIGURE 11** 

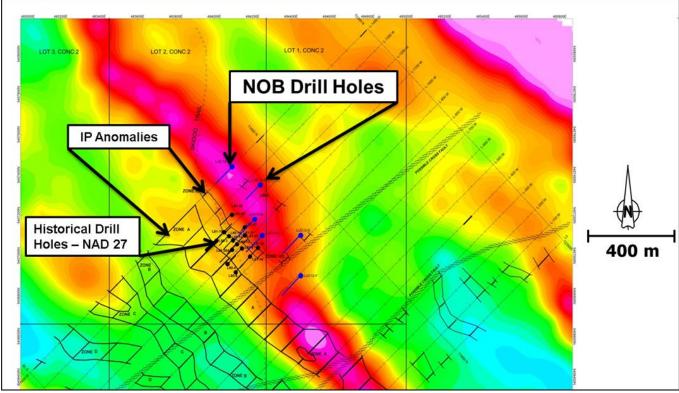


Figure 11 – Map Showing NOB 2012 Drill Holes & Historical Drill Hole Traces plotted in Datum Reference System NAD 27 on IP Anomaly Traces Map



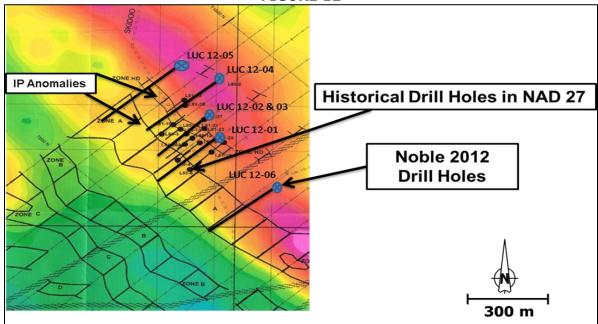
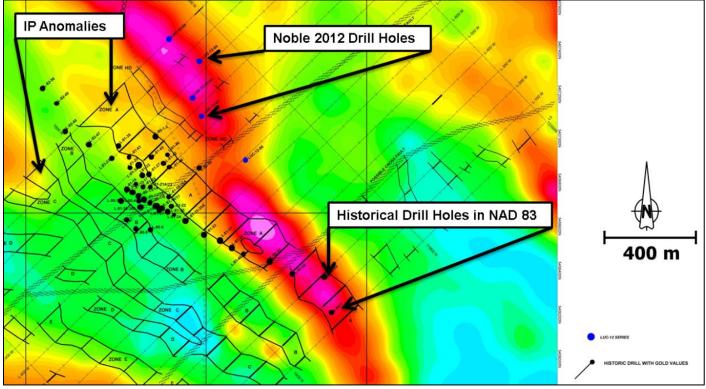


Figure 12 – Detail Blow Up Map showing NOB 2012 Drill Holes & Historical Drill Hole Traces Plotted in Datum Reference System NAD 27 on IP Anomaly Trace Map

**Figure 11 and Figure 12** show Noble Mineral Exploration Inc., 2012 drill hole collars and drill hole traces, plotted against the historical drill hole collars and drill hole traces in Reference Datum NAD27 on a map showing the IP anomaly trends. This Figure explains why it was so difficult to decipher and identify at the time of drilling, that the historical drill hole collar loactions were not correct and had been plotted in the NAD 27 coordinat system, since the historical drill holes plotted exactly where one would explect them to be plotted – between the IP conductor trends.



#### FIGURE 13

Figure 13: Map Showing NOB 2012 Drill Hole Collars & Historical Drill Hole Collars Plotted in Datum Reference System NAD 83 on IP Anomaly Trace Map

**Figure 13** shows a plan view of Noble Mineral Exploration Inc, 2012 drill hole collars plotted against the historical drill hole collars in the NAD83 coordinate system with the IP anomaly traces. Here again this maps shows the historical drill holes plotted in NAD83 lies between IP anomaly trend Zone A and Zone B as opposed to the historical drill holes that were plotted in NAD 27 coordinate system that lies between IP anomaly trends Zone HD and Zone A.

**FIGURE 14** 

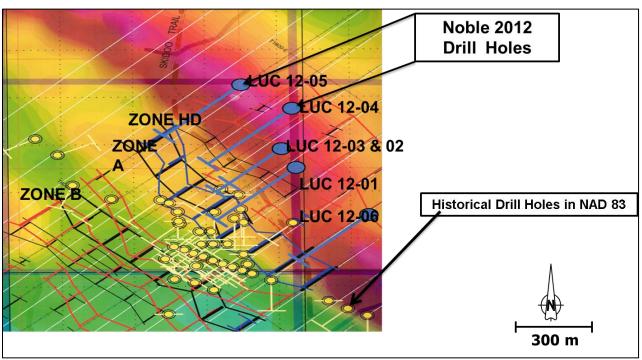
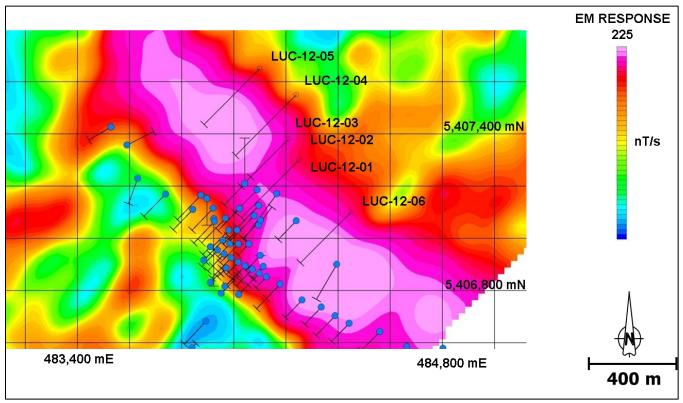


Figure 14: Detail Blow Up Map showing NOB 2012 Drill Hole Traces & Historical Drill Hole Collars plotted in Datum Reference System NAD 83 on IP Conductors & Restivity Traces Map

**Figure 14** shows a blow up of Noble Mineral Exploration Inc., 2012 drill hole collars and drill hole traces together with the historical drill hole collars plotted on IP conductor and restivity trace Map in Datum Reference System NAD 83 cordinate system. This figure visually displays why the Noble's 2012 drilling campaign, failed in its objectives to identify the historical gold mineralized zone and to duplicate the historical gold assay results published by previous operators dating back to the 1960s' and 1980s'

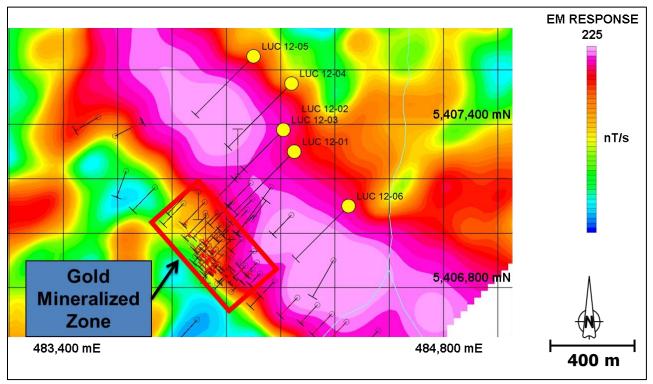
**FIGURE 15** 



# Figure 15: Map Showing NOB 2012 Drill Hole Collars and Traces together with Historical Drill Hole Collars and Traces plotted in Datum Reference NAD 83 Co-ordiante System

**Figure 15** shows Noble Mineral Exploration Inc., 2012 drill hole collars and drillhole traces, together with the historical drill hole collars and drill hole traces plotted in the Datum Reference NAD 83 coordinate system. This figure again demonstrates why the Noble 2012 drill holes failed to intersect the historical gold mineralized zone(s).

# **FIGURE 16**



# Figure 16: Map Showing NOB 2012 Drill Hole Collars and Drill Hole Traces plotted in Datum Reference NAD 83 Co-ordinate System together with the Historical Gold Mineralized Zone

**Figure 16** illustrates in more detail, how Noble Mineral Exploration Inc., 2012 drilling campaign failed to locate and identify Lucas's historical gold mineralized zone(s), and also why the drilling campaign failed to duplicate the gold assay results reported by previous operators.

# Table 5

Hole #	X-NAD 83	Y-NAD 83	Elevation	Dip	Azimuth	Length	X-NAD27	Y-NAD27
I-26638	477165	5413430	226	-50	0	129.2	477182	5413649
I-27019	482135	5406665	226	-50	15	164.9	482152	5406884
I-27026	482120	5406525	226	-50	11	193.9	482137	5406744
I-27039	482665	5406645	226	-55	350	149.7	482682	5406864
I-27044	481790	5404950	226	-50	30	156.1	481807	5405169
I-27046	481700	5405330	226	-55	29	189.6	481717	5405549
I-27049	482075	5408355	226	-55	50	145.4	482092	5408574
I-27050	475950	5408875	226	-50	5	131.1	475967	5409094
I-27053	477830	5406170	226	-55	0	179.2	477847	5406389
I-27056	484095	5406850	226	-55	36	151.2	484112	5407069
I-27061	478780	5405040	226	-55	180	350.2	478797	5405259
I-27062	477815	5406010	226	-55	0	167.6	477832	5406229
I-27063	484165	5406970	226	-50	216	331.3	484182	5407189
I-27065	477560	5407165	226	-55	0	136.9	477577	5407384
I-27068	481465	5407350	226	-55	25	244.4	481482	5407569
I-27073	480745	5405780	226	-55	342	210.3	480762	5405999
I-27075	478495	5406800	226	-60	0	176.8	478512	5407019
I-27076	476140	5407220	226	-55	24	197.5	476157	5407439
I-27079	478270	5405200	226	-55	180	169.8	478287	5405419
I-28455	477930	5411320	226	-50	180	185.9	477947	5411539
I-28465	487135	5410760	226	-50	180	152.4	487152	5410979
I-27069A	484395	5406700	226	-45	210	219.5	484412	5406919
7602-78-21	478640	5414110	226	-65	210	138.7	478657	5414329
7602-78-24	481624	5406962	226	-60	210	122.2	481641	5407181
7602-79-27	479765	5405890	226	-60	210	185.9	479782	5406109
Jan-89	483923	5406875	226	-65	180	611.7	483940	5407094
Feb-89	483897	5406952	226	-72	180	331.3	483914	5407171
904-73-1	479315	5407770	226	-90	0	41.1	479332	5407989
904-73-10	480925	5407075	226	-50	0	199.6	480942	5407294
904-73-13	484793	5406107	226	-50	210	193.2	484810	5406326
904-73-14	484090	5406985	226	-60	225	241.1	484107	5407204
904-73-15	483840	5406380	226	-60	43	44.5	483857	5406599
904-73-16	483893	5406482	226	-60	223	241.1	483910	5406701
C-83-1	478330	5411510	226	-70	0	107.6	478347	5411729
C-83-2	479540	5410685	226	-60	307	102.1	479557	5410904
C-83-3	480740	5411120	226	-70	210	76.5	480757	5411339
C-83-4	480720	5410380	226	-60	210	91.4	480737	5410599
C-83-5	484755	5409800	226	-60	225	104.2	484772	5410019
C-83-6	484860	5409320	226	-62	45	105.5	484877	5409539

#### **Table 5 Continued**

Hole #	X-NAD 83	Y-NAD 83	Elevation	Dip	Azimuth	Length	X-NAD27	Y-NAD27
C-83-7	484190	5410190	226	-70	225	91.4	484207	5410409
L-80-1	484042	5407009	226	-60	0	348.7 484059		5407228
L-80-10	484044	5406694	226	-55	224	180.4	484061	5406913
L-80-11	483990	5406725	226	-70	224	161.8	484007	5406944
L-80-12	483990	5406725	226	-55	224	186.8	484007	5406944
L-80-13	483963	5406739	226	-70	224	185	483980	5406958
L-80-14	483963	5406739	226	-55	224	157	483980	5406958
L-81-17	483938	5406754	226	-55	224	152.4	483955	5406973
L-80-2	484042	5407009	226	-75	224	435.6	484059	5407228
L-80-3	483885	5406716	226	-75	44	510.5	483902	5406935
L-80-4	483966	5406615	226	-65	44	182.9	483983	5406834
L-80-5	483952	5406589	226	-70	44	276.5	483969	5406808
L-80-6	484019	5406584	226	-65	44	199	484036	5406803
L-80-7	484017	5406708	226	-70	224	190.2	484034	5406927
L-80-8	484017	5406708	226	-80	224	303.6	484034	5406927
L-80-9	484044	5406694	226	-70	224	203.3	484061	5406913
L-81-15	483938	5406754	226	-70	224	185.6	483955	5406973
L-81-16	484071	5406681	226	-70	224	182.9	484088	5406900
L-81-18	484071	5406681	226	-55	224	153	484088	5406900
L-81-19	483910	5406767	226	-70	224	120.4	483927	5406986
L-81-20	484098	5406666	226	-70	224	182.9	484115	5406885
L-81-21	484058	5406778	226	-75	224	230.1	484075	5406997
L-81-21A	484018	5406778	226	-90	224	321.8	484035	5406997
L-81-22	484113	5406692	226	-70	224	183.2	484130	5406911
L-81-23	484018	5406778	226	-60	224	199.3	484035	5406997
L-81-24	484125	5406652	226	-72	224	182.9	484142	5406871
L-81-25	483985	5406778	226	-72	224	215.5	484002	5406997
L-81-26	484102	5406734	226	-65	224	188.1	484119	5406953
L-81-26A	484102	5406734	226	-90	0	236.3	484119	5406953
L-81-27	484013	5406831	226	-72	224	245.7	484030	5407050
L-81-29	483926	5406864	226	-60	224	228.6	483943	5407083
L-81-30	483958	5406792	226	-72	224	228.6	483975	5407011
L-81-31	483843	5406910	226	-60	224	216.1	483860	5407129
L-81-32	483981	5406831	226	-70	224	277.4	483998	5407050
L-81-33	484262	5406563	226	-60	224	185	484279	5406782
L-81-34	483968	5406876	226	-60	224	260.9	483985	5407095
L-81-35	484178	5406624	226	-60	224	152.7	484195	5406843
L-81-35A	484178	5406624	226	-45	224	183.2	484195	5406843
L-81-36	483971	5406686	226	-60	224	94.49	483988	5406905

Hole #	X-NAD 83	Y-NAD 83	Elevation	Dip	Azimuth	Length	X-NAD27	Y-NAD27
L-81-36A	483971	5406686	226	-75	224	121.9	483988	5406905
L-81-37	484336	5406536	226	-60	224	182.9	484353	5406755
L-81-38	483874	5406965	226	-65	224	306.9	483891	5407184
L-81-39	484389	5406503	226	-60	224	209.1	484406	5406722
L-81-40	484443	5406474	226	-60	224	193.9	484460	5406693
L-81-41	483910	5406630	226	-70	44	153.9	483927	5406849
L-81-42	484078	5406886	226	-50	224	204.2	484095	5407105
L-81-43	483921	5406915	226	-65	224	276.6	483938	5407134
L-81-44	484103	5406869	226	-50	224	152.4	484120	5407088
L-81-45	484022	5406914	226	-50	224	182.9	484039	5407133
L-81-46	484096	5406925	226	-50	224	182.9	484113	5407144
L-82-47	483738	5406969	226	-50	224	185.3	483755	5407188
L-82-48	483631	5407029	226	-50	200	160.6	483648	5407248
L-82-49	483590	5407157	226	-50	63	178.9	483607	5407376
L-82-50	484240	5406867	226	-50	224	154.5	484257	5407086
L-82-51	484560	5406442	226	-50	224	157.6	484577	5406661
L-82-52	484664	5406384	226	-50	224	140.5	484681	5406603
L-82-53	484803	5406378	226	-50	224	157.3	484820	5406597
L-82-56	483529	5407226	226	-50	240	153.6	483546	5407445
L-84-1	484840	5406210	226	-50	225	259.1	484857	5406429
LU-44-01	481730	5411050	226	-50	210	250.6	481747	5411269
LU-45-01	482420	5410560	226	-50	210	190.5	482437	5410779
LU-45-02	482230	5410750	226	-50	210	239.6	482247	5410969
LU-45-03	482630	5410395	226	-50	210	413.6	482647	5410614
LU-45-04	482635	5410130	226	-50	210	395.3	482652	5410349
LU-54-01	481085	5411760	226	-50	225	447.2	481102	5411979

 Table 5: Historical Drill Hole Data Sheet in Datum NAD 27 and NAD 83 Coordinate

 System

#### 12.0 SAMPLE METHOD AND APPROACH

Noble Minerals Exploration (NOB) set up a rigorous procedure to make sure the samples right from the drill site to the laboratory was done so it was NI 43- 101 compliant. The samples were brought by helicopter to the logging and core cutting facility in Timmins after their 12 hour shifts were over and the crew brought back to their residence. The NQ core was sorted and checked to make sure no core was left behind and all of the drill run blocks were in their proper place. The core was then put on the logging tables so the following procedures were done. The RQD was done by Dr. H Lahti and the photography and magnetic susceptibility by Jaaved Singh under the supervision of Dr. Lahti. Once the core had been placed into the facility the core that had been cut by an experienced worker the night before was prepared for shipment in rice bags sealed with numbered plastic security seals to the Actlab sample preparation laboratory in Timmins. Every day the sample batches (34 samples, blanks, standards and coarse reject bags) were labeled and given to the core cutter prior to him starting. The Internationally recognized standards, blanks and samples chosen for a coarse reject split were placed in random order.

The different rock units were sampled separately so different geological units were never sampled together. Once all of the information from the Actlabs was received it was put into one file labeled with the drill hole identification number i.e. LUC-12-03.

A Noble Minerals Ltd employee would then transport the labelled samples to the Actlab facility in Timmins.

# 13.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

#### 13.1 Sample Preparation

The following steps that were taken can summarize the sample preparation procedures.

- a) RQD,
- b) Photography of core
- c) Measuring of Core in The core boxes
- d) Logging core
- e) Placement of Assay tags
- f) Cutting and Bagging of Cut Core
- g) Check to Make Sure Batches are Complete

# 13.2 Analysis

All samples were crushed with 80% passing a -10mesh. A 350g split is achieved using a jones riffle and pulverized to -150 mesh in the Actlab sample preparation laboratory in Timmins, Ontario – an ISO 9001 accredited laboratory with a suitable sample split sent to the Actlab main Laboratory in Ancaster, Ontario or Thunder Bay, Ontario for final processing and analysis – both facilities are ISO 17025 accredited for specific tests. The following sample prep codes were used.

Code 1A2 - Au - Fire Assay with AA finish – detection limit 5ppb-3,000ppb Code 1A3 –Au by Fire Assay with Gravimetric Finish – detection 3g/t -10g/t Code 1A4 – Au by metallic screen analysis with gravimetric finish – detection limit>10g/t

Code 1E3 - Aqua Regia ICP (AQUAGEO)

# 1A2, 1A3 and 1A4 Analysis:

#### Gold and Silver Analyses

1A2 Au Fire Assay-AA (geo-chemistry) 30 g 5-3,000 ppb 1A2-50 Au Fire Assay-AA (geo-chemistry) 50 g 5-3,000 ppb 1A3-30 Au Fire Assay-Gravimetric (Assay) 29.16 g 0.03-1,000 g/mT 1A3-50 Au Fire Assay-Gravimetric (Assay) 50 g 0.02-1,000 g/mT 1A3-Ag Au, Ag Fire Assay-Gravimetric (Assay) 29.16g, 0.03-1,000 g/mT (Au)

\*\*1A4 Au Fire Assay-Metallic Screen (Assay) 500 g 0.03 g/mT
\*\*1A4-1000 Au Fire Assay-Metallic Screen (Assay) 1,000 g 0.03 g/mT

Notes:

Use of 50 gram sample for fire assay may not provide optimum recovery. 1 oz/ton = 34.2857 grams/metric tonne.

\*\* Code 1A4 or 1A4-1000 - A representative 500 gram or 1000 gram (or can be customized) sample split is sieved at 100 mesh (150 micron), with assays performed on the entire +100 mesh fraction and two splits of the -100 mesh fraction. It is important not to over pulverize the sample too finely; as tests have shown gold will plate out on the mill and be lost. When assays have been completed on the coarse and fine portions of the bulk sample, a final assay is calculated based on the weight of each fraction.

#### 1E3 - Aqua Regia - ICP

A 0.5 g of sample is digested with Aqua Regia for 2 hours at 95 ° C. Sample is cooled then diluted with deionized water. The samples are then analyzed on a Perkin Elmer ICP for the 35 element suite. A matrix standard and blank are run every 13 samples.

A series of USGS-geochemical standards are used as controls. This digestion is near total for base metals however will only be partial for silicates and oxides.

# 1C - OES - Fire Assay - Au, Pd, Pt-ICP/OES

A sample size of 5 to 50 grams can be used but the routine 30 g size is applied for rock pulps, soils or sediments (exploration samples). The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, intermediate 950 °C and finish 1060 °C, the entire fusion process should last 60 minutes. After cooling, the lead button is separated from the slag and cupelled at 950°C to recover the Ag (doré bead) + Au, Pt, Pd.

The Ag doré bead is digested in hot (95°C) HNO  $_3$  + HCl. After cooling for 2 hours the sample solution is analyzed for Au, Pt, and Pd by ICP/OES using a Varian 735 ICP. A blank and a digested standard are run every 15 samples. Instrument is recalibrated every 45 samples. Duplicates are run when sample duplicates are received by the ICP/MS department.

For vegetation ash samples a lower weight can be used but will result in elevated detection limits. Smaller sample splits are used for high chromite or sulphide samples to ensure proper fluxing and metal recoveries.

If values exceed upper limits, reanalysis by fire assay Au, Pt, Pd (Code 8) is recommended.

#### 13.3 Security

Security and confidentiality of drill core from the drill site to the core logging facility and all subsequent documentation has been meticulous, regimented and executed by all NOB personnel's. No other person, other than the geologists, core cutter and Geotech Technician were allowed in the core processing area. At night the building was under lock and key. The drillers who when finishing their shift would have a helicopter sling the core to Noble Mineral's logging facility. The drill crew did not leave until the geologist was satisfied that all of the core boxes were delivered, and the drill run blocks were all in the proper location.

Once the core was cut and bagged the geologist and Geotech technologist would check to make sure all of the samples were present including the standards, blanks and coarse reject splits. Only certified, gold, and silver standards were used. The samples were checked against a previously prepared list of all of the samples in each batch. Each batch was composed of 34 samples that included 2 standards, 2 blanks and a coarse reject split.

The samples were placed in rice bags that were clearly marked with the batch number, the company name, the sample numbers sequence and the total number of bag in the shipment written on them. Finally, a numbered security tag was fastened onto the bag to seal it. The shipment was then transported to the Actlab Timmins's facility by NOB personnel who made sure an Actlab official sign off on the shipment after verifying the total number of bag in the shipment and the correctness of the analytical code for that shipment.

# **14.0 DATA VERIFICATION**

The author, during summer of 2012 property was visited several times but the author was not able to locate the old drill holes with certainty. Nevertheless, along with a review of the available technical data, the scientific literature and the geological setting of the property, there is no good reason to disbelieve the location of the historical holes and the new color location were incorrect with the data available. No independent verification of previously obtained analytical or other technical data is possible until the provenance of such data can be determined, and was not made by the author of this report. However, the author is reasonably confident that the data from the Lucas Gold property was collected, documented, prepared, and analyzed to the standards of professional care and diligence applicable at the time.

#### **15.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

No metallurgical test work has been conducted on the Lucas Gold property by Noble Minerals and no documents relating to such test work having been conducted in the past has so far come to light.

# **16.0 MINERAL RESOURCE ESTIMATE**

There is at present no current NI 43-101 compliant mineral resources defined on the Lucas Gold property, and thus at the time of writing this report, no resource estimate was found that was in accordance with the criteria and categories set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects.

#### **17.0 Mineral Reserve Estimate**

There is at present no Mineral Reserve Estimate for the Lucas Gold Property.

# **18.0 Mining Methods**

This item does not apply.

#### **19.0 Recovery Methods**

This section does not apply.

# **20.0 Project Infrastructure**

This section does not apply.

#### 21.0 Market Structure and Contracts

This section does not apply.

#### 22.0 Environmental Studies, Permitting and Social or Community Impact

Since most of the Lucas Gold Project of Project "81" lands have been private property since the First World War land grants to veterans, it appears that there have been no environmental, permitting, social or community impact studies completed for any of the past exploration and drilling campaigns. Noble Mineral Exploration Inc. has signed MOU with the Matagami and Matchewan First Nations. Noble Mineral Exploration Inc. also has signed MOU with Tagmouch (TTN) First Nations. Noble Mineral Exploration Inc. continues to explore and develop dialogue with other First Nations Groups in the area.

#### 23.0 Capital and Operating Costs

This section does not apply.

#### **24.0 Economic Analysis**

This section does not apply

#### **25.0 ADJACENT PROPERTIES**

There were no significant prospects or mineralization in the near Vicinity, except for the Kidd Creek Mine approximately 25km to the south west of the Lucas Gold Project.

Figure 17

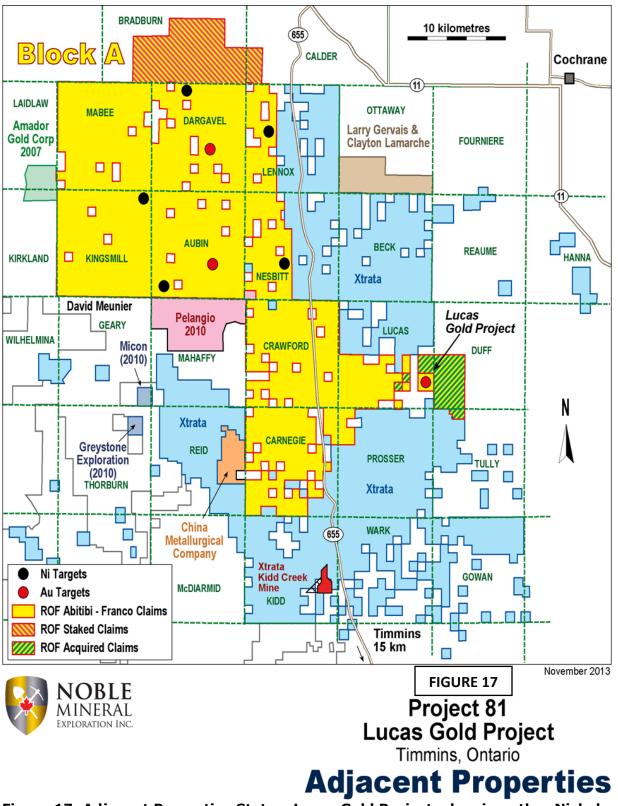


Figure 17: Adjacent Properties Status, Lucas Gold Project, showing other Nickel and Gold Occurrences, Timmins, Ontario, Canada

## 26.0 OTHER RELAVENT DATA AND INFORMATION

There are at present no plans for production from the subject property. All work contemplated at this time would be purely of an exploration nature designed to test the full extent of the historical drilling with the possible economic potential. Since the bulk of this report is based on drilling from incorrect collar sites, the testing of the historical gold intersections must be redone from properly placed drill sites. The main objective at this time is to go into the field and verify the location of the historical drilling and obtain accurate GPS NAD 83 coordinates from some of the old drill stems before locating the three new drill sites.

# **27.0 INTERPRETATION**

Noble Mineral Exploration Inc., original six drill holes intersected significant thicknesses of typical Timmins Type geological formations that are known to host gold mineralization in the Timmins Camp. The main sulphide formations were large VMS type massive pyritic iron formations with sections greater than 80% pyrite. These massive sulphide rich bands also contain sections with interbedded cherty beds, together with massive white quartz veins and quartz vein stock-work horizons that were intersected throughout the drill program. Although several one meter gold assays were very anomalous i.e. >2000 ppb Au with one sample assaying 6.1 g/t Au in LUC12-03, the vast majority were <5 ppb Au.

Noble Minerals conducted an investigation to see if there were widespread discrepancies with the assaying results, based on one sample assayed >3000 ppb Au, in the first run, but subsequent coarse reject split assay only ran 1750 ppb Au. This indicates a very fine nugget gold effect and/or the coarse reject split was poorly homogenized. The investigation did not reveal any major laboratory wide discrepancies in the assaying protocol employed by the Assaying Laboratory, on a systematic basis, however individual sample batches did show minor discrepancies, which were probably due to poorly trained staff members in the sample preparation section from time to time.

No drill hole in Noble Mineral Exploration 2012 drill program intersected the quartz vein thickness and grades of gold mineralization published for the historical drilling done in 1980-81. This was a very unusual situation as there was no indication that the historical drilling had any assay issues. The 2012 ground IP geophysical survey confirmed the electrical conductors and resistivity of the underlying geological formation consistent with Gold Mineralization in the Timmins Camp, and as such the 2012 drilling campaign was believed to have been drilled in the area of the historical gold mineralization in 2012.

# 28.0 CONCLUSIONS:

- 1.) Noble Mineral Exploration Inc., 2012 drill program did not test the area of historical gold mineralization.
- 2.) The 2016 Forensic Review regarding the true collar locations of the six drill holes in the 2012 drilling program discovered that the drill program was based on the historical drill holes being plotted in the NAD 27 coordinates system and not in NAD 83 coordinates system, as should have been the case.

3.) The Forensic Review showed that the NOB 2012 drill holes were collared approximately 215m too far North and approximately 17m too far west of the historical gold mineralized area.

4.) As a result, the original published assumption that the 2012 assay results were incorrect or had some analytical problems, were again incorrect. The fact that none of the 2012 assay results confirmed any of the grades and thickness of the drilling done in the area thought to be same area as was drilled in 1980-81 drilling program was not due to problems with the assaying but due to the aforementioned problem with the drill hole collar locations.

# **29.0 RECOMMENDATIONS**

The authors recommend that a three phase exploration approach be implemented to further develop with a high degree of certainty the exceptional gold exploration potential of the Lucas Gold Deposit going forward. The 3 phase exploration program is designed to verify the location of the historical drilling and gold mineralized area, together with additional ground Geophysical Survey to firm up the target locations and to pinpoint the drill hole collars that will prove up the historical gold mineralization, to determine the down dip continuity and gold grades of this gold zone, to establish that the gold mineralization is more wide spread that previously reported and to add additional strike length to the LUCAS GOLD DEPOSIT.

# PHASE 1

Phase 1 exploration program is primarily designed to verify by an aptly qualified technician the exact location of the historical drill hole collars in the field by searching the ground for old drill stems that were left from that drilling campaign, GPS these locations in the NAD 83 coordinate system and plot them against the locations digitized in the NAD 83 coordinate system from old drill holes location maps. It is expected that drill hole labels (drill hole numbers) will not be found on these drill stems, but by matching these locations with those derived from the digitized drill hole location maps, a qualified person can pronounce with great certainty the validity of these locations and corresponding hole numbers. Phase 1 is also designed to establish a control grid over the mineralized area and to conduct Ground Geophysical Survey to delineate and pinpoint targets for diamond drilling.

# PHASE 2

In Phase 2 exploration program, it is recommended that a closer spaced 3 hole NQ size diamond drill hole program be drilled at -45 degrees dip, to test and confirm the historical gold intersections and mineralization. This drilling will also shed light on the historical economic gold grades of the quartz veins and the potential of wider spread gold mineralization throughout the historical mineralized zone. (See Figure 18)

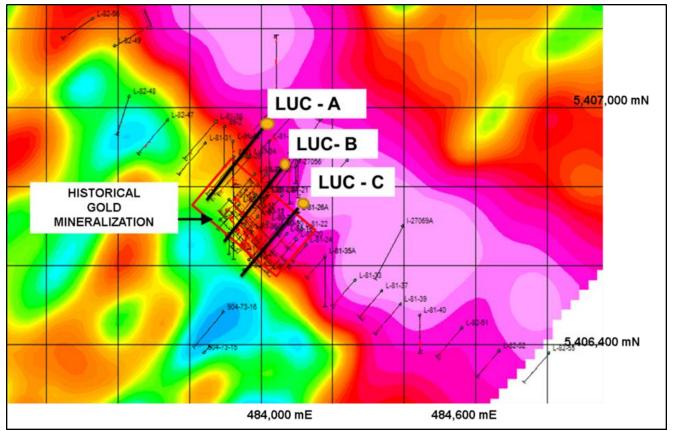


FIGURE 18

Figure 18: Map Showing Proposed Drilling Sites and Historical Gold Mineralize Zone plotted in Datum Reference NAD 83 Co-ordinate System

## PHASE 3

Phase 3 exploration program is contingent on the results of the Phase 2 drilling campaign that confirms the discovery of the historical gold mineralization as **the Lucas Gold Deposit**.

It is therefore recommended to drill an additional 7 NQ size diamond drill holes in total. Two fences of 2 diamond drill holes each (2 drill holes in total at -45 degrees and 2 drill holes at -65 degrees dip from the same set up), on either side of the PHASE B drilling to extend and probe the limits of the historical gold mineralization along strike and possible to extend this gold mineralized zone beyond what has been historically projected.

It is further recommended to drill an additional 3 NQ size diamond drill holes at each of the Phase B drilling sites at -65 degrees, to determine the true thicknesses of the

gold mineralization, gold grade and down dip continuity of this very prospective gold horizon.

# **29.1 Expenditures**

The recommended budget for the three phases of work is given below.

# **RECOMMENDED BUDGET**

PHASE 1		\$ CDN
Drill Hole Collar Location Verification – in field		10,000
Digitization of Historical Maps, drill hole data and Geophysical Surveys		50,000
Ground Geophysical Surveys and Line Cutting		50,000
	TOTAL (A)	110,000
PHASE 2	. ,	·
Diamond Drilling - 3 holes – 900m @ \$100/m		90,000
Assaying – 600 samples @ \$25/sample		15,000
150 Samples (Metallic Sieve Analysis) @ \$125/sample		18,750
Geologist - 10 days @ \$1000/diem <sup>1</sup>		10,000
Geotech – 10 days @ \$500/diem <sup>1</sup>		5,000
Logging Facility Rental – 1/2 month		2,500
Core Cutter – 10 days @ \$500/diem <sup>1</sup>		5,000
Consumables		7,500
	TOTAL (B)	153,750
PHASE 3		
Diamond Drilling - 7 holes –2100m @ \$100/m		210,000
Assaying –1400 samples @ \$25/sample		35,000
350 Samples (Metallic Sieve Analysis) @ \$125/sample		43,750
Geologist - 25 days @ \$1000/diem <sup>1</sup>		25,000
Geotech – 25 days @ \$500/diem <sup>1</sup>		12,500
Logging Facility Rental – 1 months		5,000
Core Cutter – 20 days @ \$500/diem <sup>1</sup>		10,000
Consumables		10,000
	TOTAL (C)	351,250
TOTAL (/	VTBTC)	615,000
	Атотсј	013,000
Contingency		45,000
		,•
GRA	ND TOTAL	660,000
	-	

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#### 31.0 AUTHORS CERTIFICATE AND SIGNATURE PAGE

#### 31.1 Howard Lahti PhD, PGeo (NB)

#### **Certificate of Author:**

I, Howard Lahti, do hereby certify that:

1. I am a consultant geologist, with an address of 1158 Woodstock Rd., Fredericton New Brunswick E3B 7S1.

Telephone: (506)-458-0982, Email: hlmv@nb.sympatico.ca

2. I graduated with a B.Sc., M.Sc. degrees in Geology and a Ph. D. degree in Geochemistry from the University of New Brunswick in 1968, 1971 and in 1978 respectively.

3. I am a Licensed Professional Geologist (Province of New Brunswick, No 5594).

4. I have worked as a geologist for a total of 48 years since graduation from university.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reasons of education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements of a "qualified person" for the purposes of NI 43-101.

6. I am responsible for the preparation of the technical report titled "TECHNICAL REPORT NI 43-101, Project 81, 2016 Update on the LUCAS GOLD PROJECT (Review of the 2012 DIAMOND DRILLING PROGRAM) Lucas, Duff and Tully Townships Ontario, Canada.

7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which could make the Technical Report misleading.

8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.

9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority, and to any publication by them for regulatory purposes, including electronic publication of the Technical Report on their respective websites.

Dated in Fredericton, New Brunswick, Canada, this 21<sup>st</sup> day of November, 2016.

Signature of Qualified Person

(Signed & Sealed)

Howard R. Lahti Ph.D. P Geo (NB), November 21<sup>st</sup>, 2016

#### Authors' Certificate and Signature Page

31.2 Randy S.C. Singh BSc, PGeo (ON), PEng (ON)

Certificate of Author

I, Randy S.C. Singh PGeo (ON), PEng (ON) Geologist/Geological Engineer with residence at 1065 Far North Circle, Newmarket, Ontario, Canada L3X-1N4 do herewith certifies that this certificate applies to the report entitled "TECHICAL REPORT - NI 43-101, Project 81 - 2016 Update, on the, LUCAS GOLD PROJECT - (Review of the 2012 DIAMOND DRILLING PROGRAM), Lucas, Duff, Tully Townships, Northern Ontario Canada (The Report) for Noble Mineral Exploration Inc., of 2500-120 Adelaide Street West, Toronto, Ontario Canada, dated October 14<sup>th</sup>, 2016

I do herewith certify that:

1.0) I, have practised my profession for over 30 years as a Geologist/Geological Engineer in the private sector throughout Canada, USA, Mexico, Guyana, Brazil, Suriname, Zimbabwe, Tanzania, Ghana and Panama.

2.0) I am a graduate with a BSc. degree in Earth Sciences and a BSc. degree in Applied Geology/Geotechnical Engineering from the University of Waterloo, Waterloo, Ontario, Canada.

3.0) I am a Professional Geoscientist – a Practising Member of the Association of Professional Geoscientists of Ontario (APGO) Licence No. 1634.

4.0) I am a Registered/Licensed Professional Engineer – a Practising Member of Professional Engineers Ontario (PEO) in the Province of Ontario (Licence No. 100145212).

5.0) I am a member in good standing of the Society of Economic Geologist (SEG), Littleton, Colorado, USA – Membership Number 898769.

6.0) I have read the definition of "qualified person" as set out in National Instrument 43-101("NI 43-101") (The Instrument), and Form 43-101F1 (The Form) and herewith certify that by reason of my education, affiliation with professional associations (as defined by NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of co-authoring this Report and certify that the Technical Report has been prepared in compliance with The Instrument and The Form.

7.0) I am an officer of Noble Mineral Exploration Inc., with the Title of "Vice President – Exploration and Project Development"

8.0) I am therefore, <u>NOT INDEPENDENT</u> of the issuer (Noble Mineral Exploration Inc., (NOB-TSX.V) and do expect to Receive Securities of the Company and/or any affiliated Companies and/or any Joint Venture Companies.

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

10.0) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority, and to any Publication by them for regulatory purposes, including electronic publication of the Technical Report on their Respective websites.

Dated in Newmarket, Ontario, Canada, this 21<sup>st</sup> day of November, 2016

Signed Randy S.C. Singh (Signed & sealed) Randy S.C. Singh BSc, (Waterloo), PGeo (ON), PEng (ON)

# Appendix 1 List of Claims

Company Name	Parcel	District	Township	GPlan	Units	Project Name	Property Name
NOBLE MINERAL EXPLORATION INC.	<u>4246464</u>	Porcupine	TULLY	G-3985	11	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246465</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246466</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246467</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246468</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246469</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4246470</u>	Porcupine	DUFF	G-3234	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4248239</u>	Porcupine	LUCAS	G-3534	16	Lucas Gold Project	Project 81
NOBLE MINERAL EXPLORATION INC.	<u>4269023</u>	Porcupine	LUCAS	G-3534	8	Lucas Gold Project	Project 81

TECHICAL REPORT NI 43-101

# Project 81

# 2016 Update

On the

# LUCAS GOLD PROJECT (Review of the 2012 DIAMOND DRILLING PROGRAM)

Lucas, Duff, Tully Townships Northern Ontario Canada

For

Noble Mineral Exploration Inc. 2500-120 Adelaide St. West Toronto Ontario Canada M5H 1T1

By

Howard Lahti PhD, P Geo Consulting Geologist 1158 Woodstock Rd., Fredericton New Brunswick Canada E3B 7S1

And

Randy Singh PGeo (ON) PEng (ON) VP Exploration & Project Development Noble Mineral Exploration Inc. Toronto, Ontario, Canada



November 21<sup>st</sup>, 2016

#### 31.0 AUTHORS CERTIFICATE AND SIGNATURE PAGE Howard Lahti PhD, PGeo (NB) Certificate of Author:

I, Howard Lahti, do hereby certify that:

1. I am a consultant geologist, with an address of 1158 Woodstock Rd., Fredericton New Brunswick E3B 7S1.

Telephone: (506)-458-0982, Email: hlmv@nb.sympatico.ca

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Dated this 21 Day of November, 2016.

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TECHICAL REPORT NI 43-101

# Project 81

# 2016 Update

On the

LUCAS GOLD PROJECT

(Review of the 2012 DIAMOND DRILLING PROGRAM)

Lucas, Duff, Tully Townships Northern Ontario Canada

For

Noble Mineral Exploration Inc. 2500-120 Adelaide St. West Toronto Ontario Canada M5H 1T1

By

Howard Lahti PhD, PGeo (NB) Consulting Geologist 1158 Woodstock Rd., Fredericton New Brunswick Canada E3B 7S1

And

Randy Singh BSc, PGeo (ON) PEng (ON) VP Exploration & Project Development Noble Mineral Exploration Inc. Toronto, Ontario, Canada

November 21<sup>st</sup>, 2016





# Authors' Certificate and Signature Page

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I do herewith certify that:

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10.0) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority, and to any Publication by them for regulatory purposes, including electronic publication of the Technical Report on their Respective websites.

Dated in Newmarks, Ontario, Canada, this 21st day of November, 2016

Randy S.C. Singh BSc, (Waterloo), PGeo (ON), PEng (ON)

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MEMBER

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