



# **DIOS** EXPLORATION

**GEOLOGICAL REPORT ON THE  
CLARKIOR GOLD PROJECT  
LOWER EASTMAIN AREA, JAMES BAY  
QUEBEC (33B05/B06)**

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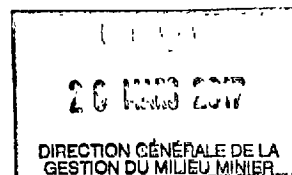
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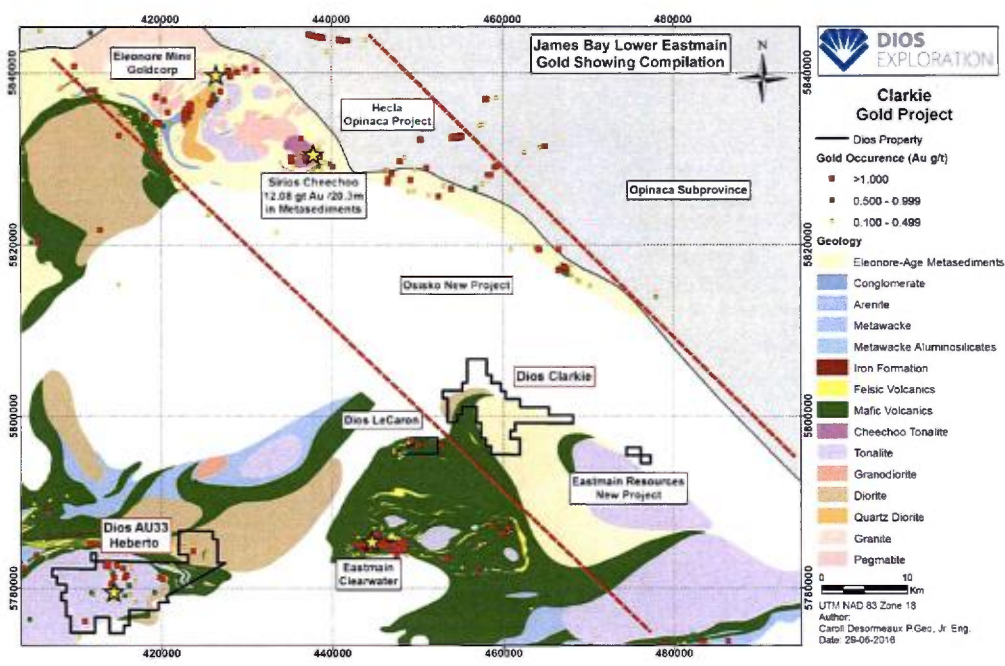
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**GM 70092**

**1615092**





## 1. INTRODUCTION

The Clarkior gold project is located 30 kilometers northeast of the Eastmain-1 power plant, James Bay territory, Quebec. It was initiated by Dios Exploration in 2010, following a regional till sampling program for gold and diamond in the 33C01, 33C08, 33B04 & 33B05 NTS map sheets.

The Clarkior property lies within the Archean Lower Eastmain Greenstone Belt, part of the La Grande sub-province. The claims are located up-ice of a significant gold-in-till dispersal train. The property is centered on a regional synformal fold closure and straddles the volcano-sedimentary contact between the Natel mafic volcanics and metasediments of the Clarkie Formation, predominantly composed of wackes, with intercalated conglomerates, silicate iron formations and minor mafic flows. A felsic to intermediate volcanic-tuff sequence also occurs in the southern part of the property. The Clarkie volcano-sedimentary assemblage is injected by small dioritic and gabbroic-ultramafic intrusions.

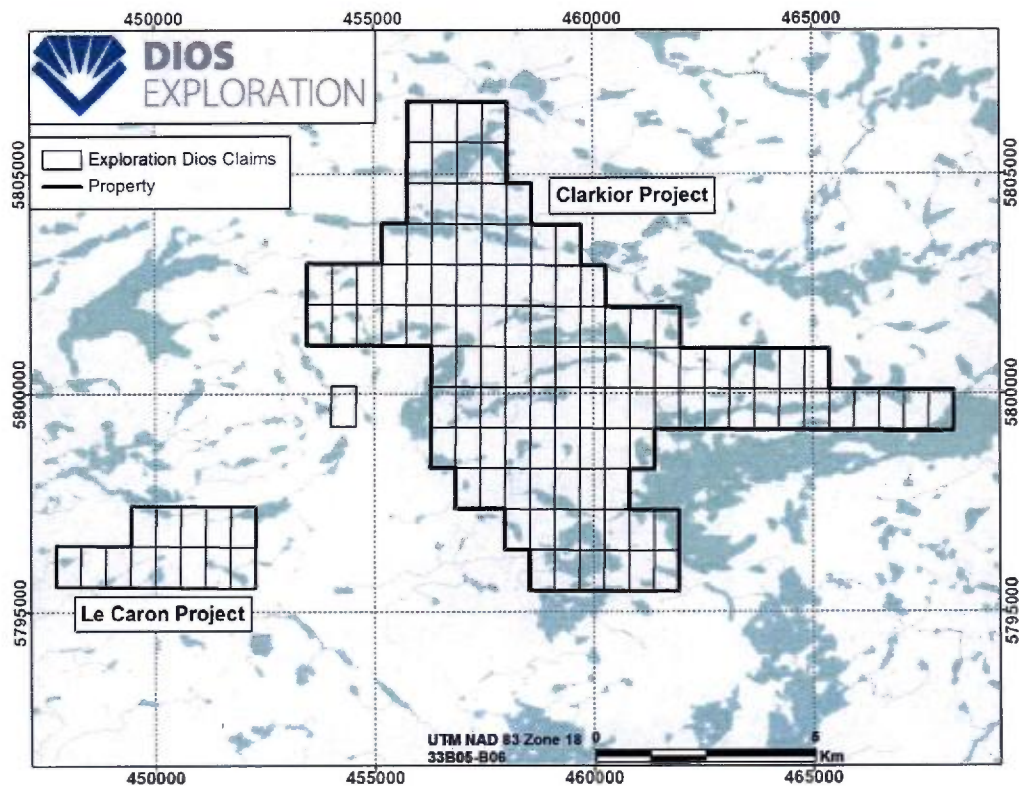
The project is located approximately 45 kilometers southeast of Goldcorp's Eleonore gold mine, containing proven and probable mineral reserves of 28.32 million tons grading 5.87 g/t Au, for a total of 5.35 Moz ([Goldcorp website, 2016](#)). It is also situated 18 kilometers northeast of Eastmain Resources Clearwater gold deposit, reported to contain a combined measured & indicated NI 43-101 resource of 7.225 Mt grading 4.09 g/t Au with 951,000 ounces of gold, and inferred resources of 5.072 Mt grading 3.88 g/t Au with 633,000 ounces. About 30 kilometers northwest of the Clarkior property, recent drilling conducted by Sirius Resources on the Cheechoo project intersected several gold zones hosted both within metasedimentary rocks and tonalite, grading up to 12.1 g/t Au over 20.3m in hole 52. This discovery generated a renewed interest for Eleonore-style metasedimentary-hosted gold deposits in the area. Consequently, Dios increased its land holdings in the 33B05 & B06 map sheets southeast of the Cheechoo property.

During summer 2016, a first six-day reconnaissance mapping and prospecting program was carried out on the Clarkior property (plus mobilization-demobilization time). Dios successfully discovered gold mineralization in silicified metawackes with disseminated 1-2% pyrite. The Waky showing returned 1.66, 1.28 & 1.22 g/t Au from outcrop and subcrop samples clustered 80 m from each other. This report aims to describe the results of this exploration program.

## 2. PROPERTY OVERLOOK

The Clarkior property is composed of 114 contiguous map-designated claims, wholly-owned by Dios Exploration, covering a total area of 59.98 km<sup>2</sup> (Table 1 and Annex 1). All claims are located in the 33B05 and 33B06 NTS sheets (Figure 1). Map-designated claims were gradually acquired between 2010 and 2016. The claims are valid for a period of two years and renewable. This land is classified as Class-III according to the James Bay Agreement and does not carry any restrictions concerning mining or exploration activities. The Clarkior property is located within the VC37 trap-line and its tallyman is Ted Moses from Eastmain ([www.cmeb.com](http://www.cmeb.com)).

Figure 1 : Claim Disposition Map



**Table 1: Clarkior K2 Project Mining Titles (28-10-2016)**

<i>Property</i>	<i>Cells (CDC)</i>	<i>NTS Sheets</i>	<i>Area Sq. Km</i>	<i>Easting UTM Nad 83</i>	<i>Northing UTM Nad 83</i>
<b>Clarkior</b>	114	33B05-B06	59.98	453500- 468200	5795500- 5806600

### **3. LOCATION, ACCESS, CLIMATE, PHYSIOGRAPHY & INFRASTRUCTURE**

The Clarkior property is located approximately 30 kilometers northeast of Hydro-Quebec Eastmain-1 dam, 45 kilometers southeast of Goldcorp's Eleonore gold mine and 18 kilometers northeast of Eastmain Resources Clearwater gold deposit (Figure 2). It is also situated 325 kilometers northeast of Matagami, 285 kilometers northwest of Chibougamau and 80 kilometers northeast of Nemaska Cree village (Figure 3). The property is only accessible by helicopter. It can be worked all-year round from Km 381 Relay camp (Societe de Developpement de la Baie James) and its heli-base, located about 95 kilometers west. Accommodations are also available at Nemaska village, Nemiscau or Eastmain-1 camps.

The physiography of the Clarkior property is dominated by moderate hills and lakes. Bedrock exposure is generally good. Rare vegetation is sparse to moderate consisting of typical north Canadian Shield black spruces, jack pines, moss, Kalmia and Labrador tea. Extensive burnt areas cover the property. Field season is commonly between the beginning of June and mid-October. The climate is typical of the James Bay with temperate to sub-arctic conditions. Average summer temperatures vary from 15 to 25°C and from -20 to -35°C during winter.

Figure 2 : Clarkior Property Location

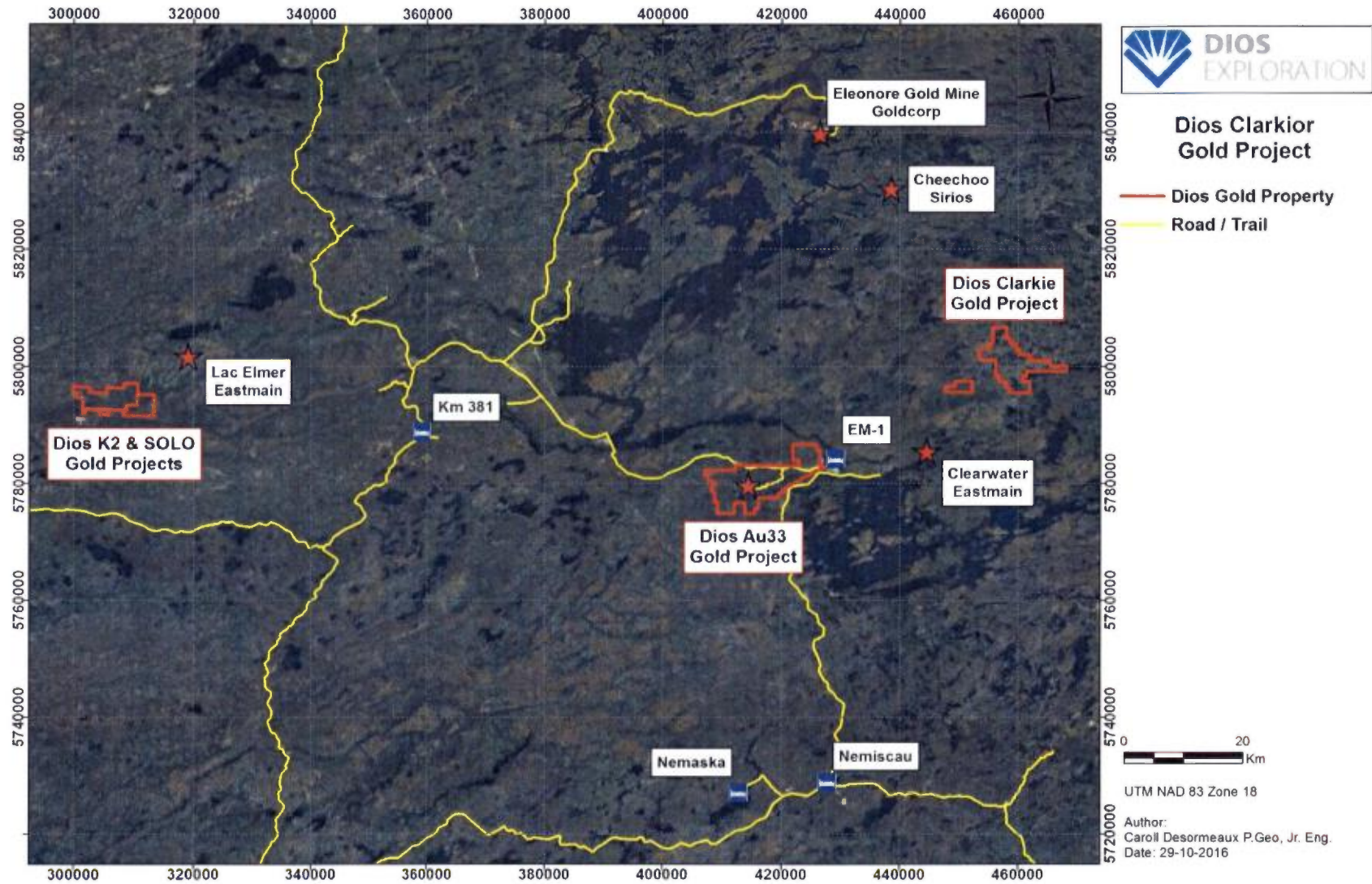
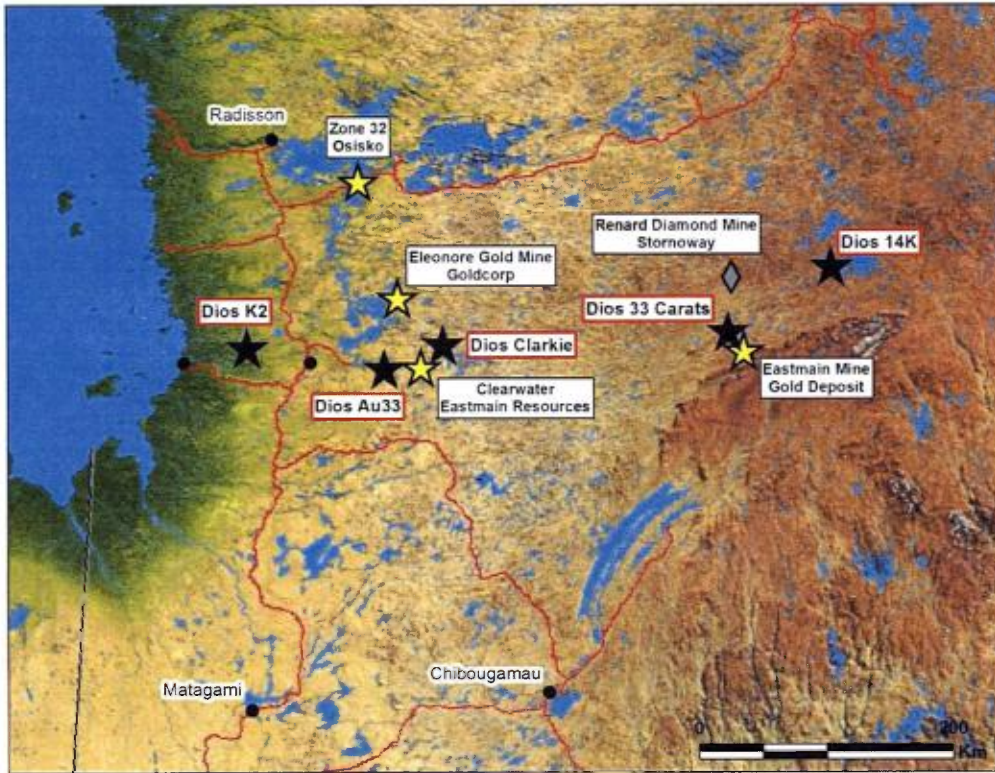


Figure 3 : Dios Gold Projects in James Bay

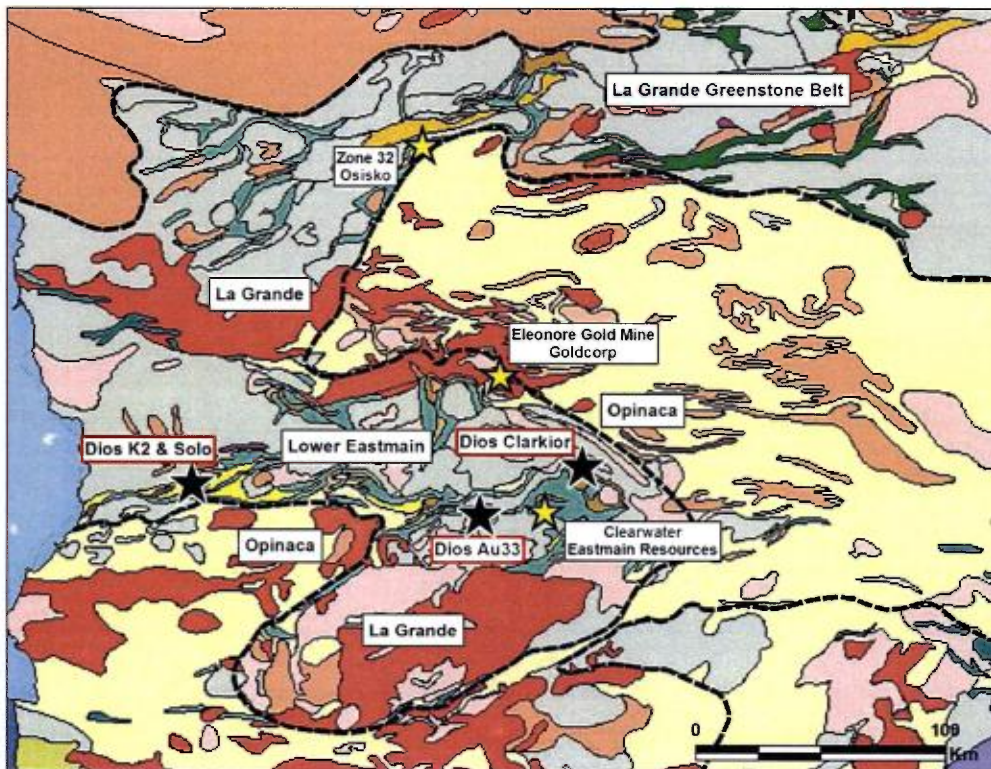


## 4. GEOLOGICAL SETTING

### 4.1 Regional Geology

The Clarkior property is located in the eastern part of the Archean Lower Eastmain Greenstone Belt (LEGB). The LEGB lies within the southern part of the La Grande volcano-plutonic sub-province, which is surrounded by the younger Opinaca metasedimentary sub-province (Figure 4).

Figure 4 : Regional Geology and Sub-provinces (modified from Hocq, 1985)



The La Grande sub-province (2752 to 2696 Ma) is composed of syn- to late-tectonic plutonic rocks and two major greenstone belts: the La Grande (LGGGB) and the Lower Eastmain (LEGB). The Opinaca sub-province (2700 to 2648 Ma) comprises paragneisses, migmatites and granitic rocks, representing exhumed metasedimentary basins and metamorphic domes. The Clarkior



property is located 20 km west of the interpreted contact between these geological sub-provinces, mostly marked by the transition from metasedimentary rocks to granitic and metamorphic domains. Metamorphic grade ranges from greenschist to amphibolite facies for the La Grande and from amphibolite to granulite facies for the Opinaca.

The Lower Eastmain greenstone belt is about 250 kilometers long, 10 to 70 kilometres wide, and extends east-west from James Bay shores to central Quebec along the Eastmain River (Figure 6). The LEGB comprises four main volcanic cycles: Kauputauch (2752-2739 My), Natel (2739-2720 My), Anatacau-Pivert (2720-2705 My) and Komo-Kasak (<2705 My) formations (Moukhsil & al., 2002). Two periods of sedimentation overlie the volcanic cycles: the Wabamisk, Anaconda and Clarkie formations (2703-2697 My) and the Auclair formation (<2697 My). The top of the Wabamisk Fm is defined by the presence of polygenic and monogenic conglomerates primarily composed of tonalitic-dioritic pebbles. The LEGB has undergone several episodes of magmatic activity. Intrusions are subdivided in three categories: synvolcanic (2747 to 2710 Ma), syntectonic (2710-2697 My) and late- to post-tectonic (<2697 My). Finally, Proterozoic diabase dykes crosscut the intrusive and supracrustal rocks of the LEGB.

Three main phases of regional deformation are recognized within the Middle-Lower Eastmain region (Boily & Moukhsil, 2002). The first (D1) is characterized by an E-W trending schistosity (2710-2697 My); the second (D2) is associated with a NE-SW, locally N-S schistosity (2668-2706 My); the third (D3) is a WNW-ESE to NW-SE schistosity and affects syn- to post-tectonic intrusions (<2688 My).

## **4.2 Lower Eastmain Gold Occurrences Compilation**

The Lower Eastmain district hosts numerous gold occurrences, as shown on DIOS compilation map (Figure 7). **Goldcorp's Eleonore gold mine** (8.44 Moz ounces in all categories) is located approximately 45 kilometers northwest of Clarkior property. In 2015, proven and probable mineral reserves of 28.32 million tons grading 5.87 g/t Au were measured, for a total of 5.35 Moz (Goldcorp website, 2016). The deposit is located a few kilometers south of the contact between the metasedimentary Opinaca sub-province and volcano-plutonic La Grande sub-province, representing a regional metamorphic gradient. It is hosted within metasedimentary

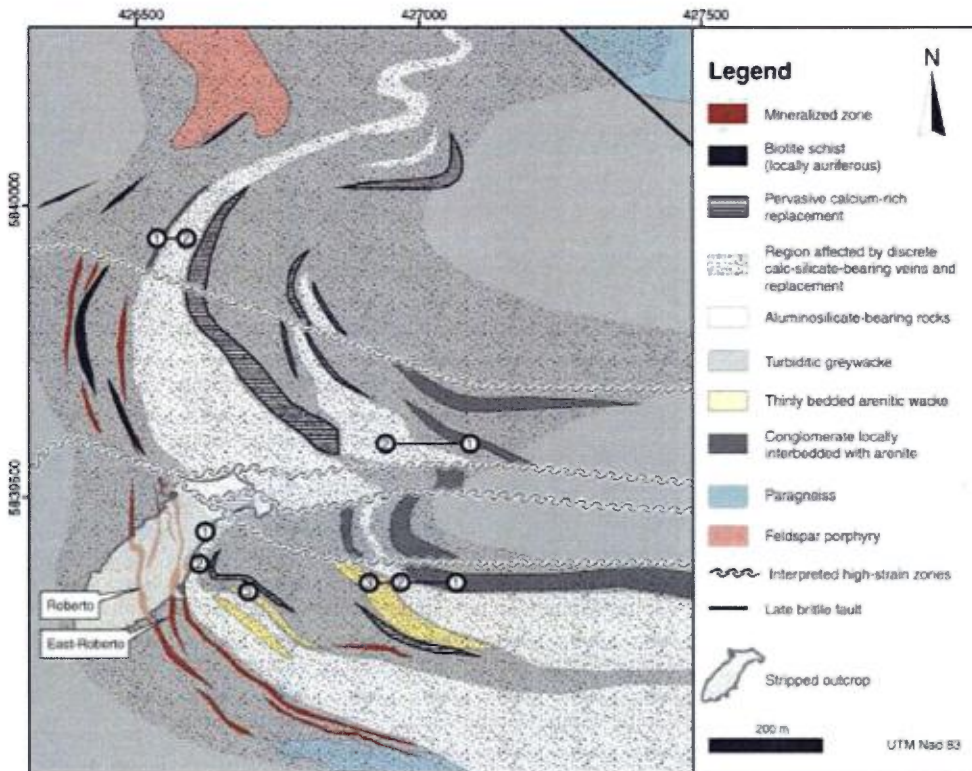
sequences of the Low Formation, part of the La Grande sub-province, along the northern edge of the Ell Lake dioritic/tonalitic intrusion. The Low Formation is composed of turbiditic greywackes, arenites, conglomerates, aluminosilicate-porphyroblast bearing rocks, biotite schist, minor banded cherty iron-formations and paragneiss. The sedimentary rocks evolve into pegmatite-bearing paragneiss to the north and to the west suggesting a steep metamorphic gradient proximal to the deposit.

The Eleonore deposit occurs within a subvertically plunging kilometer-scale F2 synformal anticline. The vertical extent of the mineralized system has been traced to 1500 m below surface. Ore zones consist of a series of sub-parallel decameter-size gold-bearing lenses with an overall true thickness of 5-6m, varying from 2 to 20 m. They are characterized by stockworks and replacement-style mineralization hosted by poly-deformed sedimentary rocks, usually thinly bedded aluminous greywackes (Figure 5). The stockworks comprise cm-dm quartz-biotite-arsenopyrite-pyrrhotite and quartz-dravite-arsenopyrite veins, locally containing visible gold. High-grade regions of the mineralized stockworks (>20 g/t Au) are hosted within replacement zones characterized by the presence of high amounts of fine-grained microcline (potassic alteration), disseminated brown tourmaline (dravite) and arsenopyrite, giving a pinkish-brown color to the rock. The presence of abundant microcline and relatively high K<sub>2</sub>O concentration suggests a potassic alteration of the aluminosilicate-bearing hanging wall rocks. Gold mineralization is associated with a large hydrothermal system characterized by distal calcium-rich metasomatic replacement zones and veins; and proximal quartz-microcline-dravite-biotite-arsenopyrite-pyrrhotite replacement zones. Calc-silicate bearing assemblages form layers of sericitized and saussuritized feldspar, clinozoisite, biotite porphyroblasts locally retrograded to chlorite and/or phrenite, and minor Ca-rich garnet.

Based on the style, gold content, mineralogy and stratigraphic position, the deposit can be divided in two distinct zones: Roberto and East Roberto. A low grade disseminated zone (up to 1.06 g/t Au/ 123.3m; 2.9 g/t Au/ 43.5m) associated with muscovite-sericite alteration was also outlined north of the main deposit. The western part of the East Roberto zone consists of hydrothermal breccias containing angular mm-cm pinkish-brown fragments of altered metagreywacke cut and replaced by quartz-actinolite-diopside veins. Most of the mineralized zones and alteration systems are deformed by a D<sub>2</sub> deformation event, while some of the gold mineralization is controlled by related S<sub>2</sub> structure. The deposit has undergone intense strain

and metamorphism related to D<sub>2</sub>, which suggests that gold mineralization was emplaced prior to and/or early during the D<sub>2</sub> deformation event.

**Figure 5 : Geological Setting of the Eleonore Deposit (modified from Ravenelle & al. 2010)**



Reconnaissance work on the **Ell Lake** porphyry-style gold-copper-silver occurrences, found by Noranda in 1964, led Virginia Mines to the discovery of Eleonore. Mineralization was composed of quartz-pyrite-chalcopyrite veinlets and stockworks hosted within the Ell Lake dioritic-tonalitic intrusion, close to the contact with the metasediments. The initial Roberto zone discovery was made on a good I.P. signature coincidental with a MMI (soil) Au-As-Sb-B anomaly. Goldcorp 2008 tills program also confirmed a good Au-As-(Sb) signature down-ice of the Roberto zone (GM 65193).

**Sirios Resources Cheechoo** gold project is located about 15 kilometers southeast of Eleonore gold mine and 30 km northwest of Clarkior property. Recent drilling returned several gold intersections grading up to 12.1 g/t Au over 20.3m in hole 52, 15.61 g/t Au over 9.70 m (inc. 177.5 /0.8m), 7.24 g/t Au over 7.9m (inc. 27.3 /0.8m), 6.9 g/t Au over 6.5m (inc. 21.5 /1.1m), 4.35 g/t Au over 20.5m (inc. 75.65 /1.0m), 4.1 g/t Au over 5.6m (inc. 28.0 /0.5m) and 1.09 g/t Au over 56.0m (inc. 25.9 /1.0m). The mineralization intercepted in hole 52 occurs at the contact between metasedimentary rocks and a felsic intrusion described as a leucocratic tonalite-trondhjemite. Visible gold is associated with numerous folded mm quartz-feldspar veinlets in both metasediments and tonalite. Several mineralized zones were also intersected by drilling in the tonalite. High grade metric intervals are usually associated with the presence of visible gold grains, comprised in larger low-grade intersections. Gold mineralization is hosted in a silicified and albite-rich fractured tonalite, with small quartz veins and a very low sulfides content (<1% pyrite-pyrrhotite-arsenopyrite±scheelite). Variable amounts of amphibole, biotite, chlorite, diopside and tourmaline are observed. A preliminary study of thin sections has shown that most of the gold seems to occur as free coarse grains outside the sulfide minerals (Sirios Resources website, 2016).

The Eastmain Resources **Clearwater gold deposit** is reported to contain a combined open pit and underground measured & indicated NI 43-101 resource of 7.225 Mt grading 4.09 g/t Au with 951 000 ounces of gold, and inferred resources of 5.072 Mt grading 3.88 g/t Au with 633 000 ounces (Eastmain Resources website, 2016). The Clearwater deposit is located at the intersection of three major structures, on the southern limb of a F2 anticlinal fold closure plunging to the west. The deposit has been traced over two kilometres in length and to a vertical depth of 900 metres. The main 450 West Zone occurs within a 200m wide deformation corridor bounded to the north (footwall) by felsic volcanic rocks and to the south (hanging wall) by a felsic porphyry dyke swarm. Gold mineralization consists of Au-(Te-Bi-Mo-Ag) bearing quartz-carbonate-tourmaline veins with less than 3% sulphides consisting of pyrite, pyrrhotite, chalcopyrite and rare molybdenite, primarily hosted by high iron-tholeiitic mafic volcanics of the Eau Claire formation. Tellurides are also commonly observed in association with gold.

The Eastmain Resources **Reservoir Gold-Copper C-52 Zone** is located 45 km west of Clearwater and 60 km southwest of Eleonore gold deposits. The C52 Zone consists of two or more gold-bearing horizons extending over an area of 2100m long by 150m wide. Mineralization comprises

disseminated pyrrhotite-pyrite-chalcopyrite associated with biotite-actinolite and local carbonate alteration, mainly hosted within and near the contact of feldspar porphyry and mafic volcanic rocks (GM 63558). Mineralization is concentrated in thin bands and within a dense micro-fracture system filled with sulphides, magnetite and chlorite. Wide zones of potassic (biotite) alteration and sodium (albite) enrichment, cross-cut by late quartz-calcite veinlets, are observed in both porphyry and adjacent mafic volcanic rocks. A copper-gold porphyry-related model was initially proposed for the C-52 Zone (Gauthier & Larocque, 1998).

The **Osisko Wabamisk-Anatacau project** (formerly held by Virginia Mines before the merging with Osisko Royalties in 2015) hosts numerous gold occurrences. They are primarily hosted within metasedimentary rocks of the Auclair formation, forming a large crescent-shape band on the property, and volcano-sedimentary sequences part of the Wabamisk and Anatacau-Pivert formations. They are frequently associated with gold-in-till anomalies containing high count of gold grains. Metasedimentary-hosted Eleonore-type, orogenic lode gold and Cu-Au porphyry-related deposits are targeted. Several Cu-Au +/- Ag quartz veins are spatially related with feldspar porphyry dykes and/or intrusive bodies on the property (GM 68139). However, no clear genetic relation has yet been established.

The **Mustang Zone** consists of a significant gold system characterized by a field of quartz veins with visible gold, occurring in a sequence of folded metawackes over 900m in strike length. Centimeter-to meter-scale quartz veins are locally accompanied by an intense silica-sericite-sulphide alteration envelope up to a few meters thick. The **Mustang Vein** is the principal gold-bearing structure and was exposed by trenching over a strike length of 425m. The vein is oriented WSW-ENE and dips steeply (75-80°) to the north. Many gold grains are observed along its entire length. Although sulphides are not generally abundant in the vein, the alteration envelope contains up to 5% disseminated arsenopyrite and a few gold grains. Channel samples spaced at approximately equal intervals across the Mustang vein yielded up to 23.28 (11.13 cut) g/t Au over 4.6m and 9.66 g/t Au /4.0m. Variable drilling results were also obtained, given the free and coarse nature of gold in the Mustang Vein. The area where the Mustang Vein sharply curves returned the best results including 22.65 g/t Au /2.25m (Hole WB-13-004) and 3.93 g/t Au /2.8m (Hole WB-13-005).

The **Contact, Isabelle (Opinaca), Bull & Chino Zones** are located approximately 5 km west of AU33W property limits. They are hosted along a strategic contact between mafic volcanics and

sediments part of the Anatacau-Pivert formation, which represents an ENE-WSW oriented auriferous corridor extending over 1.5km. The **Contact Zone** consists of cm-dm quartz veinlets with arsenopyrite sub-parallel to the regional schistosity and stratigraphy, hosted within intermediate tuffs and mafic volcanics (GM 63436, GM 66688). Gold values up to 567 g/t Au (grab), 1.1 g/t Au /8.0m (channel) and 4.73 g/t Au /3.1m (DDH OPI-06-16) were obtained. The **Isabelle Zone** comprises quartz veinlets with 3-5% pyrite and sericite hosted within sediments just above the basal conglomerate, north of the contact with mafic lavas. Drill intersections yielded up to 31.44 g/t Au /2.6m (DDH OPI-06-34). Located east of the Acotago fault, the **Bull Zone** assayed up to 1.52 g/t Au /13.6m (DDH OPI-06-37) and 2.11 g/t Au /7.25m (DDH OPI-06-47). Gold mineralization is hosted in silicified wackes cross-cut by quartz-carbonate-pyrite veinlets. Finally, the **Chino Zone** consists of a quartz-carbonate stockwork hosted in strongly deformed mafic volcanics. Gold mineralization is mainly associated with metric NW trending rusty quartz veins containing tourmaline, pyrite, arsenopyrite, pyrrhotite and rare chalcopyrite (GM 57823). Significant gold values up to 7.94 g/t Au /4.0m (channel) and 14.58 g/t Au /5.4m (DDH OPI-08-10) were obtained.

The **Isabelle (Wabamisk) Zone** consists of a series of parallel, steeply dipping, N-S striking laminated fault-fill quartz veins in a fine to coarse-grained greywacke. The gold-bearing veins are contained within a 10-20m thick envelope that has been exposed at surface over a strike length of 80m. Drill intersections yielded up to 46.5 (18.26 Cut) g/t Au /4.0m. Best surface channel sample results include 4.20 g/t Au /13.61m and 316 g/t Au /1.0m. Very little sulphides (less than 1% pyrrhotite, pyrite and chalcopyrite) are associated with gold mineralization. Visible gold is commonly observed. The greywacke is cross-cut by syn-deformation and syn-mineralization feldspar porphyry dykes, up to 4m thick. Some of the best gold grades occur in quartz veins cross-cutting the feldspar porphyry.

The **Goldcorp Wabamisk project** is located approximately 27km southeast of the Clarkior property. Several gold occurrences are hosted within the Natel volcanic formation and metasediments of the Auclair formation (GM 68190). The **GH showing** returned up to 3.4 g/t Au (grab), 8.26 g/t Au over 1.0m (channel) and 1.22 g/t Au over 10.0m (ddh). Gold-arsenic-antimony mineralization is associated with a small diorite porphyry. The showing is coincident with a strong As-Sb soil anomaly and a chargeability high. Mineralization is composed of arsenopyrite and stibnite associated with quartz veins or silica-sericite alteration zones within

metawackes, gabbro, and the diorite porphyry. On the same property, the **Dome showings** consist of multiple quartz-veins with arsenopyrite hosted in NE-SW oriented shear zones within dioritic to gabbroic dykes/sills and mafic volcanics.

Finally, the **Auclair project** (formerly Virginia Mines) hosts nine gold showings associated with arsenopyrite and silicate-sulphides iron formations. Drilling returned values up to 5.2 g/t Au over 4.00m (Golden Butterfly), 5.4 g/t Au /7.00m inc. 12.1 /3.00m (Ariane) and 1.15 g/t Au /18.00m. Mineralization is composed of pyrite-arsenopyrite-pyrrhotite and local visible gold associated with quartz veins, faulting and biotite-garnet-grunerite alteration, hosted in highly deformed banded iron formations interbedded with metagreywackes (GM 65075).

### 4.3 Dios Gold Occurrences

Located about 4 kilometers west of the Clarkior property, **Dios LeCaron project** hosts the **Conductor** showing (nad 83 18u 450240E/5796625N). It was discovered in 2010 by Dios during the follow-up of a gold-in-till dispersal train located in the 33B05 NTS sheet (Figure 8), composed of 12 samples (heavy mineral concentrates) greater than 100 ppb Au, including 3 samples over 1000 ppb Au (925, 1035 & 1160 ppb Au). Nine grab samples yielded gold and polymetallic assays between **2.9-37.3 g/t Au, 1.4-54.0 g/t Ag and up to 1.07% Zn & 1.75% Pb**. Channel sampling returned **2.77 g/t Au over 4.5 m inc. 8.1 g/t Au, 22.6 g/t Ag, 0.32% Zn & 0.31% Pb /1.0 m; 9.64 g/t Au /0.7m; 4.9 g/t Au, 14 g/t Ag, 0.28% Pb, 0.15% Zn/ 1.0 m & 1.92 g/t Au over 2.0 m**. Mineralization consists of several cm-dm quartz veins containing disseminated pyrite-arsenopyrite-sphalerite-galena injected within mafic volcanics. The veins are oriented N270° and dip 65° north, sub-parallel to the general foliation observed in this area. The conductor showing is associated with a strong ESE-WNW trending I.P. anomaly extending over 1750m.

Dios **Au33 gold project** is located approximately 35 kilometers southwest of Clarkior property. From 2010 to 2016, exploration work uncovered several gold showings within the Archean Mitsumis tonalitic-dioritic intrusive complex. The Heberto Zone was first exposed by mechanical stripping in 2012 and channel samples assayed up to 5.18 g/t Au over 5.0m. 2015-2016 drilling

programs outlined a NNW-SSE gold-bearing structural system with a minimum strike length of 500 m, spatially associated with a diorite dyke. The **Heberto Zone** returned the best drill intersections, with **2.13 g/t Au over 22.90 m (inc. 4.79 /8.65 m)**, **2.00 g/t Au over 22.00 m**, **1.15 g/t Au over 64.00 m (inc. 3.65 /13.00 m)**, **0.63 g/t Au over 41.50 m (inc. 2.05 /7.25 m)**, **2.23 g/t Au over 7.75 m**, **1.88 g/t Au over 7.05 m (inc. 3.93 /3.35 m)** and **1.65 g/t Au over 8.10 m**. Other sub-parallel potassic-altered structures were also intercepted and yielded up to **1.63 g/t Au over 18.45 m (inc. 2.47 /10.0 0m) from the West shear**, **3.23 g/t Au over 3.70 m**, **3.46 g/t Au over 2.20 m**, **0.75 g/t Au over 14.75 m (inc. 2.89 /3.00 m)** and **2.53 g/t Au over 3.00 m**.

Auriferous mineralization is concentrated in at least three sub-parallel SSE trending potassic-altered shears (3-30 m wide) moderately dipping 30-50° west, hosted both in the tonalite and diorite dyke. The main Heberto Zone has been traced over a minimum strike length of 250 m and vertical depth of 100m. Significant gold intercepts (> 1-2 g/t Au over tens of meters) are usually at or near the contact between the tonalite and diorite dyke. Typical mineralization consists of traces-5% pyrite, traces-1% magnetite and rare chalcopyrite associated with quartz stringers and silica-biotite-microcline ±carbonate-sericite alteration. Mineralized structures are locally enriched by higher-grade quartz-pyrite ±magnetite stringers/veins.



Figure 6 : Lower Eastmain Greenstone Belt Regional Geology & DIOS Gold Properties

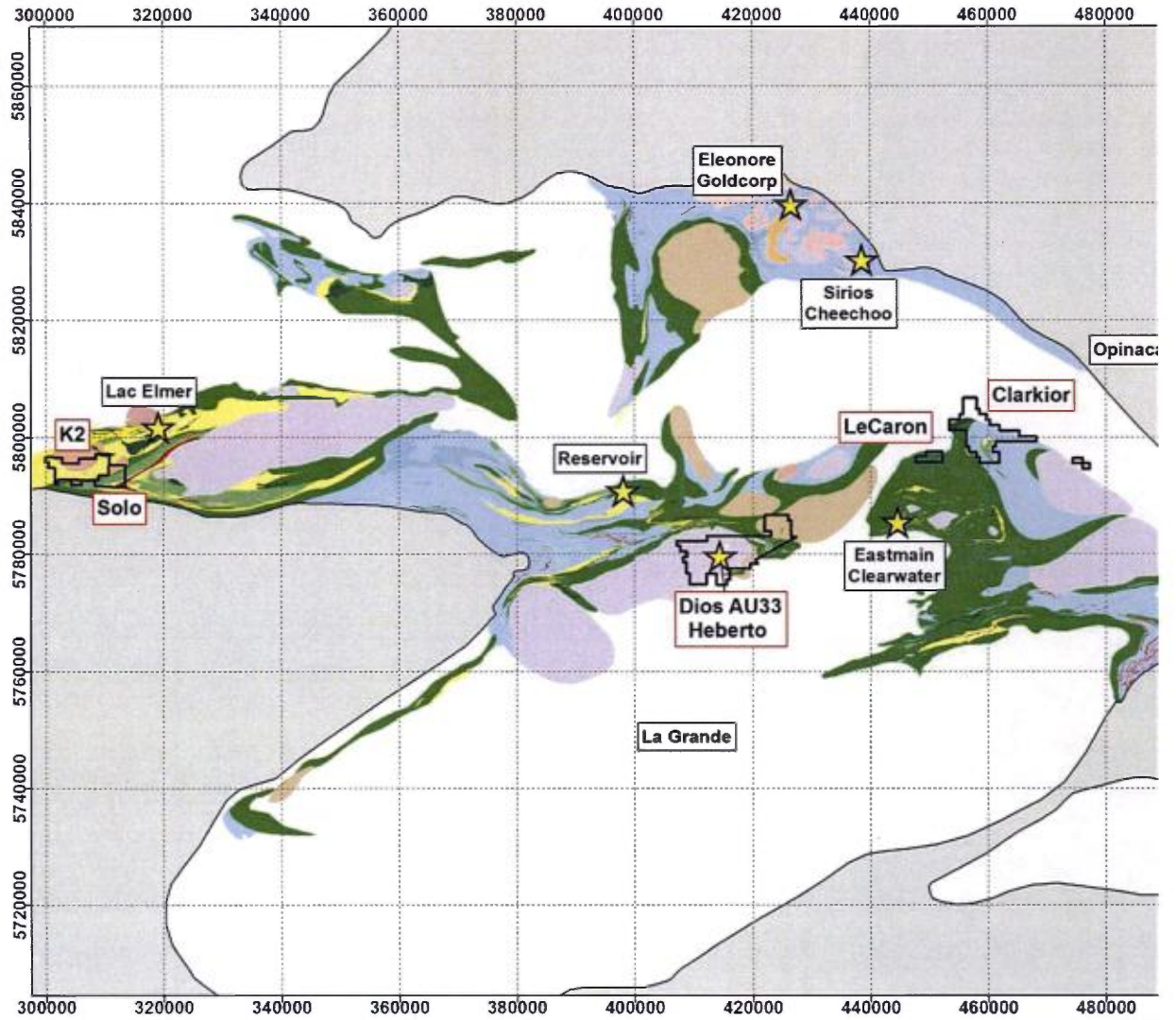


Figure 7 : Lower Eastmain Gold Occurrence Compilation

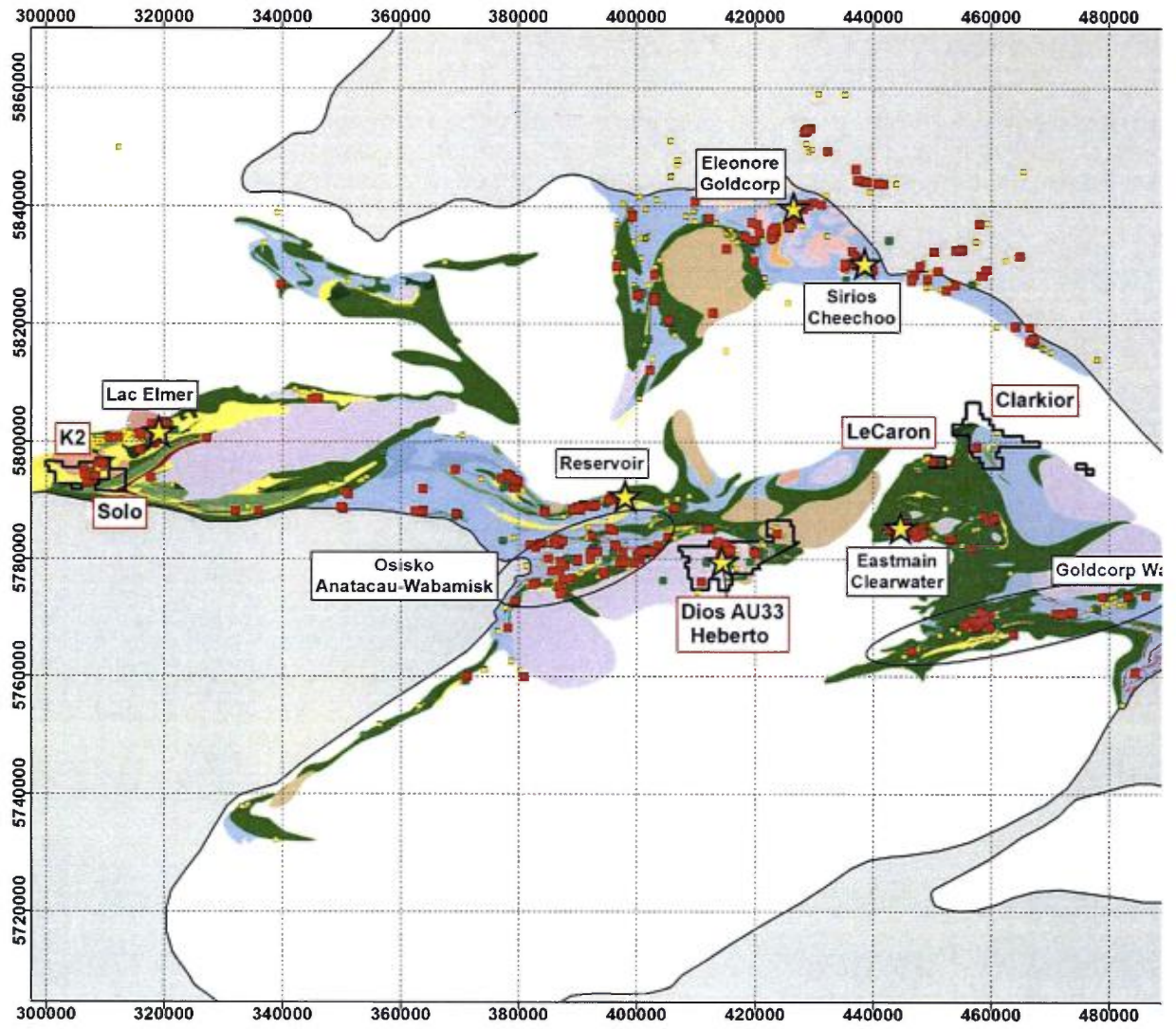
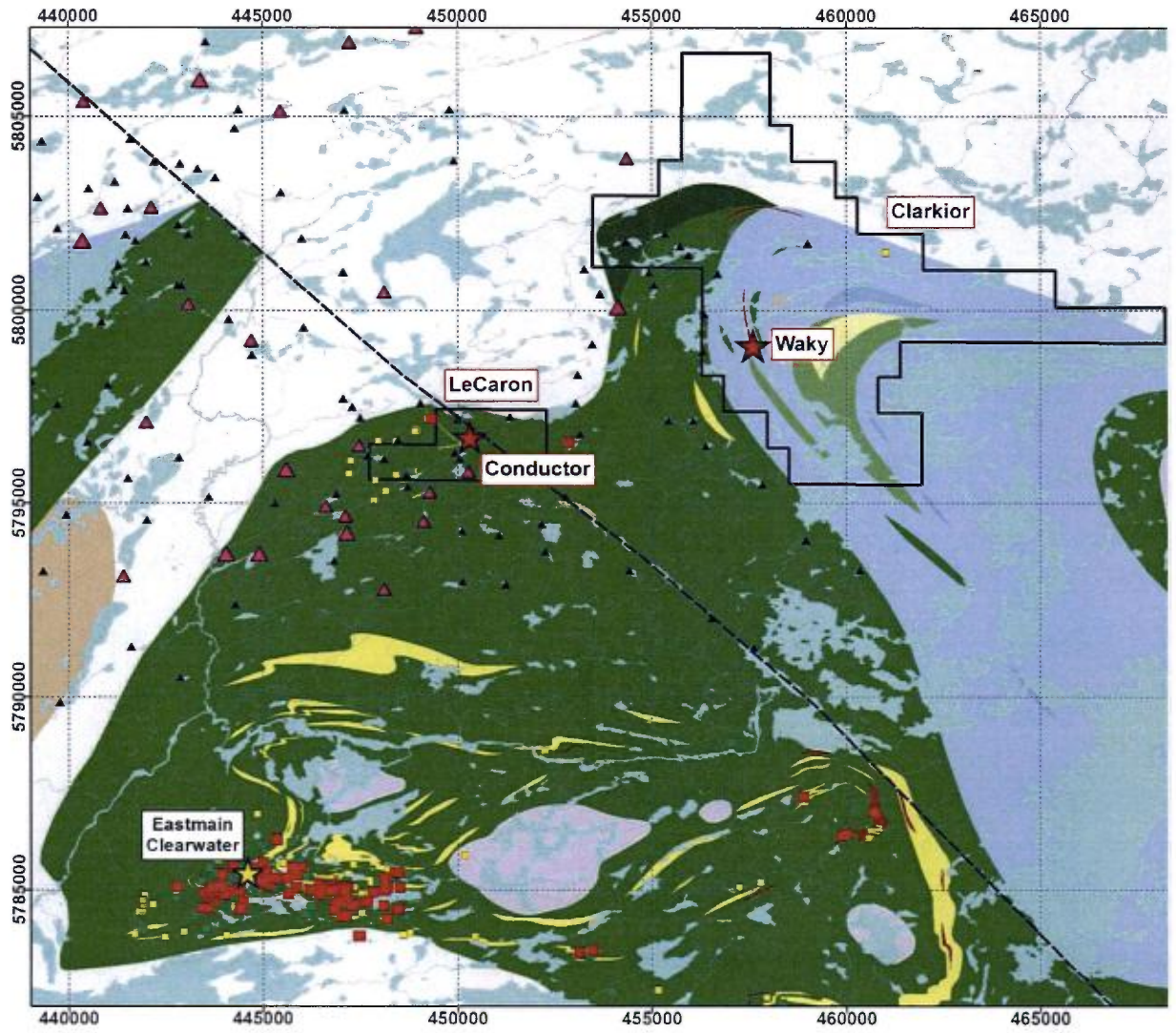


Figure 8 : Clarkior & LeCaron Geology



#### 4. Clarkior Property Geology

The property is centered on a regional synformal fold closure and straddles the volcano-sedimentary contact between the Natel mafic volcanics and metasediments of the Clarkie Formation, predominantly composed of wackes, with intercalated conglomerates, silicate iron formations and minor mafic flows. The Clarkie sedimentary Basin is dominated by a folded (syncline) fine to medium-grained wackes/ conglomerates sequence inter-bedded with minor mafic volcanics and silicate iron formations. A (100-300m thick) lapilli (& block) felsic/intermediate volcanoclastic unit topped that mixed sequence. The Clarkie volcano-sedimentary assemblage is injected by small dioritic and gabbroic-ultramafic intrusions.

A felsic to intermediate volcanic-tuff sequence also occurs in the southern part of the property. The volcanoclastic unit is composed of 20-30% centimetric lapillis & 1-5% bombs (of quartz-phyric rhyodacite composition) in an intermediate to felsic lightly silicified fine-grained matrix interbedded with rhyodacite and andesite massive flows (between nad83 18u 459000-460500e/ 5798500-5800000). The lapillis show 1:3-4:4-6 flattening ratios. No sulfidation nor significant alterations (silicification-sericitisation-chloritisation-ankeritization) were observed within the upper volcanoclastic unit. A NE-oriented magnetic gabbro sill is injected along the upper volcanoclastic unit that outcrops well along ridges.

Outward the margins (or the base) of the sedimentary basin, the metamorphic grade increases as indicated by the amount of mm aluminosilicates (3-20% sillimanite and 1-5% garnet) porphyroblasts and the muscovite (2-10%) content. The dominant lithic wackes generally contain 3-10% (up to 20%) biotite and may be locally silicified with traces to 3% disseminated pyrite/pyrrhotite particularly near the contact with mafic units and iron formations (457000-459000e/5799000-5800500n). Small dioritic bodies intruded these wackes near nad83 18u 458269e/ 5800299n and 457625e/ 5800580n.

Intercalated in the wackes sequence, a polygenic conglomerate marker-unit contains 20-30% rounded centimetric tonalitic-dioritic and/or sandstone clasts in a finer-grained quartz-feldspar rich matrix (nad83 18u 459000-461000e/ 5800000-5800500n). The plurimetric conglomerates are not mineralized (no sulfides).

Previously described as paragneiss (sigeom), silicate iron formations are composed of 50-70% olive/dark green amphibole (grunerite), 20-30% quartz; 1-10% biotite, 1-7% pyrrhotite (pyrite), tr-5% garnet, tr-1% magnetite. They are well oxidized (rusty orange gossans over a 2km-strike length) and very lightly magnetic in northern limit of the basin (best exposed at nad83 18u 457000-459000e/5802400-600n). Their thickness varies from one to forty meters. Adjacent metric fine-grained mafic volcanic units are locally silicified with tr-3% pyrite (pyrrhotite).

A metric to plurimetric peridotite sill/ magnesian basalt unit was observed above the silicate iron formation within the sedimentary sequence. In altered surface, it shows a characteristic irregularly altered/ "ropy" brownish patina. When broken, it is fine-grained, waxy light green, weakly magnetic and lightly serpentinized and carbonatized. It commonly hosts a well-developed joints set, locally injected by milky quartz veinlets.

Previously described as a diorite, a 3x1km gabbroic intrusion injected the Natel mafic volcanics (nad83 18u 454000-457000e/5802000-5803000n) to the NW of the Clarkie sedimentary basin. The gabbro is coarse-grained and is composed of 50-70% amphiboles, 40-50% plagioclases, 1-5% biotite, trace-1% magnetite. It is very poorly foliated and not altered (nor mineralized). It is well outlined by a magnetic low.

Figure 9 : Clarkior Property Geology

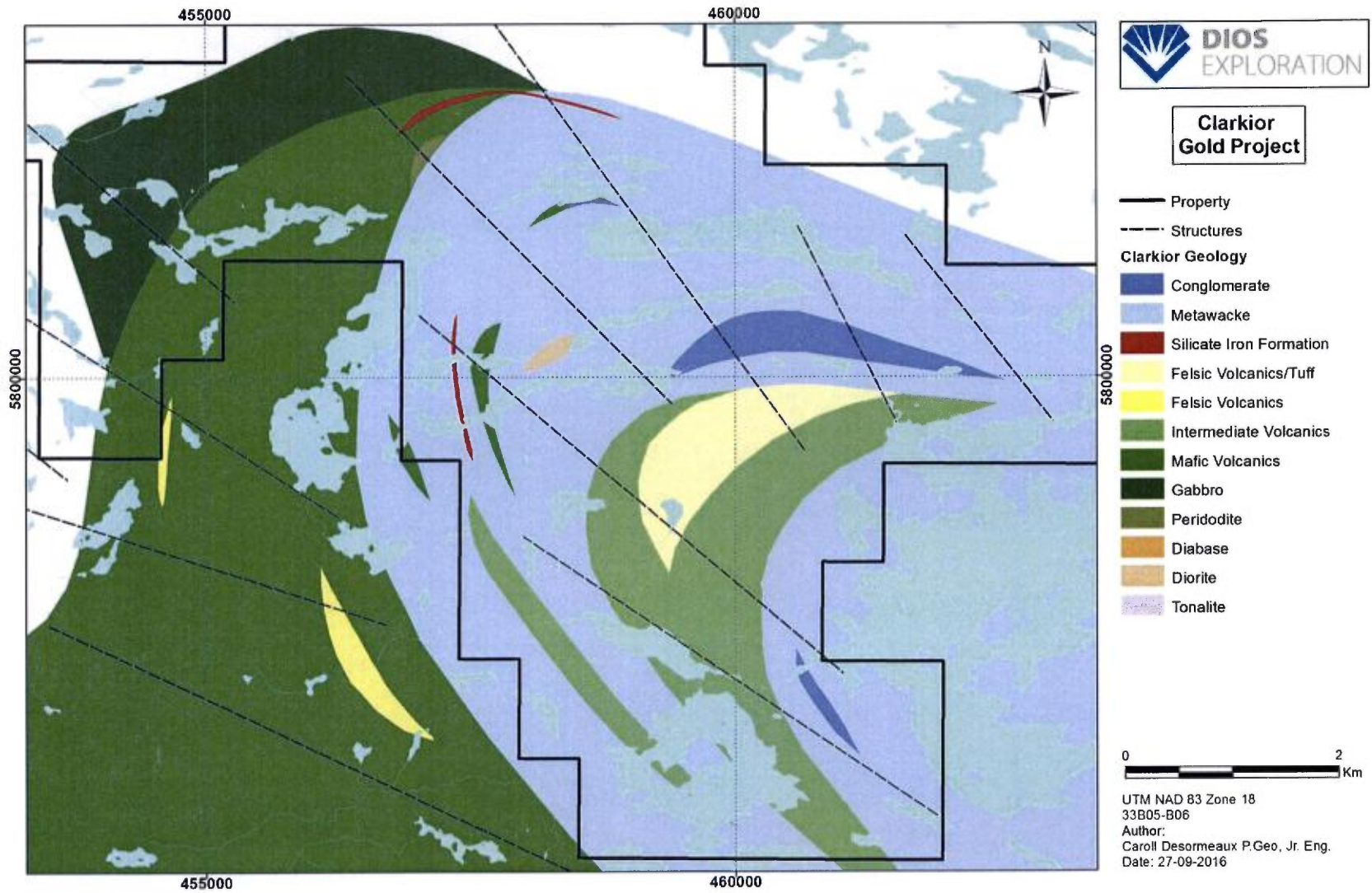
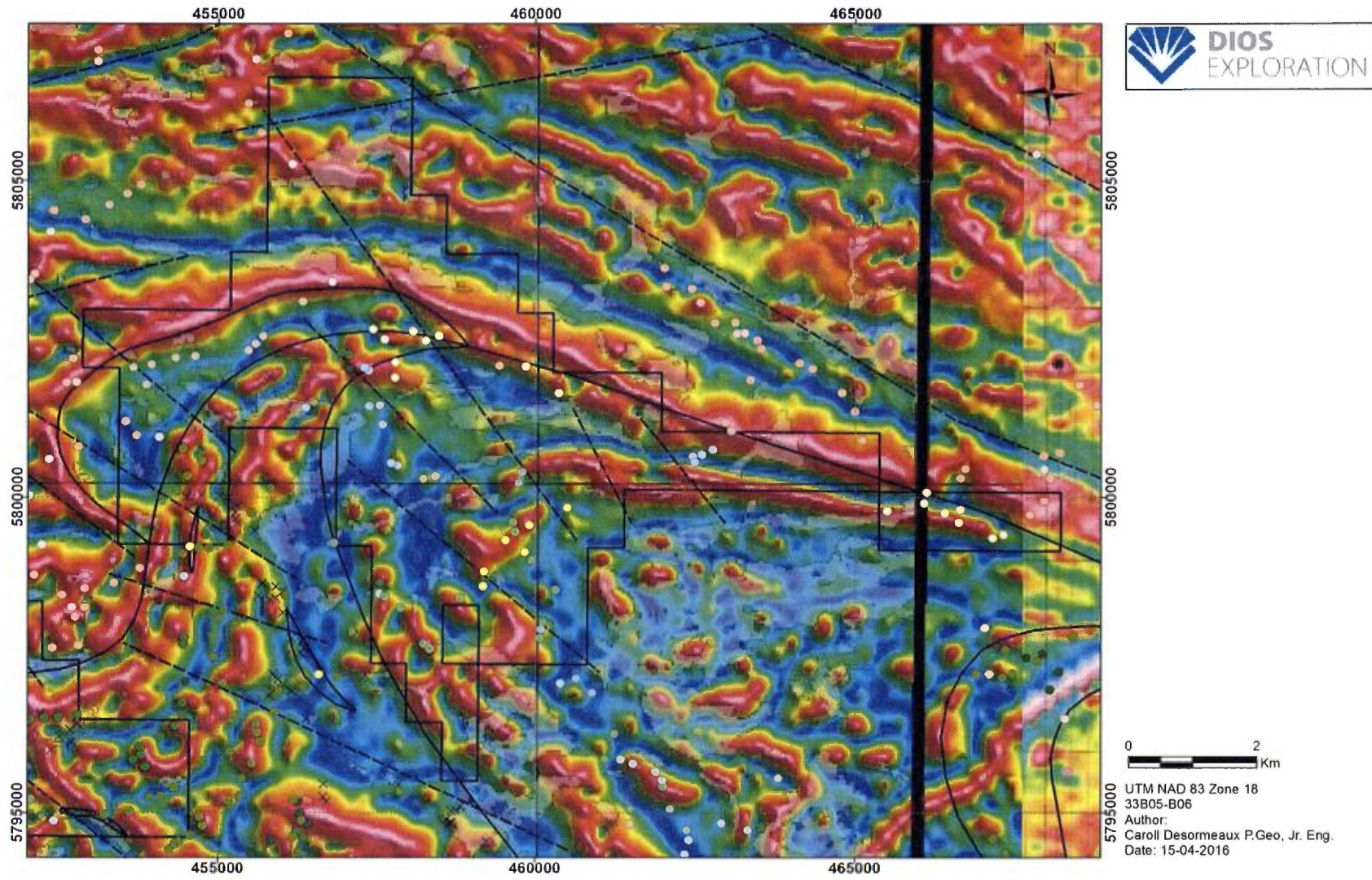


Figure 10 : Clarkior Property Geology & Magnetic 1st Vertical Derivative Map



## **5. EXPLORATION HISTORY**

In 1964, Eades carried out regional mapping over the James Bay territory for the GSC. In the 1970s, half-mile spaced federal aeromagnetic survey was flown over the region.

In 1972-73, INCO completed prospecting, mapping and ground magnetic/VLF surveys that were followed by 20 short diamond drilling holes on its LAC CARON project covering the Natel volcanics (GM 27879, GM 28792, GM 29504).

In 1975, SDBJ (Societe de Developpement de la Baie James) completed two-mile spaced lake sediment geochemistry survey over the region (GM 34035 @ 34039).

In 1995-96, prospector Frigon (& associates) completed beep-mat prospecting and on iron-formation and volcanics in the southeastern part of the 33B/05 (GM 56842). Two trenches were blasted in the vicinities of Nad83 18u 435031E, 5792225N and 436031E, 5792475N. About eight samples were collected, and none returned significant gold assays.

From 1998 to 2010, the Quebec government carried out regional mapping program over the Lower Eastmain region (MB-98-10, RG-98-14 & 15, RG 1999-04, RG2000-04, RG2001-08, ET 2002-05 & 06, 2002-05& 06, RP2007-05, RG2010-02).

In 2005, INCO carried out a ground Mag-UTEM (49km) survey that outlined several conductors. It also completed 3 drill holes for 531m targeting Ni-Cu (GM 61623, GM 62830) sulphides gossans within Natel volcanics in the SW of the 33B/05 (and of LeCaron Lake).

In 2006-2008, Virginia Gold Mines owned claims over the northern part of the present **CLARKIE** property, it probably conducted reconnaissance prospecting but no works were filed at the government (Archer, 2006). During the same period, Dianor owned claims



over the conglomeratic units within the Clarkie (33B/04-05) and carried out diamond exploration on its Ekomiak VIII project (GM 64059).

In 2007-2008, Everton and NQ exploration carried out prospecting and till programs in the area (GM 62996, GM 63761, GM 64327).

In March 2010, **DIOS** completed a 8,300 km-lines airborne magnetic survey on its Au33 project. From this data, an independent geophysist (C. St-Hilaire, 2010a, b, c) outlined 114 magnetic targets for kimberlite. In June 2010, 167 additional heavy mineral samples were collected on the Au33 project and were processed for kimberlite indicator minerals and gold by IOS Geoscientifiques at their Saguenay laboratory, Quebec. The survey confirms a 1-2 km by 6-7km gold glacial dispersion train (12 samples) located down-ice of the Conductor and Fallara (quartz veins with disseminated sulfides in volcanics) gold showings. The concentrates of the heavy minerals from this dispersion train yielded 4 samples (25%) > 0.6 g/t Au including 0.666, 0.925, 1.035, 1.160 g/t Au. During the same summer, **DIOS** completed mapping-prospecting in the vicinities of the Fallara and LeCaron showings, as well as on kimberlite magnetic targets. The Conductor gold showing was discovered and returned up to 37.3 g/t Au in grab-samples. In October 2010, a total of 34 km of induced polarization (dipole-dipole; a=25m, n=1-8) was complete by Abitibi Geophysics on a 5km by 1.5 km grid. The interpretation of the data outlined 6 first-priority conductors that are possibly associated with veins and/or disseminated sulphides as observed at the « conductor » showing. The lateral extensions of theses geophysical conductors generally vary from 1 to 2 km in length. Fourteen other second-priority conductors were also identified as well as several graphitic zones.

In 2011, **DIOS** completed a two weeks-reconnaissance (mapping & prospecting) program on the **LECARON** project. It particularly targeted the former INCO EM anomalies coincidental to sulphides (1-20% PY-PO-MG-QZ.V) gossans within the volcanic

sequence located east-northeast of the LeCaron showing. **DIOS** 2011 sampling did not returned anomalous metals contents from these gossans.

In 2012, additional till sampling located up-ice of the previous anomalies yielded 0.921 g/t Au; additional prospecting were done on Shadow and LeCaron projects.

In 2014, one week prospecting was completed over the Au33W gold project, as well as one day re-check on the Shadow best gold soil (humus) anomalies.

In 2015-2016, **DIOS** completed 20 drill holes for 4000meters over its AU33W gold project (Desbiens & Desormeaux 2015, 2016a&b). In 2016, following Sirios press release (29<sup>th</sup> march) announcing 12.08g/t Au over 20.30 meters in metasediments along the tonalite contact, extensive grounds were staked by Midland and Osisko in the SE extensions of the Cheechoo gold project. These claims cover mainly tonalite with minor paragneiss bands. About the same time, **DIOS** map-staked the present claims over the NW part of the Clarkie sedimentary Basin. Shortly after, Eastmain Resources staked most of the remaining Clarkie sediments (Lac Clarkie block; 11<sup>th</sup> August2016 pr).

## 6. DIOS 2016 EXPLORATION FIELD PROGRAM

A six (6)-day reconnaissance mapping and prospecting program was carried out over the property from August 24<sup>th</sup> to September 4<sup>th</sup> (Annex 3). The field team was composed of geologists Harold Desbiens and Carroll Desormeaux, as well as UQAM geology students Christophe Azvedo and Clyde McMillan. Accommodations, including lodge, food and fuel services, were provided by KM 381 SDBJ (Societe de Development de la Baie James) relay camp along the road linking Radisson and Matagami. An Astar-350BA+ helicopter from the Panorama Helicopters Company was used to access the Clarkie property (about 100km away from Km381 SDBJ Relay). The pilot was Stephane Caron.

The main objective was to investigate the contact between the Natel volcanics and the Clarkie sediments, as well as adjacent "diorite" intrusions and porous conglomerates and tuff units. A total of 160 outcrops were mapped & described and 88 samples were collected during the 2016 survey. The samples were later transported by Dios personnel to ALS Global laboratory in Val d'Or for gold (Au-AA23) assays (Annex 8). Six (6) blank (barren quartz bought from ALS) samples were inserted for quality control. Anomalous assay results are given in table 3.

**Three (3) rock-samples returned anomalous gold over 1 g/t Au including 1.66 (P216612); 1.28 (P216613) & 1.22 g/t Au (P216614); (Figure 11). They are all composed of silicified wackes with 1-2% disseminated pyrite and are clustered within 80meters from each others (Wacky gold showing: Nad83 18U 457500-457582E/ 5799033-078N). One is a 15x5m outcrop and the two others are plurimetric sub-outcrop/angular blocks within a 25 x 25m blocks field. A gold-in-till train (13 samples over 100 ppb Au, up to 1160 ppb Au) points to the northern extension of the new Wacky gold showing.**

Figure 11 : Clarkior Anomalous Assay Results & New Showings

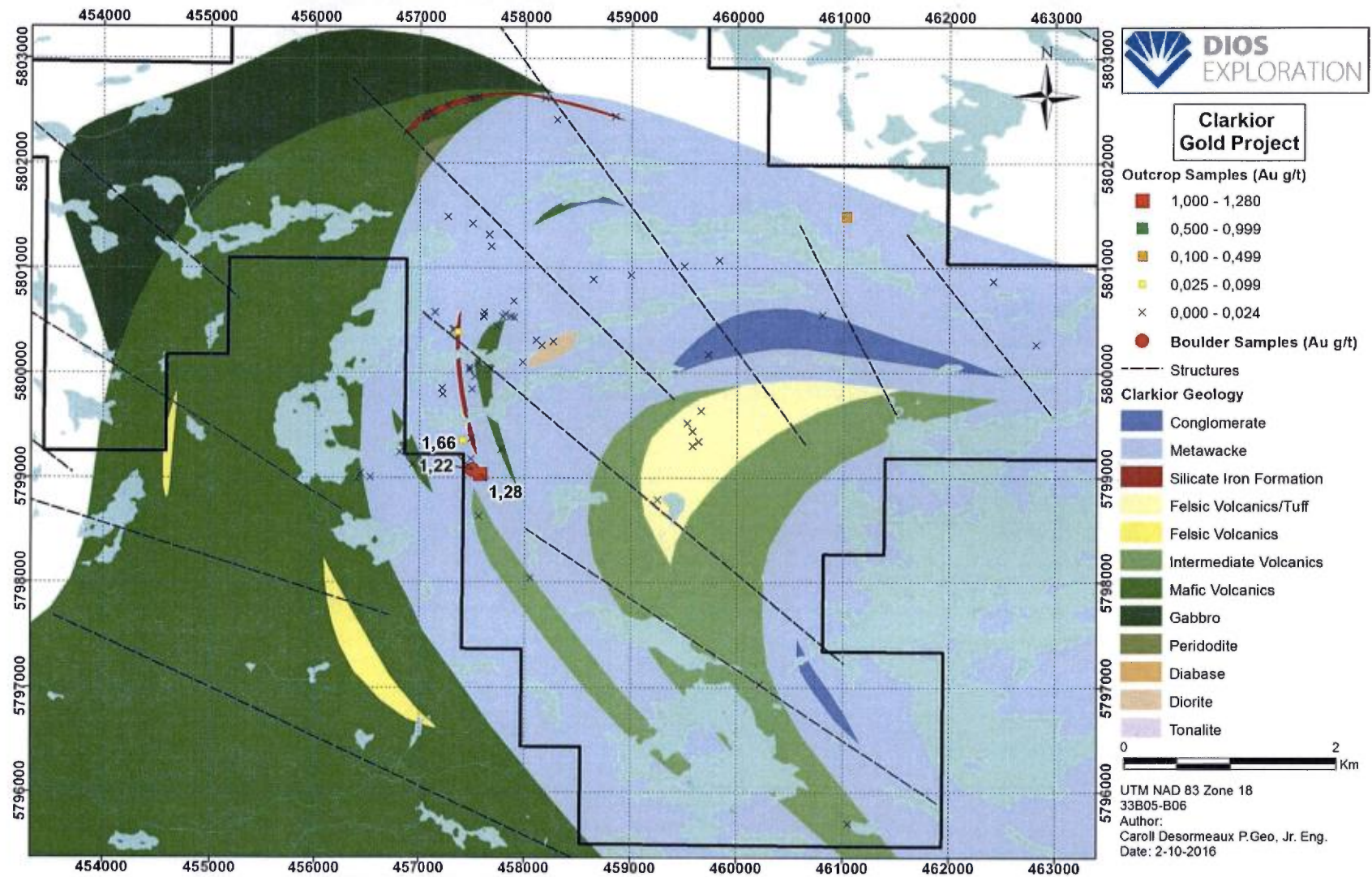
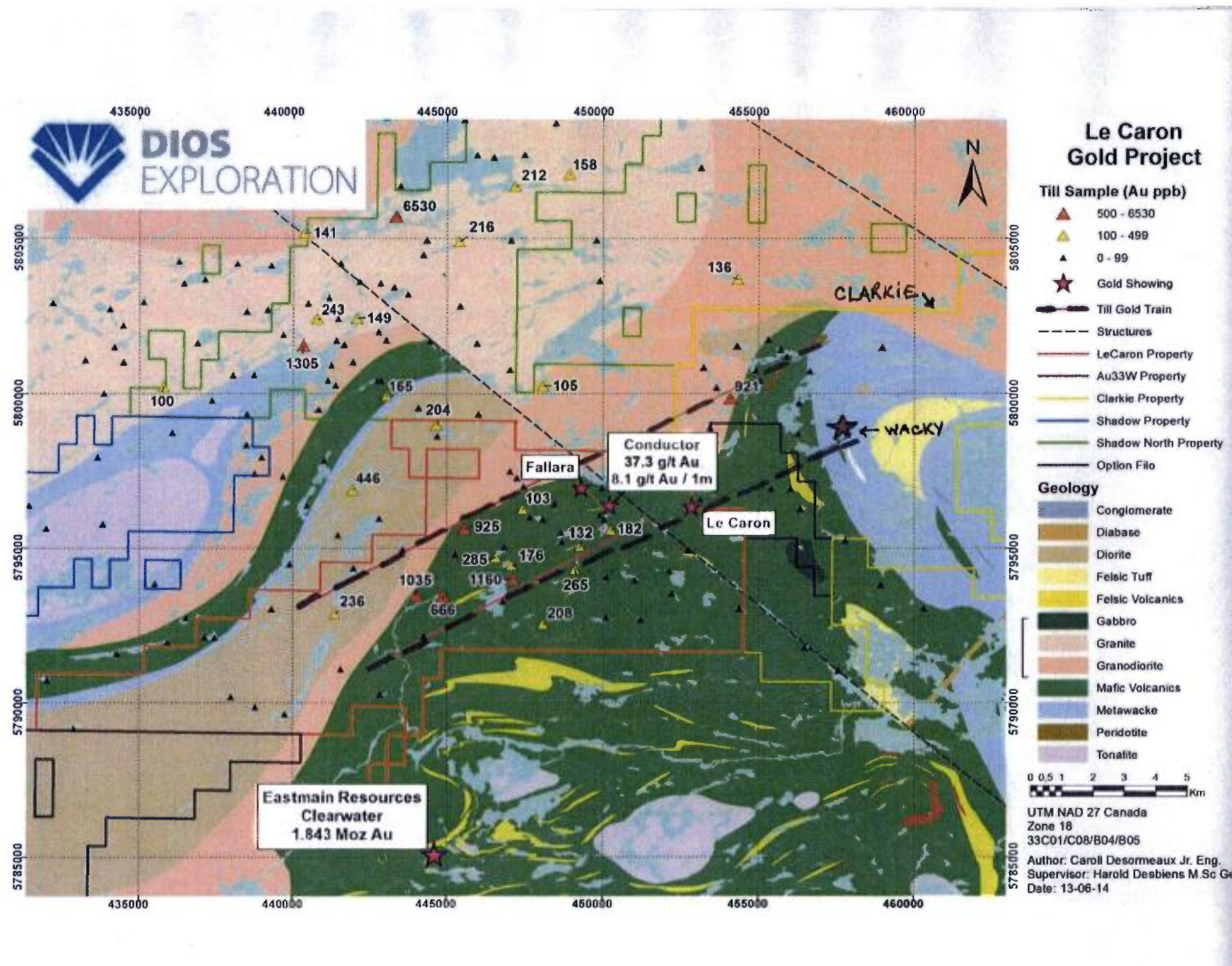


Figure 12. Gold-In-Till Anomalous Train vs Wacky showing



## **7. Sample Preparation, Analyses and Security.**

During prospecting, grab-samples were collected by Dios geologists with a hammer and a chisel from the rock outcrop or glacial float. Grab-samples were selected by Dios personnel, keeping a small part as reference material in an identified plastic bag, and another representative part averaging a fist-size, being put in a plastic bag with a sample tag for analysis. On each plastic bag, the sample (tag) number was also written with a marker and noted with the location and description in both samples booklets and field notes booklets. These plastic bags attached with tight-wraps were later put (in group of about ten) in a larger shipping "fabrene" bag (with the samples numbers series written on it). These were later transported by Dios personnel to ALS laboratory in Val d'Or, Quebec.

All 88 grab-samples were analyzed for gold by fire assay fusion with atomic absorption spectrometry finish (AAS), the Au-AA23 method of ALS Chemex laboratories, as the presence of coarse gold was not anticipated. The samples were crushed in their entirety at the ALS Minerals preparation laboratory in Val d'Or to less than 70% passing 2mm (10mesh; ALS Minerals procedure CRU-31). A 200-250g subsample was obtained after splitting. The split portion derived from the crushing process was pulverized using a ring mill to more than 85% passing 75microns (200mesh-ALS Minerals procedure PUL-31). From each pulp, a 100g sub-sample was obtained from another splitting and shipped to ALS Minerals laboratory for assay, typically on a 30g sample. For samples with values higher than 5 g/t Au, the analysis was repeated with the Au-GRA21 procedure (fire assay on 30g followed by gravimetric finish). The remainder of the pulp (nominally 100-150g) and the rejects are held for future reference.

The authors are of the opinion that sample preparation, security and analytical procedures were adequate to ensure the quality of the analytical results.

### **Data Verification**

The authors of the present report were directly involved in collecting, recording, interpreting and presenting the data in this report, as well as in the accompanying maps, figures and sections. Data was reviewed and checked by authors and is believed to be accurate.

In addition to ALS Global quality checks (duplicates, blanks and standards), Dios inserted blanks and proceeded to selected re-analysis on pulps and rejects to monitor and control accuracy, precision and possible contamination of the drill core samples. Typically, every 10 to 15 samples; a blank sample (barren quartz

bought from ALS Minerals) was inserted in the batch by Dios geologist. Afterward, selected sequences of samples from typical mineralized zones were re-assayed for the precision.

### **Blank Validation**

Blank samples were employed to monitor possible contamination in the laboratory.

A total of yy blank samples were inserted in the routine sampling line by Dios personnel. All gold concentrations of the blanks are listed in Annex yy. Assays for blanks should be less than 2 times the limit of detection of the analytical method, in this case 0.005 ppm Au for the Au-AA23 method and 0.05 ppm for the metallic screen method. Therefore, the gold content in the blank sample should be less than 0.010 g/t Au and 0.10 g/t Au, respectively, to be considered acceptable. **All blanks assayed less than 0.005 ppm Au; except for samples is at the acceptable limit.** Therefore, all blank samples are under these acceptable limits so we can assume that no significant detectable contamination occurred.

## **8. CONCLUSIONS & RECOMMENDATIONS:**

The 2016 Clarkie reconnaissance program covers the most strategic areas of the favourable sedimentary basin. This mapping helped detail the geological set-up and define possible targets for gold exploration. A total of 160 outcrops were mapped & described and 88 samples were collected during the 2016 survey.

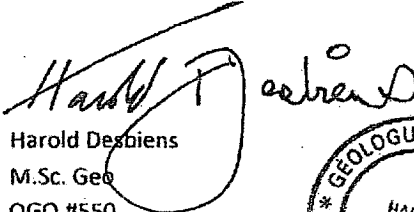
No significant structural traps (shears or faults) were observed in the field. Few alterations or sulphidic mineralisations were encountered during Dios 2016 survey, the most significant being:


- silicate iron formations bearing 1-7% disseminated pyrrhotite/pyrite;
- silicified wackes with 1-3% disseminated pyrite near mafic and silicate iron formation units. **The later included the new Wacky gold showing that yielded (3) rock-samples with anomalous gold over 1 g/t Au including 1.66 (P216612); 1.28 (P216613) & 1.22 g/t Au (P216614). They are all composed of silicified wackes with 1-2% disseminated pyrite and are clustered within 80meters from each others (Nad83 18U 457500-457582E/ 5799033-078N).**

At this time, considering the present results, a 5 days follow-up prospecting/mapping on the new Wacky gold showing are recommended by the authors. Reconnaissance soil (b-horizon) sampling should be considered on the Wacky showing as well as its extensions.

**Proposed Budget:**

- Mob-Demob = \$2000.
- Geological mapping and prospecting: 7-10 days x \$12 000/day\*(helicopter-supported, all-included + analysis) = \$84 000
- 120 000
- Report, planning & administration = \$10 000.
- Contingencies = \$5000
- Total = \$100 000- \$135 000.

  
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**DIOS**  
EXPLORATION

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**Annex 1: DIOS Clarkior Claim List (1/11/2016)**

<i>NTS Sheet</i>	<i>Title No.</i>	<i>Row</i>	<i>Column</i>	<i>Surface (Ha)</i>	<i>Type</i>	<i>Status</i>	<i>Registration Date</i>	<i>Expiration Date</i>	<i>Excess (\$)</i>	<i>Required Working Capital (\$)</i>	<i>Rights (\$)</i>
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SNRC 33B05	2446202	19	44	52,55	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
SNRC 33B05	2446201	19	43	52,55	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
SNRC 33B05	2446193	18	46	52,56	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
SNRC 33B05	2446192	18	45	52,56	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
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SNRC 33B05	2446191	17	45	52,57	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
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SNRC 33B05	2445937	15	48	52,59	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
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SNRC 33B05	2318464	15	42	52,59	CDC	Active	2011-10-18 00:00	2017-10-17 23:59	0	585	138,24

<b>NTS Sheet</b>	<b>Title No.</b>	<b>Row</b>	<b>Column</b>	<b>Surface (Ha)</b>	<b>Type</b>	<b>Status</b>	<b>Registration Date</b>	<b>Expiration Date</b>	<b>Excess (\$)</b>	<b>Required Working Capital (\$)</b>	<b>Rights (\$)</b>
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SNRC 33B05	2318050	14	48	52,6	CDC	Active	2011-10-17 00:00	2017-10-16 23:59	1388,63	585	138,24
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SNRC 33B05	2445920	13	49	52,61	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
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<i>NTS Sheet</i>	<i>Title No.</i>	<i>Row</i>	<i>Column</i>	<i>Surface (Ha)</i>	<i>Type</i>	<i>Status</i>	<i>Registration Date</i>	<i>Expiration Date</i>	<i>Excess (\$)</i>	<i>Required Working Capital (\$)</i>	<i>Rights (\$)</i>
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SNRC 33B05	2446208	12	54	52,62	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
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SNRC 33B05	2445913	12	51	52,62	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
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SNRC 33B05	2445901	11	46	52,63	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B05	2445900	10	51	52,64	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B05	2445899	10	50	52,64	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B05	2445898	10	49	52,64	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B05	2446206	10	48	52,64	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24

<i>NTS Sheet</i>	<i>Title No.</i>	<i>Row</i>	<i>Column</i>	<i>Surface (Ha)</i>	<i>Type</i>	<i>Status</i>	<i>Registration Date</i>	<i>Expiration Date</i>	<i>Excess (\$)</i>	<i>Required Working Capital (\$)</i>	<i>Rights (\$)</i>
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SNRC 33B05	2446205	9	51	52,65	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24
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SNRC 33B05	2456710	8	51	52,66	CDC	Active	2016-08-09 00:00	2018-08-08 23:59	0	87,75	138,24
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SNRC 33B05	2456708	8	49	52,66	CDC	Active	2016-08-09 00:00	2018-08-08 23:59	0	87,75	138,24
SNRC 33B05	2445893	8	48	52,66	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B05	2467422	13	44	52,62	CDC	Active	2016-11-1 00:00	2018-10-31 23:59	0	87,75	138,24
SNRC 33B05	2467421	12	44	52,62	CDC	Active	2016-11-1 00:00	2018-10-31 23:59	0	87,75	138,24
SNRC 33B05	2467419	11	44	52,62	CDC	Active	2016-11-1 00:00	2018-10-31 23:59	0	87,75	138,24
SNRC 33B05	2467420	11	45	52,62	CDC	Active	2016-11-1 00:00	2018-10-31 23:59	0	87,75	138,24
SNRC 33B05	2467418	10	45	52,62	CDC	Active	2016-11-1 00:00	2018-10-31 23:59	0	87,75	138,24
SNRC 33B06	2445940	12	1	52,62	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B06	2445941	12	2	52,62	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B06	2445942	12	3	52,62	CDC	Active	2016-05-30 00:00	2018-05-29 23:59	0	87,75	138,24
SNRC 33B06	2445953	12	4	52,62	CDC	Active	2016-05-31 00:00	2018-05-30 23:59	0	87,75	138,24

## Annex 2: Dios CLARKIOR Geological Codes

<b>Rock Types</b>		<b>Minerals</b>		<b>Structures</b>	
<b>Intrusive</b>		AM	Amphibole	DC	Diaclase
I1B	Granite	ANK	Ankerite	DY	Dyke
I1C	Granodiorite	BO	Biotite	FA	Fault
I1D	Tonalite	QZ	Quartz	FO	Foliation
I1QP	Felsic Quartz Porphyry	PG	Plagioclase	FR	Fracture
I1F	Aplite	FK	Potassic Feldspar	SC	Schistosity
I2I	Quartz Diorite	TL	Tourmaline	SH	Shear
I2J	Diorite			VN	Vein
I3	Mafic	<b>Alteration</b>		QZVN	Quartz Vein
I3A	Gabbro	AB	Albite		
I3B	Diabase	BO	Biotite	<b>Texture</b>	
QP	Quartz Porphyry	CB	Carbonate	FG	Fine Grained
QFP	Quartz-Feldspar Porphyry	Fe-CB	Iron Carbonate	MG	Medium Grained
		CL	Chlorite	CG	Coarse Grained
		EP	Epidote	HJ	Homogeneous
<b>Volcanic</b>		HM	Hematization	HK	Heterogeneous
V1	Felsic	FK	Potassic Feldspar	PO	Porphyritic
V1B	Rhyolite	SI	Silica	MA	Massive
V1C	Rhyodacite	SR	Sericite	BR	Breccia
V1D	Dacite				
V2	Intermediate	<b>Mineralization</b>		mm	millimetric
V2J	Andesite	PY	Pyrite	cm	centimetric
V3	Mafic	PO	Pyrrhotite	dm	decimetric
V3B	Basalt	CPY	Chalcopyrite	m	metric
T1	Felsic Tuff	MC	Malachite		
T2	Intermediate Tuff	MG	Magnetite	MAG	Magnetic
T(*)L	Lapilli Tuff	HM	Hematite	-	weak
T(*)C	Crystal Tuff	HS	Specularite	+	moderate
		MO	Molybdenite	++	strong

S8  
S9  
S9D  
S10

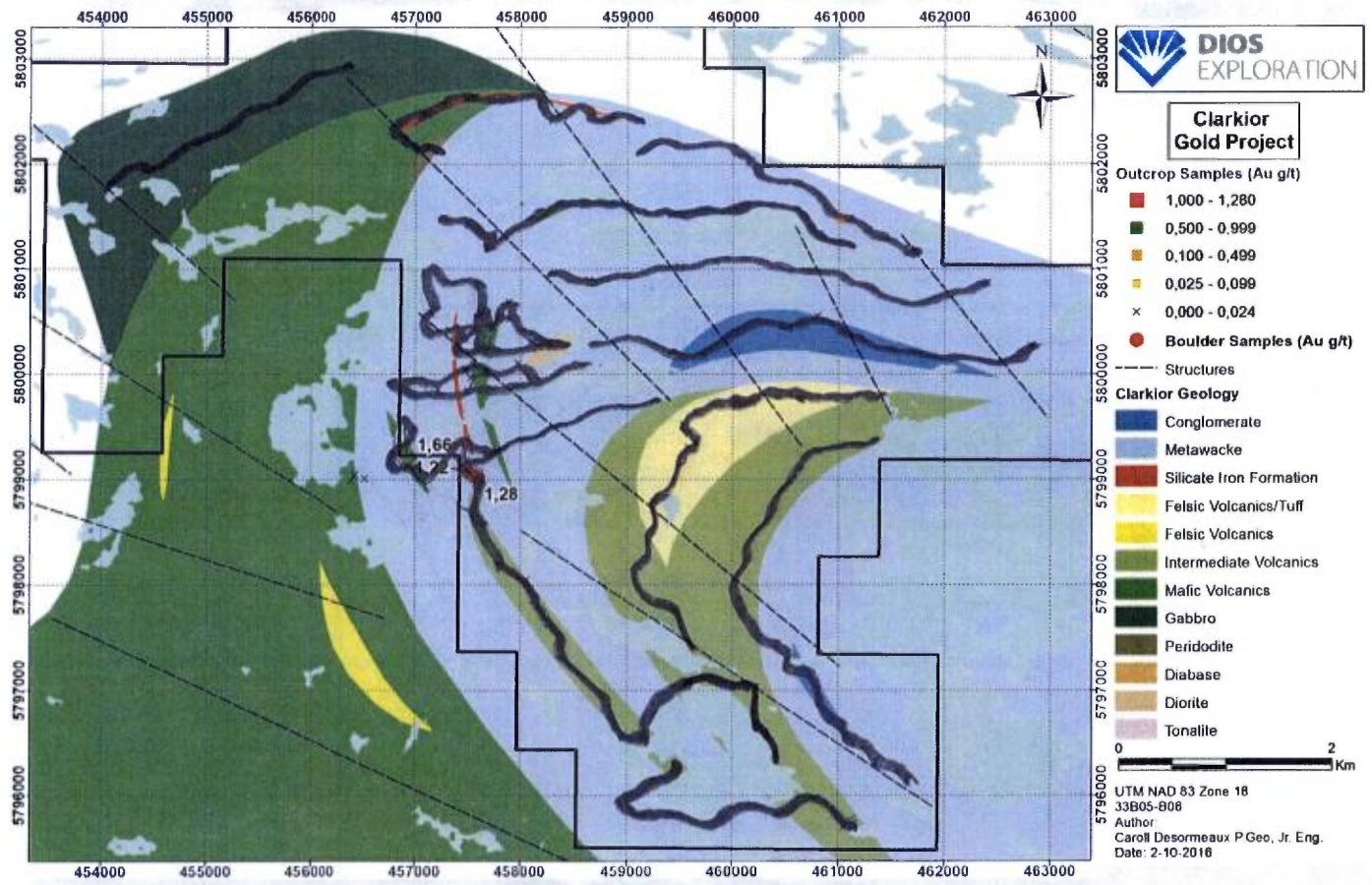
Schist  
Iron Formation  
Silicate Iron Formation  
Chert

SP  
GL  
ASPY

Sphalerite  
Galena  
Arsenopyrite



**Annex 3: CLARKIOR 2016  
TRAVERSES**



**ANNEX 4. TABLE OF 2016 CLARKIOR SAMPLES**

Sample	Outcrop	Easting	Northing	Nad	UTM	Geologist	Year	Size	Litho	PY	PO	Au_ppm
P216601	CD-CK-001	457270	5801484	83	18	CD-CA	2016		S3			0.000
P216602	CD-CK-003	457504	5801420	83	18	CD-CA	2016		QZVN/S3	Tr-1% Py		0.009
P216603	CD-CK-007	457660	5801314	83	18	CD-CA	2016		S3	Tr-1% Py		0.000
P216604	CD-CK-008	457680	5801202	83	18	CD-CA	2016		S3	Tr-1% Py		0.000
P216605	CD-CK-027	459734	5800173	83	18	CD-CA	2016		S4			0.000
P216606	CD-CK-030	460807	5800551	83	18	CD-CA	2016		S4			0.000
P216607	CD-CK-042	462819	5800268	83	18	CD-CA	2016		S3			0.000
P216608	CD-CK-043	456810	5799243	83	18	CD-CA	2016		S3			0.000
P216609	Boulder	457304	5799269	83	18	CD-CA	2016	5x3m	S3	Tr-1% Py		0.000
P216610	CD-CK-049	457490	5799176	83	18	CD-CA	2016		S3	Tr Py		0.000
P216611	Blank			83	18	CD-CA	2016					0.000
P216612	Boulder/subcrop	457500	5799078	83	18	CD-CA	2016	5x2m	S3	1-2% Py		1.660
P216613	Boulder/subcrop	457500	5799076	83	18	CD-CA	2016	1x1m	QZVN/S3			1.215
P216614	CD-CK-050	457582	5799033	83	18	CD-CA	2016		S3	1-2% Py		1.280
P216615	CD-CK-051	457567	5798628	83	18	CD-CA	2016		S3	Tr-1% Py		0.000
P216616	CD-CK-054	458057	5798038	83	18	CD-CA	2016		V2			0.000
P216617	Boulder	458129	5797833	83	18	CD-CA	2016	1.5x1.5m	S3	5-7% PY	(PO)	0.010
P216618	CD-CK-066	460220	5797027	83	18	CD-CA	2016		V2			0.000
P216619	CD-CK-069	461056	5795695	83	18	CD-CA	2016		V2			0.000
P216620	CD-CK-073	461027	5801483	83	18	CD-CA	2016		S3	Tr Py		0.187
P216621	CD-CK-074	462412	5800872	83	18	CD-CA	2016		S3			0.000
P216701	HD-CK-001	458110	5800309	83	18	HD-CM	2016		S3			0.000
P216702	HD-CK-002	458269	5800299	83	18	HD-CM	2016		I2J	TR		0.000
P216703	HD-CK-003	457895	5800529	83	18	HD-CM	2016		S3	1		0.000
P216704	HD-CK-004	457866	5800534	83	18	HD-CM	2016		S3	3		0.006
P216705	HD-CK-006	457812	5800559	83	18	HD-CM	2016		S3	TR		0.000
P216706	HD-CK-007	457812	5800559	83	18	HD-CM	2016		S3	5		0.000

Sample	Outcrop	Easting	Northing	Nad	UTM	Geologist	Year	Size	Litho			Au_ppm
P216707	HD-CK-008	457892	5800685	83	18	HD-CM	2016		S3	1		0.000
P216708	HD-CK-010	458646	5800888	83	18	HD-CM	2016		S3	TR		0.000
P216709	HD-CK-012	459000	5800933	83	18	HD-CM	2016		S3	TR		0.000
P216710	HD-CK-013	459504	5801016	83	18	HD-CM	2016		S3			0.000
P216711	HD-CK-014	459833	5801067	83	18	HD-CM	2016		S3	TR		0.000
P216712	BLANK			83	18	HD-CM	2016					0.000
P216713	HD-CK-021	459256	5798787	83	18	HD-CM	2016		V1D			0.000
P216714	HD-CK-023	459583	5799300	83	18	HD-CM	2016		T1L	TR		0.000
P216715	HD-CK-024	459642	5799344	83	18	HD-CM	2016		I3A	TR		0.000
P216716	HD-CK-025	459585	5799440	83	18	HD-CM	2016		T1L			0.000
P216717	HD-CK-026	459536	5799517	83	18	HD-CM	2016		T1L	TR		0.000
P216718	HD-CK-027	459666	5799635	83	18	HD-CM	2016		T2I			0.000
P216719	HD-CK-029	457732	5800441	83	18	HD-CM	2016		V3			0.000
P216720	HD-CK-005	457791	5800535	83	18	HD-CM	2016		S3	TR		0.000
P216721	Boulder	457865	5800536	83	18	HD-CM	2016	1X1X0.5M	S3	3		0.000
P216722	Boulder	457865	5800533	83	18	HD-CM	2016	0.3X0.3X0.1M	T1	2		0.000
P216723	HD-CK-031	457616	5800578	83	18	HD-CM	2016		S3	3		0.000
P216724	HD-CK-032	457609	5800537	83	18	HD-CM	2016		S3	2		0.000
P216725	HD-CK-032	457610	5800535	83	18	HD-CM	2016		S3	1		0.000
P216726	BLANK			83	18	HD-CM	2016					0.000
P216727	HD-CK-034	458850	5802441	83	18	HD-CM	2016		S9D	TR	2	0.000
P216728	HD-CK-038	458306	5802408	83	18	HD-CM	2016		M4		TR	0.000
P216729	HD-CK-039	458191	5802619	83	18	HD-CM	2016		S9D		1	0.000
P216730	HD-CK-041	457555	5802631	83	18	HD-CM	2016		S9D		1	0.000
P216731	HD-CK-041	457555	5802631	83	18	HD-CM	2016		S9D		1	0.000
P216732	BLANK			83	18	HD-CM	2016					0.000
P216733	HD-CK-042	457511	5802616	83	18	HD-CM	2016		S9D		3	0.000
P216734	HD-CK-042	457479	5802610	83	18	HD-CM	2016		S9D		2	0.000
P216735	HD-CK-043	457268	5802553	83	18	HD-CM	2016		S9D		4	0.000
P216736	HD-CK-045	457123	5802457	83	18	HD-CM	2016		S9D		3	0.000
P216737	HD-CK-044	457115	5802490	83	18	HD-CM	2016		S9D		3	0.000
P216738	HD-CK-046	457071	5802475	83	18	HD-CM	2016		S9D		4	0.000
P216739	HD-CK-047	457060	5802436	83	18	HD-CM	2016		S9D		4	0.000



**SCHEDULE 5 : ASSAY CERTIFICATE**



ALS Canada Ltd.  
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À: DIOS EXPLORATION INC.  
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Finalisée date: 1- OCT- 2016  
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**CERTIFICAT VO16149938**

Projet: K2

Ce rapport s'applique aux 91 échantillons de roche soumis à notre laboratoire de Val d'Or, QC, Canada le 7- SEPT- 2016.

Les résultats sont transmis à:

HAROLD DESBIENS

C. DESORMEAUX

MARIE-JOSÉE GIRARD

**PRÉPARATION ÉCHANTILLONS**

CODE ALS	DESCRIPTION
WEI- 21	Poids échantillon reçu
CRU- QC	Test concassage QC
PUL- QC	Test concassage QC
LOG- 22	Entrée échantillon - Reçu sans code barre
CRU- 31	Granulation - 70 % < 2 mm
SPL- 21	Échant. fractionné - div. riffles
PUL- 31	Pulvérisé à 85 % < 75 um

**PROCÉDURES ANALYTIQUES**

CODE ALS	DESCRIPTION	INSTRUMENT
Au- AA23	Au 30 g fini FA- AA	AAS
Au- GRA21	Au 30 g fini FA- GRAV	WST- SIM
Au- AA23D	Dup. - Au 30 g fini FA- AA	AAS

À: DIOS EXPLORATION INC.  
ATTN: HAROLD DESBIENS  
C.P. 114  
SUCC NDG  
MONTREAL QC H4A 3P4

Ce rapport est final et remplace tout autre rapport préliminaire portant ce numéro de certificat. Les résultats s'appliquent aux échantillons soumis. Toutes les pages de ce rapport ont été vérifiées et approuvées avant publication.

\*\*\*\*\* Voir la page d'annexe pour les commentaires en ce qui concerne ce certificat \*\*\*\*\*

Signature: *Nacera Amara*  
Nacera Amara, Laboratory Manager, Val d'Or





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CERTIFICAT D'ANALYSE VO16149938

Description échantillon	Méthode élément unités L.D.	WEI- 21	Au- AA23	Au- GRA21	Au- AA23D
		Poids reçu kg	Au ppm	Au ppm	Au ppm
P216601		0.65	<0.005		
P216602		0.94	0.009		
P216603		0.65	<0.005		
P216604		0.46	<0.005		
P216605		1.05	<0.005		
P216606		0.65	<0.005		
P216607		0.81	<0.005		
P216608		0.54	<0.005		
P216609		0.98	<0.005		
P216610		0.58	<0.005		
P216611		0.98	<0.005		
P216612		0.63	1.510		1.660
P216613		0.56	1.215		0.977
P216614		0.74	1.160		1.280
P216615		0.76	<0.005		
P216616		0.78	<0.005		
P216617		2.01	0.010		
P216618		0.81	<0.005		
P216619		0.60	<0.005		
P216620		0.58	0.187		
P216621		0.85	<0.005		
P216701		1.01	<0.005		
P216702		0.57	<0.005		
P216703		0.80	<0.005		
P216704		0.80	0.006		
P216705		0.62	<0.005		
P216706		0.72	<0.005		
P216707		0.74	<0.005		
P216708		0.82	<0.005		
P216709		0.89	<0.005		
P216710		0.66	<0.005		
P216711		0.89	<0.005		
P216712		1.00	<0.005		
P216713		0.85	<0.005		
P216714		0.52	<0.005		
P216715		1.18	<0.005		
P216716		0.63	<0.005		
P216717		0.55	<0.005		
P216718		1.26	<0.005		
P216719		0.73	<0.005		

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**CERTIFICAT D'ANALYSE VO16149938**

Description échantillon	Méthode élément unités LD.	WEI- 21	Au- AA23	Au- GRA21	Au- AA23D
		Poids reçu kg	Au ppm	Au ppm	Au ppm
P216720		1.06	<0.005		
P216721		0.84	<0.005		
P216722		1.50	<0.005		
P216723		1.11	<0.005		
P216724		1.36	<0.005		
P216725		0.84	<0.005		
P216726		0.70	<0.005		
P216727		0.82	<0.005		
P216728		0.39	<0.005		
P216729		0.73	<0.005		
P216730		0.43	<0.005		
P216731		0.55	<0.005		
P216732		0.52	<0.005		
P216733		0.59	<0.005		
P216734		0.58	<0.005		
P216735		0.75	<0.005		
P216736		0.63	<0.005		
P216737		0.77	<0.005		
P216738		0.88	<0.005		
P216739		0.72	<0.005		
P216740		1.04	<0.005		
P216741		0.41	<0.005		
P216742		0.60	<0.005		
P216743		0.49	<0.005		
P216744		0.79	<0.005		
P216745		0.71	<0.005		
P216746		0.76	0.025		
P216747		0.62	<0.005		
P216748		0.38	<0.005		
P216749		0.33	<0.005		
P216750		0.67	<0.005		
P216851		0.71	<0.005		
P216852		0.29	<0.005		
P216853		0.80	<0.005		
P216854		0.50	<0.005		
P216855		0.44	<0.005		
P216856		0.21	<0.005		
P216857		0.52	<0.005		
P216858		0.47	<0.005		
P216859		0.53	<0.005		

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**CERTIFICAT D'ANALYSE VO16149938**

Description échantillon	Méthode élément unités L.D.	WEI- 21	Au- AA23	Au- GRA21	Au- AA23D
		Poids reçu kg 0.02	Au ppm 0.005	Au ppm 0.05	Au ppm 0.005
P216860		0.34	<0.005		
P216861		0.76	<0.005		
P216862		0.56	0.012		
P216863		0.42	<0.005		
P216864		0.52	<0.005		
P216865		0.50	0.048		
P216866		0.67	<0.005		
P216867		0.74	<0.005		
P216868		0.44	<0.005		
P216951		4.88	5.19	3.90	
P216952		2.83	4.83	2.98	

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CERTIFICAT D'ANALYSE VO16149938

COMMENTAIRE DE CERTIFICAT

ADRESSE DE LABORATOIRE

Applique à la Méthode:

Traité à ALS Val d'Or, 1324 Rue Turcotte, Val d'Or, QC, Canada.  
Au- AA23  
CRU- QC  
SPL- 21

Au- AA23D  
LOG- 22  
WEI- 21

Au- GRA21  
PUL- 31

CRU- 31  
PUL- QC