

**Item 1 Title Page**

**Diamond Drill Results**

(Campaign of July and August 2009)

Lac des Pics Property, Qc.,  
(NTS 22H04 & 22A13)

Prepared by: Géoconseil JP  
Jean-Pierre Cloutier, P. Geo.  
September 15, 2009

## Item 2 Executive Summary

During the months of July and August 2009, First Source Resources Inc. (FSR) drilled five (5) holes for, a total of 1191 meters, on their Lac des Pics property. This property is located in the hearth of the Gaspé peninsula of the province of Quebec. It consists of 84 contiguous claims for a total of 4625 hectares.

The objective of this drilling was to test airborne and low resistivity Stratagem anomalies that could be caused by economic base metals and gold mineralization.

The property is underlain by cambro-ordovician rocks belonging to the Quebec Super Group of the north-central Appalachian orogenic belt. Those rocks mostly consist of siltstones and shales, with some sandstones and conglomerates of the Rivière Ouelle Formation and basalts of the Pics Unit. Rocks were mostly affected by the Ordovician Taconic orogeny, which resulted in easterly striking and south shallow dipping formations.

A pinch and swell, one kilometer-long mineralized zones occur in basalt of the Pics Unit near its contact with a thin conglomerate unit of the Rivière Ouelle Formation. Mineralization consists of copper, silver and gold bearing sulfides and oxides associated with quartz veins or pods. The irregular nature of this mineralized structure shows a low economic potential.

During this drilling campaign, all five holes were drilled at more than one km south of the mineralized structure. Stratagem anomalies were caused by graphite mostly with little pyrite (<3% Py) associated with siltstone and shale, and by magnetite mineralization associated with magnetite bearing sandstone of the Rivière Ouelle Formation. Fifty-seven core samples were analysed for a suite of 51 elements. No anomalous value was picked-up.

It is the writer opinion that the economic exploration potential of the property is limited. No core evidence of rock alteration from a nearby intrusive was observed in drill holes.

Based on the negative results of this campaign, no additional drilling is recommended. On the other hand, the exploration potential of untested AEM conductors of the Pics Unit and other peripheral conductors remain to be tested.

However, before conducting any additional field work, the writer recommends compiling and integrating all FSR and previous work results. The resulting report should be comprehensive and should include useful compilation maps with related figures, tables and appendices.

Conclusions that would emerge from this proposed report would determine if further work is recommended.

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## **Item 4 Introduction**

This report presents the results of a drilling campaign that was carried out, during the months of July and August 2009. This drilling was done on the Lac des Pics property (the “property”) of First Sources Resources Inc. (FSR).

The campaign was under the direction and supervision of the writer who was contracted by Jeff Baird, P.Geo. and president of Risk Reduction Resources (RRR). The latter company is the general contractor retained by Pete Smith, president of FSR.

Early in June 2009 and prior to the elaboration of the drilling campaign, the writer visited the property. The objectives of this visit were to review outcrops along existing roads and to discuss with RRR personnel (Mike Anderson and Jeff Baird) about geological interpretation of Stratagem profiles presented on a computer screen.

Between the end of the field visit and the beginning of the drilling program, there were many phones and emails exchanges between Mike Anderson (Montreal), Pete Smith (Vancouver) and the writer (Rouyn-Noranda). After several discussions, a drilling program was planned and a budget was finalized and approved by Pete Smith.

The writer declares that he is familiar with the property. In 2007, I wrote a 43-101 technical report about the property and completed an elaborate property visit as a complement to the technical report (Cloutier, 2007).

## **Item 5 Property Description and Location**

The Property (an area referred to as the Lac des Pics Property) is situated at 22 kms due south from the Village of Mont St-Pierre and 50 km east-southeast of Ste-Anne des Monts, both located along the St-Laurence River, and at 22 km west-northwest of Murdochville in the Gaspé peninsula of Quebec (Figure 1).

The property comprises 84 contiguous map-designated claims and covers an area of 4625 hectares (Figure 2 and Table 1).

All claims are registered to FSR (100%). The expiration date of all claims is July 23, 2010. There is a monetary surplus of \$93 703 that can be applied for claim renewals. However, total monetary sum requires to renew all claims for an additional period of two years is \$99 400 plus \$4 316 for license fees.









## **Item 6 Accessibility and Physiography**

The Property is easily accessible by road from the village of Mont St-Pierre to the property, which is crossed by various conditions gravelled roads.

The southern part of the Property has been the site of old lumber activities. Lumber roads give an acceptable access inside the Property. However, roads deterioration favours an easier access with all terrain vehicles (ATV).

In the west part of the Property, there are two little lakes (300 – 400 m in length): Lac de la Branche Nord and Lac des Pics, which water discharges to the South, in Rivière Madeleine Nord.

## **Item 7 Geological Setting**

### **7.1 Regional Geology**

The Property is located in the vicinity of the McGerrigle Mountains area, which is situated in the Gaspé segment of the north-central Appalachian orogenic belt (Figure 3).

Geologically, the regional area comprises four major units, each distinctive in lithology and structure.

1. Quebec and Shickshock Super-Groups (Cambro-Ordovician)
2. Connecticut Valley Gaspé Synclinorium (Siluro-Devonian)
3. McGerrigle Mountains Pluton (Upper Devonian age)



### 7.1.1 **Quebec Super Group and Shickshock Group**

The Cambro-Ordovician Quebec Super Group comprises mainly an assemblage of pelite, calcareous arenites and a conformable basalt sheet, whereas the Shickshock Group consists of metabasalts with intercalated metasediments.

The Shickshock Group, is in a faultly contact with the southern limit of the Quebec Supergroup. Both groups show the effects of multiple deformations. The NE dominant tectonic grain is the product of the Taconic orogeny (Middle to Upper Ordovician). It is characterized by northwesterly overturned folds plunging gently SW and NE.

### 7.1.2 **Connecticut Valley-Gaspé Synclinorium**

Separated from the Shickshock and Quebec Super Group by a thrust fault, the Siluro-Devonian belt of the Connecticut Valley-Gaspé Synclinorium is comprised of platform arenites, silstones, impure limestones, graywackes and conglomerates – all interbedded with alkaline and bimodal volcanic rocks and pyroclastics. Those rocks are gently folded about NE-trending axes during the Acadian orogeny.

### 7.1.3 **McGerrigle Mountains Pluton**

Rocks of the above two domains are cut by felsic to sub-alkalic post-Acadian intrusions (Late Devonian to Carboniferous). The McGerrigle Mountains Pluton is the largest complex of intrusive and hybrid rocks in the Gaspé Peninsula. It measures 13 kms by 8 kms with its long axis oriented in a north-south direction. A product of multiple intrusions, the pluton is varied and complex, both in texture and composition. It is mainly comprised of granites and hybrid rocks, for the most part of syenitic composition.

De Römer placed the McGerrigle Mountains Pluton in the Upper Devonian age (De Römer, 1977 – GR 174). The pluton is in intrusive contact with both rocks of the Quebec Supergroup and the Shickshock Group.

The country rocks are contact metamorphosed to various types of hornfels, skarn and metavolcanic rocks forming a 1.5 to 3 km wide thermal aureole.

The western property limit is about 6 km east of the pluton, and about 3 km east of the contact metamorphic aureole. Underlying rocks of the property were not affected by its metamorphism.

## 7.2 Local Geology

Regional geological interpretation proposed by De Römer (1977 – RG 174) and by Slivitsky, St-Julien and Lachambre (1988 – MB 88-19) was used, modified or adapted by successive project geologists working on the property for various mining exploration companies.

The latest geological interpretation was done by Bilodeau and Brisebois (1999 – SIGEOM CG4 22A13-200-0201) and by Brisebois, Dufour et Nadeau (2004 – SIGEOM CG3\_22H04). As most of the property is covered by NTS 22H04, the latter interpretation and lithological legend is preferred (Figure 4; Table 2).

Rock types underlying the property belong to the cambro-ordovician rocks of the Quebec Super group. Rocks consist of about 80% sedimentary clastic rock (mostly mudrock, shale, slate and siltstone, and to a lesser extent magnetite-bearing sandstone and conglomerate, and about 20% basic volcanic rocks.

The most common sedimentary rocks belong to the Rivière Ouelle Formation (Ool) and to a lesser extent to the “Romieu Formation (COrm)” and the “Trois-Pistoles Group (COtp)”.

Volcanic rocks belong to mafic volcanic rocks of the Pics Unit (COpi).

Two regional thrust faults separate the various rock formations and units.

Rock formations are oriented in a WSW direction and are inclined at an angle of 20° to 45° to the southeast.

Slivitsky, St-Julien and Lachambre (1988 – MB 88-19) mentioned that the volcanic rocks of the Pics Unit, the conglomerate adjacent and overlying the Pics Unit, and the magnetite-bearing sandstone present a stratigraphic uncertainty. Their source, environment et relative relationship is currently unknown.



Table 2

### 7.2.1 **Rivière Ouelle Formation (Ool)**

This Formation (Ool) comprises three successive lithological units of variable widths (De Römer, 1977 – RG 174). All together, they measure more than to 3 kms wide. From the lower (northermost) to the upper unit (southernmost):

Conglomerate  
Dark-grey siltstone  
Slate, light-grey siltstone and shale

Conglomerate (S4E): Lower stratigraphic unit

The lower member occurs at the contact with basalt (V3B) of the Pics Unit to the north, and siltstone (S6A) of the Rivière Ouelle Formation to the south. The conglomerate is a polymictic quartz-feldspar conglomerate. It is inter-bedded with minor black shale and tuff. The rock is typically brownish grey to reddish and shows up to 40% rounded fragments. In places, it is a quartz-pebble conglomerate. Generally, the clasts are rounded to subangular quartz, feldspar and rock fragments of 1 to 4 mm in size, embedded in a sandy matrix. Muscovite, calcite and magnetite are important accessory minerals.

Locally, the conglomerate is overlid by a grauwacke with disseminated magnetite, quartzite, conglomerate and black claystone.

Although the writer puts this unit in the Rivière Ouelle Formation, the authors of SIGEOM maps class this conglomerate in the Pics Unit.

Dark-grey siltstone (S6A): Central stratigraphic unit:

The siltstone is heterogenous in grain size and composition, and is poorly sorted. In some places, coarser layers contain transparent quartz and kaolinized feldspar and altered rock fragments suggesting reworked sediments. Certain beds have elongated and discontinuous shreds of ill-defined inclusions that are typical of tuffaceous rock. Locally, the siltstone gradually changes to a slaty shale, siltstone and black, green and grey color and finely laminated shale.

Rythmic and finelly laminated slate (S6B), siltstone (S6A) and shale (S6E): Upper stratigraphic unit:

The southern member consists of rhythmic and finely laminated black, green and grey slates, siltstone and shale. Some calcareous siltstone and silty and arenaceous limestone are also encountered.

### Pics Unit (COpi)

The Pics Unit (COpi) crosses the northern part of the Property where it forms a prominent NE-trending succession of ridges. This unit is 1500 m wide. Its northern contact with the Rivière Ouelle Formation corresponds to a thrust fault. To the south, it is at a contact with a conglomerate unit belonging to the Rivière Ouelle Formation or to the top of the Pics Unit.

The Pics Unit consists of basalt, mostly with some tuff and agglomerate, sandstone, conglomerate and mudstone. The basalt is dark green and massive with amygdaloïdal layers here and there.

On site, distorted pillows were observed. Near contact with the overlying Rivière Ouelle Formation, the amygdules are either round or oval and reach up to 1 cm in diameter. The massive basalt is holocrystalline, rarely porphyritic and typically of diabasic texture (De Römer. 1977 - RG 174).

### Romieu Formation (Corm))

Situated in the southeast corner of the property area and adjacent to a thrust fault marking the contact with the above Rivière Ouelle Formation, the Romieu Formation (Corm) consists of calcareous claystone, claystone, calcilutite, prismatic calcite and calcareous conglomerate.

### Trois-Pistoles Group (COtp)

Adjacent to the Romieu Formation (Corm), rocks of this group consist of non-differentiated grey to black mudrock, quartz arenite and a calcareous limestone.

## **Item 8 MINERALIZATION**

### **8.1 Regional**

The Property is located at about 5 kms east of the McGerrigle Mountains Pluton. This Pluton is responsible for the occurrences of three mineral deposits (former producers) and of numerous mineralized zones. These occurrences are located between 12 and 25 km away from the Property (Figure 5).

At Gaspé Mines, the deposits are associated with porphyry type intrusions (Copper Mountain deposit) and skarn (Zones A to E). The mineralization of Madeleine Mine is hosted in hornfels, and in quartz-carbonate veins at Candego Mines.

Other minor occurrences are situated in the environment of the property.

Figure 5

## 8.2 Property

Historically\* (*note*), significant base metal mineralization was discovered within a one-kilometer long by <10 meter-wide corridor, stretching from Lac de la Branche Nord to Lac des Pics (Figure 6).

Sulphide-bearing showings consisting in mineralized quartz veins and minor breccia zones occur in the basalt of the Pic Unit near or at the contact with conglomerate of the Rivière Ouelle Formation. Most of the veins and breccias are oriented in a northeast direction and show a moderate to steep dip to the south, which appears to be conformable with the local stratigraphy and local basalt-sediment contact.

Six principal veins (No. 1 to No. 6) and minor others were discovered to date. So far, the veins and breccias are relatively narrow (1 m average with a maximum width of 2-4 m) and with a trenched extension (about 100 m) along strike.

The veins are mostly composed of white milky quartz, with variable amount of sulfides and/or oxides. Their contacts are cut sharp with the enclosing rock. The breccias consist of altered angular fragments of enclosing rocks cemented by quartz, calcite, epidote and chlorite with bornite, specularite and magnetite as metallic mineralization. The breccias are referred to as stockwork in some of the Lac des Pics literature. They are narrow and limited along the strike. For instance, Vein No. 3 is mentioned as a stockwork. It is 0.8 m wide by 14 m long.

Two types of sulfide mineralization are associated with the veins and breccias: the **Pb-Sb-Au-Ag** type and the **Cu- +/-Ag** type. The former type occurs exclusively with Vein No. 1. The latter types occur in all other veins and breccias.

*Note:*

*The writer has not seen any of FSR geological work report(s). Property mineralization comes from historical documents that were summarized in his 43-101 report (Cloutier, 2007).*

Figure 6

## **Item 9 Writer property visit**

Early in June, 2009, the writer visited the Lac-des-Pics property on the invitation of Mike Anderson. The objective of this visit was to look for outcrops along roads and to discuss with RRR personnel (Mike Anderson and Jeff Baird, both P.Geo.) about geophysical rating of Stratagem geophysical anomalies.

For his GPS navigation, the writer used a Garmin Model 60CX unit in conjunction with Map Source and Topo Canada V2. The writer measured UTM coordinates of AEM zones from figure 14 of Anderson's report (2009). No other figure or map was available. Measurements were approximated but they were sufficient to find all grid lines (Figure 7).

Figure 7

The property visit was done on June 4th with Jeff Bair, president of RRR, and with Chantal Dubois, technician on June 5th. We used an all-terrain-vehicle (atv) for road surveys and general access. Fortunately, several fallen trees would have restricted the use of a pick-up truck to these roads but all were practicable with the atv – although some were almost “close” from the growing of dense alders with inter-fingering branches.

Routing was constantly GPS surveyed (Figure 8). Several digital photographs and digital notes were taken.

### **Outcrops along roads:**

Outcrops were observed along two road sections (Figure 9). Along a NNE trending road going to Lac-des-Pics (WP 011, 012 and 13; in a trench then on the top of an ENE trending ridge at Z1 8W) and along a ENE trending road (WP 014 to 017) (Table 4).

Without road construction, rocks would have not been observed. Most of the outcrop areas show thousands of random, broken-up, thin (<1 cm thick), platy, and sharp-angle fragments (<10 cm wide). Weathered surface of outcrops and fragments is thin (< 1mm) and shows whitish tinge. Fresh rock consists exclusively in grey, green and red mudstone, shale, slaty shale, slate and fine grained siltstone.

These rocks show a regular attitude. Bedding follows a WSW direction with a shallow dip (30°-40°) to the southeast. This attitude is believed to correspond to the stratification (S0) although it is not easy to distinguish S0 with the primary foliation (S1). Stratification and fissility are believed to be parallel in the property outcrop-area. NW and NE striking joints were noted.

No alteration that could be related to any “buried” intrusive was observed.

No outcrop was observed in the environment of Statagem anomalies or along grid lines (Mike Anderson – pers comm).

### **Mineralized Zone:**

Mineralized zones are located between WP079 and WP095 (Figure 10).

Two types of mineralization were encountered. The first type (Vein no 1 – WP 79) is historically reported as 35 m long by 1 m wide quartz vein. The vein strikes in a ENE direction and dips steeply to the south. It hosts massive to disseminated sulfides and 5-10% chlorite. The sulfides, in decreasing abundance, are pyrite, galena, stibine, chalcopyrite and arsenopyrite. The best values obtained in grab loose samples reported 2 to 39 g/t Au, 6 to 63 g/t Ag, 0.01 to 0.10% Cu, 2 to 13% Pb and 0.03 to 4% Sb (Cloutier, 2007).

The second type (WP093, 094 and 095) shows a similar orientation. It consists of erratic quartz veins or pods all aligned along the same corridor. The veins host variable contents of bornite, chalcopyrite, specularite, magnetite, ankerite, and barytite mineralization. Vein individual lengths

range from several tens of meters by <1 to up to 4 m in width. Assay results of selected grab samples are quite variables. In general, only Ag and Cu values were of some interest.

Historical assay results of veins are not representative of the vein grade as they were selected grabs (Cloutier, 2007). However, the writer has not reviewed the most recent work results that were carried out by First Source Resources, thus subsequent to the redaction of his 43-101 report.

Table 4

Figure 8

Figure 9

Figure 10

Table 4

## **Discussion about Stratagem EH4 anomalies:**

### **Instrumentation:**

The STRATAGEM EH4 is the result of a joint R&D/Marketing agreement between Geometrics, Inc. and Electromagnetic Instruments, Inc. (EMI). The STRATAGEM provides high resolution electrical conductivity imaging of the subsurface for depths between 10 meters and 500 meters. Conductivity information is calculated from measurements of surface electric and magnetic fields along a series of profiles.

The STRATAGEM obtains depth information at one site setup by measuring signals over a wide frequency range. Deep structures (more than 100 meters) are imaged using source fields provided by background magneto-tellurics signals or conventional CSAMT sources.

The STRATAGEM system records orthogonal electric and magnetic fields which are processed to provide tensor impedance measurements for interpreting complex 2-D structures. The recording and display units is compatible with the Geometrics' StrataView multi-channel seismic system.

In 2008, Risk Reduction Resources had been carried out Stratagem over selected lines covering AEM low conductivity zones. The survey was directed and supervised by Mike Anderson (2009).

### **Discussion:**

In June 2009, about one day was spent reviewing Stratagem data results. Results were presented by Mike Anderson to Jeff Baird, Cormac McGrath and the writer.

Only the best cross-sections were discussed. Interpretation looked quite complex – as agreed by all.

A report is in preparation by Mike Anderson.

## Item 10 Drilling program

During the months of July and August 2009, five (5) diamond drill holes were done on the property, for a combined total core length of 1191 meters (Table 6).

**Table 7: Hole parameters**

HOLE PARAMETERS									
DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-01	22A13	2171502	20 U 292159 5431176	1000W	1660S	527	335°	-70°	249
LDP-02	22A13	2171501	20 U 291884 5431269	1200W	1425S	538	338°	-55°	225
LDP-03	22H04	2171512	20 U 293875 5432129	1000E	1600S	513	333°	-45°	249
LDP-04	22H04	95442	20 U 293758 5432858	1200E	900S	575	330°	-75°	249
LDP-05	22H04	2077735	20 U 296839 5434259	4600E	965S	481	360°	-90°	219
Total									1191

### **Objective and drill targets:**

The objective of the drilling campaign was to discover an economic ore deposit similar as those of Murdochville and Madeleine Mines, which are located within a 25 km radius away from the property.

The program consisted in holes drilled across selected Stratagem anomalies that were recommended Mike Anderson of RRR.

### **Drill Contractor**

The drill contract was executed by Les Forages Dibar (Dibar) of Sainte-Anne-des-Monts (SADM). Holes were drilled on NQ size core (47.6 mm).

On July 17, the drill rig and related equipment were mobilized on a flat-bed truck from SADM to a dropping site located on the property. From there, the drill rig moved on the first drill site. After the completion of the last hole, the rig returned to the pick-up site and was demobilized to SADM on August 5th.

There were two shifts per day. During the execution of the contract, drillers travelled every day, from SADM to the drill site and back home after the completion of their 12-hour shift. Average drilling performance per 12 hour-shift was 49 m / shift. Core recovery was nearly 100%.

### **Direction and supervision**

The writer directed and supervised the drilling campaign, spotted, logged and sampled all drill holes following the “Exploration Best Practices Guidelines as adopted on August 20, 2000, by the Canadian Institutes of Mining, Metallurgy and Petroleum (CIM)

Holes were spotted along cut lines. All holes were GPS-surveyed (Figures 11 to 14;).

Figure 11

Figure 12

Figure 13

Figure 14

In the field and for hole spotting, the writer was assisted by Cormac McGrath (July 15 to July 20). For drill site visits, core handling, sampling and general work, the writer was assisted by Chantal Dubois (July 21 to August 17). Both are technicians working for RRR and Geoconseil JP respectively.

When a hole was completed and the rig pulled away, hole locations were indicated by the insertion of a wooden pole solidly fixed in the hole through the ground. All poles were identified by the fixation of an aluminium tag on which its hole number was written.

### **Core Handling:**

Retrieved core was deposited in wooden boxes consisting of three - 1.5 m-long rows for a total of 4.5 m of core per box. Hole and box numbers were marked on two sides of core boxes.

Two markers were inserted in each core box by drillers. A marker consists in a 2.5 cm-long by 1 cm square wooden pieces, on which depth is indicated.

When filled, core boxes were tied with steel wire. At the end of their shift, and twice a day, Dibar drillers brought core boxes at the designed core shack.

### **Core logging and Lithological Legend:**

The writer logged all holes in a designated core shack located in SADM. Logging was done in Word format (Appendix 1 – Drill Log of Holes LDP-1 to 5).

The lithological legend and abbreviations used in drill logs and drill sections was adopted from the MRNF – MB 96-28 (Table 3)

Table 3:

Core storage:

The core interval of all core boxes was measured. This approach revealed several depth errors in boxes. It allows depth correction before core is logged (Appendix 4).

When finished, an aluminium tag, showing “Hole No / Box No / From / To” was carved and fixed on the front side of each core box.

The core was stored in Ste-Anne des Monts on Dibar property site.

## **10.1 Rock terminologies**

Fine-grained rocks terminology:

In his rock and core description, the writer used the classification of clastic sediments – based on grain sizes proposed by Pettijohn (1957) and Wentworth (1922) (Table 5), and the classification of fine grained sediments – based on silt and clay proportion, and rock structure proposed by Ingram (1953), Folk (1965), Flawn (1953) and Vallières (1985) (Table 6).

In the field, the distinction between silt and clay size particles or grain size is not that easy as those fine grained sediments measures less than 0.0625 mm (63 microns) in diameter – thus, they could not be determined without the use of lengthy examination under a microscope.

The classification of clay and silt bearing rocks is also dependent of the silt-clay proportions, the texture and the structure of the rock. The general term for those rocks is “Mudrock or mudstone”. When massive - it is called a “Stone”, when fissile – it is a “Shale”, and when slightly metamorphic – a Slate.

**Table 5**

**Table 6**

## 10.2 Drill Cross-sections

### Cross-sections:

Geological drill cross-sections were traced with Prolog software by Gaétanne Neveu of Gescad Inc located in Rouyn-Noranda (Figures 15, 17, 19, 21 and 23).

Stratagem cross-sections were traced by Mike Anderson of RRR. Geological interpretation is from the writer (Figures 16, 18, 20, 22 and 24).

## 10.3 Drill results

### 10.3.1 Hole LDP-1

DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-01	22A13	2171502	20 U 292159 5431176	1000W	1660S	527	335°	-70°	249

#### **Objectives:**

This hole was drilled to explain a low resistivity Stratagem anomaly estimated at a vertical depth of 200 meters.

#### **Rock types:**

The hole crossed 6 m of overburden and was terminated at a depth of 249 m. It intersected clastic sedimentary rocks exclusively, consisting of siltstone mostly and red shale (Figure 15; Appendix 1 – Hole LDP-1).

Siltstone (S6A) varies from light (+) to dark grey (+++), poorly laminated (+LA) to strongly (+++) banded (RU).

Graphite is found in a dark grey siltstone unit and a fault zone.

The following rock units were intersected:

#### **Poorly laminated, light grey siltstone [S6A(+gy)(+LA)]:**

Intersected in the following core sections: 6 to 13 m; 25 to 49 m; 192 to 202 m; 208 to 249 m.

The rock is poorly (+) laminated (LA). The massive matrix shows about 10% of tiny (<0.5 mm) angular quartz fragments. The laminations are thin (<0.5 mm) and dispersed. They consist of dark (+++) grey (gy) to black (bk) shale (S6E) laminae at the direct contact with light grey, silty laminae.

Less than 1% pyrite.

The rock is fissile. Core breaks at an angle of 60° with the core axis.

#### **Banded, medium grey siltstone [S6A(++gy)(+++RU):**

Intersected in the following core sections: 91 to 192 m

This unit shows alternating and diffuse bands of medium (++) grey (gy) siltstone (S6A) with dark (+++) grey (gy) shale (S6E). Banding occurs as arrhythmic thin beds (1-2 cm) repeated at (1-3 cm, to 10 cm) intervals. These beds are all similar. From the bottom to the

top of the hole, they are composed of a light grey siltstone laminae (<1-10 mm) – and at a sharp contact, of a black shale laminae (1-2 mm).

About 3% of pyrite cubes (<1 mm) are observed “shoulder to shoulder” along laminae or disseminated throughout the light grey banding. Pyrite reach up to 15% pyrite in some rae bands.

Little graphite along fissile plans.

**Poorly laminated, dark grey siltstone [S6A(+++gy)(+LA)(++GP):**

Intersected in the following core sections: 53 to 65 m; 68 to 92 m; 202 to 208 m.

The rock is poorly laminated. Its color is the indication that the matrix is mixture of siltstone and black shale. This unit shows the ubiquitous presence of thin black shale laminae (<1 mm) contrasting in color with the dark grey matrix.

The rock shows about 3% pyrite, disseminated throughout the rock or occurring along laminae.

Presence of heavy graphite content along some shear plans.

**Red shale [S6E(+++rd)(+LA)]:**

The rock is dark (+++) burgundy to brick red (rd). It is massive to poorly laminated (+LA). Occasionally, thin (<1 mm), light grey (+gy) silty laminae with trace of disseminated pyrite cubes (<0.5 mm).

The massive core show no pyrite but less than 1% of tiny (0.2-0.8 mm) grey metallic mineral oriented along the fissility, which coincide to laminae plans and stratification.

Three fault zones (FZ) were intersected:

**Fault Zones:**

Intersected in the following core sections: 49 to 53 m; 65 to 68 m.

The first fault shows chlorite plans and gauge material. It contains some pyrite chunks but no trace of any other mineralization.

The second fault is similar but contains no pyrite but heavy graphite and qtz-carb veinings.

Core angle (CA) is quite regular. The angle between the core axis and the stratification, given by laminae, defines the CA at 60°.

Acid tests, performed for hole inclination, indicates no change from the hole collar angle to the bottom of the hole.

**Short log:**

0 – 6 m: Casing

6 – 13 m: Light grey Siltstone [S6A(+gy)(+LA)]

13 – 25 m: Red Shale [S6E(+++rd)(+LA)]

25 – 50 m: Light grey Siltstone [S6A(+gy)(+LA)]

50 – 54 m: Fault Zone [FZ]  
Little graphite and chlorite

54 – 65 m: Dark grey Siltstone [S6A(+++gy)(+LA)(++GP)]  
3% pyrite  
Locally, heavy graphite

65 – 68 m: Fault Zone [FZ(+++GP)]  
Little pyrite with quartz veining  
Heavy graphite

68 – 92 m: Dark grey Siltstone [S6A(+++gy)(+LA)]  
Locally, presence of heavy graphite

92 – 192 m: Medium Grey Siltstone and dark shale [S6A(++gy)+S6E(bk)(+++RU)]  
3% pyrite  
Little graphite

192 – 202 m: Light grey Siltstone [S6A(+gy)(+LA)]

202 – 208 m: Dark grey Siltstone [S6A(+++gy)(-LA)]

208 – 249 m: Light grey Siltstone [S6A(+gy)(+LA)]

249 m: End of hole

**Sampling and assay results:**

Seven samples were selected and analysed for a suite of 51 elements. Results in part per million (ppm) for Cu, Zn, Pb, Au and Ag are as follows:

**Modified from Appendix 2: Assay results (ppm) of core sampling**

rf	Hole No	Sp No	From	To	Length m	RckType	Cu	Zn	Pb	Au	Ag
8	1	909951	23,89	24,00	0,11	[S6E(+++rd)(+LA)]	1,00	38,00	3,20	-0,20	0,01
14	1	909957	33,13	33,25	0,12	[S6A(+gy)(+LA)]	34,30	54,00	3,60	-0,20	0,01
9	1	909952	82,22	82,34	0,12	[S6A(+++gy)(+LA)]	1,90	26,00	1,10	-0,20	0,02
10	1	909953	152,80	152,90	0,10	[S6A(++gy)(+++RU)]	54,90	197,00	39,00	-0,20	0,35
11	1	909954	169,98	170,11	0,13	[S6A(++gy)(+++RU)]	20,50	33,00	35,60	-0,20	0,10
12	1	909955	203,12	203,27	0,15	[S6A(+++gy)(-LA)]	6,00	76,00	4,20	-0,20	-0,01
13	1	909956	228,00	228,14	0,14	[S6A(+gy)(+LA)]	16,10	94,00	22,70	-0,20	0,04
						Statistics Hole LDP-1	Cu	Zn	Pb	Au	Ag
						<i>Min</i>	1,00	26,00	1,10	-0,20	-0,01
						<i>Max</i>	54,90	197,00	39,00	-0,20	0,35
						<i>Aver.</i>	19,24	74,00	15,63	-0,20	0,07
						<i>Med.</i>	16,10	54,00	4,20	-0,20	0,02
						<i>Std Dev.</i>	19,66	59,46	16,51	0,00	0,13

**Conclusion and Recommendations:**

No significant mineralization or anomalous assay results was intersected in the drill hole.

The constant core angle (CA) of 60° indicates a 50° SE apparent dip on section L 10 W.

The low conductivity Stratagem conductor is explained by moderate graphite content intersected between 53 to 192 m. The pyrite content (<3%) would not be a significant factor.

No additional work is recommended.

**Discussion:**

The shape of the Stratagem pattern on section L 10 W could be explained by complex faulting, most probably by cross-faulting (Figure 16).

Figure 15

Figure 16

### 10.3.2 Hole LDP-2

DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-02	22A13	2171501	20 U 291884 5431269	1200W	1425S	538	338°	-55°	225

**Objectives:**

This hole was drilled to explain a low resistivity Stratagem anomaly estimated at a vertical depth of 175 meters.

**Rock types:**

The hole crossed 5 m of overburden and was terminated at a depth of 225 m. It intersected clastic sedimentary rocks exclusively, consisting of siltstone mostly, conglomerate and sandstone (Figure 17; Appendix 1 – Hole LDP-2).

Siltstone (S6A) varies from light (+) to dark grey (+++), poorly laminated (+LA) to strongly (+++) banded (RU). The conglomerate shows quartz pebbles and the sandstone is red and magnetic.

Graphite and pyrite (<3-5%) was encountered in some core sections.

The following rock units were intersected:

**Poorly laminated, light grey siltstone [S6A(+gy)(+LA)]:**

Intersected in the following core sections: 87 to 100 m; 106 to 209 m

The rock is poorly (+) laminated (LA). The massive matrix shows about 10% of tiny (<0.5 mm) angular quartz fragments. The laminations are thin (<0.5 mm) and dispersed. They consist of dark (+++) grey (gy) to black (bk) shale (S6E) laminae at the direct contact with light grey, silty laminae.

Less than 1% pyrite.

The rock is fissile. Core breaks at an angle of 80° with the core axis.

**Banded, medium grey siltstone [S6A(++gy)(+++RU):**

Intersected in the following core sections: 91 to 192 m

This unit shows alternating and diffuse bands of medium (++) grey (gy) siltstone (S6A) with dark (+++) grey (gy) shale (S6E). Banding occurs as arrhythmic thin beds (1-2 cm, to 10 cm) repeated at (1-3 cm, to 10 cm) intervals. These beds are all similar. From the bottom to the top of the hole, they are composed of a light grey siltstone laminae (<1-10 mm) – and at a sharp contact, of a black shale laminae (1-2 mm).

From 5% to 20% pyrite cubes (<1 mm) are observed disseminated throughout the light grey banding, or in thin laminae (1 - 2 mm) in the dark grey shale. In the latter, pyrite grains are “shoulder to shoulder”.

As a whole, this unit shows 3% pyrite.

Occasional graphite along fissile plans.

**Black shale [S6E(bk)(+LA)(3-5%Py)(++GP)]:**

The rock is black. It is massive with occasional laminae of light grey siltstone.

5% to 8% disseminated fine grained pyrite in layers (1-5 cm).

Occasional laminae (1-3 mm) of massive pyrite.

Occasional graphite coating.

**Conglomerate and magnetite bearing sandstone [(S4E+S1AB(++MG))]:**

The conglomerate breccia (100 to 106 m) shows angular to sub-rounded fragments.

The conglomerate (209 to 211 m) shows 85% well rounded to ovoid quartz pebbles (5-8 mm) in a sandy matrix.

The sandstone 211 to 218 m) is pinkish, massive with quartz and feldspar fragments 3-6 mm). It contains fine grained magnetite, thus slightly to moderately magnetic.

One fault zone (FZ) was intersected:

**Fault Zones:**

Intersected in the following core sections: 26 to 31 m.

The core is moderately brecciated and fractures.

A few short graphite zones

3-5% pyrite

Core angle (CA) is quite regular. The angle between the core axis and the stratification, given by laminae, defines the CA at 80°.

Acid tests, performed for hole inclination, indicates no change from the hole collar angle to the bottom of the hole.

**Short log: (Figure 5; Appendix 1 – Hole LDP-2)**

0 – 5 m: Casing

5 – 13 m: Banded Medium Grey Siltstone [S6A(++gy)(+++RU)(3-5%PY)(+GP)]  
3-5% pyrite  
Occasional graphite

13 – 26 m: Black Shale [S6E(bk)(+LA)(5-8%Py)(++GP)]  
3-5% pyrite  
Occasional graphite

26 – 31 m: Fault Zone [FZ(++GP)]  
3-5% pyrite  
Occasional graphite

31 – 75 m: Banded Medium Grey Siltstone [S6A(++gy)(+++RU)(3-5%PY)]  
3-5% pyrite

75 – 87 m: Banded Light Grey Siltstone [S6A(+gy)(+LA)]

87 – 100 m: Light grey-beige Siltstone [S6A(+++gy)(+LA)]

100 – 106 m: Conglomeratic breccia [S4E]

106 – 209 m: Light grey-beige Siltstone [S6A(+gy)(+LA)]

209 – 211 m: Conglomerate [S4E]

211 – 218 m: Sandstone [S1AB(++MG)]

218 – 225 m: Siltstone [S6A(++gy)(+LA)]

225 m: End of hole

**Sampling and assay results:**

Ten samples were selected and analysed for a suite of 51 elements. Results in part per million (ppm) for Cu, Zn, Pb, Au and Ag are as follows:

**Modified from Appendix 2: Assay results (ppm) of core sampling**

rf	Hole No	Sp No	From	To	Length m	RckType	Cu	Zn	Pb	Au	Ag
15	2	909958	19,40	19,50	0,10	[S6E(bk)(+LA)(5-8%Py)(+GP)]	73,20	88,00	31,40	-0,20	0,32
16	2	909959	24,95	25,06	0,11	[S6E(bk)(+LA)(5-8%Py)(+GP)]	25,60	86,00	9,70	-0,20	0,09
17	2	909960	30,48	30,59	0,11	[FZ(+GP)]	36,80	115,00	14,80	-0,20	0,14
18	2	909961	35,20	35,29	0,09	[S6A(++gy)(+++RU)(3-5%PY)]	51,40	88,00	21,00	-0,20	0,14
19	2	909962	37,29	37,39	0,10	[S6A(++gy)(+++RU)(3-5%PY)]	35,00	229,00	22,20	-0,20	0,10
20	2	909963	44,67	44,75	0,08	[S6A(++gy)(+++RU)(3-5%PY)]	20,20	122,00	20,80	-0,20	0,12
21	2	909964	48,00	48,11	0,11	[S6A(++gy)(+++RU)(3-5%PY)]	32,80	83,00	17,10	-0,20	0,24
22	2	909965	57,09	57,18	0,09	[S6A(+gy)(+LA)]	29,10	26,00	7,60	-0,20	0,07
23	2	909966	64,40	64,53	0,13	[S6A(+gy)(+LA)]	3,50	30,00	2,10	-0,20	0,04
24	2	909967	87,00	87,07	0,07	[S6A(++gy)(+LA)]	29,80	237,00	15,90	-0,20	0,04
						Statistics Hole LDP-2	Cu	Zn	Pb	Au	Ag
						<i>Min</i>	3,50	26,00	2,10	-0,20	0,04
						<i>Max</i>	73,20	237,00	31,40	-0,20	0,32
						<i>Aver.</i>	33,74	110,40	16,26	-0,20	0,13
						<i>Med.</i>	31,30	88,00	16,50	-0,20	0,11
						<i>Std Dev.</i>	18,50	71,64	8,36	0,00	0,09

**Conclusion and Recommendations:**

No significant mineralization or anomalous assay results was intersected in the drill hole.

The constant core angle (CA) of 80° indicates a 40° SE apparent dip on section L 12 W.

The low conductivity Stratagem conductor would be explained by moderate graphite content intersected between 5 to 31 m, and perhaps by the 3-5% pyrite content intersected between 31 and 75 m.

No additional work is recommended.

**Discussion:**

The shape of the Stratagem pattern on section L 12 W could be explained by complex faulting, most probably by cross-faulting (Figure 18).

Figure 17

Figure 18

### 10.3.3 Hole LDP-3

DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-03	22H04	2171512	20 U 293875 5432129	1000E	1600S	513	333°	-45°	249

**Objectives:**

This hole was drilled to explain a low resistivity Stratagem anomaly estimated at a vertical depth of 200 meters.

**Rock types:**

The hole crossed 9 m of overburden and was terminated at a depth of 249 m. It intersected clastic sedimentary rocks mostly, consisting of siltstone, black and red shale (Figure 19; Appendix 1 – Hole No LDP-3).

Siltstone (S6A) is light (+), poorly laminated (+LA). Shale (S6E) is black (bk) and red (+++rd).

Light to heavy graphite content is associated with the black shale.

The following rock units were intersected:

**Poorly laminated, light grey siltstone [S6A(+gy)(+LA)]:**

Intersected in the following core sections: 9 to 65 m;

The rock is poorly (+) laminated (LA). The massive matrix shows about 10% of tiny (<0.5 mm) angular quartz fragments. The laminations are thin (<0.5 mm) and dispersed. They consist of dark (+++) grey (gy) to black (bk) shale (S6E) laminae at the direct contact with light grey, silty laminae.

Less than 1% pyrite.

The rock is fissile. Core breaks at an angle of 80° with the core axis.

**Red shale [S6E(+++rd)(+LA)]:**

Intersected in the following core sections: 65 to 70 m.

The rock is dark (+++) burgundy to brick red (rd). It is massive to poorly laminated (+LA). Occasionally, thin (<1 mm), light grey (+gy) silty laminae with trace of disseminated pyrite cubes (<0.5 mm).

No fault zone was intersected.

**Feldspar porphyry [I2F(PP)(++MG):**

Intersected in the following core sections: 70 to 83 m.

Rock consists of sub-angular to almost rounded, 15-20% pink, corroded feldspar phenocryst (<1 cm) in a medium grey and pink groundmass composed of quartz, white and pink feldspar, and biotite. Light green epidote (?) clusters within pink feldspar phenocryst

Both contacts with enclosing rock are gradual and at fine grained.

No sulfide and moderately magnetic.

**Black graphitic shale [S6E(bk)(MA)(+++GP):**

Intersected in the following core sections: 142 to 249 m.

Weakly to strongly graphitic, black shale with locally presence of disseminated or layered (fine laminae) pyrite. Some sections showing minor banded siltstone and quartz veining.

Core angle (CA) is quite regular. The angle between the core axis and the stratification, given by laminae, defines the CA at 80°.

Acid tests, performed for hole inclination, indicates no change from the hole collar angle to the bottom of the hole.

**Short log:**

0 – 9 m: Casing

9 – 65 m: Light grey Siltstone [S6A(+gy)(+LA)]

65 – 70 m: Red Shale [S6E(+++rd)(+LA)]

70 – 83 m: Feldspar Porphyry ([I2F(PP)(++MG)]  
Moderately magnetic

83 – 142 m: Red Shale (60%) and Siltstone (40%) [S6E(+++rd)S6A(+gy)]

142 – 182 m: Black graphitic shale [S6E(bk)(MA)(+++GP)]  
Trace of pyrite  
Heavy graphite

182 – 226 m: Black Shale (80%) and minor siltstone (20%) [S6E(+++rd)(++GP) / S6A(+gy)]  
Trace to locally 3% pyrite

## Moderate graphite

226 – 249 m: Black shale - Quartz veining [S6E(bk)(QZ30%)(+GP)]  
 Locally, presence of graphite  
 Occasional pyrite laminae

249 m: End of hole

**Sampling and assay results:**

Nine samples were selected and analysed for a suite of 51 elements. Results in part per million (ppm) for Cu, Zn, Pb, Au and Ag are as follows:

Modified from Appendix 2: Assay results (ppm) of core sampling

rf	Hole No	Sp No	From	To	Length m	RckType	Cu	Zn	Pb	Au	Ag
25	3	909968	20,47	20,57	0,10	[S6A(+gy)(+LA)]	62,30	78,00	4,80	-0,20	0,04
26	3	909969	32,20	32,34	0,14	[S6A(+gy)(+LA)]	24,30	93,00	216,00	-0,20	0,18
27	3	909970	47,42	47,52	0,10	[S6A(+gy)(+LA)]	86,10	97,00	7,50	-0,20	0,02
28	3	909971	67,63	67,76	0,13	[S6E(+++rd)(+LA)]	10,80	67,00	5,20	-0,20	-0,01
29	3	909972	73,85	73,99	0,14	[I2F(PP)(++MG)]	22,90	63,00	6,30	-0,20	0,04
30	3	909973	162,74	162,82	0,08	[S6E(bk)(MA)(+++GP)]	30,70	113,00	23,80	-0,20	0,16
31	3	909974	185,16	185,23	0,07	[S6E(+++rd)(++GP) / S6A(++gy)]	38,90	157,00	20,40	-0,20	0,08
32	3	909975	192,10	192,20	0,10	[S6E(+++rd)(++GP) / S6A(++gy)]	37,00	214,00	17,20	-0,20	0,18
33	3	909976	222,94	223,08	0,14	[S6E(+++rd)(++GP) / S6A(++gy)]	46,40	68,00	16,80	-0,20	0,26
						Statistics Hole LDP-3	Cu	Zn	Pb	Au	Ag
						<i>Min</i>	10,80	63,00	4,80	-0,20	-0,01
						<i>Max</i>	86,10	214,00	216,00	-0,20	0,26
						<i>Aver.</i>	39,93	105,56	35,33	-0,20	0,11
						<i>Med.</i>	37,00	93,00	16,80	-0,20	0,08
						<i>Std Dev.</i>	22,78	50,20	68,12	0,00	0,09

**Conclusion and Recommendations:**

No significant mineralization or anomalous assay results was intersected in the drill hole.

The constant core angle (CA) of 80° indicates a 55° SE apparent dip on section L 10 E.

The low conductivity Stratagem conductor is explained by moderate graphite content intersected between 142 to 249 m. The pyrite content (<3%) would not be a significant factor.

No additional work is recommended.

**Discussion:**

The shape of the Stratagem pattern on section L 10 E could be explained by complex faulting, probably by cross-faulting. However, thrust faulting is not excluded (Figure 20).

Figure 19

Figure 20

### 10.3.4 Hole LDP-4

DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-04	22H04	95442	20 U 293758 5432858	1200E	900S	575	330°	-75°	249

**Objectives:**

This hole was drilled to explain a low resistivity Stratagem anomaly estimated at a depth of 200 meters.

**Rock types:**

The hole crossed 4 m of overburden and was terminated at a depth of 249 m. It intersected clastic sedimentary rocks consisting of siltstone and shale mostly, and to a lesser extent, a feldspar porphyry (Figure 21; Appendix 1 – Hole LDP-4).

The following rock units were intersected:

**Thinly Laminated to layered medium grey Siltstone [S6A(LA)(RU)**

Intersected in the following core sections: 4 to 118 m; 129 to 207.

The rock shows arrhythmic medium to dark grey to black shaly siltstone alternating with medium grey-beige layers (<1-5 mm) composed of felsic minerals, probably quartz and feldspar, and dark grey more shaly material mixed with siltstone

1-2% pyrite. As small grains (<0.5 mm) or along laminae (<1 mm)

The rocks is fissile. Core breaks at an angle of 60° with the core axis.

**Feldspar porphyry [I2F(PP)(++MG):**

Intersected in the following core sections: 118 to 129 m.

The rock shows about 40% of prismatic to sub-rounded, pink aggregates and potassic feldspar phenocrysts (<1 mm) and greenish altered? plagioclase phenocrysts (<1 X <3 mm), in a medium groundmass composed of quartz, feldspar and biotite. Pink feldspar occupy the outer shell of the aggregates whereas the center shows a light bottle green acicular mineral

Trace of pyrite and moderately magnetic.

One fault zone (FZ) was intersected:

**Fault Zones:**

Intersected in the following core sections: 78 to 80 m; 113 to 118 m.

Brechiated siltstone forming displaced angular blocks coined in each others. Wavy core angle.

Core angle (CA) is quite regular. The angle between the core axis and the stratification, given by laminae, defines the CA at 60°.

Acid tests, performed for hole inclination, indicates no change from the hole collar angle to the bottom of the hole.

**Short log:**

0 – 4 m: Casing

4 – 78 m: Thinly Laminated to layered medium grey Siltstone [S6A(LA)(RU)]

78 – 80 m: Fault Zone [FZ]

80 – 96 m: Light grey Siltstone [S6A(+gy)(+LA)]  
8-10% randomly oriented quartz veining

96 – 104 m: Folding  
Gradual folding of siltstone; CA gradually coms to 0°CA

104 – 113 m: Layered medium grey Siltstone [S6A(gy++)(RU)]

113 – 118 m: Fault Zone [FZ]  
Brechiated siltstone forming angular coined fragments

118 – 129 m: Feldspar Porphyry [I2F(PP)(++MG)]  
Moderately magnetic

129 – 207 m: Layered medium grey and light beige Siltstone [S6A(+gy++gy)(RU)]

207 – 249 m: Red Sandstone [S1AB(+++rd)]  
Less than 1-2 mm wide quartz, feldspar and black shale grains in a finer reddish matrix. The matrix shows tinny (<1 mm) metallic grey mineral (<1-2 %) that may be specularite (?). Sometime in aggregates (<2 mm) slightly magnetite.

249 m: The rock is locally slightly to moderately magnetic  
End of hole

**Sampling and assay results:**

Fourteen samples were selected and analysed for a suite of 51 elements. Results in part per million (ppm) for Cu, Zn, Pb, Au and Ag are as follows:

**Modified from Appendix 2: Assay results (ppm) of core sampling**

rf	Hole No	Sp No	From	To	Length m	RckType	Cu	Zn	Pb	Au	Ag
34	4	909977	18,87	18,90	0,03	[S6A(LA)(RU)]	44,00	71,00	17,30	-0,20	0,17
35	4	909978	35,65	35,70	0,05	[S6A(LA)(RU)]	25,60	60,00	21,80	-0,20	0,11
36	4	909979	36,80	36,85	0,05	[S6A(LA)(RU)]	58,10	76,00	51,00	-0,20	0,66
37	4	909980	39,88	39,93	0,05	[S6A(LA)(RU)]	57,10	90,00	87,00	-0,20	0,49
38	4	909981	47,34	47,38	0,04	[S6A(LA)(RU)]	74,70	105,00	43,70	-0,20	0,57
39	4	909982	76,45	76,50	0,05	[S6A(LA)(RU)]	33,30	106,00	16,40	-0,20	0,27
40	4	909983	123,54	123,64	0,10	[I2F(PP)(++MG)]	48,50	71,00	5,40	-0,20	0,05
41	4	909984	144,10	144,15	0,05	[S6E(+++rd)]	10,00	90,00	8,40	-0,20	0,01
42	4	909985	193,40	193,47	0,07	[S6A(+gy++gy)(RU)]	93,80	95,00	20,30	-0,20	0,11
43	4	909986	216,50	216,56	0,06	[S1AB(+++rd)]	1,80	94,00	5,10	-0,20	-0,01
45	4	909988	218,19	218,26	0,07	[S1AB(+++rd)]	1,70	91,00	6,50	-0,20	-0,01
46	4	909989	224,90	225,00	0,10	[S1AB(+++rd)]	2,00	55,00	24,80	-0,20	0,04
47	4	909990	239,34	239,44	0,10	[S1AB(+++rd)]	25,30	155,00	3,60	-0,20	0,02
44	4	909987	245,48	245,52	0,04	[S1AB(+++rd)]	24,40	18,00	7,10	-0,20	0,02
						Statistics Hole LDP-4	Cu	Zn	Pb	Au	Ag
						<i>Min</i>	1,70	18,00	3,60	-0,20	-0,01
						<i>Max</i>	93,80	155,00	87,00	-0,20	0,66
						<i>Aver.</i>	35,74	84,07	22,74	-0,20	0,18
						<i>Med.</i>	29,45	90,00	16,85	-0,20	0,08
						<i>Std Dev.</i>	28,47	30,99	23,44	0,00	0,23

**Conclusion and Recommendations:**

No significant mineralization or anomalous assay results was intersected in the drill hole.

The constant core angle (CA) of 60° indicates a 40° SE apparent dip on section L 12 E..

The low conductivity Stratagem conductor is explained by the magnetite and perhaps the specularite content of the sandstone intersected from 207 to the end of the hole at 249 m.

No additional work is recommended.

**Discussion:**

The shape of the Stratagem pattern on section L 12 E could be explained by complex faulting, most probably cross-faulting. A high resistive zone located on the section between 1200S and 1400S is possibly caused by a dyke (Figure 22).

The gradual but relatively sharp folding of the siltstone, between 96 and 104 m, could be an indication of faulting or perhaps folding.

Figure 21

Figure 22

### 10.3.5 Hole LDP-5

DDH No	NTS	Claim No	NAD 83 UTM ZONE 20	Line	Station	Ele m	AziGrid	Dip	Length
LDP-05	22H04	2077735	20 U 296839 5434259	4600E	965S	481	360°	-90°	219

**Objectives:**

This hole was drilled to explain a low resistivity Stratagem anomaly estimated at a depth of 200 meters.

**Rock types:**

The hole crossed 10 m of overburden and was terminated at a depth of 219 m. It intersected clastic sedimentary rocks exclusively, consisting of grey and occasional red, layered to massive siltstone mostly, and one unit of red shale. Rocks is crossed by four fault zones (Figure 23; Appendix 1 – Hole No LDP-5).

**Short log: (Figure 8; Appendix 1 – Hole LDP-5)**

0 – 10 m: Casing

10 – 17 m: Fault Zone [FZ(++GP)]  
Moderately graphitic

17 – 48 m: Layered Siltstone [S6A(RU)]

48 – 50 m: Fault Zone [FZ]

50 – 74 m: Silty black shale [S6E(bk)GP]  
Little graphite

74 – 75 m: Fault [FZ]

75 – 111 m: Massive siltstone [S6A(MA)]

111 – 118 m: Massive, thinly laminated siltstone [S6A(+LA)]

118 – 121 m: Fault [FZ]

121 – 141 m: Massive and layered Siltstone [S6A(RU)]

141 – 155 m: Red shale [S6E (+++rd)]

155 – 200 m: Massive siltstone [S6A(MA)]

200 – 219 m: Red siltstone [S6A(+++rd)]

219 m: End of hole

**Sampling and assay results:**

Seventeen samples were selected and analysed for a suite of 51 elements. Results in part per million (ppm) for Cu, Zn, Pb, Au and Ag are as follows:

Modified from Appendix 2: Assay results (ppm) of core sampling

rf	Hole No	Sp No	From	To	Length m	RckType	Cu	Zn	Pb	Au	Ag
48	5	909991	17,47	17,60	0,13	[FZ(++GP)]	16,30	111,00	48,80	-0,20	0,04
49	5	909992	36,20	36,32	0,12	[S6A(RU)]	12,50	59,00	2,40	-0,20	0,01
50	5	909993	51,58	51,70	0,12	[S6E(bk)GP]	39,10	77,00	14,00	-0,20	0,17
51	5	909994	52,84	53,00	0,16	[S6E(bk)GP]	33,00	72,00	16,70	-0,20	0,14
52	5	909995	72,19	72,32	0,13	[S6E(bk)GP]	30,70	84,00	27,20	-0,20	0,21
53	5	909996	92,51	92,60	0,09	[S6A(MA)]	16,30	104,00	11,60	-0,20	0,01
54	5	909997	111,80	111,94	0,14	[S6A(+LA)]	29,00	102,00	33,20	-0,20	0,09
55	5	909998	119,10	119,24	0,14	[FZ]	8,90	121,00	32,90	-0,20	0,09
56	5	909999	130,87	131,00	0,13	[S6A(RU)]	62,60	105,00	3,70	-0,20	0,04
57	5	910000	143,10	143,56	0,46	[S6E(+++rd)]	1,80	99,00	12,20	-0,20	-0,01
1	5	909451	153,93	154,04	0,11	[S6E(+++rd)]	13,90	104,00	15,30	-0,20	0,01
2	5	909452	168,73	168,82	0,09	[S6A(MA)]	26,50	106,00	5,40	-0,20	0,01
3	5	909453	175,87	175,97	0,10	[S6A(MA)]	24,50	105,00	5,90	-0,20	0,02
4	5	909454	195,72	195,80	0,08	[S6A(MA)]	20,10	86,00	6,40	-0,20	0,02
5	5	909455	205,75	205,83	0,08	[S6A(+++rd)]	19,20	85,00	6,30	-0,20	0,02
6	5	909456	212,86	212,98	0,12	[S6A(+++rd)]	2,40	73,00	7,70	-0,20	0,01
7	5	909457	217,10	217,20	0,10	[S6A(+++rd)]	4,50	77,00	8,00	-0,20	0,01
						Statistics Hole LDP-5	Cu	Zn	Pb	Au	Ag
						<i>Min</i>	1,80	59,00	2,40	-0,20	-0,01
						<i>Max</i>	62,60	121,00	48,80	-0,20	0,21
						<i>Aver.</i>	21,25	92,35	15,16	-0,20	0,05
						<i>Med.</i>	19,20	99,00	11,60	-0,20	0,02
						<i>Std Dev.</i>	15,22	16,99	12,94	0,00	0,06

**Conclusion and Recommendations:**

No significant mineralization or anomalous assay results was intersected in the drill hole.

Core angle (CA) varies from 40° to 65°. According to Stratagem, rock formations would dip at a shallow angle to the north (?).

The low conductivity Stratagem conductor could be explained by a more conductive rock types but nothing obvious.

No additional work is recommended.

**Discussion:**

The shape of the Stratagem pattern on section L 46 W could be explained by complex faulting, most probably by cross-faulting and perhaps folding (Figure 24).

Figure 23

Figure 24

## **Item 11 Sampling method and approach**

No economic mineralization was observed in the core but local, disseminated and thin lensoid laminae of pyrite. There was no justification for long core section sampling, or core splitting.

The writer selected 57 core samples for assaying. Samples consisted of short (average 11 cm long) whole pieces of core, which contain pyrite mineralization or were representative of various rock types.

Each of these samples was individually described under a binocular and reported in drill logs. With this approach, discrepancies between assay results and core observation are easily noted. Any such discrepancy would result in a request for re-assaying by the laboratory of fine and coarse rejects, and if still not explained by core re-examination and re-sampling. No such discrepancy was noted.

Each selected sample was inserted in a clear plastic sample bag, in which a sample ticket was poured. This ticket is the first of three similar numbered tickets. Prior to bag closure, the sample ticket number was written on the bag surface. The second numbered ticket was stapled in the core box at the space where the sample was taken from. Previously, to the stapling, a red line had been traced in the core box to mark the sample location. The third ticket remains in the ticket booklet.

Sample bags were inserted in two large size canvas bags and sent by bus to ALS Laboratory located in Val d'Or, Quebec.

## **Item 12 Sampling preparation, analyses and security**

### **Val d'Or facility: (Handling and crushing)**

Code LOG-21:

Upon reception at the Laboratory, and in order to provide complete traceability of our samples throughout the sample shipping and processing stages, all samples received at ALS are barcoded and weighed prior to be processed.

Code CRU-21:

Samples were crushed to 70% - 2mm or better.

Code SPL-21:

Crushed samples were split using a riffle splitter.

Code PUL-31:

A split portion of up to 250 g was pulverized to 85% passing 75 microns or better.

About 5 g of this material was forward to ALS Laboratory of Vancouver for assaying.

**Vancouver laboratory: (Assaying and reporting)**

Code WEI-21

Pulverized samples are received.

Code ME-MS41:

About 2 – 5 g of pulverized samples are analysed for suite of 51 elements.

MS41 is an ultra-trace level method using aqua regia digestion. The instrumental analytical techniques comprise inductively coupled plasma with mass spectroscopy (ICP-MS).

Results are reported in ppm or % (Appendix 3).

Additional information is available on ALS website:

<http://www.alsglobal.com/Mineral/DownloadContent.aspx?key=1>

**Accreditation:**

ALS Laboratory – Val d’Or branch is a facility specializes in the preparation of geological materials, and analysis for gold and base metals using fire assay, atomic absorption spectroscopy (AAS), and gravimetric techniques.

Prepared samples are forwarded to their North Vancouver laboratory for analysis. This facility is a full-service, analytical laboratory, specializing in mineral testing for mining and exploration companies. It serves as a central analytical "hub" laboratory for all of ALS Chemex's North American branch facilities.

Fully equipped with state-of-the-art instrumentation, this laboratory provides a comprehensive range of analytical techniques including fire assay, atomic absorption spectroscopy (AAS), inductively coupled plasma atomic emission spectroscopy (ICP-AES), inductively coupled plasma mass spectroscopy (ICP-MS), X-Ray Fluorescence (XRF), and several others.

ALS Chemex has attained ISO 9001:2000 registration. In addition, the ALS Chemex Vancouver laboratory is accredited to ISO 17025 by Standards Council of Canada for a number of specific test procedures including fire assay Au by AA, ICP and gravimetric finish, multi-element ICP and AA Assays for Ag, Cu, Pb, and Zn.

As part of their routine procedures, ALS Chemex uses barren wash material between sample preparation batches and, where necessary, between highly mineralised samples. Performing regular QC checks on prepared material monitors sample preparation quality. Laboratories are required to submit results from QC checks to the Quality Assurance department to compile and make sure standards outlined in our Service Schedule are being met.

**Assay results, duplicates, standards and blanks:**

Assay results are reported under Certificate VO09083617, addressed to the writer.

Duplicates, standards and blank samples were inserted in the batch.

No error or discrepancy was noted.

### **Item 13 Discussion and Conclusions**

Most of the rock types, encountered in all five holes, are predominantly siltstones and shales with minor sandstones and conglomerates of the Rivière Ouelle Formation.

Stratagem low resistivity drill targets is explained by graphite with occasional pyrite (1-3%) mineralization associated with siltstones and shales mostly, and with disseminated magnetite and specularite associated with sandstones.

The stratigraphic and structural history of the general property area appears more complex than presented in published literature. This statement is mentioned by the writer after interpretation of airborne magnetic surveys and electromagnetic (Figures 25 and 26 respectively).

From Figure 25 (Total magnetic field), the contact between volcanics of Pics Unit, and sedimentary rocks of the Riviere Ouelle Formation is clearly indicated. Inferred ENE striking and parallel faults are inferred within Pics Unit.

Within the Riviere Ouelle Formation, there are four EW striking “high mag” zones. Those high mag zones are presumed to be caused by magnetic bearing sandstone. Such sandstone was intersected in holes LDP-2 and 4.

From Figure 26, high conductivity AEM zones appears as NW-SE oriented stacking zones. These zones seem to be confined between NW striking steeply dipping cross faults. Fault zones were intersected in most of the holes. In holes LDP-3 and 4, weakly to locally moderately magnetic feldspar porphyry was intersected. Such porphyry is inferred between the last two easternmost faults (from 294000 to 295500 E). Moderate conductivity zones within these two faults could be caused by disseminated magnetite.

The writer relied on Risk Reduction Resources for Stratagem interpretation (Anderson, 2009). However, the resistivity patterns of anomalies as shown on drill sections are quite complex. If those patterns are representative of rock resistivity, then rock stratigraphy and structure is complex.

It is the writer opinion that the economic exploration potential of the property is limited. Drilled Stratagem anomalies and by extension their AEM conductors are caused by graphite in siltstones and shales, and by disseminated magnetite in sandstones.

No core evidence of rock alteration from a nearby intrusive was observed in drill holes.

Figure 25

Figure 26

## Item 14 Recommendations

This drilling campaign indicated a very low exploration potential of the AEM conductors (Zones 1 to 4) and Stratagem anomalies located in the south member of the Riviere Ouelle Formation.

Based on the negative results of this drilling campaign, no additional drilling is recommended across above mentioned AEM conductors.

On the other hand, the exploration potential of AEM - Zone 5, other peripheral AEM conductors, the south-eastern area of the property and the potential of the Mineralized Zones has not been explored. The following field work would be recommended:

- Cover the property with a geological survey
- Carry out geochemical soil sampling and geophysical test lines across untested AEM conductors. The writer is particularly intrigued by the inferred NW striking intrusive located in the middle of the property.
- The proper geochemical and geophysical, and cost effective techniques should be considered.

However, before conducting any such field work, the writer recommends compiling and integrating all FSR with previous work results. The resulting report shall be comprehensive and shall include useful compilation maps with related figures, tables and appendices.

Conclusions that would emerge from this proposed report would determine if further work is recommended.

## Item 15 References

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## Item 16 Date and Signature Page

*Jean-Pierre Cloutier, P.Geo. 417 Pelissier Rouyn-Noranda, Qc J9X 6B2  
Tel: (819) 762-8779; Fax: (819) 762-5527; Email: jpcloutier@tlb.sympatico.ca*

### CERTIFICATE OF THE QUALIFIED PERSON

I, Jean-Pierre Cloutier, P.Geo., do hereby certify that:

1. This certificate applies to the report, titled and dated: "Diamond rill Results (Campaign of Julu and August 2009) Lac des Pics Property, Qc., (NTS 22H04 & 22A13). Prepared by Géoconseil JP Jean-Pierre Cloutier, P. Geo., September 15 2009".
2. I am a graduate of University of Montreal with a Bachelor degree (B.Sc.) in geology (1968). Following my graduation, I held various operational and managing positions within major exploration and mining corporations. I designed and managed numerous multidisciplinary exploration programs ranging from regional reconnaissance to resource definition. I acquired, in the process, an expertise for the exploration of nickel, base metals (Cu-Zn), gold and kimberlite mineralization. As of the date of this report, I am self-employed and consultant in mineral exploration.
3. I am registered as a Professional Geologist with the "Ordre des Géologues du Québec (no 359).
4. I have read the definition of "Qualified Person" set out in National Instrumentation 43-101 and certify that as a result of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a Qualified Person, as defined in NI 43-101.
5. I have visited the Property on June 4<sup>th</sup> and 5<sup>th</sup>, 2009.
6. I am responsible for the preparation of all sections of this report.
7. I am independent of the issuer as described in section 1.4 of NI 43-101.

Dated at Rouyn-Noranda, Québec, this 15th day of September, 2009.

*(s) Jean-Pierre Cloutier*  
Jean-Pierre Cloutier, B.Sc., P. Geo.  
Qualified Person

**Item 17 Illustrations**