

**Technical Report on  
DIAMOND DRILLING and GEOCHEMISTRY  
at GRANDUC**

**STATEMENT OF WORK  
EVENT NUMBER 4109420**

**Located:  
40 Km Northwest of  
STEWART, BRITISH COLUMBIA  
SKEENA MINING DIVISION**

**Latitude: 56° 14' North  
Longitude: 130° 20' West**

**N.T.S. 104B/1W, 1E, 8W  
MTRM 104B 018, 019, 028, 029**

**Project Period:  
April 17, 2006 to October 15, 2006**

**Owner:  
Bell Resources Corp.  
(Granduc crown grants and other claims) and  
Teuton Resources Ltd. (Silver Leduc claims)**

**Operator:  
Bell Resources Corporation  
Vancouver, B.C.  
Mine Permit number MX-1-651**

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## INTRODUCTION

### *Property, Location, Access and Physiography*

The historical Granduc mine and current Bell Resources Corporation exploration property is located about 40 km northwest of Stewart, British Columbia (Figs. 1 and 2) and lies within the regional municipality of Stewart BC. Access during mining operations from the mid 60 to mid 80s was via the 20 km long Tide Tunnel from Tide Lake in the Salmon River Valley to the Granduc mine operation in the core of Granduc Mountain. Surface access was in the past via glacier routes across the Salmon Icefield and cat roads through the Unuk River valley from the north. Access during the period of the current work was by helicopter from Stewart or staging areas along the Summit Lake road. Helicopter routes were governed by weather; in clear conditions or with ceilings above 2000 m, helicopters could fly from Stewart north through the Salmon River Valley directly over the Salmon Icefield past the Scottie Dog Peaks at the head of the South Leduc Valley. With lower cloud ceilings access routes were considerably longer and generally via the Chickamin Valley and Texas Creek.

The claim blocks optioned from Teuton Resources, claims by Bell Resources (Fig. 3) and including the Bell Resources owned crown granted claims around the historic Granduc mine workings (Fig 4), are centred on Granduc Mountain and cover much of the North and South Leduc Glaciers and surrounding mountains.

The Spring 2006 drilling program focussed on southerly extensions of the known Granduc ore deposits, which lie beneath the South Leduc Glacier and possibly within a prominent southerly-trending ridge referred to as South Ridge (Fig. 3, 5). Drilling was done from three pads on the South Leduc Glacier, one near the terminus of the North Leduc and another on the NW side of the ridge (Figure 7). The spring drilling program was followed by a limited summer prospecting program to locate the source of massive sulphide and magnetite boulders previously observed on the verge of the North Leduc glacier on Granduc Mountain. This program successfully located pyritic sulphide breccias at what is termed the JK showing (representing Jason Kolcun and John Keigher). These showing were the site of a Fall 2006 drilling program which consisted of 5 drill holes collared from a single pad at the JK showing site.

The exploration camp for these three programs was located at the base of a west aspect slope on a bench at 870 m elevation that constricts the North Leduc Glacial Valley. This site was originally used as a base of operations for mine construction and particularly the early phases of tunnel construction for access to the Granduc deposits until an avalanche on February 18, 1965 killed 25 miners residing in the camp.

Since the establishment of the Granduc mine the North and South Leduc glaciers have ablated vertically at a rate of some 3 m per year at their lower elevations. Higher elevation ice fields above ca 2000 m elevation have been less affected. During this program, most winter snow cover was melted away to an elevation of ca. 1200 m by mid-June. Peaks around the Granduc mine rise to over 2300 m from glacier-filled valleys that are ice-free below 800 m. Vegetation is mainly species adapted to deep snow cover and resistant to spring avalanches. Willow, alder and aspen cover much of the lower slopes, while heather, mosses and alpine wildflowers cover steep slopes in alpine areas. The lower slopes of the glacial valleys are covered by lateral moraine perched up to 150 m above the present glacial surface. Once the lower slopes avalanched the southerly slopes melted quickly to ground and thick deciduous growths of alder and aspen sprang up. Avalanche debris fields at the base of the slopes melted later revealing dense, tangled slide alder thickets.

The Spring 2006 program occurred during the transition from full winter conditions with thick cold, stratified snowpacks capable of slab and powder avalanches to isothermal snowpacks, which avalanche in wet debris flows, to early summer conditions with relatively stable high elevation snow fields and isolated low elevation snow patches and avalanche debris cones. Much of the snow on the steeper (greater than 30 degrees) low elevations slopes throughout the area was removed by avalanches to elevations of about 1300 m leaving fracture lines or crowns at the base of the higher cold snowpack. Thus, dangerous regional conditions existed for much of late April and May with isolated hazards persisting through early June.

The risks involved were mitigated by a continuous avalanche evaluation and control program undertaken by professional avalanche technicians Paul Berntsen, Dave Healy and Alan Dennis. The program involved passive measures such as reprioritizing the order of drill pad construction and drilling to safe zones until risk naturally abated as well as helicopter dropped blasting to test and remove hazards on significant slopes above the South Ridge drill site. All personnel were trained onsite in avalanche search and rescue techniques and given daily avalanche forecasts for specific work areas. After avalanche risk had abated, fieldwork was monitored by a certified mountain guide, who rigged safety lines for a ridge drilling platform and assisted in accessing surface exploration areas in more rugged and snow covered terrain.

## ***History***

The Stewart region has been a prolific source of mineral discoveries for over a century since it was first explored for placer gold in 1898. Rich silver vein mineralization was discovered in the upper Salmon River Valley ca. 1917 resulting

in the development of the Premier Mine. Icefield barriers delayed discovery of the well-exposed mineralization around Granduc Mountain until 1931 when prospectors Dawson and Fromholz hiked into the Leduc Valley from the Unuk River in Alaska. However, the copper showings were not staked until 1951 when Kvale and McQuillan staked them for the Helicopter Exploration Company Ltd. The Granby Mining company did the first systematic surface and underground exploration in 1952, but development did not take place until a joint venture by ASARCO and Newmont Mining Corporation Ltd were able to finance the challenging work needed to put the deposit into production. Mine development commenced in the early 1960s punctuated by the February 18, 1965 avalanche disaster in the Leduc camp. Production began in 1968 utilizing the 18 km Tide tunnel connecting the mine workings to the upper Salmon River valley to produce 2000 tpd of copper ore. Production ceased in 1977 because of low metal prices. In 1979 the mine was acquired by Esso Minerals Canada Ltd and operated until closure in May 1984. Following the closure in 1984 the property remained dormant and the mill structure at Tide Lake was removed after heavy snow collapsed the roof.

No other major mining or exploration activities were conducted after 1984 although efforts were focused on finding extensions of the known mineralization along strike to the north and south adjacent to the Granduc fault, an understanding of which has been elusive. The discovery of the North Zone, located about 3 km north of the main mine workings, was the last significant development and no copper mineralization has been discovered west of the Granduc fault on Granduc Mountain. In the 90s various localized exploration efforts by Hecla Mining Company coincided with academic studies by the Mineral Deposits Research Unit (MDRU) of the University of BC. The discovery of the rich Eskay Creek precious metal deposit some 40 km north of Granduc prompted a significant geological reassessment of the region starting with the MDRUs Iskut River study involving mineral deposit studies, regional structural mapping, geochronology and litho geochemistry extending south to the Granduc property (Lewis, 1993; 1994; Dawson, et al, 1994).

In 2004 the patented mining claims (Fig. 4) covering the Granduc mine property were purchased by Glenn Zinn and transferred to Bell Resources Corp. Subsequent staking by Teuton Resources surrounded the crown grants and their claims were in turn enclosed partially by Bell Resources claims (Fig. 3). The Teuton Resources claims were optioned by Bell in 2005 and exploration work began. In the spring of 2005 an airborne EM and magnetometer survey revealed extensions of the deposit magnetic anomalies to the south under the South Leduc glacier (Marsh, 2005). This was followed up with a diamond drilling program during September and October of 2005 on the margin of the South Leduc glacier, which confirmed that the magnetic anomalies were related to magnetite-iron-formation – hosted copper mineralization.

## ***Status of Property***

Relevant current claim information is summarized in Table 1, Appendix I.

1. The Crown grant claims covering the Granduc mine property are owned by Bell Resources Corp.
2. Teuton Resources owns the Silver Leduc and adjoining group of claims surrounding the crown grant claims.
3. Bell Resources owns 2 claims staked in 2005, which are contiguous with and encompass some of the Teuton optioned claims.

The claim locations are shown on Fig. 3 after government MTRM maps 104B 018, 019, 028 and 029 with crown grants illustrated in Fig. 4. Bell has a binding Letter of Intent with Teuton Resources Corporation for a sixty percent (60%) option interest on the Leduc Silver property. The Leduc Silver property consists of 13 claims totaling approximately 6800 hectares surrounding the Granduc Property in the Skeena Mining Division of British Columbia. Bell Resources is the operator.

## ***Summary of Work Done***

Exploration work in 2006 by Bell Resources Corp on the patented Granduc claims and surrounding, contiguous Silver Leduc claims optioned from Teuton Resources included a spring season drilling program south of the Granduc deposit, a prospecting program during the summer over the north side of Granduc Mountain and a fall drilling program on mineral occurrences found during the summer. Fieldwork commenced on April 17, and ceased on October 15, 2006.

The programs were based out of a helicopter accessed 12 man camp located 1 km west of the historic Granduc mine on a bench in the North Leduc Valley. The camp was set up on a former airstrip used during the early development of the Granduc mine. Camp equipment was stored for the winter in nearby, long-emptied sectional fuel bunkers from which a panel was removed for access. Helicopter support for the entire three-phase exploration program, including camp setup, which began on April 17, totalled \$626,424.88. Drilling amounted to of 3,900 metres of NQ II core at a cost of \$640,070, plus costs for pad building and supplies. The total expenditure on exploration by Bell Resources Corporation on the Granduc and Silver Leduc claims during this period amounted to \$2,063,288 as accounted in Table 2 (in Appendix 1), which shows cost details.

### ***Spring Drilling Program***

The Spring 2006 Granduc diamond-drilling program was designed to extend the positive results from the 2005 drilling program, which sought southerly extensions

of known Granduc orebodies. The major impetus of both programs was to discover new orebodies that could justify a mining plan that would take advantage of the existing reserves and infrastructure of the Granduc deposit. The unusually early season period of the program resulted from lack of available diamond drilling equipment and crews later in the year and necessitated significant attention to avalanche safety. On May 2 an avalanche assessment by Paul Berntsen (CAA professional and International Mountain Guide) that identified risks to the camp and some of the proposed drill sites, recommended setting up an avalanche control and awareness program involving professional avalanche technicians. This resulted in variations from the original order of scheduling for drill targets to allow natural processes to reduce risk to crews and equipment and the hiring of a series of camp based avalanche technicians to provide continuous forecasting and monitoring of avalanche risk as the spring progressed. Mobilization and refurbishment of the 2005 camp during late April and early May 2006 was hindered by the accumulated 2 m winter snowpack and significant snowfalls that at times cut off helicopter access and increased avalanche risk. A flowing water source for the camp was not located until May 3.

Technical challenges for the spring drilling included penetrating 130 m of glacier ice in the rapidly ablating South Leduc glacier and locating a drill site on the steep alpine ridge overlying the South Zone. The South Leduc glacier has declined by 120 m vertically in the past 40 years leaving a scattered lag deposit of angular rock fragments covering the ice surface adjacent to medial moraines. Four drill holes from 3 different glacier pads tested extensions of the known orebodies across the width of the South Leduc Glacier. Each site presented particular challenges related to the transition from winter to summer conditions on the glacier and the type of englacial material encountered. Specific recommendations for successful drilling under the glaciers resulting from this experience are documented in Appendix VII.

The South Zone was explored in the 1950s from an adit driven from the surface of the glacier into a cliff face on the NE aspect of a steep ridge south of the South Leduc Glacier. The glacier surface is now over 120 metres below the adit portal. Ore lenses of high copper grade and apparent thickness, but of unknown extent were indicated by diamond drilling in one drill hole. The large gossanous zone on the NE face of the ridge was the original inducement to explore the zone. The present program utilized a drill pad built on the NW side of the South Ridge. The pad site is above a 75 m cliff overlooking a hanging glacier that descends onto the South Leduc glacier. Establishing the site required mountaineering skills, a significant avalanche risk mitigation program and establishment of fixed rope escape routes for emergency descent to the South Leduc glacier.

A total of 2813 m of NQ2 diamond drilling was completed during the Spring 2006 drilling program on the Granduc property from 5 drill platforms. Three platforms were constructed on the South Leduc Glacier, one on rockslide debris below



the toe of the North Leduc Glacier and one platform on a steep alpine slope on the northwest end of the "South Ridge". Of the metres drilled 551 m involved double casing through overburden mainly consisting of glacial ice and subglacial moraine deposits. Pad building involved approximately 20 man-days for location and construction. Drilling costs including mobilization on May 2 through demobilization on June 27<sup>th</sup> totalled \$367,258.

All diamond drill core was logged geologically and geophysically. Geophysical testing included magnetic susceptibility and conductivity measurements at regular intervals and compositional analysis by Niton Xlt<sup>TM</sup> handheld XRF (Appendix VI) at intervals appropriate to the amount of mineralization. Geotechnical measurements included RQD and core recovery. The drillholes were surveyed at 10 foot increments (each standard rod length) for azimuth, inclination and magnetic field strength and dip by use of a Flexit<sup>TM</sup> Multishot borehole survey tool suspended 6 m below the bitface. This information (Appendix V) was used to detect significant magnetic field variations indicative of compositional changes in the rocks and particularly the presence of magnetite iron formation as well as the orientation of the drill holes.

The core logging identified intervals of interest for compositional analysis and a total of 669 (minus standards and blanks) diamond-saw - split samples were delivered to Acme Analytical Labs in Vancouver for geochemical analysis. The principal analytical technique was a 4 acid (HClO<sub>4</sub>-HCl-HNO<sub>3</sub>-HF) digestion with ICP-ES and ICP-MS analysis for 45 elements at assay levels of quality (Acme-G7TX). Gold was analysed by fire assay on all samples (Acme G6- Au).

Geological field exploration work, amounting to 7 man-days, included mapping and prospecting along the southern margins of the South Leduc Glacier and on the South Ridge to aid the interpretation of lithological units observed in drill core. An additional 5 days of fieldwork in areas NE of the North Leduc Glacier within the Pearson claims was conducted to discover the cause of significant airborne EM anomalies in Hazelton Group strata. This work also required 5 man-days of professional mountaineering assistance by a certified mountain guide.

## **Summer Prospecting**

Exploration activities during July and August of 2006 involved prospecting for extensions of the north zone of the Granduc deposits by prospector/camp manager Jason Kolcun and student geologist John Keigher. Generally poor flying conditions hampered the helicopter supported prospecting and sampling work on the northern slopes of Granduc Mountain. However, a significant bedrock pyrite-magnetite breccia showing was found upslope from magnetite-chalcopyrite mineralized boulders previously reported on the southern edge of North Leduc glacier. The JK showings were channel sampled and assayed using G7TX and G6 (gold) procedures at ACME Analytical in Vancouver (Appendix IV).

## **Fall 2006 JK zone drilling**

Titan Drilling of Yellowknife was contracted and drilled 5 holes totalling 1240 m from a single platform to explore the JK showing between September 6 and October 2, 2006. Inclement weather prevented additional targets from being drilled before the end of the season.

Similar logging and sampling procedures to the spring program were utilized for the core with the exception of the use of the Niton XRF and magnetic susceptibility analysers, which were not available. Analytical procedures were consistent with those used by the spring program. The program was supervised by Robert Thivierge and Tim Sandberg of Taiga Consultants Ltd, who also completed the descriptive notes included below and the drill logs for DDH-06 – 8 through 12 (Appendix III).

The five drill holes totalling 1240 m were collared from a single drill platform on the north side of Granduc Mountain in order to test airborne magnetic anomalies and a possible source to massive (Cpy) Py-Mt mineralization discovered in downslope boulder debris near the North Leduc Glacier, as well as to test the JK zone, a pyrite-bearing calcareous breccia zone exposed at surface, which was channel sampled during August, 2006. The lithological units of this area involve dominantly tuffaceous intermediate-mafic volcanic rocks and subordinate sedimentary rocks that possibly represent a northward extension of the Granduc Mine volcanic sequences.

## **TECHNICAL DATA and INTERPRETATION**

### ***Regional Geology***

The Granduc deposit lies within the Mesozoic arc-volcanic Stikine terrane, which extends through the coastal cordillera from southern BC to the Yukon. The terrane is composed largely of Mesozoic island arc volcanic rocks and related volcanoclastic deposits and intrusive phases. The terrane was strongly deformed during the Triassic to Jurassic and was subsequently intruded by discordant plutons of the Eocene Coast Plutonic Complex. The variable metamorphic grade and structural deformation across the strike have hindered stratigraphic correlations. The principal stratigraphic subdivisions are the Middle to Upper Triassic Stuhini Group, the Jurassic Hazelton Group and the Upper Jurassic Bowser Lake Group. Metamorphic grades are highest in the Stuhini Group rocks, which are commonly separated from the Hazelton Group rocks by structural discordances of great longitudinal extent.

The Stuhini and Hazelton Group rocks were previously termed the Western

and Eastern Series, respectively, based on easily recognized differences exposed on Granduc Mountain and to the north (Alldrick et al., 1989; Lewis, 1993; Lewis et al., 1993) and separated by the South Unuk shear zone. The Stuhini Group rocks consist of foliated, greenschist- to lower amphibolite - facies metavolcanic and metasedimentary rocks and are thought to include the Granduc Mine series (McGuigan and Marr, 1979), units lying north of the North Leduc glacier and units in the hanging wall of the Granduc fault on Granduc Mountain (Fig. 6). North of Granduc Mountain on the eastern side of the South Unuk River (Lewis et al. 1993), on Granduc Mountain (Klepacki and Read, 1981) and on the south side of the South Leduc Glacier (Melnik, 1991) the Stuhini Group is subdivided into several rock types showing possible structural duplication including: (i) strongly foliated, medium grained biotite schist, (ii) pale green argillite and cherty argillite, (iii) marble and calc-silicate gneisses (iv) mafic hornblende schist and gneiss, (v) intermediate schist and gneiss, and (vi) layered to laminated phyllitic mudstone to siltstone.

A minimum age of 220 Ma for the Stuhini Group is obtained by U-Pb (zircon) dates from the Bucke Glacier stock north of the North Leduc Glacier, and related bodies on Granduc Mountain that intrude western series rocks. The Bucke Glacier stock ranges from 220 to 223 Ma (J. Mortensen, personal communication to P.D. Lewis, 1994); similar composition sills on Granduc Mountain were  $232 \pm 3$  Ma (Childe, 1994). In addition, a U-Pb (zircon) analysis from the footwall andesite on Granduc Mountain (North zone) returned an identical date within error of  $230.5 \pm 14$  Ma.

The Hazelton Group rocks are much less deformed than the Stuhini Group rocks and are principally volcanic rocks and related shallow marine sedimentary rocks. The boundary between Stuhini and Hazelton Groups is easily identifiable north of Granduc Mountain, however on Granduc Mountain itself, the zone of deformation is not clearly constrained to one stratigraphic group.

The Hazelton Group strata form a northwest trending package of rocks that is separated from the Stuhini Group by the South Unuk shear zone on the west, and covered by the Frank Mackie Glacier on the east (Figs. 5). They are subdivided into three lithologically distinct conformable volcanic units (from oldest to youngest) consisting of: (i) heterolithic intermediate volcanic breccia to conglomerate, (ii) bedded dacitic tuffs, tuffaceous conglomerate and homolithic breccia, and (iii) andesitic pillowed flow and pillow breccia. These rocks are similar in age to felsic rocks (Hazelton Group) in the footwall of the precious metal-rich Eskay Creek massive sulphide deposit (Bartsch, 1993). Volcanic rocks of this age correlate with the Betty Creek Formation (Hazelton Group) in the Stewart – Iskut mining camps. In the North Leduc Glacier area, sedimentary grading and volcanic pillow shapes indicate that these units face west throughout the exposed section. The age of the Hazelton Group strata is partly constrained by U-Pb analyses of zircons separated

from a dacite megaclast collected north of Granduc Mountain. An interpreted age for this unit, based on four zircon fractions, is  $186.8 \pm 5.6$  Ma (J. Mortensen, personal communication to P. Lewis, 1994). An identical age within error of  $185.4 \pm 9$  Ma was obtained from a felsic lapilli tuff approximately 7 km to the south on the Homestake property (Childe, 1994).

Intrusive suites consist of the pre-tectonic Late Triassic Bucke Glacier stock and syenite sills or dykes that intrude the Stuhini Group and the post-tectonic Eocene Lee Brant pluton that intrudes both the Stuhini and the Hazelton Groups. The Bucke Glacier stock forms a northwesterly-trending weakly foliated elongate body concordantly intruding the Stuhini Group rocks north of Granduc Mountain (Figs. 5, 6). It consists of fine- to coarse - grained hornblende-biotite diorite to monzodiorite. Intermediate intrusive rocks exposed on the north side of Granduc Mountain (Klepacki and Read, 1981) and intersected in North Zone drilling (Freckelton et al., 1982) are correlated with the Bucke Glacier suite based on similar lithologies and U-Pb (zircon) dates (Childe, 1994). The Bucke Glacier stock has yielded U-Pb zircon ages of  $221 \pm 1$  Ma from a foliated dioritic phase and ca. 221 Ma from monzodioritic phase (personal communications to P. Lewis, 1994 cited in McGuigan, 2005)

Weakly foliated, k-spar megacrystic syenite sills (and minor dykes) form north-northwesterly trending elongate bodies conformable to tectonic fabrics in the Stuhini Group rocks north of Granduc Mountain (Figs. 5, 6). The youngest intrusive phase dated in the region is the  $55.6 \pm 2$  Ma (U-Pb, zircon) Lee Brant stock which forms a large undeformed hornblende-biotite quartz monzonite body in the Hazelton Group rocks north of Divilbliss Creek.

The major structure identified in the Unuk River area is the South Unuk shear zone (Figs. 5, 6). It is a north-northwest striking, subvertical fault that is mapped from the Iskut River area south to Granduc Mountain, a distance of 60 km (Lewis, 1994). The fault varies along strike (north to south) from a brittle fault (10-20 m thick) with uncertain sense and direction near Mount Shirley and widens to a ductile deformed zone greater than 1 km wide south of Sulphurets Creek (north of Granduc) where sinistral offset is indicated. Further south, in the Divilbliss, Duke and North Leduc areas, Stuhini Group rocks record strongly heterogeneous deformation with a large component of simple shear in a ductile to semi-brittle environment (Lewis, 1994); these features indicate that the shear zone occurs at least partly within Stuhini Group rocks. The eastern boundary of the shear zone is marked by a fault that separates the more deformed Late Triassic (or older) Stuhini Group rocks from relatively undeformed Lower to Middle Jurassic Hazelton Group rocks (McGuigan, 2005).

## ***Property Geology***

The Granduc crown grant claim property (Fig. 5) straddles the northerly-trending South Unuk Shear Zone separating the upper greenschist to amphibolite facies metasedimentary and volcanic rocks of the Stuhini Group from the lower greenschist grade metavolcanic and sedimentary rocks of the Hazelton Group. Large pre-tectonic to syn-deformational elongate plutons and dikes of the Triassic John Peakes plutonic suite, including the Bucke Stock exposed north of the Granduc Mine, composed of hornblende diorite, monzonite, gabbro and syenite, intrude the Stuhini Group metasedimentary and metavolcanic rocks. U-Pb zircon ages for the plutonic rocks of ca. 221 Ma are consistent relative to zircon ages from mafic volcanics of the Stuhini Group at the Granduc Mine of  $230 \pm 14$  Ma (McGuigan, 2005).

Several bands of graphitic schist from 3 to 8 m wide containing contorted layers of pale green volcanic arenite were observed by the writer along the southern edge of the South Leduc glacier and oriented parallel to the general foliation direction. Although strain appears to be high in other mylonitic units these schists appear to have accommodated more significant sinistral offset. Heterogeneous strain consisting of less deformed blocks with marginal shear zones appears to dominate structural relations in the South Unuk shear zone. This may account for some refolded foliations, which were interpreted by Klepacki and Read (1981) as evidence of broad scale folding. These relations were reinterpreted by Lewis (1994) as evidence of overprinted progressive strain fabrics formed by rotation of previously foliated structural domains within a continuous period of deformation rather than by several discrete, and differently oriented stress fields. Deviations in the structural trend of Stuhini Group rocks viewed on the surface of Granduc Mountain may also be related to strain around the margins of unexposed plutons including one which was discovered during diamond drilling (DDH-06-3) in this program.

The Hazelton Group volcanic rocks and related sediments are significantly less deformed than those of the Stuhini Group. Rocks correlative with Eskay Creek stratigraphic sequences extend through the eastern parts of the into the claim block. These rocks include the Betty Creek Formation which hosts high gold-silver grade volcanogenic massive sulphide deposits at Eskay Creek. Betty Creek Formation felsic volcanic rocks were identified during this program in the NE part of the claim group interleaved with pyritic slates, which may be responsible for a major EM anomaly revealed by Bell's 2005 airborne geophysical survey. The slates include hyaloclastite layers and accordingly are interpreted to be the ambient sedimentary facies of Betty Creek Formation felsic volcanism. Dioritic sills of uncertain age intrude the slates.

## ***Diamond Drilling Programs***

### **Rationale and Methods**

#### **Spring 2006 Drilling**

The Spring 2006 diamond drilling program was designed to determine the southerly extent of ore zones intersected in the Fall 2005 drilling program, to confirm South Zone mineralization under the N-S trending ridge south of the South Leduc glacier and to determine the cause of an isolated high magnitude airborne survey - magnetic anomaly near the receding toe of the North Leduc glacier. Drilling in the fall of 2005 focussed on the northern edge of the South Leduc glacier near the known limits of the mined Granduc orebodies and within a coincident magnetic and EM anomaly determined by airborne geophysical survey in 2005. It successfully determined that the orebodies continue south and that they correlate with the geophysical anomalies. The overall impetus for exploration is the identification of the Granduc deposit as a Besshi type massive sulphide deposit with many characteristics of the large Windy Craggy deposit of NW BC (McGuigan, 2005). Many massive sulphide camps contain numerous isolated lenses and remobilized lodes spread over many km related to paleovolcanic centres, thus, warranting exploration outside of the few kms of strike length known to host ore-grade mineralization.

The 2006 glacier-mounted drilling program involved three more southerly drill holes beyond the clear extent of the geophysical anomalies. These targeted an assumed, inclined tabular body extending from drill intersections on the north side of the glacier through mineralized intersections discovered in drilling from a drift within the South Ridge. A 4th hole near the southern edge of the South Leduc glacier tested a geophysically non-anomalous area in-line with the projected tabular ore horizon.

The total meterage drilled from collar to end of hole was 2,813 m of which 551m was englacial debris and glacial ice. Four holes drilled on the South Leduc glacier showed depths to bedrock of over 120 meters. Holes drilled from the glacier were restricted to inclinations of greater than -70 degrees and involved double casing the NQ2 rods with NW and HW casing. NW casing was extended to bedrock; the HW casing into subglacial overburden. The stability of subglacial overburden was significantly low and resulted in several instances of NW casing being sheared during advance which resulted in significant delays in DDH-06-4. The best practice was to begin to overcase with HW once subglacial overburden or bedrock was reached with the NQ2-NW string. The HW casing also stiffened the drill string to reduce whip as the supporting ice melted away. This experience is discussed further in Appendix VII

The drill hole orientations were determined using a FLEXIT™ multishot

downhole survey tool which was used primarily during rod extraction at the termination of each hole. Survey data was collected at each rod in the drill string from the bottom of the hole up to at least the bottom of the casing. The casing causes significant deviations of the earth's magnetic field obviating acquisition of useful magnetic field data from which the azimuth of the hole is derived. However, inclination measurements, which are acquired by triaxial accelerometers, were not affected and so most holes through the ice were surveyed through the casing as well to constrain further the coordinates of the point at which the drill string penetrated rock. No attempt was made to survey the ice holes after casing extraction because collapse of loose rock within the ice blocked much of the hole and posed a significant danger to the instrument.

The collar positions shown in Table 3 were measured by handheld GPS (Garmin GPSmap 60C) using an averaging routine, which produced results precise to within 2 meters when continuous measurements were recorded over a period of about 20 minutes. Given the irresolvable uncertainty of drill string wandering within the ice sheet this level of precision was judged to be adequate for location of the core holes.

**Table 3: Drill Collar Locations and Hole Orientation**

Hole #	Collar UTM (NAD 83)		Alt.	Collar Azimuth	Dip	Casing	Length Drilled
DDH06-1	416303E	6229769N	793	090°	-70°	140m	408.1
DDH06-2	416303E	6229769N	793	090°	-88	133m	326.1
DDH06-3	414806E	6232180N	734	090°	-45°	12m	255.7
DDH06-4	416287E	6229508N	811	090°	-70	130m	130.0
DDH06-4A	416287E	6229508N	811	110°	-70	140m	392.6
DDH06-5	416124E	6229763N	785	100°	-70	140m	399.0
DDH06-6	416206E±1.4	6229048N	1174	096°	-51	4m	505.7
DDH06-7	416206E	6229048N	1174	090°	-58	4m	389.9

### **Fall 2006 North Granduc Mountain; JK zone drilling**

Massive chalcopyrite-magnetite boulders were discovered by Teuton Resources in the 1990s on the verge of the North Leduc Glacier. These boulders were located

during the summer program and a source traced uphill towards the icefields on Granduc Mountain resulting in the discovery of pyritic – calcareous breccias at the JK showing. This showing was channel-sampled and a site located for a diamond drill platform to test for stratiform mineralization at depth. The drill pad was located at UTM coordinates 6233191 N, 416902 E and an elevation of 1396 m ASL.

## ***Collection and Treatment of Data***

### **Spring 2006 Drilling**

In the spring program the diamond-drill core was logged by Sean Milliken (Apex Geological) and Hardolph Wasteney (Granduc project geologist). Geophysical, and geotechnical data were collected by geological assistants Chris Pearson, John Keigher and Jason Kolcun. These data included XRF spot analyses at regular intervals using a handheld Niton™ XLt analyser and magnetic susceptibility and conductivity measurements. Geotechnical data included core recovery and simple RQD measurements. The Niton XRF data are recorded in Appendix VI.

Intervals of the diamond drill core were selected for analysis by the following criteria: 1. visual identification of significant amounts of magnetite, pyrrhotite and associated chalcopyrite 2. significant concentrations of base metals estimated by handheld XRF analyser (Niton™ XLt); 3. lithological difference (samples of each unit in each hole were analysed 4. border zones around mineralized intervals. Assay intervals were typically 1 metre or less.

Core observations were initially recorded on graphic log sheets and the text transferred to Microsoft Excel™ spreadsheets recorded in Appendix III.

Geophysical data were directly dumped from the Niton™ XRF and magnetic susceptibility/conductivity instruments to spreadsheet files. Compositional data were collected at 1 meter intervals generally and at 20cm intervals in mineralized sections for immediate feedback. Two modes of XRF analysis were used with the Niton™ analyser: 1. “bulk soils” mode which determined low levels of a wide range of moderate atomic weight elements including most transition metals (Fe, Cu, Zn, Pb, Mn), heavy alkalis Sr and Rb, high field strength elements such as Zr and; 2. “industrial metal” bulk mode where high metal concentrations were apparent such as in chalcopyrite mineralized magnetite iron formation, but which was also necessary to measure major elements such as Ti. The device was not usable for elements with atomic masses of less than 44 amu and for elements with K X-rays lines above 30 keV such as precious metals. Counting times of 40 seconds typically produced peak to background ratios with reasonable counting statistics. Precious metal analyses, particularly for gold, were not considered reliable in the configuration of the available unit because the



principal Au K lines were at energy levels higher than those for which the X-ray source could cause fluorescence and only Au L lines were in the analysed energy range. A test case where high levels of gold were apparently measured in arsenopyrite (2.5%) showed only 90 ppb gold in fire assay analyses. The peak fitting routine for Au in this case is probably compromised by tails of nearby Fe and As peaks.

The analytical data were useful in confirming mineralized zones and in lithochemical analysis to differentiate possible protoliths of some highly deformed and altered rocks and in identifying unknown minerals. Elements of particular common utility included Zr, Y, Sr, Rb, Cu, Zn, Pb, Fe, Co, As, and Ti. Although major rock-forming element data was generally not available some elements such as Rb and Sr which substitute in various minerals for K and Ca, respectively, were useful for inferring the presence of the former and thus helpful in interpreting rock compositions.

Flexit Multishot survey data are reported in spreadsheet form in Appendix V. The magnetometer data acquired by the tool were used to assess the reliability of azimuth calculations for the plotting downhole coordinates. Magnetic fields strengths deviating by more than 1000 nT from the ambient field strength and by more than 1.5 degrees from the regional magnetic field dip caused a deviation of the calculated drill hole azimuth. These measurements were left out of the coordinate calculations or an interpolated azimuth was substituted. However, in drill hole DDH-06-3, much of drilled section was continuously within magnetite-bearing gabbros, syenites and monzonite with high magnetic susceptibility leaving few useful azimuth readings. The magnetic data were also useful for correlating the coordinates of drilled sections with observed magnetite and pyrrhotite concentrations in drill core. Potentially, magnetic anomalies not correlated with observed ferrous mineralogy could indicate proximity to magnetite mineralization. The coordinate data were used in conjunction with sample interval and geological logs to plot geological sections Figure 8 through Figure 14 using GEMCOM™ drill-hole software.

Detailed drill logs are in Appendix III for both the Spring 2006, South Leduc and Fall 2006, North Granduc Mountain/JK zone drilling. Niton XRF analyses are recorded in Appendix VI from the Spring 2006 drilling.

### **Fall 2006 drilling program**

Methods used for sampling and logging during the Fall program by project geologists Robert Thivierge and Tim Sandberg generally followed those established during the spring program with the exception of Niton XRF and magnetic susceptibility data for which the instruments were not available. Although Flexit Multishot downhole survey and data were recorded generally instances of high

artesian water flow in several drill holes prevented complete surveys.

### ***Core Sampling Procedures and Laboratory Analysis***

These core samples were marked in the core boxes by ACME Analytical sample tags attached to the core box at the upper end of each sampled interval. The core was sawn on site by a geological assistant supervised by Hardolph Wasteney or Sean Milliken during the spring program and Robert Thivierge or Tim Sandberg during the fall program. Analytical quality control was monitored in 25 sample batches through the insertion at random intervals of 1 duplicate sample (double split of the core), 1 mineralization blank (local granodiorite) and 1 sample of an ore standard (either GD-1 or GD-3) which was available in sealed aliquots. The two ore standards, GD-1 and GD-3, were established by homogenizing a quantity of ore-grade material of similar composition to the expected mineralization and submitting 5 replicate samples for analysis to each of four accredited commercial analytical facilities for Cu, Ag and Co assay (see Appendix III, part 1). All of the analytical results fell within 1 standard deviation of the mean and all were included in the average. For GD-1 the assays are: Cu  $1.790 \pm 0.022$  wt%, Co  $.0072 \pm 0.0011$  wt% and Ag  $15.2 \pm 0.8$  g/t. For GD-3 the assays are Cu  $3.380 \pm 0.087$  wt%, Co  $0.0100 \pm 0.0011$  and Ag  $31.8 \pm 1.6$  g/t. Analyses of these standards in the analytical batches returned results within 1 sigma error of the assays.

The individual samples were sealed in 6 ml poly rock bags with the laboratory portion of the sampling tag and loaded in numerical sequence into white polyethylene "rice" bags until a reasonable weight was achieved. Samples were shipped in batches of several bags; each bag contained a copy of Acme's sample submission form with a list of sample security tag numbers used to seal the shipment bags. The samples were shipped by helicopter to Stewart BC where they were received by R. McKay of Granmac Services Ltd., Bell's local expeditor, who shipped the samples directly to Acme Analytical's facilities in Vancouver BC via secure ground transport. An e-mail advisory was also sent to Acme's sample preparation manager who notified the Project Geologist of the shipments arrival and confirmation that the security tags matched the numbers listed on the shipment forms. All shipments were received by ACME intact and without evidence of tampering.

The core, blank and standard samples were prepared for analysis using Acme's R150 procedure which involved drying, crushing to pass 70% through a -10 mesh sieve (2 mm), splitting out 250g and pulverizing to 95% passing -150 mesh (106 microns). The common analytical procedures for core samples was Acme's Group 7TX (HCl, HF, HNO<sub>3</sub>, HClO<sub>4</sub> digestion of a 0.5 g split, with ICP-ES and MS analysis of 45 elements to element dependent, low detection limits) and Group 6 Au determination on a 29.2 g sample split by Fire Assay with ICP-ES finish to detection limit of 0.001 oz/t.

The G7TX procedure involved digestion of the 0.5 g sample aliquot in a 20 ml 2:2:1:1 H<sub>2</sub>O-HF-HClO<sub>4</sub>-HNO<sub>3</sub> solution by heating until fuming and evaporating to dryness then picking up the residue in a 16 ml aliquot of 50% HCl heated to 95 degrees C for 30 minutes, cooled and the solution made up to 100 ml with 5% HCl. The solutions were analyzed in a Jarrel-Ash Atomcomp model 80 or 975 ICP-ES for 22 elements and an additional group of elements analysed by ICP-MS. The Acme laboratory QA/QC protocol for G7TX operates on Analytical Batches of 33 samples and involves insertion of a sample blank, a pulp duplicate, a -10 mesh reject duplicate, 2 reagent blanks to measure background and aliquots of Acme reference standard STD R-2 to monitor accuracy. This internal lab standardization, coupled with the blank, standard and replicates inserted in the sample stream at the Granduc site resulted in a high degree of confidence in the analytical results at a high level of precision and accuracy.

One concern in analysis of the Granduc mineralization was in representing the amount of magnetite, which is commonly associated with chalcopyrite mineralization at Granduc, but considered somewhat refractory to standard geochemical dissolution. The hot, 4 acid dissolution was selected to ensure greater digestion of potentially refractory minerals such as magnetite as well as other common rock forming minerals useful for lithogeochemical study. Although this was not fully evaluated, a partial assessment of the relative degree of digestion was made by comparison of values for standards in a batch analysed by G7AX (hot aqua regia, but no hydrofluoric or perchloric acid) with those for the same standards analysed by G7TX. Values for Fe by G7AX are about 80% of those by G7TX and similarly for Ca (50%), Mg (80%), Ti (20-60%), Al (20%), Cr (10%), La (20%), Ba 20-60%, Na (5%), Mo (95%), and Pb (90%). Copper, Zn, Ag, Co and several other elements are comparable. The higher dissolution of alkali elements may be accounted for by the silicate dissolving power of HF.

However, although more complete digestion and analytical reporting is apparent for many important elements by G7TX than by G7AX (or the common G1DX soil and silt exploration procedure which uses the same dissolution) some refractory minerals, such as zircon, rutile and cassiterite, are still not considered to be dissolved completely leaving Zr, Ti and Sn underreported. Only by the use of fusion methods prior to dissolution or XRF methods can full whole rock determinations be made of these and other important elements for lithogeochemical studies. Extensive, systematic analysis of the core by a Niton XRF analyser during logging showed values of Zr and Ti much higher than those in the geochemical study and corroborated by selective whole rock analyses using G4A fusion, nitric dissolution and ICP-ES. Barium values may also be underreported even by strong acid digestion where barite is involved because Ba may reprecipitate with sulphate in the final solution. Overall, the methods used are considered to have provided highly precise and accurate assays of the elements of economic interest as well as for many elements of use in

lithogeochemical studies.

## ***Discussion of Data***

### **Spring Drilling Program in the South Leduc Glacier zone**

Representative field samples of lithological units were not readily available in May 2006 because of snow cover and avalanche danger. Core from the 2005 diamond drill program was not uncovered from deep snow until early June. Accordingly, lithological determinations were made without the benefit of direct comparison to established mine units or previously studied material. Once snow cover melted and avalanche and rock-fall hazard abated in early to middle June, field observations were made in several well exposed areas including the bluffs west of the camp, along the cliffs at the southern edge of the South Leduc glacier west of the drill sites and in the hanging valley south of the glacier sites and west of the South Ridge. Although none of the rock units exposed in these areas were directly along strike from the drilled zones, many useful observations were made about styles of deformation and continuity of lithologies that aided interpretation of drill core. Systematic mapping was not undertaken particularly in the outcrop areas of the hanging valley west of the South Ridge because of icefall danger from seracs at the toe of the glacier. Inclement weather prevented alpine traverses into the cliff exposed gossanous area of the South Ridge.

Many of the rock types in the drill core are highly deformed and metamorphosed sedimentary rocks which possess primary fine stratification or lamination accentuated and overprinted by tectonic (mylonitic) fabrics resulting from high degrees of shear strain that kinematic indicators in outcrop reveal to have been principally sinistral. Axial strain ratios are as extreme as 20:1 and ptygmatic folding is commonly observed in some pre-metamorphic veinlets. This strain also produced small-scale drag folds probably by progressive rotation of small domains. Lateral offset appears to be concentrated locally on the western margins of the Granduc ore zones within several calcareous to graphitic argillaceous layers possibly corresponding to the inferred faults. The rocks were generally classified as phyllites, mylonites and marbles with tectonic fabrics variably modifying protolith textures and subsequently modified by brecciation related to late mineralizing events. Predominantly, in the holes drilled south of the old Granduc deposits, the rocks consisted of metamorphosed calcareous silty sediments and volcanoclastic sediments. Distinctive lithologic units include cherty phyllitic siltstones with magnetite layers and associated possibly dacitic tuffs that characteristically show a pervasive to banded maroon colouration caused by secondary biotite, which at this grade of metamorphism may be the equivalent of sericitic alteration resulting from sub-seafloor hydrothermal circulation. Additionally, epidote veining is prominent in some mineralized zones and in siliciclastic wackes where epidote microveining is ptygmatically folded.

Distinctive and complexly folded and interlayered calc-silicate gneiss and marble were encountered in South Ridge Zone drilling. These rocks probably correlate with the “Granduc limestone”, a distinctive marker unit within the “mine series” rocks.

Numerous dykes were encountered including a distinctive plagioclase glomeroporphyritic andesite with a brown biotitic groundmass. Niton XRF analyses showed distinctively low Ti and Zr, and high Sr, contents the latter probably representing the high proportion of calcic plagioclase phenocrysts. This intrusive phase probably was intruded prior to amphibolite-facies metamorphism, which resulted in the biotitic recrystallization of the groundmass.

Hornblende diorite dikes or sills appear undeformed although they are fractured and pervasively carbonate altered. They are fine- to medium- grained, leucocratic and non-porphyritic. They have high Zr (ca. 350 ppm) and moderate to high Ti (ca. 1%) contents. In the central South Leduc glacier section (DDH-06-1, 2, 5) intervals of 15 metres were encountered. These granitoid intrusions post-date mineralization and are probably apophyses of large dioritic intrusions that outcrop a few kilometres south of the South Leduc Glacier.

### **DDH-2006-1, -2 and -5**

These drill holes were collared on the South Leduc Glacier; holes 1 and 2 near an apparent medial moraine feature and hole 5 to the west on an ice bench near the south side of the glacier (Fig. 7). The stratigraphic section, highlighted by distinctively mineralized magnetite iron formation (Fig. 8 and Flexit sections in Appendix V) revealed across these three drill holes shows an apparent structural inclination to the west of about 45 degrees.

DDH-2006-1 was initiated at  $-70^\circ$  on an azimuth of  $090^\circ$  and penetrated 130 m of ice before collaring in bedrock at an inclination of  $71.8^\circ$ . The geological section cut by DDH-06-1 is divisible into 2 parts: the upper section consists of metasedimentary and tuffaceous rocks including two intervals of magnetite layered phyllites and cherts, calcareous wackes and interbedded graphitic argillite and volcanic sandstone; the lower section is dominantly volcanoclastic sediments and intermediate to mafic flows with sporadic intervals of pyrrhotite vein breccia containing low amounts of chalcopyrite.

The hole was collared in phyllite displaying alternating light-green and dark-green 2 to 5 mm layers. The lighter layers appear to be both calcareous and siliceous lenses surrounded by the darker phyllosilicate-rich layers. The dark green –light green layering grades into distinct, alternating green and maroon phyllosilicate laminae with discordant calcite veining. Fine feldspar phenocrysts deflect the

foliation and indicate simple shear deformation. Increased concentration of maroon to brown phyllitic layers is notable above the first appearance of magnetite iron formation at 162 m, which is mineralized with net-textured chalcopyrite and pyrrhotite.

Magnetite-associated sulphide mineralization is encountered in 3 zones between 162 and 196 m interspersed by banded cherty phyllite and mylonite. Grades varied from 0.6% Cu between 162.1 and 168, 2.11% from 170.5 to 175.5 and 0.69% from 180 to 196.5. Chalcopyrite occurs intergrown with pyrrhotite in the interstices between coarse magnetite grains that appear to have been recrystallized by annealing. Lower grade zones are characterized by disseminated blebs of chalcopyrite and pyrrhotite in magnetite-bearing intervals and disseminated pyrite associated with dark phyllitic layers. Massive sulphide-quartz breccias form a few sporadic veins of 10 to 15 cm thickness near 175 m and slightly discordant to the foliation.

High magnetic field variations over a range of 15,000 nT were observed in the Flexit survey in the interval from 150 m to 195 m which correlates with the observed mineralization in drill core which is predominantly characterized by magnetite iron formation (Appendix V).

Below the mineralized interval is a unit consisting of interbedded graphitic schist to siliceous argillite and volcanic arenite. This zone was difficult to drill; the rock broke easily into angular fragments, which collapsed into the hole abrading the core barrel and drill bit sleeves resulting in the premature separation of two bit faces on one type of diamond drill bit.

Metamorphic fabrics are less distinct than in the upper sections of the hole with strain apparently being accommodated by graphitic schists and argillite breccias. The rock generally consists in argillite and siltstones with lesser amounts of laminated cherty siltstone with distinct penetrative cleavage varying to a weak phyllitic foliation. Disseminated very fine grains of pyrrhotite, generally less than 2% of the rock, are dispersed in foliation parallel alignment. Pyrite is generally rare, but increases downhole and generally associated with darker laminae in cherty siltstone.

The lowest major division in the hole consists of 180 m of mafic to intermediate volcanic flows and volcanoclastics with distinct feldspar porphyritic mafic dykes. The dominantly volcanic section grades downward through several plagioclase-augite crystal – lithic tuffs beds up to 20 m thick and alternating with mafic/intermediate Volcanoclastic and siltstone into volcanoclastic and mafic metasediments. Pyrrhotite and minor chalcopyrite are disseminated as fine blebs along the foliation. Some massive pyrrhotite-cemented cognate breccias (one 2 m thick at 381 m) appear to be associated with quartz carbonate veins discordant to the foliation. Minor chalcopyrite in the pyrrhotite results in grades less than 0.3% Cu. Magnetic field variations shown

in the Flexit surveys (Appendix V) show a few spikes through the interval corresponding to the pyrrhotite veins. The hole was terminated in a mafic volcanoclastic bed with fragments up to 1 cm. Calcite and quartz-calcite veining is common throughout the lower section of the hole.

The second hole from Pad 1, DDH-06-2 generally encountered the same lithologic units in the upper sections of the hole as in DDH-06-1, but was terminated in the interbedded argillite/sandstone unit without penetrating the metavolcanic unit at the base of hole 1. Calcareous rock types classified as marble breccias and mylonites, displaying deformed carbonate lenses in phyllosilicate matrices, characterized the upper section of the stratigraphy, above mineralization. The units structurally overlie tuffaceous volcanics including metamorphosed crystal tuffs displaying fine plagioclase crystals forming “eyes” in a fine-grained maroon biotitic phyllite. This latter unit dominates the section for about 20 metres above the mineralized interval and contains distinctive calcareous intervals that are characterized by unusual amounts of epidote-diopside lenses or veins.

The main mineralized zone, consisting of magnetite layers in cherty phyllites occurred between 227 m and 260 m, but at low angles to the core axis between 10° and 35°. The upper 10 metres interval of this zone was classified as a banded magnetite-chert iron formation characterized by massive magnetite layers 1 to 40 cm true thickness interlayered with cherty/cherty layering is finer lower in the mineralized zone typically interlaminated silicate – magnetite-chalcopyrite-pyrrhotite. Chalcopyrite and pyrrhotite are myrmekitically intergrown and replace magnetite along grain boundaries forming an overall network texture. Pyrite is present in minor amounts as veinlets discordant to the foliation. A breccia of massive magnetite-chalcopyrite-quartz contains visible brown sphalerite (3.6% Zn). A distinctive 1 m thick epidote-quartz-calcite layer or vein occurs at 250 m. The epidote contains an intergrowth of biotite and tourmaline. This magnetite-rich zone correlates with magnetic field variations ranging over 10000 nT in the interval 223 to 265 m.

Significant composite Cu assays include 2.39% at 234.6 to 238.4 (true width ca. 2.2m), 1.85% at 240.4 to 245.6 (true width ca. 1 m) and 1.60% for 281.0 to 283.0 m (true width ca. 1 m) with minor zones enriched in Zn. The lower section of the stratigraphic section sampled by this hole was characterized by a highly deformed, drag-folded, cyclic/interbedded laminated grey-green siltstone and black graphitic argillite in which the drilling was terminated. The unit displayed about 15 cycles of argillite-siltstone over 40 m.

DDH-2006-5 was collared 175 m west of drill holes 1 and 2 and oriented at a starting azimuth of 100° and an inclination of -70° (Fig. 8 and Appendix V). Drilling progressed through about 100 m of clear glacial ice before hitting a subglacial moraine deposit, which required double casing with NW and HW casing before drilling through to bedrock at 120 m. A significant period of warm weather caused

rapid melting of the ice supporting the edges of the drill pad, which required frequent maintenance to stabilize. The ice bench feature is interpreted to have resulted from collapse of the axial core of the terminal of the glacier along a series of up glacier-verging arcuate normal faults forming a graben structure above sub-glacial streams. The medial ridge moraine feature at the first site is interpreted to be a scarp on the opposite side of the graben and enhanced by shielding of the ice by a lag accumulation of debris from a melted-out medial moraine.

Chalcopyrite-pyrrhotite mineralization associated, commonly, with magnetite layers in laminated cherty phyllite was encountered in the interval between 321 m and 363 m. Two composite intervals in this zone are 3.49% Cu from 327.3 to 329.3 and 1.87% Cu from 349.6 to 354.6 m downhole. Some of the mineralization occurred as sulphide cemented breccias that appear to crosscut the foliation and lithological banding of the host rock and there was a diminished presence of massive magnetite layers which hosted chalcopyrite-pyrrhotite network mineralization in DDH06-1 and 2. More commonly, pyrrhotite, chalcopyrite and variably associated subordinate magnetite occur as foliation-parallel disseminations. Fine secondary pyrite is common both as foliation parallel disseminations and random disseminations. Sphalerite and galena were more commonly observed lower in the section between 346 and 363 m. The host phyllite varies from green to brown reflecting variable amounts of actinolite/chlorite and very fine biotite, respectively. Prior to metamorphism these rocks were probably hydrothermally altered felsic volcanics containing secondary calcite - chlorite and sericite assemblages. Magnetic field variations ranging over 10000 nT were observed in the interval from 310 to 365 m depth.

The lowest 35 m of the core section cut a fine-grained sedimentary unit consisting of interbedded graphitic argillite and phyllite similar to the above mineralized interval but with only minor disseminated pyrite and pyrrhotite. Poor core recovery plagued drilling in this interval and the hole was terminated prior to encountering the expected massive volcanic-volcaniclastic section encountered in drill hole 1.

### **DDH-06-3 Pollux magnetic anomaly**

This drillhole (Fig. 7) targeted an isolated magnetic anomaly north of the field camp at the terminus of the North Leduc Glacier (Marsh, 2006). Bedrock was encountered at a shallow level and drilling progress was outstanding, with shifts returning up to 100 metres of core.

The rocks types at the top of the initially cut are principally calc-silicate gneisses (Fig. 9). Granitoid units dominate the lower sections of the hole, which was terminated after discovering that the magnetic anomaly was caused not by magnetite iron formation, but by magnetite-bearing gabbros and related megacrystic syenites and monzonites (see magnetic field data Appendix V). No



hydrothermal mineralization was noted.

#### **DDH-06-4 Southern edge of South Leduc Glacier**

DDH-2006-4 was drilled from a pad near the southern edge of the glacier (Fig. 7) on an avalanche debris cone that was released from the South Ridge in late May. An initial attempt to penetrate the ice sheet was abandoned after several attempts to bore through unstable subglacial debris of uncertain origin. This material was encountered at a depth of 110 m and apparently shifted locally as casing was advanced. The sudden shifting of the material sheared the advancing NW casing and the hole collapsed when the casing was tapped and extracted.

A second penetration was attempted with a starting azimuth of 110 degrees and an inclination of  $-70^{\circ}$ . Although the NW casing was sheared upon penetrating the rock debris it was immediately overcased with HW casing before attempting to extract the broken casing. This process was successful in penetrating the ice sheet and the basal ice sheet rock moraine and collaring in bedrock at a depth of 136.8 metres. The Flexit Multishot™ drill hole survey showed cyclic variations in dip along the casing string and the azimuth in bedrock started at  $090^{\circ}$  a variation of  $20^{\circ}$  azimuth through 130 m of ice and loose rock. In subsequent drilling, HW casing was advanced over the NW once subglacial rock debris was encountered.

At the base of the ice sheet the hole first penetrated a series of calcareous metasediments with fabrics ranging from weakly foliated to mylonitic (Fig. 10). The rock types included black calcareous argillite with fine lamination and alternating black and white carbonate layers, interbedded siltstone and argillite and laminated phyllite. The phyllitic unit displays alternating maroon and green laminae, and appears to be somewhat siliceous. Disseminated and veinlet magnetite, pyrrhotite, chalcopyrite and sphalerite are common throughout the first 80 m of the hole. Pyrite is less commonly found as a disseminated mineral.

This hole cut mineralization between 208 and 230 m (Fig. 9 and Table 4) with a 6 m interval from 220.3 to 226.3 reporting 2.20% Cu and several other 1 m intervals grading 1 to 2%. The mineralization occurs in a laminated cherty phyllite, which shows a lower abundance of disseminated sulphides and more semi-massive sulphides associated with magnetite in carbonate-rich breccias. No distinct magnetite iron formation layers were observed in the core. However, the Flexit survey showed magnetic field variations in the interval between 207 and 235 m depth but with a low range ca. 5000 nT compared to other mineralized intervals in the holes farther north. Below the mineralized zone volcanic tuffs, volcanoclastic and flow breccias are interbedded. Graphitic argillite was encountered at ca. 344 m interbedded with the phyllite. Pyrite appears increasingly common as a disseminated and veinlet sulphide

along with pyrrhotite.

Generally, the style of mineralization is less stratiform than in the DDH-06-1, 2, 5 section (Fig. 8) where chalcopyrite showed a greater association with magnetite in banded magnetite iron formation. Here, much of the chalcopyrite occurred in narrow intervals, ca. 30 cm, intergrown with pyrrhotite in sulphide-rock breccia veins. Sphalerite is commonly visible both as fine veinlets associated with pyrrhotite and chalcopyrite and in the breccia veins disseminated in the sulphide assemblage and grades to 2.6% in a 1 m interval that also grades 6% Cu and 1139g/t Ag.

The occurrence of banded or laminated magnetite was restricted to a 3 m interval ca. 210 m and this general reduction in magnetite iron formation coincides with the diminution of the coincident EM and magnetic anomalies shown in the 2005 airborne EM survey that prominently overlie the northern and central edge of the glacier (Marsh, 2006). Although this effect may be partially due to masking by the thick subglacial debris encountered in the ice coring it appears to be a lateral grading in the thickness and extent of primary iron formation. However, this does not indicate anything about down-dip variations, which remain untested.

### **South Zone drilling DDH-2006-6, 7**

The South Zone was explored from a drill platform built on the NW facing slope of a prominent N-S ridge south of the South Leduc glacier and east of a major hanging glacier that is the inferred site of the Western Fault (Fig. 7). The platform was attached to a 35° slope at the top of a 70 m cliff above the hanging valley. Two drill holes were bored to intersect high-grade Cu intersections reported in drilling done in 1961 from an adit that was drifted into the NE face of the ridge from the South Leduc Glacier. The glacier has receded some 150 m vertically below the adit since 1961.

The first drill hole DDH-2006-6 was collared at azimuth 95° degrees and dip of -51° with the intent of compensating for curvature to reach a target some 309 metres downhole on a line of 97 degrees and -49 degrees dip. The target was chosen to confirm mineralized intervals encountered by underground drilling within the South Ridge. However, the drill string curved more than anticipated and drilling was terminated at 505 m by which point the azimuth had veered to 121° azimuth and -31° dip. Core retrieval by overshot became increasingly difficult with depth because the increasingly shallow angle inhibited the descent of the standard overshot tool on the wireline. The hole had also deviated from target coordinates by some 50 meters up and to the right. It was decided to redrill the hole at a steeper and more left angle to compensate for the extreme curvature. The redrill hole DDH-2006-7 was completed to a depth of 390 m with a start azimuth of 090° and an inclination of -58°. This second hole also deviated significantly and did not encounter a secondary target anticipated at 309 m within the 390 m drilled. It crossed the same units as in the previous hole

and indicating a structural inclination in an E-W plane of 75° W consistent with the orientation of mylonitic calcareous wackes at the drill site, which strike 110° and dip steeply west.

Holes DDH-2006-6 and DDH-2006-7 cross a series of strata (Fig. 11) that correlate with stratigraphic sections for the South Zone including from top down: sheared calcareous breccia or wacke, dark green volcanoclastics, maroon “dacitic” tuffs, marble and calc-silicate gneiss (? the Granduc limestone) and about 30 m of interbedded chert and argillite. The black and white banded chert and argillite is shown in stratigraphic fence diagrams (Melnik, 1991) as the unit which may be hosting mineralization reported in the historical underground DDH #250 drilled from the adit on the other side of the ridge. No mineralization was encountered in the present drill hole, but the lower half of the hole showed a distinct increase in magnetic susceptibility revealed by the downhole Flexit™ survey (see Flexit screen shots in Appendix V). This corresponds to a siliceous phyllitic to mylonitic wacke unit cut by both DDH-2006-6 and 7 (261.4 to 293.9 m in DDH-2006-6 and 283 to 327 m in DDH-2006-7) that has distinctive ptymatically folded epidote veining that indicates either pretectonic or syntectonic emplacement, the former possibly related to hydrothermal alteration. The rock also has thin magnetically attractive bands that contain fine disseminated magnetite and occur at ca. 10 cm intervals. The range of magnetic field variation was ca. 2000 nT in the lower sections of both DDH-06-6 and 7.

**TABLE 4: Significant copper intervals Spring 2006 drilling**

<b>Drill Hole</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Interval (m)</b>	<b>Au gm/t</b>	<b>Cu %</b>	<b>Ag ppm</b>	<b>Fe %</b>
DDH-06-01	170.50	171.00	0.50	0.25	1.40	15.30	12.97
DDH-06-01	171.00	171.50	0.50	0.20	2.81	33.80	20.57
DDH-06-01	171.50	172.00	0.50	0.13	1.53	18.10	21.86
DDH-06-01	172.00	172.50	0.50	0.10	0.75	9.00	14.26
DDH-06-01	172.50	173.00	0.50	0.13	2.23	27.70	16.60
DDH-06-01	173.00	173.50	0.50	0.16	1.60	19.40	15.69
DDH-06-01	173.50	174.00	0.50	0.11	1.39	16.40	14.89
DDH-06-01	174.00	174.50	0.50	0.24	2.70	33.10	13.78
DDH-06-01	174.50	175.00	0.50	0.60	2.18	26.60	12.49
DDH-06-01	175.00	175.50	0.50	1.64	2.69	33.80	12.81
DDH-06-01	175.50	176.00	0.50	0.45	3.97	54.00	12.40
<b>DDH-06-01</b>	170.50	176.00	<b>5.50</b>	<b>0.36</b>	<b>2.11</b>	<b>26.11</b>	<b>15.30</b>
DDH-06-02	234.60	235.60	1.00	0.28	2.52	28.70	12.66
DDH-06-02	235.60	236.60	1.00	0.35	1.77	20.10	11.69
DDH-06-02	236.60	237.40	0.80	0.21	2.87	31.80	15.82

DDH-06-02	237.40	238.40	1.00	0.87	2.39	30.80	9.42
<b>DDH-06-02</b>	234.60	238.40	<b>3.80</b>	<b>0.43</b>	<b>2.39</b>	<b>27.85</b>	<b>12.40</b>
DDH-06-02	240.40	241.40	1.00	0.11	1.22	14.90	10.24
DDH-06-02	241.40	242.40	1.00	0.11	1.54	19.30	10.70
DDH-06-02	242.40	243.40	1.00	0.11	1.36	16.80	8.59
DDH-06-02	243.40	244.60	1.20	0.17	2.03	25.60	11.21
DDH-06-02	244.60	245.60	1.00	0.43	3.11	40.30	25.05
<b>DDH-06-02</b>	240.40	245.60	<b>5.20</b>	<b>0.19</b>	<b>1.85</b>	<b>23.38</b>	<b>13.16</b>
DDH-06-02	281.00	282.00	1.00	0.09	1.52	14.00	5.42
DDH-06-02	282.00	283.00	1.00	0.58	1.68	17.00	6.69
<b>DDH-06-02</b>	281.00	283.00	<b>2.00</b>	<b>0.34</b>	<b>1.60</b>	<b>15.50</b>	<b>6.06</b>
DDH-06-04	220.30	221.30	1.00	0.11	2.45	34.70	13.79
DDH-06-04	221.30	222.30	1.00	0.09	1.34	19.20	10.46
DDH-06-04	222.30	223.30	1.00	0.03	0.73	10.00	16.61
DDH-06-04	223.30	224.30	1.00	0.51	5.99	1139.90	20.98
DDH-06-04	224.30	225.30	1.00	0.03	0.87	11.00	9.75
DDH-06-04	225.30	226.25	0.95	0.37	1.84	27.60	18.71
<b>DDH-06-04</b>	220.30	226.25	<b>5.95</b>	<b>0.19</b>	<b>2.20</b>	<b>207.07</b>	<b>15.05</b>
						17.08	
DDH-06-05	327.30	328.30	1.00	0.17	5.53	73.90	17.91
DDH-06-05	328.30	329.30	1.00	0.13	1.46	22.00	13.50
<b>DDH-06-05</b>	327.30	329.30	<b>2.00</b>	<b>0.15</b>	<b>3.49</b>	<b>47.95</b>	<b>15.71</b>
DDH-06-05	349.60	350.60	1.00	0.51	1.66	26.70	9.96
DDH-06-05	350.60	351.60	1.00	0.31	2.40	42.80	11.07
DDH-06-05	351.60	352.60	1.00	0.14	1.75	22.60	10.49
DDH-06-05	352.60	353.60	1.00	0.08	0.58	7.80	6.40
DDH-06-05	353.60	354.60	1.00	0.44	2.99	36.70	12.27
<b>DDH-06-05</b>	349.60	354.60	<b>5.00</b>	<b>0.30</b>	<b>1.87</b>	<b>27.32</b>	<b>10.04</b>

### Granduc North: Fall Diamond Drilling program on the JK zone

This program involved 5 drill holes angled from a single platform on the

north side of Granduc Mountain. The field program was conducted by consulting geologists Robert Thivierge P.Geol. (drilling of DDH-06-8 and 9) and, subsequently, Tim Sandberg P.Geol. for the remaining 3 drill holes (DDH-06-10, 11, 12). Their descriptive notes are reproduced below, with minor additions, and drill logs produced in Appendix III. Sections for these drill holes are represented in Figures 12 through 17.

**JK zone descriptive geological notes by Robert Thivierge and Tim Sandberg; Taiga Consultants Ltd (revised October 17, 2006)**

Two holes were drilled at azimuth 063° (Fig. 12), plunging at 45° (DDH-06-08) and 70° (DDH-06-09), which vertically undercut the surface JK zone channel sampling. Two subsequent holes (Fig. 13) were drilled at azimuth 140°, also plunging 45° (DDH-06-10) and 70° (DDH-06-11). A fifth and final hole (Fig. 14) DDH-06-12) was drilled at an intermediary azimuth of 105° and intermediary plunge of 57°. The first four holes (DDH-06-08 to -11) were drilled at oblique angles to the local lithological layering exposed around the drill collars, which strikes 205° and dips 80° WNW. The fifth hole (DDH-06-12) was drilled in a roughly perpendicular direction to this layering.

All drill holes intersected a similar sequence of lithological units), with the following major lithological assemblages identified in the drilled sections, from top (W quadrant) to bottom (E quadrant) of the holes (Figures 15 to 17):

- (a) intermediate to mafic volcanic rocks (+ argillite, siltstone and/or chert)
- (b) chert (+ graphitic argillite, siltstone, and cherty tuff)
- (c) breccia zone (in graphitic argillite + basalt, chert)
- (d) mafic to intermediate volcanic rocks (with calcareous or Mt-bearing intervals)
- (e) chloritic diorite, Mt-bearing chloritic diorite (± intermediate-mafic volcanic rocks)
- (f) banded massive Mt-Cpy-Py mineralized zone
- (g) Mt-bearing intermediate-mafic volcanic rocks (tuff, flow and breccia)
- (h) carbonatized intermediate-mafic volcanic rocks

Preliminary evidence suggests that the assemblages represent a west-facing stratigraphic succession, with younger units occurring uphole and older units downhole.

The intermediate to mafic volcanic rocks of assemblage (a) involve massive to foliated and layered, generally equigranular, tuffaceous and argillitic chloritic rocks of basaltic to andesitic composition, variably interlayered with subordinate dark grey to black argillite, grey siltstone and/or minor chert. The mafic volcanic units are commonly calcareous and injected by relatively irregular, discontinuous and ragged, partly deformed white Qz-Cc vein patches.

Assemblages (b) and (c) reflect a downhole transition to chemical exhalative

and fine-grained clastic sedimentary rocks, respectively. Assemblage (b) involves light-grey to grey layered chert, with common interlayered graphitic argillite, siltstone or cherty siltstone, with minor cherty intermediate tuff. These rocks pass into assemblage (c) with a generally rapid reduction in the proportion of chert intervals and an increase in the proportion of graphitic argillite and siltstone, with minor mafic (basaltic) tuff.

A zone of brecciation, carbonatisation and Py-Cc-Qz veining is developed in the argillite-siltstone dominated assemblage (c), immediately to the east of the chert-rich assemblage (b). The breccia may be divided in places into graphitic argillite rich portions with subordinate irregular Cc-Qz veining, and a Cc-Qz vein-matrix rich portion, which commonly bears massive patches of coarse Py and occupies the central part of the breccia zone. In cross-section, the breccia zone appears to be more steeply inclined to the west and discordant to the general attitude of layering.

The assemblages (a), (b) and (c) all host local m-scale, greyish green diabase dykes displaying narrow pale grey chilled margins. These tend to occur within or near the margins of the chert-rich assemblage (b).

Assemblage (d) comprises massive, variably foliated and/or finely layered, equigranular, tuffaceous mafic-intermediate volcanic rocks (basalt-andesite), with local subordinate interlayers of chert or cherty tuff. These volcanic rocks are generally calcareous, and are in places penetratively or patchily carbonatized, to the extent that the dominant original metamorphic mafic minerals (mainly chlorite) are decomposed and absent in the bleached greyish-white carbonatized rock. This tuffaceous volcanic assemblage also contains in places sporadic Mt-bearing intervals of volcanic rock intermixed with (and exclusive of) the calcareous intervals.

A distinct Plag-Aug porphyritic diorite dyke, about 2-3 m in drilled width, is intrusive into assemblage (d). The dyke is grey and speckled black and white, with dispersed, medium-grained augite phenocrysts (1-2%) and plagioclase phenocrysts (1%), except in the pale grey, finer-grained and equigranular chilled margins. The dyke contains fine-grained disseminated Mt and is detectably magnetic.

Assemblage (e) constitutes a relatively broad unit of sheared, mesocratic chloritic diorite (colour index 45-75), which dominates the upper central portion of the drilled sections and is locally intermixed with units of tuffaceous to brecciform intermediate or mafic volcanic rocks. The chloritic diorite is variably foliated and mineralogically layered, with characteristic penetrative chloritic foliae and seams, and with alternations of relatively finer-grained and more mafic chlorite-rich intervals. The rock typically ranges into quasi-brecciated texture, with an interconnected network of irregular and discontinuous, chlorite-filled microfractures. In some holes, the chloritic diorite assemblage also includes

significant intervals of calcareous mafic (basaltic) tuff, and massive to Plag-phyric intermediate-mafic volcanic tuff and breccia. Portions of the chloritic diorite and intermediate-mafic tuff and breccia are Mt-bearing, with sporadic, disseminated to patchy masses of Mt, and narrow (cm-scale), massive bands of Py and Py-Mt. The rocks locally contain narrow (cm-scale), massive bands of Cpy-Py-Mt, particularly toward the lower contact transitional into the main mineralized assemblage (f). The rocks display common mottled patches and lenses of variably weak to intense, pea-green epidotization, particularly in association with Mt-bearing units.

The chloritic diorite is in places bleached of mafic constituents Chl and Mt, with a sporadic silicification and K-alteration, reflected by mottled and patchy pinkish orange to pale orange coloration, associated with Py-Cc-Qz masses and veins and with sericitic filaments in the host rock. A particularly broad zone of intermittent silicification and K-alteration occurs in DDH-06-09 (121.25-144.35 m; Fig. 12), with common late-tectonic, planar, Py-(Ab, Cc)-Qz veins displaying greyish bleached wallrock margins (2-15 cm wide) containing 1-4% fine-grained disseminated Py. The silicification and K-alteration, although spatially associated with planar Qz veining, may predate at least some of the veining since in one locality the bleached wallrock margin of a vein appears to sharply truncate the orange K-alteration pattern.

Assemblage (f) comprises banded, black-dark green and yellow, massive Mt and sulphide (Cpy-Py) within a mafic, chloritic, altered groundmass. Dominant dark green Mt-Chl rich intervals contain cm- to dm-scale bands of black, massive ( $\pm$ Py) Mt and subordinate, yellow, massive Cpy-Py and Py bands. It is developed at the principal eastern contact of the chloritic diorite assemblage and volcanic rocks. Other similar zones of banded massive Cpy-Py-Mt mineralization within mafic chloritic groundmass occur further east (downhole) in the mixed volcanic succession (g) (e.g. DDH-06-08).

Assemblage (g) involves a mixed variety of Mt-bearing intermediate-mafic volcanic rocks, which probably reflect repeated successions of volcanic (fragmental) tuff, flow and flow-top breccia. The rocks comprise mainly (i) green to dark greyish green, massive to foliated and/or layered, fine-grained, equigranular to commonly Plag-phyric, tuffaceous intermediate-mafic volcanic rock, with local mafic fragments, (ii) dull greenish grey to grey, massive to foliated, medium-grained, subequigranular, mesocratic intermediate volcanic flows (and/or sill-like intrusions?), and (iii) massive, fine- to medium-grained, subequigranular, intermediate to mafic breccia. Much of this assemblage contains abundant dispersed, cm- to m-scale fragments (volcanic bombs) of distinct, light greyish, massive, coarse- to medium-grained, marginally leucocratic to mesocratic Hbl diorite (colour index 20-35), in which the primary hornblende crystals are largely altered to Chl-Act aggregates. The Hbl diorite very locally contains small inclusions of mafic volcanic rock. The assemblage, including the Hbl diorite fragments, is

uniformly to sporadically Mt-bearing, and also contains very common dm- to m-scale mottled patches and seams of epidotization and sericitization, particularly in the brecciated units.

Successive intervals of tuff, massive flow and flow top breccia appear to be repeated at various (metre to decametre) scales in the mixed volcanic assemblage (g), and infer a general west-facing stratigraphic top direction.

A distinction is notable between the sheared chloritic diorite assemblage (e) and the altered Hbl diorite occurring as fragments in the mixed volcanic assemblage (g). The latter are widely distributed and characteristic of the downhole (suspected stratigraphically lower) mixed volcanic section, and do not occur in the successive uphole (stratigraphically upper) volcanic units. The chloritic diorite is relatively more mesocratic and sheared (with little or no relict primary texture and mineralogy), and apparently restricted to the uphole (younger) volcanic succession. If the Hbl diorite masses indeed represent volcanic bombs, they must predate the development of the older, mixed tuff – flow - flow top breccia assemblage, whereas the intrusive protolith of the chloritic diorite must be of a younger age since it intrudes overlying rocks. Nevertheless, all of these dioritic units are suspected to be of calc-alkalic nature, and are all Mt-bearing, suggesting a petrogenetic evolutionary association.

Assemblage (h) is comprised of bleached and carbonatized intermediate-mafic volcanic rocks. The rocks are generally mottled and vary considerably in colour from pale green to brownish grey, greyish white and buff pink or beige, reflecting variable carbonate and siliceous alteration. These altered rocks occur in the extreme lower parts (10-15 m intervals) of the deeper holes (e.g. DDH-06-08 and -09), associated with a general disappearance of Mt in the host. It is uncertain whether these bleached and carbonatized rocks form part of a much broader alteration assemblage beyond the extent of the drill holes.

Late, planar, narrow Py-Cc-Qz veins cut many of the rock assemblages. Most veins range between 0.5-8.0 cm wide and display bleached calcareous wallrock margins up to 15 cm wide containing about 1-5% fine-grained disseminated Py. Ferromagnesian minerals such as Chl and Mt are generally decomposed or absent within and near the bleached vein margins, where fine Py is developed as the ferromagnesian mineral phase. A notable Cpy-Py-Qz vein, occurring near the upper contact of the chloritic diorite assemblage (e) in DDH-06-09 (88.90-.95 m), contains a coarse patchy Cpy-Py mass associated with well-developed bluish malachitic staining. Another notable Qz vein, occurring in Fe-carbonatized mafic volcanic rock of mixed assemblage (g) in DDH-06-08 (284.61-.95 m) contains a coarse marginal mass of Gal-Py (silver-coloured galena with cubic cleavage?).

In summary, the JK zone drilling program confirmed the vertical and lateral



continuity of the surface calcareous breccia zone that was the subject of earlier channel sampling (Figs. 15 to 17). The breccia zone is developed in the graphitic argillite-siltstone dominated assemblage (c), immediately to the east of the chert-rich assemblage (b). It is oblique to the overall attitude of layering, and dips more steeply westward than the latter. It contains coarse patchy Py masses, but is not related to massive sulphide mineralization.

The drilling confirmed the existence of Mt-bearing assemblages, including massive sulphide facies, which are responsible for the aeromagnetic anomalies targeted. Important zones of banded massive sulphide mineralization, involving massive ( $\pm$ Py) Mt bands and subordinate, massive Cpy-Py and Py bands within a mafic Mt-Chl rich groundmass, comprise assemblage (f) which is developed at the principal eastern contact of the chloritic diorite assemblage (e) and the mixed volcanic assemblage (g). Additionally in DDH-06-08, a similar zone of banded massive Cpy-Py-Mt mineralization occurs further downhole to the east in the volcanic assemblage (Fig. 12).

There appears to be a structural break between an upper unit comprising tuffaceous argillite and grey chert/black argillite, and a lower unit comprising dominantly volcanic rocks and dioritic intrusive rocks. In the upper unit, dips are near vertical, while in the lower unit, dips are 60-70 degrees westerly. The structural break between the two domains is occupied by breccia, semi-massive to massive pyrite mineralization and post-ore diabasic dykes.

The lower unit comprises massive volcanic flows and flow breccias, crystal and lapilli tuffs and argillaceous to cherty tuffs. Laminated to semi-massive mineralization comprising banded magnetite, pyrite, with lesser quantities of pyrrhotite and chalcopyrite is hosted mainly within the argillaceous tuffs, but small pockets and wisps occur throughout the sequence. The stratigraphy appears to represent two or three volcanic cycles ranging from massive flows at the base, grading upwards through lapilli tuffs and ending with exhalative sequences.

The volcanic pile is intruded by two distinct diorite units: a dark, chloritic, highly sheared diorite may represent syn-volcanic intrusive activity, while a lighter, more massive unit that is not well-represented in the present drill holes, may represent late post-tectonic intrusive activity.

The environment appears to be a classic VMS setting. Analytical results will tell whether the mineralization is 'ore-grade' or not, but the geological setting appears promising. The zone may represent merely a distal portion of the Granduc VMS system, or may be proximal to a distinct exhalative system.  
*(End of notes by Thivierge and Sandberg)*

Significant intersections from the JK zone drilling in holes DDH06-9 and 11

are tabulated below with arithmetic average grades shown below each boxed set of assays. All results are displayed in drill sections Figs. 12, 13 and 14.

**Table 5: Significant Cu-Grade Intersections, JK Zone**

Drill Hole	From (m)	To (m)	Interval (m)	Au gm/t	Cu %	Ag ppm	Fe %
DDH-06-09	199.92	201.10	1.18	0.09	1.10	3.10	11.68
DDH-06-09	201.10	202.20	1.10	0.21	2.10	5.10	11.35
DDH-06-09	202.20	203.75	1.55	0.09	0.72	1.70	14.76
DDH-06-09	203.75	205.55	1.80	0.01	0.21	0.50	5.28
DDH-06-09	205.55	206.80	1.25	0.17	3.13	7.30	13.76
DDH-06-09	206.80	208.00	1.20	0.25	2.04	4.50	15.11
<b>DDH-06-09</b>	199.92	208.00	<b>8.08</b>	<b>0.14</b>	<b>1.55</b>	<b>3.70</b>	<b>11.99</b>
DDH-06-11	170.40	171.40	1.00	0.16	1.80	3.10	15.07
DDH-06-11	171.40	172.40	1.00	0.14	1.30	1.50	21.29
<b>DDH-06-11</b>	170.40	172.40	<b>2.00</b>	<b>0.15</b>	<b>1.55</b>	<b>2.30</b>	<b>18.18</b>
DDH-06-11	227.00	228.00	1.00	0.17	2.02	7.80	18.37
DDH-06-11	228.00	229.00	1.00	0.24	1.92	7.70	24.40
<b>DDH-06-11</b>	227.00	229.00	<b>2.00</b>	<b>0.21</b>	<b>1.97</b>	<b>7.75</b>	<b>21.39</b>

## **Conclusions**

### ***South Leduc Glacier zone copper mineralization***

Chalcopyrite mineralization, principally intergrown with pyrrhotite and replacing magnetite, was found to extend to the southern edge of the South Leduc glacier from previously determined locations near the north side of the glacier. In the central section under the glacier (Fig. 8) up to three intervals of stratabound, significant copper grades were encountered in a zone approximately 50 metres thick in three drill holes and extending down dip from the glacier-rock contact to the lowest intersecting drill hole a minimum distance of about 260 m.

Drilling near the southern edge of the glacier some 300 m south (Fig. 10) also encountered significant copper grades, but in a thinner mineralized zone in which the association of chalcopyrite with magnetite layers in cherty phyllite or magnetite iron formation was decreased. Here mineralization consisted, mainly, of sporadic massive lenses of chalcopyrite-pyrrhotite -- supported breccia below an initial 3 m interval of layered magnetite in cherty phyllite. These lenses were generally of high copper grade but the average grade of the intervals declined significantly.

Assay results available for gold show generally low gold grades ranging from ca. 200 to ca. 600 ppb within copper-iron mineralized zones and significantly lower in barren zones. Sporadic analyses show grades to 1.6 g/t within 1 meter intervals. Only a few anomalous Au analyses are not associated with elevated copper or zinc grades and these few are less than ca. 400 ppb.

### ***South Zone***

No significant mineralized zones were hit in two closely angled drill holes (Fig. 11). Minor anomalous levels of Pb and Zn were observed to correspond to a transition to a unit in which fine magnetic laminae were sporadically distributed. There also appears to be evidence of hydrothermal alteration of tuffs and wackes within the stratigraphic sequence that may be related peripherally to epigenetic stratabound copper mineralization. The unit has a variable magnetic susceptibility shown both by a handheld magnetic susceptibility analyser and by the Flexit™ borehole survey tool (Appendix V).

### ***Pollux anomaly.***

Drilling at the site of the POLLUX magnetic anomaly (Fig. 9) revealed

magnetite-bearing gabbro that does not outcrop locally, and a series of possibly related igneous units that are probably apophyses of the Bucke stock of the John Peakes plutonic suite, which includes dioritic gneisses and syenites. The granitoid intrusions are variably foliated and metamorphosed with secondary garnet and biotite typical of amphibolite facies metamorphism. The gabbro was relatively undeformed and without much evidence of metamorphic mineralogy, which is typical of pre-metamorphically emplaced anhydrous mafic intrusions. The magnetic anomaly was most probably caused by the magnetite-bearing gabbro.

### ***JK Zone***

The JK zone shows probable continuity of stratigraphic assemblages that host mineralization in the historic Granduc deposits. Pyrite-bearing calcareous breccias encountered near the top of the drill holes were interpreted to be a fault zone. Channel sampling over this zone revealed low grades of copper generally whereas banded magnetite beds in drill holes have moderate grades of copper mineralization consisting of chalcopyrite and pyrite replacing magnetite. Significantly, these chalcopyrite mineralized intervals are within probable banded magnetite iron formation and related cherty rocks of possible exhalative origin that occur at the top of two identifiable volcanic cycles from flows to tuffs. The lateral continuity of these two cycles was shown by the five holes drilled and the style of mineralization shows similarities to typical Granduc orebodies and has a strong volcanogenic massive sulphide affinity.

## **Recommendations:**

### ***Glacier Zone***

The technical drilling problems involved in consistently and efficiently penetrating the South Leduc Glacier should be resolved prior to attempting infill and downdip drilling in this mineralized extension of the main Granduc orebodies (See Appendix X). This should involve mapping of the complex structure of the rapidly ablating, near terminal zone of South Leduc Glacier, in consultation with a glaciologist. This zone of the glacier appears to be collapsing above axially-oriented subglacial streams along up ice-verging arcuate normal faults. Related to this process may be the deposition of subglacial debris possibly by influx of talus through subglacial from hanging valleys and steep cliffs on the southern margin of the glacier.

Also significant is the drilled rock quality, which was generally low and this should be realistically evaluated in consideration of potential mining at shallow depths beneath the glacier. Overbreak, and consequent ore grade dilution, was a historical problem hampering production at Granduc and the rocks observed appear to present problems in this respect. Circulation was lost throughout the drilling within this zone and the holes had to be reamed frequently because of collapse.

However, the down dip extent of the mineralized layer remains to be determined and 4 new well-mineralized drill intersections (see Table 4, above) suggest continuity across the width of the South Leduc Glacier.

### ***South Zone***

The South Zone mineralization potential was not successfully evaluated by the spring 2006 drilling program. Both drill holes DDH-06 and 7 deviated significantly, due to unexpected drill string deviation of over 20 degrees of shallowing and right offset from planned orientations. However, rock types in DDH-2006-6 appear to be a fair representation of the stratigraphic section presented for the South Zone by Melnyk et al. (1991) and correlates with mapping and sections from 1953 studies following the Granduc discovery. Black and white banded chert encountered in the lower 30 metres of the hole may correlate with a chert unit that is shown to be stratigraphically at or below the mineralization encountered in a 1961 drill hole DDH-250 (Melnyk, 1991). This unit might be used as a stratigraphic marker in further exploration of this zone down dip and along strike to the north.

Additional drilling should be done from a site in the hanging valley used in this program as a helicopter pad. The site is lower by about 100 m than the ridge site and

farther to the west, but appears to be a relatively accessible and safe site for drilling. Drilling from this site might require a rig capable of drilling 700 m holes at dips of less than  $-45^{\circ}$ .

The large gossanous area on the NE face of the ridge above the S. Leduc glacier is minimally accessible by mountaineering in dry weather. It is a dangerous face susceptible to minor uncontrollable rock falls which would be a serious hazard to personnel particularly if using ropes from above. No potential drill sites were observed within the steep area of the gossans.

### ***Pollux magnetic anomaly:***

The cause of this geophysical anomaly has been found to be a magnetite-bearing gabbro, which appears to have no economic significance. The gabbro is part of a consanguineous suite of granitoid rocks, which form large syn-deformational intrusions outcropping on the north side of the North Leduc glacier. No geochemically anomalous core samples were found. No further exploration work is recommended. However, the rocks should be classified and correlated with regional intrusive suite such as the John Peakes pluton. Local geological mapping should be completed to document any contact metamorphic mineral assemblages or hydrothermal mineralization associated with this intrusion.

### ***JK Zone***

Detailed mapping and structural interpretation are required to correlate the JK zone with mine series stratigraphy to the south although the stratigraphic section and style of mineralization are similar to those mined in the Granduc deposit. This should be accomplished to define targets for new diamond drilling in the area. The apparently stratiform chalcopyrite-pyrite-magnetite mineralization appears to be representative of a volcanogenic sea-floor exhalative environment perhaps contiguous with north zone mineralization discovered during historic Granduc mining operations.

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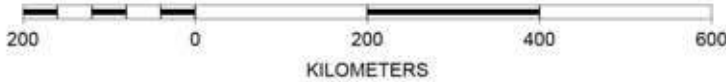
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**Figure 1: BC Location map of the Granduc project**



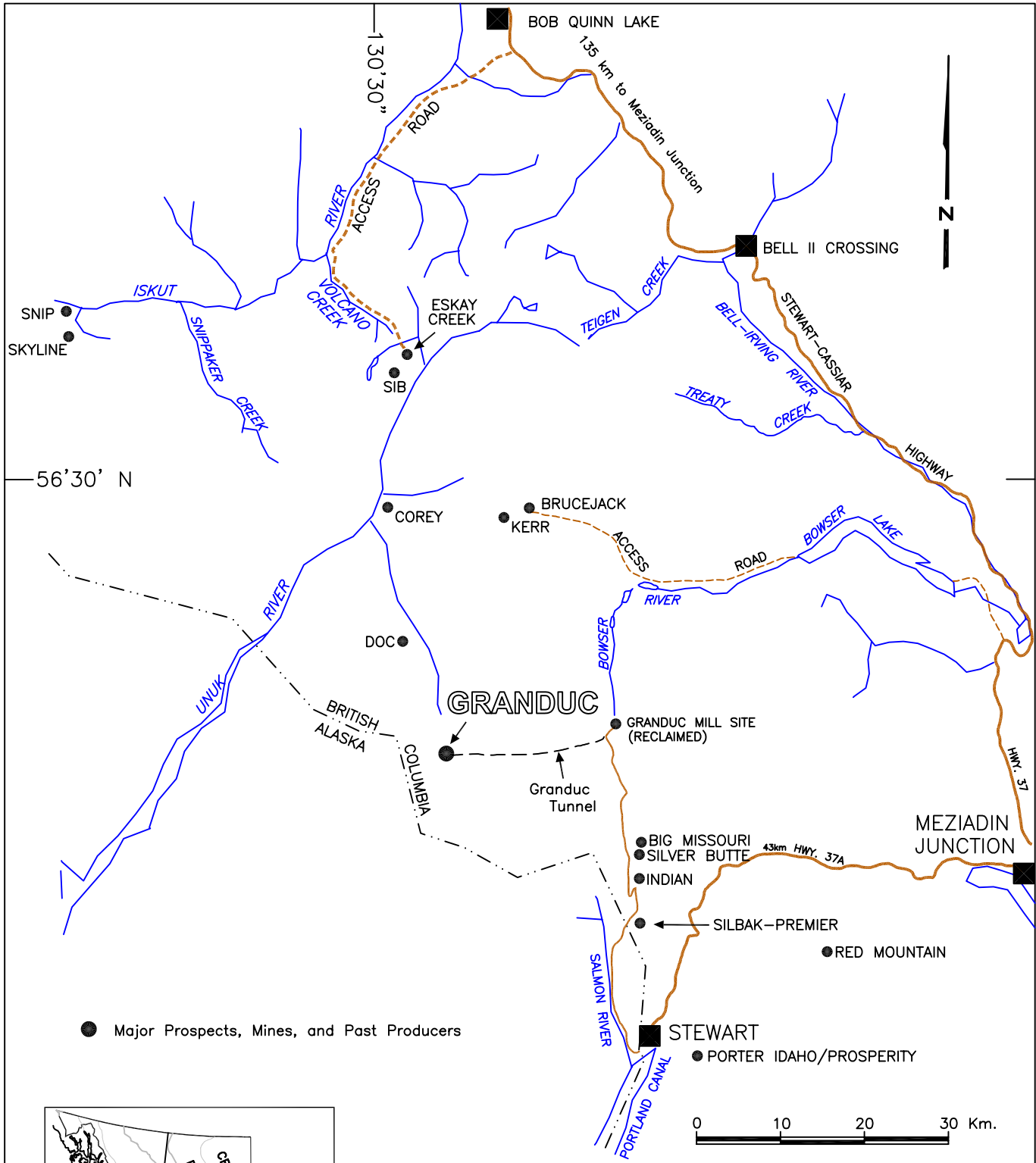
Map Center: 54.4781N 124.7082W

SCALE 1 : 8,207,882



**Figure 2: Stewart regional location map for the Granduc project**

The Granduc mine operations were accessed via road through the Salmon River Valley to the Granduc Mill Site and then through a tunnel to the deposits under Granduc Mountain. Map from McGuigan et al. 2005, Fig. 1.



● Major Prospects, Mines, and Past Producers



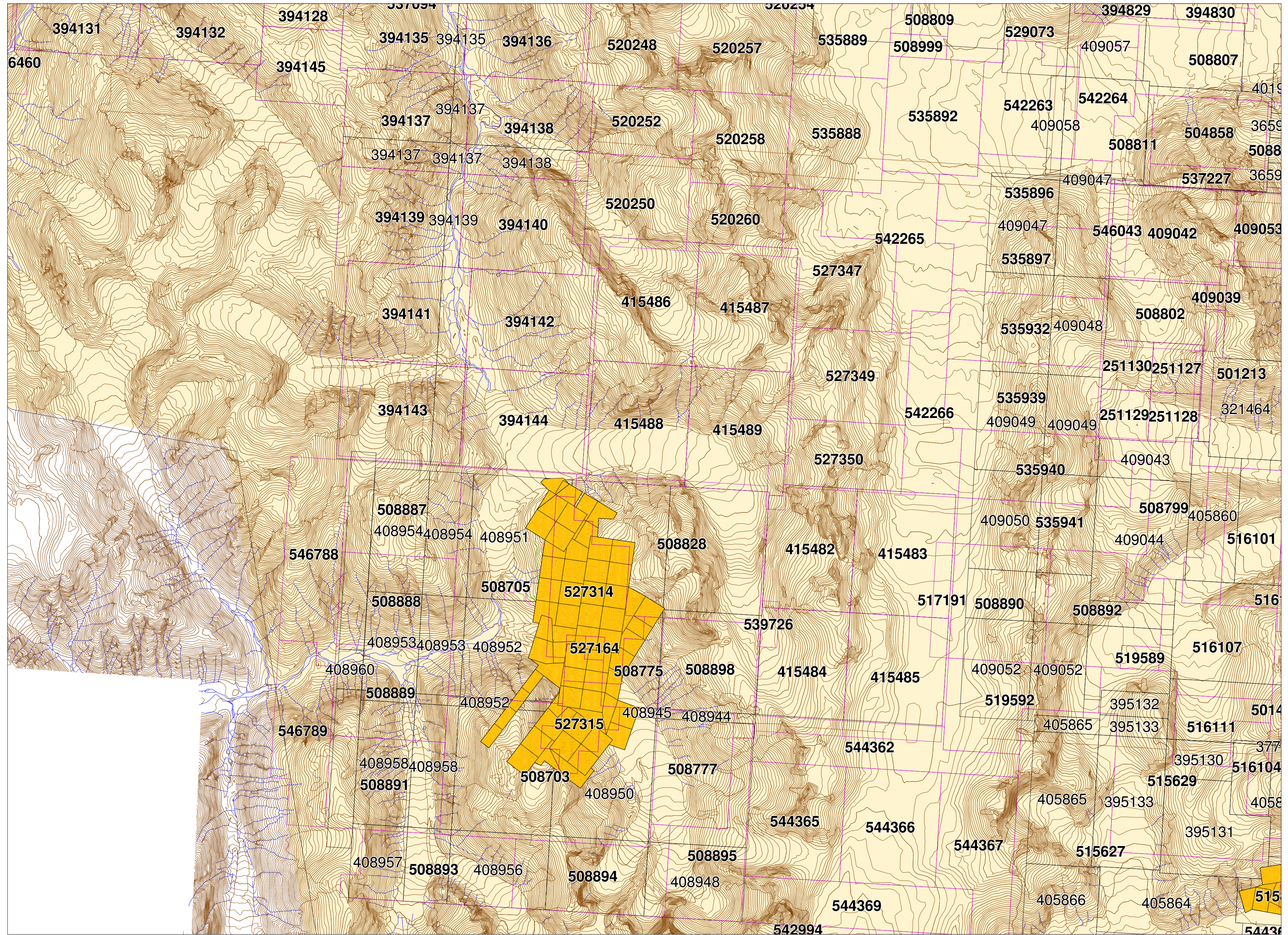
<b>BELL RESOURCES CORPORATION</b>	
Report by: McGuigan et al. P.Geol.	<b>GRANDUC MINE, STEWART, B.C.</b>
Date: May 2005	
File:	Location Map
NTS: 104 B/1,8	
Mining Division Skeena Ref. #	<b>Tecucomp Geological Inc.</b>
	Figure: <b>1.</b>

### **Figure 3: Claim map of the Granduc area**

Claim map from MapPlace.ca showing Bell, Teuton and surrounding claims in the region. Refer to Table 1 in Appendix I for list of claim numbers. The dark yellow filled claims are the Crown Grants covering the Granduc mining property. These are shown in detail in Fig. 4.

Map is at scale of 1:50,000 showing topography with contour interval of 20 metres



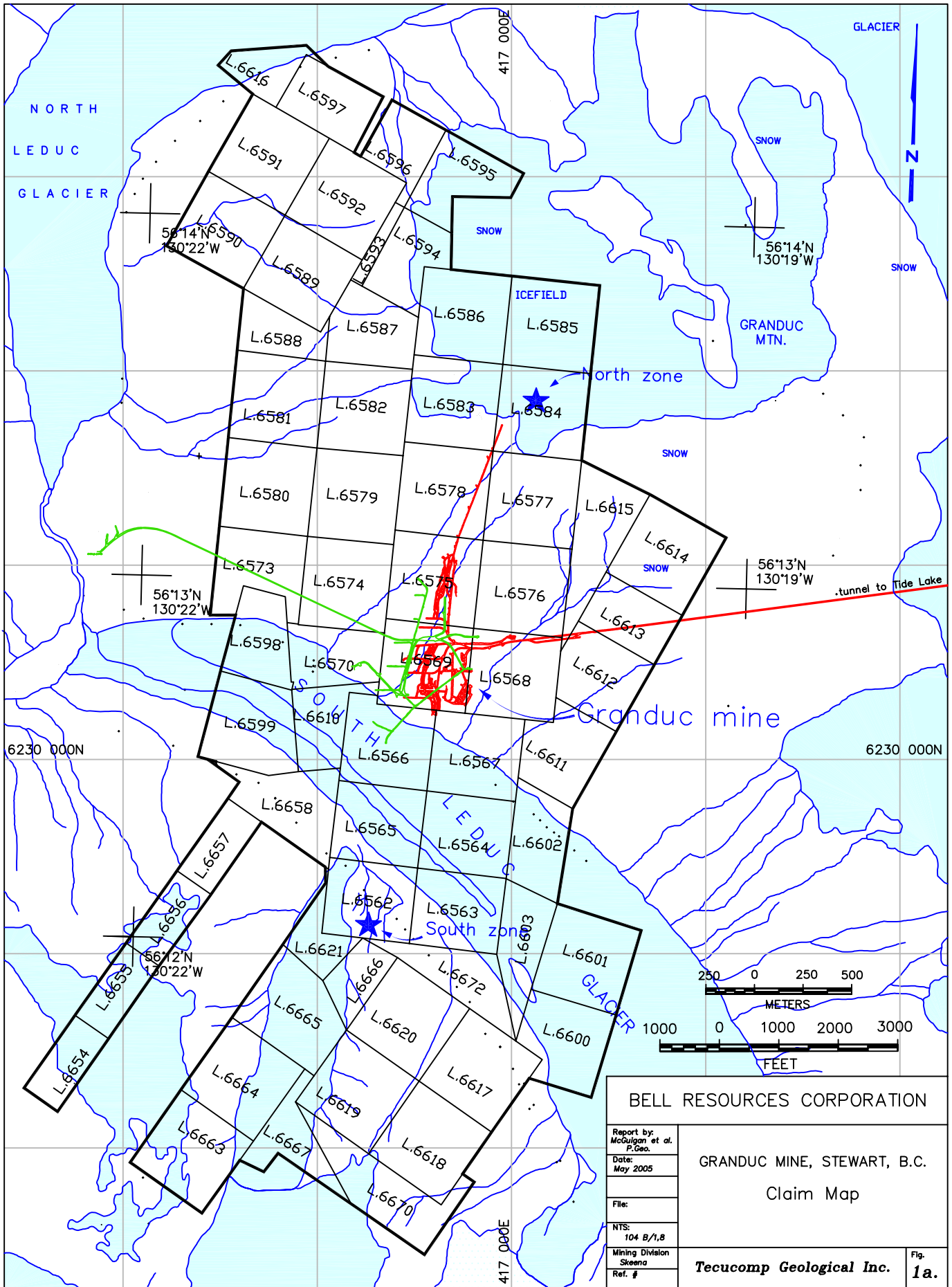


SCALE 1 : 50,000  
KILOMETERS



#### **Figure 4: Granduc Crown Grant Claims**

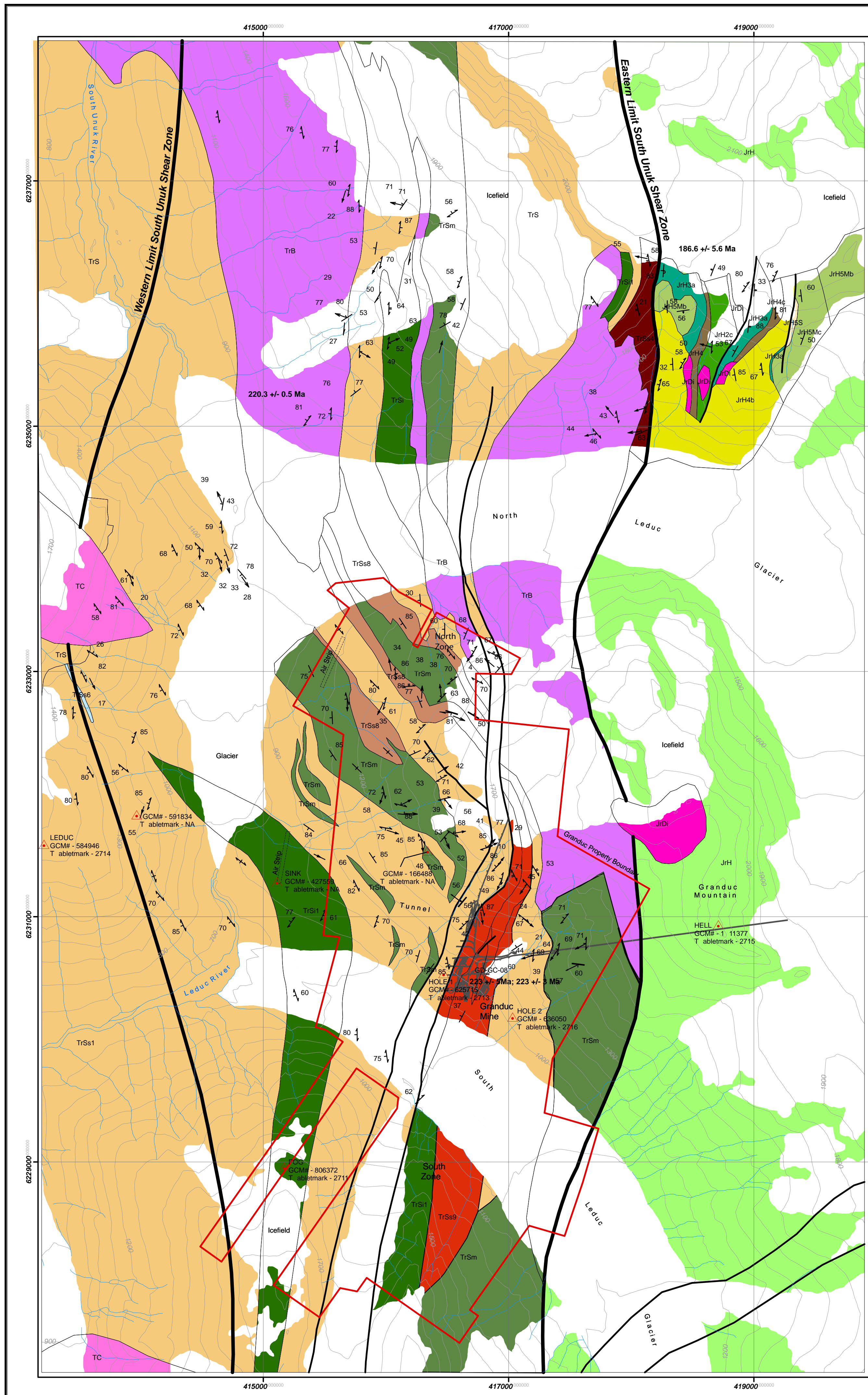
Crown grant claims map from McGuigan et al. 2005 showing claim numbers and underground workings of the Granduc mine. The 2005 and Spring 2006 drilling took place within the bounds of the crown grants. The JK zone and Fall 2006 drilling was located on Granduc Mtn just north of the NE corner of the crown grant block.



<b>BELL RESOURCES CORPORATION</b>	
Report by: McGaugan et al. P. Geo.	<b>GRANDUC MINE, STEWART, B.C.</b>
Date: May 2005	
File:	<b>Claim Map</b>
NTS: 104 B/1,8	<b>Tecucomp Geological Inc.</b>
Mining Division Skeena Ref. #	
	<b>Fig. 1a.</b>

## **Figure 5: Regional Geology of the Granduc Area**

Regional geology showing principal lithostratigraphic subdivisions including Jurassic Hazelton Group, Triassic Stuhini Group and Mesozoic and Cenozoic intrusive suites. Map is from McGuigan et al. 2005 (Fig. 2) at scale of 1:20,000 showing topography with index contour interval of 100 metres. Red polygon is the outline of the Granduc crown grants claims and the Granduc Property Boundary.



**LITHOLOGICAL LEGEND**

**STRATIFIED ROCKS**

**JURASSIC**

**HAZELTON GROUP (Lower to Middle Jurassic age)**

- JrH** Undifferentiated Hazelton Group rocks
- Salmon River Formation**
- JrH5Mb** JrH5Mb: John Peaks Member: Pillowed flows, broken pillow breccia, interbedded mudstone
- JrH5Mc** JrH5Mc: John Peaks Member: Volcanic breccia, hyaloclastite, interbedded mudstone
- JrH5S** JrH5S: Troy Ridge Member: Intercalated sedimentary rocks
- Betty Creek Formation**
- JrH2c** JrH2c: Unuk River Member: Andesitic volcanic breccia/block tuff; H<sub>2</sub>O-phyric clasts, some interstratified epiclastic rocks
- JrH3a** JrH3a: Brucejack Lake Member: Lapilli tuff, variably welded
- JrH4** JrH4: Treaty Ridge Member: Undifferentiated sedimentary rocks
- JrH4b** JrH4b: Treaty Ridge Member: Volcanic sandstone, conglomerate, local bioclastic sandy limestone intervals
- JrH4c** JrH4c: Treaty Ridge Member: Turbiditic mudstone to siltstone

**TRIASSIC**

**STUHNI GROUP**

- TrS** TrS: Volcanic and sedimentary rocks, undifferentiated
- TrSi** TrSi: Undifferentiated andesitic volcanic flows, tuffs and volcanic breccia
- TrSi1** TrSi1: Andesitic cpx/hbl-phyric block tuff, volcanic breccia
- TrSm** TrSm: Mafic volcanic rocks
- TrSs** TrSs: Sedimentary rocks
- TrSs1** TrSs1: Thinly to medium bedded argillite, siltstone turbidites, interstratified sandstone and wacke
- TrSs3** TrSs3: Thinly to medium bedded feldspathic fine-grained sandstone/wacke; Interstratified siltstone and mudstone
- TrSs4** TrSs4: Medium to thickly bedded coarse-grained feldspathic sandstone and tuffaceous heterolithic conglomerate
- TrSs6** TrSs6: Limestone
- TrSs8** TrSs8: Orange weathering, medium to coarse fossiliferous wacke
- TrSs9** TrSs9: Granduc Mine Series mafic flows, tuffs, argillite, chert, limestone, magnetite iron formation and massive sulphides

**INTRUSIVE ROCKS**

**TERTIARY - Coast Plutonic Suite**

- TC** TC: Coast Plutonic Suite: Biotite + hornblende granite, minor quartz diorite; associated dykes

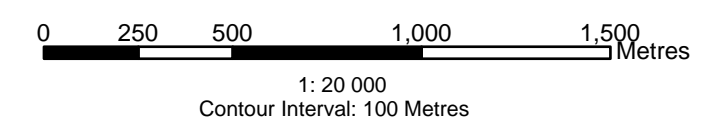
**JURASSIC - Three Sisters Plutonic Suite**

- JrDi** JrDi: Three Sister Plutonic Suite: Unnamed dioritic plutons and stocks

**TRIASSIC**

- TrB** John Peaks Pluton: hornblende diorite

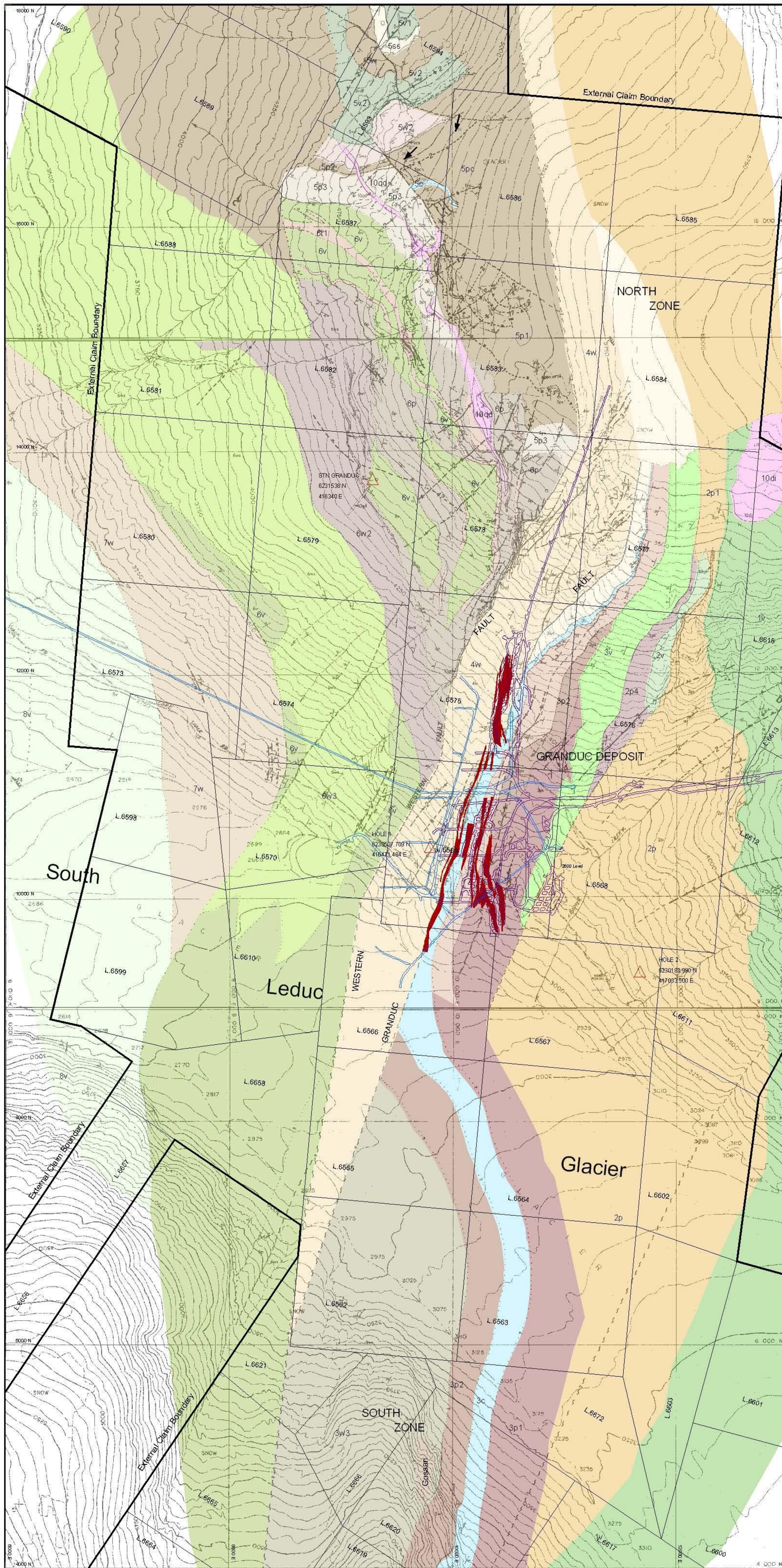
- Faults
- Property Boundary
- Claim Boundaries
- Survey Control Points



Bell Resources Corporation	
Granduc Property	
<b>Regional Geology</b>	
Map Prepared by: D. Metvedt	Date Prepared: May 11, 2005
To Accompany a Report by Paul McGuigan, P. Geo.	Report Date: May 11, 2005
Tecucomp Geological Inc.	Map Sheets: 104B 019, 028, 029
UTM - NAD 83 - Zone 9	Figure No. 2

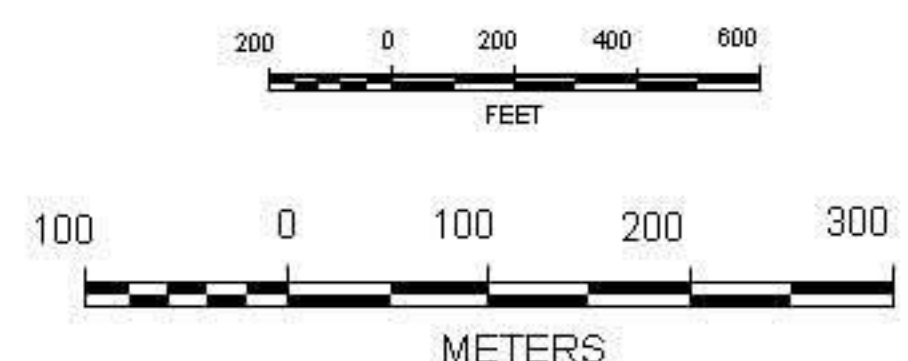
## **Figure 6: Granduc Mine Area Geology**

Mine area lithostratigraphic subdivisions of the Jurassic Hazelton Group and, Triassic Stuhini Group including the Granduc “Lower Footwall Sequence” (1v to 1f), “Upper Footwall Sequence” (2p to 2 p1), “Mine Series” (3w2 to 3v), “Hanging Wall, Gash Tuff Sequence” (4w to 4w1), Rocks of Uncertain Facing and Position in Unit (5pe to 5wa), “Hanging Wall, Varied Sequence” ( 5p3 to 5v1), Hanging Wall, Mafic Wacke Sequence” (6w3 to 6p), “Hanging Wall, Upper Volaniclastic Sequence” (7w, 8v). Map is from McGuigan et al. 2005 (Fig. 3), which was modified after Klepacki (1981). Scale of 1:5,000 shows topography with index contour interval of 50 feet.



# LEGEND

- Mesozoic/Cenozoic**
- Cretaceous And/Older**
- Lower Cretaceous And/Older**
- Post Kinematic Intrusions (10qd, 10di):**
- 10qd Light grey, fine to medium grained quartz diorite dike with chilled margins
  - 10di Light grey to green medium grained diorite
- Triassic And/Older**
- "Hanging Wall, Upper Volcaniclastic Sequence" (8v):**
- 8v Green foliated volcanics; feldspar and augite-bearing andesite flows, green foliated tuff
- "Hanging Wall, Siliceous Wacke" (7w):**
- 7w Light grey to brown bedded siliceous wacke, some pyritic clots
- "Hanging Wall, Mafic Wacke Sequence" (6w3 to 6p):**
- 6w3 Dark grey phyllite and wacke, minor sulphidic argillite, siliceous wacke, and feldspar porphyry flows near top
  - 6c Light purplish-grey calcareous tuff and limestone
  - 6w2 Dark green, grey, and purple, medium to fine grained wacke
  - 6s Bedded cream feldspathic arenite
  - 6t Cream to light green laminated chert and siliceous argillite; grades laterally into
  - 6t1 Laminated white chert horizon
  - 6v Dark green, foliated amphibole-bearing tuff, characterized by very thin white stringers
  - 6w1 Gray, foliated tuff and wacke, Laminated chert, minor argillite
  - 6p Light green, bedded argillite, minor black argillite
- "Hanging Wall, Varied Sequence" (5p3 to 5v1):**
- 5p3 Light green and grey siliceous argillite, black pyritic argillite
  - 5p2 Light green bedded argillite, local calcareous horizons
  - 5c Light grey to black limestone
  - 5p1 Light brown to dark grey, well bedded siliceous argillite
  - 5w2 Grey siliceous argillite, locally well bedded
  - 5v2 Dark green foliated volcanic rocks; fine, green acicular amphibole locally present
  - 5w1 Light grey siliceous wacke
  - 5ss Light grey to cream, tuffaceous sandstone with a medial felsite unit
  - 5r Green chloritic schist
- Rocks Of Uncertain Facing And Position In Unit 5 (5pe to 5wa):**
- 5pe Green bedded argillite, black pyritic argillite
  - 5pd Light grey limestone, local lenses of tuffaceous rock
  - 5pc Light brown and grey laminated siliceous argillite; minor foliated green volcanic rock
  - 5pb Dark grey graphitic limestone
  - 5pa Grey siliceous wacke; foliated tuff, plagioclase-bearing andesite, minor argillite
- Western Fault**
- "Hanging Wall, Gash Tuff Sequence" (4w to 4w1):**
- 4w Light green to greenish-grey phyllitic wacke, locally calcareous
  - 4c Light greenish-yellow to grey massive carbonate, grades laterally into a calcareous wacke of unit
  - 4a Light green tuffaceous sandstone
  - 4w1 Light green well bedded, foliated fine grained wacke
- Granduc Fault**
- "Mine Series" (3w2 to 3v):**
- 3w2 Dark green lapilli tuff, chert pebble conglomerate with a black calcareous matrix, minor dark green foliated volcanics
  - 3w1 Green chloritic phyllite, wacke, minor calcareous horizons
  - 3c Granduc Limestone: Light grey to dark grey graphitic limestone, local marginal calcareous tuff
  - 3t Black, grey, and white laminated chert and siliceous wacke
  - 3p2 Black argillite chip conglomerate, black pyritic argillite; minor magnetite-rich horizons, and cream and brown wacke
  - 3v Light grey bedded tuffaceous argillite
  - 3v2 Green to black volcanic, and volcaniclastic rocks, dark grey and green phyllite, green foliated wacke; minor cream laminated chert, Augite and/or feldspar-bearing flows at or near the base of the unit
- "Upper Footwall Sequence" (2p to 2p1):**
- 2p Dark grey to green argillite, minor volcanic rocks
  - 2ss Light brown tuffaceous sandstone
  - 2p4 Rusty weathering, black pyritic argillite
  - 2v Dark green, tuffaceous argillite; minor augite-bearing andesite flows
  - 2p3 Dark grey, magnetite-bearing calcareous argillite, local pyrite and chalcocite (?) bearing zones
  - 2p2 Dark grey bedded siliceous argillite
  - 2p1 Green siliceous phyllite; minor calcareous horizons, some lenses of epidote
- "Lower Footwall Sequence" (1v to 1f):**
- 1v Dark grey-green augite-bearing andesite flows; minor tuff
  - 1t Light grey siliceous wacke; minor breccia and tuff
  - 1f Green to grey lithic tuff +/- augite phenocryst, andesite tuff
- Other Symbols:**
- Glory Hole
  - Ore zones at 2600 Level
  - 2600 Level
  - 2475 Level and 2810-2475 AW
  - Geodesic Control Monument (NAD83)



## BELL RESOURCES CORPORATION

Report by: McGaugan et al.	GRANDUC MINE, STEWART, B.C.
Date: May 2005	
Scale: 1:5000	Compilation Map
File:	
NTS: 104 B/L/8	Geology modified after Klepacki (1981)
Mining Division Sheena	Tecucomp Geological Inc.
Ref. #	
	Fig. <b>3</b>

### **Figure 7: Granduc Project 2006 Bell Resources Drilling Program Map**

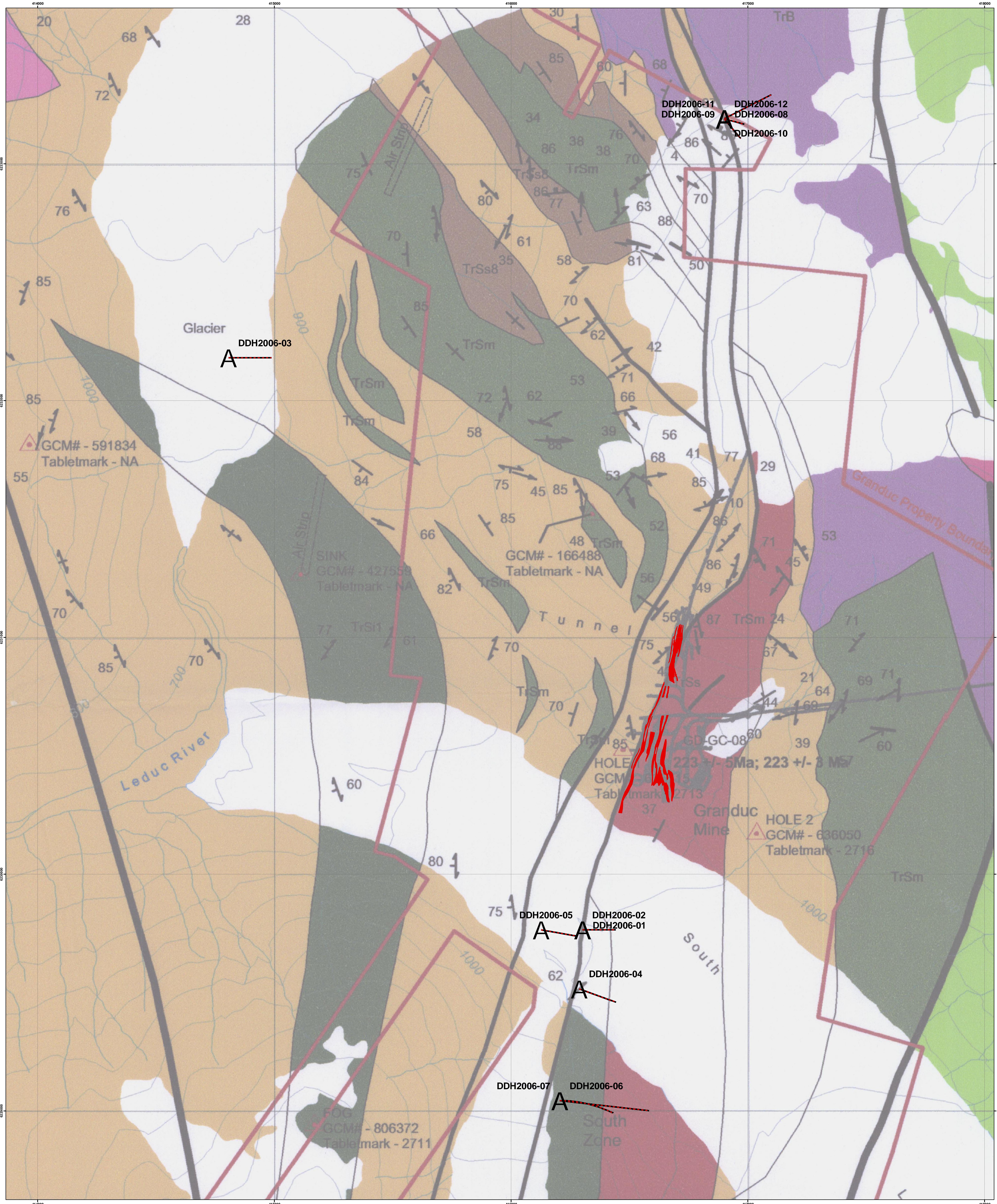
Drill sites marked with “A” symbol and showing azimuth of drill holes with labels. The Spring 2006 drilling program took place on the south side of the South Leduc Glacier and on South Ridge south of the glacier and near the terminus of the North Leduc Glacier. The JK zone is at the NE extent of the crown grant claims.

Map is at scale of 1:5,000 showing topography with index contour interval of 100 metres and geology from regional compilation map Fig. 5.

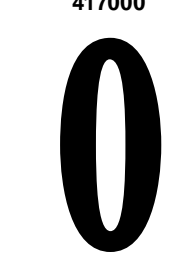
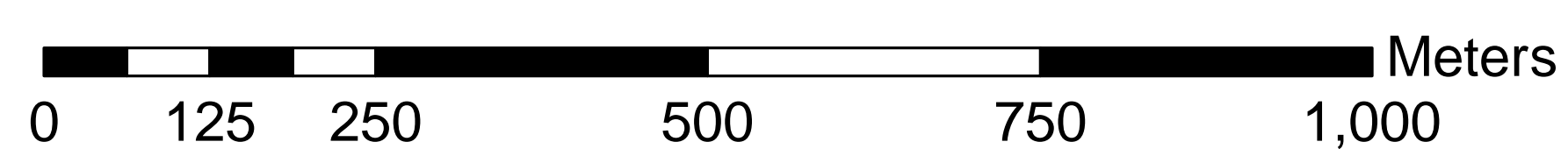
Drill sections are displayed in Figures 8 through 17. For the spring 2006 drilling Fig. 8 includes DDH-06-1, 2, 5; Fig. 9, DDH-06-3; Fig. 10, DDH-06-4; Fig. 11, DDH-06-6, 7. The JK zone drilling is displayed in Figures 12 through 17: Figs. 12 and 15, DDH-06-8, 9; Figs. 13 and 16; DDH-06-10, 11 and Figs. 14 and 17, DDH-06-12.



Granduc Project - Bell Resources 2006 Drilling Program  
Stewart Mining Camp



Scale 1:5000



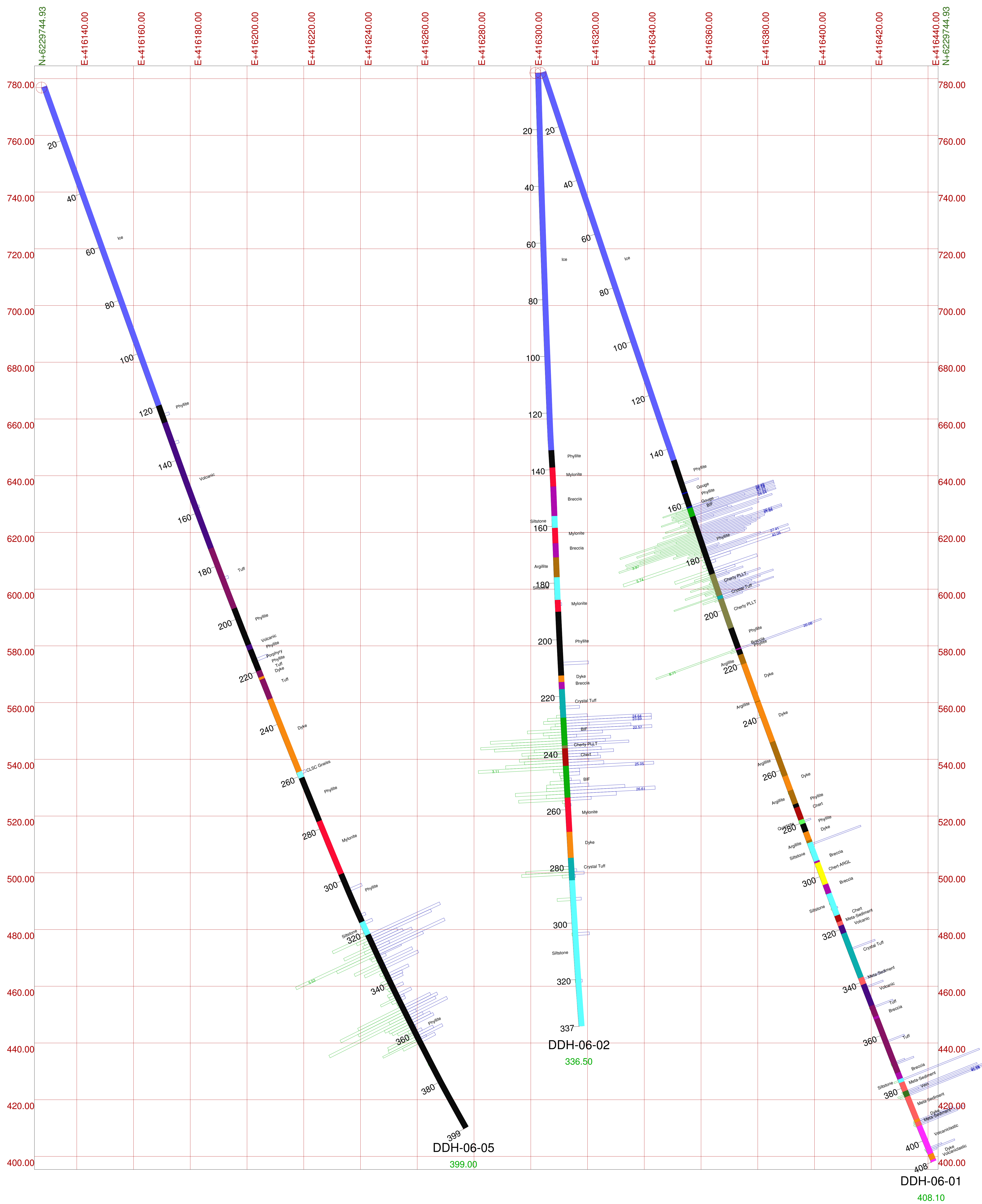
UTM NAD83 Zone 9N meters

**Figure 8: Drill Section for DDH-06-1, 2 and 5, South Leduc Glacier**

These three drill holes show probable continuity of west-facing mineralized magnetite iron formation and related cherty phyllites from the base of the glacier downdip over 200 metres to the west at approximately 60 degrees.

The copper histogram plots are truncated at upper bounds of 3%. The iron histograms are truncated at lower bounds of 5% and upper values of 25%. Values above the upper limits are annotated on the bars.

See Appendix IV for assays. View is north at scale of 1:500.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-01  
 DDH-06-02  
 DDH-06-05

View: 0° (Due North)

SCALE: 1:500

Histogram(s)  
 Left: Copper (%)  
 Right: Iron (%)

**ROCK CODES**

AMPB - Amphibole	DORC - Dioritic
ARGL - Argillite	GNSS - Gneiss
BOIT - Biotite	PLLT - Phyllite
CLSC - Calc-Silicate	

## Drawing #: 8

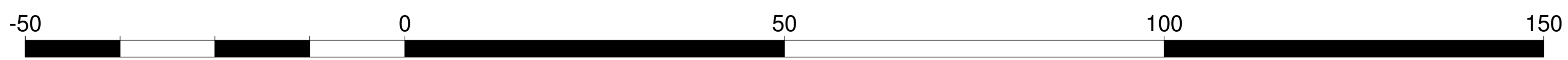
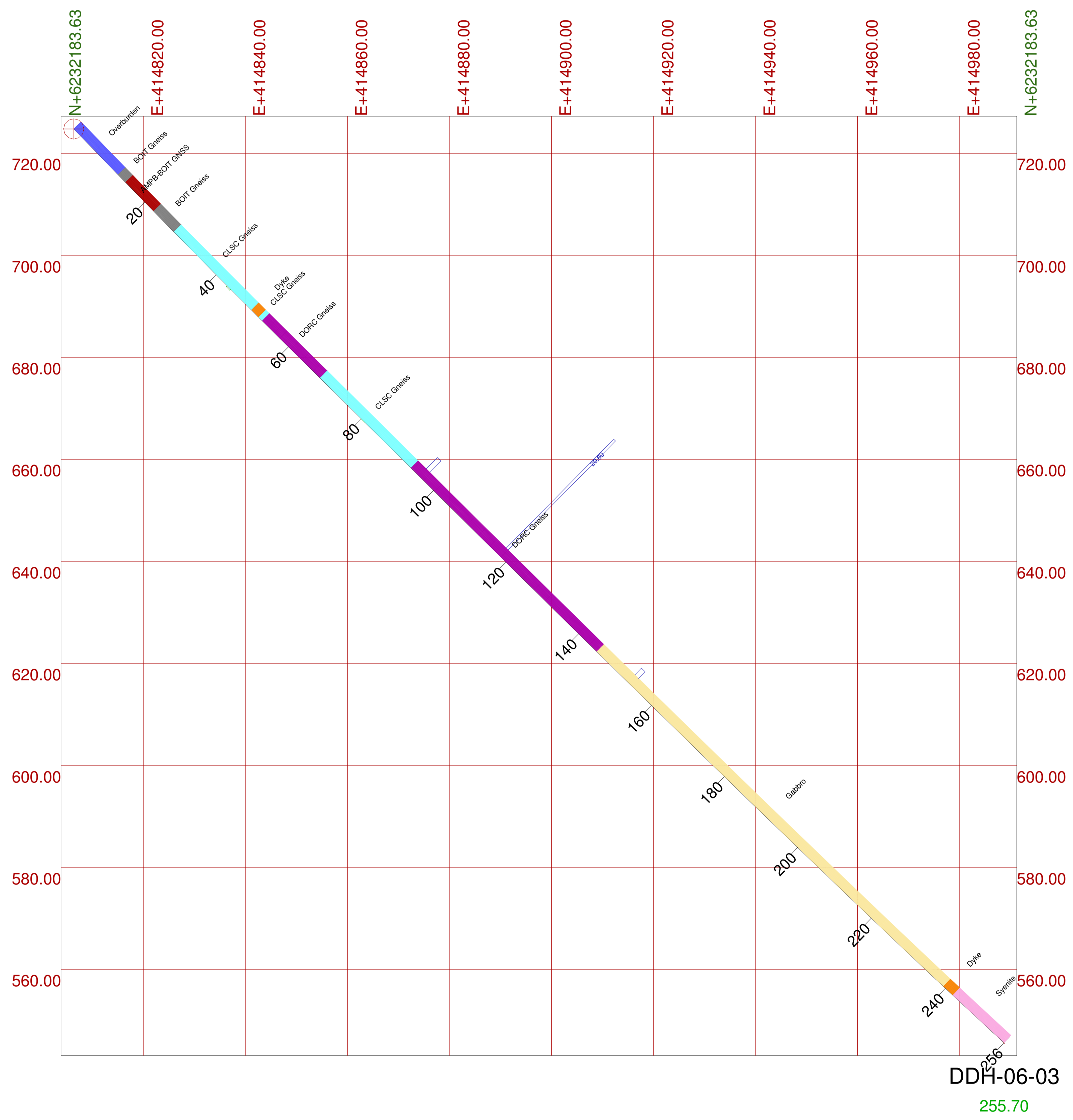
### **Figure 9: Drill Section for DDH-06-3, North Leduc Glacier Terminus**

This drill hole targeted an isolated, high-magnitude magnetic anomaly shown on the recent airborne survey as well as previous airborne and ground magnetic surveys.

The rocks encountered in the upper section of the hole were primarily amphibolite-grade metamorphic rocks including calc-silicate and dioritic gneisses. At 142 m the drilling intersected a coarse grained gabbroic intrusion with high magnetite contents that provided an explanation for the magnetic anomalies. Drilling continued into a megacrystic syenite before the hole was terminated.

No significant mineralization was encountered. Copper assays showed insignificant values. Iron contents over 20% were reported in some samples of gabbro.

See Appendix IV for assays. View is north at scale of 1:500.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-03

View: 0° (Due North)

SCALE: 1:500

Histogram(s)

Left: Copper (%)

Right: Iron (%)

### ROCK CODES

AMPB - Amphibole      DORC - Dioritic  
 ARGL - Argillite      GNSS - Gneiss  
 BOIT - Biotite        PLLT - Phyllite  
 CLSC - Calc-Silicate

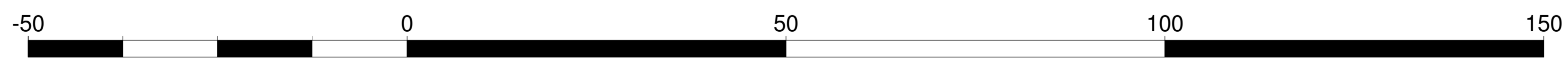
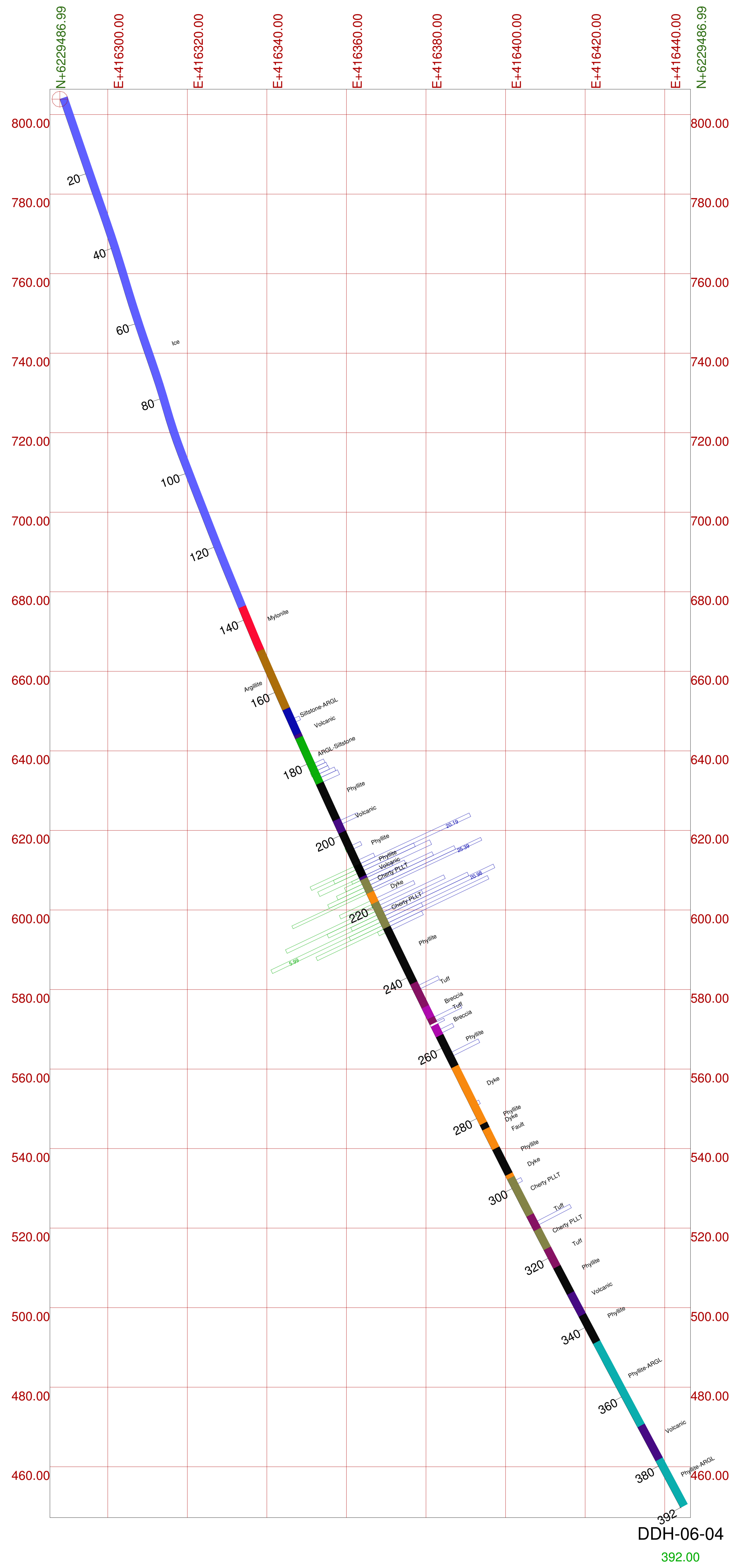
## Drawing #: 9

**Figure 10: Drill Section for DDH-06-4, South Leduc Glacier**

This drill hole shows a mineralized horizon consisting of cherty phyllites and minor banded iron formation that suggests probable continuity of west-facing mineralized magnetite iron formation and related cherty phyllites in the DDH-06-1,2,5 section (Fig. 8) to the south by about 300 metres and at a depth of 80 m below the South Leduc glacier.

The copper histogram plots are truncated at upper bounds of 3%. The iron histograms are truncated at lower bounds of 5% and upper values of 25%. Values above the upper limits are annotated on the bars.

See Appendix IV for assays. View is north at scale of 1:500.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-04

View: 0° (Due North)

SCALE: 1:500

Histogram(s)

Left: Copper (%)

Right: Iron (%)

### ROCK CODES

AMPB - Amphibole      DORC - Dioritic  
 ARGL - Argillite      GNSS - Gneiss  
 BOIT - Biotite        PLLT - Phyllite  
 CLSC - Calc-Silicate

Drawing #: 10

### **Figure 11: Drill Section for DDH-06-6, 7, South Ridge**

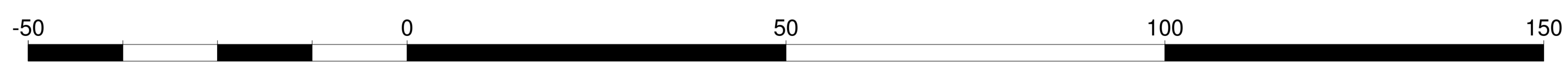
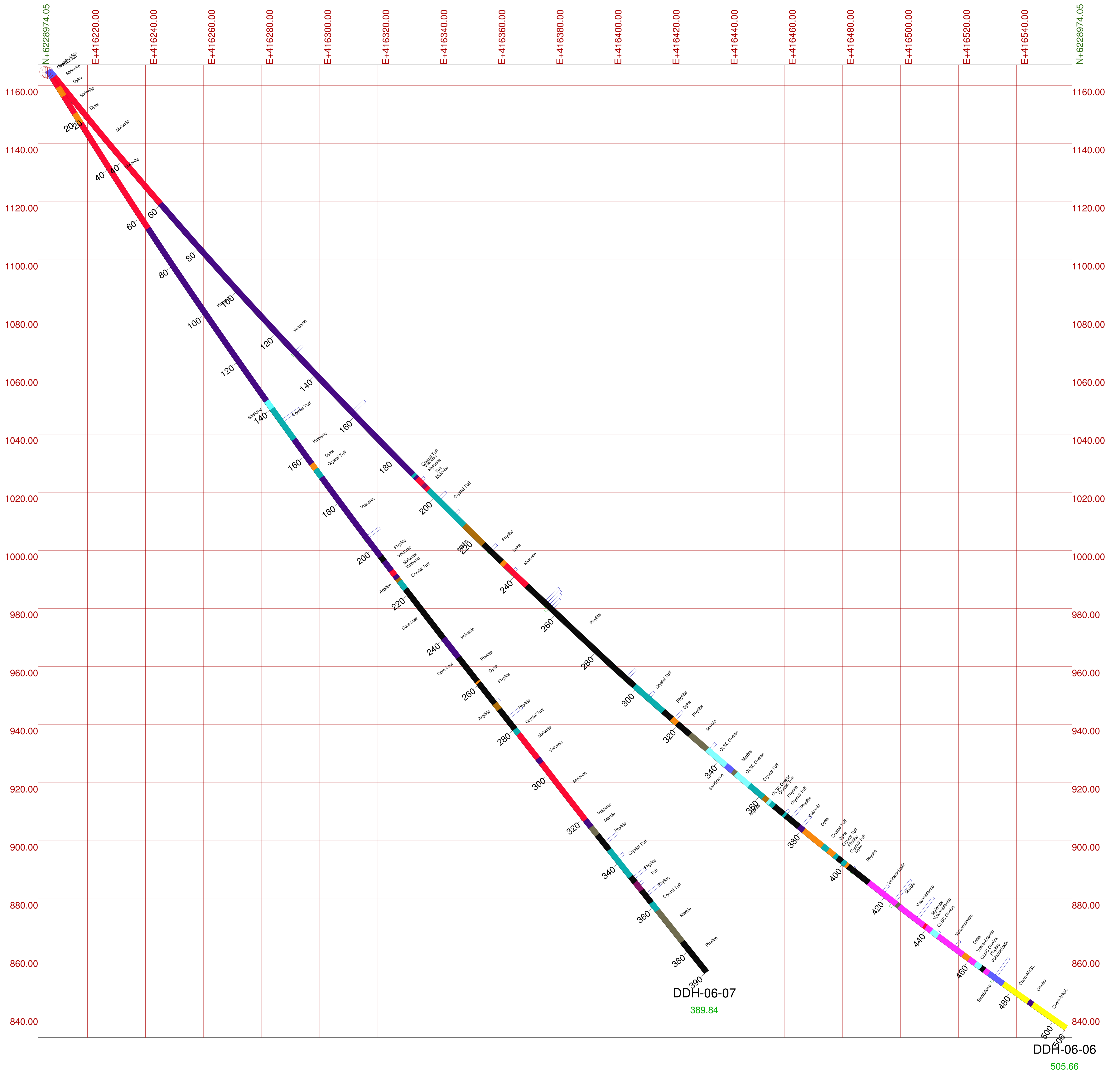
These two drill holes deviated significantly, curving up and to the right by over 20 degrees in azimuth and dip. In DDH-06-6 the shallowing of the hole hindered wireline methods.

The upper part of the west facing stratigraphic section consists of mylonitic calcareous wackes underlain by fine-grained volcanoclastic sediments, which are observable at the drill site. The section changes below these units by notable increases in calcareous sediments including possible representatives of the Granduc limestone – a calc-silicate marble interbedded with phyllitic siltstones. Also notable are fine magnetite laminae and epidote-rich intervals that may be indicative of hydrothermal alteration. The lowest stratigraphic unit is distinctive white and black-banded cherty siltstone/argillite.

No significant copper mineralization was encountered. However the magnetic susceptibility of the rocks in the lower units is much higher than in the upper as displayed in Appendix V by plots of downhole survey magnetic data.

See Appendix IV for assays. View is north at scale of 1:500.





# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-06  
 DDH-06-07

View: 0° (Due North)

SCALE: 1:500

Histogram(s)

Left: Copper (%)

Right: Iron (%)

### ROCK CODES

AMPB - Amphibole      DORC - Dioritic  
 ARGL - Argillite      GNSS - Gneiss  
 BOIT - Biotite        PLLT - Phyllite  
 CLSC - Calc-Silicate

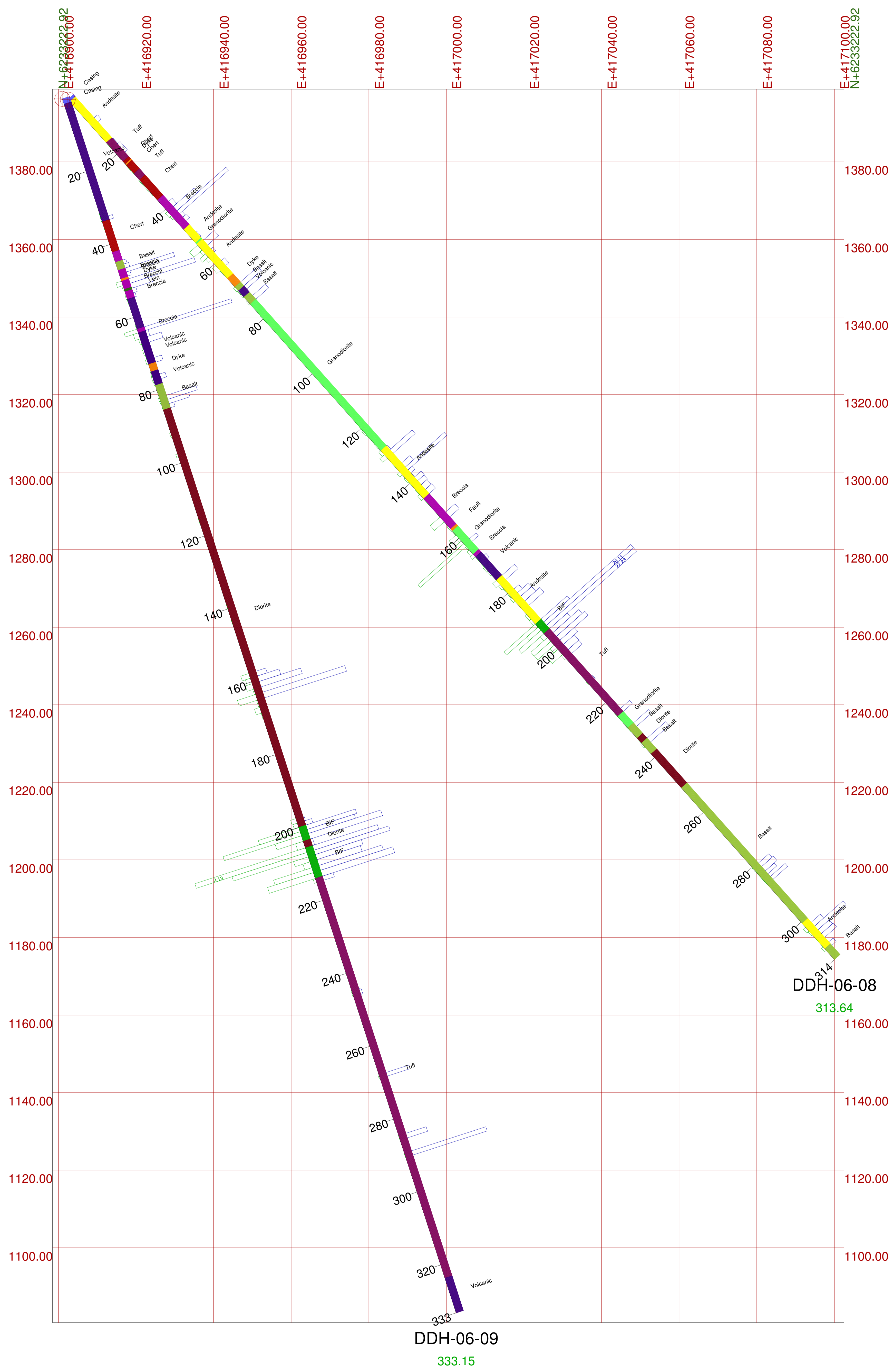
# Drawing #: 11

**Figure 12: Drill Section for DDH-06-8, 9, JK Zone North Leduc**

The section has been intruded by dioritic to granodioritic sills in a sequence of volcanic tuffs and banded magnetite iron formation. Copper grades within the BIF, which is at a contact with dioritic sill, are generally less than 1% with some intervals over 3%. See interpretive geology section in Fig. 15.

Grade information for drill holes is displayed as histograms with Fe on the right and Cu on the left of the drill string which is colour coded for rock type divisions indicated by adjacent annotations. The copper histogram plots are truncated at upper bounds of 3%. The iron histograms are truncated at lower bounds of 5% and upper values of 25%. Truncated bars have an annotation indicating the assay value.

See Appendix III for drill logs and Appendix IV for assays. View is 330 degrees (north) at scale of 1:500.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-08  
 DDH-06-09

View: 330° (Northwest)

SCALE: 1:500

Histogram(s)  
 Left: Copper (%)  
 Right: Iron (%)

ROCK CODES	
AMPB - Amphibole	DORC - Dioritic
ARGL - Argillite	GNSS - Gneiss
BOIT - Biotite	PLLT - Phyllite
CLSC - Calc-Silicate	

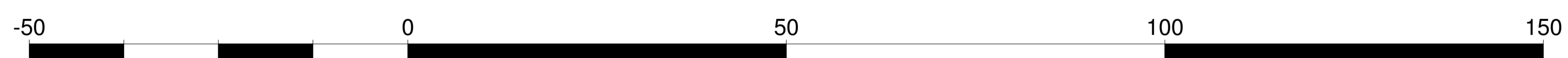
## Drawing #: 12

### **Figure 13: Drill Section for DDH-06-10, 11, JK Zone North Leduc**

The section shows an apparent dip of 50 degrees west has been intruded by dioritic to granodioritic sills in a sequence of volcanic tuffs and banded magnetite iron formation. Two distinct stratiform mineralized zones were intersected in DDH-06-9. DDH-06-10 was terminated because of high water pressure above a potential intersection with the lower mineralized zone in DDH-06-9. Copper grades within the phyllitic tuffs and BIF are generally less than a maximum of 2%.

Grade information for drill holes is displayed as histograms with Fe on the right and Cu on the left of the drill string, which is colour coded for rock type divisions indicated by adjacent annotations. The copper histogram plots are truncated at upper bounds of 3%. The iron histograms are truncated at lower bounds of 5% and upper values of 25%. Truncated bars have an annotation indicating the assay value.

See Appendix III for drill logs and Appendix IV for assays. View is 050 degrees (NE) at scale of 1:500. See interpretive geology section in Fig. 16.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-10  
 DDH-06-11

View: 50° (Northeast)

SCALE: 1:500

Histogram(s)

Left: Copper (%)

Right: Iron (%)

### ROCK CODES

AMPB - Amphibole      DORC - Diorite  
 ARGL - Argillite      GNSS - Gneiss  
 BOIT - Biotite        PLYL - Phyllite  
 CLSC - Calc-Silicate

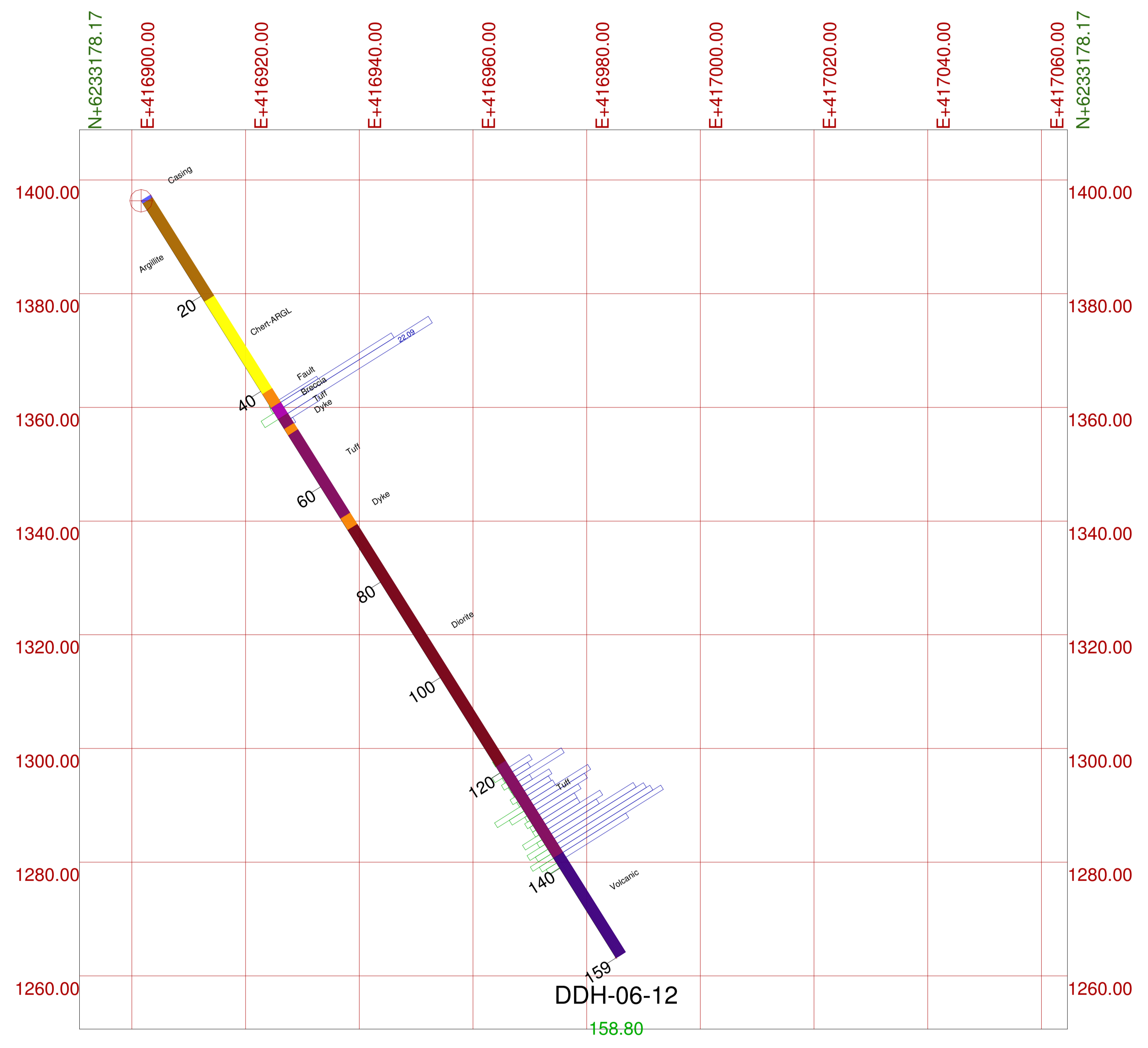
# Drawing #: 13

**Figure 14: Drill Section for DDH-06-8, 9, JK Zone North Leduc**

The section has been intruded by dioritic to granodioritic sills in a sequence of volcanic tuffs and banded magnetite iron formation. The highest copper grade assayed in this drill hole is 0.53%. See interpretive geology section in Fig. 15.

Grade information for drill holes is displayed as histograms with Fe on the right and Cu on the left of the drill string, which is colour coded for rock type divisions indicated by adjacent annotations. The copper histogram plots are truncated at upper bounds of 3%; (maximum values in this plot are 0.53% Cu). The iron histograms are truncated at lower bounds of 5% and upper values of 25%. Truncated bars have an annotation indicating the assay value.

See Appendix III for drill logs and Appendix IV for assays. View is 015 degrees (north) at scale of 1:500.



# Bell Resources Corporation

Project: Granduc  
 Location: Stewart Mining Camp  
 Drawing Created By: Jason Kolcun  
 Date: February 23, 2007

Drill Hole(s): DDH-06-12

View: 15° (Northeast)

SCALE: 1:500

Histogram(s)  
 Left: Copper (%)  
 Right: Iron (%)

**ROCK CODES**

AMPB - Amphibole	DORC - Dore
ARGL - Argillite	GNSS - Gneiss
BOIT - Biotite	PLLY - Phyllite
CLSC - Calc-Silicate	

## Drawing #: 14

**Figure 15: JK- Zone Interpretive section for DDH-06- 8 and 9**

Two stratiform mineralized zones correspond to magnetite-chert exhalite horizons, shown in red, in a west-facing stratigraphic section. Thick dioritic sills are possibly syn-volcanic. The surficial exposures of the JK zone and subject of channel sampling, is the mineralized breccia unit, interpreted to be a calcareous-pyritic fault breccia strata-parallel to tuffaceous and sedimentary bedding.

See Fig. 12 for grade data. Section is displayed at 1:2000 scale.



416900mE 6233200mN












417000mE

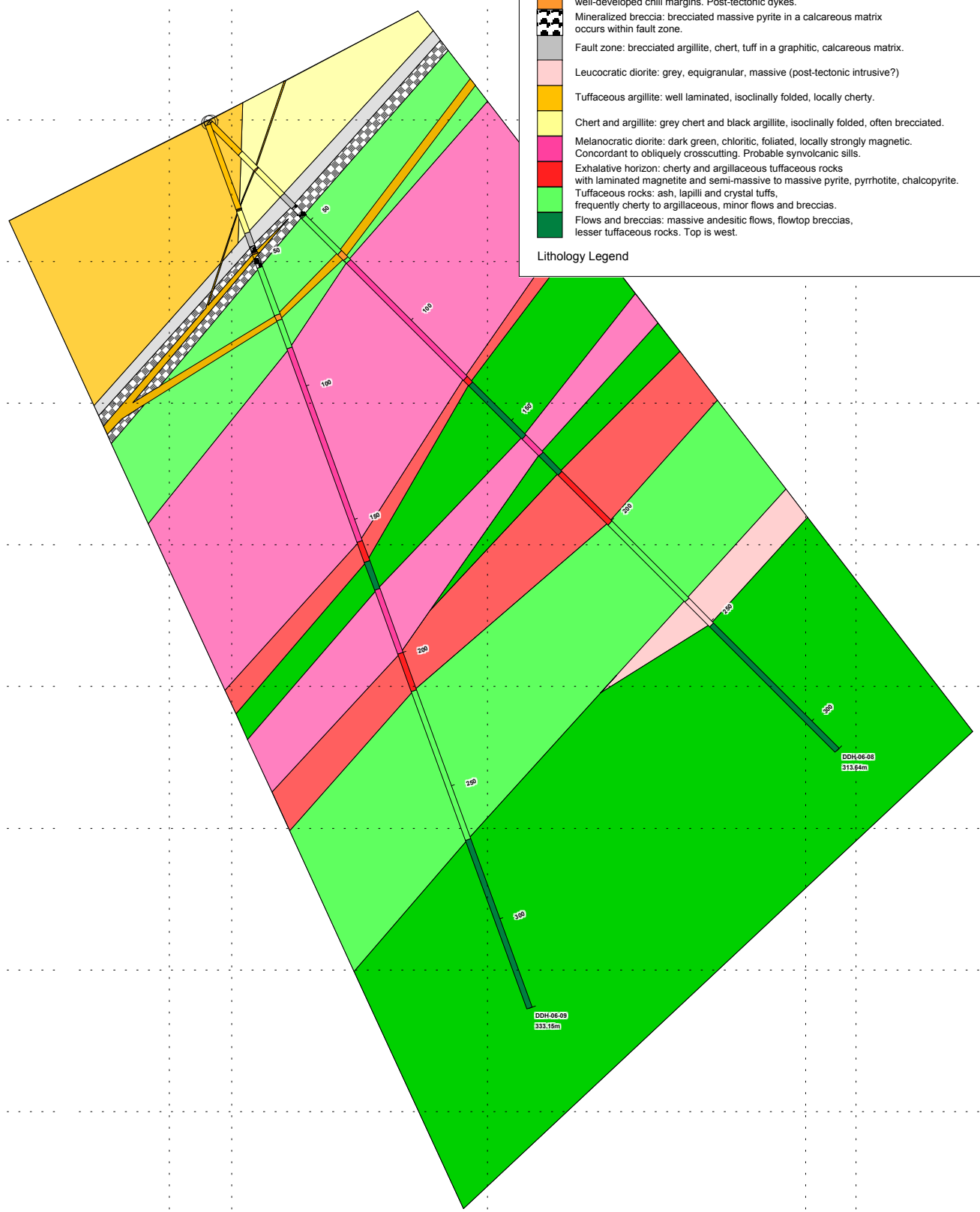
1400mRL  
1350mRL  
1300mRL  
1250mRL  
1200mRL  
1150mRL  
1100mRL  
1050mRL  
1000mRL  
950mRL

416900mE 6233200mN

417000mE

**Lithology Legend**

-  Casing
-  Diabase dyke: pale green, fine grained, sub-1mm hornblende phenocrysts, well-developed chill margins. Post-tectonic dykes.
-  Mineralized breccia: brecciated massive pyrite in a calcareous matrix occurs within fault zone.
-  Fault zone: brecciated argillite, chert, tuff in a graphitic, calcareous matrix.
-  Leucocratic diorite: grey, equigranular, massive (post-tectonic intrusive?)
-  Tuffaceous argillite: well laminated, isoclinally folded, locally cherty.
-  Chert and argillite: grey chert and black argillite, isoclinally folded, often brecciated.
-  Melanocratic diorite: dark green, chloritic, foliated, locally strongly magnetic. Concordant to obliquely crosscutting. Probable synvolcanic sills.
-  Exhalative horizon: cherty and argillaceous tuffaceous rocks with laminated magnetite and semi-massive to massive pyrite, pyrrhotite, chalcopyrite.
-  Tuffaceous rocks: ash, lapilli and crystal tuffs, frequently cherty to argillaceous, minor flows and breccias.
-  Flows and breccias: massive andesitic flows, flowtop breccias, lesser tuffaceous rocks. Top is west.



<b>BELL RESOURCES CORPORATION</b>	
Date: 23/10/2006 Author: T. Sandberg Office: Taiga Drawing: Scale: 1:2000	<b>JK Zone</b> <b>DDH-06-08 &amp; DDH-06-09</b> <b>Cross Section View Northwest</b>
Projection: Custom Projection	

**Figure 16: JK- Zone Interpretive section for DDH-06- 10 and 11**

The two stratiform mineralized zones from Fig. 15 continue into this section and again correspond to magnetite-chert exhalite horizons. See Fig. 13 for grade data, Appendix IV for assays. View is northeast.

6233200mN 416900mE











6233

1450mRL  
1400mRL  
1350mRL  
1300mRL  
1250mRL  
1200mRL  
1150mRL  
1100mRL  
1050mRL  
1000mRL

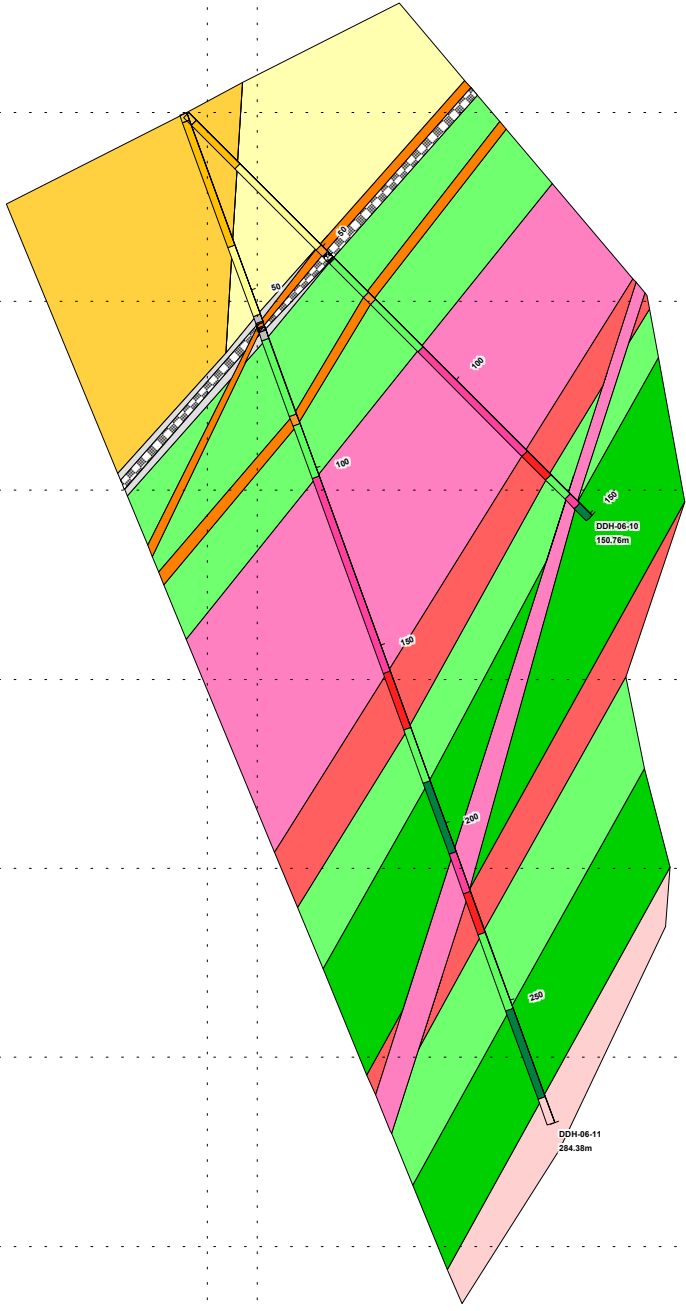
1350mRL  
1300mRL  
1250mRL  
1200mRL  
1150mRL  
1100mRL

6233200mN 416900mE

6233100mN

-  Casing
-  Diabase dyke: pale green, fine grained, sub-1mm hornblende phenocrysts, well-developed chill margins. Post-tectonic dykes.
-  Mineralized breccia: brecciated massive pyrite in a calcareous matrix occurs within fault zone.
-  Fault zone: brecciated argillite, chert, tuff in a graphitic, calcareous matrix.
-  Leucocratic diorite: grey, equigranular, massive (post-tectonic intrusive?)
-  Tuffaceous argillite: well laminated, isoclinally folded, locally cherty.
-  Chert and argillite: grey chert and black argillite, isoclinally folded, often brecciated.
-  Melanocratic diorite: dark green, chloritic, foliated, locally strongly magnetic. Concordant to obliquely crosscutting. Probable synvolcanic sills.
-  Exhalative horizon: cherty and argillaceous tuffaceous rocks with laminated magnetite and semi-massive to massive pyrite, pyrrhotite, chalcopyrite.
-  Tuffaceous rocks: ash, lapilli and crystal tuffs, frequently cherty to argillaceous, minor flows and breccias.
-  Flows and breccias: massive andesitic flows, flowtop breccias, lesser tuffaceous rocks. Top is west.

Lithology Legend



**BELL RESOURCES CORPORATION**

Date: 23/10/2006  
 Author: T. Sandberg  
 Office: Taiga  
 Drawing:

**JK Zone**  
**DDH-06-10 & DDH-06-11**  
**Cross Section View Northeast**

Scale: 1:2000

Projection: Custom Projection

**Figure 17: JK- Zone Interpretive section for DDH-06- 12**

This short hole shows continuity of the upper exhalative horizon between the NE and NW drill sections. The hole was terminated because of high artesian pressure. See Fig. 14 for grade data, Appendix IV for assays. View is north.

416800mE 6233200mN 416900mE

1450mRL

1400mRL

1350mRL

1300mRL

1250mRL

1200mRL












1150mRL

1100mRL

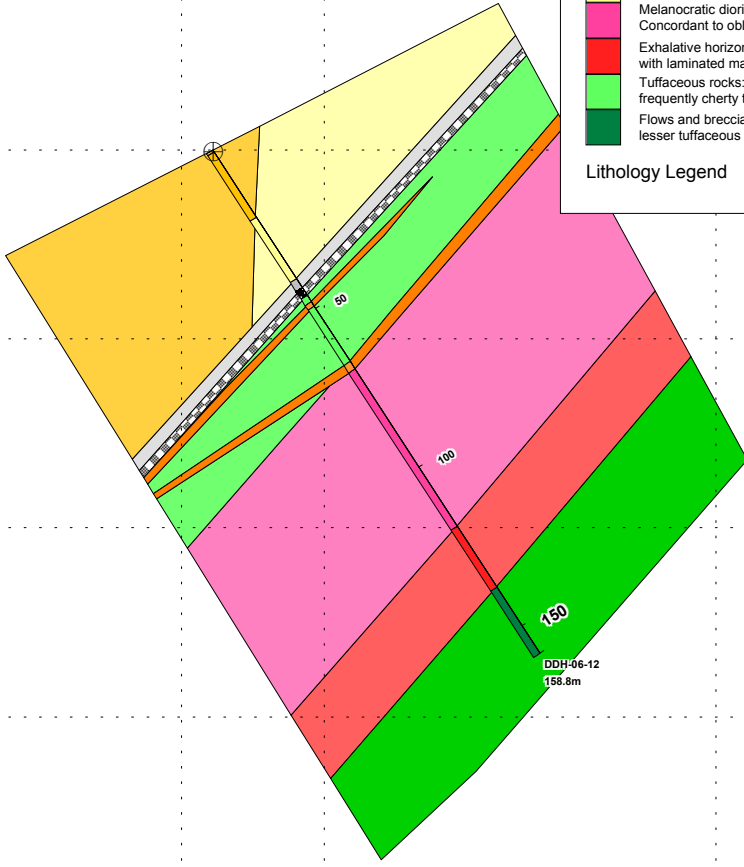
1050mRL

1000mRL

416800mE 6233200mN 416900mE

-  Casing
-  Diabase dyke: pale green, fine grained, sub-1mm hornblende phenocrysts, well-developed chill margins. Post-tectonic dykes.
-  Mineralized breccia: brecciated massive pyrite in a calcareous matrix occurs within fault zone.
-  Fault zone: brecciated argillite, chert, tuff in a graphitic, calcareous matrix.
-  Leucocratic diorite: grey, equigranular, massive (post-tectonic intrusive?)
-  Tuffaceous argillite: well laminated, isoclinally folded, locally cherty.
-  Chert and argillite: grey chert and black argillite, isoclinally folded, often brecciated.
-  Melanocratic diorite: dark green, chloritic, foliated, locally strongly magnetic. Concordant to obliquely crosscutting. Probable synvolcanic sills.
-  Exhalative horizon: cherty and argillaceous tuffaceous rocks with laminated magnetite and semi-massive to massive pyrite, pyrrhotite, chalcocopyrite.
-  Tuffaceous rocks: ash, lapilli and crystal tuffs, frequently cherty to argillaceous, minor flows and breccias.
-  Flows and breccias: massive andesitic flows, flowtop breccias, lesser tuffaceous rocks. Top is west.

**Lithology Legend**



1350mRL  
1300mRL  
1250mRL  
1200mRL  
1150mRL  
1100mRL

<b>BELL RESOURCES CORPORATION</b>	
Date: 23/10/2006 Author: T. Sandberg Office: Taiga Drawing: Scale: 1:2000	<b>JK Zone                  DDH-06-12                  Cross Section View North</b>
Projection: Custom Projection	

**Appendix I**  
**Detailed Cost Statement**

**Table 1: Statement of Work for Event # 4109420**

Bell Resources Granduc land tenures and Teuton Resources optioned claims with new “good to” dates as of October 31, 2006.

**Table 2: Work Cost Statement**

Revised accounting of costs for exploration at Granduc, during the period April 17 to October 15, 2006 plus costs for reports.

## Bell Resources Corporation Land Tenures

### Statement of Work Event 4109420

October 31, 2006

Total Value of work: \$2,031,719.76  
 Portable Assessment Credit \$1,215,790.93

Tenure	Claim Name	Owner	New Good-To Date	Claim Area (ha)	Work Value Due	Submission Fee
<b>Bell Resources Corporation</b>						
415482	TON-1	200467 (100%)	March 1, 2016	500.00	\$ 33,234.97	\$ 1,863.01
415483	TON-2	200467 (100%)	March 1, 2016	500.00	\$ 33,234.97	\$ 1,863.01
415484	TON-3	200467 (100%)	March 1, 2016	500.00	\$ 33,234.97	\$ 1,863.01
415485	TON-4	200467 (100%)	March 1, 2016	500.00	\$ 33,234.97	\$ 1,863.01
415486	PEARSON 1	200467 (100%)	March 1, 2016	500.00	\$ 33,245.90	\$ 1,863.56
415487	PEARSON 2	200467 (100%)	March 1, 2016	500.00	\$ 33,245.90	\$ 1,863.56
415488	PEARSON 3	200467 (100%)	March 1, 2016	500.00	\$ 33,245.90	\$ 1,863.56
415489	PEARSON 4	200467 (100%)	March 1, 2016	500.00	\$ 33,245.90	\$ 1,863.56
508890	Tunnel 1	200467 (100%)	March 1, 2016	449.72	\$ 28,654.42	\$ 1,614.07
508892	Tunnel 2	200467 (100%)	March 1, 2016	449.72	\$ 28,654.55	\$ 1,614.08
517191	AGE	200467 (100%)	March 1, 2016	89.95	\$ 5,495.00	\$ 310.99
527164	ESKAY GOLD	200467 (100%)	March 1, 2016	18.00	\$ 1,089.14	\$ 65.29
527299	LUDUC MINERALS	200467 (100%)	March 1, 2016	53.99	\$ 3,265.36	\$ 195.78
527314	GRANDUC NORTH	200467 (100%)	March 1, 2016	413.78	\$ 25,016.85	\$ 1,500.04
527315	GRANDUC SOUTH	200467 (100%)	March 1, 2016	162.02	\$ 9,795.33	\$ 587.34
<b>Teuton Resources optioned claims</b>						
508703		126630 (100%)	March 1, 2016	1,062.37	\$ 67,759.60	\$ 3,815.23
508705		126630 (100%)	March 1, 2016	953.49	\$ 60,835.60	\$ 3,426.28
508775		126630 (100%)	March 1, 2016	143.98	\$ 9,181.42	\$ 517.05
508777		126630 (100%)	March 1, 2016	360.10	\$ 22,963.62	\$ 1,293.20
508828		126630 (100%)	March 1, 2016	899.31	\$ 57,349.16	\$ 3,229.62
508887	Leduc Silver NW	126630 (100%)	March 1, 2016	431.61	\$ 27,500.65	\$ 1,549.08
508888	Leduc Silver W1	126630 (100%)	March 1, 2016	431.80	\$ 27,512.31	\$ 1,549.74
508889	Leduc Silver W2	126630 (100%)	March 1, 2016	431.98	\$ 27,524.04	\$ 1,550.40
508891	Leduc Silver SW1	126630 (100%)	March 1, 2016	432.17	\$ 27,535.76	\$ 1,551.06
508893	Leduc Silver SW2	126630 (100%)	March 1, 2016	450.37	\$ 28,695.64	\$ 1,616.39
508894	Leduc Silver S	126630 (100%)	March 1, 2016	450.36	\$ 28,695.20	\$ 1,616.37
508895	Leduc Silver SE	126630 (100%)	March 1, 2016	360.24	\$ 22,952.93	\$ 1,292.91
508898		126630 (100%)	March 1, 2016	377.93	\$ 24,088.16	\$ 1,357.22
520248	MACH 1	126630 (100%)	November 1, 2007	358.86	\$ 1,435.42	\$ 143.54
520250	MACH 2	126630 (100%)	November 1, 2007	448.91	\$ 1,795.65	\$ 179.57
520252	MACH 3	126630 (100%)	November 1, 2007	323.09	\$ 1,292.37	\$ 129.24
520254	BIG GOLD 1	126630 (100%)	November 1, 2007	430.44	\$ 1,721.77	\$ 172.18
520257	BIG GOLD 2	126630 (100%)	November 1, 2007	430.62	\$ 1,722.49	\$ 172.25
520258	BIG GOLD 3	126630 (100%)	November 1, 2007	359.01	\$ 1,436.04	\$ 143.60
520260	BIG GOLD 4	126630 (100%)	November 1, 2007	269.36	\$ 1,077.44	\$ 107.74
527347	ESKAY RIFT 1	126630 (100%)	February 9, 2008	449.03	\$ 1,796.10	\$ 179.61
527349	ESKAY RIFT 2	126630 (100%)	February 9, 2008	431.28	\$ 1,725.11	\$ 172.51
527350	ESKAY RIFT 3	126630 (100%)	February 9, 2008	359.56	\$ 1,438.22	\$ 143.82
				16,283.04	\$ 815,928.83	\$ 46,702.48

## APPENDIX I - WORK COST STATEMENT

Field Personnel—Period: April 17 to October 15, 2006:

### Geologists and Geological assistants

Hardolph Wasteneys, Ph.D., Project Geologist (Spring)	
66 days @ \$600/day -----	\$39,600
Robert Thivierge P.Geo. Project geologist (Fall)	
28 days \$625/day -----	\$17,500
Timothy Sandberg PGeo, Project geologist (Fall)	
15 days \$625/day -----	\$9,375
Sean Milliken, Geologist (Spring)	
50 days @ \$400/day -----	\$20,000
Jason Kolcun, Geotechnician + Camp Manager	
175days @ \$250/day-----	\$43,750
Chris Pearson, Geotechnician (Spring)	
55 days @ 200/day-----	\$11,000
Gary Gaqnon, Geotechnician (Fall)	
42 days @ \$200/day -----	\$8,400
John Keigher, Geotechnician (Spring and Summer)	
105 days @ \$150/day -----	\$15,750
Shawn Barton, Geotechnician (Fall)	
30 days @ \$200/day -----	\$6,000

### Avalanche professionals

Paul Berntsen, Avalanche tech. Mountain guide	
26 days @ \$650/day -----	\$16,900
Alan Dennis, Avalanche tech	
9 days @ \$500/day-----	\$4,500
Dave Healy, Avalanche Technician	
13 days @ \$400/day -----	\$5,200

### Cooks and First Aid

Sandy Lussier, Cook & First Aid	
60 days @ \$400/day -----	\$24,000
Brian Farnham, cook	
83 days @ \$300/day -----	\$24,900
Harvey Kroetsch, camp safety	
18 days @ \$245/day -----	\$4,410

### Helicopter

Oceanview Helicopters, Powell River BC	
Hughes 500D stationed in camp-----	
Various other helicopters for mob/demob-----	
TOTAL -----	\$629,455

### Diamond Drilling

Hy-Tech Drilling, Smithers -----	\$367,258
Titan Drilling, Yellowknife-----	\$272,822
Wood for drill pads-----	\$ 4,483
Pad building contract -----	\$26,257



**Equipment rental**

Main Generator, standby generator, Flexit borehole survey tool,  
snowmobile, quad, Core Saw, First Aid station -----\$ 68,102  
Other vehicle rental ----- \$ 5,387

**Equipment Purchase**

Computer equipment, safety gear, ----- \$ 5,398

**Camp Costs**

775 man-days field crew; 288 man-days drill crew  
Food, camp supplies, ----- \$ 92,650

**Food and cooking**

Save-On-Foods invoices ----- \$7,337

**Travel and Accommodation Expenses**

Travel ----- \$ 69,640  
Meals at King Edward Hotel, Stewart ----- \$ 3,138

**Fuel**

Heating oil, propane, diesel for generators and diamond drill, gasoline  
for saw, generator, snowmobile, Jet B for helicopters ----- \$63,788

**Assaying**

Acme Analytical, Vancouver

870 drill core, 67 rock samples ----- \$ 38,402

**Other**

Courier and postage ----- \$ 54  
Communications (satellite link) ----- \$ 2,432  
Insurance ----- \$ 232  
Reproductions ----- \$ 754  
Environmental report ----- \$ 4,243

(NB: report included in Appendix VIII)

Shipping ----- \$ 8,469  
Sample Studies ----- \$ 9,950

(NB: resampling of core stored in Stewart, by Jason Kolcun)

Maps (Allnorth Consultants) ----- \$ 4,568  
Miscellaneous ----- \$ 1,100  
Storage (core stored in Stewart at Granmac Services) ----- \$ 3,825

**Expediting**

Nugget Expediting, Smithers  
Granmac Services, Stewart  
Total ----- \$100,759

**Report Costs**

Spring report ----- \$3,600  
Taiga consultants, Fall drilling report ----- \$2,500  
Final report ----- \$15,400

**Total Revised Amount of Exploration Cost ----- \$ 2,063,288**

**Amount Claimed on Statement of Work; Event #4109420 ----- \$ 2,031,720**

## **Appendix II**

### **STATEMENTS OF QUALIFICATION**

- **Hardolph Wasteneys, B.Sc. Queen's 1979, Ph.D. Queen's 1990.**
- **Timothy Marsh, P.Eng., Ph.D. Stanford 1997**
- **Robert Thivierge, B.Sc. (Hons.) Carleton 1977**
- **Timothy Sandberg, B.Sc. UBC 1982, P.Geo. (BC), P.Geol. (AB)**

## Statement of qualifications, Hardolph Wasteneys

I, Hardolph Wasteneys, Ph.D. resident at Strathcona Park Lodge, Campbell River BC, do hereby certify that:

- I am a self employed geologist and have worked primarily as a geologist engaged in mineral exploration, mining, geological and U-Pb geochronological research, and geological education since 1978.
- I graduated with the degree of Bachelor of Science, Geological Engineering, Mineral Exploration option from the Faculty of Applied Science at Queen's University, Kingston in 1979.
- I graduated with the degree of Doctor of Philosophy (Geological Sciences) from Queen's University, Kingston in 1990. My thesis research specialized in the study of ore deposits of southern Peru under the supervision of Prof. A.H. Clark.
- I was a research associate/post-doctoral fellow at the Jack Satterley Geochronology Laboratory in the Royal Ontario Museum directed by Dr. T. E. Krogh from 1990 to ca. 1997 and completed numerous U-Pb studies on the timing of ore deposition and regional metamorphism in collaboration with university and government survey geologists. My research resulted in 4 first authored publications in peer reviewed international journals between 1995 and 2000.
- I supervised the Spring 2006 Granduc drilling program for Bell Resources Corp under the direction of Dr. T. Marsh, P.Eng., and prepared the relevant material used in this report based on my personal observations, those of personnel under my supervision and those of Timothy Sandberg, P. Geo. And Robert Thivierge, P.Geo., of Taiga Consultants Ltd.
- I have no beneficial interest in Bell Resources Corporation or in Teuton Resources.

Dated at Strathcona Park Lodge, Campbell River BC, this 29<sup>th</sup> day of January, 2007.

Hardolph Wasteneys, B.Sc., Ph.D.

## Statement of Qualifications

Timothy M. Marsh, PhD, P. E.

1. I am an officer of Bell Resources Corporation, based in Vancouver, British Columbia, Canada.
2. My residence is at 10354 East Jan Avenue, Mesa, Arizona, 85209, United States of America.
3. I graduated in 1986 with a B.S. in Geological Engineering as Outstanding Senior, Kappa Mu Epsilon (math), Tau Beta Pi (engineering), Colorado School of Mines, Golden, Colorado.
4. I graduated in 1997 with a PhD in Applied Earth Sciences, Ore Deposits and Exploration, from Stanford University, Stanford, California.
5. I have been practicing as a geological engineer and geologist for 15 years.
6. I am registered as a Professional Engineer and am entitled to engage in the practice of professional engineering in the state of Arizona under the terms of the Board of Technical Registration, Title 32, Arizona Revised Statutes.
7. I am affiliated with the following organizations: Society of Economic Geologists, Society for Mining, Metallurgy, and Exploration, and Arizona Geological Society.
8. I have reviewed all of the components of this report and provided overall supervision and direction to the Granduc 2006 exploration program.

## **Statement of Qualifications – Robert H. Thivierge**

I, Robert Hamilton Thivierge, residing at 1207 Willowdale Avenue, Ottawa, Ontario, K1H 7S5, do hereby state:

I am a Senior Geologist with Taiga Consultants Ltd., whose office address is # 4, 1922-9<sup>th</sup> Avenue SE, Calgary, Alberta, T2G 0V2, and have performed work with Taiga Consultants Ltd. on various exploration projects in Canada and in Africa since 1996.

I am a 1977 graduate of Carleton University (Ottawa, Ontario) with a B.Sc. (Honours) degree in Geology.

I have been practicing as a geologist for over 29 years since graduation, and my work has included mineral exploration (gold, base metals, uranium, diamond and industrial minerals) for private companies in Canada, the Republic of Mali, Burkina Faso, Guinea and the Republic of Congo, as well as applied geological and geotechnical studies for federal and provincial institutions in Canada.

I have an application pending for membership with the Association of Professional Geoscientists of Ontario (APGO) to become a Qualified Person for the purposes of National Instrument 43-101 of the Canadian Securities Administrators.

I have read National Instrument 43-101F1, and the information in the relevant portions of this report has been prepared in compliance with National Instrument 43-101 and Form 43-101F.

I supervised the JK Zone drilling program on the Granduc Property in September, 2006, and prepared the relevant material used in this report for Bell Resources Corp., based on my personal observations on the project site.

I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report.

I have had no prior involvement with Bell Resources Corp. or its Granduc project properties, and have no material interest in Bell Resources Corp. or the properties, nor do I expect to receive any.

Dated at Ouagadougou, Burkina Faso  
January 24, 2007

Robert H. Thivierge, B.Sc. (Hons.)

## Certificate, Timothy Martyn Sandberg

I, Timothy Martyn Sandberg, P. Geo., of 6215 34<sup>th</sup> St. SW, Calgary, Alberta, do hereby certify that:

- I am an employee of Taiga Consultants Ltd. of #4, 1922 - 9 Ave. SE, Calgary, Alberta, T3E 5M1
- I graduated with the degree of Bachelor of Science in Geological Sciences from the University of British Columbia in 1982.
- I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta and of the Association of Professional Engineers and Geoscientists of British Columbia.
- I have worked as a geologist for 24 years since my graduation from university.
- I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- I supervised the JK Zone drilling program on the Granduc Property and prepared the relevant material based on my personal observations, which are used in this report for Bell Resources Corp. on behalf of Taiga Consultants Ltd.

DATED at Calgary, Alberta, this 23rd day of January, 2007

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Timothy M. Sandberg, BSc, P. Geo. (BC); P. Geol. (AB)

## **Appendix III**

### **Diamond Drilling Logs**

#### **SPRING DRILL PROGRAM**

- **DDH-06-1; South Leduc Glacier**
- **DDH-06-2; South Leduc Glacier**
- **DDH-06-3; Pollux Magnetic anomaly; North Leduc Glacier terminus**
- **DDH-06-4; South Leduc Glacier**
- **DDH-06-5; South Leduc Glacier**
- **DDH-06-6; Granduc South Zone; South Ridge**
- **DDH-06-7; Granduc South Zone; South Ridge**

#### **Fall Drill Program**

- **DDH-06-8; Granduc Mountain North; JK zone**
- **DDH-06-9; Granduc Mountain North; JK zone**
- **DDH-06-10; Granduc Mountain North; JK zone**
- **DDH-06-11; Granduc Mountain North; JK zone**
- **DDH-06-12; Granduc Mountain North; JK zone**

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-1

Hole #: DDH-06-1 Date Started: May 10/2006 Logged May 18, 2006 by  
 Dip: -70 Date Finished: May 16/2006 NAD 83 Zone 9; 416303 E; 6229758 N 793 m ASL  
 Azimuth: 090

From (m)	To (m)	Rock Type	Description
0.00	144.43	OVB	Casing through ice and overburden
144.43	152.81	Phyllite	<b>Laminated Phyllite:</b> fine grained, alternating light and dark green to black layers, 1-5mm thick. Many of the lighter siliceous/calcareous layers are lensoid and smeared out. This smeared texture alternates with a less sheared looking foliated texture with finer less defined laminae. layers show small scale wavy folds. the foliation varies from 45°-55° TCA. unit is cut by occasional calcite veins, 2-4mm wide running approximately perpendicular to foliation.  151.78-152.10m vein breccia. Calcite veining to 10mm thick. Epidote seen as small rounded blebs along foliation. Minor blebby pyrrhotite with very minor pyrite and chalcopyrite, and magnetite within a couple of calcite veins.
152.81	156.40	Phyllite	<b>Laminated Phyllite:</b> fine grained, maroon and green laminae to 3mm. Very fine intra laminae clasts. Some look slightly smeared out. Brown layers possibly secondary biotite, and green and mix of chlorite, sericite and quartz. Foliation is somewhat wavy. becomes for biotite rich near end of interval. cut by occasional calcite veins perpendicular to foliation. minor fine disseminated pyrite along foliation.
156.40	156.89	Gouge	<b>Fault Gouge:</b> broken tightly folded, graphite rich
156.89	161.64	Phyllite	<b>Laminated Phyllite:</b> alternating layers of white/black and maroon/green. Similar to previous units (144.13-152.81m, 152.81-156.40m). Pyrrhotite 0.1mm grains infiltration trains. Generally less phyllitic than previous units; small rolled feldspar crystals-phenos. pyrite in euhedral crystals 1mm, forms trains over foliation (porphyroclasts)
161.64	162.16	Gouge	<b>Fault Gouge:</b>
162.16	165.38	MIF	<b>Magnetite Iron Formation:</b> alternating magnetite rich and cherty bands oriented 40°-50° TCA. Magnetite rich bands 5-15mm wide. Pyrrhotite + chalcopyrite + minor pyrite associated with magnetite bands. Net texture chalco in magnetite bands. To 8%cpy, 4%pyrr locally. unit bounded top and bottom by 3-3.5cm quartz calcite veins at 50° TCA
165.38	186.79	Alternating Phyllite/MIF	<b>Mixed Unit:</b> laminated phyllite or mylonite with occasional magnetite rich bands to 15cm. Grey and light grey laminations 2-5mm wide, foliation 40°-45° TCA. Mildly wavy in places with siliceous lenses. Dark grey finely laminated zones to 1m in length. Fine disseminated pyrite seen along foliation associated with darker layers (to 1% locally). chalcopyrite and pyrrhotite as blebs associated with magnetite rich layers. 165.2-165.5m IF? + quartz breccia 173.04-173.21m vein breccia. Quartz-carbonate veining. Magnetite with chalcopyrite and pyrrhotite 174.93-175.63m vein breccia. As above (173.04-173.21m) 178.40-178.52m magnetite rich band with blebby chalcopyrite and fine disseminated pyrite. 179.5-186.0m broken, rubbly core with poor to very poor recovery. 180.0m 5cm piece of semi-massive chalcopyrite and magnetite. Very poor core recovery so true extent of high grade mineralization not seen (Niton: 3.1%Zn, 15.42% Cu)
186.79	194.86	Cherty Phyllite	<b>Banded Cherty Phyllite:</b> fine grained, laminated (1-3mm) alternating white and black layers. White layers are silica rich with minor calcite in places. The dark layers are more variable in composition. Black very fine grained layers are likely amphibole rich, greener layers may contain chlorite and sericite. many dark bands are magnetic (magnetite rich). fine blebby chalcopyrite and disseminated pyrite seen in magnetic bands. chalcopyrite to 2% locally, pyrite to 0.2% locally. fabric is strong throughout. generally at low angle TCA varying from 30° at the start of the interval, shallowing to become parallel TCA in the middle and 10-15° TCA at the end. also darker layers begin to dominate towards end of interval.
194.86	196.03	Crystal Tuff	<b>Crystal Tuff:</b> massive, angular feldspar phenocrysts to 2mm. Cut by calcite-epidote veining at varying angles. Blebby chalcopyrite associated with veining. Cpy to 5% locally



## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-1

Hole #: DDH-06-1 Date Started: May 10/2006 Logged May 18, 2006 by  
 Dip: -70 Date Finished: May 16/2006 NAD 83 Zone 9; 416303 E; 6229758 N 793 m ASL  
 Azimuth: 090

From (m)	To (m)	Rock Type	Description
196.03	206.97	Cherty Phyllite	<b>Cherty Phyllite:</b> unit very blocky and broken throughout. Maroon and green layers alternating with grey silica rich layers, 1-5mm thick. Foliation is ~20° TCA. Occasional quartz-carbonate veining and vein breccia. Disseminated pyrite as euhedral crystals, associated with fine (<1mm) black layers within cherty layers
206.97	214.50	Phyllite	<b>Phyllite:</b> very poor recovery, ~25%, and core very broken. Appears laminated, probable phyllite, carbonate alteration throughout. Epidote and chlorite also seen in core fragments. Minor disseminated pyrrhotite with rare chalcopyrite and pyrite also seen, associated with dark laminae.
214.50	215.00	Breccia	<b>Sulfide Rich Vein Breccia:</b> quartz-carbonate vein breccia. Core very blocky and broken. Semi-massive chalcopyrite + pyrrhotite + magnetite. To 20% chalcopyrite, 2% pyrrhotite locally.
215.00	216.86	Phyllite	<b>Phyllite:</b> very broken core. Recovery ~50%. As above (206.97-214.5m) higher sulfide content. Disseminated pyrite, and disseminated and blebby chalcopyrite and pyrrhotite. To 1.5% chalcopyrite locally. Foliation 50-55° TCA.
216.86	220.36	Argillite	<b>Graphitic Argillite:</b> broken, incompetent core. Foliation from 50-0° TCA. Disseminated euhedral pyrite along foliation with rare pyrrhotite and chalcopyrite.
220.36	234.40	Mafic Dyke	<b>Mafic Dyke:</b> massive intermediate to mafic composition. Dark grey-green in color, fine grained. Minor disseminated pyrite throughout, to 0.5% locally. Rare pyrrhotite as small blebs. Pervasive carbonate alteration throughout.  229.30-229.41m vein breccia with some clav. soft infill (rock flour). Contacts with unbrecciated dyke sharp at 50° TCA. 229.78-230.03m vein breccia as above 231.5-232.0m vein breccia as above 233-234m moderate stockwork veining. Small pyrrhotite-calcite veins.
243.40	234.65	Argillite	<b>Graphitic Argillite:</b> as above (220.36-234.40m) completely broken. No structure visible.
234.65	249.63	Mafic Dyke	<b>Mafic Dyke/Flow:</b> similar to (220.36-234.40m) silicified and somewhat carbonate altered. Massive to weakly foliated. Disseminated pyrite and pyrrhotite throughout. Rare chalcopyrite. Broken and blocky throughout. Chlorite along fracture planes.
249.63	262.50	Argillite	<b>Graphitic Argillite:</b> core soft and very broken. Black fine grained, soft. Euhedral pyrite crystals disseminated along foliation, mostly in 1-3mm calcite veins, 0.5-1.0%. Calcite veining follows foliation planes and infills fractures between foliation perpendicular to it.
262.50	267.92	Mafic Dyke	<b>Mafic Dyke:</b> dark grey-green, fine grained, massive. Brecciated over first 0.75m of interval, clayey infill. Mild carbonate alteration throughout. Also 30cm carbonate vein breccia near end of interval. 263.3-266.93m core very broken.
267.92	273.00	Argillite	<b>Graphitic Argillite:</b> as above (249.63-262.50m) foliation 50° TCA, slightly wavy and folded. More pyrite than previous, to 4% locally, both disseminated and as blebs, with minor pyrrhotite.
273.00	274.27	Phyllite	<b>Phyllite:</b> brown-grey laminated, 1-3mm. Grey layers cherty, silica rich with some carbonate. Small scale folding of laminae. Small pyrrhotite blebs and disseminated pyrite seen along foliation. Foliation ~60° TCA
274.27	278.90	Chert	<b>Laminated Chert:</b> grey cherty laminae, 1-5mm. Occasional black graphitic intervals to 10cm. As well brown, possibly tuffaceous layers with very fine grained disseminated pyrite, to 5cm. Core generally very broken. Foliation ~50° TCA.
278.90	280.50	Quartzite	<b>Quartzite/Chert:</b> massive silica rich unit. Fine stockwork calcite + pyrrhotite + minor chalcopyrite veining. ~2% pyrrhotite, 0.2% chalcopyrite.
280.50	283.50	Phyllite	<b>Graphitic Phyllite:</b> dark, laminated and foliated. Foliation wavy, ~25° TCA. Carbonate alteration seen. Fine grained blebby pyrrhotite and pyrite seen along foliation, 1% pyrrhotite, 1% pyrite.

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-1

Hole #: DDH-06-1 Date Started: May 10/2006 Logged May 18, 2006 by  
 Dip: -70 Date Finished: May 16/2006 NAD 83 Zone 9; 416303 E; 6229758 N 793 m ASL  
 Azimuth: 090

From (m)	To (m)	Rock Type	Description
283.50	286.67	Mafic Dyke	<b>Mafic Dyke:</b> massive to very weakly foliated. Carbonate altered throughout. Dark green, fine grained. Carbonate veining throughout. Minor blebby pyrrhotite disseminated throughout, 0.3%.
286.67	287.50	Argillite	<b>Argillite:</b> finely laminated, 0.5-2mm, slightly folded. Foliation ~55° TCA. Feels graphite rich to the touch. Carbonate veining. Blebby pyrite and very fine grained pyrrhotite along foliation.
287.50	289.35	Siltstone	<b>Siltstone:</b> fine grained, medium green. Weakly foliated, and carbonate altered. Carbonate veining throughout, occasionally with blebby pyrrhotite.
289.35	294.45	Siltstone	<b>Cherty Siltstone:</b> pale to dark grey, massive to moderately foliated, 50-55° TCA. Weak to moderate stockwork veining throughout. Containing pyrrhotite and pyrite with minor to rare chalcopyrite. Interfingering with underlying unit over bottom 50cm. ~1% pyrrhotite, 1% pyrite.
294.45	295.10	Breccia	<b>Argillite Breccia:</b> black. Laminated over first 20cm, becomes brecciated after this. Soft clay rich infill and cherty clasts. Rare disseminated pyrite.
295.10	303.25	Chert-Argillite	<b>Interbedded Chert and Argillite:</b> laminated and strongly foliated, ranging from 5-50° TCA. Lower angle TCA and flooded over top 3.5m of interval then less folded and increasing angle TCA. Minor disseminated pyrite along foliation. 301.5-303.25m increasing proportion of argillite to chert.
303.25	306.71	Chert-Argillite Breccia	<b>Chert-Argillite Breccia:</b> cherty fragments in argillite matrix. Chlorite rich. Deformed fragments roughly aligned along foliation. Some calcite infill of fractures. Disseminated pyrite along foliation in argillite layers
306.71	307.90	Siltstone	<b>Laminated Siltstone:</b> somewhat brecciated and broken. Brownish laminae 1-3mm. foliation ~75° TCA. Quartz-calcite veining throughout
307.90	314.95	Siltstone	<b>Cherty Siltstone:</b> grey-brown, finely laminated chert rich siltstone, foliation ~45-30° TCA, isoclinal folding in places. Blebby pyrrhotite and pyrite in dark laminae, aligned along foliation. 310.70m small healed fault perpendicular to foliation. ~40° TCA. 3-5mm offset. 311.30-311.50m weakly foliated brown tuff(?), disseminated pyrite (0.2%) throughout. 313.70m small Healed fault, 3-5mm offset, perpendicular to foliation.
314.95	317.27	Chert	<b>Laminated Chert:</b> finely laminated, <1-2mm, grey-brown. Foliation ~30° TCA. Disseminated and blebby pyrite along foliation, ~2% pyrite, in brown layers.
317.27	318.76	Meta-sediment	<b>Laminated Meta-sediment:</b> medium green and brown, fine grained 1-3mm laminae. Foliation ~35° TCA. Very fine grained pyrrhotite disseminated along foliation. Some carbonate alteration.
318.76	321.67	Mafic Volcanic	<b>Mafic Volcanic:</b> weakly foliated, ~35° TCA. Medium green. Calcite-quartz veining throughout, sub-parallel at 20-35° TCA. Occasional coarser crystals (pyroxene?), 2-3mm.
321.67	338.44	Crystal Tuff	<b>Crystal Tuff:</b> medium to dark green with brown to maroon intervals. Foliation variable throughout, from massive to well foliated, with foliation defined by alignment of glassy shards, white to light grey. Foliation 30-50° TCA. Quartz-carbonate veining throughout, from wispy to 10mm, both along foliation and cutting it. occasional scattered coarser grained feldspar grains. 333.18m 5mm calcite vein with semi massive pyrrhotite + minor magnetite and pyrite + trace chalcopyrite. ~55° TCA
338.44	341.00	Meta-sediment	<b>Meta-sediment:</b> strongly foliated, ~30° TCA medium to dark green with brown-maroon intervals. Minor carbonate alteration. Calcite veining throughout both along foliation and crosscutting it. Sheared and folded.
341.00	349.00	Mafic Volcanic	<b>Mafic Volcanic:</b> massive, medium green with some brownish alteration in places. Medium grained, 1-3mm. Subangular to subround grains. Plag and pyroxene (augite?). Sub-parallel carbonate veining throughout. Appears to be somewhat deformed towards end of unit. unit ends with ~30cm of clayey chlorite rich gouge.

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-1

Hole #: DDH-06-1 Date Started: May 10/2006 Logged May 18, 2006 by  
 Dip: -70 Date Finished: May 16/2006 NAD 83 Zone 9; 416303 E; 6229758 N 793 m ASL  
 Azimuth: 090

From (m)	To (m)	Rock Type	Description
349.00	353.09	Tuff	<b>Crystal Tuff:</b> medium-dark green. Coarse, angular augite crystals throughout, lithic fragments to 5mm also seen. Cut by 2 or 3 fine grained mafic dykes at fairly low angle TCA, 25° or less. Fine calcite and chlorite veining throughout.
353.09	354.00	Breccia	<b>Breccia Zone:</b> as above (349.0-353.09m) bleached to pale green and brecciated by calcite veins and clayey infill.
354.00	374.40	Tuff	<b>Crystal Tuff:</b> dark green with brownish intervals. Variably foliated ranging from massive to well foliated, angle varies from 20-40° TCA. Creamy colored elongate lenses 1-5mm x 0.5-1mm throughout. Angular to subangular augite and feldspar crystals throughout, vary in size, 1-3mm, and amount, to 3% locally. quartz-calcite veining throughout. 365-370m minor pyrrhotite disseminated and in quartz-calcite veins, 0.2% overall 370-374.4m blebby and disseminated pyrrhotite with trace chalcopryrite and minor magnetite(??) 371.05m 5-10mm pyrrhotite vein at 20° TCA. Magnetite and minor chalcopryrite (~2%)
374.40	376.75	Breccia	<b>Lithic Breccia:</b> massive green with lithic clasts to 10mm, subrounded. Chlorite veining
376.75	378.07	Siltstone	Laminated/Sheared Siltstone: fine grained, green and brown layers, 1-3mm. Sheared and folded. Foliation 40° TCA. Pyrrhotite blebs along foliation. 25cm massive pyrrhotite vein/fracture infill, with minor magnetite and ~2% chalcopryrite, at 377.35m.
378.07	381.39	Meta-sediment	<b>Meta-sediment:</b> massive, patchy brown and green, matrix is fine grained. Larger 1-2mm plag grains and silica rich lenses, elongate, 3-7mm. Blebby pyrrhotite throughout.
			380.4-380.7m 5-20mm massive pyrrhotite veins associated with quartz-calcite veining. Trace chalcopryrite within veins. 30°TCA.
381.39	383.45	Vein	<b>Pyrrhotite Vein:</b> associated with quartz-calcite veining. Minor chalcopryrite, 1-2%. 35° TCA. Angular lithic clasts to 7cm within sulfide matrix. Contacts brecciated.
383.45	392.10	Meta-sediment	<b>Laminated Volcanic Meta-sediments:</b> variably laminated and sheared(?). Green and brown with light carbonate rich layers. Foliation varies 25-30° TCA. <u>Brownish layers possibly secondary biotite. Minor pyrrhotite and trace chalcopryrite along foliation.</u>
392.10	393.10	Mafic Dyke	<b>Mafic Dyke:</b> dark green, fine grained, massive. Angular, grey silica rich clasts to 2cm. Patchy pyrrhotite with minor chalcopryrite throughout, ~5% pyrrhotite.
393.10	394.64	Meta-sediment	<b>Laminated Meta-sediment:</b> as above (383.45-392.1m)
394.64	405.28	Volcaniclastic	<b>Volcaniclastic:</b> massive, undeformed, medium to coarse grained. Fragments to 10mm. Quartz-carbonate, and chlorite veining throughout. Weakly carbonate altered. Blebby pyrrhotite throughout, disseminated and in veins, minor chalcopryrite 398.27m 3cm coarse quartz-carbonate + pyrrhotite + unidentified green mineral. Vein 40° TCA, sharp contacts 398.50m as above 399.25m 1x1.5cm pyrrhotite clot. 403.4-403.6m breccia zone. Carbonate rich infill with 10% pyrrhotite and 2% chalcopryrite as clots.
405.28	407.40	Mafic Dyke	<b>Mafic Dyke:</b> fine grained feldspar porphyry dyke. Contacts sharp and wavy showing distinct 15-20mm wide chill zones. 0.5-1.0mm angular to subangular feldspars. Blebby disseminated pyrite throughout.
407.40	408.10	Volcaniclastic	<b>Volcaniclastic:</b> as above (394.64-405.28m) somewhat more deformed with higher proportion of quartz-calcite veining.
			EOH

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-2

Hole #:DDH-06-2

NAD 83; Zone 9; 416303 E; 6229758 N; elevation 793 m ASL

Dip: -88.5 Drilled May 17 to 20, 2006

Logged May 18 to 20, 2006

Azimuth: 090 NQ2

From (m)	To (m)	Rock Type	Description
0.0		OVB	Casing through ice and overburden
133.2	139.3	<b>Maroon Phyllite</b>	Maroon Phyllite: finely foliated phyllite with sporadic carbonate lenses in foliation at 50 to CA. The lenses are separated by brown to maroon phyllosilicate layers composed of fine biotite. Some thin lenticular wisps may be glass shards. Fine calcite veinlets are orthogonal to foliation.
139.3	143.5	<b>Calcareous mylonite</b>	Greenish grey calcareous laminated to foliated mylonite; carbonate lenses 2- 5mm thick with 10:1 axial ratios. Also contains siliceous fragments with more equant shape. Pyrite is subhedral and 1-2mm.
143.5	146.0	<b>calcareous mylonite</b>	Transitional calcareous mylonite unit with more epidote than previous
146.0	154.2	<b>carbonate breccia</b>	Deformed calcareous breccia similar to above, flattened lenses or fragments of calcite and quartz at 50 to CA. At 151 to 151.5 rocks grades into a black fine grained calcareous siltstone. Siliceous clasts display a slight augen texture with the phyllosilicate matrix.
154.2	156.4	<b>Carbonate breccias</b>	Laminated carbonate breccia : fine grained weakly foliated grading to laminated with carbonate lenses
156.4	160.6	<b>Graphitic siltstone</b>	Grades from dark grey siltstone with planar fabric at 60 to graphitic siltstone or argillite with thin carbonate layers. Interval ends with 10 cm of finely brecciated black gouge
160.6	166.0	<b>Marble mylonite</b>	Laminated carbonate lenses with 10:1 axial ratio in pale green phyllitic matrix. Carbonate lenses are grey-white and deformed into sigmoidal shapes surrounded by phyllosilicates (e.g. at 164 m) . Unit is most deformed at top 15 cm of interval with fabric at 15 to CA. Possible marble mylonite.
166.0	171.0	<b>Marble breccia</b>	deformed breccia; dark grey calcareous. Calcite present in network of fractures aligned or flattened into weak planar fabric enclosing massive black siltstone fragments.
171.0	178.0		Black calcareous siltstone or argillite with planar fabrics at 25 to CA consisting of irregularly spaced cleavage.
178.0	182.6	<b>siltstone</b>	Pale green laminated siltstone grading to graphitic and calcareous siltstone
182.6	186.0	<b>calcareous siltstone</b>	Graded dark grey to black siltstone to argillite; calcareous throughout. Broken core and graphitic mush with rare disseminated pyrite.
186.0	195.5	<b>marble mylonite</b>	Marble mylonite breccia; dark grey with greenish tinge; fabric at 40 to CA. Visibly drag folded with possible easterly vergence (towards anticlinal axis) Stronger planar lamination than in previous units. Gradations to graphitic black slate and alternating lighter and darker laminations
195.5	202.0	<b>Maroon phyllite</b>	distinctly maroon-brown with green laminae very finely spaced lamination/planar fabric 20:1 axial ratio of calcite lenses deformed parallel to fabric. Tuffaceous; fine glass fiamme.
202.0	202.5	<b>tuffaceous</b>	green and buff laminated phyllite
202.5	212.7	<b>Phyllite</b>	calcareous tuffaceous phyllite; probable ash crystal tuff consisting of small crystals forming eyes rolled in foliation defined by reddish brown biotite. At 210.5 20 cm qtz-carb. breccia lens parallel to foliation. Unit varies to green laminae and epidote-qtz-massive biotite-clinopyroxene (?diopside) in deformed lenses at 211.0.
212.7	215.0	<b>Diorite dyke</b>	DYKE: coarse grained mafic dyke augite phenocrysts

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-2

Hole #:DDH-06-2

NAD 83; Zone 9; 416303 E; 6229758 N; elevation 793 m ASL

Dip: -88.5 Drilled May 17 to 20, 2006

Logged May 18 to 20, 2006

Azimuth: 090 NQ2

From (m)	To (m)	Rock Type	Description
215.0	217.5	<b>Marble mylonite</b>	Marble mylonite breccia: dark grey laminated lensey calcareous mylonite
217.5	227.6	<b>Phyllitic crystal tuff</b>	Maroon-brown crystal tuff; very finely laminated with rolled interfoliation crystals. F at 40 to 45 to CA. Generally anomalous ca. 1.3% Ti content (NITON XRF). Pyrrhotite and chalcopyrite disseminated sporadically around crystals 1%. Pyrite forms 1mm subhedral crystals aligned in foliation.
227.6	237.4	<b>BIF</b>	Banded Magnetite-Chert Iron formation: indistinctly banded magnetite in dark siltstone. Magnetite forms massive layers with chalcopyrite interstitial to magnetite crystals. 227.7-228.7 40cm true thickness layer. Chalcopyrite occurs in foliation parallel band at 229.0 without magnetite. Magnetite layer 230.6 to 230.7. Thin magnetite layers less than 1 cm some only 1 mm with chalcopyrite dispersed in microveinlets and laminae interlayered with siliceous cherty mylonite. 10 cm massive magnetite at 232.0 (NITON 3.3% Cu, 56% Fe). Fine lamination continues at 35 to CA. At 233.5 black laminated siltstone layer. Pyrrhotite also forms discordant vein breccia with chalcopyrite at 45 to CA. Numerous thin chalcopyrite-magnetite lenses and laminations.
237.4	238.4	<b>Laminated cherty phyllite</b>	crumbly brown to black laminated parallel to CA; friable. Minor laminae contain chalcopyrite and magnetite separated by siliceous layers 2 mm thick which alternate with dark sub 1 mm layered sulphide and magnetite. Pyrite cubes aligned across foliation. Sphalerite possible brownish-red crystals.
238.4	244.6		Siliceous laminae interlayered with sulphides and magnetite foliation 5 to 10 to CA. At 243.8 a 3 mm thick epidote-calcite-quartz vein is ptymatically folded in 8 mm wide amplitude wave within massive brown, medium grained crystal tuff of altered plag-phyric volcanic.
244.6	245.7	<b>Quartz-magnetite breccia</b>	Magnetite-chalcopyrite in qtz-breccia (NITON 10.5%Zn, 6% Cu, 31%Fe). Pyrite veins cross breccia. Sphalerite difficult to distinguish; brown. Massive magnetite forms subhedral crystals and brecciated clasts replaced along grain boundaries by chalcopyrite and pyrrhotite. Magnetite also occurs dispersed in quartz and replaced by chalcopyrite-pyrrhotite myrmekitic intergrowth.
245.7	248.0	<b>sandstone</b>	Crumbly reddish brown sandstone; angular quartz grains in brownish matrix with weak lamination at 70 to CA varying to sub parallel.
248.0	249.8	<b>EPIDOTE</b>	epidote (80%)-quartz-calcite veins or layer at 90 to 60 to CA biotite tourmaline intergrowth in interstices of massive epidote.
249.8	253.3	<b>Silicate IF</b>	laminated quartz-biotite-sulphide-magnetite (chalcopyrite-pyrrhotite) lamination at 5 to 20 to CA.
253.3	253.6	<b>Magnetite</b>	massive magnetite layer with network of interstitial chalcopyrite and pyrrhotite along grain boundaries (NITON 1%Zn, 5%Cu, 55%Fe)
253.6	255.7	<b>chert</b>	laminated cherty; generally brownish foliation parallel to CA.
255.7	255.8	<b>Magnetite</b>	Magnetite layer; network chalcopyrite and pyrrhotite
255.8	267.9	<b>Mylonite</b>	tuffaceous mylonite; brown highly deformed lenses with minor chalcopyrite and pyrrhotite. Texture consists of small crystals and distorted lenses forming augen in phyllosilicate foliation. Sulphides are disseminated foliation parallel along laminae and concentrated in deformed quartz-carbonate veins smeared into lamination parallel lenses. core is broken RQD = 0
267.9	277.1	<b>dioritic dyke</b>	DYKE: medium grained to fine grained diorite; medium green colour with pervasive carbonate alteration; pyroxene phenocrysts are replaced by chloritic intergrowths; feldspars are equant; fine leucoxene pervasive; pyrite 1-2% as 0.5mm crystal clusters (NITON 250ppm Zr; 6%Ti). Contact occurs in breccia.

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-2

Hole #:DDH-06-2

NAD 83; Zone 9; 416303 E; 6229758 N; elevation 793 m ASL

Dip: -88.5 Drilled May 17 to 20, 2006

Logged May 18 to 20, 2006

Azimuth: 090 NQ2

From (m)	To (m)	Rock Type	Description
277.1	286.7	<b>Crystal tuff</b>	Crystal tuff or sandstone; reddish brown unlayered with weak penetrative foliation defined by biotite wrapped around feldspar crystals. 40 cm thick pyrrhotite in qtz-vein breccia at 283m. Sporadic chalcopyrite disseminated in thin veinlets.
286.7	288.0	<b>cherty breccia</b>	brown phyllosilicate matrix cherty breccia. Core is finely broken and divisions indistinct beyond this point.
288.0	297.2	<b>mylonitic chert</b>	Very finely laminated chert or siltstone; layers are ca. 0.1 mm alternate brown, pale brown, pale green. Some small ovoid shapes may be clasts in mylonitic fabric.
297.2	336.5 EOH	<b>siltstone- argillite sequence</b>	Interbedded cyclic laminated siltstone and black graphitic argillite. Grey-green siltstone to sandstone at 301.5 to 302.5; distinctly drag folded. Foliation varies at 311m // to CA; at 313 45 to CA; at 323m 70 to CA. About 15 cycles from siltstone to argillite. pyrrhotite vein 1 cm thick at 310

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-3

Azimuth: 090 Drilled: May 20 to 23, 2006 Collar: 414806 E; 6232182 N; NAD 83 Zone 9. Elevation 734 m ASL

Dip: -45 Logged: May 25, 2006 NQ2

From (m)	To (m)	Rock Type	Description
0.00	12.50	OVB	Casing through boulders
12.50	14.60	Gneiss	Casing through boulders
12.50	14.60	Gneiss	<b>Biotite Gneiss:</b> fine grained and banded. Fine brown biotite rich layers and green actinolite + feldspar + quartz rich somewhat coarser grained layers. Foliation ~65° TCA. Greenish layers and white quartz-biotite veins/melt pods appear more deformed. minor pyrrhotite seen in lighter layers/pods. pale yellow mineral with double terminations seen, possibly sphene. somewhat more homogeneous over last meter of interval.
14.60	22.47	Gneiss	<b>Amphibole-biotite Gneiss:</b> dark grey, relatively homogeneous throughout with relatively few felsic segregations. Foliation ~55° TCA. Lighter quartz-feldspar rich layers and those immediately surrounding them appear more deformed and folded. A couple of 20-30cm intervals containing significant calcite as small elongate lenses along foliation. minor pyrite disseminated along foliation. cut by a couple of 1.5cm quartz veins containing coarse clots of pyrite.
22.47	28.15	Gneiss	<b>Biotite Gneiss:</b> mostly fine, brown biotite rich layers with occasional green quartz-feldspar rich segregations, as above (14.6-22.47m) these segregations appear more deformed and folded. Foliation ~55° TCA. More homogeneous, biotite rich, below 25.2m. cut by occasional 2-15mm quartz-calcite veins containing blebby pyrite. 27.6m 15cm granitic dyke, grey, sharp contacts, disseminated pyrite
28.15	49.75	Gneiss	<b>Calc-silicate Gneiss:</b> green, fine grained, actinolite-diopside, feldspar, and quartz rich. Minor to moderate calcite throughout. Foliation from 50°-60° TCA. <del>Red and bright green banding throughout--garnet and epidote rich. Garnet as aggregates of fine crystals either in nodules or smeared out</del>
49.75	51.75	Gneiss	<b>Leucodiorite Gneiss Dyke:</b> feldspar, hornblende, biotite primarily. Grey, medium grained. Foliation 50-55° TCA occasional garnet aggregates throughout, lensoid and smeared out along foliation. Disseminated pyrite throughout. A few partially digested country rock xenoliths seen.
51.75	52.75	Gneiss	<b>Calc-silicate Gneiss:</b> as above (28.15-49.75m)
52.75	68.70	Gneiss	<b>Leucodiorite Gneiss :</b> similar to previous (49.75-51.75m), hornblende and plag with minor biotite. Color varies from light to dark grey depending on relative proportions of plag and hornblende. Greenish color to about 58.0m, due to epidote along foliation. foliation defined by alignment of hornblende, at ~65° TCA. garnet aggregates seen throughout. more prevalent at start of interval with epidote. mostly as nodules to 4mm, but also along foliation, especially at top of interval.
68.70	93.78	Gneiss	<b>Calc-silicate Gneiss:</b> similar to previous(28.15-49.75m) more color variation, green to grey near bottom of interval. Foliation 50° TCA. Garnet and epidote less pervasive, mostly found in 10-30cm intervals of alternating green, red and white bands. Very mild carbonate alteration in places. cut by several quartz-carbonate veins and small granitoid dykes, many containing disseminated and coarse pyrite. 83.47-84.64m biotite rich. Sharp wavy contacts, disseminated pyrite along foliation, ~2%. Quartz-carbonate veining perpendicular to foliation.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-3

Azimuth: 090 Drilled: May 20 to 23, 2006 Collar: 414806 E; 6232182 N; NAD 83 Zone 9. Elevation 734 m ASL

Dip: -45 Logged: May 25, 2006 NQ2

From (m)	To (m)	Rock Type	Description
			91.0-93.78m becoming coarser grained, plag and mafics.
93.78	145.00	Gneiss	<p><b>Dioritic Gneiss:</b> dark green overall. Segregations of coarse grained gray-green plagioclase, and black biotite and hornblende, giving a mottled appearance. Has been metamorphosed and strained. Fabric defined by rough alignment of mafic rich segregations. foliation 40-65° TCA relative to 117.6-118.15m granitoid dyke. Quartz-feldspar rich with biotite and altered hornblende(?), weak foliation ~55° TCA, defined by biotite. Minor disseminated pyrite.</p> <p>118.25-118.60m massive quartz-pyrite vein. ~20° TCA. Fine biotite along margins.</p>
145.00	239.49	Gabbro	<p><b>Gabbro:</b> medium to dark green, bleached to pale green over top 1m of interval. massive. Medium to coarse grained, with grains to 5mm. Upper contact sharp at 45° TCA. Magnetite rich throughout. Wispy chlorite, epidote and calcite veining throughout. Weakly carbonate altered in places, especially adjacent to a couple of quartz-pyrite veins. partially digested coarse biotite rich xenoliths with gradational contacts throughout. significant epidote seen in quartz-calcite veins, to 5cm wide, near top of interval.</p> <p>162.75-163.25m pink granitoid dyke. Contacts sharp ~50° TCA. Disseminated pyrite throughout and adjacent to.</p> <p>165.0-165.75m blebby disseminated pyrite and chlorite alteration. 4cm quartz-calcite-pyrite vein at end of interval.</p> <p>167.7-168.05m grey granitic dyke. Contacts sharp ~50° TCA. Disseminated pyrite throughout and adjacent to.</p> <p>174.60m 5cm wide clay seam. Carbonate rich.</p> <p>183.05m 10cm pink granitic dyke. Contacts sharp ~45° TCA.</p> <p>184.95-185.30m pink granitic dyke. Contacts sharp ~40° TCA. Moderately foliated parallel to contacts.</p> <p>185.75-186.15m pink granitic dyke. As above (184.75-185.30m) contacts ~30° TCA.</p> <p>187.0-187.85m pink granitic dyke. Contacts sharp ~50° TCA. Moderately foliated parallel to contacts. Minor disseminated pyrite.</p> <p>202.95m 10cm pink pegmatitic dyke. Contacts sharp ~50° TCA. Magnetite blebs throughout. Minor pyrite.</p> <p>206.50m 2cm wide dyke. Contacts sharp ~70° TCA. Matrix primarily magnetite and carbonate. Very garnet rich, ~40%.</p> <p>213.80-214.18m grey granitoid dyke. Foliated parallel to contacts. Contacts sharp ~60° TCA. Pyrite along upper margin.</p> <p>215.0m 25mm wide quartz vein containing 30% garnet and significant magnetite. Contacts sharp ~50° TCA</p> <p>220.37-221.01m grey granitoid dyke. Contacts sharp ~50° TCA. Weakly foliated. Pyrite along lower margin.</p> <p>222.48-223.72m granitoid dyke. Grey, primarily quartz and feldspar. Partially digested and brecciated xenoliths near top of dyke. Associated with these are garnet aggregates and coarse (1-2mm) sphene grains. Contacts sharp ~40° TCA.</p> <p>228.45m 5cm quartz vein containing garnet around lower margin, minor magnetite, and epidote. Sharp contacts ~25° TCA.</p> <p>230.03-230.13m quartz vein. Sharp contacts ~35° TCA. Significant pyrite at margins.</p>



# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-3

Azimuth: 090 Drilled: May 20 to 23, 2006 Collar: 414806 E; 6232182 N; NAD 83 Zone 9. Elevation 734 m ASL

Dip: -45      Logged: May 25, 2006      NQ2

From (m)	To (m)	Rock Type	Description
			231.80-232.45m pink granitoid dyke. Sharp contacts ~30° TCA. Weakly foliated. 236.15-236.47m quartz vein. Sharp contacts ~40° TCA. Pyrite along margins.
239.49	242.03	Granitoid	<b>Granitoid Dyke:</b> grey, medium grained, weakly foliated. Upper contact sharp ~60° TCA, lower sharp ~40° TCA. Minor disseminated pyrite throughout. Coarse grained pink granite dyke at 241.30-241.55m
242.03	255.70	Syenite	<b>Garnetiferous Syenite:</b> coarse grained feldspars, to 10mm, in finer grained matrix of altered mafics. Grey to dark grey in color. Massive to very weakly foliated. Gradationally becomes more mafic rich, darker in color, in middle of interval, then more feldspar rich at end of hole. garnet throughout, becoming somewhat less prevalent with depth. occurs in nodules of fine aggregate. mafics significantly altered to chlorite and sericite(?). 0.5-2mm sphene crystals seen associated with garnet.  253.10-253.29m massive quartz vein. Sharp contacts, ~50° TCA. Approximately 20% coarse pyrite.
			<b>EOH</b>

## Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-4

Azimuth 110 Logged June 8, 2006  
Dip -70 NQ2 core

Collar: South Leduc Glacier; UTM 416287 E; 6229508 N; NAD 83 Zone 9  
Drilled May 29 to June 7, 2006; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
0.00	136.75	OVB	casing through ice and bouldery overburden
136.75	148.74	Mylonite	<b>Calcareous Mylonite:</b> medium to dark green with white or grey carbonate laminae (1-3mm), and lenses to 5mm x 20mm. Occasional silica rich clasts, subangular. Foliation ~40-50° TCA. Cut by occasional carbonate veins, 2-5mm, roughly perpendicular to foliation, with trace fine chalcopryrite. trace fine disseminated pyrite and pyrrhotite throughout. minor fine magnetite throughout, disseminated and as small blebs.  143.66m 4cm epidote-carbonate vein ~45° TCA.
148.74	165.03	Argillite	<b>Black Calcareous Argillite:</b> laminated, 1-5mm, alternating black graphitic and light carbonate layers. Fine grained. Foliation strong ~45° TCA to 155m then becoming more irregular, folded and strained. Fine disseminated pyrite and pyrrhotite throughout with fine grained brown sphalerite seen in bands along foliation below 156m. fine brown secondary biotite seen adjacent to mylonite clast (see below). increasing brown (biotite), and green bands over lower 3m of interval, somewhat coarser grained. 153.88-154.48m calcareous mylonite, as above (136.75-148.74m) minor pyrite and pyrrhotite disseminated throughout.
165.03	172.07	Siltstone-Argillite	<b>Interbedded Siltstone and Argillite:</b> coarser grained than previous unit. Brown biotite rich matrix. Massive to weakly foliated with foliation defined by 1-3mm carbonate segregations. Interbedded with strongly foliated graphitic/calcareous argillite as above (148.74-165.03m). cut by occasional carbonate veins roughly perpendicular to foliation.
172.07	173.00	Mafic Volcanic	<b>Mafic Volcanic:</b> brown fine grained matrix supporting dark green, 2-4mm, pyroxene phenocrysts. Weakly foliated (flow banded??). Fabric defined by small elongate white segregations, soft, non-reactive with HCl. Blebby and disseminated pyrrhotite throughout. contacts sharp, upper ~40° TCA, lower jagged.
173.00	185.78	Argillite-Siltstone	<b>Argillite/Siltstone:</b> fine grained, dark grey to black. Carbonate rich. Laminated, strongly foliated and strongly folded/strained in places. Foliation variable ~15-50° TCA. Occasional patchy brown biotite rich zones. Fine disseminated pyrite along foliation and fracture planes throughout.  181.95-183.35m pyrrhotite and sphalerite stringers along foliation, with trace chalcopryrite.  185.03m 1-2cm carbonate vein containing 40% coarse arsenopyrite crystals. ~50° TCA.
185.78	195.98	Phyllite	<b>Phyllite:</b> foliated, green and brown, fine grained. White carbonate and light green carbonate-chlorite bands throughout. Occasional quartz-carbonate bands as well, with minor disseminated pyrite. Small stringers of pyrrhotite + chalcopryrite, and sphalerite also scattered throughout.  187.0-188.05m breccia zone. Core brecciated by carbonate and chlorite veining.
195.98	199.48	Mafic Volcanic	<b>Mafic Volcanic:</b> similar to previous (172.07-173.0m) brown matrix with fewer pyroxene phenocrysts than previous. Small stringers of sphalerite and pyrrhotite, with trace chalcopryrite, scattered throughout.  197.63m 10-15cm quartz-calcite vein with biotite along margins.
199.48	208.63	Phyllite	<b>Phyllite:</b> green and brown phyllite as above (185.78-195.98m) 201.67-202.08m feldspar porphyry dyke. Weakly foliated. 1-3mm feldspar porphyry in fine grained dark matrix.
208.63	211.86	Phyllite	<b>Laminated Cherty Phyllite:</b> mineralized. Dark grey to black. Alternating black magnetite rich layers and light siliceous layers. Foliation ~50° TCA. Blebby sulfide mineralization along foliation, associated with magnetite. ~4% chalcopryrite, 2% pyrrhotite locally.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-4

Azimuth 110 Logged June 8, 2006  
Dip -70 NQ2 core

Collar: South Leduc Glacier; UTM 416287 E; 6229508 N; NAD 83 Zone 9  
Drilled May 29 to June 7, 2006; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
211.86	212.56	Mafic Volcanic	<b>Mafic Volcanic:</b> grey brown matrix with pyroxene (1-4mm), and feldspar (1-2mm) phenocrysts. Epidote veining and alteration. Chalcopyrite, pyrrhotite, and magnetite in veinlets, and along fracture planes.
212.56	216.37	Phyllite	<b>Laminated Cherty Phyllite:</b> mineralized. As above (208.63-211.86m), variable foliation, 50-20° TCA 215.9-216.1m net textured chalcopyrite and pyrrhotite with magnetite.
216.37	219.28	Mafic Dyke	<b>Mafic Dyke:</b> dark grey, fine grained mafic dyke. Disseminated blebby pyrite throughout.
219.28	226.25	Phyllite	<b>Laminated Cherty Phyllite:</b> mineralized. Similar to above (208.63-211.86m) less magnetite than previous and less mineralization along foliation. Mineralization concentrated in sulfide-carbonate breccia zones, consisting of semi-massive sulfides + magnetite + carbonate, to 30% chalcopyrite, 15% pyrrhotite, 15% sphalerite in breccia zones.  220.70-220.94m sulfide breccia 221.40-221.60m sulfide breccia 223.28-224.0m sulfide breccia 225.20-225.35m sulfide breccia 225.73-226.13m sulfide breccia
226.25	231.30	Phyllite	<b>Laminated Phyllite:</b> dark grey, fine grained, black, grey, green, and white layer. Foliation ~55° TCA, wavy and folded. Chalcopyrite and minor pyrite along foliation over top 50cm of interval, below only pyrite seen, disseminated and along foliation.
231.30	239.21	Phyllite	<b>Phyllite:</b> cut by several mafic dykes. Phyllite as above (226.25-231.30m) more carbonate rich with depth (may be different unit but broken core and dykes make it hard to tell). Foliation variable ~55-20° TCA. Unit cut by 8 mafic dykes all with the same composition. dark grey green, fine grained carbonate rich matrix and rounded, 1-3mm, carbonate segregations, minor disseminated pyrite. contacts are sharp, with many being jagged. massive.
239.21	241.95	Phyllite	<b>Calcareous Phyllite:</b> brown and green laminations alternating with white carbonate layers. Foliation ~40-50° TCA. Minor pyrite and pyrrhotite along foliation.
241.95	248.69	Tuff	<b>Tuff:</b> green and brown, medium grained with coarser intervals. Foliation ~45° TCA. Minor carbonate alteration in places. Small glassy fragments some slightly smeared out. Pyrite and very fine pyrrhotite along foliation.
248.69	251.85	Volcanic Breccia	<b>Volcanic Flow Breccia:</b> medium grained, medium to dark green in color. Weakly to moderately foliated, ~30° TCA. Carbonate rich segregations/pseudomorphs along foliation . Pyrrhotite with minor chalcopyrite as blebs and along foliation throughout
251.85	253.35	Tuff	<b>Crystal Tuff:</b> medium green, fine grained. Moderately foliated, ~60° TCA. Small silica fragments along foliation with trace pyrite
253.35	253.93	Mudstone	<b>Laminated Mudstone:</b> dark brown to black, finely laminated. Elongate silica lenses along foliation. Pyrite and pyrrhotite disseminated along foliation.
253.93	256.94	Volcanic Breccia	<b>Volcanic Flow Breccia:</b> as above (248.69-251.85m). Brown biotite alteration at top of interval. Disseminated pyrite as well as pyrrhotite throughout. Less carbonate alteration
256.94	265.68	Phyllite	<b>Cherty Phyllite:</b> silicified, black and grey laminations with occasional green and brown layers. Foliation ~60° TCA. Small isoclinal and drag folds near top of interval. Disseminated and blebby pyrite and pyrrhotite along foliation, associated with the dark laminations.  260.39-260.50m black mafic dyke. Carbonate rich matrix. Sharp contacts 55° TCA. Disseminated fine pyrite aggregates. 265.09-265.68m very silica rich. Veinlets of pyrrhotite throughout. Last 10cm altered to black.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-4

Azimuth 110 Logged June 8, 2006  
Dip -70 NQ2 core

Collar: South Leduc Glacier; UTM 416287 E; 6229508 N; NAD 83 Zone 9  
Drilled May 29 to June 7, 2006; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
265.68	281.92	Intermediate Dyke	<b>Intermediate Dyke:</b> green, fine grained matrix with some quartz, feldspar, and dark (amphibole?) phenocrysts. Fine disseminated pyrite and pyrrhotite throughout. Massive. 280.23m 10cm dark grey siltstone xenolith. Carbonate alteration on either side. Bands of pink potassic altered feldspar (?) below xenolith.
281.92	283.40	Phyllite	<b>Phyllite:</b> altered. Probably same unit as above (256.94-265.68m), but carbonate altered by presence of 2 dykes.
283.40	284.98	Mafic Dyke	<b>Mafic Dyke:</b> same as those between (231.30-239.21m)
284.98	289.00	Gouge/Breccia	<b>Fault Breccia/Gouge:</b> core broken and altered. Appears to be Interbedded silicified siltstone and graphitic argillite. Brecciated, clay infill with some carbonate alteration.
			288.60m 2cm wide dyke. Light grey fine grained matrix (feldspar?) with 1-4mm hornblende phenocrysts.
289.00	296.38	Phyllite	<b>Cherty Phyllite:</b> as above (256.94-265.68m)
296.38	297.42	Mafic Dyke	<b>Mafic Dyke:</b> as above (283.40-284.98m)
297.42	308.13	Phyllite-Tuff	<b>Interbedded Cherty Phyllite and Crystal Tuff:</b> silicified laminated phyllite interbedded with coarser sandy crystal tuff. Phyllite similar to previous interval (256.94-265.68m) with a high degree of silicification interbedded with crystal tuff. Sand sized grains, green with brownish alteration bands. weakly foliated glassy quartz fragments along foliation. carbonate rich. stringers of fine, brown sphalerite scattered throughout, roughly along foliation. 299.0-304.40m core broken and blocky.
308.13	312.23	Tuff	<b>Crystal Tuff:</b> similar to tuff in previous interval (297.12-308.13m). Green with brown banding. Weakly to moderately foliated. Foliation ~65° TCA. Glassy and dark fragments seen along foliation, some are slightly smeared out. Carbonate and pyrrhotite veinlets with minor pyrite throughout, along foliation and cross cutting it.
312.23	317.69	Phyllite	<b>Cherty Phyllite:</b> similar to (256.94-265.68m) foliation ~65° TCA. Pyrrhotite and pyrite stringers along foliation 312.70-316.22m rubbly, broken core. 316.22-316.95m dark grey, fine grained mafic dyke. Upper contact broken, lower contact sharp at 50° TCA
317.69	323.02	Tuff	<b>Crystal Tuff:</b> as above (308.13-312.23m) 318.65m 13cm mafic dyke. Black fine grained matrix with hornblende phenocrysts altered and replaced by pyrite.
323.02	330.53	Phyllite	<b>Cherty Phyllite:</b> as above (312.23-317.69m) 326.40-330.53m core broken and blocky
330.53	336.90	Mafic Volcanic	<b>Mafic Volcanic:</b> massive. Dark green fine grained with 1mm pyroxene phenocrysts. Cut by carbonate veining at various angles, brecciated by carbonate and chlorite veining in places. 335.0-336.90m broken, blocky core.
336.90	344.70	Phyllite	<b>Cherty Phyllite:</b> as above (312.23-317.69m). Black layer more graphitic than previous. Core broken over entire interval. 339.60-339.86m intensely folded, brown, biotite altered zone.
344.70	368.83	Phyllite-Argillite	<b>Interbedded Cherty Phyllite and Graphitic Argillite:</b> core is very broken throughout. Altered throughout and friable in many places. Appears to be cherty phyllite similar to above units (256.94-265.68m, 312.23-317.69m). Foliation variable 30-60° TCA, wavy and folded in places. 30-150cm bands of graphitic argillite interbedded with phyllite. appears foliated. both rock types are brecciated in places, with silica, and minor carbonate, infill.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-4

Azimuth 110    Logged June 8, 2006

Collar: South Leduc Glacier; UTM 416287 E; 6229508 N; NAD 83 Zone 9

Dip -70    NQ2 core

Drilled May 29 to June 7, 2006; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
368.83	378.61	Intermediate Volcanic	<b>Intermediate Volcanic:</b> medium to dark green. Fine grained. Very broken over top 3m of interval. Weakly foliated/flow banded (?), ~10-30° TCA. Cut by carbonate veining, at various angles, throughout. Brown altered over final 30cm.
378.61	392.00	Phyllite-Argillite	<b>Interbedded Cherty Phyllite and Graphitic Argillite:</b> as above (344.70-368.63m). Very poor recovery 382.0-392.0m
			<b>EOH</b>

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-5

Azimuth 100 Logged June 8, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9

Dip: -70

Drilled: June 8 to 14, 2006; NQ2 core; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
0.00	119.70	OVB	NW and HW casing through ice and bouldery overburden.
119.70	126.11	Phyllite	<b>Laminated Phyllite:</b> dark grey to black. Finely laminated. Foliation 20-50° TCA, wavy and folded in places. Laminae of brown secondary biotite, and white carbonate seen, with biotite prevalent near the top of the unit, and carbonate more prevalent in the middle and at the bottom of the unit.
126.11	150.60	Volcanic	<b>Intermediate Volcanic:</b> medium green with patchy brown alteration. Weakly to moderately foliated. Matrix is fine grained, appears to be feldspar rich. Varying amounts of coarser grained amphibole seen, the highest proportion is in the center of the interval, roughly aligned along foliation. occasional scattered carbonate segregations.
150.60	173.40	Volcanic	<b>Intermediate Volcanic Flow:</b> green, fine grained. Massive to moderately foliated/flow banded. Somewhat wavy foliation, ~35° TCA. Carbonate alteration and segregations scattered throughout. Minor pyrite associated with carbonate veins/segregations. Several small altered xenoliths seen. occasional patchy brownish alteration seen in lower half of interval. 170.80-173.00m coarse, 1-4mm, black hornblende crystals seen, roughly aligned along foliation. Many are rounded.
173.40	196.22	Tuff	<b>Crystal Tuff:</b> medium to dark green with darker brown and black patches, mostly in the lower half of the interval. Fine grained, becoming coarser with depth. Moderately foliated, ~40-50° TCA. Trace disseminated pyrite throughout. Cut by occasional carbonate veining. some evidence of folding and straining. 177.85-178.03m mafic dyke. Black, fine grained. Foliated, 40° TCA, slightly carbonate altered. No contacts seen, broken core. 192.97-193.32m carbonate and chlorite alteration and veining.
196.22	210.08	Phyllite	<b>Laminated Phyllite:</b> alternating dark (black, brown, green) and lighter, grey carbonate rich layers. Strongly foliated, ~55-65° TCA. Strained/sheared almost gneissic texture. Elongate lenses of carbonate and occasionally quartz or feldspar. Some brownish, biotite rich layers. trace disseminated pyrite. 201.07-201.63m appears less strained. Coarse carbonate and sericite altered feldspar(?). Large quartz-carbonate vein/segregation.
210.08	211.90	Volcanic	<b>Intermediate Volcanic:</b> green, variably foliated. Carbonate segregations and alteration throughout. A couple of 4-8cm partially altered xenoliths near top of unit.
211.90	215.40	Phyllite	<b>Phyllite:</b> as above (196.22-210.08m)
215.40	218.24	Porphyry	<b>Feldspar Porphyry Dyke:</b> dark brown, fine grained matrix with 2-4mm, white feldspar laths. Foliated, ~30° TCA. Carbonate altered. Pink fine grained garnet aggregates associated with carbonate veining.
218.24	219.90	Phyllite	Phyllite: as above (196.22-210.08m, 211.90-215.40m)
219.90	222.25	Tuff	<b>Crystal Tuff:</b> medium grained, green to brown. Foliated and strained. A couple of 2cm lithic fragments seen. Secondary biotite and garnet seen. 0.5-1mm white crystal fragments. Carbonate rich throughout.
222.25	223.14	Mafic Dyke	<b>Mafic Dyke:</b> dark green, massive. Black and green, 1-2mm, amphibole crystals. Contacts sharp.
223.14	230.70	Tuff	<b>Crystal Tuff:</b> as above (219.90-222.25m)
230.70	258.52	Intermediate Dyke	<b>Intermediate Dyke:</b> fine to medium grained. Massive. Medium to dark grey. Quartz, carbonate, feldspar and mafics (hornblende?) moderately to strongly chlorite altered. Minor disseminated pyrite throughout. Cut by occasional carbonate veins. 256.30-256.57m carbonate vein breccia.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-5

Azimuth 100 Logged June 8, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9

Dip: -70

Drilled: June 8 to 14, 2006; NQ2 core; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
258.52	260.77	Gneiss	<b>Calc-Silicate Gneiss:</b> green, fine grained. Feldspar, quartz, pyroxene. Minor to moderate calcite throughout. Foliation ~60-70° TCA. Red garnet aggregates and bright green epidote banding. Quartz-carbonate vein at 259.27 with large pyrite and pyrrhotite clots, trace chalcopyrite.
260.77	268.98	Phyllite	<b>Laminated Phyllite:</b> silicified, interbedded green epidote and quartz rich, and black and white, mafic and quartz-chlorite rich zones. Foliated and strained, foliation ~40° TCA. Epidote rich zones also show red-brown bands of fine grained garnet. disseminated and blebby pyrite along foliation throughout.
268.98	277.37	Phyllite	<b>Laminated Phyllite:</b> black and light alternating laminae. Foliation ~45-55° TCA. Foliation wavy and folded. Light and dark zones depending on relative proportions of light and dark laminae. Minor disseminated pyrite and pyrrhotite. 269.13-269.34m aplitic dyke. Creamy white, fine grained matrix with dark green chlorite altered mafics.
277.37	297.72	Mylonite	<b>Mylonite:</b> dark green, fine grained. Lenses and segregations of fine grained feldspar (?). Somewhat carbonate altered. Foliation ~50° TCA. Carbonate and fine chlorite veining throughout, foliation parallel and crosscutting it. Trace disseminated pyrite.
297.72	301.55	Phyllite	<b>Laminated Phyllite:</b> finely laminated and silicified. Foliation 50° TCA. Dark grey with brownish secondary biotite. Foliation slightly wavy. Fine chlorite veining throughout. Trace chalcopyrite and pyrite. 299.26-299.47m breccia zone. Clay and carbonate rich infill. 301.0m quartz-chlorite vein, brecciated contacts.
301.55	309.57	Phyllite	<b>Phyllite:</b> green and whitish layers. fine grained. Foliation variable. Wavy and folded areas. Quartz lenses somewhat elongate along foliation. Cut by quartz-carbonate veining at various angles. Mafic layers becoming darker and less altered with depth.
309.57	316.29	Phyllite	<b>Laminated Phyllite:</b> green and brown alternating layers. Intervals of more siliceous white and black laminations. Fine grained, foliation ~60° TCA, wavy and strained in places. Minor pyrite along foliation. Cut by occasional quartz-carbonate veining.
316.29	321.30	Siltstone	<b>Laminated Siltstone:</b> dark grey to black, fine grained. Finely laminated, 1-2mm. Relatively undeformed. Lamination at ~55° TCA. Small, 1mm, white carbonate segregations throughout. Fine pyrite disseminated throughout, trace magnetite.
321.30	329.79	Phyllite	<b>Laminated Phyllite:</b> mineralized. Core broken and blocky. Foliation variable, 40-65° TCA, folded in places. Alternating dark (black, green) and light silica rich layers. Minor carbonate. Sulfide mineralization mostly along foliation, as blebs of chalcopyrite and pyrrhotite with minor pyrite, associated with magnetite. some mineralization as semi-massive sulfide breccia. 2-3% chalcopyrite overall, to 50% locally in breccia.
329.79	346.56	Phyllite	<b>Laminated Cherty Phyllite:</b> core broken and blocky. Fine grained, silicified. Light grey, dark grey, and brown layers. Foliated ~50° TCA, somewhat wavy in places. Weakly mineralized, pyrite disseminated throughout, minor chalcopyrite and pyrrhotite along foliation over lower 2-3m of interval. to 2% chalcopyrite locally 336.98-339.35m epidote rich zone. Epidote along foliation and in epidote-carbonate veins.
346.56	363.23	Phyllite	<b>Laminated Cherty Phyllite:</b> mineralized. Core broken and blocky. Similar to previous unit (329.79-346.56m). More secondary biotite than previous, and foliation more folded and strained. Stronger mineralization than previous. Mostly along foliation as blebs of chalcopyrite, pyrrhotite and sphalerite, associated with brownish secondary biotite. little magnetite present. minor galena seen associated with other sulfides over last 3m of interval.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-5

Azimuth 100    Logged June 8, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9

Dip: -70

Drilled: June 8 to 14, 2006; NQ2 core; Hy-Tek Drilling

From (m)	To (m)	Rock Type	Description
363.23	399.00	Phyllite/Argillite	<p><b>Laminated Phyllite with Interbedded Graphitic Argillite:</b> core very broken and blocky, poor recovery in places. Cherty phyllite simialar to previous (329.79-346.56m). Slightly less silicified. Brown, green and white laminae. Foliation ~60° TCA. Minor blebby pyrrhotite and pyrite seen, mostly in more silicified areas. intervals of black graphitic argillite 0.5-2.0m in length interbedded with the coarser phyllite. very fine grained graphite rich with light grey carbonate rich laminae. strained and folded, much more so than surrounding phyllite. foliation variable. pyrite disseminated and as stringers along foliation.</p> <p>373.0-377.0m poor recovery</p> <p>381.0-392.5m poor recovery</p> <p>392.35-393.15m mafic dyke. Fine grained with a few scattered 0.5mm carbonate segregations. Trace fine disseminated pyrite.</p>
			<b>EOH</b>



# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-6

Azimuth; 096.4 Logged June 20, 2006

Collar: South Ridge UTM 416206 E; 6229046 N; NAD 83 zone 9

Dip: -51

Drilled June 14 to 20, 2006 NQ@; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
0.00	2.52	OVB	casing into bedrock
2.52	59.70	Mylonite	<p><b>Mylonite:</b> white and black, fine grained, alternating layers. Sheared and folded. Elongate carbonate and quartz lenses and angular fragments. Quartz-carbonate layers boudinaged. Strongly foliated, varying from ~40-60° TCA. Some chlorite and carbonate alteration of dark, mafic layers. occasional quartz-carbonate veining, foliation parallel and at low angle TCA.</p> <p><b>Mylonite:</b> white and black, fine grained, alternating layers. Sheared and folded. Elongate carbonate and quartz lenses and angular fragments. Quartz-carbonate layers boudinaged. Strongly foliated, varying from ~40-60° TCA. Some chlorite and carbonate alteration of dark, mafic layers. occasional quartz-carbonate veining, foliation parallel and at low angle TCA.</p> <p>6.63-9.60m breccia zone. Quartz-carbonate and lithic fragments in fine grained chlorite rich matrix.</p>
59.70	188.91	Volcanic	<p><b>Intermediate Volcanic:</b> grey to grey-green, fine grained. Foliated/flow banded. Lighter felsic and darker more mafic layers. Foliation ~50° TCA. Small quartz nodules occasionally seen along foliation. Somewhat coarser grained intervals seen occasionally. carbonate veining at various angles throughout. carbonate altered over top 1-2m. color and grain size variations are gradational.</p> <p>71.17-71.69m breccia zone. Healed, carbonate rich.</p> <p>150.66-152.03m breccia zone. Brecciated by fine chlorite veining.</p> <p>157.40-160.12m porphyritic dyke. 2-4mm angular to subangular grains. Sericite and epidote altered. Massive to moderately foliated. Contacts not sharp.</p> <p>163.42m 3cm breccia zone. Quartz-carbonate infill.</p> <p>182.71-182.89m breccia zone. Carbonate and chlorite infill. Minor pyrite immediately adjacent to breccia.</p>
188.91	189.93	Tuff	<b>Crystal Tuff:</b> dark grey-green with light carbonate rich segregations foliated ~55° TCA. Quartz and mafic crystal fragments seen aligned along foliation. Cut by occasional quartz-carbonate veining.
189.93	190.95	Volcanic	<b>Mafic Volcanic:</b> dark grey, fine grained. Weakly foliated, ~60° TCA. Cut by carbonate-chlorite veining parallel to foliation
190.95	193.89	Mylonite	<b>Mylonite:</b> as above (2.52-59.70m). Greener color due to chlorite alteration of mafics.
193.89	195.54	Tuff	<b>Tuff:</b> similar to previous (188.91-189.93m) dark green, finer grained. 193.93m 6cm carbonate vein breccia. Sulfide rich (chalcopyrite, pyrrhotite, pyrite) carbonate veinlets for 10cm below breccia.
195.54	196.81	Mylonite	<b>Mylonite:</b> as above (190.95-193.89m) 196.21m 3cm pink, white and green carbonate-chlorite vein/segregation.
196.81	206.73	Tuff	<b>Crystal Tuff:</b> as above (188.91-189.93m) somewhat coarser grained overall. Greener areas of epidote and chlorite alteration. Carbonate altered zones also seen. Foliation 50-60° TCA. Lithic fragments to 3cm also seen.
206.73	214.60	Tuff	<b>Crystal Tuff:</b> dark grey, fine grained. Moderately foliated, ~60° TCA. 0.5-1.0mm quartz fragments, angular to subangular, roughly aligned along foliation. Foliation gets stronger with depth, as does carbonate alteration and veining. 207.43-207.77m fault zone. Clayey gouge is brown (biotite?), and contains carbonate. Core broken throughout.
214.60	224.10	Argillite	<b>Silicified Argillite:</b> dark grey with fine brown and green alteration bands. Massive to moderately foliated. Folded in places. Foliation angle variable, 10-70° TCA. Small 10-20cm breccia zones. Carbonate rich segregations throughout, deformed and folded. carbonate altered zones. quartz carbonate veining at various angles throughout. very fine disseminated pyrite throughout.
224.10	233.20	Phyllite	<b>Phyllite:</b> fine grained, foliated ~60° TCA. Dark grey with brown (biotite) and green (chlorite, sericite) alteration bands. Silicified. Mild pervasive carbonate alteration. Trace disseminated pyrite. 227.06-227.33m breccia zone. Healed, angular to subangular clasts 5-10mm.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-6

Azimuth; 096.4 Logged June 20, 2006

Collar: South Ridge UTM 416206 E; 6229046 N; NAD 83 zone 9

Dip: -51

Drilled June 14 to 20, 2006 NQ@; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
			228.18-228.94m breccia zone. Quartz-carbonate vein breccia. Minor pyrite associated with veining.
233.20	234.79	Porphyry Dyke	<b>Feldspar Porphyry Dyke:</b> fine grained, grey matrix with 1-4mm carbonate and sericite altered feldspar laths. Foliated ~60° TCA. Foliation defined by rough alignment of feldspars.
234.79	245.56	Mylonite	<b>Mylonite:</b> similar to top of hole (2.52-59.70m) appears more strained, with light quartz and carbonate rich layers more smeared out, at top of interval. Becoming less strained towards bottom of unit.
245.56	252.14	Phyllite	<b>Phyllite:</b> fine grained, dark green with brown layers. Folded and moderately foliated. Foliation variable, 10-70° TCA. Carbonate altered throughout with small segregations along foliation. Carbonate veining along foliation and cutting it. 248.42-248.92m epidote rich. Epidote and carbonate alteration/replacement.
252.14	261.40	Phyllite	<b>Phyllite:</b> somewhat similar to previous (245.56-252.14m), far less folded, and with white carbonate rich layers. Brown secondary biotite far more prevalent. Fine disseminated pyrite throughout. 255.50m 10cm quartz-carbonate vein breccia 255.70-258.80m weakly mineralized zone. Disseminated and blebby chalcopyrite, sphalerite, pyrrhotite. Centered on quartz-carbonate veining at 256.75m. Pyrrhotite to 3%, chalcopyrite to 1%, sphalerite to 0.5% locally.
261.40	293.88	Phyllite	<b>Epidote veined phyllitic wacke:</b> white carbonate and siliceous layers alternating with dark mafic layers. Fine grained. Somewhat folded in areas. Strained. Foliation ~60° TCA. Becomes more siliceous with depth. Epidote along foliation throughout, becoming more prevalent with depth. trace pyrite disseminated along foliation.
			271.73-272.23m mafic dyke. Fine grained, dark grey, massive. Fine epidote veining. Contacts sharp.
293.88	298.83	Phyllite	<b>Laminated Phyllite:</b> green and brown laminae with white quartz-carbonate layers, and lenses. Folded and strained. Foliation 30-70° TCA. Chlorite and biotite alteration throughout.
298.83	312.87	Tuff	<b>Crystal Tuff:</b> medium green, fine to medium grained, massive. Feldspar, quartz and mafic crystal fragments to 1mm throughout. Occasional patchy brown biotite alteration. Cut by quartz-carbonate and chlorite veining at various angles TCA.
312.87	316.99	Phyllite	<b>Laminated Phyllite:</b> as above (293.88-298.83m)
316.99	319.59	Porphyry Dyke	<b>Feldspar Porphyry Dyke:</b> as above (233.20-234.79m), massive. Contacts sharp ~75° TCA.
319.59	325.77	Phyllite	<b>Laminated Phyllite:</b> as above (293.88-298.83m, 312.87-316.99m) 321.83-321.95m feldspar porphyry dyke. Similar to above (316.99-319.59m) fewer and larger feldspar laths, green matrix (chlorite altered?)
325.77	334.15	Marble	<b>Dirty Marble:</b> fine grained, grey-brown. Sheared and folded. Mo consistent fabric. Mostly carbonate with significant contamination (volcanic sediments?) now altered to chlorite and brown biotite. More chlorite and biotite than carbonate over lower ~1.5m of unit. foliation also more consistent.
334.15	343.18	Gneiss	<b>Calc-Silicate Gneiss:</b> brown-green, fine to medium grained. Folded and sheared. Mafics (diopside, actinolite) mostly altered to secondary biotite and chlorite. Very carbonate rich. Texture becomes less gneissic and more laminated over last 3m of unit, mineral assemblage stays the same.
343.18	346.52	Sandstone	<b>Volcanic Sandstone:</b> green, fine to medium sand sized grains. Intermediate to mafic. Carbonate altered over top 50cm of unit. Massive to moderately foliated, cut by biotite rich quartz veining, one at 346.02m contains blebby pyrite and pyrrhotite.
346.52	348.00	Marble	<b>Dirty Marble:</b> as above (325.77-334.15m)
348.00	354.61	Gneiss	<b>Calc-Silicate Gneiss:</b> as above (334.15-343.18m)

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-6

Azimuth; 096.4 Logged June 20, 2006

Collar: South Ridge UTM 416206 E; 6229046 N; NAD 83 zone 9

Dip: -51

Drilled June 14 to 20, 2006 NQ@; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
354.61	361.44	Tuff	<b>Crystal Tuff:</b> green, fine to medium grained. Massive to well foliated. Folded and brecciated towards middle of interval for 25cm. Becomes coarser grained at bottom of unit. Glassy and milky white quartz and feldspar fragments, 0.5-2mm, seen throughout. minor pyrite and pyrrhotite disseminated and in calcite veinlets.
361.44	363.45	Argillite	<b>Argillite:</b> black, very fine grained. Finely laminated. Silicified, sheared and folded, foliation ~50° TCA. Minor pyrite and pyrrhotite along foliation.
363.45	364.77	Gneiss	<b>Calc-Silicate Gneiss:</b> As above (334.15-343.18m, 348.0-354.61m)
364.77	366.64	Tuff	<b>Crystal Tuff:</b> as above (354.61-361.44m) 2 small 10-30cm black argillite intervals. Minor pyrrhotite disseminated throughout.
366.64	371.14	Phyllite	<b>Laminated Phyllite:</b> fine grained, black and brown layers alternating with light green and white chlorite and carbonate rich laminae. Folded and strained. Foliation variable 20-70° TCA.
371.14	372.17	Tuff	<b>Crystal Tuff:</b> as above (354.61-361.44m) minor blebby chalcopyrite and pyrrhotite associated with quartz-carbonate veining.
372.17	378.53	Phyllite	<b>Laminated Phyllite:</b> similar to previous (245.56-252.14m) foliation less variable, 40-70° TCA. Cut by small mafic dykes at 376.04m and 378.06m. 10cm of chlorite alteration above lower dyke.
378.53	380.86	Volcanic	<b>Intermediate Volcanic:</b> metamorphosed and strained. Green, fine grained matrix with milky segregations of quartz and feldspar(?). Weakly foliated. Minor pyrrhotite and pyrite throughout.
380.86	389.92	Mafic Dykes	<b>Mafic Dyke Swarm:</b> a series of 6 mafic dykes from 27cm to 3.2m wide cutting what appears to be a tuffaceous unit. Dykes are fine grained, dark grey-green to black, some with carbonate or epidote altered phenocrysts. Fine disseminated sulphides (pyrrhotite, pyrite) through most.
389.92	392.54	Tuff	<b>Crystal Tuff:</b> possibly same unit as cut by dukes above (380.86-389.92m). Medium green, fine grained with quartz and mafic crystal fragments throughout. Foliated ~60° TCA, with foliation defined by whitish carbonate rich zones. Epidote also seen, associated with carbonate.
392.54	395.56	Mafic Dyke	<b>Mafic Dyke:</b> dark grey, fine grained, massive. Carbonate and epidote altered phenocrysts, 1-3mm. Contacts sharp with chill zones.
395.56	397.05	Tuff	<b>Crystal Tuff:</b> as above (389.92-392.54m)
397.05	399.30	Phyllite	<b>Phyllite:</b> brown and white. Biotite and carbonate rich. Fine grained, foliated ~80° TCA.
399.30	401.07	Tuff	<b>Crystal Tuff:</b> as above (389.92-392.54m)
401.07	402.16	Mafic Dyke	<b>Mafic Dyke:</b> as above (392.54-395.56m)
402.16	412.04	Phyllite	<b>Laminated Phyllite:</b> fine grained, grey to green in color. Light grey to white carbonate layers. Laminated sheared and folded. Foliation variable. Green chlorite and brownish biotite altered zones. Blebby pyrrhotite and pyrite seen over upper 3m of interval, mostly associated with carbonate veining.
412.04	423.04	Volcaniclastic	<b>Mafic Volcaniclastic:</b> medium to fine grained. Appears like a series of small fining up sequences. Moderately to weakly foliated. Crystal and lithic fragments. Possible primary bedding/flow structure seen. Blebby pyrrhotite seen near top of unit.
423.04	425.25	Volcaniclastic	<b>Mafic Volcaniclastic:</b> similar to previous (412.04-423.04m) coarser grained. Altered, biotite and chlorite. Brecciated and sheared over upper 1.5m. Pyrrhotite, with minor chalcopyrite, veining and blebs throughout.
425.25	426.64	Marble	<b>Dirty Marble:</b> grey to green in color. Folded and sheared. Brown biotite and green chlorite throughout. Blebs and stringers of pyrrhotite in middle of unit associated with chlorite rich zone.
426.64	430.95	Volcaniclastic	<b>Volcaniclastic:</b> as above (412.04-423.04m) only trace pyrrhotite and pyrite disseminated.
430.95	438.45	Volcaniclastic	<b>Volcaniclastic:</b> similar to above (412.04-423.04m, 426.64-430.95m) lots of patchy, brown secondary biotite. Minor pyrrhotite in fine stringers.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-6

Azimuth; 096.4 Logged June 20, 2006

Collar: South Ridge UTM 416206 E; 6229046 N; NAD 83 zone 9

Dip: -51

Drilled June 14 to 20, 2006 NQ@; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
438.45	439.54	Mylonite	<b>Mylonite:</b> fine grained, green and black layers with light grey carbonate and quartz lenses and layers. Minor blebby pyrrhotite. Foliation ~65° TCA
439.54	442.07	Volcaniclastic	<b>Volcaniclastic:</b> similar to previous (412.04-423.04m) no fining up. Fine grained throughout.
442.07	445.19	Gneiss	<b>Calc-Silicate Gneiss:</b> green, fine grained. 0.5-1mm actinolite crystals. Sheared and folded. Quartz lenses and segregations, smeared out. Carbonate alteration throughout. Blebs and stringers of pyrrhotite with trace chalcopyrite over lower 30cm of unit.
445.19	457.05	Volcaniclastic	<b>Volcaniclastic:</b> similar to previous (412.04-423.04m) a couple of small fining up sequences in an overall fine grained unit. Bands of brown biotite alteration associated with 1-3mm carbonate veins. Massive, with some bedding evident. 446.15m 25cm quartz vein, broken.
457.05	459.89	Porphyry Dyke	<b>Feldspar Porphyry Dyke:</b> as above (233.20-234.79m, 316.99-319.59m)
459.89	462.83	Volcaniclastic	<b>Volcaniclastic:</b> as above (445.19-457.05m)
462.83	465.44	Gneiss	<b>Calc-Silicate Gneiss:</b> as above (442.07-445.19m)
465.44	467.13	Phyllite	<b>Laminated Phyllite:</b> fine grained alternating black and white laminae, silica rich. Weakly carbonate altered. Minor pyrite and pyrrhotite. Green volcanic rich over lower 50cm. Foliation ~70° TCA. Lower contact gradational with fabric extending into volcanic unit beneath.
467.13	469.22	Volcaniclastic	<b>Volcaniclastic:</b> as above (423.04-425.25m) coarser grained, and with less sulfides.
469.22	476.09	Sandstone	<b>Volcanic Sandstone:</b> sand sized mafic grains. Green with patchy brown alteration. Somewhat metamorphosed showing silica rich segregations. Massive to weakly foliated, ~70° TCA. Blebby pyrrhotite associated with quartz-carbonate veining and brecciation, minor chalcopyrite.  471.28-473.24m breccia zone. Quartz-carbonate vein breccia with carbonate, biotite and chlorite alteration. Blebby pyrrhotite with minor chalcopyrite seen.
476.09	487.83	Argillite/Chert	<b>Interbedded Argillite and Chert:</b> black, very fine grained, finely laminated argillite showing some lighter carbonate rich laminae, interbedded to interlaminated with grey laminated chert. Deformed and folded, especially in more argillite rich zones. foliation overall ~70° TCA. blebby pyrrhotite and pyrite with minor chalcopyrite.
487.83	489.84	Gneiss	<b>Calc-Silicate Gneiss:</b> similar to (442.07-445.19m) coarser feldspars, 2-4mm, minimal carbonate alteration. Patchy brown biotite.
489.84	505.66	Argillite/Chert	<b>Interbedded Argillite and Chert:</b> as above (476.09-487.83m)
			501.93-502.32m dyke. Medium grey, very fine grained dyke.
			503.19m porphyry dyke. 6cm feldspar porphyry dyke. Grey, 1-3mm, feldspars, blebby pyrite throughout.
			503.79m dyke. As above (501.93-502.32m) 8cm.
			<b>EOH</b>

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-7

Azimuth 090 Logged June 25, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9; Elevation 1174 m ASL

Dip: -58

Drilled: June 20 to 25, 2006; NQ2 core; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
0.00	3.05	OVB	casing into bedrock
3.05	6.81	Mylonite	<b>Mylonite:</b> white and black, fine grained, alternating layers. Sheared and folded. Elongate carbonate and quartz lenses and angular fragments. Quartz-carbonate layers boudinaged. Strongly foliated, varying from 50-65° TCA. Some chlorite and carbonate alteration in dark layers. occasional quartz carbonate veining both parallel to and cutting foliation at a low angle. trace fine disseminated pyrrhotite throughout.
6.81	10.47	Porphyry	<b>Feldspar Porphyry Dyke:</b> fine grained, grey-brown matrix with 1-4mm carbonate and sericite altered feldspar laths. Massive to weakly foliated, with foliation defined by rough alignment of feldspars.
10.47	17.51	Mylonite	<b>Mylonite:</b> as above (3.05-6.81m)
17.51	21.48	Porphyry	<b>Feldspar Porphyry Dyke:</b> as above (6.81-10.47m) massive throughout.
21.48	64.49	Mylonite	<b>Mylonite:</b> as above (3.05-6.81m)
64.49	136.76	Volcanic	<b>Volcanic:</b> grey to grey-green, fine grained. Foliated/flow banded. Lighter felsic and darker mafic rich layers. Foliation ~40° TCA. Small quartz nodules occasionally seen along foliation. Somewhat coarser grained zones occasionally seen. Carbonate veining at various angles, throughout. color and grain size variations are gradational. minor carbonate altered zones throughout. 102.20-106.14m breccia zone. Quartz and clay infill. Core broken and blocky. 120.22-120.43m quartz-carbonate vein with significant biotite along margins. Core somewhat bleached on either side.
136.76	140.04	Siltstone	<b>Cherty Siltstone:</b> grey-green, fine grained. Silicified. Mottled appearance. Massive to weakly foliated, ~55° TCA. Cut by quartz veining at various angles.
140.04	153.09	Tuff	<b>Crystal Tuff:</b> dark to medium green, masive. 2 fining up sequences represented. Crystal fragments, 1-3mm, mostly feldspar and pyroxene. Some bedding preserved. Feldspars slightly sericite altered. Occasional quartz veining.
153.09	163.57	Volcanic	<b>Volcanic:</b> as above (64.49-136.76m)
163.57	165.85	Porphyry	<b>Feldspar Porphyry Dyke:</b> as above (6.81-10.47m)
165.85	169.35	Tuff	<b>Crystal Tuff:</b> as above (140.04-153.09m)
169.35	177.75	Volcanic	<b>Volcanic:</b> dark grey, fine grained, weakly foliated, ~55° TCA. Cut by quartz veining at various angles. Quartz carbonate vein breccia over top 0.5m of unit.
177.75	193.47	Volcanic	<b>Volcanic:</b> as above (64.49-136.76m)
193.47	203.70	Volcanic	<b>Volcanic:</b> fine to medium grained, dark green to dark grey. 1-3mm pyroxene and feldspars seen. Foliated ~55° TCA. Cut by quartz veining at various angles, over lower half of unit these veins contain blebs of pyrrhotite and chalcopyrite. 197.20m 10cm quartz veining containing brown biotite and significant blebby pyrrhotite and minor chalcopyrite.
203.70	205.70	Phyllite	<b>Phyllite:</b> black and grey, fine grained. Foliated 60° TCA. Folded and sheared. grey layers are carbonate rich. Some brown biotite alteration
205.70	209.87	Volcanic	<b>Volcanic:</b> as above (193.47-203.70m). No sulfides
209.87	211.89	Mylonite	<b>Mylonite:</b> similar to (3.05-6.81m) more carbonate rich, less quartz. No visible sulfides.
211.89	213.38	Volcanic	<b>Volcanic:</b> as above (193.47-203.70m).

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-7

Azimuth 090 Logged June 25, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9; Elevation 1174 m ASL

Dip: -58

Drilled: June 20 to 25, 2006; NQ2 core; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
			213.18m 5cm quartz-carbonate vein with blebby pyrrhotite and chalcopyrite.
213.38	214.50	Argillite	<b>Argillite:</b> black with white and grey carbonate rich layers. Very fine grained. Folded and sheared. Foliation ~60° TCA.
214.50	217.96	Tuff	<b>Crystal Tuff:</b> grey-green, medium grained, somewhat mottled appearance. Pyroxene and feldspar crystals, 1-3mm. Moderately foliated, ~60° TCA. Occasional fine quartz veining. Carbonate alteration over top 1m of unit.
217.96	239.63	Core Lost	<b>Core jumbled in fall from drill pad. No mineralization or unusual rock types noted.</b>
239.63	248.17	Volcanic	<b>Volcanic:</b> similar to (64.49-136.76m) weakly foliated. foliation ~60° TCA. Foliation parallel quartz-carbonate veining throughout. 242.30-242.45m 3 small clay seams with rock fragments entrained. Possible fault gouge.
248.17	249.63	Core Lost	<b>Core Lost:</b> as above (217.96-239.63m)
249.63	258.82	Phyllite	<b>Phyllite:</b> dark grey-brown, fine grained. Light silica rich layers, sheared and boudinaged. Foliated ~65° TCA. Brownish secondary biotite rich layers. Color varies with amount of silica. Trace disseminated pyrite. 256.42m 13cm wide quartz-carbonate vein breccia. Somewhat vuggy. No visible sulfides.
258.82	259.52	Porphyry	<b>Feldspar Porphyry Dyke:</b> as above (6.81-10.47m)
259.52	268.68	Phyllite	<b>Phyllite:</b> fine grained dark brown and green with variable amounts of light silica rich segregations and fragments. Foliated ~70° TCA. Sheared and folded. Fine pyrite disseminated throughout. Areas of almost all brown biotite rich laminae.
268.68	271.33	Argillite	<b>Argillite:</b> black with lighter grey to white carbonate layers/segregations. Cut by occasional carbonate veining. Moderately foliated and folded. Foliation variable. Pyrite and pyrrhotite disseminated along foliation.
271.33	280.09	Phyllite	<b>Laminated Phyllite:</b> brown and green, laminated, fine grained. Light carbonate rich layers/segregations elongate and boudinaged. Foliated and folded in places. Foliation ~70° TCA. Occasional quartz-carbonate veining, occasionally epidote associated. pyrite and pyrrhotite blebs disseminated along foliation throughout.
280.09	282.23	Tuff	<b>Crystal Tuff:</b> fine grained, dark grey matrix with 0.5-1.0mm crystal fragments, feldspar and mafics. Weakly floiated, ~50° TCA. Cut by carbonate veining at various angles.
282.23	293.17	Wacke	<b>Epidote veined phyllitic to mylonitic wacke:</b> similar to (3.05-6.81m) more silica rich. Core green due to large amount of epidote seen in unit. Mafic layers are also more green than black, more pyroxene rich than previous. Disseminated and blebby pyrrhotite and pyrite throughout. Trace magnetite associated with sulfides in some areas.
293.17	295.23	Volcanic	<b>Mafic Volcanic:</b> dark grey, fine grained, weakly foliated, ~60° TCA. Minor epidote veining, foliation parallel. Trace disseminated pyrite.
295.23	307.92	Mylonite	<b>Mylonite:</b> as above (282.23-293.17m) less epidote with increasing depth.
307.92	309.74	Mylonite	<b>Mylonite:</b> green and brown layer with upto 60% silica rich layers and fragments. Sheared but not really folded. Foliation ~60° TCA. Minor pyrrhotite, pyrite and magnetite along foliation.
309.74	320.81	Mylonite	<b>Mylonite:</b> as above (282.23-293.17m, 295.23-307.92m)
320.81	324.00	Wacke	<b>Epidote veined phyllitic wacke/Volcanic:</b> fine grained, dark grey matrix with 0.5-1mm dark pyroxene crystals, and sericite and epidote altered feldspars. Weakly foliated, ~60° TCA. Epidote veining throughout, ptymatically folded at high angle to core axis. Minor chlorite alteration in places.
324.00	327.61	Marble	<b>Dirty Marble:</b> white to grey-green in color. Very carbonate rich with significant contamination from fine grained sediments, and significant epidote throughout. Blebs and stringers of pyrite and pyrrhotite. Folded and sheared.

# Bell Resources: Granduc Project Spring 2006 Drill Log DDH-06-7

Azimuth 090 Logged June 25, 2006

Collar: South Leduc Glacier, UTM 416124 E; 6229763 N; NAD 83 zone 9; Elevation 1174 m ASL

Dip: -58

Drilled: June 20 to 25, 2006; NQ2 core; Hy-Tech Drilling

From (m)	To (m)	Rock Type	Description
327.61	334.33	Phyllite	<b>Phyllite:</b> green and brown, fine grained. Foliated, and folded in places. Foliation ~50° TCA. Brown layers are mostly secondary biotite. Green layers are composed of chlorite altered mafics(pyroxene and amphiboles). Epidote seen over upper 1m of unit. pyrite and pyrrhotite disseminated throughout.
334.33	346.52	Tuff	<b>Crystal Tuff:</b> grey to green, fine grained with 0.5-2mm feldspar and pyroxene crystals. Massive to moderately foliated. Foliation ~60° TCA. Small lithic fragments occasionally seen. Blebby and disseminated pyrrhotite and pyrite along foliation throughout.
346.52	349.07	Phyllite	<b>Laminated Phyllite:</b> as above (327.61-334.33m) occasional epidote veins and segregations throughout.
349.07	352.75	Tuff	<b>Lithic Tuff:</b> green, fine grained matrix with angular, black, very fine grained lithic clasts to 15mm, smaller feldspar and pyroxene grains to 2mm. Massive to weakly foliated. ~60° TCA.
352.75	358.33	Phyllite	<b>Phyllite:</b> similar to above (346.52-349.07m) less epidote, more folded, small scale and larger folds. Carbonate rich throughout. 355.87-357.55m two mafic dykes/flows cut unit. Fine grained black with what appears to be flow banding near margins.
358.33	361.87	Tuff	<b>Crystal Tuff:</b> as above (334.33-346.52m), coarser grained.
361.87	376.05	Marble	<b>Dirty Marble:</b> similar to above (324.0-327.61m), less contaminated. No epidote seen. Cut by several slightly porphyritic mafic dykes. 363.0-364.04m mafic dyke. Fine grained green matrix with 0.5-2mm white to yellow altered feldspar phenocrysts. 365.25-365.60m mafic dyke. As above (363.0-364.04m) 366.46-366.84m mafic dyke. As above (363.0-364.04m) 368.94-369.44m mafic dyke. As above (363.0-364.04m) 370.73-372.59m mafic dyke. As above (363.0-364.04m)
376.05	389.84	Phyllite	<b>Laminated Phyllite:</b> green and brown with lighter grey and green carbonate rich layers. Fine grained, foliated, ~70° TCA. Folded and sheared.trace pyrite and pyrrhotite disseminated throughout. Cut by occasional carbonate veining. Minor epidote seen over last meter of hole. 381.78-382.47m mafic dyke. Black fine grained with 0.5-1.0mm white phenocrysts. Contacts sharp.
			<b>EOH</b>

## Bell Resources Corp.

Hole No.: DDH-06-08  
Azimuth: 063°  
Dip: 45°  
Core Size: NQ2

## Granduc Project

Date Started: Sept. 3, 2006  
Date Finished: Sept. 13, 2006  
Drilled by: Titan Dr  
Logged by: Robert Thivierge

## Drill Log

Datum: NAD83  
UTM Zone: 9  
Easting: 416900 (prior to survey)  
Northing: 6233190 (prior to survey)

Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
0.00	0.84	<b>Casing</b> <b>Intermediate volcanic rock</b> <b>(+ argillite, chert)</b>	0.00	0.84	casing	Casing above bedrock
0.84	15.74		0.84	15.74	andesitic tuff, argillite, siltstone, chert	Layered to massive andesitic tuff, with subordinate finely layered argillite and chert. Light greenish-grey to grey, variably layered to massive, fine-grained, equigranular, calcareous andesite, with intervals of finely layered tuffaceous andesite (4.28-5.02 m), tuffaceous andesite and grey argillite and siltstone (6.39-6.92 m; 7.91-8.50 m), and grey calcareous chert (9.3-9.4 m). Variable ankeritic alteration of tuffaceous andesite between 8.5-10.0 m embraces the latter chert interval, which contains 2-3% fine-to medium-grained Py patches and layer-parallel stringer-like disseminations. Contains common, dispersed, irregular and apophysitic patches of Qz-Cc (particularly in the less layered and more massive andesitic tuff intervals) which cut across S0-S1 fabric and show septate margins parallel to that fabric, as well as narrow, discontinuous, planar Qz-Cc veinlets both subparallel to layering and less commonly at a high angle to S0-S1 fabric. Layering is very tightly to isoclinally and asymmetrically folded, with long limbs of folds represented by attitudes of dominant S0-S1 layering at 37° to c/a @ 4.9 m, 29° to c/a @ 8.45 m, and 45° to c/a @ 11.3 m and 13.48 m. Axial traces of folds are inclined at shallower angle to c/a: 20° to c/a @ 8.1 m.
15.74	36.70	<b>Chert, cherty tuff</b> <b>(+ argillite, graphitic argillite &amp; chert)</b>	15.74	22.65	cherty tuff, chert & graphitic chert, argillite-siltstone	Dark cherty tuff, grey chert and graphitic chert. Layering is tightly to isoclinally folded in asymmetric fashion. Contains common (up to 3-4%) fine- to medium-grained disseminated Py and clusters and patches of Py, generally associated with Cc veinlets. Contains graphitic seams and fracture coatings between 17.8-22.0 m [note- significant core loss occurs between 17.98-21.03 m]. Includes finely interlayered black argillite and siltstone between 22.33-65 m. Layering inclined at 34° to c/a @ 15.88 m.
			22.65	23.53	chert	Light grey layered chert. Same unit as 23.92-27.05 m, separated by mafic dyke. Contains 2-3% Py fracture fillings, patches and minor fine-grained disseminations. Layering inclined at 80° to c/a @ 23.12 m.
			<b>23.53</b>	<b>23.92</b>	diabase dyke	Diabase dyke. Light green, fine-grained calcareous mafic intrusion, in which occur 1-2% scattered ovoid to subcircular quartz-calcite "eyes" up to 1.5 mm in long dimension, oriented subparallel to intrusive contacts. Contacts display narrow, very fine-grained chilled margins about 0.5 cm wide. Upper contact inclined at 59° to c/a, lower contact at 56° to c/a.
			23.92	27.05	chert, graphitic argillite, argillite-siltstone	Light grey layered chert and cherty graphitic argillite with siltstone. Same unit as 22.65-23.53 m, separated by mafic dyke. Contains ~2% fracture-controlled Py stringers and disseminated grains. Interlayered at base of unit (25.75-27.05 m) with black argillite and siltstone containing 1% fine-grained disseminated and stringy Py. Layering is tightly asymmetrically folded. Layering inclined at 40° to c/a @ 24.38 m and 67° to c/a @ 26.65 m.
			27.05	29.32	andesitic tuff, chert, graphitic chert	Layered andesitic tuff with subordinate chert and graphitic argillitic chert. Pale green to light green, finely layered, fine-grained, equigranular, intermediate (andesitic) tuff with subordinate, narrow, light grey chert and dark graphitic argillitic chert interlayers. Layering is tightly asymmetrically folded. Layering inclined at 64° to c/a @ 27.73 m. Axial plane of tight fold inclined at a shallower angle 25° to c/a @ 27.24 m. Contains stringer-like Py seams subparallel to axial plane of asymmetric fold, and disseminated to layer-parallel seams of Py, totaling overall about 1-2% Py.
			29.32	29.94	chert	Light grey layered chert, with narrow chloritic foliae and bands. Contains fine-grained disseminated Py and narrow, irregular and interconnected, microfracture-controlled Qz-Py stringers.
			29.94	36.70	chert, cherty tuff, argillite, graphitic argillite	Finely layered chert, argillite and graphitic argillite. Includes light green cherty tuff with 1-2% disseminated Py (30.78-31.30 m) and light greenish grey chloritic chert (33.25-34.0 m and 34.63-.94 m). Close to tight asymmetric folding of layering. Very graphitic argillite intervals occur @ 29.90-30.78 m, 31.30-33.25 m, 34.00-.63 m, and 34.94-43.45 m (extending within the following breccia zone). Contains Qz-Cc veins and elongate, irregular patches, which locally form a brecciform patchwork @ 32.42-.68 m, 33.12-.22 m and 34.55-.60 m. Layering inclined 44° to c/a @ 30.35 m, 0° to c/a @ 32.0 m, 33° to c/a @ 33.25 m, 10° to c/a @ 34.94 m, 27° to c/a @ 35.97 m and 34° to c/a @ 36.6 m.
36.70	47.43	<b>Breccia zone (in graphitic siltstone-argillite)</b> <b>(Py-Qz-Cc veins)</b>	<b>36.70</b>	<b>42.37</b>	disrupted calcareous graphitic siltstone-argillite	Structurally disturbed and brecciated, layered cherty siltstone and graphitic argillite. Calcareous, with common Qz-Cc patches and irregular veinlets. Flushed with calcitic vein-patches (associated with up to 5-7% coarse Py disseminations and cubes and Py masses up to 4 cm in dimension) between 41.44-42.00 m. Layering inclined 52° to c/a @ 38.73 m



Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
			42.37	43.30	brecciated calcareous graphitic siltstone-argillite (Py-Qz-Cc veins)	Brecciated, calcareous, graphitic siltstone-argillite with a graphite-dominated breccia matrix, and flushed with white Py-Qz-Cc masses, containing 10-20% coarse, blocky masses and irregular patches of Py.
			43.30	44.92	Py-Qz-Cc vein	Main white Py-Qz-Cc vein mass in the central part of breccia zone, with 5-7% patches of massive Py.
			44.92	47.43	brecciated calcareous graphitic siltstone-argillite (Py-Qz-Cc veins)	
47.43	69.77	<b>Mafic-intermediate volcanic rock (+ diorite)</b>	47.43	52.23	calcareous mafic-intermediate tuff	Homogeneous, massive to tuffaceous and weakly layered at mm-scale, chloritic mafic-intermediate volcanic rock. Calcareous, and contains significant irregular ( $\pm$ Py) Qz-Cc patches and planar ( $\pm$ Py) Qz-Cc veins (at moderately high angle to c/a), comprising 10-15% of the rock. Calcitic patches locally contain mm- to cm-scale fragments of host rock. Contains $\leq$ 1% disseminated fine- to medium-grained Py overall. Layering inclined 40° to c/a @ 48.23 m and 61° to c/a @ 50.23 m. Zone of intermixture with following calcified unit occurs in lower part unit between 51.85-52.23 m.
			52.23	52.72	calcified diorite?	Pale whitish grey (bone-colored), weakly foliated, medium-grained, equigranular, very calcareous (calcified) diorite? Displays hybrid, mixed margins outside of main contacts and with patches and lenses of adjacent rock around contact margins. Contains 1% fine-grained disseminated Py. Foliation inclined 54° to c/a @ 52.5 m.
			52.72	65.30	calcareous mafic-intermediate tuff, cherty tuff	Massive to foliated and finely layered (tuffaceous), fine-grained, equigranular, mafic-intermediate volcanic rock, with local cherty tuff interlayers @ 56.30-58.65 m and 60.57-64.10 m, containing 1-2% fine-grained, disseminated Py, and layer-parallel stringy patches of Py. Variably calcareous. Highly injected with diffuse Qz-Cc patches and layer-parallel seams @ 54.9-56.3 m and 58.65-60.77 m. Layering inclined 55° to c/a @ 55.1 m, 44° to c/a @ 56.6 m, 40° to c/a @ 58.14 m, 71° to c/a @ 60.6 m, 62° to c/a @ 61.7 m and 55° to c/a @ 63.55 m.
			65.30	68.36	Plag-Aug phyric diorite dyke	Homogeneous, grey (speckled black and white), massive Plag-Aug phyric diorite dyke. Contains 5-7% subhedral medium-grained black augite phenocrysts and 1-2% white plagioclase phenocrysts, except in relatively broad, pale grey, very fine-grained and equigranular, chilled margins (upper margin 13 cm wide, lower margin 20 cm wide). Mt-bearing (detectably moderately magnetic). Intrusive dyke post-dates the intense Qz-Cc veins and injections that occur in the adjacent mafic-intermediate volcanic rocks, but does contain some minor, apparently late-generation Cc-filled fractures.
			68.36	69.77	calcareous tuffaceous basalt	Massive to foliated (tuffaceous), fine-grained, equigranular, chloritic basalt. Calcareous. Injected by 20% by volume. Qz-Cc patches and lenses elongated subparallel to foliation as well as oblique to foliation (i.e. at a moderately high angle to foliation and at a moderate angle to c/a). Contains 2-3% fine-grained disseminated Py. Foliation and chloritic layering inclined 60° to c/a @ 68.83 m
69.77	128.07		<b>Chloritic diorite (+ basalt)</b>	69.77	72.05	chloritic diorite
		72.05		74.65	calcareous tuffaceous basalt	Medium to dark green, foliated, equigranular tuffaceous basalt. Injected by 20% by volume Qz-Cc patches and lenses oriented subparallel to foliation and layering and in part transverse to foliation. Contains 1-2% fine disseminated Py. Foliation and layering inclined 7° to c/a @ 72.35 m (at a low angle to c/a in upper part of unit, with broken core, between 72.07-.95 m) and inclined 57° to c/a @ 73.75 m.
		74.65		128.07	chloritic diorite	Greenish grey, weakly to well foliated, medium-grained, subequigranular, mesocratic chloritic diorite (CI ~ 50-55), with penetrative, interconnected and anastomosing chloritic shear foliae and seams. Similar to chloritic diorite unit @ 69.77-72.05 m. Relatively fine-grained and very thinly foliated at top of unit (74.65-75.30 m) Contains bleached, silicified and calcitic intervals @ 78.80-79.17 m (centred around a planar, white Qz vein, 1 cm wide, inclined 18 to c/a) associated with small masses of Py up to 0.6 cm in dimension along vein margin, and @ 80.12-81.50 m (centred around a planar, white Qz-Cc vein, 1.1 cm wide, inclined 21 to c/a @ 80.35 m), with masses of Py up to 0.6 cm in dimension. Contains very coarse Py masses up to 4 cm in dimension in Qz between 80.53-.67 m. Bleached interval @ 90.06-.67 m, containing 1-2% fine-grained disseminated Py, is spatially associated with several hematite-coated open fractures that are inclined at an oblique angle to foliation. Patchy, pea-green to yellowish green epidotisation occurs @ 92.05-.20 m and 93.95-94.75 m. Detectably Mt-bearing in sporadic small intervals and point localities below ~ 78.2 m (@ 78.2-.8 m, 79.9 m, 83.0-85.6 m, 90.5-.7 m, 94.85 m and 114.08 m). Chloritic shear foliation and mineralogical layering are inclined 40° to c/a @ 97.1 m, 55° to c/a @ 101.25 m, 61° to c/a @ 105.17 m. Generally quasi-brecciated and weakly foliated between 105.60-120.75 m. Well foliated with chloritic mineralogical seams between 120.75-128.07 m. Includes a Mt-bearing chloritic diorite locality @ 121.37 m, in upper part of foliated zone. In proximity to a Cc-Qz vein (0.4 cm wide, with 2-3% disseminated Py), inclined at 21° to c/a and at a very high angle to foliation, that is transposed along foliation planes

Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
						with cm-scale displacements @ 121.5 m. Chloritic shear foliation and mineralogical layering are inclined 78° to c/a @ 121.45 m, 64° to c/a @ 124.0 m, 61° to c/a @ 126.25 m. Contains numerous, late, planar white Py-Cc-Qz veins with associated bleached margins containing disseminated Py: Vein inclined 30° to c/a @ 98.55 m (1 cm wide, with 60% massive patches of Py and 1-2% fine-grained disseminated Py in 5 cm-wide calcitic bleached margins). Vein inclined 29° to c/a @ 100.60 m (2 cm wide, with 2% local Py patches and 1-2% fine disseminated Py in bleached margins between 100.1-.8 m). Several narrow deformed Cc veins occur at a moderate angle to foliation between 103.9-104.45 m. Vein inclined 21° to c/a @ 112.22 m (1 cm wide, devoid of internal Py, but associated with 1-2% fine disseminated Py cubes in host rock. Veins inclined 13° to c/a @ 116.8 m (1.5 cm wide, with 15-20% coarse blocky masses of Py) and inclined 14° to c/a @ 117.35 m (1 cm wide, with trace Py) are similarly associated with bleached wallrock margins containing 1-2% fine-grained disseminated Py.
128.07	157.34	<b>mafic-intermediate volcanic rock</b>	128.07	157.34	mafic-intermediate volcanic breccia	Dark green to medium green and pale greyish green, massive and equigranular to Plag-phyric mafic-intermediate volcanic breccia.
			128.07	130.80	massive to Plag-phyric intermediate-mafic tuff (Py bands)	Upper contact area is characterised by dark green chloritic foliated facies, with pea-green to yellowish green epidotised seams and patches, and common, narrow, cm-scale bands of massive Cc-Amph/Trm?-Py occurring @ 129.67 m (0.5 cm wide), 129.99-130.00 m (1 cm wide), 130.11-.12 m (1 cm wide) and 130.25-.30 (5 cm wide). These bands are dominated by massive Py, and black amphibole or tourmaline (Amph/Trm?; non-magnetic) occurs generally as small, blocky aggregates or lenticular seams marginal to Py and adjacent to and intermixed with white, fine-grained Cc concentrations. The black mineral (Amph/Trm?) also forms discontinuous, fracture-controlled seams oblique to the foliation. Epidotised seams and patches that appear to be both concordant and transverse in pattern relative to the foliation, occur throughout the unit, with subordinate white Cc patches and veinlets. Foliation inclined 78° to c/a @ 128.47 m. Pyritic banding inclined 49° to c/a @ 130.3 m.
			130.80	134.81	brecciated Plag-phyric mafic-intermediate tuff	Bleached, mottled pale greyish green, brecciated, Plag-phyric mafic-intermediate tuff, with dispersed white Plag phenocrysts (0.5-4.0 mm in dimension) and local dark mafic clots or fragments. Displays pervasive brecciform structure, with a light creamy-yellowish green, interconnected, epidotitic-sericitic microfracture network.
			134.81	145.55	Plag-phyric mafic-intermediate volcanic breccia (Py-Mt bands)	Dark green to medium green, Plag-phyric to massive, mafic-intermediate volcanic breccia, with common epidotitic alteration patches and veins. Contains dm-scale bands of <b>massive Py-Mt</b> , in which Py is fringed by black Amph/Trm(?) -Mt and further surrounded by dark chloritic alteration @ 136.14-.25 m and 136.34-.40 m. Contains similar cm- to dm-scale, narrow bands of massive <b>Py-Mt</b> with accessory Amph/Trm(?) @ 143.92-.95 m, 144.46-.52 m and 144.73-.82 m. Planar Qz-Cc vein (0.5-1.5 cm wide) inclined 18° to c/a @ 142.4 m, with secondary hematitic staining. The calcareous volcanic rock following this vein contains numerous small Cc patches and stringers @ 142.4-143.15 m (with vein patches about 1.0-2.5 cm wide) and @ 143.67-145.55 m. Planar Chl-Qz-Cc shear vein (≤1.0 cm wide) inclined 19° to c/a @ 144.05 m.
			145.55	152.00	brecciated Plag-phyric mafic-intermediate tuff	Bleached, mottled pale greyish green, brecciated, Plag-phyric mafic-intermediate volcanic rock, with dispersed white Plag phenocrysts and local dark mafic clots or fragments. Displays pervasive brecciform structure, with a light creamy-beige, interconnected, epidotitic-sericitic microfracture network. Contains a planar Py-Cc-Qz vein 5-6 cm wide oriented 17° to c/a @ 145.95-146.10 cm, associated with 2% fine disseminated Py in an upper bleached interval between 145.55-146.45 m around the vein.
			152.00	157.34	brecciated mafic-intermediate volcanic rock (& chloritic diorite?)	Green to blackish green, brecciated mafic-intermediate volcanic rock, with pervasive Cc-Ep veinlets and patches. Very blocky and friable unit. Possibly intermixed with chloritic diorite. Contains disseminated to patchy semimassive Py (25-30%) with <b>Cpy</b> (3-5%) in dark, friable Amph/Trm matrix @ 152.3-.7 m, and semimassive Py (25%) in dark Amph/Trm(?) matrix @ 153.60-.65 m and @ 156.50-.57 m. Chloritic clay rich gouge (fault zone?) occurs at base of unit @ 156.65-157.34 m. Foliated at least near base, with chloritic foliation inclined 48° to c/a @ 157.0 m.
157.34		<b>chloritic diorite</b>	157.34	165.84	sheared chloritic diorite (Mt-Py, Mt-Cpy-Py bands)	Variably foliated, sheared and quasi-brecciated, grey to greenish grey, medium-grained, subequigranular, mesocratic (CI 45-55) chloritic diorite. Displays brecciform structure, with penetrative network of irregular interconnected chloritic foliae, seams and filaments. Very locally fine-grained with reduced grain size at 161.48-.61 m. Chloritic shear foliation inclined 69° to c/a @ 163.4 m. Cut by local, planar Cc-Qz veins and fractures associated with bleached wallrock margins up to 1.5 cm wide. Planar Qz-Cc veins occur at 158.43 m (1.5 cm wide, inclined 17° to c/a) and at 158.95 m (2.0 cm wide, inclined 15° to c/a). Contains a narrow Amph/Trm(?) -Py-Qz seam @ 159.15-.17 m. Contains massive <b>Qz-Mt-Py</b> seam and patches @ 159.33-.40 m within a foliated chloritic envelope, inclined 63 to c/a. Banded, massive <b>Mt-Cpy-Py</b> interval occurs @ 162.43-.62 m. Cpy-Mt-Amph/Trm(?) tend to be aggregated in distinct composite bands from Py-rich bands.
165.84	175.34	<b>mafic-intermediate volcanic rock (+ chloritic diorite)</b>	165.84	166.78	mixed mafic-intermediate volcanic rock & chloritic diorite	Mixed green, highly chloritised, calcareous, plag-phyric to massive, tuffaceous mafic-intermediate volcanic rock and subordinate buff-grey sericitic-chloritic diorite with a network of patchy buff sericite filaments. Local irregular Cc

Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
			166.78	175.34	Plag-phyric mafic-intermediate volcanic breccia	<p>veinlets. Contains a band of massive Py (2.0 cm wide) fringed by black Amph/Trm(?) and Chl between 166.20-.25 m.</p> <p>Green to pale greyish green, massive and unlayered, poorly foliated, Plag-phyric mafic-intermediate volcanic tuff or breccia, with small, fine-grained equigranular mafic fragments (commonly 0.2 cm, up to 0.5 cm in dimension) and larger cm-scale, mafic fragments.</p> <p>Generally disrupted by an irregular network of fracturing and related Cc-Ab-Ep alteration. Moderately to highly epidotised Plag-phyric intermediate tuff in lower part of unit (@ 173.6-174.95 m) adjacent to the following dark banded Py-Mt unit.</p> <p>Intruded by a planar Cc-Qz vein (1.5 cm wide) oriented 29° to c/a @ 168.6 m, subparallel to proximal Ep-rich seams. Contains several narrow seams of massive Py, bordered by black Amph/Trm(?) in chlorite-rich host rock @ 170.73 m and 171.71-.78 m, and a narrow band of massive Pyrh?-Py with marginal Amph/Trm(?) and associated Qz-Cc seams @ 172.41-.46 m.</p>
175.34	191.30	Mineralized diorite and mafic-intermediate tuff contact zone (± Cpy Py-Mt bands)	175.34	176.88	mineralized Mt-bearing chloritic diorite (Py-Mt bands)	<p>Mineralized chloritic diorite with intense black to dark green Py-Mt-Chl rich alteration. Comprised of dominant, fine-grained, foliated and mineralogically layered, mafic-ultramafic Chl-rich intervals, with subordinate, diffuse, relict masses of mesocratic diorite, and cm-scale massive <b>Py-Mt-Amph/Trm(?) bands</b> @ 175.65-175.70 m and 176.66-176.68 m. In these bands, patches of massive Mt are surrounded by black Amph/Trm(?) within massive Py. Chloritic banding inclined 68° to c/a @ 176.3 m. Local isoclinal folding of layering.</p>
			176.88	191.30	mafic-intermediate tuff & breccia (±Cpy Py-Mt bands)	<p>Mixed dark green to black, fine-grained, massive mafic tuff and light greenish grey to grey Plag-phyric and fragmental intermediate tuff (with mm- to cm-scale mafic fragments), and less common grey, massive, equigranular intermediate volcanic rock. Displays variably epidotised patches and seams.</p> <p>Includes narrow, cm-scale, semi-massive <b>Py seams</b>, generally fringed by black Amph/Trm(?) and dark green Chl, @ 180.43-.44 m, 180.57-.58 m, 181.25-.26 m, 181.52-.54 m, and @ 181.96-.98 m notably bearing Py+ Pyrh (associated with patchy epidotisation and with hematitically stained fractures at moderate angle to c/a).</p> <p>The preceding Py seams are followed downhole by the occurrence of <b>Py-Mt-Amph/Trm(?) lenses</b> @ 182.27-.28 m and 185.58-.59 m.</p> <p>Sporadic Mt-bearing intervals occur @ 182.27-.28 m, 183.46-184.10 m and 185.58-.59 m. The former and the latter relate to the occurrences of <b>Py-Mt lenses</b>, and the central interval reflects small patches and disseminated grains of Mt.</p> <p>Foliation and local layering are inclined 52° to c/a @ 182.65 m and 50° to c/a @ 183.69 m.</p> <p>Transected by numerous hematite-coated fractures inclined at low angle (0-25°) to c/a between 185.0-189.4 m. Contains an irregular, patchy semi-massive <b>Mt-Py-Amph/Trm(?) band</b> @ 189.73-.75 m, and a massive <b>Cpy-Py-Amph/Trm(?) band</b> @ 191.02-.05 m.</p> <p>Probable dm-scale mafic bomb occurs @ 190.00-.07 m, displaying arcuately foliated border zone.</p>
191.30	194.80	Banded massive Cpy-Py-Mt zone	191.30	194.80	Banded massive Cpy-Py-Mt zone	<p>Black to dark greenish black and yellow, banded massive sulphide-oxide mineralised zone, containing dm-scale intervals with patchy bands of coarse, massive sulphide phases Cpy-Py, within broader intervals in which Py is the prevailing sulphide phase accompanied by Chl and Mt. The oxide phase Mt is present in all intervals, as patchy aggregates and lenses and fine-grained disseminations. The sulphide-bearing bands are separated by fine-grained bands of (±Py) Mt-Chl.</p> <p><b>Cpy-Py-Mt zone</b> (191.39-191.57 m)</p> <p><b>Py-Mt zone</b> (191.57-194.43 m)- includes cm-scale massive Py bands @ 192.96 m, 193.05 m, 193.60 m and 194.00 m</p> <p><b>Cpy-Py-Mt zone</b> (194.43-194.73 m)</p> <p><b>Py-Mt zone</b> (194.73-194.80 m)</p>
194.80	200.20	mineralized Mt-bearing intermediate-mafic tuff	194.80	200.20	mineralized Mt-bearing intermediate-mafic tuff	<p>Mt-bearing fine-grained, equigranular chloritic mafic tuff to Plag-phyric mafic-intermediate tuff, displaying variably developed foliation and crude layering. Sporadically Mt-bearing in upper interval and Mt-bearing @ 195.9-196.5 m, 197.60-198.20 m (includes sulphide facies with patchy bands of <b>Cpy-Py-Mt</b> and wispy bands of <b>Py-Mt</b> within a chloritic matrix.</p>
200.20	224.96	Mt-bearing intermediate-mafic volcanic rock (+ chloritic diorite?)	200.20	203.84	foliated Mt-bearing mafic tuff, chloritic diorite(?)	<p>Foliated, weakly to moderately calcareous, mixed Mt-bearing mafic-intermediate tuff.</p> <p>Black to dark greenish grey, laminated and/or foliated zone of mafic, equigranular to very locally Plag-phyric mafic chloritic tuff, with common, thin, medium-grained, intermediate feldspathic (chloritic diorite?) interlayers.</p> <p>Mt-bearing intervals, where Mt forms seams and lenticular patches parallel to foliation, occur @ 200.50-.95 m, 202.40-.45 m, 202.75-203.50 m. Local, narrow bands of semi-massive Py-Mt occur @ 200.96 and 201.09-.12 m.</p> <p>Chloritic clay and debris zone occurs @ 201.84-202.4 m (with 0.14 m core recovered and 0.41 m core loss).</p> <p>Contains volumetrically significant (35-40%) deformed Qz-Cc veins and seams @ 203.09-203.80 m, generally oriented parallel to foliation, and partly developed in a Mt-bearing interval.</p> <p>Foliation and layering inclined 57° to c/a @ 200.96 m and 60° to c/a @ 203.43 m.</p>
			203.84	224.96	Mt-bearing mafic-intermediate tuff	<p>Mixed, black and dark grey to grey, variably foliated and layered, Mt-bearing mafic-intermediate tuff.</p> <p>Mt occurs throughout the sequence as disseminated grains and narrow, mm-scale seams or bands oriented parallel</p>

Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
						to foliation. Foliation inclined 52° to c/a @ 208.15 m, 70° to c/a @ 211.52 m, 69° to c/a @ 216.0 m, 73° to c/a @ 218.4 m, 79° to c/a @ 221.87 m, 55° to c/a @ 224.2 m, and 40° to c/a @ 224.95 m (well foliated lower contact). Contains coarse masses of white Cc-Qz in upper part @ 204.24-.27 m, 205.22-.30 m, 206.49-.60 m and 207.05-.28 m. Abundant deformed Cc injection veinlets, which are folded with irregular margins and comprise ~ 20% of the rock, occur @ 206.6-207.05 m (between the latter two intervals with coarse Cc-Qz masses). Contains patchy Py aggregates associated with Qz masses between 207.05-.10 m. Includes epidotised felsic masses @ 212.95 m, 213.18-.21 m, 213.40-.44 m, 215.37-.44 m, and especially toward the base of the unit @ 222.8-223.85 m (where Mt is apparently absent). Intruded by a planar Py-Cc-Qz vein @ 212.8 m (0.5 cm wide, inclined 12° to c/a) with dispersed, coarse blocky patches of Py up to 0.7 cm in dimension, associated with 2-7% fine disseminated Py developed in calcareous, Mt-bearing host rock between 212.27-213.06 m. Intruded by planar Py-Qz-Cc vein @ 216.17 m (0.4 cm wide, inclined 27° to c/a, containing 5% rusted Py crystals) with associated bleached wallrock margins about 1.0 cm wide.
224.96	251.03	<b>Mixed Mt-bearing Hbl diorite and Mt-bearing mafic volcanic rock</b>	224.96	229.14	chloritic Mt-bearing Hbl diorite	Light grey to grey, relatively massive to locally quasi-brecciated, coarse-grained equigranular leucocratic Hbl diorite, with dark secondary chlorite pseudomorphs (after primary hornblende), chloritic patches or discontinuous, irregular seams. Contains some disseminated Mt in the centre of the unit @ 226.2-227.25 m. Intruded by an 11-12 cm wide, white Cc-Qz vein @ 225.85-226.11 m, associated with bleached wallrock margins 8-9 cm wide containing 2-3 % fine disseminated Py (Mt absent in bleached wallrock). Cut by 1.0-2.5 cm wide Cc-Qz vein @ 228.30-.35 m, inclined 19 to c/a with moderately bleached and calcareous wallrock containing 1-2% fine disseminated Py.
			229.14	232.92	Mt-bearing mafic volcanic rock	Massive to Plag-phyric and tuffaceous mafic chloritic volcanic rock. Particularly tuffaceous and Plag-phyric texture in lower part of the unit @ 232.4-.9 m, where it grades into following Hbl diorite unit. Mt-bearing throughout unit (and locally very concentrated), as fine disseminated grains and patchy aggregates or seams. Contains common, irregular epidotised patches, seams and bands.
			232.92	234.70	chloritic Mt-bearing Hbl diorite	Grey, massive to quasi-brecciated, coarse-grained and equigranular, leucocratic Hbl diorite, transected by wispy interconnected chloritic filaments and seams. Primary Hbl is altered to secondary Act and Chl. Displays very gradational upper contact with Plag-phyric mafic tuff, and a sharper lower contact. Contains disseminated to aggregated patches of Mt (5-7%) and disseminated Py (2-3%) with possible trace Cpy developed locally @ 234.0 m.
			234.70	238.64	Mt-bearing mafic volcanic rock	Black to dark grey, Plag-phyric to massive, mafic volcanic rock. Bears locally 25-80% and generally 30-40% Mt as fine-grained, aggregated bands and patches with diffuse borders. Displays a gradational lower contact with a following diorite unit, coincident with a point where the presence of Mt becomes undetectable downhole. Displays common epidotisation in the form of broad, irregular patches, seams or fracture-controlled fillings. Cut by local, narrow, planar and irregular Cc-Qz veins.
			238.64	251.03	chloritic Hbl diorite	Relatively homogeneous, light grey to grey or locally brownish-greenish grey, equigranular, mesocratic Hbl diorite. Contains about 20-25% altered amphibole (primary Hbl is largely altered to secondary Act and Chl). Unit is non-magnetic, and contains no detectable Mt. Contains trace (≤1%) fine-grained disseminated Py. Contains sporadic, (±Ser) Chl-rich seams and narrow mineralogical bands (layering) inclined 63° to c/a @ 241.85 m, 65° to c/a @ 245.05 m and 54° to c/a @ 247.05 m. Also contains elongate Ser-rich masses and wispy foliae.
251.03	300.46	<b>Mt-bearing mafic tuff and breccia with Mt-bearing Hbl diorite fragments</b>	251.03	300.46	Mt-bearing mafic tuff and breccia Mt-bearing Hbl diorite fragments	Variably Mt-bearing mafic tuff with common Mt-bearing Hbl diorite volcanic bombs. Composed mainly of dark green, massive, inequigranular (medium- to fine-grained) to Plag-phyric basaltic tuff and possible flows, containing variable amounts (in places up to 20%?) of disseminated to patchy lenticular masses of Mt aggregates, with subordinate but important grey, massive, coarse-grained, equigranular, Mt-bearing Hbl diorite, occurring as very common, cm- to dm-scale masses (bombs or fragments?) throughout the unit. The Hbl diorite masses generally contain disseminated to patchy Mt, and trace (≤1%) amounts of fine disseminated Py. Contains common cm- to dm-scale, dispersed epidotised patches and lenses. Relatively Mt-rich in upper part (251.03-256.0 m) associated with abundant Hbl diorite masses, and sporadically Mt-bearing below this, notably in other intervals with Hbl diorite masses between 266.96-269.64 m. Contains a Mt-rich band 1-2 cm wide, inclined 49° to c/a @ 271.21-.22 m. Uniformly Mt-bearing intervals occur @ 286.5-288.5 m and 291.5-299.3 m, with sporadic Mt occurring elsewhere. Hbl diorite masses (bombs?) occur within the following intervals: 256.30-.56 m, 257.28-.31, 257.75-.90 m, 258.38-.47 m, 261.61-.64 m, 261.71-.73 m, 264.90-.92 m, 266.96-269.64 m (large interval with subordinate epidotised masses), 271.71-272.70 m (Hbl diorite contains inclusions of mafic volcanic rock), 273.10-.36 m (partially epidotised), 273.56-.66 m, 274.28-.37 m, 275.76-.90 m, 276.10-.43 m, 277.30-.45 m, 278.05-.13 m, 278.50-.57 m, 278.65-.90 m, 280.37-.40 m, 280.60-.75 m, 280.85-281.07 m, 282.00-.27 (contains possible Cpy grain), 287.32-.52 m, 288.25-.49 m, 290.57-.70 m, 293.41-.43 m, 293.75-.78 m and 293.86-.97 m. Chloritic foliation and banding inclined 73° to c/a @ 253.95 m and 84° to c/a @ 255.1 m.

Interval (m)		Major Lithological Unit	Interval (m)		Lithological Unit	Description
From	To		From	To		
						Contains a wide mass of Py-Cc-Qz, with minor Py and inclusions of mafic volcanic rock, @ 259.72-.85 m. Cut by minor Qz-Cc veinlets ranging between 0-65° to c/a, and generally at shallow angles (15-20°) to c/a. 284.15-285.15 m: Druzy grey-brown, Fe-carbonatised and pyritised, calcareous mafic volcanic rock, containing disseminated Fe-carbonate (ankerite?) and 5-7% fine- to medium-grained disseminated Py cubes. Developed adjacent to white Qz vein (@ 284.61-.95 m), which contains coarse marginal aggregates of Gal and Py near upper contact and internal Py crystals [silver-colored Gal with cubic/orthorhombic cleavage]. Chloritic foliation and banding inclined 89-90° to c/a @ 285.90 m (margin of a volcanic bomb?), and 39° to c/a @ within a narrow Chl-rich zone @ 292.84-.89 m.
300.46	301.85	<b>Mafic-intermediate volcanic rock</b>	300.46	301.85	carbonatised intermediate volcanic rock	Light grey, medium- to fine-grained and inequigranular, carbonatised intermediate volcanic rock(?). Displays a mottled appearance with altered (carbonatised) coarse patches of plagioclase crystals. Calcareous, generally with 4-7% disseminated fine-grained Py. Intruded by a Cc-Qz mass with irregular margins @ 301.06-.28 m, containing !% coarse Py masses along margins. Cut by a planar Cc-Qz vein @ 301.45 m (1.0 cm wide), inclined 10° to c/a, with ≤1% fine- to medium-grained Py at vein margins.
301.85	309.72	<b>Mt-bearing mafic-intermediate volcanic rock</b>	301.85	309.72	Mt-bearing mafic-intermediate volcanic rock	Massive to tuffaceous, medium-grained, equigranular to inequigranular and Plag-phyric mafic (basalt) to intermediate volcanic rock. The Plag-phyric facies contain variable amounts (1-20%) of white Plag phenocrysts. Contains comon narrow lenses or patches of pale green epidotisation with generally minor minor Qz-Cc veinlets inclined at a low to moderate angle to c/a, associated with ≤1% fine-grained disseminated Py. Uniformly Mt-bearing in upper part between 301.85-307.35 m, and non Mt-bearing below in lower part, where the rock is calcareous and/or Fe-carbonatised, and injected by Qz-Cc veins. Qz-Cc vein injections and local breccia occur in a zone between 307.35-.95 m, associated with a lack of detectable Mt and a general lack of epidotisation. The brecciated portion includes dark green ultramafic (chloritic) patches.
309.72	313.64	<b>Mafic-intermediate volcanic rock</b>	309.72	313.64	carbonatised mafic-intermediate volcanic rock	Buff beige and brownish grey to green, recrystallised (Fe-carbonatised) mafic-intermediate volcanic rock, with irregular "unbleached" relict patches of massive to foliated, fine-grained chloritic mafic volcanic rock. Contains narrow, planar Qz-Cc veins inclined at low angle to c/a @ 310.74 m (0.3-0.4 cm wide), 311.36-.37 m (1.0 cm wide) and 311.60 m (0.4 cm wide), associated with trace amount of fine disseminated Py in veins and/or host wallrock. Foliation inclined 72° to c/a @ 310.42 m. End of hole.
			313.64			

## Bell Resources Corp.

Hole No.: DDH-06-09  
Azimuth: 063°  
Dip: 70°  
Core Size: NQ2

## Granduc Project

Date Started: Sept. 13, 2006  
Date Finished: Sept. 18, 2006  
Drilled by: Titan Dr  
Logged by: Robert Thivierge

## Drill Log

Datum: NAD83  
UTM Zone: 9  
Easting: 416900 (prior to survey)  
Northing: 6233190 (prior to survey)

Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
0.00	1.45	<b>Casing</b>	0.00	1.45		Top of casing to bedrock surface.
1.45	33.75	<b>Mafic-intermediate volcanic rock (+ graphitic argillite, siltstone &amp; chert)</b>	1.45	2.82	calcareous basalt	Massive to foliated, deep green, fine-grained equigranular chloritic basalt. Calcareous and injected by abundant irregular deformed Qz-Cc patches and local planar Qz-Cc veins.
			2.82	9.88	tuffaceous basalt-andesite, siltstone	Finely layered, dark green, equigranular tuffaceous chloritic basalt-andesite, grey cherty tuffaceous siltstone and dark grey argillitic siltstone. Contains distinct greyish green tuffaceous andesite intervals (@ 3.84-4.09, 7.43-.59, 8.70-.90 and 9.55-.70 m). Generally weakly calcareous, with local minor discontinuous Cc veinlets and patches. Fine layering and shear foliation inclined 22° to c/a @ 4.15 m, 40° to c/a @ 6.75 m, 27° to c/a @ 8.00 m and 20° to c/a @ 9.75 m.
			9.88	18.70	basalt, siltstone	Relatively massive and homogeneous, dark green to greenish black basalt. Locally finely layered with grey siltstone (15.63-.81 m), where layering is inclined 39° to c/a @ 15.75 m. Variably calcareous, with abundant injections of discontinuous Qz-Cc patches and local planar veins, occupying up to 15-20% of the rock. Contains <1% fine-grained disseminated Py.
			18.70	22.70	tuffaceous basalt-andesite, argillitic basalt, siltstone	Relatively layered, fine-grained, equigranular, green tuffaceous chloritic basalt-andesite and dark grey to black argillitic basalt, with very local thin layers of grey to dark grey, fine-grained siltstone or chert. Foliation and layering inclined 33° to c/a @ 19.55 m and 46° to c/a @ 22.20 m, and is locally very tightly to isoclinally asymmetrically folded, with fold axial planes inclined at a lower angle to c/a. Variably calcareous, and contains a relatively lower volume of small, dispersed ragged Cc patches and some narrow discontinuous quasi-planar Qz-Cc veins inclined at a high angle to layering and about 35-40° to c/a @ 20.10-.15 m. Local cm-scale patchy and irregular seam of Py @ 18.85 m associated with patchy Cc injections. Grades rapidly into following lower unit with the appearance of graphitic argillite seams and a diminishing proportion of basaltic tuff.
			22.70	33.00	tuffaceous basalt, graphitic argillite & chert, siltstone	Interlayered dark tuffaceous (argillitic) chloritic basalt, graphitic argillite, cherty siltstone, and graphitic chert. Layering is asymmetrically folded, and displays a variation in orientation from generally moderately inclined to shallowly inclined to c/a (15° to c/a @ ~25.5 m, 9° to c/a @ 29.7 m and 4° to c/a @ 31.1 m). Brecciform in lower part adjacent to the following diabase dyke interval, with sporadic large irregular masses of Py-Qz-Cc occurring between 31.55-33.00 m associated with a patch of semi-massive Py @ 31.8 m.
			33.00	33.40	diabase dyke	Homogenous, greyish green, massive calcareous diabase dyke with narrow, pale grey, chilled margins.
			33.40	33.75	tuffaceous basalt, graphitic argillite & chert, siltstone	Interlayered dark tuffaceous (argillitic) chloritic basalt, graphitic argillite, cherty siltstone, and graphitic chert, with irregular masses of Py-Qz-Cc occurring between 33.40-.60 m. Largely brecciform, and comprises an extension of the lower brecciform part of the preceding interlayered unit (22.7-33.0 m) on the opposite margin of the intervening diabase dyke.
33.75	42.15	<b>Chert, graphitic chert &amp; argillite (+ siltstone)</b>	33.75	34.72	chert	Layered, grey and light grey chert. Layering is tightly asymmetrically folded. Layering inclined at 15° to c/a @ 34.5 m, representing the general long limb attitude of asymmetric folds.
			34.72	35.14	graphitic argillite, chert (cherty siltstone)	Layered pyritic graphitic argillite and subordinate chert or cherty siltstone. Contains 2% disseminated and stringy to patchy aggregates of Py. Comprises a folded re-entrant of graphitic argillite of the above tuffaceous basalt and graphitic argillite unit (33.40-33.75 m).
			35.14	38.45	chert, graphitic chert	Layered, grey and light grey chert, with local graphitic or sericitic parting surfaces along layering. Layering inclined 33° to c/a @ 35.4 m, 29° to c/a @ 36.0 m and 25° to c/a @ 37.4 m. Contains common (<2%) fine-grained disseminated Py and occasional discontinuous microfracture-controlled Py seams.
			38.45	42.15	graphitic chert, graphitic argillite, siltstone	Finely layered graphitic chert, graphitic argillite and siltstone, and possible cherty tuff or argillite. Contains up to 1-2% fine- to medium-grained disseminated Py and stringy Py trains. Relatively non-calcareous. Layering inclined at 28° to c/a @ 39.35 m, 28° to c/a @ 40.25 m and 37° to c/a @ 40.95 m. Displays open to tight, disharmonic folding of layering ~41 m, with axial planes inclined at 64° to c/a (with subparallel Qz-Cc veinlets) and at a very high angle to layering. Displays disrupted and brecciated structure in lower part (between ~41.38-42.15 m), marking entry into the following breccia zone.
42.15	55.00	<b>Breccia zone (in argillite-basalt-chert)</b>	42.15	44.88	brecciated argillite-siltstone-tuff (Qz-Cc matrix)	Brecciated interlayered (non-graphitic) argillite, siltstone and cherty tuff, including volumetrically significant (10-60%) white, patchy and interconnected Qz-Cc breccia matrix containing sparse Py. Developed in the lower part of the preceding unit; includes notable mafic volcanic fragments between 43.40-.56 m.
			44.88	47.05	tuffaceous basalt	Green to dark green, massive to mineralogically layered, fine-grained, tuffaceous basalt, with chloritic concentrations defining layering, inclined 42° to c/a @ 46.05 m. In part brecciated with small cm-scale angular fragments, and

Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
						containing common dispersed irregular patches and veinlets of Qz-Cc. Host basalt is relatively non-calcareous, and contains trace amount of fine Py stringers.
			47.05	49.47	brecciated basalt-argillite-chert (Py-Qz-Cc matrix)	Brecciated, tuffaceous chloritic basalt-argillite-minor chert, with white ( $\pm$ Chl) Py-Qz-Cc breccia matrix. Divisible into two subunits: (a) a matrix-vein dominant upper part and (b) a matrix-subordinate lower part. (a) The upper part of breccia unit (between 47.05-48.4 m) contains dominant (60-75%) Py-Qz-Cc matrix and vein masses, with abundant irregular cm-scale patchy aggregates of semi-massive Py (15-20%). (b) The lower part of the breccia unit (between ~48.4-49.47 m) contains subordinate Py-Qz-Cc matrix patches (25-35%) with 2-5% variably disseminated to patchy Py.
			49.47	50.03	diabase dyke	Homogenous, greyish green, massive calcareous diabase dyke with paler chilled margins (2 cm wide). Upper contact inclined 41° to c/a, and lower contact inclined 44° to c/a.
			50.03	52.29	brecciated argillite-graphitic argillite (Py-Qz-Cc matrix)	Brecciated argillite-graphitic argillite, containing minor green basalt fragments, with dispersed, irregular patchy masses of Py-Qz-Cc forming the breccia matrix, and containing up to 7-12% coarse irregular patches of Py. Layering inclined 59° to c/a @ 50.08 m. Includes a notably graphitic interval @ 50.90-52.29 m.
			52.29	52.96	Py-Qz-Cc vein	White, coarse-grained Py-Qz-Cc vein mass, with common marginal Py crystals and sparse internal Py. Occupies core position between adjacent breccia units (which are most mineralised in Py).
			52.96	55.00	brecciated argillite-cherty argillite (Qz-Cc matrix)	Brecciated argillite-cherty argillite-minor chert, similar to breccia subunit @ 50.03-52.29 m, but of relatively cherty nature and lacking a significant graphitic component. Infused by variable amount of white Qz-Cc patches and masses comprising the breccia matrix, and contains about 2% by volume, mm- to cm-scale, patchy aggregates and cubes of Py. Displays local brownish grey Fe-carbonatisation? and sericitisation of cherty fragments.
55.00	63.21	<b>Mafic-intermediate volcanic rock (+ graphitic argillite, chert)</b>	55.00	63.21	calcareous basalt, graphitic argillite, chert	Mottled dark green and greyish white, calcareous basalt, with subordinate (very minor) graphitic argillite and chert. Dominantly dark green, fine-grained, equigranular, massive to foliated (tuffaceous?) chloritic basalt, which is penetratively calcified, bleached of ferromagnesian minerals and altered to light greyish white calcitic rock containing mottled relict patches and spots of original basalt, particularly below 59.18 m. Calcified basalt generally contains trace ( $\leq$ 1%) fine-grained disseminated Py, with local patchy Py aggregates developed @ 61.20-.22 and @ 62.20 m. The upper part of this calcified interval (i.e. between 55.00-57.45 m), adjacent to the preceding brecciated unit, contains variable light tawny brown or buff-colored patches and fine lenses of sericitised and Fe-carbonatized? rock, which is most intensely developed between ~56.75-57.45 m (zone of broken core with probable core loss). Less penetratively calcified portions of the interval contain common, irregular, discontinuous (in places interconnected) white calcitic patches and narrow planar Cc veinlets of at least 3 general orientations, two of which are inclined 30-60° to each other with each inclined at moderate angles to c/a, and a third of which is inclined at a moderately high angle to c/a. Includes minor intervals of graphitic argillite @ 56.58-.65 and 61.50-.68 m, associated with narrow bands of chert @ 61.37-.43 and 61.63-.68 m. Green chloritic clay interval with core loss occurs @ ~57.75-58.85 m (0.17 m recovered). Chloritic layering and shear foliation inclined 36° to c/a @ 56.60 m, 56° @ 59.65 m, 51° @ 62.10 m and 47° @ 62.16 m.
63.21	64.21	<b>Mt-bearing mafic volcanic rock</b>	63.21	64.21	brecciated Mt-bearing calcareous basalt	Brecciated to layered, mottled dark green and light greenish grey to grey, fine-grained, equigranular, Py-Mt-bearing basalt. Dark green, generally calcareous, (tuffaceous?) chloritic basalt forms fragments and wispy patches occurring in a light grey to greenish grey calcitic matrix with coarse (cm-scale), irregular blobs or masses of semi-massive Mt-Py and massive Mt (total metallic sulphide-oxide content about 15%). Lower part passes from a brecciform to a layered structure and grades rapidly into the following unit with the disappearance of Mt masses around 64.18 m.
64.21	85.40	<b>Mafic-intermediate volcanic rock (+ chert)</b>	64.21	72.89	cherty tuffaceous basalt-andesite, chert	Upper part of unit (64.21-68.84 m) composed of greyish green and dark green to black, cherty tuffaceous basalt-andesite interlayered at cm- to dm-scale with light greenish grey and grey, tuffaceous chert. Locally contains 3-4% medium-grained disseminated Py @ 64.65-.85 m. A dark tuffaceous basalt band @ 65.80-66.07 m, containing 1% fine-grained disseminated Py, occurs within a broader interval with common deformed, ragged and patchy Qz-Cc injections occurring between 65.85-67.85 m. Central part of unit (68.84-69.60 m) comprised of layered tuffaceous chert, with gradational upper and lower contacts, which contains $\leq$ 3% fine- to medium-grained disseminations and small dispersed aggregates of Py (notably developed across the contacts between 68.3-70.3 m). Lower part of unit (69.60-72.89 m) characterised by cherty tuffaceous basalt-andesite, which includes a zone with folded elongate patches and lenses of drizzly-brown Fe-carbonate/sericite alteration between 70.30-.65 m, and contains 5% disseminated and patchy aggregates of Py between 72.00-.89 m. Layering is moderately inclined to c/a in upper parts of the unit, and becomes progressively less inclined to c/a downward through the central and lower parts of the unit: layering inclined 63° to c/a @ 65.8 m, 56° @ 67.3 m, 45° @ 68.2 m, 29° @ 69.45 m, 28° @ 70.3 m and 8° @ 71.0 m. Layering is tightly to openly asymmetrically folded about axial planes which are relatively highly inclined to c/a (75° to c/a @ 71.2 m).
			72.89	74.91	Plag-Aug phyric diorite dyke	Homogeneous, grey (with black and white speckles), massive, Plag-Aug porphyritic diorite dyke. Displays dispersed medium-grained augite phenocrysts (1-2%) and subordinate plagioclase phenocrysts ( $\leq$ 1%), except in the narrow, light grey, fine-grained and equigranular chilled margins of dyke. Contains fine-grained disseminated Mt (detectably

Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
						magnetic). Moderately calcareous.
			74.91	78.66	cherty tuffaceous andesite, chert	Layered, greenish grey cherty tuffaceous intermediate volcanic rock (andesite?) and light grey chert. Contains up to 2-4% stringy (fracture- and/or foliation-controlled) to disseminated fine-grained Py between 76.02-78.02 m, and includes a narrow interval of patchy-stringy Mt-Py masses between 76.34-.36 m. Layering inclined 42° to c/a @ 75.25 m and 40° to c/a @ 77.88 m.
			78.66	85.40	calcareous tuffaceous basalt, argillitic basalt	Massive to foliated and layered, dark green to black, tuffaceous chloritic basalt and argillitic basalt. Relatively finely layered and foliated in top and bottom parts. The dark green tuffaceous basalt is mottled-banded black with increase in argillitic components. Moderately to highly calcareous. Contains early, wispy and elongate Qz-Cc patches as well as late, planar Qz-Cc veinlets, most commonly in the more massive centre of unit (between ~ 81.40-84.75 m), and dominantly mm-scale seams parallel to layering elsewhere in the unit. Foliation and layering inclined 51° to c/a @ 79.10 m, 53° to c/a @ 80.92 m and 51° to c/a @ 85.17 (parallel to nearby sheared diorite contact). Late, planar Qz-Cc veinlets in the centre of the unit are inclined at a moderately shallow angle to c/a and at a high angle to foliation and layering: veinlets inclined 20° to c/a @ 80.92 m, 23° to c/a @ 81.85 m, and 16° to c/a @ 82.63 m.
85.40	121.25	<b>Chloritic diorite (+ Mt-bearing chloritic diorite)</b>	85.40	121.25	chloritic diorite, Mt-bearing chloritic diorite	Grey to dark green, medium- to fine-grained, foliated to quasi-brecciform, mesocratic chloritic diorite (CI 35-60). Displays variable chlorite development, primarily as narrow, chloritic shear foliae and/or irregular, interconnected and anastomosing microfracture seams that are transverse and oblique to the foliation, producing a relatively penetrative quasi-brecciform structure, and also as penetrative cm-wide curvilinear chloritic bands accompanied by a reduction of grain size of host altered diorite. Local Mt-bearing chloritic diorite in upper part (@ 86.45-88.55 m, 90.65 m, 91.15-92.50 m and 95.90 m), and are associated with foliated, fine-grained, mafic chloritic enclaves or lenses, which also bear Mt, at 88.40-.65 m, 90.88-91.05 m and 91.93-92.33 m (which includes a dense mass of Mt-Chl). Chloritic shear foliation inclined 43° to c/a @ 87.88 m, 50° @ 89.48 m, 31° @ 92.33 m, 47° @ 94.9 m, 20° @ 96.45 m, 29° @ 98.72 m, 23° @ 100.85 m, 58° @ 105.0 m, 43° to c/a @ 107.43 m, 40° @ 110.1 m, 35° @ 114.55 m and 45° @ 118.85 m. Intermittently cut by late, planar, cm-scale Py-Cc-Qz veins, generally at a moderate angle to c/a and at a high angle to the chloritic foliation. A notable planar <b>Py-Cpy-Qz vein</b> (4.5 cm wide, with well-developed <b>malachitic staining</b> associated with a coarse patchy Py-Cpy mass, measuring 1.5 x 0.8 cm in dimension) occurs near the upper contact at 88.90-.95 m, inclined 51° to c/a. Other planar Py-Cc-Qz veins are inclined 40° to c/a @ 97.7 m (1 cm wide), 41° to c/a @ 98.36-.39 m (2 cm wide, with moderately bleached host rock), 51° to c/a @ 100.68-.73 m (4 cm wide, with bleached margins containing minor fine-grained disseminated Py up to 8 cm wide), 43° to c/a @ 104.44-.46 m (1.5 cm wide), 45° to c/a @ 115.17-.19 m (1.5 cm wide), 43° to c/a @ 116.36-.37 m (0.5-1.0+ cm wide) and 46° to c/a @ 116.78-.80 m (1.5 cm wide, with patchy tawny-beige Ser associated with altered Py).
121.25	144.35	<b>Veined, silicified &amp; K-altered diorite (+ chloritic diorite)</b>	121.25	133.60	silicified & K-altered diorite (Py-Qz veins)	Sheared chloritic diorite (as above) with sporadic intervals of leucocratic, pinkish and light greyish, bleached and silicified diorite with mottled pinkish orange K-alteration pattern (@ 121.25-123.20, 127.95-128.93 and 132.05-133.20 m), containing local, minor, irregular mafic patches of Chl, and associated with Py-Qz masses and veins and with sericitic filaments in host rock. Intervals of mottled orange alteration contain up to 1% fine-grained, disseminated Py. Mt-bearing diorite interval occurs within a mafic (CI ~ 65-70) Mt-Chl rich segment @ 126.95-127.45 m, which is peripheral (uphole) to the more intense silicification and K-alteration developed in diorite below 127.95 m. Chloritic shear foliation inclined 49° to c/a @ 124.4 m and 65° to c/a @ 132.25 m. Planar Py-Cc-Qz veins that occur outside of the mottled orange alteration intervals are inclined at 47° to c/a @ 124.57-.59 m (1.5 cm wide, with marginal silicification and sericisation) and 48° to c/a @ 125.80-.85 m (3.5 cm wide, 2% Py, limited marginal bleaching). Planar Py-Cc-Qz veins that occur within mottled orange alteration intervals are inclined at 51° to c/a @ 132.11-.17 m (3.5 cm wide) and 32° to c/a @ 133.41-.60 m (8-9 cm wide, with coarse Py; marks lower margin of an upper, sporadic K-alteration zone).
			133.60	136.03	chloritic diorite	Foliated to massive, mesocratic chloritic diorite.
			136.03	139.48	silicified & K-altered diorite (Py-Qz veins)	Foliated to massive, mesocratic chloritic diorite with dm- to m-scale intervals of intensely bleached and silicified diorite, and associated penetrative to patchy mottled pinkish orange to light orange K-alteration (@ 136.03-.30 m, 137.10-138.12 m and 138.65-139.48 m) in part associated with a local Ab-Qz mass (139.15-.27 m); Chloritic shear foliation inclined 62° to c/a @ 137.2 m, otherwise displays relatively poorly foliated to massive texture. Chloritic diorite is Mt-bearing over a narrow interval @ 137.25-138.65 m.
			139.48	141.55	chloritic diorite	Foliated to massive, mesocratic chloritic diorite. Chloritic diorite is Mt-bearing over a small interval @ 140.35-141.55 m.
			141.55	144.35	silicified & K-altered diorite (Py-Qz veins)	Foliated to massive, mesocratic chloritic diorite with sporadic bleached and silicified intervals displaying a mottled pinkish orange K-alteration (@ 141.55-144.35 m), containing up to 2-4% disseminated Py. The K-alteration is sharply



Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
						truncated in planar fashion at the outer edge of the light grey bleached margin (6-15 cm wide, containing ≤4% fine disseminated Py) adjacent to a planar Py-Ab-Qz vein (3.7 cm wide, inclined 50° to c/a @ 144.01-.06 m). The sporadic bleached and mottled alteration intervals of this unit mark the lower (downhole) limit of the broadly combined silicification and K-alteration zones (between 121.25-144.35, where Mt is largely absent and Py is present). The bleached and mottled alteration encloses intervals of Mt-bearing chloritic diorite (@ 142.55-.80 and 143.1-.8 m), which mark a transition into the following uniformly Mt-bearing diorite unit. Chloritic mineralogical layers and shear foliation inclined 50° to c/a @ 141.5 m
144.35	199.92	<b>Mt-bearing chloritic diorite</b>	144.35	199.92	Mt-bearing chloritic diorite with Py-Mt bands	Greenish grey to green, foliated to massive, mesocratic to mafic chloritic diorite. Particularly well foliated below 151.8 m, with development of up to 80-85% dark chloritic seams and foliae, in part associated with narrow mm-scale quartz seams, interspersed with less foliated (more massive and quasi-brecciated) mesocratic chloritic diorite. The chloritic diorite is detectably Mt-bearing in continuous fashion between 144.35-153.58 m (across the transition to well foliated chloritic diorite @ 151.8 m), and contains dark green to black, mafic Mt-Chl and Mt-rich mineralogical bands or lenses between 150.27-.87 m. Further downhole, the chloritic diorite contains intermittent, narrow (cm-scale) bands of massive Mt-Py (@ 157.80-.85 m, 158.18-.22 m, 159.82-.95 m, 160.15-.25 m, 161.23-.36 m and 161.75-.78 m), and a broader interval of Mt-Py bands between ~ 163.45-.90 m. Mt-bearing intervals of mesocratic chloritic diorite occur further downhole @ 169.3-171.4 m and 172.5-173.0 m. Chloritic shear foliation and banding inclined 70° to c/a @ 152.85 m, 37° to c/a @ 154.5 m, 41° to c/a @ 156.25 and 159.15 m, 52° to c/a @ 161.0 m and 35° to c/a @ 165.0 m. Broken, very blocky core between 164.5-173 m, with local Chl-rich clay and debris (~ 165.75-166.25 m and ~ 168.8-169.3 m), and local intervals of more leucocratic quasi-brecciated chloritic diorite. Contains in places up to 3-5% disseminated Py in a non-magnetic interval (between ~ 171.4-172.0 m) that occurs between Mt-bearing intervals. Quasi-brecciated, mesocratic, chloritic diorite (characterised by a braided and anastomosing network of chloritic foliae and seams) continues downhole from the blocky zone. Contains common Mt-bearing intervals, in part related to increased mafic content (Cl 70-75), relatively fine reduced grain size, and well-developed anastomosing chloritic shear foliation. The Mt-bearing intervals occur @ 173.95-174.10 m, 174.85-177.55 m [interrupted by a bleached zone containing 1% very fine-grained disseminated Py, centred about a planar Qz vein 1.2 cm wide, inclined at 40° to c/a @ 177.97 m], and downhole @ 178.2-.5 m, 180.1-.9 m and 184.35-187.95 m. Chloritic shear foliation and banding inclined 33° to c/a @ 176.15 m, 35° to c/a @ 181.2 m, 40° to c/a @ 184.85 m, 50° to c/a @ 186.05 m, 51° to c/a @ 190.0 m, 47° to c/a @ 198.15 m and 42° to c/a @ 199.75 m. Cut by late, narrow (cm-scale), planar (±Py,Cc,Ab) Qz veins inclined 37° to c/a @ 179.77 m (1 cm wide, with weak narrow bleached margin), 45° to c/a @ 181.47 m (1 cm wide, with 2-3 cm wide bleached margins containing trace disseminated Py), 35° to c/a @ 189.19-.25 m (3.5 cm wide, with broad bleached margins between 189.0-.35 m bearing 1% fine-grained disseminated Py). Contains light grey silicified and bleached zones between 190.6-194.85 m, associated with local coarse, white Ab-Qz masses. Near base of dioritic unit contains narrow (cm-scale) semi-massive Py-Chl bands @ 197.77-.85 m and 198.04-.09 m, and a narrow massive Py-Mt band @ 199.25-.29 m.
199.92	213.94	<b>Mineralized diorite-mafic tuff contact zone with banded massive Py-Cpy-Mt</b>	199.92	203.75	<b>mineralized Mt-bearing chloritic diorite with banded massive Py-Cpy-Mt</b>	Mineralized siliceous chloritic diorite with intense black to dark green Py-Mt-Chl rich alteration, containing broad, fine-grained, foliated and mineralogically layered, mafic-ultramafic intervals composed of Chl and Chl-Mt, with subordinate dm-scale bands of massive sulphide-rich Py-Cpy-Mt mineralization in the following intervals: <b>Py-Cpy-Mt band</b> (199.92-200.08 m). <b>(±Cpy) Py-Mt band</b> (200.22-200.31 m). <b>(±Py) Mt band</b> (200.51-201.38 m). <b>(±Py) Mt band</b> (201.53-201.55 m). <b>Cpy-Py-Mt band</b> (201.66-202.20 m; with dark green Mt-Chl bands, remains Mt-bearing downhole beyond sulphide-bearing interval to 202.54 m). <b>Cpy-Py-Mt band</b> (202.69-203.75 m; with dominant dark Chl-Mt bands and subordinate Cpy-Py bands, and notable large Mt masses or lenses). Foliation and mineralogical layering inclined 54° to c/a @ 202.05 m and 50° to c/a @ 203.0 m Contains local folded, irregular and discontinuous, ragged Cc veinlets.
			203.75	205.55	Plag-phyric mafic-intermediate tuff, mafic tuff	Massive, greyish green, plagioclase-phyric mafic-intermediate (basalt-andesite) tuff (with 10% medium- to coarse-grained Plag phenocrysts dispersed in a chloritic matrix) and ultramafic-mafic chloritic (basalt) tuff
			205.55	213.94	<b>mineralized Mt-bearing mafic tuff with banded massive Py-Cpy-Mt</b>	Layered, Mt-bearing, mafic chloritic tuff with massive <b>Cpy-Py sulphide bands</b> . Dark green and black, altered, massive to Plag-phyric, finely layered, calcareous basaltic tuff, with pervasive Mt-bearing intervals between 205.55-213.13 m and 213.55-213.72 m, which contain common cm-scale massive Cpy-Py sulphide bands. The former pervasive Mt-bearing interval [205.55-213.13 m] contains prominent <b>Cpy-Py sulphide masses @ 205.66-.76 m, 206.37-.39 m, 206.69-.70 m, 206.97-.99 m, 207.57-.61 m and 207.80-.85 m, and (±Cpy) Py masses @</b>

Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
						208.41 m (1 cm wide), 208.61-.63 m, 208.88-.89 m, 209.02-.03 m, 211.46-.53 m (Cpy-Py), 211.68-.69 m and 212.53-.54 m. The latter pervasive Mt-bearing interval [213.55-213.72 m] contains several ( $\pm$ Cpy) <b>Py lenses or masses</b> . Mineralogical layering, defined by alternating Chl- and Mt-rich seams and by thin mm-scale calcareous seams, is inclined at 59° to c/a @ 209.6 m and 66° to c/a @ 212.85 m. Crosscut by common, narrow, discontinuous, syn- to late-tectonic Cc and Ep veinlets.
213.94	227.12	<b>Intermediate-mafic tuff</b>	213.94	217.77	schistose argillitic mafic tuff	Finely layered, schistose, black, argillitic mafic (chloritic) tuff with abundant, mm-scale, white Qz-Cc seams, bearing 1% fine-grained disseminated Py. Not Mt-bearing (non-magnetic). Mineralogical layering is inclined at 50° to c/a @ 214.7 m. Includes some intervals of Chl-rich clay and debris (gouge zones? with core loss) between ~ 215-217 m.
			217.77	225.71	layered Mt-bearing intermediate-mafic tuff	Greenish grey to dark grey or black, largely layered to locally massive, fine-grained, subequigranular to locally subporphyritic (Plag), intermediate to mafic tuff, with light grey interlayers. Relatively homogeneous, mm- to cm-scale layering alternation. Mainly of andesitic composition and uniformly Mt-bearing. Foliation and mineralogical layering (defined by Mt-Chl concentrations) are inclined at 49° to c/a @ 218.6 m, 55° to c/a @ 221.1 m, 55° to c/a @ 223.45 m and 53° to c/a @ 225.6 m.
			225.71	227.12	calcareous mafic tuff	Dark green, massive to foliated, calcareous, mafic chloritic tuff. Contains common, ragged, discontinuous, patchy, syn- to late-tectonic Qz-Cc veins, particularly between 226.3-227.1 m. Devoid of Mt (non-magnetic).
227.12	323.60	<b>Mt-bearing intermediate-mafic tuff, flow &amp; breccia</b>	227.12	241.40	Mt-bearing intermediate-mafic tuff	Greenish grey to dark grey or black, layered to locally massive, fine-grained, subequigranular to locally subporphyritic (Plag), intermediate to mafic tuff, with light grey interlayers. Uniformly Mt-bearing. Mainly of andesitic composition and similar to unit at 217.77-225.71 m. Contains minor, cm-scale, weakly epidotised patches between 232.36-.39 m and at 233.25 m. Cut by late, narrow (cm-scale), planar Py-Cc-Ab-Qz vein, inclined at a high angle to layering and at 40° to c/a @ 234.93-235.00 m (3.8 cm wide), with variably bleached zone along wallrock margins up to 13 cm wide containing 10% fine-grained disseminated Py. Toward the base, below 238.44 m, the unit contains local, diffuse, cm- to dm-scale intervals displaying Plag-porphyritic texture and occasional small mafic fragments, marking a downhole transition to the following unit. Foliation and mineralogical layering (defined by Mt-Chl concentrations) are inclined at 48° to c/a @ 229.0 m, 46° to c/a @ 231.3 m, 36° to c/a @ 232.65 m, 41° @ 235.7 m, 51° @ 237.9 m, 50° @ 240.15 m and 55° to c/a @ 240.9 m.
			241.40	263.15	Mt-bearing mafic-intermediate tuff and breccia	Massive to foliated and layered, green to greenish grey and blackish green, fine-grained, equigranular mafic-intermediate tuff (generally andesitic to basaltic composition, and in places argillitic) mixed with dm- to cm-scale bodies of light grey, massive, medium- to coarse-grained, inequigranular to Plag-phyric, leucocratic Hbl diorite (primary Hbl crystals are generally altered to Chl). The altered Hbl diorite bodies display diffuse to sharp borders, and likely comprise volcanic bombs (or dykes?), dispersed across the significant width of the unit. Both the host mafic-intermediate tuff and the Hbl diorite bombs are Mt-bearing (very detectably magnetic) throughout the unit. Contains common, dm-scale, lime-green, moderately to strongly epidotised patches, especially @ 243.93-.96 m, 244.28-.39 m, 246.54-.64 m, 247.46-.57 m, 249.65-.76 m, 252.93-253.18 m (strongly epidotised) and 253.70-.82 m. Intruded by late, cm-scale, planar to irregular Py-Ab-Cc-Qz veins @ 245.07-.09 m (1 cm wide, inclined at moderate angle to c/a, associated with bleached wallrock margins containing 3-5% fine-grained disseminated Py) and @ 246.06-.17 m (6.0 cm wide, inclined 31 to c/a, also associated with bleached wallrock margins containing 3-5% fine-grained disseminated Py). Foliation and mineralogical layering (defined by Mt-Chl concentrations) are inclined at 55° to c/a @ 247.45 m, 57° to c/a @ 249.35 m, 58° to c/a @ 254.8 m, 41° @ 256.55 m and 59° to c/a @ 258.4 m.
			263.15	323.60	Mt-bearing intermediate-mafic tuff, flow & breccia	Mixed, mottled greenish grey or light green, Plag-phyric to massive intermediate tuff (with mafic fragments) and green to black mafic tuff, with local intervals of relatively medium-grained subequigranular intermediate volcanic flows(?). Contains common, dm-scale, moderately to strongly epidotised patches between 269.7-279.25 m, an a notable abundance below 278.08 m of light grey Mt-bearing Hbl diorite masses (probable fragments or bombs). Intruded by a late, cm-scale, planar to irregular Py-Cc-Qz veins @ 268.30-.33 m (3.0 cm wide, with mildly bleached silicified wallrock margins containing 5-10% fine-grained disseminated Py) and by several irregular, cm- to dm-scale Py-Cc-Qz vein masses within a bleached and silicified wallrock interval (containing disseminated Py) between 284.55-285.45 m. All lithological components of the unit are uniformly and continuously Mt-bearing downhole at least to ~ 284.0 m, and sporadically Mt-bearing below this to ~ 308.0 m. Mt is generally absent in the zones of bleaching and pyritisation, associated with various Py-Qz veins (e.g. zone of bleaching between ca. 284.55-290.7 m). Cut by a massive Py-Qz vein @ ~ 290.4 m (6.5 cm wide, inclined at 37° to c/a), with very coarse, massive patches of Py in the vein and 10% disseminated Py in the marginally bleached wallrock. The zone of bleaching and pyritisation coincides with the local disappearance of detectable Mt in the wallrock between 290.25-.68 m. Intruded by a late, planar Py-Cc-Qz vein @ 307.2-.3 m (inclined 36° to c/a), with bleached wallrock margins up to

Interval (m)		Major Lithological Units	Interval (m)		Lithological Unit	Description
From	To		From	To		
						10-15 cm wide containing fine-grained disseminated Py. Mixed, green to greenish grey, Mt-bearing intermediate-mafic tuff, breccia and flows, with epidotised patches, continue to a gradational contact around 323.6 m with bleached and silicified, non-magnetic volcanic rock.
323.60	333.15	Intermediate volcanic rock & breccia	323.60	333.15	bleached intermediate volcanic rock & breccia	Massive to foliated, green to mottled pale green-greyish white-buff pink, fine- to medium-grained, equigranular to inequigranular, intermediate volcanic rock, with bleached and silicified intervals. Bleached and silicified intermediate volcanic rock (323.6-325.1 m) passes into a brecciated silicified intermediate volcanic rock with a chloritic matrix (325.1-326.4 m), a foliated and sheared chloritic zone with mylonitic foliation inclined at 40° to c/a (326.4-.7 m), and finally a pale green-white-buff pink mottled, massive to foliated, bleached intermediate volcanic rock with diffuse patches of buff pinkish K-alteration. All rocks in this unit are non-magnetic (not Mt-bearing).
			333.15			

**Bell Resources Corp.: Granduc Project- Drill Log DDH-06-9**

 Azimuth 140  
 Dip -45

 Drilled: September 19 to 22, 2006; NQ2 Titan Drilling  
 Logged September 26, 27, 2006 by Tim Sandberg

Collar:

**Easting: 416900 (prior to survey)**  
**Northing: 6233190 (prior to survey)**

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Description
0.00	2.80						Casing
2.80	19.20	Tuffaceous Argillite					Tuffaceous argillite, grey-green tuff w/ grey to black 1-2 mm argillaceous laminae, well-bedded at 40-50 to CA. Well-developed shear fabric subparallel to bedding approx 20-30 to CA. Fabric is particularly well-developed in a dominantly argillaceous section 10.5 - 14 m. Calcite veins follow the shear fabric; a second set of extensional calcite veins cut the first at 10-15 to CA. Small blebs of pyrite are associated w/ both
						10.85	3 cm quartz vn @ 45 to CA with a 2-3 mm core of py contains trace blebby cpy
						11.30	blebs of malachite on fracture cutting bedding @ 45 to CA
						14.60	occasional highly disrupted chert laminae begin to appear
			15.40	15.60			tight angular folding @ 15 to CA. hand spec @ 15.7
			18.80	19.00			broken siliceous rock w/ partially hematized py
			19.00	19.20			gougy fault
19.20	49.60	Chert, argillite and tuff					Grey chert w/ lesser black argillite and green tuff bands, small veins and fracture filling w/ quartz greater than calcite
			19.20	22.60	grey chert		very broken
			22.60	24.00	grey chert		1-2 mm scale banding @ 40-45 to CA w/ abundant isoclinal folds @ 45. Cut by fine network of quartz veins at 60, cut by near core-parallel vns. Both sets typically contain blebby py. Overall py content approx 1%
						22.70	3 cm quartz vein @ 45 w/ core of py + tourmaline? (sooty black mineral)
						23.3 - 24.0	strongly developed core parallel 2-3 mm quartz veins
			24.00	24.20	green tuff		green tuff band w/ irreg carb vns
			24.20	26.80	grey chert		highly disrupted grey chert w/ isoclinal folds @ 30, core parallel banding 25.3-26.0. cut by py vns @ 60-70. 3-4% py. Hand spec 25.2
			26.80	37.00	grey chert		grey to black argillaceous chert, well developed 1-2 mm scale laminae @ 40-45 w/ tr py along laminae, poorly developed network of irreg calcite vns, rare 2-4 mm quartz vns @ 20-30. Green tuff beds occur 31.1-31.4, 33.4-34.0. Hand specs 30.9, 32.5, 34.2, 36.2
						34.9 - 35.4	slickensided graphitic gouge
			37.00	41.30	grey chert		grey chert, very disrupted banding cut by 1 mm dark (chlorite?) vns @ 10, 30 and 60 to CA, contain 1-2% blebby py. Hand spec @ 38.15
			41.30	41.60			very broken, slickensided graphitic gouge
			41.60	43.50	green tuff		pale green tuffaceous chert, extremely contorted w/ isoclinal folds @ 50. hand spec 42.9
			43.50	49.60	black argillite		black argillaceous chert, Extremely graphitic, very broken, w/ significant core loss. 2% blebby to fracture py throughout. 30 cm of gouge adjacent to dyke contact below
49.60	52.00	Pale green dyke					Pale green aphanitic chloritized dyke cut by calcite vns. UC @ 40 to CA, sheared, gougy; LC @ 40 on gouge zone from 52.0-52.1. Internal chunk of argillite 51.0-51.1
52.00	54.65	Sulphide Zone					Brecciated semi-massive sulphide in calcite-chlorite matrix
			52.00	53.15	Breccia		Breccia w/ chert clasts and minor blebby pyrite in matrix of calcite and chlorite. 5% py

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Description
			53.15	53.80	Massive sulphide		Massive sulphide; brecciated massive pyrite-magnetite and argillaceous chert in a calcareous matrix. 50% py, 30% magnetite. Hand spec 53.15
			53.8	54.1	pale green dyke		Pale green dyke, same as 49.6 - 52.0. UC and LC @ 60 to CA
			54.1	54.65	Breccia		Breccia, same as 52.0 - 53.15. 2% py. Gouge zone 54.2-54.3 @ 60 to CA
54.65	67.25	Cherty green tuff					Light green tuff, locally cherty, mm scale bedding @ 60 to CA. Numerous irreg discontinuous qtz-calc vns. Trace py. Hand spec 55.0, 66.0
			57.15	57.30			sheared argillite band @ 60 w/ 2% blebby py
			61.70	65.20			shear fabric @ 60 w/ local brx and isoclinal folding, 2-3% blebby py, tr malachite on fracture @ 63.6
67.25	69.95	Diabase dyke					Grey-green, fine grained w/ 1-2 mm chloritized augite phenos and trace fspar. UC @ 40, LC @ 50. 5 cm chill margin @ UC. Hand spec @ 69.7
69.95	87.70	Green tuff					Green tuff, locally cherty. Well-bedded and banded @ 40 to CA with shear fabric subparallel to bedding. hand spec @ 79.5
			69.95	71.00			highly sheared @ 40-50 to CA - irreg discontinuous qtz-calc vns follow shear fabric
			72.60	72.90			cherty banding @ 45
			73.10	75.90			distorted cherty bands and irreg folding, local brx, 2% dis to blebby py
						75.70	1 cm qtz vn @ 45 to CA, offset by 1 cm along bedding parallel shear
						76.15	1 cm qtz vn @ 45 to CA
			78.30	79.00			cherty banding @ 40, w/ 2% discontinuous banding of blebby py @ 40.
87.70	126.60	Diorite					Diorite, dark grey-green fspar-chlorite rock. Relict fspar phenos and clasts in anastomosing chlorite matrix, strong shear fabric @ 60-70 to CA. Upper contact is heavily sheared @ 70 to CA and indistinct against tuffaceous rock above. Probably a syn-volcanic sill or flow. The rock is non-magnetic to 110, strongly magnetic 110-112.3, weak, patchy magnetism below that. Rare qtz vns; early phase of diffuse, discontinuous qtz +/- calcite vns @ 30 to CA are cut by a late phase of well-defined 1-5 cm bull quartz and Kspar veins @ 40-45. LC @ 80 to CA. hand spec @ 105.0, 113.0
			87.70	88.30			indistinct heavily sheared contact @ 70
			96.90	97.90			brecciated, silicified
			99.00	100.70			brecciated, silicified
			101.55	101.90			silicification assoc w/ 10 cm wide shear band 101.8-101.9 @ 70 to CA
			103.30	103.50			brecciated, silicified, trace coarse pyrite
			106.10	106.50			strong shear @ 70 w/ pink and black Kspar/chlorite banding
			108.70	108.90			bleaching, silicification, pyrite assoc w/ 5 cm qtz vn at 108.85-108.9
			110.00	112.30			strongly magnetic but no obvious difference from the rest of the rock
			112.30	115.00			sporadic weak magnetism
			122.20	126.60			brecciated, silicified, locally vuggy
126.60	135.45	Sulphide Zone					Black cherty argillite banded w/ pyrite, magnetite, possible pyrrhotite +/- cpy. Well banded @ 70 to CA, very fissile "poker chip" rock

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Description
			126.60	128.50			black argillite banded w/ calcareous layers @ 70. Black bands are moderately magnetic. Widely-spaced 2-3 mm pyrite laminae total <1%
			128.50	128.90			brecciated w/ irreg patches and bands of pale green epidote, patchy magnetism - transitional section to more strongly magnetic below
			128.90	129.40			black magnetite-rich cherty argillite, v. str magnetic, 2% py. Hand spec 129.4
			129.40	129.85			black and white mottled silica-magnetite rock with mesh-textured cpy. Black grains of magnetite are visible within the mesh. 10% py, 5% cpy, very str magnetic
			129.85	135.45			black argillite laminated w/ calcareous layers @ 70. Alternating magnetic/non-magnetic. 3% py. Hand spec 134.9
						135.05	2 cm qtz vn w/ albite selvage @ 45
						135.45	LC sharp @ 80 to CA
135.45	137.70	Green tuff					Siliceous green tuff, massive to brecciated. Mottled green/grey sericitic tuff w/ rare blebs and discontinuous bands of py. 1% py. Non-magnetic
137.70	142.75	Cherty argillite					Black and grey banded chert/magnetite argillite w/ mm scale banding @ 70. Top 30 cm is transitional w/ tuff above. Black bands str magnetic. 2% py as discontinuous bands and blebs @ 70. hand spec 134.9
142.75	146.20	Diorite					Black massive to moderately sheared diorite, same as above. Variably-developed shear fabric at 70. UC strongly sheared @ 70. Equigranular 1-2 mm fspars in black matrix. Weakly magnetic.
146.20	150.76	Andesitic tuff or flow					Dark green, epidotized volcanic, locally brecciated w/ matrix of pale green epidote. 1% blebby py assoc w/ epidote. Local porphyritic textures and bombs of diorite are preserved. Upper contact broken, approx 20 to CA. hand spec 146.5, 148.9
146.20	150.76	Andesitic tuff or flow					

EOH hole shut down due to heavy water flow

**Bell Resources Corp.: Granduc Project- Drill Log DDH-06-11**

 Azimuth 140  
 Dip -70

 Drilled: September 23 to 27, 2006; NQ2 Titan Drilling  
 Logged September 28, 2006 by Tim Sandberg

Collar:

**Easting: 416900 (prior to survey)**  
**Northing: 6233190 (prior to survey)**

Major Interval		Minor Interval			Lithology	Notes	Casing
From	To	From (m)	To (m)	Lithology			
0.00	2.14						Tuffaceous argillite, grey-green tuff w/ brown to grey argillaceous laminae. Abundant ragged-looking qtz-calcite vns generally subparallel to bedding, cut by a weaker set @ 30-40. Shear fabric represented by bdg parallel veins. The hole is generally going down-dip; bedding is low-angle relative to core axis, but varies somewhat with depth: 0-9.5 20 to CA; 9.5-15 30 to CA; 15-16.5 40 to CA; 16.5-18.0 crenulation with axes parallel to core. 18.0-30.0 40 to CA; 30.0-37.3 10-20 to CA. Narrow late extensional quartz veins occur: 8.1 1 cm QV @ 70; 11.5 10 cm Q brx vn @ 30; 15.05 1 cm QV @ 30 w/ tr blebby py; 16.4 1 cm QV @ 60 offset 2 cm by fracture @ 30 to CA; 22.6 2-5 mm qtz vn @ 20.
2.14	37.30			Tuffaceous Argillite			very broken
			25.30	26.00			brecciated chert w/ lots of core loss
			26.00	28.00			brecciated grey chert
			30.00	31.00			blebby py assoc w/ 2 parallel qtz brx vns @ 40 to CA
			31.70	31.85			slaty grey argillite, very fissile, bedding @ 10-20 to CA
			31.85	36.00			slaty green tuff, very fissile, bedding @ 10-20 to CA
			36.00	37.30			
							Black argillite and grey chert w/ minor green cherty tuff beds. Bedding is usually 40 to CA, except near 40.0 m, where it is core parallel. Very broken, significant core loss throughout.
37.30	56.80			Black argillite and grey chert			Grey chert, well bedded @ 40 to CA
			37.30	39.50	grey chert		Graphitic black argillite, locally cherty, minor green cherty tuff. Very broken core. 1% pyrite as blebs and discontinuous bands parallel to laminae at approx 40 to CA
			39.50	49.70	black argillite		interbedded graphitic argillite and black cherty argillite. Graphitic arg is very broken, often gougy, cherty arg is more competent, but often brecciated and filled w/ qtz-calc matrix
			49.70	52.70	argillite		black cherty argillite; competent, but bedding very distorted, often brecciated and filled w/ qtz-calc matrix
			52.70	56.80	cherty argillite		
							Breccia comprising clasts of magnetite and semi-massive pyrite in a quartz-calcite matrix. 5% pyrite, 10% magnetite. UC distinct @ 80 to CA, LC broken. Cut by 2 diabase dykes as noted below.
56.80	63.55			Mineralized breccia			aphanitic light green dyke, contacts @ 90 to CA
			58.70	59.05	green dyke		semi-massive pyrite w/ approx 5% magnetite as clasts within quartz-calcite breccia
			59.60	60.00	semi-massive pyrite		aphanitic light green dyke, contacts @ 50 to CA, but ragged, irregular
			60.20	60.30	green dyke		semi-massive pyrite w/ approx 5% magnetite as clasts within quartz-calcite breccia
			60.70	61.20	semi-massive pyrite		
							Light green tuff, poorly bedded @ 45 to CA
63.55	69.00			Green tuff			sheared @ 40, brecciated, w/ calcite matrix. Lower contact grades into grey chert
			65.90	66.70			gouge

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Casing
			66.70	66.90			
							Grey chert, well bedded @ 40-45 to CA, but often wavy and distorted ( <i>fold axes?</i> ) Apparent rip-up clasts of green tuff appear @ 70.2 and 72.0 - 72.3
69.00	84.80	Grey chert					bedding goes from 45 to core parallel, then steepens again. Probable fold hinge.
			83.2	84.2			
							Grey-green, fine grained diabase dyke, 1 mm chloritized augite and sub 1 mm fspar. Contacts @ 40 to CA
84.80	87.65	Diabase dyke					
							Dark green tuffaceous volcanic w/ cherty interbeds, well bedded @ 40-50 to CA.
87.65	99.50	Dark green tuff					brecciated chert in quartz matrix adjacent to dyke contact
			87.65	87.85			Dark grey chert, well bedded @ 40-50 to CA
			87.85	88.60			bedding parallel shear fabric w/ ragged quartz veins and trace blebby elongate pyrite
			90.00	91.50			5 cm band of mesh-textured pyrite approx 10%
			92.20				Dark grey chert, well bedded @ 40-50 to CA, 2% blebby to laminated pyrite
			92.55	95.20			2 cm qtz-alb vn @ 70 crosscuts fabric
						97.80	
							Black chert, highly sheared w/ boudinaged parallel to bedding @ 40, 5% blebby py laminae
99.50	102.40	Black chert					
							Diorite, dk grn to blk, strong shear fabric, locally bleached. UC @ 40 to CA
102.40	1537.30	Diorite					sheared, mylonitized w/ light feldspathic bands and dark chloritic bands
			102.40	102.90			dk grn to blk, sheared @ 40 w/ anastomosing chlorite bands and augen of feldspatic material, dark chlorite bands are magnetic
			102.90	108.50			1 cm qtz vn @ 60 xcuts shear fabric. 5 cm each side bleached wallrock w/ 1% blebby py. Bleached diorite throughout the hole is non-magnetic; presumably sulphide has been introduced w/ the fluids and the magnetite has been destroyed
						103.70	four parallel qtz vns within this interval, each 2-5 mm, @ 60, xcut shear, assoc w/ bleaching and dis py. Bleached rock non-magnetic
						105.5-106.0	5 cm qtz-albite vn @ 60, bleaching, dis py
						106.90	5 cm qtz brx vn @ 40, bleaching, dis py
						107.80	dk grn, massive to weakly sheared @ 40, very broken, especially 110.7-112.0
			108.50	112.00			diorite, w/ numerous quartz +/- albite vns @ 60, and brecciated silicified sections. Fabric generally obscured by alteration and destroyed the magnetism. Many of the veins and breccias contain bands and patches of a black, massive, aphanitic, non-magnetic mineral
			112.00	133.75			grey magnetic diorite, wk-mod sheared @ 40, very rare qtz vns. Mylonitized sections @ 30 to CA occur at 147.5-147.8; 148.75-148.9; 150.0-150.25; 150.5-151.0. Mylonitization seems to have taken up the strain leaving the rest of the rock relatively massive.
			133.75	154.30			shear fabric increases towards bottom contact. Dark magnetic chlorite bands anastomosing around augen of feldspathic material. Dark bands are magnetic
			154.30	157.30			3 cm qtz-albite vn xcutting shear @ 45 w/ coarse py
						156.30	
							Banded chert-magnetite iron formation layered w/ sections of laminated py +/- pyrrhotite. Occasional greenish bands of tuff. Banding consistently @ 40 throughout
157.30	173.20	Chert-magnetite iron formation					chert laminated w/ qtz/calc bands @ 40, 1% laminated py +/- pyrrhotite, weakly magnetic, somewhat fissile



From	To	Lithology	From (m)	To (m)	Lithology	Notes	Casing
			157.30	159.60			chert, mod magnetic, 2% py/pyrh as laminae and mesh textures
			159.60	163.50			chert, 20% py/pyrh, 10% magnetite. Magnetite appears as dark grains within sulphide mesh. V. str magnetic
			163.50	166.60			chert, weak to mod magnetic, 1-2 mm bands of chert and magnetite, 1% widely-spaced py/pyrh bands. Patchy, irreg epidote replacements, generally fissile rock.
			166.60	170.40			chert, black, v. str magnetic, 10% py/pyrh as laminae and meshes. Cpy noted @ 170.7; 171.8; 172.0; 172.2. LC @ 40, very fissile for 20 cm into FW
			170.40	173.20			
							Green tuff w/ chert laminae in 2-5 mm scale banding @ 40 to CA. Cherty bands are magnetic, tuff is not, overall the rock is weakly magnetic.
173.20	188.10	Green cherty tuff					1% laminated py
			186.40	188.10			
							Grey, massive to moderately banded @ 30 to CA, w/ 2-3 mm fspar phenos in an aphanitic matrix. It may be a tuff with bedding, or a flow or sill with a shear fabric. Weakly magnetic. Ghostly xenoliths of diorite occur 190.0-190.2 and 190.95-191.0
188.10	195.30	Crystal tuff?					
							Massive grey-green lapilli tuff - occasional 2-5 mm rounded lapilli, fsapr phenos, bomb of coarse grained epidotized diorite. Non-magnetic. Network of epidote stringers throughout interval.
195.30	208.20	Green tuff					bomb of coarse grained epidotized diorite
			196.30	196.50			broken bull quartz vein w/ coarse py
			199.90	200.10			5 cm band of 20% py @ 30
						201.30	brecciated, quartz stockwork, broken
			207.00	208.00			gougy green clay fault
			208.00	208.20			
							Diorite - grey, massive to weakly foliated @ 45 to CA. Weak to mod magnetic throughout. Rare stringy, discontinuous qtz/calc vnlets following shear fabric, stronger set of continuous vns xcut fabric @ 30-40. 1% dis py throughout, minor banded py in sheared sections
208.20	219.35	Diorite					very broken, core loss
			208.20	209.00			gougy, broken
			211.35	211.50			very fractured subparallel CA
			212.40	214.70			
							Grey-green to black laminated cherty tuff. 1-2 mm scale tuffaceous, siliceous, sulphide and magnetite laminae @ 30-40 to CA. May be more a shear fabric than bedding. UC sharp @ 35 to CA, LC gradational. 2% blebby to banded py, except for 2-3 cm band of massive py/pyrh at 221.3. Sulphide is strongly magnetic, may be pyrhotite or a mix of pyrite and pyrhotite
219.35	223.35	Cherty tuff					
							Cherty green tuff laminated @ 30-35 to CA 1-2 mm scale w/ silica, sulphide and magnetite. Ripup clasts or boudinaged magnetite occur occasionally, eg 227.1, 225.5 Strongly magnetic throughout. Mineralization varies: 223.5-224.35 - 5% py/pyrh, mod magnetic; 224.35-228.7 - 15% py/pyrh, v str magnetic; 228.7-230.8 - 5% py/pyrh, mod magnetic. No veins to speak of.
223.35	230.80	Mineralized Zone					



# Bell Resources Corp.: Granduc Project- Drill Log DDH-06-12

Azimuth 105  
Dip -57

Drilled: September 29 to October 2, 2006; NQ2 Titan Drilling  
Logged September 30 to October 3, 2006 by Tim Sandberg

Easting: 416900 (prior to survey)  
Northing: 6233190 (prior to survey)

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Description
0.00	0.61						Casing
0.61	21.20	Tuffaceous Argillite					Tuffaceous argillite, grey-green tuff w/ brown to grey argillaceous 2-5 mm laminae. Well bedded @ 40 to CA with a lot of bedding parallel shear and occasional isoclinal folds with axes @ 30-40. Shear planes are marked by boudinaged cherty beds and ragged calcite +/- qtz veins. Non-magnetic, limited sulphide content. Rare late qt-calc veins xcut shear fabric @ 30-60. Core very broken, especially 18.59-19.6
						6.80	crenulation @ 20 to CA, 30 to bedding
						12.70	isoclinal folding @ 40
						14.70	isoclinally folded veins
			16.10	16.20			discontinuous py laminae @ 40
						20.30	py assoc w/ 2 mm quartz stringer @ 40
			20.70	21.20			dis to blebby py assoc w/ qtz vns
			20.00	21.20			becomes increasingly cherty, gradational w/ unit below
21.20	40.60	Grey chert and black argillite					Interbedded grey chert and black argillite. Bedding very highly distorted, often brecciated, but occasionally evident at angles ranging from 10-40 to CA. Box #6 23.85-27.74 got dropped
			21.20	24.80	grey chert		Grey chert, bedded @ 10-40 to CA, fine fracture network w/ 1% dis py. Very broken core. From 23.0-24.8 bedding is very distorted with irregular folding, but gives some sense of a fold hinge @ approx 10 to CA
			24.80	27.60	black argillite		Graphitic black argillite, very fractured subparallel to CA. Bedding and isoclinal folding @ 0-10 to CA 1% dis to blebby pyrite along bedding and fractures
			27.60	34.50	grey chert & black argillite		Grey chert w/ minor black argillite. Very broken core. 27.6-31.0 is brecciated chert in a silica-chlorite matrix, all evidence of bedding destroyed. 1% blebby py in matrix and fractures
			34.50	40.60	grey chert		grey chert; competent, well laminated @ 35-40. 1% blebby py
40.60	43.50	Fault Zone					Fault Zone: clasts of chert breccia w/ calcite matrix in graphitic gouge. UC @ 60, LC @ 50. 1% blebby py within chert clasts
43.50	45.85	Mineralized Zone					brecciated massive pyrite in calcite-chlorite matrix. 20% finely crystalline massive py, tr cpy, sporadically magnetic. The dark chloritic clasts tend to be magnetic, but no magnetite or pyrrhotite was observed. Probably not more than 1% magnetite overall
45.85	47.90	Green tuff					Massive light green tuffaceous volcanic, very sheared to brecciated, very calcareous, locally bedded @ 50. General appearance is alternating calcite and chlorite shear bands. The chloritic bands tend to be magnetic, but no magnetite is visible. 1% py occurs as fine grained disseminations and rare blebs.
47.90	49.25	Diabase dyke					Diabase dyke: narrow pale green chloritized, aphanitic, massive UC @ 60, LC against green tuff indistinct

From	To	Lithology	From (m)	To (m)	Lithology	Notes	Description
49.25	66.70	Green tuff					Pale green tuff, massive to locally bedded, generally calcareous, non-magnetic. Light green chloritic rock w/ calcareous banding @ 60 to CA. Rare bands of dis to blebby py.
						52.65	narrow band of blebby py
			52.75	56.70			1% dis py
			58.30	58.70			1% blebby py
			58.95	59.05			brx w/ blebby py
			59.60	60.05			cherty banding @ 60
			61.70	62.10			brx w/ calcite matrix
			63.50	66.70			increasing shear fabric @ 40 to CA w/ ragged calcite vns
66.70	69.10	Diabase dyke					Diabase dyke - grey, fine grained, 1-2 mm chloritized hornblende phenos. UC @ 90, LC broken. 5-10 cm chill margins at UC and LC contain laminated xenoliths
69.10	118.70	Diorite					Diorite, grey equigranular, mod to well foliated @ 60-70 to CA throughout, typical texture of anastomosing chlorite shears and feldspathic augen. Weak to mod magnetic throughout, although sporadically distributed. The dark chlorite bands tend to be magnetic, while feldspathic patches are not, so the degree of magnetic character depends on the amount of chlorite. Upper contact is broken. Rare calcite vns @ 10-20 to CA, qtz vns @ 40-60 w/ blebby py. Trace amounts of dis py throughout
			69.10	74.00			strongly sheared @ 70 to CA, bleached, silicified, texturally destroyed
			97.70	98.70			slightly brecciated, silicified, tr blebby py
			101.70	102.60			brecciated, silicified, non-magnetic
						103.50	5 cm qtz vn @ 45
						111.60	6 cm qtz vn @ 40
			117.20	118.70			very strongly sheared, well foliated @ 70
118.70	133.00	Magnetite-bearing tuff					Tuffaceous volcanic - dark green to black, banded to massive, rare pyritic laminae @ 60 - 70 to CA. Weak to moderately magnetic throughout, except for widely-spaced pyrite-magnetite bands, which are strongly magnetic. The upper contact with diorite is not distinct - foliated, perhaps mylonitized diorite grades into foliated tuff. I drew the contact at a bit of a textural change where the feldspar augen finally disappear and pyrite laminations begin. Detailed descriptions of internal intervals below:
			118.70	122.25			Well laminated or foliated @ 70 to CA with 2-5 mm dark green chloritic bands and black magnetite or magnetite-rich argillite bands. Not at all cherty. 1-2 mm epidotized fspar phenos are visible. 2% banded py, except 118.5-120.0, 121.0-121.1, 121.7-121.8, which have 10%. Weak to mod magnetic, except for py bands, which are strongly magnetic.
			122.25	126.00			massive black tuffaceous volcanic, 2% py except for minor banded interval at 124.5-125.2 w/ 5% py. Tuffaceous texture shown by epidotized feldspars between 123.8-124.0. Whole interval cut by narrow, irreg veins, bands and blotches of epidote. Weakly magnetic throughout.
			126.00	128.70			Similar to 118.7-122.25, well laminated or foliated @ 70 to CA, fissile 'poker-chip' rock with traces of tuffaceous texture shown by epidotized feldspars. Weakly magnetic, except strongly magnetic 126.7-126.8 band of py w/ cpy and 127.7-127.8 band of py + pyr. A 10 cm gouge seam occurs 126.9-127.0.



**Appendix IV**  
**Geochemical Analyses**

**Part 1: Analyses of Field Standards**

**Part 2: Assay Certificates**

**Part 3: Analyses correlated with sample intervals**

**Appendix IV; Part 1**  
**Geochemical Analyses**

**Analyses of Field Standards**

Two samples of ore grade material from the Granduc mine were crushed, homogenized and split into aliquots. Four aliquots of each were submitted to 4 independent analytical facilities for assay grade analysis of copper, cobalt and silver.

The tabulated results all fall within 2 sigma standard deviation and the mean was reported for quality control of drill core analyses.





**Appendix IV: Part 2**  
**Geochemical Analyses**

**Acme Analytical Assay Certificates**

Microsoft Excel (.csv) files as received from Acme Analytical.

ELEMENT	Au**
SAMPLES	gm/mt
G-1	<.01
330301	<.01
330302	<.01
330303	0.01
330304	0.23
330305	0.05
330306	0.06
330307	0.04
330308	0.03
330309	0.05
RE 330309	0.05
RRE 330309	0.07
330310	0.12
330311 (pulp)	0.2
330312	0.05
330313	0.02
330314	0.03
330315	0.04
330316	0.1
330317	<.01
330318	0.01
330319	0.03
330320	0.17
330321	0.08
330322 (rock)	<.01
330323	0.09
330324	0.25
330325	0.2
330326	0.13
330327	0.1
330328	0.13
330329	0.16
330330	0.11
330331 (pulp)	0.21
330332	0.24
STANDARD O*	5.84
G-1	<.01
330333	0.6
330334	1.64
330335	0.45
330336	0.43
330337	0.14
330338	0.19
330339	0.85
330340	0.03
RE 330340	0.03
RRE 330340	0.04
330341	0.05
330342	0.08
330343	0.01
330344	0.05
330345 (rock)	0.01
330346	0.21
330347	0.13
330348	<.01
330349	0.01
330350	0.02
330351	0.31
330352	0.02
330353	0.09
330354	0.11
330355	0.04
330356	0.01
330357	0.01
330358	0.02
330359	0.02
330360	0.06
330361	0.06
330362	0.03
330363	0.01
330364	0.09
STANDARD O*	5.79
G-1	<.01
330365	0.11
330366	0.04
330367	<.01
330368	0.02
330369	0.17
330370	0.02
330371	0.11
330372	0.03
330373	0.02
330374 (pulp)	0.26
330375	<.01
330376	0.3
330377	<.01
330378 (rock)	<.01
330379	<.01
330380	<.01
RE 330380	<.01
RRE 330380	<.01
330381 (pulp)	0.2
330382	<.01
330383	<.01
330384	0.02
330385	<.01
330386	<.01
330387	<.01
330388	0.01
330389	0.03
330390 (rock)	<.01
330391	<.01
330392	<.01
330393	<.01
330394	<.01
330395	<.01
330396	<.01
STANDARD O*	5.81
G-1	<.01
330397	<.01
330398	<.01
330399	<.01
330400	<.01
330401	<.01
330402	<.01
330403	0.02
330404 (pulp)	0.19
330405	<.01
330406	<.01
330407	0.03
330408	0.03
330409	0.05
330410	<.01
330411	<.01
330412	<.01
330413	0.01
330414	0.01
330415	<.01
330416	0.03
330417	<.01
330418 (rock)	<.01
330419	<.01
330420	<.01
330421	<.01
330422	<.01
330423	<.01
330424	<.01
330425	<.01
RE 330425	<.01
RRE 330425	<.01
330426	<.01
330427	<.01
330428 (pulp)	0.23
STANDARD O*	5.72
330429	0.03
330430	0.04
330431	0.04
330432	0.04
330433	0.04
330434	0.18
STANDARD O*	5.82

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S	Rb	Hf	
G-1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
330301	1	4	25	43	5	5	14	776	2.45	11	4.1	8.1	769	0.5	<5	196	5.5	2.87	0.1	22	7	0.77	1964	0.25	2.83	2.81	1.1	20.3	46	1.3	12.9	21.3	1.7	<5	5	34	5	114	0.7	
330302	1	64	34	197	<5	31	5	1965	4.27	11	1.1	1.5	163	0.5	<5	196	7.56	0.1	8	32	1.52	1834	0.31	6.02	0.74	1.31	1.1	20.7	46	1.3	12.9	21.3	1.7	<5	5	20	3	40	<5	
330303	1	58	9	74	<5	47	33	2679	7.61	8	<5	1	177	<5	<5	167	9.4	0.17	12	32	2.98	455	1.32	6.91	0.86	1.87	0.8	3.1	28	1.6	17	13.5	1.2	<5	16	31	<5	67	<5	
330304	6	1820	106	3971	2.4	21	16	194	19.9	1.2	2	1.6	194	0.2	<5	202	14.6	0.22	106	142	8.09	2.69	2.1	10.6	1.42	0.8	2.7	21	1.3	14.1	1.3	<5	21	31	<5	60	0.6			
330305	21	9142	11	3433	11.5	24	92	281	33.49	12	1	0.4	28	15.9	0.6	258	4.8	0.02	11	198	11	11	0.4	0.66	0.03	0.25	<5	10	66	<5	2.1	1.9	<5	<5	<5	<5	<5	<5	<5	
330306	104	4358	317	2651	5.4	18	68	938	21.1	23	1.3	<5	3	12.2	1.3	<5	145	4.79	0.02	188	9	0.02	3.37	0.03	0.03	<5	6.3	2.2	<5	1.8	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
330307	140	6188	41	942	7.8	33	78	1842	25.54	9	13.9	1.1	53	3.8	1.1	<5	250	6.25	0.04	3164	13	3.69	6	0.02	1.35	0.03	0.03	<5	11.8	3615	1.1	17.9	2	<5	<5	<5	<5	<5	<5	
330308	86	5622	12	408	6.5	23	66	810	15	2.7	2.2	<5	101	3.15	0.02	68	14.11	0.01	141	77	0.01	0.24	0.02	0.02	<5	4.7	79	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
330309	90	6361	4	714	7.9	32	143	1172	27.52	84	1.2	<5	23	3.8	2	<5	215	3.85	0.02	272	10	1.99	11	0.03	0.47	0.02	0.06	<5	5.1	312	<5	2	<5	<5	<5	<5	<5	<5	<5	<5
RE 330309	65	5100	204	691	5.6	35	111	2124	18.54	48	2.9	1.5	166	3.3	3.1	<5	229	4.75	0.12	555	13	2.6	873	0.35	5.43	1.46	1.39	0.8	4.6	654	1.5	12.2	2.5	<5	<5	<5	<5	<5	<5	<5
330310	67	5127	214	688	5.7	33	113	2117	19.07	48	3	1.5	174	4	3.5	<5	206	4.78	0.11	555	11	2.63	883	0.36	5.42	1.45	1.4	0.6	4.8	613	1.5	12.9	2.1	<5	<5	<5	<5	<5	<5	<5
330311	72	5359	211	733	5.7	38	111	2149	19.27	40	3.1	1.5	171	3	3.5	<5	240	4.89	0.11	573	21	2.62	837	0.36	5.3	1.41	1.39	0.6	3.9	670	1.2	12.7	1.8	<5	<5	<5	<5	<5	<5	<5
330312	19	10665	51	594	10.4	61	148	2201	24.64	18	4.2	1.6	172	4.4	4	<5	329	4.55	0.25	338	17	1.96	463	0.27	4.04	0.11	1.33	21.4	7.2	393	1.4	13.2	2.6	<5	<5	<5	<5	<5	<5	<5
330313	14	18373	514	2628	15.7	79	81	1243	10.63	54	1.2	2.7	111	2.3	<5	185	3.78	0.11	38	116	2.39	545	0.34	6.01	1.48	1.8	7.7	15.7	48	1.3	12.2	4.7	<5	<5	<5	<5	<5	<5	<5	<5
330314	29	4580	26	321	3.5	26	52	2574	10.89	11	4.3	1.4	370	1.1	3.8	<5	265	5.92	0.23	290	10	2.04	1042	0.5	8.08	1.49	1.8	1.1	6.2	331	2.8	18.2	3	<5	<5	<5	<5	<5	<5	<5
330315	63	2748	83	385	2.6	28	58	2304	11.65	21	2.7	1.6	313	1.6	4.1	<5	309	5.17	0.15	32	17	2.12	1563	0.43	7.16	1.02	2.35	1	7.8	39	1.9	18	3.7	<5	<5	<5	<5	<5	<5	<5
330316	19	2245	98	622	2.1	36	87	1093	19.03	43	2.7	2	65	2.5	1.4	<5	363	1.09	0.09	46	28	0.79	1154	0.24	3.5	0.61	1.55	1	14.7	57	1.3	14.8	4.3	<5	<5	<5	<5	<5	<5	<5
330317	19	4271	146	530	3.8	51	170	1069	8.07	77	4.7	2.4	96	2.4	1.3	<5	338	1.51	0.19	34	28	1.12	471	0.38	5.16	0.92	2.26	1.2	19.1	48	1.1	23.3	4.3	<5	<5	<5	<5	<5	<5	<5
330318	22	10003	81	536	9.1	52	92	1932	16.4	28	2.4	2.3	198	85	1.5	<5	198	85	1.5	23	104	1.88	2.62	3.9	0.5	1.34	0.6	5.9	235	1.1	11.7	3.9	<5	<5	<5	<5	<5	<5	<5	
330319	8	557	289	664	0.9	55	43	1097	4.17	39	1.5	1.6	126	3.2	0.8	<5	135	2.6	0.08	13	75	1.37	1553	0.27	4.47	1.28	0.7	6.4	18	0.6	13.9	3.5	<5	<5	<5	<5	<5	<5	<5	
330320	11	468	288	1.6	1.8	1.35	2.9	0.9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
330321	40	1857	451	1587	2.3	51	41	1162	4.97	42	1.3	2.1	160	7.7	1.1	<5	183	2.42	0.11	23	80	2.15	1394	0.36	5.46	1.61	1.59	14.8	6	34	0.9	16.8	4.3	<5	<5	<5	<5	<5	<5	<5
330322	9	11455	141	4608	11.9	71	75	1222	14.91	31	1.3	1.7	107	19.4	2.6	<5	215	2.53	0.09	46	99	1.93	501	0.27	4.15	1.07	1.22	14	3.4	61	1	11.7	3.1	<5	<5	<5	<5	<5	<5	<5
330323	23	2713	73	392	3.1	39	46	1200	11.54	31	1.7	2.2	125	1.4	0.9	<5	223	2.52	0.11	106	80	1.93	2863	0.3	4.42	0.97	1.56	0.7	4.4	126	1.1	13.2	4.2	<5	<5	<5	<5	<5	<5	<5
330324	1	2485	27	489	2.7	4	5	1485	10.09	40	2.3	2.6	89	1.4	1.3	<5	199	2.64	0.09	251	81	2.26	1102	0.26	3.85	0.37	1.42	0.5	4.1	308	0.9	11.5	3.9	<5	<5	<5	<5	<5	<5	<5
330325	10	13971	20	1523	23	60	103	1466	12.97	47	1.9	1.7	101	5.6	1.5	<5	204	2.62	0.11	69	103	1.88	537	0.27	5.4	1.54	0.5	4.2	584	1.7	15.4	5.1	<5	<5	<5	<5	<5	<5	<5	
330326	3	28091	20	2401	33.8	87	110	1702	20.57	12	3.3	3.1	115	11	2.3	<5	255	3.87	0.1	582	81	2.12	392	0.17	3.06	0.09	0.89	0.5	3.1	697	1.1	10	2.5	<5	<5	<5	<5	<5	<5	
330327	11	15301	16	1118	5.6	101	110	1734	21.86	26	4.3	5	117	3.9	1.7	<5	322	3.41	0.14	963	53	2	1051	0.22	3.61	0.38	1.03	0.7	4.3	1129	1	13.1	3.1	<5	<5	<5	<5	<5	<5	
330328	4	7538	13	1264	9	34	77	1541	14.26	56	3.3	5	106	5.2	1	<5	256	2.88	0.14	622	34	1.46	1621	0.34	4.03	0.72	1.33	0.5	5.5	731	1.1	15.9	5.1	<5	<5	<5	<5	<5	<5	
330329	5	22341	19	1815	27.7	69	100	295	1815	22	2.6	2.1	211	1.2	0.3	<5	291	10.4	0.11	100	47	1.2	254	0.1	1.4	2.5	24.2	3.6	14.2	4.8	<5	<5	<5	<5	<5	<5	<5	<5	<5	
330330	5	15991	36	1472	6.9	43	155	1815	15.69	77	2.7	2.6	171	5.9	1.7	<5																								

STANDARD SF	328	7055	9114	12602	67.6	3630	116	4625	8.37	25	2.7	4.1	404	54	50.8	5.5	69	3.02	0.06	16	2213	4.4	465	0.18	4.66	1.87	2.11	1.2	9.3	27	6.4	12	13.8	1 <5	8	21	3.1	74	0.6
G-1	<.5	3	26	57 <.5	4	4	4	797	2.58 <5	4.2	9	9	851 <.5	<.5	<.5		51	2.77	0.09	27	21	0.76	994	0.24	8.88	2.73	3.11 <.5		9.2	51	1	14.9	22.4	1.9 <5	6	40 <.5	125	0.7	
330429	19	1490	123	649	1.6	16	36	1618	8.73	18	3	2.9	309	2.8	4.3 <.5		163	4.09	0.1	69	8	1.67	1288	0.48	8.07	1.47	3.52	1.3	109.7	100	2.7	30.6	30.7	2.3 <.5	11	32 <.5	90	2.9	
330430	16	4670	19	618	5.2	26	96	2766	24.64	77	16	7.8	124	1.8	5 <.5		315	6.46	0.07	2880	16	2.76	72	0.17	2.91	0.04	0.58	1.3	49.2	2969	2.8	29.2	11.7	1.3 <.5	<.5	20	0.9	22	2.7
330431	5	6156	27	2712	6.1	24	44	2138	23.69	14	3.2	0.7	180	13.1	4.9 <.5		233	4.01	0.15	130	17	2.2	927	0.35	5.31	0.73	2.58	1.2	7.8	135	2.1	15.3	3.1 <.5	<.5	9	22	1	64 <.5	
330432	4	2102	56	265	2.1	21	38	2102	8.99	131	4.1	1	312	0.6	5.2 <.5		210	5.87	0.19	74	12	1.43	2540	0.53	8.64	1.94	2.68	2.2	5.9	81	2.9	18.8	3.6 <.5	<.5	13	42	0.5	61 <.5	
330433	6	3720	32	426	3.8	26	59	2848	16.33	24	3.1	1.3	250	0.8	4.9 <.5		291	4.7	0.16	170	21	2.3	1104	0.47	7.08	1	2.51	0.8	4.5	180	3.2	16.8	2 <.5	<.5	18	48	0.7	73 <.5	
330434	21	12020	55	784	11.9	46	96	1566	22.57	54	3.3	2.2	106	3.4	4.4 <.5		294	3	0.17	169	30	1	635	0.24	3.36	0.45	1.44 <.5		9.8	144	1.3	14	2.9 <.5	<.5	7	22	1.7	42 <.5	
STANDARD SF	341	7197	9425	13296	69.6	3614	117	4626	8.49	24	2.8	4.4	409	53.4	55.2	4.2	61	3.1	0.06	17	2418	4.56	346	0.18	5.26	1.89	2.34	1.2	9	25	6.5	11.9	13	1 <.5	7	22	3.3	78 <.5	

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
G-1	<.5												4.1	78	<.5	<.5		39	0.64	0.084	9	7.7	0.62	252	0.167	1.04	0.12	0.58	<.5		2.9	<.5		5
330435	7.4	6467	218	1296	6.8	45.6	134.4	1475	11.28	106	<.5	<.5		37	5.5	4.5	176	2.46	0.111	10.9	40.9	1.37	552	0.238	2.32	0.02	1.34		0.11	6.9	<.5	2.5	13	5
330436	5	4459	325	1533	5.1	50.5	91	1460	6.67	55	<.5	<.5		34	7	2.4	143	1.78	0.13	1.6	71.6	1.83	648	0.325	2.71	0.04	1.64	<.5	0.17	7.1	<.5	1.7	11	3
330437	3.3	25228	89	8016	28.7	95.2	126.1	1645	12.66	46	<.5	<.5		56	37.2	7.7	161	2.75	0.15	21.4	36.7	1.69	982	0.303	2.88	0.03	1.6	0.6	0.73	5.6	<.5	4.3	14	13
330438	14.3	17656	123	2126	20.1	55.5	101.2	1462	11.69	100	<.5	<.5		35	10.1	11.4	181	2.41	0.107	8.3	89.5	1.79	1019	0.259	2.43	0.03	1.79	<.5	0.23	6.7	<.5	2.4	12	7
330439	16	28748	27	6107	31.8	61.7	88.9	1689	15.82	77	<.5	<.5		32	26.5	21.2	168	3.01	0.11	10.2	26.1	1.52	814	0.215	2.26	0.02	1.74	<.5	0.49	3	<.5	3.5	13	13
330440 (rock) <.5		154	4	79	<.5	2.7	8.1	433	2.55	<.5			4.7	44	<.5	<.5	67	0.49	0.087	13.5	11.7	0.72	535	0.209	0.92	0.13	0.64	<.5		2.8	<.5	<.5	5	<.2
330441	17.6	23945	436	16627	30.8	69.6	189.8	1191	9.42	2183	0.5	<.5		31	78.1	31	153	1.85	0.089	5.5	33.3	1.07	526	0.201	1.7	0.02	0.96	0.5	0.87	4.2	<.5	4.1	9	14
330442	15.9	9936	372	3168	12.1	42.3	107.7	1100	10.88	162	0.5	<.5		28	16.6	5.9	166	1.41	0.101	13.1	34	1.13	406	0.229	1.54	0.02	0.69	0.5	0.19	3.5	<.5	1.7	12	5
330443	10.4	14360	43	1847	16.4	54.9	109.1	1345	13.05	145	<.5	<.5		27	8	9.2	182	1.45	0.16	21.8	47.2	1.63	683	0.342	2.07	0.02	1.26	0.7	0.15	3.7	<.5	2	12	5
330444	16	12157	41	1634	14.9	33.4	59.3	1088	10.24	84	<.5	<.5		39	7.3	6.1	134	1.92	0.142	12.1	29.6	1.19	218	0.222	1.61	0.02	0.37	0.8	0.16	2.5	<.5	1.6	12	5
330445	15.4	15355	14	3755	19.3	42.6	63.4	1235	10.7	84	<.5	<.5		47	17.6	6.6	118	1.87	0.162	11	26	1.01	289	0.182	1.37	0.02	0.34	0.8	0.36	2.9	<.5	2.3	13	8
330446	26.8	13639	36	3956	16.8	42.4	94	908	8.59	112	0.5		0.5	37	18	5.1	106	1.76	0.119	25.8	31.2	0.81	224	0.152	1.12	0.01	0.28	<.5	0.29	2.7	<.5	2	9	6
330447	8.5	20296	37	3756	25.6	49.8	77.9	1522	11.21	71	<.5	<.5		43	17.8	4.7	125	1.65	0.144	18.3	23.4	1.56	318	0.215	2.18	0.03	0.66	0.6	0.38	2.7	<.5	2.5	15	9
330448	2	31065	40	26552	40.3	78.8	131.8	1444	25.05	272	<.5	<.5		57	127.2	14.2	208	3.98	0.05	14	11.8	0.34	136	0.024	0.43	0.01	0.09	<.5	2.54	1.5	<.5	7	15	25
330449	1.2	25163	52	21471	31.6	63.7	105.1	1594	23.76	126	<.5	<.5		62	95	10.8	223	4.35	0.048	12.3	14.8	0.46	155	0.031	0.61	0.01	0.13	<.5	1.93	1.9	<.5	4.6	15	18
330450	9.6	3627	49	2397	4.9	29.2	48	1486	6.88	102	<.5	<.5		59	11.7	2.9	146	1.67	0.148	4.2	19.5	1.62	462	0.358	2.44	0.03	0.81	0.8	0.19	3.2	<.5	0.8	12	<.2
330451	8.9	1505	60	1295	1.8	25.2	46.8	1918	6.86	46	<.5	<.5		79	3.9	1.9	133	2.1	0.195	2.4	38.5	2.15	269	0.348	3.16	0.02	0.84	0.7	0.08	4.4	<.5	<.5	17	<.2
330452	1.2	1241	26	744	1.5	7.6	9.1	918	2.45	17	<.5	<.5		120	3.1	2.6	45	3.96	0.083	0.8	8.1	0.52	42	0.105	1.45	0.01	0.1	<.5	0.07	2.5	<.5	<.5	6	<.2
330453	2.5	1033	24	1057	1.3	19.8	19.3	1487	5.35	20	<.5	<.5		136	3.8	3.1	84	2.3	0.185	1.8	14.4	1.5	142	0.273	2.68	0.01	0.45	1.1	0.09	3.1	<.5	<.5	15	<.2
330454	9	4946	90	2888	6	33.8	52	1924	6.88	41	<.5	<.5		72	11.4	1.5	147	3.14	0.094	2	124.5	1.87	319	0.284	2.69	0.02	0.85	<.5	0.21	8.2	<.5	0.9	15	3
330455	54.9	6254	175	3255	8.4	36.8	75.5	1503	8.34	77	<.5	<.5		140	23.7	10.7	140	2.37	0.107	5.5	66	1.72	363	0.236	2.66	0.02	0.93	<.5	0.19	6.6	<.5	0.9	17	4
330456	63.3	6360	266	1762	8.7	32.2	58.8	1295	14.69	93	0.5	<.5		43	9.2	3.1	185	2.47	0.115	8.4	33	1.06	301	0.21	1.75	0.02	0.75	<.5	0.18	5.6	<.5	0.9	15	4
330457 (pulp)	13.1	18288	411	1961	13.6	54.2	69.7	843	8.68	89	0.8	1.5		53	11.6	1.2	105	1.88	0.108	9.4	78.4	1.34	213	0.199	1.79	0.05	0.72	1.2	0.37	5.2	<.5	2.5	8	8
330458	31.9	17400	51	1874	21.9	49.4	70.6	1257	26.61	36	<.5	<.5		27	9.4	3.7	244	1.21	0.081	11.8	21.3	0.82	158	0.138	1.41	0.01	0.52	<.5	0.32	3.3	<.5	2.5	18	7
330459	55.3	6545	82	356	6.9	41.5	52.8	923	13.12	54	0.6	<.5		24	1.8	4.3	164	0.96	0.088	9.8	31	0.95	306	0.181	1.55	0.02	0.79	<.5	0.06	3.2	<.5	1.2	11	4
330460	12.1	16384	224	2194	17.4	72	108.8	1068	8.66	124	<.5	<.5		33	10	3.6	150	1.27	0.12	3	29.3	1.4	666	0.228	2.11	0.03	1.5	<.5	0.35	3.5	<.5	2.3	11	8
330461	16.3	1030	263	1673	1.7	35.9	22.2	764	2.86	44	0.5		0.5	27	7.2	2.5	158	1.21	0.107	3	44.4	1.16	520	0.207	1.46	0.04	0.73	0.5	0.19	6.5	<.5	<.5	7	3
330462	5.4	390	66	573	<.5	21	1103	5.05	26	44	<.5	<.5		146	1.8	2.3	146	1.62	0.16	1.5	26.3	1.5	928	0.309	2.49	0.03	1.26	0.9	0.08	3.6	<.5	<.5	10	<.2
330463 <.5		20	2	82	<.5	9	14.3	858	3.59	<.5			0.7	72	<.5	<.5	37	3.18	0.204	10.5	22.2	1.34	92	0.163	1.76	0.03	0.25	<.5	0.8	4.5	<.5	<.5	8	<.2
330464	6.1	3036	451	1116	3.1	44.8	57.1	874	4.87	64	<.5	<.5		122	4.7	0.6	132	1.56	0.125	1.5	101	1.86	368	0.297	2.26	0.05	1	0.5	0.09	4.8	<.5	0.6	12	3
330465	8.8	15233	403	1527	14	49.4	53.8	837	5.42	44	<.5	<.5		43	7.9	0.9	99	2.68	0.108	2	71.2	1.39	224	0.241	1.76	0.05	0.63	0.6	0.14	3.7	<.5	2	9	7
330466	15.8	16764	412	1865	17	62.7	65.1	1068	6.69	43	<.5	<.5		62	9	0.6	98	3.88	0.096	2.7	85.2	1.72	277	0.211	2.24	0.03	0.72	0.5	0.23	4.1	<.5	1.9	11	7
RE 330466	16.6	16668	404	1973	16.1	61.7	68.2	1066	6.51	48	<.5	<.5		62	9.8	0.8	99	3.84	0.094	2.8	90.4	1.72	292	0.211	2.23	0.03	0.71	0.6	0.23	4.1	<.5	2	11	7
RRE 330466	14.9	18514	421	2090	17.3	64.8	70.2	1093	7.01	45	<.5	<.5		66	11	0.7	98	3.93	0.094	3	89.7	1.77	288	0.211	2.3	0.03	0.69	0.5	0.25	3.9	<.5	2.1	12	9

Acme file # A602645 Page 1 Received: JUN 8 2006 \* 57 samples in this disk file.

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

ELEMENT	Au**	Sample
SAMPLES	gm/mt	kg
330435	0.11	1.55
330436	0.05	1.38
330437	0.28	3.16
330438	0.35	1.27
330439	0.21	2.11
330440 (rock) <.01		0.66
330441	0.87	1.78
330442	0.13	1.65
330443	0.18	3.77
330444	0.11	2.95
330445	0.11	2.47
330446	0.11	2.25
330447	0.17	2.87
330448	0.43	1.22
330449	0.27	1.19
330450	0.07	2.37
330451	0.02	1.73
330452	0.15	2.85
330453	0.02	3.17
330454	0.04	2.66
330455	0.05	1.45
330456	0.05	1.51
330457 (pulp)	0.11 -	
330458	0.2	3.45
330459	0.05	2.57
330460	0.13	2.11
330461 <.01		1.75
330462 <.01		1.81
330463 <.01		2.93
330464	0.02	2.55
330465	0.09	1.57
330466	0.58	0.98
RE 330466	0.73 -	
RRE 330466	0.35 -	
STANDARD Ox	5.79 -	
330467	0.04	2.27
330468 (rock) <.01		0.65
330469	0.05	1.78
330470 <.01		1.21
330471 <.01		1.35
330472 <.01		1.09
330473 <.01		1.85
330474 <.01		3.21
330475 <.01		3.52
330476 <.01		2.48
330477	0.02	2.55
330478 (pulp)	0.32 -	
330479 <.01		2.93
330480 <.01		2.85
330481 <.01		3.25
330482 <.01		3.57
330483 <.01		1.59
330484	0.01	1.41
330485 <.01		1.66
330486 <.01		1.59
RE 330486 <.01	-	
RRE 330486 <.01	-	
330487 <.01		3.08
STANDARD Ox	5.82 -	

To Bell Resources Corp.

Acme file # A602924 Page 1 Received: JUN 21 2006 \* 129 samples in this disk file.

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

ELEMENT	Au**	gm/mt	
SAMPLES			
G-1	<.01		
329501	0.14		DDH06-4
329502	0.08		DDH06-4
329503	0.06		DDH06-4
329504	<.01		DDH06-4
329505	0.07		DDH06-4
329506	0.07		DDH06-4
329507	0.09		DDH06-4
329508	0.82		DDH06-4
329509	<.01		DDH06-4
329510 (pulp)	0.21		std
329511	0.01		DDH06-4
329512	<.01		DDH06-4
329513	<.01		DDH06-4
329514	0.11		DDH06-4
329515	0.09		DDH06-4
329516	0.03		DDH06-4
329517	0.51		DDH06-4
329518	0.03		DDH06-4
329519	0.37		DDH06-4
329520 (rock)	<.01		blank
329521	0.01		DDH06-4
329522	<.01		DDH06-4
329523	0.01		DDH06-4
329524	<.01		DDH06-4
RE 329524	0.01		DDH06-4
RRE 329524	<.01		DDH06-4
329525	<.01		DDH06-4
329526	0.01		DDH06-4
329527	<.01		DDH06-4
329528	<.01		DDH06-4
329529	0.01		DDH06-4
329530	0.02		DDH06-4
329531	<.01		DDH06-4
329532	0.01		DDH06-4
STANDARD Ox	5.81		STANDARD OxL34
G-1	<.01		G-1
329533 (pulp)	0.37		std
329534	<.01		DDH06-4
329535	0.09		DDH06-4
329536	0.06		DDH06-4
329537	0.02		DDH06-4
329538	<.01		DDH06-5
329539	<.01		DDH06-5
329540	<.01		DDH06-5
329541	<.01		DDH06-5
329542	0.01		DDH06-5
329543 (rock)	<.01		std
329544	0.01		DDH06-5
329545	<.01		DDH06-5
329546	<.01		DDH06-5
329547	<.01		DDH06-5
329548	<.01		DDH06-5
329549	<.01		DDH06-5
RE 329549	<.01		DDH06-5
RRE 329549	<.01		DDH06-5
329550	0.01		DDH06-5
329551	<.01		DDH06-5
329552	<.01		DDH06-5
329553	<.01		DDH06-5
329554	0.12		DDH06-5
329555	0.03		DDH06-5
329556	0.02		DDH06-5
329557	0.03		DDH06-5
329558	0.04		DDH06-5
329559	0.21		DDH06-5
329560	0.04		DDH06-5
329561	0.17		DDH06-5
329562	0.13		DDH06-5
329563	0.1		DDH06-5
329564 (pulp)	0.2		std
STANDARD Ox	5.69		STANDARD OxL34
G-1	<.01		G-1
329565	<.01		DDH06-5
329566	<.01		DDH06-5
329567	0.06		DDH06-5
329568	<.01		DDH06-5
329569 (rock)	<.01		blank
329570	0.09		DDH06-5
329571	<.01		DDH06-5
329572	0.03		DDH06-5
329573	0.02		DDH06-5
329574	<.01		DDH06-5
329575	0.03		DDH06-5
329576	<.01		DDH06-5
329577	0.02		DDH06-5
329578	0.02		DDH06-5
329579	<.01		DDH06-5
329580	0.04		DDH06-5
329581	0.04		DDH06-5
329582	0.03		DDH06-5
329583 (pulp)	0.22		std
329584	0.03		DDH06-5
329585	<.01		DDH06-5
329586	<.01		DDH06-5
329587	0.51		DDH06-5
329588	0.31		DDH06-5
329589	0.29		DDH06-5
329590	0.14		DDH06-5
329591	0.08		DDH06-5
329592	0.44		DDH06-5
329593	0.07		DDH06-5
RE 329593	0.06		DDH06-5
RRE 329593	0.11		DDH06-5
329594	0.25		DDH06-5
329595	0.12		DDH06-5
329596	0.12		DDH06-5
STANDARD Ox	5.73		STANDARD OxL34
G-1	<.01		G-1
329597	0.04		DDH06-5
329598	0.03		DDH06-5
329599	0.17		DDH06-5
329600	0.08		DDH06-5
329601	0.1		DDH06-5
329602	0.05		DDH06-5
RE 329602	0.05		DDH06-5
RRE 329602	0.04		DDH06-5
329603	0.02		DDH06-5
329604 (rock)	<.01		blank
330488	<.01		DDH06-5
330489	<.01		DDH06-5
330490	<.01		DDH06-5
330491 (rock)	<.01		blank
330492	<.01		DDH06-5
330493	<.01		DDH06-5
330494	0.02		DDH06-5
330495	0.09		DDH06-5
330496	0.01		DDH06-5
330497	0.41		DDH06-5
330498	<.01		DDH06-5
330499	0.01		DDH06-5
330500	<.01		DDH06-5
STANDARD Ox	5.76		STANDARD OxL34

Table with columns for ELEMENT, SAMPLES, and various chemical elements (Cu, Pb, Zn, Ag, Ni, Co, Fe, As, U, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, Al, Na, K, W, Zr, Ce, Sn, Y, Nb, Ta, Be, Sc, Li, S, Rb, Hf, Pb, Bi, Po, At, Rn, Fr, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr). Rows list various sample IDs and their corresponding concentrations for these elements.



Acme file # A603360 Page 1 Received: JUL 5 2006 \* 72 samples in this disk file.

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

ELEMENT	Au**	Sample	
SAMPLES	gm/mt	kg	
G-1	<.01	-	
329605		0.01	2.5
329606	<.01		2.8
329607		0.02	2.8
329608		0.01	2.9
329609		0.01	1.4
329610		0.01	1.2
329611		0.01	2.8
329612	<.01		2.5
329613		0.01	3
329614		0.02	2.9
329615 (pulp)		0.15	-
329616		0.01	2.8
329617		0.01	2.9
329618		0.01	2.5
329619		0.02	2.6
329620		0.01	2.5
329621 (rock)		0.01	0.5
329622		0.02	2.5
329623		0.01	2.5
329624		0.01	2.7
RE 329624		0.01	-
RRE 329624		0.01	-
329625		0.01	2.8
329626		0.01	2.5
329627		0.01	2.8
329628		0.01	2.8
329629		0.03	2.5
329630		0.02	3
329631		0.01	2.8
329632		0.01	2.7
329633 (pulp)		0.33	-
329634		0.01	3
329635		0.01	2.8
329636		0.02	1.2
STANDARD Ox		5.72	-
G-1	<.01	-	
329637		0.01	1.2
329638	<.01		2.7
329639		0.01	2.7
329640		0.01	2.9
329641	<.01		3
329642 (rock)		0.01	0.7
329643	<.01		2.7
329644		0.01	2.5
329645		0.01	2.5
329646		0.01	2.4
329647		0.01	2.5
329648		0.01	2.5
329649		0.01	2.7
329650	<.01		3
329651	<.01		2
329652		0.01	2.7
329653	<.01		2.7
329654	<.01		2
329655	<.01		2.7
329656 (pulp)		0.16	-
329657		0.01	3
329658		0.01	2.4
329659	<.01		2.3
329660	<.01		2.5
RE 329660	<.01	-	
RRE 329660	<.01	-	
329661		0.01	2.5
329662	<.01		1.1
329663	<.01		1.1
329664	<.01		2.7
329665	<.01		3.8
329666	<.01		2.5
329667	<.01		3.1
329668 (rock)	<.01		0.7
STANDARD Ox		5.7	-
329669		0.01	2.8
STANDARD Ox		5.7	-

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S	Rb	Hf	
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
G-1	1.3	4	19.8	56 <5	11.1	11.1	4	828	2.48 <5	5.6	773 <5	3.3	5.6	277	0.8 <5	48	3.2	0.09	20	101	0.74	893	0.231	7.65	3.29	1.81	1	15.9	13.4	23.6	1.6	13.2	23.6	1.6	5	39.3 <5	64.2	0.8			
329605	2.4	54.7	20.1	806 <5	13.8	4	1003	4.07	36	1.1	277	1.1	1.1	277	3	0.8 <5	128	6.77	0.12	10	43.2	1.33	1316	0.285	4.91	1.42	1.33	1.7	40	0.8	15.4	6.1	15.9	0.5	10	19.9 <5	33.9 <5				
329606 <5	6.9	3.3	47 <5	11.2	7	797	2.52	7	797	0.7	493 <5	0.5 <5	0.7	493 <5	0.5 <5	52	3.15	0.08	9	14.3	0.82	337	0.235	8.98	4.17	1.19	0.5	4.9	19 <5	5.2	5.7	0.5 <5	5	15.3 <5	31.4 <5						
329607	470	3.7	43 <5	15.6	80	291	6.21	1	195 <5	0.7	1	195 <5	0.5	1	195 <5	228	7.22	0.15	7	10.6	2.03	643	0.502	9.52	1.23	1.69	3.1	3.3	15	0.9	11.3	3	11.3	3	11.3	3	11.3	3			
329608 <5	105.2	7.7	111 <5	9.3	24	1800	7.44 <5	24	1800	0.5	1	683 <5	0.5	1	683 <5	306	6.98	0.2	7	13	2.09	625	0.569	7.78	2.64	1.43	1.1	9.1	14	0.8	15.2	2	15.2	2	15.2	2	15.2	2			
329609	4.2	84.8	38.5	179	0.5	29.2	12	2789	5.52 <5	2.1	0.8	245 <5	<5	<5	133	8.93	0.17	8	34.3	1.44	475	0.341	6.32	1.6	1.11	0.6	13.9	14	0.5	12	2.8 <5	<5	11	19.5 <5	33.6 <5						
329610	2.1	61	14.5	135 <5	15.6	13	2851	5.59 <5	0.8	0.8	242 <5	0.5	0.8	242 <5	<5	145	9.15	0.18	8	33.2	1.46	500	0.345	6.5	1.62	1.17	0.5	12	15 <5	11.9	2.1 <5	<5	11	21.2 <5	32.6	1.2					
329611 <5	40.8	9.8	121 <5	12.8	24	1890	6.39 <5	24	1890	0.8	569 <5	0.5	0.8	569 <5	<5	245	6.89	0.11	6	10	2.76	316	0.609	9.3	2.28	0.76	0.6	5.6	13	0.5	13	2.5 <5	<5	25	22.4 <5	23.1	0.5				
329612	1.2	79.3	7.5	85 <5	1	20	1563	5.72 <5	<5	0.8	420 <5	<5	0.8	420 <5	<5	205	4.57	0.19	8	2.8	1.79	722	0.561	9.81	3.55	1.55	4	1.8	18	0.6	15	3.6 <5	<5	11	21.6 <5	46.9 <5					
329613 <5	14.1	7.1	53 <5	6.8	11	1495	4.39 <5	<5	<5	1.1	253 <5	<5	1.1	253 <5	<5	113	6.11	0.15	9	8.5	1.1	476	0.409	9.1	2.36	1.57 <5	4	5.2	18	0.7	10.2	4.6 <5	<5	9	16.6 <5	42.7 <5					
329614	1.4	229.6	26.9	296 <5	16.3	22	2014	6.02	9	1.1	419	1.3	1.1	419	1.3	226	5.99	0.18	7	35	1.86	688	0.494	8.29	2.94	0.95 <5	7	15	0.8	15.4	2.1 <5	<5	16	24 <5	31.9 <5						
329615 (puD)	13.1	17892	471.3	1948	15.7	77	1313	10.77	39	1.4	2.5	298	11.4	2.2 <5	178	3.93	0.12	37	119.7	2.43	984	0.37	6.03	1.57	1.39	1.3	17.4	50	1.1	13.4	5.1 <5	<5	15	15.3	2.1	17.4	47.5	0.5			
329616	3.8	130.5	18.5	174	0.6	35.8	23	1936	5.44	10	0.8	1.6	295	0.7	0.6 <5	201	4.23	0.15	10	64.2	2.03	571	0.461	7.97	2.82	1.27	1.1	6.2	19	0.8	17.4	3.7	0.7 <5	15	23.4 <5	42.6 <5					
329617	0.6	89.4	354.5	1049	0.5	43.1	31	2734	8.03	14	<5	0.7	224	5	1.1 <5	803	6.49	0.18	9	47.8	3.27	795	1.042	8.03	1.87	1.32	1.3	2.5	22	0.9	16	8.5	0.7 <5	25	36.3 <5	0.7	43.4 <5				
329618	1	147.9	246.1	1213	0.5	19.2	29	2617	7.88	14	0.5	0.9	362	6	1.2 <5	288	5.66	0.21	8	15.7	2.83	701	0.729	8.86	2.49	1.28	0.9	4.4	17	0.9	17.7	3.6 <5	<5	22	32.5 <5	45.6 <5					
329619	6	106.7	40.6	687	2.4	32	1863	7.52	7	0.5	0.7	230	3.6	0.8 <5	245	6.95	0.17	15	16.4	2.6	816	0.631	8.06	2.82	1.34	0.9	3.6	24	0.7	14.1	4.4 <5	<5	18	24.8	0.6	40.4 <5					
329620	1	101.9	10.5	124 <5	42.8	26	1598	6.77	10	0.6	1	157 <5	<5	<5	223	6.45	0.15	9	78.3	2.59	432	0.603	8.48	3.78	0.95	0.9	3.5	18	0.8	15.3	3.6 <5	<5	18	24.1 <5	37.2 <5						
329621 (rock)	0.7	99.2	12.9	89 <5	5.2	11	1124	4.95 <5	1.4	4.4	5.2	1.4	4.4	5.2	1.4	161	4.1	0.14	19	10.4	1.41	1192	0.548	8.69	3.57	1.75	0.5	4.8	36	1.2	11.6	7.4	0.6 <5	10	19.3 <5	42.6 <5					
329622	5.8	33	7.2	126 <5	45.1	9	1242	2.75	5	2.2	1	191 <5	<5	<5	165	9.99	0.11	11	22.4	0.74	2037	0.231	3.39	0.86	0.78 <5	3	18	0.5	14.6	4.2 <5	<5	7	9.4 <5	20.9 <5							
329623	2	164.3	7.2	106 <5	52.6	29	1581	6.78 <5	1.6	0.8	265 <5	<5	1.6	265 <5	<5	278	7.97	0.18	15	59.7	3.11	689	1.181	8.07	1.93	1.43	0.8	13.3	32	1.5	24.2	12.1	1 <5	22	21.8 <5	34.6	1.1				
329624	1.6	156.2	5.2	75 <5	60.6	28	1244	5.66	8	0.8	1.1	428 <5	0.8	1.1	428 <5	271	8.52	0.13	9	196.4	3.69	770	0.48	8.31	2.58	0.83 <5	1.2	16	1.6	14	1.9 <5	<5	26	8.1 <5	12.2	1.1					
RE 329624	2.1	144.4	4.8	71 <5	60.8	27	1243	5.95	8	0.8	1.1	438 <5	0.8	1.1	438 <5	276	8.47	0.13	9	201.8	3.57	819	0.483	8.24	2.54	0.81 <5	1.1	16	0.6	14.4	2.2 <5	<5	26	7.3 <5	14.6	0.5					
RRE 329624	1.3	147.6	4.9	76 <5	55.2	28	1213	5.88	8	0.9	1.1	431 <5	0.8	1.1	431 <5	276	8.26	0.14	8	181.5	3.59	755	0.476	8.02	2.51	0.82 <5	1.1	14	0.6	14	2.1 <5	<5	26	7.8 <5	12.7	0.9					
329625 <5	155.4	7.4	9.1 <5	24.5	25	1000	6.7	7 <5	0.5	0.8	556 <5	<5	0.8	556 <5	<5	316	7.23	0.17	6	50.8	2.68	581	0.561	10.38	2.49	1.64	0.5	7	12	0.6	12.7	1.5 <5	<5	18	7.8 <5	39.7 <5					
329626	2.9	64	1.3	67 <5	30.7	14	986	3.95	5	2.2	0.7	389 <5	<5	<5	162	18.56	0.15	8	93	2.76	383	0.355	4.57	0.93	0.84 <5	9.7	12	0.6	9.5	2.2	0.6 <5	15	11 <5	17.1	0.5						
329627 <5	6.4	1.5	67 <5	69.2	30	987	6.23 <5	0.5	139 <5	<5	<5	<5	0.5	139 <5	<5	193	9.23	0.11	9	57	3.4	186	1.247	6.83	1.75	1.35 <5	7.5	22	1	15.1	11.3	0.8 <5	21	41.8 <5	28.8 <5						
329628	2	46.4	2	38.6	20	1173	4.42 <5	0.8	362 <5	0.8	0.8	362 <5	0.8	0.8	362 <5	216	15.23	0.11	8	106.2	3.19	783	0.408	5.82	1.5	1	<5	23	10.4	13 <5	1	10.3	2.9 <5	23	10.3	2.9 <5	0.5				
329629	18.4	79	6.6	94 <5	44.7	13	623	3.15 <5	2.3	1.7	222	0.9	0.7	222	0.9	245	5.25	0.09	10	66.8	1.18	795	0.311	4.41	2.06	0.76 <5	20.8	18	0.7	14	4.1 <5	<5	11	6.1	0.8	15.6	0.6				
329630	0.5	100.6	9.2	55 <5	6.6	25	1446	3.28 <5	0.6	<5	328 <5	0.8	0.5	328 <5	0.8	256	6.28	0.14 <5	12	19.8	2.93	503	0.671	9.73	3.18	1.08 <5	20.1	8 <5	11	2.8 <5	<5	19	18.9 <5	17.9	0.8						
329631 <5	13	113.5	4	62 <5	47.7	42	1585	7.14 <5	<5	<5	300 <5	<5	<5	300 <5	<5	296	10.01	0.19	10	58.3	3.98	342	1.203	8.45	2.27	1.25 <5	17.1	27	1.1	15.8	14.2	1.1 <5	21	17.5 <5	27.7	0.6					
329632	1.3	15.3	5	71 <5	15	12	1420	2.5	9	1.1	402 <5	0.8	1.1																												

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT  
 To Bell Resources Corp.

Acme file # A606223 Page 1 Received: SEP 7 2006 \* 53 samples in this disk file.

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

ELEMENT	Au**	Sample	
SAMPLES	gm/mt	kg	
G-1	<.01	-	
329695	<.01		0.6
329696		0.01	1.9
329697	<.01		1.9
329698	<.01		1.6
329699	<.01		2.3
329700		0.12	5.1
330251	<.01		1.1
330252		0.06	4.2
330253		0.08	3.4
330254	<.01		5.6
330255	<.01		4.7
330256		0.01	2.7
330257		0.03	3.2
330258		0.05	3.3
330259		0.03	2.7
330260	<.01		2.3
330261(pulp)		0.16 -	
330262		0.34	2.1
330263		0.11	4.5
RE 330263		0.13 -	
330264		0.04	3.6
330265		0.08	1.7
330266		0.11	2.5
330267		0.07	3.7
330268		0.7	4
330269		0.1	3.6
330270		0.03	3.9
330271(pulp)		0.19 -	
330272	<.01		3.5
330273		0.02	3.5
330274		0.01	6
330275	<.01		4
330276	<.01		1.1
330277		0.02	4.2
STANDARD SL:		6.04 -	
G-1	<.01	-	
330278		0.11	5.6
330279		0.08	7
330280		0.01	2.5
330281	<.01		2.4
330282		0.02	4.1
330283		0.03	4.2
RE 330283		0.01 -	
330284		0.01	5.1
330285	<.01		5.3
330286(pulp)		0.22 -	
330287	<.01		6.9
330288	<.01		4.7
330289	<.01		4.3
330290	<.01		5.4
330291	<.01		6.3
330292	<.01		5.8
330293		0.01	4.4
STANDARD SL:		6.08 -	

To Bell Resources Corp

Acme file # A006223 Page 1 Received SEP 7 2006 \* 53 samples in this disk file

Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCl) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S	Rb	Hf	
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
G-1	<.5	2.1	22.6	49	<.5	2	4	745	2.12	4.7	8	758	<.5	<.5	<.5	41	2.45	0.08	0.08	19	19.8	0.66	1011	0.216	8.19	2.72	2.43	<.5	8.5	41	1.6	14.2	24.7	1.5	<.5	5	8.4	41.4	<.5	105.7	0.7
329695	<.5	2.1	18.5	76	<.5	9	8	630	3.01	2.5	9	860	<.5	<.5	<.5	77	2.69	0.09	0.09	28	21.1	1.08	1712	0.349	8.55	2.91	2.21	<.5	6.6	53	0.9	9.6	9	0.6	<.5	6	18.3	<.5	58.4	0.5	
329696	3.9	638.3	6.6	47	<.5	72.7	87	1352	11.2	10	1	282	<.5	1.1	0.6	168	9.12	0.11	0.11	8	107.3	2.35	75	0.322	4.56	1.06	0.16	<.5	19.2	14	0.7	16.5	3.3	<.5	<.5	14	1.7	1.8	3.5	0.6	
329697	7.6	340.6	4.6	37	<.5	52	52	1186	6.52	5	2.6	287	<.5	1.1	0.9	167	12.39	0.14	0.14	10	76.2	1.55	303	0.259	4.06	1.09	0.26	<.5	14.5	17	0.5	14.1	2.6	<.5	<.5	11	1.9	1.2	5.4	0.6	
329698	14	114.3	3.2	51	<.5	30.8	7	529	2.08	8	4.7	189	<.5	0.5	<.5	158	7.65	0.24	0.24	9	49.1	0.69	1153	0.189	2.94	1.14	0.85	<.5	20.7	14	0.8	13.8	3.5	<.5	<.5	8	0.9	0.5	19.1	1.1	
329699	4.6	49.7	4.4	55	<.5	34	20	1225	5.73	9	1.7	365	<.5	1.4	<.5	181	11.65	0.15	0.15	8	98.8	2.25	730	0.321	5.68	1.73	0.61	<.5	29	15	0.7	14.2	2.3	<.5	<.5	16	0.8	<.5	12.6	0.9	
329700	13.6	11896.4	5.3	20	2.4	48.1	59	1156	31.93	14	0.6	95	<.5	1.2	<.5	342	10.91	0.1	0.1	16	68.9	1.32	340	0.097	2.02	0.11	0.25	<.5	2	30	1.5	10.8	<.5	<.5	<.5	10	7.2	1.5	15.7	<.5	
330251	0.5	8.7	22.9	77	<.5	1.9	8	573	3.01	<.5	2.2	8.3	<.5	0.5	<.5	83	2.51	0.09	0.09	25	25.3	1.05	2048	0.346	8.44	2.88	2.33	<.5	6.1	52	0.9	9.7	11	0.7	<.5	6	19	<.5	54.7	<.5	
330252	6.7	1947.6	103	205	<.5	6.7	43.3	13	2656	9.05	155	2.6	2.1	1800	2.5	2.1	4.8	120	2153	0.07	15	38.8	1.88	251	0.119	3.18	0.79	0.38	3.3	28	28	0.6	30.5	2	<.5	<.5	12	12.9	6.9	13.2	0.6
330253	9.8	2424.4	91.4	3	192	2	1929	1.5	1.9	4.5	101	22.2	0.08	1.5	2.1	1929	1.5	1.9	4.5	101	22.2	0.08	1.5	2.1	1929	1.5	1.9	4.5	101	22.2	0.08	1.5	1.9	4.5	<.5	<.5	11	12.9	7.1	9.7	0.7
330254	<.5	3782	36.4	294	2.7	27.9	15	3972	9.92	32	0.6	0.5	2176	2	0.5	3	159	23.36	0.02	9	16.9	2.97	391	0.066	2.52	0.01	0.01	6.2	5.3	18	0.7	25.4	1.4	<.5	<.5	14	25.1	3.6	<.5	<.5	
330255	2.1	739.3	313.7	366	9.7	52.4	22	2172	12.92	17	2.5	1.2	1172	4.2	1.8	36.3	495	11.66	0.09	9	28.3	2.08	213	0.125	3.24	1.04	0.02	10.9	20.4	17	1.1	19.6	2.5	<.5	<.5	9	18.8	1.5	0.9	0.6	
330256	34.6	1082.6	126.8	171	2.1	86.9	26	646	9.67	136	5.8	2.3	119	1.7	1.9	2.4	282	1.66	0.21	14	43.1	1.15	199	0.125	3.35	0.04	1.14	4.4	26.6	25	1.7	11.3	2.7	<.5	<.5	10	8.9	7	37.9	0.6	
330257	10.9	293.2	60.3	80	1.9	40	12	1411	4.78	94	2.9	2	2.9	202	3.45	2	2.9	202	3.45	0.12	12	43.8	1.32	457	0.141	3.63	0.06	1.38	4.3	31.4	22	1.4	12.1	2.6	<.5	<.5	10	10.9	2.8	46.8	0.8
330258	8.2	477.8	90.3	76	1.8	38.3	17	700	6.62	86	1.3	0.8	125	0.8	1.5	3.9	69	1.76	0.03	<.5	33.6	0.63	173	0.048	1.5	0.01	0.45	3.7	13.9	8	0.8	5.1	0.8	<.5	<.5	<.5	5	4.8	5.5	15.1	0.5
330259	9.1	223.2	47.7	113	1.9	18.3	8	1260	3.65	36	2.9	1.1	551	1.3	0.6	3.1	108	5.67	0.05	7	34.7	0.99	594	0.049	1.83	0.01	0.55	2.6	18.7	13	0.6	10.6	0.5	<.5	<.5	5	6.8	1.6	19	0.6	
330260	3.1	120	22	33	1.3	6.3	4	491	1.37	15	1.2	<.5	1.21	<.5	0.6	1.3	54	1.36	0.01	<.5	27.9	0.4	559	0.036	1.09	0.02	0.47	1.3	11.3	<.5	<.5	3.4	0.5	<.5	<.5	<.5	16	13.5	2.1	52.5	0.7
330261 (pu)	11.8	17995.5	452.7	1872	14.5	69.9	77	1180	10.11	65	1.6	2.4	285	12	2.7	<.5	175	3.52	0.11	37	127.7	2.24	782	0.11	5.75	1.49	1.67	1.6	22.4	52	1.2	13.1	5.5	<.5	<.5	16	13.5	2.1	52.5	0.7	
330262	33	3874.5	97.1	216	40.5	47.9	111	2466	23.31	155	5.7	1.6	1196	1.3	1	31.2	130	13.13	0.1	8	20.7	2.3	185	0.094	2.51	0.01	0.17	7.8	29.7	17	0.6	20.9	2	<.5	<.5	7	15	19.5	6.5	0.7	
330263	1.6	5273.5	80.1	182	6.3	33	79	2385	20.76	225	<.5	<.5	1546	1.6	0.8	10.7	52	17.18	0.01	8	9.9	1.66	73	0.007	1.53	<.01	<.01	5.1	2.9	16	<.5	25.5	<.5	<.5	<.5	<.5	9	12.4	19	<.5	<.5
RE 330263	1.8	5252.6	80.7	175	6.5	31.4	79	2385	20.99	218	0.5	<.5	1528	1.6	1	11	56	17.18	0.01	8	11.8	1.66	74	0.007	1.5	<.01	<.01	4.7	2.4	17	<.5	25.3	<.5	<.5	<.5	<.5	9	11.3	18.9	<.5	<.5
330264	1.9	218.4	157.8	99	3.6	44.9	24	2829	6.53	109	6.6	3.3	3432	0.7	3	9.2	143	16.25	0.2	11	32.5	1.01	95	0.108	4.78	3.2	0.03	4.6	38.6	19	<.5	15.5	2.9	<.5	<.5	9	6.7	4.4	0.6	1	
330265	2.9	510.9	378.4	54	4.1	28.9	31	741	5.87	196	1.3	0.6	322	<.5	3	8.7	55	2.84	0.02	<.5	27.7	0.36	105	0.034	0.72	0.25	0.01	4.7	10.1	6	0.9	4.3	0.9	<.5	<.5	5	3.2	5.1	<.5	<.5	
330266	21.3	830.9	111.8	56	9.5	37.3	103	178	13.2	101	4.7	1.2	30	<.5	2.5	13.7	74	0.31	0.13	5	40.3	0.31	61	0.035	0.74	0.03	0.15	4	15.1	10	0.9	5.1	1	<.5	<.5	5	2.3	11.4	6.4	<.5	
330267	12.3	823.7	102.3	47	5.9	28.9	31	801	10.68	46	2.7	0.7	88	<.5	1.1	11.6	94	1.7	0.06	<.5	32	0.57	119	0.049	1.5	0.01	0.3	3.3	13.4	6	0.5	4.7	0.7	<.5	<.5	5	5.9	6	11.2	<.5	
330268	6.2	2102.2	119.7	71	72.5	78	47	612	17.29	140	1	0.7	57	<.5	1.1	155.9	70	0.81	0.02	7	28.5	0.79	1.1	0.056	1.78	0.01	0.23	5.8	7.2	14	0.8	3.7	0.9	<.5	<.5	5	7.6	11.4	7.8	<.5	
330269	9.1	1867.6	739.1	637	14.9	24.4	19	907	7.84	116	3	1.1	170	1.6	1.3	30.5	96	2.14	0.05	6	30.3	0.82	174	0.071	1.62	0.09	0.37	4.4	15.9	11	0.6	6.1	1.4	<.5	<.5	5	6	6	13	<.5	
330270	3.7	529.5	74.3	150	2.7	43.2	16	744	4.27	49	2.8	1.5	297	1	1.8	6.9	108	2.51	0.08	7	34.5	0.74	56	0.118	2.71	1.47	0.1	6.5	27.1	14	0.9	8.3	2.1	<.5	<.5	6	6.7	2.1	3.3	0.7	
330271 (pu)	22.2	34680.4	1120.2	4331	29.7	71.6	107	1254	12.11	94	2.1	2	197	23.1	3.3	0.9	183	2.78	0.11	34	64.1	1.86	322	0.363	5.12	1.17	1.76	1.9	13.3	50	1.4	13.2	4.8	<.5	<.5	14	14.2	3.9	55.5	0.9	
330272	0.5	48.4	10.2	25	<.5	3.3	1	200	0.64	<.5	0.6																														

ELEMENT	Au**	Sample	
SAMPLES	gm/mt	kg	
G-1	<.01	-	
C156701		0.02	2.29
C156702		0.06	2.11
C156703		0.13	2.57
C156704	<.01		2.48
RE C156704	<.01	-	
RRE C156704	<.01	-	
C156705		0.02	3.11
C156706		0.2	2.19
C156707		0.04	3.02
C156708	<.01		2.85
C156709		0.01	1.63
C156710		0.02	1.82
C156711	<.01		1.78
C156712	<.01		2.79
C156713	<.01		1.75
C156714		0.02	2.56
C156715	<.01		2.43
C156716	<.01		2.61
C156717	<.01		2.45
C156718	<.01		2.89
C156719	<.01		2.56
C156720 (rock	<.01		1.01
C156721	<.01		2.31
C156722	<.01		2.75
C156723	<.01		1.87
C156724	<.01		2.36
C156725 (pulv		0.38	-
C156726	<.01		2.65
C156727	<.01		2.73
C156728	<.01		2.39
C156729	<.01		2.27
C156730	<.01		1.94
C156731	<.01		2.21
C156732	<.01		2.27
STANDARD SL		6.02	-
G-1	<.01	-	
C156733	<.01		2.45
C156734	<.01		1.06
C156735	<.01		1.13
C156736	<.01		2.46
C156737	<.01		2.58
C156738	<.01		2.51
C156739	<.01		2.57
C156740	<.01		2.78
C156741		0.12	3.19
C156742		0.03	2.51
C156743		0.16	2.11
C156744	<.01		2.73
C156745 (rock	<.01		1.24
C156746	<.01		2.28
C156747		0.02	2.19
RE C156747	<.01	-	
RRE C156747		0.01	-
C156748	<.01		2.36
C156749		0.16	2.51
C156750 (pulv		0.3	-
C156751		0.14	2.63
C156752		0.17	2.46
C156753	<.01		2.38
C156754		0.01	2.41
C156755	<.01		2.87
C156756	<.01		2.61
C156757	<.01		2.48
C156758	<.01		1.26
C156759		0.02	1.11
C156760		0.02	1.25
C156761		0.02	3.71
C156762		0.05	2.15
C156763		0.23	2.06
C156764		0.12	2.58
STANDARD SL		6.06	-
G-1		0.01	-
C156765		0.05	2.66
C156766		0.17	2.82
C156767		0.24	2.93
C156768		0.08	2.8
C156769		0.02	2.74
C156770 (rock		0.01	1.51
C156771	<.01		3.25
C156772		0.04	2.58
C156773		0.02	2.46
C156774		0.02	2.39
C156775 (pulv		0.23	-
C156776		0.01	2.46
C156777		0.02	2.58
C156778		0.01	2.29
C156779		0.01	2.21
C156780		0.01	2.73
C156781		0.01	2.68
C156782	<.01		2.5
C156783		0.02	2.63
C156784		0.01	1.24
RE C156784		0.01	-
RRE C156784		0.01	-
C156785		0.02	1.17
C156786	<.01		2.66
C156787		0.01	2.32
C156788		0.01	2.51
C156789		0.01	2.4

C156790	0.01	2.58
C156791	0.06	2.33
C156792	0.02	3.19
C156793	0.01	3.27
C156794	0.01	3.12
C156795 (rock	0.02	1.46
C156796	0.02	2.66
STANDARD SL	6.04	-
G-1	<.01	-
C156797	0.04	2.61
C156798	<.01	2.39
C156799	0.01	2.26
C156800 (rock	<.01	0.92
C156801	0.01	2.61
C156802	<.01	2.83
C156803	<.01	2.8
C156804	<.01	2.76
C156805	0.01	2.93
C156806	0.01	2.76
C156807 (rock	<.01	0.83
C156808	<.01	2.05
C156809	<.01	2.26
C156810	<.01	1.35
C156811 (pul	0.31	-
C156812	<.01	2.11
C156813	0.09	2.58
C156814	0.14	2.51
C156815	<.01	2.44
C156816	0.01	2.25
C156817	<.01	2.57
C156818	<.01	2.38
C156819	<.01	1.96
C156820	0.02	1.58
C156821	0.02	1.38
C156822 emp	-	-
C156823	<.01	2.57
C156824	0.01	2.25
RE C156824	0.01	-
RRE C156824	0.01	-
C156825	0.01	1.94
C156826	0.02	2.62
C156827	0.01	2.75
C156828	<.01	2.03
STANDARD SL	5.97	-
G-1	<.01	-
C156829	0.08	1.92
C156830	0.04	1.9
C156831 (rock	<.01	1.17
C156832	0.01	2.29
C156833	0.02	2.35
RE C156833	0.01	-
RRE C156833	0.01	-
C156834	0.01	2.56
C156835	0.01	2.58
C156836 (pul	0.36	-
C156837	0.03	2.84
C156838	0.01	2.35
C156839	0.03	2.71
C156840	0.02	2.21
C156841	0.1	2.17
C156842	0.03	2.35
C156843	<.01	2.53
329701 (rock)	<.01	1.09
329702	<.01	3.72
329703	<.01	2.05
329704	<.01	1.91
329705 (pul	0.12	-
329706	<.01	1.03
329707	0.04	1.22
329708	0.01	1.31
329709	<.01	3.96
329710	<.01	2.45
329711	<.01	2.31
329712	<.01	2.35
329713	<.01	3.54
329714	0.01	1.18
329715	0.01	1.22
329716	<.01	2.95
329717	<.01	2.87
STANDARD SL	6.01	-
G-1	<.01	-
329718	<.01	3.08
329719	<.01	3.01
329720	<.01	2.67
329721	0.07	2.55
329722	<.01	3.07
329723	<.01	2.96
RE 329723	<.01	-
RRE 329723	<.01	-
329724	<.01	2.16
329725 (rock)	<.01	0.41
329726	<.01	2.98
329727	<.01	3.11
329728	0.02	4.23
329729	0.02	4.41
329730 (pul	0.31	-
329731	0.03	1.52
329732	<.01	2.87
329733	<.01	4.43
329734	<.01	3.22
329735	<.01	3.15
329736	0.02	2.85
329737	<.01	2.12
329738	<.01	2.41
329739	<.01	1.15
STANDARD SL	6.05	-



C156836 (pul	20.2	34592.3	1204.7	4439	28.9	82.2	106	1239	12.46	88	1.8	2	194	24.6	3.4	0.9	198	2.71	0.11	36	51	1.84	1197	0.373	5.05	1.15	2.1	2.3	13.5	48	1.3	13.1	4	<.5	<.5	13	14.3	3.7	57	0.5	
C156837	18.9	3505.6	6.7	66	1.2	69.6	33	1226	9.96	11	0.9	1.8	265	<.5	1.7	<.5	297	5.45	0.12	15	216.3	4.37	495	0.435	6.88	1.18	3.03	1.6	6.2	20	1.2	12.4	1.5	<.5	<.5	29	21.5	0.5	141	<.5	
C156838	29.8	1160.9	4.1	36	<.5	42.1	27	1940	13.48	13	1.9	1.5	209	<.5	1.3	<.5	335	4.89	0.19	9	105.1	4.07	542	0.418	5.95	1.23	3.02	14.3	5.6	15	2.1	14.5	2.1	<.5	<.5	30	17.1	<.5	133.2	<.5	
C156839	17.1	3796.9	5.7	46	1.3	48.8	33	786	14.23	8	1.8	1.7	252	<.5	1.2	<.5	309	4.06	0.14	11	88.3	3.34	725	0.442	7.01	1.37	3.64	1.2	3.4	17	1.7	11.5	1.7	<.5	<.5	25	23.3	<.5	166.9	<.5	
C156840	15	2685.3	8.3	127	1	40.8	34	959	14.6	6	1.4	1.2	207	<.5	0.6	1.9	298	3.94	0.13	14	77.5	3	879	0.402	6.9	1.37	3.75	1.9	2.6	20	1.7	10.9	1.7	<.5	<.5	24	23.4	0.8	154	<.5	
C156841	7.6	4375.6	4.5	32	1.6	40.7	47	693	15.41	5	1.9	1.4	256	<.5	1.5	<.5	318	4.89	0.13	26	77.7	3.05	707	0.405	6.74	1.06	3.45	1.2	3.4	35	1.7	11.3	1.8	<.5	<.5	23	21.7	0.6	145.8	<.5	
C156842	4	3056.6	8.3	55	0.8	33.5	28	707	11.5	5	1.9	1.5	309	<.5	1.7	<.5	244	4.28	0.12	31	58.3	2.67	1095	0.383	8.13	1.92	3.31	1.6	4	37	11.1	1.5	<.5	<.5	16	20.3	<.5	117.1	<.5		
C156843	30.1	2236.8	14.3	50	0.8	58.8	101	636	3.52	49	1.4	1.3	361	<.5	1.6	<.5	185	6.13	0.2	10	16.8	2.55	280	0.461	8.99	4.02	1.24	1.9	10.1	21	1.2	16.3	2.1	<.5	<.5	16	6.7	1	30.4	<.5	
329701 (rock'	0.8	39.9	15.5	73	<.5	2.3	8	588	2.94	<.5	2.7	8.4	773	<.5	<.5	<.5	91	2.92	0.09	25	10.2	1.07	1716	0.349	8.53	2.95	2.59	0.6	5.4	45	0.9	8.6	7.6	0.6	<.5	6	18.9	<.5	56.8	<.5	
329702	1.1	93.6	4.2	69	<.5	54.7	31	1342	5.56	18	0.5	1.9	197	<.5	<.5	<.5	224	2.88	0.12	13	76.3	2.88	401	0.509	6.8	1.98	1.13	1	9.7	28	1.4	8.9	2.9	<.5	<.5	20	14.4	<.5	23	0.6	
329703	1.2	119.7	158	236	1.8	72.6	25	1395	5.06	13	2.9	3.3	638	<.5	1.6	<.5	173	5.37	0.15	16	42.9	2.09	132	0.276	7.81	4.83	0.11	2	27.5	29	0.5	15.3	3.1	<.5	<.5	13	12	1.1	2.3	0.7	
329704	1.1	63.4	76.3	234	0.7	72.7	24	1744	5.44	15	2.9	2.8	623	<.5	3	<.5	187	6.47	0.21	17	34.5	2.17	169	0.327	6.41	3.64	0.08	1.8	23	29	0.5	17.5	2.9	<.5	<.5	15	12	1.3	1.6	0.9	
329705 (pul)	11.5	18249.2	455.4	2022	14.4	69.6	79	1187	10.14	58	1.7	2.6	270	10.6	1.8	<.5	180	3.51	0.1	37	95.8	2.24	1224	0.328	5.65	1.49	1.93	1.4	31.6	49	1.1	11.7	3.7	<.5	<.5	14	15.9	2	48.5	1.6	
329706	24.5	177.7	259.3	249	1.2	101	19	1247	4.54	9	4.3	4.9	513	3.3	0.8	1.9	166	5.34	0.14	23	66.1	1.53	137	0.323	7.15	4.89	0.06	3.9	59.8	39	1.2	20.8	6.5	<.5	<.5	13	8.9	1.6	1.1	1	
329707	1.3	102.7	595.8	461	4.6	68.8	11	1371	3.55	15	1.7	1.9	795	9	0.8	10.1	115	5.93	0.04	14	32.5	1.1	3865	0.177	5.41	3.4	0.18	2.7	63.1	21	0.6	18.2	2.8	<.5	<.5	13	9.3	0.9	4.5	<.5	
329708	4.3	89.7	268.5	1823	0.9	78.2	16	678	2.69	25	0.7	1.1	79	39.2	0.8	0.8	70	1.57	0.02	14	11.6	0.68	433	0.087	1.96	0.14	0.59	1	11.5	20	0.6	5.7	1	<.5	<.5	6	5.9	1.2	13.4	<.5	
329709	5.1	189.9	798	2554	3	89.8	18	1179	2.78	24	1.2	1.4	142	56.8	1.1	2.1	53	2.52	0.04	13	15.7	0.82	273	0.06	1.81	0.15	0.47	1.3	13.5	22	0.5	8.1	1.3	<.5	<.5	6	5.8	1.2	10.5	<.5	
329710	8.9	110.4	89.6	237	0.5	65.2	11	719	2.56	12	2.2	2.5	161	5	<.5	0.7	131	2.41	0.1	11	36.7	1.27	490	0.101	2.43	0.14	0.72	0.6	14	20	0.8	8	2.3	<.5	<.5	6	8.3	1	20.5	<.5	
RE 329710	8	110.9	91.3	239	<.5	64.1	10	720	2.57	10	2.3	2.5	158	4.6	0.5	0.6	132	2.39	0.11	11	36.7	1.28	479	0.097	2.44	0.14	0.71	1	14	19	0.6	8.6	1.7	<.5	<.5	6	8.3	1	20.1	0.5	
329711	2	49.7	19	71	<.5	53.1	16	903	3.88	10	0.6	1.6	170	<.5	<.5	<.5	110	1.89	0.07	18	21.9	1.75	2606	0.168	4.7	0.57	1.36	0.6	4.3	28	1.6	6.8	2.5	<.5	<.5	13	15.1	0.9	33.3	0.7	
329712	8.9	92.5	7.8	68	<.5	60.4	13	1052	3	11	2.1	1.8	199	0.7	0.5	<.5	145	2.94	0.09	12	27.6	1.53	1447	0.155	3.3	0.14	1	1	40	19	1	6.8	2.6	<.5	<.5	8	13.2	0.8	25.2	0.6	
329713	2.1	312.5	18.3	138	0.6	74.3	19	674	3.93	19	2.5	1.8	169	0.6	0.5	1.1	115	1.72	0.06	14	19.1	1.36	851	0.19	2.81	0.77	0.35	1.4	21.2	23	1	9	2.6	<.5	<.5	9	10.6	1.4	8.4	0.9	
329714	2.4	279.9	19.4	169	0.7	56.1	14	1323	3.24	15	4.1	2.4	590	1.9	0.5	0.8	147	5.91	0.12	14	21.8	1.29	1453	0.217	3.36	1.38	0.29	1.8	32.5	24	1.3	21.1	4	<.5	<.5	11	10.6	0.9	8.1	0.9	
329715	2	298.3	22.6	174	0.9	53.4	14	1527	3.31	14	4.8	2.3	657	3.1	0.6	0.8	151	6.69	0.12	14	20.8	1.34	1829	0.217	3.06	1.25	0.19	1.7	26.1	22	1.4	21.1	2.3	<.5	<.5	11	11.8	0.8	5.3	0.8	
329716	1.5	210.1	11	181	<.5	59.9	18	842	3.79	12	2.2	2.5	268	<.5	0.5	0.8	110	2.42	0.08	17	38.9	1.87	968	0.221	3.02	0.93	0.13	1.2	16.5	29	1	10.3	3.6	<.5	<.5	11	12.8	0.6	3.7	0.6	
329717	1.7	52	12.6	169	<.5	69.3	15	686	3.4	13	3.4	3.4	245	<.5	0.6	0.7	158	2.25	0.11	13	44.4	1.52	294	0.203	3.23	1.31	0.18	1.9	21.8	21	1.2	12.7	3.1	<.5	<.5	10	12	0.5	4.8	1.2	
329718	1.2	32.8	21.2	216	1	79.9	14	2788	4.28	<.5	2.3	3.5	1063	0.8	<.5	4	167	11.58	0.16	14	56	2.99	752	0.185	4.5	1.51	0.17	1.1	24.5	24	0.6	19.9	2.8	<.5	<.5	11	21	<.5	5.4	0.6	
329719	4.1	55.4	9.8	268	<.5	90	17	2983	5.57	5	2	3	1157	0.5	<.5	<.5	164	14.25	0.09	16	44.3	3.49	1206	0.203	4.42	0.8	0.28	1	28.4	27	1	49.1	3.6	<.5	<.5	12	21.8	0.7	8.3	1	
329720	22.8	843.3	12.9	201	0.7	82.2	27	2149	8.55	46	6.7	2.9	949	<.5	0.8	1.5	292	10.24	0.19	16	30.6	2.29	262	0.229	5.59	0.99	1.19	2.4	28.4	29	1.3	20.3	4.4	<.5	<.5	14	21.1	4.1	33.4	0.7	
329721	45.4	517.9	23.9	368	1.1	140.4	49	2936	13.41	46	11.6	5.1	1222	1.3	1	3.2	369	15.02	0.43	25	55.9	4	417	0.404	4.61	0.11	0.31	2.1	147.1	46	2	36.3	7	0.5	<.5	17	34.1	6.7	9.6	1.2	
329722	2.8	81.2	11.8	85	<.5	44.2	11	3330	5.42	37	3.1	1.5	2151	0.6	<.5	4.7	62	28.39	0.09	13	12.3	1.32	218	0.089	1.1	0.05	0.02	4.2	20.7	23	0.5	25.1	1.5	<.5	<.5	6	9	2.6	<.5	0.6	
STANDARD SF	317.5	7024.3	8853.5	13422	61.4	3502.4	120	4440	7.95	24	2.7	4.1	401	54.7	53	4.7	61	2.88	0.05	16	1695	4.31	511	0.178	4.9	1.89	2.32	1.5	9	26	6.8	13.8	11.7	1	<.5	<.5	7	20	3	68.5	<.5
329723	1.9	7.8	10.9	296	<.5	72.8	19	3026	5.62	7	2.6	2.4	1811	0.7	<.5	0.1	145	20.7	0.1	14	29.7	3.2	193	0.257	3.87	0.91	0.02	2	31	26	0.8	34.4	4.8	<.5	<.5	12	21.4	<.5	0.7	0.7	
329724	0.5	15.1	7.5	158	<.5	47.3	16	1936	3.91	5	1.8	2.2	879	0.5	<.5	<.5	139	9.39	0.14	13	22.4	2.05	666	0.355	7.02	4.31	0.08	4.9	11.1	23	0.9	25.8	4.1	<.5	<.5	12	14.7	<.5	1.7	0.5	
329725 (rock'	0.9	6.2	21	88	<.5	3.9	8	640	3.13	6	2.4	2.4	8	811	<.5	<.5	85	2.63	0.09	26	9.9	0.98	1503	0.353	8.12	2.83	2.46	<.5	6.3	46	0.8	11.8	7.4	0.6	<.5	6	16.5	<.5	63.4	0.5	
329726	0.7	6.2	8.6	100	<.5	11.5	14	1332	5.13	11	0.9	1.2	197	6.35	0.15	8	13.3	2.1	0.19	8	13.3	2.1	1019	0.481	8.91	3.23	1.62	2.6	4.6	15	1.4	13.1	1.9	<.5							



ELEMENT	Au**	Sample	
SAMPLES	gm/mt	kg	
G-1	<.01	-	
329740	<.01		1.08
329741	<.01		2.49
329742	<.01		2.58
329743	<.01		2.94
329744	<.01		2.75
RE 329744	<.01	-	
RRE 329744	<.01	-	
329745	<.01		3.02
329746	<.01		3.12
329747	<.01		3.19
329748	0.02		2.92
329749	<.01		2.61
329750 (rock)	<.01		0.78
329751	<.01		3.69
329752	<.01		3.53
329753	<.01		3.37
329754	<.01		2.56
329755 (pulp)	0.16	-	
329756	<.01		3.41
329757	<.01		3.34
329758	<.01		2.76
329759	<.01		1.82
329760	0.01		3.39
329761	<.01		2.92
329762	<.01		3.26
329763	<.01		3.89
329764	<.01		2.25
329765	<.01		1.71
329766	<.01		1.59
329767	<.01		3.78
329768	<.01		3.31
329769	<.01		3.25
329770	<.01		3.37
329771	<.01		3.19
STANDARD SL	5.97	-	
G-1	<.01	-	
329772	0.02		3.27
329773	<.01		2.59
329774	0.01		2.44
RE 329774	<.01	-	
RRE 329774	<.01	-	
329775 (rock)	<.01		0.38
329776	<.01		2.83
329777	0.01		0.31
329778	0.02		2.41
329779	<.01		2.96
329780 (pulp)	0.24	-	
329781	<.01		2.75
329782	<.01		2.63
329783	0.03		2.41
329784	<.01		2.33
329785	0.04		2.38
329786	0.2		2.52
329787	0.01		2.93
329788	0.02		3.45
329789	0.02		0.98
329790	0.02		1.01
329791	0.01		2.94
329792	<.01		3.12
329793	0.01		3.26
329794	0.01		3.58
329795	<.01		3.44
329796	<.01		4.68
329797	0.03		4.13
329798	<.01		3.4
329799	<.01		4.36
329800 (rock)	<.01		0.58
329801	<.01		3.32
329802	<.01		2.64
329803	0.01		4.02
STANDARD SL	5.92	-	
G-1	<.01	-	
329804	0.01		3.52
329805 (pulp)	0.16	-	
329806	<.01		3.31
329807	0.02		3.87
329808	0.02		4.08
329809	0.11		2.68
329810	0.06		3.13
329811	0.1		3.56
RE 329811	0.12	-	
RRE 329811	0.12	-	
329812	0.03		3.22
329813	0.05		3.82
329814	0.05		1.56
329815	0.08		1.58
329816	0.02		3.57
329817	0.05		2.85
329818	0.01		2.45
329819	0.02		2.29
329820	0.01		2.64
329821	<.01		2.96
329822	0.01		2.75
329823	0.01		4.08

329824	<.01		3.85
329825 (rock)	<.01		0.48
329826	<.01		2.87
329827		0.03	3.52
329828		0.01	3.22
329829	<.01		3.71
329830 (pulp)		0.22 -	
329831	<.01		2.66
329832		0.15	2.43
329833	<.01		2.54
329834	<.01		3.11
329835	<.01		3.24
STANDARD SL		5.89 -	
G-1	<.01	-	
329836		0.02	3.37
329837		0.01	3.32
329838	<.01		2.87
329839	<.01		1.25
329840		0.01	1.45
329841		0.02	3.7
329842		0.01	3.38
329843	<.01		2.35
329844	<.01		2.27
329845	<.01		2.58
329846 (rock)		0.01	0.98
329847	<.01		2.07
329848		0.01	1.95
329849		0.01	2.85
329850 (pulp)		0.16 -	
329851	<.01		1.81
329852		0.01	2.02
329853	<.01		1.87
329854	<.01		3.16
329855	<.01		2.21
329856	<.01		2.95
329857	<.01		2.41
RE 329857	<.01	-	
RRE 329857	<.01	-	
329858		0.09	2.15
329859		0.01	1.09
329860	<.01		1.18
329861	<.01		1.76
329862		0.03	3.08
329863		0.01	2.87
329864		0.02	2.75
329865	<.01		2.38
329866	<.01		3.15
329867	<.01		2.41
STANDARD SL		5.93 -	
G-1	<.01	-	
329868		0.07	2.52
329869		0.01	3.39
329870 (rock)	<.01		0.59
329871	<.01		3.43
329872	<.01		3.35
329873	<.01		3.76
329874	<.01		3.06
329875 (pulp)		0.32 -	
329876	<.01		3.37
329877	<.01		2.79
329878	<.01		2.61
329879	<.01		2.72
329880	<.01		2.5
329881	<.01		2.58
329882	<.01		2.71
RE 329882	<.01	-	
RRE 329882	<.01	-	
329883	<.01		2.68
329884	<.01		1.46
329885	<.01		1.23
329886	<.01		2.59
329887	<.01		2.74
329888	<.01		2.62
329889	<.01		2.65
329890	<.01		1.83
329891	<.01		4.35
329892	<.01		2.93
329893	<.01		3.62
329894	<.01		3.02
329895 (rock)	<.01		0.72
329896	<.01		3.16
329897	<.01		3.28
329898	<.01		3.41
329899	<.01		2.55
STANDARD SL		6.05 -	
G-1	<.01	-	
329900 (pulp)		0.25 -	
329901		0.02	2.91
329902	<.01		3.15
329903		0.02	2.38
329904	<.01		2.71
329905		0.04	1.93
329906	<.01		2.54
329907	<.01		1.92
329908	<.01		1.89
329909	<.01		1.12
329910	<.01		1.13
329911	<.01		3.19
329912	<.01		3.05
329913		0.01	3.17
329914		0.01	2.82

329915	0.09	3.11
329916	0.21	2.99
329917	0.09	4.14
329918	0.01	4.55
329919	0.17	3.39
329920 (rock) <.01		0.69
329921	0.25	3.29
329922	0.06	3.51
329923	0.02	3.78
RE 329923	0.02 -	
RRE 329923	0.01 -	
329924	0.1	3.35
329925 (pulp)	0.2 -	
329926	0.16	3.14
329927 <.01		2.95
329928 <.01		4.36
329929 <.01		2.59
329930 <.01		3.02
329931 <.01		2.71
STANDARD SL	5.95 -	
G-1 <.01	-	
329932	0.01	1.62
329933 (rock) <.01		0.73
329934 <.01		2.25
329935 <.01		2.13
329936	0.01	1.34
329937 (pulp)	0.32 -	
329938 <.01		0.47
329939	0.01	0.81
329940 <.01		1.95
329941 <.01		1.91
329942 <.01		1.21
329943 <.01		2.19
329944	0.02	2.75
329945 <.01		2.4
329946 <.01		0.81
329947 <.01		1.11
329948 <.01		2.17
329949 <.01		2.45
329950 <.01		2.41
329951 <.01		1.96
329952 <.01		1.56
329953 <.01		2.11
RE 329953 <.01	-	
RRE 329953 <.01	-	
329954 <.01		1.57
329955 <.01		1.62
329956 <.01		2.17
329957 (rock) <.01		0.59
329958 <.01		2.11
329959 <.01		2.04
329960 <.01		1.93
329961 <.01		1.85
329962 (pulp)	0.24 -	
329963 <.01		2.28
STANDARD SL	5.99 -	
G-1 <.01	-	
329964 <.01		1.45
329965 <.01		0.78
329966 <.01		0.73
329967 <.01		0.94
329968 <.01		1.22
329969 <.01		1.35
329970 <.01		1.11
329971 <.01		1.25
329972 <.01		1.17
329973	0.26	1.66
329974 <.01		2.11
329975	0.02	1.45
329976 <.01		1.55
329977 <.01		3.84
329978 <.01		2.41
329979 <.01		2.36
329980 <.01		1.65
329981 <.01		2.24
329982 (rock) <.01		0.71
329983 <.01		2.15
329984	0.12	2.55
329985	0.06	2.89
RE 329985	0.08 -	
RRE 329985	0.06 -	
329986	0.05	1.76
329987 (pulp)	0.15 -	
329988	0.05	2.56
329989	0.05	2.93
329990 <.01		5.57
329991	0.08	2.51
329992 <.01		2.58
329993 <.01		2.31
329994	0.02	2.24
329995 <.01		2.14
STANDARD SL	5.96 -	
G-1	0.03 -	
329996 (rock) <.01		1.83
329997 <.01		1.25
329998 <.01		1.31
329999	0.01	1.61
330000 (pulp)	0.17 -	
STANDARD SL	6.08 -	

ELEMENT	Cu	Zn	Ag	Ni	Co	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S	Rb	Hf				
329740	3.6	256.1	45.9	327 < .5	97.7	56	1933	7.79	11.7	1.4	4.6	1.1	4.97	242	5.56	0.12	19	160.0	4.47	1369	0.376	6.54	2.1	0.53	2.9	4.1	25	1.8	19.5	1.6	< .5	25	22.5	1.2	19.7	< .5					
329741	8.1	402.4	17.9	210 < .5	94.1	58	1504	7.18	17.9	1.9	2.1	1.5	352 < .5	181	5.33	0.11	28	140.6	3.49	1588	0.35	6.57	1.81	0.77	1.2	6.5	34	1.7	17.1	2.9	< .5	19	19.3	1.6	32.2	< .5					
329742 < .5	87.9	11.8	86 < .5	2.5	10	1032	3.7 < .5	2.4	7.6	2.96 < .5	< .5	< .5	106	2.45	0.13	13	5.8	1.35	510	0.366	8.74	5.76	0.9	2.1	7.9	2.9	1.4	20.6	5.5	0.5	< .5	5	5.8	< .5	33.2	< .5					
329743	2.4	259.3	7.7	110 < .5	2.2	10	1037	3.03	14.7	6	2.2	5.4	167	4.41	0.17	16	4.1	114	1.4	596	0.237	8.22	3.29	3.23	9.2	8.5	35	14.5	2.6	< .5	5	9	5.8	1.6	118	< .5					
329744	0.5	157.3	1.4	1.4	15	1032	3.82 < .5	2.3	1.1	1.95	1.4	1.2	0.5	7.5	1.15	0.13	12	< .5	157	0.22	179	2.14	3.23	12.9	6.8	25	2.1	21	2.1	2.5	< .5	8	44.51	3.3	152.8	< .5					
329745 < .5	51.8	10.2	52 < .5	1.8	7	794	2.79 < .5	1.9	4.6	337 < .5	1.5	2.7	< .5	125	3.51	0.15	13	0.7	1.3	581	0.439	9.01	5.05	1.81	1	6.8	29	1.2	22.2	6.3	0.5	< .5	9	6.9	< .5	73.8	0.5				
329746 < .5	48.1	8.7	60 < .5	< .5	7	1810	1.97 < .5	1.7	4.3	265 < .5	1.7	0.8	0.8	99	4.78	0.13	13	0.6	1.42	1128	0.293	8.66	3.02	2.48	10.2	8.1	29	1.3	17.1	4.2	< .5	< .5	10	18.6	< .5	111	< .5				
329747	0.8	38	9.2	< .5	4	813	3.40 < .5	1.6	4.6	340 < .5	2.2	5.5	1.2	117	14.4	0.11	11	< .5	1.17	1444	0.372	8.73	4.16	2.4	0.6	9.1	29	1.3	20.1	5.6	< .5	< .5	16	80.9	< .5	80.9	< .5				
329748	0.9	122.9	13.7	110 < .5	< .5	10	2331	4.03 < .5	1.9	4.1	214 < .5	1.3	34.5	139	4.9	0.15	13	< .5	1.6	723	0.258	9.35	2.9	2.65	7.9	4.2	27	1.7	13	1.9	< .5	< .5	10	25.7	1.6	129.4	< .5				
329749	0.8	86.6	10.8	61 < .5	< .5	5	1380	1.82 < .5	1.1	3.7	238 < .5	0.6	3.7	63	4.31	0.04	10	< .5	1.3	1962	0.209	8.42	2.7	3.17	10.1	6.6	28	0.8	11.4	2.3	< .5	< .5	10	10.1	< .5	110.2	< .5				
329750 (rock < .5	1.5	3.6	14.4	78 < .5	1.5	8	638	2.93 < .5	2.2	7	768 < .5	< .5	< .5	77	2.81	0.08	27	9.2	1.07	1482	0.348	8.56	2.92	2.45	< .5	4.8	44	0.8	9.9	7	0.6	< .5	7	16	< .5	64.9	0.5				
329751	1.5	64	22.2	99 < .5	1	9	2488	2.99 < .5	1.7	4.3	195 < .5	1.1	17.8	133	4.71	0.13	13	2.2	1.12	839	0.192	9.01	2.57	3.07	10.5	8.6	31	2.4	13.9	9	7	1.8	< .5	9	13.2	2.3	134.5	< .5			
329752	2	124.4	24.1	3.5	3.4	7	1687	2.45 < .5	2.5	3.4	223 < .5	1.5	2.6	107	3.49	0.12	14	1.2	1.11	574	1.194	8.6	4.08	2.51	130.7	6.6	29	1.3	12	1.4	< .5	< .5	9	13.2	1.4	128.7	0.5				
329753	1.4	155.2	6.4	103 < .5	0.9	10	1192	3.08 < .5	1.5	3.9	284 < .5	1.1	1.1	113	3.28	0.15	12	< .5	1.33	639	0.251	8.93	4.96	1.99	5.1	6.6	27	1	13.8	1.8	< .5	< .5	9	9.9	< .5	101.6	< .5				
329754	0.5	502.2	7.9	97 < .5	2.5	32	1222	2.99 < .5	1.3	4.1	296 < .5	0.9	0.9	9.9	3.4	0.15	11	< .5	1.13	657	0.287	8.75	4.99	1.76	7.4	6.1	20	1.4	15.9	13.3	< .5	< .5	9	10.6	0.6	74.8	< .5				
329755 (uob)	12.9	17875.8	416.3	205 < .5	14.4	61.8	1188	61.8	2.2	2.4	264	1.6	2.2	166	3.54	0.11	9	106.3	2.23	553	0.325	5.66	1.52	2.04	1.5	16.2	50	1.5	14.6	4.2	< .5	< .5	16	14.5	2.1	62.7	0.5				
329756	1.3	218.2	12.1	94 < .5	4.1	31	950	2.98 < .5	2	4.7	381 < .5	1.1	< .5	110	3.43	0.16	11	< .5	1.1	790	0.251	8.77	5.47	1.48	3.1	5.2	24	0.7	18.8	1.5	< .5	< .5	9	6	< .5	34.2	< .5				
329757	0.9	179.2	11.3	205 < .5	1.9	11	749	2.11	5	2.2	6.3	338 < .5	1.2	< .5	70	2.95	0.11	11	< .5	1.03	1555	0.19	8.68	4.26	2.76	2.6	9.9	27	1.2	14.1	3.2	< .5	< .5	7	6.8	< .5	75.3	0.5			
329758	1.8	283	48.8	178 < .5	2.3	37	767	2.64	10	1.5	6.7	306	2.3	0.9	2.5	0.11	10	0.7	1.12	1362	0.17	8.32	3.84	3.04	27.2	5.2	21	1.1	18.9	4.4	< .5	< .5	11	5.4	0.9	78.6	< .5				
329759	1	224.6	76.8	279 < .5	3.1	13	604	1.93	14	1.6	5.4	274	1.7	0.6	5.9	3	0.17	13	3.7	1.08	458	0.247	8.61	5.46	1.65	3.1	5.9	6.7	1.1	18.6	6.7	0.5	< .5	7	3.8	< .5	59.8	0.5			
329760	1.7	779.7	17.2	75 < .5	8.8	26	1022	5.12	18	1.6	2.1	354 < .5	1.2	< .5	5.12	4.84	0.13	6	37.8	2.4	1338	0.407	17.2	1.13	3.45	44.9	6.2	11	1.2	13.1	2.9	< .5	< .5	25	13.5	< .5	112.4	< .5			
329761	2.4	1695.4	16.9	144	0.9	13.5	84	1057	8.79	37	2.3	2.8	304	0.7	4.8	< .5	289	5.01	0.11	7	54.4	2.74	689	0.426	7.57	1.42	3.14	832	4.8	13	1.4	15.2	3.4	< .5	< .5	30	16.5	2.1	158.5	< .5	
329762 < .5	10	11	10	67 < .5	1.1	10	858	2.83	26	1.7	1.5	268 < .5	0.7	5.4	< .5	253	6.03	0.16	6	29.4	3.63	335	0.47	7.75	2.81	1.42	10.7	15.7	13	0.6	17	2.3	< .5	< .5	37	1.8	< .5	46.5	< .5		
329763 < .5	1.5	111.9	10.6	48 < .5	11.9	21	718	3.49	31	0.7	0.9	330 < .5	4.8	< .5	202	6.83	0.11	12	10.6	2.45	308	4.41	9.58	3.18	1.56	22.3	8.8	16	0.6	13.7	1.7	< .5	< .5	23	7.6	< .5	64.4	< .5			
329764 < .5	0.5	45.8	11.8	71 < .5	23.5	26	1022	6.36	53	0.6	1.7	384 < .5	9.7	< .5	363	7.39	0.15	7	62.3	3.73	182	0.497	8.44	2.17	1.16	3.8	7.6	14	0.9	16.2	2.1	< .5	< .5	36	11	< .5	53.1	0.6			
329765	0.5	45.3	11.7	64 < .5	25.5	20	1003	5.97	47	0.5	1.6	414 < .5	8.8	< .5	342	7.44	0.14	7	63	3.57	195	0.506	8.53	2.36	1.1	3.2	8.3	13	0.8	16.3	2	< .5	< .5	33	10.8	< .5	51.9	0.5			
329766	7.1	684	22.2	24.2	24.0	11	827	6.14	29	3.1	4.4	394	1.1	6.1	2.6	0.15	12	1.1	1.68	299	0.438	8.56	1.86	15.8	5.2	21	14.4	18.4	1.5	14.2	4.9	0.6	2.6	6.6	22.3	< .5	32	18.4	4.9	121.2	< .5
RE 329766	8.4	956.5	10.4	66 < .5	24	223	849	11.58	112	2.4	1.5	283 < .5	5.6	< .5	250	4.46	0.14	6	42.3	3.14	293	0.433	7.34	1.73	1.77	16.3	5.6	11	1.5	14.1	1.9	< .5	< .5	31	17.3	4.9	93.3	< .5			
329767	0.6	29.5	8	39 < .5	17.2	5	915	5.68	32	0.7	2.7	427 < .5	10.6	< .5	3.4	2.63	0.13	7	34.7	3.4	261	0.465	8.25	2.8	1.14	4.1	7.8	13	0.8	16.6	2.6	< .5	< .5	35	6.8	< .5	45.6	< .5			
329768	1.3	43.8	9	46 < .5	13.9	3.4	927	5.02	32	1.3	1.9	395 < .5	6.6	< .5	295	7.38	0.13	8	56.5	3.9	4.07	5.28	8.41	2.62	1.41	60.6	10.9	17	1.1	18.5	1.8	< .5	< .5	41	7	< .5	62	1.1			
329769	1.1	108	11.1	51 < .5	20	11	108	6.14	29	0.5	1.1	371	7.44	0.13	3.1	0.15	11	0.5	1.1	194	0.481	9.51	3.71	1.05	1.9	6.1	41	1.1	7.9	7.5	< .5	< .5	41	8.3	< .5	38.4	< .5				
329770 < .5	4.2	43.6	7.2	6																																					

329875 (pub)	21.4	34548.8	1152.5	4191	29.2	73.6	24.2	2.7	1.1	173	24.2	2.7	1.1	178	2.74	0.1	34	57	1.85	321	0.381	5.09	1.16	2.12	1.5	12.8	45	1.4	14.5	3.6 <-5	<-5	12	14.5	3.6	59.4 <-5						
329876	29.8	505.1	72.1	760	0.7	133.3	33	372	5.97	49	3.2	2	114	7.8	0.6 <-5	118	1.49	0.05	22	152	320	0.154	3.09	1.74	0.16	1.9	123.4	19	<-5	9.5	2.8 <-5	<-5	10	12.4	2.6	2.9	1.1				
329877	4.7	1408	16.5	133	<-5	67.4	20	32	250	4.8	2.2	235	<-5	0.5	139	4.1	0.12	20	30.4	252	125	0.417	4.19	2.75	3.97	84.4	33	1.6	15.7	2.1	13.9	<-5	9	19	2.1	13.9	<-5	0.8			
329878	25.2	398.6	186.5	309	1	90.8	35	577	5.73	31	7.9	2.3	206	2.5	0.9	1.3	250	2.92	0.2	12	68.7	1.89	437	0.264	4.82	1.94	0.45	21	32	20	0.7	21.3	2.9 <-5	<-5	14	15.3	2.4	11	1.1		
329879	4.2	294.1	53.5	201	0.5	45.7	30	606	4.62	10	2.2	2.03	262	0.6	0.8 <-5	145	2.88	0.07	13	49.4	2.01	802	0.367	6.36	3.72	0.12	1.4	14	23	0.8	18.1	3.6 <-5	<-5	16	17.4	1.5	2.2	1.4			
329880	6.5	320.4	26.3	186 <-5		167.6	52	1401	8.99	12	1.1	0.9	245	0.7	1.1 <-5	223	6.97	0.1	12	216.8	5.1	362	0.42	5.54	0.69	1.31	2.8	4.4	19	1.1	15.1	4.4 <-5	<-5	26	34.8	1.6	55.4 <-5				
329881	13.8	5204.7	10.2	371	<-5	204.2	110	246.3	58.9	18	6.7	2.5	246	0.8	0.7 <-5	152	6.46	0.19	8	36.9	5.89	0.263	7.06	2.32	1.84	2.3	4.4	16	2.2	14.7	1.7	15.5	1.8	23	26.1	1.8	59.9	<-5	0.8		
329882	13.6	140.4	10.7	123 <-5		48.9	104	1587	5.61	15	2.4	3.4	325 <-5	1.1	<-5	146	6.21	0.1	20	91.1	2.51	569	0.301	7.23	2.47	2.02	4.5	7.9	29	1.2	12.2	2.2 <-5	<-5	14	16.4	1.8	81.9	<-5			
329883	0.9	67.4	9.2	94 <-5		3.8	12	1052	3.6 <-5	2.1	5	246 <-5	<-5	<-5	137	2.72	0.14	13	4	1.35	645	0.407	8.83	5.37	1.79	1.7	6.3	29	1.2	13.4	8.3	0.5 <-5	8	7.1 <-5	6.8 <-5	0.6	9				
329884	1.1	53.5	9.8	115 <-5		2.5	11	1282	3.82 <-5	2.5	6.2	242 <-5	<-5	<-5	133	3.85	0.16	14	1.5	1.35	593	0.408	8.8	5.05	2.08	1.4	6.8	30	1.2	12.1	4.7 <-5	<-5	9	6.8 <-5	7.9 <-5	0.6	9				
RE 329884	0.7	54.2	13.1	116 <-5		1.3	11	1278	3.78 <-5	1.1	6	235 <-5	<-5	0.5 <-5	131	3.81	0.16	13	1.3	1.38	541	0.412	8.1	1.92	1.5	8.7	27	1.3	12.1	3.7	0.6 <-5	9	7.6 <-5	7.91 <-5	0.6	9					
329885	0.8	51.2	7.3	118 <-5		2.3	11	1222	3.83 <-5	1.7	4.1	215 <-5	<-5	0.5 <-5	133	3.55	0.15	13	2.3	1.35	543	0.417	8.61	4.94	2	1.5	8	27	1.1	11.1	4.4 <-5	<-5	8	7.1 <-5	73.4	1	1				
329886 <-5	0.8	66.5	19.9	109 <-5		2.3	8	1110	3.06	5	2.1	5	220 <-5	<-5	0.5 <-5	137	3.02	0.16	13	2.3	1.19	540	0.416	8.2	5.03	1.45	2.9	6.8	28	1.4	15.2	4.1 <-5	<-5	8	8.1 <-5	51.7	0.9	9			
329887 <-5	21.8	6.2	68 <-5	2.3	9	877	7	1.8	5.1	258 <-5	8.2	7	1.8	0.7	1.8	87	4.07	0.25	16	2.2	1.54	289	0.247	8.36	5.32	1.42	0.8	9	33	0.7	13.1	3.1 <-5	<-5	10	11.3	1.5	59.9	<-5			
329888	0.8	81.6	6.4	60 <-5		3.2	15	936	2.98 <-5	1.6	4.9	247 <-5	<-5	0.7 <-5	113	3.59	0.2	15	4.7	1.3	525	0.295	8.86	5.19	1.93	1.2	7.7	34	1.2	12.1	2.6 <-5	<-5	10	6.5 <-5	62.9 <-5	0.6	9				
329889	0.6	368.5	8	70 <-5		6.4	40	1220	3.36	6	1.9	4.8	299 <-5	0.5	<-5	95	5.49	0.2	15	4.3	1.35	551	0.297	8.41	4.65	1.53	3.1	10.6	30	1.5	15.1	3.1 <-5	<-5	10	8.2 <-5	50.3	0.6	9			
329890	1.6	562.3	76.6	225	1.5	5.7	5	1704	2.4 <-5	1.9	5.6	252	1.5	0.9	3.3	87	4.69	0.14	13	4.7	1.23	747	0.263	8.56	3.61	2.8	4	10.3	30	1.6	11.6	3 <-5	<-5	9	16.1	1.2	105.1 <-5				
329891	1	166.1	17.9	260 <-5		2.1	8	1281	2.24 <-5	1.7	4.3	271	<-5	1.7	4.3	271	2.1	0.6	9.7	3.49	0.17	20	3.1	1.12	458	0.286	8.61	5.23	1.6	4	7.6	41	1.3	16.3	3.4 <-5	<-5	9	9.7 <-5	10.5 <-5		
329892	0.6	38.1	6.9	56 <-5		2	4	670	1.35 <-5	2	4	354 <-5	<-5	2.1 <-5	60	3.47	0.07	13	2.8	0.84	1143	0.237	9.12	5.91	1.32	0.9	8.6	35	1.1	9.1	2.5 <-5	<-5	9	4.9 <-5	43.5 <-5						
329893	0.5	60.8	8.5	89 <-5		1	8	1080	3.41	5	2.3	5.8 <-5	<-5	4.8 <-5	108	3.36	0.14	12	2.5	1.05	935	0.237	9.02	4.67	2.3	3.7	8.6	27	1.1	11.2	2.2 <-5	<-5	9	6.4 <-5	98.1 <-5						
329894	0.5	114.9	18.2	281 <-5		1.8	9	2674	3.35 <-5	1.9	4.1	168	1.8	11.8	1.8	131	3.68	0.14	13	3.5	1.35	597	0.237	8.47	2.63	3.21	12.1	6.7	27	1.5	11.9	2.2 <-5	<-5	10	26.5	1.3	133.9 <-5		0.6		
329895 (rock)	0.8	3.5	54.8	82 <-5		2.4	8	599	2.98 <-5	3.2	8.2	823 <-5	<-5	1.7 <-5	78	2.94	0.09	27	15	1.04	1593	0.352	8.54	2.96	2.52	<-5	12.1	5.5	49	0.9	7.7	0.6 <-5	6	8.8 <-5	61.9	0.6	9				
329896	1	60.1	8.3	93 <-5		2.7	10	1265	3.19 <-5	1.7	4.2	300 <-5	<-5	1.7 <-5	115	3.44	0.11	11	3	1.24	549	0.239	8.71	5.1	2.05	1.1	7	25	1	9.8	2 <-5	<-5	9	10.2 <-5	82 <-5						
329897	0.7	54.3	9.8	81 <-5		1.5	6	1383	2.16 <-5	1.4	3.7	277 <-5	<-5	1.4 <-5	115	3.5	0.07	11	5.5	0.92	738	0.239	9.21	4.78	2.55	3.6	32.7	28	1.2	9.5	1.9 <-5	<-5	9	10.9 <-5	88.4 <-5						
329898	0.5	147.4	11.5	140 <-5		2.7	5.1	156	2148	3.71	6	2.1	5.3	198	3.8	5.8	1.15	12	7.1	1.16	538	0.283	8.69	3.13	3.4	8	3.8	26	1.3	12.6	3 <-5	<-5	5	10	25.8	1.5	149 <-5				
329899	1.4	102	11.8	281 <-5		7.6	47	965	4.87	7	1.4	4.6	224	1.1	2.3 <-5	98	1.66	0.1	9	7.6	1.45	1146	0.321	8.7	2.53	3.4	7.8	19	2.8	6.9	2.3 <-5	<-5	10	9.4 <-5	87.8 <-5						
329900 (pub)	12.4	18266.3	433.9	1966	13.8	74.4	78	1193	10.12	44	2.4	2.6	260	11.6	2.2 <-5	168	3.59	0.11	38	120.6	2.25	441	0.323	5.68	1.51	2.03	1.4	16.5	51	1.2	13.9	3.9 <-5	<-5	15	14	2.1	56	0.6			
329901	2.4	2260.3	186.2	1847	1.8	8.8	121	1156	6.29	26	3.7	2.9	287	12.2	1.4 <-5	76	3.55	0.06	6	23.6	2.18	438	0.209	7.91	1.81	4.38	294.9	6.8	15	1.6	11.2	3 <-5	<-5	12	13.9	2.3	129.6 <-5				
329902	1.7	1408	16.5	133	<-5	67.4	20	32	250	4.8	2.2	235	<-5	0.5	139	4.1	0.12	20	30.4	252	125	0.417	4.19	2.75	3.97	84.4	33	1.6	15.7	2.1	13.9	<-5	<-5	25	19.9	2.1	13.9	<-5	0.8		
329903	4.2	1878.6	19.6	69	0.9	20.1	174	1069	10.57	81	4.2	2.9	240	0.6	2	0.6	221	3.59	0.1	25	44.3	2.67	275	0.437	3.66	1.47	2.81	96.5	74	33	2.2	17.2	2.5 <-5	<-5	29	23.1	3.8	96.9 <-5			
329904	0.8	355.1	12	42 <-5		8.8	33	820	3.38	17	2.9	16.2	282 <-5	<-5	1.9 <-5	124	5.79	0.03	13	26.9	2.09	582	0.314	8.42	3.66	1.52	7.3	8.2	19	1.2	13.3	3.9	0.5 <-5	18	12	0.6	56 <-5				
STANDARD SF	298.1	7290.2	8893.8	12611	65.4	3434.7	120	4330	8.26	25	2.8	4	380	54.6	50.8	4.8	60	3.01	0.06	17	2412.4	4.39	372	0.18	5.14	1.99	2.37	1.2	8.7	28	6.2	13.9	12.7	1 <-5	7	23	3.1	81.3 <-5			
329905	0.5	5204.7	14.5	254 <-5		1.7	30.1	324	16.09	175	1.9	2.5	182	1.3	2.1	0.6	7.7	16.09	1.3	21	82.7	1.85	11.2	2.7	1.6	1.9	12.4	16	2.3	7.4	2.6 <-5	<-5	7	14.4	1.1	88.7 <-5					
329906	1.4	314.2	31.5	124 <-5		6.7	33	1260	4.13	7	6.6	3.9	269 <-5	<-5	0.8 <-5	90	4.69	0.07	10	41.7	2.48	1507	0.34	7.66	1.4	5.18	10.1	13.6	26	2.2	20.9	3.7 <-5	<-5	26	18	0.7	177.4 <-5		0.7		
329907	0.6	1506.4	45.8	7.6	1.4	3.2	23	954	2.57	8	2	10.1	270 <-5	<-5	1	42.5	5.8	0.06	12	2	1.08	1377	0.213	8.49	4.45	2.58	9.4	7.2	27	1.8	21.6	4.2 <-5	<-5	7	9.1	0.8	91.4 <-5				
329908	1.4	212.8	11	88 <-5		3.1	20	975	3.97	6	2.7	5.7	332 <-5	<-5	0.9 <-5	101	2.92	0.15	13	0.9	1.39	977	0.325	9.12	4.48	2.44	3.8	6.4	28	1.1	21.5	3.9 <-5	<-5	9	10.9 <-5	84.2 <-5					
329909	0.6	50.2	13.1	89 <-5		9	1260	9.36	2.9	5.2	6.1	260	0																												

## **Appendix IV-Part 3**

### **Geochemical Analyses**

**Excel spreadsheet files extracted from analytical certified files and merged with drill hole sample intervals. Analyses of lab and field standards have been removed for clarity.**

To Bell Resources Corp. GRANDUC Project  
 From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 Granduc DDH-06-1

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7XX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	Drill Hole	From (m)	To (m)	Interval	Au g/m <sup>3</sup>	Mo ppm	Cu %	Fe %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm		
330301	DDH-06-01	145.50	146.00	0.50	<0.1	3.8	0.0064	4.27	33.6	97	<5	30.5	14	1965	11	1.1	1.5	163	0.5	<5	<5	196	7.56	0.1	8	31.8	1.52	1834	0.31	6.03	0.74	1.31	1.1	20.3	15	0.7	13.2	2.5	<5	<5	16	17.6	<5	40.1	<5		
330302	DDH-06-01	153.00	153.50	0.50	<0.1	0.6	0.0052	7.61	8.7	177	<5	47.4	33	2679	8	<5	1	177	<5	1.3	<5	167	9.4	0.17	12	32.4	2.98	455	1.32	6.91	0.86	1.87	0.8	3.1	28	1.6	17	13.5	1.2	<5	21	31.4	<5	67.0	<5		
330303	DDH-06-01	161.50	162.16	0.66	0.01	5.5	0.1829	9.91	128.1	318	2.4	31.2	106	1767	32	2	1.6	194	1.2	1.3	<5	202	4.57	0.14	40	32.6	2.22	930	0.62	8.09	2.09	1.69	2.0	12.1	60	2.7	21	14.1	1.3	<5	16	32.9	<5	47.1	0.6		
330304	DDH-06-01	162.16	162.50	0.34	0.23	21.2	0.9142	33.49	11.3	3433	11.5	24.4	92	1251	12	1	0.6	28	15.9	0.6	<5	258	4.8	0.02	58	8.8	1.98	11	0.04	0.66	0.03	0.07	<5	10.0	66	<5	2.1	1.9	<5	<5	<5	3.9	1.3	2.9	<5		
330305	DDH-06-01	162.50	163.00	0.50	0.05	10.4	0.4358	6.1	317.1	2651	5.4	18	68	938	23	1.3	<5	33	12.2	1.3	<5	145	4.79	0.02	188	8.9	1.67	9	0.02	0.37	0.03	0.03	<5	6.3	221	<5	1.8	<5	<5	<5	<5	1.9	0.9	1.2	<5		
330306	DDH-06-01	163.00	163.50	0.50	0.06	140.3	0.6183	25.54	41	942	7.8	32.8	78	1842	9	13.9	1.1	53	3.8	1.1	<5	250	6.25	0.04	3164	12.7	3.93	6	0.09	1.35	0.06	0.08	<5	11.8	3615	1.1	17.9	2	<5	<5	<5	<5	2.1	0.9	1.7	0.5	
330307	DDH-06-01	163.50	164.00	0.50	0.04	85.7	0.5622	14.46	11.5	408	6.5	22.8	66	810	34	0.6	<5	15	2.7	2.2	<5	101	3.15	0.02	68	21.2	1.41	7	0.01	0.24	0.02	0.02	<5	4.7	79	<5	0.9	<5	<5	<5	<5	1.0	1.2	0.8	<5		
330308	DDH-06-01	164.00	164.50	0.50	0.04	18.6	0.4271	8.07	146.4	530	3.8	51.2	170	1069	77	4.7	2.4	96	2.4	1.3	<5	338	1.51	0.19	34	28.4	1.12	471	0.38	5.16	0.92	2.26	1.2	19.1	48	1.1	23.3	4.3	<5	14	19.1	2.2	54.8	0.6			
330309	DDH-06-01	164.50	165.00	0.50	0.05	64.9	0.5100	18.54	204.2	691	5.6	35.2	111	2124	48	2.9	1.5	166	3.3	3.1	<5	229	4.75	0.12	555	13.2	2.6	873	0.35	5.43	1.46	1.39	0.8	4.6	654	1.5	12.2	2.2	<5	<5	<5	<5	9	25.0	1.5	48.2	<5
330310	DDH-06-01	165.00	165.38	0.38	0.12	18.7	1.0665	24.64	50.7	594	10.4	60.5	148	2201	18	4.2	1.6	172	4.4	4	<5	309	4.55	0.25	338	16.8	1.96	463	0.27	4.04	0.11	1.33	21.4	7.2	393	1.4	13.2	2.6	<5	<5	<5	<5	9	19.1	2.1	44.9	<5
330312	DDH-06-01	165.38	166.00	0.62	0.05	29	0.4580	10.89	26.3	321	3.5	26.1	52	2574	11	4.3	1.4	370	1.1	3.8	<5	265	5.92	0.23	290	9.8	2.04	1042	0.50	8.08	1.49	1.80	1.1	6.2	331	2.8	18.2	3	<5	<5	14	29.1	0.8	55.5	<5		
330313	DDH-06-01	166.00	166.50	0.50	0.02	62.6	0.2748	11.65	83.1	385	2.6	28.3	58	2304	21	2.7	1.6	313	1.6	4.1	<5	309	5.17	0.15	32	16.5	2.12	1563	0.43	7.16	1.02	2.35	1.0	7.8	39	1.9	18	3.7	<5	<5	18	27.7	0.7	72.3	<5		
330314	DDH-06-01	166.50	167.00	0.50	0.03	19.4	0.2245	19.03	98.2	622	2.1	35.9	87	1093	43	2.7	2	65	2.5	1.4	<5	363	1.09	0.09	46	28.1	0.79	1154	0.24	3.50	0.61	1.55	1.0	14.7	57	1.3	14.8	4.3	<5	<5	9	15.2	1.0	40.6	<5		
330315	DDH-06-01	170.00	170.50	0.50	0.09	19.8	0.2485	10.09	27.3	489	2.7	45.3	65	1485	40	2.3	2.6	104	1.3	1.1	<5	199	2.64	0.09	251	80.9	2.26	1102	0.26	3.85	0.37	1.42	0.5	4.1	308	0.9	11.5	3.9	<5	<5	12	30.7	<5	41.8	<5		
330316	DDH-06-01	167.50	168.00	0.50	0.1	21.7	1.0003	16.4	81	536	9.1	52	92	1932	28	2.4	2.3	98	2.6	1.5	<5	235	2.63	0.13	198	84.7	1.6	856	0.26	3.90	0.50	1.34	0.6	5.9	235	1.1	13.7	3.9	<5	<5	11	28.0	1.5	43.3	<5		
330317	DDH-06-01	168.00	168.50	0.50	<0.1	8.1	0.0557	4.17	289	664	0.9	54.6	43	1097	39	1.5	1.8	126	3.2	0.8	<5	162	3.29	0.08	13	75.3	1.37	1553	0.27	4.47	1.28	1.47	0.7	6.6	18	0.6	13.9	3.5	<5	<5	13	20.0	0.8	35.7	<5		
330319	DDH-06-01	168.50	169.00	0.50	0.03	39.7	0.1857	4.97	450.5	1587	2.3	56.8	41	1162	42	1.3	2.1	160	7.7	2.1	<5	183	2.42	0.11	23	90.2	2.15	131	0.36	5.46	1.61	1.59	14.8	6.0	34	0.9	16.8	4.3	<5	<5	15	20.2	0.8	39.5	<5		
330320	DDH-06-01	169.00	169.50	0.50	0.17	9.2	1.1455	14.91	140.8	4608	11.9	70.9	75	1222	31	1.3	1.7	107	19.4	2.6	<5	215	2.53	0.09	46	99.2	1.95	194	0.01	4.15	1.07	1.22	14.0	3.4	61	1	11.7	3.1	<5	<5	13	17.9	2.2	32.7	<5		
330321	DDH-06-01	169.50	170.00	0.50	0.08	22.7	0.2713	11.54	72.6	392	3.1	39.1	46	1200	31	1.7	2.2	125	1.4	0.9	<5	223	2.52	0.11	106	80	1.93	2863	0.30	4.42	0.97	1.56	0.7	4.4	126	1.1	13.2	4.2	<5	<5	13	19.1	<5	40.2	<5		
330322	DDH-06-01	170.00	170.50	0.50	0.09	4.9	1.5991	15.69	36.3	1472	19.4	42.9	155	77	2.7	2.6	171	5.9	1.7	<5	249	2.71	0.15	380	19.1	2.30	1087	0.57	4.18	1.07	2.28	1.2	17.1	21	0.9	18.1	5.7	0.6	<5	<5	15	25.4	1.7	69.4	<5		
330330	DDH-06-01	173.50	174.00	0.50	0.11	10	1.3878	14.89	40.6	1913	16.4	51.3	104	1534	50	5.5	6.4	103	7.7	1.7	<5	244	3.44	0.15	1120	32.4	1.79	800	0.29	3.37	0.60	1.01	0.5	4.8	1314	1.1	17.3	4.2	<5	<5	9	15.4	1.6	30.4	<5		
330332	DDH-06-01	174.00	174.50	0.50	0.24	7.1	2.6989	13.78	947.5	12277	33.1	64.4	112	2078	12	2	2.3	181	51.7	3.5	<5	185	4.78	0.15	275	21.1	1.88	375	0.32	4.92	0.93	1.39	0.7	3.0	348	1.1	11	3.9	<5	<5	8	28.9	3.3	43.6	<5		
330333	DDH-06-01	174.50	175.00	0.50	0.6	6.5	2.1847	12.49	239.4	10568	26.6	79.2	205	1312	24	1.9	1.7	110	45.6	2.9	<5	170	2.61	0.11	69	27.5	1.15	296	0.28	2.86	0.62	1.04	0.5	7.1	91	0.9	11.9	4.1	<5	<5	7	13.8	3.7	22.8	<5		
330334	DDH-06-01	175.00	175.50	0.50	1.64	8.8	2.6909	12.81	118.2	19507	33.8	69.8	116	2261	13	1.5	1.8	102	11.5	3.3	<5	225	3.59	0.14	28	9.1	2.27	305	0.44	5.37	1.45	1.53	0.7	4.2	43	1	11.7	3.1	<5	<5	14	22.4	3.4	49.7	<5		
330335	DDH-06-01	175.50	176.00	0.50	0.45	18.6	3.9737	12.4	93.4	14886	54	93.3	137	2651	17	1.7	1.4	183	73.8	3.6	<5	161	7	0.09	161	13.6	1.31	271	0.21	2.72	0.23	1.02	0.5	6.7	204	1.1	8.9	2.7	<5	<5	6	14.2	4.4	23.3	<5		
330336	DDH-06-01	176.00	176.50	0.50	0.19	4.1	0.9512	15.69	36.3	1472	19.4	42.9	155	77	2.7	2.6	171	5.9	1.7	<5	249	2.71	0.15	380	19.1	2.30	1087	0.57	4.18	1.07	2.28	1.2	17.1	21	0.9	18.1	5.7	0.6	<5	<5	15	25.4	1.7	69.4	<5		
330338	DDH-06-01	176.50	177.00	0.50	0.19	23.2	0.8812	4.79	1364	5127	11	44.1	50	1093	35	2.2	2.6	170	29.3	2.5	<5	240	2.76	0.15	83	43.8	1.27	774	0.52	4.14	0.68	2.34	1.1	14.9	11.3	1.2	18.3	6	0.6	<5	<5	12	10.7	1.1	27.5	0.6	
330339	DDH-06-01	177.00	177.50	0.50	0.85	40.6	1.0288	7.41	177.6	1537	12.6	60.1	70	1585	47	2.2	1.9	153	7.2	2.4	<5	202	3.07	0.13	41	40.3	1.57	739	0.32	3.53	0.61	1.57	1.2	11.9	58	1	15.3	4.5	<5	<5	10	14.9	1.3	30.9	<5		
330340	DDH-06-01	177.50	178.00	0.50	0.03	75.9	0.4704	6.96	288.5	953	6.9	44.4	59	1447	51	2.3	1.8	226	5	2.2	<5	217	2.47	0.16	79	37.7	1.53	1166	0.41	5.09	1.44	1.92	0.6	13.3	105	1	17.8	5.1	<5	<5	10	1					





From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.

Analysis: GROUP 7AX - 1.000 GM SAMPLE LEACHED WITH 30 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 100 ML, ANALYSED BY ICP-ES AND ICP-MS.

ELEMENT	Drill Hole	From	To	Interval	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
SAMPLES		(m)	(m)	(m)	gm/mt	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm			
330474	DDH-06-03	17.00	18.00	1.00	<.01	2.5	0.0032	5.4	101	<.5	0.5	4.8	873	3.51	<.5	0.7	2.7	21	<.5	<.5	<.5	30	1.07	0.08	18.5	3.3	0.51	52	0.23	1.01	0.08	0.65	<.5	<.05	6.7	<.5	<.5	8	<.2	
330475	DDH-06-03	25.50	26.50	1.00	<.01	4.8	0.0091	2.1	86	<.5	14.5	14.8	999	4.58	<.5	<.5	1.2	86	<.5	<.5	0.5	133	0.72	0.10	3.3	26.8	1.43	851	0.34	2.55	0.10	1.87	0.7	<.05	15.1	<.5	0.5	8	<.2	
330476	DDH-06-03	43.00	44.00	1.00	<.01	<.5	0.0361	2.0	22	<.5	8.1	6.1	565	1.44	<.5	1.5	1.2	106	<.5	<.5	<.5	87	3.20	0.06	2.5	8.1	0.29	30	0.12	0.85	0.03	0.19	<.5	<.05	4.6	<.5	0.5	<.5	<.2	
330477	DDH-06-03	54.00	55.00	1.00	0.02	<.5	0.0067	3.5	14	<.5	0.6	2.4	468	1.34	<.5	3.0	4.5	108	<.5	<.5	<.5	61	1.83	0.12	8.9	3.3	0.12	18	0.04	0.64	0.05	0.17	<.5	<.05	2.4	<.5	0.7	<.5	<.2	
330479	DDH-06-03	61.00	62.00	1.00	<.01	<.5	0.0082	7.5	35	<.5	3.8	5.6	585	1.93	<.5	6.1	4.3	118	<.5	<.5	<.5	95	1.53	0.03	4.6	4.0	0.27	49	0.09	0.61	0.05	0.30	<.5	<.05	3.0	<.5	0.5	<.5	<.2	
330480	DDH-06-03	80.00	81.00	1.00	<.01	<.5	0.0119	5.0	43	<.5	6.9	8.1	238	2.44	<.5	1.2	1.6	59	<.5	<.5	<.5	105	0.82	0.07	7.0	12.0	0.24	37	0.20	0.36	0.05	0.29	<.5	<.05	1.8	<.5	0.6	<.5	<.2	
330481	DDH-06-03	96.00	97.00	1.00	<.01	2.2	0.0065	1.9	115	<.5	25.7	38.1	1048	6.54	<.5	0.7	1.4	233	<.5	<.5	0.5	226	2.43	0.69	23.2	54.8	2.54	461	0.39	2.30	0.04	2.27	<.5	<.05	5.5	<.5	<.5	12	<.2	
330482	DDH-06-03	109.50	110.50	1.00	<.01	<.5	0.0004	1.1	21	<.5	60.7	34.4	309	3.09	<.5	7	<.5	0.7	365	<.5	<.5	<.5	37	3.90	1.49	14.5	128.7	3.56	1362	0.24	2.23	0.02	2.29	<.5	<.05	6.5	<.5	<.5	<.5	<.2
330483	DDH-06-03	117.60	118.10	0.50	<.01	<.5	0.0013	12.8	29	<.5	4.5	4.7	667	0.70	<.5	10.7	6.6	77	<.5	<.5	<.5	4.2	12	1.84	0.11	5.5	13.7	0.52	68	0.04	0.30	0.04	0.38	1.2	<.05	3.3	<.5	<.5	<.5	<.2
330484	DDH-06-03	118.10	118.60	0.50	0.01	125.8	0.0061	39.6	99	0.6	40.0	107.6	1758	20.69	<.5	12.5	2.2	161	<.5	<.5	26.7	52	3.82	0.15	538.3	20.8	1.65	94	0.05	0.68	0.01	0.86	<.5	<.05	7.9	0.5	23.5	6	18	
330485	DDH-06-03	153.50	154.50	1.00	<.01	<.5	0.0010	1.3	16	<.5	15.6	20.4	208	5.91	<.5	<.5	0.7	307	<.5	<.5	<.5	68	3.22	0.98	13.4	66.6	0.72	130	0.12	0.34	0.02	0.28	<.5	<.05	5.4	<.5	<.5	<.5	<.2	
330487	DDH-06-03	246.00	247.00	1.00	<.01	<.5	0.0095	0.9	29	<.5	3.0	8.0	476	2.66	<.5	<.5	<.5	213	<.5	<.5	<.5	211	1.81	0.12	1.2	3.6	0.30	124	0.21	0.60	0.03	0.39	<.5	<.05	2.5	<.5	<.5	<.5	<.2	

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.

**Granduc DDH-06-4**

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

Analysis: GROUP 7X - 0.5000g SAMPLE, 4 ACID (HF-HClO4-HNO3-HCl) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT	Drill Hole	From (m)	To (m)	Interval (m)	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S	Rb	Hf	
SAMPLES		(m)	(m)	(m)	g/mt	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
330488	DDH-06-04	155.00	156.00	1.00	<.01	3.9	0.0058	31.7	221	<.5	19.7	8	1105	3.17	15	2.1	1.0	272	1.1	1.5	<.5	109	17.39	0.11	12	43.5	1.75	546	0.28	3.83	1.16	0.82	<.5	10.7	19	0.7	16.0	4.0	<.5	<.5	10	10.9	<.5	29.1	<.5	
330489	DDH-06-04	156.00	157.00	1.00	<.01	3.5	0.0074	69.6	458	<.5	40.7	12	1167	3.63	9	1.9	1.3	310	2.9	1.0	<.5	134	11.37	0.12	14	59.5	1.62	578	0.43	4.76	1.58	1.18	<.5	7.8	19	0.6	15.7	5.2	<.5	<.5	14	16.5	<.5	50.2	<.5	
330490	DDH-06-04	157.00	158.00	1.00	<.01	2.9	0.0063	35.5	51	<.5	42.8	6	483	3.01	<.5	0.8	0.7	228	<.5	1.4	<.5	86	10.16	0.08	15	45.8	0.77	512	0.37	3.57	1.29	0.95	0.5	2.6	14	0.5	14.9	4.3	<.5	<.5	9	11.5	<.5	36.6	0.5	
330492	DDH-06-04	168.00	169.00	1.00	<.01	1.7	0.0121	50.2	802	<.5	19.2	20	1319	5.60	9	1.0	1.2	468	5.1	1.3	<.5	226	9.15	0.17	8	27.8	2.05	674	0.49	8.05	2.14	1.54	1.1	6.4	15	0.8	13.2	2.3	0.5	<.5	14	17.6	<.5	64.2	0.9	
330493	DDH-06-04	180.50	181.50	1.00	<.01	1.8	0.0107	33.6	163	<.5	53.7	30	1222	6.19	14	1.7	1.6	379	<.5	0.6	<.5	321	6.29	0.16	11	117.0	2.65	865	0.44	8.15	2.35	1.66	0.6	5.9	20	0.7	15.7	2.6	<.5	<.5	23	21.7	<.5	51.6	<.5	
330494	DDH-06-04	181.50	182.50	1.00	0.02	2.4	0.0120	40.8	271	<.5	53.8	33	1377	6.31	22	2.5	1.6	296	0.8	0.8	<.5	267	6.07	0.14	11	122.7	2.84	837	0.45	7.94	2.11	1.64	0.8	7.3	20	0.7	16.2	2.7	<.5	<.5	23	24.5	<.5	48.2	<.5	
330495	DDH-06-04	182.50	183.50	1.00	0.09	2.0	0.0218	260.3	2600	0.5	67.7	52	1650	6.35	229	3.5	1.4	288	18.8	1.6	<.5	314	7.31	0.13	9	83.2	2.47	1241	0.40	7.44	2.07	1.23	1.9	10.6	17	0.5	14.6	2.0	<.5	<.5	19	23.6	<.5	39.9	<.5	
330496	DDH-06-04	183.50	184.50	1.00	0.01	2.4	0.0091	123.6	182	<.5	38.8	29	1121	7.00	24	1.7	1.7	241	<.5	0.5	<.5	455	4.52	0.20	10	88.0	2.56	1195	0.51	7.68	2.13	1.56	0.5	3.2	20	<.5	16.5	2.3	<.5	<.5	22	29.1	<.5	48.8	<.5	
330497	DDH-06-04	184.50	185.78	1.28	0.41	3.6	0.0140	163.8	541	0.7	57.9	564	7.23	1496	5.6	1.8	348	4.4	3.0	<.5	385	5.61	0.22	11	73.6	2.50	1238	0.59	8.06	2.14	1.48	1.0	8.9	22	0.8	20.4	2.6	<.5	<.5	22	25.4	<.5	48.8	<.5		
330498	DDH-06-04	186.50	187.50	1.00	<.01	1.2	0.0110	146.9	930	<.5	28.4	29	1711	7.21	20	0.7	1.2	356	6.4	1.0	<.5	293	5.91	0.16	9	51.1	2.62	840	0.63	9.04	2.78	1.59	0.6	6.2	18	0.8	17.8	3.3	<.5	<.5	22	17.2	<.5	56.5	<.5	
330499	DDH-06-04	203.50	204.50	1.00	0.01	<.5	0.0155	53.7	345	<.5	52.7	25	1633	6.08	18	1.0	1.6	361	1.8	1.3	<.5	234	6.08	0.15	10	100.8	2.91	2277	0.46	8.41	2.94	1.37	0.6	9.7	20	0.9	16.5	2.5	<.5	<.5	22	14.1	0.5	39.8	0.6	
330500	DDH-06-04	207.60	208.63	1.03	<.01	2.7	0.0135	16.8	193	<.5	10.1	24	1251	6.96	233	0.7	2.1	346	<.5	1.4	<.5	242	5.00	0.17	23	20.4	2.50	818	0.68	8.85	3.13	1.40	1.2	18.8	52	2.3	31.7	16.9	1.4	<.5	<.5	17	21.0	<.5	53.6	0.8
329501	DDH-06-04	208.63	209.60	0.97	0.14	83.1	1.2206	7.6	2573	14.6	40.6	72	1413	20.19	35	6.8	4.9	90	12.5	1.2	<.5	248	3.72	0.22	1534	19.2	1.38	313	0.17	3.10	0.25	1.10	0.8	6.7	1786	1.9	19.6	2.9	<.5	<.5	5	14.0	1.4	35.3	<.5	
329502	DDH-06-04	209.60	210.60	1.00	0.08	6.1	0.6231	16.8	269	7.0	24.8	61	1889	12.08	25	1.4	1.1	217	0.8	2.4	<.5	245	4.47	0.17	111	14.3	2.11	886	0.56	8.36	2.02	2.37	<.5	40.0	134	1.5	19.1	2.5	<.5	<.5	15	33.5	0.8	68.5	<.5	
329503	DDH-06-04	210.60	211.86	1.26	0.06	7.2	1.0984	12.2	1458	13.1	55.3	56	1461	14.06	25	2.1	1.9	127	6.1	1.5	<.5	220	3.47	0.13	177	47.9	1.56	1477	0.27	4.57	0.94	1.52	0.5	3.6	209	1.0	17.6	2.9	<.5	<.5	12	23.9	1.3	50.9	<.5	
329504	DDH-06-04	211.86	212.56	0.70	<.01	1.6	0.2241	34.9	444	3.1	11.8	25	2411	8.53	56	0.5	0.7	690	1.3	5.4	<.5	311	10.39	0.15	19	14.6	2.21	243	0.63	8.54	2.01	0.38	0.9	14.2	31	0.9	19.7	2.1	<.5	<.5	23	8.3	<.5	11.6	0.5	
329505	DDH-06-04	212.56	213.60	1.04	0.07	6.2	0.4505	17.6	1807	5.8	21.4	49	2193	10.10	33	0.7	0.9	302	8.8	2.4	<.5	336	6.28	0.17	28	9.6	3.09	989	0.60	8.87	1.44	1.79	0.5	5.9	35	1.2	16.4	1.9	<.5	<.5	22	29.7	0.5	66.3	<.5	
329506	DDH-06-04	213.60	214.60	1.00	0.07	3.9	0.7215	14.8	1561	10.0	35.4	61	1868	13.70	41	0.9	1.3	196	6.9	1.7	<.5	290	5.51	0.13	51	28.5	2.25	707	0.41	6.62	1.27	1.09	0.6	5.8	50	0.7	13.6	2.1	<.5	<.5	17	19.9	0.9	41.6	<.5	
329507	DDH-06-04	214.60	215.60	1.00	0.09	4.0	1.0148	21.2	3815	14.6	46.3	64	1099	16.54	44	1.7	1.7	143	17.6	0.7	<.5	269	5.07	0.15	105	43.6	1.13	1594	0.27	4.80	1.55	1.52	0.5	2.4	122	0.8	15.0	2.2	<.5	<.5	11	16.6	1.1	55.8	<.5	
329508	DDH-06-04	215.60	216.37	0.77	0.82	2.6	2.0497	11.0	1362	27.5	42.6	76	1240	25.39	21	2.4	2.6	118	8.0	1.3	<.5	317	4.89	0.10	414	28.9	1.18	978	0.20	3.49	0.57	0.98	<.5	4.0	473	0.9	11.6	1.7	<.5	<.5	9	16.6	1.7	34.2	<.5	
329509	DDH-06-04	216.37	217.40	1.03	<.01	2.5	0.0120	16.7	171	<.5	11.8	17	700	4.85	8	4.1	2.3	989	<.5	<.5	<.5	123	3.68	0.28	51	31.3	1.64	2035	0.73	8.34	3.01	2.31	0.6	68.8	99	2.6	10.0	20.4	1.4	<.5	<.5	10	29.4	<.5	65.9	1.5
329511	DDH-06-04	218.30	219.28	0.98	0.01	2.7	0.8567	17.7	723	11.6	28.7	52	795	10.06	19	1.3	3.1	665	3.9	0.9	<.5	163	4.10	0.23	180	30.4	1.28	1791	0.55	6.38	2.16	1.81	<.5	59.0	231	1.9	9.4	15.1	0.7	<.5	8	21.8	1.0	53.3	1.3	
329512	DDH-06-04	219.28	220.30	1.02	<.01	11.5	0.0201	24.7	164	0.6	41.7	15	1088	4.98	17	1.2	1.6	227	<.5	2.0	<.5	202	3.39	0.14	12	51.4	1.65	2194	0.36	5.79	2.07	1.17	<.5	6.2	21	1.1	19.6	3.3	<.5	<.5	14	17.3	<.5	30.6	<.5	
329514	DDH-06-04	220.30	221.30	1.00	0.11	9.2	2.4540	39.0	8746	34.7	82.7	111	1099	13.79	9	1.5	1.8	164	40.4	1.8	<.5	222	3.32	0.12	81	58.3	1.32	511	0.29	4.68	1.42	1.17	0.6	3.7	98	1.4	16.7	2.7	<.5	<.5	12	14.8	2.4	36.1	<.5	
329515	DDH-06-04	221.30	222.30	1.00	0.09	7.9	1.3378	26.9	4143	19.2	45.3	73	1467	10.46	22	2.7	2.1	192	19.9	2.1	<.5	218	4.32	0.16	232	44.5	1.70	775	0.34	5.46	1.38	1.22	0.9	5.8	268	1.5	20.4	2.9	<.5	<.5	13	18.4	1.4	36.2	<.5	
329516	DD																																													

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-5

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

SAMPLE	Drill Hole	From (m)	To (m)	Interval (m)	Au gm/mt	Mo %	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm		
329538	DDH-06-05	123.00	124.00	1.00	<0.01	0.60	0.0032	17.7	148	0.8	8.5	15	1293	5.80	57	0.5	0.9	457	<5	2.6	<5	180	4.74	0.12	7	7.5	2.19	378	0.50	9.33	2.71	1.37	5.7	3.2	14	0.7	13.6	2.2	<5	<5	18	22.2	<5	31.3	<5		
329539	DDH-06-05	133.50	134.50	1.00	<0.01	<5	0.0038	10.1	140	13	0.6	17	1638	5.09	13	0.6	1.0	332	<5	1.5	<5	175	4.42	0.12	7	11.3	2.25	383	0.49	9.34	3.55	1.59	1.3	7.0	14	0.6	13.7	2.0	<5	<5	18	19.5	<5	29.8	0.5		
329540	DDH-06-05	157.50	158.50	1.00	<0.01	<5	0.0035	9.1	82	<5	5.5	14	1302	5.21	8	0.5	1.0	433	<5	2.6	<5	152	6.02	0.09	7	9.0	1.82	189	0.41	10.14	3.08	0.85	0.6	11.1	15	0.8	12.5	2.1	<5	<5	13	12.4	<5	9.7	0.5		
329541	DDH-06-05	184.50	185.50	1.00	<0.01	<5	0.0036	4.0	36	<5	3.9	13	1037	5.56	5	0.6	1.2	533	<5	1.8	<5	113	4.55	0.18	9	3.7	1.62	412	0.44	9.66	3.44	1.57	1.2	40.0	19	1.1	12.7	2.3	<5	<5	9	16.5	<5	37.1	<5		
329542	DDH-06-05	206.00	207.00	1.00	0.01	1.20	0.0040	10.8	100	<5	13.8	10	1157	4.04	8	1.4	1.0	457	<5	1.0	<5	136	9.64	0.18	8	3.4	1.45	813	0.32	6.37	2.04	1.41	0.6	5.2	15	0.5	15.1	2.5	<5	<5	13	12.1	<5	28.5	<5		
329544	DDH-06-05	215.50	216.50	1.00	0.01	0.80	0.0150	11.6	85	<5	9.2	18	1533	6.97	29	0.6	1.0	628	<5	2.1	<5	313	7.28	0.19	8	15.1	1.94	981	0.52	9.00	1.98	2.07	1.2	7.5	17	1.1	16.3	1.5	<5	<5	16	22.7	<5	66.5	0.5		
329545	DDH-06-05	224.50	225.50	1.00	<0.01	2.20	0.0044	52.4	138	0.7	16.1	7	1538	3.96	13	1.9	1.2	475	1.1	1.6	<5	124	14.65	0.14	9	32.7	1.58	989	0.27	4.69	1	1.37	0.5	31.0	17	0.9	15.5	3.2	<5	<5	11	4.9	<5	25.6	1.0		
329546	DDH-06-05	234.50	235.50	1.00	<0.01	1.70	0.0024	16.3	117	<5	11.8	12	733	5.09	6	0.5	2.7	808	<5	5	<5	101	3.59	0.25	48	23.9	1.55	205	0.56	8.12	2.93	2.54	0.6	25.9	88	1.3	9.6	11.7	0.7	<5	<5	9	14.6	<5	48.5	0.8	
329547	DDH-06-05	258.50	259.50	1.00	<0.01	10.70	0.0172	38.9	135	0.6	11.6	52	1903	5.63	9	1.9	1.6	520	0.5	1.4	<5	147	7.53	0.11	12	18.7	1.27	1414	0.29	6.47	2.28	2.18	5.7	27.3	20	14.3	13.5	6.1	0.5	<5	<5	10	12.6	1.0	45.0	1.2	
329548	DDH-06-05	276.00	277.00	1.00	<0.01	1.30	0.0063	27.0	124	<5	21.7	10	1205	3.94	5	1.6	1.5	519	0.5	1.3	<5	105	10.26	0.12	20	28.1	1.56	824	0.37	6.08	2.12	1.74	0.8	12.9	36	1.5	21.2	8.2	0.9	<5	<5	10	15.1	<5	42.3	<5	
329549	DDH-06-05	289.50	290.50	1.00	<0.01	2.30	0.0075	31.6	151	<5	12.5	9	1441	3.49	7	0.6	1.0	476	<5	1.0	<5	104	5.47	0.12	13	14.8	1.17	645	0.31	7.93	3.18	1.66	0.6	5.9	20	0.8	10.3	3.2	<5	<5	9	10.5	<5	40.2	<5		
329550	DDH-06-05	303.50	304.50	1.00	0.01	1.30	0.0014	32.5	252	<5	31.4	22	4781	7.12	15	<5	0.6	230	<5	4.3	<5	383	10.56	0.13	6	266.7	2.50	392	0.71	5.08	0.63	1.63	4.9	9.0	13	1.0	15.8	2.6	<5	<5	9	29.1	<5	54.6	<5		
329551	DDH-06-05	313.50	314.50	1.00	<0.01	3.10	0.0070	23.7	397	<5	40.3	18	2383	5.67	18	1.5	1.5	288	1.5	1.5	<5	247	5.77	0.16	10	77.5	2.87	923	0.49	7.58	2.58	2.12	1.0	9.5	19	0.8	15.7	3.3	<5	<5	20	21.6	<5	62.0	<5		
329552	DDH-06-05	316.50	317.50	1.00	<0.01	4.90	0.0102	29.2	311	<5	1.8	10	466	6.33	10	0.7	3.1	95	1.8	0.8	<5	<10	1.38	0.01	59	31.0	0.39	613	0.36	6.85	2.9	3.54	0.9	13.7	118	6.6	48.6	51.2	4.6	<5	<5	5	6.6	<5	44.1	0.6	
329553	DDH-06-05	320.30	321.30	1.00	<0.01	3.90	0.0575	24.0	129	0.9	5.7	19	466	4.99	7	2.0	4.0	99	<5	0.7	<5	<10	1.19	0.01	81	7.7	0.32	723	0.36	6.85	3.17	3.35	1.4	27.9	149	4.1	47.4	54.6	5.1	<5	<5	5	5.6	<5	44.4	0.6	
329554	DDH-06-05	321.30	322.30	1.00	0.12	31.70	1.2960	90.7	1639	17.2	39.7	92	1610	18.36	13	3.0	1.9	123	7.5	1.6	<5	187	5.07	0.12	385	12.8	2.45	534	0.26	4.11	0.95	1.68	1.0	15.4	421	2.2	16.9	12.1	1.3	<5	<5	8	13.2	1.6	34.0	<5	
329555	DDH-06-05	322.30	323.30	1.00	0.03	74.90	0.4106	18.0	626	5.5	16.2	43	2017	16.42	10	2.3	1.6	171	2.5	1.6	<5	225	6.01	0.21	418	16.8	3.33	789	0.18	3.51	0.77	1.60	0.8	4.9	46.7	1.5	10.1	1.7	<5	<5	9	15.1	0.6	41.2	<5		
329557	DDH-06-05	323.30	324.30	1.00	0.03	34.50	0.1664	81.2	523	2.0	21.8	32	1767	9.62	10	2.5	1.9	218	1.5	0.8	<5	195	3.67	0.16	149	27.5	2.14	1838	0.35	5.52	1.66	1.73	0.9	6.1	167	1.3	13.6	2.5	<5	<5	11	19.6	<5	42.0	<5		
329558	DDH-06-05	324.30	325.30	1.00	0.04	18.90	0.2538	13.2	257	3.1	37.6	47	1984	10.47	25	2.3	2.5	145	0.8	0.7	<5	198	3.35	0.12	251	78.8	2.00	1376	0.32	4.78	1.01	2.04	0.9	3.9	285	0.9	15.2	3.5	<5	<5	14	21.1	<5	44.0	<5		
329559	DDH-06-05	325.30	326.30	1.00	0.21	14.20	1.0383	21.7	524	13.8	45.7	62	2330	12.01	18	2.1	1.8	203	2.1	1.3	<5	234	4.82	0.15	189	48.1	1.98	1062	0.46	5.95	1.26	2.75	0.5	3.2	217	1.5	17.1	3.6	<5	<5	5	21.9	1.3	71.2	<5		
329560	DDH-06-05	326.30	327.30	1.00	0.04	1.80	0.2850	52.4	562	3.9	36.9	40	1964	7.40	17	1.1	1.0	290	1.2	2.2	<5	284	3.60	0.13	13	35.2	2.26	2064	0.65	8.21	2.87	1.93	1.3	3.6	18	1.1	16.6	2.1	<5	<5	22	22.5	<5	42.6	1.3		
329561	DDH-06-05	327.30	328.30	1.00	0.17	7.50	5.5341	28.3	2385	73.9	169.4	111	1858	17.91	8	1.8	1.7	172	11.2	2.1	<5	181	3.87	0.08	234	63.6	1.65	377	0.22	3.63	0.68	1.29	0.8	3.9	259	1.4	12.3	2.7	<5	<5	11	17.6	4.6	19.0	<5		
329562	DDH-06-05	328.30	329.30	1.00	0.13	14.50	1.4553	33.3	3829	22.0	61.8	99	1653	13.50	20	1.8	1.5	214	12.8	2.4	<5	211	3.26	0.10	144	75.9	1.60	830	0.29	4.33	0.92	1.58	0.7	3.7	163	1.3	12.3	2.3	<5	<5	12	19.1	1.7	29.8	<5		
329563	DDH-06-05	329.30	329.79	0.49	0.1	10.50	0.2134	203.1	1572	3.6	46.0	52	1710	9.11	27	1.5	1.7	162	6.5	1.4	<5	201	3.26	0.12	24	85.5	1.84	1321	0.35	5.26	1.44	2.35	0.5	4.1	32	1.1	13.2	1.1	16.6	2.9	<5	<5	16	24.3	1.1	40.8	<5
329565	DDH-06-05	329.79	330.80	1.01	<0.01	7.20	0.1758	60.0	766	2.4	48.7	24	1364	5.93	17	1.1	1.3	182	3.8	0.9	<5	186	3.93	0.20	13	72.2	1.95	2916	0.38	5.34	1.62	1.75	0.5	93.9	21	1.2	15.6	3.2	<5	<5	16	18.5	<5	38.7	0.5		
329566	DDH-06-05	330.80	331.80	1.00	<0.01	6.50	0.0245	24.7	264	0.6	39.0	24	946	4.30	18	1.2	1.7	135	0.8	0.5	<5	162	2.38	0.12	22	66.0	1.43	1684	0.30	4.86	1.9	1.36	1.1	6.1	32	0.8	13.4	3.3	<5	<5	12	19.3	<5	32.9	<5		
329567	DDH-06-05	331.80	332.80	1.00	0.06	41.40	0.9354	34.8	1039	22.0	54.3	38	1012	10.60	12	1.9	1.7	134	5.5	1.1	<5	206	2.30	0.13	72	68.3	1.35	1769	0.28	4.09	0.9	1.57	1.0	7.5	88	1.1	16.1	3.5	<5	<5	12	18.2	1.1	40.4	<5		
329568	DDH-06-05	332.80	333.80	1.00	<0.01	6.70	0.0434	30.8	209	1.1	44.9	29	1022	5.01	13	1.8	1.8	141	0.6	0.8	<5	185	2.66	0.11	41	85.8	1.48	2616	0.33	4.97	1.64	1.52	0.7	9.4	52	1.2	16.2	3.6	<5	<5	15	18.5	<5	31.6	<5		
329570	DDH-06-05	333.80	334.80	1.00	0.09	4.90	0.6356	34.1	436	12.8	47.3	55	1324	11.29	16	1.9	1.5	143	2.3	1.1	<5	206	4.16	0.29	75	60.5	1.64	1562	0.24	3.90	0.96	0.98	0.8	8.3	89	1.3											

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-6  
 Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 71X - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	Drill Hole	From (m)	To (m)	Interval (m)	Au gm/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm
329605	DDH-06-06	33.00	34.00	1.00	0.01	2.4	0.0055	20.1	806	<5	13.8	9	1003	4.07	36	1.0	1.1	277	3.0	0.8	<5	128	6.77	0.12	10	43.2	1.33	1316	0.29	4.91	1.42	1.33	1.7	5.7	20	0.8	15.4	6.1	0.5	<5	10	19.9	<5	33.9	<5
329606	DDH-06-06	72.50	73.50	1.00	<0.1	<5	0.0007	3.3	47	<5	11.2	7	797	2.52	6	0.7	493	<5	0.5	<5	52	3.15	0.08	9	14.3	0.82	337	0.24	8.98	4.17	1.19	0.5	4.9	19	<5	5.2	5.7	0.5	<5	5	15.3	<5	31.4	<5	
329607	DDH-06-06	129.00	130.00	1.00	0.02	0.8	0.0470	3.7	43	<5	15.6	80	1291	6.21	45	0.7	1.0	196	<5	0.9	<5	228	7.22	0.15	7	10.6	2.03	643	0.50	9.52	1.23	1.69	3.1	3.3	15	0.9	11.3	3.0	<5	<5	16	22.1	<5	51.3	<5
329608	DDH-06-06	158.00	159.00	1.00	0.01	<5	0.0105	7.7	111	<5	9.3	24	1800	7.44	<5	0.5	1.0	683	<5	1.5	<5	306	6.98	0.20	7	13.0	2.09	625	0.57	9.78	2.64	1.43	1.1	9.1	14	0.8	15.2	2.0	<5	<5	17	20.5	<5	44.4	0.5
329609	DDH-06-06	192.00	193.00	1.00	0.01	4.2	0.0085	38.5	179	0.5	29.2	12	2789	5.52	<5	2.1	0.8	245	<5	<5	<5	133	8.93	0.17	8	34.3	1.44	475	0.34	6.32	1.60	1.11	0.6	13.9	14	0.5	12.0	2.8	<5	<5	11	19.5	<5	33.6	<5
329611	DDH-06-06	201.00	202.00	1.00	0.01	<5	0.0041	9.8	121	<5	12.8	24	1890	6.39	<5	0.5	0.8	569	<5	1.3	<5	245	6.89	0.11	6	10.0	2.76	316	0.61	9.30	2.28	0.76	0.6	5.6	13	0.5	13.0	2.5	<5	<5	25	22.4	<5	23.1	0.5
329612	DDH-06-06	209.00	210.00	1.00	<0.1	1.2	0.0079	7.5	85	<5	1.0	20	1563	5.72	<5	<5	0.8	420	<5	0.9	<5	205	4.57	0.19	8	2.8	1.79	722	0.56	9.81	3.55	1.55	4.0	1.8	18	0.6	15.0	3.6	<5	<5	11	21.6	<5	46.9	<5
329613	DDH-06-06	218.00	219.00	1.00	0.01	<5	0.0014	7.1	53	<5	6.8	11	1495	4.39	<5	<5	1.0	253	<5	<5	<5	113	6.11	0.15	9	8.5	1.10	476	0.41	9.10	2.36	1.57	<5	5.2	18	0.7	10.2	4.6	<5	<5	9	16.6	<5	42.7	<5
329614	DDH-06-06	227.00	228.00	1.00	0.02	1.4	0.0230	26.9	296	<5	16.3	22	2014	6.02	9	1.0	1.1	419	1.3	0.7	<5	226	5.99	0.18	7	35.0	1.86	688	0.49	8.29	2.94	0.95	<5	7.0	15	0.8	15.4	2.1	<5	<5	16	24.0	<5	31.9	<5
329616	DDH-06-06	238.00	239.00	1.00	0.01	3.8	0.0131	18.5	174	0.6	35.8	23	1936	5.44	10	0.8	1.6	295	0.7	0.6	<5	201	4.23	0.15	10	64.4	2.03	571	0.46	7.39	2.82	1.27	1.1	6.2	19	0.8	17.4	3.7	0.7	<5	15	23.4	<5	42.6	<5
329617	DDH-06-06	254.00	255.00	1.00	0.01	0.6	0.0089	354.5	1049	0.5	43.1	31	2734	8.03	14	<5	0.7	224	5.0	1.1	<5	271	6.49	0.18	9	47.8	3.27	795	1.04	8.03	1.87	1.32	1.3	2.5	22	0.9	16.0	8.5	0.7	<5	25	36.3	0.7	43.4	<5
329618	DDH-06-06	255.00	256.00	1.00	0.01	1.0	0.0148	246.1	1213	0.5	19.2	29	2617	7.88	14	0.5	0.9	362	6.0	1.2	<5	288	5.66	0.21	8	15.7	2.83	701	0.73	8.86	2.49	1.28	0.9	4.4	17	0.9	17.7	3.6	<5	<5	22	32.5	<5	45.6	<5
329619	DDH-06-06	256.00	257.00	1.00	0.02	6.0	0.1067	40.6	687	2.4	24.7	32	1863	7.52	7	0.5	0.7	230	3.6	0.8	<5	245	6.95	0.17	15	16.4	2.60	816	0.63	8.06	2.82	1.34	0.9	3.6	24	0.7	14.1	4.4	<5	<5	18	24.8	0.6	40.4	<5
329620	DDH-06-06	257.00	258.00	1.00	0.01	1.0	0.0102	10.5	124	<5	42.8	26	1598	6.77	10	0.6	1.0	157	<5	<5	<5	223	6.45	0.15	9	78.3	2.59	432	0.60	8.48	3.78	0.95	0.9	3.5	18	0.8	15.3	3.6	<5	<5	18	24.1	<5	37.2	<5
329622	DDH-06-06	280.50	281.50	1.00	0.02	5.8	0.0033	7.2	126	<5	45.1	9	1242	2.75	5	2.2	1.6	191	<5	1.3	<5	165	1.99	0.11	11	22.4	0.74	2037	0.23	3.39	0.86	0.78	<5	3.0	18	0.5	14.6	4.2	<5	<5	7	9.4	<5	20.9	<5
329623	DDH-06-06	294.50	295.50	1.00	0.01	2.0	0.0164	7.2	106	<5	52.6	29	1581	6.78	<5	1.6	0.8	265	<5	1.2	<5	278	7.97	0.18	15	59.7	3.11	689	1.18	8.07	1.93	1.43	0.8	13.3	32	1.5	24.2	12.1	1.0	<5	22	21.8	<5	34.6	1.1
329624	DDH-06-06	305.00	306.00	1.00	0.01	1.6	0.0156	5.2	75	<5	60.6	28	1244	5.96	8	0.8	1.1	428	<5	1.3	<5	271	8.52	0.13	9	196.4	3.69	770	0.48	8.31	2.58	0.83	<5	12.2	16	0.6	14.0	1.9	<5	<5	26	8.1	<5	12.2	1.0
329625	DDH-06-06	317.50	318.50	1.00	0.01	<5	0.0155	7.4	91	<5	24.5	25	1100	6.70	7	<5	0.8	556	<5	0.7	<5	316	7.23	0.17	6	50.8	2.68	581	0.56	10.38	2.49	1.64	0.5	7.0	12	0.6	12.7	1.5	<5	<5	18	18.0	<5	39.7	<5
329626	DDH-06-06	329.00	330.00	1.00	0.01	2.9	0.0064	1.3	67	<5	30.7	14	986	3.95	5	2.2	0.7	389	<5	<5	<5	162	18.56	0.15	8	93.0	2.76	383	0.36	4.57	0.93	0.84	<5	9.7	12	0.6	9.5	2.2	0.6	<5	15	11.0	<5	17.1	0.5
329627	DDH-06-06	334.50	335.50	1.00	0.01	<5	0.0006	1.5	67	<5	69.2	30	987	6.23	<5	0.5	0.5	139	<5	<5	<5	193	9.23	0.11	9	57.0	3.40	196	1.25	6.33	1.75	1.35	<5	7.5	22	1.0	15.1	11.3	0.8	<5	21	41.8	<5	28.8	<5
329628	DDH-06-06	344.00	345.00	1.00	0.01	2.0	0.0046	2.0	57	<5	38.6	20	1173	4.42	6	0.8	0.8	362	<5	0.8	<5	216	15.23	0.11	8	196.2	3.19	793	0.41	5.82	1.50	1.00	<5	10.4	13	<5	12.0	2.2	<5	<5	23	10.3	<5	19.3	0.5
329629	DDH-06-06	361.75	362.75	1.00	0.03	18.4	0.0079	6.6	94	<5	44.7	13	623	3.15	<5	2.3	1.7	222	0.9	0.7	<5	245	5.25	0.09	10	66.8	1.18	795	0.31	4.41	2.06	0.76	<5	20.8	18	0.7	14.0	4.1	<5	<5	11	6.1	0.8	15.6	0.6
329630	DDH-06-06	371.14	372.17	1.03	0.02	0.5	0.0101	9.2	55	<5	21.8	25	1446	5.66	6	<5	0.6	328	<5	0.8	<5	256	6.28	0.14	<5	19.8	2.93	503	0.67	9.73	3.18	1.08	<5	20.1	8	<5	11.0	2.8	<5	<5	19	18.9	<5	17.9	0.6
329631	DDH-06-06	374.00	375.00	1.00	0.01	<5	0.0114	4.0	62	<5	47.7	42	1585	7.14	<5	<5	0.9	300	<5	0.8	<5	296	10.01	0.19	12	58.3	3.98	342	1.20	8.45	2.27	1.25	<5	7.1	27	1.1	15.8	14.2	1.1	<5	21	17.5	<5	27.7	0.6
329632	DDH-06-06	379.00	380.00	1.00	0.01	1.3	0.0015	5.4	71	<5	48.4	25	1429	7.20	9	1.1	1.1	402	<5	0.8	<5	276	8.77	0.14	10	77.7	3.62	460	0.70	7.47	2.44	1.25	0.5	16.5	19	0.8	16.2	3.9	<5	<5	28	11.2	<5	33.3	<5
329634	DDH-06-06	404.00	405.00	1.00	0.01	4.1	0.0256	5.1	86	<5	36.0	23	1095	5.15	22	1.4	1.1	337	0.5	0.6	<5	232	10.79	0.15	8	82.1	2.55	496	0.49	6.81	2.59	0.83	0.6	10.3	14	<5	12.8	2.6	<5	<5	18	12.7	<5	22.4	<5
329635	DDH-06-06	418.00	419.00	1.00	0.01	2.2	0.0035	35.5	109	0.5	86.4	25	1066	6.17	12	0.9	1.4	368	<5	1.0	<5	253	7.54	0.14	9	135.2	3.42	1447	0.50	8.15	2.83	1.34	<5	12.1	16	0.8	14.5	2.3	<5	<5	22	3.1	<5	28.8	0.6
329636	DDH-06-06	423.50	424.50	1.00	0.02	4.6	0.1182	7.9	88	<5	40.0	59	1254	9.32	<5	1.3	1.1	262	<5	0.6	<5	220	9.51	0.38	8	106.9	2.87	285	0.52	6.38	2.35	0.42	0.6	10.5	15	0.8	14.9	3.0	<5	<5	18	10.4	1.3	14.7	0.6
329638	DDH-06-06	425.50	426.50	1.00	<0.1	4.3	0.0123	8.2	84	0.7	90.5	16	1468	4.65	<5	3.1	0.7	237	0.5	0.7	<5	125	15.78	0.32	17	61.4	2.97	702	0.50	4.22	1.56	0.86	1.1	15.8	23	0.9	22.3	5.1	<5	<5	12	7.9	1.2	28.7	0.5
329639	DDH-06-06	434.50	435.50	1.00	0.01	0.9	0.0060	6.6	60	<5	46.1	36	1296	9.31																															

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-7  
 Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	Drill Hole	From (m)	To (m)	Interval (m)	Au** gm/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm
329646	DDH-06-07	50.00	51.00	1.00	0.01	1.8	0.0057	11.2	112	<.5	22.1	10	1192	3.78	5	1.2	1.0	360	<.5	0.9	<.5	162	7.10	0.11	8	42.20	1.62	2035	0.35	5.45	1.82	0.91	0.6	4.7	14	0.6	14.0	2.9	<.5	<.5	13.00	15.7	<.5	26.1	<.5
329647	DDH-06-07	110.00	111.00	1.00	0.01	<.5	0.0009	3.8	50	<.5	11.2	4	742	2.42	5	<.5	0.7	486	<.5	0.6	<.5	40	3.85	0.07	10	7.10	0.96	400	0.23	8.36	3.37	1.04	0.7	3.6	17	<.5	<.5	5.00	12.6	<.5	33.4	<.5			
329648	DDH-06-07	137.00	138.00	1.00	0.01	<.5	0.0038	2.6	24	<.5	10.3	5	808	2.34	<.5	<.5	0.8	381	<.5	<.5	<.5	49	3.92	0.07	10	7.20	0.51	594	0.24	8.94	3.96	1.44	0.6	1.6	17	<.5	6.1	6.3	0.5	<.5	5.00	11.9	<.5	38.7	<.5
329649	DDH-06-07	145.00	146.00	1.00	0.01	<.5	0.0115	5.1	85	<.5	10.0	30	1727	8.40	<.5	<.5	0.6	590	<.5	1.1	<.5	328	8.77	0.18	5	<.5	3.57	498	0.74	10.41	1.77	1.14	0.6	11.0	10	0.6	12.3	1.6	<.5	<.5	19.00	15.3	<.5	44.4	0.5
329650	DDH-06-07	174.00	175.00	1.00	<.01	<.5	0.0034	2.4	43	<.5	9.3	5	516	2.60	<.5	<.5	0.6	500	<.5	<.5	<.5	51	3.94	0.07	9	9.20	0.76	378	0.24	8.70	3.17	1.04	<.5	2.1	17	<.5	6.7	4.8	<.5	<.5	5.00	12.4	<.5	33.8	1.0
329651	DDH-06-07	195.00	196.00	1.00	<.01	0.5	0.0167	15.5	186	<.5	11.4	23	2512	7.34	9	<.5	1.2	382	<.5	0.7	<.5	271	5.90	0.23	8	10.40	2.07	428	0.61	9.61	2.97	0.84	<.5	1.9	15	0.5	14.9	2.1	<.5	<.5	15.00	23.6	<.5	27.1	<.5
329652	DDH-06-07	255.00	256.00	1.00	0.01	1.7	0.0042	5.9	42	<.5	24.6	14	1488	4.72	<.5	1.0	1.0	429	<.5	0.5	<.5	160	8.16	0.17	9	49.10	1.63	832	0.47	7.89	2.32	1.48	0.7	10.6	17	<.5	13.7	2.9	<.5	<.5	15.00	26.5	<.5	47.2	<.5
329653	DDH-06-07	265.00	266.00	1.00	<.01	3.5	0.0076	14.3	65	<.5	31.3	14	1226	4.27	7	0.9	1.6	288	<.5	<.5	<.5	154	4.76	0.16	11	39.10	1.51	713	0.45	7.49	1.98	1.71	<.5	4.1	21	<.5	16.6	3.7	<.5	<.5	11.00	31.3	<.5	58.5	<.5
329654	DDH-06-07	268.00	269.00	1.00	<.01	7.0	0.0098	42.4	327	<.5	39.7	19	1738	5.60	55	1.3	1.6	198	1.00	0.7	<.5	203	5.24	0.15	11	58.60	1.63	1012	0.47	7.20	2.04	1.57	<.5	3.6	19	<.5	18.1	3.4	<.5	<.5	16.00	27.6	<.5	50.6	<.5
329655	DDH-06-07	275.00	276.00	1.00	<.01	2.4	0.0086	110.7	928	<.5	82.5	32	2531	7.83	<.5	1.9	0.7	218	2.90	1.1	<.5	179	4.96	0.23	10	67.90	3.19	1078	1.12	8.32	2.14	2.19	0.6	4.1	23	1.4	16.5	9.0	0.8	<.5	24.00	44.6	<.5	48.4	<.5
329657	DDH-06-07	287.00	288.00	1.00	0.01	6.0	0.0087	35.0	168	0.60	44.6	16	1244	4.68	5	1.4	1.1	339	<.5	1.4	<.5	211	5.69	0.13	9	44.40	1.76	1911	0.45	6.90	2.12	1.10	<.5	5.3	16	0.7	16.6	3.4	<.5	<.5	17.00	15.4	<.5	37.9	<.5
329658	DDH-06-07	308.00	309.00	1.00	0.01	22.0	0.0067	12.1	143	0.50	41.5	7	1141	2.51	<.5	2.2	1.6	127	2.40	0.7	<.5	145	2.63	0.12	11	17.10	0.74	2018	0.24	3.54	1.00	0.60	<.5	12.1	18	0.6	15.8	3.5	<.5	<.5	7.00	7.5	<.5	19.0	<.5
329659	DDH-06-07	322.00	323.00	1.00	<.01	3.7	0.0037	7.6	115	<.5	20.0	11	1476	3.83	7	0.8	1.3	460	0.60	2.4	<.5	93	6.18	0.17	11	6.80	1.61	856	0.42	8.15	2.90	0.73	<.5	5.4	19	<.5	17.1	3.5	<.5	<.5	5.00	14.0	<.5	20.1	1.2
329660	DDH-06-07	325.00	326.00	1.00	<.01	8.6	0.0037	5.2	81	<.5	36.7	17	2185	4.13	<.5	3.1	1.2	314	<.5	1.5	<.5	165	11.65	0.21	10	24.20	2.03	680	0.42	6.06	1.60	0.91	<.5	5.6	12	0.7	14.7	3.2	<.5	<.5	13.00	12.3	<.5	25.3	<.5
329661	DDH-06-07	331.00	332.00	1.00	0.01	5.7	0.0086	5.3	100	<.5	33.5	33	1418	7.44	<.5	<.5	0.5	223	<.5	0.7	<.5	228	4.57	0.19	12	66.00	5.31	370	1.20	9.53	1.72	0.91	<.5	5.8	29	1.4	22.2	11.0	0.9	<.5	22.00	29.2	<.5	20.0	1.7
329662	DDH-06-07	338.00	339.00	1.00	<.01	2.5	0.0091	5.3	93	<.5	51.1	26	1288	6.00	8	0.8	1.2	501	<.5	1.2	<.5	266	9.33	0.15	9	135.10	3.66	707	0.48	8.54	1.99	0.81	<.5	11.1	15	0.5	12.6	2.4	<.5	<.5	28.00	8.1	<.5	14.9	0.5
329664	DDH-06-07	347.00	348.00	1.00	<.01	<.5	0.0088	5.2	79	<.5	74.5	34	1156	7.40	<.5	1.5	0.8	233	<.5	<.5	<.5	310	9.40	0.19	14	51.30	4.73	434	1.53	8.45	1.69	2.35	<.5	12.7	32	1.5	16.3	17.9	1.4	<.5	24.00	27.2	<.5	37.1	0.7
329665	DDH-06-07	350.00	351.00	1.00	<.01	1.1	0.0066	3.9	85	<.5	50.8	22	1232	5.65	5	1.0	0.9	412	<.5	0.6	<.5	257	10.96	0.12	8	187.90	3.69	702	0.48	7.34	1.87	0.93	<.5	9.0	13	<.5	10.8	1.8	<.5	<.5	32.00	9.2	<.5	18.8	<.5
329666	DDH-06-07	354.50	355.50	1.00	<.01	<.5	0.0010	2.2	57	<.5	105.3	38	1214	7.97	<.5	<.5	0.5	238	<.5	0.5	<.5	226	10.49	0.13	10	70.70	5.08	320	1.38	8.06	1.03	2.21	<.5	31.6	24	1.3	14.6	13.2	1.0	<.5	25.00	25.5	<.5	31.9	0.8
329667	DDH-06-07	367.50	368.50	1.00	<.01	4.5	0.0059	6.3	91	<.5	29.4	11	940	3.83	<.5	1.6	1.0	376	0.50	<.5	<.5	145	14.61	0.13	10	62.40	2.25	527	0.37	4.95	1.81	0.57	<.5	7.9	14	0.5	11.2	3.1	<.5	<.5	15.00	9.4	0.5	13.1	<.5
329669	DDH-06-07	383.00	384.00	1.00	0.01	0.5	0.0360	2.3	72	<.5	54.5	31	974	5.79	<.5	1.2	1.7	349	<.5	0.6	<.5	658	9.30	0.25	21	34.30	3.35	297	1.56	8.42	1.92	1.80	<.5	12.1	47	1.5	20.1	26.2	1.9	<.5	24.00	23.6	<.5	33.5	2.3

Granduc DDH-06-8  
Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
Analysis: GROUP TTX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	From (m)	To (m)	Interval (m)	Au g/m	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	
329702	8.49	9.96	1.47	<0.1	1.1	0.0094	4.2	69	<5	54.7	31	1342	5.56	18	0.5	1.9	197	<5	<5	<5	224	4.34	0.12	13	76.3	2.88	401	0.51	6.80	1.98	1.13	1.0	9.7	28	1.4	8.9	2.9	<5	<5	20	14.4	<5	23.0	0.6	
329703	16.02	17.98	1.96	<0.1	1.2	0.0120	158.0	236	1.8	72.6	25	1395	5.06	13	2.9	3.3	638	1.6	<5	4.1	173	5.37	0.15	16	42.9	2.09	132	0.28	7.81	4.83	0.11	2.0	27.5	29	0.5	15.3	3.1	<5	<5	13	12.0	1.1	2.3	0.7	
329704	17.98	21.03	3.05	<0.1	1.1	0.0063	76.3	234	0.7	72.7	24	1744	5.44	15	2.9	2.8	623	3.0	<5	1.7	187	6.47	0.21	17	34.5	2.17	169	0.33	6.41	3.64	0.08	1.8	23.0	29	0.5	17.5	2.9	<5	<5	15	12.0	1.3	1.6	0.9	
329705	21.03	21.85	0.82	<0.1	24.5	0.0178	259.3	249	1.2	101.0	19	1247	4.54	9	4.3	4.9	513	3.0	0.8	1.9	166	5.34	0.14	23	66.1	1.53	137	0.32	7.15	4.89	0.06	3.9	59.8	39	1.2	20.8	6.5	<5	<5	13	8.9	1.6	1.1	1.0	
329706	21.85	22.65	0.80	0.04	1.3	0.0103	595.8	461	4.6	68.8	11	1371	3.55	15	1.7	1.9	795	9.3	0.8	10.1	115	5.34	0.04	14	32.5	1.10	130	0.18	5.41	3.40	0.18	2.7	63.1	21	0.6	18.2	2.8	<5	<5	13	9.3	0.9	4.5	<5	
329707	22.65	23.53	0.88	0.01	4.3	0.0090	268.5	162	0.9	78.2	16	678	2.62	25	0.7	1.1	79	39.2	0.8	0.8	70	1.57	0.02	13	36.2	1.16	433	0.06	1.96	0.14	0.59	1.0	11.5	20	0.6	5.7	1.0	<5	<5	6	5.9	1.2	13.4	<5	
329708	23.53	25.75	2.22	<0.1	5.1	0.0190	798.0	2554	3.0	117.9	28	1179	5.78	11	2.1	1.4	142	56.8	1.1	2.1	53	2.52	0.04	13	15.7	0.82	273	0.06	1.81	0.15	0.47	1.3	13.5	22	0.5	8.1	1.3	<5	<5	14	10.9	1.5	10.9	<5	
329709	25.75	27.05	1.30	<0.1	8.9	0.0110	866.5	257	0.5	65.2	11	679	2.56	12	2.2	2.5	237	161	5.0	<5	1.7	131	2.41	0.10	11	36.7	1.27	490	0.10	2.43	0.14	0.72	0.6	14.0	20	0.8	8.0	2.3	<5	<5	6	8.3	1.0	20.5	<5
329710	27.05	28.22	1.17	<0.1	2.0	0.0050	19.0	71	<5	53.1	16	903	3.88	10	0.6	1.6	170	<5	<5	<5	110	1.89	0.07	18	21.9	1.75	2606	0.17	4.70	0.57	1.36	0.6	4.3	28	1.6	6.8	2.5	<5	<5	13	15.1	0.9	33.3	0.7	
329711	28.22	29.32	1.10	<0.1	8.9	0.0093	7.8	68	<5	60.4	13	1052	3.00	11	2.1	1.8	199	0.7	0.5	<5	145	2.94	0.09	12	27.6	1.53	1447	0.16	3.30	0.14	1.00	1.0	40.0	19	1.0	6.8	2.6	<5	<5	8	13.2	0.8	25.2	0.6	
329712	29.32	31.30	1.98	<0.1	2.1	0.0313	18.3	138	0.6	74.3	19	674	3.93	19	2.5	1.8	169	0.6	0.5	1.1	115	1.72	0.06	14	20.1	1.36	831	0.19	2.81	0.77	0.35	1.4	21.2	23	1.0	9.0	2.6	<5	<5	9	10.6	1.4	8.4	0.9	
329713	31.30	33.25	1.95	0.01	2.0	0.0298	11.0	174	0.9	53.4	14	1527	3.31	14	2.4	2.5	288	<5	0.5	0.8	110	2.42	0.08	17	38.9	1.87	968	0.22	3.02	0.93	0.13	1.2	16.5	29	1.0	10.3	3.6	<5	<5	11	11.8	0.8	5.3	0.8	
329714	33.25	34.94	1.69	<0.1	1.5	0.0210	11.0	181	<5	59.9	18	842	2.2	12	2.2	2.5	288	<5	0.5	0.8	110	2.42	0.08	17	38.9	1.87	968	0.22	3.02	0.93	0.13	1.2	16.5	29	1.0	10.3	3.6	<5	<5	11	12.8	0.6	3.7	0.6	
329715	34.94	36.70	1.76	<0.1	1.7	0.0052	12.6	169	<5	69.3	15	686	3.40	13	3.4	3.4	245	<5	0.6	0.7	158	2.25	0.11	13	44.4	1.52	294	0.20	3.23	1.31	0.18	1.9	21.8	21	1.2	12.7	3.1	<5	<5	10	12.0	0.5	4.8	1.2	
329716	36.70	38.97	2.27	<0.1	1.2	0.0033	21.2	216	1.0	79.9	14	2788	4.28	<5	2.3	3.5	1063	0.8	<5	4.0	167	11.58	0.16	14	56.0	2.99	752	0.19	4.50	1.51	0.17	1.1	24.5	24	0.6	19.9	2.8	<5	<5	11	21.0	<5	5.4	0.6	
329717	38.97	40.84	1.87	<0.1	4.1	0.0055	9.8	268	<5	90.0	17	2983	5.57	5	2.0	3.0	1157	0.5	<5	<5	164	14.25	0.09	16	44.3	3.49	1206	0.20	4.42	0.80	0.28	1.0	28.4	27	1.0	49.1	3.6	<5	<5	12	21.8	0.7	8.3	1.0	
329718	40.84	42.37	1.53	<0.1	22.8	0.0843	12.9	201	0.7	82.2	27	2149	8.55	46	6.7	2.9	949	<5	0.8	1.5	292	10.24	0.19	16	30.6	2.29	262	0.23	5.59	0.99	1.19	2.4	28.4	29	1.3	20.3	4.4	<5	<5	12	21.1	4.1	33.4	0.7	
329719	42.37	43.45	1.08	0.07	46.4	0.0518	23.9	368	1.1	140.4	49	2356	13.41	46	11.6	5.1	1222	1.3	1.0	3.2	369	15.02	0.43	25	55.9	4.00	417	0.40	4.61	0.11	0.31	2.1	147.7	46	2.0	36.3	7.0	0.5	<5	<5	17	34.1	6.7	9.6	1.2
329720	43.45	44.75	1.30	<0.1	36.1	0.0081	11.8	85	<5	40.7	18	186	4.2	64	2.2	2.4	461	0.6	<5	<5	170	8.38	0.12	33	173.0	3.69	699	0.39	4.41	1.50	0.27	2.3	17.6	24	0.5	15.9	4.8	<5	<5	10	11.2	0.7	14.8	<5	
329721	44.75	46.00	1.25	<0.1	1.9	0.0008	10.9	296	<5	72.8	19	3026	5.62	7	2.6	2.4	1811	0.7	<5	<5	165	20.70	0.10	14	25.9	3.20	193	0.26	3.87	0.91	0.02	2.0	31.0	26	0.8	34.4	4.8	<5	<5	12	21.4	<5	0.7	0.7	
329722	46.00	47.43	1.43	<0.1	0.5	0.0015	7.5	158	<5	47.3	16	1936	3.91	5	1.8	2.2	879	0.5	<5	<5	139	9.39	0.14	13	22.4	2.05	666	0.44	7.02	4.31	0.08	4.9	11.1	23	0.9	25.8	4.1	<5	<5	12	14.7	<5	1.7	0.5	
329723	50.06	51.85	1.79	<0.1	0.7	0.0006	8.6	100	<5	11.5	10	1332	5.13	11	0.9	1.2	440	<5	0.8	<5	132	6.35	0.15	8	13.3	2.10	1019	0.48	8.91	3.23	1.62	2.6	4.6	1.5	1.4	13.1	1.9	<5	<5	16	18.8	<5	4.9	1.8	
329724	51.85	53.11	1.26	<0.1	7.7	0.0025	9.6	60	<5	18.7	17	1831	3.62	18	1.9	1.2	759	<5	<5	<5	89	18.16	0.10	8	20.9	1.40	509	0.25	4.81	2.27	0.43	0.5	10.6	14	1.0	14.5	2.4	<5	<5	8	10.3	0.9	13.9	0.7	
329725	53.11	54.90	1.79	0.02	55.1	0.2960	11.4	231	0.9	23.9	34	1274	6.96	34	6.2	3.7	573	0.7	0.6	<5	212	7.76	0.86	30	13.7	2.01	1342	0.39	7.57	3.33	0.91	2.7	21.7	38	0.8	13.5	1.8	<5	<5	13	15.3	0.6	24.5	<5	
329726	54.90	56.30	1.40	0.02	36.1	0.0797	36.9	301	1.2	30.7	54	1218	1.24	69	3.5	1.5	231	0.6	<5	<5	161	10.27	0.12	33	17.0	3.69	699	0.39	4.41	1.50	0.27	2.3	17.6	24	0.5	15.9	4.8	<5	<5	10	11.2	0.7	14.8	<5	
329727	56.30	57.45	1.15	0.03	181.0	0.2053	33.3	325	3.6	78.9	170	612	5.30	241	4.6	1.9	96	2.8	0.9	<5	198	1.78	0.14	12	25.0	1.54	725	0.20	3.21	0.71	0.38	1.2	24.3	19	0.6	10.1	2.5	<5	<5	8	8.8	1.5	8.0	0.8	
329728	57.45	58.65	1.20	<0.1	25.1	0.0905	39.1	163	1.4	60.1	46	745	4.30	31	2.5	2.2	194	0.6	0.5	<5	156	2.89	0.08	9	62.7	1.85	1237	0.20	4.69	1.81	0.62	0.8	16.8	15	<5	<5	12	12.2	0.9	10.7	0.8				
329729	58.65	60.57	1.92	<0.1	7.9	0.0095	14.9	108	<5	11.5	10	1156	2.97	9	2.0	0.8	568	<5	1.5	<5	105	14.87	0.09	6	16.9	1.24	878	0.26	4.59	2.47	0.16	1.0	10.4	12	0.5	11.5	1.6	<5	<5	8	9.5	<5	3.8	0.9	
329730	60.57	62.34	1.77	<0.1	21.9	0.1225	71.0	303	0.9	48.3	46	1100	5.51	17	2.3	1.7	445	0.7	1.0	<5	204	4.98	0.12	22	57.9	2.49	1323	0.47	5.99	2.84	0.11	1.4	10.4	33	0.8	20.2	4.2	<5	<5	16	14.5	<5	2.6	0.7	
329731	62.34	63.10	0.76	<0.1	6.1	0.0210	15.5	133	<5	66.9	35	617	3.39	19	3.0	2.8	312	<5	0.8	<5	154	3.14	0.11	11	46.8	1.72	398	0.27	5.18	3.02	0.04	1.6	30.7	19	0.7	14.6	3.0	<5	<5	12	14.9	<5	0.6	0.8	
329732	63.10	64.75	1.65	0.02	107.8	0.0671	36.0	388	<5	107.8	128</																																		

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-9

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 77X - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	From	To	Interval	Au g/mnt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	
329847	31.50	32.75	1.25	<0.01	5.4	0.0172	1391.2	3039	3.2	54.7	13	963	3.80	25	2.7	2.1	372	79.9	0.8	6.6	143	2.99	0.13	14	38.7	1.32	633	0.16	3.95	1.84	0.43	3.4	29.4	22	0.7	14.1	1.8	<5	<5	11	9.0	1.5	12.1	0.5	
329848	32.75	33.75	1.00	0.01	2.8	0.0216	155.4	495	1.1	51.6	13	1742	5.54	18	4.1	3.0	954	7.6	1.0	1.4	131	6.25	0.20	28	22.9	1.62	389	0.40	5.14	2.30	0.95	3.0	87.1	53	0.9	21.3	8.4	<5	<5	10	11.8	2.2	23.7	1.9	
329849	33.75	35.14	1.39	0.01	16.7	0.0103	81.7	169	1.0	68	12	761	3.24	15	3.6	2.3	225	2.1	1.2	0.9	195	2.32	0.14	16	53.2	1.00	539	0.13	3.22	0.47	0.97	2.6	12.5	24	0.8	12.7	2.3	<5	<5	8	7.3	1.2	29.1	<5	
329851	35.14	36.15	1.01	<0.01	3.2	0.0128	24.5	50	0.7	61.4	12	929	3.01	22	1.2	0.9	156	0.5	0.6	<5	72	2.31	0.04	15	17.3	0.85	548	0.10	2.73	0.09	1.05	1.9	5.1	22	0.5	9.1	1.3	<5	<5	9	4.9	1.3	29.2	<5	
329852	36.15	37.25	1.10	0.01	5.8	0.0088	33.8	44	0.6	86.7	16	817	2.29	19	0.5	1.2	122	0.6	0.5	1.0	46	1.71	0.02	15	16.8	0.68	339	0.05	1.52	0.05	0.53	1.0	5.7	24	<5	<5	7	3.7	1.5	17.5	<5				
329853	37.25	38.45	1.20	<0.01	2.7	0.0055	11.1	33	<5	76.3	12	705	1.97	10	0.7	1.1	134	<5	<5	1.5	34	1.75	0.03	11	12.8	0.92	359	0.05	1.82	0.06	0.63	0.5	6.8	20	<5	<5	5	5.6	0.8	18.8	<5				
329854	41.20	42.70	1.50	<0.01	6.4	0.0014	16.2	190	<5	83.8	13	4480	4.95	<5	2.2	6.2	2250	1.2	<5	1.5	141	19.42	0.11	22	80.8	3.01	228	0.13	3.31	0.85	0.07	2.1	35.1	39	<5	<5	14	22.4	1.3	1.7	0.6				
329855	42.70	44.88	2.18	<0.01	1.0	0.0027	7.4	159	<5	56.6	16	1814	3.26	<5	2.0	2.4	1387	0.6	<5	<5	137	12.87	0.13	15	35.5	1.77	129	0.20	6.29	4.03	0.03	2.7	13.7	26	<5	<5	8	13.4	<5	0.6	0.5				
329856	44.88	45.95	1.07	<0.01	0.8	0.0007	7.9	244	<5	89.2	28	1758	5.42	<5	1.8	2.3	1030	0.5	0.5	<5	224	8.51	0.10	13	123.4	3.03	158	0.31	7.43	4.04	0.06	2.4	10.5	23	0.8	21.9	3.1	<5	<5	18	19.1	<5	1.3	0.6	
329857	45.95	47.05	1.10	<0.01	0.6	0.0007	8.2	228	<5	70	28	1859	5.62	<5	1.5	1.4	625	<5	0.7	<5	112	6.90	0.13	9	65.7	3.05	68	0.39	8.10	4.57	0.03	4.8	16.7	17	1.0	16.9	2.4	<5	<5	17	21.0	<5	<5	0.5	
329858	47.05	48.15	1.10	0.09	<5	0.0026	24.1	172	1.4	154.1	38	3115	11.52	206	1.2	0.7	1444	0.7	0.8	10.3	223	16.27	0.05	6	34.1	2.88	74	0.08	2.93	0.60	<0.01	4.3	9.5	12	0.6	22.9	1.2	<5	<5	11	21.9	7.3	<5	<5	
329860	48.15	49.25	1.10	<0.01	<5	0.0054	13.5	137	<5	58	20	2108	5.47	17	1.0	0.9	748	<5	<5	1.7	155	8.37	0.03	8	12.9	1.56	628	0.06	3.27	1.57	0.01	3.9	65.7	14	<5	<5	8	12.5	1.2	<5	<5				
329861	49.25	50.03	0.78	<0.01	0.5	0.0019	11.2	234	<5	22.2	14	1016	4.34	<5	1.9	3.9	593	<5	<5	<5	116	3.81	0.23	37	26.9	2.07	1489	0.60	6.63	3.86	0.07	2.1	148.6	70	1.3	15.0	12.4	0.6	<5	<5	9	15.4	<5	2.2	2.9
329862	50.03	51.25	1.22	0.03	17.8	0.1560	26.7	241	1.1	91.4	43	2649	13.85	32	5.2	3.3	988	0.5	0.5	3.0	277	11.65	0.21	17	32.6	2.75	183	0.21	5.24	0.91	0.84	2.1	47.6	31	0.9	26.6	3.6	<5	<5	14	17.5	9.3	29.2	1.9	
329863	51.25	52.61	1.36	0.01	22.0	0.0390	13.9	174	0.5	43.8	18	3581	7.90	26	5.5	2.6	1534	0.9	<5	1.0	288	18.55	0.15	20	28.7	2.93	406	0.23	5.13	0.04	1.49	3.4	37.8	35	1.3	38.2	3.3	<5	<5	16	17.4	3.2	54.0	2.6	
329864	52.61	53.85	1.24	0.02	6.3	0.0049	14.6	244	0.5	53.4	16	2663	5.54	29	1.9	1.5	1731	1.0	<5	1.0	187	16.98	0.13	17	16.7	1.80	45	0.13	4.54	2.70	0.05	4.4	13.9	28	<5	<5	9	9.1	2.6	1.3	0.6				
329865	53.85	55.00	1.15	<0.01	0.8	0.0031	24.6	244	0.9	52	21	1779	5.23	6	1.2	1.6	1158	<5	<5	<5	187	7.25	0.08	14	25.6	1.88	479	0.25	7.72	4.88	0.07	7.1	67.0	22	<5	<5	12	7.9	0.8	1.3	1.0				
329866	55.00	56.50	1.50	<0.01	0.9	0.0178	17.2	202	<5	12	19	1545	4.86	<5	0.8	1.4	640	<5	0.5	<5	170	6.89	0.17	9	11.7	2.35	979	0.55	7.45	4.50	0.06	6.3	5.6	18	0.6	18.3	3.7	<5	<5	15	10.5	<5	1.1	0.5	
329867	62.00	63.21	1.21	<0.01	9.5	0.0223	8.9	75	<5	19.3	15	1637	3.80	13	2.1	1.1	318	<5	<5	<5	135	12.57	0.10	10	32.3	1.41	1046	0.55	4.51	1.30	0.84	0.6	50.3	15	<5	<5	10	9.2	0.6	20.9	0.5				
329868	63.21	64.21	1.00	0.07	28.3	0.3582	30.0	325	3.6	49.2	71	1686	16.74	19	2.4	1.6	366	2.4	1.3	0.9	158	10.22	0.12	195	28.6	1.78	294	0.23	2.81	0.18	0.22	1.3	11.6	214	0.7	15.2	4.0	0.6	<5	<5	7	10.3	2.3	8.9	0.5
329869	64.21	65.85	1.64	0.01	137.9	0.1413	214.8	528	3.6	68.3	119	687	5.34	114	6.0	1.9	118	3.6	0.9	3.9	173	1.87	0.11	10	29.3	1.67	546	0.23	3.37	0.96	0.90	2.2	21.9	16	<5	<5	9	9.0	1.3	21.8	1.6				
329871	65.85	67.35	1.50	<0.01	19.1	0.0519	175.0	226	2.6	130.3	31	1164	6.86	35	3.5	1.7	254	2.0	0.6	<5	313	4.16	0.14	21	197.8	4.15	1073	0.39	6.24	1.47	2.06	1.2	15.6	31	0.7	17.3	3.3	<5	<5	24	23.1	0.8	61.7	<5	
329872	67.35	68.84	1.49	<0.01	17.7	0.0214	74.5	144	<5	81	45	544	4.76	190	3.3	2.1	130	0.7	0.8	<5	168	2.30	0.09	8	108.2	2.63	742	0.30	4.94	1.37	0.94	1.6	19.5	16	0.5	10.6	3.4	<5	<5	15	14.7	1.1	19.6	1.6	
329873	68.84	70.30	1.46	<0.01	41.3	0.0400	106.6	150	0.9	80.7	66	195	3.56	200	10.3	2.4	45	2.0	0.6	1.2	142	0.74	0.10	11	20.6	0.69	387	0.09	2.34	0.70	0.47	1.5	49.7	19	<5	<5	<5	<5	15	8.2	1.9	10.7	1.2		
329874	70.30	71.59	1.29	<0.01	1.5	0.0157	175.4	319	0.6	54.4	19	628	4.29	8	1.4	2.0	278	3.0	0.6	0.5	142	2.61	0.09	9	67.5	2.44	1219	0.38	5.37	2.33	0.39	3.0	14.2	18	0.5	13.4	4.2	<5	<5	14	14.2	0.6	8.1	1.1	
329876	71.59	72.89	1.30	<0.01	29.8	0.0505	72.1	760	0.7	133.3	33	372	5.97	49	3.2	2.0	114	7.8	0.6	<5	118	1.49	0.05	12	22.2	1.52	290	0.15	3.90	1.74	0.16	1.9	123.4	19	<5	<5	9	12.4	2.6	2.9	1.1				
329877	74.91	76.15	1.24	<0.01	46.8	0.0251	63.4	132	<5	67.4	20	348	4.01	25	4.8	2.2	126	<5	<5	0.5	139	1.47	0.15	20	38.4	1.33	126	0.17	4.19	2.26	0.12	1.3	32.0	30	<5	<5	15	7.2	2.6	<5	<5				
329878	76.15	77.40	1.25	<0.01	25.2	0.0399	186.5	309	1.0	90.8	35	577	5.73	31	7.9	2.3	206	2.5	0.9	1.3	250	2.92	0.20	12	68.7	1.89	457	0.26	4.82	1.94	0.45	2.1	32.0	20	0.7	21.3	2.9	<5	<5	14	15.3	2.4	11.0	1.1	
329879	77.40	78.66	1.26	<0.01	4.2	0.0294	53.5	201	0.5	45.7	30	606	4.62	20	2.2	2.3	262	0.6	0.8	<5	145	2.88	0.07	13	49.4	2.01	802	0.37	6.36	3.72	0.12	1.4	14.0	23	0.8	18.1	3.6	<5	<5	16	17.4	1.5	2.2	1.4	
329880	82.00	83.10	1.10	<0.01	6.5	0.0320	26.3	186	<5	167.6	52	1401	8.99	12	1.1	0.9	245	0.7	1.1	<5	223	6.97	0.10	12	216.8	5.10	362	0.42	5.54	0.69	1.31	2.8	4.4	19	1.1	15.1	4.0	<5	<5	26	34.8	1.6	55.4	<5	
329881	83.10	84.25	1.15	<0.01	10.8	0.0247	20.6	174	<5	100.4	110	1456	7.81	18	2.0	2.0	246	0.8	0.7	<5	212	5.66	0.11	28	152.9	3.99	586	0.36	7.06	2.22	1.64	2.3	49.6	36	1.2	14.7	1.9	<5							

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-10

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCl) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	From (m)	To (m)	Interval (m)	Au gpm/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm
329934	16.00	17.00	1.00	<.01	<.5	0.0068	2.1	56	<.5	31.9	13	865	4.61	10	0.5	1.5	94	<.5	<.5	<.5	136	2.65	0.09	16	20.4	2.32	1366	0.35	6.67	0.61	1.99	0.9	6.1	32	1.8	14.6	4.3	<.5	<.5	16	15.6	<.5	54.0	<.5
329935	17.00	19.20	2.20	<.01	1.9	0.0106	11.6	69	<.5	73.7	21	1611	4.61	26	0.9	1.3	201	<.5	0.6	<.5	134	5.43	0.07	10	106.6	2.28	670	0.14	3.98	0.56	0.73	1.0	12.6	18	0.5	13.4	1.4	<.5	<.5	13	12.1	1.0	22.1	<.5
329936	19.20	20.00	0.80	0.01	1.5	0.0044	11.5	15	<.5	45.1	11	240	1.12	32	<.5	0.8	20	0.5	<.5	0.6	26	0.55	0.02	<.5	14.4	0.20	359	0.05	0.93	0.07	0.44	0.6	2.1	8	<.5	3.5	0.9	<.5	<.5	<.5	1.1	<.5	13.9	<.5
329938	20.00	21.00	1.00	<.01	0.6	0.0085	14.3	38	<.5	91.9	13	237	1.87	35	<.5	0.8	18	0.9	0.6	0.6	71	0.31	0.02	7	17.5	0.32	325	0.07	1.35	0.09	0.60	1.6	3.2	14	0.5	8.3	1.2	<.5	<.5	6	2.8	<.5	16.8	<.5
329939	21.00	22.00	1.00	0.01	1.2	0.0069	21.3	28	<.5	54.6	11	412	1.66	16	<.5	0.7	60	0.7	0.6	0.5	54	1.82	0.04	7	13.0	0.36	450	0.08	1.60	0.15	0.78	1.2	35.9	13	4.8	7.5	1.5	<.5	<.5	5	2.9	0.5	19.6	<.5
329940	22.00	23.00	1.00	<.01	1.6	0.0206	121.4	93	1.30	52.2	11	620	2.11	13	0.6	1.0	119	1.4	0.5	2.1	78	2.55	0.05	9	20.6	0.63	385	0.15	2.05	0.51	0.51	1.8	7.1	16	0.8	8.8	3.0	<.5	<.5	6	4.4	0.5	14.9	<.5
329941	23.00	24.00	1.00	<.01	1.9	0.0090	5.7	36	<.5	52.0	11	632	3.25	7	1.5	1.4	204	<.5	2.8	118	2.04	0.15	12	36.9	1.48	592	0.25	3.40	1.11	0.39	2.5	13.8	19	0.7	11.7	4.0	<.5	<.5	9	12.9	<.5	9.8	<.5	
329942	24.00	25.00	1.00	<.01	0.5	0.0057	41.6	141	<.5	37.0	19	1052	4.37	9	0.7	1.0	142	<.5	0.6	<.5	150	3.37	0.12	12	28.3	2.65	986	0.25	6.10	0.76	1.59	1.2	7.7	23	1.1	9.5	2.2	<.5	<.5	13	24.1	<.5	33.3	<.5
329943	25.00	26.00	1.00	<.01	0.9	0.0110	13.8	31	<.5	46.6	12	400	2.63	25	<.5	0.9	37	0.5	<.5	<.5	74	1.39	0.08	14	14.7	0.71	492	0.14	3.02	0.06	1.22	0.9	3.6	21	0.7	6.2	1.8	<.5	<.5	8	5.3	1.2	33.2	<.5
329944	26.00	26.80	0.80	0.02	5.4	0.0076	13.4	47	<.5	41.5	10	921	2.61	12	0.5	0.9	192	<.5	0.5	<.5	84	4.12	0.05	11	15.5	0.82	417	0.10	2.25	0.39	0.56	0.9	6.5	19	<.5	9.8	1.1	<.5	<.5	6	5.5	1.0	15.5	0.5
329945	26.80	28.00	1.20	<.01	1.7	0.0063	6.3	31	<.5	51.6	12	504	2.86	10	<.5	0.9	89	<.5	0.5	<.5	90	1.97	0.06	13	29.8	1.04	729	0.21	3.53	0.59	1.00	1.2	4.6	20	0.7	7.6	2.7	<.5	<.5	9	7.5	0.8	26.6	<.5
329947	28.00	29.00	1.00	<.01	2.7	0.0074	14.4	41	<.5	57.9	10	632	2.50	21	<.5	1.1	123	0.5	<.5	0.8	86	2.85	0.05	10	19.1	0.62	541	0.14	2.81	0.47	0.90	1.0	5.2	18	0.6	8.6	2.2	<.5	<.5	8	4.8	1.2	25.1	<.5
329948	29.00	30.00	1.00	<.01	1.9	0.0090	5.7	36	<.5	52.0	11	632	3.44	13	0.9	2.0	65	<.5	2.5	<.5	154	2.18	0.07	16	43.2	1.49	734	0.23	5.12	0.15	1.91	1.0	9.0	28	1.5	14.4	2.7	<.5	<.5	12	8.2	0.8	53.2	0.7
329949	30.00	31.00	1.00	<.01	10.3	0.0127	4.6	28	<.5	69.5	15	985	3.76	33	2.2	1.3	65	<.5	0.6	<.5	156	2.58	0.08	14	31.3	1.19	403	0.15	3.95	0.14	1.39	1.0	17.3	23	0.8	11.1	2.2	<.5	<.5	11	6.7	1.6	39.9	<.5
329950	31.00	32.00	1.00	<.01	5.6	0.0072	5.8	41	<.5	37.9	12	1181	3.42	14	1.9	1.4	138	<.5	0.5	<.5	171	3.85	0.14	9	21.4	1.47	740	0.21	4.76	0.72	1.32	1.0	10.2	16	0.6	9.7	1.6	<.5	<.5	11	9.3	0.8	38.3	<.5
329951	32.00	33.00	1.00	<.01	7.5	0.0149	16.6	43	<.5	88.3	18	366	3.52	20	1.5	1.5	52	<.5	0.5	0.9	162	1.22	0.08	13	30.4	0.79	341	0.12	3.06	0.09	1.18	1.2	12.1	21	0.9	9.5	1.5	<.5	<.5	8	5.2	1.9	35.5	<.5
329952	33.00	34.00	1.00	<.01	10.3	0.0118	7.4	64	<.5	51.8	15	1140	4.93	17	1.9	1.4	128	<.5	1.0	0.6	251	3.36	0.12	11	25.2	2.03	424	0.20	5.79	0.79	1.52	1.2	13.4	19	1.2	11.3	1.5	<.5	<.5	15	14.4	1.7	50.7	<.5
329953	34.00	35.00	1.00	<.01	14.3	0.0129	21.4	174	<.5	67.7	14	634	4.39	34	3.0	1.3	63	3.3	0.8	0.6	207	1.93	0.12	13	31.7	1.31	298	0.18	4.58	0.24	1.63	1.2	10.3	18	0.9	10.2	1.5	<.5	<.5	11	9.3	2.3	47.8	<.5
329954	35.00	36.00	1.00	<.01	17.7	0.0142	26.5	138	<.5	63.0	11	632	3.75	18	4.4	2.8	84	2.2	1.2	0.5	243	2.05	0.19	19	33.0	1.29	392	0.19	4.74	0.11	1.82	1.6	24.6	27	1.5	14.4	2.7	<.5	<.5	12	7.7	1.8	57.7	0.9
329955	36.00	37.00	1.00	<.01	10.3	0.0075	30.1	128	<.5	47.6	11	2582	4.11	11	4.0	1.3	260	2.3	0.8	0.5	187	8.53	0.27	17	24.4	2.14	602	0.18	3.84	0.56	0.87	1.0	13.9	26	0.8	19.8	2.0	<.5	<.5	10	9.8	1.1	26.1	<.5
329956	37.00	38.00	1.00	<.01	1.7	0.0065	52.1	135	<.5	61.6	12	388	1.88	15	0.7	1.3	41	3.1	0.5	0.6	46	1.09	0.05	8	18.1	0.50	376	0.08	1.74	0.09	0.69	0.9	6.6	16	0.6	5.1	1.6	<.5	<.5	6	4.7	1.0	20.9	<.5
329958	38.00	39.00	1.00	<.01	1.1	0.0042	182.0	434	1.00	39.8	8	214	1.29	7	<.5	0.9	49	10.5	<.5	1.9	39	0.70	0.03	9	21.1	0.26	564	0.06	1.12	0.29	0.28	0.8	2.0	16	<.5	5.2	1.1	<.5	<.5	<.5	2.9	0.6	10.3	<.5
329959	39.00	40.00	1.00	<.01	1.4	0.0067	49.6	62	0.50	66.7	10	241	1.55	15	<.5	0.9	54	1.0	0.5	1.3	47	0.79	0.04	9	30.4	0.21	392	0.06	0.96	0.28	0.22	0.9	2.3	16	0.5	4.7	1.6	<.5	<.5	<.5	1.9	0.7	5.9	<.5
329960	40.00	41.00	1.00	<.01	1.4	0.0066	64.2	90	0.70	57.2	11	287	1.67	17	<.5	0.9	68	1.6	0.6	1.2	51	0.85	0.04	6	25.6	0.32	447	0.08	1.30	0.37	0.35	1.5	3.9	12	0.5	4.6	1.9	<.5	<.5	<.5	2.0	0.7	9.9	<.5
329961	41.00	42.00	1.00	<.01	42.4	0.0069	64.6	106	0.60	52.4	10	382	1.95	22	2.5	1.2	83	2.4	1.1	0.7	123	1.33	0.10	9	23.1	0.35	509	0.07	1.73	0.18	0.71	1.6	9.9	16	0.7	6.6	1.9	<.5	<.5	5	3.3	1.0	21.9	<.5
329963	42.00	43.00	1.00	<.01	18.7	0.0185	34.5	99	0.60	33.5	13	1094	4.15	21	3.6	1.3	173	0.8	0.5	0.6	257	3.67	0.18	9	21.7	1.34	595	0.22	4.92	0.85	1.45	0.9	13.8	16	0.8	14.8	1.5	<.5	<.5	14	8.9	1.5	43.0	<.5
329964	43.00	44.00	1.00	<.01	24.9	0.0112	150.3	303	1.10	72.8	11	1135	4.03	20	9.5	2.5	248	8.8	1.1	3.0	232	5.22	0.47	15	35.6	0.96	373	0.15	3.04	0.78	0.68	1.5	24.0	26	0.7	22.7	2.7	<.5	<.5	9	6.3	2.1	22.3	0.6
329965	44.00	45.00	1.00	<.01	33.5	0.0117	65.0	119	0.90	74.3	12	656	3.03	22	5.9	2.0	177	2.1	0.7	3.1	195	3.33	0.21	14	27.8	0.61	386	0.11	1.96	0.31	0.57	1.2	36.6	26	0.9	14.1	2.6	<.5	<.5	6	4.5	1.7	19.3	0.5
329966	45.00	46.00	1.00	<.01	67.8	0.0164	108.9	322	1.60	97.1	15	768	4.22	43	14.9	3.8	180	9.2	1.3	3.7	416	3.23	0.67	24	56.7	0.92	384	0.15	2.74	0.64	0.63	3.3	37.8	41	0.9	26.9	4.5	<.5	<.5	8	5.8	1.9	21.2	0.7
329967	46.00	47.00	1.00	<.01	4.2	0.0085	74.8	170	1.10	59.0	10	979	3.00	31	2.1	1.2	332	2.8	0.8	2.7	86	3.70	0.07	11	31.5	0.92	471	0.10	2.17	0.58	0.39	1.5	9.9	18	<.5	11.4	1.7	<.5	<.5	8	5.5	1.3	14.0	<.5
329968	47.00	48.00	1.00	<.01	2.4	0.0096	50.6	113	0.60	43.2	9	1044	2.92	12	0.9	0.9	388	2.1	<.5	1.3	78	4.60	0.04	11	22.5	0																		



Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
Analysis: GROUP TTX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCl) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	From (m)	To (m)	Interval (m)	Au g/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	
329997	50.70	51.70	1.00	<0.01	1.5	0.0026	12.1	108	<5	42.3	12	2411	15.10	5	3.1	1.8	1864	0.8	1.2	0.5	915	18.03	0.09	12	45.1	1.49	52	0.16	2.94	1.28	0.03	37.8	13.0	20	2.7	19.9	3.0	<5	<5	8	12.0	0.5	0.9	<5	
329998	51.70	52.70	1.00	<0.01	2.3	0.0009	7.1	206	<5	111.1	23	2943	4.93	<5	6.0	4.3	1784	0.8	0.5	<5	242	19.61	0.22	34	71.4	2.28	21	0.22	3.97	1.79	0.04	5.3	58.8	61	0.8	40.2	4.4	<5	<5	14	15.6	<5	1.2	1.1	
329999	52.70	53.80	1.10	0.01	1.2	0.0060	33.4	161	2.1	54.0	13	2044	3.53	12	3.2	1.6	1110	0.5	<5	9.6	167	12.09	0.10	10	36.6	1.71	1108	0.11	6.55	4.32	0.04	2.5	37.3	18	<5	20.4	1.4	<5	<5	10	12.4	<5	0.6	0.9	
C156701	53.80	54.80	1.00	0.02	2.6	0.0327	63.0	161	5.4	59.7	18	1303	4.06	14	4.9	2.7	1087	<5	<5	35.8	140	8.29	0.09	12	42.3	1.67	594	0.21	7.10	4.64	0.04	1.1	52.9	20	0.6	20.7	3.2	<5	<5	9	13.1	1.2	1.1	1.6	
C156702	54.80	55.80	1.00	0.06	5.9	0.0067	11.6	263	<5	87.8	24	1693	6.34	11	7.4	5.0	1238	<5	<5	1.1	190	10.85	0.39	18	53.3	2.69	164	0.26	6.41	3.28	0.03	0.6	72.5	32	0.6	35.2	4.1	<5	<5	13	18.9	1.7	0.8	1.5	
C156703	55.80	56.80	1.00	0.13	5.0	0.0128	15.0	304	<5	104.0	28	1478	7.74	7	7.2	3.6	859	0.5	<5	1.5	217	7.13	0.16	16	48.8	3.03	74	0.32	7.33	3.65	0.03	0.8	58.1	28	0.8	28.2	3.8	<5	<5	16	21.5	2.2	<5	3.1	
C156704	56.80	57.80	1.00	<0.01	0.5	0.0026	11.6	269	<5	22.7	8	3350	4.32	8	1.9	1.2	2420	0.6	<5	<5	115	21.67	0.02	17	27.8	1.96	824	0.15	3.35	1.34	0.02	1.1	38.6	23	0.5	39.9	1.6	<5	<5	11	13.4	1.1	0.5	0.5	
C156705	57.80	59.05	1.25	0.02	0.5	0.0007	6.9	263	<5	37.4	13	2786	4.94	<5	2.3	3.5	1902	0.8	<5	<5	165	18.21	0.19	27	40.0	2.23	1274	0.35	4.69	2.04	0.02	4.4	51.3	50	0.8	35.7	6.1	<5	<5	10	17.5	<5	0.5	1.9	
C156706	59.05	60.00	0.95	0.20	2.4	0.1426	25.8	178	1.2	142.5	55	2819	14.39	112	2.5	3.0	1781	1.0	1.2	5.1	323	18.22	0.15	17	42.6	1.84	234	0.09	2.56	0.56	0.01	12.4	50.8	32	0.8	40.2	2.1	<5	<5	8	16.2	8.3	0.6	0.6	
C156707	60.00	61.00	1.00	0.04	1.1	0.0053	18.3	174	1.0	141.9	60	2723	10.92	58	1.2	1.6	1914	0.5	0.7	5.9	136	23.23	0.08	13	23.3	1.71	190	0.09	3.28	1.30	0.01	1.9	29.1	23	0.5	33.4	1.5	<5	<5	8	13.8	8.3	<5	0.6	
C156708	61.00	62.00	1.00	<0.01	0.8	0.0095	10.2	291	<5	80.1	31	2677	7.77	14	3.2	3.1	1485	0.6	<5	1.0	276	14.67	0.19	22	33.8	2.62	1234	0.27	5.75	2.44	0.02	4.0	70.1	39	0.9	36.6	4.4	<5	<5	12	22.3	1.2	<5	2.0	
C156710	62.00	63.55	1.55	0.02	1.0	0.0022	8.6	151	<5	51.6	16	2116	3.81	7	1.6	2.1	1266	0.6	<5	0.7	160	11.83	0.14	17	29.2	1.52	2177	0.22	6.10	3.64	0.13	3.8	38.5	29	0.7	28.3	2.8	<5	<5	12	16.0	<5	3.7	0.9	
C156711	63.55	64.55	1.00	<0.01	0.8	0.0045	17.6	208	<5	15.8	16	1435	4.85	<5	1.3	1.1	702	<5	<5	<5	252	6.26	<5	12	22.7	2.35	928	0.39	8.70	4.60	0.53	4.1	15.2	21	0.5	14.3	2.2	<5	<5	17	11.7	<5	14.4	<5	
C156712	64.55	65.55	1.00	<0.01	0.6	0.0016	12.1	178	<5	14.6	17	1431	4.85	5	1.3	1.3	703	<5	0.8	<5	198	7.00	0.19	11	28.9	2.36	419	0.52	8.38	4.80	0.13	1.9	33.7	21	1.0	20.6	3.5	<5	<5	16	16.5	<5	2.8	0.5	
C156713	73.20	74.20	1.00	<0.01	11.2	0.0078	24.8	113	<5	12.5	6	1352	2.78	14	2.5	0.8	435	0.5	1.0	<5	115	17.65	0.08	7	23.4	1.21	871	0.23	3.99	0.69	1.16	0.9	12.9	10	<5	12.5	1.6	<5	<5	8	10.6	<5	30.0	<5	
C156714	74.20	75.40	1.20	0.02	112.2	0.1555	74.1	665	2.2	64.6	127	730	4.61	150	4.5	1.6	175	5.7	0.7	<5	152	3.22	0.10	11	37.9	1.69	875	0.26	3.57	0.91	1.29	1.0	37.9	18	0.5	10.3	3.3	<5	<5	9	9.5	0.9	40.3	0.7	
C156715	75.40	76.40	1.00	<0.01	9.6	0.0145	93.9	191	<5	106.4	33	953	5.25	49	2.4	1.7	262	<5	0.5	<5	272	3.92	0.12	10	146.0	3.47	967	0.30	5.81	1.52	1.24	0.9	17.8	18	<5	11.0	2.1	<5	<5	22	22.3	<5	34.1	<5	
C156716	76.40	77.40	1.00	<0.01	13.2	0.0259	96.1	222	0.5	73.1	28	648	3.97	73	2.8	3.0	192	1.4	0.7	<5	198	2.56	0.10	10	94.3	2.12	995	0.21	4.10	1.11	0.63	0.9	21.5	16	<5	9.9	3.3	<5	<5	12	18.2	<5	3.7	0.9	
C156717	77.40	78.40	1.00	<0.01	15.4	0.0237	73.8	256	<5	137.8	43	1201	7.41	32	1.1	1.3	338	<5	<5	<5	277	5.51	0.11	9	186.9	5.92	894	0.31	6.45	1.11	0.74	0.6	11.9	16	<5	11.3	0.7	<5	<5	27	35.5	<5	20.1	<5	
C156718	78.40	79.40	1.00	<0.01	15.4	0.0237	290.6	808	0.6	55.0	22	284	3.76	44	3.8	3.4	109	8.6	0.7	<5	211	1.09	0.07	8	64.1	1.48	591	0.23	4.59	1.50	0.87	1.2	30.6	15	0.5	11.2	3.8	<5	<5	11	11.1	1.4	21.2	1.1	
C156719	79.40	80.40	1.00	<0.01	55.6	0.0467	171.6	223	0.8	82.0	47	287	4.07	125	15.3	3.7	60.1	1.9	0.7	<5	553	1.76	0.34	16	60.1	1.32	474	0.25	4.71	1.09	1.25	1.8	47.5	25	0.5	15.9	4.6	<5	<5	13	10.4	1.7	29.1	1.1	
C156721	80.40	81.40	1.00	<0.01	74.0	0.0584	202.5	218	0.8	121.6	46	553	5.90	32	47.7	2.8	970	1.2	0.8	<5	438	2.74	0.22	14	85.6	2.19	392	0.28	5.76	2.15	0.67	1.8	32.5	23	0.6	17.8	3.7	<5	<5	14	15.8	2.3	17.5	1.0	
C156722	81.40	82.40	1.00	<0.01	7.0	0.0278	62.9	165	0.6	73.7	25	567	4.11	8	2.2	2.6	263	<5	0.7	1.2	174	3.24	0.06	16	94.9	2.01	859	0.22	4.34	2.15	0.06	2.5	38.0	23	0.6	13.3	2.1	<5	<5	13	10.2	0.9	1.3	1.2	
C156723	82.40	83.40	1.00	<0.01	6.5	0.0181	27.3	161	<5	43.1	15	496	3.51	5	1.6	2.1	354	<5	<5	<5	95	1.36	2.11	0.05	20	23.4	1.81	1391	0.32	5.33	3.35	0.19	1.6	41.5	28	1.0	19.3	3.6	<5	<5	14	9.2	<5	4.3	0.9
C156724	83.40	84.40	1.00	<0.01	6.7	0.0558	25.3	160	0.5	43.9	20	550	3.48	5	2.0	6.4	241	<5	0.6	<5	148	2.21	0.05	14	34.5	1.81	572	0.59	5.53	2.82	0.28	1.2	13.1	21	0.6	15.5	4.3	<5	<5	12	12.3	<5	8.8	0.9	
C156726	98.45	99.50	1.05	<0.01	1.0	0.0072	11.8	112	<5	126.5	28	1373	7.35	6	0.7	1.0	208	<5	1.2	<5	260	6.47	0.10	14	186.1	5.88	410	0.39	6.32	1.37	1.42	0.8	6.6	20	0.8	13.0	1.4	<5	<5	35	21.8	<5	54.6	<5	
C156727	99.50	100.50	1.00	<0.01	9.9	0.0249	26.5	173	<5	111.9	98	1587	7.43	16	2.3	2.7	219	<5	0.5	<5	211	5.57	0.10	34	164.0	4.15	675	0.35	6.34	1.41	2.21	0.6	5.4	38	1.5	14.5	3.0	<5	<5	21	22.5	1.6	92.4	<5	
C156728	100.50	101.50	1.00	<0.01	6.2	0.0150	18.6	210	<5	119.4	74	1541	7.40	14	2.0	1.8	169.8	4.00	999	<5	231	5.02	0.13	38	169.8	4.00	999	0.45	7.09	1.57	2.65	0.7	4.7	45	1.8	17.6	2.8	<5	<5	20	25.0	1.3	102.2	<5	
C156729	101.50	102.40	0.90	<0.01	18.5	0.0357	10.6	178	<5	126.2	240	1663	9.46	35	2.8	2.5	212	<5	0.6	<5	218	6.44	0.12	37	136.5	3.78	673	0.38	6.73	1.54	2.52	1.7	4.6	43	1.5	15.8	3.4	<5	<5	18	25.3	3.6	97.9	<5	
C156730	102.40	103.50	1.10	<0.01	1.0	0.0028	6.4	57	<5	3.8	7	1.6	7.0	266	<5	<5	95	<5	<5	<5	95	1.36	0.13	9	9.6	1.23	622	0.24	6.05	5.17	1.65	1.5	14.0	21	1.0	14.8	2.9	<5	<5	8	6.6	<5	3.7	0.5	
C156731	103.50	104																																											

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
 Granduc DDH-06-12

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	From (m)	To (m)	Interval (m)	Au gm/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm
C156808	40.00	41.00	1.00	<.01	<.5	0.0013	14.1	165	0.7	55.3	13	1012	2.82	8	2.0	2.0	415	1.0	0.6	0.7	148	4.54	0.07	19	30.1	1.27	633	0.17	5.10	2.20	0.61	3.1	8.2	30	1.1	9.4	5.8	0.5	<.5	10	14.9	0.5	19.7	0.6
C156809	41.00	42.00	1.00	<.01	<.5	0.0002	5.2	176	<.5	71.2	15	1535	3.16	11	2.0	2.0	892	<.5	<.5	0.5	139	9.15	0.05	22	27.1	1.67	288	0.24	7.19	4.80	0.05	7.4	11.5	34	0.6	21.9	4.3	<.5	<.5	11	12.8	0.7	1.0	<.5
C156810	42.00	42.98	0.98	<.01	1.0	0.0013	7.9	202	<.5	66.8	17	1910	4.02	<.5	2.8	2.8	1573	<.5	<.5	0.8	130	13.54	0.12	28	25.2	2.14	5528	0.21	5.88	3.41	0.04	5.1	36.4	46	0.5	29.3	4.6	1.4	<.5	12	14.9	1.1	0.7	0.6
C156812	42.98	43.50	0.52	<.01	5.2	0.0218	13.1	314	0.5	117.0	34	2207	8.88	12	5.0	3.7	1576	1.1	0.5	0.6	198	15.28	0.22	19	33.7	3.43	1137	0.17	4.94	1.37	0.01	3.3	27.9	35	1.3	30.5	2.7	<.5	<.5	11	27.4	2.9	0.5	1.2
C156813	43.50	44.50	1.00	0.09	3.3	0.0319	56.6	159	2.1	120.2	56	2387	16.46	24	2.8	1.2	1183	0.7	0.8	0.6	153	13.17	0.11	11	11.8	1.60	71	0.10	3.23	1.01	0.22	3.2	14.5	20	0.6	24.6	1.4	<.5	<.5	10	13.8	18.0	8.4	0.5
C156814	44.50	45.85	1.35	0.14	4.1	0.2816	43.4	190	2.6	172.8	71	2582	22.09	36	2.7	1.1	1180	1.1	0.7	0.7	137	12.87	0.08	11	10.2	1.87	130	0.09	2.44	0.14	0.19	3.8	12.6	19	<.5	22.3	1.0	<.5	<.5	8	12.4	23.9	7.0	<.5
C156815	45.85	46.90	1.05	<.01	4.3	0.0083	17.7	242	<.5	67.2	22	2470	7.99	16	3.4	2.5	1454	0.8	0.5	1.7	215	11.49	0.13	15	28.0	2.64	456	0.21	6.08	2.71	0.21	4.9	28.5	26	0.7	29.0	2.4	<.5	<.5	16	16.3	3.7	7.3	1.5
C156816	46.90	47.90	1.00	<.01	1.0	0.0056	19.0	240	<.5	78.1	23	2331	5.18	5	4.1	2.9	1441	1.1	<.5	0.7	196	13.54	0.17	18	37.6	2.51	1714	0.24	5.58	2.78	0.02	4.9	64.6	30	0.8	27.6	4.1	<.5	<.5	14	18.0	1.3	0.5	1.0
C156817	47.90	49.00	1.10	<.01	<.5	0.0054	7.6	149	<.5	12.0	21	1086	4.58	<.5	0.8	1.1	562	<.5	<.5	<.5	194	5.47	0.13	8	12.7	1.92	1073	0.36	8.13	4.87	0.34	3.7	3.0	16	0.7	11.4	1.9	<.5	<.5	15	6.7	0.5	9.8	<.5
C156818	117.70	118.70	1.00	<.01	1.1	0.0193	16.6	153	<.5	3.9	12	991	2.94	<.5	1.6	4.3	385	<.5	0.9	<.5	106	3.24	0.13	12	2.7	1.16	943	0.22	8.54	4.26	3.23	1.3	10.3	27	1.2	9.8	1.9	<.5	<.5	9	9.1	<.5	106.8	<.5
C156819	118.70	120.00	1.30	<.01	0.7	0.0028	6.5	90	<.5	1.7	7	1011	2.52	<.5	1.0	4.0	326	<.5	0.9	<.5	115	3.74	0.15	10	2.0	1.29	836	0.24	8.46	4.57	2.08	1.5	4.6	22	0.7	11.3	1.2	<.5	<.5	10	8.3	<.5	87.1	<.5
C157820	120.00	121.00	1.00	0.02	1.9	0.1712	10.2	156	1.2	19.3	62	1304	7.04	15	2.9	2.2	162	0.6	1.3	2.5	322	4.12	0.17	9	42.5	2.50	882	0.35	7.51	1.55	4.14	122.8	2.7	15	1.4	10.5	1.7	<.5	<.5	27	23.2	3.6	202.7	<.5
C156823	121.00	122.00	1.00	<.01	0.7	0.0295	11.2	132	<.5	18.0	57	1123	6.55	18	0.9	1.3	205	<.5	1.5	<.5	273	6.20	0.13	6	73.3	3.52	544	0.40	6.82	2.01	2.48	29.0	2.9	12	1.0	14.9	1.6	<.5	<.5	34	20.7	1.2	133.0	<.5
C156824	122.00	123.00	1.00	0.01	1.2	0.1056	22.2	283	0.5	32.3	125	824	9.74	32	1.8	1.4	259	2.6	2.5	<.5	353	4.07	0.14	10	91.0	3.43	572	0.46	6.99	1.86	2.53	201.0	2.6	17	1.0	15.0	1.6	<.5	<.5	33	17.8	2.3	129.9	<.5
C156825	123.00	124.00	1.00	0.01	0.8	0.0238	12.8	211	<.5	30.8	39	761	6.13	13	1.6	3.5	321	1.3	2.4	<.5	232	5.08	0.08	6	83.6	3.60	603	0.37	6.86	2.28	2.15	25.5	4.3	14	1.6	17.0	3.4	<.5	<.5	27	17.9	0.7	112.6	<.5
C156826	124.00	125.00	1.00	0.02	<.5	0.0203	19.1	75	<.5	45.5	29	887	7.84	23	0.5	1.0	367	<.5	5.0	<.5	395	6.50	0.12	<.5	138.0	4.44	477	0.50	7.63	1.90	2.17	5.9	3.4	9	0.7	14.1	1.9	<.5	<.5	37	15.5	<.5	110.6	<.5
C156827	125.00	126.00	1.00	0.01	0.7	0.1120	15.3	53	<.5	40.0	37	826	7.47	23	1.5	1.2	297	<.5	5.1	<.5	329	6.01	0.12	7	158.1	4.00	550	0.47	7.14	1.90	2.08	135.8	4.7	12	1.1	15.7	1.8	<.5	<.5	37	13.8	0.7	95.8	<.5
C156828	126.00	127.00	1.00	<.01	<.5	0.0352	19.3	93	<.5	45.0	31	942	7.59	20	1.3	1.1	375	<.5	5.5	<.5	354	6.65	0.11	7	140.9	4.40	467	0.47	6.95	2.05	1.91	49.5	5.0	13	1.0	15.9	1.5	<.5	<.5	38	12.1	<.5	89.4	<.5
C156829	127.00	128.00	1.00	0.08	6.8	0.5577	26.2	201	1.7	68.7	156	791	10.93	107	13.6	1.5	274	0.6	4.3	<.5	313	4.41	0.11	11	160.6	3.86	463	0.42	6.30	1.41	2.20	640.6	4.1	16	1.7	13.3	1.9	<.5	<.5	30	21.2	3.3	125.4	<.5
C156830	128.00	129.00	1.00	0.04	2.4	0.3147	13.7	57	1.1	69.7	96	765	10.29	41	1.3	1.4	258	<.5	3.2	<.5	273	4.42	0.13	15	197.8	3.93	645	0.40	6.91	1.79	2.50	240.0	4.1	20	1.6	14.3	2.7	<.5	<.5	27	19.3	2.4	127.9	<.5
C156832	129.00	130.00	1.00	0.01	1.0	0.0554	6.4	46	<.5	51.1	30	901	9.31	13	0.9	1.3	273	<.5	3.8	<.5	339	5.29	0.10	13	239.3	4.66	580	0.42	6.40	1.06	3.37	1.5	3.8	19	1.6	11.0	1.5	<.5	<.5	36	21.5	<.5	181.2	<.5
C156833	130.00	131.00	1.00	0.02	1.6	0.1180	4.4	69	<.5	73.6	34	962	8.60	10	0.8	1.3	236	<.5	2.7	<.5	349	5.11	0.12	13	195.3	5.21	528	0.50	6.79	0.97	3.93	1.2	7.2	18	1.8	12.5	2.4	<.5	<.5	35	27.5	<.5	160.7	0.5
C156834	131.00	132.00	1.00	0.01	2.7	0.0749	6.7	39	<.5	48.7	28	949	8.58	21	0.9	1.2	275	<.5	3.0	<.5	309	6.93	0.19	9	175.8	4.60	361	0.41	6.56	1.53	2.14	1.6	6.3	16	1.4	12.5	1.4	<.5	<.5	33	14.0	<.5	89.2	<.5
C156835	132.00	133.00	1.00	0.01	7.2	0.0777	6.7	48	<.5	66.7	29	1109	10.63	13	0.7	1.0	299	<.5	3.1	<.5	317	5.96	0.10	6	238.7	4.64	485	0.45	6.81	1.23	2.47	1.4	6.5	11	1.3	10.7	1.4	<.5	<.5	32	19.9	<.5	110.0	<.5
C156837	133.00	134.00	1.00	0.03	18.9	0.3506	6.7	66	1.2	69.6	33	1226	9.96	11	0.9	1.8	265	<.5	1.7	<.5	297	5.45	0.12	15	216.3	4.37	495	0.44	6.88	1.18	3.03	1.6	6.2	20	1.2	12.4	1.5	<.5	<.5	29	21.5	0.5	141.0	<.5
C156838	134.00	135.00	1.00	0.01	29.8	0.1161	4.1	36	<.5	42.1	27	940	13.48	13	1.9	1.5	209	<.5	1.3	<.5	335	4.89	0.19	9	165.1	4.07	542	0.42	5.95	1.23	3.02	14.3	5.6	15	2.1	14.5	2.1	<.5	<.5	30	17.1	<.5	133.2	<.5
C156839	135.00	136.00	1.00	0.03	17.1	0.3797	5.7	46	1.3	48.8	33	786	14.23	8	1.8	1.7	252	<.5	1.2	<.5	309	4.06	0.14	11	88.3	3.34	725	0.44	7.01	1.37	3.64	1.2	3.4	17	1.7	11.5	1.7	<.5	<.5	25				

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716  
 To Bell Resources Corp.  
**Granduc JK Zone channel samples**

Analysis: GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.  
 Analysis: GROUP 7TX - 0.500 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCL) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES/ICP-MS.

ELEMENT SAMPLES	Drill Hole	From (m)	To (m)	Au gmv/mt	Mo ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	
330252	001-A	0.00	0.60	0.06	6.7	0.1948	103.0	205	6.7	43.3	13	2696	9.05	155	2.6	2.1	1800	2.5	2.1	4.8	120	21.53	0.07	15	38.8	1.88	251.00	0.12	3.18	0.79	0.38	3.3	28.0	28	0.6	30.5	2.0	<5	<5	12	12.9	6.9	13.2	0.6	
330253	001-B	0.00	0.60	0.08	9.8	0.2424	91.4	192	6.3	33.8	13	2851	9.07	171	3.0	2.0	1929	1.5	1.9	4.5	101	22.20	0.08	15	25.1	1.82	272.00	0.11	2.75	0.65	0.26	2.6	30.1	29	0.6	33.2	1.9	<5	<5	11	12.7	7.1	9.7	0.7	
330254	002-A	0.00	1.00	<0.1	<5	0.3782	36.4	294	2.7	27.9	15	3972	9.92	32	0.6	0.5	2176	2.0	0.5	3.0	159	23.96	0.02	9	16.9	2.97	391.00	0.07	2.52	0.01	0.01	6.2	5.3	18	0.7	25.4	1.4	<5	<5	14	25.1	3.6	<5	<5	
330255	002-B	1.00	1.96	<0.1	2.1	0.0739	313.7	366	9.7	52.4	22	2172	12.92	17	2.5	1.2	1172	4.2	1.8	36.3	495	11.66	0.09	9	28.3	2.08	213.00	0.13	3.24	1.04	0.02	18.9	20.4	17	1.1	19.6	2.5	<5	<5	9	18.8	1.5	0.9	0.6	
330256	003-A1	0.00	0.80	0.01	34.6	0.1083	126.8	171	2.1	86.9	26	646	9.67	136	5.8	2.3	119	1.7	1.9	2.4	282	1.66	0.21	14	43.1	1.15	199.00	0.13	3.35	0.04	1.14	4.4	26.6	25	1.7	11.3	2.7	<5	<5	10	8.9	7.0	37.9	0.6	
330257	003-A2	0.80	1.95	0.03	10.9	0.0293	60.3	80	1.9	40.0	12	1411	4.78	94	2.9	1.9	254	<5	2.0	2.9	202	3.45	0.10	12	43.8	1.32	457.00	0.14	3.63	0.06	1.38	4.3	31.4	22	1.4	12.1	2.6	<5	<5	10	10.9	2.8	46.8	0.8	
330258	003-B1	1.95	3.00	0.05	8.2	0.0478	90.3	76	1.8	38.3	17	700	6.62	86	1.3	0.8	125	0.8	1.5	3.9	69	1.76	0.03	<5	33.6	0.63	173.00	0.05	1.50	0.01	0.45	3.7	13.9	8	0.8	5.1	0.8	<5	<5	<5	4.8	5.5	15.1	0.5	
330259	003-B2	3.00	4.10	0.03	9.1	0.0223	47.7	113	1.9	18.3	8	1260	3.65	36	2.9	1.1	551	1.3	0.6	3.1	108	5.67	0.05	7	34.7	0.99	594.00	0.05	1.83	0.01	0.55	2.6	18.7	13	0.6	10.6	0.5	<5	<5	5	6.8	1.6	19.0	0.6	
330260	003-B3	4.10	4.80	<0.1	3.1	0.0120	22.0	33	1.3	6.3	4	491	1.37	15	1.2	<5	121	<5	0.6	1.3	54	1.36	0.01	<5	27.9	0.40	559.00	0.04	1.09	0.02	0.47	1.3	11.3	<5	<5	<5	<5	<5	<5	<5	3.1	0.6	16.7	<5	
330262	003-C1	4.80	5.40	0.34	33.0	0.3875	97.1	216	40.5	47.9	111	2466	23.31	155	5.7	1.6	1196	1.3	1.0	31.2	130	13.13	0.10	8	20.7	2.30	185.00	0.09	2.51	0.01	0.17	7.8	29.7	17	0.6	20.9	2.0	<5	<5	7	15.0	19.5	6.5	0.7	
330263	003-C2	5.40	6.00	0.11	1.6	0.5274	80.1	182	6.3	33.0	79	2385	20.76	225	<5	<5	1546	1.6	0.8	10.7	52	17.18	0.01	8	9.9	1.66	73.00	0.01	1.53	<0.1	5.1	2.9	16	<5	25.5	<5	<5	<5	7	12.4	19.0	<5	<5		
330264	004-A1	0.00	0.85	0.04	1.9	0.0218	157.8	99	3.6	44.9	24	2829	6.53	109	6.6	3.3	3432	0.7	1.0	9.2	143	16.25	0.20	11	32.5	1.01	95.00	0.11	4.78	3.20	0.03	4.6	38.6	19	<5	15.5	2.9	<5	<5	9	6.7	4.4	0.6	1.0	
330265	004-A2	0.85	1.80	0.08	2.9	0.0511	378.4	54	4.1	28.9	31	741	5.87	196	1.3	0.6	322	<5	3.0	8.7	95	2.84	0.02	<5	27.7	0.36	105.00	0.03	0.72	0.25	0.01	4.7	10.1	6	0.9	4.3	0.9	<5	<5	<5	3.2	5.1	<5	<5	
330266	004-B1	1.80	2.90	0.11	21.3	0.0831	111.8	56	9.5	37.3	103	178	13.20	101	4.7	1.2	30	<5	2.5	13.7	74	0.31	0.13	5	40.3	0.31	61.00	0.04	0.74	0.03	0.15	4.0	15.1	10	0.9	5.1	1.0	<5	<5	<5	2.3	11.4	6.4	<5	
330267	004-B2	2.90	4.10	0.07	12.3	0.0824	102.3	47	5.9	28.9	31	801	10.68	46	2.7	0.7	88	<5	1.1	11.6	94	1.70	0.06	<5	32.0	0.57	119.00	0.05	1.50	0.01	0.30	3.3	13.4	6	0.5	4.7	0.7	<5	<5	<5	5.9	6.0	11.2	<5	
330268	004-B3	4.10	5.10	0.70	6.2	0.2102	119.7	71	72.5	78.0	47	612	17.29	140	1.0	0.7	57	<5	1.1	155.9	70	0.81	0.02	7	28.5	0.79	113.00	0.06	1.78	0.01	0.23	5.8	7.2	14	0.8	3.7	0.9	<5	<5	5	7.6	11.4	7.8	<5	
330269	004-B4	5.10	6.40	0.10	9.1	0.1868	739.1	637	14.9	24.4	19	907	7.84	116	3.0	1.1	170	15.1	1.3	30.5	96	2.14	0.05	6	30.3	0.82	174.00	0.07	1.62	0.09	0.37	4.4	15.9	11	0.6	6.1	1.4	<5	<5	5	6.0	6.0	13.0	<5	
330270	004-B5	6.40	7.50	0.03	3.7	0.0530	74.3	150	2.7	43.2	16	744	4.27	49	2.8	1.5	297	1.0	1.8	6.9	108	2.51	0.08	7	34.5	0.74	56.00	0.12	2.71	1.47	0.10	6.5	27.1	14	0.9	8.3	2.1	<5	<5	6	6.7	2.1	3.3	0.7	
330272	005-A	0.00	1.00	<0.1	0.5	0.0048	10.2	25	<5	3.3	1	200	0.64	<5	0.6	<5	62	<5	1.4	0.5	14	0.83	0.03	<5	35.9	0.18	18.00	0.02	0.36	0.09	0.02	0.8	5.5	<5	<5	<5	<5	<5	1.8	<5	0.6	<5			
330273	005-B	1.00	2.00	0.02	5.5	0.0214	83.7	72	1.0	36.5	7	795	2.62	32	3.9	1.8	373	0.6	1.5	1.8	166	2.95	0.14	10	45.7	0.51	240.00	0.09	2.07	0.56	0.56	3.3	37.4	18	0.8	11.6	1.8	<5	<5	7	4.2	1.1	21.6	0.6	
330274	005-C	2.00	3.00	0.01	12.3	0.0647	12.9	87	1.7	25.0	25	365	9.65	35	3.1	1.1	34	<5	1.6	2.6	180	0.42	0.12	7	43.3	0.79	174.00	0.08	2.15	0.08	0.44	4.8	20.2	13	0.8	5.1	1.2	<5	<5	6	8.6	5.4	15.0	<5	
330275	005-D	3.00	4.00	<0.1	5.0	0.0262	15.8	39	0.5	15.1	4	1256	3.12	9	0.6	0.8	130	<5	0.8	1.4	117	2.87	0.03	5	41.9	0.76	292.00	0.08	1.89	0.02	0.62	3.1	10.9	8	0.5	6.1	1.2	<5	<5	5	6.2	1.2	19.9	<5	
330277	005-E	4.00	5.00	0.02	5.3	0.0973	30.6	86	6.3	78.8	36	970	16.41	89	<5	0.6	0.9	90	0.5	0.9	25.9	1.01	1.82	0.02	<5	26.5	1.05	75.00	0.07	1.85	0.01	0.17	2.9	6.0	7	0.5	4.6	0.7	<5	<5	5	9.0	13.9	6.9	<5
330278	005-F	5.00	6.00	0.11	5.4	0.1489	54.4	118	14.4	70.4	67	562	15.44	50	0.6	0.7	28	<5	1.2	62.6	41	0.44	0.02	7	18.3	0.97	46.00	0.07	1.82	0.02	0.04	4.7	6.3	14	0.8	3.2	1.0	<5	<5	<5	11.4	9.5	1.5	<5	
330279	005-G	6.00	7.00	0.08	5.1	0.3024	90.1	133	14.6	128.2	40	790	27.83	75	1.0	0.5	93	0.6	2.0	176.8	101	1.51	0.02	6	19.2	0.94	48.00	0.05	1.58	0.01	0.04	21.8	5.0	11	0.5	5.6	0.7	<5	<5	<5	6.8	17.2	1.4	<5	
330280	006-A	0.00	0.90	0.01	1.3	0.0485	26.7	75	1.2	276.3	29	533	9.23	20	0.6	1.1	134	<5	1.3	3.7	309	1.52	0.03	10	24.0	0.58	122.00	0.09	0.99	0.24	0.03	19.0	6.3	19	0.6	5.9	1.5	<5	<5	<5	3.1	2.1	1.4	<5	
330281	006-B	0.90	1.70	<0.1	1.7	0.0612	14.8	86	1.0	80.6	18	842	6.05	27	1.2	1.3	199	<5	0.7	7.6	97	2.02	0.07	8	28.4	0.90	467.00	0.12	2.14	0.22	0.52	5.7	11.0	14	0.6	7.2	2.1	<5	<5	6	4.5	2.8	16.1	<5	
330282</																																													

## Appendix V

### FLEXIT DOWNHOLE SURVEYS

#### SPRING DRILL PROGRAM

##### Section DDH-06-1, 2, 5: South Leduc glacier

- DDH-06-1 data table
- DDH-06-2 data table
- DDH-06-5 data table
- East-west section coordinates DDH-06-1, 2, 5
- DDH-06-1 Magnetic field plot
- DDH-06- Magnetic field plot
- DDH-06-5 Magnetic field plot
- Flexit screen shots of magnetic field and inclination

##### Section DDH-06-4: South Leduc Glacier

- DDH-06-4 data table
- Drill trace plan
- DDH-06-4 Magnetic field plot
- DDH-06-4 section

##### Section DDH-06-6, 7: South Zone

- DDH-06-6 data table
- DDH-06-7 data table
- DDH-06-6, 7 drill trace plan
- DDH-06-6, 7 drill trace section
- DDH-06-6 Magnetic field plot
- DDH-06-7 Magnetic field plot
- Flexit screen shots of magnetic field and inclination

##### Section DDH-06-3: Pollux Zone Magnetic anomaly

- DDH-06-3 data table
- DDH-06-4 Magnetic field plot
- 

#### Fall Drill Program

Continuous surveys aborted because of high artesian flow in drill holes.

Granduc DDH-06-1 FLEXIT tool downhole survey data

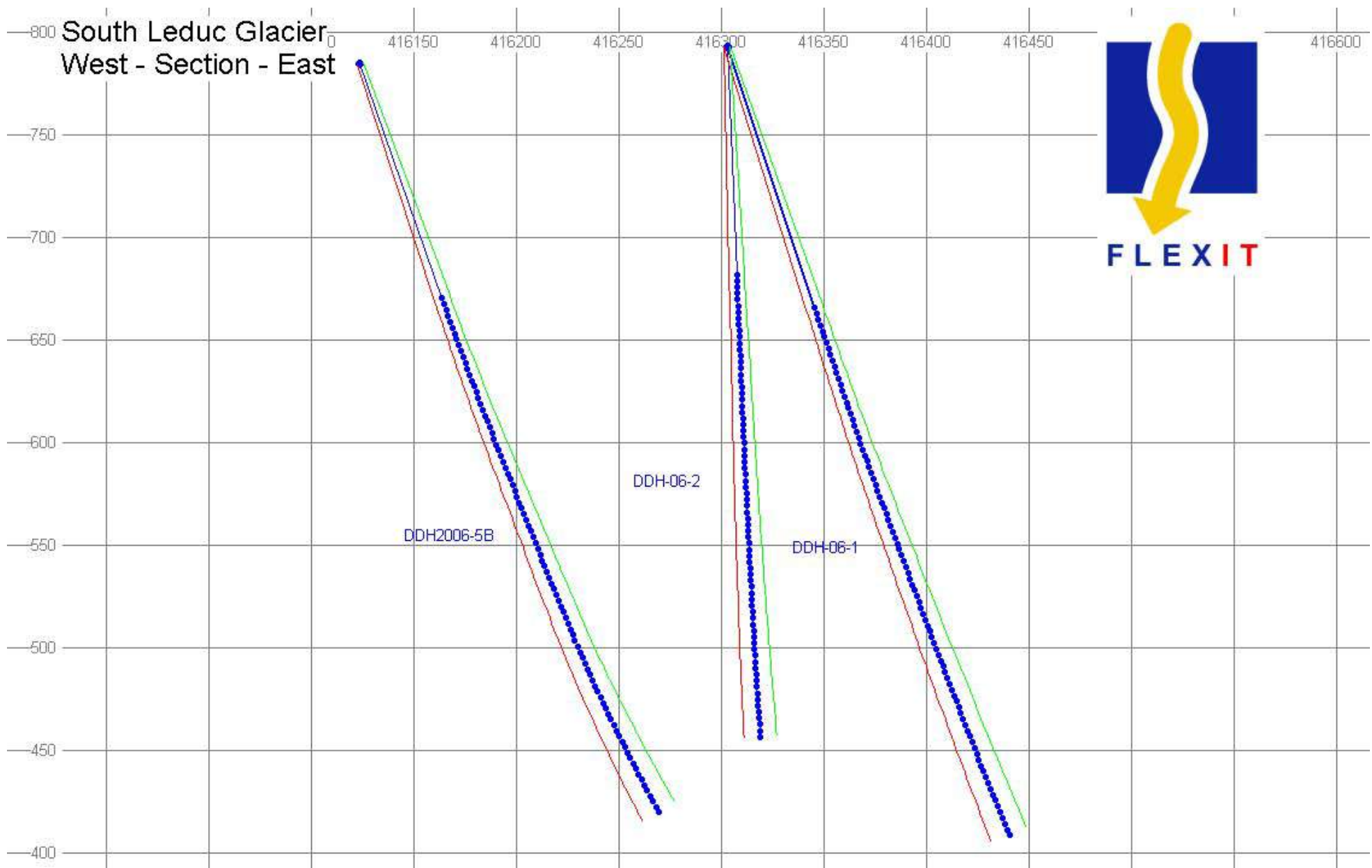
Hole ID	Station Metres	Dip Degrees	Azimuth Degrees	Easting Metres	Northing Metres	Elevation Metres	Mag.Field nT	Mag.Dip Degrees	Grav.Field G	Temperature Centigrade	ToolRoll Degrees	MagToolFace Degrees	DLS deg./m	Status *	MagH nT	MagV nT	UpDown Metres	LeftRight Metres	Shortfall Metres	
DDH-06-1	0.0		-71.6	90.0	416303.0	6229769.0	793.0	137253	-26.23	1.001283	3.5	250.55	117.07	0.000	19	1E+05	-60664	0.00	0	0
DDH-06-1	133.8	133.8	-71.3	90.0	416345.5	6229769.0	666.1	103245	65.10	1.000987	3.5	252.36	196.51	0.002	19	43475	93645	0.39	0	0
DDH-06-1	136.9	3.1	-70.7	90.0	416346.5	6229769.0	663.2	102912	61.64	1.001584	4.0	253.74	270.34	0.195	19	48888	90559	0.42	0	0
DDH-06-1	139.9	3.0	-70.7	90.0	416347.5	6229769.0	660.4	93501	-72.44	1.001203	4.5	253.87	314.12	0.007	19	28216	-89142	0.47	0	0
DDH-06-1	143.0	3.1	-71.7	90.0	416348.5	6229769.0	657.4	60313	69.96	1.001455	4.5	252.69	0.96	0.343	19	20672	56660	0.50	0	0
DDH-06-1	146.0	3.0	-71.7	90.0	416349.5	6229769.0	654.6	58665	68.97	1.001251	4.5	246.81	353.55	0.033	19	21050	54759	0.49	0	0
DDH-06-1	149.0	3.0	-71.5	90.0	416350.4	6229769.0	651.7	58133	67.48	1.001255	5.0	246.05	347.73	0.056	19	22268	53699	0.50	0	0
DDH-06-1	152.1	3.1	-71.5	90.0	416351.4	6229769.0	648.8	57621	68.20	1.001016	5.0	247.43	353.23	0.001	19	21403	53499	0.51	0	0
DDH-06-1	155.1	3.0	-71.4	90.0	416352.4	6229769.0	646.0	58730	69.71	1.001186	5.0	249.01	358.56	0.035	19	20369	55085	0.52	0	0
DDH-06-1	158.2	3.1	-71.3	90.0	416353.3	6229769.0	643.0	54875	53.86	1.001362	5.0	250.03	30.23	0.009	18	32364	44315	0.53	0	0
DDH-06-1	161.2	3.0	-71.4	90.0	416354.3	6229769.0	640.2	49302	73.49	1.001149	5.5	249.76	12.90	0.005	17	14012	47269	0.55	0	0
DDH-06-1	164.3	3.1	-71.4	90.0	416355.3	6229769.0	637.2	41885	82.42	1.001365	5.5	249.67	48.25	0.001	19	5523	41519	0.56	0	0
DDH-06-1	167.3	3.0	-71.3	90.0	416356.3	6229769.0	634.4	49499	65.83	1.001227	5.5	249.72	28.97	0.010	19	20264	45161	0.58	0	0
DDH-06-1	170.4	3.1	-71.3	90.0	416357.2	6229769.0	631.5	51653	66.82	1.001247	6.0	249.76	19.27	0.005	19	20331	47483	0.60	0	0
DDH-06-1	173.4	3.0	-71.3	90.0	416358.2	6229769.0	628.6	58782	73.24	1.001207	6.0	252.68	22.12	0.001	17	16949	56285	0.62	0	0
DDH-06-1	176.5	3.1	-71.2	90.0	416359.2	6229769.0	625.7	52753	83.33	1.001069	6.0	252.40	51.45	0.024	19	6125	52397	0.64	0	0
DDH-06-1	179.5	3.0	-71.2	90.0	416360.2	6229769.0	622.9	51834	70.43	1.001207	6.0	248.18	9.20	0.026	19	17367	48838	0.66	0	0
DDH-06-1	182.6	3.1	-71.1	90.0	416361.2	6229769.0	619.9	51044	71.65	1.001170	6.5	249.89	15.30	0.008	17	16067	48449	0.69	0	0
DDH-06-1	185.6	3.0	-71.1	90.0	416362.1	6229769.0	617.1	55211	71.20	1.001016	6.5	249.56	10.97	0.020	18	17794	52265	0.72	0	0
DDH-06-1	188.7	3.1	-71.1	90.0	416363.2	6229769.0	614.1	43273	77.64	1.001576	6.5	249.14	27.98	0.003	19	9267	52269	0.75	0	0
DDH-06-1	191.7	3.0	-71.0	90.0	416364.1	6229769.0	611.3	55797	76.99	1.001296	6.5	249.06	33.14	0.013	18	12562	54365	0.78	0	0
DDH-06-1	194.8	3.1	-71.0	90.0	416365.1	6229769.0	608.4	54654	75.23	1.001222	7.0	249.23	22.12	0.010	18	13933	52848	0.81	0	0
DDH-06-1	197.8	3.0	-70.9	90.0	416366.1	6229769.0	605.5	55997	74.69	1.001234	7.0	253.70	25.48	0.018	18	14782	54010	0.85	0	0
DDH-06-1	200.9	3.1	-70.8	90.0	416367.1	6229769.0	602.6	55635	73.76	1.001488	7.0	264.80	35.11	0.038	16	15559	53415	0.89	0	0
DDH-06-1	203.9	3.0	-70.7	90.0	416368.1	6229769.0	599.8	55268	73.57	1.001372	7.5	262.87	33.38	0.053	16	15635	53010	0.94	0	0
DDH-06-1	207.0	3.1	-70.3	90.0	416369.2	6229769.0	596.9	55028	73.42	1.001286	7.5	263.34	34.21	0.117	16	15706	52739	1.00	0	0
DDH-06-1	210.0	3.0	-70.1	90.0	416370.2	6229769.0	594.0	55086	73.22	1.001459	7.5	267.54	37.99	0.050	16	15903	52740	1.08	0	-0.01
DDH-06-1	213.1	3.1	-70.0	90.0	416371.2	6229769.0	591.1	54869	73.87	1.001458	8.0	267.79	39.38	0.040	16	15246	52708	1.16	0	-0.01
DDH-06-1	216.1	3.0	-70.0	90.0	416372.3	6229769.0	588.3	54678	73.72	1.001422	8.0	270.91	41.74	0.005	16	15328	52486	1.25	0	-0.01
DDH-06-1	219.2	3.1	-70.1	90.0	416373.3	6229769.0	585.4	54635	73.94	1.001282	8.0	270.72	41.67	0.014	16	15115	52502	1.33	0	-0.01
DDH-06-1	222.2	3.0	-70.1	90.0	416374.3	6229769.0	582.6	54063	73.85	1.001396	8.5	270.45	41.36	0.003	17	15037	51930	1.41	0	-0.01
DDH-06-1	225.2	3.0	-70.1	90.0	416375.4	6229769.0	579.8	54494	74.00	1.001320	8.5	270.78	42.03	0.004	17	15024	52382	1.50	0	-0.01
DDH-06-1	228.3	3.1	-70.1	89.9	416376.4	6229769.0	576.8	54845	73.78	1.001260	9.0	270.83	40.43	0.019	0	15316	52663	1.58	0	-0.01
DDH-06-1	231.3	3.0	-70.1	89.9	416377.4	6229769.0	574.0	54999	73.86	1.001629	9.0	271.13	41.11	0.023	0	15288	52832	1.66	0	-0.01
DDH-06-1	234.4	3.1	-69.9	89.7	416378.5	6229769.0	571.1	55012	73.93	1.001361	9.0	270.70	41.17	0.054	0	15228	52863	1.75	-0.01	-0.01
DDH-06-1	237.4	3.0	-69.8	89.2	416379.5	6229769.0	568.3	54976	73.81	1.001333	9.5	271.38	41.55	0.063	0	15327	52796	1.84	-0.02	-0.02
DDH-06-1	240.5	3.1	-69.7	88.9	416380.6	6229769.0	565.4	55251	73.77	1.001470	9.5	272.03	42.23	0.054	0	15443	53049	1.94	-0.03	-0.02
DDH-06-1	243.5	3.0	-69.7	88.1	416381.6	6229769.0	562.6	55337	73.62	1.001500	9.5	269.57	39.25	0.091	0	15609	53090	2.05	-0.06	-0.02
DDH-06-1	246.6	3.1	-69.7	89.4	416382.7	6229769.0	559.7	55492	73.70	1.001357	10.0	267.50	37.72	0.143	0	15578	53261	2.15	-0.08	-0.02
DDH-06-1	249.6	3.0	-69.7	89.6	416383.8	6229769.0	556.8	55552	73.71	1.001339	10.0	263.91	34.12	0.026	0	15579	53323	2.25	-0.09	-0.02
DDH-06-1	252.7	3.1	-70.1	89.6	416384.8	6229769.0	553.9	55633	73.71	1.001185	10.5	259.64	29.00	0.123	0	15604	53399	2.35	-0.1	-0.02
DDH-06-1	255.7	3.0	-69.9	89.5	416385.8	6229769.0	551.1	55677	73.69	1.000698	10.5	248.05	17.79	0.072	0	15633	53437	2.43	-0.11	-0.03
DDH-06-1	258.8	3.1	-69.5	89.0	416386.9	6229769.0	548.2	55713	73.69	1.001230	10.5	242.15	12.74	0.153	0	15647	53470	2.54	-0.12	-0.03
DDH-06-1	261.8	3.0	-69.6	89.3	416388.0	6229769.0	545.4	54962	73.99	1.001178	10.5	239.71	10.91	0.066	0	15163	52829	2.65	-0.14	-0.03
DDH-06-1	264.9	3.1	-69.7	87.1	416389.1	6229769.0	542.5	55902	73.40	1.001105	10.5	234.43	3.15	0.248	0	15976	53571	2.76	-0.17	-0.03
DDH-06-1	267.9	3.0	-70.0	88.5	416390.1	6229769.0	539.7	56204	73.71	1.001075	10.5	238.20	7.50	0.192	0	15764	53948	2.85	-0.21	-0.03
DDH-06-1	271.0	3.1	-69.6	89.5	416391.2	6229769.0	536.8	55737	73.71	1.000424	11.0	108.81	239.24	0.163	0	15636	53499	2.95	-0.23	-0.04
DDH-06-1	274.0	3.0	-69.6	89.8	416392.2	6229769.0	534.0	55727	73.74	1.000082	11.0	109.18	239.88	0.044	0	15601	53499	3.06	-0.24	-0.04
DDH-06-1	277.1	3.1	-69.6	89.0	416393.3	6229769.0	531.0	55624	74.00	1.001344	11.5	315.11	86.22	0.091	0	15331	53470	3.17	-0.25	-0.04
DDH-06-1	280.1	3.0	-69.6	88.5	416394.3	6229769.0	528.2	55805	73.70	1.001178	12.0	319.63	89.81	0.069	0	15666	53561	3.28	-0.27	-0.04
DDH-06-1	283.2	3.1	-69.6	89.0	416395.4	6229769.0	525.3	55760	73.82	1.001321	12.0	314.34	85.02	0.060	0	15536	53552	3.39	-0.3	-0.04
DDH-06-1	286.2	3.0	-69.5	89.3	416396.5	6229769.0	522.5	55442	73.65	1.001146	12.0	309.00	79.35	0.033	0	15603	53201	3.50	-0.31	-0.05
DDH-06-1	289.3	3.1	-69.4	94.9	416397.5	6229769.0	519.6	55664	73.59	1.001322	12.5	308.89	80.93	0.634	0	15982	54260	3.61	-0.27	-0.05
DDH-06-1	292.3	3.0	-69.4	90.3	416398.6	6229769.0	516.8	55730	73.89	1.001037	12.5	307.78	79.31	0.537	0	15464	53541	3.73	-0.23	-0.05
DDH-06-1	295.4	3.1	-69.5	89.4	416399.7	6229769.0	513.9	55757	73.71	1.001172	13.0	298.36	69.02	0.098	0	15639	53518	3.84	-0.23	-0.05
DDH-06-1	298.4	3.0	-69.5	90.4	416400.7	6229769.0	511.1	55644	73.95	1.001117	13.0	291.63	63.18	0.120	0	15384	53476	3.95	-0.23	-0.05
DDH-06-1	301.4	3.0	-69.5	90.2	416401.8	6229769.0	508.3	55600	73.66	1.001242	13.0	286.31	57							

Granduc DDH-06-2 FLEXIT tool downhole survey data

Hole ID	Station	Dip	Azimuth	Easting	Northing	Elevation	Mag.Field	Mag.Dip	Grav.Field	Temperature	ToolRoll	MagToolFace	DLS	Status	MagH	MagV	UpDown	LeftRight	Shortfall
	Metres	Degrees	Degrees	Metres	Metres	Metres	nT	Degrees	G	Centigrade	Degrees	Deg/m	deg/m	*	nT	nT	Metres	Metres	Metres
DDH-06-2	0.0	-87.5	90.0	416303.0	6229769.0	793.0	33911	72.63	1.000752	0.5	201.79	179.64	0.000	17	10126	32364	0.00	0	0
DDH-06-2	110.9	-87.7	91.0	416307.6	6229769.0	682.2	98863	84.51	1.001280	0.5	200.94	92.79	0.002	19	9461	98409	-0.19	0.04	0
DDH-06-2	114.0	-87.8	91.0	416307.7	6229769.0	679.1	93261	81.49	1.001263	1.0	199.72	90.05	0.037	19	13805	92344	-0.21	0.04	0
DDH-06-2	117.0	-87.9	92.0	416307.8	6229769.0	676.1	91415	-78.00	1.000712	1.0	197.82	20.15	0.035	19	19003	89418	-0.23	0.04	0
DDH-06-2	120.1	-87.9	92.0	416307.9	6229769.0	673.0	106346	72.32	1.000844	1.0	194.78	164.57	0.005	17	32303	101321	-0.25	0.05	0
DDH-06-2	123.1	-87.8	93.0	416308.0	6229769.0	670.0	72607	-81.08	1.001133	1.0	193.52	308.24	0.055	19	3505	-22334	-0.26	0.05	0
DDH-06-2	126.2	-87.4	93.0	416308.2	6229768.9	666.9	32900	79.20	1.000119	1.0	193.35	166.72	0.117	19	6165	32317	-0.27	0.06	0
DDH-06-2	129.2	-87.0	94.0	416308.3	6229768.9	663.9	101695	87.79	1.001312	1.5	194.91	6.38	0.133	19	3917	101620	-0.25	0.07	0
DDH-06-2	132.3	-86.6	95.0	416308.5	6229768.9	660.8	89981	-88.77	1.000879	1.5	197.87	205.06	0.121	19	1931	-89960	-0.21	0.08	0
DDH-06-2	135.3	-86.5	95.0	416308.7	6229768.9	657.8	78687	85.09	1.001221	2.0	199.71	45.70	0.050	19	6737	78398	-0.16	0.1	0
DDH-06-2	138.4	-86.5	96.0	416308.9	6229768.9	654.7	89880	-86.91	1.001300	2.0	202.16	260.32	0.021	19	4849	-89749	-0.11	0.12	0
DDH-06-2	141.4	-86.7	96.0	416309.1	6229768.9	651.7	85427	78.96	1.001641	2.5	202.74	297.38	0.087	19	16358	83847	-0.06	0.13	0
DDH-06-2	144.5	-87.5	97.0	416309.2	6229768.9	648.6	57057	73.50	1.002210	2.5	206.28	292.70	0.237	17	16201	54709	-0.04	0.15	0
DDH-06-2	147.5	-87.7	99.4	416309.3	6229768.8	645.6	56520	73.42	1.001025	3.0	216.91	296.30	0.100	0	16131	54169	-0.04	0.17	0
DDH-06-2	150.6	-87.8	97.1	416309.5	6229768.8	642.5	56385	73.39	1.001303	3.0	223.85	300.76	0.031	0	16120	54032	-0.05	0.19	0
DDH-06-2	153.6	-87.8	97.3	416309.6	6229768.8	639.5	56347	73.35	1.001071	3.5	224.31	301.48	0.006	0	16148	53984	-0.07	0.2	0
DDH-06-2	156.7	-87.8	97.8	416309.7	6229768.8	636.5	56076	73.41	1.001361	3.5	225.89	303.45	0.009	0	16015	53741	-0.08	0.22	0
DDH-06-2	159.7	-87.8	98.3	416309.8	6229768.8	633.5	56217	73.39	1.000952	4.0	225.57	303.73	0.011	0	16068	53872	-0.10	0.23	0
DDH-06-2	162.8	-87.8	98.1	416309.9	6229768.8	630.4	56157	73.33	1.001002	4.0	227.03	304.91	0.006	0	16113	53796	-0.11	0.25	0
DDH-06-2	165.8	-87.8	96.4	416310.0	6229768.7	627.4	56090	73.31	1.001466	4.0	230.43	306.44	0.025	0	16109	53727	-0.13	0.27	0
DDH-06-2	168.9	-87.8	96.1	416310.2	6229768.7	624.3	56024	73.31	1.000906	4.5	234.60	310.24	0.006	0	16087	53664	-0.14	0.28	0
DDH-06-2	171.9	-87.8	96.0	416310.3	6229768.7	621.3	56093	73.36	1.001024	4.5	235.16	310.67	0.003	0	16067	53743	-0.16	0.29	0
DDH-06-2	175.0	-87.8	96.7	416310.4	6229768.7	618.2	56043	73.34	1.001204	4.5	234.85	311.08	0.009	0	16072	53689	-0.18	0.3	0
DDH-06-2	178.0	-87.8	95.6	416310.5	6229768.7	615.2	56028	73.28	1.000843	5.0	239.27	314.35	0.014	0	16121	53659	-0.19	0.32	0
DDH-06-2	181.1	-87.7	96.0	416310.6	6229768.7	612.1	56012	73.30	1.001282	5.0	241.16	317.07	0.035	0	16095	53650	-0.21	0.33	0
DDH-06-2	184.1	-87.6	95.4	416310.7	6229768.7	609.1	56018	73.28	1.001228	5.0	242.04	317.66	0.033	0	16116	53650	-0.22	0.34	0
DDH-06-2	187.1	-87.5	94.4	416310.9	6229768.7	606.1	55936	73.23	1.001112	5.5	248.67	323.49	0.034	0	16139	53558	-0.22	0.35	0
DDH-06-2	190.2	-87.5	93.0	416311.0	6229768.6	603.0	56039	73.18	1.001040	5.5	250.17	323.79	0.028	0	16218	53641	-0.22	0.36	0
DDH-06-2	193.2	-87.4	92.9	416311.1	6229768.6	600.0	56038	73.12	1.000941	5.5	251.32	324.85	0.010	0	16271	53623	-0.21	0.37	0
DDH-06-2	196.3	-87.4	92.5	416311.3	6229768.6	596.9	56165	73.06	1.001046	5.5	252.05	325.30	0.019	0	16362	53729	-0.21	0.37	0
DDH-06-2	199.3	-87.3	92.1	416311.4	6229768.6	593.9	55951	73.02	1.001208	6.0	259.13	332.10	0.018	0	16338	53512	-0.20	0.38	0
DDH-06-2	202.4	-87.3	91.3	416311.6	6229768.6	590.8	55876	72.88	1.000946	6.0	266.10	338.32	0.021	0	16452	53399	-0.19	0.38	0
DDH-06-2	205.4	-87.2	90.4	416311.7	6229768.6	587.8	55767	72.78	1.001110	6.0	269.71	341.17	0.021	0	16509	53267	-0.17	0.38	0
DDH-06-2	208.5	-87.2	90.3	416311.9	6229768.6	584.7	55611	72.82	1.000954	6.5	270.50	341.91	0.011	0	16429	53129	-0.16	0.39	0
DDH-06-2	211.5	-87.2	91.3	416312.0	6229768.6	581.7	55264	72.99	1.001393	6.5	271.14	343.81	0.018	0	16165	52847	-0.14	0.39	0
DDH-06-2	214.6	-87.2	91.3	416312.2	6229768.6	578.6	55025	72.86	1.001229	6.5	271.62	344.25	0.007	0	16214	52582	-0.12	0.39	0
DDH-06-2	217.6	-87.1	92.0	416312.3	6229768.6	575.6	54498	73.06	1.001009	7.0	282.82	358.51	0.015	17	15883	52133	-0.10	0.4	0
DDH-06-2	220.7	-87.1	92.2	416312.5	6229768.6	572.5	54824	73.94	1.001032	7.0	294.55	8.96	0.008	0	15167	52684	-0.08	0.4	0
DDH-06-2	223.7	-87.1	93.0	416312.6	6229768.6	569.5	54264	74.09	1.001119	7.0	296.41	6.53	0.018	17	14872	52186	-0.06	0.41	0
DDH-06-2	226.8	-87.0	93.0	416312.8	6229768.6	566.4	51356	62.12	1.001101	7.5	304.06	30.95	0.015	19	24016	45395	-0.03	0.42	0
DDH-06-2	229.8	-87.0	93.0	416312.9	6229768.6	563.4	46076	61.46	1.001090	7.5	307.99	76.28	0.004	19	22017	40475	-0.01	0.42	0
DDH-06-2	232.9	-87.1	94.0	416313.1	6229768.6	560.3	53445	78.51	1.001207	8.0	309.91	16.52	0.017	19	10644	52374	-0.02	0.43	0
DDH-06-2	235.9	-87.0	94.0	416313.2	6229768.6	557.3	51459	79.99	1.001367	8.0	310.55	40.98	0.014	19	8944	50676	0.05	0.44	0
DDH-06-2	239.0	-87.0	94.0	416313.4	6229768.5	554.2	56417	78.51	1.001359	8.5	313.58	34.30	0.003	18	11242	55285	0.07	0.46	0
DDH-06-2	242.0	-87.0	95.0	416313.6	6229768.5	551.2	51354	70.75	1.001109	8.5	316.21	39.54	0.026	19	16928	48484	0.10	0.47	0
DDH-06-2	245.1	-86.9	95.0	416313.7	6229768.5	548.1	58874	74.80	1.001155	8.5	318.48	47.89	0.016	19	15432	56816	0.13	0.48	0
DDH-06-2	248.1	-86.9	95.5	416313.9	6229768.5	545.1	63822	81.91	1.001103	9.0	330.61	49.70	0.010	19	8987	63186	0.16	0.5	-0.01
DDH-06-2	251.2	-86.9	95.5	416314.1	6229768.5	542.1	55848	76.63	1.001067	9.0	331.89	55.03	0.008	18	12913	54335	0.20	0.51	-0.01
DDH-06-2	254.2	-86.9	95.5	416314.2	6229768.5	539.1	52431	81.89	1.000965	9.5	334.31	53.16	0.014	19	7394	51907	0.23	0.53	-0.01
DDH-06-2	257.3	-86.9	96.0	416314.4	6229768.5	536.0	55104	77.79	1.000837	9.5	336.26	58.09	0.009	18	11651	53858	0.26	0.55	-0.01
DDH-06-2	260.3	-86.9	96.0	416314.5	6229768.4	533.0	57947	76.89	1.001147	9.5	337.36	59.59	0.023	19	13144	56437	0.29	0.56	-0.01
DDH-06-2	263.3	-86.9	96.5	416314.7	6229768.4	530.0	53960	74.92	1.000986	10.0	338.71	64.13	0.016	19	14040	52101	0.33	0.58	-0.01
DDH-06-2	266.4	-86.9	96.5	416314.9	6229768.4	526.9	55897	75.41	1.001002	10.0	338.63	52.42	0.005	18	14079	54095	0.36	0.6	-0.01
DDH-06-2	269.4	-86.8	97.0	416315.0	6229768.4	523.9	56353	74.84	1.001044	10.0	339.95	55.94	0.017	18	14735	54393	0.40	0.62	-0.01
DDH-06-2	272.5	-86.8	97.0	416315.2	6229768.4	520.8	56258	74.59	1.000805	10.0	340.99	61.58	0.002	18	14950	54235	0.43	0.64	-0.01
DDH-06-2	275.5	-86.8	98.0	416315.4	6229768.3	517.8	55783	74.52	1.001245	10.5	342.86	63.93	0.019	18	14890	53759	0.47	0.66	-0.01
DDH-06-2	278.6	-86.8	99.1	416315.5	6229768.3	514.7	54947	74.26	1.001259	10.5	353.61	76.58	0.020	0	14907	52887	0.50	0.69	-0.01
DDH-06-2	281.6	-86.8	95.9	416315.7	6229768.3	511.7	56626	75.07	1.001027	11.0	352.95	73.32	0.060	3	14591	54713	0.54	0.71	-0.01
DDH-06-2	284.7	-86.7	96.9	416315.															

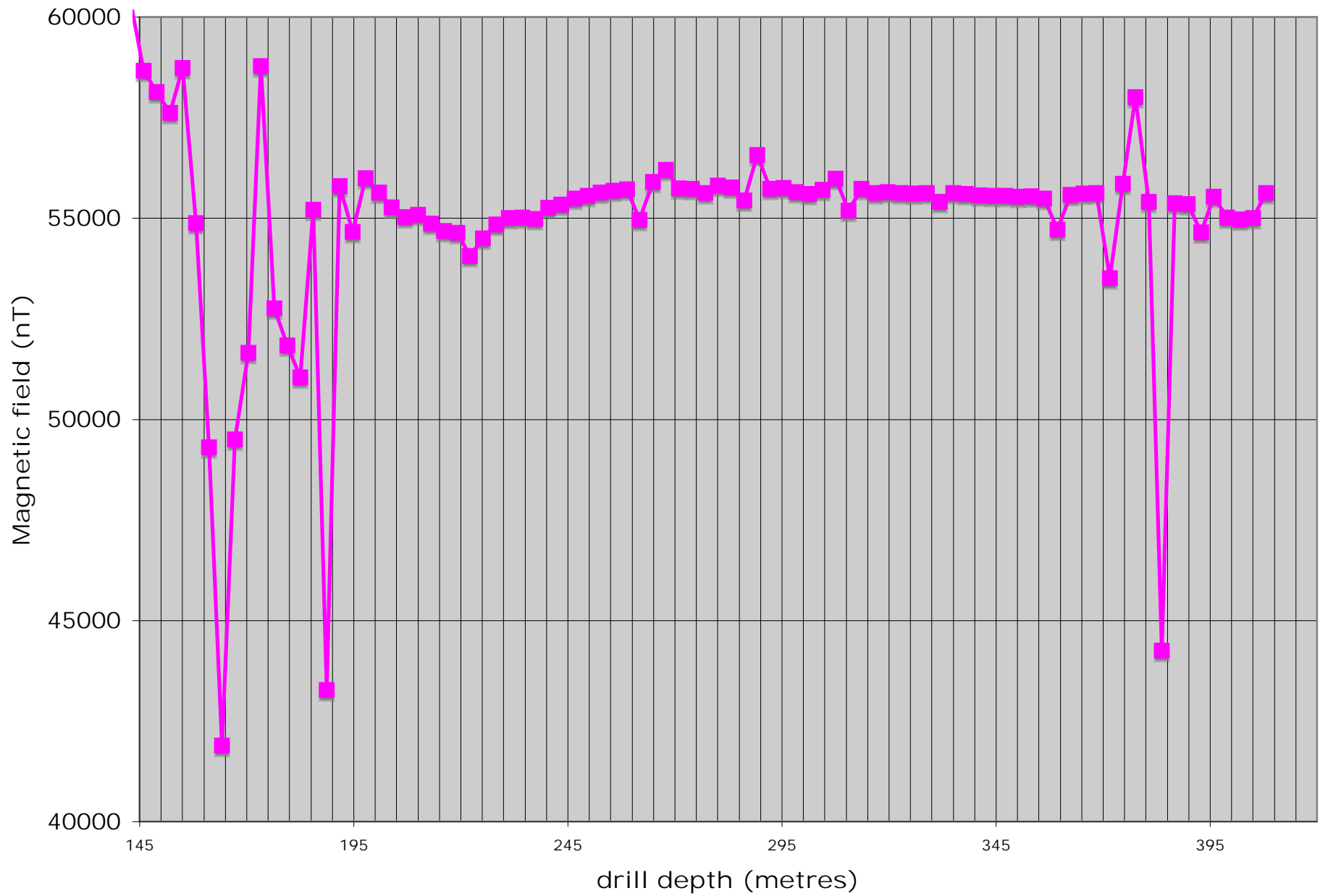
Granduc DDH-06-5 FLEXIT tool downhole survey data

Hole ID	Station Metres	Dip Degrees	Azimuth Degrees	Easting Metres	Northing Metres	Elevation Metres	Mag.Field nT	Mag.Dip Degrees	Grav.Field G	Temperature Centigrade	ToolRoll Degrees	MagToolFace Degrees	DLS deg/m	Status	MagH nT	MagV nT	UpDown Metres	LeftRight Metres	Shortfall Metres
DDH2006-5B	0	-70.59	100.0	416124.0	6229763.0	785.0	56869.0	73.59	1.00	2.000000	226.2	356.23	0.00	17.000	16069	54551	0	0.00	0
DDH2006-5B	121.3	-70.57	95.7	416163.9	6229757.5	670.6	56881.0	73.58	1.00	2.500000	0.0	0.00	0.01	33.000	16079	54561	-0.04	-1.51	-0.01
DDH2006-5B	124.4	-70.48	96.0	416165.0	6229757.4	667.7	56752.0	73.61	1.00	3.500000	269.6	39.96	0.04	1.000	16016	54445	-0.03	-1.58	-0.01
DDH2006-5B	127.4	-70.44	96.2	416166.0	6229757.3	664.8	56746.0	73.65	1.00	3.500000	280.7	51.23	0.03	1.000	15976	54451	-0.03	-1.65	-0.01
DDH2006-5B	130.5	-70.56	97.6	416167.0	6229757.2	661.9	56720.0	73.88	1.02	4.500000	297.5	68.93	0.16	1.000	15749	54490	-0.03	-1.71	-0.01
DDH2006-5B	133.5	-70.16	96.8	416168.0	6229757.0	659.1	56694.0	73.65	1.00	4.500000	316.9	88.30	0.16	1.000	15963	54400	-0.02	-1.76	-0.02
DDH2006-5B	136.6	-70.08	97.4	416169.0	6229756.9	656.2	56665.0	73.63	1.00	4.500000	357.0	128.71	0.07	1.000	15972	54367	0.01	-1.81	-0.02
DDH2006-5B	139.6	-69.94	97.4	416170.0	6229756.8	653.4	56671.0	73.63	1.00	5.000000	3.5	135.50	0.05	1.000	15972	54374	0.04	-1.86	-0.02
DDH2006-5B	142.6	-69.83	97.8	416171.1	6229756.6	650.5	56668.0	73.62	1.00	5.000000	19.1	151.43	0.06	1.000	15980	54368	0.07	-1.90	-0.02
DDH2006-5B	145.7	-69.78	98.3	416172.1	6229756.5	647.6	56666.0	73.69	1.00	5.000000	29.2	161.92	0.05	1.000	15914	54386	0.12	-1.94	-0.02
DDH2006-5B	148.7	-69.63	98.5	416173.2	6229756.3	644.8	56649.0	73.6	1.00	5.500000	33.0	165.81	0.06	1.000	15999	54343	0.16	-1.96	-0.02
DDH2006-5B	151.8	-69.47	98.8	416174.2	6229756.2	641.9	56651.0	73.6	1.00	5.500000	38.9	172.03	0.06	1.000	16030	54336	0.22	-1.99	-0.02
DDH2006-5B	154.8	-69.44	99.3	416175.3	6229756.0	639.1	56646.0	73.57	1.00	5.500000	53.9	187.28	0.06	1.000	16021	54333	0.28	-2.01	-0.02
DDH2006-5B	157.9	-69.34	99.5	416176.3	6229755.8	636.2	56628.0	73.54	1.00	5.500000	54.1	187.66	0.04	1.000	16041	54308	0.34	-2.02	-0.02
DDH2006-5B	160.9	-69.26	99.8	416177.4	6229755.6	633.4	56613.0	73.53	1.00	6.000000	57.7	191.49	0.05	1.000	16052	54289	0.41	-2.03	-0.02
DDH2006-5B	164	-68.1	100.1	416178.5	6229755.5	630.5	56600.0	73.51	1.00	6.000000	59.2	193.28	0.05	0.000	16063	54272	0.48	-2.03	-0.02
DDH2006-5B	167	-69.04	100.3	416179.5	6229755.3	627.7	56587.0	73.51	1.00	6.000000	59.8	194.06	0.04	0.000	16067	54258	0.56	-2.02	-0.02
DDH2006-5B	170.1	-68.99	100.5	416180.6	6229755.1	624.8	56582.0	73.46	1.00	6.000000	60.2	194.56	0.03	0.000	16105	54242	0.65	-2.02	-0.02
DDH2006-5B	173.1	-68.92	100.8	416181.7	6229754.9	622.0	56557.0	73.48	1.00	6.000000	61.0	195.60	0.05	0.000	16082	54222	0.73	-2.00	-0.02
DDH2006-5B	176.2	-68.78	101.4	416182.8	6229754.7	619.1	56475.0	73.44	1.00	6.000000	62.3	197.22	0.09	0.000	16097	54132	0.83	-1.98	-0.03
DDH2006-5B	179.2	-68.71	101.4	416183.8	6229754.4	616.3	56484.0	73.54	1.00	6.500000	60.2	195.47	0.02	0.000	16005	54169	0.92	-1.96	-0.03
DDH2006-5B	182.3	-68.62	101.3	416184.9	6229754.2	613.4	56493.0	73.54	1.00	6.500000	62.3	197.71	0.03	0.000	16009	54177	1.03	-1.93	-0.03
DDH2006-5B	185.3	-68.51	101.8	416186.0	6229754.0	610.6	56431.0	73.53	1.00	6.500000	64.5	200.23	0.07	0.000	15996	54117	1.13	-1.90	-0.03
DDH2006-5B	188.4	-68.41	101.7	416187.1	6229753.8	607.8	56497.0	73.53	1.00	6.500000	63.9	199.74	0.03	0.000	16017	54179	1.25	-1.87	-0.03
DDH2006-5B	191.4	-68.35	101.9	416188.2	6229753.5	605.0	56482.0	73.54	1.00	6.500000	63.6	199.59	0.03	0.000	16005	54167	1.36	-1.83	-0.04
DDH2006-5B	194.5	-68.25	102.1	416189.3	6229753.3	602.1	56463.0	73.55	1.00	6.500000	64.5	200.79	0.04	0.000	15993	54150	1.49	-1.79	-0.04
DDH2006-5B	197.5	-68.19	102.1	416190.4	6229753.1	599.3	56456.0	73.45	1.00	6.500000	65.6	201.76	0.02	0.000	16077	54118	1.61	-1.75	-0.04
DDH2006-5B	200.6	-68.1	102.5	416191.6	6229752.8	596.4	56504.0	73.56	1.00	6.500000	65.9	202.53	0.06	0.000	15992	54194	1.74	-1.70	-0.05
DDH2006-5B	203.7	-68.01	102.6	416192.7	6229752.6	593.6	56419.0	73.51	1.00	7.000000	83.3	219.98	0.03	0.000	16019	54097	1.88	-1.65	-0.05
DDH2006-5B	206.7	-67.96	103.1	416193.8	6229752.3	590.8	56514.0	73.74	1.00	7.000000	84.1	221.54	0.06	0.000	15826	54253	2.01	-1.60	-0.05
DDH2006-5B	209.7	-67.94	102.8	416194.9	6229752.1	588.0	56039.0	73.24	1.00	7.000000	84.7	221.00	0.03	0.000	16157	53659	2.15	-1.54	-0.06
DDH2006-5B	212.8	-67.9	102.6	416196.0	6229751.8	585.1	56421.0	73.45	1.00	7.000000	85.7	222.50	0.03	0.000	16070	54084	2.29	-1.48	-0.06
DDH2006-5B	215.8	-67.87	102.2	416197.1	6229751.6	582.3	56443.0	73.45	1.00	7.000000	84.6	221.33	0.06	0.000	16077	54105	2.43	-1.44	-0.06
DDH2006-5B	218.8	-67.77	102.1	416198.2	6229751.3	579.6	56403.0	73.42	1.00	7.000000	84.6	221.34	0.03	0.000	16099	54056	2.58	-1.39	-0.07
DDH2006-5B	221.9	-67.7	102.1	416199.4	6229751.1	576.7	56319.0	73.33	1.00	7.000000	86.3	222.93	0.02	0.000	16160	53950	2.73	-1.35	-0.07
DDH2006-5B	224.9	-67.66	102.8	416200.5	6229750.8	573.9	56381.0	73.97	1.00	7.000000	86.3	224.64	0.09	0.000	15574	54187	2.88	-1.30	-0.08
DDH2006-5B	228	-67.59	106.9	416201.6	6229750.5	571.0	56261.0	73.98	1.00	7.500000	86.1	225.75	0.50	0.000	15530	54075	3.04	-1.20	-0.08
DDH2006-5B	231	-67.59	106.8	416202.7	6229750.2	568.3	56584.0	74.16	1.00	7.500000	84.7	224.73	0.01	0.000	15201	53569	3.19	-1.06	-0.09
DDH2006-5B	234.1	-67.57	106.4	416203.9	6229749.9	565.4	56582.0	73.86	1.00	7.500000	85.4	224.67	0.06	0.000	15478	53488	3.34	-0.93	-0.09
DDH2006-5B	237.1	-67.52	107.0	416205.0	6229749.5	562.6	56587.0	73.92	1.00	7.500000	85.5	225.15	0.08	0.000	15473	53487	3.5	-0.79	-0.1
DDH2006-5B	240.2	-67.45	105.8	416206.1	6229749.2	559.8	56781.0	74.02	1.00	7.500000	87.1	226.73	0.14	0.000	15357	53625	3.66	-0.66	-0.11
DDH2006-5B	243.2	-67.37	106.1	416207.2	6229748.9	557.0	56022.0	74.1	1.00	7.500000	87.7	227.72	0.05	0.000	15351	53878	3.82	-0.54	-0.12
DDH2006-5B	246.3	-67.3	107.1	416208.3	6229748.5	554.1	55792.0	74.28	1.00	8.000000	93.0	233.72	0.12	0.000	15112	53706	3.99	-0.40	-0.12
DDH2006-5B	249.3	-67.28	106.3	416209.5	6229748.2	551.4	55737.0	74.34	1.00	8.000000	84.0	224.69	0.11	0.000	15049	53667	4.15	-0.27	-0.13
DDH2006-5B	252.4	-67.28	106.6	416210.6	6229747.9	548.5	55704.0	74.35	1.00	8.000000	80.0	220.80	0.04	0.000	15027	53639	4.32	-0.14	-0.14
DDH2006-5B	255.4	-67.28	104.1	416211.7	6229747.6	545.7	56066.0	73.81	1.00	8.000000	81.0	219.92	0.31	0.000	15637	53841	4.49	-0.03	-0.15
DDH2006-5B	258.5	-67.26	105.0	416212.9	6229747.3	542.9	55694.0	73.59	1.00	8.000000	85.4	224.11	0.11	0.000	15732	53426	4.67	0.07	-0.15
DDH2006-5B	261.5	-67.24	129.9	416213.9	6229746.7	540.1	56038.0	71.54	1.00	8.500000	82.9	227.18	3.18	0.000	17744	53155	4.77	0.41	-0.18
DDH2006-5B	264.6	-67.16	105.2	416214.9	6229746.2	537.3	56889.0	73.87	1.00	8.500000	81.8	221.35	3.07	0.000	15472	53497	4.87	0.76	-0.2
DDH2006-5B	267.6	-67.15	103.2	416216.1	6229745.9	534.5	56128.0	73.95	1.00	8.500000	82.7	221.88	0.26	0.000	15518	53940	5.05	0.85	-0.21
DDH2006-5B	270.7	-67.07	105.4	416217.2	6229745.6	531.6	56871.0	73.37	1.00	8.500000	82.7	221.32	0.28	0.000	15995	53533	5.24	0.94	-0.22
DDH2006-5B	273.7	-67.04	105.7	416218.4	6229745.3	528.9	55972.0	73.6	1.00	8.500000	86.8	226.06	0.04	0.000	15807	53694	5.42	1.05	-0.22
DDH2006-5B	276.8	-66.96	105.7	416219.5	6229745.0	526.0	55977.0	73.59	1.00	9.000000	87.1	226.45	0.03	0.000	15812	53698	5.6	1.17	-0.23
DDH2006-5B	279.8	-66.89	105.9	416220.6	6229744.7	523.3	55967.0	73.61	1.00	9.000000	87.4	226.94	0.04	0.000	15797	53691	5.79	1.29	-0.24
DDH2006-5B	282.9	-66.78	106.3	416221.8	6229744.3	520.4	55960.0	73.63	1.00	9.000000	85.9	225.77	0.06	0.000	15775	53690	5.99	1.42	-0.25
DDH2006-5B	285.9	-66.74	106.1	416223.0	6229744.0	517.6	56087.0	73.68	1.00	9.000000	84.2	224.10	0.04	0.000	15766	53826	6.18	1.55	-0.26
DDH2006-5B	289	-66.61	106																

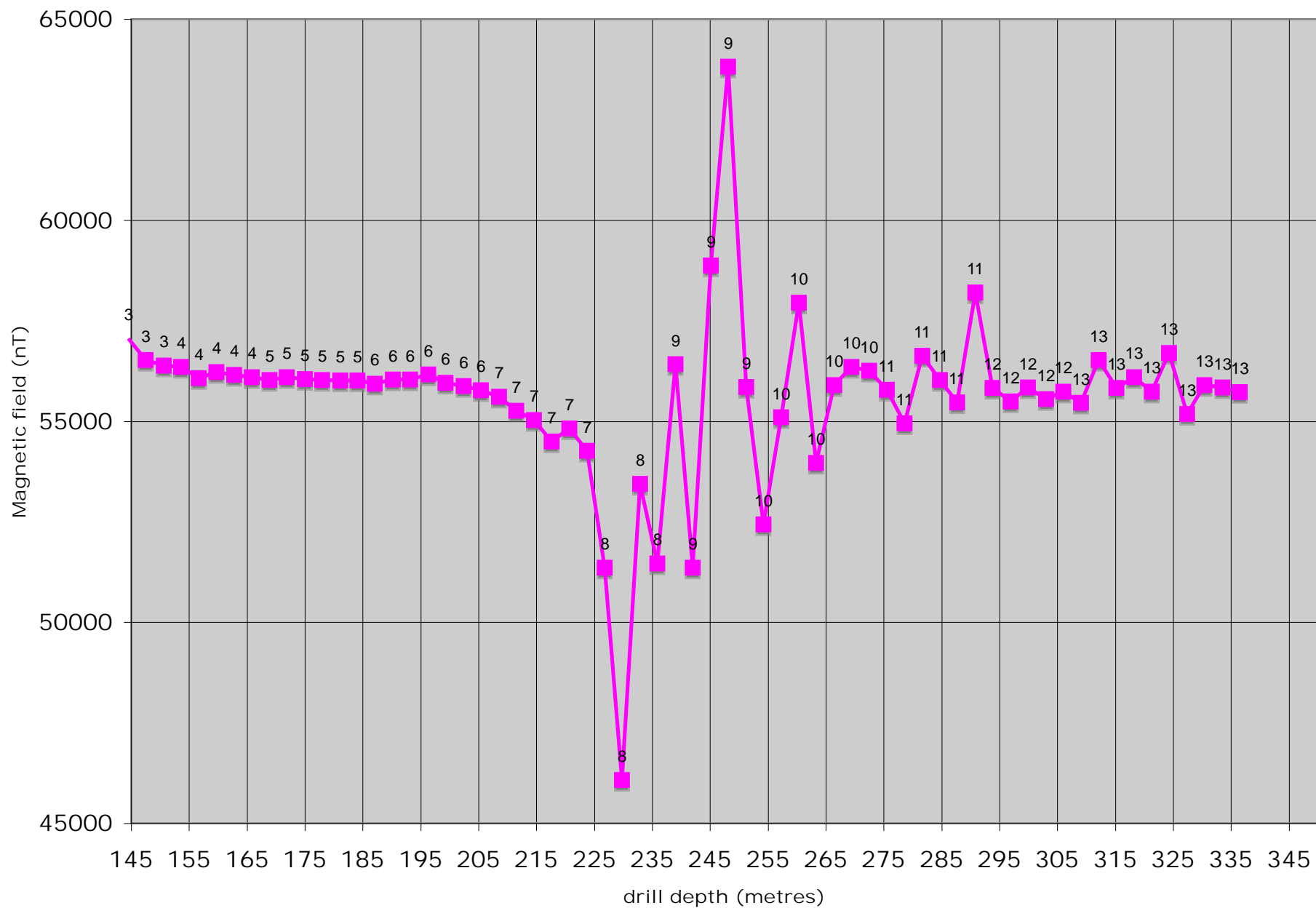




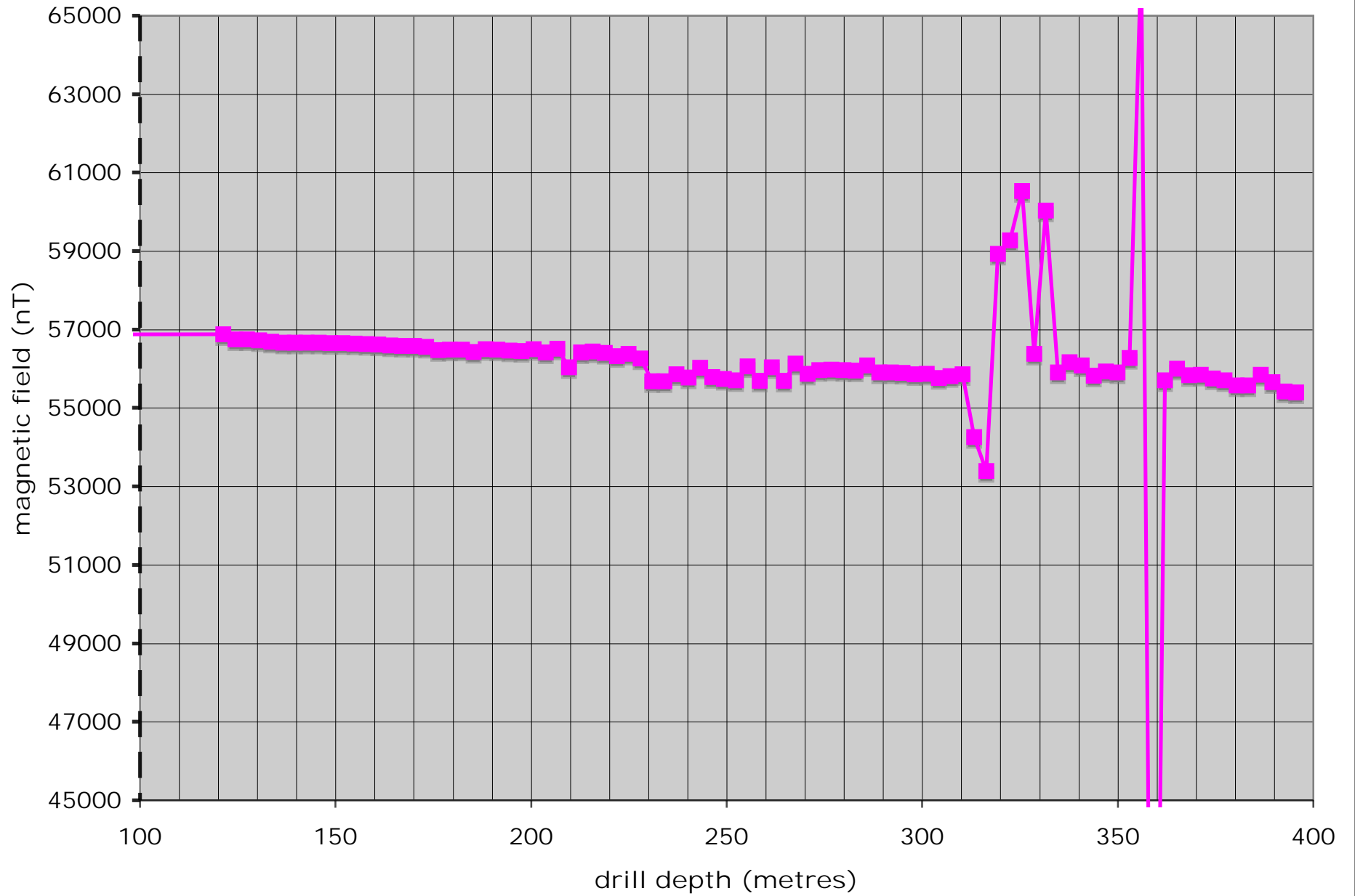
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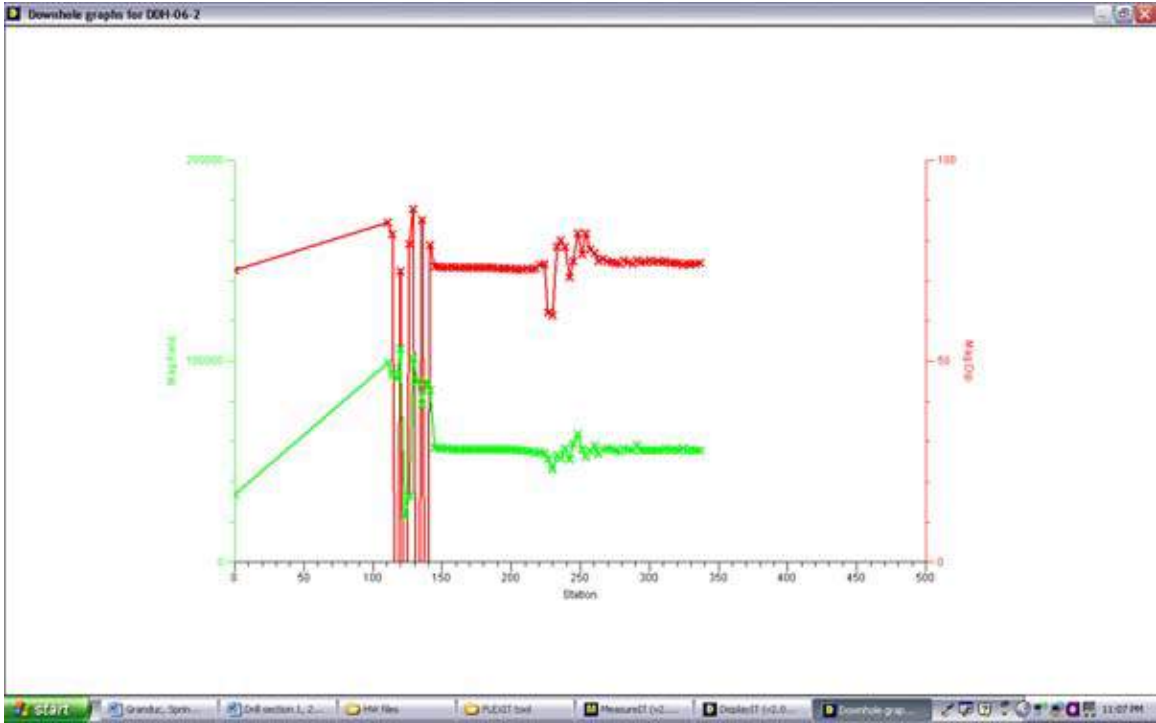
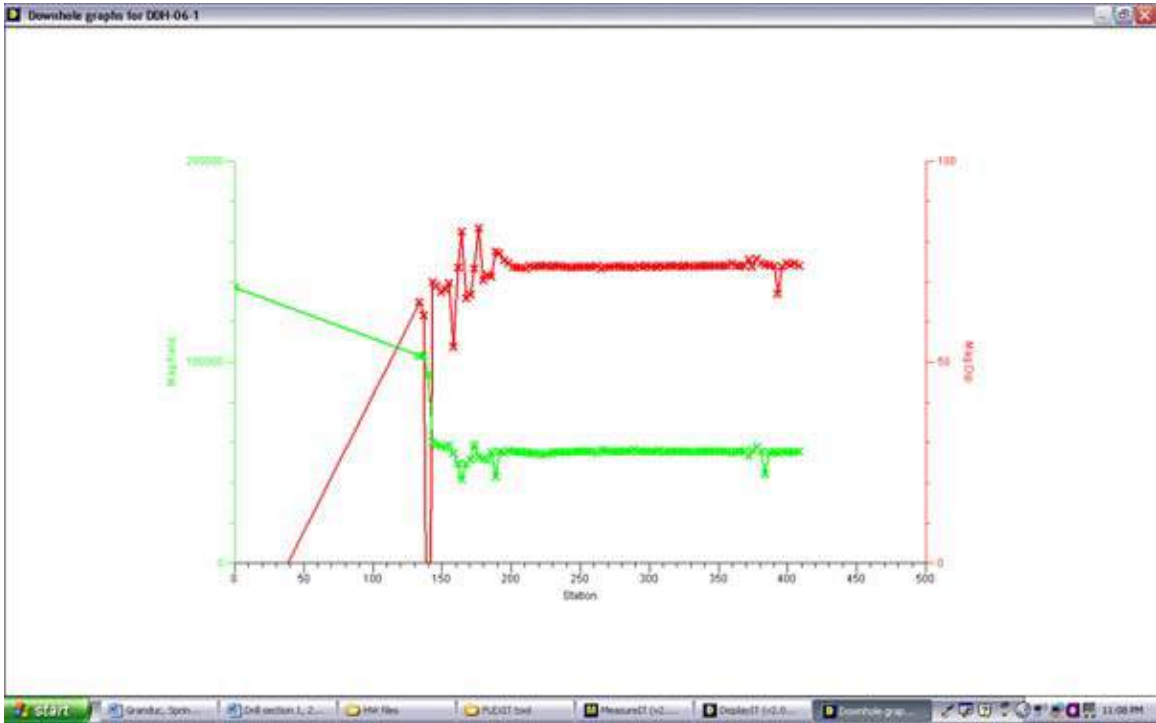


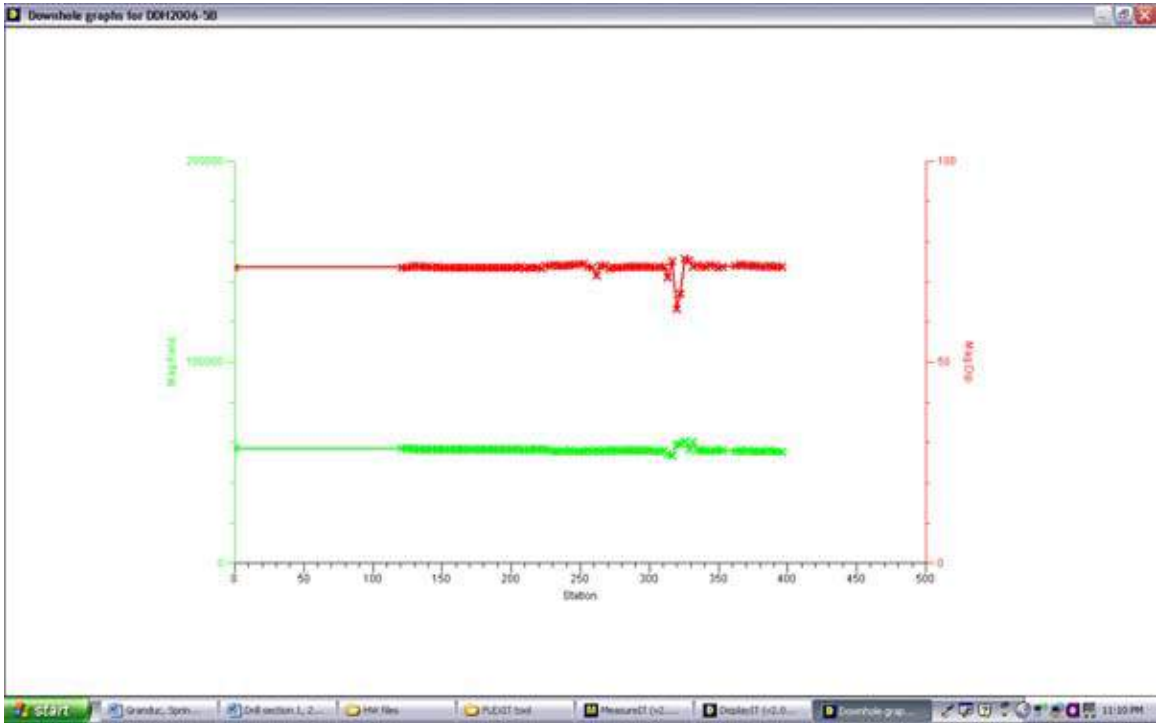
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# Gd DDH-06-5







Granduc DDH-06-4 Flexit tool downhole survey data

Hole ID	Station Metres	Dip Degrees	Azimuth Degrees	Easting Metres	Northing Metres	Elevation Metres	Mag.Field nT	Mag.Dip Degrees	Grav.Field G	Temperature Centigrade	ToolRoll Degrees	MagToolFace Degrees	DLS deg/m	Status *	MagH nT	MagV nT	UpDown Metres	LeftRight Metres	Shortfall Metres
DDH2006-4	0	-64.0	110.0	416297.0	6229508.0	811.0	52209	73.39	0.999996	3.5	192.84	352.10	0	17	14922	50031	0.00	0.00	0.00
DDH2006-4	9.4	-73.4	110.0	416300.2	6229506.8	802.3	18744	67.61	1.001885	1	21.14	195.72	0.997	19	7141	17331	-0.77	0.00	-0.04
DDH2006-4	12.5	-72.9	110.0	416301.1	6229506.5	799.3	20507	31.00	1.000422	1	20.20	66.18	0.171	19	17579	10560	-1.26	0.00	-0.08
DDH2006-4	15.5	-72.1	110.0	416301.9	6229506.2	796.4	104734	76.81	1.000920	1	19.92	247.32	0.27	19	23899	101971	-1.70	0.00	-0.11
DDH2006-4	18.6	-71.2	110.0	416302.8	6229505.9	793.5	103558	75.99	1.001203	1	20.94	249.21	0.273	19	25077	100476	-2.11	0.00	-0.14
DDH2006-4	21.6	-70.4	110.0	416303.7	6229505.6	790.7	38242	-50.33	1.000748	1.5	22.27	191.12	0.259	19	24411	-29437	-2.46	0.00	-0.16
DDH2006-4	24.7	-69.9	109.0	416304.7	6229505.2	787.7	61696	71.59	1.001038	1.5	24.00	256.60	0.212	17	19480	58540	-2.79	-0.01	-0.18
DDH2006-4	27.7	-69.6	109.0	416305.7	6229504.9	784.9	45319	71.07	1.001092	1.5	24.31	139.68	0.09	19	14703	42867	-3.09	-0.03	-0.19
DDH2006-4	30.8	-69.6	108.0	416306.7	6229504.5	782.0	60861	72.44	1.001050	1.5	23.83	197.29	0.113	17	18358	58026	-3.39	-0.06	-0.21
DDH2006-4	33.8	-69.8	108.0	416307.7	6229504.2	779.2	52039	70.10	1.000982	1.5	24.25	127.98	0.084	19	17712	48932	-3.69	-0.09	-0.22
DDH2006-4	36.9	-70.5	108.0	416308.7	6229503.9	776.3	64596	64.01	1.000770	1.5	22.85	32.10	0.213	19	28308	58062	-4.02	-0.13	-0.24
DDH2006-4	39.9	-71.2	107.0	416309.7	6229503.6	773.5	103902	77.22	1.001142	1.5	21.93	160.86	0.263	19	22977	101329	-4.38	-0.17	-0.26
DDH2006-4	43	-71.8	107.0	416310.6	6229503.3	770.5	8384	17.88	1.001111	1.5	24.96	111.32	0.179	19	7979	2573	-4.78	-0.22	-0.29
DDH2006-4	46	-72.1	106.0	416311.5	6229503.0	767.7	102857	69.88	1.001308	1.5	28.50	297.41	0.145	19	35381	96580	-5.19	-0.28	-0.32
DDH2006-4	49.1	-72.1	102.0	416312.4	6229502.8	764.7	53913	69.45	1.000615	1.5	64.82	43.60	0.397	19	18923	50483	-5.63	-0.38	-0.35
DDH2006-4	52.1	-71.9	101.0	416313.3	6229502.6	761.9	87144	81.70	1.000242	2	92.07	299.39	0.122	19	12587	86230	-6.05	-0.52	-0.39
DDH2006-4	55.2	-71.5	100.0	416314.3	6229502.4	758.9	91672	72.15	1.000406	2	92.89	347.82	0.158	17	28094	87261	-6.48	-0.68	-0.42
DDH2006-4	58.2	-70.9	106.0	416315.2	6229502.2	756.1	45145	-69.54	1.000320	2	95.08	74.21	0.672	19	15780	-42298	-6.86	-0.79	-0.45
DDH2006-4	61.3	-70.4	98.0	416316.2	6229502.0	753.2	10648	56.19	1.000244	2	96.34	302.88	0.875	19	5925	8847	-7.23	-0.94	-0.47
DDH2006-4	64.3	-70.0	97.0	416317.3	6229501.9	750.3	103022	62.01	1.000087	2	97.47	115.49	0.174	19	48350	90972	-7.57	-1.16	-0.50
DDH2006-4	67.4	-69.7	97.0	416318.3	6229501.7	747.4	75243	-65.01	0.999951	2	98.08	257.19	0.085	19	31793	-68196	-7.91	-1.40	-0.53
DDH2006-4	70.4	-69.8	96.0	416319.3	6229501.6	744.6	19152	56.90	1.000200	2	111.15	234.39	0.12	19	10459	16044	-8.23	-1.64	-0.55
DDH2006-4	73.5	-70.3	104.0	416320.4	6229501.4	741.7	84036	60.31	1.000161	2	112.44	163.88	0.896	19	41628	73001	-8.58	-1.83	-0.58
DDH2006-4	76.5	-71.4	95.0	416321.4	6229501.3	738.9	102393	65.59	0.999903	2	111.92	97.07	1.047	19	42313	93241	-8.95	-2.00	-0.61
DDH2006-4	79.6	-72.5	95.0	416322.3	6229501.2	735.9	55907	-65.81	1.000505	2	112.55	354.62	0.345	18	22909	-50997	-9.41	-2.25	-0.65
DDH2006-4	82.6	-72.6	94.0	416323.2	6229501.1	733.0	101845	70.77	0.999802	2	117.22	64.05	0.114	19	33540	96164	-9.88	-2.49	-0.70
DDH2006-4	85.6	-71.9	94.0	416324.1	6229501.1	730.2	32353	-65.32	0.999847	2	122.69	2.48	0.244	19	13508	-29399	-10.34	-2.74	-0.75
DDH2006-4	88.7	-70.5	93.0	416325.1	6229501.0	727.3	103498	81.01	1.000201	2	128.87	292.03	0.459	19	16166	102227	-10.77	-3.03	-0.79
DDH2006-4	91.7	-69.1	93.0	416326.1	6229500.9	724.4	8163	5.96	0.999891	2	134.61	324.47	0.474	19	8119	848	-11.11	-3.33	-0.82
DDH2006-4	94.8	-68.2	92.0	416327.3	6229500.9	721.6	101859	66.12	0.999779	2.5	139.37	109.32	0.329	19	41231	93141	-11.41	-3.67	-0.86
DDH2006-4	97.8	-68.0	92.0	416328.4	6229500.9	718.8	89901	-68.81	1.000086	2.5	142.73	72.84	0.043	19	32492	-83824	-11.67	-4.01	-0.89
DDH2006-4	100.9	-67.9	91.0	416329.6	6229500.8	715.9	85504	74.21	0.999362	2.5	144.66	316.43	0.126	17	23261	82279	-11.93	-4.38	-0.92
DDH2006-4	103.9	-67.6	91.0	416330.7	6229500.8	713.1	87833	69.80	1.000942	2.5	146.70	30.74	0.12	19	30335	82428	-12.18	-4.75	-0.96
DDH2006-4	107	-67.3	90.0	416331.9	6229500.8	710.3	84288	60.34	0.999758	3	150.45	136.11	0.149	19	41716	73241	-12.43	-5.15	-0.99
DDH2006-4	110	-67.5	90.0	416333.0	6229500.8	707.5	90357	-75.76	0.999547	3	153.39	158.56	0.052	19	22234	-87579	-12.67	-5.55	-1.03
DDH2006-4	113.1	-67.7	89.0	416334.2	6229500.8	704.6	96910	64.93	1.000185	3	156.25	250.50	0.147	19	41067	87779	-12.93	-5.96	-1.07
DDH2006-4	116.1	-67.2	88.0	416335.4	6229500.8	701.9	100040	71.37	1.000144	3.5	158.90	283.80	0.221	19	31952	94800	-13.18	-6.38	-1.11
DDH2006-4	119.2	-67.2	87.0	416336.6	6229500.9	699.0	105306	83.04	1.000096	3.5	161.08	333.91	0.126	19	12770	104529	-13.43	-6.84	-1.15
DDH2006-4	122.2	-67.0	87.0	416337.7	6229500.9	696.2	102676	74.60	1.000277	4	161.11	314.99	0.083	19	27274	98988	-13.67	-7.30	-1.20
DDH2006-4	125.3	-66.7	86.0	416339.0	6229501.0	693.4	93201	70.77	1.000459	4	161.01	333.64	0.158	19	30697	88001	-13.91	-7.79	-1.24
DDH2006-4	128.3	-66.5	86.0	416340.1	6229501.1	690.6	89738	-64.30	1.000558	4	161.93	357.86	0.049	19	38911	-80863	-14.14	-8.27	-1.29
DDH2006-4	131.4	-66.5	85.0	416341.4	6229501.2	687.8	72523	67.66	1.000703	4	162.94	270.64	0.129	19	27571	67077	-14.37	-8.78	-1.34
DDH2006-4	134.4	-66.7	85.0	416342.6	6229501.3	685.0	103188	58.62	0.999910	4.5	163.37	191.77	0.05	19	53733	88093	-14.60	-9.29	-1.39
DDH2006-4	137.5	-66.5	84.0	416343.8	6229501.4	682.2	34356	-56.82	1.000060	4.5	165.05	6.93	0.142	19	18804	-28754	-14.85	-9.82	-1.45
DDH2006-4	140.5	-66.3	84.0	416345.0	6229501.5	679.4	59354	72.61	1.000075	4.5	165.44	297.51	0.056	17	17740	56641	-15.08	-10.34	-1.51
DDH2006-4	143.6	-66.0	83.3	416346.2	6229501.7	676.6	56544	73.13	1.000025	5	166.67	301.77	0.141	0	16406	54111	-15.31	-10.90	-1.57
DDH2006-4	146.6	-65.7	82.7	416347.5	6229501.8	673.9	56476	73.29	1.000201	5	168.68	304.78	0.129	0	16240	54091	-15.53	-11.46	-1.63
DDH2006-4	149.7	-65.3	79.0	416348.7	6229502.0	671.0	56935	72.77	1.000025	5	169.38	304.30	0.514	17	16862	54380	-15.75	-12.09	-1.70
DDH2006-4	152.7	-65.0	79.0	416350.0	6229502.3	668.3	56931	72.84	1.000162	5	169.64	305.39	0.097	17	16795	54397	-15.97	-12.74	-1.78
DDH2006-4	155.8	-64.9	78.8	416351.3	6229502.5	665.5	56930	73.08	1.000409	5	169.81	306.54	0.042	1	16566	54466	-16.19	-13.41	-1.86
DDH2006-4	158.8	-64.8	79.0	416352.5	6229502.8	662.8	57755	72.72	0.999985	5.5	169.50	305.30	0.046	17	17160	55147	-16.40	-14.07	-1.94
DDH2006-4	161.8	-64.7	79.6	416353.8	6229503.0	660.1	56702	73.00	1.000098	5.5	170.87	307.84	0.092	1	16576	54225	-16.59	-14.73	-2.02
DDH2006-4	164.9	-64.5	78.3	416355.1	6229503.3	657.3	56681	72.79	1.000195	5.5	171.21	307.73	0.177	1	16769	54144	-16.80	-15.41	-2.10
DDH2006-4	167.9	-64.5	78.0	416356.3	6229503.5	654.6	56943	72.62	1.000444	5.5	171.65	307.81	0.058	1	17007	54344	-17.00	-16.09	-2.19
DDH2006-4	171	-64.4	78.9	416357.6	6229503.8	651.8	57005	72.65	1.000205	5.5	171.73	308.09	0.129	1	16995	54413	-17.20	-16.80	-2.28
DDH2006-4	174	-64.4	78.6	416358.9	6229504.1	649.1	57030	72.46	1.000232	6	172.12	307.97	0.046	1	17184	54379	-17.38	-17.47	-2.36
DDH2006-4	177.1	-64.3	78.2	416360.2	6229504.3	646.3	56749	72.51	1.000218	6	173.11	309.25	0.064	1	17059	54124	-17.58	-18.17	-2.45
DDH2006-4	180.1	-64.3	79.4	416361.5	6229504.6	643.6	56790	72.53	1.000394	6	174.56	310.84	0.174	1	17053	54169	-17.76	-18.85	-2.53
DDH																			

South Leduc DDH06-4  
Plan

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416400

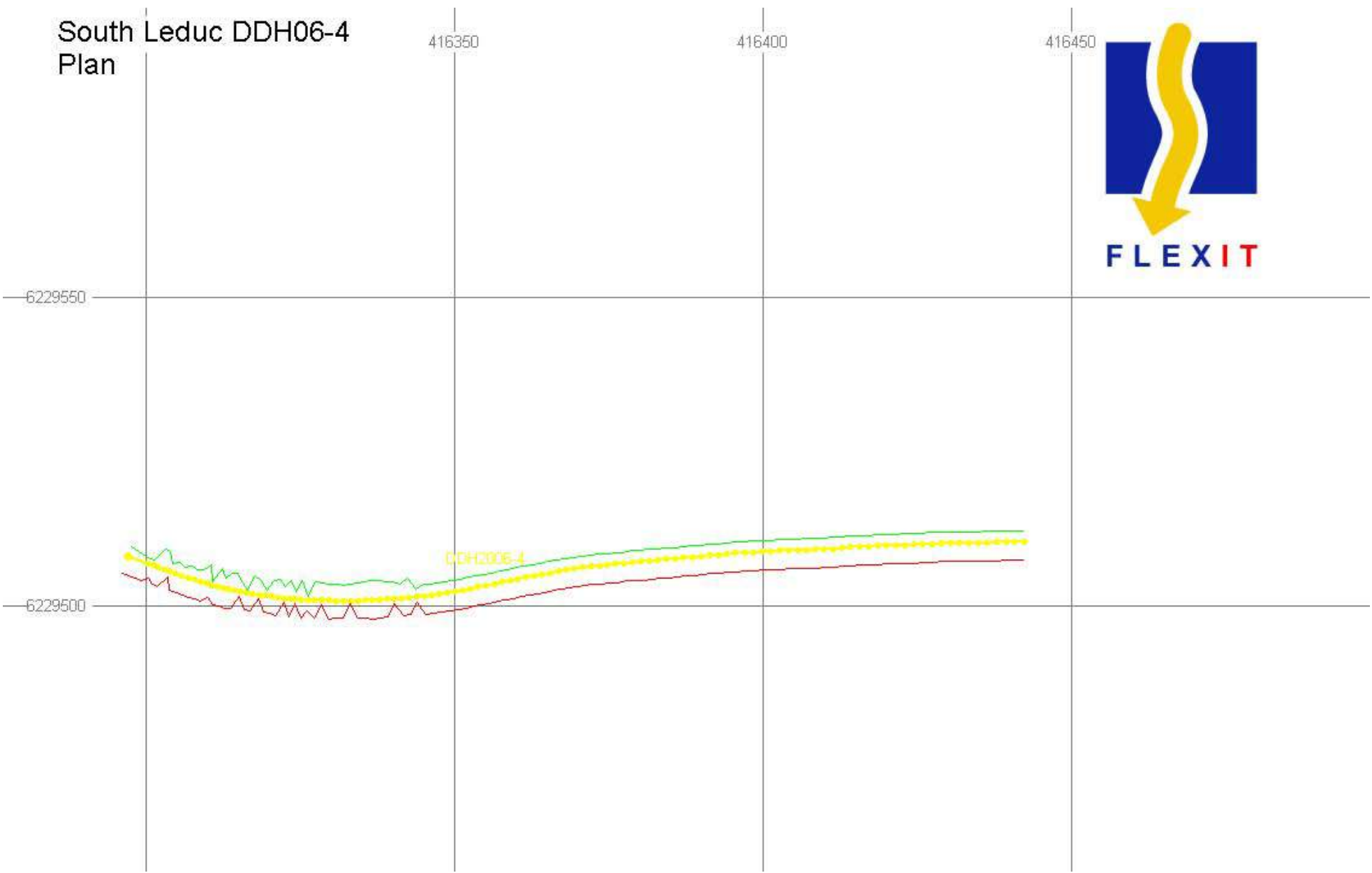
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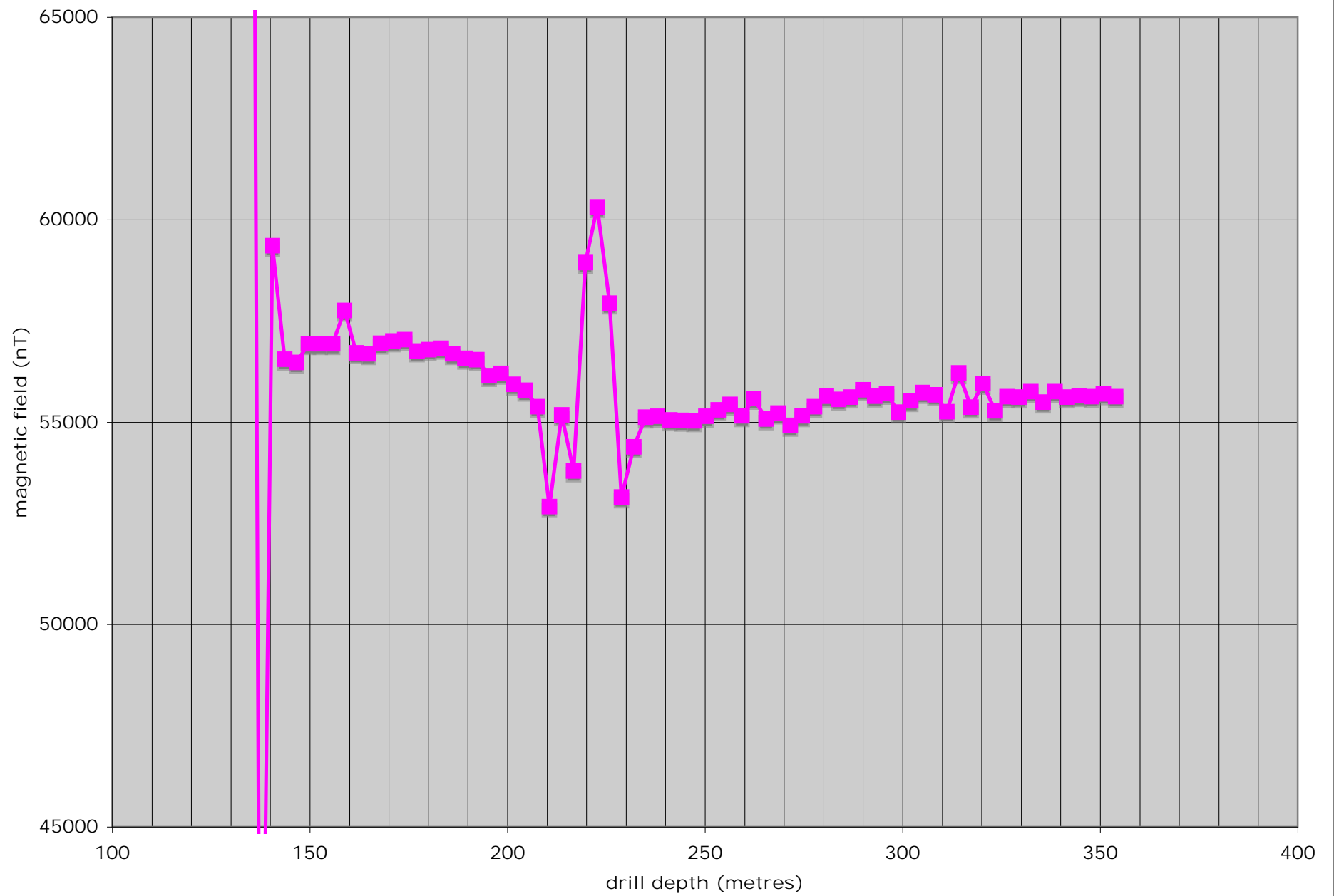
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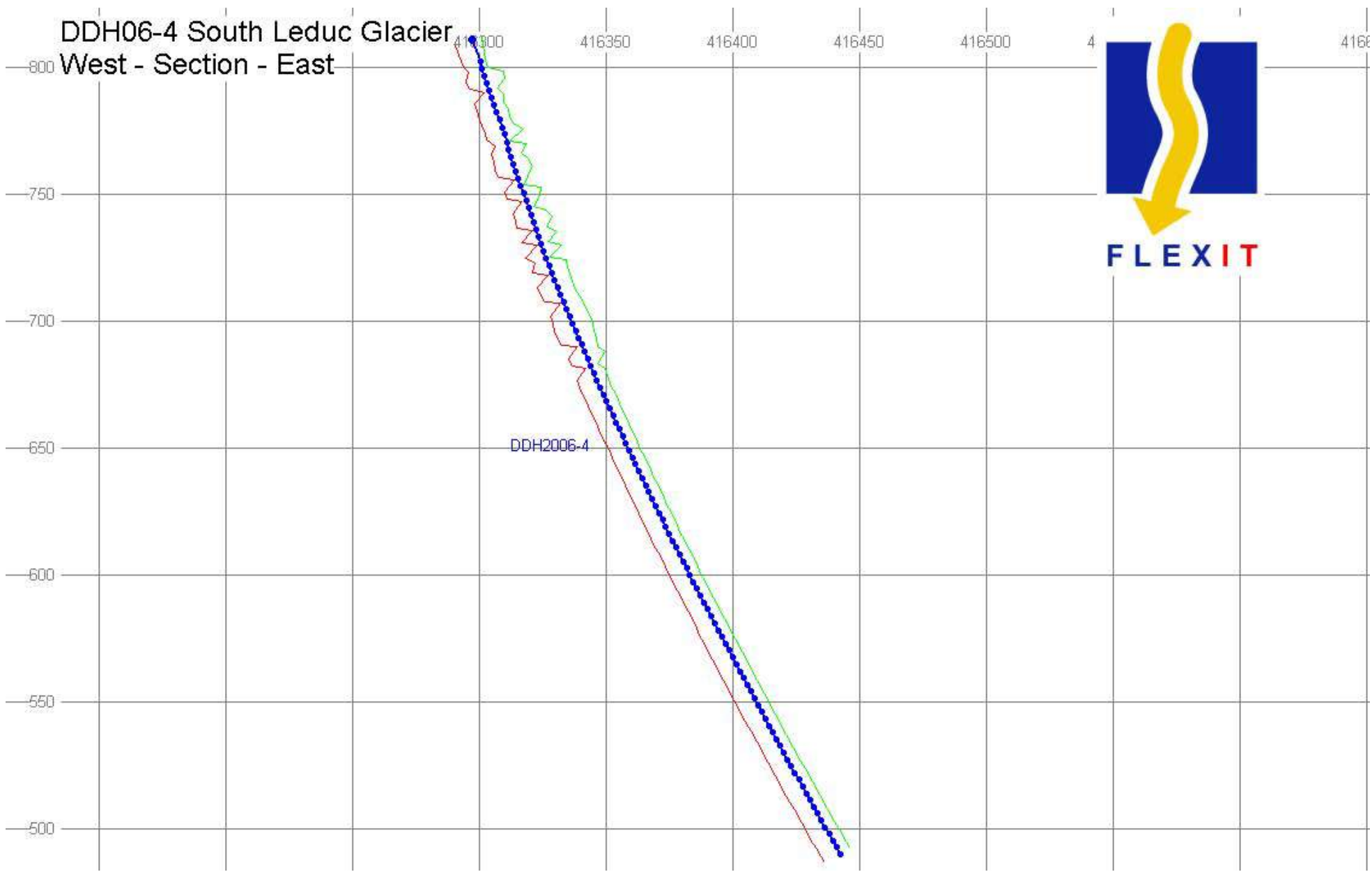


# Gd DDH-06-4





DDH06-4 South Leduc Glacier  
West - Section - East



Granduc Flexit downhole tool survey magnetic data DDH-06-6

Hole ID	Station	Dip	Azimuth	Easting	Northing	Elevation	Mag.Field	Mag.Dip	Grav.Field	Temperature	ToolRoll	MagToolFace	DLS	Status	MagH	MagV	UpDown	Left/Right	Shortfall
	Metres	Degrees	Degrees	Metres	Metres	Metres	mG	Degrees	Grav	Centigrade	Degrees	Degrees	deg./m *		nT	nT	Metres	Metres	Metres
DDH2006-6	0.0	-46.8	94.0	416206.0	6229046.0	1174.0	61721	56.87	0.997304	5.0	0.00	0.00	0	51	31774	49738	0.00	0.00	0.00
DDH2006-6	11.6	-51.3	93.8	416213.6	6229045.5	1165.3	57319	74.51	0.999614	5.0	202.84	357.63	0.385	3	15308	55237	-0.45	-0.01	-0.01
DDH2006-6	14.6	-51.1	93.6	416215.5	6229045.4	1162.9	56740	74.33	0.999823	4.5	203.84	358.40	0.072	0	15327	54631	-0.68	-0.02	-0.02
DDH2006-6	17.7	-51.0	93.4	416217.4	6229045.2	1160.5	56472	74.29	0.999613	4.5	204.94	359.52	0.053	0	15294	54362	-0.91	-0.04	-0.03
DDH2006-6	20.7	-50.9	93.7	416219.3	6229045.1	1158.2	56339	74.22	0.999825	4.5	205.67	0.20	0.086	0	15318	54127	-1.13	-0.05	-0.04
DDH2006-6	23.8	-50.6	93.8	416221.3	6229045.0	1155.8	56280	74.23	0.999829	4.5	206.47	1.17	0.088	0	15299	54160	-1.34	-0.06	-0.04
DDH2006-6	26.8	-50.4	94.2	416223.2	6229044.9	1153.5	56209	74.22	0.999737	4.0	207.74	2.55	0.125	0	15289	54090	-1.53	-0.06	-0.05
DDH2006-6	29.9	-50.1	94.6	416225.1	6229044.7	1151.1	56172	74.22	1.000050	4.0	208.42	3.35	0.102	0	15281	54054	-1.72	-0.05	-0.06
DDH2006-6	32.9	-49.8	94.8	416227.1	6229044.6	1148.8	56170	74.20	0.999578	4.0	207.80	2.86	0.111	0	15295	54047	-1.89	-0.02	-0.06
DDH2006-6	36.0	-49.6	95.4	416229.1	6229044.4	1146.4	56150	74.19	0.999938	4.0	208.95	4.13	0.136	0	15303	54024	-2.05	0.02	-0.07
DDH2006-6	39.0	-49.4	95.9	416231.0	6229044.2	1144.1	56154	74.22	0.999817	3.5	210.05	5.35	0.122	0	15274	54037	-2.19	0.07	-0.07
DDH2006-6	42.1	-49.3	96.1	416233.0	6229044.0	1141.8	56149	74.20	0.999609	3.5	211.15	6.47	0.057	0	15293	54026	-2.33	0.14	-0.07
DDH2006-6	45.1	-49.3	96.7	416235.0	6229043.8	1139.5	56128	74.14	0.999911	3.5	212.33	7.58	0.128	0	15340	53991	-2.46	0.22	-0.08
DDH2006-6	48.2	-49.2	96.7	416237.0	6229043.5	1137.2	56137	74.20	1.000133	3.5	213.31	8.71	0.032	0	15284	54016	-2.59	0.32	-0.08
DDH2006-6	51.2	-49.0	96.9	416238.9	6229043.3	1134.9	56183	74.22	0.999793	3.5	214.04	9.54	0.056	0	15282	54065	-2.72	0.41	-0.09
DDH2006-6	54.3	-48.9	97.5	416240.9	6229043.0	1132.6	56141	74.17	0.999979	3.5	215.24	10.72	0.142	0	15313	54012	-2.84	0.52	-0.09
DDH2006-6	57.3	-48.8	97.9	416242.9	6229042.8	1130.3	56110	74.20	0.999878	3.5	217.44	13.01	0.096	0	15279	53990	-2.95	0.65	-0.09
DDH2006-6	60.4	-48.7	98.1	416244.9	6229042.5	1128.0	56129	74.20	1.000804	3.5	218.35	13.96	0.049	0	15287	54007	-3.06	0.79	-0.10
DDH2006-6	63.4	-48.7	98.5	416246.9	6229042.2	1125.7	56114	74.19	1.000191	3.5	219.15	14.78	0.096	0	15284	53992	-3.17	0.94	-0.11
DDH2006-6	66.4	-48.5	98.8	416248.8	6229041.9	1123.5	56108	74.20	1.000269	3.0	218.95	14.67	0.079	0	15279	53988	-3.27	1.11	-0.11
DDH2006-6	69.5	-48.4	99.0	416250.9	6229041.6	1121.1	56099	74.20	1.000422	3.0	220.39	16.15	0.053	0	15279	53978	-3.37	1.28	-0.12
DDH2006-6	72.5	-48.3	99.3	416252.8	6229041.3	1118.9	56107	74.19	1.000140	3.0	221.14	16.97	0.076	0	15290	53983	-3.45	1.46	-0.12
DDH2006-6	75.6	-48.2	99.5	416254.9	6229040.9	1116.6	56105	74.21	0.999783	3.0	222.42	18.32	0.057	0	15269	53987	-3.54	1.65	-0.13
DDH2006-6	78.6	-48.1	99.7	416256.8	6229040.6	1114.3	56095	74.20	1.000625	3.0	223.30	19.25	0.062	0	15277	53974	-3.62	1.85	-0.14
DDH2006-6	81.7	-47.9	100.0	416258.9	6229040.2	1112.0	56109	74.19	1.000853	3.0	224.79	20.81	0.089	0	15281	53986	-3.69	2.06	-0.15
DDH2006-6	84.7	-47.7	100.0	416260.9	6229039.9	1109.8	56111	74.18	0.999806	3.0	225.57	21.65	0.058	0	15302	53985	-3.75	2.27	-0.16
DDH2006-6	87.8	-47.6	100.4	416262.9	6229039.5	1107.5	56114	74.19	1.000382	3.0	225.72	21.88	0.076	0	15287	53982	-3.81	2.49	-0.16
DDH2006-6	90.8	-47.5	100.7	416264.9	6229039.2	1105.3	56108	74.20	1.000512	3.0	225.28	21.51	0.084	0	15279	53988	-3.86	2.72	-0.17
DDH2006-6	93.9	-47.4	101.0	416267.0	6229038.8	1103.0	56105	74.18	1.000200	3.0	225.54	21.80	0.073	0	15298	53979	-3.91	2.97	-0.18
DDH2006-6	96.9	-47.2	101.0	416269.0	6229038.4	1100.8	56112	74.19	1.000389	3.0	225.31	21.68	0.064	0	15287	53989	-3.94	3.22	-0.19
DDH2006-6	100.0	-47.1	101.2	416271.0	6229038.0	1098.6	56106	74.21	1.000574	3.0	224.78	21.24	0.067	0	15270	53988	-3.97	3.48	-0.21
DDH2006-6	103.0	-46.9	101.3	416273.0	6229037.6	1096.4	56111	74.19	1.000443	3.0	224.78	21.29	0.046	0	15284	53989	-4.00	3.74	-0.22
DDH2006-6	106.1	-46.9	101.5	416275.1	6229037.1	1094.1	56105	74.19	1.000249	3.0	224.30	20.83	0.058	0	15283	53983	-4.02	4.01	-0.23
DDH2006-6	109.1	-46.7	101.8	416277.1	6229036.7	1091.9	56107	74.21	1.000842	3.0	224.40	21.04	0.074	0	15284	53991	-4.03	4.29	-0.24
DDH2006-6	112.2	-46.6	101.8	416279.2	6229036.3	1089.7	56109	74.23	1.000659	3.0	224.20	20.92	0.047	0	15252	53986	-4.03	4.58	-0.25
DDH2006-6	115.2	-46.5	102.0	416281.2	6229035.9	1087.5	56110	74.20	1.000517	3.0	226.39	23.10	0.036	0	15282	53989	-4.03	4.86	-0.27
DDH2006-6	118.3	-46.4	102.1	416283.3	6229035.4	1085.2	56109	74.20	1.000630	3.0	226.39	23.16	0.053	0	15280	53989	-4.03	5.16	-0.28
DDH2006-6	121.3	-46.2	102.4	416285.4	6229035.0	1083.1	56109	74.20	1.000631	3.0	227.41	24.24	0.086	0	15281	53988	-4.02	5.46	-0.30
DDH2006-6	124.4	-46.1	102.7	416287.5	6229034.5	1080.8	56105	74.19	1.000710	3.0	227.79	24.67	0.084	0	15290	53982	-4.00	5.78	-0.31
DDH2006-6	127.4	-46.0	103.0	416289.5	6229034.1	1078.7	56111	74.19	1.000361	3.0	227.82	24.79	0.031	0	15272	53993	-3.98	6.10	-0.33
DDH2006-6	130.5	-45.8	103.4	416291.6	6229033.6	1076.4	56151	74.25	1.000586	3.0	228.27	25.37	0.092	0	15246	54042	-3.95	6.44	-0.35
DDH2006-6	133.5	-45.7	103.7	416293.6	6229033.1	1074.3	56104	74.19	1.000211	3.5	228.01	25.07	0.069	0	15284	53982	-3.92	6.79	-0.37
DDH2006-6	136.6	-45.6	103.9	416295.7	6229032.6	1072.1	56118	74.21	1.000283	3.5	227.71	24.85	0.069	0	15272	54000	-3.89	7.16	-0.39
DDH2006-6	139.6	-45.5	104.1	416297.8	6229032.0	1069.9	56115	74.18	1.000407	3.5	227.89	25.04	0.045	0	15294	53990	-3.85	7.52	-0.42
DDH2006-6	142.6	-45.5	104.3	416299.8	6229031.5	1067.8	56118	74.18	1.000537	3.5	227.08	24.25	0.065	0	15300	53992	-3.80	7.89	-0.44
DDH2006-6	145.7	-45.3	104.5	416301.9	6229031.0	1065.6	56109	74.18	1.000406	3.5	228.35	25.58	0.063	0	15298	53983	-3.75	8.29	-0.46
DDH2006-6	148.7	-45.2	104.7	416303.9	6229030.5	1063.5	56117	74.17	1.000785	3.5	228.08	25.35	0.065	0	15309	53989	-3.70	8.67	-0.49
DDH2006-6	151.8	-45.1	104.9	416306.1	6229029.9	1061.3	56118	74.16	1.000434	3.5	227.86	25.16	0.06	0	15322	53986	-3.64	9.09	-0.52
DDH2006-6	154.8	-45.0	105.2	416308.1	6229029.4	1059.1	56110	74.19	1.000300	3.5	227.76	25.14	0.059	0	15291	53986	-3.58	9.49	-0.55
DDH2006-6	157.9	-44.9	105.3	416310.2	6229028.8	1056.9	56112	74.19	1.000804	3.5	227.22	24.65	0.052	0	15290	53989	-3.51	9.92	-0.58
DDH2006-6	160.9	-44.8	105.6	416312.3	6229028.2	1054.8	56113	74.17	1.000488	3.5	226.52	23.96	0.075	0	15308	53985	-3.44	10.34	-0.61
DDH2006-6	164.0	-44.8	105.7	416314.4	6229027.6	1052.6	56119	74.17	1.000338	3.5	226.29	23.76	0.032	0	15314	53980	-3.36	10.79	-0.64
DDH2006-6	167.0	-44.7	106.0	416316.4	6229027.0	1050.5	56117	74.18	1.000496	3.5	226.91	24.44	0.071	0	15299	53991	-3.29	11.22	-0.67
DDH2006-6	170.1	-44.5	106.1	416318.6	6229026.4	1048.4	56122	74.17	1.000514	3.5	227.03	24.61	0.051	0	15307	53994	-3.21	11.68	-0.71
DDH2006-6	173.1	-44.4	106.8	416320.6	6229025.8	1046.3	56136	74.07	1.000154	3.5	226.74	24.24	0.167	0	15403	53982	-3.12	12.14	-0.75
DDH2006-6	176.2	-44.3	106.6	416322.7	6229025.2	1044.1	56168	74.22	1.000276	3.5	225.78	23.55	0.072	0	15277	54050	-3.03	12.63	-0.79
DDH2006-6	179.2	-44.2	106.9	416324.8	6229024.6	1042.0	56138	74.18	1.000136	3.5	224.52	22.27	0.075	0	15304	54012	-2.93	13.10	-0.82
DDH2006-6	182.3	-44.0	107.1	416326.9															

DDH2006-6	362.1	-36.5	120.3	416452.7	6228970.2	923.6	55964	74.17	0.999622	5.0	220.82	21.58	0.716	0	15269	53840	11.79	58.38	-7.47
DDH2006-6	365.2	-36.4	116.9	416454.9	6228969.0	921.8	55518	74.09	0.999763	5.0	219.97	20.42	0.898	0	15222	53390	12.18	59.42	-7.68
DDH2006-6	368.2	-36.3	117.4	416457.1	6228967.9	920.0	55986	74.10	1.000793	5.0	219.30	19.84	0.157	0	15336	53845	12.59	60.37	-7.86
DDH2006-6	371.2	-36.2	117.8	416459.2	6228966.8	918.2	55985	74.02	0.999365	5.0	219.45	19.93	0.099	0	15418	53820	12.99	61.34	-8.05
DDH2006-6	374.3	-36.0	117.8	416461.4	6228965.6	916.4	55978	74.03	0.999401	5.0	220.54	21.07	0.06	0	15405	53817	13.41	62.35	-8.25
DDH2006-6	377.3	-35.9	117.8	416463.6	6228964.5	914.7	55972	74.10	0.999942	5.0	220.35	20.99	0.039	0	15334	53830	13.82	63.33	-8.44
DDH2006-6	380.4	-35.8	117.9	416465.8	6228963.3	912.8	55917	74.13	0.999317	5.0	220.10	20.81	0.071	0	15294	53785	14.25	64.34	-8.65
DDH2006-6	383.4	-35.6	120.0	416467.9	6228962.2	911.1	56799	74.07	0.999354	5.0	219.84	20.67	0.557	0	15588	54619	14.67	65.37	-8.86
DDH2006-6	386.5	-35.5	118.0	416470.2	6228960.9	909.3	55925	74.44	0.999514	5.0	219.18	20.72	0.521	16	15007	53874	15.10	66.44	-9.08
DDH2006-6	389.5	-35.4	116.2	416472.3	6228959.8	907.5	56504	74.51	0.999665	5.0	219.80	20.94	0.504	2	15094	54451	15.54	67.39	-9.27
DDH2006-6	392.6	-35.3	117.4	416474.6	6228958.7	905.7	56133	73.73	0.999328	5.0	219.59	19.92	0.336	0	15724	53885	16.01	68.37	-9.47
DDH2006-6	395.6	-35.2	118.4	416476.7	6228957.5	904.0	55582	73.99	0.999698	5.5	217.06	17.85	0.538	0	15329	53426	16.46	69.38	-9.68
DDH2006-6	399.6	-35.0	118.8	416479.6	6228955.9	901.7	55622	73.72	0.999526	5.5	215.71	16.18	0.122	0	15590	53392	17.04	70.77	-9.97
DDH2006-6	402.6	-34.9	118.0	416481.8	6228954.8	900.0	56215	74.71	0.999009	5.5	213.60	15.63	0.227	18	14820	54226	17.49	71.79	-10.19
DDH2006-6	405.7	-34.8	118.2	416484.0	6228953.6	898.2	55948	74.01	0.999225	5.5	211.52	12.33	0.071	0	15414	53783	17.97	72.83	-10.41
DDH2006-6	408.7	-34.6	118.6	416486.2	6228952.4	896.5	56126	74.16	1.000012	5.5	210.37	11.41	0.126	0	15324	53993	18.44	73.85	-10.62
DDH2006-6	411.8	-34.5	118.5	416488.4	6228951.2	894.8	56028	74.07	0.999902	5.5	210.57	11.53	0.044	0	15375	53877	18.93	74.91	-10.85
DDH2006-6	414.8	-34.4	118.8	416490.6	6228950.0	893.1	55948	74.11	0.999988	5.5	210.49	11.55	0.093	0	15315	53811	19.41	75.94	-11.08
DDH2006-6	417.9	-34.2	119.1	416492.8	6228948.7	891.3	55978	74.15	1.000567	5.5	209.29	10.46	0.087	0	15286	53851	19.91	77.02	-11.32
DDH2006-6	420.9	-34.0	119.2	416495.0	6228947.5	889.6	56007	74.15	1.000175	5.5	210.29	11.48	0.053	0	15300	53877	20.39	78.08	-11.55
DDH2006-6	424.0	-33.9	120.3	416497.2	6228946.3	887.9	55608	74.00	0.999445	5.5	210.62	11.74	0.303	0	15332	53453	20.90	79.19	-11.80
DDH2006-6	427.0	-33.8	126.5	416499.3	6228944.9	886.2	56527	74.72	0.999160	6.0	206.62	9.10	1.728	2	14900	54528	21.33	80.41	-12.10
DDH2006-6	430.1	-33.6	119.6	416501.5	6228943.5	884.5	55984	74.14	0.999588	6.0	209.09	10.39	1.852	0	15296	53854	21.79	81.67	-12.40
DDH2006-6	433.1	-33.5	119.8	416503.6	6228942.2	882.9	55876	73.97	0.999178	6.0	208.56	9.69	0.053	0	15428	53704	22.30	82.75	-12.65
DDH2006-6	436.2	-33.4	119.8	416505.9	6228941.0	881.1	56260	74.09	0.999385	6.0	209.41	10.70	0.034	0	15422	54104	22.83	83.87	-12.91
DDH2006-6	439.2	-33.3	119.8	416508.1	6228939.7	879.5	56024	74.17	0.999583	6.0	208.97	10.38	0.049	0	15281	53899	23.34	84.96	-13.16
DDH2006-6	442.3	-33.1	119.0	416510.3	6228938.4	877.8	55807	74.15	0.998910	6.0	207.64	9.00	0.206	0	15244	53685	23.89	86.07	-13.42
DDH2006-6	445.3	-33.0	119.4	416512.5	6228937.2	876.2	56273	74.29	0.998957	6.0	207.04	8.61	0.107	0	15240	54170	24.43	87.14	-13.67
DDH2006-6	448.4	-32.9	119.9	416514.8	6228935.9	874.5	56019	74.33	0.998899	6.0	205.71	7.39	0.144	0	15131	53937	24.98	88.27	-13.93
DDH2006-6	451.4	-32.7	120.2	416517.0	6228934.7	872.9	55996	74.18	0.998681	6.0	201.29	2.85	0.107	0	15268	53875	25.52	89.38	-14.20
DDH2006-6	454.5	-32.6	120.4	416519.2	6228933.3	871.2	55931	74.17	0.999398	6.0	199.22	0.81	0.081	0	15254	53810	26.08	90.53	-14.48
DDH2006-6	457.5	-32.4	120.7	416521.4	6228932.1	869.6	55590	74.18	0.999367	6.5	198.77	0.42	0.092	0	15155	53484	26.63	91.67	-14.75
DDH2006-6	460.6	-32.2	119.8	416523.7	6228930.7	867.9	56063	74.09	0.999223	6.5	198.80	0.31	0.255	0	15373	53914	27.21	92.82	-15.04
DDH2006-6	463.6	-32.1	120.0	416525.9	6228929.5	866.3	56014	74.10	0.999467	6.5	197.31	358.88	0.088	0	15343	53871	27.78	93.93	-15.31
DDH2006-6	466.6	-31.9	120.6	416528.1	6228928.2	864.7	55964	74.19	1.000050	6.5	195.32	357.06	0.167	0	15248	53847	28.35	95.06	-15.59
DDH2006-6	469.7	-31.8	120.7	416530.3	6228926.8	863.1	55971	74.15	0.999953	6.5	192.42	354.14	0.062	0	15291	53842	28.95	96.24	-15.88
DDH2006-6	472.7	-31.6	121.9	416532.5	6228925.5	861.5	56097	74.03	0.999010	6.5	187.00	348.70	0.331	0	15431	53933	29.52	97.41	-16.18
DDH2006-6	475.8	-31.5	120.4	416534.8	6228924.2	859.9	55437	74.06	0.999408	6.5	179.32	340.98	0.402	0	15220	53306	30.12	98.62	-16.49
DDH2006-6	478.8	-31.3	120.9	416537.0	6228922.9	858.3	55998	74.20	0.999062	6.5	171.02	332.89	0.141	0	15252	53881	30.72	99.77	-16.78
DDH2006-6	481.9	-31.2	121.1	416539.2	6228921.5	856.7	55999	74.15	0.999543	6.0	166.90	328.76	0.079	0	15299	53869	31.34	100.97	-17.10
DDH2006-6	484.9	-31.1	121.0	416541.4	6228920.2	855.2	55690	74.28	0.999000	6.0	163.22	325.23	0.034	0	15088	53608	31.95	102.14	-17.40
DDH2006-6	488.0	-31.0	120.9	416543.7	6228918.8	853.6	56028	74.16	0.999115	6.0	155.08	316.97	0.049	0	15296	53900	32.58	103.34	-17.71
DDH2006-6	491.1	-30.9	122.4	416546.0	6228917.4	852.0	56299	74.25	0.998619	6.0	149.70	311.81	0.413	0	15282	54185	33.20	104.58	-18.04
DDH2006-6	494.1	-30.7	122.5	416548.2	6228916.0	850.4	56197	74.17	0.998543	6.0	144.35	306.42	0.07	0	15326	54067	33.80	105.81	-18.37
DDH2006-6	497.1	-30.5	121.2	416550.4	6228914.7	848.9	56209	74.13	0.999004	6.0	137.80	299.76	0.373	0	15370	54067	34.42	107.01	-18.69
DDH2006-6	500.2	-30.3	124.3	416552.6	6228913.2	847.3	56368	74.03	0.998779	6.0	124.39	286.51	0.874	0	15505	54194	35.06	108.30	-19.05
DDH2006-6	503.2	-30.2	121.3	416554.8	6228911.8	845.8	56019	74.17	0.998369	6.0	122.95	285.01	0.864	0	15280	53895	35.68	109.55	-19.39
DDH2006-6	506.3	-30.1	121.1	416557.1	6228910.4	844.3	56070	74.29	0.999208	6.0	101.48	263.68	0.076	0	15180	53976	36.35	110.77	-19.72

Granduc Flexit downhole tool survey magnetic data

DDH-06-7

Hole ID	Station Metres	Dip Degrees	Azimuth Degrees	Easting Metres	Northing Metres	Elevation Metres	Mag.Field nT	Mag.Dip Degrees	Grav.Field G	Temperature Centigrade	ToolRoll Degrees	MagToolFace Degrees	DLS deg/m	Status *	MagH nT	MagV nT	UpDown Metres	LeftRight Metres	Shortfall Metres
DDH-2006-7	0.0	-58.3	88.5	416206.0	6229046.0	1174.0	57962	75.25	0.999696	9.0	58.64	209.69	0	19	14760	56051	0.00	0.00	0.00
DDH-2006-7	11.9	-58.3	89.2	416212.3	6229046.1	1163.9	57042	74.70	1.000186	9.0	58.57	208.48	0.032	2	15049	55021	0.00	0.04	0.00
DDH-2006-7	14.9	-58.2	88.7	416213.8	6229046.2	1161.3	56665	74.45	1.000312	4.0	59.07	208.50	0.093	0	15188	54591	0.00	0.05	0.00
DDH-2006-7	18.0	-58.1	88.6	416215.5	6229046.2	1158.7	56419	74.39	1.000636	4.0	60.27	209.67	0.039	0	15181	54338	0.00	0.06	0.00
DDH-2006-7	21.0	-58.1	88.6	416217.1	6229046.2	1156.2	56338	74.37	1.000253	3.5	61.06	210.43	0.006	0	15178	54255	0.01	0.06	0.00
DDH-2006-7	24.1	-58.0	88.7	416218.7	6229046.3	1153.5	56279	74.34	1.000685	3.5	62.10	211.49	0.033	0	15192	54190	0.02	0.06	0.00
DDH-2006-7	27.1	-57.9	88.8	416220.3	6229046.3	1151.0	56245	74.32	1.000206	3.5	63.57	213.04	0.046	0	15203	54152	0.04	0.07	0.00
DDH-2006-7	30.2	-57.8	89.3	416221.9	6229046.3	1148.4	56263	74.36	1.000422	3.5	63.67	213.26	0.089	0	15164	54181	0.06	0.08	0.00
DDH-2006-7	33.2	-57.7	89.6	416223.5	6229046.4	1145.8	56188	74.31	1.000194	3.5	64.44	214.02	0.07	0	15198	54094	0.09	0.11	0.00
DDH-2006-7	36.3	-57.6	90.2	416225.2	6229046.4	1143.2	56263	74.36	1.000160	3.5	65.16	215.00	0.114	0	15166	54180	0.12	0.15	0.00
DDH-2006-7	39.3	-57.5	90.5	416226.8	6229046.3	1140.7	56189	74.28	1.000182	3.5	66.68	216.43	0.068	0	15220	54088	0.16	0.20	0.00
DDH-2006-7	42.4	-57.4	90.8	416228.5	6229046.3	1138.1	56169	74.29	1.000498	3.5	67.11	216.93	0.046	0	15207	54071	0.20	0.26	0.00
DDH-2006-7	45.4	-57.3	91.1	416230.1	6229046.3	1135.5	56153	74.31	0.999944	3.5	68.03	218.01	0.077	0	15190	54059	0.25	0.33	0.00
DDH-2006-7	48.5	-57.2	91.3	416231.8	6229046.3	1132.9	56183	74.27	0.999219	3.0	68.85	218.84	0.044	0	15228	54080	0.30	0.41	-0.01
DDH-2006-7	51.5	-57.1	91.6	416233.4	6229046.2	1130.4	56195	74.28	1.000416	3.0	70.21	220.31	0.074	0	15229	54092	0.36	0.49	-0.01
DDH-2006-7	54.6	-56.9	92.1	416235.1	6229046.2	1127.8	56202	74.26	0.999799	3.0	71.49	221.69	0.099	0	15244	54095	0.43	0.59	-0.01
DDH-2006-7	57.6	-56.9	92.8	416236.7	6229046.1	1125.3	56178	74.26	1.000077	3.0	72.42	222.70	0.116	0	15236	54073	0.49	0.71	-0.01
DDH-2006-7	60.7	-56.8	93.0	416238.4	6229046.0	1122.7	56198	74.28	1.000210	3.0	72.93	223.30	0.046	0	15229	54096	0.57	0.84	-0.02
DDH-2006-7	63.7	-56.7	93.0	416240.1	6229045.9	1120.2	56091	74.37	1.000987	3.0	73.88	224.47	0.014	0	15112	54017	0.64	0.96	-0.02
DDH-2006-7	66.8	-56.6	92.9	416241.8	6229045.8	1117.6	56203	74.29	0.999023	3.0	74.78	225.33	0.044	0	15216	54105	0.73	1.10	-0.02
DDH-2006-7	69.8	-56.6	93.0	416243.4	6229045.7	1115.1	56365	74.26	1.000873	3.0	75.06	225.55	0.182	0	15293	54251	0.81	1.24	-0.03
DDH-2006-7	72.8	-56.4	94.0	416245.1	6229045.6	1112.6	56183	74.27	0.999699	3.0	75.84	226.54	0.073	0	15231	54079	0.90	1.40	-0.03
DDH-2006-7	75.9	-56.3	94.4	416246.8	6229045.5	1110.0	56172	74.26	1.000790	3.0	76.43	227.23	0.083	0	15236	54066	0.99	1.57	-0.04
DDH-2006-7	78.9	-56.1	95.1	416248.4	6229045.4	1107.5	56154	74.28	1.000724	3.0	77.22	228.22	0.137	0	15215	54054	1.10	1.75	-0.05
DDH-2006-7	82.0	-55.9	94.8	416250.2	6229045.2	1104.9	56170	74.26	1.000646	3.0	77.24	228.32	0.076	0	15236	54064	1.21	1.94	-0.06
DDH-2006-7	85.0	-55.8	94.8	416251.9	6229045.1	1102.5	56150	74.23	0.999208	3.0	77.93	229.05	0.041	0	15258	54037	1.33	2.13	-0.06
DDH-2006-7	88.1	-55.7	95.2	416253.6	6229044.9	1099.9	56187	74.27	1.000264	3.0	76.97	228.23	0.079	0	15234	54082	1.46	2.33	-0.07
DDH-2006-7	91.1	-55.6	95.5	416255.3	6229044.8	1097.4	56175	74.24	0.999641	3.0	77.83	229.15	0.071	0	15255	54064	1.58	2.53	-0.08
DDH-2006-7	94.2	-55.5	95.9	416257.0	6229044.6	1094.9	56167	74.24	1.000409	3.0	78.41	229.81	0.059	0	15257	54056	1.72	2.74	-0.09
DDH-2006-7	97.2	-55.3	95.9	416258.7	6229044.4	1092.4	56172	74.21	0.999762	3.0	78.92	230.37	0.046	0	15285	54053	1.86	2.96	-0.10
DDH-2006-7	100.3	-55.2	96.1	416260.5	6229044.2	1089.9	56170	74.21	0.999656	3.0	79.69	231.24	0.059	0	15280	54052	2.01	3.19	-0.12
DDH-2006-7	103.3	-55.2	96.5	416262.2	6229044.1	1087.4	56177	74.30	1.000130	3.0	80.99	232.71	0.078	0	15198	54082	2.15	3.42	-0.13
DDH-2006-7	106.4	-55.1	96.6	416263.9	6229043.9	1084.8	56177	74.22	0.999849	3.0	81.57	233.21	0.013	0	15276	54061	2.31	3.67	-0.14
DDH-2006-7	109.4	-55.1	96.6	416265.6	6229043.7	1082.4	56159	74.21	1.000126	3.0	82.97	234.61	0.033	0	15280	54040	2.46	3.91	-0.16
DDH-2006-7	112.5	-55.0	96.9	416267.4	6229043.4	1079.8	56166	74.22	0.999903	3.0	83.73	235.45	0.051	0	15270	54050	2.61	4.17	-0.17
DDH-2006-7	115.5	-54.9	97.1	416269.1	6229043.2	1077.4	56173	74.21	0.999871	3.0	84.36	236.13	0.062	0	15289	54053	2.77	4.42	-0.18
DDH-2006-7	118.6	-54.8	97.4	416270.9	6229043.0	1074.9	56174	74.21	0.999690	3.0	84.33	236.20	0.06	0	15290	54053	2.93	4.69	-0.20
DDH-2006-7	121.6	-54.7	97.6	416272.6	6229042.8	1072.4	56172	74.19	1.000044	3.0	84.35	236.29	0.06	0	15300	54048	3.10	4.96	-0.22
DDH-2006-7	124.7	-54.6	97.9	416274.4	6229042.5	1069.9	56173	74.21	0.999870	3.0	83.61	235.69	0.071	0	15284	54054	3.28	5.25	-0.24
DDH-2006-7	127.7	-54.5	98.2	416276.1	6229042.3	1067.4	56171	74.20	0.999663	3.0	83.76	235.87	0.062	0	15293	54049	3.45	5.54	-0.26
DDH-2006-7	130.8	-54.4	98.4	416277.9	6229042.0	1064.9	56177	74.21	1.000007	3.0	84.40	236.61	0.078	0	15286	54058	3.64	5.85	-0.28
DDH-2006-7	133.8	-54.3	98.7	416279.6	6229041.8	1062.5	56182	74.20	1.000109	3.5	84.27	236.55	0.076	0	15297	54060	3.82	6.15	-0.30
DDH-2006-7	136.9	-54.2	99.0	416281.4	6229041.5	1060.0	56162	74.21	0.999728	3.5	83.94	236.31	0.066	0	15285	54042	4.01	6.48	-0.32
DDH-2006-7	139.9	-54.1	99.1	416283.1	6229041.2	1057.5	56177	74.18	1.000006	3.5	84.67	237.05	0.033	0	15317	54049	4.20	6.80	-0.34
DDH-2006-7	143.0	-54.0	99.3	416284.9	6229040.9	1055.0	56161	74.17	0.999567	3.5	84.80	237.24	0.04	0	15319	54032	4.40	7.14	-0.37
DDH-2006-7	146.0	-53.9	99.5	416286.7	6229040.6	1052.6	56161	74.17	1.000101	3.5	84.52	237.02	0.044	0	15318	54032	4.60	7.47	-0.39
DDH-2006-7	149.0	-53.9	99.8	416288.4	6229040.3	1050.2	56156	74.19	1.000026	3.5	84.81	237.37	0.065	0	15304	54030	4.80	7.82	-0.42
DDH-2006-7	152.1	-53.8	100.1	416290.2	6229040.0	1047.7	56168	74.18	0.999681	3.5	84.13	236.74	0.061	0	15314	54040	5.01	8.18	-0.45
DDH-2006-7	155.1	-53.7	100.3	416292.0	6229039.7	1045.2	56160	74.17	1.000025	3.5	83.79	236.46	0.051	0	15323	54029	5.21	8.54	-0.48
DDH-2006-7	158.2	-53.7	100.5	416293.8	6229039.4	1042.7	56173	74.19	0.999929	3.5	83.79	236.55	0.04	0	15306	54047	5.42	8.92	-0.51
DDH-2006-7	161.2	-53.6	100.7	416295.5	6229039.1	1040.3	56182	74.18	0.999735	3.5	84.18	236.97	0.048	0	15312	54055	5.63	9.29	-0.54
DDH-2006-7	164.3	-53.5	100.9	416297.3	6229038.7	1037.8	56160	74.16	1.00031	3.5	85.17	237.99	0.057	0	15333	54026	5.85	9.68	-0.57
DDH-2006-7	167.3	-53.4	101.1	416299.1	6229038.4	1035.4	56171	74.16	0.999760	3.5	87.19	240.07	0.037	0	15331	54038	6.07	10.07	-0.60
DDH-2006-7	170.4	-53.4	101.2	416300.9	6229038.0	1032.9	56179	74.18	0.999485	3.5	87.20	240.15	0.026	0	15317	54050	6.29	10.47	-0.64
DDH-2006-7	173.4	-53.2	101.3	416302.7	6229037.7	1030.5	56180	74.15	0.999556	3.5	88.54	241.56	0.062	0	15340	54045	6.52	10.87	-0.67
DDH-2006-7	176.5	-53.1	101.4	416304.5	6229037.3	1028.1	56170	74.15	0.999452	3.5	89.94	243.05	0.055	0	15345	54033	6.75	11.28	-0.71
DDH-2006-7	179.5	-53.0	101.6	416306.2	6229036.9	1025.7	56171	74.14	1.000125	3.5	89.07	242.24	0.037	0	15349	54033	6.99	11.69	-0.75
DDH-2006-7	182.6	-52.9	101.7	416308.1	6229036.6	1023.2	56176	74.15	0.9										

DDH-2006-7	322.8	-49.6	111.0	416392.4	6229011.1	914.3	56564	74.08	0.999662	5.0	105.50	260.87	0.021	16	15512	54396	21.10	39.81	-4.36
DDH-2006-7	325.8	-49.6	111.6	416394.2	6229010.4	912.0	56255	74.02	0.999373	5.0	103.08	258.62	0.135	0	15488	54081	21.42	40.57	-4.47
DDH-2006-7	328.9	-49.5	110.2	416396.1	6229009.6	909.6	56119	73.90	0.999665	5.0	98.82	254.08	0.304	0	15564	53917	21.76	41.33	-4.59
DDH-2006-7	331.9	-49.5	109.9	416398.0	6229009.0	907.4	56126	73.98	0.999624	5.0	95.16	250.52	0.067	0	15492	53946	22.11	42.05	-4.69
DDH-2006-7	335.0	-49.4	110.8	416399.8	6229008.3	905.0	56186	73.97	0.999612	5.0	92.01	247.47	0.202	0	15513	54003	22.46	42.80	-4.80
DDH-2006-7	338.0	-49.4	110.3	416401.7	6229007.6	902.7	56124	74.00	0.999274	5.0	90.65	246.10	0.124	0	15470	53949	22.80	43.53	-4.91
DDH-2006-7	341.1	-49.4	113.9	416403.5	6229006.8	900.4	55607	73.89	0.999367	5.0	86.79	242.44	0.774	0	15430	53424	23.13	44.34	-5.04
DDH-2006-7	344.1	-49.4	111.0	416405.3	6229006.1	898.1	56171	73.89	0.999605	5.0	84.89	240.26	0.631	0	15586	53965	23.44	45.13	-5.16
DDH-2006-7	347.2	-49.4	111.2	416407.2	6229005.4	895.7	56105	73.83	0.999690	5.0	84.27	239.58	0.039	0	15627	53885	23.79	45.91	-5.28
DDH-2006-7	350.2	-49.4	110.9	416409.1	6229004.6	893.5	56168	73.95	0.999323	5.0	82.65	238.12	0.059	0	15534	53978	24.13	46.66	-5.40
DDH-2006-7	353.3	-49.3	112.0	416410.9	6229003.9	891.1	56257	73.98	0.999871	5.0	81.81	237.45	0.224	0	15530	54071	24.47	47.45	-5.52
DDH-2006-7	356.3	-49.3	114.8	416412.7	6229003.1	888.8	56757	74.65	0.999811	5.0	80.65	237.53	0.604	2	15028	54731	24.79	48.27	-5.65
DDH-2006-7	359.4	-49.3	111.3	416414.6	6229002.3	886.5	56077	74.01	0.999902	5.0	78.36	233.98	0.728	0	15450	53907	25.11	49.11	-5.79
DDH-2006-7	362.4	-49.3	111.5	416416.4	6229001.6	884.2	56260	73.98	0.999580	5.0	77.54	233.14	0.035	0	15527	54075	25.45	49.87	-5.90
DDH-2006-7	365.5	-49.3	111.5	416418.3	6229000.9	881.9	56176	73.96	0.999718	5.0	77.37	232.96	0.012	0	15518	53990	25.80	50.66	-6.03
DDH-2006-7	368.5	-49.3	112.6	416420.1	6229000.2	879.6	56415	74.15	0.999623	5.5	76.13	232.09	0.231	0	15412	54269	26.13	51.44	-6.15
DDH-2006-7	371.6	-49.3	113.8	416422.0	6228999.4	877.2	55888	74.39	0.999621	5.5	72.22	228.63	0.261	0	15041	53825	26.46	52.29	-6.29
DDH-2006-7	374.6	-49.2	114.8	416423.7	6228998.5	875.0	56199	73.49	1.000235	5.5	70.30	225.55	0.207	0	15972	53882	26.76	53.14	-6.42
DDH-2006-7	377.6	-49.2	112.2	416425.5	6228997.8	872.7	56168	73.97	0.999913	5.5	82.18	237.87	0.566	0	15506	53985	27.07	53.97	-6.56
DDH-2006-7	380.7	-49.2	112.2	416427.4	6228997.0	870.3	56183	74.01	0.999988	5.5	77.28	233.05	0.024	0	15478	54009	27.42	54.78	-6.69
DDH-2006-7	383.7	-49.1	112.6	416429.2	6228996.3	868.1	56144	74.03	0.999913	5.5	68.27	224.14	0.074	0	15448	53977	27.75	55.58	-6.81
DDH-2006-7	386.8	-49.0	112.7	416431.1	6228995.5	865.7	56123	74.05	0.999899	5.5	64.82	220.76	0.032	0	15422	53963	28.10	56.41	-6.95
DDH-2006-7	389.8	-49.1	112.5	416432.9	6228994.7	863.5	56263	74.00	0.999811	5.5	73.98	229.79	0.055	0	15507	54084	28.43	57.21	-7.08

# South Ridge Zone DDH06-6,7 Plan

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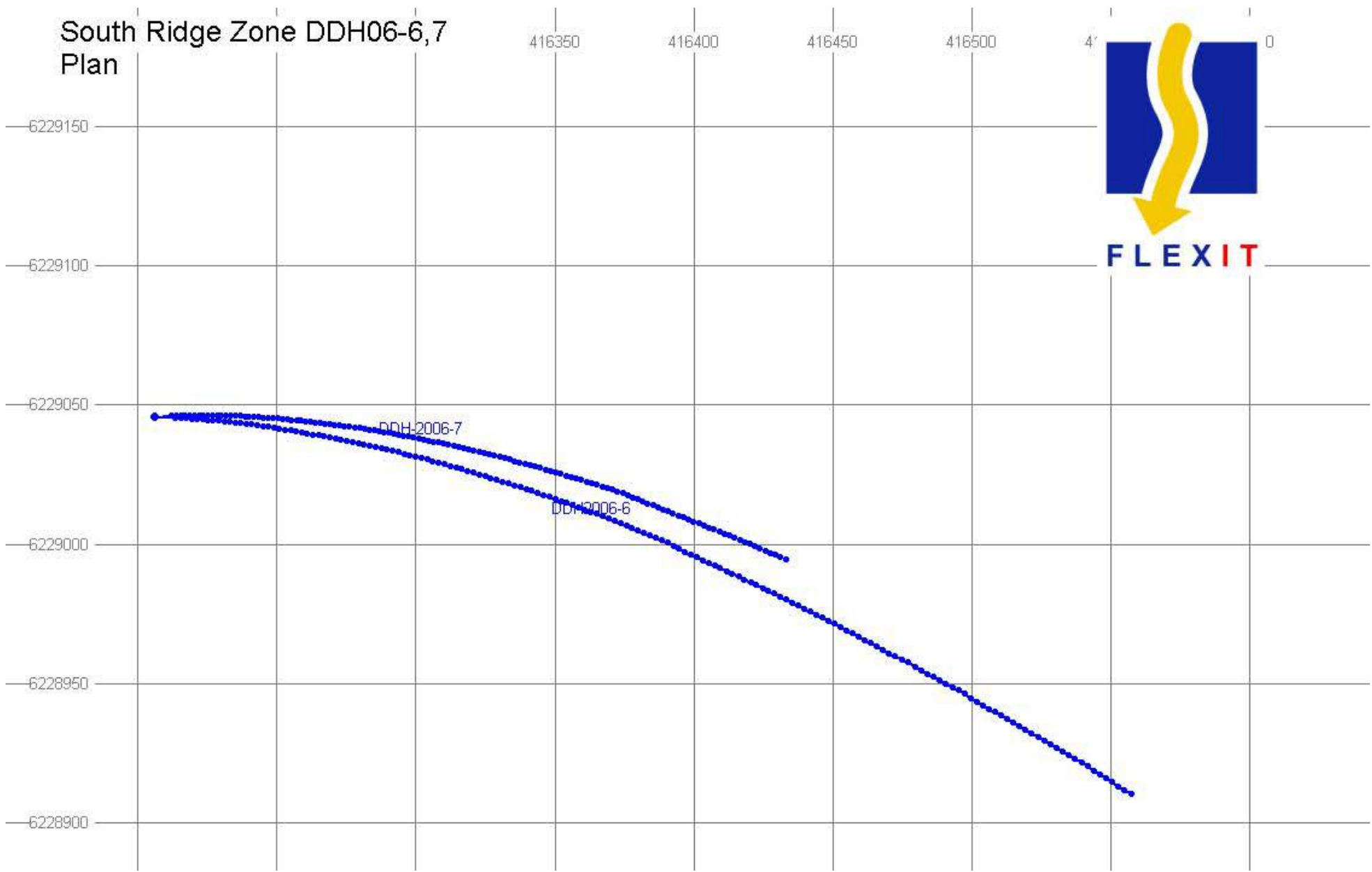
6228950

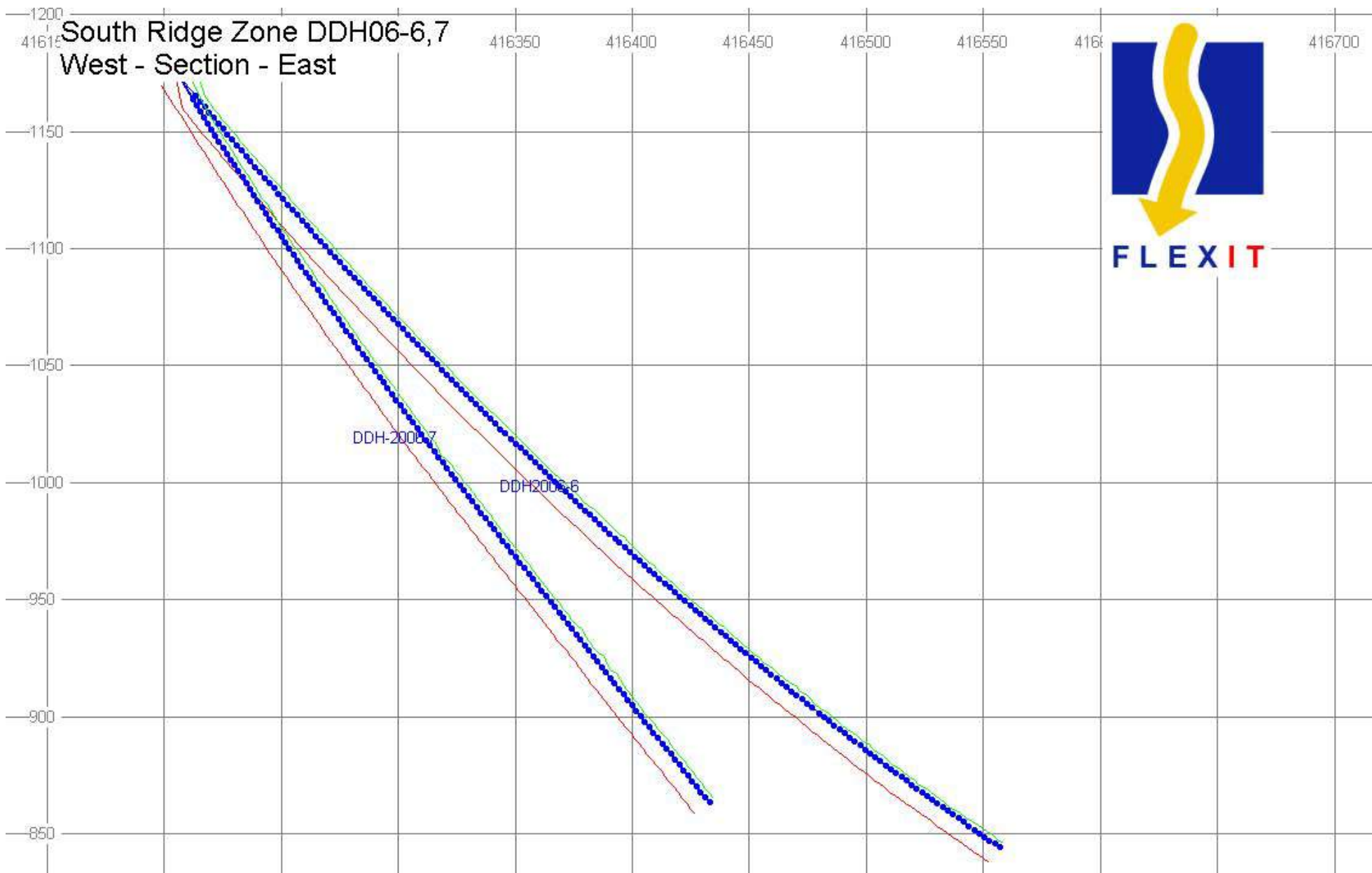
6228900



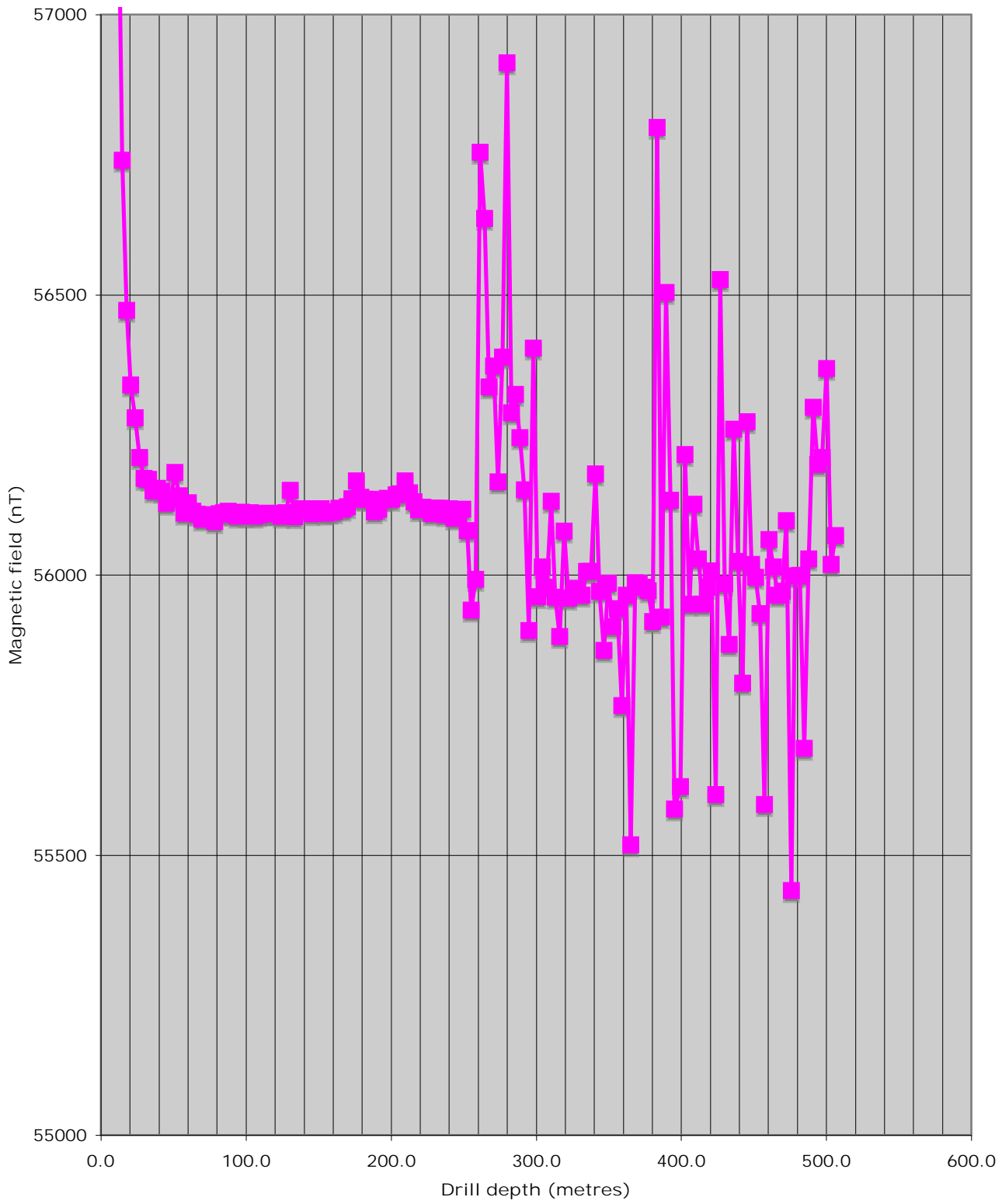
DDH-2006-7

DDH-2006-6



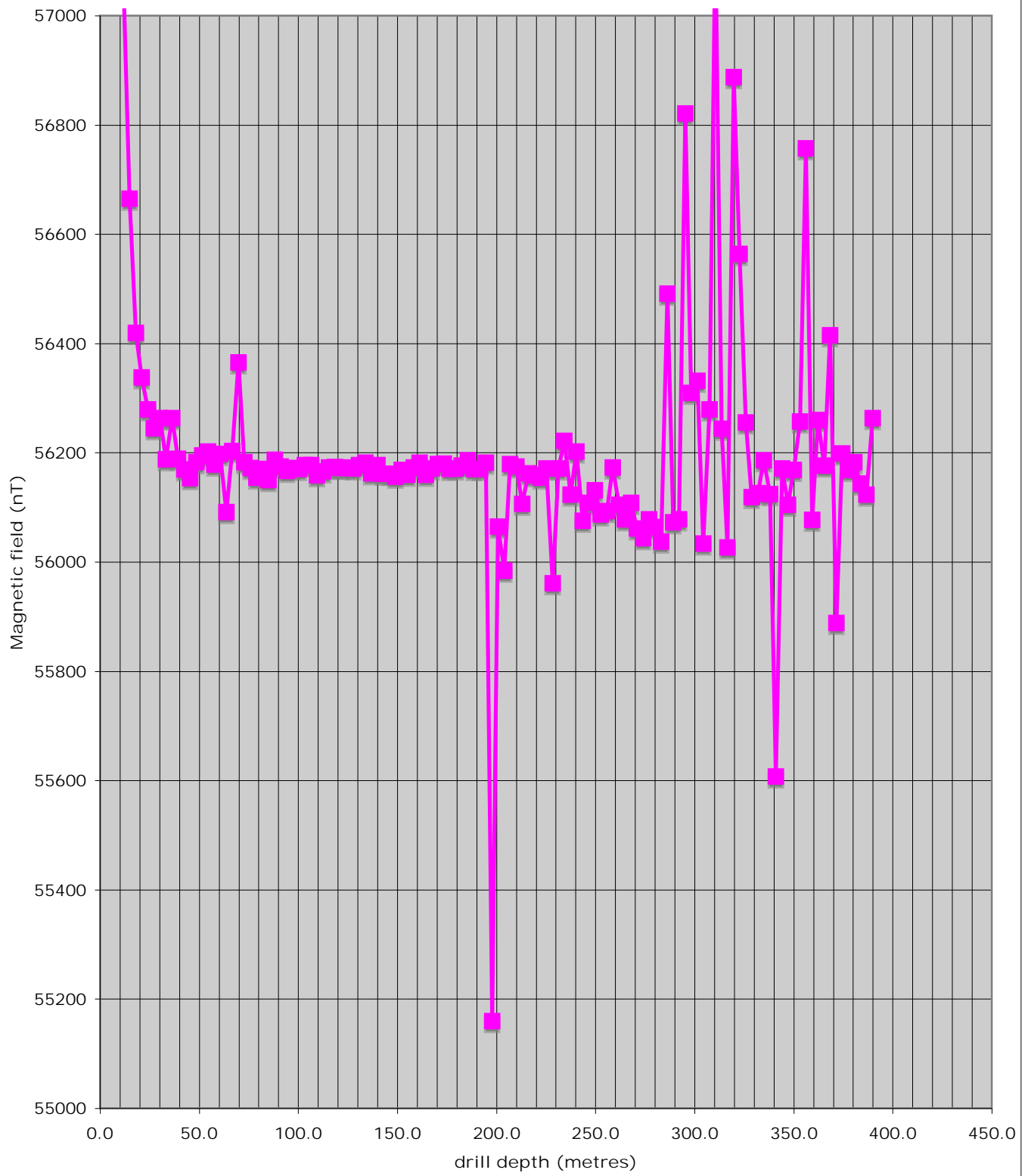


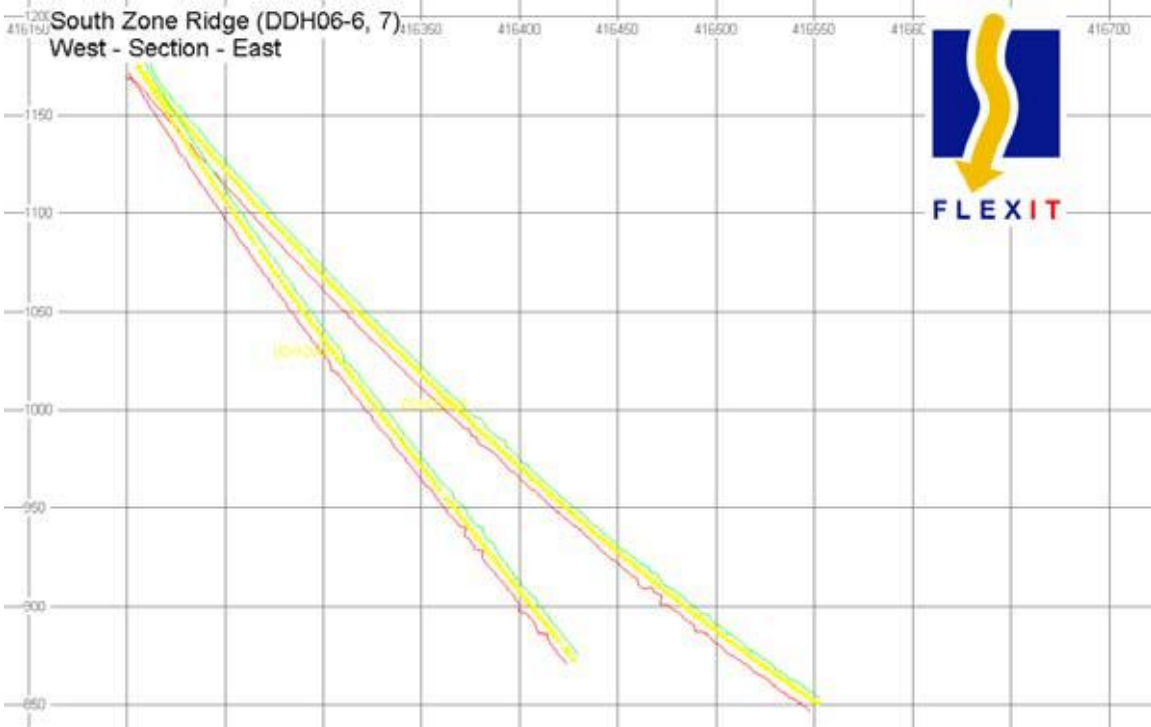
DDH-06-6



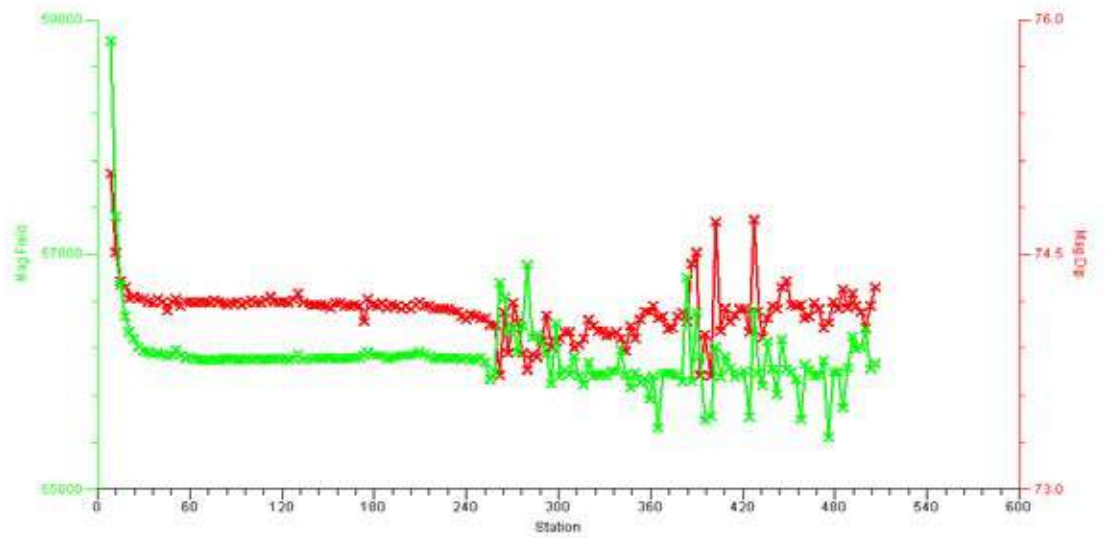


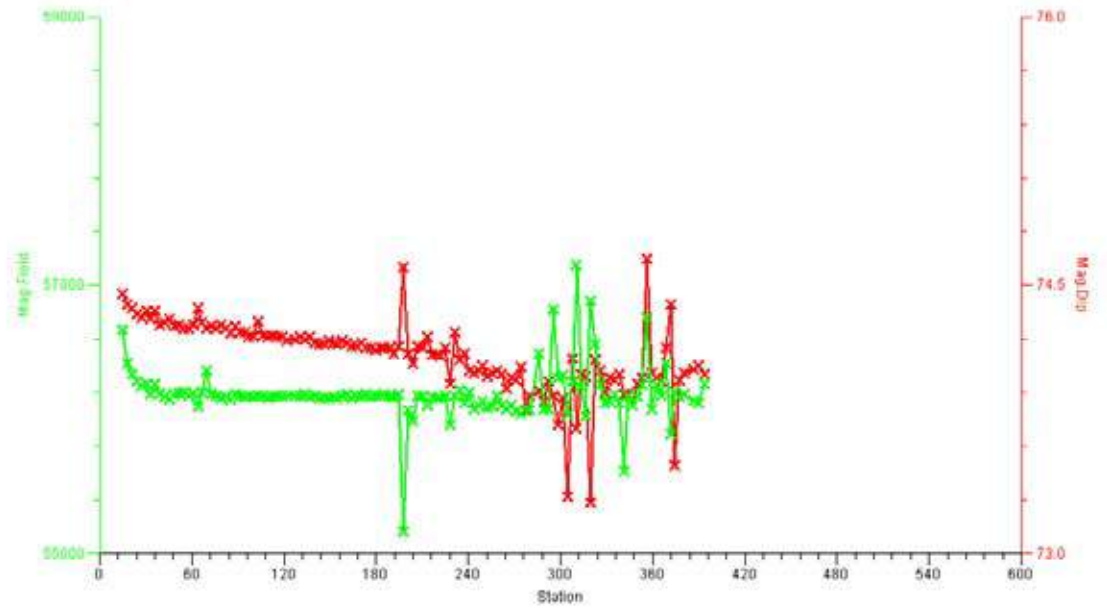
DDH-06-7





Downhole graphs for DDH2006-6

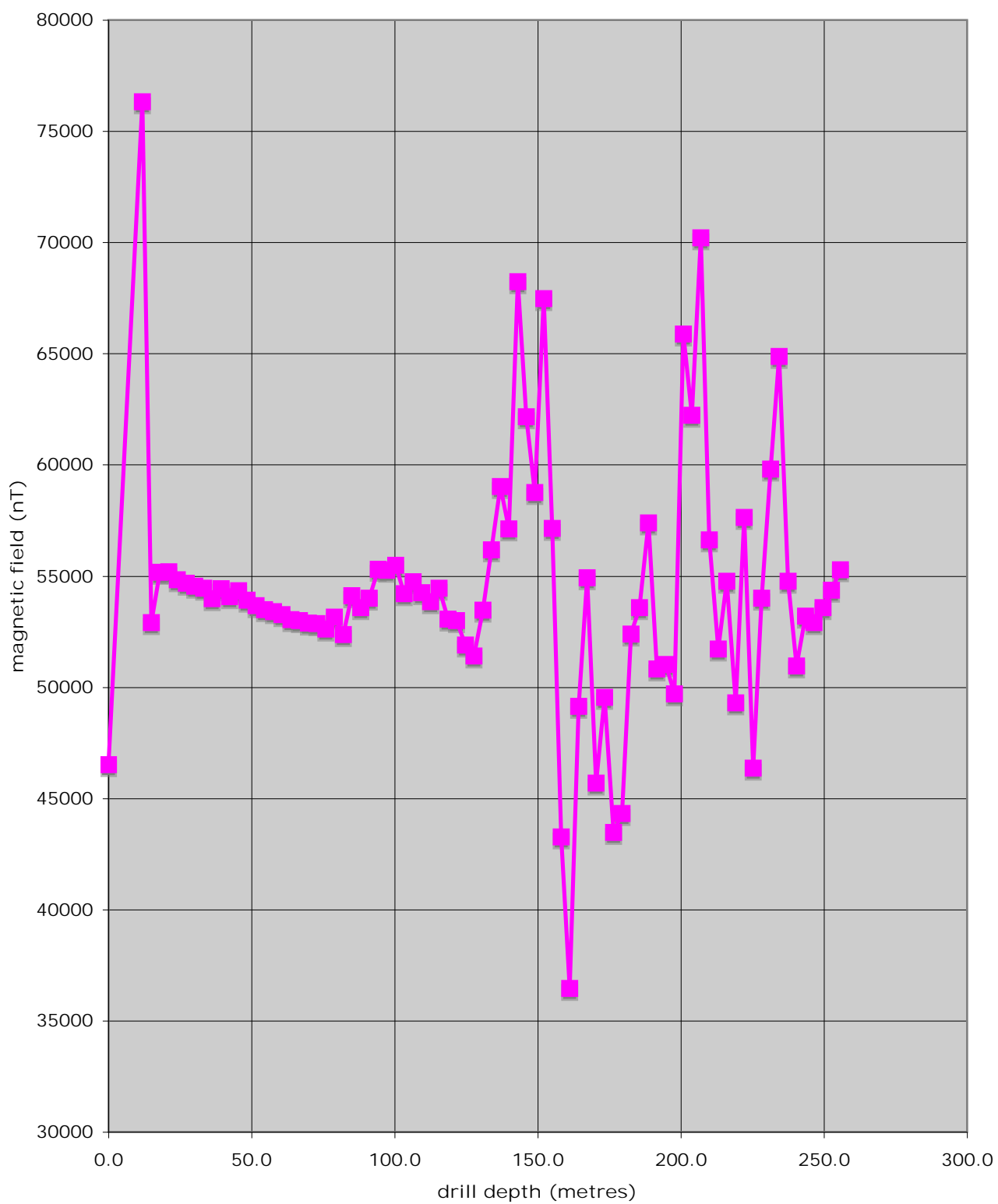




Granduc Flexit downhole tool survey magnetic data DDH-06-3 unedited data

Hole ID	Station Metres	Dip Degrees	Azimuth Degrees	Easting Metres	Northing Metres	Elevation Metres	Mag.Field nT	Mag.Dip Degrees	Grav.Field G	Temperature Centigrade	ToolRoll Degrees	MagToolFace Degrees	DLS deg/m	Status *	MagH nT	MagV nT	UpDown Metres	LeftRight Metres	Shortfall Metres
DDH-06-3	0.0	-45.78	89.00	414806.0	6232180.0	734.0	46515	61.96	0.999108	4.0	158.93	346.99	0.000	19	21868	41054	0.00	0.00	0.00
DDH-06-3	11.9	-45.94	89.00	414814.3	6232180.1	725.5	76320	54.18	0.999562	4.0	159.84	13.44	0.013	19	44671	61881	-0.18	-0.14	0.00
DDH-06-3	14.9	-45.98	89.00	414816.4	6232180.2	723.3	52913	72.81	0.999432	4.0	172.01	326.85	0.013	17	15641	50549	-0.23	-0.18	0.00
DDH-06-3	18.0	-45.84	89.00	414818.5	6232180.2	721.1	55173	73.00	0.999517	4.0	172.59	327.88	0.044	16	16131	52762	-0.28	-0.22	0.00
DDH-06-3	21.0	-45.71	89.00	414820.6	6232180.3	718.9	55189	73.06	0.999811	4.0	173.18	328.76	0.044	16	16083	52794	-0.32	-0.26	0.00
DDH-06-3	24.1	-45.65	88.84	414822.8	6232180.3	716.7	54833	72.52	0.999674	4.0	173.22	328.16	0.040	1	16471	52300	-0.36	-0.30	0.00
DDH-06-3	27.1	-45.48	88.21	414824.9	6232180.4	714.6	54682	72.48	0.999791	4.0	174.22	329.24	0.158	1	16463	52145	-0.39	-0.35	-0.01
DDH-06-3	30.2	-45.44	87.94	414827.1	6232180.4	712.4	54539	72.51	0.999513	4.0	174.87	329.98	0.062	1	16391	52017	-0.41	-0.42	-0.01
DDH-06-3	33.2	-45.39	88.67	414829.2	6232180.5	710.2	54443	72.62	1.000136	4.0	175.42	330.67	0.172	1	16266	51957	-0.44	-0.49	-0.01
DDH-06-3	36.3	-45.32	88.41	414831.3	6232180.5	708.0	53983	72.79	0.999478	4.5	175.69	331.27	0.063	1	15972	51566	-0.46	-0.54	-0.01
DDH-06-3	39.3	-45.18	88.03	414833.5	6232180.6	705.9	54424	72.61	0.999961	4.5	176.15	331.55	0.099	1	16267	51936	-0.47	-0.61	-0.01
DDH-06-3	42.4	-45.10	88.69	414835.6	6232180.7	703.7	54061	72.17	0.999763	4.5	176.94	331.62	0.153	1	16557	51463	-0.48	-0.67	-0.01
DDH-06-3	45.4	-45.04	86.68	414837.8	6232180.8	701.6	54335	72.28	0.999488	4.5	177.16	332.25	0.474	1	16537	51758	-0.48	-0.75	-0.01
DDH-06-3	48.5	-44.97	86.77	414839.9	6232180.9	699.4	53907	72.35	1.000000	4.5	177.48	333.71	0.030	1	16344	51369	-0.49	-0.88	-0.01
DDH-06-3	51.5	-44.90	87.00	414842.1	6232181.0	697.3	53667	72.48	0.999928	5.0	181.57	337.01	0.059	1	16156	51177	-0.48	-1.00	-0.01
DDH-06-3	54.6	-44.76	86.55	414844.3	6232181.1	695.1	53498	72.57	0.999914	5.0	182.90	338.59	0.113	1	16028	51040	-0.48	-1.12	-0.02
DDH-06-3	57.6	-44.72	89.08	414846.4	6232181.2	693.0	53402	72.77	1.000051	5.0	186.80	342.59	0.599	1	15821	51004	-0.47	-1.20	-0.02
DDH-06-3	60.7	-44.66	87.78	414848.6	6232181.3	690.8	53258	72.92	0.999913	5.0	187.68	343.86	0.299	1	15644	50909	-0.45	-1.26	-0.02
DDH-06-3	63.7	-44.67	87.77	414850.7	6232181.3	688.7	53032	73.04	1.000058	5.0	188.43	344.79	0.005	1	15471	50725	-0.43	-1.34	-0.02
DDH-06-3	66.8	-44.64	88.81	414852.9	6232181.4	686.5	52985	73.19	1.000147	5.5	188.50	345.01	0.239	1	15320	50722	-0.42	-1.41	-0.02
DDH-06-3	69.8	-44.62	90.63	414855.1	6232181.4	684.4	52876	73.22	0.999873	5.5	188.97	345.38	0.432	1	15265	50625	-0.40	-1.42	-0.02
DDH-06-3	72.8	-44.62	89.52	414857.2	6232181.4	682.3	52861	73.51	1.000258	5.5	189.84	346.78	0.263	1	15008	50686	-0.38	-1.42	-0.02
DDH-06-3	75.9	-44.63	92.72	414859.4	6232181.4	680.1	52606	73.97	1.000413	5.5	189.91	347.33	0.735	1	14524	50562	-0.36	-1.37	-0.02
DDH-06-3	78.9	-44.67	93.18	414861.5	6232181.3	678.0	53159	74.17	1.000082	6.0	190.67	348.35	0.110	1	14500	51143	-0.34	-1.26	-0.02
DDH-06-3	82.0	-44.66	94.38	414863.7	6232181.1	675.8	52360	74.48	1.000096	6.0	191.12	349.21	0.275	1	14008	50451	-0.33	-1.12	-0.03
DDH-06-3	85.0	-44.70	94.51	414865.9	6232181.0	673.7	54117	75.67	1.000216	6.0	191.40	351.24	0.034	3	13397	52433	-0.31	-0.95	-0.03
DDH-06-3	88.1	-44.78	96.35	414868.1	6232180.7	671.5	53568	75.28	1.000177	6.0	191.85	350.99	0.422	3	13616	51809	-0.31	-0.74	-0.04
DDH-06-3	91.1	-44.78	95.67	414870.2	6232180.5	669.4	53999	75.16	1.000218	6.0	192.53	351.51	0.161	3	13834	52197	-0.30	-0.52	-0.05
DDH-06-3	94.2	-44.79	108.59	414872.3	6232180.1	667.2	55297	76.03	0.999911	6.5	192.57	352.77	2.955	2	13352	53661	-0.34	-0.06	-0.09
DDH-06-3	97.2	-44.82	116.94	414874.3	6232179.2	665.1	55259	78.07	1.000152	6.5	192.52	355.90	1.974	2	11427	54065	-0.45	0.76	-0.20
DDH-06-3	100.3	-44.87	95.50	414876.4	6232178.6	662.9	55478	76.68	1.000463	6.5	193.41	354.65	4.889	2	12780	53986	-0.53	1.37	-0.27
DDH-06-3	103.3	-44.84	94.27	414878.5	6232178.5	660.8	54211	75.28	1.000175	6.5	193.09	352.30	0.291	3	13779	52431	-0.53	1.55	-0.28
DDH-06-3	106.4	-44.81	97.26	414880.7	6232178.2	658.6	54740	74.69	1.000398	6.5	192.65	350.86	0.684	3	14457	52797	-0.52	1.77	-0.29
DDH-06-3	109.4	-44.85	96.89	414882.8	6232178.0	656.5	54256	73.74	0.999829	7.0	180.12	336.91	0.089	1	15189	52087	-0.53	2.03	-0.30
DDH-06-3	112.5	-44.64	97.92	414885.0	6232177.7	654.3	53837	73.53	0.999539	7.0	157.40	313.93	0.245	1	15267	51627	-0.53	2.32	-0.31
DDH-06-3	115.5	-44.61	100.28	414887.1	6232177.4	652.2	54442	73.45	0.999464	7.0	157.12	313.53	0.560	1	15509	52186	-0.53	2.65	-0.33
DDH-06-3	118.6	-44.58	102.86	414889.2	6232176.9	650.0	53066	72.89	0.999726	7.0	157.26	312.89	0.593	1	15615	50716	-0.54	3.10	-0.36
DDH-06-3	121.6	-44.56	102.88	414891.3	6232176.4	647.9	52992	72.41	0.999127	7.0	154.22	309.16	0.008	1	16018	50513	-0.55	3.57	-0.40
DDH-06-3	124.7	-44.66	105.59	414893.5	6232175.9	645.7	51905	72.57	0.999184	7.5	152.43	307.66	0.623	1	15549	49521	-0.58	4.11	-0.45
DDH-06-3	127.7	-44.65	112.65	414895.5	6232175.2	643.6	51398	74.10	0.998922	7.5	152.34	310.11	1.673	1	14082	49431	-0.65	4.81	-0.53
DDH-06-3	130.8	-44.60	119.49	414897.4	6232174.2	641.4	53466	75.80	0.998888	7.5	151.83	312.42	1.570	3	13118	51831	-0.79	5.78	-0.69
DDH-06-3	133.8	-44.55	125.10	414899.3	6232173.1	639.3	56176	77.79	0.998561	7.5	153.29	316.97	1.332	2	11882	54905	-1.00	6.92	-0.93
DDH-06-3	136.9	-44.55	115.51	414901.2	6232172.0	637.2	59015	76.80	0.998664	7.5	152.09	313.74	2.203	3	13478	57455	-1.20	8.03	-1.14
DDH-06-3	139.9	-44.56	137.12	414902.9	6232170.7	635.0	57107	65.36	0.998602	7.5	152.23	304.46	5.118	3	23812	51905	-1.49	9.28	-1.44
DDH-06-3	143.0	-44.56	119.35	414904.6	6232169.4	632.9	68241	72.04	0.998707	7.5	152.01	307.79	4.076	1	21039	64917	-1.82	10.64	-1.78
DDH-06-3	146.0	-44.52	170.25	414905.7	6232167.7	630.7	62165	72.74	0.998662	8.0	153.08	321.10	11.891	1	18443	59366	-2.54	12.27	-2.43
DDH-06-3	149.0	-44.42	158.10	414906.3	6232165.7	628.6	58743	82.73	0.999344	8.0	152.98	325.83	2.888	3	7429	58271	-3.62	14.32	-3.53
DDH-06-3	152.1	-44.43	191.57	414906.5	6232163.5	626.4	67478	68.61	0.999221	8.0	156.96	330.68	7.656	3	24606	62831	-5.04	16.47	-4.93
DDH-06-3	155.1	-44.44	169.53	414906.5	6232161.4	624.3	57140	67.03	0.998869	8.0	156.39	321.02	5.230	3	22297	52610	-6.55	18.58	-6.45
DDH-06-3	158.2	-44.39	157.48	414907.1	6232159.3	622.1	43267	54.08	0.999438	8.0	155.82	307.73	2.774	3	25384	55038	-7.64	20.70	-7.57
DDH-06-3	161.2	-44.43	183.04	414907.5	6232157.2	620.0	36444	68.69	0.998662	8.0	156.09	326.56	6.062	3	13246	33951	-8.89	22.77	-8.83
DDH-06-3	164.3	-44.41	169.57	414907.6	6232155.0	617.8	49129	59.99	0.998977	8.5	156.32	317.36	3.100	3	24573	42542	-10.32	24.97	-10.29
DDH-06-3	167.3	-44.36	170.17	414908.0	6232152.9	615.7	54917	60.67	0.999028	8.5	156.63	318.28	0.144	3	26903	47876	-11.54	27.08	-11.54
DDH-06-3	170.4	-44.32	140.39	414908.9	6232151.0	613.5	45682	59.49	0.999189	8.5	157.02	305.22	6.833	3	23193	39356	-12.45	29.05	-12.45
DDH-06-3	173.4	-44.27	134.28	414910.3	6232149.4	611.4	49551	71.73	0.999583	8.5	156.83	314.83	1.457	1	15538	47051	-12.90	30.63	-12.94
DDH-06-3	176.5	-44.21	140.79	414911.8	6232147.7	609.3	43471	66.09	0.999155	8.5	156.81	310.92	1.504	3	17616	39741	-13.37	32.27	-13.45
DDH-06-3	179.5	-44.28	163.05	414912.8	6232145.9	607.1	44323	73.82	0.999127	8.5	156.21	322.92	5.299	1	12353	42567	-14.16	34.14	-14.25
DDH-06-3	182.6	-44.20	142.13	414913.9															

# Magnetite-rich Gabbro



## **Appendix VI**

### **Niton XRF data from diamond drill core**

#### **SPRING DRILL PROGRAM**

- **DDH-06-1; South Leduc Glacier**
- **DDH-06-3; Pollux Magnetic anomaly; North Leduc Glacier terminus**
- **DDH-06-4; South Leduc Glacier**
- **DDH-06-5; South Leduc Glacier**
- **DDH-06-6; Granduc South Zone; South Ridge**
- **DDH-06-7; Granduc South Zone; South Ridge**

#### **Fall Drill Program**

**Instrument unavailable; no Niton data collected.**







78 5/18/06 8:09 BULK 31.62 % Final DCH-06-1 407

82 5/18/06 8:11 BULK 31.79 % Final DCH-06-1 408

0 0.02 0 0.01 0 0.01 0 0.01 94.37 0.33 0 0.01 0 0.01 0.04 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0.02 0.01 0.01 0.01 0 0.01 0.03 0.04 4.52 0.19 0.08 0.04 0.03 0.05 0.11 0.1 0.78 0.23

0 0.02 0 0.01 0 0.01 0 0.01 94.47 0.3 0 0.01 0 0.01 0.01 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0 0.01 0.01 0.01 0.01 0.01 0 0.01 0.03 0.04 4.96 0.19 0.11 0.04 0.01 0.05 0.06 0.09 0.34 0.19









Rowing No	Time	Distance	SWIMMER	Dr	V	St	Ph	Ps	Zs	Co	Ca	Em	M	Em	Co	Em	Pa	St	V	St
1	01300612	35:30	DH46-102	115	45:0	8:8	45:5	1:7	2:8	20:1	9:7	6:2	7:15	5:4	1:16	17:1				
2	01300613	35:40	DH46-102	120	53:5	17:8	36:6	25:0	27:4	9:7	20:9	8:8	47:9	7:2	44:0	37:2	50:14	15:26		
3	01300615	35:50	DH46-102	117	46:7	10:5	37:6	25:0	28:1	22:3	10:9	7:12	21:0	7:2	11:8	24:1	24:1	26:2		
4	01300616	35:45	DH46-102	121	51:1	16:3	30:1	25:6	16:7	28:7	18:0	10:1	8:1	20:1	14:0	40:1	40:1	40:1		
5	01300618	35:45	DH46-102	122	51:1	16:3	30:1	25:6	16:7	28:7	18:0	10:1	8:1	20:1	14:0	40:1	40:1	40:1		
6	01300619	35:25	DH46-104	124	40:2	8:6	10:13	36:2	14:2	24:3	87:4	27:8	18:1	18:1	18:1	18:1	18:1	18:1		
7	01300620	36:40	DH46-102	125	45:2	14:1	16:6	4:0	10:1	1:0	2:7	5:2	6:2	6:2	6:2	6:2	6:2	6:2		
8	01300620	35:21	DH46-102	127	51:7	21:1	25:5	28:8	16:4	74:2	29:3	8:7	27:8	70:3	32:7	36:7	50:23	14:18		
9	01300624	35:2	DH46-102	128	45:7	13:7	16:6	4:0	10:1	1:0	2:7	5:2	6:2	6:2	6:2	6:2	6:2	6:2		
10	01300625	35:2	DH46-102	129	38:0	11:9	20:6	23:0	23:4	4:7	11:0	7:1	7:1	7:1	7:1	7:1	7:1	7:1		
11	01300627	35:40	DH46-102	130	51:8	17:7	16:6	13:8	22:1	8:1	10:1	10:1	10:1	10:1	10:1	10:1	10:1	10:1		
12	01300628	35:40	DH46-102	131	50:7	16:8	24:0	47:9	23:9	15:7	15:0	8:8	22:2	70:1	16:0	24:1	50:26	14:02		
13	01300629	35:44	DH46-102	132	44:0	11:4	20:1	27:9	4:0	10:1	1:0	17:3	10:1	10:1	10:1	10:1	10:1	10:1		
14	01300630	35:45	DH46-102	133	54:4	18:8	23:8	33:5	14:2	12:1	6:1	6:1	6:1	6:1	6:1	6:1	6:1	6:1		
15	01300631	35:45	DH46-102	134	48:5	10:7	16:6	4:0	10:1	1:0	2:7	5:2	6:2	6:2	6:2	6:2	6:2	6:2		
16	01300634	35:45	DH46-102	135	48:5	10:7	16:6	4:0	10:1	1:0	2:7	5:2	6:2	6:2	6:2	6:2	6:2	6:2		
17	01300634	35:45	DH46-102	136	48:5	10:7	16:6	4:0	10:1	1:0	2:7	5:2	6:2	6:2	6:2	6:2	6:2	6:2		
18	01300638	35:45	DH46-102	138	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
19	01300638	35:45	DH46-102	139	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
20	01300639	35:45	DH46-102	140	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
21	01300639	35:45	DH46-102	141	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
22	01300639	35:45	DH46-102	142	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
23	01300639	35:45	DH46-102	143	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
24	01300639	35:45	DH46-102	144	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
25	01300639	35:45	DH46-102	145	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
26	01300639	35:45	DH46-102	146	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
27	01300639	35:45	DH46-102	147	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
28	01300639	35:45	DH46-102	148	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
29	01300639	35:45	DH46-102	149	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
30	01300639	35:45	DH46-102	150	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
31	01300639	35:45	DH46-102	151	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
32	01300639	35:45	DH46-102	152	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
33	01300639	35:45	DH46-102	153	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
34	01300639	35:45	DH46-102	154	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
35	01300639	35:45	DH46-102	155	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
36	01300639	35:45	DH46-102	156	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
37	01300639	35:45	DH46-102	157	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
38	01300639	35:45	DH46-102	158	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
39	01300639	35:45	DH46-102	159	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
40	01300639	35:45	DH46-102	160	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
41	01300639	35:45	DH46-102	161	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
42	01300639	35:45	DH46-102	162	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
43	01300639	35:45	DH46-102	163	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
44	01300639	35:45	DH46-102	164	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
45	01300639	35:45	DH46-102	165	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
46	01300639	35:45	DH46-102	166	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
47	01300639	35:45	DH46-102	167	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
48	01300639	35:45	DH46-102	168	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
49	01300639	35:45	DH46-102	169	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
50	01300639	35:45	DH46-102	170	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
51	01300639	35:45	DH46-102	171	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
52	01300639	35:45	DH46-102	172	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
53	01300639	35:45	DH46-102	173	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
54	01300639	35:45	DH46-102	174	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
55	01300639	35:45	DH46-102	175	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
56	01300639	35:45	DH46-102	176	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
57	01300639	35:45	DH46-102	177	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
58	01300639	35:45	DH46-102	178	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
59	01300639	35:45	DH46-102	179	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
60	01300639	35:45	DH46-102	180	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
61	01300639	35:45	DH46-102	181	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
62	01300639	35:45	DH46-102	182	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
63	01300639	35:45	DH46-102	183	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
64	01300639	35:45	DH46-102	184	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
65	01300639	35:45	DH46-102	185	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1	4:3	40:4	40:4	40:4		
66	01300639	35:45	DH46-102	186	31:0	17:4	20:5	23:2	24:0	17:4	24:2	8:8	5:1	70:1						

186	0100061410	20.05	DMH46-00	287	4.5	680.2	31.5	17.4	34.5	96.9	67.4	31.5	56.4	-103.3	234.0	2780.4	734.5	
187	0100061411	20.04	DMH46-00	288	1.8	684.4	12.2	18.1	27.7	91.1	62.1	2.2	52.6	148.3	260.0	2880.1	289.0	
188	0100061412	20.04	DMH46-00	289	56.5	246.8	20.7	27.1	76.5	4.3	96.7	87.0	246.3	420.8	6202.7	2634.4		
189	0100061413	20.04	DMH46-00	290	6.2	411.4	26.1	26.8	90.5	87.0	77.4	12.2	62.1	62.5	237.4	614.4		
190	0100061414	20.04	DMH46-00	291	46.7	11.5	246.1	62.8	1.8	79.4	-47.1	75.1	76.5	60.2	-105.8	230.0	532.4	
191	0100061415	20.02	DMH46-00	292	24.4	402.8	22.9	47.3	27.9	100.0	73.5	95.1	27.6	174.6	174.6	4702.7	-61.3	
192	0100061416	20.05	DMH46-00	293	40.5	4.4	289.0	84.1	1.6	102.2	24.0	50.0	104.5	83.0	233.5	260.0	5910.7	1050.3
193	0100061417	20.04	DMH46-00	294	10.1	471.1	45.5	16.6	20.4	46.8	80.2	34.4	26.8	24.4	26.8	444.7	4073.0	267.9
194	0100061418	20.04	DMH46-00	295	26.4	36.3	286.3	22.0	23.8	12.0	90.4	26.2	74.6	28.7	20.0	3709.0	2879.0	
195	0100061419	20.04	DMH46-00	296	24.5	81.6	12.4	13.8	206.4	4.6	81.6	81.6	26.3	80.4	-205.1	200.0	2154.0	
196	0100061420	20.73	DMH46-00	297	23.1	14.8	289.2	9.5	20.7	98.2	7.0	67.8	4.2	12.3	122.3	305.0	4118.8	258.4
197	0100061421	21.24	DMH46-00	298	11.1	146.6	64.7	16.6	11.1	137.7	65.8	67.7	63.0	-159.9	236.0	2094.4	2297.0	
200	0100061423	20.77	DMH46-00	300	90.4	132.0	75.2	11.1	63.7	65.8	67.7	63.0	-159.9	236.0	2094.4	2297.0		
201	0100061424	20.04	DMH46-00	301	23.8	18.6	14.1	20.8	1.9	26.4	26.4	26.4	18.6	26.4	18.6	26.4	18.6	
202	0100061425	20.03	DMH46-00	302	8.2	4.4	215.3	21.0	14.6	26.0	43.9	84.8	83.0	76.1	-481.9	202.0	3746.7	-410.8
203	0100061426	20.04	DMH46-00	303	20.7	20.7	44.7	26.9	403.0	23.4	16.7	125.0	90.4	-203.2	432.0	200.0	3058.9	
204	0100061428	21.25	DMH46-00	305	40.5	94.9	286.4	28.2	23.8	227.7	28.7	96.1	95.5	87.2	-117.5	413.0	6279.0	360.7
205	0100061427	20.04	DMH46-00	304	67.2	4.4	204.5	18.0	10.7	26.7	102.1	1.4	21.8	144.0	1.4	21.8	144.0	1.4
206	0100061428	20.04	DMH46-00	305	17.2	22.2	286.0	48.9	20.3	176.4	10.1	101.1	138.2	83.5	-179.0	420.0	7246.0	3481.7
207	0100061429	20.04	DMH46-00	306	21.1	46.6	105.8	23.8	63.3	173.8	48.8	84.4	28.3	83.1	63.3	472.0	4194.0	261.4
208	0100061431	20.01	DMH46-00	307	37.7	27.8	228.4	52.3	20.9	181.9	28.7	96.1	93.3	24.8	-217.8	37.0	4118.8	794.2
209	0100061433	20.79	DMH46-00	309	9.1	177.4	19.4	30.4	20.0	46.8	84.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8
210	0100061433	20.54	DMH46-00	309	40.3	16.6	165.6	79.6	60.7	65.4	76.8	22.5	64.5	1.8	24.4	24.4	2066.0	826.4
211	0100061435	21.72	DMH46-00	311	36.1	48.1	193.1	22.1	16.6	41.1	-13.8	62.8	11.7	81.4	-41.6	31.8	6732.0	671.5
212	0100061436	21.05	DMH46-00	311	26.9	21.5	174.2	76.7	23.8	23.2	34.4	90.1	60.7	79.7	-168.8	365.0	6279.0	2779.5
213	0100061437	21.05	DMH46-00	312	41.6	146.6	26.8	80.1	147.0	23.2	60.4	86.8	103.3	82.2	-84.6	384.0	6102.0	2251.1
214	0100061438	20.52	DMH46-00	313	-38.2	4.9	171.1	24.7	20.4	65.3	-17.3	73.7	23.8	61.6	-127.1	222.0	2202.0	897.2
215	0100061439	20.51	DMH46-00	314	17.6	26.2	203.1	45.0	20.7	46.2	84.8	86.8	103.3	82.2	-84.6	384.0	6102.0	4578.4
216	0100061439	20.47	DMH46-00	315	580.0	24.9	120.5	15.0	14.6	-48.7	26.5	86.5	97.5	83.3	286.0	386.0	14397.4	1653.3
217	0100061440	21.22	DMH46-00	316	1746.0	26.3	103.0	26.3	7.5	45.1	645.6	34.4	26.4	26.4	26.4	26.4	26.4	26.4
218	0100061441	21.22	DMH46-00	317	1250.0	88.2	67.5	42.7	15.9	101.5	80.0	62.3	24.8	87.6	-20.8	26.4	4747.6	331.1
219	0100061442	21.22	DMH46-00	318	1213.0	27.4	26.4	41.2	20.5	27.7	46.2	77.5	87.7	70.7	26.7	202.0	4200.0	201.4
220	0100061443	20.56	DMH46-00	319	1020.7	86.0	66.4	50.1	12.4	73.7	187.8	74.8	24.6	50.0	58.2	212.0	2206.0	431.4
221	0100061444	21.27	DMH46-00	320	1288.0	81.0	83.5	72.5	27.4	206.6	13.7	81.5	64.5	74.2	108.2	284.0	2801.0	458.1
222	0100061445	21.21	DMH46-00	321	1581.1	70.9	72.0	69.0	30.2	42.1	63.9	82.3	76.3	77.1	-328.3	285.0	3222.0	551.6
223	0100061445	21.42	%	DMH46-00	321	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.4	0.1
224	0100061452	21.3	%	DMH46-00	321	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
225	0100061453	21.74	%	DMH46-00	321	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
226	0100061454	21.41	%	DMH46-00	321	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	40.847
227	0100061455	20.01	%	DMH46-00	321	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
228	0100061455	21.82	%	DMH46-00	321	0.0	0.1	0.6	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	8.9	0.3
229	0100061456	21.3	%	DMH46-00	321	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	11.6	0.1
230	0100061457	21.25	%	DMH46-00	322	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.1	0.1	14.7	0.2	0
231	0100061457	21.84	%	DMH46-00	322	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	14.3	0.2	0
232	0100061458	21.54	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	14.1	0.2	0
233	0100061459	21.54	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	14.3	0.2	0
234	0100061459	20.01	%	DMH46-00	322	0.0	0.0	0.5	1.3	0.2	0.0	0.0	0.0	0.1	0.1	19.3	0.2	0.3
235	0100061460	20.25	%	DMH46-00	322	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	20.8	0.2	0
236	0100061460	21.81	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	23.8	0.2	0
237	0100061460	21.81	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	20.8	0.2	0
238	0100061460	20.03	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	20.8	0.2	0.2
239	0100061460	20.03	%	DMH46-00	322	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	7.4	0.1	0
240	0100061460	21.48	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.3	0.2	0
241	0100061460	21.48	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.3	0.2	0
242	0100061460	21.48	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.3	0.2	0
243	0100061460	21.48	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.3	0.2	0
244	0100061460	21.34	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.2	0.4	0
245	0100061460	21.34	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	7.0	0.1	0
246	0100061460	21.34	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	14.4	0.2	0
247	0100061460	21.18	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	14.4	0.2	0.4
248	0100061460	21.18	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	15.1	0.3	0.2
249	0100061460	21.18	%	DMH46-00	323	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	15.1	0.3	0.2
250	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	7.2	0.1	0
251	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	16.8	0.4	0
252	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	8.5	0.3	0
253	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	21.1	0.1	0
254	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.3	0.3	0
255	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	7.4	0.2	0
256	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.7	0.4	0
257	0100061460	21.36	%	DMH46-00	324	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	14.3	0.2	0.1
258	0100061460	21.3																

366	01606113	21.24	%	DDH46-05-2616	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	10.9	0.3	0
367	01606113	21.28	%	DDH46-05-2617	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	14.6	0.3	0
368	01606113	21.33	%	DDH46-05-2618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	14.2	0.3	0
369	01606113	21.33	%	DDH46-05-2619	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.8	0.1	0
370	01606114	21.33	%	DDH46-05-2621	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.1	12.2	0.3	0
371	01606114	21.33	%	DDH46-05-2622	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	12.4	0.2	0
372	01606115	21.38	%	DDH46-05-2623	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	14.6	0.3	0
373	01606115	21.38	%	DDH46-05-2624	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	11.2	0.2	0
374	01606115	21.35	%	DDH46-05-2626	0.0	0.0	0.1	0.4	0.1	0.0	0.0	0.1	11.0	0.3	0
375	01606117	21.38	%	DDH46-05-2627	0.0	0.4	2.9	4.4	0.2	0.0	0.1	0.1	14.1	0.3	0 0 0.1
376	01606118	21.16	%	DDH46-05-2628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.1	0.1	0
377	01606118	21.38	%	DDH46-05-2629	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	12.8	0.3	0
378	01606118	21.55	%	DDH46-05-263	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	3.5	0.1	0
379	01606119	21.32	%	DDH46-05-2631	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.4	0.2	0
380	01606119	21.84	%	DDH46-05-2632	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.3	0.2	0
381	01606119	21.48	%	DDH46-05-2633	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.8	0.1	0
382	01606119	21.88	%	DDH46-05-2635	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	11.1	0.2	0.1
383	01606119	21.7	%	DDH46-05-2636	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	11.4	0.3	0
384	01606119	21.11	%	DDH46-05-2637	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	6.5	0.1	0
385	01606119	21.16	%	DDH46-05-2638	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.1	14.4	0.3	0
386	01606119	21.66	%	DDH46-05-264	0.0	0.2	1.8	4.8	0.3	0.0	0.0	0.1	15.8	0.1	0.0 0.1
2	01606121	21.52	%	DDH46-05-2641	0.0	0.1	0.4	1.1	0.1	0.0	0.0	0.1	11.2	0.2	0
3	01606122	21.24	%	DDH46-05-2642	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.1	10.1	0.2	0.1
4	01606123	21.54	%	DDH46-05-2643	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.9	0.2	0.1 0
5	01606124	21.86	%	DDH46-05-2644	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	6.7	0.1	0
6	01606125	21.18	%	DDH46-05-2645	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	3.2	0.0	0
7	01606126	21.82	%	DDH46-05-2646	0.0	0.0	1.5	8.5	0.7	0.0	0.0	0.1	20.8	0.1	0.7 0.1
8	01606127	21.53	%	DDH46-05-2647	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	0
9	01606128	21.28	%	DDH46-05-2648	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	8.5	0.3	0
10	01606129	21.21	%	DDH46-05-2649	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.8	0.1	0
11	01606130	21.17	%	DDH46-05-265	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.9	0.1	0.4
12	01606131	21.22	%	DDH46-05-2651	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.8	0.1	0
13	01606132	21.39	%	DDH46-05-2652	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0
14	01606132	21.88	%	DDH46-05-2653	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0
15	01606133	21.21	%	DDH46-05-2653	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.4	0.1	0
16	01606134	21.2	%	DDH46-05-2654	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.7	0.1	0
17	01606135	21.79	%	DDH46-05-2655	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.8	0.1	0
18	01606136	21.29	%	DDH46-05-2656	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.2	0.1	0	
19	01606137	21.2	%	DDH46-05-2657	0.0	0.1	0.1	0.4	0.0	0.0	0.0	0.1	11.0	0.3	0
20	01606137	21.78	%	DDH46-05-2658	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	8.9	0.3	0
21	01606138	21.54	%	DDH46-05-2659	0.0	0.0	1.1	1.5	0.1	0.0	0.0	0.1	14.8	0.2	0
22	01606140	21.82	%	DDH46-05-266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	12.5	0.2	1.2
23	01606140	21.49	%	DDH46-05-2661	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	9.3	0.3	1.6
24	01606147	21.33	%	DDH46-05-2662	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	12.8	0.3	0.2
25	01606147	21.36	%	DDH46-05-2663	0.0	0.0	0.1	0.4	0.1	0.0	0.0	0.1	11.8	0.3	0.2
26	01606148	21.46	%	DDH46-05-2664	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	11.8	0.2	0.1
27	01606148	21.31	%	DDH46-05-2665	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	8.4	0.2	0
28	01606150	21.65	%	DDH46-05-2666	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	13.8	0.3	0
29	01606151	21.27	%	DDH46-05-2667	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	10.0	0.3	1.6
30	01606152	21.52	%	DDH46-05-2668	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.2	12.8	0.4	1.1
31	01606153	21.2	%	DDH46-05-2668	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	11.9	0.2	0
32	01606154	21.83	%	DDH46-05-2669	0.0	0.0	0.2	1.4	0.2	0.0	0.0	0.1	13.7	0.3	0
33	01606155	21.59	%	DDH46-05-267	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	8.5	0.2	0
34	01606155	21.22	%	DDH46-05-2671	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	10.2	0.2	0
35	01606156	21.25	%	DDH46-05-2672	0.0	0.0	0.3	0.8	0.3	0.0	0.1	0.0	10.7	0.5	0
36	01606156	21.27	%	DDH46-05-2673	0.0	0.0	0.2	0.7	0.1	0.0	0.0	0.1	12.8	0.3	0
37	01606157	21.28	%	DDH46-05-2673	0.1	0.0	0.1	0.3	0.0	0.0	0.0	0.1	6.0	0.1	0
38	01606158	21.23	%	DDH46-05-2674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.2	0
39	01606159	21.18	%	DDH46-05-2675	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.1	0
40	01606159	21.25	%	DDH46-05-2676	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.1	0
41	01606159	21.29	%	DDH46-05-2677	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.8	0.1	0.1
42	01606159	21.4	%	DDH46-05-2678	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.1	0
43	01606159	21.56	%	DDH46-05-2679	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.0	0.1	0
44	01606159	21.2	%	DDH46-05-268	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.1	8.6	0.2	0
45	01606159	21.41	%	DDH46-05-2682	0.0	0.0	0.4	1.6	0.1	0.0	0.1	0.1	13.7	0.2	0.2 0.8
46	01606160	21.24	%	DDH46-05-2684	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.1	0
47	01606161	21.89	%	DDH46-05-2686	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.1	0.1 0.1
48	01606161	21.24	%	DDH46-05-2688	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.1	0
49	01606163	21.22	%	DDH46-05-2688	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.2	0
50	01606164	21.81	%	DDH46-05-269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0
51	01606164	21.86	%	DDH46-05-2692	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.1	0
52	01606165	21.33	%	DDH46-05-2694	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0
53	01606166	21.99	%	DDH46-05-2696	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.1	0
54	01606166	21.27	%	DDH46-05-2698	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.1	0.1	0.1 0.3
55	01606168	21.91	%	DDH46-05-2695	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	7.1	0.1	0
56	01606169	21.25	%	DDH46-05-2691	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	6.2	0.1	0
57	01606170	21.99	%	DDH46-05-2612	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	10.5	0.2	0
58	01606171	21.89	%	DDH46-05-2614	0.0	0.0	1.1	1.9	0.1	0.0	0.0	0.1	10.7	0.4	0
59	01606172	21.33	%	DDH46-05-2616	0.0	0.1	0.4	1.5	0.1	0.0	0.0	0.1	11.0	0.2	0.1 0.6
60	01606174	21.19	%	DDH46-05-262	0.0	0.1	0.4	1.8	0.1	0.0	0.0	0.1	14.7	0.2	0
61	01606174	21.2	%	DDH46-05-2622	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	11.4	0.2	0
62	01606175	21.12	%	DDH46-05-2624	0.0	0.1	0.4	0.9	0.1	0.0	0.0	0.1	10.2	0.3	0
63	01606176	21.23	%	DDH46-05-2628	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.1	11.2	0.2	0
64	01606177	21.2	%	DDH46-05-2628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.1	0
65	01606178	21.88	%	DDH46-05-2631	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0
67	01606179	21.27	%	DDH46-05-2632	0.0	0.7	2.2	4.3	0.3						













93	6/25/06 13:17 BULK	40 ppm	Final	DDH-06-07	373	3.29	4.42	181.38	19.8	9.01	6.49	247.62	13.76	14.02	22.49	39.83	7.7	2.61	7.55	-1.65	13.37	4.08	7.01	6.6	10.65	33.01	32.42	-5.79	7.25	112.38	35.81	55.12	81.19	57.73	69.71	-42.87	327.7	52711.96	989.32	827.23	221.14	165.42	280.62
94	6/25/06 13:18 BULK	40 ppm	Final	DDH-06-07	374	0.08	4.52	667.62	28.6	42.59	8.61	378.68	15.93	11.19	22.39	48.96	7.89	-3.33	6.32	5.79	12.65	3.03	6.37	5.43	8.93	0.33	24.34	9.63	8.23	81.56	30.83	35.4	72.08	108.53	68.33	51.66	277.42	41282.71	829.9	327.93	165.5	96.4	242.67
95	6/25/06 13:19 BULK	40 ppm	Final	DDH-06-07	375	0.94	4.21	9.11	14.76	21.66	7	210.59	12.98	5.66	17.88	9.11	5	-0.78	7.03	5.38	14.09	4.77	7.23	2.94	10.79	13.18	29.41	-1.75	7.71	37.26	28.8	-65.14	79.1	70.13	67.64	-185.2	196.86	18118.84	606.94	910.13	206.92	-77.72	226.73
96	6/25/06 13:20 BULK	40 ppm	Final	DDH-06-07	376	-3.66	4.26	-13.98	14.38	6.07	5.96	184.57	12.7	15.66	20.47	8.92	5.32	2.09	8.11	26.38	17.23	4.53	7.67	1.74	12.97	3.18	29.52	1.71	8.58	76.74	34.6	72.17	91.81	30.54	69.8	-160.1	232.81	23391.96	711.96	1152.66	238.95	115.42	269.56
98	6/25/06 13:21 BULK	40 ppm	Final	DDH-06-07	377	5.92	5.15	216.42	23.48	19.2	8.27	307.23	16.81	-3.8	22.84	42.53	8.72	3.42	8.89	18.2	17.54	2.88	7.98	-1.35	12.99	12.91	33.62	-3.02	8.7	52.85	37.4	-39.86	94.05	70.03	86.13	364.91	464.27	85071.63	1379.05	1170.49	290.03	242.91	360.76
99	6/25/06 13:22 BULK	40 ppm	Final	DDH-06-07	378	-2.2	4.66	245.58	22.53	22.41	8.29	197.17	13.16	1.96	23.59	53.07	9.1	-5.7	8.81	8.14	15.1	6.26	9.01	5.45	11.78	-10.71	26.59	5.87	9.09	49.08	34.48	-30.85	87.62	81.33	79.83	111.13	399.81	68776.88	1197.32	862.81	255.95	189.01	323.52
100	6/25/06 13:23 BULK	40 ppm	Final	DDH-06-07	379	1.99	4.34	27.42	16.47	21.59	7.51	305.1	15.69	-0.07	18.57	29.55	7.05	-1.34	7.14	10.42	15.08	2.43	7.12	-2.34	11.09	17.02	31.36	4.46	8.81	46.43	33.13	53.35	86.49	62.95	73.82	-221.76	381.45	68639.09	1163.59	1264.13	265.51	117.93	305.07
101	6/25/06 13:26 BULK	40 ppm	Final	DDH-06-07	380	-1.63	4.39	236.67	22.28	28.24	8.18	393.79	17.29	18.71	25.02	49.21	8.51	0.66	7.59	6.18	14.42	5.25	7.29	0.64	10.75	19.32	30.42	-0.52	7.91	40.59	30.36	6.59	80.32	50.26	70.85	196.02	318.19	47036.61	943.44	1165.3	241.58	216.1	283.64
102	6/25/06 13:26 BULK	40 ppm	Final	DDH-06-07	381	-2.3	4.1	186.77	19.17	20.27	6.76	184.79	11.83	2.2	16.3	11.1	5.02	1.74	6.93	7.6	13.51	3.23	6.76	3.47	10.51	6.55	26.88	1.41	7.78	52.61	31.97	47.76	78.67	149.34	75.91	-335.59	387.65	78881.95	1188.79	2222.93	305.54	160.8	298.16
103	6/25/06 13:27 BULK	40 ppm	Final	DDH-06-07	382	-0.86	3.92	7.54	15.72	9.85	6.07	412.01	17.14	0.66	19.02	24.79	6.34	-2.03	6.48	0.35	12.61	3.67	6.73	6.44	10.07	6.2	26.6	4.18	7.99	25.7	27.9	-43.32	73.64	90.75	70.12	-6.86	315.73	50855.22	950.98	950.56	222.41	156.63	269.85
104	6/25/06 13:28 BULK	40 ppm	Final	DDH-06-07	383	-1.45	4.34	247.01	21.84	22.97	7.27	289.84	14.9	6.65	19.1	16.54	5.79	2.17	7.45	4.45	13.37	1.89	6.73	19.41	11.86	-3.15	25.75	-0.72	7.61	46.26	30.53	-31.58	78.51	114.27	73.18	-135.02	300.91	44267.59	914.85	1114.97	236.55	244.53	282.51
105	6/25/06 13:29 BULK	40 ppm	Final	DDH-06-07	384	-2.31	5.01	207.62	25.42	27.13	9.07	259.67	15.64	0.35	24.24	48.43	9.26	8.23	9.84	27.63	18.13	-1.61	7.41	-9.18	12.72	-14	27.8	2.4	9.26	70.61	43.72	1662.45	153.57	103.83	85.23	-774.93	472.75	85493.01	1469.9	1120.67	294.84	197.3	368.71
106	6/25/06 13:30 BULK	40 ppm	Final	DDH-06-07	385	-2.15	4.51	320.53	24.15	28.85	8.05	329.01	16.09	9.6	21.51	27.11	6.92	4.51	8.13	3.96	14.18	5.9	7.54	1.99	10.87	6.45	28.64	5.06	8.65	53.35	31.94	-85.92	78.49	43.95	70.35	-58.41	322.86	48927.86	975.31	800.83	222.05	103.97	280.45
107	6/25/06 13:31 BULK	40 ppm	Final	DDH-06-07	386	1.23	4.51	308.36	22.75	14.96	6.92	231.45	13.33	23.35	23.13	32.46	7.21	3.16	7.73	7.83	13.78	-0.65	6.94	5.89	10.9	3.89	26.95	1.17	7.86	38.86	29.42	-42.66	77.17	112.51	72.55	-45.44	285.15	29463	859.93	681.27	203.95	283.65	278.97
108	6/25/06 13:32 BULK	40 ppm	Final	DDH-06-07	387	1.38	4.96	257.44	23.04	16.9	8.11	159.15	12.2	8.91	25.13	54.36	9.44	-3.19	7.42	18.43	16.31	3	7.76	7.66	13.01	-20.91	25.53	0.97	9.92	29.6	34.98	-106.56	87.96	98.21	84.59	-155.66	474.01	82753.95	1439.16	1407.94	308.21	538.95	355.23
109	6/25/06 13:33 BULK	40 ppm	Final	DDH-06-07	388	-2	3.86	55.32	16.89	22.89	6.92	410.34	16.9	-1.05	17.77	18.63	5.71	-2.89	6.4	20.5	14.6	-1.57	5.84	-6.11	10.41	11.25	26.96	1.73	7.6	55.72	29.28	-47.1	71.65	51.96	65.34	56.27	274.86	38591.51	821.49	616.56	189.23	77.86	246.11
110	6/25/06 13:34 BULK	40 ppm	Final	DDH-06-07	389	2.02	4.59	245.03	22.31	22.89	7.93	192.58	12.93	-1.06	20.52	33.16	7.52	10.26	9.38	11.6	16.39	5.72	7.89	-7.62	11.43	36.88	36.05	2.93	9.07	57	40.18	2549.85	165.15	91.27	79.24	83.21	351.85	53695.21	1052.49	925.18	242.21	105.59	299.61

## **Appendix VII**

### **Avalanche and Glacier Hazard Assessment Reports**

#### **SPRING DRILL PROGRAM**

- Panoramic aerial photo of Granduc mountain (right center) facing NE on May 1, 2006. Camp location is at base of west facing slope at center of photo near junction of North and South Leduc glacial valleys
- Snow Avalanche Hazard Assessment; by Paul Berntsen, CAA Professional Member, AMCG/IFMGA Mountain Guide; May 2, 2006 (4 pages)
- Action Plan for Avalanche Risk Management. by Hardolph Wasteneys Ph.D., Project Geologist, May 2, 2006. (2 pages)
- Avalanche and mountain safety at Granduc project (Leduc); drilling program 2006; by Alan Dennis, CAA Professional Member (3 pages)
- Granduc Project Diamond drilling on the South Leduc Glacier by Hy-Tech Drilling, May 2006: Glacier Drilling Recommendations; by Hardolph Wasteneys, Ph.D. , Granduc project geologist (3 pages)
- Granduc Exploration Camp 2006: Blasting Procedures; by Dave Healy, CAA professional member, May 2006 (10 pages)



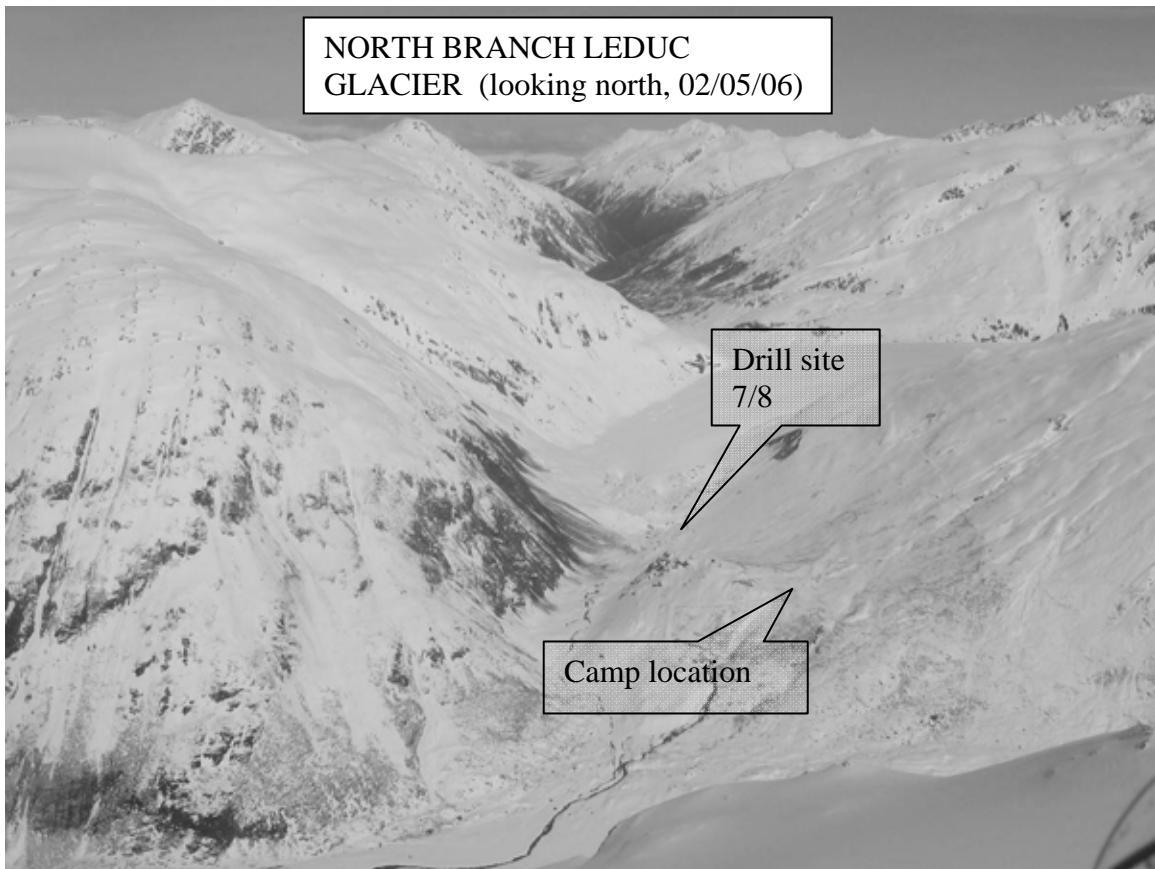


# **Snow Avalanche Hazard Assessment**

**May 2 – June 30, 2006**

## **Bell Resources Corporation**

- 1) Leduc Camp**
- 2) Drill site 3/4**
- 3) Drill site 7/8**



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This avalanche study area is about 35 km NW of Stewart BC, in a mountainous area of icecaps and glaciers. The 3 locations are in valley bottoms at an elevation of between 2500 – 2800 ft. The snow depth in these locations on May 2 is about 130cm. The ridgelines around the camp area rise to an average of 6500 ft. The weather conditions in spring can vary from warm clear conditions to cold storms with significant snow deposition.

*All 3 locations can be effected by avalanches.*

### **1) Leduc campsite**

The camp is located beside an old airstrip that forms a bench between the North and South Leduc Glaciers Leduc Glacier. The ground cover is gravel moraine feature with willow growth. There are large fuel storage tanks located about 500ft from the camp that have been sitting for 30 years or more. The camp is about 300m from the “toe of the slope. The fuel tanks are about 450m from the toe of the slope. The airstrip and the camp borders on the end of the “avalanche run out zone”

The avalanche hazard to the site comes from the slopes above the camp. The slopes rise to 3000ft over the camp, with a West Aspect. The incline, overall is about 28 degrees. The vegetation around the camp indicates there is infrequent avalanche activity in the camp area. The fuel tanks are positioned farther from the slope in a more protected area. There is evidence of damage on two tanks that may be from a “powder Blast”

The Start zones of the avalanche paths have snow depth of over 400cm. The start zones are smooth and uniform with foot pen of 45cm of cold dry snow. (-5.0 snow temp) There are some channels and gullies that lead into the campsite that could direct wet snow slides into the camp area.

*Avalanche activity;*

Several size 2 – 2.5 with 60cm crowns, have run in the past 10 days on this slope. These avalanches ran to the south of the camp, and into the valley.

### **2) Drill site 7/8**

This location is on a lateral moraine. Slopes to the west rise 3000 ft above the toe of the glacier. To the east the slope rises to about 1500ft. Immediately west of the drill site are some significant terrain traps, in some moraine hollows

The slope to the west, is a E/NE aspect. The Height of Snow in the starting zones is 400cm plus. These slopes are cross loaded and the isothermal lower sections have slid in the past 3 days. The upper starting zones are smooth and loaded. The overall slope incline is 37 degrees.

As the temperatures warm, avalanche activity will continue into the valley bottom. The drill site itself appears to be safe from these wet slides, however if there was a

late season cold snowstorm, avalanches from the upper slopes pose a powder blast hazard.

#### *Avalanche activity*

There have been numerous avalanches on the lower slope. The upper slopes have had some small slabs on select features, in the past 10 days

### **3) Drill site 3/4**

The site 3/4 is located on a small medial moraine. This feature is 500m from the slopes on either side. The slopes are to the north and south of the glacier. These slopes rise about 3500 above the drill site.

#### *Avalanche activity*

The south facing slopes have had numerous slab avalanches in the past 10 days. These slides are as large as size 3 and have removed much of the snow from the lower and mid level slopes. The North aspect slopes have shown less activity. The upper reaches of these start zones were not probed, but are estimated to have 300 – 500cm of snow

### **Summary**

All the sites are in avalanche terrain. The drill sites, 3/4 and 7/8 have potential for powder blasts during avalanche cycles. The actual camp location has some potential for both powder blasts and debris damage.

There is still a winter snow pack in the higher elevation start zones. At the time of the survey, the avalanche hazard was acceptable at the actual locations. It is possible that the avalanche hazard could increase to an unacceptable level during specific climatic conditions. This could be site specific, and may be temporary. The daylight hours are becoming longer and the tendency is for the snow pack to become easier to predict as warming and settlement of the snow pack takes place. However should the snow warm to quickly then the size of wet slides could become dangerous to the camp. Furthermore, a late season, cold snowstorm could produce a significant avalanche cycle that could affect all sites.

Safety in this location would require monitoring the snow pack stability closely and recognizing the hazards. This would require routine information collected on snow and weather data. There should be a plan in place to react to changing conditions. This would include identifying safe areas to wait in if a large avalanche cycles developed. Any decisions regarding safety must be followed by the crew and would be non-negotiable. The worst case scenario may include moving personnel to the fuel tank area, or completely evacuating the site. A more likely scenario would restrict movements around the actual location. This may require emergency survival gear and some avalanche rescue equipment.

## **Recommendations**

- An Avalanche Forecaster should monitor the Avalanche Hazard
- “Safe areas” should be identified at each location
- An evacuation plan should be prepared
- Avalanche safety decisions are non-negotiable

**Action Plan for Avalanche Risk Management at  
Bell Resources Corporation Granduc Project  
for the period of May and June 2006**

Summary:

The avalanche risk in camp and drill sites of Bell Resources May-June 2006 Granduc project was assessed by Paul Berntsen, CAA Prof. Member, AMCG, IFMGA (internationally accredited alpine guide), on May 2, 2006 accompanied by Hardolph Wasteneys, Bell Resources Project Geologist. On the basis of Mr. Berntsen's recommendations submitted in a written document to Bell Resources Corp VP of Exploration Dr. T. Marsh on May 2, the following action plan will be implemented to mitigate avalanche hazards to project personnel during the project: this plan consists of immediate changes to the order of the program and a commitment to follow direction from an accredited avalanche technician or forecaster to be retained within the next few days.

Immediate Action:

1. The order of drill targets has been changed to drill first a target where avalanche hazard was considered by Mr. Berntsen to be minimal. This site, DDH 2006-3/4 is on a medial moraine within the South Leduc glacier some 500m from either valley wall to the NE and SW. The previous first priority target on a lateral moraine north of the camp (DDH 2006-7/8) will be drilled when risk of powder blast avalanches from the upper slopes of the E/NE alpine areas west of the site has abated. Currently, there is significant wet avalanche/debris flow activity on the lower slopes of this area but which do not pose much threat to the site. The potential for powder blast hazard was considered by Mr. Berntsen to be increased if a late season cold snowstorm deposited significant snow on the upper slopes.
2. All personnel have been made aware of Mr. Berntsen's assessment and recommendations by Project Geologist Hardolph Wasteneys, Ph.D. A safe zone, identified by Mr. Berntsen as the area around the large empty fuel bunkers 150m west of camp, has been made accessible for foot traffic from the camp. The specific types of avalanche hazards identified by Mr. Berntsen in the three sites he assessed have been explained to project personnel.

#### Continuing Action: Avalanche Forecasting:

Paul Berntsen has assessed the immediate risk of avalanche hazards to project sites, and the potential hazards from significant weather events including cold snowstorms and sudden rapid warming of the snowpack. The risks posed by these changes cannot be assessed by project personnel or possibly even experienced avalanche technicians without routine monitoring of snowpack conditions.

Therefore, the company will retain the services of a professional avalanche forecaster and commit to following the forecaster's directions to mitigate avalanche risk to project personnel. This professional will either be stationed in the camp with the ready use of the project helicopter, or visit the camp periodically and additionally in the event of significant weather events, depending on the availability of these services and the professional preference of the individual. This service will be retained until, in the opinion of the forecaster, the avalanche risk has abated at the camp and drill sites.

Hardolph Wasteneys Ph.D.

Project Geologist

Bell Resources Corporation

Granduc Project 2006

**From TECHNICAL AVALANCHE SERVICES  
SUMMARY FOR BELL RESOURCES**

**Alan Dennis**

**AVALANCHE & MOUNTAIN SAFETY AT GRANDUC PROJECT (LEDUC)  
DRILLING PROGRAM 2006**

The 1965 avalanche disaster occurred very close to the Bell Resources camp site. The present camp is in the run zone of the same avalanche path. It was also recognized that drilling is proposed in avalanche terrain; in both the run out zone and track of avalanches. The nature of the terrain in glaciated and steep alpine ground requires care and vigilance to maintain a work site with minimal exposure to mountain hazards.

Leduc avalanche path

By 23 May it appeared that the threat of avalanche to the immediate camp area was essentially over. An extreme storm of heavy rain or snow may have contributed to an event that might have reached camp but this did not occur. By 23 May there was less than one metre in the camp area with snow profile in the days before that indicating 2-3 metres in the start zone. This showed a relatively homogeneous isothermal late winter snowpack. Over the next few days there was rapid attrition of snowpack at camp elevation, reduced to about 40cm in the week to 30 May. Large open areas bare to ground showed in the avalanche track elevations. The start zone still indicated complete snow cover.

The scale and nature of avalanche activity before 23 May indicated a deep release due to rain was unlikely unless there was an unusual sequence of intense weather event. No avalanche control was considered necessary for this slope.

Future plans for use of this camp site will always need to consider the avalanche problem.

Drill Pad 3

This drill pad is built on avalanche debris and rockfall. The site is on the south Leduc glacier among a moraine boulder surface. A large natural avalanche had run over the site and adjacent ground the week before the drill pad was established. The starting zone and track of the avalanche terrain above the site were not completely clear, although it appeared that with a spotter and escape route it was safe to prepare the site. Over the course of the next few days there was rapid attrition of snow from the 'arrow' snow feature. An earlier site inspection of this snow zone indicated reasonably stable snow but with the potential to run to the site. The site was continuously in the fall line of rockfall that always stopped well back from the site.

When the drill is running the drillers, without a spotter, have no way of knowing or hearing about any threat or advance warning from above.

#### Drill Pad 4

This drill pad is in fall line immediately above (~400m) drill pad 3 on rock outcrop among heather ground surface and in an avalanche track. It is highly exposed and first access required tiptoe of helicopter skid drop-off for access. Results with explosives on the short snow slope above the drill site ran each side of the drill pad. A larger slope higher above the drill pad indicated good stability in a snow profile but it was unclear if it released whether it will run over the drill site or down adjacent terrain. It was considered safe to proceed with construction but not for 24 hour use required by two shifts for drilling.

A second avalanche control mission with explosives on the higher slope indicated good snow stability but it still did not show if due to the configuration of terrain, an avalanche will run over Pad 4.

#### Glacier and Mountain Safety

A route was flagged from Drill Pad 3 across the glacier to camp. At the time the risk of crevasse or 'moulin' risk was considered low. This was partly based on prior experience in the area.

Crews should be familiar, by demonstration, with crevasse and avalanche rescue techniques.

The terrain around drill pad 4 requires extreme care. The consequences of a slip on the heather/rock ledge terrain may be fatal. Hard hats, harnesses, possibly crampons & ice axes and short rope techniques may be required to move safely depending on the experience of the party.

During work on Drill Pad 4 or similar sites an experienced individual is required to monitor activity, recommend procedures and be available to assist with appropriate safe travel techniques.

#### Summary

Particularly due to the history of avalanches in the Leduc area it was deemed prudent to establish snow safety procedures using current methodology. The proposed schedule for the establishment of camp and drilling were potentially exposed to the consequences of a late winter storm and the spring avalanche cycle.

A quick response from the Department of Mines to permit the implementation of avalanche control with explosives and procedures established by D Healey contributed to an effective program being in place very quickly.

The timing of the natural cycle of large spring avalanches in the area of Drill Pad 3 & 4 was fortunate to allow progress without hindering the drilling schedule.

The cooperation of all staff and party chief H Wasteneys is appreciated.



3...

Although very close to the site of the Leduc avalanche this avalanche safety work was moving into new terrain with unknown avalanche characteristics. Any future work, specially the transition from summer development work to year round operations, needs to consider the avalanche problem. Many potentially long term avalanche problems may be avoided with careful planning. An excellent example of how not to develop the property is shown where the camp, waste and ventilation portals for Leduc were placed in avalanche terrain. All those long term problems could have been avoided.

## **Granduc Project diamond drilling on the South Leduc Glacier by Hy-Tech Drilling, May 2006: Glacier Drilling Recommendations**

Recent experience drilling through the South Leduc Glacier to outline the trend of magnetite iron formation related copper mineralization has been variably successful and has led to some strong recommendations for standard drilling practices to ensure success.

Problems in glacier drilling in the 2005 Granduc drilling program were largely attributed to shallow holes and high melt rates resulting in unsupported drill strings and consequent eccentric whip causing eventual breakage of the rods near the drill head. This problem was avoided in the 2006 program by allowing only drill hole inclinations steeper than  $-70$  degrees and by stiffening the NW casing with an extra HW casing sleeve added to the drill string after completing the NW casing. In the one  $-70$  hole surveyed so far the inclination only steepened to  $-71.8$  degrees through 146 metres of glacial ice and the HW casing was added prior to significant rock drilling. The drill hole in question, DDH-06-1, was drilled near the centre of the glacier through clean ice allowing the continuous use of carbide tipped ice cutting bits which cut quickly and thus minimized melting of the ice supporting the drill string. An additional vertical hole was drilled without any problem.

This successful drilling situation was not repeated in DDH-06-4 which was drilled near the southern lateral edge of the glacier and slightly up ice from a hanging glacier that lies above and to the south of the South Leduc glacier. In the first attempt at reaching bedrock a few isolated rocks were encountered, but the principal problems started when an unsuspected deposit of boulders was encountered at a depth of 110 metres. The NW casing was sheared 3 times, apparently as a result of sudden collapse of the boulder framework surrounding the advancing NW casing and probably exacerbated by meltout of the ice supporting the casing. When the broken casing was retrieved the rocks collapsed and the hole had to be redrilled. After three attempts a new hole was started at an azimuth 20 degrees away from the first hole and although a similar boulder deposit was encountered it appeared more stable.

Unfortunately, the NW casing sheared off again at depth. It was decided that the only way to continue was to leave the broken NW casing in the hole and sleeve around it with HW casing and then retrieve the NW casing. Eventually by advancing the HW casing to 110 m and cautiously advancing NW casing and NQ2 rods the hole was cased to bedrock at 130 m in NW casing.

Two recommendations stem from this experience:

1. use normal rod and casing advance methods until subglacial boulders are encountered and then ream down with HW casing into the boulders. The HW casing reduces the net resistance on the NW casing and reduces the effect of the support lost by melting of the ice around the casing. In the event of shifting

subglacial debris the HW casing reduces the bending of the NW casing which can result in shearing. If available use a casing advance mechanism that Hy-Tech has but which was not available for this project.

2. Avoid lateral glacier sites with high potential for moraine and colluvial deposits. In this case the instability of the boulder deposit may be related to an origin as an unstable colluvial fan that built up in meltwater cavities under the ice. The central part of the glacier near the terminus is clearly affected by graben collapse features over subglacial streams which might extend a considerable distance up glacier and be connected to meltwater streams from the hanging glacier. Colluvial material from the valley walls and lateral moraines of the hanging glacier could both cover the surface of the glacier and penetrate it along meltwater stream filling ice cavities along the lateral margin of the glacier. Since these might be maintained above a stable angle of repose they would have the potential to shift when disturbed by drilling.

The design and construction of drill pads on glacial ice is also a significant in successful and efficient drilling program. The last pad constructed on the glacier was subject to continual melting problems requiring significant and frustrating expenditures of time to restabilize the platform after the drilling had started. Ice melted more rapidly around the edges of the pad leaving the pad unstably suspended on central sections of beams. Additional support had to be wedged daily under the edges of the pad. In places affected by overflow water deep melt holes had to be bridged to support corners of the pad. This remedial work is frustrating and time consuming.

In the early season when winter snow is thick upon the ice the ice under the drill pad is insulated and with enough contact point a simple pad can remain stable despite melt-out of some posts. In warm weather or after winter snow has melted off the ice the preservation of ice support under the pad is more critical. Pad cribbing beams should either be recessed into the ice or built upon a widespread insulating surface such as thick layers of saw-dust covered with plywood. In either case the danger to the pad comes from rapid melting of unshaded ice around the periphery of the pad so a marginal area should be insulated outside of the structural pad. As well excess drilling water should be directed away from the pad to prevent causing melting under the pad.

These recommendations are made in light of the author's experience on the South Leduc glacier during the Spring 2006 drilling program for Bell Resources Corp. and during a drilling operation on a high elevation icefield near Haines, Alaska in August 2006 and are based on a speculative assessment of visible ice features and the corresponding experience of the drill program. The toe region of this stagnant glacier should be carefully mapped out with a view to determining the structure of the ice sheet and using this information to determine the optimum location for drilling site. This region of the glacier although probably stagnant is much more structurally complex than upper regions of the same glacier.

The present structure of the terminal 2 to 3 km of the glacier appears to be dominated by an axial graben defined by arcuate normal faults that verge up ice in a parabolic form. Crevasses are largely closed or filled by supraglacial rock debris which typically consists of highly angular blocks melted out from lateral and medial moraines. These moraines formerly extended through the ablated 150 meters or more of ice that lay above the present ice surface at the time of initial discovery of the Granduc copper deposits and can be traced along glacial flow lines to various cliffs marginal to the upper regions of the glacier.. Presently, ice thicknesses of about 120 meter occur in the central and south lateral parts of the glacier that overlie the projected subglacial extent of the Granduc copper deposits. The toe of the glacier exhibits meltwater channels exiting through cavernous portals and sinkholes in the surface of the glacier. The axial zone of the glacier appears to be collapsing above these meltwater channels along normal faults which run parallel to the meltwater channels. These ice faults appear to extend up ice and converge. The higher regions of the glacier, but still below the ice falls from the Salmon ice field show more typical arcuate down-ice verging stress lines and crevasses with moraine features diffused by ablation.

The glacier is not axially symmetric because of steeper cliffs on the southern margin which shade it and deposit rockfall and avalanche debris onto the ice surface. The subglacial debris encountered in drill holes DDH-06-4 and 5 appears to be spatially related to the southern margin of the glacier and possibly the hanging valley glacier that lies to the south of DDH-06-4 and up ice of DDH-06-5. It is interpreted that the debris originated from streams penetrating the lateral edge of the glacier and funneling debris flows of terminal moraine under the main glacier. As the ablation process proceeds, subglacial meltwater channels and related debris deposits may become more of a hazard for drilling in the axial region of the glacier.

Hardolph Wasteney Ph.D.  
Project Geologist  
Granduc, Spring 2006  
Bell Resources Corp.

## **Granduc Exploration Camp 2006 BLASTING PROCEDURES**

**Dave Healy 2006**

Avalanche Control Methods carried out utilizing Explosives at Granduc Exploration Camp (GEC) include Hand Charging, Cornice Control, and Helicopter Control.

### **General**

1. All control missions will consist of a Blaster-in-charge (Team Leader) and at least one assistant (Team Member). All team leaders will possess a valid W.C.B. Blaster's Certificate or Dept of Mines blasting ticket for the type of avalanche control blasting being performed. Leaders will be familiar with and adhere to the national / provincial explosives regulations and GEC explosives policy / procedures at all times. Team members will be subject to the approval of the team leader. Team members must be certified blasters or under the direct visual supervision of a certified blaster during the blasting operation. Team members will be in good physical and mental condition and will be familiar with avalanche technology. They will know and adhere to GEC explosives policy / procedures as well as national / provincial regulations. All team leaders / members must provide documented proof of training and qualifications. All members of the control team will be clothed and equipped to safely conduct avalanche control including rescues. Review of explosives procedures will be conducted at the beginning of each mission.
2. Prior to any blasting operation commencing, any area affected by concussion from the blast and potential resulting avalanches shall be evacuated of people, confirmation of clearance will be made by visual observation and radio contact with operational personnel. As necessary, guards (in radio contact with the Blaster-in-Charge) will be positioned in a safe location to make sure that no one enters the zone of effect during blasting operations.
3. The Blaster-in-Charge will be physically present in the Blasting Area during all blasting operations and responsible for all phases of charge preparation and placement, fixing, firing of charges and the handling of misfires. The Blaster-in-charge will also be responsible for security of personnel/public and ensuring closures are maintained. A team member will be responsible for timing of safety fuse ignition and recording all blasting activity and results.
4. Only one meter safety fuse assemblies will be used in all operations. These assemblies have a safety staple to bleed off static charges.
5. Charges will be assembled at the last most practicable moment before deployment.
6. Once assembled, no charge will ever be stripped or returned to the magazine. All assembled charges will be detonated in a safe area that has been evacuated and guarded.
7. Only a pull wire fuse lighter will be used to light a safety fuse assembly. All control team members will be completely trained in identification and removal of igniter cord

- connectors and in the installation and use of the pull wire fuse lighter.
8. Only one attempt will be made to ignite a safety fuse assembly.
  9. Magazines, if used, will be secured, located, marked and constructed as per the Explosives Act of Canada. Appropriate licenses will be current and available at magazine locations.
  10. Only a certified blaster is to make entries in the magazine logbooks.

## **Hand Charging**

1. Hand charges are used to deliver explosives into terrain that is generally easily accessed. As the term implies, hand charging consists of using an explosive charge that is tossed into “shot points”, generally in the avalanche start zone.
2. The items involved in hand charging are as follows:
  - A Safety Fuse Assembly
  - A 1kg stick of Emulex or a 12.5kg bag of AN/FO (with a cast booster)
  - A Pull Wire Lighter
3. Safety fuse has a special black powder core in a spirally wrapped cover of textiles and waterproof materials. The cover protects from contamination and abrasive damage, and the fuse conveys flame to the detonator at a uniform speed (131 sec/m at sea level). The ‘Safety Fuse Assembly’ has a high strength cap (detonator) consisting of PETN on one end of a minimum one meter length of fuse (which is not to be cut). The ‘cap’ is silver and clearly marked ‘explosive’. The other end has an igniter cord connector, usually copper in color to differentiate from the silver of the high strength cap. The Safety Fuse Assembly is used to detonate the charge.
4. The Pull Wire Lighter is used to light the safety fuse. It is a cardboard tube 12cm long with a plastic cap on one end. A metal clip on the inside holds it in place on the Safety Fuse. It is composed of a low-grade black powder.
5. AN/FO is an explosive charge composed of 94% Ammonium Nitrate (fertilizer) and 6% Fuel Oil (diesel). AN/FO comes in 12.5kg or 25kg bags that are to remain intact. AN/FO is to be primed with a cast booster.
6. Emulex comes in 1kg sticks and is composed of 80% AN/FO and 20% emulsifiers.

## **Transportation of materials**

1. Safety Fuse Assemblies will be transported in a crush proof container and separate from charges. Pull Wire igniters will also be kept separate from both SFA’s and charges. Charges will be assembled at the last most practicable moment.
2. Bags of AN/FO are put within another plastic or fabric bag before being placed in a backpack to prevent the explosive residue from contaminating the backpack.

## **Assembly of hand charges**

1. Ideally, charges and detonators (safety fuses) will be brought together at the blast site only when the charges are ready to be primed and fired. In avalanche work however, it is recognized that it may not be practicable to prime the charges at the actual shot point. The last most practicable moment would most likely be at the heli drop point, or at the top of climbing track. Only persons involved in ASSEMBLING the charges should be present during assembly. The assembly of the charges, as with all blasting operations, will be under the personal control of the blaster of record.
3. Emulex charges are primed with a Safety Fuse Assembly. Cap wells will be punched into the end or angled in the side of the cartridge by a punch made of non-sparking

material. The cap well hole must not exit the other side of the cartridge. The high strength cap end of the SFA is inserted into the cap well of the Emulex charge. The remaining SFA is then doubled back along the cartridge and taped. Under certain conditions where larger charges may be required, they will be constructed by securing two or more standard charges, off set, in a tight bundle. One of the charges will be primed in the standard fashion and the bundles will be taped securely together.

4. When priming AN/FO a cast booster is primed with a Safety Fuse Assembly and then inserted into the bag of AN/FO. Primed explosives will be placed in a bag before being placed in a backpack. This step keeps any explosive from contaminating the backpack.

### **Deploying of hand charges**

1. When deploying a charge, safety of the team is the first priority. The team leader is responsible for all actions taken on his control mission. Ensure everyone is familiar with their roles and what is expected of them. Assemble the charge at the last most practicable moment, ensure the integrity of your controlled area, and that there is no possibility of anyone being in the zone of effect. Communicate with your guards, your team and drill & camp staff via radio. Ensure your safe zone is easily reachable after deployment. If necessary, attach a rope to your shot to prevent it from rolling or sliding down the hill.
5. Verbalize the steps to deployment; Call out on the radio “Explosives control commencing in ...”.
6. Verbalize to your team; “Igniter on, safety off”.
7. Call out on the radio “Fire in the hole...”.
8. Verbalize to your team “3,2,1, pull”, as you pull the igniter.
9. Watch for signs of successful safety fuse ignition; verbalize to your team “fuse lit”.
10. Place the shot in the most likely spot to result in an avalanche (air blasts and rock shots are often successful).
- 11. Retreat to your safe zone, do not run.**
12. Wait for detonation and ensure pertinent information is recorded in the blaster's log.
13. Inspect blast site for evidence of complete consumption of explosive materials.
14. If explosive materials remain or a ‘dud’ is suspected, post a guard and follow disposal procedures.

### **Disposal of unused primed explosive charges**

1. No primed charge shall be dismantled.
2. Unused primed charges shall be detonated in the same manner as charges used for avalanche control.
3. Ideally these extra charges should be detonated in avalanche terrain.
4. The area in which the charges are detonated must be considered as a controlled zone, and all procedures followed to ensure the safety of the blasting team and others in the area.



### **Disposal of misfired or 'dud' charges**

1. The blasting zone (zone of effect) must be considered dangerous at all times until the misfire is destroyed. Make sure all controls are in place & maintained disposal is complete.
2. 30 min (or manufacturer's recommendation) must elapse before any attempt to destroy the misfire is initiated.
3. Observe the area of the misfire placement. If any smoke or smell of burning material is observed, do not approach the misfire.
4. Approach the misfire only when safe; this may include waiting for favorable weather, rigging safety lines, locating misfire, or obtaining appropriate product.
5. Place & detonate another charge beside (but not touching) the misfire.
6. Examine area of detonation and ensure all material has been destroyed.

## **Helicopter Avalanche Control (heli bombing)**

1. This method of avalanche control requires the bombardier to hold a current WCB blasting permit with a heli bombing endorsement. It is often the only available method to deliver an adequate test to an inaccessible or dangerous area.
2. The explosives used are primarily AN/FO and/or 'nukes' the preparation of these are discussed in the hand charging section.
3. Shots are not primed until just prior to deployment from the helicopter.

### **Transportation of materials**

1. Cast boosters are primed at the last most practicable moment (usually the heli pad).
2. Boosters are then placed in a box that is easy to jettison if required to do so.
3. AN/FO bags are placed on the seat and floor adjacent to the Armer/Bombardier where they are easily accessible.

### **Personnel**

The helicopter bombing crew consists of a pilot, a bombardier, and a spotter / recorder.

#### **A. Pilot**

1. Primarily responsible for the safe operation of the aircraft and the safety of the occupants.
2. Knowledgeable in helicopter avalanche control
3. Familiar with the areas to be controlled.

#### **B. Bombardier**

1. Certified with a valid BC WCB explosives certificate for Avalanche control with a Helicopter Control endorsement.
2. Ensuring no more than 3 primed charges are prepared at one time.
3. Directing the Pilot to do a dry run of the area.
4. Testing all equipment before take off.
5. Direct the pilot to the avalanche start zones assisted by the. All personnel must be familiar with the operating area.
6. Ensure that there is a complete area closure in effect.
7. Announce to the crew "Pull wires on" X number.
8. Announces to the crew "Fuses ignited".
9. Announce to the crew "Bomb # dropped clear"
10. Announce to the crew when all ignited bombs are clear of the helicopter.
11. Observe all results and confirm them with the spotter / recorder.

### **C. Spotter / Recorder**

1. Assist with visual closure sweep during dry run.
2. Record that all closures are in affect and the area is clear.
3. Aid the bombardier in directing the pilot to placements.
4. Record the time that each fuse is ignited.
5. Record time that each explosive detonates.
6. Record and if able sketch the avalanche results. Record and photograph the area where any misfire has been dropped

### **Equipment**

1. Helicopter with reliable radio contact with camp & drill crews.
2. One intercom headset for each crew member.
3. A stopwatch or similar timing device.
4. A field notebook for recording
5. 2 pencils.
6. Camera to photograph misfire locations.
7. Approved container made of non-sparking material to carry the primers. This container will be jettisoned if directed to do so by the helicopter pilot.
8. Approved blasting tool made of non-sparking material.
9. Pull wire igniters.
10. Electrical tape for closing AN/FO bags after placing primers inside.

### **Preparation of explosives**

1. All primers are to be constructed as per standard procedures in a safe location prior to entering the aircraft. Where an AN/FO type explosive is to be used, primer will be placed into the AN/FO just prior to the shot placement.
2. The Bombardier must keep the pull wire igniters and the primers in separate locations.
3. Only the explosives that are needed on a particular bombing run may be carried in the helicopter.
4. No primed explosive may be returned to the ground. Once a primed charge has been placed into an AN/FO bag it must be detonated. No primer will be dismantled in the helicopter.

### **Procedures prior to take off**

1. Ensure drill & camp staff crew are aware of mission flight plan and that radio contact must be maintained
2. On the Hughes 500, remove the port passenger door. On other aircraft, remove the starboard passenger door.
3. Ensure that the intercom is working.

4. Ensure that the radio is working and that you have contact with the camp & drill crews.
5. Complete a dry run on the ground to test: intercom, stopwatch, and radio. Log the test results in the field book.
6. Load the primers aboard the helicopter and secure them using a quick release mechanism in a container that can be easily jettisoned if necessary.
7. The bombardier must wear an approved body harness with non-instantaneous release system and attach to the helicopter via two hard point anchor points. The spotter / recorder uses the standard seat belt for helicopter travel.
8. Ensure that the required blasting tools are within easy reach of the bombardier and will not fall or fly out of the helicopter.

### **After takeoff**

1. Spotter / Recorder starts the recording; Date, Avalanche Area, Helicopter.
2. Once airborne, proceed to the Avalanche Area to be controlled and do a fly-by to confirm that the blast area is clear. Confirm that no one has been able to enter the Danger Area.
3. Direct the Pilot to the first Avalanche Area to be controlled, inform drill & camp staff that explosives control is commencing.
4. Ready the primer by trimming the fuse end to ensure a clean powder trail. Do not attach the pull wire igniter until you are in-bound to the target area.
5. Direct the Pilot to the correct target and elevation.
6. When the Pilot is sure of the correct course to the target, you will be told to put the pull wire igniters onto the end of the fuse.
7. When the helicopter is 15 seconds from the target area the pilot will tell the Bombardier to ignite the fuse. Always point the fuse toward the door to avoid possible sparks within the helicopter.
8. The dialog should be as follows;
  - Pilot advises "15 seconds to the target".
  - Bombardier "Fuses ignited".
  - Spotter / Recorder "Fuses ignited".
10. Spotter records the number ignited and the time.
11. Bombardier checks that the fuse is properly ignited before dropping the bomb.
12. When dropping the bomb, drop it down and away from the helicopter. The explosives charges should be dropped only at slow flight speed or a hover.
13. The dialogue should be as follows:
14. Bombardier: "Shot # is away", advise status of the dropped charge. When all lit shots have been placed say "all shots away"
15. Spotter / Recorder: Start the timer and repeat, "Shot # is away".
16. If 2 or more charges are being dropped the spotter / recorder must keep track of the time and have the helicopter move off to a safe distance to maintain the 2 minute safety margin.
17. Once at a safe distance from the blast area another bombing run can be initiated as long as the entire run is a safe distance from explosives already placed.

18. Upon return to the blast site the spotter / recorder records the results of the blast and the position of any misfired shots.
19. Any misfires must be left alone for 30 minutes or longer if the manufacture requires. See product information sheet.
20. Once the avalanche control work is complete, advise drill & camp staff via radio or in person that explosives work has been completed

### **Safety Precautions**

1. The Bombardier must not drop or throw the shot behind their seat position, above their seat position or underneath the helicopter.
2. The minimum crew size for helicopter bombing in a Bell 206 or Hughes 500 is 3 persons (Pilot, Spotter / Recorder & Bombardier). The maximum number of charges to be ignited at any time is 3 shots.
3. The helicopter must be directed away from the blast area for the detonation periods.
4. The pull wire igniters must be kept separate from the primers.
5. The Bombardier must discard any explosives that are malfunctioning. He must inform the pilot of his actions right away.
6. The helicopter Pilot may order the Bombardier to jettison the explosives if the helicopter develops mechanical problems. The Bombardier will comply and have the Spotter / Recorder record the position of the discarded explosives.
7. The Pilot will make all decisions regarding safe flying conditions.
8. The Pilot will maintain communications with drill & camp staff, and any other aircraft in the area.
9. Ski baskets or attachment devices, which may restrict or obstruct the dropping of the explosives, will be removed prior to the flight.
10. The gross weight of the explosives, and the control crew must not exceed 75 % of the helicopter carrying capacity. This is the Pilots' calculation and decision.
11. No passengers will be allowed on board the helicopter during any phase of the helicopter bombing operations.
12. Primers are not to be assembled or dismantled in the helicopter. No primer will be brought back to the ground. No primer that has been put into a bag of AN/FO may be dismantled; they must be destroyed prior to landing.
13. The primers will remain in their storage container throughout the bombing run until they are needed for the control work when they are put into the ANFO bags.
14. The primer storage container must be made of a non-conductive, non-sparking material, which meet Federal Standards.

### **Misfire procedures**

1. Bombing in the affected area will be stopped and the entire area will be kept closed by the blaster (Bombardier) for a period of at least 30 minutes (or longer, as required by the manufacturer) from the time that the last fuse was ignited.
2. After 30 minutes (or longer, as required by the manufacturer), the blaster will assess the area to determine if the drop point in question is safe to enter. A delay may be

required for some areas. If the area is not safe to enter, the entire affected area will remain closed until the misfire can be found and destroyed.

3. After the required time to wait for a misfire has passed and the area is still not safe to enter, the helicopter may try to hover over the misfire location and the Bombardier will try to drop another charge onto the misfired shot.
4. A visual check will be done to see if the misfire has gone off.
5. Photograph the area where the misfire has landed.
6. The entire area will be posted as a closure and guarded..
7. A ground search will be conducted when the area is safe to access.

## **Appendix VIII**

### **Environmental Assessment of Water Quality near the historical Granduc workings above the South Leduc Glacier**

**Technical memorandum by Alan Martin of Lorax Environmental to Tim  
Marsh, Bell Resources (9 Pages)**



## **TECHNICAL MEMORANDUM**

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**To: Tim Marsh, Bell Resources**

**Date: October 30, 2006**

**From: Alan Martin**

**Subject: Granduc Water Quality Assessment – September 2006 Survey**

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### **1. Introduction**

The Granduc property is located 40 km northwest of Stewart in northwestern British Columbia. Bell Resources has recently advanced exploration activity at the property through drilling programs conducted in 2005 and 2006 which have focused on delineating massive sulphide deposits in areas north and south of the historical mining areas. As part of on-going environmental programs at the site, a water quality and hydrology survey was conducted on September 15, 2006, by Ray Carrier of Ecos Environmental Consulting (Smithers, B.C.). The following technical memorandum discusses the results of the water quality and flow assessment.

### **2. Sampling Locations**

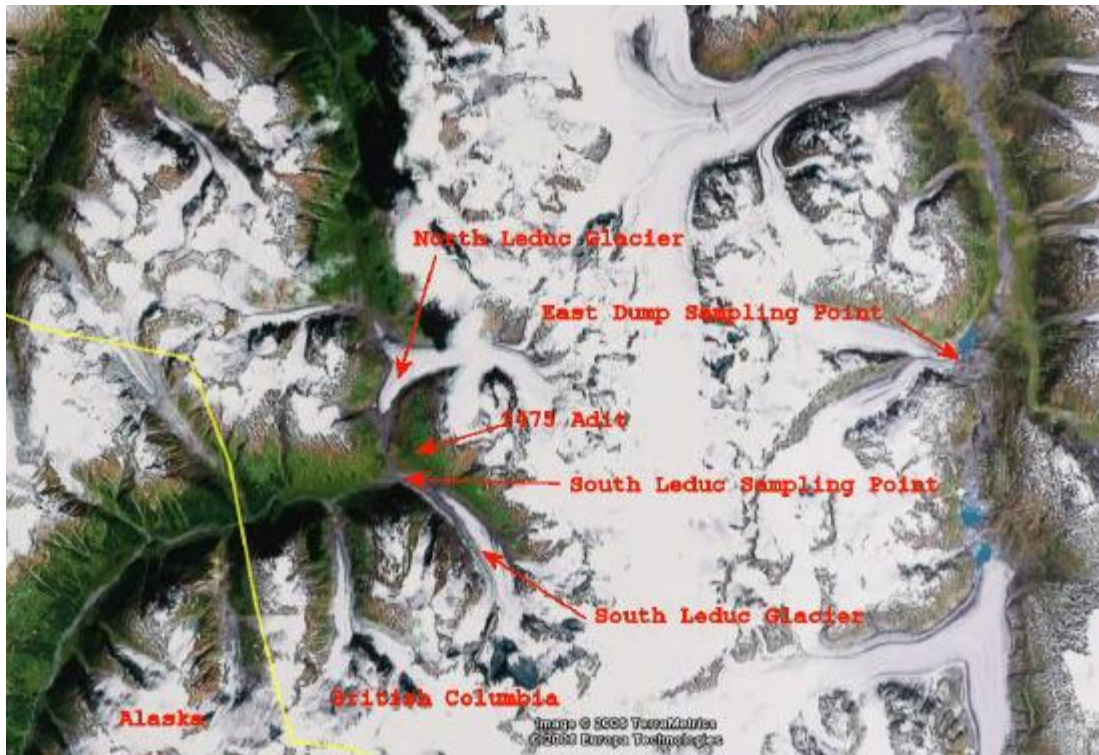
Water samples and flow data were collected at three locations: 1) East Dump Culvert; 2) 2475 Adit Discharge; and 3) South Leduc Creek (Figure 1). The East Dump Culvert drains the tunnel that extends through the mountain (Figure 2). An instantaneous flow of 0.66 L/s was measured at the time of sampling. The culvert is not presumed to be in hydrologic contact with wasterock in the East Dump.

The 2475 Adit Discharge is located between and upgradient of South and North Leduc Creeks (Figure 3). The adit discharge merges with North Leduc Creek prior to its confluence with South Leduc Creek (Figure 4). An instantaneous flow of ~241 L/s was measured at the time of sampling. There were no obvious high water marks on the vertical ceiling supports inside the Adit entrance, suggesting relatively-stable flow conditions.

South Leduc Creek was sampled to encompass background water quality in the area. Sampling was conducted on South Leduc Creek upstream of the North Leduc Creek confluence near the terminus of the South Leduc Glacier, and presumably upgradient of any mine-related inputs (Figure 4). South Leduc Creek receives the merged flow of the

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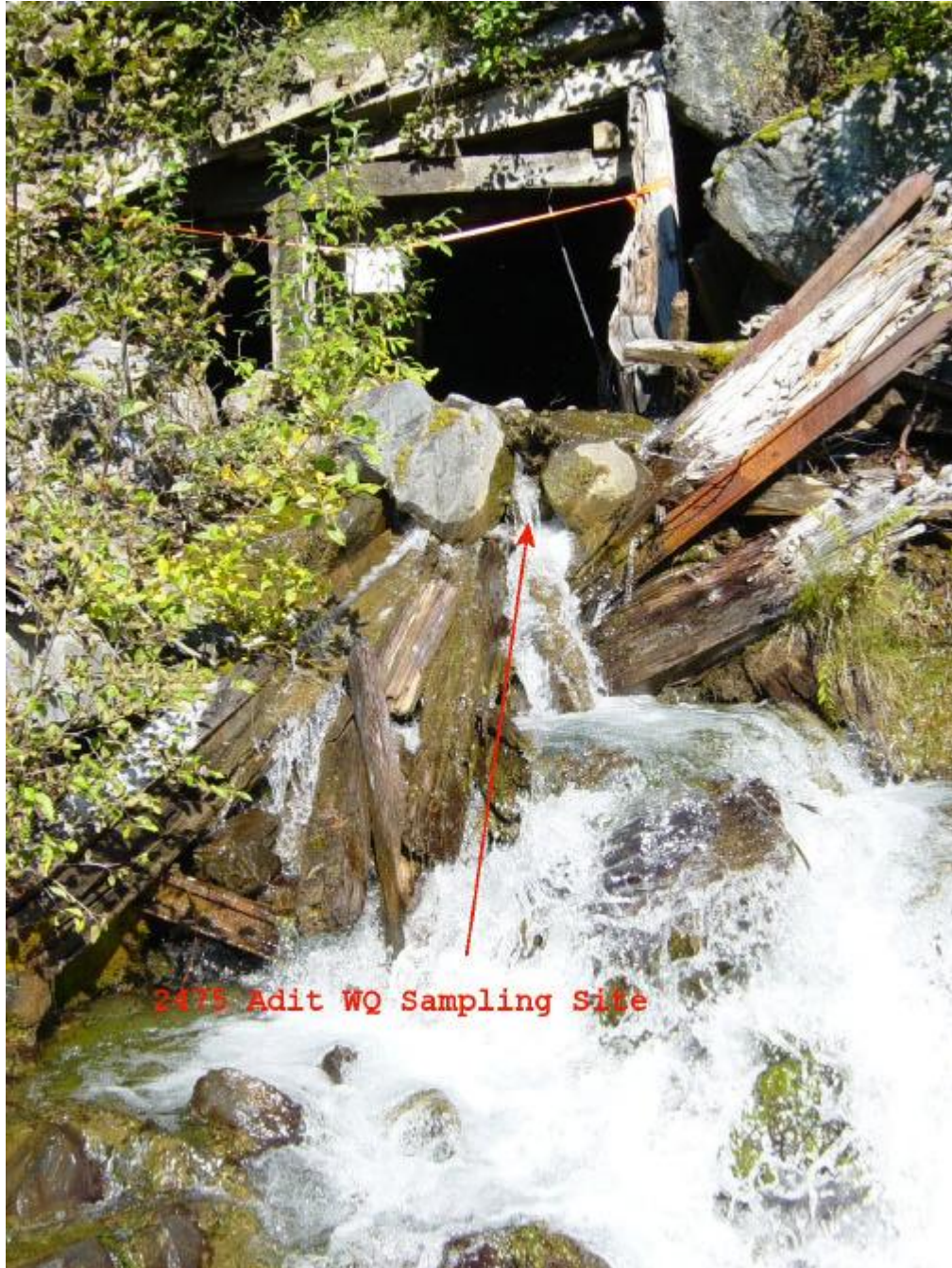


**Figure 1:** Google Earth image of Granduc Mine area and water quality sampling locations.



**Figure 2:** East Dump Culvert flow and water quality sampling location.

2475 Adit Discharge and North Leduc Creek. South Leduc Creek showed an instantaneous flow of ~3,000 L/s at the time of sampling. A cross-sectional flow analysis of North Leduc Creek was not conducted due to high-water conditions. However, visual flow estimates were projected be between 4,500 and 6,000 L/s.



**Figure 3:** 2475 Adit sampling location. The flow transect was conducted ~8 m downstream from the water buttress shown in the picture.



**Figure 4:** South Leduc Creek flow and water quality sampling location, showing confluence of the 2475 Adit discharge and North Leduc Glacier Creek.

At each location, water samples were collected for a full suite of physical and chemical parameters including TSS/turbidity, pH, conductivity, major ions, nutrients, and trace elements. Sampling conformed with methods outlined in the B.C. Ministry of Environment protocols (British Columbia Field Sampling Manual, 2003). Samples were stored cool and in the dark until receipt by the analytical laboratory (ALS Environmental, Vancouver). The filtration of samples for dissolved metals and nutrient parameters was conducted at ALS Environmental.

### **3. Results and Discussion**

In the sections to follow, water quality data are used to describe general water quality conditions for the three sampling locations. Parameter values are screened against B.C. provincial guidelines for the protection of aquatic life in order to identify contaminants which may be of potential concern in downstream receiving water courses. The chemistry data, in combination with on-site flow measurements, are also used to coarsely assess the assimilative capacity of the receiving environment for mine-influenced drainages. All water quality data are presented in Table 1.

**Table 1:**  
**Water quality data for samples collected as part of September 15, 2006, survey.**

	South Leduc Creek	Guideline 30-day	Guideline Max	East Dump	Guideline 30-day	Guideline Max	2475 Adit	Guideline 30-day	Guideline Max
<b>Physical Tests</b>									
Colour (CU)	<5.0	NP	NP	<5.0	NP	NP	<5.0	NP	NP
Conductivity (uS/cm)	87.5	NP	NP	218	NP	NP	469	NP	NP
Total Dissolved Solids	60	NP	NP	132	NP	NP	328	NP	NP
Hardness CaCO3	41.8	NP	NP	80.8	NP	NP	247	NP	NP
pH	7.95	6.5-8.5		7.99	6.5-8.5		8.01	6.5-8.5	
Total Suspended Solids	41.0	5	25	<3.0	5	25	<3.0	5	25
Turbidity (NTU)	41.6	2	8	<0.10	2	8	0.18	2	8
<b>Dissolved Anions (mg/L)</b>									
Alkalinity-Total CaCO3	25.5	NP	NP	67.6	NP	NP	84.4	NP	NP
Bromide Br	<0.050	NP	NP	<0.050	NP	NP	<0.050	NP	NP
Chloride Cl	<0.50	NP	NP	0.61	NP	NP	<0.50	NP	NP
Fluoride F	<0.020	NP	0.2	0.494	NP	0.2	0.079	NP	0.2
Sulphate SO4	15.2	50	100	45.1	50	100	<b>161</b>	50	100
<b>Nutrients (mg/L)</b>									
Ammonia Nitrogen N	<0.020	1.18	6.14	<0.020	1.18	6.14	<0.020	1.18	6.14
Total Kjeldahl Nitrogen N	0.068	NP	NP	<0.050	NP	NP	<0.050	NP	NP
Nitrate Nitrogen N	0.0073	40	200	0.0191	40	200	0.0236	40	200
Nitrite Nitrogen N	<0.0010	0.02	0.06	<0.0010	0.02	0.06	<0.0010	0.02	0.06
Dissolved ortho-Phosphate P	0.0047	NP	NP	0.0016	NP	NP	0.0010	NP	NP
Total Phosphate P	0.0194	NP	NP	0.0033	NP	NP	<0.0020	NP	NP
<b>Total Metals (mg/L)</b>									
Aluminum T-Al	1.87	NP	NP	0.0063	NP	NP	0.0060	NP	NP
Antimony T-Sb	0.00019	NP	0.02	0.0014	NP	0.02	0.00208	NP	0.02
Arsenic T-As	0.00276	NP	0.005	<b>0.0264</b>	NP	0.005	<b>0.0109</b>	NP	0.005
Barium T-Ba	0.0336	1	5	0.124	1	5	0.0127	1	5
Beryllium T-Be	<0.00050	0.0053	NP	<0.00050	0.0053	NP	<0.00050	0.0053	NP
Boron T-B	<0.010	NP	1.2	0.077	NP	1.2	<0.010	NP	1.2
Cadmium T-Cd	<b>0.000040</b>	NP	0.000016	<b>0.000028</b>	NP	0.000028	<b>0.000113</b>	NP	0.000072
Calcium T-Ca	16.2	NP	NP	27.9	NP	NP	88.8	NP	NP
Chromium T-Cr	<b>0.00493</b>	NP	0.001	<0.00050	NP	0.001	<0.00050	NP	0.001
Cobalt T-Co	0.00137	0.004	0.11	<0.00010	0.004	0.11	0.00050	0.004	0.11
Copper T-Cu	<b>0.0102</b>	0.002	0.006	0.00163	0.003	0.010	0.0037	0.010	0.025
Iron T-Fe	<b>1.81</b>	NP	0.3	<0.030	NP	0.3	<0.030	NP	0.3
Lead T-Pb	0.00239	0.004	0.027	<0.00050	0.006	0.062	0.00014	0.013	0.258
Lithium T-Li	<0.0050	0.096	0.87	0.0064	0.096	0.87	<0.0050	0.096	0.87
Magnesium T-Mg	1.59	NP	NP	3.16	NP	NP	7.11	NP	NP
Manganese T-Mn	0.0473	0.79	1.00	0.000491	0.96	1.43	0.0059	1.7	3.3
Mercury T-Hg	<0.000010	0.00002	0.001	<0.000010	0.00002	0.001	<0.000010	0.00002	0.001
Molybdenum T-Mo	0.0025	1	2	0.0191	1	2	0.0583	1	2
Nickel T-Ni	0.0030	NP	0.025	<0.00050	NP	0.065	0.0033	NP	0.15
Potassium T-K	<2.0	NP	NP	<2.0	NP	NP	6.2	NP	NP
Selenium T-Se	0.00124	NP	0.002	<b>0.0020</b>	NP	0.002	<b>0.0054</b>	NP	0.002
Silicon T-Si	3.76	NP	NP	3.84	NP	NP	2.44	NP	NP
Silver T-Ag	<0.000030	0.00005	0.0001	<0.000010	0.00005	0.0001	<0.000010	0.00005	0.0001
Sodium T-Na	<2.0	NP	NP	15.0	NP	NP	<2.0	NP	NP
Strontium T-Sr	0.054	NP	NP	0.706	NP	NP	0.603	NP	NP
Thallium T-Tl	<0.00010	NP	0.0003	<0.00010	NP	0.0003	<0.00010	NP	0.0003
Tin T-Sn	<0.00010	NP	NP	<0.00010	NP	NP	<0.00010	NP	NP
Titanium T-Ti	0.120	NP	NP	<0.010	NP	NP	<0.010	NP	NP
Uranium T-U	0.00035	NP	0.3	0.0033	NP	0.3	0.0036	NP	0.3
Vanadium T-V	0.0064	NP	NP	0.0080	NP	NP	<0.0010	NP	NP
Zinc T-Zn	<b>0.0188</b>	0.0075	0.033	<b>0.0091</b>	0.0075	0.033	0.0213	0.125	0.151
<b>Dissolved Metals (mg/L)</b>									
Aluminum D-Al	<b>0.155</b>	0.05	0.1	0.0051	0.05	0.1	0.0047	0.05	0.1
Antimony D-Sb	0.00014	NP	0.02	0.00129	NP	0.02	0.00212	NP	0.02
Arsenic D-As	0.00183	NP	0.005	<b>0.0234</b>	NP	0.005	<b>0.0103</b>	NP	0.005
Barium D-Ba	0.0150	1	5	0.120	1	5	0.0128	1	5
Beryllium D-Be	<0.00050	0.0053	NP	<0.00050	0.0053	NP	<0.00050	0.0053	NP
Boron D-B	<0.010	NP	1.2	0.075	NP	1.2	<0.010	NP	1.2
Cadmium D-Cd	<0.000017	NP	0.000016	<0.000017	NP	0.000028	<b>0.000125</b>	NP	0.000072
Calcium D-Ca	15.6	NP	NP	27.3	NP	NP	87.6	NP	NP
Chromium D-Cr	<0.00050	NP	0.001	<0.00050	NP	0.001	<0.00050	NP	0.001
Cobalt D-Co	<0.00010	0.004	0.11	<0.00010	0.004	0.11	0.00050	0.004	0.11
Copper D-Cu	0.00067	0.002	0.006	0.0013	0.003	0.010	0.0030	0.010	0.025
Iron D-Fe	0.112	NP	0.3	<0.030	NP	0.3	<0.030	NP	0.3
Lead D-Pb	0.000107	0.004	0.027	<0.00050	0.006	0.062	<0.00050	0.013	0.258
Lithium D-Li	<0.0050	0.096	0.87	0.0060	0.096	0.87	<0.0050	0.096	0.87
Magnesium D-Mg	0.66	NP	NP	3.08	NP	NP	6.82	NP	NP
Manganese D-Mn	0.00606	0.79	1.00	0.000362	0.96	1.43	0.0058	1.7	3.3
Mercury D-Hg	<0.000010	0.00002	0.001	<0.000010	0.00002	0.001	<0.000010	0.00002	0.001
Molybdenum D-Mo	0.0026	1	2	0.0186	1	2	0.060	1	2
Nickel D-Ni	<0.00050	NP	0.025	<0.00050	NP	0.065	0.0036	NP	0.15
Potassium D-K	<2.0	NP	NP	<2.0	NP	NP	5.9	NP	NP
Selenium D-Se	0.00064	NP	0.002	<b>0.0021</b>	NP	0.002	<b>0.0053</b>	NP	0.002
Silicon D-Si	0.882	NP	NP	3.76	NP	NP	2.35	NP	NP
Silver D-Ag	<0.000010	0.00005	0.0001	<0.000010	0.00005	0.0001	<0.000010	0.00005	0.0001
Sodium D-Na	<2.0	NP	NP	14.8	NP	NP	<2.0	NP	NP
Strontium D-Sr	0.045	NP	NP	0.684	NP	NP	0.615	NP	NP
Thallium D-Tl	<0.00010	NP	0.0003	<0.00010	NP	0.0003	<0.00010	NP	0.0003
Tin D-Sn	<0.00010	NP	NP	<0.00010	NP	NP	<0.00010	NP	NP
Titanium D-Ti	<0.010	NP	NP	<0.010	NP	NP	<0.010	NP	NP
Uranium D-U	0.00025	NP	0.3	0.00324	NP	0.3	0.00377	NP	0.3
Vanadium D-V	<0.0010	NP	NP	0.0076	NP	NP	<0.0010	NP	NP
Zinc D-Zn	<0.0010	0.0075	0.033	0.0063	0.0075	0.033	0.024	0.125	0.151
<b>Organic Parameters</b>									
Total Organic Carbon (mg/L)	1.28	NP	NP	0.72	NP	NP	1.24	NP	NP

Guidelines are B.C. aquatic guidelines for the Protection of aquatic life  
 Guidelines for Cd, Cu, Pb, Mn, Ni, Ag and Zn are hardness-dependent  
 Shaded values exceed 30-day guideline  
 Bold values exceed maximum guideline

### 2475 Adit

The chemistry of waters emanating from the 2475 Adit provides a direct reflection of weathering reactions and associated metal remobilization mechanisms within the mine workings. Accordingly, water quality for this discharge provides useful insight into the controls governing current levels of metal release.

In general, Adit drainages can be described as very hard (hardness = 247 mg/L), basic in pH, and only slightly turbid (Table 1). The high hardness can be attributed to the presence of elevated levels of dissolved calcium and magnesium salts (*e.g.*, carbonate minerals). Consistent with the high hardness values, Adit waters are also characterized by relatively-high alkalinity, which imparts stable and slightly basic pH conditions (pH = 8.01). The high total dissolved solids (TDS) concentration in the Adit sample can also be attributed to the presence of elevated sulphate (161 mg/L). All nutrient parameters are present at undetectable or trace levels, and therefore contribute negligibly to the conductivity signature.

The high concentrations of both alkalinity and sulphate suggest that the major ion composition is governed primarily by the oxidation of sulphide minerals and associated buffering reactions. Specifically, concentrations of alkalinity and sulphate are often linked in systems where the oxidation of sulphide minerals is accompanied by the dissolution of carbonate minerals (*e.g.*, calcite). In this process, acidity liberated from sulphide-mineral oxidation is neutralized by dissolved carbonate released from the carbonate-mineral matrix. Irrespective of sulphide oxidation within the mine workings, the high alkalinity values and basic pHs indicate that any inputs of acidity are well buffered prior to discharge to the environment.

Total levels of trace elements in the Adit discharge are generally very low, with most metals occurring predominantly in filterable forms (<0.45 µm) (Table 1). The dominance of dissolved metals is consistent with the low turbidity and undetectable levels of suspended solids at the time of sampling. Several trace elements show elevated dissolved values in comparison to background conditions, including arsenic, cadmium, copper, molybdenum, selenium and zinc. Of these, arsenic, cadmium and selenium exhibit values above B.C. guidelines for the protection of aquatic life (Table 1). Arsenic, molybdenum and selenium have the potential to be elevated in neutral-pH and fully oxygenated mine drainages since these elements occur as oxy-anions ( $\text{AsO}_4^{2-}$ ,  $\text{MoO}_4^{2-}$ ,  $\text{SeO}_4^{2-}$ ), which tend to be most mobile at circum-neutral pH.

At the time of sampling, the Adit flow of ~240 L/s, combined with the estimated combined flow of the North-South Leduc Creeks (~8,000 L/s), translates to a 33-fold

dilution of Adit drainages. This rate of mixing will bring the concentrations of all parameters to values well below B.C. aquatic life guidelines. Given the relatively-low levels of trace elements emanating from the 2475 Adit, and the high rate of dilution which occurs in within the North/South Leduc Creeks, Adit loadings currently present a negligible risk to aquatic communities.

#### *East Dump Culvert*

Drainages emanating from the East Dump culvert are less saline, although geochemically similar in composition to the Adit discharge. In general, the culvert waters can be described as moderately hard (hardness = 81 mg/L), with low turbidity and circum-neutral pH (Table 1). The relatively-high alkalinity (68 mg/L) imparts stable and slightly basic pH conditions (pH = 7.99). The slightly elevated levels of sulphate (45 mg/L) may reflect minor weathering of naturally occurring sulphide-bearing minerals within the tunnel complex. As observed for the 2475 Adit, all nutrient parameters in culvert flows are present at undetectable or trace levels.

As observed for the Adit discharge, the East Dump Culvert shows slightly elevated concentrations of arsenic, cadmium, copper, molybdenum, selenium and zinc in comparison to typical background values. Of these, levels for total/dissolved arsenic, total cadmium, total/dissolved selenium and total zinc exceeded maximum allowable guideline values. The low flow of this discharge at the time of sampling (<1 L/s), and the relatively-low levels of trace elements, suggests that the minor loadings associated with this flow are greatly diluted to acceptable conditions in the receiving environment.

Collectively, the similar major and minor element proportions of the East Dump Culvert and 2475 Adit suggest their compositions reflect similar modes of water-rock interaction, and indicate there is some degree of geological consistency in the subsurface environments of the tunnel and Adit complexes.

#### *South Leduc Creek*

In contrast to the 2475 Adit and East Dump Culvert drainages, background flows in South Leduc Creek are strongly influenced by melt waters and suspended sediments emanating from the toe of the South Leduc Glacier, which contribute to lower salinity and higher turbidity (Table 1). The lower ionic strength of South Leduc Creek is reflected in the TDS, conductivity and hardness values, all of which are characteristic of soft waters. Stream waters were reasonably turbid at the time of sample collection (TSS = 41 mg/L). The high energetics of South Leduc Creek, in combination with glacier-related erosion occurring within the catchment, likely contribute to perennially turbid conditions.

High stream-turbidity has a marked influence on several parameters, including nutrient parameters and total metals. For example, elevated levels of total phosphate (0.0194 mg/L) can likely be attributed to the suspension of phosphate-bearing mineral components. TSS also exerts the dominant control on metal concentrations, with most metals being present predominantly as metal-bound particulates. Typical to natural conditions in streams influenced by erosional activity, several metals exhibit total levels above B.C. guidelines for the protection of aquatic life, including aluminum, cadmium, chromium, copper and iron. With the exception of aluminum, the dissolved values for these elements remain well below aquatic life guidelines. Given that the exceedances for cadmium, chromium, copper and iron are governed largely by particulate phases, the total values for these elements have little relevance to metal bioavailability given that the toxicity of metals to aquatic biota is typically governed by the free-metal ion concentration in solution (*i.e.*, dissolved forms).

The dissolved value for aluminum exceeds the B.C. guideline for aquatic life. However, a large proportion of the “dissolved” aluminum inventory is predicted to be present as aluminum colloids which will pass through a 0.45 µm filter. As such, the dissolved aluminum values in this system are predicted to be an overestimate of aluminum bioavailability and toxicity. The same scenario is predicted to explain the relatively-high “dissolved” iron value (*i.e.*, 0.122 mg/L). The presence of Fe- and Al-colloids smaller than 0.45 µm is consistent with glacial-derived fine-grained suspensions.

Collectively, the data for South Leduc Creek suggest that TSS will provide the greatest limitation to biological productivity, and not metal levels. The vast proportion of metals present in the South Leduc system are predicted to be present in forms which are unavailable to aquatic biota (*e.g.*, metals bound to clay/silt particles, colloids, *etc.*).

#### **4. Recommendations**

In general, it is important to note that the interpretations possible from the single round of sampling that has been conducted are extremely limited. Additional sampling will be needed to adequately define seasonal variability in site water quality conditions. Additional sampling sites could include control and receiving sites on both the Leduc and Bowser systems, and should be assessed based on possible/probable mining locations. In the paragraphs below, considerations are outlined with regards to programs in support of water quality/flow characterization and metal leaching/acid rock drainage predictions.

Water Quality Sampling and Flow Measurements - The advancement of the Granduc property from an exploration site to an operational mine would require a B.C. Environmental Assessment Certificate and permits under the *Mines Act* and

*Environmental Management Act* of B.C. As part of the environmental programs in support of the Certificate and these permits, consideration should be given to the collection of data which are sensitive to project timelines. For example, seasonal flow and water quality data would be required for both the baseline characterization and impact assessment. At a minimum, monthly water quality collection of surface flows for a period of 1 year is required for metal mines in B.C. for the establishment of baseline conditions. Further, groundwater samples (e.g. from the 2475 Adit) should be collected on a quarterly basis.

Similarly, it is expected that continuous flow-measurements for critical drainages will be required for the development of baseline hydrologic conditions and the development water management strategies (mine dewatering, diversions, sedimentation ponds, *etc.*). Continuous stream-flow measurements can be obtained at relatively low cost through the installation of automated recording devices. For example, near-term installation of a continuous flow monitor underground at the 2475 Adit is recommended as a relatively low cost measure that could provide very useful information. The device could be installed sufficiently far underground that freezing is not expected to be a concern. Continued monitoring of water quality and flows from the 2475 Adit would be particularly important if any dewatering of the existing underground mine workings proves necessary. Authorization for any such dewatering is expected to require accurate predictions of flow and contaminant loadings to the receiving environment.

ML/ARD - As part of permitting through the B.C. Ministry of Energy, Mines and Petroleum Resources (MEMPR), a combination of static and kinetic test work would be required to assess the likelihood of Acid Rock Drainage (ARD) and the potential for metal leaching (ML). The ML/ARD program would be a critical component of the environmental assessment. Static test work involves acid base accounting, whole rock analysis, and mineralogical examination, whereas kinetic programs are designed to look at the rates of metal leaching and the relative rates of acid producing and acid consuming reactions. In general, a minimum of 30 to 50 weeks of kinetic test work is typically required by MEMPR for metal mines in British Columbia, and therefore there is an element of time sensitivity.