

ASSESSMENT REPORT

**BC Geological Survey
Assessment Report
30132**

**DIAMOND DRILLING, AIRBORNE &
GROUND GEOPHYSICAL SURVEYS,
GEOLOGICAL MAPPING AND PROSPECTING
ON THE
RANCH PROPERTY**

**TOODOGGONE AREA
NORTHERN BRITISH COLUMBIA**

**LIARD MINING DIVISION
LATITUDE 57° 25' N LONGITUDE 127° 23' W
NTS MAP SHEETS 94E/05, 06, 11 & 12
MINERAL CLAIM SHEETS 94E/043, 044, 053, 054**

CLAIMS:
(tenure no's upon which
work was done in 2007)

- 507328, 507329, 507330, 516988, 517311, 518259
- 518261, 518263, 518265, 518266, 518267, 518268
- 519032, 519033, 519035, 519037, 519038, 519079
- 521433, 521446, 521447, 528836, 528838, 528847

OWNER: Guardsmen Resources Inc., Langley, B.C.

OPERATOR: Christopher James Gold Corp., Vancouver, B.C.

**REPORT
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**REPORT
DATE:** July 31, 2008

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1.0

SUMMARY

The Ranch property is located in northern British Columbia about 470 km northwest of Prince George and 60 km northwest of the Kemess South mine. The property covers an area of 16,464 hectares and is 100%-owned by Guardsmen Resource Inc., a private mining company based in Langley, B.C.

The property is located near the northwestern limit of the Toodoggone District which has seen significant levels of exploration and mine development over the past three decades. The district is known for porphyry copper-gold deposits and epithermal gold-silver deposits.

Past work in property area spans the period from 1973 to 2006. Texasgulf Canada Limited and a number of junior or private mining companies have carried out various work programs on the property, including extensive trenching and diamond drilling campaigns on three main resources zones: Bonanza, Thesis III and BV. In 1991, Cheni Gold Mines mined 41,200 tonnes of ore grading 9.2 g/t Au from three small open pit operations at the Bonanza, Thesis III and BV zones. The ore was trucked approximately 40 km to Cheni's Lawyers property mill for processing.

The property is underlain mainly by trachyandesite ash-flows to lapilli tuffs of the Adoogacho and Metsantan Members of the Lower Jurassic Toodoggone Formation. The volcanic sequence is intruded locally by dikes which are compositionally similar to the volcanic units and may represent feeder systems to them. Felsic dikes and irregular bodies of dacitic, rhyo-dacitic and rhyolitic composition have been encountered in a number of drill holes. These intrusive rocks may be genetically linked to late-stage ore-forming fluids.

The gold-silver deposits on the Ranch property occur as fissure veins, quartz stockwork zones, breccia zones and zones of silicification. Principal ore minerals include argentite, electrum, native gold and silver and lesser chalcopyrite, galena and sphalerite. Also present in the area but not confirmed on the property is porphyry-style mineralization. The Ranch deposits are classified as high sulphidation (alunite-kaolinite) or acid-sulfate type. At least six distinct zones of strong alteration are recognized. All have a highly sulphidized mineral assemblage associated with advanced argillic alteration zones containing kaolinite and alunite that formed contemporaneously with the deposits.

Work completed by Christopher James Gold Corp. during the period late April to mid September 2007 consisted of the following: the drilling of 45 HQ and NQ2-sized diamond drill holes totaling 7,194 m in four mineralized zones on the property; mapping, prospecting and geochemical sampling in two areas well outside the drill areas; a helicopter-borne magnetic gradiometer survey consisting of 2,229 line km within a single, 54 km² block in the southern part of the property; and a 3D-IP survey totaling 61 line km completed in the southern part of the property, over and adjacent to known zones of gold mineralization. Cost of the 2007 work on the Ranch property totaled \$4,924,517.08.

2.0

CONCLUSIONS

The 2007 drilling at the Ranch property will prove invaluable in the updating of historic resource estimates to 43-101 compliant standards. The airborne and ground geophysical surveys were successful in identifying a possible porphyry-type target on the property as well as additional high-sulphidation gold targets which, after further screening, will likely warrant additional drill-testing. Outside mapping and prospecting has identified two additional precious metals target areas which warrant follow-up.

3.0

RECOMMENDATIONS

The following work is recommended for the Ranch property:

1. Complete a more thorough review of the 3D-IP survey results, incorporating in with it an overview of all past soil geochemical, geological and diamond drill results on the property. Based on the approximate coincidence of moderate chargeability and resistivity responses with known gold mineralization at the Bonanza Zone, the 3D-IP survey method may provide effective in identifying additional valid drill targets outside of historical exploration areas. The latter have, in the writer's opinion, received a too heavily-weighted amount of work in the past. Based on the wide distribution of gold occurrences on the property, the volcanic-hydrothermal system contained within it is large and likely hosts other significant, as yet undetected zones of mineralization.
2. Carry out additional 3D-IP surveys as extensions to the 2007 survey in order to fully delineate anomalies partially defined by the survey. Especially important is the need to fully define the coincident chargeability-resistivity anomaly southwest of the Thesis II and III zones. This area is also characterized by a high aeromagnetic response and may hold potential for the discovery of a deeper-seated porphyry deposit similar to that at Kemess North.
3. Carryout additional 3D-IP surveys in the target area located approximately 2 km northwest of the Thesis area (refer to the discussion in Section 9.1.2 above). This area may have a structural and alteration-mineralization setting similar to that at the Bonanza and Thesis zones and should be further examined.
4. Revisit the mineralized surface exposures in the Mickey Zone to ascertain whether the rock samples collected by Christopher James in 2006 were taken from outcrop or float. If it is determined that they were taken, for the most part, from outcrop, it may be warranted to carry out a shallower drill test of this zone. Better precious metals grades here may be restricted to shallower depths than those drill-tested to date.
5. Complete the detailed sectional interpretations for diamond drilling on the Bonanza, Thesis II and Thesis III zones. The purpose of doing so would be two-fold: (1) to assist in the preparation of 43-101 compliant resource estimates as part of the requirements of updating the 2006, 43-101 report on the property; and (2) to ascertain what additional resource potential may exist at each of the mineralized zones and how much more drilling, if warranted, would be needed to test this potential.

4.0

INTRODUCTION

4.1 General Statement

In December 2007, the writer was asked by Scott Gifford, President of Guardsmen Resources Inc., to compile data and prepare an assessment report on the Ranch property in the Toodoggone District of northern British Columbia. This report describes the results of May to September 2007 field work carried out by Christopher James Gold Corp. who held the property under option from Guardsmen Resources Inc.

The writer is familiar with the subject property having worked on it in September 2006 and in portions of May, June and September 2007. In 2006 he logged core from the Thesis III Zone under the supervision of Cam Graham, then VP Exploration for Christopher James Gold Corp. In 2007 his primary role was to assist in the supervision of diamond drilling and the core logging and sampling related to it. Core from both the Bonanza and Mickey Zones was logged.

The writer is familiar with the general geological setting of the Toodoggone District, having been involved in a number of grass-roots and drilling projects in the area during the period 1968 to 2007.

4.2 Location and Access

The Ranch property is located in northern British Columbia about 470 km northwest of Prince George and 60 km northwest of the Kemess South mine (see Figures 1 and 2 in Folder 2 of the CD). Specifically, the claims are located in the Liard Mining Division, on map sheets 94E/05, 06, 11 & 12 at coordinates 57°25' N & 127°23' W.

Access is via helicopter, based in the summer months at the Kemess South mine, or based year-round in Smithers, a distance of 320 km from the property. Road access to the Kemess South mine is via an all-weather gravel road which connects the mine to supply centers at Mackenzie, Fort St. James and Prince George. There is regularly-scheduled air service from the mine to Prince George, Smithers and Vancouver from Monday to Thursday throughout the year.

Future road access to the property, if required, could be via a system of active and decommissioned mine access roads which lead northwesterly from the Kemess South mine through the Baker Mine and Lawyers property and onwards to the Ranch property.

4.3 Claims

The 46 mineral claims that comprise the Ranch property cover a total area of 16,464 hectares (see Figure 3 in Folder 2). Table 1 (in Folder 3) presents the claims data as of April 23, 2008. The claims are 100%-owned by Guardsmen Resources Inc., a private mining company based in Langley, B.C.

4.4 Topography, Vegetation and Climate

The Ranch property is located largely above tree line at an elevation of 1300 - 1900 m. The area consists of rounded hills with steep talus and overburden covered slopes. Outcrop on the property is sparse and limited predominantly to ridges and valleys. Parts of the property have been disturbed from surface mining activities carried out by Cheni Gold Mines in 1991.

In the alpine, vegetation consists of alpine meadow grasses, heather and shrubs with isolated patches of coniferous trees. In reclaimed areas, the recommended alpine mix provides rich lush green growth for the first year. In subsequent years the lush growth is reduced, due to lack of nutrients and grazing by ungulates occupying the area. At lower elevations, open forest of pine and hemlock predominate with alders occurring in poorly drained areas or on steep slopes.

The climate of the property can be described as cool continental with cool summers and cold winters. Temperatures range from 30° C in summer to -20° C in winter. Some permanent ice is present on the property. The summer exploration season lasts from early June into late September.

4.5 History and Development

A concise summary of the history and development on and around the Ranch (previously AL) property is given by Graham et al. in their 2006 assessment report on the Ranch property (Assessment Report #28887). It describes past work as follows (additional comments or edits by the writer are in *italics*):

- 1973: Surface exploration, aimed at the identification of copper-molybdenum porphyry mineralization, was conducted by Newconnex Exploration in and around the current Ranch property.
- 1979: Energex Minerals Ltd. ("Energex") optioned a group of four claims (the original AL property) over part of the current Ranch property.
- 1980: The AL property, along with the nearby Moose and JD properties, were optioned to Texasgulf Canada Ltd. ("Texasgulf") who completed reconnaissance geochemical surveys, geological mapping and staking of additional ground south of the current Ranch property.
- 1981: Texasgulf conducted more extensive grid-controlled geochemistry, along with trenching and VLF-EM/magnetometer orientation surveys; results were positive and additional ground was acquired.
- 1982: Texasgulf conducted additional geological mapping, rock and soil geochemistry, IP surveys, trenching, diamond drilling and a legal survey of corner posts. Drilling and trenching focused on the Bonanza and Ridge zones; drilling was considered a technical success in that the target was intercepted. However results were variable, perhaps reflecting nugget effects which are a common occurrence in high-grade precious metal vein systems.

- 1983: Texasgulf conducted surface exploration, including trenching, geological mapping and soil sampling, which lead to the discovery of the "Verrenas" zone (a very high-grade portion of the Bonanza zone) and the Thesis II zone.
- 1984: Texasgulf conducted extensive trenching and diamond drilling of the Bonanza, Ridge and Thesis II zones, as well as on the newly discovered high-grade Thesis III and BV (Barite Vein) zones. The property was subsequently returned to Energex by Texasgulf.
- 1985-1986: Energex conducted a surface program consisting of trenching, geological mapping, geophysical and geochemical surveys, followed by drilling of in excess of 14,500 m, mainly in the Bonanza, BV and Thesis zones.
- 1986: Energex constructed a pilot plant with a 5.5 tonnes/day capacity to process high-grade ore from the Thesis zone; a total of 209 tonnes of ore was processed. A geological resource of 1,900,000 tons *grading* 0.16 oz/ton (1,723,490 tonnes *grading* 5.5 grams gold per tonne; 304,000 contained ounces), including a higher grade portion of 374,680 tons *grading* 0.28 oz/ton (339,872 tonnes *grading* 9.6 grams gold per tonne; 104,910 contained ounces) (uncut and undiluted, with a 0.12 oz/ton cutoff) was reported for several zones on the AL and Mets properties.
- 1987: Energex drilled 8,600 m in 122 holes, directed towards proving up reserves in the Bonanza and BV zones. Writers of Assessment Report #17655 concluded that "an insignificant amount of drilling inadequately tested the depth potential of the Bonanza zone".
- 1988: Energex completed 6,800 m of drilling on the Bonanza West, Thesis, Ridge and the low grade *copper-gold* Bingo zone. By the end of 1988, a total of 19 surface showings had been discovered on and around what is now Guardsmen's Ranch property.
- 1987-1988: Energex carried out a feasibility study and heap leach tests funded by flow-through financing and aimed at a self-financed development. Changes in the structure of flow-through funds in 1989 precluded Energex's ability to continue to raise money and carry out this plan.
- 1990: Cheni Gold optioned the AL property and completed an access road from the Lawyer's deposit to the Bonanza zone. Reserves of 226,775 tonnes of ore with an average grade of 10.28 g/t gold (69,993 contained ounces) was reported for the Bonanza zone (George Cross Newsletter #95, May 16, 1990).
- 1991: Cheni Gold *surface-mined* high grade *ore* from the Bonanza zone and trucked it approximately 40 kilometers to the south *for processing* at the Lawyer's mill. Assessment Report #25707 states that about 10,000 ounces of gold were recovered from 38,000 tons *of ore* at an average grade of 0.30 oz/ton mined from two small pits, whereas the BC MINFILE reports 60,000 tons of an unspecified grade was mined.
- 1996: AGC Americas Gold Corporation ("AGC") *acquired an option on the AL property to add it to their large holdings in the area. During 1997 AGC formed a JV with Antares Mining Corporation ("ANZ") and conducted a twenty-six hole, two stage diamond drill program, induced polarization survey and a helicopter based EM - Magnetometer – Radiometric survey over the property.*
- 2001: *The Mining Leases covering the Bonanza, Thesis and BV Zones were allowed to lapse on July 21, 2001. In addition, AGC allowed their claims in the Alberts Hump area to lapse. Guardsmen acquired the property by staking in August 2001. Additional claims were added to the property between 2002 and 2005 as previous claims expired.*

- 2002: In December 2002, Guardsmen Resources Inc., optioned the Ranch property to Bishop Gold Inc.
- 2003: Bishop Gold conducted a limited ten hole (712 m) drill program on the Ranch property's Bonanza Zone.
- 2005: Guardsmen formed a Joint Venture with Bishop Gold Inc. (85% Guardsmen, 15% Bishop) on the Ranch property.
- 2006: In June 2006, Christopher James Gold Corp. acquired an exclusive option to purchase all of the shares of Guardsmen Resources Inc. Guardsmen's principal asset was its 85% JV interest in the Ranch property. In August and September 2006, Christopher James completed the drilling of 625 m of diamond drilling in 7 holes on the Thesis III Zone and carried out surface mapping and sampling in several areas on the property.

4.6 Summary of 2007 Work Done

Work completed by Christopher James Gold Corp. during the period late April to mid September 2007 consisted of the following:

- the drilling of 45 HQ and NQ2-sized diamond drill holes totaling 7,194 m in four mineralized zones on the property;
- mapping, prospecting and geochemical sampling in two areas well outside the drill areas;
- a helicopter-borne magnetic gradiometer survey consisting of 2,229 line km within a single, 54 km² block in the southern part of the property; and
- a 3D-IP survey totaling 61 km completed in the southern part of the property, over and adjacent to known zones of gold mineralization on which most past exploration and surface mining activity had been carried out.

The claims upon which work was done include tenure no's 507328, 507329, 507330, 516988, 517311, 518259, 518261, 518263, 518265, 518266, 518267, 518268, 519032, 519033, 519035, 519037, 519038, 519079, 521433, 521446, 521447, 528836, 528838 and 528847.

The entire 2007 program was helicopter-supported using a Bell Long Ranger provided by Yellowhead Helicopters of Valemount, B.C. To support the technical work program, a sizeable exploration camp was established in an area central to the four drill areas. Due to an unseasonably late snow-melt and record snow accumulations through the winter months, camp construction at site was delayed. This delay required the construction of a temporary camp on the Sturdee airstrip, from which drill crews and all other personnel commuted to and from the property on a daily basis for the first few weeks of the program. Cost of the 2007 work on the Ranch property totaled \$4,924,517.08.

5.0

GEOLOGY AND MINERALIZATION

5.1 Regional Geology and Mineral Deposits

The Ranch property is located near the northwestern limit of the Toodoggone District which has seen significant levels of exploration and mine development over the past three decades (see Figure 4 in Folder 2).

Staargaard (1994) summarized the regional geology of the Toodoggone area as follows (with some modifier comments or edits by the writer in *italics*):

“The Toodoggone area is situated in the Intermontane Belt, near its eastern margin. The oldest rocks in the region are limestones and rhyolitic tuffs of the Permian Asitka Group. These are overlain by mafic to intermediate flows and related fragmental and sedimentary rocks of the Upper Triassic Takla Group. Overlying these in turn are volcanics of the Lower Jurassic Toodoggone Formation, a complexly intercalated pile of largely subaerial, high potassium, calc-alkaline latite and dacite flows, fragmental rocks and related sediments exceeding 2,200 metres in thickness. Two main periods of eruptive activity are evident and the formation is subdivided into six members on the basis of lithology, mineral assemblage, texture and field relationships.” (*see Table 2 in Folder 3*).

The youngest stratified rocks in the area are those which comprise the Mid to Upper Cretaceous Sustut Group. These occupy the southwestern part of the Figure 4 map area. They consist of a lower section of chert, quartz pebble conglomerate and felsic ash tuff and an upper section of mudstone-siltstone with coal layers.

“A series of comagmatic plutons were emplaced during the lower volcanic cycle and were partly unroofed and eroded during a brief period of uplift before commencement of the upper cycle.”

“Extensive and repeated faulting led to the development of an asymmetric collapse feature and served to localize epithermal vein-type gold-silver mineralization *at many localities such as Shasta, Baker Mine and Lawyers, and high sulphidation gold-silver mineralization such as that present at the Bonanza, Thesis and BV Zones on the Ranch property (see Figure 4). All but the Baker Mine are hosted in Toodoggone volcanic rocks. The Baker mine, although of the same general age as the other deposits, is hosted by older Takla Group rocks.* A number of porphyry copper-gold deposits and prospects, including the Kemess South Mine and the Kemess North deposit in the southeastern portion of the Toodoggone area, are apparently related to plutons comagmatic with Toodoggone Formation volcanic rocks.” *A schematic section of the deposit types and their zonal relationships is shown in Figure 5 (in Folder 2).*

5.2 Property Geology and Mineralization

Figure 6 (and its accompanying legend, both in Folder 2) shows the geology of the Ranch property area. It was obtained via a download from the British Columbia government

internet site “The Map Place”. The downloaded map does not show details of the property geology, a complete map of which is not available at present.

5.2.1 Lithology

The northern two-thirds of the property is underlain by trachyandesite ash-flows to lapilli tuffs and reworked equivalents of the Adoogacho Member (Toodoggone Formation). Overlying trachyandesite (latite) flows with lenses of lapilli tuff of the Metsantan Member occupy the southern part of the property. Other volcanic and sedimentary rocks of limited extent include small areas of Metsantan Member volcanic conglomerate and finer bedded epiclastic rocks exposed in the eastern part of the property and Upper Triassic Stuhini Group undivided arc volcanic and sedimentary rocks in the northern part of the property. A subvolcanic plug or flow dome related to Toodoggone volcanism is present in the northeastern part of the property.

The volcanic sequence is intruded locally by dikes which are compositionally similar to the volcanic units and may represent feeder systems to them. Felsic dikes and irregular bodies of dacitic, rhyo-dacitic and rhyolitic composition have been encountered in a number of drill holes. These intrusive rocks may be genetically linked to late-stage ore-forming fluids.

5.2.2 Structure

Structural interpretation is limited by the poor rock exposure. Where bedrock is exposed, Toodoggone Formation volcanic units are generally flat-lying or dip gently to the west. No folding has been observed.

The dominant structures in the area are steeply dipping faults which define a prominent regional northwest structural fabric trending 140° - 170° . In turn, high angle, northeast-striking faults (approximately 060°) appear to truncate and displace northwest-striking faults. Collectively these faults form a boundary for variably rotated and tilted blocks underlain by monoclinical strata.

The geometry and chronology of fault movements are poorly understood, and reconstructions are tenuous. Geophysics, trenching and drilling indicate that there are severe structural complexities associated with alteration zones. Block fault dip-slip movement is suggested where alteration zones are abruptly truncated, and strike-slip movement is common along many linear silicified zones. Slickensides and oriented tectonic breccias are locally present.

5.2.3 Alteration and Mineralization

The gold-silver deposits on the Ranch property are hosted by dacitic to andesitic Toodoggone Formation volcanic rocks. They occur as fissure veins, quartz stockwork zones, breccia zones and zones of silicification. Principal ore minerals include argentite,

electrum, native gold and silver and lesser chalcopyrite, galena and sphalerite. Also present in the area but not confirmed on the property is porphyry-style mineralization.

The Ranch deposits are classified as high sulphidation (alunite-kaolinite) or acid-sulfate type. At least six distinct zones of strong alteration are recognized. All have a highly sulphidized mineral assemblage associated with advanced argillic alteration zones containing kaolinite and alunite that formed contemporaneously with the deposits.

The host rocks are transected by three northerly-trending sub-vertical fault systems, with little evidence of movement. Mineralization is centered on north-northwest trending extensional faults and northeast trending tensional faults related to regional extension. High-grade gold-bearing zones have a crudely elliptical shape and are discontinuous along the controlling fault systems.

Mineralization is limited to within these complex fracture-fault systems, with higher gold values typically occurring within brecciated zones with silicified clasts in a barite and crushed silica matrix. In better mineralized intervals, diamond drill core is 100% silicified and characterized by a frothy texture (usually a box-like lattice left from leached feldspar phenocrysts), with an overall porosity of 5-10%. In 2007 core logs, this type of alteration is referred to as “vuggy silica”. Ore minerals are usually associated with barite in open space cavities within a silica-alunite core, flanked by advanced argillic alteration.

On surface, zones of argillic alteration weather recessively and are typically obscured by alpine vegetation or underlie linear swamps. Where argillically altered zones are exposed on surface they comprise strongly limonite and jarosite-stained argillic and lesser vuggy silica altered felsenmeer.

Previous exploration on the Ranch property has identified four northwesterly and one northeasterly trending fault systems hosting significant precious metals mineralization. These include, from west to east, the BV, Thesis, JK, Bonanza and Ridge zones (see Figure 6 in Folder 2). Higher-grade gold mineralization is hosted by quartz-barite-pyrite-sericite in the BV deposit, by quartz-barite-pyrite-(chalcopyrite, galena, spalerite) in the Thesis III deposit, and by quartz-barite and quartz-pyrite-chalcopyrite-bornite-(barite) in the Bonanza deposit. Mineral assemblages in other zones are similar, with quartz-hematite-pyrite being an important type at the Thesis II and Ridge zones.

In 2006, mapping and prospecting work carried out by Christopher James Gold Corp. outlined a new zone of interest named the Mickey Zone located north of Thesis II and southwest of the Bonanza zone on tenure #518261. It is centered at UTM coordinates 597400 E / 6371100 N. Systematic panel-chip samples were taken on all outcrops & felsenmeer along a north-south trending corridor some 1,500 m long and 50-150 m wide. High-grade samples in this zone include 80.56 g/t Au and 9.7 g/t Au. Of a total of 111 samples taken, 49 samples assayed >1 g/t Au and the average of all samples was 1.36 g/t Au. At the end of the 2006 field season, the Mickey zone was considered a high-priority target for the discovery of high-grade gold mineralization in either a single tabular ore shoot or a series of ore shoots.

6.0

2007 DIAMOND DRILL PROGRAM

6.1 Introduction

Diamond drilling was carried out during the period May 28 to September 12, 2007 by Radius Drilling Ltd. of Prince George, B.C. Forty-five HQ/NQ2 holes totaling 7,194 m were completed in four zones: Bonanza, Thesis II, Thesis III and Mickey (see Table 3 in Folder 3). The breakdown of the number of holes and total meters per zone is as follows:

<u>Zone</u>	<u>No. of Holes</u>	<u>Hole No. Sequence</u>	<u>Meters</u>
Bonanza	29	A07-001 to A07-029	4,858.26
Thesis III	6	A07-030 to A07-035	845.53
Mickey	9	A07-036 to A07-044	1340.84
Thesis II	1	A07-045	149.35

All 2007 drill hole collars were surveyed using a Geo Explorer XT differential GPS unit which has a horizontal accuracy of less than 0.5 metre and a vertical accuracy of about 1 to 2 metres. This survey data (easting, northing and elevation) is presented in Table 3. Down-hole surveys were executed with an EZI Digital Reflex System which gave the deviation of dip and azimuth down the hole. Down-hole survey results are summarized in Table 4 (in Folder 3).

All core was photographed then logged in detail at the site. Logging included the recording of recovery and RQD data for each entire hole. Main zones of mineralized vuggy and pervasive silica were sampled continuously, with a sample interval of mainly 1.0 metre. Argillically or sericitically-altered wall rocks to silicified zones were generally sampled at 1.0 to 2.0 m intervals. Weakly (propylitically) altered wall rocks were sampled at 2.0 m intervals for a distance of about 6 m before and past more strongly altered and mineralized zones. Sampling and assaying procedures were subject to a rigorous QA/QC program which included insertion of standards and blanks for each batch of samples shipped.

Half of the sawed core was retained in the core box and the other half was placed into numbered plastic sample bags which were then placed into labeled and numbered five-gallon pails. The latter were sealed with a lid before they were shipped by helicopter and then truck to the ALS Chemex laboratory in North Vancouver for gold, silver and multi-element analyses. A total of 3,057 samples (including standards and blanks) were analyzed. All retained core is stored on the property at the 2007 exploration camp located about 500 m southwest of the Bonanza Zone, on tenure #518268,

Results of the 2006 drilling program are discussed in Section 6.2. Diamond drill hole plans for the Bonanza, Thesis II/III and Mickey Zones are shown in Figures 7 to 9 respectively in Folder 2.

Appendix 1 (in Folder 4-1) contains the 2007 diamond drill hole records which include: a detailed meter by meter description of lithology, alteration, mineralization and structure coded for brevity; a description per main or sub-interval of lithology and additional descriptive comments; and an explanation of the code used in the meter by meter descriptions.

Appendix 2 (in Folder 4-2) contains the 2007 diamond drill hole sample records and merged analytical results. The 2007 diamond drill hole recovery and RQD records are summarized in Appendix 3 (in Folder 4-3). In Appendix 4 (Folder 4-4), certificates of analysis and chemical procedures have been compiled.

6.2 Results

6.2.1 *Bonanza Zone*

A thorough description of the geological setting of the Bonanza Zone is given by Graham et al. in their 2006 assessment report on the Ranch property (Assessment Report #28887). An update to Graham's description, based on 2007 drilling results and some technical considerations, is given below in bullet form:

- Christopher James Gold Corp. ("CJGC") decided to aggressively drill this zone for several reasons, including:
 - the need to validate a reported historical resource of 266,775 tonnes grading 10.28 g/t Au (George Cross News Letter #95, May 16, 1990);
 - the lack of historical core from which to carry out comprehensive check assay studies. All Ranch (AL) core was apparently buried during the reclamation that followed Cheni Gold's 1991 surface mining activities; and
 - the prospect had been described as not having been adequately depth-tested, leaving open the possibility that significant additional gold resources might be present at depth.
- CJGC completed 29 holes totaling 4,858 m on six east-west sections spaced 25 m apart (see Figure 7 in Folder 2). The holes were inclined from -55° to -65° to the east and west and generally tested to vertical depths of 130-150 m below surface.
- Table 5a (in Folder 3) presents a summary of gold intersections in 2007 diamond drill holes at 1.0, 3.0 and 5.0 ppm Au cut-offs. A review of these mineralized intercepts clearly shows that, for the most part, gold-bearing silicified structures are restricted to within 60 m vertically from surface. The 2007 results do not indicate significant resource potential at depth in the Bonanza zone, although there remains the possibility that steeply plunging ore shoots may persist to greater depths than those encountered in the 2007 drill holes.
- The best "clustering" of higher-grade mineralized intercepts occurs in Holes A07-006, 008, 009, 016 and 017 on Sections 6371975 N and 6372000 N at relatively shallow (30-50 m) depths, below and to the west of the Ghost Pit from which Cheni mined 4,700 tonnes to a depth of about 7 m. Some of the better intercepts here include 5 m grading 6.52 ppm Au in Hole A07-006, 2 m grading 17.47 ppm Au in Hole A07-008 and 1 m grading 22 ppm Au in Hole A07-017.

- A 15-20 m wide, steeply west-dipping rhyodacite feldspar porphyry dike persists throughout the north-south portion of the Bonanza Zone tested by 2007 drilling. It appears to be post-mineral and has likely truncated some gold-bearing zones.
- Table 5b (in Folder 3) is a summary of gold intersections at a 5.0 ppm Au cut-off accompanied by some descriptive alteration and mineralization remarks. It shows that the higher grade mineralization encountered in 2007 drill holes is hosted mainly by zones of vuggy silica accompanied by variable amounts of pyrite, lesser chalcopyrite and enargite and locally barite veins and veinlets. Surprisingly, given the number of higher grade intercepts encountered in the 2007 drilling, visible gold was only rarely noted.
- A mineralized hydrothermal breccia in Hole A07-009 returned a 2 m intercept grading 12.17 ppm Au. The interval contains abundant pyrite seams and veins up to 10 cm thickness. Other hydrothermal breccia zones encountered in the 2007 drilling were also gold-bearing, but lower in tenor. The hydrothermal breccias often contain clasts of vuggy silica rock, indicating that at least two gold-bearing pulses occurred at Bonanza.

6.2.2 *Thesis III Zone*

The writer again defers to Graham et al. and their description of alteration and mineralization of the Thesis III zone given in their 2006 assessment report. The update below, in bullet form, is based on 2007 assay results and geological observations made by others. The writer did not log any of the 2007 drill core from the Thesis III Zone. He did, however, log some core from this zone in 2006 and therefore has some familiarity with its pertinent features.

- CJGC's considerable success with its 2006 drilling at Thesis III included intercepts of 16.0 m grading 11.87 g/t Au in Hole A06-01 and 24.0 m grading 10.75 g/t Au in Hole A06-02. These higher-grade intercepts were cut at relatively shallow depths ranging from 10-30 m. The 2007 drill results were lower in grade; the best intercept was 3.0 m grading 6.55 g/t ppm in Hole A07-030 (see Figure 8 and Table 5a). This intercept is at a shallow depth (at top of bedrock from 6.0-9.0 m), is oxidized (goethite-limonite) and is described as being a possible precursor to vuggy silica rock (see Table 5b).
- Holes A07-031, 033 and 034 returned low grade (<3.0 ppm) intercepts over lengths of 1 to 6 metres. Holes A07-033 and 034 also returned narrow, low grade intercepts at greater down-hole depths. The mineralized interval from 163-164 m in Hole A07-033 is described as a pervasively silicified rock with abundant pyrite. That in Hole A07-034, from 133-134 m, is similar silica-altered rock with abundant disseminated sulphides (10% pyrite, 1% chalcopyrite). The presence of mineralized silica zones at depth, albeit low grade, may indicate that there is some potential for adding resources at depth at Thesis III.
- A review of the descriptive comments in Appendix 1 shows no mention of visible gold in the drill logs for the 2007 Thesis III holes. This is in contrast to the 2006 Thesis III holes, in which visible gold was frequently noted in association with barite in vuggy silica-altered rock. The higher grade mineralization encountered in 2006 likely is due, at least in part, to the greater abundance of visible gold at shallow depths in the Thesis III Zone.

6.2.3 Mickey Zone

Summary comments for the Mickey Zone 2007 drill results are as follows:

- Nine holes tested the Mickey Zone mineralized corridor over a north-south distance of approximately 400 m on three east-west sections spaced about 200 m apart (see Figure 9). The holes were angled at mainly -55° to the east; two holes (A07-041 and 042) were inclined -55° to the west.
- Vuggy silica altered rock, similar to that hosting gold mineralization at other zones on the Ranch property, was intersected from 113-116 m in Hole A07-036, from 131-142 in Hole A07-040 and from 133-136 m in Hole A07-042. In addition, pervasively silicified rock was intersected from 106-113 m and 142-147 m in Hole A07-036 and from 136-138 m and 167-170 m in Hole A07-037. Both vuggy and pervasively silica-altered intercepts contain abundant disseminated pyrite in the 5-20% range. The precious metals grades of these zones ranged from <0.01 to 0.19 ppm Au, <1 to 34.3 ppm Ag and up to 732 ppm Cu.
- The range of vertical depths at which the favourable silicified intervals were encountered in the drill holes is from about 90 to 140 m, which is considerably deeper than the known 60 m vertical extent of gold mineralization at the Bonanza Zone. It could be that had the drilling at the Mickey Zone targeted it at shallower depths, any silica-altered zones encountered may have had higher precious metals contents.
- There is the possibility that the 2006 surface sampling on the Mickey Zone may not have been taken from bedrock or subcrop, but rather from transported blocks of mineralized rock sourced from an area other than that tested by the 2007 drilling.

6.2.4 Thesis II Zone

One hole, A07-045, tested the Thesis II Zone at depth, approximately 40 m vertically below one of the deeper gold-bearing intercepts encountered in historical drilling. The hole returned 6 m grading 1.67 ppm Au from 107-113 m and 6 m grading 2.43 ppm Au from 120-126 m. These intercepts were encountered at vertical depths below surface of 90 and 100 m. Similar to the 2007 drilling at Thesis III, the one hole drilled here shows promise for the potential for adding resources at depth.

The gold-bearing interval from 107-113 m is characterized by more massive rather than vuggy silica (although some vuggy silica is present) and contains 3-10% disseminated pyrite and minor disseminated chalcopyrite and enargite. The lower interval from 120-126 m is vuggy silica with 3-5% disseminated pyrite but with no copper sulphides noted.

7.0 2007 GEOLOGICAL CONSULTANTS' STUDIES

7.1 Field Observations - Jim Shannon, PhD

Jim Shannon, PhD Geology, logged core at the Ranch property in July 2007. A memo report from Dr. Shannon to Dr. Max Baker, President of Christopher James Gold Corp. is

included in this report (Appendix 5: Sub-folder 4-5a). Highlights of Dr. Shannon's field observations are:

- The main host rock for mineralization and alteration at the Bonanza Zone appears to be a specific horizon of crystal-lithic lapilli tuff. Well-bedded volcanoclastics are present at the bottoms of a number of drill holes. The latter lithologic unit is relatively distinct and if it has lateral continuity it should make a good stratigraphic marker horizon. This potential marker may be useful in working out the structural complexities at Bonanza.
- Preliminary observations at Thesis III (Holes A07-030, 031 and 032) suggest a different host rock than at Bonanza. The altered rocks in these three holes may be a possible porphyritic intrusive.
- Rhyodacite porphyry dikes are present at Bonanza and Thesis III. Unless strongly bleached and argillically-altered, the dikes have disseminated magnetite and are weakly to moderately magnetic. The larger bodies will have strong magnetic contrasts with the relatively non-magnetic andesitic tuffs and should produce strong, positive, linear magnetic anomalies.
- There is mounting evidence of a possible genetic relationship between the rhyodacite porphyry dikes and gold mineralization. The rhyodacite dikes locally exhibit significant hydrothermal alteration, are cut by minor quartz and calcite veins and contain disseminated pyrite. The silicified zones and hydrothermal breccias are spatially associated with a rhyodacite dike at Bonanza. A detailed petrographic analysis of a rhyodacite porphyry dike shows minor disseminated chalcopyrite associated with disseminated pyrite and minor barite associated with carbonate alteration of alkali feldspar phenocrysts (see Shannon petrographic report, also in Appendix 4, Sub-folder 4-5a)
- At Bonanza, the main altered-mineralized zones are cored by hydrothermal breccias and strongly silicified replacement zones. There are well developed proximal alteration halos consisting of alunite, sericite(?) and clays and broad, outer zones of propylitic alteration. There is a distinct lack of open-space vein textures, banded veins, crustification textures, and quartz-calcite textures indicative of boiling (bladed and ghost blade textures) that are commonly developed in adularia-sericite type (low sulphidation) systems. The lack of these textures and the lack of evidence of adularia argue against a significant low-sulphidation overprint.
- Hydrothermal breccias are well developed at Bonanza and occur over a vertical extent of at least 120 meters. The thickest hydrothermal breccia intercepts on Section 6372000N are about 7 to 11 meters thick. Hydrothermal breccias locally contain clasts and fragments of mineralized material including vuggy silica, barite and pyrite. Some hydrothermal breccias are mineralized with variable amounts of disseminated and wispy stringer pyrite, disseminated to clotted barite and disseminated pyrite, enargite, chalcopyrite, galena and sphalerite(?). Thus, the hydrothermal breccias are inter-mineralization and probably locally contain significant gold mineralization. The abundance of hydrothermal breccias and the associated very fine- to fine-grained silica and vuggy silica impart a high-level epithermal character to the system.
- Alteration halos show systematic patterns developed about the core silicification and hydrothermal breccias. The gray and pink quartz-alunite alteration halos are typically about 3 to 6 meters thick and range up to about 9 meters thick on Section 6372000N.

Thus, the quartz-alunite alteration halos are about as thick as the core silicified/hydrothermal breccia zones and suggest that the alteration halos are relatively narrow and telescoped at Bonanza. In contrast, Holes A07-030 and 031 at Thesis III show broad alteration halos of light to medium gray quartz-alunite(?) -pyrite that surround the core vuggy silica/massive silica zone. Preliminary observations suggest that this quartz-alunite-pyrite alteration zone is up to 30 to 40 meters thick and is less telescoped than the alteration halos at Bonanza.

- Structural complexities, especially at Bonanza, are indicated by numerous faults and fault zones intersected by drilling. Most faults are brittle and post-mineralization. Significant offsets are indicated by juxtaposition of rock types and contrasting alteration types. Many, if not a majority of lithologic contacts and alteration contacts are faults.
- New target areas (e.g. Mickey Zone, Alberts Hump) should be tested with 2 or 3 drill holes and wait for assays before follow-up drilling. This procedure would require more helicopter time for moving drill rigs and for site preparation but prevent drilling getting too far ahead of assaying and the understanding of the major controls on gold mineralization.

7.2 Petrological Studies - Jim Shannon

As a follow-up to his field work at the Ranch property during the month of July 2007, Dr. Shannon carried out limited petrological studies on two core samples from the Bonanza Zone. His petrological report is included in this report in Appendix 4, Sub-folder 4-5b.

7.3 Field Observations - Richard Nielson

Richard Nielson, Consulting Geologist, logged core at the Ranch property in August 2007. A memo report from Mr. Nielson to David Trabert, VP Exploration of Christopher James Gold Corp., is included in this report (Appendix 5: Sub-folder 4-5b). Highlights of Mr. Nielson's field observations are:

- A large porphyry (copper?) type of intrusion is believed to underlie the entire property. Aqueous fluids degassed from the deep intrusion, following steep fractures and in some areas were closely followed by the intrusion of rhyolite and quartz-latitude porphyries. The high temperature and high energy fluids produced breccias and hydro-fractures. Near surface dissociation reactions in the fluids produced sulfuric acid, which produced hypogene alunite, vuggy silica by acid leaching and kaolinite clay alteration.
- Gold mineralization came along later and preferentially precipitated in brecciated and vuggy quartz; barite also appears to be late. Most known gold deposits on the Ranch property are located along relatively narrow structures and are confined to a zone from surface to 70 meters depth.
- The compact and well indurated nature of the host volcanic rocks seem to favour structurally-controlled deposits of limited size. A possible exception is the peripheral aprons around the flow dome complexes where relatively permeable pyroclastic aprons may develop. This type of target may possibly be detected by an IP survey that is designed to locate associated disseminated pyrite in these permeable pyroclastic rocks.

- Mr. Nielson found no firm evidence that major flat faults have cut through the Bonanza area, thereby cutting off gold mineralization or otherwise disrupting alteration or mineralizing patterns.
- Gold commonly is associated with vuggy silica at Bonanza, but only at shallow levels. Gold values fall off to almost nil about 60 m down-hole, even though attractive silica with pyrite is present below 60 m.
- At Bonanza, Mr. Nielson found no evidence for a permeable horizon or aquaclude that would divert and direct fluids laterally or sub-horizontally into a layered bed or unit that would later be the host for tabular gold mineralization as at Yanacocha, Peru.
- Thesis III is a relatively wide zone of alteration characterized by fine granular to micro-crystalline quartz that is strongly brecciated and associated with introduced alunite and strong hydrolytic illite-sericite alteration. Host rock for mineralization appears to be a fine-grained quartz latite porphyry. Barite is scattered through silicified rock along veinlets and in vugs within the silicified rock.

8.0 2007 MAPPING AND PROSPECTING SURVEYS

8.1 Patti Zone

Tim Nillos, project geologist for Christopher James Gold Corp., carried out a one-day mapping and rock geochemical sampling program in the Patti Zone (previously Al-Patti) located in the southern part of the Ranch property (on tenure #518266), about 2 km northwest of the Mets minfile occurrence (see Figures 6 and 10 in Folder 2).

Mr. Nillos' work covered an area of about 200 m by 300 m in an area underlain by silicified porphyritic andesite of likely the Metsantan member of the Toodoggone Group. In the Patti Zone, the silicified andesite is cored by a one hectare area of massive silica alteration which is fractured and occasionally iron-stained.

A total of 9 rock chip samples were collected and later submitted to ALS Chemex for gold and multi-element analyses. Selected analytical results are summarized in Table 6 in Folder 3 and the Certificate of Analysis can be found in Appendix 4.

Six of the samples were collected from the area of silicified porphyritic andesite. These returned values ranging from <0.01 to 1.1 ppm Au and 0.3 to 12 ppm Ag. Three samples collected from the area of massive silica returned values ranging from 0.16 to 13.6 ppm Au and 0.4 to 2.3 ppm Ag. The 13.6 ppm Au value is a significant result and it's interesting to note that although there is a historic drill hole nearby, it appears to have been drilled due north, away from the location of the 2007 surface sample. It would be helpful to obtain the assay results for the historic hole, if they are still available.

8.2 AB Zone

Michael Renning, prospector, and Scott Gifford, President of Guardsmen, carried out a one-day prospecting and rock and silt sampling program in the AB Zone in the northern part of the Ranch property (at the common boundary between tenure no's 528836 and

528838 - see Figure 11 in Folder 2). They were attracted to the area by noting the presence of gossanous fault structures exposed along the banks of a northwesterly-flowing stream.

Renning and Gifford collected six rock chip and two silt samples in the immediate vicinity of the AB Zone. Two additional silt samples were collected to the west and southeast of the zone. Selected analytical results are summarized in Table 6 in Folder 3 and the Certificate of Analysis can be found in Appendix 4.

Highlight of the AB Zone work are two samples (AB-R1 and AB-R2) taken from a pyritic, hydrothermally-altered shear within a fine-grained andesite-basalt unit. These two samples returned high Sb-As-Hg values to 15 ppm, 4790 ppm and 18 ppm respectively, and low precious metals values. The high “pathfinder” elements may indicate that the current level of erosion on these structures may be too high in what are often vertically-zoned epithermal systems.

9.0 2007 GEOPHYSICAL SURVEYS

9.1 Airborne Magnetic Gradiometer Survey

9.1.1 Introduction

On behalf of Christopher James Gold Corp., Aeroquest International carried out a helicopter-borne magnetic gradiometer survey consisting of 2,229 line km within a single, 54 km² block in the southern part of the property. The area surveyed covered all historic gold deposits and minfile occurrences on the property. Survey flying took place between April 28 and May 11, 2008. The base of operations was at the Kemess South mine, 60 km southeast of the survey area.

A copy of Aeroquest’s report is appended as Appendix 7 (Sub-folder 4-7a). The report includes a set of five (5) 1:10,000 maps (appended in Sub-folder 4-7b) as listed below:

Ranch: N-S Lines

- TMI - Coloured Total Magnetic Intensity (TMI) with line contours

Ranch: E-W Lines

- TMI - Coloured Total Magnetic Intensity (TMI) with line contours

Ranch (All Lines)

- M3AS - Measured 3-D Analytic Signal with line contours
- MVG - Measured Vertical Magnetic Gradient with line contours
- TDR - Colour-shaded Tilt Derivative of the TMI

The coordinate/projection system for the maps is NAD83 - UTM Zone 9N. For reference, the latitude and longitude in WGS84 are also noted on the maps. All the maps show flight path trace and contain topographic base data. Survey specifications are displayed in the margin of the maps.

9.1.2 *Results*

For the purposes of discussion, the writer has chosen two of the above maps on which to make a few review comments. They are: (1.) TMI - Coloured Total Magnetic Intensity (TMI) with line contours (Ranch east-west lines); and (2.) MVG - Measured Vertical Magnetic Gradient with line contours.

TMI - Coloured Total Magnetic Intensity (TMI) with line contours (Ranch east-west lines):

The writer's review comments are as follows:

- There are three discreet aeromagnetic highs which display prominently on the map. They are:
 - a roughly circular feature measuring about 700 m in diameter centered about 600 m west-southwest of the Thesis III Zone;
 - an elongated, north-northwest trending feature measuring about 1,800 m by 400 m and centered about 1 km northwest of the Alberts Hump minfile occurrence; and
 - a small roughly circular feature measuring about 200 m in diameter centered about 1,400 m northwest of the Thesis III Zone.
- The writer suggests that these aeromagnetic features may represent high-level intrusions, possibly co-magmatic with Toodoggone volcanic rocks. They may have provided the "heat engine" for the volcanic-hydrothermal system depicted in the Schematic Model shown in Figure 5. The presence of such buried intrusive bodies would concur with Richard Nielson's comment in Section 7.3 of this report. He states that "a large porphyry (copper?) type of intrusion is believed to underlie the entire property. Aqueous fluids degassed from the deep intrusion, following steep fractures and in some areas were closely followed by the intrusion of rhyolite and quartz-latite porphyries."
- On the northeast flank of the 700 meter diameter aeromagnetic high described above is a distinct northwest-trending aeromagnetic low which passes through or nearby the Thesis II and III Zones. It is thought to represent the property-scale fault system which hosts gold mineralization in the Thesis area.

MVG - Measured Vertical Magnetic Gradient with line contours:

The prominent magnetic features on this map which deserve mention are two strong, positive, linear magnetic anomalies which straddle the likely northwest extension of the fault system which passes through the Thesis area. They are located about 2 km northwest of Thesis and may represent rhyodacite dikes similar to those which are present in the Bonanza and Thesis III Zones. If so, and if such dikes are genetically related to gold mineralization, then this area of the property represents an attractive target for further exploration, especially given that it would appear to lie along the same fault system hosting the Thesis gold zones.

9.2 3D – IP Survey

9.2.1 Introduction

On behalf of Christopher James Gold Corp., SJ Geophysics Ltd. completed a 3D-IP survey totaling 61 km in the southern part of the property, over and adjacent to known zones of gold mineralization on which most past exploration and surface mining activities had been carried out. The survey was done during the period August 13 to September 11, 2007 and the geophysical crew was based at the main exploration camp on the property.

A copy of SJ Geophysics' report is appended as Appendix 8 (Sub-folder 4-8a). The report includes three sets of plan maps and sections (appended in Sub-folder 4-8b) which include chargeability and resistivity plan maps at several elevation levels below the land surface and a number of east-west IP chargeability and resistivity 3D cross sections.

9.2.2 Results

Highlights of the 3D-IP survey are summarized in bullet form below. Additional comments added by the writer are in *italics*.

- The purpose of the 3D-IP survey was two fold: measure the geophysical response over known mineral occurrences on a relatively detailed scale and explore to significant depth for *responses similar to those over known, gold-bearing zones*.
- East-west survey lines were spaced 100 m apart. The electrode array consisted of a modified pole-dipole 3D-IP configuration that used a combination of 12 to 16 dipoles. Measurements were taken every 50m. The full length potential array of the survey is 800m, allowing for a nominal depth of penetration of one-half of this or 400m below the middle of the full spread. In general the data acquired in the survey was very clean. GPS locations of all stations were provided by Christopher James and were collected in NAD 83 coordinates with a differential GPS.
- Under ideal circumstances, IP chargeability responses are a measurement of the amount of disseminated metallic sulphides in the subsurface rocks. Unfortunately, there are other rock materials that give rise to IP effects, including some graphitic rocks, clays and some metamorphic rocks (serpentine for example). Geologically, IP responses are almost never uniquely interpretable. Because of this it is always prudent to incorporate other data sets to assist in interpretation.
- Topography variations add another level of complexity to 3D-IP interpretation, especially with the use of plan maps. Plan maps produced for this report were created at depths of 25m, 50m, 75m, 100m, 125m, 150m, 175m, 200m and 250m below surface. 2007 drill hole collar locations are *plotted* on the plan maps.
- Illustrations 4 and 5 of the appended report show plan views of the inverted resistivity model at 75m and 150m below the topography. Examination of the model clearly illustrates the existence of 3 zones exhibiting different resistivity properties. They are:
 - Zone 1 is defined by relatively high resistivity (between 360 and 1200 ohm-m). It is located in the southwest corner of the survey area, *west-southwest of the Thesis II and III Zones*. It remains open to the west and south.

- Zone 2 is an area of intermediate resistivity values. It contrasts with the relatively high resistivity feature of Zone 1 revealing a possible contact or fault *between the two zones*. Within Zone 2 lie four major lineations and four isolated pods of medium to high resistivity (between 360 and 840 ohm-m) which constitute the main *area of interest* of this survey. *Of particular interest to the writer is a small, medium-intensity resistivity anomaly at depths of 25m and 50 m below surface that shows an approximate spatial relationship with the 2007 Bonanza drill hole cluster. This resistivity response may be reflecting the high silica zones which characterize many parts of the Bonanza zone.*
- Zone 3 is located in the northern part of the grid, *northeast of the Bonanza Zone*. It is defined by a relatively high resistivity zone (> 360 ohm-m) and remains open to the west, north and east.
- Illustrations 6 and 7 of the appended report show plan views of the inverted chargeability model at 75m and 150m below the topography. The model exhibits the existence of 8 pods of relatively high chargeability (above 7 milli-seconds). *Of particular interest to the writer are two chargeability features:*
 - one designated as Zone 1 (also referred to as “C-Pod 1”) in Illustrations 6 and 7 of the report. Peak values of the anomaly exceed 24 milli-seconds. This zone is coincident with the Zone 1 resistivity feature described above and is also coincident with the 700 m diameter aeromagnetic high described in Section 9.1.2 of this assessment report. *It is suggested that to the west-southwest of the Thesis II and III Zones, there may be a sulphide-bearing, porphyry-type intrusion at depth.*
 - a small, medium-intensity chargeability anomaly at depths of 25m, 50m and 75m below surface that shows an approximate spatial relationship with the 2007 Bonanza drill hole cluster. *The chargeability response here may be reflecting zones of higher sulphide content that are known to accompany gold mineralization at the Bonanza Zone.*

10.0

PROPOSED WORK

The following work is recommended for the Ranch property:

1. Complete a more thorough review of the 3D-IP survey results, incorporating in with it an overview of all past soil geochemical, geological and diamond drill results on the property. Based on the approximate coincidence of moderate chargeability and resistivity responses with known gold mineralization at the Bonanza Zone, the 3D-IP survey method may provide effective in identifying additional valid drill targets outside of historical exploration areas. The latter have, in the writer’s opinion, received a too heavily-weighted amount of work in the past. Based on the wide distribution of gold occurrences on the property, the volcanic-hydrothermal system contained within it is large and likely hosts other significant, as yet undetected zones of mineralization.
2. Carry out additional 3D-IP surveys as extensions to the 2007 survey in order to fully delineate anomalies partially defined by the survey. Especially important is the need to fully define the coincident chargeability-resistivity anomaly southwest of the Thesis II and III zones. This area is also characterized by a high

aeromagnetic response and may hold potential for the discovery of a deeper-seated porphyry deposit similar to that at Kemess North.

3. Carryout additional 3D-IP surveys in the target area located approximately 2 km northwest of the Thesis area (refer to the discussion in Section 9.1.2 above). This area may have a structural and alteration-mineralization setting similar to that at the Bonanza and Thesis zones and should be further examined.
4. Revisit the mineralized surface exposures in the Mickey Zone to ascertain whether the rock samples collected by Christopher James in 2006 were taken from outcrop or float. If it is determined that they were taken, for the most part, from outcrop, it may be warranted to carry out a shallower drill test of this zone. Better precious metals grades here may be restricted to shallower depths than those drill-tested to date.
5. Complete the detailed sectional interpretations for diamond drilling on the Bonanza, Thesis II and Thesis III zones. The purpose of doing so would be two-fold: (1) to assist in the preparation of 43-101 compliant resource estimates as part of the requirements of updating the 2006, 43-101 report on the property; and (2) to ascertain what additional resource potential may exist at each of the mineralized zones and how much more drilling, if warranted, would be needed to test this potential.

11.0

COST STATEMENT

The cost for the work summarized in Section 4.6 is as follows:

Section Ref	Schedule Ref	Ranch 2007 Cost Statement	SUMMARY
C	1	Travel, Accommodations & Meals	3,957.47
A	1	Wages, Salaries & Consulting:	
		Management & Tech Wages	97,930.94
		Project Management	488,663.39
		Casual Labour	634,513.56
		Short Term Geoscientist Consulting	3,250.00
		Wages, Salaries & Consulting - Other	46,220.00
			1,270,577.89
F		Health & Safety Training	7,968.39
D		Database/Surveying/Imagery Costs:	
		Satellite Image & Air Photo	4,300.00
		Topographic Surveying	32,488.12
		Geological Mapping	147.54
		Exploration Report Preparation	12,569.03
			49,504.69
F		Sampling & Assaying:	
		Standard, Blank Preparations	3,130.56
		Sample Prep & Assaying Rocks	22,398.34
		Sampling Prep & Assaying Drill	89,845.10
		Sampling Bags & Equipment	16,305.19
		Sample Dispatch & Transport	1,073.69
			132,752.88
D	1	Exploration Contractors & Services:	
		Geological	241,080.55
		Geophysical	126,409.65
		Exploration Contractors -Other	1,127.47
			368,617.67
C	1	Project Field Support Costs:	
F		Fuel	181,897.92
C	2	Earth Moving & Truck Hire	20,970.08
C	2	Pumps, Generators, Heaters etc	159,849.69
C	2	Food, Supplies & Flights Charges	12,297.17
C	1	Food, Supplies & Meal Charges	4,543.44
B	1	Accommodation & Camp Equipment	490,924.01
C	1	Travel To/From Projects (meals)	21,025.81
B	1	Travel To/From Projects (Accommodations)	15,845.22
C	2	Field Vehicle Hire/Maintenance	50,470.09
C	2	All Terrain Vehicle Hire/Maintenance	35,122.00
C	1	Helicopter (Non Drilling Costs)	21,602.24
F		Field Office Supplies	51,784.79
F		Phone, Postage, Couriers	36,002.93
F		Satellite Phone Services	13,656.46
			1,115,791.85
C	1	Drilling Costs:	
C	1	Earth Moving & Truck Hire	12,060.00
C	1	Helicopter, Fixed Wing (for Drilling)	747,041.59
D	1	Diamond Drilling Meterage Costs	935,440.87
D	1	RC Meterage Charges	1,582.00
D	1	Other Drilling Charges/Labour	260,671.78
D	1	Drilling - Other Costs	3,150.00
			1,959,845.24
E		Report Writing - Reasonable Costs	15,400.00
		Total Ranch 2007 Costs (Jan 1/07 - Dec 31/07)	4,924,517.08

The above cost statement summary is also presented in Appendix 4 (sub-folder 4-6a) as File Name [Ranch_2007_CS-Summary.pdf](#). Eight back-up files, providing cost details for the categories summarized above, are contained in Appendix 4 (sub-folder 4-6b) - see Table of Contents for a listing of back-up files.

12.0

REFERENCES

- (1.) B.C. Ministry of Energy and Mines' website 'The Map Place': claims data, regional geology, aeromagnetic data and minfile descriptions for portions of map sheet 94E. The website address is:
(<http://www.em.gov.bc.ca/mining/geolsurv/MapPlace/default.htm>).
- (2.) Graham, C., Renning, M., Gifford L. and Graham L.
2007: 2006 Drilling, Geological and Prospecting Report for Christopher James Gold Corp.; Assessment Report 28887, February 2007
- (3.) Fulp, M.S.
2006: Geology of the Albert Hump Area; in-house report for Christopher James Gold Corp.; November 2006
- (4.) Fulp, M.S.
2006: Geology of the Mickey Structure; in-house report for Christopher James Gold Corp.; November 2006
- (5.) Hawkins, P.A.
2006: A Technical Report Covering the Ranch Property; Consultant's report for Christopher James Gold Corp.; July 2006
- (6.) Hunt, L.C.
2004: 2003 Exploration on the Al Property for Bishop Gold Inc.; Assessment Report 27335, February 2004
- (7.) Hunt, L.C., Glover, M.J. and Reid, R.E.
2004: A Technical Report on the Al (Ranch) Property, Toodoggone River Area, B.C. for Bishop Gold Inc., December 2003; filed on SEDAR
- (8.) Hawkins, P.A.
2003: A Technical Report Covering the Lawyers and Al (Ranch) Properties; Consultant's report for Bishop Gold Inc.; June 2003
- (9.) Kaip, A. and Childe, F.
2001: Summary Report on the Ranch Property, Liard Mining District, British Columbia, Canada for Guardsmen Resources Inc.; October 2001
- (10.) Panteleyev, A.
1996: Epithermal Au-Ag-Cu High Sulphidation, in Selected British Columbia Mineral Deposit Profiles, Volume 2 – Metallic Deposits, Lefebure, D.V. and Hoy, T., Editors; British Columbia Ministry of Employment and Investment, Open File 1996-13, pp. 37-39

References - continued

(11.) GSJ

- 1996: Epithermal Gold Deposits, Geothermal Systems and Volcanoes, Mineral Resource Department, Geological Survey of Japan;
<http://www.gsj.go.jp/dMR/Jikkan/Epithermal.htm>

(12.) Staargaard, C.F.

- 1994: Geochemical Sampling and Reconnaissance Geology of the Pil 1-13 Claims, Toodoggone Area, British Columbia. Consultant's report for Electrum Resource Corporation.

(13.) Diakow, L.J., Panteleyev, A. and Schroeter, T.G.

- 1993: Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia. B.C.M.E.M.P.R. Bulletin 86, Geological Survey Branch - Mineral Resources Division, 72 p.

(14.) Cairn, N., Eccles, L. K., Hutchings, T. and Sivertz, G.W.G.

- 1989: Toodoggone Properties - Exploration Overview for Energex Minerals Ltd.; January 1989

(15.) Eccles, L. K. and Sivertz, G.W.G.

- 1988: Final Report for the Al Property, Toodoggone River District, British Columbia for Energex Minerals Ltd.; December 1988

(16.) BCDM

Miscellaneous Al Property assessments reports written in support of Statements of Work filed with the B.C. Ministry of Mines and Petroleum Resources ; assessment report no's include: 4060, 4680, 4681, 8128, 9241, 10348, 10708, 12457, 12491, 13037, 13198, 13454, 14005, 14459, 14476, 14498, 14984, 15045, 15081, 15345, 15533, 15735, 16054, 16056, 17019, 17250, 17655, 20535, 25707, 27335*, 28887*

* also listed above in reference no.s (6.) and (2.)

13.0

STATEMENTS OF QUALIFICATIONS

I, Brian K. Bowen, of Surrey, in the Province of British Columbia, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geological Engineer with an office at 12470 99A Avenue, Surrey, British Columbia, Canada, V3V 2R5, Telephone (604) 930-0177.
2. I am a graduate of the University of British Columbia with a degree of Bachelor of Applied Science in Geological Engineering, obtained in 1970. I have been practicing my profession continuously in Canada and elsewhere since graduation.
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. This report is based upon my review of all available historical data relating to the Ranch (previously AL) property and upon my review and compilation of all technical data generated from the exploration program completed on the Ranch property during the period May to September 2007 by Christopher James Gold Corp.
5. I participated in the 2007 field work described in this report during portions of May, June and September. My primary role was to assist in the supervision of diamond drilling and the core logging and sampling related to it. I also logged core on the property in September 2006 under the supervision of Cam Graham, then VP Exploration for Christopher James Gold Corp.
6. I hold no beneficial interest in the Ranch property, nor in any corporation nor other entity whose value could reasonably be expected to be affected by the conclusions expressed herein.
7. I authorize Guardsmen Resources Inc. to use this report, but only in its entire and unabridged form, for any lawful purpose.

Dated at Surrey, British Columbia, this thirty-first day of July, 2008.

July 31, 2008
Surrey, B.C.
BKB/bb

B. K. Bowen, P. Eng.
Consulting Geologist

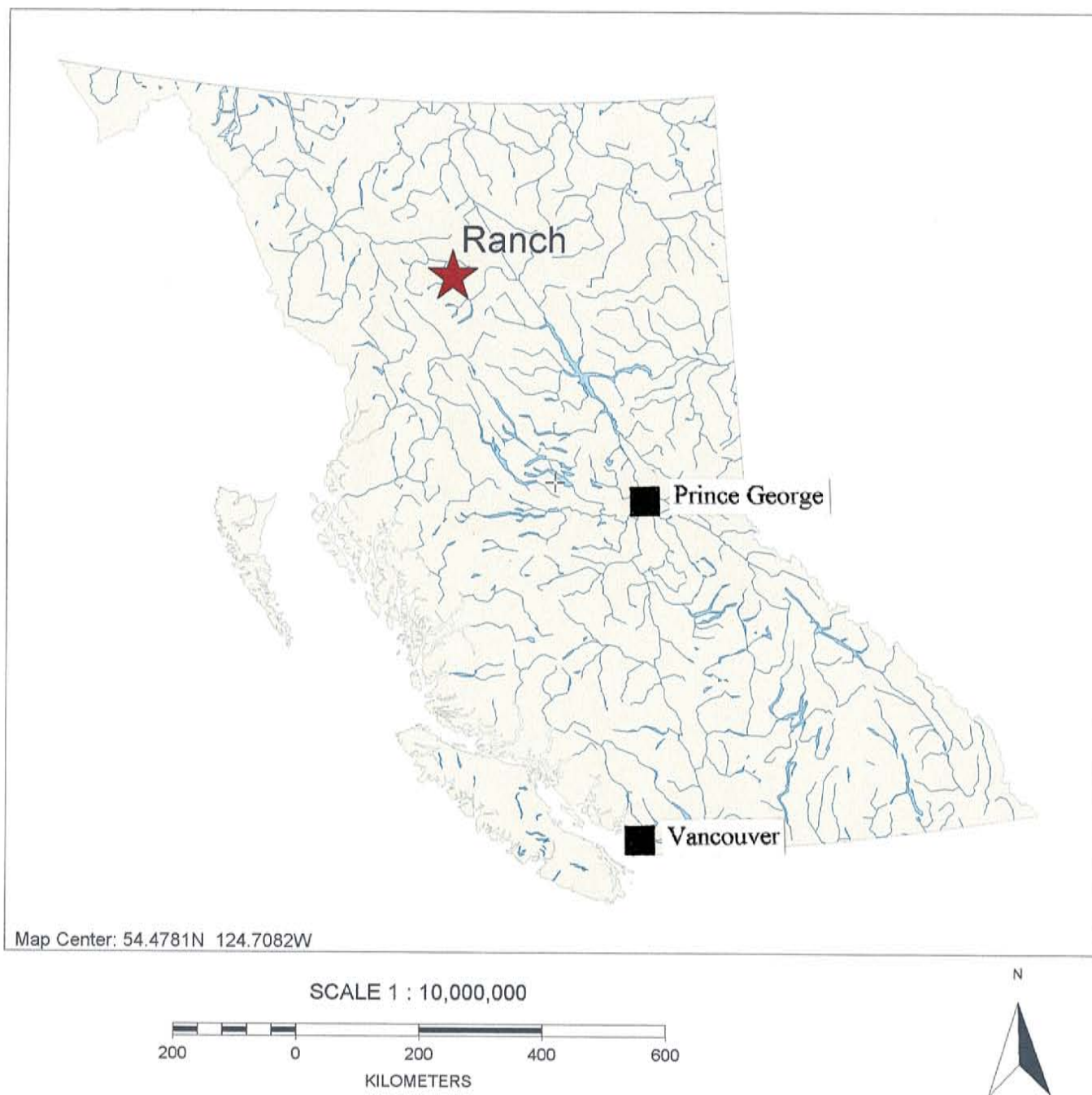
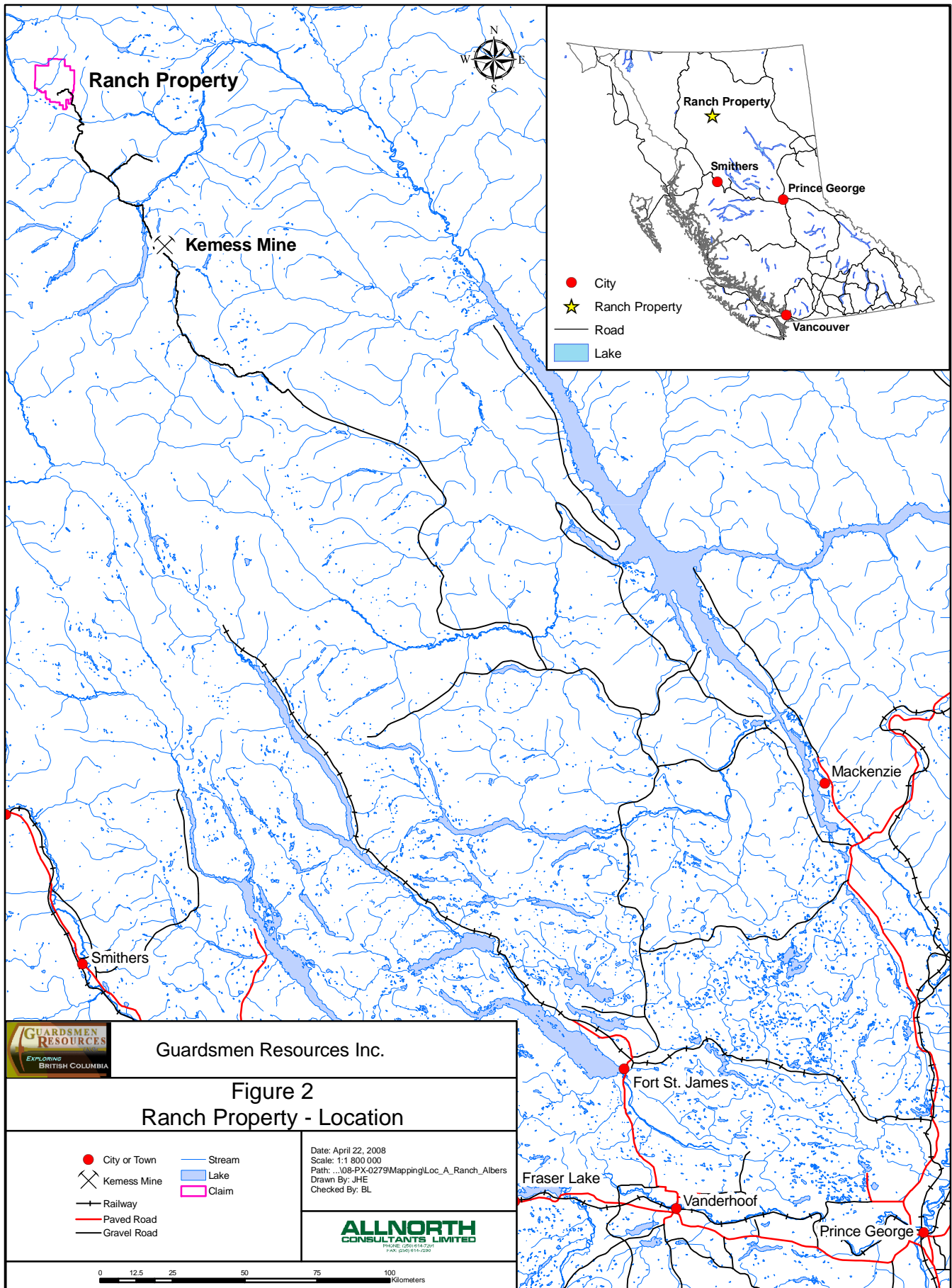
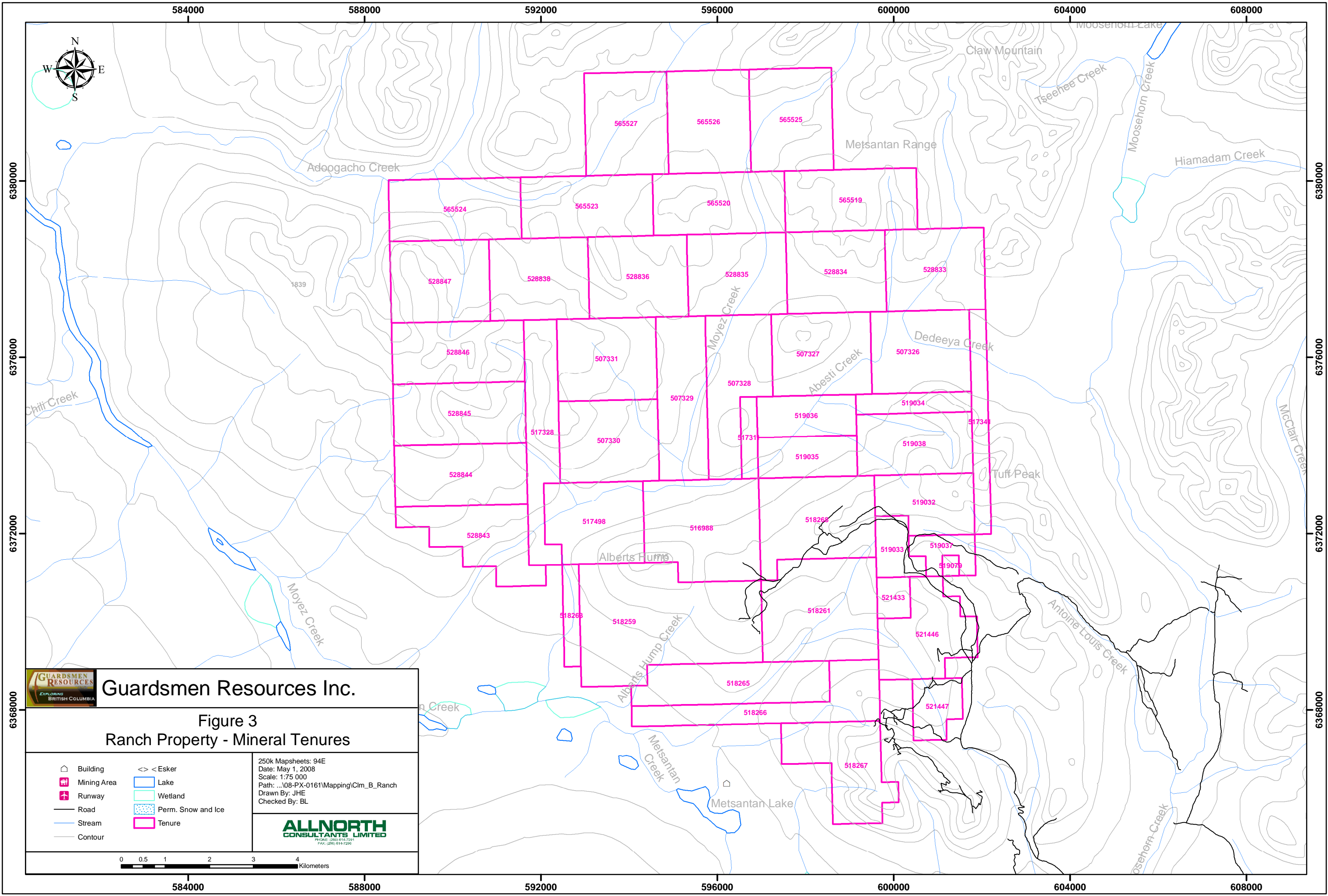


Figure 1
RANCH PROPERTY
INDEX MAP
Date: July 2008



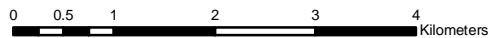


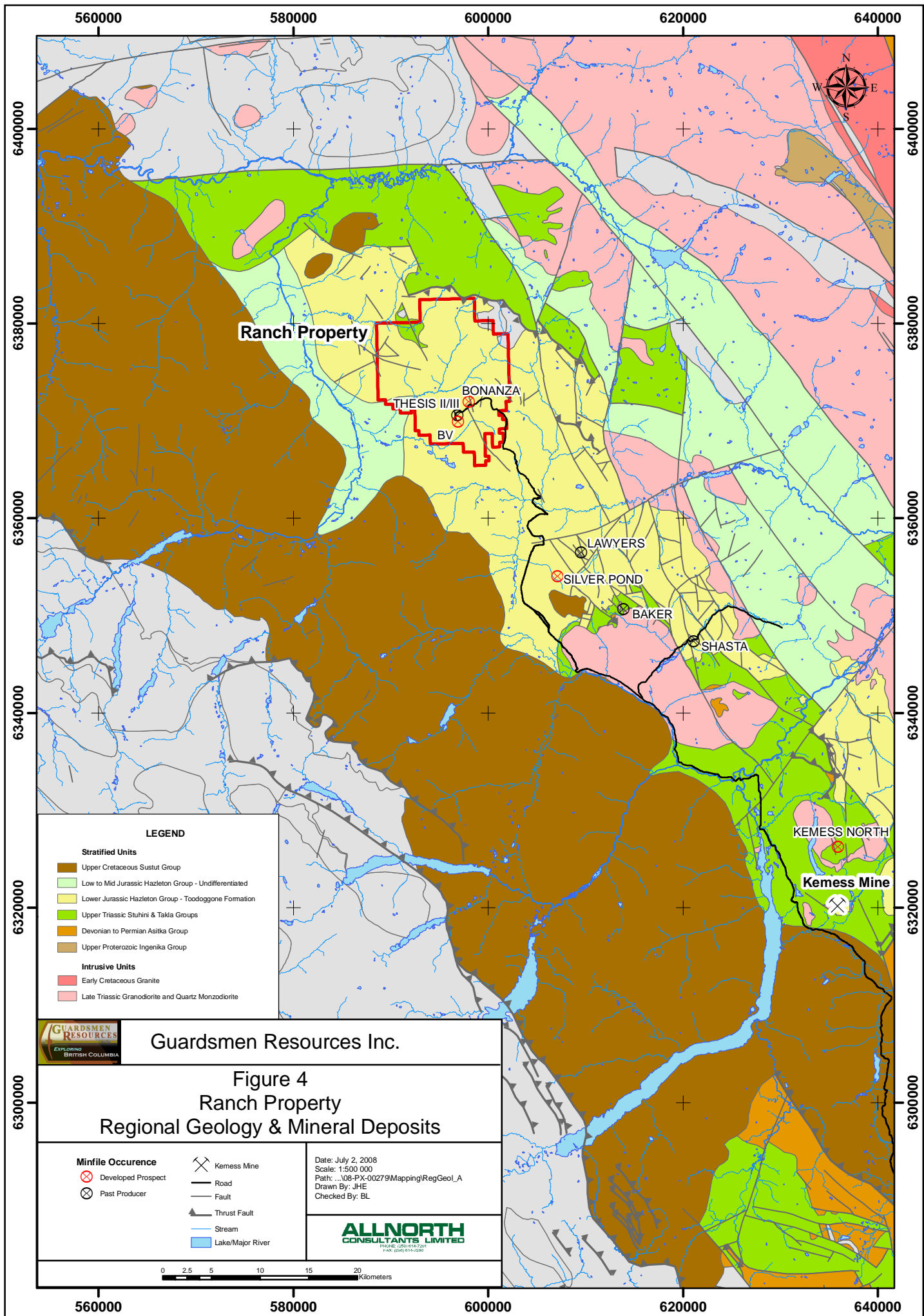
Guardsmen Resources Inc.

Figure 3
Ranch Property - Mineral Tenures

- | | |
|-------------|--------------------|
| Building | Esker |
| Mining Area | Lake |
| Runway | Wetland |
| Road | Perm. Snow and Ice |
| Stream | Tenure |
| Contour | |

250k Mapsheets: 94E
Date: May 1, 2008
Scale: 1:75 000
Path: ...08-PX-0161\Mapping\CIm_B_Ranch
Drawn By: JHE
Checked By: BL





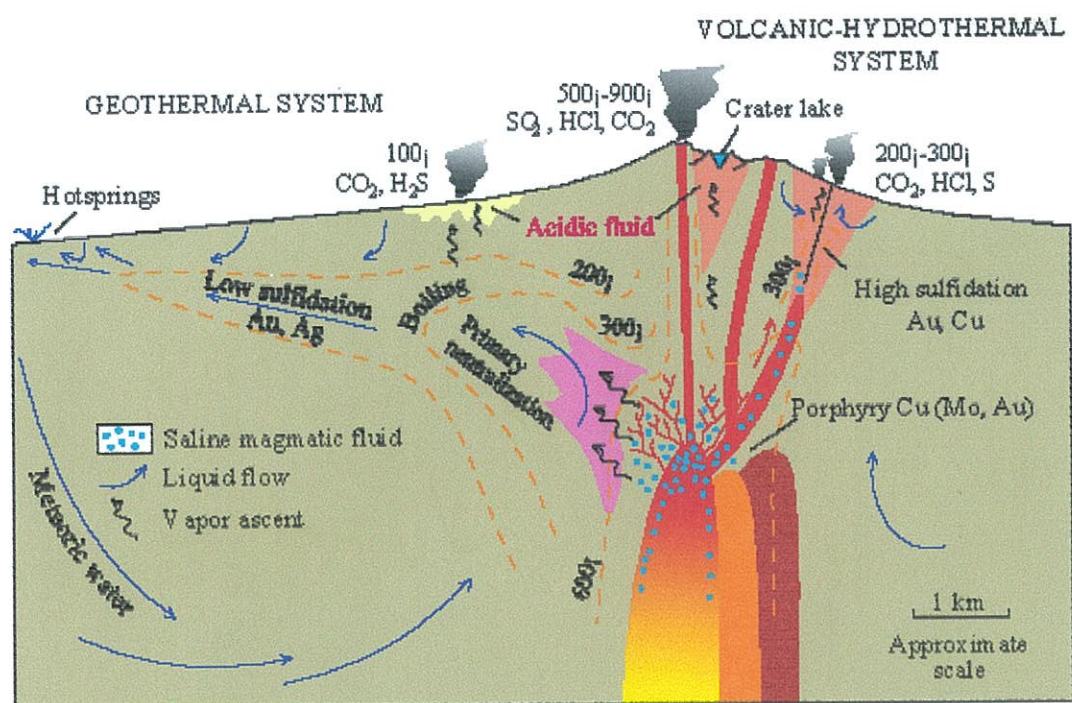


Figure 5. Schematic Model for Toodoggone Epithermal Mineralization (GSJ, 1996).

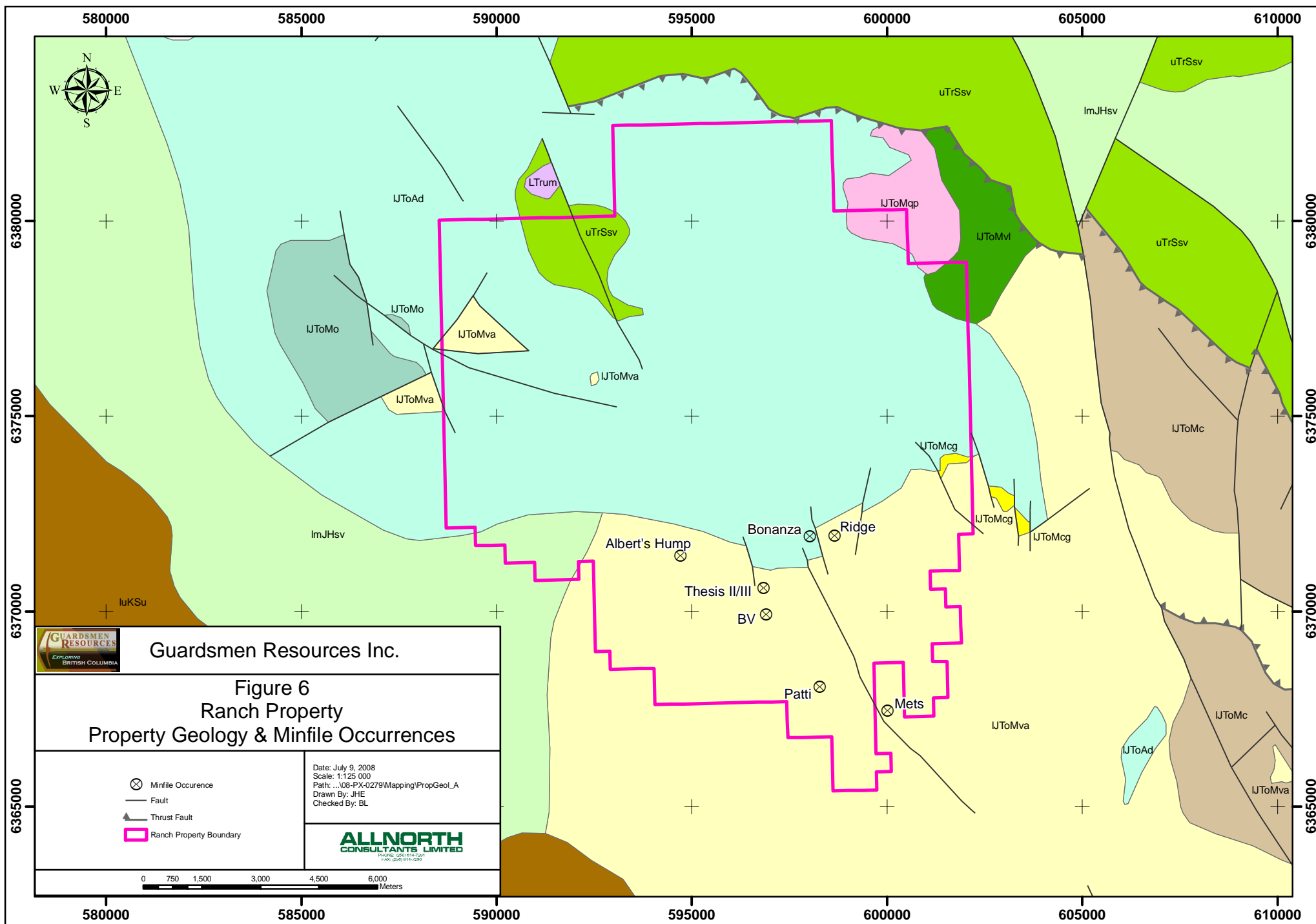













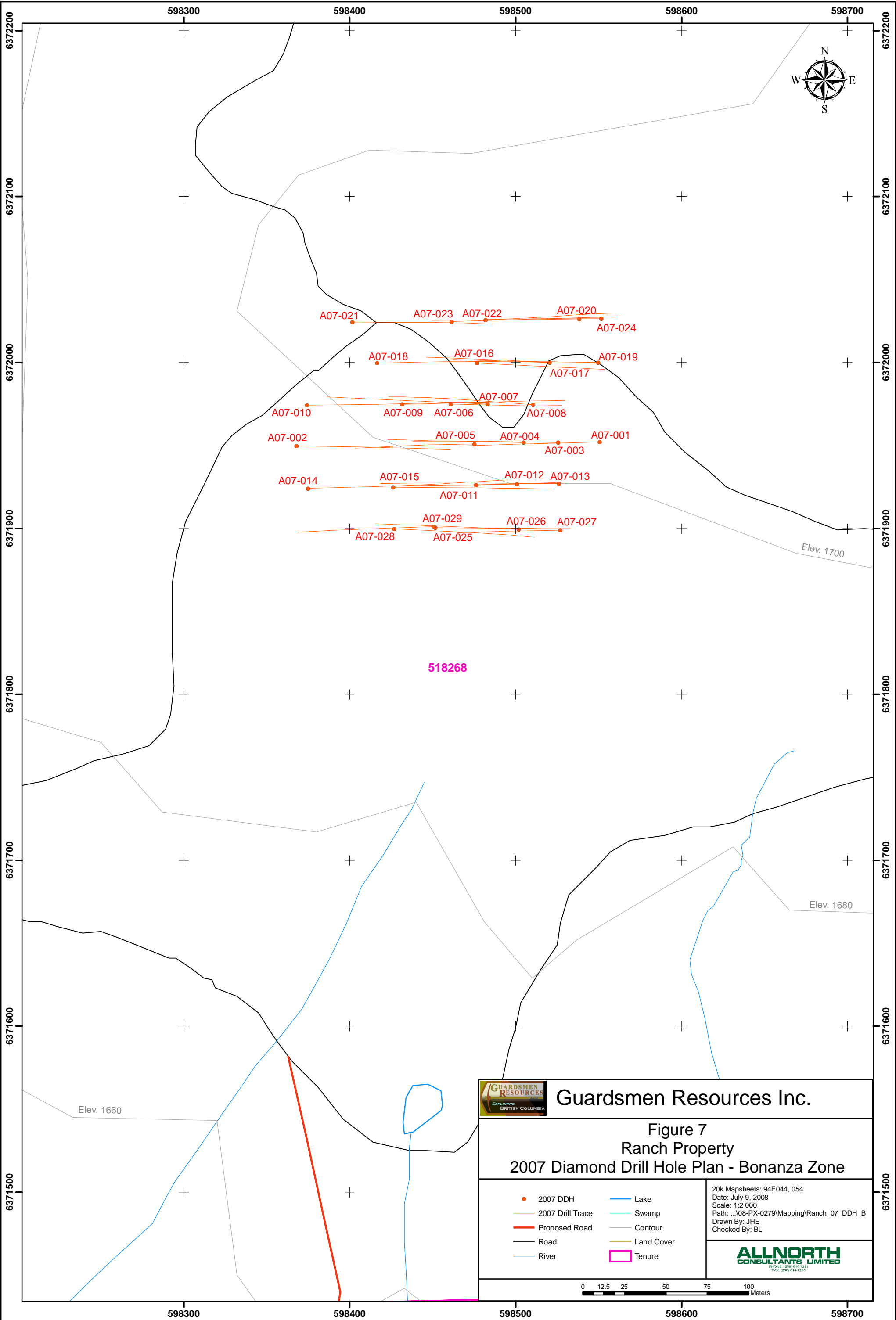
Figure 6 Legend

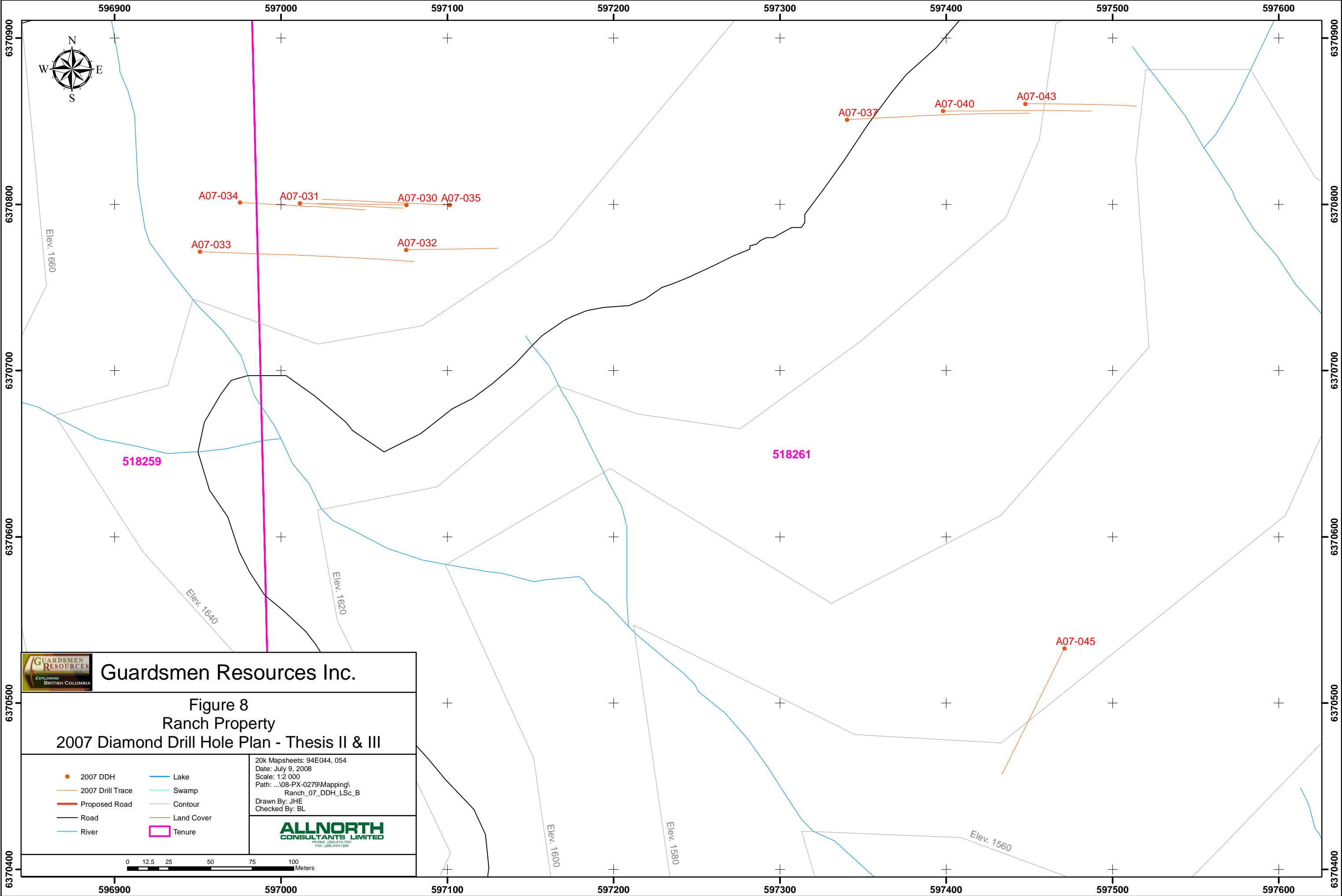
Intrusive Rocks

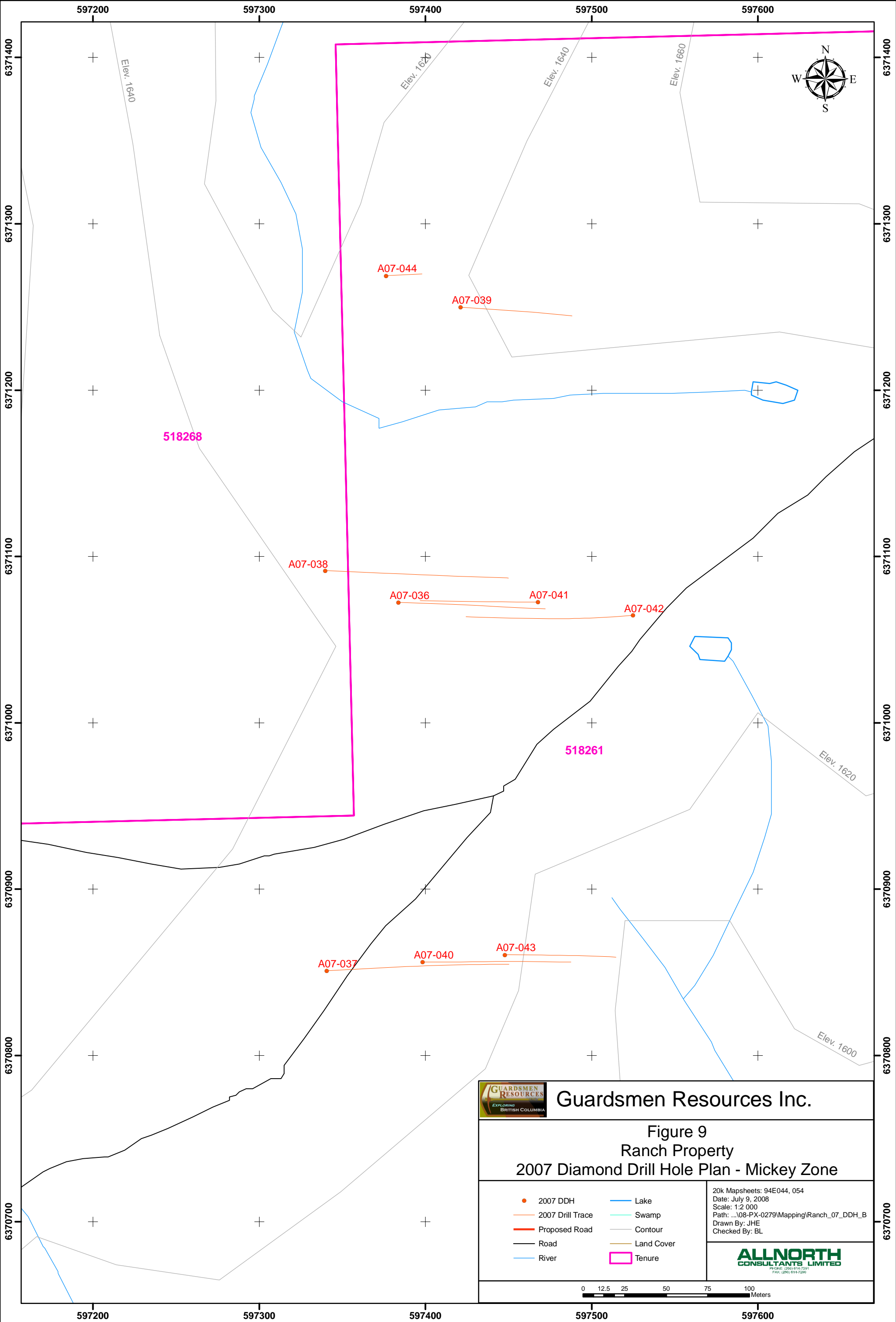
	IJToMqp	Lower Jurassic Subvolcanic plug or flow dome related to Toodoggone volcanism
	LTrum	Late Triassic Hornblendite

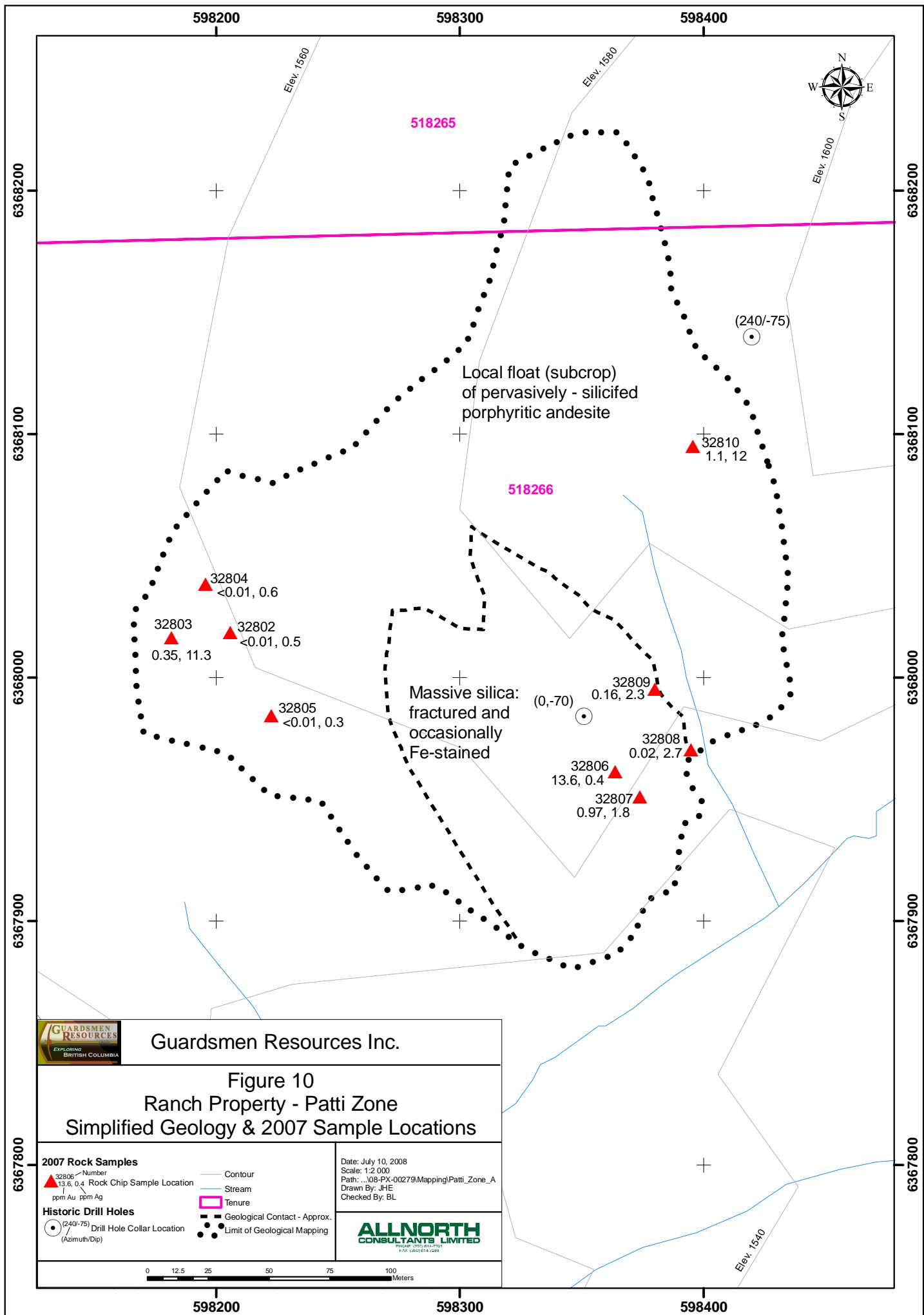
Volanic and Sedimentary Rocks

	IuKSu	Mid to upper Cretaceous Sustut Group - lower section of chert, quartz pebble conglomerate & felsic ash stuff; upper section of mudstone-siltstone with coal layers.
	ImJHsv	Lower to middle Jurassic Hazelton Group - epiclastic & felsic volcanic unit; minor sediments, including limestone
	IJTo	Lower Jurassic Hazelton Group - Toodoggone Formation - members described separately below (see also Table 2)
	IJToMc	McClair Member - heterogeneous lithic tuffs, andesite flows & sub-volcanic dikes & plugs
	IJToMva	Metsantan Member - trachyandesite latite flows and tuffs
	IJToMvl	Metsantan Member - debris flow deposits
	IJToMcg	Metsantan Member - volcanic conglomerate & finer bedded epiclastic rocks
	IJToMo	Moyez Member - dacitic crystal tuff with volcanic conglomerate at base
	IJToAd	Adoogacho Member - trachyandesite ash flows to lapilli tuffs & reworked equivalents
	uTrSsv	Upper Triassic - Stuhini Group - undivided arc, volcanic & sedimentary rocks









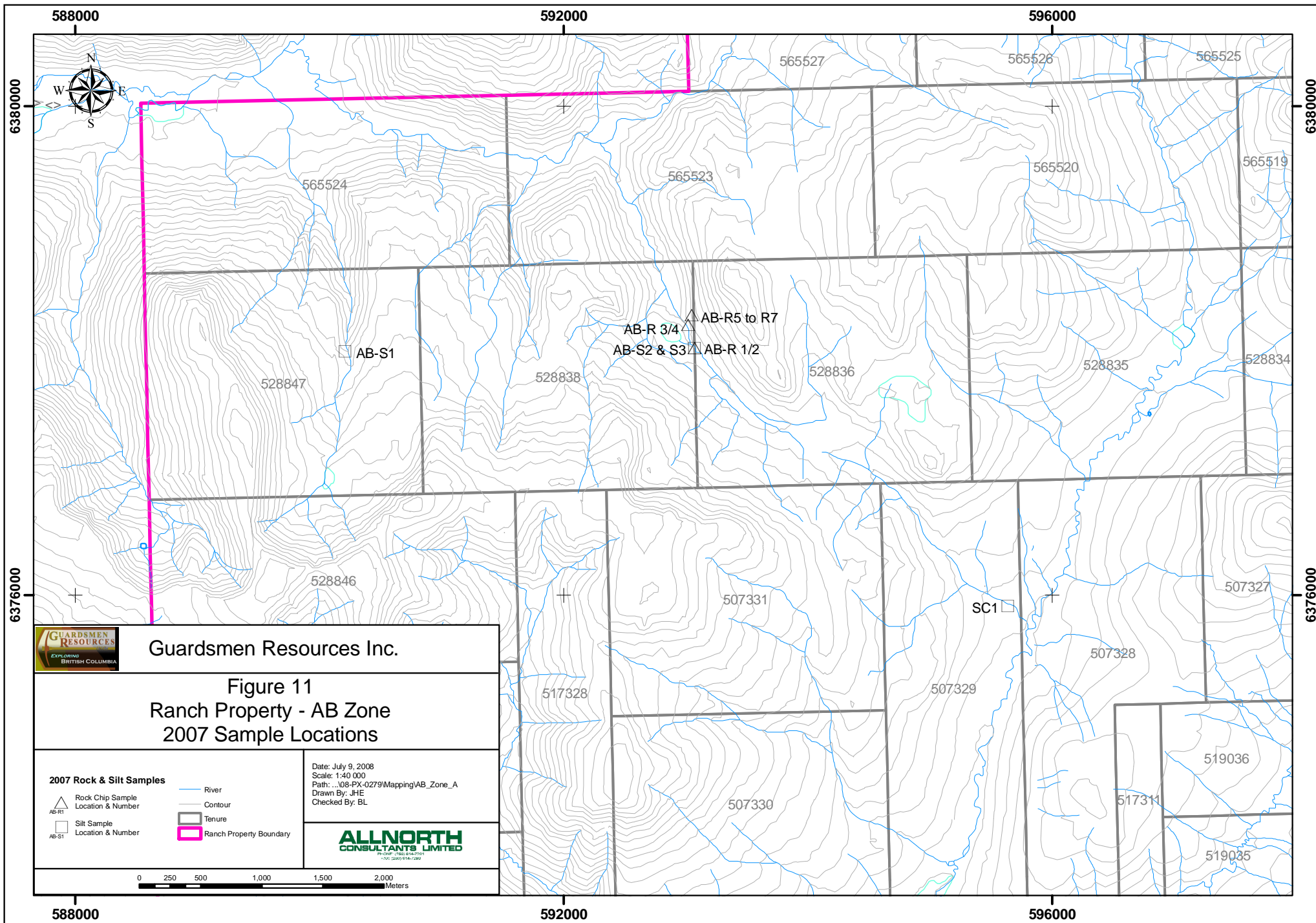


Table 1
Ranch Property Claims Data
(as of April 23, 2008)

page 1 of 2

<u>Claim Name</u>	<u>Tenure #</u>	<u>100% Owner</u>	<u>Area</u> (hectares)	<u>Expiry Date</u>
AB 1	507326	Guardsmen*	417.12	2013/nov/15
AB 2	507327	Guardsmen	417.13	2013/nov/15
AB 3	507328	Guardsmen	417.2	2013/nov/15
AB 4	507329	Guardsmen	417.23	2013/nov/15
AB 5	507330	Guardsmen	417.34	2013/nov/15
AB 6	507331	Guardsmen	417.15	2013/nov/15
	516988	Guardsmen	574.11	2013/nov/15
Bert Fraction	517311	Guardsmen	69.55	2013/nov/15
Hump Back	517328	Guardsmen	365.15	2013/nov/15
Albert East	517341	Guardsmen	191.25	2013/nov/15
	517498	Guardsmen	400.13	2013/nov/15
	518259	Guardsmen	939.95	2013/nov/15
	518261	Guardsmen	591.78	2013/nov/15
Albert West	518263	Guardsmen	87.03	2013/nov/15
AI 5&6	518265	Guardsmen	400.48	2013/nov/15
AI 5&6 Fraction	518266	Guardsmen	365.7	2013/nov/15
	518267	Guardsmen	383.25	2013/nov/15
	518268	Guardsmen	504.5	2013/nov/15
	519032	Guardsmen	278.31	2013/nov/15
	519033	Guardsmen	121.79	2013/nov/15
	519034	Guardsmen	121.69	2013/nov/15
	519035	Guardsmen	208.69	2013/nov/15
	519036	Guardsmen	208.64	2013/nov/15
	519037	Guardsmen	104.4	2013/nov/15
Hump	519038	Guardsmen	365.17	2013/nov/15
Alpark	519079	Guardsmen	17.4	2013/nov/15
Furlong	521433	Guardsmen	69.62	2013/nov/15
Almet 1	521446	Guardsmen	365.55	2013/nov/15
Almet 2	521447	Guardsmen	139.31	2013/nov/15
Alberts North 1	528833	Guardsmen	416.93	2013/nov/15
Alberts North 2	528834	Guardsmen	416.94	2013/nov/15
Alberts North 3	528835	Guardsmen	416.94	2013/nov/15
Alberts North 4	528836	Guardsmen	416.95	2013/nov/15
Alberts North 5	528838	Guardsmen	416.96	2013/nov/15
Alberts Northeast 1	528843	Guardsmen	365.36	2013/nov/15
Alberts Northeast 2	528844	Guardsmen	417.42	2013/nov/15
Alberts Northeast 3	528845	Guardsmen	417.28	2013/nov/15
Alberts Northeast 4	528846	Guardsmen	417.13	2013/nov/15
Alberts Northeast 5	528847	Guardsmen	416.96	2013/nov/15
Renford 1	565519	Guardsmen	416.77	2008/sep/02
* Guardsmen Resources Inc. (131812)				

<u>Claim Name</u>	<u>Tenure #</u>	<u>100% Owner</u>	<u>Area</u> (hectares)	<u>Expiry Date</u>
Renford 2	565520	Guardsmen	416.78	2008/sep/02
Renford 3	565523	Guardsmen	416.79	2008/sep/02
Renford 4	565524	Guardsmen	416.79	2008/sep/02
Renford 5	565525	Guardsmen	433.94	2008/sep/02
Renford 6	565526	Guardsmen	433.94	2008/sep/02
Renford 7	565527	Guardsmen	433.95	2008/sep/02
		Total:	16,464.45	

Table 2
Jurassic Toodoggone Formation Lithostratigraphic Column

FORMATION MEMBER	ERUPTIVE CYCLE	AGE (Ma)	MEMBER DESCRIPTIONS
Saunders	Upper	192.9 to 194	Trachyandesite tuffs
Attycelley		193.8	Dacite tuffs and related feeder dikes and sub-volcanic domes
McClair			Heterogeneous lithic tuffs, andesite flows and sub-volcanic dikes and plugs
Metsantan	Lower	197 to 200	Trachyandesite latite flows and tuffs
Moyez			Well-layered crystal and ash tuffs
Adoogacho		197.6	Trachyandesite ash flows to lapilli tuffs and reworked equivalents

Table 3
Ranch Property
Summary of 2007 Diamond Drill Holes -
Collar Data & Total Depths

Hole_ID	Easting	Northing	Elevation	Azimuth	Inclination	Total_Depth_m	ZONE	Date_start	Date_finish
A07-001	598550.67	6371952.02	1696.96	269.00	-60.00	190.20	Bonanza	5-28-07	5-30-07
A07-002	598367.83	6371949.68	1700.09	90.00	-55.00	163.07	Bonanza	5-31-07	6-1-07
A07-003	598525.51	6371951.67	1696.82	270.00	-60.00	184.41	Bonanza	6-1-07	6-4-07
A07-004	598504.68	6371951.75	1695.66	270.00	-60.00	170.69	Bonanza	6-4-07	6-6-07
A07-005	598475.04	6371950.96	1695.28	270.00	-60.00	150.88	Bonanza	6-6-07	6-7-07
A07-006	598460.85	6371975.03	1697.36	89.00	-55.00	121.92	Bonanza	6-7-07	6-8-07
A07-007	598483.08	6371975.02	1696.76	271.00	-55.00	174.96	Bonanza	2007-06-08	2007-06-10
A07-008	598510.58	6371974.63	1696.68	271.00	-55.00	155.45	Bonanza	2007-06-11	2007-06-12
A07-009	598431.52	6371974.83	1698.02	91.00	-55.00	173.74	Bonanza	2007-06-13	2007-06-15
A07-010	598374.14	6371974.26	1699.78	91.00	-55.00	195.07	Bonanza	2007-06-16	2007-06-19
A07-011	598476.07	6371926.11	1692.90	89.00	-55.00	99.98	Bonanza	2007-06-14	2007-06-17
A07-012	598500.86	6371926.71	1692.73	269.00	-55.00	163.98	Bonanza	2007-06-17	2007-06-18
A07-013	598526.12	6371927.06	1694.10	270.00	-55.00	194.46	Bonanza	2007-06-19	2007-06-22
A07-014	598374.79	6371924.06	1698.71	91.00	-55.00	223.42	Bonanza	2007-06-22	2007-06-25
A07-015	598426.21	6371924.83	1695.90	89.50	-55.00	170.99	Bonanza	2007-06-26	2007-06-28
A07-016	598476.65	6371999.73	1698.80	90.00	-55.00	135.64	Bonanza	2007-06-19	2007-06-20
A07-017	598520.57	6371999.96	1697.40	270.00	-60.00	155.45	Bonanza	2007-06-21	2007-06-23
A07-018	598416.49	6371999.61	1700.80	91.00	-55.00	188.67	Bonanza	2007-06-22	2007-06-25
A07-019	598549.78	6372000.05	1698.32	270.00	-60.00	174.96	Bonanza	2007-07-08	2007-07-10
A07-020	598538.35	6372026.30	1700.96	270.00	-55.00	158.19	Bonanza	2007-06-25	2007-06-27
A07-021	598401.59	6372024.34	1702.31	91.00	-55.00	149.35	Bonanza	2007-06-27	2007-06-29
A07-022	598481.95	6372025.54	1699.74	91.00	-55.00	147.83	Bonanza	2007-06-29	2007-07-01
A07-023	598461.37	6372024.67	1700.02	89.00	-55.00	179.83	Bonanza	2007-07-01	2007-07-03
A07-024	598551.58	6372026.40	1700.76	272.00	-60.50	155.45	Bonanza	2007-07-03	2007-07-05
A07-025	598451.60	6371900.44	1693.45	89.00	-59.50	169.47	Bonanza	2007-06-28	2007-06-30
A07-026	598501.84	6371899.43	1691.41	271.00	-65.00	208.49	Bonanza	2007-06-30	2007-07-03
A07-027	598526.95	6371898.89	1691.69	270.00	-65.00	148.74	Bonanza	2007-07-04	2007-07-06
A07-028	598426.77	6371899.77	1692.50	90.00	-60.00	176.79	Bonanza	2007-07-06	2007-07-08
A07-029	598450.70	6371901.14	1692.99	270.00	-60.00	176.18	Bonanza	2007-07-06	2007-07-08
Sub-total Bonanza:						4858.26			
A07-030	597075.32	6370799.60	1648.49	270.00	-60.00	116.74	Thesis III	2007-07-09	2007-07-12
A07-031	597011.39	6370800.69	1653.20	90.00	-60.00	124.97	Thesis III	2007-07-11	2007-07-13
A07-032	597075.23	6370772.71	1646.35	90.00	-55.00	99.98	Thesis III	2007-07-12	2007-07-14
A07-033	596951.18	6370771.50	1648.89	91.00	-50.00	199.03	Thesis III	2007-07-13	2007-07-17
A07-034	596975.23	6370801.08	1652.76	91.00	-50.00	153.93	Thesis III	2007-07-17	2007-07-20
A07-035	597101.52	6370799.56	1646.67	271.00	-60.00	150.88	Thesis III	2007-07-20	2007-07-23
Sub-total Thesis III:						845.53			
A07-036	597383.72	6371072.43	1632.21	90.00	-55.00	159.41	Mickey	2007-07-23	2007-07-26
A07-037	597340.45	6370850.95	1628.47	91.00	-55.00	199.65	Mickey	2007-07-26	2007-07-29
A07-038	597339.71	6371091.62	1636.32	91.00	-55.00	199.65	Mickey	2007-08-10	2007-08-14
A07-039	597421.04	6371249.94	1637.26	91.00	-55.00	119.18	Mickey	2007-08-15	2007-08-18
A07-040	597398.23	6370856.20	1626.23	90.00	-55.00	161.55	Mickey	2007-08-19	2007-08-23
A07-041	597467.71	6371072.60	1633.33	270.00	-55.00	126.49	Mickey	2007-08-23	2007-08-27
A07-042	597524.71	6371064.55	1631.21	270.00	-55.00	175.26	Mickey	2007-08-27	2007-08-30
A07-043	597447.66	6370860.57	1620.79	90.00	-65.00	161.55	Mickey	2007-08-31	2007-09-03
A07-044	597376.27	6371268.87	1628.52	90.00	-55.00	38.10	Mickey	2007-09-04	2007-09-05
Sub-total Mickey:						1340.84			
A07-045	597471.192	6370532.976	1582.743	205.00	-55.00	149.35	Thesis II	2007-09-06	2007-09-12
Sub-total Thesis II:						149.35			
GRAND TOTAL - ALL ZONES:						7193.98			

Table 4
Ranch Property
Summary of 2007 Diamond Drill Holes -
Downhole Survey Data

Hole_ID	Depth_m	Azimuth	Inclination
<i>Bonanza Zone:</i>			
A07-001	97.20	268.60	-63.40
A07-001	181.10	268.00	-63.80
A07-002	50.30	90.80	-55.40
A07-002	100.60	91.70	-55.20
A07-003	94.50	271.10	-61.80
A07-003	134.11	269.80	-61.50
A07-004	49.99	271.40	-61.30
A07-004	95.71	270.50	-61.60
A07-004	140.21	272.30	-61.40
A07-004	170.69	270.40	-61.10
A07-005	50.29	268.70	-61.50
A07-005	102.11	267.20	-61.70
A07-005	150.88	267.00	-61.70
A07-006	50.29	91.60	-56.50
A07-006	103.63	89.30	-57.00
A07-007	56.39	272.30	-56.30
A07-007	109.73	272.70	-56.30
A07-007	174.96	273.00	-56.30
A07-008	51.82	274.20	-55.70
A07-008	101.19	273.00	-56.20
A07-008	155.45	270.50	-55.70
A07-009	60.96	88.50	-55.60
A07-009	108.21	88.60	-55.60
A07-009	173.74	89.20	-55.00
A07-010	64.01	89.30	-56.20
A07-010	91.44	88.20	-56.50
A07-010	137.16	88.40	-56.10
A07-010	195.07	91.00	-56.20
A07-011	48.16	88.30	-55.90
A07-011	99.98	87.50	-56.10
A07-012	57.30	269.20	-55.70
A07-012	99.98	268.90	-56.50
A07-012	163.98	269.80	-56.50
A07-013	42.06	270.30	-56.00
A07-013	90.83	270.50	-56.40
A07-013	139.60	269.60	-56.70
A07-013	194.46	268.70	-56.80
A07-014	74.07	88.40	-56.70
A07-014	122.84	87.10	-57.30
A07-014	171.60	86.70	-58.00
A07-014	220.37	86.60	-58.50
A07-014	223.42	86.60	-58.50
A07-015	70.10	90.40	-56.00

Hole_ID	Depth_m	Azimuth	Inclination
A07-015	103.63	90.90	-55.70
A07-015	170.90	91.00	-56.50
A07-016	75.59	93.00	-55.30
A07-016	82.30	92.40	-55.00
A07-016	134.11	93.20	-55.00
A07-016	135.64	93.20	-55.00
A07-017	45.72	273.10	-61.50
A07-017	91.44	272.00	-61.50
A07-017	155.45	272.10	-60.80
A07-018	46.03	88.70	-56.50
A07-018	91.75	89.60	-56.60
A07-018	137.16	90.20	-56.60
A07-018	188.67	92.20	-56.70
A07-019	45.72	270.90	-61.20
A07-019	88.39	270.90	-59.80
A07-019	174.96	272.10	-58.00
A07-020	45.72	269.20	-55.70
A07-020	91.44	269.60	-55.90
A07-020	158.19	269.40	-56.00
A07-021	45.72	90.10	-56.10
A07-021	89.61	90.50	-55.00
A07-021	128.68	92.30	-55.20
A07-021	149.30	92.30	-55.20
A07-022	45.72	87.00	-56.40
A07-022	91.44	85.80	-56.50
A07-022	147.83	88.30	-56.40
A07-023	137.16	88.30	-56.70
A07-023	179.83	88.80	-56.30
A07-024	45.72	270.30	-62.60
A07-024	89.92	269.00	-63.40
A07-024	148.74	270.00	-63.50
A07-024	155.40	270.00	-63.50
A07-025	70.10	90.60	-61.10
A07-025	121.92	89.00	-61.60
A07-025	150.74	90.00	-61.90
A07-025	169.47	90.00	-61.90
A07-026	76.20	272.40	-65.30
A07-026	129.24	272.20	-65.60
A07-026	176.18	271.90	-66.10
A07-026	208.50	271.90	-66.10
A07-027	45.72	269.00	-65.20
A07-027	148.74	267.90	-65.40
A07-028	97.54	92.80	-61.40
A07-028	176.79	95.70	-61.10
A07-029	51.82	268.10	-61.80
A07-029	97.54	267.50	-62.20
A07-029	176.18	266.90	-63.00

Thesis III Zone:

A07-030	61.88	271.10	-62.70
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Hole_ID	Depth_m	Azimuth	Inclination
A07-030	116.74	270.20	-62.80
A07-031	82.30	92.80	-60.20
A07-031	124.97	92.80	-59.80
A07-032	51.82	89.30	-56.50
A07-032	99.98	88.90	-57.00
A07-033	67.06	92.00	-50.30
A07-033	128.02	92.70	-49.40
A07-033	199.04	94.40	-47.80
A07-034	51.82	93.30	-60.40
A07-034	97.54	92.80	-61.10
A07-034	153.93	94.60	-60.30
A07-035	51.82	272.50	-59.90
A07-035	97.54	272.50	-58.80
A07-035	150.88	272.50	-58.60

Mickey Zone:

A07-036	51.82	92.10	-56.40
A07-036	97.54	93.30	-56.50
A07-036	159.41	92.40	-55.60
A07-037	82.30	87.10	-56.90
A07-037	97.54	87.60	-56.90
A07-037	199.65	90.10	-55.80
A07-038	45.72	92.70	-56.00
A07-038	91.44	92.30	-56.30
A07-038	137.16	92.30	-56.80
A07-038	199.95	91.90	-57.40
A07-039	45.72	93.90	-55.40
A07-039	118.87	95.70	-55.90
A07-040	10.67	90.50	-55.50
A07-040	45.72	89.10	-56.20
A07-040	91.44	89.90	-56.80
A07-040	161.55	91.20	-56.90
A07-041	12.19	270.00	-55.70
A07-041	60.96	271.00	-55.90
A07-041	126.49	270.60	-56.00
A07-042	15.24	265.9	-54.8
A07-042	91.44	270.7	-55.2
A07-042	175.26	272	-54.9
A07-043	45.72	90.7	-65
A07-043	91.44	90.8	-65.7
A07-043	161.55	93.2	-66.3
A07-044	38.10	87.5	-55.3

Thesis II Zone:

A07-045	149.35	206.4	-55.4
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Table 5a
Ranch Property
Summary of 2007 Diamond Drill Holes -
Gold Intersections Summary

Hole ID	1 ppm Au Cut-off				3 ppm Au Cut-off				5 ppm Au Cut-off			
	From (m)	To (m)	Interval (m)	ppm Au	From (m)	To (m)	Interval (m)	ppm Au	From (m)	To (m)	Interval (m)	ppm Au
Bonanza Zone:												
A07-001	No significant mineralization											
A07-002	108.9	109.9	1	1.13								
A07-003	42.2	52.5	10.3	16.25	45.2	50.5	5.3	29.75	45.2	50.5	5.3	29.75
	53.5	58.1	4.6	2.35	55.7	56.9	1.2	4.25				
A07-004	14	15	1	3.14	14	15	1	3.14				
	26	28	2	1.35								
	29	31	2	3.39	30	31	1	5.19	30	31	1	5.19
	67	70	3	3.97	68	70	2	5.03	68	69	1	5.31
A07-005	52	56	4	9.75	52	56	4	9.75	53	55	2	15.75
A07-006	20	40	20	4.15	25	30	5	6.52	25	30	5	6.52
					32	36	4	5.45	33	34	1	9.39
									35	36	1	5.69
					38	40	2	5.85	39	40	1	6.81
	41	43	2	3.33	41	42	1	3.85				
A07-007	45	47	2	1.92								
	24	26	2	2.1								
	33	36	3	1.74								
	37	39	2	3.38	37	38	1	4.46				
A07-008	18	21	3	4.6	18	21	3	4.6	19	20	1	7.46

A07-009	23	24	1	1.13	46	48	2	17.47	46	48	2	17.47
	44	48	4	9.74								
	53	55	2	2.45								
	57	61	4	6.09								
	39	43	4	1.38								
	53	55	2	1.26								
	56	63	7	5.22								
	56	57	1	3.25								
A07-010	59	62	3	9.19	59	61	2	12.17				
	70	71	1	1.08								
	24	25	1	1.19								
	24	25	1	1.03								
	34	35	1	1.39								
	48	49	1	22.7								
	51	52	1	10.55								
	54	55	1	5.13								
A07-012	54	55	1	5.13	48	49	1	22.7	48	49	1	22.7
	18	22	4	2.64								
	43	46	3	12.81								
	51	57	6	5.15								
	51	52	1	10.55								
	54	55	1	5.13								
	19	20	1	3.27								
	43	45	2	17.86								
A07-013	51	53	2	3.59	43	45	2	17.86	51	52	1	10.55
	54	57	3	7.16								
	55	57	2	8.97								
	33	40	7	4.04								
	34	35	1	4.41								
	36	37	1	6.48								
	38	39	1	8.91								
	51	53	2	29.55								
A07-014	63	66	3	6.4	64	66	2	8.8	55	57	2	8.97
	64	66	2	8.8								
	51	53	2	29.55								
	64	66	2	8.8								
	51	55	4	3.13								
	59	60	1	1.72								
	61	63	2	2.22								
	62	63	1	3.38								
A07-015	6	8	2	1.83	38	41	3	2.2	38	39	1	3.49
	23	25	2	1.05								
A07-016												

	26	32	6	1.68								
	37	40	3	9.07	37	40	3	9.07	39	40	1	20.3
A07-017	13	15	2	1.41	16	17	1	1.15				
	16	17	1	1.15								
	19	22	3	1.34								
	28	34	6	8.68	29	34	5	10.03	29	30	1	22
									31	34	3	7.74
A07-018	No significant mineralization											
A07-019	No significant mineralization											
A07-020	5	10	5	3.06	5	8	3	4.05				
	11	14	3	2.42	13	14	1	4.26				
	15	16	1	2.98	17	21	4	4.47				
	17	21	4	4.47	18	19	1	13.05	18	19	1	13.05
	22	23	1	2.91								
	24	25	1	1.27								
	37	38	1	2.36								
	57	58	1	3.8	57	58	1	3.8				
A07-021	23	27	4	1.95	26	27	1	3				
	29	30	1	1.8								
A07-022	No significant mineralization											
A07-023	68	69	1	1.59								
A07-024	No significant mineralization											
A07-025	No significant mineralization											
A07-026	13	19	6	6.88	14	17	3	12.37	14	17	3	12.37
A07-027	No significant mineralization											

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A07-040	No significant mineralization							
A07-041	No significant mineralization							
A07-042	No significant mineralization							
A07-043	No significant mineralization							
A07-044	No significant mineralization							
Thesis II Zone:								
A07-045	13	14	1	1.14				
	104	105	1	1.1				
	107	113	6	1.67				
	114	117	3	1.51				
	118	119	1	1.15				
	120	126	6	2.43	121	123	2	3.82
	127	128	1	1.1				

Table 5b
Ranch Property
Gold Intersections (5 ppm Au Cut-Off)
Alteration & Mineralization Remarks

Hole ID	5 ppm Au Cut-off				Alteration & Mineralization Remarks	
	From (m)	To (m)	Interval (m)	ppm Au	Alt. Code*	Mineralization
<i>Bonanza Zone:</i>					* for explanation of alteration code, see Appendix 1	
A07-003	45.2	50.5	5.3	29.75	Vsi (s) Sal (s)	Visible gold noted at 46.1 & 49.1 m; Cp & En fract-fill & diss. locally; 3.5% diss. Py
A07-004	30	31	1	5.19	Ser (s) Psi (m)	Strongly sericitized rock; remnant sect.'s with kaolinized lithic frags.; loc. up to 5% Py as veins; textures vague
A07-005	68	69	1	5.31	Vsi (s)	5% diss. Py; minor diss. Cp & En
	53	55	2	15.75	Msi (s) Vsi (m) Alu (w)	Strongly silicified rock; 5% diss. Py & minor diss. Cp & En
	25	30	5	6.52	Vsi (s) Alu (w)	Total Py content locally 15-30%, including seams & veins; locally diss. En
A07-006	33	34	1	9.39	Vsi (s) Alu (m)	Diss. & fracture-fill Cp & En fairly common; minor Ba vlts.; 5% diss. Py & minor Py vlts.
	35	36	1	5.69	Vsi (s) Alu (m)	Same as 33-34 m
	39	40	1	6.81	Vsi (s) Alu (m)	Same as 33-34 m
A07-008	19	20	1	7.46	Vsi (s) Alu (m) Pro (m)	Core broken, fault gouge, altered propylitically by chlorite; 1% diss. Py & minor diss. En
	46	48	2	17.47	Vsi (s) Alu (m)	Vuggy silicified, pinkish-grey rock with partial infill of vugs by alunite crystals; locally massive to diss. Cp & En - 40 mm at 46.25 m; 1% diss. Py & 1% diss. Cp
	57	59	2	8.81	Vsi (s) Alu (w)	5% diss. Py
A07-009	59	61	2	12.17	Vsi (m)	Extensive Py seams & veining up to 10

A07-011	48	49	1	22.7	Psi (m) Alu (w)	cm thickness; 3% diss. Py throughout zone; rock code = HBX
	51	52	1	10.55	Vsi (s) Msi (m) Alu (w)	Py locally as high as 20%; at 49.0 m, sulphides have charred black look - Py, En & other unknown minerals; 2 cm Ba vlt. at 48.2 m; also minor diss. Cp
	54	55	1	5.13	Cly (w) Ich(w)	Minor clay alteration of lithic frags; strongly hematized/chloritized clay-altered fault gouge at 54.5 m
A07-012	43	45	2	17.86	Vsi (m) Alu (m)	Kaol or clay has infilled some of the vugs; silicified frags up to 5 cm (possible dike?); Py vlts are irreg; 1% Py diss. on fracture surfaces
	55	57	2	8.97	Vsi (s) Sal (w)	10% Py as vlts.; Py replacement at 53.4 m (3 cm x 1.5 cm); massive Py to locally anhedral Py to 1 mm on fractures; total Py in interval = 10-20%
A07-013	36	37	1	6.48	Sal (s)	5% Py in stringers; Ba vlts.
	38	39	1	8.91	Sal (s)	5% diss. Py, irreg. vlts of Ba & Qtz.,
	51	53	2	29.55	Vsi (s) Sal (m) Ser (w)	0.5% diss. Py; Py, Cp & Cv vlts.; irreg. Ba vlts.; probable free gold locally associated with Cu sulphides; at 51.9 m, 2 cm band of solid Cp + Cv at 30 degrees CA
	64	66	2	8.8	Msi (s) Vsi (w) Sal (w)	2% Py as vlts. & diss.; silicified hydro-thermal breccia?
A07-015	38	39	1	3.49	Sal (m) Ser (w)	Minor diss. Py in fault breccia
A07-016	39	40	1	20.3	Vsi (s)	0.5% to 1% Py & Cp as vlts & diss.; minor patchy Ba in Cp vlts.
A07-017	29	30	1	22	Vsi (s)	Partially oxidized; 0.5% diss. Py; minor diss. Cp & Cc; locally Ba veins ass'd with Cp
	31	34	3	7.74	Vsi (s)	Partially oxidized; similar to 29-30 m

A07-020	18	19	1	13.05	Vsi (m) Cly (m)	Strong grey-black colour of sulphides (dominantly Py ~ 10%); Vsi infilled by clay dominantly as diss. & seams
A07-026	14	17	3	12.37	Acy (m) Vsi (w)	Interval from 15-17 m is HBX with up to 15% diss. Py & local Ba veins; some Cv ass'd with Cp
<i>Thesis III Zone:</i>						
A07-030	9	12	3	6.55	Vsi (s) Msi (m) Sal (m)	Interval is oxidized (goethitic/limonitic); 4.5% diss. Py; irreg. Ba vltcs & Ba crystals in vugs common

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Appendix 1
Ranch Property
Descriptive Codes to Accompany 2007 Diamond Drill Hole Records

Description	2007	
	CJGC Code	Previous Code Equivalent
Alteration Codes:		
Intensity use; S (strong), M(medium), W(weak)		
Massive Silicification	Msi	A5
Vuggy Silicification	Vsi	A6(oxide) & A7(sulphide)
Pervasive Silicification	Psi	
Silica-Alunite	Sal	A1
Alunite	Alu	A1
Alunite-Clay	Acy	A1
Clay	Cly	A2
Mixed Silica Clay	Scy	A2
Sericite	Ser	A8
Illite-Chlorite	Ich	A8
Propylitic	Pro	A3
Unaltered	Ual	
Oxidation Code:		
Oxidized (red- d.brown hematitic)	Oh	
Oxidized (yellow goetitic/limonitic)	OI	
Partial Oxide-Sulphide	PO	
Sulphide	Su	
Vein Gangue:		
Crystalline quartz	Sq	
Amorphous quartz	Sa	
Barite	Ba	
Carbonate	Ca	
Sulphide only	Su	
Limonite	Lim	
Anhydrite/Gypsum	An	
Hematite	Hem	
Adularia	Adu	
Alunite	Alu	
Sericite	Ser	
Clay	Cly	
Kaolinite	Kao	
Chlorite	Chl	
Illite-Smectite	Ism	
Jasper	Jas	
Vein & Disseminated Sulphides:		
Pyrite	Py	
Chalcopyrite	Cp	
Pyrrhotite	Po	

Descriptive Codes to Accompany 2007 Diamond Drill Hole Records

Description	2007	
	CJGC Code	Previous Code Equivalent
Marcasite	Ma	
Sphalerite	Sp	
Galena	Ga	
Tennantite -Tetrahedrite	Tn	
Enargite	En	
Chalcocite	Cc	
Covellite	Cv	
Digenite	Di	
Bornite	Bn	
Orpiment	Orp	
Realgar	Rea	
Lithology:		
Andesitic Volcanio-Clastic Breccia	AVB	7
Andesitic Volcano-Clastics Sedimentary	AVS	1
Andesitic Crystal-Lapilli Tuff	AXT	1 & 7
Andesite-Dacite Tuff with Fiammi	ADF	1 & 7
Andesite Flows	AVF	5
Dacite Pyroclastic Flow	DPF	6
Dacite Lava Flow	DLF	6
Latite with Kspar megacrysts	LKF	4
Rhyo-dacite Dyke	RDD	3
Granodiorite-Diorite	GRD	2
Dacite Feldspar Porphyry Dike	DCD	
Andesite Crystal-Rich Lapilli Tuff	AXRT	
Rhyolite	RHY	
Casing	CAS	
Structure:		
Fracture Zone/Fault	FF	
Fault Breccia	FB	
Fault Gouge	FG	

Appendix 1
Ranch Property
2007 Diamond Drill Hole Records (DDH A07-001 to A07-045)
Alteration & Mineralization Comments

	Hole_ID	From	To	A07-	Alteration_Intensity_1	Alteration_Code_2	Alteration_Intensity_2	Alteration_Code_3	Alteration_Intensity_3	Oxidation_Code_1	Oxidation_Code_2	Vein_GAngue_1	Vein_Angle_1	Vein_GAngue_2	Vein_Angle_2	Vein_Sulphide_1	Vein_Sulphide_1_1%	Vein_Sulphide_2	Vein_Sulphide_2_1%	Vein_Sulphide_Angle	Dissem_Sulphide_1	Dissem_Sulphide_1_1%	Dissem_Sulphide_2	Dissem_Sulphide_2_1%	Dissem_Sulphide_3	Dissem_Sulphide_3_1%	Visible_Gold	Rock_Code_1	Rock_Code_2	Rock_Bedding	Fault_Code	From_m	Thickness_mm	Structure_Angle
A07-001		0.00	1.00																								CAS							
A07-001		1.00	2.00																								CAS							
A07-001		2.00	3.00																								CAS							
A07-001		3.00	4.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		4.00	5.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		5.00	6.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		6.00	7.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		7.00	8.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		8.00	9.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		9.00	10.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		10.00	11.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		11.00	12.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		12.00	13.00	Cly	w					Su		Ca	40								Py	0.5					AVF			FG	12.3	4	20	
A07-001		13.00	14.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		14.00	15.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		15.00	16.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		16.00	17.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		17.00	18.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		18.00	19.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		19.00	20.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		20.00	21.00	Cly	m					Su		Ca	irreg								Py	2.5					AVF							
A07-001		21.00	22.00	Cly	w					Su		Ca	40								Py	2.5					AVF							
A07-001		22.00	23.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		23.00	24.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		24.00	25.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		25.00	26.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		26.00	27.00	Cly	w					Su		Ca	40								Py	0.5					AVF							
A07-001		27.00	28.00	Cly	&					Su		Ca	irreg								Py	0.5					AVB							
A07-001		28.00	29.00	Cly	w					Su		Ca	irreg								Py	0.5					AVB							
A07-001		29.00	30.00	Cly	w					Su		Ca	irreg								Py	0.5					AVB							
A07-001		30.00	31.00	Cly	w					Su		Ca	irreg								Py	0.5					AVB							
A07-001		31.00	32.00	Cly	w					Su		Ca	irreg								Py	0.5					AVB							
A07-001		32.00	33.00	Cly	m					Su		Ca	irreg								Py	0.5					AVB							
A07-001		33.00	34.00	Cly	m					Su		Ca	irreg								Py	0.5					AVB							
A07-001		34.00	35.00	Cly	w					Su		Ca		25							Py	0.5					AVB			FG		34.45	30	60
A07-001		35.00	36.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		36.00	37.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		37.00	38.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		38.00	39.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		39.00	40.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		40.00	41.00	Cly	m					Su		Ca	irreg								Py	0.5					AVB							
A07-001		41.00	42.00	Cly	m					Su		Ca	irreg								Py	0.5					AVB							
A07-001		42.00	43.00	Cly	m					Su		Ca	irreg								Py	0.5					AVB			FG		42.2	10	80
A07-001		43.00	44.00	Cly	w					Su		Ca		52							Py	0.1					AVB							
A07-001		44.00	45.00	Cly	w					Su		Ca		50							Py	0.1					AVB							
A07-001		45.00	46.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		46.00	47.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		47.00	48.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		48.00	49.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		49.00	50.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB			FG		49.9	7	40
A07-001		50.00	51.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		51.00	52.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		52.00	53.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		53.00	54.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		54.00	55.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		55.00	56.00	Cly	w					Su		Ca		52.5							Py	0.1					AVB							
A07-001		56.00	57.00	Cly	w					Su		Ca	irreg								Py	0.1					AVB							
A07-001		57.00	58.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		58.00	59.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		59.00	60.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		60.00	61.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		61.00	62.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		62.00	63.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		63.00	64.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		64.00	65.00	Cly	w					Su		Ca		25							Py	0.5					AVB							
A07-001		65.00	66.00	Cly	w					Su																								

A07-001	80.00	81.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	81.00	82.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	82.00	83.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	83.00	84.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	84.00	85.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	85.00	86.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	86.00	87.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB		FG	86.8	10	40
A07-001	87.00	88.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	88.00	89.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	89.00	90.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	90.00	91.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB		FB	90.2	40	40
A07-001	91.00	92.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	92.00	93.00	Cly	w		Su	Ca	irreg	Sa		30 Py	0.1			AVB					
A07-001	93.00	94.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	94.00	95.00	Cly	w		Su	Ca	irreg				Py	0.5		AVB					
A07-001	95.00	96.00	Msi	m		Su	Ca		25			Py	0.5		AVB					
A07-001	96.00	97.00	Cly	w		Su	Ca		45			Py	0.5		AVB					
A07-001	97.00	98.00	Cly	w		Su	Ca		45			Py	0.5		AVB					
A07-001	98.00	99.00	Cly	w		Su	Ca		45 Sa		40 Py	0.1			AVB					
A07-001	99.00	100.00	Cly	w		Su	Ca		45			Py	0.5		AVB					
A07-001	100.00	101.00	Cly	w		Su	Ca		45			Py	0.5		AVB					
A07-001	101.00	102.00	Cly	w		Su	Ca		45			Py	0.5		AVB		FG	101.4	5	45
A07-001	102.00	103.00	Cly	w		Su	Ca		45			Py	0.5		AVB		FB	102.2	30	15
A07-001	103.00	104.00	Cly	w		Su	Ca		45			Py	0.5		AVB					
A07-001	104.00	105.00	Cly	w		Su	Ca		45			Py	0.5		AVB		FG	104.7	10	65
A07-001	105.00	106.00	Cly	m	Msi	m	An	irreg				Py	0.5		AVB	AVF	FG	105.8	15	60
A07-001	106.00	107.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	107.00	108.00	Cly	m	Msi	m	An	irreg							AVF		FG	107.6	200	50
A07-001	108.00	109.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	109.00	110.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	110.00	111.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	111.00	112.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	112.00	113.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	113.00	114.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	114.00	115.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	115.00	116.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	116.00	117.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	117.00	118.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	118.00	119.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	119.00	120.00	Cly	m	Msi	m	An	irreg							AVF		FG	119.1	10	0
A07-001	120.00	121.00	Cly	m	Msi	m	An	irreg							AVF		FG	120.1	10	30
A07-001	121.00	122.00	Cly	m	Msi	m	An	irreg							AVF		FG	121.2	70	50
A07-001	122.00	123.00	Cly	m	Msi	m	An	irreg							AVF		FG	122.1	50	30
A07-001	123.00	124.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	124.00	125.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	125.00	126.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	126.00	127.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	127.00	128.00	Cly	m	Msi	m	Su	An	irreg	Sa	35 Py	0.1			AVF					
A07-001	128.00	129.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	129.00	130.00	Cly	m	Msi	m	An	irreg							AVF					
A07-001	130.00	131.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	131.00	132.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	132.00	133.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	133.00	134.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	134.00	135.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	135.00	136.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	136.00	137.00	Msi	w		Su	An	irreg				Py	5		AVF					
A07-001	137.00	138.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	138.00	139.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75 FG	138.7	1400	55
A07-001	139.00	140.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	140.00	141.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	141.00	142.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	142.00	143.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	143.00	144.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	144.00	145.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	145.00	146.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	146.00	147.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	147.00	148.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	148.00	149.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	149.00	150.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	150.00	151.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	151.00	152.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	152.00	153.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	153.00	154.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75 FB	153	60	20
A07-001	154.00	155.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	155.00	156.00	Ich	m		Su	Ca		40 Hem		35	Py	0.1		AVF		75			
A07-001	156.00	157.00	Ich	m			Hem		35						AVF		75			
A07-001	157.00	158.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	158.00	159.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	159.00	160.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	160.00	161.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	161.00	162.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	162.00	163.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	163.00	164.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	164.00	165.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	165.00	166.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	166.00	167.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	167.00	168.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	168.00	169.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	169.00	170.00	Ich	m		Su	Ca		40			Py	0.1		AVF		75			
A07-001	170.00	171.00	Ich	m		Oh	Su	Ca	40		Py	0.1			AVF	UNK	75			
A07-001	171.00	172.00	Cly	s	Msi	w	Oh	Su			Py	0.1			UNK		FG	171.3	700	
A07-001	172.00	173.00	Cly	s	Msi	w	Oh	Su			Py	0.1			UNK		FG	172.4	1000	

A07-001	173.00	174.00	Msi	w	Cly	m		Oh	Su	Ca	irreg		Py	0.1		Py	0.1		UNK	AVB					
A07-001	174.00	175.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	175.00	176.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	176.00	177.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	177.00	178.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	178.00	179.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	179.00	180.00	Cly	w				Su		Ca	irreg					Py	0.1		AVB						
A07-001	180.00	181.00	Cly	w				Su								Py	4.5		AVB						
A07-001	181.00	182.00	Ich	m				Su	Oh							Py	0.1		AVB						
A07-001	182.00	183.00	Ich	m				Su	Oh							Py	0.1		AVB			FB	182.9	300	65
A07-001	183.00	184.00	Pro	m				Su								Py	0.1		AVF						
A07-001	184.00	185.00	Pro	m				Su								Py	0.1		AVF			FG	185.9	10	35
A07-001	185.00	186.00	Pro	m				Su								Py	0.1		AVF						
A07-001	186.00	187.00	Ual					Su		Ca		35				Py	0.1		DCD						
A07-001	187.00	188.00	Ual					Su		Ca		35				Py	0.1		DCD						
A07-001	188.00	189.00	Ual					Su		Ca		35				Py	0.1		DCD						
A07-001	189.00	190.00	Ual					Su		Ca		35				Py	0.1		DCD						
A07-001	190.00	190.20	Ual					Su		Ca		35				Py	0.1		DCD						
A07-002	0.00	1.00																	CAS						
A07-002	1.00	2.00	Cly	w				Ol											CAS						
A07-002	2.00	3.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	3.00	4.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	4.00	5.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	5.00	6.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	6.00	7.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	7.00	8.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	8.00	9.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	9.00	10.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	10.00	11.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	11.00	12.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	12.00	13.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	13.00	14.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	14.00	15.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	15.00	16.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	16.00	17.00	Cly	w				Su	Ol							Py	0.1		AXT						
A07-002	17.00	18.00	Cly	m				Su	Ol							Py	0.1		UNK						
A07-002	18.00	19.00	Cly	m				Su	Ol							Py	0.1		UNK						
A07-002	19.00	20.00	Cly	m				Su	Ol							Py	0.1		UNK						
A07-002	20.00	21.00	Ich	m				Su		Sa		45		Py	3.5			Py	0.1						
A07-002	21.00	22.00	Ich	m				Su								Py	0.1		AXT						
A07-002	22.00	23.00	Cly	s	Ich	w		Su								Py	0.1		AXT						
A07-002	23.00	24.00	Msi	s				Su		An	irreg					Py	2 En	0.1	UNK						
A07-002	24.00	25.00	Msi	s				Su		An	irreg					Py	2 En	0.1	UNK						
A07-002	25.00	26.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	26.00	27.00	Cly	s	Ich	w		Su								Py	0.1		AXT						
A07-002	27.00	28.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	28.00	29.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	29.00	30.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	30.00	31.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	31.00	32.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	32.00	33.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	33.00	34.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	34.00	35.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	35.00	36.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	36.00	37.00	Cly	s				Su								Py	0.1		AXT						
A07-002	37.00	38.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	38.00	39.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	39.00	40.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	40.00	41.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	41.00	42.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	42.00	43.00	Ich	w				Su		Sa		45				Py	0.1		AXT						
A07-002	43.00	44.00	Vsi	s				Su		Sa		50				Py	2.5 En	0.1	UNK						
A07-002	44.00	45.00	Vsi	s				Su		Sa		50				Py	2.5 En	0.1	UNK						
A07-002	45.00	46.00	Cly	w	Msi	m	Vsi	Su		An		45				Py	0.1		RDD						
A07-002	46.00	47.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	47.00	48.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	48.00	49.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	49.00	50.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	50.00	51.00	Msi	s															AXT						
A07-002	51.00	52.00	Msi	s															AXT						
A07-002	52.00	53.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	53.00	54.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT			FG	53.2	100	
A07-002	54.00	55.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	55.00	56.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	56.00	57.00	Msi	s															AXT						
A07-002	57.00	58.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	58.00	59.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	59.00	60.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	60.00	61.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	61.00	62.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT			FG	61.5	30	40
A07-002	62.00	63.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	63.00	64.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	64.00	65.00	Ich	w	Cly	w		Su		Sa		35				Py	0.1		AXT						
A07-002	65.00	66.00	Cly	s				Su		Sa		35				Py	0.1		AXT			FG	65.5	1300	
A07-002	66.00	67.00	Ich	w	Cly	w		Su		Sa		35													

A07-002	74.00	75.00	Ich	w	Cly	w		Su	Sa	35						Py	0.1	AXT
A07-002	75.00	76.00	Ich	w	Cly	w		Su	Sa	35						Py	0.1	AXT
A07-002	76.00	77.00	Ich	w	Cly	w		Su	Sa	35						Py	0.1	AXT
A07-002	77.00	78.00	Ich	w	Cly	w		Su	Sa	35						Py	0.1	AXT
A07-002	78.00	79.00	Ich	w	Cly	w		Su	Sa	35						Py	0.1	AXT
A07-002	79.00	80.00	Ich	m	Cly	w		Su	Sa	55 An	55 Py	1 En	0.5			Py	0.1	AXT
A07-002	80.00	81.00	Ich	m	Cly	w		Su	Sa	55 An	55 Py	1 En	0.5			Py	0.1	AXT
A07-002	81.00	82.00	Ich	m	Cly	w		Su	Sa	55 An	55 Py	1 En	0.5			Py	0.1	AXT
A07-002	82.00	83.00	Ich	s	Cly	m		Su	Sa	55 An	55 Py	1.5 En	0.5			Py	0.1	AXT
A07-002	83.00	84.00	Ich	m	Cly	w		Su	Sa	40		0.5 En	0.1			Py	0.1	AXT
A07-002	84.00	85.00	Ich	m	Cly	w	Msi	w	Su	Sa	40		0.5 En	0.1		Py	0.1	AXT
A07-002	85.00	86.00	Vsi	s				Su	Ba	irreg		Py	1			Py	0.1	UNK
A07-002	86.00	87.00	Vsi	s				Su	Ba	irreg		Py	1			Py	0.1	UNK
A07-002	87.00	88.00	Vsi	s				Su	Ba	irreg		Py	1			Py	0.1	UNK
A07-002	88.00	89.00	Vsi	s				Su	Ba	irreg		Py	1			Py	0.1	UNK
A07-002	89.00	90.00	Cly	m				Su	Sa		45	Py	0.1			Py	0.1	AXT
A07-002	90.00	91.00	Cly	m				Su	Sa		45	Py	0.1			Py	0.1	AXT
A07-002	91.00	92.00	Cly	m				Su	Sa		45	Py	0.1			Py	0.1	AXT
A07-002	92.00	93.00	Msi	s				Su	Alu	irreg						Py	0.1	UNK
A07-002	93.00	94.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	94.00	95.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	95.00	96.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	96.00	97.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	97.00	98.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	98.00	99.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	99.00	100.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	100.00	101.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	101.00	102.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	102.00	103.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	103.00	104.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	104.00	105.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	105.00	106.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	106.00	107.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	107.00	108.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	108.00	109.00	Cly	m	Alu	w		Su	Alu		45 Sa	45 Py	1			Py	1	AXT
A07-002	109.00	110.00	Vsi	s				Su	Ba	irreg		Py	1			Py	0.1	UNK
A07-002	110.00	111.00	Cly	s	Msi	m		Su	Ba		40	Py	0.5			Py	0.1	AXT
A07-002	111.00	112.00	Cly	s	Msi	m		Su	Ba		40	Py	0.5			Py	0.1	AXT
A07-002	112.00	113.00	Vsi	s				Su	Alu	irreg						Py	0.1	UNK
A07-002	113.00	114.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	114.00	115.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	115.00	116.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	116.00	117.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	117.00	118.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	118.00	119.00	Cly	s				Su	Alu		30					Py	0.1	AXT
A07-002	119.00	120.00	Msi	s				Su								Py	0.1	UNK
A07-002	120.00	121.00	Msi	s				Su								Py	0.1	UNK
A07-002	121.00	122.00	Msi	s				Su								Py	0.1	UNK
A07-002	122.00	123.00	Cly	s	Msi	m		Su	Alu		35					Py	0.1	AXT
A07-002	123.00	124.00	Cly	s	Msi	m		Su	Alu		35					Py	0.1	AXT
A07-002	124.00	125.00	Cly	s	Msi	m		Su	Alu		35					Py	0.1	AXT
A07-002	125.00	126.00	Cly	s	Msi	m		Su	Alu		35					Py	0.1	AXT
A07-002	126.00	127.00	Ual					Su								Py	0.1	AXT
A07-002	127.00	128.00	Ual					Su								Py	0.1	AXT
A07-002	128.00	129.00	Ual					Su								Py	0.1	AXT
A07-002	129.00	130.00	Ual					Su								Py	0.1	AXT
A07-002	130.00	131.00	Ual					Su								Py	0.1	AXT
A07-002	131.00	132.00	Ual					Su								Py	0.1	AXT
A07-002	132.00	133.00	Cly	m				Su								Py	0.1	RDD
A07-002	133.00	134.00	Cly	m				Su								Py	0.1	RDD
A07-002	134.00	135.00	Cly	m				Su								Py	0.1	RDD
A07-002	135.00	136.00	Cly	m				Su								Py	0.1	RDD
A07-002	136.00	137.00	Cly	m				Su								Py	0.1	RDD
A07-002	137.00	138.00	Cly	m				Su								Py	0.1	RDD
A07-002	138.00	139.00	Cly	m				Su								Py	0.1	RDD
A07-002	139.00	140.00	Ich	w				Su								Py	0.1	RDD
A07-002	140.00	141.00	Cly	m														AVB
A07-002	141.00	142.00	Cly	m														RDD
A07-002	142.00	143.00	Cly	m														RDD
A07-002	143.00	144.00	Ual					Su								Py	0.1	ADF
A07-002	144.00	145.00	Ual					Su								Py	0.1	ADF
A07-002	145.00	146.00	Cly	m														RDD
A07-002	146.00	147.00	Ual					Su								Py	0.1	ADF
A07-002	147.00	148.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	148.00	149.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	149.00	150.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	150.00	151.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	151.00	152.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	152.00	153.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	153.00	154.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	154.00	155.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	155.00	156.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	156.00	157.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	157.00	158.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	158.00	159.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	159.00	160.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	160.00	161.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	161.00	162.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	162.00	163.00	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-002	163.00	163.10	Cly	w				Su	Ca	35						Py	0.1	RDD
A07-003	0.00	1.00																CAS
A07-003	1.00	2.00																CAS

A07-003	95.00	96.00	Ser	s	Msi	m	Su	lsm	10	Py	0.1	Py	3	UNK
A07-003	96.00	97.00	Cly	s	Pro	s	Su					Py	0.1	AXT
A07-003	97.00	98.00	Cly	s	Pro	s	Su					Py	0.1	AXT
A07-003	98.00	99.00	Cly	m			Su	Sa	30 Smi	30 Py	50	Py	1	AXT
A07-003	99.00	100.00	Cly	m			Su	lsm	irreg			Py	0.5	AXT
A07-003	100.00	101.00	Cly	m			Su	lsm	irreg			Py	0.5	AXT
A07-003	101.00	102.00	Cly	m			Su	lsm	irreg			Py	0.5	AXT
A07-003	102.00	103.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	103.00	104.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	104.00	105.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	105.00	106.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	106.00	107.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	107.00	108.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	108.00	109.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	109.00	110.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	110.00	111.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	111.00	112.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	112.00	113.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	113.00	114.00	Ser	s	Msi	w	Su	Sa	35	Py	7.5	Py	2	UNK
A07-003	114.00	115.00	Ser	m	Msi	w	Su	Sa	40 Smi	40 Py	10			UNK
A07-003	115.00	116.00	Ser	m	Msi	w	Su	Sa	40 Smi	40 Py	10			UNK
A07-003	116.00	117.00	Pro	s			Su					Py	0.1	AXT
A07-003	117.00	118.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	118.00	119.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	119.00	120.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	120.00	121.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	121.00	122.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	122.00	123.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	123.00	124.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	124.00	125.00	Ual				Su	Ca	50			Py	0.1	RDD
A07-003	125.00	126.00	Pro	w			Su	Ca	irreg			Py	0.1	AVB
A07-003	126.00	127.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	127.00	128.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	128.00	129.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	129.00	130.00	Pro	w			Su	Sa	40	Py	2.5	Py	0.1	AVB
A07-003	130.00	131.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	131.00	132.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	132.00	133.00	Pro	w			Su	Ca	50			Py	0.1	AVB
A07-003	133.00	134.00	Cly	w				Ca	irreg					RDD
A07-003	134.00	135.00	Cly	w				Ca	irreg					RDD
A07-003	135.00	136.00	Cly	w				Ca	irreg					RDD
A07-003	136.00	137.00	Cly	w				Ca	irreg					RDD
A07-003	137.00	138.00	Cly	w				Ca	irreg					RDD
A07-003	138.00	139.00	Cly	w				Ca	irreg					RDD
A07-003	139.00	140.00	Cly	w				Ca	irreg					RDD
A07-003	140.00	141.00	Cly	w				Ca	irreg					RDD
A07-003	141.00	142.00	Cly	w				Ca	irreg					RDD
A07-003	142.00	143.00	Cly	w				Ca	irreg					RDD
A07-003	143.00	144.00	Cly	w				Ca	irreg					RDD
A07-003	144.00	145.00	Cly	w				Ca	irreg					RDD
A07-003	145.00	146.00	Cly	w				Ca	irreg					RDD
A07-003	146.00	147.00	Ich	m			Su					Py	0.1	AXT
A07-003	147.00	148.00	Ich	m			Su					Py	0.1	AXT
A07-003	148.00	149.00	Ich	m			Su					Py	0.1	AXT
A07-003	149.00	150.00	Ich	m			Su					Py	0.1	AXT
A07-003	150.00	151.00	Ich	m			Su					Py	0.1	AXT
A07-003	151.00	152.00	Ich	m			Su					Py	0.1	AXT
A07-003	152.00	153.00	Ich	m			Su					Py	0.1	AXT
A07-003	153.00	154.00	Ich	m			Su					Py	0.1	AXT
A07-003	154.00	155.00	Ich	m			Su					Py	0.1	AXT
A07-003	155.00	156.00	Ich	m			Su					Py	0.1	AXT
A07-003	156.00	157.00	Ich	m			Su					Py	0.1	AXT
A07-003	157.00	158.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	158.00	159.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	159.00	160.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	160.00	161.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	161.00	162.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	162.00	163.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	163.00	164.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	164.00	165.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	165.00	166.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	166.00	167.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	167.00	168.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	168.00	169.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	169.00	170.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	170.00	171.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	171.00	172.00	Vsi	s	Msi	s	Su	Ba	irreg	Py	1.5	Py	4.5	UNK
A07-003	172.00	173.00	Pro	m			Su					Py	0.1	AXT
A07-003	173.00	174.00	Pro	m			Su					Py	0.1	AXT
A07-003	174.00	175.00	Pro	m			Su					Py	0.1	AXT
A07-003	175.00	176.00	Pro	m			Su					Py	0.1	AXT
A07-003	176.00	177.00	Pro	m			Su					Py	0.1	AXT
A07-003	177.00	178.00	Pro	m			Su					Py	0.1	AXT
A07-003	178.00	179.00	Pro	m			Su					Py	0.1	AXT
A07-003	179.00	180.00	Pro	m			Su					Py	0.1	AVF
A07-003	180.00	181.00	Pro	m			Su					Py	0.1	AVF
A07-003	181.00	182.00	Pro	w				Ca	30					AXT
A07-003	182.00	183.00	Pro	w				Ca	30					AXT
A07-003	183.00	184.00	Pro	w				Ca	30					AXT
A07-003	184.00	184.40	Pro	w				Ca	30					AXT
A07-004	0.00	1.00												CAS
A07-004	1.00	2.00	Cly	s			OI							ADF

ADF
ADF
ADF

FG

115.6

230

FG

125

200

45

FG

136.75

300

25

45

FG

146

100

60

FG

149.6

20

30

FG

155.6

350

FG

171.9

1000

50

FG

180.4

100

35

FG

1.5

3400

50

[illegible]

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A07-007	20.00	21.00 Ser	m	Psi	w			Su									Py	0.25					AXT
A07-007	21.00	22.00 Vsi	s	Alu	w			Su									Py	1					UNK
A07-007	22.00	23.00 Vsi	s	Alu	w			Su									Py	1					UNK
A07-007	23.00	24.00 Ser	s	Psi	m			Su									Py	0.5					UNK
A07-007	24.00	25.00 Vsi	s	Msi	w	Alu	w	Su									Py	3.5 En		0.1 Cp		0.1	UNK
A07-007	25.00	26.00 Vsi	s	Msi	w	Alu	w	Su									Py	3.5 En		0.1 Cp		0.1	UNK
A07-007	26.00	27.00 Ser	s	Psi	w			Su									Py	1					UNK
A07-007	27.00	28.00 Ser	s	Psi	w			Su									Py	1					UNK
A07-007	28.00	29.00 Ser	s	Psi	w			Su									Py	1					UNK
A07-007	29.00	30.00 Psi	s	Cly	m			Su	Adu	irreg							Py	2					AXT
A07-007	30.00	31.00 Psi	s	Cly	m			Su	Adu	irreg							Py	2					AXT
A07-007	31.00	32.00 Psi	s	Cly	m			Su	Adu	irreg							Py	2					AXT
A07-007	32.00	33.00 Psi	s	Cly	m			Su	Adu	irreg							Py	2					AXT
A07-007	33.00	34.00 Vsi	s					Su	Sa		50 Ba						Py	3.5					UNK
A07-007	34.00	35.00 Vsi	s					Su	Sa		50 Ba						Py	3.5					UNK
A07-007	35.00	36.00 Psi	s	Cly	m			Su									Py	2					AXT
A07-007	36.00	37.00 Psi	s	Cly	m			Su									Py	2					AXT
A07-007	37.00	38.00 Vsi	s	Alu	w			Su									Py	4					UNK
A07-007	38.00	39.00 Ich	w						Sa		55												AXT
A07-007	39.00	40.00 Ich	w						Sa		55												AXT
A07-007	40.00	41.00 Ich	w						Sa		55												AXT
A07-007	41.00	42.00 Ich	w						Sa		55												AXT
A07-007	42.00	43.00 Ich	w						Sa		55												AXT
A07-007	43.00	44.00 Ich	w						Sa		55												AXT
A07-007	44.00	45.00 Ich	w						Sa		55												AXT
A07-007	45.00	46.00 Ich	w						Sa		55												AXT
A07-007	46.00	47.00 Ich	w						Sa		55												AXT
A07-007	47.00	48.00 Ich	w						Sa		55												AXT
A07-007	48.00	49.00 Ich	w						Sa		55												AXT
A07-007	49.00	50.00 Ich	w						Sa		55												AXT
A07-007	50.00	51.00 Ich	w						Sa		55			</									

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A07-008	30.00	31.00	Cly	w																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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A07-008	123.00	124.00 Ser	s	Psi	m		Su	Adu	80		Py	5		Py	1		UNK
A07-008	124.00	125.00 Ser	s	Psi	m		Su	Adu	80		Py	5		Py	1		UNK
A07-008	125.00	126.00 Ser	s	Psi	m		Su	Adu	80		Py	5		Py	1		UNK
A07-008	126.00	127.00 Psi	s	Ser	m												UNK
A07-008	127.00	128.00 Psi	s	Ser	m												UNK
A07-008	128.00	129.00 Kao	w					Sa	irreg								AXT
A07-008	129.00	130.00 Kao	w					Sa	irreg								AXT
A07-008	130.00	131.00 Ser	s	Psi	m								Py		0.1		UNK
A07-008	131.00	132.00 Ser	s	Psi	m								Py		0.1		UNK
A07-008	132.00	133.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	133.00	134.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	134.00	135.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	135.00	136.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	136.00	137.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	137.00	138.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	138.00	139.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	139.00	140.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	140.00	141.00 Pro	w	Cly	w			Ca	irreg								AXT
A07-008	141.00	142.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	142.00	143.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	143.00	144.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	144.00	145.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	145.00	146.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	146.00	147.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	147.00	148.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	148.00	149.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	149.00	150.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	150.00	151.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	151.00	152.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	152.00	153.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	153.00	154.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	154.00	155.00 Pro	w					Ca	irreg				Py		0.1		AVS
A07-008	155.00	155.40 Pro	w					Ca	irreg				Py		0.1		AVS
A07-009	0.00	1.00															CAS
A07-009	1.00	2.00															CAS
A07-009	2.00	3.00															CAS
A07-009	3.00	4.00 Cly	m	Pro	w		OI	Cly	irreg	Sa		irreg					AXT
A07-009	4.00	5.00 Cly	m	Pro	w		OI	Cly	irreg	Sa		irreg					AXT
A07-009	5.00	6.00 Ich	m	Pro	m												AXT
A07-009	6.00	7.00 Ich	m	Pro	m												AXT
A07-009	7.00	8.00 Ich	m	Pro	m												AXT
A07-009	8.00	9.00 Ich	m	Pro	m												AXT
A07-009	9.00	10.00 Ich	m	Pro	m												AXT
A07-009	10.00	11.00 Pro	s	Ich	m												AXT
A07-009	11.00	12.00 Pro	s														AXT
A07-009	12.00	13.00 Pro	s														AXT
A07-009	13.00	14.00 Ual						Ca	irreg								AXT
A07-009	14.00	15.00 Ich	s	Pro	w			Sa	irreg								AXT
A07-009	15.00	16.00 Pro	s														AXT
A07-009	16.00	17.00 Pro	s														AXT
A07-009	17.00	18.00 Pro	s														AXT
A07-009	18.00	19.00 Pro	s														AXT
A07-009	19.00	20.00 Pro	s														AXT
A07-009	20.00	21.00 Cly	m														AXT
A07-009	21.00	22.00 Ser	m	Psi	m		Su	Sa	80		Py	1		Py	1		UNK
A07-009	22.00	23.00 Ser	m	Psi	m		Su	Sa	80		Py	1		Py	1		UNK
A07-009	23.00	24.00 Ser	m	Psi	m		Su	Sa	80		Py	1		Py	1		UNK
A07-009	24.00	25.00 Ser	m	Psi	m		Su	Sa	80		Py	1		Py	1		UNK
A07-009	25.00	26.00 Cly	w					Cly	irreg								AXT
A07-009	26.00	27.00 Cly	w					Cly	irreg								AXT
A07-009	27.00	28.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	28.00	29.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	29.00	30.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	30.00	31.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	31.00	32.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	32.00	33.00 Ser	s	Psi	m		Su	Sa	irreg		Py	1		Py		0.5	UNK
A07-009	33.00	34.00 Psi	s	Ser	m			Sa	irreg								UNK
A07-009	34.00	35.00 Ser	m	Psi	m		Su	Adu	irreg		Py	1		Py		0.5	UNK
A07-009	35.00	36.00 Ser	m	Psi	m		Su	Adu	irreg		Py	1		Py		0.5	UNK
A07-009	36.00	37.00 Ser	m	Psi	m		Su	Adu	irreg		Py	1		Py		0.5	UNK
A07-009	37.00	38.00 Ser	m	Psi	m		Su	Adu	irreg		Py	1		Py		0.5	UNK
A07-009	38.00	39.00 Ser	m	Psi	m		Su	Adu	irreg		Py	1		Py		0.5	UNK
A07-009	39.00	40.00 Ser	m	Psi	m		Su	Sa	irreg				Py		5		HBX
A07-009	40.00	41.00 Ser	m	Psi	m		Su	Sa	irreg				Py		5		HBX
A07-009	41.00	42.00 Ser	m	Psi	m		Su	Sa	irreg				Py		5		HBX
A07-009	42.00	43.00 Ser	m	Psi	m		Su	Sa	irreg				Py		5		HBX
A07-009	43.00	44.00 Ser	m	Psi	s		Su	Sa	irreg		Py	5		Py		0.5	UNK
A07-009	44.00	45.00 Ich	s	Pro	m												AXT
A07-009	45.00	46.00 Cly	w	Ser	w		Su	Ca	irreg				Py		0.1		AXT
A07-009	46.00	47.00 Ich	s														AXT
A07-009	47.00	48.00 Ich	s	Cly	s	Pro	m										AXT
A07-009	48.00	49.00 Ual															AXT
A07-009	49.00	50.00 Ual															AXT
A07-009	50.00	51.00 Pro	m														AXT
A07-009	51.00	52.00 Ich	m														AXT
A07-009	52.00	53.00 Ich	s	Cly	s	Pro	w										AXT
A07-009	53.00	54.00 Vsi	w	Alu	s	Ser	w	Su	Sa	irreg			Py		0.1		UNK
A07-009	54.00	55.00 Vsi	w	Alu	s	Ser	w	Su	Sa	irreg			Py		0.1		UNK
A07-009	55.00	56.00 Vsi	w	Alu	s	Ser	w	Su	Sa	irreg			Py		0.1		UNK
A07-009	56.00	57.00 Vsi	m	Alu	m			Su	Sa	irreg	Ba	irreg	Py	5	En	0.1	UNK
A07-009	57.00	58.00 Vsi	m	Alu	m			Su	Sa	irreg	Ba	irreg	Py	5	En	0.1	UNK
A07-009	58.00	59.00 Vsi	m	Alu	m			Su	Sa	irreg	Ba	irreg	Py	5	En	0.1	UNK

A07-009	59.00	60.00	Vsi	m	Msi	m	Alu		Su								Py	3		HBX
A07-009	60.00	61.00	Vsi	m	Msi	m	Alu		Su								Py	3		HBX
A07-009	61.00	62.00	Vsi	m	Msi	m	Alu		Su								Py	3		HBX
A07-009	62.00	63.00	Ser	s	Psi	s			Su								Py	0.1		UNK
A07-009	63.00	64.00	Ser	s	Psi	s			Su								Py	0.1		UNK
A07-009	64.00	65.00	Ser	s	Psi	s			Su								Py	0.1		UNK
A07-009	65.00	66.00	Pro	s	Ich	w														AXT
A07-009	66.00	67.00	Pro	s	Ich	w														AXT
A07-009	67.00	68.00	Cly	w	Ser	w														AXT
A07-009	68.00	69.00	Ser	m	Psi	m	Cly		Su		Sa	irreg	Cly	irreg			Py	0.1		UNK
A07-009	69.00	70.00	Ser	m	Psi	m	Cly		Su		Sa	irreg					Py	0.1		UNK
A07-009	70.00	71.00	Vsi	m	Alu	w			Su		Sa	irreg					Py	5		UNK
A07-009	71.00	72.00	Ser	m	Psi	m	Cly		Su		Sa	irreg			Py	5	Py	2		UNK
A07-009	72.00	73.00	Ser	m	Psi	m	Cly		Su		Sa	irreg			Py	5	Py	2		UNK
A07-009	73.00	74.00	Pro	s	Ich	m														AXT
A07-009	74.00	75.00	Pro	s	Ich	m														AXT
A07-009	75.00	76.00	Pro	s	Ich	m														AXT
A07-009	76.00	77.00	Pro	s	Ich	m														AXT
A07-009	77.00	78.00	Ich	m	Pro	w														AXT
A07-009	78.00	79.00	Ich	m	Pro	w														AXT
A07-009	79.00	80.00	Ich	m	Pro	w														AXT
A07-009	80.00	81.00	Ich	m	Pro	w														AXT
A07-009	81.00	82.00	Ich	m	Pro	w														AXT
A07-009	82.00	83.00	Ich	m	Pro	w														AXT
A07-009	83.00	84.00	Cly	m	Ich	m					Cly	irreg								AXT
A07-009	84.00	85.00	Ich	w																ADF
A07-009	85.00	86.00	Ich	w																AXT
A07-009	86.00	87.00	Ich	w																AXT
A07-009	87.00	88.00	Ich	w																AXT
A07-009	88.00	89.00	Ich	w																ADF
A07-009	89.00	90.00	Ich	w							Sulphate	irreg								RDD
A07-009	90.00	91.00	Ich	s							Sulphate	irreg								RDD
A07-009	91.00	92.00	Ich	w							Sulphate	irreg								RDD
A07-009	92.00	93.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	93.00	94.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	94.00	95.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	95.00	96.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	96.00	97.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	97.00	98.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	98.00	99.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	99.00	100.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	100.00	101.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	101.00	102.00	Cly	w	Ich	w	Pro	w	Oh		Ca	irreg								RDD
A07-009	102.00	103.00	Ich	w							Ca	irreg								RDD
A07-009	103.00	104.00	Ich	w							Ca	irreg								RDD
A07-009	104.00	105.00	Ich	w							Ca	irreg								RDD
A07-009	105.00	106.00	Ich	w							Ca	irreg								RDD
A07-009	106.00	107.00	Ich	w							Ca	irreg								RDD
A07-009	107.00	108.00	Ich	w							Ca	irreg								RDD
A07-009	108.00	109.00	Ich	w							Ca	irreg								RDD
A07-009	109.00	110.00	Ich	w							Ca	irreg								RDD
A07-009	110.00	111.00	Ich	w							Ca	irreg								RDD
A07-009	111.00	112.00	Ich	w							Ca	irreg								RDD
A07-009	112.00	113.00	Ich	w							Ca	irreg								RDD
A07-009	113.00	114.00	Ich	w							Ca	irreg								RDD
A07-009	114.00	115.00	Ich	w							Ca	irreg								RDD
A07-009	115.00	116.00	Ich	w							Ca	irreg								RDD
A07-009	116.00	117.00	Ich	w							Ca	irreg								RDD
A07-009	117.00	118.00	Ich	w							Ca	irreg								RDD
A07-009	118.00	119.00	Ich	w							Ca	irreg								RDD
A07-009	119.00	120.00	Ich	w							Ca	irreg								RDD
A07-009	120.00	121.00	Ich	w							Ca	irreg								RDD
A07-009	121.00	122.00	Ich	w							Ca	irreg								RDD
A07-009	122.00	123.00	Ich	w							Ca	irreg								RDD
A07-009	123.00	124.00	Ich	w							Ca	irreg								RDD
A07-009	124.00	125.00	Ich	m							Ca	irreg								RDD
A07-009	125.00	126.00	Ich	m							Ca	irreg								RDD
A07-009	126.00	127.00	Ich	m							Ca	irreg								RDD
A07-009	127.00	128.00	Ich	m							Ca	irreg								RDD
A07-009	128.00	129.00	Ich	m							Ca	irreg								RDD
A07-009	129.00	130.00	Ich	m							Ca	irreg								RDD
A07-009	130.00	131.00	Ich	m							Ca	irreg								RDD
A07-009	131.00	132.00	Ich	m							Ca	irreg								RDD
A07-009	132.00	133.00	Ich	m							Ca	irreg								RDD
A07-009	133.00	134.00	Ich	m							Ca	irreg								RDD
A07-009	134.00	135.00	Ich	m							Ca	irreg								RDD
A07-009	135.00	136.00	Ich	m							Ca	irreg								RDD
A07-009	136.00	137.00	Ich	m							Ca	irreg								RDD
A07-009	137.00	138.00	Ich	m							Ca	irreg								RDD
A07-009	138.00	139.00	Ich	m							Ca	irreg								RDD
A07-009	139.00	140.00	Ich	m							Ca	irreg								RDD
A07-009	140.00	141.00	Ich	m							Ca	irreg								RDD
A07-009	141.00	142.00	Ich	m							Ca	irreg								RDD
A07-009	142.00	143.00	Ich	w	Cly	w	Pro	w												AXT
A07-009	143.00	144.00	Ser	m	Psi	w	Cly	w	Su		Sa		70				Py	2		UNK
A07-009	144.00	145.00	Ser	m	Psi	w	Cly	w	Su		Sa		70				Py	2		UNK
A07-009	145.00	146.00	Ser	m	Psi	w	Cly	w	Su		Sa		70				Py	2		UNK
A07-009	146.00	147.00	Ser	m	Psi	w	Cly	w	Su		Sa		70				Py	2		UNK
A07-009	147.00	148.00	Ser	s	Psi	w			Su		Adu		70				Py	0.1		UNK
A07-009	148.00	149.00	Cly	w	Ich	w														AXT
A07-009	149.00	150.00	Cly	w	Ich	w														AXT
A07-009	150.00	151.00	Cly	w	Ich	w														AXT
A07-009	151.00	152.00	Cly	w	Ich	w	Pro	w			Ca	irreg								RDD

A07-009	152.00	153.00	Cly	w	Ich	w	Pro	w		Ca	irreg							RDD
A07-009	153.00	154.00	Cly	w	Ich	w	Pro	w		Ca	irreg							RDD
A07-009	154.00	155.00	Cly	w	Ich	w	Pro	w		Ca	irreg							RDD
A07-009	155.00	156.00	Ich	s														AXT
A07-009	156.00	157.00	Ich	s	Cly	m												AXT
A07-009	157.00	158.00	Ich	s	Cly	m												AXT
A07-009	158.00	159.00	Vsi	m	Alu	w			Su	Sa	irreg		Py	5				AXT
A07-009	159.00	160.00	Vsi	m	Alu	w			Su	Sa	irreg		Py	5				UNK
A07-009	160.00	161.00	Vsi	m	Alu	w			Su	Sa	irreg		Py	5				UNK
A07-009	161.00	162.00	Ser	m	Vsi	w			Su	Sa	irreg		Py					UNK
A07-009	162.00	163.00	Ser	m	Vsi	w			Su	Sa	irreg		Py					UNK
A07-009	163.00	164.00	Cly	w	Ich	w												AXT
A07-009	164.00	165.00	Ser	m	Cly	m			Su	Sa		90	Py	5				UNK
A07-009	165.00	166.00	Ser	m	Cly	m			Su	Sa		90	Py	5				UNK
A07-009	166.00	167.00	Ich	m	Cly	w	Pro	m										AXT
A07-009	167.00	168.00	Ich	m	Cly	w	Pro	m										AXT
A07-009	168.00	169.00	Ich	m	Cly	w	Pro	m										AXT
A07-009	169.00	170.00	Ich	m	Pro	s	Cly	w										AXT
A07-009	170.00	171.00	Ich	m	Pro	s	Cly	w	Su	Sa		90 Hem	90 Py	5				AXT
A07-009	171.00	172.00	Ich	m	Pro	s	Cly	w										AXT
A07-009	172.00	173.00	Ich	m	Pro	s	Cly	w										AXT
A07-009	173.00	173.74	Ich	m	Pro	s	Cly	w										AXT
A07-010	0.00	1.00																CAS
A07-010	1.00	2.00																CAS
A07-010	2.00	3.00																CAS
A07-010	3.00	4.00																CAS
A07-010	4.00	5.00	Ich	w					OI									AXT
A07-010	5.00	6.00	Ich	w					OI									AXT
A07-010	6.00	7.00	Ich	w	Cly	w												AXT
A07-010	7.00	8.00	Ich	w	Cly	w												AXT
A07-010	8.00	9.00	Ich	w	Cly	w												AXT
A07-010	9.00	10.00	Ich	w	Cly	w												AXT
A07-010	10.00	11.00	Ich	w	Cly	w												AXT
A07-010	11.00	12.00	Ich	w	Cly	w												AXT
A07-010	12.00	13.00	Ich	w	Cly	w												AXT
A07-010	13.00	14.00	Ich	w	Cly	w												AXT
A07-010	14.00	15.00	Ich	m	Pro	w												AXT
A07-010	15.00	16.00	Ich	m	Pro	w												AXT
A07-010	16.00	17.00	Ich	m	Pro	w												AXT
A07-010	17.00	18.00	Ich	m	Pro	w												AXT
A07-010	18.00	19.00	Ich	m	Pro	w												AXT
A07-010	19.00	20.00	Ich	m	Pro	w												AXT
A07-010	20.00	21.00	Ich	m	Pro	w												AXT
A07-010	21.00	22.00	Msi	m	Ser	w	Cly	w	Su									UNK
A07-010	22.00	23.00	Msi	m	Ser	w	Cly	w	Su									UNK
A07-010	23.00	24.00	Vsi	s	Alu	w			PO	Sa	irreg		Py	2				UNK
A07-010	24.00	25.00	Vsi	s	Alu	w			PO	Sa	irreg		Py	2				UNK
A07-010	25.00	26.00	Vsi	s	Alu	w			PO	Sa	irreg		Py	2				UNK
A07-010	26.00	27.00	Ser	w	Ich	s												UNK
A07-010	27.00	28.00	Ser	w	Ich	s												UNK
A07-010	28.00	29.00	Ich	w	Pro	w												AXT
A07-010	29.00	30.00	Ser	m	Psi	m	Ich	w										UNK
A07-010	30.00	31.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	31.00	32.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	32.00	33.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	33.00	34.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	34.00	35.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	35.00	36.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	36.00	37.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	37.00	38.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	38.00	39.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	39.00	40.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	40.00	41.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	41.00	42.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	42.00	43.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	43.00	44.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	44.00	45.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	45.00	46.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	46.00	47.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	47.00	48.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	48.00	49.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	49.00	50.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	50.00	51.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	51.00	52.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	52.00	53.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	53.00	54.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	54.00	55.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	55.00	56.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	56.00	57.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	57.00	58.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	58.00	59.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	59.00	60.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	60.00	61.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	61.00	62.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	62.00	63.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	63.00	64.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	64.00	65.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	65.00	66.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	66.00	67.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	67.00	68.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	68.00	69.00	Ich	m	Pro	m	Cly	w										AXT
A07-010	69.00	70.00	Ich	m	Pro	m	Cly	w										AXT

FG

155.4

2600

FG

157.5

1900

FG

163.2

800

FG

165.7

200

FG

168.8

200

FG

170.4

100

70

FG

171.1

20

80

FG

173.1

100

70

FG

4.1

200

45

FG

13.4

20

60

FG

20.3

600

FB

25.7

300

FB

27.6

900

60

FG

29.6

100

40

FB

32.7

200

FB

33.2

1000

FG

39.8

20

FG

[illegible]

[illegible]

A07-012	51.00	52.00	Ser	m	Psi	m	Su	Sq	15	Py	1	Py	0.1	UNK
A07-012	52.00	53.00	Msi	m	Vsi	m	Su			Py	3	Py	2	UNK
A07-012	53.00	54.00	Ser	m	Psi	w	Su			Py	0.5	Py	0.5	UNK
A07-012	54.00	55.00	Vsi	s			Su			Py	2	Py	3	UNK
A07-012	55.00	56.00	Vsi	s	Sal	w	Su			Py	10	Py	15	UNK
A07-012	56.00	57.00	Vsi	s	Sal	w	Su			Py	10	Py	15	UNK
A07-012	57.00	58.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	58.00	59.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	59.00	60.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	60.00	61.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	61.00	62.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	62.00	63.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	63.00	64.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	64.00	65.00	Ser	m	Psi	w	Su					Py	0.1	UNK
A07-012	65.00	66.00	Ser	m	Psi	w								UNK
A07-012	66.00	67.00	Ser	m	Cly	w								UNK
A07-012	67.00	68.00	Pro	w										UNK
A07-012	68.00	69.00	Pro	m										UNK
A07-012	69.00	70.00	Pro	m										UNK
A07-012	70.00	71.00	Pro	m	lch	w								UNK
A07-012	71.00	72.00	lch	s			Su							UNK
A07-012	72.00	73.00	Pro	s	lch	m	Su			Py	0.1			UNK
A07-012	73.00	74.00	Pro	m						Py	0.1			UNK
A07-012	74.00	75.00	Pro	m										UNK
A07-012	75.00	76.00	Pro	m										UNK
A07-012	76.00	77.00	Pro	m	lch	w								UNK
A07-012	77.00	78.00	Pro	m	lch	w								UNK
A07-012	78.00	79.00	Pro	m	lch	w								UNK
A07-012	79.00	80.00	Pro	m	lch	w								UNK
A07-012	80.00	81.00	Pro	m	lch	w								UNK
A07-012	81.00	82.00	Pro	m	lch	w								UNK
A07-012	82.00	83.00	Pro	m	lch	w								UNK
A07-012	83.00	84.00	Pro	m	lch	w								UNK
A07-012	84.00	85.00	Pro	m	lch	w								UNK
A07-012	85.00	86.00	Pro	m	lch	w								UNK
A07-012	86.00	87.00	Pro	m	lch	w								UNK
A07-012	87.00	88.00	Pro	m	lch	w								UNK
A07-012	88.00	89.00	Pro	m	lch	w								UNK
A07-012	89.00	90.00	Pro	m	lch	w								UNK
A07-012	90.00	91.00	Pro	m	lch	w								UNK
A07-012	91.00	92.00	Pro	m	lch	w								UNK
A07-012	92.00	93.00	Pro	m	lch	w								UNK
A07-012	93.00	94.00	Pro	m	lch	w								UNK
A07-012	94.00	95.00	Pro	m	lch	w								UNK
A07-012	95.00	96.00	Pro	m	lch	w								UNK
A07-012	96.00	97.00	Pro	m	lch	w								UNK
A07-012	97.00	98.00	Pro	m	lch	w								UNK
A07-012	98.00	99.00	Pro	m	lch	w								UNK
A07-012	99.00	100.00	Pro	m	lch	w								UNK
A07-012	100.00	101.00	Pro	m	lch	w								UNK
A07-012	101.00	102.00	Pro	m	lch	w								UNK
A07-012	102.00	103.00	Pro	m	lch	w								UNK
A07-012	103.00	104.00	Pro	m	lch	w								UNK
A07-012	104.00	105.00	Pro	m	lch	w								UNK
A07-012	105.00	106.00	Pro	m	lch	w								UNK
A07-012	106.00	107.00	Pro	m	lch	w								UNK
A07-012	107.00	108.00	Pro	m	lch	w								UNK
A07-012	108.00	109.00	Pro	m	lch	w								UNK
A07-012	109.00	110.00	Pro	m	lch	w								UNK
A07-012	110.00	111.00	Pro	m	lch	w								UNK
A07-012	111.00	112.00	Pro	m	lch	w								UNK
A07-012	112.00	113.00	Pro	s	lch	m	Oh							UNK
A07-012	113.00	114.00	Ser	s			Su	Oh				Py	0.1	UNK
A07-012	114.00	115.00	Ser	s			Su	Oh				Py	0.1	UNK
A07-012	115.00	116.00	Ser	s			Su	Oh		Py	4	Py	1	UNK
A07-012	116.00	117.00	Pro	s			Su					Py	0.1	UNK
A07-012	117.00	118.00	Pro	s			Su					Py	0.1	UNK
A07-012	118.00	119.00	Pro	s			Su					Py	0.1	UNK
A07-012	119.00	120.00	Pro	s			Su					Py	0.1	UNK
A07-012	120.00	121.00	Pro	s			Su					Py	0.1	UNK
A07-012	121.00	122.00	Pro	s			Su					Py	0.1	UNK
A07-012	122.00	123.00	Pro	s			Su					Py	0.1	UNK
A07-012	123.00	124.00	Ser	m					Py	2		Py	0.1	UNK
A07-012	124.00	125.00	Pro	m	Ser	w								UNK
A07-012	125.00	126.00	Pro	m	Ser	w								UNK
A07-012	126.00	127.00	Ser	m	Cly	w			Py	1		Py	0.1	UNK
A07-012	127.00	128.00	Pro	s			Oh							UNK
A07-012	128.00	129.00	Pro	s			Oh							UNK
A07-012	129.00	130.00	Pro	s			Oh							UNK
A07-012	130.00	131.00	Ser									Py	0.1	UNK
A07-012	131.00	132.00	Pro	s			Oh							UNK
A07-012	132.00	133.00	Pro	s			Oh							UNK
A07-012	133.00	134.00	Pro	s			Oh							UNK
A07-012	134.00	135.00	Pro	s			Oh							UNK
A07-012	135.00	136.00	Pro	s			Oh							UNK
A07-012	136.00	137.00	Pro	s			Oh							UNK
A07-012	137.00	138.00	Pro	s			Oh							UNK
A07-012	138.00	139.00	Pro	s			Oh							UNK
A07-012	139.00	140.00	Pro	s			Oh							UNK
A07-012	140.00	141.00	Pro	s			Oh							UNK
A07-012	141.00	142.00	Pro	s			Oh							UNK
A07-012	142.00	143.00	Acy	m	Ser	m								UNK
A07-012	143.00	144.00	Acy	m	Ser	m								UNK

FB
20
40
70

FG
FG
FG

FG
FG
FG

FG
FG
FG

FG
FG
FG

FF
FF
FF

FF
FF
FF

FF
FF
FF

FB
FB

FG

[illegible]

A07-013	165.00	166.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	166.00	167.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	167.00	168.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	168.00	169.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	169.00	170.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	170.00	171.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	171.00	172.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	172.00	173.00	Vsi	w	Msi	m	Sal	m	Su	Py	2	Py	3	UNK				
A07-013	173.00	174.00	Ser	s	Pro	m								UNK	FF	172	1500	
A07-013	174.00	175.00	Ser	s	Pro	m								AVF				
A07-013	175.00	176.00	Ser	s	Pro	m								AVF				
A07-013	176.00	177.00	Ser	s	Pro	m								AVF				
A07-013	177.00	178.00	Vsi	w	Msi	m	Sal	m	Oh					AXT	FG	176.5	50	
A07-013	178.00	179.00	Vsi	w	Msi	m	Sal	m	Oh					UNK	FF	177	1600	
A07-013	179.00	180.00	Pro	w	Cly	w								UNK	FF	178.6	1400	
A07-013	180.00	181.00	Pro	w										AVB				
A07-013	181.00	182.00	Pro	w										AXT	FF	186.4	200	
A07-013	182.00	183.00	Pro	w										AXT				
A07-013	183.00	184.00	Pro	w										AXT				
A07-013	184.00	185.00	Pro	w										AXT				
A07-013	185.00	186.00	Pro	w										AXT				
A07-013	186.00	187.00	Pro	w										AXT				
A07-013	187.00	188.00	Pro	w										AXT				
A07-013	188.00	189.00	Pro	w										AXT				
A07-013	189.00	190.00	Pro	w										AXT				
A07-013	190.00	191.00	Pro	w										AXT				
A07-013	191.00	192.00	Pro	w										AXT				
A07-013	192.00	193.00	Pro	w										AXT				
A07-013	193.00	194.00	Pro	w										AXT				
A07-013	194.00	194.56	Pro	w										AXT				
A07-014	0.00	1.00												CAS				
A07-014	1.00	2.00												CAS				
A07-014	2.00	3.00												CAS				
A07-014	3.00	4.00												CAS				
A07-014	4.00	5.00												CAS				
A07-014	5.00	6.00	Pro	m					OI	Ca	30			AXT	FF	5.26	90	30
A07-014	6.00	7.00	Pro	m					OI	Ca	30			AXT				
A07-014	7.00	8.00	Pro	m					OI	Ca	30			AXT				
A07-014	8.00	9.00	Pro	w					OI					AXT				
A07-014	9.00	10.00	Pro	w					OI					AXT				
A07-014	10.00	11.00	Pro	w					OI					AXT				
A07-014	11.00	12.00	Pro	w					OI					AXT				
A07-014	12.00	13.00	Pro	w					OI					AXT				
A07-014	13.00	14.00	Pro	w					OI					AXT				
A07-014	14.00	15.00	Ich	m	Pro	m				Cly	30			AXT				
A07-014	15.00	16.00	Ich	m	Pro	m				Cly	30			AXT				
A07-014	16.00	17.00	Ich	m	Pro	m				Cly	30			AXT				
A07-014	17.00	18.00	Ich	m	Pro	m				Cly	30			AXT	FG	17	600	
A07-014	18.00	19.00	Pro	m	Ich	s				Cly	irreg	Sq	irreg	AXT				
A07-014	19.00	20.00	Pro	m	Ich	s				Cly	irreg	Sq	irreg	AXT				
A07-014	20.00	21.00	Pro	m	Ich	s				Cly	irreg	Sq	irreg	AXT	FB	20.2	300	50
A07-014	21.00	22.00	Pro	m	Ich	s				Cly	irreg	Sq	irreg	AXT				
A07-014	22.00	23.00	Pro	m	Ich	s				Cly	irreg	Sq	irreg	AXT	FG	22.9	1600	
A07-014	23.00	24.00	Ich	m	Cly	w								AXT				
A07-014	24.00	25.00	Sal	m	Cly	m	Ser	w						AXT				
A07-014	25.00	26.00	Vsi	w	Sal	w	Kao	w	Su			Py	5	UNK				
A07-014	26.00	27.00	Vsi	m	Kao	w			Sa	20	Py	1	Py	1	HBX			
A07-014	27.00	28.00	Sal	s	Ser	w							Py	0.5	UNK			
A07-014	28.00	29.00	Sal	s	Ser	w			Su				Py	0.5	AXT			
A07-014	29.00	30.00	Pro	s										AXT				
A07-014	30.00	31.00	Pro	s										AXT				
A07-014	31.00	32.00	Pro	w	Ich	m								AXT				
A07-014	32.00	33.00	Pro	w	Ich	w								AXT				
A07-014	33.00	34.00	Pro	w	Ich	w								AXT				
A07-014	34.00	35.00	Pro	w	Ich	w								AXT				
A07-014	35.00	36.00	Pro	w	Ich	w								AXT				
A07-014	36.00	37.00	Pro	w	Ich	w								AXT				
A07-014	37.00	38.00	Pro	m	Sal	w			Su				Py	0.5	AXT	FB	37.7	300
A07-014	38.00	39.00	Pro	m	Sal	w			Su				Py	0.5	AXT	FB	38.5	400
A07-014	39.00	40.00	Pro	m	Sal	w			Su				Py	0.5	AXT	FB	39.7	1700
A07-014	40.00	41.00	Msi	m	Ich	s			Su				Py	10	HBX			
A07-014	41.00	42.00	Pro	m	Ich	w				Adu	70	Sa	50	Py	10	HBX		
A07-014	42.00	43.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	43.00	44.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	44.00	45.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	45.00	46.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	46.00	47.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	47.00	48.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	48.00	49.00	Sal	m	Cly	w			Su				Py	0.1	UNK	60		
A07-014	49.00	50.00	Vsi	m	Cly	w	Kao	w	Su				Py	5	UNK			
A07-014	50.00	51.00	Vsi	m	Msi	s			Su		Sq	30		Py	0.5	HBX		
A07-014	51.00	52.00	Vsi	m	Msi	s			Su		Sa	90		Py	0.5	HBX		
A07-014	52.00	53.00	Vsi	s	Msi	w			Su				Py	10	HBX			
A07-014	53.00	54.00	Vsi	s	Msi	w			Su				Py	10	HBX			
A07-014	54.00	55.00	Vsi	s	Msi	w			Su				Py	10	HBX			
A07-014	55.00	56.00	Sal	s					Su				Py	0.1	UNK			
A07-014	56.00	57.00	Sal	s	Ser	w			Su		Sa	30		Py	2	HBX		
A07-014	57.00	58.00	Sal	s	Ser	w			Su		Sa	30		Py	2	HBX		
A07-014	58.00	59.00	Vsi	s	Ser	w	Kao	w	Su				Py	5	HBX			
A07-014	59.00	60.00	Sal	s	Ser	m			Su		Ser	irreg		Py	0.1	UNK		
A07-014	60.00	61.00	Vsi	s	Msi	m			Su				Py	2	Cp	0.1	HBX	
A07-014	61.00	62.00	Vsi	s	Msi	m			Su				Py	2	Cp	0.1	HBX	

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A07-014	155.00	156.00	Vsi	m	Sal	m			Su	Ser	irreg	Py	0.5	Py	1	HBX				
A07-014	156.00	157.00	Vsi	s	Ser	m	Msi	m	Su	Ser	irreg			Py	1	UNK	FF	155.3	200	
A07-014	157.00	158.00	Vsi	s	Ser	m	Msi	m	Su	Ser	irreg			Py	1	UNK				
A07-014	158.00	159.00	Vsi	s	Ser	m	Msi	m	Su	Ser	irreg			Py	1	UNK				
A07-014	159.00	160.00	Pro	s	Ich	m										AVF	FG	159.1	1700	40
A07-014	160.00	161.00	Pro	s	Ich	m										AVF				
A07-014	161.00	162.00	Pro	w												AXT				
A07-014	162.00	163.00	Pro	w												AXT	FF	162.6	10	30
A07-014	163.00	164.00	Pro	w												AXT	FG	163.8	200	30
A07-014	164.00	165.00	Pro	m						Sa	irreg			Py	0.1	AXT				
A07-014	165.00	166.00	Pro	m						Sa	irreg			Py	0.1	AXT				
A07-014	166.00	167.00	Pro	m						Sa	irreg			Py	0.1	AXT				
A07-014	167.00	168.00	Pro	m						Sa	irreg			Py	0.1	AXT	FB	167.8	400	50
A07-014	168.00	169.00	Pro	m												AXT				
A07-014	169.00	170.00	Pro	m												AXT				
A07-014	170.00	171.00	Pro	m												AXT				
A07-014	171.00	172.00	Pro	m												AXT				
A07-014	172.00	173.00	Pro	m												AXT				
A07-014	173.00	174.00	Pro	m												AXT				
A07-014	174.00	175.00	Pro	m												AXT				
A07-014	175.00	176.00	Pro	m												AXT				
A07-014	176.00	177.00	Pro	m												AXT				
A07-014	177.00	178.00	Pro	m												AXT				
A07-014	178.00	179.00	Pro	m												AXT	FB	178.6	300	
A07-014	179.00	180.00	Pro	m												AXT				
A07-014	180.00	181.00	Sal	m	Ich	m										AXT	FB	180.75	650	
A07-014	181.00	182.00	Ich	s	Pro	m										AXT				
A07-014	182.00	183.00	Ich	s	Pro	m										AXT				
A07-014	183.00	184.00	Ich	s	Pro	m										AXT				
A07-014	184.00	185.00	Pro	s				Oh								AXT				
A07-014	185.00	186.00	Pro	m												AXT				
A07-014	186.00	187.00	Pro	m												AXT				
A07-014	187.00	188.00	Pro	m												AXT				
A07-014	188.00	189.00	Pro	m												AXT				
A07-014	189.00	190.00	Pro	m												AXT				
A07-014	190.00	191.00	Pro	m												AXT				
A07-014	191.00	192.00	Pro	m												AXT				
A07-014	192.00	193.00	Pro	m												AXT				
A07-014	193.00	194.00	Pro	m												AXT				
A07-014	194.00	195.00	Pro	m												AXT				
A07-014	195.00	196.00	Pro	m												AXT				
A07-014	196.00	197.00	Pro	m												AXT				
A07-014	197.00	198.00	Pro	m												AXT				
A07-014	198.00	199.00	Pro	m												AXT				
A07-014	199.00	200.00	Pro	m												AXT				
A07-014	200.00	201.00	Pro	m												AXT				
A07-014	201.00	202.00	Pro	m												AXT				
A07-014	202.00	203.00	Pro	m												AXT				
A07-014	203.00	204.00	Pro	m												AXT				
A07-014	204.00	205.00	Pro	m												AXT				
A07-014	205.00	206.00	Pro	m												AXT				
A07-014	206.00	207.00	Pro	m												AXT				
A07-014	207.00	208.00	Pro	m												AXT				
A07-014	208.00	209.00	Pro	m												AXT				
A07-014	209.00	210.00	Pro	m												AXRT				
A07-014	210.00	211.00	Pro	m												AXRT				
A07-014	211.00	212.00	Pro	m												AXRT				
A07-014	212.00	213.00	Pro	m												AXRT				
A07-014	213.00	214.00	Pro	m												AXRT				
A07-014	214.00	215.00	Pro	m												AXRT				
A07-014	215.00	216.00	Pro	m												AXRT				
A07-014	216.00	217.00	Pro	m												AXRT				
A07-014	217.00	218.00	Pro	m												AXRT				
A07-014	218.00	219.00	Pro	m												AXRT				
A07-014	219.00	220.00	Pro	m												AXRT				
A07-014	220.00	221.00	Pro	m												AXRT				
A07-014	221.00	222.00	Pro	m												AXRT				
A07-014	222.00	223.00	Pro	m												AXRT				
A07-014	223.00	223.42	Pro	m												AXRT				
A07-015	0.00	1.00														CAS				
A07-015	1.00	2.00														CAS				
A07-015	2.00	3.00														CAS				
A07-015	3.00	4.00	Sal	s					PO					Py	0.1	AXT				
A07-015	4.00	5.00	Vsi	s	Msi	s			Su					Py	2	UNK				
A07-015	5.00	6.00	Vsi	s	Msi	s			Su					Py	2	UNK				
A07-015	6.00	7.00	Vsi	s	Msi	s			Su					Py	2	UNK				
A07-015	7.00	8.00	Vsi	s	Msi	s			Su					Py	5	UNK				
A07-015	8.00	9.00	Vsi	s	Msi	s			Su					Py	5	UNK				
A07-015	9.00	10.00	Msi	s	Sal	w			Su					Py	3	UNK	FF	8.3	650	
A07-015	10.00	11.00	Msi	s	Sal	w			Su					Py	3	UNK				
A07-015	11.00	12.00	Sal	s					Su					Py	1	UNK				
A07-015	12.00	13.00	Sal	m	Pro	w	Ser	w	Su					Py	0.1	UNK				
A07-015	13.00	14.00	Sal	m	Pro	w	Ser	w	Su					Py	0.1	UNK				
A07-015	14.00	15.00	Sal	m	Pro	w	Ser	w	Su					Py	0.1	UNK				
A07-015	15.00	16.00	Sal	m	Pro	w	Ser	w	Su					Py	0.1	UNK				
A07-015	16.00	17.00	Sal	m	Pro	w	Ser	w	Su					Py	0.1	UNK				
A07-015	17.00	18.00	Vsi	s	Msi	m			Su					Py	0.5	UNK				
A07-015	18.00	19.00	Sal	s					PO					Py	0.3	UNK				
A07-015	19.00	20.00	Sal	s					PO					Py	0.3	UNK				
A07-015	20.00	21.00	Sal	w	Ser	m	Pro	w								AXT				
A07-015	21.00	22.00	Sal	s	Ser	w										UNK	FF	21.25		
A07-015	22.00	23.00	Sal	s	Ser	w										UNK				

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A07-017	86.00	87.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	87.00	88.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	88.00	89.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK	FG		88.0	20	
A07-017	89.00	90.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	90.00	91.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	91.00	92.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	92.00	93.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	93.00	94.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	94.00	95.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	95.00	96.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	96.00	97.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK					
A07-017	97.00	98.00 Sal	s	Cly	w	Ser	w	PO		Sq	irreg		Py	0.1					UNK	AXT	FF		97.9	600
A07-017	98.00	99.00 Pro	s					Oh											AXT					
A07-017	99.00	100.00 Pro	s					Oh											AXT					
A07-017	100.00	101.00 Pro	s					Oh											AXT					
A07-017	101.00	102.00 Pro	s					Oh											AXT					
A07-017	102.00	103.00 Pro	s	Sal	m	Cly	w	Oh											AXT	UNK	FF		101.25	850
A07-017	103.00	104.00 Sal	s	Ser	w			Su											AXT	UNK	FG		102.5	20
A07-017	104.00	105.00 Sal	s	Ser	w			Su					Py	0.1					HBX	UNK				
A07-017	105.00	106.00 Sal	s	Ser	w			Su					Py	0.1					UNK					
A07-017	106.00	107.00 Sal	m	Ser	m	Msi	s	Su					Py	0.1					UNK	HBX				
A07-017	107.00	108.00 Msi	s	Vsi	w	Sal	w	Su					Py	0.1 Ga		0.1			HBX	UNK				
A07-017	108.00	109.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	109.00	110.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	110.00	111.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	111.00	112.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	112.00	113.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	113.00	114.00 Msi	s	Vsi	w	Sal	w												UNK					
A07-017	114.00	115.00 Msi	s	Vsi	w	Sal	w												UNK		FF		114.3	80
A07-0																								

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A07-018	115.00	116.00	Sal	s	Ser	w	Pro	m	Oh			Py	0.1		Py	0.1	UNK	AXT	FF	115.3	2400	
A07-018	116.00	117.00	Pro	m	Ser	w			Oh			Py	0.1		Py	0.1	AXT					
A07-018	117.00	118.00	Pro	m	Ser	w			Oh			Py	0.1		Py	0.1	AXT					
A07-018	118.00	119.00	Pro	m	Ser	w			Oh			Py	0.1		Py	0.1	AXT					
A07-018	119.00	120.00	Pro	m	Ser	w			Oh			Py	0.1		Py	0.1	AXT					
A07-018	120.00	121.00	Pro	m	Ser	w	Msi	w	Oh	Su		Py	1		Py	0.5	AXT	UNK	FF	120.45	200	
A07-018	121.00	122.00	Ser	m	Msi	w			Su			Py	2		Py	1	UNK					
A07-018	122.00	123.00	Pro	m													UNK	AXT	FG	122.1	80	
A07-018	123.00	124.00	Pro	m													AXT					
A07-018	124.00	125.00	Pro	m													AXT					
A07-018	125.00	126.00	Pro	m													AXT	UNK	FF	125.1	900	
A07-018	126.00	127.00	Sal	m	Ser	w	Cly	w									UNK					
A07-018	127.00	128.00	Sal	m	Ser	w	Cly	w									UNK					
A07-018	128.00	129.00	Sal	m	Ser	w	Cly	w									UNK					
A07-018	129.00	130.00	Sal	m	Ser	w	Cly	w									UNK					
A07-018	130.00	131.00	Vsi	m	Msi	m						Py	1		Py	2	UNK	HBX				
A07-018	131.00	132.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX		FF	131	300	
A07-018	132.00	133.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	133.00	134.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	134.00	135.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	135.00	136.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	136.00	137.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	137.00	138.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	138.00	139.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	139.00	140.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	140.00	141.00	Msi	m	Sal	m	Vsi	m				Py	1		Py	2	HBX					
A07-018	141.00	142.00	Msi	m	Sal	m	Cly	w				Py	1		Py	2.5	UNK					
A07-018	142.00	143.00	Msi	m	Sal	m	Cly	w				Py	1		Py	2.5	UNK					
A07-018	143.00	144.00	Msi	m	Sal	m	Cly	w				Py	1		Py	2.5	UNK					
A07-018	144.00	145.00	Msi	m	Sal	m	Cly	w				Py	1		Py	2.5	UNK					
A07-018	145.00	146.00	Msi	m	Sal	m	Cly	w				Py	1		Py	2.5	UNK	HBX				
A07-018	146.00	147.00	Msi	s	Sal	m	Cly	w				Py	2.5		Py	2.5	HBX					
A07-018	147.00	148.00	Msi	s	Sal	m	Cly	w				Py	2.5		Py	2.5	HBX					
A07-018	148.00	149.00	Msi	s	Sal	m	Cly	w				Py	2.5		Py	2.5	HBX					
A07-018	149.00	150.00	Msi	s	Sal	m	Cly	w				Py	2.5		Py	2.5	HBX	UNK	FF	149.1	2380	
A07-018	150.00	151.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	151.00	152.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	152.00	153.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	153.00	154.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	154.00	155.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	155.00	156.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	156.00	157.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	157.00	158.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	158.00	159.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	159.00	160.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	160.00	161.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	161.00	162.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	162.00	163.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	163.00	164.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	164.00	165.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	165.00	166.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	166.00	167.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	167.00	168.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	168.00	169.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	169.00	170.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	170.00	171.00	Msi	s	Sal	w						Py	2		Py	3	UNK					
A07-018	171.00	172.00	Sal	m	Vsi	w	Msi	w									UNK					
A07-018	172.00	173.00	Sal	m	Vsi	w	Msi	w									UNK					
A07-018	173.00	174.00	Sal	m	Vsi	w	Msi	w									UNK					
A07-018	174.00	175.00	Sal	m	Vsi	w	Msi	w									UNK		FF	174.5	1400	
A07-018	175.00	176.00	Sal	m	Vsi	w	Msi	w									UNK					
A07-018	176.00	177.00	Sal	m	Vsi	w	Msi	w									UNK		FF	176.6	1600	
A07-018	177.00	178.00	Sal	m	Vsi	w	Msi	w									UNK					
A07-018	178.00	179.00	Sal	m	Vsi	w	Msi	w														

A07-020	28.00	29.00	Sal	m	Ser	m			Su									Py	0.1		AXT						
A07-020	29.00	30.00	Sal	m	Ser	m			Su									Py	0.1		AXT			FG	29.9	600	50
A07-020	30.00	31.00	Sal	m	Cly	s		Ich	s												UNK	AXT		FG	30.5	400	
A07-020	31.00	32.00	Pro	s	Ich	w			Oh												AXT		FG	31.1	800		
A07-020	32.00	33.00	Pro	s	Ich	w			Oh												AXT						
A07-020	33.00	34.00	Pro	s	Ich	w			Oh												AXT						
A07-020	34.00	35.00	Pro	s	Ich	w			Oh												AXT		FG	34	300		
A07-020	35.00	36.00	Pro	s	Ich	w			Oh												AXT						
A07-020	36.00	37.00	Pro	s	Ich	w		Sal	s			Su								10	AXT	UNK	FG	36.5	1100		
A07-020	37.00	38.00	Sal	s					Su											25	AXT						
A07-020	38.00	39.00	Vsi	m	Msi	m		Cly	m			Su								5	UNK						
A07-020	39.00	40.00	Sal	m	Ich	w			Su											0.1	UNK						
A07-020	40.00	41.00	Sal	m	Ich	w		Pro	s			Su	Oh	Sa		50				0.1	UNK	AXT	FG	40.53	500		
A07-020	41.00	42.00	Pro	s					Oh				Sa			50					AXT						
A07-020	42.00	43.00	Pro	s					Oh				Sa			50					AXT		FG	42.4	100		
A07-020	43.00	44.00	Pro	s					Oh				Sa			50					AXT						
A07-020	44.00	45.00	Pro	s					Oh				Sa			50					AXT						
A07-020	45.00	46.00	Pro	s					Oh				Sa			50					AXT						
A07-020	46.00	47.00	Pro	s					Oh				Sa			50					AXT		FG	46.8	70	50	
A07-020	47.00	48.00	Pro	s					Oh				Sa			50					AXT						
A07-020	48.00	49.00	Pro	s					Oh				Sa			50					AXT						
A07-020	49.00	50.00	Pro	s					Oh				Sa			50					AXT						
A07-020	50.00	51.00	Pro	s					Oh				Sa			50					AXT		FG	50.23	500	70	
A07-020	51.00	52.00	Pro	s					Oh				Sa			50					AXT						
A07-020	52.00	53.00	Pro	s					Oh				Sa			50					AXT						
A07-020	53.00	54.00	Pro	s					Oh				Sa			50					AXT						
A07-020	54.00	55.00	Pro	s					Oh				Sa			50					AXT						
A07-020	55.00	56.00	Pro	s					Oh				Sa			50					AXT						
A07-020	56.00	57.00	Pro	s	Ich	s			Oh	Su			Sa			50				0.3	AXT		FG	56.6	980		
A07-020	57.00	58.00	Ich	s	Msi	m		Sal	m			Su	Sa			60	Sq	90	Py	0.1	AXT	UNK	FG	57.8	200		
A07-020	58.00	59.00	Sal	w	Pro	s						Su								0.1	UNK	AXT	FG	58.6	200		
A07-020	59.00	60.00	Sal	m								Su								0.1	UNK	AXT					
A07-020	60.00	61.00	Sal	m								Su								0.1	UNK	AXT	FG	60.96	300		
A07-020	61.00	62.00	Sal	m	Cly	m						Su								0.1	UNK	AXT	FG	61.9	150		
A07-020	62.00	63.00	Msi	m	Vsi	w		Cly	w			Su								5	HBX	ADF					
A07-020	63.00	64.00	Msi	m	Vsi	w		Cly	w			Su								5	HBX	ADF					
A07-020	64.00	65.00	Sal	s	Ser	w		Cly	w				Sa			90					UNK		FF	64.8	200		
A07-020	65.00	66.00	Sal	m	Ser	m		Cly	w												UNK						
A07-020	66.00	67.00	Sal	s	Ser	m						Su								0.1	UNK						
A07-020	67.00	68.00	Sal	s	Ser	m						Su								0.1	UNK						
A07-020	68.00	69.00	Vsi	m	Cly	m						Su						Py	0.5		UNK		FG	68.8	700		
A07-020	69.00	70.00	Sal	m	Ser	s						Su								0.5	UNK						
A07-020	70.00	71.00	Msi	s	Vsi	w						Su						Py	0.5		UNK						
A07-020	71.00	72.00	Sal	s	Ser	w		Msi	m			Su								7	UNK						
A07-020	72.00	73.00	Vsi	m	Ser	w		Cly	w			Su								0.5	UNK	ADF	FF	71.3	160	90	
A07-020	72.00	73.00	Vsi	m	Msi	m		Cly	w			Su		Sa		25				5	HBX	ADF					
A07-020	73.00	74.00	Sal	s	Ser	s		Pro	s			Su								2	UNK	AXT	FB	73.3	500		
A07-020	74.00	75.00	Pro	s																	AXT		FG	74.7	800	10	
A07-020	75.00	76.00	Pro	s	Sal	s						Oh									UNK	AXT					
A07-020	76.00	77.00	Sal	s	Pro	s		Ich	s			Oh									UNK		FG	76.2	180		
A07-020	77.00	78.00	Pro	s	Ich	s						Oh									AXT						
A07-020	78.00	79.00	Sal	m	Pro	w		Cly	m			Su		Alu		10		Py	0.5		UNK		FG	78.15	120		
A07-020	79.00	80.00	Sal	m	Pro	w		Cly	m			Su		Alu		10		Py	0.5		UNK						
A07-020	80.00	81.00	Sal	m	Pro	w		Cly	m			Su		Alu		10		Py	0.5		UNK						
A07-020	81.00	82.00	Pro	s																	UNK	AXT	FB	81.9	1020	70	
A07-020	82.00	83.00	Pro	s																	UNK						
A07-020	83.00	84.00	Sal	s	Ser	w			Su											0.1	UNK	AXT					
A07-020	84.00	85.00	Sal	m	Cly	w		Ser	w				Ser			45					AXT		FG	84.8	240	40	
A07-020	85.00	86.00	Pro	s	Sal	w						Oh									AXT						
A07-020	86.00	87.00	Pro	s	Sal	w						Oh									AXT						
A07-020	87.00	88.00	Pro	s	Sal	w						Oh									AXT						
A07-020	88.00	89.00	Pro	s	Sal	w						Oh									AXT		FG	88.8	300		
A07-020	89.00	90.00	Pro	s	Sal	w						Oh									AXT		FG	89.5	420		
A07-020	90.00	91.00	Pro	s	Sal	w						Oh									AXT						
A07-020	91.00	92.00	Sal	m								Oh									AXT	UNK					
A07-020	92.00	93.00	Sal	s	Ser	w			Su												UNK	AXT					
A07-020	93.00	94.00	Pro	s	Ich	s			Oh				Ca		irreg						AXT		FF	93.66	300	20	
A07-020	94.00	95.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	95.00	96.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	96.00	97.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	97.00	98.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	98.00	99.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	99.00	100.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	100.00	101.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	101.00	102.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	102.00	103.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	103.00	104.00	Pro	s					Oh				Ca		irreg						AXT		FG	103.5	40	40	
A07-020	104.00	105.00	Pro	s					Oh				Ca		irreg						AXT						
A07-020	105.00	106.00	Pro	s					Oh				Ca			60					AXT		FG	105	360	60	
A07-020	106.00	107.00	Pro	s					Oh				Ca			60					AXT						
A07-020	107.00	108.00	Pro	s					Oh				Ca			60					AXT						
A07-020	108.00	109.00	Pro	s					Oh				Ca			60					AXT						

A07-020		121.00	122.00 Pro	s				Oh		Ca	irreg								AXT					
A07-020		122.00	123.00 Pro	m	Ich	m		Su		Ca									AXT		FG	122.05	220	50
A07-020		123.00	124.00 Pro	m	Ich	m		Su		Ca	40 Sa 40 Sa	irreg irreg	Py Py	0.1 0.1					AXT					
A07-020		124.00	125.00 Msi	s				Su											HBX					
A07-020		125.00	126.00 Pro	m	Sal	m	Msi	Oh		Ca	80				Py	0.5 Cp	0.1		AXT UNK HBX		FG	125.65	90	50
A07-020		126.00	127.00 Pro	m	Sal	m		Oh	Su	Ca	80 Sq	irreg			Py	1 Orp	0.1 Rea	0.1	UNK		FF	126.85	10	
A07-020		127.00	128.00 Pro	s						Ca	60								AXT		FG	127.9	500	60
A07-020		128.00	129.00 Pro	s						Ca	60								AXT					
A07-020		129.00	130.00 Pro	s						Ca	60								AXT		FG	129.1	100	50
A07-020		130.00	131.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT		FF	130.1	200	20
A07-020		131.00	132.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT		FG	131.4	3800	
A07-020		132.00	133.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT					
A07-020		133.00	134.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT					
A07-020		134.00	135.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT					
A07-020		135.00	136.00 Pro	s	Ich	s		Oh		Ca	irreg								AXT		FB	135.2	200	70
A07-020		136.00	137.00 Pro	s						Ca	irreg								AXT		FG	136	200	60
A07-020		137.00	138.00 Pro	s						Ca	irreg								AXT		FB	137.35	550	70
A07-020		138.00	139.00 Pro	s						Ca	irreg								AXT		FB	138	150	40
A07-020		139.00	140.00 Pro	s						Ca	irreg								AXT		FB	138.82	1080	70
A07-020		140.00	141.00 Ich	s	Pro	s				Ca	irreg								AXT					
A07-020		141.00	142.00 Ich	s	Pro	s				Ca	irreg								AVS AVS AVS AVS					
A07-020		142.00	143.00 Ich	s	Pro	s				Ca	irreg								AXT					
A07-020		143.00	144.00 Ich	s	Pro	s				Ca	irreg								AXT					
A07-020		144.00	145.00 Ich	s	Pro	s				Ca	irreg								AXT					
A07-020		145.00	146.00 Ich	s	Pro	s				Ca	irreg								AVS					
A07-020		146.00	147.00 Ich	s	Pro	s				Ca	irreg								AVS		FF	145.06	120	
A07-020		147.00	148.00 Ich	s	Pro	s				Ca	irreg								AVS		40			
A07-020		148.00	149.00 Ich	s	Pro	s				Ca	irreg								AVS					

[illegible]

A07-023	33.00	34.00	Pro	s	Ich	s	Msi	m	Oh	Su					Py	0.1			AXT		FF	33.83	180	25
A07-023	34.00	35.00	Pro	s					Oh										AXT		FF	34.46	320	15
A07-023	35.00	36.00	Pro	s					Oh										AXT					
A07-023	36.00	37.00	Pro	s					Oh										AXT		FF	36	1400	0
A07-023	37.00	38.00	Pro	s					Oh										AXT					
A07-023	38.00	39.00	Pro	s					Oh										AXT					
A07-023	39.00	40.00	Pro	s					Oh										AXT					
A07-023	40.00	41.00	Pro	s					Oh										AXT					
A07-023	41.00	42.00	Pro	s					Oh										AXT					
A07-023	42.00	43.00	Pro	s					Oh										AXT		FF	42.67	180	70
A07-023	43.00	44.00	Pro	s					Oh										AXT		FF	43.66	180	30
A07-023	44.00	45.00	Pro	s					Oh										AXT		FF	44.67	200	30
A07-023	45.00	46.00	Pro	s					Oh										AXT					
A07-023	46.00	47.00	Pro	s	Sal	s	Ser	s	Oh	Su	Sa	25			Py	0.1			AXT	UNK	FG	46.27	160	
A07-023	47.00	48.00	Sal	s	Ser	s	Pro	s	Su	Oh	Sa	25			Py	0.1			UNK	AXT	FG	47.26	300	20
A07-023	48.00	49.00	Pro	s					Oh										AXT		FF	48.78	300	10
A07-023	49.00	50.00	Pro	s					Oh										AXT					
A07-023	50.00	51.00	Pro	s					Oh										AXT					
A07-023	51.00	52.00	Pro	m	Sal	m			Oh										UNK	AXT	FG	51.03	260	60
A07-023	52.00	53.00	Pro	s					Oh										AXT		FF	52.77	90	30
A07-023	53.00	54.00	Pro	s					Oh										AXT					
A07-023	54.00	55.00	Pro	s					Oh										AXT		FG	54.66	650	80
A07-023	55.00	56.00	Pro	s	Sal	s			Oh										AXT	UNK				
A07-023	56.00	57.00	Pro	s	Sal	s			Oh	Su					Py	0.1			UNK	AXT	FG	56.44	500	30
A07-023	57.00	58.00	Pro	s					Oh										AXT					
A07-023	58.00	59.00	Pro	s					Oh										AXT		FF	58.22	1780	
A07-023	59.00	60.00	Pro	s					Oh										AXT					
A07-023	60.00	61.00	Pro	s					Oh										AXT					
A07-023	61.00	62.00	Pro	s					Oh										AXT					
A07-023	62.00	63.00	Pro	s					Oh										AXT		FG	62.8	100	
A07-023	63.00	64.00	Pro	s	Sal	m	Ser	m	Oh						Py	1			AXT	UNK	FG	63.65	150	
A07-023	64.00	65.00	Sal	m	Ser	m	Pro	s	Su						Py	2.5			UNK	AXT				
A07-023	65.00	66.00	Pro	s															AXT		FG	65.4	600	
A07-023	66.00	67.00	Sal	m	Ser	m	Vsi	m	Su						Py	1.5			UNK	HBX	FG	66.42	80	
A07-023	67.00	68.00	Vsi	s	Kao	w			Su		Sa	60			Py	1.5		0.1	HBX					
A07-023	68.00	69.00	Vsi	s	Kao	w			Su		Sa	60			Py	1.5		0.1	HBX					
A07-023	69.00	70.00	Vsi	s	Kao	w			Su		Sa	60			Py	1.5		0.1	HBX					
A07-023	70.00	71.00	Vsi	s	Kao	w			Su		Sa	60			Py	1.5		0.1	HBX					
A07-023	71.00	72.00	Vsi	s	Kao	w	Sal	m	Su		Sa	60			Py	1.5	0.1		HBX	UNK	FF	71.8	220	80
A07-023	72.00	73.00	Sal	m	Ser	m			Su						Py	0.5			UNK					
A07-023	73.00	74.00	Sal	w	Ser	m			Su						Py	0.5			UNK					
A07-023	74.00	75.00	Sal	m	Msi	s	Vsi	w	Su		Sa	75			Py	0.1			UNK					
A07-023	75.00	76.00	Ser	s	Sal	m			Su		Ser	90			Py	0.5			UNK					
A07-023	76.00	77.00	Ser	s	Sal	m			Su		Ser	90			Py	0.5			UNK					
A07-023	77.00	78.00	Ser	m	Sal	w	Pro	s	Oh		Ser	irreg	Sa	irreg					UNK	AXT	FF	76.15	360	
A07-023	78.00	79.00	Pro	s					Oh		Sa	irreg							AXT		FF	77.2	240	50
A07-023	79.00	80.00	Pro	s					Oh		Sa	irreg							AXT		FF	79.14	500	
A07-023	80.00	81.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	81.00	82.00	Pro	s					Oh		Sa	irreg							AXT		FF	81	210	70
A07-023	82.00	83.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	83.00	84.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	84.00	85.00	Pro	s					Oh		Sa	irreg							AXT		FF	84.26	650	35
A07-023	85.00	86.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	86.00	87.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	87.00	88.00	Pro	s					Oh		Sa	irreg							AXT		FF	87.83	220	70
A07-023	88.00	89.00	Pro	s					Oh		Sa	irreg							AXT		FF	88.7	200	
A07-023	89.00	90.00	Pro	s					Oh		Sa	irreg							AXT		FG	89.6	1000	60
A07-023	90.00	91.00	Pro	s					Oh		Sa	irreg							AXT					
A07-023	91.00	92.00	Pro	s					Oh		Sa	irreg							AXT		FG	91.32	640	10
A07-023	92.00	93.00	Pro	s					Oh		Sa	irreg							AXT	ADF				
A07-023	93.00	94.00	Pro	s					Oh										AXT	ADF	FG	93	380	60
A07-023	94.00	95.00	Pro	s					Oh										AXT	ADF	FF	94.12	170	
A07-023	95.00	96.00	Pro	s	Sal	m	Ser	w	Oh										AXT	ADF	FG	95.45	300	
A07-023	96.00	97.00	Sal	s	Ser	m	Pro	m	Oh	Su					Py	1.5	60	Py	0.1		FF	96.71	500	
A07-023	97.00	98.00	Pro	s					Oh										AXT		FF	97.96	880	
A07-023	98.00	99.00	Pro	m	Sal	m	Ser	s	Oh	Su					Py	1.5	50	Py	3.5	UNK				
A07-023	99.00	100.00	Sal	m	Ser	s	Msi	m	Su						Py	1.5	50	Py	3.5	UNK	FF	99.24	750	
A07-023	100.00	101.00	Vsi	w	Msi	s	Ser	m	Su		Sa	40			Py	0.5			HBX					
A07-023	101.00	102.00	Sal	m	Ser	s			Oh		Ser	irreg							HBX	UNK	FF	101.56	380	70
A07-023	102.00	103.00	Sal	m	Ser	s			Oh	Su	Ser	irreg							UNK		FF	102.05	250	20
A07-023	103.00	104.00	Msi	s	Vsi	s			Su						Py	0.5	70	Py	1	HBX				
A07-023	104.00	105.00	Msi	s	Vsi	s	Pro	s	Su	Oh					Py	0.5	70	Py	1	HBX	AXT	FF	104.35	100
A07-023	105.00	106.00	Pro	s					Oh										AXT		FG	105.12	950	80
A07-023	106.00	107.00	Pro	s					Oh										AXT					
A07-023	107.00	108.00	Pro	s					Oh										AXT		FG	107.6	400	40
A07-023	108.00	109.00	Sal	s	Ser	m			Su	Oh					Py	0.5			UNK		FF	108.91	160	
A07-023	109.00	110.00	Sal	s	Vsi	s	Msi	s	Su	Oh	Sa	70			Py	2			UNK	HBX				
A07-023	110.00	111.00	Ich	s	Vsi	m	Msi	m	Su		Sa	70			Py	1.5			UNK	HBX	FG	110.8	800	
A07-023	111.00	112.00	Sal	m	Ser	m			Oh		Ser	90							UNK	UNK				
A07-023	112.00	113.00	Sal	m	Ser	m			Su		Ser	90							UNK					
A07-023	113.00	114.00	Sal	m	Ser	m			Su						Py	2.5			UNK					
A07-023	114.00	115.00	Vsi	w	Msi	s	Ser	s	Su						Py	4.5			UNK		FF	113.73	100	
A07-023	115.00	116.00	Ser	s	Msi	m			Su						Py	1			HBX	UNK	FF	114.3	150	
A07-023	116.00	117.00	Ser	s	Msi	w	Vsi	m	Su						Py	0.1			UNK	HBX	FF	115.4	200	
A07-023	117.00	118.00	Vsi	m	Msi	s	Ser	m	Su						Py	0.1			HBX					

A07-023	126.00	127.00	Vsi	s	Ser	s	Msi	w	Su		Sa	80	Py	0.5	Py	1.8	HBX	UNK	FF	126.72	170
A07-023	127.00	128.00	Ser	s	Msi	m	Sal	m	Oh	Su					Py	1.5	UNK	UNK			
A07-023	128.00	129.00	Sal	s	Ser	m			Su	Oh					Py	1.5	UNK	UNK			
A07-023	129.00	130.00	Sal	s	Ser	m			Su	Oh					Py	1.5	UNK	UNK			
A07-023	130.00	131.00	Sal	w	Ser	s	Ich	w	Oh								UNK	UNK	FF	130.09	270
A07-023	131.00	132.00	Ser	s	Sal	m	Ich	w	Su						Py	0.1	UNK	UNK	FF	131	750
A07-023	132.00	133.00	Sal	w	Ser	s											UNK	UNK			
A07-023	133.00	134.00	Sal	w	Ser	s											UNK	UNK			
A07-023	134.00	135.00	Sal	w	Ser	s			Su						Py	0.5	UNK	UNK			
A07-023	135.00	136.00	Vsi	m	Msi	s	Ser	w	Su		Sa	irreg			Py	0.5	HBX	HBX			
A07-023	136.00	137.00	Vsi	m	Msi	s	Ser	w	Su		Sa	irreg			Py	0.5	HBX	HBX			
A07-023	137.00	138.00	Vsi	m	Msi	s	Ser	w	Su		Sa	irreg			Py	0.5	HBX	HBX			
A07-023	138.00	139.00	Vsi	m	Msi	s	Ser	w	Su		Sa	irreg			Py	0.5	HBX	HBX			
A07-023	139.00	140.00	Ser	s	Msi	m			Su				Py	0.5	60 Py	2.5	HBX	HBX			
A07-023	140.00	141.00	Ser	s	Msi	m	Vsi	w	Su				Py	0.5	60 Py	2.5 En	HBX	HBX	0.1		
A07-023	141.00	142.00	Vsi	m	Msi	s			Su		Sa	15	Py	0.1	Py	1.5 En	HBX	HBX	0.1		
A07-023	142.00	143.00	Vsi	m	Msi	s			Su		Sa	15	Py	0.1	Py	1.5	HBX	HBX			
A07-023	143.00	144.00	Vsi	m	Msi	s			Su		Sa	15	Py	0.1	Py	1.5	HBX	HBX	FF	143.15	230
A07-023	144.00	145.00	Vsi	m	Msi	s			Su		Sa	15	Py	0.1	Py	1.5	HBX	HBX			
A07-023	145.00	146.00	Msi	s	Vsi	m			Su						Py	1	HBX	HBX			
A07-023	146.00	147.00	Msi	s	Vsi	m			Su						Py	1	HBX	HBX			
A07-023	147.00	148.00	Msi	s	Vsi	m			Su						Py	1	HBX	HBX			
A07-023	148.00	149.00	Msi	s	Vsi	m			Su						Py	1	HBX	HBX			
A07-023	149.00	150.00	Msi	s	Vsi	m			Su						Py	1	HBX	HBX			
A07-023	150.00	151.00	Sal	s	Ser	m			Su	Oh					Py	0.1	UNK	UNK	FF	150	170
A07-023	151.00	152.00	Sal	s	Ser	m			Su	Oh			Py	0.1	Py	1.5	UNK	UNK			
A07-023	152.00	153.00	Ser	s	Sal	w			Su				Py	0.1	Py	2.5	UNK	UNK	FF	152.1	130
A07-023	153.00	154.00	Ser	s	Sal	w			Su				Py	0.1	Py	2.5	UNK	UNK	FF	153	300
A07-023	154.00	155.00	Ser	s	Sal	w			Su				Py	0.1	Py	2.5	UNK	UNK			
A07-023	155.00	156.00	Ser	s	Sal																

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A07-030	19.00	20.00	Msi	m	Sal	w	Cly	w	Su	Ba	irreg	Py	4	AXT			
A07-030	20.00	21.00	Msi	m	Sal	w	Cly	w	Su	Ba	irreg	Py	4	AXT	UNK		
A07-030	21.00	22.00	Vsi	m	Msi	m			Su	Ba	irreg	Py	4	UNK			
A07-030	22.00	23.00	Vsi	m	Msi	m			Su	Ba	irreg	Py	4	UNK			
A07-030	23.00	24.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	24.00	25.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	25.00	26.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	26.00	27.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	27.00	28.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	28.00	29.00	Msi	m	Cly	w			Su			Py	3.5	UNK	AXT		
A07-030	29.00	30.00	Msi	m	Cly	w	Vsi	m	Su			Py	3.5	UNK	AXT		
A07-030	30.00	31.00	Vsi	m	Sal	w			Su			Py	3.5	UNK			
A07-030	31.00	32.00	Vsi	m	Sal	w			Su			Py	3.5	UNK			
A07-030	32.00	33.00	Vsi	m	Sal	w			Su			Py	3.5	UNK			
A07-030	33.00	34.00	Vsi	m	Sal	w			Su			Py	3.5	UNK			
A07-030	34.00	35.00	Vsi	m	Sal	w	Msi	m	Su	Ba	irreg	En	0.1	UNK			
A07-030	35.00	36.00	Msi	m	Vsi	m			Su	Ba	irreg	En	0.1	UNK			
A07-030	36.00	37.00	Vsi	m	Msi	w			Su			En	0.1	UNK			
A07-030	37.00	38.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	38.00	39.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	39.00	40.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	40.00	41.00	Vsi	m	Msi	w			Su	Ba	irreg	En	0.1	UNK			
A07-030	41.00	42.00	Vsi	m	Msi	w			Su	Ba	irreg			UNK			
A07-030	42.00	43.00	Vsi	m	Msi	w			Su	Ba	irreg	En	0.1	UNK			
A07-030	43.00	44.00	Vsi	m	Msi	w			Su			Py	2.5	UNK			
A07-030	44.00	45.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	45.00	46.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	46.00	47.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	47.00	48.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	48.00	49.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	49.00	50.00	Vsi	m	Msi	w			Su	Ba	irreg	Py	2.5	UNK			
A07-030	50.00	51.00	Vsi	s	Msi	m	Sal	m	Su			Py	3	UNK			
A07-030	51.00	52.00	Sal	s					Su			Py	3	UNK			
A07-030	52.00	53.00	Sal	s					Su			Py	3	UNK			
A07-030	53.00	54.00	Sal	s					Su			Py	3	UNK			
A07-030	54.00	55.00	Sal	s	Vsi	m			Su	Ba	irreg	Py	3	UNK			
A07-030	55.00	56.00	Vsi	s	Msi	s	Sal	w	Su	Ba	irreg	Py	3	UNK			
A07-030	56.00	57.00	Vsi	s	Msi	s	Sal	w	Su	Ba	irreg	Py	3	UNK			
A07-030	57.00	58.00	Vsi	s	Msi	s	Sal	w	Su	Ba	irreg	Py	3	UNK			
A07-030	58.00	59.00	Vsi	s	Msi	s	Sal	w	Su	Ba	irreg	Py	3	UNK			
A07-030	59.00	60.00	Msi	s	Vsi	w			Su	Ba	irreg	Py	1.5	UNK			
A07-030	60.00	61.00	Msi	s	Vsi	w			Su			Py	1.5	UNK			
A07-030	61.00	62.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	62.00	63.00	Msi	s	Vsi	w			Su	Ba	50	Py	3	UNK			
A07-030	63.00	64.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	64.00	65.00	Msi	s	Vsi	w			Su			Py	3	UNK			
A07-030	65.00	66.00	Vsi	m	Msi	m			Su	Ba	irreg	Py	1.5 En	0.1	UNK		
A07-030	66.00	67.00	Msi	m	Vsi	w			Su	Ba	irreg	Py	1.5 En	0.1	UNK		
A07-030	67.00	68.00	Msi	m	Vsi	w	Ser	s	Su	Lim	irreg	Py	3	UNK			
A07-030	68.00	69.00	Ser	s	Msi	w			Su	Lim	irreg	Py	3	UNK			
A07-030	69.00	70.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	70.00	71.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	71.00	72.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	72.00	73.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	73.00	74.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	74.00	75.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	75.00	76.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	76.00	77.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	77.00	78.00	Msi	m	Ser	m			Su	Lim	irreg	An	75	UNK			
A07-030	78.00	79.00	Ser	m	Msi	w			Su	Sa		70	En	0.1 Py	0.1		
A07-030	79.00	80.00	Ser	m	Msi	w			Su			Py	0.1	20 Py	0.1		
A07-030	80.00	81.00	Ser	m	Msi	m			Su	An		35 Ser	Py	0.1	70 Py	0.1	
A07-030	81.00	82.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	82.00	83.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	83.00	84.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	84.00	85.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	85.00	86.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	86.00	87.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	87.00	88.00	Msi	s	Ser	w			Su	An		35 Ser	Py	0.1			
A07-030	88.00	89.00	Msi	s	Ser	w			Su	An		60 Ser	Py	0.1			
A07-030	89.00	90.00	Msi	s	Ser	m			Su	An		60 Ser	Py	0.1			
A07-030	90.00	91.00	Msi	s	Ser	m			Su	An		60 Ser	Py	0.1			
A07-030	91.00	92.00	Msi	s	Ser	m			Su	An		60 Ser	Py	0.1			
A07-030	92.00	93.00	Msi	s	Ser	m			Su	An		60 Ser	Py	0.1			
A07-030	93.00	94.00	Msi	s	Ser	m			Su	An		60 Ser	Py	0.1			
A07-030	94.00	95.00	Msi	s	Ser	m			Su	An		35 Ser	Py	2.5			
A07-030	95.00	96.00	Msi	m	Ser	w			Su	An		35	Py	5			
A07-030	96.00	97.00	Msi	m	Ser	w			Su	An		35	Py	5			
A07-030	97.00	98.00	Msi	m	Ser	w			Su	An	irreg	Ser	Py	3	UNK		
A07-030	98.00	99.00	Msi	m	Ser	w			Su	An	irreg	Ser	Py	3	UNK		
A07-030	99.00	100.00	Msi	m	Ser	w			Su	An	irreg	Ser	Py	3	UNK		
A07-030	100.00	101.00	Msi	m	Ser	w			Su	An	irreg	Ser	Py	3	UNK		
A07-030	101.00	102.00	Msi	m	Ser	w			Su	An	irreg	Ser	Py	3	UNK		
A07-030	102.00	103.00	Msi	m	Ser	w	Sal	w	Su	An		50 Ser	Py	2	UNK		
A07-030	103.00	104.00	Msi	s	Ser	w			Su	An		50	Py	1.5	UNK		
A07-030	104.00	105.00	Msi	s	Ser	w			Su	An		45	Py	1.5	UNK		
A07-																	

A07-030	112.00	113.00 Msi	s	Ser	w		Su	An	45		Py	1.5	UNK							
A07-030	113.00	114.00 Msi	s	Ser	w		Su	An	45		Py	1.5	UNK							
A07-030	114.00	115.00 Msi	s	Ser	w		Su	An	45		Py	1.5	UNK		FG	114.67	3070	0		
A07-030	115.00	116.00 Msi	m	Ser	m		Su	An	45		Py	1.5	UNK							
A07-030	116.00	116.74 Msi	m	Ser	m		Su	An	irreg		Py	1.5	UNK							
A07-031	0.00	1.00											CAS							
A07-031	1.00	2.00											CAS	UNK						
A07-031	2.00	3.00 Ser	m	Msi	w		OI	Su	Sa	irreg	Py	1.5	CAS	UNK						
A07-031	3.00	4.00 Ser	m	Msi	m		OI	Su	Sa	irreg	Py	1.5	UNK							
A07-031	4.00	5.00 Ser	m	Msi	m		OI	Su	Sa	irreg	Py	1.5	UNK							
A07-031	5.00	6.00 Ser	m	Msi	m		Su		Sa		Py	1.5	UNK							
A07-031	6.00	7.00 Msi	m	Ser	w		Su				Py	2.5	UNK		FF	6	700	50		
A07-031	7.00	8.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	8.00	9.00 Msi	m	Ser	w		Su				Py	2.5	UNK		FF	8	400			
A07-031	9.00	10.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	10.00	11.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	11.00	12.00 Msi	m	Ser	w		Su				Py	2.5	UNK		FF	11.36	130	60		
A07-031	12.00	13.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	13.00	14.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	14.00	15.00 Msi	m	Ser	w		Su				Py	2.5	UNK		FF	14.2	1200	60		
A07-031	15.00	16.00 Msi	m	Ser	w		Su				Py	2.5	UNK							
A07-031	16.00	17.00 Msi	m	Ser	m		Su				Py	2.5	UNK							
A07-031	17.00	18.00 Msi	m	Ser	m		Su				Py	2.5	UNK		FF	17.65	300			
A07-031	18.00	19.00 Msi	m	Ser	m		Su				Py	2.5	UNK							
A07-031	19.00	20.00 Msi	m	Ser	m		Su				Py	2.5	UNK		FF	19.73	4500			
A07-031	20.00	21.00 Msi	w	Ser	m	Cly	Su				Py	3.5	UNK							
A07-031	21.00	22.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	22.00	23.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	23.00	24.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	24.00	25.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	25.00	26.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	26.00	27.00 Msi	w	Ser	s	Cly	Su				Py	3.5	UNK							
A07-031	27.00	28.00 Msi	m	Ser	m		Su		Sa	35	Py	2.5	UNK							
A07-031	28.00	29.00 Msi	m	Ser	m		Su		Sa	35	Py	2.5	UNK							
A07-031	29.00	30.00 Msi	m	Ser	m		Su		Sa	35	Py	2.5	UNK							
A07-031	30.00	31.00 Msi	m	Ser	m		Su		Sa	35	Py	2.5	UNK							
A07-031	31.00	32.00 Msi	w	Ser	m		Su	Oh	Ser	irreg	Py	0.5	UNK							
A07-031	32.00	33.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	33.00	34.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	34.00	35.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	35.00	36.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	36.00	37.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	37.00	38.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	38.00	39.00 Msi	s	Ser	m		Su				Py	2.5	UNK							
A07-031	39.00	40.00 Msi	s	Ser	m		Su				Py	2	UNK							
A07-031	40.00	41.00 Msi	s	Ser	w		Su				Py	2	UNK							
A07-031	41.00	42.00 Msi	s	Ser	w		Su				Py	2	UNK							
A07-031	42.00	43.00 Msi	s	Ser	w		Su		Sa	0	Py	0.1	UNK							
A07-031	43.00	44.00 Msi	s	Ser	w		Su		Sa	0	Py	0.1	UNK							
A07-031	44.00	45.00 Msi	s	Ser	m		Su		Sq	5	Py	0.1	UNK		FF	44.75	300	10		
A07-031	45.00	46.00 Msi	s	Ser	m		Su		Sq	5	Py	0.1	UNK							
A07-031	46.00	47.00 Msi	s	Ser	m		Su		Sq	5	Py	0.1	UNK							
A07-031	47.00	48.00 Msi	s	Ser	m		Su		Sq	5	Py	0.1	UNK							
A07-031	48.00	49.00 Msi	m	Ser	m		Su		An	35	Py	0.1	UNK		FF	46.55	150	45		
A07-031	49.00	50.00 Msi	s	Ser	m		Su		An	70	Py	0.1	UNK							
A07-031	50.00	51.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK		FG	50	1360			
A07-031	51.00	52.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK							
A07-031	52.00	53.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK		FG	52.17	530	50		
A07-031	53.00	54.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK		FG	53.24	3300			
A07-031	54.00	55.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK							
A07-031	55.00	56.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK							
A07-031	56.00	57.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK							
A07-031	57.00	58.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK		FG	57	760			
A07-031	58.00	59.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK		FG	58.2	180	70		
A07-031	59.00	60.00 Msi	w	Ser	s	Cly	Su				Py	5	UNK							
A07-031	60.00	61.00 Vsi	m	Ser	w		Su				Py	3.5	UNK							
A07-031	61.00	62.00 Msi	s	Vsi	w		Su		Sa	50	Py	5	UNK							
A07-031	62.00	63.00 Msi	s	Vsi	w		Su		Sa	50	Py	5	UNK							
A07-031	63.00	64.00 Msi	s	Vsi	w		Su				Py	3.5 En	0.1 Cp	0.5	UNK		FF	63.2	400	50
A07-031	64.00	65.00 Msi	s	Vsi	w		Su				Py	3.5 En	0.1 Cp	0.5	UNK					
A07-031	65.00	66.00 Msi	s	Vsi	w		Su				Py	3.5 En	0.1 Cp	0.5	UNK					
A07-031	66.00	67.00 Msi	w	Ser	s		Su				Py	10	UNK		FG	66.05	1800			
A07-031	67.00	68.00 Msi	w	Ser	s		Su				Py	10	UNK							
A07-031	68.00	69.00 Vsi	w	Ser	m	Msi	Su				Py	2.5	UNK		FF	68.33	310			
A07-031	69.00	70.00 Vsi	w	Ser	m	Msi	Su				Py	2.5	UNK		FF	69.05	260			
A07-031	70.00	71.00 Msi	s	Vsi	w		Su				Py	3.5 Cp	0.1	UNK						
A07-031	71.00	72.00 Msi	s	Vsi	m		Su				Py	2.5	UNK							
A07-031	72.00	73.00 Msi	s	Vsi	m		Su				Py	2.5	UNK							
A07-031	73.00	74.00 Msi	s	Vsi	m		Su		Ba	irreg	Py	1.5	UNK							
A07-031	74.00	75.00 Msi	m	Vsi	w		Su		Ba	irreg	Py	1.5	UNK		FF	74.22	150			
A07-031	75.00	76.00 Msi	m	Vsi	w		Su				Py	3.5	UNK							
A07-031	76.00	77.00 Msi	m	Vsi	w		Su				Py	3.5	UNK							
A07-031	77.00	78.00 Vsi	s	Msi	w		Su		Bn	0.1	Py	2.5	UNK							
A07-031	78.00	79.00 Vsi	s	Msi	w		Su				Py	2.5	UNK		FF	78.9	860			
A07-031	79.00	80.00 Vsi	s	Msi	w		Su				Py	3	UNK							
A07-031	80.00	81.00 Vsi	s				Su				Py	3.5	UNK							
A07-031	81.00	82.00 Vsi	s				Su				Py	3.5	UNK		FF	81.69	4250			
A07-031	82.00	83.00 Vsi	s				Su				Py	3.5	UNK							
A07-031	83.00	84.00 Vsi	s				Su				Py	3.5	UNK							
A07-031	84.00	85.00 Vsi	s				Su				Py	3.5	UNK							
A07-031	85.00	86.00 Vsi	s				Su				Py	3.5	UNK		FF	86.95	720			
A07-031	86.00	87.00 Ser	s				Su	Ser		60	Py	1.5	UNK		FF	87	1600			

[illegible]

A07-033	46	47 Msi	s				Su			Py	1			Py	15					UNK						
A07-033	47	48 Msi	s				Su							Py	15					UNK						
A07-033	48	49 Msi	s				Su							Py	10 Cp		0.1			UNK			FG	48.8	2	20
A07-033	49	50 Psi	w				Su			Py	5			Py	10					UNK	AXT		FG	49.4	300	70
A07-033	50	51 Psi	m				Su			Py	5			Py	15					UNK	AXT		FF	50.4	3	5
A07-033	51	52 Psi	s				Su			Py	5			Py	20					UNK			FF	51	2	5
A07-033	52	53 Psi	s				Su			Py	15			Py	10 Cp		1			UNK			FF	52.55	2	70
A07-033	53	54 Psi	m				Su			Py	10			Py	10					UNK			FB	53.9	360	40
A07-033	54	55 Psi	w				Su			Py	5			Py	5					UNK			FG	54.3	500	50
A07-033	55	56 Msi	s																	UNK						
A07-033	56	57 Msi	s				Su							Cc	0.1					UNK			FF	56	2	40
A07-033	57	58 Msi	s																	UNK			FF	57.15	1	60
A07-033	58	59 Msi	s				Su							Cc	0.1					UNK			FF	58	1	70
A07-033	59	60 Msi	s																	UNK						
A07-033	60	61 Cly	s				Su							Py	3					UNK	AXT		FG	60.75	250	70
A07-033	61	62 Cly	s				Su							Py	5					UNK	AXT		FG	61.6	250	30
A07-033	62	63 Cly	m				Su							Py	5					UNK	AXT		FG	62.5	500	70
A07-033	63	64 Cly	s				Su							Py	3					UNK	AXT		FG	63.7	200	40
A07-033	64	65 Cly	s				Su							Py	3					UNK	AXT		FG	64.2	100	60
A07-033	65	66 Cly	m				Su							Py	5					UNK	AXT		FF	65.05	3	60
A07-033	66	67 Scy	m				Su							Py	3					AXT			FF	66.05	3	20
A07-033	67	68 Scy	m				Su							Py	3					AXT			FF	67.25	2	60
A07-033	68	69 Scy	m	Cly	w		Su		Sa		60	Py	1	Py	3					AXT			FF	68.2	2	40
A07-033	69	70 Scy	s	Cly	w		Su							Py	1					AXT			FG	69.05	150	40
A07-033	70	71 Scy	s				Su							Py	0.1					AXT			FF	70.3	2	50
A07-033	71	72 Scy	s				Su							Py	0.1					AXT			FF	71.2	2	45
A07-033	72	73 Scy	s				Su							Py	1					AXT			FF	72.95	2	40
A07-033	73	74 Scy	s				Su							Py	0.1					AXT			FF	73.5	3	40
A07-033	74	75 Scy	s				Su		Sa		40			Py	1					AXT			FF	74.5	5	40
A07-033	75	76 Scy	m	Cly	w		Su		Sa		40			Py	1					AXT			FF	75.2	2	20
A07-033	76	77 Scy	m	Cly	w		Su							Py	1					AXT			FF	76.25	2	40
A07-033	77	78 Scy	m	Cly	w		Su							Py	1					AXT			FF	77.7	2	40
A07-033	78	79 Scy	m	Cly	w		Su							Py	0.1					AXT			FF	78.3	2	40
A07-033	79	80 Scy	m	Cly	w		Su							Py	0.1					AXT			FF	79.2	2	15
A07-033	80	81 Scy	m	Cly	w		Su							Py	0.1					AXT			FF	80.5	2	50
A07-033	81	82 Scy	m	Cly	w		Su		An		60			Py	1					AXT			FF	81.15	5	60
A07-033	82	83 Scy	m	Cly	w		Su		An		50			Py	0.1					AXT			FF	82.2	2	50
A07-033	83	84 Scy	m	Cly	m		Su		An		60			Py	0.1					AXT			FF	83.5	2	60
A07-033	84	85 Scy	m	Cly	m		Su		An		60			Py	1					AXT			FF	84.15	4	60
A07-033	85	86 Scy	m	Cly	m		Su		Sq		40			Py	3					AXT			FG	85.25	100	40
A07-033	86	87 Scy	m	Cly	m		Su		An		50			Py	2					AXT			FG	86.75	50	40
A07-033	87	88 Scy	w	Cly	m		Su		An		50			Py	1					AXT			FF	87.4	10	40
A07-033	88	89 Scy	w	Cly	m		Su		An		60			Py	0.1					AXT			FF	88.83	3	60
A07-033	89	90 Scy	w	Cly	m		Su		An		30			Py	1					AXT			FG	89.9	60	60
A07-033	90	91 Scy	w	Cly	s		Su		An		80	Py	1	Py	1					AXT			FG	90.15	150	70
A07-033	91	92 Scy	w	Cly	m		Su		An		30			Py	3					AXT			FF	91.1	4	40
A07-033	92	93 Scy	w	Cly	m		Su		An		70			Py	3					AXT			FG	92.65	30	
A07-033	93	94 Scy	w	Cly	m		Su		An		40			Py	3					AXT			FF	93.35	60	70
A07-033	94	95 Scy	w	Cly	m		Su		An		40			Py	1					AXT			FF	94.6	3	40
A07-033	95	96 Scy	w	Cly	m		Su		An		30			Py	3					AXT			FF	95	1	30
A07-033	96	97 Scy	w	Cly	m		Su		An		85			Py	3 Cp		0.1			AXT			FF	96	60	85
A07-033	97	98 Scy	w	Cly	m		Su		An		60			Py	3 Cp		0.1			AXT			FF	97.5	10	60
A07-033	98	99 Scy	w	Cly	m		Su		An		40	Py	1	Py	5					AXT			FF	98.31	50	40
A07-033	99	100 Scy	w	Cly	s		Su		An		40	Py	0.1	Py	5					AXT			FF	99.25	400	40
A07-033	100	101 Cly	s				Su		An		40	Py	1	Py	3					UNK	AXT		FG	100.4	550	40
A07-033	101	102 Cly	s				Su		An		70	Py	1	Py	5					UNK	AXT		FG	101.55	250	70
A07-033	102	103 Cly	s				Su		An		40	Py	1	Py	5					UNK	AXT		FG	102.45	10	70
A07-033	103	104 Cly	m	Psi	m		Su		An		60	Py	1	Py	5					UNK	AXT		FB	103	600	60
A07-033	104	105 Psi	m				Su		An		60			Py	5					UNK			FF	104.15	10	60
A07-033	105	106 Psi	m				Su		An		60	Py	2	Py	7					UNK			FF	105.45	10	60
A07-033	106	107 Psi	s				Su		An		20	Py	1	Py	5					UNK			FF	106.05	2	60
A07-033	107	108 Psi	s				Su		An		30			Py	7 Cp		0.1			UNK			FF	107.05	30	30
A07-033	108	109 Psi	s				Su		An		40			Py	7					UNK			FF	108.7	2	40
A07-033	109	110 Psi	s				Su		An		40			Py	7					UNK			FF	109.85	2	40
A07-033	110	111 Psi	s				Su		An		30			Py	5					UNK			FF	110.85	30	50
A07-033	111	112 Psi	s				Su		An		30			Py	7					UNK			FF	111.2	10	30
A07-033	112	113 Psi	s				Su		An		60			Py	10					UNK			FF	112.75	15	60
A07-033	113	114 Psi	s				Su		An		80			Py	10					UNK			FF	113.35	1	80
A07-033	114	115 Psi	s				Su		An		40			Py	7					UNK			FF	114.45	2	40
A07-033	115	116 Psi	s				Su		An		40			Py	7					UNK						
A07-033	116	117 Psi	s				Su		An		40			Py	7					UNK			FF	116.6	2	40
A07-033	117	118 Psi	s				Su		Sa		30			Py	10					UNK			FF	117.7	2	30
A07-033	118	119 Psi	s				Su		An		50			Py	7					UNK						
A07-033	119	120 Psi	m				Su		An		40	Py	2	Py	7					UNK			FF	119.8	50	40
A07-033	120	121 Cly	s				Su		Sa		40			Py	3					UNK	AXT		FB	120.05	60	40
A07-033	121	122 Cly	s				Su		An		40	Py	1	Py	2					UNK	AXT		FG	121.8	600	40
A07-033	122	123 Cly	s	Psi	w		Su		An		0	Py	1	Py	7					UNK	AXT		FG			
A07-033	123	124 Cly	s				Su		An		40			Py	5					UNK	AXT		FG	123.5	150	30
A07-033	124	125 Cly	s				Su		An		50			Py	5					UNK	AXT		FG	124.5	50	40
A07-033	125	126 Cly	s				Su		An		30			Py	3					UNK	AXT		FF	125.2	5	30
A07-033	126	127 Cly	s																							

A07-034	31.00	32.00	Cly	s				Su										Py	15					UNK		FF	31.2	2	20
A07-034	32.00	33.00	Cly	s				Su										Py	10					UNK		FB	32	100	40
A07-034	33.00	34.00	Cly	s				Su										Py	5					UNK		FF	33.5	2	40
A07-034	34.00	35.00	Cly	s				Su										Py	5					UNK		FG	34.7	50	70
A07-034	35.00	36.00	Cly	s				Su										Py	5					UNK		FG	35.8	20	
A07-034	36.00	37.00	Cly	s				Su										Py	10					UNK		FB	36	1000	60
A07-034	37.00	38.00	Cly	s				Su										Py	5					UNK		FF	37.05	2	40
A07-034	38.00	39.00	Cly	s				Su										Py	10					UNK		FF	38.4	2	20
A07-034	39.00	40.00	Cly	s				Su										Py	10					UNK		FF	39.9	3	60
A07-034	40.00	41.00	Cly	s				Su										Py	10					UNK		FF	40.8	3	60
A07-034	41.00	42.00	Cly	s				Su										Py	10					UNK		FF	41.35	3	50
A07-034	42.00	43.00	Cly	s				Su										Py	10					UNK					
A07-034	43.00	44.00	Cly	s				Su										Py	10					UNK					
A07-034	44.00	45.00	Cly	s				Su										Py	5					UNK		FG	44.9	500	50
A07-034	45.00	46.00	Scy	m	Cly	m		Su										Py	5					UNK		FG	45.4	10	60
A07-034	46.00	47.00	Scy	s				Su										Py	5					UNK		FG	46.2	20	50
A07-034	47.00	48.00	Scy	s				Su										Py	5					UNK					
A07-034	48.00	49.00	Scy	s				Su										Py	5					UNK		FF	48.15	2	50
A07-034	49.00	50.00	Scy	s				Su										Py	5					UNK		FF	49.9	2	10
A07-034	50.00	51.00	Scy	s				Su										Py	5					UNK		FF	50.75	2	15
A07-034	51.00	52.00	Scy	s				Su										Py	5					UNK		FF	51.25	2	15
A07-034	52.00	53.00	Scy	s				Su										Py	6 Cp		1			UNK		FF	52.4	40	40
A07-034	53.00	54.00	Scy	s				Su										Py	7 Cp		2			UNK		FF	53.7	2	60
A07-034	54.00	55.00	Scy	s				Su										Py	5 Cp		3			UNK		FG	54.2	30	40
A07-034	55.00	56.00	Scy	s				Su										Py	5 Cp		5			UNK		FF	55.6	3	20
A07-034	56.00	57.00	Scy	s				Su										Py	5 Cp		3			UNK		FF	56.3	2	50
A07-034	57.00	58.00	Scy	s				Su										Py	6 Cp		0.1			UNK		FF	57.7	2	80
A07-034	58.00	59.00	Scy	s				Su										Py	5					UNK		FF	58.9	2	40
A07-034	59.00	60.00	Scy	s				Su										Py	5					UNK		FG	59.25	3	50
A07-034	60.00	61.00	Scy	s				Su										Py	5					UNK		FG	60.55	200	60
A07-034	61.00	62.00	Scy	s				Su										Py	5 Cp		0.1			UNK		FF	61.9	200	15
A07-034	62.00	63.00	Scy	s				Su										Py	5					UNK		FF	62.18	2	10
A07-034	63.00	64.00	Scy	s				Su										Py	3					UNK		FF	63.2	2	20
A07-034	64.00	65.00	Scy	s				Su										Py	3					UNK		FF	64	5	10
A07-034	65.00	66.00	Scy	s				Su										Py	3					UNK		FF	65.05	3	20
A07-034	66.00	67.00	Scy	s				Su										Py	5					UNK		FF	66.3	3	0
A07-034	67.00	68.00	Scy	s				Su										Py	5					UNK		FF	67.2	2	40
A07-034	68.00	69.00	Scy	s				Su										Py	3					UNK		FF	68.05	2	30
A07-034	69.00	70.00	Scy	s				Su										Py	2					UNK		FG	69.3	3	10
A07-034	70.00	71.00	Scy	s	Cly	m		Su										Py	1					UNK		FG	70.2	500	40
A07-034	71.00	72.00	Scy	s	Cly	w		Su										Py	1					UNK		FF	71.3	200	70
A07-034	72.00	73.00	Scy	s				Su										Py	1					UNK		FF	72.3	2	50
A07-034	73.00	74.00	Scy	s				Su										Py	1					UNK	AVB	FF	73.3	2	50
A07-034	74.00	75.00	Scy	s				Su										Py	2					UNK	AVB	FF	74.1	3	10
A07-034	75.00	76.00	Scy	s				Su										Py	5					UNK	AVB	FF	75.4	4	40
A07-034	76.00	77.00	Scy	s				Su										Py	5					UNK	AVB	FF	76.3	2	30
A07-034	77.00	78.00	Scy	s				Su										Py	2					UNK		FF	77.4	2	20
A07-034	78.00	79.00	Scy	s				Su										Py	3					UNK	AVB	FF	78.05	3	50
A07-034	79.00	80.00	Scy	s				Su										Py	3					UNK		FF	79	4	15
A07-034	80.00	81.00	Scy	s				Su										Py	1					UNK		FF	80.75	3	45
A07-034	81.00	82.00	Scy	s				Su										Py	1					UNK		FF	81.75	5	40
A07-034	82.00	83.00	Scy	s				Su										Py	1					UNK		FF	82.3	4	60
A07-034	83.00	84.00	Scy	s				Su										Py	0.1					UNK		FF	83.55	3	50
A07-034	84.00	85.00	Scy	s				Su										Py	1					UNK		FF	84.6	8	60
A07-034	85.00	86.00	Scy	s				Su										Py	1					UNK		FF	85.7	2	60
A07-034	86.00	87.00	Scy	s				Su										Py	0.1					UNK		FF	86.15	3	70
A07-034	87.00	88.00	Scy	s				Su										Py	1					UNK		FF	87.55	15	40
A07-034	88.00	89.00	Scy	s				Su										Py	1					UNK		FF	88.05	10	40
A07-034	89.00	90.00	Scy	s				Su										Py	1					UNK		FF	89.55	5	50
A07-034	90.00	91.00	Scy	s				Su										Py	0.1					UNK		FF	90.45	2	60
A07-034	91.00	92.00	Scy	s				Su										Py	1					UNK		FF	91.24	2	30
A07-034	92.00	93.00	Scy	s				Su										Py	1					UNK		FF	92.3	4	40
A07-034	93.00	94.00	Scy	m				Su										Py	3 Cp		0.1			UNK		FF	93.7	15	70
A07-034	94.00	95.00	Scy	m				Su										Py	5					UNK		FG	94.4	75	20
A07-034	95.00	96.00	Scy	m	Cly	w		Su										Py	5					UNK		FF	95.6	5	20
A07-034	96.00	97.00	Scy	m	Cly	w		Su										Py	5					UNK		FG	96.85	150	60
A07-034	97.00	98.00	Scy	m	Cly	w		Su										Py	7					UNK		FF	97.5	5	60
A07-034	98.00	99.00	Scy	m	Cly	w		Su										Py	7 Cp		0.1			UNK		FF	98.7	5	70
A07-034	99.00	100.00	Scy	m	Cly	w		Su										Py	7					UNK		FF	99.25	2	20
A07-034	100.00	101.00	Scy	m	Cly	w		Su										Py	7					UNK		FG	100.79	200	30
A07-034	101.00	102.00	Scy	m	Cly	w		Su										Py	7					UNK		FG	101.6	400	50
A07-034	102.00	103.00	Scy	m	Cly	w		Su										Py	5					UNK		FG	102.6	50	70
A07-034	103.00	104.00	Scy	m	Cly	w		Su										Py	5					UNK		FF	103.7		

A07-035	62	63 Vsi	m	Msi	m	Kao	w	Su				Py	4 Cp	0.1		HBX	UNK	FF	62	800	
A07-035	63	64 Vsi	s	Msi	m	Kao	w	Su				Py	4 Cp	0.1		HBX	UNK	FF	63	3550	
A07-035	64	65 Vsi	s	Msi	w	Kao	m	Su				Py	4 Cp	0.1		HBX	UNK				
A07-035	65	66 Vsi	s	Msi	w	Kao	m	Su				Py	4 Cp	0.1		HBX	UNK				
A07-035	66	67 Vsi	m	Kao	m	Msi	w	Su				Py	3			UNK		FG	66.65	150	70
A07-035	67	68 Ser	s					Su				Py	3			UNK		FG	67.7	130	70
A07-035	68	69 Ser	w	Cly	s			Su				Py	3			UNK		FG	68.95	250	
A07-035	69	70 Ser	w	Cly	s			Su				Py	3			UNK		FF	69.3	3	60
A07-035	70	71 Ser	w	Cly	s			Su				Py	3			UNK		FG	70.05	100	60
A07-035	71	72 Ser	w	Cly	s			Su				Py	3			UNK		FF	71	200	50
A07-035	72	73 Ser	w	Cly	s			Ol	Su			Py	3			UNK		FG	72.05	15	40
A07-035	73	74 Scy	m					Ol	Su			Py	3			UNK		FF	73.85	3	70
A07-035	74	75 Scy	m	Vsi	w			Su				Py	5			UNK		FG	74	200	60
A07-035	75	76 Scy	m	Vsi	w			Su				Py	3			UNK		FG	75.1	10	70
A07-035	76	77 Scy	m					Su				Py	3			UNK		FF	76.15	2	30
A07-035	77	78 Scy	s					Su		Py	1	Py	3			UNK		FF	77.6	3	20
A07-035	78	79 Scy	s					Su				Py	5			UNK		FF	78.35	8	60
A07-035	79	80 Scy	s					Su				Py	5			UNK		FF	79.85	15	60
A07-035	80	81 Scy	s					Su				Py	5			UNK		FF	80.95	10	60
A07-035	81	82 Scy	s					Su		Py	1	Py	5			UNK		FF	81.5	3	30
A07-035	82	83 Scy	s					Su				Py	5			UNK		FF	82.75	10	60
A07-035	83	84 Scy	s					Su				Py	5			UNK		FF	83.18	8	60
A07-035	84	85 Scy	s					Su				Py	5			UNK		FF	84.5	8	60
A07-035	85	86 Scy	s	Cly	w			Su		Py	1	Py	5			UNK		FF	85.5	10	50
A07-035	86	87 Scy	s					Su		Py	1	Py	5			UNK		FF	86.9	15	30
A07-035	87	88 Scy	s					Su		Py	1	Py	5 Cp	0.1		UNK		FF	87.4	4	65
A07-035	88	89 Scy	s					Su		Py	1	Py	5 Cp	0.1		UNK		FF	88.25	10	65
A07-035	89	90 Scy	m	Cly	w			Su				Py	7			UNK		FF	89.2	150	60
A07-035	90	91 Scy	m	Cly	w			Su				Py	7			UNK		FF	90.4	20	60
A07-035	91	92 Scy	s					Su				Py	5			UNK		FF	91.2	10	35
A07-035	92	93 Scy	s					Su				Py	5			UNK		FF	92.6	5	60
A07-035	93	94 Scy	s					Su				Py	5			UNK					
A07-035	94	95 Scy	s					Su				Py	5			UNK		FF	94.1	10	20
A07-035	95	96 Scy	s					Su				Py	3			UNK		FF	95.55	5	60
A07-035	96	97 Scy	s					Su				Py	3			UNK		FG	96.93	1500	40
A07-035	97	98 Ser	m	Cly	s			Su				Py	3			UNK		FG	97	1000	40
A07-035	98	99 Cly	s	Psi	w			Su		Py	2	Py	7			UNK		FG	98	493	40
A07-035	99	100 Psi	w					Su				Py	7			UNK		FF	99	5	0
A07-035	100	101 Psi	m					Su				Py	7			UNK		FF	100.3	20	10
A07-035	101	102 Psi	m					Su				Py	10			UNK		FB	101.05	60	80
A07-035	102	103 Psi	s					Su				Py	5			UNK		FB	102	800	10
A07-035	103	104 Psi	s					Su				Py	15			UNK		FB	103.7	600	15
A07-035	104	105 Psi	s					Su				Py	15			UNK					
A07-035	105	106 Psi	s					Su				Py	15			UNK		FF	105.95	2	60
A07-035	106	107 Psi	s					Su				Py	15			UNK					
A07-035	107	108 Psi	s					Su				Py	15			UNK		FF	107.2	2	70
A07-035	108	109 Psi	s					Su				Py	15			UNK		FF	109.1	2	40
A07-035	109	110 Psi	s					Su		Py	1	Py	10			UNK					
A07-035	110	111 Psi	s					Su				Py	10			UNK		FF	111.55	10	40
A07-035	111	112 Psi	s					Su				Py	10			UNK		FF	112.35	2	30
A07-035	112	113 Psi	s					Su				Py	10			UNK					
A07-035	113	114 Psi	s					Su				Py	10			UNK		FF	114.3	2	10
A07-035	114	115 Psi	s					Su				Py	10			UNK					
A07-035	115	116 Psi	s					Su				Py	15			UNK					
A07-035	116	117 Psi	s					Su				Py	15			UNK					
A07-035	117	118 Psi	s					Su				Py	15			UNK					
A07-035	118	119 Psi	s					Su				Py	15			UNK		FF	118.35	5	80
A07-035	119	120 Psi	s					Su				Py	15			UNK		FF	119.3	4	80
A07-035	120	121 Psi	s					Su		Py	5	Py	15			UNK		FF	120.35	10	70
A07-035	121	122 Psi	s					Su				Py	10			UNK		FF	121.4	4	60
A07-035	122	123 Psi	m	Cly	m			Ol	Su			Py	5			UNK		FF	122.5	20	80
A07-035	123	124 Psi	w	Cly	m			Ol	Su		Py	2	Py	3		UNK		FG	123	750	60
A07-035	124	125 Scy	m					Su				Py	3			UNK		FF	124.7	5	30
A07-035	125	126 Scy	s					Su				Py	5			UNK		FF	125.4	200	20
A07-035	126	127 Scy	s					Su				Py	5			UNK		FF	126.15	4	50
A07-035	127	128 Scy	s					Su		Py	2	Py	3			UNK		FF	127.93	4	80
A07-035	128	129 Scy	s					Su		Py	1	Py	3			UNK		FG	128.55	150	70
A07-035	129	130 Scy	s					Su				Py	3			UNK		FF	129.85	3	30
A07-035	130	131 Scy	s					Su		Py	1	Py	3			UNK		FG	130.55	10	30
A07-035	131	132 Scy	m	Cly	w			Su				Py	3			UNK		FB	131.6	200	50
A07-035	132	133 Scy	m					Su				Py	5			UNK		FF	132.25	5	30
A07-035	133	134 Scy	m	Cly	w			Su				Py	5			UNK		FF	133.6	50	80
A07-035	134	135 Scy	w	Psi	m			Su				Py	7			UNK		FG	134.25	180	70
A07-035	135	136 Psi	s					Su				Py	10			UNK					
A07-035	136	137 Psi	s					Su				Py	7			UNK					
A07-035	137	138 Psi	s					Su				Py	20			UNK					
A07-035	138	139 Psi	s					Su				Py	10			UNK					
A07-035	139	140 Psi	s					Su				Py	10			UNK					
A07-035	140	141 Psi	s					Su				Py	10			UNK		FF	140.82	1	80
A07-035	141	142 Psi	s					Su				Py	10			UNK					
A07-035	142	143 Psi	s					Su		Py	1	Py	10			UNK		FF	142.6	1	60
A07-035	143	144 Psi	s					Su				Py	10			UNK					
A07-035	144	145 Psi	s					Su				Py	7			UNK					
A07-035	145	146 Psi	m					Su		Py	1	Py	5			UNK		FF	145.5	3	30
A07-035	146	147 Psi	m					Su		Py	1	Py	5			UNK		FG	146.85	750	60
A07-035	147	148 Psi	w	Cly	m			Su		Py	1	Py	3			UNK					
A07-035	148	149 Psi	s					Su				Py	5			UNK		FF	148.4	1	20
A07-035	149	150 Psi	s					Su				Py	10			UNK		FF	149.95	1	60
A07-035	150	150.88 Psi	s					Su		Py	5	Py	7 Cp	0.1		UNK		FF	150.7	2	60
A07-036	0	1														CAS					
A07-036	1	2 Ual						Oh								CAS	AVB	FF		1	50
A07-036	2	3 Ual						Oh								AVB		FF			60

A07-036	3	4 Ual		Oh					AVB				30
A07-036	4	5 Ual		Oh					AVB				50
A07-036	5	6 Ual		Oh					AVB				80
A07-036	6	7 Ual		Oh					AVB				20
A07-036	7	8 Pro	w	Oh	Ca	0			AVB				0
A07-036	8	9 Pro	m	Oh	Ca	40			AVB				30
A07-036	9	10 Ual		Oh					AVB				50
A07-036	10	11 Ual		Oh					AVB				30
A07-036	11	12 Ual		Oh					AVB				30
A07-036	12	13 Ual		Oh					AVB				50
A07-036	13	14 Ual		Oh					AVB				30
A07-036	14	15 Ual		Oh	Ca	30			AVB				30
A07-036	15	16 Ual		Oh					AVB				
A07-036	16	17 Ual		Oh					AVB				
A07-036	17	18 Ual		Oh					AVB			10	
A07-036	18	19 Ual		Oh					AVB			40	
A07-036	19	20 Ual		Oh					AVB				
A07-036	20	21 Ual		Oh					AVB			70	
A07-036	21	22 Ual		Oh					AVB			60	
A07-036	22	23 Ual		Oh					AVB			10	
A07-036	23	24 Ual		Oh					AVB			10	
A07-036	24	25 Ual		Oh					AVB			15	
A07-036	25	26 Pro	w	Oh					AVF			15	
A07-036	26	27 Pro	m	Oh					AVF			15	
A07-036	27	28 Pro	m	Oh					AVF			60	
A07-036	28	29 Pro	m	Oh					AVF			70	
A07-036	29	30 Pro	m	Oh	Ca	50			AVF	FF	1	70	
A07-036	30	31 Pro	m	Oh	Ca	50			AVF				
A07-036	31	32 Pro	w	Oh					AVF	FF		1	60
A07-036	32	33 Pro	w	Oh					AVF	FF		1	50
A07-036	33	34 Pro	w	Oh					AVF				
A07-036	34	35 Pro	w	Oh					AVF	FF		1	60
A07-036	35	36 Pro	w	Oh					AVF	FF		1	40
A07-036	36	37 Pro	w	Oh					AVB	FF	36.05	1	50
A07-036	37	38 Pro	w	Oh					AVB				
A07-036	38	39 Pro	w	Oh					AVB	FF	38.45	1	50
A07-036	39	40 Pro	m	Oh	Ca	40			AVB	FF	39.3	1	50
A07-036	40	41 Pro	w	Oh					AVB	FB	40.3	200	40
A07-036	41	42 Pro	w	Oh					AVB	FF	41.8	1	50
A07-036	42	43 Pro	m	Oh					AXT	FF	42.1	1	50
A07-036	43	44 Pro	m	Oh					AXT	FF	43.35	1	60
A07-036	44	45 Pro	m	Oh					AXT	FF	44.6	1	30
A07-036	45	46 Pro	m	Oh					AXT	FF	45.8	1	20
A07-036	46	47 Pro	m	Oh	Ca	25			AXT	FF	46.45	5	25
A07-036	47	48 Pro	m	Oh					AXT	FF	47.9	1	30
A07-036	48	49 Pro	m	Oh					AVB	FG	48.1	40	40
A07-036	49	50 Pro	w	Oh					AVB	FF	49.2	1	50
A07-036	50	51 Pro	m	Oh					AVB	FF	50.8	1	40
A07-036	51	52 Pro	w	Oh					AVB	FF	51.5	1	50
A07-036	52	53 Pro	w	Oh					AVB				
A07-036	53	54 Pro	m	Oh					AVB	FF	53.9	1	60
A07-036	54	55 Pro	w	Oh					AVB	FF	54.1	1	60
A07-036	55	56 Pro	w	Oh					AVB	FF	55.15	1	70
A07-036	56	57 Pro	w	Oh					AVB				
A07-036	57	58 Pro	w	Oh					AVB	FF	57.8	1	70
A07-036	58	59 Pro	w	Oh					AVB	FF	58.2	1	60
A07-036	59	60 Pro	m	Oh					AVB	FF	59.44	1	50
A07-036	60	61 Pro	w	Oh					AVB	FF	60.7	1	30
A07-036	61	62 Pro	w	Oh					AVB	FF	61.6	1	60
A07-036	62	63 Pro	w	Oh					AVB	FF	62.8	1	40
A07-036	63	64 Pro	w	Oh					AVB	FF	63.3	1	70
A07-036	64	65 Pro	m	Oh					AVB	FF	64.2	1	30
A07-036	65	66 Pro	w	Oh					AVB	FF	65.5	1	20
A07-036	66	67 Pro	w	Oh					AVB				
A07-036	67	68 Pro	m	Oh					AVB	FF	67.3	1	20
A07-036	68	69 Pro	s	Oh	Ca	20			AVB	FF	68.6	1	20
A07-036	69	70 Pro	w	Oh					AXT	FF	69.5	1	70
A07-036	70	71 Pro	w	Oh					AXT				
A07-036	71	72 Pro	w	Oh					AXT				
A07-036	72	73 Pro	w	Oh					AXT				
A07-036	73	74 Pro	m	Oh					AXT				
A07-036	74	75 Pro	m	Oh					AXT				
A07-036	75	76 Pro	m	Oh					AXT				
A07-036	76	77 Pro	m	Oh					AXT				
A07-036	77	78 Pro	w	Oh					AVB				
A07-036	78	79 Pro	w	Oh					AVB				
A07-036	79	80 Pro	w	Oh					AVB				
A07-036	80	81 Pro	w	Oh					AVB				
A07-036	81	82 Pro	w	PO					AVB				
A07-036	82	83 Pro	w	PO	Ca				AVB		4		35
A07-036	83	84 Pro	m	PO					AVB				
A07-036	84	85 Pro	m	PO					AVB				
A07-036	85	86 Pro	m	PO					AVB				
A07-036	86	87 Pro	m	PO					AVB				
A07-036	87	88 Pro	m	Oh					AVB				
A07-036	88	89 Pro	m	Oh					AVB				
A07-036	89	90 Pro	m	Oh					AVB				
A07-036	90	91 Pro	m	PO					AVB				
A07-036	91	92 Pro	m	PO					AVF				
A07-036	92	93 Pro	m	PO					AVF	FF			20
A07-036	93	94 Pro	m	PO					AVF	FF			70
A07-036	94	95 Pro	m	PO					AVF	FF			60
A07-036	95	96 Pro	m	PO					AVF	FF			10

A07-037	28.00	29.00	Pro	m	Oh				AVB	FF	28.8	2	40
A07-037	29.00	30.00	Pro	m	Oh				AVB	FF	20.3	2	20
A07-037	30.00	31.00	Pro	m	Oh				AVB	FF	30.25	2	60
A07-037	31.00	32.00	Pro	m	Oh	Ca	60		AVB	FF	31.65	2	40
A07-037	32.00	33.00	Pro	m	Oh	Ca	20		AVB	FG	31.45	100	20
A07-037	33.00	34.00	Pro	m	Oh	Ca	5		AVB	FF	33.4	2	60
A07-037	34.00	35.00	Pro	m	Oh	Ca	15		AVB	FF	34.9	3	15
A07-037	35.00	36.00	Pro	m	Oh	Ca	5		AVB	FF	35.95	2	50
A07-037	36.00	37.00	Pro	m	Oh				AVB				
A07-037	37.00	38.00	Pro	m	Oh	Ca	0		AVB	FF	37.45	2	40
A07-037	38.00	39.00	Pro	m	Oh	Ca	0		AVB	FF	38.15	2	50
A07-037	39.00	40.00	Pro	m	Oh	Ca	0		AVB				
A07-037	40.00	41.00	Pro	w	Oh	Ca	0		AVB	FF	40.55	2	40
A07-037	41.00	42.00	Pro	w	Oh				AVB	FG	41.4	5	40
A07-037	42.00	43.00	Pro	w	Oh	Ca	80		AVB	FF	42.8	2	40
A07-037	43.00	44.00	Pro	w	Oh				AVB	FF	43.1	2	40
A07-037	44.00	45.00	Pro	m	Oh	Ca	70		AVB				
A07-037	45.00	46.00	Pro	m	Oh				AVB	FF	45.4	1	70
A07-037	46.00	47.00	Pro	m	Oh	Ca	40		AVB	FF	46.65	1	60
A07-037	47.00	48.00	Pro	w	Oh				AVB	FF	47.15	1	60
A07-037	48.00	49.00	Pro	w	Oh				AVB				
A07-037	49.00	50.00	Pro	w	Oh				AVB	FF	49.35	1	90
A07-037	50.00	51.00	Pro	w	Oh				AVB	FF	50.05	1	50
A07-037	51.00	52.00	Pro	w	Oh				AVB				
A07-037	52.00	53.00	Pro	w	Oh				AVB	FF	52.05	1	60
A07-037	53.00	54.00	Pro	w	Oh				AVB				
A07-037	54.00	55.00	Pro	w	Oh	Ca	50		AVB	FF	54.4	2	40
A07-037	55.00	56.00	Pro	w	Oh				AVB				
A07-037	56.00	57.00	Pro	w	Oh	Ca	5		AVB	FF	56.75	1	60
A07-037	57.00	58.00	Pro	w	Oh	Ca	90		AVB	FG	57.9 ?	?	
A07-037	58.00	59.00	Pro	m	Oh				AVB	FG	58.35	50	25
A07-037	59.00	60.00	Pro	m	Oh	Ca	30		AVB	FG	59.8	10	80
A07-037	60.00	61.00	Pro	m	Oh	Ca	40		AVB	FF	60.2	250	40
A07-037	61.00	62.00	Pro	m	Oh	Ca	30		AVB	FF	66.8	10	30
A07-037	62.00	63.00	Pro	m	Oh	Ca	90		AVB	FF	62.4	2	20
A07-037	63.00	64.00	Pro	m	Oh	Ca	10		AVB	FF	63	2	10
A07-037	64.00	65.00	Pro	s	Oh	Ca	30		AVB	FB	63.9	600	25
A07-037	65.00	66.00	Pro	s	Oh	CA	30		AVB	FB	65.15	250	30
A07-037	66.00	67.00	Pro	m	Oh	Ca	50		AVB	FF	66.28	3	50
A07-037	67.00	68.00	Pro	m	Oh	Ca	30		AVB	FF	67.6	2	30
A07-037	68.00	69.00	Pro	m		Ca	90		AVB				
A07-037	69.00	70.00	Pro	m		Ca	90		AVB				
A07-037	70.00	71.00	Pro	w		Ca	90		AVB				
A07-037	71.00	72.00	Pro	w		Ca	90		AVB	FF	71.85	3	60
A07-037	72.00	73.00	Pro	m		Ca	90		AVB	FF	72.9	3	60
A07-037	73.00	74.00	Pro	w	Oh				AVB	FF	73	2	40
A07-037	74.00	75.00	Pro	w	Oh				AVB				
A07-037	75.00	76.00	Pro	w	Oh				AVB	FF	75.55	3	50
A07-037	76.00	77.00	Pro	w	Oh				AVB	FF	76.85	2	60
A07-037	77.00	78.00	Pro	w	Oh				AVB				
A07-037	78.00	79.00	Pro	w	Oh	Ca	90		AVB	FF	78.01	1	40
A07-037	79.00	80.00	Pro	w	Oh	Ca	20		AVB	FF	78.9	1	20
A07-037	80.00	81.00	Pro	w	Oh	Ca	20		AVB	FF	80.05	1	80
A07-037	81.00	82.00	Pro	w	Oh				AVB				
A07-037	82.00	83.00	Pro	w	Oh				AVB	FF	82.05	1	50
A07-037	83.00	84.00	Pro	w	Oh				AVB				
A07-037	84.00	85.00	Pro	w	Oh				AVB				
A07-037	85.00	86.00	Pro	w	Oh				AVB				
A07-037	86.00	87.00	Pro	w	Oh				AVB	FF	86.45	1	40
A07-037	87.00	88.00	Pro	w	Oh	Ca	70		AVB				
A07-037	88.00	89.00	Pro	w	Oh	Ca	50		AVB	FF	88.7	1	50
A07-037	89.00	90.00	Pro	w	Oh				AVB				
A07-037	90.00	91.00	Pro	w	Oh				AVB	FF	90.25	1	50
A07-037	91.00	92.00	Pro	w	Oh				AVB	FF	91.7	2	50
A07-037	92.00	93.00	Pro	w	Oh				AVB				
A07-037	93.00	94.00	Pro	w	Oh				AVB				
A07-037	94.00	95.00	Pro	w	Oh				AVB	FF	94.3	3	40
A07-037	95.00	96.00	Pro	w	Oh				AVB	FF	95.01	3	40
A07-037	96.00	97.00	Pro	w	Oh				AVB	FF	97	3	20
A07-037	97.00	98.00	Pro	w	Oh				AVS	FF	97.15	5	40
A07-037	98.00	99.00	Pro	w	Oh				AVS	FF	98.35	3	50
A07-037	99.00	100.00	Pro	w	Oh				AVS				
A07-037	100.00	101.00	Pro	w	Oh				AVS				
A07-037	101.00	102.00	Pro	w	Oh				AVS	FF	101.1	2	40
A07-037	102.00	103.00	Pro	m	Oh				AVS				
A07-037	103.00	104.00	Pro	m	Oh				AVS	FF	103.4	3	50
A07-037	104.00	105.00	Pro	m	Oh				AVS	FF	104.8	3	40
A07-037	105.00	106.00	Pro	m	Oh				AVS	FF	105.1	3	30
A07-037	106.00	107.00	Pro	m	Oh				AVS	FF	106.05	3	20
A07-037	107.00	108.00	Pro	m	Oh				AVS	FF	107.4	2	30
A07-037	108.00	109.00	Pro	m	Oh				AVS	FG	108.15	3	50
A07-037	109.00	110.00	Pro	m	Oh				AVS	FF	109.2	2	40
A07-037	110.00	111.00	Pro	m	Oh				AVS	FB	110.9	40	60
A07-037	111.00	112.00	Pro	m	Oh				AVS	FG	111	20	70
A07-037	112.00	113.00	Pro	w	Oh				AVS				
A07-037	113.00	114.00	Pro	w	Oh				AVS	FB	113.2	10	30
A07-037	114.00	115.00	Pro	m	Oh				AVS	FF	114.7	1	60
A07-037	115.00	116.00	Pro	m	Oh				AVS	FG	115.02	20	60
A07-037	116.00	117.00	Pro	m	Oh				AVS	FG	116	40	50
A07-037	117.00	118.00	Pro	m	Oh				AVS	FF	117.5	1	40
A07-037	118.00	119.00	Pro	m	Oh				AVS	FF	118.55	2	30
A07-037	119.00	120.00	Pro	m	Oh				AVS	FF	119.05	2	40
A07-037	120.00	121.00	Pro	m	Oh				AVS	FF	120.75	3	30

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A07-038	13.00	14.00	Ual	Ol	Ca	90	RDD	FF	13	5	40
A07-038	14.00	15.00	Ual	Ol			RDD	FF	14.6	2	30
A07-038	15.00	16.00	Ual	Oh			RDX	FF	15.2	400	25
A07-038	16.00	17.00	Ual	Oh			RDX				
A07-038	17.00	18.00	Ual	Oh			RDX				
A07-038	18.00	19.00	Ual	Oh			RDX	FF	18.05	2	20
A07-038	19.00	20.00	Ual	Oh	Ca	80	RDX				
A07-038	20.00	21.00	Ual	Oh	Ca	30	RDX				
A07-038	21.00	22.00	Ual	Oh	Ca	30	RDX				
A07-038	22.00	23.00	Ual	Oh	Ca	20	RDX				
A07-038	23.00	24.00	Ual	Oh	Ca	30	RDX				
A07-038	24.00	25.00	Ual	Oh	Ca	20	RDX				
A07-038	25.00	26.00	Ual	Oh	Ca	30	RDX				
A07-038	26.00	27.00	Ual	Oh	Ca	30	RDX	FF	26	2	15
A07-038	27.00	28.00	Ual	Oh			RDX				
A07-038	28.00	29.00	Ual	Oh			RDX				
A07-038	29.00	30.00	Ual	Oh			RDX	30			
A07-038	30.00	31.00	Ual	Oh			RDX				
A07-038	31.00	32.00	Ual	Oh			RDX	40			
A07-038	32.00	33.00	Ual	Oh			RDX				
A07-038	33.00	34.00	Ual	Oh			RDX				
A07-038	34.00	35.00	Ual	Oh			RDX	60			
A07-038	35.00	36.00	Ual	Oh			RDX	FF	35.3	2	40
A07-038	36.00	37.00	Pro	Ol			RDX	FG	36.4	10	50
A07-038	37.00	38.00	Pro	Oh			RDX	FF	37.5	5	50
A07-038	38.00	39.00	Pro	Oh			RDX	FF	38.5	3	40
A07-038	39.00	40.00	Pro	Oh			RDX	70 FF	39.45	3	50
A07-038	40.00	41.00	Pro	Oh			AVF	FG	40.8	250	70
A07-038	41.00	42.00	Pro	Oh			AVF	40 FG	41.15	100 ?	
A07-038	42.00	43.00	Pro	Oh			AVF				
A07-038	43.00	44.00	Pro	Oh			AVF				
A07-038	44.00	45.00	Pro	Oh			AVF				
A07-038	45.00	46.00	Pro	Oh			AVF	50			
A07-038	46.00	47.00	Pro	Oh			AVF				
A07-038	47.00	48.00	Pro	Oh			AVF				
A07-038	48.00	49.00	Pro	Oh			AVF	FF	48.55	2	80
A07-038	49.00	50.00	Pro	Oh			AVF	FF	49.6	4	30
A07-038	50.00	51.00	Pro	Oh			AVF	FF	50	5	0
A07-038	51.00	52.00	Pro	Oh			AVF	60 FF	51	5	0
A07-038	52.00	53.00	Pro	Oh			AVF	FF	52	5	0
A07-038	53.00	54.00	Pro	Oh			AVF	50 FF	53.8	3	20
A07-038	54.00	55.00	Pro	Oh			AVF	FF	54	2	0
A07-038	55.00	56.00	Pro	Oh			AVF	FF	55.45	3	30
A07-038	56.00	57.00	Pro	Oh			AVF	FG	56.7	100	40
A07-038	57.00	58.00	Pro	Oh			AVF	FG	57.15	50	70
A07-038	58.00	59.00	Pro	Oh			AVF				
A07-038	59.00	60.00	Pro	Oh			AVF				
A07-038	60.00	61.00	Pro				AVF				
A07-038	61.00	62.00	Pro				AVF				
A07-038	62.00	63.00	Pro		Ca	20	AVF	FF	62.4	10	20
A07-038	63.00	64.00	Pro				AVF				
A07-038	64.00	65.00	Pro		Ca	30	AVF				
A07-038	65.00	66.00	Pro			30	AVF	FF	65.97	10	60
A07-038	66.00	67.00	Pro		Ca	70	AVF	FF	66.35	2	40
A07-038	67.00	68.00	Pro				AVF	FF	67.2	2	10
A07-038	68.00	69.00	Pro				AVF				
A07-038	69.00	70.00	Pro				AVF				
A07-038	70.00	71.00	Pro				AVF	FF	70.2	2	0
A07-038	71.00	72.00	Pro				AVF				
A07-038	72.00	73.00	Pro				AVF				
A07-038	73.00	74.00	Pro		Ca	30	AVF	30			
A07-038	74.00	75.00	Pro				AVF	FF	74.2	2	20
A07-038	75.00	76.00	Pro				AVF	50			
A07-038	76.00	77.00	Pro		Ca	0	AVF	50			
A07-038	77.00	78.00	Pro				AVF	FF	77.6	2	30
A07-038	78.00	79.00	Pro		Ca	0	AVF	FF	278	2	0
A07-038	79.00	80.00	Pro		Ca	20	AVF	FF	79	2	0
A07-038	80.00	81.00	Pro		Ca	30	AVF				
A07-038	81.00	82.00	Pro				AVF	50			
A07-038	82.00	83.00	Pro				AVF	FF	81.9	2	60
A07-038	83.00	84.00	Pro		Ca	40	AVF	FF	82.1	2	30
A07-038	84.00	85.00	Pro				AVF	FF	?	?	?
A07-038	85.00	86.00	Pro		Ca	40	AVF	FF	84	2	60
A07-038	86.00	87.00	Pro				AVF	45 FF	85.15	2	60
A07-038	87.00	88.00	Pro		Ca	50	AVF	FF	86.15	2	50
A07-038	88.00	89.00	Pro				AVF				
A07-038	89.00	90.00	Pro				AVB	55			
A07-038	90.00	91.00	Pro	w			AVB	70 FF	89.9	2	70
A07-038	91.00	92.00	Pro	m			AVB	FF	90.2	3	70
A07-038	92.00	93.00	Pro	m			AVS				
A07-038	93.00	94.00	Pro	m			AVS				
A07-038	94.00	95.00	Pro	m			AVS	60 FB	93.35	650	70
A07-038	95.00	96.00	Pro	m			AVS	FF	?	?	?
A07-038	96.00	97.00	Pro	m			AVS	45 FF	95.25	3	50
A07-038	97.00	98.00	Pro	m			AVS				
A07-038	98.00	99.00	Pro	w			AVS	40			
A07-038	99.00	100.00	Pro	w			AVS				
A07-038	100.00	101.00	Pro	w			AVS				
A07-038	101.00	102.00	Pro	w			AVS				
A07-038	102.00	103.00	Pro	w			AVS				
A07-038	103.00	104.00	Pro	w			AVS	55			
A07-038	104.00	105.00	Pro	w			AVS	FB	104.5	100	65
A07-038	105.00	106.00	Pro	w			AVS				

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A07-042	144.00	145.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	145.00	146.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	146.00	147.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	147.00	148.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	148.00	149.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	149.00	150.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	150.00	151.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	151.00	152.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	152.00	153.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	153.00	154.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	154.00	155.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	155.00	156.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	156.00	157.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	157.00	158.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	158.00	159.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	159.00	160.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	160.00	161.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	161.00	162.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	162.00	163.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	163.00	164.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	164.00	165.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	165.00	166.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	166.00	167.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	167.00	168.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	168.00	169.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	169.00	170.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	170.00	171.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	171.00	172.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	172.00	173.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	173.00	174.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	174.00	175.00	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-042	175.00	175.26	Pro	w	Su	Ca	50	Py	0.1	AXT
A07-043	0	1								CAS
A07-043	1	2								CAS
A07-043	2	3								CAS
A07-043	3	4	Cly	w		Ca	50			AVB
A07-043	4	5	Cly	w		Ca	50			AVB
A07-043	5	6	Cly	w		Ca	50			AVB
A07-043	6	7	Cly	w		Ca	50			AVB
A07-043	7	8	Cly	w		Ca	50			AVB
A07-043	8	9	Cly	w		Ca	50			AVB
A07-043	9	10	Cly	w		Ca	50			AVB
A07-043	10	11	Cly	w		Ca	50			AVB
A07-043	11	12	Cly	w		Ca	50			AVB
A07-043	12	13	Cly	w		Ca	50			AVB
A07-043	13	14	Cly	w		Ca	50			AVB
A07-043	14	15	Cly	w		Ca	50			AVB
A07-043	15	16	Cly	w		Ca	50			AVB
A07-043	16	17	Cly	w		Ca	50			AVB
A07-043	17	18	Cly	w		Ca	50			AVB
A07-043	18	19	Cly	w		Ca	50			AVB
A07-043	19	20	Cly	w		Ca	50			AVB
A07-043	20	21	Cly	w		Ca	50			AVB
A07-043	21	22	Cly	w		Ca	50			AVB
A07-043	22	23	Cly	w		Ca	50			AVB
A07-043	23	24	Cly	w		Ca	50			AVB
A07-043	24	25	Cly	w		Ca	50			AVB
A07-043	25	26	Cly	w		Ca	50			AVB
A07-043	26	27	Cly	w		Ca	50			AVB
A07-043	27	28	Cly	w		Ca	50			AVB
A07-043	28	29	Cly	w		Ca	50			AVB
A07-043	29	30	Cly	w		Ca	50			AVB
A07-043	30	31	Cly	w		Ca	50			AVB
A07-043	31	32	Cly	w		Ca	50			AVB
A07-043	32	33	Cly	w		Ca	50			AVB
A07-043	33	34	Cly	w		Ca	50			AVB
A07-043	34	35	Cly	w		Ca	50			AVB
A07-043	35	36	Cly	w	OI	Ca	50			AVB
A07-043	36	37	Cly	w	OI	Ca	irreg			AVB
A07-043	37	38	Cly	w	OI	Ca	irreg			AVB
A07-043	38	39	Cly	w	OI	Ca	irreg			AVB
A07-043	39	40	Cly	w	OI	Ca	irreg			AVB
A07-043	40	41	Cly	w	OI	Ca	irreg			AVB
A07-043	41	42	Cly	w	OI	Ca	irreg			AVB
A07-043	42	43	Cly	w		Ca	40			AVF
A07-043	43	44	Cly	w		Ca	40			AVF
A07-043	44	45	Cly	w		Ca	40			AVF
A07-043	45	46	Cly	w		Ca	40			AVF
A07-043	46	47	Cly	w		Ca	40			AVF
A07-043	47	48	Cly	w		Ca	40			AVF
A07-043	48	49	Cly	w		Ca	40			AVF
A07-043	49	50	Cly	w		Ca	40			AVF
A07-043	50	51	Cly	w		Ca	40			AVF
A07-043	51	52	Cly	w		Ca	40			AVF
A07-043	52	53	Cly	w		Ca	40			AVF
A07-043	53	54	Cly	w		Ca	40			AVF
A07-043	54	55	Cly	w		Ca	40			AVF
A07-043	55	56	Cly	w		Ca	40			AVF
A07-043	56	57	Cly	w		Ca	40			AVF
A07-043	57	58	Cly	w		Ca	40			AVF
A07-043	58	59	Cly	w		Ca	40			AVF
A07-043	59	60	Cly	w		Ca	40			AVF

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A07-043	153	154 Cly	w	Ser	w	Su				Py	3.5	AXT							
A07-043	154	155 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-043	155	156 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-043	156	157 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-043	157	158 Pro	w			Su	Ca	40		Py	0.1	AXT	FG	157.6	20	60			
A07-043	158	159 Pro	w			Su	Ca	40		Py	0.1	AXT	FG	158.37	100	50			
A07-043	159	160 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-043	160	161 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-043	161	161.55 Pro	w			Su	Ca	40		Py	0.1	AXT							
A07-044	0	1 Pro	s			Oh						CAS							
A07-044	1	2 Pro	s			Oh						CAS							
A07-044	2	3 Pro	s			Oh						CAS	AXT	FG	2.85	40	70		
A07-044	3	4 Pro	s			Oh						AXT		FF	3.65	1	30		
A07-044	4	5 Pro	s			Oh						AXT		FF	4.85	70	50		
A07-044	5	6 Pro	s			Oh	Ca	50				AXT		FG	5.21	540	50		
A07-044	6	7 Pro	s			Oh						AXT							
A07-044	7	8 Pro	s			Oh						AXT							
A07-044	8	9 Pro	s			Oh						AXT							
A07-044	9	10 Pro	s			Oh	Ca	50				AXT		FG	9.36	1	50		
A07-044	10	11 Pro	s			Oh	Ca	55				AXT		FG	10	6 irreg			
A07-044	11	12 Pro	s			Oh						AXT		FG	11.19	200	60		
A07-044	12	13 Pro	s			Oh						AXT		FF	12	290			
A07-044	13	14 Pro	s			Oh						AXT		FF	13.8	1	40		
A07-044	14	15 Pro	s			Oh						AXT		FF	14.06	1	50		
A07-044	15	16 Pro	s			Oh	OI					AXT		FF	15.24	1	15		
A07-044	16	17 Pro	s			Oh						AXT		FF	16.55	40	15		
A07-044	17	18 Pro	s			Oh						AXT		FF	17.4	1	35		
A07-044	18	19 Pro	s	Msi	w	Oh	Sa	irreg				AXT		FG	18.29	450	20		
A07-044	19	20 Pro	s			Oh						AXT		FG	19.1	340	40		

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Appendix 1
Ranch Property
2007 Diamond Drill Hole Records (DDH A07-001 to A07-045)
Lithology & Other Descriptive Comments

Hole_ID	Interval_From	Interval_To	SubInterval_From	SubInterval_To	Description	Comments
A07-001		0	3		OVERBURDEN	D rod (= HW casing to 3.05m) HQ core size starts at 3.0 m. Overall AVF is med greyish-green in colour, w/ ~30% 1-3 mm plag phenos; rock rel. fresh to v. weakly perv. clay alt
A07-001	3	27.1			ANDESITE FELDSPAR PORPHYRY	Tan cast associated w/ w-m clay alt. & 2-3% f. diss. py
A07-001			20.4	21.1	ANDESITE FELDSPAR PORPHYRY	Similar to 3.0 - 20.4 m
A07-001			21.1		ANDESITE FELDSPAR PORPHYRY	Overall, AVB is med. Greyish-grn in colour w/ volc clasts to 10 cm in max dimension, rock rel fresh to very weakly perv. clay alt, except where noted
A07-001	27.1	67.5			ANDESITE VOLC BRECCIA - L. TUFF	Locally, very fine diss. Py
A07-001			27.1	32.5	ANDESITE VOLC BRECCIA - L. TUFF	Zone of clay seams, 1-4 cm wide @ 30-40 CA; rock is lighter grey in colour; Py loc. granular
A07-001			32.5	34.3	ANDESITE VOLC BRECCIA - L. TUFF	@34.45 m; clay-chl fault gouge w/ ~0.5% f. dissem py
A07-001			34.3	40.2	ANDESITE VOLC BRECCIA - L. TUFF	This interval char. by crackled text. Of AVB w/ infilling few mm wide clay vlts; upper + lower contacts of interval sharp @ 30° CA; loc. rock has light brn cast
A07-001			40.2	43.2	ANDESITE VOLC BRECCIA - L. TUFF	@49.9: minor clay-chl alt fault gouge
A07-001			43.2	56.4	ANDESITE VOLC BRECCIA - L. TUFF	Irreg clay ff w/ 1 cm wide lt brn to tan-coloured alt; med to dark greyish-grn in colour
A07-001			56.4	56.6	ANDESITE VOLC BRECCIA - L. TUFF	Rel fresh to very weakly clay alt; med to dark greyish-grn in colour
A07-001			56.6	67.5	ANDESITE VOLC BRECCIA - L. TUFF	Distinct beige coloured, mod clay-alt lapilli frags, elongated to 5cm-7cm, weakly aligned (bedding) @ 50° CA
A07-001	67.5	69.9			LAPILLI TUFF (BANDED)	Similar to 27.1 to 67.5; med greyish-grn in colour; rel fresh
A07-001	69.9	105.4			ANDESITE VOLCANIC BRECCIA	4 cm wide chalcedony vein w/ minor Hem; both contacts vein show 3 mm FG
A07-001			69.9		ANDESITE VOLCANIC BRECCIA	matrix to FB clay-alt; frags weakly hematized
A07-001			73.3 &		ANDESITE VOLCANIC BRECCIA	Minor fault gouge over 0.1m interval
A07-001			75.5		ANDESITE VOLCANIC BRECCIA	Reduce core size from HQ3 to NQ2
A07-001			85.35		ANDESITE VOLCANIC BRECCIA	1 cm wide str clay-alt fault gouge
A07-001			86.8		ANDESITE VOLCANIC BRECCIA	2 x 40mm wide, straight clay-alt FB + FG
A07-001			90.2		ANDESITE VOLCANIC BRECCIA	10 mm wide chalc vlt w/ tr Py diss; 1-2 cm clast-alt selvage
A07-001			92.5		ANDESITE VOLCANIC BRECCIA	Grey to tan cast, textures vague
A07-001			95.1	96.1	ANDESITE VOLCANIC BRECCIA	Generally, dark grn in colour; loc f-spar phenos weakly clay alt (spotted text)
A07-001			96.1	105.4	ANDESITE VOLCANIC BRECCIA	5 mm wide chalcedony vlt w/ tr py clasts
A07-001			98.65		ANDESITE VOLCANIC BRECCIA	5 mm wide chl fault gouge
A07-001			101.4		ANDESITE VOLCANIC BRECCIA	clay-alt FB + FG
A07-001			102.2		ANDESITE VOLCANIC BRECCIA	10 mm wide chl fault gouge (minor slip)
A07-001			104.7		ANDESITE VOLCANIC BRECCIA	Variably clay alt & locally silicified poss andesite flow; textures mainly vague, but where visible it is plag porph
A07-001	105.4	136.6			ANDESITE FLOW (?)	where textures vague, rock is variably lt to med grey in colour to lt brn or tan cat; v. soft "greasy" vlts common - likely anhydrite
A07-001			105.4	130.5	ANDESITE FLOW (?)	str clay-alt fault gouge
A07-001			105.8		ANDESITE FLOW (?)	str clay-chl alt fault gouge
A07-001			107.6		ANDESITE FLOW (?)	intermediate clay-alt fault gouge // CA
A07-001			119.1		ANDESITE FLOW (?)	intermediate clay-alt fault gouge @ 30° CA
A07-001			120.1		ANDESITE FLOW (?)	mod clay alt fault gouge
A07-001			121.2		ANDESITE FLOW (?)	intermediate clay-alt fault gouge + FB
A07-001			122.1		ANDESITE FLOW (?)	intermediate clay-alt fault gouge + FB
A07-001			122.5		ANDESITE FLOW (?)	25 cm wide banded chalcedony vein w Tr py
A07-001			127.9		ANDESITE FLOW (?)	zone of str diss py averaging ~5%; rock is lt-med grey coloured, textureless, w/ poss some perv Sa. This zone sampled at 1.5m sample interval w/ 1.5 HW sample + 2.0m FW sample
A07-001			130.5		135 ANDESITE FLOW (?)	Mainly med dark grey-green coloured andesitic plag porphyritic volc flow w/ some minor volc clasts to a few cm across; Flow (?) banding common @ 70-80°CA
A07-001	136.6	170.7			ANDESITIC VOLCANIC FLOW	Intensely clay-chl alt'd (lch) FG + FB w/ upper & lower contacts of zone @ 50-60°CA; mod hematized; Tr v.f. Py dissem
A07-001			138.7		ANDESITIC VOLCANIC FLOW	6 cm wide, str clay-chl altered FB + FG
A07-001			153		ANDESITIC VOLCANIC FLOW	minor hematite vlts to 4 mm wide
A07-001			155.7		157.2 ANDESITIC VOLCANIC FLOW	Lt grey coloured, intermediate clay-alt rock, soft, textureless, protolith not recognizable; minor Py on fract & Tr Py diss; interval includes two strong FG zones as shown
A07-001	170.7	173.4			INTENSELY CLAY ALTERED ROCK	
A07-001	173.4	182.9			ANDESITIC VOLCANIC BRECCIA	
A07-001			173.4	179.8	ANDESITIC VOLCANIC BRECCIA	Fragmental or VB texture more obvious & plag porph text absent; lt greyish-grn in colour
A07-001			179.8	181.5	ANDESITIC VOLCANIC BRECCIA	Sim to 173.4 to 179.8, except marked increase in Py (~4-5%)
A07-001			181.5	182.9	ANDESITIC VOLCANIC BRECCIA	Sim to 173.4 to 179.8, except poss some chl admixed w/ clay (i.e. lch); minor hematite after some frags & in groundmass
A07-001	182.9	185.9			ANDESITIC CRYSTAL - L. TUFF	Dark green in colour; rel fresh, except some frags mod chl
A07-001			182.9		ANDESITIC CRYSTAL - L. TUFF	mod lch-altered FB + FG w/ ~0.5% diss Py
A07-001	185.9	190.2			DACITE FSPAR PORPHYRY DYKE	Med grey to tan coloured, sparsely porphyritic (20-30% phenos); phenos to 3-4 mm, anhedral to sub-hedral, salmon coloured, poss K-spar,
A07-001	190.2 EOH				END OF HOLE	upper contact dike sharp @ 25-30° CA
A07-002	0	17.1			ANDESITIC CRYSTAL - L. TUFF	Minor Ol on occ fract @ 25-60° CA; v. weak Cly after some felsic (x1) frags; o/w, dark-greyish grn in colour, relatively fresh. Note: Core reduced HQ3 --> NQ2 @ 6.1 m b/c of void, but no ft. blk ==> vd width

A07-002	17.1	19.5		UNCERTAIN	Distinct unit w/ "flattened" felsic frags w fabric @ 60° CA. Texture of frags is (x1) line, not pumice-like. UNC denotes uncertain
A07-002			19.1	UNCERTAIN	10 mm wide Sa vein, grey in colour, w/ 3-4% Py along vein margins + minor blue-grey metallic mineral = En (?)
A07-002	19.5	22.9		ANDESITIC CRYSTAL - L. TUFF	Sim to 0.0-17.1, except no oxidized fract
A07-002			22.15	ANDESITIC CRYSTAL - L. TUFF	10 mm zone of clay alt @ 30° CA.
A07-002	22.9	25.25		INT. SILICIC RX - PROTO UNKNOWN	mod-str pervasive Sa <1 to 3% v.f. grained diss Py & poss Tr En? - blue grey metallic
A07-002	25.25	42.85		ANDESITIC CRYSTAL - L. TUFF	Sim to 19.5 - 22.9, except somewhat fresher; some narrow clay-alt zones/seams
A07-002			26	26.5 ANDESITIC CRYSTAL - L. TUFF	Str clay alt zone @ 30-40° CA; some bxn, poss assoc w/ fault
A07-002			36.3	ANDESITIC CRYSTAL - L. TUFF	2 x clay-alt seams, 30 & 50 mm wide, @ 60 & 45° CA respectively
A07-002	42.85	44.9		INT. SILICIFIED ROCK (VUGGY)	Mainly Sv (s) w/ lesser Sa(s) which loc is banded @ 45° CA; locally Py vlts to 10mm @ 40-60° CA
A07-002	44.9	45.25		RHYODACITE DIKE	Lt red-brn b/c of Hem in grndmass; subhedral plag phenos to 1 cm - some are w-m clay alt; lower contact @ 35° CA
A07-002	45.25	85.3		ANDESITIC CRYSTAL - L. TUFF	Sim to AXT intervals above; locally w+ clay alt assoc w/ some broken, faulted zones
A07-002			45.25	46.2 ANDESITIC CRYSTAL - L. TUFF	More str clay alt just past above zone of vuggy silica & adj narrow RDD; includes - 0.2 m intermediate of Sa +/- Sv w/ ~1% Py diss
A07-002			50.3	50.6 ANDESITIC CRYSTAL - L. TUFF	
A07-002			51.1	56.5 ANDESITIC CRYSTAL - L. TUFF	3 x 0.1 - 0.3 sections perv silicified but no accompanying sulphides
A07-002			61.5	ANDESITIC CRYSTAL - L. TUFF	Minor fault-str clay alt
A07-002			65.4	ANDESITIC CRYSTAL - L. TUFF	str 10 mm wide clay slip @ 30° CA
A07-002			68.5	ANDESITIC CRYSTAL - L. TUFF	10 mm wide Sa+ possibly some Ba vlt
A07-002			81.9	83.1 ANDESITIC CRYSTAL - L. TUFF	5 mm Py vlt noted in sub-interval. FG at 83 lch alt
A07-002			83.1	84.8 ANDESITIC CRYSTAL - L. TUFF	2 Sa vlts to 5 mm; one w/ f. diss blue-grey metallic min (En?)
A07-002			84.8	85.3 ANDESITIC CRYSTAL - L. TUFF	Also Py vlt + ff @ 85.2
A07-002	85.3	89		INTENSELY SILICIFIED ROCK	Typical vuggy silica loc cut by irreg Ba vlts; no visible gold noted
A07-002	89	92.7		ANDESITIC CRYSTAL - L. TUFF	Variably clay-alt AXT; where less bleached, greyish-grn in colour w/ Hem in matrix
A07-002	92.7	93.2		MOD-STR SILICIFIED ROCK	Mod-str silicified (amorphous) rock; cut by soft white vlts, irreg-poss Alu?; upper & lower contacts of zone sharp @ 45° CA
A07-002	93.2	108.9		ANDESITIC CRYSTAL - L. TUFF	Variably Cly or Alu altered AXT; mostly bleached appearance, but some sections appear fresher; vlts Sa, Alu & Py common in bleached
A07-002	108.9	109.9		INTENSELY SILICIFIED ROCK	portions; in darker rx, Sa vlts w/ flesh-coloured alt-envelopes-could this be 2° Kspar, and if so, is this high enough temp regime?
A07-002	109.9	111.9		ANDESITIC CRYSTAL - L. TUFF	Intensely silicified, vuggy rock; irreg Ba vlts locally; locally abundant Py in vlts & seams
A07-002	111.9	112.4		INTENSELY SILICIFIED ROCK	Bleached, clay-alt andesitic wall-rock; perv Sa locally
A07-002	112.4	118.9		ANDESITIC CRYSTAL - L. TUFF	Soft, white gangue mineral as irreg vlts & also filling cavities in vuggy silica
A07-002	118.9	121		INTENSELY SILICIFIED ROCK	Sim vein gangue as per last interval (Alu?) also v. light aquamarine coloured, soft vein gangue = (?)
A07-002	121	132.5		ANDESITIC CRYSTAL - L. TUFF	Upper 0.2 m of zone shows very strong HBX (hydrothermal bx?) texture w/ frags up to 7 cm (long direction) of altered (clay and/or Sa) wall-
A07-002			121	126.3 ANDESITIC CRYSTAL - L. TUFF	rock frags; matrix to bx is med-dark grey in colour w/ mixture of ser-clay-diss Py. In other parts of zone, have frags of vuggy silica w/ Alu &
A07-002			126.3	132.5 ANDESITIC CRYSTAL - L. TUFF	Py+ in matrix of white Sa - this too could be HBX
A07-002	132.5	138.7		RHYODACITE DIKE	
A07-002	138.7	139.5		ANDESITIC VOLCANIC BRECCIA	Mostly bleached clay-alt; again soft white vein gangue; also lt. aquamarine= coloured vein material, loc 2-4% Py, but gen <1%
A07-002	139.5	143.2		RHYODACITE DIKE	Relatively fresh volcanic wall-rock
A07-002	143.2	144.9		ANDESITE-DACITE TUFF	Variably hematized, lower contact sharp @ 60° CA
A07-002	144.9	146.1		RHYODACITE DIKE	Weak lch to Ual
A07-002	146.1	146.4		ANDESITE-DACITE TUFF	Sim to 132.5-138.7; upper contact irreg @ ~40° CA; lower contact @ 20° CA
A07-002	146.6	163.1		RHYODACITE DIKE	w/ flattened pumice frags aligned 65° CA
A07-002	163.1 EOH			END OF HOLE	Similar to 132.5-138.7; upper contact @ 40° CA; lower contact @ 50°. Not true??: texture is not sparse porphyritic but rather have 30-40%
A07-003	0	4.6		CASING	darker grey, sub-rounded frags set in buff-coloured matrix. i.e. hybrid dike texture
A07-003	4.6	18.7		ANDESITIC CRYSTAL - L. TUFF	w/ flattened pumice frags aligned 65° CA
A07-003			4.6	9.2 ANDESITIC CRYSTAL - L. TUFF	similar to 132.5 - 138.7; upper contact @ 30° CA; variably hematized, reddish-pink cast
A07-003			9.2	11.75 ANDESITIC CRYSTAL - L. TUFF	
A07-003			11.75	18.7 ANDESITIC CRYSTAL - L. TUFF	Lim + goet common on fract @ 60-70° CA
A07-003	18.7	21.3		ANDESITE-DACITE TUFF	Intense clay alt FG; minor Lim + goet; lower contact irreg @ ~30° CA
A07-003	21.3	32		ANDESITIC VOLCANIC BRECCIA	Abundant chl locally ass'd w/ irreg fract fill, oxidized fract continue to 23.0 m
A07-003	32	35		ANDESITE-DACITE TUFF	w/ flattened pumice frags @ 60-65° CA
A07-003	35	40.4		ANDESITIC CRYSTAL - L. TUFF	Weakly chloritized to rel fresh AVB
A07-003			35	37.3 ANDESITIC CRYSTAL - L. TUFF	w/ flattened pumice frags @ 50-70° CA
A07-003			37.3	39 ANDESITIC CRYSTAL - L. TUFF	
A07-003			39	40.4 ANDESITIC CRYSTAL - L. TUFF	
A07-003	40.4	45.2		TEXTURES VAGUE (PROTO?) (LIKELY AXT)	Py loc 5-10% where have vlts & seams + diss
A07-003	45.2	50.5		INTENSELY SILICIFIED ROCK	Visible gold noted @ 46.1 & 49.1 m, Cp + En fract-fill & diss locally common
A07-003	50.5	58.1		INTENSELY ALTERED ROCK	Rock is perv silicic w/ lesser silica & minor Vsi locally
A07-003	58.1	74.9		ANDESITIC VOLCANIC BRECCIA / CRYSTAL L. TUFF	
A07-003			58.1	73.6 L. TUFF	Minor kao FG from 58.1 - 58.8 m
A07-003			73.6	74.9 L. TUFF	Intense clay (smectite?) - altered FG
A07-003	74.9	94.3		ANDESITE-DACITE TUFF W/ FIAMME	

A07-003			75.8	ANDESITE-DACITE TUFF W/ FIAMME	Intense clay (smectite?) - altered FG
A07-003			76.5	ANDESITE-DACITE TUFF W/ FIAMME	Intense clay (smectite?) - altered FG
A07-003			92.8	ANDESITE-DACITE TUFF W/ FIAMME STRONGLY ALTERED ROCK (PROTOLITH UNKNOWN)	Str chlorite-altered FG Strongly sericitized, mod pervasive silica; poss illite vning (aquamarine colour) @ low angle to CA ass- w/ abundant Py; overall Py, incl vlts + diss locally >5%
A07-003	94.3	95.7		ANDESITIC CRYSTAL - L. TUFF	
A07-003	95.7	101.85		97.7 ANDESITIC CRYSTAL - L. TUFF	
A07-003			95.7	99.2 ANDESITIC CRYSTAL - L. TUFF	Strongly faulted interval; protolith uncertain; FG is both strongly clay-alt & in other sections strongly chl alt
A07-003			97.7	101.85 ANDESITIC CRYSTAL - L. TUFF	Several few cm wide Sa-illite (soft, translucent) - Py+ vlts mainly @ ~20° CA; lithic frags white, clay-alt; poss fiamme present
A07-003			99.2	INTENSELY ALTERED ROCK	Sim to 99.7-99.2, but no veining w/ Py+
A07-003	101.85	115.6		114.2 INTENSELY ALTERED ROCK	
A07-003			101.85	115.6 INTENSELY ALTERED ROCK	Abundant Py vns & vlts locally
A07-003			114.2	ANDESITIC CRYSTAL - L. TUFF	Buff to grey coloured; towards bottom of interval several 1-4 cm vlts of Sa-II (soft, translucent) - Py++ cut zone @ 20-50° CA
A07-003	115.6	117		RHYODACITE DIKE	115.6-115.83: FG, in part strongly chloritized & in part str clay-alt w/ hematite
A07-003	117	125		ANDESITIC VOLC BRECCIA	Typical tan-coloured RDD, sparsely porph. In fspar; cut by occasional few mm carb vlts
A07-003	125	133.2		ANDESITIC VOLC BRECCIA	125.0-125.2: Str clay-alt (loc str chlorite) FG @ 45° CA. @ 155.6-155.95: str chlorite - (clay) alt FG
A07-003			129		129.0: 15 mm Sa-Py vlt @ 40° CA
A07-003	133.2	146		RHYODACITE DIKE	Varies from relatively fresh to pinkish cast (hematized gm) w/ pitted, clay-alt fspar phenos; upper contact @ 15° CA; lower contact is faulted @ 60° CA (FG is str cly)
A07-003				ANDESITIC CRYSTAL - L. TUFF	Mainly lch-altered AXT w/ some short (few metres) sections of ADF w/ flattened pumice frags @ 45° CA. @ 155.6-155.95: Str chlorite - (clay) alt FG
A07-003	146	156.7		INTENSELY SILICIFIED ROCK	Intensely silicified rock, vuggy in part, w/ loc abundant Py. No VG noted on cut surfaces
A07-003	156.7	171.9		ANDESITIC CRYSTAL - L. TUFF	171.9-172.9: Str FG, both chlorite & clay alt.; lower contact @ ~50° CA; this fault marks lower contact Vsi from 156.7-171.9 m
A07-003	171.9	178.6	173.4	173.9 ANDESITIC CRYSTAL - L. TUFF	Str FG, mainly chlorite-alt, lesser clay
A07-003				ANDESITIC VOLCANICLASTICS	Banding/bedding in volcaniclastics seds observed.
A07-003	178.6	180.9		ANDESITIC VOLCANICLASTICS	Str FG, str chlorite, lesser clay alt; ~0.5% f. diss Py
A07-003			180.4	ANDESITIC CRYSTAL - L. TUFF	Grey-grn in colour; weakly chl-alt, occasionally frag to 3-4 cm across
A07-003	180.9	184.4		END OF HOLE	
A07-003	184.4 EOH				
A07-004	0	1.5		CASING	
A07-004	1.5	4.9		STR LIMONITIC FAULT GOUGE	Strongly lim + goet in clay-alt fault gouge; locally have gouge contents @ 50° CA w/ less faulted rock
A07-004	4.9	8.3		ANDESITE-DACITE TUFF	With flattened pumice frags @ 45° CA, buff coloured, wk perv. Clay alt (may be supergene weathering)
A07-004	8.3	11		ANDESITIC CRYSTAL - L. TUFF	Weakly clay-alt (again, likely supergene); locally str lim induration
A07-004			10.6	11 ANDESITIC CRYSTAL - L. TUFF	Str clay-alt FG w/ locally str lim, str ol ends @ 11.0m
A07-004				STRONGLY SERICITIZED ROCK (PROTOLITH UNKNOWN)	
A07-004	11	16.25		ANDESITIC CRYSTAL - L. TUFF	Locally Py seams/vns to 1-2 cm @ 30-50 CA; total Py content, incl diss ~3-4%, textures generally vague
A07-004	16.25	20.6		STRONGLY SERICITIZED ROCK	w-m kaolinized lithic frags loc visible, but some sections w/ vague text (more ser)
A07-004	20.6	22.4			Locally Py seams to 1 cm wide @ 50-70° CA; total Py content of interval ~3-4%
A07-004	22.4	28.2		ANDESITIC CRYSTAL - L. TUFF	
A07-004	28.2	32.7		STRONGLY SERICITIZED ROCK	Variably altered w/ kao'd lithic frags --> textures more vague (Ser + Psi altered) including vlts & diss, Py content probably averages ~3-4%
A07-004	32.7	38.8		ANDESITIC CRYSTAL - L. TUFF	Remnant sections w/ kao'd lithic frags; locally abundant Py; textures vague, poss some fiamme locally (elongated @ 75° CA)
A07-004			32.7	33.1 ANDESITIC CRYSTAL - L. TUFF	
A07-004			33.1	33.8 ANDESITIC CRYSTAL - L. TUFF	Mostly grey-green in colour; strongly faulted, str chl-clay alt (likely smectite clay)
A07-004			37.2	38.8 ANDESITIC CRYSTAL - L. TUFF	Intense FG, variably clay & chl altered, FG brackets alt sub-interval
A07-004					Intensely chlorite & lesser clay-alt FG; locally Py diss >1%; lower contact at FG zone w/ dike @ 60° CA
A07-004	38.8	42.2		DIKE (EXOTIC TEXTURE)	Unusual textured dike - mottled or blotchy w/ more sil sub-rounded frags (?), grey-tan in colour, set in matrix of clay-alt, lt grn-beige coloured
A07-004	42.4	44.2		RHYODACITE DIKE	dike material w/ quartz eyes/phenos present; @42.2 may have flow banding in dike at 60° CA
A07-004				BRECCIA	Sparse porphyry texture locally visible; locally pinkish cast due to grn hematization
A07-004	44.2	46		RHYODACITE DIKE	Angular frags of lt grn-cream coloured quartz porphyry dike (wk cly alt) & lesser sparse porphyry RDD set in mod-dark gry coloured, str ser/d matrix w/ 2-3% diss. Py; overall Py content of zone ~1%; upper contact @ 60° CA, lower contact @ 20° CA
A07-004	46	66.25		55 RHYODACITE DIKE	
A07-004			46		Sparse porphyry text locally visible; locally pinkish cast due to grn hematization; mod clay-alt ass'd w/ faults
A07-004				66.25 RHYODACITE DIKE	Typical sparsely porphyritic RDD; locally groundmass is hematized; in fault contact w/ Vsi zone below; fault @ 66-66.25 is str clay alt (smectite?)
A07-004	66.25	69.85		INTENSELY SILICIFIED ROCK (VUGGY)	Vuggy silica w/ abundant Py; minor diss Cp + En
A07-004	69.85	86.8		ANDESITIC CRYSTAL - L. TUFF	
A07-004			69.85	70.9 ANDESITIC CRYSTAL - L. TUFF	Lithic frags visible
A07-004			72.2	73.2 ANDESITIC CRYSTAL - L. TUFF	Str chl-clay alt fault
A07-004			73.25	ANDESITIC CRYSTAL - L. TUFF	0.1m Sa @ 45° CA; minor Py as selvage
A07-004			73.3	73.9 ANDESITIC CRYSTAL - L. TUFF	Str chl +cly alt FG
A07-004			74.7	75.1 ANDESITIC CRYSTAL - L. TUFF	Narrow dikelet "exotic" texture as per 38.8-42.2 m; lower contact at FG @ 45° CA
A07-004			75.1	75.2 ANDESITIC CRYSTAL - L. TUFF	Str clay-chl alt FG w/ ~0.5% f. diss Py
A07-004			76	77.5 ANDESITIC CRYSTAL - L. TUFF	Str clay-chl alt FG
A07-004			78.6	ANDESITIC CRYSTAL - L. TUFF	Str clay alt minor fault
A07-004			83.4	83.8 ANDESITIC CRYSTAL - L. TUFF	Str clay-alt FG
A07-004			84.9	86.8 ANDESITIC CRYSTAL - L. TUFF	Textures vague - str pervasive ser alt
A07-004			86.3	86.8 ANDESITIC CRYSTAL - L. TUFF	Str clay (smectite) - lat FG w/ Tr. Fine diss Py
A07-004	86.8	97.5		RHYODACITE DIKE	Sparse porphyritic texture, pinkish cast; loc fspar phenos weakly clay-alt; FG w/in dike strongly clay alt
A07-004			90.7	RHYODACITE DIKE	2-4 mm Py vlt cuts RDD
A07-004			92.7	RHYODACITE DIKE	str clay (smt) - alt FG w/ loc Hem+, mod-str clay alt

A07-004			97	99 RHYODACITE DIKE	Str clay (smt), w/ some chl, alt. FG which brackets RDD/AXT contact
A07-004	97.5	103.6		ANDESITIC CRYSTAL - L. TUFF	Locally fiamme text @ 70° CA; generally dark greyish-grn in colour; weakly chl-alt
A07-004			102.8	ANDESITIC CRYSTAL - L. TUFF	str chl-alt FG
A07-004	103.6	105.2		STRONGLY SERICITIZED ROCK	Loc vague fiamme text @ 45° CA
A07-004	105.2	109.3		ANDESITIC CRYSTAL - L. TUFF	str chl-alt FG
A07-004	109.3	125.3		RHYODACITE DIKE	
A07-004			109.3	RHYODACITE DIKE	Str clay (smt) - alt fault @ upper contact of dike
A07-004			125.2	RHYODACITE DIKE	Str clay (smt) - alt fault @ lower contact of dike
A07-004	125.3	126.3		ANDESITIC CRYSTAL - L. TUFF	loc lithic frags weak clay-alt
					Generally perv alt white in colour, possibly Alunite (?) & lesser sericite alt. Py veins & vlts associated with lt aquamarine coloured gangue
A07-004	126.3	130.2		STRONGLY ALTERED ROCK	material (translucent = illite?)
A07-004	130.2	130.6		STRONGLY SILICIFIED ROCK (VUGGY)	5-10% Py as irreg masses & diss
A07-004	130.6	131.1		STRONGLY ALTERED ROCK	Sim to 126.3 - 130.2, except Ser > Alu. Lower contact at "alteration front" sharp @ 35° CA
A07-004	131.1	135.6		ANDESITIC CRYSTAL - L. TUFF	Rock is distinct maroon colour due to gm hematization
A07-004			133.75	ANDESITIC CRYSTAL - L. TUFF	Str chl FG
A07-004	135.6	137.6		STRONGLY ALTERED ROCK	Sim to 126.3-130.2
A07-004	137.6	140.2		ANDESITIC CRYSTAL - L. TUFF	Sim to 131.1-135.6 m; maroon, hematized
A07-004	140.2	145.3		ANDESITIC CRYSTAL - L. TUFF	
A07-004			140.2	143.5 ANDESITIC CRYSTAL - L. TUFF	Sim to 126.3 to 130.2 m
A07-004			143.5	145.3 ANDESITIC CRYSTAL - L. TUFF	Interval characterized by fairly abundant, white, hard (but scratched by knife) vein material cutting greyish-white textureless rock; vein
A07-004	145.3	145.7		INTENSELY SILICIFIED ROCK (VUGGY)	material may be adularia (Adu?)
A07-004	145.7	146		STRONGLY ALTERED ROCK	Some Py as irreg masses; adularia & vns still present
A07-004	146	146.3		INTENSELY SILICIFIED ROCK (VUGGY)	Some Py as irreg masses; minor adularia? Vlts
					Narrow zone of vuggy silica cut by abundant adularia? Veining
					Sim to above altered zone; translucent illite vns & vlts common, associated w/ abundant Py seams & vlts; adularia w/ abundant Py seams &
					vlts; adularia? Vning still present. Loc have "micro-brecciated" texture w/ abundant v. fine sulphide infilling. Overall sulphide content of zone
A07-004	146.3	149.2		STRONGLY ALTERED ROCK	10-15%
A07-004	149.2	151.35		ANDESITIC CRYSTAL - L. TUFF	
A07-004			149.4	150 ANDESITIC CRYSTAL - L. TUFF	Strongly chl w/ lesser clay-alt FG
A07-004	151.35	170.7		ANDESITIC VOLCANO-CLASTIC SEDS	Greyish-grn in colour; relatively fresh; includes some 1-2m wide lapilli tuff layers
A07-004	151.35 EOH			END OF HOLE	
A07-005	0	3.04		CASING	
A07-005	3.0	4.9		ALTERED ROCK	Generally bleached, clay-alt (supergene?) w/ some remnant patches med grey col. Ser-Pv alt (including some Py fract-fill Str OI on fract
A07-005	4.9	12.35		ANDESITIC CRYSTAL - L. TUFF	locally) Some aligned fiamme locally @ 80° CA, but o/w (vague) text --> AXT?
A07-005			4.9	11 ANDESITIC CRYSTAL - L. TUFF	
A07-005			11	12.35 ANDESITIC CRYSTAL - L. TUFF	9.3-11.0 m = str FG w/ ~1% diss Py. O/w in interval, AXT is lt brown to buff colour w/ poss OI+ as matrix soaking
A07-005	12.4	15.3		STRONGLY SERICITIZED ROCK	Fragmental text. <ser --> l. tuff
A07-005	15.3	32.5		ANDESITIC CRYSTAL - L. TUFF	Pervasively Ser-Psi alt; some Kao lithic frags locally; o/w text vague
A07-005			15.3	29.7 ANDESITIC CRYSTAL - L. TUFF	
A07-005			29.7	32.5 ANDESITIC CRYSTAL - L. TUFF	Sub-interval mainly greyish-green in colour; locally ser frags --> AVB
A07-005	32.5	36.6		STRONGLY SERICITIZED ROCK	Local fiamme text @ 70° CA
A07-005	36.6	38		ANDESITIC CRYSTAL - L. TUFF	Textures vague
A07-005	38.0	40.6		STRONGLY SERICITIZED ROCK	Light buff colour; some kao'd lithic frags visible
A07-005	40.6	45.15		ANDESITIC CRYSTAL - L. TUFF	39.3-39.4: clay (smectite?) - alt FG
A07-005	45.2	52.2		INTENSELY SILICIFIED ROCK	possible some local fiamme @ 80° CA
				STRONGLY SERICITIZED ROCK (w/ PERVASIVE ROCK)	Intensely silicified vuggy in part; ~50% Py as fine-grained massive aggregates & heavy disseminations. No V.G. as noted
A07-005	52.2	56.4			
A07-005	56.4	61.2		INTENSELY SILICIFIED ROCK (VUGGY)	<< Py than silicified interval from 52.2 - 55.2; white vning may be adularia - mod hard but not bladed text; minor En on irreg frac locally
A07-005	61.2	64.3		ANDESITIC CRYSTAL - L. TUFF	
A07-005	64.3	64.5		INTENSELY SILICIFIED ROCK (VUGGY)	Mainly buff-coloured; w/ short intervals less altered, grey-green coloured AXT; buff-coloured sections may have some Ser & illite alteration
A07-005	64.5	73.7		ANDESITIC CRYSTAL - L. TUFF	no VG as noted
A07-005			64.5	64.9 ANDESITIC CRYSTAL - L. TUFF	Buff coloured; some lithic frags kao'd
A07-005			64.9	66.9 ANDESITIC CRYSTAL - L. TUFF	Med dark greyish-green in colour
A07-005			66.9	67.6 ANDESITIC CRYSTAL - L. TUFF	Similar to 64.5-64.9
A07-005			67.6	72.75 ANDESITIC CRYSTAL - L. TUFF	60.9-70.6: mod FG, chloritized
A07-005			72.75	73.7 ANDESITIC CRYSTAL - L. TUFF	Similar to 64.5-64.9
A07-005	73.7	77.1		STRONGLY SERICITIZED ROCK	Similar to 55.2-56.4
A07-005	77.1	77.95		INTENSELY SILICIFIED ROCK (VUGGY)	Possible adularia vlts; no v.g. noted
A07-005	78.0	80.8		STRONGLY SERICITIZED ROCK	Poss En w/ Il-Py vlts & diss
A07-005	80.8	81.2		INTENSELY SILICIFIED ROCK	Lower contact sharp @ 45° CA; interval brecciated in part; no VG noted
A07-005	81.2	83.5		STRONGLY SERICITIZED (IN PART)	Ser'd rock grades to AXT w/ kao'd frags at bottom of interval. Loc bx'd w/ ser-py infilling; hematite locally in groundmass
A07-005	83.5	87.9		ANDESITIC CRYSTAL - L. TUFF	Greyish-grn AXT; relatively fresh
A07-005	87.9	89.9		VARIABLY SERICITIZED ROCK	Kao'd lithic frags locally visible
A07-005	89.9	90.5		INTENSELY SILICIFIED ROCK (VUGGY)	White f. hard veining may be adularia w/ Sa; no VG noted; lower contact zone sharp @ 40° CA
A07-005	90.5	93.75		STRONGLY SERICITIZED ROCK	Str illite vning (soft translucent) w/ loc abundant Py; locally short sections bx'd w/ illite-Py infilling

A07-005	93.8	96.95		ANDESITIC CRYSTAL - L. TUFF	Greyish-grn in colour; loc kao'd lithic frags; groundmass is hematized @ 96.8: 20 mm vlt Sa w/ poss 2° Kspar envelope. AXT is well foliated
A07-005	97.0	97.3		VARIABLY SERICITIZED ROCK	
A07-005	97.3	105.85		ANDESITIC CRYSTAL - L. TUFF	Greyish- grn in colour. Note: @ 105.2 m = reduce from HQ3 to NQ2
A07-005	105.85	106.9		STRONGLY SERICITIZED ROCK (w/ KAO)	Some Kao'd lithic frags visible
A07-005	106.9	109.7		ANDESITIC CRYSTAL - L. TUFF	Greyish-grn in colour; locally Kao'd lithic frags
A07-005	109.7	112.6		STRONGLY SERICITIZED ROCK (w/ KAO)	
A07-005	112.6	114.7		STRONGLY SILICIFIED ROCK (VUGGY)	Locally f. grained masses of pyrite comprise ~50% of the rock; no VG noted
A07-005	114.7	115.4		STRONGLY SERICITIZED ROCK	
A07-005	115.4	116.2		STRONGLY SILICIFIED ROCK (VUGGY)	Locally f. grained masses of pyrite comprise 30% of the rock; poss adularia veins w/ frags; no VG noted
A07-005	116.2	117.35		MOD-STRONGLY SERICITIZED ROCK	Some Kao'd lithic frags visible; also some f.g. Py masses of aggregates
A07-005	117.35	118.9		INTENSELY SILICIFIED ROCK	
A07-005	118.9	119.5		STRONGLY SERICITIZED ROCK	Vuggy silica w/ locally f.g. Py masses; abundant adularia vning w/ locally Vsi frags; adularia veining loc banded & carries only minor Py
A07-005	119.5	150.88		ANDESITIC CRYSTAL - L. TUFF	
A07-005			121.9	ANDESITIC CRYSTAL - L. TUFF	Str. Chl, lesser illite-altered fault gouge
A07-005			124	ANDESITIC CRYSTAL - L. TUFF	Chl-clay altered fault gouge
A07-005			137.4	ANDESITIC CRYSTAL - L. TUFF	Cly-chl altered FG
A07-005			138.4	ANDESITIC CRYSTAL - L. TUFF	Str. Clay altered FG
A07-005			145.8	ANDESITIC CRYSTAL - L. TUFF	4 x (2 to 5 cm wide) FG, wk clay alt
A07-005			148.6	ANDESITIC CRYSTAL - L. TUFF	5 cm wide f. gr volcaniclastic tuff bed
A07-005	150.9 EOH			END OF HOLE	
A07-006	0	3.05		CASING	
A07-006	3.05	6.2		SERICITE ALTERED ROCK	Abundant limonite on fract surfaces & also diss alt Py; rock has generally bleached appearance
A07-006	6.2	12		ANDESITIC CRYSTAL - L. TUFF	
A07-006			6.2	6.7 ANDESITIC CRYSTAL - L. TUFF	Clay-chl altered fault gouge
A07-006			9.2	ANDESITIC CRYSTAL - L. TUFF	5 cm clay-alt FG
A07-006			11.7	11.8 ANDESITIC CRYSTAL - L. TUFF	Clay (smectite?) altered fault gouge
A07-006	12	13		ANDESITIC CRYSTAL - L. TUFF	Minor Ol after Py, but diss Py >> Ol
A07-006	13	15.4		ANDESITIC CRYSTAL - L. TUFF	
A07-006			13	ANDESITIC CRYSTAL - L. TUFF	Str Chl-lesser clay-alt fault; minor Ol
A07-006			15.1	ANDESITIC CRYSTAL - L. TUFF	Str Chl-lesser clay-alt FG; minor Ol
A07-006	15.4	18.2		SERICITE ALTERED ROCK	Minor Py as fract fill
A07-006	18.2	19.2		ANDESITIC CRYSTAL - L. TUFF	Bleached, buff-coloured; minor Py as fract-fill
A07-006	19.2	20.6		SILICA-SERICITE ALTERED ROCK	
A07-006	20.6	43.6		INTENSELY SILICIFIED ROCK (VUGGY)	
A07-006			20.6	30.4 INTENSELY SILICIFIED ROCK (VUGGY)	Including seams + veins, total Py content loc 15-20%; loc diss En
A07-006			30.4	31.3 INTENSELY SILICIFIED ROCK (VUGGY)	Very strong Ba veining in sub-interval, surprisingly no VG noted
A07-006			31.3	43.6 INTENSELY SILICIFIED ROCK (VUGGY)	Only minor Ba vlt, diss & fract-fill Cp + En fairly common
A07-006				STRONGLY SERICITIZED ROCK (W/ MOD PSI)	
A07-006	43.6	46.5		ANDESITIC CRYSTAL - L. TUFF	Strongly sericitized w/ local buff-coloured sections where Psi > Ser; locally Py vlts & seams to 2 cm @ 30-60° CA
A07-006	46.5	48.8		ANDESITE-DACITE TUFF W/ FIAMME	Weak Ich altered to relatively fresh interval in fault contact w/ ser zone from 43.6-96.5
A07-006	48.8	54.1		ANDESITE-DACITE TUFF W/ FIAMME	Prominent fiamme aligned @ 40-50° CA.
A07-006			52.7	ANDESITE-DACITE TUFF W/ FIAMME	45 dip to fault breccia includes some broken Sa vein material
A07-006	54.1	57.9		ANDESITIC CRYSTAL - L. TUFF	Grey-green in colour
A07-006					Minor clay alt FG at upper contact of dike. Variably clay alt, both after fspar phenos & loc mod pervasive; locally hematized. Towards lower contact, RDD exhibits flow banding @ 60° CA
A07-006	57.9	72		RHYODACITE DIKE	Prominent fiamme @ 45° CA; minor clay alt associated w/ FB zones
A07-006	72	80.4		ANDESITE-DACITE TUFF W/ FIAMME	Mainly greyish-green, relatively fresh; minor Sa + Ca veins & fract fillings
A07-006	80.4	100.8		ANDESITIC CRYSTAL - L. TUFF	Chl-clay alt FB
A07-006			92.1	ANDESITIC CRYSTAL - L. TUFF	Chl-clay altd FB
A07-006			99.3	100.6 ANDESITIC CRYSTAL - L. TUFF	Bleached to buff-coloured in appearance
A07-006	100.8	102.1		MODERATELY ALT AXT(?)	Grey-green in colour
A07-006	102.1	104.5		ANDESITIC CRYSTAL - L. TUFF	Have vague alignment of chloritized, dark grn frags @ 70° CA (fiamme?)
A07-006	104.5	108.6		ANDESITE-DACITE TUFF W/ FIAMME	Some clay-alt associated with faulting
A07-006	108.6	119.9		ANDESITIC CRYSTAL - L. TUFF	Lt grey to buff in colour
A07-006	119.9	120.7		STRONGLY SERICITIZED ROCK	
A07-006	120.7	121.92		ANDESITIC CRYSTAL - L. TUFF	
A07-006	121.92 EOH			END OF HOLE	
A07-007	0	3.05		CASING	
A07-007	3.05	4.3		OXIDIZED AND ALTERED ROCK	Possible fiamme texture noted locally; section broken, strongly oxidized & clay altered (supergene?)
A07-007	4.3	7.5		ANDESITE-DACITE TUFF (W/ FIAMME)	Minor Ol on fract; 7.0-7.5 m: str. clay-chl alt fault gouge w/ minor Py diss
A07-007	7.5	9.85		STRONGLY SERICITIZED ROCK	
A07-007	9.85	10.7		STRONGLY SILICIFIED ROCK (VUGGY +/-)	Strongly diss Py; possibly Tr diss En; no VG noted
A07-007	10.7	14		STRONGLY SERICITIZED ROCK (+/- PSI)	Locally vague lithic frags - weakly alt
A07-007	14	20.6		ANDESITIC CRYSTAL - L. TUFF	Bleached, light buff coloured; clay-alt lithic frags visible
A07-007	20.6	21.4		MOD. SERICITIZED ROCK	Textures vague; possible AXT

A07-007	21.4	22.9		INTENSELY SILICIFIED ROCK	Upper contact zone sharp @ 30° CA; Some diss. Alu clasts; poss En on irreg fract
A07-007		22.9		STRONG SERICITIZED ROCK	
A07-007		23.7		STRONGLY SILICIFIED ROCK (VUGGY)	Dark coloured mineral (En?) common on irreg fract & diss; also minor Cp diss; no VG noted
A07-007		26.1		STRONGLY SERICITIZED ROCK	Mainly grey, textureless rock; minor Py
					White clay after lithic frags may be Alu not Kao; also could be minor Vsi component to Psi; overall Py content, including irreg. seams & masses ~ 5%
A07-007	29.3	32.7		ANDESITIC CRYSTAL - L. TUFF	Poss En as diss & irreg fract-fill
A07-007	32.7	35.2		INTENSELY SILICIFIED ROCK (VUGGY)	Similar to 29.3 to 32.7 m; Py common as irreg seams & fract-fill; total Py content ~5-10%
A07-007	35.2	37.3		ANDESITIC CRYSTAL - L. TUFF	Abundant Py as irreg vns & masses; total Py content for interval = 15-20%; no VG noted
A07-007	37.3	38.25		STRONGLY SILICIFIED ROCK (VUGGY)	
A07-007	38.25	51.35		ANDESITIC CRYSTAL - L. TUFF	
A07-007			38.25	38.4 ANDESITIC CRYSTAL - L. TUFF	Str clay-chl alt'd FG
A07-007			39	40 ANDESITIC CRYSTAL - L. TUFF	All str clay-chl altered
A07-007			45.15	ANDESITIC CRYSTAL - L. TUFF	All str clay-chl altered
A07-007			50.6	51.35 ANDESITIC CRYSTAL - L. TUFF	FG brackets sub-interval; clay-alt lithic frags visible
A07-007	51.35	54.4		SILICA-SERICITE ALTERED ROCK	Textures vague; silica & sericite alt'd; overall Py content ~3-4%, including Py seams & fract-fill
A07-007	54.4	55.6		STRONGLY SILICIFIED ROCK (VUGGY)	Possible adularia vning @ 40° CA; w/ Py seams & irreg v.f. gr'd masses, total sulphide content ~15%; no VG noted
A07-007	55.6	56.65		SILICA-SERICITE ALTERED ROCK	Locally str Py veins to 40 mm in width @ 30-40° CA; overall Py content ~10-15%, including prominent Py seams/veins
A07-007	56.65	58		STRONGLY SILICIFIED ROCK (VUGGY)	Upper contact of zone sharp @ 30° CA; minor En on irreg fractures; some Py seams
A07-007	58	58.8		STRONGLY SERICITIZED ROCK	
A07-007	58.8	72.1		ANDESITIC CRYSTAL - L. TUFF	
A07-007			58.8	59.4 ANDESITIC CRYSTAL - L. TUFF	Buff-coloured; clay alt lithic frags
A07-007			59.4	63.9 ANDESITIC CRYSTAL - L. TUFF	Locally gm is hematized in sub-interval; both FG's strongly chloritized
A07-007			64.7	71.1 ANDESITIC CRYSTAL - L. TUFF	Locally gm is hematized
A07-007			71.1	72.1 ANDESITIC CRYSTAL - L. TUFF	Buff-coloured; (white) clay-alt lithic frags
A07-007	72.1	75.2		MOD-STR SERICITIZED ROCK	Possibly one Adu vlt @ 30° CA
A07-007	75.2	75.95		HYDROTHERMAL BRECCIA	Upper contact sharp @ 45° CA; gm to frags is strongly ser-altered w/ abundant Py as diss & f. gr'd masses
A07-007	75.95	80.3		STRONGLY SERICITIZED ROCK	Total Py including vlts & fract-fill ~4.5%
A07-007	80.3	88		ANDESITIC CRYSTAL - L. TUFF	81.15-81.65: Str chl-alt FG; in sub-int, loc. text vague, poss ser alt
A07-007	88	89.6		STRONGLY SERICITIZED ROCK	3% diss includes Py fracture-fill
A07-007	89.6	93.1		STRONGLY SILICIFIED ROCK (VUGGY)	No VG noted
A07-007	93.1	98.25		STRONGLY SERICITIZED ROCK	
A07-007	98.25	104.4		ANDESITIC CRYSTAL - L. TUFF	
A07-007			98.25	99.6 ANDESITIC CRYSTAL - L. TUFF	@99.6: 7 cm intense clay-alt FG, sub interval characterized by clay-alt lithic frags; switch to NQ2 at 103.63
A07-007	104.4	111		ANDESITE-DACITIC TUFF (W/ FIAMME)	Long axis fiamme aligned @ 60° CA; 3 x 30 x 70 mm wide str clay-alt FG
					113.7-114.9: lower contact zone FF =40° CA; o/w sub-interval is Ual to wk chl w/ local clay-alt lithic frags ass'd w/ FF or FG; overall rock is dark-green in colour; str clay-chl alt FG
A07-007	111	151.5		ANDESITIC CRYSTAL - L. TUFF	Str clay-alt minor fault parallel to bedding, interval characterized by various volcanic/volcaniclastic interbeds including lapilli tuff, f.g. bedded tuffs & somewhat coarser grained volcaniclastic units; rocks weakly chloritized to Ual
A07-007	151.5	175		ANDESITIC VOLCANICLASTIC SEDIMENTS	
A07-007	175 EOH			END OF HOLE	
A07-008	0	3.05		CASING	
A07-008	3.05	17.8		RHYODACITE DIKE	Sparsely porphyritic; typical RDD. No dominant bedding. Ol fracture to 11.61 m. Brownish-pink due to hematization of groundmass.
A07-008	17.8	20.4		SILICIFIED ROCK (VUGGY)	Bleached flesh colour of RDD close to contact w/ Vsi. No distinct chilled margin w/ vsi. Fault controlled
					Greyish-blue altered rock. Loc massive Py aggregate @ 19.81 m, generally Py diss (~1%; hematite staining @ 20 m. Loc diss En (bluish coloured mineral).
A07-008			17.8	SILICIFIED ROCK (VUGGY)	FG from 17.8-18 m = sharp change in colour & texture from RDD, heavily disintegrated, clasts in gouge up to 5 mm in size, difficult to distinguish < of FG, approx 70
A07-008			19.4	SILICIFIED ROCK (VUGGY)	Broken FG altered propylitically by chlorite
					Generally FB w/ minor remnant Vsi, but very loc. Rock is relatively soft (clay alt) & has kept appearance of original protolith. Contact at 22.86
A07-008	20.4	22.9		ANDESITIC CRYSTAL TUFF	is with ~10 cm section of heavy conc of Py diss.
A07-008			22.6	22.9 ANDESITIC CRYSTAL TUFF	Irregular contact w/ Vsi (s) interval @ 22.86 m
A07-008	22.9	23.8		SILICIFIED ROCK (VUGGY)	Local Vsi altered, w/ minor Py diss; Qtz & Alu xtals are present as microphenocrysts. Rock has retained most of original AXT protolith
A07-008	23.8	27.7		ANDESITIC CRYSTAL - L. TUFF	
A07-008			23.8	25.5 ANDESITIC CRYSTAL - L. TUFF	Chloritization of lithic frags & grndmass; heavily faulted throughout section, with no definitive orientation for the fault contacts.
A07-008			25.5	ANDESITIC CRYSTAL - L. TUFF	Heavily hematized (reddish stain) contact @ 50° CA; trace Py diss
A07-008			26	ANDESITIC CRYSTAL - L. TUFF	Mineralized fault gouge w/ Py diss
A07-008			26.4	27.7 ANDESITIC CRYSTAL - L. TUFF	Exotic chilled margin w/ remnant appearance of AXT. Small vlts of carbonate material. Green groundmass alteration from RDD appears to be chlorite. No distinct contact w/ RDD, as cast becomes gradually lighter towards the dike. 2 small chlorite FG @ 27.6 & 27.8 m
A07-008	27.7	31.2		RHYODACITE DIKE	Tan-brown cast gradually changing to pink @ 30.5 m due to hematization of groundmass. Relatively textureless, no distinct bedding. Minor vesicularity towards hematized section. Sparsely porphyritic. Contact with AXT at 31.2 m = 50° CA
A07-008	31.2	39.8		ANDESITIC CRYSTAL - L. TUFF	
A07-008			31.2	33 ANDESITIC CRYSTAL - L. TUFF	Strongly hematized, faulted; FG from 31.7 - 33 m
A07-008			33	39.8 ANDESITIC CRYSTAL - L. TUFF	Variably stained red & purple due to hematization. Propylitically altered @ end of interval (39.5 - 39.8 m). Loc breccia clasts in interval
A07-008	39.8	45		SERICITICALLY/PERVASIVELY ALTERED ROCK	Differing degrees of hardness throughout section indicating sericite (scratch with knife) vs. pervasive silicification (black mark with knife)

A07-008			41	SERICITICALLY/PERVASIVELY ALTERED 45 ROCK	Grades into Vsi (w) @ 44.9 m Vuggy silicified, pinkish grey rock w/ partial infill of vugs by Alu xtals. Loc massive diss of Cp++ & En~ 40mm at 46.25 m. Bright blue-peacock colour of dense tarnished Cp prominent at 46.25 m (determined by hardness...not covellite or bornite). Alunite xtals in greater abundance towards gradual transition to Ser + Psi on above and below this interval.
A07-008	45	47.5		SILICIFIED ROCK (VUGGY) SERICITICALLY/PERVASIVELY ALTERED ROCK	
A07-008	47.5	48.9		SERICITICALLY/PERVASIVELY ALTERED ROCK	
A07-008			47.5	48.2 ROCK SERICITICALLY/PERVASIVELY ALTERED	Loss of original texture
A07-008			48.2	48.9 ROCK	Kaolitinitized xtals w/ massive sulphide seam @ 48.7 m, contact 70° CA at 48.8 m with altered AXT
A07-008	48.9	53		ANDESITIC CRYSTAL - L. TUFF	Dominantly propylitically altered; heavily faulted & fractured. Zone of lch from 50.0 to 50.2. Thin 5mm vlt of sulphide (pyrite) at fault gouge contact w/ less altered AXT. Cast is reddish purple due to hematization of the groundmass.
A07-008			48.8	ANDESITIC CRYSTAL - L. TUFF	
A07-008			51.3	53 ANDESITIC CRYSTAL - L. TUFF	Pink, heavily altered sericitic rock w/ no visibly pyrite. Clay vning = soft, white material?
A07-008	53	55		SILICIFIED ROCK (VUGGY) SERICITICALLY/PERVASIVELY ALTERED ROCK	Vuggy silica w/ partial infill by alunite xtals. 80° vning of spotted Sa // w/ vning of massive Py diss.
A07-008	55	57.4		SILICIFIED ROCK (VUGGY)	Pinkish grey altered rock w/ minimal Py diss
A07-008	57.4	63.3		SILICIFIED ROCK (VUGGY)	
A07-008			57.4	58.8 SILICIFIED ROCK (VUGGY)	Grey to pinkish (alunite-filled) cast
A07-008			59.3	SILICIFIED ROCK (VUGGY)	Broken-up pebbles of Ser (w) w/ FG at contact of Vsi (70° CA)
A07-008			59.5	63.3 SILICIFIED ROCK (VUGGY) SERICITICALLY/PERVASIVELY ALTERED ROCK	Extensive Py seams/vning up to 10 cm in thickness. Py diss prevalent throughout zone.
A07-008	63.3	65.7		ANDESITIC CRYSTAL - L. TUFF	Py vlts crosscut, have T-junctions; Sericitization has pinkish-grey cast
A07-008	65.7	66.8		SERICITICALLY/PERVASIVELY ALTERED ROCK	Alt of plag frags to kao; small Py seam ~10 cm @ 66.7 m separating Kao alt from Ser alt.
A07-008	66.8	71.9		SERICITICALLY/PERVASIVELY ALTERED ROCK	White, soft mineral, no HCl rxn, associated with Py veins (Ba?)
A07-008			70	71.9 ROCK	Pinkish cast w/ alt of plag clasts. Loc Ser & Cly alt, no Py
A07-008	71.9	72.6		ANDESITIC CRYSTAL - L. TUFF SERICITICALLY/PERVASIVELY ALTERED ROCK	Loc alt of plag clasts, alteration front w/ sericitic zone @ 72.6 m & 50° C. Hematization of groundmass.
A07-008	72.6	76.2		SERICITICALLY/PERVASIVELY ALTERED ROCK	Pinkish-cream white cast.
A07-008			73.1	74.3 ROCK	Loc Py seams 2cm-10 cm. Bleached white interval. Also minor Psi (w) w/ alunite xtal replacement. Subtle contact with AXT = sub //.
A07-008	76.2	77.6		ANDESITIC CRYSTAL - L. TUFF SERICITICALLY/PERVASIVELY ALTERED ROCK	Hematization of groundmass; alt of lithic frags to kaolinite. Greenish purple cast. Distinct alteration front w/ sericitic alt @ 177.6 m (45° CA)
A07-008	77.6	83.2		ANDESITIC CRYSTAL - L. TUFF	Pinkish cast up to 80.0 m, when cast becomes grey. Pinkish cast reappears at 82.8 m. Generally textureless w/ v. loc alt of plag clasts to clay. V. little loc Py diss.
A07-008	83.2	85.3		84.5 ANDESITIC CRYSTAL - L. TUFF	
A07-008			83.2	85.3 ANDESITIC CRYSTAL - L. TUFF	Relatively unaltered, purplish AXT (hematization of groundmass)
A07-008			84.5	SERICITICALLY/PERVASIVELY ALTERED ROCK	Alt kao'd frags of plag. Minimally alt.
A07-008	85.3	88.9		SILICIFIED ROCK (VUGGY)	Gradational change from grey cast to pink cast (~86.5 m) to grey cast. Minimal textures preserved, trace Py diss loc.
A07-008	88.9	99.5			
A07-008			88.9	91.6 SILICIFIED ROCK (VUGGY)	Greyish-cream brecciated rock. Brecciation appears to post date the vuggy silica event (overprint). Clasts range from 1 mm to ~60 mm and are well silicified. Gangue Vning is Sa & surrounds brecciated clasts; vning has no dominant orientation and is continuous from 89.9 to 90.1 m. A thick irregular Sa vein from 90.9 - 91.2 m has pink staining (hematization) & cockscomb texture. There is poss. some adularia infill. Py vning is present at 90.1 & 90.2 m.
A07-008			91.6	95.7 SILICIFIED ROCK (VUGGY)	Non-brecciated; vugs show partial infill by alunite. Gradational change from Msi to Vsi @ 92.86 m, from Vsi to Msi @ 94 m, and back to Vsi at 95 m. There is a massive Py seam (30 cm) @ 94.5 m, but lack continuity to be a vein.
A07-008			95.7	97 SILICIFIED ROCK (VUGGY)	Py vlts & vns in section are not associated with Sa. Vsi (w) is loc in section. Poss Chalcedony in the Sa veins.
A07-008			97	99.5 SILICIFIED ROCK (VUGGY)	Pinkish cast, v loc Py
A07-008	99.5	101.7		ANDESITIC CRYSTAL - L. TUFF SERICITICALLY/PERVASIVELY ALTERED ROCK	Purplish-grey w/ minor Cly (w) alt of plag frags. White soft mineral as minor vlts, scratch w/ knife (clay?)
A07-008	101.7	103.3		ANDESITIC CRYSTAL - L. TUFF	Pinkish-grey w/ minor loc Py diss
A07-008	103.3	108.7		107.3 ANDESITIC CRYSTAL - L. TUFF	Relatively unaltered, Sa vning ~2 cm scattered throughout section. Kao'd alt of plag frags; kao altered vn at 103.6 m.
A07-008			107.1	SERICITICALLY/PERVASIVELY ALTERED ROCK	Minor Py diss & alt of vlt to cly 40° CA Sa vns become irreg @ 110 m, spaced every ~40 cm. V. minor Vsi (w) @ 110 m. Illitization of vlt material towards Vsi interval @ 110 m onwards.
A07-008	108.7	114.5			Py vning borders Adu? vns (crack-seal text?). Alu crystals have partially infilled vugs. Loc Sa vlts. Cream to Grey cast. Poss some Cp as trace diss (diff colour then Py observed). No brecciation as per previous interval of Vsi (88.9 to 99.5 m)
A07-008	114.5	119.5		SILICIFIED ROCK (VUGGY) SERICITICALLY/PERVASIVELY ALTERED ROCK	
A07-008	119.5	127.7		SERICITICALLY/PERVASIVELY ALTERED ROCK	Py seams & diss in grey sericite rock w/ v. loc vsi (w). Poss. Minor illitization from 125.2 - 125.3 m (aquamarine, soft) along fractures.
A07-008			126.3	127.7 ROCK	
A07-008				ANDESITIC CRYSTAL - L. TUFF SERICITICALLY/PERVASIVELY ALTERED ROCK	Pinkish cast w/ no visible sulphides, minor hematization locally. Locally Vsi (w). Irregular contact w/ AXT @ 25° CA Hematized purple w/ minor alt of plag frags. Elongated lithic frags are perpendicular to CA (not fiamme frags, intermediate in composition/colour). Illitization? On fracture planes (aquamarine, soft)
A07-008	127.7	130.2			
A07-008	130.2	132.3			Pinkish-grey cast w/ minimal texture preserved. Irregular contact w/ AXT

A07-008	132.3	141.2		ANDESITIC CRYSTAL - L. TUFF	
A07-008			132.3	134 ANDESITIC CRYSTAL - L. TUFF	Brown, clay alt w/ carbonate stringers
A07-008			134	141.2 ANDESITIC CRYSTAL - L. TUFF	Chloritized FG,; greenish yellow (limonitized?)
					Medium interlayered beds of greyish-green AXT w/ Ca stringers & relatively unaltered plag frags & lithic xtals w/ fine volcanic mudstone.
					Mudstone has a dark green groundmass (marine?) due to the presence of chlorite. Mudstone is fissile. Beds are ~60° CA. Chloritization of the groundmass = pervasive?
A07-008	141.2	155.4		ANDESITIC VOLCANO-CLASTIC SEDS	
A07-008	155.4 EOH			END OF HOLE	
A07-009	0	3.05		CASING	
A07-009	3.05	21.4		ANDESITIC CRYSTAL - L. TUFF	
A07-009			3.05	4.6 ANDESITIC CRYSTAL - L. TUFF	Heavily oxidized; yellowish brown
A07-009			4.6	9.9 ANDESITIC CRYSTAL - L. TUFF	Relatively Ual; purple brown; from 9.5-10.0 m = alt FG/FB w/ illitized frags in breccia; contact @ 50° CA w/ heavily pro (s) alt AXT
A07-009			9.9	10.7 ANDESITIC CRYSTAL - L. TUFF	Essentially FG material of heavily pro (s) alt; purple
A07-009			10.7	11 ANDESITIC CRYSTAL - L. TUFF	Light purple; (still FG) AXT
A07-009			11	12.3 ANDESITIC CRYSTAL - L. TUFF	Heavily alt; purple
A07-009			13	14.1 ANDESITIC CRYSTAL - L. TUFF	Relatively Ual; purple brown
A07-009			14.1	14.8 ANDESITIC CRYSTAL - L. TUFF	Tan-pink cast (cast) dacitic from 14.7-14.8 m; contact sub-90 to CA
A07-009			15.1	17 ANDESITIC CRYSTAL - L. TUFF	Purple; heavily prop (s) alt. V. loc trace Py; broken up sericitic frags from 16.9-17.1 m.
A07-009			17	20.6 ANDESITIC CRYSTAL - L. TUFF	Heavily pro (s) alt; purple
A07-009			20.6	21.4 ANDESITIC CRYSTAL - L. TUFF	Mod alt of plag frags; alt front @ 70° CA w/ sericitic zone
A07-009	21.4	25		SERICITICALLY ALTERED ROCK	Grey, textureless; Py diss & fract-fill; assoc w/ SA; gradational change to 25.0 m; Cly (m) interval
A07-009	25	27.4		ANDESITIC CRYSTAL - L. TUFF	Pinkish cast; original texture preserved; alt of frags & veins to Cly (w); gradual alt @ 27.0 m to Ser.
A07-009	27.4	38.7		SERICITICALLY ALTERED ROCK	
A07-009			27.4	33 SERICITICALLY ALTERED ROCK	Grey, textureless; poss some illitization (blue); Py diss & fract-fill; Sa vning w/ Py
A07-009			33	33.8 SERICITICALLY ALTERED ROCK	No Py, flesh pink cast, Minor Cly (w) alt @ 33.8 m
A07-009			33.8	38.6 SERICITICALLY ALTERED ROCK	Grey, textureless; Py diss & fract-fill w/ Adu? Vn gangue only as vlts
					Grey, hydrothermal breccia w/ subangular clasts of AXT up to 64 mm. Clasts have been silicified. Clast dominated; Py is common (5%) throughout the matrix. Strong alteration of Sa w/ Py on edges. Clasts are well dispersed throughout breccia (polymict); Matrix is lithic/sulphide rich
A07-009	38.6	42.6		HYDROTHERMAL BRECCIA	Loss of breccia text; dominantly textureless; lighter grey-pink; Py as loc diss & fract-fill w/ Sa vns in contact w/ FG ~ 80° CA
A07-009	42.6	43.7		SERICITICALLY ALTERED ROCK	
A07-009	43.7	53.2		ANDESITIC CRYSTAL - L. TUFF	
A07-009			43.7	44.5 ANDESITIC CRYSTAL - L. TUFF	Heavily chloritized; purple FG; w/ AXT proto
					Purple; rel Ual AXT, but w/ strong diss of sulphide/Py from 45.0 to 45.1 m; contact @ 70° CA w/ non-Py AXT; Whitish green FG from 45.7-46.0 m
A07-009			44.5	47.3 ANDESITIC CRYSTAL - L. TUFF	Heavily alt greenish purple FG
A07-009			47.3	47.8 ANDESITIC CRYSTAL - L. TUFF	Purple; Ual plag frags; heavily alt
A07-009			47.8	52.7 ANDESITIC CRYSTAL - L. TUFF	Heavily chloritized & clay FG (green/white)
A07-009			52.7	53.2 ANDESITIC CRYSTAL - L. TUFF	
A07-009	53.2	59.1		SILICIFIED ROCK (VUGGY/PERVASIVE)	
					Appears clay alt, but under closer inspection, rock is actually heavily alt w/ Alu infill; Very minimal Py (trace); loc sericitized; greyish cream cast.
A07-009			53.2	55.8 SILICIFIED ROCK (VUGGY/PERVASIVE)	Vuggy silica w/ loc heavy Py seams/veins, trace En diss (violet); Loc Ba? & Adu? Vning; White to grey cast; partial infill of vugs by Alu; Alt front w/ HBX @ 50° CA
A07-009			55.8	59.1 SILICIFIED ROCK (VUGGY/PERVASIVE)	
					Dark-grey clast-dominated HBX w/ Py diss (3%) in matrix & trace Py in clasts. Clasts are well silicified & seem to have remnant appearance of Vsi; partial infill of Alu? Infill is also noted. Interval appears to have thin Py seam @ 62.2 m separating HBX from SER alt rocks
A07-009	59.1	62.2		HYDROTHERMAL BRECCIA	
A07-009	62.2	64.5		SERICITICALLY ALTERED ROCK	
A07-009			62.2	63.8 SERICITICALLY ALTERED ROCK	Grey, textureless, silicified/sericitized to 63.6 m.
A07-009			63.8	64.5 SERICITICALLY ALTERED ROCK	Sharp change to pinkish cast from prev sub-interval w/ minor text retained & cly (w) alt plag clasts
A07-009	64.5	68.1		ANDESITIC CRYSTAL - L. TUFF	
A07-009			64.5	66.8 ANDESITIC CRYSTAL - L. TUFF	Purple (hematized); heavily disintegrated AXT that has become FG; Plag clasts are chloritized
A07-009			66.8	68.1 ANDESITIC CRYSTAL - L. TUFF	Purple; competent, relatively Ual AXT w/ minor alt of plag clasts to Cly
A07-009	68.1	73.2		SERICITICALLY ALTERED ROCK	
					Pinkish-grey cast; w/ minor hematization in pinkish cast 68.5-69 m, as well as minor cly (w) alt of plag clasts; minor sulphide diss @ ~69.3 m w/ trace Py
A07-009			68.1	70 SERICITICALLY ALTERED ROCK	Loc interval of Vsi w/ strong Py diss & minor infill of vugs w/ Alu; no distinct contact w/ Ser alt
A07-009			70	70.4 SERICITICALLY ALTERED ROCK	
					Textureless grey-pink alt rock w/ strong Py diss from 72.4 to 73.0 m; Py vning surrounded by Sa (fract-fill); V. loc alt of plag clasts to Cly
A07-009	73.2	84.3		73.2 SERICITICALLY ALTERED ROCK	
A07-009			70.4	ANDESITIC CRYSTAL - L. TUFF	
A07-009			73.2	77 ANDESITIC CRYSTAL - L. TUFF	Heavily hematized, disintegrated reddish, purple w/ alt of plag frags to Chl; from 73.0 - 73.6 m = Chl (s)
A07-009			77	82.6 ANDESITIC CRYSTAL - L. TUFF	Relatively Ual AXT w/ weak chloritization of plag frags; small ADF interval from 80.6-80.7 m; heavily chloritized FG at 77.2 m
					More alt AXT then previous subinterval 77.0-82.6 m; small brn vlts dominate AXT, initially thought Ca or Cly as vn gangue, but rotten egg smell w/ acid could = sulfate. Fault breccia has aquamarine colour & soft (illite) & is v. loc hematized
A07-009	84.3	85	82.6	84.3 ANDESITIC CRYSTAL - L. TUFF	Loc section of what appears to be ADF, contact @ 85.0 m = 40° CA. Light brown cast
A07-009	85	87.6		ANDESITE-DACITIC TUFF W/ FIAMME	Similar to 77-82.6 m interval. Purple cast, contact w/ ADF @ 87.6 m
A07-009	87.6	89		ANDESITIC CRYSTAL - L. TUFF	Similar to ADF w/ hematization of ~50% of the fiamme clasts; contact @ 70° CA
A07-009	89	92		ANDESITE-DACITIC TUFF W/ FIAMME	Greyish purple, relatively Ual AXT w/ chloritization of plag clasts & sulfate stringers (lt brown)
A07-009	92	141.7		ANDESITIC CRYSTAL - L. TUFF	
				RHYODACITE DIKE	
A07-009			92	124.2 RHYODACITE DIKE	Oxidized reddish pink. Loc flesh brown-tan. Cly & Chl alt of plag frags. V. loc Ca vlts. Chilled margin (green) & chloritized from 92.0-92.8 m; contact @ 50° CA; chloritized, tan cast FG sections in sub interval; at 130.6 m appears to be gypsum in FG

A07-009			124.2	141.7	RHYODACITE DIKE	Chloritized RDD; Chilled margin from 141.5-141.7 m, heavily chloritized
A07-009	141.7	142.4			ANDESITIC CRYSTAL - L. TUFF	Cly/lch (w) alt plag frags
A07-009	142.4	148			SERICITICALLY ALTERED ROCK	
A07-009			142.4	146	146 SERICITICALLY ALTERED ROCK	Grey-pink textureless rock w/ minor loc hematization, loc cly (w) alt of plag frags
A07-009			146		148 SERICITICALLY ALTERED ROCK	Bleached whitish grey interval w/ loc minor limonitization on fracture surfaces
A07-009	148	150.6			ANDESITIC CRYSTAL - L. TUFF	Purplish-green; relatively Ual. Green frags have "fiamme-like" appearance and subtle orientation, perhaps a pyroclastic flow? 40° CA contact
A07-009	150.6	155.4			RHYODACITE DIKE	w/ chilled margin of RDD
A07-009	155.4	158.2			ANDESITIC CRYSTAL - L. TUFF	Green; plag frags alt to cly & chl. Rock has been pro (w) alt, chilled margin 150.6-151.0 m; No chilled margin @ 155.4 m interval
A07-009						Dominantly disintegrated; sections of chloritized & hematized FG, with minor cly alt towards end of interval
A07-009	158.2	162.6			SILICIFIED ROCK (VUGGY)	Heavily broken up section of VSI pebbles & cobbles (sampled/broken by rock saw); small x-cutting Py vlts (~1 mm) & minor Py diss (trace-
A07-009	162.6	164.5			ANDESITIC CRYSTAL - L. TUFF	1%); minor hematization
A07-009	164.5	165.7			SERICITICALLY ALTERED ROCK	Purple/pink; Alt of plag frags to clay & chlorite
A07-009	165.7	173.7			ANDESITIC CRYSTAL - L. TUFF	Creamish pink w/ loc Vsi @ 164.8 m (vlt?); w/ loc Py
A07-009			165.7	169.3	169.3 ANDESITIC CRYSTAL - L. TUFF	
A07-009			169.3	173.7	173.7 ANDESITIC CRYSTAL - L. TUFF	Purple (hematized) pro (m) alt rock w/ alt of plag clasts by chl & cly; heavily fract
A07-009	173.7 EOH				END OF HOLE	Green (chloritically alt) & epidotized AXT; appears to have tuffistic light green units interlayered w/ dark green AXT w/ bigger frags. Loc
A07-010	0	4.5			CASING	vsi/psi (170.7-171.1 m) vlts; separate loc. mineralization event?
A07-010	4.5	21.5			ANDESITIC CRYSTAL - L. TUFF	
A07-010			4.5		6.1 ANDESITIC CRYSTAL - L. TUFF	Relatively Ual, generally purple in colour (oxidized section = brownish yellow) w/ loc clay (w) alt of plag clasts
A07-010			13.8		21.5 ANDESITIC CRYSTAL - L. TUFF	Loc alt of plag clasts to clay. Light pink dike from 12.1 to 12.19 m of ADF?
A07-010	21.5	25.7			SILICIFIED ROCK (MASSIVE/VUGGY)	More intensely altered then previous subinterval 4.5-13.8
A07-010			21.5		23 SILICIFIED ROCK (MASSIVE/VUGGY)	
A07-010			23	25.7	25.7 SILICIFIED ROCK (MASSIVE/VUGGY)	Pinkish cast (MSI) grading into VSI interval @ 23 m
A07-010	25.7	27.6			SERICITICALLY ALTERED ROCK	Cream-grey; strongly vuggy silicified unit. V minor Py diss. Minor silicified clasts. Complete Alu infill from 23.0m to 23.20 m. Rest of interval =
A07-010	27.6	28.9			ANDESITIC CRYSTAL - L. TUFF	PO + no until 25.5 m (alunite infill).
A07-010	28.9	29.7			SERICITICALLY ALTERED ROCK	Greenish-pink; FG w/ minor Cly (w) of plag frags
A07-010						Purple; broken up AXT frags; Fault contact? approx 60° CA
A07-010						Heavily chloritized, contact w/ AXT @ 40° CA
A07-010	29.7	89			ANDESITIC CRYSTAL - L. TUFF	Purple, pro/ich altered plag frags. Stringers of illite along fractures @ 60° CA. Heavily disintegrated from 39-39.62 m. Strongly hematized
A07-010	89	91			SERICITICALLY ALTERED ROCK	from 33.2 to 34.2 m. Illite (aquamarine) vein @ 52.4m @ 40° CA. Switched from HQ to NQ @ 63.86 m. Heavily disintegrated fault breccia
A07-010	91	92			ANDESITIC CRYSTAL - L. TUFF	from 63.2-63.7 m. Throughout section from 64.8-67.2 m, variably altered, but continuously hematized (above surface deposition). Heavily
A07-010						chloritized from 88 to 89 m.
A07-010	92	94.2			SERICITICALLY ALTERED ROCK	Grey, textureless; w/ minimal Py diss. Minor Psi (w)
A07-010	94.2	100.6			ANDESITIC CRYSTAL - L. TUFF	Pinkish sericitic rock w/ clay alt plag frags.
A07-010			98.4	99.1	99.1 ANDESITIC CRYSTAL - L. TUFF	Grey, textureless, w/ ~1 mm Py vlt stringers every 5 cm. Py vlts assoc w/ Sa. Minor Py diss. Hard to scratch (indicating pervasive
A07-010			99.1	100.6	100.6 ANDESITIC CRYSTAL - L. TUFF	silicification) as well. Pinkish, w/ minimal remnant texture; no Py from 93 to 94.2 m.
A07-010	100.6	101.6			SERICITICALLY ALTERED ROCK	Purple-pink, minor hematization, chloritized frags, minor propylitic alteration.
A07-010	101.6	118			ANDESITIC CRYSTAL - L. TUFF	Clay alt lithic frags
A07-010			101.6		108 ANDESITIC CRYSTAL - L. TUFF	Heavily chl alt; hematized; disintegrated. Considered as FG, but maybe just heavily Pro alt'd.
A07-010			108	116.7	116.7 ANDESITIC CRYSTAL - L. TUFF	Grey, textureless rock w/ trace Py diss in contact w/ relatively Ual/Cly (w) AXT @ 101.6 m --> 50° CA
A07-010			116.7		118 ANDESITIC CRYSTAL - L. TUFF	
A07-010	118	121.2			SERICITICALLY ALTERED ROCK	Purple, hematized, w/ loc broken up pro alt. Clasts are Cly (w) alt in this subinterval. Texture is relatively preserved. Poss some illitization in
A07-010	121.2	126.2			SILICIFIED ROCK (VUGGY)	vning @ 107.7 m.
A07-010	126.2	182.9			SILICIFIED ROCK (MASSIVE)	Light purple, relatively Ual AXT w/ minor alt of plag clasts to chl. Poss loc fiamme? Difficult to determine because grndmass has been quite
A07-010			126.2		139 SILICIFIED ROCK (MASSIVE)	hematized.
A07-010			139		146 SILICIFIED ROCK (MASSIVE)	Dark purple until 118 interval. Clay alt plag frags. Contact w/ less alt subinterval (108-116.7 m @ 60° CA)
A07-010			146		159.7 SILICIFIED ROCK (MASSIVE)	
A07-010			159.7		160.1 SILICIFIED ROCK (MASSIVE)	Textureless, light pink-cream cast. Trace Py diss. Poss illitization on fract surface. Hematization stringers are loc abundant & 90° CA
A07-010			160.1		182.9 SILICIFIED ROCK (MASSIVE)	
A07-010	182.9	184.8			ANDESITIC CRYSTAL - L. TUFF	Dark grey. Heavily fractured & block. Dominantly Msi w/ loc zones of Vsi (less then the previous interval (121.6-126.2 m). Where vuggy,
A07-010	184.8	195.1			RHYODACITE DIKE	there is v. little infill. Locally abundant Py occurring as intersecting vlt stringers, diss & anhedral crystalline masses up to 2mm in size.
A07-010	195.1 EOH				END OF HOLE	At ~139m, rock becomes less fractured w/ less Py diss. Sky blue stain/mineralization on fracture surface, diagnostic of interval. When soft
A07-011	0	3			CASING	clay is cleaned on surface, appears to be harder mineral (dumortierite w/ pyrophyllite?) or illite/dickite)
A07-011	3	4			HEAVILY ALTERED (CLY)	Minor sericitization in this sub-interval, fractured w/ mainly cobbles (difficult to drill?)
A07-011	4	5.3			ANDESITIC CRYSTAL - L. TUFF	Heavily hematized FG, not typical of section
						Blue alt mineral along fract planes. Py vlts crosscut; loc. Py diss abundant in section
						FG AXT that has been strongly hematized & propylitically altered. Plag frags have been chloritized
						Green-tan pro (w) alt of sparsely porphyritic RDD. Green colour = marine? Localized FG

A07-011	5.3	7		SILICIFIED ROCK (VUGGY)	Bluish grey w/ pink tinge; rock has broken into cobbles. Minor illitization along planar surfaces. Gossanous texture loc vis on outer surface of rock. w/ Py diss
A07-011	7	13.3		ANDESITIC CRYSTAL - L. TUFF	Pinkish brown w/ minor oxidation on fracture planes. Chloritization of lithic frags
A07-011	13.3	17.6		SERICITICALLY ALTERED ROCK	Greyish pink, minimal texture, minor Ich (w) & Cly (w) of lithic frags. Minor illitization along fracture planes
A07-011	17.6	23.2		ANDESITIC CRYSTAL - L. TUFF	Pinkish-blue (hematized) & pro (w) alt'd. Minor replacement of lithic frags by Ich (w) & Cly (w). Cast of rock changes in areas of FG
A07-011	23.2	24		SERICITICALLY ALTERED ROCK	Pinkish cast, textureless, no Py
A07-011	24	26.2		SILICIFIED ROCK (MASSIVE/VUGGY)	
A07-011			24	25.3 SILICIFIED ROCK (MASSIVE/VUGGY)	Greyish pink; textureless alt'd rock grained from Ser (w) @ first 10 cm to Msi (s) w/ loc zones of Psi. Massive sulphide seen from 24.2 - 24.7 m, which appears to envelop an aquamarine blue soft diss of minerals (illite?)
A07-011			25.3	26.2 SILICIFIED ROCK (MASSIVE/VUGGY)	Pinkish-brown, w/ Alu infill on vugs & vns. Alunite has infilled fracture surface. Minimal Py diss in interval.
A07-011	26.2	27.2		SERICITICALLY ALTERED ROCK	Lt pink; textureless; w/ minor Py diss. Subtle transition from previous interval; minor illite on fracture surface.
A07-011	27.2	27.6		SILICIFIED ROCK (VUGGY)	Whitish-grey; heavy Py vning in interval w/ Trace Cp & En. Vlts stem from ~2 cm wide vns
A07-011	27.6	33		ANDESITIC CRYSTAL - L. TUFF	
A07-011			27.6	31.7 ANDESITIC CRYSTAL - L. TUFF	Purple; hematized; loc strong alt, but still preservation of text; heavily disintegrated FG @ 31.4 m
A07-011			31.7	33 ANDESITIC CRYSTAL - L. TUFF	Pink, kaolinitization? of original AXT; abundant plag frags
A07-011	33	35.1		PERVASIVELY SILICIFIED/SERICITICALLY ALTERED ROCK	Light pink --> turning grey @ 33.8 m. Heavily alt'd w/ differing degrees of alt. Dominantly Psi, but Ser along fract planes. FG separates interval from AXT
A07-011	35.1	38		ANDESITIC DACITE TUFF W/ FIAMME	Tan-purple w/ what appear to be lt tan pumice shards; no distinct orientation, but still prominent enough to be fiamme. Minor chloritization & illitization of plag frags
A07-011	38	46.5		ANDESITIC CRYSTAL - L. TUFF	Purple; relatively Ual. Minor chloritization of plag frags
A07-011	46.5	48		SERICITICALLY ALTERED ROCK	Grey-pink; textureless; elongation of Adu? alt'd replaced frags. Grades into Vsi alt @ 48.2 m.
A07-011	48	52.4		SILICIFIED ROCK (VUGGY)	Black-grey-pink; partial infill; Py loc as high as 20% @ 49.0 m of diss. Charred black sulphide look - En + Py + other unknown minerals.
A07-011	52.4	54.3		SERICITICALLY ALTERED ROCK	Barite vlt 2 cm @ 48.2 m
A07-011	54.3	63.6		ANDESITIC CRYSTAL - L. TUFF	Textureless; pink; minor Kao alt towards end of interval (~ last 0.4 m)
A07-011	63.6	71		ANDESITIC DACITE TUFF W/ FIAMME	Purple-pink; w/ minor alt of lithic frags; strongly hematized/chloritized & disintegrated clay alt FG @ 54.5 & 58.7 m
A07-011	71	100		ANDESITIC CRYSTAL - L. TUFF	Elongated fiamme frags 90° to CA. Illite vning @ 30° CA at contact w/ AXT in previous subinterval. One sub interval from 66.8 to 70.1 m that appears to be AXT, subtle transition above AXT & illite vning separation below AXT in contact w/ ADF @ 70° CA
A07-011			71	90 ANDESITIC CRYSTAL - L. TUFF	Purple, relatively Ual; Minor ADF subinterval (~30 cm locally)
A07-011			90	100 ANDESITIC CRYSTAL - L. TUFF	Green; moderately alt w/ remnant fiamme text?
A07-011	100 EOH			END OF HOLE	
A07-012	0	3		CASING	
A07-012	3	16.9		ANDESITIC DACITE TUFF W/ FIAMME	
A07-012			3	5.5 ANDESITIC DACITE TUFF W/ FIAMME	Heavily oxidized; yellowish brown w/ cly infilling fracture planes; heavily disintegrated FB at 4.4 m
A07-012			5.5	8.8 ANDESITIC DACITE TUFF W/ FIAMME	Light purple-brown; brownish yellow oxidation on fracture planes; pinkish cast on outside of rock (hematite oxidation)
A07-012			8.8	16.9 ANDESITIC DACITE TUFF W/ FIAMME	Reddish-brown-pink (hematized); frags appear to have orientation 90° CA locally (fiamme?) FB @ 8.9 m roughly parallel to CA
A07-012	16.9	18.3		QUARTZ-ALUNITE	Pinkish grey; textureless; minor illitization of clasts; sulphide diss w/ minor Py
A07-012	18.3	22		SILICIFIED ROCK (MASSIVE/VUGGY)	Dark grey-pink w/ minor infill of vugs by Alu? (after discussion with Jim about the hardness of Alu...tend to lean more towards clay or kaolinite). Poss barite vlts locally; Py vning, seams & diss are loc as high as 10%
A07-012	22	42.1		ANDESITIC CRYSTAL - L. TUFF	
A07-012			22	23.2 ANDESITIC CRYSTAL - L. TUFF	FG; broken zone w/ gouge. Pink-light green in colour; heavily chloritized & clay altered; no distinct fault contact. Oxidation by hematite
A07-012			23.2	30.9 ANDESITIC CRYSTAL - L. TUFF	Purple-light blue; w/ minor hematization of matrix & chloritization of lithic frags (ADF?) from 26.0-27.0 m; higher fiamme content ~45° CA
A07-012			30.9	31.9 ANDESITIC CRYSTAL - L. TUFF	Heavily alt; layered appearance w/ Ich & Pro alt subintervals
A07-012			31.9	34.1 ANDESITIC CRYSTAL - L. TUFF	Similar to subinterval 23.2 - 30.94 m, but w/ prominent sulphide stringers
A07-012			34.1	35.1 ANDESITIC CRYSTAL - L. TUFF	Pink-purple w/ texture intact in non-fault areas; heavily hematized (purple); FG w/ both contacts @ 30° CA
A07-012			35.1	41.6 ANDESITIC CRYSTAL - L. TUFF	Pink-purple w/ loc fiamme (not prominent enough to be classified as ADF)
A07-012			41.6	42.1 ANDESITIC CRYSTAL - L. TUFF	Heavily chloritized; no obvious fault contact
A07-012	42.1	43		QUARTZ-ALUNITE	Greyish pink; textureless; partially replacement of frags by chl & cly
A07-012	43	45.8		SILICIFIED ROCK (VUGGY)	Light grey-tan; Alu? (after discussing with Jim...Kao or Clay) has infilled some of the vugs. Rock has remnant fiamme texture ~90° CA as well as silicified frags up to 5 cm (poss dike?); Py vlts are irreg; Py diss on fracture surfaces
A07-012	45.8	51.7		QUARTZ-ALUNITE	
A07-012			45.8	51 QUARTZ-ALUNITE	Pink-grey; relatively textureless; loc Py diss & banding, w/ banding ~90° CA
A07-012			51	51.7 QUARTZ-ALUNITE	Same colour as prev sub-interval (45.8-51 m); vein w/ halo of Py from 51.0-51.3 m @ 15° CA. Crystalline qtz/chalcedonic vn assoc w/ Py @ 51.0 m.
A07-012	51.7	52.5		SILICIFIED ROCK (MASSIVE/VUGGY)	Dark grey w/ white frags; poss partial Alu? (now think clay or kaolinite) infill. Prominent sulphide band @ 51.8 m that is ~20 cm long x 2 cm thick @ 25° CA. Approx 5% Py as vning & diss
A07-012	52.5	54.4		QUARTZ-ALUNITE	Pink to grey, rel textureless, Py vlts xcut loc Py stringers 5mm wide, variable length, irreg orientation. Partial fracture fill diss of Py; subtle contact to Vsi @ 54.4 m
A07-012	54.4	56.5		SILICIFIED ROCK (VUGGY)	
A07-012			54.4	54.9 SILICIFIED ROCK (VUGGY)	Light grey w/ white vugs w/ alu infill (?) (possibly kao or clay). Py replace @ 53.4 m (3 cm x 1.5 cm) w/ some loc ser - as fn bands; no faults; Py - anhedral grains to 1mm; pinkish grey w/ brassy yellow tint; massive Py + loc anhedral Py to 1mm on fractures; no orient to Py. Alt front w/ Ser/Sal zone @ 56.5 m, irreg high < to CA
A07-012			54.9	56.5 SILICIFIED ROCK (VUGGY)	Light grey-pink, textureless w/ loc clasts (to 5 x 6 cm @ 59.8 m) - v. fn gr w/ sericite or illite? Mod hematized locally; minor sericite filling fractures w/ late slicks; more remnant textures @ 62.7 m.
A07-012	56.5	65.9		QUARTZ-ALUNITE	

A07-012			64.7	65	QUARTZ-ALUNITE	Irreg fault surface - rock more greyish to 65.3 m
A07-012	66	66.4			FAULT BRECCIA W/ SILICA	Contact across this fault w/ RDD. Minor qtz (psi (w)) localized @ end of interval
A07-012	66.4	70.4			RHYODACITE DIKE	
A07-012			66.4	67.8	RHYODACITE DIKE	Green, sparsely porphyritic w/ chilled margin @ beginning of interval that has been mildly silicified. Loc accretionary lapilli (?) for the first 60 cm; minor vesicularity (or weathering out of clasts). Appears to be minor sulphate (rotten egg smell w/ acid) yellow-brown alt'd frags. Contact w/ next RDD @ 20° CA
A07-012			67.8	69.4	RHYODACITE DIKE	Reddish-brown; cracked text on surface of core. Strongly hematized & sparsely porphyritic
						Green; appears partially epidotized; fine-grained w/ plag phenos disappearing @ 70.0 m. Black, rounded breccia-size masses appearing from 70.0-70.4 m which are possibly spherulites (?) or amalgamated accretionary lapilli
A07-012			69.4	70.4	RHYODACITE DIKE	
A07-012	70.4	73			ANDESITIC CRYSTAL - L. TUFF	
A07-012			70.4	70.8	ANDESITIC CRYSTAL - L. TUFF	Pink & altered FG (minor competent blocks of rock)
A07-012			70.8	71.1	ANDESITIC CRYSTAL - L. TUFF	Green; mild remnant texture w/ minor breccia frags loc; Py diss along chloritic fracture planes. 30° contact w/ next interval
A07-012			71.1	72	ANDESITIC CRYSTAL - L. TUFF	purple; pink-green; heavily alt & disintegrated w/ trace Py diss on fracture
						Remnant AXT that has been heavily faulted & become FB. Breccia frags are chaotically mixed & chl altered. Appears to be in a strain zone @ 72.40 m; in contact w/ RDD. Weak chilled margin @ 73.0 m.
A07-012			72	73	ANDESITIC CRYSTAL - L. TUFF	
A07-012	73	112			RHYODACITE DIKE	
A07-012			73	76	RHYODACITE DIKE	Green; fine grained groundmass w/ accretionary lapilli for first 2 m of interval. Minor brown sulphate stringers?
A07-012			76	112	RHYODACITE DIKE	Reddish-brown; slightly porphyritic; fine-grained groundmass w/ vesicle infill by light green soft mineral (chlorite?). RDD is loc green w/ brown-yellow sulphate stringers. Poss several dikes in this interval. Qtz vlt from 85.2-85.7 m ~// to CA & 1 cm wide. Rel vesicular throughout section. Weak dark green chlorite along fracture planes. Trace Py on fract surfaces in interval (coating on fractures, perhaps late fluids). (START OF JS LOG). At 107.3 m, still in RDD - w/ 4% relict plag phenos (replaced by f.g. greenish sericite (Brian calls illite)). Poss relict mafic phenos sites w/ tiny black hematitic grains - in aphanitic grndmass - light pinkish brown. At 107.4, increase in phenocrysts in RDD? Diff to tell where contact is - another dike? See good lithic clasts at 109.2 m. Contact @ 109.1 m is 20° CA & has ???
						Contact - RDD uphole/Purplish grey AXT; crystal rich (20% 0.5-5.0 mm phenos) w/ minor lithic clasts (1.2 mm). Xtals are not fragmental - mostly subhedral to euhedral plag - alt to sericite-illite; At 111.05 m --> 0.3 mm chlorite vlt w/ trace diss Py 35° CA in greenish grey AXT. Tuff is cut by fine clay - limonite vltts.
A07-012	112	147.95			ANDESITIC CRYSTAL - L. TUFF	
					Fault zone - broken fault w/ clay gouge w/ hematite	113.3 --> irreg white-grey clay-ser (?) vltts (1 mm to 4 mm) 45° CA.
A07-012			111.95	113	hematite	113.7 --> irreg white clay vein 40° CA; Tr diss Py & Hem
A07-012			113.5	116.3	Bleached zone around Ser-Py vein	Py bands in wk silicified - mod Ser 'vein' ~20° CA (QSP?) w/ weird striped texture w/ irreg f.g. pyrite mottles, not much qtz in here
A07-012			114.9	115.45	Low < Py vein w/ wk silica & mod ser	Purplish med dark grey AXT w/ diss Hem. 116.31 --> 0.7 cm qtz vein 55° CA. 116.63 --> 0.4 cm qtz vein 45° CA. 117.45 --> irreg qtz - sulfate? Vltts ~50° CA (1-5 mm). 117.93 --> irreg qtz vltts 40° CA (1-6 mm). 119.37 --> disrupted qtz vn 15° CA (~1 cm) w/ brownish sulfate (Brian) or limonite? 120.4 --> 0.8 cm sericite-illite? vein w/ spec hem grains 55° CA. 121.4 --> small bleached St Ser zone around 2 cm sericite? Vn @ 35° CA. 122.0 --> AXT w/ mod aligned xtals & elongated frags 40° CA.
A07-012			116.3	122.6	Pro alt andesite lapilli tuff	
					Ser alt andesite lapilli tuff. Note 108 to 122 split assay. Included a lot of prop alt andesite. I (Jim) would have included 122-	Interesting mineralized bx at 123.0 m. 2 cm thick bx band w/ irreg 65° CA. Qtz-Alunite (?) - Py zone (122.8-123.4 m). At 122.9 m, some bright red grains-stains looks like cinnabar? 123.55 --> 2.5 cm thick Ser-Py band w/ poss 4.0 cm thick qtz-alunite halo? 50° CA. 124.1 --> 0.5 cm, Ser-Py vein-slip 55° CA.
A07-012			122.6	124.4	124 m.	124.4-125.6 m --> pro alt AXT w/ minor sericite-illite bands-veins at 124.7 m (0.8 cm), 60° CA at 125.13 (3-6 mm) 55° CA. 125.5 --> poss 2 cm dike (?) f.g. andesite cuts AXT (25° CA) or elongate inclusion - cut by sericite-illite veins -irreg x-cut Ser veins.
A07-012			124.4	125.6	Andesite lapilli tuff (pro alt)	Small zones 125-125.2 m and 125.9-126.0 m w/ suggest of fiamme-rich AXT w/ st compaction fol (?) 40° CA. Bleached Ser zone is assoc w/ semi-shooted ser-illite? V @ 1-5 mm, 55-65° CA + Py veins 60-70° CA, think there is tannish pinkish alunite in here.
A07-012			125.6	126.5	Bleached ser alt zone	Prop alt andesite has diss hem - don't see Py here. 128.35 flt along qtz-Py vein 60° CA. Plag replaced by greenish Ser-II? 129.35 disrupted Qtz vn 1-5 mm thick.
A07-012			126.5	130	Andesite lapilli tuff (ser/III)	Bleached AXT - plag sites replaced by white Ser-II. The diss hem gets destroyed in the bleached zones. 130.31 --> 2 cm band mixed ??
						Alunite-qtz + sericite. 80°CA trace Py diss in halo. All prop alt intervals are med-dark purplish grey colour. All bleached zones varicoloured light pinkish to greenish gray (bleached-chlor destroyed?).
A07-012			130	131.4	Andesite Lapilli Tuff (pro)	131.7 --> 0.5 cm qtz vein 65° CA. 131.9 --> 0.7 cm qtz-ser vein 70° CA.
A07-012			131.4	142.4	Andesite Lapilli Tuff (pro)	
A07-012			142.4	143.9	Andesite Lapilli Tuff Ser-Al	AXT w/ abund xtal frags (plag - many subhedral - some broken xtals 0.5-5.0 mm) gen repl by soft greenish Ser-III? Fault at 133.62 m has swelling clay + minor qtz vn on edge ~ 10% lithic clasts. 133.85 --> qtz vn - brecciated near edge of fault 70-75° CA ~1 cm. 134.96 --> 3 mm qtz-ser-vn ~80° CA. 139-141.6 m --> prop andesite w/ intermittent qtz vns 1-10 mm @ mod to high < to CA ~ 0.3 m. Fault at 141.6 m is on edge of bleached Ser-II alt zone. Altered bleached andesite flts on both contacts! This is not very good looking rock - v wk silicified - no good qtz veins - looks like the lt greenish sericite (?) Vn age later (and cut) earlier alunite? 143.7 --> 1.2 cm alunite vn? 45°CA.
						At 143.9 --> change alt to less bleached rock w/ vein & diss Py, looks like pervasive-qtz-Py? This stuff looks better w/ abundant sulphide - by not much silicification. 143.9-146.46, this is strange zone - has abundant Py - local bx textures (prob hydrothermal). 144.6-144.85 and local remnant shear textures @ 145.1-145.3 m.

A07-013	6	6.7			Overburden (?) prob loc transported surface material? Broken - silicified rock	6.5 m - another clast from gravel - prob out of place? More overburden (?) oxidized limonite & hematite: pretty good looking silicified rock 6.4 to 6.7 m is gougy material - still overburden? At 6.7 m into bedrock - Andesite Lapilli Tuff w ~20% xtals & xtal fragments - plag to 3.0 mm altered to sericite-clay? See remnant biotite planes! 9.5 m pick up more clasts that look like collapse pumice - fiamme? Foliation 40° CA, see diss hematite, but not pyrite. Andesite is non-magnetic Possible dacite fiamme (~25-30%) w/ 12-15% xtals & 2-5% lithic clasts. 16 m = well developed compaction foliation ~50° CA. Back into Andesite Crystal L. Tuff
A07-013	6.7	12.48			ANDESITIC CRYSTAL - L. TUFF	
A07-013	12.48	16.65			ANDESITIC DACITE TUFF W/ FIAMME	
A07-013	16.65	26.8			ANDESITE CRYSTAL - L. TUFF	
A07-013			22	25.2	Sericitically altered	Major Fault broken gougy rock. Into m-s sericite alteration zone as halo on down hole. Interesting white chalcedonic to almost opaline silica on fracture 22.0 to 23.7 m with some white clay. 25.2 to 26.4 m, is zone of prop al andesite caught up on fault zone of mostly bleached sericitized andesite. 24.4 to 26.82 m is broken rock w/ local gouge (mostly st clay alt in fault zone - not true clay gouge. Across fault into strong silicified rock. Silicified rock is broken, some adjacent to fault. 28.0-28.3 m is zone w/ more fine diss Py in silica rock - it doesn't look like vuggy silica is produced by leaching of sulphide. Sharp contact alt mod-str silicified w/ m-s propylitic alt AXT - dark purplish grey @ 28.7 m. Dark purplish-grey Andesite Crystal L. - Tuff. Changes colour to med reddish brown @ 29.6 to 30.45 m and 31.2 m onward - these colour changes appear related to alteration prop alt andesite has rel abund diss fn hematite - non-magnetic - sec vein b/w Bleached interval - Quartz Alunite altered (?) - w/ weak silicification, chlorite is destroyed also diss Hem. Some sericite-illite here? Looks like plag xtals red by sericite-illite & matrix is alt to quartz-alunite. ~32.3 pick up trace diss Py 31.2 m - into light-medium pinkish Qtz-Alunite Alt zone (remnant textures suggest AXT)
A07-013	26.8	28.7			SILICIFIED ROCK (MASSIVE/VUGGY)	
A07-013	28.7	31.2			ANDESITIC CRYSTAL - L. TUFF	
A07-013			29.6	30.45	Andesite - bleached wk gr-al?	
A07-013			30.45	31.2	Andesite - propylitically altered Start good zone Qtz Alunite alt w/ abundant Py. This is all replacement alteration. NO VEINS HERE!	
A07-013	31.2	33.1				32.3 m - pick up diss Sulphide in Quartz Alunite - rocks more silicified, also increase silicification 33.1 m - increase diss Py content - local massive patches appear to replace lithic clast sites - good looking rock! 33.9 m - start picking up patches of semi-vuggy silicified rock - looks like vuggy silica is produced by removal of the sericite-illite replaced plag xtal sites? 35.3 to 35.9 m, small zone w/ abundant white bladed barite in vugs, great looking stuff, but don't see any VG, but some diss Py is in barite. ~37 m - Trace fine Py stringers. Into halo on Quartz-Alunite-Py zone: mod pinkish grey (bleached) AXT, pick up textures - abundant xtals & spots w/ suggestions of fiamme (?) 43.1 m - irreg quartz vein - v. fn gr ~3-7 mm, 15° CA Into med-dark purplish grey AXT. Small gougy fault at 43.7 m is high < to CA, diss Hem. At 44.1 m - 4-8 mm Qtz-spec hem vn @ 30° CA. At 44.4 m - irreg 5-8 mm Qtz-spec Hem Vn @ 30° CA- has patch white barite. At 45.33 m, Intersect another - approx 70° CA (first time I've ever seen this in 29 years in this business. Look at section 1925 N - this area has abundant drill holes). Gradational contacts interval of fiamme-rich AXT. Pinkish clasts (dacitic) highly flattened - compaction foliation 55° CA Medium-dark purplish grey AXT. Plag xtals alt to greenish sericite. I have seen minor remnants of biotite phenos - alt to bronzy-punky flakes (chlorite?) non-magnetic has fine diss spec Hem
A07-013	33.1	41.4			QUARTZ ALUNITE - Py Alt - good looking	
A07-013	41.4	41.9			Andesite - bleached - Ser?	
A07-013	41.9	46.3			Andesite Propylitically altered	
A07-013	46.3	46.95			Small Interval /fiamme rich	
A07-013	46.95	48.16			ANDESITIC CRYSTAL - L. TUFF	
A07-013	48.16	48.75			ANDESITE VOLCANIC BRECCIA	Sharp text changes - small interval w/ higher lithic clast content. Could be at base of flow unit? Clasts sub-ang to subrounded up to 5 cm fn grained andesite; andesite porphyry. 45.2 to 45.5 couple more disrupted qtz veinlets 2 to 4 mm. 47.9 m - 5-6 mm f.g. qtz vein ~55° CA
A07-013	48.75	50.5			ANDESITIC CRYSTAL - L. TUFF	Andesite Lapilli Tuff - purplish grey - propylitic alt
A07-013	50.5	51.4			ANDESITE - SERICITE?/BLEACHED	Into bleached-sericitized? halo on silica zone - prob wk Qtz-Alu. Pick-up wispy Py stringers; diss Py @ 51.25 m
A07-013	51.4	52.52			QUARTZ ALUNITE w/ barite & Cu; Vuggy quartz w/ VG	Into mod-str Qtz-Alunite replaced Andesite - textre destoryed. 51.7 m - pick up some white barite in vuggy silica rock. 51.73 m - prob fn flake 0.2 mm. 51.8 m - pick up chalcopyrite-covellite and another Cu mineral - suspect Chalcocite but pretty hard and does not plate-out Cu? Probable free gold: One grain at 51.75 m, one grain at 51.83m assoc w/ Cu minerals? multiple grains at 52.0 m on both sides of split core. One coarse (~1 mm) grain at 52.05 m assoc w/ Cu - sulphides. At 51.9 m covellite? stringer ~35° CA, at 52.15 m ~4 cm patch white barite, at 52.22 m think sm grains + stains of cinnabar ~ right colour? at 52.42 m interesting 2 cm solidvein of Cu- sulphides banded w/ chalcopyrite on one side & covellite 30° CA on other side at central band of fn massive - this was not split properly - but not a problem (no-one explained to Christian & Andy that the proper way is to split down the middle of inclined veins or bands - now they know). End of strong Qtz-Alunite-Vuggy Silica at 52.52 m - core apun & eroded here? Into less silicified Qtz-Alunite rock w/ more sericite or illite after relict plag grains - close to upper vuggy silica zone - see strong fn diss Py preferentially replacing remnant collapse pumice (foliation ~40° CA). At 53.71 m - ~8-10 mm Py vein 30° CA (not split properly - less went to lab - prob not a problem & now Christian knows how to mark it for cutting)
A07-013	52.52	55			Weak-moderate Quartz Alunite	
A07-013	55	55.2			Fault?	Probable fault w/ str clay alt & bleach separates mod Qtz-Alunite altered Andesite (up-hole) from str propylitic alt andesite down-hole. Small interval dark purplish grey to orange (plag sites) AXT, strong propylitic alteration. Then at 55.44 m into major fault zone (thick - but could be drilling down in - no strong indicators of orientation to CA). Finely broken rock from 55.44 to 58.5 m, the white plag altered sites develop yellow colour in the fault rock - sulphate? Mixed broken st pro/st clay andesite to 62.0 m
A07-013	55.2	62			ANDESITE CRYSTAL - L. TUFF - major fault - st hematite diss grains & coatings on slips	
A07-013	62	63.4			ANDESITE CRYSTAL LAPILLI TUFF	Into more competent Andesite - prop alt. It is common to see broken - gougy looking rock at the rod changes - e.g. at block 63.40 - most are prob <u>not</u> faults? But think this is because it separates prop alt andesite (uphole) from silicified hydrothermal breccia down-hole. Across fault into interesting silicified breccia consisting of earlier dark grey ~chalcedonic silica clasts in matrix of light grey v. fn xtalline Qtz - locally w/ diss Py + Py stringers + patches. At 65.0 m there is some vuggy silica patches - looks like they are fragments in the hydrothermal (?) breccia matrix - maybe mixed alunite in silica bx matrix?
A07-013	64.65	66			Silicified Hydrothermal breccia? Fault contact - into Andesite Crystal Lapilli	
A07-013	66	66.3			Tuff below	Faults are slicing & dicing the silicified zones! 66.0-66.3 m is gougy clay fault contact
A07-013	66.3	67.1			Andesite	66.3 to 67.1 m is med-purplish grey Andesite - prop alt & clay alt
A07-013	67.1	67.55			Fault zone - clay gouge	Fault zone w/ clay gouge & clasts of silica rock from below
A07-013	67.55	68.7			Silicified Zone	Silicified andesite - brownish quartz alunite alt rock, don't see pyrite? Maybe dead silica?
A07-013	68.7	69.2			Fault Zone	Fault zone - broken silicified sericite rock
A07-013	69.2	71			Silicified Zone	Another silicified zone - much better has a lot more Py. Poss fault contact - not sure, very broken andesite

A07-013	71	71.63		ANDESITIC CRYSTAL - L. TUFF	From Qtz-Alunite (uphole) into propylitic AXT w/ diss hematite - mostly pink, clay-alt rock muck
A07-013	71.63	73.3		Moderately silicified andesite	Interval of mod silicified qtz & alunite (?) w/ local diss Py, still some remnant patches propylitic alt Andesite - chlorite cut by fault and in fault contact w/ andesite (prop) down hole
A07-013	73.3	74.4		Fault zone	Gougy broken fault-contact b/w mod silicified rock (up hole) and propylitic alt andesite (downhole). Silicified fragments in gouge to ~73.08 m. Propylitic + clay alt andesite. Suggest compaction foliation 35° CA. 75.1 m - cut by qtz-ser band vein at low < to CA (15 to CA). 78.7 m - irreg qtz-barite vein 3-12 mm w/ 25° CA. 79.0-79.35 m fault w/ minor pieces mod silicified rock. 80.55 to 81.3 m broken fault w/ minor silicification around ~1-2 cm qtz vein band 40° CA
A07-013	74.4	81.3		ANDESITIC CRYSTAL - L. TUFF	Zone mod-str silicified w/ abundant dissem + vein Py - only patchy alunite in here? At 81.7 m - irreg 1-2 mm Py stringers 30 ° CA. At 82.3 m - banded sericite + pyrite 50°CA w/ minor BAR? Silicification decreases from 83 to 83.7 m.
A07-013	81.3	83.7		QUARTZ-SERICITE-ALUNITE-PYRITE ZONE	
A07-013	83.7	84.55		Fault Zone - bleached Andesite	Fault zone w/ bleached andesite. At 83.85 m - small zone qtz-Py in ground up fault zone.
A07-013	84.55	92.1		Andesite - propylitically altered	Into M-S propylitic alt andesite - I don't see much evidence for epidote? At 85.62 m = 1-2 mm qtz vein 70° CA. 87.1 m = 6-7 cm bleached qtz sericite band 35° CA w/ bright red hematite. 88.75 m - irreg 2-3 cm qtz vein 20° CA w/ sericite & hematite halo
A07-013	92.1	95.5		Quartz-Alunite-Sericite (?) Zone	Into Qtz Alun alt zone w/ mod silicification but no vuggy quartz. ~93 m suggestions of narrow fiamme-rich zone? No diss Py but trace fine Py stringers. At 94.3 m - irreg sericite (?) vein @ 2-4 mm, 35° CA
A07-013	95.5	99.4		ANDESITIC CRYSTAL - L. TUFF	Hematitic - med to dark purplish grey andesite - plag xtals alt to white clay-illite? w/ ~0.3% fine diss hematite. Interesting fault zone: broken rock in hanging wall of 2.3 cm sheared alteration band - sericitic material w/ ductile def fabric about 10 ° CA into more alt-bleached andesite at 99.4 m.
A07-013	99.4	100.85		Moderate Quartz-Alunite Alt Zone	Light to medium pinkish brown qtz-alunite alt zone w/ local greenish sericite bands. At 99.7 m - irreg Py stringers cutting Qtz-Alunite rock.
A07-013	100.85	103		ANDESITIC CRYSTAL - L. TUFF	Medium to dark purplish grey Andesite - prop alt w/ fine diss Hem. At 101.34 m - irreg 1-2 mm Py stringer 20 ° CA. 101.65 m - into broken zone that extends to 102.85 m - very punky rock but questionable if this is really a fault?
A07-013			101.75	Sub w/ mod silicification & trace Py	Zone of silicified ser alt - 20° CA - in broken zone
A07-013	103	108.3		Quartz-Alunite (Sericite/Illite) Alteration Zone	Into pretty good silicified zone - with the light to med pinkish brown alteration assemblage (Qtz-Alunite) with the mottles, bands and veins of salt white material (sericite, illite or clay?), the same whitish material also replaced the remnant plag grains. At 104 m - 4 cm vein of sericite (?) 35° CA. At 104.8 m - 5 cm band - vein of the white material sericite-illite? ~20° CA. At 105.8 m - 6 to 7 cm banded (30-40°) Qtz-Alunite, sericite + Py in this zone most of the Py is fine diss cut along the white (sericite?) veins. At 108.10 to 108.14 m - another narrow band of ductile shear fabrics in mottled sericite (?) rock. At 108.15 m - 1 to 2 cm white qtz-sericite band w/ conc of Py in one margin - Py sericite vein - has stylolitic Py seam at other contact (65° CA)
A07-013	108.3	109.6		Andesite-Propylitic (prob faulted slice)	At 108.3 to 109.6 m is zone of str prop alt andesite - with small faults at contacts that suggest this is a fault slice. It is all broken.
A07-013	109.6	114.05		Quartz-Alunite (Sericite/Illite) Alteration Zone	After narrow (3 cm) fault back into Qtz-Alunite w/ sericite (?) zone - same as zone above. At 110.5 m - 8 mm qtz-vein w/ Py & sericite ~25 ° CA. See trace of steel grey diss flakes @ 110.6 m - 20° CA. At 114 m into broken fault zone w/ some gougy material. 114-115 m - most propylitic alt andesite in broken fault. At 110.1 m is fracture surface w/ partial ??? of euhedral ~1 mm crystals - H = ~6, slight greenish-light brown w/ rhombic shapes - not sure possibly an epidote group?
A07-013	114.05	115		Broken Andesite Lapilli Tuff	Broken fault w/ propylitic andesite - drk purple-grey
A07-013	115	115.5		Broken Quartz-Alunite-Sericite Rock	Mostly broken fault w/ wk-mod qtz-alunite-ser alt rock.
A07-013	115.5	116.45		Broken Andesite	Complex mixing of prop Andesite + zones of mod qtz alun alt
A07-013	116.45	117.2		Broken Quartz-Alunite-Sericite Rock	Another mostly broken interval of mod qtz-alun-ser rock, this does not look like good rock - not strongly silicified - mostly wk silica - mod alunite w/ sericite + no pyrite
A07-013	117.2	117.9		Quartz-Alunite-Sericite Rock	Quartz Alunite Sericite Rock
A07-013	117.9	118.75		Propylitic Andesite L. Tuff	Small sliver of prop alt andesite. Dark purple grey lapilli tuff.
A07-013	118.75	128.8		Quartz-Alunite-Sericite-Pyrite Rock	Into broader zone - mod qtz-alun-ser alt (bleached) andesite w/ small zone of prop andesite in fault at 120.5 m. At 119.15 m - 9-10 cm thick - probable <u>hydrothermal breccia</u> w/ 0.2 to 1.2 cm sub-rounded clasts of qtz-alun rock in fine gr qtz-ser-Py matrix 30° CA. 119.6 to 119.8 m - more <u>hydrothermal breccia</u> - irreg dike-like body - Py veins are cut off in clasts & wall rock. More Py starting at 119.0 m. 122.35 to 123.5 - more <u>hydrothermal breccia</u> (similar to above) - locally Py-rich w/ Py in clasts & matrix both: some prop alt andesite mixed in alt rock zone approaching dike contact. At 124.9 - 4 cm ser-Py vein 40° CA. Interesting <u>hydrothermal breccias</u> from 119.5 to 123.5 m could be one thin breccia dike at low < to CA? They have Py mineralized clasts & locally abundant Py in matrix and concentrated on contacts; contact at 122.65 m is 20° CA.
A07-013	128.8	163		Rhyodacite Porphyry Dike	128.8 m - fault contact - into the rhyodacite porphyry dike: the dike is med-dark green right at contact and med greenish-grey downhole - w/ pink feldspars (altered). The dike is mod magnetic to about 131.3 m, then weak to mod magnetic down hole. Brian is right, there are reaction rims or overgrowths on some of the feldspar phenos - plag overgrowth on K-spar? Of the feldspar phenos - plag overgrowth on K-spar? RDD has ~15% feldspar (1-4 mm) phenos + variable (1-4 mm) mafic phenos (2-4%) in aphanatic to v. fn gr matrix. Small gougy fault at 130, then 2.5 cm of weird rock - has rounded blebby pieces of RDD in a fn gr green igneous (?) matrix. Has suggestion of immiscible magma mixing? Blebs range from 2 mm to 30 mm. Dik has fine diss magnetite - poss related to mafic phenos? 133.5 m - fine 0.5-2 mm calcite veins cut dike. 133.54 m - 0.5-1.0 qtz veinlets w/ diss Py in halo - cut dike. 134.4 - irreg qtz-sericite + calcite veinlets cut RDD, some brecciation. 138.0 m - see 1-3 cm clasts of andesite in RDD. 146.0 m still see minor thin 0.5-2 mm calcite veinlets & trace andesite clasts in RDD - still diss Py
A07-013	163.25	164.5		ANDESITIC CRYSTAL - L. TUFF - broken	Subinterval of Propylitic alt AXT - think this is a fault sliver of Andesite: lower contact is fault break w/ both rock types - upper contact is sharp & irregular. At 161 irreg 10 cm inclusion of andesite in the RDD dike - just above fault contact. At 163.25 m fault contact b/w RDD (uphole) & broken andesite (downhole). At 163.9 m - start getting pieces of good silicified rock in the fault breccia.
A07-013	164.5	172.9		Silicified rock & Vuggy Silica Rock	Through fault and into quartz-alunite rod at 164.5 m still broken. At ~165.35 m into massive silica rock & some vuggy silica rock - locally w. abundant Py; some of the vuggy texture (here) looks like may be produced by leaching the diss Py? This looks like good rock - but don't see any barite or VG; poss Tr diss enargite in Box 52. BOX 52 - 167.6 to 171.8 m was dropped - whole box is good silicified & vuggy silica rock w/ some alunite - a lot of the box is small pebbles of silicified rock suggesting the drillers had lots of problems drilling this - maybe was still broken by faulting? Samples were taken from the box E211477 to E211483 they probably should be averaged for a composite value for whole 6 meters at the rock all mixed up. Hole 26 is being pushed through the RDD dike to see if this same zone occurs on the section 25 m to the south - being drilled today.
A07-013	172.9	175.6		Fine Grained Andesite Dike?	V. fn grained, mod-str sericite alt rock - haven't seen this before - looks like aphyric andesite dike? May be post mineral? No silicification

A07-013	175.6	176.8			ANDESITIC CRYSTAL - L. TUFF	Interval of Andesite Lapilli Tuff w/ mod green grey colour & propylitic + clay alteration.
A07-013	176.8	178.6			Broken Silicified-Quartz-Alunite Rock	At 177.0 m back into highly broken strong silicified rock drillers had much difficulty drilling this - all small rounded (ground)
A07-013	178.6	180			Broken Andesite & Fault Brecciated Andesite	~179.0 m - into broken str propylitic + clay alt AXT (grey) and fault brecciated andesite
						Med purple-grey AXT w/ abundant xtals (30%) & lithic clasts (5%) w/ ~0.5% diss Py ~184 m the plag xtals in Andesite are fresher. See only one calcite vein at 194.0 m ~25 to CA. This is freshest Andesite I've seen so far - get Andy to cut slic from center of core at <u>193.55 block for thin section studs</u>
A07-013	180	194.56			ANDESITIC CRYSTAL - L. TUFF	
A07-013	194.56 EOH				END OF HOLE	
A07-014	0	4.57			CASING	
A07-014	4.57	24.5			ANDESITIC CRYSTAL - L. TUFF	Purple; limonitized AXT w/ replacement of plag frags by limonite.
A07-014			4.57	5.26	ANDESITIC CRYSTAL - L. TUFF	4.57-4.8 m - rock appears to be either overburden or cased
						5.26-6.16 m - layered; FG material that has been cemented by limonite, clay @ trace chlorite, as well as an orange carbonate mineral (strong RXN). 6.16-8.2 m - continued limonitization of plag frags (orange-brown, no rxn)
A07-014			5.26	8.2	ANDESITIC CRYSTAL - L. TUFF	Similar to subinterval 4.57-8.2 m, but w/ an increase of solid, competent plag frags. Loc vning from 8.53-8.73 m of Ca material (wk rxn to HCl). Limonitization along fract planes, but not as extreme as previous subinterval.
A07-014			8.2	14.5	ANDESITIC CRYSTAL - L. TUFF	Purple; w/ abundant alt of plag frags to light green soft mineral (illite?). Minor brown cly vlts ~30° CA.
A07-014			14.5	17	ANDESITIC CRYSTAL - L. TUFF	Heavily broken, faulted & fractured; dark purple (same as 14.5-17.0 m)
A07-014			17	22.9	ANDESITIC CRYSTAL - L. TUFF	Purple; minor irreg vning of cly (w) (brown-colour). Irreg qtz vning @ 20.4 & 21.1 m
A07-014			17.6	24.5	ANDESITIC CRYSTAL - L. TUFF	Pink-purple; w/ alteration of plag frags to clay & light green mineral (illite?). No visible contact
			22.9		Quartz Alunite - Remnant Andesitic Crystal	
A07-014	24.5	25			L. Tuff	Pink; w/ clay alteration of frags; diminishes @ 25.0 m - subtle contact is approached. Minor sericitization along frac planes.
A07-014	25	25.8			SILICIFIED ROCK (VUGGY)	Dark grey; qtz alu fill @ 25.4 m transitioning into Vsi; textureless; Py is smeared & loc heavily diss; weak kaolinitization in minor fract & vugs
						Bleached white; soft; sticks to the tongue; w/ minor limonite stain; Py diss along fract planes. Vuggy silica is very weak in Kao interval.
A07-014	25.8	26.3			KAOLINITIZED ROCK	Alteration halo contact w/ next interval
					SILICIFIED ROCK (VUGGY) - REMNANT	White-grey-pink; Vsi matrix w/ qtz vning (milky qtz). Loc limonite staining on fracture planes. Loc clasts of silicified material (volcanics?).
A07-014	26.3	27.1			HYDROTHERMAL BRECCIA	Partial kaolinite infill of vugs (white, clay material, sticks to the tongue)
						Pink; minimal text; minor sericitization, particularly along fract planes (white). V. loc smeared Py diss. V. loc cly (w) alt of plag clasts; in flt
A07-014	27.1	29			QUARTZ ALUNITE	contact w/ lower interval
A07-014	29	31			ANDESITE - PROPYLITICALLY ALTERED	Purple (heavily hematized); w/ cly (w) alt of plag clasts. Most of interval is heavily disintegrated & faulted/fractured. Has appearance of AXT.
						Light green-pinkish purple; has remnant appearance of AXT; heavily fractured. 31.5 m - purple; w/ irreg qtz (Sa?) vlts & vn infill by illite?
A07-014	31	37.3			ANDESITIC CRYSTAL - L. TUFF	(aquamarine green) & relatively soft (H ~2). Vn infill @ 35.25 & 35.65 m = illite/dacite clast replacement?
					ANDESITIC CRYSTAL - L. TUFF - w/ loc	
A07-014	37.3	39.7			zones of silicified fault breccia	Purple; w/ loc zones of pinkish grey partial silicification in FB // to 40° CA. Weak silicification & partial light green (illite) alteration
						Grey; w/ remnant text of pink-tan clasts (Alu?). In parallel contact w/ exotic gangue material of smeared Py & Chl? Jim says this fault material
A07-014	39.7	41.4			FAULT BRECCIA - HYDROTHERMAL?	could be important. Appears to be several pulses of fluid activity (all ~// to CA)
A07-014	41.4	48.3			ANDESITIC CRYSTAL - L. TUFF	Purple (loc tan); w/ light green (illite?) alt of plag frags. Loc sulphate stringers throughout interval. Ser (w) replacement of some frags
						Pink-purple; minor cly (w) alt of plag frags decreasing towards next interval @ 49.4 m. Poss remnant fiamme elongated 90° CA. Trace
A07-014	48.3	49.4			QUARTZ ALUNITE	smeared Py
					ALTERATION FRONT (BANDED) W/	
A07-014	49.4	49.8			SULPHIDES & VUGGY SILICA	Black-grey-tan-white; alteration front w/ qtz-alu (prev interval); has stringer of Py & diss sulphides embaying 4 cm Qtz vein. Kaolinite (white
						clay of some sort, sticks to the tongue) appears to have infilled vugs. Py diss loc abundant. Hematite has also partially filled in vugs
A07-014	49.8	55.2			HYDROTHERMAL BRECCIA	
A07-014			49.8	51.6	HYDROTHERMAL BRECCIA	Grey-brown matrix of Vsi w/ v. fn vugs. Clasts are white-grey & are composed of bleached white barite crystal or amorphous silica. Breccia is
						matrix dominated w ~5% clasts. Vertical banding of grey silica w/ deviations towards CA, becomes subhorizontal @ 50.0 m. Clasts are 0.5-
						6.5 cm (breccia-size). Vugginess increases @ 50.3 m & is seen in the matrix
						Dark grey; transition to a Py matrix w/ vuggy silica clasts. Some of the clasts have been infilled by white clay. 51.6 m: subtle transition to Py
						matrix marked by Py vlts (50° CA) (very subtle). BX is clast dominated w/ clasts up to 13 cm (length-wise in size). Py is diss in the matrix &
A07-014			51.6	55.2	HYDROTHERMAL BRECCIA	loc appears vuggy. 54.40 m - layered banding, wavy text w/ strong Py diss ~40° C. Appears to be small barite bladed crystals (relatively soft).
						Trace sericite? along fracture planes as well (late stage?)
A07-014	55.2	55.9			QUARTZ ALUNITE	Pink; v. weak remnant appearance of AXT w/ minor Py vlts @ 55.2 & 55.9 m. Smeared Py along fract planes & yellow-white sericite along
						fract planes. Gradually transitions to a qtz-alu HBX? @ 56.0 m w/ Py matrix
A07-014	55.9	58.52			HYDROTHERMAL BRECCIA	
A07-014			55.9	58.2	HYDROTHERMAL BRECCIA	Pink-grey HBX? Not as prominent as HBX in Vsi & Msi intervals. Py diss in matrix of clast-dominated HBX. Sericitization overprint is evident
						along fract planes, as well as smeared Py. 58.2 m - irreg seam of abundant Py is alt front w/ Vsi
A07-014			58.2	58.52	HYDROTHERMAL BRECCIA	Grey HBX/VSİ (difficult to differentiate b/w breccia & strong silicification). Dominantly Vsi, poss kao? (white clay, stick to the tongue) infill of
						vugs. Ser restricted to fract planes & v. loc vug infill
A07-014	58.52	59.4			QUARTZ ALUNITE	Light pink (Jim & I think this might be a key colour + weak texture assoc w/ qtz alunite). Remnant AXT text w/ strong white sericitization along
						fract planes. Grounded pebbles @ 58.0 m. Trace smeared Py diss.
						Whitish-grey; difficult to discern matrix from clasts. Milky white silicified. Yellow sulphate (?) in vugs @ 59.70 m ~ // CA (poss important).
A07-014	59.4	62.88			HYDROTHERMAL BRECCIA W/ VSI CLASTS	Partial-weak hematization of clasts @ 59.80 m. 59.80-62.88 m -> clasts appear to be partially replaced by Py (late stage?). No vis barite @
						61.6 m -> becomes extremely vuggy (matrix-dom?). Trace Cp from 62.5-62.8 m.

A07-014	62.88	66.9			HYDROTHERMAL BRECCIA - BANDED SILICIFICATION	62.88-63.25 m - bizarre layered Vsi (unable to see vugs, but can tell by noise made w/ water). Appears to be interlayering of grey & white silica bands perhaps related to crack-seal. Individual bands appear to have normal faults @ 60° CA, with bands // CA. Jim mentions seeing clasts of same mineralization ion in A07-018
A07-014			62.88	63.25	HYDROTHERMAL BRECCIA - BANDED SILICIFICATION	Milky qtz (dom matrix?). Loc massive vugs in Vsi clasts? Difficult to discern clasts from matrix. Loc En flakes. Appears to have clast/matrix orientation of 80° CA
A07-014			63.25	64.35	HYDROTHERMAL BRECCIA - BANDED SILICIFICATION	Very strong vugginess. Vugs separated by thin ~0.5 cm "ridge of rock" (swiss-cheese). <u>Lighter</u> (weight) rock then previous subinterval. Appears to be trace En flakes in matrix
A07-014			64.35	66.9	HYDROTHERMAL BRECCIA - BANDED SILICIFICATION	
A07-014	66.9	68.4			QUARTZ ALUNITE	
A07-014			66.9	67.5	QUARTZ ALUNITE	Pink-grey; textureless; Py vning 40-70° CA & appears to be closely assoc w/ crystalline qtz. Alteration change @ 67.5 m to yellow clay? (vn @ 70° CA); sericite on fracture planes
A07-014			67.5	68.4	QUARTZ ALUNITE	67.5-68.4 m - pink w/ bizarre yellow sericite (?) replacing plag frags. Trace Py in irreg vns & as clast replacement
A07-014	68.4	69			SILICIFIED ROCK (VUGGY)	Remnant HBX? Very dense sulphides w/ abundant Py diss. Difficult to diff matrix from clasts. Partial infill of vugs by clay material. Poss remnant Sal clasts.
A07-014	69	69.6			QUARTZ ALUNITE	Pink "classic" qtz alunite w/ partial limonitization? Appears to have poss remnant fiamme text @ 60° CA. Grades into increased limonite @ 70.6 m. Trace Py.
A07-014	69.6	70.8			FAULTED ANDESITE	Purple; heavily pro alt'd. Plag frags yellow/green (illite?)
A07-014	70.8	72			QUARTZ ALUNITE	Remnant AXT w/ qtz alunite. Yellow liminozation near upper contact.
A07-014	72	74.3			ANDESITIC CRYSTAL - L. TUFF	
A07-014	74.3	76.15			QUARTZ ALUNITE	Purple; limonitized & hematized plag frags. Stronger propylitic alt/disintegration @ 73.5 m. Gradual transition to Qtz Alunite alteration.
A07-014	76.15	76.7			SILICIFIED ROCK (VUGGY)	Pink w/ grey incomplete vns of smeared Py. Sericitic alteration is prominent on fract planes. V. weak alteration front.
A07-014	76.7	81.69			QUARTZ ALUNITE	Grey-white; mod heavy weight; w/ partial infill by clay minerals. Hematization of qtz veins @ 75.5 m. Py vlts are irreg @ thin (1 mm on avg). Poss wk sericite overprint (vis on fract planes).
A07-014			76.7	77.4	QUARTZ ALUNITE	Grey; w/ minimal text, smeared irreg Py diss; loc hematization of Sal clasts (2 episodes of Sal mineralization?)
A07-014			77.4	79.03	QUARTZ ALUNITE	Yellow coating on greyish pink qtz alunite. V weak sericitization (white) on fract planes. Relict fiamme text from 78.5-79.03 m. Note @ 78.6 m ; cream coloured qtz cross-cuts silicified breccia size frag.
A07-014			79.03	81.69	QUARTZ ALUNITE	79.03 m - 30cm intrusion? of strongly hematized AXT (rounded?) 79.55 m - start of interlayered grey & pink qtz-alunite. Pink clasts? are richer in cly (w) plag frags. 80.44 m - 5.5 x 6.5 cm clast of andesite phyric plag. 80.80 m - evidence of cream-qtz enveloping ser en echelon vns @ 50° CA. 80.95 m - relict fiamme-like clasts, bleached white to 81.69 m.
A07-014	81.69	82.5			HYDROTHERMAL BRECCIA	81.69-82.02 m; white-pink; qtz-sericite matrix. Appears as though massive silicified clasts had pyritic infill followed by qtz alt (creamy) which was later sericitized. 82.4 m - pyrite gashes for 10 cm. Poss originally vsi w/ clay infill that has been silicified
A07-014	82.5	84.2			QUARTZ ALUNITE	
A07-014	84.2	84.64			HYDROTHERMAL BRECCIA	Bleached pink; sericitization along fract planes. Exotic radiating pattern of hematized clasts @ 83.90 m. Contact w/ lower interval ~60° CA
A07-014	84.64	91.07			QUARTZ ALUNITE	Remnant hydrothermal breccia w/ clasts dom of qtz-alunite; Py dom as matrix vns & diss. Massive anhedral Py xtals @ 84.3 m on fract plane w/ trace En?
A07-014	91.07	95			ANDESITIC CRYSTAL - L. TUFF	84.64-87.6 m - grey trace fiamme from 86.10-86.20 m @ 90° CA. 87.6-91.07 m - dom pink w/ minimal Py smeared. 88.20-88.36 m - dacite clast w/ large plag phenos. 89.10-89.25 m - massive aquamarine blue (illite?) vein w/ minor qtz. Py vlts on lower contact. Sericite on fract planes. 91.07 m - contact marked by 5 mm wide qtz vein @ 40° CA.
A07-014	95	96.4			QUARTZ ALUNITE	92.3 m - yellow alt (limonite) of plag frags. Massive band of sericitically alt layers. Pink-green-white ~5 cm wide @ 94.6 m
A07-014	96.4	97.1			ANDESITIC CRYSTAL - L. TUFF	Light pink; irreg < ser vning, interlayered w/ Py vning. 96.2 m - microfault offsets Py + ser vn
A07-014	97.1	97.25			QUARTZ ALUNITE	Purple; heavily hematized; alt contact rounded
A07-014	97.25	97.6			ANDESITIC CRYSTAL - L. TUFF	Pink; w/ subtle lower contact; Py assoc w/ sericite
A07-014	97.6	97.67			QUARTZ ALUNITE	Dark purple; plag crystals wkly alt
A07-014	97.67	97.85			ANDESITIC CRYSTAL - L. TUFF	Pyrite assoc w/ sericite; pink colour
A07-014	97.85	98.35			QUARTZ ALUNITE	Purple; sericite veins bounded by small alt halos of Sal? Gradual transition to Sal.
A07-014	98.35	108.8			ANDESITIC CRYSTAL - L. TUFF	Pink; textureless; w/ trace smeared Py
A07-014	108.8	110.3			QUARTZ ALUNITE	Purple; alteration of plag frags to light green Ich or Cly? Exotic hematite pressure dissolution layering @ 105.0 m (former fault?) Sa vning @ 106.6 m. Contact w/ qtz alunite separated by milky qtz vein @ 30° CA.
A07-014	110.3	110.95			ANDESITIC CRYSTAL - L. TUFF	Light pink-grey w/ gashes of Py & smeared Py on fract planes.
A07-014	110.95	111.45			QUARTZ ALUNITE	Purple; hematized; weak alt of plag grains
A07-014	111.45	112			SILICIFIED ROCK (VUGGY) -	Pink; w/ trace smeared Py gashes; hard to differentiate from vsi (transitional)
A07-014	112	112.7			HYDROTHERMAL BRECCIA	
A07-014	112.7	114.1			QUARTZ ALUNITE	Strong tan-grey Vsi w/ Py vns @ ~30° CA (not spongy vsi). Matrix of Msi?
A07-014	114.1	114.7			SILICIFIED ROCK (VUGGY)	White-bleached-pink; rock might be misplaced; smeared Py diss
A07-014	114.7	116.2			QUARTZ ALUNITE	Tan-grey w/ heavy Py diss; loc Py crystals have infilled vugs. Py vning ~50° CA. Sulphides cut thought vugs.
A07-014					ANDESITIC CRYSTAL - L. TUFF	White-pink; grey smeared Py diss. Py on fracture plane ~30° CA b/w grey (upper) & pink (lower) Sal
A07-014					QUARTZ ALUNITE/MINOR MASSIVE	Purple; alt of plag frags to clay; minor fracture sericite infill
A07-014	116.2	117			SILICIFICATION	
A07-014	117	119			RHYODACITE DIKE - w/ abundant sulphate stringers	Pink-grey; w/ strong sericitization & smeared Py on fracture planes. Strong limonitization @ fault contact (107.0 m) from Py?
A07-014	119	138.45			RHYODACITE DIKE - sparsely porphyritic	Purple w/ abundant brown sulphate stringers which turn green to white w/ acid
A07-014	138.45	144.3			RHYODACITE DIKE	Red-brown; fine groundmass; phenos altered green w/ ~25% of phenos weathered out of rock leaving cavities. Has cracked appearance on outside of rock. Weakly magnetic.
A07-014	144.3	145.1			FAULTED ANDESITE - Strong Pro alt	
A07-014	145.1	147			QUARTZ ALUNITE	Green; mod magnetism; cracked appearance; phenos are less pronounced then 119-138.45 m interval. Minor spherulites at lower contact.
						Purple; heavily hematized (spectular & diss); chloritized. Separates RDD from qtz alunite
						Grey-white; w/ Py stringers 30-40° CA & assoc w/ ser

A07-014	147	147.3	SILICIFIED ROCK (VUGGY)	Bleached, white w/ dense grey sulphides & Py diss in vugs. Rock has been kaolinized
A07-014	147.3	147.7	QUARTZ ALUNITE	Light grey-white; w/ relict fiamme-like lenses from 147.6-147.7 m. Gradual transition to next interval
A07-014	147.7	148.8	ANDESITIC CRYSTAL - L. TUFF	Plag alt to Cly (w), loc cavities have been formed by removal of plag crystals
A07-014	148.8	150.7	QUARTZ ALUNITE	Grey; w/ smeared Py & sericite on fracture planes. Transition to pink qtz alunite @ 149.6 m w/ no visible Py
A07-014	150.7	152.9	ANDESITIC CRYSTAL - L. TUFF	Purple; minor sericite on fracture planes; Cly (w) alt of plag frags
A07-014	152.9	154.3	QUARTZ ALUNITE	Bleached white w/ sericitization along fracture planes - Py diss closely assoc w/ sericite
A07-014	154.3	156.1	HYDROTHERMAL BRECCIA	White-cream; milky qtz represents the matrix w/ clasts infilled by Vsi & loc Py. Sericitization restricted to fracture planes.
A07-014	156.1	156.4	SERICITICALLY ALTERED ROCK	Grey; strongly sericitized; abundant smeared Py
A07-014	156.4	159.1	HYDROTHERMAL BRECCIA	Milky white-cream qtz matrix w/ soft clear-white (sericite?) overprint. Loc vsi (s) contact @ fault ~40° CA (both sides of fault).
A07-014	159.1	160.8	ANDESITIC - Strong Pro alt	Purple; heavily altered; essentially all FG w/ small fragments of rock (heavily fractured)
A07-014	160.8	163.18	ANDESITIC CRYSTAL - L. TUFF	Purplish-green; strong hematization along fault planes. Strong chlorite alteration.
A07-014	163.18	167.8	ANDESITIC CRYSTAL-RICH TUFF?	Green; w/ elongated lithic frags (fiamme-like?). Left-lateral offset of silicified vein ~0.5 cm thick (@165.9 m)
A07-014	167.8	168.2	FAULT BRECCIA	Fault breccia/strain zone w/ heavily chloritized & silicified fragments
A07-014	168.2	178.6	ANDESITIC CRYSTAL - L. TUFF	Green; w/ minor elongation of frags. Poss remnant alt pumice frags
A07-014	178.6	178.9	FAULT BRECCIA	Green-tan; clasts partially silicified & chloritized.
A07-014	178.9	180.75	ANDESITIC CRYSTAL - L. TUFF	Same as interval 168.2-178.6 m
A07-014	180.75	181.3	FAULT BRECCIA	Heavily silicified w/ loc smeared Py
A07-014	181.3	183.5	ANDESITIC CRYSTAL - L. TUFF	Clasts HEAVILY chloritized (green); contact w/ lower interval @ 30° CA.
A07-014	183.5	183.8	FAULT BRECCIA	Faulted & fractured (tan-grey) w/ loc strong smeared Py. Interesting b/c it does not fit w/ bounding intervals
			Hematized? Chloritized? Fault breccia/fault gouge	
A07-014	183.8	185		Strongly hematized fault gouge w/ wk breccia pebbles (Red w/ green colouration loc)
A07-014	185	187.8	ANDESITIC CRYSTAL - L. TUFF	Green; minor light pink hematization of plag frags
A07-014	187.8	188	FAULT BRECCIA	Green-purple; w/ rounded breccia pebble clasts
A07-014	188	208.8	ANDESITIC CRYSTAL - L. TUFF	Green; typical AXT; hematization on fract planes; no distinct faults in interval
A07-014	208.8	223.42	ANDESITIC CRYSTAL-RICH TUFF	Green w/ pink frags; appears similar to what Jim calls crystal-rich. Elongated crystals ~80° CA. Slight hematization of frags & fract planes.
A07-014	223.42 EOH		END OF HOLE	
			Poor recovery - mixed fragments suggest overburden?	
A07-015	0	3.1		
A07-015	3.1	3.65	BEDROCK - into M-S Qtz Alunite	Strong Quartz-Alunite rock - relict textures suggest Andesite Crystal Lapilli Tuff. Rock is bleached & texture mostly destroyed; patches of more grey silica have remnant diss Py
				3.65 m - transition into vuggy silica rock - Nice looking material w/ mixutre of vuggy silica + massive silica - locally minor remnant feldspar sites have white clay & most vuggy texture appears to be produced by leaching of feldspar sites - some may be from leach of pyrite. The silica rock is locally brecciated & re-healed by multiple silicification events. The silica rock is also fractured & partly re-healed but w/ open pockets - this appears to be cause of difficult drilling some silica rock - many intervals (deeper?) are broken and the rock comes out as subrounded (ground) fragments- they generally have poor recovery of this. Pyrite is generally very fine + is variable from fine disseminations to patches of semi-massive Py-quartz. See a fine dissem tan mineral in the quartz - not sure what this is - possibly rutile? It is sometimes assoc w/ dissem Py. 8.3 m - broken rock - not significant fault -prob was just a little broken - don't see any barite or VG here
A07-015	3.65	9.3	Vuggy + Massive Silica-Pyrite	9.3 m - loose vuggy quartz - continue in the massive silicified andesite w/ abundant Py; see minor pinkish alunite spots
A07-015	9.3	10.9	Massive Silica-Pyrite	10.9 m - rapid change in alt - into pinkish st Qtz-alunite rock - halo on the vuggy massive silica zone; abundant dissem Py continues to 11.4 m - then decreases rapidly to nil at 11.7 m
A07-015	10.9	11.7	Quartz Alunite-Pyrite Halo	At 11.7 loose Py - continue in med pink quartz alunite rock w/ good relict textures - AXT. There is large patch of grey weakly silicified andesite at 13.15 to 14.3 m - looks like some remnant collapsed pumice textures? Contact b/w weak silicified andesite & strong quartz alunite is very sharp irreg contact - sample for <u>thin section @ 13.12 m</u> ~14.5 - pick up 0.2-0.5% dissem Py tends to be in remnant fiamme-like clasts in andesite. 14.85 -> 0.5 mm PY veinlet 25° CA
A07-015	11.7	17	Quartz Alunite	
A07-015	17	17.9	Small Interval Vuggy + Massive Silica in st Qtz-Alun alt	Small interval 17.0 to 17.9 m increased silicification - good vuggy silica + massive silicic rock - think pieces of core are mixed up in here?
A07-015	17.9	20.5	Quartz Alunite	Strong Quartz Alunite altered - prob AXT w/ some remnant patches of grey quartz alunite rock w/ dissem Py. Most dissem Py in pink qtz alunite is altered or partially altered. At 18.9 m - 1-3 mm thick whitish sericite vein at 15 ° CA
				Light grey Andesite - better textures crystal rich lapilli tuff - v. wk silicified - mostly pervasive alunite + sericite-clay. 20.73 to 23.77 m - only 38% recovery - mostly med broken pieces - prob most core loss at about 21.25 m, right here pick up mod-st quartz alunite rock. Also probably fault at 23.00 m get spun mod silicified rock and at 23.77 m get strong silicified + massive silicified rock
A07-015	20.5	21.25	Interval of Andesite w/ weak alunite, weak sericite-clay alt	BROKEN FAULTS - only 38% core recovery 20.73 to 23.77 m - not sure of meterage - includes good looking strongly silicified rock above 23.77 m block & vuggy silica below block - don't know thickness of silicification zone - and none of 20.73 - 23.77 was assayed! Another lost interval due to poor recover
A07-015	19	21	???	Light pinkish grey strong Quartz Alunite Rock - AXT
A07-015	21.25	23	Strong Quartz Alunite	Massive + vuggy silicified rock - has strong qtz alunite on both sides - but drillers had trouble prob because of faulting and highly fractured silica
A07-015	23	24.1	Massive + Vuggy Silica	Pinkish brown strong qtz-alunite rock w/ some green sericite
A07-015	24.1	26.75	Strong Quartz Alunite	26.75 alteration contact - not a fault! Medium purplish brown AXT - has some remnant biotite -bronzy altered by hematite & chlorite? w/ dissem hematite, plag replaced by soft clay? or sericite?
A07-015	26.75	32.8	Andesitic Crystal - L. Tuff	
A07-015	32.8	37.9	M-S Quartz Alunite	At 32.8 m - fault contact back into M-S Quartz Alunite rock cut by broken-gougy faults + thin sericite veins/bands. At 37.0 m - 3-4 mm quartz-sericite vein is 45° CA. At 38.0 m - decrease alunite content - less bleached becomes grey andesite w/ weak qtz-alunite alt w/ dissem Py
A07-015	37.9	39.5	Wk-Mod Quartz-Alunite-Broken Rock	
A07-015			Fault Zone w/ Alt Andesite	Major fault contact b/w wk-mod qtz-alunite-Py alt andesite (uphole) and RDD (dike) downhole. Fault bx has both rock types

A07-015	39.5	65.95		Rhyodacite Dike w/ numerous faults	Brownish to tannish grey RDD (Dike) w/ 1% (2 mm) Qtz, 7-8% (1-4 mm) plag + 2% (1-4 mm) Kspar in aphanitic-dissem hem after magnetite. At 39.75 - RDD has pinkish barite? In irreg gash veinlet + most of dike is non-magnetic (mag alt to hem) - at ~52.5 m - local spots wk to mod magnetite - magnetite fresher. Numerous broken gougy faults cut dike. 44.0 - 45.1 m - RDD is reddish, 45.1 - 50.5 m - RDD is greenish, 50.5 - 63.4 - RDD is the usual reddish brown, 63.4 - 65.95 m - RDD is tannish colour - because non-magnetic mag alt to hem. 60 m - reddish brown RDD (Dike) w/ altered feldspars. At 65. 8 m - irreg qtz-dolomite/siderite (Eff w/ scratch only) veins. Sharp contact - intrusive contact - no chill textures, mainly colour change from tannish RDD (dike) up hole w/ reddish brown Andesite Tuff. 65.95-66.35 m - brick red Andesite Tuff. It is difficult to see the texture change at contact! More crystals in tuff + finer grdmass/matrix in dike. 66.35 m - into dark purple grey AXT. At 67.05 m - small band of the 'spherulitic' texture - small rounded 2-3 mm blebs brown spherulite in greenish matrix Just below dike the propylitic altered andesite rapidly transitions into mod qtz-alunite-sericite (?) altered rock - loc w/ abundant fn diss Py. At 68.5 - irreg 8 to 20 mm qtz-Py vein 15° CA Interval w/ increased silicification + Py assoc w/ qtz-Py and qtz-sericite veins. At 69.55 - a later (6-15 mm) qtz-Py vein (15° CA) cuts earlier qtz-Py blotchy bands. At 69.95 - a 1 cm sericite-illite band w/ Py is 35° CA Narrow zone Purplish-grey AXT w/ sharp alteration contacts w/ surrounding qtz-alunite alt. Contact at 71.35 m is irregular; at 72.25 contact is 45° CA
A07-015	65.95	67.1		Andesitic Crystal - L. Tuff	
A07-015	67.1	71.35		Quartz-Alunite Alt Zone in Andesite Sub-interval w/ more silicification + Py in Quartz-Alunite zone	
A07-015			69.1	70	
A07-015	71.35	72.25		Propylitic altered Andesite	
A07-015	72.25	77.9		Quartz-Alunite Alt Zone	Into more mod qtz-alunite altered andesite w/ abundant fn gr sericite or illite veins + local abund Py. At 72.95 m - 4 parallel 2 to 10 mm thick sericite-illite vn @ 40° CA. At 74.4 m - irreg qtz-ser? Vein 30° CA. At 74.45 m - three 8-10 mm thick sericite vein @ 60° CA. Mod qtz alunite w/ sericite-illite? alt of plagioclase. More pyrite from 75-76 m & 77.4-77.6 m. At 75.2 m - irreg Ser-Py veins 55° CA to 10-12 mm w/ abundant Py. At 75.8 m - more irreg Ser-Py veins w/ abund Py. At 76.35 - 1 cm sericite vein 50° CA. At 77.4-77.6 m - peculiar fn 1-2 mm Py veinlets that partly make irreg replacements of qtz-alunite rock 60° CA, several mismatch pieces at 78.03 m block. Alteration contact from quartz-alunite (uphole) into propylitic alt andesite - hematitic med-dark purplish andesite. At 78.45 m - propylitic alt Andesite is cut by 2-5 mm sericite vein 60° CA - no halo on vein - this supports that the sericite veins cutting the qtz-alunite altered rock are later and super imposed!
A07-015	77.9	79.8		Andesite	
A07-015	79.8	82.85		Quartz-Alunite	At 79.8 m -back into mod-st qtz-alunite rock: this is prob a fault contact but core is mixed up; pretty punky-ground-up at 79.4 m At 82.85 - sharp alt change at fault - fault contact between qtz-alunite rock (uphole) and propylitic alt andesite down hole. 5mm qtz veinlet @ 84.6 m is 30° CA. At 85.9 m - 2 to 6 mm pinch-swell qtz vein 15° CA. At 87.5 m - irreg 3-6 mm is 60° CA. At 88.4 m - 5 to 6 mm qtz vein is 65° CA. At 88.5 m - 4-5 mm qtz vein is 65° CA. At 91.66 m - 2-3 mm qtz vein is 55° CA. 93.31 m - back into another fault slice of qtz-alunite alt rock - don't see the sericite Py veins in this one. Across another broken gougy fault + back into med-dark purplish grey AXT. At 96.3 m ~8-10 mm qtz-ser vein @ 40° CA. 99.15 to 99.25 - qtz-sericite banded vein w/ chlorite-sericite-qtz 75° CA bands + trace silvery grey metallic - looks like hematite (but no red streak) - not sure what it is? Compaction foliation in Andesite tuff @ 118.85 m is 50° CA. 124.5 m - compact foliation in Andesite is 50° CA. 125 m - irreg bands - bleached sericite-clay alt. 127-127.4 m - sm zone bleached sericite0clay alt. The andesite has colour variations - reddish to greenish. 96 to 117 m - is med dark greenish grey. 117 to 119 m - is med dark reddish grey. 119 to 135 m - is med-dark greenish grey. 135 to 144.5 m - is med-dark reddish grey. 129.5 m - 8 mm qtz vein 40° CA. At 144.5 m - change into the fiamme-rich andesite. 131.5 m - strong compaction foliation in andesite tuff (25-30% fiamme) 45° CA. At 144.5 m - start seeing more obvious fiamme - a fairly sbutle change but much more evident lighter coloured elongated fiamme - like inclusions w/ strong compaction foliation. The fiamme unit still has clasts of various andesites - intervals of the Andesite-Dacite Fiamme Tuff? 145.0 m - compaction foliation is 50° CA. 144.5 to 161.5 m is med-dk greenish grey (esp fiamme). 148.6 m - normal fault gouge w/ good orientations (40° CA). 161.5 to 164 m is med-dark reddish grey. 156.6 m - 8-10 mm white qtz vein in fault 25° CA. 164.0 to 170.99 m is mixed med greenish (Fiamme) + reddish (matrix), both colours have dissem hematite - non-magnetic and don't see any significant Py. COMPACTION FOLIATION is present in all of this andesite - it looks like difference is produced by colour difference b/w fiamme & matrix. Places where fiamme are lighter produces more evident collapsed-pumice like textures. 165 m - fault w/ disrupted qtz-calcite vn + minor vuggy-like qtz 30° CA. At 170.3 m - 2.0 cm calcite vein along small (3 cm) fault 40° CA
A07-015	82.85	94.05		Andesitic Crystal - L. Tuff	
A07-015	94.05	96		Quartz-Alunite	
A07-015	96	144.5		Andesitic Crystal - L. Tuff	
A07-015	144.5	170.99		Andesitic Crystal - L. Tuff w/ more evident fiamme-rich intervals	
A07-015	170.99 EOH			END OF HOLE	
A07-016	0	3		CASING	
A07-016	3	5.5		1st large piece st quartz alunite w/ abundant pyrite	Start core recovery at 3.0 m - loose chips Msi, may be overburden? First 0.5 m - med str qtz-alunite-Py core; variable Py from nil to almost massive patches. At 3.5 m into broken fault - chips quartz-alunite-Py to ~4.0 m. At 4.0 to 4.15 m - 1.5 cm of great looking multistage hydrothermal breccia - has angular fragments of brown to grey Msi in light grey fine grained silica + white clay (?) filling late voids & some Py. These hydrothermal breccias may be the main structural conduits for the Vsi + msi zones (w/ haloes of quartz-alunite)?
A07-016			4	4.15 Hydrothermal Breccia	5 to 6 m interval only 30% recovery - into fault at 5.3 m. 1st part is gougy qtz-alunite rock (2nd part is crushed-gougy fault slice of grey andesite (str clay))
A07-016	5.5	6.15		Fault Sliver - Andesite Quartz-Alunite w/ relict andesite crystal lapilli tuff texture	6.15 to 6.9 m continue in broken qtz-alunite rock. 6.9 to 7.8 m - interval str qtz-alunite rock - into fault at 7.5 m. Gougy fault 7.5 to 8.4 m - contact b/w faulted qtz-alunite (uphole) and another fault slice of propylitic altered (much clay) andesite at 7.8 m
A07-016	6.15	7.8			Fault slice of propylitic alt andesite (all gougy clay) at 8.0 m there is a small patch of crushed andesite w/ large pyrite grains 1 to 5mm. Have seen remnants of bio phenos in the andesite slices.
A07-016	7.8	8.4		Fault Sliver - Andesite	
A07-016	8.4	15.5		Strong Quartz-Alunite +/- Py zone	
A07-016			8.4	10.75 Sub interval - tannish/pinkish qtz alunite	Sub interval - more bleached qtz-alunite - think pyrite mostly oxidized
A07-016			10.75	14.5 Sub interval - tannish grey qtz-alunite-pyrite	Sub-interval - w/ relatively abund dissem Py + local Py concentrations in remnant fiamme Sub interval more bleached qtz-alunite w/ dissem Py oxidized? Contact b/w qtz-alunite (uphole) and andesite (propylitic altered - downhole) is in fault zone at 15.5 m - both rock types severely faulted.
A07-016	15.5	17.4		15.5 Sub interval - tannish pink qtz alunite	Another fault slice of propylitic alt AXT; the andesite has med-dk purple grey colour w/ fine dissem hematite
A07-016	17.4	22.7		Strong Quartz-Alunite Alt	Across fault into strong light pinkish brown qtz-alunite rock - most texture is destroyed - but still have sericitized remnants of plagioclase grains. At 21.8 m - pick up dissem pyrite in the quartz-alunite rock don't see the sericite (?) greenish veins in this zone
A07-016			17.4	21.8 Subzone Quartz-Alunite w/o pyrite	

A07-016			21.8	22.7	Subzone Quart-Alunite-Pyrite	
A07-016	22.7	24.57			Into Strong Silicified Zone	Alteration contact strong quartz-alunite zone (uphole) w/ strong silicified zone (downhole) - into mixed massive silica; vuggy silica & still some strong qtz-alunite rock
A07-016	24.57	31.43			Hydrothermal breccia at contact of fine vuggy silica (spongy) zone	At 24.57 m - into vuggy silica-matrix hydrothermal breccia sharp change alt contact of 2-3 cm thick hydrothermal breccia and then into a strange vuggy silica zone - it is different then the ones I have seen to date - much finer pores and no evidence of the tuff textures- this may all be hydrothermal breccia w/ silicified fragments (massive - brownish) in light grey silica sponge - it soaks up water like a sponge! There is a fairly thick zone + extremely interesting - there is a small vein w/ local spots of comb quartz crystals and also clasts w/ white barite. Should be gold in this stuff!
A07-016			29.35	31.43	Sub-Zone of Vuggy (Spongy) Silica Rock w/ Pyrite	Sub-zone - continue same v. fine very porous vuggy (spongy) silica - with wispy Py + dissem Py - Py occurs in the fine pores. At 31.43 m - sharp irreg contact b/w the spongy silica zone (uphole) with mod silicified andesite ~25° CA.
A07-016	31.43	32.4			Mod-str silicified rock	Narrow interval of mod silicified (with alunite?) rock
A07-016	32.4	37.3			Strong Quartz Alunite Alt	At 32.4 m into the light pinkish brown qtz-alunite rock w/ faint relict textures suggesting AXT; this only has trace fine dissem Py near 37.2 m. Narrow zone similar to 31.43 to 32.4 m of mod silicified Andesite - with good remnant textures + plag xtals replaced by white sericite-illite?
A07-016	37.3	38.45			Mod Silicified Andesite Crystal Lapilli Tuff	Locally abundant fine Py ars irreg stringers & patches Back into very good looking vuggy silica zone w/ chalcopyrite-pyrite; this is the more normal vuggy silica w/ remnants of Andesite Tuff texture. At 38.8 m - start seeing diss chalcopyrite w/ diss Py. At 39.2 m - there are irreg stringers of chalcopyrite w/ patchy spots of very fine barite - the barite appears to be assoc w/ the chalcopyrite. At 48.0 m - there are remnant patches of qtz-alunite in the spongy silica. At 139.95 m - fine Py vlt 25° CA.
A07-016	38.45	40.34			Vuggy Silica Zone	Into strong med pinkish grey qtz-alunite alt andesite. At 41.9 m - fault contact - quartz alunite rock (uphole) w/ propylitic alt andesite downhole.
A07-016	40.34	41.9			Strong Quartz-Alunite Rock	Dark reddish brown Andesite Crystal Lapilli Tuff - nonmagnetic w/ fine diss hematite grains. 43.92 m - 1-2 mm Qtz vein 70° CA; 44.82 m - 3mm qtz vein 50° CA. 47.3 m - fault in the qtz-alunite rock.
A07-016	41.9	46.5			Andesite Crystal Lapilli Tuff	Another fault contact at 46.5 m - faulted, broken + gougy andesite uphole w/ m-s qtz-alunite rock (downhole) w/ diss & minor irreg stringer Py. 48.3-48.8 m has abundant fn gr Py patches-stringers.
A07-016	46.5	49.25			M-S Quartz Alunite	49.3 m - fault contact qtz-alunite rock (uphole) w/ propylitic alt andesite downhole - this is a big fault zone! w/ much gouge & finely broken andesite. 55.2 m to 56.4 m another fault zone - this one is intact - broken rock w/ gougy seams ~25° CA. Propylitic andesite med-dk pinkish grey AXT. At 62.0-62.1 m there is highly brecciated quartz vein
A07-016	49.25	62.2			Propylitic Alt Andesite Lapilli Tuff	Andesite-Dacite Fiamme Tuff (?) w/ 25-30% fiamme-like flattened clasts. At 63.3 m strong compaction foliation is 50° CA. Fault at 63.9 m is 45° CA; fault is just before contact w/ RDD (dike)
A07-016	62.2	64.3			Interval of Andesite-Dacite Fiamme Tuff	
A07-016	64.3	82.6			RDD (dike)	Sharp contact w/ slt undulations - into light pinkish grey 40° CA RDD (dike). There is 20.0 cm margin w/ the spherulitic (?) blebs ~15% remnant feldspar phenos to 3 mm in orangish brown aphanitic matrix fault contact RDD 55° CA. More spherulitic textures 66.4-76 m. Then wk-mod magnetic where It becomes red-brown 51.2 m. 67-69 m dike is cut by gashy white calcite veinlets mostly 40-50° CA. More reddish brown rhodacite porphyry dike (64.3 m) w/ ~20% phenocrysts (0.5-1% quartz, 15% fspar & 3-4% chloritized biotite in aphanitic grdmass)
A07-016	82.6	82.75			RDD (dike)	Fault contact (82.6 m) RDD (uphole) w/ dk purple-grey Andesite Crystal Lapilli Tuff (downhole)
A07-016	82.75	82.9			Fault Slice Silicified Rock	Small slice silicified altered rock caught up in fault zone b/w RDD & AXT; brecciated dk grey to white v. fn gr silica lower contact is ~20° CA.
A07-016	82.9	84.4			Andesite Crystal Lapilli Tuff	Dark grey Andesite Crystal Lapilli Tuff; hematite w/ dissem hem 0.5% plag xtals altered/replaced by lt greenish sericite
A07-016	84.4	85			Quartz Alunite rock	At 84.4 m alteration transition into the pink qtz-alunite alt may be halo on sericite band; 84.8 to 84.95 m sericite vein/band at 60° CA
A07-016	85	85.3			Massive Silica (+Alunite?) Rock	Small interval of massive silicified rock w/ alunite - the pink rock (qtz-alun?) may be halo on this small zone
A07-016	85.3	85.9			Quartz-Alunite rock	Next fault zone 85.6 to 86.0 m w/ fault brecciated qtz-alunite rock in upper part and propylitic andesite in lower part Med-Dark Purple Andesite Crystal Lapilli Tuff - totally nonmagnetic. At 87.2 m - compaction foliation in AXT is 40° CA. At 90.38 m - sm fault w/ silicic frags in bx & sericite halo. At 91.95 m - 1.2 cm qtz-hem vein w/ sericite halo 40° CA. At 91.95 m - ~1.0 cm qtz-sericite vein in AXT 50° CA. At 93.95 m - broken fault zone w/ broken rock, breccia & gouge. At 97.7 m to 97.9 m same qtz-alunite rock + breccia clasts of mod silicified material. At 102.55 m - irreg 2-5 mm cal veins w/ ser-clay halo 20° CA Repetitions of dark purple Andesite and bands of wk to mod pink qtz alunite alteration & mostly broken fault contacts b/w pink qtz alunite 106.4 to 107.05 m; 107.2 to 108.55 (contact ~50° CA) ~110.25 m - compaction foliation in AXT 50° CA. 122.5 m - 1.5 cm grey gtz vein 50° CA. At 130.4 m is 1 cm quartz vein (40° CA) w/ halo of pink qtz alunite rock from 130.2 to 130.6 m. At 130.6 m into andesite-dacite fiamme-tuff? appears to have much higher fiamme-like flattened clast content (35 %). Strong compaction foliation 35-40° CA @ 130.8 m & 40-45° CA @ 134.25 m
A07-016	85.9	106.5			Andesite Crystal Lapilli Tuff	
A07-016	106.5	108.6			Andesite Tuff w/ mixed Qtz Alunite Alt	
A07-016	108.6	135.64			Andesite Crystal Lapilli Tuff	
A07-016	135.64	EOH			END OF HOLE	
A07-017	0	3.05			CASING	
A07-017	3.05	3.5			Probable Overburden	Overburden mixed rock Andesite-Propylitic and quartz-alunite rock - couple rounded clasts & piece of wood
A07-017	3.5	3.9			Andesite Propylitic alt	At 3.5 m - into med-dk purple grey broken-weathered (?) or faulted andesite crystal lapilli tuff. This still could be overburden?
A07-017	3.9	4.2			Mixed pieces Propylitic Andesite + Quartz-Alunite	3.9 to 4.2 - mixed interval - may be complications due to faulting? The broken Propylitic andesite continues to 4.57 m - favour that hole started in propylitic andesite and immediately into fault zone w/ the quartz-alunite rock. It is possible that overburden continued to ~4.2 m - but this seems quite thick? Adjacent holes may help?
A07-017	4.2	4.5			Broken Andesite - Propylitic Altered	Broken Andesite - med-dk purple-grey Andesite Crystal Lapilli Tuff. Prob in faulted bedrock?
A07-017	4.5	5.7			Quartz-Alunite Pyritic Clay Altered Zone	Alteration contact at 4.5 m - sharp transition may support a fault contact? Propylitic andesite up hole is broken into m-s quartz-alunite alteration of andesite crystal lapilli tuff from 4.5 to 5.7 m has more clay? alt of the remnant feldspars - minor zones still have ~0.5% diss Py - but it is oxidized - leached in some of the stronger intervals. 5.0 to 5.2 m and 5.4 to 5.8 m are broken.
A07-017	5.7	8.1			Quartz-Alunite-Pyritic Altered	Light pinkish brown quartz-alunite-pyrite - strong alteration of Andesite (AXT) w/ fairly abundant dissem pyrite (0.5 to 1.0%). Minor patches of silica flooding wipe out textures. Remnant fiamme (?) are preferentially replaced by greenish grey quartz-sericite?
A07-017	8.1	12.4			Quartz-Alunite Pyrite Altered w/ pervasive silicification	Light to med grey and pinkish grey quartz-alunite-pyrite w/ more silicification - The dissem pyrite contact drops off in this stuff. Looks like 9 to 10 to 11 intervals are shorted (0.5 m) but there is excess on both sides 8 to 9 m and 11 to 12 m.. Don't think there is signif core loss - some broken zones in 11 to 12 m interval suggest some brittle fractured zones.

A07-017	12.4	16	Vuggy Silica w/ High Pyrite Zones	<p>Into Strong mineralized zone - Vuggy Silica w/ Alunite and Clay most relict texture completely destroyed (prob AXT protolith?) think there is still fine gr alunite in areas and there are bands of fine semi-massive pyrite at 12.47 m to 12.75 m ~30° CA, 13.08 to 13.58 m - ~40° CA, 15.6 to 15.8 m - irreg patches massive Py-qtz, don't see any VG in here - but rock looks great -should run good! small broken zone at 16.4-16.6 m.</p> <p>At ~16.0 m loosing the vuggy silica texture and into light grey to light pink more massive silicification w/ considerable alunite? + some clay? And this may be one of the precursors to vuggy silica rock - where alunite + clays are leached? Still see the small massive bands of pyrite-quartz at 16.2 to 16.4 m at 70° CA; irregular blotches at 18.25 to 18.35 m, 19.0 to 19.25 m; 19.8 to 19.9 m. See hints of relict textures supporting AXT protolith - but much texture wiped out</p> <p>Back into fine vuggy silica rock - still has some alunite + white clay? Difficult to tell - but appears vuggy silica zone produced by locally of the fine alunite + removal of white clay? Locally some vuggy silica may be produced by removal of the semi-massive pyrite. Minor broken zones - not signif faults - don't think there is signif core loss</p>
A07-017	16	19.25	Change to more Massive Silicification but with significant Alunite (?) and late clay-illite? With high pyrite zones	
A07-017	19.25	22.1	Vuggy Silica w/ alunite clay & high pyrite zones	
A07-017	22.1	26.45	Str Quartz Alunite	<p>At ~22.1 m transition into Strong Quartz Alunite rock - occur just after broken zone from 21.8 to 22.05 m - so may be a fault contact? Into the light pinkish to lt-med reddish Quartz-Alunite rock w/ greyish green sericite? Or illite after plag xtals & some fiamme-like clasts. Quartz Alunite zone is cut by numerous small broken zones - prob minor faults. At 25.9 m - into signif fault zone w/ much broken rock.</p> <p>One piece of medium to dk grey breccia w/ pink quartz-alunite clasts and minor grey massive silica clasts in quartz-pyrite matrix prob <u>Hydrothermal breccia</u> just one piece!</p> <p>25.9 to 26.8 m then gougy + broken zone. 26.8 to 27.5 m - there is a contact b/w st qtz-alunite rock (uphole) and propylitic alt andesite (AXT) in the fault zone at about 26.45 m, therefore this is a fault contact into a faulted slice of propylitic altered wall rock</p> <p>At 28.65 m - fault contact propylitic alt Andesite Crystal Lapilli Tuff (uphole) w/ strong silicified vuggy silica rock - the andesite is highly broken faulted w/ clay gouge at 28.08 to 28.25 m. At 28.07 m there is contact b/w massive silicified band and vuggy silica @ 60° CA. Light grey colour</p> <p>At 29.2 m - pick up abundant irreg 'stringers' bands of remnant Cu-sulphide; mostly the black Cu-oxide? Phase w/ minor covellite & traces of the original chalcopyrite. 'Bands' are ~60° CA.</p> <p>At 29.8 m - 3-4 cm 'vein' band of white barite and copper phases; mostly the black hard phase w/ trace covellite + local patches of chalcopyrite. The vuggy silica + places w/ heavy impregnations of copper-oxide-sulphide are very porous + soak up water. From 29.8 to 30.2 m - has very abundant Cu-oxide sulphide ~25-30%. I still think the black stuff looks like chalcocite, but it is harder. I would like to have split this interval out for assay - I bet it is multi-ounce shit.</p> <p>Again barite is clearly assoc w/ the copper mineralization! At 30.3 to 30.8 m zone of breccia textures w/ brownish & greyish silicified fragments (both massive silica + vuggy silica) in whitish to pinkish vuggy silica matrix - not sure about this one - could be remnant bx texture from Andesite Lapilli Tuff; this zone has pinkish bands of vuggy silica - FeO?</p> <p>30.9 to 31.3 m - more remnant irregular Cu bands in vuggy silica, again assoc w/ white barite ~50° CA. 31.8 to 31.95 m - more barite banding w/ dark vuggy silica bands - prob had Py and Cu-sulphides? 50° CA - these may give orientations of main silicification zones? At 32.15 to 32.25 m - more pyrite and grey silica banding - still see remnants of chalcopyrite - the dark grey/black Cu phase + covellite disseminations - 50° CA. At 32.9 m - see pieces of brownish massive silica (w/ vugs) in light grey vuggy silica. At 33.1 to 33.2 m - more remnants of Cu-sulphide stringers in vuggy (light to dark grey) silica.</p> <p>33.2 to 34.35 m - mostly dk brown to grey brown massive silica typically brecciated w/ matrix of brownish grey vuggy silica - looks like possible hydrothermal brecciation of earlier massive silica and later stage of vuggy silica as matrix</p>
A07-017	26.45	28.65	Andesite Crystal Lapilli Tuff	
A07-017	28.65	33.2	Vuggy Silica Rock	
A07-017		29.2	33.3 Mod Copper-Vuggy Silica Rock	
A07-017		29.8	30.2 High Copper-Vuggy Silica Rock	
A07-017		30.3	30.8 Poss Hydrothermal Breccia? w/ vuggy silica	
A07-017		30.8	34.35 Vuggy Silica Rock	
A07-017	33.2	34.35	Mixed Massive Silica and Vuggy Silica Zone	
A07-017	34.35	35.2	Quartz Alunite - Clay Zone	<p>34.35 to 36.2 m - pinkish quartz-alunite-clay zone w/ local vuggy silica patches - faint suggestions - grey areas of remnant sulphides - oxidized. This material looks like it is precursor to vuggy silica development but still has alunite and clay in most of the voids.</p>
A07-017	35.2	39.5	Quartz Alunite Zone	<p>35.2 to 39.5 m - into reddish brown quartz alunite (?) alt zone w/ pretty strong massive silicification - but can see good remnant textures in the Andesite Crystal Lapilli Tuff, has trace fine dissem Py. Probably small fault at contact? 0.35 m broken andesite zone.</p> <p>39.5 m - into med-dk purplish grey Andesite Crystal Lapilli Tuff w/ light greenish altered plagioclase fragments - it is fairly hard here - think sercicite has 0.5% fine dissem Py in contact area, also dissem hematite - prob after primary magnetite - totally nonmagnetic by 39.3 m - loose dissem Py v. abundant hematite - dissem and also in mafic xtal sites. From 42.05 to 42.3 m, there is qtz-hematite vein (1-2 mm) at low < to CA (10° CA). Another quartz vein from 43.0 to 43.5 m has some barite 5-10° CA. At 44.25 m - gash of white barite assoc w/ quartz-barite-chalcocite (?) vein from 44.25 to 44.60 m ~20° CA- has the same black copper mineral locally symetrically on vein margins. *Took small research sample at 44.46 m*. Gen don't see any dissem Py in this propylitic alt andesite - there is 1-2% dissem hematite and the andesite matrix is cut by v fine gr yellow-orange & red limonite microveinlets. Generally no reactionto dilute HCl - on surface or scratched surface, so carbonate is not important component of propylitic alt here. 53.8 m - possible fault - small? at contact - increased clay alteration</p> <p>54.1 m - narrow zone (halo) of strong quartz-alunite alteration - this is the hard -dense more silicified version w/ med reddish grey colour.</p> <p>54.5 m - sharp alteration contact - transition into strong silicified zone.</p> <p>Strong silicified zone consisting of mixed massive silicification + some vuggy silica. At 55.0 m - some silicification banding 60° CA. At 55.1 m - irreg band of fine pyrite stringers ~70° CA. At 55.42 m - narrow band <u>hydrothermal breccia</u> (15 cm thick) w/ vuggy silica clasts (brownish grey) in white f.g. silica matrix.</p> <p>At 55.85 m - into beautiful coarse vug - vuggy silica zone. Think some scattered fine grained white barite</p> <p>Alteration transition into massive silica mixed w/ vuggy silica areas of more massive silica have more pyrite.</p> <p>Alteration transition into mostly quartz alunite (pinkish grey). At 58.4 m - the rock is broken + some mixing of silicified rock + quartz alunite rock - broken fault zone, pick up clotty fine gr Py - poss replacing of clasts in volcanic? Some white clay + poss lt greenish sericite on textures</p> <p>Into Hydrothermal Breccia (?) zone - with early stage lt-mod brown massive silica rock - shattered and brecciated w/ later lt grey silica matrix; no evidence of signif movement of clasts - no mixing of clast types. Main support for HBX is the multistage silicification events. At 63.22 m - suggestion of a 2nd stage of brecciation and a 3rd stage of silicification - this is a late white f.g. silica, the 2nd stage grey silica is locally weakly, finely vuggy.</p>
A07-017	39.5	54.1	Propylitic Andesite	
A07-017	54.1	54.75	Narrow St Qtz-Alunite Alt Zone	
A07-017	54.75	55.85	Massive Silica/Vuggy Silica	
A07-017	55.85	57.7	Coarse Vug - Vuggy Silica Zone	
A07-017	57.7	58.2	Mixed Massive Silica/Vuggy Silica	
A07-017	58.2	59.85	Quartz Alunite	
A07-017	59.85	64.1	Hydrothermal Breccia Zone	

A07-017			61	Hydrothermal Breccia Zone w/ semi abundant Pyrite	Broken rock 60.9 to 61.05 m - at rod change; may be small fault here? In Breccia Zone. At 61.0 m - increase in Py content - pick up thin irregular stringers and slip surfaces - some of these stringers cut across the HBX clasts + matrix and therefore relatively late. Some of them have stylolitic form. At 61.4 m irreg 6-15 mm quartz vein/band 45° CA - there is clotty Py here assoc w/ vein. 61.8 m - another irreg 4-6 mm white qtz vein 30° CA w/ abundant marginal clotty pyrite. Seeing well developed striated slickensides on feature surfaces. Small zone of more massive silicification w/ brownish colour related to some quartz-alunite. This has more fine dissem Py and patches of fine qtz-pyrite. This zone lacks the white clay.
A07-017	64.1	64.8		Zone Massive Silicification w/ Qtz Alunite	
A07-017	64.8	68.4		Hydrothermal Breccia Vuggy Silica	At 64.8 m sharp transition back into Hydrothermal Breccia- vuggy silica rock - most of it shows the early brownish silica- shattered and infilled w/ lt greyish to lt brownish silica. Locally the vugs are filled w/ white soft clay/possibly montmorillonite?) relatively abundant clotty to irreg stringer fine pyrite continues to ~65.5 m. At 67.8 to 68.05 has large oval patches of pyrite rich grey silica. At 65.33 m - there is a band of stage 3 white silica microbreccia (2-4 mm) 35° CA. At 66.35 m - 3-12 mm thick band of stage 3 white silica cuts the hydrothermal breccia. Around 68.4 m - transition out of the hydrothermal breccia and into silicified andesite w/ white clay altered plagioclase grains. This has local vuggy silica textures and overall moderate silicification w/ patches of strong silicification, some Py stringers & patches. Also think there is irreg remnants of pinkish qtz-alunite?
A07-017	68.4	69.8		Mod to Str Silicification - Mixed Massive to Vuggy	At 69.8 m - transition into quartz-alunite-illite alteration w/ zones of mod to str massive silicification mixed pinkish grey to mod grey; most pyrite is in the grey silicified patches.
A07-017	69.8	70.97		Quartz Alunite w/ local Massive Silicification	At 70.97 m - sharp transition into propylitic alt andesite -minor broken rock here - maybe a small fault? Andesite Crystal Lapilli Tuff.
A07-017	70.97	71.7		Propylitic Andesite	71.7 to 72.05 is fault slice of mod qtz-alunite altered andesite. At 71.9 m - 2-3 irreg 2-5 mm quartz veins 50° CA.
A07-017	71.7	72.05		Quartz Alunite Clay	Fault slice of propylitic alt Andesite. At 72.25 m - 3-4 mm Qtz vein 70° CA
A07-017	72.05	73.1		Propylitic Andesite	Across small fault into zone mixed mod-quartz-alunite-clay alt w/ mod silicified zones. The grey silicified zones have fairly abundant disseminated fn pyrite and the pink zones of qtz-alunite gen lack dissem Py. Not sure if qtz-alunite alteration is overprinted on the mod-silicified Py zones? At 75.17 m - ~8 mm white f.g. qtz vein 60° CA.
A07-017	73.1	77.5		Moderate Massive Silicified w/ Mixed Quartz Alunite	
A07-017	77.5	78.6		Andesite Crystal Lapilli Tuff; Prob Fault Sliver	At 77.5 m is sharp contact qtz-alunite (uphole) to propylitic alt andesite (downhole) there are 3 pieces core (Andesite) then into high broken faulted andesite- suspect core pieces out of place and this is a sm fault contact? 77.5 to 78.6 m is all broken faulted andesite-dk grey tuff
A07-017	78.6	82.3		Quartz-Alunite Altered	At 78.6 m - fault contact -back into mod-str qtz-alunite alteration - pink grey to reddish brown quartz-alunite w/ good remnant Andesite Crystal Lapilli Tuff textures. At 79.15 m - 1 to 2 cm thick banded qtz-sericite (?) Py vein 15° CA; qtz-alunite alt rock gen cuts dissem Py, but is cut by irregular Py veinlets-stringers 20° CA. At 81.8 m - irreg grey sericite gash veins 40° CA.
A07-017	82.3	84		Andesite Crystal Lapilli Tuff	Zone of Andesite - propylitic altered in quartz-alunite - the contacts are sharp transitions not faults here. At 83.95 m - hairline qtz-Py veinlet w/ irreg bleached halo
A07-017	84	90.8		Quartz Alunite ALTERED	84.0 m - pink + grey quartz-alunite-pyrite zone; mostly pinkish qtz-alunite w/ remnant patches of grey mod str silicified alunite in here? The pink to reddish colours are related to v. fine hematite stain. At 87.0 m - 1-2 cm ~25° CA banded quartz-sericite -Py vein. At 87.95 m - gougy fault slice of andesite-propylitic 15° CA. At 90.2 m - irreg 4-8 mm qtz-sericite-pyrite vein 10° CA.
A07-017	90.8	97.9		Quartz Alunite ALTERED	At 90.8 m - sharp contact - alteration into soapy talc-like sericite rich? alt band band cutting the qtz-alunite rock 30° CA. At 91.2 m - reduce core diameter. At 94.18 - interesting quartz vein - has fgine-grained chalcdeonic silica. Upper contact not preserved; lower contact is 20° CA- the fn scale chalcedonic banding is mostly in a thin band at lower conact. True thickness - esimated 30 cm thick. At 95.4 m ~ 3 cm thick hydrothermal breccia band @ 50° CA has silicified clasts in white v fn gr quartz matrix. There is minor dissem Py & poss black mineral in breccia + dissem Py + see one 1 mm blue grey mineral w/ 2 cleavages at ~90° CA+ v. soft - possible Hg-mineral? Acanthite? (Unknown; has colour similar to molybdenite, but not or galena). 95.4-96.4 m - dissem galena in HBX + wall rock At 95.6 m - 1 cm sericite (?) Py band 35° CA. At 96.15 to 96.4 m - irreg hydrothermal breccia bands w/ grey silica clasts in white f.g. quartz matrix. The white qtz matrix and wall rock has dissem of blue grey metallic mineral - in one spot at 19.16 m has grains w/ cubic cleavage - prob galena. 97.08 m - more dissem GAL w/ At 97.9 m - into broken zone in med-dk purplish grey Andesite; probably a fault contact (1-3 mm). Andesite is cut by irreg quartz veins: at 98.9 m - 25° CA; At 99.65 m - 25° & 45° CA
A07-017	90.8	102.5		Andesite Crystal Lapilli Tuff	
A07-017	102.5	103.1		Quartz-Alunite Altered	At 102.5 m - fault contact propylitic andesite (uphole) w/ quartz alunite altered rock
A07-017	103.1	103.4		Hydrothermal Breccia	At 103.1 m - 0.28 m thick hydrothermal breccia w/ silica + minor Pyrite clasts to 2 cm in white f.g. qtz matrix. There are clasts of the finely laminated white qtz material (Same as in Hole 14 @ 63 m), the upper contact of HBX is 40° CA; looks like pink alunite in breccia matrix
A07-017	103.4	106		Quartz-Alunite Altered	Mostly pinkish brown quartz-alunite rock w/ good relict Andesite Crystal Lapilli Tuff textures - more greyish patches have more dissem pyrite.
A07-017	106.03	106.4		Quartz-(Alunite/Sericite)-Pyrite Altered	At 104.65 m cut by 0.5-1.5 cm qtz-sericite veins @ 50° CA
A07-017	106.4	107.05		Hydrothermal Breccia	At 106.03 m - sharp alteration contact @ 50° CA with pinkish quartz-alunite (uphole) and into the soapy feeling grey strong sericite? rock. This locally has dissem pyrite concentrations in relict lithic/pumice? clasts
A07-017	107.05	117.65		Massive Silicification Zone	At 106.4 m - into a v. fine grained white hydrothermal breccia w/ only minor silica clasts; white matrix is mixture of quartz alunite? + some clay? It locally has patches or clasts of fine vuggy texture. At 106.97 to 107.0 m there is fine dissem grey metallic galena
A07-017	117.65	123.45		Quartz-Alunite Zone	At 107.05 m - into strong massive light to med grey silicified rock w/ some relict textures suggesting Andesite Lapilli Tuff - with irreg white quartz patches + some vuggy silica, minor suggestions of hydrothermal brecciation, some alunite with silica. At 111.5 m - there is ~18 cm band of hydrothermal breccia w/ silicified clasts in light grey f.g. qtz matrix - 40° CA. 107.05 to 107.8 m is relatively Py rich w/ irreg stringers of fn pyrite; some 40° CA. At 112.6 m ~8 cm thick hydrothermal breccia band 75-80° CA w/ silicified clasts in white f.g. qtz matrix w/ clots of Py. At 113.9 m - small zone sheeted Py veinlets w/ some stylolitic dissolution 40° CA. Small broken zones @ 114.25 and 115.2 m, the into significant broken zone in high silica rock starting 115.65 to 123.45 m seems to have OK recovery - no signif loss; mostly small chips. At ~117.65 m - pick up hematitic staining & remanants of sericite or chlorite? in relict grains prob into qtz-alunite halo around 118.5 m - pyrite drops off in strong silicified rock & have hematitic staining
A07-017	123.45	132.85		Andesite Crystal Lapilli Tuff	At 123.45 m end of major broken fault zone and into strong propylitic med green AXT. This still has rel abundant 0.5 to 1.0 % diss hematite grains. This andesite has strong chlorite -replaces clasts and fiamme-like clasts. At 125.0 m - remnant ~compaction foliation 60 ° CA. At 130 m 'compaction foliation' is 60° CA. This tuff has 15-20% crystals ~10% pumice-like clasts & 2-5% lithic fragments of various andesite types

				<p>Interesting change in Andesite Crystal Lapilli Tuff at 132.85 - seems to be a different unit - dramatic increas in crystal content - this unit may signify approach to the volcaniclastic unit downhole. Going to call this unit <u>Andesite-Crystal-Rich Tuff</u> (med-dk grey): it has 30% xtals and more fiamme-like clasts...15% and 5-7% lithic clasts. Compaction foliation at 133 m is 60° CA. The fiamme-like clasts are preferentially replaced by black chlorite. The compaction foliation in both units appears to be conformable. The Andesite Crystal-Rich Tuff has ~0.5% dissem hematite and is non-magnetic. At 131.0 m - there is 6 cm long clast of fine lam volcaniclastic. At 143 m compaction foliation 60° CA. At 145.68 small fault - this this is contact w/ Andesite Crystal-Rich Tuff w/ Andesitic Volcaniclastic Unit. Greenish + reddish grey bedded volcaniclastics - with good volcanic conglomerate/breccia horizons: some suggestions of clasts are subangular to rounded and range up to 8 cm.</p> <p>Clasts are subangular to rounded and range up to 8 cm. ~153 m - mod carbonate in volcaniclastic + pick up trace calcite vein/gashes; bedding in volcaniclastic is generally conformable (?) w/ compaction foliations bedding 40-60 ° CA</p>
A07-017	132.85	145.68	Andesite Crystal Rich Tuff	
A07-017	145.68	155.45	Andesitic Volcaniclastic Unit: nice bedding/graded bedding	
A07-017	155.45 EOH		END OF HOLE	
A07-018	0	4.57	No Overburden recovery	
A07-018	4.57	15	Andesitic Crystal Lapilli Tuff	Start recovery 4.57 m in AXT approx 15-20% crystals (mostly plag) + 7-8% lithic clasts (andesite) - up to 7 cm w/ 0.5% dissem hematite; plag xtals replaced by soft white clay. At 14.5 m - pick up mod compaction foliation textures w/ 7-10% fiamme-like clasts ~45 ° CA.
A07-018	15	15.7	Wk-Mod Qtz Alunite +/- Py Zone. 212071 Assay 15-16 m, 212072 Assay 16-17 m	~15.0 m start into alteration zone - into pinkish brown qtz-alunite rock - At 15.50 m - small patch of more pyritic grey qtz-alunite - now think this is precursor to the pink brown rock -produced by break down - hematization of pyrite?
A07-018	15.7	16	Small Massive Silica w/ Pyrite. Assay starts @ 17.0 m.	
A07-018	16	16.3	Wk-Mod Qtz-Alunite narrow halo	Small massive silica band w/ abundant Pyrite & some chalcopyrite 40° CA
A07-018	16.3	18.7	Andesitic Crystal Lapilli Tuff	Small qtz-alunite (pinkish brown) halo
A07-018	18.7	23.75	Andesitic Crystal Lapilli Tuff	Propylitic-hematitic AXT - mod purple grey. At 16.7 m - compaction foliation of fiamme-like clasts is 50 ° CA, see minor alt remnant bio phenos and v. rare qtz phenos.
A07-018	23.75	24.15	Small Quartz-Alunite zone	At 18.7 m - increased clay alteration. Cross small fault at 23.75 m into Qtz-Alunite alteration.
A07-018	24.15	25.1	Quartz-Sericite-(or alunite)-Pyrite zone	Pinkish quartz-alunite alt rock - halo on grey quartz-alunite-pyrite or quartz0sericite-pyrite zone. The pinkish alt gen lacks dissem pyrite
A07-018	25.1	25.5	Core zone of massive silicification w/ abund Py	Sharp alteration transition from pink rock (quartz-alun-hem) into grey rock w/ more quartz and abundant sericite and pyrite. Pyrite is conc at contact & as bands and high dissem conc in this halo.
A07-018	25.5	25.9	Quartz-Sericite(-alunite)-Py zone	Dk grey mod-strong silicified zone w/ abund Py
A07-018	25.9	26.8	Quartz-Alunite zone	At 25.5 m - sharp alteration transition into grey quartz-sericite-pyrite halo.
A07-018	26.8	32.7	Bleached Andesite Crystal Lapilli Tuff	25.9 m - into the pink quartz-alunite zone w/o Py; think there is mixing of core or alt type assoc w/ fault zone at 26.10 m.
A07-018	32.7	50.05	Andesite Crystal Lapilli Tuff	At 26.8 m - there is some prop alt AXT and at 27.0 m into bleached AXT w/ wk alunite alteration + clay attacking fiamme-like fragments. At 29.5 m - irreg 1-3 mm white quartz veinlet 40° CA.
A07-018	50.05	54.3	Mixed Qtz-Alunite + Qtz-Ser-Py zone w/ intervals AXT (prop)	At 32.7 m into the med-dk purple grey Andesite AXT - hematitic continue to see irreg quartz veinelet with minor calcite in halos at 32.84, 32.9 to 33.6 m. At 33.9 m - intact rock - broken faults & str clay alt. At 36.4 m - 1 cm sercitie-clay band 70 ° CA. At 38.85 - irreg 2-4 mm qtz vein 40° CA. At 39.7 m - 2-3 qtz vein at 40° CA. At 40.77 m - 3 cm thick sericite band w/ discontinuous quartz around this alt band (sericite). At 44.6 m - irreg patch and gashes of white barite. At 46.6 m - 6 cm of fault breccia w/ small clasts AXT in clay rich (w/ sericite?) matrix. Across fault into small zone pink qtz-alunite assoc w/ 4 cm massive quartz band - this is a nice telescoped example of the alteration zonation pattern w/ silicified core, grey (qtz-ser?) and pink (qtz-alunite?) there is only tr dissem Py in silica band - 55 ° CA. At 47.8 m - 5mm qtz-sericite vein (60° CA). At 49.0 m - 1 cm qtz-sericite vein (60° CA). At 49.4 m - sm fault in purple prop AXT - w/ broken rock to alteration contact @ 50.05 m. A little pink qtz-alunite rock in fault
A07-018	54.3	61.8	Andesite Crystal Lapilli Tuff	Mixed zone of pink quartz alunite rock, bands of quartz sericite w/ abund pyrite and intervals of purple AXT. The pink qtz-alunite zones are around qtz-ser-Py zones at 50.15 to 50.55 (65° CA), 50.9 to 51.10 (60°CA), 51.3 to 51.9 (55° CA) (GOOD ORIENTATIONS). At 52.83 m - 1-2 cm greenish sericite vein/band at contact b/w pink qtz-alunite and purple pro andesite
A07-018	61.8	63.35	Quartz-Alunite Alt	Med-dk purple (as well as purple-grey) hematitic Andesite Crystal Lapilli Tuff. Broken fault zone from 55.6 to 57.0 m & 58.4 to 58.9 m. At 59.65 m - nice example of telescoped alteration zone about 5-10 mm thick white grey quartz vein 80 ° CA w/ 1.5 to 2.5 cm selvage of greenish grey quartz-sericite-pyrite and ~3.0 cm, outer selvage of the pink 'quartz-alunite' rock (no pyrite); irreg 1-2 mm qtz veins cut Andesite ~60.8-61.10 m
A07-018	63.35	64.5	Small Zone Qtz-Ser-Py w/ core of Msi	At 61.8 m (after fault zone) alteration transition into the pink qtz-alunite alt. ~61.84 m irreg qtz vein (3-8 mm) @ 50 ° CA. At 62.05 m - irreg qtz-hematite (bright red) (1-1.2 cm) @ 50° CA. At 62.9 m - ~1.2 cm qtz-hematite vein @ 45° CA. At 63.25 m - small zone of the 'sheeted Py veinlets' 50° CA developed in transition zone from pink qtz-alunite to qtz-ser-Py
A07-018	64.5	75.23	Andesite Crystal Lapilli Tuff	At 63.35 m - transition into greenish grey quartz-sericite-pyrite zone w/ some bands of massive silicification at 63.75 to 64.1 m (65 ° CA). At 63.75-63.90 m - small zone <u>possible hydrothermal breccia</u> w/ clasts msi + partial matrix of quartz + patchy massive pyrite. There is telescoped zones of grey quartz-sericite-pyrite 64.1 to 64.3 m and pink quartz-sericite-pyrite 64.3 to 64.5 m.
A07-018	75.23	75.36	Narrow band Quartz-Alunite	Med purplish grey to dark purplish grey AXT - some lighter bleaching here - weak alunite? Prob around white grey clay (?) band @ 66.25-66.35 m and 2 cm grey quartz vein at 66.55 m @ 40° CA and 67.55-67.66 m (2 veins @ 60° CA) and 2 cm qtz veins @ 68.0 m (50° CA). At 71.25 m - start fault zone broken AXT - has two gouge zones at 71.05 m and 71.90 m. At 71.25 m beginning of fault zone -broken qtz-ser + qtz veinlets (1-10 mm) @ 40° CA. At 73.2 to 73.5 m - zone of irreg qtz veins + gashes (2 to 10 mm thick) - 45 + 25 ° CA. At 74.25 m - ~1 cm white QV 45° CA
A07-018	75.36	75.78	Narrow band Quartz-Ser-Py and mod massive silica	Narrow band pinkish quartz-alunite-relict AXT textures-no dissem Py
				Transitional sharp alt contact Qtz-alunite into grey qtz-ser-Py rock - At ~75.55 m narrow band of the white quartz hydrothermal breccia cuts Msi - oriented 60° CA. The quartz-sericite-pyrite rock has remnant AXT textures - pick up alt'd light grey vuggy silica rock along HBX contact.

				White to light greyish to slt pinkish white massive fine grained silica matrix hydrothermal breccia w/ clasts of alt andesite and massive greyish quartz-msi. Contact is 30° CA; only tr dissemin Py in bx matrix. Get some dissemin Py concentrations at contacts w/ wall rock + inclusions. At 77.05 m see evidence of multistage silicification early massive slight brownish grey. Intermediate light grey and late white v fine gr silica - here start seeing minor disseminated enargite (steel to bluish). In the light grey silica - at 77.55 m dissemin enargite in the remnant wall rock (str silicified AXT) and see euhedral grain in sm open cavity. Started seeing open cavities at 77.10 m . At 78.0 m - interesting pink coloration in v. fine grained silica clasts in light to med grey breccia matrix, pink colour develops in centers of clasts. At 78.4 m - contact hydrothermal bx w/ strong silicified andesite - 30-35° CA, there are pyrite rich bands parallel to contact and parallel to msi bands - still see minor dissemin enargite
A07-018	75.78	78.48	Hydrothermal Breccia (white grey matrix)	
A07-018	78.48	79.4	Massive silica alt and strong Qtz-Ser-Py Alt	78.40 to 78.48 m str alt qtz-ser-py - Py-rich bands @ 40° CA; At 78.48 m - contact st alt qtz-ser-Py w/ strong massive silicified (dk grey) andesite - rich w/ fine pyrite
A07-018	79.4	81.9	Hydrothermal Breccia (white quartz matrix)	At 79.40 m - irreg contact strong altered (msi + qtz-ser-Py) andesite w/ another Hydrothermal Breccia - contact is highly irregular and weens in and out of core from 79.40 to about 82.0 m - suggests a thin hydrobx zone that is at very low < to CA, there is pyritic stylolite along some contacts. Continue to see dissemin enargite in hydrobx and alt wall rock to 82.3 m - biggest concentration is at 79.7-79.9 m. Prob broken fault at 81.9-82.5 m and maybe contact b/w HBX (uphole) and qtz-alunite rock (downhole). There is a core loss here (+10-20% loss). Pinkish to greyish qtz-alunite alt AXT w/ grey HBX; the qtz-alun rock has local abund irreg Py stringers + wisps. From 81.8 to 83.1 m - there are pieces of another type of Hydrothermal Breccia - it has small (up to ~1 cm) clasts of silicified rock + qtz alunite rock in a med to dk grey qtz matrix w/ local abund Py - think there are some Py clasts and grains of enargite in bx - it appears to be a thin irreg band prob at low < to CA.
A07-018	81.9	83.5	Quartz Alunite Alt + (Grey qtz-Py matrix)	Mixed vuggy silica, massive silica and some qtz-alunite rock w/ spots of Py-rich vuggy silica at 84.25-84.4 m; 2nd massive silica @ 84.55 to 84.65 m. At 84.65 m - irreg 2 to 18 mm white qtz vein cutting str qtz-ser-Py rock 30° C. At 85.4 m - alteration bands + qtz-Py bands 40° CA. At 85.72 m - 4 to 8 mm white qtz vein qtz-alun rock 75° CA
A07-018	83.5	84.6	Vuggy Silica/Massive Silicification	
A07-018	84.6	85.4	Quartz-Sericite-Pyrite Zone	Grey quartz-sericite-pyrite w/ some alunite (?)
A07-018	85.4	89.25	Quartz-Alunite Zone	Med to lt pinkish quartz-alunite (?) altered zone - mostly w/ well preserved remnant AXT textures - at 87.5 m relatively abundant 15% fiamme-like flattened clasts. Compaction foliation 55° CA. At 87.4 m - 3-4 mm greenish sericite (?) vein cuts across compaction foliation at 20° CA
A07-018	89.25	91.6	Quartz-Sericite-Pyrite (-Alunite) Zone	At 89.25 m - alteration transition - small band of strong massive silicification 89.3 to 89.5 m then into mixed grey qtz-ser-Py (harder) and pinkish grey zones w/ alunite (softer) there is fairly abundant dissemin irreg vein-band pyrite. The 85.4 to 89.25 m zone of qtz-alunite (low pyrite) and the 89.25 to 91.6 m zone of qtz-sericite-alunite-pyrite is a good place to compare the gold grades of these two alteration types and see if gold correlated w/ pyrite; also for comparison w/ pyrite-rich zones 78.48 to 79.47 m. Good way also correlate w/ the enargite zone 77.05 to 82.30 m?
A07-018	91.6	91.8	Vuggy Silica Zone	2 pieces of core - vuggy silica rock and locally pyrite-rich - pyrite may preferentially replace lithic clasts. Reduce Core Diameter HQ3 to NQ2 @ 91.75 m.
A07-018	91.8	94.75	Hydrothermal Breccia	Beautiful hydrothermal breccia w/ mixed silicified clasts: massive silica and vuggy silica; clasts (35%) are predom angular to subangular up to 7 to 10 cm in size in white, lt grey to pinkish grey fine grained silica matrix. Upper contact not preserved, not much Py in HBX - minor in some clasts. At 92.05 to 92.20 m - minor area w/ dissemin enargite in HBX matrix, may be lower contact HBX w/ grey st-qtz-alunite (sericite?) 40° CA. At 94.27 m - open vugs filled w/ cryptocrystalline, finely banded chalcodony - almost approaching opaline silica - EPITHERMAL OVERPRINT? Tr of BARITE IN VUG AT 94.35 m.
A07-018	94.75	96.7	Mixed Massive Silica/Vuggy Silica w/ massive sericite + massive f.g. pyrite	Strong silicified zone w/ mixed massive silica and some vuggy silica and the 'soapstone' rock - from 95.1 to 95.5 m - this has the slippery feel & abund v. fn Py from 96.0 to 96.3 m - massive dk grey silica w/ v. abundant ~massive pyrite; some mixed gray quartz-sericite-Py (alunite?) rock w/ wispy Py stringers
A07-018	96.7	97.7	Quartz-Sericite-Pyrite (alunite?) Alt	Sharp alteration transition @ 96.7 m vugs silica - into the grey Quartz-Sericite(-Alunite?)-Py rock - w/ f.g. wispy pyrite stringers 60° CA @ 96.8 m and cut by lt greenish to pinkish + cream sericite veins/bands 45° CA @ 98.7 m.
A07-018	97.7	101.25	Quartz-Alunite Alt	Pink Quartz-Alunite alt rock - lt pinkish to medium reddish-prob v. fine hematite? Little or/no Py
A07-018	101.25	104.25	Andesite Crystal Lapilli Tuff	Dark purple grey Andesite Crystal Lapilli Tuff - highly broken from 101.5 to 102.25 m - the plag xtals are altered - replaced by lt greenish clay that turns yellow upon exposure to air
A07-018	104.25	104.85	Quartz-Alunite Rock	Sharp alt transition from purple Andesite (propylitic) into pinkish to pinkish grey quartz-alunite rock
A07-018	104.85	105.5	Hydrothermal Breccia	One piece of pinkish to lt greyish Hydrothermal Breccia w/ quartz alunite clasts and quartz-alunite matrix w/ dissemin enargite; contacts not entact - this piece of core maybe out of place?
A07-018	105.5	106.45	Quartz-Sericite (-Alunite) Rock	
A07-018	106.45	112.87	Hydrothermal Breccia Zone w/ some Quartz-Sericite-Pyrite Rock	Zone of mixed Hydrothermal breccia - grey silica to locally pyritic matrix in grey quartz-sericite-pyrite; think the HBX are narrow bands - prob at low < to CA so skirting the same breccia @ 106.4 to 106.5 m; 106.62 to 106.8 m; 107.18 to 107.36 m contact of HBX w/ Qtz-Ser-Alun rock at 111.0 m is almost parallel to CA. At 111.60 m - vugs have clear to white barite blades and broken surface has red to brownish mineral - sphalerite ? The HBX has patches of dark green mineral - possibly chlorite? more HBX from 112.4 to 133.5 m.
A07-018	112.87	114	Hydrothermal Breccia Zone w/ some Quartz-Sericite-Pyrite Rock	At 112.87 to 113.04 m - some very interesting epithermal - like textures w/ reddish (hematite) of ghost-blade textures - but not bladed - they are circular (x-section) elongated rods - some have been replaced by silica + some are filled with white clay. May have been qtz-barite intergrowth? but that is weird. This texture almost looks organic - like coral structure there are some unusual minerals here - think galena and possibly sphalerite (reddish) also see green mineral. Textures suggest this is remnant open space filling - but not sure if in place or this could be large inclusion in hydrobx? I lean toward this being inclusions in the HBX - some areas nearby have v fn scale chalcadonic banding. At 113.2 to 113.5 m is run of HBX.
A07-018	114	115.6	Quartz-Alunite Alt Rock	At 114.10 m - sharp change - contact of HBX w/ Qtz-Alunite rock is not entact. At 114.2 to 114.75 m is broken lt pinkish tan quartz-alunite rock. Light pinkish to tannish quartz-alunite rock. 114.75 to 115.25 m is whole core - that gets stronger reddish hematitic colour. At 115.25 m into high broken zone w/ mostly pinkish qtz-alunite rock and at 115.52 m block another piece of HBX - and chunk of purple fault gouge - I think this is all a fault contact b/w HBX and pink qtz-alunite rock with a fault sliver of purple broken AXT. At 117.75 m AXT cut by 1 cm QV 45° CA - Py in vn and halo. Large fault contact Qtz-Alunite + Hydrothermal Bx (uphole) with Propylitic Andesite (downhole)

A07-018	115.6	120.4	Andesite Crystal Lapilli Tuff	Dark purple grey Andesite Crystal Lapilli Tuff w/ ~1.0% dissem hematite grains up to 1.0 mm; plag replace by white clay (?) - some greenish sericite replaces remnant fiamme-like clasts. At 119.0 m - start gradational bleaching to contact. From 119.7 to 120.4 m - close to what I've been calling qtz-alunite rock - med to lt pink mod hard w/o visible Py - still see AXT texture.
A07-018	120.4	122.1	Quartz-Alunite(-Sericite) Alt	Lt greenish grey qtz-sericite-pyrite (alunite?) rock w/ fairly abundant dissem pyrite + diffuse Py stringers. At 120.7 m - minor patchy m-str silicified rock (Msi). At 121.6 to 121.7 m - sm band of HBX w/ dk grey to white massive silicified (msi) clasts in lt to med gr f.g. silica +/- alunite matrix. ~122.1 m - fault contact w/ strong alt (Qtz-Ser-Py + mod silicified) rock up hole w/ dark purple propylitic andesite.
A07-018	122.1	125.9	Andesite Crystal Lapilli Tuff	Dark purple grey Andesite Crystal Lapilli Tuff - strong hematized cut by remnant to irreg 0.5 to 6.0 mm qtz veinlets. At 123.67 m - qtz-spec hem vlt 50° CA. 125.1 m - broken andesite most of 125 to 126 m - prob fault contact andesite (prop) uphole w/ quartz-alunite rock downhole
A07-018	125.9	128.4	Quartz Alunite Alt Rock	Light pinkish grey Quartz-Alunite alt andesite w/ relict AXT textures - this is fairly hard wk-mod silicified - but does not have pyrite. 127.25-128.3 m - has remnant text w/ ~20% pumice-like clasts - these are lighter coloured (more sericitized?)
A07-018	128.4	130.05	Quartz-Sericite (-Alunite) Rock	At 128.4 m - transition into light greenish grey quartz-sericite alteration - prob still has alunite and still see the dissem hematite grains (black) - don't see any pyrite
A07-018	130.05	130.7	Vuggy Silica - Massive Silica (after Qtz-Barite?)	At 130.05 m - sharp alt transition into an unusual type of vuggy silica rock - has patches of vuggy silica w/ flattened shapes - suggesting they were replaced fiamme-like clasts - and the vugs have distinct blade shape - suggests they are leached barite xtals? heavy med grey w/ some fine pyrite. Some of this looks like hydrothermal breccia
A07-018	130.7	141	Quartz-Alunite Jumbled Hydrothermal Breccia? Massive Silica Zone w/ Clay Alt + Intervals of Hydrothermal Breccia + minor vuggy silica	Broken fault at 131.0 m has striated slickensides. Into lt grey + white massive silica w/ clay (montmorillonite?) rock varies from mod hard to hard w/ mixed Hydrothermal breccia intervals @ 130.5-130.6, 131.65-132.2, 133.35-133.55, 133.70-134.0, 136.2-136.8 m (these are more silicified + have less clay). HBX matrix + veins of later white v. fg qtz, there is white alunite or clay mixed w/ a lot of the silica. Small patch of vuggy silica @ 134.1-134.2 m; massive silica @137.5 to 138.3 m. Increase silicification at ~140.0 m. This whole zone from 127.5-141.0 m has a complex jumbled texture and has a lot of white qtz-clay alt and multistage veining. Even the hydrothermal breccia from 131.65-132.2 m has this white clay (?) and the white veins. Interval from 134 to 137.6 m has remnant zebra stripe texture - from remnant fiamme-like? clasts - highly flattened + producing compaction foliation ~60° CA. ~140.0 m - los the white clay alt + veins
A07-018	141	145.7	Quartz-Alunite Alt Zone w/ minor jumbled Hydrothermal Breccia	At 140.0 m - increase amount of silicification in the jumbled zone - this may all be a variety of hydrothermal brecciation? The jumbled texture zone stops at 141.0 m with small bands of it at 141.36-141.6 m, 142.50-142.55 m; 142.8-142.85 m, 142.95-143.05 m, 143.55-143.7 m, 144.10-144.2 m, 144.7-145.0 m, 145.2-145.25 m, 145.47-145.56 m. Appears to be multistage hydrothermal brecciation creating jumbled textures. At 144.24 m - irreg 3-10 cm bluish green illite vein cutting light grey matrix hydrobx
A07-018	145.7	149.5	Strong Silicified Jumbled Hydrothermal Breccia zone	At 145.7-149.5 m - another zone of complex jumbled textures related to multi-stage hydrothermal brecciation - texture is same as the abund zone from (130.7-141.0 m) but w/ less white clay (montmorillonite?) and more silicification and <u>pyrite</u> . This stuff looks great - should run good gold??? *Don't see any barite or Cu-minerals in this zone, some patchy vuggy silica @146.1-146.6 m; 146.95-147.9 m & 149-153 m.
A07-018	149.5	171.05	Massive Silica-Pyrite Zone	At 149.5 m into large massive silica (mostly mod to dk grey - locally black v. fn gr massive silica w/ mostly complex texture destruction - pyrite is v. fn gr + massive + occurs as blotchy masses and bands (at 184.44 m band is 15° CA). 154-155.5 is highly broken but no signif core loss. 157.0-157.2 m is fine rounded chips - no signif core loss. Local vuggy pockets 156.0-156.6 m appear to be remnants of flattened fiamme-like clasts. At 150.3 to 156.8 m - see the sheared pyrite veinlets @ 20-25° CA. Some sm black grains in the massive - most appear to be fragments of black silica? Also see the tiny tannish grains - This massive silica zone overall has abundant pyrite and there are local spots of v. fn gr massive pyrite (areas up to 10%). More broken zones in massive silica rock at: 157.5-157.6 m; 158.1-158.2 m; 163.5-164 m (core loss); 164.0-167.0 m (no signif core loss?); 167.3-168 m (no core loss); 168-170 m (some core loss).
A07-018	171.05	178.62	Mixed Quartz-Alunite (+sericite?) w/ minor vuggy silica and massive silica zones	At 171.05 m - into mixed zone - leading into propylitic RDD dike. Interesting mix of vuggy silica: 171.15-171.7 m; 172.2-172.8 m; 174.95-175.1 m, and some massive silica w/ pinkish qtz-alunite rock (no pyrite) think there is mixing of rock in large broken fault zone from 174.5-175.90 m. More broken rock (176.6-177.4 m). Evidence of fault gouge @ 177.3, 178.65, 178.0-178.2 m. Minor remnant textures in the quartz-alunite intervals suggest protolith is Andesite Crystal Lapilli Tuff.
A07-018 A07-018	178.62 188.67 EOH	188.67	Rhyodacite Dike w/ propylitic altered RDD (dike-downhole) END OF HOLE	Rhyodacite Dike - w/ zone of the 'spherulite' blebby texture from 128.2-178.5 then into altered dike - wkly magnetic - dike is clay-carbonate altered near faults to 184.2 m. Then into greenish brown dike w/ 4-5% (yellow red alt) kspar, 3-4% (green-sericite altered) plag + 2% (chloritized) bio phenos in aphanitic grdmass. Dike becomes wk-mod magnetic ~181 to 182 m; cut by irreg gashy white calcite vlts.
A07-019	0	3.05	CASING/OVERBURDEN (NO RETURN)	
A07-019	3.05	10.9	ANDESITIC CRYSTAL LAPILLI TUFF	Slightly bleached pinkish brown AXT - mod propylitic w/ chlorite-carbonate altered; the usual hematite is altered to limonite 15 to 18% plag + mafic crystal fragments; 5-10% lithic up to 7.0 cm. 5.15 m - wk-mod compaction foliation @ 60° CA; 5.14 m - 3-5 m white calcite vein @ 60° CA. 6.30 m - cross broken fault into med green coloured AXT. 9.20 m - major broken fault w/ gougy zones starting at 9.20 m and carries to the RDD contact - faulting in AXT - the RDD is <u>not</u> faulted. Very early stage reccia dike at 10.40 to 10.62 m - Igneo-fragmental injection dike - probably related to the RDD dike (?) contact at 10.90 m. The dike is irregular and tapers from about 2.0 cm thick to 2 to 4mm; beautiful example of gradation in clast size - rapidly decresing away from RDD contact. Has angular clasts derived from AXT in a brownish fine grained matrix. Dikelet is 10 to 20° CA. This weird dikelet may support that RDD dikes intruded un lithified andesite tuff - and this is similar to pepperite dikes? Very weird
A07-019	10.9	20.3	RHYODACITE PORPHYRY DIKE	Intrusive contact w/ AXT (uphole) and Rhyodacite Porphyry Dike (downhole) - I think there is a thin scab of AXT preserving the intrusive contact - 60° CA. There is a narrow (~10 cm) chilled margin, with the small stretched blebby (spherulites) - foliation is 50° CA - this chilled margin is weak to mod magnetic. 17.0 m - in contact zone - the greenish RDD is also cut by irregular fragmental dikelets that are ~ parallel to CA. More of the spherulitic blebby texture from 12.2-12.6 m - has med brownish blebs - strongly flattened foliated (by flowage in dike?) 30° CA. RDD dike is med greenish to light-med greenish brow, w/ 0.5% (1-2 mm) qtz, 8% (2-5 mm) kspar, 6% (1-4 mm) plagioclase & 1-2% remnant biotite phenocrysts & some carbonate in matrix + ds minor discontinuous vlts/gashes. 16.5-17.0 m - weird mixing zone - internal RDD dike - pick up the weird blebby textutres - this looks like magma mixing textures - the green matrix RDD has inclusion of the brown RDD and locally the brown RDD is as blebs in green matrix - there are also some fragments of AXT and inclusions from AXT? 17.0-18.05 m is normal

A07-019	20.3	26	ANDESITIC CRYSTAL LAPILLI TUFF	At 20.3 to 20.95 m is highly faulted zone of greenish AXT. At 20.55 m, into greenish to purplish mod clay altered AXT - continue in AXT w/ series of broken gougy faults @ 24.6 m possible compaction foliation in AXT 60° CA. AXT is mostly dk greenish to brownish - due to abundant chlorite. There is still 0.5-1.0 % diss hematite + the network of limonitic vlts. At 25.40 m - start into transition in the pink qtz-alunite (?) rock
A07-019	26	28.05	QUARTZ ALUNITE	26.0 m - into the pinkish qtz alunite altered rock - this ends at a fault of 27.95 m suggesting that silicified core of this alteration is faulted out?
A07-019	28.05	28.23	ANDESITIC CRYSTAL LAPILLI TUFF	Cross fault at 27.95 m into short interval (18 cm) of med purple grey andesite - propylitically altered
A07-019	28.23	91.8	RHYODACITE PORPHYRY DIKE	Med-dk purplish grey AXT. Intrusive contact w/ AXT (uphole) and into RDD dike (downhole)
A07-019		28.23	34.7 RHYODACITE PORPHYRY DIKE	RDD w/ contact zone - spherulite/blebby textures from 28.23 to 29.5 m - the mixed zone rocks have similar pheno content as the main dike. Border zone is brownish to greenish - then transition into (at 31 m) more usual reddish brown colour. As usual the RDD is wk to mod magnetic, the propylitic alt of RDD includes weak diss carbonate w/ chlorite + sericite-clay after feldspars & minor gashy calcite veins. At 34.7 m - pick up irreg patchy bleached zones in RDD w/ light brownish colour + <u>0.1% diss pyrite</u> - the diss hematite is destroyed in this bleached rock - weak sericite-pyrite? - non-magnetic. At 36.85 m there is a hairline chlorite (?) pyrite vlt w/ one of the bleached diss Py haloes. Most bleachy is not assoc w/ veins. The siss Py & sericite alt in RDD raises questions about the timing of RDD dikes in relation to mineralization?? Dikes may be late mineralization? The belach + diss Py alt zones are also spatially assoc w/ minor fault breccia zones. At 41 m still seeing the bleached zones but only trace diss Py and now have some diss magnetite + RDD is weakly magnetic. 47.54 m - white qtz-calcite vein (2-3 mm thick) @ 60° CA. 49.2-51.5 m - pick up bleachy (sericite alt) w/ diss Py in RDD. Increased calcite veining in area of faults (51.3 to 53.5 m). ~53.0 m RDD (dike) has 18% total phenos: 0.5 % qtz, 8-9% kspar, 6-7% plag. THink plag phenos mostly alt/replace sericite + kspar by orangish-reddish clay? At 52.9-53.5 m there are some f.g. green-grey andesite inclusions. 53.5 to 56.0 m - sporadic broken zones but not well defined faults. Commonly see thin greenish sericite/clay on natural fractures. 62.0-63.0 m - still see minor areas w/ ε
A07-019		34.7	88.35 RHYODACITE PORPHYRY DIKE	At 88.3 m - into strong argillic altered RDD - completely bleached light tannish white from 88.3-89.15 m, then more pinkish zones mixed with greyish. This is usual alteration? of RDD - sericite + clay. RDD (dike) in fault contact at 91.80 m w/ altered AXT (downhole) major gougy fault w/ clasts. This is a large fault from 91.65-96.95 m w/ complex mixing of RDD and strong silicified rock (prob AXT). This is an example of altered RDD in fault contact w/ massive silicified andesite.
A07-019		88.35	91.8 RHYODACITE PORPHYRY DIKE	There are major gouge intervals from 91.85-92.8 m; 93.7-94.55 m; 94.70-95.35 m. Intervals of Msi @ 92.85-93.7 m; 94.55-94.70 and interval of RDD (st argillic altered) 95.85-96.20 m. At end of main fault zone - 96.95 m into MSI - but still broken to 97.54 m
A07-019	91.8	96.95	FAULT ZONE	Massive silica rock - light brownish tanned dark grey w/ trace diss Py
A07-019	96.95	97.74	MASSIVE SILICIFIED ZONE	Into zone mixed grey qtz-alunite (+sericite) rocks and the pinkish qtz-alunite rock - cut by irreg sericite (?) veins ~3.5° CA. 102.1-102.3 m - small band of silicified breccia - possible hydrothermal breccia w/ clasts of qtz-alunite rock in lt greyish green qtz-sericite matrix - localized Py conc. 102.65-103.0 m - short interval of purple AXT (st hematitic). 104-104.4 m - irreg light greenish vlts cut tan to pinkish qtz-alunite rock 15° CA.
A07-019	97.74	106.2	QUARTZ ALUNITE (SERICITE) ROCK	
A07-019		106.2	ANDESITIC CRYSTAL LAPILLI TUFF	At 106.2 m - alteration transition from pink-tan qtz alunite rock (uphole) into predom med-dk purple andesite (AXT) w/ minor intervals of pinkish-tannish QTZ alunite zones @ 108.3-108.6 m and w/ qtz-py vein/band + alt 60° CA. 109.5-110.1 m - alteration banding + pyrite vlts 50° CA. AXT has 0.5% diss hematite grains + plag crystals alt/replaced by white sericite/clay. 114-118.6 m - cut by irreg white qtz veins 55-65° CA (from 1 to 20 mm). At 117.5 m - 1-2 mm sericite vein has 4 cm halo of bleached qtz-sericite alt
A07-019		118.75		At 118.75 m - alteration contact between med-dark purple AXT (propylitic altered + hematitic) uphole with bleached quartz-alunite altered zone (downhole) contact is 50° CA. Qtz-alunite alt is lt to med pinkish + is cut by irreg sericite (?) veins ~20-30° CA at 120-121 m. From 120.9-121.4 m - minor diss black oxide grains in light pinkish qtz-alunite - think they are hematitic grains (w/o red streak?). At 121.6 m - slight increase in silicification to mod and getty grey banding of the pyrite 60-65° CA.
A07-019	118.75	121.95	QUARTZ ALUNITE (SERICITE) ROCK	Small hydrothermal breccia band at 121.95-122.11 m and 60° CA lower contact; there is irreg vein of green illite on lower contact. Minor diss Py around HBX and contains fragments of med-grey silica in light grey to white fn gr silica matrix; has coarse vuggy texture to removal of clay-rich clasts! Trace black oxide grains (hematite?)
A07-019	121.95	122.11	HYDROTHERMAL BRECCIA W/ WHITE SILICA MATRIX	Halo of quartz alunite alt b/w HBX - varicoloured greenish grey to light toned pink to purplish (AXT) - cut by irreg (2-10mm) whitish sericite-clay veins 40-50° CA. 122.55-124.1 m is the pinkish qtz-alunite rock (outer halo type). This qtz-alunite lacks pyrite; remnant compaction foliation in AXT ~123.2 m is 40° CA.
A07-019	122.11	125.3	QUARTZ ALUNITE	At 125.3 m - into proximal halo of more pyritic qtz-alunite w/ 2 bands of white silica matrix HBX at 124.4 m - 1-3 cm developed in matrix - banding is ~perpendicular to contacts and looks like gravitational banding in cavity (?) - banding is 15° CA; second HBX at 125.0 m is 7 cm thick and 35° CA. The two HBX bands are sub-parallel and cut across the remnant compaction foliation (40° CA) in AXT - they are subsiding HBX's in hanging wall of the main HBX zone (below). B/w HBX band (at 125 m) and main HBX zone is mixed lt grey qtz-alunite rock and bands of the drk grey soapy feeling rock (st sericite) w/ relatively abundant Py
A07-019		125.3	QUARTZ ALUNITE W/ HYDROTHERMAL BRECCIA BANDS	
A07-019		126.05	HYDROTHERMAL BRECCIA - LIGHT GREY + DARK GREY MULTI-STAGE BRECCIAS	At 126.05 m - into main HBX zone w/ multi-stage hydrothermal breccias: 126.05-129.4 m is mostly lt grey and white silica matrix bx - at 126.45 m the light grey matrix bx cuts the white-matrix bx (contacts ~45° CA). At 127.35 m - the light grey matrix bx is cutting the white matrix bx - the light toned grey matrix bx has more diss Py than the white matrix bx. At 127.7 m - pick up suggestions of local semi-ductile fabrics in banded qtz-pyrite material along edges of med-dk matrix HBX at high > (~70°) CA. At 128.15 m - st conc of f.g. py along edges of lt-med grey HBX from 128.85-129.20 m is dk grey matrix HBX - w/ clasts of white silica + lt-med grey matrix HBX + put up evidence of Py clasts in HBX (it would help to be able to break up the assay intervals according to specific breccias). Lower contact of dark-grey matrix HBX is @ 40° CA + cuts silica-pyrite banding that is 55° CA. From 127.6-131.25 m is more pyrite rich zone in HBX's and extending into HBX footwall
A07-019	126.05	130.35		Decrease silicification at lower contact of HBX - lower part of HBX has intricate silica-pyrite banding that has semi-ductile textures 60° CA and is disrupted by hydrothermal brecciation~ last clasts at 130.25 m. Below HBX is interesting silica-py banded zone - pyr-rich zone extends below HBX to 131.20 m. In HBX + banded zone there are pyritic stylolites. At 130.6 m the silica(-alunite) -pyrite bands in 50° CA, rapid alteration transition with small qtz-alunite alteration halo.
A07-019	130.35	131.25	SILICA-ALUNITE PYRITE ZONE	At 131.25 m - into Qtz-alunite (light grey to med pinkish) alt halo.
A07-019	131.25	132.05	QUARTZ ALUNITE	

A07-019	132.05	138.12			ANDESITIC CRYSTAL LAPILLI TUFF	At 132.05 m - rapid transition from light pinkish qtz-alunite alt to med-dk purplish AXT; no significant faulting at the alteration transitions - intact telescoped halo. Andesite is xtal rich and has ~3-4% lithic clasts but don't see the fiamme-like clasts until about 135.0 m. Has 0.5 to 1.0% diss hematite grains and abundant orangish limonite microvlts & patches. At 132.2 m - irreg qtz vein ~40° CA, from 134.35-134.65 m - andesite is cut by qtz-alunite vn/band that is 35° CA. From 136.3-137.90 m is semi-bleached AXT w/ wk qtz-alunite? alt. At 138.1 m - fault contact AXT (prop +qtz alunite? alt) uphole w/ volcanoclastics (downhole) - don't see orientation for faults contact? Faint bedding right at contact is 30° CA.
A07-019	138.12	171.22			VOLCANICLASTICS	Varicoloured volcanoclastics (AVS) ranging from light to med grey, greenish grey and reddish brown, fairly wel bedded w/ centimeter to tens of centimeter scale bedding w/ grain size variations from v. fn grained (shale) to fn to med grained sandstone + minor clast rich beds. There is signif diss Py - more abundant in the finer ground beds - chlorite/sericite - carbonate alteration. Bedding @ 143.8 m is 65° CA - core breaks typically parallel bedding. From 143.9 to 144.6 is graded bed w/ fining uphole -suggests volcanic stratigraphy is right side up. 146.5 still 0.2-0.5% diss Py. Some beds are almost conglomeratic w/ abundant large crystals fragments & small lithic clasts to 1 cm. There are small elongated, black grains - especially in shales that look like pieces of flattened organics. 149.58 to 149.86 m is another right side (uphole) graded bed. Bedding at 150 m is 50° CA. At ~151 m lose the fine diss Py in volcanoclastics. ~147 m pick up minor white calcite vlts. ~149.5 m - increase density of calcite vlts 20-80° CA. * Assay to 151 m to include the diss Py zone in volcanoclastics bedding ~155 m @ 55° Fault contact b/w volcanoclastics (uphole) and coarse crystal, abundant crystal tuff: has ~35-40% crystals - mostly subhedral (altered feldspar, trace qtz & biotite) and abundant dk green lithic clasts (fn pheno porphyry?) and layer clasts that look like the RDD (dike). This lithic tuff is weakly magnetic! appears kspar rich (?), may be rhyodacitic?
A07-019	171.22	174.96			CRYSTAL-RICH LITHIC TUFF	
A07-019	174.96 EOH				END OF HOLE	
A07-020	0	5.8			CASING	Casing + overburden; heavily oxidized; OL w/ small rounded pebbles
A07-020	5.8	13.9			Silicified Rock (Vuggy)	Dark grey-black vuggy silica w/ clay infill of vugs
A07-020			5.2	8.1	Silicified Rock (Vuggy)	Brownish-yellow limonitization along fracture planes. Str clay infill; loc strong Py diss. Abundant smeared sulphides. Partial pink hematization of silica (<20% of rock). FG/tiny pebbles of Vsi @ 6.5 m. Continued fracturing from 7.3-8.1 m.
A07-020			8.1	13.9	Silicified Rock (Vuggy)	Dark grey v. wk pink discolouration of clasts. Loc strong massive silicification (banded); Poss minor sphalerite @ 8.7 m in vlts associated w/ Py
A07-020			13.9	18.1	Silicified Rock (Vuggy)	Pinkish-grey; higher % of clay infill of vugs; Py dom as gashes, seams & diss
A07-020			18.1	18.7	Silicified Rock (Vuggy)	Str grey-black colour of sulphides (dominantly Py). Vsi infilled by clay dom as diss & seams.
A07-020			18.7	20.7	Silicified Rock (Vuggy)	
A07-020	20.7	21.7			Quartz Alunite	Bleached white to grey; Sal grading into Vsi w/ vugs infilled by clay. Strong Py diss from 20.3-20.7 m. Py diss increases on fracture planes.
A07-020	21.75	23.75			Silicified Rock (Vuggy)	Grey-pink; sericite overprint?; Py dominantly as smeared diss on fracture planes. Sulphide seams are ~90 ° CA
A07-020	23.75	24.1			Str Pro-Andesite FG	Light grey - w/ white vug infill (clay (?)) 22.0 m - str Py-sulphide diss. 22.6 m - Py stringers branching from strong diss of Py near center of core (on fracture surface). Sulphide stringers ~70 ° CA. Msi from 23.68-23.75 m. Irregular contact w/ FG @ 23.75 m.
A07-020	24.1	24.7			Quartz Alunite	Heavily hematized; purple; orig andesite or AXT? @ 23.8 m - tannish-lt green (Fe-chlorite?) FG - heavily disintegrated. Vague contact downhole @ ~50° CA
A07-020	24.7	26.7			Heavily str Pro - Andesite Crystal Lapilli Tuff	Greyish-pink; minimal texture w/ Py on fracture surfaces (smeared) & assoc w/ sericite.
A07-020	26.7	30.5			Quartz Alunite	Purple; orange-brown alt of plag frags (limonite (?))
A07-020			26.7	27.8	Quartz Alunite	26.7-27.7 m - Pink Sal w/ remnant AXT texture preserved. 27-27.8 m - Grey Sal w/ Py & Ser on fract planes; contact w/ pink Sal in lower interval @ 20° CA (crystalline qtz). 27.8-29.9 m - grey-pink
A07-020			27.8	29.9	Quartz Alunite	Grey-pink; grey-black sulphide vn (not able to see Py) @ 29.70 m @ ~50° CA
A07-020			29.9	30.5	Quartz Alunite	Qtz alunite (pinkish); heavily disintegrated; subtle fault contact w/ interval downhole
A07-020	30.5	36.7			Andesite Crystal Lapilli Tuff	Purple; strongly hematized w/ light green chlorite clasts? Light brown limonite stringers loc.
A07-020	36.7	38.3			Quartz Alunite Fractured & Faulted Gouge	Dark grey; w/ trace pink alteration. Heavily silicified; abundant sulphides (primarily Py). 36.5 m - Chloritized (lt green); mixed w/ Py. No obvious fault contact.
A07-020	38.3	39			Silicified Rock (Vuggy--> Massive)	Light grey "cracked texture". Strongly silicified w/ minimal Vsi texture (partial infill by Cly). Py smeared on fractures & as stringers
A07-020	39	40.53			Quartz Alunite	Pink w/ trace grey cast; appears to be illite-chlorite on fract planes. Py smeared on fract planes. In fault contact w/ lower interval.
A07-020	40.53	56.6			Andesite Crystal Lapilli Tuff	Purple w/ abundant brown vlts/stringers - limonite/clay (not sulphate since there is no rxn or smell with HCl). Green chloritization of plag frags. 46.8 m - Heavily chloritized FG (tannish green). 50.23 m - heavily hematized fractured rocks. 56.3 m - hematized purple FG has sharp transition into Illite-chlorite (?) w/ smeared Py (sericite too?) @ ~70 ° CA
A07-020	56.6	57.4			Fault Gouge	Disintegrated lt green (illite-chlorite (?)); grey Py, which is dominantly smeared.
A07-020	57.4	57.9			Silicified Rock (Massive?)	Dark grey - loc black; Py in sulphide vein ~20° CA w/ left // left lateral offset. Strong Py diss on fracture planes
A07-020	57.9	61.6			Quartz Alunite	
A07-020			57.9	58.1	Quartz Alunite	Grey; Py concentrated w/ qtz vns (v. scattered) @ 90° CA. V. weakly sericitized on fract planes
A07-020			58.1	58.6	Quartz Alunite	Pink; v. minimal text; trace smeared Py on frat planes. In fault contact w/ AXT in next interval (58.6-58.8 m).
A07-020			58.6	58.8	Quartz Alunite	Purple FG, heavily propylitically alt; originally AXT
A07-020			58.8	61.6	Quartz Alunite	Pink; minimal Py (fract surfaces); microfractures abundant throughout rock
A07-020	61.6	61.9			Quartz Alunite w/ plag alt'd to clay	Pink; w/ abundant weathering of plag frags to clay; trace vis Py; in fault contact w/ lower interval (unable to discern fault angle)
A07-020	61.9	64			Silicified Rock (Massive/Vuggy)	Greyish white-cream; w/ clay infill; appears to have remnant fiamme texture. Py diss w/ Ser (w) alt on fracture planes & as stringers w/ irreg <s
A07-020	64	64.8			Quartz Alunite	Pink-grey; minimal texture; sericite on fracture planes; no vis Py, but possibly sulphides. Qtz alt front ~90 ° CA (not totally continuous around cut rock). w/ more Cly (w) alt rock (downhole)
A07-020	64.8	66			Clay altered Plag Crystalline Quartz Alunite	Similar to previous interval, but with remnant plagioclase phenos altered to clay
A07-020	66	68.1			Quartz Alunite	Grey; w/ sericite coating on fracture planes & broken pebbles. Contact w/ lower interval ~20 ° CA.
A07-020	68.1	68.8			Vuggy Silicified Rock	Grey; w/ Py vlts ~// to VA; 2 flakes of realgar (???) vis (very bright red colour, could be thrown off by saw). Cly infill of vugs
A07-020	68.8	69.7			Quartz Alunite - Sericitically Alt'd Rock	Grey; strongly sericitic; assoc w/ smeared Py
A07-020	69.7	70.5			Strongly Silicified Rock (Massive + Vuggy)	Dark greyish-black; strong Py diss; appears semi-brecciated; faintly appears that minor Py vlts have undergone pressure dissolution. Py diss strong on fract planes.

A07-020	70.5	71.5		Quartz Alunite	Pinkish-grey; Py diss on fract planes; weakly sericitic on fract planes; increase in clay alt of plag frags for ~15 cm marks transition to Msi
A07-020	71.5	72.1		Silicified Rock (Massive)	Grey-pink; appears to have remnant fiamme-like texture (sulphides & possibly alunite). Trace Py in fiamme like lenses.
A07-020	72.1	73		Silicified Rock (Vuggy)	Dark-grey/black w/ white/lt grey qtz vning. @ 72.3 m - white intertwining qtz vlts w/ comb-like sulphide text (w/ Py diss) ~90 ° CA to qtz. Clast-dominated HBX? Py dom in the matrix
A07-020	73	73.3		Quartz Alunite w/ Sericitic Fracture Planes	Light grey; textureless; subtle transition from Msi/Vsi rock. Py diss on fract planes
A07-020	73.3	73.8		Faulted Gouge/Breccia Pro alt'd	Dark-green/light green-purple (chloritic?)
A07-020	73.8	75.5		Pro Alt'd Andesite Crystal Lapilli Tuff	Purple; heavily propylitically alt'd; light green alt of plag crystals (sericite (?)). 74.7 m - silicified fragment on strong propylitically alt'd AXT
A07-020	75.5	76.2		Quartz Alunite	Pink; relatively textureless; minor Cly alt of plag or alunite frags. 76.05 m - stronger grey silicified rock that appears out of place.
A07-020	76.2	78		Pro Alt'd Andesite	Purple; w/ light green altered plag frags; heavily disintegrated
A07-020	78	81.4		Quartz Alunite Fault Breccia	Pink-purple-grey; this section was not assayed <u>but probably could have been</u> (should plot on section). Relatively competent. 77.65-80.1 m - strong greyish-green silicified fragment w/ Jasper vn ~20° CA (irreg vn).
A07-020	81.4	81.9		Pro Alt'd Andesite Crystal Lapilli Tuff	Purple AXT; w/ lt green alt of plag frags & light brown stringers. IN contact w/ lower interval @ 40 ° CA.
A07-020	81.9	82.92		Fault Breccia	Complex mix of quartz alunite, chlorite, hematite, & Py diss. Purple-red-green. Loc strong Py diss including 3 flattened pebbles @ 82.9 m in contact w/ lower interval @ irreg <
A07-020	82.92	83.82		Quartz Alunite	"Classic" pink Sal; w/ subtle alunite elongation? (frag of some sort sub 90 to CA). 83.6-83.8 m - intricate vlt network of sulphides (dom Py) that trends ~30-60° CA w/ orange sericite.
A07-020	83.82	84.8		Quartz Alunite --> argillic alt w/ clay alt of plag frags	Purple-pink; w/ cly (w) alt of plag frags; dark purple clast ~9 cm thick @ 84.0 m & plag-phyric brownish red dacite clast 4 cm x 9 cm @ 84.54 m. Minor silicification @ lower contact of interval.
A07-020	84.8	91.2		Andesite Crystal Lapilli Tuff	Purple; hematized strongly. Weakly silicified subintervals: 85.2-85.55, 87.1-87.5, 89.3-89.5 m. Wk qtz vlts @ end of FG @ 87.5 m. 88.80 m - heavily pro alt'd FG/FB.
A07-020	91.2	92		Quartz Alunite (no Pyrite)	Purple-pink; minimal texture --> end of HQ3 @ 91.44 m. Gradual transition to grey Py-rich Qtz Alunite.
A07-020	92	92.9		Quartz Alunite (Py-rich)	Grey; wk sericitized along fracture planes; wk Py gashes ~ 90° CA @ 92.6 m (<1 mm thick)
A07-020	92.9	121.95	92.9	Andesite Crystal Lapilli Tuff	
A07-020			93.15	Fault Gouge (andesitic)	Med purple-light green AXT - FG; crumbled
A07-020			93.15	105 Andesite Crystal Lapilli Tuff	Dk purple; w/ Ca stringers & vlts; elongated clasts (remnant fiamme?) ~ 90° CA. 100.13 m - 5 mm weakly silicified FG lens. 101.8-103.33 m - Ca stringers ~70° CA @ 101.8 m decreasing in angle to ~ // w/ CA @ 103.0 m.
A07-020			105	115 Andesite Crystal Lapilli Tuff	As per sub-interval from 93.15-105 m but w/ more pronounced CA vning. 113.35 m - strong Ca bands pink & white; ~90 ° CA.
A07-020			115	121.95 Andesite Crystal Lapilli Tuff	Dk purple; strongly propylitic. Strong FG @ 119.08 m. Wk Py diss @ 120.9 to approx 121.0 m. 121.37-121.95 m - green; w/ frags aligned @ 60° CA (in line w/ Ca vning)
A07-020	121.95	124		Andesite Crystal Lapilli Tuff w/ intervals of FG	Dk green AXT w/ fiamme-like med green frags. Wk Py diss in FG vn @ 122.05 m. 123.06-123.08 m - dark red qtz alunite frag in FG. 123.30-123.9 m - reddish purple AXT w/ wk silicification on outer surface of rock (Sal (w)?). Important contact w/ lower interval of HBX @ 20 ° CA.
A07-020	124	124.66		Hydrothermal Breccia	LATE SAMPLE TO 147 m. Grey silicified matrix (matrix dominated); angular clasts of qtz alunite, msi (jasper frags). Clasts are <1mm to 1 cm.
A07-020	124.66	125.85		Andesite Crystal Lapilli Tuff	Brownish-green AXT w/ remnant fiamme-like clasts? Calcite as stringers & vlts.
A07-020	125.85	126.6		Quartz Alunite	Dark red; w/ Ca gashes; 126.14 m -> orange-red mineral; possibly Realgar w/ orpiment. Consider sampling if good results.
A07-020	126.6	126.85		Silicified HBX	Multicoloured; appears to have undergone @ least 3 silicification events. Remnant barite may also have been silicified (needles). Will add to map section. Orpiment & Realgar are with dk grey mineral that may be arsenopyrite.
A07-020	126.85	127.85		Fracture/Fault	
A07-020	127.85	130		Andesite Crystal Lapilli Tuff	Med purple; in fault contact w/ previous interval. Strongly disintegrated FG @ 127.9-128.4 m. Strongly fractured from 129.1-129.2 m.
A07-020	130	135.2		Andesite Crystal Lapilli Tuff	Med-dk purple; disintegrated w/ irregular Ca stringers. 130.10-130.30 m - chlorite-epidote (?) fault material. 130.70-130.90 m - chlorite-epidote (?) fault material. 131.10 m - chlorite-epidote fault material. 131.4-135.2 m - med purple AXT --> dominantly faulted & fractured
A07-020	135.2	139.9		Andesite Crystal Lapilli Tuff - Green	Dk green; AXT w/ remnant fiamme-like frags. Some of the cavities left by weathered plag frags appear to be replaced by Ca. Small rounded pebbles of green AXT. FG of hematite & clay & Ca. 137.90-139.90 m - purplish-green; w/ pinkish alt'd (hematite) plag frags. FB @ 138.82 m is strongly chloritic
A07-020	139.9	144.6		Andesite Crystal-Rich Tuff (Andesite Volcaniclastic?)	
A07-020	144.6	158.19		Andesite Volcaniclastic Seds	Lt green; w/ clasts oriented 70° CA (dk green); Ca clasts in matrix. May possibly be sedimentary
A07-020			146	147 Andesite Volcaniclastic Seds	Interlayered sequence of volcanic sandstone, mudstone, & remnant AXT; dom green
A07-020			147	151.9 Andesite Volcaniclastic Seds	Bedding ~40°CA
A07-020			151.9	154 Andesite Volcaniclastic Seds	14.3 m - fine layered volcanic mudstone ~40° CA. 148-151.9 m - volcanic conglomerate w/ dominantly granule-size frags (slightly hematized red - clast supported).
A07-020			154	155.15 Andesite Volcaniclastic Seds	151.9-152.5 m - volcanic conglomerate/sst. 152.5-152.8 m - mudstone w/ strong red hematite on fracture planes. 152.8-154 m - layered volcanic sst; coarse -> fine-grained.
A07-020			155.15	158.19 Andesite Volcaniclastic Seds	154-155.15 m --> volcanic mudstone -> fissile
A07-020	158.19 EOH			END OF HOLE	155.15-156.2 m - interlayered volcanic sandstone w/ mudstone. 156.2-158.19 m - dominantly volcanic mudstone - fine grained sandstone w/ loc volcanic conglomerate clasts.
A07-021	0	5.18		CASING	
A07-021	5.18	21.56		ANDESITE CRYSTAL LAPILLI TUFF	Med purple; orange limonitization of frags (plag?) gives speckled appearance. 8.8 m - breccia-size clasts (8 cm x 3 cm). 10.5 m - clasts of elongated volcanic rock are pink (brown-yellow in previous 10.5 m sub-interval); possibly due to <u>hematization</u> . Limonitization on fracture planes @ 13.66 m, 14.6-15 m. Not very exciting AXT. Throughout interval --> plag frags are light green (alt to illite or chlorite?...may be just sericite). No veining in interval. ~16-17 m: heavily fracture (low RQD). 18.9-20.2 m: white clay colour of plag frags "stands out" more; still illite-chlorite (sericite), alt'd 70° CA.

A07-021	21.56	22.76		Pink Quartz Alunite w/ clay altered plag frags	21.5-22.05 m - reddish-pink - strong clay alt'd plag frags - alteration front w/ reddish pink Sal @ 22.05 m ~// to 40 ° CA. Wk Py diss/gash appears to mimic alt front. 22.05-22.76 m - light pink --> subtle transition to grey colour @ 22.86 m. Clay alteration restricted to fracture planes. 22.2 m --> wk fracture zone of angular pebble-sized Sal frags.
A07-021	22.76	23.6		Weak Vuggy Silica w/ Clay Infill	Light grey-pink; 90% of vugs appear to be infilled by clay (or perhaps clay weathers out to create vugs). Advanced argillic alt? Py trace as wk gashes w/ black-grey sulphides
A07-021	23.6	26.4		Silicified Rock (vuggy)	Light grey-bleached. 23.6-23.8 m - strong Py gashes in sulphide veins ~60° CA. 24.84 m -> Ba vn ~60° CA ~1.5 cm wide. 25.38-25.71 m -> larger vugs (up to 2.5 x 1 cm); Py infills vugs & is seen as diss throughout section. Appears to be black Py? Qtz vlts cut through (white & grey) as well as qtz gashes.
A07-021	26.4	27.3		Quartz Alunite	Light pink-grey; minimal texture. Black Py diss vis on fracture planes. Weak clay alt on fracture planes. Weak appearance of AXT.
A07-021	27.3	27.8		Quartz Alunite w/ Clay Alt'd Plag Frags & sericitized fract planes	Med pink; sericitization on fract planes; white clay alt of plag frags. V. loc trace Py diss
A07-021	27.8	28.4		Quartz Alunite	Light pink-grey; heavily fractured; sericitic overprint? Trace black Py diss
A07-021	28.4	30.35		Silicified Rock (vuggy)	Light grey; strong Py vning/seams from 29.7-29.8 m. ~2 cm vein of barite @ 60° CA @ 30.0 m. No vis gold in barite vn. Vugs are small (< 5mm) & show little Py vning ~70° CA
A07-021	30.35	31.35		Quartz Alunite	Pinkish grey to 31.0 m changing to cream-tan w/ strong sericite overprint on rock & fracture planes.
A07-021	31.35	31.73		Quartz Alunite w/ altered plag frags	Med pink, strong clay altered plag frags; remnant AXT; no vis Py
A07-021	31.73	64.3		ANDESITE CRYSTAL LAPILLI TUFF	Overall, interval in pro (m-s) purple AXT
A07-021	31.73		31.73	ANDESITE CRYSTAL LAPILLI TUFF	Med purple; no obvious vning; crystals are lt green (illit-chlorite (?)); hematized; w/ very minor Fe-rich orange-brown stringers.
A07-021			35.8	ANDESITE CRYSTAL LAPILLI TUFF	Light green-pink chloritized, propylitically alt AXT FG w/ Sal zone from 37.1-37.2 m.
A07-021			37.4	ANDESITE CRYSTAL LAPILLI TUFF	Med purple w/ calcite vns @ 40.3, 40.6, 41.0 m @ 20-60° CA. Vlt // to CA @ 41.2 m w/ brown clay.
A07-021			37.4	ANDESITE CRYSTAL LAPILLI TUFF	Med purple; ~ 1mm thick cly vns @ 43.76, 44.4, & 45.48 m; wk, white, silicified vn in fracture fault @ 46.5 m (~80 mm thick).
A07-021			41.2	ANDESITE CRYSTAL LAPILLI TUFF	47.48-47.66 m - tan breccia clast or dike? (dacite?). Calcite-chlorite (lt green) clay FG @ 47.6 m. 48.1 m - as per fault interval 47.6-47.88 m, but steeper angle
A07-021			47.48	ANDESITE CRYSTAL LAPILLI TUFF	Dark green-brown; fiamme-like (med-green frags); calcite contact w/ purple AXT subinterval (uphole) @ 40 ° CA. Irregular Ca stringers in interval.
A07-021			51.7	ANDESITE CRYSTAL LAPILLI TUFF	Med purple; w/ thin ~1 mm Ca vlts throughout subinterval. Frags & vlts appear weakly hematized (red). 55.87 m - strongly silicified (white, hard) fault gouge material; visible Py on fracture plane. Clay altered FG @ 56.2 m. Chlorite FG @ 57.9 m. 62.7 m - red CA stringer // CA for ~400 mm
A07-021			52.75	ANDESITE CRYSTAL LAPILLI TUFF	Med green-purple; remnant fiamme; altered lt-med green? Large dark green clast w/ white frags 8 x 10 cm @ 64.6 m. In fracture contact w/ previous interval @ 30° CA.
A07-021	64.3	66		Andesite-Dacite Tuff w/ Fiamme	
A07-021	66	76.2		ANDESITE CRYSTAL LAPILLI TUFF	
A07-021			66	ANDESITE CRYSTAL LAPILLI TUFF	Med purple; wkly red-pink; alt'd plag crystals; curvilinear contact w/ downhole interval (med purple-dk green AXT). Contact ~// to CA
A07-021			68.2	ANDESITE CRYSTAL LAPILLI TUFF	Greenish purple; wk Ca vning @ 68.2 m (2 veins). Strongly chloritic FG @ 69.0 m.
A07-021			69	ANDESITE CRYSTAL LAPILLI TUFF	Med purple-med green; 72.20 m -> 5 x 7 cm andesite porphyry clast.
A07-021			74.84	ANDESITE CRYSTAL LAPILLI TUFF	Med green; dark green breccia-sized clast @ 75.5 m
A07-021	75.8	76.4		Hydrothermal/Fault Breccia	Med purple-jasper red-med green (consider sampling if other fault/hydrothermal breccias have high gold grades). Jasper veining is irregular & chaotic & appears to be closely associated w/ chlorite (possibly chalcopyrite). Wk Calcite gashes.
A07-021	76.4	94.65		ANDESITE CRYSTAL LAPILLI TUFF	
A07-021			76.4	ANDESITE CRYSTAL LAPILLI TUFF	
A07-021			81.15	ANDESITE CRYSTAL LAPILLI TUFF	Med-purple; w/ pink hematized plag clasts wkly altered to clay
A07-021			86.4	ANDESITE CRYSTAL LAPILLI TUFF	85.2-85.3 m - med green, increase in cavities of weathered plag crystals; chloritized fracture planes
A07-021			86.4	AXT w/ chloritized FG vns	Med green; w/ dark green chlorite vns in faults @ 87.88 m (~1 cm thick), 86.86 m (~2 cm thick, mixed w/ qtz & hematite), switch to NQ2 @ 88.24 m.
A07-021			88.8	AXT w/ trace ADF?	Med purple-med green; reddish pink carbonate on fracture planes.
A07-021	94.65	96.25		Andesite-Dacite Tuff w/ Fiamme	Dark green w/ med green alt'd fiamme-like fragments aligned @ ~50° CA. Chlorite-calcite slivers in fracture/faults @ 95.0, 95.2, 95.28, 95.33, & 95.98 m.
A07-021	96.25	115.75		ANDESITE CRYSTAL LAPILLI TUFF	Med purple-reddish brown; w/ minor elongated clasts @ ~50° CA. 97.0 m - strong Ca vning ~60°-70° CA till 97.10 m. 98.25-101.6 m - light green fiamme-like clasts @ high < to CA. Green chlorite-clay FG @ 100.59 m. 100.8-101.2 m - tan-light green alt halo or small dikelets (appears to be dacitic?). From 102.86-104 m Ca vlts (trace) @ 20-60 ° CA. 104.0-105.0 m - Ca // to CA w/ trace vlts. 106.35 m -> purple chloritic FG. 109.65 m -> dike/large clast (10 cm thick) of weathered andesite porphyry. 109.73 m - abundant Ca in FG. 112.37 m - large section of FG. Small frag of jasper @ 122.87 m & small frag of pink rhodochrosite bounded by galena @ 113.0 m
A07-021	115.75	120.1		Medium Green Andesite Crystal Lapilli Tuff w/ Intervals of Silica-Chlorite-Calcite Fault Gouge	(LATE SAMPLE!) Chlorite-clay altered FG @ 115.8 m. Appears altered lch? Med green AXT (whole interval) 117.50-117.70 m - light green chloritic FG w/ smoky qtz & Py diss ~10° CA. 117.80-118.35 m - banded vein from (top to bottom): Jasper -> Pyrite -> Quartz -> Jasper -> Pyrite -> Fault Gouge -> Chlorite -> Pyrite -> Quartz -> Pyrite -> Quartz -> Pyrite -> Chlorite. 118.42 m - right lateral offset of calcite-pyrite vlt @ ~30° CA. 118.64 m - pyrite-chlorite-quartz FB
A07-021	120.1	123.4		Hydrothermal Breccia	Got thrown off in quick log by similar texture to AXT -> this interval has jasper vlts & AXT clasts with the weakly silicified clasts. 120.4 - 122.5 m - mainly purple-brown AXT. 122.5-123.4 m - HBX? w/ jasper vning & trace cp & Py.
A07-021	123.4	126.49		ANDESITE CRYSTAL LAPILLI TUFF	Med green-med purple; w/ weak aligned clasts (fiamme?)
A07-021	126.49	129.54		Quartz Alunite	Pink-white vn material @ 126.49 m
A07-021	129.54	130.8		Hydrothermal Breccia	Patchy pink-grey; wk pink alt (hematite) that may be qtz alunite; Py vlts @ 60° CA
A07-021	130.8	138.48		ANDESITE CRYSTAL LAPILLI TUFF	Purple; extensive FG subintervals; wk chlorite clay alt (pro (s))
A07-021	138.48	139.6		Quartz Alunite	Purple-dk pink; no vis Py & no vis vning; relatively textureless
A07-021	139.6	144.96		ANDESITE CRYSTAL LAPILLI TUFF	Med Purple
A07-021	144.96	145.17		Quartz Alunite	Med Purple; calcite qtz vning (dark red) vning @ 40° CA. Contact w/ lower interval @ 20° CA
A07-021	145.17	147.14		ANDESITE CRYSTAL LAPILLI TUFF	Med purple; heavily fractured
A07-021	147.14	147.82		Fault contact	Contact w/ med green chloritic FB/FG @ 30° CA
A07-021	147.82	148.4		Fault gouge	Med purple; hematitic; w/ chlorite in sheets below hematite
A07-021	148.4	149.23		Fault gouge	Med green strongly chloritic; has texture of RDD in lower interval
A07-021	149.23	149.35		Rhyodacite Dike	Med green; v. weakly magnetic RDD

A07-021	149.35 EOH		END OF HOLE	
A07-022	0	1.5	CASING/OVERBURDEN	Vuggy silica w/ clay infill of vugs
A07-022	1.5	5	Vuggy Silica w/ barite infill	Light pink vsi w/ white barite infill of vugs. Loc gashes of Py, but not continuous enough to be considered a vein. Slight dark grey stain from sulphides. No VG. Faulted Pebble rock @ 4.27 m into quartz alunite bounding rock (downhole).
A07-022	5	9.6	Quartz Alunite	Med pink; Qtz alunite (sericitized on fracture planes). V trace Py diss (<< 0.1%). Minor remnant texture of possibly AXT. Slight hematization = pink colour? Increased white crystal alteration (instead of clear) --> possibly altered to sericite or clay
A07-022	9.6	14.23	Andesite Crystal Lapilli Tuff w/ limonite staining	Reddish purple w/ abundant orange limonitization of fractures. Partial lime green, soft alteration mineral replaces plagioclase (form of sericite?), also visible on fracture planes. Visible biotite ~0.5% dissem. 11.34 m - black oxidation on fracture planes (manganese oxide?).
A07-022	14.23	15.34	Quartz Alunite	Rounded breccia-size clast @ 13.9 m is 4 x 4 cm & dark maroon w/ lime green phenos. 14.16-14.23 m - med purple alt'd strongly hematized Bleached cream-pink qtz alunite w/ very minor trace Py; contact w/ lower andesite crystal lapilli tuff @ ~50 ° CA
A07-022	15.34	20.85	Andesite Crystal Lapilli Tuff w/ limonite vning & dominantly tuff-sized frags	Med purple grndmass; plag frags have been altered to lime green-yellow mineral (sericite/illite?); hematized; trace biotite; wk qtz vein contact @ 20.85 m. Med purple-brown (b/c of greater conc of dacitic? lapilli-breccia clasts = brown). Biotite visible (~0.1%) in grndmass. Silicified vein @ 23.25 m =~2 cm thick w/ trace galena. 24.82 m - silicified vlt on fract plane @ 25° CA. Evidence for late limonite vein --> 24.06 m left lateral offset of 2.5 x 2.5 cm clast, cut @ base by hematite stringer clasts ~70° CA.
A07-022	20.85	25.85	Andesite Crystal Lapilli Tuff w/ wk elongation of clasts (ADF?)	
A07-022	25.85	28.06	Andesite Crystal Lapilli Tuff	Clast orientation ~50° CA @ 24.7 m & steepens @ 25.2 m. Fault/fracture contact @ 24.8 m is ~15 ° CA & is dominated by quartz & limonite.
A07-022	28.06	28.72	Fault Gouge/Breccia of Silicified/Chloritized & Hematized Frags	Appears to be a progressive shallowing of clast angle towards faults/major fractures (try to prove theory). Med purple w/ lt brown limonitization around frags. No obvious orientation of clasts. Biotite still vis. Hematization strong along fract planes. 27.40 m - gypsum/anhydrite crystallization along fract plane.
A07-022	28.72	35.35	Andesite-Dacite Tuff w/ Fiamme	Lt green; purple; white; fault gouge/breccia material has angle ~20 ° CA. Upper to lower: lt green chlorite/illite (?), purple hematization of AXT (~1 cm thick), silicified clasts/veins ~2.5 cm thick, no distinct visible sulphides. 0.5% of silicified frags have been stained pink/orange (rose qtz?). Could sample if good assays (FUTURE SAMPLING)
A07-022	35.35	37.65	Chaotic Fault Breccia/Fault Breccia	Light pink-brown grndmass w/ abundant light brown-tan clasts & lt green frags (phenos?). Aligned @ 50-70 ° CA. Large (~11.5 cm, wraps around core) dacitic clast w/ lt green mineralization. Perhaps magmatic contact w/ AXT above (@29.20 m). Dacitic unit cuts off clast in AXT, indicating dacite unit is younger. Grades into purplish brown unit @ ~35.0 m.
A07-022	37.65	38.75	Quartz Alunite	Light green-med purple-tan; gougy material w/ few frags of silicified material & andesitic crystal lapilli tuff. Semi-competent from 35.35-36 m w/ silicified vns? (broken up). 35.55 m -> 15 ° CA; silica vn @ 35.60 m -> 35° CA. Med purple AXT w/ green altd crystals from 35.7-36.0 m.
A07-022	38.75	39.43	Andesite - propylitically altered	Gougy from 36.0-37.18 m w/ v. few silicified frags. 37.18-37.65 m - wk qtz alunite (med pink-red) w/ clay/sericite frags as alt mineral. Downhole contact ~10° CA, while uphole contact ~20° CA. Light grey-pink-dk purple (38.55 m). Fault contact w/ AXT is @ 38.75 m (45° CA)
A07-022	39.43	51.67	Andesite Crystal Lapilli Tuff w/ Calcite Veins	Dark purple; light green-white mineral replacing plag (sericite/clay); high angle fractures ~60 ° CA. Lacks lapilli-tuff fragments. May be just andesite.
A07-022			46	Medium reddish-purple (maroonish); lime green-white alteration mineral has again replaced plag (common throughout AXT intervals of Bonanza)
A07-022	51.67	52	49 Andesite Crystal Lapilli Tuff w/ Calcite Veins	White calcite vlts (strong rxn to HCl) from 47-49.2 m -> limonite stringers run ~ // to CA; equivalent w/ microfractures. Silicified clast in AXT @ 50.86 m (lt pink Sal?)
A07-022	52	53.55	Silicified Fault Vein/Fractured AXT	White, pink, green, yellow (multicoloured) silicified vein trending ~35 ° CA from 51.67-51.80 m. Fractured gougy AXT from 51.80-51.95 m bounding vein of white qtz 5 mm thick @ reddish brown quartz (jasper?)
A07-022	53.55	53.7	Andesite Crystal Lapilli Tuff w/ Quartz Veining	Med reddish purple (maroon); lapilli-size clasts have subtle orientation ~60 ° CA. 52.90 m - white qtz vein @ 50° Ca is bounded by green discolouration (vein is 0.5 mm thick). 53.43-53.55 m - heavily disintegrated
A07-022	53.7	59.85	Massive Silica Vein	White-green-pink; strong qtz vein; no visible sulphides
A07-022	59.85	62.47	Andesite Crystal Lapilli Tuff	Med purple; orange-brown fracture fill; macroscopically vis trace biotite. White qtz gashes from 59.40-59.60 m. 59.85 m - lt green chlorite-clay FG
A07-022	62.47	63	Andesite Crystal L. Tuff w/ quartz gashes and fault gouge	Fault; gougy material (on fracture planes) that is light green-brown & soft (clay-chlorite?) 61.45 m - loses structure angle @ 60.40 m & becomes more dispersed. Wk calcite seems intermixed w/ qtz gashes.
A07-022	63	64.5	Fracture - vein infill	Soft, light green fracture infill w/ white qtz. 62.51 m - fracture is ~// to CA & increases to 30 ° CA @ 62.78 m - which also is where fracture material becomes AXT
A07-022	64.5	70.1	Andesite Crystal Lapilli Tuff w/ limonite stringers	Med reddish purple w/ irreg orange-brown vlts of limonite? (Starting to wonder if some of the vn material is actually jarosite)
A07-022	70.1	71	Andesite Crystal Lapilli Tuff w/ elongated reddish clasts (lapilli)	Med-dark purple (w/ red tinge); red-purple clasts appear elongated & at an angle of 80 ° CA. Strongly hematized; the qtz veins in this interval have a slight pinkish hue. 64.66 m - rx w/ acid wk, but stinks of rotten eggs (white w/ pinkish hue) indicative of tiny sulphides on fract plane w/ qtz (I think Py). 68.40-69.05 m - faulted, fractured slivers of AXT w/ grey silica, v. trace sulphides
A07-022	71	73.46	Fault breccia/fault gouge	Fault gouge w/ disintegrated AXT, contact @ low < to VA. 70.1 m - 5 pebble sized grey sericite pyrite frags. 70.95 m - grey sericite pyrite clast.
A07-022	73.46	74.23	Andesite Crystal Lapilli Tuff	Med re-purple subtle clast orientation ~// to CA (not fiamme though). Wk fault/fracture subintervals.
A07-022	74.23	75.55		
A07-022	75.55	78	Fault breccia/fault gouge	Top to bottom: grey silica frags (~2 cm) to pink AXT -> purple AXT -> pink AXT -> silica -> pink AXT. Pebbles are rounded in FB subinterval
A07-022	78	78.61	Andesite Dacite Tuff w/ Fiamme	Med purple; w/ lt brown hue; clasts are oriented @ 30 ° CA; silicified clast ~ 4 x 6 cm in FB subinterval
A07-022	78.61	86.3	Andesite Crystal Lapilli Tuff	Med red-purple; pick up fiamme-like texture from 77.6-78.0m. Fiamme-like clasts @ 30 ° CA; broken contact w/ lower interval (downhole)
A07-022	86.3	90.75	Faulted Vein/Breccia	Upper contact = purple AXT w/ lime green/light green mineral (illite-chlorite). Purple w/ green mineral AXT -> pink Sal? (or slightly silicified AXT proto)
			Andesite Crystal Lapilli Tuff	Med reddish-purple; pinkish (hematized) plag frags; fiamme-like texture @ 30 ° CA for 20 cm (70.61-70.81 m). 82.15 m - thin fracture plane w/ sheeted hematite
			Andesite Dacite Tuff w/ Fiamme	Light purple-tan; fiamme is distinct & at an angle of ~70 ° CA; trace galena spotted on the lower side of the jasper vein (could the fiamme be a conduit for gold? It has been cut to double-check).

A07-022	90.75	91.8	Andesite Fault Gouge Pink Quartz Alunite w/ clay/sericite alt'd plag frags	Dark purple w/ bright green alt mineral replacing plag (sericite?); switch from HQ2 to NQ3 @ 91.29 m.
A07-022	91.8	92.36		Light pink; relatively textureless; trace vis Py; orange brown stringers = limonite or jarosite (?)
A07-022	92.36	92.97	Silicified Rock (Massive/Vuggy)	Dk grey; w/ white/orange-yellow coating loc on fracture planes. Appears to be chalcopyrite in interval. Cp + Py = green colour. Vugs are visible by microscope, but not macroscopically.
A07-022	92.97	94.3	Quartz Alunite	Med pink; Qtz alunite (sericitized on fracture planes). V trace Py diss (<< 0.1%). Minor remnant texture of possibly AXT. Slight hematization = pink colour? Increased white crystal alteration (instead of clear) --> possibly altered to sericite or clay
A07-022	94.3	94.67	Chloritic Fault Gouge	Dark green; broken pebble-sized frags of chlorite + pyrite
A07-022	94.67	96.2	Andesite Dacite Tuff w/ Fiamme	Med purple-brown; wk clast orientation ~40° CA. 95.54 m - 1 cm red qtz vein w/ chalcopyrite (~0.5% along vein) - mineralization on fringe of vein (Cp + Py + Ga)
A07-022	96.2	96.88	Andesite Crystal Lapilli Tuff	Med-dk purple; heavily fractured; strong red hematization along fract planes
A07-022	96.88	97.17	Quartz Alunite	Dark pink; relatively textureless; no vis Py
A07-022	97.17	97.55	Massive Silicification	Dark grey; dominantly Py as sulphide mineral; no obvious vugginess; similar to HBX for last 13 mm (Sal breccia clast in silica matrix)
A07-022	97.55	99	Andesite Crystal Lapilli Tuff	Med purple-brown; brownish colour caused by limonite stringers (may be jarosite (?)); lime green alteration (sericite) of plag crystals
A07-022	99	99.56	Andesite Pro Alt'd FG	Strongly disintegrated; reddish purple; heavily hematized
A07-022	99.56	100.1	Quartz Alunite	Med grey; moderately soft (late sericitization?); Py banded diss. 99.56-99.7 m - initial 1.4 cm is pink w/ clay/sericite alt of clasts & no vis Py
A07-022	100.1	102.6	Silicified Rock (Vuggy)	White-grey; sericitized on fracture planes. 100.1-100.9 m - Py-rich vlt stringers; relatively weak Vsi; orange silica vlt 70 ° CA @ 100.2 m. 100.9-101.94 m - light grey-mod strong vuggy silica w/ minimal Py. 101.94-102.06 m - solid white vuggy silica vn (?) envelops clasts of silica.
A07-022	102.6	103.1	Quartz Alunite	Med pink; white, soft alteration mineral (sericite/clay) replaces plag @ 102.86 m. Appears to have remnant AXT texture. Subtle transition to AXT @ 103.1 m.
A07-022	103.1	113	Andesite Crystal Lapilli Tuff	Med purple; w/ subtle dark purple-red clast orientation of 80° CA. FG @ 110.2 m of light green, chlorite-illite (Ich (w)).
A07-022	113	121.67	Andesite Crystal Lapilli Tuff w/ subtle elongation of clasts	Med reddish purple; slight increase in appearance of elongated clasts (60-70 ° CA). Limonite-jarosite veining @ 114.33 m (~5-30° CA) stringers. Increase in tannish-brown colour of clasts @ 120.25 m. 121.3 m -dark pink appearance similar to qtz alunite after fault (downhole), but soft (scratch easy with knife).
A07-022	121.67	122.74	Quartz Alunite	Light pink-light grey; silicified w/ trace loc Py (not enough to even consider as trace Py). 122.38-122.74 m - increase in white soft mineral replacing plag (sericite?). Still strongly silicified but appears to look like AXT w/ poss fiamme? 123.45 m - white phenos have slight yellow stain. Contact w/ softer AXT @ 50° CA.
A07-022	122.74	123.49	Quartz Alunite w/ Clay/Sericite Alt'd Phenos	Med-dk purple; w/ strong appearance of white mod hard phenos (sericite/kaolinite?); still strongly silicified, but appears to look like AXT w/ poss fiamme? 123.45 m - white phenos have slight yellow stain. Contact w/ softer AXT @ 50° CA
A07-022	123.49	124.63	Andesite Crystal Lapilli Tuff	Med reddish purple; disintegrated gougy, tiny rock frags @ 124.2 m till silicic vning @ 124.63 m.
A07-022	124.63	125.4	Silicic/Sericitic Fault Gouge/Veining	Dark-light green, light pink; dominantly silicic veining; Py stringers are same angle as silicic veining ~45 ° CA.
A07-022	125.4	125.9	Andesite Pro Alt'd	Dark purple; remnant AXT?
A07-022	125.9	131.83	Andesite Dacite Tuff w/ Fiamme	Med red-purple; fiamme-like clasts oriented ~65° CA
A07-022	131.83	142.39	Andesite Crystal Lapilli Tuff w/ Qtz & Calcite Vning	131.83-132.02 m - partially silicified vein? w/ clear qtz veins @ 80° CA & discontinuous white qtz @ 60° CA. Trace visible Py in this interval; white quartz cuts through clear quartz. Visible crystalline hematite. 133.8-134.2 m - calcite veining @ 5-15 ° CA.
A07-022	142.39	147.83	Andesite Dacite Tuff w/ Fiamme	Med pink-purple-lt brown; fiamme @ ~80° CA. 143.96 m - clayey FG. 145.06 m - clayey limonitized FG
A07-022	147.83 EOH		END OF HOLE	
A07-023	0	3.05	CASING	
A07-023	3.05	7	ANDESITE CRYSTAL LAPILLI TUFF	Med brownish-purple; brown limonite stringers throughout AXT; strong purple hematization along fracture planes; continued weak fracturing after fracture/faulted AXT @ an angle of ~10° CA to 6.0 m. Contact w/ AXT preserved @ 60° CA (7.0 m).
A07-023	7	7.24	QUARTZ ALUNITE	Light grey; strong orange-yellow limonitization along fracture planes. Trace Py diss. Irreg contact w/ purple gougy material.
A07-023	7.24	7.44	Andesite Pro Alt'd	Med-dk purple; strongly hematized; might be former ADF (downhole); unable to discern
A07-023	7.44	12.44	Andesite Dacite Tuff w/ Fiamme	Light pinkish-purple; fiamme-like clasts are light pink. 7.44-9.0 m - clast orientation ~70 ° CA. 8.13 m - light brown clay infills fracture fault. 9.0-12.44 m - med-dk purple w/ maroon-red fiamme-like clasts aligned 80° CA. Lt green-white sericite replaces plag phenos
A07-023	12.44	23.45	Andesite Crystal Lapilli Tuff w/ loc volcanic breccia-size clasts	Med reddish-purple; hematized; 7x7 cm purple volcanic clasts w/ small red blebs ~1-2 cm? that appear to postdate breccia-size clast @ 17.20 m. 18.81 m - 6 cm wide (Wrap around hole core) fine grained red tuff (poss dike). 20.38 m - fine-grained med purple 2.5x4 cm clast.
A07-023	23.45	27.74	Andesite Crystal Lapilli Tuff w/ wk clast orientation	20.66 m - 11x9 cm angular breccia clast.
A07-023	27.74	33	Andesite Dacite Tuff w/ Fiamme	Light pinkish brown; clasts oriented ~30° CA. Regains med reddish purple colour @ 25.18 m.
A07-023	33	33.7	Andesite Crystal Lapilli Tuff	Light pink-light purple ADF (?) v. subtle fiamme-like clasts aligned ~35° CA. Ca stringers give off rotten egg smell (associated with sulphides?). Light pink from 27.74-29.10 m. Light purple grndmass w/ reddish fiamme-like clasts from 29.10-31.0 m. Strong light brown stringers (wk rxn to HCl - Ca?) throughout light purple grndmass. 31.35-33.0 m - light purple w/ light pink fiamme-like clasts. Lime green alteration mineral (sericite (?)) has replaced plag phenos.
A07-023	33.7	33.95	White Silicified Fault Rock	Med purple grndmass w/ bright green soft alteration mineral (sericite (?)) replacing plag. Green mineral possibly illite variety of sericite.
A07-023	33.95	34.77	Andesite Crystal Lapilli Tuff	White-light grey; dominantly silicified; light green-yellow FG (poss illite-chlorite) on fracture planes. V. trace Py diss.
A07-023				Light pink-purple AXT w/ tan lapilli-sized clasts (poss orig ADF?); heavily fractured. 34.46 m - fracture set ~15 ° CA
A07-023				Med-dk purple (hematized) w/ light green/white alteration mineral (sericite?) replacing plag phenos. No obvious alignment of clasts. From 34.7-36 m - continuous fracture // to CA. 38.78 m - dk pink 5x4 cm silicified (rounded) clast ~// to CA (not very obvious). 41.40-42.68 m - subtle dark red aligned clasts // to CA in dk purple grndmass. 42.85-43.53 m - dark red fiamme-like clasts ~25 ° CA in dk purple grndmass.
A07-023	34.77	46.45	Andesite Crystal Lapilli Tuff (hematized)	Silicified 2x2 cm pink clast w/ yellow alt halo @ 43.50 m. 44.77 m - 1 cm white qtz vein aligned @ 30 ° CA. Alteration contact @ 46.45 m is 30° CA.

A07-023	46.45	47.18	QUARTZ ALUNITE	46.45-46.53 m - pink; hematized qtz alunite w/ no vis Py; alteration contact @ ~30° CA. 46.53-47.04 m - light grey w/ dark sulphide gashes (trace Py). (Sericitically altered on fracture planes throughout interval). Alteration contact @ 47.04 m is ~50 ° CA w/ pink qtz alunite. 47.05-47.18 m - med-dk pink qtz alunite w/ no vis Py. Alteration contact w/ AXT lost due to fractured nature of rock. CONSIDER SAMPLING IN FUTURE, IF GOOD RESULTS FROM QTZ ALUNITE INTERVALS
A07-023	47.18	51.03	Andesite Crystal Lapilli Tuff	Med purple; light green/white sericite (?) replacing plag phenos. 48.43-48.59 m - light brown/med purple/light green FG/fault slivers oriented @ 40° CA. 48.78-49.08 m - low angle fracture plane w/ light brown stringers
A07-023	51.03	51.29	Andesitic/qtz alunite fault gouge	Layered light pink-med purple-med pink fault gouge of AXT & qtz alunite material. Alteration/rock type boundaries are @ 60 ° CA.
A07-023	51.29	51.65	QUARTZ ALUNITE	Med pink; hematized; light green alt mineral replacing plag from 51.29-51.48 m; no distinct contact w/ AXT (downhole)
A07-023	51.65	55.31	Andesite Crystal Lapilli Tuff	Med-dk purple grndmass; lt green soft alt mineral replaces plag phenos (sericite (?)). 52.22 m - fault contact ~15-40 ° CA w/ med purple AXT (downhole). Dark grey breccia-size clast (15x25 cm) @ 53.90 m. Subtle clast orientation ~// to CA in interval.
A07-023	55.31	55.55	QUARTZ ALUNITE	Light pink-light grey segment of AXT (<u>consider sampling in future if qtz alunite runs</u>). Alteration contacts ~70° CA.
A07-023	55.55	56.08	Andesite Crystal Lapilli Tuff	Med purple grndmass w/ lt green alt mineral (sericite) replacing plag phenos.
A07-023	56.08	56.44	Andesite Crystal Lapilli Tuff	Med purple groundmass w/ light green alt mineral (sericite (?)) replacing plag phenos. 56.08-56.21 m - light grey w/ trace Py; no obvious contact uphole; lower alteration contact w/ med-dk pink qtz alunite @ 56.21 m is ~60 ° CA. 56.21-56.44 m - lower contact @ 40° CA w/ AXT (fault contact). <u>Consider sampling if AXT runs</u> .
A07-023	56.44	63.7	Andesite Crystal Lapilli Tuff	Med-dk purple AXT; w/ light green-white alt mineral replacing plag (my guess again is sericite). Subtle fiamme-like clasts oriented 70-80 ° CA (no obvious). 58.22-60.0 m - fractured & faulted AXT; strongly hematized on fracture planes. 62.80-62.90 m - light green-white clayey FG. Wk fault contact w/ Qtz Alunite (downhole) & no contact is preserved.
A07-023	63.7	64.54	Quartz Alunite/Sericitic Alteration	63.70-63.90 m - light-med pink; slightly hematized qtz alunite; no obvious uphole contact ; downhole alteration contact w/ grey qtz alunite @ 63.90 m is ~25° CA. 63.90-64.13 m - med grey; phenos blend in with colour of rock. 61.3-64.31 m - poss consider calling massive silicification w/ sericite/alunite replacing plag phenos & strong Py diss. Py diss as vein ~2.5 cm @ 50 ° CA @ 64.09 m. 64.31-64.54 m - dk purple (still hard: H~7) w/ strong white pheno alt (sericite/clay(?)). Appears to be 2 alt halo contacts ~80 ° CA & 1 mm thick stronger hematite material.
A07-023	64.54	66	Andesite Crystal Lapilli Tuff	Med-dk purple grndmass; w/ lt brown cly? stringers irreg angles. Gougy material from 65.40-66.0 m.
A07-023	66	66.5	Grey Quartz Alunite	Med grey; lch (s) FG @ 66.42 m -> lt-med grey; FG assoc w/ smeared Py. Relatively textureless.
A07-023	66.5	71.18	Vuggy/Banded Silicified Rock/Hydrothermal Breccia	Light grey w/ white kaolinite infill; 66.65 m - ~5mm white qtz vein w/ thin (<1 mm) Py stringers. 67.20-67.35 m - kaolinite infill of vugs. 67.70-68.0 m - thin laminae of qtz, Py & what appears to be sphalerite. A Py vlt ~2mm wide cuts across banded qtz & sphalerite @ 67.95 m (pressure dissolution texture). 68.0 m - colloform texture w/ green sphalerite (?) & anhydrite ~ 2x0.5 cm. 68.15-68.77 m - has HBX appearance w/ white Msi matrix & grey Vsi clasts (clast-dominated). 69.0-69.23 m - crustiform/colloform texture w/ quartz & red sphalerite (?). 69.23 m - ~2.5 cm wide banding of white qtz w/ grey qtz. 69.46-70.16 m - med pink vsi w/ kaolinite infill of vugs. Py smeared @ ~55 ° CA
A07-023	71.18	72.52	Grey Quartz Alunite/Sericite	could be remnant fiamme-like clasts. Alteration banding w/ Py & qtz @ 70.16 m is ~70 ° CA. 70.16-71.18 m - dominantly msi (slight HBX); white milky qtz @ 70.77 m which is ~5 cm thick @ an angle of 40° CA
A07-023	72.52	73.75	Pink Quartz Alunite/Sericite	Lt-med grey qtz-alunite(?). Sericitically altered on fract planes w/ smeared Py. Subtle transition to hematized quartz alunite/sericite (downhole).
A07-023	73.75	74.13	Grey Quartz Alunite/Sericite	Med pink qtz alunite/sericite. Py has been altered to hematite (?) Strong sericitization (possibly illite too - light blue (?)) on fracture planes.
A07-023	74.13	74.4	Massive Silicified Rock	Alteration contact w/ grey qtz-sericite/alunite is ~75° CA @ 73.75 m.
A07-023	74.4	75.06	Pink Sericite/Quartz Alunite; Grey from 74.4-74.6 m	Grey qtz sericite (minor alunite (?)), weakly fractured (small pieces of rock ~ 8 cm max).
A07-023	75.06	76.64	Grey Sericite/Quartz Alunite	Light grey w/ white qtz veining ~70-80° CA (Py veining is ~same angle)
A07-023	76.64	77.44	Pink Quartz Alunite/Sericite	74.4-74.6 m - I think a few of these rocks may be displaced, should be qtz alunite/sericite (since no obvious fault). 74.6-75.06 m - med-pink w/ wk white phenos visible of sericite (?). Called Vsi in quick log, but would reconsider after seeing cut section.
A07-023	77.44	92.73	Andesite Crystal Lapilli Tuff w/ Sericite/Clay alt'd Phenos	Strongly sericitic (especially on fracture plane) called Vsi on quick log (would reconsider). Py vlts are rare & @ ~90 ° CA.
A07-023	92.73	95.45	Andesite Crystal Lapilli Tuff w/ Fiamme-like Clast Orientation	Pink qtz sericite/alunite (?). Strongly sericitic on fracture planes, weakly limonitized in fracture fault. Unobvious fault contact w/ downhole unit.
A07-023	95.45	95.87	Andesite - propylitically alt'd	Med purple-lt brown "classic" AXT w/ loc zones of fiamme-like clast orientation. Hematite locally specular. 83.20-84.0 m - fiamme-like clasts (light purple-pink) are oriented ~80° CA until 83.76 m when they shallow to ~40° CA. 87.51-87.78 m - light green, mod silicified, fractured chunk of rock; in contact w/ AXT downhole @ ~40° CA. No vis Py. 89.6-90.6 m - heavily disintegrated & fractured AXT (marked as fracture fault).
A07-023	95.87	96.4	Pink Quartz Alunite/Sericite	92.73-93.0 m - pick up fiamme-like clasts @ ~20° CA. 93.38 m - fiamme-like clasts are dark red-light purple. 94.09 m - pick up limonitized (could be jarosite) stringers that are irregular throughout rock.
A07-023	96.4	96.71	Grey Quartz Alunite/Sericite	Dark purple grndmass; w/ lt green-white alt of plag phenos (to sericite (?)). Alteration front w/ qtz alunite/sericite (downhole) @ ~80 ° CA.
A07-023	96.71	98.84	Andesite Crystal Lapilli Tuff	Med pink qtz alunite/sericite w/ v trace loc Py on fract planes. Loss of texture, but still vis pheno replacement (white hard mineral = alunite or sericite (?))
A07-023	98.84	99.9	Small Frags of Quartz Alunite & Massive Silicified Rock w/ Sericite Alt'n on Fracture Planes	Light grey qtz alunite/sericite w/ thin (~0.5 mm Py veins), contact w/ interval downhole @ 96.71 m is ~30 ° CA. Contact consists of thin vlts of brown clay & Py (poss Cp giving green colour?).
A07-023	99.9	101.3	Hydrothermal Breccia	Med purple grndmass w/ light green sericite alt'd minerals. 97.21-97.96 m - brown limonite (jarosite (?)) irregular vlts.
A07-023	101.3	102.68	Light-med Pink Quartz Alunite/Sericite	Light grey (one pinkish 5 cm rock); w/ smeared Py assoc w/ sericite alt'n (prevalent on fract planes). 99.24-99.9 m - Py diss abundant in this subinterval as thin <1 mm vlts.
A07-023	102.68	102.95	Med grey Qtz sericite/alunite	Light grey - w/ vns of milky white qtz; sericitized along fracture planes. Slight orange tine on silica from 100.5-100.7 m. V. weakly vuggy.
A07-023	102.95	104.5	Hydrothermal Breccia	Poss qtz alunite/sericite from ~101.0-101.3 m, but difficult to determine certainly (broken).
				Light-med pink; beige-light green sericite strong in fracture fault subinterval. Pink colour caused by hematization.
				Med grey; short interval of relatively soft sericite-dominated (relatively soft) - qtz alunite (?) Py bands @ ~70 ° CA separate this interval from hydrothermal breccia (downhole).
				White-light med grey; Vsi clasts w/ a Py-Msi matrix (difficult to differentiate); vugs are not very visible, but give a bubbling noise when rock is immersed in water. Slight orange-red oxidation (very locally) @ 103.50, 104.13, & 104.40 m. Strong Py diss from 103.87-104.08 m. Not quite sure what orange staining is (poss Arsenic mineral (?)). In fault contact w/ AXT downhole.

			Andesite Crystal Lapilli Tuff w/ Loc zones of fiamme-like clasts	104.50-105.12 m. No obvious uphole contact; med purple AXT w/ brown limonite stringers. 105.12-106.07 m - dark purple andesitic FG w/ light green sericitically alt'd phenos @ 105.40 m - appears to be "out of place" HBX clast (misplaced when cutting?). 106.07-107.60 m - med purple AXT w/ fiamme-like clasts aligned @ ~20° CA. Contact w/ FG ~50° CA. 107.6-108.0 m - strongly hematized FG interval.
A07-023	104.5	108	Quartz Alunite/Sericite	Slight pink-grey; relatively textureless; Py associated w/ sericite on fracture planes. Strong Py diss @ 108.31 m is ~80 ° CA.
A07-023	108	109.75	Hydrothermal Breccia	White vsi matrix w/ vsi/msi clasts. Consider either HBX or banded irreg silicification.
A07-023	109.75	110	Chloritic Fault Gouge	Strong chloritic (lt-dk green, soft) FG w/ 3 small rock frags ~5 cm each from 110.5-110.7 m.
A07-023	110	110.8		White-grey HBX w/ Vsi matrix & Msi clasts. Jasper vein ~2 mm to 1 cm w/ trace Cp on jasper fragment. Py vein network ~1 cm wide @ 40 ° CA @ 110.07 m.
A07-023	110.8	111.15	Hydrothermal Breccia/Vuggy Silicified Rock	Light-med pink; sericite vein 90° CA @ 111.26 m; bleached pink clast in Sal/Ser interval @ 111.78 m. White sericite vein ~1 cm thick @ 112.20 m, poss alt halo to grey qtz alunite/sericite
A07-023	111.15	112.2	Pink Quartz Alunite/Sericite	White vuggy silica clasts w/ Py-rich matrix. No other vis sulphides.
A07-023	112.2	114	Hydrothermal Breccia	Med grey; sericite-rich wkly silicified rock; sericite on fracture planes is associated w/ smeared Py
A07-023	114	114.2	Quartz Sericite w/ Smeared Pyrite	Light grey vsi clasts w/ white/milky msi matrix & weak Py diss. Breccia has been wkly hematized loc (jasper ?); wk crustiform/colloform texture is visible @ 117.45 m. Breccia ID'd by milky white matrix.
A07-023	114.2	116.64	Hydrothermal Breccia	Med grey; less texture then HBX above & below - smeared Py is assoc w/ sericitization
A07-023	116.64	118.4	Quartz Sericite	
A07-023	118.4	119.43	Hydrothermal Breccia	Med grey sericitized matrix w/ white msi clasts & trace Py blebs/clasts. Appears to be @ least 3 silicification events. Bx is matrix-dominated.
A07-023	119.43	119.83	Sericitically Altered Rock	Med-dk grey; poss orig HBX that has been strongly silicified (not as obvious as uphole HBX intervals). Sericitization associated w/ Py diss (especially strong on fracture planes). Contact w/ downhole interval @ ~25° CA.
A07-023	119.83	121.62	Hydrothermal Breccia	121.6 m - banding/vning @ 25° CA, which shallows to // to CA @ 121.72 m & steepens to ~25° CA @ 121.87 m; banded texture is lost @ 122.0 m, where the bx has a light grey vuggy silica matrix w/ white massive silicified clasts (really difficult to differentiate -> several silica stages). Slight orange staining on rx locally throughout interval. 123.0 m - increase in size of grey vuggy silica clasts (become bx size frags). 124.79 m - banding ~60-70° CA of white milky qtz (thin bands ~2 mm) continues till 124.90 m (and still has Bx appearance w/ ~5 mm & smaller wispy vuggy silica clasts). From 124.79-126.45 m - appears to be increase in pressure dissolution textures in this subinterval of HBX w/ wispier, "ductile" deformed white massive silica matrix/vning
A07-023	121.62	126.45	Sericitically Altered Rock	Med grey; w/ smeared Py on fract planes; alteration front w/ uphole interval @ ~70 ° CA (spotty Py vein) contact w/ hematized sericitically alt'd rock downhole is ~20° CA.
A07-023	126.45	126.9	Hematized sericitically altered rock w/ remnant ADF texture	Med pink; hematized; has remnant ADF appearance w/ fiamme-like clasts oriented ~70 ° CA.
A07-023	126.9	127.33	Quartz Alunite/Sericite (?)	Med grey; has subtle ADF remnant appearance. 128.0-128.05 m - slightly hematized rock frag. Black-dark grey sulphides aligned @ ~30 ° CA @ 128.10 m. Circular clast @ 128.65 m has 3 cm diameter; uncertain of importance
A07-023	127.33	129.76	Hematized Quartz Alunite/Sericite	Med pink; hematized; strongly sericitized fracture planes w/ sericite/clay replacing plag frags locally. Slight green tinge on fracture planes (chlorite?)
A07-023	129.76	130.83	Sericitically Altered Rock/Quartz Alunite	Light-med grey; lt green-grey sericitization on fracture planes; v minimal Py (smeared). (Tim has suggested that "sericite" on fracture planes, may be pyrophyllite.
A07-023	130.83	133.93	Hematized Quartz Alunite/Sericite	Light-med pink; has remnant AXT texture; fracture planes have soapy texture (calling this sericite, but may actually be pyrophyllite - light green loc)
A07-023	133.93	135	Quartz Alunite/Sericite	Light grey; again has soft, waxy sericite/pyrophyllite on fracture planes
A07-023	135	139.25	Hydrothermal Breccia w/ orange staining locally	White, milky silica matrix that has orange tinge (limonite?). Clasts are light grey vsi clasts. Fracture planes are soft & waxy (sericite/pyrophyllite?). Matrix is veined loc; vein @ 136.43 m is 3 cm wide. 138.33-139.25 m - white msi + grey vsi clasts w/ Py matrix; 138.79-139.25 m - increase in milky qtz (vn ~10 cm @ 139.11 m w/ orientation of 90 ° CA.
A07-023	139.25	140.55	Pyrite-Rich Hydrothermal Breccia (Sericitically Alt'd)	Dark grey; soft (strongly sericitic?); Py is diss throughout interval & assoc w/ fracture planes. Weak HBX.
A07-023	140.55	141.7	Hydrothermal Breccia w/ Pyrite	Med grey; dominantly Vsi (HBX? - despite minimal clasts?). Appears to have vsi clasts @ 141.40 m, where matrix = thin veined Py w/ dark blue enargite (?)
A07-023	141.7	144.45	Hydrothermal Breccia w/ strong grey Vsi	Med grey vsi clasts with banded/veined milky white msi matrix. Appears to have undergone partial pressure dissolution vning @ 143 m is ~45° CA. Smeared Py on fracture planes.
A07-023	144.45	149.92	Hydrothermal Breccia w/ strong grey Vsi	144.145-145.10 m - dominantly milky white qtz; matrix-dominated. Minimal grey vsi? (not obvious) clasts. 145.10-145.30 m - dominantly grey fractured msi w/ minor white milky qtz. 145.30-146.0 m - dominantly milky white quartz w/ trace grey vsi clasts (~2 mm). 146.0-146.74 m - wispy, banded, milky white msi w/ grey vsi (pressure dissolution). 146.74-147.50 m - milky white qtz-dominated. 147.50-149.92 m - whitish grey msi matrix w/ ~2 mm sized grey vsi clasts - appears to be @ least 3 silica tinged orange stages.
A07-023	149.92	151.7	Quartz Alunite/Sericite	Mixed med pink-light grey; hematized-sulphidic qtz alunite/sericite. Relatively textureless. Sericitically altered on fracture planes. 149.92-150.32 m - light grey w/ Py diss. 150.32-150.37 m - hematized. 150.37-151.08 m - light grey w/ v trace Py diss. 151.08-151.30 - hematized. Strong smeared Py w/ sericite on fracture planes. Intense Py veining (vlts) @ high < to CA @ 154.48 to 154.56 m. 154.84-155.05 m - wk massive silica HBX? w/ red clasts of hematized qtz alunite? Py & dark grey sericite-qtz make up matrix. Red clasts could also be weakly jasperized (hard). 155.05-156.23 m - v wk HBX w/ dark grey sulphide vning. 156.23-158.60 m - strong Py veining (~1% in veins), which are @ high < to CA; jasper vning (weak) @ 156.85 m. Supposed copper (from quick log observation) does not seem visible on cut section of rock. 158.609-158.70 m - milky qtz blebs trace by wk sulphides (Py).
A07-023	151.7	159	Sericitically Altered Hydrothermal Breccia	Dark grey w/ irregular Py veins (no obvious orientation); subtle contact w/ bleached beige quartz alunite/sericite interval (downhole).
A07-023	159	160.7	Sericitically Altered Rock w/ Pyrite	Bleached beige w/ relatively minimal texture; sericite on fracture planes has no vis Py
A07-023	160.7	161.21	Bleached Beige Quartz Alunite	Strongly pyritic quartz alunite/sericite w/ smeared Py on fracture planes & Py vlts.
A07-023	161.21	162.87	Pyritic Quartz Alunite/Sericite	Med pink; relatively textureless; w/ cloudy lt grey crystalline alunite? replacing plag; hematized; ~40 ° CA contact w/ lower interval downhole @ 165.25 m w/ AXT
A07-023	162.87	165.25	Med Pink Quartz Alunite	Med purplish-brown; slightly limonitized (?); plag phenos have been replaced by sericite
A07-023	165.25	167.5	Andesite Crystal Lapilli Tuff	

A07-023	167.5	171.6		Andesite Crystal Lapilli Tuff w/ Pyrite - Subtle Hydrothermal Breccia	(COULD BE IMPORTANT...thankfully it was cut). Light brown matrix w/ limonite stringers. On outer core surface; would not suspect Py, but when cut - smooth surface reveals abundant Py diss & Py blebs. V. weakly vuggy; bizarre; unlike anything I have seen so far.
A07-023	171.6	174.58		Andesite Crystal Lapilli Tuff	Med pink-purple; w/ lt brown fiamme-like clasts aligned @ ~80° CA.
A07-023	174.58	179.83		Andesite Crystal Lapilli Tuff	174.58-174.76 m - weak jasper veining w/ Py & what appears to be trace malachite (soft, as well). Light brown colour throughout interval w/ brown limonite stringers throughout section.
A07-023	179.83 EOH			END OF HOLE	
A07-024	0	3.05		CASING	HW casing, no core
A07-024					Mottled lt brown to dk grey; ~20% porphyritic w/ 2-3 mm anhedral to sub-hedral alt'd plag laths cast - probably pyrophyllite (lt yellow & a bit waxy). Mod- highly broken core w/ fault gouge contact @ 17.68-18.6 m (dk grey). Fracture angle can't be determined because the core was cut/sampled already. Syn-alt'n brecciated w/ pebble to cobble size sub-rounded clasts. Fracture/fault @ 11 m - 3-4 cm white to translucent white cristobalite w/ minor jasper @ wall-rock portion of central part. has v.f. specular hematite = vf Py. Slickenside @ 14 m - 5 ° CA w/ left-lateral movement - limonite filled. Traces
A07-024	3.05	18.6	18	Andesite Crystal Lapilli Tuff	Traces of disseminated copper-red flaky biotite observed from 16.85-18.6 m along w/ white sericite? Sheen
A07-024				Andesite Crystal Lapilli Tuff	Silica-alunite alt'd AXT; tan to lt pink). Highly silica-alunite alt'd propylitic w/ pebble-sized volcanoclastic breccia @ 19-22 m (2-3 mm anhedral to subhedral clay alt'd plag casts) - generally alt'd to alunite w/ sericite +/- pyrophyllite (lt-yellow to white); waxy
A07-024	18.6	29.57	26.3	Andesite Crystal Lapilli Tuff	Normal fault band on slickenside w/ sulphides v.f.
A07-024					Maroon to dk grey w/ lt grey to yellowish-grey portions where it is alt'd/bxd/sheared. Porphyritic w/ ~20% med-grained 2-4 mm cly-alt'd phenos. Bx'd to rarely fiammitic texture w/o seem to be related to the hematite alt'n because there is a sub-angular clast of andesite porphyry. Andesite porphyry clasts look "exotic" is weakly clay alt'd w/ rare amphibole leached out cast. These clasts are not affected by hematite, thus greenish-grey. Porphyry texture due to anhedral to subhedral clay alt'd phenocrysts-present @ 48-54.8 m.
A07-024	29.57	68.79		Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		31.5	32.3	Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		32.6	36	Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		36.4	37.9	Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		43.4	43.9	Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		44.15	44.4	Andesite Crystal Lapilli Tuff	Pervasive silicification
A07-024		63.25	63.33	Andesite Crystal Lapilli Tuff	Fault-bx clast
A07-024		67.05	67.2	Andesite Crystal Lapilli Tuff	Clay alt'd phenocrysts, cream to yellowish green, sometimes waxy (prob pyrophyllite)
A07-024		42.8	42.83	Andesite Crystal Lapilli Tuff	Off-white to cream waxy pyrophyllite? vn 30° CA
A07-024		48.9		Andesite Crystal Lapilli Tuff	Translucent white, waxy sericite-pyrophyllite? vlt @ 48.9 m (3-10 mm)
A07-024		50.8		Andesite Crystal Lapilli Tuff	w/ disseminated specular hematite crystals, trace @ fracture w/ left-lateral (sinistral) movement.
A07-024		52.2		Andesite Crystal Lapilli Tuff	Left lateral movement on fracture plane
A07-024		57		Andesite Crystal Lapilli Tuff	Milky-white silica w/ greenish-white waxy sericite-pyrophyllite vn in sinistral fault
A07-024		73.2		Andesite Crystal Lapilli Tuff	Left-lateral slickenside w/ fiammitic texture down to 85 m
A07-024		75.5		Andesite Crystal Lapilli Tuff	< 10 mm amorphous silica-clay +/- carb filled fracture. Sub-angular fine-grained clay +/- chlorite alt'd basaltic? Clasts following the fiammitic texture (70-40°) observable (5%) @ 75 to 88 m - probably basalt
A07-024		78.7		Andesite Crystal Lapilli Tuff	Massive to platy galena embedded in 2 to 20 mm greenish-grey silica vein/vlts @ HW of yellowish brown cly-filled fracture. The clay cuts the galena-bearing silica.
A07-024		83.3		Andesite Crystal Lapilli Tuff	Light gn-grey silica vein w/ lt pinkish white central portion
A07-024		85.15		Andesite Crystal Lapilli Tuff	Series of fractures ~15 cm apart down to 86.6 m
A07-024		86.6	106	Andesite Crystal Lapilli Tuff	Highly broken core - sampled already, down to 106 m
A07-024		94.4		Andesite Crystal Lapilli Tuff	Slickenside indicates lateral movement sinistral? Concentrate w/ Sal has translucent white waxy pyrophyllite?
A07-024		109.6		Andesite Crystal Lapilli Tuff	Greenish-white silica-cly filled fracture + hematite
A07-024		114.4		Andesite Crystal Lapilli Tuff	Irregular carb-filled fractures/stockworking within less porphyritic but 2-4 mm clay alt'd phenocrysts of andesite block. Also hematitic but slightly hard - silicified
A07-024		119.4		Andesite Crystal Lapilli Tuff	Above the clay-carb filled fracture is carb-alt'd (weak), below it is back to fiammitic textured clay-alt'd phenocryst AXT
A07-024		122.25		Andesite Crystal Lapilli Tuff	Hematite-rich fractures
A07-024		124.6		Andesite Crystal Lapilli Tuff	Silica clay filled fracture
A07-024		127.15		Andesite Crystal Lapilli Tuff	Bluish-green, dull to vitreous, a bit waxy, maybe montmorillonite? w/ silica
A07-024		134.9		Andesite Crystal Lapilli Tuff	Montmorillonite? - Silica-calcite vein
A07-024		138.1		Andesite Crystal Lapilli Tuff	Silica-mont?-cal vein, 4 cm thick in FB
A07-024		142.2		Andesite Crystal Lapilli Tuff	Carb filled fracture w/ sinistral movement in slickenside
A07-024		143.9		Andesite Crystal Lapilli Tuff	chloritic (greenish-grey) highly sheared/bx'd zone of AXT w/ blocks/xenoliths (4 mm to 30 cm) of fine grained andesitic basalt - probably the earlier phase of AXT deposition w/ blocks/bombs of andesitic-basalt wall-rock of early mafic magma. Propylitic alt'n is dominantly chlorite-carbonate. Breccia fault zone from 103.9 to 155.45 m (EOH). Fiamme-texture of AXT occasionally preserved. Caving
A07-024	155.4 EOH			END OF HOLE	
A07-025	0	3		CASING	No core
A07-025	3	4		HYDROTHERMAL BRECCIA	Msi hydrothermal bx veinlets Py rhyolite blebs
A07-025	4	5		Rhyolite	aplitic rhy core badly crushed low recovery
A07-025	5	6		Andesite Crystal Lapilli Tuff	Crushed goethite stained tuff
A07-025	7	8		Rhyodacite Dike	Strong fractured goethite limonite; tan colour
A07-025	9	10		Rhyodacite Dike	Fault gouge 0.2 m @ 9.0 m mark
A07-025	11	12		Rhyodacite Dike/Andesite Crystal Lapilli Tuff	11.5 m - contact w/ screen of lapilli tuff
A07-025	14	15		Rhyodacite Dike	14.2 m - contact w/ RDD, 0.5 m gouge (14.5-15.0 m)

A07-025	15	16	Rhyodacite Dike	salmon tan dike; badly broken
A07-025	16	17	Rhyodacite Dike	Light brown colour, flow bands near 17.0 m - 35 ° CA
A07-025	19	20	Andesite Crystal Lapilli Tuff	Crystal lapilli-rich tuff; fiamme 50° CA; tan colour
A07-025	20	21	Andesite Crystal Lapilli Tuff	Tan colour
A07-025	21	22	Andesite Crystal Lapilli Tuff	Crystal lapilli-rich tuff; fiamme 80° CA; tan colour
A07-025	22	23	Andesite Crystal Lapilli Tuff	Tan colour
A07-025	25	26	Andesite Crystal Lapilli Tuff	Block w/ 2-3% diss Py 25.8-26 m
A07-025	27	28	Andesite Crystal Lapilli Tuff	30 cm fault gouge @ 27.5-27.8 m
A07-025	28	29	Andesite Crystal Lapilli Tuff	Hydro fracture, alunite band @ 28.8 m
A07-025	29	30	Andesite Crystal Lapilli Tuff	Hydro fracture to bx, pink to dk grey, gypsum vn
A07-025	30	31	Andesite Crystal Lapilli Tuff	Hydro fracture to bx
A07-025	31	32	Andesite Crystal Lapilli Tuff	Salmon pink, hematite alt
A07-025	32	33	Andesite Crystal Lapilli Tuff	contact @ 32.4 m from above to purple-grey AXT
A07-025	33	34	Andesite Crystal Lapilli Tuff	med grey
A07-025	34	35	Andesite Crystal Lapilli Tuff	fault 35.2 - 35.5 m
A07-025	35	36	Andesite Crystal Lapilli Tuff	grey, core broken - shattered crystal-rich tuff
A07-025	36	37	Andesite Crystal Lapilli Tuff	calcite, v. clay-calcite alt
A07-025	37	38	Andesite Crystal Lapilli Tuff	v. clay-calcite alt
A07-025	38	39	Andesite Crystal Lapilli Tuff	v. clay-calcite alt
A07-025	39	40	Andesite Crystal Lapilli Tuff	v. clay-calcite alt
A07-025	40	41	Andesite Crystal Lapilli Tuff	v. clay-calcite alt
A07-025	41	42	Andesite Crystal Lapilli Tuff	v. clay-calcite alt
A07-025	42	43	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; sparse calcite veinlet
A07-025	43	44	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; calcite veinlet
A07-025	44	45	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; grey colour tuff
A07-025	45	46	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; grey colour tuff
A07-025	46	47	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; grey colour tuff
A07-025	47	48	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	48	49	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour; core badly crushed; white quartz veinlet @ 48.6 m
A07-025	49	50	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	50	51	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour; 1 cm white quartz vein @51 m, 20 ° CA
A07-025	51	52	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	52	53	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	53	54	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	54	55	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	55	56	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	56	57	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	57	58	Andesite Crystal Lapilli Tuff	v. clay-calcite alt; brown colour
A07-025	58	59	Clay altered rock	Flt 58-59 m; dissem pie on fault gouge
A07-025	59	60	Alunite-clay rock	Pale pink grey, hydrofract several gyps/Py veinlets, quartz-Py vein
A07-025	60	61	Andesite Crystal Lapilli Tuff	Pale pink-grey, quartz alunite + Py veins 59.9-60.6 m; gypsum veinlet
A07-025	61	62	Andesite Crystal Lapilli Tuff	Hydro fracture - some hydrobx; gyps vlt
A07-025	63	64	Andesite Crystal Lapilli Tuff	Hydrofract grad diminishes
A07-025	64	65	Andesite Crystal Lapilli Tuff	grey crumbly vlt 64-64.3 m - brown AXT
A07-025	65	66	Andesite Crystal Lapilli Tuff	few calcite veinlets
A07-025	66	67	Andesite Crystal Lapilli Tuff	Purple-brown crystal-rich tuff wk alt
A07-025	68	69	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1/2 cm quartz vein @ 68.0 m
A07-025	69	70	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1/2 cm quartz vein @ 69.0 m
A07-025	70	71	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	71	72	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1 cm quartz vein w/ clay envelope 71.3 m
A07-025	72	73	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	73	74	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1 cm quartz vein w/ clay envelope 73.5 m
A07-025	74	75	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	75	76	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1 cm quartz vein w/ clay envelope 75.0 m
A07-025	76	77	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	77	78	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	78	79	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	79	80	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	80	81	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%)
A07-025	81	82	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 3 cm quartz vein w/ clay envelope @ 81.5 m; 2 cm quartz vein @ 81.6 m
A07-025	82	83	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); 1 cm quartz vein w/ clay envelope @ 82.2 m
A07-025	83	84	Andesite Crystal Lapilli Tuff	fiamme-rich (30-40%); few carbonate veinlets
A07-025	84	85	Andesite Crystal Lapilli Tuff	Purple-brown xtal-rch, fiamme <10% to 86.0 m
A07-025	86	87	Andesite Crystal Lapilli Tuff	Tan fiamme-rich crystal tuff; carb-illite veinlets
A07-025	87	88	Andesite Crystal Lapilli Tuff	Major fault 87.8-91.4 m
A07-025	91	92	Andesite Crystal Lapilli Tuff	Flt zone ends at 91.4 m; tiny CaCO3 veinlets
A07-025	92	93	Andesite Crystal Lapilli Tuff	Tiny CaCO3 veinlets
A07-025	94	95	Andesite Crystal Lapilli Tuff	Wk hematite alt
A07-025	95	96	Andesite Crystal Lapilli Tuff	Ilmenite patches in tuff

A07-025	100	101	Andesite Crystal Lapilli Tuff	Flt zone ends 100.5 m - crystal-rich tuff
A07-025	101	102	Andesite Crystal Lapilli Tuff	0.5 cm qtz-py vein @ 101.6 m
A07-025	103	104	Andesite Crystal Lapilli Tuff	Flt ends @ 104.4 m - fiamme-rich 40-50%
A07-025	105	106	Andesite Crystal Lapilli Tuff	Brownish colour
A07-025	109	110	Andesite Crystal Lapilli Tuff	Quartz calcite veinlets crystal-rich fiamme <40%
A07-025	110	111	Andesite Crystal Lapilli Tuff	Sparse calcite veinlets 111 - 115 m
A07-025	117	118	Andesite Crystal Lapilli Tuff	0.5 cm quartz veinlets in fault zone
A07-025	118	119	Andesite Crystal Lapilli Tuff	Green-grey lapilli >40%
A07-025	120	121	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	125	126	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	126	127	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	127	128	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets; crystal frags (10-20%); fiamme (40-50%)
A07-025	128	129	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets; wk hematite on shear surfaces
A07-025	129	130	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	130	131	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	131	132	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	132	133	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	133	134	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	134	135	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	135	136	Andesite Crystal Lapilli Tuff	Dark brown grey; tiny calcite veinlets; wk hematite on shear surfaces
A07-025	136	137	Andesite Crystal Lapilli Tuff	Greenish grey; wk hematite on shear surfaces; tiny calcite veinlets
A07-025	137	138	Andesite Crystal Lapilli Tuff	Greenish grey; wk hematite on shear surfaces; tiny calcite veinlets
A07-025	138	139	Andesite Crystal Lapilli Tuff	Greenish grey; wk hematite on shear surfaces; tiny calcite veinlets
A07-025	139	140	Andesite Crystal Lapilli Tuff	Greenish grey; tiny calcite veinlets
A07-025	140	141	Andesite Crystal Lapilli Tuff	Greenish grey; tiny calcite veinlets
A07-025	141	142	Andesite Crystal Lapilli Tuff	Greenish grey; tiny calcite veinlets
A07-025	142	143	Andesite Crystal Lapilli Tuff	Purple grey; very sparse calcite veinlets
A07-025	143	144	Andesite Crystal Lapilli Tuff	Purple grey; very sparse calcite veinlets
A07-025	144	145	Andesite Crystal Lapilli Tuff	Purple grey; very sparse calcite veinlets
A07-025	145	146	Andesite Crystal Lapilli Tuff	Purple grey; very sparse calcite veinlets
A07-025	146	147	Andesite Crystal Lapilli Tuff	Purple grey; very sparse calcite veinlets
A07-025	147	148	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%
A07-025	148	149	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%
A07-025	149	150	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%; sparse calcite veinlets
A07-025	150	151	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%; sparse calcite veinlets
A07-025	151	152	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%; sparse calcite veinlets
A07-025	152	153	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10-20%; fiamme 20-30%; sparse calcite veinlets
A07-025	153	154	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; xtals 10%; fiamme 50-60%; sparse calcite veinlets
A07-025	154	155	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; sparse calcite veinlets
A07-025	155	156	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; sparse calcite veinlets
A07-025	156	157	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; sparse calcite veinlets
A07-025	157	158	Andesite Crystal Lapilli Tuff	Purple grey-brown tuff; sparse calcite veinlets
A07-025	158	159	Contact w/ Andesite Crystal Lapilli Tuff & Rhyodacite Dike	Purple grey-brown tuff; fault contact w/ rhyodacite dike 158.8-159.3 m
A07-025	159	160	Andesite Crystal Lapilli Tuff	Grey crystal lithic tuff; xtals 10-15% fiamme
A07-025	160	161	Andesite Crystal Lapilli Tuff	Grey crystal lithic tuff; xtals 10-15% fiamme
A07-025	161	162	Andesite Crystal Lapilli Tuff	Grey crystal lithic tuff; xtals 10-15% fiamme
A07-025	162	163	Andesite Crystal Lapilli Tuff	Reddish grey crystal-lithic tuff; xtals 10-20%; fiamme <10%
A07-025	163	164	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	164	165	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	165	166	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	166	167	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	167	168	Andesite Crystal Lapilli Tuff	Sparse tiny calcite veinlets
A07-025	169.74 EOH		END OF HOLE	
A07-026	0	3	CASING	No core
A07-026	3	4	Andesite Crystal Lapilli Tuff	Busted up surficial rocks
A07-026	4	5	Andesite Crystal Lapilli Tuff	Weathered, soil-rich tuff; soft
A07-026	5	6	Andesite Crystal Lapilli Tuff	Dk grey-brown bx and tuff
A07-026	6	7	Andesite Crystal Lapilli Tuff	Grey crystal-rich tuff (xtals 30-40%); fiamme (<10%)
A07-026	7	8	Andesite Crystal Lapilli Tuff	Crushed; fractured; bx
A07-026	8	9	Andesite Crystal Lapilli Tuff	Crushed; fractured; bx
A07-026	9	10	Andesite Crystal Lapilli Tuff	Core, v. broken alunite; alt of tuff starts @ 9.7 m
A07-026	10	11	Andesite Crystal Lapilli Tuff	Clay-hematite alt (10.3-11.4 m)
A07-026	11	12	Andesite Crystal Lapilli Tuff	Hydrofract + bx
A07-026	14	15	Andesite Crystal Lapilli Tuff	Fine Py diss & on fractured
A07-026	15	16	Breccia	bx: vug silica, some covellite flakes & clasts w cp, barite
A07-026	16	17	Breccia	Strong msi bx 15.4-16.2 m
A07-026	17	18	Breccia	Strong Acy diss Py 5-10% (18.0-18.2 m)

A07-026	18	19	Breccia	Alunite alt @ 19.7 m
A07-026	20	21	Andesite Crystal Lapilli Tuff	Purple-grey badly crushed hematite-kaolinite
A07-026	21	22	Andesite Crystal Lapilli Tuff	crystal rich (xtals 20-30%); fiamme <5%; hematite-kaolinite
A07-026	22	23	Andesite Crystal Lapilli Tuff	hematite on fractures; hematite-kaolinite
A07-026	23	24	Andesite Crystal Lapilli Tuff	hematite on fractures; hematite-kaolinite
A07-026	24	25	Andesite Crystal Lapilli Tuff	hematite on fractures; hematite-kaolinite
A07-026	25	26	Andesite Crystal Lapilli Tuff	hematite on fractures; hematite-kaolinite
A07-026	26	27	Andesite Crystal Lapilli Tuff	Brown-grey crystal-rich (xtals 10-20%); fiamme <10%; white calcite veinlets
A07-026	27	28	Andesite Crystal Lapilli Tuff	Cly-carb alt of plag; white calcite veinlets
A07-026	28	29	Andesite Crystal Lapilli Tuff	Cly-carb alt of plag
A07-026	29	30	Andesite Crystal Lapilli Tuff	Cly-carb alt of plag
A07-026	30	31	Andesite Crystal Lapilli Tuff	Cly-carb alt of plag
A07-026	31	32	Andesite Crystal Lapilli Tuff	Massive red-brown crystal-rich tuff (xtals 20-30%); fiamme <10%)
A07-026	32	33	Andesite Crystal Lapilli Tuff	Cly-carb alt
A07-026	36	37	Andesite Crystal Lapilli Tuff	Strongly broken & fract
A07-026	37	38	Andesite Crystal Lapilli Tuff	Strongly broken & fract
A07-026	38	39	Andesite Crystal Lapilli Tuff	Strongly broken & fract; fault contact to alunite w/ wk clay
A07-026	39	40	Andesite Crystal Lapilli Tuff	Grey alunite- clay-Py
A07-026	40	41	Andesite Crystal Lapilli Tuff	Dk grey clay m fault zones
A07-026	42	43	Andesite Crystal Lapilli Tuff	Patches of dissem f. gr Py in alunite rk
A07-026	43	44	Andesite Crystal Lapilli Tuff	Flted AXT heavy clay & fine hem
A07-026	47	48	Andesite Crystal Lapilli Tuff	47.4-50 m; bx + hydro fractured tuff alt to alunite w/ veins of silica-Py; patches of silica + covellite
A07-026	48	49	Andesite Crystal Lapilli Tuff	47.4-50 m; bx + hydro fractured tuff alt to alunite w/ veins of silica-Py; patches of silica + covellite
A07-026	49	50	Andesite Crystal Lapilli Tuff	47.4-50 m; bx + hydro fractured tuff alt to alunite w/ veins of silica-Py; patches of silica + covellite
A07-026	50	51	Andesite Crystal Lapilli Tuff	Dark red grey fault in tuff; hematite-clay alt
A07-026	51	52	Andesite Crystal Lapilli Tuff	Dark red grey fault in tuff; hematite-clay alt
A07-026	52	53	Andesite Crystal Lapilli Tuff	Dark red grey fault in tuff; hematite-clay alt
A07-026	53	54	Andesite Crystal Lapilli Tuff	Dark red grey fault in tuff; hematite-clay alt
A07-026	54	55	Andesite Crystal Lapilli Tuff	Crystal rich tuff; xtals (20-30%); fiamme (10-20%)
A07-026	56	57	Andesite Crystal Lapilli Tuff	Fiamme-rich (xtals 10-20%); fiamme (20-40%)
A07-026	57	58	Andesite Crystal Lapilli Tuff	Carb vlt 5mm @ 58.2 m; fiamme (20-40%)
A07-026	58	59	Andesite Crystal Lapilli Tuff	Fiamme (20-40%)
A07-026	59	60	Andesite Crystal Lapilli Tuff	Fiamme (20-40%)
A07-026	60	61	Andesite Crystal Lapilli Tuff	Quartz vein 60-60.2 m; no alt envelope; crystal-rich tuff
A07-026	61	62	Andesite Crystal Lapilli Tuff	xtals 20-30%; fiamme 10-20%
A07-026	62	63	Andesite Crystal Lapilli Tuff	Sparse tiny quartz veinlets; xtals 20-30%; fiamme 10-20%
A07-026	63	64	Andesite Crystal Lapilli Tuff	xtals 20-30%; fiamme 10-20%
A07-026	64	65	Andesite Crystal Lapilli Tuff	Brown-grey fiamme-rich (xtals 10%; fiamme 20%)
A07-026	65	66	Andesite Crystal Lapilli Tuff	Xtals 10%; fiamme 20%
A07-026	66	67	Andesite Crystal Lapilli Tuff	3 cm quartz vein @ 66.3 m; xtals 10%; fiamme 20%
A07-026	67	68	Andesite Crystal Lapilli Tuff	Brown-grey fiamme-rich (xtals ~10%; fiamme 20%)
A07-026	68	69	Andesite Crystal Lapilli Tuff	Quartz vein 2mm @ 68.8 m
A07-026	72	73	Andesite Crystal Lapilli Tuff	Crushed zone w/ 1/2 cm quartz core
A07-026	76	77	Andesite Crystal Lapilli Tuff	halo of hem-clay 76.7-77.1 m
A07-026	77	78	Andesite Crystal Lapilli Tuff	77.1-77.9 m - thin gypsum vein enclosed in envelope alunite
A07-026	78	79	Andesite Crystal Lapilli Tuff	Halo of hematite clay - 77.9-78.1 m
A07-026	79	80	Andesite Crystal Lapilli Tuff	Tiny quartz veinlets
A07-026	80	81	Andesite Crystal Lapilli Tuff	Clay rich gouge w/ hematite
A07-026	81	82	Andesite Crystal Lapilli Tuff	Clay rich gouge w/ hematite
A07-026	82	83	Andesite Crystal Lapilli Tuff	Clay rich gouge w/ hematite
A07-026	83	84	Andesite Crystal Lapilli Tuff	Clay rich gouge w/ hematite
A07-026	84	85	Andesite Crystal Lapilli Tuff	Inclusion - alunitized tuff w/ f. Py veinlets @ 84.8-85 m
A07-026	87	88	Rhyolite	Alunitized tuff cut blebs white aphyric rhyolite 87.2-87.4 m (0.5-1 cm gypsum veins & tiny Py veins)
A07-026	88	89	Andesite Crystal Lapilli Tuff	Gyp-Py veinlet @ 88.9 m
A07-026	89	90	Andesite Crystal Lapilli Tuff	Pink-pale grey alunitized tuff. Few tiny Py veinlets
A07-026	90	91	Andesite Crystal Lapilli Tuff	Pink-pale grey alunitized tuff. Hydro fract Py-ser veinlets
A07-026	91	92	Andesite Crystal Lapilli Tuff	Purple grey soft crumbly clay-hem
A07-026	93	94	Andesite Crystal Lapilli Tuff	Tiny quartz veinlet cut alu
A07-026	95	96	Andesite Crystal Lapilli Tuff	Dk green grey tuff xtals (10-20%), from 10-20 m
A07-026	96	97	Andesite Crystal Lapilli Tuff	Few tiny quartz veinlets
A07-026	99	100	Andesite Crystal Lapilli Tuff	Quartz-carb veinlet 100.3 m
A07-026	102	103	Andesite Crystal Lapilli Tuff	Quartz-carb veinlet 102.4 m
A07-026	104	105	Andesite Crystal Lapilli Tuff	f dissem hematite
A07-026	105	106	Andesite Crystal Lapilli Tuff	Tiny quartz-carb veinlet; dk purple grey crystal tuff
A07-026	109	110	Andesite Crystal Lapilli Tuff	quartz-calc veinlet @ 110 m
A07-026	112	113	Andesite Crystal Lapilli Tuff	f dissem hematite
A07-026	113	114	Andesite Crystal Lapilli Tuff	Hydro fractures; gyp matrix in bx
A07-026	115	116	Rhyolite	Cream rhy bx w/ gyps matrix; 20 cm complex Py-quartz-alunite-gypsum vein @ 115.6 m

A07-026	116	117	Andesite Crystal Lapilli Tuff	Alu w/ Py stringers @ 116 m; hematite dissem 116.2-117 m
A07-026	117	118	Andesite Crystal Lapilli Tuff	Dk green-grey; sparse quartz-calc veinlets
A07-026	118	119	Andesite Crystal Lapilli Tuff	1.5 cm dike of RDD; sparse quartz-calc vlts
A07-026	119	120	Andesite Crystal Lapilli Tuff	sparse quartz-calc veinlets
A07-026	123	124	Andesite Crystal Lapilli Tuff	Grey-green-grey tuff; sparse tiny quartz-calc vlts
A07-026	124	125	Andesite Crystal Lapilli Tuff	Sparse tiny quartz-calc vlts
A07-026	125	126	Andesite Crystal Lapilli Tuff	Sparse tiny quartz-calc vlts
A07-026	126	127	Andesite Crystal Lapilli Tuff	Sparse tiny quartz-calc vlts
A07-026	129	130	Hydrothermal Breccia	Banded vein 129 m; 3 cm Py-sulphide alt-alunite=gypsum. Hydrofract
A07-026	130	131	Hydrothermal Breccia	Gyp-alunite matrix to bx
A07-026	131	132	Hydrothermal Breccia	Red-purple grey clay-hematite
A07-026	132	133	Hydrothermal Breccia	Hem-clay alt of FB
A07-026	134	135	Hydrothermal Breccia	Breccia + hydrofract 133-141 m; abundant Py + sulphosalt 134.8-135 m
A07-026	135	136	Hydrothermal Breccia	Alu alt tuff only - not RHY; gyps vlts
A07-026	136	137	Hydrothermal Breccia/Rhyolite	Gyps vlts; many thin Py-sulphosalt vlts
A07-026	137	138	Hydrothermal Breccia/Rhyolite	Gyps vlts
A07-026	138	139	Hydrothermal Breccia/Rhyolite	Creamy aphyric-aplitic rhyolite; many tiny Py-sulphosalt vlts
A07-026	139	140	Hydrothermal Breccia/Rhyolite	Many tiny Py- sulphosalt vlts & gypsum vlts
A07-026	141	142	Hydrothermal Breccia/Rhyolite	Cly hematite alt
A07-026	146	147	Hydrothermal Breccia/Rhyolite	Broken rk, v. poor recovery, vuggy silica frags to 149 m, diss Py
A07-026	147	148	Hydrothermal Breccia/Rhyolite	Broken rk, low recovery, vuggy silica to 149.4 m
A07-026	150	151	Andesite Crystal Lapilli Tuff	Cly-hematite alt; badly broken rk
A07-026	151	152	Andesite Crystal Lapilli Tuff	1 cm Py-ser vlt 151.5 m
A07-026	152	153	Andesite Crystal Lapilli Tuff	Poor recovery
A07-026	153	154	Andesite Crystal Lapilli Tuff	Cly-hematite
A07-026	156	157	Rhyodacite Dike	Rhyodacite w/ pro sparse tiny Ca vlts
A07-026	157	158	Rhyodacite Dike	Plag - calc clay
A07-026	162	163	Rhyodacite Dike	Gyps vlts 162.8 m
			Andesite Crystal Lapilli Tuff; Hydrothermal Breccia	
A07-026	173	174	Hydrothermal Breccia	Massive + vuggy silica tiny vlts; white clay
A07-026	174	175	Hydrothermal Breccia	Core rubbly; appears to be hydrothermal bx
A07-026	175	176	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	176	177	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	177	178	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	178	179	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	179	180	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	180	181	Hydrothermal Breccia	Appears to be hydrothermal bx
A07-026	181	182	Andesite Crystal Lapilli Tuff	Salmon pink alunite alt
A07-026	182	183	Andesite Crystal Lapilli Tuff	Vuggy silica w/ white clay
A07-026	183	184	Andesite Crystal Lapilli Tuff	Vuggy silica + alunite rk; clots + vns of Py + black mineral
A07-026	184	185	Andesite Crystal Lapilli Tuff	Red brown crystal-rich tuff spec hem-clay alt
A07-026	188	189	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	189	190	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	190	191	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	191	192	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	192	193	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	193	194	Hydrothermal Breccia	Appears bx-hydrothermal bx-vuggy silica
A07-026	194	195	Andesite Crystal Lapilli Tuff	Mixed alunite + vuggy silica
A07-026	195	196	Andesite Crystal Lapilli Tuff	Purple grey bx
A07-026	196	197	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	197	198	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff; wk clay-carb alt of plag
A07-026	198	199	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	199	200	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	200	201	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	201	202	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	202	203	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	203	204	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	204	205	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	205	206	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	206	207	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	207	208	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	208	208.49	Andesite Crystal Lapilli Tuff	Purple-brown-grey massive crystal tuff
A07-026	208.49 EOH		END OF HOLE	
			CASING	
A07-027	0	5	Andesite Crystal Lapilli Tuff	Soil, boulders, no o/c
A07-027	5	6	Andesite Crystal Lapilli Tuff	Med grey crystal-rich tuff; wk clay-calcite alt
A07-027	6	7	Andesite Crystal Lapilli Tuff	few tiny calcite veinlets; wk clay-calcite alt
A07-027	7	8	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	8	9	Andesite Crystal Lapilli Tuff	wk-clay calcite alt

A07-027	9	10	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	10	11	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	11	12	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	12	13	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	13	14	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	14	15	Andesite Crystal Lapilli Tuff	Big fiamme marker 14.5-15.5 m; wk-clay calcite alt
A07-027	15	16	Andesite Crystal Lapilli Tuff	Crystal-rich brown v. weak alt to 26.8; wk-clay calcite alt
A07-027	16	17	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	17	18	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	18	19	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	19	20	Andesite Crystal Lapilli Tuff	wk-clay calcite alt
A07-027	23	24	Andesite Crystal Lapilli Tuff	Fiamme increasing
A07-027	25	26	Andesite Crystal Lapilli Tuff	Med brown fiamme-rich -30%; v wk alt
A07-027	26	27	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	27	28	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	28	29	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	29	30	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	30	31	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	31	32	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	32	33	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	33	34	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts; brown crystal lapilli tuff (20-30% fiamme)
A07-027	34	35	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	35	36	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	36	37	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	37	38	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	38	39	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	39	40	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	40	41	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	41	42	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	42	43	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	43	44	Andesite Crystal Lapilli Tuff	Sparse rare calcite vlts
A07-027	44	45	Andesite Crystal Lapilli Tuff	Brown-grey crystal-rich tuff (crystal ~20%; fiamme <5%)
A07-027	45	46	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	46	47	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	47	48	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	48	49	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	49	50	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	50	51	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	51	52	Andesite Crystal Lapilli Tuff	Cly-illite-quartz vlts spars
A07-027	52	53	Andesite Crystal Lapilli Tuff	Fiamme increase @53.5 m to 20%
A07-027	57	58	Andesite Crystal Lapilli Tuff	Cly alt gradually increase, greasy clay replace plag
A07-027	61	62	Andesite Crystal Lapilli Tuff	quartz vlt in fault zone
A07-027	62	63	Andesite Crystal Lapilli Tuff	Pale brown crystal lapilli tuff (xtals 10-20%; fiamme 20-30%)
A07-027	63	64	Andesite Crystal Lapilli Tuff	Greasy grey cly replacing plag
A07-027	64	65	Andesite Crystal Lapilli Tuff	Greasy grey cly replacing plag
A07-027	65	66	Andesite Crystal Lapilli Tuff	Greasy grey cly replacing plag
A07-027	66	67	Andesite Crystal Lapilli Tuff	Greasy grey cly replacing plag
A07-027	67	68	Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (xtals 20%; fiamme 10%); sparse tiny quartz
A07-027	70	71	Andesite Crystal Lapilli Tuff	Pink quartz Alu alt of crystal tuff; tiny Py + gyp vlts (few)
A07-027	71	72	Andesite Crystal Lapilli Tuff	Wk-mod hydro fractured
A07-027	72	73	Breccia	Bx-hydrothermal alunite wall rock frags in matrix of quartz, alunite, Py (20-40%); spec minor Cp?
A07-027	73	74	Breccia	Bx-hydrothermal alunite wall rock frags in matrix of quartz, alunite, Py (20-40%); spec minor Cp?
A07-027	74	75	Breccia	Gyps vlts common
A07-027	75	76	Breccia	Hydrofract w/ vlts of quartz, Py-spec
A07-027	76	77	Andesite Crystal Lapilli Tuff	Hydrofract w/ vlts of quartz, Py-spec
A07-027	79	80	Andesite Crystal Lapilli Tuff	Red-brown crystal tuff; wk clay - hem grndmass
A07-027	83	84	Andesite Crystal Lapilli Tuff	Tiny calcite vlts
A07-027	84	85	Andesite Crystal Lapilli Tuff	10 cm rhyodacite dike (83.3 m)
A07-027	85	86	Andesite Crystal Lapilli Tuff	Narrow 10 cm rhyodacite dike // to fault zone (chlorite alt)
A07-027	86	87	Andesite Crystal Lapilli Tuff	Chlorite alt
A07-027	87	88	Andesite Crystal Lapilli Tuff	Chlorite alt; lapilli-rich tuff to 87.4 m
A07-027	88	89	Andesite Crystal Lapilli Tuff	Chlorite alt; 20 cm quartz vein 87.9 m; brown-grey crystal-rich tuff to 90.2
A07-027	89	90	Andesite Crystal Lapilli Tuff	Chlorite alt
A07-027	90	91	Andesite Crystal Lapilli Tuff	Chlorite alt
A07-027	91	92	Andesite Crystal Lapilli Tuff	Chlorite alt; greenish f gr rhyodacite dike (90.2-90.4 m)
A07-027	92	93	Andesite Crystal Lapilli Tuff	1 cm white quartz vein @ 92.0 m; few tiny quartz veinlets
A07-027	98	99	Andesite Crystal Lapilli Tuff	~1 cm quartz vein 98.1-98.6 m w/ Sal alt - lapilli-rich tuff
A07-027	99	100	Andesite Crystal Lapilli Tuff	irreg quartz vlts to 100.0 m
A07-027	102	103	Andesite Crystal Lapilli Tuff	Pink alunite 2-3 cm vein 102.5-103.0 m

A07-027	108	109	Andesite Crystal Lapilli Tuff	Tiny quartz-alunite vlts 109.3 m
A07-027	109	110	Andesite Crystal Lapilli Tuff	Gypsum-clay on fracts esp 112-113.5 m
A07-027	116	117	Andesite Crystal Lapilli Tuff	Med grey, massive crystal-rich tuff; pervasive chlorite alt
A07-027	120	121	Andesite Crystal Lapilli Tuff	Green-grey crystal lapilli-tuff; tiny quartz-calc vlts
A07-027	123	124	Andesite Crystal Lapilli Tuff	Brown-grey massive crystal tuff
A07-027	128	129	Andesite Crystal Lapilli Tuff	1 cm white quartz v @ 128.5 m
A07-027	129	130	Rhyodacite Dike	RDD 129.3-130.0 m
A07-027	134	135	Andesite Crystal Lapilli Tuff	f dissem Py in silica-alunite rock
A07-027	137	138	Andesite Crystal Lapilli Tuff	Reddish brown crystal tuff
A07-027	142	143	Andesite Crystal Lapilli Tuff	Grey crystal lapilli tuff; tiny calcite vlts
A07-027	148.74 EOH		END OF HOLE	
A07-028	0	3.05	CASING	
A07-028	3.05	8	Highly oxidized/unaltered AXT	Dk brown to mottled white-maroon @ 6 to 8 m. Porphyritic, 10% phenocryst casts, 1-4 mm anhedral to euhedral cly alt'd phenocrysts, bxd w/ fiammitic texture (flow 70° CA) of white sub-angular elongated sil-cly-alt'd f.g. frags (pumice?) in highly hematized-cly alt'd rock-flour matrix. Limonite-stained fractures. FG @ 5.5 m (75° CA) - no apparent movement
A07-028	8	16.3	Silica-alunite alt'd AXT	Mottled/clotted pinkish-red. Bxd/fiammitic w/ rock-flour porphyries (10%), 1-2 mm anhedral to subhedral cly-alt'd phenocrysts, matrix and white to cream cly-alt'd f.g. elongated sub-angular fragments (pumice?), ranging from 2-40 mm diameter. Later sil-Py matrix (hydrothermal bx) in bxd Sal-alt'd AXT @ 10.2-11.3 m. Clay alteration on both phenocryst & f.g. (pumice?) fragments seem to be ser (lt greenish-grey), w/ common fracture fill, waxy @ 14.2-15.1 m. Py-mineralization is v.f. associated w/ sil-cly (ser) and seems very soft w/ anhydrite translucency - as later then Sal matrix-fill & fracture-fillings
A07-028	16.3	30	Silica-clay alt'd AXT	Light brown to brown w/ mottled grn-yellow @ some portions. Highly fracture but well-recovered core. The mottled green-yellow to rarely white, a bit waxy are ser-alt'd phenocrysts (5-10%) anhedral to subhedral (1-3 mm). Elongated sub-angular (pumice?) frags are altered to gy to lt brown sil-cly. Contact @ FW is 30° CA w/ no apparent movement, except for 20 cm strong yellow-grn ser after phenocrysts casts before the Psi zone.
A07-028	30	43.2	Pervasive Silica alteration	Light brown to brown w/ mottled green-yellow. Slight to moderately broken core, slightly fractured, pervasively silicified + Py + hem w/ later sericite (greenish yellow) phenocryst replacement to vug-fill. Phenocryst casts are 2-8 mm anhedral to subhedral, sometimes dirty-white in colour & dull to waxy. Very fine ~1% Py associated w/ silicification, some specular hematite spots (0.1-0.5 mm) around 1-2%. Py disseminations can be seen under microscope. Texture seems Dacite Feldspar Porphyry Dike (DCD). Weakly magnetic.
A07-028	43.2	48	Highly cly-altered	Zone w/ Psi portions @ 45-46.6 m (yellowish-white w/ grey portions). Intensely fracture or brecciated w/ cly-filled/matrix in pervasively silicified clasts/fragments. Fragments/clasts are porphyritic (5-10%) w/ 2-4 mm anhedral to subhedral (white) clay-altered phenocryst casts, occasionally w/ greenish-yellow, waxy, fracture-filling pyrophyllite? V.f. Py in silica matrix-fill @ 46-46.30 m. Probably DCD protolith - weakly magnetic.
A07-028	48	52.5	Pervasive Silica alteration	Zone w/ ser casts. Pinkish to light brown w/ mottled greenish-yellow. Moderately fracture to gougy, where greenish-yellow sericite common along fractures. Porphyritic (10-15%) w/ 2-8 mm anhedral to subhedral sericitized casts. Silicification is pinkish due to hematite staining from associated ~2% v.f. specular hematite - most probably from magnetite - magnetic.
A07-028	52.5	61.3	Strongly sericite altered DCD	Light greenish-brown. Strongly brecciated/broken core, gougy w/ greenish-yellow (ser) fracture-fill, almost foliated. Sericite strongly fill also the 2-5 mm anhedral-subhedral phenocryst casts (5-10%). Very rare to trace of v.f. Py associated w/ silicification. FW contact @ 61.3 m is a lateral movement slip. Weakly magnetic.
A07-028	61.3	62.95	Strongly Chlorite altered (pro)	Fault gouge; greenish-grey to dk green. Dk to black v.f. magnetite 1% disseminations @ 62.4-62.6 m. POST MINERALIZATION DIKE (DCD)
A07-028	62.95	70.3	Strongly silica-alunite altered/brecciated AXT	Pinkish-brown w/ mottled dark purple gougy HW & FW. Contact w/ pro HW is marked by gouge w/ 50 ° CA & strike-slip movement.
A07-028	70.3	73.8	FAULT ZONE/GOUGE	Porphyritic wk-flow matrix ~20% 2-4 mm subrounded to anhedral white cly-altered (alunite) casts, w/ silica-clay altered subangular, elongated fine-grained (pumice?) casts - fiammitic texture. Py-silica (dk grey) vlts/vns common (60-70 ° CA). Fiammitic-rich (40%) @ 67.8-68.4 m (40° CA). Semi-massive Py +/- anhydrite vein (70° CA) @ 65.6-65.7 m + Py-filled hydraulic fractures (70%). Rhyolitic (cream), aphyric fragment, sub-rounded @ 66.45-66.6 m & 69.6-69.65 m.
A07-028	73.8	76.8	Strongly silica-alunite altered/brecciated AXT	Dk violet; porphyritic AXT
A07-028	76.8	77.8	FAULT ZONE/GOUGE	Pinkish-brown w/ yellowish-white portions. Porphyritic 2-4 mm anhedral cly-alt'd (alunite) casts w/ fiamme-rich portions (80 ° CA) @ 74.2-74.55 m w/ 2 cm Py-silica matrix (60° CA) @ FW. Rhyolitic (cream) intrusion/injection @ 75.4-75.55 m (60 ° CA)
A07-028	77.8	83.05	Strongly Sal - AXT	Dk violet w/ white coatings, porphyritic AXT
A07-028	83.05	89	Strongly chloritized (Pro) AXT	Light pink to maroon; fiammitic w/ 30-80° bedding/alignment of lt-grey f.g. pumice 2-40 mm long in porphyritic matrix. Dirty white to cream aphyric rhyolite veins/dikelet cuts to brecciate the Sal, along w/ v.f. Py-bands + disseminations @ 78.95 m (20 °); 81.4-81.5 m (75°); 82.1-82.17 m (80°); 82.9-82.95 m (50°)
A07-028	89	90.4	FAULT ZONE/GOUGE	Dk green w/ dk purple boundaries. Strongly chloritized/hematized AXT; porphyritic w/ 2 4mm anhedral to euhedral cly-alt'd greenish sericite? w/ fiamme texture of also chloritically altered pumice fragments (40° CA). ~2 cm aphyric vn @ 86.6 m (50° CA). Gougy FW @ 89-90.4 m.
A07-028	90.4	91.25	Strongly Sal - AXT	Dk green-violet
A07-028	91.25	95.7	Propylitically/gougy AXT	Pinkish-maroon. Strongly silica-alunite alt'd AXT, fiamme ghost texture still observable as sub-angular 2-4 mm phenocrysts. An aphyric vein 80° CA (yellowish-white) cuts the Sal @ 90.5 - 90.52 m w/in a sulphide-rich (dk-gy pyrite) bx zone @ 90.48-90.55 m. Under the microscope: v.f. triangular-faced xtals - tetrahedrite.
A07-028	95.7	101	Sal-Cly alt'd AXT	Hematized (dark-purple)
A07-028	101	103.4	Propylitically alt'd/gougy AXT	Pinkish-brown to dk brown w/ white portions. Highly sheared/gougy Sal portions are pk-red, porphyritic w/ fiamme texture (50 ° CA) w/ fractures cly (ser) -filled having strike-slip movement
				Hematized (dark-purple)

A07-028	103.4	176.79		Propylitically alt'd AXT	Dk-green-grey to brown. Highly chloritized-hematized AXT w/ cream to light brown RDD @ 112.4-112.6 m & 113.6-113.8 m. Porphyritic w/ 1-4 mm anhedral/subhedral (5%) phenocrysts, fiamme texture shown by chlorite-silica altered elongated v.f. fragments of up to 3 cm long. Occasional (1%) pegmatitic sub-angular fragments observable. Speck of galena? @ RDD. Generally solid core, where gougy it is clay alt'd & weak chlorite. Fiamme bedding observed. Speck of cc-cpy? elongate vein (0.8 cm) @ 132.5 m. Hematization is weak in the form of v.f. specularite disseminations (1-3%) from 103-151 m, from 151 to 176 m it is moderate (dk brown to maroon). Carbonate fracture-fill common @ 154 to 175 m.
A07-028			160	Propylitically alt'd AXT	Highly fractured
A07-028			165	169 Propylitically alt'd AXT	Moderately fractured down to 170 m w/ Ca-fills
A07-028			176.29	END OF HOLE	
A07-029	0	6.1		CASING	No core - casing
A07-029	6.1	7		Andesite Crystal Lapilli Tuff	Tan crystal lithic & latite tuff (xtals 10%); fiamme 10%
A07-029	7	8		Andesite Crystal Lapilli Tuff	Weathered
A07-029	14	15		Andesite Crystal Lapilli Tuff	Core broken
A07-029	16	17		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme
A07-029	17	18		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme
A07-029	18	19		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme; core broken
A07-029	19	20		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme
A07-029	20	21		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme
A07-029	21	22		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme
A07-029	22	23		Andesite Crystal Lapilli Tuff	Pale brown crystal-rich tuff (10-20% xtals); limonite hair-like veinlets; very few fiamme; narrow zone gouge
A07-029	27	28		Andesite Crystal Lapilli Tuff	Hematite dusting
A07-029	32	33		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff as above; heavy
A07-029	34	35		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	35	36		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	36	37		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	37	38		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	38	39		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	39	40		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	40	41		Andesite Crystal Lapilli Tuff	Crystal-vitric tuff (10-20% crystals); hematite dusting (fiamme <5%)
A07-029	43	44		Rhyolite	Rhyolite-bx & hydro-fracture, gypsum vlts
A07-029	44	45		Rhyolite	Pink-cream colour, prob alunite alt to 46.5 m
A07-029	45	46		Rhyolite	Pink-cream colour, prob alunite alt to 46.5 m
A07-029	46	47		Rhyolite	Bx rhyolite as above but w/ vlts, clots & inclusion of quartz Py rk
A07-029	47	48		Rhyolite	Bx rhyolite as above but w/ vlts, clots & inclusion of quartz Py rk
A07-029	48	49		Rhyolite	Bx rhyolite as above but w/ vlts, clots & inclusion of quartz Py rk; Quartz-Py-barite vein @ 49 m
A07-029	49	50		Rhyolite	Bx rhyolite as above but w/ vlts, clots & inclusion of quartz Py rk; barite vuggy silica vein @ 49.4 m, cv @ 49.6 m
A07-029	50	51		Rhyolite	Rhyolite contact @ 50.5
A07-029	51	52		Andesite Crystal Lapilli Tuff	Fiamme-rich tuff - bleached alunite alt
A07-029	52	53		Andesite Crystal Lapilli Tuff	Many gypsum vlts
A07-029	53	54		Andesite Crystal Lapilli Tuff	Many gypsum vlts
A07-029	54	55		Andesite Crystal Lapilli Tuff	Many gypsum vlts
A07-029	55	56		Andesite Crystal Lapilli Tuff	Many gypsum vlts
A07-029	56	57		Andesite Crystal Lapilli Tuff	Rhyolite dike 56.0-56.2 m; quartz vein 56.5-57 m
A07-029	57	58		Andesite Crystal Lapilli Tuff	Acy alt ends @ 58.0 m
A07-029	59	60		Andesite Crystal Lapilli Tuff	Red-brown crystal-lapilli tuff
A07-029	65	66		Andesite Crystal Lapilli Tuff	Hydro fracture AXT to 65.7 m; ACT w/ hematite to 66 m
A07-029	67	68		Andesite Crystal Lapilli Tuff	Clay calc replaces plag & tiny vlts
A07-029	68	69		Andesite Crystal Lapilli Tuff	
A07-029	69	70		Andesite Crystal Lapilli Tuff	
A07-029	70	71		Andesite Crystal Lapilli Tuff	Purplish lapilli crystal tuff
A07-029	71	72		Andesite Crystal Lapilli Tuff	Quartz-ser vein 2 cm wide
A07-029	72	73		Andesite Crystal Lapilli Tuff	
A07-029	73	74		Andesite Crystal Lapilli Tuff	
A07-029	74	75		Andesite Crystal Lapilli Tuff	
A07-029	75	76		Andesite Crystal Lapilli Tuff	
A07-029	76	77		Andesite Crystal Lapilli Tuff	
A07-029	77	78		Andesite Crystal Lapilli Tuff	
A07-029	78	79		Andesite Crystal Lapilli Tuff	
A07-029	79	80		Andesite Crystal Lapilli Tuff	Quartz-alunite 2 cm vn @ 78.5 m (80° CA); sample 80-82 m #212861 contains 3m of sample
A07-029	80	81		Andesite Crystal Lapilli Tuff	Crushed & bx rock 80.2-82.4 m
A07-029	81	82		Andesite Crystal Lapilli Tuff	
A07-029	82.3	88.8		Rhyolite/AXT	Rhyolite, hydro fractured bx 82.3-88.8 m, mixed w/ blocks of AXT. Gyps & tiny Py vlts scattered throughout
A07-029	88.8	90.5		Andesite Crystal Lapilli Tuff	AXT impregnate alunite
A07-029	90.5	92		Andesite Crystal Lapilli Tuff	AXT crystals 10-20%
A07-029	93	94		Andesite Crystal Lapilli Tuff	8 cm quartz-Py vein w/ alunite envelope 93.7 m
A07-029	94	95		Andesite Crystal Lapilli Tuff	
A07-029	95	96		Andesite Crystal Lapilli Tuff	
A07-029	96	97		Andesite Crystal Lapilli Tuff	Quartz-al vein @ 96.4 m

A07-029	97	98	Andesite Crystal Lapilli Tuff	
A07-029	98	99	Andesite Crystal Lapilli Tuff	7 cm quartz vein 98.2 m
A07-029	99	100	Andesite Crystal Lapilli Tuff	
A07-029	100	101	Rhyolite	w/ Py & enargite; 1 cm quartz-gypsum vn @ 99.9 m; rhyolite starts @ 100.2 m; f.g. Py + enargite @ 100.5 m.; hydro fractured
A07-029	101	102	Rhyolite	Quartz-Py-sulphosalt vlts; gyps stringers; hydro fractured
A07-029	102	103	Andesite Crystal Lapilli Tuff	Hydro fractured
A07-029	103	104	Andesite Crystal Lapilli Tuff	
A07-029	104	105	Andesite Crystal Lapilli Tuff	
A07-029	105	106	Rhyolite	Silica alunite alt of AXT
A07-029	106	107	Rhyolite/breccia	Vuggy silica 105.7 m; rhyolite @ 105.7 m
A07-029	107	108	Rhyolite/breccia	Py + sulphosalt 5-10%; w/ alunite + clay
A07-029	108	109	Rhyolite/breccia	Dissem Py + sulphosalt in blebs & clots
A07-029	109	110	Rhyolite/breccia	vug sq 108.5-109 m
A07-029	113	114	Rhyolite/breccia	Pinkish white strong bx mixed w/ blocks of AXT
A07-029	115	116	Rhyolite/breccia	Trace barite in vugs
A07-029	117	118	Andesite Crystal Lapilli Tuff	Mixed bx AXT + rhyolite
A07-029	118	119	Andesite Crystal Lapilli Tuff	Quartz veinlet 118 m; sparse gyp-alunite vlts; gyps on fracture
A07-029	119	120	Andesite Crystal Lapilli Tuff	gyps on fracture
A07-029	120	121	Andesite Crystal Lapilli Tuff	gyps on fracture
A07-029	121	122	Andesite Crystal Lapilli Tuff	gyps on fracture
A07-029	122	123	Andesite Crystal Lapilli Tuff	gyps on fracture
A07-029	123	124	Andesite Crystal Lapilli Tuff	gyps on fracture
A07-029	124	125	Andesite Crystal Lapilli Tuff/bx Breccia	Hydro fractured bx bleaching starts @ 124.3 m
A07-029	125	126	Rhyolite/breccia	Many gyps vlts; sparse stringers of Rhy bx w/ Alu envelopes
A07-029	129	130	Rhyolite/breccia	White rhy begins @ 129.3 m; rhyolite bx; clots, blebs, vlts; Py & black sulphide?
A07-029	130	131	Rhyolite/breccia	Many vlts & stringers of gyps
A07-029	132	133	Andesite Crystal Lapilli Tuff	RDD contact @ 132.7 m; f.g. flow-banded margin
A07-029	136	137	Rhyodacite/breccia	Brown rhyodacite autobx below fault
A07-029	137	138	Breccia	Possible clastic bx massive
A07-029	141	142	Rhyodacite/Breccia	Bx ends @ 141.4 m against mudstone contact 60° C
A07-029	142	143	Andesite Volcanic Seds	Grey cgl, grit, well-bedded ss, siltstone, mudstone, ang frags, some boulders; tiny calcite vlts
A07-029	150	151	Andesite Volcanic Seds	Grey bedded akosic ss grit, sltst
A07-029	151	152	Andesite Volcanic Seds	Massive mostly some bedded
A07-029	171.1 EOH		END OF HOLE	
A07-030	0	6.1	No return - Casing	First 2007 drill hole @ Thesis III Zone. Moved rig to Thesis ~12 noon on July 9, 2007, most of afternoon to set-up. Laurier started hole around 11 PM: Much difficulty getting return @ start of hole. Laurier said hit a clay layer at about 20 ft. He collected some fine cuttings (later) from zone below casing that were panned. 0-6.1 m - Casing - no recovery (wait for Lee to mark meterage). First return is ~6.1 m into strong yellow stained pinkish quartz-clay rock. This is prob the GQP rock w/ pyrite oxidized - also may be the precursor to vuggy silica rock. All is broken few pieces of whole core. Contact in broken rock @ 9.2 m. Meterage is very rough due to poor recovery.
A07-030	6.1	9.2	Quartz-Clay Rock	Highly broken vuggy silica rock - still has abundant pyrite in the vuggy silica; alunite-clay have been removed? In first chips can see minor small (1-2 mm) white barite blades in some of the larger vugs. Lose minor FeOx -goethite staining about 10.0 m. 9.2 to 11.28 m - vuggy silica rock w/ common white barite xtals in vugs and fairly abundant but variable pyrite - disseminated. Locally see v fn euhedral quartz crystal druese in vugs. 11.8-14.0 m - vuggy silica rock w/ 2-3% barite & 2-4% pyrite
A07-030	9.2	14	Vuggy silica Pyrite-Barite w/ abundant Bar-Py Quartz-Py(-Alunite-Clay) this clay altered GQP rock	At ~14.0 m (just before 14.33 m block) into strong Clay-Py alt rock - after block - pick-up run of broken GQP - Grey Quartz - pyrite rock w/ abundant white clay (sticks to tongue), still see dissem Py, but don't see barite
A07-030	14	16.8	Vuggy Silica - Pyrite	~16.8 m - back into broken Vuggy silica rock - some vugs still filled w/ the white clay - don't see barite here - still has a lot of pyrite
A07-030	16.8	17.37	Vuggy Silica - Pyrite - Barite	Vuggy silica rock w/ abundant pyrite - coarser euhedral crystals are pyritohedrous w/ triangular faces/minor barite. Py also occurs as very f. grained concentrations on some fractures - vlts.
A07-030	17.37	18.1		
A07-030	18.1	20.7	Quartz-Py(-Alunite-Clay)	Another zone starting around 18.24 block of GQP rock, but w/ white alunite-clay? In plag crystal site - locally vuggy silica w/ some barite. Vuggy Silica-Pyrite-Barite - 20.73 to 22.25 m - v. poor recovery - minor chips + some quartz sand. Mixed pieces of lt-med grey Vuggy silica rock w/ ~3-5% pyrite & some white barite blades in vugs mixed w/ pieces of grey quartz pyrite rock (GQP) - see on piece of GQP rock w/ patch of vuggy silica - supporting that VSI forms from the GQP rock
A07-030	20.7	23	Vuggy Silica-Pyrite Poor Recovery Chips & Sand	Zone of lt-med grey GQP rock w/ white (alunite or clay?) v. soft material fully plag crystal sites w/ abundant dissem pyrite
A07-030	23	29.26	Zone of GQP rock	At 30.0 m - is semi-vuggy silica + some GQP rock, w/ locally still alunite (or sericite?) replacing feldspar sites - only wk vuggy texture - not sure? but this could be produced by washing clay out of plag sites during drilling? At 32.9 m - semi-vuggy silica - think there is alunite filling some vugs here - some small equivalent crystals in vugs? See cubic pyrite now - some crystals up to 1-2 mm - some etching & breaking of euhedral crystals.
A07-030	29.26	34.6	Vuggy to Semi Vuggy Silica-Pyrite Rock w/ Alunite	Into fractured med-dk grey Msi w/ some patches of vuggy silica - pickup barite in vugs + dissem enargite crystals just after 34.75 m block, local patches enargite - may be in bands (?) poss tr chalcopyrite assoc / enargite - top of zone has euhedral enargite in silica + vugs - lower part enargite is etched +resorbed?
A07-030	34.6	35.4	Massive Silica - Py-Enargite. Minor Vuggy Silica - Py-poor	
A07-030	35.4	37	Vuggy Silica-Pyrite	At 35.7-35.8 m - remnant patch of med grey GQP in vuggy silica. At 36 m contact - fractured whole core - vuggy silica w/ healed fractures w/ pyrite @ 20-30° CA. 36.6 m - Py-rich bands in vuggy silica w/ minor white barite blades also see Py on fracture surfaces.
A07-030	37	39.8	Massive Silica-Py + minor Semi Vuggy Silica Py	Into zone more massive silicification - some of the vugginess is produced by fine shattering; local areas of semi-vuggy silica; still has abundant dissem Py

A07-030	39.8	49.7	Vuggy Silica + Massive Silica-Py w/ BARITE Transition Vsi/Msi to GQP Rock	At 39.8 m - pick up semi-vuggy silica texture + start seeing barite again in the bigger voids & along fracture voids. Quite a lot of barite locally filling + partly filling voids - still abundant pyrite in silica - don't see any free gold - especially looking around barite-rich areas. In spite of the broken rock - should be able to see if there is a correlation of gold w/ barite and enargite. Have not seen any areas where pyrite has been removed. Barite-rich zone contains past 42.0 m at ~42.3 m. Irreg barite veins are disrupted by fracturing. ~42.5 m - lose the abundant barite; continue in vuggy silica + massive silica w/ 1-3 % disseminated Py. Pick up barite again 44.0 m. At 45.6 m - 2-3 mm barite veins are @ 65 ° CA. At 46.6 m - still in barite rich zone - massive + vuggy silica w/ Py, some evidence from multi-stage silicification events @ 46.6 m - some white silica bands in med grey silica. At 49.7 m - out of abundant barite zone
A07-030	49.7	50.7		Starting at 49.7 m - start picking up remnant plagioclase crystals replaced by alunite-disseminated Py cavities unchanged.
A07-030	50.7	54.6	Grey Quartz-Pyrite-Alunite Rock Vuggy Silica-Pyrite Barite local Massive Silica	At 50.7 m - into the med grey Quartz-Pyrite Rock - has alunite replacing remnant plagioclase crystals - prob andesite crystal lapilli tuff. At 54.6 m - broken area - prob fault contact - back into mod-strong silicified rock - massive + vuggy silica.
A07-030	54.6	58.5		Vuggy silica w/ relatively abundant white barite blades in some vugs at 55.3 m - start seeing disseminated enargite again. 56.0-56.7 m - see striated slickensided surfaces - sapping fault zone. At 57.55 m - pyritic microfracture @ 40 ° CA.
A07-030	58.5	61.35	Massive Silica - Barite	~58.5 m to 59.2 m - zone w/ remnant plagioclase crystals & pyrite content decreases a little. 59.5 m mostly. This massive silica has less disseminated pyrite & even the whole pieces of core are shattered. Barite drops off ~60.0 m. Small fractured pieces (pebble-sized) of barite-silica (lt grey) w/ dk grey Py-rich silica from 61.25-62.25 m.
A07-030	61.35	64.7		Med-dk-grey; bronzy-yellow (Py) on fracture planes & surfaces of pebbles. Vsi (w) from 61.35 m - 61.70 m. Py decreases @ 62.79 m - light med grey - w/ 2% Py
A07-030	64.7	65.45	Massive Silica w/ loc strong Py diss Vuggy Silica - blocky/fractured	Med grey; med vsi; < 20% of vugs are infilled (clay?). Grades into Msi w/ barite/alunite vug infill @ lower contact
A07-030	65.45	67.4		Light-med grey; w/ complete infill of vugs? (white mineral, H=4, barite?) & wk barite vls. Either orig vuggy or becoming vuggy. No Vg, but a few sulphide minerals w/ another unknown dark sulphide (poss enargite or tennantite). 66.25-66.45 m - Py conc ~5% (on fracture planes) 67.83 m - Bluish FG colour w/ lt-brown-orange (limonite?) stringers. Almost (?) has orangey appearance of orpiment (?) (absolutely no rxn or smell w/ HCl). Light-med grey silicified grndmass; lime-green stained (white when scratched) - soft (can scratch w/ fingernail - originally thought was fluorite -> but prob sericitic). Py loc up to 5%
A07-030	67.4	69	Quartz Sericite-Pyrite w/ lime green crystals	
A07-030	69	77.3		Light grey silicified matrix (harder than last interval). Orangey-yellow fibrous rectangular crystals; wk anhydrite (clear, crystalline, soft) dominantly vning @ 70-80° CA. Lime-green crystallized mineral found in anhydrite vein @ 69.12 m (starting to wonder if lime green mineral is gypsum?). Py 1-2% - poss be black biotite or hbl as well mistaken as Py. 69.70 m - injection breccia? (darker grey; strongly silicified); ~2.5 cm wide & 6 cm thick @ ~15° CA. 70.35 m - < 1mm black sulphide vein (enargite?). 72.64 m - light grey-dark grey sulphides. 73.0 m - 1.0 cm anhydrite vein -> 73.07 m - 2.5 cm anhydrite vein. 73.64 m - anhydrite flakes w/ vn (limonite (?) - orange) & GQP material. Trace enargite? 75.44 m - broken GQP ~1mm anhydrite vein ~60° CA. 76.2 m - broken FG frags until 76.3 m where fracture plane is ~// to CA. 76.49 m - strong dark grey Py diss in FG, contact @ ~50° CA w/ competent GQP
A07-030	77.3	80.86	Quartz-Sericite-Pyrite	Bleached light grey; still silicified, but w/ more texture than previous intervals; plagioclase crystals are white. 77.3-78.15 m - fractured/faulted w/ minor Py diss; enargite vein @ 78.15 m - ~1 cm thick. 78.86-79.2 m - Qtz-Py vls ~// to CA. 79.9 m - Py vls scattered @60-80 ° CA.
A07-030	80.86	88.4		Bleached cream grey Qtz matrix; w/ black (partially elongated) grains speckled throughout rock (hornblende ~1.0%). Irregular vning throughout interval. (This interval & similar intervals will be assayed in hole 1 & hole 2 of Thesis, if they don't have gold values, they will stop being tested). Py-sericite vein ~// to CA from 85.3-85.6 m.
A07-030	88.4	94.5	Bleached Quartz Sericite w/ wk coating of white (salt & pepper) Quartz-Hornblende	Bleached cream-grey Qtz matrix; w/ black hornblende grains comprising ~10%; patches of exposed veins? (coatings) of black & white hornblende/Qtz w/ trace Py; coating/vn has sharp boundaries w/ groundmass & has thin bladed shape; does not cut through entire flat face of core. Visible from 89-89.6 m, 92-92.20 m, 94.28-94.5 m.
A07-030	94.5	97		Bleached white (lighter than previous 3 uphole intervals); ~3% of dark grains under scope are Py; w/ less hornblende. Strongly silicified matrix. Feldspar grains (phenos) make up ~5-10% of rock and have a pinkish hue (hematized?). 95.0 m - anhydrite vein @ ~20 ° CA w/ dk grey gougy sulphide matrix (~2 cm wide). 95.80 m - ~1 cm anhydrite vein @ 50° CA
A07-030	97	102.16	Med-dk Grey Quartz-Sericite-Pyrite Rock	Med-dk grey w/ no vis hornblende (silicified); appears to have white, soft altered crystals (sericite?). 97.74 m - 1 mm wide anhydrite vein @ 20° CA. 99.6 m - 2.5 cm wide & 33 cm thick ~// to CA. Fracture @ 102 m - light orange anhydrite in fracture fault (Tim thinks it is pyrophyllite). 100.33 m - smeared Py on fracture planes. 101.07 m - heavy Py diss on fracture plane. 102.0 m - fractured, pebble-sized frags.
A07-030	102.16	103.74		Bleached light grey matrix w/ white phenos altered by sericite? (pretty hard, H>4, but scratch w/ knife...may be alunite). Smeared black & white hornblende quartz (vein?). 102.65, 103, 103.1, 103.3, 103.7 m - semi bladed "flat" coating (palm leave/bear claw appearance) - I think this "hornblende-quartz rich" coating may be just a result of the cutting process.
A07-030	103.74	114.67	Bleached-Light Grey Quartz-Sericite w/ Anhydrite Veins	
A07-030	103.74	105.71		Light grey-white matrix dominated by quartz. Py content ~3%. 105.40 m - light green ~1x 2cm, mod hard, triangular shape (fluorite?); white phenos may be sericitized (but hard?) or alunite/albite (there has to be some albite somewhere...)
A07-030	0	105.71	Bleached-Light Grey Quartz-Sericite w/ Anhydrite Veins	
A07-030	0	109.3		108.7 m - strong Py diss assoc w. anhydrite. Same as subinterval from 103.7-105.71 m, but w/ less pronounced phenos.
A07-030	0	109.3	Bleached-Light Grey Quartz-Sericite w/ Anhydrite Veins	
A07-030	0	110		Light-grey clasts in a med grey matrix; clasts are angular
A07-030	0	110	Bleached-Light Grey Quartz-Sericite w/ Anhydrite Veins	
A07-030	114.67	116.74		Bleached white w/ ~4% diss Py; anhydrite vning @ high < to CA.
A07-030	116.74	116.74	GQP END OF HOLE	GQP rock that has been heavily faulted & fractured w/ remnant anhydrite vns. 116.5 m - abundant Py gouge
A07-031	0	2.7		
A07-031	2.7	30.9	CASING/OVERBURDEN GREY QUARTZ-SERICITE-PYRITE	Yellow-brown-black alteration on white clay altered fragments
A07-031	2.7	2.7		Med grey matrix; whitish-yellow sericite altered crystals; w/ wk sericite veins
A07-031	4.57	4.57	GREY QUARTZ-SERICITE-PYRITE	Yellowish-brown oxidation on fracture planes
A07-031	4.57	6.1		Med-dk grey; w/ cream soft coloured minerals replacing plagioclase. Crystal content ~20%

A07-031		6.1	10	GREY QUARTZ-SERICITE-PYRITE	Increase in light-grey colour of rock; corresponding to increased crystal content (~35%). Light-cream coloured frags are dom qtz w/ minor sericite. Slight increase in Py diss (in matrix).
A07-031		10	15.4	GREY QUARTZ-SERICITE-PYRITE	Med-dk grey; decrease in crystal content (~20%); crystals are mod soft & grndmass is hard, grey-white (sericite crystals & quartz matrix). Very subtle difference from 6.1-10.0 m subinterval. Slight yellow staining on fract planes @ 14.2 m.
A07-031		15.4	19.73	GREY QUARTZ-SERICITE-PYRITE	Light grey; increase in crystal content (~35%); Tiny Py grains throughout rock. Grains are poss replaced by sericite. Wk yellow (limonite?) on fract planes - soft.
A07-031		19.73	26.23	GREY QUARTZ-SERICITE-PYRITE	Faulted med-dk grey; sulphide-rich; longest piece of core ~ 14 cm; average ~ 6 cm & soft. 24.37-25.44 m - yellowish staining on fracture planes. 25.4-26.23 m - heavily faulted (FG); black smeared sulphides (~5% Py); no obvious fault contact angle.
A07-031		26.23	30.9	GREY QUARTZ-SERICITE-PYRITE	Med grey; white altered phenos of qtz-sericite; qtz-dom alt; Sa vn @ 20.10 m is ~30 ° CA; Sa vn @ 20.35 m is ~40° CA.
A07-031	30.9	31.7		Light Pink Quartz-Sericite	Med pink; similar to GQP (qtz-dom sericitically alt'd); but w/ less Py (~0.5%). Poss Py has altered to hematite, giving rock pink hue. Altered crystals appear somewhat "yellower" then white in previous interval, perhaps due to oxidation. Weak sericite vlts (w/ minor qtz alt) of irreg <'s to CA.
A07-031	31.7	39.25		Light-medium Grey Quartz-Sericite-Pyrite Rock	Light-medium grey; subtle transition from pink altered rock; ~20% phenos of qtz-sericite? alt plag frags. 35.4 m - fault/fracture zone similar to 35.4 m with strong sulphides (dark grey - Py ~5%). Wk-mod clay alteration on fracture pieces of rock
A07-031	39.25	42		Light Grey Quartz-Sericite-Pyrite w/ greater Pheno %	Lighter grey then prev interval (31.7-39.25 m) w/ greater % of smaller altered crystals (30%). Again very subtle transition b/w GQP intervals. After looking at intervals of GQP, my guess (Brian) is that original protolith was AXT. V. trace loc hornblende.
A07-031	42	44.08		Bleached light grey qtz-sericite-pyrite w/ local clast "foliation"	Light grey-bleached light grey; has subtle "foliation" (alignment of elongated phenos) @ 20-50 ° CA. 42.6-43.13 m - cloudy white/clear quartz vein ~1 cm thick, // to CA & bounded by fine diss Py
A07-031	44.08	47.74		Light-medium-bleached grey GQP w/out foliation	Light-med-bleached grey; w/ no obvious alignment of crystals; similar GQP w/ ~30% phenos qtz-ser alt'd plag. 44.75 m - smeared dark grey sulphides. 45.22-45.56 m - ~1.5 m quartz/crystalline // to CA w/ wk Py diss. Contact w/ next (lower) interval @ 47.74 m = ~20 ° CA (again subtle change).
A07-031	47.74	49.24		Grey QUARTZ-SERICITE-PYRITE w/ wk-mod sericitization & anhydrite veining	Lt-med grey; w/ white alt'd (qtz-ser) plagioclase crystals. 47.4-47.84 m - 1 cm thick anhydrite vein that trends ~25 ° CA. 47.87-47.97 m - conjugate vn? (anhydrite) @ 45° CA.
A07-031	49.24	50		Med grey Quartz w/ Pyrite Veining & Wk sericitization	Med grey qtz w/ ~2% Py vning; loc trace Py assoc w/ anhydrite. Anhydrite vning @ 49.24 m, is ~2 mm wide & is lower then overall surface of rock (visible under scope "canyon-like"). Sulphides (including Py) gives dark-grey cloudy appearance to veins, which appear semi-stylolitic.
A07-031	50	60.12		Faulted Sulphide-Rich Gougy Quartz-Sericite Rock	Med-dk grey; sulphide rich sericitized FG. 51.36 m - piece of white anhydrite vn 90 ° CA (my guess?), which is 0.5-2 cm in width. 51.35-52 m - original GQP w/ ~2-3% Py. 52 m - 10 cm of anhydrite vein material. 53.05 m - 0.5 cm anhydrite vein ~50 ° CA on mod competent rock w/ alt orange orig plag frags (sericite now?). Orange limonite vning to 55.63 m (irregular vning). 56.24 m - wk Vsi? or just fractured in semi-vuggy rock, med-dk grey (to 57.0 m). 57.84-58.22 m - wk Vsi, light grey cast, Py ~5%. 58.22-60.0 m - wk GQP? heavily faulted & fractured, some pebbles may be Vsi w/ clay infill (difficult to determine & differentiate precise transition to next interval downhole (60.12 m). May be trace green sphalerite? Light blue alt clay @ 59.5 m.
A07-031	60.12	60.87		Light Grey Vuggy Silica	Light grey Vsi w/ clay infill, possibly sericite infill (seems a little bit harder then clay...No kaolinite (?) -> white in colour, poss even loc alunite?). Smeared Py - high on fracture planes (~20%)
A07-031	60.87	63.2		Dark Grey Fracture Massive Silica	Dark grey; sulphide-rich (Py up to 10%); loc vsi (w) @ 61.27-62.60 m. Mislatch @ 62.18 m - 2 rock frags of >80% red-orange sphalerite (2 pebble-sized & 1 cobble-sized frag). Wk white quartz blebs. 63.03 m - qtz vein @ 50 ° CA
A07-031	63.2	66.02		Light Grey Fractured Massive Silica w/ Weak Vugginess	Light grey; extremely fractured w/ brecciated appearance. Med grey rounded clasts/frags in light grey wkly vuggy (loc) matrix. 63.60-63.70 m - smeared Py on fracture plane (solid), w/ another black "solid" mineral (enargite?). 64.42 m - black (MACROSCOPIC) mineral actually green (MICROSCOPIC) w/ H~4, my guess is chalcopyrite. One tiny pebble sized frag, saw small (under high power mag) piece of wiry silver (?) (so tiny -> uncertain)
A07-031	66.02	67.85		Dark grey-black sulphide-rich fault gouge	Dark grey-black w/ abundant smeared Py & poss trace chalcopyrite ("green" colour - not so certain anymore). Up to ~10% Py in gougy material.
A07-031	67.85	70		Light grey Vsi/Msi w/ wk barite infill	Light grey; massive silicification; w/ v wk local Vsi. White sericitization (?) on fracture planes. Heavily microfractured. Smeared Py on fract planes. Wk barite infill.
A07-031	70	70.91		Med-dk grey Py rich; massively silicified w/ wk vugginess	Med-dk grey; bronzish dark colour of sulphides, w/ green tinge - may be due to chalcopyrite
A07-031	70.91	73.7		Light grey blocky/fractured massive silica	Light grey; vuggy on outside of core; massive silica when cut; small fractures make rock appear blocky. Wk barite infill of vugs. Poss trace chalcopyrite
A07-031	73.7	74.22		White barite matrix w/ grey massive silicified clasts	White; matrix-dominated (barite); w/ subrounded to angular med-grey pebble-sized clasts. No VG noted.
A07-031	74.22	77		Hydrothermal Breccia w/ massive silicification	Dark grey-black matrix w/ med grey clasts. Dark grey dom sulphides w/ grey clasts; dom siliceous. Almost appears as though there is a subtle contact b/w more massive silicified rock @ Vsi @ 80 ° CA
A07-031	77	79.86		Light grey vuggy silica rock	Light grey; v weak infill of vugs w/ barite. 77.12 m - 0.5-1 mm wide vlt ~6 cm in length. Rainbow coloured sulphide mineral (bornite) over bulbous hematite grains (I don't think hematite would adopt that colour & bornite is not normally bulbous) @ ~40 ° CA. Slight green tinge again w/ Py (trace chalcopyrite).
A07-031	79.86	81.69		Cave Material	HQ3 to NQ2 switch @ 79.86 m.
A07-031	81.69	85.95		Light grey vuggy silica w/ wk infill by barite; heavily fractured	Light grey; vuggy silica w/ <10% infill by barite. Dominantly tiny pebble-sized rock fragments (largest rock is ~9 cm). No VG
A07-031	85.95	96.1		Quartz-Sericite-Pyrite (sericite dominated)	
A07-031	85.95		87	Quartz-Sericite-Pyrite (sericite dominated)	Light grey; heavily fractured & faulted; w/ soft white alteration mineral (sericite?)
A07-031	87		88.6	GQP (faulted & fractured)	Light grey groundmass; yellow mineral has replaced plagioclase (poss sericite...or some form of sericite). Orange limonite vning irregular < throughout interval. Anhydrite chunk @ 87.22 m is ~40 mm wide.
A07-031	88.6		91.44	GQP w/ anhydrite vning	Light grey w/ orange limonite staining & vlts of limonite. 88.7 m - 4mm anhydrite vn. 90.43 m - 7 mm anhydrite vein. 90.5 m - 3mm anhydrite vn. 90.95 m - 1 cm light green anhydrite vein. 91.3 m - ~80 mm gap w/ white anhydrite veining ~30 mm. Py vlts ~50-80 ° CA from 91.53-91.65 m. White bleached qtz-sericite vn @ 91.80 m; has "delta" like shape on cut face & is 1 cm wide.
A07-031	91.44		92.43	Sericitized fault; gougy rock	Light grey; higher Py conc (3-4%) w/ flattened (ductile Py vein); Smeared Py on fract planes

A07-031			92.43	96.1	Sericite dominated GQP w/ anhydrite veining	Light-grey; w/ white crystal yellow anhydrite veining. Smeared Py on fracture planes @ ~20° CA @ 96.0 m.
A07-031	96.1	101.11			Quartz-dominated GQP w/ wk sericite (bleached grey colour)	Bleached light grey colour. Blebs of Py (grouped) make up ~0.2% of rock. Py vning locally @ irreg angles to CA. Subtle transition to darker grey GQP rock. Anhydrite vein @ 100.47 m is 3 mm thick & @ 80° CA & anhydrite vein @ 100.5 m is 1 cm thick @ 30 cm long. Med-dk grey; white anhydrite veining. 102.6 m - 20 cm vn is // to 15° CA. 104.32 m - 3 cm anhydrite vein @ 80° CA. 104.9 m - anhydrite veining @ 50-70° CA (~2 mm each). Most anhydrite veins in this interval are @ high < to CA. 107.0 m - anhydrite veining ~5 mm wide @ 35 ° CA. Increase in pheno content compared to last interval
A07-031	101.11	109.12			Quartz-dominant GQP w/ anhydrite veining	Light grey; heavily gougy fault breccia; smeared Py vein ~40° CA @ 109.6 m (vn is 13 mm thick)
A07-031	109.12	109.6			Sericitized fault gouge w/ Py diss	Med grey; w/ increase in Py conc compared to previous 2 intervals uphole (101.11-109.6 m). 110.26 m - 2 parallel anhydrite veins ~0.5 cm thick, each @ 60° CA. Light crystal yellow-green anhydrite @ 110.38 & 110.45 m is ~2 cm & 3 cm respectively & lacks continuity to be a vein. 111.35-111.40 m - greenish-yellow anhydrite vein ~1 cm thick is // to CA & reappears from 110.63-100.75 m. 112.17 m - greenish-yellow anhydrite in this interval is @ high < to CA, whereas yellowish-green anhydrite is ~// to CA.
A07-031	109.6	114			Light-bleached grey GQP	
A07-031	114	116.95			Med grey Quartz-Pyrite rock w/ wk anhydrite vning	Slightly darker grey then the interval uphole (109.60-114.0 m). Veining is less pronounced. Fault contact @ 116.95 m is @ 45 ° CA.
A07-031	116.95	117.15			Faulted GQP	Heavily fractured; lt grey-med grey w/ smeared Py
A07-031	117.15	119.45			Med grey GQP w/ anhydrite veining	Lt to med grey w/ thin (~1 mm anhydrite veins @ 70° CA). 1 mm white crystalline anhydrite ~70° CA@ 118.74 m.
A07-031	119.45	120.09			Faulted Light grey GQP w/ wk vning	Light grey-fractured & faulted; yellow-green anhydrite @ 119.90 m (blotchy irregular, but ~50 ° CA). 120.0 m - 2 cm anhydrite vein @ 70° CA
A07-031	120.09	121.47			Bleached light grey GQP w/ wk anhydrite veining	120.1-120.33 m - 3 m anhydrite vein ~5° C, but takes sharp turn @ 120.33 m to 70° CA (interesting).
A07-031	121.47	121.77			Fault gouge of GQP	Thin layered sulphide, white sericite & GQP @ 20° CA
A07-031	121.77	124.97			Light grey GQP w/ ~70° CA anhydrite veining	Bleached light grey w/ anhydrite veining; white to alt yellow @ ~70° CA. 122.2 m - anhydrite-pyrite vein ~70° CA bounds fault. 123.0 m - 30° CA anhydrite fault. 124.29 m - thin pyrite vlt @ 40° CA
A07-031	124.97	EOH			END OF HOLE	
A07-032	0	3.05			CASING	0-3.05 Casing
A07-032	3.05	12.6			Alunite-clay altered rock	3.05 - 12.6m. Strongly Alunite-Clay alt'd (pinkish-white w/ yellow stains), highly brecciated w gougy lower portions - very poor recovery from 3.05 to 9.0 m, occasional (3%) sub-rounded silica-alunite alt'd clasts w/ rare vuggy texture. Limonite-jarosite (yellow-brown) stained to 12m w/ trace of pyrite.
A07-032	12.6	16.24			Silica clay alt'd AXT	12.6 - 16.24m Strongly silica-clay alt'd (AXT) andesitic crystal-lapilli tuff (lt-gray, mottled) highly broken core - probably brecciated. Clasts are angular silica-clay alt'd, porphyritic - probably sericite after plagioclase, 3-8mm tabular anhedral to euhedral (20%).
A07-032	16.24	20.95			Alunite-clay altered AXT	16.24 - 20.95m Strongly alunite-clay-alt'd AXT? (pinkish-white), highly broken core - probably fault-brecciated, w/ gougy footwall contact & clayey.
A07-032	20.95	27.6			Silica clay alt'd AXT	20.95 - 27.6m Moderately silica-clay alt'd AXT? (light-gray) highly broken core - fractured, generally with vuggy texture (5%) of 1 - 5mm anhedral to subhedral clasts. Rock is porphyritic (30%) of 1-8mm anhedral to euhedral clay-alt'd phenocryst casts. Very fine pyrite disseminations & occasionally filling vugs.
A07-032	27.6	30.8			Clay-alt'd AXT	27.6 30.8m Clay-alt'd AXT? (lt-gray to bleached). Intensely broken core to gougy - probably sericitized w/ occ'l vuggy texture (1%). Traces of very fine pyrite disseminations.
A07-032	30.8	33.1			Silica clay alt'd AXT	30.8 - 33.1 Silica-clay alt'd AXT (light-grayish brown w/ lim-stained clay-alt'd casts (20%), 1 -10mm anhedral to euhedral. In fault contact w/ footwall propylitically altered AXT @ 33.1 w/ 30° CA. Around 3-5% very fine pyrite disseminations w/ anhydrite veinlets/fracture-fill @ 32 to 33.1 meters.
A07-032	33.1	41.9			Propylitic alt'd AXT	33.1 - 41.9m Propylitic alt'd AXT (light grayish-brown), occasionally highly broken to gougy @ 37 to 40m, at fault contact w (gougy) w/ footwall hematitic AXT?
A07-032	41.9	57.45			Andesitic Crystal Lapilli Tuff	41.9 - 57.45m Andesitic crystal lapilli tuff (AXT), maroon w/ mottled to light-brown portions, intensely fractured/fault brecciated, w lapilli-tuff clasts @ 45.15 - 46m, 51.05 - 51.12m, 51.21 - 53.35m. Clayey where it is intensely fault-brec'd. Highly hematite-alt'd w/ rare specular
A07-032			56	57	Andesitic Crystal Lapilli Tuff	With ~10 cm zone of highly sericitic (greenish) alt'd porphyritic rock.
A07-032	57.45	99.98			Andesitic Crystal Lapilli Tuff	57.45 - 99.98m EOH, as above but less brecciated/gougy. Very rare lapilli tuff clasts >5mm but with common fiammitic clasts of rhyolite (light-gray) & hematized tuffaceous clasts @ 92 to 99.98m.
A07-032			62	63	Andesitic Crystal Lapilli Tuff	Series of fractures ~5cm apart down to 64m, very rare alt'd biotite (phlogopite)
A07-032			65	66	Andesitic Crystal Lapilli Tuff	Series of fractures to foliations down to 66.5m.
A07-032			74	75	Andesitic Crystal Lapilli Tuff	Series of fractures, to almost foliated, w/ grn-gray carbonate-alt'd fragments.
A07-032			76	77	Andesitic Crystal Lapilli Tuff	Series of fractures to almost foliated.
A07-032			77	78	Andesitic Crystal Lapilli Tuff	Carbonate-filled fractures, irregular.
A07-032			79	80	Andesitic Crystal Lapilli Tuff	Series of fractures/foliations w/ occasional breccia texture down to 83.5m, with rare 2mm-wide calcite-fillings
A07-032			85	86	Andesitic Crystal Lapilli Tuff	Sub-parallel and irregular fractures to core axis
A07-032			90	91	Andesitic Crystal Lapilli Tuff	Series of fractures to foliations.
A07-032			92	93	Andesitic Crystal Lapilli Tuff	Sub-parallel fracture/foliations.
A07-032			94	95	Andesitic Crystal Lapilli Tuff	Series of fractures to foliations.
A07-032			95	99.98	Andesitic Crystal Lapilli Tuff	Fiammitic texture following the fracture (30°), subrounded 5-20mm fragments of hematized (brick-red) fine-grained andesite, poorly sorted down to EOH.
A07-032	99.98	EOH			END OF HOLE	
A07-033	2.44	7.7			Strongly clay-alt'd w/ clasts/frags of strongly Scy-alt'd AXT	Bleached white to lt-grey w/ grn-gry frags. Intensely sheared to gougy (fault zone), strongly limonitic (yellow-brown) @ 2.44 to 2.6 m, fracture-stains downwards. Poor recovery. 30° CA - FG contact w/ FW. V.f. Py disseminations in gouge clasts.
A07-033	7.7	19.15			Moderately propylitically alt'd AXT	Ca increases w/ clay along shear/gouge zones (fizzes). Generally highly fault-bx'd (FB). Porphyritic andesite crystal-lapilli tuff frags/clasts rare, w/ 2-8 mm anhedral to subhedral clay-alt'd phenocryst casts (15-20%). Lt yellow-gn clay after plag? casts @ 8.1-10 m. Very rare v.f. Py disseminations w/ occasional black spots of tarnished Py?

A07-033	19.15	22.9		Strongly clay alt'd AXT	Light grey to grey. Intensely bxd/gougy (fault zone). Clasts of Py-rich (5%) <u>pervasively silicified rock</u> common @ 20-22.9 m. Common v.f. Py disseminations (5 %) in pervasively silicified clasts & rare (~1%) in cly-alt'd AXT?
A07-033		22.9	34.35	Massive silicified w/ occasional vuggy silica portions	Dirty white to cream. Highly fractured/brecciated w/o the matrix recovered. Clasts are generally sub-angular to angular, occasionally slickensided. Very poor core recovery nil to very rare v.f. Py disseminations normally along fractures.
A07-033	34.35	44.1		Pervasively silicified AXT?	Light maroon to light brown. Fine-grained porphyritic (10-15%) w/ fiammitic-textured portions. The maroon colour is due to hematite as impurities in late pervasive silicification. Very fine specular hematite common (1-2%) w/ even-later fracture-fill carb. Fractures common, often as series.
A07-033	44.1	48.8		Massively silicified rock	Grey, slight to moderately broken core w/ crackle-bx texture. Highly pyritic, v. fine grained associated w/ silicification + fracture-fills. FG contact 20° CA @ 48.8 m, w/ traces of v.f. covellite in vugs.
A07-033	48.8	54.8		Pervasively silicified AXT?	Grey to light grey. Slightly broken core w/ Py-filled fractures & veinlets. Almost massive @ 52-53.9 m.
A07-033	54.8	60		Massive silica	Dirty white to cream. Crackle bx-textured arising to local vuggy voids. Nil to strong of v.f. Py associated w/ silicification @ 54.8 to 55.2 m. Chalcocite? Powder @ vugs, rare.
A07-033	60	65.85		Clay-altered AXT	Light grey to grey. Porphyritic texture of 2-8 mm anhedral to subhedral cly-alt'd plag (10-15%) observable (yellowish to yellow-brown). Moderately fractured w/ gougy portions. Yellowish, waxy, soft pyrophyllite? In gouge @ 60.75-61 m. V.f. Py common, replacing ferromags
A07-033	65.85	100.4	81.15	Silica-clay alt'd AXT	Brown to grey-brown, w/ mottled yellow-green; clay-replaced plagioclase casts. Porphyritic w/ 2-8 mm anhedral to subhedral clay-altered phenocrysts (sericite-pyrophyllite?). Under the microscope, early v.f. Py is rimmed w/ hematite embedded in later silicification (translucent), clay (white) seems older then Py, but Py seems to have replaced the amphiboles (ferromags). White clays encapsulated/embedded by silica is carb-alt'd when scratched/liberated - suggesting early clay-carb alt'n followed by silicification. Dip-slip (but oblique) slickenside on fracture planes. Rare v.f. specular hem spots (1%).
A07-033			85.25	Silica-clay alt'd AXT	Anhydrite filled fractures start @ 81.15 m
A07-033	100.4	103.6		Strongly clay atl'd AXT	2 cm thick drusy qtz vein w/ vuggy central core + v.f. Py in vug & near wall-rock. 85.0 m (40° CA). The FG's have qtz-vein (1-2 cm) w/ ~1% v.f. Py
A07-033	103.6	120.1		Strongly pervasively silicified rock	Light grey to grey. Intensely fault-bx'd w/ gouge & later infilled by gypsum (anhydrite). Common v.f. Py disseminations, usually in silicified clasts & some in gougy fractures.
A07-033	120.1	144.25	127	Moderately to strongly clay-alt'd AXT	Grey to dk-grey. Crackle-bx'd but qtz-healed @ boundaries of wall-rock but w/ hydrothermal bx @ 107.1 to 109.85 m. The hydrothermal bx is composed of sub-angular clasts of f.g. rhyolite (pinkish grey) w/ v.f. Py, cut by later Py-silica (dk-grey) matrix. Milled or pebble-bx zones of above composition @ 111.3 to 112.1 m as shown by sub-rounded pebble-size (2-15 mm) rhyolite clasts in Py-silica matrix. Most fractures after crackle-bx texture are filled by later anhydrite.
A07-033			134.8	Moderately to strongly clay-alt'd AXT	Light grey to light grn-grey. Porphyritic w/ 20-25% 2-8 mm anhedral to subhedral clay-altered casts (dirty white). Slightly fractured w/ sheared gougy portions where anhydrite-fills common. Common (2-5%) v.f. Py disseminations.
A07-033	144.25	147.15		Pervasive silicification	Cubic but fine (0.1-0.5 mm) Py disseminations from 127-144 m (3-5%)
A07-033	147.15	149.05		Clay-altered AXT	Post-anhydrite, very gougy fault
A07-033	149.05	171.2		Strongly pervasively altered rock	Grey to light grey. Slightly crackle-bx'd to anhydrite-filled fractures, solid core -slightly broken. Occasional fine vuggy portions. Common Py, v.f. and seem associated w/ silicification. Fault contact w/ clay-alt'd FW @ 147.15 m
A07-033	171.2	186.9		Silica-clay alt'd AXT	Light grey, vague porphyritic texture, 15-20% of 2-8 mm anhedral to subhedral phenocryst casts. Slightly sheared/fractured w/ rare to common (1-3%) v.f. Py disseminations, late anhydrite-filled fractures.
A07-033	186.9	199.04		Moderately silica-clay altered AVB	Grey to dark grey, mottled white in light brown AXT? @ 153.1 to 155.45 m (rhyolite dike?). Generally solid core w/ crackle-breccia to stock-work texture @ 157-171 m. Occasional anhydrite fracture-fill.
A07-033	199.04 EOH			End of Hole	
A07-034	0	3.05		CASING	Green-grey to brown, mottled w/ dirty white to yellowish-white. 2-10 mm (5-10 %) anhedral to subhedral clay-altered casts. Propylitic @ 172 to 180 m (fizzes). w/ common (5 %) v.f. specular hem spots. Highly Scy-alt'd AVB starts @ 180.2 m downwards to EOH.
A07-034	3.05	9.05		Vuggy Silica	Green-grey w/ mottled pinkish brown. Fairly solid core, slightly fractured. Sub-rounded to subangular volcanoclastic clasts - porphyritic w/ ~20-25% 1-4 mm anhedral to subhedral plag casts, in darker greenish-grey matrix. Matrix is somewhat chloritized, especially @ 196 to EOH.
A07-034	9.05	19.2		Massive Silica	Approximately 3-5% v.f. (0.1-0.3 mm) cubic Py disseminations.
A07-034	19.2	23.2		Pervasive silica to almost massive w/ clay filled fractures	Casing, no core
A07-034	23.2	23.85		Silica-clay	White to lt brown Fe-stained; mod'l'y to highly broken core. Vug silica ~0.5 m to 4mm w/ rare black-like form @ 3.05 to 3.85 m parallel to fracture, kaolinitic @ 5 to 9 m w/ some phenocryst clasts probably kaolinite. Low recovery.
A07-034	23.85	26.5		Clay alt'd	White to lt brown Fe-staining to lt-grey when fresh/unoxidized. Highly brecciated to stockworked w/ white kaolinite clay in between clasts. Digenite coatings on some voids from 12 to 16.5 m, w/ chalcocite-dominant @ 15.09 to 16.46 m. Hem-filled 60 ° CA fracture w/ lateral movement.
A07-034	26.5	45.4		Strong clay alteration	Vuggy in part, mostly cly-filled already w/ open space produced by later fracturing/crackle brecciation. Very fine diss'd Py forming grey bands/shade to the rock. Pervasive silica down to 23.2 m then cly further down w/ grn-gy to golden yellow waxy alt'd phenocrysts - probably py to phyllic? down to 26.5 m.
A07-034			27	Strong clay alteration	Altered purple andesite (bxd) AVB? V.f. Py on fractures & some diss
A07-034			37.05	Strong clay alteration	Weak purple andesite (50% phenocryst casts), 4-8 mm tilted/replaced by greenish white to golden-yellow waxy pyrophyllite? Moderately fractured w/ FG at ends. (Mottled grey to lt-brown)
A07-034			38.4	Strong clay alteration	Purple andesite? (mottled grey to lt-gry), occasionally vuggy, highly fractured to faulted (gougy) w/ very fine disseminated Py & compact fracture-filling
A07-034			39.9	Strong clay alteration	Py diss in 50 cm Sal core w/ little on fract of Scy
A07-034			40.8	Strong clay alteration	Highly broken core - probably brecciated
A07-034			41.35	Strong clay alteration	Highly broken core - probably brecciated
A07-034					White translucent waxy pyrophyllite? along fracture
A07-034					White, highly broken core - probably brecciated
A07-034					White, highly broken core - probably brecciated

A07-034	45.4	94.4				Altered purple andesite (lt-tan to lt-grey w/ spots of lt-tan to lt-brown porphyries). Slightly fractured w/ common disseminated Py & occasional Py-Cp clusters. Contact w/ Cly-alt'd hanging wall is FB/FG w/o apparent movement. The lt-tan to pinkish-brown phenocrysts is actually splintery under the microscope & flooded w/ silica which may be alunite. Py is very fine (<0.2 mm) & which is either as fracture-fill or diss'd - probably related to initial hydrothermal pulses.
A07-034			49.9			Normal fault movement
A07-034			51.75			Sinistral movement
A07-034			62.18			w/ lateral movement
A07-034			70.7			Below the FG @ 70.7 m, the clay alteration increase dom to 71.5 m
A07-034			75.4			w/ series of fractures @ 5 cm downwards
A07-034			78.05			3 m anhydrite-filled fracture. ANHYDRITE veinlets/fracture-till zone from 78.05-153.93 m EOH
A07-034			87.55			w/ anhydrite in fracture
						Particularly where FG/FB exist. Tan-coloured Scy becomes white to almost bleached-looking w/ occasional lt-yellow to lt-brown waxy pyrophyllite? Fracture-fill apart from common fibrous-looking anhydrite still has andesite porphyry texture, <1 mm to ~ 5 mm, anhedral to euhedral casts, filled/replaced by white, dull, soft clays. ~20% contact w/ hanging wall is w/ 15 ° FG anhydrite-fill. Py disseminations is v. fine but occasionally clusters, still cubic at times.
A07-034	94.4	131.05				w/ anhydrite fills 10, 5, & 30 mm thicknesses
A07-034			108.4			w/ 250 mm anhydrite-pyrophyllite-healed zone
A07-034			109.1			
A07-034			111.3			w/ 20 cm wide lt-yellow waxy to dull pyrophyllite? & 5 cm wide fibrous anhydrite @ footwall of pyrophyllite, separated by 2 cm grey gouge.
A07-034			114.3			w/ anhydrite-pyrophyllite? Fracture/bx fills. Cp traces in Psi clasts
A07-034			117.35			End of FG from 116.6 m
A07-034			120.6			w v.f. disseminated to clustered greenish Cp
A07-034			127.45			FAULT ZONE to ~131 m
						w/ occasionally clay-alt'd portions (grey to dk-grey), crackle-bx'd texture to stockwork @ 140.5 to 151.4 m, w/ almost massive silica texture. Very rarely porphyritic rock, <2 mm phenocrysts almost massive tuff texture
A07-034	131.05	153.93				Psi w/ crackle bx texture to stockwork filled by anhydrite vlts & common Py +/- Cp disseminations. Stockwork zone begins/dominate @ 145 to 151 m
A07-034			140.5	151.4		
A07-034	153.93 EOH					
A07-035	0	9.14				
A07-035	9.14	15.24				
A07-035			10.67			
A07-035	15.24	18.39				
A07-035	18.39	21.17				
A07-035	21.17	27.18				
A07-035			21.17			
A07-035			21.65			
A07-035			22.6			
A07-035			23	24		
A07-035	27.18	28.66				
A07-035			25.7			
A07-035	28.66	33.4				
A07-035			29.42			
A07-035			33			
A07-035	33.4	33.7				
A07-035	33.7	34.87				
A07-035	34.87	37.7				
A07-035	37.7	41.51				
A07-035			38.27	38.9		
A07-035			38.9	39.62		
A07-035			39.62	41.51		
A07-035	41.51	44.4				
A07-035			41.51	42.77		
A07-035	0		42.77	44.4		
A07-035	44.4	46.62				
A07-035	46.62	51.21				
A07-035			46.62	47.58		
A07-035			47.58	51.21		
A07-035	51.21	53.64				
A07-035	53.64	55.6				

A07-035			53.64	53.8	Dark grey qtz-dominated Qtz-Ser-Py Rock	Shear zone separating softer GQP (uphole) w/ harder GQP (downhole) Phenocryst content decreases (30% to 15%); there is an increase in the silicification of the rock ; it also is more of a dark grey colour. V.
A07-035				53.8	55.6 Dark grey qtz-dominated Qtz-Ser-Py Rock	weakly vuggy
A07-035	55.6	61.75			Light grey qtz-dominated qtz-ser-Py rock w/ wk vugginess	Light-med grey qtz-dom qtz-ser-Py rock w/ kaolinite on fract planes (poss wk sericite too). Vugginess stronger from 56.25-56.35 m. Does not appear to be much mineral growth in vugs, or at least v. wk mineral growth -> poss kao (?) to ~ 62.80 m
A07-035				58.3	58.75 Light grey qtz-dominated qtz-ser-Py rock w/ wk vugginess	Smearred Py on fracture planes
A07-035				60.96	Light grey qtz-dominated qtz-ser-Py rock w/ wk vugginess	Switch from HQ3 to NQ2
A07-035	61.75	66.55			Light grey vuggy silica w/ tiny vugs (poss HBX as well?)	
A07-035				62.17	Light grey vuggy silica w/ tiny vugs (poss HBX as well?)	Somewhat brecciated w/ Py growth in vugs. Smearred Py on fracture planes until 63.60 m..
A07-035				63	Light grey vuggy silica w/ tiny vugs (poss HBX as well?)	Visible tarnished Cp on fract plane (wkly rainbow coloured); begin picking up elongated frags (ADF?) & becomes slightly brecciated
A07-035				65.3	Light grey vuggy silica w/ tiny vugs (poss HBX as well?)	Trace covellite on fract plane
A07-035	66.55	68			Light grey quartz-ser-Py rock	Light grey (bleached) strongly sericitically altered w/ white phenos
A07-035	68	72.2			Strongly clay-altered AXT	Light grey; highly fractured (FG). Possibly sericite w/ ~3% Py disseminations. Gradational contact of Scy-alt'd FW (footwall)
A07-035	72.2	96.9			Silica clay alt'd AXT	Light pinkish-brown; porphyritic; 2-8 mm anhedral to euhedral phenocryst casts, 30%, w/ anhydrite-filled fractures @ 78.35 m to 148.65 m. V.
A07-035	96.9	98.5			Strongly clay alt'd	fine cubic Py disseminations (3-5%). Anhydrite is barren, thus probably late Py slickenside w/ lateral movement. Supergene or secondary
A07-035						Possibly sericitic fault zone (FG), lt grey, gougy to bxd, w/ ~3% v.f. Py disseminations in clasts & matrix
A07-035	98.5	123.75			Strongly Psi alt'd	Dk grey to grey; slightly vuggy, crackle-bx'd to stockworked from 102-123.70 m, w ~10-15% v.f. Py disseminations, mostly filling the 1 to 4 mm anhedral to sub-hedral vugs, (5% of core). Common anhydrite bx-fill (20%) @ 102-105 m
A07-035			118.35		Strongly Psi alt'd	Anhydrite filled fractures
A07-035			120.35		Strongly Psi alt'd	v.f. Py in fracture
						Light pinkish brown to lt grey; porphyritic w/ elongated to flow-textured portions replaced by clay, may be sericite (~20%), 1-5 mm disseminated w/ v.f. Py 3-7%, slightly fractured. Generally vuggy (15%) w/ leached-out anhedral to euhedral casts around 2 mm to 4mm, some v.f. Py fills up around 10% of the vug. Common anhydrite veinlets filling the fractures (secondary-supergene)
A07-035	123.75	134.15			Silica clay alt'd AXT	Grey to lt grey; generally vuggy, 1-4 mm anhedral to euhedral casts, occasionally Py-filled, v.f., crackle-bx texture to almost stockworked w/ later (supergene) anhydrite fracture to matrix fill (minor) crackle-bx. Py-filled fracture on matrix @ 137 to 138 m.
A07-035	134.15	150.88			Pervasive silicification	Blotchy sericite after anhedral to euhedral phenocrysts, 10%
A07-035	150.88 EOH		144		Pervasive silicification	
					END OF HOLE	
A07-036	0	1.52			CASING	Casing, overburden
						Maroon-brown; highly porphyritic ~30% plag-feldspar in both clasts & matrix, 1 to 10 mm subhedral to euhedral plag-feldspar phenocrysts. Rock-flour matrix w/ sub-rounded to sub-angular mm to 14 cm clasts. Hematitic-oxid w/ occasional to trace of fine-grained crystalline specular hematite. Contact @ 24.85 m is irregular fracture, 3 mm-thick w/ purple gougy infill.
A07-036	1.52	24.85			ANDESITE VOLCANIC BRECCIA	Maroon to brown; highly porphyritic ~30% plag-feldspar w/ occasional flow to banding textures. Feldspars are mostly anhedral (80%) especially the big ones - 4-8 mm, but the smaller ones (<4 mm) are sub to euhedral w/ common flow textures. Weakly to moderately carb-alt'd (propylitic). Reverse fault @ 26 m. Occasional (5%) v.f. specular hematite crystals disseminated.
A07-036	24.85	36.05			ANDESITE FLOWS	Maroon to brown; high porphyritic (~30%) w/ generally sub to euhedral play-feldspars, 1 mm to 4mm. Rock flour matrix w/ subrounded to sub-angular clasts from mm to 3 cm. Weakly carb-alt'd. Rare (2%) vlt disseminated specular hematite crystals.
A07-036	36.05	41.8			ANDESITE VOLCANO-CLASTIC BRECCIA	Maroon to brown; highly porphyritic (~15%) w/ mm to 1 cm anhedral to euhedral plag-casts. Casts are clay-carb alt'd. Occasional (5%) disseminated specular hematite v.f grained.
A07-036	41.8	47.8			ANDESITE CRYSTAL LAPILLI TUFF	Maroon; highly porphyritic (20%) w/ mm almost 1 cm plag-feldspar and casts, subhedral to anhedral. Weakly carb-alt'd
A07-036	47.8	68.6			ANDESITE VOLCANO-CLASTIC BRECCIA	W/ abundant fracture/faults throughout interval
A07-036	68.6	70.86			ANDESITE VOLCANO-CLASTIC BRECCIA	70.78-77.2 m - mottled maroon to brown. HQ2 @ 70.78-73.15 m. NQ2 @ 73.15 m to E.O.H. Oxidized-hematitic w/ ~10% disseminated specular hematitic crystals. Selectively weak carb-alt'd plag-feldspar (30%) to carb-filled fractures (2%) w/ occasional calcite-crystals in voids (propylitic alt'n)
A07-036	70.86	78.22			ANDESITE CRYSTAL LAPILLI TUFF	Mottled brown; sub-rounded to sub-angular poorly-sorted, w/ clast size ranging from mm to 15 cm. Chilled margin @ 86.72 m and w/ flow texture @ 90.2 m. Plag-feldspar more common (40%). 83 m - <4 mm carb-filled fracture. Common (50%) fine-grained felsic sub-angular clasts @ 83.6-86.70 m - maybe rhyolite? Weakly carb-alt'd plag feldspar (propylitic). Flow texture @ 90.2 m
A07-036	78.22	90.2			ANDESITE VOLCANO-CLASTIC BRECCIA	Brown to mottled greenish-grey. Flow textured fine-grained (chilled) to med-grained plag-feldspar @ 90 to 92 m, massive to fractured @ 92 to 95 m, folded +/- brecciated @ 95 to 101 m, then brecciated & sheared @ 101 to 103 m. Selectively carb alt'd plag-feldspar w/ occasional sericite alt'd fractures/foliations.
A07-036	90.2	103			ANDESITE FLOWS	Grey; w/ occasional vuggy silica. Highly pyritic, v. fn grained to semi-massive @ certain portions. (Silica-Alunite zone). Galena-sphalerite?
A07-036	103	115.7			PERVASIVE SILICA +/- ALUNITE	Flake along fracture @ 106.65 m.
A07-036	115.7	141.4			ANDESITE VOLCANIC BRECCIA	Light brown w/ mottled green, becoming dark brown downwards. Generally almost matrix-supported w/ common <2 mm-size relict plag-casts. Clasts are rub-rounded to sub-angular, poorly sorted ranging in size from mm to ~5 cm diameter. Highly to pervasive clay-alt'd at the first 2 meters, becoming selectively pyrophyllite-alt'd plag-casts. Fresh (unoxidized). Fiamme texture @ 125.5 to 129.2 m.
A07-036	141.4	147.9			SILICA-ALUNITE PERVASIVE	Grey; w/ vuggy silica @ 144-146 m. Right lateral (dextral) fault gouge @ 141.07 m. 148 m - damming effect of Acy to Py-rich fluids, v. fn grained & greenish - maybe marcasite. Lost core @ 148-149 m.
A07-036	147.9	159.41			ANDESITE VOLCANO-CLASTIC BRECCIA	Left lateral fault @ 155 m.
A07-036	159.41 EOH				END OF HOLE	

A07-037	0	3.05			CASING	
A07-037	3.05	97.15			Andesite Volcano-clastic Breccia	
A07-037			32		34 Andesite Volcano-clastic Breccia	Dark-brown to maroon; lightly hematitic-alt'd w/ mottled-white 1-10 mm anhedral to euhedral plagioclase feldspar phenocrysts (~30%). Occasionally weakly to moderate carb alt'd. Rock flour matrix but w/ rare clasts of fine-grained sub-angular more felsic (lt-pinkish brown), 2 mm to 400 mm diameter. Common (5%) very fine (1 to 2 mm) specular hematite spots. Slightly broken core of common tight irregular fractures w/ more slickensides
A07-037			58		60 Andesite Volcano-clastic Breccia	w/ 4 cm thick carb vein (white to pinkish brown) - hematite stained. w/ dip-slip, but oblique movement
A07-037			64		69 Andesite Volcano-clastic Breccia	Finer-grained & lesser plag (10%) feldspar, more carb-alt'd & strong hematite-alt'n; gradational change, most probably due to proplitization & hematization (almost black)
A07-037			68		73 Andesite Volcano-clastic Breccia	Yellowish green (epidotized?) ferromags w/ pinkish-red phenocrysts (10-15%) w/ common carb-filled fractures especially as vein-breccia (clasts) near wall rock contact. Very soft lt-greenish yellow clay (sericite?) along fracture/foliation
A07-037			76.2		Andesite Volcano-clastic Breccia	Angular carb-fill from 68-73 m, as fracture to matrix-fill
A07-037			97		97.15 Andesite Volcano-clastic Breccia	SWITCH FROM HQ3 to NQ2 Chilled contact w/ AVS @ 97 to 97.15 m
A07-037	97.15	122.6			Andesitic Volcano-clastic sediments	Light brown to green grey; almost interlocking texture @ 97.15 to 98.75 m, but has very fine sandy lithics altered to hematite & chlorite (green to dk green). Interbedded/layered siltstone to f.g. sandstone (30° bedding to CA) and also as sub-angular lithic fragments/clasts ranging in size from 1 mm to 20 mm. Weakly carb alt'd w/ variable chlorite alt'n. Chlorite seems moderate to strong @ 114-117 m (greenish). Tuffaceous to fine sandstone-siltstone (brown) @ 119 to 122.6 m w/ lithic fragments (5-10% sub-rounded pebble-sized). Generally poorly sorted w/ bands of phenocryst-rich layers & occasional to rare sandy-rich intertongue. Weak hematite alt'n replaced by chlorite @ 108 to 113 m, 114 to 117 m
A07-037			113		114 Andesitic Volcano-clastic sediments	30 cm siltstone 40° CA bedding
A07-037			120		122.6 Andesitic Volcano-clastic sediments	Highly fractured w/ limonite-staining down to 122.6 m contact w/ tuff
A07-037			122.6		124.75 Andesitic Volcano-clastic sediments	Massive tuff (maroon) fractured (40° CA), highly hematized
A07-037	124.75	134.75			Andesite Crystal Lapilli Tuff	Mottled white in dk-green to lt-green grndmass. Porphyritic w/ ~20-25% 1-4 mm cly-alt'd sericite plag-casts. Fiammitic texture w/ 60° Ca elongation. Mod'ly clay-alt'd (ser-illite?) w/ strong chlor'n. Cubic 1-2 mm v.f. Py diss rare
A07-037	134.75	137.6			Pervasively silicified rock	Bluish grey to lt grey w/ vuggy texture variably distributed. Highly to intensely fractured (broken core) w/ v fine cubic Py 1-2 mm, disseminated & filling the vugs
A07-037	137.6	166.55			Sericitically alt'd AXT	Light brownish-grey to cream. Porphyritic (20-30%) w/ 1-4 mm ser-alt'd plag casts, generally bxd w/ rock flour matrix but occasionally (2%) alt'd fine-grained sub-angular fragments of pumice (2-50 mm) observable. Chlorite @ 161 to 166.55 m - slightly greenish & with fiammitic texture. 3-4% disseminated v.f. (1-2 mm) cubic Py. Weak to mod'ly carb alt'd
A07-037	166.6	167.05			Andesite Volcanic Breccia	Mottled white-maroon; porphyritic (10-15% of 5-10 mm anhedral clay-alt'd (ser? - greenish-yellow) in highly hematite-alt'd groundmass becoming silicified downwards close to FW contact as hematite-stained silica (maroon to pk-brown). Below the FG, silicification increases - suggesting that the original host rock for Psi below might be AVB.
A07-037	167.05	170			Pervasively silicified rock	Grey to lt-maroon; highly broken core w/ rare vuggy portions & most vugs are clay-filled (white), hard (porcelainous) - alunite. Around 5-7% v.f. Py diss to filling the vugs. The lt-maroon colour seems to be cased w/ silica, thus probably alunite
A07-037	170	199.65			Andesite Crystal Lapilli Tuff	Dark green-grey to brown/maroon; moderately carb-alt'd, mod to strongly chlorite alt'd (propylitic) andesite crystal lapilli tuff w/ lt-greenish portions where gougy/clay altered. Clays are greenish-white after plag laths, anhedral to subhedral w/ fiammitic texture as shown by elongated/aligned/flowed structure of v.f. grained, also cly-chlorite alt'd, sub-angular 5-50 mm long fragments. Occasional (5%) silica-hematite altered (maroon/brown) sub-rounded frags also observable - probably because of pre-eruption silicification-hematization made them hard to form fiamme. Very fine (<0.5 mm) Py disseminations (1-3%) haloes clay-alteration and nil @ prop'd zones. Contact @ 170.0 m shows upthrown block @ HW. Rare (0.1%) platy, shiny lt-brown to brown phlogopite
A07-037	199.65 EOH				END OF HOLE	
A07-038	0	3.05			CASING	
A07-038	3.05	15.2			Rhyodacite Dike	Greenish-brown w/ mottled maroon to grn-grey. Contact w/ FW bx is chilled @ 15.2 m (25° CA) w/ rounded/milled 4-20 mm hematized AXT @ 15.5-15.6 m. RDD is generally porphyritic w/ 15% anhedral 2-6 mm purplish-red silica fragments; common (5%) sub-rounded 1-5 mm diameter fragments of chlorite-Py +/- Cly alt'd magnetic andesite (PORPHYRY SYSTEM CLASTS) @ 5.15-13 m, w/ up to 10 cm diameter @ 6-7 mm. "This RDD seems to have intruded the bx @ FW." Slightly fractured, good core recovery
A07-038	15.2	39.95			Rhyodacite Bx	Contact @ 15.2 m. Dark brown; poorly sorted (1 mm to almost 1 m) fragments of 70% RDD - (lt grey w/ common (3%) pinkish-red anhedral silica fragments) are sub-rounded to sub-angular in dk-brown (hematized) andesite matrix. Dominant RDD, probably mega-clast, @ 31.45-31.65 m; 31.70-32.2 m; 34.55-35.70 m. Contact w/ andesite matrix-supported bx, but still w/ RDD fragments (10-30%) @ 39.95 m (70° CA). This RDD Bx zone seems to be the margin/interface b/w RDD & andesite flow (AVF). Weak carb-alt'n @ 36-40 m (Pro). Milled, w/ matrix-supported & sub-rounded pebble-cobbles of RDD frags are noted as bedding
A07-038	39.95	87			Hematite Andesite Flows (AVF)	Dark brown w/ mottled lt-grey fragments). Fine-grained dk-brown (hematite) groundmass w/ porphyritic 1-70 mm anhedral-subhedral plag laths (5-20 %), common (10-30%) RDD frags of probable RDD - highly hematized along w/ the AVF. Flow-texture / aligned plag laths on bands measure as bedding. Chloritic but weak @ 39.95 to 44 m. Polymictic bx near FW contact - angular fragments. Weak (Pro) carb-alteration w/ occasional fracture fill
A07-038			59.45		Hematite Andesite Flows (AVF)	SWITCH FROM HQ3 to NQ2
A07-038			77.6		Hematite Andesite Flows (AVF)	Sericite? (greenish-yellow), waxy, fracture-fill
A07-038			78		Hematite Andesite Flows (AVF)	Sericite? (greenish-yellow), waxy, fracture-fill
A07-038			83		Hematite Andesite Flows (AVF)	Sericite fracture fill
A07-038			85		Hematite Andesite Flows (AVF)	Fine layering of non-porphyritic andesite flow
A07-038	87	88.35			Andesite Volcanic Seds	Red-brown coarse massive volcanic sediments. 1 cm calcite vlt @ 87 m. Red-brown coarse gritty volcanic ss. Felds @ to calcite-clay
A07-038	88.35	91			Andesite Volcanic Breccia	Chlorite-altered AVB (dk green). Pebble to cobble-sized polymictic volcano-clastic bx. Highly chloritized ferro-mag groundmass/matrix of: a) subangular hematized andesite porphyry (20-30 % Acy subhedral to euhedral plag laths), b) subangular 1-10 mm plag laths, anhedral to subhedral (5-10%), c) subangular f.g. RDD frags, 4-10 mm, 5%, chloritized (green)
A07-038	91	92			Andesite Volcanic Seds	Red-brown coarse massive volcanic sediments. 1 cm calcite vlt @ 87 m. Red-brown coarse gritty volcanic ss. Felds @ to calcite-clay
A07-038	92	93			Andesite Volcanic Breccia	Red-brown gritty ss massive

A07-038	93	94	Andesite Volcanic Breccia	Red-brown gritty ss massive
A07-038	94	95	Andesite Volcanic Breccia	Red-brown gritty ss massive
A07-038	95	96	Andesite Volcanic Breccia	Red-brown gritty ss massive
A07-038	96	97	Andesite Volcanic Breccia	Red-brown gritty ss massive
A07-038	97	98	Andesite Volcanic Breccia	Red-brown silty grit interbedded w/ ss
A07-038	98	99	Andesite Volcanic Breccia	Red-brown silty grit interbedded w/ ss
A07-038	99	100	Andesite Volcanic Breccia	Red-brown silty grit interbedded w/ ss
A07-038	100	101	Andesite Volcanic Breccia	Red-brown silty grit interbedded w/ ss
A07-038	101	102	Andesite Volcanic Breccia	Red-brown massive siltst/mudst; few calcite vlts
A07-038	102	103	Andesite Volcanic Breccia	Red-brown massive siltst/mudst; few calcite vlts
A07-038	103	104	Andesite Volcanic Breccia	Red-brown massive siltst/mudst; few calcite vlts
A07-038	104	105	Andesite Volcanic Breccia	Greenish grey pebbly ss coarse massive volcanoclastics
A07-038	105	106	Andesite Volcanic Breccia	Sparse calcite vlts
A07-038	112	113	Andesite Volcanic Breccia	Med grey massive coarse volc ss calcite vlts in grndmass
A07-038	116	117	Andesite Crystal Lapilli Tuff	Appears to be changing into lapilli tuff w/ pale grey flattened pumice lapilli in crystal-rich matrix
A07-038	117	118	Andesite Crystal Lapilli Tuff	Appears to be changing into lapilli tuff w/ pale grey flattened pumice lapilli in crystal-rich matrix; sparse calcite vlts
A07-038	118	119	Andesite Crystal Lapilli Tuff	Appears to be changing into lapilli tuff w/ pale grey flattened pumice lapilli in crystal-rich matrix
A07-038	119	120	Andesite Crystal Lapilli Tuff	Appears to be changing into lapilli tuff w/ pale grey flattened pumice lapilli in crystal-rich matrix
A07-038	120	121	Andesite Crystal Lapilli Tuff	Appears to be changing into lapilli tuff w/ pale grey flattened pumice lapilli in crystal-rich matrix
A07-038	121	122	Andesite Volcanic Seds	Gradual change from pumice lapilli to blocky frags
A07-038	122	123	Andesite Volcanic Seds	Pale-med grey volc ss few angular blocks
A07-038	123	124	Andesite Volcanic Seds	sparse calcite vlts; calcite alt
A07-038	124	125	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	125	126	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	126	127	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	127	128	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	128	129	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	129	130	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	130	131	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	131	132	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	132	133	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	133	134	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	134	135	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	135	136	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	136	137	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	137	138	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	138	139	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	139	140	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	140	141	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	141	142	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	142	143	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	143	144	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	144	145	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	145	146	Andesite Volcanic Seds	sparse calcite vlts; massive
A07-038	146	147	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	147	148	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	148	149	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	149	150	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	150	151	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	151	152	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	152	153	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	153	154	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	154	155	Andesite Volcanic Seds	med greenish grey-reddish brown; crystal-rich volc sed, sparse blocky andesite frags wk clay-carb alt sparse calcite vlts
A07-038	155	156	Andesite Volcanic Seds	Py vanishes @ 155 m, chlorite grad increases; v. massive crystal-rich volc ss chloritic
A07-038	156	157	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	157	158	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	158	159	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	159	160	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	160	161	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	161	162	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	162	163	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	163	164	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	164	165	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	165	166	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	166	167	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	167	168	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	168	169	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	169	170	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	170	171	Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic

A07-038	171	172		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	172	173		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	173	174		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	174	175		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic
A07-038	175	176		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic; calcite vlts
A07-038	176	177		Andesite Volcanic Seds	v massive crystal-rich volc ss chloritic; calcite vlts
A07-038	177	178		Andesite Crystal Lapilli Tuff	Pale reddish grey lapilli crystal tuff, broken, clay-rich; wk Py 177-178 m
A07-038	179	180		Andesite Volcanic Seds	Brown-grey massive volc ss, coarse grndmass, chloritic
A07-038	180	181		Andesite Volcanic Seds	180.5-181 m - pale red-brown zone of greenish waxy clay alt in vein
A07-038	181	182		Andesite Volcanic Seds	2 cm quartz vlt @ 181 m; numerous tiny calcite vlts
A07-038	182	183		Andesite Volcanic Seds	2 cm quartz vlt @ 182.4 m; numerous tiny calcite vlts
A07-038	183	184		Andesite Volcanic Seds	Numerous tiny calcite vlts
					Greenish grey massive volc sed crystals ash (some fiamme) and sparse blocks of andesite chlorite in fractures & grndmass. Numerous tiny calcite vlts
A07-038	184	185		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	185	186		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	186	187		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	187	188		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	188	189		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	189	190		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	190	191		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	191	192		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	192	193		Andesite Volcanic Seds	Numerous tiny calcite vlts
A07-038	193	194		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	194	195		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	195	196		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	196	197		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	197	198		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	198	199		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	199	199.65		Andesite Crystal Lapilli Tuff	Sparse fiamme appear to base of hole; numerous tiny calcite vlts
A07-038	199.65	EOH		END OF HOLE	
A07-039	0	3.05		CASING	No core
A07-039	3.05	4		Crystal Vitric Tuff	Red-brown massive crystal vitric tuff; Weak ox on fractures; mod calc alt vlts & replacing plag
A07-039	4	5		Crystal Vitric Tuff	Red-brown massive crystal vitric tuff; Weak ox on fractures; mod calc alt vlts & replacing plag
A07-039	5	6		Crystal Vitric Tuff	Red-brown massive crystal vitric tuff; Weak ox on fractures; mod calc alt vlts & replacing plag
					Med red-grey @ 14m becomes slightly more crystal rich (crystals 10-15 %). At 17 m - crystals increase to 20% calcite vlts. Calcite impregnates rock.
A07-039	14	15		AXT	Red-brown crystal rich tuff (crystals 10-20%). Probably impregnated w/ calcite. Vlts of calcite common 20-24 m. Calcite + hem on fractures.
					Massive - no fiamme dacite-latite.
A07-039	16	17		AXT	Red-brown massive crystal tuff dacite- impregnated w/ calcite, numerous calcite vlt
A07-039	31	32		AXT	Bx w/ Ca matrix
A07-039	32	33		AXT	Pink-brown massive crystal lithic tuff dacite - strongly layered w/ Ca vlts. Sparse grey dacite inclusions. Numerous Ca vlts.
A07-039	37	38		AXT	Massive red-grey crystal-rich tuff dacitic (crystal ~10-20%); heavy laced w/ Ca vlts hematite-calcite-clay on fractures
A07-039	46	47		AXT	Salmon-pink zeolite (laumontite) on fractures w/ calcite. Early quartz veinlet cut by Ca veinlet
A07-039	50	51		AXT	Greenish-grey mottled bx. Frags of greenish-chlorite rich and porph, bx starts @ 53 m - coarse autobx laced by calcite-laumontite veinlets,
					breccia continues to 59 m, becomes red-brown
A07-039	53	59	58	AXT	Merges back to crystal tuff
A07-039			59	AXT	Massive red-brown crystal lapilli tuff, sparse large crystals (5-10%) in vitric matrix - hem-Ca on fractures
A07-039	60	61		AXT	67.5 m - becomes faintly bx-autobx lava. V large crystals in matrix - reddish brown-greenish clasts in red-brown matrix.
A07-039	67	68		AVF	Bx fabric apparent 74-77 m
A07-039	74	77		AVF	Red-brown massive crystal-vitric tuff (crystals 10%). V. Large crystals - some up to 1 cm; weak calcite veinlets.
A07-039	80	81		AXT	Pinkish, brown grey massive crystal vitric tuff (crystals ~10-20%); few tiny calcite vlts
A07-039	89	90		AXT	Core lost - possibly 2 m core lost in fault zone
A07-039	92	93		AXT	Fault gouge w/ 1 cm quartz vein material
A07-039	102	103		AXT	Pale reddish grey massive crystal vitric tuff (crystals ~20%); tiny vlts of calcite, plag alt to illite + Ca
A07-039	104	105		AXT	
A07-039	119.18	EOH		End of hole	
A07-040	0	3.05		CASING	No core
A07-040	3.05	5		AXT	Crystal vitric tuff; brown-olive colour; partly weathered to 5 m andesite tuff.
A07-040	5	14		AXT	Red-brown massive crystal lithic tuff (crystals 5-20 %). Few exotic volc rock frags. Plag alt to illite + Ca, sparse Ca vlts; massive; coherent
A07-040	14	24		AVB	Pink-brown massive tuff bx. Angular blocky volc rock frags in a crystal-rich tuff (crystals ~20%)
A07-040	24	28		AXT	Pinkish grey massive crystal-rich crystal tuff (crystals ~20%). Few exotic rock frags. Wk fine hematite in tuff grndmass
A07-040	28	31		AVB	Pinkish grey massive tuff bx - crystals + volc rk frags in a fine aphanitic matrix. Sparse Ca vlts; plag alt to clay wk
A07-040	31	32		AVB	Ca-filled bx 40 mm wide @ 32.1 m
A07-040	37	56		AVB	Andesite latite tuff bx continues in, but clay alt gradually increase. Rock becomes softer with crumbly zones.
A07-040			48	AVB	Wk hem on fractures; Ca vein 20 mm
A07-040			52	AVB	Ca vein 10 mm @ 52.60 m. Clay alt zone 52.6-53.0 m
A07-040	56	60		AXT	Pinkish brown crystal-rich andesite-latite tuff - massive large crystals (crystals ~10-15%)

A07-040	60	70		AXT	Pink-brown massive and latite crystal-tuff. Sparse angular exotic frags and few vlts and vugs w/ Ca. Plag partly alt'd to clay
A07-040	75	77		AXT	Reddish grey massive crystal tuff. Goethite limonite bands and on fractures (76.7-79.0 m)
A07-040	77	79		AVB	Tuff bx, angular frags of siliceous, rhyodacite (dissem Py ~1%) in lithic vitric tuff matrix
A07-040	80	82		AVB	Fault gouge (80-81 m); bleached, clay altered w/ dissem Py
A07-040	82	83		AVB	Ca 100 mm vuggy silica above flt
A07-040	83	84		AVB	Bx continues to 85.7 m
A07-040	85	88		AXT	Red-brown massive crystal tuff andesite latite numerous Ca vlts; wk alt to 88.3 m
A07-040	88	89		AVS	Red-brown tuff seds begins @ 88.3 m
A07-040	89	94		AVS	Coarse to f.g. red-brown volc ss; some well bedded mudstone layers; coarse grained layers are massive; few Ca vlts 20 mm Ca vein @ 91.5 m.
A07-040	94	104		AVB	Sediment ends @ 94.5 m. Brownish grey to greenish grey; massive tuff bx andesite. Ca vlt's 96.2, 96.4, 96.8 m. V. chlorite rich w/ Ca alt phenos
A07-040	104	117		AVS	Green grey to brown tuffaceous seds well bedded. Fine mud, ss to coarse ss. Mainly coarse grained grits to 109.2 m. Then finer grained seds take over.
A07-040			110	AVS	Red-brown, mudstone tuffaceous to 116.4 m
A07-040	117.35	130.3		AXT	Pale tan to buff latite crystal tuff; welded w/ fiamme, few lithic frags . Wk-mod clay-alt. Several clot & vlts of pink Mn carbonate b/w 123-124 m. Massive trace dissem Py ~0.1 %; scattered white Ca vlts
A07-040					Sheared recrystallized laminated alunite-quartz-clay. Med-dk grey vuggy silica rock, possibly all AXT. Few plag phenos. Definitely bx and hydrofracturing. Introduced f.g. quartz, abund dissem Py, some kaolinite/dickite @ plag. Possibly some salmon-coloured zeolite in vugs (laumontite)
A07-040	130.3	142		Vuggy silica	Poor core recovery (30-40%)
A07-040			138	140 Vuggy silica	Poor core recovery (40%). W/ patches of alunite-strong clay. Appears to be latite tuff
A07-040			140	142 Mixed vuggy silica & clay alteration	Med grey crystal-lapilli tuff, mottled tiny Ca vlts present. Plag alt to illite + Ca
A07-040	143	147		AXT	Pale to med crystal-lapilli tuff as above. Latite-andesite, wk-mod clay Ca alt
A07-040	147	154		AXT	Purplish colour envelopes to fault zone. Past set AXT textures on Med grey colour. Very coherent. Crystal lapilli & latite tuff. Chlorite & carbonate - wk illite alt of plag. Massive
A07-040	154	161.55		AXT	
A07-040	161.55 EOH			END OF HOLE	
A07-041	0	3.05		Casing	Broken - purple andesite
A07-041	3.05	13.75		Dark purple-maroon AXT w/ fine-grained disseminated hematite	
A07-041			3	Dark purple-maroon AXT w/ fine-grained disseminated hematite	Very strong hematization of groundmass w/ manganese on fracture planes
A07-041			5	Dark purple-maroon AXT w/ fine-grained disseminated hematite	Heavily fractured interval
A07-041			7	Dark purple-maroon AXT w/ fine-grained disseminated hematite	7.92 m - reduced from HQ3 to NQ2
A07-041			11	Dark purple-maroon AXT w/ fine-grained disseminated hematite	Gougy; strongly friable; possibly manganese oxidation
A07-041			13	Dark purple-maroon AXT w/ fine-grained disseminated hematite	Appearance of green breccia-size clasts --> green AXT
A07-041	13.75	14.7		Green AXT/AVB	
A07-041	14.7	15.2		Green Py-rich FG	
A07-041			14	Green Py-rich FG	14.30 m - limonite-filled fracture // to CA. 14.70 m - contact w/ Py-rich gouge
A07-041	15.2	16.6		Green AXT	
A07-041			15	Green AXT	15.20 m - downhole contact @ 40° CA
A07-041	16.6	17.61		Purple-maroon AXT	
A07-041			17	Purple-maroon AXT	Contact w/ green AXT/AVB @ 17.61 m is @ angle of 50° CA.
A07-041	17.61	20.9		Green AVB	
A07-041			18	Green AVB	18.05-18.35 m - dominantly greenish FG, 18.35 m - clasts = more greenish w/ purple matrix
A07-041			20	Green AVB	20.90 m - strong limonitized contact association w/ Ca veining ~30° CA
A07-041	20.9	34.9		Purple-maroon AXT; slightly hematized plag phenos (~30%)	
A07-041			21	Purple-maroon AXT; slightly hematized plag phenos (~30%)	21.75 m - limonitized FG w/ Ca vlts
A07-041			23	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Weak breccia dike @ 23.66 m -> 23.90 m (no obvious contacts)
A07-041			25	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Appears to have weak subtle transition b/w green & maroon AXT
A07-041			27	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Strong Ca groundmass w/ abundant Ca veinlets
A07-041			28	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Pinkish Ca veining on fracture plane
A07-041			31	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Strong Ca veining in matrix
A07-041			32	Purple-maroon AXT; slightly hematized plag phenos (~30%)	Ca crystal growth in cavity @ 32.13 m, weak limonitization @ 32.95 m contact
A07-041			34	Purple-maroon AXT; slightly hematized plag phenos (~30%)	34.9-35.3 m - sliver of greenish AXT in fault contact above & below

A07-041	34.9	35.3			Greenish AXT Purple-maroon AXT w/ weak AVB-sized clasts	
A07-041	35.3	61			Purple-maroon AXT w/ weak AVB-sized clasts	
A07-041			38	39	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Increase in clast size @ ~38 m to lapilli-bx (3-4 cm). Poss weak silicification @ 38.75 m
A07-041			39	40	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Irregular fractures in interval dominantly @ high < to CA.
A07-041			40	41	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Semi-bleached 1 m interval w/ abundant Ca gashes & veinlets
A07-041			41	42	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Continued strong Ca vlts & gashes
A07-041			44	45	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Dom high angle Ca vlts w/ wk cavities
A07-041			46	47	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Very subtle, but poss breccia-sized clasts
A07-041			47	48	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Same as previous 1 m interval
A07-041			48	49	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Weak cavities in interval w/ yellowish Ca infill
A07-041			49	50	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Bx clasts are more distinct
A07-041			54	55	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Big cavity @ 54.6 m
A07-041			56	57	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Has a hint of tannish coloration w/ maroon
A07-041			58	59	clasts Purple-maroon AXT w/ weak AVB-sized clasts	Weak cavity fractures in interval
A07-041			60	61	clasts Flow-banded AXT (?)	Has very weak orientation (perhaps flow?) @ 55° CA
A07-041	61	64	61	62	Flow-banded AXT (?)	Orientation easier to observe (55° CA) of flow
A07-041			63	64	Flow-banded AXT (?)	Weak Ca veining
A07-041	64	86			Purple-maroon AXT w/ loc AVB clasts	
A07-041			64	65	Purple-maroon AXT w/ loc AVB clasts	Flow banding is lost. Weak bx-sized clasts
A07-041			67	68	Purple-maroon AXT w/ loc AVB clasts	Irreg Ca gashes in 1 m interval
A07-041			68	69	Purple-maroon AXT w/ loc AVB clasts	Possible weak greenish gypsum w/ Ca
A07-041			69	70	Purple-maroon AXT w/ loc AVB clasts	As above 1 m interval
A07-041			71	72	Purple-maroon AXT w/ loc AVB clasts	Small cavities infilled w/ Ca mineral & poss zeolite
A07-041			72	73	Purple-maroon AXT w/ loc AVB clasts	Weak breccia-sized clasts
A07-041			73	74	Purple-maroon AXT w/ loc AVB clasts	Stronger appearance of bx-sized clasts
A07-041			75	76	Purple-maroon AXT w/ loc AVB clasts	V. weak Ca cavities in interval
A07-041			76	77	Purple-maroon AXT w/ loc AVB clasts	Heavily fractured @ 76.53 m
A07-041			78	79	Purple-maroon AXT w/ loc AVB clasts	Weak bx-sized clasts
A07-041			79	80	Purple-maroon AXT w/ loc AVB clasts	Impressive Ca crystals on fract plane @ 79.70 m
A07-041			81	82	Purple-maroon AXT w/ loc AVB clasts	81.90 m - appearance of bx clasts
A07-041			82	83	Purple-maroon AXT w/ loc AVB clasts	Conjugate fracture set @ 82.23 m
A07-041			83	84	Purple-maroon AXT w/ loc AVB clasts	Core has been ground, possible mismatch
A07-041			85	86	Purple-maroon AXT w/ loc AVB clasts	Core appears ground again (rounded edges)
A07-041	86	88			Purple AVB	
A07-041			86	87	Purple AVB Purple-maroon Andesite Crystal Lapilli Tuff (almost seds-like appearance)	Has weak fiamme appearance
A07-041	88	91.14			Purple-maroon Andesite Crystal Lapilli Tuff (almost seds-like appearance)	
A07-041			88	89	(almost seds-like appearance) Purple-maroon Andesite Crystal Lapilli Tuff	Ground & fractured in ~30 cm frags @ 88.8 m
A07-041			89	90	(almost seds-like appearance) Purple-maroon Andesite Crystal Lapilli Tuff	Very strongly hematized; dom tuff-sized fragments
A07-041			90	91	(almost seds-like appearance) Dark purple-dark green Andesite Volcanic Seds	Heavily fractured; gougy @ 90.3 m
A07-041	91.14	104.03			Dark purple-dark green Andesite Volcanic Seds	
A07-041			91	92	Seds Dark purple-dark green Andesite Volcanic Seds	Subtle tuff/volcanic mudstone
A07-041			92	93	Seds Dark purple-dark green Andesite Volcanic Seds	Sandstone/mudstone bedding
A07-041			93	94	Seds Dark purple-dark green Andesite Volcanic Seds	V. subtle sedimentary rock (dom green AXT)
A07-041			94	95	Seds	Dom crs sandstone/cgl; very gougy in 1st half of interval

A07-041			95	96	Dark purple-dark green Andesite Volcanic Seds	Crs sandstone to 95.36 m, becomes fine mudstone
A07-041			96	97	Dark purple-dark green Andesite Volcanic Seds	Purple-maroon fine-grained mudstone; laminae too subtle to guestimate
A07-041			97	98	Dark purple-dark green Andesite Volcanic Seds	Light brownish injection dikes (?) of sed material in dk purple sed's (massive)
A07-041			98	99	Dark purple-dark green Andesite Volcanic Seds	Dark purple thin laminae sed's
A07-041			99	100	Dark purple-dark green Andesite Volcanic Seds	99.06 m - switch from mudstone to coarse sandstone (dom dark green)
A07-041			100	101	Dark purple-dark green Andesite Volcanic Seds	Change from crs sandstone to AXT @ 100.40 m
A07-041			101	102	Dark purple-dark green Andesite Volcanic Seds	Very subtle if AVS; appears more like dark purple AXT
A07-041			102	103	Dark purple-dark green Andesite Volcanic Seds	Clay veining @ ~15° CA @ 102 m (?)
A07-041			103	104	Dark purple-dark green Andesite Volcanic Seds	Distinct layering from 103.0-103.3 m
A07-041	104.03	104.7	104	105	Dark green ADF Dark green ADF	Greenish ADF - disseminated
A07-041	104.7	124.25			Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	
A07-041			107	108	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Slightly more Py w/in bx clasts (dk green colour)
A07-041			108	109	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Stronger smeared Py in FG
A07-041			109	110	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Larger dark green-grey clast (7 cm) @ 109.8 m
A07-041			113	114	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Appears to be a dikelet @ 133.33 m (14 cm wide) w/ ductily deformed greyish sulphides
A07-041			114	115	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Increased Py disseminations
A07-041			115	116	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Increased Py disseminations
A07-041			116	117	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Increased Py disseminations
A07-041			117	118	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Increased Py disseminations

A07-041			118	119	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Green; weaker fiamme appearance (not as obvious)
A07-041			119	120	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Py concentrations decrease & begin to see Ca vltS (1 cm thick vlt @ 119.5 m)
A07-041			120	121	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Smeared gougy Py assoc w/ fracture
A07-041			122	123	Light green Py-rich ADF w/ wk sericitization & clay alt on fracture planes (?) w/ subtle breccia-sized frags (zone of argillic alteration (??) w/ pink alt'd phenos	Fracture assoc w/ Ca veining
A07-041	124.25	126.49			Medium green ADF w/ no Py	
A07-041			124	125	Medium green ADF w/ no Py	124.08 m - drop in Py; Ca veining boundary (?) 124.25 m - Py totally disappears - contact
A07-041			125	126	Medium green ADF w/ no Py	125.05 m - 70 mm banded dike (?); layering @ 90° CA
A07-041	126.49 EOH				END OF HOLE	
A07-042	0	3.05			CASING	
A07-042	3.05	9.2			Andesite Crystal Lapilli Tuff	Towards bottom of interval short sections of andesitic volcanic breccia present. Moderately decreasing to weak goethite + limonite on fracture to 9.2 m. NQ3 to HQ2 @ 7.62 m.
A07-042	9.2	12.9			Andesite Porphyry Flow	Dark greyish-green, massive, w/ an-subhedral fspar phenos to 10 mm, average 3-5 mm
A07-042	12.9	20.3			Andesitic Volcanic Breccia	Med greyish-green in colour; individual clasts to 10-15 cm across in max dimension; most clasts AVF
A07-042	20.3	31.9			Andesite Porphyry Flow	
A07-042			20.3	22.5	Andesite Porphyry Flow	Similar to 9.20-12.9 m
A07-042				22.5	Andesite Porphyry Flow	22.5-22.65 m: minor fault-mod broken core; mod goethite + limonite on fracture; minor OI on fracture continues to end of sub-interval
A07-042				27.1	Andesite Porphyry Flow	Some fspar phenos weakly clay altered
A07-042			28.25		Andesite Porphyry Flow	2-4 cm irreg carb-silica vein@ ~30° CA (at HW contact of minor fault)
A07-042						Med-dark green, str chloritized, some fspar phenos clay alt; texture is loc brecciated-unsure if this is 1° feature (ie AVB) or related to minor faulting as altered zone below is approached.
A07-042			28.3	31.9	Andesite Porphyry Flow	
A07-042	31.9	34.3			Strongly altered rock - protolith uncertain	Light grey to tan coloured , silicified (Psi) in part, w/ ~0.1 m, Vsi (+/-) texture @ 33.6 m. 31.9-32.0 m - clay-altered FG w/ ~1% fine diss Py
A07-042	34.3	47.5			Andesite Porphyry Flow	Med-dark green, locally texture vague b/c of strong chlorite altered associated w/ faulting; Clay-altered fspar phenos locally; Tr-minor diss. Py associated w/ chl-altered faults.
A07-042			34.9	36.85	Andesite Porphyry Flow	Strong chlorite-clay altered FG; minor f diss Py
A07-042			37.35	37.8	Andesite Porphyry Flow	Strong chlorite-clay altered FG; minor f diss Py
A07-042			41.9	42.5	Andesite Porphyry Flow	Broken core; minor FG
A07-042	47.5	55.6			Andesitic Volcanic Breccia	Locally slightly bleached; poss weak pervasive clay-alteration
A07-042	55.6	60.96			Andesite Porphyry Flow	Unit is light grey-green in colour; bleached appearance due to wk-mod pervasive cly (chl) alteration; no Py noted
A07-042	60.96	64.5			Andesitic Volcanic Breccia	Clasts are light greyish-green - pervasive chl-clay alt; groundmass w/ brownish hue poss due to hematization
A07-042	64.5	67.35			Andesite Porphyry Flow	
A07-042	67.35	68.28			Andesitic Volcanic Breccia	
A07-042	68.28	77.7			Andesite Porphyry Flow	Similar to 60.96-64.5
A07-042						Similar to 55.6-60.96 m, except only locally bleached, no Py noted in bleached zones
A07-042			76.3	76.4	Andesite Porphyry Flow	Broken core w/ (FG)
A07-042	77.7	89.35			Andesitic Volcanic Breccia	Locally pervasive chloritization, but o/w rel fresh w/ local Hem in grndmass
A07-042	89.35	91.44			Andesitic Crystal Lapilli Tuff	This unit could poss have been grouped in to AVS below, but not enough evidence of bed. Contact w/ AVB above is sharp @ 45°CA. Vague bedding noted @ 91.0 m.
A07-042	91.44	100.59			Andesitic Volcano-Clastic Seds	
A07-042			91.44	97.54	Andesitic Volcano-Clastic Seds	Poorly sorted volcanic wacke to sandstone; includes well-banded tuffaceous or mudstone unit from 91.44-91.65 m (bedding @ 55° CA)
A07-042			96.1	96.4	Andesitic Volcano-Clastic Seds	Clay altered fault gouge
A07-042			97.3	97.6	Andesitic Volcano-Clastic Seds	Clay altered fault gouge (w/ FB); minor f diss Py
A07-042			97.54	99.1	Andesitic Volcano-Clastic Seds	Fn grained tuffaceous unit; brownish-grey in colour; hem locally in grndmass; massive, no bedding observed; a few hairline carb veinlets
A07-042			99.1	100.59	Andesitic Volcano-Clastic Seds	Reddish brown. Strongly hematitic, well-banded, f grained sediment - v. distinct unit. 10 mm wide clay seam of upper contact of hematitic unit.
A07-042	100.59	132.5			Andesitic Lapilli Tuff w/ fiamme texture locally	
A07-042			100.59	103.7	Andesitic Lapilli Tuff w/ fiamme texture locally	Locally bleached & wk-mod clay alt due to proximity to minor faults; minor f diss Py associated w/ clay alt

A07-042			100.59	100.7	Andesitic Lapilli Tuff w/ fiamme texture locally	Clay-chl alt minor fault
A07-042			100.9	101	Andesitic Lapilli Tuff w/ fiamme texture locally	Clay-chl alt minor fault
A07-042			103.7	109	Andesitic Lapilli Tuff w/ fiamme texture locally	Relatively fresh; no Py noted
A07-042			109	124.6	Andesitic Lapilli Tuff w/ fiamme texture locally	Rock looks fresh but white on scratch (= wk perv clay alteration?); <0.5% v.f. gr diss Py
A07-042			124.6	126.15	Andesitic Lapilli Tuff w/ fiamme texture locally	Rock has bleached appearance; illite noted w/ wk-mod perv clay alt; <0.3% v.f. diss Py
A07-042			126.15	132.05	Andesitic Lapilli Tuff w/ fiamme texture locally	Similar to pervious interval except ADF >> AXT; only trace v.f. gr diss Py. 131.95-132.05 m - minor fault; <0.5% v.f. gr diss Py
A07-042			132.05	132.5	Andesitic Lapilli Tuff w/ fiamme texture locally	Lt grey to white in colour; texture vague, pervasively altered; Alu may be dominant clay
A07-042	132.5	135.7			Intensely Silicified Rock (Vuggy Silica)	Py loc semi-massive, 20-30% of rock; some Cp present; no V.G. noted. Only 10% recovery from 132.59-134.42 m
A07-042	135.7	175.26			Andesitic Lapilli Tuff/Andesitic Crystal Tuff	
A07-042			135.7	137.5	Andesitic Lapilli Tuff/Andesitic Crystal Tuff	Str clay alt (v. soft, off-white colour); textures vague; 1-2% f diss Py
A07-042			137.5	140	Andesitic Lapilli Tuff/Andesitic Crystal Tuff	Rock bleached in appearance; remains Clay altered, but decrease to mod intensity; illite noted; 1% f diss Py; fiamme texture noted
A07-042			140	175.26	Andesitic Lapilli Tuff/Andesitic Crystal Tuff	Gradual decrease in Pro alt --> Ual towards E.O.H.; fresher rock dark green in colour
A07-042			175.26		EOH	
A07-043	0	3.05			CASING	
A07-043	3.05	34.4			Andesite Porphyry Flow	Dark reddish - brown to dark green in colour w/ reddish-brown due to hem in groundmass; at top of interval, no obvious zone of Oh or Ol; very minor carb vlts; fspar phenos locally clay-alt; no Py noted
A07-043	34.4	42.2			Andesitic Volcanic Breccia	Mainly med-dark greyish-green coloured; minor lim on fract towards bottom of interval; locally fspar phenos clay-alt; very minor carb vlts
A07-043	42.2	62.95			Andesite Porphyry Flow	Dark brownish-grey in colour; hem in groundmass common; locally carb vns & vlts fairly abundant
A07-043			42.65	43.2	Andesite Porphyry Flow	Str clay alt fault gouge at 50-60° CA w/ also some FB development; 1-2% fine diss Py associated w/ FG
A07-043	62.95	72			Andesite Volcanic Breccia	Loc beige to tan-coloured, or where darker grey-green coloured matrix may be weakly chloritized; up to 0.5% f. diss Py associated w/ beige to tan-coloured sections; minor lim on fract loc
A07-043			70.45	70.46	Andesite Volcanic Breccia	Minor clay alt fault w/ ~1% fn diss Py
A07-043	72	77.5			Andesite Porphyry Flow	Reddish-brown to dark grey w/ abundant hem in groundmass except where more siliceous, grey-coloured, irregular alteration zones (?)
A07-043	77.5	78.9			Andesitic Volcanic Sediments	appear to flood the more hematized rock
A07-043	78.9	84.1			Andesitic Volcanic Flow	Relatively unaltered, variably hematized volc seds; finer grained beds more hematitic
A07-043						Sim Psi alteration (?) feature as per 72.0-77.5 m
A07-043	84.1	86.9			Andesitic Volcanic Sediments	Sim to 77.5-78.9 m, except more hematitic fn. Grained beds only minor component of unit; dominant unit is poorly sorted, weakly hematized
A07-043	86.9	93.3			Andesitic Lapilli Tuff	wacke
A07-043	93.3	113.3			Andesitic Volcanic Sediments	Some frags hematitic, no Py noted
A07-043			95.95	95.97	Andesitic Volcanic Sediments	Finer grained beds less hematitic; some coarse wacke beds; very minor hairline carb vlts
A07-043			105.8	106.1	Andesitic Volcanic Sediments	Bedding parallel fault gouge @ 95.95 m, has distinctive light-green tinge to it (=mineral?)
A07-043			109.7	112	Andesitic Volcanic Sediments	Broken core, minor fault; minor clay-alt fault gouge
A07-043			113.3	113.34	Andesitic Volcanic Sediments	Strongly hematitic f. grained bed of mudstone or tuffaceous material
A07-043	113.3	141			Andesitic Crystal Lapilli Tuff	4 cm clay alt FG marks contact b/w AVS & AXT
A07-043			117.06	118.87	Andesitic Crystal Lapilli Tuff	Sub-interval shows noticeable increase in Py as fine dissem associated w/ med tan-coloured, altered (weakly bleached) rock; bleaching may be due to weak pervasive clay-alteration w/ some admixed Ser (?)
A07-043			117.3	117.4	Andesitic Crystal Lapilli Tuff	Clay alt FG/FB w/ ~2% f. diss Py
A07-043			136.85		Andesitic Crystal Lapilli Tuff	3 cm FG, clay altered, w/ minor Hem @ contacts
A07-043	141	141.4			Rhyodacite Dike	Typical RDD dike (but narrow); no chilled margin; non-magnetic; anhedral to euhedral fspar phenos to 8 mm, flesh-coloured, weakly clay
A07-043	141.4	161.55			Andesitic Crystal Lapilli Tuff	altered; upper & lower contacts sharp @ 45° CA
A07-043			148.96	153.5	Andesitic Crystal Lapilli Tuff	
A07-043			147.36	147.76	Andesitic Crystal Lapilli Tuff	Similar to 117.06-118.87 m, characterized by pyritic, tan-coloured alteration.
A07-043			150.88	151	Andesitic Crystal Lapilli Tuff	Clay altered FG/FB w/ 3-4% diss Py
A07-043			153.5	161.55	Andesitic Crystal Lapilli Tuff	Clay altered FG w/ 2-3% diss Py
A07-043			156.4		Andesitic Crystal Lapilli Tuff	Mainly relatively fresh AXT, minor cly-altered fault w/ some brecciated illite vn material & <1% fine diss Py
A07-043					Andesitic Crystal Lapilli Tuff	Minor clay alt FG w/ some illite & trace diss Py
A07-043	161.55	EOH			END OF HOLE	0.2 m wide dark grey coloured, sparsely fspar porphyritic dike - different in appearance from RD Dike
A07-044	0	2.13			CASING	
A07-044	2.13	38.1			Med purple-red andesitic crystal lapilli tuff - strongly hematized	Ground purple andesite core
A07-044			5.21	5.75	Med purple-red andesitic crystal lapilli tuff - strongly hematized	V gougy interval w/ strongly hematized plag frags

A07-044			6	9 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Lost gouge (no core, v poor recovery), dark purple groundmass
A07-044			11.19	11.39 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Very gougy, disintegrated
A07-044			13	14 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Strong red hematization
A07-044			15	16 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Yellow limonitization w/ chlorite on fracture plane. REDUCE FROM HQ3 to NQ2 @ 15.54 m
A07-044			16	17 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Brownish limonitization on fracture planes
A07-044			17	18 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Green illite? as patchy seam @ ~17 m
A07-044			18.74	19.2 Silica Breccia/Silica Vein? Med purple-red andesitic crystal lapilli tuff - strongly hematized	Appears to be weak silica breccia @ 18.74 - 19.2 m, maybe very trace Py diss
A07-044			19.1	19.44 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Gougy w/ limonite stain
A07-044			23.98	Med purple-red andesitic crystal lapilli tuff - strongly hematized	Limonite-hematite stain on fracture
A07-044			29	30 Med purple-red andesitic crystal lapilli tuff - strongly hematized	Strong Ca veins (6 cm @ 29.74 m)
A07-044			32.38	Med purple-red andesitic crystal lapilli tuff - strongly hematized	Gougy interval
A07-044			38.1 EOH	END OF HOLE	Hole cut short b/c of poor Mickey Zone grades
A07-045	0	3.05		CASING	Gougy; rounded purple andesite clasts
A07-045	3.05	7.5		Gougy, faulted, rock clasts; AVB(?) Faulted Andesite Volcanic Breccia (more competent then interval uphole)	Purple-brown, gougy clay w/ rounded cobble-sized clasts; magnetic. Not a typical AVB; appears more like overburden
A07-045	7.5	8.7		Faulted Andesite Volcanic Breccia (more competent then interval uphole)	Dark brown; w/ subrounded cobbles in hematite gouge.
A07-045			8		12 cm RDD fragment @ 8.0 m . RDD fragment is magnetic w/ salmon pink phenos & spherulitic texture. Non-lithified (extremely sandy); limonitized; light brown; coarse gruss w/ andesite fragments. Will sample (basically soil sample), because of silicified fragments (msi (w)).
A07-045	8.7	16		Coarse grained sand (gruss)/fault breccia	
A07-045			9.34	Coarse grained sand (gruss)/fault breccia	Another 6 cm RDD frag @ 9.34 m.
A07-045			10	11 Coarse grained sand (gruss)/fault breccia	9 cm & 8cm Msi chunk into 10-11 m
A07-045			13	14 Coarse grained sand (gruss)/fault breccia	All broken Msi pebbles that have been strongly hematized/limonitized
A07-045			14	15 Coarse grained sand (gruss)/fault breccia	Broken light grey Msi pebbles
A07-045			15	16 Coarse grained sand (gruss)/fault breccia	More solid core then previous 1 m subinterval. 8 cm Msi clast @ 15.3 m
A07-045	16	21.45		Medium purple fractured andesite volcanic flow (magnetic) w/ manganese staining on fracture planes	
A07-045			16	18 Medium purple fractured andesite volcanic flow (magnetic) w/ manganese staining on fracture planes	Manganese-limonite staining on fracture planes
A07-045			18	19 Medium purple fractured andesite volcanic flow (magnetic) w/ manganese staining on fracture planes	Low angle fractures to CA in interval
A07-045			19	21 Fractured purple andesite w/ calcitic fracture planes	Yellowish limonite coating on fracture planes
A07-045	21.45	21.58		Silicified Seam	Pyrite-sericite-quartz (light green fracture & tan on outside of core); 13 cm thick. Lower contact = 60° CA
A07-045	21.58	27.8		Fractured purple andesite w/ calcitic fracture planes	
A07-045			23	24 Fractured purple andesite w/ calcitic fracture planes	Very poor recovery; gougy; not sampleable; chlorite altered
A07-045			24	27 Fractured purple andesite w/ calcitic fracture planes	Chlorite-calcite alt on fracture planes
A07-045	27.8	28.4		Medium green chloritized andesite volcanic flow	Turns from med purple to med green @ 27.8 m.
A07-045	28.4	29.5		Purple Andesite	
A07-045	29.5	30.9		Green Andesite	Subtle transition to Py-rich green andesite w/ Py diss in interval
A07-045	30.9	31.35		Purple Andesite	Chlorite-calcite alt on fracture planes; Ca veining
A07-045	31.35	33		Greyish green Gouge w/ Pyrite	Very gougy
A07-045	33	34		Vuggy/Massive Silica (Dark Grey)	Heavily broken, weak vuggy silica
A07-045	34	35		Sulphidic Fault Gouge	Dark grey fault gouge; w/ Py diss
A07-045	35	36.54		Py-rich Greenish Andesite	Galena on fracture planes; rock type I used to call GQP & what Dick calls rhyolite

A07-045	36.54	37.85		Purple andesite flow	Alteration contact w/ purple andesite @ 36.54 m is ~15° CA
A07-045	37.85	38.6		Py-rich gouge	Begin picking up Py diss (dominantly smeared)
A07-045	38.6	38.96		Greenish clay-altered andesite	Dominantly smeared Py fault gouge w/ Ca on fracture planes
A07-045	38.96	39.72		Purple andesite	Dominantly purple andesite w/ weak green Py andesite @ 39.72 m.
A07-045	39.72	42		Green clay-altered andesite w/ weak Py diss	Chlorite-calcite alteration on fracture planes. Gougy pebbles @ 41.02 m.
A07-045	42	44.75		Purple andesite w/ weak green altered clasts	Weak chloritization & Ca coatings on clasts & fracture planes
A07-045	44.75	45.62		Clay-altered Py gouge	Weak chloritization & Ca coatings on clasts & fracture planes; weak Py concentrations
A07-045	45.62	46.6		Med purple andesite	Dark grey smeared Py on fracture planes
A07-045	46.6	54.4		Dark green chlorite altered andesite	
A07-045			46.6	47 Dark green chlorite altered andesite	Strong Ca coating on fracture planes
A07-045			47	49 Dark green chlorite altered andesite	Dark green, chloritized andesite w/ trace Py diss
A07-045			51	52 Dark green chlorite altered andesite	Higher Py diss then subintervals uphole (in 46.6-54.4 m interval).
A07-045	54.4	55.1		Med purple andesite	Strong Ca coating on fracture planes
A07-045	55.1	55.6		Dark greenish chloritized andesite	Strong Ca coating on fracture planes
A07-045	55.6	56.63		Med purple andesite	Starts to pick up lapilli-tuff sized frags in addition to plag phenos
A07-045	56.63	59.6		Dark greenish chloritized andesite	
A07-045			58	59 Dark greenish chloritized andesite	Broken semi-gougy & chloritized
A07-045			59	60 Dark greenish chloritized andesite	V strongly hematized "rusty" brown gouge w/ Ca gougy seams
A07-045	59.6	62.85		Med purple andesite crystal lapilli tuff	Ca dominant on fracture planes w/ chlorite
A07-045			62.48	Med purple andesite crystal lapilli tuff	REDUCE FROM HQ3 to NQ2 @ 62.48 m
A07-045				Greenish gougy veining of illite & clay/chlorite	
A07-045	62.85	63.35		Greenish gougy veining of illite & clay/chlorite	
A07-045			63	63.35 Med purple AXT/AVF w/ slightly green, chloritized intervals	Pinkish white Ca on fracture planes
A07-045	63.35	73		Med purple AXT/AVF w/ slightly green, chloritized intervals	
A07-045			63.35	66 Med purple AXT/AVF w/ slightly green, chloritized intervals	Pinkish white Ca on fracture planes
A07-045			66	68 Med purple AXT/AVF w/ slightly green, chloritized intervals	Greenish-grey tinge (less purple); pinkish-white Ca on fracture planes
A07-045			68	70 Med purple AXT/AVF w/ slightly green, chloritized intervals	White Ca on fracture planes
A07-045			70	71 Med purple AXT/AVF w/ slightly green, chloritized intervals	Pinkish white Ca on fracture planes
A07-045	73	75.8		Dark green; gougy w/ an increase in smeared Py	
A07-045			73	Dark green; gougy w/ an increase in smeared Py	Abundant Ca veining @ high angle to CA
A07-045			74	Dark green; gougy w/ an increase in smeared Py	Abundant Ca veining @ high angle to CA; heavily altered
A07-045	75.8	88.5		Med purple AVF w/ Ca veining	
A07-045			75.8	Med purple AVF w/ Ca veining	Less gougy, but still Py-rich; alteration contact w/ purple AVF @ 75.8 m is 60° CA
A07-045			76.45	Med purple AVF w/ Ca veining	Left lateral offset of Ca vn by later Ca vn @ 76.45 m.
A07-045			76.61	77.87 Med purple AVF w/ Ca veining	Weak grey altered rock similar to 73.8-75.8 m
A07-045			77.9	Med purple AVF w/ Ca veining	Intense clay veining @ 77.9m is ~25° CA
A07-045			79.6	79.73 Med purple AVF w/ Ca veining	Whitish-pink Ca on fract planes; weak Py smeared
A07-045			82	83 Med purple AVF w/ Ca veining	Black veining assoc w/ Ca (don't think its sulphide though)
A07-045			83	84 Med purple AVF w/ Ca veining	White Ca on fract planes
A07-045			84	85 Med purple AVF w/ Ca veining	Dark greenish purple; v. trace Py diss
A07-045			85	87 Med purple AVF w/ Ca veining	Ca coating on fract planes
A07-045	88.5	94.4		Med green-med purple tan AXT w/ Ca veining & minor Py diss	
A07-045			88.7	Med green-med purple tan AXT w/ Ca veining & minor Py diss	Gradual change from purple to greenish andesite
A07-045			90	90.1 Med green-med purple tan AXT w/ Ca veining & minor Py diss	Intensely Ca veined
A07-045			91	92 Med green-med purple tan AXT w/ Ca veining & minor Py diss	Banded veining of greenish andesite & Py diss @ an angle of 50° CA
A07-045			92.43	Med green-med purple tan AXT w/ Ca veining & minor Py diss	Weak Py diss in greenish andesite
A07-045			93.2	93.32 Med green-med purple tan AXT w/ Ca veining & minor Py diss	Greenish sulphide-rich andesite
A07-045			93.5	93.65 Med green-med purple tan AXT w/ Ca veining & minor Py diss	Greenish sulphide-rich andesite
A07-045	94.4	98.08		Greyish-green, strongly sulphide-rich andesite	

A07-045			94.65	94.7	Greyish-green, strongly sulphide-rich andesite	Sulphide banding; moderately gougy
A07-045			97	98	Greyish-green, strongly sulphide-rich andesite	Dark grey; Py-rich clay altered rock
A07-045	98.08	99.46			Med grey sulphide-rich gouge	
A07-045	99.46	102.4			Med-dark grey massive silica	
A07-045			99.46	100	Med-dark grey massive silica	Weak gypsum on fracture planes
A07-045			100	101	Med-dark grey massive silica	Appears to be trace silvery white arsenopyrite (?)
A07-045			101	102	Med-dark grey massive silica	Trace chalcopyrite flakes
A07-045	102.4	128.3			Dark grey fractured massive/vuggy silica	
A07-045			102.4	104	Dark grey fractured massive/vuggy silica	Increase in copper mineralization
A07-045			104	105	Dark grey fractured massive/vuggy silica	Minor vug infill by white clay (possibly kaolinite)
A07-045			107	108	Dark grey fractured massive/vuggy silica	Blotchy "violet" enargite disseminated throughout interval. GOOD 1 m INTERVAL.
A07-045			108	109	Dark grey fractured massive/vuggy silica	Enargite & chalcopyrite in high concentration
A07-045			109	110	Dark grey fractured massive/vuggy silica	Very strong diss of En, poss w/ chalcocite
A07-045			110	111	Dark grey fractured massive/vuggy silica	Py-rich interval, w/ less Cu mineralization
A07-045			111	112	Dark grey fractured massive/vuggy silica	Lighter grey; vuggy 1 m interval
A07-045			113	114	Dark grey fractured massive/vuggy silica	Strongly brecciated w/ grey sulphides; micro-fractured
A07-045			114	115	Dark grey fractured massive/vuggy silica	White rounded silica clasts w/ black-dark grey Py-rich matrix
A07-045			115	116	Dark grey fractured massive/vuggy silica	Less massive & fractured then intervals uphole; more vuggy
A07-045			117	118	Dark grey fractured massive/vuggy silica	Heavy infill of vugs by clay (poss kao (?))
A07-045			118	119	Dark grey fractured massive/vuggy silica	Dark grey-black; strongly vuggy
A07-045			119	120	Dark grey fractured massive/vuggy silica	White clay; possibly kao; less silicified then intervals uphole
A07-045			120	121	Dark grey fractured massive/vuggy silica	Weak white silicification on cobbles in interval
A07-045			122.23	122.43	Dark grey fractured massive/vuggy silica	Light grey subinterval of vuggy silica
A07-045			125	126	Dark grey fractured massive/vuggy silica	V. tiny vugs, dominantly msi
A07-045			127.8	128	Dark grey fractured massive/vuggy silica	Dark grey; msi increases, vsi decreases
A07-045	128.3	130.37			Quartz Alunite	
A07-045			128.3	130	Quartz Alunite	Appears to have white alunite crystals; weakly clay altered
A07-045	130.37	132.4			Questionable RDD/Rock altered by Rhyodacite Dike	Could be altered RDD (?) similar to intervals downhole
			131.7		Questionable RDD/Rock altered by Rhyodacite Dike	Start entering what appears to be RDD rock
A07-045	132.4	149.35			Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	
A07-045			132.4		Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Appears to be chilled margin; which is @ 50° CA
A07-045			133	134	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Dark pink groundmass w/ light green altered phenos & "cracked" dike appearance
A07-045			134	135	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Dark pink-med green groundmass w/ light green alt'd phenos
A07-045			135	136	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Dom dark pink; cracked texture
A07-045			136	137	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Dark pink; cracked texture
A07-045			139	140	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Little (1 mm) black semi-rectangular black crystals on exterior of rock
A07-045			141.4		Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Gougy, fractured RDD
A07-045			142.6	143	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Gougy & fractured
A07-045			143	144	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Cracked texture w/ light green illite-chlorite (?) alt'd plag phenos; v weakly magnetic; wk clay veining
A07-045			144	149.35	Cracked Rhyodacite Dike w/ soft light green illite-chlorite altered phenocrysts	Cracked texture; v weakly magnetic; light green illite-chlorite phenos
A07-045			149.35 EOH		END OF HOLE	

[illegible]

2106431	AD7-004	Bonanza	9,80	11,00	2,50	E2106431	<0,01	0,21	0,68	12	<10	580	0,4	<0,22	1,1	12	2	75	7,87	<10	<0,18	<10	0,42	2270	2	<0,01	3	730	28	0,43	<2	<10	<0,01	<10	50	<10	765								
210644	AD7-004	Bonanza	11,80	12,00	1,00	E210644	0,02	0,1	0,4	8	<10	365	<0,5	2	0,01	<0,04	17	1	150	2,93	<10	<0,26	<10	0,84	1626	2	<0,01	7	703	510	0,12	<2	<10	<0,01	<10	30	<10	243							
210645	AD7-004	Bonanza	12,00	13,00	1,00	E210645	0,11	0,11	0,64	125	<10	<10	<0,5	<0,1	<0,01	<0,01	37	6	75	8,71	<10	<0,40	<10	0,01	37	6	<0,01	61	760	548	6,44	29	1	<10	<0,01	<10	18	<10	10						
210646	AD7-004	Bonanza	13,00	14,00	1,00	E210646	0,99	1,9	0,4	20	<10	250	<15	<0,1	<0,01	<0,01	1	124	2,57	<10	<10	<10	<0,01	8	<0,01	6	80	91	2,93	14	1	53	<10	<0,01	<10	7	<10	4							
210647	AD7-004	Bonanza	14,00	15,00	1,00	E210647	0,14	0,14	0,68	125	<10	250	<15	<0,1	<0,01	<0,01	1	124	2,57	<10	<10	<10	<0,01	8	<0,01	6	80	91	2,93	14	1	53	<10	<0,01	<10	7	<10	4							
210648	AD7-004	Bonanza	15,00	16,00	1,00	E210648	0,9	1,2	0,28	79	<10	110	<0,5	<0,001	<0,6	2	4	461	8,62	<10	<10	<10	<0,01	17	22	<0,01	5	20	34	0,53	108	<1	72	<10	<0,01	<10	8	<10	48						
210649	AD7-004	Bonanza	16,00	17,00	1,00	E210649	0,02	0,02	0,48	7	<10	340	<0,5	<0,1	<0,05	<1	14	6	5,95	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	11	14	0,6	<2	<10	<0,01	<10	8	<10	<2							
210650	AD7-004	Bonanza	17,00	18,00	1,00	E210650	0,02	<0,2	0,48	7	<10	340	<0,5	<0,1	<0,05	<1	14	6	5,95	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	11	14	0,6	<2	<10	<0,01	<10	8	<10	<2							
210651	AD7-004	Bonanza	18,00	19,00	1,00	E210651	0,4	<0,2	0,58	3	<10	30	<0,5	<0,1	<0,05	<1	1	20	2,44	<10	<10	<10	<0,01	6	1	<10	<10	4	80	32	2,77	<2	1	<10	<0,01	<10	7	<10	<2						
210652	AD7-004	Bonanza	19,00	20,00	1,00	E210652	1,31	2,4	0,8	20	<10	160	<0,5	<0,1	<0,05	<1	1	20	2,44	<10	<10	<10	<0,01	6	1	<10	<10	4	80	32	2,77	<2	1	<10	<0,01	<10	7	<10	<2						
210653	AD7-004	Bonanza	20,00	20,00	1,00	E210653	0,09	<0,2	0,36	8	<10	120	<0,5	<0,1	<0,05	<1	1	17	0,84	<10	<10	<10	<0,01	5	2	<0,01	3	40	21	0,9	<2	1	41	<10	<0,01	<10	6	<10	<2						
210654	AD7-004	Bonanza	20,00	21,00	1,00	E210654	0,04	<0,2	0,52	6	<10	140	<0,5	<0,1	<0,05	<1	1	10	0,94	<10	<10	<10	<0,01	5	1	<10	<10	2	80	1,94	<2	2	38	<10	<0,01	<10	9	<10	<2						
210655	AD7-004	Bonanza	21,00	22,00	1,00	E210655	0,8	0,8	0,9	8	<10	140	<0,5	<0,1	<0,05	<1	1	10	0,94	<10	<10	<10	<0,01	5	1	<10	<10	2	80	1,94	<2	2	38	<10	<0,01	<10	9	<10	<2						
210656	AD7-004	Bonanza	22,00	23,00	1,00	E210656	0,77	0,8	0,46	15	<10	20	<0,5	<0,1	<0,05	<1	1	95	2,29	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	4	80	35	2,62	5	1	44	<10	<0,01	<10	7	<10	<2				
210657	AD7-004	Bonanza	23,00	24,00	1,00	E210657	0,02	0,02	0,56	7	<10	340	<0,5	<0,1	<0,05	<1	1	14	0,95	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	11	14	0,6	<2	<10	<0,01	<10	8	<10	<2							
210658	AD7-004	Bonanza	24,00	25,00	1,00	E210658	0,28	0,2	0,56	7	<10	30	<0,5	<0,1	<0,05	<1	<1	7	1,59	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	70	63	1,81	<2	1	<10	<0,01	<10	9	<10	<2						
210659	AD7-004	Bonanza	25,00	26,00	1,00	E210659	0,39	0,3	0,4	8	<10	30	<0,5	<0,1	<0,05	<1	1	83	7,19	<10	<10	<10	<0,01	5	3	<0,01	7	70	37	2,93	2	1	48	<10	<0,01	<10	10	<10	<2						
210660	AD7-004	Bonanza	26,00	27,00	1,00	E210660	1,7	0,45	0,75	1	<10	160	<0,5	<0,1	<0,05	<1	1	20	2,44	<10	<10	<10	<0,01	6	1	<10	<10	4	80	32	2,77	<2	1	<10	<0,01	<10	7	<10	<2						
210661	AD7-004	Bonanza	27,00	28,00	1,00	E210661	1	0,8	0,74	11	<10	20	<0,5	<0,1	<0,05	<1	1	177	0,28	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	6	130	36	2,4	1	1	<10	<0,01	<10	11	<10	<10					
210662	AD7-004	Bonanza	28,00	29,00	1,00	E210662	0,62	0,6	0,5	<10	50	<0,5	<0,1	<0,05	<1	1	185	1,76	<10	<10	<10	<0,01	5	5	<10	<10	5	170	107	2,01	<2	1	88	<10	<0,01	<10	12	<10	<10						
210663	AD7-004	Bonanza	29,00	30,00	1,00	E210663	1,86	<0,2	0,73	<10	50	<0,5	<0,1	<0,05	<1	1	185	1,76	<10	<10	<10	<0,01	5	5	<10	<10	5	170	107	2,01	<2	1	88	<10	<0,01	<10	12	<10	<10						
210664	AD7-004	Bonanza	30,00	31,00	1,00	E210664	9	1,9	0,75	70	<10	10	<0,5	<0,1	<0,05	<1	1	378	4,74	<10	<10	<10	<0,01	6	18	<10	<10	2	170	204	8,5	8	2	70	<10	<0,01	<10	17	<10	<10					
210665	AD7-004	Bonanza	31,00	32,00	1,00	E210665	0,77	0,14	0,14	11	<10	110	<0,5	<0,1	<0,05	<1	1	1	0,05	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	380	112	0,99	<10	4	60	<10	<0,01	<10	23	<10	<10					
210666	AD7-004	Bonanza	32,00	33,00	1,00	E210666	0,01	<0,2	0,9	5	<10	570	<0,5	<0,1	<0,05	<1	1	8	3,12	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	1310	190	0,07	<2	4	169	<10	<0,01	<10	47	<10	<10					
210667	AD7-004	Bonanza	33,00	34,00	1,00	E210667	16,35	0,4	0,3	480	<10	30	<0,5	<0,1	<0,05	<1	7	26	0,14	<10	<10	<10	<0,01	3	0,18	<10	<10	607	128	6	2,25	26	2	1	<10	<0,01	<10	16	<10	<10					
210668	AD7-004	Bonanza	34,00	35,00	2,50	E210668	0,8	<0,2	0,4	10	<10	560	<0,5	<0,1	<0,05	<1	8	14	1,07	<10	<10	<10	<0,01	2	1,23	<10	<10	1	960	1	0,3	5	4	60	<10	<0,01	<10	23	<10	<10					
210669	AD7-004	Bonanza	35,00	37,00	2,50	E210669	0,4	0,2	0,52	4	<10	250	<0,5	<0,1	<0,05	<1	11	309	2,29	<10	<10	<10	<0,01	2	0,27	<10	<10	85	1	<10	6	630	44	0,66	<2	3	59	<10	<0,01	<10	27	<10	<10		
210670	AD7-004	Bonanza	37,00	38,00	1,00	E210670	0,1	0,1	0,52	8	<10	360	<0,5	<0,1	<0,05	<1	1	1	0,05	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	10	10	0,27	<10	1	1	1	<10	<0,01	<10	69	<10	<10				
210671	AD7-004	Bonanza	39,00	41,00	2,50	E210671	0,2	0,2	0,67	9	<10	250	<0,5	<0,1	<0,05	<1	1	1	0,05	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	1	114	2270	1	<10	<10	<10	<10	<10	<10	<10	<10					
210672	AD7-004	Bonanza	41,00	43,00	2,50	E210672	0,1	<0,2	0,52	10	<10	110	<0,5	<0,2	<0,58	<0,5	1	1	0	2,85	<10	<10	<10	<0,01	1	0,24	<10	<10	1	880	48	0,01	<2	2	21	<10	<0,01	<10	41	<10	<10				
210673	AD7-004	Bonanza	43,00	44,00	1,00	E210673	0,01	0,2	0,5	8	<10	360	<0,5	<0,2	<0,4	<0,5	17	1	150	2,93	<10	<10	<10	<0,01	1	0,26	<10	<10	0,84	1626	2	<0,01	7	703	510	0,12	<2	1	28	<10	<0,01	<10	30	<10	<10
210674	AD7-004	Bonanza	44,00	45,00	1,00	E210674	0,02	1,8	0,49	243	<10	90	0,5	<0,2	<0,88	<0,7	11	2	1	3,84	<10	<10	<10	<0,01	1	0,24	<10	<10	1	820	82	1,68	<2	3	28	<10	<0,01	<10	35	<10	<10				
210675	AD7-004	Bonanza	45,00	46,00	1,00	E210675	0,02	1	0,51	231	<10	240	<0,5	<0,2	<1,06	<0,5	9	2	1	3	<10	<10	<10	<0,01	2	1	<10	<10	1	820	43	0,95	<2	2	28	<10	<0,01	<10	38	<10	<10				
210676	AD7-004	Bonanza	46,00	47,00	1,00	E210676	0,01	0,48	0,5	230	<10	180	<0,5	<0,2	<0,4	<0,5	10	1	0,05	<10	<10	<10	<0,01	<10	<0,01	<5	<10	<10	61	0,88	133	0,5	<10	1	1	<10	<0,01	<10	40	<10	<10				
210677	AD7-004	Bonanza	48,00	50,00	2,50	E210677	0,01	0,4	0,8	17	<10	220	<0,5	<0,2	<0,4	<0,5	6	1	16	2,63	<10	<10	<10	<0,01	1	0																			

210748	AD7-005	Bonanza	80.00	80.00	1.00	E210748	-0.01	0.68	0.99	23	<10	1860	-0.55	<-2	0.01	0.7	1	164	0.08	<-10	<-1	0.01	<-10	<-0.01	6	2	0.01	1	190	274	0.09	0	3	396	>0	<-0.01	<-10	15	<-10	190	
210749	AD7-005	Bonanza	80.00	80.00	1.00	E210749	-0.01	0.76	1.17	303	<10	1860	-0.55	<-2	0.01	0.7	1	164	0.08	<-10	<-1	0.01	<-10	<-0.01	6	2	0.01	1	190	274	0.09	0	3	396	>0	<-0.01	<-10	15	<-10	190	
210748	AD7-005	Bonanza	89.00	90.00	1.00	E210748	-0.03	0.93	0.61	14	<10	790	<-0.55	<-2	<0.01	<-0.01	3	3	0.48	<-10	<-1	<0.01	<-13	6	<0.01	3	70	589	0.41	3	2	118	>0	<-0.01	<-10	12	<-10	81			
210748	AD7-005	Bonanza	90.00	91.00	1.00	E210748	-0.03	0.93	0.61	14	<10	790	<-0.55	<-2	<0.01	<-0.01	3	3	0.48	<-10	<-1	<0.01	<-13	6	<0.01	3	70	589	0.41	3	2	118	>0	<-0.01	<-10	12	<-10	81			
210801	AD7-005	Bonanza	92.00	92.00	1.00	E210801	0.13	3	0.53	35	<10	120	<-0.55	<-2	<0.01	<-0.01	3	7	165	1.53	<-10	<-1	<0.01	22	18	<0.01	4	100	607	1.85	0	1	193	>0	<-0.01	<-10	14	<-10	102		
210801	AD7-005	Bonanza	91.00	92.00	1.00	E210801	0.13	3	0.53	35	<10	120	<-0.55	<-2	<0.01	<-0.01	3	7	165	1.53	<-10	<-1	<0.01	22	18	<0.01	4	100	607	1.85	0	1	193	>0	<-0.01	<-10	14	<-10	102		
210801	AD7-005	Bonanza	92.00	93.00	1.00	E210801	0.02	2.4	0.75	19	<10	220	<-0.55	<-2	<0.01	<-0.01	3	6	11	17	<-10	<-1	<0.01	<-10	1	<0.01	3	10	233	1.31	3	1	193	>0	<-0.01	<-10	14	<-10	22		
210801	AD7-005	Bonanza	92.00	94.00	1.00	E210801	0.02	2.4	0.75	19	<10	220	<-0.55	<-2	<0.01	<-0.01	3	6	11	17	<-10	<-1	<0.01	<-10	1	<0.01	3	10	233	1.31	3	1	193	>0	<-0.01	<-10	14	<-10	22		
210801	AD7-005	Bonanza	92.00	95.00	1.00	E210801	0.02	2.4	0.75	19	<10	220	<-0.55	<-2	<0.01	<-0.01	3	6	11	17	<-10	<-1	<0.01	<-10	1	<0.01	3	10	233	1.31	3	1	193	>0	<-0.01	<-10	14	<-10	22		
210801	AD7-005	Bonanza	94.00	96.00	2.00	E210801	<-0.01	0.3	0.55	3	<10	210	<-0.55	<-2	0.01	<-0.01	7	2	37	8.82	<-10	<-1	<0.01	7	2	<0.01	3	70	12	>0	<-2	4	4	>0	<-0.01	<-10	13	<-10	14		
210804	AD7-005	Bonanza	96.00	98.00	2.00	E210804	<-0.01	0.6	0.67	5	<10	890	<-0.55	<-2	0.01	<-0.01	3	108	4.91	<-10	<-1	<0.01	65	2	<0.01	4	100	22	0.11	2	4	74	>0	<-0.01	<-10	117	<-10	19			
210805	AD7-005	Bonanza	98.00	100.00	2.00	E210805	<-0.01	0.4	0.65	3	<10	100	<-0.55	<-2	0.01	<-0.01	3	116	0.27	<-10	<-1	<0.01	62	3	<0.01	4	100	22	0.11	2	4	74	>0	<-0.01	<-10	117	<-10	19			
210806	AD7-005	Bonanza	100.00	102.00	2.00	E210806	<-0.01	0.54	0.58	<2	<10	110	<-0.55	<-2	0.22	1.3	3	7	7.06	<-10	<-1	0.22	0.28	<0.01	3	490	31	0.18	<-2	6	48	>0	<-0.02	<-10	<-10	<-10	3690				
210807	AD7-005	Bonanza	102.00	104.00	2.00	E210807	<-0.01	7.9	0.54	3	<10	750	<-0.55	<-2	0.16	0.19	2	3	8.8	<-10	<-1	0.22	0.19	290	<0.01	3	470	43	<-2	6	43	>0	<-0.01	<-10	<-10	<-10	1680				
210808	AD7-005	Bonanza	104.00	106.00	2.00	E210808	<-0.01	0.44	0.45	0	<10	120	<-0.55	<-2	0.01	<-0.01	3	126	0.1	<-10	<-1	0.22	0.19	290	<0.01	3	470	43	<-2	6	43	>0	<-0.01	<-10	<-10	<-10	1680				
210809	AD7-005	Bonanza	106.00	108.00	1.00	E210809	<-0.01	0.5	0.74	18	<10	2050	<-0.55	<-11	0.02	<-0.01	1	3	10	2.32	<-10	<-1	<0.01	<0.01	0.01	5	2	<0.01	<1	180	40	0.68	0	3	184	>0	<-0.01	<-10	74	<-10	21
210810	AD7-005	Bonanza	108.00	110.00	1.00	E210810	<-0.01	0.4	0.86	1	<10	120	<-0.55	<-2	0.01	<-0.01	3	126	0.1	<-10	<-1	0.22	0.19	290	<0.01	3	470	43	<-2	6	43	>0	<-0.01	<-10	<-10	<-10	1680				
210811	AD7-005	Bonanza	107.00	109.00	1.00	E210811	<-0.01	0.2	0.52	<2	<10	320	<-0.55	<-2	0.01	<-0.01	3	3	1.76	<-10	<-1	0.07	0.02	0.8	1	<0.01	2	<0.01	<0.01	30	0.14	2	3	<2	<-0.01	<-10	<-10	<-10	31		
210812	AD7-005	Bonanza	108.00	110.00	1.00	E210812	38	16.1	0.3	499	<10	30	<-0.55	<-2	0.11	<-0.01	7	42	44	3.29	<-10	3	0.18	0.06	147	11	0.01	33	390	1	2	3	36	1	5	>0	<-0.01	<-10	13	<-10	51
210813	AD7-005	Bonanza	109.00	111.00	1.00	E210813	<-0.01	0.65	0.55	0	<10	100	<-0.55	<-2	0.01	<-0.01	3	126	0.1	<-10	<-1	0.22	0.19	290	<0.01	3	470	43	<-2	6	43	>0	<-0.01	<-10	<-10	<-10	1680				
210814	AD7-005	Bonanza	108.00	110.00	1.00	E210814	<-0.01	0.03	0.47	4	<10	320	<-0.55	<-2	0.01	<-0.01	3	3	1.54	<-10	<-1	0.18	0.02	0.92	2	<0.01	2	110	44	0.13	<-2	7	22	>0	<-0.01	<-10	<-10	47	38		
210815	AD7-005	Bonanza	110.00	111.00	1.00	E210815	<-0.03	2.1	0.49	17	<10	320	<-0.55	<-2	<0.01	<-0.01	3	3	1.54	<-10	<-1	0.18	0.02	0.92	2	<0.01	2	110	44	0.13	<-2	7	22	>0	<-0.01	<-10	<-10	47	38		
210816	AD7-005	Bonanza	111.00	112.00	1.00	E210816	<-0.01	0.01	0.55	10	<10	320	<-0.55	<-2	<0.01	<-0.01	3	3	1.54	<-10	<-1	0.18	0.02	0.92	2	<0.01	2	110	44	0.13	<-2	7	22	>0	<-0.01	<-10	<-10	47	38		
210817	AD7-005	Bonanza	112.00	113.00	1.00	E210817	0.18	3.5	0.55	18	<10	110	<-0.55	<-2	<0.01	<-0.01	3	138	2.3	<-10	<-1	<0.01	<0.01	9	14	<0.01	3	50	232	2.64	16	1	66	>0	<-0.01	<-10	<-10	<-10	16		
210818	AD7-005	Bonanza	113.00	114.00	1.00	E210818	<-0.01	0.23	0.11	1	<10	110	<-0.55	<-2	<0.01	<-0.01	3	138	2.3	<-10	<-1	<0.01	<0.01	9	14	<0.01	3	50	232	2.64	16	1	66	>0	<-0.01	<-10	<-10	<-10	16		
210819	AD7-005	Bonanza	114.00	115.00	1.00	E210819	0.63	9.6	0.4	47	<10	40	<-0.55	<-11	<0.01	<-0.01	3	2	291	4.81	<-10	<-1	<0.01	13	27	<0.01	3	70	78	13.3	47	1	90	>0	<-0.01	<-10	<-10	<-10	167		
210820	AD7-005	Bonanza	115.00	116.00	1.00	E210820	0.04	1.1	1.96	13	<10	30	<-0.55	<-2	0.01	<-0.01	3	5	1.2	<-10	<-1	<0.01	<0.01	13	13	<0.01	2	70	18	0.2	3	133	>0	<-0.01	<-10	<-10	<-10	16			
210821	AD7-005	Bonanza	116.00	117.00	1.00	E210821	0.06	2	0.72	12	<10	80	<-0.55	<-2	0.01	<-0.01	3	10	2.08	<-10	<-1	<0.01	<0.01	13	13	<0.01	2	70	18	0.2	3	133	>0	<-0.01	<-10	<-10	<-10	16			
210822	AD7-005	Bonanza	117.00	118.00	1.00	E210822	0.47	0.72	0.18	25	<10	20	<-0.55	<-11	<0.01	<-0.01	3	4	217	3.13	<-10	<-1	<0.01	<0.01	19	23	<0.01	5	30	1535	3.36	26	1	31	>0	<-0.01	<-10	<-10	<-10	36	
210823	AD7-005	Bonanza	118.00	119.00	1.00	E210823	0.25	0.22	0.1	2	<10	20	<-0.55	<-11	<0.01	<-0.01	3	4	217	3.13	<-10	<-1	<0.01	<0.01	19	23	<0.01	5	30	1535	3.36	26	1	31	>0	<-0.01	<-10	<-10	<-10	36	
210824	AD7-005	Bonanza	119.00	120.00	1.00	E210824	<-0.01	0.8	0.79	13	<10	430	<-0.55	<-2	0.01	<-0.01	3	3	2.66	<-10	<-1	<0.01	<0.01	14	3	<0.01	1	280	173	0.33	14	2	369	>0	<-0.01	<-10	<-10	<-10	49		
210825	AD7-005	Bonanza	120.00	122.00	2.00	E210825	0.02	<-0.2	0.58	3	<10	80	<-0.55	<-2	0.38	<-0.01	11	3	6.39	<-10	<-1	0.17	0.18	177	1	<0.01	3	800	27	0.02	3	6	83	>0	<-0.01	<-10	<-10	<-10	386		
210826	AD7-005	Bonanza	122.00	124.00	2.00	E210826	<-0.01	0.4	0.65	2	<10	100	<-0.55	<-2	0.01	<-0.01	3	126	0.1	<-10	<-1	0.22	0.19	290	<0.01	3	470	43	<-2	6	43	>0	<-0.01	<-10	<-10	<-10	1680				
210827	AD7-005	Bonanza	123.00	125.00	2.00	E210827	<-0.01	<-0.2	1.54	4	<10	90	<-0.55	<-2	0.85	<-0.01	7	32	38	1.7	<-10	<-1	0.11	0.10	0.78	497	4	0.08	18	620	<-2	0.04	<-2	5	<-10	<-10	47	43			
210828	AD7-005	Bonanza	124.00	126.00	2.00	E210828	<-0.01	0.2	0.62	2	<10	530	<-0.55	<-2	0.1	<-0.01	17	2	6.38	<-10	<-1	<0.01	<0.01	0.22	0.96	3070	<-1	0.01	3	1040	65	0.02	<-2	5	82	>0	<-0.02	<-10	<-10	<-10	1499
210829	AD7-006	Bonanza	1.53	3.00	1.48	E210829	0.79	1.7	0.57	8	<10	188	<-0.55	<-8	0.03	<-0.01	2	3	41</																						

210948	A07-A007	Bonanza	86.00	87.00	1.00	E210948	<0.01	<-0.2	1.21	11	<10	480	-0.51	8	0.04	-0.51	1	2	2	1.97	<10	<-0.01	<-0.01	10	-2.00	<-1	650	23	0.04	16	2	394	<-20	0.02	<-10	38	10	3			
210949	A07-A007	Bonanza	87.00	88.00	1.00	E210949	<0.01	<-0.1	0.72	8	<10	295	0.17	2	0.38	-0.14	16	<1	10	1.78	<10	<-0.17	<-0.09	150	<-1	<-1	800	3	0.09	3	2	205	<-20	0.01	<-10	18	40	2			
210950	A07-A007	Bonanza	88.00	89.00	1.00	E210950	0.02	<-0.28	0.88	11	<10	<-40	-0.51	4	0.01	-0.51	6	1	48	1.34	<10	<-0.01	<-0.01	<-5	<-6	<-1	620	10	0.4	2	4	156	<-20	0.01	<-10	48	10	3			
210951	A07-A007	Bonanza	89.00	90.00	1.00	E210951	0.07	0	0.73	18	<10	<-30	-0.51	0.01	0.51	11	1	106	1.96	<10	<-0.01	<-0.01	<-7	<-7	<-1	510	7	2.04	11	1	189	<-20	0.01	<-10	40	10	6				
210952	A07-A007	Bonanza	90.00	91.00	1.00	E210952	0.07	0	0.73	18	<10	<-30	-0.51	0.01	0.51	11	1	106	1.96	<10	<-0.01	<-0.01	<-7	<-7	<-1	510	7	2.04	11	1	189	<-20	0.01	<-10	40	10	6				
210953	A07-A007	Bonanza	91.00	92.00	1.00	E210953	0.07	0	0.73	18	<10	<-30	-0.51	0.01	0.51	11	1	106	1.96	<10	<-0.01	<-0.01	<-7	<-7	<-1	510	7	2.04	11	1	189	<-20	0.01	<-10	40	10	6				
210954	A07-A007	Bonanza	92.00	93.00	1.00	E210954	0.07	0	0.73	18	<10	<-30	-0.51	0.01	0.51	11	1	106	1.96	<10	<-0.01	<-0.01	<-7	<-7	<-1	510	7	2.04	11	1	189	<-20	0.01	<-10	40	10	6				
210955	A07-A007	Bonanza	93.00	94.00	1.00	E210955	0.03	<-0.5	0.28	4	<10	<-60	-0.51	4	-0.01	-0.51	7	8	4	1.16	<10	<-0.01	<-0.01	<-30	<-20	<-1	40	35	7.9	<-2	138	<-20	0.01	<-10	12	40	131				
210956	A07-A007	Bonanza	94.00	95.00	2.00	E210956	0.03	3.3	0.72	12	<10	<-40	-0.51	5	0.01	0.7	10	2	57	1.11	<10	<-0.01	<-0.01	<-7	8	<-10	70	1.2	4	2	114	<-20	0.01	<-10	20	40	142				
210957	A07-A007	Bonanza	95.00	96.00	1.00	E210957	0.01	0	0.5	7	<10	<-100	-0.51	0.01	0.51	1	1	1	0.44	<10	<-0.01	<-0.01	<-1	140	<-1	0.4	1	1	1	1	1	1	1	1	181	10	1				
210958	A07-A007	Bonanza	96.00	97.00	1.00	E210958	<0.01	<-0.5	0.97	4	<10	<-80	-0.51	<-2	0.02	-0.51	<-1	1	3	0.05	<-10	<-0.01	<-0.01	<-5	<-11	<-10	230	84	0.03	<-2	224	<-20	0.01	<-10	48	10	33				
210959	A07-A007	Bonanza	97.00	98.00	1.00	E210959	<0.01	0	0.94	2	<10	1740	-0.51	<-2	0.02	-0.51	<-1	1	3	0.15	<-10	<-0.01	<-0.01	<-5	2	<-10	210	83	2.6	<-2	238	<-20	0.01	<-10	40	10	72				
210960	A07-A007	Bonanza	98.00	99.00	1.00	E210960	<0.01	0	0.94	2	<10	1740	-0.51	<-2	0.02	-0.51	<-1	1	3	0.15	<-10	<-0.01	<-0.01	<-5	2	<-10	210	83	2.6	<-2	238	<-20	0.01	<-10	40	10	72				
210961	A07-A007	Bonanza	99.00	100.00	2.00	E210961	<0.01	1.8	0.75	4	<10	270	0.7	2	0.44	15.8	14	21	2	8.88	<-10	<-0.17	<-0.18	2320	<-1	0.57	7	920	436	0.07	3	8	86	<-20	0.01	<-10	74	40	1815		
210962	A07-A007	Bonanza	100.00	101.00	2.00	E210962	<0.01	0	0.53	5	<10	100	-0.51	<-2	0.02	-0.51	<-1	1	3	0.05	<-10	<-0.01	<-0.01	<-5	<-11	<-10	230	84	0.03	<-2	224	<-20	0.01	<-10	48	10	33				
210963	A07-A007	Bonanza	103.00	105.00	2.00	E210963	<0.01	<-0.2	0.83	4	<10	<-180	-0.51	<-2	1.97	-0.51	12	2	6.58	<-10	<-0.26	<-1	0.57	1250	<-10	0.01	3	5	58	<-20	0.02	<-10	109	40	751						
210964	A07-A008	Bonanza	12.00	14.00	2.00	E210964	<0.01	<-0.2	0.54	<-2	<10	<-30	-0.51	<-2	1.8	-0.51	5	1	8	2.3	<-10	<-0.1	0.18	1	0.03	1	550	7	0.05	<-2	4	30	<-20	0.01	<-10	40	10	50			
210965	A07-A008	Bonanza	14.00	16.00	2.00	E210965	<0.01	<-0.2	0.57	5	<10	<-50	-0.51	<-2	1.97	-0.51	5	1	8	2.61	<-10	<-0.1	0.23	10	0.74	1000	<-1	0.03	1	570	9	0.13	<-2	4	21	<-20	0.01	<-10	40	10	64
210966	A07-A008	Bonanza	16.00	18.00	2.00	E210966	0.25	0.3	0.51	30	<10	<-30	-0.51	<-2	1.07	-0.51	7	1	39	2.36	<-10	<-0.2	0.2	106	6.66	1.1	0.01	1	560	3	0.4	<-2	3	39	<-20	0.01	<-10	40	10	70	
210967	A07-A008	Bonanza	18.00	20.00	2.00	E210967	0.25	0.3	0.51	30	<10	<-30	-0.51	<-2	1.07	-0.51	7	1	39	2.36	<-10	<-0.2	0.2	106	6.66	1.1	0.01	1	560	3	0.4	<-2	3	39	<-20	0.01	<-10	40	10	70	
210968	A07-A008	Bonanza	18.00	19.00	1.00	E210968	0.28	1.4	0.11	195	<10	<-20	-0.51	8	0.01	-0.51	14	16	50	3.15	<-10	<-0.04	<-0.01	64	29	<-10	0.01	64	29	0.01	64	29	<-10	0.01	<-10	40	10	4			
210969	A07-A008	Bonanza	19.00	20.00	1.00	E210969	0.46	0.3	0.08	386	<10	<-20	-0.51	8	0.01	-0.51	14	16	50	3.15	<-10	<-0.04	<-0.01	64	29	<-10	0.01	64	29	0.01	64	29	<-10	0.01	<-10	40	10	4			
210970	A07-A008	Bonanza	20.00	21.00	1.00	E210970	3.07	<-1	0.41	271	<10	<-90	-0.51	<-3	0.17	-0.51	12	2	66	1.81	<-10	<-0.1	<-0.1	22	4	0.01	3	580	488	1.76	9	1	50	<-20	0.01	<-10	40	10	15		
210971	A07-A008	Bonanza	21.00	22.00	1.00	E210971	0.18	0.7	0.42	71	<10	<-80	-0.51	<-2	0.17	-0.51	8	2	864	5.65	<-10	<-0.25	0.03	15	4	0.01	1	530	460	0.43	2	1	51	<-20	0.01	<-10	40	10	3		
210972	A07-A008	Bonanza	22.00	23.00	1.00	E210972	0.45	1.3	0.34	13	<10	<-170	-0.51	<-3	0.18	-0.51	21	1	116	1.97	<-10	<-0.1	<-0.1	25	1	0.01	1	793	294	1.42	2	1	51	<-20	0.01	<-10	40	10	3		
210973	A07-A008	Bonanza	23.00	24.00	1.00	E210973	1.13	1.4	0.42	189	<10	<-60	-0.51	5	0.14	-0.51	27	1	1120	1.84	<-10	<-0.28	-0.04	38	11	0.01	6	80	40	1.48	4	2	33	<-20	0.01	<-10	40	10	12		
210974	A07-A008	Bonanza	24.00	25.00	2.00	E210974	0.14	0.42	133	<10	<-100	-0.51	<-2	0.28	-0.51	21	1	548	2.64	<-10	<-0.23	<-1	0.01	1	0.01	1	90	40	1.27	2	1	51	<-20	0.01	<-10	40	10	18			
210975	A07-A008	Bonanza	26.00	28.00	2.00	E210975	0.04	0.9	0.54	85	<10	<-150	-0.71	<-2	0.34	-0.51	33	1	215	5.91	<-10	<-0.1	0.23	10	0.69	1240	<-1	0.01	2	880	84	0.4	<-2	3	18	<-20	0.01	<-10	40	10	177
210976	A07-A008	Bonanza	28.00	30.00	2.00	E210976	0.01	0.3	0.74	4	<10	<-580	-0.51	<-2	0.37	1.2	8	<-1	44	4.85	<-10	<-0.18	10	1.23	730	<-1	0.01	1	720	1090	0.22	<-2	30	<-20	0.01	<-10	40	10	393		
210977	A07-A008	Bonanza	30.00	32.00	2.00	E210977	0.01	0.2	0.6	8	<10	<-780	-0.71	2	0.38	-0.14	16	<-1	109	1.78	<-10	<-0.17	<-0.09	150	<-1	0.01	1	800	3	0.09	3	2	205	<-20	0.01	<-10	40	10	1665		
210978	A07-A008	Bonanza	35.00	37.00	2.00	E210978	0.01	0.4	0.64	4	<10	<-910	-0.6	<-2	0.38	1.18	11	1	277	7	<-10	<-0.2	<-0.2	1400	<-1	0.01	8	870	58	0.06	<-2	30	<-20	0.01	<-10	75	10	1090			
210979	A07-A008	Bonanza	37.00	39.00	2.00	E210979	0.01	0.3	0.51	<-2	<10	1940	-0.6	<-2	0.38	1.41	19	<-1	180	7.82	<-10	<-0.18	<-0.1	9.93	160	<-1	0.01	7	800	87	0.06	<-2	42	<-20	0.03	<-10	40	10	1900		
210980	A07-A008	Bonanza	38.00	40.00	1.00	E210980	0.01	0.7	0.64	5	<10	<-1080	-0.51	<-2	0.44	1.4	12	<-1	225	10.1	<-10	<-0.1	<-0.1	14	0.01	1	820	4	0.06	<-2	42	<-20	0.01	<-10	40	10	1900				
210981	A07-A008	Bonanza	40.00	41.00	1.00	E210981	0.04	1.8	0.65	5	<10	<-770	-0.51	5	0.02	0.7	3	<-1	88	0.29	<-10	<-0.1	<-0.1	0.01	12	5	<-10	202	0.18	<-2	128	<-20	0.01	<-10	40	10	64				
210982	A07-A008	Bonanza	42.00	43.00	1.00	E210982	0.04	1.8	0.65	5	<10	<-770	-0.51	5	0.02	0.7	3	<-1	88	0.29	<-10	<-0.1	<-0.1	0.01	12	5	<-10	202	0.18	<-2	128	<-20	0.01	<-10	40	10	64				
210983	A07-A008	Bonanza	41.00	42.00	1.00	E210983	<0.01	<-0.2	0.86	<-2	<10	<-400	-0.51	<-3	0.01	-0.51	<-1	<-1	11	0.05	<-10	<-0.01	<-0.01	517	<-1	0.01	1	1	1	1	1	1	1	1	12						
210984	A07-A008	Bonanza	42.00	43.00	1.00	E210984	<0.01	<-0.2	0.85	<-2	<10	<-880	-0.51	<-2	0.01	-0.51	<-1	<-1	38	0.03	<-10	<-0.01	<-0.01	<-2	<-2	<-1	70	32	0.03	<-2	1	53	<-20	0.01	<-10						

212523	A02-010	Bonanza	169.00	170.00	1.00	E212523	0.01	5.3	0.82	54	<10	90	-0.55	-20	-0.01	-0.55	29	10	1.25	-0.01	1	0.28	-0.10	-0.01	15	9	0.03	11	90	166	3.99	16	1.52	-20	-0.01	-10	-17	-10	6		
212524	A02-010	Bonanza	170.00	171.00	1.00	E212524	<0.01	8.1	0.91	8	<10	90	-0.55	-20	-0.01	-0.55	29	10	1.25	-0.01	1	0.28	-0.10	-0.01	15	9	0.03	11	90	166	3.99	16	1.52	-20	-0.01	-10	-17	-10	6		
212525	A02-010	Bonanza	171.00	172.00	1.00	E212525	<0.01	7.8	0.92	61	<10	30	-0.55	-33	-0.01	-0.55	36	8	12	-0.45	19	4	0.18	-0.10	-0.01	12	15	0.02	12	80	231	6.07	26	1.38	-0.01	-0.01	-16	-16	-10	3	
212526	A02-010	Bonanza	172.00	173.00	1.00	E212526	<0.01	8.2	1.01	35	<10	30	-0.55	-33	-0.01	-0.55	36	8	12	-0.45	19	4	0.18	-0.10	-0.01	12	15	0.02	12	80	231	6.07	26	1.38	-0.01	-0.01	-16	-16	-10	3	
212527	A02-010	Bonanza	173.00	174.00	1.00	E212527	<0.01	7.1	1.01	197	<10	30	-0.55	-33	-0.01	-0.55	36	8	12	-0.45	19	4	0.18	-0.10	-0.01	12	15	0.02	12	80	231	6.07	26	1.38	-0.01	-0.01	-16	-16	-10	3	
212528	A02-010	Bonanza	174.00	175.00	1.00	E212528	<0.01	2.8	0.84	76	<10	46	-0.55	-44	-0.01	-0.55	11	6	14	-0.45	-10	2	0.24	-0.10	-0.01	27	8	0.02	13	70	238	5.1	19	1.16	-20	-0.01	-10	-20	-10	-4	
212529	A02-010	Bonanza	175.00	176.00	1.00	E212529	<0.01	2.1	0.83	10	<10	46	-0.55	-44	-0.01	-0.55	11	6	14	-0.45	-10	2	0.24	-0.10	-0.01	27	8	0.02	13	70	238	5.1	19	1.16	-20	-0.01	-10	-20	-10	-4	
212530	A02-010	Bonanza	176.00	177.00	1.00	E212530	<0.01	2.1	0.83	10	<10	46	-0.55	-44	-0.01	-0.55	11	6	14	-0.45	-10	2	0.24	-0.10	-0.01	27	8	0.02	13	70	238	5.1	19	1.16	-20	-0.01	-10	-20	-10	-4	
212531	A02-010	Bonanza	177.00	178.00	1.00	E212531	<0.01	1.4	0.8	81	<10	10	-0.55	-20	-0.01	-0.55	7	13	13	-0.36	-10	2	0.24	-0.10	-0.01	12	8	0.03	6	90	200	8.14	13	1.38	-0.01	-0.01	-10	-20	-10	3	
212532	A02-010	Bonanza	178.00	179.00	1.00	E212532	<0.01	1.4	0.8	81	<10	10	-0.55	-20	-0.01	-0.55	7	13	13	-0.36	-10	2	0.24	-0.10	-0.01	12	8	0.03	6	90	200	8.14	13	1.38	-0.01	-0.01	-10	-20	-10	3	
212533	A02-010	Bonanza	179.00	180.00	1.00	E212533	<0.01	-0.2	1.01	31	<10	250	-0.55	-22	-0.01	-0.55	1	4	2	-0.46	-10	2	0.27	-0.10	-0.01	9	8	0.08	1	100	67	1.08	-2	2	197	-0.01	-10	-14	-10	2	
212534	A02-010	Bonanza	180.00	181.00	1.00	E212534	<0.01	0.9	0.77	41	<10	10	-0.55	-20	-0.01	-0.55	5	8	7	1.66	-10	2	0.19	-0.10	-0.01	28	11	0.06	1	90	86	2.04	3	1.97	-0.01	-0.01	-16	-16	-10	3	
212535	A02-010	Bonanza	181.00	182.00	1.00	E212535	<0.01	1.2	1.08	1	<10	170	-0.55	-44	-0.01	-0.55	1	1	1	1.66	-10	2	0.19	-0.10	-0.01	28	11	0.06	1	90	86	2.04	3	1.97	-0.01	-0.01	-16	-16	-10	3	
212536	A02-010	Bonanza	182.00	183.00	1.00	E212536	<0.01	0.8	0.1	15	<10	220	-0.55	-22	-0.01	-0.55	0.5	8	1	1.66	-10	2	0.19	-0.10	-0.01	28	11	0.06	1	90	86	2.04	3	1.97	-0.01	-0.01	-16	-16	-10	3	
212537	A02-010	Bonanza	183.00	184.00	1.00	E212537	1.48	0.1	3	6	<10	220	-0.55	-22	-0.01	-0.55	0.5	8	1	1.66	-10	2	0.19	-0.10	-0.01	28	11	0.06	1	90	86	2.04	3	1.97	-0.01	-0.01	-16	-16	-10	3	
212538	A02-010	Bonanza	183.00	185.00	2.00	E212538	<0.01	2	1.4	9	<10	310	0.6	-2	-0.01	0.6	12	2	87	6.45	-10	2	0.32	0.16	171	3	0.03	3	970	14	0.53	-2	3	24	-0.02	-10	-10	-10	3410		
212539	A02-010	Bonanza	185.00	187.00	2.00	E212539	<0.01	0.7	0.8	10	<10	590	0.6	-2	-0.01	0.6	15	2	6	4.95	-10	2	0.32	0.16	171	3	0.03	3	970	14	0.53	-2	3	24	-0.02	-10	-10	-10	3410		
212540	A02-010	Bonanza	187.00	189.00	2.00	E212540	0.02	0.7	1.59	3	<10	146	0.6	-2	-0.01	0.6	11	2	3	1	0.35	-10	0.78	0.99	2	0.01	4	0.01	203	0.16	4	13	-20	-0.01	-10	-17	-10	898			
212541	A02-010	Bonanza	189.00	190.00	1.00	E212541	<0.01	0.3	1.03	10	<10	1950	0.6	-2	-0.01	0.6	12	3	70	4.86	-10	1	0.37	0.16	171	1	-0.01	8	960	210	0.15	-2	3	46	-20	-0.01	-10	-14	-10	392	
212542	A02-010	Bonanza	190.00	191.00	1.00	E212542	0.02	0.7	0.92	2	<10	740	0.6	-2	-0.01	0.6	9	1	86	4.65	-10	1	0.37	0.16	171	1	-0.01	8	960	210	0.15	-2	3	46	-20	-0.01	-10	-14	-10	392	
212543	A02-010	Bonanza	191.00	192.00	1.00	E212543	<0.01	0.1	0.94	1	<10	1950	0.6	-2	-0.01	0.6	9	1	86	4.65	-10	1	0.37	0.16	171	1	-0.01	8	960	210	0.15	-2	3	46	-20	-0.01	-10	-14	-10	392	
212544	A02-010	Bonanza	192.00	193.00	1.00	E212544	<0.01	0.7	0.92	18	<10	40	-0.55	-22	-0.01	-0.55	18	2	33	-0.47	-10	1	0.12	-0.10	-0.01	0.28	4	0.02	4	130	50	2.80	5	3	74	-20	-0.01	-10	-14	-10	342
212545	A02-010	Bonanza	193.00	194.00	1.00	E212545	<0.01	0.4	0.86	8	<10	50	0.7	-2	-0.01	0.7	10	1	1	6.01	-10	1	0.3	0.1	13	0.98	-10	0.01	5	1010	37	1.83	3	3	3	-20	-0.01	-10	-20	-10	815
212546	A02-010	Bonanza	194.00	195.00	1.00	E212546	<0.01	0.3	0.79	9	<10	560	0.7	-2	-0.01	0.7	9	1	8	7.8	-10	1	0.3	0.1	13	0.98	-10	0.01	5	1010	37	1.83	3	3	3	-20	-0.01	-10	-20	-10	815
212547	A02-010	Bonanza	195.00	196.00	1.00	E212547	<0.01	0.4	0.92	6	<10	290	0.8	-2	-0.01	0.8	12	1	12	4.45	-10	1	0.32	0.16	171	0.01	0.02	3	1000	51	0.96	-2	3	22	-20	-0.01	-10	-20	-10	218	
212548	A02-010	Bonanza	196.00	197.00	1.00	E212548	<0.01	0.2	0.81	11	<10	290	0.8	-2	-0.01	0.8	12	1	12	4.45	-10	1	0.32	0.16	171	0.01	0.02	3	1000	51	0.96	-2	3	22	-20	-0.01	-10	-20	-10	218	
212549	A02-010	Bonanza	197.00	198.00	1.00	E212549	0.02	0.3	0.85	-2	<10	220	-0.55	-22	-0.01	-0.55	4	1	3	1.05	-10	1	0.04	-0.01	18	-0.01	1	0.0	18	98	-10	-2	77	-20	-0.01	-10	-10	-10	10		
212550	A02-010	Bonanza	198.00	199.00	1.00	E212550	0.02	0.3	0.84	-2	<10	510	-0.55	-44	-0.01	-0.55	0.2	1	18	0.58	-10	1	0.02	-0.01	12	-2	-0.01	3	50	4	0.53	2	1	16	-20	-0.01	-10	-12	-10	4	
212551	A02-010	Bonanza	199.00	200.00	1.00	E212551	<0.01	-0.2	1.48	87	<10	80	-0.55	-22	-0.01	-0.55	0.8	32	1	0.1	0.75	-0.01	0.01	100	1	0.0	100	1	0.0	100	1	0.0	100	1	0.0	100	1	0.0	100	1	0.0
212552	A02-010	Bonanza	200.00	201.00	1.00	E212552	<0.01	-0.2	0.77	4	<10	770	-0.55	-22	-0.01	-0.55	3	1	43	0.63	-10	1	0.1	0.15	185	-0.01	0.01	3	220	2	0.22	-2	2	2	-20	-0.01	-10	-13	-10	14	
212553	A02-010	Bonanza	201.00	202.00	1.00	E212553	<0.01	0.3	0.85	-2	<10	910	-0.55	-22	-0.01	-0.55	13	1	36	0.13	-10	1	0.21	0.15	185	-0.01	0.01	3	220	2	0.22	-2	2	2	-20	-0.01	-10	-13	-10	14	
212554	A02-010	Bonanza	202.00	203.00	1.00	E212554	<0.01	0.1	0.86	1	<10	1300	-0.55	-22	-0.01	-0.55	1	1	2	0.42	-10	1	0.21	0.15	185	-0.01	0.01	3	220	2	0.22	-2	2	2	-20	-0.01	-10	-13	-10	14	
212555	A02-010	Bonanza	203.00	204.00	1.00	E212555	<0.01	0.5	0.8	5	<10	520	0.6	-2	-0.01	0.6	13	1	64	6.85	-10	1	0.23	0.16	171	0.01	0.02	3	1000	51	0.96	-2	3	22	-20	-0.01	-10	-20	-10	218	
212556	A02-010	Bonanza	204.00	205.00	1.00	E212556	<0.01	0.6	0.8	5	<10	520	0.6	-2	-0.01	0.6	13	1	64	6.85	-10	1	0.23	0.16	171	0.01	0.02	3	1000	51	0.96	-2	3	22	-20	-0.01	-10	-20	-10	218	
212557	A02-010	Bonanza	205.00	206.00	1.00	E212557	<0.01	0.6	0.8	5	<10	520	0.6	-2	-0.01	0.6	13	1	64	6.85	-10	1	0.23	0.16	171	0.01	0.02	3	1000	51	0.96	-2	3	22	-20	-0.01	-10	-20	-10	218	
212558	A02-010	Bonanza	206.00	207.00	1.00	E212558	<0.01	1.8	1.03	80	<10	16	-0.55	-20	-0.01	-0.55	20	-1	175	6.86	-10	1	0.01	-0.01	10	-0.01	0.01	3	50	101	27	25	1	14	-20	-0.01	-10	-17	-10	6	
212559	A02-010	Bonanza	207.00	208.00	1.00	E212559	0.05	1.7	0.97	16	<10	140	-0.55	-44	-0.01	-0.55	5	5	50	1	-10																				

214404	A07-013	Bonanza	55,00	57,00	2,00	E214404	0,01	0,5	0,58	4	<10	1010	-0,5	<-2	0,05	4	2	4	7,1	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214405	A07-013	Bonanza	57,00	59,00	2,00	E214405	0,01	0,7	0,71	1	<10	760	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214406	A07-013	Bonanza	59,00	61,00	2,00	E214406	-0,01	0,5	0,62	18	<10	1010	-0,5	<-2	0,05	4	2	4	7,1	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214407	A07-013	Bonanza	61,00	63,00	2,00	E214407	-0,01	0,2	0,56	5	<10	350	-0,7	<-3	0,38	12,2	11	1	0,7	5,39	<-10	<-1	0,23	<-1	0,68	170	<-1	<-0,01	3	990	25	0,13	<-3	4	29	<-20	0,03	<-10	97	<-10	121
214408	A07-013	Bonanza	63,00	65,00	2,00	E214408	1	1	1	1	<10	1150	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214409	A07-013	Bonanza	64,00	66,00	2,00	E214409	10,4	5,4	0,31	63	<10	78	-0,5	<-2	0,18	1,28	26	8	366	3,68	<-10	<-1	0,09	<-1	0,38	372	0,02	<-1	0,0	116	1,82	40	2	22	<-20	0,01	<-10	96	<-10	126	
214410	A07-013	Bonanza	66,00	68,00	2,00	E214410	7,2	1,8	0,48	10	<10	1150	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214411	A07-013	Bonanza	68,00	70,00	2,00	E214411	0,08	0,4	0,55	4	<10	1170	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214412	A07-013	Bonanza	70,00	72,00	2,00	E214412	25,8	15,8	0,26	522	<10	30	-0,5	<-2	0,15	-0,05	7	42	43	3,34	<-10	<-1	0,17	<-1	0,05	177	<-1	<-0,01	3	410	8	2,26	36	1	5	<-20	<-10	111	<-10	140	
214413	A07-013	Bonanza	72,00	74,00	2,00	E214413	0,08	0,4	0,56	2	<10	2900	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214414	A07-013	Bonanza	74,00	76,00	2,00	E214414	0,04	0,4	0,56	2	<10	2900	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214415	A07-013	Bonanza	76,00	78,00	2,00	E214415	0,06	0,7	0,61	9	<10	<-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128		
214416	A07-013	Bonanza	78,00	80,00	2,00	E214416	0,04	0,6	0,61	9	<10	<-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128		
214417	A07-013	Bonanza	80,00	82,00	2,00	E214417	0,01	1,2	0,58	9	<10	350	-0,5	<-2	0,18	-0,05	14	2	82	8,89	<-10	<-1	0,26	<-1	0,15	329	1	<-0,01	3	820	85	0,09	2	4	56	<-20	0,02	<-10	91	<-10	141
214418	A07-013	Bonanza	82,00	84,00	2,00	E214418	0,0	0,5	0,56	6	<10	1170	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214419	A07-013	Bonanza	84,00	86,00	2,00	E214419	-0,01	<-0,2	0,62	<-2	<10	320	0,6	<-2	0,14	-0,05	5	1	5	1,05	<-10	<-1	0,31	<-1	0,34	556	<-1	<-0,01	3	1940	47	0,05	<-2	3	51	<-20	<-10	101	<-10	146	
214420	A07-013	Bonanza	86,00	88,00	2,00	E214420	0,06	<-0,2	0,56	3	<10	1600	-0,4	<-2	0,18	-0,05	1	1	24	3,44	<-10	<-1	0,28	<-1	0,31	200	<-1	<-0,01	2	850	133	0,06	<-2	3	72	<-20	<-10	101	<-10	146	
214421	A07-013	Bonanza	88,00	90,00	2,00	E214421	-0,01	0,2	0,62	1	<10	1600	-0,4	<-2	0,18	-0,05	1	1	24	3,44	<-10	<-1	0,28	<-1	0,31	200	<-1	<-0,01	2	850	133	0,06	<-2	3	72	<-20	<-10	101	<-10	146	
214422	A07-013	Bonanza	90,00	92,00	2,00	E214422	-0,01	<-0,2	0,68	2	<10	510	0,8	<-2	0,84	-11	8	2	4	4,87	<-10	<-1	0,27	<-1	0,129	2520	<-1	<-0,01	3	1190	56	0,03	<-2	3	63	<-20	0,02	<-10	95	<-10	115
214423	A07-013	Bonanza	92,00	94,00	2,00	E214423	-0,02	0,75	<-2	<10	740	-0,5	<-2	0,15	-0,05	3	2	8	8,07	<-10	<-1	0,25	<-1	0,181	400	<-1	<-0,01	3	1190	56	0,03	<-2	3	63	<-20	0,02	<-10	95	<-10	115	
214424	A07-013	Bonanza	94,00	96,00	2,00	E214424	0,01	0,7	0,62	10	<10	740	-0,5	<-2	0,15	-0,05	3	2	8	8,07	<-10	<-1	0,25	<-1	0,181	400	<-1	<-0,01	3	1190	56	0,03	<-2	3	63	<-20	0,02	<-10	95	<-10	115
214425	A07-013	Bonanza	96,00	98,00	2,00	E214425	-0,01	0,7	0,62	10	<10	680	0,6	<-2	0,15	10,6	10	2	4	4,04	<-10	<-1	0,25	<-1	0,81	1145	<-1	<-0,01	3	1240	77	0,15	<-2	3	65	<-20	<-10	101	<-10	145	
214426	A07-013	Bonanza	98,00	100,00	2,00	E214426	-0,01	0,2	0,62	1	<10	680	0,6	<-2	0,15	10,6	10	2	4	4,04	<-10	<-1	0,25	<-1	0,81	1145	<-1	<-0,01	3	1240	77	0,15	<-2	3	65	<-20	<-10	101	<-10	145	
214427	A07-013	Bonanza	100,00	102,00	2,00	E214427	0,01	<-0,2	1,55	6	<10	50	-0,5	<-2	0,84	-0,05	7	34	37	3,36	<-10	<-1	0,10	<-1	0,77	508	4	0,08	2	61	0,05	<-2	4	38	<-20	0,12	<-10	96	<-10	144	
214428	A07-013	Bonanza	102,00	104,00	2,00	E214428	-0,01	5,5	0,74	151	<10	30	-0,5	<-2	0,15	-0,05	7	42	43	3,34	<-10	<-1	0,17	<-1	0,05	177	<-1	<-0,01	3	410	8	2,26	36	1	5	<-20	<-10	111	<-10	140	
214429	A07-013	Bonanza	104,00	106,00	2,00	E214429	0,01	0,5	0,71	47	<10	46	-0,5	<-2	0,18	-0,05	14	21	69	4,54	<-10	<-1	0,21	<-1	0,152	360	1	0,07	3	1001	161	0,17	<-2	4	60	<-20	<-10	101	<-10	140	
214430	A07-013	Bonanza	106,00	108,00	2,00	E214430	-0,01	<-0,2	1,03	2	<10	830	0,6	<-2	0,17	0,2	2	1	3	5,36	<-10	<-1	0,26	<-1	0,146	3530	<-1	0,01	2	1190	36	0,05	<-2	5	53	<-20	<-10	101	<-10	140	
214431	A07-013	Bonanza	108,00	110,00	2,00	E214431	-0,01	1,1	1,71	1	<10	1170	-0,5	<-2	0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128	
214432	A07-013	Bonanza	110,00	112,00	2,00	E214432	-0,01	<-0,2	1,89	2	<10	1220	-0,7	<-3	0,47	1,7	14	2	6	6,05	<-10	<-1	0,24	<-1	0,18	4000	<-1	<-0,01	3	1140	42	0,05	<-2	6	61	<-20	<-10	101	<-10	140	
214433	A07-013	Bonanza	112,00	114,00	2,00	E214433	-0,01	<-0,2	0,77	25	<10	1150	-0,5	<-2	0,07	2,1	5	2	3	3,87	<-10	<-1	0,18	<-1	0,43	868	<-1	<-0,01	3	1660	148	0,06	5	4	189	<-20	<-10	101	<-10	140	
214434	A07-013	Bonanza	114,00	116,00	2,00	E214434	-0,01	<-0,2	1,14	11	<10	710	-0,5	<-2	0,38	-0,05	1	2	1	2,8	<-10	<-1	0,24	<-1	0,19	374	2	<-0,01	2	790	95	0,07	<-2	4	74	<-20	0,03	<-10	95	<-10	128
214435	A07-013	Bonanza	116,00	118,00	2,00	E214435	-0,01	0,2	0,8	5	<10	1630	-0,5	<-2	0,33	-0,05	2	2	3	1	4	<-10	<-1	0,04	<-1	0,104	<-1	<-0,01	3	820	86	0,11	<-2	2	96	<-20	0,02	<-10	91	<-10	141
214436	A07-013	Bonanza	118,00	120,00	2,00	E214436	-0,01	<-0,2	0,51	5	<10	1440	-0,5	<-2	0,15	-0,05	2	2	3	3,38	<-10	<-1	0,16	<-1	0,04	77	<-1	<-0,01	3	1310	85	0,07	<-2	4	44	<-20	<-10	101	<-10	141	
214437	A07-013	Bonanza	120,00	122,00	2,00	E214437	-0,01	0,48	0,5	1	<10	1440	-0,5	<-2	0,15	-0,05	2	2	3	3,38	<-10	<-1	0,16	<-1	0,04	77	<-1	<-0,01	3	1310	85	0,07	<-2	4	44	<-20	<-10	101	<-10	141	
214438	A07-013	Bonanza	122,00	124,00	2,00	E214438	-0,01	<-0,2	1,53	5	<10	38	-0,5	<-2	0,80	-0,05	8	34	37	3,35	<-10	<-1	0,11	<-1	0,76	506	4	0,08	81	3,05	<-2	4	37	<-20	0,13	<-10	96	<-10	142		
214439	A07-013	Bonanza	124,00	126,00	2,00	E214439	0,01	0,5	0,56	6	<10	2160																													

215507	AD7-014	Bonanza	96.50	96.50	1.50	E215507	-0.01	2.9	0.63	31	<10	90	-0.55	7	-0.01	-0.55	13	<1	76	7.35	<10	<1	-0.01	-0.01	-5	3	-0.01	4	60	50	3.31	5	1	85	-20	-0.02	<10	13	<1	21	
215508	AD7-014	Bonanza	96.50	96.50	1.50	E215508	<0.01	1	0.63	10	<10	90	-0.55	7	-0.01	-0.55	13	<1	76	7.35	<10	<1	-0.01	-0.01	-5	3	-0.01	4	60	50	3.31	5	1	85	-20	-0.02	<10	13	<1	21	
215509	AD7-014	Bonanza	96.50	96.50	1.50	E215509	-0.01	2.3	0.5	5	<10	40	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215510	AD7-014	Bonanza	96.50	96.50	1.50	E215510	-0.01	6.8	0.52	8	<10	90	-0.55	7	0.52	16.2	17	<1	66	6.59	<10	<1	-0.2	-0.2	113	143	0.08	3	910	48	0.15	3	6	34	-20	-0.02	<10	13	<1	400	
215511	AD7-014	Bonanza	96.50	96.50	1.50	E215511	-0.01	1.6	0.5	8	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215512	AD7-014	Bonanza	105.00	107.00	2.00	E215512	-0.01	3.4	0.5	8	<10	790	0.4	14	0.33	12	7	<1	20	4.87	<10	<1	-0.22	-0.22	0.41	602	2	710	143	0.08	3	6	34	-20	-0.02	<10	13	<1	1320		
215513	AD7-014	Bonanza	105.00	107.00	2.00	E215513	-0.01	0.3	0.6	7	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215514	AD7-014	Bonanza	109.00	111.00	2.00	E215514	-0.01	1.4	0.59	10	<10	980	-0.55	7	0.05	0.05	3	1	21	1.79	<10	<1	-0.01	-0.01	23	4	-0.01	1	200	171	0.32	3	2	364	-20	-0.01	<10	13	<1	97	
215515	AD7-014	Bonanza	111.00	112.00	1.00	E215515	-0.01	3.6	0.7	33	<10	50	-0.55	8	0.01	-0.05	7	1	156	1.34	<10	<1	-0.01	-0.01	10	4	-0.01	1	150	97	3.22	18	1	199	-20	-0.02	<10	13	<1	56	
215516	AD7-014	Bonanza	112.00	113.00	1.00	E215516	-0.01	1.2	0.4	20	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215517	AD7-014	Bonanza	113.00	114.00	1.00	E215517	-0.01	14.6	0.94	465	<10	30	-0.55	2	0.15	0.05	7	25	43	3.2	<10	<1	0.18	0.18	0.08	118	5	-0.01	15	480	6	2.05	27	1	5	-20	-0.01	<10	13	<1	44
215518	AD7-014	Bonanza	113.00	114.00	1.00	E215518	-0.01	4.7	0.33	27	<10	90	-0.55	7	0.01	-0.05	15	1	144	6.14	<10	<1	-0.01	-0.01	10	5	-0.01	3	304	64	0.3	4	1	52	-20	-0.02	<10	13	<1	77	
215519	AD7-014	Bonanza	115.00	115.00	1.00	E215519	-0.01	14.08	0.33	4	<10	810	-0.55	7	0.01	-0.05	15	1	144	6.14	<10	<1	-0.01	-0.01	10	5	-0.01	3	304	64	0.3	4	1	52	-20	-0.02	<10	13	<1	77	
215520	AD7-014	Bonanza	115.00	117.00	2.00	E215520	-0.01	0.5	0.64	7	<10	820	-0.55	3	0.02	0.02	3	1	8	2.28	<10	<1	-0.01	-0.01	30	2	-0.01	1	150	93	0.21	2	1	174	-20	-0.01	<10	13	<1	22	
215521	AD7-014	Bonanza	115.00	117.00	2.00	E215521	-0.01	17.0	0.3	24	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215522	AD7-014	Bonanza	115.00	121.00	2.00	E215522	-0.01	0.5	0.53	17	<10	720	0.5	<1	0.01	-0.05	9	1	6	7.34	<10	<1	-0.21	-0.21	0.63	878	1	0.5	1	660	54	0.07	<2	2	58	-20	-0.01	<10	13	<1	278
215523	AD7-014	Bonanza	136.00	138.00	2.00	E215523	-0.01	-0.2	0.53	23	<10	30	-0.55	2	2.65	0.05	5	1	8	2.54	<10	<1	-0.17	-0.17	0.87	983	1	0.51	1	830	8	0.08	<2	3	48	-20	-0.01	<10	13	<1	47
215524	AD7-014	Bonanza	138.00	140.00	2.00	E215524	-0.01	0.3	0.63	81	<10	160	-0.55	6	0.12	-0.04	6	<1	1	160	-0.55	<1	-0.01	-0.01	33	8	-0.01	2	980	29	1.49	1	2	170	-20	-0.01	<10	13	<1	10	
215525	AD7-014	Bonanza	140.00	142.00	2.00	E215525	-0.01	0.5	0.84	75	<10	170	-0.55	2	1.58	-0.05	6	1	18	8.63	<10	<1	-0.22	-0.22	0.54	831	<1	0.51	1	680	22	0.34	<2	2	38	-20	-0.01	<10	13	<1	83
215526	AD7-014	Bonanza	142.00	144.00	2.00	E215526	-0.01	0.8	0.95	116	<10	20	-0.55	<1	0.2	-0.05	8	1	8	8.62	<10	<1	-0.32	-0.32	0.66	886	<1	0.51	1	680	22	0.34	<2	2	38	-20	-0.01	<10	13	<1	83
215527	AD7-014	Bonanza	144.00	146.00	2.00	E215527	-0.01	0.8	0.95	116	<10	20	-0.55	<1	0.2	-0.05	8	1	8	8.62	<10	<1	-0.32	-0.32	0.66	886	<1	0.51	1	680	22	0.34	<2	2	38	-20	-0.01	<10	13	<1	83
215528	AD7-014	Bonanza	144.00	148.00	2.00	E215528	-0.01	2.8	1.18	8	<10	260	-0.55	8	0.28	-0.06	6	<1	18	8.64	<10	<1	-0.01	-0.01	6	2	-0.01	1210	582	0.88	3	2	70	-20	-0.01	<10	13	<1	40		
215529	AD7-014	Bonanza	145.00	147.00	2.00	E215529	-0.01	0.1	0.44	2	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215530	AD7-014	Bonanza	150.00	151.00	1.00	E215530	-0.01	0.67	1.08	9	<10	1020	-0.55	8	0.38	-0.04	1	1	38	2.26	<10	<1	-0.01	-0.01	23	2	-0.01	1180	96	0.05	3	3	95	-20	-0.02	<10	13	<1	44		
215531	AD7-014	Bonanza	150.00	152.00	1.00	E215531	-0.01	1.5	0.81	8	<10	1470	-0.55	8	0.14	-0.05	2	1	74	5.5	<10	<1	-0.01	-0.01	20	2	-0.01	1	480	9	0.37	4	1	40	-20	-0.02	<10	13	<1	47	
215532	AD7-014	Bonanza	150.00	152.00	1.00	E215532	-0.01	1.62	1.2	8	<10	90	-0.55	2	0.31	-0.05	7	34	3	53	<10	<1	-0.11	-0.11	0.74	49	<1	0.09	2	22	0.1	0.3	1	45	-20	-0.01	<10	13	<1	61	
215533	AD7-014	Bonanza	152.00	153.00	1.00	E215533	-0.01	1.3	0.73	8	<10	1370	-0.55	5	0.13	-0.05	2	1	64	5.4	<10	<1	-0.01	-0.01	36	1	-0.01	3	550	10	0.37	4	4	34	-20	-0.04	<10	13	<1	47	
215534	AD7-014	Bonanza	153.00	154.00	1.00	E215534	-0.01	0.3	1.07	9	<10	1750	-0.55	6	0.18	-0.05	3	<1	1	1750	-0.55	<1	-0.01	-0.01	33	8	-0.01	2	980	29	1.49	1	2	170	-20	-0.01	<10	13	<1	10	
215535	AD7-014	Bonanza	154.00	155.00	1.00	E215535	-0.01	2	1.13	6	<10	110	-0.55	4	0.18	-0.05	3	<1	1	10.87	<10	<1	-0.01	-0.01	<5	9	-0.01	<1	300	238	0.87	<2	2	123	-20	-0.01	<10	13	<1	6	
215536	AD7-014	Bonanza	155.00	156.00	1.00	E215536	-0.01	2.2	1.1	38	<10	480	-0.55	4	0.18	-0.05	3	<1	12	0.4	<10	<1	-0.01	-0.01	<5	17	-0.01	2	880	850	0.47	2	2	308	-20	-0.01	<10	13	<1	10	
215537	AD7-014	Bonanza	156.00	157.00	1.00	E215537	-0.01	0.3	1.21	7	<10	160	-0.55	6	0.12	-0.04	6	<1	1	160	-0.55	<1	-0.01	-0.01	33	8	-0.01	2	980	29	1.49	1	2	170	-20	-0.01	<10	13	<1	10	
215538	AD7-014	Bonanza	158.00	160.00	2.00	E215538	-0.01	2.1	0.55	12	<10	1150	-0.55	7	0.21	-0.05	3	1	6	1.15	<10	<1	-0.13	-0.13	0.22	22	5	-0.01	1	750	213	0.26	4	2	120	-20	-0.01	<10	13	<1	35
215539	AD7-014	Bonanza	160.00	162.00	2.00	E215539	-0.01	1.3	1.35	9	<10	120	0.7	3	0.37	15.3	10	2	15	5.43	<10	<1	-0.23	-0.23	0.66	100	1	-0.01	3	1150	267	0.08	4	4	34	-20	-0.03	<10	13	<1	221
215540	AD7-015	Bonanza	3.00	4.00	1.00	E215540	0.05	2.8	0.78	12	<10	430	-0.55	3	0.06	-0.05	2	2	20	0.95	<10	<1	-0.01	-0.01	0.04	44	11	0.51	<1	80	3	0.59	5	1	89	-20	-0.01	<10	13	<1	9
215541	AD7-015	Bonanza	4.00	5.00	1.00	E215541	0.05	4.0	0.92	14	<10	90	-0.55	7	0.1	0.7	7	<1	73	7.35	<10	<1	-0.12	-0.13	189	1	-0.01	3	250	166	0.34	3	5	40	-20	-0.02	<10	13	<1	687	
215542	AD7-015	Bonanza	5.00	6.00	1.00	E215542	0.05	0.29	0.52	0.95	<10	140	-0.55	6	0.18	-0.05	7	15	77	1.82	<10	<1	-0.01	-0.01	<14	14	0.5	<1	0	3.38	10	<1	8	-20	-0.01	<10	13	<1	2		
215543	AD7-015</																																								

[illegible]

211859	A07-018	Bonanza	85.00	86.00	1.00	E211859	0.01	-0.2	0.81	-2	<10	1320	-0.5	-2	0.08	-0.5	2	4	5.17	-10	<1.00	<1.00	-0.01	7	7	-0.00	<1	1460	198	0.1	-2	1	89	-20	<0.01	<1.0	9	<10	12		
211860	A07-018	Bonanza	86.00	87.00	1.00	E211860	0.01	-0.2	0.81	-2	<10	290	-0.5	8	0.01	-0.5	1	1	7	0.89	-10	<1.00	<1.00	-0.01	1	1	-0.01	<1	1140	0.1	-2	1	61	-0.01	<1.0	<10	17	<10	13		
211861	A07-018	Bonanza	86.00	90.00	2.00	E211861	0.01	-0.2	1.65	-25	<10	490	-0.5	-2	0.01	-0.5	1	1	3	0.13	-10	<1.00	<1.00	-0.01	-5	-1	-0.01	<1	140	150	0.09	-2	220	-20	<0.01	<1.0	19	<10	4		
211862	A07-018	Bonanza	90.00	91.00	1.00	E211862	0.03	0.1	1.14	10	<10	170	-0.5	8	0.01	-0.5	1	1	36	1.92	-10	<1.00	<1.00	-0.01	-4	-0.01	3	70	516	1.77	-2	3	105	-20	<0.01	<1.0	38	<10	6		
211863	A07-018	Bonanza	91.00	92.00	1.00	E211863	0.1	0.2	1.91	1	<10	290	-0.5	8	0.01	-0.5	1	1	6	0.79	-10	<1.00	<1.00	-0.01	0	0	-0.01	<1	130	337	0.74	-1	1	100	-10	<1.0	<1.0	24	<10	8	
211864	A07-018	Bonanza	92.00	93.00	1.00	E211864	0.05	0.6	0.19	2	<10	1080	-0.5	3	-0.00	-0.6	3	4	19	0.62	-10	<1.00	<1.00	-0.01	31	8	-0.01	2	30	336	0.2	-3	41	-69	-0.01	<1.0	5	<10	8		
211865	A07-018	Bonanza	93.00	94.00	1.00	E211865	0.07	0.8	0.18	2	<10	560	-0.5	3	-0.00	-0.6	3	4	19	0.62	-10	<1.00	<1.00	-0.01	31	8	-0.01	2	30	336	0.2	-3	41	-69	-0.01	<1.0	5	<10	8		
211866	A07-018	Bonanza	94.00	95.00	1.00	E211866	0.06	0.8	0.3	4	<10	130	-0.5	2	-0.00	-0.6	5	5	10	1.02	-10	<1.00	<1.00	-0.01	38	20	-0.01	2	30	5	0.57	-2	60	-0.01	<1.0	7	<10	4			
211867	A07-018	Bonanza	95.00	96.00	1.00	E211867	14.4	9.1	0.94	511	<10	150	-0.5	-2	0.16	-0.5	9	29	46	3.86	-10	3	0.53	1	0.1	170	5	0.01	16	510	8	2.29	-26	3	13	-20	<1.0	<1.0	30	<10	46
211868	A07-018	Bonanza	96.00	97.00	1.00	E211868	0.07	0.5	1.3	1	<10	290	-0.5	8	0.01	-0.5	1	1	6	0.79	-10	<1.00	<1.00	-0.01	0	0	-0.01	<1	130	337	0.74	-1	1	100	-10	<1.0	<1.0	24	<10	8	
211869	A07-018	Bonanza	96.00	97.00	1.00	E211869	0.43	10.8	0.83	87	<10	50	-0.5	10	-0.01	-0.7	26	3	284	9.2	-10	<1.00	<1.00	-0.01	22	24	-0.01	7	60	380	6.3	-43	1	80	-20	<0.01	<1.0	16	<10	20	
211870	A07-018	Bonanza	97.00	98.00	1.00	E211870	0.02	0.3	1.96	13	<10	290	-0.5	8	0.01	-0.5	3	2	6	0.79	-10	<1.00	<1.00	-0.01	0	0	-0.01	<1	130	337	0.74	-1	1	100	-10	<1.0	<1.0	24	<10	8	
211871	A07-018	Bonanza	98.00	99.00	1.00	E211871	0.1	0.2	2.18	1	<10	290	-0.5	8	0.01	-0.5	1	1	6	0.79	-10	<1.00	<1.00	-0.01	0	0	-0.01	<1	130	337	0.74	-1	1	100	-10	<1.0	<1.0	24	<10	8	
211872	A07-018	Bonanza	100.00	102.00	2.00	E211872	0.01	0.8	1.01	5	<10	810	-0.5	2	0.17	-0.5	5	3	3	3.59	-10	<1.0	<1.0	0.03	5	1	-0.01	2	760	137	0.45	-2	8	84	-20	0.02	<1.0	88	<10	30	
211873	A07-018	Bonanza	102.00	103.00	1.00	E211873	0.01	0.8	1.01	5	<10	810	-0.5	2	0.17	-0.5	5	3	3	3.59	-10	<1.0	<1.0	0.03	5	1	-0.01	2	760	137	0.45	-2	8	84	-20	0.02	<1.0	88	<10	30	
211874	A07-018	Bonanza	104.00	105.00	1.00	E211874	<0.01	0.6	0.98	4	<10	1620	-0.5	-2	0.01	-0.6	1	1	25	0.69	-10	<1.00	<1.00	-0.01	21	1	0	-0.01	<1	30	484	0.21	-2	3	112	-20	<1.0	<1.0	27	<10	105
211875	A07-018	Bonanza	105.00	106.00	1.00	E211875	0.01	0.8	1.18	12	<10	450	-0.5	-2	0.01	-0.6	4	1	46	0.48	-10	<1.00	<1.00	-0.01	7	8	-0.01	<1	180	1210	0.46	-2	3	75	-20	<0.01	<1.0	22	<10	23	
211876	A07-018	Bonanza	106.00	107.00	1.00	E211876	0.02	0.8	0.88	47	<10	290	-0.5	8	0.01	-0.5	1	1	6	0.79	-10	<1.00	<1.00	-0.01	0	0	-0.01	<1	130	337	0.74	-1	1	100	-10	<1.0	<1.0	24	<10	8	
211877	A07-018	Bonanza	107.00	108.00	1.00	E211877	0.01	0.1	0.83	17	<10	30	-0.5	5	-0.01	-0.6	0.5	1	86	1.73	-10	<1.00	<1.00	-0.01	13	6	-0.01	1	90	1160	1.84	8	2	76	-20	<0.01	<1.0	17	<10	81	
211878	A07-018	Bonanza	108.00	109.00	1.00	E211878	0.06	4	0.58	20	<10	80	-0.5	4	-0.01	-0.6	0.5	1	85	1.65	-10	<1.00	<1.00	-0.01	20	48	-0.01	1	200	528	0.71	-17	1	129	-20	<0.01	<1.0	13	<10	4	
211879	A07-018	Bonanza	109.00	110.00	1.00	E211879	0.1	0.3	1.03	8	<10	1110	-0.5	2	-0.01	-0.6	1	1	28	0.98	-10	<1.00	<1.00	-0.01	22	15	-0.01	2	130	255	0.36	-2	2	147	-20	<0.01	<1.0	11	<10	215	
211880	A07-018	Bonanza	110.00	111.00	1.00	E211880	0.01	2.8	0.93	8	<10	1110	-0.5	2	-0.01	-0.6	1	1	28	0.98	-10	<1.00	<1.00	-0.01	22	15	-0.01	2	130	255	0.36	-2	2	147	-20	<0.01	<1.0	11	<10	163	
211881	A07-018	Bonanza	111.00	112.00	1.00	E211881	0.02	0.6	1.28	1	<10	270	-0.5	7	0.08	-0.7	11	2	32	1.19	-10	<1.00	<1.00	-0.01	14	0	-0.01	<1	140	0.1	0.68	-2	3	65	-20	<0.01	<1.0	24	<10	153	
211882	A07-018	Bonanza	112.00	113.00	1.00	E211882	0.01	6.2	2.46	4	<10	220	-0.5	3	1.22	-0.6	9	39	41	3.71	-10	1	0.26	0	0.83	0.73	4	0.32	190	0.04	-2	7	80	-0.01	<1.0	19	<10	74	<10	47	
211883	A07-018	Bonanza	112.00	113.00	1.00	E211883	0.03	4	1.13	8	<10	530	-0.5	7	0.02	-0.6	4	30	37	1.10	-10	<1.00	<1.00	-0.01	22	31	-0.01	2	160	248	0.57	-2	3	94	-20	<0.01	<1.0	24	<10	172	
211884	A07-018	Bonanza	113.00	114.00	1.00	E211884	0.03	4	1.08	12	<10	270	-0.5	7	0.08	-0.7	11	2	32	1.19	-10	<1.00	<1.00	-0.01	14	0	-0.01	<1	140	0.1	0.68	-2	3	65	-20	<0.01	<1.0	24	<10	153	
211885	A07-018	Bonanza	114.00	115.00	1.00	E211885	0.03	1.3	1.28	-2	<10	510	-0.5	-2	0.01	-0.6	2	<1	10	0.15	-10	<1.00	<1.00	-0.01	5	1	-0.01	<1	420	317	0.12	-2	3	326	-20	<0.01	<1.0	13	<10	252	
211886	A07-018	Bonanza	115.00	117.00	2.00	E211886	0.07	1	0.9	17	<10	170	-0.5	1	0.17	-0.5	14	2	1	6.69	-10	0.24	0	0.01	140	0.01	0.00	700	473	0.21	-2	8	0.01	<1.0	<1.0	97	<10	9			
211887	A07-018	Bonanza	117.00	119.00	2.00	E211887	0.01	1.6	0.67	-2	<10	960	-0.5	1	0.1	-0.5	18	2	16	8.31	-10	1	0.17	0	0.04	88	2	0.01	1	1480	5	0.34	-2	4	58	-20	0.04	<1.0	125	<10	53
211888	A07-018	Bonanza	119.00	121.00	2.00	E211888	0.01	0.8	1.96	-22	<10	480	-0.5	3	0.01	-0.6	-2	2	18	0.92	-10	1	0.01	<1.00	-0.01	19	7	-0.01	<1	290	48	0.14	-2	2	143	-20	<0.01	<1.0	47	<10	26
211889	A07-018	Bonanza	121.00	122.00	1.00	E211889	0.08	0.4	0.95	14	<10	290	-0.5	8	0.01	-0.5	1	1	7	0.89	-10	<1.00	<1.00	-0.01	4	6	-0.01	<1	62	0.01	-2	2	305	-20	<0.01	<1.0	17	<10	132		
211890	A07-018	Bonanza	122.00	124.00	2.00	E211890	0.01	2.3	1.1	4	<10	100	0.8	2	0.34	0.7	23	2	6	0.77	-10	<1.00	<1.00	-0.01	5	0	-0.01	<1	942	1	280	361	0.06	-2	7	26	-0.01	<1.0	113	<10	2400
211891	A07-018	Bonanza	124.00	126.00	2.00	E211891	0.01	2.3	1.04	5	<10	280	-0.5	7	0.26	-0.6	19	2	14	1.74	-10	1	0.32	0	0.38	646	0.03	-3	780	265	0.03	-2	7	22	-20	0.02	<1.0	124	<10	1420	
211892	A07-018	Bonanza	126.00	128.00	2.00	E211892	0.01	2.6	1.45	2	<10	280	-0.5	7	0.26	-0.6	19	2	14	1.74	-10	1	0.32	0	0.38	646	0.03	-3	780	265	0.03	-2	7	22	-20	0.02	<1.0	124	<10	1420	
211893	A07-018	Bonanza	128.00	129.00	1.00	E211893	<0.01	-0.2	1.3	13	<10	380	-0.5	2	0.01	-0.6	2	<1	1	0.68	-10	<1.00	<1.00	-0.01	<1	<1.00	<1	<1	70	161	0.02	-2	2	146	-20	<0.01	<1.0	<1.0	8	<10	8
211894	A07-018	Bonanza	130.00	131.00	1.00	E211894	0.01	0.3	0.56	1	<10	770	-0.5	3	-0.01	-0.6	5	2	27	0.4	-10	<1.00	<1.00	-0.01	13	58	-0.01	<1	10	60	0.26	-7	1	82	-20	<0.01	<1.0	<1.0	13	<10	4
211895	A07-018	Bonanza	130.00																																						

[illegible]

212536	A07-025	Bonanza	12.00	14.00	2.00	E212536	-0.01	-0.2	0.51	7	<10	510	-0.5	2	1.28	-0.5	5	13	2.34	<10	<1	0.22	10	0.81	854	2	0.52	2	570	9	0.44	<2	3	26	<20	<10	<10	32	<10	73	
212537	A07-025	Bonanza	14.00	16.00	2.00	E212537	<0.01	<0.2	0.3	18	<10	115	-0.5	3	0.36	-0.5	8	2	18	3.03	<10	<1	0.22	10	0.99	100	1	0.52	3	500	12	1.98	<2	3	19	<20	<10	<10	30	<10	99
212538	A07-025	Bonanza	21.00	23.00	2.00	E212538	<0.01	<0.2	0.79	<2	<10	250	-0.4	2	1.37	2	9	1	18	3.99	<10	<1	0.27	20	1.48	210	1	0.52	4	880	25	0.4	<2	4	30	<20	<10	<10	37	<10	402
212539	A07-025	Bonanza	23.00	25.00	2.00	E212539	<0.01	<0.5	0.86	10	<10	40	-0.7	3	1.02	16.5	9	1	14	5.62	<10	<1	0.22	10	1.4	2620	1	<1	860	105	2.84	2	3	28	<20	<10	<10	21	<10	1010	
212540	A07-025	Bonanza	27.00	29.00	2.00	E212540	<0.01	<0.5	0.70	3	<10	120	-0.5	2	0.85	12	1	1	10	3.51	<10	<1	0.22	10	1.04	133	1	<1	600	133	0.4	<2	3	30	<20	<10	<10	33	<10	603	
212541	A07-026	Bonanza	17.00	19.00	1.00	E212541	<0.01	-0.2	1.6	10	<10	90	-0.5	<2	0.88	-0.5	7	34	38	3.33	<10	<1	0.1	<10	0.79	509	4	0.59	32	840	3	0.3	<2	4	43	<20	<10	60	<10	43	
212542	A07-026	Bonanza	17.00	19.00	1.00	E212542	<0.01	<0.5	0.67	3	<10	100	-0.5	<2	0.88	-0.5	7	34	38	3.33	<10	<1	0.1	<10	0.79	509	4	0.59	32	840	3	0.3	<2	4	43	<20	<10	60	<10	43	
212543	A07-026	Bonanza	28.00	29.00	1.00	E212543	0.95	0.8	0.6	38	<10	30	-0.5	<2	0.97	-0.5	19	5	115	4.69	<10	<1	0.02	0.03	34	8	<1	80	66	49	11	1	37	<20	<10	<10	10	<10	43		
212544	A07-026	Bonanza	29.00	30.00	1.00	E212544	0.58	1.7	0.77	80	<10	10	-0.5	24	0.09	-0.5	28	3	12	7.21	<10	<1	0.04	<10	0.01	15	8	<1	330	50	7.43	8	2	36	<20	<10	<10	13	<10	13	
212545	A07-026	Bonanza	30.00	31.00	1.00	E212545	0.11	1.2	0.96	15	<10	10	-0.5	24	0.09	-0.5	28	3	12	7.21	<10	<1	0.04	<10	0.01	15	8	<1	330	50	7.43	8	2	36	<20	<10	<10	13	<10	13	
212546	A07-026	Bonanza	32.00	34.00	2.00	E212546	<0.01	0.3	0.63	32	<10	30	-0.5	22	0.32	-0.4	14	4	44	3.76	<10	<1	0.2	<10	0.5	1345	1	0.01	4	780	208	1.56	<2	3	42	<20	<10	<10	34	<10	885
212547	A07-026	Bonanza	34.00	36.00	2.00	E212547	0.03	<0.2	0.71	2	<10	850	-0.7	0.7	16.9	11	1	1	16	5.96	<10	<1	0.26	<10	1.19	4030	<1	0.01	1120	65	0.13	3	5	53	<20	<10	<10	37	<10	1053	
212548	A07-026	Bonanza	36.00	38.00	2.00	E212548	<0.01	<0.2	0.71	2	<10	850	-0.7	0.7	16.9	11	1	1	16	5.96	<10	<1	0.26	<10	1.19	4030	<1	0.01	1120	65	0.13	3	5	53	<20	<10	<10	37	<10	1053	
212549	A07-026	Bonanza	58.00	60.00	2.00	E212549	0.12	5.8	0.61	18	<10	80	-0.5	6	0.26	-0.5	11	2	32	2.09	<10	<1	0.18	<10	0.69	168	19	0.01	1	860	274	1.5	<2	3	149	<20	<10	<10	18	<10	84
212550	A07-026	Bonanza	60.00	62.00	2.00	E212550	0.14	1.6	1.1	51	<10	10	-0.5	6	0.26	-0.5	11	2	32	2.09	<10	<1	0.18	<10	0.69	168	19	0.01	1	860	274	1.5	<2	3	149	<20	<10	<10	18	<10	84
212551	A07-026	Bonanza	62.00	63.00	1.00	E212551	<0.01	0.3	0.8	113	<10	30	-0.5	11	0.08	-0.5	15	<1	149	2.86	<10	<1	<10	0.01	<10	0.01	<1	<1	80	232	2.6	3	152	<20	<10	<10	25	<10	25		
212552	A07-026	Bonanza	63.00	64.00	1.00	E212552	0.02	0.7	1.25	2	<10	830	-0.5	3	0.04	-0.5	4	1	18	0.55	<10	<1	0.01	<10	<10	0.01	4	<1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18	
212553	A07-026	Bonanza	64.00	65.00	1.00	E212553	<0.01	0.3	0.8	113	<10	30	-0.5	11	0.08	-0.5	15	<1	149	2.86	<10	<1	<10	0.01	<10	0.01	<1	<1	80	232	2.6	3	152	<20	<10	<10	25	<10	25		
212554	A07-026	Bonanza	66.00	66.00	1.00	E212554	<0.01	0.2	0.84	4	<10	1410	0.9	3	1.27	-0.5	13	2	<1	6.53	<10	<1	0.23	10	1.1	4690	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212555	A07-026	Bonanza	67.00	67.00	1.00	E212555	0.41	0.8	0.71	202	<10	90	-0.5	3	0.36	-0.5	8	2	18	3.03	<10	<1	0.22	10	0.99	100	1	0.52	3	500	12	1.98	<2	3	19	<20	<10	<10	30	<10	99
212556	A07-026	Bonanza	67.00	67.00	1.00	E212556	<0.01	<0.2	0.8	1	<10	1240	0.9	3	1.18	13	12	7	2	6.18	<10	<1	0.27	10	1.39	4530	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212557	A07-026	Bonanza	67.00	69.00	2.00	E212557	<0.01	<0.2	0.8	1	<10	1240	0.9	3	1.18	13	12	7	2	6.18	<10	<1	0.27	10	1.39	4530	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212558	A07-026	Bonanza	70.00	71.00	1.00	E212558	<0.01	<0.2	0.73	2	<10	610	0.8	<2	0.71	-0.5	10	2	19	5.5	<10	<1	0.26	<10	1.29	3330	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212559	A07-026	Bonanza	71.00	73.00	2.00	E212559	<0.01	-0.2	0.79	<2	<10	610	0.8	<2	0.71	-0.5	10	2	19	5.5	<10	<1	0.26	<10	1.29	3330	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212560	A07-026	Bonanza	74.00	76.00	2.00	E212560	<0.01	0.4	1.08	25	<10	10	-0.5	3	0.66	8	9	1	21	6.4	<10	<1	0.26	<10	1.29	3330	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212561	A07-026	Bonanza	76.00	78.00	2.00	E212561	<0.01	0.34	0.53	4	<10	20	-0.5	40	0.3	-0.5	11	2	216	8.14	<10	<1	0.22	<10	0.98	18	<1	0.01	4	80	489	3.09	10	2	177	<20	<10	<10	13	<10	93
212562	A07-026	Bonanza	76.00	77.00	1.00	E212562	<0.01	2.3	0.61	18	<10	230	-0.5	4	0.37	-0.5	11	2	53	1.81	<10	<1	0.26	<10	0.77	279	4	0.01	2	880	306	0.93	<2	3	85	<20	<10	<10	28	<10	152
212563	A07-026	Bonanza	77.00	78.00	1.00	E212563	<0.01	0.11	0.91	31	<10	10	-0.5	6	0.68	-0.5	16	1	10	1.65	<10	<1	0.26	<10	0.77	279	4	0.01	2	880	306	0.93	<2	3	85	<20	<10	<10	28	<10	152
212564	A07-026	Bonanza	78.00	79.00	1.00	E212564	<0.01	1.8	0.51	18	<10	50	-0.5	3	0.61	-0.5	16	1	10	1.65	<10	<1	0.26	<10	0.77	279	4	0.01	2	880	306	0.93	<2	3	85	<20	<10	<10	28	<10	152
212565	A07-026	Bonanza	79.00	80.00	1.00	E212565	<0.01	0.3	0.8	113	<10	30	-0.5	11	0.08	-0.5	15	<1	149	2.86	<10	<1	<10	0.01	<10	0.01	<1	<1	80	232	2.6	3	152	<20	<10	<10	25	<10	25		
212566	A07-026	Bonanza	83.00	84.00	1.00	E212566	<0.01	0.7	1.25	2	<10	830	-0.5	3	0.04	-0.5	4	1	18	0.55	<10	<1	0.01	<10	<10	0.01	4	<1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18	
212567	A07-026	Bonanza	84.00	85.00	1.00	E212567	<0.01	0.3	0.8	113	<10	30	-0.5	11	0.08	-0.5	15	<1	149	2.86	<10	<1	<10	0.01	<10	0.01	<1	<1	80	232	2.6	3	152	<20	<10	<10	25	<10	25		
212568	A07-026	Bonanza	86.00	86.00	1.00	E212568	<0.01	0.2	0.84	4	<10	1410	0.9	3	1.27	-0.5	13	2	<1	6.53	<10	<1	0.23	10	1.1	4690	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212569	A07-026	Bonanza	87.00	88.00	1.00	E212569	0.41	0.8	0.71	202	<10	90	-0.5	3	0.36	-0.5	8	2	18	3.03	<10	<1	0.22	10	0.99	100	1	0.52	3	500	12	1.98	<2	3	19	<20	<10	<10	30	<10	99
212570	A07-026	Bonanza	87.00	88.00	1.00	E212570	<0.01	<0.2	0.8	1	<10	1240	0.9	3	1.18	13	12	7	2	6.18	<10	<1	0.27	10	1.39	4530	<1	0.01	1	280	108	0.26	<2	3	132	<20	<10	<10	37	<10	18
212571	A07-026	Bonanza	89.00	90.00	1.00	E212571	<0.01	<0.2	0.8</																																

212251	AD7-031	Thesis 13	17.00	16.00	1.00	E212251	-0.01	0.2	0.82	6	<10	60	0.4	>2	3.05	-0.5	6	1	12	3.34	<10	1	0.17	10	0.64	1550	<1	0.02	<1	810	11	3.86	2	2	26	>20	<0.01	<10	23	>40	66	
212252	AD7-031	Thesis 13	16.00	17.00	1.00	E212252	<0.01	0.2	0.75	10	<10	56	0.5	>2	2.98	-0.5	6	1	12	3.37	<10	1	0.15	10	0.64	950	<1	0.03	<1	900	10	3.71	2	1	22	>20	<0.01	<10	32	>40	114	
212253	AD7-031	Thesis 13	15.00	18.00	1.00	E212253	-0.01	-0.2	0.65	16	<10	60	0.5	>2	2.98	-0.5	6	1	11	3.32	<10	<1	0.17	10	0.96	1770	<1	0.02	<1	3	780	11	3.76	2	2	26	>20	<0.01	<10	21	>40	49
212254	AD7-031	Thesis 13	18.00	19.00	1.00	E212254	<0.01	-0.2	0.75	15	<10	30	0.7	>2	2.73	-0.5	6	1	10	3.56	<10	<1	0.18	10	0.83	1460	<1	0.02	<1	3	880	12	4.05	2	2	25	>20	<0.01	<10	23	>40	41
212255	AD7-031	Thesis 13	18.00	19.00	1.00	E212255	-0.01	-0.2	0.75	15	<10	30	0.7	>2	2.73	-0.5	6	1	10	3.56	<10	<1	0.18	10	0.83	1460	<1	0.02	<1	3	880	12	4.05	2	2	25	>20	<0.01	<10	23	>40	41
212256	AD7-031	Thesis 13	20.00	20.00	1.00	E212256	-0.01	-0.2	0.84	7	<10	40	0.7	>2	2.71	-0.5	6	1	11	3.53	<10	<1	0.2	10	1.06	1770	<1	0.02	<1	3	860	14	4.01	3	2	27	>20	<0.01	<10	22	>40	66
212257	AD7-031	Thesis 13	20.00	20.00	1.00	E212257	-0.01	0.4	0.66	8	<10	40	0.7	>2	2.71	-0.5	6	1	11	3.53	<10	<1	0.2	10	1.06	1770	<1	0.02	<1	3	860	14	4.01	3	2	27	>20	<0.01	<10	22	>40	66
212258	AD7-031	Thesis 13	21.00	22.00	1.00	E212258	-0.01	0.53	39	<10	10	0.68	>2	0.41	0.6	9	1	23	3.69	<10	<1	0.21	<10	0.69	134	<1	0.01	3	1	640	40	3.84	3	2	51	>20	<0.01	<10	12	>40	167	
212259	AD7-031	Thesis 13	22.00	23.00	1.00	E212259	0.23	1	0.56	28	<10	20	0.6	>2	0.38	1.2	9	1	30	4.03	<10	<1	0.22	<10	0.96	78	2	0.01	2	620	41	4.24	4	2	34	>20	<0.01	<10	14	>40	249	
212260	AD7-031	Thesis 13	23.00	24.00	1.00	E212260	0.01	1.1	0.47	30	<10	20	0.6	>2	0.38	1.2	9	1	30	4.03	<10	<1	0.22	<10	0.96	78	2	0.01	2	620	41	4.24	4	2	34	>20	<0.01	<10	14	>40	249	
212261	AD7-031	Thesis 13	24.00	25.00	1.00	E212261	-0.01	0.2	0.79	30	<10	20	0.5	>2	1.94	-0.5	7	1	82	3.26	<10	<1	0.16	10	0.54	1170	<1	0.01	1	750	39	3.51	11	2	29	>20	<0.01	<10	28	>40	119	
212262	AD7-031	Thesis 13	25.00	26.00	1.00	E212262	0.06	3.6	0.64	34	<10	20	0.7	>2	0.71	-0.5	9	1	75	3.41	<10	<1	0.25	10	0.35	318	<1	0.01	1	860	38	3.58	10	3	24	>20	<0.01	<10	20	>40	165	
212263	AD7-031	Thesis 13	26.00	27.00	1.00	E212263	0.01	0.39	1.96	30	<10	20	0.7	>2	0.68	-0.5	9	1	57	3.1	<10	<1	0.25	<10	0.35	318	<1	0.01	1	780	35	3.44	3	2	25	>20	<0.01	<10	24	>40	149	
212264	AD7-031	Thesis 13	27.00	28.00	1.00	E212264	-0.01	0.6	0.6	8	<10	80	0.5	>2	2.36	-0.5	6	1	19	3.34	<10	<1	0.15	10	0.92	1350	<1	0.04	1	830	14	3.46	3	3	25	>20	<0.01	<10	49	>40	66	
212265	AD7-031	Thesis 13	28.00	29.00	1.00	E212265	<0.01	0.7	0.51	10	<10	80	0.5	>2	2.36	-0.5	6	1	19	3.34	<10	<1	0.15	10	0.92	1350	<1	0.04	1	830	14	3.46	3	3	25	>20	<0.01	<10	49	>40	66	
212266	AD7-031	Thesis 13	29.00	30.00	1.00	E212266	-0.01	0.6	0.56	9	<10	110	0.6	>2	2.41	-0.5	7	1	26	3.14	<10	<1	0.14	10	0.81	1480	<1	0.04	1	850	11	2.83	3	3	29	>20	<0.01	<10	39	>40	55	
212267	AD7-031	Thesis 13	30.00	31.00	1.00	E212267	-0.01	0.4	0.56	9	<10	120	0.6	>2	2.54	-0.5	7	1	16	3.23	<10	<1	0.15	10	0.78	1670	<1	0.04	2	860	10	2.83	3	3	25	>20	<0.01	<10	44	>40	89	
212268	AD7-031	Thesis 13	31.00	32.00	1.00	E212268	-0.01	0.2	0.28	30	<10	110	0.6	>2	2.54	-0.5	7	1	16	3.23	<10	<1	0.15	10	0.78	1670	<1	0.04	2	860	10	2.83	3	3	25	>20	<0.01	<10	44	>40	89	
212269	AD7-031	Thesis 13	32.00	33.00	1.00	E212269	-0.01	-0.2	0.5	3	<10	120	0.6	>2	2.01	-0.5	6	1	10	3.14	<10	<1	0.13	10	1.1400	<1	0.04	2	780	7	8.79	3	2	27	>20	<0.01	<10	41	>40	62		
212270	AD7-031	Thesis 13	33.00	34.00	1.00	E212270	0.44	0.2	0.5	470	<10	30	-0.5	>2	0.16	-0.5	7	26	44	3.25	<10	<1	0.38	10	0.07	130	<1	0.04	1	840	10	3.19	3	2	3	>20	<0.01	<10	14	>40	45	
212271	AD7-031	Thesis 13	34.00	35.00	1.00	E212271	-0.01	-0.2	0.5	470	<10	30	-0.5	>2	0.16	-0.5	7	26	44	3.25	<10	<1	0.38	10	0.07	130	<1	0.04	1	840	10	3.19	3	2	3	>20	<0.01	<10	14	>40	45	
212272	AD7-031	Thesis 13	34.00	35.00	1.00	E212272	-0.01	-0.2	0.58	9	<10	100	0.5	>2	2.67	-0.5	7	1	10	3.32	<10	<1	0.13	10	0.85	1550	<1	0.04	1	840	10	3.22	4	2	34	>20	<0.01	<10	35	>40	64	
212273	AD7-031	Thesis 13	35.00	36.00	1.00	E212273	0.02	0.8	0.25	10	<10	100	0.5	>2	2.67	-0.5	7	1	10	3.32	<10	<1	0.13	10	0.85	1550	<1	0.04	1	840	10	3.22	4	2	34	>20	<0.01	<10	35	>40	64	
212274	AD7-031	Thesis 13	36.00	37.00	1.00	E212274	-0.01	0.45	0.7	31	<10	20	-0.5	>2	2.174	-0.5	7	1	12	3.66	<10	<1	0.15	10	0.62	1240	<1	0.03	3	850	35	3.78	<2	2	30	>20	<0.01	<10	45	>40	198	
212275	AD7-031	Thesis 13	37.00	38.00	1.00	E212275	-0.01	0.2	0.87	15	<10	40	0.5	>2	2.29	-0.5	7	<1	10	3.66	<10	<1	0.15	10	0.54	1310	<1	0.03	3	850	35	3.88	3	2	32	>20	<0.01	<10	39	>40	56	
212276	AD7-031	Thesis 13	38.00	39.00	1.00	E212276	-0.01	0.33	0.69	30	<10	20	0.7	>2	0.66	-0.5	8	1	28	4.27	<10	<1	0.23	<10	0.31	430	<1	0.02	2	2	25	>20	<0.01	<10	40	>40	93					
212277	AD7-031	Thesis 13	39.00	40.00	1.00	E212277	-0.01	0.2	0.85	16	<10	50	0.6	>2	1.63	-0.5	7	<1	11	3.89	<10	<1	0.15	10	0.79	1070	<1	0.03	2	1030	9	4.32	2	3	26	>20	<0.01	<10	47	>40	79	
212278	AD7-031	Thesis 13	40.00	41.00	1.00	E212278	-0.01	0.3	0.78	14	<10	50	0.6	>2	2.3	-0.5	7	1	10	3.59	<10	<1	0.14	10	0.69	1050	<1	0.03	1000	10	4.11	<2	3	30	>20	<0.01	<10	37	>40	61		
212279	AD7-031	Thesis 13	41.00	42.00	1.00	E212279	-0.01	-0.2	0.71	12	<10	60	0.7	>2	2.71	-0.5	8	1	12	4.07	<10	<1	0.13	20	0.99	1550	<2	0.01	11	1000	1	4.73	<2	3	30	>20	<0.01	<10	36	>40	62	
212280	AD7-031	Thesis 13	42.00	43.00	1.00	E212280	-0.01	0.2	0.51	16	<10	40	-0.5	>2	1.53	-0.5	8	2	10	3.79	<10	<1	0.14	10	0.56	988	<2	0.01	5	990	7	4.41	<2	2	23	>20	<0.01	<10	20	>40	54	
212281	AD7-031	Thesis 13	43.00	44.00	1.00	E212281	-0.01	0.2	0.2	<10	50	0.5	>2	1.72	-0.5	8	1	12	4.37	<10	<1	0.15	10	0.64	950	<1	0.01	2	900	10	3.71	<1	1	22	>20	<0.01	<10	32	>40	114		
212282	AD7-031	Thesis 13	44.00	45.00	1.00	E212282	-0.01	0.2	0.54	19	<10	40	0.5	>2	1.74	-0.5	8	1	13	4.21	<10	<1	0.15	20	0.41	1020	<1	0.01	2	900	7	4.93	4	2	25	>20	<0.01	<10	42	>40	75	
212283	AD7-031	Thesis 13	45.00	46.00	1.00	E212283	-0.01	0.2	0.85	25	<10	30	0.6	>2	2.31	-0.5	7	1	11	3.78	<10	<1	0.15	10	0.96	1425	<1	0.02	1	850	1	4.46	3	3	32	>20	<0.01	<10	28	>40	67	
212284	AD7-031	Thesis 13	46.00	47.00	1.00	E212284	0.36	0.28	0.25	20	<10	212284	-0.01	-0.2	0.84	-0.5	7	1	10	3.66	<10	<1	0.15	10	0.8	1330	<1	0.01	1	850	1	4.56	<2	2	31	>20	<0.01	<10	40	>40	93	
212285	AD7-031	Thesis 13	47.00	48.00	1.00	E212285	-0.01	-0.2	1.84	<2	<10	80	-0.5	>2	0.87	-0.5	7	34	39	3.29	<10	<1	0.11	<10	0.81	517	<1															

213222	AD7-033	Thesis III	20.00	23.00	3.00	E213222	0.03	0.2	0.73	8	<10	10	-0.55	<2	0.06	-0.5	12	<1	46	-0.45	<10	<1	0.1	<10	0.01	47	14	-0.01	4	400	19	4.57	<2	3	160	>20	<0.01	<10	<10	8	<10	16
213223	AD7-033	Thesis III	21.00	24.00	3.00	E213223	0.01	0.1	0.7	8	<10	10	-0.55	<2	0.06	-0.5	11	<1	30	0.38	<10	<1	0.01	<10	0.01	34	16	<0.01	3	317	3.11	<2	1	98	>20	<0.01	<10	<10	8	<10	16	
213224	AD7-033	Thesis III	26.00	29.00	3.00	E213224	0.02	0.4	0.05	<2	<10	60	-0.55	<2	0.01	-0.5	<1	8	35	0.23	<10	<1	0.01	<10	0.01	21	19	-0.01	1	140	19	0.05	<2	1	84	>20	<0.01	<10	<10	1	<10	2
213225	AD7-033	Thesis III	29.00	32.00	3.00	E213225	0.03	0.2	0.03	<2	<10	20	-0.55	<2	0.01	-0.5	<1	7	16	0.33	<10	<1	0.01	<10	0.01	34	10	-0.01	1	10	4	0.02	<2	1	5	>20	<0.01	<10	<10	1	<10	2
213226	AD7-033	Thesis III	32.00	35.00	3.00	E213226	0.07	0.6	0.06	<2	<10	20	-0.55	<2	0.01	-0.5	<1	7	16	0.33	<10	<1	0.01	<10	0.01	34	10	-0.01	1	10	4	0.02	<2	1	5	>20	<0.01	<10	<10	1	<10	2
213227	AD7-033	Thesis III	34.00	36.00	1.00	E213227	0.01	0.3	0.56	4	<10	80	-0.55	<2	2.4	-0.05	10	2	13	3.0	<10	<1	0.21	10	0.56	17.00	<1	0.02	2	910	11	3.13	<2	3	36	>20	<0.01	<10	<10	32	<10	72
213228	AD7-033	Thesis III	36.00	38.00	1.00	E213228	0.01	0.3	0.56	4	<10	80	-0.55	<2	2.4	-0.05	10	2	13	3.0	<10	<1	0.21	10	0.56	17.00	<1	0.02	2	910	11	3.13	<2	3	36	>20	<0.01	<10	<10	32	<10	72
213229	AD7-033	Thesis III	36.00	37.00	1.00	E213229	<0.01	0.3	0.44	8	<10	130	-0.55	<2	2.87	-0.05	7	3	12	3.3	<10	<1	0.21	10	0.54	17.00	<1	0.03	330	8	1.48	<2	4	28	>20	<0.01	<10	<10	40	<10	66	
213230	AD7-033	Thesis III	37.00	38.00	1.00	E213230	0.01	<0.2	0.41	<2	<10	80	-0.55	<2	1.76	-0.05	5	3	7	2.81	<10	<1	0.22	20	0.54	13.05	<1	0.01	840	7	0.44	<2	1	31	>20	<0.01	<10	<10	40	<10	63	
213231	AD7-033	Thesis III	37.00	38.00	1.00	E213231	<0.01	0.1	0.12	<2	<10	80	-0.55	<2	1.76	-0.05	5	3	7	2.81	<10	<1	0.22	20	0.54	13.05	<1	0.01	840	7	0.44	<2	1	31	>20	<0.01	<10	<10	40	<10	63	
213232	AD7-033	Thesis III	38.00	39.00	1.00	E213232	0.01	0.3	0.46	3	<10	80	-0.55	<2	1.73	-0.05	2	2	18	1.3	<10	<1	0.23	80	0.49	12.05	<1	0.02	1	870	23	1.68	<2	4	73	>20	<0.01	<10	<10	32	<10	59
213233	AD7-033	Thesis III	38.00	40.00	1.00	E213233	<0.01	0.3	0.46	3	<10	80	-0.55	<2	1.73	-0.05	2	2	18	1.3	<10	<1	0.23	80	0.49	12.05	<1	0.02	1	870	23	1.68	<2	4	73	>20	<0.01	<10	<10	32	<10	59
213234	AD7-033	Thesis III	41.00	42.00	1.00	E213234	0.01	0.3	0.47	2	<10	80	-0.55	<2	1.80	-0.05	9	2	15	3.37	<10	<1	0.22	20	0.59	12.73	<1	0.01	2	890	12	0.33	<2	2	22	>20	<0.01	<10	<10	34	<10	26
213235	AD7-033	Thesis III	41.00	42.00	1.00	E213235	<0.01	0.3	0.47	2	<10	80	-0.55	<2	1.80	-0.05	9	2	15	3.37	<10	<1	0.22	20	0.59	12.73	<1	0.01	2	890	12	0.33	<2	2	22	>20	<0.01	<10	<10	34	<10	26
213236	AD7-033	Thesis III	43.00	44.00	1.00	E213236	<0.01	0.2	0.44	3	<10	80	-0.55	<2	1.84	-0.05	10	1	11	2.88	<10	<1	0.21	10	0.74	10.05	<1	0.02	1	910	9	2.12	<2	3	28	>20	<0.01	<10	<10	30	<10	73
213237	AD7-033	Thesis III	43.00	44.00	1.00	E213237	<0.01	0.2	0.44	3	<10	100	0.6	<1	1.4	-0.05	10	1	14	3.59	<10	<1	0.24	10	0.61	10.00	<1	0.01	530	11	2.46	<2	3	25	>20	<0.01	<10	<10	41	<10	61	
213238	AD7-033	Thesis III	44.00	45.00	1.00	E213238	0.4	0.6	0.6	8	<10	20	-0.55	<2	0.12	-0.5	15	3	175	3.7	<10	<1	0.08	<10	0.01	28	4	-0.01	3	430	18	3.26	<1	1	119	>20	<0.01	<10	<10	7	<10	25
213239	AD7-033	Thesis III	45.00	46.00	1.00	E213239	1.5	1.5	1.5	2	<10	120	-0.55	<2	0.03	-0.5	15	3	182	3.1	<10	<1	0.08	<10	0.01	28	4	-0.01	3	430	18	3.26	<1	1	119	>20	<0.01	<10	<10	7	<10	25
213240	AD7-033	Thesis III	46.00	47.00	1.00	E213240	0.48	0.8	0.52	7	<10	150	-0.55	<2	<0.01	-0.5	11	1	148	2.04	<10	<1	<0.01	<10	0.01	79	3	-0.01	1	30	1.44	<2	1	15	>20	<0.01	<10	<10	1	<10	<2	
213241	AD7-033	Thesis III	47.00	48.00	1.00	E213241	0.17	0.2	0.16	14	<10	20	-0.55	<2	0.01	-0.5	15	23	86	2.66	<10	<1	<0.01	<10	0.01	82	8	-0.01	1	14	2.3	<2	1	5	>20	<0.01	<10	<10	1	<10	11	
213242	AD7-033	Thesis III	47.00	48.00	1.00	E213242	<0.01	<0.2	0.12	<2	<10	20	-0.55	<2	0.01	-0.5	11	23	86	2.66	<10	<1	<0.01	<10	0.01	82	8	-0.01	1	14	2.3	<2	1	5	>20	<0.01	<10	<10	1	<10	11	
213243	AD7-033	Thesis III	48.00	49.00	1.00	E213243	2.33	8.8	0.18	56	<10	40	-0.55	<2	0.01	-0.5	4	11	1692	2.42	<10	<1	0.03	<10	0.01	64	8	-0.01	7	100	29	2.24	<1	1	26	>20	<0.01	<10	<10	2	<10	84
213244	AD7-033	Thesis III	49.00	50.00	1.00	E213244	0.17	0.2	0.16	14	<10	20	-0.55	<2	0.01	-0.5	11	23	86	2.66	<10	<1	<0.01	<10	0.01	82	8	-0.01	1	14	2.3	<2	1	5	>20	<0.01	<10	<10	1	<10	11	
213245	AD7-033	Thesis III	50.00	51.00	1.00	E213245	0.24	0.6	0.81	17	<10	30	-0.55	<2	0.12	-0.05	10	2	28	2.80	<10	<1	0.06	<10	0.01	28	4	-0.01	3	140	35	2.91	<2	1	18	>20	<0.01	<10	<10	12	<10	24
213246	AD7-033	Thesis III	51.00	52.00	1.00	E213246	0.84	1.1	0.44	44	<10	10	-0.55	<2	0.02	-0.05	16	10	4	5.16	<10	<1	0.01	<10	0.01	28	15	-0.01	8	120	108	8.64	<1	1	101	>20	<0.01	<10	<10	8	<10	21
213247	AD7-033	Thesis III	52.00	53.00	1.00	E213247	0.7	1.0	0.44	34	<10	10	-0.55	<2	0.01	-0.05	12	10	4	5.16	<10	<1	0.01	<10	0.01	22	8	-0.01	3	35	34	3	1	1	>20	<0.01	<10	<10	2	<10	19	
213248	AD7-033	Thesis III	53.00	54.00	1.00	E213248	0.84	0.5	0.51	32	<10	20	-0.55	<2	0.03	-0.5	12	8	34	2.08	<10	<1	0.04	<10	0.01	22	8	-0.01	3	350	44	2.25	<2	1	277	>20	<0.01	<10	<10	6	<10	10
213249	AD7-033	Thesis III	54.00	55.00	1.00	E213249	0.8	0.1	0.54	31	<10	20	-0.55	<2	0.12	-0.1	4	10	4	2.08	<10	<1	0.04	<10	0.01	22	8	-0.01	3	350	44	2.25	<2	1	277	>20	<0.01	<10	<10	6	<10	10
213250	AD7-033	Thesis III	56.00	56.00	1.00	E213250	0.55	<0.2	0.5	2	<10	2000	-0.55	<2	<0.01	-0.5	18	31	5.38	<10	<1	0.01	<10	0.01	39	4	-0.01	3	30	2	0.13	<2	<1	83	>20	<0.01	<10	<10	1	<10	<2	
213251	AD7-033	Thesis III	56.00	58.00	2.00	E213251	0.03	<0.2	0.04	5	<10	1380	-0.55	<2	<0.01	-0.5	1	20	35	0.53	<10	<1	0.01	<10	0.01	58	1	-0.01	3	20	12	0.08	<2	<1	34	>20	<0.01	<10	<10	1	<10	2
213252	AD7-033	Thesis III	58.00	60.00	2.00	E213252	0.06	0.2	0.05	2	<10	278	-0.55	<2	<0.01	-0.5	1	1	28	0.38	<10	<1	0.01	<10	0.01	34	16	<0.01	1	30	317	3.11	<2	1	98	>20	<0.01	<10	<10	1	<10	2
213253	AD7-033	Thesis III	60.00	61.00	1.00	E213253	0.59	0.4	0.53	38	<10	40	-0.55	<2	0.31	-0.05	10	2	15	2.75	<10	<1	0.18	<10	0.03	35	3	-0.01	3	390	41	3.13	<2	2	137	>20	<0.01	<10	<10	8	<10	108
213254	AD7-033	Thesis III	61.00	63.00	2.00	E213254	<0.02	0.62	0.86	89	<10	40	0.7	<2	0.96	-1	11	15	4.28	<10	<1	0.25	10	0.17	340	2	-0.01	2	880	24	4.23	<2	2	18	>20	<0.01	<10	<10	18	<10	208	
213255	AD7-033	Thesis III	63.00	62.00	2.00	E213255	0.56	0.2	0.05	2	<10	10	-0.55	<2	<0.01	-0.5	1	20	35	0.53	<10	<1	0.01	<10	0.01	58	1	-0.01	3	20	12	0.08	<2	<1	34	>20	<0.01	<10	<10	1	&	

212973	AD7-034	Thesis III	71.00	72.00	1.00	E212973	0.01	<0.2	1.03	25	<10	70	<0.5	4	1.96	<0.5	8	2	14	3.55	<0.1	<0.22	10	1.1355	2	0.04	<1	870	12	3.75	3	3	31	<20	<0.01	<10	36	<10	81			
212974	AD7-034	Thesis III	72.00	73.00	1.00	E212974	0.01	<0.2	1.03	25	<10	70	<0.5	4	1.96	<0.5	8	2	14	3.55	<0.1	<0.22	10	1.1355	2	0.04	<1	870	12	3.75	3	3	31	<20	<0.01	<10	36	<10	81			
212975	AD7-034	Thesis III	73.00	74.00	1.00	E212975	0.01	<0.2	1.04	11	<10	100	0.5	<2	2.38	<0.5	8	2	10	3.38	<0.1	1	0.24	20	1.46	1885	1	0.06	<1	870	8	2.9	4	3	37	<20	<0.01	<10	41	<10	62	
212976	AD7-034	Thesis III	74.00	75.00	1.00	E212976	0.01	<0.2	1.06	14	<10	120	0.5	<2	2.1	<0.5	9	2	11	3.53	<0.1	<0.2	10	1.33	1730	4	0.06	<1	870	8	2.97	<2	4	3	37	<20	<0.01	<10	41	<10	62	
212977	AD7-034	Thesis III	75.00	76.00	1.00	E212977	0.01	<0.2	1.06	14	<10	120	0.5	<2	2.1	<0.5	9	2	11	3.53	<0.1	<0.2	10	1.33	1730	4	0.06	<1	870	8	2.97	<2	4	3	37	<20	<0.01	<10	41	<10	62	
212978	AD7-034	Thesis III	76.00	77.00	1.00	E212978	0.04	<0.2	1.06	13	<10	60	0.5	<2	1.86	<0.5	9	2	12	3.82	<0.1	<0.25	10	1.06	1345	3	0.06	<1	880	10	3.68	<3	3	35	<20	<0.01	<10	42	<10	60		
212979	AD7-034	Thesis III	77.00	78.00	1.00	E212979	0.01	<0.2	1.06	13	<10	60	0.5	<2	1.86	<0.5	9	2	12	3.82	<0.1	<0.25	10	1.06	1345	3	0.06	<1	880	10	3.68	<3	3	35	<20	<0.01	<10	42	<10	60		
212980	AD7-034	Thesis III	78.00	79.00	2.00	E212980	<0.01	<0.2	1.09	11	<10	60	0.6	<2	2.01	<0.5	7	3	10	3.37	<0.1	<0.18	20	1.61	1990	<1	0.05	<1	870	8	2.42	<2	4	3	30	<20	<0.01	<10	42	<10	60	
212981	AD7-034	Thesis III	80.00	82.00	2.00	E212981	<0.01	<0.2	1.04	9	<10	140	0.5	<2	2.23	<0.5	8	3	16	3.4	<0.1	<0.21	10	1.48	1535	1	0.06	<1	870	8	2.22	<2	4	3	35	<20	<0.01	<10	40	<10	66	
212982	AD7-034	Thesis III	81.00	83.00	2.00	E212982	<0.01	<0.2	1.04	9	<10	140	0.5	<2	2.23	<0.5	8	3	16	3.4	<0.1	<0.21	10	1.48	1535	1	0.06	<1	870	8	2.22	<2	4	3	35	<20	<0.01	<10	40	<10	66	
212983	AD7-034	Thesis III	84.00	86.00	2.00	E212983	<0.01	<0.2	0.9	12	<10	160	<0.5	<2	2.26	<0.5	7	2	10	3.36	<0.1	<0.17	10	1.63	1375	1	0.06	<1	830	8	1.74	<2	4	3	33	<20	<0.01	<10	45	<10	62	
212984	AD7-034	Thesis III	86.00	88.00	2.00	E212984	0.01	<0.2	0.75	32	<10	40	<0.5	<2	2.36	<0.5	8	3	16	3.7	<0.1	<0.23	10	1.13	1385	1	0.04	<1	830	16	3.23	<2	3	32	<20	<0.01	<10	46	<10	68		
212985	AD7-034	Thesis III	88.00	90.00	2.00	E212985	<0.01	<0.2	0.86	2	<10	160	<0.5	<2	2.38	<0.5	8	3	16	3.7	<0.1	<0.23	10	1.13	1385	1	0.04	<1	830	16	3.23	<2	3	32	<20	<0.01	<10	46	<10	68		
212986	AD7-034	Thesis III	90.00	91.00	1.00	E212986	<0.01	<0.2	1.54	8	<10	80	<0.5	<2	0.84	<0.5	7	34	38	1.38	<0.1	1	0.11	<10	0.75	497	4	0.06	<1	820	22	0.06	<2	4	4	41	<20	<0.01	<10	40	<10	44
212987	AD7-034	Thesis III	91.00	92.00	1.00	E212987	0.01	<0.2	0.9	12	<10	50	0.6	<2	2.75	<0.5	7	3	10	3.37	<0.1	<0.18	20	1.61	1990	<1	0.05	<1	870	8	2.42	<2	4	3	30	<20	<0.01	<10	42	<10	60	
212988	AD7-034	Thesis III	91.00	92.00	1.00	E212988	<0.01	<0.2	0.74	19	<10	80	<0.5	<2	2.75	<0.5	7	3	10	3.38	<0.1	1	0.21	<10	1.41	1565	<1	0.06	<1	830	8	3.07	<2	4	3	35	<20	<0.01	<10	46	<10	66
212989	AD7-034	Thesis III	92.00	93.00	1.00	E212989	<0.01	<0.2	0.65	17	<10	120	0.5	<2	2.34	<0.5	8	2	10	3.89	<0.1	<0.16	10	1.48	1620	<1	0.04	<1	830	8	2.37	<2	4	4	3	37	<20	<0.01	<10	43	<10	70
212990	AD7-034	Thesis III	93.00	94.00	1.00	E212990	<0.01	<0.2	0.65	17	<10	120	0.5	<2	2.34	<0.5	8	2	10	3.89	<0.1	<0.16	10	1.48	1620	<1	0.04	<1	830	8	2.37	<2	4	4	3	37	<20	<0.01	<10	43	<10	70
212991	AD7-034	Thesis III	94.00	95.00	1.00	E212991	<0.01	<0.2	1	20	<10	20	0.6	<2	3.08	<0.5	7	2	13	3.82	<0.1	<0.21	20	1.45	1515	1	0.04	<1	890	9	3.75	<3	3	33	<20	<0.01	<10	45	<10	78		
212992	AD7-034	Thesis III	95.00	96.00	1.00	E212992	<0.01	<0.2	0.75	19	<10	20	<0.5	<2	3.38	<0.5	6	4	11	3.51	<0.1	<0.18	10	1.68	1335	1	0.04	<1	830	8	4.41	<2	4	3	37	<20	<0.01	<10	47	<10	61	
212993	AD7-034	Thesis III	96.00	97.00	1.00	E212993	<0.01	<0.2	0.8	12	<10	111	0.5	<2	3.38	<0.5	6	4	11	3.51	<0.1	<0.18	10	1.68	1335	1	0.04	<1	830	8	4.41	<2	4	3	37	<20	<0.01	<10	47	<10	61	
212994	AD7-034	Thesis III	97.00	98.00	1.00	E212994	<0.01	<0.2	1.06	14	<10	60	0.5	<2	2.17	<0.5	8	3	11	3.63	<0.1	<0.24	20	0.75	1000	2	0.06	<1	880	8	4.65	<2	3	3	37	<20	<0.01	<10	48	<10	178	
212995	AD7-034	Thesis III	99.00	100.00	1.00	E212995	<0.01	<0.2	0.9	12	<10	60	0.5	<2	2.38	<0.5	8	3	16	3.7	<0.1	<0.23	10	1.13	1385	1	0.04	<1	830	16	3.23	<2	3	32	<20	<0.01	<10	44	<10	64		
212996	AD7-034	Thesis III	100.00	100.00	1.00	E212996	<0.01	<0.2	1.05	13	<10	40	<0.5	<2	2.71	<0.5	8	2	11	3.26	<0.1	<0.18	10	1.26	1552	1	0.04	<1	830	8	3.69	<3	4	3	34	<20	<0.01	<10	49	<10	67	
212997	AD7-034	Thesis III	100.00	101.00	1.00	E212997	<0.01	<0.2	0.87	18	<10	40	<0.5	<2	3.46	<0.5	7	3	10	3.29	<0.1	<0.22	10	0.96	1240	1	0.04	<1	860	12	3.84	<3	3	33	<20	<0.01	<10	52	<10	165		
212998	AD7-034	Thesis III	101.00	102.00	1.00	E212998	0.01	<0.2	0.9	17	<10	20	0.6	<2	3.38	<0.5	6	4	10	3.59	<0.1	<0.2	10	1.58	1220	<1	0.04	<1	780	21	2.54	<2	3	3	37	<20	<0.01	<10	53	<10	144	
212999	AD7-034	Thesis III	103.00	105.00	2.00	E212999	<0.01	<0.2	1.14	17	<10	20	<0.5	<2	3.23	<0.5	7	3	11	3.49	<0.1	<0.25	10	1.06	1640	1	0.06	<1	740	13	4.84	<2	3	3	36	<20	<0.01	<10	40	<10	174	
213000	AD7-034	Thesis III	103.00	107.00	2.00	E213000	<0.01	<0.2	1.07	1	<10	50	0.6	<2	3.38	<0.5	6	4	10	3.59	<0.1	<0.25	10	1.06	1640	1	0.06	<1	800	24	4.65	<2	3	3	37	<20	<0.01	<10	40	<10	174	
213001	AD7-034	Thesis III	103.00	107.00	2.00	E213001	1.84	<0.2	0.24	514	<10	30	<0.5	<2	0.71	<0.5	13	435	25	3.75	<0.1	0.15	10	0.05	241	16	0.01	0.37	340	1	1.96	<7	1	5	<20	<0.01	<10	19	<10	40		
213002	AD7-034	Thesis III	107.00	109.00	2.00	E213002	0.01	<0.2	1.02	14	<10	50	<0.5	<2	3.18	<0.5	7	3	11	3.28	<0.1	<0.25	10	0.55	535	1	0.04	<1	740	31	5.76	<2	3	37	<20	<0.01	<10	38	<10	116		
213003	AD7-034	Thesis III	109.00	110.00	1.00	E213003	0.01	<0.4	0.86	12	<10	50	<0.5	<2	3.46	<0.5	6	4	10	3.68	<0.1	<0.15	10	0.72	925	5	0.04	<1	680	4	2.22	<2	3	3	36	<20	<0.01	<10	38	<10	146	
213004	AD7-034	Thesis III	110.00	111.00	1.00	E213004	<0.01	<0.2	1.25	17	<10	20	0.7	<2	2.38	<0.5	7	5	12	3.57	<0.1	0.2	10	1.13	1170	1	0.04	<1	820	11	4.74	<3	4	3	37	<20	<0.01	<10	46	<10	79	
213005	AD7-034	Thesis III	111.00	112.00	1.00	E213005	0.01	<0.6	0.57	17	<10	20	<0.5	<2	2.56	<0.5	7	2	13	3.83	<0.1	<0.23	<10	0.8	840	2	0.04	<1	780	28	4.77	<2	3	3	36	<20	<0.01	<10	19	<10	73	
213006	AD7-034	Thesis III	113.00	114.00	1.00	E213006	0.01	<0.2	1.33	13	<10	20	<0.5	<2	2.56	<0.5	7	2	13	3.83	<0.1	<0.23	<10	0.8	840	2	0.04	<1	780	28	4.77	<2	3	3	36	<20	<0.01	<10	19	<10	73	
213007	AD7-034	Thesis III	113.00	114.00	1.00	E213007																																				

212621	ADP-036	Mickey	118.00	120.00	2.00	E212621	<0.01	0.3	1.09	12	<10	770	0.7	<0.06	12	11	2	14	17.4	<10	<0.27	10	119	2650	<1	0.03	1	830	11	0.27	5	5	70	<20	<0.01	<10	48	<10	803	
212622	ADP-036	Mickey	118.00	120.00	2.00	E212622	<0.01	0.3	1.18	23	<10	680	0.7	<0.06	<0.5	8	2	11	13.9	<10	<0.24	10	178	918	<1	0.03	<1	803	11	0.29	5	5	70	<20	<0.01	<10	44	<10	668	
212623	ADP-036	Mickey	122.00	124.00	2.00	E212623	<0.01	0.4	1.06	23	<10	480	0.7	<0.08	<0.5	12	2	15	8.27	<10	<0.12	10	188	3360	<1	0.03	<1	840	10	0.46	4	5	72	<20	<0.01	<10	43	<10	663	
212733	ADP-036	Mickey	135.00	137.00	2.00	E212733	<0.01	0.2	1.06	4	<10	1000	1	<0.1	<0.3	3	10	14	5.1	<10	<0.31	10	197	8250	<1	0.02	<1	960	34	0.05	4	5	108	<20	<0.01	<10	61	<10	626	
212734	ADP-036	Mickey	135.00	137.00	2.00	E212734	<0.01	0.2	1.07	12	<10	1000	1	<0.1	<0.3	3	10	14	5.1	<10	<0.31	10	197	8250	<1	0.02	<1	960	34	0.05	4	5	108	<20	<0.01	<10	61	<10	626	
212735	ADP-036	Mickey	139.00	141.00	2.00	E212735	<0.01	1.1	1	10	<10	800	0.7	<0.12	<0.7	2	11	4	20.474	<10	<0.31	10	173	4600	<1	0.03	<1	860	70	0.22	5	5	77	<20	<0.01	<10	49	<10	383	
212736	ADP-036	Mickey	142.00	144.00	2.00	E212736	<0.01	1.1	1	10	<10	800	0.7	<0.12	<0.7	2	11	4	20.474	<10	<0.31	10	173	4600	<1	0.03	<1	860	70	0.22	5	5	77	<20	<0.01	<10	49	<10	383	
212737	ADP-036	Mickey	142.00	143.00	1.00	E212737	<0.11	13.8	0.55	50	<10	10	<0.5	14	0.05	<0.5	7	165	7.20	<10	<0.06	<10	61	174	0.01	<1	10	165	176	37	1	47	<20	<0.01	<10	16	<10	176		
212738	ADP-036	Mickey	143.00	144.00	1.00	E212738	0.4	34.3	0.23	54	<10	10	<0.5	34	0.01	<0.5	14	14	10.95	<10	<0.02	<10	60	18	0.01	<1	10	165	176	37	1	47	<20	<0.01	<10	16	<10	176		
212739	ADP-036	Mickey	144.00	145.00	1.00	E212739	0.07	2.1	0.01	72	<10	10	<0.5	2.1	0.01	<0.5	14	14	10.95	<10	<0.02	<10	60	18	0.01	<1	10	165	176	37	1	47	<20	<0.01	<10	16	<10	176		
212740	ADP-036	Mickey	145.00	147.00	2.00	E212740	0.19	13.1	0.16	20	<10	20	<0.5	15	0.01	<0.5	19	139	3.32	<10	<0.01	<10	60	174	0.01	<1	10	28	2.56	35	41	53	<20	<0.01	<10	3	<10	<2		
212741	ADP-036	Mickey	147.00	148.00	1.00	E212741	<0.01	0.2	1.06	20	<10	100	<0.5	<0.08	<0.5	8	10	13.9	<10	<0.01	<10	60	174	0.01	<1	10	28	2.56	35	41	53	<20	<0.01	<10	3	<10	<2			
212742	ADP-036	Mickey	147.00	148.00	1.00	E212742	0.08	1.8	0.17	15	<10	100	<0.5	<0.08	<0.5	8	10	13.9	<10	<0.01	<10	60	174	0.01	<1	10	28	2.56	35	41	53	<20	<0.01	<10	3	<10	<2			
212743	ADP-036	Mickey	148.00	149.00	1.00	E212743	<0.01	0.3	0.99	10	<10	100	<0.5	<0.08	<0.5	8	10	13.9	<10	<0.01	<10	60	174	0.01	<1	10	28	2.56	35	41	53	<20	<0.01	<10	3	<10	<2			
212744	ADP-036	Mickey	149.00	150.00	2.00	E212744	<0.01	0.3	0.99	10	<10	100	<0.5	<0.08	<0.5	8	10	13.9	<10	<0.01	<10	60	174	0.01	<1	10	28	2.56	35	41	53	<20	<0.01	<10	3	<10	<2			
212745	ADP-036	Mickey	151.00	153.00	2.00	E212745	<0.01	0.2	0.91	2	<10	280	0.7	<0.12	<0.6	7	14	2	53.676	<10	<0.26	<10	1.68	2600	<1	0.03	1	860	24	0.03	5	5	57	<20	<0.01	<10	40	<10	585	
212746	ADP-036	Mickey	153.00	155.00	2.00	E212746	0.02	0.7	0.84	6	<10	1000	0.6	<0.1	<0.7	<10	3	4	3.84	<10	<0.29	10	1.13	1660	<1	0.03	1	860	28	0.05	4	5	50	<20	<0.01	<10	40	<10	195	
213315	ADP-037	Mickey	57.00	59.00	2.00	E213315	<0.01	0.8	2.49	14	<10	130	0.6	<0.2	<0.96	<0.5	7	2	32	8.64	<10	<0.16	20	1.13	1040	<1	0.02	1	900	9	0.01	<2	6	47	<20	<0.02	<10	89	<10	64
213316	ADP-037	Mickey	59.00	61.00	2.00	E213316	38	17.8	0.1	533	<10	30	<0.5	<0.1	<0.5	7	45	45	4.87	<10	<0.17	10	6.06	144	12	<10	150	8	2.87	45	1	5	<20	<0.01	<10	13	<10	53		
213317	ADP-037	Mickey	61.00	63.00	2.00	E213317	<0.01	0.8	2.49	14	<10	130	0.6	<0.2	<0.96	<0.5	7	2	32	8.64	<10	<0.16	20	1.13	1040	<1	0.02	1	900	9	0.01	<2	6	47	<20	<0.02	<10	89	<10	64
213318	ADP-037	Mickey	63.00	65.00	2.00	E213318	<0.01	0.2	1.52	18	<10	60	0.5	<0.26	<0.6	6	6	2	3.05	<10	<0.14	10	2.06	1.975	<1	0.03	1	850	4	0.01	<2	5	34	<20	<0.04	<10	77	<10	44	
213319	ADP-037	Mickey	65.00	67.00	2.00	E213319	<0.01	0.3	1.09	1	<10	100	0.5	<0.12	<0.6	10	1	2	2.64	<10	<0.05	<10	1.20	1.00	<1	0.03	1	850	4	0.01	<2	5	34	<20	<0.04	<10	77	<10	44	
213320	ADP-037	Mickey	64.00	66.00	1.00	E213320	<0.01	0.2	1.52	17	<10	150	0.5	<0.2	<0.6	<0.5	8	2	49	2.12	<10	<0.1	10	1.71	2190	<1	0.03	1	1000	6	0.01	<2	5	128	<20	<0.01	<10	47	<10	77
213321	ADP-037	Mickey	65.00	67.00	1.00	E213321	<0.01	0.4	3.73	10	<10	120	0.7	<0.2	<0.5	<0.5	8	2	86	2.24	<10	<0.1	10	1.53	1670	<1	0.02	<1	940	6	0.01	<2	5	75	<20	<0.01	<10	62	<10	70
213322	ADP-037	Mickey	66.00	68.00	2.00	E213322	<0.01	0.2	1.52	13	<10	200	0.5	<0.2	<0.5	<0.5	7	2	10	1.19	<10	<0.1	10	1.19	<1	0.03	1	840	7	0.01	<2	5	12	<20	<0.04	<10	60	<10	64	
213323	ADP-037	Mickey	68.00	70.00	2.00	E213323	<0.01	0.2	2.46	58	<10	70	0.6	<0.2	<0.6	<0.5	8	2	13	10.9	<10	<0.1	10	1.78	1635	<1	0.04	1	910	<10	<1	6	67	<20	<0.06	<10	67	<10	60	
213324	ADP-037	Mickey	70.00	72.00	2.00	E213324	<0.01	0.2	2.46	58	<10	70	0.6	<0.2	<0.6	<0.5	8	2	13	10.9	<10	<0.1	10	1.78	1635	<1	0.04	1	910	<10	<1	6	67	<20	<0.06	<10	67	<10	60	
213325	ADP-037	Mickey	71.00	73.00	2.00	E213325	<0.01	0.2	1.77	8	<10	60	0.5	<0.1	<1.91	<0.5	8	4	2	2.3	<10	<0.1	10	1.36	1358	<1	0.03	1	980	<10	<1	5	47	<20	<0.06	<10	79	<10	58	
213326	ADP-037	Mickey	71.00	73.00	2.00	E213326	<0.01	0.2	1.84	4	<10	230	0.5	<0.2	<0.34	<0.5	9	3	10	3.28	<10	<0.22	10	1.35	1085	<1	0.02	<1	790	8	0.01	<2	4	76	<20	<0.02	<10	88	<10	58
213327	ADP-037	Mickey	71.00	73.00	2.00	E213327	<0.01	0.2	1.43	23	<10	60	0.5	<0.2	<0.34	<0.5	9	3	10	3.28	<10	<0.22	10	1.35	1085	<1	0.02	<1	790	8	0.01	<2	4	76	<20	<0.02	<10	88	<10	58
213328	ADP-037	Mickey	73.00	75.00	2.00	E213328	<0.01	0.2	2.01	8	<10	750	0.5	<0.2	<1.53	<0.5	9	3	14	3.8	<10	<0.23	10	1.07	924	<1	0.03	1	860	12	0.03	2	4	81	<20	<0.01	<10	61	<10	67
213329	ADP-037	Mickey	73.00	75.00	2.00	E213329	<0.01	0.2	1.56	17	<10	530	0.5	<0.2	<1.13	<0.5	9	3	21	3.07	<10	<0.25	10	0.62	918	<1	0.02	<1	720	22	0.02	2	3	79	<20	<0.01	<10	68	<10	64
213330	ADP-037	Mickey	75.00	77.00	2.00	E213330	<0.01	0.2	1.25	1	<10	530	0.5	<0.2	<0.86	<0.5	9	3	21	3.07	<10	<0.25	10	0.62	918	<1	0.02	<1	720	22	0.02	2	3	79	<20	<0.01	<10	68	<10	64
213331	ADP-037	Mickey	75.00	77.00	2.00	E213331	<0.01	0.2	1.67	4	<10	100	<0.5	<0.91	<0.5	8	35	38	3.35	<10	<0.11	<10	0.79	537	<1	0.08	<10	3.0	0.05	2	5	42	<20	<0.14	<10	61	<10	43		
213332	ADP-037	Mickey	77.00	79.00	2.00	E213332	<0.01	0.2	1.42	11	<10	1260	0.6	<0.2	<2.57	<0.5	9	2	14	3.8	<10	<0.26	<10	0.44	870	<1	0.03	1	1000	22	0.07	<2	3	108	<20	<0.01	<10	70	<10	40
213333	ADP-037	Mickey	79.00	81.00	2.00	E213333	<0.01	0.2	1.42	11	<10	1260	0.6	<0.2	<2.57	<0.5	9	2	14	3.8	<10																			

213440	A07-040	Mickey	134.00	135.00	1.00	E213440	0.04	8.4	0.02	27	<10	16	-0.5	14	0.01	-0.5	24	8	149	8.4	<10	8	-0.001	<10	-0.01	41	4	-0.01	8	<10	24	6.34	21	41	27	-0.07	<10	<10	1	<10	13	
213450	A07-040	Mickey	135.00	136.00	1.00	E213450	0.04	8.4	0.02	27	<10	16	-0.5	14	0.01	-0.5	24	8	149	8.4	<10	8	-0.001	<10	-0.01	41	4	-0.01	8	<10	24	6.34	21	41	27	-0.07	<10	<10	1	<10	13	
213451	A07-040	Mickey	136.00	137.00	1.00	E213451	0.1	15	22.2	0.02	47	<10	16	-0.5	14	0.01	-0.5	24	7	152	10.05	<10	16	-0.001	<10	-0.01	47	11	<10	38	-0.00	62	41	<10	<10	<10	<10	4	<10	16		
213452	A07-040	Mickey	137.00	138.00	1.00	E213452	0.1	16	16.3	0.16	37	<10	16	-0.5	14	0.01	-0.5	24	8	298	6.05	<10	12	-0.01	<10	-0.01	34	4	-0.01	6	<10	33	6.42	39	41	<10	<10	<10	<10	8	<10	7
213453	A07-040	Mickey	138.00	139.00	1.00	E213453	0.02	8.4	0.02	27	<10	16	-0.5	14	0.01	-0.5	24	8	149	8.4	<10	8	-0.001	<10	-0.01	41	4	-0.01	8	<10	24	6.34	21	41	27	-0.07	<10	<10	1	<10	13	
213454	A07-040	Mickey	140.00	142.00	2.00	E213454	0.02	8.4	0.02	36	<10	16	-0.5	14	0.01	-0.5	24	8	51	8.65	<10	4	-0.04	<10	-0.01	64	3	-0.04	4	120	66	8.4	13	1	81	-0.07	<10	<10	12	<10	24	
213455	A07-040	Mickey	142.00	144.00	2.00	E213455	0.02	8.4	0.02	36	<10	16	-0.5	14	0.01	-0.5	24	8	51	8.65	<10	4	-0.04	<10	-0.01	64	3	-0.04	4	120	66	8.4	13	1	81	-0.07	<10	<10	12	<10	24	
213456	A07-040	Mickey	144.00	146.00	2.00	E213456	0.02	8.4	0.02	36	<10	16	-0.5	14	0.01	-0.5	24	8	51	8.65	<10	4	-0.04	<10	-0.01	64	3	-0.04	4	120	66	8.4	13	1	81	-0.07	<10	<10	12	<10	24	
213457	A07-040	Mickey	146.00	148.00	2.00	E213457	0.1	27	0.73	212	<10	140	-0.5	-0.2	0.33	-0.5	10	104	1265	3.43	<10	4	0.31	10	-0.26	107	109	0.8	81	420	24	1.75	30	1	<10	0.02	<10	<10	27	<10	67	
213458	A07-040	Mickey	148.00	150.00	2.00	E213458	0.1	27	0.73	212	<10	140	-0.5	-0.2	0.33	-0.5	10	104	1265	3.43	<10	4	0.31	10	-0.26	107	109	0.8	81	420	24	1.75	30	1	<10	0.02	<10	<10	27	<10	67	
213459	A07-040	Mickey	150.00	152.00	2.00	E213459	0.1	27	0.73	212	<10	140	-0.5	-0.2	0.33	-0.5	10	104	1265	3.43	<10	4	0.31	10	-0.26	107	109	0.8	81	420	24	1.75	30	1	<10	0.02	<10	<10	27	<10	67	
213460	A07-041	Mickey	139.00	140.00	1.00	E213460	-0.01	-0.2	2.12	10	<10	180	0.8	-0.2	4.34	-0.5	7	3	9	2.02	10	1	0.56	20	0.82	2460	<1	0.05	2	880	8	0.03	3	4	75	-0.07	<10	<10	66	<10	83	
213461	A07-041	Mickey	140.00	141.00	1.00	E213461	-0.01	-0.4	2.08	88	<10	318	0.7	-0.2	2.23	-0.5	11	2	41	3.33	10	<1	0.32	20	1.77	2470	<1	0.04	3	950	17	1.65	3	4	56	-0.07	<10	<10	88	<10	96	
213462	A07-041	Mickey	141.00	142.00	1.00	E213462	-0.01	-0.4	2.08	88	<10	318	0.7	-0.2	2.23	-0.5	11	2	41	3.33	10	<1	0.32	20	1.77	2470	<1	0.04	3	950	17	1.65	3	4	56	-0.07	<10	<10	88	<10	96	
213463	A07-041	Mickey	142.00	143.00	1.00	E213463	-0.01	-0.5	2.85	3	<10	180	0.8	-0.2	2.35	-0.5	14	3	20	3.86	10	<1	0.34	10	1.43	1250	<1	0.05	3	1030	18	1.23	4	5	56	-0.07	<10	<10	82	<10	84	
213464	A07-041	Mickey	143.00	144.00	1.00	E213464	-0.01	-0.5	1.93	13	<10	80	0.8	-0.2	4.38	-0.5	10	2	16	4.03	<10	1	0.47	20	0.57	1070	<1	0.04	1	1080	18	4.07	<1	320	-0.07	<10	<10	34	<10	50		
213465	A07-041	Mickey	144.00	145.00	1.00	E213465	-0.01	-0.5	1.79	10	<10	80	0.8	-0.2	4.38	-0.5	10	2	16	4.03	<10	1	0.47	20	0.57	1070	<1	0.04	1	1080	18	4.07	<1	320	-0.07	<10	<10	34	<10	50		
213466	A07-041	Mickey	145.00	146.00	1.00	E213466	-0.01	-0.5	4.13	3	<10	70	0.7	-0.2	5.08	-0.5	10	3	14	4.14	<10	1	1	0.3	0.89	1080	<1	0.09	3	840	7	3.74	<1	<10	-0.06	<10	<10	66	<10	71		
213467	A07-041	Mickey	146.00	147.00	1.00	E213467	-0.01	-0.5	1.41	3	<10	50	0.5	-0.2	5.08	-0.5	11	1	13	3.87	<10	1	0.22	0.82	1080	<1	0.03	3	1030	7	3.95	<1	<10	-0.05	<10	<10	27	<10	66			
213468	A07-041	Mickey	147.00	148.00	1.00	E213468	-0.01	-0.5	1.69	10	<10	50	0.5	-0.2	5.08	-0.5	11	1	13	3.87	<10	1	0.22	0.82	1080	<1	0.03	3	1030	7	3.95	<1	<10	-0.05	<10	<10	27	<10	66			
213469	A07-041	Mickey	148.00	149.00	1.00	E213469	-0.01	-0.5	1.82	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213470	A07-041	Mickey	149.00	150.00	1.00	E213470	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213471	A07-041	Mickey	150.00	151.00	1.00	E213471	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213472	A07-041	Mickey	151.00	152.00	1.00	E213472	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213473	A07-041	Mickey	152.00	153.00	1.00	E213473	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213474	A07-041	Mickey	153.00	154.00	1.00	E213474	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213475	A07-041	Mickey	154.00	155.00	1.00	E213475	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213476	A07-041	Mickey	155.00	156.00	1.00	E213476	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213477	A07-041	Mickey	156.00	157.00	1.00	E213477	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213478	A07-041	Mickey	157.00	158.00	1.00	E213478	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213479	A07-041	Mickey	158.00	159.00	1.00	E213479	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213480	A07-041	Mickey	159.00	160.00	1.00	E213480	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213481	A07-041	Mickey	160.00	161.00	1.00	E213481	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213482	A07-041	Mickey	161.00	162.00	1.00	E213482	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213483	A07-041	Mickey	162.00	163.00	1.00	E213483	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10	<1	0.33	10	0.89	984	<1	0.04	1080	8	3.64	<1	<10	-0.01	<10	<10	34	<10	67			
213484	A07-041	Mickey	163.00	164.00	1.00	E213484	-0.01	-0.5	1.73	9	<10	120	0.5	-0.2	4.14	-0.5	10	1	14	3.72	<10</																					

213598	A07-045	Thesis II	107.00	108.00	1.00		E213598	1.04	3.3	0.02	119	<10	10	<-0.5	3	0.01	9.5	12	14	4210	3.24	<10	6	<-0.01	<10	<-0.01	80	3	<-0.01	2	30	18	3.17	684	1	25	<-20	<-0.01	<10	<10	2	<10	226
213599	A07-045	Thesis II	108.00	109.00	1.00		E213599	1.5	2.1	0.03	87	<10	<-0.5	<-0.01	4.3	16	15	2840	3.72	<10	8	<-0.01	<10	<-0.01	84	5	<-0.01	3	10	8	3.69	120	1	6	<-20	<-0.01	<10	<10	2	<10	110		
213600	A07-045	Thesis II	109.00	110.00	1.00		E213600	2.97	6.4	0.05	1110	<10	10	<-0.5	6	<-0.01	40.9	19	14	>10000	4.86	<10	39	<-0.01	<10	<-0.01	88	5	<-0.01	3	20	17	5.39	###	1	14	<-20	<-0.01	<10	<10	2	<10	1720
213601	A07-045	Thesis II	110.00	111.00	1.00	Standard 2	E213601	4.66	5.1	0.23	473	<10	20	<-0.5	<-2	0.11	<-0.5	12	466	65	0.61	<10	7	0.15	<10	0.05	231	15	<-0.01	361	320	2	1.9	83	1	5	<-20	<-0.01	10	<10	17	<10	34
213602	A07-045	Thesis II	110.00	111.00	1.00		E213602	1.3	4.1	0.05	1190	<10	10	<-0.5	7	0.01	24.8	28	10	>10000	7.95	<10	35	<-0.01	<10	<-0.01	80	9	<-0.01	4	20	24	5.99	###	1	51	<-20	<-0.01	<10	<10	3	<10	165
213603	A07-045	Thesis II	111.00	112.00	1.00		E213603	1.65	1.5	0.06	17	<10	10	<-0.5	2	0.01	0.7	16	14	886	4.13	<10	7	<-0.01	<10	<-0.01	79	13	<-0.01	2	50	30	3.75	57	1	47	<-20	<-0.01	<10	<10	2	<10	16
213604	A07-045	Thesis II	112.00	113.00	1.00		E213604	1.53	0.9	0.05	10	<10	10	<-0.5	2	0.01	<-0.5	11	13	323	3.04	<10	4	0.01	<10	<-0.01	72	11	<-0.01	3	50	23	2.67	29	1	39	<-20	<-0.01	<10	<10	2	<10	5
213605	A07-045	Thesis II	113.00	114.00	1.00		E213605	0.95	0.8	0.04	5	<10	10	<-0.5	2	0.01	<-0.5	12	13	152	3.40	<10	2	<-0.01	<10	<-0.01	74	16	<-0.01	3	30	13	5.16	7	<1	28	<-20	<-0.01	<10	<10	2	<10	2
213606	A07-045	Thesis II	114.00	115.00	1.00		E213606	1.76	0.7	0.04	5	<10	10	<-0.5	<-2	0.01	<-0.5	14	16	85	3.9	<10	1	<-0.01	<10	<-0.01	79	4	0.01	3	10	11	3.62	6	1	16	<-20	<-0.01	<10	<10	2	<10	2
213607	A07-045	Thesis II	115.00	116.00	1.00		E213607	1.5	0.7	0.03	4	<10	<-10	<-0.5	<-2	0.01	<-0.5	14	16	97	4.11	<10	<1	<-0.01	<10	<-0.01	65	16	<-0.01	3	10	15	3.72	5	1	11	<-20	<-0.01	<10	<10	2	<10	2
213608	A07-045	Thesis II	116.00	117.00	1.00		E213608	1.28	0.5	0.05	<-2	<10	<-10	<-0.5	2	<-0.01	<-0.5	12	21	67	2.95	<10	1	<-0.01	<10	<-0.01	75	15	<-0.01	3	10	13	2.5	3	<1	16	<-20	<-0.01	<10	<10	1	<10	<-2
213609	A07-045	Thesis II	117.00	118.00	1.00		E213609	0.65	0.4	0.04	7	<10	10	<-0.5	2	0.01	<-0.5	10	5	45	3.62	<10	<1	0.01	<10	<-0.01	62	30	0.01	3	60	24	5.8	8	1	62	<-20	<-0.01	<10	<10	2	<10	2
213610	A07-045	Thesis II	118.00	119.00	1.00		E213610	1.15	0.7	0.27	<-2	<10	10	<-0.5	<-2	0.01	<-0.5	12	12	76	3.28	<10	1	<-0.01	<10	<-0.01	53	9	<-0.01	3	80	<1	3.12	6	1	73	<-20	<-0.01	<10	<10	4	<10	2
213611	A07-045	Thesis II	118.00	120.00	1.00		E213611	0.46	0.3	0.61	3	<10	40	<-0.5	2	0.02	<-0.5	14	2	94	3.49	<10	<1	0.01	<10	<-0.01	34	31	<-0.01	2	230	20	3.89	3	1	202	<-20	<-0.01	<10	<10	8	<10	2
213612	A07-045	Thesis II	120.00	121.00	1.00		E213612	1.4	0.4	0.26	7	<10	10	<-0.5	2	0.02	<-0.5	12	9	73	3.53	<10	1	0.01	<10	<-0.01	58	11	<-0.01	3	140	25	5.4	6	1	125	<-20	<-0.01	<10	<10	4	<10	3
213613	A07-045	Thesis II	121.00	123.00	2.00		E213613	3.62	0.8	0.1	9	<10	20	<-0.5	3	0.01	<-0.5	11	13	65	3.02	<10	1	<-0.01	<10	<-0.01	69	10	<-0.01	2	50	22	2.7	5	1	54	<-20	<-0.01	<10	<10	2	<10	2
213614	A07-045	Thesis II	123.00	124.00	1.00		E213614	1.95	0.8	0.02	8	<10	10	<-0.5	2	0.01	<-0.5	12	14	72	3.34	<10	<1	<-0.01	<10	<-0.01	69	9	<-0.01	3	30	14	3.04	4	1	26	<-20	<-0.01	<10	<10	2	<10	2
213615	A07-045	Thesis II	124.00	125.00	1.00		E213615	2.63	1.3	0.02	13	<10	30	<-0.5	2	0.01	<-0.5	13	12	82	3.52	<10	<1	<-0.01	<10	<-0.01	78	21	<-0.01	2	90	27	3.18	8	1	82	<-20	<-0.01	<10	<10	2	<10	2
213616	A07-045	Thesis II	125.00	126.00	1.00	Standard 4	E213616	35.2	18.7	0.27	484	<10	30	<-0.5	<-2	0.11	<-0.5	7	41	42	3.23	<10	4	0.17	10	0.05	141	10	0.01	13	390	7	2.13	37	1	6	<-20	<-0.01	<10	<10	12	<10	50
213617	A07-045	Thesis II	126.00	128.00	1.00		E213617	1.21	0.8	0.04	8	<10	70	<-0.5	<-2	0.01	<-0.5	15	18	70	4.91	<10	<1	<-0.01	<10	<-0.01	89	22	<-0.01	4	80	34	3.55	4	<1	52	<-20	<-0.01	<10	<10	2	<10	2
213618	A07-045	Thesis II	128.00	127.00	1.00		E213618	0.96	0.8	0.01	3	<10	45	<-0.5	2	0.01	<-0.5	12	19	61	3.07	<10	1	<-0.01	<10	<-0.01	74	18	0.01	2	20	14	2.68	4	<1	25	<-20	<-0.01	<10	<10	1	<10	<-2
213619	A07-045	Thesis II	127.00	128.00	1.00		E213619	1.1	0.9	0.04	5	<10	20	<-0.5	2	0.01	<-0.5	15	13	78	3.73	<10	1	<-0.01	<10	<-0.01	76	14	0.01	3	20	18	3.37	4	<1	30	<-20	<-0.01	<10	<10	2	<10	2
213620	A07-045	Thesis II	129.00	129.00	1.00		E213620	0.1	0.3	0.56	49	<10	155	<-0.5	2	0.16	0.6	11	2	241	3.75	<10	1	0.17	<10	0.02	25	8	0.01	2	450	32	3.67	3	2	99	<-20	<-0.01	<10	<10	15	<10	34
213621	A07-045	Thesis II	129.00	130.00	1.00		E213621	0.18	<-0.2	0.54	3	<10	360	<-0.5	4	0.01	<-0.5	8	4	70	1.17	<10	<1	<-0.01	<10	<-0.01	37	25	<-0.01	1	220	24	0.96	<-2	2	216	<-20	<-0.01	<10	<10	7	<10	3
213622	A07-045	Thesis II	130.00	131.00	1.00		E213622	0.43	0.4	0.52	6	<10	140	<-0.5	<-2	0.03	<-0.5	9	4	126	2.05	<10	1	0.06	<10	0.01	45	22	<-0.01	2	190	27	1.87	3	1	166	<-20	<-0.01	<10	<10	8	<10	4
213623	A07-045	Thesis II	131.00	132.00	1.00		E213623	0.09	0.8	0.68	155	<10	60	1	<-2	0.33	2.0	11	2	56	2.29	<10	<1	0.25	10	0.06	99	10	0.01	3	910	106	2.21	2	3	38	<-20	<-0.01	<10	<10	36	<10	294
213624	A07-045	Thesis II	132.00	133.00	1.00		E213624	0.07	0.5	0.65	71	<10	80	1	3	0.36	2.2	11	1	24	3.78	<10	<1	0.28	10	0.2	280	8	0.01	2	780	95	2.36	2	3	30	<-20	<-0.01	<10	<10	23	<10	260
213625	A07-045	Thesis II	133.00	135.00	2.00		E213625	0.02	0.3	0.68	<-2	<10	1730	0.7	<-2	0.39	<-0.5	7	2	28	3.09	<10	<1	0.3	10	0.26	377	2	0.01	2	660	19	0.16	<-2	3	42	<-20	<-0.01	<10	<10	69	<10	102
213626	A07-045	Thesis II	135.00	137.00	2.00		E213626	0.01	0.3	0.74	<-2	<10	1410	0.8	<-2	0.3	<-0.5	8	2	12	3.46	<10	<1	0.33	10	0.36	427	1	0.01	2	650	14	0.03	<-2	3	51	<-20	<-0.01	<10	<10	82	<10	96
213627	A07-045	Thesis II	137.00	139.00	2.00		E213627	<-0.01	<-0.2	0.71	4	<10	1430	0.7	<-2	1.8	<-0.5	8	2	14	3.09	<10	<1	0.32	10	0.41	595	1	0.01	2	610	14	0.06	<-2	3	62	<-20	<-0.01	<10	<10	80	<10	82

Appendix 3
Ranch Property
2007 Diamond Drill Hole Core Recovery & RQD Records

Hole_ID	From	To	Interval	Recovery	Recovery_Pcnt	RQD
A07-001	3.05	4.57	1.52	1.52	1.00	0.00
A07-001	4.57	6.10	1.53	1.37	0.90	0.65
A07-001	6.10	7.62	1.52	1.53	1.01	0.87
A07-001	7.62	9.14	1.52	1.50	0.99	1.34
A07-001	9.14	10.67	1.53	1.49	0.97	1.19
A07-001	10.67	12.19	1.52	1.50	0.99	1.31
A07-001	12.19	13.72	1.53	1.41	0.92	0.77
A07-001	13.72	15.24	1.52	1.53	1.01	1.53
A07-001	15.24	16.76	1.52	1.53	1.01	1.42
A07-001	16.76	18.29	1.53	1.42	0.93	1.25
A07-001	18.29	19.81	1.52	1.53	1.01	1.41
A07-001	19.81	21.34	1.53	1.56	1.02	1.48
A07-001	21.34	22.86	1.52	1.49	0.98	1.30
A07-001	22.86	24.38	1.52	1.48	0.97	1.30
A07-001	24.38	25.91	1.53	1.49	0.97	1.27
A07-001	25.91	27.43	1.52	1.53	1.01	1.42
A07-001	27.43	28.96	1.53	1.52	0.99	1.40
A07-001	28.96	30.48	1.52	1.50	0.99	1.42
A07-001	30.48	32.00	1.52	1.48	0.97	1.27
A07-001	32.00	33.53	1.53	1.50	0.98	1.43
A07-001	33.53	35.05	1.52	1.30	0.86	1.10
A07-001	35.05	36.58	1.53	1.51	0.99	1.38
A07-001	36.58	38.10	1.52	1.51	0.99	1.36
A07-001	38.10	39.62	1.52	1.51	0.99	1.51
A07-001	39.62	41.15	1.53	1.49	0.97	1.49
A07-001	41.15	42.67	1.52	1.50	0.99	1.43
A07-001	42.67	44.20	1.53	1.55	1.01	1.55
A07-001	44.20	45.72	1.52	1.55	1.02	1.48
A07-001	45.72	47.24	1.52	1.48	0.97	1.37
A07-001	47.24	48.77	1.53	1.53	1.00	1.53
A07-001	48.77	50.29	1.52	1.51	0.99	1.27
A07-001	50.29	51.82	1.53	1.51	0.99	1.51
A07-001	51.82	53.34	1.52	1.53	1.01	1.53
A07-001	53.34	54.86	1.52	1.50	0.99	1.34
A07-001	54.86	56.39	1.53	1.53	1.00	1.53
A07-001	56.39	57.91	1.52	1.52	1.00	1.52
A07-001	57.91	59.44	1.53	1.54	1.01	1.34
A07-001	59.44	60.96	1.52	1.51	0.99	1.51
A07-001	60.96	62.48	1.52	1.55	1.02	1.55
A07-001	62.48	64.01	1.53	1.50	0.98	1.46
A07-001	64.01	65.53	1.52	1.51	0.99	1.44
A07-001	65.53	67.06	1.53	1.49	0.97	1.23
A07-001	67.06	68.58	1.52	1.49	0.98	1.37
A07-001	68.58	70.10	1.52	1.56	1.03	1.40
A07-001	70.10	71.63	1.53	1.53	1.00	1.38

A07-001	71.63	73.15	1.52	1.48	0.97	1.40
A07-001	73.15	74.68	1.53	1.45	0.95	1.38
A07-001	74.68	76.20	1.52	1.45	0.95	1.20
A07-001	76.20	77.72	1.52	1.56	1.03	1.56
A07-001	77.72	79.25	1.53	1.53	1.00	1.53
A07-001	79.25	80.77	1.52	1.50	0.99	1.50
A07-001	80.77	82.30	1.53	1.43	0.93	1.23
A07-001	82.30	83.82	1.52	1.43	0.94	1.34
A07-001	83.82	85.35	1.53	0.50	0.33	0.00
A07-001	85.35	88.40	3.05	3.06	1.00	2.78
A07-001	88.40	91.44	3.04	3.06	1.01	2.91
A07-001	91.44	94.50	3.06	3.00	0.98	2.66
A07-001	94.50	97.54	3.04	3.02	0.99	2.74
A07-001	97.54	100.60	3.06	3.05	1.00	2.96
A07-001	100.60	103.63	3.03	2.93	0.97	2.71
A07-001	103.63	106.70	3.07	2.96	0.96	2.82
A07-001	106.70	109.73	3.03	3.03	1.00	1.74
A07-001	109.73	112.78	3.05	3.05	1.00	1.63
A07-001	112.78	115.82	3.04	3.24	1.07	2.13
A07-001	115.82	118.87	3.05	3.01	0.99	2.52
A07-001	118.87	120.40	1.53	1.52	0.99	0.80
A07-001	120.40	123.45	3.05	3.02	0.99	0.15
A07-001	123.45	126.49	3.04	3.00	0.99	0.62
A07-001	126.49	129.54	3.05	3.05	1.00	2.40
A07-001	129.54	132.60	3.06	2.90	0.95	2.06
A07-001	132.60	135.64	3.04	3.03	1.00	2.22
A07-001	135.64	138.70	3.06	2.98	0.97	1.27
A07-001	138.70	140.21	1.51	0.36	0.24	0.00
A07-001	140.21	143.26	3.05	2.84	0.93	2.43
A07-001	143.26	146.31	3.05	3.05	1.00	2.27
A07-001	146.31	149.35	3.04	3.04	1.00	2.56
A07-001	149.35	152.40	3.05	3.00	0.98	2.32
A07-001	152.40	155.45	3.05	3.04	1.00	2.11
A07-001	155.45	158.50	3.05	2.95	0.97	1.86
A07-001	158.50	161.55	3.05	3.05	1.00	2.70
A07-001	161.55	164.60	3.05	2.96	0.97	1.99
A07-001	164.60	167.64	3.04	3.00	0.99	2.59
A07-001	167.64	170.69	3.05	3.05	1.00	1.29
A07-001	170.69	173.13	2.44	2.26	0.93	0.00
A07-001	173.13	175.87	2.74	2.97	1.08	1.64
A07-001	175.87	178.92	3.05	3.03	0.99	1.36
A07-001	178.92	181.05	2.13	1.93	0.91	1.93
A07-001	181.05	184.10	3.05	2.98	0.98	2.98
A07-001	184.10	185.93	1.83	1.92	1.05	1.92
A07-001	185.93	188.98	3.05	3.09	1.01	3.09
A07-001	188.98	190.20	1.22	1.24	1.02	1.24
A07-002	1.52	3.05	1.53	1.10	0.72	0.22
A07-002	3.05	3.96	0.91	0.82	0.90	0.39
A07-002	3.96	4.57	0.61	0.69	1.13	0.63
A07-002	4.57	6.10	1.53	1.44	0.94	1.06
A07-002	6.10	9.14	3.04	2.99	0.98	2.70

A07-002	9.14	12.19	3.05	2.74	0.90	1.63
A07-002	12.19	15.24	3.05	2.97	0.97	2.69
A07-002	15.24	18.29	3.05	3.01	0.99	2.63
A07-002	18.29	21.34	3.05	3.14	1.03	2.38
A07-002	21.34	22.86	1.52	1.52	1.00	1.09
A07-002	22.86	24.40	1.54	1.74	1.13	0.94
A07-002	24.40	27.43	3.03	2.59	0.85	2.24
A07-002	27.43	30.50	3.07	3.06	1.00	2.57
A07-002	30.50	33.53	3.03	3.06	1.01	2.65
A07-002	33.53	36.58	3.05	3.03	0.99	2.93
A07-002	36.58	39.62	3.04	3.07	1.01	2.91
A07-002	39.62	42.67	3.05	3.02	0.99	2.99
A07-002	42.67	45.72	3.05	2.88	0.94	1.96
A07-002	45.72	47.24	1.52	1.53	1.01	1.35
A07-002	47.24	50.30	3.06	3.04	0.99	2.97
A07-002	50.30	53.34	3.04	3.12	1.03	1.05
A07-002	53.34	56.40	3.06	3.05	1.00	2.20
A07-002	56.40	59.44	3.04	3.04	1.00	1.78
A07-002	59.44	62.50	3.06	3.02	0.99	2.39
A07-002	62.50	65.53	3.03	3.03	1.00	2.52
A07-002	65.53	68.60	3.07	3.07	1.00	2.38
A07-002	68.60	71.63	3.03	3.05	1.01	2.59
A07-002	71.63	74.70	3.07	2.88	0.94	1.65
A07-002	74.70	76.20	1.50	1.50	1.00	1.25
A07-002	76.20	79.25	3.05	3.04	1.00	2.80
A07-002	79.25	82.30	3.05	3.10	1.02	2.79
A07-002	82.30	85.35	3.05	3.11	1.02	2.94
A07-002	85.35	88.40	3.05	2.98	0.98	2.65
A07-002	88.40	91.44	3.04	2.72	0.89	2.50
A07-002	91.44	94.50	3.06	3.04	0.99	2.37
A07-002	94.50	97.54	3.04	3.04	1.00	2.89
A07-002	97.54	100.59	3.05	3.03	0.99	2.91
A07-002	100.59	103.63	3.04	2.92	0.96	2.37
A07-002	103.63	106.70	3.07	2.92	0.95	2.74
A07-002	106.70	109.73	3.03	2.95	0.97	2.87
A07-002	109.73	112.80	3.07	2.94	0.96	2.64
A07-002	112.80	115.83	3.03	3.05	1.01	2.88
A07-002	115.83	118.90	3.07	2.95	0.96	2.59
A07-002	118.90	121.92	3.02	3.02	1.00	2.84
A07-002	121.92	125.00	3.08	2.96	0.96	2.61
A07-002	125.00	128.02	3.02	3.00	0.99	1.88
A07-002	128.02	131.07	3.05	3.05	1.00	2.67
A07-002	131.07	134.11	3.04	3.07	1.01	3.03
A07-002	134.11	137.16	3.05	2.86	0.94	2.86
A07-002	137.16	139.90	2.74	2.70	0.99	2.36
A07-002	139.90	142.04	2.14	1.85	0.86	1.70
A07-002	142.04	144.78	2.74	2.69	0.98	2.69
A07-002	144.78	147.52	2.74	2.74	1.00	2.63
A07-002	147.52	150.57	3.05	3.08	1.01	2.85
A07-002	150.57	153.62	3.05	3.04	1.00	2.66
A07-002	153.62	156.70	3.08	3.07	1.00	2.56
A07-002	156.70	159.72	3.02	3.04	1.01	2.66

A07-002	159.72	162.50	2.78	2.75	0.99	2.50
A07-002	162.50	163.07	0.57	0.63	1.11	0.49
A07-003	4.57	6.10	1.53	0.21	0.14	0.00
A07-003	6.10	7.62	1.52	1.21	0.80	0.00
A07-003	7.62	9.14	1.52	1.62	1.07	0.44
A07-003	9.14	10.70	1.56	1.50	0.96	1.12
A07-003	10.70	12.20	1.50	1.48	0.99	1.23
A07-003	12.20	13.72	1.52	1.52	1.00	0.78
A07-003	13.72	15.24	1.52	1.44	0.95	1.19
A07-003	15.24	16.80	1.56	1.48	0.95	0.84
A07-003	16.80	18.30	1.50	1.50	1.00	1.34
A07-003	18.30	19.81	1.51	1.41	0.93	1.35
A07-003	19.81	21.34	1.53	1.48	0.97	1.48
A07-003	21.34	22.90	1.56	1.43	0.92	1.12
A07-003	22.90	24.40	1.50	1.50	1.00	1.37
A07-003	24.40	25.91	1.51	1.51	1.00	1.43
A07-003	25.91	27.43	1.52	1.45	0.95	1.37
A07-003	27.43	29.00	1.57	1.54	0.98	1.50
A07-003	29.00	30.50	1.50	1.50	1.00	1.43
A07-003	30.50	32.00	1.50	1.50	1.00	1.50
A07-003	32.00	33.53	1.53	1.44	0.94	1.15
A07-003	33.53	35.05	1.52	1.45	0.95	0.94
A07-003	35.05	36.60	1.55	1.56	1.01	1.56
A07-003	36.60	38.10	1.50	1.45	0.97	1.31
A07-003	38.10	39.62	1.52	1.48	0.97	1.16
A07-003	39.62	40.23	0.61	0.61	1.00	0.00
A07-003	40.23	41.15	0.92	0.90	0.98	0.00
A07-003	41.15	42.70	1.55	1.64	1.06	0.45
A07-003	42.70	43.30	0.60	0.60	1.00	0.00
A07-003	43.30	44.20	0.90	0.90	1.00	0.55
A07-003	44.20	45.72	1.52	1.39	0.91	0.89
A07-003	45.72	47.24	1.52	1.48	0.97	1.40
A07-003	47.24	48.80	1.56	1.36	0.87	1.00
A07-003	48.80	50.30	1.50	1.49	0.99	1.34
A07-003	50.30	51.82	1.52	1.52	1.00	1.20
A07-003	51.82	52.43	0.61	0.39	0.64	0.00
A07-003	52.43	54.90	2.47	2.42	0.98	0.78
A07-003	54.90	57.91	3.01	2.81	0.93	2.41
A07-003	57.91	61.00	3.09	3.12	1.01	1.63
A07-003	61.00	64.01	3.01	2.82	0.94	0.67
A07-003	64.01	67.06	3.05	3.03	0.99	2.59
A07-003	67.06	70.10	3.04	3.04	1.00	2.92
A07-003	70.10	73.20	3.10	3.04	0.98	2.84
A07-003	73.20	76.20	3.00	2.97	0.99	2.50
A07-003	76.20	79.25	3.05	3.04	1.00	2.50
A07-003	79.25	82.30	3.05	2.84	0.93	2.84
A07-003	82.30	85.35	3.05	3.03	0.99	3.03
A07-003	85.35	88.40	3.05	2.04	0.67	2.04
A07-003	88.40	91.44	3.04	0.00	0.00	0.00
A07-003	91.44	94.50	3.06	2.88	0.94	1.80
A07-003	94.50	97.54	3.04	3.05	1.00	1.58

A07-003	97.54	100.60	3.06	2.87	0.94	2.01
A07-003	100.60	103.63	3.03	2.89	0.95	2.07
A07-003	103.63	106.70	3.07	3.08	1.00	2.03
A07-003	106.70	109.73	3.03	2.92	0.96	2.01
A07-003	109.73	112.80	3.07	3.16	1.03	2.36
A07-003	112.80	115.83	3.03	3.02	1.00	2.07
A07-003	115.83	118.90	3.07	2.72	0.89	0.72
A07-003	118.90	121.92	3.02	3.07	1.02	2.12
A07-003	121.92	125.00	3.08	2.78	0.90	2.11
A07-003	125.00	128.02	3.02	3.10	1.03	2.40
A07-003	128.02	129.54	1.52	1.60	1.05	1.38
A07-003	129.54	132.60	3.06	3.02	0.99	2.45
A07-003	132.60	135.64	3.04	2.77	0.91	1.30
A07-003	135.64	138.70	3.06	3.04	0.99	2.28
A07-003	138.70	141.73	3.03	2.96	0.98	2.44
A07-003	141.73	144.78	3.05	2.99	0.98	2.42
A07-003	144.78	147.52	2.74	2.42	1.09	1.54
A07-003	147.52	150.57	3.05	2.98	0.98	2.93
A07-003	150.57	153.62	3.05	2.98	0.95	2.65
A07-003	153.62	156.67	3.05	2.90	0.79	0.77
A07-003	156.67	159.11	2.44	2.41	1.18	0.12
A07-003	159.11	162.16	3.05	2.87	0.37	0.82
A07-003	162.16	163.70	1.54	1.14	0.74	0.00
A07-003	163.70	166.12	2.42	2.84	1.17	0.00
A07-003	166.12	167.34	1.22	0.94	0.77	0.00
A07-003			0.00			
A07-003			0.00			
A07-003			0.00			
A07-003			0.00			
A07-003		184.40	184.40			
A07-004	3.66	4.88	1.22	0.34	0.28	0.00
A07-004	4.88	7.32	2.44	2.47	1.01	0.63
A07-004	7.32	7.62	0.30	0.10	0.33	0.10
A07-004	7.62	10.60	2.98	1.65	0.55	0.61
A07-004	10.60	11.58	0.98	1.82	1.86	0.11
A07-004	11.58	14.33	2.75	2.90	1.05	1.65
A07-004	14.33	17.37	3.04	3.07	1.01	2.46
A07-004	17.37	20.42	3.05	2.98	0.98	1.85
A07-004	20.42	21.64	1.22	1.18	0.97	0.50
A07-004	21.64	24.38	2.74	2.40	0.88	2.06
A07-004	24.38	27.43	3.05	2.95	0.97	2.31
A07-004	27.43	28.96	1.53	1.60	1.05	0.75
A07-004	28.96	32.00	3.04	2.91	0.96	0.83
A07-004	32.00	33.53	1.53	0.74	0.48	0.42
A07-004	33.53	36.58	3.05	3.02	0.99	2.21
A07-004	36.58	39.62	3.04	3.04	1.00	1.88
A07-004	39.62	42.67	3.05	3.05	1.00	2.57
A07-004	42.67	45.72	3.05	2.99	0.98	2.81
A07-004	45.72	48.77	3.05	3.05	1.00	2.59
A07-004	48.77	51.82	3.05	2.89	0.95	2.64
A07-004	51.82	54.86	3.04	2.98	0.98	2.05

A07-004	54.86	57.91	3.05	3.02	0.99	2.29
A07-004	57.91	60.96	3.05	2.98	0.98	2.52
A07-004	60.96	64.01	3.05	3.02	0.99	2.75
A07-004	64.01	65.53	1.52	1.39	0.91	0.48
A07-004	65.53	68.58	3.05	3.05	1.00	2.04
A07-004	68.58	71.63	3.05	2.98	0.98	2.40
A07-004	71.63	74.68	3.05	3.01	0.99	1.81
A07-004	74.68	77.72	3.04	2.96	0.97	1.85
A07-004	77.72	80.77	3.05	2.99	0.98	2.75
A07-004	80.77	83.82	3.05	2.94	0.96	2.25
A07-004	83.82	86.87	3.05	2.79	0.91	2.10
A07-004	86.87	89.92	3.05	2.94	0.96	1.97
A07-004	89.92	92.97	3.05	3.01	0.99	1.93
A07-004	92.97	96.01	3.04	2.08	0.68	1.61
A07-004	96.01	97.54	1.53	1.15	0.75	0.00
A07-004	97.54	100.59	3.05	3.00	0.98	1.92
A07-004	100.59	103.63	3.04	3.09	1.02	2.53
A07-004	103.63	106.68	3.05	2.76	0.90	2.18
A07-004	106.68	109.73	3.05	3.24	1.06	2.58
A07-004	109.73	112.78	3.05	3.06	1.00	2.96
A07-004	112.78	115.83	3.05	2.99	0.98	2.06
A07-004	115.83	118.87	3.04	3.09	1.02	2.57
A07-004	118.87	121.92	3.05	2.89	0.95	2.50
A07-004	121.92	124.97	3.05	3.27	1.07	2.87
A07-004	124.97	128.02	3.05	2.95	0.97	1.89
A07-004	128.02	131.02	3.00	2.93	0.98	1.96
A07-004	131.02	134.11	3.09	2.95	0.95	2.75
A07-004	134.11	137.16	3.05	3.00	0.98	1.72
A07-004	137.16	140.21	3.05	2.99	0.98	2.28
A07-004	140.21	143.26	3.05	3.05	1.00	2.11
A07-004	143.26	146.31	3.05	2.68	0.88	1.97
A07-004	146.31	149.35	3.04	2.93	0.96	2.19
A07-004	149.35	152.40	3.05	3.05	1.00	1.49
A07-004	152.40	155.45	3.05	3.02	0.99	2.41
A07-004	155.45	158.50	3.05	3.02	0.99	2.79
A07-004	158.50	161.55	3.05	3.01	0.99	2.70
A07-004	161.55	164.59	3.04	3.04	1.00	2.36
A07-004	164.59	167.64	3.05	3.05	1.00	2.40
A07-004	167.64	170.69	3.05	3.03	0.99	2.60
A07-005	4.57	7.32	2.75	3.03	1.10	0.57
A07-005	7.32	9.14	1.82	1.80	0.99	0.99
A07-005	9.14	12.19	3.05	2.97	0.97	1.19
A07-005	12.19	14.94	2.75	2.70	0.98	1.97
A07-005	14.94	18.14	3.20	3.05	0.95	2.30
A07-005	18.14	21.34	3.20	2.95	0.92	2.54
A07-005	21.34	24.38	3.04	2.95	0.97	2.79
A07-005	24.38	27.43	3.05	2.90	0.95	2.50
A07-005	27.43	30.48	3.05	3.03	0.99	2.18
A07-005	30.48	32.31	1.83	1.90	1.04	0.00
A07-005	32.31	34.14	1.83	1.75	0.96	1.14
A07-005	34.14	36.58	2.44	2.35	0.96	1.62

A07-005	36.58	39.32	2.74	2.02	0.74	1.01
A07-005	39.32	41.76	2.44	2.57	1.05	1.20
A07-005	41.76	44.81	3.05	3.06	1.00	2.49
A07-005	44.81	48.16	3.35	3.10	0.93	2.38
A07-005	48.16	50.29	2.13	2.06	0.97	1.80
A07-005	50.29	53.34	3.05	2.90	0.95	2.32
A07-005	53.34	56.39	3.05	2.69	0.88	1.79
A07-005	56.39	59.44	3.05	3.06	1.00	2.64
A07-005	59.44	62.48	3.04	2.82	0.93	2.55
A07-005	62.48	65.53	3.05	2.93	0.96	2.56
A07-005	65.53	68.58	3.05	2.98	0.98	2.97
A07-005	68.58	71.63	3.05	2.99	0.98	2.67
A07-005	71.63	74.68	3.05	2.97	0.97	2.73
A07-005	74.68	77.72	3.04	3.03	1.00	2.49
A07-005	77.72	80.77	3.05	2.94	0.96	2.79
A07-005	80.77	82.60	1.83	1.54	0.84	0.62
A07-005	82.60	85.65	3.05	2.85	0.93	2.48
A07-005	85.65	88.70	3.05	2.86	0.94	2.62
A07-005	88.70	90.03	1.33	2.00	1.50	1.80
A07-005	90.03	93.88	3.85	2.82	0.73	2.29
A07-005	93.88	96.93	3.05	2.92	0.96	2.53
A07-005	96.93	99.98	3.05	3.02	0.99	2.46
A07-005	99.98	103.02	3.04	3.06	1.01	2.81
A07-005	103.02	105.16	2.14	2.22	1.04	1.51
A07-005	105.16	105.46	0.30	0.26	0.87	0.17
A07-005	105.46	108.21	2.75	3.00	1.09	2.67
A07-005	108.21	111.25	3.04	3.08	1.01	2.52
A07-005	111.25	114.30	3.05	3.08	1.01	2.38
A07-005	114.30	117.35	3.05	2.80	0.92	1.20
A07-005	117.35	119.18	1.83	1.85	1.01	1.32
A07-005	119.18	121.92	2.74	2.75	1.00	2.01
A07-005	121.92	124.97	3.05	3.04	1.00	2.86
A07-005	124.97	128.02	3.05	3.00	0.98	2.88
A07-005	128.02	131.07	3.05	3.07	1.01	2.90
A07-005	131.07	134.11	3.04	2.99	0.98	2.79
A07-005	134.11	137.16	3.05	2.98	0.98	2.72
A07-005	137.16	138.69	1.53	1.44	0.94	1.02
A07-005	138.69	141.73	3.04	3.01	0.99	2.45
A07-005	141.73	144.78	3.05	3.04	1.00	2.54
A07-005	144.78	147.83	3.05	2.95	0.97	2.30
A07-005	147.83	150.88	3.05	3.04	1.00	2.65
A07-006						
A07-006	3.05	4.57	1.52	1.13	0.74	0.20
A07-006	4.57	5.49	0.92	1.28	1.39	0.26
A07-006	5.49	6.71	1.22	1.25	1.02	0.40
A07-006	6.71	8.23	1.52	1.29	0.85	0.52
A07-006	8.23	10.06	1.83	1.43	0.78	0.00
A07-006	10.06	11.89	1.83	1.83	1.00	0.26
A07-006	11.89	13.11	1.22	1.02	0.84	0.69
A07-006	13.11	15.85	2.74	2.68	0.98	2.05
A07-006	15.85	17.68	1.83	2.25	1.23	1.93
A07-006	17.68	19.81	2.13	2.23	1.05	1.79

A07-006	19.81	22.86	3.05	2.97	0.97	1.86
A07-006	22.86	25.91	3.05	2.84	0.93	2.00
A07-006	25.91	28.96	3.05	2.80	0.92	2.02
A07-006	28.96	30.18	1.22	1.20	0.98	0.62
A07-006	30.18	33.22	3.04	2.47	0.81	2.52
A07-006	33.22	36.27	3.05	3.13	1.03	2.78
A07-006	36.27	39.32	3.05	2.92	0.96	2.61
A07-006	39.32	42.37	3.05	2.75	0.90	1.95
A07-006	42.37	45.57	3.20	3.03	0.95	2.24
A07-006	45.57	48.77	3.20	3.01	0.94	2.18
A07-006	48.77	51.82	3.05	3.01	0.99	2.64
A07-006	51.82	54.86	3.04	2.95	0.97	2.58
A07-006	54.86	57.91	3.05	2.94	0.96	2.68
A07-006	57.91	60.96	3.05	3.05	1.00	2.28
A07-006	60.96	64.01	3.05	2.70	0.89	1.71
A07-006	64.01	67.06	3.05	2.99	0.98	1.96
A07-006	67.06	69.50	2.44	2.28	0.93	1.66
A07-006	69.50	72.70	3.20	3.10	0.97	2.41
A07-006	72.70	75.90	3.20	3.04	0.95	2.69
A07-006	75.90	78.94	3.04	3.04	1.00	2.32
A07-006	78.94	82.14	3.20	3.10	0.97	2.58
A07-006	82.14	85.35	3.21	3.08	0.96	2.32
A07-006	85.35	88.39	3.04	3.09	1.02	2.72
A07-006	88.39	91.44	3.05	2.99	0.98	2.11
A07-006	91.44	94.49	3.05	2.95	0.97	2.60
A07-006	94.49	97.54	3.05	3.00	0.98	2.79
A07-006	97.54	100.59	3.05	2.99	0.98	1.59
A07-006	100.59	103.63	3.04	2.91	0.96	1.76
A07-006	103.63	106.68	3.05	3.05	1.00	1.98
A07-006	106.68	109.73	3.05	3.02	0.99	2.69
A07-006	109.73	112.78	3.05	3.05	1.00	1.34
A07-006	112.78	115.83	3.05	3.05	1.00	1.84
A07-006	115.83	118.87	3.04	2.92	0.96	0.91
A07-006	118.87	121.92	3.05	3.02	0.99	0.00
A07-007	4.57	7.62	3.05	3.10	1.02	1.51
A07-007	7.62	9.75	2.13	2.06	0.97	0.41
A07-007	9.75	11.58	1.83	1.75	0.96	0.91
A07-007	11.58	13.87	2.29	2.15	0.94	1.45
A07-007	13.87	16.76	2.89	2.96	1.02	2.48
A07-007	16.76	19.81	3.05	2.80	0.92	2.47
A07-007	19.81	22.86	3.05	2.96	0.97	2.05
A07-007	22.86	25.91	3.05	2.73	0.90	1.90
A07-007	25.91	28.35	2.44	2.30	0.94	1.52
A07-007	28.35	31.55	3.20	3.11	0.97	2.07
A07-007	31.55	34.55	3.00	3.01	1.00	2.12
A07-007	34.55	37.34	2.79	2.47	0.89	1.96
A07-007	37.34	40.39	3.05	3.11	1.02	2.34
A07-007	40.39	43.59	3.20	3.06	0.96	2.60
A07-007	43.59	46.79	3.20	3.08	0.96	2.40
A07-007	46.79	49.99	3.20	2.61	0.82	2.28
A07-007	49.99	51.82	1.83	2.38	1.30	2.07

A07-007	51.82	54.41	2.59	2.60	1.00	1.81
A07-007	54.41	56.39	1.98	1.96	0.99	1.64
A07-007	56.39	59.44	3.05	3.03	0.99	2.56
A07-007	59.44	62.48	3.04	3.00	0.99	2.95
A07-007	62.48	65.53	3.05	2.98	0.98	2.78
A07-007	65.53	68.58	3.05	3.06	1.00	2.90
A07-007	68.58	71.63	3.05	3.12	1.02	3.10
A07-007	71.63	74.68	3.05	2.86	0.94	2.67
A07-007	74.68	77.12	2.44	2.37	0.97	1.99
A07-007	77.12	79.25	2.13	2.12	1.00	1.74
A07-007	79.25	82.30	3.05	3.06	1.00	2.42
A07-007	82.30	84.13	1.83	1.75	0.96	1.18
A07-007	84.13	85.95	1.82	1.90	1.04	1.50
A07-007	85.95	88.39	2.44	2.33	0.95	1.79
A07-007	88.39	89.61	1.22	1.17	0.96	0.26
A07-007	89.61	91.44	1.83	1.86	1.02	1.67
A07-007	91.44	94.49	3.05	1.87	0.61	1.73
A07-007	94.49	96.62	2.13	1.91	0.90	1.38
A07-007	96.62	98.15	1.53	1.69	1.10	0.61
A07-007	98.15	100.59	2.44	1.76	0.72	1.03
A07-007	100.59	103.63	3.04	3.00	0.99	2.86
A07-007	103.63	103.94	0.31	0.35	1.13	0.24
A07-007	103.94	106.99	3.05	3.03	0.99	2.45
A07-007	106.99	110.03	3.04	3.03	1.00	1.90
A07-007	110.03	113.08	3.05	3.05	1.00	2.74
A07-007	113.08	116.13	3.05	3.06	1.00	2.57
A07-007	116.13	119.18	3.05	3.03	0.99	2.28
A07-007	119.18	122.23	3.05	3.03	0.99	2.46
A07-007	122.23	125.27	3.04	3.05	1.00	2.44
A07-007	125.27	128.32	3.05	3.04	1.00	1.99
A07-007	128.32	131.37	3.05	2.99	0.98	2.88
A07-007	131.37	134.42	3.05	3.03	0.99	1.01
A07-007	134.42	137.47	3.05	3.02	0.99	2.68
A07-007	137.47	140.51	3.04	3.00	0.99	2.50
A07-007	140.51	143.56	3.05	3.10	1.02	2.99
A07-007	143.56	146.61	3.05	3.03	0.99	2.74
A07-007	146.61	149.66	3.05	2.84	0.93	2.27
A07-007	149.66	152.71	3.05	3.04	1.00	2.11
A07-007	152.71	155.75	3.04	2.98	0.98	2.59
A07-007	155.75	158.80	3.05	3.05	1.00	2.01
A07-007	158.80	161.85	3.05	3.00	0.98	2.05
A07-007	161.85	164.90	3.05	2.99	0.98	2.63
A07-007	164.90	167.95	3.05	3.04	1.00	2.53
A07-007	167.95	171.00	3.05	3.03	0.99	2.51
A07-007	171.00	174.04	3.04	2.90	0.95	1.61
A07-007	174.04	174.96	0.92	0.90	0.98	0.35
A07-008	3.05	3.35	0.30	0.70	2.33	0.28
A07-008	3.35	4.57	1.22	1.34	1.10	0.78
A07-008	4.57	6.71	2.14	1.98	0.93	0.60
A07-008	6.71	7.92	1.21	0.81	0.67	0.24
A07-008	7.92	9.45	1.53	0.53	0.35	0.26

A07-008	9.45	10.36	0.91	1.00	1.10	0.46
A07-008	10.36	12.50	2.14	2.14	1.00	0.26
A07-008	12.50	13.72	1.22	1.02	0.84	0.43
A07-008	13.72	15.85	2.13	1.88	0.88	0.60
A07-008	15.85	17.37	1.52	1.23	0.81	0.00
A07-008	17.37	18.90	1.53	1.64	1.07	1.16
A07-008	18.90	19.81	0.91	1.11	1.22	0.44
A07-008	19.81	22.86	3.05	2.62	0.86	2.21
A07-008	22.86	25.91	3.05	3.00	0.98	2.48
A07-008	25.91	28.96	3.05	2.80	0.92	1.01
A07-008	28.96	32.00	3.04	3.01	0.99	2.49
A07-008	32.00	35.05	3.05	2.96	0.97	2.76
A07-008	35.05	38.10	3.05	3.04	1.00	3.02
A07-008	38.10	41.15	3.05	3.01	0.99	1.21
A07-008	41.15	42.98	1.83	1.81	0.99	1.08
A07-008	42.98	43.59	0.61	0.63	1.03	0.18
A07-008	43.59	46.48	2.89	3.09	1.07	2.34
A07-008	46.48	49.23	2.75	2.75	1.00	1.78
A07-008	49.23	52.12	2.89	3.05	1.06	2.11
A07-008	52.12	53.80	1.68	1.64	0.98	0.90
A07-008	53.80	55.32	1.52	1.51	0.99	1.16
A07-008	55.32	56.39	1.07	1.07	1.00	0.82
A07-008	56.39	59.44	3.05	2.94	0.96	1.71
A07-008	59.44	62.48	3.04	2.82	0.93	2.21
A07-008	62.48	65.08	2.60	2.34	0.90	1.72
A07-008	65.08	65.69	0.61	0.05	0.08	0.00
A07-008	65.69	66.29	0.60	0.57	0.95	0.00
A07-008	66.29	67.67	1.38	1.21	0.88	0.84
A07-008	67.67	69.34	1.67	1.49	0.89	0.88
A07-008	69.34	70.41	1.07	1.15	1.07	0.45
A07-008	70.41	73.00	2.59	2.58	1.00	1.67
A07-008	73.00	75.74	2.74	2.57	0.94	1.28
A07-008	75.74	77.12	1.38	1.31	0.95	0.65
A07-008	77.12	80.01	2.89	2.61	0.90	1.86
A07-008	80.01	81.69	1.68	1.19	0.71	0.43
A07-008	81.69	83.82	2.13	1.94	0.91	1.22
A07-008	83.82	86.56	2.74	2.72	0.99	2.25
A07-008	86.56	89.61	3.05	3.00	0.98	2.55
A07-008	89.61	92.66	3.05	2.81	0.92	1.96
A07-008	92.66	95.71	3.05	3.05	1.00	2.84
A07-008	95.71	96.01	0.30	0.23	0.77	0.23
A07-008	96.01	99.06	3.05	2.80	0.92	2.18
A07-008	99.06	101.19	2.13	1.88	0.88	1.36
A07-008	101.19	103.63	2.44	2.46	1.01	1.80
A07-008	103.63	106.68	3.05	2.94	0.96	2.29
A07-008	106.68	109.73	3.05	3.07	1.01	2.60
A07-008	109.73	112.78	3.05	2.67	0.88	1.94
A07-008	112.78	115.52	2.74	2.65	0.97	2.59
A07-008	115.52	115.83	0.31	0.28	0.90	0.16
A07-008	115.83	117.35	1.52	1.26	0.83	0.58
A07-008	117.35	119.48	2.13	1.29	0.61	0.78
A07-008	119.48	120.40	0.92	0.57	0.62	0.13

A07-008	120.40	121.62	1.22	1.00	0.82	0.58
A07-008	121.62	121.92	0.30	0.10	0.33	0.00
A07-008	121.92	123.45	1.53	1.50	0.98	0.66
A07-008	123.45	126.49	3.04	2.88	0.95	2.13
A07-008	126.49	128.63	2.14	2.17	1.01	1.58
A07-008	128.63	131.68	3.05	2.90	0.95	1.50
A07-008	131.68	134.72	3.04	2.93	0.96	1.82
A07-008	134.72	137.16	2.44	2.34	0.96	2.34
A07-008	137.16	140.21	3.05	2.98	0.98	2.76
A07-008	140.21	143.26	3.05	3.00	0.98	1.99
A07-008	143.26	146.31	3.05	3.03	0.99	2.31
A07-008	146.31	149.35	3.04	3.04	1.00	1.97
A07-008	149.35	152.40	3.05	2.60	0.85	1.21
A07-008	152.40	155.45	3.05	2.80	0.92	1.54
A07-009	3.05	4.57	1.52	0.59	0.39	0.93
A07-009	4.57	7.62	3.05	2.95	0.97	2.40
A07-009	7.62	10.67	3.05	3.04	1.00	1.77
A07-009	10.67	13.72	3.05	3.01	0.99	1.04
A07-009	13.72	16.76	3.04	3.09	1.02	2.08
A07-009	16.76	19.81	3.05	2.98	0.98	1.55
A07-009	19.81	22.86	3.05	2.94	0.96	1.65
A07-009	22.86	25.00	2.14	2.02	0.94	1.20
A07-009	25.00	27.43	2.43	2.35	0.97	1.55
A07-009	27.43	30.48	3.05	2.88	0.94	1.65
A07-009	30.48	33.53	3.05	2.70	0.89	0.46
A07-009	33.53	38.10	4.57	4.39	0.96	3.38
A07-009	38.10	41.15	3.05	2.92	0.96	2.15
A07-009	41.15	44.20	3.05	2.97	0.97	1.62
A07-009	44.20	47.24	3.04	2.92	0.96	1.83
A07-009	47.24	50.29	3.05	2.98	0.98	2.04
A07-009	50.29	53.34	3.05	3.05	1.00	1.89
A07-009	53.34	56.39	3.05	2.84	0.93	2.47
A07-009	56.39	59.44	3.05	2.95	0.97	2.71
A07-009	59.44	62.48	3.04	3.06	1.01	2.49
A07-009	62.48	65.53	3.05	2.96	0.97	2.19
A07-009	65.53	68.55	3.02	2.88	0.95	2.47
A07-009	68.55	70.10	1.55	1.45	0.94	1.02
A07-009	70.10	73.15	3.05	2.85	0.93	1.39
A07-009	73.15	74.68	1.53	1.61	1.05	0.62
A07-009	74.68	77.72	3.04	3.05	1.00	2.08
A07-009	77.72	80.77	3.05	3.03	0.99	2.88
A07-009	80.77	83.82	3.05	3.05	1.00	2.87
A07-009	83.82	86.87	3.05	2.99	0.98	2.90
A07-009	86.87	89.92	3.05	3.04	1.00	3.02
A07-009	89.92	92.97	3.05	3.10	1.02	2.76
A07-009	92.97	96.01	3.04	2.90	0.95	2.32
A07-009	96.01	99.06	3.05	3.00	0.98	2.27
A07-009	99.06	102.11	3.05	1.74	0.57	2.99
A07-009	102.11	104.85	2.74	1.74	0.64	2.71
A07-009	104.85	107.90	3.05	3.05	1.00	1.86
A07-009	107.90	109.73	1.83	1.64	0.90	1.44

A07-009	109.73	112.78	3.05	3.05	1.00	1.71
A07-009	112.78	115.83	3.05	2.85	0.93	1.76
A07-009	115.83	118.87	3.04	3.05	1.00	2.49
A07-009	118.87	121.92	3.05	2.82	0.92	2.02
A07-009	121.92	124.97	3.05	2.89	0.95	2.55
A07-009	124.97	129.54	4.57	4.57	1.00	3.66
A07-009	129.54	132.59	3.05	2.90	0.95	2.55
A07-009	132.59	135.64	3.05	3.04	1.00	2.15
A07-009	135.64	138.69	3.05	3.01	0.99	2.27
A07-009	138.69	141.73	3.04	2.94	0.97	1.47
A07-009	141.73	144.78	3.05	3.05	1.00	1.39
A07-009	144.78	147.83	3.05	3.05	1.00	1.66
A07-009	147.83	152.40	4.57	4.31	0.94	2.85
A07-009	152.40	155.45	3.05	2.51	0.82	1.14
A07-009	155.45	158.19	2.74	2.32	0.85	0.15
A07-009	158.19	159.72	1.53	0.52	0.34	0.00
A07-009	159.72	160.33	0.61	0.36	0.59	0.00
A07-009	160.33	160.94	0.61	0.56	0.92	0.19
A07-009	160.94	161.55	0.61	0.66	1.08	0.00
A07-009	161.55	164.59	3.04	2.74	0.90	0.55
A07-009	164.59	167.64	3.05	3.05	1.00	0.41
A07-009	167.64	170.69	3.05	2.94	0.96	1.00
A07-009	170.69	172.21	1.52	1.31	0.86	0.55
A07-009	172.21	173.74	1.53	1.64	1.07	0.88
A07-010	4.57	6.10	1.53	1.50	0.98	0.83
A07-010	6.10	9.14	3.04	2.73	0.90	1.65
A07-010	9.14	12.19	3.05	3.04	1.00	2.61
A07-010	12.19	15.24	3.05	3.04	1.00	2.71
A07-010	15.24	18.28	3.04	3.12	1.03	2.86
A07-010	18.28	21.34	3.06	2.96	0.97	1.31
A07-010	21.34	24.38	3.04	2.90	0.95	1.48
A07-010	24.38	27.43	3.05	3.07	1.01	1.47
A07-010	27.43	30.48	3.05	3.05	1.00	0.84
A07-010	30.48	33.53	3.05	3.05	1.00	1.77
A07-010	33.53	36.58	3.05	3.07	1.01	1.50
A07-010	36.58	39.62	3.04	2.95	0.97	0.00
A07-010	39.62	42.67	3.05	3.05	1.00	0.00
A07-010	42.67	45.72	3.05	2.99	0.98	0.40
A07-010	45.72	48.77	3.05	2.83	0.93	0.70
A07-010	48.77	51.82	3.05	2.91	0.95	1.71
A07-010	51.82	54.86	3.04	3.04	1.00	2.45
A07-010	54.86	57.91	3.05	3.02	0.99	2.93
A07-010	57.91	60.96	3.05	2.85	0.93	1.71
A07-010	60.96	64.01	3.05	0.00	0.00	0.00
A07-010	64.01	67.06	3.05	3.04	1.00	0.36
A07-010	67.06	70.10	3.04	3.04	1.00	1.31
A07-010	70.10	73.15	3.05	2.90	0.95	1.65
A07-010	73.15	76.20	3.05	2.93	0.96	2.09
A07-010	76.20	78.94	2.74	2.60	0.95	1.45
A07-010	78.94	80.77	1.83	1.87	1.02	0.91
A07-010	80.77	83.82	3.05	2.88	0.94	1.57

A07-010	83.82	86.87	3.05	2.72	0.89	1.88
A07-010	86.87	89.92	3.05	3.01	0.99	0.50
A07-010	89.92	92.97	3.05	2.98	0.98	2.17
A07-010	92.97	96.01	3.04	2.95	0.97	1.70
A07-010	96.01	99.06	3.05	2.98	0.98	1.70
A07-010	99.06	102.11	3.05	3.00	0.98	0.98
A07-010	102.11	104.24	2.13	2.13	1.00	0.70
A07-010	104.24	106.68	2.44	2.26	0.93	1.33
A07-010	106.68	109.73	3.05	3.02	0.99	1.17
A07-010	109.73	112.78	3.05	3.05	1.00	1.74
A07-010	112.78	115.83	3.05	2.92	0.96	1.77
A07-010	115.83	118.26	2.43	2.37	0.98	1.64
A07-010	118.26	120.40	2.14	2.40	1.12	2.04
A07-010	120.40	123.45	3.05	2.93	0.96	2.50
A07-010	123.45	124.97	1.52	1.11	0.73	0.79
A07-010	124.97	126.19	1.22	1.22	1.00	0.69
A07-010	126.19	128.02	1.83	1.63	0.89	0.16
A07-010	128.02	130.76	2.74	2.89	1.05	0.11
A07-010	130.76	132.59	1.83	0.89	0.49	0.00
A07-010	132.59	134.42	1.83	2.04	1.11	0.00
A07-010	134.42	136.25	1.83	1.75	0.96	0.00
A07-010	136.25	138.69	2.44	1.92	0.79	0.52
A07-010	138.69	141.73	3.04	2.77	0.91	1.84
A07-010	141.73	144.78	3.05	3.14	1.03	2.14
A07-010	144.78	147.22	2.44	0.00	0.00	0.00
A07-010	147.22	149.05	1.83	1.84	1.01	0.21
A07-010	149.05	149.35	0.30	0.49	1.63	0.00
A07-010	149.35	150.88	1.53	1.38	0.90	0.14
A07-010	150.88	152.71	1.83	1.52	0.83	0.12
A07-010	152.71	153.93	1.22	1.12	0.92	0.11
A07-010	153.93	156.97	3.04	2.29	0.75	0.21
A07-010	156.97	159.72	2.75	1.64	0.60	0.11
A07-010	159.72	160.33	0.61	0.18	0.30	0.00
A07-010	160.33	161.55	1.22	1.14	0.93	0.00
A07-010	161.55	162.16	0.61	0.12	0.20	0.00
A07-010	162.16	164.60	2.44	1.94	0.80	0.00
A07-010	164.60	166.42	1.82	1.63	0.90	0.00
A07-010	166.42	168.25	1.83	1.90	1.04	0.00
A07-010	168.25	169.17	0.92	0.75	0.82	0.00
A07-010	169.17	170.08	0.91	0.75	0.82	0.00
A07-010	170.08	171.60	1.52	1.21	0.80	0.27
A07-010	171.60	173.13	1.53	2.05	1.34	0.00
A07-010	173.13	173.74	0.61	0.69	1.13	0.14
A07-010	173.74	175.57	1.83	1.74	0.95	0.00
A07-010	175.57	176.18	0.61	0.36	0.59	0.00
A07-010	176.18	178.01	1.83	2.72	1.49	0.14
A07-010	178.01	179.83	1.82	1.71	0.94	0.00
A07-010	179.83	181.66	1.83	1.59	0.87	0.16
A07-010	181.66	182.88	1.22	1.67	1.37	0.00
A07-010	182.88	185.63	2.75	2.58	0.94	0.10
A07-010	185.63	187.45	1.82	1.74	0.96	1.07
A07-010	187.45	190.50	3.05	2.80	0.92	0.56

A07-010	190.50	193.55	3.05	2.85	0.93	0.11
A07-010	193.55	195.07	1.52	1.36	0.89	0.20
A07-011	3.05	3.35	0.30	0.25	0.83	0.00
A07-011	3.35	3.96	0.61	0.38	0.62	0.00
A07-011	3.96	5.33	1.37	1.03	0.75	0.00
A07-011	5.33	7.01	1.68	1.24	0.74	0.00
A07-011	7.01	9.14	2.13	1.24	0.58	0.10
A07-011	9.14	10.36	1.22	1.05	0.86	0.83
A07-011	10.36	11.58	1.22	1.36	1.11	0.93
A07-011	11.58	14.02	2.44	2.27	0.93	0.52
A07-011	14.02	17.07	3.05	2.86	0.94	2.08
A07-011	17.07	20.12	3.05	3.01	0.99	2.01
A07-011	20.12	23.17	3.05	2.62	0.86	1.30
A07-011	23.17	25.30	2.13	1.98	0.93	0.00
A07-011	25.30	27.13	1.83	1.94	1.06	0.27
A07-011	27.13	28.65	1.52	1.34	0.88	0.19
A07-011	28.65	31.40	2.75	2.89	1.05	2.03
A07-011	31.40	34.44	3.04	3.04	1.00	0.64
A07-011	34.44	36.27	1.83	1.11	0.61	0.47
A07-011	36.27	39.01	2.74	2.93	1.07	2.52
A07-011	39.01	42.06	3.05	3.00	0.98	2.74
A07-011	42.06	44.20	2.14	1.97	0.92	1.53
A07-011	44.20	47.24	3.04	3.01	0.99	1.54
A07-011	47.24	50.29	3.05	2.87	0.94	2.02
A07-011	50.29	53.34	3.05	3.05	1.00	1.88
A07-011	53.34	56.39	3.05	3.05	1.00	1.20
A07-011	56.39	59.44	3.05	3.05	1.00	2.75
A07-011	59.44	62.48	3.04	2.98	0.98	2.87
A07-011	62.48	63.40	0.92	0.81	0.88	0.74
A07-011	63.40	66.45	3.05	3.01	0.99	2.59
A07-011	66.45	69.50	3.05	3.00	0.98	2.56
A07-011	69.50	72.54	3.04	3.04	1.00	1.69
A07-011	72.54	75.59	3.05	3.05	1.00	2.47
A07-011	75.59	78.64	3.05	3.00	0.98	2.31
A07-011	78.64	81.69	3.05	2.99	0.98	2.14
A07-011	81.69	84.74	3.05	3.05	1.00	2.20
A07-011	84.74	87.78	3.04	2.92	0.96	2.07
A07-011	87.78	90.83	3.05	2.65	0.87	1.98
A07-011	90.83	91.75	0.92	0.92	1.00	0.60
A07-011	91.75	93.88	2.13	2.20	1.03	1.41
A07-011	93.88	96.93	3.05	3.05	1.00	1.62
A07-011	96.93	99.98	3.05	3.03	0.99	2.74
A07-012	3.05	5.49	2.44	2.45	1.00	0.00
A07-012	5.49	7.32	1.83	1.54	0.84	0.30
A07-012	7.32	8.53	1.21	1.03	0.85	0.13
A07-012	8.53	11.58	3.05	2.69	0.88	0.52
A07-012	11.58	14.63	3.05	2.90	0.95	1.12
A07-012	14.63	16.15	1.52	1.10	0.72	0.65
A07-012	16.15	17.07	0.92	1.04	1.13	0.00
A07-012	17.07	18.90	1.83	1.50	0.82	0.26

A07-012	18.90	21.95	3.05	0.74	0.24	0.57
A07-012	21.95	22.56	0.61	0.40	0.66	0.00
A07-012	22.56	25.60	3.04	2.84	0.93	1.33
A07-012	25.60	28.65	3.05	3.05	1.00	2.41
A07-012	28.65	31.70	3.05	2.82	0.92	0.53
A07-012	31.70	34.75	3.05	3.05	1.00	2.14
A07-012	34.75	37.80	3.05	3.05	1.00	2.90
A07-012	37.80	39.62	1.82	1.72	0.95	1.22
A07-012	39.62	42.06	2.44	2.05	0.84	0.15
A07-012	42.06	45.11	3.05	3.00	0.98	1.98
A07-012	45.11	47.24	2.13	2.06	0.97	0.78
A07-012	47.24	50.29	3.05	2.08	0.68	2.52
A07-012	50.29	53.34	3.05	2.90	0.95	2.63
A07-012	53.34	56.39	3.05	3.00	0.98	2.46
A07-012	56.39	58.52	2.13	2.12	1.00	1.75
A07-012	58.52	60.35	1.83	1.72	0.94	1.11
A07-012	60.35	62.18	1.83	1.85	1.01	1.66
A07-012	62.18	65.23	3.05	3.03	0.99	2.06
A07-012	65.23	66.45	1.22	1.05	0.86	0.15
A07-012	66.45	69.50	3.05	3.05	1.00	2.89
A07-012	69.50	72.54	3.04	3.00	0.99	0.84
A07-012	72.54	75.59	3.05	3.02	0.99	2.83
A07-012	75.59	78.64	3.05	3.05	1.00	2.87
A07-012	78.64	81.69	3.05	3.05	1.00	2.58
A07-012	81.69	84.74	3.05	3.02	0.99	0.70
A07-012	84.74	87.78	3.04	3.05	1.00	1.90
A07-012	87.78	90.83	3.05	2.96	0.97	2.25
A07-012	90.83	93.88	3.05	3.05	1.00	1.62
A07-012	93.88	96.93	3.05	3.00	0.98	1.88
A07-012	96.93	99.98	3.05	3.00	0.98	1.56
A07-012	99.98	103.02	3.04	2.98	0.98	2.32
A07-012	103.02	106.07	3.05	2.83	0.93	1.57
A07-012	106.07	109.12	3.05	3.04	1.00	2.31
A07-012	109.12	112.17	3.05	3.00	0.98	2.49
A07-012	112.17	115.22	3.05	3.04	1.00	2.58
A07-012	115.22	118.26	3.04	3.05	1.00	2.55
A07-012	118.26	121.31	3.05	2.96	0.97	1.84
A07-012	121.31	124.36	3.05	2.92	0.96	2.46
A07-012	124.36	127.41	3.05	3.05	1.00	2.43
A07-012	127.41	130.46	3.05	2.94	0.96	2.29
A07-012	130.46	133.50	3.04	3.05	1.00	2.55
A07-012	133.50	136.55	3.05	3.04	1.00	1.80
A07-012	136.55	139.60	3.05	3.04	1.00	1.83
A07-012	139.60	142.65	3.05	3.04	1.00	2.10
A07-012	142.65	145.09	2.44	2.32	0.95	1.43
A07-012	145.09	148.13	3.04	3.10	1.02	2.53
A07-012	148.13	151.18	3.05	3.03	0.99	2.85
A07-012	151.18	154.23	3.05	2.99	0.98	2.19
A07-012	154.23	157.28	3.05	2.95	0.97	1.20
A07-012	157.28	160.33	3.05	3.09	1.01	2.68
A07-012	160.33	163.37	3.04	3.04	1.00	1.94
A07-012	163.37	163.98	0.61	0.61	1.00	0.33

A07-013	4.57	5.49	0.92	1.46	1.59	0.00
A07-013	5.49	8.53	3.04	2.08	0.68	0.19
A07-013	8.53	11.58	3.05	2.89	0.95	1.04
A07-013	11.58	14.63	3.05	2.90	0.95	0.23
A07-013	14.63	17.68	3.05	2.91	0.95	0.61
A07-013	17.68	20.73	3.05	2.92	0.96	2.19
A07-013	20.73	23.77	3.04	2.94	0.97	1.25
A07-013	23.77	26.82	3.05	3.02	0.99	0.34
A07-013	26.82	27.74	0.92	0.49	0.53	0.00
A07-013	27.74	29.26	1.52	1.55	1.02	0.12
A07-013	29.26	32.31	3.05	2.98	0.98	0.58
A07-013	32.31	32.61	0.30	0.34	1.13	0.13
A07-013	32.61	35.36	2.75	2.42	0.88	0.70
A07-013	35.36	38.41	3.05	3.08	1.01	2.00
A07-013	38.41	40.23	1.82	1.82	1.00	0.26
A07-013	40.23	42.06	1.83	1.72	0.94	0.21
A07-013	42.06	45.11	3.05	3.00	0.98	2.13
A07-013	45.11	48.16	3.05	3.05	1.00	3.04
A07-013	48.16	50.60	2.44	2.34	0.96	1.96
A07-013	50.60	53.65	3.05	2.96	0.97	2.07
A07-013	53.65	56.69	3.04	3.06	1.01	1.17
A07-013	56.69	59.74	3.05	3.07	1.01	0.26
A07-013	59.74	62.18	2.44	1.99	0.82	0.26
A07-013	62.18	63.40	1.22	1.37	1.12	0.56
A07-013	63.40	66.45	3.05	2.93	0.96	2.15
A07-013	66.45	69.19	2.74	2.33	0.85	1.10
A07-013	69.19	74.07	4.88	4.15	0.85	1.74
A07-013	74.07	77.12	3.05	2.82	0.92	1.85
A07-013	77.12	80.16	3.04	3.11	1.02	0.74
A07-013	80.16	83.21	3.05	2.98	0.98	1.27
A07-013	83.21	86.26	3.05	3.12	1.02	1.65
A07-013	86.26	87.78	1.52	1.53	1.01	1.00
A07-013	87.78	90.83	3.05	2.96	0.97	2.83
A07-013	90.83	93.88	3.05	2.95	0.97	1.79
A07-013	93.88	96.93	3.05	3.10	1.02	2.38
A07-013	96.93	99.98	3.05	2.90	0.95	1.44
A07-013	99.98	103.02	3.04	3.16	1.04	1.35
A07-013	103.02	106.07	3.05	3.12	1.02	3.01
A07-013	106.07	109.12	3.05	2.97	0.97	2.02
A07-013	109.12	112.17	3.05	2.87	0.94	2.61
A07-013	112.17	115.22	3.05	2.98	0.98	1.26
A07-013	115.22	118.26	3.04	3.03	1.00	1.04
A07-013	118.26	121.01	2.75	2.50	0.91	1.38
A07-013	121.01	124.06	3.05	2.94	0.96	2.18
A07-013	124.06	127.10	3.04	3.04	1.00	1.49
A07-013	127.10	130.15	3.05	2.71	0.89	1.28
A07-013	130.15	133.20	3.05	2.98	0.98	2.26
A07-013	133.20	136.25	3.05	2.92	0.96	2.48
A07-013	136.25	139.30	3.05	3.00	0.98	2.65
A07-013	139.30	142.34	3.04	3.14	1.03	2.88
A07-013	142.34	145.39	3.05	3.05	1.00	2.95

A07-013	145.39	145.70	0.31	0.18	0.58	0.18
A07-013	145.70	148.74	3.04	3.00	0.99	2.56
A07-013	148.74	151.79	3.05	3.08	1.01	3.03
A07-013	151.79	154.84	3.05	2.97	0.97	2.73
A07-013	154.84	157.89	3.05	3.11	1.02	2.11
A07-013	157.89	160.94	3.05	2.89	0.95	2.55
A07-013	160.94	163.07	2.13	1.70	0.80	0.00
A07-013	163.07	165.07	2.00	1.76	0.88	0.61
A07-013	165.42	171.81	6.39	0.00	0.00	0.00
A07-013	171.91	173.13	1.22	0.62	0.51	0.00
A07-013	173.13	176.18	3.05	2.86	0.94	0.00
A07-013	176.18	178.01	1.83	1.02	0.56	0.00
A07-013	178.01	178.61	0.60	0.66	1.10	0.00
A07-013	178.61	181.66	3.05	1.46	0.48	0.16
A07-013	181.66	182.27	0.61	0.25	0.41	0.14
A07-013	182.27	182.58	0.31	0.11	0.35	0.00
A07-013	182.58	182.88	0.30	0.27	0.90	0.00
A07-013	182.88	184.71	1.83	1.20	0.66	1.15
A07-013	184.71	187.45	2.74	2.58	0.94	2.19
A07-013	187.45	190.50	3.05	3.08	1.01	2.63
A07-013	190.50	193.55	3.05	2.67	0.88	2.59
A07-013	193.55	194.46	0.91	1.39	1.53	1.10
A07-014	4.57	5.49	0.92	0.92	1.00	0.40
A07-014	5.49	8.53	3.04	2.73	0.90	1.86
A07-014	8.53	11.58	3.05	2.94	0.96	1.73
A07-014	11.58	14.63	3.05	2.99	0.98	2.39
A07-014	14.63	17.68	3.05	3.04	1.00	1.89
A07-014	17.68	20.73	3.05	3.05	1.00	2.16
A07-014	20.73	21.34	0.61	0.67	1.10	0.52
A07-014	21.34	23.77	2.43	2.40	0.99	1.20
A07-014	23.77	26.82	3.05	2.98	0.98	1.63
A07-014	26.82	28.96	2.14	2.00	0.93	0.49
A07-014	28.96	32.00	3.04	2.86	0.94	0.00
A07-014	32.00	35.05	3.05	2.88	0.94	2.64
A07-014	35.05	38.10	3.05	3.09	1.01	2.37
A07-014	38.10	41.15	3.05	2.72	0.89	1.13
A07-014	41.15	44.20	3.05	3.04	1.00	2.35
A07-014	44.20	47.24	3.04	2.19	0.72	1.21
A07-014	47.24	50.29	3.05	3.06	1.00	2.09
A07-014	50.29	53.34	3.05	2.92	0.96	2.86
A07-014	53.34	56.39	3.05	3.04	1.00	2.75
A07-014	56.39	58.52	2.13	2.22	1.04	1.55
A07-014	58.52	60.35	1.83	1.82	0.99	0.65
A07-014	60.35	63.40	3.05	2.62	0.86	1.90
A07-014	63.40	66.45	3.05	2.90	0.95	1.94
A07-014	66.45	68.89	2.44	2.34	0.96	1.57
A07-014	68.89	71.93	3.04	2.61	0.86	1.45
A07-014	71.93	74.37	2.44	2.40	0.98	1.56
A07-014	74.37	77.42	3.05	2.97	0.97	1.59
A07-014	77.42	79.55	2.13	2.04	0.96	1.69
A07-014	79.55	81.69	2.14	2.20	1.03	1.90

A07-014	81.69	84.74	3.05	2.84	0.93	1.98
A07-014	84.74	87.78	3.04	2.98	0.98	2.90
A07-014	87.78	90.83	3.05	3.05	1.00	2.61
A07-014	90.83	92.66	1.83	1.58	0.86	1.13
A07-014	92.66	95.71	3.05	2.57	0.84	2.22
A07-014	95.71	98.76	3.05	3.03	0.99	2.71
A07-014	98.76	99.67	0.91	0.96	1.05	0.95
A07-014	99.67	102.72	3.05	3.02	0.99	2.81
A07-014	102.72	105.77	3.05	2.98	0.98	2.30
A07-014	105.77	108.21	2.44	2.84	1.16	1.92
A07-014	108.21	110.95	2.74	2.53	0.92	1.71
A07-014	110.95	112.17	1.22	1.07	0.88	0.84
A07-014	112.17	115.22	3.05	2.53	0.83	1.91
A07-014	115.22	117.04	1.82	2.16	1.19	1.34
A07-014	117.04	118.57	1.53	1.72	1.12	1.37
A07-014	118.57	121.31	2.74	2.53	0.92	2.32
A07-014	121.31	122.53	1.22	1.13	0.93	0.88
A07-014	122.53	125.58	3.05	3.05	1.00	2.24
A07-014	125.58	128.63	3.05	3.03	0.99	2.40
A07-014	128.63	131.68	3.05	2.84	0.93	2.55
A07-014	131.68	134.72	3.04	2.91	0.96	2.34
A07-014	134.72	137.47	2.75	2.79	1.01	2.12
A07-014	137.47	139.60	2.13	2.15	1.01	1.78
A07-014	139.60	142.65	3.05	3.01	0.99	2.03
A07-014	142.65	145.09	2.44	2.22	0.91	1.29
A07-014	145.09	146.00	0.91	0.83	0.91	0.63
A07-014	146.00	148.74	2.74	2.81	1.03	2.25
A07-014	148.74	150.57	1.83	1.77	0.97	1.36
A07-014	150.57	152.40	1.83	1.81	0.99	1.11
A07-014	152.40	153.62	1.22	0.88	0.72	1.47
A07-014	153.62	156.06	2.44	2.06	0.84	1.00
A07-014	156.06	157.89	1.83	1.59	0.87	1.27
A07-014	157.89	160.33	2.44	2.38	0.98	0.80
A07-014	160.33	163.37	3.04	2.68	0.88	1.68
A07-014	163.37	165.51	2.14	1.90	0.89	0.84
A07-014	165.51	168.56	3.05	3.05	1.00	2.03
A07-014	168.56	171.60	3.04	2.98	0.98	2.26
A07-014	171.60	173.13	1.53	1.37	0.90	1.13
A07-014	173.13	174.65	1.52	1.57	1.03	1.35
A07-014	174.65	177.70	3.05	3.10	1.02	2.65
A07-014	177.70	180.75	3.05	2.87	0.94	1.75
A07-014	180.75	183.80	3.05	2.89	0.95	1.57
A07-014	183.80	185.02	1.22	0.93	0.76	0.00
A07-014	185.02	187.15	2.13	2.10	0.99	1.89
A07-014	187.15	188.98	1.83	1.84	1.01	1.28
A07-014	188.98	191.42	2.44	2.52	1.03	2.17
A07-014	191.42	194.46	3.04	2.75	0.90	2.10
A07-014	194.46	197.51	3.05	3.00	0.98	2.47
A07-014	197.51	200.56	3.05	2.89	0.95	1.74
A07-014	200.56	202.69	2.13	2.13	1.00	1.31
A07-014	202.69	205.74	3.05	2.77	0.91	2.13
A07-014	205.74	208.18	2.44	2.51	1.03	2.07

A07-014	208.18	211.23	3.05	2.97	0.97	1.93
A07-014	211.23	214.28	3.05	3.00	0.98	2.00
A07-014	214.28	217.33	3.05	2.99	0.98	2.21
A07-014	217.33	220.37	3.04	3.05	1.00	2.85
A07-014	220.37	223.42	3.05	3.04	1.00	2.90
A07-015	3.05	5.49	2.44	2.55	1.05	1.43
A07-015	5.49	8.53	3.04	2.30	0.76	1.19
A07-015	8.53	11.43	2.90	2.65	0.91	1.65
A07-015	11.43	14.02	2.59	2.62	1.01	0.80
A07-015	14.02	15.54	1.52	1.52	1.00	0.77
A07-015	15.54	17.68	2.14	1.60	0.75	0.66
A07-015	17.68	20.73	3.05	2.64	0.87	1.00
A07-015	20.73	23.71	2.98	1.15	0.39	0.12
A07-015	23.71	24.38	0.67	0.64	0.96	0.23
A07-015	24.38	26.52	2.14	1.95	0.91	0.53
A07-015	26.52	28.65	2.13	1.33	0.62	0.45
A07-015	28.65	31.70	3.05	2.98	0.98	2.53
A07-015	31.70	34.75	3.05	3.04	1.00	2.00
A07-015	34.75	35.97	1.22	1.22	1.00	2.38
A07-015	35.97	39.01	3.04	2.92	0.96	2.71
A07-015	39.01	42.06	3.05	3.03	0.99	0.97
A07-015	42.06	45.11	3.05	2.92	0.96	2.36
A07-015	45.11	48.16	3.05	3.05	1.00	2.30
A07-015	48.16	51.21	3.05	2.99	0.98	2.43
A07-015	51.21	53.95	2.74	2.71	0.99	2.06
A07-015	53.95	57.00	3.05	3.05	1.00	1.93
A07-015	57.00	60.05	3.05	2.96	0.97	1.59
A07-015	60.05	62.48	2.43	2.25	0.93	1.66
A07-015	62.48	64.92	2.44	2.25	0.92	1.77
A07-015	64.92	66.45	1.53	1.56	1.02	1.02
A07-015	66.45	69.19	2.74	2.44	0.89	1.93
A07-015	69.19	71.63	2.44	1.97	0.81	1.47
A07-015	71.63	73.46	1.83	1.87	1.02	1.12
A07-015	73.46	74.98	1.52	1.16	0.76	1.00
A07-015	74.98	78.83	3.85	2.82	0.73	2.31
A07-015	78.83	81.08	2.25	2.87	1.28	1.97
A07-015	81.08	82.30	1.22	1.15	0.94	0.67
A07-015	82.30	82.91	0.61	0.51	0.84	0.28
A07-015	82.91	85.65	2.74	1.43	0.52	0.79
A07-015	85.65	87.17	1.52	2.03	1.34	2.03
A07-015	87.17	89.31	2.14	2.85	1.33	2.40
A07-015	89.31	89.61	0.30	0.13	0.43	0.00
A07-015	89.61	92.66	3.05	2.83	0.93	2.82
A07-015	92.66	95.71	3.05	3.05	1.00	1.78
A07-015	95.71	98.76	3.05	2.92	0.96	1.29
A07-015	98.76	101.80	3.04	3.05	1.00	2.64
A07-015	101.80	104.85	3.05	3.05	1.00	2.31
A07-015	104.85	107.90	3.05	3.06	1.00	1.36
A07-015	107.90	110.95	3.05	3.01	0.99	0.65
A07-015	110.95	114.30	3.35	2.94	0.88	2.07
A07-015	114.30	117.35	3.05	2.10	0.69	1.43

A07-015	117.35	119.48	2.13	2.08	0.98	1.55
A07-015	119.48	122.53	3.05	2.61	0.86	1.54
A07-015	122.53	125.27	2.74	2.72	0.99	2.03
A07-015	125.27	128.93	3.66	3.44	0.94	1.54
A07-015	128.93	131.98	3.05	2.98	0.98	2.02
A07-015	131.98	135.03	3.05	3.05	1.00	1.58
A07-015	135.03	138.08	3.05	3.01	0.99	0.64
A07-015	138.08	141.12	3.04	3.04	1.00	2.78
A07-015	141.12	142.65	1.53	1.47	0.96	1.41
A07-015	142.65	145.70	3.05	2.83	0.93	2.67
A07-015	145.70	148.74	3.04	3.00	0.99	1.81
A07-015	148.74	151.49	2.75	2.44	0.89	1.25
A07-015	151.49	153.93	2.44	2.45	1.00	1.95
A07-015	153.93	156.36	2.43	2.17	0.89	1.87
A07-015	156.36	158.19	1.83	1.86	1.02	0.56
A07-015	158.19	159.11	0.92	0.90	0.98	0.39
A07-015	159.11	162.16	3.05	2.79	0.91	2.24
A07-015	162.16	165.20	3.04	2.99	0.98	0.67
A07-015	165.20	166.42	1.22	1.16	0.95	0.65
A07-015	166.42	169.47	3.05	3.05	1.00	2.08
A07-015	169.47	170.99	1.52	1.12	0.74	0.21
A07-016	3.05	3.96	0.91	0.80	0.88	0.00
A07-016	3.96	4.57	0.61	0.44	0.72	0.00
A07-016	4.57	6.10	1.53	0.60	0.39	0.00
A07-016	6.10	7.92	1.82	1.74	0.96	0.00
A07-016	7.92	10.52	2.60	2.14	0.82	0.00
A07-016	10.52	13.41	2.89	2.70	0.93	1.25
A07-016	13.41	15.24	1.83	1.70	0.93	0.69
A07-016	15.24	18.29	3.05	3.01	0.99	0.70
A07-016	18.29	19.81	1.52	1.35	0.89	0.62
A07-016	19.81	21.34	1.53	1.52	0.99	0.43
A07-016	21.34	23.77	2.43	2.51	1.03	1.52
A07-016	23.77	26.82	3.05	3.08	1.01	2.33
A07-016	26.82	31.70	4.88	4.24	0.87	2.47
A07-016	31.70	33.83	2.13	2.02	0.95	0.75
A07-016	33.83	36.11	2.28	2.36	1.04	1.14
A07-016	36.11	37.64	1.53	1.25	0.82	0.56
A07-016	37.64	39.62	1.98	1.93	0.97	1.37
A07-016	39.62	42.67	3.05	2.97	0.97	0.94
A07-016	42.67	44.20	1.53	1.46	0.95	1.05
A07-016	44.20	45.72	1.52	1.52	1.00	1.40
A07-016	45.72	47.85	2.13	1.79	0.84	0.29
A07-016	47.85	50.29	2.44	2.63	1.08	0.75
A07-016	50.29	53.34	3.05	2.99	0.98	0.00
A07-016	53.34	56.39	3.05	3.00	0.98	1.09
A07-016	56.39	57.91	1.52	1.52	1.00	1.32
A07-016	57.91	60.96	3.05	3.00	0.98	2.58
A07-016	60.96	64.01	3.05	3.00	0.98	2.03
A07-016	64.01	67.06	3.05	3.03	0.99	2.31
A07-016	67.06	70.10	3.04	2.95	0.97	2.43
A07-016	70.10	72.54	2.44	2.28	0.93	0.42

A07-016	72.54	75.29	2.75	2.55	0.93	1.30
A07-016	75.29	77.12	1.83	1.80	0.98	1.38
A07-016	77.12	79.55	2.43	2.24	0.92	1.52
A07-016	79.55	82.60	3.05	3.07	1.01	2.83
A07-016	82.60	85.65	3.05	3.04	1.00	1.45
A07-016	85.65	88.70	3.05	3.05	1.00	2.02
A07-016	88.70	91.75	3.05	2.87	0.94	1.65
A07-016	91.75	94.79	3.04	2.88	0.95	1.63
A07-016	94.79	96.32	1.53	1.53	1.00	0.33
A07-016	96.32	99.37	3.05	3.14	1.03	0.81
A07-016	99.37	102.11	2.74	2.74	1.00	0.75
A07-016	102.11	103.63	1.52	1.50	0.99	0.85
A07-016	103.63	105.16	1.53	1.53	1.00	0.35
A07-016	105.16	108.21	3.05	3.04	1.00	0.33
A07-016	108.21	111.25	3.04	2.94	0.97	0.72
A07-016	111.25	114.30	3.05	3.02	0.99	0.73
A07-016	114.30	117.35	3.05	3.03	0.99	1.49
A07-016	117.35	120.40	3.05	3.05	1.00	1.59
A07-016	120.40	123.45	3.05	2.98	0.98	2.11
A07-016	123.45	126.49	3.04	3.00	0.99	1.21
A07-016	126.49	129.54	3.05	2.97	0.97	0.64
A07-016	129.54	132.59	3.05	3.06	1.00	1.31
A07-016	132.59	135.64	3.05	3.01	0.99	1.73
A07-017	3.05	4.57	1.52	1.20	0.79	0.00
A07-017	4.57	6.10	1.52	1.25	0.82	0.10
A07-017	6.10	7.32	1.22	0.98	0.80	0.32
A07-017	7.32	8.23	0.91	0.75	0.82	0.10
A07-017	8.23	9.14	0.91	0.90	0.98	0.21
A07-017	9.14	11.28	2.13	0.98	0.46	0.45
A07-017	11.28	12.19	0.91	0.81	0.89	0.00
A07-017	12.19	13.72	1.52	1.20	0.79	0.57
A07-017	13.72	16.15	2.44	1.72	0.71	0.59
A07-017	16.15	17.68	1.52	1.12	0.73	0.30
A07-017	17.68	18.59	0.91	0.69	0.75	0.00
A07-017	18.59	20.12	1.52	1.33	0.87	0.43
A07-017	20.12	21.79	1.68	1.30	0.78	0.14
A07-017	21.79	24.38	2.59	2.61	1.01	0.31
A07-017	24.38	26.82	2.44	2.12	0.87	0.36
A07-017	26.82	29.87	3.05	2.90	0.95	1.07
A07-017	29.87	32.92	3.05	2.98	0.98	2.70
A07-017	32.92	33.53	0.61	0.60	0.98	0.50
A07-017	33.53	35.97	2.44	2.15	0.88	1.71
A07-017	35.97	38.10	2.13	1.98	0.93	1.21
A07-017	38.10	39.62	1.52	1.40	0.92	0.37
A07-017	39.62	42.67	3.05	2.94	0.96	2.53
A07-017	42.67	45.72	3.05	3.00	0.98	2.66
A07-017	45.72	48.77	3.05	3.00	0.98	2.59
A07-017	48.77	51.82	3.05	2.96	0.97	2.76
A07-017	51.82	54.86	3.05	2.97	0.97	2.25
A07-017	54.86	57.91	3.05	2.95	0.97	0.97
A07-017	57.91	59.44	1.52	1.11	0.73	0.14

A07-017	59.44	61.57	2.13	1.70	0.80	0.78
A07-017	61.57	64.01	2.44	2.17	0.89	0.94
A07-017	64.01	65.53	1.52	2.20	1.44	1.26
A07-017	65.53	68.58	3.05	2.86	0.94	2.47
A07-017	68.58	71.63	3.05	2.99	0.98	2.25
A07-017	71.63	74.68	3.05	2.92	0.96	1.53
A07-017	74.68	77.12	2.44	2.23	0.91	0.56
A07-017	77.12	80.16	3.05	2.99	0.98	1.42
A07-017	80.16	83.21	3.05	2.92	0.96	2.00
A07-017	83.21	86.26	3.05	2.94	0.96	1.93
A07-017	86.26	89.61	3.35	3.16	0.94	2.27
A07-017	89.61	91.44	1.83	1.82	1.00	1.82
A07-017	91.44	94.49	3.05	2.96	0.97	2.03
A07-017	94.49	97.54	3.05	3.05	1.00	2.03
A07-017	97.54	100.59	3.05	3.05	1.00	2.58
A07-017	100.59	103.63	3.05	3.04	1.00	1.78
A07-017	103.63	106.68	3.05	3.05	1.00	1.92
A07-017	106.68	108.51	1.83	1.37	0.75	1.61
A07-017	108.51	111.56	3.05	2.99	0.98	2.64
A07-017	111.56	114.61	3.05	2.86	0.94	2.13
A07-017	114.61	117.65	3.05	2.47	0.81	0.98
A07-017	117.65	120.70	3.05	3.05	1.00	0.11
A07-017	120.70	123.45	2.74	2.75	1.00	0.00
A07-017	123.45	125.27	1.83	1.68	0.92	0.67
A07-017	125.27	128.32	3.05	3.05	1.00	1.93
A07-017	128.32	131.37	3.05	2.95	0.97	0.82
A07-017	131.37	134.42	3.05	3.04	1.00	0.36
A07-017	134.42	137.47	3.05	3.05	1.00	1.50
A07-017	137.47	140.51	3.05	3.01	0.99	0.95
A07-017	140.51	143.56	3.05	2.94	0.96	1.27
A07-017	143.56	146.61	3.05	2.96	0.97	0.94
A07-017	146.61	147.52	0.91	0.51	0.56	0.33
A07-017	147.52	150.57	3.05	3.01	0.99	0.83
A07-017	150.57	153.62	3.05	2.98	0.98	1.06
A07-017	153.62	155.45	1.83	1.75	0.96	0.03
A07-018	4.57	6.40	1.83	1.65	0.90	1.19
A07-018	6.40	9.30	2.90	2.66	0.92	2.27
A07-018	9.30	12.50	3.20	3.04	0.95	0.93
A07-018	12.50	15.54	3.05	3.04	1.00	1.70
A07-018	15.54	18.59	3.05	2.95	0.97	1.95
A07-018	18.59	21.64	3.05	3.05	1.00	0.90
A07-018	21.64	24.69	3.05	2.90	0.95	1.35
A07-018	24.69	26.98	2.29	2.18	0.95	0.91
A07-018	26.98	29.26	2.29	2.28	1.00	1.61
A07-018	29.26	32.31	3.05	2.83	0.93	1.42
A07-018	32.31	35.36	3.05	3.02	0.99	0.66
A07-018	35.36	38.41	3.05	2.98	0.98	0.97
A07-018	38.41	41.45	3.05	2.97	0.97	0.18
A07-018	41.45	44.50	3.05	2.81	0.92	2.08
A07-018	44.50	47.55	3.05	2.95	0.97	1.23
A07-018	47.55	50.60	3.05	3.02	0.99	2.77

A07-018	50.60	53.65	3.05	2.76	0.91	1.87
A07-018	53.65	56.69	3.05	2.99	0.98	1.08
A07-018	56.69	59.74	3.05	3.02	0.99	0.86
A07-018	59.74	62.79	3.05	2.89	0.95	0.98
A07-018	62.79	65.84	3.05	2.91	0.95	1.72
A07-018	65.84	68.89	3.05	2.64	0.87	0.95
A07-018	68.89	71.93	3.05	3.16	1.04	0.91
A07-018	71.93	74.98	3.05	2.92	0.96	1.92
A07-018	74.98	77.72	2.74	2.54	0.93	1.70
A07-018	77.72	80.93	3.20	3.05	0.95	2.07
A07-018	80.93	83.21	2.29	1.97	0.86	1.17
A07-018	83.21	86.26	3.05	2.90	0.95	2.11
A07-018	86.26	89.61	3.35	2.91	0.87	1.70
A07-018	89.61	91.75	2.13	2.25	1.05	1.82
A07-018	91.75	94.79	3.05	3.07	1.01	2.98
A07-018	94.79	97.54	2.74	2.84	1.04	0.58
A07-018	97.54	100.59	3.05	3.05	1.00	2.65
A07-018	100.59	103.63	3.05	3.01	0.99	1.05
A07-018	103.63	106.68	3.05	3.05	1.00	1.66
A07-018	106.68	109.73	3.05	3.00	0.98	2.85
A07-018	109.73	112.78	3.05	2.94	0.96	2.31
A07-018	112.78	115.52	2.74	2.35	0.86	1.18
A07-018	115.52	118.57	3.05	3.02	0.99	0.44
A07-018	118.57	121.62	3.05	3.17	1.04	2.17
A07-018	121.62	124.66	3.05	2.97	0.97	2.27
A07-018	124.66	127.10	2.44	2.43	1.00	0.66
A07-018	127.10	130.15	3.05	3.02	0.99	1.23
A07-018	130.15	133.20	3.05	2.88	0.94	1.30
A07-018	133.20	136.25	3.05	3.00	0.98	1.42
A07-018	136.25	139.30	3.05	3.07	1.01	2.55
A07-018	139.30	142.34	3.05	2.88	0.94	2.21
A07-018	142.34	145.39	3.05	2.95	0.97	2.46
A07-018	145.39	148.13	2.74	2.70	0.98	1.93
A07-018	148.13	149.96	1.83	1.53	0.84	0.73
A07-018	149.96	153.01	3.05	2.69	0.88	0.00
A07-018	153.01	156.06	3.05	3.23	1.06	0.11
A07-018	156.06	156.97	0.91	0.85	0.93	0.25
A07-018	156.97	157.58	0.61	0.59	0.97	0.00
A07-018	157.58	159.11	1.52	1.20	0.79	0.00
A07-018	159.11	160.63	1.52	0.80	0.52	0.00
A07-018	160.63	161.55	0.91	0.68	0.74	0.00
A07-018	161.55	163.22	1.68	0.53	0.32	0.00
A07-018	163.22	164.29	1.07	0.64	0.60	0.00
A07-018	164.29	164.59	0.30	0.18	0.59	0.00
A07-018	164.59	165.36	0.76	0.88	1.15	0.00
A07-018	165.36	166.12	0.76	0.56	0.73	0.00
A07-018	166.12	167.64	1.52	1.05	0.69	0.34
A07-018	167.64	169.78	2.13	1.68	0.79	0.00
A07-018	169.78	170.39	0.61	0.13	0.21	0.00
A07-018	170.39	172.82	2.44	1.83	0.75	0.00
A07-018	172.82	175.87	3.05	2.10	0.69	0.00
A07-018	175.87	177.40	1.52	1.60	1.05	0.00

A07-018	177.40	180.44	3.05	2.94	0.96	0.00
A07-018	180.44	183.49	3.05	2.90	0.95	0.98
A07-018	183.49	185.63	2.13	2.40	1.12	0.48
A07-018	185.63	188.67	3.04	2.82	0.93	2.31
A07-019	3.05	6.10	3.05	2.75	0.90	1.30
A07-019	6.10	9.14	3.05	3.05	1.00	1.64
A07-019	9.14	12.19	3.05	2.88	0.94	1.17
A07-019	12.19	15.24	3.05	2.77	0.91	1.54
A07-019	15.24	18.29	3.05	2.90	0.95	0.94
A07-019	18.29	21.34	3.05	2.85	0.94	1.14
A07-019	21.34	24.38	3.05	3.02	0.99	1.09
A07-019	24.38	27.43	3.05	2.06	0.68	1.12
A07-019	27.43	30.48	3.05	2.89	0.95	1.24
A07-019	30.48	33.53	3.05	2.89	0.95	1.97
A07-019	33.53	36.58	3.05	2.91	0.95	1.36
A07-019	36.58	39.62	3.05	2.86	0.94	1.72
A07-019	39.62	42.67	3.05	2.88	0.94	1.49
A07-019	42.67	45.72	3.05	2.92	0.96	2.21
A07-019	45.72	48.77	3.05	2.78	0.91	2.16
A07-019	48.77	51.82	3.05	2.71	0.89	1.34
A07-019	51.82	54.86	3.05	2.82	0.93	1.70
A07-019	54.86	57.91	3.05	2.88	0.94	1.31
A07-019	57.91	60.96	3.05	2.89	0.95	1.54
A07-019	60.96	64.01	3.05	2.87	0.94	1.66
A07-019	64.01	67.06	3.05	2.93	0.96	2.11
A07-019	67.06	70.10	3.05	2.76	0.91	0.97
A07-019	70.10	73.15	3.05	2.89	0.95	1.30
A07-019	73.15	74.98	1.83	2.12	1.16	0.48
A07-019	74.98	78.03	3.05	1.89	0.62	0.12
A07-019	78.03	80.16	2.13	1.90	0.89	0.74
A07-019	80.16	83.21	3.05	2.84	0.93	1.09
A07-019	83.21	85.35	2.13	2.14	1.00	1.59
A07-019	85.35	88.39	3.05	2.98	0.98	2.61
A07-019	88.39	90.22	1.83	2.20	1.20	1.48
A07-019	90.22	91.75	1.52	1.11	0.73	1.06
A07-019	91.75	92.66	0.91	0.75	0.82	0.00
A07-019	92.66	96.62	3.96	2.26	0.57	0.38
A07-019	96.62	97.54	0.91	1.67	1.83	1.23
A07-019	97.54	100.59	3.05	3.05	1.00	2.15
A07-019	100.59	103.63	3.05	3.04	1.00	1.33
A07-019	103.63	106.38	2.74	2.70	0.98	1.22
A07-019	106.38	109.42	3.05	3.13	1.03	1.69
A07-019	109.42	112.47	3.05	3.03	0.99	1.42
A07-019	112.47	112.93	0.46	0.40	0.87	0.25
A07-019	112.93	114.91	1.98	2.17	1.10	1.40
A07-019	114.91	117.96	3.05	3.02	0.99	1.83
A07-019	117.96	120.40	2.44	2.37	0.97	0.44
A07-019	120.40	123.45	3.05	3.05	1.00	1.60
A07-019	123.45	126.49	3.05	3.01	0.99	2.56
A07-019	126.49	129.54	3.05	2.83	0.93	2.24
A07-019	129.54	132.59	3.05	2.81	0.92	1.66

A07-019	132.59	135.64	3.05	2.74	0.90	2.24
A07-019	135.64	138.38	2.74	2.83	1.03	2.26
A07-019	138.38	141.43	3.05	2.95	0.97	1.38
A07-019	141.43	144.48	3.05	2.94	0.96	1.24
A07-019	144.48	147.52	3.05	2.71	0.89	1.16
A07-019	147.52	150.57	3.05	2.96	0.97	2.34
A07-019	150.57	153.32	2.74	2.83	1.03	1.80
A07-019	153.32	156.36	3.05	2.98	0.98	1.52
A07-019	156.36	158.50	2.13	2.29	1.07	0.42
A07-019	158.50	161.55	3.05	3.09	1.01	1.29
A07-019	161.55	164.59	3.05	2.93	0.96	2.04
A07-019	164.59	167.64	3.05	2.75	0.90	1.76
A07-019	167.64	170.69	3.05	3.05	1.00	1.34
A07-019	170.69	171.91	1.22	1.22	1.00	0.28
A07-019	171.91	174.96	3.05	2.96	0.97	1.67
A07-020	4.57	5.18	0.61	0.00	0.00	0.00
A07-020	5.18	7.62	2.44	1.54	0.63	0.21
A07-020	7.62	9.14	1.52	1.32	0.87	0.52
A07-020	9.14	12.19	3.05	2.77	0.91	1.42
A07-020	12.19	15.24	3.05	2.75	0.90	1.95
A07-020	15.24	19.81	4.57	2.94	0.64	1.06
A07-020	19.81	22.86	3.05	2.77	0.91	1.36
A07-020	22.86	25.91	3.05	2.70	0.89	0.51
A07-020	25.91	28.96	3.05	2.81	0.92	1.67
A07-020	28.96	30.79	1.83	1.74	0.95	0.56
A07-020	30.79	35.36	4.57	2.87	0.63	1.84
A07-020	35.36	37.95	2.59	2.49	0.96	0.78
A07-020	37.95	40.08	2.13	1.62	0.76	0.73
A07-020	40.08	43.28	3.20	2.83	0.88	2.03
A07-020	43.28	45.72	2.44	2.45	1.00	1.80
A07-020	45.72	48.77	3.05	2.93	0.96	1.94
A07-020	48.77	51.82	3.05	2.86	0.94	1.87
A07-020	51.82	54.86	3.05	2.56	0.84	2.16
A07-020	54.86	57.91	3.05	2.48	0.81	1.37
A07-020	57.91	60.96	3.05	2.61	0.86	1.10
A07-020	60.96	64.01	3.05	2.52	0.83	1.26
A07-020	64.01	66.14	2.13	1.66	0.78	0.25
A07-020	66.14	67.97	1.83	1.54	0.84	0.15
A07-020	67.97	71.02	3.05	2.50	0.82	1.24
A07-020	71.02	74.68	3.66	2.90	0.79	2.02
A07-020	74.68	76.20	1.52	1.45	0.95	0.13
A07-020	76.20	77.72	1.52	1.43	0.94	0.61
A07-020	77.72	80.77	3.05	2.95	0.97	0.75
A07-020	80.77	83.82	3.05	2.54	0.83	0.59
A07-020	83.82	86.87	3.05	2.99	0.98	0.99
A07-020	86.87	89.92	3.05	2.64	0.87	0.63
A07-020	89.92	91.44	1.52	1.24	0.81	0.55
A07-020	91.44	93.88	2.44	2.30	0.94	1.52
A07-020	93.88	97.23	3.35	3.30	0.98	3.12
A07-020	97.23	100.28	3.05	2.99	0.98	2.79
A07-020	100.28	103.33	3.05	3.03	0.99	2.99

A07-020	103.33	106.38	3.05	3.02	0.99	1.86
A07-020	106.38	109.42	3.05	2.99	0.98	2.58
A07-020	109.42	112.47	3.05	3.02	0.99	2.37
A07-020	112.47	115.52	3.05	2.94	0.96	2.48
A07-020	115.52	118.57	3.05	2.92	0.96	1.62
A07-020	118.57	121.62	3.05	3.04	1.00	0.58
A07-020	121.62	124.66	3.05	2.89	0.95	1.23
A07-020	124.66	127.71	3.05	3.03	0.99	1.86
A07-020	127.71	130.76	3.05	3.01	0.99	0.36
A07-020	130.76	133.81	3.05	2.96	0.97	0.00
A07-020	133.81	136.86	3.05	2.95	0.97	0.40
A07-020	136.86	139.90	3.05	2.88	0.94	0.32
A07-020	139.90	142.95	3.05	2.79	0.92	0.87
A07-020	142.95	146.00	3.05	2.63	0.86	0.79
A07-020	146.00	149.05	3.05	2.77	0.91	0.81
A07-020	149.05	152.10	3.05	2.87	0.94	1.70
A07-020	152.10	155.15	3.05	2.67	0.88	0.84
A07-020	155.15	158.19	3.05	2.69	0.88	0.70
A07-021	4.57	7.62	3.05	2.72	0.89	1.21
A07-021	7.62	10.67	3.05	2.70	0.89	1.24
A07-021	10.67	13.72	3.05	2.39	0.78	0.87
A07-021	13.72	16.76	3.05	2.56	0.84	0.66
A07-021	16.76	19.81	3.05	3.03	0.99	1.46
A07-021	19.81	22.86	3.05	2.91	0.95	0.95
A07-021	22.86	25.91	3.05	2.39	0.78	1.26
A07-021	25.91	28.65	2.74	2.22	0.81	0.28
A07-021	28.65	30.48	1.83	1.30	0.71	0.56
A07-021	30.48	33.53	3.05	2.74	0.90	1.75
A07-021	33.53	36.58	3.05	2.94	0.96	1.54
A07-021	36.58	39.62	3.05	3.03	0.99	1.34
A07-021	39.62	42.67	3.05	2.84	0.93	2.64
A07-021	42.67	45.72	3.05	2.94	0.96	2.87
A07-021	45.72	48.77	3.05	3.01	0.99	1.91
A07-021	48.77	51.82	3.05	2.94	0.96	2.61
A07-021	51.82	54.86	3.05	2.80	0.92	2.19
A07-021	54.86	57.91	3.05	2.87	0.94	1.89
A07-021	57.91	60.96	3.05	2.86	0.94	2.14
A07-021	60.96	64.01	3.05	3.05	1.00	2.91
A07-021	64.01	67.06	3.05	3.00	0.98	2.48
A07-021	67.06	70.10	3.05	2.90	0.95	1.78
A07-021	70.10	73.15	3.05	3.01	0.99	2.51
A07-021	73.15	74.68	1.52	1.47	0.96	0.92
A07-021	74.68	77.72	3.05	2.80	0.92	0.41
A07-021	77.72	80.77	3.05	3.03	0.99	1.46
A07-021	80.77	83.82	3.05	3.02	0.99	0.73
A07-021	83.82	86.87	3.05	2.93	0.96	2.21
A07-021	86.87	88.24	1.37	1.30	0.95	0.43
A07-021	88.24	91.44	3.20	2.91	0.91	1.85
A07-021	91.44	94.49	3.05	3.03	0.99	1.47
A07-021	94.49	97.54	3.05	3.04	1.00	2.10
A07-021	97.54	100.59	3.05	3.01	0.99	2.75

A07-021	100.59	105.16	4.57	4.53	0.99	2.99
A07-021	105.16	108.21	3.05	2.99	0.98	2.20
A07-021	108.21	111.25	3.05	2.92	0.96	1.44
A07-021	111.25	114.30	3.05	3.05	1.00	1.33
A07-021	114.30	117.35	3.05	3.03	0.99	1.44
A07-021	117.35	120.40	3.05	3.04	1.00	0.32
A07-021	120.40	123.45	3.05	3.05	1.00	2.21
A07-021	123.45	126.49	3.05	3.03	0.99	1.89
A07-021	126.49	129.54	3.05	3.01	0.99	2.30
A07-021	129.54	132.59	3.05	2.99	0.98	1.34
A07-021	132.59	135.33	2.74	2.51	0.91	1.69
A07-021	135.33	139.90	4.57	4.44	0.97	0.85
A07-021	139.90	142.95	3.05	3.03	0.99	0.54
A07-021	142.95	146.15	3.20	3.05	0.95	0.56
A07-021	146.15	149.35	3.20	2.97	0.93	0.00
A07-022	4.57	6.10	1.52	1.35	0.89	0.00
A07-022	6.10	9.14	3.05	2.32	0.76	0.00
A07-022	9.14	12.19	3.05	2.63	0.86	0.00
A07-022	12.19	15.24	3.05	2.54	0.83	0.00
A07-022	15.24	18.29	3.05	2.98	0.98	0.00
A07-022	18.29	21.34	3.05	2.93	0.96	0.00
A07-022	21.34	24.38	3.05	2.94	0.96	0.00
A07-022	24.38	27.43	3.05	2.99	0.98	0.00
A07-022	27.43	30.48	3.05	3.00	0.98	0.00
A07-022	30.48	33.53	3.05	2.99	0.98	0.00
A07-022	33.53	36.58	3.05	3.01	0.99	0.00
A07-022	36.58	39.62	3.05	2.93	0.96	0.00
A07-022	39.62	42.67	3.05	3.03	0.99	0.00
A07-022	42.67	45.72	3.05	3.00	0.98	0.00
A07-022	45.72	48.77	3.05	3.05	1.00	0.00
A07-022	48.77	51.82	3.05	2.97	0.97	0.00
A07-022	51.82	54.86	3.05	2.98	0.98	0.00
A07-022	54.86	57.91	3.05	2.94	0.96	0.00
A07-022	57.91	60.96	3.05	3.00	0.98	0.00
A07-022	60.96	64.01	3.05	2.83	0.93	0.00
A07-022	64.01	67.06	3.05	2.88	0.94	0.00
A07-022	67.06	70.10	3.05	3.01	0.99	0.00
A07-022	70.10	73.15	3.05	2.86	0.94	0.00
A07-022	73.15	76.20	3.05	2.97	0.97	0.00
A07-022	76.20	79.25	3.05	3.03	0.99	0.00
A07-022	79.25	82.30	3.05	3.04	1.00	0.00
A07-022	82.30	85.35	3.05	2.96	0.97	0.00
A07-022	85.35	88.39	3.05	3.01	0.99	0.00
A07-022	88.39	91.29	2.90	2.75	0.95	0.00
A07-022	91.29	92.97	1.68	1.38	0.82	0.00
A07-022	92.97	96.01	3.05	3.02	0.99	0.00
A07-022	96.01	99.06	3.05	3.03	0.99	0.00
A07-022	99.06	102.11	3.05	3.04	1.00	0.00
A07-022	102.11	105.16	3.05	2.54	0.83	0.00
A07-022	105.16	108.21	3.05	3.03	0.99	0.00
A07-022	108.21	111.25	3.05	2.96	0.97	0.00

A07-022	111.25	114.30	3.05	3.04	1.00	0.00
A07-022	114.30	117.35	3.05	2.96	0.97	0.00
A07-022	117.35	120.40	3.05	3.05	1.00	0.00
A07-022	120.40	123.45	3.05	2.99	0.98	0.00
A07-022	123.45	126.49	3.05	3.03	0.99	0.00
A07-022	126.49	129.54	3.05	3.04	1.00	0.00
A07-022	129.54	132.59	3.05	3.05	1.00	0.00
A07-022	132.59	135.64	3.05	2.96	0.97	0.00
A07-022	135.64	138.69	3.05	2.97	0.97	0.00
A07-022	138.69	141.73	3.05	2.98	0.98	2.64
A07-022	141.73	144.78	3.05	2.95	0.97	2.45
A07-022	144.78	147.83	3.05	3.00	0.98	2.64
A07-023	3.05	4.88	1.83	1.19	0.65	0.90
A07-023	4.88	7.92	3.05	2.84	0.93	1.71
A07-023	7.92	10.97	3.05	2.54	0.83	0.81
A07-023	10.97	13.11	2.13	1.90	0.89	0.82
A07-023	13.11	15.54	2.44	2.20	0.90	1.64
A07-023	15.54	18.59	3.05	2.79	0.92	2.72
A07-023	18.59	21.64	3.05	2.70	0.89	2.53
A07-023	21.64	24.69	3.05	2.76	0.91	1.90
A07-023	24.69	27.74	3.05	2.51	0.82	1.98
A07-023	27.74	30.79	3.05	2.92	0.96	1.99
A07-023	30.79	33.83	3.05	2.88	0.94	1.52
A07-023	33.83	36.88	3.05	2.77	0.91	1.60
A07-023	36.88	39.93	3.05	2.83	0.93	1.26
A07-023	39.93	42.98	3.05	2.89	0.95	2.18
A07-023	42.98	46.03	3.05	2.81	0.92	1.43
A07-023	46.03	49.07	3.05	2.85	0.94	1.33
A07-023	49.07	52.12	3.05	2.84	0.93	1.23
A07-023	52.12	55.17	3.05	2.88	0.94	1.73
A07-023	55.17	58.22	3.05	2.85	0.94	0.80
A07-023	58.22	61.27	3.05	2.60	0.85	1.27
A07-023	61.27	64.31	3.05	3.00	0.98	1.29
A07-023	64.31	67.36	3.05	2.90	0.95	0.63
A07-023	67.36	70.41	3.05	2.80	0.92	0.75
A07-023	70.41	73.46	3.05	2.58	0.85	1.21
A07-023	73.46	76.51	3.05	2.92	0.96	1.17
A07-023	76.51	79.55	3.05	2.86	0.94	2.02
A07-023	79.55	82.60	3.05	2.99	0.98	2.23
A07-023	82.60	85.65	3.05	2.97	0.97	2.73
A07-023	85.65	88.70	3.05	2.82	0.93	2.28
A07-023	88.70	91.44	2.74	2.62	0.96	1.60
A07-023	91.44	94.49	3.05	2.98	0.98	2.09
A07-023	94.49	97.54	3.05	2.89	0.95	1.07
A07-023	97.54	100.59	3.05	2.66	0.87	1.11
A07-023	100.59	103.63	3.05	2.73	0.90	1.61
A07-023	103.63	106.07	2.44	2.15	0.88	0.84
A07-023	106.07	108.21	2.13	2.28	1.07	1.47
A07-023	108.21	110.03	1.83	1.70	0.93	0.30
A07-023	110.03	110.64	0.61	0.72	1.18	0.00
A07-023	110.64	110.80	0.15	0.20	1.31	0.00

A07-023	110.80	112.78	1.98	1.88	0.95	0.76
A07-023	112.78	115.83	3.05	2.95	0.97	1.15
A07-023	115.83	118.87	3.05	2.67	0.88	0.89
A07-023	118.87	121.62	2.74	2.59	0.94	0.98
A07-023	121.62	124.66	3.05	2.93	0.96	1.97
A07-023	124.66	127.71	3.05	3.00	0.98	1.68
A07-023	127.71	130.46	2.74	2.64	0.96	1.35
A07-023	130.46	133.50	3.05	2.96	0.97	1.52
A07-023	133.50	135.03	1.52	1.56	1.02	0.51
A07-023	135.03	137.16	2.13	1.52	0.71	0.93
A07-023	137.16	140.21	3.05	3.01	0.99	1.96
A07-023	140.21	142.95	2.74	2.47	0.90	1.36
A07-023	142.95	146.00	3.05	2.81	0.92	1.35
A07-023	146.00	149.05	3.05	2.58	0.85	1.74
A07-023	149.05	151.18	2.13	2.02	0.95	0.84
A07-023	151.18	152.71	1.52	1.31	0.86	0.57
A07-023	152.71	155.45	2.74	2.62	0.96	1.07
A07-023	155.45	158.50	3.05	2.81	0.92	1.87
A07-023	158.50	161.55	3.05	2.99	0.98	1.76
A07-023	161.55	164.59	3.05	3.02	0.99	2.06
A07-023	164.59	167.64	3.05	2.99	0.98	1.95
A07-023	167.64	170.69	3.05	3.05	1.00	2.81
A07-023	170.69	173.74	3.05	2.99	0.98	2.63
A07-023	173.74	176.79	3.05	3.04	1.00	2.87
A07-023	176.79	179.83	3.05	3.05	1.00	2.32
A07-024	3.05	4.57	1.52	0.38	0.25	0.00
A07-024	4.57	6.40	1.83	1.50	0.82	0.00
A07-024	6.40	8.84	2.44	1.26	0.52	0.00
A07-024	8.84	11.43	2.59	1.90	0.73	0.35
A07-024	11.43	12.80	1.37	1.06	0.77	0.37
A07-024	12.80	14.33	1.52	1.48	0.97	0.14
A07-024	14.33	16.15	1.83	1.22	0.67	0.25
A07-024	16.15	18.29	2.13	2.13	1.00	0.33
A07-024	18.29	19.20	0.91	0.73	0.80	0.00
A07-024	19.20	20.73	1.52	1.09	0.72	0.25
A07-024	20.73	23.77	3.05	2.92	0.96	0.23
A07-024	23.77	26.52	2.74	2.28	0.83	0.00
A07-024	26.52	29.57	3.05	2.74	0.90	0.55
A07-024	29.57	32.61	3.05	2.77	0.91	0.12
A07-024	32.61	35.66	3.05	2.42	0.79	0.39
A07-024	35.66	38.71	3.05	2.87	0.94	0.20
A07-024	38.71	41.76	3.05	2.86	0.94	2.02
A07-024	41.76	44.81	3.05	2.81	0.92	0.91
A07-024	44.81	47.85	3.05	2.87	0.94	1.96
A07-024	47.85	50.90	3.05	2.94	0.96	2.52
A07-024	50.90	53.95	3.05	2.97	0.97	2.92
A07-024	53.95	57.00	3.05	2.63	0.86	1.95
A07-024	57.00	60.05	3.05	2.95	0.97	1.45
A07-024	60.05	62.79	2.74	2.63	0.96	2.19
A07-024	62.79	65.53	2.74	2.39	0.87	1.19
A07-024	65.53	68.58	3.05	2.89	0.95	2.38

A07-024	68.58	71.63	3.05	2.95	0.97	2.53
A07-024	71.63	74.68	3.05	2.87	0.94	2.08
A07-024	74.68	77.72	3.05	2.94	0.96	2.31
A07-024	77.72	80.77	3.05	3.03	0.99	2.96
A07-024	80.77	83.82	3.05	2.98	0.98	2.65
A07-024	83.82	86.87	3.05	2.94	0.96	1.90
A07-024	86.87	89.92	3.05	2.85	0.94	1.11
A07-024	89.92	92.97	3.05	2.62	0.86	1.89
A07-024	92.97	96.01	3.05	2.98	0.98	1.01
A07-024	96.01	99.06	3.05	2.71	0.89	0.51
A07-024	99.06	102.11	3.05	2.95	0.97	0.52
A07-024	102.11	105.16	3.05	2.92	0.96	1.18
A07-024	105.16	108.05	2.90	2.97	1.03	1.94
A07-024	108.05	111.10	3.05	2.77	0.91	1.78
A07-024	111.10	114.15	3.05	2.98	0.98	1.51
A07-024	114.15	116.13	1.98	2.01	1.01	1.57
A07-024	116.13	119.18	3.05	3.05	1.00	2.51
A07-024	119.18	122.23	3.05	2.92	0.96	2.33
A07-024	122.23	125.27	3.05	2.93	0.96	2.65
A07-024	125.27	128.32	3.05	2.89	0.95	2.14
A07-024	128.32	131.37	3.05	3.02	0.99	1.59
A07-024	131.37	134.42	3.05	3.00	0.98	0.00
A07-024	134.42	137.47	3.05	2.91	0.95	1.63
A07-024	137.47	140.51	3.05	2.71	0.89	0.94
A07-024	140.51	143.56	3.05	2.84	0.93	2.34
A07-024	143.56	146.61	3.05	2.77	0.91	0.00
A07-024	146.61	149.66	3.05	2.94	0.96	0.34
A07-024	149.66	152.40	2.74	2.17	0.79	0.00
A07-024	152.40	155.45	3.05	2.58	0.85	0.00
A07-025	3.05	5.18	2.13	0.62	0.29	0.00
A07-025	5.18	7.62	2.44	2.00	0.82	0.00
A07-025	7.62	9.14	1.52	1.18	0.77	0.00
A07-025	9.14	10.67	1.52	1.25	0.82	0.38
A07-025	10.67	13.11	2.44	2.07	0.85	0.95
A07-025	13.11	14.94	1.83	1.30	0.71	0.52
A07-025	14.94	17.07	2.13	1.80	0.84	0.76
A07-025	17.07	19.81	2.74	2.72	0.99	1.39
A07-025	19.81	22.86	3.05	2.85	0.94	2.36
A07-025	22.86	25.91	3.05	2.99	0.98	0.60
A07-025	25.91	26.82	0.91	1.03	1.13	0.17
A07-025	26.82	29.87	3.05	2.68	0.88	1.37
A07-025	29.87	32.92	3.05	2.98	0.98	1.70
A07-025	32.92	35.66	2.74	2.23	0.81	1.53
A07-025	35.66	38.71	3.05	2.42	0.79	1.59
A07-025	38.71	41.76	3.05	2.88	0.94	2.26
A07-025	41.76	44.81	3.05	3.52	1.15	1.67
A07-025	44.81	47.85	3.05	2.49	0.82	1.15
A07-025	47.85	50.90	3.05	2.97	0.97	1.54
A07-025	50.90	52.73	1.83	1.67	0.91	1.38
A07-025	52.73	55.78	3.05	3.00	0.98	2.56
A07-025	55.78	58.83	3.05	2.89	0.95	1.90

A07-025	58.83	60.35	1.52	1.29	0.85	0.65
A07-025	60.35	61.88	1.52	1.05	0.69	0.66
A07-025	61.88	64.31	2.44	2.24	0.92	1.25
A07-025	64.31	67.06	2.74	2.36	0.86	2.28
A07-025	67.06	69.50	2.44	2.08	0.85	1.90
A07-025	69.50	71.32	1.83	2.06	1.13	1.59
A07-025	71.32	74.07	2.74	2.77	1.01	1.49
A07-025	74.07	75.90	1.83	1.88	1.03	1.31
A07-025	75.90	78.94	3.05	3.05	1.00	1.39
A07-025	78.94	81.69	2.74	2.76	1.01	1.05
A07-025	81.69	84.74	3.05	2.87	0.94	1.85
A07-025	84.74	87.78	3.05	3.01	0.99	1.30
A07-025	87.78	90.83	3.05	2.76	0.91	0.16
A07-025	90.83	93.88	3.05	2.87	0.94	1.17
A07-025	93.88	96.93	3.05	2.86	0.94	0.73
A07-025	96.93	98.15	1.22	0.95	0.78	0.00
A07-025	98.15	101.19	3.05	2.87	0.94	0.27
A07-025	101.19	104.24	3.05	2.99	0.98	0.14
A07-025	104.24	107.29	3.05	2.98	0.98	1.48
A07-025	107.29	109.12	1.83	1.67	0.91	0.90
A07-025	109.12	112.17	3.05	2.91	0.95	2.05
A07-025	112.17	115.22	3.05	2.99	0.98	2.60
A07-025	115.22	118.26	3.05	2.86	0.94	1.00
A07-025	118.26	121.31	3.05	2.56	0.84	1.22
A07-025	121.31	123.90	2.59	2.57	0.99	1.64
A07-025	123.90	126.95	3.05	2.88	0.94	1.49
A07-025	126.95	130.00	3.05	2.90	0.95	1.04
A07-025	130.00	132.59	2.59	2.08	0.80	1.41
A07-025	132.59	135.64	3.05	2.72	0.89	1.89
A07-025	135.64	138.38	2.74	2.57	0.94	2.19
A07-025	138.38	141.12	2.74	2.82	1.03	1.80
A07-025	141.12	143.87	2.74	2.39	0.87	1.71
A07-025	143.87	146.61	2.74	2.41	0.88	1.48
A07-025	146.61	148.44	1.83	1.96	1.07	1.11
A07-025	148.44	150.88	2.44	2.31	0.95	1.36
A07-025	150.88	153.32	2.44	2.28	0.94	1.72
A07-025	153.32	154.84	1.52	1.39	0.91	0.81
A07-025	154.84	157.89	3.05	2.77	0.91	1.74
A07-025	157.89	160.94	3.05	2.87	0.94	1.75
A07-025	160.94	162.46	1.52	1.40	0.92	0.90
A07-025	162.46	163.68	1.22	0.98	0.80	0.32
A07-025	163.68	164.75	1.07	0.68	0.64	0.30
A07-025	164.75	169.47	4.72	4.85	1.03	2.99
A07-026	5.18	8.23	3.05	3.05	1.00	0.00
A07-026	8.23	10.36	2.13	2.11	0.99	0.00
A07-026	10.36	12.80	2.44	2.35	0.96	0.24
A07-026	12.80	13.72	0.91	1.05	1.15	0.11
A07-026	13.72	16.46	2.74	2.60	0.95	1.82
A07-026	16.46	17.98	1.52	1.38	0.91	0.65
A07-026	17.98	21.03	3.05	2.69	0.88	0.62
A07-026	21.03	22.86	1.83	1.96	1.07	0.56

A07-026	22.86	25.91	3.05	3.05	1.00	1.45
A07-026	25.91	28.96	3.05	3.02	0.99	3.02
A07-026	28.96	32.00	3.05	3.05	1.00	2.60
A07-026	32.00	35.05	3.05	2.94	0.96	2.30
A07-026	35.05	38.10	3.05	2.91	0.95	0.54
A07-026	38.10	40.84	2.74	2.70	0.98	0.65
A07-026	40.84	41.76	0.91	0.60	0.66	0.25
A07-026	41.76	42.67	0.91	1.01	1.10	0.12
A07-026	42.67	44.50	1.83	1.83	1.00	0.22
A07-026	44.50	44.81	0.30	0.29	0.95	0.00
A07-026	44.81	47.85	3.05	2.93	0.96	0.00
A07-026	47.85	49.38	1.52	1.24	0.81	0.22
A07-026	49.38	49.68	0.30	0.30	0.98	0.00
A07-026	49.68	50.60	0.91	0.64	0.70	0.22
A07-026	50.60	53.65	3.05	3.05	1.00	0.86
A07-026	53.65	56.69	3.05	2.97	0.97	2.43
A07-026	56.69	59.74	3.05	2.96	0.97	2.43
A07-026	59.74	62.79	3.05	2.69	0.88	2.22
A07-026	62.79	65.84	3.05	3.03	0.99	2.47
A07-026	65.84	67.67	1.83	2.45	1.34	1.84
A07-026	67.67	70.41	2.74	2.69	0.98	1.06
A07-026	70.41	71.02	0.61	0.47	0.77	0.11
A07-026	71.02	71.93	0.91	0.62	0.68	0.10
A07-026	71.93	73.76	1.83	1.81	0.99	0.23
A07-026	73.76	75.59	1.83	1.56	0.85	0.84
A07-026	75.59	78.64	3.05	2.99	0.98	1.15
A07-026	78.64	81.69	3.05	2.83	0.93	1.47
A07-026	81.69	84.74	3.05	2.92	0.96	0.00
A07-026	84.74	87.48	2.74	2.88	1.05	0.43
A07-026	87.48	89.31	1.83	1.84	1.01	1.13
A07-026	89.31	90.83	1.52	1.62	1.06	1.46
A07-026	90.83	93.88	3.05	2.78	0.91	0.87
A07-026	93.88	96.93	3.05	2.75	0.90	0.25
A07-026	96.93	99.98	3.05	3.09	1.01	1.08
A07-026	99.98	103.02	3.05	2.92	0.96	0.69
A07-026	103.02	106.07	3.05	3.04	1.00	0.16
A07-026	106.07	106.99	0.91	1.03	1.13	0.12
A07-026	106.99	110.03	3.05	2.18	0.72	0.28
A07-026	110.03	113.08	3.05	3.05	1.00	1.30
A07-026	113.08	116.13	3.05	2.72	0.89	1.95
A07-026	116.13	117.96	1.83	1.59	0.87	0.32
A07-026	117.96	121.01	3.05	3.04	1.00	1.21
A07-026	121.01	122.84	1.83	1.80	0.98	0.00
A07-026	122.84	125.27	2.44	2.20	0.90	0.44
A07-026	125.27	128.32	3.05	2.81	0.92	1.63
A07-026	128.32	131.07	2.74	2.51	0.91	1.43
A07-026	131.07	134.11	3.05	2.99	0.98	0.16
A07-026	134.11	137.16	3.05	2.99	0.98	2.33
A07-026	137.16	138.69	1.52	1.56	1.02	0.78
A07-026	138.69	140.82	2.13	1.51	0.71	0.74
A07-026	140.82	143.26	2.44	2.28	0.94	0.00
A07-026	143.26	144.17	0.91	0.46	0.50	0.00

A07-026	144.17	147.22	3.05	0.61	0.20	0.10
A07-026	147.22	148.74	1.52	0.48	0.31	0.00
A07-026	148.74	149.35	0.61	0.38	0.62	0.00
A07-026	149.35	149.66	0.30	0.22	0.72	0.00
A07-026	149.66	149.96	0.30	0.29	0.95	0.00
A07-026	149.96	151.79	1.83	1.98	1.08	0.00
A07-026	151.79	154.84	3.05	1.93	0.63	0.00
A07-026	154.84	156.21	1.37	0.72	0.52	0.00
A07-026	156.21	157.89	1.68	1.90	1.13	0.31
A07-026	157.89	159.72	1.83	1.41	0.77	0.24
A07-026	159.72	162.77	3.05	2.69	0.88	1.44
A07-026	162.77	163.98	1.22	1.48	1.21	0.49
A07-026	163.98	165.81	1.83	1.90	1.04	1.00
A07-026	165.81	168.25	2.44	2.48	1.02	1.63
A07-026	168.25	170.08	1.83	1.39	0.76	0.28
A07-026	170.08	173.13	3.05	1.60	0.52	0.38
A07-026	173.13	176.18	3.05	0.88	0.29	0.00
A07-026	176.18	177.70	1.52	0.65	0.43	0.00
A07-026	177.70	179.22	1.52	0.52	0.34	0.00
A07-026	179.22	181.05	1.83	0.46	0.25	0.00
A07-026	181.05	182.27	1.22	0.91	0.75	0.00
A07-026	182.27	183.19	0.91	0.58	0.63	0.00
A07-026	183.19	184.41	1.22	0.85	0.70	0.00
A07-026	184.41	187.45	3.05	2.91	0.95	1.57
A07-026	187.45	190.50	3.05	3.05	1.00	0.81
A07-026	190.50	193.55	3.05	0.57	0.19	0.00
A07-026	193.55	194.46	0.91	0.29	0.32	0.00
A07-026	194.46	197.51	3.05	2.72	0.89	0.44
A07-026	197.51	199.65	2.13	1.81	0.85	0.98
A07-026	199.65	202.69	3.05	3.05	1.00	0.94
A07-026	202.69	205.44	2.74	2.25	0.82	1.10
A07-026	205.44	208.49	3.05	3.01	0.99	0.21
A07-027	3.05	5.18	2.13	0.97	0.45	0.10
A07-027	5.18	8.23	3.05	2.77	0.91	0.51
A07-027	8.23	11.28	3.05	3.05	1.00	2.09
A07-027	11.28	14.33	3.05	3.05	1.00	2.36
A07-027	14.33	16.46	2.13	1.57	0.74	0.55
A07-027	16.46	17.68	1.22	1.17	0.96	0.78
A07-027	17.68	20.73	3.05	2.99	0.98	1.95
A07-027	20.73	23.77	3.05	3.05	1.00	2.87
A07-027	23.77	26.82	3.05	2.92	0.96	2.70
A07-027	26.82	29.87	3.05	2.82	0.93	2.08
A07-027	29.87	32.92	3.05	3.04	1.00	2.63
A07-027	32.92	35.97	3.05	3.05	1.00	2.80
A07-027	35.97	39.01	3.05	3.03	0.99	2.16
A07-027	39.01	42.06	3.05	3.05	1.00	2.43
A07-027	42.06	45.11	3.05	3.05	1.00	2.86
A07-027	45.11	48.16	3.05	2.98	0.98	2.11
A07-027	48.16	51.21	3.05	2.94	0.96	2.56
A07-027	51.21	53.34	2.13	2.96	1.39	2.41
A07-027	53.34	56.39	3.05	2.14	0.70	1.57

A07-027	56.39	59.44	3.05	2.71	0.89	1.29
A07-027	59.44	59.74	0.30	0.27	0.89	0.23
A07-027	59.74	62.64	2.90	2.05	0.71	0.56
A07-027	62.64	65.69	3.05	3.11	1.02	1.62
A07-027	65.69	66.45	0.76	0.56	0.73	0.21
A07-027	66.45	68.89	2.44	2.58	1.06	1.46
A07-027	68.89	71.93	3.05	3.01	0.99	1.30
A07-027	71.93	74.22	2.29	1.69	0.74	0.85
A07-027	74.22	75.59	1.37	1.36	0.99	1.26
A07-027	75.59	78.64	3.05	3.08	1.01	1.49
A07-027	78.64	81.69	3.05	3.03	0.99	1.08
A07-027	81.69	84.74	3.05	3.05	1.00	1.26
A07-027	84.74	87.78	3.05	2.91	0.95	1.57
A07-027	87.78	90.83	3.05	2.99	0.98	2.02
A07-027	90.83	93.88	3.05	3.07	1.01	1.11
A07-027	93.88	96.93	3.05	3.02	0.99	0.12
A07-027	96.93	99.98	3.05	1.94	0.64	0.47
A07-027	99.98	103.02	3.05	3.05	1.00	1.34
A07-027	103.02	106.07	3.05	2.95	0.97	2.61
A07-027	106.07	109.12	3.05	3.08	1.01	0.12
A07-027	109.12	112.17	3.05	3.05	1.00	0.17
A07-027	112.17	115.22	3.05	3.05	1.00	0.15
A07-027	115.22	118.26	3.05	2.99	0.98	0.48
A07-027	118.26	121.31	3.05	3.05	1.00	0.73
A07-027	121.31	124.36	3.05	2.87	0.94	2.50
A07-027	124.36	127.41	3.05	2.99	0.98	1.51
A07-027	127.41	130.46	3.05	3.05	1.00	0.00
A07-027	130.46	133.50	3.05	2.57	0.84	0.14
A07-027	133.50	135.03	1.52	1.40	0.92	0.13
A07-027	135.03	137.16	2.13	1.79	0.84	0.00
A07-027	137.16	138.08	0.91	0.91	1.00	0.13
A07-027	138.08	139.60	1.52	1.42	0.93	0.39
A07-027	139.60	142.04	2.44	2.48	1.02	0.00
A07-027	142.04	144.48	2.44	2.00	0.82	0.77
A07-027	144.48	147.52	3.05	2.61	0.86	0.57
A07-027	147.52	148.74	1.22	1.44	1.18	0.79
A07-028	3.05	5.79	2.74	2.95	1.08	0.30
A07-028	5.79	8.84	3.05	3.02	0.99	2.01
A07-028	8.84	11.89	3.05	3.05	1.00	2.01
A07-028	11.89	14.94	3.05	2.97	0.97	1.99
A07-028	14.94	17.98	3.05	3.05	1.00	0.31
A07-028	17.98	21.03	3.05	2.82	0.93	0.15
A07-028	21.03	24.08	3.05	2.97	0.97	0.24
A07-028	24.08	27.13	3.05	2.84	0.93	0.57
A07-028	27.13	30.18	3.05	3.05	1.00	0.36
A07-028	30.18	32.00	1.83	1.54	0.84	0.80
A07-028	32.00	35.05	3.05	3.03	0.99	0.98
A07-028	35.05	38.10	3.05	3.08	1.01	1.63
A07-028	38.10	41.15	3.05	2.89	0.95	1.53
A07-028	41.15	44.20	3.05	3.05	1.00	0.25
A07-028	44.20	47.24	3.05	3.05	1.00	1.34

A07-028	47.24	50.29	3.05	3.05	1.00	1.78
A07-028	50.29	53.34	3.05	2.92	0.96	0.61
A07-028	53.34	56.39	3.05	3.29	1.08	0.00
A07-028	56.39	59.44	3.05	2.95	0.97	0.00
A07-028	59.44	62.48	3.05	3.03	0.99	1.05
A07-028	62.48	65.53	3.05	3.02	0.99	1.27
A07-028	65.53	68.58	3.05	2.94	0.96	1.61
A07-028	68.58	71.63	3.05	3.02	0.99	1.57
A07-028	71.63	74.68	3.05	3.00	0.98	0.65
A07-028	74.68	77.72	3.05	3.01	0.99	1.72
A07-028	77.72	80.77	3.05	2.93	0.96	2.19
A07-028	80.77	83.82	3.05	3.01	0.99	1.87
A07-028	83.82	86.87	3.05	3.04	1.00	2.11
A07-028	86.87	89.92	3.05	3.03	0.99	0.72
A07-028	89.92	92.97	3.05	2.96	0.97	0.45
A07-028	92.97	96.01	3.05	2.70	0.89	0.10
A07-028	96.01	99.06	3.05	3.04	1.00	0.47
A07-028	99.06	102.11	3.05	3.05	1.00	0.36
A07-028	102.11	105.16	3.05	2.98	0.98	1.00
A07-028	105.16	108.21	3.05	3.05	1.00	2.18
A07-028	108.21	111.25	3.05	2.99	0.98	1.11
A07-028	111.25	114.30	3.05	3.00	0.98	0.35
A07-028	114.30	117.35	3.05	3.05	1.00	0.00
A07-028	117.35	120.40	3.05	3.09	1.01	1.27
A07-028	120.40	123.45	3.05	3.03	0.99	1.65
A07-028	123.45	126.49	3.05	2.89	0.95	0.90
A07-028	126.49	129.54	3.05	3.11	1.02	0.46
A07-028	129.54	132.59	3.05	3.04	1.00	0.35
A07-028	132.59	135.64	3.05	3.05	1.00	0.00
A07-028	135.64	138.69	3.05	3.07	1.01	0.16
A07-028	138.69	141.73	3.05	3.07	1.01	0.11
A07-028	141.73	144.78	3.05	3.05	1.00	0.12
A07-028	144.78	147.83	3.05	3.03	0.99	1.84
A07-028	147.83	149.66	1.83	1.60	0.87	0.00
A07-028	149.66	152.40	2.74	2.77	1.01	0.93
A07-028	152.40	155.45	3.05	3.20	1.05	0.36
A07-028	155.45	158.50	3.05	2.91	0.95	0.73
A07-028	158.50	160.63	2.13	2.22	1.04	0.25
A07-028	160.63	163.07	2.44	1.37	0.56	0.46
A07-028	163.07	165.20	2.13	1.96	0.92	0.20
A07-028	165.20	167.49	2.29	2.35	1.03	1.76
A07-028	167.49	170.54	3.05	3.05	1.00	2.12
A07-028	170.54	173.59	3.05	3.02	0.99	2.59
A07-028	173.59	174.04	0.46	0.36	0.79	0.24
A07-028	174.04	176.79	2.75	2.80	1.02	2.61
A07-029	6.10	8.53	2.44	2.43	1.00	0.81
A07-029	8.53	11.58	3.05	2.93	0.96	0.92
A07-029	11.58	14.63	3.05	2.64	0.87	0.39
A07-029	14.63	17.68	3.05	2.78	0.91	0.18
A07-029	17.68	20.73	3.05	2.91	0.95	0.38
A07-029	20.73	23.77	3.05	2.99	0.98	0.12

A07-029	23.77	26.82	3.05	2.83	0.93	0.14
A07-029	26.82	29.87	3.05	2.84	0.93	0.40
A07-029	29.87	32.92	3.05	3.05	1.00	0.36
A07-029	32.92	35.97	3.05	2.97	0.97	0.63
A07-029	35.97	39.01	3.05	2.93	0.96	0.72
A07-029	39.01	42.06	3.05	3.02	0.99	0.87
A07-029	42.06	45.11	3.05	2.97	0.97	1.51
A07-029	45.11	48.16	3.05	3.03	0.99	1.70
A07-029	48.16	51.21	3.05	2.44	0.80	1.26
A07-029	51.21	54.26	3.05	2.90	0.95	2.20
A07-029	54.26	57.30	3.05	2.99	0.98	2.03
A07-029	57.30	60.35	3.05	2.98	0.98	1.77
A07-029	60.35	63.40	3.05	3.03	0.99	2.48
A07-029	63.40	66.45	3.05	2.57	0.84	1.56
A07-029	66.45	69.19	2.74	3.13	1.14	2.38
A07-029	69.19	72.24	3.05	3.08	1.01	2.99
A07-029	72.24	75.29	3.05	2.61	0.86	0.57
A07-029	75.29	76.51	1.22	1.16	0.95	1.06
A07-029	76.51	78.64	2.13	1.94	0.91	1.28
A07-029	78.64	81.69	3.05	2.72	0.89	1.30
A07-029	81.69	82.30	0.61	1.59	2.61	0.14
A07-029	82.30	84.74	2.44	2.41	0.99	1.08
A07-029	84.74	86.26	1.52	1.52	1.00	1.48
A07-029	86.26	87.78	1.52	1.56	1.02	1.48
A07-029	87.78	89.61	1.83	1.82	1.00	1.47
A07-029	89.61	91.75	2.13	1.84	0.86	0.15
A07-029	91.75	93.88	2.13	2.39	1.12	0.87
A07-029	93.88	96.93	3.05	2.70	0.89	1.05
A07-029	96.93	99.98	3.05	3.05	1.00	0.85
A07-029	99.98	103.02	3.05	2.98	0.98	2.38
A07-029	103.02	106.07	3.05	2.38	0.78	0.90
A07-029	106.07	109.12	3.05	2.98	0.98	1.30
A07-029	109.12	112.17	3.05	2.87	0.94	1.87
A07-029	112.17	115.22	3.05	1.62	0.53	1.04
A07-029	115.22	118.26	3.05	3.01	0.99	2.59
A07-029	118.26	121.31	3.05	2.75	0.90	1.75
A07-029	121.31	124.36	3.05	2.57	0.84	1.36
A07-029	124.36	127.41	3.05	3.19	1.05	2.17
A07-029	127.41	130.46	3.05	3.02	0.99	2.88
A07-029	130.46	133.50	3.05	2.81	0.92	1.64
A07-029	133.50	136.55	3.05	3.01	0.99	1.28
A07-029	136.55	139.60	3.05	2.99	0.98	2.55
A07-029	139.60	142.65	3.05	2.91	0.95	1.73
A07-029	142.65	145.70	3.05	2.90	0.95	0.66
A07-029	145.70	146.61	0.91	0.90	0.98	0.70
A07-029	146.61	148.74	2.13	2.05	0.96	1.18
A07-029	148.74	151.79	3.05	2.93	0.96	0.93
A07-029	151.79	154.84	3.05	2.99	0.98	2.61
A07-029	154.84	157.89	3.05	3.03	0.99	1.95
A07-029	157.89	160.94	3.05	2.94	0.96	2.19
A07-029	160.94	163.98	3.05	2.87	0.94	0.43
A07-029	163.98	167.03	3.05	2.92	0.96	0.93

A07-029	167.03	170.08	3.05	2.95	0.97	0.73
A07-029	170.08	173.13	3.05	2.92	0.96	0.37
A07-029	173.13	176.18	3.05	2.99	0.98	0.86
A07-030	6.10	11.28	5.18	1.45	0.28	0.00
A07-030	11.28	14.33	3.05	0.90	0.30	0.00
A07-030	14.33	17.37	3.05	1.30	0.43	0.00
A07-030	17.37	18.29	0.91	0.52	0.57	0.00
A07-030	18.29	19.20	0.91	0.28	0.31	0.00
A07-030	19.20	20.73	1.52	0.86	0.56	0.00
A07-030	20.73	22.25	1.52	0.20	0.13	0.00
A07-030	22.25	24.99	2.74	0.41	0.15	0.00
A07-030	24.99	26.82	1.83	0.54	0.30	0.00
A07-030	26.82	28.04	1.22	0.48	0.39	0.00
A07-030	28.04	29.26	1.22	0.57	0.47	0.00
A07-030	29.26	30.79	1.52	0.50	0.33	0.00
A07-030	30.79	32.92	2.13	0.46	0.22	0.00
A07-030	32.92	33.83	0.91	0.86	0.94	0.00
A07-030	33.83	34.75	0.91	0.78	0.85	0.14
A07-030	34.75	37.49	2.74	2.64	0.96	0.96
A07-030	37.49	40.23	2.74	3.12	1.14	0.25
A07-030	40.23	43.59	3.35	2.95	0.88	0.26
A07-030	43.59	46.63	3.05	2.85	0.94	0.23
A07-030	46.63	48.16	1.52	0.88	0.58	0.00
A07-030	48.16	49.68	1.52	0.37	0.24	0.00
A07-030	49.68	50.90	1.22	0.88	0.72	0.00
A07-030	50.90	51.82	0.91	0.76	0.83	0.00
A07-030	51.82	52.73	0.91	0.95	1.04	0.35
A07-030	52.73	54.26	1.52	1.47	0.96	0.41
A07-030	54.26	55.17	0.91	1.00	1.09	0.00
A07-030	55.17	55.78	0.61	0.44	0.72	0.00
A07-030	55.78	56.69	0.91	0.67	0.73	0.00
A07-030	56.69	57.91	1.22	1.18	0.97	0.64
A07-030	57.91	58.22	0.30	0.22	0.72	0.00
A07-030	58.22	59.13	0.91	0.80	0.87	0.30
A07-030	59.13	60.35	1.22	1.22	1.00	0.21
A07-030	60.35	61.88	1.52	1.53	1.00	0.42
A07-030	61.88	62.79	0.91	0.72	0.79	0.00
A07-030	62.79	63.70	0.91	0.64	0.70	0.00
A07-030	63.70	64.92	1.22	1.06	0.87	0.62
A07-030	64.92	66.45	1.52	1.48	0.97	0.54
A07-030	66.45	67.36	0.91	0.81	0.89	0.34
A07-030	67.36	67.97	0.61	0.49	0.80	0.00
A07-030	67.97	70.41	2.44	2.45	1.00	1.74
A07-030	70.41	73.76	3.35	3.30	0.98	2.22
A07-030	73.76	77.12	3.35	3.20	0.95	1.20
A07-030	77.12	80.16	3.05	3.04	1.00	2.05
A07-030	80.16	83.21	3.05	3.04	1.00	2.75
A07-030	83.21	86.26	3.05	3.01	0.99	2.88
A07-030	86.26	89.31	3.05	3.00	0.98	2.82
A07-030	89.31	92.36	3.05	3.05	1.00	2.89
A07-030	92.36	95.40	3.05	2.99	0.98	2.66

A07-030	95.40	98.45	3.05	3.05	1.00	2.99
A07-030	98.45	101.50	3.05	3.02	0.99	2.58
A07-030	101.50	104.55	3.05	2.98	0.98	2.58
A07-030	104.55	107.60	3.05	3.02	0.99	2.92
A07-030	107.60	110.64	3.05	2.99	0.98	1.18
A07-030	110.64	112.17	1.52	1.53	1.00	1.41
A07-030	112.17	113.69	1.52	1.54	1.01	1.12
A07-030	113.69	115.22	1.52	1.53	1.00	1.53
A07-030	115.22	116.74	1.52	1.47	0.96	1.47
A07-031	0.91	2.44	1.52	1.30	0.85	0.00
A07-031	2.44	3.66	1.22	1.02	0.84	0.36
A07-031	3.66	4.57	0.91	1.08	1.18	0.57
A07-031	4.57	6.10	1.52	1.44	0.94	1.13
A07-031	6.10	7.62	1.52	1.48	0.97	1.03
A07-031	7.62	9.14	1.52	1.45	0.95	0.94
A07-031	9.14	10.67	1.52	1.51	0.99	1.28
A07-031	10.67	12.19	1.52	1.43	0.94	1.15
A07-031	12.19	13.72	1.52	1.50	0.98	1.20
A07-031	13.72	15.24	1.52	0.96	0.63	0.51
A07-031	15.24	16.46	1.22	1.53	1.25	0.66
A07-031	16.46	17.98	1.52	1.52	1.00	1.20
A07-031	17.98	19.51	1.52	1.41	0.93	0.87
A07-031	19.51	21.03	1.52	1.43	0.94	0.21
A07-031	21.03	22.56	1.52	1.35	0.89	0.00
A07-031	22.56	24.08	1.52	1.54	1.01	0.32
A07-031	24.08	25.60	1.52	1.52	1.00	0.40
A07-031	25.60	27.13	1.52	1.45	0.95	0.43
A07-031	27.13	28.65	1.52	1.38	0.91	1.29
A07-031	28.65	30.18	1.52	1.50	0.98	1.05
A07-031	30.18	31.70	1.52	1.52	1.00	1.07
A07-031	31.70	33.38	1.68	1.52	0.91	1.00
A07-031	33.38	34.90	1.52	1.52	1.00	1.10
A07-031	34.90	36.58	1.68	1.60	0.95	0.44
A07-031	36.58	38.10	1.52	1.41	0.93	0.66
A07-031	38.10	39.62	1.52	1.43	0.94	0.00
A07-031	39.62	41.15	1.52	1.34	0.88	0.99
A07-031	41.15	42.67	1.52	1.39	0.91	0.91
A07-031	42.67	44.20	1.52	1.44	0.94	1.12
A07-031	44.20	45.72	1.52	1.46	0.96	0.29
A07-031	45.72	47.24	1.52	1.42	0.93	0.64
A07-031	47.24	48.77	1.52	1.50	0.98	1.37
A07-031	48.77	50.29	1.52	1.53	1.00	0.73
A07-031	50.29	50.60	0.30	0.41	1.35	0.00
A07-031	50.60	51.82	1.22	1.10	0.90	0.00
A07-031	51.82	53.34	1.52	1.52	1.00	0.18
A07-031	53.34	54.86	1.52	1.52	1.00	0.34
A07-031	54.86	56.24	1.37	1.22	0.89	0.00
A07-031	56.24	57.76	1.52	1.29	0.85	0.00
A07-031	57.76	58.22	0.46	0.30	0.66	0.00
A07-031	58.22	59.74	1.52	1.60	1.05	0.00
A07-031	59.74	61.27	1.52	1.52	1.00	0.30

A07-031	61.27	62.18	0.91	0.18	0.20	0.00
A07-031	62.18	63.70	1.52	1.52	1.00	0.52
A07-031	63.70	64.62	0.91	0.56	0.61	0.00
A07-031	64.62	65.84	1.22	0.83	0.68	0.10
A07-031	65.84	67.36	1.52	1.01	0.66	0.17
A07-031	67.36	68.89	1.52	1.66	1.09	0.00
A07-031	68.89	70.41	1.52	1.54	1.01	0.79
A07-031	70.41	71.93	1.52	1.29	0.85	0.38
A07-031	71.93	73.46	1.52	1.00	0.66	0.40
A07-031	73.46	74.37	0.91	0.92	1.01	0.10
A07-031	74.37	77.12	2.74	1.52	0.55	0.56
A07-031	77.12	78.03	0.91	0.42	0.46	0.00
A07-031	78.03	79.10	1.07	0.90	0.84	0.00
A07-031	79.10	79.86	0.76	0.22	0.29	0.00
A07-031	79.86	80.16	0.30	0.00	0.00	0.00
A07-031	80.16	80.77	0.61	0.00	0.00	0.00
A07-031	80.77	81.69	0.91	0.00	0.00	0.00
A07-031	81.69	82.30	0.61	0.51	0.84	0.00
A07-031	82.30	84.13	1.83	2.32	1.27	0.00
A07-031	84.13	84.74	0.61	0.74	1.21	0.00
A07-031	84.74	85.95	1.22	1.31	1.07	0.11
A07-031	85.95	89.00	3.05	3.09	1.01	1.32
A07-031	89.00	89.92	0.91	0.74	0.81	0.67
A07-031	89.92	92.97	3.05	3.05	1.00	2.68
A07-031	92.97	94.03	1.07	1.00	0.94	0.72
A07-031	94.03	97.08	3.05	3.05	1.00	2.70
A07-031	97.08	100.13	3.05	3.05	1.00	2.72
A07-031	100.13	103.18	3.05	2.99	0.98	2.46
A07-031	103.18	106.07	2.90	3.04	1.05	2.66
A07-031	106.07	109.12	3.05	3.09	1.01	2.78
A07-031	109.12	112.17	3.05	3.02	0.99	2.75
A07-031	112.17	113.39	1.22	0.99	0.81	0.99
A07-031	113.39	115.83	2.44	2.57	1.05	2.47
A07-031	115.83	118.87	3.05	3.01	0.99	2.55
A07-031	118.87	121.92	3.05	3.01	0.99	2.49
A07-031	121.92	124.97	3.05	2.84	0.93	2.82
A07-032	4.88	6.40	1.52	0.94	0.62	0.00
A07-032	6.40	7.92	1.52	0.14	0.09	0.00
A07-032	7.92	9.14	1.22	0.93	0.76	0.00
A07-032	9.14	9.45	0.30	0.00	0.00	0.00
A07-032	9.45	10.97	1.52	1.60	1.05	0.00
A07-032	10.97	12.50	1.52	1.22	0.80	0.00
A07-032	12.50	14.02	1.52	1.34	0.88	0.24
A07-032	14.02	15.54	1.52	1.42	0.93	0.00
A07-032	15.54	18.59	3.05	2.14	0.70	0.00
A07-032	18.59	21.64	3.05	2.42	0.79	0.00
A07-032	21.64	24.69	3.05	1.37	0.45	0.00
A07-032	24.69	27.74	3.05	2.20	0.72	0.00
A07-032	27.74	30.79	3.05	1.82	0.60	0.00
A07-032	30.79	33.83	3.05	3.05	1.00	1.80
A07-032	33.83	36.88	3.05	2.70	0.89	0.00

A07-032	36.88	39.01	2.13	1.35	0.63	0.43
A07-032	39.01	40.23	1.22	1.52	1.25	0.50
A07-032	40.23	41.76	1.52	1.46	0.96	0.51
A07-032	41.76	42.37	0.61	0.40	0.66	0.00
A07-032	42.37	43.59	1.22	0.20	0.16	0.00
A07-032	43.59	45.11	1.52	1.24	0.81	0.00
A07-032	45.11	46.63	1.52	1.24	0.81	0.00
A07-032	46.63	48.16	1.52	1.52	1.00	0.00
A07-032	48.16	49.68	1.52	1.10	0.72	0.00
A07-032	49.68	51.21	1.52	1.53	1.00	0.00
A07-032	51.21	52.73	1.52	1.52	1.00	0.00
A07-032	52.73	54.26	1.52	1.53	1.00	0.00
A07-032	54.26	55.78	1.52	1.34	0.88	0.00
A07-032	55.78	57.30	1.52	1.27	0.83	0.00
A07-032	57.30	58.83	1.52	1.24	0.81	0.15
A07-032	58.83	60.35	1.52	1.52	1.00	0.00
A07-032	60.35	63.40	3.05	2.96	0.97	0.00
A07-032	63.40	64.92	1.52	1.30	0.85	0.00
A07-032	64.92	66.45	1.52	1.52	1.00	0.00
A07-032	66.45	67.97	1.52	1.45	0.95	0.50
A07-032	67.97	71.02	3.05	2.61	0.86	0.52
A07-032	71.02	74.07	3.05	3.05	1.00	0.54
A07-032	74.07	77.12	3.05	3.05	1.00	0.72
A07-032	77.12	80.16	3.05	3.05	1.00	0.57
A07-032	80.16	83.21	3.05	2.83	0.93	0.13
A07-032	83.21	86.26	3.05	3.05	1.00	1.08
A07-032	86.26	89.31	3.05	2.66	0.87	1.84
A07-032	89.31	92.36	3.05	2.87	0.94	1.14
A07-032	92.36	95.40	3.05	2.98	0.98	1.08
A07-032	95.40	98.45	3.05	2.88	0.94	1.81
A07-032	98.45	99.98	1.53	1.53	1.00	0.59
A07-033	2.44	3.96	1.52	0.68	0.45	0.00
A07-033	3.96	5.49	1.52	0.33	0.22	0.00
A07-033	5.49	6.10	0.61	0.28	0.46	0.00
A07-033	6.10	7.01	0.91	0.88	0.96	0.00
A07-033	7.01	8.53	1.52	1.51	0.99	0.00
A07-033	8.53	10.06	1.52	1.53	1.00	0.00
A07-033	10.06	11.58	1.52	1.49	0.98	0.39
A07-033	11.58	13.11	1.52	1.48	0.97	0.00
A07-033	13.11	14.63	1.52	1.52	1.00	0.00
A07-033	14.63	16.15	1.52	1.42	0.93	0.00
A07-033	16.15	17.53	1.37	1.41	1.03	0.00
A07-033	17.53	19.05	1.52	1.52	1.00	0.60
A07-033	19.05	20.12	1.07	1.04	0.97	0.00
A07-033	20.12	20.73	0.61	0.35	0.57	0.00
A07-033	20.73	22.25	1.52	0.47	0.31	0.00
A07-033	22.25	23.47	1.22	0.76	0.62	0.00
A07-033	23.47	24.38	0.91	0.36	0.39	0.00
A07-033	24.38	25.60	1.22	0.21	0.17	0.00
A07-033	25.60	26.21	0.61	0.14	0.23	0.00
A07-033	26.21	26.52	0.30	0.22	0.72	0.00

A07-033	26.52	27.13	0.61	0.29	0.48	0.00
A07-033	27.13	28.35	1.22	0.34	0.28	0.00
A07-033	28.35	28.65	0.30	0.15	0.49	0.00
A07-033	28.65	29.57	0.91	0.43	0.47	0.00
A07-033	29.57	29.87	0.30	0.23	0.75	0.00
A07-033	29.87	30.79	0.91	0.29	0.32	0.00
A07-033	30.79	31.70	0.91	0.41	0.45	0.10
A07-033	31.70	33.22	1.52	0.78	0.51	0.17
A07-033	33.22	34.44	1.22	0.50	0.41	0.14
A07-033	34.44	35.97	1.52	1.38	0.91	0.76
A07-033	35.97	37.49	1.52	1.47	0.96	0.80
A07-033	37.49	39.01	1.52	1.40	0.92	0.89
A07-033	39.01	40.54	1.52	1.45	0.95	0.25
A07-033	40.54	42.06	1.52	1.52	1.00	0.44
A07-033	42.06	43.59	1.52	1.53	1.00	0.36
A07-033	43.59	45.11	1.52	1.42	0.93	0.31
A07-033	45.11	46.63	1.52	1.46	0.96	0.80
A07-033	46.63	48.16	1.52	1.34	0.88	0.63
A07-033	48.16	49.38	1.22	1.13	0.93	0.74
A07-033	49.38	50.90	1.52	1.52	1.00	0.52
A07-033	50.90	52.58	1.68	1.58	0.94	0.82
A07-033	52.58	54.26	1.68	1.51	0.90	0.47
A07-033	54.26	56.69	2.44	2.26	0.93	1.43
A07-033	56.69	58.52	1.83	1.22	0.67	0.76
A07-033	58.52	60.35	1.83	1.14	0.62	0.39
A07-033	60.35	63.40	3.05	2.67	0.88	0.00
A07-033	63.40	66.14	2.74	3.04	1.11	1.06
A07-033	66.14	69.19	3.05	3.00	0.98	1.52
A07-033	69.19	72.24	3.05	2.98	0.98	1.57
A07-033	72.24	75.29	3.05	2.98	0.98	2.02
A07-033	75.29	78.33	3.05	2.87	0.94	2.36
A07-033	78.33	81.38	3.05	2.90	0.95	1.57
A07-033	81.38	84.43	3.05	3.05	1.00	1.69
A07-033	84.43	87.48	3.05	3.04	1.00	2.29
A07-033	87.48	89.92	2.44	2.26	0.93	2.17
A07-033	89.92	92.66	2.74	2.70	0.98	0.88
A07-033	92.66	94.79	2.13	2.21	1.04	1.72
A07-033	94.79	97.84	3.05	3.03	0.99	2.54
A07-033	97.84	100.59	2.74	2.73	1.00	1.12
A07-033	100.59	103.71	3.12	3.11	1.00	0.10
A07-033	103.71	106.83	3.12	3.08	0.99	2.59
A07-033	106.83	109.88	3.05	3.01	0.99	2.42
A07-033	109.88	112.78	2.90	2.80	0.97	2.40
A07-033	112.78	115.83	3.05	3.02	0.99	2.49
A07-033	115.83	118.87	3.05	3.09	1.01	2.94
A07-033	118.87	121.31	2.44	2.31	0.95	1.31
A07-033	121.31	122.53	1.22	1.15	0.94	0.61
A07-033	122.53	124.36	1.83	1.81	0.99	0.58
A07-033	124.36	127.41	3.05	2.92	0.96	0.97
A07-033	127.41	130.46	3.05	3.03	0.99	1.89
A07-033	130.46	133.50	3.05	2.93	0.96	0.88
A07-033	133.50	136.55	3.05	3.05	1.00	0.89

A07-033	136.55	139.60	3.05	3.05	1.00	0.14
A07-033	139.60	142.65	3.05	3.02	0.99	0.00
A07-033	142.65	145.70	3.05	3.03	0.99	1.21
A07-033	145.70	148.74	3.05	3.03	0.99	1.09
A07-033	148.74	151.79	3.05	3.03	0.99	2.41
A07-033	151.79	154.84	3.05	3.04	1.00	2.36
A07-033	154.84	157.89	3.05	3.05	1.00	1.95
A07-033	157.89	160.94	3.05	2.98	0.98	2.66
A07-033	160.94	163.98	3.05	3.02	0.99	2.76
A07-033	163.98	167.03	3.05	3.03	0.99	2.84
A07-033	167.03	168.25	1.22	1.11	0.91	1.04
A07-033	168.25	171.30	3.05	3.00	0.98	2.55
A07-033	171.30	174.35	3.05	3.04	1.00	2.08
A07-033	174.35	177.40	3.05	3.05	1.00	2.33
A07-033	177.40	180.44	3.05	3.04	1.00	2.48
A07-033	180.44	181.66	1.22	1.22	1.00	1.16
A07-033	181.66	183.80	2.13	2.07	0.97	1.65
A07-033	183.80	186.84	3.05	2.97	0.97	1.69
A07-033	186.84	189.89	3.05	3.04	1.00	1.71
A07-033	189.89	192.94	3.05	3.04	1.00	1.94
A07-033	192.94	195.99	3.05	3.02	0.99	1.11
A07-033	195.99	199.04	3.05	3.04	1.00	1.25
A07-034	3.05	4.57	1.52	0.50	0.33	0.24
A07-034	4.57	6.10	1.52	0.42	0.28	0.00
A07-034	6.10	7.62	1.52	0.19	0.12	0.00
A07-034	7.62	9.14	1.52	0.53	0.35	0.00
A07-034	9.14	10.67	1.52	0.75	0.49	0.33
A07-034	10.67	11.13	0.46	0.45	0.98	0.38
A07-034	11.13	12.19	1.07	0.61	0.57	0.12
A07-034	12.19	13.41	1.22	0.14	0.11	0.00
A07-034	13.41	14.48	1.07	0.47	0.44	0.16
A07-034	14.48	15.09	0.61	0.19	0.31	0.00
A07-034	15.09	15.54	0.46	0.05	0.11	0.00
A07-034	15.54	16.46	0.91	0.09	0.10	0.00
A07-034	16.46	17.68	1.22	1.57	1.29	0.60
A07-034	17.68	19.20	1.52	1.12	0.73	0.40
A07-034	19.20	20.73	1.52	0.74	0.49	0.00
A07-034	20.73	22.25	1.52	1.10	0.72	0.27
A07-034	22.25	23.77	1.52	1.23	0.81	0.11
A07-034	23.77	25.30	1.52	1.35	0.89	0.00
A07-034	25.30	26.82	1.52	1.47	0.96	0.16
A07-034	26.82	28.35	1.52	1.50	0.98	0.49
A07-034	28.35	29.87	1.52	1.52	1.00	0.00
A07-034	29.87	31.39	1.52	1.40	0.92	0.00
A07-034	31.39	32.92	1.52	1.05	0.69	0.00
A07-034	32.92	34.44	1.52	1.52	1.00	0.24
A07-034	34.44	35.97	1.52	1.53	1.00	0.30
A07-034	35.97	37.49	1.52	1.05	0.69	0.00
A07-034	37.49	38.41	0.91	1.00	1.09	0.00
A07-034	38.41	39.32	0.91	0.78	0.85	0.00
A07-034	39.32	39.93	0.61	0.47	0.77	0.00

A07-034	39.93	40.69	0.76	0.44	0.58	0.00
A07-034	40.69	41.15	0.46	0.52	1.14	0.00
A07-034	41.15	42.52	1.37	0.50	0.36	0.00
A07-034	42.52	42.98	0.46	0.11	0.24	0.00
A07-034	42.98	43.89	0.91	0.48	0.52	0.00
A07-034	43.89	45.42	1.52	1.31	0.86	0.33
A07-034	45.42	46.94	1.52	1.47	0.96	0.70
A07-034	46.94	48.62	1.68	1.58	0.94	1.20
A07-034	48.62	50.14	1.52	1.44	0.94	0.86
A07-034	50.14	51.66	1.52	1.52	1.00	1.32
A07-034	51.66	53.19	1.52	1.20	0.79	0.69
A07-034	53.19	54.71	1.52	1.58	1.04	1.08
A07-034	54.71	56.39	1.68	1.48	0.88	0.88
A07-034	56.39	57.91	1.52	1.45	0.95	0.98
A07-034	57.91	59.44	1.52	1.50	0.98	1.03
A07-034	59.44	60.96	1.52	1.50	0.98	0.33
A07-034	60.96	62.48	1.52	1.50	0.98	0.62
A07-034	62.48	64.01	1.52	1.50	0.98	0.44
A07-034	64.01	65.53	1.52	1.52	1.00	0.96
A07-034	65.53	67.06	1.52	1.53	1.00	1.19
A07-034	67.06	68.58	1.52	1.40	0.92	0.56
A07-034	68.58	70.10	1.52	1.52	1.00	0.62
A07-034	70.10	71.63	1.52	1.48	0.97	0.19
A07-034	71.63	73.15	1.52	1.52	1.00	1.02
A07-034	73.15	74.68	1.52	1.48	0.97	0.90
A07-034	74.68	76.20	1.52	1.52	1.00	0.75
A07-034	76.20	77.72	1.52	1.53	1.00	1.43
A07-034	77.72	79.25	1.52	1.47	0.96	1.14
A07-034	79.25	80.77	1.52	1.41	0.93	1.30
A07-034	80.77	82.30	1.52	1.59	1.04	1.26
A07-034	82.30	83.82	1.52	1.58	1.04	1.27
A07-034	83.82	85.35	1.52	1.59	1.04	1.30
A07-034	85.35	86.87	1.52	1.49	0.98	1.49
A07-034	86.87	88.39	1.52	1.52	1.00	1.24
A07-034	88.39	89.61	1.22	1.22	1.00	1.22
A07-034	89.61	91.44	1.83	1.51	0.83	1.02
A07-034	91.44	94.49	3.05	3.05	1.00	2.00
A07-034	94.49	97.54	3.05	2.90	0.95	1.67
A07-034	97.54	100.59	3.05	3.05	1.00	2.56
A07-034	100.59	103.63	3.05	3.04	1.00	1.56
A07-034	103.63	106.68	3.05	3.05	1.00	2.01
A07-034	106.68	109.73	3.05	3.05	1.00	1.05
A07-034	109.73	112.78	3.05	3.05	1.00	1.88
A07-034	112.78	115.83	3.05	3.05	1.00	1.78
A07-034	115.83	118.87	3.05	3.05	1.00	1.41
A07-034	118.87	121.92	3.05	3.05	1.00	2.84
A07-034	121.92	124.97	3.05	3.01	0.99	2.43
A07-034	124.97	128.02	3.05	3.05	1.00	0.32
A07-034	128.02	131.07	3.05	3.05	1.00	0.00
A07-034	131.07	134.11	3.05	3.05	1.00	2.34
A07-034	134.11	137.16	3.05	3.03	0.99	2.53
A07-034	137.16	140.21	3.05	3.05	1.00	2.83

A07-034	140.21	142.50	2.29	2.32	1.01	2.20
A07-034	142.50	145.54	3.05	3.01	0.99	2.89
A07-034	145.54	147.83	2.29	2.17	0.95	2.12
A07-034	147.83	150.88	3.05	3.05	1.00	2.72
A07-034	150.88	153.93	3.05	3.05	1.00	2.25
A07-035	9.14	9.91	0.76	0.27	0.35	0.00
A07-035	9.91	10.67	0.76	0.32	0.42	0.00
A07-035	10.67	11.28	0.61	0.30	0.49	0.00
A07-035	11.28	12.19	0.91	0.18	0.20	0.00
A07-035	12.19	13.72	1.52	0.16	0.10	0.00
A07-035	13.72	15.24	1.52	0.29	0.19	0.00
A07-035	15.24	16.76	1.52	1.52	1.00	0.00
A07-035	16.76	18.29	1.52	0.99	0.65	0.00
A07-035	18.29	19.81	1.52	1.52	1.00	0.28
A07-035	19.81	21.34	1.52	1.39	0.91	0.00
A07-035	21.34	22.86	1.52	1.44	0.94	0.72
A07-035	22.86	24.38	1.52	1.51	0.99	1.07
A07-035	24.38	25.91	1.52	1.53	1.00	1.26
A07-035	25.91	27.43	1.52	1.50	0.98	1.43
A07-035	27.43	28.96	1.52	1.56	1.02	1.24
A07-035	28.96	30.48	1.52	1.35	0.89	0.87
A07-035	30.48	32.00	1.52	1.53	1.00	1.08
A07-035	32.00	33.53	1.52	1.41	0.93	0.81
A07-035	33.53	35.05	1.52	1.52	1.00	0.00
A07-035	35.05	36.58	1.52	1.32	0.87	0.35
A07-035	36.58	38.10	1.52	1.52	1.00	0.14
A07-035	38.10	39.62	1.52	1.52	1.00	0.25
A07-035	39.62	41.15	1.52	1.28	0.84	0.00
A07-035	41.15	42.67	1.52	1.29	0.85	0.46
A07-035	42.67	44.20	1.52	1.49	0.98	1.29
A07-035	44.20	45.72	1.52	1.52	1.00	0.19
A07-035	45.72	47.24	1.52	1.46	0.96	0.21
A07-035	47.24	48.77	1.52	1.48	0.97	0.00
A07-035	48.77	50.29	1.52	1.53	1.00	0.00
A07-035	50.29	51.82	1.52	1.51	0.99	0.00
A07-035	51.82	53.34	1.52	1.48	0.97	0.12
A07-035	53.34	54.86	1.52	1.52	1.00	0.26
A07-035	54.86	56.08	1.22	1.50	1.23	0.11
A07-035	56.08	57.00	0.91	1.22	1.33	0.27
A07-035	57.00	58.22	1.22	0.70	0.57	0.00
A07-035	58.22	58.52	0.30	0.36	1.18	0.00
A07-035	58.52	59.13	0.61	0.77	1.26	0.00
A07-035	59.13	60.05	0.91	0.99	1.08	0.00
A07-035	60.05	60.96	0.91	0.91	1.00	0.17
A07-035	60.96	62.79	1.83	1.58	0.86	0.00
A07-035	62.79	64.01	1.22	1.77	1.45	0.12
A07-035	64.01	65.84	1.83	2.08	1.14	0.00
A07-035	65.84	66.75	0.91	0.99	1.08	0.00
A07-035	66.75	69.19	2.44	2.08	0.85	0.00
A07-035	69.19	71.63	2.44	1.95	0.80	0.00
A07-035	71.63	74.37	2.74	2.30	0.84	0.00

A07-035	74.37	76.20	1.83	0.98	0.54	0.26
A07-035	76.20	79.25	3.05	2.81	0.92	0.89
A07-035	79.25	82.30	3.05	3.00	0.98	2.95
A07-035	82.30	85.35	3.05	3.02	0.99	1.63
A07-035	85.35	88.39	3.05	3.03	0.99	1.26
A07-035	88.39	91.44	3.05	2.99	0.98	2.50
A07-035	91.44	94.49	3.05	3.05	1.00	2.73
A07-035	94.49	97.54	3.05	3.05	1.00	1.74
A07-035	97.54	100.59	3.05	3.00	0.98	1.40
A07-035	100.59	103.63	3.05	3.00	0.98	2.90
A07-035	103.63	106.68	3.05	2.91	0.95	2.49
A07-035	106.68	109.73	3.05	3.01	0.99	3.05
A07-035	109.73	112.78	3.05	2.87	0.94	2.51
A07-035	112.78	115.83	3.05	3.05	1.00	2.68
A07-035	115.83	118.87	3.05	3.05	1.00	2.83
A07-035	118.87	120.09	1.22	1.22	1.00	1.22
A07-035	120.09	122.53	2.44	2.44	1.00	2.36
A07-035	122.53	124.97	2.44	2.52	1.03	0.57
A07-035	124.97	126.19	1.22	1.25	1.03	0.71
A07-035	126.19	129.24	3.05	3.05	1.00	2.23
A07-035	129.24	129.54	0.30	0.29	0.95	0.29
A07-035	129.54	132.59	3.05	2.98	0.98	2.39
A07-035	132.59	135.64	3.05	3.01	0.99	2.24
A07-035	135.64	138.69	3.05	2.96	0.97	2.74
A07-035	138.69	140.82	2.13	2.24	1.05	2.23
A07-035	140.82	142.95	2.13	1.97	0.92	1.86
A07-035	142.95	144.78	1.83	1.89	1.03	1.74
A07-035	144.78	147.83	3.05	3.05	1.00	1.98
A07-035	147.83	150.88	3.05	3.02	0.99	2.77
A07-036	1.52	4.50	2.97	2.77	0.93	0.90
A07-036	4.50	6.02	1.52	1.55	1.02	1.27
A07-036	6.02	7.62	1.60	1.53	0.96	1.10
A07-036	7.62	9.14	1.52	1.49	0.98	0.00
A07-036	9.14	10.67	1.52	1.41	0.93	0.47
A07-036	10.67	12.19	1.52	1.54	1.01	1.31
A07-036	12.19	13.72	1.52	1.47	0.96	0.96
A07-036	13.72	15.24	1.52	1.46	0.96	1.22
A07-036	15.24	16.76	1.52	1.50	0.98	1.35
A07-036	16.76	18.29	1.52	1.53	1.00	1.34
A07-036	18.29	19.81	1.52	1.51	0.99	1.41
A07-036	19.81	21.34	1.52	1.52	1.00	1.19
A07-036	21.34	22.86	1.52	1.46	0.96	1.08
A07-036	22.86	24.38	1.52	1.52	1.00	1.14
A07-036	24.38	25.91	1.52	1.49	0.98	1.01
A07-036	25.91	27.43	1.52	1.51	0.99	1.19
A07-036	27.43	28.96	1.52	1.55	1.02	1.46
A07-036	28.96	30.48	1.52	1.50	0.98	1.37
A07-036	30.48	32.00	1.52	1.53	1.00	1.30
A07-036	32.00	33.53	1.52	1.54	1.01	0.58
A07-036	33.53	35.05	1.52	1.48	0.97	1.42
A07-036	35.05	36.58	1.52	1.54	1.01	1.31

A07-036	36.58	38.10	1.52	1.53	1.00	1.44
A07-036	38.10	39.62	1.52	1.49	0.98	1.39
A07-036	39.62	41.15	1.52	1.51	0.99	0.82
A07-036	41.15	42.67	1.52	1.52	1.00	1.49
A07-036	42.67	44.20	1.52	1.51	0.99	1.45
A07-036	44.20	45.72	1.52	1.53	1.00	1.45
A07-036	45.72	47.24	1.52	1.52	1.00	0.92
A07-036	47.24	48.77	1.52	1.52	1.00	0.50
A07-036	48.77	50.29	1.52	1.44	0.94	1.14
A07-036	50.29	51.82	1.52	1.59	1.04	1.29
A07-036	51.82	53.34	1.52	1.49	0.98	1.43
A07-036	53.34	54.86	1.52	1.52	1.00	1.39
A07-036	54.86	56.39	1.52	1.45	0.95	1.17
A07-036	56.39	57.91	1.52	1.52	1.00	1.38
A07-036	57.91	59.44	1.52	1.48	0.97	1.40
A07-036	59.44	60.96	1.52	1.48	0.97	1.23
A07-036	60.96	62.48	1.52	1.47	0.96	0.96
A07-036	62.48	64.01	1.52	1.55	1.02	1.50
A07-036	64.01	65.53	1.52	1.43	0.94	1.16
A07-036	65.53	67.06	1.52	1.50	0.98	0.97
A07-036	67.06	68.58	1.52	1.44	0.94	1.40
A07-036	68.58	70.10	1.52	1.50	0.98	0.98
A07-036	70.10	71.63	1.52	1.53	1.00	1.44
A07-036	71.63	73.15	1.52	1.52	1.00	1.52
A07-036	73.15	76.20	3.05	2.38	0.78	2.16
A07-036	76.20	77.12	0.91	0.93	1.02	0.82
A07-036	77.12	80.16	3.05	3.04	1.00	3.01
A07-036	80.16	83.21	3.05	3.04	1.00	2.75
A07-036	83.21	86.26	3.05	3.05	1.00	3.05
A07-036	86.26	89.31	3.05	3.05	1.00	2.88
A07-036	89.31	92.36	3.05	2.99	0.98	2.68
A07-036	92.36	95.40	3.05	2.94	0.96	0.41
A07-036	95.40	97.54	2.13	2.19	1.03	1.41
A07-036	97.54	100.59	3.05	3.05	1.00	2.26
A07-036	100.59	103.63	3.05	2.98	0.98	0.85
A07-036	103.63	105.46	1.83	1.91	1.04	0.17
A07-036	105.46	106.68	1.22	0.71	0.58	0.24
A07-036	106.68	108.21	1.52	1.08	0.71	0.00
A07-036	108.21	109.73	1.52	0.81	0.53	0.00
A07-036	109.73	111.25	1.52	0.57	0.37	0.00
A07-036	111.25	112.47	1.22	1.05	0.86	0.00
A07-036	112.47	114.30	1.83	1.54	0.84	0.00
A07-036	114.30	115.83	1.52	0.95	0.62	0.11
A07-036	115.83	117.35	1.52	1.51	0.99	0.80
A07-036	117.35	120.40	3.05	2.95	0.97	1.82
A07-036	120.40	123.45	3.05	3.05	1.00	2.67
A07-036	123.45	126.49	3.05	2.99	0.98	2.87
A07-036	126.49	129.54	3.05	3.01	0.99	2.93
A07-036	129.54	131.07	1.52	1.53	1.00	1.25
A07-036	131.07	133.96	2.90	2.87	0.99	2.68
A07-036	133.96	137.01	3.05	3.02	0.99	1.87
A07-036	137.01	139.30	2.29	2.17	0.95	1.28

A07-036	139.30	142.34	3.05	3.04	1.00	1.95
A07-036	142.34	144.78	2.44	2.17	0.89	0.53
A07-036	144.78	146.61	1.83	1.15	0.63	0.00
A07-036	146.61	148.13	1.52	1.52	1.00	0.32
A07-036	148.13	150.57	2.44	1.22	0.50	1.00
A07-036	150.57	153.62	3.05	2.63	0.86	2.74
A07-036	153.62	156.36	2.74	2.71	0.99	1.73
A07-036	156.36	159.41	3.05	2.90	0.95	2.49
A07-037	3.05	4.57	1.52	1.40	0.92	0.78
A07-037	4.57	6.10	1.53	1.40	0.92	0.94
A07-037	6.10	7.62	1.52	1.52	1.00	1.39
A07-037	7.62	9.14	1.52	1.30	0.86	0.72
A07-037	9.14	10.67	1.53	1.44	0.94	1.12
A07-037	10.67	12.19	1.52	1.45	0.95	1.12
A07-037	12.19	13.72	1.53	1.51	0.99	1.30
A07-037	13.72	15.24	1.52	1.52	1.00	1.40
A07-037	15.24	16.76	1.52	1.44	0.95	1.18
A07-037	16.76	18.29	1.53	1.52	0.99	1.48
A07-037	18.29	19.81	1.52	1.50	0.99	0.91
A07-037	19.81	21.34	1.53	1.52	0.99	1.47
A07-037	21.34	22.86	1.52	1.46	0.96	1.32
A07-037	22.86	24.38	1.52	1.40	0.92	0.84
A07-037	24.38	25.91	1.53	1.42	0.93	1.34
A07-037	25.91	27.43	1.52	1.49	0.98	1.17
A07-037	27.43	28.96	1.53	1.42	0.93	0.97
A07-037	28.96	30.48	1.52	1.38	0.91	1.11
A07-037	30.48	32.00	1.52	1.48	0.97	1.30
A07-037	32.00	33.53	1.53	1.47	0.96	1.23
A07-037	33.53	35.05	1.52	1.45	0.95	0.95
A07-037	35.05	36.58	1.53	1.47	0.96	1.10
A07-037	36.58	38.10	1.52	1.56	1.03	1.40
A07-037	38.10	39.62	1.52	1.49	0.98	1.33
A07-037	39.62	41.15	1.53	1.47	0.96	1.43
A07-037	41.15	42.67	1.52	1.51	0.99	0.94
A07-037	42.67	44.20	1.53	1.22	0.80	1.06
A07-037	44.20	45.72	1.52	1.52	1.00	1.39
A07-037	45.72	47.24	1.52	1.52	1.00	1.23
A07-037	47.24	48.77	1.53	1.40	0.92	1.26
A07-037	48.77	50.29	1.52	1.52	1.00	1.36
A07-037	50.29	51.82	1.53	1.53	1.00	1.50
A07-037	51.82	53.34	1.52	1.48	0.97	1.37
A07-037	53.34	54.86	1.52	1.41	0.93	1.24
A07-037	54.86	56.39	1.53	1.53	1.00	1.37
A07-037	56.39	57.91	1.52	1.50	0.99	1.29
A07-037	57.91	59.44	1.53	1.52	0.99	0.00
A07-037	59.44	60.96	1.52	1.52	1.00	0.94
A07-037	60.96	62.48	1.52	1.48	0.97	0.94
A07-037	62.48	64.01	1.53	1.53	1.00	0.00
A07-037	64.01	65.53	1.52	1.42	0.93	0.00
A07-037	65.53	67.06	1.53	1.48	0.97	0.69
A07-037	67.06	68.58	1.52	1.49	0.98	1.07

A07-037	68.58	70.10	1.52	1.55	1.02	1.43
A07-037	70.10	71.63	1.53	1.43	0.93	1.33
A07-037	71.63	73.15	1.52	1.52	1.00	1.16
A07-037	73.15	74.68	1.53	1.45	0.95	1.21
A07-037	74.68	76.20	1.52	1.46	0.96	1.38
A07-037	76.20	79.25	3.05	2.69	0.88	2.32
A07-037	79.25	82.30	3.05	2.99	0.98	2.66
A07-037	82.30	85.35	3.05	3.07	1.01	3.07
A07-037	85.35	88.39	3.04	3.01	0.99	2.70
A07-037	88.39	90.53	2.14	2.08	0.97	1.89
A07-037	90.53	92.97	2.44	2.41	0.99	2.05
A07-037	92.97	96.01	3.04	3.04	1.00	2.83
A07-037	96.01	97.23	1.22	1.14	0.93	1.08
A07-037	97.23	100.28	3.05	3.00	0.98	2.92
A07-037	100.28	103.33	3.05	3.05	1.00	2.09
A07-037	103.33	105.16	1.83	1.79	0.98	1.29
A07-037	105.16	107.90	2.74	2.61	0.95	2.04
A07-037	107.90	109.73	1.83	1.76	0.96	1.47
A07-037	109.73	112.47	2.74	2.52	0.92	1.78
A07-037	112.47	114.30	1.83	1.69	0.92	1.08
A07-037	114.30	116.13	1.83	2.30	1.26	0.90
A07-037	116.13	118.57	2.44	2.31	0.95	0.77
A07-037	118.57	120.40	1.83	1.69	0.92	0.33
A07-037	120.40	122.84	2.44	2.37	0.97	0.13
A07-037	122.84	124.97	2.13	2.31	1.08	0.11
A07-037	124.97	128.02	3.05	3.02	0.99	1.21
A07-037	128.02	131.07	3.05	3.04	1.00	2.27
A07-037	131.07	134.11	3.04	3.05	1.00	2.88
A07-037	134.11	135.94	1.83	1.75	0.96	0.00
A07-037	135.94	138.69	2.75	2.03	0.74	0.31
A07-037	138.69	141.73	3.04	3.05	1.00	0.41
A07-037	141.73	144.78	3.05	3.05	1.00	1.15
A07-037	144.78	147.83	3.05	3.05	1.00	1.52
A07-037	147.83	150.88	3.05	3.02	0.99	1.64
A07-037	150.88	153.93	3.05	3.02	0.99	2.89
A07-037	153.93	156.97	3.04	3.07	1.01	2.84
A07-037	156.97	160.02	3.05	3.03	0.99	2.40
A07-037	160.02	163.07	3.05	3.00	0.98	2.12
A07-037	163.07	166.12	3.05	3.02	0.99	1.27
A07-037	166.12	169.17	3.05	2.19	0.72	0.00
A07-037	169.17	169.78	0.61	0.64	1.05	0.13
A07-037	169.78	172.21	2.43	1.52	0.63	0.00
A07-037	172.21	175.26	3.05	2.86	0.94	2.66
A07-037	175.26	178.31	3.05	3.05	1.00	2.76
A07-037	178.31	181.36	3.05	2.83	0.93	1.27
A07-037	181.36	184.41	3.05	3.00	0.98	2.01
A07-037	184.41	187.45	3.04	2.92	0.96	1.61
A07-037	187.45	189.89	2.44	2.44	1.00	2.58
A07-037	189.89	192.94	3.05	3.05	1.00	2.02
A07-037	192.94	195.07	2.13	2.06	0.97	1.59
A07-037	195.07	198.12	3.05	3.05	1.00	2.82
A07-037	198.12	199.65	1.53	1.44	0.94	1.16

A07-038	3.05	4.57	1.52	1.52	1.00	0.89
A07-038	4.57	7.62	3.05	2.87	0.94	2.33
A07-038	7.62	10.67	3.05	3.03	0.99	1.76
A07-038	10.67	13.72	3.05	2.71	0.89	1.80
A07-038	13.72	16.76	3.05	3.00	0.98	2.58
A07-038	16.76	19.81	3.05	2.94	0.96	2.37
A07-038	19.81	22.86	3.05	2.97	0.97	2.88
A07-038	22.86	25.91	3.05	2.92	0.96	2.80
A07-038	25.91	27.43	1.52	1.51	0.99	1.31
A07-038	27.43	30.48	3.05	2.97	0.97	2.64
A07-038	30.48	33.53	3.05	3.01	0.99	2.97
A07-038	33.53	36.58	3.05	2.98	0.98	2.57
A07-038	36.58	39.62	3.05	2.98	0.98	2.41
A07-038	39.62	42.67	3.05	2.94	0.96	2.32
A07-038	42.67	45.72	3.05	3.02	0.99	2.93
A07-038	45.72	48.77	3.05	2.74	0.90	1.91
A07-038	48.77	51.82	3.05	3.02	0.99	0.85
A07-038	51.82	54.86	3.05	2.80	0.92	1.91
A07-038	54.86	59.44	4.57	3.59	0.79	2.48
A07-038	59.44	64.01	4.57	4.22	0.92	3.94
A07-038	64.01	67.06	3.05	3.03	0.99	2.70
A07-038	67.06	70.10	3.05	3.04	1.00	2.81
A07-038	70.10	73.15	3.05	3.05	1.00	2.35
A07-038	73.15	76.20	3.05	3.05	1.00	2.79
A07-038	76.20	78.64	2.44	2.44	1.00	1.61
A07-038	78.64	80.77	2.13	2.13	1.00	1.77
A07-038	80.77	82.60	1.83	1.83	1.00	1.01
A07-038	82.60	86.87	4.27	2.66	0.62	2.16
A07-038	86.87	89.92	3.05	3.05	1.00	2.59
A07-038	89.92	92.97	3.05	2.96	0.97	2.61
A07-038	92.97	94.79	1.83	1.62	0.89	0.50
A07-038	94.79	97.54	2.74	2.63	0.96	1.52
A07-038	97.54	100.59	3.05	2.82	0.93	1.37
A07-038	100.59	103.63	3.05	3.00	0.98	2.04
A07-038	103.63	106.68	3.05	2.86	0.94	2.27
A07-038	106.68	109.73	3.05	3.05	1.00	2.95
A07-038	109.73	112.78	3.05	3.02	0.99	2.84
A07-038	112.78	115.83	3.05	3.05	1.00	2.87
A07-038	115.83	118.87	3.05	3.01	0.99	2.60
A07-038	118.87	121.92	3.05	3.01	0.99	2.90
A07-038	121.92	124.97	3.05	3.05	1.00	2.16
A07-038	124.97	128.02	3.05	3.00	0.98	2.55
A07-038	128.02	131.07	3.05	3.05	1.00	1.79
A07-038	131.07	134.11	3.05	3.04	1.00	2.68
A07-038	134.11	137.16	3.05	2.91	0.95	2.57
A07-038	137.16	140.21	3.05	2.98	0.98	2.61
A07-038	140.21	143.26	3.05	2.79	0.92	2.63
A07-038	143.26	146.31	3.05	3.13	1.03	2.52
A07-038	146.31	149.05	2.74	2.60	0.95	1.54
A07-038	149.05	150.88	1.83	1.83	1.00	1.58
A07-038	150.88	153.93	3.05	3.18	1.04	2.63

A07-038	153.93	156.97	3.05	2.79	0.92	2.55
A07-038	156.97	160.02	3.05	3.03	0.99	2.61
A07-038	160.02	163.07	3.05	3.02	0.99	2.98
A07-038	163.07	166.12	3.05	2.99	0.98	2.99
A07-038	166.12	169.17	3.05	2.88	0.94	2.08
A07-038	169.17	172.21	3.05	3.04	1.00	2.87
A07-038	172.21	175.26	3.05	3.02	0.99	2.82
A07-038	175.26	177.09	1.83	1.83	1.00	1.74
A07-038	177.09	179.83	2.74	2.62	0.96	2.18
A07-038	179.83	182.88	3.05	2.75	0.90	1.91
A07-038	182.88	185.93	3.05	3.23	1.06	2.48
A07-038	185.93	188.98	3.05	2.96	0.97	2.20
A07-038	188.98	192.03	3.05	3.05	1.00	1.90
A07-038	192.03	195.07	3.05	3.27	1.07	2.98
A07-038	195.07	198.12	3.05	3.01	0.99	2.78
A07-038	198.12	199.65	1.53	1.53	1.00	1.36
A07-039	3.05	3.66	0.61	0.61	1.00	0.27
A07-039	3.66	5.18	1.52	1.52	1.00	0.62
A07-039	5.18	7.62	2.44	2.06	0.84	1.02
A07-039	7.62	9.75	2.13	1.91	0.90	1.14
A07-039	9.75	10.67	0.91	0.92	1.01	0.13
A07-039	10.67	12.19	1.52	1.09	0.72	0.21
A07-039	12.19	13.72	1.52	1.51	0.99	0.51
A07-039	13.72	15.24	1.52	1.50	0.98	0.34
A07-039	15.24	18.29	3.05	3.02	0.99	0.58
A07-039	18.29	21.34	3.05	3.00	0.98	1.47
A07-039	21.34	24.38	3.05	3.26	1.07	1.23
A07-039	24.38	28.96	4.57	4.12	0.90	0.94
A07-039	28.96	30.48	1.52	1.26	0.83	0.21
A07-039	30.48	32.00	1.52	1.43	0.94	0.94
A07-039	32.00	34.44	2.44	2.40	0.98	0.78
A07-039	34.44	36.58	2.13	2.02	0.95	0.82
A07-039	36.58	39.62	3.05	2.85	0.94	1.45
A07-039	39.62	42.67	3.05	2.89	0.95	1.62
A07-039	42.67	45.72	3.05	2.92	0.96	0.90
A07-039	45.72	48.77	3.05	2.74	0.90	1.00
A07-039	48.77	50.29	1.52	1.50	0.98	0.49
A07-039	50.29	51.82	1.52	1.48	0.97	0.73
A07-039	51.82	53.65	1.83	1.84	1.01	1.76
A07-039	53.65	56.39	2.74	2.56	0.93	0.99
A07-039	56.39	57.91	1.52	1.52	1.00	0.51
A07-039	57.91	61.57	3.66	3.23	0.88	1.53
A07-039	61.57	63.40	1.83	1.77	0.97	1.23
A07-039	63.40	65.53	2.13	1.99	0.93	1.27
A07-039	65.53	68.58	3.05	2.89	0.95	1.73
A07-039	68.58	71.63	3.05	2.96	0.97	1.28
A07-039	71.63	74.68	3.05	2.84	0.93	1.98
A07-039	74.68	77.42	2.74	2.83	1.03	1.17
A07-039	77.42	79.25	1.83	2.73	1.49	1.05
A07-039	79.25	82.30	3.05	3.00	0.98	2.03
A07-039	82.30	84.74	2.44	2.44	1.00	1.69

A07-039	84.74	86.87	2.13	2.04	0.96	1.27
A07-039	86.87	89.31	2.44	2.43	1.00	0.66
A07-039	89.31	91.44	2.13	2.09	0.98	1.51
A07-039	91.44	94.49	3.05	0.80	0.26	0.00
A07-039	94.49	97.54	3.05	2.92	0.96	2.22
A07-039	97.54	100.59	3.05	2.95	0.97	2.11
A07-039	100.59	103.63	3.05	2.82	0.93	1.24
A07-039	103.63	106.68	3.05	3.02	0.99	2.45
A07-039	106.68	109.73	3.05	3.01	0.99	2.00
A07-039	109.73	112.17	2.44	1.92	0.79	0.98
A07-039	112.17	114.30	2.13	2.10	0.98	1.33
A07-039	114.30	116.74	2.44	2.95	1.21	2.31
A07-039	116.74	118.57	1.83	1.04	0.57	0.67
A07-039	118.57	119.18	0.61	0.58	0.95	0.41
A07-040	3.05	4.57	1.52	1.23	0.81	0.21
A07-040	4.57	7.62	3.05	2.41	0.79	1.76
A07-040	7.62	10.36	2.74	2.56	0.93	2.09
A07-040	10.36	13.72	3.35	2.86	0.85	2.42
A07-040	13.72	16.76	3.05	2.89	0.95	1.83
A07-040	16.76	19.81	3.05	2.99	0.98	1.42
A07-040	19.81	22.86	3.05	2.98	0.98	2.73
A07-040	22.86	25.91	3.05	2.90	0.95	2.66
A07-040	25.91	28.96	3.05	3.01	0.99	2.73
A07-040	28.96	32.00	3.05	2.77	0.91	2.10
A07-040	32.00	35.05	3.05	2.93	0.96	2.55
A07-040	35.05	36.58	1.52	1.48	0.97	1.40
A07-040	36.58	39.62	3.05	2.98	0.98	2.33
A07-040	39.62	42.67	3.05	2.97	0.97	2.26
A07-040	42.67	45.11	2.44	2.40	0.98	0.93
A07-040	45.11	46.63	1.52	1.21	0.79	0.75
A07-040	46.63	47.85	1.22	1.15	0.94	0.22
A07-040	47.85	50.29	2.44	2.25	0.92	1.03
A07-040	50.29	53.34	3.05	2.80	0.92	2.15
A07-040	53.34	55.17	1.83	1.68	0.92	0.71
A07-040	55.17	57.91	2.74	2.82	1.03	1.84
A07-040	57.91	60.96	3.05	2.78	0.91	2.06
A07-040	60.96	64.01	3.05	2.99	0.98	2.44
A07-040	64.01	67.06	3.05	2.95	0.97	2.54
A07-040	67.06	70.10	3.05	2.99	0.98	2.67
A07-040	70.10	73.15	3.05	3.02	0.99	2.46
A07-040	73.15	76.20	3.05	2.76	0.91	1.55
A07-040	76.20	78.33	2.13	1.85	0.87	0.78
A07-040	78.33	79.86	1.52	1.43	0.94	1.01
A07-040	79.86	82.30	2.44	2.22	0.91	1.02
A07-040	82.30	85.35	3.05	2.84	0.93	2.40
A07-040	85.35	88.39	3.05	3.03	0.99	2.90
A07-040	88.39	91.44	3.05	3.02	0.99	2.68
A07-040	91.44	94.49	3.05	2.81	0.92	2.48
A07-040	94.49	97.54	3.05	2.85	0.94	1.26
A07-040	97.54	100.59	3.05	2.93	0.96	0.82
A07-040	100.59	102.72	2.13	1.90	0.89	0.69

A07-040	102.72	105.16	2.44	2.37	0.97	1.38
A07-040	105.16	108.21	3.05	2.89	0.95	1.84
A07-040	108.21	110.03	1.83	1.59	0.87	0.60
A07-040	110.03	112.78	2.74	2.50	0.91	1.21
A07-040	112.78	115.22	2.44	1.84	0.75	0.17
A07-040	115.22	117.35	2.13	1.20	0.56	0.00
A07-040	117.35	120.40	3.05	2.99	0.98	0.00
A07-040	120.40	123.45	3.05	2.98	0.98	2.79
A07-040	123.45	126.49	3.05	3.03	0.99	2.61
A07-040	126.49	129.54	3.05	2.95	0.97	2.63
A07-040	129.54	132.59	3.05	2.79	0.92	1.24
A07-040	132.59	135.64	3.05	3.03	0.99	1.97
A07-040	135.64	137.77	2.13	1.77	0.83	0.55
A07-040	137.77	140.21	2.44	1.04	0.43	0.00
A07-040	140.21	142.04	1.83	0.71	0.39	0.00
A07-040	142.04	143.26	1.22	1.08	0.89	0.11
A07-040	143.26	146.31	3.05	2.96	0.97	2.60
A07-040	146.31	149.35	3.05	3.00	0.98	2.29
A07-040	149.35	152.40	3.05	3.03	0.99	2.30
A07-040	152.40	155.45	3.05	3.02	0.99	1.52
A07-040	155.45	158.50	3.05	2.99	0.98	1.58
A07-040	158.50	161.55	3.05	3.01	0.99	2.68
A07-041	3.05	5.79	2.74	2.63	0.96	1.04
A07-041	5.79	7.62	1.83	2.67	1.46	1.20
A07-041	7.62	7.92	0.30	0.17	0.56	0.12
A07-041	7.92	9.14	1.22	0.79	0.65	0.50
A07-041	9.14	12.19	3.05	2.84	0.93	1.73
A07-041	12.19	15.24	3.05	2.75	0.90	1.65
A07-041	15.24	17.37	2.13	1.72	0.81	0.92
A07-041	17.37	19.81	2.44	2.47	1.01	2.01
A07-041	19.81	22.86	3.05	2.89	0.95	1.85
A07-041	22.86	25.91	3.05	2.99	0.98	2.78
A07-041	25.91	28.96	3.05	2.78	0.91	1.55
A07-041	28.96	32.00	3.05	2.77	0.91	2.27
A07-041	32.00	35.05	3.05	2.87	0.94	1.68
A07-041	35.05	38.10	3.05	2.91	0.95	2.77
A07-041	38.10	41.15	3.05	3.03	0.99	2.14
A07-041	41.15	44.20	3.05	3.00	0.98	2.23
A07-041	44.20	47.24	3.05	3.02	0.99	2.39
A07-041	47.24	50.29	3.05	2.84	0.93	1.71
A07-041	50.29	53.34	3.05	2.85	0.94	1.66
A07-041	53.34	56.39	3.05	2.70	0.89	2.37
A07-041	56.39	59.44	3.05	3.03	0.99	2.29
A07-041	59.44	64.01	4.57	4.04	0.88	2.62
A07-041	64.01	67.06	3.05	3.03	0.99	2.60
A07-041	67.06	70.10	3.05	3.04	1.00	2.34
A07-041	70.10	73.15	3.05	2.91	0.95	2.82
A07-041	73.15	76.20	3.05	3.04	1.00	2.34
A07-041	76.20	79.25	3.05	3.04	1.00	2.60
A07-041	79.25	82.30	3.05	2.93	0.96	2.69
A07-041	82.30	85.35	3.05	2.83	0.93	2.19

A07-041	85.35	88.39	3.05	3.01	0.99	2.64
A07-041	88.39	91.14	2.74	2.03	0.74	0.78
A07-041	91.14	94.49	3.35	2.73	0.81	1.25
A07-041	94.49	97.54	3.05	2.97	0.97	2.74
A07-041	97.54	99.06	1.52	1.37	0.90	0.78
A07-041	99.06	102.11	3.05	2.82	0.93	2.37
A07-041	102.11	105.16	3.05	3.00	0.98	2.79
A07-041	105.16	108.21	3.05	3.03	0.99	2.91
A07-041	108.21	111.25	3.05	3.01	0.99	2.74
A07-041	111.25	114.30	3.05	2.96	0.97	2.77
A07-041	114.30	117.35	3.05	3.05	1.00	2.95
A07-041	117.35	120.40	3.05	2.88	0.94	2.39
A07-041	120.40	123.45	3.05	2.97	0.97	2.69
A07-041	123.45	126.49	3.05	2.99	0.98	2.99
A07-042	3.05	4.57	1.52	1.37	0.90	0.98
A07-042	4.57	6.10	1.52	1.40	0.92	0.72
A07-042	6.10	7.62	1.52	1.39	0.91	0.93
A07-042	7.62	10.67	3.05	2.70	0.89	2.31
A07-042	10.67	13.72	3.05	2.88	0.94	2.45
A07-042	13.72	16.76	3.05	2.96	0.97	2.62
A07-042	16.76	19.81	3.05	2.63	0.86	2.49
A07-042	19.81	22.86	3.05	3.01	0.99	2.06
A07-042	22.86	25.91	3.05	3.00	0.98	2.79
A07-042	25.91	30.48	4.57	4.54	0.99	3.75
A07-042	30.48	33.53	3.05	2.89	0.95	1.62
A07-042	33.53	38.10	4.57	3.24	0.71	0.57
A07-042	38.10	40.54	2.44	2.96	1.21	1.98
A07-042	40.54	42.67	2.13	1.37	0.64	0.24
A07-042	42.67	45.72	3.05	2.96	0.97	2.01
A07-042	45.72	48.77	3.05	2.04	0.67	2.56
A07-042	48.77	51.82	3.05	3.00	0.98	2.65
A07-042	51.82	54.86	3.05	2.94	0.96	2.41
A07-042	54.86	57.91	3.05	2.91	0.95	2.45
A07-042	57.91	60.96	3.05	3.03	0.99	1.01
A07-042	60.96	64.01	3.05	2.85	0.94	2.53
A07-042	64.01	68.28	4.27	4.35	1.02	3.76
A07-042	68.28	70.10	1.83	1.63	0.89	1.47
A07-042	70.10	73.15	3.05	0.61	0.20	0.35
A07-042	73.15	76.20	3.05	2.46	0.81	1.38
A07-042	76.20	80.47	4.27	4.16	0.97	3.34
A07-042	80.47	82.30	1.83	1.61	0.88	1.39
A07-042	82.30	85.35	3.05	3.02	0.99	2.75
A07-042	85.35	88.39	3.05	2.94	0.96	2.38
A07-042	88.39	91.44	3.05	3.01	0.99	2.56
A07-042	91.44	94.49	3.05	2.95	0.97	1.43
A07-042	94.49	97.54	3.05	2.94	0.96	2.35
A07-042	97.54	100.59	3.05	2.57	0.84	1.46
A07-042	100.59	102.72	2.13	1.92	0.90	0.75
A07-042	102.72	105.16	2.44	2.20	0.90	1.89
A07-042	105.16	108.21	3.05	2.98	0.98	2.76
A07-042	108.21	111.25	3.05	2.94	0.96	2.94

A07-042	111.25	114.30	3.05	3.01	0.99	2.95
A07-042	114.30	117.35	3.05	3.04	1.00	2.96
A07-042	117.35	120.40	3.05	3.00	0.98	2.41
A07-042	120.40	123.45	3.05	2.84	0.93	2.29
A07-042	123.45	126.49	3.05	3.01	0.99	3.01
A07-042	126.49	129.54	3.05	3.00	0.98	2.77
A07-042	129.54	132.59	3.05	2.71	0.89	1.35
A07-042	132.59	134.42	1.83	0.20	0.11	0.00
A07-042	134.42	136.55	2.13	1.74	0.82	0.29
A07-042	136.55	138.69	2.13	1.94	0.91	1.01
A07-042	138.69	141.73	3.05	2.92	0.96	2.32
A07-042	141.73	144.78	3.05	3.03	0.99	2.74
A07-042	144.78	147.83	3.05	2.92	0.96	2.81
A07-042	147.83	150.88	3.05	2.98	0.98	2.50
A07-042	150.88	153.93	3.05	3.04	1.00	2.74
A07-042	153.93	156.97	3.05	3.05	1.00	2.28
A07-042	156.97	160.02	3.05	3.05	1.00	2.80
A07-042	160.02	163.07	3.05	3.01	0.99	2.73
A07-042	163.07	166.12	3.05	2.89	0.95	2.62
A07-042	166.12	169.17	3.05	3.05	1.00	2.88
A07-042	169.17	172.21	3.05	3.05	1.00	2.20
A07-042	172.21	175.26	3.05	3.05	1.00	2.97
A07-043	1.52	2.74	1.22	0.64	0.52	0.10
A07-043	2.74	3.96	1.22	1.21	0.99	0.51
A07-043	3.96	5.18	1.22	1.17	0.96	0.37
A07-043	5.18	6.10	0.91	0.92	1.01	0.77
A07-043	6.10	9.14	3.05	2.20	0.72	0.95
A07-043	9.14	12.19	3.05	3.32	1.09	1.61
A07-043	12.19	14.94	2.74	2.63	0.96	1.08
A07-043	14.94	16.15	1.22	1.15	0.94	0.46
A07-043	16.15	18.29	2.13	2.01	0.94	1.21
A07-043	18.29	21.34	3.05	2.89	0.95	1.69
A07-043	21.34	24.38	3.05	3.03	0.99	2.57
A07-043	24.38	27.43	3.05	2.97	0.97	2.75
A07-043	27.43	30.48	3.05	3.01	0.99	2.81
A07-043	30.48	33.53	3.05	3.05	1.00	2.62
A07-043	33.53	36.58	3.05	3.01	0.99	2.64
A07-043	36.58	39.62	3.05	2.97	0.97	1.98
A07-043	39.62	42.67	3.05	2.25	0.74	1.00
A07-043	42.67	45.72	3.05	2.94	0.96	2.18
A07-043	45.72	48.77	3.05	3.10	1.02	3.01
A07-043	48.77	51.82	3.05	2.98	0.98	2.90
A07-043	51.82	54.86	3.05	3.03	0.99	2.81
A07-043	54.86	57.91	3.05	3.01	0.99	2.65
A07-043	57.91	60.96	3.05	2.95	0.97	2.58
A07-043	60.96	64.01	3.05	2.82	0.93	2.61
A07-043	64.01	67.06	3.05	3.00	0.98	2.67
A07-043	67.06	69.80	2.74	2.85	1.04	2.32
A07-043	69.80	72.85	3.05	3.01	0.99	2.47
A07-043	72.85	75.90	3.05	2.93	0.96	2.71
A07-043	75.90	78.94	3.05	3.04	1.00	2.76

A07-043	78.94	81.99	3.05	3.04	1.00	2.71
A07-043	81.99	82.30	0.30	0.30	0.98	0.30
A07-043	82.30	85.35	3.05	2.98	0.98	2.09
A07-043	85.35	88.39	3.05	2.88	0.94	2.79
A07-043	88.39	91.44	3.05	3.08	1.01	2.27
A07-043	91.44	94.49	3.05	2.94	0.96	2.21
A07-043	94.49	97.54	3.05	3.03	0.99	1.84
A07-043	97.54	100.59	3.05	2.29	0.75	1.25
A07-043	100.59	103.63	3.05	2.96	0.97	2.12
A07-043	103.63	106.07	2.44	2.96	1.21	2.05
A07-043	106.07	109.73	3.66	3.05	0.83	1.90
A07-043	109.73	112.78	3.05	1.73	0.57	0.37
A07-043	112.78	114.30	1.52	1.49	0.98	0.78
A07-043	114.30	117.35	3.05	3.04	1.00	2.75
A07-043	117.35	118.87	1.52	1.59	1.04	1.45
A07-043	118.87	121.92	3.05	3.05	1.00	2.67
A07-043	121.92	124.97	3.05	3.03	0.99	3.03
A07-043	124.97	128.02	3.05	3.05	1.00	2.91
A07-043	128.02	131.07	3.05	3.05	1.00	2.67
A07-043	131.07	134.11	3.05	3.05	1.00	2.81
A07-043	134.11	137.16	3.05	3.05	1.00	2.97
A07-043	137.16	140.21	3.05	3.04	1.00	2.82
A07-043	140.21	143.26	3.05	3.00	0.98	2.77
A07-043	143.26	146.31	3.05	3.04	1.00	2.92
A07-043	146.31	149.35	3.05	3.05	1.00	1.78
A07-043	149.35	150.88	1.52	1.53	1.00	1.40
A07-043	150.88	153.93	3.05	2.96	0.97	2.12
A07-043	153.93	156.97	3.05	2.97	0.97	1.92
A07-043	156.97	159.11	2.13	2.12	0.99	0.38
A07-043	159.11	161.55	2.44	2.33	0.95	1.71
A07-044	0.91	2.13	1.22	1.00	0.82	0.52
A07-044	2.13	3.05	0.91	0.66	0.72	0.34
A07-044	3.05	4.57	1.52	1.45	0.95	0.99
A07-044	4.57	5.79	1.22	1.19	0.98	0.44
A07-044	5.79	7.62	1.83	0.47	0.26	0.00
A07-044	7.62	10.06	2.44	0.98	0.40	0.21
A07-044	10.06	11.58	1.52	1.48	0.97	0.51
A07-044	11.58	13.72	2.13	1.83	0.86	0.57
A07-044	13.72	15.24	1.52	1.35	0.89	0.75
A07-044	15.24	15.54	0.30	0.30	0.98	0.00
A07-044	15.54	18.29	2.74	3.99	1.45	2.01
A07-044	18.29	22.86	4.57	4.39	0.96	3.01
A07-044	22.86	25.91	3.05	2.97	0.97	2.46
A07-044	25.91	28.96	3.05	2.94	0.96	2.15
A07-044	28.96	32.00	3.05	3.05	1.00	2.82
A07-044	32.00	35.05	3.05	2.95	0.97	2.66
A07-044	35.05	38.10	3.05	3.05	1.00	2.84
A07-045	2.74	3.05	0.30	0.18	0.59	0.00
A07-045	3.05	5.49	2.44	1.24	0.51	0.11
A07-045	5.49	7.32	1.83	1.54	0.84	0.00

A07-045	7.32	9.14	1.83	1.62	0.89	0.00
A07-045	9.14	10.67	1.52	0.85	0.56	0.00
A07-045	10.67	11.89	1.22	1.07	0.88	0.00
A07-045	11.89	13.41	1.52	2.28	1.50	0.00
A07-045	13.41	15.24	1.83	0.19	0.10	0.00
A07-045	15.24	16.76	1.52	1.21	0.79	0.00
A07-045	16.76	18.29	1.52	1.79	1.17	0.00
A07-045	18.29	19.81	1.52	1.56	1.02	0.00
A07-045	19.81	21.34	1.52	1.39	0.91	0.23
A07-045	21.34	22.86	1.52	1.41	0.93	0.46
A07-045	22.86	24.38	1.52	0.53	0.35	0.22
A07-045	24.38	25.91	1.52	1.49	0.98	0.00
A07-045	25.91	27.43	1.52	1.28	0.84	0.20
A07-045	27.43	28.96	1.52	1.35	0.89	0.10
A07-045	28.96	30.79	1.83	1.73	0.95	0.36
A07-045	30.79	32.00	1.22	1.01	0.83	0.13
A07-045	32.00	33.53	1.52	0.81	0.53	0.11
A07-045	33.53	35.05	1.52	0.42	0.28	0.00
A07-045	35.05	36.27	1.22	1.30	1.07	0.00
A07-045	36.27	37.19	0.91	0.85	0.93	0.27
A07-045	37.19	38.10	0.91	1.00	1.09	0.23
A07-045	38.10	39.62	1.52	1.52	1.00	0.56
A07-045	39.62	41.15	1.52	1.49	0.98	0.13
A07-045	41.15	42.67	1.52	1.52	1.00	0.13
A07-045	42.67	44.20	1.52	1.52	1.00	0.51
A07-045	44.20	45.72	1.52	1.45	0.95	0.14
A07-045	45.72	47.24	1.52	1.52	1.00	0.00
A07-045	47.24	48.77	1.52	1.28	0.84	0.00
A07-045	48.77	50.29	1.52	1.52	1.00	0.10
A07-045	50.29	51.82	1.52	1.52	1.00	0.29
A07-045	51.82	53.34	1.52	1.52	1.00	0.38
A07-045	53.34	54.86	1.52	1.52	1.00	0.54
A07-045	54.86	56.39	1.52	1.52	1.00	0.00
A07-045	56.39	57.91	1.52	1.36	0.89	0.37
A07-045	57.91	59.13	1.22	1.30	1.07	0.15
A07-045	59.13	60.96	1.83	1.19	0.65	0.00
A07-045	60.96	62.48	1.52	1.48	0.97	0.00
A07-045	62.48	65.53	3.05	2.75	0.90	0.34
A07-045	65.53	68.58	3.05	2.98	0.98	0.61
A07-045	68.58	71.63	3.05	2.90	0.95	0.41
A07-045	71.63	74.68	3.05	2.14	0.70	0.45
A07-045	74.68	77.72	3.05	3.28	1.08	0.68
A07-045	77.72	80.77	3.05	3.05	1.00	1.26
A07-045	80.77	83.82	3.05	3.01	0.99	2.39
A07-045	83.82	86.56	2.74	2.76	1.01	1.27
A07-045	86.56	89.92	3.35	3.32	0.99	1.60
A07-045	89.92	92.97	3.05	2.87	0.94	1.28
A07-045	92.97	96.01	3.05	3.04	1.00	2.06
A07-045	96.01	99.06	3.05	3.01	0.99	1.73
A07-045	99.06	102.11	3.05	2.86	0.94	1.75
A07-045	102.11	105.16	3.05	3.05	1.00	1.46
A07-045	105.16	108.21	3.05	2.58	0.85	0.21

A07-045	108.21	111.25	3.05	2.48	0.81	0.62
A07-045	111.25	114.30	3.05	2.99	0.98	0.33
A07-045	114.30	117.35	3.05	2.62	0.86	0.69
A07-045	117.35	120.40	3.05	3.05	1.00	0.97
A07-045	120.40	123.45	3.05	2.16	0.71	0.30
A07-045	123.45	124.97	1.52	1.55	1.02	0.42
A07-045	124.97	128.02	3.05	2.90	0.95	1.73
A07-045	128.02	131.07	3.05	3.00	0.98	1.84
A07-045	131.07	134.11	3.05	2.70	0.89	1.51
A07-045	134.11	137.16	3.05	3.05	1.00	2.29
A07-045	137.16	140.21	3.05	3.02	0.99	2.31
A07-045	140.21	143.26	3.05	2.87	0.94	1.56
A07-045	143.26	146.31	3.05	3.10	1.02	2.89
A07-045	146.31	149.35	3.05	3.05	1.00	2.98

PO NUMBER : " "

SAMPLE DESCRIPTION	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	
	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	
E210501	1.45	3.4	0.71	214	10	110	<0.5	<2	0.33	0.6	10	101	1315	3.47	<10	4	0.31	20	0.27	202	116	<0.01	60	430	19	1.81	<27	3	17	<20	0.02	<10	<10	<10	26	<10	67
E210502	0.01	0.5	1.7	14	<10	390	<0.5	<2	0.36	<0.5	4	1	9	0.39	10	1	0.08	<10	0.01	11	9	<0.01	1	1430	322	0.34	<2	2	107	<20	<0.01	<10	<10	28	<10	3	
E210503	0.01	1.7	1.49	45	<10	30	<0.5	4	0.28	<0.5	20	1	73	2.72	10	1	0.01	<10	0.01	26	37	<0.01	5	1110	913	3.05	5	2	35	<20	<0.01	<10	<10	34	<10	5	
E210504	0.01	1	1.74	14	<10	150	<0.5	<2	0.22	<0.5	13	1	29	1.3	20	<1	0.01	<10	0.01	11	17	<0.01	3	830	832	1.4	2	3	47	<20	<0.01	<10	<10	38	<10	3	
E210505	0.01	0.8	1.79	12	<10	100	<0.5	<2	0.23	<0.5	12	1	21	1.46	20	1	<0.01	<10	0.01	6	5	<0.01	3	880	1060	1.65	4	5	39	<20	<0.01	<10	<10	45	<10	4	
E210506	0.01	0.4	1.75	4	<10	830	<0.5	<2	0.3	<0.5	3	1	3	0.15	10	<1	<0.01	<10	0.01	6	2	<0.01	<1	1100	645	0.16	2	3	63	<20	<0.01	<10	<10	32	<10	2	
E210507	<0.01	<0.2	0.87	3	<10	610	<0.5	<2	0.34	<0.5	6	2	2	2.12	<10	1	0.16	<10	0.03	72	1	<0.01	1	1070	83	0.32	<2	4	61	<20	0.01	<10	<10	61	<10	8	
E210508	0.01	0.6	3.62	26	<10	60	0.9	<2	0.83	0.9	15	3	17	5.65	10	1	0.31	20	3.07	4420	3	<0.01	6	1200	19	1.16	4	5	27	<20	<0.01	<10	<10	82	<10	1225	
E210509	0.01	2	2.07	100	<10	30	0.8	<2	1.72	1.5	12	2	31	5.6	10	<1	0.32	20	1.71	2830	4	<0.01	5	1160	49	4.66	7	3	30	<20	<0.01	<10	<10	55	<10	752	
E210510	0.01	2	2.02	94	<10	40	0.8	<2	1.62	1.9	13	2	30	5.48	10	1	0.31	20	1.69	2800	3	<0.01	7	1140	42	4.48	5	3	29	<20	<0.01	<10	<10	53	<10	784	
E210511	0.01	2.5	3.26	47	<10	40	1.3	<2	1.01	24.3	10	2	186	5.18	10	1	0.33	20	2.34	4440	1	<0.01	4	1130	787	0.65	<2	4	28	<20	<0.01	<10	<10	70	<10	1795	

VA07068340 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 50
DATE RECEIVED : 2007-06-29 DATE FINALIZED : 2007-07-14
PROJECT : " RANCH A07-B0N-02"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

SAMPLE	Au-AA26	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41						
DESCRIPTION	Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
E210562	1.28	3.2	0.72	226	<10	110	<0.5	3	0.33	0.6	10	105	1320	3.58	<10	3	0.31	20	0.27	203	115	0.02	62	440	22	1.84	27	3	17	<20	0.02	10	<10	27	<10	73
E210563	0.07	0.2	0.67	11	<10	1510	<0.5	3	0.12	<0.5	2	1	7	0.2	<10	<1	0.04	<10	0.01	10	2	<0.01	1	500	48	0.15	<2	2	162	<20	<0.01	<10	<10	15	<10	39
E210564	0.03	0.2	0.74	3	<10	100	<0.5	3	0.08	<0.5	1	1	9	0.15	<10	<1	0.01	<10	0.01	8	9	<0.01	<1	320	34	0.09	2	1	111	<20	<0.01	<10	<10	14	<10	15
E210565	2.31	2.6	0.65	31	<10	40	<0.5	11	0.05	0.5	16	<1	245	2.7	<10	<1	0.02	<10	0.01	6	23	<0.01	4	150	115	3.05	11	1	81	<20	<0.01	<10	<10	13	<10	17
E210566	1.76	1.8	0.74	33	<10	10	<0.5	11	0.03	0.5	13	<1	192	2.63	<10	<1	0.03	<10	0.01	6	26	<0.01	4	40	73	2.93	12	1	61	<20	<0.01	<10	<10	14	<10	14
E210567	16.55	3.8	0.28	79	<10	40	<0.5	14	0.01	1.4	4	3	>10000	1.47	<10	1	<0.01	<10	<0.01	13	19	<0.01	1	10	14	1.64	35	1	27	<20	<0.01	<10	<10	7	<10	42
E210568	11.5	2.8	0.17	24	<10	20	<0.5	9	<0.01	<0.5	8	5	655	3.69	<10	<1	<0.01	<10	<0.01	26	20	<0.01	4	<10	19	3.75	22	<1	31	<20	<0.01	<10	<10	4	<10	8
E210569	12.85	1.6	0.13	<2	<10	1130	<0.5	6	<0.01	<0.5	3	7	42	0.37	<10	<1	<0.01	<10	<0.01	20	99	0.01	1	10	15	0.11	6	<1	85	<20	<0.01	<10	<10	3	<10	2
E210570	92.9	9.3	0.1	70	<10	50	<0.5	13	<0.01	2	28	9	4890	1.8	<10	4	<0.01	<10	<0.01	39	90	0.01	12	<10	35	1.5	78	<1	114	<20	<0.01	<10	<10	3	<10	46
E210571	73.5	8	0.09	65	<10	40	<0.5	4	<0.01	1.6	33	8	6830	1.46	<10	5	<0.01	<10	<0.01	25	82	<0.01	12	<10	41	1.37	57	<1	124	<20	<0.01	<10	<10	3	<10	36
E210572	8.6	5.6	0.09	132	<10	20	<0.5	13	0.01	3.6	16	10	>10000	2.33	<10	25	<0.01	<10	<0.01	40	46	<0.01	9	10	33	2.62	96	1	65	<20	<0.01	<10	<10	4	<10	62
E210573	1.89	0.5	0.13	3	<10	200	<0.5	3	<0.01	<																										

VA07067065 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 94
DATE RECEIVED : 2007-06-29 DATE FINALIZED : 2007-07-19
PROJECT : "RANCH A07-B0N-04"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E210721	<0.01	1	0.72	5	<10	180	<0.5	3	<0.01	<0.5	4	<1	16	0.31	10	<1	<0.01	<10	<0.01	<5	18	<0.01	1	30	44	0.35	<2	<1	160	<20	<0.01	<10	<10	13	<10	3
E210722	0.01	2.4	0.43	7	<10	70	<0.5	3	<0.01	<0.5	4	2	55	0.88	10	1	<0.01	<10	<0.01	11	19	<0.01	2	30	31	0.86	4	<1	95	<20	<0.01	<10	<10	9	<10	7
E210723	0.04	3.4	0.37	10	<10	40	<0.5	5	<0.01	<0.5	6	1	98	1.59	10	<1	<0.01	<10	<0.01	7	12	<0.01	2	20	27	1.77	9	<1	43	<20	<0.01	<10	<10	10	<10	8
E210724	0.02	2.4	0.38	6	<10	30	<0.5	4	<0.01	<0.5	7	3	47	1.77	10	<1	<0.01	<10	<0.01	14	16	<0.01	1	20	25	1.86	5	<1	67	<20	<0.01	<10	<10	9	<10	8
E210725	<0.01	4.8	0.71	21	<10	10	<0.5	11	<0.01	<0.5	23	<1	67	3.94	10	1	<0.01	<10	<0.01	<5	193	<0.01	6	20	41	4.6	12	<1	40	<20	<0.01	<10	<10	15	<10	5
E210726	<0.01	5.5	0.95	27	<10	10	<0.5	16	<0.01	<0.5	23	1	62	4.33	10	1	<0.01	<10	<0.01	<5	144	<0.01	6	40	58	5.02	13	1	68	<20	<0.01	<10	<10	21	<10	15
E210727	<0.01	0.4	1.57	7	<10	100	<0.5	<2	0.91	<0.5	8	34	38	3.2	<10	<1	0.11	10	0.77	520	4	0.09	19	610	2	0.05	2	5	43	<20	0.15	<10	<10	61	<10	43
E210728	<0.01	0.2	0.42	6	<10	200	0.5	2	0.3	<0.5	6	2	8	3.27	<10	<1	0.14	10	0.11	948	<1	<0.01	1	820	157	0.02	2	4	69	<20	0.02	<10	<10	73	<10	211
E210729	<0.01	0.4	0.5	4	<10	550	0.8	<2	0.42	<0.5	15	1	3	4.99	<10	<1	0.17	10	0.37	3220	<1	<0.01	4	740	143	0.02	<2	4	28	<20	0.01	<10	<10	48	<10	859
E210730	<0.01	0.3	0.57	<2	<10	130	0.9	<2	1.14	<0.5	10	2	2	4.35	<10	<1	0.18	10	0.6	4570	<1	0.01	1	760	90	0.01	<2	5	34	<20	0.01	<10	<10	48	<10	1190
E210731	<0.01	0.3	0.51	<2	<10	590	0.9	<2	2.19	<0.5	8	2	2	4.32	<10	<1	0.17	20	0.53	3240	<1	0.01	<1	750	56	0.02	<2	4	52	<20	0.01	<10	<10	51	<10	565

VA07066677 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 97
DATE RECEIVED : 2007-06-29 DATE FINALIZED : 2007-07-19
PROJECT : "RANCH A07-BON-05"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E210815	0.03	2.1	0.49	17	<10	90	<0.5	2	<0.01	<0.5	7	1	47	1.17	<10	1	<0.01	<10	<0.01	7	7	<0.01	3	60	111	1.25	4	1	67	<20	<0.01	<10	<10	12	<10	147
E210816	0.01	0.5	0.84	7	<10	780	<0.5	<2	0.01	<0.5	3	1	10	0.32	10	<1	<0.01	<10	<0.01	<5	2	<0.01	1	100	107	0.35	<2	1	117	<20	<0.01	<10	<10	11	<10	13
E210817	0.18	3.5	0.55	18	<10	110	<0.5	6	<0.01	<0.5	15	2	136	2.3	<10	1	<0.01	<10	<0.01	9	14	<0.01	3	50	232	2.54	16	1	66	<20	<0.01	<10	<10	9	<10	16
E210818	0.23	4.1	0.09	21	<10	10	<0.5	5	<0.01	<0.5	17	3	166	2.93	<10	1	<0.01	<10	<0.01	18	30	<0.01	5	<10	126	3.11	20	<1	10	<20	<0.01	<10	<10	4	<10	21
E210819	0.63	9.6	0.5	47	<10	40	<0.5	11	<0.01	<0.5	26	2	291	4.61	<10	2	<0.01	<10	<0.01	13	27	<0.01	8	70	799	5.13	47	1	90	<20	<0.01	<10	<10	12	<10	167
E210820	0.04	1.1	1.06	13	<10	30	<0.5	3	<0.01	<0.5	6	2	58	1.2	10	<1	<0.01	<10	<0.01	13	13	<0.01	2	90	86	1.2	3	1	133	<20	<0.01	<10	<10	20	<10	18
E210821	0.06	2	0.72	12	<10	80	<0.5	5	<0.01	<0.5	10	1	106	2.08	10	1	<0.01	<10	<0.01	<5	5	<0.01	4	140	258	2.4	5	1	161	<20	<0.01	<10	<10	17	<10	16
E210822	0.47	7.2	0.18	25	<10	20	<0.5	11	<0.01	<0.5	13	4	217	3.13	<10	1	<0.01	<10	<0.01	19	23	<0.01	5	30	1535	3.36	26	1	31	<20	<0.01	<10	<10	6	<10	35
E210823	0.25	7	0.23	25	<10	20	<0.5	8	<0.01	<0.5	12	4	164	3.19	<10	<1	<0.01	<10	<0.01	21	17	<0.01	4	30	590	3.38	25	1	48	<20	<0.01	<10	<10	7	<10	49
E210824	<0.01	0.8	0.79	13	<10	430	<0.5	3	0.01	<0.5	3	2	9	2.66	<10	<1	<0.01	<10	<0.01	14	3	<0.01	1	280	173	0.33	14	2	369	<20	0.01	<10	<10	61	<10	7
E210825	0.02	<0.2	0.58	3	<10	80	<0.5	<2	0.26	<0.5	11	3	3	6.39	<10	<1	0.17	<10	0.18	477	1	<0.01	3	800	27	0.02	3	6	83	<20	0.04	<10	<10	108	<10	386
E210826	<0.01	0.4	0.65	3	<10	1040	0.6	2	0.46	<0.5	15	3	10	6.71	<10	<1	0.25	<10	0.49	1135	1	0.01	3	950	73	0.04	<2	6	125	<20	0.03	<10	<10	104	<10	1115
E210827	0.01	<0.2	1.54	4	<10	90	<0.5	<2	0.85	<0.5	7	32	38	3.17	<10	<1	0.11	<10	0.76	497	4	0.09	19	620	<2	0.04	<2	5	41	<20	0.14	<10	<10	59	<10	43
E210828	<0.01	0.2	0.62	2	<10	530	0.7	<2	1.1	<0.5	17	2	5	6.38	<10	<1	0.22	10	0.96	3070	<1	0.01	3	1040	65	0.02	<2	5	62	<20	0.02	<10	<10	81	<10	1495

SAMPLE	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn
DESCRIPTION	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
E210829	0.79	1.7	0.57	9	<10	180	<0.5	8	0.03	<0.5	2	3	41	0.86	<10	<1	0.02	<10	0.01	39	10	<0.01	2	180	88	0.56	5	1	84	<20	<0.01	<10	<10	15	<10	11
E210830	0.01	0.7	0.4	26	<10	890	<0.5	4	0.01	<0.5	1	1	5	0.31	<10	<1	<0.01	<10	<0.01	14	6	<0.01	1	70	29	0.12	<2	1	39	<20	<0.01	<10	<10	11	<10	3
E210831	0.01	0.4	0.69	19	<10	580	<0.5	18	0.01	<0.5	1	1	10	0.63	<10	<1	0.01	<10	<0.01	28	9	<0.01	<1	160	55	0.3	<2	1	110	<20	<0.01	<10	<10	14	<10	4
E210832	0.01	0.4	0.68	8	<10	1000	<0.5	19	0.01	<0.5	1	1	6	0.38	<10	<1	0.01	<10	<0.01	15	8	<0.01	2	190	57	0.11	<2	1	155	<20	<0.01	<10	<10	11	<10	4
E210833	<0.01	0.2	0.73	10	<10	550	<0.5	3	0.08	0.6	4	2	66	3.29	<10	<1	0.19	<10	0.13	248	2	<0.01	2	560	42	0.12	<2	5	32	<20	0.01	<10	<10	57	<10	150
E210834	<0.01	<0.2	0.65	20	<10	1280	0.6	<2	0.37	1.8	15	1	107	8.62	<10	1	0.17	<10	1.27	1825	<1	<0.01	4	850	10	0.12	<2	5	30	<20	0.01	<10	<10	77	<10	1045
E210835	<0.01	<0.2	0.71	35	<10	1080	0.6	<2	0.42	1.7	13	1	38	8.58	<10	<1	0.18	<10	1.44	1975	<1	<0.01	2	890	6	0.15	<2	5	27	<20	<0.01	<10	<10	67	<10	1245
E210836	0.02	0.6	0.67	74	<10	60	0.7	3	0.36	<0.5	17	1	47	8.05	<10	<1	0.2	<10	0.83	1045	1	<0.01	3	890	22	1.92	3	5	16	<20	<0.01	<10	<10	61	<10	652
E210837	0.07	0.8	0.54	92	<10	80	<0.5	7	0.04	<0.5	13	1	21	2.21	<10	<1	0.06	<10	0.02	20	5	<0.01	4	220	35	2.4	2	2	31	<20	<0.01	<10	<10	14	<10	35
E210838	0.01	<0.2	1.59	4	<10	100	<0.5	<2	0.91	<0.5	7	34	38	3.37	10	<1	0.11	<10	0.79	515	5	0.08	22	620	<2	0.03	<2	5	43	<20	0.15	<10	<10	59	<10	43
E210839	0.02	0.4	0.59	10	<10	300	0.6	4	0.27	<0.5	16	2	38	6.82	<10	<1	0.19	<10	0.53	730	1	<0.01	2	680	43	0.8	2	4	13	<20	0.02	<10	<10	69	<10	752
E210840	0.01	<0.2	0.67	<2	<10	680	0.7	<2	0.37	<0.5	21	1	34	9.28	<10	<1	0.22	<10	0.82	1015	1	<0.01	4	830	34	0.										

VA07068218 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 86
DATE RECEIVED : 2007-06-29 DATE FINALIZED : 2007-07-15
PROJECT : "RANCH A07-BON-07"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

[illegible]

E211047	0.01	0.6	0.99	10	<10	380	<0.5	4	<0.01	<0.5	5	1	21	0.6	<10	1	<0.01	<10	<0.01	<5	3	<0.01	1	50	24	0.6	<2	2	75	<20	<0.01	<10	<10	18	<10	2
E211048	<0.01	0.2	0.78	20	<10	1000	<0.5	<2	<0.01	<0.5	1	2	1	2.41	<10	<1	<0.01	<10	<0.01	30	1	<0.01	2	40	9	0.08	<2	3	63	<20	0.02	<10	<10	59	<10	2
E211049	<0.01	0.3	0.77	8	<10	800	<0.5	<2	0.01	<0.5	1	2	1	3.13	<10	<1	<0.01	<10	<0.01	31	2	<0.01	2	30	6	0.05	2	2	52	<20	0.02	<10	<10	51	<10	3
E211050	<0.01	<0.2	0.75	26	<10	2410	<0.5	<2	<0.01	<0.5	1	3	1	2.17	<10	<1	<0.01	<10	<0.01	32	2	<0.01	2	40	17	0.07	2	2	128	<20	0.02	<10	<10	67	<10	4
E211051	<0.01	<0.2	0.81	56	<10	740	<0.5	2	<0.01	<0.5	1	2	1	2.72	<10	1	<0.01	<10	<0.01	33	1	<0.01	1	70	15	0.03	<2	2	159	<20	0.02	<10	<10	82	<10	2
E211052	1.32	2.9	0.76	201	<10	120	<0.5	2	0.32	0.7	9	98	1225	3.36	<10	3	0.32	20	0.26	191	108	0.02	59	450	20	1.69	25	3	17	<20	0.02	<10	<10	27	<10	67
E211053	0.01	0.3	1.34	6	<10	1380	<0.5	2	<0.01	<0.5	2	1	10	0.21	10	<1	<0.01	<10	<0.01	<5	6	<0.01	1	70	54	0.18	2	1	147	<20	<0.01	<10	<10	12	<10	5
E211054	0.01	1.2	0.69	11	<10	140	<0.5	3	<0.01	<0.5	6	1	21	0.66	10	1	<0.01	<10	<0.01	<5	7	<0.01	1	30	108	0.67	3	<1	76	<20	<0.01	<10	<10	10	<10	3
E211055	0.01	1.1	0.97	10	<10	220	<0.5	3	<0.01	<0.5	7	1	25	0.84	10	<1	<0.01	<10	<0.01	<5	20	<0.01	3	60	136	0.92	5	1	95	<20	<0.01	<10	<10	14	<10	5
E211056	0.01	1.4	1.05	15	<10	50	<0.5	4	<0.01	<0.5	8	1	43	1.21	10	1	<0.01	<10	<0.01	<5	11	<0.01	2	40	80	1.33	4	<1	87	<20	<0.01	<10	<10	15	<10	3
E211057	0.01	1.2	1.06	9	<10	190	<0.5	4	<0.01	<0.5	8	<1	39	1.08	10	<1	<0.01	<10	<0.01	<5	9	<0.01	4	50	51	1.19	4	<1	90	<20	<0.01	<10	<10	15	<10	3
E211058	0.01	3	1.16	23	<10	30	<0.5	9	<0.01	<0.5	13	1	93	2.45	10	1	<0.01	<10	<0.01	<5	9	<0.01	6	40	157	2.67	7	<1	81	<20	<0.01	<10	<10	17	<10	4
E211059	<0.01	0.6	0.61	6	<10	250	<0.5	<2	<0.01	<0.5	3	1	20	0.55	10	<1	<0.01	<10	<0.01	7	10	<0.01	1	120	103	0.52	3	<1	161	<20	<0.01	<10	<10	11	<10	18
E211060	0.01	1.2	0.64	11	<10	110	<0.5	2	<0.01	<0.5	5	4	26	0.76	10	1	<0.01	<10	<0.01	12	13	<0.01	3	150	103	0.67	5	<1	196	<20	<0.01	<10	<10	11	<10	12
E211061	0.01	1.5	0.84	10	<10	90	<0.5	2	<0.01	<0.5	6	<1	37	1.28	10	1	<0.01	<10	<0.01	<5	11	<0.01	3	80	121	1.38	5	<1	102	<20	<0.01	<10	<10	12	<10	9
E211062	0.01	2.3	0.77	14	<10	30	<0.5	4	<0.01	<0.5	10	<1	64	2.02	10	1	<0.01	<10	<0.01	<5	13	<0.01	4	80	174	2.18	7	<1	95	<20	<0.01	<10	<10	11	<10	9
E211063	0.01	6.5	0.86	30	<10	10	<0.5	14	<0.01	0.5	25	<1	228	6.33	10	4	<0.01	<10	<0.01	<5	20	<0.01	9	40	328	6.83	21	<1	56	<20	<0.01	<10	<10	12	<10	7
E211064	0.01	1.3	0.69	16	<10	30	<0.5	3	<0.01	<0.5	10	<1	60	2.13	10	1	<0.01	<10	<0.01	<5	24	<0.01	4	80	187	2.28	6	<1	96	<20	<0.01	<10	<10	12	<10	13
E211065	0.01	2.8	0.79	14	<10	20	<0.5	7	<0.01	<0.5	11	<1	77	2.86	10	1	<0.01	<10	<0.01	<5	47	<0.01	3	110	240	3.14	9	<1	121	<20	<0.01	<10	<10	15	<10	16
E211066	0.01	4.6	0.9	56	<10	10	<0.5	24	<0.01	0.7	15	<1	63	8.04	<10	4	<0.01	<10	<0.01	<5	54	<0.01	4	100	89	8.67	47	1	116	<20	<0.01	<10	<10	17	<10	10
E211067	14.25	8.1	0.34	480	<10	30	<0.5	<2	0.15	<0.5	8	27	45	3.25	<10	3	0.19	10	0.07	123	6	0.01	14	560	5	2.23	25	2	7	<20	<0.01	10	<10	16	<10	47
E211068	0.01	1.1	0.78	11	<10	160	<0.5	4	<0.01	<0.5	5	<1	12	0.81	<10	<1	<0.01	<10	<0.01	<5	20	<0.01	3	60	275	0.87	3	1	92	<20	<0.01	<10	<10	13	<10	7
E211069	<0.01	0.4	0.94	14	<10	290	<0.5	3	0.01	<0.5	1	1	11	0.06	<10	<1	<0.01	<10	<0.01	6	1	<0.01	<1	70	151	0.04	4	1	137	<20	<0.01	<10	<10	5	<10	86
E211070	<0.01	0.2	0.9	11	<10	1870	<0.5	2	0.01	<0.5	2	1	4	0.11	<10	<1	<0.01	<10	<0.01	<5	36	<0.01	<1	120	112	0.17	3	1	231	<20	<0.01	<10	<10	10	<10	14
E211071	<0.01	0.4	0.82	16	<10	2270	<0.5	9	<0.01	<0.5	4	1	3	0.08	<10	<1	<0.01	<10	<0.01	5	120	<0.01	2	70	68	0.09	2	1	185	<20	<0.01	<10	<10	12	<10	11
E211072	<0.01	<0.2	0.81	46	<10	1010	<0.5	2	0.01	<0.5	<1	1	1	0.22	<10	<1	<0.01	<10	<0.01	<5	1	<0.01	1	80	17	0.04	<2	1	261	<20	<0.01	<10	<10	7	<10	<2
E211073	0.01	0.3	0.87	10	<10	1300	<0.5	3	0.02	<0.5	<1	3	1	4.05	<10	<1	<0.01	<10	<0.01	51	3	<0.01	1	90	12	0.04	2	4	108	<20	0.05	<10	<10	204	<10	6
E211074	<0.01	<0.2	0.8	11	<10	1690	<0.5	2	0.01	<0.5	1	1	1	0.5	<10	<1	<0.01	<10	<0.01	9	<1	<0.01	<1	70	7	0.05	<2	2	165	<20	0.01	<10	<10	30	<10	2
E211075	0.01	0.2	0.93	20	<10	840	<0.5	4	0.01	<0.5	2	1	5	0.43	<10	<1	<0.01	<10	<0.01	<5	5	<0.01	<1	110	24	0.31	2	2	234	<20	<0.01	<10	<10	23	<10	11
E211076	0.01	0.7	0.67	7	<10	300	<0.5	9	0.25	<0.5	8	2	58	4.75	<10	<1	0.12	<10	0.19	347	3	<0.01	2	630	182	0.36	2	6	81	<20	0.02	<10	<10	89	<10	292
E211077	0.01	<0.2	1.16	<2	<10	250	0.8	2	0.74	<0.5	16	1	3	9.23	<10	1	0.17	10	1.08	1570	<1	0.01	2	1020	79	0.01	<2	6	50	<20	0.01	<10	10	90	<10	1655
E211078	<0.01	<0.2	1.82	<2	<10	230	0.7	<2	1.09	3.3	14	1	4	6.73	<10	<1	0.17	10	1.81	3050	<1	<0.01	1	1030	60	0.03	<2	5	73	<20	<0.01	<10	<10	64	<10	2100
E211079	0.02	5.9	1.33	24	<10	840	0.9	<2	2.26	22.6	14	2	120	5.8	<10	<1	0.24	20	1.59	4090	<1	0.01	2	1120	398	0.28	28	4	170	<20	<0.01	<10	<10	55	<10	1575

	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Ti	U	V	W	Zn
SAMPLE DESCRIPTION	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
E211080	<0.01	<0.2	0.7	<2	<10	820	0.7	2	0.29	6.9	17	1	7	6.68	<10	<1	0.23	<10	0.61	631	<1	<0.01	3	780	73	0.14	<2	6	37	<20	0.02	<10	<10	62	<10	2100
E211081	<0.01	0.2	0.7	<2	<10	730	0.8	3	0.25	2.5	20	1	36	6.59	<10	<1	0.24	<10	0.62	725	<1	<0.01	3	610	128	0.12	<2	6	29	<20	0.02	<10	<10	54	<10	1335
E211082	0.01	<0.2	1.64	3	<10	100	<0.5	<2	0.92	<0.5	7	34	39	3.32	10	<1	0.11	<10	0.79	514	4	0.09	22	630	<2	0.06	<2	5	45	<20	0.15	<10	<10	63	<10	45
E211083	0.01	<0.2	0.73	<2	<10	940	0.6	5	0.23	0.7	14	2	19	6.54	<10	<1	0.21	<10	0.38	496	<1	<0.01	4	690	112	0.18	<2	6	29	<20	0.03	<10	<10	79	<10	593
E211084	0.12	<0.2	0.85	7	<10	590	<0.5	4	0.05	<0.5	6	1	56	1.54	<10	<1	0.03	<10	0.01	25	1	<0.01	2	360	188	0.53	<2	3	62	<20	0.01	<10	<10	66	<10	47
E211085	0.09	2.4	1.02	25	<10	170	<0.5	6	0.02	<0.5	13	1	150	1.48	10	<1	<0.01	<10	0.01	<5	4	<0.01	2	210	686	1.69	9	3	50	<20	<0.01	<10	<10	27	<10	52
E211086	0.15	1	0.91	22	<10	110	<0.5	3	0.02	<0.5	10	1	113	1.4	10	<1	<0.01	<10	<0.01	<5	3	<0.01	2	230	533	1.59	<2	3	68	<20	<0.01	<10	<10	23	<10	27
E211087	0.07	0.5	0.9	6	<10	370	<0.5	2	0.03	<0.5	5	1	53	0.74	<10	<1	<0.01	<10	<0.01	<5	1	<0.01	2	300	252	0.82	2	2	67	<20	<0.01	<10	<10	17	<10	11
E211088	0.06	<0.2	0.66	11	<10	1070	<0.5	5	0.05	<0.5	4	1	20	0.3	<10	<1	<0.01	<10	<0.01	<5	1	<0.01	2	290	29	0.31	2	3	38	<20	<0.01	<10	<10	15	<10	3
E211089	0.01	<0.2	0.89	<2	<10	680	<0.5	<2	0.08	<0.5	1	1	9	0.19	<10	<1	<0.01	<10	<0.01	7	<1	<0.01	1	480	33	0.13	<2	2	57	<20	<0.01	<10	<10	12	<10	3
E211090	0.02	0.3	1.02	13	<10	610	<0.5	2	0.05	<0.5	4	1	30	0.37	<10	<1	<0.01	<10	<0.01	<5	1	<0.01	1	490	445	0.41	<2	2	98	<20	<0.01	<10	<10	20	<10	17
E211091	0.03	<0.2	0.62	3	<10	30	<0.6	<2	0.01	<0.5	2	2	16	0.31	<10	<1	<0.01	<10	<0.01	7	14	<0.01	<1													

SAMPLE	Au-AA26	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41		
DESCRIPTION	Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
E211148	<0.01	<0.2	0.7	4	<10	110	0.6	<2	1.58	<0.5	8	3	1	3.87	<10	<1	0.24	20	1.46	2910	<1	0.01	4	970	29	0.01	2	5	18	<20	0.03	<10	<10	60	<10	365
E211149	<0.01	<0.2	0.69	<2	<10	940	0.8	<2	0.89	1.8	11	2	1	6.22	<10	<1	0.24	10	2.02	3880	1	<0.01	3	990	56	0.04	<2	5	35	<20	0.01	<10	<10	61	<10	1845
E211150	<0.01	0.5	0.72	<2	<10	1270	0.6	<2	0.43	49.3	14	3	16	7.13	<10	1	0.24	10	1.08	1880	<1	<0.01	5	890	657	0.24	<2	5	66	<20	0.02	<10	<10	98	<10	4830
E211151	<0.01	0.3	0.65	<2	<10	1160	<0.5	<2	0.28	35.2	6	3	31	4.34	<10	<1	0.21	<10	0.44	502	2	<0.01	4	960	177	0.14	<2	6	222	<20	0.01	<10	<10	100	<10	2950
E211152	1.02	2.8	0.71	205	<10	140	<0.5	2	0.35	0.5	10	105	1285	3.64	<10	3	0.32	20	0.27	200	114	0.01	65	430	24	1.8	28	3	17	<20	0.02	10	<10	27	<10	73
E211153	0.01	0.3	0.74	4	<10	50	<0.5	<2	0.19	14	7	2	27	3.35	<10	<1	0.12	<10	0.21	330	1	<0.01	5	670	115	0.18	2	4	114	<20	0.01	<10	<10	86	<10	1215
E211154	0.1	0.8	0.68	8	<10	20	<0.5	4	0.09	1.1	8	2	93	1.69	<10	<1	0.03	<10	0.04	57	7	<0.01	4	470	147	1.31	<2	2	131	<20	<0.01	<10	<10	20	<10	192
E211155	0.67	6.2	0.23	42	<10	90	<0.5	6	<0.01	<0.5	8	6	812	2.75	<10	1	0.08	<10	0.02	33	24	<0.01	5	140	50	1.96	14	1	84	<20	<0.01	<10	<10	20	<10	157
E211156	1.19	2.5	0.07	10	<10	40	<0.5	5	0.01	<0.5	9	13	268	2.01	<10	1	0.03	<10	0.01	38	11	<0.01	6	50	9	1.3	10	<1	15	<20	<0.01	<10	<10	10	<10	45
E211157	0.19	0.8	0.23	5	<10	30	<0.5	<2	0.02	<0.5	3	10	101	0.68	<10	<1	0.09	<10	0.03	31	6	<0.01	2	120	4	0.18	4	1	92	<20	<0.01	<10	<10	13	<10	20
E211158	0.01	<0.2	0.6	3	<10	30	<0.5	3	0.11	<0.5	1	2	7	0.18	<10	1	0.11	<10	0.04	11	<1	<0.01	<1	510	<2	0.04	2	2	216	<20	<0.01	<10	<10	18	<10	19
E211159	0.05	1.3	0.51	17	<10	20																														

E211231	0.02	4.7	0.99	39	<10	30	<0.5	11	0.04	<0.5	17	7	46	4.37	10	1	0.34	<10	0.02	47	12	0.02	7	110	146	5.19	23	1	131	<20	<0.01	<10	<10	20	<10	14
E211232	<0.01	7.1	1.02	56	<10	70	<0.5	14	0.01	<0.5	23	3	62	5.28	10	2	0.37	<10	<0.01	15	12	0.03	10	80	137	6.21	32	2	132	<20	<0.01	<10	<10	20	<10	7
E211233	0.01	2.3	0.73	42	<10	60	<0.5	3	<0.01	<0.5	8	9	21	3	10	<1	0.28	<10	<0.01	13	11	0.02	4	60	119	3.63	10	1	99	<20	<0.01	<10	<10	11	<10	5
E211234	<0.01	7.2	0.89	58	<10	80	<0.5	16	0.01	<0.5	18	3	53	3.85	10	2	0.31	<10	<0.01	19	19	0.02	6	110	184	4.5	24	1	166	<20	<0.01	<10	<10	17	<10	14
E211235	<0.01	10.5	0.83	75	<10	70	<0.5	25	<0.01	<0.5	26	5	104	6.75	10	2	0.3	<10	<0.01	11	13	0.02	10	100	190	7.69	40	1	159	<20	<0.01	<10	<10	17	<10	9
E211236	0.02	6.4	0.9	41	<10	20	<0.5	13	0.01	<0.5	33	1	80	7.98	<10	1	0.3	<10	<0.01	19	8	0.04	11	70	151	9.01	18	2	120	<20	<0.01	<10	<10	19	<10	10
E211237	<0.01	5.8	1.07	44	<10	10	<0.5	7	0.01	<0.5	35	<1	59	10.9	10	1	0.36	<10	<0.01	13	3	0.05	11	100	154	>10.0	18	1	129	<20	<0.01	<10	<10	27	<10	13
E211238	<0.01	0.2	1.61	<2	<10	90	<0.5	<2	0.92	<0.5	8	33	39	3.33	<10	<1	0.11	<10	0.8	509	4	0.09	25	620	<2	0.05	<2	5	44	<20	0.14	<10	<10	61	<10	42
E211239	0.01	9.8	1	76	<10	20	<0.5	10	0.01	<0.5	39	<1	65	13.2	10	2	0.3	<10	<0.01	17	3	0.07	16	70	198	>10.0	30	2	117	<20	<0.01	<10	<10	24	<10	9
E211240	0.01	6.5	1.12	98	<10	10	<0.5	14	0.01	<0.5	44	2	70	8.72	10	2	0.37	<10	<0.01	7	4	0.05	17	90	164	>10.0	20	2	138	<20	<0.01	<10	<10	28	<10	6
E211241	<0.01	3.5	1.15	40	<10	20	<0.5	6	0.01	<0.5	23	9	49	4.62	10	2	0.38	<10	<0.01	26	3	0.06	8	110	134	5.49	13	2	155	<20	<0.01	<10	<10	27	<10	6
E211242	0.02	6.5	1.19	46	<10	30	<0.5	5	0.36	<0.5	23	9	78	6.61	10	2	0.32	<10	0.27	395	6	0.05	10	310	119	6.83	12	3	118	<20	0.01	<10	<10	38	10	73
E211243	<0.01	9.1	0.79	50	<10	90	<0.5	33	0.02	<0.5	70	4	49	5.09	<10	3	0.21	<10	<0.01	37	7	0.04	18	120	202	5.56	19	1	154	<20	<0.01	<10	<10	18	<10	9
E211244	<0.01	4.7	0.93	52	<10	60	<0.5	17	0.02	<0.5	22	5	16	3.74	<10	3	0.33	<10	<0.01	14	10	0.02	10	140	204	4.52	21	1	170	<20	<0.01	<10	<10	19	<10	13
E211245	0.01	3.6	0.95	42	<10	90	<0.5	13	0.01	<0.5	13	5	12	2.54	<10	2	0.34	<10	<0.01	29	9	0.03	9	110	190	3.06	16	1	153	<20	<0.01	<10	<10	19	<10	12
E211246	0.01	5.3	0.86	63	<10	80	<0.5	19	0.01	<0.5	24	3	18	4.31	<10	2	0.32	<10	<0.01	12	11	0.02	9	120	230	5.13	21	1	149	<20	<0.01	<10	<10	17	<10	20
E211247	0.01	3.7	0.7	50	<10	50	<0.5	13	0.01	<0.5	18	6	14	3.08	<10	1	0.25	<10	<0.01	34	9	0.02	10	80	154	3.38	14	1	120	<20	<0.01	<10	<10	13	<10	10
E211248	0.02	5.2	0.89	46	<10	90	<0.5	15	0.01	<0.5	24	4	19	3.95	<10	1	0.29	<10	<0.01	12	16	0.03	10	80	162	4.72	12	1	128	<20	<0.01	<10	<10	15	<10	18
E211249	<0.01	8.2	0.75	50	<10	70	<0.5	31	0.01	<0.5	41	4	23	6.36	<10	2	0.21	<10	<0.01	23	7	0.03	15	80	145	7	17	1	113	<20	<0.01	<10	<10	16	<10	6
E211250	0.01	12.5	0.9	67	<10	70	<0.5	44	0.01	<0.5	81	2	19	6.72	<10	2	0.23	<10	<0.01	8	6	0.05	23	100	221	7.72	18	1	148	<20	<0.01	<10	<10	20	<10	6
E211251	<0.01	5.8	0.78	65	<10	60	<0.5	21	<0.01	<0.5	30	6	9	4.26	<10	1	0.26	<10	<0.01	28	9	0.02	11	80	141	4.73	28	1	124	<20	<0.01	<10	<10	17	<10	5
E211252	NSS	3.2	0.73	202	<10	140	<0.5	<2	0.34	<0.5	10	101	1290	3.53	<10	3	0.31	20	0.27	199	118	0.02	64	430	18	1.83	29	3	17	<20	0.02	<10	<10	26	<10	69
E211253	0.01	5.3	0.82	54	<10	90	<0.5	20	<0.01	<0.5	29	10	12	3.25	<10	1	0.28	<10	<0.01	15	9	0.03	11	90	165	3.99	16	1	152	<20	<0.01	<10	<10	17	<10	6
E211254	<0.01	9	0.92	67	<10	20	<0.5	33	0.01	<0.5	36	5	14	5.87	<10	2	0.26	<10	<0.01	23	10	0.03	17	80	196	6.55	22	1	136	<20	<0.01	<10	<10	19	<10	3
E211255	<0.01	7.8	0.92	61	<10	30	<0.5	33	<0.01	<0.5	36	8	12	4.45	10	4	0.18	<10	<0.01	12	15	0.02	12	80	231	5.07	26	1	138	<20	<0.01	<10	<10	16	<10	3
E211256	<0.01	8.2	1.07	85	<10	30	<0.5	44	<0.01	<0.5	37	3	10	5.11	<10	1	0.22	<10	<0.01	17	12	0.03	37	80	544	5.77	21	1	144	<20	<0.01	<10	<10	21	<10	2
E211257	<0.01	3.1	1.01	85	<10	60	<0.5	37	<0.01	<0.5	17	4	5	4.74	<10	2	0.26	<10	<0.01	11	8	0.02	13	70	243	5.51	18	2	147	<20	<0.01	<10	<10	24	<10	2
E211258	<0.01	2.9	0.84	76	<10	40	<0.5	44	<0.01	<0.5	11	6	14	4.65	<10	2	0.24	<10	<0.01	27	9	0.02	13	70	236	5.1	19	1	150	<20	<0.01	<10	<10	20	<10	<2
E211259	<0.01	2.2	1.12	73	<10	20	<0.5	17	0.01	<0.5	10	4	25	4.05	<10	<1	0.28	<10	<0.01	9	14	0.03	6	100	149	4.84	10	2	202	<20	<0.01	<10	<10	34	<10	2
E211260	0.02	2.5	0.78	87	<10	20	<0.5	20	0.01	<0.5	17	4	33	6.09	<10	<1	0.23	<10	<0.01	28	16	0.02	4	60	165	6.57	12	2	93	<20	<0.01	<10	<10	32	<10	2
E211261	0.01	1.4	0.9	81	<10	10	<0.5	20	0.01	<0.5	7	5	13	5.36	<10	<1	0.24	<10	<0.01	12	9	0.03	6	90	200	6.14	13	2	138	<20	<0.01	<10	<10	25	<10	3
E211262	<0.01	2.6	0.9	89	<10	20	<0.5	28	0.01	<0.5	13	5	19	5.45	<10	1	0.22	<10	<0.01	26	11	0.03	6	100	204	5.98	14	2	154	<20	<0.01	<10	<10	22	<10	2
E211263	<0.01	<0.2	1.01	31	<10	250	<0.5	<2	0.01	<0.5	1	4	2	0.46	<10	<1	0.27	<10	<0.01	9	8	0.08	1	100	67	1.08	<2	2	197	<20	<0.01	<10	<10	14	<10	2
E211264	0.01	0.9	0.77	41	<10	150	<0.5	4	<0.01	<0.5	5	7	8	1.66	<10	<1	0.19	<10	<0.01	28	11	0.06	1	90	96	2.04	4	1	181	<20	<0.01	<10	<10	16	<10	4
E211265	<0.01	0.2	1.09	43	<10	170	<0.5	3	<0.01	<0.5	3	5	3	0.65	<10	<1	0.3	<10	<0.01	10	19	0.07	1	90	94	1.41	2	2	170	<20	<0.01	<10	<10	17	<10	6
E211266	<0.01	0.9	0.7	15	<10	220	<0.5	<2	0.03	<0.5	5	5	8	1.06	<10	<1	0.14	<10	0.01	36	5	0.03	1	140	44	0.69	<2	3	92	<20	<0.01	<10	<10	20	<10	17
E211267	14.8	8.1	0.3	468	<10	30	<0.5	<2	0.15	<0.5	7	27	45	3.16	<10	3	0.17	10	0.06	122	4	<0.01	14	530	7	2.32	31	2	6	<20	<0.01	<10	<10	14	<10	44
E211268	0.01	2	1.4	9	<10	310	0.6	<2	0.28	42.6	12	2	67	6.45	<10	<1	0.32	10	0.16	171	3	0.01	3	970	14	0.53	<2	3	24	<20	0.02	<10	<10	60	<10	3410
E211269	<0.01	0.7	2	10	<10	590	0.6	<2	0.28	2.1	15	2	6	4.05	10	<1	0.32	10	0.88	1120	<1	0.01	1	890	70	0.08	2	3	20	<20	0.01	<10	<10	57	<10	698
E211270	0.02	2.7	1.59	31	<10	140	0.6	<2	0.27	<0.5	11	3	11	3.7	<10	1	0.35	10	0.73	969	2	0.01	<1	820	23	0.16	<2	4	13	<20	<0.01	<10	<10	58	<10	230

VA07074502 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 3
DATE RECEIVED : 2007-07-16 DATE FINALIZED : 2007-08-07
PROJECT : "RANCH A07-B0N-11"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

	Au-SCR24	Au-SCR24	Au-SCR24	Au-SCR24	Au-SCR24	Au-SCR24	Au-AA26	Au-AA26D
SAMPLE	Au Total (+)(-) Combined	Au (+) Fraction	Au (-) Fraction	Au (+) mg	WT. + Frac Entire	WT. - Frac Entire	Au	Au
DESCRIPTION	ppm	ppm	ppm	mg	g	g	ppm	ppm
E211306	26.5	37.9	26.5	0.118	3.11	1332.5	25.7	27.2
E211309	13.35	<0.05	13.4	<0.001	0.41	747.6	13.65	13.1
E211312								

VA07067067 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 58
DATE RECEIVED : 2007-06-29 DATE FINALIZED : 2007-07-19
PROJECT : "RANCH A07-B0N-12"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

VA07071960 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 121
DATE RECEIVED : 2007-07-09 DATE FINALIZED : 2007-07-26
PROJECT : "RANCH A07-BON-13"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E211451	<0.01	0.5	1.01	<2	<10	1250	<0.5	5	0.88	<0.5	2	1	3	1.29	<10	<1	0.02	<10	0.25	449	<1	0.01	1	1340	132	0.1	5	2	87	<20	<0.01	<10	<10	15	<10	113
E211452	15.25	8.3	0.29	489	<10	30	<0.5	<2	0.15	<0.5	8	26	46	3.15	<10	2	0.17	10	0.06	123	4	0.01	17	520	7	2.27	27	1	6	<20	<0.01	<10	<10	13	<10	46
E211453	0.01	2.5	0.53	16	<10	690	<0.5	5	0.29	<0.5	7	2	7	1.01	<10	<1	0.22	<10	0.07	150	<1	0.01	3	800	491	0.44	<2	5	70	<20	<0.01	<10	<10	14	<10	134
E211454	<0.01	1.3	0.59	10	<10	1170	<0.5	3	0.4	<0.5	3	2	3	1.6	<10	<1	0.23	<10	0.08	114	1	0.01	1	1200	205	0.16	<2	4	76	<20	0.01	<10	<10	26	<10	116
E211455	0.02	2.4	0.55	18	<10	330	<0.5	3	0.39	<0.5	9	2	30	3.56	<10	<1	0.22	<10	0.11	236	<1	0.01	3	1120	320	0.9	<2	7	69	<20	0.01	<10	<10	57	<10	87
E211456	<0.01	1	0.5	5	<10	1470	<0.5	<2	0.32	<0.5	4	2	4	2.7	<10	<1	0.22	<10	0.1	249	<1	0.01	1	830	361	0.21	<2	6	74	<20	0.01	<10	<10	44	<10	58
E211457	<0.01	3.5	0.6	59	<10	250	<0.5	10	0.26	<0.5	9	1	32	1.97	<10	<1	0.11	<10	0.02	45	4	0.01	2	930	466	1.15	5	5	78	<20	0.01	<10	<10	30	<10	15
E211458	<0.01	0.3	0.65	4	<10	830	<0.5	3	0.38	<0.5	5	3	4	3.16	<10	<1	0.14	<10	0.04	93	<1	0.01	2	1320	106	0.26	<2	4	70	<20	0.02	<10	<10	89	<10	19
E211459	<0.01	8.2	0.82	18	<10	20	<0.5	26	0.28	<0.5	30	<1	81	2.77	<10	<1	0.01	<10	0.01	17	5	0.01	7	1250	977	3.17	7	2	109	<20	<0.01	<10	<10	16	<10	10
E211460	<0.01	0.4	0.86	2	<10	890	0.5	<2	0.3	0.6	5	3	4	3.02	<10	<1	0.2	<10	0.26	542	<1	0.01	1	770	392	0.07	<2	3	66	<20	0.01	<10	<10	52	<10	295
E211461	<0.01	0.4	0.62	6	<10	2220	<0.5	<2	0.32	<0.5	1	1	3	0.43	<10	<1	0.23	<10	0.04	43	<1	0.01	<1	960	192	0.09	<2	3	104	<20	<0.01	<10	<10	14	<10	25
E211462	<0.01	6	0.69	10	<10	20	<0.5	13	0.1	<0.5	17	1	129	2.45	<10	<1	0.03	<10	0.01	16	7	0.01	3	380	466	2.7	6	2	86	<20	<0.01	<10	<10	14	<10	7
E211463	0.02	7.7	0.66	36	<10	20	<0.5	9	0.11	<0.5	12	1	195	2.65	<10	<1	0.1	<10	0.01	14	8	0.01	3	440	552	2.88	8	2	78	<20	<0.01	<10	<10	16	<10	10
E211464	<0.01	3.9	0.68	23	<10	80	<0.5	21	0.22	<0.5	8	2	24	3.05	<10	<1	0.09	<10	0.02	38	5	0.01	3	740	261	1.74	6	3	87	<20	0.01	<10	<10	41	<10	9
E211465	<0.01	2.1	0.56	12	<10	980	<0.5	5	0.35	<0.5	5	2	15	1.8	<10	<1	0.21	<10	0.05	37	1	0.01	1	1030	221	0.31	<2	3	93	<20	0.01	<10	<10	31	<10	25
E211466	<0.01	1.5	0.76	14	<10	1080	<0.5	5	0.33	<0.5	2	2	41	0.59	<10	<1	0.08	<10	0.02	47	2	0.01	<1	1310	636	0.17	2	2	73	<20	<0.01	<10	<10	19	<10	8
E211467	1.51	2.9	0.68	212	<10	140	<0.5	3	0.3	0.5	11	101	1285	3.33	<10	3	0.29	20	0.25	192	111	0.02	62	420	24	1.79	28	3	16	<20	0.02	<10	<10	25	<10	68
E211468	<0.01	1.5	0.77	6	<10	760	<0.5	5	0.37	<0.5	4	1	25	0.9	<10	<1	0.11	<10	0.14	182	3	0.01	<1	1380	520	0.35	2	2	57	<20	<0.01	<10	<10	17	<10	33
E211469	<0.01	0.2	1.29	11	<10	310	0.5	<2	0.39	<0.5	8	1	9	3.81	<10	<1	0.25	10	0.74	1065	<1	0.01	2	950	129	0.06	<2	2	41	<20	<0.01	<10	<10	45	<10	166
E211470	0.01	1.3	1.13	116	<10	140	<0.5	<2	1.53	<0.5	9	10	12	3.22	<10	<1	0.18	10	0.73	1115	4	0.02	7	830	58	0.62	<2	2	33	<20	<0.01	<10	<10	40	<10	127
E211471	<0.01	<0.2	0.99	17	<10	1310	<0.5	<2	2.46	<0.5	6	8	9	2.5	<10	<1	0.24	20	0.59	1085	1	0.02	4	650	8	0.13	<2	3	65	<20	<0.01	<10	<10	39	<10	65
E211472	0.01	1.8	0.59	88	<10	400	0.6	<2	0.44	1.5	14	1	12	4.37	<10	<1	0.21	10	0.65	1080	1	0.01	<1	700	118	0.32	<2	2	22	<20	<0.01	<10	<10	35	<10	666
E211473	0.02	0.9	0.91	73	<10	810	0.7	<2	0.32	1.2	15	2	31	6.88	<10	<1	0.21	10	0.58	1135	2	0.01	3	890	243	0.26	2	3	22	<20	0.01	<10	<10	53	<10	1050
E211474	0.01	1.5	0.69	51	<10	960	0.6	2	0.29	15.7	14	1	21	7.31	<10	<1	0.21	10	0.41	899	2	0.01	4	870	587	0.38	<2	4	27	<20	0.02	<10	<10	71	<10	3400
E211475	<0.01	1.6	0.57	3	<10	630	<0.5	3	0.14	0.7	9	2	13	2.86	<10	<1	0.14	<10	0.03	47	3	0.01	1	560	194	0.33	3	7	57	<20	0.01	<10	<10	58	<10	165
E211476	<0.01	2.7	0.61	23	<10	180	<0.5	8	0.07	<0.5	14	2	26	1.69	<10	<1	0.12	<10	0.01	26	11	0.01	6	240	165	1.83	4	2	122	<20	<0.01	<10	<10	13	<10	25
E211477	<0.01	3.5	0.59	44	<10	60	<0.5	13	0.01	<0.5	24	2	62	3.87	<10	1	0.07	<10	<0.01	27	18	0.01	10	80	116	4.01	7	1	106	<20	<0.01	<10	<10	14	<10	27
E211478	<0.01	4.9	0.64	61	<10	40	<0.5	12	0.01	<0.5	32	2	75	5.72	<10	1	0.17	<10	<0.01	29	7	0.03	14	80	151	6.31	11	2	103	<20	<0.01	<10	<10	16	<10	23
E211479	<0.01	3.5	0.62	46	<10	80	<0.5	8	0.01	<0.5	26	6	66	4.74	<10	2	0.17	<10	<0.01	57	6	0.02	10	80	145	4.91	9	1	109	<20	<0.01	<10	<10	17	<10	23
E211480	<0.01	2	0.46	41	<10	70	<0.5	5	0.02	<0.5	13	2	44	3.33	<10	<1	0.14	<10	<0.01	16	3	0.02	8	70	100	3.6	6	1	88	<20	<0.01	<10	<10	12	<10	14
E211481	<0.01	6.8	0.4	33	<10	130	<0.5	7	0.01	<0.5	16	3	46	2.55	<10	1	0.11	<10	<0.01	23	5	0.02	9	60	106	2.65	5	1	73	<20	<0.01	<10	<10	10	30	15
E211482	<0.01	<0.2	1.48	3	<10	90	<0.5	<2	0.82	<0.5	6	32	37	3.16	10	<1	0.1	<10	0.73	475	4	0.08	22	570	2	0.04	<2	4	40	<20	0.12	<10	<10	55	<10	39
E211483	<0.01	1.6	0.44	67	<10	100	<0.5	4	0.01	<0.5	21	3	63	4.06	<10	1	0.11	<10	<0.01	34	3	0.02	9	60	103	4.08	6	2	79	<20	<0.01	<10	<10	11	<10	21
E211484	<0.01	1.9	0.43	67	<10	30	<0.5	5	0.05	40.6	16	4	50	4.33	<10	1	0.09	<10	0.02	64	8	<0.01	7	90	116	4.36	6	2	61	<20	<0.01	<10	<10	10	<10	4420
E211485	<0.01	2.3	1.08	48	<10	50	0.6	<2	0.21	73.2	17	<1	52	5.29	<10	1	0.21	<10	0.24	374	4	<0.01	5	610	133	4.93	4	3	136	<20	<0.01	<10	<10	19	<10	8020
E211486	<0.01	0.9	3.42	29	<10	370	1.2	<2	0.25	20.7	10	1	17	5.82	10	1	0.2	10	1.88	3300	2	<0.01	4	760	732	1.09	2	4	19	<20	<0.01	<10	<10	40	<10	2330
E211487	<0.01	<0.2	3.57	5	<10	1460	1	<2	0.29	2.3	12	2	10	6.84	10	<1	0.18	10	1.63	3580	1	<0.01	5	890	20	0.14	2	5	27	<20	<0.01	<10	<10	73	<10	1210
E211488	<0.01	<0.2	0.51	17	<10	1130	<0.5	<2	0.06	<0.5	1	13	5	1.49	<10	<1	0.13	<10	0.03	93	2	0.01	3	190	19	0.18	2	3	106	<20	0.01	<10	<10	33	<10	26
E211489	<0.01	3.1	0.61	28	<10	440	<0.5	<2	0.05	2	3	19	19	1.19	<10	<1	0.14	<10	0.04	118	6	0.02	4	280	54	0.56	2	2	196	<20	<0.01	<10	<10	17	20	150
E211490	<0.01	1	2.72	11	<10	220	0.6	<2	0.24	45.6	12	4	31	6.35	10	1	0.16	10	1	1750	3	0.01	5	760	53	1.52	<2	4	28	<20	<0.01	<10	<10	60	<10	2320
E211491	<0.01	<0.2	2.77	5	<10																															

VA07071264 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 94
DATE RECEIVED : 2007-07-09 DATE FINALIZED : 2007-07-25
PROJECT : "RANCH A07-BON-14"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E211570	<0.01	0.5	0.64	7	<10	920	<0.5	3	0.02	<0.5	3	1	8	2.28	<10	<1	0.01	<10	0.01	35	2	<0.01	<1	150	93	0.21	2	1	174	<20	0.01	<10	10	34	<10	22
E211571	<0.01	0.3	0.52	24	<10	350	0.6	2	0.43	<0.5	14	1	6	4.8	<10	<1	0.17	10	0.66	987	1	0.01	4	920	132	0.08	<2	3	36	<20	<0.01	<10	<10	51	<10	575
E211572	<0.01	0.3	0.53	17	<10	720	0.5	<2	1.01	<0.5	9	1	6	3.74	<10	<1	0.21	20	0.83	878	1	0.01	1	660	54	0.07	<2	2	56	<20	<0.01	<10	<10	40	<10	278
E211573	<0.01	<0.2	0.93	23	<10	30	<0.5	<2	2.65	<0.5	5	1	9	2.54	<10	<1	0.17	20	0.67	983	1	0.01	1	630	6	0.08	<2	3	49	<20	<0.01	<10	<10	45	<10	47
E211574	<0.01	0.3	1.03	31	<10	50	<0.5	<2	1.92	<0.5	6	1	6	2.47	<10	<1	0.26	20	0.59	889	1	0.01	2	580	12	0.13	<2	3	41	<20	<0.01	<10	<10	38	<10	55
E211575	0.01	0.5	0.84	75	<10	170	<0.5	<2	1.58	<0.5	6	1	16	2.63	<10	<1	0.22	20	0.54	831	<1	0.01	1	680	22	0.34	<2	2	38	<20	<0.01	<10	<10	36	<10	83
E211576	0.01	0.6	0.96	116	<10	20	0.5	<2	0.47	<0.5	8	1	13	3.62	<10	<1	0.32	10	0.66	846	1	0.01	3	860	83	0.42	3	2	30	<20	<0.01	<10	<10	45	<10	171
E211577	<0.01	6	0.66	12	<10	60	<0.5	11	0.3	<0.5	16	<1	101	4.06	<10	<1	0.22	<10	0.13	190	6	0.01	5	960	452	1.54	4	3	54	<20	0.01	<10	<10	46	<10	53
E211578	<0.01	2.9	1.16	8	<10	360	<0.5	8	0.29	<0.5	6	<1	16	0.84	10	<1	0.01	<10	0.01	6	2	<0.01	1	1210	592	0.68	3	2	70	<20	<0.01	<10	<10	20	<10	5
E211579	<0.01	2.1	0.88	11	<10	490	<0.5	8	0.27	<0.5	3	1	36	1.66	<10	<1	0.01	<10	<0.01	16	1	<0.01	1	1150	143	0.44	<2	2	107	<20	0.01	<10	<10	51	<10	5
E211580	<0.01	0.7	1.06	9	<10	1020	<0.5	6	0.28	<0.5	1	1	36	2.26	<10	<1	0.01	<10	<0.01	23	2	<0.01	<1	1180	96	0.05	3	3	95	<20	0.02	<10	<10	54	<10	5
E211581	<0.01	1.5	0.81	8	<10	1470	<0.5	4	0.12	<0.5	2	2	74	5.5	<10	<1	0.01	<10	0.01	38	1	<0.01	2	480	9	0.07	4	4	39	<20	0.05	<10	<10	100	<10	7
E211582	<0.01	0.2	1.62	8	<10	90	<0.5	<2	0.91	<0.5	7	34	38	3.33	10	<1	0.11	10	0.78	495	4	0.09	22	610	3	0.03	2	5	45	<20	0.14	<10	<10	60	<10	41
E211583	<0.01	1.3	0.73	8	<10	1370	<0.5	5	0.13	<0.5	2	3	64	5.24	<10	<1	0.01	<10	0.01	36	1	<0.01	3	550	10	0.07	4	4	34	<20	0.04	<10	<10	93	<10	7
E211584	<0.01	0.8	1.07	7	<10	1730	<0.5	5	0.12	<0.5	1	<1	2	0.18	<10	<1	0.01	<10	<0.01	<5	1	<0.01	<1	550	133	0.17	<2	2	200	<20	<0.01	<10	<10	13	<10	6
E211585	<0.01	2	1.13	6	<10	110	<0.5	4	0.08	<0.5	3	<1	12	0.67	<10	<1	0.01	<10	<0.01	<5	9	<0.01	<1	350	238	0.67	2	2	123	<20	<0.01	<10	<10	20	<10	6
E211586	<0.01	2.2	1.1	38	<10	480	<0.5	4	0.18	<0.5	3	1	12	0.4	10	<1	<0.01	<10	<0.01	<5	17	<0.01	2	880	850	0.47	2	2	308	<20	<0.01	<10	<10	23	<10	10
E211587	<0.01	3.5	1.21	17	<10	160	<0.5	6	0.12	<0.5	6	<1	27	1.32	<10	<1	<0.01	<10	<0.01	<5	9	<0.01	1	590	266	1.49	9	2	170	<20	<0.01	<10	<10	20	<10	12
E211588	<0.01	2.1	0.55	12	<10	1150	<0.5	7	0.21	<0.5	3	1	6	1.15	<10	<1	0.13	<10	0.02	22	5	<0.01	1	750	213	0.26	4	3	120	<20	0.01	<10	<10	32	<10	35
E211589	<0.01	1.3	1.35	9	<10	120	0.7	3	0.37	15.3	10	2	15	5.43	<10	<1	0.23	10	0.66	2010	1	<0.01	3	1150	267	0.08	4	4	34	<20	0.03	<10	<10	84	<10	2210

SAMPLE DESCRIPTION	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Ti	U	V	W	Zn
	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
E211590	0.05	2.9	0.79	12	<10	430	<0.5	3	0.06	<0.5	2	2	20	0.95	<10	<1	0.01	<10	0.04	44	11	0.01	<1	80	31	0.59	5	1	69	<20	<0.01	<10	<10	17	<10	9
E211591	0.64	6.3	0.03	44	<10	20	<0.5	20	<0.01	<0.5	12	9	96	3.45	<10	<1	<0.01	<10	<0.01	35	65	0.01	4	<10	43	3.22	23	<1	5	<20	<0.01	<10	<10	2	<10	4
E211592	0.29	2.2	0.05	9	<10	140	<0.5	6	0.01	<0.5	7	15	77	1.92	<10	<1	<0.01	<10	<0.01	43	14	0.01	2	<10	9	1.38	10	<1	8	<20	<0.01	<10	<10	2	<10	5
E211593	2.65	3.9	0.03	17	<10	30	<0.5	10	<0.01	<0.5	10	13	158	2.51	<10	1	<0.01	<10	<0.01	39	15	0.01	2	10	21	2.17	11	<1	32	<20	<0.01	<10	<10	2	<10	5
E211594	1.01	4.2	0.02	21	<10	20	<0.5	9	<0.01	<0.5	15	20	134	3.03	<10	1	0.01	<10	<0.01	39	10	<0.01	5	<10	49	2.77	13	<1	16	<20	<0.01	<10	<10	2	<10	6
E211595	0.47	5.5	0.09	72	<10	10	<0.5	11	<0.01	<0.5	10	11	95	7.02	<10	1	0.01	<10	<0.01	36	20	<0.01	6	20	151	7.39	23	<1	18	<20	<0.01	10	<10	3	<10	15
E211596	0.53	5.6	0.42	54	<10	10	<0.5	20	<0.01	<0.5	14	6	105	4.14	<10	2	0.01	<10	<0.01	19	188	<0.01	3	30	143	4.31	14	1	40	<20	<0.01	<10	<10	10	<10	5
E211597	4.87	5.4	0.24	511	<10	30	<0.5	2	0.11	<0.5	12	497	56	3.72	<10	6	0.17	10	0.05	239	18	0.01	375	350	7	1.93	65	1	5	<20	<0.01	10	<10	18	<10	42
E211598	0.12	3.3	0.65	79	<10	10	<0.5	24	<0.01	<0.5	12	1	95	6.53	<10	2	0.01	<10	<0.01	7	11	<0.01	8	70	152	7.17	9	2	55	<20	<0.01	<10	<10	13	<10	3
E211599	<0.01	1.7	0.73	94	<10	20	<0.5	9	0.01	<0.5	9	<1	71	4.03	<10	<1	0.01	<10	<0.01	5	6	<0.01	3	110	208	4.34	3	2	83	<20	<0.01	<10	<10	19	<10	2
E211600	<0.01	1	0.66	12	<10	630	<0.5	10	0.02	<0.5	<1	1	14	0.5	<10	<1	0.01	<10	<0.01	12	2	0.01	<1	250	35	0.1	<2	1	169	<20	<0.01	<10	<10	12	<10	<2
E211601	<0.01	0.3	0.86	13	<10	470	<0.5	2	0.02	<0.5	1	1	3	1.16	<10	<1	0.01	<10	<0.01	21	3	0.01	<1	280	11											

SAMPLE	Au-Au26	ME-ICP41	ME-ICP41	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Me-ICP41	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	
DESCRIPTION	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
E211704	0.01	1.1	0.69	36	<10	940	<0.5	2	0.21	1.5	10	2	134	5.54	<10	1	0.16	<10	0.4	1675	5	0.01	4	620	25	0.17	<2	4	47	<20	0.01	<10	<10	<10	51	<10	537	
E211705	0.04	0.3	1.19	169	<10	320	<0.5	3	0.01	<0.5	4	1	67	0.61	<10	<1	<0.01	<10	<0.01	5	11	<0.01	1	70	46	0.68	2	1	78	<20	<0.01	<10	<10	20	<10	4		
E211706	0.04	<0.2	0.9	120	<10	20	<0.5	2	<0.01	<0.5	4	1	72	0.67	<10	<1	<0.01	<10	<0.01	<5	8	<0.01	2	50	35	0.77	<2	1	51	<20	<0.01	<10	<10	16	<10	3		
E211707	0.02	<0.2	1.2	11	<10	10	<0.5	<2	<0.01	<0.5	<1	1	43	0.16	<10	<1	<0.01	<10	<0.01	5	2	<0.01	1	70	26	0.12	<2	1	90	<20	<0.01	<10	<10	15	<10	6		
E211708	0.07	0.5	0.99	59	<10	20	<0.5	3	<0.01	<0.5	4	1	58	0.49	<10	<1	<0.01	<10	<0.01	5	2	<0.01	1	40	41	0.55	2	1	48	<20	<0.01	<10	<10	16	<10	3		
E211709	0.02	<0.2	1.23	6	<10	10	<0.5	<2	<0.01	<0.5	1	1	40	0.14	<10	<1	<0.01	<10	<0.01	<5	9	<0.01	1	50	19	0.11	<2	1	63	<20	<0.01	<10	<10	21	<10	<2		
E211710	0.01	<0.2	0.88	11	<10	10	<0.5	<2	<0.01	<0.5	1	1	60	0.12	<10	<1	<0.01	<10	<0.01	<5	7	<0.01	1	60	25	0.11	<2	1	74	<20	<0.01	<10	<10	16	<10	<2		
E211711	0.01	<0.2	1.52	14	<10	10	<0.5	<2	<0.01	<0.5	1	1	56	0.2	10	<1	<0.01	<10	<0.01	<5	5	<0.01	1	50	36	0.21	<2	1	63	<20	<0.01	<10	<10	29	<10	2		
E211712	34.8	16.6	0.29	480	<10	20	<0.5	<2	0.1	<0.5	6	39	43	3.06	<10	3	0.17	<10	0.06	134	9	<0.01	12	400	8	2.2	35	1	5	<20	<0.01	<10	<10	12	<10	47		
E211713	0.28	6.6	0.69	103	<10	10	<0.5	20	0.02	<0.5	17	2	108	3.86	10	5	<0.01	<10	<0.01	15	17	<0.01	4	20	146	4.28	25	1	26	<20	<0.01	<10	<10	16	<10	5		
E211714	1.78	10.3	0.38	174	<10	<10	<0.5	88	0.01	<0.5	74	3	258	9.8	<10	11	<0.01	<10	<0.01	45	13	0.01	13	10	388	>10.0	129	<1	32	<20	<0.01	10	<10	8	<10	5		
E211715	1.03	4.8	0.39	26	<10	20	<0.5	34	0.01	<0.5	24	3	241	3.49	<10	8	<0																					

E211780	<0.01	<0.2	1.16	<2	<10	890	<0.5	<2	0.06	<0.5	1	1	26	0.8	<10	<1	0.05	<10	0.01	10	1	<0.01	<1	290	49	0.07	<2	3	32	<20	0.01	<10	<10	29	<10	7
E211781	<0.01	<0.2	1.82	<2	<10	1140	<0.5	2	0.04	<0.5	2	2	3	0.27	10	<1	<0.01	<10	<0.01	10	<1	<0.01	2	300	21	0.12	<2	3	65	<20	<0.01	<10	<10	27	<10	4
E211782	0.05	<0.2	1.51	2	<10	90	<0.5	<2	0.8	<0.5	8	32	36	3.1	<10	<1	0.1	<10	0.71	493	4	0.07	21	580	2	0.03	<2	4	38	<20	0.14	<10	<10	55	<10	41
E211783	<0.01	0.3	1.85	2	<10	330	<0.5	<2	0.02	<0.5	1	1	16	0.04	10	<1	<0.01	<10	<0.01	<5	1	<0.01	<1	370	203	0.04	<2	2	319	<20	<0.01	<10	<10	23	<10	19
E211784	<0.01	0.8	2.3	16	<10	320	<0.5	4	0.02	<0.5	4	1	20	0.15	10	<1	<0.01	<10	<0.01	<5	3	<0.01	<1	380	333	0.14	<2	3	295	<20	<0.01	<10	<10	25	<10	23
E211785	<0.01	0.7	2.4	13	<10	390	<0.5	3	0.02	<0.5	7	4	23	0.24	10	<1	<0.01	<10	<0.01	12	7	<0.01	8	320	253	0.28	3	3	212	<20	<0.01	<10	<10	45	<10	77
E211786	0.04	0.9	1.68	6	<10	130	<0.5	2	0.01	<0.5	5	5	46	0.77	10	<1	<0.01	<10	<0.01	24	36	<0.01	3	140	301	0.56	5	2	106	<20	<0.01	<10	<10	29	<10	46
E211787	0.03	1.3	1.74	40	<10	390	<0.5	4	0.01	<0.5	6	<1	128	0.58	10	<1	<0.01	<10	<0.01	<5	12	<0.01	1	240	522	0.68	13	3	127	<20	<0.01	<10	<10	34	<10	123
E211788	<0.01	1.2	1.55	34	<10	150	<0.5	3	0.01	<0.5	5	1	119	0.71	10	<1	<0.01	<10	<0.01	12	6	<0.01	2	170	1015	0.66	8	3	78	<20	<0.01	<10	<10	27	<10	187
E211789	<0.01	1.6	1.84	6	<10	210	<0.5	4	0.02	<0.5	2	<1	23	0.55	10	<1	0.06	<10	<0.01	7	4	<0.01	<1	260	621	0.53	3	3	135	<20	<0.01	<10	<10	35	<10	152
E211790	<0.01	2	1.12	9	<10	1960	0.8	<2	0.38	<0.5	22	1	37	9.1	10	<1	0.33	<10	0.78	785	<1	<0.01	1	740	70	0.08	2	8	56	<20	0.02	<10	<10	138	<10	2670
E211791	<0.01	0.5	1.29	9	<10	560	0.8	<2	0.46	<0.5	18	2	1	8.86	10	<1	0.37	<10	0.87	978	<1	<0.01	<1	1170	54	0.03	2	7	30	<20	0.03	<10	<10	154	<10	2100
E211792	<0.01	0.7	1.17	10	<10	1100	<0.5	2	0.16	<0.5	7	<1	4	3.26	10	<1	0.24	<10	0.27	303	1	<0.01	<1	450	116	0.07	<2	5	72	<20	0.01	<10	<10	70	<10	690
E211793	0.01	1	1.8	8	<10	550	<0.5	3	<0.01	<0.5	2	<1	19	0.45	10	<1	0.02	<10	<0.01	11	5	<0.01	<1	70	311	0.39	3	3	99	<20	<0.01	<10	<10	27	<10	48
E211794	<0.01	<0.2	1.93	5	<10	810	<0.5	3	0.01	<0.5	<1	<1	2	0.04	10	1	<0.01	<10	<0.01	<5	<1	<0.01	<1	70	145	0.04	2	2	128	<20	<0.01	<10	<10	11	<10	5
E211795	<0.01	<0.2	1.87	12	<10	420	<0.5	3	<0.01	<0.5	<1	<1	1	0.05	10	<1	<0.01	<10	<0.01	<5	1	<0.01	<1	110	70	0.03	<2	3	185	<20	<0.01	<10	<10	19	<10	9
E211796	0.03	1	1.97	14	<10	140	<0.5	4	<0.01	<0.5	5	<1	33	0.63	10	<1	<0.01	<10	<0.01	<5	19	<0.01	1	60	750	0.72	5	2	83	<20	<0.01	<10	<10	34	<10	9
E211797	4.68	7	0.26	480	<10	30	<0.5	<2	0.11	<0.5	12	460	49	3.74	<10	8	0.15	10	0.05	237	16	<0.01	352	340	8	1.94	65	1	6	<20	<0.01	10	<10	19	<10	38
E211798	0.05	1.9	2.27	26	<10	70	<0.5	6	<0.01	<0.5	14	1	63	1.68	20	1	<0.01	<10	<0.01	<5	32	<0.01	4	70	630	1.87	10	2	105	<20	<0.01	<10	<10	47	<10	8
E211799	<0.01	<0.2	1.87	20	<10	1760	<0.5	<2	<0.01	<0.5	<1	<1	1	0.07	10	<1	<0.01	<10	<0.01	<5	5	<0.01	<1	120	69	0.12	2	1	237	<20	<0.01	<10	<10	33	<10	9
E211800	<0.01	0.2	2.18	14	<10	920	<0.5	2	<0.01	<0.5	1	<1	2	0.22	20	1	<0.01	<10	<0.01	<5	9	<0.01	<1	60	95	0.24	<2	1	130	<20	<0.01	<10	<10	44	<10	5
E211801	<0.01	<0.2	2.05	43	<10	1400	<0.5	<2	<0.01	<0.5	<1	<1	<1	0.03	20	<1	0.06	<10	<0.01	<5	4	<0.01	<1	120	132	0.2	<2	1	262	<20	<0.01	<10	<10	25	<10	3
E211802	<0.01	<0.2	1.58	56	<10	150	<0.5	<2	<0.01	<0.5	<1	<1	<1	0.06	10	<1	0.33	<10	<0.01	<5	<1	0.04	<1	120	119	0.76	<2	2	271	<20	<0.01	<10	<10	30	<10	2
E211803	<0.01	0.4	1.99	58	<10	40	<0.5	3	<0.01	<0.5	3	2	6	0.84	10	<1	0.51	<10	<0.01	<5	14	0.05	<1	190	378	1.95	8	2	291	<20	<0.01	<10	<10	33	<10	7
E211804	<0.01	0.4	1.54	58	<10	220	<0.5	4	<0.01	<0.5	6	1	4	0.75	10	<1	0.42	<10	<0.01	10	8	0.04	<1	180	201	1.57	7	2	278	<20	<0.01	<10	<10	27	<10	5
E211805	<0.01	0.2	1.1	31	<10	230	<0.5	2	<0.01	<0.5	2	2	3	0.52	<10	<1	0.36	<10	<0.01	7	5	0.03	<1	140	190	1.2	3	1	190	<20	<0.01	<10	<10	19	<10	3
E211806	<0.01	1.2	0.92	50	<10	120	<0.5	3	0.01	<0.5	5	5	8	1.07	<10	<1	0.27	<10	<0.01	30	13	0.03	1	180	239	1.32	8	1	248	<20	<0.01	<10	<10	16	<10	11
E211807	0.01	1.4	1.1	109	<10	100	<0.5	5	0.01	<0.5	4	4	4	0.99	10	1	0.36	<10	<0.01	10	13	0.04	<1	220	153	1.71	6	1	356	<20	<0.01	<10	<10	20	<10	7
E211808	0.01	2	1.07	115	<10	50	<0.5	11	0.01	<0.5	7	6	13	1.84	10	1	0.31	<10	<0.01	35	18	0.04	2	270	167	2.2	20	1	376	<20	<0.01	<10	<10	20	<10	14
E211809	<0.01	0.6	1.1	71	<10	200	<0.5	4	0.01	<0.5	2	4	3	0.65	<10	<1	0.33	<10	<0.01	9	7	0.07	<1	180	99	1.37	7	2	280	<20	<0.01	<10	<10	15	<10	11
E211810	<0.01	<0.2	1.1	32	<10	230	<0.5	<2	0.01	<0.5	<1	7	1	0.47	<10	<1	0.31	<10	<0.01	29	2	0.07	<1	200	35	0.84	<2	2	219	<20	<0.01	<10	<10	15	<10	9
E211811	<0.01	<0.2	1.28	26	<10	300	<0.5	<2	0.01	<0.5	<1	3	<1	0.29	<10	<1	0.25	<10	<0.01	12	1	0.1	<1	210	27	0.8	<2	3	238	<20	<0.01	<10	<10	25	<10	14
E211812	34.5	16.3	0.28	503	<10	30	<0.5	<2	0.11	<0.5	6	39	42	3.2	<10	3	0.16	10	0.06	143	9	<0.01	10	420	8	2.21	39	1	6	<20	<0.01	<10	<10	12	<10	53
E211813	0.01	0.3	1.25	23	<10	190	<0.5	<2	0.02	<0.5	<1	6	1	2.96	<10	<1	0.15	<10	<0.01	51	1	0.17	<1	210	10	0.8	3	4	173	<20	0.01	<10	<10	82	<10	4
E211814	0.01	2.2	1.24	33	<10	120	<0.5	11	0.02	<0.5	6	3	34	3.28	<10	<1	0.09	<10	<0.01	34	3	0.12	1	230	16	0.83	4	6	185	<20	0.02	<10	10	127	<10	8
E211815	0.01	0.2	3.63	7	<10	690	<0.5	<2	0.04	<0.5	45	1	40	9.85	10	1	0.07	<10	0.29	214	2	<0.01	22	150	11	0.03	<2	12	70	<20	0.03	<10	<10	116	<10	528
E211816	0.01	<0.2	4.63	8	<10	810	0.8	<2	0.21	<0.5	39	1	15	13.5	10	1	0.18	<10	0.84	658	1	<0.01	8	760	4	0.02	<2	7	37	<20	0.02	<10	<10	105	<10	1620
E211817	0.01	0.2	4.26	9	<10	30	0.8	<2	0.26	<0.5	22	1	2	11.15	10	<1	0.28	<10	1.31	1055	<1	<0.01	2	910	3	<0.01	<2	6	10	<20	0.01	<10	<10	106	<10	2380

[illegible]

E211894	0.01	0.3	0.74	4	<10	3110	<0.5	2	0.01	<0.5	2	1	1	0.13	<10	2	<0.01	<10	<0.01	9	12	0.05	3	20	36	0.08	<2	1	93	<20	<0.01	<10	<10	11	<10	6	
E211895	0.03	2.3	0.55	12	<10	770	<0.5	3	<0.01	<0.5	5	2	27	0.4	<10	1	<0.01	<10	<0.01	13	96	0.01	<1	20	80	0.26	7	1	62	<20	<0.01	<10	<10	13	<10	7	
E211896	0.02	0.7	0.88	<2	<10	2210	<0.5	3	<0.01	<0.5	2	1	17	0.18	10	1	<0.01	<10	<0.01	8	9	0.03	1	20	80	0.14	4	1	90	<20	<0.01	<10	<10	17	<10	4	
E211897	4.79	5.9	0.26	482	<10	30	<0.5	2	0.1	<0.5	12	459	51	3.83	<10	7	0.16	10	0.05	231	16	<0.01	347	330	3	1.99	67	1	6	<20	<0.01	10	<10	18	<10	37	
E211898	0.01	0.9	0.82	3	<10	1720	<0.5	2	0.09	<0.5	2	1	13	0.24	10	1	<0.01	<10	0.01	9	6	0.02	1	20	87	0.18	3	1	88	<20	<0.01	<10	<10	17	<10	4	
E211899	0.01	0.8	0.75	3	<10	790	<0.5	3	<0.01	<0.5	3	<1	13	0.25	10	2	<0.01	<10	<0.01	5	13	0.01	<1	20	40	0.23	<2	1	93	<20	<0.01	<10	<10	17	<10	2	
E211900	0.05	3.6	1.41	20	<10	50	<0.5	7	<0.01	<0.5	13	<1	82	1.55	10	1	<0.01	<10	<0.01	<5	54	<0.01	3	40	76	1.77	8	1	97	<20	<0.01	<10	<10	31	<10	3	
E211901	0.01	0.9	0.55	3	<10	1440	<0.5	3	<0.01	<0.5	4	<1	11	0.16	<10	<1	<0.01	<10	<0.01	<5	40	0.02	1	20	46	0.2	4	<1	78	<20	<0.01	<10	<10	12	<10	2	
E211902	0.01	0.7	1.12	<2	<10	1650	<0.5	3	<0.01	<0.5	3	1	13	0.23	10	1	<0.01	<10	<0.01	7	19	0.02	<1	40	73	0.18	<2	<1	104	<20	<0.01	<10	<10	17	<10	10	
E211903	0.01	0.8	1.44	10	<10	140	<0.5	4	<0.01	<0.5	3	<1	17	0.89	10	2	<0.01	<10	<0.01	<5	13	<0.01	<1	70	258	1	<2	1	158	<20	<0.01	<10	<10	21	<10	7	
E211904	0.01	1	0.6	6	<10	240	<0.5	4	<0.01	<0.5	5	<1	21	1.05	10	<1	<0.01	<10	<0.01	<5	10	<0.01	1	60	524	1.17	5	1	126	<20	<0.01	<10	<10	13	<10	3	
E211905	0.01	1	1.34	17	<10	70	<0.5	5	<0.01	<0.5	6	<1	18	1.06	10	1	0.01	<10	<0.01	<5	14	<0.01	1	120	580	1.22	3	1	260	<20	<0.01	<10	<10	29	<10	3	
E211906	0.01	0.8	0.8	17	<10	40	<0.5	5	<0.01	<0.5	4	2	20	1.63	10	2	0.04	<10	<0.01	<5	13	<0.01	2	110	132	1.89	<2	1	223	<20	<0.01	<10	<10	16	<10	3	
E211907	<0.01	0.5	0.74	20	<10	300	<0.5	<2	<0.01	<0.5	4	3	6	0.55	10	1	0.13	<10	<0.01	<5	11	0.02	2	80	100	0.88	2	1	187	<20	<0.01	<10	<10	19	<10	3	
E211908	0.01	1.1	0.89	38	<10	190	<0.5	3	<0.01	<0.5	5	<1	14	1.42	10	1	0.19	<10	<0.01	8	14	0.01	1	60	122	1.87	8	1	153	<20	<0.01	<10	<10	19	<10	<2	
E211909	<0.01	1.6	0.81	22	<10	100	<0.5	6	<0.01	<0.5	10	<1	16	1.82	10	2	0.23	<10	<0.01	5	11	0.02	1	60	185	2.48	8	1	122	<20	<0.01	<10	<10	21	<10	<2	
E211910	0.01	2.4	0.68	26	<10	80	<0.5	5	<0.01	<0.5	10	2	30	2.49	10	1	0.17	<10	<0.01	17	10	0.01	4	40	243	2.82	13	1	100	<20	<0.01	<10	<10	18	<10	<2	
E211911	0.01	1.9	0.58	20	<10	110	<0.5	4	<0.01	<0.5	6	1	24	2.13	10	2	0.15	<10	<0.01	17	10	0.01	2	50	284	2.43	10	1	102	<20	<0.01	<10	<10	13	<10	<2	
E211912	35.5	19	0.29	484	<10	30	<0.5	2	0.1	<0.5	7	39	41	3.18	<10	4	0.17	10	0.06	138	10	<0.01	11	390	5	2.2	37	1	6	<20	<0.01	<10	<10	12	<10	48	
E211913	0.01	4.1	0.55	32	<10	40	<0.5	7	<0.01	<0.5	13	1	56	5.08	10	2	0.11	<10	<0.01	20	12	0.01	5	60	314	5.44	23	<1	106	<20	<0.01	<10	<10	12	<10	3	
E211914	<0.01	4	0.46	29	<10	10	<0.5	9	<0.01	<0.5	14	3	46	4.04	10	2	0.07	<10	<0.01	25	10	<0.01	7	50	273	4.19	18	<1	113	<20	<0.01	<10	<10	10	<10	2	
E211915	0.01	5.7	0.65	50	<10	10	<0.5	12	<0.01	<0.5	19	1	72	6.61	10	1	0.13	<10	<0.01	20	11	0.01	6	70	393	7.16	23	1	121	<20	<0.01	<10	<10	15	10	2	
E211916	<0.01	4.8	0.32	24	<10	20	<0.5	9	<0.01	<0.5	9	2	31	2.89	<10	1	0.08	<10	<0.01	12	10	<0.01	6	60	370	3.21	14	<1	94	<20	<0.01	<10	<10	9	<10	5	
E211917	<0.01	5.2	0.47	32	<10	10	<0.5	13	<0.01	<0.5	19	6	82	7.82	<10	1	0.15	<10	<0.01	36	10	0.01	3	70	177	8.34	20	<1	84	<20	<0.01	<10	<10	10	<10	4	
E211918	<0.01	2.6	0.25	20	<10	110	<0.5	5	<0.01	<0.5	8	3	34	2.2	<10	<1	0.08	<10	<0.01	8	8	<0.01	4	60	143	2.43	11	<1	72	<20	<0.01	<10	<10	7	<10	5	
E211919	<0.01	4.9	0.6	24	<10	130	<0.5	3	0.01	<0.5	7	7	34	3.2	10	1	0.19	<10	<0.01	47	7	0.01	5	100	156	3.14	20	1	122	<20	<0.01	<10	<10	13	<10	6	
E211920	<0.01	2.2	0.45	23	<10	110	<0.5	5	<0.01	<0.5	9	4	18	2.17	<10	1	0.15	<10	<0.01	16	8	0.01	3	100	122	2.41	12	<1	114	<20	<0.01	<10	<10	10	<10	3	
E211921	<0.01	4.1	0.56	32	<10	120	<0.5	5	0.01	<0.5	18	4	27	3.46	10	2	0.19	<10	<0.01	40	10	0.01	5	90	136	3.49	11	<1	115	<20	<0.01	<10	<10	11	<10	4	
E211922	<0.01	4.4	0.34	27	<10	60	<0.5	5	0.01	0.34	27	8	2	23	2.49	<10	1	0.1	<10	<0.01	10	6	0.01	4	80	128	2.77	16	<1	87	<20	<0.01	<10	<10	8	<10	3
E211923	<0.01	4	0.63	32	<10	100	<0.5	8	0.01	<0.5	19	4	25	2.49	<10	1	0.18	<10	<0.01	20	5	0.02	7	70	162	2.8	11	1	95	<20	<0.01	<10	<10	15	<10	3	
E211924	0.03	5	0.33	33	<10	70	<0.5	10	<0.01	<0.5	12	2	39	4.67	<10	2	0.12	<10	<0.01	12	9	0.01	6	60	136	5.12	20	<1	74	<20	<0.01	<10	<10	7	<10	4	
E211925	<0.01	4	0.47	28	<10	140	<0.5	9	0.01	<0.5	12	4	12	1.88	<10	1	0.17	<10	<0.01	24	11	0.01	5	80	149	2.02	11	1	104	<20	<0.01	<10	<10	9	<10	3	
E211926	<0.01	3.8	0.69	41	<10	110	<0.5	11	<0.01	<0.5	13	4	11	1.94	10	1	0.24	<10	<0.01	22	11	0.01	5	100	192	2.25	11	1	137	<20	<0.01	<10	<10	13	<10	4	
E211927	0.01	<0.2	1.46	5	<10	90	<0.5	<2	0.79	<0.5	7	32	37	3.08	<10	<1	0.1	<10	0.71	473	4	0.08	22	580	3	0.05	<2	4	39	<20	0.13	<10	<10	57	<10	42	
E211928	<0.01	3.7	0.61	41	<10	80	<0.5	14	0.01	<0.5	9	7	18	2.3	<10	1	0.22	<10	<0.01	37	14	0.01	8	90	185	2.31	11	1	120	<20	<0.01	<10	<10	13	<10	7	
E211929	<0.01	4.2	1.86	60	<10	140	<0.5	13	0.01	<0.5	4	9	31	2.02	10	1	0.69	<10	<0.01	33	15	0.04	5	170	309	2.95	9	2	254	<20	<0.01	<10	<10	29	30	19	
E211930	0.01	5.8	0.72	63	<10	40	<0.5	20	0.01	<0.5	7	5	7	6.37	<10	2	0.25	<10	<0.01	33	18	0.01	5	110	169	6.9	49	1	137	<20	<0.01	<10	<10	12	<10	6	
E211931	<0.01	4.8	1.05	54	<10	100	<0.5	15	0.01	<0.5	21	5	16	5.89	10	1	0.39	<10	<0.01	34	28	0.03	7	80	165	6.62	20	1	121	<20	<0.01	<10	<10	16	<10	3	
E211932	0.01	4.8	0.43	48	<10	50	<0.5	14	0.01	<0.5	16	9	17	5.45	<10	2	0.15	<10	<0.01	49	15	0.01	8	50	118	5.44	25	1	73	<20	<0.01	<10	<10	7	<10	4	
E211933	<0.01	3.4	0.43	37	<10	80	<0.5	10	0.01	<0.5	15	10	10	4.31	<10	1	0.16	<10	<0.01	55	7	0.01	6	50	86	4.08	16	1	57	<20	<0.01	<10	<10	10	<10	6	
E211934	<0.01	5	0.57																																		

VA07081640 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 60
DATE RECEIVED : 2007-07-24 DATE FINALIZED : 2007-08-13
PROJECT : "Ranch A07-BON-19"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

VA07076280 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 63
DATE RECEIVED : 2007-07-16 DATE FINALIZED : 2007-08-03
PROJECT : "Ranch A07-BON-20"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

VA07081283 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 31
DATE RECEIVED : 2007-07-24 DATE FINALIZED : 2007-08-14
PROJECT : "Ranch A07-BON-22"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

VA07081288 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 113
DATE RECEIVED : 2007-07-24 DATE FINALIZED : 2007-08-12
PROJECT : "Ranch A07-BON-23"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E212435	0.26	1.9	0.08	<2	<10	810	<0.5	5	<0.01	<0.5	11	10	15	1.1	<10	<1	<0.01	<10	<0.01	54	338	0.04	5	10	82	0.35	3	1	23	<20	0.01	<10	<10	6	<10	<2
E212436	0.04	0.6	0.57	4	<10	230	<0.5	2	0.01	<0.5	2	3	13	0.46	<10	<1	<0.01	<10	<0.01	8	22	0.04	1	20	25	0.44	<2	<1	49	<20	<0.01	<10	<10	18	<10	2
E212437	0.06	1.8	0.39	5	<10	60	<0.5	4	<0.01	<0.5	5	5	29	1.48	<10	1	<0.01	<10	<0.01	32	35	0.04	2	10	67	1.22	2	<1	93	<20	<0.01	<10	<10	13	<10	<2
E212438	0.05	0.2	0.07	3	<10	500	<0.5	2	<0.01	<0.5	2	8	3	0.94	<10	<1	<0.01	<10	<0.01	55	13	0.04	2	10	107	0.22	<2	<1	192	<20	<0.01	<10	<10	5	<10	<2
E212439	0.02	<0.2	0.03	2	<10	2850	<0.5	<2	<0.01	<0.5	2	13	2	0.9	<10	<1	<0.01	<10	<0.01	57	25	0.03	3	10	49	0.09	<2	<1	44	<20	<0.01	<10	<10	3	<10	14
E212440	0.02	0.4	0.06	<2	<10	60	<0.5	<2	<0.01	<0.5	2	7	3	0.35	<10	1	<0.01	<10	<0.01	20	36	<0.01	1	10	85	0.07	<2	<1	10	<20	<0.01	<10	<10	4	<10	<2
E212441	<0.01	<0.2	1.5	8	<10	100	<0.5	<2	0.77	<0.5	9	31	37	3.2	10	<1	0.1	<10	0.74	497	5	0.08	21	600	3	0.05	<2	4	41	<20	0.13	<10	<10	57	<10	41
E212442	0.03	0.4	0.32	<2	<10	10	<0.5	2	<0.01	<0.5	3	8	7	0.67	<10	<1	<0.01	<10	<0.01	38	26	<0.01	2	20	59	0.1	<2	1	18	<20	<0.01	<10	<10	9	<10	<2
E212443	0.02	0.7	0.45	6	<10	30	<0.5	3	<0.01	<0.5	3	6	10	1.06	<10	<1	<0.01	<10	<0.01	30	27	<0.01	2	20	49	0.67	<2	<1	28	<20	<0.01	<10	<10	12	<10	7
E212444	0.02	0.5	0.19	2	<10	10	<0.5	3	<0.01	<0.5	3	5	10	0.51	<10	<1	<0.01	<10	<0.01	16	21	<0.01	1	10	33	0.31	2	<1	8	<20	<0.01	<10	<10	6	<10	<2
E212445	<0.01	0.2	4.16	8	<10	50	<0.5	3	0.08	0.5	2	3	4	0.32	10	<1	<0.01	<10	<0.01	7	5	<0.01	<1	410	38	0.23	<2	1	127	<20	<0.01	<10	<10	52	<10	8
E212446	<0.01	<0.2	1.48	<2	<10	1340	<0.5	3	0.04	<0.5	1	2	1	0.24	<10	<1	<0.01	<10	<0.01	8	3	<0.01	<1	210	51	0.17	<2	1	148	<20	<0.01	<10	<10	22	<10	6
E212447	<0.01	0.5	1.31	<2	<10	350	<0.5	3	0.04	<0.5	2	1	4	0.54	10	1	<0.01	<10	<0.01	<5	12	<0.01	<1	170	57	0.58	5	1	77	<20	<0.01	<10	<10	26	<10	3
E212448	0.01	<0.2	1.84	7	<10	20	<0.5	3	0.06	<0.5	2	1	2	0.32	10	<1	<0.01	<10	<0.01	<5	26	<0.01	<1	260	40	0.33	<2	1	116	<20	<0.01	<10	<10	37	<10	8
E212449	0.01	<0.2	1.05	5	<10	50	<0.5	2	0.09	<0.5	2	1	1	0.15	<10	<1	<0.01	<10	<0.01	<5	24	<0.01	1	390	37	0.15	<2	1	85	<20	<0.01	<10	<10	24	<10	2
E212450	<0.01	<0.2	4.57	2	<10	880	<0.5	3	0.04	0.6	1	2	1	0.13	10	<1	<0.01	<10	<0.01	5	13	<0.01	<1	220	56	0.09	2	2	176	<20	<0.01	<10	<10	69	<10	5
E212451	0.01	0.8	1.95	21	<10	90	<0.5	7	0.12	<0.5	10	1	15	2.38	10	1	<0.01	<10	<0.01	6	9	<0.01	4	520	428	2.48	<2	3	102	<20	<0.01	<10	<10	43	<10	11
E212452	0.01	2.1	1.71	28	<10	50	<0.5	10	0.22	<0.5	14	<1	26	3.39	10	<1	<0.01	<10	0.01	<5	16	<0.01	6	980	767	3.66	4	5	110	<20	<0.01	<10	<10	50	<10	8
E212453	0.02	7.6	2.53	14	<10	90	<0.5	8	0.14	<0.5	14	<1	22	2.48	10	2	<0.01	<10	<0.01	<5	17	<0.01	5	660	753	2.67	2	4	149	<20	<0.01	<10	<10	73	<10	19
E212454	0.01	0.8	2.04	17	<10	150	<0.5	5	0.12	<0.5	8	<1	14	1.54	10	1	<0.01	<10	<0.01	<5	3	<0.01	3	560	710	1.7	<2	4	157	<20	<0.01	<10	<10	40	<10	12
E212455	1.48	2.7	0.67	204	<10	130	<0.5	4	0.28	0.8	10	94	1235	3.3	<10	3	0.28	10	0.24	188	105	0.02	59	410	26	1.64	25	3	16	<20	0.02	<10	<10	24	<10	65
E212456	0.01	1	2.05	21	<10	90	<0.5	4	0.23	<0.5	7	1	16	1.7	10	<1	<0.01	<10	0.02	19	2	<0.01	2	830	442	1.82	2	3	79	<20	<0.01	<10	<10	38	<10	17
E212457	0.01	1.2	1.58	37	<10	30	<0.5	16	0.16	<0.5	25	<1	22	3.4	10	2	<0.01	<10	<0.01	<5	3	0.01	4	730	805	3.63	15	2	112	<20	<0.01	<10	<10	27	<10	18
E212458	<0.01	0.4	1.41	30	<10	70	<0.5	7	0.12	<0.5	10	<1	13	1.92	<10	<1	<0.01	<10	<0.01	<5	4	<0.01	2	560	222	2.06	4	2	95	<20	<0.01	<10	<10	30	<10	19
E212459	<0.01	<0.2	1.87	6	<10	610	<0.5	2	0.26	<0.5	1	1	<1	0.07	10	<1	<0.01	<10	<0.01	<5	<1	<0.01	<1	1240	145	0.05	<2	3	182	<20	<0.01	<10	<10	17	<10	3
E212460	0.01	<0.2	1.13	2	<10	100	<0.5	3	0.15	<0.5	2	1	1	0.44	<10	1	0.09	<10	0.01	21	1	<0.01	2	610	120	0.18	<2	2	153	<20	<0.01	<10	<10	35	<10	15
E212461	<0.01	<0.2	0.74	<2	<10	160	<0.5	<2	0.46	<0.5	7	1	1	5.57	<10	<1	0.26	<10	0.26	731	1	0.01	2	1000	82	0.02	<2	5	86	<20	0.02	<10	10	100	<10	252
E212462	<0.01	0.2	1.49	<2	<10	430	0.8	3	0.66	<0.5	17	<1	112	9.31	10	<1	0.36	10	0.81	2430	1	0.02	4	980	107	0.08	<2	5	66	<20	0.01	<10	<10	104	<10	839
E212463	<0.01	0.6	1.19	12	<10	90	0.8	4	0.65	12.8	23	<1	30	9.47	<10	<1	0.29	10	0.93	2330	1	0.02	5	990	235	1.24	<2	4	55	<20	0.01	<10	<10	91	<10	3120
E212464	0.01	4.2	0.89	33	<10	30	0.6	<2	0.54	22.7	26	<1	25	9.91	<10	<1	0.27	10	0.76	1830	3	0.02	5	950	273	5.15	3	3	51	<20	<0.01	10	<10	58	<10	4690
E212465	<0.01	1.8	1.22	17	<10	80	0.7	2	0.63	17.2	20	<1	19	9.96	<10	<1	0.33	10	1.06	2870	4	0.02	3	940	127	3.8	4	3	52	<20	<0.01	<10	<10	66	<10	3790
E212466	<0.01	1.4	1.01	66	<10	70	0.8	2	1.1	9.4	13	<1	17	7.4	<10	1	0.27	10	1.12	4430	6	0.02	4	1060	301	2.65	3	3	67	<20	<0.01	<10	<10	58	<10	1780
E212467	<0.01	0.2	0.93	29	<10	30	0.7	<2	1.97	1.7	9	1	27	4.15	<10	<1	0.23	10	1.16	3890	1	0.02	2	1150	121	0.32	3	4	82	<20	<0.01	<10	<10	63	<10	694
E212468	<0.01	<0.2	1.61	3	<10	290	0.8	3	1.43	0.5	11	2	2	5.48	<10	<1	0.42	10	1.16	4320	1	0.02	3	1070	59	0.08	<2	5	90	<20	<0.01	<10	<10	67	<10	690
E212469	<0.01	0.9	1.02	7	<10	1250	0.8	<2	1.39	5.8	13	1	27	5.92	<10	<1	0.28	10	1.17	4190	1	0.01	3	1060	104	0.22	5	4	134	<20	<0.01	<10	<10	60	<10	1005
E212470	14.7	8	0.28	481	<10	30	<0.5	<2	0.13	<0.5	8	24	43	3.09	<10	3	0.16	10	0.06	124	5	<0.01	15	490	5	2.03	26	1	6	<20	<0.01	<10	<10	13	<10	43
E212471	<0.01	<0.2	0.79	<2	<10	2120	0.7	<2	1.9	<0.5	12	1	2	6.21	<10	<1	0.23	10	1.25	4280	<1	0.01	2	1030	41	0.07	<2	4	178	<20	0.01	<10	<10	62	<10	808

VA07086464 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 47
DATE RECEIVED : 2007-08-07 DATE FINALIZED : 2007-09-04
PROJECT : "Ranch A07-BON-025"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

VA07087229 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 107
DATE RECEIVED : 2007-08-07 DATE FINALIZED : 2007-09-08
PROJECT : "Ranch A07-BON-026"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E212636	<0.01	0.9	0.86	12	<10	90	<0.5	3	0.33	<0.5	1	1	12	0.72	<10	<1	<0.01	<10	<0.01	5	4	<0.01	2	1370	179	0.75	<2	2	103	<20	<0.01	<10	<10	14	<10	17
E212637	0.01	8.5	0.67	34	<10	10	<0.5	5	0.24	<0.5	14	<1	57	4.95	<10	<1	<0.01	<10	<0.01	8	10	0.01	4	990	672	5.34	5	2	65	<20	<0.01	<10	<10	15	<10	67
E212638	<0.01	6.5	0.56	75	<10	100	<0.5	5	0.22	1.6	9	2	1260	3.99	<10	1	0.16	<10	0.03	26	4	0.01	2	570	252	2.21	19	4	66	<20	0.01	<10	<10	69	<10	1060
E212639	<0.01	2.9	0.45	80	<10	820	<0.5	<2	0.24	<0.5	2	2	845	2.99	<10	<1	0.16	<10	0.04	41	2	0.01	1	480	70	0.19	18	4	81	<20	0.01	<10	<10	85	<10	99
E212640	<0.01	35.2	0.32	78	<10	540	<0.5	6	0.03	<0.5	2	3	2360	0.86	<10	1	0.03	<10	0.01	18	5	0.01	1	50	41	0.48	5	3	63	<20	<0.01	<10	<10	29	<10	38
E212641	<0.01	<0.2	1.42	10	<10	90	<0.5	<2	0.79	<0.5	7	32	38	3.04	<10	1	0.1	<10	0.7	482	4	0.08	19	570	4	0.04	<2	4	38	<20	0.12	<10	<10	55	<10	42
E212642	<0.01	4.3	0.42	62	<10	120	<0.5	9	0.01	<0.5	7	5	57	2.47	<10	<1	0.09	<10	<0.01	25	9	0.02	3	70	227	2.57	10	1	111	<20	<0.01	<10	<10	12	<10	13
E212643	<0.01	1.1	0.38	17	<10	430	<0.5	<2	0.01	<0.5	16	3	10	2.23	<10	<1	0.02	<10	<0.01	30	2	0.01	4	30	39	0.63	2	5	35	<20	0.02	<10	<10	91	<10	6
E212644	<0.01	9.1	0.34	63	<10	110	<0.5	<2	0.02	<0.5	23	3	29	7.11	<10	<1	0.01	<10	0.01	37	3	0.01	4	30	111	1.7	3	5	14	<20	0.06	<10	<10	131	<10	25
E212645	<0.01	27.3	0.29	63	<10	40	<0.5	3	0.02	<0.5	40	1	45	4.72	<10	<1	0.01	<10	0.01	21	3	0.01	9	20	107	3.45	3	4	14	<20	0.02	<10	<10	58	<10	16
E212646	<0.01	2.5	0.36	27	<10	160	<0.5	2	0.12	10.3	11	1	19	2.89	<10	<1	0.12	<10	0.02	41	17	0.01	4	270	45	1.56	2	5	18	<20	0.01	<10	<10	48	<10	898
E212647	0.01	0.4	1.21	93	<10	70	0.6	<2	0.64	<0.5	13	2	10	3.78	<10	<1	0.22	10	0.64	1580	2	0.02	3	740	8	0.34	<2	3	17	<20	<0.01	<10	<10	43	<10	153
E212648	0.02	1	1.45	239	<10	110	<0.5	<2	0.23	<0.5	9	1	9	3.64	10	1	0.17	20	0.72	956	5	0.01	4	860	13	0.95	<2	2	11	<20	<0.01	<10	<10	47	<10	129
E212649	<0.01	0.5	1.46	111	<10	240	<0.5	<2	0.27	<0.5	12	1	10	4.16	10	<1	0.21	10	0.69	1070	2	0.02	2	870	27	0.4	<2	3	18	<20	0.01	<10	<10	55	<10	184
E212650	<0.01	11.7	0.33	97	<10	30	<0.5	50	0.02	0.7	37	8	96	4.8	<10	15	0.09	<10	0.02	62	132	0.02	12	80	404	4.73	32	1	61	<20	<0.01	<10	<10	9	<10	44
E212651	<0.01	1.9	0.39	28	<10	450	<0.5	7	<0.01	<0.5	6	9	15	0.94	<10	1	0.14	<10	<0.01	33	15	0.02	3	50	82	0.84	7	<1	85	<20	<0.01	<10	<10	8	<10	10
E212652	<0.01	0.9	0.44	22	<10	220	<0.5	<2	0.03	<0.5	3	14	9	1.19	<10	1	0.12	<10	0.01	46	5	0.02	3	170	85	0.94	<2	1	98	<20	<0.01	<10	<10	8	<10	10
E212653	<0.01	3.4	0.43	22	<10	90	<0.5	4	<0.01	<0.5	10	6	15	3.03	<10	1	0.08	<10	<0.01	24	10	0.01	2	50	53	3.03	2	1	66	<20	<0.01	<10	<10	20	<10	18
E212654	<0.01	1.2	0.48	11	<10	460	<0.5	<2	0.01	<0.5	3	8	6	2.64	<10	<1	0.06	<10	<0.01	44	3	<0.01	2	30	31	0.52	<2	3	33	<20	0.03	<10	<10	102	<10	55
E212655	1.3	2.5	0.65	202	<10	130	<0.5	<2	0.3	0.5	10	92	1180	3.21	<10	2	0.29	10	0.24	187	98	0.02	60	390	20	1.65	26	2	15	<20	0.02	<10	<10	23	10	66
E212656	<0.01	4.2	0.38	8	<10	810	<0.5	<2	0.01	1.1	15	2	30	8.51	<10	1	0.08	<10	0.01	58	5	<0.01	4	10	21	0.31	2	6	8	<20	0.11	<10	<10	130	<10	3500
E212657	<0.01	3.1	0.4	10	<10	770	<0.5	<2	0.01	1.6	7	5	47	6.78	<10	<1	0.04	<10	0.01	53	3	<0.01	5	10	16	0.3	<2	5	12	<20	0.11	<10	<10	109	<10	4890
E212658	<0.01	1.5	0.41	<2	<10	1390	<0.5	<2	0.01	<0.5	2	5	3	3.84	<10	<1	0.04	<10	0.01	67	2	<0.01	1	20	11	0.06	<2	3	37	<20	0.05	<10	<10	114	<10	139
E212659	<0.01	<0.2	0.68	6	<10	840	<0.5	<2	<0.01	<0.5	<1	7	1	0.47	<10	<1	0.06	<10	<0.01	12	1	0.01	<1	80	38	0.16	<2	1	137	<20	<0.01	10	<10	40	<10	11
E212660	<0.01	0.4	0.47	2	<10	320	<0.5	<2	<0.01	<0.5	2	10	4	1.16	<10	<1	0.17	<10	<0.01	36	2	0.01	1	60	38	0.51	<2	1	86	<20	0.01	10	<10	14	<10	169
E212661	<0.01	0.5	0.48	6	<10	240	<0.5	<2	<0.01	<0.5	1	8	3	0.85	<10	<1	0.19	<10	<0.01	23	1	0.01	<1	70	68	0.88	<2	1	83	<20	<0.01	<10	<10	6	<10	13
E212662	<0.01	0.8	0.47	13	<10	310	<0.5	2	<0.01	<0.5	4	10	5	1.36	<10	<1	0.17	<10	<0.01	43	2	0.02	1	50	70	1.02	<2	1	72	<20	<0.01	<10	<10	8	<10	10
E212663	<0.01	1.8	0.61	9	<10	220	<0.5	<2	0.17	<0.5	5	13	4	3.07	<10	<1	0.16	<10	0.07	304	2	0.01	4	510	37	0.3	<2	3	44	<20	0.02	10	<10	21	<10	192
E212664	<0.01	0.8	1.59	8	<10	440	1.1	<2	0.4	<0.5	12	2	5	4.91	<10	<1	0.3	10	0.95	3120	<1	0.01	3	980	91	0.01	<2	5	16	<20	0.04	10	<10	36	<10	1080
E212665	0.03	<0.2	1.14	<2	<10	420	0.9	<2	3.42	2.2	7	2	1	2.9	<10	<1	0.22	10	1.03	4260	<1	0.01	1	910	62	0.01	<2	5	39	<20	0.03	10	<10	19	<10	418
E212666	<0.01	<0.2	1.37	<2	<10	120	0.8	<2	0.93	<0.5	7	2	2	3.82	<10	<1	0.22	10	0.99	3300	<1	0.01	2	930	74	0.01	2	4	17	<20	0.04	<10	<10	39	<10	845

VA07086463 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 37
DATE RECEIVED : 2007-08-07 DATE FINALIZED : 2007-09-06
PROJECT : "Ranch A07-BON-027"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

SAMPLE	Au-AA26	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41		
DESCRIPTION	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn
	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
E212747	0.02	<0.2	0.78	3	<10	250	0.9	<2	0.22	0.7	20	2	42	10.1	<10	1	0.17	10	0.26	5350	<1	0.01	4	970	17	0.04	2	5	11	<20	0.01	<10	<10	83	<10	1425
E212748	0.01	0.4	0.66	10	<10	1420	<0.5	3	0.12	<0.5	8	2	33	4.43	<10	<1	0.1	<10	0.18	592	4	0.01	2	310	17	0.08	2	4	88	<20	0.01	<10	<10	69	<10	251
E212749	<0.01	<0.2	0.8	14	<10	1120	<0.5	4	0.01	<0.5	1	2	3	1.87	<10	<1	0.01	<10	<0.01	37	5	<0.01	<1	100	14	0.06	<2	2	116	<20	0.02	<10	<10	68	<10	5
E212750	<0.01	0.3	0.69	8	<10	470	<0.5	12	0.01	<0.5	1	<1	6	0.45	<10	<1	<0.01	<10	<0.01	<5	15	<0.01	<1	210	59	0.48	<2	1	156	<20	<0.01	<10	<10	13	<10	<2
E212751	0.01	0.5	0.89	13	<10	390	<0.5	21	0.02	<0.5	<1	1	18	0.41	<10	<1	<0.01	<10	<0.01	8	4	<0.01	<1	280	166	0.35	<2	1	159	<20	<0.01	<10	<10	14	<10	2
E212752	0.02	0.2	0.59	10	<10	700	<0.5	5	0.01	<0.5	1	1	10	0.21	<10	<1	<0.01	<10	<0.01	<5	3	<0.01	<1	150	60	0.21	2	1	120	<20	<0.01	<10	<10	10	<10	<2
E212753	0.01	0.3	1.15	8	<10	1000	<0.5	3	0.01	<0.5	1	1	9	0.32	<10	<1	<0.01	<10	<0.01	7	2	<0.01	1	200	83	0.38	<2	1	237	<20	<0.01	<10	<10	19	<10	<2
E212754	0.01	0.2	0.92	10	<10	890	<0.5	3	0.01	<0.5	1	<1	7	0.21	<10	<1	<0.01	<10	<0.01	<5	3	<0.01	<1	200	55	0.29	<2	1	223	<20	<0.01	<10	<10	14	<10	<2
E212755	1.15	3.2	0.75	214	<10	150	<0.5	4	0.32	0.5	11	103	1335	3.41	<10	4	0.31	20	0.26	204	115	0.02	59	450	22	1.96	24	3	18	<20	0.02	<10	<10	27	<10	70
E212756	0.01	0.3	0.96	5	<10	780	<0.5	4	0.02	<0.5	2	1	13	0.13	<10	<1	<0.01	<10	<0.01	6	4	<0.01	1	270	116	0.16	<2	1	242	<20	<0.01	<10	<10	19	<10	3
E212757	0.02	1.9	1.07	12	<10	350	<0.5	22	0.01	<0.5	17	1	122	0.5																						

VA07086460 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 89
DATE RECEIVED : 2007-08-07 DATE FINALIZED : 2007-09-01
PROJECT : "Ranch A07-BON-029"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E212900	4.87	6.1	0.26	476	<10	30	<0.5	<2	0.11	<0.5	12	469	52	3.68	<10	7	0.15	<10	0.05	237	15	0.01	342	360	4	2.07	63	2	6	<20	<0.01	10	<10	18	<10	37
E212901	0.01	<0.2	1.51	27	<10	550	<0.5	3	0.01	<0.5	<1	3	2	3.02	<10	<1	<0.01	<10	<0.01	19	1	<0.01	<1	190	24	0.04	8	2	344	<20	0.02	<10	<10	65	<10	2
E212902	<0.01	<0.2	1.91	38	<10	910	<0.5	2	0.01	<0.5	1	2	2	3.26	10	<1	<0.01	<10	<0.01	25	1	<0.01	<1	120	26	0.06	9	2	295	<20	0.02	<10	<10	55	<10	3
E212903	0.01	<0.2	1.61	23	<10	790	<0.5	3	0.01	<0.5	<1	1	2	0.38	<10	<1	<0.01	<10	<0.01	<5	<1	<0.01	<1	130	33	0.05	9	1	289	<20	0.01	<10	<10	24	<10	24
E212904	<0.01	<0.2	1.75	32	<10	860	<0.5	6	0.02	<0.5	<1	2	2	0.7	<10	<1	<0.01	<10	<0.01	6	1	0.01	<1	230	35	0.08	18	1	447	<20	0.01	<10	<10	36	10	<2
E212905	<0.01	<0.2	1.28	22	<10	1040	<0.5	4	0.01	<0.5	<1	2	1	0.47	<10	1	<0.01	<10	<0.01	<5	<1	<0.01	<1	110	22	0.07	15	2	232	<20	0.01	<10	<10	36	<10	2
E212906	<0.01	2.3	1.73	18	<10	30	<0.5	6	0.01	<0.5	6	1	54	2.03	10	<1	<0.01	<10	<0.01	<5	7	<0.01	2	70	160	2.37	5	2	150	<20	<0.01	<10	<10	31	<10	6
E212907	0.01	1.8	1.26	16	<10	70	<0.5	9	0.01	<0.5	7	1	26	1.25	10	1	<0.01	<10	<0.01	<5	8	<0.01	2	90	126	1.56	5	2	176	<20	<0.01	<10	<10	24	<10	9
E212908	0.01	2.7	2.43	24	<10	40	<0.5	12	0.02	<0.5	9	1	39	1.43	10	1	<0.01	<10	<0.01	<5	8	0.01	3	130	303	1.77	8	3	227	<20	<0.01	<10	<10	44	<10	8
E212909	<0.01	<0.2	1.23	6	<10	1030	0.8	2	0.49	<0.5	13	3	5	4.27	<10	<1	0.27	<10	0.56	2160	<1	0.01	1	1080	56	0.08	<2	5	95	<20	0.01	<10	<10	71	<10	736
E212910	0.02	0.2	1.51	5	<10	590	1	2	2.25	<0.5	13	2	6	5.11	<10	<1	0.37	10	1.05	3090	<1	0.01	1	1030	33	0.17	3	4	90	<20	0.01	<10	<10	73	<10	434
E212911	0.01	0.2	1.35	5	<10	140	0.8	2	3.79	<0.5	9	3	9	3.46	<10	<1	0.39	20	0.78	2570	<1	0.02	2	1030	30	0.05	<2	4	58	<20	0.02	<10	<10	72	<10	120
E212912	0.02	<0.2	1.08	5	<10	140	0.5	<2	3.73	0.5	9	3	6	3.44	<10	<1	0.32	20	0.55	2200	<1	0.03	2	990	31	0.05	<2	5	53	<20	0.05	<10	<10	75	<10	105

VA07081284 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 105
DATE RECEIVED : 2007-07-24 DATE FINALIZED : 2007-08-21
PROJECT : "Ranch A07-BON-30"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E212207	<0.01	0.2	0.65	20	<10	30	0.6	<2	3.92	<0.5	6	2	10	3.21	<10	<1	0.22	<10	0.32	310	1	0.05	2	690	16	6.52	<2	1	107	<20	<0.01	<10	<10	24	<10	47
E212208	0.01	0.4	0.38	17	<10	30	<0.5	4	7.37	<0.5	6	2	24	3.1	<10	<1	0.17	<10	0.27	342	1	0.03	3	760	10	9.34	<2	1	320	<20	<0.01	<10	<10	9	<10	23
E212209	<0.01	0.4	0.9	57	<10	20	0.8	<2	3.33	0.7	7	2	14	3.34	<10	<1	0.21	10	0.66	769	1	0.05	3	820	52	5.85	<2	3	354	<20	<0.01	<10	<10	29	<10	199
E212210	<0.01	0.2	0.52	14	<10	30	0.6	2	5.27	1.1	7	1	11	3.23	<10	<1	0.24	<10	0.36	415	<1	0.06	3	710	12	7.55	3	1	154	<20	<0.01	<10	<10	8	<10	292
E212211	<0.01	0.2	0.9	22	<10	40	0.6	<2	2.01	0.5	9	2	15	4.01	<10	<1	0.2	10	0.88	1630	<1	0.06	3	970	22	4.9	2	4	67	<20	<0.01	<10	<10	39	<10	205
E212212	<0.01	<0.2	0.76	20	<10	50	0.5	<2	2.84	<0.5	6	1	11	3.17	<10	<1	0.13	20	1.71	3350	<1	0.05	3	920	5	3.67	<2	4	79	<20	<0.01	<10	<10	48	<10	85
E212213	0.17	<0.2	0.71	13	<10	40	<0.5	<2	2.52	<0.5	7	2	10	3.14	<10	<1	0.13	10	1.59	3290	<1	0.05	3	870	5	3.31	2	4	107	<20	<0.01	<10	<10	48	<10	66
E212214	0.02	<0.2	0.68	14	<10	70	0.5	<2	1.86	<0.5	6	2	10	2.93	<10	<1	0.15	20	1.58	2920	<1	0.05	3	900	6	2.61	<2	5	73	<20	<0.01	<10	<10	52	<10	82
E212215	34.6	20.1	0.28	513	<10	20	<0.5	2	0.12	<0.5	6	42	44	3.28	<10	3	0.16	10	0.06	150	10	<0.01	13	410	6	2.26	36	1	5	<20	<0.01	10	<10	12	<10	52
E212216	<0.01	<0.2	0.68	18	<10	90	<0.5	<2	1.78	<0.5	9	3	14	3.24	<10	<1	0.14	10	1.43	2630	4	0.05	3	850	14	2.97	<2	4	61	<20	<0.01	<10	<10	45	<10	69
E212217	<0.01	<0.2	0.61	14	<10	50	0.5	<2	2.67	<0.5	7	2	11	3.2	<10	<1	0.12	10	1.73	2770	1	0.05	1	840	9	3.29	3	4	92	<20	<0.01	<10	<10	46	<10	76
E212218	<0.01	<0.2	0.67	17	<10	80	0.5	<2	3.32	<0.5	7	2	13	3.64	<10	<1	0.19	10	0.99	1605	1	0.07	1	850	12	5.24	2	3	74	<20	<0.01	<10	<10	27	<10	78
E212219	<0.01	<0.2	0.86	7	<10	70	0.5	<2	2.19	<0.5	7	2	11	3.51	<10	<1	0.15	10	0.78	1245	1	0.06	2	840	10	4.67	<2	3	74	<20	<0.01	<10	<10	46	<10	100
E212220	<0.01	0.2	0.83	24	<10	30	0.5	<2	3.24	<0.5	7	2	13	3.36	<10	<1	0.16	10	0.81	1055	1	0.06	1	720	21	5.42	2	3	373	<20	<0.01	<10	<10	28	<10	177
E212221	<0.01	0.2	0.85	25	<10	40	0.6	<2	3.06	<0.5	7	1	14	3.5	<10	<1	0.15	10	0.92	1370	1	0.07	2	800	28	5.3	2	3	256	<20	<0.01	<10	<10	34	<10	111
E212222	<0.01	<0.2	1.11	8	<10	50	0.7	<2	2.74	<0.5	7	2	12	3.52	<10	<1	0.15	10	1.07	1530	1	0.06	2	820	15	5.01	3	3	141	<20	<0.01	<10	<10	41	<10	119
E212223	<0.01	0.4	0.79	16	<10	40	0.7	<2	3.69	0.9	7	1	11	3.11	<10	<1	0.14	10	1.09	1735	1	0.06	2	760	58	5.29	2	3	136	<20	<0.01	<10	<10	46	<10	241
E212224	<0.01	0.5	0.9	21	<10	60	0.7	<2	2.57	1.9	7	2	12	3.55	<10	<1	0.18	10	0.82	1135	1	0.07	1	900	57	5.11	<2	3	105	<20	<0.01	<10	<10	51	<10	330
E212225	0.01	1.9	0.51	42	<10	40	0.7	<2	3.58	3.6	7	1	58	3.65	<10	<1	0.22	<10	0.75	1125	3	0.08	1	950	74	5.96	24	2	214	<20	<0.01	<10	<10	10	<10	450
E212226	<0.01	0.6	0.84	35	<10	60	0.8	<2	2.51	2.6	7	1	14	3.64	<10	<1	0.22	<10	0.52	559	2	0.08	2	690	93	5.61	<2	2	173	<20	<0.01	<10	<10	44	<10	345
E212227	0.01	0.4	1.47	10	<10	120	0.6	<2	2.72	1.9	9	2	103	3.95	10	<1	0.24	20	1.14	2200	<1	0.02	1	1090	144	0.1	2	4	91	<20	0.01	<10	<10	72	<10	494
E212228	0.01	1.2	1.37	7	<10	230	0.5	<2	2.44	17	9	3	93	3.98	<10	<1	0.22	10	0.97	2460	<1	0.02	3	1030	325	0.21	2	4	79	<20	0.01	<10	<10	70	<10	1030
E212229	<0.01	0.4	1.6	6	<10	90	<0.5	<2	0.87	<0.5	7	33	39	3.33	10	<1	0.11	<10	0.78	501	4	0.1	22	640	2	0.05	2	5	43	<20	0.13	<10	<10	58	<10	40
E212230	0.03	2.7	1.02	8	<10	590	0.5	<2	1.81	46.9	10	2	214	3.87	<10	<1	0.21	10	0.78	2050	1	0.02	2	1100	510	0.49	<2	4	86	<20	0.01	<10	<10	59	<10	2070
E212231	0.04	10.8	0.59	25	<10	70	0.6	<2	2.03	17	16	2	342	5.04	<10	<1	0.28	10	0.52	1710	5	0.02	2	1140	338	2.77	3	3	80	<20	<0.01	<10	<10	27	<10	1870
E212232	0.03	8.6	0.47	24	<10	100	0.6	<2	1.8	45.1	12	1	60	4.73	<10	<1	0.25	10	0.48	1535	9	0.01	2	1030	580	1.5	3	3	56	<20	0.01	<10	<10	42	<10	4050
E212233	0.05	3.8	0.75	6	<10	520	0.8	6	1.37	68.2	14	2	387	7.56	<10	<1	0.24	10	0.93	2980	<1	0.02	4	1040	910	0.29	<2	6	82	<20	0.02	<10	<10	99	<10	2810
E212234	0.03	1.3	0.57	6	<10	90	0.6	<2	1.37	24.3	10	2	374	5.83	<10	<1	0.24	10	0.63	2200	<1	0.02	1	1040	130	0.2	2	4	61	<20	0.02	<10	<10	77	<10	2240
E212235	0.02	3.2	1.49	73	<10	60	0.5	<2	2.4	31	13	2	77	4.76	10	<1	0.22	10	1.01	3040	3	0.02	4	1100	288	0.91	<2	5	89	<20	0.01	<10	<10	75	<10	1470

VA07081289 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 124
DATE RECEIVED : 2007-07-24 DATE FINALIZED : 2007-08-20
PROJECT : "Ranch A07-BON-31"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E212312	1.34	1.9	0.02	25	<10	10	<0.5	7	<0.01	<0.5	22	16	329	4.88	<10	2	<0.01	<10	<0.01	67	7	<0.01	5	30	15	4.76	10	<1	66	<20	<0.01	<10	<10	2	<10	6
E212313	1.22	1.4	0.29	23	<10	10	<0.5	5	0.04	<0.5	18	9	173	5.22	<10	2	0.03	<10	0.01	54	7	<0.01	3	90	32	5.56	3	1	57	<20	<0.01	<10	<10	5	<10	15
E212314	0.79	1	0.52	26	<10	10	<0.5	5	0.01	<0.5	16	7	136	5.12	<10	1	0.01	<10	<0.01	46	7	<0.01	4	60	38	5.36	<2	1	64	<20	<0.01	<10	<10	6	<10	16
E212315	34.1	14.9	0.3	470	<10	30	<0.5	<2	0.11	<0.5	7	40	42	3.06	<10	4	0.16	<10	0.06	143	10	<0.01	12	380	7	2.15	33	1	5	<20	<0.01	10	<10	12	<10	52
E212316	0.22	0.3	1.43	37	<10	20	<0.5	2	0.01	<0.5	12	3	55	3.98	<10	1	<0.01	<10	<0.01	31	1	<0.01	2	90	54	4.33	2	1	94	<20	<0.01	<10	<10	15	<10	5
E212317	0.06	0.2	1.04	33	<10	20	<0.5	2	0.03	<0.5	11	2	51	3.73	<10	1	0.07	<10	0.01	38	1	<0.01	3	130	40	4.03	<2	2	109	<20	<0.01	<10	<10	14	<10	10
E212318	<0.01	0.7	1.89	23	<10	30	0.5	<2	0.94	2	8	2	141	3.63	<10	<1	0.5	<10	0.18	134	1	<0.01	2	740	9	4.63	21	3	54	<20	<0.01	<10	<10	24	<10	266
E212319	<0.01	0.4	1.63	20	<10	30	1.2	<2	1.33	1.4	8	1	16	3.49	<10	<1	0.31	<10	0.4	394	1	<0.01	2	730	9	4.63	<2	3	50	<20	<0.01	<10	<10	25	<10	274
E212320	<0.01	0.3	1.26	17	<10	30	0.9	<2	2.26	1.3	7	1	12	3.34	<10	1	0.24	<10	0.74	1110	<1	0.01	2	650	16	4.6	2	3	67	<20	<0.01	<10	<10	29	<10	256
E212321	<0.01	0.2	1.48	15	<10	40	0.9	<2	2.71	<0.5	7	1	11	3.47	<10	<1	0.32	10	1.02	1560	<1	0.01	3	760	29	4.54	<2	4	126	<20	<0.01	<10	<10	39	<10	129
E212322	<0.01	0.2	0.93	11	<10	30	0.7	<2	3.36	<0.5	6	1	10	3.04	<10	1	0.21	10	1.27	2380	<1	0.01	1	700	17	4.14	<2	4	146	<20	<0.01	<10	<10	39	<10	101
E212323	<0.01	0.9	1.61	17	<10	30	0.9	<2	3.54	0.7	6	2	12	3.19	<10	<1	0.41	10	1.39	2630	1	0.02	2	680	16	4.49	<2	4	180	<20	<0.01	<10	<10	39	<10	144
E212324	<0.01	0.2	0.96	7	<10	40	0.8	<2	2.98	<0.5	6	2	11	3.22	<10	<1	0.26	10	1.14	2290	<1	0.02	2	760	5	4.51	<2	4	212	<20	<0.01	<10	<10	36	<10	63
E212325	<0.01	0.2	0.79	12	<10	50	0.8	<2	3.09	<0.5	7	1	11	3.42	<10	1	0.19	10	1.32	2910	<1	0.02	2	800	12	4.56	<2	4	131	<20	<0.01	<10	<10	41	<10	84
E212326	<0.01	0.2	0.96	9	<10	50	0.6	<2	3.08	<0.5	6	1	10	3.15	<10	<1	0.26	10	1.25	2870	<1	0.02	2	790	6	4.3	<2	3	117	<20	<0.01	10	<10	39	<10	50
E212327	<0.01	0.2	1.84	10	10	40	0.6	<2	2.7	<0.5	6	1	13	3.13	<10	1	0.41	10	1.44	2620	<1	0.02	2	750	6	3.92	<2	4	77	<20	<0.01	<10	<10	40	<10	56
E212328	<0.01	0.3	0.93	10	<10	40	0.5	<2	3.07	<0.5	6	1	10	2.76	<10	1	0.22	10	1.25	2320	1	0.02	1	700	6	3.82	<2	3	128	<20	<0.01	<10	<10	28	<10	50
E212329	<0.01	0.2	0.96	8	<10	40	0.5	<2	2.3	<0.5	6	1	10	3.08	<10	1	0.23	10	1.06	2070	1	0.02	3	750	7	3.77	<2	3	104	<20	<0.01	<10	<10	31	<10	53
E212330	0.01	<0.2	1.56	2	<10	90	<0.5	<2	0.86	<0.5	7	33	37	3.02	<10	<1	0.11	<10	0.73	501	4	0.08	22	570	3	0.05	<2	4	42	<20	0.14	<10	<10	58	<10	43
E212331	0.01	0.5	1.09	22	<10	70	0.5	<2	2.48	<0.5	7	1	12	2.88	<10	<1	0.24	10	1.2	2500	<1	0.02	2	760	12	3.6	<2	3	60	<20	<0.01	<10	<10	34	<10	73
E212332	<0.01	0.6	1.05	29	<10	90	0.6	<2	2.62	<0.5	6	2	12	2.79	<10	1	0.23	10	1.25	2540	<1	0.03	1	750	7	3.56	<2	3	78	<20	<0.01	<10	<10	29	<10	61
E212333	<0.01	0.4	1.09	13	<10	40	0.5	<2	2.81	<0.5	6	1	11	2.94	<10	<1	0.2	10	1.25	2590	<1	0.03	3	730	10	3.99	<2	4	82	<20	<0.01	<10	<10	31	<10	65
E212334	<0.01	0.3	1.15	8	<10	40	0.5	<2	2.75	<0.5	6	2	11	3.14	<10	<1	0.19	10	1.19	2130	<1	0.03	2	760	8	4.26	<2	4	104	<20	<0.01	<10	<10	33	<10	69
E212335	<0.01	0.3	1.15	11	<10	40	0.5	<2	3.09	<0.5	6	1	11	3.08	<10	1	0.23	10	1.28	2340	<1	0.03	1	770	5	4.38	<2	3	80	<20	<0.01	<10	<10	25	<10	66
E212336	<0.01	0.2	0.96	7	<10	30	0.5	<2	3.16	<0.5	6	2	10	2.91	<10	1	0.18	10	1.2	2140	<1	0.03	2	710	6	4.25	<2	3	99	<20	<0.01	<10	<10	28	<10	56
E212337	<0.01	0.2	1.05	8	<10	50	0.5	<2	2.73	<0.5	6	1	12	3.04	<10	1	0.19	10	1.19	2130	<1	0.03	2	750	6	4.12	<2	3	79	<20	<0.01	<10	<10	28	<10	61
E212338	<0.01	<0.2	1.12	8	<10	60	0.5	<2	2.52	<0.5	6	2	11	3.1	<10	<1	0.19	10	1.22	2280	<1	0.04	3	780	6	3.98	<2	3	84	<20	<0.01	<10	<10	32	<10	63
E212339	0.01	0.2	1.02	10	<10	50	0.5	<2	2.63	<0.5	6	1	11	3.01	<10	<1	0.18	10	1.2	2380	1	0.03	4	730	6	3.92	<2	3	107	<20	<0.01	<10	<10	30	<10	59
E212340	<0.01	0.3	0.96	6	<10	50	<0.5	<2	2.59	<0.5	6	2	11	3.08	<10	1	0.18	10	1.07	2130	1	0.04	3	750	7	4.13	<2	3	94	<20	<0.01	<10	<10	32	<10	62
E212341	<0.01	0.2	1.44	7	<10	80	<0.5	<2	0.78	<0.5	7	30	35	2.84	<10	1	0.1	<10	0.69	469	4	0.07	21	540	3	0.05	<2	4	37	<20	0.13	<10	<10	54	<10	41
E212342	<0.01	0.3	1.53	10	<10	40	0.6	<2	2.75	<0.5	6	2	11	3.07	<10	1	0.29	10	1.23	1940	1	0.04	2	730	7	4.15	<2	4	106	<20	<0.01	<10	<10	37	<10	52
E212343	0.03	0.7	0.74	24	<10	20	0.5	<2	2.94	<0.5	6	2	12	2.89	<10	1	0.22	10	0.68	941	2	0.03	2	610	25	4.76	<2	3	307	<20	<0.01	<10	<10	20	<10	76
E212344	<0.01	0.3	0.9	9	<10	30	0.5	<2	3.73	<0.5	5	1	10	2.9	<10	<1	0.18	10	1.29	2320	1	0.03	2	690	7	4.64	<2	3	147	<20	<0.01	<10	<10	30	<10	63
E212345	<0.01	0.2	0.91	3	<10	30	<0.5	<2	3.15	<0.5	6	2	10	2.81	<10	1	0.17	10	1.25	2350	1	0.04	3	690	6	4.09	<2	3	161	<20	<0.01	<10	<10	31	<10	51
E212346	<0.01	0.2	1.02	11	<10	30	<0.5	<2	3.24	<0.5	6	2	11	2.79	<10	<1	0.16	10	1.23	2320	<1	0.04	3	700	7	4.27	<2	4	174	<20	<0.01	<10	<10	32	<10	53
E212347	<0.01	0.2	1.08	9	<10	60	0.5	<2	2.54	<0.5	6	2	12	2.85	<10	1	0.18	10	1.14	2060	1	0.04	3	720	6	3.87	<2	3	103	<20	<0.01	<10	<10	32	<10	58
E212348	<0.01	0.2	1.05	9	<10	70	0.5	<2	2.06	<0.5	7	2	11	3.07	<10	<1	0.2	10	1.1	2040	1	0.04	2	770	5	3.71	<2	4	103	<20	<0.01	<10	<10	34	<10	61
E212349	0.01	0.3	0.96	7	<10	20	0.5	<2	2.66	<0.5	6	2	10	3.02	<10	1	0.17	10	1.06	1950	<1	0.04	4	720	10	4.11	<2	3	207	<20	<0.01	<10	<10	32	<10	72
E212350	0.01	1	0.99	17	<10	20	0.6	<2	2.6	1.1	6	2	13	3.27	<10	1	0.2	10	0.98	1840	1	0.04	4	770	56	4.48	<2	3	184	<20	<0.01	<10	<10	37	<10	290
E212351	<0.01	0.7	0.8	16	<10	30	0.5	<2	2.55	1.1	7	1	14	3.27	<10	1	0.18	10	0.83	1590	1	0.04	2	780	61	4.56	<2	3	199	<20	<0.01	<10	<10	35	<10	289
E212352	<0.01	1.4	0.94	10	<10	30	0.6	<2	2.44	<0.5	7	2	12	3.2																						

ALS CHEMEX
CHUAGO
VA07092471

2007-09-20

		Au_ppm_AA26	Ag_ppm_ME-ICP41	Al_%_ME-ICP41	As_ppm_ME-ICP41	B_ppm_ME-ICP41	Ba_ppm_ME-ICP41	Be_ppm_ME-ICP41	Bi_ppm_ME-ICP41	Ca_%_ME-ICP41	Cd_ppm_ME-ICP41	Co_ppm_ME-ICP41	Cr_ppm_ME-ICP41	Cu_ppm_ME-ICP41	Fe_%_ME-ICP41	Ga_ppm_ME-ICP41	Hg_ppm_ME-ICP41	K_%_ME-ICP41	La_ppm_ME-ICP41	Mg_%_ME-ICP41	Mn_ppm_ME-ICP41	Mo_ppm_ME-ICP41	Na_%_ME-ICP41	Ni_ppm_ME-ICP41	P_ppm_ME-ICP41	Pb_ppm_ME-ICP41	S_%_ME-ICP41	Sb_ppm_ME-ICP41	Sc_ppm_ME-ICP41	Sr_ppm_ME-ICP41	Th_ppm_ME-ICP41	Tl_%_ME-ICP41	Tl_ppm_ME-ICP41	U_ppm_ME-ICP41	V_ppm_ME-ICP41	W_ppm_ME-ICP41	Zn_ppm_ME-ICP41	
E213170	A	0.03	0.3	1	14	<10	240	<0.5	2	0.09	<0.5	1	9	47	1.27	<10	3	0.29	<10	0.03	28	2	0.02	1	220	27	0.43	4	2	96	<20	<0.01	<10	<10	<10	<10	16	
E213180	A	<0.01	0.4	1	52	<10	30	0.9	<2	0.17	<0.5	5	1	53	4.51	<10	<1	0.53	10	0.06	252	<1	0.02	3	880	15	2.03	2	4	40	<20	<0.01	<10	<10	<10	<10	51	
E213181	A	<0.01	0.2	1.52	24	<10	20	1.1	<2	0.22	<0.5	10	1	15	4.31	<10	<1	0.31	10	0.06	166	<1	0.02	4	900	18	3.57	<2	3	16	<20	<0.01	<10	<10	<10	<10	70	
E213182	A	0.08	0.3	0.73	15	<10	20	<0.5	<2	0.13	<0.5	6	1	115	3.29	<10	<1	0.2	<10	0.03	37	6	0.02	2	180	115	3.39	3	2	30	<20	<0.01	<10	<10	<10	<10	34	
E213183	A	0.2	0.5	1.05	11	<10	10	<0.5	2	0.02	<0.5	8	1	37	3.5	<10	1	0.01	<10	<0.01	14	3	0.01	1	60	20	3.69	2	1	42	<20	<0.01	<10	<10	<10	<10	5	
E213184	A	0.22	0.2	0.88	10	<10	20	<0.5	<2	0.01	<0.5	7	2	37	3.48	<10	1	0.01	<10	<0.01	19	3	0.02	1	50	15	3.65	<2	1	56	<20	<0.01	<10	<10	<10	<10	5	
E213185	A	0.19	0.3	0.63	3	<10	30	<0.5	<2	0.01	<0.5	5	4	35	2.07	<10	2	0.01	<10	0.01	41	2	0.01	1	40	7	2	1	58	<20	<0.01	<10	<10	<10	<10	6		
E213186	A	0.01	<0.2	1.49	4	<10	80	<0.5	<2	0.89	<0.5	6	30	36	3.18	10	1	0.11	<10	0.74	485	4	0.1	20	580	3	0.05	2	41	<20	0.14	<10	<10	<10	<10	<10	41	
E213187	A	0.02	<0.2	1.49	15	<10	30	0.8	<2	0.21	1.2	10	2	76	3.66	<10	1	0.23	10	0.31	863	1	0.02	3	780	6	2.01	<2	3	47	<20	<0.01	<10	<10	<10	<10	125	
E213188	A	<0.01	0.7	1.35	39	<10	20	0.8	<2	0.35	3.9	13	1	103	4.18	<10	1	0.27	10	0.19	497	4	0.02	5	1130	139	3.42	4	15	<20	<0.01	<10	<10	<10	<10	307		
E213189	A	<0.01	0.2	0.8	33	<10	50	<0.5	3	0.18	<0.5	9	2	193	3.33	<10	1	0.25	<10	0.03	42	2	0.02	2	450	24	3.44	<2	3	130	<20	<0.01	<10	<10	<10	<10	19	
E213190	A	0.07	0.3	0.72	19	<10	10	<0.5	2	0.03	<0.5	8	2	40	3.88	<10	1	0.08	<10	0.01	24	2	0.01	2	130	19	3.99	2	1	106	<20	<0.01	<10	<10	<10	<10	10	
E213191	A	0.23	<0.2	0.83	9	<10	10	<0.5	2	0.01	<0.5	9	7	69	3.21	<10	<1	0.01	80	<0.01	21	2	0.01	1	80	28	3.27	6	8	88	<20	<0.01	<10	<10	<10	<10	7	
E213192	A	0.02	0.4	0.94	26	<10	10	<0.5	2	0.08	<0.5	8	23	112	3.84	<10	<1	0.12	<10	0.02	24	4	0.02	13	170	29	4.05	2	2	79	<20	<0.01	<10	<10	<10	<10	53	
E213193	A	<0.01	0.5	1.11	16	<10	30	<0.5	<2	0.25	2.3	8	12	329	3.15	<10	<1	0.26	<10	0.05	37	2	0.02	8	740	50	3.38	<2	3	147	<20	<0.01	<10	<10	<10	<10	347	
E213194	A	<0.01	<0.2	1.41	12	<10	20	0.7	<2	0.7	1.2	12	5	107	3.98	<10	<1	0.23	10	0.36	494	1	0.02	5	1100	13	3.79	<2	3	20	<20	<0.01	<10	<10	<10	<10	90	
E213195	A	<0.01	<0.2	1.47	11	<10	20	0.7	<2	1.04	0.7	13	3	15	4.35	<10	<1	0.23	10	0.32	708	1	0.02	3	910	13	4.17	<2	3	14	<20	<0.01	<10	<10	<10	<10	27	
E213196	A	<0.01	0.2	1.22	9	<10	20	0.8	<2	2.4	<0.5	12	1	11	4.57	<10	<1	0.22	10	0.5	1445	<1	0.02	3	730	11	4.17	<2	3	19	<20	<0.01	<10	<10	<10	<10	130	
E213197	A	<0.01	<0.2	1.22	11	<10	30	0.6	<2	3.44	<0.5	8	1	14	1705	<10	2	0.28	20	0.7	1705	<1	0.03	1	850	12	3.44	<2	3	26	<20	<0.01	<10	<10	<10	<10	50	
E213198	A	<0.01	<0.2	1.04	9	<10	30	0.5	<2	3.54	<0.5	7	2	11	3.25	<10	1	0.3	<10	0.81	1520	<1	0.03	1	850	8	3.4	<2	2	26	<20	<0.01	<10	<10	<10	<10	43	
E213199	A	<0.01	<0.2	0.92	6	<10	20	0.5	<2	3.2	<0.5	8	3	11	3.5	<10	1	0.25	20	0.55	1320	<1	0.03	1	840	10	3.77	<2	2	25	<20	<0.01	<10	<10	<10	<10	128	
E213200	A	<0.01	0.2	1.06	7	<10	20	0.5	<2	2.94	0.6	8	2	11	3.53	<10	<1	0.28	10	0.53	1305	<1	0.03	3	820	16	3.73	<2	2	27	<20	<0.01	<10	<10	<10	<10	118	
E213201	A	4.75	6.3	0.25	461	<10	30	<0.5	<2	0.11	<0.5	11	459	49	3.76	<10	7	0.15	<10	0.05	229	16	0.02	16	330	3	1.89	59	1	5	<20	<0.01	<10	<10	<10	<10	37	
E213202	A	0.05	<0.2	0.76	12	<10	30	<0.5	<2	2.35	<0.5	7	19	38	2.9	<10	1	0.22	10	0.37	1190	4	0.03	4	630	14	2.05	<2	2	47	<20	<0.01	<10	<10	<10	<10	20	
E213203	A	<0.01	<0.2	0.96	8	<10	30	0.5	<2	3.61	<0.5	7	4	11	3.25	<10	<1	0.26	10	0.59	1995	<1	0.03	1	850	7	2.62	<2	3	36	<20	<0.01	<10	<10	<10	<10	56	
E213204	A	<0.01	0.2	0.81	4	<10	170	0.6	2	3.35	<0.5	9	3	11	3.06	<10	1	0.19	10	0.7	2510	3	0.02	4	840	16	1.40	<2	3	54	<20	<0.01	<10	<10	<10	<10	98	
E213205	A	<0.01	<0.2	1.05	8	<10	80	0.5	<2	3.3	<0.5	8	1	11	3.02	<10	1	0.21	10	0.55	2070	1	0.03	3	810	7	2.31	<2	3	43	<20	<0.01	<10	<10	<10	<10	70	
E213206	A	<0.01	0.3	1.13	11	<10	20	0.6	3	3.32	<0.5	9	1	14	3.19	<10	1	0.21	10	0.54	1545	1	0.01	1	800	12	3.21	<2	3	40	<20	<0.01	<10	<10	<10	<10	102	
E213207	A	<0.01	0.5	1.1	10	<10	1160	0.6	3	1.38	0.5	6	2	16	3.84	<10	<1	0.23	10	0.37	729	5	0.03	<1	910	39	0.18	<2	5	65	<20	0.02	<10	<10	<10	<10	130	
E213208	A	0.01	0.6	1.42	12	<10	1300	0.6	2	0.64	<0.5	3	2	12	3.43	<10	<1	0.29	20	0.32	122	2	0.02	1	960	12	0.05	<2	3	74	<20	0.01	<10	<10	<10	<10	50	
E213209	A	<0.01	0.2	0.92	4	<10	760	0.5	2	3.97	<0.5	4	2	22	2.87	<10	1	0.27	10	0.31	912	<1	0.03	<1	920	9	0.03	<2	3	90	<20	0.01	<10	<10	<10	<10	41	
E213198	LABDUP	<0.01																																				
BLANK	LABSTD	<0.01																																				
BLANK	LABSTD	<0.01																																				
BLANK	LABSTD		<0.2	<0.01	<2	<10	<10	<0.5	<2	<0.01	<0.5	<1	<1	<1	<0.01	<10	<1	<0.01	<10	<0.01	<5	1	<0.01	<1	<10	<2	<0.01	<2	<1	<1	<20	<0.01	<10	<10	<10	<10	<2	
BLANK	LABSTD																																					
CHFS3	LABSTD	0.79																																				
ST-327	LABSTD	6.88																																				
ST-327	LABSTD	6.75																																				
G2000	LABSTD		3.6	1.87	487	<10	850	1	<2	0.51	7	23	70	296	3.85	10	2	0.42	20	0.67	545	5	0.04	267	940	669	0.28	21	7	66	<20	0.05	<10	<10	<10	67	<10	1290
GBM398-4c	LABSTD		52.4	0.44	7	<10	20	<0.5	12	0.3	7.4	1885	1925	3710	3.69	<10	3	0.08	<10	0.1	4800	879	0.21	4010	170	>1000												

VA07101896 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 105
DATE RECEIVED : 2007-08-31 DATE FINALIZED : 2007-10-15
PROJECT : "RANCH-A07-033"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

E213286	<0.01	0.3	1.41	4	<10	90	<0.5	<2	0.82	<0.5	7	32	36	3.06	10	<1	0.09	<10	0.71	466	3	0.07	20	550	4	0.05	<2	4	37	<20	0.13	<10	<10	55	<10	41
E213287	0.01	0.8	0.49	42	<10	10	0.6	<2	1.66	3.5	8	2	95	3.69	<10	<1	0.21	<10	0.1	134	<1	<0.01	2	800	15	5.11	23	1	85	<20	<0.01	<10	<10	8	<10	472
E213288	0.03	0.3	0.48	8	<10	10	<0.5	3	4.86	<0.5	6	3	16	2.71	<10	<1	0.02	<10	0.04	70	1	<0.01	3	360	15	6.82	2	2	168	<20	<0.01	<10	<10	13	<10	42
E213289	0.22	0.4	0.39	12	<10	10	<0.5	2	5.82	<0.5	7	2	35	2.78	<10	1	<0.01	<10	0.01	35	1	<0.01	1	50	17	7.95	2	1	465	<20	<0.01	<10	<10	7	<10	4
E213290	0.16	<0.2	0.5	17	<10	10	<0.5	2	3.11	<0.5	9	2	28	3.82	<10	<1	<0.01	<10	<0.01	35	2	<0.01	3	20	10	6.7	<2	1	249	<20	<0.01	<10	<10	13	<10	3
E213291	0.06	0.2	0.41	11	<10	10	<0.5	<2	2.87	<0.5	8	4	13	3.3	<10	<1	<0.01	<10	<0.01	36	1	<0.01	3	20	9	5.94	2	1	230	<20	<0.01	<10	<10	6	<10	4
E213292	0.04	<0.2	0.53	11	<10	10	<0.5	2	3.28	<0.5	7	3	10	2.95	<10	<1	<0.01	<10	0.08	108	1	<0.01	2	390	26	5.85	3	3	172	<20	<0.01	<10	<10	12	<10	17
E213293	0.06	0.2	0.5	15	<10	10	<0.5	<2	3.23	<0.5	7	2	8	2.52	<10	1	0.01	<10	0.02	46	4	<0.01	2	520	44	5.53	<2	2	138	<20	<0.01	<10	<10	10	<10	15
E213294	0.11	<0.2	0.58	20	<10	10	<0.5	<2	2.1	<0.5	8	2	12	3.23	<10	<1	0.01	<10	0.02	43	2	<0.01	2	200	40	5.13	2	2	219	<20	<0.01	<10	<10	12	<10	54
E213295	0.2	0.3	0.37	26	<10	10	<0.5	<2	2.82	<0.5	10	3	19	2.99	<10	<1	0.02	<10	0.01	40	4	<0.01	1	70	14	5.47	2	1	189	<20	<0.01	<10	<10	6	<10	3
E213296	0.31	0.2	0.03	16	<10	10	<0.5	<2	3.39	<0.5	7	11	20	1.81	<10	<1	<0.01	<10	<0.01	74	1	<0.01	2	10	15	4.14	2	<1	194	<20	<0.01	<10	<10	1	<10	<2
E213297	0.34	0.3	0.01	8	<10	10	<0.5	<2	3.95	<0.5	7	10	26	1.35	<10	<1	<0.01	<10	<0.01	48	1	<0.01	2	<10	6	4.37	3	<1	222	<20	<0.01	<10	<10	1	<10	<2
E213298	0.47	0.6	0.01	7	<10	10	<0.5	<2	4.36	<0.5	10	6	34	1.75	<10	<1	<0.01	<10	<0.01	64	<1	<0.01	1	<10	8	5.01	<2	<1	213	<20	<0.01	<10	<10	<1	<10	<2
E213299	0.91	1.1	0.05	12	<10	10	<0.5	2	4.91	<0.5	13	12	71	2.6	<10	1	0.01	<10	<0.01	55	4	<0.01	3	10	18	6.46	3	<1	241	<20	<0.01	<10	<10	1	<10	2
E213300	0.37	0.5	0.03	6	<10	10	<0.5	<2	4.27	<0.5	9	16	53	1.97	<10	<1	<0.01	<10	<0.01	76	3	<0.01	3	10	8	4.83	2	<1	252	<20	<0.01	<10	<10	1	<10	<2
E213301	4.68	5.4	0.24	499	<10	30	<0.5	<2	0.12	<0.5	13	489	52	3.89	<10	8	0.14	<10	0.05	241	16	<0.01	360	300	7	1.83	64	1	5	<20	<0.01	10	<10	18	<10	41
E213302	0.5	0.4	0.05	9	<10	10	<0.5	<2	2.99	<0.5	13	17	61	3.35	<10	2	<0.01	<10	<0.01	67	4	<0.01	3	10	10	5.21	3	<1	163	<20	<0.01	<10	<10	1	<10	2
E213303	1.38	2.1	0.11	20	<10	10	<0.5	<2	2.93	<0.5	33	9	198	6.69	<10	3	0.01	<10	<0.01	90	3	<0.01	7	10	17	8.46	3	<1	176	<20	<0.01	<10	<10	2	<10	5
E213304	0.76	1.1	0.02	14	<10	20	<0.5	2	4.1	<0.5	19	9	76	4.13	<10	1	<0.01	<10	<0.01	61	1	<0.01	4	<10	13	7.06	4	<1	191	<20	<0.01	<10	<10	1	<10	4
E213305	0.21	0.2	0.02	6	<10	20	<0.5	<2	3.57	<0.5	5	12	12	1.35	<10	<1	<0.01	<10	<0.01	82	1	<0.01	2	<10	5	3.49	2	<1	151	<20	<0.01	<10	<10	1	<10	2
E213306	0.33	0.3	0.06	7	<10	10	<0.5	<2	2.57	<0.5	10	20	22	2.02	<10	<1	<0.01	<10	<0.01	66	1	<0.01	2	10	12	3.43	3	<1	126	<20	<0.01	<10	<10	1	<10	3
E213307	0.34	0.6	0.02	13	<10	10	<0.5	<2	2.82	<0.5	15	12	99	3.72	<10	1	<0.01	<10	<0.01	62	2	<0.01	4	10	12	5.59	2	<1	153	<20	<0.01	<10	<10	1	<10	3
E213308	0.41	0.7	0.12	13	<10	10	<0.5	<2	2.53	<0.5	14	13	76	3.18	<10	<1	<0.01	<10	<0.01	81	6	<0.01	3	10	9	4.61	4	<1	131	<20	<0.01	<10	<10	2	<10	10
E213309	0.58	0.8	0.11	9	<10	10	<0.5	<2	4.21	<0.5	16	9	76	3.21	<10	3	<0.01	<10	0.01	116	1	<0.01	3	10	13	5.94	3	<1	278	<20	<0.01	<10	<10	1	<10	14
E213310	<0.01	1.1	0.66	29	<10	20	0.7	<2	2.5	6.3	8	2	31	4.16	<10	<1	0.16	10	0.55	1020	<1	0.01	2	680	244	4.91	3	3	119	<20	<0.01	<10	<10	28	<10	980
E213311	0.18	0.4	0.5	15	<10	10	<0.5	<2	4.35	<0.5	11	6	29	3.91	<10	2	0.01	<10	0.01	116	1	<0.01	2	80	33	6.67	3	1	485	<20	<0.01	<10	<10	8	<10	24
E213312	<0.01	1.3	0.69	44	<10	20	0.7	<2	2	4.9	8	2	12	3.93	<10	1	0.19	10	0.88	1575	<1	0.02	2	780	274	3.71	4	3	86	<20	<0.01	<10	<10	29	<10	878
E213313	<0.01	0.3	0.61	70	<10	50	0.6	<2	2.7	2.6	8	3	14	3.2	<10	<1	0.18	10	1.12	2400	<1	0.02	2	820	155	1.95	3	3	91	<20	<0.01	<10	<10	40	<10	427
E213314	<0.01	<0.2	0.7	29	<10	100	0.5	<2	2.66	0.5	7	2	9	3.39	<10	1	0.19	10	0.81	1760	<1	0.02	1	820	21	1.76	<2	3	79	<20	<0.01	<10	<10	43	<10	114

ALS CHEMEX
CHJAGO
VA07090882
2007-09-21

		Au_ppm	Ag_ppm	Al_%_ME-	As_ppm	B_ppm_M	Ba_ppm	Be_ppm	Bi_ppm_M	Ca_%_ME-	Cd_ppm	Co_ppm	Cr_ppm	Cu_ppm	Fe_%_ME-	Ga_ppm	Hg_ppm	K_%_ME-	La_ppm	Mg_%_M	Mn_ppm	Mo_ppm	Na_%_ME-	Ni_ppm	P_ppm_M	Pb_ppm	S_%_ME-	Sb_ppm	Sc_ppm	Sr_ppm	Th_ppm	Ti_%_ME-	Tl_ppm_M	U_ppm_M	V_ppm_M	W_ppm	Zn_ppm	
		AA26	ME-ICP41	ICP41	ME-ICP41	E-ICP41	ME-ICP41	ME-ICP41	E-ICP41	ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ICP41	ME-ICP41	ME-ICP41	ICP41	ME-ICP41	E-ICP41	ME-ICP41	ME-ICP41	ICP41	ME-ICP41	E-ICP41	ME-ICP41	ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ICP41	E-ICP41	E-ICP41	E-ICP41	E-ICP41	ME-ICP41	ME-ICP41
E212913	A	0.22	<0.2	2.16	2	<10	170	<0.5	<2	2.46	<0.5	6	4	2	3.54	10	<1	0.16	10	0.81	797	<1	0.04	1	1060	3	0.01	<2	3	153	<20	0.01	<10	<10	34	<10	54	
E212914	A	0.5	0.3	0.41	2	<10	480	<0.5	<2	0.03	<0.5	1	16	7	0.7	<10	<1	0.06	<10	0.03	66	2	0.01	2	70	4	0.08	<2	1	48	<20	0.01	<10	<10	7	<10	6	
E212915	A	0.64	0.4	0.57	8	<10	210	<0.5	<2	0.02	<0.5	1	6	224	0.89	<10	<1	0.12	<10	0.01	18	3	<0.01	1	60	23	0.55	5	1	43	<20	<0.01	<10	<10	6	<10	7	
E212916	A	36.3	0.3	0.03	<2	<10	10	<0.5	<2	<0.01	<0.5	1	18	42	0.52	<10	<1	0.01	<10	<0.01	31	1	<0.01	1	10	3	0.04	15	<1	6	<20	<0.01	<10	<10	1	<10	3	
E212917	A	1.69	17.3	0.27	476	<10	20	<0.5	<2	0.1	<0.5	5	40	41	3.12	<10	3	0.17	<10	0.05	139	10	<0.01	12	370	4	2.06	27	1	5	<20	<0.01	10	<10	12	<10	47	
E212918	A	0.26	5.2	0.06	113	<10	240	<0.5	<2	<0.01	16.5	2	28	5400	1.46	<10	16	0.01	<10	<0.01	63	3	<0.01	2	10	15	0.66	972	<1	18	<20	<0.01	<10	<10	3	<10	264	
E212919	A	0.26	0.5	0.01	11	<10	650	<0.5	<2	<0.01	<0.5	<1	19	61	0.7	<10	1	0.01	<10	<0.01	30	4	0.01	2	20	7	0.09	43	<1	18	<20	<0.01	<10	<10	1	<10	3	
E212920	A	0.31	0.3	0.01	8	<10	560	<0.5	<2	<0.01	<0.5	1	16	25	0.59	<10	<1	0.01	<10	<0.01	26	3	0.01	<1	20	7	0.08	32	<1	16	<20	<0.01	<10	<10	1	<10	<2	
E212921	A	0.37	0.5	0.03	8	<10	50	<0.5	<2	0.01	<0.5	6	21	221	2.31	<10	2	0.01	<10	<0.01	53	3	<0.01	3	30	8	1.73	23	1	28	<20	<0.01	<10	<10	1	<10	4	
E212922	A	0.88	0.4	0.01	3	<10	180	<0.5	<2	0.01	<0.5	1	25	116	0.94	<10	<1	0.01	<10	<0.01	33	5	<0.01	2	40	7	0.28	18	1	27	<20	<0.01	<10	<10	1	<10	2	
E212923	A	0.5	0.3	0.01	2	<10	390	<0.5	<2	0.01	<0.5	2	23	121	0.91	<10	<1	0.01	<10	<0.01	33	3	0.01	2	10	4	0.46	9	<1	21	<20	<0.01	<10	<10	1	<10	<2	
E212924	A	0.66	0.3	0.02	23	<10	20	<0.5	<2	0.01	<0.5	9	24	268	3.11	<10	1	0.01	<10	<0.01	67	8	<0.01	3	40	9	2.44	11	1	37	<20	<0.01	<10	<10	1	<10	2	
E212925	A	0.02	0.2	1.1	22	<10	60	<0.5	<2	0.1	0.8	12	3	112	3.36	<10	1	0.16	<10	0.03	126	4	<0.01	2	560	9	3.29	3	2	294	<20	<0.01	<10	<10	15	<10	37	
E212926	A	<0.01	<0.2	0.87	53	<10	20	0.7	<2	0.26	1.1	10	<1	14	3.03	<10	<1	0.26	10	0.06	403	3	<0.01	2	780	25	2.76	<2	2	66	<20	<0.01	<10	<10	18	<10	160	
E212927	A	0.05	<0.2	1.07	57	<10	20	1.2	<2	0.36	0.5	15	1	12	5.03	<10	<1	0.36	10	0.33	1710	1	0.01	3	930	13	2.8	<2	3	9	<20	<0.01	<10	<10	32	<10	196	
E212928	A	0.47	<0.2	1.01	27	<10	30	0.8	<2	0.26	1.4	11	2	33	3.07	<10	<1	0.26	10	0.2	825	1	<0.01	3	760	16	1.84	2	2	18	<20	<0.01	<10	<10	28	<10	156	
E212929	A	0.05	0.2	0.94	17	<10	20	<0.5	<2	0.01	0.6	10	9	425	2.73	<10	<1	0.02	<10	<0.01	28	5	<0.01	1	0.02	18	2.82	12	1	204	<20	<0.01	<10	<10	6	<10	16	
E212930	A	0.02	<0.2	1.13	124	<10	30	<0.5	<2	0.19	1.5	11	1	114	3.52	<10	<1	0.28	<10	0.07	54	6	0.01	2	740	26	3.72	<2	2	84	<20	<0.01	<10	<10	14	<10	77	
E212931	A	0.01	<0.2	1.74	5	<10	110	<0.5	<2	0.91	<0.5	8	34	39	3.43	10	<1	0.13	<10	0.78	521	4	0.09	21	640	3	0.15	<2	5	49	<20	0.15	<10	<10	61	<10	48	
E212932	A	2.42	0.3	1.05	52	<10	10	<0.5	<2	0.04	1.3	12	1	238	4.08	<10	<1	0.14	<10	0.02	37	4	<0.01	2	200	31	4.37	<2	2	167	<20	<0.01	<10	<10	13	<10	33	
E212933	A	0.92	0.2	1.67	14	<10	10	<0.5	<2	0.01	0.9	12	1	202	4.01	<10	1	0.01	<10	<0.01	27	4	<0.01	3	80	25	4.29	<2	1	104	<20	<0.01	<10	<10	16	<10	4	
E212934	A	0.47	0.2	1.31	23	<10	10	<0.5	<2	0.01	1.5	12	<1	218	4.4	<10	1	0.01	<10	<0.01	32	5	<0.01	3	70	31	4.75	2	1	92	<20	<0.01	<10	<10	14	<10	6	
E212935	A	0.18	0.3	1.6	21	<10	10	<0.5	<2	0.01	1.1	11	<1	271	4.18	<10	<1	0.01	<10	<0.01	34	5	<0.01	2	50	20	4.48	9	2	48	<20	<0.01	<10	<10	21	<10	16	
E212936	A	0.35	0.2	1.06	40	<10	10	<0.5	<2	0.03	1	10	1	353	4.14	<10	1	0.22	<10	0.02	42	3	<0.01	3	220	33	4.38	4	3	124	<20	<0.01	<10	<10	15	<10	123	
E212937	A	0.08	0.2	1.34	21	<10	10	<0.5	<2	0.02	0.6	10	1	176	3.83	<10	<1	0.12	<10	0.01	37	5	<0.01	1	220	26	4.06	2	2	198	<20	<0.01	<10	<10	17	<10	26	
E212938	A	0.09	0.3	1.07	46	<10	10	<0.5	<2	0.06	4.5	12	1	84	4.4	<10	1	0.26	<10	0.02	49	4	<0.01	3	470	86	4.6	<2	2	381	<20	<0.01	<10	<10	13	<10	124	
E212939	A	0.07	<0.2	1.55	38	<10	10	<0.5	<2	0.01	0.8	10	2	155	4.05	<10	<1	0.02	<10	0.01	35	3	<0.01	3	110	17	4.37	<2	2	105	<20	<0.01	<10	<10	15	<10	8	
E212940	A	0.34	0.2	1.68	49	<10	10	<0.5	<2	0.01	<0.5	9	1	112	4.14	<10	1	0.01	<10	<0.01	36	3	<0.01	2	70	16	4.45	<2	3	61	<20	<0.01	<10	<10	18	<10	11	
E212941	A	0.11	<0.2	2.16	26	<10	10	<0.5	<2	0.01	<0.5	11	1	146	4.2	10	1	0.01	<10	<0.01	37	2	<0.01	3	100	33	4.52	5	2	128	<20	<0.01	<10	<10	18	<10	16	
E212942	A	0.01	<0.2	1.68	7	<10	90	<0.5	<2	0.91	<0.5	7	34	38	3.32	10	<1	0.11	<10	0.77	519	4	0.09	20	610	2	0.05	<2	5	46	<20	0.15	<10	<10	60	<10	41	
E212943	A	0.22	0.2	1.67	53	<10	10	<0.5	<2	0.01	0.8	13	1	211	4.05	10	1	0.01	<10	<0.01	28	2	<0.01	2	70	8	4.41	19	1	107	<20	<0.01	<10	<10	15	<10	24	
E212944	A	0.23	0.7	1.49	36	<10	10	<0.5	<2	0.09	3.6	10	1	90	4.3	<10	1	0.1	<10	0.02	23	6	<0.01	2	240	87	4.67	4	3	131	<20	<0.01	<10	<10	18	<10	328	
E212945	A	0.01	0.7	1.21	44	<10	10	0.7	<2	0.74	1.7	10	<1	13	4.05	<10	<1	0.29	10	0.35	594	2	0.01	3	920	89	4.29	<2	3	26	<20	<0.01	<10	<10	28	<10	355	
E212946	A	<0.01	0.5	1	24	<10	20	0.7	2	1.06	<0.5	12	2	18	4.18	<10	<1	0.24	10	0.64	1610	2	0.01	4	910	19	3.93	<2	4	28	<20	<0.01	<10	<10	55	<10	97	
E212947	A	<0.01	0.3	1.15	34	<10	40	0.8	2	2.26	<0.5	9	1	16	3.9	<10	<1	0.26	10	1.22	3040	1	0.02	<1	890	10	3.6	2	4	35	<20	<0.01	<10	<10	55	<10	89	
E212948	A	<0.01	<0.2	0.98	34	<10	40	0.5	<2	1.95	<0.5	9	2	17	3.78	<10	<1	0.21	10	1.03	2380	<1	0.02	<1	890	11	3.61	2	3	26	<20	<0.01	<10	<10	49	<10	94	
E212949	A	<0.01	<0.2	1.02	25	<10	40	0.5	3	1.64	<0.5	9	1	15	3.77	<10	<1	0.22	10	0.85	1855	1	0.02	<1	930	10	4.08	<2	3	25	<20	<0.01	<10	<10	40	<10	91	
E2																																						

E213001	A	4.84	6.2	0.24	514	<10	30	<0.5	<2	0.11	<0.5	13	493	53	3.79	<10	8	0.15	10	0.05	241	16	0.01	373	340	5	1.98	71	1	5	<20	<0.01	10	<10	18	<10	40
E213002	A	0.01	<0.2	1.02	14	<10	50	0.6	<2	3.16	0.6	7	3	11	3.26	<10	<1	0.25	10	0.55	535	1	0.04	<1	740	31	5.76	<2	3	137	<20	<0.01	<10	<10	36	<10	116
E213003	A	0.01	0.4	0.86	17	<10	20	0.5	<2	5.46	0.5	6	3	12	3.06	<10	1	0.19	10	0.72	921	5	0.04	<1	680	43	7.22	3	3	365	<20	<0.01	<10	<10	28	<10	146
E213004	A	<0.01	<0.2	1.25	17	<10	20	0.7	<2	2.38	<0.5	7	5	12	3.57	<10	1	0.2	10	1.13	1710	1	0.05	2	820	11	4.74	3	4	97	<20	<0.01	<10	<10	56	<10	79
E213005	A	0.01	0.6	0.57	17	<10	20	0.5	2	5.56	<0.5	7	2	13	2.83	<10	<1	0.23	<10	0.6	840	2	0.04	1	760	29	7.17	3	2	523	<20	<0.01	<10	<10	19	<10	73
E213006	A	<0.01	0.2	1.37	17	<10	20	0.7	<2	2.78	0.6	7	4	11	3.64	<10	<1	0.26	10	1.15	1810	2	0.05	<1	870	27	5.11	<2	5	130	<20	<0.01	<10	<10	90	<10	170
E213007	A	0.01	<0.2	1.08	12	<10	20	0.7	4	2.53	<0.5	8	2	11	3.39	<10	<1	0.2	10	1.28	1950	1	0.05	<1	830	16	4.69	<2	5	116	<20	<0.01	<10	<10	81	<10	132
E213008	A	0.01	1.2	0.94	33	<10	10	0.6	3	2.78	0.6	7	3	18	3.49	<10	<1	0.24	<10	0.61	679	2	0.05	2	670	53	5.72	5	3	305	<20	<0.01	<10	<10	28	<10	152
E213009	A	0.06	1.2	0.68	13	<10	10	<0.5	5	4.22	<0.5	7	5	19	3.41	<10	<1	0.16	<10	0.09	134	4	0.02	2	640	17	6.86	3	1	734	<20	<0.01	<10	<10	26	<10	37
E213010	A	0.01	1.1	0.83	20	<10	20	0.5	3	2.37	4.6	8	4	14	3.8	<10	1	0.33	<10	0.12	102	4	0.04	2	580	79	6	<2	2	130	<20	<0.01	<10	<10	24	<10	716
E213011	A	0.03	0.7	0.73	62	<10	10	0.6	<2	3.12	1.3	8	3	19	3.34	<10	1	0.21	<10	1.14	1340	2	0.04	<1	780	97	5.16	3	2	302	<20	<0.01	<10	<10	27	<10	271
E213012	A	0.01	<0.2	0.77	16	<10	20	0.5	3	5.82	<0.5	6	6	10	3.02	<10	<1	0.15	10	2.37	4400	2	0.04	<1	650	12	4.63	2	3	176	<20	<0.01	<10	<10	41	<10	94
E213013	A	<0.01	<0.2	0.66	23	<10	40	0.6	2	3.6	<0.5	7	3	10	3.08	<10	<1	0.17	10	2.13	3820	2	0.05	<1	740	12	3.25	2	2	130	<20	<0.01	<10	<10	39	<10	82
E213014	A	<0.01	0.4	0.7	18	<10	30	0.5	2	2.59	<0.5	8	5	12	3.25	<10	<1	0.19	10	1.36	2230	2	0.05	<1	770	19	4.1	2	2	107	<20	<0.01	<10	<10	32	<10	136
E213015	A	0.01	0.5	0.73	21	<10	30	0.5	3	2.88	0.9	9	4	14	3.58	<10	<1	0.23	10	1.36	2440	1	0.05	<1	810	24	4.41	3	2	117	<20	<0.01	<10	<10	31	<10	176
E213016	A	32.4	19.3	0.28	508	<10	30	<0.5	<2	0.11	<0.5	6	42	42	3.22	<10	4	0.16	10	0.06	148	10	0.01	11	390	9	2.17	35	1	5	<20	<0.01	<10	<10	12	<10	51
E213017	A	<0.01	<0.2	0.73	15	<10	30	0.5	<2	3	0.6	8	6	12	3.55	<10	<1	0.22	10	1.46	2940	1	0.05	2	830	12	4.38	2	2	100	<20	<0.01	<10	<10	33	<10	149
E213018	A	<0.01	0.3	0.83	21	<10	30	0.7	<2	3.39	1.2	11	7	20	3.52	<10	<1	0.23	10	1.27	2190	4	0.05	8	880	56	5.21	2	3	180	<20	<0.01	<10	<10	34	<10	237
E213019	A	0.01	0.6	1.19	22	<10	50	0.9	<2	1.97	1.9	9	5	15	3.98	<10	<1	0.31	10	1.01	1280	2	0.05	4	880	105	5.07	4	3	82	<20	<0.01	<10	<10	37	<10	360
E213020	A	0.01	1.1	1.01	51	<10	20	0.9	2	3.86	5.7	7	3	24	3.63	<10	<1	0.25	10	1.31	2030	4	0.05	3	700	191	5.63	4	3	224	<20	<0.01	<10	<10	62	<10	985
E213021	A	0.01	1.4	1.19	33	<10	50	1	2	2.01	8.2	9	2	27	3.9	<10	<1	0.28	10	0.93	1155	2	0.05	2	950	103	5.32	4	3	149	<20	<0.01	<10	<10	35	<10	1130
E213022	A	0.01	1.4	0.81	59	<10	20	0.8	<2	1.82	30.1	8	2	38	3.79	<10	<1	0.34	<10	0.24	245	4	0.05	1	780	99	5.46	4	2	132	<20	<0.01	<10	<10	12	<10	3430
E213023	A	0.01	1.3	1.3	72	<10	20	1.2	<2	1.14	54.8	9	3	68	4.15	<10	1	0.46	<10	0.36	337	1	0.06	3	870	89	5.24	6	2	152	<20	<0.01	<10	<10	21	<10	5680
E213024	A	0.04	0.7	0.75	28	<10	30	<0.5	4	2.47	0.6	8	6	16	4.04	<10	<1	0.04	<10	0.08	81	2	0.01	2	380	165	6.33	3	2	143	<20	<0.01	<10	<10	13	<10	130
E213025	A	0.13	0.7	0.9	30	<10	10	<0.5	2	3.58	<0.5	11	5	37	4.21	<10	<1	0.03	<10	0.02	83	2	0.01	4	430	36	7.16	3	2	320	<20	<0.01	<10	<10	13	<10	19
E213026	A	1	1.7	0.04	15	<10	10	<0.5	4	3.7	<0.5	18	30	226	4.41	<10	2	0.01	<10	<0.01	86	4	0.01	8	30	12	6.96	4	<1	259	<20	<0.01	<10	<10	1	<10	6
E213027	A	0.94	1.3	0.08	16	<10	10	<0.5	2	2.39	<0.5	23	22	239	4.15	<10	1	<0.01	<10	<0.01	68	1	0.01	6	10	6	5.84	4	<1	218	<20	<0.01	<10	<10	2	<10	6
E213028	A	0.23	1.3	0.95	16	<10	10	<0.5	<2	3.98	<0.5	16	10	55	3.63	<10	1	<0.01	<10	<0.01	54	3	0.01	4	10	122	7.03	3	1	422	<20	<0.01	<10	<10	10	<10	3
E213029	A	0.35	1.1	0.77	15	<10	10	<0.5	<2	2.47	<0.5	16	5	50	3.63	<10	<1	<0.01	<10	<0.01	26	3	0.01	3	<10	15	6.06	4	1	284	<20	<0.01	<10	<10	7	<10	4
E213030	A	0.47	1.1	1.13	15	<10	20	<0.5	2	3.7	<0.5	16	4	48	3.87	10	1	0.02	<10	0.02	34	5	0.01	4	20	17	7.42	5	1	510	<20	<0.01	<10	<10	10	<10	12
E213031	A	0.01	<0.2	1.78	6	<10	100	<0.5	<2	0.93	<0.5	9	37	43	3.37	10	<1	0.11	<10	0.8	546	5	0.09	23	670	<2	0.06	3	5	48	<20	0.16	<10	<10	66	<10	47
E213032	A	0.17	0.5	1.04	9	<10	20	<0.5	<2	4.01	<0.5	12	2	20	3.09	10	1	<0.01	<10	<0.01	33	2	0.01	2	10	31	6.68	3	1	374	<20	<0.01	<10	<10	12	<10	5
E213033	A	0.47	1	0.63	26	<10	10	<0.5	<2	4.59	<0.5	11	7	29	3.85	<10	1	<0.01	<10	<0.01	32	13	0.01	3	10	54	8.03	4	1	480	<20	<0.01	<10	<10	7	<10	3
E213034	A	0.63	1.3	0.55	22	<10	10	<0.5	3	3.65	<0.5	18	9	183	5.88	<10	1	<0.01	<10	<0.01	53	14	0.01	5	10	13	9.02	5	1	341	<20	<0.01	<10	<10	6	<10	3
E213035	A	0.47	1.1	0.58	17	<10	10	<0.5	2	3.59	<0.5	15	13	115	4.71	<10	1	<0.01	<10	<0.01	70	14	0.01	6	<10	9	7.53	6	<1	394	<20	<0.01	<10	<10	5	<10	2
E213036	A	0.6	1.2	0.16	16	<10	10	<0.5	2	4.24	<0.5	18	11	96	4.27	<10	1	<0.01	<10	<0.01	45	3	0.01	3	<10	12	7.93	5	<1	382	<20	<0.01	<10	<10	2	<10	3
E213037	A	0.55	0.8	0.05	19	<10	20	<0.5	<2	3.61	<0.5	18	23	60	4.67	<10	<1	<0.01	<10	<0.01	77	4	0.01	8	<10	11	7.22	3	<1	224	<20	<0.01	<10	<10	2	<10	3
E213038	A	0.39	0.6	0.16	11	<10	20	<0.5	<2	2.89	<0.5	15	16	29	3.97	<10	<1	<0.01	<10	<0.01	92	2	0.01	5	<10	9	5.72	4	<1	222	<20	<0.01	<10	<10	3	<10	3
E213039	A	0.48	1.2	0.34	15	<10	40	<0.5	<2	2.68	<0.5	17	17	41	3.86	<10	<1	<0.01	<10	<0.01	51	4	0.01	5	<10	13	5.92	4	<1	243	<20	<0.01	<10	<10	3	<10	3
E213040	A	0.45	0.4	0.25	13	<10	30	<0.5	<2	2.49	<0.5	13	15	37	3.38	<10	<1	<0.01	<10	<0.01	79	2	0.01	4	<10	14	4.91	6	<1								

		Au_ppm_ AA26	Ag_ppm_ ME-ICP41	Al_%_ME- ICP41	As_ppm_ ME-ICP41	B_ppm_M E-ICP41	Ba_ppm_ ME-ICP41	Be_ppm_ ME-ICP41	Bi_ppm_M E-ICP41	Ca_%_ME- ICP41	Cd_ppm_ ME-ICP41	Co_ppm_ ME-ICP41	Cr_ppm_ ME-ICP41	Cu_ppm_ ME-ICP41	Fe_%_ME- ICP41	Ga_ppm_ ME-ICP41	Hg_ppm_ ME-ICP41	K_%_ME- ICP41	La_ppm_ ME-ICP41	Mg_%_M E-ICP41	Mn_ppm_ ME-ICP41	Mo_ppm_ ME-ICP41	Na_%_ME- ICP41	Ni_ppm_ ME-ICP41	P_ppm_M E-ICP41	Pb_ppm_ ME-ICP41	S_%_ME- ICP41	Sb_ppm_ ME-ICP41	Sc_ppm_ ME-ICP41	Sr_ppm_ ME-ICP41	Th_ppm_ ME-ICP41	Ti_%_ME- ICP41	Tl_ppm_M E-ICP41	U_ppm_M E-ICP41	V_ppm_M E-ICP41	W_ppm_ ME-ICP41	Zn_ppm_ ME-ICP41
E213049	A	0.02	<0.2	0.99	35	<10	20	<0.5	<2	0.03	<0.5	8	10	23	3.67	<10	1	0.09	<10	<0.01	47	4	0.02	4	130	13	3.79	<2	1	155	<20	<0.01	<10	<10	13	<10	7
E213050	A	<0.01	0.2	1.12	43	<10	20	<0.5	<2	0.26	<0.5	10	1	212	4.38	<10	<1	0.2	<10	0.19	75	1	<0.01	2	670	17	4.82	<2	3	261	<20	<0.01	<10	<10	15	<10	46
E213051	A	<0.01	<0.2	0.9	13	<10	20	<0.5	<2	0.32	0.6	9	1	109	3.79	<10	1	0.25	10	0.05	48	1	<0.01	3	710	6	4.14	<2	2	100	<20	<0.01	<10	<10	12	<10	34
E213052	A	<0.01	<0.2	0.97	14	<10	40	0.5	<2	0.5	0.7	11	<1	14	4.22	<10	2	0.24	10	0.07	90	<1	<0.01	3	990	9	4.68	<2	2	13	<20	<0.01	<10	<10	12	<10	43
E213053	A	<0.01	<0.2	1.31	9	<10	20	0.8	<2	0.46	0.5	13	1	16	5.18	<10	2	0.39	10	0.15	856	1	0.01	3	990	11	4.49	<2	2	12	<20	<0.01	<10	<10	19	<10	140
E213054	A	<0.01	<0.2	1.63	10	<10	20	1.3	<2	0.89	1.1	11	1	119	4.02	<10	<1	0.27	10	0.45	1110	<1	0.01	3	940	11	3.99	<2	3	13	<20	<0.01	<10	<10	21	<10	90
E213055	A	<0.01	<0.2	1.54	14	<10	30	1.3	<2	1.58	1.9	10	1	198	3.85	<10	1	0.24	10	0.85	1965	<1	0.02	1	940	9	3.96	<2	3	22	<20	<0.01	<10	<10	24	<10	87
E213056	A	1.21	2.8	0.66	213	<10	110	<0.5	<2	0.31	0.7	10	100	1220	3.41	<10	4	0.29	10	0.25	194	105	0.01	59	410	21	1.74	24	3	16	<20	0.02	<10	<10	25	<10	68
E213057	A	<0.01	<0.2	1.14	14	<10	20	1.1	<2	1.63	0.6	14	1	18	4.67	<10	1	0.24	10	0.48	2020	1	0.01	3	810	9	4.43	<2	3	37	<20	<0.01	<10	<10	19	<10	129
E213058	A	0.01	<0.2	1.18	14	<10	20	1.1	<2	2.36	<0.5	13	1	13	4.66	<10	1	<0.3	10	0.42	2160	1	0.01	3	780	8	4.88	<2	3	49	<20	<0.01	<10	<10	23	<10	128
E213059	A	0.01	<0.2	1.54	8	<10	50	1	<2	2.5	<0.5	15	1	12	4.78	<10	1	0.2	10	0.73	2790	<1	0.02	4	850	7	4.72	<2	3	30	<20	<0.01	<10	<10	34	<10	131
E213060	A	<0.01	<0.2	1.48	24	<10	20	1.1	<2	2.83	<0.5	12	1	11	4.31	<10	<1	0.2	10	0.68	2210	1	0.02	3	850	7	4.98	<2	3	42	<20	<0.01	<10	<10	33	<10	138
E213061	A	<0.01	<0.2	1.25	18	<10	50	0.7	<2	2.77	<0.5	12	1	10	4.39	<10	<1	0.21	10	0.68	2660	1	0.03	3	830	9	4.32	<2	3	29	<20	<0.01	<10	10	33	<10	131
E213062	A	0.01	<0.2	1.26	15	<10	50	0.7	<2	2.8	<0.5	12	1	11	4.08	<10	1	0.19	10	0.98	2970	<1	0.03	2	870	10	3.11	<2	4	40	<20	<0.01	<10	<10	48	<10	88
E213063	A	<0.01	<0.2	1.37	6	<10	300	0.7	<2	3.03	<0.5	9	2	8	3.47	<10	<1	0.22	20	1.02	2850	<1	0.03	3	850	3	0.89	<2	3	56	<20	0.01	<10	<10	57	<10	108
E213064	A	<0.01	<0.2	1.17	3	<10	170	0.8	<2	2.3	<0.5	11	2	6	3.81	<10	1	0.21	10	0.86	2350	<1	0.03	<1	950	4	1.31	<2	3	48	<20	0.01	<10	<10	53	<10	143
E213065	A	<0.01	<0.2	0.95	9	<10	20	0.6	<2	1.9	<0.5	14	1	12	4.8	<10	1	0.19	10	0.7	2280	<1	0.03	2	890	6	3.13	<2	3	38	<20	<0.01	<10	<10	43	<10	122
E213066	A	<0.01	<0.2	0.78	12	<10	20	0.5	<2	2.39	<0.5	10	1	11	3.87	<10	<1	0.15	10	0.69	1855	1	0.02	4	880	9	3.3	<2	3	36	<20	<0.01	<10	<10	46	<10	72
E213067	A	0.01	<0.2	0.85	7	<10	40	0.5	<2	2.81	<0.5	11	1	11	3.97	<10	<1	0.15	10	0.72	2030	1	0.02	2	880	8	3.57	<2	3	36	<20	<0.01	<10	<10	42	<10	73
E213068	A	<0.01	<0.2	0.8	11	<10	20	0.5	<2	2.9	<0.5	9	1	10	4.07	<10	1	0.14	10	0.66	1810	1	0.02	2	860	8	4.02	<2	3	34	<20	<0.01	<10	<10	39	<10	60
E213069	A	<0.01	<0.2	1.21	17	<10	40	0.9	<2	1.19	<0.5	18	1	11	6.12	<10	1	0.19	10	0.58	2060	1	0.02	2	930	8	4.27	<2	3	17	<20	<0.01	<10	<10	32	<10	168
E213070	A	<0.01	0.2	1.02	35	<10	10	0.9	<2	0.59	0.5	14	1	13	5.71	<10	1	0.15	10	0.16	646	1	<0.01	3	1290	23	5.51	<2	2	14	<20	<0.01	<10	<10	17	<10	169
E213071	A	14.1	8.7	0.32	501	<10	30	<0.5	<2	0.15	<0.5	8	28	45	3.35	<10	3	0.18	10	0.07	129	5	<0.01	17	510	8	2.28	25	2	7	<20	<0.01	<10	<10	15	<10	46
E213072	A	0.01	0.2	1.03	27	<10	10	0.5	<2	0.86	0.9	9	1	136	4.47	<10	1	0.18	10	0.19	90	1	<0.01	3	710	12	5.57	<2	2	86	<20	<0.01	<10	<10	20	<10	85
E213073	A	0.01	0.6	0.68	63	<10	10	<0.5	<2	0.6	0.7	9	1	402	5.37	<10	1	0.14	10	0.08	67	1	<0.01	3	350	24	6.32	<2	2	129	<20	<0.01	<10	<10	12	<10	118
E213074	A	0.01	0.4	0.72	42	<10	40	<0.5	<2	0.11	<0.5	8	3	102	4.49	<10	<1	0.24	<10	0.02	55	2	<0.01	4	360	13	4.65	<2	2	275	<20	<0.01	<10	<10	14	<10	14
E213075	A	0.03	<0.2	0.87	83	<10	30	<0.5	3	0.15	<0.5	8	2	90	5.15	10	1	0.27	10	0.03	54	6	<0.01	2	850	18	5.26	3	3	722	<20	<0.01	<10	<10	17	<10	14
E213076	A	0.03	0.2	1.44	43	<10	10	<0.5	<2	0.95	0.8	9	2	196	4.12	<10	1	0.2	10	0.1	71	2	0.01	3	630	16	5.23	2	2	161	<20	<0.01	<10	<10	23	<10	81
E213077	A	<0.01	<0.2	1.11	16	<10	20	0.9	<2	0.96	1	16	<1	13	5.41	<10	<1	0.12	10	0.15	1295	1	<0.01	4	990	10	4.39	<2	2	20	<20	<0.01	<10	<10	20	<10	200
E213078	A	0.01	0.2	1.16	33	<10	10	1	<2	0.9	<0.5	18	1	13	6.05	<10	1	0.23	10	0.22	1630	1	0.01	3	890	9	4.39	<2	2	21	<20	<0.01	<10	<10	24	<10	207
E213079	A	0.01	0.2	0.91	29	<10	10	0.6	<2	0.85	1.1	9	1	12	3.95	<10	1	0.13	10	0.1	88	1	<0.01	3	980	26	4.78	<2	2	20	<20	<0.01	<10	<10	15	<10	183
E213080	A	0.01	0.2	0.89	43	<10	10	0.5	<2	1.04	0.7	10	1	12	4.44	<10	1	0.21	10	0.12	102	1	<0.01	3	990	25	5.48	<2	2	41	<20	<0.01	<10	<10	15	<10	122
E213081	A	0.86	1.5	0.48	66	<10	10	<0.5	<2	0.67	1.7	10	1	84	3.13	<10	1	0.1	<10	0.04	48	5	<0.01	3	560	36	3.93	<2	2	362	<20	<0.01	<10	<10	9	<10	144
E213082	A	0.07	0.9	0.65	115	<10	10	<0.5	<2	0.53	2.1	10	1	33	4.32	<10	<1	0.2	<10	0.05	91	2	<0.01	3	820	64	4.97	<2	2	133	<20	<0.01	<10	<10	11	<10	447
E213083	A	0.02	0.8	0.65	100	<10	10	<0.5	<2	0.34	2	11	1	17	4.86	<10	1	0.21	<10	0.05	84	2	<0.01	4	790	92	5.34	<2	2	101	<20	<0.01	<10	<10	10	<10	362
E213084	A	0.01	0.5	0.96	63	<10	10	0.5	<2	0.41	2.6	9	1	17	4.98	<10	1	0.3	<10	0.07	103	1	0.01	3	1230	100	5.4	<2	2	206	<20	<0.01	<10	<10	13	<10	413
E213085	A	0.01	0.4	1.03	54	<10	10	0.6	<2	0.39	0.7	13	4	20	4.1	<10	1	0.17	<10	0.26	194	4	<0.01	10	960	109	4.67	4	2	113	<20	<0.01	10	<10	16	<10	218
E213086	A	0.02	0.2	1.49	6	<10	90	<0.5	<2	0.86	<0.5	7	32	36	3.11	10	&																				

E213137	A	0.34	0.5	0.01	2	<10	10	<0.5	<2	3.05	<0.5	7	10	30	2	<10	<1	<0.01	<10	<0.01	30	5	<0.01	1	10	8	4.52	2	<1	189	<20	<0.01	<10	<10	1	<10	<2	
E213138	A	0.29	0.3	0.02	3	<10	10	<0.5	2	3	<0.5	7	12	28	2.19	<10	<1	<0.01	<10	<0.01	50	2	<0.01	2	10	6	4.43	<2	<1	211	<20	<0.01	<10	<10	1	<10	<2	
E213139	A	0.41	0.5	0.02	11	<10	10	<0.5	<2	4.86	<0.5	9	7	23	2.08	<10	<1	<0.01	<10	<0.01	20	4	<0.01	<1	10	9	6.48	<2	<1	301	<20	<0.01	<10	<10	2	<10	<2	
E213140	A	0.41	0.7	0.02	12	<10	10	<0.5	<2	3.4	<0.5	11	10	24	2.44	<10	<1	<0.01	<10	<0.01	37	3	<0.01	2	<10	11	5.35	2	<1	254	<20	<0.01	<10	<10	1	<10	<2	
E213141	A	0.43	1.5	0.03	21	<10	10	<0.5	<2	3.16	0.5	12	10	91	2.7	<10	<1	<0.01	<10	<0.01	23	47	<0.01	3	10	14	5.66	32	<1	212	<20	<0.01	<10	<10	2	<10	28	
E213142	A	0.01	<0.2	1.75	6	<10	110	<0.5	<2	0.98	<0.5	8	37	40	3.51	10	<1	0.12	<10	0.82	546	5	0.08	20	650	<2	0.05	4	5	50	<20	0.16	<10	<10	65	<10	45	
E213143	A	0.34	0.9	0.05	12	<10	10	<0.5	<2	1.72	<0.5	14	21	41	4.48	<10	<1	<0.01	<10	<0.01	114	2	<0.01	3	10	12	4.84	<2	<1	119	<20	<0.01	<10	<10	2	<10	<2	
E213144	A	0.4	0.6	0.02	11	<10	10	<0.5	2	1.92	<0.5	14	16	53	3.4	<10	<1	<0.01	<10	<0.01	78	3	<0.01	4	10	25	4.37	2	<1	169	<20	<0.01	<10	<10	1	<10	<2	
E213145	A	0.37	0.6	0.02	8	<10	10	<0.5	<2	2.47	<0.5	13	15	35	3.47	<10	<1	<0.01	<10	<0.01	113	2	<0.01	5	<10	21	4.45	2	<1	158	<20	<0.01	<10	<10	2	<10	<2	
E213146	A	0.43	0.6	0.26	12	<10	10	<0.5	<2	2.1	<0.5	14	14	74	3.42	<10	<1	<0.01	<10	<0.01	75	9	<0.01	3	10	8	4.67	3	<1	79	<20	<0.01	<10	<10	3	<10	<2	
E213147	A	0.44	0.7	0.5	15	<10	10	<0.5	2	2.44	<0.5	18	10	109	4.35	<10	<1	<0.01	<10	<0.01	93	13	<0.01	4	<10	12	5.8	<2	<1	146	<20	<0.01	<10	<10	5	<10	8	
E213148	A	0.23	0.4	0.75	14	<10	10	<0.5	2	1.31	1.6	11	4	44	3.78	<10	<1	0.14	<10	0.22	204	5	0.01	2	120	38	4.47	2	3	162	<20	<0.01	<10	<10	12	<10	420	
E213149	A	<0.01	1.3	1.39	38	<10	10	1.3	2	1.77	6.4	11	2	19	5.32	<10	<1	0.41	10	0.86	1145	3	0.04	1	660	159	5.23	<2	4	105	<20	<0.01	<10	<10	38	<10	952	
E213150	A	<0.01	0.8	1.19	22	<10	10	1.2	<2	1.47	4	8	2	16	4.49	<10	<1	0.33	10	1.19	1570	1	0.03	<1	860	114	4.47	<2	5	84	<20	<0.01	<10	<10	56	<10	636	
E213151	A	<0.01	1.2	1.31	37	<10	10	1.2	<2	2.44	7.8	7	2	23	4.3	<10	<1	0.42	10	1.37	1730	3	0.04	<1	830	335	4.85	2	5	63	<20	<0.01	<10	<10	50	<10	1260	
E213152	A	<0.01	0.5	1.15	14	<10	20	1.2	<2	1.46	3.9	7	1	13	4.11	<10	<1	0.36	10	1.19	1505	1	0.04	<1	870	205	4.43	2	4	45	<20	<0.01	<10	<10	45	<10	694	
E213153	A	<0.01	0.5	1.31	12	<10	20	1.2	<2	1.66	2.3	8	2	14	4.23	<10	<1	0.33	20	1.51	2180	1	0.04	<1	860	101	4.26	2	6	42	<20	<0.01	<10	<10	61	<10	413	
E213154	A	<0.01	0.8	1.11	17	<10	30	1.3	<2	1.69	9.1	8	2	14	3.98	<10	<1	0.33	10	1.22	1590	1	0.04	<1	860	224	4.55	<2	4	47	<20	<0.01	<10	<10	44	<10	1135	
E213155	A	<0.01	0.5	0.99	14	<10	20	1.1	<2	1.36	0.8	8	3	13	4.09	<10	<1	0.28	10	1.27	1930	2	0.03	<1	860	55	4.14	3	6	37	<20	<0.01	<10	<10	56	<10	211	
E213156	A	1.16	3	0.73	196	<10	120	<0.5	2	0.31	0.7	9	102	1240	3.39	<10	3	0.3	20	0.26	195	108	<0.01	62	400	21	1.74	24	3	17	<20	0.02	<10	<10	26	<10	69	
E213157	A	<0.01	0.5	0.8	16	<10	50	1.2	<2	1.58	1.2	10	5	14	4.07	<10	<1	0.25	10	1.51	2380	3	0.05	5	810	76	4.1	3	5	41	<20	<0.01	<10	<10	54	<10	290	
E213158	A	<0.01	1.1	0.91	21	<10	50	1.2	<2	1.72	4.1	8	2	13	4.31	<10	<1	0.29	10	1.25	1635	1	0.05	4	790	106	4.82	<2	4	71	<20	<0.01	<10	<10	40	<10	602	
E213159	A	<0.01	0.8	0.79	19	<10	40	1.1	<2	1.28	4.2	8	2	11	4.24	<10	<1	0.23	10	1.24	1940	1	0.05	2	830	124	4.54	<2	6	42	<20	<0.01	<10	<10	56	<10	618	
E213160	A	<0.01	1.3	1.09	27	<10	50	1.3	<2	1.58	6.4	8	2	12	4.52	<10	<1	0.29	10	1.46	2360	3	0.05	3	810	239	4.7	4	5	50	<20	<0.01	<10	<10	50	<10	1010	
E213161	A	0.72	0.8	0.65	20	<10	20	0.5	<2	2.32	2.9	12	4	28	4.5	<10	1	0.11	<10	0.44	653	1	0.03	4	420	217	6.04	<2	3	157	<20	<0.01	<10	<10	22	<10	492	
E213162	A	0.68	1.8	0.02	18	<10	10	<0.5	2	4.27	<0.5	19	9	78	4.17	<10	3	0.01	<10	0.01	61	<1	0.01	6	<10	23	7.86	4	<1	249	<20	<0.01	<10	<10	2	<10	5	
E213163	A	0.62	1.5	0.02	8	<10	10	<0.5	3	4.2	<0.5	17	13	83	3.45	<10	1	<0.01	<10	<0.01	76	2	0.01	5	<10	14	6.59	6	<1	211	<20	<0.01	<10	<10	2	<10	2	
E213164	A	1.19	12	0.02	35	<10	10	<0.5	9	3.47	<0.5	38	12	328	10.05	<10	9	0.01	<10	<0.01	111	2	0.01	10	<10	86	>10.0	29	<1	124	<20	<0.01	<10	<10	3	<10	6	
E213165	A	0.69	2.5	0.03	19	<10	10	<0.5	3	2.24	<0.5	23	14	93	5.24	<10	2	0.01	<10	0.01	98	1	0.01	6	10	32	6.66	7	<1	145	<20	<0.01	<10	<10	10	2	<10	6
E213166	A	0.53	0.9	0.02	12	<10	10	<0.5	2	2.9	<0.5	18	18	71	3.97	<10	1	0.01	<10	<0.01	91	5	0.01	8	<10	18	5.82	4	<1	175	<20	<0.01	<10	<10	2	<10	<2	
E213167	A	0.57	1.2	0.02	16	<10	10	<0.5	<2	2.43	<0.5	20	20	89	4.1	<10	1	0.01	<10	<0.01	63	3	0.01	7	10	22	5.95	4	<1	134	<20	<0.01	<10	<10	2	<10	2	
E213168	A	0.43	0.8	0.01	11	<10	10	<0.5	<2	3.71	<0.5	19	15	94	4.62	<10	<1	<0.01	<10	<0.01	79	1	0.01	6	10	9	7.4	4	<1	188	<20	<0.01	<10	<10	3	<10	<2	
E213169	A	0.46	0.6	0.01	9	<10	10	<0.5	<2	3.78	<0.5	15	12	117	5.45	<10	<1	<0.01	<10	<0.01	53	1	0.01	7	<10	7	8.91	4	<1	172	<20	<0.01	<10	<10	4	<10	<2	
E213170	A	0.56	0.9	0.03	12	<10	10	<0.5	4	3.22	<0.5	18	16	133	5.58	<10	1	<0.01	<10	<0.01	62	4	0.01	7	<10	16	8.25	5	<1	103	<20	<0.01	<10	<10	3	<10	<2	
E213171	A	14.45	9	0.31	472	<10	30	<0.5	<2	0.16	<0.5	8	27	44	3.28	<10	2	0.18	10	0.07	124	4	0.01	16	510	4	2.24	29	1	6	<20	<0.01	<10	<10	15	<10	44	
E213172	A	1.29	1.1	0.29	12	<10	10	<0.5	2	3.22	<0.5	17	13	115	5.51	<10	1	<0.01	<10	<0.01	82	3	0.01	7	<10	17	7.92	6	<1	144	<20	<0.01	<10	<10	5	<10	2	
E213173	A	1.13	0.9	0.21	12	<10	10	<0.5	4	3.13	<0.5	15	12	105	4.96	<10	1	<0.01	<10	<0.01	61	4	0.01	6	10	17	7.54	5	<1	145	<20	<0.01	<10	<10	4	<10	<2	
E213174	A	0.12	0.4	0.88	13	<10	10	<0.5	<2	1.43	1.2	12	4	33	4.97	<10	<1	0.07	<10	0.01	38	4	0.02	5	60	65	6.3	3	1	161	<20	<0.01	<10	<10	10	<10	164	
E213175	A	0.05	0.4	0.67	49	<10	30	<0.5	<2	1.49	13.5	9	3	18	4.4	<10	<1	0.22	<10	0.07	36	<1	0.05	3	500	183	5.85	3	2	113	<20	<0.01	<10	<10	11	<10	1780	
E213176	A	0.27	1.1	0.38	16	<10	20	<0.5	<2	5.48	<0.5	13</																										

VA07101895 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 78
DATE RECEIVED : 2007-08-31 DATE FINALIZED : 2007-10-17
PROJECT : "RANCH-A07-037"
CERTIFICATE COMMENTS : ""
PO NUMBER : " "

SAMPLE DESCRIPTION	Au-AA26 ppm	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm	ME-ICP41 Hg ppm	ME-ICP41 K %	ME-ICP41 La ppm	ME-ICP41 Mg %	ME-ICP41 Mn ppm	ME-ICP41 Mo ppm	ME-ICP41 Na %	ME-ICP41 Ni ppm	ME-ICP41 P ppm	ME-ICP41 Pb ppm	ME-ICP41 S %	ME-ICP41 Sb ppm	ME-ICP41 Sc ppm	ME-ICP41 Sr ppm	ME-ICP41 Th ppm	ME-ICP41 Ti %	ME-ICP41 Tl ppm	ME-ICP41 U ppm	ME-ICP41 V ppm	ME-ICP41 W ppm	ME-ICP41 Zn ppm	
E213315	0.01	0.6	2.49	14	<10	130	0.6	<2	2.98	<0.5	7	2	32	2.64	10	<1	0.16	20	1.13	1040	<1	0.02	1	900	9	0.01	<2	6	47	<20	0.02	<10	<10	89	<10	64	
E213316	35.3	17.5	0.31	533	<10	30	<0.5	<2	0.13	<0.5	7	45	45	3.57	<10	4	0.17	10	0.06	164	12	<0.01	15	450	9	2.37	42	1	5	<20	<0.01	<10	<10	13	<10	53	
E213317	0.02	<0.2	1.74	12	<10	60	0.5	<2	2.65	<0.5	6	2	2	3.24	10	<1	0.16	20	0.96	942	<1	0.03	2	900	4	0.01	3	5	31	<20	0.04	<10	<10	83	<10	49	
E213318	0.01	<0.2	1.57	18	<10	60	0.5	<2	2.82	<0.5	6	2	1	3.06	<10	<1	0.14	20	0.86	975	<1	0.03	1	850	4	<0.01	2	5	34	<20	0.04	<10	<10	77	<10	48	
E213319	<0.01	<0.2	2.89	10	<10	270	0.7	<2	3.21	<0.5	8	2	14	3.09	10	<1	0.24	10	1.32	1300	<1	0.01	2	920	6	0.01	<2	6	44	<20	0.02	<10	<10	78	<10	66	
E213320	0.01	<0.2	5.21	17	<10	150	0.9	<2	8.15	<0.5	8	2	49	2.12	20	1	0.18	10	1.7	2190	<1	0.03	<1	1060	6	0.01	2	5	126	<20	0.01	<10	<10	67	<10	77	
E213321	0.01	0.4	3.73	10	<10	120	0.7	<2	4.53	<0.5	8	2	85	2.24	10	<1	0.18	10	1.53	1670	<1	0.02	<1	840	5	0.01	2	6	73	<20	0.01	<10	10	82	<10	70	
E213322	0.02	<0.2	2.18	13	<10	200	0.5	<2	3.02	<0.5	7	2	17	3.15	10	<1	0.11	10	1.26	1275	<1	0.03	1	840	7	0.01	2	5	52	<20	0.04	<10	<10	80	<10	54	
E213323	<0.01	<0.2	2.46	58	<10	70	0.6	<2	2.67	<0.5	8	2	13	3.09	10	<1	0.1	20	1.78	1635	<1	0.04	1	910	7	<0.01	2	6	67	<20	0.06	<10	<10	67	<10	60	
E213324	<0.01	<0.2	2.33	49	<10	80	0.7	<2	2.2	<0.5	7	2	14	3.13	10	<1	0.1	10	1.76	1645	<1	0.05	<1	910	8	<0.01	<2	7	74	<20	0.09	<10	<10	70	<10	52	
E213325	<0.01	<0.2	1.77	6	<10	60	0.5	<2	1.91	<0.5	8	4	5	2.9	<10	<1	0.21	10	1.36	1385	<1	0.03	2	580	7	0.01	<2	4	71	<20	0.04	<10	<10	79	<10	58	
E213326	<0.01	<0.2	1.84	4	<10	230	0.5	<2	2.34	<0.5	9	3	10	3.26	<10	<1	0.22	20	1.35	1085	<1	0.02	<1	790	6	0.01	2	4	76	<20	0.02	<10	<10	88	<10	58	
E213327	<0.01	<0.2	1.42	6	<10	620	0.5	<2	2.34	<0.5	8	3	18	3.39	<10	<1	0.24	10	0.78	918	<1	0.01	3	640	10	0.02	2	4	81	<20	0.03	<10	<10	71	<10	50	
E213328	<0.01	<0.2	2.01	8	<10	750	0.5	<2	1.53	<0.5	7	3	14	3.8	10	<1	0.23	10	1.07	924	<1	0.01	2	660	12	0.03	2	4	83	<20	0.01	<10	<10	61	<10	67	
E213329	<0.01	<0.2	1.55	17	<10	530	0.5	<2	1.13	<0.5	7	2	21	3.07	<10	<1	0.25	10	0.62	519	<1	0.01	2	720	22	0.02	2	3	79	<20	0.01	<10	<10	58	<10	64	
E213330	<0.01	<0.2	1.25	6	<10	150	0.6	<2	0.88	<0.5	3	2	16	3.51	<10	1	0.31	10	0.23	235	3	0.01	1	1090	24	0.01	2	3	81	<20	0.01	<10	<10	65	<10	32	
E213331	<0.01	<0.2	1.67	4	<10	100	<0.5	<2	0.91	<0.5	8	35	38	3.35	10	<1	0.11	<10	0.79	537	4	0.08	22	670	3	0.05	2	5	42	<20	0.14	<10	<10	61	<10	43	
E213332	<0.01	0.2	0.93	9	<10	710	0.5	2	0.59	<0.5	<1	2	9	3.11	<10	<1	0.27	10	0.07	101	17	<0.01	<1	1060	13	0.02	<2	3	83	<20	0.01	<10	<10	62	<10	5	
E213333	<0.01	0.2	1.42	11	<10	1260	0.6	<2	2.57	<0.5	5	2	14	3.69	<10	<1	0.26	10	0.44	570	4	0.01	2	1060	22	0.07	<2	3	109	<20	0.01	<10	<10	70	<10	40	
E213334	<0.01	<0.2	2.57	24	<10	90	0.7	<2	3.86	0.5	11	2	12	3.62	10	1	0.22	10	1.14	1310	3	0.01	4	1040	21	0.08	<2	5	97	<20	<0.01	<10	<10	59	<10	64	
E213335	<0.01	0.2	2.93	8	<10	120	0.8	<2	4.79	<0.5	18	2	18	4.05	10	1	0.21	20	1.69	1945	2	0.02	1	1060	21	0.37	<2	6	107	<20	<0.01	<10	<10	71	<10	109	
E213336	<0.01	0.2	1.68	18	<10	200	0.6	<2	5.85	<0.5	10	1	10	3.56	<10	<1	0.21	20	0.83	1995	1	0.01	2	1080	13	1.67	<2	4	127	<20	<0.01	<10	<10	40	<10	62	
E213337	<0.01	0.2	0.93	8	<10	120	0.5	<2	6.21	<0.5	8	1	8	2.87	<10	<1	0.2	10	0.48	1810	2	<0.01	3	960	11	1.65	<2	3	117	<20	<0.01	<10	10	28	<10	53	
E213338	0.01	0.2	1.5	4	<10	100	0.7	<2	4.72	<0.5	8	1	100	8	3.64	<10	<1	0.19	10	1.12	2080	1	0.01	2	980	13	0.3	2	5	134	<20	<0.01	<10	<10	48	<10	69
E213339	<0.01	<0.2	1.73	4	<10	90	0.8	<2	4.35	<0.5	7	1	13	3.87	<10	<1	0.27	10	1.17	2490	1	0.01	2	1020	9	0.25	<2	6	121	<20	<0.01	<10	<10	54	<10	72	
E213340	<0.01	0.6	1.98	9	<10	40	0.9	<2	1.98	3.9	9	1	9	5.06	<10	<1	0.47	10	0.62	1310	4	0.01	3	990	122	3.43	2	4	107	<20	<0.01	<10	<10	41	<10	1090	
E213341	<0.01	2.5	1.14	28	<10	30	<0.5	6	0.08	0.6	10	3	15	4.58	<10	2	0.15	<10	0.02	55	5	0.02	4	190	99	4.99	4	3	105	<20	<0.01	<10	<10	19	<10	78	
E213342	0.06	<0.2	1.68	7	<10	100	<0.5	<2	0.91	<0.5	8	36	39	3.37	10	<1	0.11	<10	0.79	540	4	0.08	21	660	<2	0.05	<2	5	42	<20	0.14	<10	<10	62	<10	43	
E213343	0.02	6.4	0.85	15	<10	110	<0.5	17	0.02	<0.5	11	9	26	3.42	<10	1	0.25	<10	0.01	39	2	0.04	4	100	86	3.99	7	2	163	<20	<0.01	<10	<10	15	<10	6	
E213344	<0.01	0.6	1.63	23	<10	40	0.7	2	1.33	1.2	9	2	9	4.52	<10	1	0.29	10	0.35	606	1	0.01	2	670	55	4.6	3	4	103	<20	<0.01	<10	<10	29	<10	460	
E213345	<0.01	<0.2	1.44	19	<10	40	0.8	<2	5.63	0.5	8	1	8	3.88	<10	<1	0.21	20	0.9	2750	<1	0.01	1	920	13	3.95	<2	5	150	<20	<0.01	<10	<10	32	<10	146	
E213346	0.01	<0.2	1.07	15	<10	40	0.8	<2	4.73	<0.5	10	1	14	4.1	<10	<1	0.19	10	0.58	1875	1	0.01	3	1140	11	4.68	2	4	127	<20	<0.01	<10	<10	19	<10	96	
E213347	<0.01	<0.2	1.65	16	<10	120	0.7	<2	4.86	<0.5	9	1	9	3.66	<10	<1	0.26	10	0.65	1645	<1	0.01	3	990	6	4.13	2	6	112	<20	<0.01	<10	<10	37	<10	48	
E213348	0.01	<0.2	1.54	21	<10	40	0.7	<2	6.2	<0.5	8	1	8	3.49	<10	<1	0.27	10	0.57	1860	1	0.01	3	940	8	4.02	<2	4	116	<20	<0.01	<10	<10	33	<10	51	
E213349	0.01	<0.2	1.76	21	<10	70	0.8	<2	4.33	<0.5	9	1	12	3.79	<10	1	0.31	10	0.68	1290	<1	0.01	1	980	10	4.26	<2	4	107	<20	<0.01	<10	<10	39	<10	56	
E213350	0.01	<0.2	1.76	16	<10	40	0.7	<2	4.84	<0.5	9	1	9	3.78	<10	<1	0.31	10	0.63	1285	<1	0.01	1	1050	9	4.29	<2	5	120	<20	<0.01	<10	<10	35	<10	67	
E213351	<0.01	0.3	1.41	17	<10	30	0.5	<2	4.05	<0.5	10	4	13	3.27	<10	<1	0.26	10	0.58	1120	4	0.02	5	780	15	3.67	<2	5	104	<20	<0.01	<10	<10	27	<10	51	
E213352	0.01	0.3	1.05	20	<10	20	0.5	<2	4.19	<0.5	8	2	10	3.28	<10	1	0.22	10	0.51	1090	1	0.02	4	810	11	3.75	<2	4	107	<20	<0.01	<					

PO NUMBER : " "

	Au-AA26	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-IC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VA07108587 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 5
DATE RECEIVED : 2007-09-25 DATE FINALIZED : 2007-10-18
PROJECT : "RANCH-A07-039"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

VA07108580 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 62
DATE RECEIVED : 2007-09-25 DATE FINALIZED : 2007-10-27
PROJECT : "RANCH-A07-040"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

PO NUMBER : " "

[illegible]

VA07108499 - Finalized
CLIENT : "CHJAGO - Christopher James Gold Corp."
of SAMPLES : 84
DATE RECEIVED : 2007-09-25 DATE FINALIZED : 2007-10-18
PROJECT : "RANCH-A07-045"
CERTIFICATE COMMENTS : ""
PO NUMBER : ""

E213620	0.1	0.3	0.56	49	<10	150	<0.5	2	0.16	0.6	11	2	244	1.75	<10	1	0.17	<10	0.02	35	8	0.01	2	450	32	1.67	3	2	99	<20	<0.01	<10	<10	15	<10	34
E213621	0.18	<0.2	0.54	3	<10	360	<0.5	4	0.01	<0.5	8	4	70	1.17	<10	<1	<0.01	<10	<0.01	37	25	<0.01	1	220	24	0.96	<2	2	216	<20	<0.01	<10	<10	7	<10	3
E213622	0.43	0.4	0.52	6	<10	140	<0.5	<2	0.03	<0.5	9	4	128	2.05	<10	1	0.06	<10	0.01	45	22	<0.01	2	190	27	1.87	3	1	166	<20	<0.01	<10	<10	6	<10	4
E213623	0.09	0.8	0.68	155	<10	60	1	<2	0.33	2.6	11	2	58	2.29	<10	<1	0.25	10	0.06	59	10	0.01	3	910	106	2.21	2	3	38	<20	<0.01	<10	<10	26	<10	294
E213624	0.07	0.5	0.65	71	<10	80	1	3	0.36	2.2	11	1	24	3.78	<10	<1	0.28	10	0.2	280	8	0.01	2	780	95	2.36	2	3	30	<20	<0.01	<10	<10	23	<10	260
E213625	0.02	0.5	0.68	<2	<10	1730	0.7	<2	0.39	<0.5	7	2	28	3.09	<10	<1	0.3	10	0.26	377	2	0.01	2	660	19	0.16	<2	3	45	<20	<0.01	<10	<10	55	<10	103
E213626	0.01	0.3	0.74	<2	<10	1410	0.8	<2	0.5	<0.5	8	2	12	3.46	<10	<1	0.33	10	0.36	427	1	0.01	2	650	14	0.03	<2	3	51	<20	0.01	<10	<10	62	<10	96
E213627	<0.01	<0.2	0.71	4	<10	1430	0.7	<2	1.6	<0.5	8	2	14	3.09	<10	<1	0.32	10	0.41	595	1	0.01	2	610	14	0.06	<2	3	62	<20	0.01	<10	<10	60	<10	82



Fire Assay Procedure – Au-AA25 and Au-AA26

Fire Assay Fusion, AAS Finish

Sample Decomposition: Fire Assay Fusion (FA-FUS03 & FA-FUS04)
Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 10 mL with de-mineralized water, and analyzed by atomic absorption spectroscopy against matrix-matched standards.

Method Code	Element	Symbol	Units	Sample Weight (g)	Lower Limit	Upper Limit	Default Overlimit Method
Au-AA25	Gold	Au	ppm	30	0.01	100	Au-GRA21
Au-AA26	Gold	Au	ppm	50	0.01	100	Au-GRA22



Geochemical Procedure - ME-ICP41

Trace Level Methods Using Conventional ICP-AES Analysis

Sample Decomposition: Nitric Aqua Regia Digestion (GEO-AR01)
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample is digested with aqua regia for in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 mL with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

NOTE: In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	0.2	100	Ag-OG46
Aluminum	Al	%	0.01	25	
Arsenic	As	ppm	2	10000	
Boron	B	ppm	10	10000	
Barium	Ba	ppm	10	10000	
Beryllium	Be	ppm	0.5	1000	
Bismuth	Bi	ppm	2	10000	
Calcium	Ca	%	0.01	25	
Cadmium	Cd	ppm	0.5	1000	
Cobalt	Co	ppm	1	10000	
Chromium	Cr	ppm	1	10000	
Copper	Cu	ppm	1	10000	Cu-OG46
Iron	Fe	%	0.01	50	



Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Gallium	Ga	ppm	10	10000	
Mercury	Hg	ppm	1	10000	
Potassium	K	%	0.01	10	
Lanthanum	La	ppm	10	10000	
Magnesium	Mg	%	0.01	25	
Manganese	Mn	ppm	5	50000	
Molybdenum	Mo	ppm	1	10000	
Sodium	Na	%	0.01	10	
Nickel	Ni	ppm	1	10000	
Phosphorus	P	ppm	10	10000	
Lead	Pb	ppm	2	10000	Pb-OG46
Sulfur	S	%	0.01	10	
Antimony	Sb	ppm	2	10000	
Scandium	Sc	ppm	1	10000	
Strontium	Sr	ppm	1	10000	
Thorium	Th	ppm	20	10000	
Titanium	Ti	%	0.01	10	
Thallium	Tl	ppm	10	10000	
Uranium	U	ppm	10	10000	
Vanadium	V	ppm	1	10000	
Tungsten	W	ppm	10	10000	
Zinc	Zn	ppm	2	10000	Zn-OG46



Elements listed below are available upon request

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Cerium	Ce	ppm	10	10000	
Hafnium	Hf	ppm	10	10000	
Indium	In	ppm	10	10000	
Lithium	Li	ppm	10	10000	
Niobium	Nb	ppm	10	10000	
Rubidium	Rb	ppm	10	10000	
Selenium	Se	ppm	10	10000	
Silicon	Si	ppm	10	10000	
Tin	Sn	ppm	10	10000	
Tantalum	Ta	ppm	10	10000	
Tellurium	Te	ppm	10	10000	
Yttrium	Y	ppm	10	10000	
Zirconium	Zr	ppm	5	10000	



Sample Preparation Package – PREP-31B

Standard Sample Preparation: Dry, Crush, Split and Pulverize

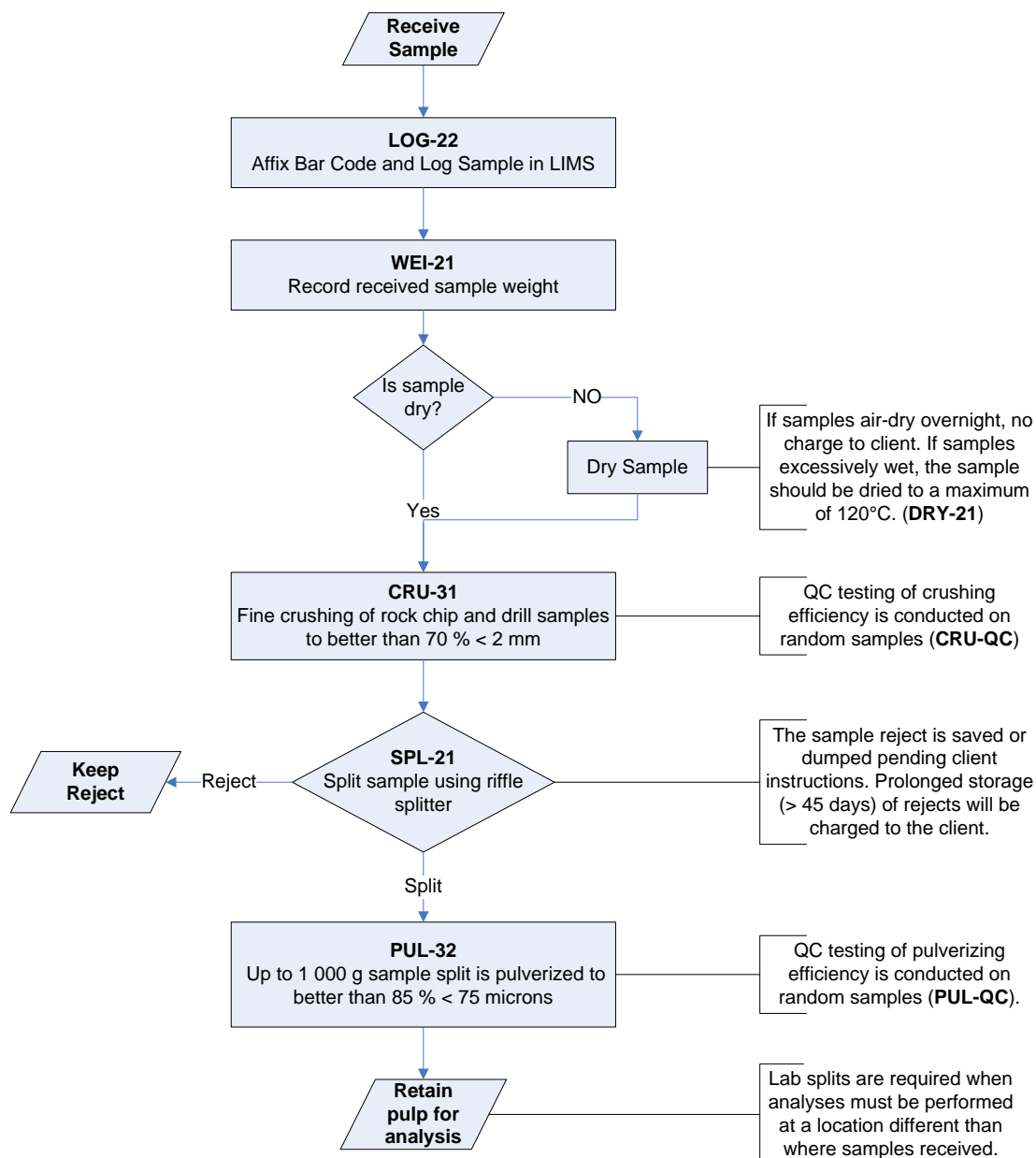
Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

The sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 10 mesh) screen. A split of up to 1000 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh) screen. This method is appropriate for rock chip or drill samples.

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
CRU-31	Fine crushing of rock chip and drill samples to better than 70 % of the sample passing 2 mm.
SPL-21	Split sample using riffle splitter.
PUL-32	A sample split of up to 1000 g is pulverized to better than 85 % of the sample passing 75 microns.

Flow Chart - Sample Preparation Package – PREP-31B

Standard Sample Preparation: Dry, Crush, Split and Pulverize



TO: Dave Trabert
Max Baker
Brian May
FROM: Jim Shannon
DATE: July 25, 2007

SUMMARY OF FIELD OBSERVATIONS: RANCH PROJECT

The Ranch Project was visited between June 28th and July 16th, 2007. The main purpose was to assist with core logging and to evaluate the gold mineralization and specifically the associated hydrothermal alteration. The last third of a 29-hole program on the Bonanza zone and the first holes (T01, T02 and T06 completed and T07 in progress) on the Thesis III zone were completed during this time. Orientation consisted of working with Brian May on Quick Logs of 07-BON-21 and 07-BON-25 and completing the Detailed Log of 07-BON-12. Quick Logs were completed for 07-BON-19, 07-BON-24 and 07-BON-29. Detailed Logs were completed for 07-BON-13 (195m), 07-BON-15 (174m), 07-BON-16 (135.6m), 07-BON-17 (155.46m), 07-BON-18 (188.7m), 07-BON-19 (174.96m) and A07-T01 (0 to 60m). Holes 16, 17, 18 and 19 were selected because they are on the same east-west fence allowing the evaluation of the B2000N section. A suite of representative alteration and mineralization samples was collected from drill holes and the surface for follow up studies at the Colorado School of Mines (see Attached List). Previous work has indicated the presence of both high-sulfidation and low-sulfidation epithermal gold systems in the region around Alberts Hump. Previous drilling has shown that gold is associated with vuggy silica textures and specifically with barite and copper sulfides.

HOST ROCKS

The main host rock for mineralization and alteration at the Bonanza zone appears to be a specific horizon of crystal-lithic lapilli tuff. There are poorly understood variations in crystal content, lithic clast content, and the amount of fiamme-like inclusions that may represent different tuff units. Well-bedded volcanoclastics are present in the bottoms of a number of the drill holes (e.g. BON-17, BON 19 and BON 20). This lithologic unit is relatively distinct and if it has lateral continuity should make a good stratigraphic marker horizon. This potential marker may be useful in working out the structural complexities at Bonanza.

Preliminary observations (T01, T02 and T07) at Thesis III suggest a different host rock than at Bonanza. Hole T07 was drilling through a possible porphyritic intrusive with feldspar phenocrysts in a fine-grained groundmass. The phenocrysts are poorly formed and the rock displays a weak fabric. The altered rocks in holes T01 and T02 have similar remnant textures and may also be intrusives.

Rhyodacite Porphyry Dikes

Rhyodacite porphyry dikes are present at Bonanza and Thesis III. The dikes are variably altered usually with chloritized biotite and sericite-clay altered feldspar phenocrysts. Unless strongly bleached and argillic altered, the dikes have disseminated magnetite and are weak to moderately magnetic. The larger bodies will have relatively strong magnetic contrasts with the relatively non-magnetic andesitic tuffs and should produce strong, positive, linear magnetic anomalies.

At Bonanza, the rhyodacite dikes have complex border textures that suggest two pulses of magma injection (composite dikes). The border zones display unusual bleb textures with spherical (sometimes stretched) inclusions of darker porphyry in lighter porphyry. The earlier porphyry sometimes occurs as angular breccia clasts but usually as rounded blebs suggesting incomplete, or immiscible mixing. One dike contact zone in hole BON-19 has an unusual breccia dike cutting the andesite lapilli tuff wallrock. The breccia dike has similarities to “pepperite” dikes that are produced by phreatomagmatic injections when hot volcanic rocks are deposited on wet sediments. These textures may support that some rhyodacite dikes were emplaced during late volcanism when the tuffs were not completely consolidated.

There is mounting evidence of a possible genetic relationship between the rhyodacite porphyry dikes and the gold mineralization. The rhyodacite dikes locally exhibit significant hydrothermal alteration, are cut by minor quartz and calcite veins, and contain disseminated pyrite. The silicified zones and hydrothermal breccias are spatially associated with a rhyodacite dike at Bonanza. A detailed petrographic analysis of a rhyodacite porphyry dike (sampled by Dave Trabert) shows minor disseminated chalcopyrite associated with disseminated pyrite and minor barite associated with carbonate alteration of alkali feldspar phenocrysts (Shannon, petrographic reports, in progress).

MINERALIZATION AND ALTERATION

The overall style of mineralization is most similar to a structurally controlled, high-sulfidation type epithermal system. The key features include the development of vuggy silica textures by the massive replacement of volcanic host rocks and the selective leaching and removal of feldspars and lithic clasts (or their alteration products) and locally possible pyrite and the superposition of a later gold (+ barite) mineralization stage. Empirical observations support an association of copper sulfides (chalcopyrite, enargite, chalcocite(?), and covellite) with barite, and presumably with gold. Possible free gold, associated with pyrite, chalcopyrite and barite was observed in Hole BON-13.

In general, there is a lack of significant veining in the systems (Bonanza and Thesis III). At Bonanza, the main alteration-mineralized zones are cored by hydrothermal breccias and strong silicified replacement zones. There are well developed proximal alteration

halos consisting of alunite, sericite(?) and clays and broad, outer zones of propylitic alteration. There is a distinct lack of open-space vein textures, banded veins, crustification textures, and quartz-calcite textures indicative of boiling (bladed and ghost blade textures) that are commonly developed in adularia-sericite type (low sulfidation) systems. The lack of these textures and the lack of evidence of adularia argue against a significant low-sulfidation overprint.

Hydrothermal Breccias

Hydrothermal breccias are well developed at Bonanza and occur over a vertical extent of at least 120 meters. The thickest hydrothermal breccia intercepts in Section B2000N are about 7 to 11 meters thick. The shapes, sizes and continuity of hydrothermal breccias are difficult to determine because of structural complexities related to post-mineral faulting. They consist of multistage silicified breccias with different colors of very fine- to fine-grained silica. Two and three brecciation and silicification events are typically indicated with earlier, medium brownish to dark gray silica, intermediate medium- to light gray silica, and later white silica events. The clast compositions are variable ranging from angular locally derived, monolithic clasts to subangular to subrounded, transported heterolithic clasts. Hydrothermal breccias locally contain clasts and fragments of mineralized material including vuggy silica, barite and pyrite. In addition, there are rare clasts of very fine-grained, chalcedonic silica that have fine colloform-type banding and may represent early or higher level veins. The matrix of hydrothermal breccias varies from very fine-grained massive silica to different types of very fine- to fine grained vuggy silica and mixtures of silica, alunite, and clay(?). Some hydrothermal breccias are mineralized with variable amounts of disseminated and wispy stringer pyrite, disseminated to clotty barite and disseminated pyrite, enargite, chalcopryite, galena and sphalerite(?). Thus, the hydrothermal breccias are inter-mineralization and probably locally contain significant gold mineralization. The abundance of hydrothermal breccias and the associated very fine- to fine grained silica and vuggy silica impart a high-level epithermal character to the system.

Veins

Minor quartz-chalcopryite-enargite-chalcocite(?)-covellite veins are present and occur in a wide range of settings including the core silicified-hydrothermal breccia zones, as fragments in hydrothermal breccias, in propylitic altered wall rocks and caught up in fault zones. Minor pyrite veins are generally thin (millimeters), irregular and discontinuous, and are wispy stringers probably mostly of replacement origin. Irregular sericite, illite and/or clay veins are the most abundant and typically cut the quartz-alunite(or sericite?)-pyrite alteration halos. Minor, thin (millimeter) quartz, calcite, and quartz-calcite veinlets are present in the propylitic altered rocks, including the purple andesite lapilli tuff and the rhyodacite porphyry dikes. Barite is usually disseminated and occurs in voids and vugs in high-silica zones. Minor barite occurs in veins cutting vuggy silica (at Thesis III) and propylitic-altered wallrocks (at Bonanza).

Alteration Halos

There are systematic alteration halos developed on the hydrothermal breccia and strong silicified zones at Bonanza. The inner halos consist of a light to medium gray, quartz-alunite(?) -pyrite alteration assemblage. The outer halos consist of a light to medium pink, quartz-alunite alteration assemblage which generally lacks disseminated pyrite. Both the gray and pink alteration zones display ghost, relict textures suggesting an andesitic lapilli tuff protolith. Both zones are locally cut by irregular and discontinuous light greenish to gray illite or sericite veinlets. The outer alteration zone has been characterized as propylitic alteration with chlorite and epidote. Preliminary observations during core logging failed to identify significant chlorite and epidote in the purple-gray andesite crystal lapilli tuff. The main characteristics of the outer alteration zone are the presence of 1 to 3 percent disseminated hematite (complete lack of magnetite) and development of sericite, clay and carbonate in relict feldspar sites. Preliminary follow up petrographic analysis shows significant carbonate (siderite?) partially replacing remnant fiamme-like clasts and sericite(-illite?)-clay-calcite replacing feldspars. Thus, the outer alteration zone appears to be a predominantly sericite(illite?)-clay carbonate-hematite assemblage.

The mineralogy of the fine grained alteration assemblages is uncertain and requires follow up petrographic and XRD studies. The important features of the hydrothermal alteration are that the alteration halos show systematic patterns developed about the core silicification and hydrothermal breccias. The gray and pink quartz-alunite alteration halos are typically about 3 to 6 meters thick and range up to about 9 meters thick on Section 2000N. Thus, the quartz-alunite alteration halos are about as thick as the core silicified/hydrothermal breccia zones and suggest that the alteration halos are relatively narrow and telescoped at Bonanza.

In contrast, the first two holes at Thesis III showed broad alteration halos of light to medium gray quartz-alunite(?) -pyrite that surround the core vuggy silica/massive silica zone. Preliminary observations suggest that this quartz-alunite-pyrite alteration zone is up to 30 to 40 meters thick and is less telescoped than alteration halos at Bonanza.

Controls on Gold Mineralization

Based on previous observations the main controls on gold mineralization are development of vuggy silica textures and an association with barite and copper mineralization. Critical questions include: how and when vuggy silica textures are developed (most vuggy textures appear to be related to remnant feldspar crystal sites); timing of barite, copper and gold mineralization (barite commonly partially fills vugs suggesting it is superimposed after vuggy silica development); relationship between massive silica and vuggy silica; does gold grade correlate with pyrite content in vuggy silica, massive silica and hydrothermal breccias; timing of hydrothermal breccia development (preliminary observations suggest hydrothermal breccias have multiple ages

and some are late syn-mineral suggested by vuggy silica, barite and sulfide clasts). The correlation of gold assays with the detailed logs should help answer these questions.

STRUCTURE

Structural complexities, especially at Bonanza, are indicated by numerous faults and fault zones intersected by drilling. The faults consist of broken rock zones with localized fault breccia and gouge zones. Some faults in mineralized/alteration zones display semi-ductile shear fabrics usually developed in the softer phyllosilicates, and may support syn- or late mineral deformation. Most faults are brittle and post-mineralization. Significant offsets are indicated by juxtaposition of rock types and contrasting alteration types. Many, if not a majority of lithologic contacts and alteration contacts are faults. In places, faults have chopped out portions of symmetrical alteration zones or have sliced in segments with disparate alteration assemblages.

Attempts to interpret the orientation and continuity of faults in the B2000N section were unsuccessful. There are too many fault and fault zones and a lack of coherent geologic datum suggesting multiple sections are required. The volcanoclastic unit, rhyodacite porphyry dikes, and the core silicified/hydrothermal breccia zones provide the best datum to evaluate the orientation and distribution of significant faults.

Late, post-mineral brittle faulting is locally superimposed on the vuggy silica/massive silica zones and causes problems with core drilling and has resulted in significant core loss of some silicified zones (at Bonanza and Thesis III). Radius Drilling was able to significantly improve core recovery in shattered, strong silicified zones with custom mud mixes during the first hole at Thesis III. There are numerous springs and seeps on the surface in the Thesis III area. It is possible that locating active springs and seeps may indicate the general location of major fault zones.

In core holes at Bonanza, the broken fault zones typically exhibit local zones with slickenside and striated slickenside surfaces. Minor exposures at Thesis III and along the Mickey zone have striated slickensides showing predominantly horizontal and some dip slip orientations. Max Baker indicated similar horizontal striations on slickenside surfaces exposed in the Bonanza pit. Thus, the latest movements on fault structures are strike-slip and dip slip offsets suggesting a possible wrench fault system.

RECOMMENDATIONS

In addition to routine observations on lithology, hydrothermal alteration and mineralization the detailed logging should specifically address:

- (1) The distribution and character of hydrothermal breccias (nature of breccia clasts and hydrothermal matrix) and relationship to strong silicification.

- (2) The distribution and contact characteristics of rhyodacite porphyry dikes and superimposed hydrothermal alteration and mineralization.
- (3) The distribution and orientation of the volcaniclastic unit.
- (4) The distribution and character of major faults and fault zones with particular emphasis on juxtaposition of lithologic units and alteration types.

In order to assist the detailed evaluation of the controls on gold mineralization it is recommended to allow for the selected assaying of specific geologic features that are smaller than the one meter assay interval. Examples include narrow quartz-sulfide veins, disseminated and massive sulfide zones, and narrow fault or hydrothermal breccias with mineralized clasts. It is also recommended to allow geologists to break out assay intervals based on specific geologic (lithologic, mineralization or alteration) features. Although the main approach is the evaluation of bulk mineable potential, the presence of relatively high grade gold mineralization requires detailed sampling directed at specific features that may control gold distributions and grades. This can be done without increasing assay costs by shorting or expanding the assay intervals in areas of contacts.

The remote camp setting and required helicopter support put constraints on the drilling program. However, there are benefits in systematic drilling and assaying of multiple target areas. A more systematic approach would be to drill 5 to 10 drill holes on existing target areas (e.g. previously drilled Bonanza, Thesis III and BV) and wait for assays to more efficiently continue step out definition drilling. New target areas (e.g. Mickey zone, Thesis II, and Alberts Hump) should be tested with 2 or 3 drill holes and wait for assays before follow up drilling. This procedure would require more helicopter time for moving drill rigs and for site preparation but prevent drilling getting to far ahead of assaying and the understanding of the major controls on gold mineralization.

RANCH PROJECT

CORE AND SURFACE SAMPLES(Collected by Jim Shannon July 2007)

BONANZA CORE SAMPLES

07-BON-13-110.1m	Pink quartz-alunite(sericite?)
07-BON-13-193.5m	Axt- crystal rich
07-BON-15-13.12m	Alteration contact: pink and gray quartz-alunite?
07-BON-17-44.46m	Quartz-enargite(?) vein
07-BON-18-47.35m	Alteration contacts: pink, gray quartz-alunite and Msi
07-BON-18-79.7m	HBX with disseminated enargite
07-BON-18-82.1m	HBX with gray silica-pyrite matrix
07-BON-18-83.0m	Wispy pyrite stringers in pink quartz-alunite(?)
07-BON-18-86.8m	Pink quartz-alunite(?)
07-BON-18-95.15m	Dark gray soapy/waxy alteration(?) with pyrite
07-BON-18-96.0m	Massive, fine-grained pyrite
07-BON-18-113.0m	HBX with coral-like quartz-barite(?) intergrowth(+galena and sphalerite?)
07-BON-18-113.3m	HBX with quartz-clay(?) matrix
07-BON-18-131.85m	HBX with pink quartz-alunite(?) clasts in white quartz-clay(?) matrix
07-BON-18-132.6m	HBX cut by translucent green illite(?) vein
07-BON-18-138.3m	Pyritic HBX cut by illite(-sericite?) veinlets
07-BON-18-153.1m	Quartz-alunite(?) with unknown black and tan minerals
07-BON-19-130.7m	HBX(?) with stylolitic pyrite stringers
07-BON-20-124.4m	Brian's HBX with red jasper, purple Axt and pyrite-chalcopyrite clasts

THESIS III CORE SAMPLES

07-T01-13.9m	Vuggy silica-alunite(?) with barite and pyrite
07-T01-40.1m	Vuggy silica with barite and pyrite
07-T01-104.9m	GQP- gray quartz-pyrite rock with disseminated pyrite and gypsum-anhydrite veins
07-T07-261ft	Intrusive(?) - porphyritic with anhedral feldspar phenocrysts and weak aligned fabric

BONANZA SURFACE SAMPLES

BON-1	Grab float vuggy quartz with barite
BON-2	Grab float vuggy quartz with pyrite band and barite

THESIS III SURFACE SAMPLES

THE-1	Grab float coarse-grained barite
THE-2	Grab float barite contact with silica-pyrite
THE-3	Grab float massive-vuggy silica with Cu-oxides
THE-4	Subcrop quartz-alunite

MICKY SURFACE SAMPLE

MIC-1 Outcrop silicified hydrothermal breccia (site 06-7879)

EAST OF CAMP SURFACE SAMPLE

TRA-1 Outcrop of hornblende trachyte porphyry- probably same intrusive or
flow as exposed at quarry?

PETROLOGICAL REPORT

COMPANY: Christopher-James Gold Corp
PROJECT: Ranch, N.B.C.
SAMPLE NUMBER: 07-BON-PET-01

REPORT BY: James R. Shannon, Ph.D.
DATE: August 1, 2007
SAMPLE TYPE: Polished Thin Section

BILLET DESCRIPTION: Core sample from Bonanza zone collected by Dave Trabert. Sample of crystal-rich andesitic(?) crystal lapilli tuff (Axt) similar to crystal-rich tuff lithologic unit (Act) above the volcanoclastic unit(?). Pinkish to greenish, purplish gray, hematitic, crystal-rich tuff with 25 percent light greenish sericitized plagioclase crystals and 12 to 15 percent, flattened fiamme-like clasts. The rock is totally non-magnetic and does not effervesce with dilute HCl.

PETROGRAPHIC DESCRIPTION:

MINERAL	EST %	SIZE mm	COMMENTS
PHENOCRYST	(43-45)		
Feldspar	35-38	Up to 2.5	Subhedral (some euhedral) mostly whole (some broken) relict plagioclase (possibly some K-feldspar?) phenocrysts; completely altered-replaced by clay-sericite+/-carbonate; most xtals 0.5 to 1.4 mm and suggestions of large size population (1.5 to 2.5 mm).
Quartz	0.5	Up to 0.6	Anhedral (minor suggestion of subhedral) phenocrysts; suggestion of subhedral faces, rounding and minor resorption.
Mafic	3-4	Up to 0.5	Difficult to distinguish relict mafic phenocrysts due to complete alteration; relict biotite phenocrysts in fiamme-like inclusions are altered-replaced by sericite-carbonate-hematite-rutile.
GRDMASS	(40)	0.2-0.8	Very fine-grained quartzo-feldspathic mosaic intergrowth; consists of about 30 to 35 percent plagioclase altered to sericite-clay; lacks evidence of vitro-clastic and devitrification textures; exhibits slight variations in grain size suggesting rapid crystallization from melt or slower crystallization of thick tuff accumulation(?).
ACCESSORY	(3)		
Opaque	2-3	Up to 1.0	Relatively abundant subhedral to anhedral grains of hematite; some smaller grains have octahedral shapes suggesting originally magnetite.
Apatite	0.5	Up to 0.8	Euhedral to subhedral hexagonal grains; moderately altered with wk to mod brownish pleochroism and lamellar hematite inclusions.
CLASTS	(14-16)		
Fiamme-Like	12-13	Up to 10.	Flattened, fiamme-like clasts with suggestion of lower phenocryst content and with remnant k-feldspar spherulites suggesting devitrified glass; preferentially moderately replaced by siderite(?) carbonate.
Lithic	2-3	Up to .5	Minor clasts of porphyritic volcanic rocks.
ALTERATION	(45-50)		
Sericite-Illite	25	V fn gr	As complete alteration-replacement of feldspar crystals; as coarser mats intergrown with low birefringent clay and carbonate.

MINERAL	EST%	SIZEmm	COMMENTS
Carbonate	10-12	Fn gr	Possibly two varieties of carbonate: siderite- slt brownish pleochroism; as preferential replacement of fiamme-like clasts; and calcite- as patchy replacement in altered feldspars.
Clay	10-12	V fn gr	As complete alteration-replacement of feldspar; as intergrowth with sericite and patchy carbonate; low birefringence.
Hematite	2-3	Up to 1.0	As abundant disseminated grains probably as pseudomorphic replacement of original magnetite.
Rutile	Tr	Up to .03	Tiny disseminated grains probably in altered mafic mineral sites(?); high relief, high birefringence.

TEXTURES AND ADDITIONAL OBSERVATIONS

The rocks exposed at the Bonanza zone are part of the Adoogacho member of the Toodoggone Formation (Diakow and others, 1991). The Adoogacho member is the basal map unit of the Lower Volcanic Cycle and is composed of variably welded dacitic ash flows and associated air-fall tuffs with minor lava flows and volcanic-derived clastic interbeds. Sample PET-01 is a crystal-rich porphyritic rock with abundant fiamme-like inclusions. The fiamme-like inclusions are strongly elongated and moderately to strongly aligned producing a relatively consistent moderate compaction foliation. Feldspar phenocrysts (all plagioclase?) are completely altered-replaced, predominantly subhedral to euhedral tabular grains that are mostly whole crystals. Mafic phenocrysts are difficult to discern due to complete alteration. Fragmental textures are suggested by some broken crystals and relatively abundant fiamme-like and lithic clasts. The very fine-grained matrix consists of a relatively quartz and K-feldspar rich, quartzo-feldspathic intergrowth with general 0.03 to 0.08 mm grain size. The presence of minor quartz phenocrysts and the relatively quartz and K-feldspar-rich groundmass suggest a latite or quartz latite composition.

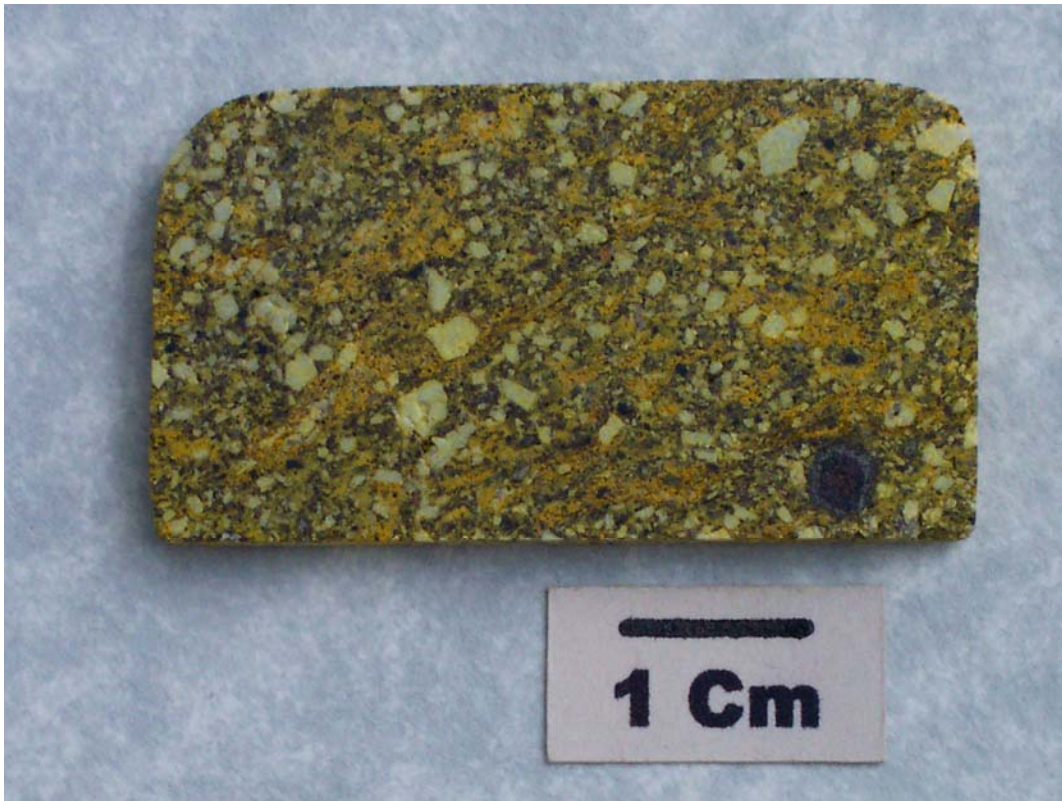
The fiamme-like inclusions have a lower phenocryst content (15 to 20 percent) than the host porphyry and have remnant devitrification textures suggesting that they were originally glassy. The remnants of devitrified groundmass consist of very fine grained (0.005 to 0.01mm) quartzo-feldspathic intergrowths with abundant 0.2 to 0.3 mm K-feldspar spherulites. The fiamme-like inclusions are moderately to strongly, preferentially replaced by siderite(?) carbonate. Relict biotite phenocrysts are apparent in the fiamme-like inclusions.

The characteristics of the host porphyry indicate a lack of vitroclastic textures, but suggestions of fragmental textures (broken crystals and lithic clasts). The rock has a porphyro-aphanitic texture with a very-fine grained quartzo-feldspathic groundmass. Thus, the characteristics of the groundmass suggest rapid crystallization (quenching) of a relatively thick crystal-rich and lithic-rich flow or possibly slower cooling of a thick accumulation of ash-flow tuff. Incorporation of the variable, but relatively large component of fiamme-like inclusions is supportive of an ash-flow tuff origin. Remnant K-feldspar spherulites suggests the fiamme-like inclusions were originally glassy. The apparent 'compaction foliation' could be produced by compaction of glassy pumice clasts or flow alignment of elongated, glassy inclusions. The pumice clasts or glassy inclusions could have been incorporated in the host latite to quartz latite in the vent area or possibly from earlier flows. Additional studies on fresher samples of Axt and Adf units are required to further evaluate the lack of vitroclastic textures in the matrix.

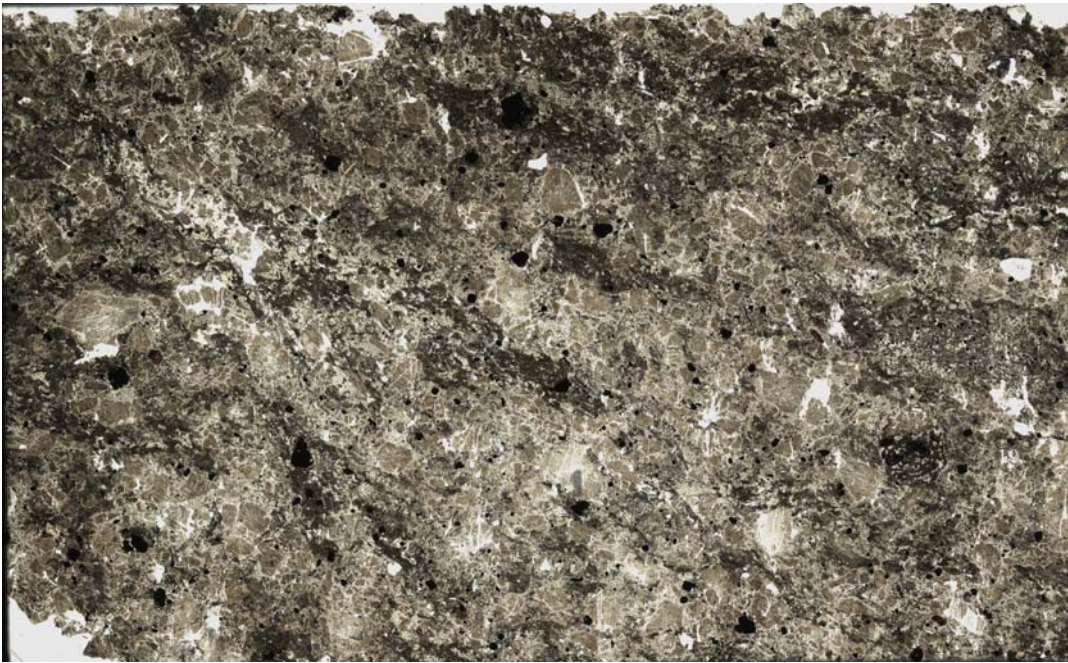
The rock is moderate to strongly hydrothermally altered with complete alteration replacement of plagioclase and mafic phenocrysts by sericite-illite, clay and patchy carbonate. Abundant disseminated hematite appears to be pseudomorphic alteration-replacement of primary magnetite. The predominant sericite-clay-carbonate-hematite alteration appears to be the outer

alteration assemblage at the Bonanza zone. The lack of chlorite and epidote suggest more of an argillic alteration assemblage, rather than a propylitic assemblage.

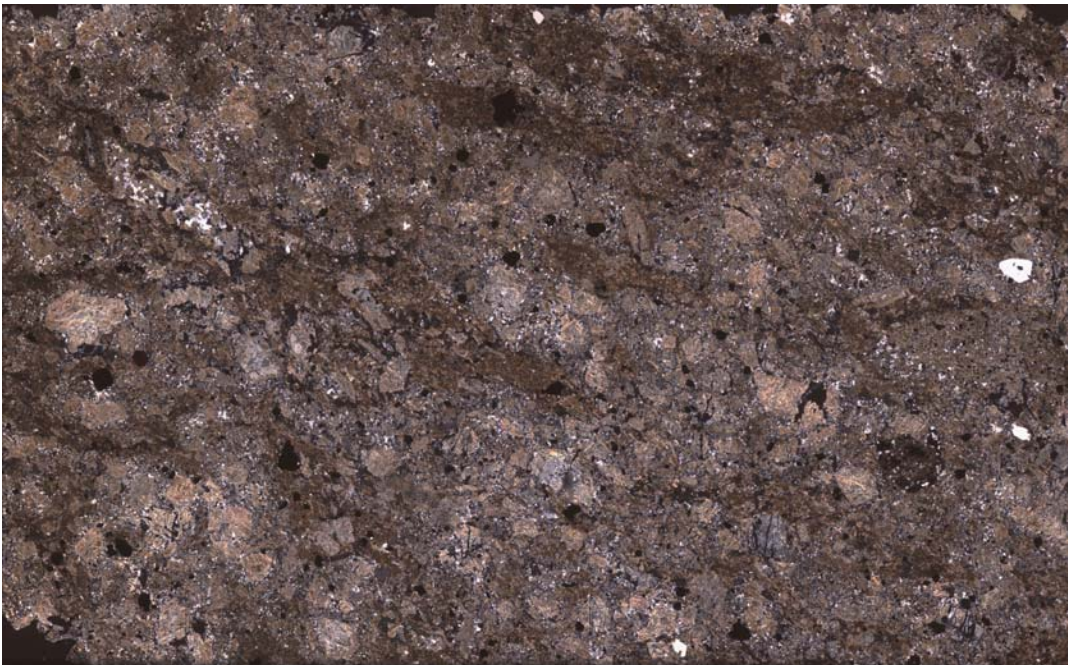
ROCK NAME: Porphyritic Latite to Quartz Latite Ash-Flow Tuff With Moderate-Strong Sericite-Clay-Carbonate-Hematite Alteration



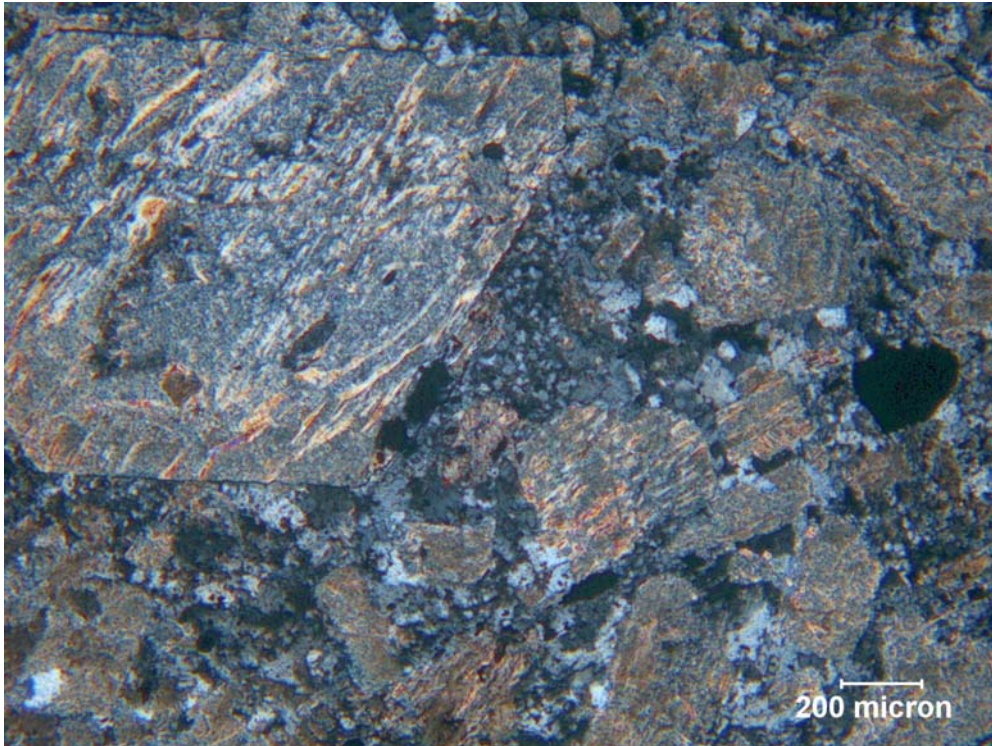
Sample 07-BON-PET-01. Thin section billet stained (yellow) for K-feldspar showing relatively k-feldspar-rich matrix and preferential staining of fiamme-like clasts. Note abundant plagioclase crystals.



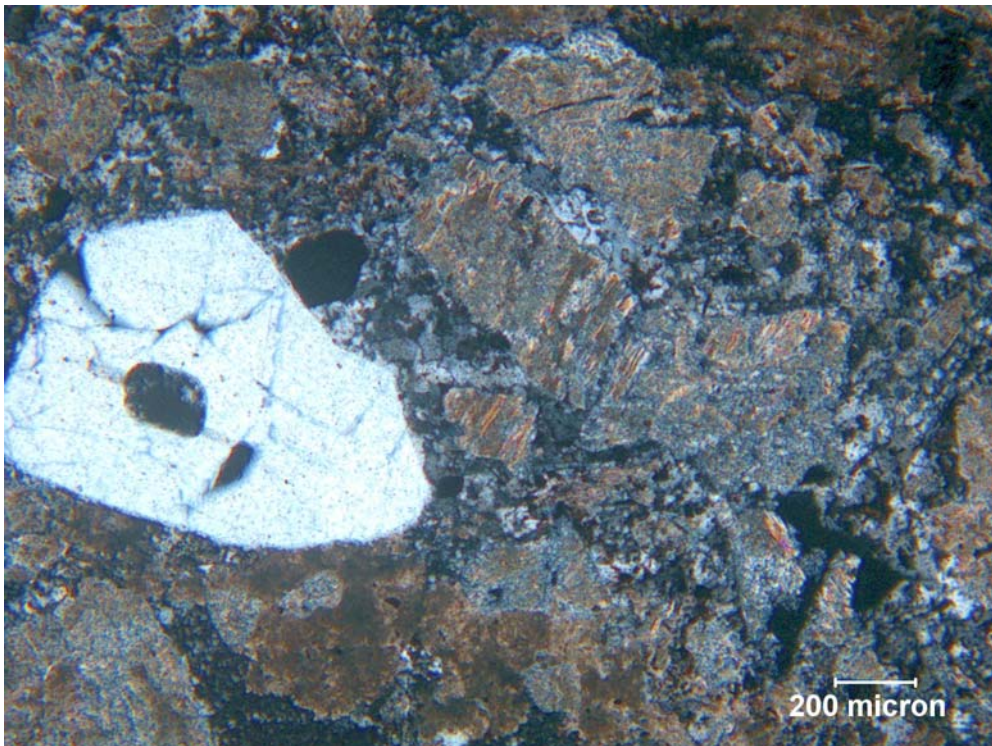
Sample 07-BON-PET-01. Full thinsection view of crystal-rich, porphyritic latite to quartz latite flow. Plane light; approx. 3.6 cm across. Note abundant disseminated hematite.



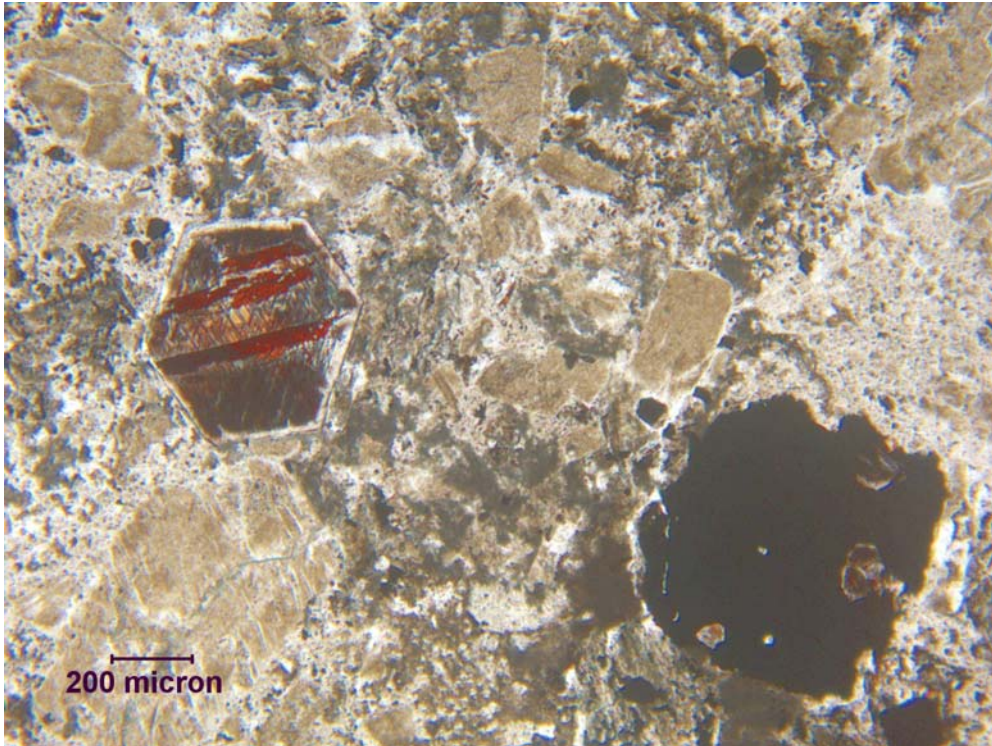
Sample 07-BON-PET-01. Same view as above with crossed polarizers. Note alignment of remnant fiamme-like inclusions (darker lenses).



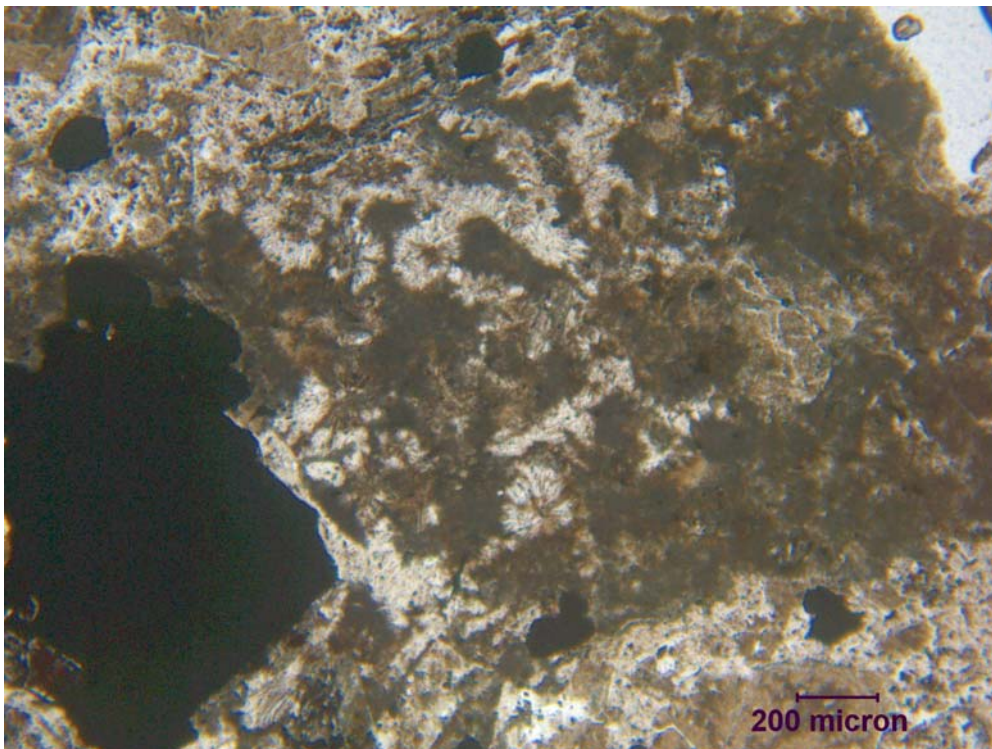
Sample 07-BON-PET-01. Close-up view showing crowded, completely altered plagioclase phenocrysts. Note variable grain size of quartzo-feldspathic groundmass. Crossed pol.



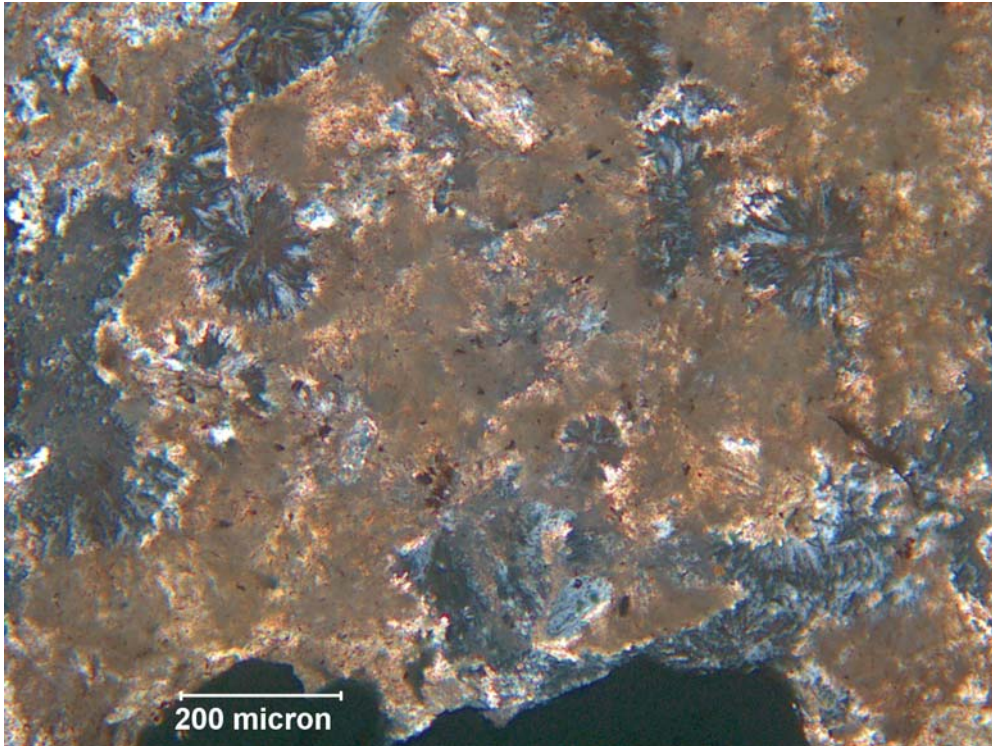
Sample 07-BON-PET-01. Close-up view of quartz and altered plagioclase phenocrysts in quartzo-feldspathic groundmass. Crossed polarizers.



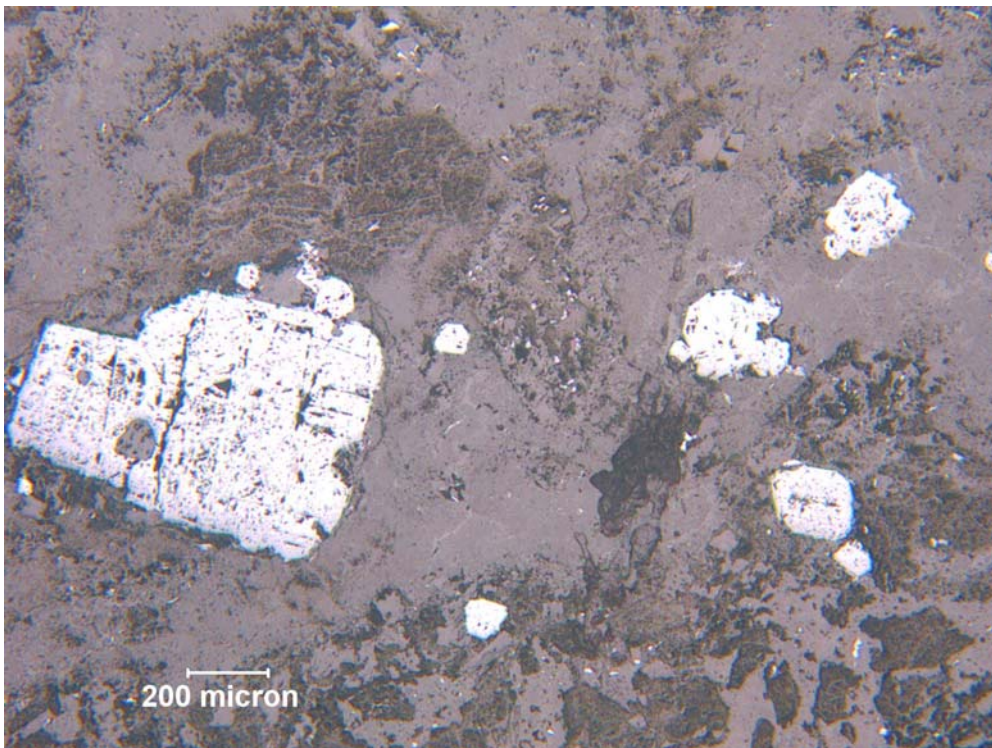
Sample 07-BON-PET-01. Accessory, hematite-altered apatite (left) and hematite-altered magnetite (right) microphenocrysts. Plane light.



Sample 07-BON-PET-01. Close-up view of fiamme-like inclusion with remnants of K-feldspar spherulites and strong siderite (brownish) alteration. Plane light.



Sample 07-BON-PET-01. Detail of remnant K-feldspar spherulites in fiamme-like clasts. Crossed polarizers.



Sample 07-BON-PET-01. Close-up view of disseminated hematite pseudomorphic replacements of magnetite. Reflected light.

PETROLOGICAL REPORT

COMPANY: Christopher-James Gold Corp
PROJECT: Ranch, N.B.C.
SAMPLE NUMBER: 07-BON-PET-02

REPORT BY: James R. Shannon, Ph.D.
DATE: August 1, 2007
SAMPLE TYPE: Polished Thin Section

BILLET DESCRIPTION: Sample of DDH core collected by Dave Trabert. Medium reddish brown, porphyritic felsic igneous rock with small- to medium-sized, subhedral phenocrysts in an aphanitic groundmass. Phenocrysts include reddish, hematite-stained plagioclase, pinkish K-feldspar, gray quartz and dark green biotite. The phenocrysts are moderately to strongly hydrothermally altered. The rock is weakly-moderately magnetic and feldspar phenocrysts effervesce with dilute HCl.

PETROGRAPHIC DESCRIPTION:

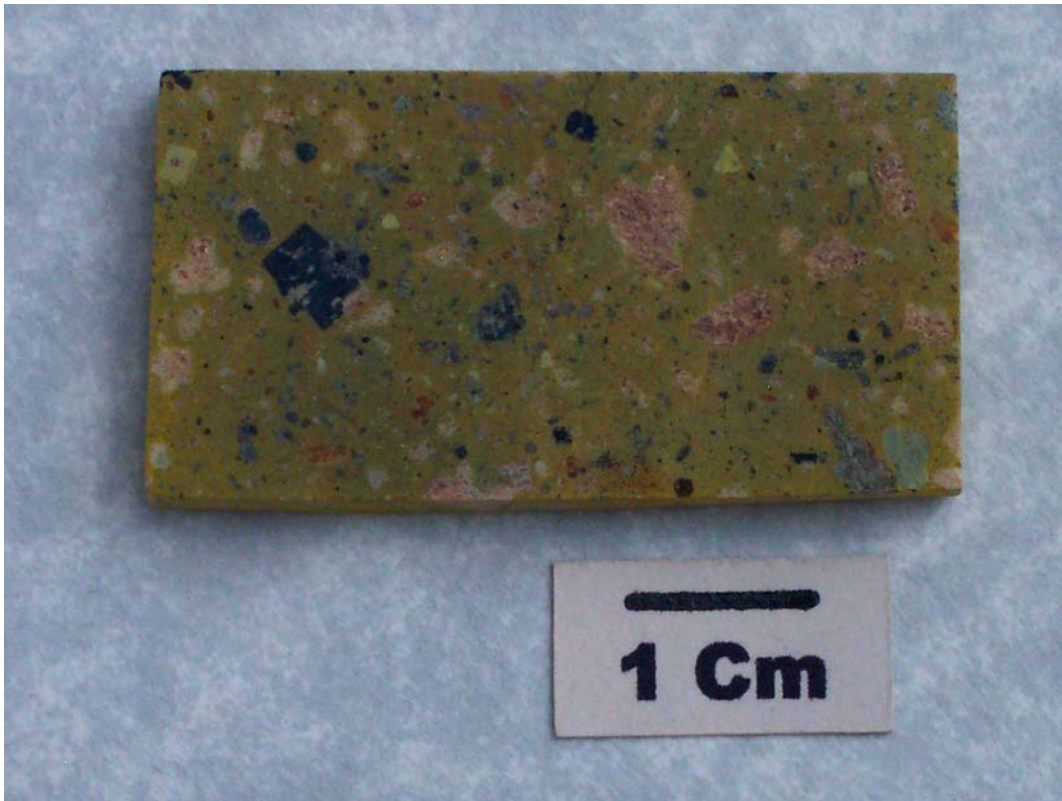
MINERAL	EST %	SIZE mm	COMMENTS
PHENOCRYST	(25)		
Plagioclase	12-14	Up to 4.0	Subhedral phenocrysts almost completely altered-replaced by carbonate-sericite-clay; trace twinned remnants.
K-feldspar	7-8	Up to 2.0	Subhedral phenocrysts (orthoclase) moderately altered-replaced by carbonate.
Biotite	3-4	Up to 2.3	Subhedral phenocrysts completely altered-replaced by green chlorite-carbonate-rutile.
Quartz	2-3	Up to 1.8	Subhedral, rounded, resorpted phenocrysts; distinctly rounded with narrow reaction overgrowths.
GRDMASS	(74)	v. fn gr	Very fine-grained (aphanitic) quartz-Kfeldspar-plagioclase intergrowth.
ACCESSORY	(1)		
Magnetite	0.5	Up to 1.3	Subhedral to anhedral, skeletal grains in clusters up to 2.3 mm; Grains are complex with abundant rutile-leucoxene inclusions and cracks/fractures.
Apatite	0.1	Up to 0.6	Subhedral to euhedral grains.
Zircon	Tr	Up to 0.1	Subhedral elongated crystals.
Rutile	Tr	.03-.07	Subhedral, primary grains associated with magnetite.
ALTERATION	(28)		
Sericite-illite	16-17	V fn gr	As patchy intergrowth with carbonate and clay as alteration-replacement of plagioclase.
Carbonate	8-9	Fn gr	Calcite as patchy replacement mosaics of K-feldspar, patchy intergrowths with sericite-clay after plagioclase; and alteration patches in groundmass.
Chlorite	3	Fn gr	As pseudomorphic alteration-replacement of biotite; mod. yellow to green pleochroism; bluish birefringence suggest pinnite.
Clay	2	V fn gr	Minor low birefringent clay intergrown with sericite and carbonate in altered plagioclase.
Barite	Tr	Up to 0.1	Trace anhedral grains in K-feldspar phenocrysts.
Rutile	Tr	.01-.04	Tiny, secondary grains concentrated in altered biotite.
MINERALIZ	(0.5)		
Pyrite	0.5	Up to 0.8	Subhedral to anhedral disseminated grains
Chalcopyrite	Tr	Up to .08	Anhedral grains and composite grains with pyrite; partly rims pyrite.
VEINS	(0.1)		
Carbonate	0.1		Minor irregular carbonate replacement veinlets.
Chlorite	Tr		Trace hairline, discontinuous chlorite microveinlets.

TEXTURES AND ADDITIONAL OBSERVATIONS

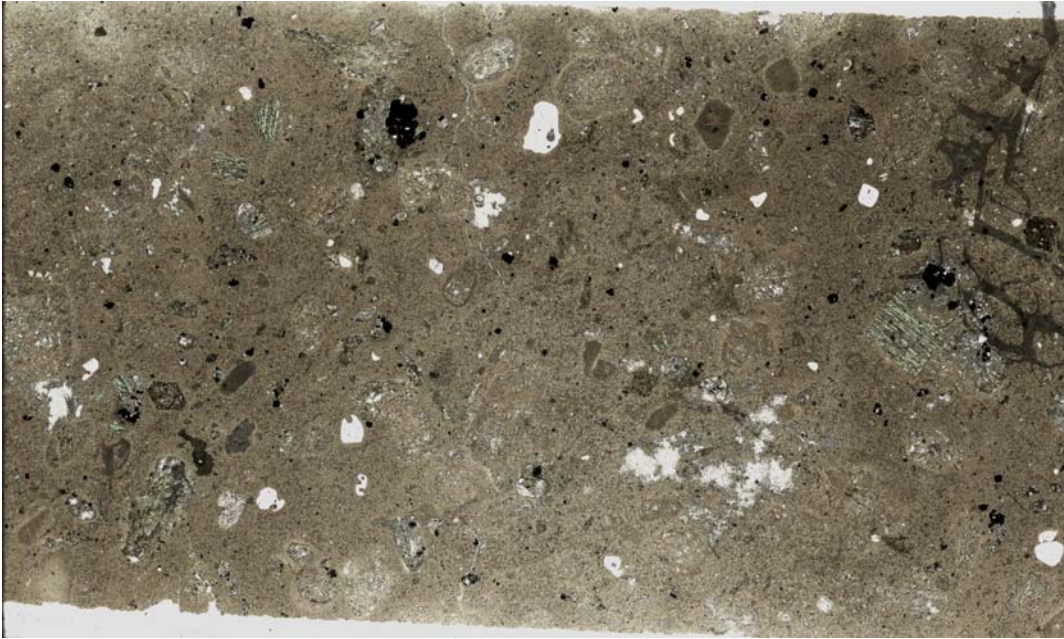
The rock displays a well-developed porphyro-aphanitic texture with moderately abundant (25 percent) subhedral phenocrysts of plagioclase, orthoclase, biotite and quartz in a very fine-grained groundmass. The billet was stained for potassium feldspar and indicates some orthoclase phenocrysts remain in the rock and the groundmass is relatively K-feldspar rich. Field relations suggest the rhyodacite porphyry dikes are shallow, hypabyssal intrusions. The very fine-grained groundmass indicates rapid quenching of the matrix after emplacement.

The sample is moderately hydrothermally altered with almost complete alteration-replacement of plagioclase phenocrysts by sericite-carbonate-clay, weak to moderate alteration-replacement of orthoclase phenocrysts by patchy carbonate and trace barite, and complete alteration-replacement of biotite phenocrysts by chlorite-carbonate-rutile. The dominance of sericite-carbonate-clay alteration of feldspar and chloritization of biotite suggests a propylitic alteration assemblage.

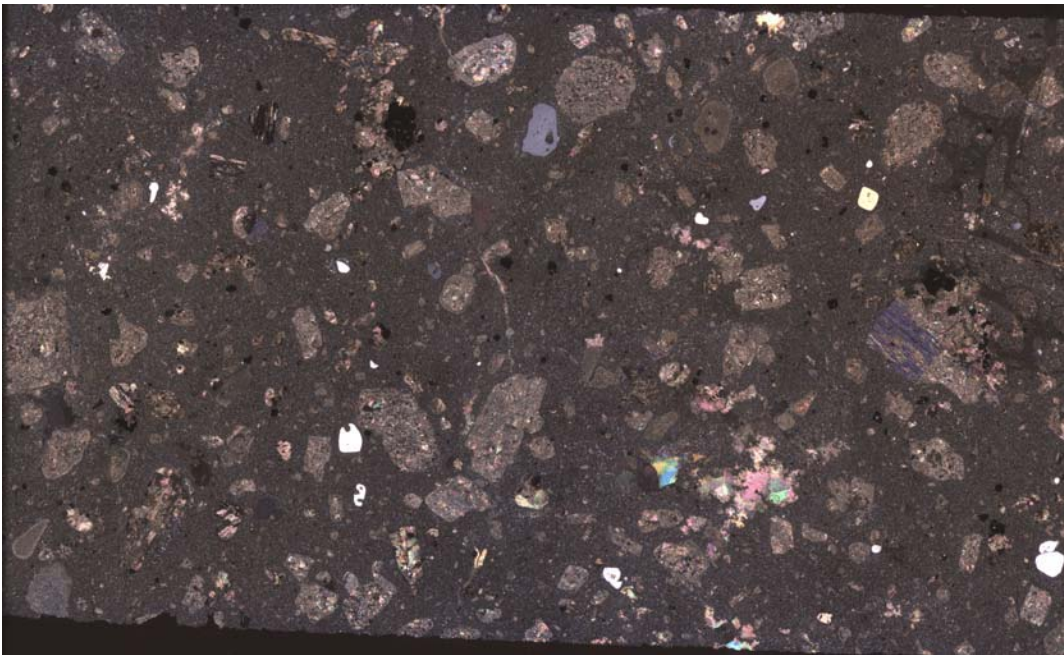
ROCK NAME: Biotite Rhyodacite Porphyry Dike With Moderate-Strong Sericite-Carbonate-Chlorite Alteration and Minor Disseminated Pyrite and Chalcopyrite



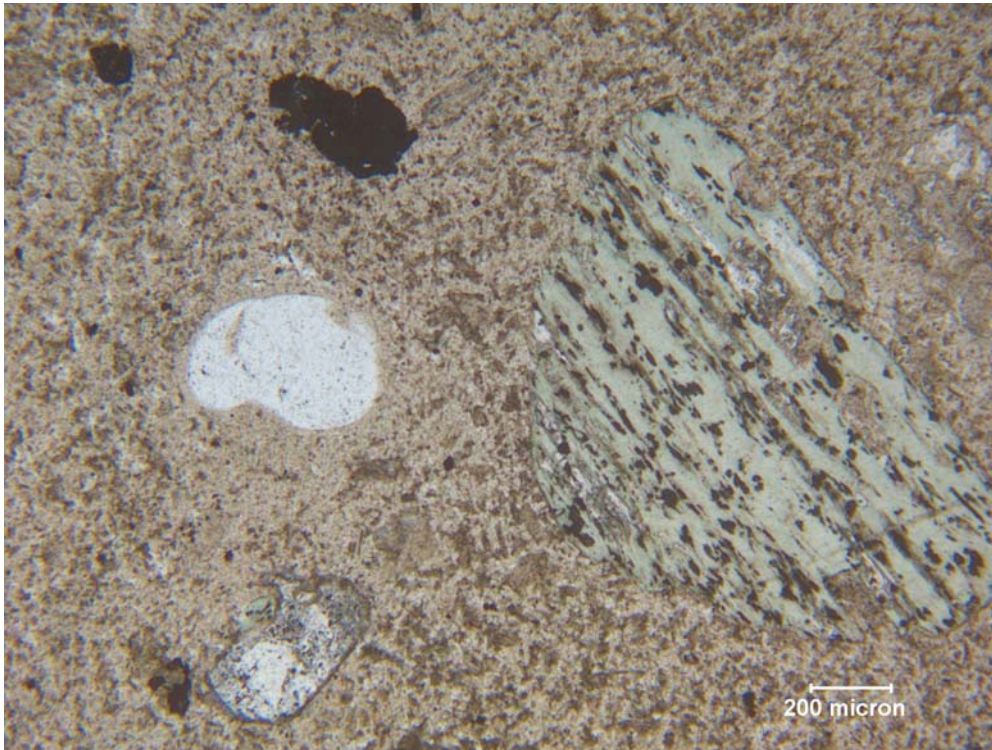
Sample 07-BON-PET-02. Thin-section billet of biotite rhyodacite porphyry dike stained (yellow) for K-feldspar. Note quartz phenocrysts (gray), small orthoclase phenocrysts (yellow), altered plagioclase phenocrysts (reddish) and chloritized biotite phenocryst (lg black grain, left) in K-feldspar rich aphanitic groundmass (grayish yellow).



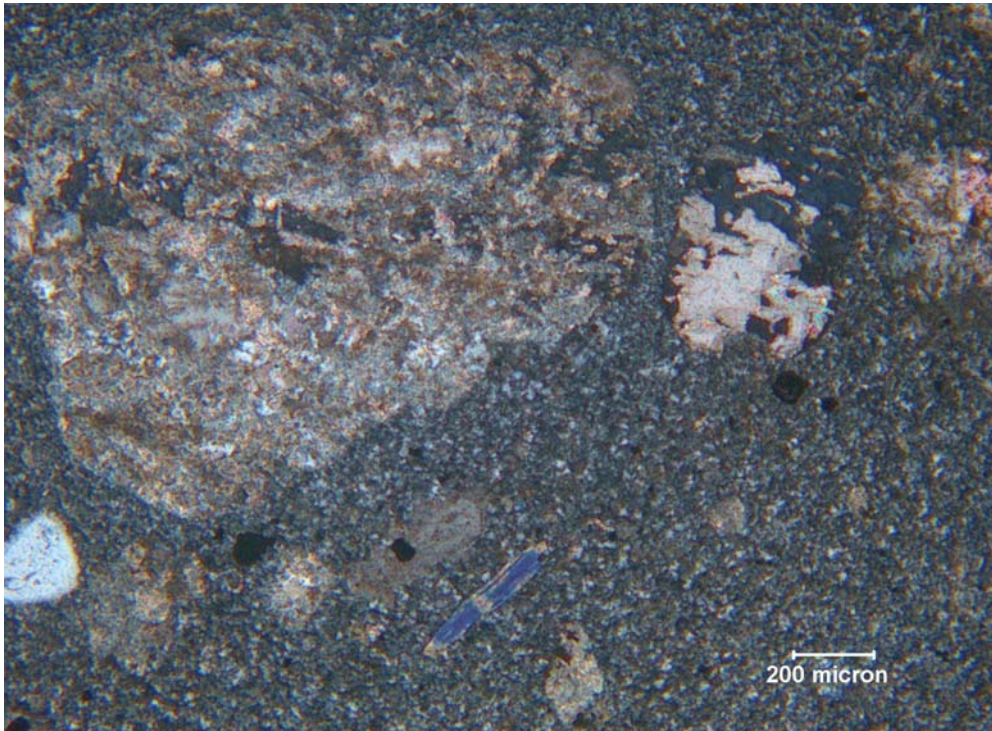
Sample 07-BON-PET-02. Full thinsection view of rhyodacite porphyry dike. Note relatively abundant quartz phenocrysts (white). Plane light; approx. 3.6 cm across.



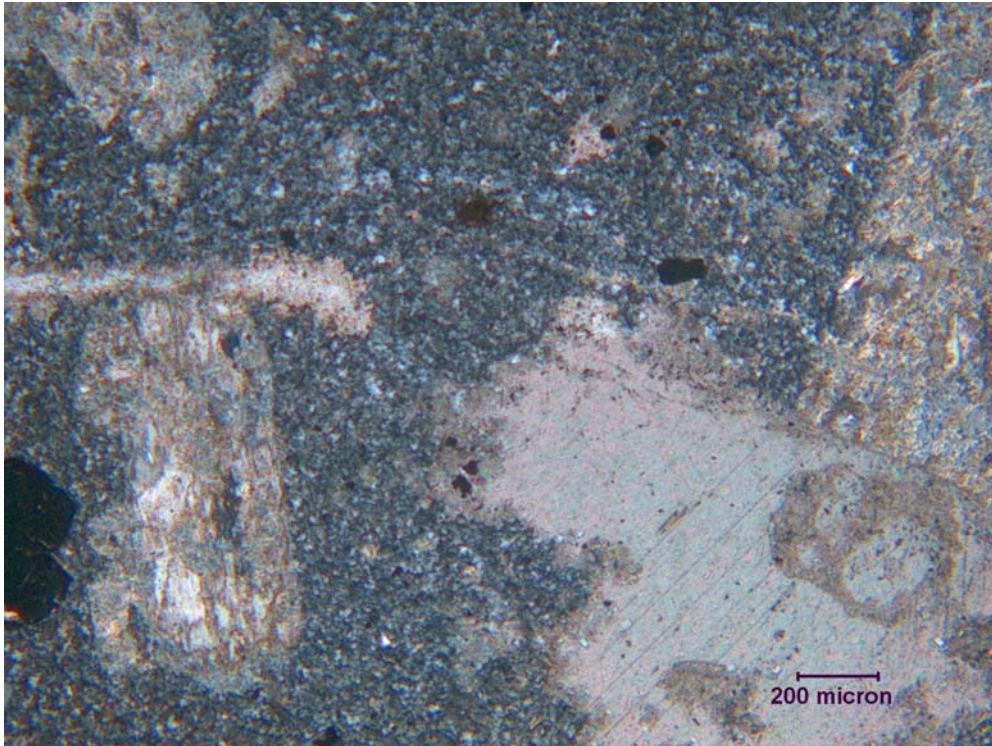
Sample 07-BON-PET-02. Same view as above with crossed polarizers showing porphyrophanitic texture with abundant altered plagioclase phenocrysts.



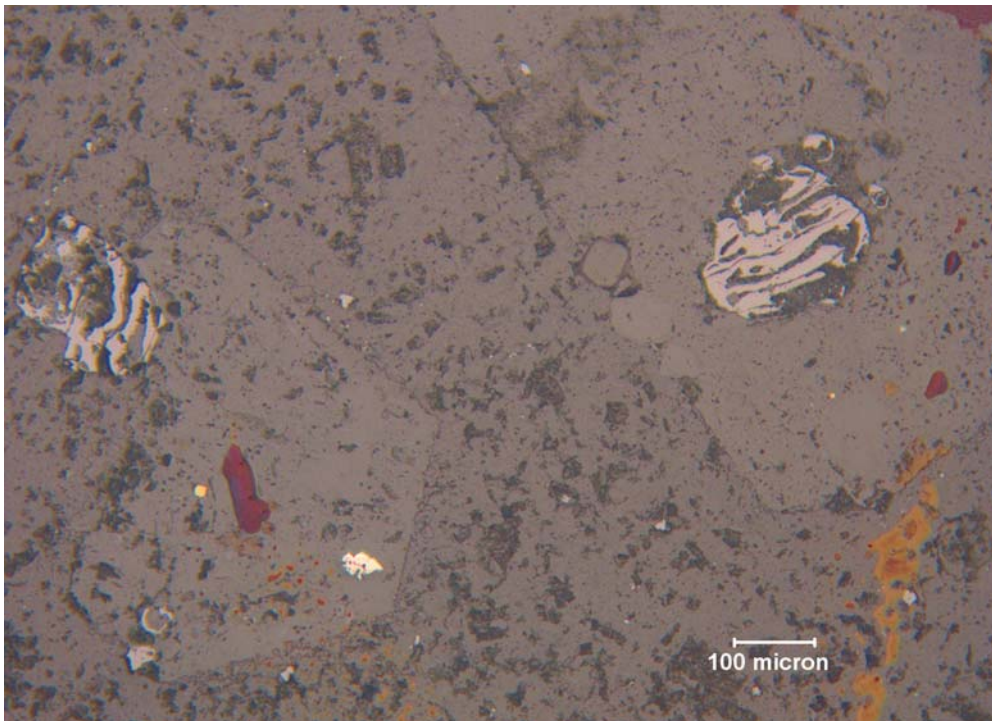
Sample 07-BON-PET-02. Close-up view showing quartz (white, left), altered orthoclase (gray, lower left) and altered biotite (greenish, right) phenocrysts. Plane light.



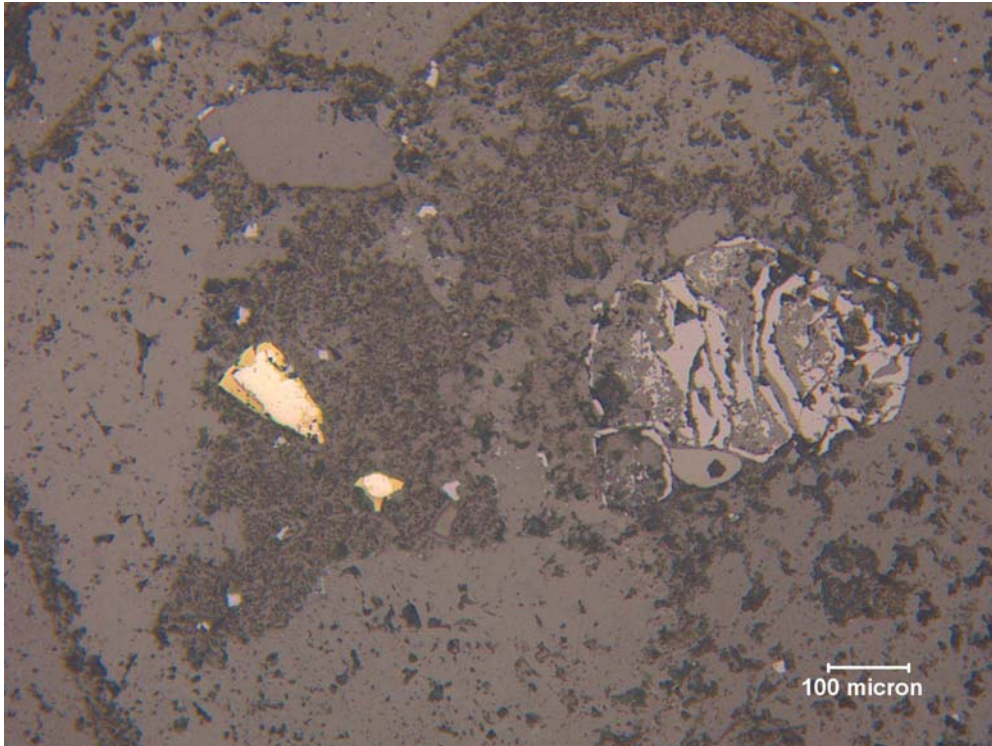
Sample 07-BON-PET-02. Close-up of sericite-carbonate altered plagioclase phenocryst (left) and partly carbonate altered orthoclase phenocryst (right). XP.



Sample 07-BON-PET-02. Detailed view of irregular carbonate microveinlet and alteration patch (lower right). Crossed polarizers.



Sample 07-BON-PET-02. Close-up view of disseminated magnetite (right), pyrite (tanish, lower left center), and chalcopyrite (yellow, left of red ink mark). Reflected light.



Sample 07-BON-PET-02. Detailed view of composite pyrite (tanish) and chalcopyrite (yellow) grains (left center). Note chalcopyrite partially rims pyrite. Reflected light.

XRD REPORT

COMPANY: Christopher-James Gold Corp
PROJECT: Ranch, N.B.C.
SAMPLE NUMBERS: 07-BON-ALT-01
07-BON-ALT-02

REPORT BY: James R. Shannon, Ph.D.
DATE: August 1, 2007
SAMPLE TYPE: Core

The purpose of this report is to document a preliminary X-Ray Diffraction (XRD) study that was conducted on two samples from the Bonanza zone that were collected by Dave Trabert. Two small slabs were prepared and stained for K-feldspar. Sample 07-BON-ALT-01 is a vein-alteration sample (see digital image) consisting of two domains: a mottled domain with gray and pinkish areas and abundant disseminated pyrite and a 'vein' of very fine grained pinkish tan material with only trace disseminated pyrite. Both domains are cut by irregular light greenish gray veinlets. Sample 07-BON-ALT-02 also has two domains (see digital image): a chaotic mixture of very fine grained pinkish and grayish material with irregularly distributed disseminated pyrite (appears to be a hydrothermal breccia?) and altered wall rock with remnant textures from the volcanic protolith. Along with quartz, the alteration phases have been variously referred to as alunite, sericite, or clay in the field. Max Baker has suggested that original secondary adularia is probably largely replaced by sericite at Bonanza.

Staining for potassium feldspar shows that neither sample has secondary K-feldspar (adularia) or evidence of remnants of primary K-feldspar (orthoclase or sanidine). The preliminary XRD study was conducted by Dr. Ric Wendlandt, Department of Geology and Geological Engineering, Colorado School of Mines. Dr. Wendlandt usually provides a list of minerals that are interpreted from the X-ray diffraction patterns. His summary is included here:

Jim,

The power supply for the XRD finally arrived and I have had the opportunity to analyze the two samples per your request.

Both are dominated by kaolinite and quartz with lesser pyrite or sphalerite (there is a difficult peak overlap problem for pyrite and sphalerite). I detect no other micaceous material (i.e., 10-A phase), nor do I detect any alunite.

I'll show you the data when you return.

RW

--

Richard F. Wendlandt
Prof., Geochemistry and Mineralogy
Dept. of Geology and Geological Engineering Colorado School of Mines
Golden, CO 80401

Phone: 303-273-3809

As part of the follow up, I asked Ric to evaluate the presence of adularia in the samples, and he indicated no adularia in either sample. His interpretation is that there is quartz and a kaolinite group mineral as the alteration assemblage in both samples. The distinction of

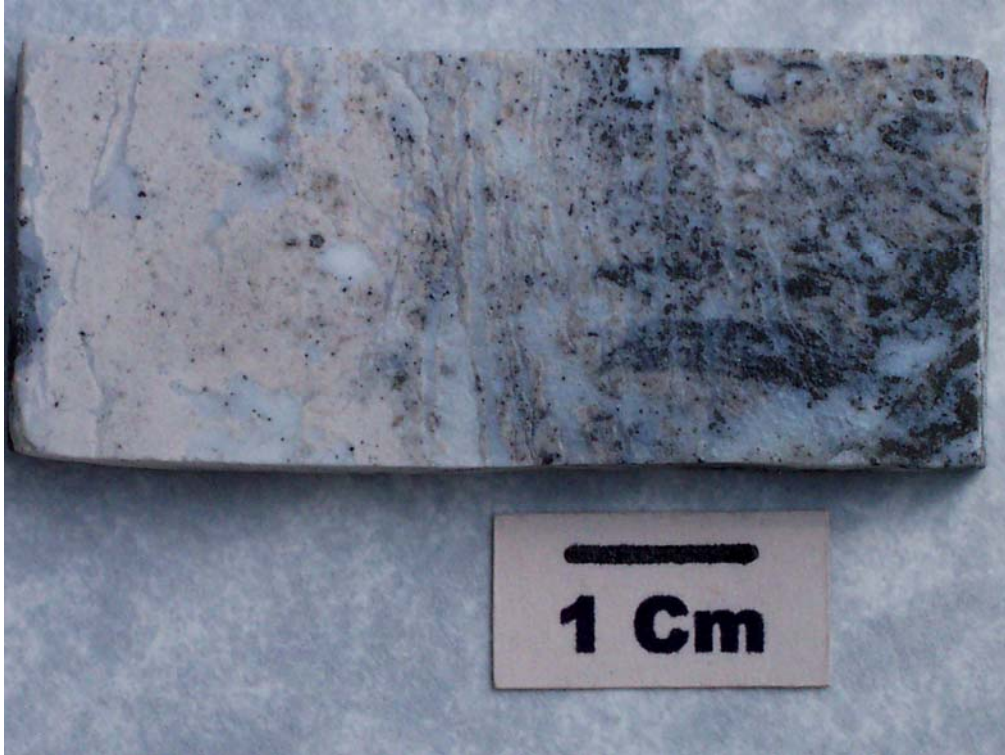
the various kaolinite group minerals (kaolinite, anauxite, dickite, nacrite, halloysite and allophone) requires more detailed XRD studies. I suspect that the different colors of fine-grained alteration phases in these samples may be related to different kaolinite group phases. This is supported by general descriptions of acid-sulfate type alteration zones in the Alberts Hump area that exhibit a “transition outward from silicified zones into an annular zone of predominantly dickite, nacrite, quartz and sodium-rich alunite” (Diakow and others, 1991, p.542) or at the AL (Bonanza) deposit where “the silicified zone is flanked by quartz-natroalunite-dickite and an outer quartz-illite-hematite assemblage” (Clark and Williams-Jones, 1986; summarized in Diakow and others, 1991, p.544). I requested copies of the X-ray diffraction patterns for the two samples and they are included below. I also requested that future studies include X-ray diffraction patterns with the interpreted mineral labels on appropriate peaks.

RECOMMENDATIONS

The preliminary XRD study of two samples from the Bonanza zone indicates that quartz and kaolinite group minerals are the main alteration assemblage. Neither sample has evidence of alunite, sericite-illite or adularia. Additional characterization of alteration phases at Bonanza is recommended. Additional X-ray diffraction studies should be directed at confirming the presence, distribution, and character of alunite (or natroalunite) and sericite. These alteration studies should be applicable to similar high-sulfidation system target areas in the region.

Preliminary petrographic observations on a sample of ‘purplish andesite’ considered to be the outer propylitic alteration zone at Bonanza indicate a lack of chlorite and epidote. The dominant sericite-carbonate-clay-hematite alteration assemblage is problematic. Is it equivalent to an outer propylitic zone or is there another, more distal propylitic zone that has not been recognized? Can small zones with disseminated pyrite and localized quartz-pyrite-chalcopyrite+/-galena and sphalerite veins and hydrothermal breccias carry significant precious metals in the sericite-carbonate-clay-hematite zone? Additional studies at the BV zone are recommended because there are indicated differences including the presence of discrete gold-bearing, barite-quartz-pyrite veins and abundant sericite, and lack of advanced argillic mineral assemblages (Clark and Williams-Jones, 1989) compared to Bonanza and Thesis zones.

Additional studies directed at evaluating the presence and distribution of adularia are recommended. Staining slabs for K-feldspar is a quick and relatively cheap method to achieve this. The Lawyers property includes a number of adularia-sericite type showings. If this property is added to the portfolio of Christopher-James Gold Corp holdings, additional alteration studies are recommended.

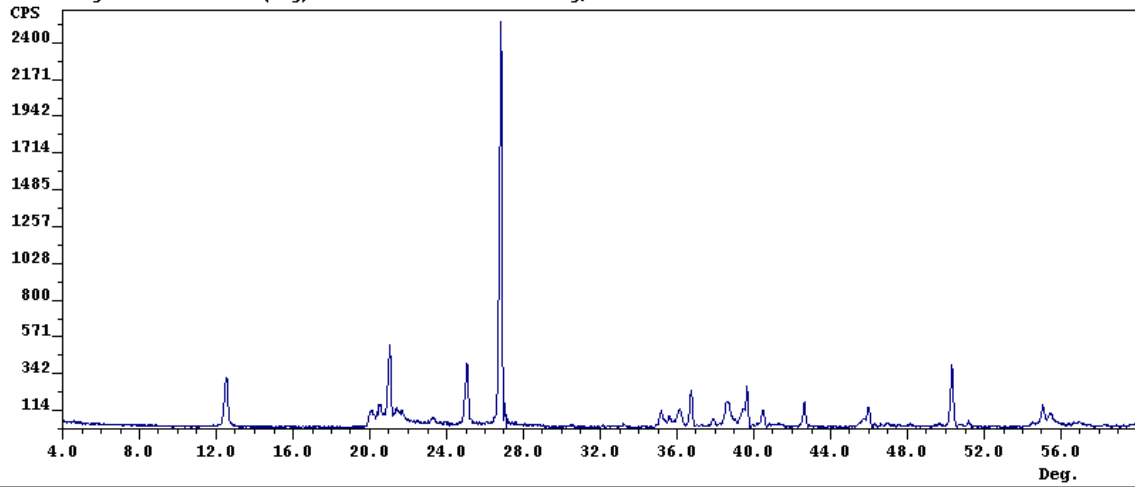


Sample 07-BON-ALT-01. Small slab of alteration/vein stained for K-feldspar. Lack of staining indicates no secondary K-feldspar (adularia) or remnants of primary K-feldspar (orthoclase?) in the sample. Material analyzed with XRD was mixture of very fine-grained pinkish-tan material with fine light greenish veinlets in left half of slab.

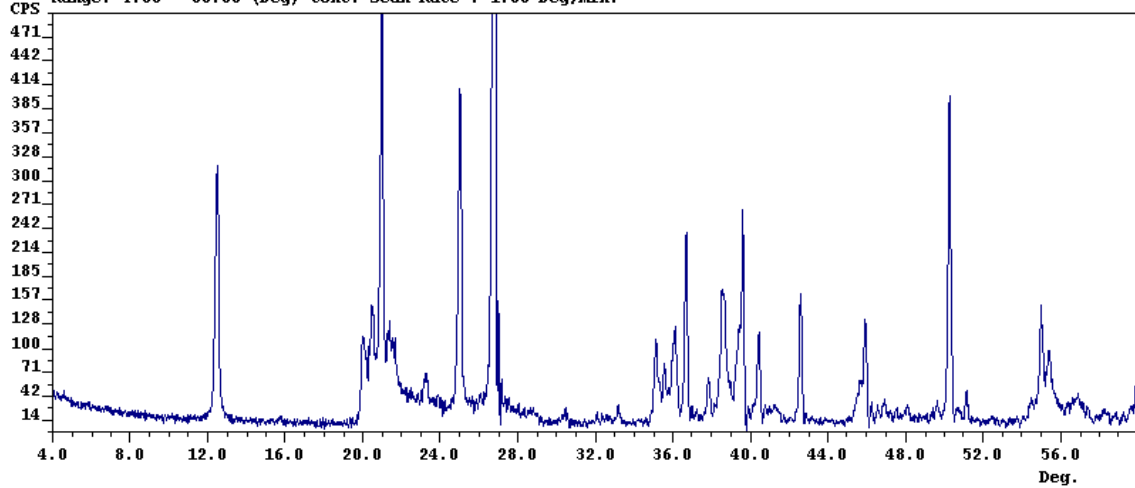


Sample 07-BON-ALT-02. Small slab of 'alteration/vein', probably a hydrothermal breccia (left 2/3) and altered wall rock volcanic (light pinkish brown, right 1/3). Material analyzed with XRD was mixture of grayish and pinkish material with disseminated pyrite from the vein-breccia (left).

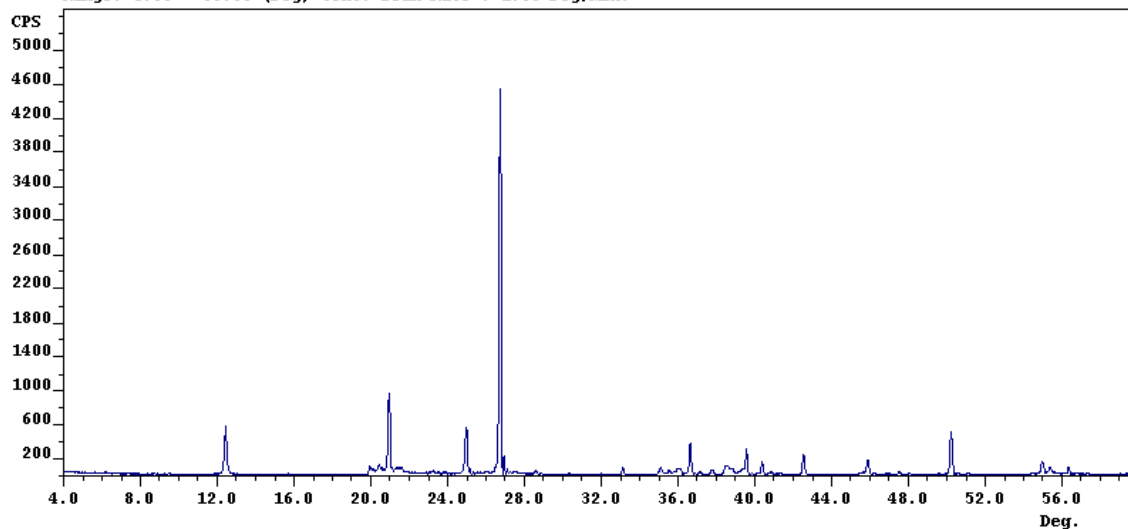
File: BON-ALT-01, ID: acetone smear mount
Date: 07/11/07 14:54 Step : 0.020° Cnt Time: 1.200 Sec.
Range: 4.00 - 60.00 (Deg) Cont. Scan Rate : 1.00 Deg/min.



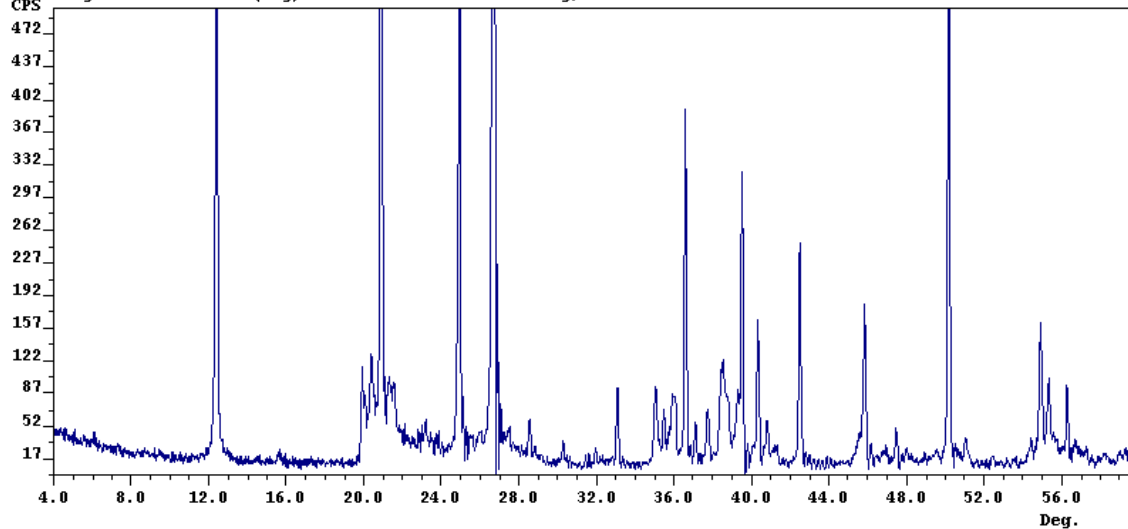
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Range: 4.00 - 60.00 (Deg) Cont. Scan Rate : 1.00 Deg/min.



File: BON-ALT-02, ID: acetone smear mount
Date: 07/12/07 11:16 Step : 0.020° Cnt Time: 1.200 Sec.
Range: 4.00 - 60.00 (Deg) Cont. Scan Rate : 1.00 Deg/min.



File: BON-ALT-02, ID: acetone smear mount
Date: 07/12/07 11:16 Step : 0.020° Cnt Time: 1.200 Sec.
Range: 4.00 - 60.00 (Deg) Cont. Scan Rate : 1.00 Deg/min.



SEM REPORT

COMPANY: Christopher-James Gold Corp
PROJECT: Ranch, N.B.C.
SAMPLE NUMBER: 07-BON-PET-02

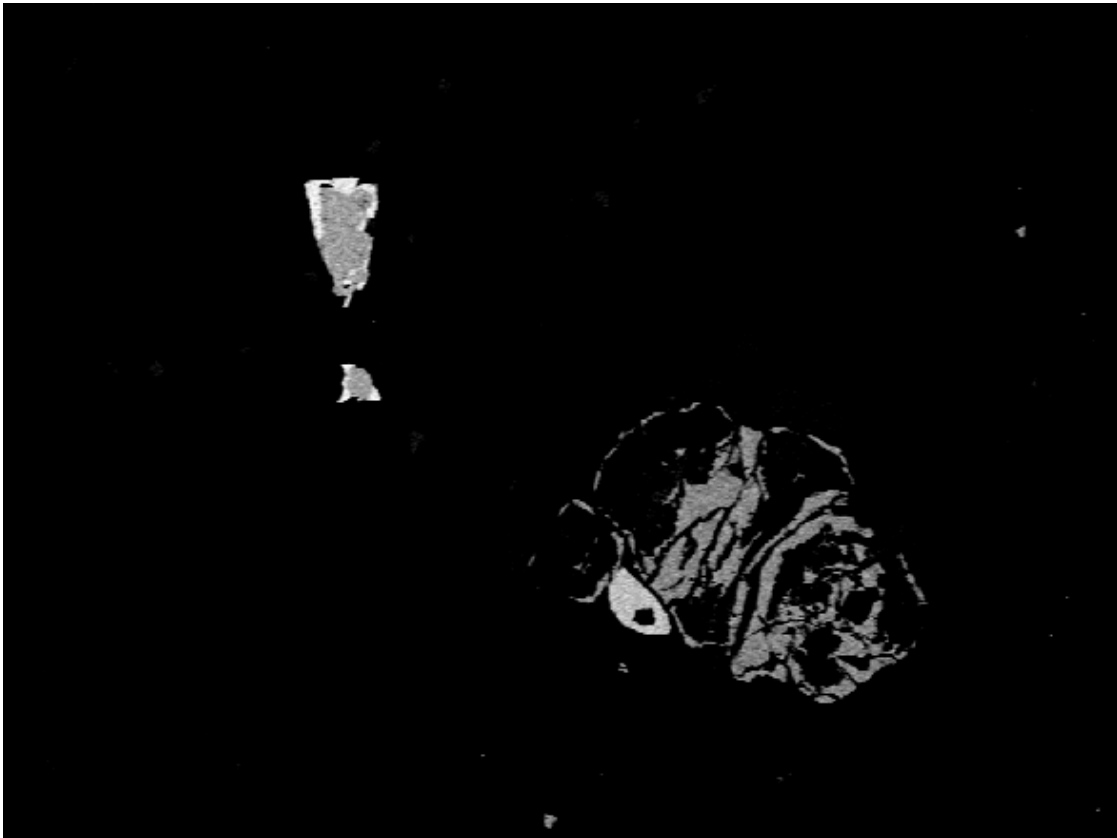
REPORT BY: James R. Shannon, Ph.D.
DATE: August 1, 2007
SAMPLE TYPE: Polished Thinsection

The purpose of this report is to document a small Scanning Electron Microscope (SEM) study that was conducted on sample 07-BON-PET-02 as a follow up of the petrographic study. This report also serves as an example of the kinds of studies that can be done with an SEM. SEM studies use a finely focused electron beam in spot mode for semi-quantitative analyses of unknown minerals and generates an Energy Dispersive Spectrometer (EDS) spectrum showing the major and minor elements present. The SEM also can scan an area (scan mode) and generates three useful types of images: (1) Secondary Electron(SE) images which show surface morphologic features; (2) Backscatter Electron (BSE) images which show compositional features (brightness) related to the atomic number of the elements present; and (3) X-Ray Dot Mapping which can map the distribution of specific elements within the scan area.

Minor disseminated chalcopyrite associated with pyrite was observed during reflected light studies of sample 07-BON-PET-02. A brief SEM study was conducted to confirm the presence of chalcopyrite and to scan for other potential minerals. The SEM EDS spectrum confirmed the presence of pyrite, chalcopyrite (spectrum below) and Ti-bearing magnetite (spectrum below). In addition, a very bright phase (relatively high atomic number) was identified during scanning for other phases (SEM BSE image below) and was confirmed to be barite with SEM EDS (spectrum below). SEM studies typically identify and characterize minor or trace phases that are easily overlooked during hand sample or petrographic studies.

The presence of trace chalcopyrite and barite in the rhyodacite porphyry dikes may be important in evaluating a possible genetic relationship between the dikes and spatially associated gold mineralization (including associations with barite and possibly copper) at the Bonanza zone.

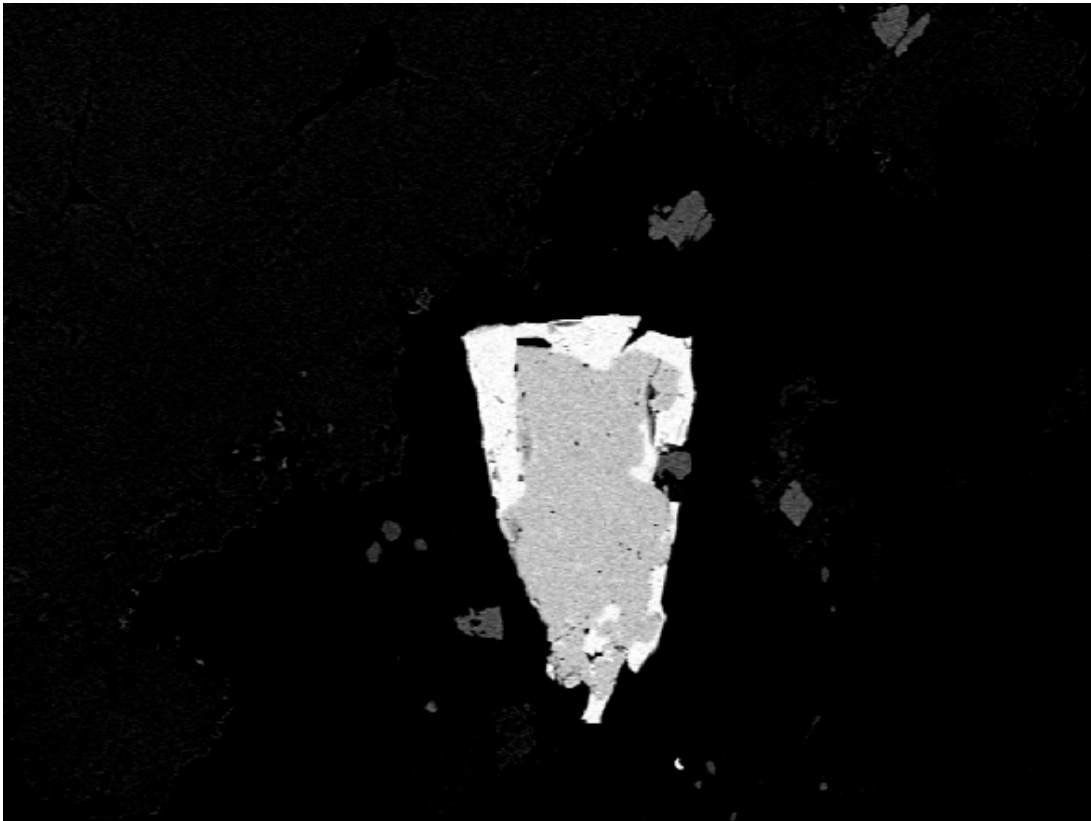
File: BON-PET-02-1-BSE-95x
Collected: July 23, 2007 14:11:02



Scope magnification: 95X

Sample 07-BON-PET-02. SEM BSE image of composite pyrite-chalcopyrite grains (left) and skeletal magnetite and zircon grain (lower right center).

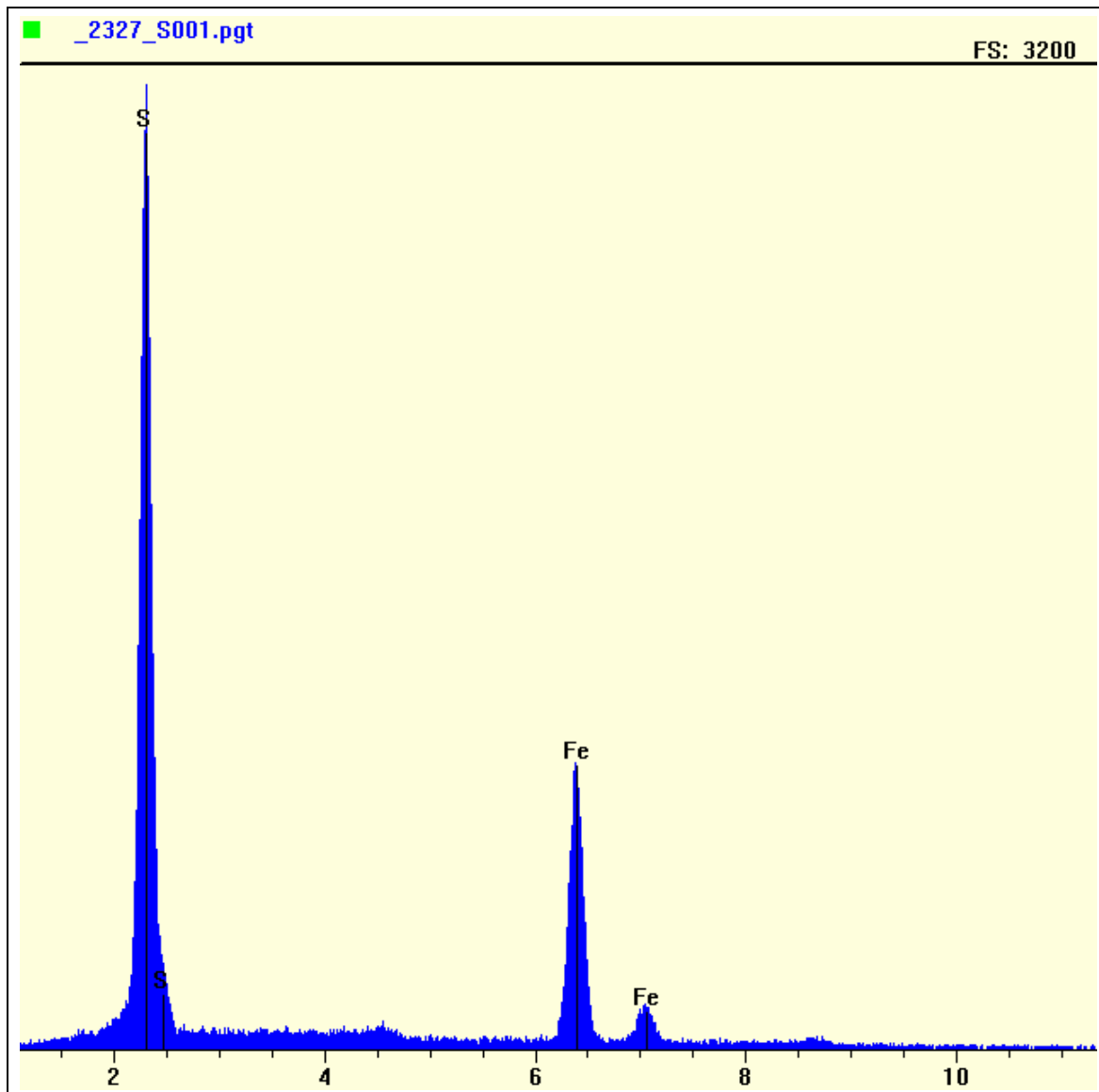
File: BON-PET-02-1-BSE
Collected: July 23, 2007 13:52:54



Scope magnification: 300X

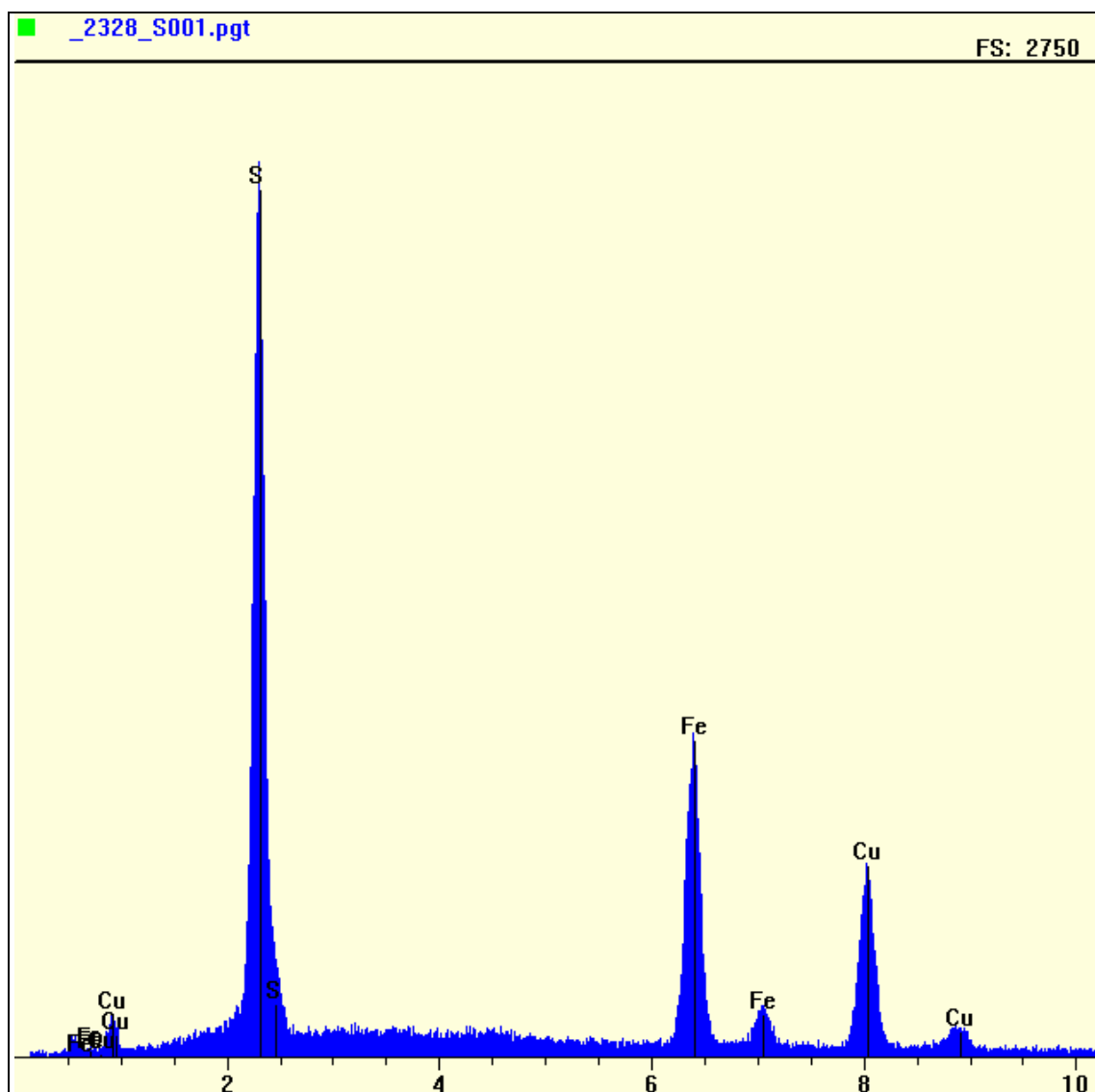
Sample 07-BON-PET-02. BSE image of composite pyrite(gray)-chalcopyrite(white) grain. Chalcopyrite partially rims pyrite.

File: BON-PET-02-1-A
Collected: July 23, 2007 13:57:33



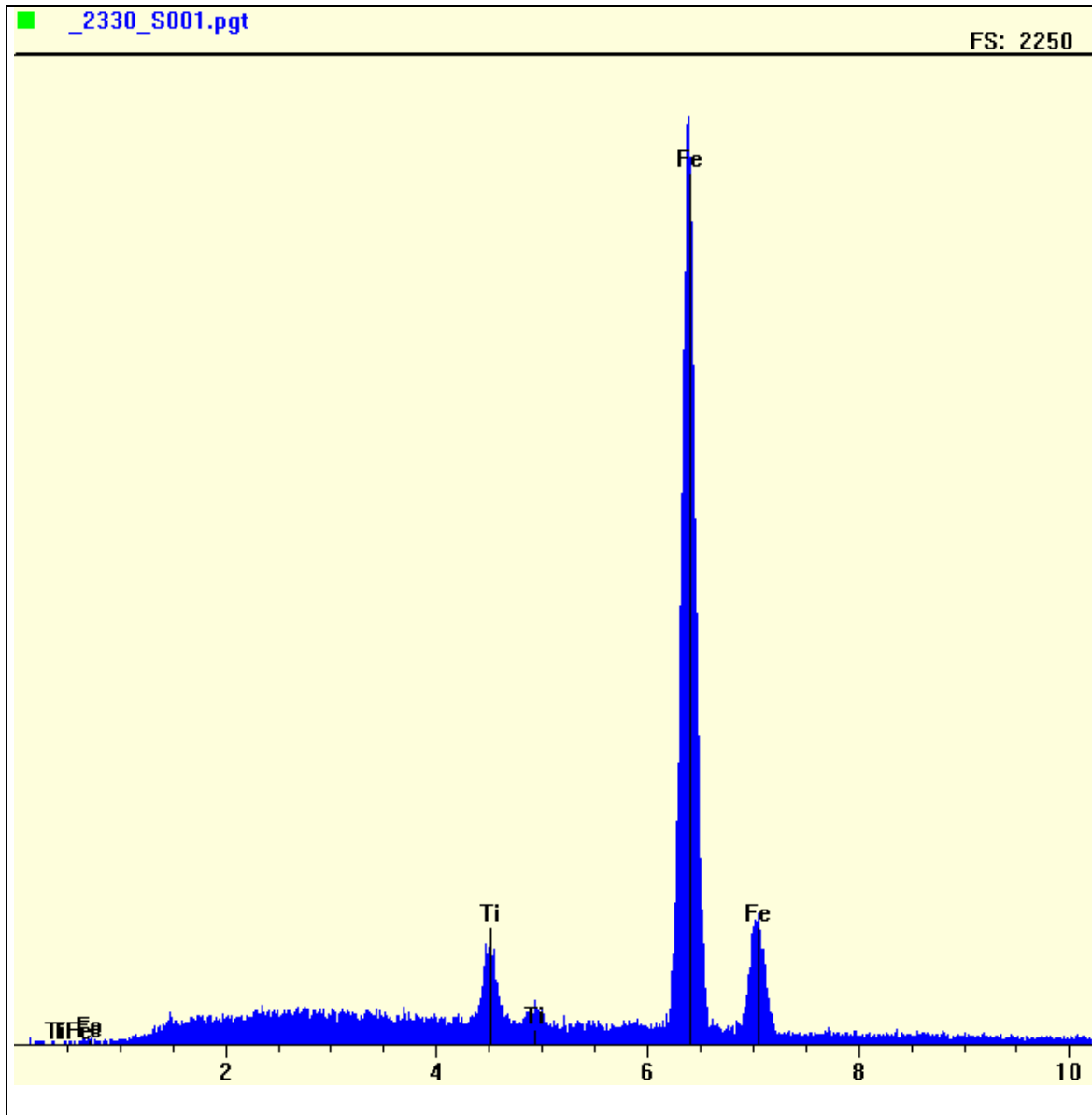
Sample 07-BON-PET-02. SEM EDS spectrum of pyrite.

File: BON-PET-02-1-B
Collected: July 23, 2007 14:00:52



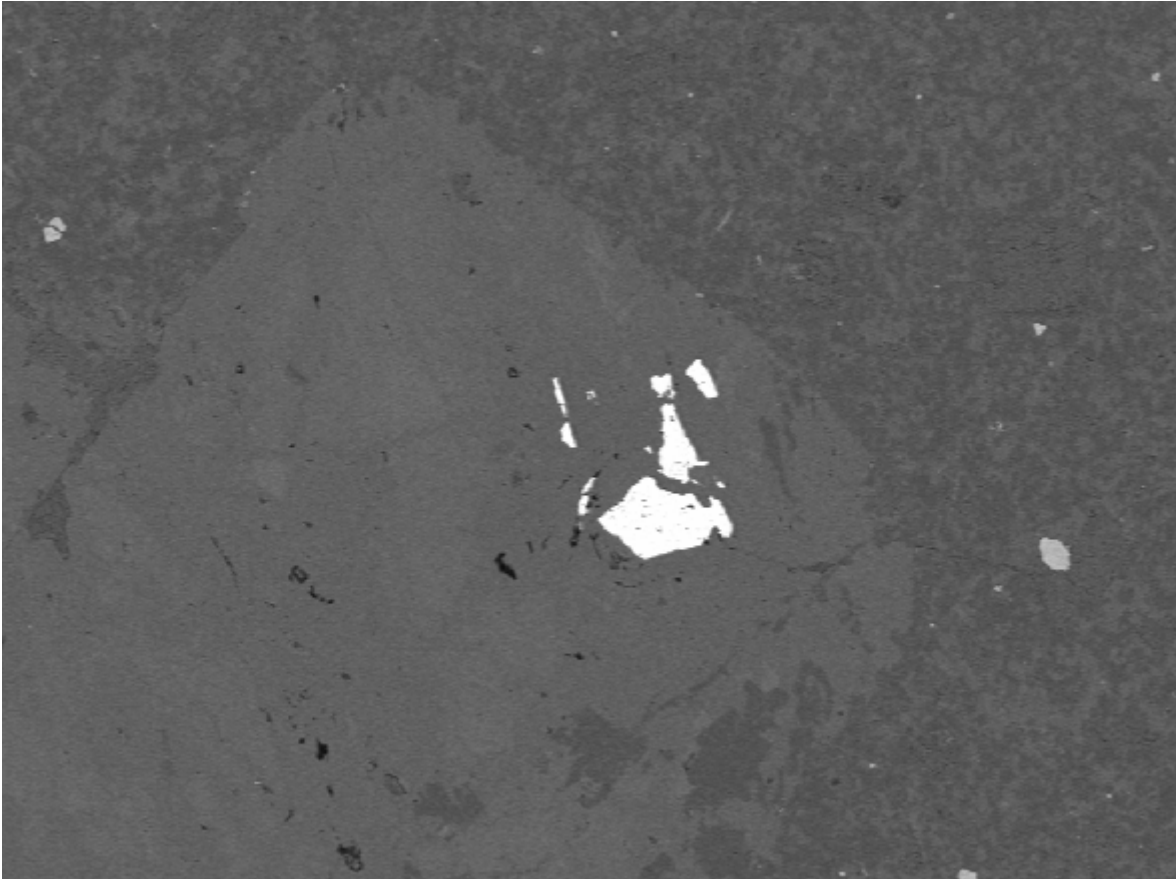
Sample 07-BON-PET-02. SEM EDS spectrum of chalcopyrite.

File: BON-PET-02-1-C
Collected: July 23, 2007 14:00:52



Sample 07-BON-PET-02. SEM EDS spectrum of Ti-bearing magnetite.

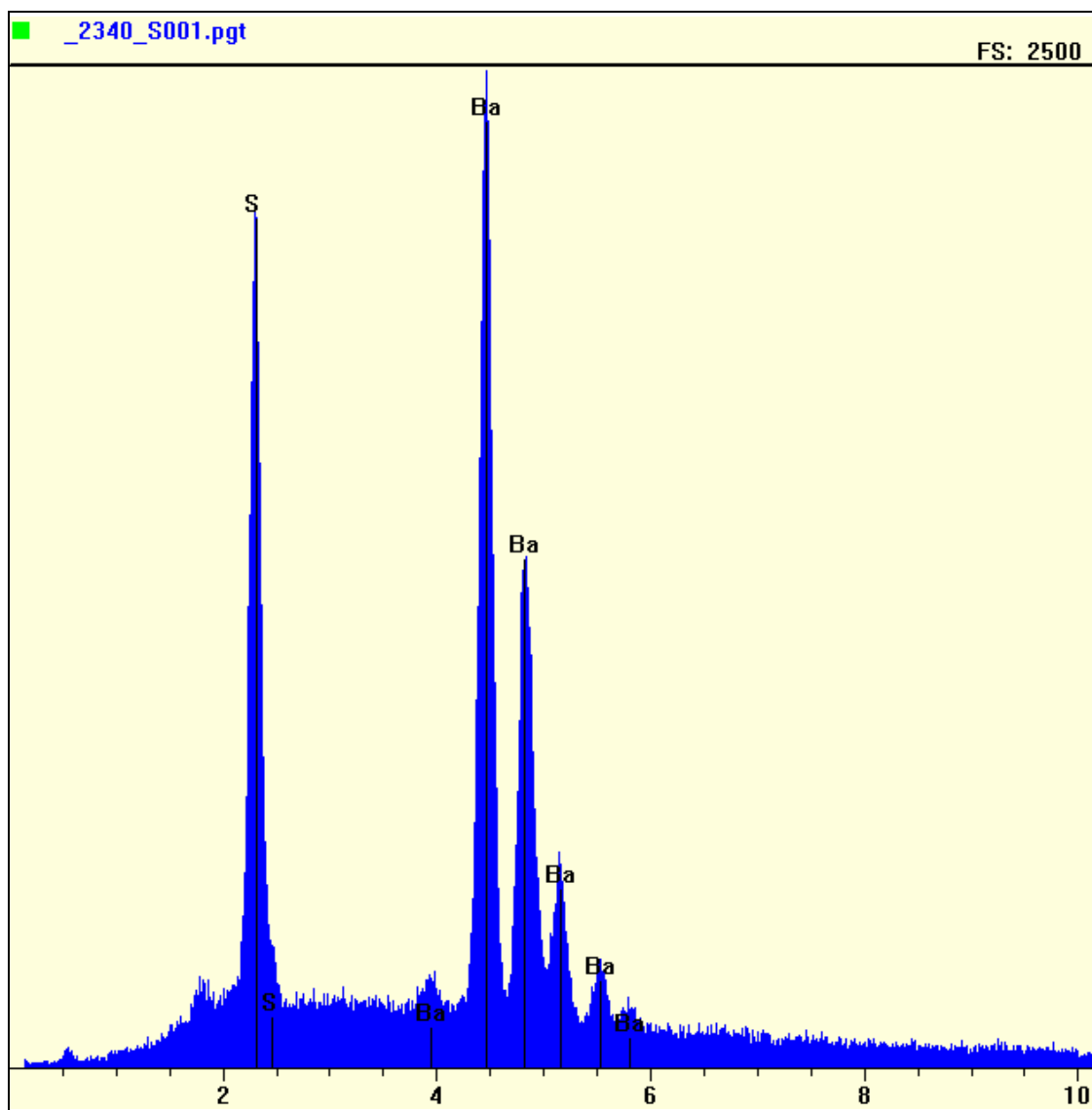
File: BON-PET-02-1-BSE-130x
Collected: July 23, 2007 14:47:21



Scope magnification: 130X

Sample 07-BON-PET-02. SEM BSE image of altered K-feldspar phenocryst with barite grains (white).

File: BON-PET-02-1-E
Collected: July 23, 2007 14:00:52



Sample 07-BON-PET-02. SEM EDS spectrum of barite.

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M E M O R A N D U M

TO: David Trabert, VP Exploration, Christopher James Gold Corp.
FROM: Richard Nielsen, Consulting Geologist, Golden, CO
CC: Max Baker, Pres. Christopher James Gold Corp., Vancouver, B.C.
SUBJECT: Ranch Property, Toodoggone Region, northern B.C., Canada
Date: August 29, 2007

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Gold mineralization at the Ranch property is closely associated with pyrite-bearing massive brecciated quartz and a surrounding halo of vuggy silica. Various amounts of alunite alteration, kaolinite (clay) and clay-hematite alteration surrounds the quartz-pyrite alteration.

The high-temperature and acid-sulfate alteration that characterizes gold mineralization at the Ranch property is located along steep structures and in breccias that cut host andesite-latite crystal-lithic tuffs, or in the rhyolite and co-magmatic quartz latite porphyries that also are emplaced along the structures. Some rhyolite and quartz latites made it to the surface and formed flow-dome complexes (Albert's Hump and BBX areas). A large porphyry (copper?) type of intrusion is believed to underlie the entire property. SO₂ and CO₂ charged aqueous fluids degassed from the deep intrusion, followed steep fractures and in some areas were closely followed by intrusion of rhyolite and quartz-latite porphyries. The high-temperature and high-energy fluids produced breccias and hydro fractures. Near surface dissociation reactions in the fluids produced sulfuric acid, which produced hypogene alunite, vuggy silica by acid leaching, and kaolinite clay alteration. Loss of H⁺ ion by reaction with the wall rock reduced the fluid, producing excess S⁻² ion

and pyrite was precipitated with quartz in pipes and fissures. CO₂ was reduced to various black carbon compounds that are associated with the fine-grained pyrite.

Gold mineralization came along later and preferentially precipitated in brecciated and vuggy quartz; barite also appears to be late. Gold mineralization is likely formed when geothermal pools and hot spring developed near surface. Meteoric water circulated, picked up the last gasps of SO₂ from deep magmatic sources forming HS⁻ which complexes with gold and thus deep gold was leached and moved upwards where it was precipitated by near surface oxidation. Most known gold deposits on the Ranch property are located along relatively narrow structures and are confined to a zone from the surface to 70 meters depth.

Targets for high-grade deposits along relatively narrow structures are a viable and possible target type. Additional gold deposits with resources similar to that at Bonanza may be found with additional exploration. The real challenge is to develop targets for wide-spread bulk tonnage disseminated gold mineralization. The compact and well indurated nature of the host volcanic rocks seems to favor structure-controlled deposits of limited size. A possible exception is the peripheral aprons around the flow dome complexes where relatively permeable pyroclastic aprons may develop. This type of target may possibly be detected by an IP survey that is designed to locate associated disseminated pyrite in these permeable pyroclastic rocks. The IP survey presently underway could possibly be extended to cover the BBX and Albert's Hump target areas.

Geologic mapping with emphasis on location of structures and distribution of alteration types would enhance the definition of drill targets.

Finally, possibility of a porphyry copper target at depth can be enhanced by compilation of structural, geochemical and geophysical data.

INTRODUCTION

The writer re-logged drill holes A07-001 through -006 (Bonanza Area); hole A07-036 from the Mickey target; and holes A07—030, -031, -034 and -035 (Holes T-01 through T-04, Thesis III zone). Notes from this relogging are attached as an Appendix to this report.

The writer also logged A07-25, -26, -27 and -29 (Bonanza zone); A07-37, -38, -39 and -40 (Mickey zone). Logs for these holes are in the camp drill hole files.

Field examinations were made in the Bonanza area, Mickey and Thesis areas, the BV pit and outcrops in the BBX target areas. Field notes are included below in the discussion of individual mineralized areas. The writer spent a total of 25 days at the property, August 2 to 27, 2007.

REGIONAL GEOLOGIC SETTING FOR MINERALIZATION

Gold mineralization in the project area is hosted by the lower unit (Adoogacho member) of the Toodoggone volcanic sequence of Early Jurassic age. The host unit is composed of andesite to latite crystal-rich tuffs; some rich in compressed pumice lapilli (fiamme); and most are welded into compact, coherent, well indurated tuff units.

Location of eruptive vents for these pyroclastic rocks is uncertain. Possible vents may be located at the Albert's Hump and BBX target areas, which appear to be extrusive rhyolite flow dome complexes. These dome complexes also appear to be the focus of explosive breccias and subsequent high-temperature acid-sulfate alteration that produced vuggy-quartz breccias, extensive alunite alteration, barite veinlets, and possible gold mineralization. Some of the mineralized structures in the area also may have served as vents for fissure eruptions. Regional studies describe these tuffaceous units and intrusive rocks as part of a magmatic island arc active in early Jurassic times. The arc is believed to have moved easterly and docked against the North American continents shortly after or

during magmatism in early Jurassic time. This notion is consistent with the many near horizontal slickensides we observed in the area. These suggest the principal fault movements were in a compressional setting.

Radiometric age dates and oxygen-isotope data from Albert's Hump alunite samples (Diakow and others, 1991) are consistent with acid-sulfate alteration being emplaced late in the volcanic eruptive event that formed the tuffaceous sequence of the Adoogacho member. Isotopic data are consistent with the notion that fluids producing vuggy silica and alunite alteration were magmatic. This supports the writer's hypothesis that acid-sulfate alteration and associated rhyolite intrusions are related to degassing of a porphyry (copper?) pluton underlying the district.

Origin of gold mineralization appears to be later than the acid-sulfate alteration and very likely gold was deposited by fluids that were very much different in temperature and composition than the high-temperature oxidized fluids that produced acid-sulfate alteration. Gold likely was deposited from reduced, high pH, dilute fluids in which HS^- ion is stable. Gold was deposited by near surface oxidation of these gold-bearing fluids.

BONANZA TARGET AREA

Field Examination

Bonanza North contains a north-south oriented prospect trench that exposes pinkish andesite tuff that may be partly alunitized. This rock is cut by ribs of sugary granular quartz. Strong brecciation and vuggy quartz are exposed at the north end of the trench. Numerous sub-horizontal slickensides are exposed near the north end of the trench.

Main Zone of the Bonanza prospect contains the pit from which about 4700 tons of ore were extracted. Pervasive vuggy silica with barite and heavy pyrite mineralization is exposed over an extensive area. Some alunite may be present. Very likely this well

mineralized area is located at the intersection of NNE and NNW structures. Gold grades are similar to those encountered in drill hole A07-006.

The Bonanza Ridge area, located NE of Bonanza North, contains a NNE-trending mass of brecciated rock about 10 meters wide. This structure is characterized by fine grained massive quartz with some vuggy quartz. Sub-horizontal slickensides exposed trend NNE. Continuing to the NE is a pod of silicified andesite tuff about 50 meters long and 20-30 meters wide. This structure is characterized by fine grained granular quartz--almost chert-like—that is heavily brecciated and stained with goethite limonite. This area of mineralization has gold values of 0.1 to 0.2 g/t gold and may be near the northern limit of mineralization defined in the Bonanza target area..

Notes from Drill Cores

Host rocks for gold mineralization at Bonanza are layered andesite tuffs. Published chemical analyses suggest the compositions of the tuffaceous host rocks are dacites to latites. Crystal-rich tuffs are common and usually contain compressed pumice lapilli, or fiamme. Exotic blocks of volcanic rocks are present in relatively minor amounts. These tuffs are compact and well indurated. Pervasive permeability is limited. Pathways for fluids are mainly along fault zones, breccias and fractures.

Our logging of drill cores A07-01 through A07-06 (see Appendix for logs) revealed a distinctive fiamme-rich layer in several drill holes (A07-01, -02, -03 and -04). This was used as a marker horizon or bed and when correlated between these holes indicate the host rock tuffs have been folded or warped into an anticlinal structure in this part of Bonanza area that was drilled (Attachment 2).

The axial area of this anticlinal uplift is cut by several faults that trend NNE, NNW and NS. Although many fault zones are intersected and logged in drill hole, we found no firm evidence that major flat faults have cut through the Bonanza area, thereby cutting off gold mineralization or otherwise disrupting alteration or mineralization patterns.

The axial zone of the anticlinal warp and the major fissures that cut through it are the focus of alteration and mineralization. Principal types of alteration are vuggy silica, alunite replacement and impregnation, clay alteration (presumably kaolinite and/or dickite) and clay-hematite alteration. Generally alteration types appear to be zoned. A central core of vuggy silica with disseminated and veinlet pyrite is flanked by alunite-clay, then a clay zone which grades into clay-hematite as the outer margin type of acid-surface alteration. Beyond the limits of acid-sulfate alteration is widespread background alteration of clay-calcite-chlorite and some minor zeolites replacing plagioclase and deposited on fractures.

Gold commonly is associated with vuggy silica at Bonanza, but only at shallow levels. Gold values fall off to nil about 60 meters down hole, even though attractive vuggy silica with pyrite is present below 60 meters. Gold mineralization may be accompanied by copper sulfides (chalcopyrite, bornite, covellite and perhaps sulfo-salts) but not always. Copper mineralization is present in some locations without elevated gold values. Usually barite crystals in vugs and veinlets accompany gold mineralization, and gold values are elevated in cores where sulfide content, usually pyrite is visibly high.

Within the zoned acid-sulfate alteration are several features that are genetically linked with the high-temperature and high-energy alteration. First, hydrothermal breccia, crackle breccia and hydro fractures are common in the central zone of vuggy silica, alunite and clays, and are evidence of the high energy associated with alteration. Secondly, this central core of acid-sulfate alteration commonly is intruded by fine-grained rhyolite and rhyolite breccia, evidence of the high temperature associated with these zones. Rhyolite is present as blebs, dikes and pods of white to cream-colored aphyric rock. Larger pods and dikes of rhyolite are pinkish color and consist of microplitic and granular K feldspar, quartz and plagioclase. Small quartz eyes are common in rhyolite.

Rhyolite commonly is brecciated and consists of white rhyolite fragments in a pale pinkish gray rhyolite matrix. Fragments of alunitized rock and quartz-pyrite

mineralization are inclusions in rhyolite and indicate the intrusive rhyolite moved up along structures already containing acid sulfate alteration and mineralization. Parts of the rhyolite also are altered and mineralized. Usually copper sulfides and geochemically elevated Mo values also are associated with intrusive rhyolite. These features indicate the rhyolite is intramineral in the sense that it was emplaced during the acid sulfate alteration and pyrite-mineralizing event.

At Bonanza the high-temperature, high-energy alteration and sulfide mineralization is focused along relatively narrow vertical structures. We find no evidence for permeable horizon or aquaclude that would divert and direct fluids laterally or subhorizontally into a layered bed or unit that would later be the host for tabular gold mineralization as at Yanacocha, Peru. Gold mineralization at Bonanza is found in structural zones, usually a few meters wide, characterized by brecciation and hydro fractures—structures along which high-temperature, energetic and corrosive fluids were released from a crystallizing porphyry that underlies the entire district at some depth.

The high-temperature, high-energy acid sulfate alteration appears to have prepared the host rock by producing strong acid leaching and vuggy texture in the silica-rich rock. These solutions are inferred to be high temperature, low pH, and oxidized judging by the alteration assemblages and textures produced. These are not the kind of solutions expected to transport gold in an epithermal environment. Rather, gold in epithermal settings is thought to be transported by neutral, alkaline, reduced, lower temperature fluids in which HS^- ions are stable and can complex with gold. Gold is thought to be precipitated by oxidation in the near surface environment.

Preparation of four interpretive cross-sections (Attachments 1 through 4) show that gold mineralization in the Bonanza area seems preferentially located in vuggy silica rock or in hydro fractured rock. Hydro fracturing refers to strongly fractured and partly brecciated rock, usually associated with hydrothermal alteration minerals, and presumably produced by high energy and explosive release of fluids from a vapor saturated crystallizing

intrusion. Re-logging identified rhyolite porphyry intrusions that is believed to be associated with the hydro fractures.

The area with strongest, high-grade gold mineralization is found in drill holes along section 1975N (eg. Drill hole A0-06, Attachment 3). Grades generally decrease to the north and south of this section, and the width of gold-mineralization likewise decreases to the north and south. . Section 2000 (Attachment 4) appears to be along the northern limits of gold mineralization. Section 1900 (Attachment 1) appears to define the southern limit of continuous gold mineralization. Gold mineralization also appears confined to shallow levels at Bonanza (At time of writing all assays from Bonanza are not available.). No significant gold values occur below about 60 meters down hole. Gold mineralization appears to be highly focused and located along the intersection of NNW and NNE structures in the Bonanza area.

THESIS III AREA

Thesis III is a relatively wide zone of alteration characterized by fine granular to micro crystalline quartz that is strongly brecciated and associated with introduced alunite and strong hydrolytic illite-sericite alteration. Host rock for mineralization appears to be a fine-grained quartz latite porphyry. Barite is scattered through silicified rock along veinlets and in vugs within the silicified rock.

Six exploration holes have been drilled along two east-west lines. Drill holes 07-30, -31, -34, and -35 were relogged (logs are in an attached appendix) and the interpretive geologic section is Attachment 5.

Host rock for gold mineralization appears to be a complex of intrusive quartz bearing porphyries of quartz latite and rhyolite compositions. Some rhyolite is aphyric—a white aphanitic texture. Usually the intrusion contains sparse plagioclase phenocrysts in a

siliceous ground mass that varies from aphanitic to micro-aplitic to aplitic. Sparse phenocrysts of igneous biotite and hornblende have all been altered to clays with finely disseminated ilmenite and rutile. These titanium oxide minerals also are scattered through the rock and comprise about 1% of the ground mass. Plagioclase feldspars are generally altered to clay and sericite. Veins and veinlets of gypsum, presumably derived from anhydrite are found throughout the porphyries, mainly at depths of more than 50 meters below the surface (Attachment 5).

The host porphyry complex shows evidence of multiple pulses of intrusive magma. Intrusion breccias and cross-cutting contacts between intrusive rocks are recognized in drill holes 07-030 and 07-035 indicating that the quartz-bearing intrusions were emplaced in a series of pulses.

Hydrothermal alteration is distributed around a vertical pipe-like mass of quartz breccia that was cut by all four drill holes (Attachment 5). Gray to dark gray pyritic massive quartz is brecciated and cemented by additional introduced quartz. This quartz-rich breccia pipe appears to be about 10-20m wide. The pipe of dark gray introduced quartz is enclosed in an envelope of vuggy silica with a cross section width of up to 40 meters. Pyrite is common and abundant in amounts of a few percent up to 5 volume percent in the breccia and vuggy silica.

Vuggy texture in the siliceous rock is created by leaching of feldspars from the porphyry. A bit of residual kaolinite (dickite?) clay is present in vuggy silica. Strong kaolinite clay alteration of the porphyries lies adjacent to the vuggy silica. Most of the strongly altered porphyry is cut by hydro fractures or crackle breccia, which provides indication of the high energy nature of formation of these alteration patterns.

Gold mineralization at Thesis III appears to be confined to the brecciated quartz pipe and adjacent vuggy silica. At time of writing this report, only assays from holes 07-030 and 07-031 are available. Holes 07-034 and 07-035 cut through attractive brecciated silica but gold values in these areas are not available.

It appears that gold mineralization at Thesis III is located in and controlled by the quartz-pyrite-rich breccia pipe. Lateral extent of the pipe is not known. The IP survey presently being done may help map extent of the mineralized quartz-pyrite-rich breccia structures.

MICKEY ZONE

The Mickey zone is defined by mineralization and alteration that is detected in float, some of which may be very near outcrop. Mineralization is inferred to be present along a northerly-trending structure and may have a width of 10 meters. Float consists of broken gray quartz, mainly fine gray cherty silica of the introduced type. Heavy pyrite mineralization is associated with silica and is indicated by strong limonite coatings, especially jarosite. Both fine-grained chert-like silica (inferred to be introduced) as well as vuggy leached silica is present in float.

Drill holes 07-036, 07-037 and 07-040 intersected stretches of silicification and vuggy silica. No assays are available at time of writing this report. My notes of holes I logged for possibly mineralized intercepts are summarized as follows.

A07-036: 106.6 – 115.6 m Highly leached and altered andesite-latite crystal tuff; much is vuggy silica; overall disseminated pyrite is 3-5% with some stretches up to 10% pyrite. Rock appears brecciated. This zone is enclosed in tuff with strong kaolinite alteration.

A07-036: 141.3 –146.7 m Medium gray, strongly altered andesite crystal tuff; transitional to vuggy silica rich in kaolinite clay; abundant pyrite from 5-20 vol %. Pale gray rhyolite intrudes at base of mineralization at 146.7m.

A07-40: 131 – 142 m Host rock appears to be latite crystal tuff, altered to a dark gray vuggy silica with pyrite from 3 to 7 vol %, about one meter of alunite-clay alteration lies adjacent to the vuggy silica.

Without benefit of gold assays, it is very difficult to arrive at significant conclusions.

However, some general features are evident.

- Vuggy silica zones encountered in drilling have been narrow, usually four to seven meters wide.
- Vuggy silica zones contain some introduced fine-grained quartz and are strongly brecciated.
- Disseminated pyrite in the vuggy silica zones is pervasive and present at 3 to 7 vol %.
- Zones of clay-alunite alteration adjacent to vuggy silica are narrow—about one meter. Beyond is moderate to weak clay-calcite alteration of tuff.
- Rhyolite or quartz latite porphyry intrusive rocks do not appear to be significant part of the vuggy silica zones.
- Because of limited data it is very difficult to correlate vuggy silica between drill holes.

Drilling results, so far suggests the favorable vuggy silica may be present in more than one structural zone (two were intersected in A0-036) but the individual zones are likely to be narrow and steeply inclined. Potential for a major discovery along the Mickey zone appears limited.

BBX ZONE

We visited outcrops of pinkish siliceous rhyolite with quartz eyes in an aphyric siliceous matrix. Rhyolite appears to have a pervasive quartz-sericite alteration. The quartz eye porphyry contains extensive patches of flesh colored granular alunite with some kolinite. The alunite appears to be hypogene. Small areas of vuggy silica are present in the clay alunite alteration. Some of the rhyolite has pyroclastic texture indicated by shards and fragments. Fluorite and zeolites appear to fill some vugs. Barite is present as clots and veinlets. The rhyolite BBX is thought to be a rhyolite flow dome complex.

Some flow dome complexes, as at Yanacoacha and Pueblo Viejo are described to have aprons or borders of pyroclastic fragmental rocks which are preferred location for epithermal mineralization. Flow dome complexes at Albert's Hump and BBX should be examined for presence of pyroclastic aprons. These also can be evaluated by IP surveys to check for presence of disseminated pyrite.

Respectfully submitted,

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Consulting Geologist

APPENDIX

These are geologic logs of holes that have previously been logged. This information was used to construct the geologic cross section in Attachments 1 through 5.

QUICK LOG BY RICHARD NIELSEN---A07-BON-01

0 – 17 m Andesite-dacite crystal lithic tuff; crystal fragments 30-35%, fiamme and rock fragments 5-10%. Purple gray in color. Weak limonite oxidation on fractures. Plagioclase altered to illite-carbonate; groundmass has chlorite-carbonate alteration.

17 – 40 m Andesite-dacite crystal lapilli tuff as above, but greenish fiamme and inclusions increases to 25-35%. Fiamme up to 50% in some places; angle to core axis about 70. Sparse fractures filled with clay-carbonate. Crushed zone and fault at 35 and 40.5 meters.

40 – 67.5 m Back into purple-brown andesite crystal tuff; about 10% fiamme; 30% crystal fragments. Fiamme at 60 degrees to core axis.

67.5 – 104 m Brownish-gray fiamme-rich crystal tuff.; 20-30% crystals, 25-40% fiamme. Fractures with clay are common. Glassy gray quartz veinlet @ 70m. Greenish clay replacement of feldspar near vein. Numerous white calcite veinlets. Fiamme dip at 60 degrees to core axis. One-inch quartz vein @ 92.5m.

104 – 117 m Dacite crystal tuff as above; becomes crumbly and propylitically altered. Zone of pale gray alteration 105.3-106.5 with silica, sericite and gypsum; some silica in

bleached zones but mainly clay-gypsum-illite alteration. Rock has a mottled greenish cast.

117 – 124 m Reddish brown crystal-rich andesite-latite tuff as above. Soft and gougy, probably a fault zone, with a number of strands, all appear about parallel to core axis. Clay-illite alteration along fault.

124 – 125.5 m Reddish crystal-rich andesite tuff; strongly fractured and brecciated.

125.5 – 138 m Mottled altered latite crystal tuff, pale gray color. Soft, probably clay-illite alteration with residual quartz. Veinlets and fractures coated with kaolinite and maybe some gypsum. Finely disseminated pyrite, 3-5%, with possibly some chlorite. Sample for thin section taken at 132 m.(check for alunite).

138 – 170.6 m Brownish-gray crystal-rich andesite-latite tuff; crystals 20%, fiamme 30-50%. Reddish (hematite?) alteration near top; but becomes less broken, more coherent and less altered with depth. Greenish chlorite(?) alteration 153-157 and 168.5-170.6.

170.6 – 173.3 m Greenish-gray clay-rich gouge zone.

173.3 – 185.9 m Andesite-latite crystal-rich lapilli tuff; coherent; appears to have propylitic chlorite-carbonate-illite alteration. Becomes more fresh and coherent below 183m; very crystal rich.

185.9 – 190.2 m (E.O.H.) Medium grained rhyodacite porphyry dike. Rounded salmon pink phenocrysts of K feldspar, chloritized biotite phenocrysts in a greenish gray igneous matrix. Thin veinlets of calcite present. Weak propylitic alteration

Summary No gold mineralization is present in this hole. Alteration is propylitic and a little clay sericite alteration is associated with fault zones.

A07-BON-02

0 – 17 m Brown to medium brown crystal-rich latite tuff; Crystal fragments 20%, fiamme and inclusions 10-15%. Pervasive reddish alteration, probably hematite.

17 – 19.5 m Lithic fiamme rich tuff; fiamme up to 40-50% (marker horizon seen in Hole 1 at 17 to 40 m.

19.5 – 23 m Medium brown, crystal rich latite (andesitic) tuff; fiamme 20-40%

23 – 25.5 m Pale gray altered latite tuff; recrystallized. Mottled recrystallized texture; greasy kaolinite coatings on fractures. Finely disseminated pyrite 1-3%. This may be outer halo zone to mineralization. Possibly quartz-kaolinite-alunite alteration.

25.5 – 43.0 m Reddish to brownish gray crystal-rich latite tuff; crystals 20-30%, fiamme 10-15%. Major clay gouge zone at 26.1m; 3-inch gouge zone at 3.5 m. Plagioclase is altered to fine mixture of clay and carbonate.

43.0 – 46.1 m Pale gray altered andesite-latite tuff—brecciated in places. Shear gouge at 45.5-46m. Several zones of massive fracture-controlled chalcedonic silica that appear to enclose vuggy silica cores. Disseminated fine pyrite 1-5%; white clay (kaolin) on fractures.

46.1 – 57.0 m Latite crystal-rich tuff; crystals 20-40%; fiamme 10-20%. Some places the rock is sheared and gouged, but mostly coherent.

57.0 – 66.0 m Crystal tuff as above, but fiamme increases to 50-70%. Crushed breccia at 65.5-66.0. Plagioclase altered to carbonate-illite mixture. Few thin chalcedonic quartz veinlets with clay envelopes.

66.0 – 82.0 m Medium brown, massive crystal-rich andesite-latite tuff; crystals 10-25 %, fiamme ca 10%. Fiamme increase to 50% at 76 m; gouge zone at 81-82m.

82.0 – 83.0 m Crystal tuff as above, bleached with clay-sericite alteration; contains several gouge zones.

83.0 – 84.8 m Reddish brown crystal lithic latite tuff; crystals 10%, fiamme 10%; reddish color may be hematite alteration.

84.8 – 89.5 m Creamy white to pale gray complex breccia, with 2-3 inch wide clastic dikes, characterized by rock fragment and crystal shards in a fluidal fine grained matrix of quartz, sericite, pyrite and alunite(?). These small dikes cut hydrothermal breccia and hydrofractured rock consisting of blocks and clasts of vuggy silica in a matrix of quartz-sericite. Vuggy silica has a trace of hematite. Vuggy silica contains 1-4% pyrite with some late barite. This zone contains 0.3 to 0.4 g/t gold.

89.5 – 96.3 m Varigated gray, pinkish to purple gray crowded crystal-rich andesite-latite tuff; crystals 60-80%, lapilli 10%. Pale colored areas are quartz-sericite-alunite alteration. Feldspars are sericitized; thin veinlets are alunite-kaolinite.

96.3 – 103.0 m Pale creamy pink to light gray pervasively altered crystal-rich andesite-latite tuff, cut by numerous quartz-sericite-pyrite veins and thin pale gray gypsum veinlets that are ca 45 degrees to core axis. Many quartz-sericite-pyrite veinlets. Pervasive alteration of creamy flesh colored alunite. Near base are greenish gray veinlets of gypsum with pyrite and copper sulfides (possible enargite or tetrahedrite). This zone runs up to 0.3% copper.

103.0 – 108.5 m Purple to pale gray mottled crystal andesite-latite tuff. Crystals 30-50%, fiamme and inclusions 30-50%. Few gypsum veinlets and quartz veinlets. Pinkish alunite appears to be present adjacent to gypsum veinlets.

108.5 – 114.0 m Mostly pinkish cream to gray pervasively altered lapilli tuff. Pervasive alunite-sericite-kaolinite alteration. Pale gray gypsum veinlets, some white alunite(?) veinlets. Vuggy silica 109.5-109.7; pyrite rich; kaolinite alteration of feldspar. Gold mineralization appears present in vuggy silica at 109.5-109.7.

114.0 – 117.7 m Mostly pale gray crystal-rich tuffs; crystals 60%, fiamme <10%. Narrow intrusive dike at 116.2. Feldspars altered to sericite and clay.

117.7 – 119.2 m Pale pinkish gray pervasively altered crystal tuff. Halo of alteration to adjacent breccia below is pink-flesh colored quartz-alunite. Some gray quartz veinlets; kaolinite alteration on fractures; few gypsum veinlets are present.

119.2 – 122.1 m Creamy white rhyolite breccia dike. Explosive breccia; angular wall rock fragments, rounded elongate blebs of rhyolite are in a quartz-sericite-pyrite matrix. Rhyolite contains broken fragments of vuggy silica, alunite alteration. Blebs and pockets of kaolin alteration are present.

122.1 – 126.2 m Pinkish gray fiamme-rich andesite-latite crystal tuff. Pinkish alunite alteration close to breccia above; quartz-sericite-kaolinite alteration is more common down hole. Numerous tiny pale gray gypsum veinlets; ca 1-2% disseminated pyrite.

126.2 – 132.5 m Purple-gray crystal- and fiamme-rich andesite tuff. Weakly altered, probably propylitic; plagioclase altered to illite-carbonate mix. Dike contact at 132.5.

132.5 – 163.07 m (E.O.H.) Red-brown, salmon and greenish gray rhyodacite porphyry dike. K feldspar and biotite phenocrysts in a reddish aphanitic ground mass. Screen of andesite wall rock at 138.6 to 139.5 and 143.2 to 146.6; mixed andesite-rhyodacite at 144.8 to 145.9. Variable texture. Feldspar phenocrysts fresh to altered (greenish sericite).

Summary. This hole is not particularly well mineralized. Two areas of weak gold mineralization were encountered. At 85 to 90 m gold is present in a high energy breccia and hydrofractured rock. Repeated pulses of fluids are evident by the breccia dikes and zones of hydro-fracuting. This structure was a conduit for high-temperature fluids that produced alunite alteration and vuggy silica leached rock. A small area of vuggy silica at 109.8 contains about 1.5 g/t gold and some copper mineralization.

07-BON-03

0 – 6.0 m No core, casing

6.0 – 18.7 m Brown to medium gray crystal-rich andesite-latite tuff. Crystals 20-40%, fiamme and inclusions 10-20%, crumbly, weathered, plagioclase altered to clay-carbonate.

18.7 – 23.3 m Gray and tan fiamme-rich marker horizon. Crystals 20-30%, fiamme 30-60%. Fiamme are large flattened flow banded dacite lava fragments. Plagioclase altered to clay –carbonate.

23.3 – 35.0 m Medium gray crystal-lithic andesite-latite tuff; grades to pale purple gray. Crystal fragments 10-20%, fiamme 30-50%. Fiamme 50 to 80 degrees to core axis. Very rich in fiamme near base.

35.0 – 39.0 m Purple gray crystal rich a-l tuff, crystals 20-30%, fiamme 10-20%; plagioclase altered to clay-carbonate.

39.0 – 40.2 m Clay gouge fault zone, kaolinite alteration.

40.2 – 45.1 m Pale gray mottled altered and-lat tuff. Whitish clay-illite alteration, kaolinite on fractures; 1-3% fine disseminated pyrite. Mottled possibly broken and healed. Thin-section sample at 42.2 m. Au about 2 g/t 42.0-45.2 m.

45.1 – 46.0 m Pinkish altered tuff and crystal tuff. Probably massive alunite replacement; grades into vuggy silica **Au values about 16.6 g/t.**

46.0 – 50.5 m Mainly medium gray vuggy silica alteration of andesite tuff. Patch of covellite at 46.1m; disseminated pyrite 1-5%, locally very high at 46.5 m. Kaolinite alteration of feldspar. Covellite stringers and chalcopryite-covellite stringers present through the zone. Rock appears brecciated. **Very high gold values, up to 93 ppm.**

50.5 – 52.5 m Pinkish gray altered andesite crystal tuff. Probably pervasive alunite-kaolinite alteration. Au about 1.8 g/t.

52.5 – 58.6 m Pale gray sugary granular alteration of breccia, up to 5% disseminated pyrite. Some patches of pinkish alunite. Veinlets of gypsum; quartz-sericite-clay alteration. Ends in fault zone against weakly altered andesite tuff. Au values 1-4 g/t.

58.6 – 93.4 m Crystal-rich andesite-latite tuff; gray to brownish gray; crystals 10-20%, fiamme ca 10%. Few white tiny calcite veinlets. Long run of this andesite. Crushed gouge zones with thin pale gray quartz veinlets at 74-75m, 76-76.5, rock is bleached in these zones. No gold values.

94.4 – 94.0 m Reddish brown andesite-l crystal tuff; crushed and broken with hematite-sericite-clay alteration.

94.0 – 96.0 m Gray breccia dike or breccia vein, pale gray quartz with abundant fine pyrite 5-10%. Blebs and fragments of creamy aphyric rhyolite, fragments of alunitized andesite. Fluidal fabric in the vein.

96.0 – 97.6 m Brownish andesite-l crystal tuff, hematite-clay alteration (propylitic). Crushed and gouge at 96.5-97.5 m.

97.6 – 102.0 m Crystal rich andesite-l tuff; pervasive hematite-kaolinite alteration, bleached in places. Thin veinlets of fine grained pyrite. Few pale gray stringers of gypsum.

102.0 – 106.5 m Medium gray crystal-rich andesite tuff; Strongly fractured, some incipient brecciation or crackle breccia; pervasive kaolinite-alunite alteration. Disseminated and veinlet pyrite 2-5%; ends in breccia vein with blebs of aphyric rhyolite in matrix of quartz and pyrite.

106.5 – 114.2 m Complex mixed igneous breccia; much of this is pinkish gray rhyolite with flattened lithophase that are tan colored and resemble fiamme. Sparse fragments of wall rocks. Micro breccia veinlets contain quartz, broken rhyolite fragments and sulfides (pyrite) 1-7%. Vein-like segregations of pyrite and quartz with faint boundaries, cut across mixed rock; fiamme 20-30%; illite-carbonate alteration. Ends with banded quartz-pyrite vein. Thin veinlets of gypsum. This may be some sort of rhyolite dike, broken by later quartz-pyrite veining. No gold mineralization present.

114.2 – 115.6 m Pinkish flesh colored crystal-rich and-latitude tuff, with clay-illite alteration. Cut by dark veinlets of pyrite-quartz.

115.6 – 116.0 m Reddish brown, crystal-rich and-latitude tuff; crushed, crumbly, weak hematite-illite alteration.

116.0 – 125.0 m Greenish gray rhyodacite porphyry dike; phenocrysts of pink K feldspar, biotite, quartz in green-brown aphanitic matrix. Sparse veinlets of carbonate. End with gouge.

125.0 – 128.0 m Red-brown crystal-rich and-latitude tuff; crystals 10-20%,

128.0 – 134.0 m Andesite tuff as above, becomes greenish color; crystals 10%, fiamme 50%, chlorite-carbonate alteration. Fault or shear 133-134 m.

134.0 – 146.0 m Gray rhyodacite porphyry dike as above, some areas are salmon colored to pale gray color (bleached); gouge at 144.7, end in gouge at 146.0 m.

146.0 – 158.0 m Mainly brown crystal-rich and-latitude tuff; crystals 10-20%, fiamme 20-30% of rock. Illite-carbonate alteration; lower two meters are broken and crushed. Narrow vuggy silica zone at 156.7m.

158.0 – 163.0 m Medium gray pervasive silicified rock after andesite crystal tuff. Patches of vuggy silica. Barite crystals in vugs. Appears brecciated and hydro fractured with breccia veins. Pervasive silica alteration with kaolin-sericite alteration on fractures. Finely disseminated pyrite 2-5%.

163.0 – 171.9 m Medium gray to greenish gray fine grained dacite tuff, no fiamme; very fine grained (possibly an intrusive dike). Crackled and hydro fractured; pervasive silica-kaolinite-illite alteration; finely disseminated pyrite 2-5%. Areas with pale brown secondary biotite. Local areas of vuggy silica. May be a rhyolite-dacite intrusion. No gold values.

171.9 – 184.41 m Medium gray, greenish gray, purple gray crystal-rich andesite-latite tuff. Very few fiamme; crystals 50-60%, fiamme <5%, almost all crystals; appears to contain pink K feldspar crystals. Tight, relatively unfractured, feldspars fresh. Gouge at 172.7 m possible fault contact. E.O.H.

Summary. Some interesting stretches of gold mineralization are present in this hole. All are located at relatively shallow levels in the hole. No significant gold values were found below 58 meters even though vuggy silica and appropriate favorable alteration is present at lower levels. The high gold values at 47 to 52 m are found in vuggy silica with associated copper minerals and presence of breccia, alunite alteration, gypsum veinlets appear to be guides.

07-BON-04

0 – 5.0 m Geothite brown soil and weathered rock.

5.0 – 10.7 m Medium brown fiamme-rich and-latite crystal tuff (Probably the marker horizon seen in other holes. Very large fattened pumice lapilli; crystals 10-20%, fiamme 30-50%. Plagioclase altered to sericite carbonate mixture.

10.7 – 11.0 m Fault gouge.

11.0 – 16.0 m Medium gray intrusion breccia; rounded fragments of porphyry in a fine micro-granular granitic textured dacite; some pinkish areas may have alunite alteration, especially blocks of lapilli-rich andsite bedrocks. Fractures with fine grained pyrite are cut the alunite especially at 14.5-15m. Possible intrusive dike. Weak gold mineralization up to 3 g/t.

16.0 – 32.3 m Pinkish, fleshy and gray lapilli-crystal and-latite tuff; crystals 20-30%, fiamme 20-30%. Weak to moderately pervasive silica alteration, plagioclase altered to clay-sericite. Micro-granitic pinkish dacite dike at 20.6-21.6; moderately pervasive silica. Alteration same as in adjacent rock. Thin section @ 20.8m fine-grained intrusion. Other small dikes and plugs of intrusive rock of similar composition but varying textures may be present in this zone. Pinkish color suggests alunite alteration. Plagioclase is altered sericite and clay. 5 ppm gold at 30-31m may be on fine grained

pyrite-clay fracture surfaces. Gypsum-clay-pyrite filled fractures are found in zone of mineralization. Section ends in a gouge at 32.5 to 39.0m. Weak gold mineralization with values 0.1 to 5 g/t.

32.8 – 39.0 m Fault gouge with gray and tan colors.

39.0 – 40.4 m Tan contact breccia. Intrusive contact; breccia laminated and flow banded. Plagioclase altered to clay and sericite.

40.4 – 42.1 m Light brown flow banded intrusion. Banding about parallel to core axis. K feldspar phenocrysts about 10% in a fine aphanitic ground mass.

42.1 – 44.0 m Tan, pale brown, rhyodacite-dacite porphyry, cut by few tiny uartz veinlets, greenish sericite-clay alteration of plagioclase, with clay-illite alteration of ground mass.

44.0 – 46.2 m Tan rhyodacite dike rock, brecciated with matrix of quartz-hematite-pyrite. Plagioclase altered to caly-illite. Matrix of breccia contains 1-2% pyrite.

46.2 – 53.3 m Fleshy tan rhyodacite-dacite intrusion, 10-20% feldspar phenocrysts, tiny quartz crystals, altered biotie in an aphanitic matrix. Few tiny quartz veinlets. Phenocrysts replaced by green waxy sericite.

53.3 – 66.0 m Gray to salmon pink (rhyo) dacite porphyry. Plagioclase phenocrysts 20-320%, sparse hornblende and biotite phenocrysts, magnetite(?) grains. White altered plagioclase replaced by carbonate-illite.

66.0 – 69.9 m Medium gray vuggy quartz rock, probably brecciated andesite tuff. Pyrite-rich veinlets. Clots and stringers of chalcopyrite with black mineral (ilmenite? or covellite?). Chalcopyrite distribution very irregular. Gold values 1-5 g/t; associated with copper up to 0.6%.

69.9 – 73.2 m Pale tan to medium gray lapilli crystal andesitic tuff; crystals 10-20%, fiamme 10-20%, trace of pyrite, plagioclase altered to pale gray greasy sericite, crushed 72.5-73.2m.

73.2 – 75.3 m Intrusive dike, probably rhyodacite, flow banding, brecciated, sphereulitic.

75.3 – 76.0 m Pale pinkish gray screen of crystal tuff.

76.0 – 77.7 m Gouge and broken zone.

77.7 – 79.5 m Reddish gray broken zone, appears to be a screen of crystal tuff; clay-illite alteration, fine hematite.

79.5 – 80.0 m Gray gouge

80.0 – 83.2 m Light brown rhyodacite dike; phenocrysts appear plagioclase altered to greasy clay-sericite, hematite dusting.

83.2 – 84.4 m Gray gouge.

84.0 – 87.2 m Brown, purple, gray screen of andesite tuff; partly brecciated and hydro-fractured; moderate pervasive silica alteration, greasy-gray clay-sericite alteration of plagioclase.

87.2 – 86.9 m Gouge

86.9 – 97.0 m Fleishy tan to pale gray bleached rhyodacite dike. Dusting of hematite, illite-clay alteration of plagioclase; broken and fractured heavy clay and gouge.

97.0 – 99.0 m Pale gray clay gouge.

99.0 – 102.8 m Purplish gray, crystal-rich andesite tuff; crystals 20-40%, fiamme 10-20%, white quartz veinlets present, feldspar altered to clay-illite.

102.8 – 103.5 m Gray gouge.

103.5 – 105.1 m Tan to salmon lapilli crystal andesite tuff, bleached and cut by veinlets and stringers of gypsum; quartz pyrite veins at 70 degrees to core axis. Feldspar altered to clay-illite.

105.1 – 106.0 m Gray gouge

106.0 – 109.5 m Greenish-gray crystal-rich lapilli andesite tuff; weak silica alteration; plagioclase altered to clay-illite; possible chlorite and hematite.

109.5 – 125.1 m Intrusion breccia at contact and grades into rhyodacite porphyry intrusion; salmon pink color, disseminated hematite, clay-illite alteration of plagioclase.

125.1 – 126.4 m Pale pinkish-gray lapilli-tuff, moderate silicification, clay-sericite alteration of plagioclase.

126.4 – 130.0 m Complex mixed rock. Mainly intrusive white aphyric rhyolite that grades in fine granular micro-aplitic rhyolite. Some blocky inclusions of altered silicified crystal tuff; quartz veinlets present. Gypsum veinlets and stringers, pyrite disseminated and in veinlets; pervasive quartz-sericite alteration. Patches of pink alunite. Gold values are nil.

130.0 – 130.7 m Medium gray vuggy silica, pervasive and veinlet silica; patches of fine disseminated pyrite; clay-sericite alteration and some alunite. Gold about 0.19 g/t.

130.7 – 131.2 m Probably crystal-rich andesite tuff; strong quartz-sericite alteration; bleached light gray.

131.2 – 135.8 m Purplish gray crystal-rich andesite tuff; clay alteration on fractures and after plagioclase. Some pervasive quartz-sericite alteration.

135.8 – 149.3 m Pinkish white rhyolite, some patches are aphyric white rhyolite, Most is micro-aplitic and leucocratic. Quartz veins with fine grained pyrite are common. Vuggy breccia with disseminated pyrite at 145.0. Abundant fine grained pyrite (5-10%) is present at 149-149m, fine grained pyrite most abundant near base; flow banding, pervasive quartz-sericite alteration.

149.3 – 150.0 m Crushed gougy zone along contact.

150.0 – 152.0 m Gray crystal-rich tuff with clay-illite alteration.

152.0 – EOH m Gray to tan well bedded volcanic sandstone. Coarse beds of grits, pebble conglomerate, interbedded with fine grained mudstone and siltstone. Some massive beds, others are well bedded and sorted. Reddish color, oxidized, unaltered fragments. Beds about 70-75 degrees to core-axis.

Summary. Weak gold mineralization is found in two favorable zones of high-energy breccia, acid alteration, gypsum veinlets, and local development of vuggy silica at 11-32m and 66-78m. No elevated gold values encountered below 70m even though favorable structural setting at 120-130m and 135-150m.

07-BON-05

0 – 3 m No core.

3.0 – 4.6 m Massive white to pale gray crystal-rich andesite-latite tuff; quartz-sericite-illite alteration, goethite limonite on fractures; 1-3% disseminated pyrite. Very few fiamme.

4.6 – 9.3 m Yellow-tan massive crystal-rich tuff; crystals 20%, fiamme <1%. Goethite limonite on fractures; tuff mainly devitrified glass shards.

9.3 – 11.0 m Gray to buff fault gouge.

11.0 – 15.2 m Pinkish gray crystal-rich andesite-latite tuff; crystals 20-40%, fiamme 10%; strong hydro-fracturing; moderate quartz-sericite alteration; 1-2% disseminated pyrite. Weak mineralization Au 0.3-0.9 g/t.

15.2 – 30.0 m Brown to medium brown massive crystal-rich andesite-latite tuff; crystal fragments 20-40%; fiamme 20%; plagioclase weakly altered to clay-illite-carbonate. Fiamme 90 degrees to core axis. Fragments in tuff are angular rock fragments with some fiamme.

30.0 – 32.5 m Salmon pink bleached crystal tuff as above; crystals 20-40%, fiamme 10-20%; pervasive moderate silica-sericite alteration; few veinlets of quartz; plagioclase altered to greasy clay.

32.5 – 34.1 m Pinkish to gray breccia and hydro-fractured crystal tuff. Pinkish alteration of tuff may be alunite; breccia matrix is gray quartz with some gypsum and sericite. No elevated gold values.

34.1 – 36.6 m Pinkish gray to gray silicified tuff, moderate silicification, incipient brecciation; about 1% pyrite.

36.6 – 45.5 m Pinkish gray, salmon crystal-rich ash flow tuff; crystals 30-50%, fiamme and rock fragments 20%; weak silica alteration; plagioclase altered clay-sericite.

45.5 – 52.5 m Pink to gray crystal lapilli tuff; pervasive alteration and hydro-fracturing; Pink pervasive alunite cut by dark gray quartz with fine grained pyrite veinlets and thin gypsum stringers. Weak to moderate silica alteration. Original rock fabric largely destroyed by hydro-fracturing and recrystallization.

52.5 – 55.0 m Pyrite-rich breccia vein about parallel to core axis; nearly massive fine grained pyrite with some gray quartz and patches of black mineral (enargite?). Plagioclase altered to kaolinite. **Gold values 4-18 g/t.**

55.0 – 61.0 m Pale gray to medium gray high energy breccia; vein-like zone of breccia, about 10 degrees to core axis. Breccia fragments are massive gray silica, some vuggy. Breccia matrix hard white mineral, probably alunite with kaolinite and quartz; white creamy quartz; pyrite about 1-5%; especially vuggy 60-61m, Gold values 0.2 to 3.2 g/t.

61.0 – 64.8 m Mottled salmon and purplish crystal lapilli andesite tuff; few quartz and quartz alunite veinlets; kaolin commonly replaces plagioclase; patches of alunite; small patches of vuggy silica.

64.8 – 73.8 m Dark purplish gray crystal-rich andesite tuff; crystals 30%; rock fragments and fiamme 20%; banded silica vein @ 72.0 about parallel to core axis. Bleached at 72.0 to 73.8 with kaolinite alteration of plagioclase; most purple areas plagioclase is altered to illite clay.

73.8 – 76.3 m Pink-gray pervasive alteration of andesite crystal tuff; probably quartz-alunite-hematite alteration. Few small quartz veinlets about parallel to core axis; gypsum veinlets and stringers. Irregular blebs of greenish soft mineral, probably sericite.

76.3 – 82.9 m Complex multi-phase breccia. Wall rock is salmon crystal tuff with quartz-alunite alteration. Intrusion of pale gray micro-granitic or micro-aphyric rhyolite. Some blebs of white aphyric rhyolite. Numerous irregular blebs and veinlets of milky quartz. Late veinlets of gray gypsum. Main rock type in this interval is granular rhyolite.

82.9 – 83.6 m Bleached crystal tuff; margin to rhyolite intrusion and breccia above.

83.6 – 87.9 m Red-brown crystal-rich andesite tuff; crystals 20-40%, lapilli and rock fragments 10%; Plagioclase altered to clay and illite.

87.9 – 89.3 m Salmon pink crystal lapilli andesite tuff. Begins with breccia vein, 0.1m wide. Lapilli tuff appears to be pervasively altered to alunite; core is broken, hydro-fractured and laced with soft greenish clay veinlets. Base is in contact with rhyolite porphyry.

89.3 – 93.8 m Complex body of brecciated rhyolite porphyry. Some porphyritic rhyolite; areas and blebs of aphyric rhyolite; white veins of quartz-alunite; blebs and irregular veins of fine grained pyrite, pyrite 1-3%. Pyrite common in quartz-rich breccia matrix. Complex parallel veins at 30 degrees to core axis at 92.4-93.0—parallel quartz-alunite veinlets, gypsum stringers, and pyrite rich veinlets. Pinkish pervasive alteration of rhyolite, probably alunite.

93.8 – 96.9 m Purple gray crystal-rich lapilli tuff; hematite-clay altered rock; veinlets of gypsum present.

96.9 – 97.7 m Bleached area in crystal tuff associated with irregular 5 cm wide complex vein of rhyolite; pinkish K feldspar or alunite alteration; gypsum veinlets and stringers.

97.7 – 105.1 m Purplish gray crystal lapilli andesite tuff; crystals 20-30%, lapilli 20-30%; white veinlets of quartz-sericite. Core crushed at 103-105m.

105.1 – 107.2 m Pale whitish alteration associated with vein complex at 45 degrees to core axis at 106.5m; crystal tuff next to vein is altered to alunite; some quartz-alunite stringers and veinlets of gypsum.

107.2 – 109.8 m Purple brown crystal lapilli andesite tuff may be some montmorillonite alteration of plagioclase.

109.8 – 110.6 m Bleached and altered crystal lapilli andesite tuff located adjacent to rhyolite dike; rhyolite contact about 20 degrees to core axis. Halo to rhyolite appears to have pink alunite alteration. Plagioclase altered to kaolinite. Pale gray gypsum stringers are common.

110.6 – 112.5 m Mainly pink alunitized crystal andesite tuff cut by white rhyolite veins; numerous white alunite veins; veinlets of fine grained pyrite. Weakly elevated gold values at 0.1 g/t.

112.5 – 114.8 m Medium gray crystal lapilli andesite tuff, strongly altered and hydro-fractured. Altered to vuggy silica but micaceous alteration common, possibly quartz-sericite alteration. Some massive pyrite blebs; injection veinlets of white aphyric rhyolite; gypsum veinlets at 114-115. Gold values of 0.65g/t associated with vuggy silica.

114.8 – 115.4 m Pale gray pinkish alteration of crystal lapilli andesite tuff; pinkish alunite with kaolinite after plagioclase.

115.4 – 116.0 m Medium gray vuggy silica replacement of tuff; blebs of fine grained pyrite; thin veinlets of white rhyolite.

116.0 – 119.3 m Breccia with mixed blocks of crystal tuff and rhyolite porphyry; white aphyric rhyolite commonly has fragment of vuggy silica containing clots of fine pyrite.

119.3 – 135.0 m Pinkish gray to purple gray crystal-lapilli andesite tuff. The first meter bleached and then goes into purple color. Fault gouge at 124m. Last 2 meters are bleached to green gray color.

135.0 – 148.5 m Greenish gray crystal lapilli andesite tuff; strong fractures; tiny brown siderite veinlets are common; Crystal rich 30-40%, lapilli 10-20%.

148.5 – 150.9 m E.O.H. Greenish gray sedimentary breccia, volcanic detritus; beds appear to dip 40 degrees from core axis; propylitic alteration.

Summary. Gold appears to be found in zones of hydro-fracturing and brecciation where it is associated with copper minerals, pyrite and vuggy silica. No significant gold values are found below 61m in the drill hole, even though the associated features are present at greater depths. On exception is gold is weakly elevated in vuggy silica at 112-115m. This may be faulted into this location but there is no good evidence this is the case.

07-BON-06

0 – 3 m No Core

3.1 – 6.1 m Pale gray massive bleached crystal lithic andesite-lateite tuff; no fiamme; blocks and fragments of exotic rocks present as inclusions; quartz-sericite-clay alteration; goethitic limonite on fractures.

6.1 – 6.7 m Gray fault gouge.

6.7 – 11.8 m Tan crystal lapilli andesite-latite tuff. 20 cm gouge at 11.8m; 1-2% disseminated pyrite; weak alteration, probably clay-illite. Tiny limonite veinlets, may be siderite.

11.8 – 13.0 m Pale gray crystal-rich andesite-latite tuff; sparse fiamme; crystals 20-40%; about 1-2% disseminated pyrite; moderate clay-sericite-quartz alteration.

13.0 – 15.1 m Brownish gray crystal-lithic andesite tuff; crystals 20-30%, exotic blocks, minor fiamme 10-20%; clay (possibly smectite) altered plagioclase.

15.1 – 15.4 m Gouge

15.4 – 20.5 m Pinkish gray crystal-lithic andesite tuff; bleached; moderately strong zone of quartz-sericite alteration associated with silica veins 90 degrees to core axis, with disseminated pyrite 17.5-17.7m; pinkish areas of clay-illite alteration.

20.5 – 30.0 m Pale gray breccia complex; fragments of dense pervasive silica rock (massive silica); vuggy silica rock inclusions in a buff to gray medium to fine grained granular rock that appears igneous, and in turn is being altered to vuggy silica. Fine disseminated pyrite concentrated around breccia fragments, White kaolinite fills some vugs, fractures and replaces plagioclase (not leached in vuggy silica). Barite at 28.5 m; fibrous white zeolite? Also present. Gold values from 1.5 to 8.3 g/t—higher gold values associated with sulfides and barite. Not high in copper or base metal values.

30.0 – 31.1 m Breccia as above, but here a zone of heavy barite. Fragments of barite are inclusions in fine grained rhyolite. Gold values ca 2.7 g/t.

31.1 – 34.0 m Pale pinkish gray, strongly altered andesite crystal tuff, probably brecciated or hydro-fractured. Breccia matrix is strongly porphyritic igneous rock, moderate to strong silica alteration with varite veinlets; vuggy silica, massive fine pyrite veins with barite covellite, enargite?. Gold values 1.5-9.4 g/t associated with vuggy silica, barite and copper sulfides.

34.0 – 35.5 m Flesh colored to gray quartz latite porphyry; stringers of chalcopyrite and bornite; plagioclase altered to clay. Ground mass of porphyry is bubbly-aplitic; disseminated sulfides 1-5%. Gold at 5.7g/t; Copper at 0.9%. Porphyry copper-type mineralization.

35.5 – 44.0 m Fleshy gray breccia. Quartz latite host (some looks like tuff) vuggy silica partly developed; 1-3% pyrite in vugs and on fractures. Very strong silica, white kaolinite on fractures and in vugs. Fine grained pyrite stringers and rims on breccia clasts. Some fragments previously silicified before incorporation into breccia. Gold values from 1 to 15 g/t. associated with vuggy silica, sulfides and brecciation.

44.0 – 46.3 m Pinkish gray quartz latite porphyry; contains some silica and pyrite-rich layers; small quartz grains in granular micro-aplitic matrix; last ½ m 1-5% pyrite. Gold values 0.4 to 1.6 g/t.

46.3 – 50.5 m Red-brown crystal-rich crystal-lithic andesite tuff; crystals 20%, fiamme 10-20%; hematite dusting, plagioclase altered to clay.

50.5 – 54.2 m Red-brown crystal lithic tuff. Very coarse large fiamme marker horizon.

54.2 – 57.9 m Reddish brown crystal andesite tuff; crystals 10-30%; fiamme ca 10%; weakly altered but plagioclase replaced by clay-illite.

57.9 – 72.0 m Reddish to pale gray rhyodacite porphyry dike; crushed and fractured; clay-illite-carbonate alteration of plagioclase. Sparse tiny altered biotite phenocrysts; tiny quartz eyes. Feldspar phenocrysts ca 10-20% in a reddish aphanitic igneous matrix. Gouge fault contact at 72 m.

72.0 – 80.0 m Purple gray massive fiamme-rich andesite crystal tuff; crystals 10-20%, fiamme 20-40%; clay-illite-calcite alteration of plagioclase; hematite dusting.

80.0 – 91.4 m Purple gray crystal-rich andesite tuff; crystals 10-30%, inclusions 15%; clay-illite-calcite alteration of plagioclase. Tiny veinlets of calcite sparsely scattered through the core.

91.4 – 99.4 m Greenish gray fiamme-rich andesite tuff; crystals 10-15%, fiamme 30-50%; weak alteration.

99.4 – 100.0 m Reddish gouge and crushed rock.

100.0 – 110.0 m Reddish brown to fleshy colored crystal-lithic andesite tuff; crystals 10-20%; greenish fiamme ca 40%; thin calcite veinlets; illite-calcite alteration of plagioclase; chlorite alteration of fiamme.

110.0 – 121.9 m E.O.H. Reddish gray andesite crystal tuff; crystals 20%; fiamme ca 10%; gouge at 116m, 119.0-119.8m. E.O.H.

Summary. Gold mineralization from 20 to 47 m associated with a breccia complex. Brecciated wall rock is andesite tuff that shows alunite-kaolinite alteration and vuggy silica development. Barite is present in some vuggy silica. Breccia is intruded by rhyolite and latite dikes and blebs which show aphyric, porphyritic and micro-aplitic textures. The latite intrusions have picked up fragments of alunitized rock and vuggy silica. Latite also contains disseminated pyrite and copper sulfides. This latite intrusive shows features of porphyry copper-style mineralization was intruded after at least some strong high-T acid fluids altered the host rock; but the intrusive also contains pyrite and copper sulfides. It appears to be associated with mineralization.

A07-036

This is a check log of the first drill hole in the Mickey zone. The log starts at 95.40m. All core above this level is logged as un-mineralized with little or propylitic alteration. The idea is to get a feel for characteristics of mineralization in the Mickey Zone.

95.4 – 100 m Red-brown massive crystal tuff; sparse lithic fragments; crystals 20%, Hematite-clay on fracture surfaces; calcite veinlets and calcite in ground mass of the volcanic rock.

100 – 103 m Red-gray to gray massive crystal tuff, but very strong clay alteration and moderate amount of fine hematite in clay, mostly on fractures.

103 – 106.6 m Pale gray crumbly alteration of massive dacite tuff. Very strongly leached and clay altered. 1-2 % disseminated pyrite; probably clay-illite alteration. Kaolin clay in this alteration is a good bet.

106.6 – 115.6 m Medium gray, very strongly leached and altered tuff; pyrite content increases; much of this rock is vuggy silica. Some patches and stretches are very high in fine granular disseminated pyrite, about 10%. Overall pyrite content about 3-5%. Appears brecciated or hydro-fractured.

115.6 – 117.5 m Pale gray brecciated rhyolite. Rounded white clasts in pinkish gray rhyolite that has a micro-aplitic texture. Sericite-clay alteration (pyrophyllite?). Fault gouge at 117.5m.

117.5 – 126.0 m Light tan or gray crystal-lithic tuff. Soft waxy clay alteration of plagioclase. Probably clay-illite alteration, clay on fractures. Some areas look brecciated with tuff fragments in fine igneous matrix.

126.0 – 135.0 m Pale to medium gray massive crystal-lithic tuff, dacitic composition; color changes to brownish gray. Calcite veinlets and calcite impregnated ground mass; weak alteration.

135 – 141.3 m Red-brown to tan crystal-lapilli, to crystal-lithic dacite tuff. Reddish hematite in ground mass; clay-illite alteration.

141.3 – 146.6 m Medium gray strongly altered crystal tuff; gradually becomes gray vuggy silica at 142m. Vuggy silica appears rich in clay (kaolinite) and abundant pyrite 5-.3 – 14.020%; kaolin-silica alteration .

146.6 – 149.0 m Zone of intrusion? Breccia; irregular blebs and fragments of pale gray rhyolite in a matrix of silica and very hard black mineral.

149 – 155.0 m Reddish brown crystal tuff, hematite alteration. Gray greasy waxy clay alteration of plagioclase. Probably hematite-clay alteration.

155 – 159.41 m E.O.H. Medium to pale brownish gray crystal tuff; calcite veinlets and calcite replacement of fedspar; calcite-clay alteration.

Summary. Host rock is mainly crystal –lithic tuff; very few fiamme. Massive crystal tuff in appearance. Tuff is cut by two structural zones along which there has been very high-T alteration and leaching. Vuggy silica is well developed and contains abundant fine disseminated pyrite and kaolin alteration. Perhaps some alunite alteration also is present. Squirts and blebs of aphyric rhyolite, and micro-aplitic rhyolite has intruded in these two structural zones. The vuggy silica looks good for mineralization but is at a depth of about 100 m below surface.

A07-031 (Thesis Hole #1)

0.0 – 6.1 m Casing, no core

6.1 – 9.3 m Pale, yellow-buff rhyolite porphyry. Tiny phenocrysts of plagioclase, quartz eyes in micro-aplitic ground mass. Probably strong kaolinite alteration of plagioclase; oxidized and leached of iron; a fine grained porphyry.

9.3 – 14.0 m Medium gray porphyry strongly altered to vuggy silica. Core is broken and rubblely ; poor core recovery; quartz-kaolinite (dickite?) alteration pyrite about 4%. About 40% core recovery. Barite crystals in some vugs. Appears hydro-fractured and brecciated.

14.0 – 14.4 m White kaolinite-rich gouge zone; about 5% pyrite.

14.4 – 15.6 m White to pale gray broken and gougy, clay-altered latite tuff. Apparently no quartz eyes are present. Strongly brecciated and altered—kaolinite alteration; about 4% finely disseminated pyrite.

15.6 – 19.2 m Mostly gray vuggy silica, mixed with kaolinite alteration. Original rock probably a plagioclase- bearing igneous rock, may be a mixture of latite tuff and rhyodacite intrusion. Brecciated and laced with hydrothermal quartz; about 5% pyrite.

19.2 – 20.4 m Pale gray soft plagioclase-rich igneous rock, probably a latite tuff. Strong kaolinite alteration with about 3% disseminated pyrite. Some of the rock is a micro-breccia with fragments of white clay altered rhyolite (contains quartz eyes).

20.4 – 25.2 m Pale gray breccia and micro-breccia, some clay (kaolinite) alteration, possibly altered latite tuff, mixed with vuggy silica (plus kaolinite). Contains small inclusions of white, clay-altered rhyolite (with some quartz eyes).

25.2 – 30.0 m Pale gray micro-breccia. Appears to be a complex mix of rock types; partly tuff, partly quartz-eye rhyolite porphyry and blebs of aphyric rhyolite altered to clay. Patches of vuggy silica, but mostly strong kaolinite alteration; about 3% pyrite.

30.0 – 34.0 m Medium gray breccia and hydro-fractured rock, mostly rhyolite (or quartz latite) porphyry with some blebs of aphyric rhyolite. Mainly vuggy silica alteration with abundant kaolinite clay; about 3% finely disseminated pyrite.

34.0 – 40.0 m Medium gray, mostly vuggy silica, appears brecciated. Main brecciated rock is rhyolite porphyry with quartz eyes. Mainly silica alteration with patches of kaolin clay after feldspars; matrix of breccia is pyrite-rich. Some areas contain black mineral possibly enargite or argentite.

40.0 – 51.3 m Medium gray to dark gray vuggy silica rock; very strongly brecciated. Main fragments appear to be rhyolite (quartz latite) porphyry, micro-aplitic type with quartz eyes, feldspars are altered to kaolinite (pyrophyllite), abundant very fine grained pyrite, about 5% of rock. Disseminated reddish mineral (hematite?). Black mineral in breccia matrix may be argentite or enargite. Vugs filled with barite crystals in places.

51.3 – 54.6 m Medium gray micro-aplitic quartz latite porphyry, brecciated and hydro-fractured. Blebs and pods of white waxy clay; clay altered (kaolinite), highly siliceous. About 2% pyrite; much introduced quartz, some vuggy. Small patches of white clay (kaolinite). Traces of black mineral may be argentite, enargite, or tetrahedrite.

54.6 – 58.2 m Pale to medium gray vuggy silica rock; brecciated and hydro-fractured; much quartz has been added; about 2% disseminated pyrite. Dark gray fine grained opaque mineral may be argentite, tetrahedrite or enargite. Some barite in vugs. Weak white kaolinite clay alteration.

58.2 – 64.9 m Medium gray highly fractured breccia; largely introduced quartz, vuggy and fractured; barite in veinlets and vugs. Some kaolinite alteration, but mainly silicification. About 3% pyrite. Some dark mineral may be copper sulfides or argentite.

64.9 – 65.6 m Medium gray brecciated quartz; largely introduced silica, vuggy, laced with dark sulfides that may be a mixture of pyrite and argentite?? Some fragments in breccia are rhyolite porphyry.

65.6 – 68.0 m Medium to light gray quartz latite porphyry; hydro-fractured; appears to be an intrusion; weak sulfides about 0.1%; ends in gouge at 68.0-65.5; probably kaolinite clay alteration; barite on fractures.

68.5 – 73.7 m Medium to pale gray intrusive rock, appears to be a quartz-latite porphyry. Sparse large K feldspar phenocrysts in a fine grained aplitic ground mass of feldspar and quartz, trace of pyrite. Weak clay alteration; sparse gypsum veinlets. Some intrusion breccia in core, ends in gouge zone.

73.7 – 74.8 m Gouge.

74.8 – 77.3 m Crushed and gougy quartz monzonite porphyry (quartz latite) becoming fine coarse grained and pale gray in color. Pinkish salmon K feldspar phenocrysts in granular aplitic ground mass of quartz, plagioclase and feldspar. Veinlets of gypsum-anhydrite; Clay alteration is common and probably is kaolinite; about 0.2 %. Dark clasts of disseminated minerals may be rutile or ilmenite. Core is brecciated with fragments of aplitic porphyry in aplitic matrix; appears to be an intrusion breccia.

77.3 – 81.0 m Pale buff gray quartz monzonite porphyry, appears faintly brecciated. Large phenocrysts of K feldspar, 0.5 cm, in ground mass of aplitic mixture of plagioclase, K feldspar and quartz; many tiny black mineral grains 1-2% ilmenite or rutile; sparse tiny gypsum veinlets.

81.0 – 97.0 m 81.1 is contact between two porphyries; gray as above against a buff tan porphyry that is almost equigranular. Plagioclase and K feldspar phenocrysts in a fine grained aplitic matrix of quartz and feldspar. Strong to weak hydro-fractures; tiny gypsum veinlets. Some incipient brecciation.

97.0 -- 102.5 m Contact between buff intrusion as above against a medium gray siliceous porphyry that brecciated and hydro-fractured. Veins and veinlets of gypsum and anhydrite are common. Core through this section is heavily brecciated and hydro-fractured; prominent feldspar phenocrysts are set in a gray aplitic groundmass. Greenish brown waxy gypsum-clay patches and fractures with clay-sericite alteration; about 0.2% disseminated pyrite.

102.5 – 110.0 m Buff colored aplitic porphyry (quartz latite porphyry). Clay-altered plagioclase phenocrysts are set in a fine granular aplitic ground mass of quartz and feldspar; faintly brecciated; possibly an intrusion breccia; some flow banding; white gypsum veinlets are common.

110.0 – 114.8 m Pale gray siliceous porphyry (quartz latite); sparse clay-altered plagioclase are set in a siliceous matrix of quartz and feldspar. Heavy hydro-fractures with many gypsum veinlets; clay-sericite alteration; trace of pyrite mineralization (0.2%).

114.8 – 116.74 EOH Gouge and breccia in intrusion as above. Clay alteration; many gypsum veinlets.

Summary. Upper part of this hole appears to cut some latite tuff, but mainly is in rhyolite (quartz latite) intrusive to 15m. From 15 meters on, host rock is mainly quartz latite porphyry that is brecciated and hydro-fractured and highly silicified in some stretches. Vuggy silica present in highly silicified parts. Much of the quartz appears introduced from 40 to 65 m. Much of the silicified zone is vuggy with some barite in the vugs. A dark mineral present may be enargite, tetrahedrite or argentite. Below the silicified zone the hole goes into quartz latite porphyry, some weakly altered, to end of the hole.

A07-031 (Thesis Hole #2)

0 – 2.5 m Heavily weathered volcanic rock, black soil, limonite-rich, broken and friable.

2.5 – 14.5 m Medium gray massive quartz monzonite porphyry; K feldspar, plagioclase, sparse biotite phenocrysts in pale gray siliceous ground mass. Clay-illite alteration of feldspar, chlorite alteration of biotite. Scattered rutile and ilmenite grains. Sparse veinlets of calcite, about 0.2% pyrite. Texture is variable, matrix is fine aphanitic and siliceous to micro-aplitic. Some areas almost seriate texture

14.5 – 15.0 m Gray clay-rich fault gouge.

15.0 – 19.7 m Porphyry as above, slightly stronger clay alteration.

19.7 – 23.6 m Medium gray clay-rich gouge; original rock feldspar quartz latite porphyry as above.

23.6 – 24.7 m Medium gray quartz latite porphyry; moderate clay alteration; core broken, about 0.2% pyrite.

24.7 – 26.1 m Pale gray clay-rich gouge and crushed quartz latite porphyry; strong clay alteration.

26.1 – 37.9 m Medium to pale gray quartz latite porphyry; phenocrysts plagioclase, K-feldspar, sparse biotite in a fine siliceous matrix.

37.9 – 39.1 m Quartz latite porphyry, broken and gouged, moderate clay alteration.

39.1 – 50.0 m Medium gray quartz latite porphyry; flow banded with variable texture. Plagioclase is altered to clay; roughly parallel crystals of plagioclase in fine grained granular matrix of quartz, feldspar and occasional biotite. Tiny rutile or ilmenite grains scattered through the ground mass. Quartz pyrite veinlets begin to appear at 42m. Gypsum veinlets begin to appear at 42m. Hydro-fracturing textures at 49.5m.

50.0 – 53.0 m Medium gray quartz latite porphyry; strongly broken with strong clay-rich gouge. Gypsum veinlets at 52m.

53.0 – 56.3 m Medium gray broken and gougy quartz latite porphyry. Clay alteration strong, veinlets of gypsum, about 1% finely disseminated pyrite.

56.3 – 60.2 m Medium gray clay-rich gouge. Some lumps in this zone are quartz latite porphyry; brecciated and hydro-fractured and partly altered to vuggy silica with 2% disseminated pyrite.

60.2 – 61.1 m Medium gray quartz latite porphyry; hydro fractured and brecciated; vuggy silica texture; moderate kaolinite-quartz alteration. Some gypsum replacing plagioclase.

61.1 – 64.6 m Medium gray quartz latite porphyry, brecciated and filled with gray quartz. Very strongly silicified, vuggy open breccia; about 3% disseminated pyrite. Mainly introduced quartz that has been brecciated; some is vuggy.

64.6 – 66.0 m Medium gray quartz-kaolinite breccia; strong brecciation, strong clay alteration; some vuggy quartz.

66.0 – 68.0 m Dark gray gouge with about 5% fine grained disseminated pyrite with strong clay alteration. Some fragments in the gouge are vuggy silica.

68.0 – 70.0 m Pale gray quartz latite porphyry, strongly brecciated and recrystallized to partly vuggy silica rock; strong quartz-kaolinite alteration; pyrite on fractures; about 2% very fine grained pyrite. Areas of strong silica alteration and moderately developed vuggy silica.

70.0 – 75.0 m Medium to dark gray brecciated silica rock; appears to be silicified and brecciated quartz latite porphyry. Both massive and vuggy silica present; about 3% disseminated pyrite. Barite veinlets at 73 to 75m.

75.0 – 79.9 m Dark gray brecciated silica rock; gray silica fragments in a matrix of dark gray pyrite-rich rock flour; some silica is vuggy. Appears to be mostly introduced quartz which is largely brecciated; quartz-kaolinite-pyrite alteration. About 4% disseminated pyrite.

79.0 – 81.7 m Olive-drab unconsolidated soft sand, with about 1% pyrite; probably clay alteration.

81.7 – 84.7 m Medium gray silicified and brecciated quartz latite porphyry with strong silica-kaolinite alteration. Some vuggy silica texture moderately well developed; about 3% finely disseminated pyrite.

NOTE: Best mineralization between 59-85m: 26m >0.3 g/t gold correlates with the zone of introduced gray quartz which is brecciated and vuggy. A zone of introduced brecciated quartz runs 1.5g/t gold. A second zone at 77-83m runs 1.3 g/t gold is strongly brecciated introduced silica and vuggy quartz.

84.7 – 89.0 m Medium to pale gray brecciated and altered quartz latite porphyry with strong clay alteration and numerous gypsum veinlets. About 1% disseminated pyrite.

89.0 – 94.0 m Pale gray quartz latite porphyry; weak flow banding, otherwise massive, with weak to moderate clay alteration. About 0.5 % disseminated pyrite.

94.0 – 121.0 m Pale gray massive quartz latite porphyry, aplitic quartz feldspar. Sparse altered plagioclase (clay); pinkish gray color. Patches of flow banding; weak hydro fractures. About 0.1% pyrite.

121.0 – 124.97 EOH Pink gray massive aplitic quartz latite porphyry; clay-illite alteration of plagioclase. Few gypsum veinlets present.

Summary. Host rock drilled by this hole is a pinkish tan to tan to gray quartz latite porphyry. This rock usually has a porphyritic texture. Ground mass varies from fine grained siliceous, to aplitic. The rock is nearly leucocratic, Biotite phenos are altered to chlorite and/or clay. Rutile and ilmenite scattered as small grains through the ground mass. Numerous fault zone are indicated by clay rich gouge. A zone of silicification from 59 to 85 meters correlates with gold assays above 0.3 g/t. This zone appears to have been brecciated quartz latite porphyry with introduced massive gray silica and some porphyry fragments of blocks are thought to have been altered to vuggy silica rock. Best assays of gold, ca. 1.3 to 1.5 g/t is associated with massive and vuggy silica zones. The mineralized zone appears to be flanked by strong clay alteration in porphyry.

A07-034 (Thesis Hole #3)

0.0 – 3.05 m Casing, no core

3.05 – 7.62 m Pale tan quartz laite porphyry, brecciated, fractured, vuggy silica with kaolin clay alteration.

7.62 – 8.5 m Gray clay-rich fault gouge

8.5 – 23.0 m Pale gray (unoxidized) and tan (oxidized) broken and brecciated quartz fragments in white matrix that appears to be aphyric rhyolite. Blue-black covellite-bornite (13.5-14.0m). Rock is vuggy with about 1% fine disseminated pyrite; kaolinite clay on fractures. Base of oxidation is about 19.8m.

23.0 – 24.8 m Pale gray quartz latite porphyry; phenocrysts of white clay-sericite alteration of plagioclase that are set in a granular aplitic matrix of quartz and feldspar; about 1% disseminated pyrite.

24.8 – 26.8 m Buff-tan fine grained granitic textured quartz monzonite (quartz latite), hydro fractures, clay alteration of plagioclase, and about 1% disseminated pyrite.

26.8 – 27.0 m Medium gray fault gouge, clay rich.

27.0 – 27.5 m Gray to tan massive silica; introduced silica, some vuggy, some pinkish alunite present.

27.5 – 36.2 m Medium gray quartz latite porphyry; altered plagioclase phenocrysts are in a fine siliceous matrix; partly leached and verging on vuggy silica. Appears to be brecciated and hydro fractured. Weak disseminated pyrite, about 0.5%. Kaolinite-rich alteration.

36.2 – 37.0 m Gray clay-rich fault gouge.

37.0 – 44.0 m Medium gray quartz latite porphyry, brecciated, hydro fractured and recrystallized. Partly leached and vuggy. Small amount of barite is present in vugs. Clay sericite alteration may contain kaolinite (kaolinite, dickite etc.)

44.0 – 44.6 m Medium gray quartz latite porphyry; weak clay alteration; hydro fractured; about 1% disseminated pyrite.

44.6 – 45.2 m Gray clay-rich gouge

45.2 – 47.7 m Medium gray to tan gray quartz latite porphyry; possible fine grained margin of the intrusion or contact zone; phenocrysts of plagioclase in a fine siliceous matrix; weakly altered, weak clay-illite alteration with trace of pyrite.

47.7 – 60.0 m Pale gray to tan massive quartz latite porphyry; gradually becoming more coarse grained in contact zones.

60.0 – 61.0 m Zone of broken, shard and fractured core; probably porphyry as above.

61.0 – 70.0 m Pinkish tan quartz latite porphyry; pinkish or flesh colored plagioclase in a fine grained aplitic matrix of quartz and feldspar; sparse altered biotite; rock studded with tiny opaque grains of rutile or ilmenite. Appears hydro fractured; trace of pyrite; weak illite alteration of plagioclase. End in a broken and rubbly gouge 70-71 m

71.0 – 79.0 m Fleishy-tan massive quartz latite porphyry; 5mm plagioclase phenocrysts 20% in granular ground mass of feldspar and quartz. Few quartz eyes and sparse biotite phenocrysts; about 1% disseminated pyrite, fine grained pyrite on fractures. Plagioclase weakly altered to illite and moderate to weak hydro fracturing and brecciation. Gypsum veinlets cut and displace pyrite fractures.

79.0 – 89.0 m Porphyry as above but phenocrysts become less obvious, flow banding becomes evident, becomes less porphyritic and more micro-granular or aplitic with depth. Trace of disseminated pyrite; fine grained pyrite on fractures; numerous gypsum veinlets; fine disseminated ilmenite-rutile throughout—about 1%.

89.0 – 106.5 m Tan massive quartz latite porphyry as above; sparse phenos of plagioclase in an aplitic leucocratic aggregate of feldspar and quartz; trace of finely disseminated pyrite. Probably weak illite alteration of plagioclase; ground mass is

unaltered; weak flow banding. Moderate to weak hydro fractures; gypsum-anhydrite veinlets are common.

106.5 – 114.0 m Medium gray feldspar-rich porphyry; massive, brecciated and hydro fractured; plagioclase about 20%; aplitic ground mass consists of quartz and feldspar; minor altered hornblende; about 1% fine disseminated rutile and/or ilmenite. About 1% pyrite as fracture fillings and disseminations. Numerous gypsum-anhydrite veinlets and clots; Ends in gouge. Weak clay alteration of plagioclase. Probably dacite composition.

114.0 – 115.0 m Fault gouge.

115.0 – 117.7 m Medium to dark gray brecciated and silicified dacite porphyry. Heavy gouge at 116.3-117.7 m. Numerous gypsum veinlets present. Strong clay alteration of plagioclase; kaolinite-quartz alteration.

117.7 – 125.0 m Tan and gray mottled quartz latite porphyry; about 10% plagioclase phenocrysts in a siliceous aplitic matrix of quartz and feldspar. Disseminated rutile-ilmenite 1%; Hydro fractured and brecciated. Matrix of brecciated quartz and gypsum-anhydrite. Numerous gypsum veinlets; Vein of white aphyric rhyolite at 119.0. Strong introduced silica veinlets at 123-125m.

125.0 – 131.0 m Medium gray strongly broken and brecciated porphyry—possibly dacite porphyry—brecciated with abundant introduced quartz; sheared and fractured. Numerous gypsum veinlets; strong kaolinite-clay alteration. Possibly early silica-anhydrite cut by later kaolinite alteration.

131.0 – 147.0 m Medium to dark gray massive silicified breccia; probably brecciated dacite. Much introduced silica, mainly as matrix. Repeated brecciation as silicified fragments are in a quartz matrix. Veinlets and vugs of barite. Mottled brecciated appearance. Possible some specularite on fractures. Pyrite about 3% disseminated clots, grains and veinlets.

147.0 – 153.0 m Dark gray silicified breccia; fragments of silicified dacite porphyry in a matrix of dark introduced quartz. About 2% finely disseminated pyrite and on fractures. Strongly broken and laced with white quartz veinlets. Possibly some white alunite veinlets. Numerous gypsum veinlets. Ptygmatic white quartz veinlets present.

153.0 – 153.97 m EOH Fault gouge; possibly clay (kaolinite)-rich altered porphyry.

A07-035 (Thesis Hole T04)

0 – 9.14 m Casing, no core.

9.14 – 15.3 m Medium gray vuggy silica-clay rock. Core is broken and rubbly. Very poor core recovery, about 30%. Disseminated pyrite about 2%; kaolinite (dickite) alteration. Probably an altered dacite porphyry.

15.3 – 18.3 m Medium gray fault gouge, probably in dacite porphyry; kaolinite alteration, about 0.5% disseminated pyrite.

18.3 – 21.4 m Soft crumbly dacite porphyry, weak limonite on fractures; base of oxidation is at 21.4m; clay-chlorite alteration.

21.4 – 27.0 m Medium gray massive to mottled dacite porphyry; about 25% tan plagioclase phenocrysts in a fine siliceous aphanitic ground mass. Many phenocrysts look like crystal fragments. Variable texture makes rock look like faint igneous breccia. Finely disseminated ilmenite-rutile. Hornblende is rare and altered. Illite alteration of plagioclase. Numerous tiny quartz and gypsum veinlets.

27.0 – 33.0 m Complex igneous breccia; blocky and rounded clasts of porphyry as above (dacite with disseminated pyrite in wine red brown porphyry in a matrix of siliceous igneous rock). Changes from wine-red matrix 27-29m into mainly dacite porphyry at 30-35m. About 2% disseminated pyrite; clay-illite alteration of plagioclase; numerous white veinlets of barite?

33.0 – 35.0 m Broken, brecciated gouge, possibly broken up dacite porphyry; trace of pyrite; clay alteration.

35.0 – 41.6 m Pale gray dacite porphyry; strongly altered and broken; strong clay alteration; some plagioclase replaced by gypsum; pyrite disseminated and in fine veinlets, about 3%. Much of the core is gouge.

41.6 – 44.4 m Relatively coherent stretch of igneous breccia; fine grained, phenocrysts-poor porphyry; possible quartz latite against dacite porphyry; cross-cutting relationships not clear; trace of pyrite; strong clay alteration.

44.4 – 50.0 m Mostly medium gray fault gouge; probably porphyry with large phenocrysts; quartz latite porphyry; strong clay alteration; about 0.4% disseminated pyrite.

50.0 – 54.0 m Medium to pale gray quartz latite porphyry; broken and crumbly; very strong clay alteration; about 0.5% disseminated pyrite.

54.0 – 62.0 m Medium gray fine granular igneous rock, possibly a crystal tuff. Layering may be flow banding or a tuffaceous layer. Many crystals appear to be fragments, some layers look like fiamme, but rock is recrystallized and strongly broken. Clay alteration is strong to moderate.

62.0 – 66.6 m Strongly broken and crumbly, medium gray, appears to be quartz latite porphyry; large plagioclase phenocrysts in a granular recrystallized matrix; vuggy with about 3% pyrite; strong clay-sericite alteration.

66.6 – 74.3 m Medium gray quartz latite porphyry; strongly crumbled, soft, fragmented, strong kaolinite-sericite alteration; about 2% disseminated pyrite.

74.3 – 75.0 m Medium gray, rubblely quartz latite porphyry; recrystallized, crushed, poor recovery, weak development of vuggy silica; kaolinite-quartz alteration.

75.0 – 78.0 m Medium gray quartz latite porphyry; weak flow banding. Altered plagioclase phenocrysts are set in a fine siliceous ground mass of quartz and feldspar; sparse altered hornblende and biotite; studded with tiny ilmenite-rutile grains; about 2% disseminated and fracture pyrite.

78.0 – 88.4 m Medium to pale gray quartz latite porphyry; sparse phenocrysts (altered to illite) in a siliceous ground mass of feldspar and quartz; few sparse micro-phenocrysts of hornblende, now altered to clay. Mottled, with weak to moderate hydro fractures. Sparse veinlets of white quartz and gypsum; trace disseminated pyrite; about 1% disseminated ilmenite-rutile.

88.4 – 96.6 m Fleshy tan color, quartz latite porphyry; seriate texture to weakly porphyritic; almost granitic texture; medium to fine grained; weakly altered. Plagioclase altered to clay-sericite; biotite and hornblende are altered to clay plus ilmenite-rutile; few gypsum veinlets; very coherent porphyry

96.6 – 98.5 m Medium to light gray, clay-rich fault gouge.

98.5 – 101.7 m Medium gray quartz latite porphyry; strongly hydro fractured and brecciated; heavy silica alteration; some minor white kaolinite; about 3% disseminated pyrite; numerous gypsum veinlets.

101.7 – 122.0 m Medium to dark gray brecciated silica; mostly introduced quartz; abundant gypsum-anhydrite veins; probably quartz latite porphyry, but completely silicified. Light gray quartz veins common; some are quartz-anhydrite-gypsum veins. Late barite in veinlets and clots in breccia. No vuggy silica. Massive gray silicification; trace of pyrite; weak vuggy development where feldspars are available to leach.

122.0 – 122.5 m Quartz latite porphyry, medium grained; strongly silicified, about 5% disseminated pyrite; hydro fractured.

122.5 – 124.0 m Clay-rich fault gouge.

124.0 – 134.3 m Medium tanish gray quartz latite porphyry; brecciated and hydro fractured.

134.3 – 140.2 m Medium to dark gray siliceous breccia; fragments of dark gray quartz (silicified porphyry) in a matrix of light gray quartz, gypsum and relatively minor barite. About 2% disseminated pyrite; kaolinite alteration.

140.2 – 146.9 m Medium to dark gray silicified porphyry; pervasive silicification; hydro fractures common. Minor white kaolinite in remnant plagioclase; about 4% disseminated pyrite. Some pale gray quartz veins; sparse veinlets of gypsum, barite.

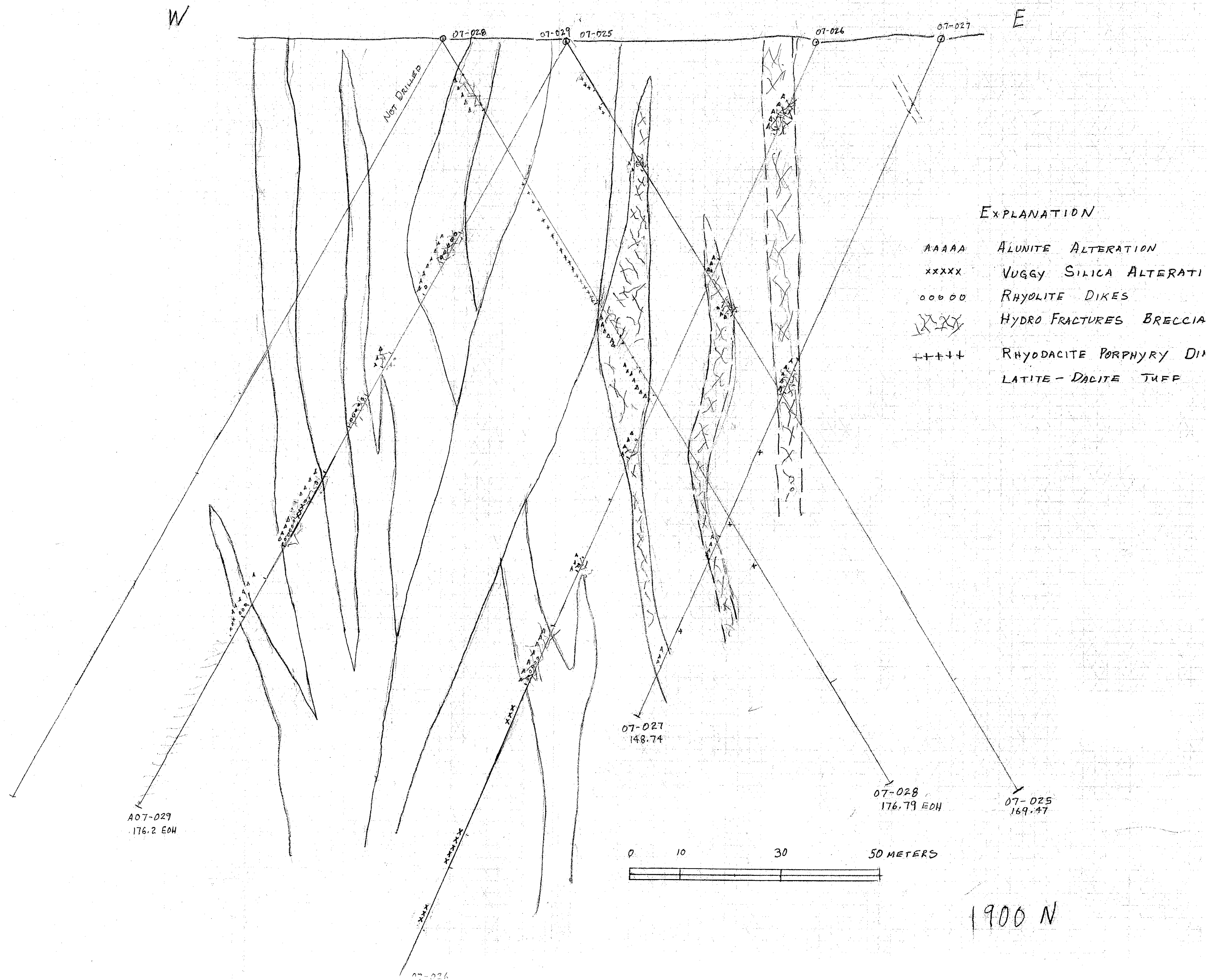
146.9 – 147.7 m Tan crumbly fault gouge.

147.7 – 150.88 EOH Mottled medium grained brecciated and hydro fractured porphyry. Medium to dark gray. Pyrite disseminated and in clots, 4%; cut by white quartz veinlets with gypsum and maybe some alunite.

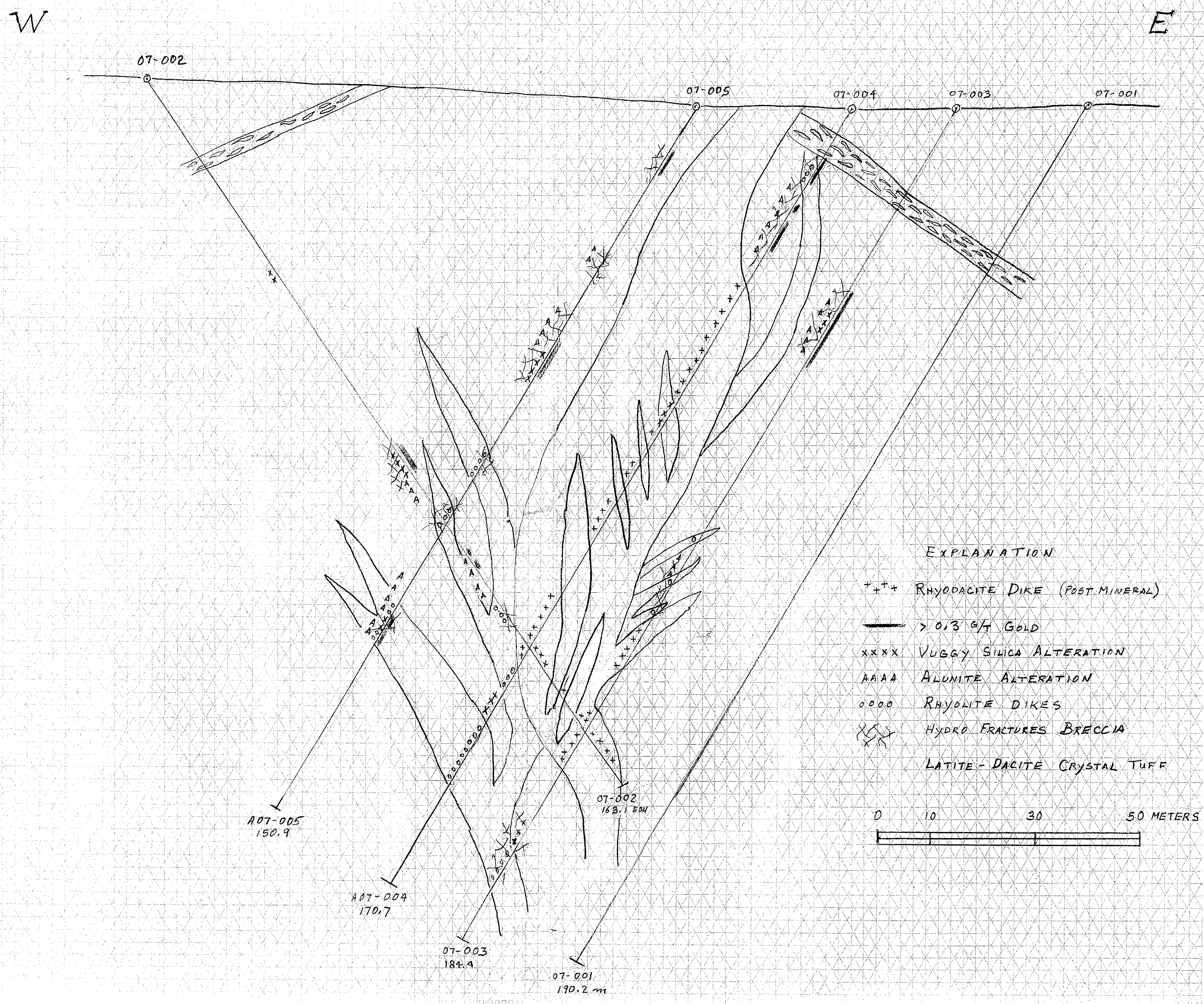
ATTACHMENTS

- 1. Interpretive Geologic Cross Section—Bonanza Area—Line 1900N**
- 2. Interpretive Geologic Cross Section—Bonanza Area—Line 1950N**
- 3. Interpretive Geologic Cross Section—Bonanza Area—Line 1975N**
- 4. Interpretive Geologic Cross Section—Bonanza Area—Line 2000N**
- 5. Interpretive Geologic Cross Section—Thesis III Area**

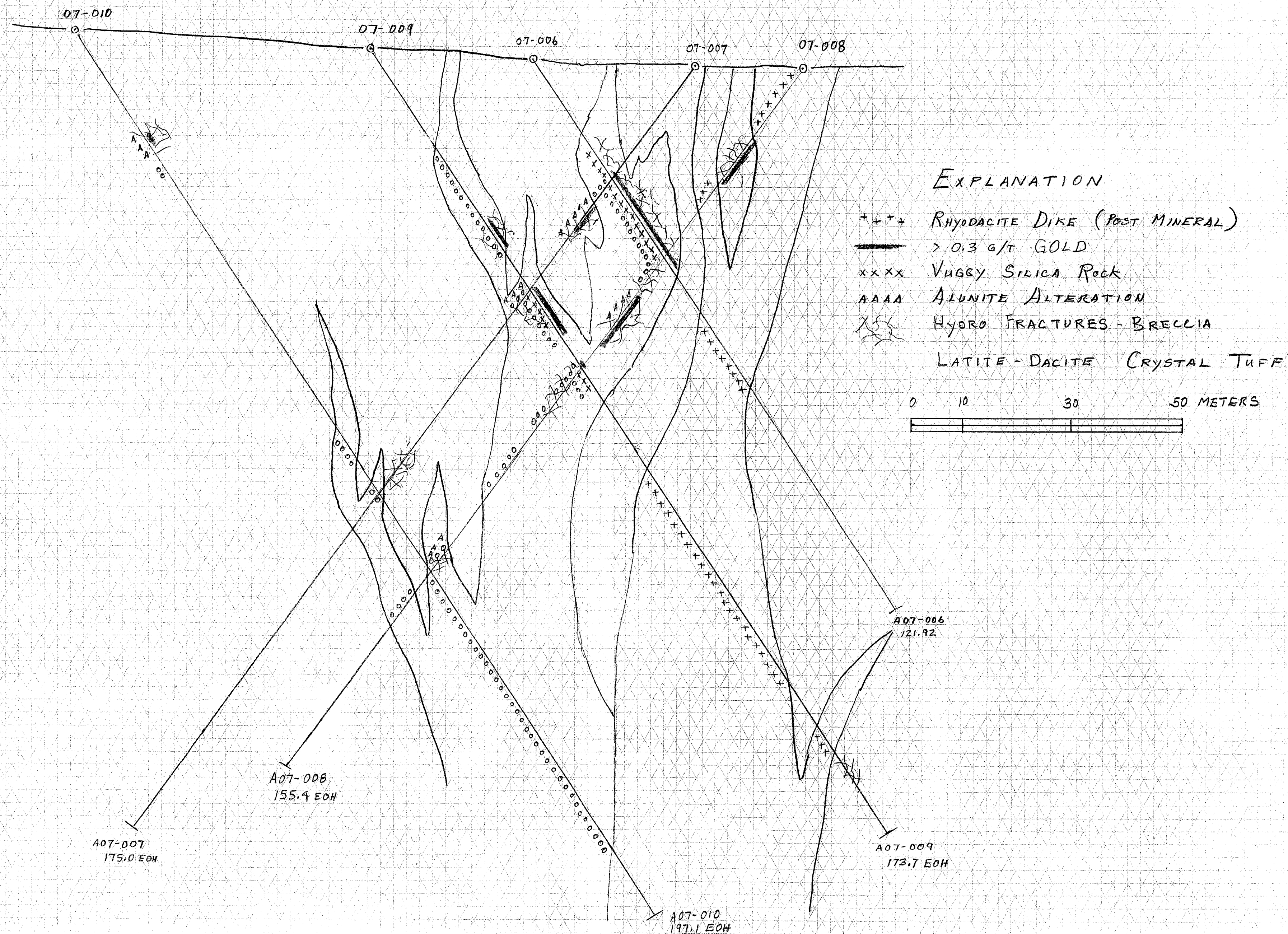
BONANZA AREA - INTERPRETIVE CROSS SECTION - LINE 1900 N



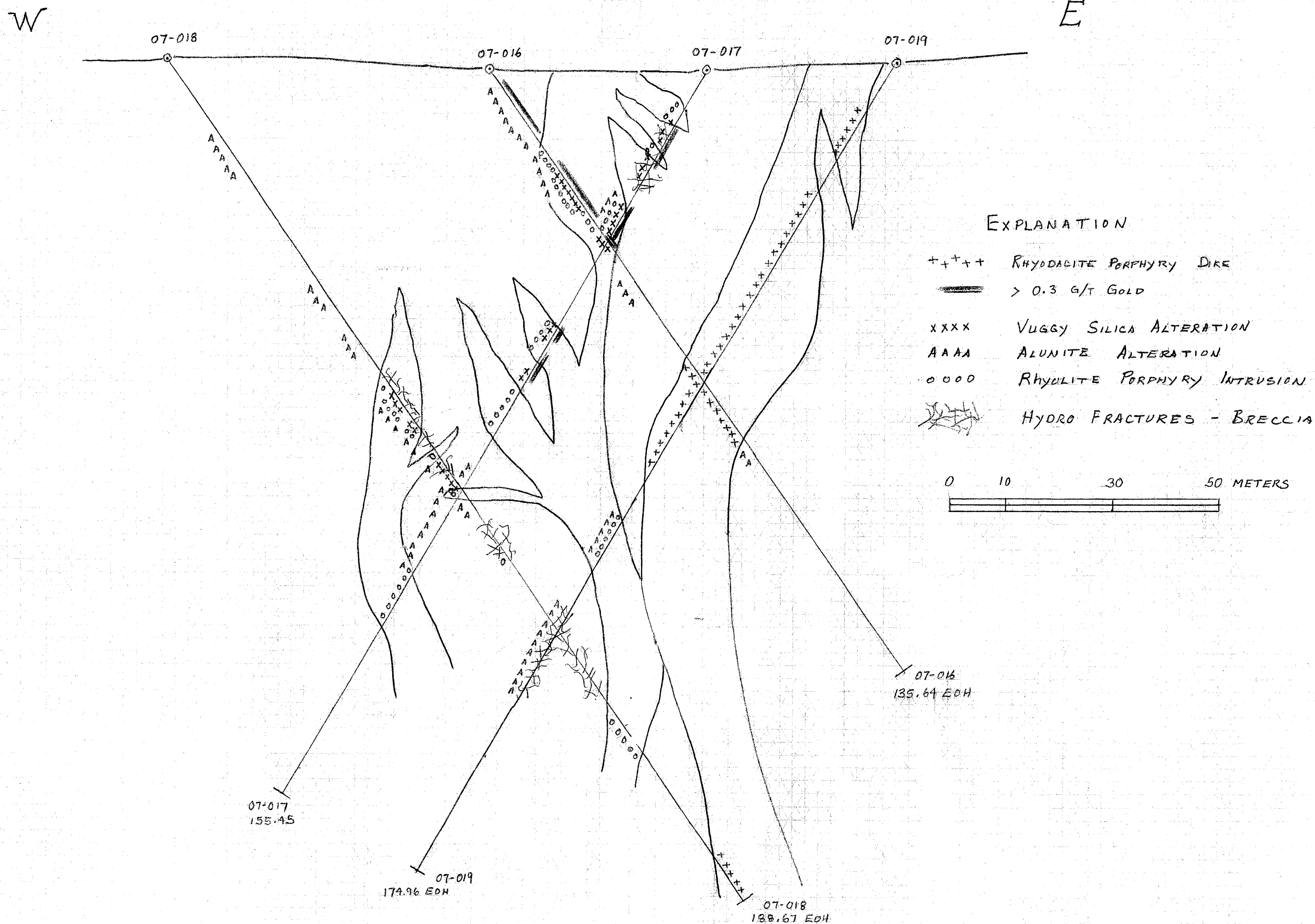
BONANZA AREA - INTERPRETIVE CROSS SECTION - 1950 N



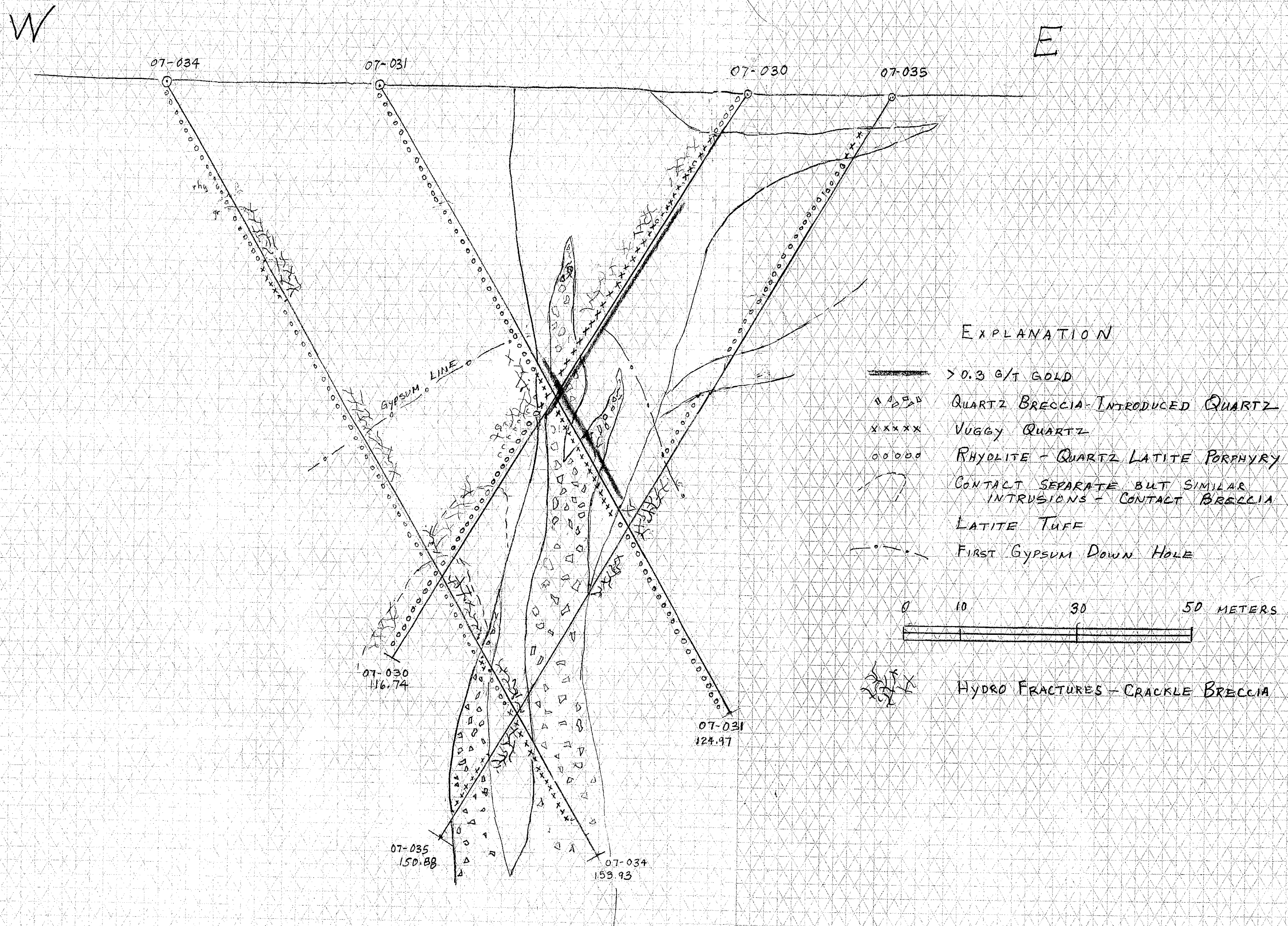
BONANZA AREA - INTERPRETIVE CROSS SECTION - 1975 N



BONANZA AREA - INTERPRETIVE CROSS SECTION - 2000N



THESIS III AREA - INTERPRETIVE CROSS SECTION



Guardsmen Resources Inc.

January 1, 2007 - December 31, 2007

2007

Section Ref	Schedule Ref	Ranch 2007 Cost Statement		SUMMARY
C	1	Travel, Accomodations & Meals		3,957.47
A	1	Wages, Salaries & Consulting:		
		Management & Tech Wages	97,930.94	
		Project Management	488,663.39	
		Casual Labour	634,513.56	
		Short Term Geoscientist Consulting	3,250.00	
		Wages, Salaries & Consulting - Other	46,220.00	
				1,270,577.89
F		Health & Safety Training		7,968.39
D		Database/Surveying/Imagery Costs:		
		Satellite Image & Air Photo	4,300.00	
		Topographic Surveying	32,488.12	
		Geological Mapping	147.54	
		Exploration Report Preparation	12,569.03	
				49,504.69
F		Sampling & Assaying:		
		Standard, Blank Preparations	3,130.56	
		Sample Prep & Assaying Rocks	22,398.34	
		Sampling Prep & Assaying Drill	89,845.10	
		Sampling Bags & Equipment	16,305.19	
		Sample Dispatch & Transport	1,073.69	
				132,752.88
D	1	Explorataion Contractors & Services:		
		Geological	241,080.55	
		Geophysical	126,409.65	
		Exploration Contractors -Other	1,127.47	
				368,617.67
C	1	Project Field Support Costs:		
F		Fuel	181,897.92	
C	2	Earth Moving & Truck Hire	20,970.08	
C	2	Pumps, Generators, Heaters etc	159,649.69	
C	2	Food, Supplies & Flights Charges	12,297.17	
C	1	Food, Supplies & Meal Charges	4,543.44	
B	1	Accomodation & Camp Equipment	490,924.01	
C	1	Travel To/From Projects (meals)	21,025.81	
B	1	Travel To/From Projects (Accomodations)	15,845.22	
C	2	Field Vehicle Hire/Maintenance	50,470.09	
C	2	All Terrain Vehicel Hire/Maintenance	35,122.00	
C	1	Helicopter (Non Drilling Costs)	21,602.24	
F		Field Office Supplies	51,784.79	
F		Phone, Postage, Couriers	36,002.93	
F		Satellite Phone Services	13,656.46	
				1,115,791.85
		Drilling Costs:		
C	1	Earth Moving & Truck Hire	12,060.00	
C	1	Helicopter, Fixed Wing (for Drilling)	747,041.59	
D	1	Diamond Drilling Meterage Costs	935,440.87	
D	1	RC Meterage Charges	1,582.00	
D	1	Other Drilling Charges/Labour	260,671.78	
D	1	Drilling - Other Costs	3,150.00	
				1,959,946.24
E		Report Writing - Reasonable Costs		15,400.00
		Total Ranch 2007 Costs	(Jan 1/07 - Dec 31/07)	4,924,517.08

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Pay End Date	Name	Position	GL Category	# Days	Rate/day	Other	Total Paid	Dates	Management & Tech TOTAL	Project Management TOTAL	Wages & Salaries TOTAL	Casual Labour TOTAL	Short Term Geoscientist TOTAL
Michael Renning:													
Jan 31/07	Michael Renning	Planning	Management & Tech (Vancouver)	16.00	405.68	0.00	6,490.94	Dec 1/06 - Dec 22/06	6,490.94				
Totals				16.00	400.00	0.00	6,490.94						
Brian May													
June 30/07	Brian May	Geologist	Wages, Salaries & Consulting - Other	19.00	350.00	0.00	6,650.00	June 12-30/07			6,650.00		
July 31/07	Brian May	Geologist	Wages, Salaries & Consulting - Other	30.00	350.00	0.00	10,500.00	July 1-30/07			10,500.00		
Aug 28/07	Brian May	Geologist	Wages, Salaries & Consulting - Other	26.00	350.00	0.00	9,100.00	July 31 - Aug 31/07			9,100.00		
Sept 28/07	Brian May	Geologist	Wages, Salaries & Consulting - Other	25.00	350.00	0.00	8,750.00	Sept 1-30/07			8,750.00		
Totals				100.00	400.00	0.00	35,000.00						
J. Graham Campbell:													
Jan 31/07	J. Graham Campbell	Manager	Management & Tech (Vancouver)	6.67	599.70	0.00	4,000.00	Jan 1-7/07	4,000.00				
Mar 30/07	J. Graham Campbell	Manager	Management & Tech (Vancouver)	1.00	600.00	0.00	600.00	Mar 1/07	600.00				
Totals				7.67	300.00	0.00	4,600.00						
Scott Gifford:													
Apr 30/07	Scott Gifford	Manager	Management & Tech (Vancouver)	19.00	400.00	0.00	7,600.00	Apr 12/07 - Apr 30/07	7,600.00				
Sept 15/07	Scott Gifford	Manager	Management & Tech (Vancouver)	15.00	500.00	0.00	7,500.00	Sept 1/07 - Sept 15/07	7,500.00				
Apr 30/07	Scott Gifford	Project Manager	Project Management	15.00	419.31	0.00	6,289.78	Apr 16-30/07		6,289.78			
May 15/07	Scott Gifford	Project Manager	Project Management	14.00	500.00	0.00	7,000.00	May 1/07 - May 15/07		7,000.00			
June 15/07	Scott Gifford	Project Manager	Project Management	15.00	500.00	0.00	7,500.00	June 1-15/07		7,500.00			
July 15/07	Scott Gifford	Project Manager	Project Management	15.00	500.00	0.00	7,500.00	July 1-15/07		7,500.00			
Aug 15/07	Scott Gifford	Project Manager	Project Management	8.00	500.00	0.00	4,000.00	Aug 1-8/07		4,000.00			
Aug 31/07	Scott Gifford	Project Manager	Project Management	16.00	500.00	0.00	8,000.00	Aug 16-31/07		8,000.00			
Oct 15/07	Scott Gifford	Project Manager	Project Management	2.00	500.00	0.00	1,000.00	Oct 2-3/07		1,000.00			
May 31/07	Scott Gifford	Project Manager	Casual Labour	16.00	500.00	0.00	8,000.00	May 16-31/07				8,000.00	
June 30/07	Scott Gifford	Project Manager	Casual Labour	9.00	500.00	0.00	4,500.00	June 16-30/07				4,500.00	
July 31/07	Scott Gifford	Project Manager	Casual Labour	16.00	500.00	0.00	8,000.00	July 16-31/07				8,000.00	
Sept 30/07	Scott Gifford	Project Manager	Casual Labour	12.00	500.00	0.00	6,000.00	Sept 16-27/07				6,000.00	
Totals				172.00	350.00	0.00	82,889.78						
Harry Huffels													
Apr 30/07	Harry Huffels	Logistics Coordinator	Project Management	15.00	350.00	0.00	5,250.00	Apr 16-30/07		5,250.00			
May 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	15.00	400.00	0.00	6,000.00	May 1-15/07				6,000.00	
May 31/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	16.00	400.00	0.00	6,400.00	May 16-31/07				6,400.00	
June 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	14.00	400.00	0.00	5,600.00	June 1-15/07				5,600.00	
June 30/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	12.00	400.00	0.00	4,800.00	June 16-30/07				4,800.00	
July 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	15.00	400.00	0.00	6,000.00	July 1-15/07				6,000.00	
July 31/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	16.00	400.00	0.00	6,400.00	July 16-31/07				6,400.00	
Aug 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	15.00	400.00	0.00	6,000.00	Aug 1-15/07				6,000.00	
Aug 31/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	5.00	400.00	0.00	2,000.00	Aug 16-31/07				2,000.00	
Sept 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	10.00	400.00	0.00	4,000.00	Sept 1-15/07				4,000.00	
Sept 30/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	12.00	400.00	0.00	4,800.00	Sept 16-27/07				4,800.00	
Oct 15/07	Harry Huffels	Field Coordinator/Truck Driver	Casual Labour	2.00	400.00	0.00	800.00	Oct 2-3/07				800.00	
Totals				147.00	300.00	0.00	58,050.00						
Andy Rasmussen													
May 15/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	3.00	250.00	0.00	750.00	May 1-15/07				750.00	
May 31/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	16.00	250.00	0.00	4,000.00	May 16-31/07				4,000.00	
June 15/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	15.00	250.00	0.00	3,750.00	June 1-15/07				3,750.00	
June 30/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	15.00	250.00	0.00	3,750.00	June 16-30/07				3,750.00	
July 15/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	15.00	250.00	0.00	3,750.00	July 1-15/07				3,750.00	
July 31/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	1.00	250.00	0.00	250.00	July 16-31/07				250.00	
Aug 15/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	7.00	250.00	0.00	1,750.00	Aug 1-15/07				1,750.00	
Aug 31/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	16.00	250.00	0.00	4,000.00	Aug 16-31/07				4,000.00	
Sept 15/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	15.00	250.00	0.00	3,750.00	Sept 1-15/07				3,750.00	
Sept 30/07	Andy Rasmussen	Carpenters Assistant	Casual Labour	9.00	250.00	0.00	2,250.00	Sept 16-27/07				2,250.00	
Totals				112.00	300.00	0.00	28,000.00						
Anthony Didonato													
May 15/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	1.00	350.00	0.00	350.00	May 1-15/07				350.00	

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Pay End Date	Name	Position	GL Category	# Days	Rate/day	Other	Total Paid	Dates	Management & Tech TOTAL	Project Management TOTAL	Wages & Salaries TOTAL	Casual Labour TOTAL	Short Term Geoscientist TOTAL
May 31/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	16.00	300.00	0.00	4,800.00	May 16-31/07				4,800.00	
June 15/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	15.00	300.00	0.00	4,500.00	June 1-15/07				4,500.00	
June 30/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	15.00	300.00	0.00	4,500.00	June 16-30/07				4,500.00	
July 15/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	9.00	300.00	0.00	2,700.00	July 1-15/07				2,700.00	
July 31/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	13.00	300.00	0.00	3,900.00	July 16-31/07				3,900.00	
Aug 15/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	15.00	300.00	0.00	4,500.00	Aug 1-15/07				4,500.00	
Aug 31/07	Anthony Didonato	Drill Pad Construction Prep	Casual Labour	8.00	300.00	0.00	2,400.00	Aug 16-31/07				2,400.00	
Totals				92.00	300.00	0.00	27,650.00						
Ian Brett													
May 15/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	1.00	300.00	0.00	300.00	May 1-15/07				300.00	
May 31/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	16.00	350.00	0.00	5,600.00	May 16-31/07				5,600.00	
June 15/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	15.00	350.00	0.00	5,250.00	June 1-15/07				5,250.00	
June 30/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	15.00	350.00	0.00	5,250.00	June 16-30/07				5,250.00	
July 15/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	15.00	350.00	0.00	5,250.00	July 1-15/07				5,250.00	
July 31/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	5.00	350.00	0.00	1,750.00	July 16-31/07				1,750.00	
Aug 15/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	7.00	350.00	0.00	2,450.00	Aug 1-15/07				2,450.00	
Aug 31/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	16.00	350.00	0.00	5,600.00	Aug 16-31/07				5,600.00	
Sept 15/07	Ian Brett	Drill Pad Construction Prep	Casual Labour	10.00	350.00	0.00	3,500.00	Sept 1-15/07				3,500.00	
Totals				100.00	300.00	0.00	34,950.00						
Kristian Rasmussen													
May 15/07	Kristian Rasmussen	Camp Logistics	Casual Labour	2.00	275.00	0.00	550.00	May 1-15/07				550.00	
May 31/07	Kristian Rasmussen	Camp Logistics	Casual Labour	16.00	275.00	0.00	4,400.00	May 16-31/07				4,400.00	
June 15/07	Kristian Rasmussen	Camp Logistics	Casual Labour	15.00	275.00	0.00	4,125.00	June 1-15/07				4,125.00	
June 30/07	Kristian Rasmussen	Camp Logistics	Casual Labour	15.00	275.00	0.00	4,125.00	June 16-30/07				4,125.00	
July 15/07	Kristian Rasmussen	Camp Logistics	Casual Labour	15.00	275.00	0.00	4,125.00	July 1-15/07				4,125.00	
July 31/07	Kristian Rasmussen	Camp Logistics	Casual Labour	15.00	275.00	0.00	4,125.00	July 16-31/07				4,125.00	
Aug 15/07	Kristian Rasmussen	Camp Logistics	Casual Labour	7.00	275.00	0.00	1,925.00	Aug 1-15/07				1,925.00	
Aug 31/07	Kristian Rasmussen	Camp Logistics	Casual Labour	16.00	275.00	0.00	4,400.00	Aug 16-31/07				4,400.00	
Sept 15/07	Kristian Rasmussen	Camp Logistics	Casual Labour	15.00	275.00	0.00	4,125.00	Sept 1-15/07				4,125.00	
Sept 30/07	Kristian Rasmussen	Camp Logistics	Casual Labour	9.00	275.00	0.00	2,475.00	Sept 16-24/07				2,475.00	
Totals				125.00	300.00	0.00	34,375.00						
Lee Gifford													
May 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	2.00	375.00	0.00	750.00	May 1-15/07				750.00	
May 31/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	16.00	375.00	0.00	6,000.00	May 16-31/07				6,000.00	
June 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	15.00	375.00	0.00	5,625.00	June 1-15/07				5,625.00	
June 30/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	15.00	375.00	0.00	5,625.00	June 16-30/07				5,625.00	
July 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	7.00	375.00	0.00	2,625.00	July 1-15/07				2,625.00	
July 31/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	16.00	375.00	0.00	6,000.00	July 16-31/07				6,000.00	
Aug 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	15.00	375.00	0.00	5,625.00	Aug 1-15/07				5,625.00	
Aug 31/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	7.00	375.00	0.00	2,625.00	Aug 16-31/07				2,625.00	
Sept 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	15.00	375.00	0.00	5,625.00	Sept 1-15/07				5,625.00	
Sept 30/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	12.00	375.00	0.00	4,500.00	Sept 16-27/07				4,500.00	
Oct 15/07	Lee Gifford	Geological Assistant/Logistics	Casual Labour	2.00	375.00	0.00	750.00	Oct 2-3/07				750.00	
Totals				122.00	300.00	0.00	45,750.00						
Dan Tigchelaar													
May 31/07	Dan Tigchelaar	Camp Chef	Casual Labour	8.00	300.00	0.00	2,400.00	May 16-31/07				2,400.00	
June 15/07	Dan Tigchelaar	Camp Chef	Casual Labour	15.00	300.00	0.00	4,500.00	June 1-15/07				4,500.00	
June 30/07	Dan Tigchelaar	Camp Chef	Casual Labour	15.00	300.00	0.00	4,500.00	June 16-30/07				4,500.00	
July 15/07	Dan Tigchelaar	Camp Chef	Casual Labour	15.00	300.00	0.00	4,500.00	July 1-15/07				4,500.00	
July 31/07	Dan Tigchelaar	Camp Chef	Casual Labour	8.00	300.00	0.00	2,400.00	July 16-31/07				2,400.00	
Aug 15/07	Dan Tigchelaar	Camp Chef	Casual Labour	14.00	300.00	0.00	4,200.00	Aug 1-15/07				4,200.00	
Aug 31/07	Dan Tigchelaar	Camp Chef	Casual Labour	16.00	300.00	0.00	4,800.00	Aug 16-31/07				4,800.00	
Sept 15/07	Dan Tigchelaar	Camp Chef	Casual Labour	15.00	300.00	0.00	4,500.00	Sept 1-15/07				4,500.00	
Sept 30/07	Dan Tigchelaar	Camp Chef	Casual Labour	2.00	300.00	0.00	600.00	Sept 16-17/07				600.00	
Sept 30/07	Dan Tigchelaar	Camp Chef	Casual Labour	108.00	100.00	0.00	10,800.00	May 23/07 - Sept 17/07				10,800.00	
Totals				216.00	300.00	0.00	43,200.00						
Ian Kirkland													
May 31/07	Ian Kirkland	Assistant Chef	Casual Labour	8.00	250.00	0.00	2,000.00	May 16-31/07				2,000.00	
June 15/07	Ian Kirkland	Assistant Chef	Casual Labour	15.00	250.00	0.00	3,750.00	June 1-15/07				3,750.00	

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June 30/07	Ian Kirkland	Assistant Chef	Casual Labour	15.00	250.00	0.00	3,750.00	June 16-30/07				3,750.00	
July 15/07	Ian Kirkland	Assistant Chef	Casual Labour	15.00	250.00	0.00	3,750.00	July 1-15/07				3,750.00	
July 31/07	Ian Kirkland	Assistant Chef	Casual Labour	16.00	250.00	0.00	4,000.00	July 16-31/07				4,000.00	
Aug 15/07	Ian Kirkland	Assistant Chef	Casual Labour	15.00	250.00	0.00	3,750.00	Aug 1-15/07				3,750.00	
Aug 31/07	Ian Kirkland	Assistant Chef	Casual Labour	16.00	250.00	0.00	4,000.00	Aug 16-31/07				4,000.00	
Sept 15/07	Ian Kirkland	Assistant Chef	Casual Labour	15.00	250.00	0.00	3,750.00	Sept 1-15/07				3,750.00	
Sept 30/07	Ian Kirkland	Assistant Chef	Casual Labour	9.00	250.00	0.00	2,250.00	Sept 16-24/07				2,250.00	
Sept 30/07	Ian Kirkland	Assistant Chef	Casual Labour	124.00	100.00	0.00	12,400.00	May 23/07 - Sept 17/07				12,400.00	
Totals				248.00	300.00	0.00	43,400.00						
Buddy Bonshor													
May 31/07	Buddy Bonshor	Camp Worker & Logistics	Casual Labour	1.00	250.00	0.00	250.00	May 16-31/07				250.00	
June 15/07	Buddy Bonshor	Camp Worker & Logistics	Casual Labour	15.00	250.00	0.00	3,750.00	June 1-15/07				3,750.00	
June 30/07	Buddy Bonshor	Camp Worker & Logistics	Casual Labour	10.00	250.00	0.00	2,500.00	June 16-30/07				2,500.00	
Totals				26.00	300.00	0.00	6,500.00						
Cole Robbillard													
May 31/07	Cole Robillard	General Labourer	Casual Labour	9.00	250.00	0.00	2,250.00	May 16-31/07				2,250.00	
June 15/07	Cole Robillard	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	June 1-15/07				1,000.00	
July 15/07	Cole Robillard	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	July 1-15/07				1,000.00	
July 31/07	Cole Robillard	General Labourer	Casual Labour	15.00	250.00	0.00	3,750.00	July 16-31/07				3,750.00	
Totals				32.00	300.00	0.00	8,000.00						
Guy Kristian													
May 31/07	Guy Kristian	General Labourer	Casual Labour	8.00	250.00	0.00	2,000.00	May 16-31/07				2,000.00	
June 15/07	Guy Kristian	General Labourer	Casual Labour	15.00	250.00	0.00	3,750.00	June 1-15/07				3,750.00	
June 30/07	Guy Kristian	General Labourer	Casual Labour	15.00	250.00	0.00	3,750.00	June 16-30/07				3,750.00	
July 15/07	Guy Kristian	General Labourer	Casual Labour	15.00	250.00	0.00	3,750.00	July 1-15/07				3,750.00	
July 31/07	Guy Kristian	General Labourer	Casual Labour	1.00	250.00	0.00	250.00	July 16/07				250.00	
Totals				54.00	300.00	0.00	13,500.00						
Ian Armstrong													
May 31/07	Ian Armstrong	General Labourer	Casual Labour	9.00	250.00	0.00	2,250.00	May 16-31/07				2,250.00	
June 15/07	Ian Armstrong	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	June 1-15/07				1,000.00	
Totals				13.00	300.00	0.00	3,250.00						
Ian Forrest													
May 15/07	Ian Forrest	General Labourer	Casual Labour	1.00	250.00	0.00	250.00	May 15/07				250.00	
Totals				1.00	300.00	0.00	250.00						
James Bentley													
May 31/07	James Bentley	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	May 16-31/07				1,000.00	
Totals				4.00	300.00	0.00	1,000.00						
Johnny Lopez													
May 31/07	Johnny Lopez	General Labourer	Casual Labour	9.00	250.00	0.00	2,250.00	May 16-31/07				2,250.00	
June 15/07	Johnny Lopez	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	June 1-15/07				1,000.00	
Totals				13.00	300.00	0.00	3,250.00						
Jordan Evans													
May 31/07	Jordan Evans	General Labourer	Casual Labour	9.00	250.00	0.00	2,250.00	May 16-31/07				2,250.00	
June 15/07	Jordan Evans	General Labourer	Casual Labour	4.00	250.00	0.00	1,000.00	June 1-15/07				1,000.00	
Totals				13.00	300.00	0.00	3,250.00						
Erl Chambers													
June 30/07	Erl Chambers	Carpenter	Casual Labour	3.00	400.00	0.00	1,200.00	June 16-30/07				1,200.00	
July 15/07	Erl Chambers	Carpenter	Casual Labour	9.00	400.00	0.00	3,600.00	July 1-15/07				3,600.00	
Totals				12.00	300.00	0.00	4,800.00						
Rafael Diaz													
June 30/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	3.00	400.00	0.00	1,200.00	June 16-30/07				1,200.00	
July 15/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	15.00	400.00	0.00	6,000.00	July 1-15/07				6,000.00	

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Pay End Date	Name	Position	GL Category	# Days	Rate/day	Other	Total Paid	Dates	Management & Tech TOTAL	Project Management TOTAL	Wages & Salaries TOTAL	Casual Labour TOTAL	Short Term Geoscientist TOTAL
July 31/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	16.00	400.00	0.00	6,400.00	July 16-31/07				6,400.00	
Aug 15/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	13.00	400.00	0.00	5,200.00	Aug 1-15/07				5,200.00	
Aug 31/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	9.00	400.00	0.00	3,600.00	Aug 16-31/07				3,600.00	
Sept 15/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	15.00	400.00	0.00	6,000.00	Sept 1-15/07				6,000.00	
Sept 30/07	Rafael Diaz	Geological Assistant/First Aid	Casual Labour	9.00	400.00	0.00	3,600.00	Sept 16-24/07				3,600.00	
Totals				80.00	300.00	0.00	32,000.00						
Aldo Torres													
June 30/07	Aldo Torres	Camp Woker	Casual Labour	3.00	250.00	0.00	750.00	June 16-30/07				750.00	
July 15/07	Aldo Torres	Camp Woker	Casual Labour	15.00	250.00	0.00	3,750.00	July 1-15/07				3,750.00	
July 31/07	Aldo Torres	Camp Woker	Casual Labour	16.00	250.00	0.00	4,000.00	July 16-31/07				4,000.00	
Aug 15/07	Aldo Torres	Camp Woker	Casual Labour	15.00	250.00	0.00	3,750.00	Aug 1-15/07				3,750.00	
Aug 31/07	Aldo Torres	Camp Woker	Casual Labour	5.00	250.00	0.00	1,250.00	Aug 16-31/07				1,250.00	
Totals				54.00	300.00	0.00	13,500.00						
Allan Dee													
July 31/07	Allan Dee	Replacement Chef	Casual Labour	9.00	300.00	0.00	2,700.00	July 16-31/07				2,700.00	
May 16/07	Allan Dee	Replacement Chef	Casual Labour	1.00	1,044.34	0.00	1,044.34	May 16/07				1,044.34	
Aug 15/07	Allan Dee	Replacement Chef	Casual Labour	2.00	300.00	0.00	600.00	Aug 1-15/07				600.00	
Totals				12.00	300.00	0.00	4,344.34						
Peter Szerencsi													
July 31/07	Peter Szerencsi	Replacement Assistant Chef	Casual Labour	9.00	300.00	0.00	2,700.00	July 16-31/07				2,700.00	
Aug 15/07	Peter Szerencsi	Replacement Assistant Chef	Casual Labour	2.00	300.00	0.00	600.00	Aug 1-15/07				600.00	
Totals				11.00	300.00	0.00	3,300.00						
Vern Dexter													
Apr 26/07	Vern Dexter	Helper	Casual Labour	2.00	150.00	0.00	300.00	Apr 25-26/07				300.00	
May 23/07	Vern Dexter	Helper	Casual Labour	10.00	150.00	0.00	1,500.00	May 13-23/07				1,500.00	
Totals				12.00	300.00	0.00	1,800.00						
Silverwater Enterprises													
Apr 26/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	16.00	700.00	0.00	11,200.00	May 16-31/07				11,200.00	
May 31/07	Silverwater Ent	Storage	Casual Labour	1.00	750.00	0.00	750.00	May 16-31/07				750.00	
June 15/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	15.00	700.00	0.00	10,500.00	June 1-15/07				10,500.00	
June 15/07	Silverwater Ent	Storage	Casual Labour	1.00	750.00	0.00	750.00	June 1-15/07				750.00	
June 30/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	15.00	700.00	0.00	10,500.00	June 16-30/07				10,500.00	
June 30/07	Silverwater Ent	Storage	Casual Labour	1.00	750.00	0.00	750.00	June 16-30/07				750.00	
July 15/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	15.00	700.00	0.00	10,500.00	July 1-15/07				10,500.00	
July 15/07	Silverwater Ent	Storage	Casual Labour	1.00	750.00	0.00	750.00	July 16-31/07				750.00	
July 31/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	8.50	700.00	0.00	5,950.00	July 16-31/07				5,950.00	
Aug 15/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	11.00	700.00	0.00	7,700.00	Aug 1-11/07				7,700.00	
Aug 31/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	16.00	700.00	0.00	11,200.00	Aug 16-31/07				11,200.00	
Sept 15/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	15.00	700.00	0.00	10,500.00	Sept 1-15/07				10,500.00	
Sept 30/07	Silverwater Ent	Contractor - General Labourer	Casual Labour	11.00	700.00	0.00	7,700.00	Sept 16-24/07				7,700.00	
Totals				126.50	300.00	0.00	88,750.00						
Kelly Breeden Transport													
June 15/07	Kelly Breeden	Expediting	Casual Labour	15.00	90.00	0.00	1,350.00	June 1-15/07				1,350.00	
Totals				15.00	300.00	0.00	1,350.00						
Trabro Ventures													
June 15/07	Trabro Ventures	Expediting	Casual Labour	15.50	90.00	0.00	1,395.00	June 1-15/07				1,395.00	
Totals				15.50	300.00	0.00	1,395.00						
Radius Drilling													
June 22/07	Radius Drilling	Casual Labour	Casual Labour	1.00	858.60	0.00	858.60	June 1-22/07				858.60	
Totals				1.00	300.00	0.00	858.60						
Adrenaline Expediting													
June 27/07	Adrenaline Expediting	BZH Enterprises	Casual Labour	1.00	320.00	0.00	320.00	June 1-27/07				320.00	
July 5/07	Adrenaline Expediting	Lamaar, Renee	Casual Labour	1.00	96.25	0.00	96.25	July 5/07				96.25	

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May 25/07	Adrenaline Expediting	Expediting	Casual Labour	10.00	129.92	0.00	1,299.20	May 10 - 25/07				1,299.20	
June 1/07	Adrenaline Expediting	Expediting	Casual Labour	6.00	320.62	0.00	1,923.75	May 25 - June 1/07				1,923.75	
June 15/07	Adrenaline Expediting	Expediting	Casual Labour	11.00	179.85	0.00	1,978.40	June 3 - 14/07				1,978.40	
July 6/07	Adrenaline Expediting	Expediting	Casual Labour	17.00	304.95	0.00	5,184.30	June 14 - July 5/07				5,184.30	
July 13/07	Adrenaline Expediting	Expediting	Casual Labour	6.00	390.68	0.00	2,344.10	July 8 - 14/07				2,344.10	
July 23/07	Adrenaline Expediting	Expediting	Casual Labour	6.00	268.80	0.00	1,612.85	July 15-22/07				1,612.85	
Aug 6/07	Adrenaline Expediting	Expediting	Casual Labour	5.00	246.04	0.00	1,230.20	July 23/07 - Aug 3/07				1,230.20	
Aug 17/07	Adrenaline Expediting	Expediting	Casual Labour	5.00	341.92	0.00	1,709.60	Aug 7 - 16/07				1,709.60	
Sept 5/07	Adrenaline Expediting	Expediting	Casual Labour	11.00	265.40	0.00	2,919.45	Aug 17 - Sept 4/07				2,919.45	
Sept 18/07	Adrenaline Expediting	Expediting	Casual Labour	7.00	101.60	0.00	711.50	Sept 5-12/07				711.50	
Totals				86.00	300.00	0.00	21,329.60						
Tyrone Greenley													
July 6/07	Tyrone Greenley	Labourer	Casual Labour	1.00	201.75	0.00	201.75	July 6/07				201.75	
July 12/07	Tyrone Greenley	Expediting	Casual Labour	1.00	175.00	0.00	175.00	July 12/07				175.00	
Aug 3/07	Tyrone Greenley	Expediting	Casual Labour	1.00	113.75	0.00	113.75	Aug 3/07				113.75	
Aug 16/07	Tyrone Greenley	Expediting	Casual Labour	1.00	118.13	0.00	118.13	Aug 16/07				118.13	
Aug 29/07	Tyrone Greenley	Expediting	Casual Labour	1.00	70.00	0.00	70.00	Aug 29/07				70.00	
Totals				5.00	300.00	0.00	678.63						
Tyrone Osbourne													
July 6/07	Tyrone Osbourne	Labourer	Casual Labour	1.00	126.88	0.00	126.88	July 6/07				126.88	
Totals				1.00	300.00	0.00	126.88						
Renee Lamarre													
July 12/07	Renee Lemarre	Expediting	Casual Labour	1.00	105.00	0.00	105.00	July 12/07				105.00	
July 20/07	Renee Lemarre	Expediting	Casual Labour	1.00	87.50	0.00	87.50	July 20/07				87.50	
Aug 3/07	Renee Lemarre	Expediting	Casual Labour	1.00	78.75	0.00	78.75	Aug 3/07				78.75	
Aug 16/07	Renee Lemarre	Expediting	Casual Labour	1.00	96.25	0.00	96.25	Aug 16/07				96.25	
Sept 1/07	Renee Lemarre	Expediting	Casual Labour	1.00	140.00	0.00	140.00	Sept 1/07				140.00	
Totals				5.00	300.00	0.00	507.50						
Jacob Brent													
July 12/07	Jason Brent	Expediting	Casual Labour	1.00	140.00	0.00	140.00	July 12/07				140.00	
Aug 3/07	Jason Brent	Expediting	Casual Labour	1.00	87.50	0.00	87.50	Aug 3/07				87.50	
Aug 16/07	Jason Brent	Expediting	Casual Labour	1.00	105.00	0.00	105.00	Aug 16/07				105.00	
Totals				3.00	300.00	0.00	332.50						
Patrick Wilson													
Aug 31/07	Patrick Wilson	Camp Worker	Casual Labour	2.00	250.00	0.00	500.00	Aug 30-31/07				500.00	
Sept 15/07	Patrick Wilson	Camp Worker	Casual Labour	15.00	250.00	0.00	3,750.00	Sept 1-15/07				3,750.00	
Sept 30/07	Patrick Wilson	Camp Worker	Casual Labour	9.00	250.00	0.00	2,250.00	Sept 16-24/07				2,250.00	
Totals				26.00	300.00	0.00	6,500.00						
Garry Pendyrasse													
Sept 15/07	Garry Pendegrass	Camp Worker	Casual Labour	5.00	350.00	0.00	1,750.00	Sept 1-15/07				1,750.00	
Sept 30/07	Garry Pendegrass	Camp Worker	Casual Labour	2.00	350.00	0.00	700.00	Sept 16-17/07				700.00	
Totals				7.00	300.00	0.00	2,450.00						
Lloyd Baker													
Aug 22/07	Lloyd Baker	Camp Worker	Casual Labour	32.00	250.00	0.00	8,000.00	May 17/07 - July 18/07				8,000.00	
Totals				32.00	300.00	0.00	8,000.00						
A-1 Rentals 476708 BC Ltd.													
Sept 1/07	A-1 Rentals	Expediting	Casual Labour	1.00	640.00	0.00	640.00	Sept 1/07				640.00	
Sept 2/07	A-1 Rentals	Expediting	Casual Labour	1.00	1,155.00	0.00	1,155.00	Sept 2/07				1,155.00	
Oct 5/07	A-1 Rentals	Expediting	Casual Labour	1.00	2,415.00	0.00	2,415.00	Oct 5/07				2,415.00	
Oct 9/07	A-1 Rentals	Expediting	Casual Labour	1.00	2,835.00	0.00	2,835.00	Oct 9/07				2,835.00	
Oct 10/07	A-1 Rentals	Expediting	Casual Labour	1.00	3,483.00	0.00	3,483.00	Oct 10/07				3,483.00	
Totals				5.00	300.00	0.00	10,528.00						
Skeena Expediting													
Sept 7/07	Cynthia Schneider	Expediting	Casual Labour	1.00	613.50	0.00	613.50	Sept 7/07				613.50	
Totals				1.00	300.00	0.00	613.50						

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E.M Baker & Associates Inc.													
Jan 30/07	Max Baker	Consultation	Project Management	10.00	486.00	0.00	4,860.00	Jan 1-10/07		4,860.00			
June 30/07	Max Baker	Consultation	Management & Tech (Vancouver)	30.00	486.00	0.00	14,580.00	June 1 - 30/07	14,580.00				
July 1/07	Max Baker	Consultation	Management & Tech (Vancouver)	15.00	486.00	0.00	7,290.00	June 1 - 15/07	7,290.00				
Sept 5/07	Max Baker	Consultation	Management & Tech (Vancouver)	30.00	486.00	0.00	14,580.00	Aug 1-31/07	14,580.00				
Sept 28/07	Max Baker	Consultation	Management & Tech (Vancouver)	30.00	486.00	0.00	14,580.00	Sept 1-30/07	14,580.00				
Oct 30/07	Max Baker	Consultation	Management & Tech (Vancouver)	30.00	486.00	0.00	14,580.00	Oct 1-30/07	14,580.00				
Feb 28/07	Max Baker	Consultation	Project Management	15.00	486.00	0.00	7,290.00	Feb 1-15/07		7,290.00			
Mar 28/07	Max Baker	Consultation	Project Management	30.00	486.00	0.00	14,580.00	Mar 1-31/07		14,580.00			
May 31/07	Max Baker	Consultation	Project Management	30.00	486.00	0.00	14,580.00	May 1-31/07		14,580.00			
			Totals	210.00	350.00	0.00	36,450.00						
S.J. Geophysics Ltd.													
Sept 28/07	Unknown Name	Quality Control Support Crew	Management & Tech (Vancouver)	6.00	130.00	0.00	780.00	Sept 1-6/07	780.00				
Sept 28/07	Unknown Name	Location/Final review crew	Management & Tech (Vancouver)	20.00	65.00	0.00	1,300.00	Sept 1-20/07	1,300.00				
			Totals	26.00	275.00	0.00	2,080.00						
Amex Exploration Services Ltd.													
Oct 31/07	Unknown Name	Claims Work	Management & Tech (Vancouver)	6.75	600.00	0.00	4,050.00	May 1 - Nov 30/07	4,050.00				
Jan 31/07	Unknown Name	Claims Work	Project Management	33.50	600.00	0.00	20,000.00	Dec 1/07 - Jan 3/07		20,000.00			
			Totals	40.25	250.00	0.00	24,050.00						
Paul Hawkins & Assoc.													
Feb 2/07	Paul Hawkins	Project Generation	Project Management	1.00	1,155.00	0.00	1,155.00	Feb 6/07		1,155.00			
			Totals	1.00	250.00	0.00	1,155.00						
Barney B.K. Bowen													
Sept 15/07	Barney Bowen	Geologists	Short Term Geoscientist Consulting	6.50	500.00	0.00	3,250.00	Aug 30 - Sept 5/07					3,250.00
			Totals	6.50	250.00	0.00	3,250.00						
Mountainside Exploration Management Inc.													
May 15/07	Inv 1002	Management Fees	Project Management	15.00	209.33	0.00	3,140.00	May 1-15/07		3,140.00			
May 15/07	Inv 1003	Management Fees	Project Management	15.00	374.70	0.00	5,620.50	May 1-15/07		5,620.50			
May 31/07	Inv 1004	Management Fees	Project Management	16.00	698.12	0.00	11,170.00	May 16-31/07		11,170.00			
May 31/07	Inv 1005	Management Fees	Project Management	15.00	720.00	0.00	10,800.00	May 15-31/07		10,800.00			
June 15/07	Inv 1008	Management Fees	Project Management	15.00	873.33	0.00	13,100.00	June 1-15/07		13,100.00			
June 15/07	Inv 1009	Management Fees	Project Management	15.00	1,639.22	0.00	24,588.36	June 1-15/07		24,588.36			
June 30/07	Inv 1014CR	Management Fees	Project Management	15.00	-24.00	0.00	-360.00	June 16-30/07		-360.00			
June 30/07	Inv 1010	Management Fees	Project Management	15.00	890.00	0.00	13,350.00	June 16-30/07		13,350.00			
June 30/07	Inv 1011	Management Fees	Project Management	30.00	387.18	0.00	11,615.68	June 1 - 30/07		11,615.68			
June 30/07	Inv 1012	Management Fees	Project Management	15.00	669.33	0.00	10,040.00	June 16-30/07		10,040.00			
July 15/07	Inv 1013	Management Fees	Project Management	15.00	777.33	0.00	11,660.00	July 1-15/07		11,660.00			
July 15/07	Inv 1015	Management Fees	Project Management	15.00	883.33	0.00	13,250.00	July 1-15/07		13,250.00			
July 31/07	Inv 1017	Management Fees	Project Management	16.00	707.81	0.00	11,325.00	July 16-31/07		11,325.00			
July 31/07	Inv 1018	Management Fees	Project Management	16.00	653.12	0.00	10,450.00	Jul 16-31/07		10,450.00			
July 31/07	Inv 1020	Management Fees	Project Management	107.00	459.78	0.00	59,619.31	Apr 15 - July 31/07		59,619.31			
July 31/07	Inv 1021	Management Fees	Project Management	31.00	374.69	0.00	11,615.68	July 1-31/07		11,615.68			
Aug 15/07	Inv 1022	Management Fees	Project Management	15.00	591.33	0.00	8,870.00	Aug 1-15/07		8,870.00			
Aug 15/07	Inv 1023	Management Fees	Project Management	15.00	526.66	0.00	7,900.00	Aug 1-15/07		7,900.00			
Aug 31/07	Inv 1024	Management Fees	Project Management	16.00	539.68	0.00	8,635.00	Aug 16-31/07		8,635.00			
Aug 31/07	Inv 1025	Management Fees	Project Management	16.00	849.37	0.00	13,590.00	Aug 16-31/07		13,590.00			
Aug 31/07	Inv 1026	Management Fees	Project Management	31.00	374.69	0.00	11,615.68	Aug 1-31/07		11,615.68			
Aug 31/07	Inv 1028CR	Management Fees	Project Management	23.00	106.89	0.00	-2,458.51	Aug 8-31/07		-2,458.51			
Sept 30/07	Inv 1040	Management Fees	Project Management	16.00	144.37	0.00	2,310.00	Aug 16-31/07		2,310.00			
Sept 15/07	Inv 1031	Management Fees	Project Management	15.00	623.33	0.00	9,650.00	Sept 1-15/07		9,650.00			
Sept 15/07	Inv 1032	Management Fees	Project Management	15.00	690.00	0.00	10,350.00	Sept 1-15/07		10,350.00			
Sept 30/07	Inv 1039	Management Fees	Project Management	12.00	877.08	0.00	10,525.00	Sept 16-27/07		10,525.00			
Oct 9/07	Inv 1044	Management Fees	Project Management	177.00	63.32	0.00	11,209.38	Apr 15 - Oct 9/07		11,209.38			
Oct 9/07	Inv 1044	Management Fees	Project Management	177.00	268.52	0.00	47,528.70	Apr 15 - Oct 9/07		47,528.70			
Sept 30/07	Inv 1041	Management Fees	Project Management	30.00	387.18	0.00	11,615.68	Sept 1-30/07		11,615.68			
Oct 15/07	Inv 1049	Management Fees	Project Management	143.00	15.47	0.00	2,212.83	Mar 25 - Oct 15/07		2,212.83			
Oct 15/07	Inv 1046CR	Management Fees	Project Management	18.00	40.74	0.00	-2,533.24	Sept 16-Oct 3/07		-2,533.24			
Oct 15/07	Inv 1047	Management Fees	Project Management	2.00	255.00	0.00	510.00	Oct 2 - 3/07		510.00			

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Oct 31/07	Inv 1052	Management Fees	Project Management	23.00	14.15	0.00	325.58	Oct 23 - Nov 15/07		325.58			
Oct 31/07	Inv 1051CR	Management Fees	Project Management	1.00	-162.52	0.00	-162.52	Oct 3/07		-162.52			
Sept 30/07	Inv 1043CR	Management Fees	Casual Labour	1.00	-32.62	0.00	-32.62	Sept 30/07				-32.62	
June 15/07	Inv 1006	Project Management	Wages, Salaries Consulting - Other	15.00	748.00	0.00	11,220.00	June 1-15/07			11,220.00		
Totals				1,127.00	250.00	0.00	383,865.49						
Future Metals													
Aug 31/07	Inv 1005	Management Fees	Project Management	11.70	399.39	0.00	4,672.93	Aug 19-31/07		4,672.93			
Sept 1/07	Inv 1005	Management Fees	Project Management	1.57	401.27	0.00	630.00	Aug 17-18/07		630.00			
Sept 30/07	Inv 1006	Management Fees	Project Management	2.50	399.16	0.00	997.90	Sept 6-8/07		997.90			
Oct 31/07	Inv 11/19/07	Management Fees	Project Management	0.50	300.02	0.00	150.01	Oct 1/07		150.01			
Oct 31/07	Inv 11/19/07	Management Fees	Project Management	1.50	353.10	0.00	529.66	Oct 2-3/07		529.66			
Aug 31/07	1005	Management Fees	Casual Labour	105.00	361.42	0.00	37,950.00	Aug 14-31/07				37,950.00	
Sept 1/07	1005	Management Fees	Casual Labour	15.75	400.00	0.00	6,300.00	Aug 1-15/07				6,300.00	
Sept 30/07	1006	Management Fees	Casual Labour	22.00	356.81	0.00	7,850.00	Aug 1-22/07				7,850.00	
Oct 31/07	10/31/2007	Management Fees	Casual Labour	288.00	12.70	0.00	3,656.63	Jan 1 - Oct 15/07				3,656.63	
Totals				448.52	2,983.87	0.00	62,737.13		97,930.94	488,663.39	46,220.00	634,513.56	3,250.00

CREW SUMMARY:			
GL Category:	Totals	GL	Variance
Management & Tech (Vancouver)	97,930.94	97,930.94	0.00
Project Management	488,663.39	488,663.39	0.00
Casual Labour	634,513.56	634,513.56	0.00
Short Term Geoscientist Consulting	3,250.00	3,250.00	0.00
Wages, Salaries & Consulting - OTHER	46,220.00	46,220.00	0.00
TOTALS	1,270,577.89	1,270,577.89	0.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(B) ROOM & BOARD**Alberts Hump/Ranch 2007 Cost Statement****SCHEDULE 1**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Food Supplies & Meal Charges - Travel				Days	Rate/Day	Total	
Apr 17/07	The Publik	Scott Gifford	Travel Meal - Ranch Flyover	1	157.05	157.05	Apr 17/07
Apr 17/07	Palominos YVR	Scott Gifford	Travel Meal - Ranch Flyover	1	27.46	27.46	Apr 17/07
Apr 17/07	Ric's Grill	Scott Gifford	Travel Meal - Ranch Flyover	3	155.24	465.72	Apr 18/07
Apr 18/07	Denny's	Scott Gifford	Travel Meal - Ranch Flyover	1	52.77	52.77	Apr 18/07
Apr 18/07	Treasure Cove Hotel	Scott Gifford	Travel Meal - Ranch Flyover	1	24.26	24.26	Apr 18/07
Apr 20/07	Smiley O'Neils	Scott Gifford	Travel Meal - Ranch Flyover	2	52.33	104.66	Apr 20/07
May 15/07	Ocean Park Pizza	Scott Gifford	Travel Meal - Mob	1	53.70	53.70	May 15/07
June 15/07	YVR	Dr. Max Baker	Airport Meal	1	142.31	142.31	June 15/07
July 19/07	Moxie's Grill	Scott Gifford	Travel Meal	1	76.36	76.36	July 19/07
July 19/07	DaddyO's Pizza	Scott Gifford	Travel Meal	1	9.00	9.00	July 19/07
July 20/07	Starbucks	Scott Gifford	Travel Meal	1	10.43	10.43	July 20/07
July 20/07	Earls	Scott Gifford	Travel Meal	1	45.05	45.05	July 20/07
Aug 2/07	Moxie's Grill	Scott Gifford	Travel Meal	1	36.29	36.29	Aug 2/07
Aug 3/07	Earls	Scott Gifford	Travel Meal	1	49.55	49.55	Aug 3/07
Aug 4/07	McKenzie	Scott Gifford	Travel Meal	1	13.83	13.83	Aug 4/07
Aug 15/07	Windy Point	Scott Gifford	Travel Meal	1	9.25	9.25	Aug 15/07
Aug 15/07	Earls	Scott Gifford	Travel Meal	1	141.95	141.95	Aug 15/07
Aug 16/07	Moxie's Grill	Scott Gifford	Travel Meal	1	48.93	48.93	Aug 16/07
Aug 17/07	Tim Hortons	Scott Gifford	Travel Meal	1	9.98	9.98	Aug 17/07
Sept 23/07	Coast Inn of the North	Scott Gifford	Travel Meal - Demob	1	287.50	287.50	Sept 23/07
Sept 23/07	Coast Inn of the North	Scott Gifford	Travel Meal - Demob	1	1,300.74	1,300.74	Sept 23/07
Sept 23/07	Coast Inn of the North	Scott Gifford	Travel Meal - Demob	1	40.00	40.00	Sept 23/07
Sept 23/07	Sandman Inn	Scott Gifford	Travel Meal - Demob	1	21.50	21.50	Sept 23/07
Sept 24/07	Earls	Scott Gifford	Travel Meal - Demob	1	110.20	110.20	Sept 24/07
Sept 25/07	DaddyO's Pizza	Scott Gifford	Travel Meal - Demob	1	45.58	45.58	Sept 25/07
Sept 25/07	DaddyO's Pizza	Scott Gifford	Travel Meal - Demob	1	41.95	41.95	Sept 25/07
Sept 25/07	Ulysses Restaurant	Scott Gifford	Travel Meal - Demob	1	318.02	318.02	Sept 25/07
Sept 26/07	Bonaparte Bend	Scott Gifford	Travel Meal - Demob	1	34.85	34.85	Sept 26/07
Sept 27/07	Ciello Restaurant	Scott Gifford	Travel Meal - Demob	1	59.73	59.73	Sept 27/07
Sept 30/07	Silverwater Ent	Silverwater Ent.	Travel Meal - Demob	1	534.13	534.13	Sept 30/07
Sept 30/07	Future Metals	Future Metals	Meals - travel	1	41.38	41.38	Sept 30/07
Oct 2/07	ESM Langley	Scott Gifford	Travel Meal - Demob	1	75.86	75.86	Oct 2/07
Oct 3/07	Jimmy Mac's Neighbourhood	Scott Gifford	Travel Meal - Demob	1	153.45	153.45	Oct 3/07

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(B) ROOM & BOARD**Alberts Hump/Ranch 2007 Cost Statement****SCHEDULE 1**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
Travel To/From Projects		Meals		Days	Rate/Day	Total	
June 15/07	Mountainside Exploration	Dexter, Vern	Travel Meal - Mob	1	337.82	337.82	May 20-23/07
May 18/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	163.74	163.74	May 18/07
May 7/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	68.30	68.30	May 7/07
May 15/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	23.47	23.47	May 15/07
May 16/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	41.94	41.94	May 16/07
May 17/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	113.23	113.23	May 17/07
May 19/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	199.75	199.75	May 19/07
May 18/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	35.63	35.63	May 18/07
May 18/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	17.75	17.75	May 18/07
May 17/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	12.34	12.34	May 17/07
May 17/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	25.60	25.60	May 17/07
May 19/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	64.60	64.60	May 19/07
May 17/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	35.22	35.22	May 17/07
May 18/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	33.84	33.84	May 18/07
May 17/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	75.89	75.89	May 17/07
May 18/07	Mountainside Exploration	Scott Gifford	Travel Meal - Mob	1	153.31	153.31	May 18/07
June 18/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	103.04	103.04	June 18/07
June 26/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	341.66	341.66	June 26/07
June 27/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	29.23	29.23	June 27/07
June 28/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	20.16	20.16	June 28/07
July 4/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	17.50	17.50	July 4/07
July 5/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	9.50	9.50	July 5/07
July 5/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	69.47	69.47	July 5/07
July 11/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	42.40	42.40	July 11/07
July 12/07	Mountainside Exploration	Scott Gifford	Travel Meal	1	56.35	56.35	July 12/07
Aug 31/07	Future Metals	Future Metals	Travel Meal	1	73.90	73.90	Aug 31/07
Sept 30/07	Future Metals		Travel Meal	1	14.65	14.65	Sept 30/07
Apr 18/07	Mountainside Exploration	Treasure Cove Hotel	Hotel Accomodation	1	505.56	505.56	Apr 18/07
Apr 19/07	Mountainside Exploration	Ramada Hotel	Hotel Accomodation	1	550.81	550.81	Apr 19/07
May 17/07	Mountainside Exploration	Sandman Inn PG	Hotel Accomodation	1	287.80	287.80	May 17/07
June 9/07	Mountainside Exploration	Stork Nest Inn	Hotel Accomodation	1	223.16	223.16	June 9/07
June 26/07	Mountainside Exploration	Alexander Inn	Hotel Accomodation	1	86.04	86.04	June 26/07
Aug 4/07	Mountainside Exploration	Sandman Inn PG	Hotel Accomodation	1	273.19	273.19	Aug 4/07
June 27/07	Mountainside Exploration	Blue Horizon Hotel	Hotel Accomodation	1	212.30	212.30	Aug 27/07
Sept 26/07	Mountainside Exploration	Talisman Inn	Hotel Accomodation	1	85.32	85.32	Sept 26/07
Sept 26/07	Mountainside Exploration	Talisman Inn	Hotel Accomodation	1	96.12	96.12	Sept 26/07
Sept 26/07	Mountainside Exploration	Sandman Inn PG	Hotel Accomodation	5	353.75	1,768.75	Sept 26/07
Aug 25/07	Mountainside Exploration	Hudson Bay Lodge	Hotel Accomodation	1	198.69	198.69	Aug 25/07
Sept 28/07	Mountainside Exploration	La Casita Rest	Travel Meal	1	30.50	30.50	Sept 28/07
Sept 30/07	Microminde Ltd.	Micromine Ltd.	Travel Meal/Accomodations	10	934.66	9,346.69	Sept 20-30/07

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(B) ROOM & BOARD**Alberts Hump/Ranch 2007 Cost Statement****SCHEDULE 1**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
TOTALS						15,845.22	

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(B) ROOM & BOARD**Alberts Hump/Ranch 2007 Cost Statement****SCHEDULE 1**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Accommodation & Camp Equipment		Room & Board		Days	Rate/Day	Total
Mar 9/07	Westcoast Canvas Projects	Westcoast Canvas Projects	Camp Equipment	1	1,575.00	1,575.00
Apr 13/07	Budget Food Equipment	Budget Food Equipment	Camp Equipment	1	2,520.00	2,520.00
May 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board	300	150.00	45,000.00 May 17/07 - May 31/07
May 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Beds	15	600.00	9,000.00 May 17/07 - May 31/07
June 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board	382	150.00	57,300.00 June 1 - 15/07
June 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Beds	82	100.00	8,200.00 June 1 - 15/07
May 17/07	Anco Hotel	Mountainside Exploration	Hotel Accomodations - MOB	5	75.60	378.00 May 17/07
May 19/07	Alexander MacKenzie Hotel	Mountainside Exploration	Hotel Accomodations - MOB	4	67.75	271.00 May 19/07
May 19/07	Alexander MacKenzie Hotel	Mountainside Exploration	Hotel Accomodations - MOB	1	75.44	75.44 May 19/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board	-18	150.00	-2,700.00 June 16 - 30/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	-15	600.00	-9,000.00 June 16 - 30/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	72	100.00	7,200.00 June 16 - 30/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board	18	150.00	2,700.00 June 16 - 30/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board	385	150.00	57,750.00 June 16-30/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	15	600.00	9,000.00 June 16-30/07
July 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board	369	150.00	55,350.00 July 1-15/07
July 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	52	100.00	5,200.00 July 1-15/07
July 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board	38	150.00	5,700.00 July 1-15/07
July 31/07	Exploration Technology US	Exploration Technology	Hotel Accomodations	1	281.80	281.80 July 31/07
July 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board	299	150.00	44,850.00 July 16-31/07
July 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	74	100.00	7,400.00 July 16-31/07
July 31/07	Mountainside Exploration	Kemess Mines	Room & Board - MOB	59	100.00	5,900.00 Apr 26 - May 14/07
June 14/07	New Calendonia Motel	Mountainside Exploration	Hotel Accomodations	4	59.40	237.60 June 14/07
June 25/07	Spruceland Inn	Mountainside Exploration	Hotel Accomodations	1	71.28	71.28 June 25/07
July 5/07	Alexander MacKenzie Hotel	Mountainside Exploration	Hotel Accomodations	1	86.40	86.40 July 5/07
July 6/07	Sandman Inn PG	Mountainside Exploration	Hotel Accomodations	1	129.60	129.60 July 6/07
July 13/07	Sandman Inn PG	Mountainside Exploration	Hotel Accomodations	1	311.04	311.04 July 13/07
July 21/07	Sandman Inn PG	Mountainside Exploration	Hotel Accomodations	1	273.19	273.19 July 21/07
July 21/07	Sandman Inn PG	Mountainside Exploration	Hotel Accomodations	1	278.33	278.33 July 21/07
Aug 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board	246	150.00	36,900.00 Aug 1-15/07
Aug 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board - Standby Unoccupied	26	100.00	2,600.00 Aug 1-15/07
Aug 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board	453	150.00	67,950.00 Aug 16-31/07
Aug 31/07	Future Metals	Mountainside Exploration	Meals & Hotel Accomodations	12	316.78	3,801.36 Aug 15-26/07
Aug 31/07	Mountainside Exploration	Mountainside Exploration	Room & Board	77	150.00	11,550.00 Aug 16-31/07
Sept 15/07	Mountainside Exploration	Mountainside Exploration	Room & Board	345	150.00	51,750.00 Sept 1-15/07
Sept 30/07	Future Metals	Mountainside Exploration	Meals & Hotel Accomodations	3	344.66	1,033.97 Aug 23-30/08

TOTALS**490,924.01**

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(B) ROOM & BOARD**Alberts Hump/Ranch 2007 Cost Statement****SCHEDULE 1**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Room & Board Summary Totals

GL Category:	Totals	GL	Variance
Food Supplies & Meal Charges - Travel	4,543.44	4,543.44	0.00
Travel To/From Projects - Meals	15,845.22	15,845.22	0.00
Accomodation & Camp Equipment - Room & Board	490,924.01	490,924.01	0.00
TOTALS	511,312.67	511,312.67	0.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
Travel, Accomodations & Meals			Transportation Reimbursements	Days	Rate	Total	
Feb 15/07	Guardsmen Resources Inc.	Scott Gifford	Travel Expenses reimbursement	1	\$798.69	798.69	Feb 15/07
Mar 30/07	Lee Gifford	Lee Gifford	Travel Expenses reimbursement	1	\$130.00	130.00	Mar 1-30/07
May 11/07	Lee Gifford	Lee Gifford	Travel Expenses reimbursement	1	\$100.80	100.80	May 11/07
July 31/07	Exploration Technology	Exploration Technology	Travel Expenses reimbursement (USD)	1	\$2,205.61	2,205.61	July 31/07
Sept 5/07	E.M. Baker & Associates	E.M. Baker & Associates	Airfare to Ranch reimbursement	1	\$618.34	618.34	Sept 5/07
Sept 5/07	E.M. Baker & Associates	E.M. Baker & Associates	Taxi to Airport	1	\$57.45	57.45	Sept 5/07
Sept 17/07	E.M. Baker & Associates	E.M. Baker & Associates	Rental Car is Smithers	1	\$46.58	46.58	Sept 5/07
						<u>\$3,957.47</u>	

Food Supplies & Meal Charges - Travel			Transportation (Flights)	Flights	Rate/Flight	Total	
June 15/07	Air Canada	Scott Gifford	Vancouver - Prince George	1	\$492.67	492.67	May 17/07
June 15/07	Air Canada	Lee Gifford	Vancouver - Prince George	1	\$492.67	492.67	May 17/07
June 27/07	Yellowhead Helicopters	Cooper/Gasser	Crew Rotation, PG - Calgary	2	\$1,016.27	2,032.54	June 26 & 27/07
June 18/07	BV Taxi Service	Scott Gifford	Taxi	1	\$7.00	7.00	June 18/07
June 28/07	White Rock Taxi	Scott Gifford	Taxi	1	\$120.00	120.00	June 28/07
June 12/07	Kemess Mines	Mountainside Exploration	Flighs (Vancouver - Kemess)	6	\$250.00	1,500.00	May 24/07
June 12/07	Kemess Mines	Mountainside Exploration	Flights (PG - Kemess)	3	\$125.00	375.00	May 24/07
June 12/07	Kemess Mines	Mountainside Exploration	Flight (Vancouver - Kemess)	1	\$250.00	250.00	May 31/07
July 3/07	Air Canada	Peter Szerencsi	Flight (Vancouver - PG)	1	\$427.80	427.80	July 23/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - PG)	1	\$125.00	125.00	June 5/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (PG - Kemess)	2	\$125.00	250.00	June 6/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - PG)	2	\$125.00	250.00	June 6/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Vancouver - Kemess)	2	\$250.00	500.00	June 7/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (PG - Kemess)	1	\$125.00	125.00	June 7/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - Vancouver)	2	\$250.00	500.00	June 11/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Smithers - Kemess)	1	\$62.50	62.50	June 11/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - PG)	1	\$125.00	125.00	June 14/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Vancouver - Kemess)	1	\$250.00	250.00	June 14/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Smithers - Kemess)	1	\$62.50	62.50	June 19/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - Vancouver)	2	\$250.00	500.00	June 25/07

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(C) TRANSPORTATION

SCHEDULE 1

RANCH/ALBERTS HUMP PROJECT COSTS 2007

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
July 7/07	Kemess Mines	Mountainside Exploration	Flight (PG - Kemess)	2	\$125.00	250.00	June 27/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Kemess - PG)	2	\$125.00	250.00	June 27/07
July 7/07	Kemess Mines	Mountainside Exploration	Flight (Vancouver - Kemess)	5	\$250.00	1,250.00	June 28/07
July 17/07	Westjet	Ian Brett	Flight (PG - Vancouver)	1	\$171.67	171.67	July 20/07
July 30/07	Air Canada	Allan/Peter	Flight (PG - Vancouver)	2	\$242.74	485.48	Aug 2/07
Aug 2/07	ALS Chemex	ALS Chemex	Freight of Samples	1	\$809.05	809.05	Aug 2/07
Aug 31/07	Future Metals	Future Metals	Flight (Vancouver - Kemess)	1	\$633.29	633.29	Aug 31/07
						12,297.17	

Travel To/From Projects	Transportation (Meals)	Flights	Rate/Flight	Total	
Apr 17/07	Westjet	Mountainside Exploration	Flight	1	\$647.34
Apr 19/07	Air Canada	Mountainside Exploration	Flight	2	\$420.93
Aug 2/07	Air Canada	Mountainside Exploration	Flight	1	\$774.53
July 3/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00
July 5/07	Kemess Mines	Mountainside Exploration	Flight	2	\$250.00
July 9/07	Kemess Mines	Mountainside Exploration	Flight	4	\$250.00
July 11/07	Kemess Mines	Mountainside Exploration	Flight	2	\$125.00
July 12/07	Kemess Mines	Mountainside Exploration	Flight	3	\$250.00
July 16/07	Kemess Mines	Mountainside Exploration	Flight	5	\$250.00
July 18/07	Kemess Mines	Mountainside Exploration	Flight	2	\$125.00
July 19/07	Kemess Mines	Mountainside Exploration	Flight	1	\$150.00
July 23/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00
July 23/07	Kemess Mines	Mountainside Exploration	Flight	2	\$125.00
July 26/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00
July 30/07	Kemess Mines	Mountainside Exploration	Flight	2	\$250.00
Aug 21/07	Air Canada	Mountainside Exploration	Flight	1	\$366.67
Sept 7/07	Sustut Air	Mountainside Exploration	Flight	1	\$2,304.65
Aug 2/07	Kemess Mines	Mountainside Exploration	Flight	2	\$250.00
Aug 2/07	Kemess Mines	Mountainside Exploration	Flight	2	\$125.00
Aug 7/07	Kemess Mines	Mountainside Exploration	Flight	2	\$250.00
Aug 9/07	Kemess Mines	Mountainside Exploration	Flight	6	\$250.00
Aug 13/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00
Aug 16/07	Kemess Mines	Mountainside Exploration	Flight	3	\$250.00
Aug 20/07	Kemess Mines	Mountainside Exploration	Flight	7	\$250.00
Aug 23/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
Aug 27/07	Kemess Mines	Mountainside Exploration	Flight	2	\$250.00	500.00	Aug 27/07
Aug 30/07	Kemess Mines	Mountainside Exploration	Flight	4	\$250.00	1,000.00	Aug 30/07
Sept 20/07	Omega Travel	Mountainside Exploration	Flight	1	\$915.72	915.72	Sept 20/07
Sept 20/07	Omega Travel	Mountainside Exploration	Flight	1	\$497.23	497.23	Sept 20/07
Apr 23/07	Mountainside Exploration	Scott Gifford	YVR Parking	1	\$8.49	8.49	Apr 23/07
July 12/07	Emerald Taxi	Scott Gifford	Travel - Taxi	1	\$9.43	9.43	July 12/07
July 13/07	Emerald Taxi	Scott Gifford	Travel - Taxi	1	\$9.48	9.48	July 13/07
Aug 13/07	Richmond Taxi	Scott Gifford	Travel - Taxi	1	\$14.15	14.15	Aug 13/07
Aug 23/07	Richmond Taxi	Scott Gifford	Travel - Taxi	1	\$14.15	14.15	Aug 23/07
Sept 23/07	PG Taxi	Scott Gifford	Travel - Taxi	1	\$15.33	15.33	Sept 23/07
Sept 23/07	PG Taxi	Scott Gifford	Travel - Taxi	1	\$9.43	9.43	Sept 23/07
Sept 24/07	PG Taxi	Scott Gifford	Travel - Taxi	1	\$9.43	9.43	Sept 24/07
June 13/07	Air Canada	Mountainside Exploration	Flight	1	\$437.92	437.92	June 13/07
Sept 6/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00	250.00	Sept 6/07
Sept 10/07	Kemess Mines	Mountainside Exploration	Flight	1	\$250.00	250.00	Sept 10/07
Sept 17/07	Kemess Mines	Mountainside Exploration	Flight	3	\$250.00	750.00	Sept 17/07
						<u>21,025.81</u>	

Helicopter (Other than Drilling)		Transportation		Hours	Rate/Hour	Total	
Jan 31/07	Guardsmen Resources	MacKenzie Fuels	Helicopter Fuel Refund (2006)	1	(\$1,073.50)	(1,073.50)	Jan 31/07
Apr 1/07	Canadian Helicopter	Canadian Helicopter	Helicopter with Fuel	1.52	\$1,160.00	1,760.86	Apr 1/07
Apr 30/07	Yellowhead Helicopters	Yellowhead Helicopters	Helicopter Flight Time	9.9	\$1,750.00	17,325.00	Apr 18/07
Apr 30/07	Yellowhead Helicopters	Yellowhead Helicopters	Helicopter - Fuel	1881	\$1.80	3,385.80	Apr 18/07
Apr 30/07	Yellowhead Helicopters	Yellowhead Helicopters	Helicopter Crew Accomodations	2	\$102.04	204.08	Apr 18/07
						<u>21,602.24</u>	

Earth Moving & Truck Hire		Drilling Transportation		Hours	Rate/Hour	Total	
Sept 15/07	Radius Drilling Corp	Elite Transport Ltd.	Transport Drill from Sturdee to PG	25	\$120.00	3,000.00	July 14/07
Sept 17/07	Radius Drilling Corp	Elite Transport Ltd.	Transport Drill to Sturdee from PG	30.5	\$120.00	3,660.00	Sept 17/07
Oct 23/07	Burnell Contractors	Burnell Contractors	Trailer - from Sturdee to Burnell Yard	25	\$216.00	5,400.00	Oct 1-3/07
						<u>12,060.00</u>	

Guardsmen Resources Inc.

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(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
Helicopter, Fixed Wing		Drilling Transportation		Hours	Rate/Hour	Total	
May 19/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.7	\$1,750.00	2,975.00	May 19/07
May 19/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Fuel	323	\$1.20	387.60	May 19/07
May 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.9	\$1,750.00	6,825.00	May 20/07
May 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Fuel	741	\$1.32	978.12	May 20/07
May 21/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.2	\$1,750.00	3,850.00	May 21/07
May 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.5	\$1,750.00	4,375.00	May 22/07
May 23/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.5	\$1,750.00	4,375.00	May 23/07
May 24/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	7.8	\$1,750.00	13,650.00	May 24/07
May 25/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	10.8	\$1,750.00	18,900.00	May 25/07
May 26/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.2	\$1,750.00	14,350.00	May 26/07
May 27/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.8	\$1,750.00	15,400.00	May 27/07
May 28/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	9	\$1,750.00	15,750.00	May 28/07
May 29/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.4	\$1,750.00	14,700.00	May 29/07
May 30/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	7.1	\$1,750.00	12,425.00	May 30/07
May 31/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6.6	\$1,750.00	11,550.00	May 31/07
June 1/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	7.8	\$1,750.00	13,650.00	June 1/07
June 2/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.9	\$1,750.00	15,575.00	June 2/07
June 3/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	9	\$1,750.00	15,750.00	June 3/07
June 4/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	9	\$1,750.00	15,750.00	June 4/07
June 5/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5.3	\$1,750.00	9,275.00	June 5/07
June 5/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Crew Rotation Costs	2	\$1,148.47	2,296.93	May 19/07
June 6/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.6	\$1,750.00	6,300.00	June 6/07
June 7/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5	\$1,750.00	8,750.00	June 7/07
June 8/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.5	\$1,750.00	2,625.00	June 8/07
June 9/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4	\$1,750.00	7,000.00	June 9/07
June 9/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Fuel	248.3	\$1.32	328.75	June 9/07
June 10/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.5	\$1,750.00	875.00	June 10/07
June 11/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5.6	\$1,750.00	9,800.00	June 11/07
June 12/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.8	\$1,750.00	3,150.00	June 12/07
June 13/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.3	\$1,750.00	4,025.00	June 13/07
June 14/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	9.6	\$1,750.00	16,800.00	June 14/07
June 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	11	\$1,750.00	19,250.00	June 15/07
June 16/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.9	\$1,750.00	15,575.00	June 16/07
June 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.5	\$1,750.00	875.00	June 17/07

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(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
June 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.7	\$1,750.00	2,975.00	June 17/07
June 18/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.2	\$1,750.00	3,850.00	June 18/07
June 19/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5.3	\$1,750.00	9,275.00	June 19/07
June 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.7	\$1,750.00	6,475.00	June 20/07
June 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.2	\$1,750.00	350.00	June 20/07
June 21/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.4	\$1,750.00	2,450.00	June 21/07
June 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.5	\$1,750.00	6,125.00	June 22/07
June 23/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3	\$1,750.00	5,250.00	June 23/07
June 24/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.5	\$1,750.00	7,875.00	June 24/07
June 25/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3	\$1,750.00	5,250.00	June 25/07
June 26/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.4	\$1,750.00	14,700.00	June 26/07
June 27/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.8	\$1,750.00	3,150.00	June 27/07
June 28/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5	\$1,750.00	8,750.00	June 28/07
June 29/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6	\$1,750.00	10,500.00	June 29/07
June 30/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.3	\$1,750.00	5,775.00	June 30/07
July 1/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.5	\$1,750.00	2,625.00	July 1/07
July 2/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	July 2/07
July 3/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.1	\$1,750.00	3,675.00	July 3/07
July 4/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5.3	\$1,750.00	9,275.00	July 4/07
July 5/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6	\$1,750.00	10,500.00	July 5/07
July 6/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.9	\$1,750.00	8,575.00	July 6/07
July 7/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.8	\$1,750.00	8,400.00	July 7/07
July 8/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.3	\$1,750.00	5,775.00	July 8/07
July 9/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5	\$1,750.00	8,750.00	July 9/07
July 10/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.9	\$1,750.00	3,325.00	July 10/07
July 11/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.2	\$1,750.00	7,350.00	July 11/07
July 12/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.1	\$1,750.00	5,425.00	July 12/07
July 13/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6.1	\$1,750.00	10,675.00	July 13/07
July 14/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	9.9	\$1,750.00	17,325.00	July 14/07
July 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.6	\$1,750.00	8,050.00	July 15/07
July 16/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.8	\$1,750.00	1,400.00	July 16/07
July 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.4	\$1,750.00	2,450.00	July 17/07
July 18/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.4	\$1,750.00	700.00	July 18/07
July 19/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4	\$1,750.00	7,000.00	July 19/07
July 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.8	\$1,750.00	1,400.00	July 20/07
July 21/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.9	\$1,750.00	5,075.00	July 21/07

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(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
July 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.8	\$1,750.00	6,650.00	July 22/07
July 23/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	July 23/07
July 24/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.6	\$1,750.00	1,050.00	July 24/07
July 25/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.8	\$1,750.00	1,400.00	July 25/07
July 26/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.4	\$1,750.00	2,450.00	July 26/07
July 27/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.8	\$1,750.00	3,150.00	July 27/07
July 29/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.7	\$1,750.00	1,225.00	July 29/07
July 30/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1	\$1,750.00	1,750.00	July 30/07
Sept 15/07	Mountainside Exploration	Yellowhead Helicopters Ltd	Helicopter Flight	2	\$2,100.00	4,200.00	Aug 15/07
Aug 1/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.8	\$1,750.00	6,650.00	Aug 1/07
Aug 2/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.4	\$1,750.00	4,200.00	Aug 2/07
Aug 4/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.5	\$1,750.00	6,125.00	Aug 4/07
Aug 5/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3	\$1,750.00	5,250.00	Aug 5/07
Aug 6/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.2	\$1,750.00	2,100.00	Aug 6/07
Aug 7/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.8	\$1,750.00	1,400.00	Aug 7/07
Aug 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Crew Rotation Costs	2	\$1,101.04	2,202.08	July 11/07
Aug 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Crew Rotation Costs	2	\$951.44	1,902.88	Aug 8/07
Aug 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter unscheduled landing costs	1	\$30.79	30.79	July 9/07
Sept 4/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Crew Rotation Costs	2	\$1,239.24	2,478.48	Aug 29/07
Aug 9/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.3	\$1,750.00	2,275.00	Aug 9/07
Aug 10/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.2	\$1,750.00	2,100.00	Aug 10/07
Aug 11/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1	\$1,750.00	1,750.00	Aug 11/07
Aug 13/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.7	\$1,750.00	1,225.00	Aug 13/07
Aug 14/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	Aug 14/07
Aug 16/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.4	\$1,750.00	2,450.00	Aug 16/07
Aug 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.2	\$1,750.00	3,850.00	Aug 17/07
Aug 18/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.7	\$1,750.00	6,475.00	Aug 18/07
Aug 18/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Fuel	703	\$1.80	1,265.40	Aug 18/07
Aug 19/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	8.4	\$1,750.00	14,700.00	Aug 19/07
Aug 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	Aug 20/07
Aug 21/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.6	\$1,750.00	1,050.00	Aug 21/07
Aug 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.2	\$1,750.00	350.00	Aug 22/07
Aug 23/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.3	\$1,750.00	2,275.00	Aug 23/07
Aug 25/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	Aug 25/07
Aug 27/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.7	\$1,750.00	2,975.00	Aug 27/07
Sept 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter unscheduled landing costs	1	\$30.79	30.79	Sept 5/07

Guardsmen Resources Inc.

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(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
Sept 15/07	Mountainside Exploration	Yellowhead Helicopters Ltd	Helicopter Fuel - Credit	-1	(\$176.33)	(178.33)	Sept 2/07
Sept 15/07	Mountainside Exploration	Yellowhead Helicopters Ltd	Helicopter Fuel - Credit	-1	(\$757.19)	(757.19)	Aug 9-20/07
Sept 15/07	Mountainside Exploration	Yellowhead Helicopters Ltd	Helicopter Fuel - Credit	-1	(\$28.51)	(28.51)	July 31/07
Sept 24/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Crew Rotation Costs	2	\$114.40	228.80	Sept 22/07
Aug 30/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.4	\$1,750.00	5,950.00	Aug 30/07
Sept 1/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3	\$1,750.00	5,250.00	Sept 1/07
Sept 2/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.2	\$1,750.00	5,600.00	Sept 2/07
Sept 4/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.2	\$1,750.00	2,100.00	Sept 4/07
Sept 5/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.9	\$1,750.00	3,325.00	Sept 5/07
Sept 6/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.1	\$1,750.00	1,925.00	Sept 6/07
Sept 7/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.4	\$1,750.00	700.00	Sept 7/07
Sept 8/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.4	\$1,750.00	700.00	Sept 8/07
Sept 10/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	2.7	\$1,750.00	4,725.00	Sept 10/07
Sept 11/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.8	\$1,750.00	3,150.00	Sept 11/07
Sept 12/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4	\$1,750.00	7,000.00	Sept 12/07
Sept 13/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6.6	\$1,750.00	11,550.00	Sept 13/07
Sept 15/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.3	\$1,750.00	525.00	Sept 15/07
Sept 16/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	6.3	\$1,750.00	11,025.00	Sept 16/07
Sept 17/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	0.7	\$1,750.00	1,225.00	Sept 17/07
Sept 18/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4.5	\$1,750.00	7,875.00	Sept 18/07
Sept 20/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	5.9	\$1,750.00	10,325.00	Sept 20/07
Sept 21/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	3.7	\$1,750.00	6,475.00	Sept 21/07
Sept 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	1.2	\$1,750.00	2,100.00	Sept 22/07
Sept 22/07	Yellowhead Helicopters Ltd.	Yellowhead Helicopters Ltd	Helicopter Flight	4	\$1,750.00	7,000.00	Sept 22/07
						<u>747,041.59</u>	

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(C) TRANSPORTATION**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Invoice Name	RE: Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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TRANSPORTATION SUMMARY:

GL Category:		Totals	GL	Variance
Travel, Accomodation & Meals	Transportation Reimbursmenets	3,957.47	3957.47	0.00
Food Supplies & Meal Charges	Transportation (Flights)	12,297.17	12,297.17	0.00
Travel to/from Projects	Transportation (Meals)	21,025.81	21,025.81	0.00
Helicopter (Other than Drilling)	Transportation	21,602.24	21,602.24	0.00
Earth Moving & Truck Hire	Transportation	12,060.00	12,060.00	0.00
Helicopter, Fixed Wing	Transportation	747,041.59	747,041.59	0.00
TOTALS		817,984.28	817,984.28	0.00

Guardsmen Resources Inc.

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(C) RENTALS**SCHEDULE 2****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Earth Moving & Truck Hire		Rentals		Days	Rate/Day	Total	
May 28/07	Lomak Road Maint	Mountainside Exploration	Lowbed - Plow Open Road to Sturdee	9.5	\$135.00	1,282.50	May 1-15/07
May 28/07	Lomak Road Maint	Mountainside Exploration	D6 Dozer - Plow open road to Sturdee	60	\$140.00	8,400.00	May 1-15/07
May 28/07	Lomak Road Maint	Mountainside Exploration	Camp/Pickup & ATV	6	\$350.00	2,100.00	May 1-15/07
May 31/07	Lomak Road Maint	Mountainside Exploration	Lowbed - Plow Open Road to Sturdee	12.5	\$135.00	1,687.50	May 16-31/07
May 31/07	Lomak Road Maint	Mountainside Exploration	Pickup - Plow Open Road to Sturdee	3.5	\$60.00	210.00	May 16-31/07
Aug 31/07	Future Metals	Future Metals	RV Trailer Rental	6	\$200.00	1,200.00	Aug 26-31/07
Aug 31/07	Future Metals	Future Metals	Utility Trailer Rental	6	\$35.00	210.00	Aug 26-31/07
July 31/07	Mountainside Exploration	Silverwater Enterprises	Storage Rental	15	\$50.00	750.00	July 1-15/07
Aug 15/07	Mountainside Exploration	Silverwater Enterprises	Storage Rental	15	\$50.00	750.00	Aug 1-15/07
Aug 31/07	Mountainside Exploration	Silverwater Enterprises	Storage Rental	15	\$50.00	750.00	Aug 16-30/07
Sept 15/07	Mountainside Exploration	Silverwater Enterprises	Storage Rental	15	\$50.00	750.00	Sept 1-15/07
Sept 30/07	Mountainside Exploration	Silverwater Enterprises	Storage Rental	15	\$50.00	750.00	Sept 16-30/07
Oct 23/07	Mountainside Exploration	A-1 Rentals	Rentals	3	\$210.00	630.00	Oct 20-23/07
Oct 31/07	Future Metals	Future Metals	Rentals	1	\$1,500.08	1,500.08	Oct 16-31/07
						20,970.08	

Pumps, Generators, Heaters etc.		Rentals		Days	Rate/Day	Total	
Apr 30/07	Guardsmen Resources	Guardsmen Resources	Equipment Rental	1	\$1,055.01	1,055.01	Apr 17-19/07
May 15/07	Mountainside Exploration	Mountainside Exploration	Equipment Rental	15	\$2,004.64	30,069.68	May 17-31/07
May 25/07	Mountainside Exploration	Cansel - Vancouver	GPS Equipment Rental	1	\$1,717.35	1,717.35	May 25 - June 24/07
June 30/07	Mountainside Exploration	Mountainside Exploration	Equipment Rental	30	\$2,071.46	62,143.90	June 1-30/07
July 31/07	Mountainside Exploration	Cansel - Vancouver	GPS Equipment Rental	1	\$1,717.35	1,717.35	June 25 - July 24/07
July 12/07	Mountainside Exploration	BK - Two way Radio	2-Way Radio Rental	1	\$802.50	802.50	July 12 - Aug 11/07
July 31/07	Mountainside Exploration	Mountainside Exploration	Equipment Rental	30	\$2,071.46	62,143.90	July 1-31/07
						159,649.69	

Field Vehicle Hire/Maintenance		Rentals		Days	Rate/Day	Total	
Feb 20/07	Clearbrook Yamaha	Clearbrook Yamaha	Repair ATV's	1	\$5,068.37	5,068.37	Feb 1-20/07
May 3/07	Mountainside Exploration	Co-Van International	Truck Rental	5	\$129.28	646.42	May 3-8/07
Apr 26/07	Mountainside Exploration	Ryder Truck Rental	Truck Rental	1	\$180.16	180.16	Apr 25/07
Apr 27/07	Mountainside Exploration	Penske Truck Leasing	Tractor Trailer Rental	1	\$253.00	253.00	Apr 27/07

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(C) RENTALS**SCHEDULE 2****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
May 20/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	30	\$93.40	2,801.89	Apr 20 - May 20/07
May 31/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	May 1-31/07
June 12/07	Mountainside Exploration	K. Miller Enterprises	Truck Rental	4	\$251.31	1,005.23	June 12 - 15/07
June 12/07	Mountainside Exploration	Co-Van International	Truck Rental	6	\$127.65	765.91	May 16-21/07
June 13/07	Mountainside Exploration	K. Miller Enterprises	Truck Rental	3	\$297.18	891.53	June 13-15/07
June 15/07	Mountainside Exploration	Kal Tire	Truck Repairs	1	\$114.49	114.49	June 15/07
June 15/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	June 1-15/07
June 30/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	June 16-30/07
June 18/07	Mountainside Exploration	Co-Van International	Truck Rental	31	\$100.30	3,109.42	May 15 - June 15/07
June 19/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	13	\$215.53	2,801.89	May 20 - June 19/07
July 15/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	July 1-15/07
July 16/07	Mountainside Exploration	Co-Van International	Truck Rental	31	\$84.94	2,633.27	June 15- July 15/07
Aug 13/07	Future Metals	Future Metals	Parking	1	\$12.50	12.50	Aug 13/07
Aug 15/07	Future Metals	Future Metals	Parking	1	\$15.00	15.00	Aug 15/07
Aug 22/07	Future Metals	Future Metals	Parking	1	\$12.50	12.50	Aug 22/07
Aug 22/07	Future Metals	Future Metals	Parking	1	\$10.00	10.00	Aug 22/07
Aug 22/07	Future Metals	Future Metals	Parking	1	\$3.00	3.00	Aug 22/07
Aug 22/07	Future Metals	Future Metals	Parking	1	\$3.00	3.00	Aug 22/07
Aug 31/07	Future Metals	Future Metals	Dodge Ram 2x2 Truck Rental	6	\$100.00	600.00	Aug 26-31/07
Aug 23/07	Future Metals	Future Metals	Truck - Fuel	1	\$94.35	94.35	Aug 23/07
Aug 24/08	Future Metals	Future Metals	Truck - Fuel	1	\$84.62	84.62	Aug 24/07
Sept 7/07	Future Metals	Future Metals	Dodge Ram 2x2 Truck Rental	2	\$100.00	200.00	Sept 6-7/07
Sept 7/07	Future Metals	Future Metals	Trailer Rental	2	\$200.00	400.00	Sept 6-7/07
Sept 7/07	Future Metals	Future Metals	Utility Trailer Rental	2	\$35.00	70.00	Sept 6-7/07
July 19/07	Mountainside Exploration	Great Canadian Oil	Truck R & M	1	\$100.02	100.02	July 19/07
July 31/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	July 16-31/07
Aug 15/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	Aug 1-15/07
Aug 16/07	Mountainside Exploration	Co-Van International	Truck Rental	32	\$88.94	2,845.99	July 16 - Aug 16/07
Aug 31/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	Aug 16-31/07
Sept 15/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	Sept 1-15/07
Sept 17/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	30	\$93.40	2,801.89	Aug 18 - Sept 17/07
Sept 18/07	Mountainside Exploration	Co-Van International	Truck Rental	32	\$94.06	3,009.81	Sept 18-Oct 18/07
Sept 27/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	11	\$124.15	1,365.68	Sept 17-27/07
Sept 30/07	Mountainside Exploration	Silverwater Enterprises	2002 Chev 4x4 Truck Rental	15	\$83.33	1,250.00	Sept 16-30/07
July 16/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	30	\$93.40	2,801.89	June 19 - July 19/07
Aug 16/07	Mountainside Exploration	Canadian Car & Truck	Truck Rental	30	\$93.40	2,801.89	July 19 - Aug 18/07
Oct 10/07	Mountainside Exploration	Co-Van International	Truck Mileage & Collision Damage	1	\$1,716.37	1,716.37	Sept 16-Oct 10/07
						50,470.09	

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(C) RENTALS**SCHEDULE 2****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
All Terrain Vehicle Hire/Maintenance		Rentals		Days	Rate/Day	Total	
Aug 31/07	Future Metals	Future Metals	ATV Rental - MPV 4x4	6	\$90.00	540.00	Aug 26-31/07
Aug 31/07	Future Metals	Future Metals	ATV Rental - Yamaha 2007	6	\$150.00	900.00	Aug 26-31/07
Aug 31/07	Future Metals	Future Metals	ATV Rental - Yamaha 2006	6	\$125.00	750.00	Aug 26-31/07
Sept 7/07	Future Metals	Future Metals	ATV Rental - MPV 4x4	2	\$95.00	190.00	Sept 6 - 7/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Polaris 2007 ATV Rental	30	\$214.00	6,420.00	Sept 1-30/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Polaris 2007 ATV Rental	30	\$214.00	6,420.00	Sept 1-30/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Polaris 2007 ATV Rental	30	\$214.00	6,420.00	Sept 1-30/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Kodiak 1994 ATV Rental	30	\$112.35	3,370.50	Sept 1-30/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Kodiak 1994 ATV Rental (2)	30	\$224.70	6,741.00	Sept 1-30/07
Sept 30/07	Mountainside Exploration	Mountainside Exploration	Kodiak 1995 ATV Rental	30	\$112.35	3,370.50	Sept 1-30/07
						<u>35,122.00</u>	

CREW SUMMARY:

GL Category:	Totals	GL	Variance
Earth Moving & Truck Hire	Rentals 20,970.08	20,970.08	0.00
Pumps, Generators & Heaters Etc.	Rentals 159,649.69	159,649.69	0.00
Field Vehicle Hire/Maintenance	Rentals 50,470.09	50,470.09	0.00
All Terrain Vehicle Hire/Maintenance	Rentals 35,122.00	35,122.00	0.00
TOTALS	266,211.86	266,211.86	0.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(D) SURVEYS**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Satellite Image & Air Photos		Surveys		Days	Rate/Day	Total
June 12/07	Eagle Mapping	Eagle Mapping	Todoggone Porperty Mapping	1	4,300.00	<u>4,300.00</u> June 12/07

Topographic Surveying & Related		Surveys		Days	Rate/Day	Total	
Jan 12/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	9	250.00	2,250.00	Dec 18/06 - Jan 16/07
Jan 29/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	4.5	250.00	1,125.00	Jan 17 - 29/07
Jan 31/07	Future Metals	Future Metals	Ranch Maps Production	20.5	400.00	8,200.00	Jan 1-31/07
Jan 31/07	Future Metals	Future Metals	Ranch Maps Reimbursed costs	1	1,233.96	1,233.96	Jan 1 - 31/07
Feb 15/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	2	250.00	500.00	Feb 1-2/07
Feb 27/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	2.35	250.00	587.50	Feb 15-18/07
Mar 20/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	2.2	250.00	550.00	Mar 1-3/07
Mar 30/07	Future Metals	Future Metals	Ranch Maps Production	17.55	400.00	7,018.76	Feb 1/07 - Mar 15/07
Apr 2/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	5.75	250.00	1,437.50	Mar 21-26/07
Apr 3/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	10	250.00	2,500.00	Apr 1-10/07
Apr 30/07	Lindsay Graham	Lindsay Graham	Ranch Maps Production	4	250.00	1,000.00	Apr 15-19/07
May 31/07	Lindsay Graham	Lindsay Graham	Ranch Aeromagnetic Survey QA	15.08	250.00	3,770.00	May 1-15/07
Aug 24/07	Bearpaw Consutlng Ltd.	Bearpaw Consulting Ltd.	QC Reports Little Fort Aeromagnetic	32	65.00	2,080.00	July 6-28/07
Oct 31/07	Mountainside Exploration	B.K. Barney Bowen	Ranch DDH GPS Survey	2	117.70	235.40	Sept 6 & 14/07
						<u>32,488.12</u>	

Geological Mapping		Surveys		Days	Rate/Day	Total
Apr 3/07	Industrial Reproductions Ltd.	John Glanville	Ranch Maps	1	118.65	118.65 Apr 3/07
Apr 17/07	Universal Reproductions	Ab Ablett	Ranch Maps	1	28.89	28.89 Apr 17/07
						<u>147.54</u>

Exploration Report Preparations		Surveys		Days	Rate/Day	Total	
Feb 28/08	Lee Gifford	Lee Gifford	Ranch Report Preparations	4.88	250.00	1,221.25	Feb 1-28/07
Mar 30/07	Lee Gifford	Lee Gifford	Ranch Report Preparations	12.5	250.00	3,075.00	Mar 1-30/07
Mar 31/07	Lee Gifford	Lee Gifford	Ranch Report Preparations	1.93	250.00	483.00	Mar 30-31/07
Apr 30/07	Lee Gifford	Lee Gifford	Ranch Report Preparations	22.09	250.00	5,523.38	Apr 1-30/07
Apr 30/07	Lee Gifford	Lee Gifford	parking	1	16.40	16.40	Apr 30/07
May 11/07	Lee Gifford	Lee Gifford	Ranch Report Preparations	9	250.00	2,250.00	May 1-11/07
						<u>12,569.03</u>	

(D) SURVEYS

SCHEDULE 1

RANCH/ALBERTS HUMP PROJECT COSTS 2007

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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SURVEY SUMMARY:					
GL Category:	Sub-Category	Totals	GL	Variance	
Database/Surveying/Imagery Costs:	Satellite Image & Air Photos	4,300.00	4,300.00	0.00	
Database/Surveying/Imagery Costs:	Topographic Surveyng & Related	32,488.12	32,488.12	0.00	
Database/Surveying/Imagery Costs:	Geological Mapping	147.54	147.54	0.00	
Database/Surveying/Imagery Costs:	Exploration Report Preparation	12,569.03	12,569.03	0.00	
TOTALS		49,504.69	49,504.69	0.00	

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(D) SURVEYS

SCHEDULE 2
RANCH/ALBERTS HUMP PROJECT COSTS 2007

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
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Exploration Contractors & Surveyors	Surveys - Geological			Days	Rate/Day	Total	
Mar 30/07	Aeroquest Limited	Aeroquest Limited	2170 line km @ \$140/km (Survey 30% Deposit)	15	3,038.00	45,570.00	Apr 1-15/07
Apr 25/07	Aeroquest Limited	Aeroquest Limited	Mobilization Charges	3	5,833.33	17,500.00	Apr 16-18/07
Apr 30/07	Aeroquest Limited	Aeroquest Limited	2170 line km @ \$140/km (Survey 65% Deposit)	15	6,582.33	98,735.00	Apr 1-15/07
Apr 30/07	Aeroquest Limited	Aeroquest Limited	2170 line km @ \$140/km (Survey Balance)	15	582.32	8,734.80	Apr 1-15/07
June 15/07	Mountianside Exploration	B.K. Barney Bowen	Geologists	6	500.00	3,000.00	May 24-31/07
July 25/07	James R Shannon	James R. Shannon	Geologists (USD converted to CAD)	25	500.00	13,480.70	July 1-15/07
July 31/07	Timoteo Nillos	Timoteo Nillos	Geologist	6	500.00	3,000.00	July 16 - 31/07
July 31/07	Mountianside Exploration	B.K. Barney Bowen	Geologist	12	500.00	6,000.00	June 1-15/07
July 31/07	Mountianside Exploration	B.K. Barney Bowen	Geologist	9.5	500.00	4,750.00	June 16 - 30/07
Sept 2/07	Geocon	Geocon	Geotechnical	31	575.11	17,828.46	Aug 1-31/07
Sept 2/07	Geocon	Geocon	Geotechnical	1	481.59	481.59	Aug 31/07
Sept 5/07	Timoteo Nillos	Timoteo Nillos	Geologists (USD converted to CAD)	27	500.00	13,500.00	Aug 1-31/07
Oct 2/07	Timoteo Nillos	Timoteo Nillos	Geologists (USD converted to CAD)	17	500.00	8,500.00	Sept 1-30/07
						241,080.55	

Exploration Contractors & Surveyors	Surveys - Geophysical			Days	Rate/Day	Total	
June 7/07	Aeroquest Limited	Aeroquest Limited	Final Report per contract	1	7,595.00	7,595.00	Apr 15/07
June 7/07	Aeroquest Limited	Aeroquest Limited	Difference of 3.8 lkms - final billing	3.8	70.00	266.00	Apr 15/07
June 29/07	Aeroquest Limited	Aeroquest Limited	Standby Charges	3	3,500.00	10,500.00	
Aug 28/07	S.J Geophysics Ltd.	S.J. Geophysics	Geophysical Survey	14	3,498.87	48,984.16	Aug 13-26/07
Sept 10/07	S.J Geophysics Ltd.	S.J. Geophysics	Geophysical Survey with Insurance	14	3,360.72	47,050.00	Aug 27- Sept 9/07
Sept 14/07	S.J Geophysics Ltd.	S.J. Geophysics	Geophysical Survey with Insurance	3	4,004.83	12,014.49	Sept 10-12/07
						126,409.65	

Exploration Contractors & Surveyors	Other			Days	Rate/Day	Total	
July 16/07	James Shannon	James Shannon	Expenses Reimbursement (USD converted to CAD)	1	1,127.47	1,127.47	Aug 27/07

Drilling Costs	Diamond Drilling Meterage Charges			Days	Rate/Day	Total	
June 24/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring adj HQ3-R1500-01 (2725 metres)	27	5.00	13,625.00	May 23 - June 18/07
June 26/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (2788 metres)	27	3,510.81	94,792.00	May 23 - June 18/08
June 26/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (2725 metres)	27	3,936.11	106,275.00	May 23 - June 18/09
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (1431 metres)	12	4,054.50	48,654.00	June 19-30/07
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (1562 metres)	12	5,727.33	68,728.00	June 19-30/07
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ3-R1500-01 (1492 metres)	16	3,170.50	50,728.00	June 14-30/07
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (2097 metres)	16	5,766.75	92,268.00	June 14-30/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R2000-01 (356 metres)	15	806.93	12,104.00	July 1-15/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R2000-01 (2276 metres)	15	6,701.50	100,522.50	July 1-15/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (620 metres)	14	1,505.71	21,080.00	July 1-14/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (2305 metres)	14	7,244.29	101,420.00	July 1-14/07
July 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (1094 metres)	16	2,324.75	37,196.00	July 15-31/07

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(D) SURVEYS
SCHEDULE 2
RANCH/ALBERTS HUMP PROJECT COSTS 2007

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates
July 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HG3-R1500-01 (1232 metres)	16	3,397.14	54,354.37	July 15-31/07
Aug 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (485 metres)	15	1,099.33	16,490.00	Aug 1-15/07
Aug 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (240 metres)	15	717.33	10,760.00	Aug 1-15/07
Aug 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (1734 metres)	16	3,684.75	58,956.00	Aug 16-31/07
Aug 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (237 metres)	16	651.75	10,428.00	Aug 16-31/07
Sept 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring NQ2-R1500-01 (760 metres)	13	1,987.69	25,840.00	Sept 1-13/07
Sept 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Coring HQ3-R1500-01 (255 metres)	13	863.08	11,220.00	Sept 1-13/07
						935,440.87	

Drilling Costs		RC Drilling Meterages Charges		Days	Rate/Day	Total	
Jan 31/07	Guardsmen Resources Inc.	Westcoast Drilling Supplies	Light Equipment	30	52.73	<u>1,582.00</u>	Dec 14/06 - Jan 14/07

Drilling Costs		Other Drilling Charges/Labour		Days	Rate/Day	Total
June 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Pad Building & Fly Basket	16	1,173.75	18,780.00 May 28 - June 12/07
June 22/07	Phil's Boxes	Phil's Boxes	Core Boxes (1020)	1	9,996.00	9,996.00 June 22/07
June 22/07	Phil's Boxes	Phil's Boxes	Core Boxes (504)	1	4,939.20	4,939.20 June 22/07
June 22/07	Phil's Boxes	Phil's Boxes	Core Boxes (4857)	1	4,953.00	4,953.00 June 22/07
Jun 25/07	Radius Drilling Corp.	Radius Drilling Corp.	Labour to unload core boxes	1	1,000.00	1,000.00 June 25/07
June 24/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	27	2,345.59	63,331.03 May 23 - June 18/07
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	12	1,551.86	18,622.32 June 19-30/07
June 30/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	16	1,581.25	25,300.00 June 14-30/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	15	1,604.67	24,070.00 July 1-15/07
July 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	14	1,873.64	26,231.00 July 1-14/07
July 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	16	1,602.50	25,640.00 July 15-31/07
Aug 16/07	Phil's Boxes	Phil's Boxes	Core Boxes (1086)	1	1,939.91	1,939.91 Aug 16/07
Aug 28/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	15	287.00	4,305.00 Aug 1-15/07
Aug 31/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	16	802.32	12,837.16 Aug 16-31/07
Sept 15/07	Radius Drilling Corp.	Radius Drilling Corp.	Misc Drilling consumeables/supplies	13	1,440.55	18,727.16 Sept 1-13/07
						260,671.78

Drilling Costs		Other		Days	Rate/Day	Total	
Sept 30/07	BC Gold Corp.	BC Gold Corp	Helicopter	1	3,150.00	<u>3,150.00</u>	Sept 21/07

SURVEY SUMMARY:

GL Category:	Sub-Category	Totals	GL	Variance
Exploration Contractors & Surveyors	Surveys - Geological	241,080.55	241,080.55	0.00
Exploration Contractors & Surveyors	Surveys - Geophysical	126,409.65	126,409.65	0.00
Exploration Contractors & Surveyors	Other	1,127.47	1,127.47	0.00
Drilling Costs	Diamond Drilling Meterage Charges	935,440.87	935,440.87	0.00
Drilling Costs	RC Drilling Meterages Charges	1,582.00	1,582.00	0.00
Drilling Costs	Other	3,150.00	3,150.00	0.00
TOTALS		1,308,790.54	1,308,790.54	0.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(D)	SURVEYS
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SCHEDULE 2

RANCH/ALBERTS HUMP PROJECT COSTS 2007

Pay End Date	Name	Vendor Name	Description	Units	Rate/Unit	Total Paid	Dates

Guardsmen Resources Inc.

Jan 1/08 - June 30/08

E. Reasonable Costs to Complete Report**Alberts Hump/Ranch 2007 Cost Statement****Preparing of Report Pertaining to the Investigation:**

		Days	Rate/Day	Total
1	Barney Bowen, PGeo	20	550.00	11,000.00
2	Michael Renning	5	400.00	2,000.00
3	Catherine Economou	8	300.00	2,400.00
Total		33	1,250.00	15,400.00

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(F) OTHER COSTS**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

	Date	Name	Memo	Amount
8092700 · Health, Safety, Tech Training				
8092710 · Health & Safety Training Fees				
	02/20/2007	John Glanville	Safety training	533.07
	02/22/2007	Association of Mineral Exploration BC	Ranch safety	132.50
	02/22/2007	Association of Mineral Exploration BC		125.00
	02/22/2007	Association of Mineral Exploration BC		125.00
	02/22/2007	Association of Mineral Exploration BC		100.00
	02/22/2007	Association of Mineral Exploration BC		25.00
	02/22/2007	Association of Mineral Exploration BC		100.00
	02/28/2007	Association of Mineral Exploration BC	Safte	40.00
	02/28/2007	Lee M Gifford		249.99
	02/28/2007	Future Metals Inc.	Inv 40	1,597.33
	03/30/2007	Future Metals Inc.	Inv 37	4,400.00
	03/30/2007	Future Metals Inc.	Inv 37	540.50
Total 8092710 · Health & Safety Training Fees				<u>7,968.39</u>
8093200 · Sampling, Assaying & Bench Scal				
8093210 · Standard, Blank Preparation/Pur				
	04/30/2007	Guardsmen Resources Inc.	Guardmen account rec -Assay cost (credit)	(132.94)
	05/11/2007	Canadian Resources Labs	Sample Bags	3,050.00
	10/31/2007	AJE	11/01/07-10/31/07 to allocate PST to expense	213.50
Total 8093210 · Standard, Blank Preparation/Pur				<u>3,130.56</u>
8093230 · Sample Prep & Assaying Rocks				
	11/02/2006	E.M. Baker & Associates, Inc.	Assay	436.35
	01/19/2007	E.M. Baker & Associates, Inc.	Max expense report	20.00
	01/31/2007	ALS Chemex	1Q Guardsmen	16,980.73
	10/02/2007	ALS Chemex	10/02 assaying	54.03
	10/27/2007	ALS Chemex	10/27 sample analysis	1,848.83
	10/28/2007	ALS Chemex	10/28 sample analysis	988.79
	10/28/2007	ALS Chemex	10/28 assaying	747.67
	10/31/2007	ALS Chemex	10/31 sample tag book ordered S.Gifford	583.15
	10/31/2007	ALS Chemex	11/14 assaying	684.76
	10/31/2007	ALS Chemex	11/22 assaying	54.03
Total 8093230 · Sample Prep & Assaying Rocks				<u>22,398.34</u>
8093240 · Sampling Prep & Assaying Drill				
	07/17/2007	ALS Chemex	drill core assay alsc-cw07-033-chjago-r1	336.84
	07/19/2007	ALS Chemex	Drill Core Assay Ranch A07-BON-14	3,565.26
	07/19/2007	ALS Chemex	Drill core assay quote alsc-cw07-chjago-r1	2,927.27
	07/19/2007	ALS Chemex	credit for invoice 1571502	(336.84)
	07/19/2007	ALS Chemex	drill core ALSC-CW07-033-CHJAGO-R1	326.00
	07/19/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	2,150.96
	07/20/2007	ALS Chemex	Credit for invoice 1571477	(3,565.26)
	07/20/2007	ALS Chemex	Drill core assay quote alsc-cw07-033-chjago-r1	3,461.76
	07/20/2007	ALS Chemex	credit of invoice 1571490	(2,927.27)
	07/20/2007	ALS Chemex	drill core alsc-cw07-033-chjago-r1	2,842.67
	07/20/2007	ALS Chemex	CREDIT FOR INV 1571512	(2,150.96)
	07/20/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	2,089.76
	07/25/2007	ALS Chemex	Drill core assay	2,940.74
	07/26/2007	ALS Chemex	DRILL CORE ALSC-CW07-CHJAGO-R1	3,770.26
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	3,033.62
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,784.83
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,478.13
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,377.87
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	2,692.98
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	2,344.55
	07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,489.86

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

RANCH/ALBERTS HUMP PROJECT COSTS 2007**(F) OTHER COSTS****SCHEDULE 1**

Date	Name	Memo	Amount
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	3,730.61
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,286.06
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	2,329.21
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,534.86
07/31/2007	ALS Chemex	CREDIT FOR I 1576932	(1,534.86)
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,418.37
07/31/2007	ALS Chemex	CREDIT FOR I 1571457	(1,418.37)
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,522.23
07/31/2007	ALS Chemex	CREDIT FOR I 1571465	(1,522.23)
07/31/2007	ALS Chemex	DRILL CORE ALSC-CW07-033-CHJAGO-R1	1,837.03
07/31/2007	ALS Chemex	CREDIT FOR I 1571473	(1,837.03)
08/03/2007	ALS Chemex	VA07076280	1,980.05
08/03/2007	ALS Chemex	VA07075219	4,069.74
08/04/2007	ALS Chemex	VA07075919	3,546.07
08/07/2007	ALS Chemex	VA07074502	109.32
08/12/2007	ALS Chemex	VA07081288	3,371.69
08/13/2007	ALS Chemex	VA07081640	1,771.62
08/14/2007	ALS Chemex	VA07081283	926.25
08/14/2007	ALS Chemex	VA07081282	814.11
08/19/2007	ALS Chemex	VA07078222	54.03
08/19/2007	ALS Chemex	VA07078223	108.06
08/19/2007	ALS Chemex	VA07078224	54.03
08/19/2007	ALS Chemex	VA07078225	54.03
08/20/2007	ALS Chemex	VA07081289	3,684.08
08/21/2007	ALS Chemex	VA07081284	3,132.64
09/01/2007	ALS Chemex	9/01 analysis	2,717.02
09/03/2007	ALS Chemex	9/04 analysis	961.76
09/03/2007	ALS Chemex	9/03 analysis	2,271.98
09/03/2007	ALS Chemex	9/03 analysis	1,675.42
09/04/2007	ALS Chemex	9/04 analysis	1,427.65
09/06/2007	ALS Chemex	9/06 sample analysis	1,142.28
09/08/2007	ALS Chemex	9/06 sample analysis	3,276.31
09/08/2007	ALS Chemex	9/08 sample analysis	54.03
09/08/2007	ALS Chemex	9/08 sample analysis	108.06
09/18/2007	ALS Chemex	9/18 sample analysis	277.16
09/20/2007	ALS Chemex	9/20 sample analysis	30.05
09/20/2007	ALS Chemex	9/20 sample analysis	940.34
09/21/2007	ALS Chemex	9/18 sample analysis	4,075.89
09/24/2007	ALS Chemex	9/24 sample analysis	3,912.63
10/18/2007	ALS Chemex	10/17 analysis of sample	2,356.63
10/18/2007	ALS Chemex	10/18 sample analysis	420.53
10/18/2007	ALS Chemex	10/18 sample analysis	150.74
10/18/2007	ALS Chemex	10/18 sample analysis	2,540.81
10/19/2007	ALS Chemex	10/19 sample analysis	770.34
10/20/2007	ALS Chemex	10/20 sample analysis	80.84
Total 8093240 · Sampling Prep & Assaying Drill			89,845.10

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(F) OTHER COSTS**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

	Date	Name	Memo	Amount
8093260 · Sampling Bags and Equipment				
	04/13/2007	Phil's Boxes	Boxes for Cores	6,968.70
	04/30/2007	Phil's Boxes	Core Box	6,968.70
	10/31/2007	AJE	11/01/07-10/31/07 to allocate PST to expense	2,367.79
Total 8093260 · Sampling Bags and Equipment				<u>16,305.19</u>
8093270 · Sample Dispatch & Transport				
Total 8093270 · Sample Dispatch	01/03/2008	ALS Chemex	1/03 sample storage	<u>1,073.69</u>
				<u>1,073.69</u>
Total 8093200 · Sampling, Assaying & Bench Scal				
8093400 · Project Field Support Costs				
8093405 · Fuel				
	06/15/2007	Mountainside Exploration Management Inc	MEM INV 109	68,246.11
	07/31/2007	Mountainside Exploration Management Inc	Fuel	82,612.27
	08/31/2007	Mountainside Exploration Management Inc	Mountainside Expl. Inv 1028	(12,292.53)
	09/30/2007	Mountainside Exploration Management Inc	4/15-10/09 fuel	59,498.48
	09/30/2007	Mountainside Exploration Management Inc	9/30 fuel to Future Metals - tkt 35083	(163.10)
	10/18/2007	Mountainside Exploration Management Inc	5/24-10/15 fuel	(6,499.12)
	10/18/2007	Mountainside Exploration Management Inc	9/30-10/03 fuel rtrn	(9,454.09)
	10/31/2007	Mountainside Exploration Management Inc	10/23 demob	762.50
	10/31/2007	Mountainside Exploration Management Inc	10/03 fuel refund	(812.60)
Total 8093405 · Fuel				<u>181,897.92</u>
8093471 · Field Office Supplies				
	06/15/2007	Max Baker	Sleeping bag, steel toed boots, water proof note	250.81
	06/15/2007	Mountainside Exploration Management Inc	MEM INV 109	24,529.97
	07/31/2007	Mountainside Exploration Management Inc	Field Supplies	26,902.64
	08/28/2007	Print Three		25.00
	08/31/2007	Future Metals		193.22
	08/31/2007	AJE	Adj. JE 1843	76.37
	08/31/2007	Future Metals	Rev 1005 est.	(193.22)
Total 8093471 · Field Office Supplies				<u>51,784.79</u>
8093473 · Phone, Email, Postate, Couriers				
	01/03/2007	Guardsmen Resources Inc.	ranch phone system	197.64
	01/03/2007	Guardsmen Resources Inc.	ranch phone computer system	144.82
	01/03/2007	Guardsmen Resources Inc.	back up to ranch phone system	130.97
	01/31/2007	Guardsmen Resources Inc.	1Q Guardsmen	333.17
	01/31/2007	Guardsmen Resources Inc.	1Q Guardsmen	43.41
	02/02/2007	Guardsmen Resources Inc.	Inv 3375423	186.45
	02/02/2007	Guardsmen Resources Inc.	PHONE SYSTEM	47.24
	02/22/2007	Guardsmen Resources Inc.	satilite phone	139.65
	03/01/2007	Info Sat	March Inv 3377211	174.91
	06/15/2007	Mountainside Exploration Management Inc	MEM INV 109	4,774.71
	07/31/2007	Mountainside Exploration Management Inc	Apr 15-July 31 Communications Sattelite Phones	10,044.45
	07/31/2007	Mountainside Exploration Management Inc	Apr 15-July 31 Communications Sattelite Phones	192.72
	07/31/2007	Mountainside Exploration Management Inc	Apr 15- July 31 Freigt, postage	2,662.76
	07/31/2007	Guardsmen Resources	Guardmen account rec - cell bills	442.48
	08/31/2007	Future Metals		1,004.95

Guardsmen Resources Inc.

January 1, 2007 through to December 31, 2007

(F) OTHER COSTS**SCHEDULE 1****RANCH/ALBERTS HUMP PROJECT COSTS 2007**

Date	Name	Memo	Amount
08/31/2007	Future Metals	Rev 1005 est.	(1,004.95)
08/31/2007	Future Metals	Inv. 1005 2nd revision	14.67
09/30/2007	Mountainside Exploration Management Inc	4/15-10/09 freight	15,851.09
09/30/2007	Mountainside Exploration Management Inc	4/15-10/09 postage courier	178.21
10/18/2007	Mountainside Exploration Management Inc	5/24-10/15 postage/courier	26.22
10/18/2007	Mountainside Exploration Management Inc	5/24-10/15 freight	417.36
Total 8093473 · Phone, Email, Postage, Couriers			<u>36,002.93</u>
8093474 · Satellite Phone Services			
01/31/2007	Guardsmen Resources Inc.	1Q Guardsmen	793.62
03/13/2007	Globalstar	Globalstar	1,251.90
03/30/2007	Lee M Gifford	March 2007	106.95
04/18/2007	John Glanville	refund on satelite phone as it did not work.	(1,414.56)
07/31/2007	Infosat Communications	Guardmen account rec -sat. phone	2,125.68
09/30/2007	Mountainside Exploration Management Inc	4/15-10/09 sat phn/internet	10,415.23
10/18/2007	Mountainside Exploration Management Inc	5/24-10/15 sat phone	161.37
10/18/2007	Mountainside Exploration Management Inc	5/24-10/15 sat net	109.09
10/31/2007	Mountainside Exploration Management Inc	11/01/07-10/31/07 to allocate PST to expense	107.18
Total 8093474 · Satellite Phone Services			<u>13,656.46</u>

CREW SUMMARY:

GL Category:		Totals
Health & Safety Training		7,968.39
Sampling & Assaying:	Standard, Blank Preparations	3,130.56
Sampling & Assaying:	Sample Prep & Assaying Rocks	22,398.34
Sampling & Assaying:	Sampling Prep & Assaying Drill	89,845.10
Sampling & Assaying:	Sampling Bags & Equipment	16,305.19
Sampling & Assaying:	Sample Dispatch & Transport	1,073.69
Fuel		181,897.92
Field Office Supplies		51,784.79
Phone, Postage & Couriers		36,002.93
Satellite Phone Services		13,656.46
TOTALS		424,063.37

Report on a Helicopter-Borne Magnetic Gradiometer Survey



Aeroquest Job # 07092

Ranch Project

Toodoggone Area, British Columbia
NTS 094E06

For

Christopher James Gold Corp.

by



7687 Bath Road,
Mississauga, ON, L4T 3T1
Tel: (905) 672-9129
Fax: (905) 672-7083
www.aeroquest.ca

Report date: July 2007

Report on a Helicopter-Borne Magnetic Gradiometer Survey

Aeroquest Job # 07092

Ranch Project

Toodoggone Area, British Columbia
NTS 094E06

For

Christopher James Gold Corp.
410-1111 Melville St.,
Vancouver,
British Columbia,
V6E 3V6
Tel: 604-408-8829

by



7687 Bath Road,
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Report date: July 2007

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LIST OF MAPS

Ranch: N-S Lines:

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours

Ranch: E-W Lines:

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours

Ranch (All Lines):

- M3AS – Measured 3-D Analytic Signal with line contours
- MVG – Measured Vertical Magnetic Gradient with line contours
- TDR – Colour-shaded Tilt Derivative of the TMI

1. INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Christopher James Gold Corp. on the Ranch survey, Toadoggone area, British Columbia. The principal geophysical sensor is Aeroquest's HELI-TAG tri-directional magnetic gradiometer (towed-bird) system which employs four (4) optically pumped Cesium magnetometer sensors. Ancillary equipment includes a GPS navigation system, radar altimeter, digital video acquisition system, and a base station magnetometer.

The airborne survey was flown at 50 m spaced east-west lines and 50 m spaced north-south lines. The presented line kilometre total is 2229.1 of which 2173.8 kms fell within the defined survey boundary (Appendix 1). Survey flying described in this report took place between April 28th and May 11th, 2007. This report describes the survey logistics, the data processing, and provides an overview of the results.

2. SURVEY AREA

The Project area (Figure 1) is located in Northern British Columbia approximately 350km north of Terrace, 180km southeast of Dease Lake and 100km west of Fort Ware. Closest towns in the vicinity are Hylands Post 50km to the northwest and Caribou Hide just to the west. The survey was made up of a single block (54km²) over rugged, mountainous terrain. Survey area elevations ranged from 1200 – 2000m. The survey area was accessible by helicopter only.

There were 31 mining claims either fully or partly covered by the survey. They are outlined in Appendix 2.

The base of operations was at Kemess Mine, 60km southeast of the survey area.

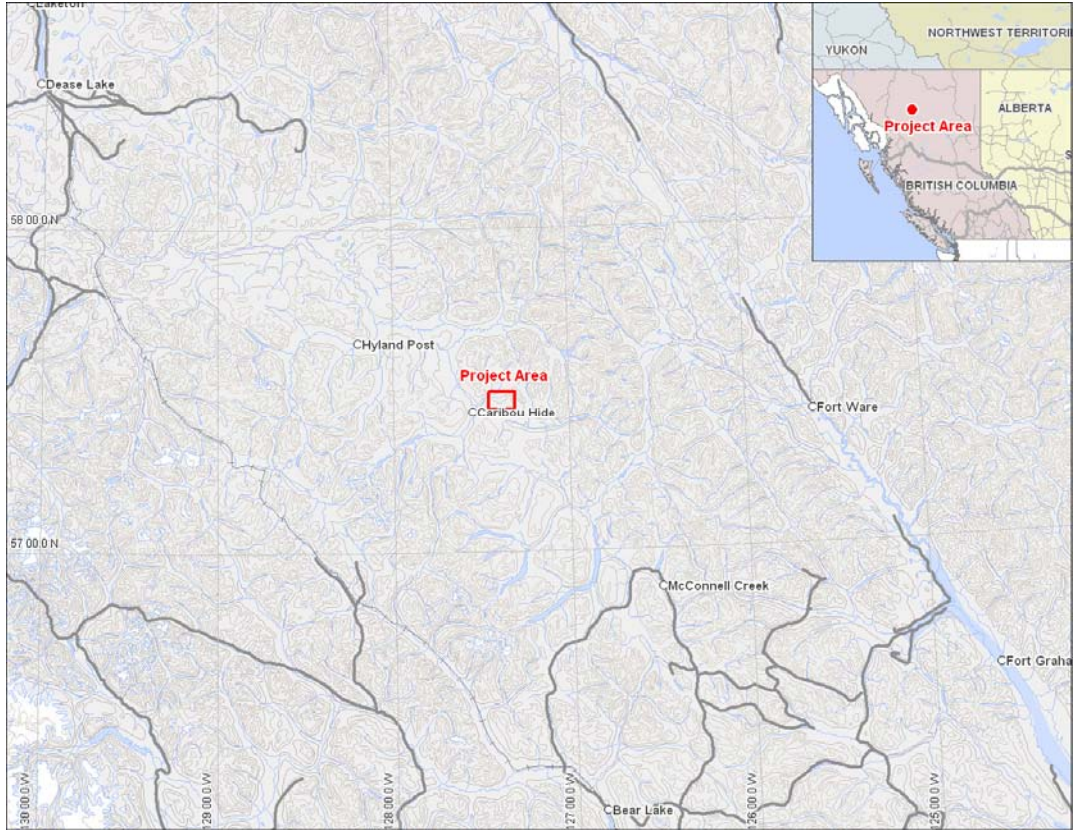


Figure 1. Project Area

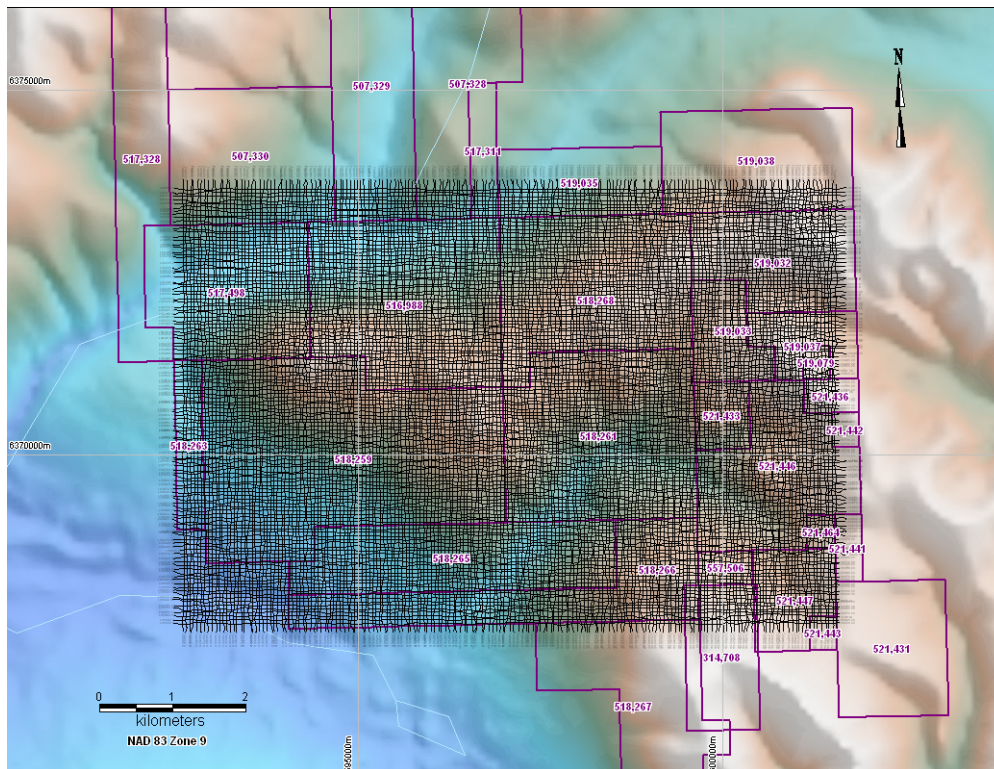


Figure 2. Project flight path and mining claims



Figure 3. Project flight path over Google Earth imagery

3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarised in the following table:

Project Name	Line Spacing (metres)	Line Direction	Survey Coverage (line-km)	Date flown
Ranch	50 X 50	N-S(0°) and E-W(90°)	2229.1	April 28 th – May 11 th , 2007

Table 1. Survey specifications summary

The presented survey coverage was calculated by adding up the survey and control (tie) line lengths as presented in the final Geosoft database.

The nominal gradiometer bird terrain clearance was 30 m but was periodically higher or lower over due to the rugged terrain and the capability of the aircraft. Nominal survey speed over relatively flat terrain is 100 km/hr and is generally lower in rougher terrain. Scan rates for gradiometer data acquisition is 0.10 seconds. The 10 samples per second translates to a gradiometer reading about every 1.5 to 3.0 metres along the flight path.

3.1. NAVIGATION

Navigation is carried out using a GPS receiver installed on the gradiometer bird, an AGNAV2 system for navigation control. The Pico Envirotec acquisition system is used for GPS data recording. The x-y-z position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals. The system has a published accuracy of under 3 metres. A recent static ground test of the Mid-Tech WAAS GPS yielded a standard deviation in x and y of under 0.6

metres and for z under 1.5 metres over a two-hour period. The GPS antenna was mounted in a small bird 8 m below the aircraft.

4. AIRCRAFT AND EQUIPMENT

4.1. AIRCRAFT

A Eurocopter (Aerospatiale) AS350B2 "A-Star" helicopter - registration C-GPTY was used as survey platform. The helicopter was owned and operated by Hi-Wood Helicopters, Calgary, Alberta. Installation of the geophysical and ancillary equipment was carried out by Aeroquest Limited personnel in conjunction with a licensed aircraft. The survey aircraft was flown at a nominal terrain clearance of 220 ft (65 metres).



Figure 4. Helicopter registration number C-GPTY

4.2. MAGNETIC GRADIOMETER SYSTEM

4.2.1. Overview

The Aeroquest HELI-TAG magnetic gradiometer system employs four (4) Geometrics G-823A optically pumped Cesium-vapor sensors. The Mag bird consists of 4 sensors allowing for measurements of the total field, vertical gradient and horizontal gradients both along and cross flight lines. Three sensors are configured in a tri-axial configuration at the rear of the bird and the fourth sensor is located in the nose of the bird to provide a longitudinal (horizontal) gradient measurement. The magnetic data is collected at a rate of 20Hz, and recorded by a dedicated Windows-based computer.

4.2.2. Magnetometer Sensors

The specifications of the cesium vapour magnetometer sensors are as follows*:

Sensitivity:	<0.004 nT/rt-Hz
Absolute Accuracy:	< +/- 1.5 nT throughout operating range
Sampling Rate:	10 Hz
Dynamic Range:	20,000 - 100,000 nT
Heading Error:	less than 0.15 nT combined for sensor spins on all axes
Operating Temperature:	-35°C to +50°C

**Specifications are provided by the sensor manufacturer*

4.2.3. Bird Design

Sensor Standoffs:

- Horizontal:	3.00 metres
- Vertical:	3.00 metres
- Longitudinal:	3.00 metres

Tow Cable: 45 metres long, with Kevlar strain member and weak-link

Terrain Clearance: 30 metres (nominal)

Refer to Figure 5.

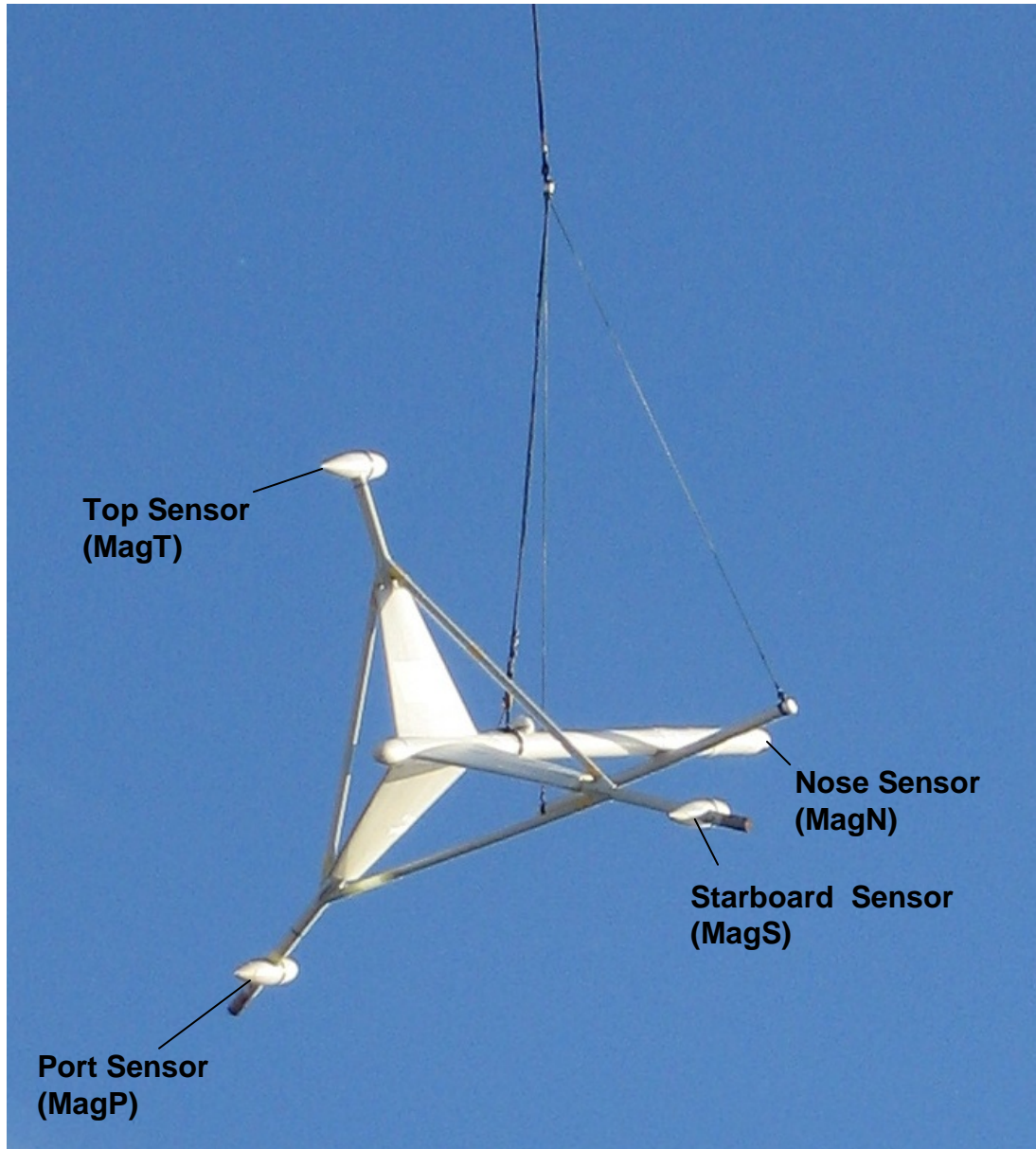


Figure 5. The Aeroquest HELI-TAG bird

4.3. MAGNETOMETER BASE STATION

The base station was a Geometrics G858 optically pumped Caesium vapour magnetometer coupled with a Garmin GPS18 GPS sensor. Data logging and magnetometer control was provided by the unit's internal software. The logging was configured to measure at 1.0 second intervals. Digital recording resolution was 0.01 nT. The sensor was placed on a tripod away from potential noise sources near the camp. A continuously updated profile plot of the magnetometer value is available for viewing on the unit's display.

4.4. RADAR ALTIMETER

A Terra TRA 3500/TRI-30 radar altimeter is used to record terrain clearance. The antenna was mounted on the outside of the helicopter beneath the cockpit. Therefore, the recorded data reflect the height of the helicopter above the ground. The Terra altimeter has an altitude accuracy of +/- 1.5 metres.

4.5. VIDEO TRACKING AND RECORDING SYSTEM

A high resolution digital colour video camera is used to record the helicopter ground flight path along the survey lines. The video is recorded digitally and annotated with GPS position and time and can be used to verify ground positioning information and cultural causes of anomalous geophysical responses.



Figure 6. Digital video camera typical mounting location.

4.6. GPS NAVIGATION SYSTEM

The navigation system consists of an Ag-Nav Incorporated AG-NAV2 GPS navigation system comprising a PC-based acquisition system, navigation software, a deviation indicator in front of the aircraft pilot to direct the flight, a full screen display with controls in front of the operator, a Mid-Tech RX400p WAAS-enabled GPS receiver mounted on the instrument rack and an antenna mounted on the magnetometer bird. WAAS (Wide Area Augmentation System) consists of approximately 25 ground reference stations positioned across the United States that monitor GPS satellite data. Two master stations located on the east and west coasts collect data from the reference stations and create a GPS correction message. This correction accounts for GPS satellite orbit and clock drift plus signal delays caused by the atmosphere and ionosphere. The corrected differential message is then broadcast through one of two geostationary satellites, or satellites with a fixed position over the equator. The corrected position has a published accuracy of less than 3 metres.

Survey co-ordinates are set up prior to the survey and the information is fed into the airborne navigation system. The co-ordinate system employed in the survey design was WGS84 [World] using the UTM zone 9N projection. The real-time differentially corrected GPS positional data was recorded by the RMS DGR-33 in geodetic coordinates (latitude and longitude using WGS84) at 0.2 s intervals.

5. PERSONNEL

The following Aeroquest personnel were involved in the project:

- Manager of Operations: Bert Simon
- Manager of Data Processing: Jonathan Rudd
- Field Data Processor: Greg Roman
- Field Operator: Paul Starmach
- Data interpretation, reporting, and mapping: Matt Pozza, Sean Walker, Eric Steffler, Marion Bishop

The survey pilot, Remi Fashanu, was employed directly by the helicopter operator – Hi Wood Helicopters.

6. DELIVERABLES

6.1. HARDCOPY DELIVERABLES

The report includes a set of five (5) 1:10,000 maps. The survey area is covered by a single map plate and five geophysical data products are delivered as listed below:

Ranch: N-S Lines

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours

Ranch: E-W Lines

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours

Ranch (All Lines)

- M3AS – Measured 3-D Analytic Signal with line contours
- MVG – Measured Vertical Magnetic Gradient with line contours
- TDR – Colour-shaded Tilt Derivative of the TMI

The coordinate/projection system for the maps is NAD83 – UTM Zone 9N. For reference, the latitude and longitude in WGS84 are also noted on the maps.

All the maps show flight path trace and contain topographic base data. Survey specifications are displayed in the margin of the maps.

6.2. DIGITAL DELIVERABLES

6.2.1. Final Database of Survey Data (.GDB, .XYZ)

The geophysical profile data is archived digitally in a Geosoft GDB binary format database. A description of the contents of the individual channels in the database can be found in Appendix 2. A copy of this digital data is archived at the Aeroquest head office in Mississauga.

6.2.2. Geosoft Grid files (.GRD)

Seventeen (17) levelled Grid products are included. Cell size for all grid files is 10 metres.

North South Lines

- Total Magnetic Intensity (N-S TMI.grd)
- Measured Vertical Gradient (N-S MVG.grd)
- Measured Transverse Gradient (N-S_MTG.grd)
- Measured Longitudinal Gradient (N-S_MLG.grd)
- First vertical derivative of the TMI grid (N-S_1VD.grd)
- Measured 3-D Analytic Signal (N-S_MDAS.grd)

East West Lines

- Total Magnetic Intensity (E-W TMI.grd)
- Measured Vertical Gradient (E-W MVG.grd)
- Measured Transverse Gradient (E-W_MTG.grd)
- Measured Longitudinal Gradient (E-W_MLG.grd)
- First vertical derivative of the TMI grid (E-W_1VD.grd)
- Measured 3-D Analytic Signal (E-W_MDAS.grd)

All Lines

- Total Magnetic Intensity (All_lines_TMIIf.grd)
- Calculated 3-D Analytic Signal (All_lines_calc_3DAS.grd)
- Calculated Tilt Derivative of the TMI (All_lines_TDR.grd)
- Calculated 1st Vertical Derivative of the TMI (All_lines_1VD.grd)
- Measured Vertical Gradient (All_lines_MVG.grd)

6.2.3. Digital Versions of Final Maps (.MAP, .PDF)

Map files in Geosoft .map and Adobe PDF format.

6.2.4. Free Viewing Software

- Geosoft Oasis Montaj Viewing Software with Tutorial
- Adobe Acrobat Reader
- Google Earth Viewer

6.2.5. Digital Copy of this Document (.PDF)

7. DATA PROCESSING AND PRESENTATION

All in-field and post-field data processing was carried out using Aeroquest proprietary data processing software and Geosoft Oasis Montaj software. Maps were generated using 36-inch wide Hewlett Packard ink-jet plotters.

7.1. BASE MAP

The geophysical maps accompanying this report are based on positioning in the NAD83 datum. The survey geodetic GPS positions have been projected using the Universal Transverse Mercator projection in Zone 9 North. A summary of the map datum and projection specifications is given following:

- Ellipse: GRS 1980
- Ellipse major axis: 6378137m eccentricity: 0.081819191
- Datum: North American 1983 - Canada Mean
- Datum Shifts (x,y,z) : 0, 0, 0 metres
- Map Projection: Universal Transverse Mercator Zone 9 (Central Meridian -129°W)
- Central Scale Factor: 0.9996
- False Easting, Northing: 500,000m, 0m

For reference, the latitude and longitude in WGS84 are also noted on the maps.

The background vector topography based on Natural Resources Canada's National Topographic Data Base 1:50000 data. The background shading was derived from NASA Shuttle Radar Topography Mission (SRTM) 90 metres resolution DEM data.

7.2. FLIGHT PATH & TERRAIN CLEARANCE

The position of the survey helicopter was directed by use of the Global Positioning System (GPS). Positions were updated five times per second (5 Hz) and expressed as WGS84 latitude and longitude calculated from the raw pseudo range derived from the C/A code signal. The instantaneous GPS flight path, after conversion to UTM co-ordinates, is drawn using linear interpolation between the x/y positions. The terrain clearance was maintained with reference to the radar altimeter. The raw Digital Terrain Model (DTM) was derived by taking the GPS survey elevation and subtracting the radar altimeter terrain clearance values. The calculated topography elevation values are relative and are not tied in to surveyed geodetic heights.

Each flight included at least two high elevation 'background' checks. These high elevation checks are to ensure that the gain of the system remained constant and within specifications.

7.3. MAGNETIC GRADIENT DATA

7.3.1. Initial Processing – Total Field

Prior to any levelling the magnetic data was subjected to a lag correction of -0.1 seconds and a spike removal filter. The total field was calculated using an average reading of all the magnetometers (Mag_TF channel in database). This process provides a more accurate reading of the total field in comparison to a single sensor measurement. Diurnal variation was removed using the base magnetometer data. Due to the small size of the survey area no corrections for the regional reference field (IGRF) were applied. Finally the data was micro-levelled using a directional spatial filtering technique. This process removes other very small systematic errors in the data. The N-S and E-W data were separately interpolated into grids using a gradient enhanced bi-directional gridding algorithm with a cell size of 10 m (1/5th of

the line spacing). The grid files were then merged to create a grid file representative of both flight directions.

Note that the above process produces three levelled total magnetic intensity (TMI) grids. The grid file generated from the N-S lines (N-S TMI.grd) will better resolve and/or enhance E-W trending magnetic lineaments (across the line direction). Likewise, the grid generated from the E-W trending lines (E-W TMI) is better suited for interpreting lineaments trending N-S. The merged grid product (All_lines TMI.grd) equally enhances both directions at the expense of some amplitude loss on some measured responses due to the levelling procedure.

7.3.2. Total field Derivative Products

Starting from the three levelled TMI grids, several additional magnetic products were generated using Fourier domain (grid-based) filtering in Oasis Montaj. The 1st vertical derivative (1VD), tilt derivative (TDR) and Analytic Signal (Calc_3DAS) of the TMI were calculated. Please refer to section 6.2.2 for a list of grid files included in the digital archive.

7.3.3. Measured Gradients

The three magnetic gradient components were calculated by variable differencing of the four measured total field readings. The baseline distances of the gradient measurements are described in section 5.2. Further levelling of the gradient components was then carried tie-line levelling if required. This process minimised the small sources of error discussed above, as well as removed any DC gradient shifts introduced by the absolute accuracy limitations of the cesium sensors.

The measured vertical, longitudinal, and transverse gradient profiles were interpolated into grids from the N-S and E-W data independently, since the longitudinal and transverse gradients are direction dependent. A measured vertical gradient grid from both flight directions was produced.

For comparison, a calculated vertical gradient grid was produced by applying a first vertical derivative (1VD) to the levelled total field grid. This product is also included in the digital archive. In general the products are similar, but the measured gradient reveals higher frequency information that is not present in the computed gradient. Magnetic trends visible in the calculated gradient, but not in the measured gradient, can be interpreted as deeper magnetic sources. The measured gradients effectively ‘filter out’ the longer wavelength magnetic response due to the short baseline design of the gradiometer. In contrast, smaller near surface responses have been enhanced in the measured gradients.

Note that the MLG gradient enhances cross line structures, while the MTG will enhance along-line structures. Note the similarity between the MTG grid of the N-S lines and the MLG grid the E-W lines as expected.

7.3.4. Measured 3-D Analytic Signal

The 3-D Analytic Signal or “Total Magnetic Gradient” is indirectly measured by the Aeroquest HELI-TAG system. Since three orthogonal gradient components are measured, calculating the measured analytic signal is a trivial matter:

$$AS = \sqrt{MVG^2 + MTG^2 + MLG^2}$$

Where:

AS is the magnitude of the total gradient vector and

MVG, MTG, and MLG are the measured vertical, transverse, and longitudinal gradients.

The above formula is applied using the three gradient channels to provide the measured analytic signal (AS) profile. The primary advantage of this magnetic data form is that positive peaks will directly correlate with the centre of the magnetic sources, regardless of the Earth's magnetic field orientation, or possible remnant magnetism effects in the source bodies. Again, due to the short baseline design of the gradiometer system, the measured AS tends to enhance near surface magnetic sources. The AS profiles were interpolated onto a grid and included in the digital archive. This product may be useful for data interpretation since it can be thought of as a map of magnetisation in the ground.

Respectfully submitted,

Matt Pozza MSc.
Aeroquest Limited
July, 2007

APPENDIX 1: SURVEY BOUNDARIES

The following table presents the Ranch block boundaries. All geophysical data presented in this report have been windowed to these outlines. X and Y positions are in NAD83 UTM Zone 9N.

X	Y
592562.09	6367674.77
592562.09	6373682.43
601591.11	6373682.43
601591.11	6367674.77

APPENDIX 2: MINING CLAIMS

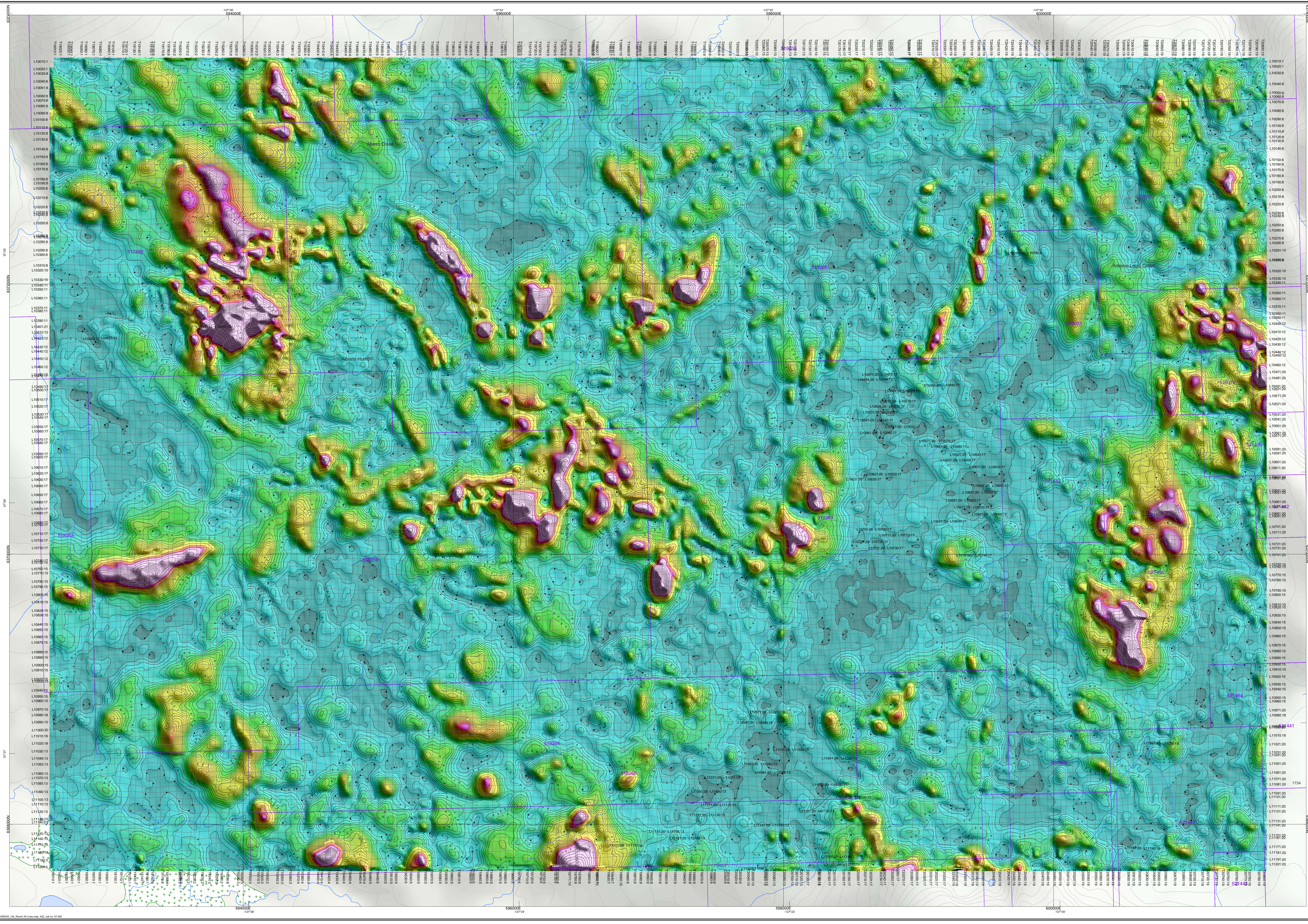
Taken from Government of British Columbia Mineral Titles Online

Tenure Number	Tenure Type	Claim Name	Owner	Good To Date	Mining Division	Area (Ha)
314708	Mineral		ALLAN, JAMES RUPERT	2008/apr/30	LIARD	200
507328	Mineral	AB 3	GUARDSMEN RESOURCES INC.	2009/nov/15		417.198
507329	Mineral	AB 4	GUARDSMEN RESOURCES INC.	2009/nov/15		417.233
507330	Mineral	AB 5	GUARDSMEN RESOURCES INC.	2009/nov/15		417.341
516988	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		574.112
517311	Mineral	BERT FRACTION	GUARDSMEN RESOURCES INC.	2009/nov/15		69.554
517498	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		400.13
518259	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		939.948
518261	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		591.784
518263	Mineral	ALBERT WEST	GUARDSMEN RESOURCES INC.	2009/nov/15		87.029
518265	Mineral	AL 5&6	GUARDSMEN RESOURCES INC.	2009/nov/15		400.484
		AL 5&6 FRACTION				
518266	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		365.702
518268	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		504.501
519032	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		278.311
519033	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		121.793
519035	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		208.686
519037	Mineral		GUARDSMEN RESOURCES INC.	2009/nov/15		104.396
519038	Mineral	HUMP	GUARDSMEN RESOURCES INC.	2009/nov/15		365.166
519079	Mineral	ALPARK	GUARDSMEN RESOURCES INC.	2009/nov/15		17.401
521433	Mineral	FURLONG	GUARDSMEN RESOURCES INC.	2009/nov/15		69.615
521446	Mineral	ALMET1	GUARDSMEN RESOURCES INC.	2009/nov/15		365.552
521447	Mineral	ALMET2	GUARDSMEN RESOURCES INC.	2009/nov/15		139.314
540042	Placer	RANCH 1	GUARDSMEN RESOURCES INC.	2007/aug/29		191.39
540043	Placer	RANCH 2	GUARDSMEN RESOURCES INC.	2007/aug/29		191.41
540044	Placer	RANCH 3	GUARDSMEN RESOURCES INC.	2007/aug/29		260.961
540761	Placer		CHRISTOPHER JAMES GOLD CORP.	2007/sep/08		34.793
521436	Mineral	MET 6	PAGET RESOURCES CORPORATION	2008/oct/22		34.805
521442	Mineral	MET 11	PAGET RESOURCES CORPORATION	2008/oct/22		17.405
521443	Mineral	MET 12	PAGET RESOURCES CORPORATION	2008/oct/22		17.417
521464	Mineral	MET EXT	PAGET RESOURCES CORPORATION	2008/oct/24		17.411
557506	Mineral	MET W	PAGET RESOURCES CORPORATION	2008/apr/23		34.825

APPENDIX 3: DESCRIPTION OF DATABASE FIELDS

The GDB file is a Geosoft binary database. In the database, the Survey lines and Tie Lines are prefixed with an "L" for "Line" and "T" for "Tie".

COLUMN	UNITS	DESCRIPTOR
x	m	UTM Easting (NAD83, Zone 9N)
y	m	UTM Northing (NAD83, Zone 9N)
bheight	m	Terrain clearance of EM bird
Galt	m	GPS altitude
dtm	m	Digital Terrain Model
magN_uncorr	nT	Nose (front) sensor, Magnetic Field reading
magP_uncorr	nT	Port sensor, Magnetic Field reading
magS_uncorr	nT	Starboard sensor, Magnetic Field reading
magT_uncorr	nT	Top sensor, Magnetic Field reading
Basemagf	nT	Base station Total Magnetic Intensity
Mag_TF	nT	Total Field Total Magnetic Intensity
Mag_lev	nT	Levelled Magnetics
MLGf	nT/m	Measured Longitudinal Gradient
MTGf	nT/m	Measured Transverse Gradient
MVGf	nT/m	Measured Vertical Gradient
ANSIGNAL	nT/m	Measured Total Gradient (3DAnalytic Signal)
Pitch	Degree	Pitch of Gradiometer bird
Roll	Degree	Roll of Gradiometer bird
Yaw	Degree	Yaw of Gradiometer bird



North Arrow

Grid North
NAD83 Zone 18

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.

Inset data derived from Natural Resources Canada 'Atlas of Canada Base Map'.

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Ranch Property, Toodogone Area, British Columbia, by Aeroquest Limited, July 2007'.

Scale 1:10,000.00

0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.00
1.10
1.20
1.30
1.40
1.50
1.60
1.70
1.80
1.90
2.00
2.10
2.20
2.30
2.40
2.50
2.60
2.70
2.80
2.90
3.00

M3DAS
nT/m

M3DAS Contour Interval
0.1 nT/m
0.5 nT/m

SURVEY SPECIFICATIONS:
Survey from: April 27 to May 11, 2007
Traverse line spacing: 50 metres
Traverse line direction: 90° Azimuth (E-W) & 0° Azimuth (N-S)
Nominal EM bed height: 30 metres
Aircraft: Aerostar A-Star 3000-2 (C-GPTY)
INSTRUMENTATION:
Data acquisition: HelimAG - Tri-Directional Total Field/Gradient Magnetometer: 4 x GEM-3
Sensitivity: 0.04 nanoTesla
Sample Interval: 10 Hz
Gamma Ray Spectrometer: PicoEnvirotec AGRS GRS 10-5
Downward looking crystal vol. - 16.8L (1024cu in)
Upward looking crystal vol. - 4L (256cu in)
Sample Interval: 1.0 seconds
Channels: 256
Installation: In helicopter
NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30
DATA PROCESSING:
Magnetic: diurnal, sidereal and micro-leveling corrections
POSITIONING:
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
MAP PROJECTION:
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Scale 1:10,000

0 200 400 600
metres
UTM 98 UTM Zone 18E

Christopher James Gold
Toodogone Area, British Columbia

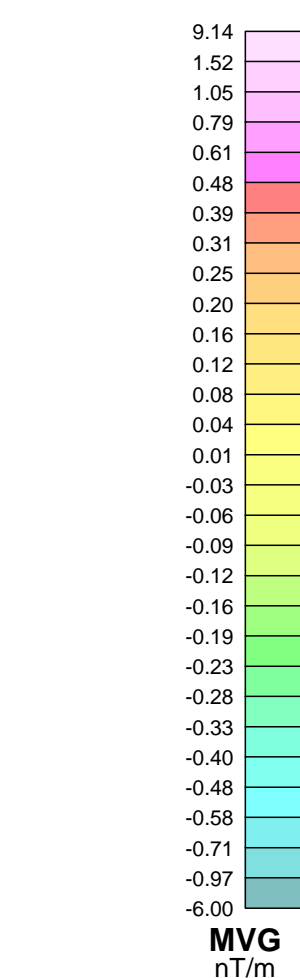
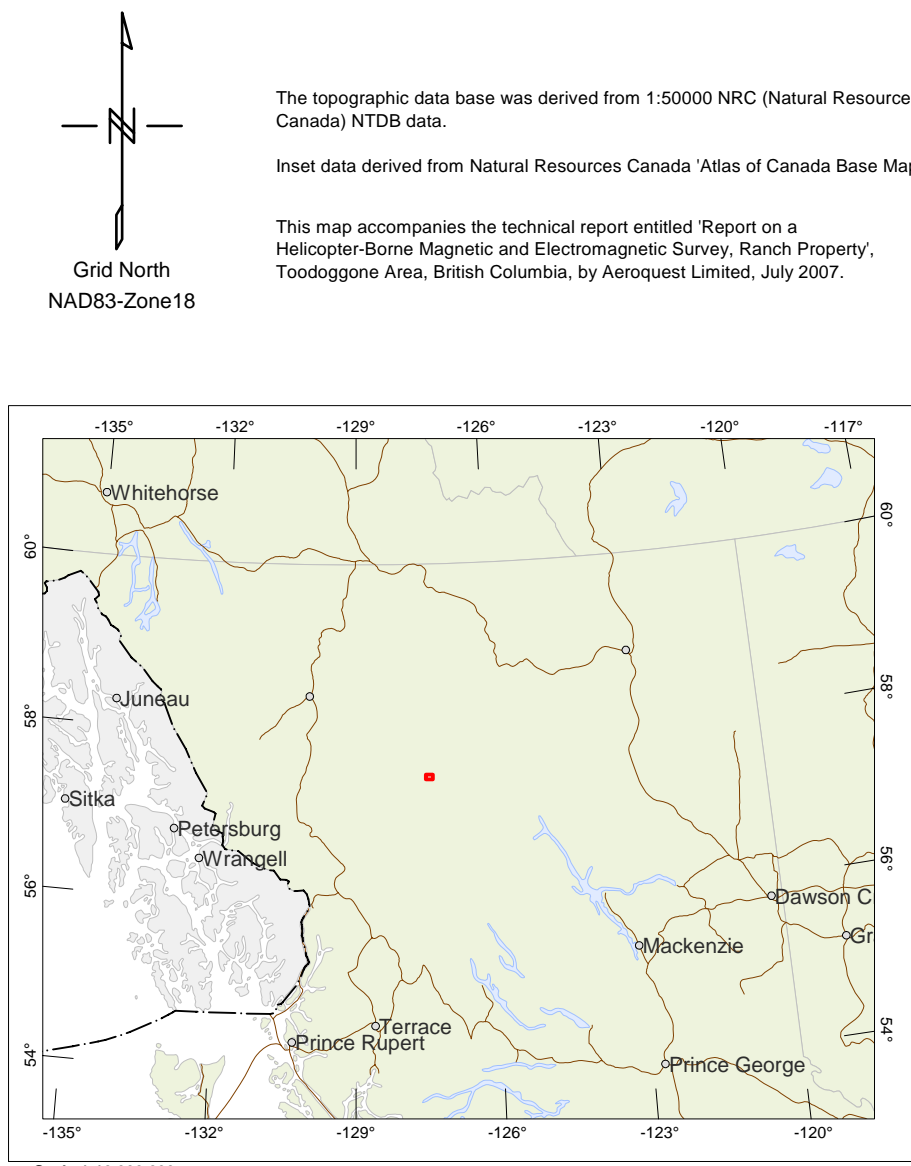
**MEASURED 3D
ANALYTIC SIGNAL**

Ranch All Lines Block

NTS 094E06

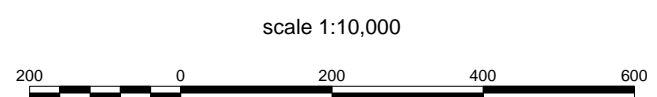
Survey flown by:
**AEROQUEST
LIMITED**
7887 Bath Road, Mission, BC, CANADA V2T 3T1
Tel: (604) 872-9147 Fax: (604) 872-7885
www.aeroquest.com
July 2007

M3DAS Ranch All Lines



MVG Contour Interval
0.1 nT/m
0.5 nT/m

SURVEY SPECIFICATIONS:
Survey flown: April 27 to May 11, 2007
Traverse line spacing: 50 metres
Traverse line direction: 90° Azimuth (E-W) & 0° Azimuth (N-S)
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B-2 (C-GPTY)
INSTRUMENTATION:
Data acquisition: HelMAG - Tri-Directional Total Field/Gradient
Magnetometers: 4 x GE23A Cesium Vapour sensors
Installation: Towed bird (30m nominal ground clearance)
Sensitivity: .004 nanoTesla
Sample interval: 10 Hz
Gamma Ray Spectrometer: ProCon/Inertec AGRS 10-5
Downward looking crystal vol. - 16.8L (1024u in)
Upward looking crystal vol. - 4L (256u in)
Sample interval: 1.0 seconds
Channels: 256
Installation: In helicopter
NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TH-30
DATA PROCESSING
Magnetics: diurnal, diurnal and micro-leveling corrections
POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m



Christopher James Gold
Toodoggone Area, British Columbia

MEASURED VERTICAL MAGNETIC GRADIENT Ranch All Lines Block

NTS 094E06

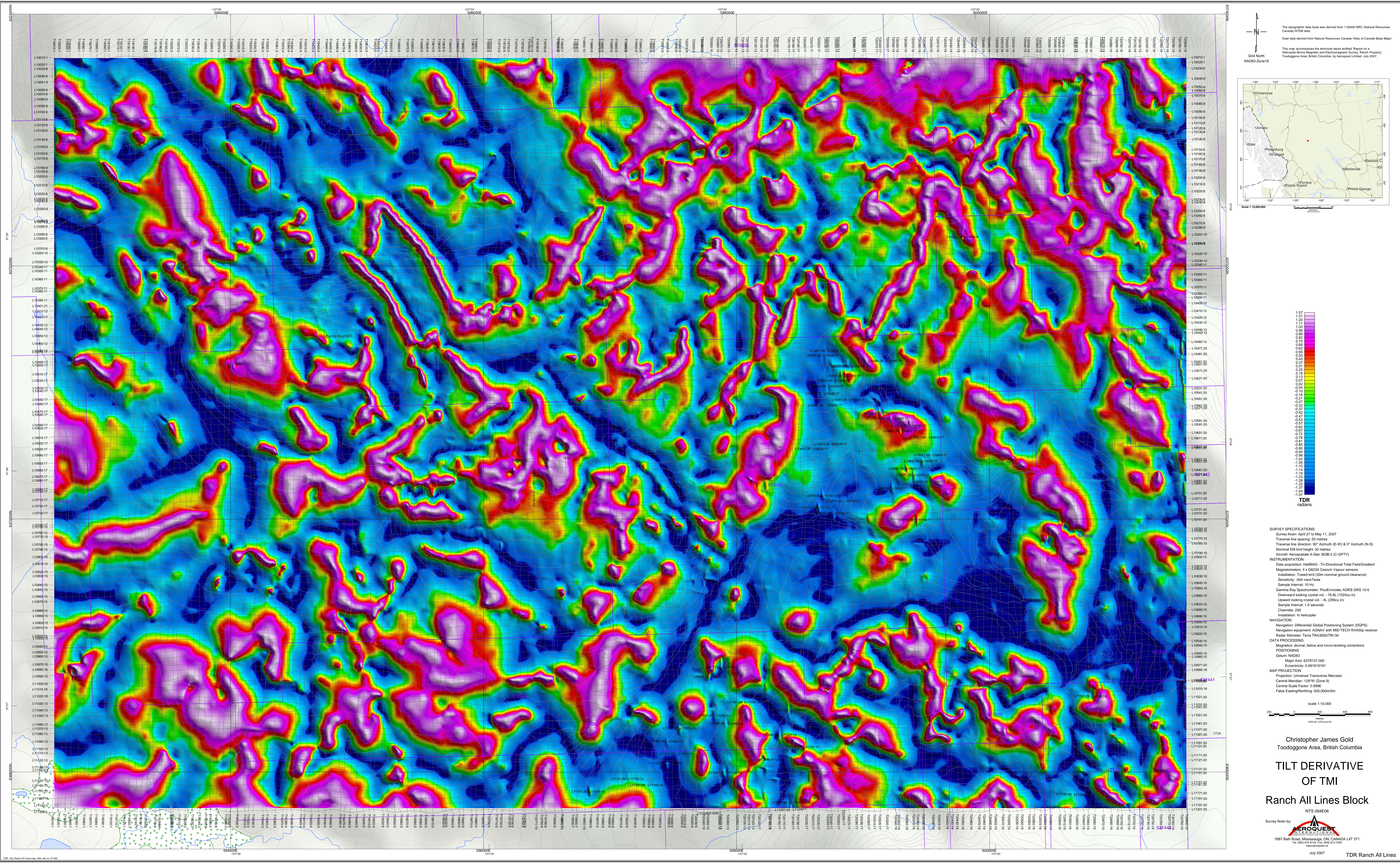
Survey flown by:



7887 Bath Road, Mississauga, ON, CANADA L4T 3T1
Tel: (905) 672-9125 Fax: (905) 672-7085
www.aeroquest.ca

July 2007

MVG Ranch All Lines



The topographic data base was derived from 1:50,000 NRC Natural Resources Canada NTDB data.

This map accompanies the technical report entitled "Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Ranch Property, Toodogone Area, British Columbia, by Aerowest Limited, July 2007."

Grid North
NAD83-Zone18

Scale 1:10,000.000

SURVEY SPECIFICATIONS:
Survey from: April 27 to May 11, 2007
Traverse line spacing: 50 metres
Traverse line direction: 90° Azimuth (E-W) & 0° Azimuth (N-S)
Nominal EM bird height: 30 metres
Aircraft: Aeromaster A-Star 350B-2 (C-GPTY)

INSTRUMENTATION:
Data acquisition: HelMag - Tri-Directional Total Field/Gradient Magnetometer: 4 x G252A Cesium Vapour sensors
Installation: Towed bird (30m nominal ground clearance)
Sensitivity: .004 nanoTesla
Sample Interval: 10 Hz
Gamma Ray Spectrometer: PicoEnvirotec AGRS GRS 10-5
Downward looking crystal vol. - 16.8L (1024cu in)
Upward looking crystal vol. - 4L (256cu in)
Sample Interval: 1.0 seconds
Channels: 256
Installation: In helicopter

NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING:
Magnetics: diurnal, tidal and micro-leveling corrections

POSITIONING:
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
Projection: Universal Transverse Mercator
Central Meridian: 125°W (Zone 9)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:10,000

Christopher James Gold
Toodogone Area, British Columbia

**TILT DERIVATIVE
OF TMI**

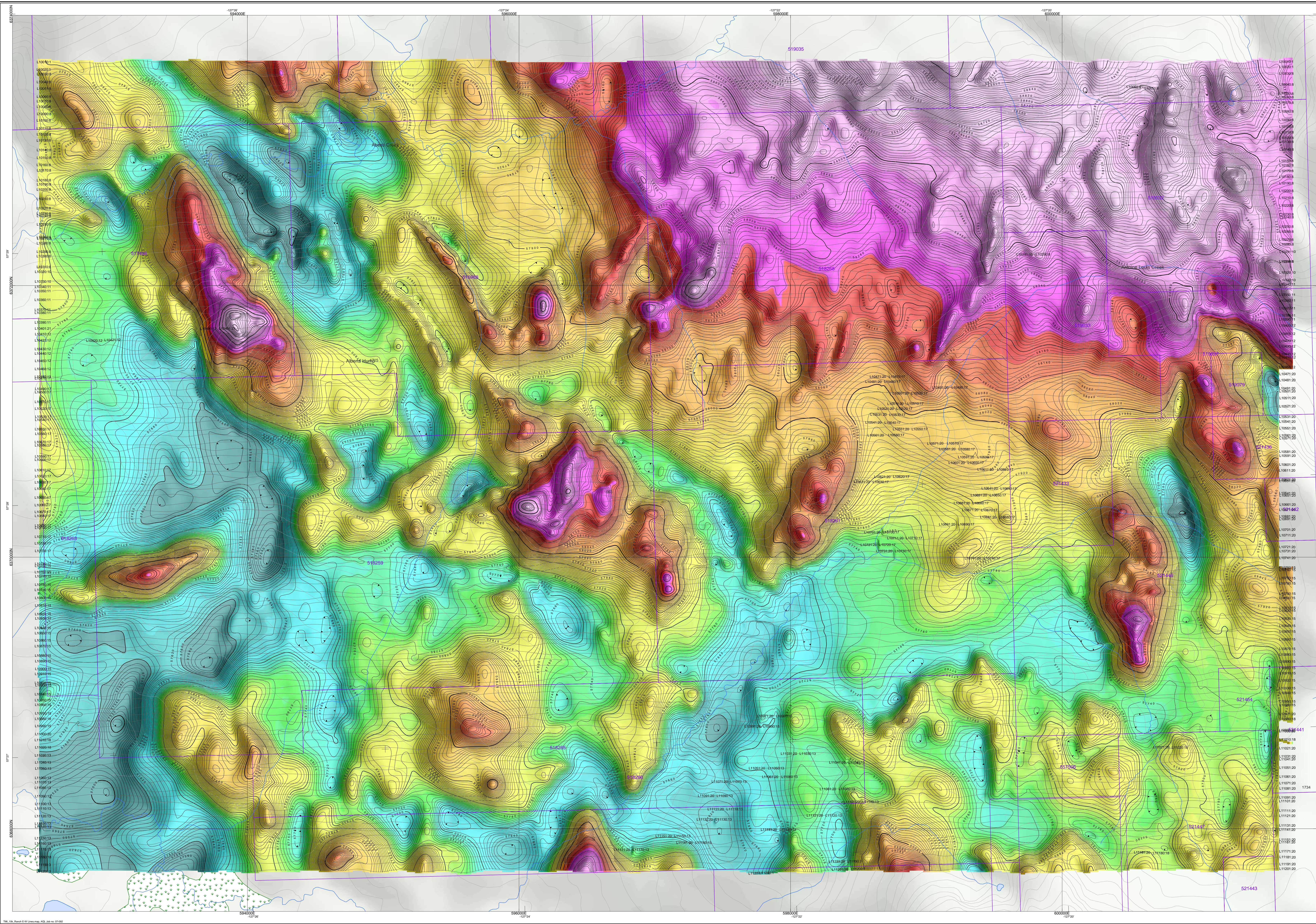
Ranch All Lines Block

NTS 094E06

Survey town by:
AEROSURVEY
7687 Bath Road, Mississauga, ON, CANADA L4T 3T1
Tel: (905) 872-8121 Fax: (905) 872-8100
www.aerowest.ca

July 2007

TDR Ranch All Lines



North arrow pointing up.

Grid North
NAD83-Zone18

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data.

Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Ranch Property, Toodoggone Area, British Columbia, by Aeroquest Limited, July 2007.'

Scale 1:10,000,000

59055
58966
58847
58547
58452
58340
58248
58172
58095
58030
57998
57965
57933
57903
57877
57852
57833
57817
57803
57789
57777
57766
57754
57742
57729
57714
57691
57688
57637
57600
57462

TMI
nT

TMI Contour Interval

10nT
20nT
500nT

SURVEY SPECIFICATIONS:

Survey from: April 27 to May 11, 2007

Traverse line spacing: 50 metres

Traverse line direction: 90° Azimuth (E-W)

Nominal EM bird height: 30 metres

Aircraft: Aerospaciale A-Star 350B-2 (C-GPTV)

INSTRUMENTATION:

Data acquisition: HelMag - Tri-Directional Total Field/Gradient Magnetometers: 4 x GSC23A Cesium Vapour sensors

Installation: Towed bird (30m nominal ground clearance)

Sensitivity: .004 nanoTesla

Sample interval: 10 Hz

Gamma Ray Spectrometer: Picometrics AGRS 10-6

Downward looking crystal vol. - 16.8L (1024cu in)

Upward looking crystal vol. - 4L (256cu in)

Sample interval: 1.0 seconds

Channels: 256

Installation: In helicopter

NAVIGATION:

Navigation: Differential Global Positioning System (DGPS)

Navigation equipment: AGNAV with MID-TECH RX400p receiver

Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING

Magnetics: diurnal, sideline and micro-leveling corrections

POSITIONING

Datum: NAD83

Major Axis: 6378137.000

Eccentricity: 0.081819191

MAP PROJECTION

Projection: Universal Transverse Mercator

Central Meridian: 129°W (Zone 9)

Central Scale Factor: 0.9996

False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600

METERS

WGS 84 UTM zone 18N

Christopher James Gold
Toodoggone Area, British Columbia

**TOTAL MAGNETIC
INTENSITY**

Ranch E-W Lines Block

NTS 094E06

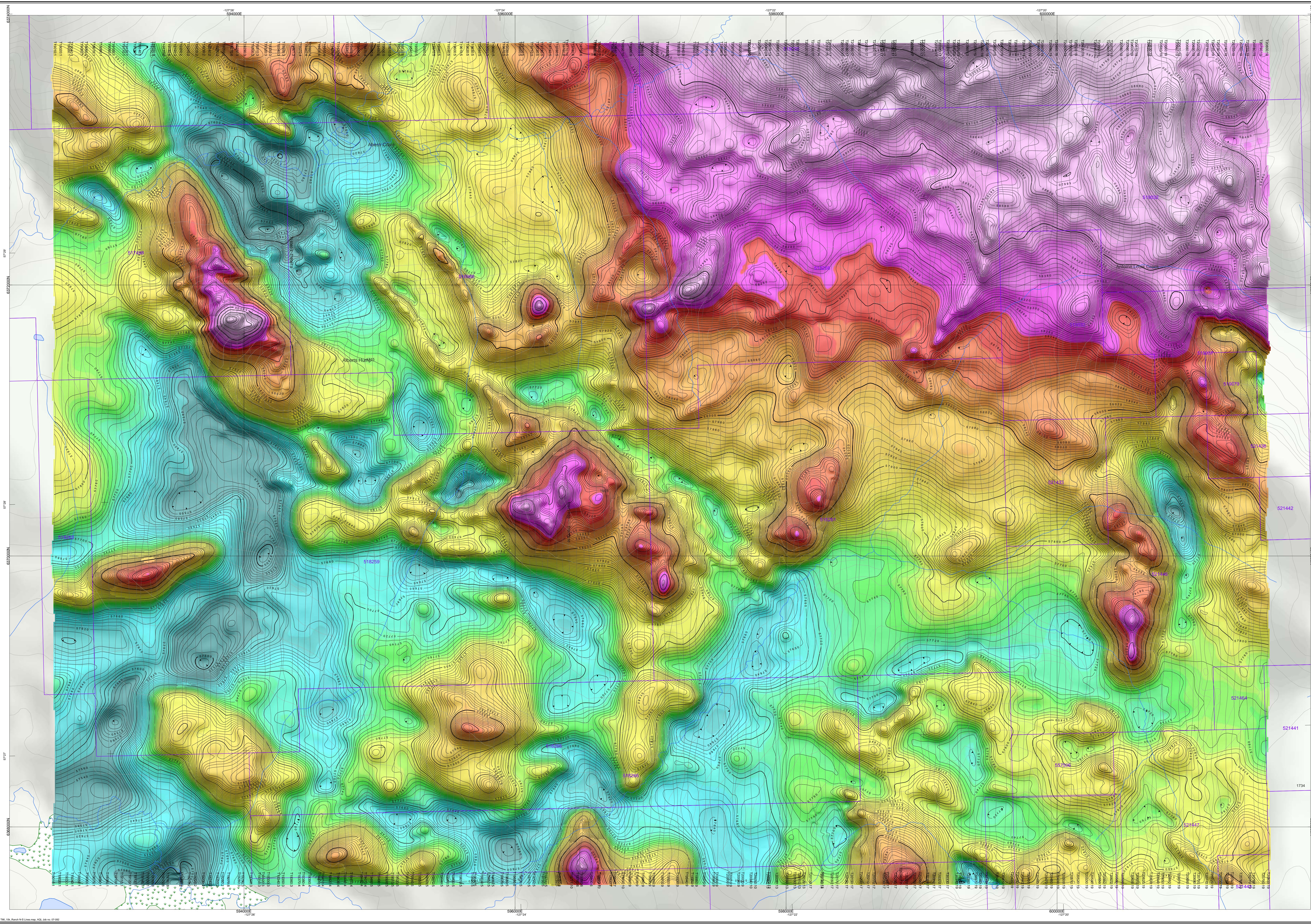
Survey from by:

AEROQUEST
LIMITED
A-STAR 350B-2

7887 Bath Road, Mississauga, ON, CANADA L4T 3T1
Tel: (905) 675-9125 Fax: (905) 672-7030
www.aeroquest.ca

July 2007

TMI Ranch E-W Lines



The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data.

Inset data derived from Natural Resources Canada's Atlas of Canada Base Map.

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Ranch Property, Toodoggone Area, British Columbia, by Aerogeomatics Limited, July 2007.'

Grid North
NAD83-Zone18

Scale 1:10,000,000

59143
58665
58549
58455
58342
58244
58165
58053
58039
57993
57953
57914
57884
57861
57838
57819
57803
57790
57777
57765
57753
57740
57727
57712
57696
57678
57651
57626
57581
57388

TMI
dT

TMI Contour Interval

10nT
20nT
500nT

SURVEY SPECIFICATIONS:

Survey flown: April 27 to May 11, 2007
Traverse line spacing: 50 metres
Traverse line direction: 0° Azimuth (N-S)
Nominal EM bird height: 30 metres
Aircraft: Aerogeomatics A-Star 350B-2 (C-CPY)

INSTRUMENTATION:

Data acquisition: HelMAG - Tri-Directional Total Field/Gradient
Magnetometers: 4 x G823A Cesium Vapour sensors
Installation: Towed bird (30m nominal ground clearance)
Sensitivity: .004 nanoTesla
Sample Interval: 10 Hz
Gamma Ray Spectrometer: PicEnvirotec AGRS GRS 10-S
Downward looking crystal vol. - 16.8L (1024cu in)
Upward looking crystal vol. - 4L (256cu in)
Sample Interval: 1.0 seconds
Channels: 256
Installation: In helicopter

NAVIGATION:

Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING

Magnetics: diurnal, tideline and micro-leveling corrections

POSITIONING

Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191

MAP PROJECTION

Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:10,000

200 0 200 400 600
Metres
MGS 041 1/1789 area (N)

Christopher James Gold
Toodoggone Area, British Columbia

**TOTAL MAGNETIC
INTENSITY**

Ranch N-S Lines Block

NTS 094E06

Survey flown by
AEROQUEST
Aerogeomatics Ltd.
7687 Bath Road, Mississauga, ON, CANADA L4T 3T1
Tel: (905) 672-9229 Fax: (905) 672-7055
www.aerogeomatics.ca

July 2007

TMI Ranch N-S Lines

GEOPHYSICAL REPORT

FOR A

3D INDUCED POLARIZATION SURVEY

ON THE

RANCH PROJECT

Toodoggone Area, British Columbia

Location of Grid:

597500E, 6371400N (NAD_83 Zone 9)

NTS sheets: 094E06

TRIM mapsheets: 094E043,044

Mining Division: Omenica

PREPARED FOR

GUARDSMEN RESOURCES INC.

SURVEY CONDUCTED BY

SJ Geophysics Ltd.

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1. SUMMARY

A 3D IP survey was used to explore an historically interesting site in the Toadoggone region of British Columbia. Christopher James Gold Corp. commissioned SJ Geophysics Ltd. to survey a portion of the Ranch property.

This geophysical report summarizes the operational aspects of the survey, the survey methodologies used and proposes a geophysical interpretation of the models obtained by inversion of the data gathered in the field.

2. INTRODUCTION

Christopher James Gold Corp. contracted SJ Geophysics Ltd. to conduct a 3DIP survey on the Ranch property, located in the Toddoggone area of British Columbia, approximately 65km northeast of the Kemess Mine.

The ground geophysical program, consisting of 31 lines totaling 61.3km was completed from August 13, 2007 to September 11, 2007. Initial quality control was performed on site, while the final data processing and inversions were carried out in the offices of S.J.V. Consulting Ltd.

The Ranch property exhibits “alterations and precious metal mineralization of high sulfidation epithermal style [...] Mineralization is centered on the north-west trending extensional faults related to regional extension. Previous exploration on the Ranch property has identified three northwesterly and one northeasterly trending faults systems which host significant precious metal mineralization. These include from west to east, the Thesis, JK, Bonanza and Ridge zones.” (Summary Report on the Ranch Property, Liard Mining District, British Columbia, Canada, by Andrew Kaip, M.Sc. and Fiona Childe, Ph.D.. October 2005)

The purpose of the geophysical survey was thus two fold: measure the geophysical response over known mineral occurrences on a relatively detailed scale and explore to significant depth

for a possible intrusive body.

3. LOCATION AND GRID INFORMATION

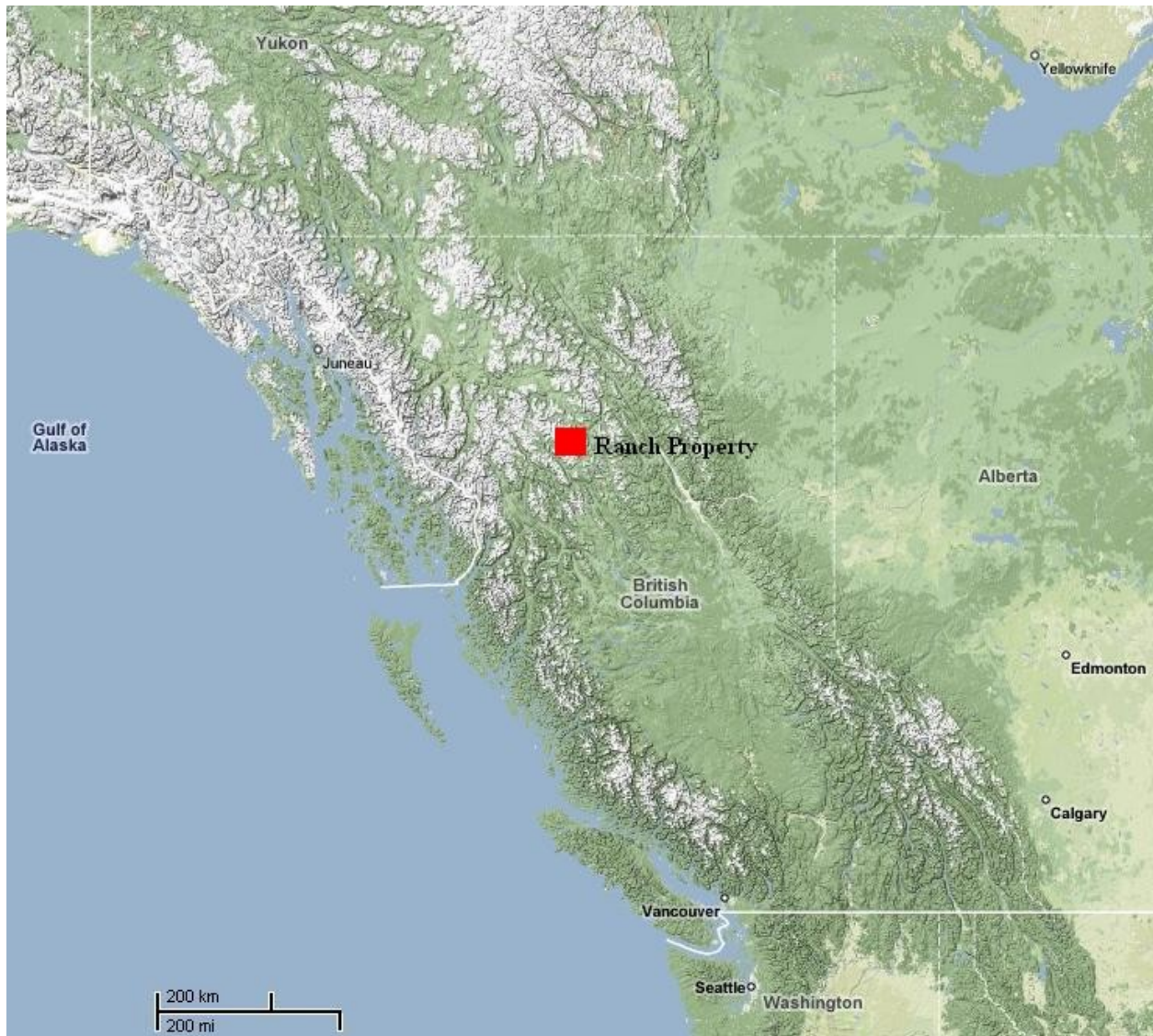


Illustration 1: Regional Map of the Ranch Property at the country scale (google map)

The geophysical grid is situated 470km northwest of Prince George, British Columbia. (see Illustration 1). The site was accessed by road to the Sturdee Strip airstrip from where a helicopter mobilized the crew and equipment to the camp.

The camp was situated right on the geophysical grid allowing very good access. The topography was relatively flat with elevations ranging from 1410m to 1730m. A total of 31 lines traversing to the east had a line spacing of 100m and were different in length, from 1100m to 3200m (see Illustration 2 for a map of the grid surveyed and Appendix 2 for the detailed breakdown of the lengths). GPS locations of all the gridded stations were provided by client and were collected in NAD_83 coordinates with a differential GPS.



Illustration 2: Location map of the 3DIP survey grid on the Ranch Property

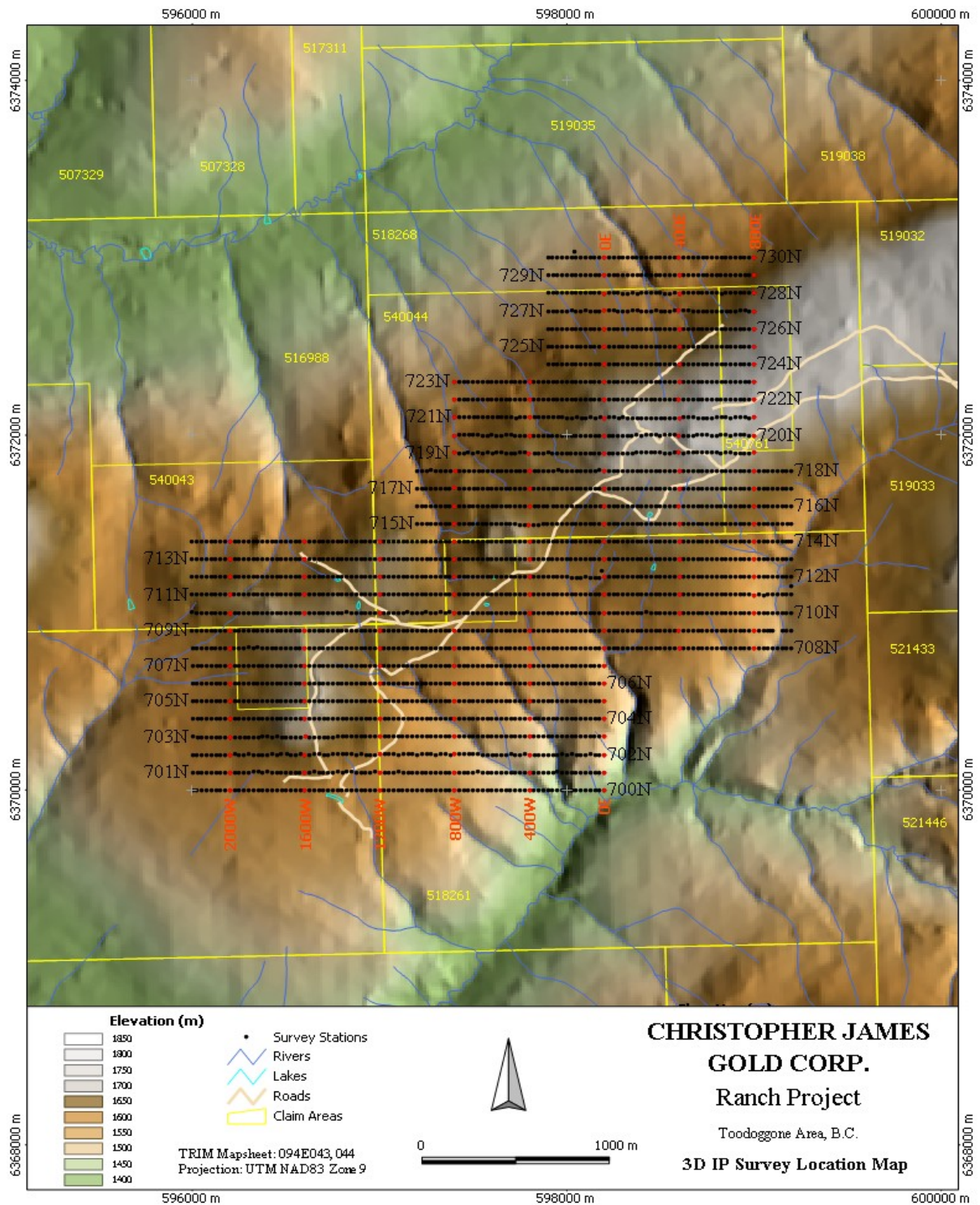


Illustration 3: Map of the Ranch 3DIP Survey Grid

4. FIELD WORK AND INSTRUMENTATION

4.1. Field Logistics

The SJ Geophysics Ltd. crew initially consisted of five SJ Geophysics employees: Rolf Krawinkel (Geophysicist), John Wilkinson (Crew Supervisor), Dustin Walcer (Technician), Bobby Benson (Technician) and Walter Mainville (Technician). The the client provided three helpers, Gary Pendencygrasse, Thea Greyeyes and Michael, to aid the survey.

Rolf, John, Dustin, Bobby and Walter mobilized with the geophysical instrumentation from Vancouver and made their way to Prince George on August 13th. They traveled to the Sturdee Strip airstrip and flew into camp via helicopter on August 15th. Rolf left the camp on August 25th and was replaced by Luran Devlin (Geophysical technician), who mobilized from Vancouver on August 29th.

The survey stations were put in place shortly before the geophysical survey started. In the open alpine, small metal rods with attached flags were used to mark the stations. The location of these flags was later determined by high quality GPS measurements. In some of the lower lying areas there were places with a significant amount of bush. Lines in this area were cut with a chain saw.

In general the data acquired on this project was very clean. Good currents were able to be injected and the background resistivities allowed good signal at the far end of the array. The IP effect (chargeability) decay curves were very smooth although the values measured were low.

The open terrain allowed some high production days but the weather with rain and wind slowed the production.

On August 16th, the crew laid out remotes and current lines and started recording. IP measurements started on line 718N and progressed south to line 700N. On September 1st, the crew moved to the west side of the grid and surveyed the remaining parts of lines 700N to 708N. Then the crew returned to the north side on September 5th and surveyed lines 718N to 730N. The

survey was finished on September 10th.

From September 11th to 13th, the crew demobilized from camp to their respective places of origin.

4.2. Survey Parameters and Field Instrumentation

For the entire survey, the electrode array consisted of a modified pole-dipole 3D-IP configuration that used a combination of 12 to 16 dipoles. Measurements were taken every 50m. All data was collected using the proprietary SJ-24 Full-Waveform Digital Receiver (Rx). The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a transmitter (Tx). A VIP 3/4000 model transmitter was utilized during the duration of the program. For further information on the instrumentation, their specifications are located in Appendix 3 at the end of the report.

The dipole array was implemented using standard 8 conductor cables configured with potential electrodes spaced 50m apart. At each current station, the electrodes used consisted of 5/8" stainless steel rods of approximately 1m in length. For the potential line, the electrodes consisted of 3/8" stainless steel "pins" of 0.5m in length. Current injections were spaced every 50m with an offset of 25m for the repeated current line while surveying the next receiver line.

The IP readings from each days surveying were downloaded to a computer and entered into a database archive every evening. The database program allows the operator to display the IP decay curves in an efficient manner, and this provides a visual review of the data quality on site.

5. GEOPHYSICAL TECHNIQUES

5.1. IP Method

The time domain IP technique energizes the ground surface with an alternating square wave pulse via a pair of current electrodes. On most surveys, such as this one, the IP/Resistivity measurements are made on a regular grid of stations along survey lines.

After the transmitter (Tx) pulse has been transmitted into the ground via the current electrodes, the IP effect is measured as a time diminishing voltage at the receiver electrodes. The IP effect is a measure of the amount of IP polarized materials in the subsurface rock. Under ideal circumstances, IP chargeability responses are a measure of the amount of disseminated metallic sulfides in the subsurface rocks.

Unfortunately, there are other rock materials that give rise to IP effects, including some graphitic rocks, clays and some metamorphic rocks (serpentinite for example). So from a geological point of view, IP responses are almost never uniquely interpretable. Because of the non-uniqueness of geophysical measurements it is always prudent to incorporate other data sets to assist in interpretation.

Also, from the IP measurements the apparent (bulk) resistivity of the ground is calculated from the input current and the measured primary voltage. IP/resistivity measurements are generally considered to be repeatable to within about five percent. However, they will exceed that if field conditions change due to variable water content or variable electrode contact.

IP/resistivity measurements are influenced, to a large degree, by the rock materials nearest the surface (or, more precisely, nearest the measuring electrodes), and the interpretation of the traditional pseudosection presentation of IP data in the past has often been uncertain. This is because stronger responses that are located near surface could mask a weaker one that is located at depth.

5.2. 3DIP Method

Three dimensional IP surveys are designed to take advantage of the interpretational functionality offered by 3D inversion techniques. Unlike conventional IP, the electrode arrays are no longer restricted to in-line geometry. Typically, current electrodes and receiver electrodes are located on adjacent lines. Under these conditions, multiple current locations can be applied to a single receiver electrode array and data acquisition rates can be significantly improved over conventional surveys.

In a common 3D-IP configuration, a receiver array is established, along a survey line while current electrodes are located on the two adjacent lines. The survey typically starts at one end of the line and proceeds to the other end. In some areas the potential electrode spacings are modified to compensate for local conditions such as inaccessible sites, streams, and areas of high conductivity. Current electrodes are advanced along the adjacent lines. Starting from one end they will advance through about $\frac{3}{4}$ of the potential array before the receiver needs to be moved ahead. In this case the moves were made every 400m ($\frac{1}{2}$ of the array length). When the end of the lines are reached the receiving array is moved over 2 lines and the common current line is repeated using the stations offset by 25m. In this way a spatial resolution is achieved down to 25m in the field which merits an analysis on a 12.5m cell size mesh.

The full length potential array is 800m and this will allow a nominal depth of penetration of $\frac{1}{2}$ of this or 400m below the middle of the full spread.

5.3. Inversion Programs

“Inversion” programs have recently become available that allow a more definitive interpretation, although the process remains subjective. The purpose of the inversion process is to convert surface IP/Resistivity measurements into a realistic “Interpreted Depth Section.” However, note that the term is left in quotation marks. The use of the inversion routine is a subjective one because the input into the inversion routine calls for a number of user selectable variables whose adjustment can greatly influence the output. The output from the inversion routines do assist in providing a more reliable interpretation of IP/Resistivity data, however, they are relatively new to the exploration industry and are, to some degree, still in the experimental stage.

The inversion programs are generally applied iteratively to evaluate the output with regard to what is geologically known, to estimate the depth of detection, and to determine the viability of specific measurements.

The Inversion Program (DCINV3D) used by the SJ Geophysical Group was developed by a consortium of major mining companies under the auspices of the UBC-Geophysical Inversion Facility. It solves two inverse problems. The DC potentials are first inverted to recover the spatial distribution of electrical resistivity, and, secondly, the chargeability data (IP) are inverted to recover the spatial distribution of IP polarizable particles in the rocks.

The interpreted depth section maps represent the cross sectional distribution of polarizable materials, in the case of IP effect, and the cross sectional distribution of the resistivity, in the case of the resistivity parameter.

6. DATA PRESENTATION

6.1. The Inversion Models

The inversion models presented in the following section have been computed using data gathered during the August 13, 2007 to September 11, 2007 survey.

Given the small line and station spacing and the good quality of the data, the inversion models were expected to give relatively complex geophysical features. The topography for the inversion model has been extracted from the BC TRIM DEM as the elevations it provided were coinciding very well with the survey stations elevations provided by the Digital GPS measurements. The purchased BC TRIM DEM provided good topographic coverage in between the lines to assist in creating more accurate inversion models.

The inversion first ran with a “coarse” mesh composed of 25m cells in the northern and eastern directions. Results were obtained after a relatively short inversion calculation and were delivered as preliminary images. Given the limitation in computing efficiency when the amount of cells becomes too large, the model had to be split into three separate parts that would run independently for the “fine” inversion (12.5m cells in the northern and eastern directions). These three blocks were then merged together after the resistivity inversion but the resulting model was not satisfying due to discrepancies between the background resistivity values of the three blocks. We thus decided to not run the fine chargeability inversion and to concentrate on the coarse inversion, re-running it while slightly changing the inversion parameters in order to let the calculation add more structure to the models. The results obtained by this method were considered as satisfying even though we conceded the 12.5m accuracy that the fine inversion granted.

6.2. Visualization of the Inversion Models

False color contour maps of the inverted resistivity and chargeability results can be produced for selected depths. Data is positioned using UTM coordinates gathered during the field work. This display illustrates the regional distribution of the geophysical trends, outlining strike orientation and possible fault offsets.

The topography variations add a level of complexity to the interpretation, especially with the use of plan maps. Plan maps can be displayed in two ways: depth below topography or as horizontal slices in terms of elevation. For the purposes of this report, the plan maps produced were created at depth below the surface.

Plan maps plotted for both resistivity and chargeability at depths of 25m, 50m, 75m, 100m, 125m, 150m, 175m, 200m, 250m are provided in Appendix 6.

Vertical slices of the resistivity and chargeability models are also plotted as false color sections for each survey line (Tx and Rx). This allows the direct comparison of the resistivity and chargeability variations.

With the computer technology that exists today, the 3D inversion results can also be easily viewed using a 3D visualization program such as UBC-GIF's Dicer3d program or open-source software such as Paraview. These programs allow one to plot contour and thresholds of the resistivity and chargeability models simultaneously. It enhances the interpretation process by illustrating the direct association between the different parameters.

For this project, informations about the 2007, 2006 and historical drilling programs have been provided by the client for the Bonanza, Ridge, Thesis and JK area. The locations of the drillhole collars are visible on the planmaps and the assays have been represented on Paraview. Integrating drillholes information into geophysical models is very useful as it helps the interpretation of the data.

7. DISCUSSION OF THE INVERSION RESULTS

The following discussion of the geophysical data will provide a brief interpretation of each individual geophysical parameter (resistivity and chargeability), and then look at the association between these parameters for a complete compilation and deduce a possible relation with the geology of the area.

All locational references will be based on the local coordinates system for this grid. Please refer to Illustration 2 for orientation of the grid.

7.1. Resistivity

Illustrations 4 and 5 show plan views of the inverted resistivity model 75 and 150m below the topography. Examination of the model clearly illustrates the existence of 3 zones exhibiting different resistivity properties.

Zone 1 is defined by a relatively high resistivity (between 360 and 1200 ohm-m). It is located in the southwest corner of the survey area, roughly to the west of the imaginary line between line 700N station 1000W and line 714N station 2000W. Zone 1 is well delimited to the east and open to the west and south.

Zone 2 is an area of intermediate resistivity values. It contrasts with the relatively high resistivity feature of Zone 1 revealing a possible contact or fault. Note that this contrast is smoother at depth than at the near surface (contrast between Illustration 4 and 5). Within this zone lies four major lineations and four isolated pods of medium-high resistivity (between 360 and 840 ohm-m) constituting the main interest of this survey.

Zone 3 is located to the north of the grid, above the imaginary line running approximately from line 719N station 800W to line 723N station 700E. It is defined by a relatively high resistivity zone (> 360 ohm-m). Zone 3 is well defined to the south and open to the west, the north and the east. The transition between Zone 2 and 3 is relatively smooth, revealing a possible

contact or fault.

Of these three area, Zone 2 appears like the most interesting one because it hosts lineations and pods of medium-high resistivity. It also exhibits mineral occurrences and has been extensively drilled.

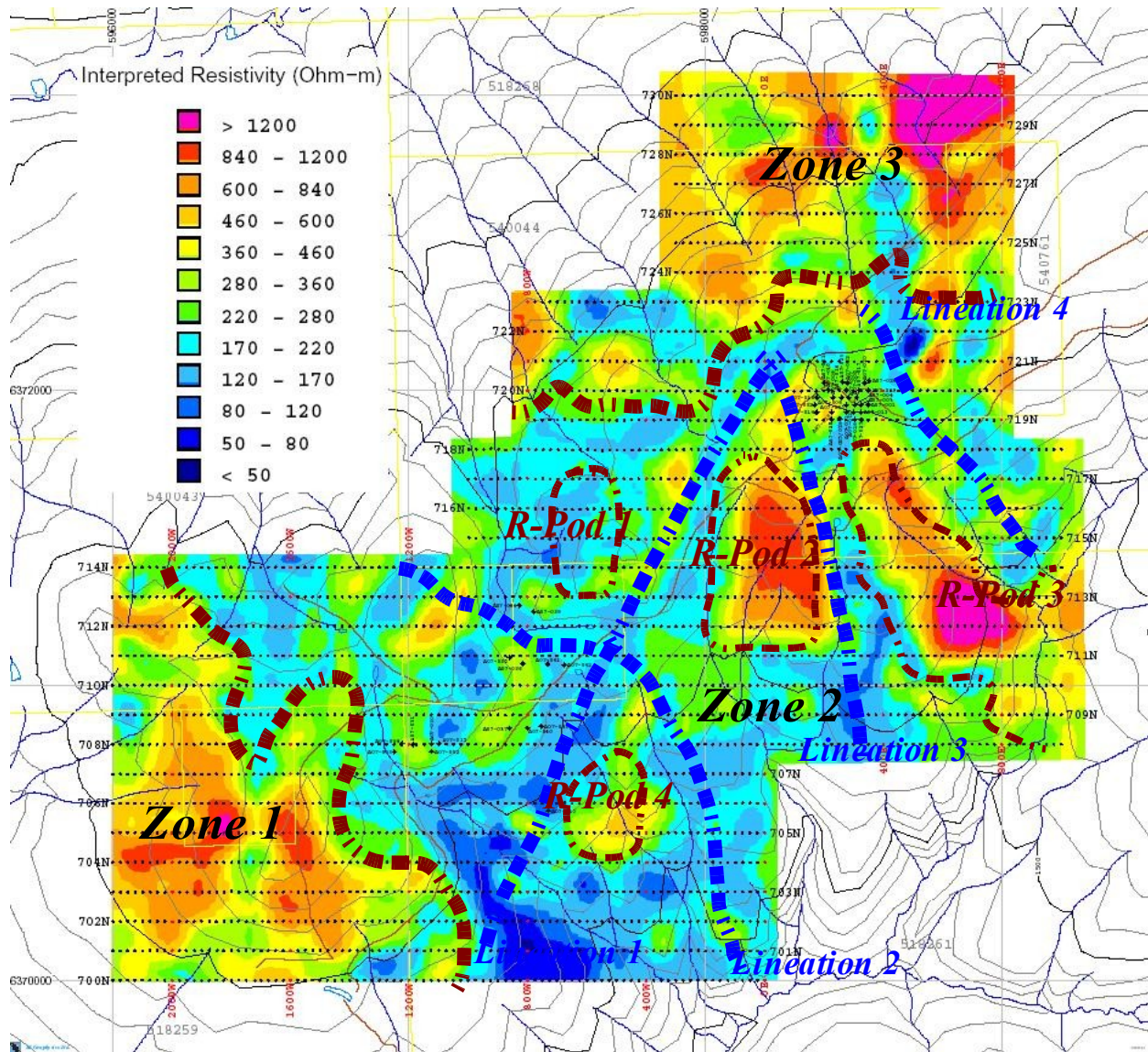


Illustration 4: Plan Map of the Interpreted Resistivity model at 75m below the topography.

- thick dashed brown lines: limits of the three different zones;
- thick dashed blue lines: lineations;
- fine dashed brown lines: limits of the relatively high resistivity pods.

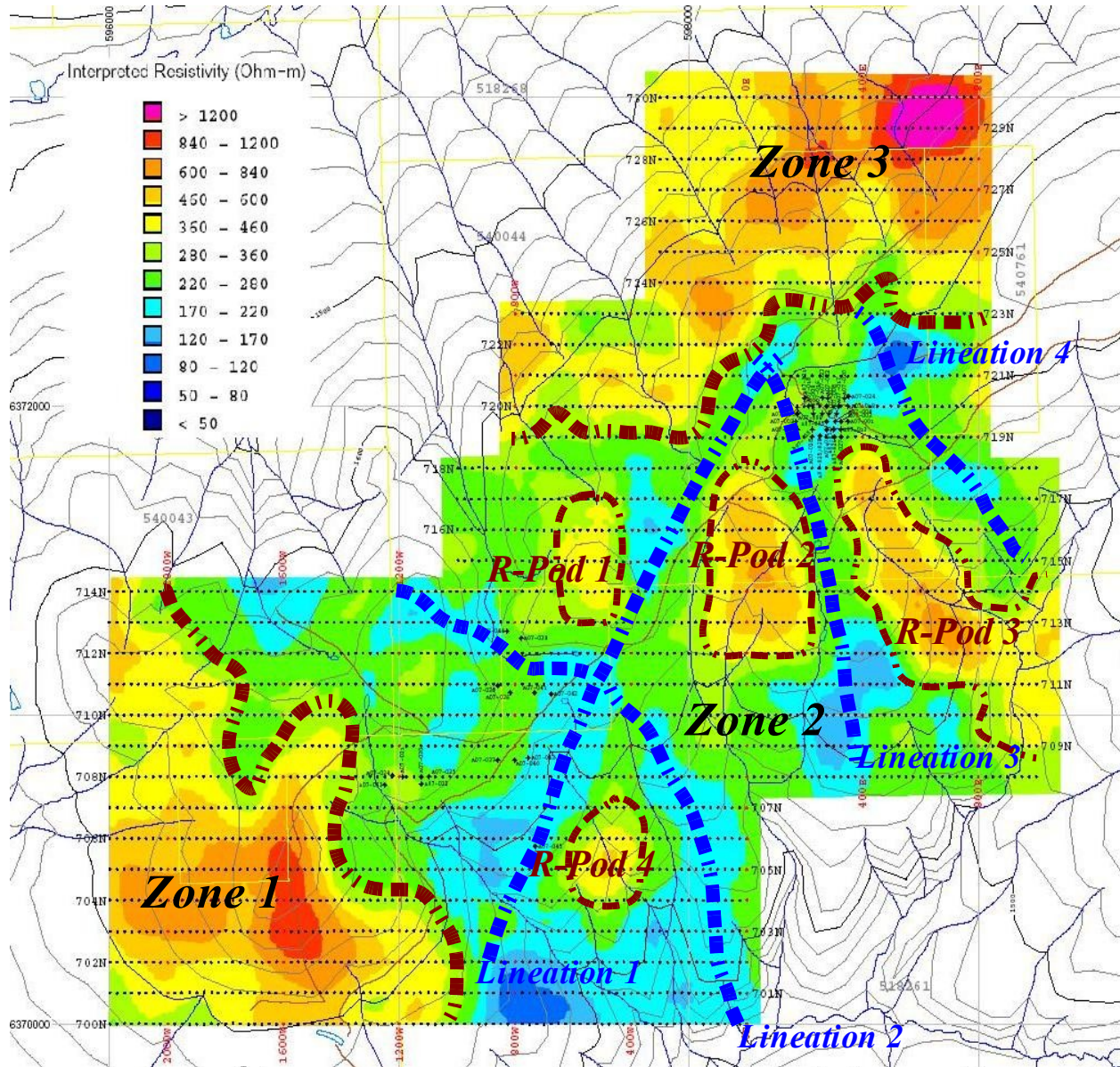


Illustration 5: Plan Map of the Interpreted Resistivity model at 150m below the topography.

- thick dashed brown lines: limits of the three different zones;
- thick dashed blue lines: lineations;
- fine dashed brown lines: limits of the relatively high resistivity pods.

Lineation 1 follows a low resistivity trend cutting through the intermediate resistivity values of Zone 2, clearly visible from the near surface to the deeper layers. This low resistivity trend can be either linked to the topography (Lineation 1 runs along a ridge crossing the grid) or to a geological break (contact or fault).

Lineation 2 roughly describes a curved line crossing Lineation 1 and running southeast-northwest from line 700N station 0E to line 711N station 500W then to line 714N station 1200W. It crosses a zone of intermediate-low resistivity (between 120 and 280 ohm-m). Similarly to Lineation 1, Lineation 2 follows a low resistivity trend cutting through the intermediate resistivity values of Zone 2. It is visible from the subsurface but gains in intensity with depth. Lineation 2 roughly follows the path taken by small rivers crossing the survey area (one running from the top of the ridge towards the south, the other one running from the top of the ridge towards the north) characterizing a possible change in geology (fault or geological contact).

Lineation 3 trends south-southeast to north-northwest and also intersects Lineation 1 at an angle of approximately 65 degrees. It extends from line 708N station 400E to line 721N station 100E where it crosses a zone of intermediate resistivity. Lineation 3 is following a low resistivity trend cutting through an area of relatively high resistivity values (between 360 and 840 ohm-m) and is visible from the near surface to depth. Lineation 3 roughly follows the path of a small river running from a small lake at the top of the ridge towards the south, characterizing a possible change in geology (fault or geological contact).

Lineation 4, runs almost parallel to Lineation 3 and extends from line 715N station 1000E to line 723N station 400E. It crosses a zone of intermediate-low resistivity zone (between 120 and 280 ohm-m) and is flanked to the northeast by a relatively low resistivity feature (between 80 and 170 ohm-m). Like Lineations 1 and 2, Lineation 4 follows a low resistivity trend cutting through the intermediate resistivity values of Zone 2. It is visible from the subsurface to depth and roughly follows a small river running from the top of the ridge toward the southeast, characterizing a change in geology (fault or geological contact).

R-Pod 1 (between 360 and 460 ohm-m) is located to the west of Lineation 1 and to the north of Lineation 2 between lines 711N and 717N and stations 400W and 800W. R-Pod 1 is not outstanding from the surface of the resistivity inversion model (intermediate resistivity at 75m below the topography on Illustration 4) and appears with depth (approximately below 100m

depth below the topography, clearly visible at 150m below the topography on Illustration 5).

R-Pod 2 (between 360 and 840 ohm-m) lies to the east of Lineation 1, in between Lineation 2 and 3. It extends from line 711N to line 718N and from station 200W to station 200E. R-Pod 2 is clearly visible from the surface of the resistivity inversion model with higher resistivity values (ranging from 360 to 1200 ohm-m at 75m below the topography on Illustration 4) and fades with depth (360 to 600 ohm-m at 150m below the topography on Illustration 5).

R-Pod 3 (between 360 and 840 ohm-m) is the more extended of the four pods. It lies between Lineations 3 and 4, roughly trending southeast-northwest from line 709N to line 719N. R-Pod3s extent to the west is well defined by the survey but it remains open to the east. R-Pod 3 is visible from the surface of the resistivity inversion model where it represents one of the highest resistivity features (above 360 ohm-m at 75m below the topography on Illustration 4). It then progressively fades with depth (between 360 and 600 ohm-m at 150m below the topography on Illustration 5).

R-Pod 4 (between 360 and 600 ohm-m) lies to the east of Lineation 1 and to the south of Lineation 2. It is located between lines 704N and 706N and stations 400W and 600W. R-Pod 4 is visible from the surface of the inversion model, with resistivity values ranging between 360 and 600 ohm-m (at 75m below the topography on Illustration 4). It then progressively fades with depth (between 360 and 600 ohm-m at 150m below the topography on Illustration 5).

7.2. Chargeability

The inversion model for the chargeability, represented on Illustration 6 and 7 (respectively 75m and 175m below the topography), exhibits eight pods of relatively high chargeability (above 7ms).

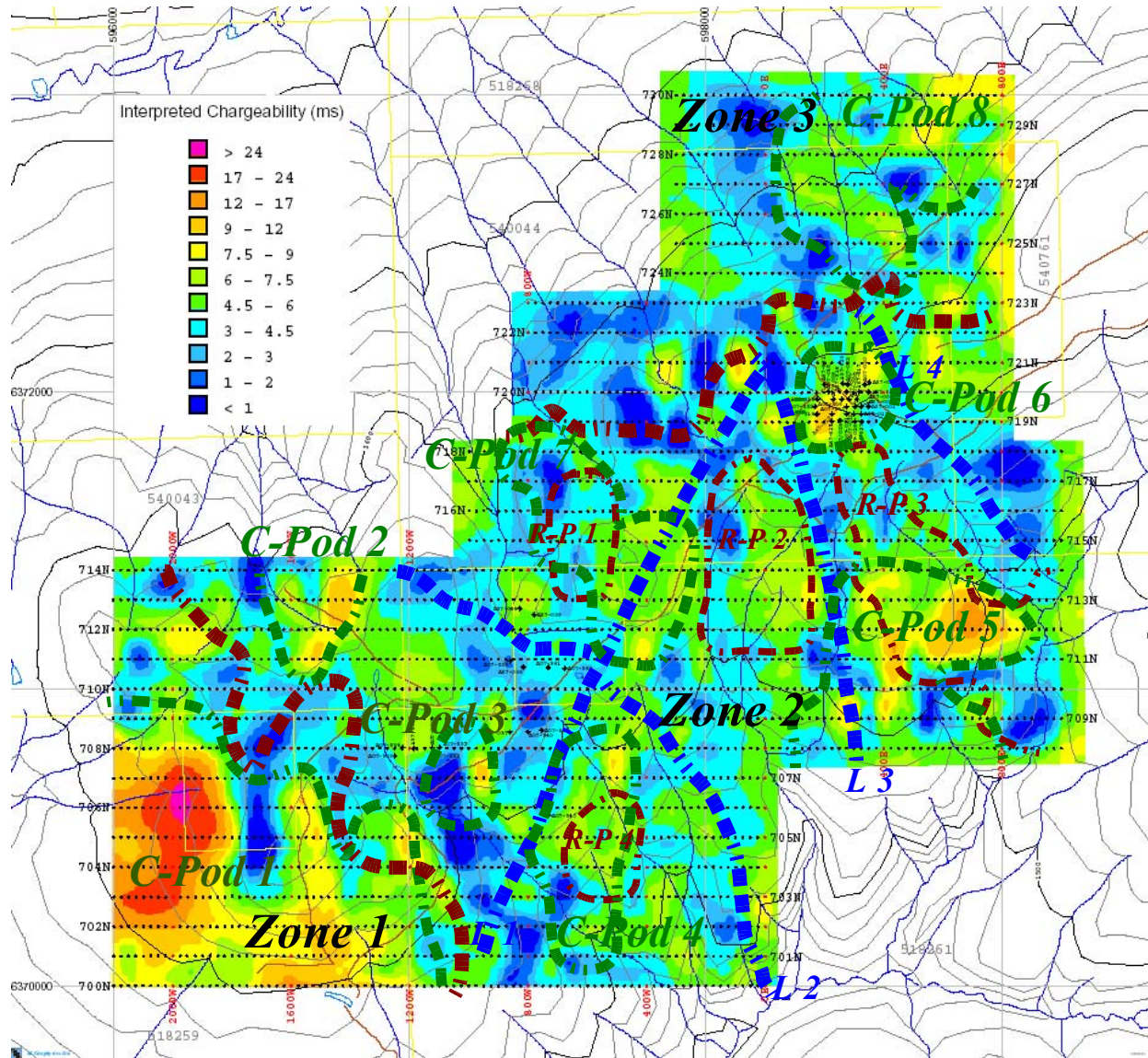


Illustration 6: Plan Map of the Interpreted Chargeability at 75m below the topography.

- thick dashed brown lines: limits of the three different zones;
- thick dashed blue lines: Lineations;
- fine dashed brown lines: limits of the relatively high resistivity pods.
- thick dashed green lines: limits of the relatively high chargeability pod.

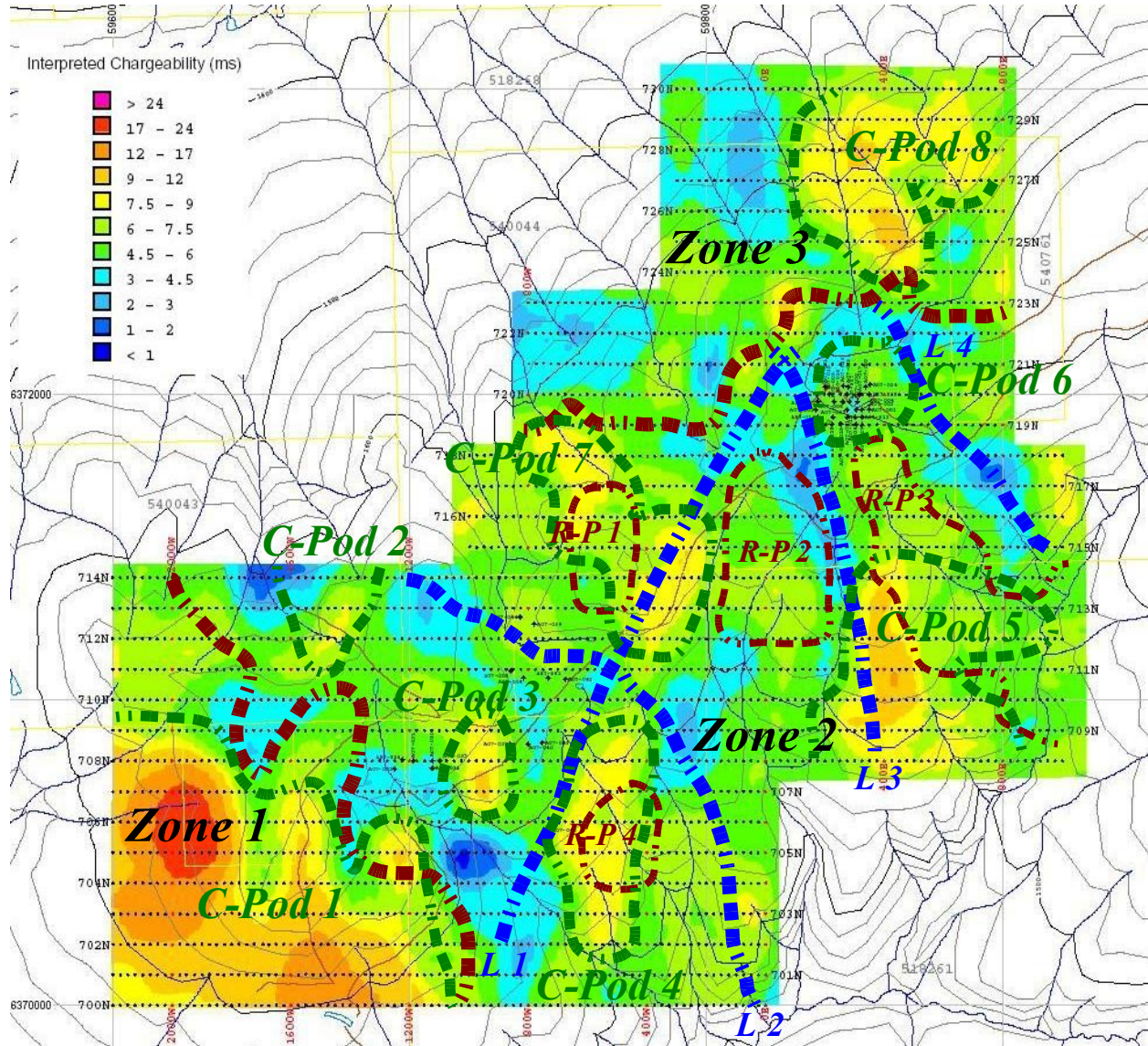


Illustration 7: Plan Map of the Interpreted Chargeability at 150m below the topography.

- thick dashed brown lines: limits of the three different zones;
- thick dashed blue lines: Lineations;
- fine dashed brown lines: limits of the relatively high resistivity pods.
- thick dashed green lines: limits of the relatively high chargeability pod.

C-Pod 1 (above 24 ms) is mainly situated in resistivity Zone 1 described earlier. Its extent to the south and the west are limited by the survey. It roughly runs from the southern edge of the grid up to line 709N and from the west edge of the survey grid to 2200W. It coincides with the relatively high resistivity feature mentioned earlier (see Illustration 8). C-Pod 1 is visible from

the surface of the chargeability model with values above 7 ms (visible at 75 m below the topography on Illustration 6), slightly intensify with depth and eventually fades under 125m below the topography (values ranging between 7 and 24 m at 150 m below the topography on Illustration 7).

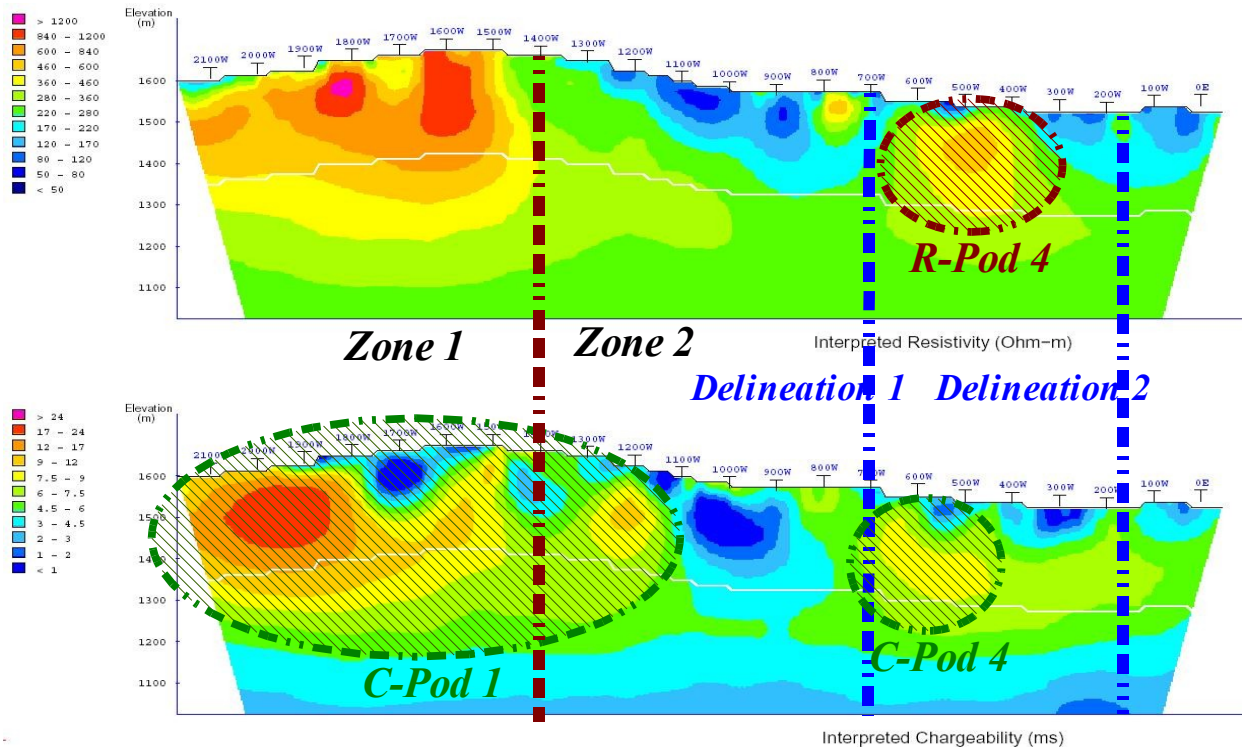


Illustration 8: 3D Section of the Interpreted Resistivity and Chargeability at Line 705N.

- thick dashed brown lines: limits of the different zones;
- thick dashed blue lines: lineations;
- hatched brown circle: limits of the relatively high resistivity pod;
- hatched green circle: limits of the relatively high chargeability pod.

C-Pod 2 (between 6 and 12 ms) extends north of line 711N and approximately between stations 1400W and 1700W in resistivity Zone 2. It is flanked by Lineation 2 to the east and is open to the north (see Illustrations 7 and 8). It is visible from the surface (between 6 and 9 ms at 75 m below the topography on Illustration 7) and becomes slightly stronger at depth (between 6 and 12 ms at 150m below the topography on Illustration 8). It is located in the Bingo drilling

zone that will be presented later.

C-Pod 3 (between 6 and 12 ms) lies in resistivity Zone 2, approximately between lines 706N and 710N, and stations 800W and 1100W. It is located north of Lineation 1 and west of Lineation 2. It is partly visible from the surface and becomes more extended at depth. C-Pod 3 is located in the Thesis drilling zone that will be presented later.

C-Pod 4 (above 4 ms) extends in resistivity Zone 2, approximately from line 702N to line 710N and from station 700W to station 400W following a south-southwest to north-northeast trend. C-Pod 4 runs along Lineation 1 (see Illustration 8) and crosses Lineation 2 at an approximate angle of 40 degrees. It coincides with R-Pod 4 and is flanked by R-Pod 1 to the northwest and R-Pod 2 to the northeast (see Illustrations 6 and 7). C-Pod 4 is visible from the surface of the chargeability model with intermediate chargeability values (between 6 and 7 ms at 75 m below the topography on Illustration 6) and becomes stronger at depth till approximately 150m below the topography (between 4 and 9 ms at 150m below the topography on Illustration 7) and then progressively fades with depth.

C-Pod 5 (between 7 and 17 ms) is located in the southeast corner of the survey grid, in resistivity Zone 2. Its extent to the south is limited by the survey but it runs to the north up to line 714N and runs approximately between stations 200E and 900E, coinciding with Lineation 3. It is flanked by R-Pod 2 to the northwest and by R-Pod 3 to the northeast (Illustration 9). C-Pod 5 is visible from the surface and progressively fades with depth.

C-Pod 6 (between 6 and 12 ms) lies in resistivity Zone 2, in the Bonanza drilling zone that will be presented later. It approximately extends from line 718N to line 722N and from station 100E to station 500E. It is situated to the north of R-Pod3 and between Lineation 3 and 4. C-Pod 6 is visible from the near surface with medium-high chargeability values (between 6 and 12 ms at 75 m below the topography on Illustration 6) and progressively fades with depth (between 6 and 8 ms at 150m below the topography on Illustration 7).

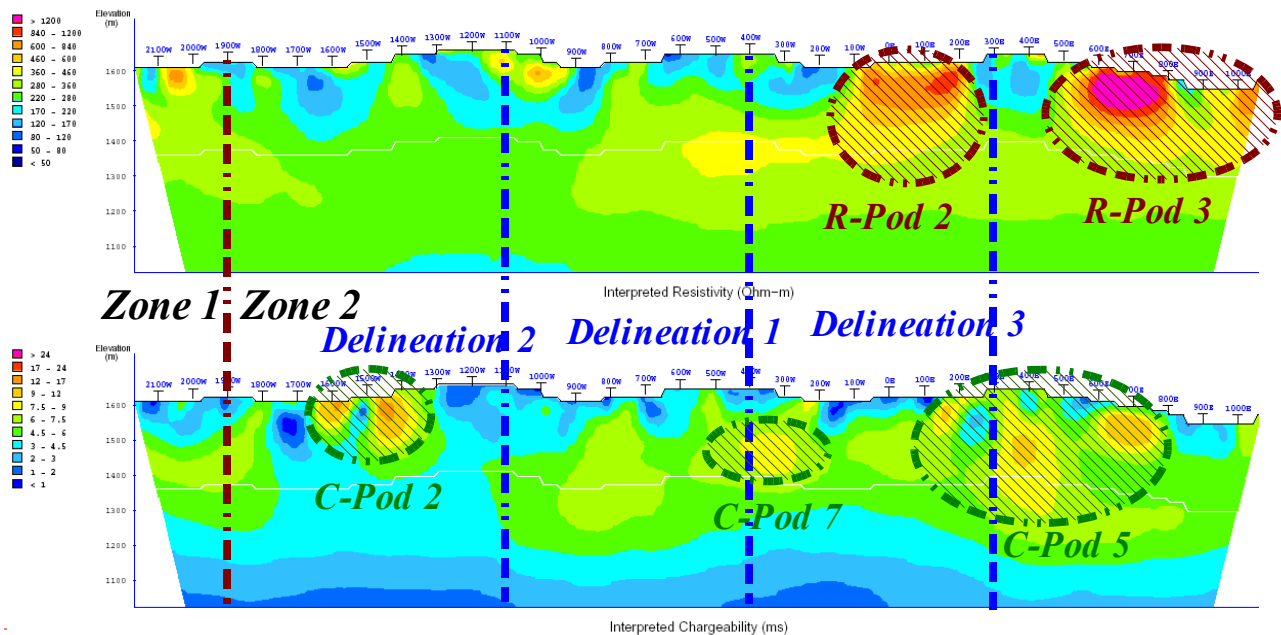


Illustration 9: 3D Section of the Interpreted Resistivity and Chargeability at Line 713N.

- thick dashed brown lines: limits of the different zones;
- thick dashed blue lines: Lineations;
- hatched brown circle: limits of the relatively high resistivity pod;.
- hatched green circle: limits of the relatively high chargeability pod.

C-Pod 7 (between 6 and 9 ms) is located in the transition between resistivity Zone 2 and resistivity Zone 3. It approximately extends from line 715N to line 719N and from station 400W to station 800W slightly trending southeast-northwest. The southern part of C-Pod 7 coincides with Lineation 1 (see Illustration 9) and its middle part coincides with R-Pod 1. C-Pod 7 is not visible from the near surface and appears below 100m below the topography.

C-Pod 8 is located in the northeast of the survey grid, in the resistivity Zone 3 described earlier. Its extent to the east and to the north are limited by the survey. It approximately runs from the northern edge of the grid down to line 724N and from the eastern edge of the grid to station 0E. It coincides with the relatively high resistivity feature located in Zone 3 (see Illustration 10). C-Pod 8 is visible from the surface of the chargeability model with intermediate values (between 6 and 9 ms at 75 m below the topography on Illustration 6) and becomes stronger at depth (between 6 and 17 at 150 m below the topography on Illustration 7).

3D IP Geophysical Report: Ranch Project, Guardsmen Resources Inc., 2008

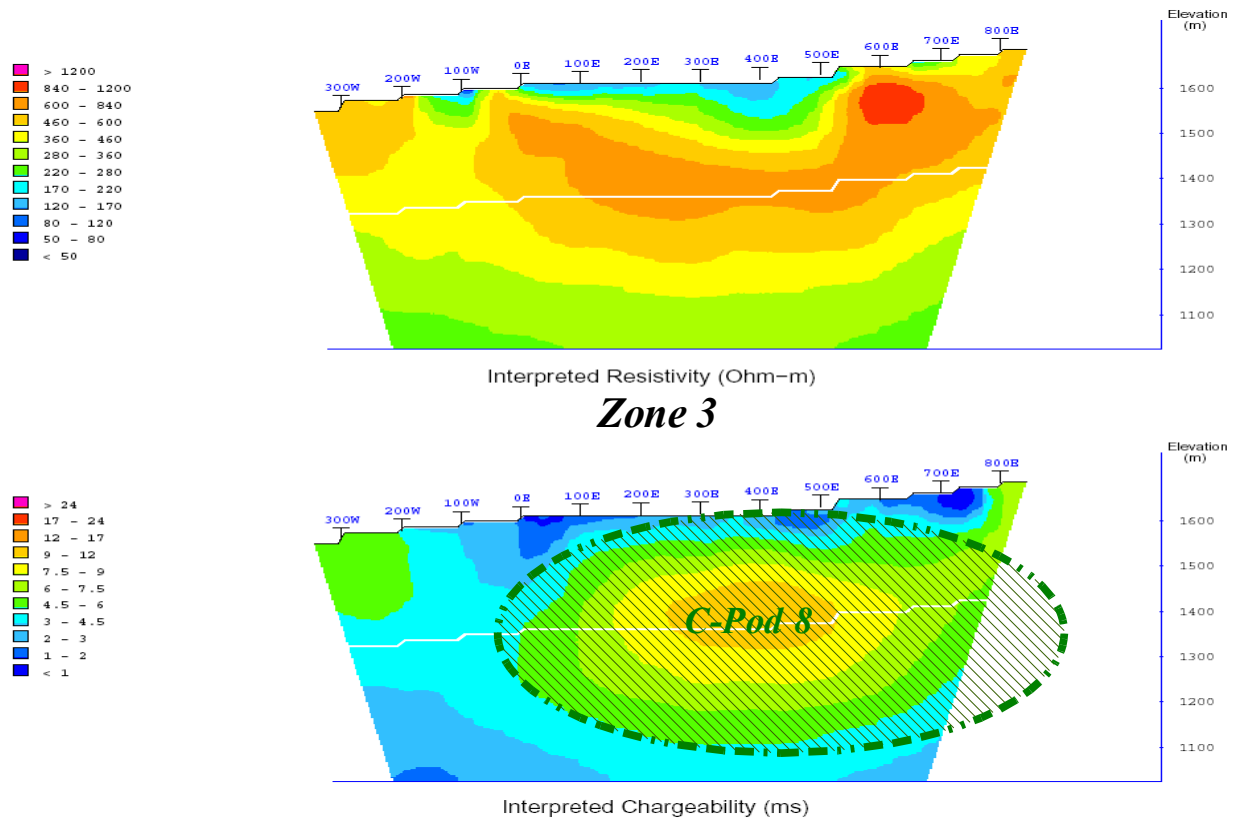


Illustration 10: 3D Section of the Interpreted Resistivity and Chargeability at Line 728N.

- thick dashed brown lines: limits of the different zones;
- thick dashed blue lines: Lineations;
- hatched brown circle: limits of the relatively high resistivity pod;.
- hatched green circle: limits of the relatively high chargeability pod.

7.3. Relation between the inversion models and the past drillhole results

Drillhole information have been provided for Bonanza, Ridge, Thesis, JK and Bingo, the five main zones located in the survey area (see Illustration 11).

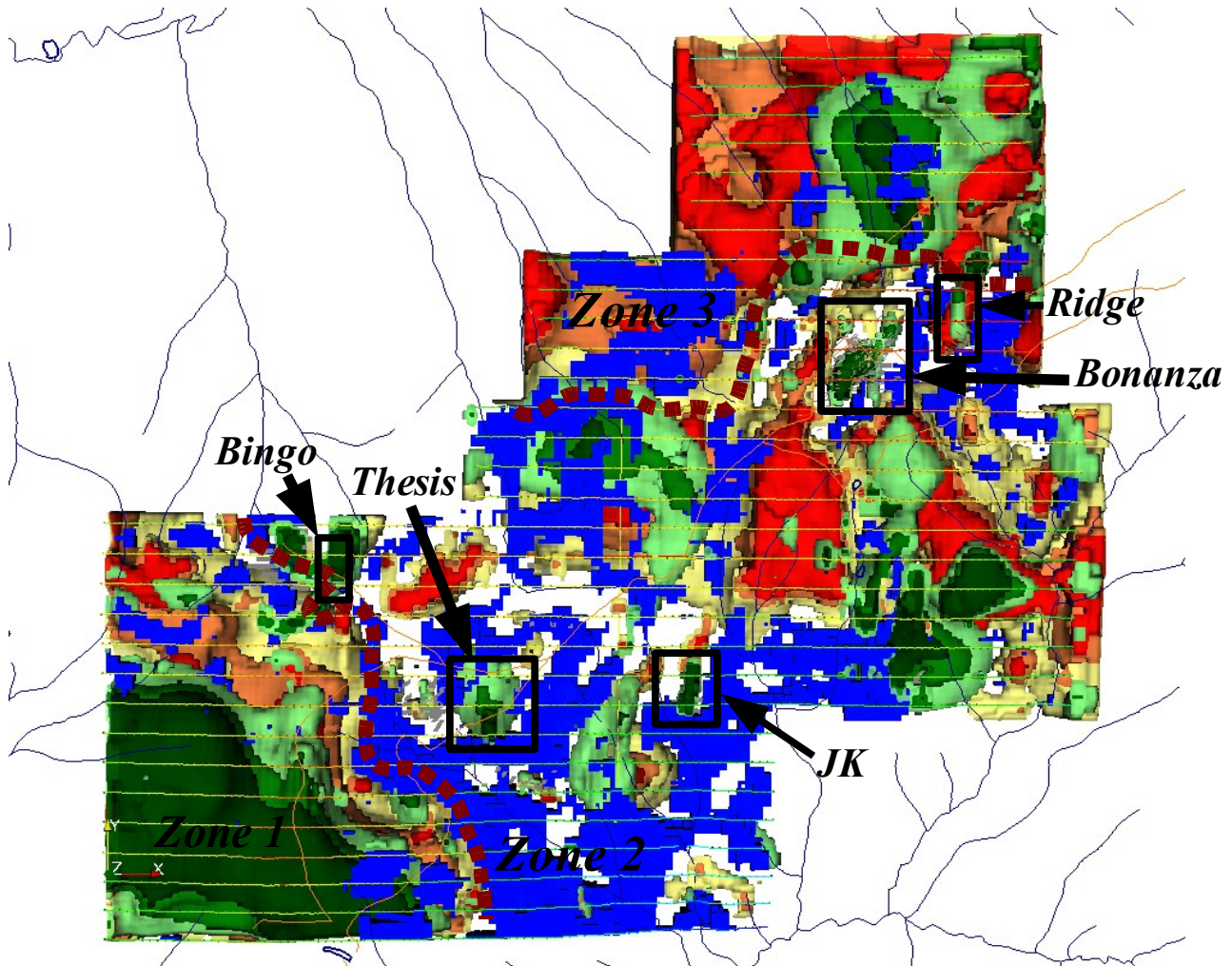


Illustration 11: Top view of the Resistivity and Chargeability models displayed in Paraview.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- blue threshold: resistivity between 1 and 150 ohm-m;
- yellow: resistivity isocontour at 300 ohm-m;-orange : resistivity isocontour at 400 ohm-m;
- red: resistivity isocontour at 500 ohm-m;
- thick dashed brown lines: limits of the different resistivity zones;
- thick black rectangles: delimitation of the drillholes area.

These mineralized zones exhibit “alteration and mineralization characteristic of high-sulphidation epithermal systems, with high-grade gold mineralization hosted within zones of vuggy silicate centered on north-northwest trending extensional faults and subsidiary northeast and northwest trending tensional faults” (Kaip and Childe, 2005).

The Bonanza zone has been intensively drilled throughout time (assays available for historical -date non communicated- and 2007 drillhole programs). It is located in the resistivity Zone 2 described earlier, between Lineations 3 and 4, to the north of R-Pod 3 and coincides with C-Pod 6. This area corresponds to intermediate resistivity (between 170 and 280 ohm-m) and chargeability (below 10 ms) zones. The drillholes are all intersecting an intermediate

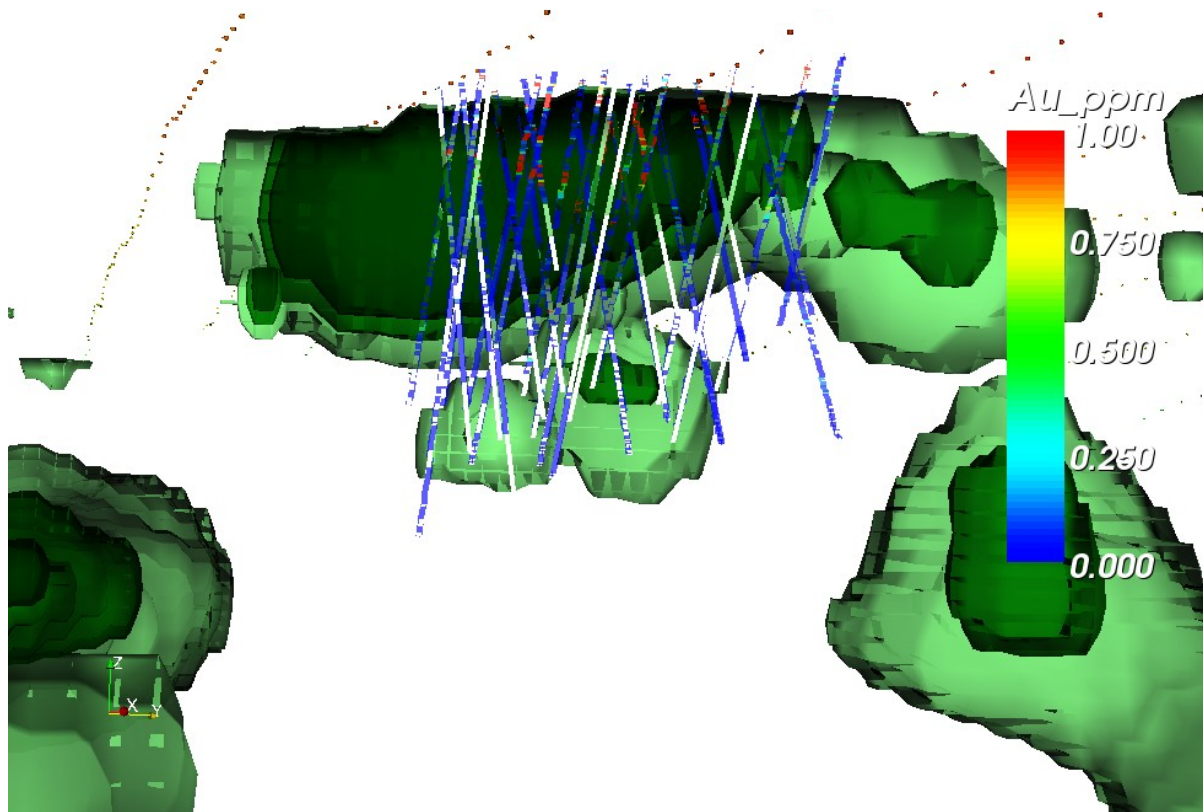


Illustration 12: Low angle Shot of the Bonanza area versus the chargeability model.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- gold assays displayed with a [0;1] ppm color scale.

chargeability feature (between 7 and 10 ms). Illustration 12 shows the gold assays in part per million for the Bonanza drillholes. The anomalous gold (>1 ppm) is found in the near surface and intersect the chargeability isocontour at 10 ms. This phenomenon can also be observed with other elements like silver and copper.

The Ridge zone is part of a historical drilling program (date non communicated). It is located to the east of the Bonanza zone (east of C-Pod 6) and to the east of Lineation 4 in the resistivity Zone 2 at the border of resistivity Zone 3. The Ridge area corresponds to relatively high resistivity (>360 ohm-m) and medium chargeability (below 10 ms) zones. The anomalous gold (>1 g/T) mainly correspond to the area where the drillholes are intersecting a relatively high resistivity feature coinciding at some places with a chargeability feature (see Illustration 13). This phenomenon is also visible with silver assays.

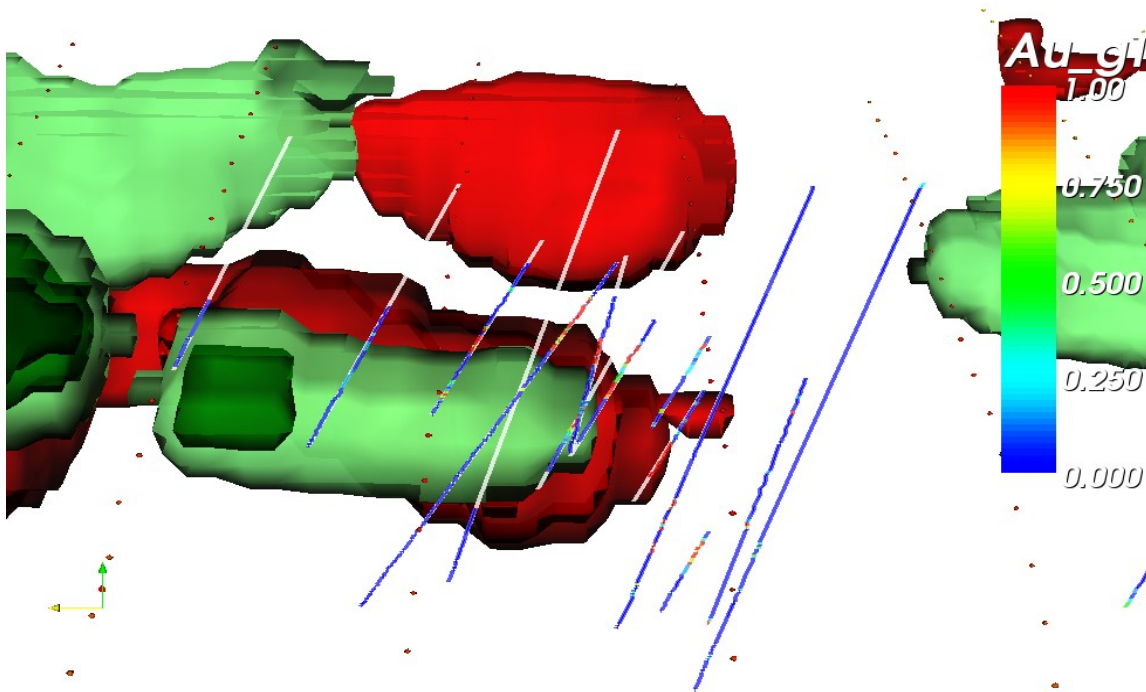


Illustration 13: Northwest view of the Ridge area versus the resistivity and chargeability models.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- red: resistivity isocontour at 500 ohm-m;
- gold assays displayed with a [0;1] g/T color scale.

The Thesis zone is located in the resistivity Zone 2 mentioned earlier. It is one of the most intensively drilled area of the Ranch property (assays available for the historical -date non communicated-, 2006 and 2007 drillhole programs). It is situated to the north of Lineation 1, to the west of Lineation 2 and is flanked to the east by C-Pod 3. As for the Bonanza drillholes zone, the Thesis zone is located in an area of intermediate resistivity (between 170 and 280 ohm-m) and chargeability (below 10 ms). All the drillholes that intersect a chargeability feature exhibit

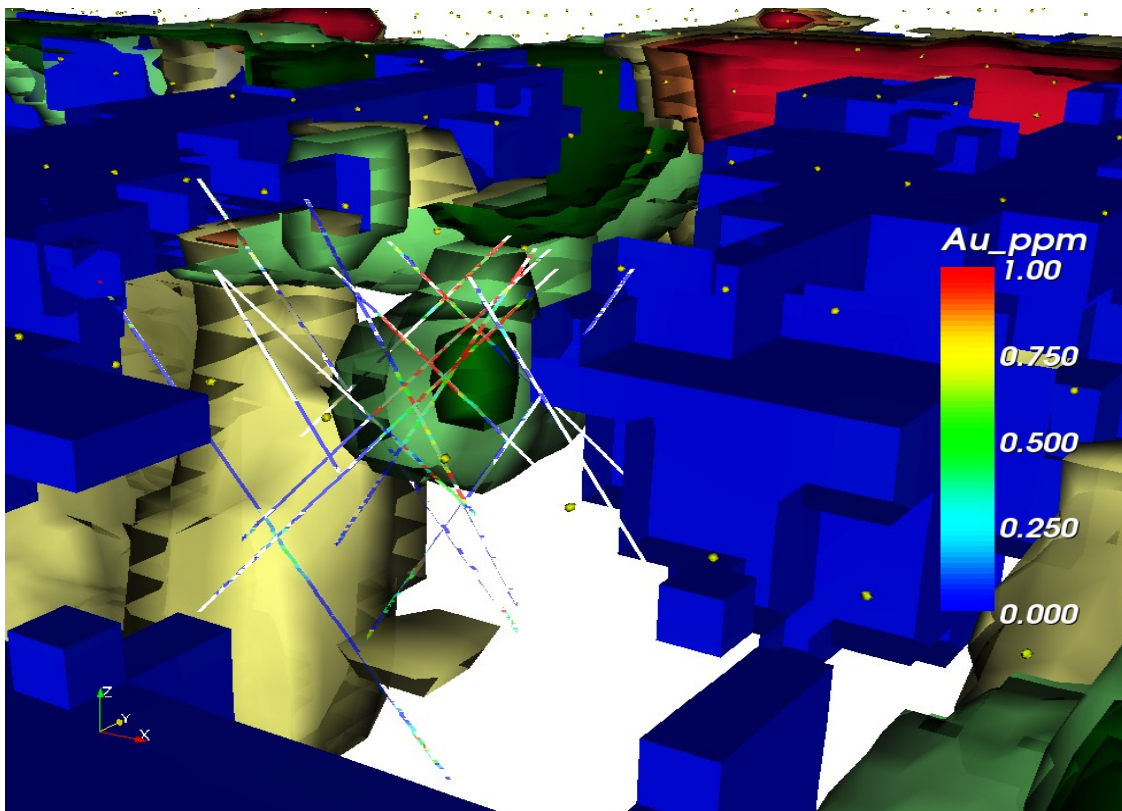


Illustration 14: High Angle Shot of the Thesis area versus the resistivity and chargeability.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- blue threshold: resistivity between 1 and 150 ohm-m;
- yellow: resistivity isocontour at 300 ohm-m;
- orange : resistivity isocontour at 400 ohm-m;
- red: resistivity isocontour at 500 ohm-m;
- gold assays displayed with a [0;1] ppm color scale.

anomalous gold (>1 ppm) whereas the drillholes that are not related to the resistivity and chargeability features exhibit relatively low grade gold (see Illustration 14). This phenomenon can also be observed with other elements like silver and copper. The drillholes are not crossing any outstanding resistivity features.

The JK zone consists in two historical drillholes (date non communicated) located in Zone 2, to the east of the Thesis area, of Lineation 2 and of C-Pod 4. Similarly to the Bonanza and Thesis area, JK lies in an area of intermediate resistivity (between 170 and 280 ohm-m) and chargeability (below 10 ms). The two drillholes exhibit anomalous gold (>1 g/T) and intersect a chargeability feature (see Illustration 15). There is no obvious relation with the resistivity features.

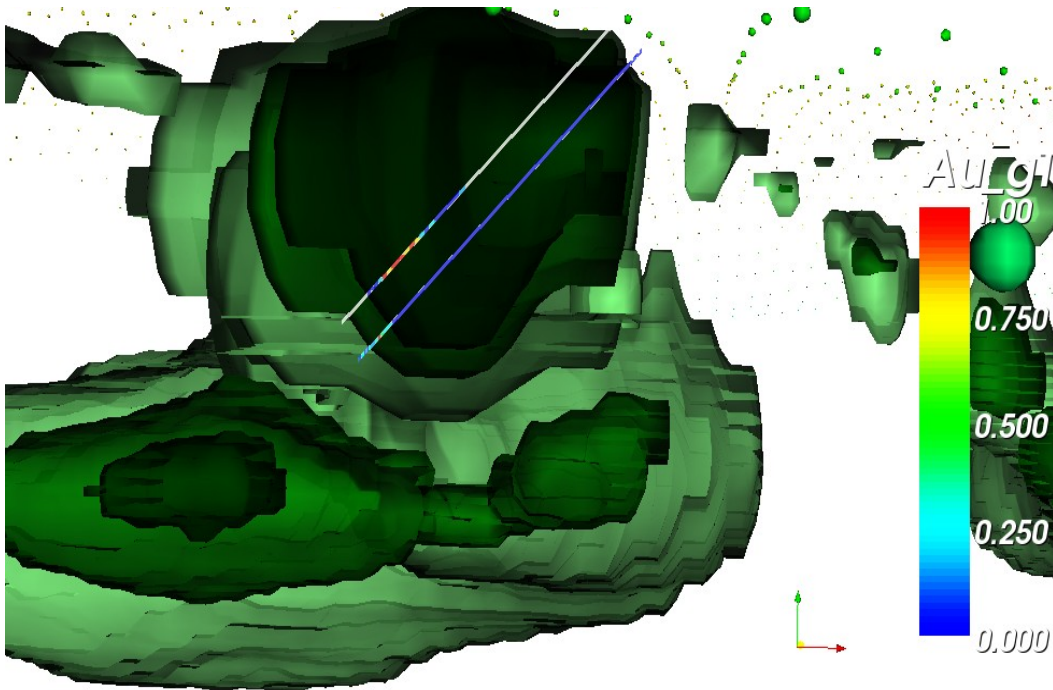


Illustration 15: South view of the JK area versus the chargeability model.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- gold assays displayed with a [0;1] g/T color scale.

The Bingo zone is located in resistivity Zone 2 and consists in historical drillholes (date non communicated). Similarly to the Bonanza, Thesis and JK area, Bingo is located in an area of intermediate resistivity (between 170 and 280 ohm-m) and chargeability (below 10 ms). It is situated to the west of C-Pod 2 and Lineation 2, and to the east of the transition between resistivity Zone 1 and 2. Only few of the drillholes intersect the chargeability feature (see Illustration 16) and these drillholes exhibit anomalous gold (>1 g/T).

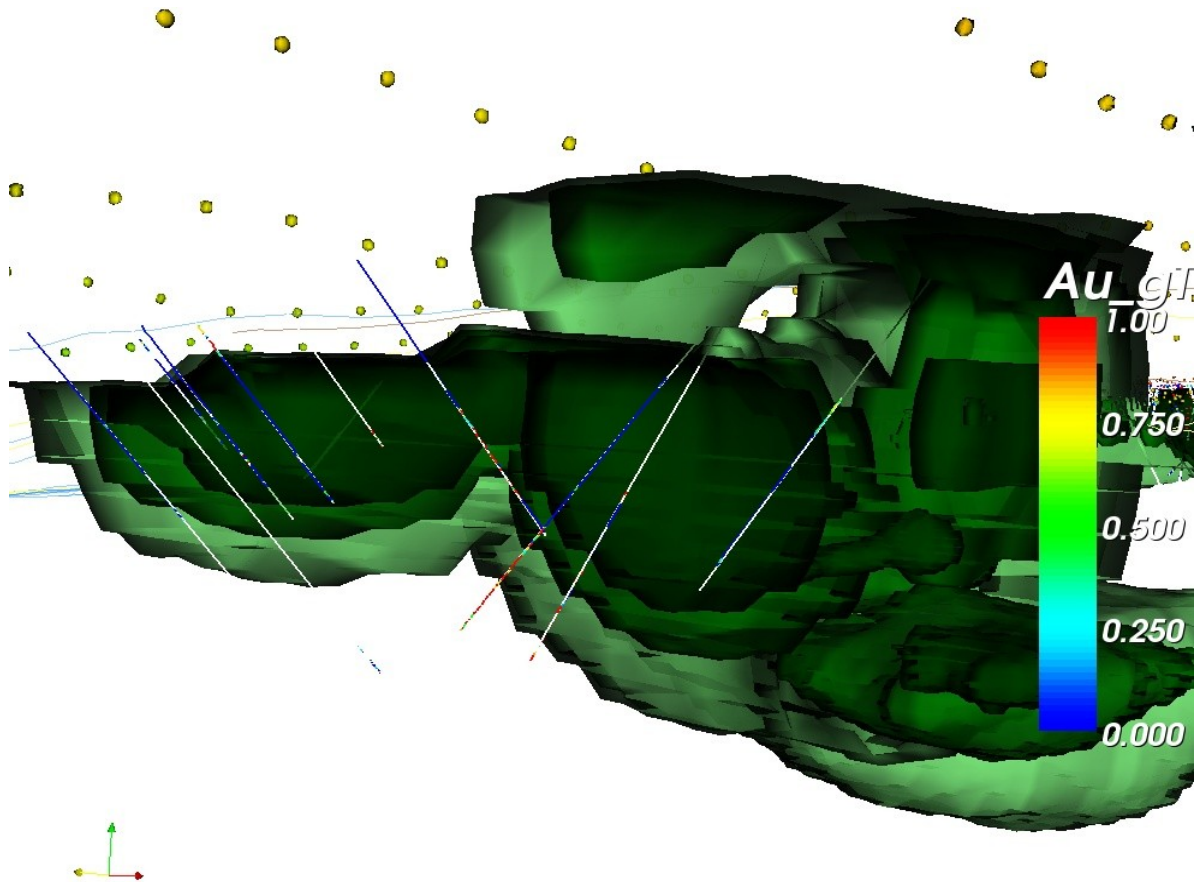


Illustration 16: Southwest view of the Bingo area versus the chargeability model.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- gold assays displayed with a [0;1] g/T color scale.

8. RECOMMENDATIONS

The 3DIP survey didn't allow to determine the presence of an intrusive body. If this remains the purpose of further investigation, the use of other geophysical methodologies such as the magnetic technique would be advised.

The 3DIP survey conducted in August-September 2007 is too small to identify any of the deep porphyry system mentioned in the Kaip and Childe Summary Report ('The Ranch property [...] covers the central core of a larger zone of hydrothermal alteration within a 10-km² area...'). The survey area should thus be extended in order to map the edges of this large target.

In order to have a better understanding of the different resistivity zones delineated by the 3DIP survey, efforts should be made to associate these different zones to a lithology or a facies. It hasn't been possible to relate the transition between these three geophysical zones to a geological phenomenon as they don't appear on the geological mapping of the survey area (Kaip and Childe, 2005). Amongst the three resistivity zones the geophysical results allowed to define, Zone 2 is the most interesting. However Zone 2 remains open to the north and the south, the survey should thus be extended in these directions in order to have a better idea of the extent of this zone.

Illustration 17 summarizes the locations of the drilling area relatively to the chargeability pods and the relatively high resistivity area. From the analysis of the resistivity and chargeability feature in relation to the drilling areas, two types of chargeability feature stand out of this study:

- The medium-high chargeability zones, such as C-Pod 2, 3 and 4, that are not related with a resistivity low or high feature. As mentioned earlier, these type of isolated chargeability pods have already been tested through the Bingo (flanking C-Pod 2), Thesis (flanking C-Pod 3), JK and Bonanza (coinciding with C-Pod 6) drilling areas.

- The medium-high chargeability pods associated with relatively high resistivity features such as C-Pod 1, 5, 7 and 8 have been investigated through the small Ridge drillhole zone. However, as

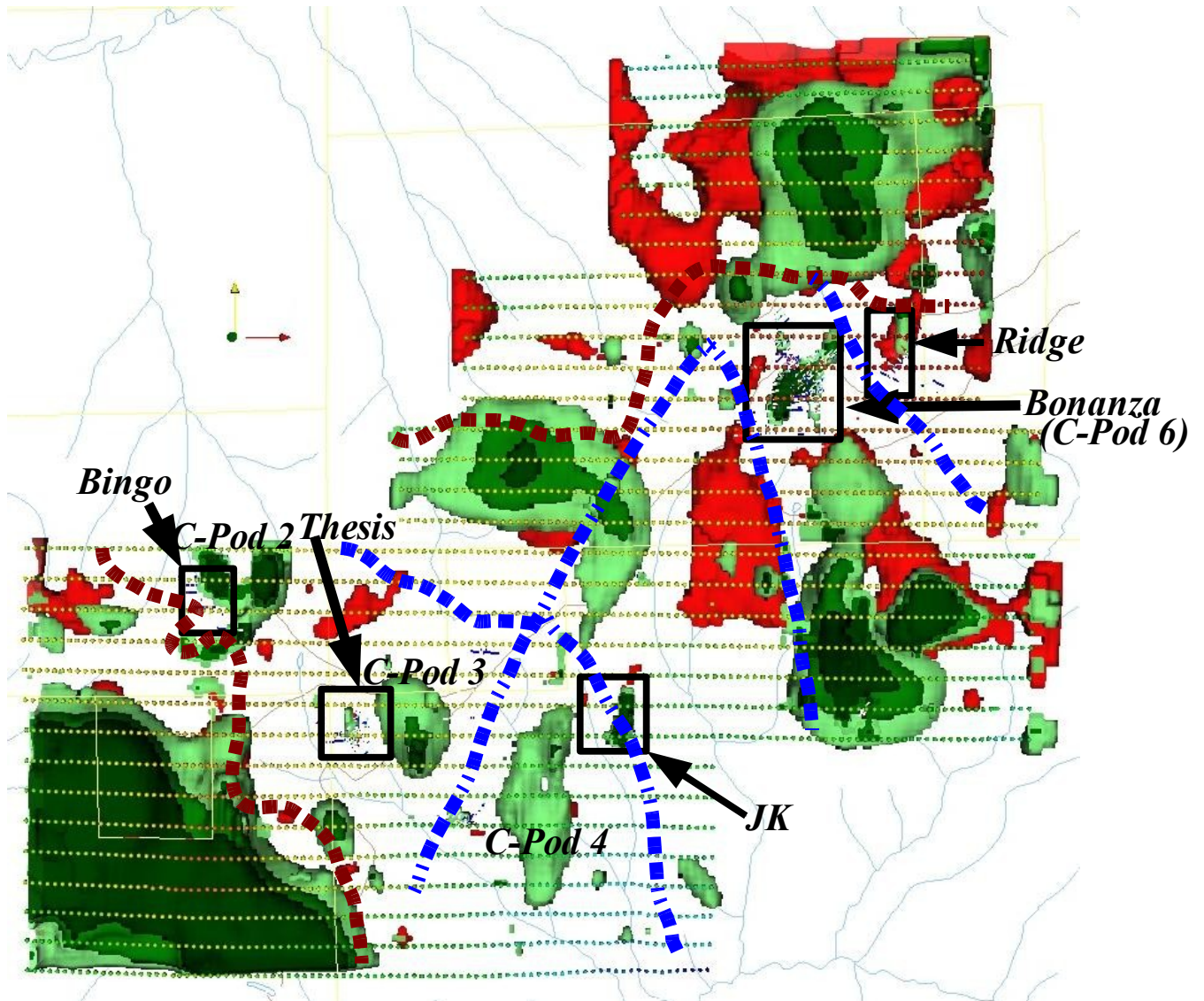


Illustration 17: Top view of the Resistivity and Chargeability models displayed in Paraview.

- light green: chargeability isocontour at 7.5ms;
- medium green: chargeability isocontour at 9 ms;
- dark green: chargeability isocontour at 10ms;
- red: resistivity isocontour at 500 ohm-m;
- thick dashed brown lines: limits of the different zones;
- thick black rectangles: delimitation of the drillholes area.
- thick dashed blue lines: Lineations;

only few of the drillholes of the Ridge zone are intersecting the chargeability and resistivity features it is difficult to relate the drillholes results with the geophysical features. In the Kaip and Childe Summary Report, the presence of high grade gold has been associated to the presence of sulfide mineralization. This sulfide mineralization can be likely the source of the scattered chargeability features hosted by Zone 2, explaining the good results in the investigation of the Bingo, Thesis JK and Bonanza isolated chargeability features in the historical, 2006 and 2007 drilling programs. Other area exhibiting the same pattern can be found in the same resistivity zone, such as C-Pod 2, 3 and 4, and thus should be tested with drills.

The Ridge drilling zone stands in an outstanding high resistivity zone related to chargeability features and gave relatively good results. It would thus be interesting to find the relation between the presence of mineralization and these geophysical features. Similar zones, such as C-Pod 1, 5, 7 and 8, should also be investigated with drills.

9. CONCLUSIONS

The data collected during the 3DIP survey conducted by SJ Geophysics Ltd. in August and September 2007 allowed the creation of resistivity and chargeability models. These models exhibit three different zones. Two of combined relatively high resistivity and relatively high chargeability (to the southwest and to the northeast of the survey grid) and an other zone of scattered intermediate resistivity and chargeability, crossed by four lineations (in the middle of the survey grid).

The middle of the survey grid hosts four drilling area associated with medium-high chargeability pods that present anomalous gold results (Bingo, Bonanza, JK and Thesis). Other chargeability pods that exhibit the same geophysical pattern can be found in the same area.

Extended medium-high chargeability features associated with relatively high resistivity features can also be found in the survey area but they have not been tested yet and thus can not be related to any mineralization.

No detailed geological maps have been used in the writing of this report. When some geological data becomes available for this property, the geophysical data should definitely be revisited and a detailed review of the inversion models should be conducted. Examination of the geophysical data with geological data can act as a control and greatly enhance the interpretation of the geophysics by relating the cores with resistivity values and then tracking the associated trends.

Respectfully submitted

As per S.J.V. Consultants Ltd.

Charlotte Thibaud, M.Sc. (Geophysics)

APPENDIX 1 – STATEMENT OF QUALIFICATIONS – CHARLOTTE THIBAUD

I, Charlotte Thibaud, of the city of Vancouver, Province of British Columbia, hereby certify that:

- I graduated from the Ecole et Observatoire des Sciences de la Terre de Strasbourg I in September 2007;
- I have been working continuously from that date.
- I have no interest in *Guardsmen Resources Inc.* or any of their subsidiaries or related companies, nor do I expect to receive any.

Signed by: _____

Charlotte Thibaud

M.Sc. Geophysicist

APPENDIX 2 – STATEMENT OF QUALIFICATIONS - SYD VISSER

I, Syd J. Visser, of 11762 - 94th Avenue, Delta, British Columbia, hereby certify that,

- 1) I am a graduate from the University of British Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.
- 2) I am a graduate from Haileybury School of Mines, 1971.
- 3) I have been engaged in mining exploration since 1968
- 4) I am a professional Geoscientist registered in British Columbia

Signed by: _____

Syd Visser, B.Sc., P.Geo.

Geophysicist/Geologist

Date: _____

APPENDIX 3 – SUMMARY TABLE

Line	Start Stn	End Stn	Type	Remotes used	Surveyed Length (m)
700	-2200	-100	Cx	777N1001, 778N1	2100
701	-2200	0	Rx		2200
702	-2200	0	Cx	777N1001, 778N1	2200
703	-2200	0	Rx		2200
704	-2200	0	Cx	777N1001, 778N1	2200
705	-2200	0	Rx		2200
706	-2200	0	Cx	776N999, 777N1001, 778N1	2200
707	-2200	0	Rx		2200
708	-2200	1000	Cx	776N999, 777N1001, 778N1	3200
709	-2200	1000	Rx		3200
710	-2200	1000	Cx	733N-164, 778N1	3200
711	-2200	1000	Rx		3200
712	-2200	1000	Cx	733N-164, 778N1	3200
713	-2200	1000	Rx		3200
714	-2200	1000	Cx	733N-164, 778N1	3200
715	-1000	1000	Rx		2000
716	-1000	1000	Cx	733N-164	2000
717	-1000	1000	Rx		2000
718	-1000	1000	Cx	733N-164, 778N1	2000
719	-800	800	Rx		1600
720	-800	800	Cx	778N1	1600
721	-800	800	Rx		1600
722	-800	800	Cx	778N1	1600
723	-800	800	Rx		1600
724	-300	800	Cx	778N1	1100
725	0	800	Rx		800
726	-200	800	Cx	778N1	1000
727	0	800	Rx		800
728	-300	800	Cx	778N1	1100
729	0	800	Rx		800
730	-300	800	Cx	778N1	1100

Total Linear Meters = 62600 m

APPENDIX 4 – INSTRUMENT SPECIFICATIONS

SJ-24 Full-Waveform Digital IP Receiver

Technical:

Input impedance:	10 Mohm
Input overvoltage protection:	up to 1000V
External memory:	Unlimited readings
Number of dipoles:	4 to 16 +, expandable.
Synchronization:	Software signal post-processing user selectable
Common mode rejection:	More than 100 dB (for $R_s = 0$)
Self potential (Sp):	Range: -5V to + 5V Resolution: 0.1 mV Proprietary intelligent stacking process rejecting strong non-linear SP drifts
Primary voltage:	Range: 1 μ V – 10V (24bit) Resolution: 1 μ V Accuracy: typ. <1.0%
Chargeability:	Resolution: 1 μ V/V Accuracy: typ. <1.0%

General (4 dipole unit):

Dimensions:	18x16x9 cm
Weight:	1.1 Kg
Battery:	12V External
Operating temperature range:	-20°C to 40°C

VIP 3/4000 IP Transmitter

Output power:	4000 VA maximum.
Output voltage:	3000V maximum, auto voltage range selection.
Output current:	20 ma to 5A, current regulated to better than 1 %.
Dipoles:	9, push button selected.
Output connectors:	Uniclip connectors accept bare wire or plug of up to 4 mm diameter.
Waveforms:	see figure 4.1.
Fall times:	better than 1 ms in resistive load.
Time domain:	preprogrammed on and off times from 0.25 to 8 seconds, by factor of 2. Other cycles programmable by user.
Frequency domain:	Automatic circuit opening in off time. Preprogrammed frequencies from 0.0625 Hz to 4Hz, by factor of 2. Alternate or simultaneous transmission of two frequencies. Other frequencies programmable by user.
Time and frequency stability:	0.01 % 1 PPB optional

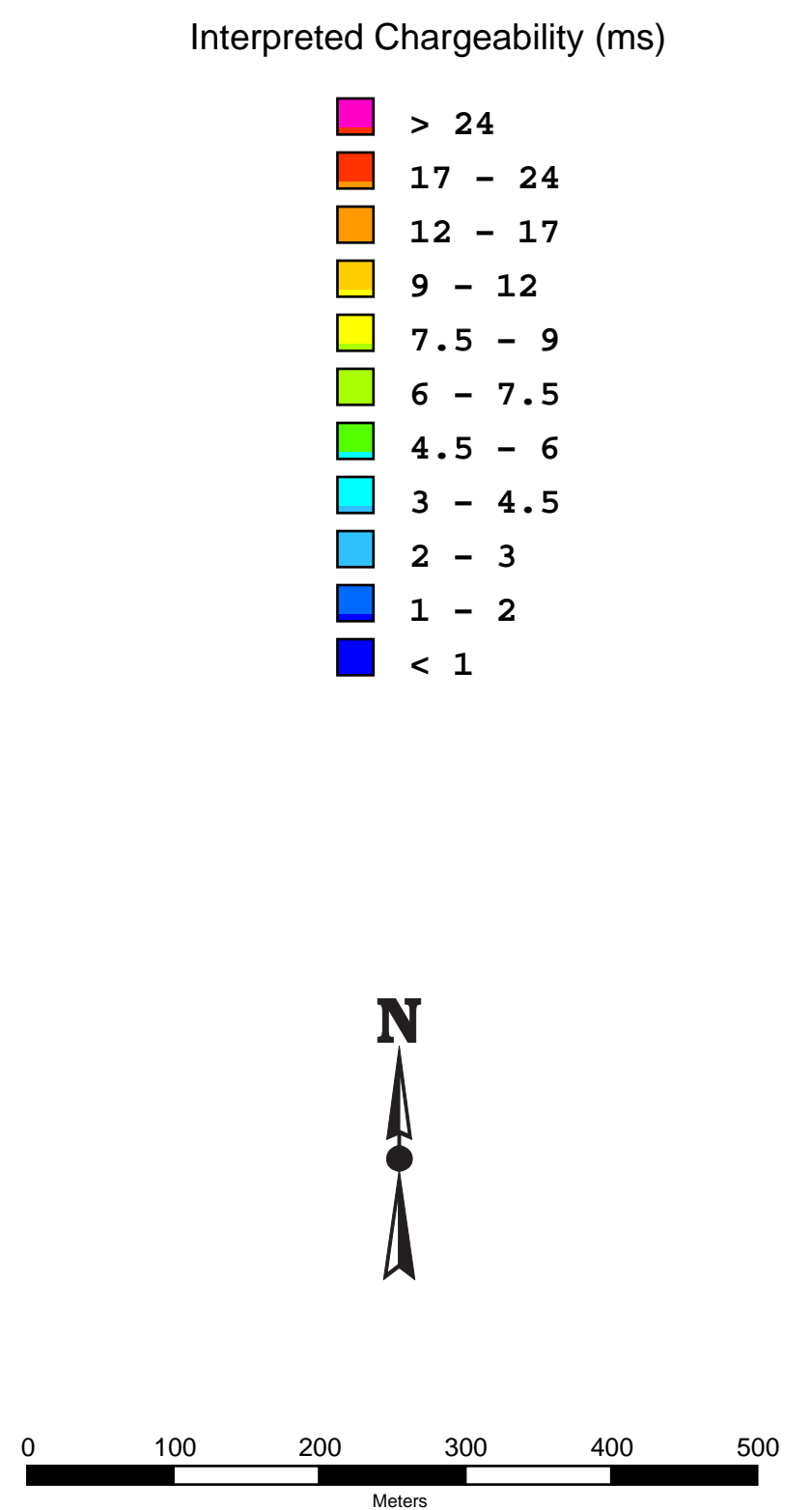
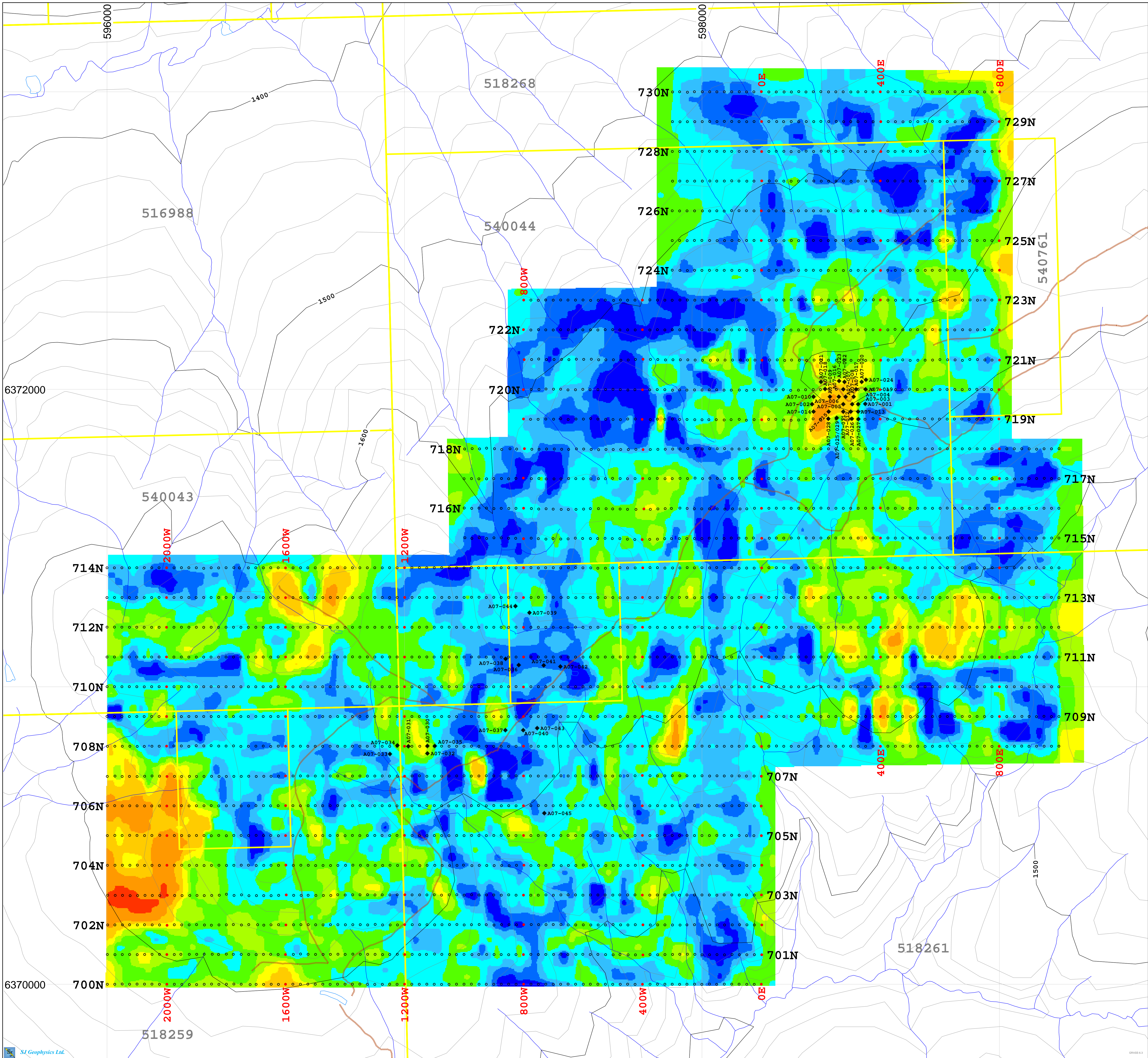
APPENDIX 5 – REFERENCES

- **“Summary Report on the Ranch Property, Liard Mining District, British Columbia, Canada”.**

by Andrew Kaip, M.Sc. and Fiona Childe, Ph.D.

October 2005

APPENDIX 6 - MAPS



Survey Information

3D IP Array : n=1-16 a=50m and 100m

INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter

Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

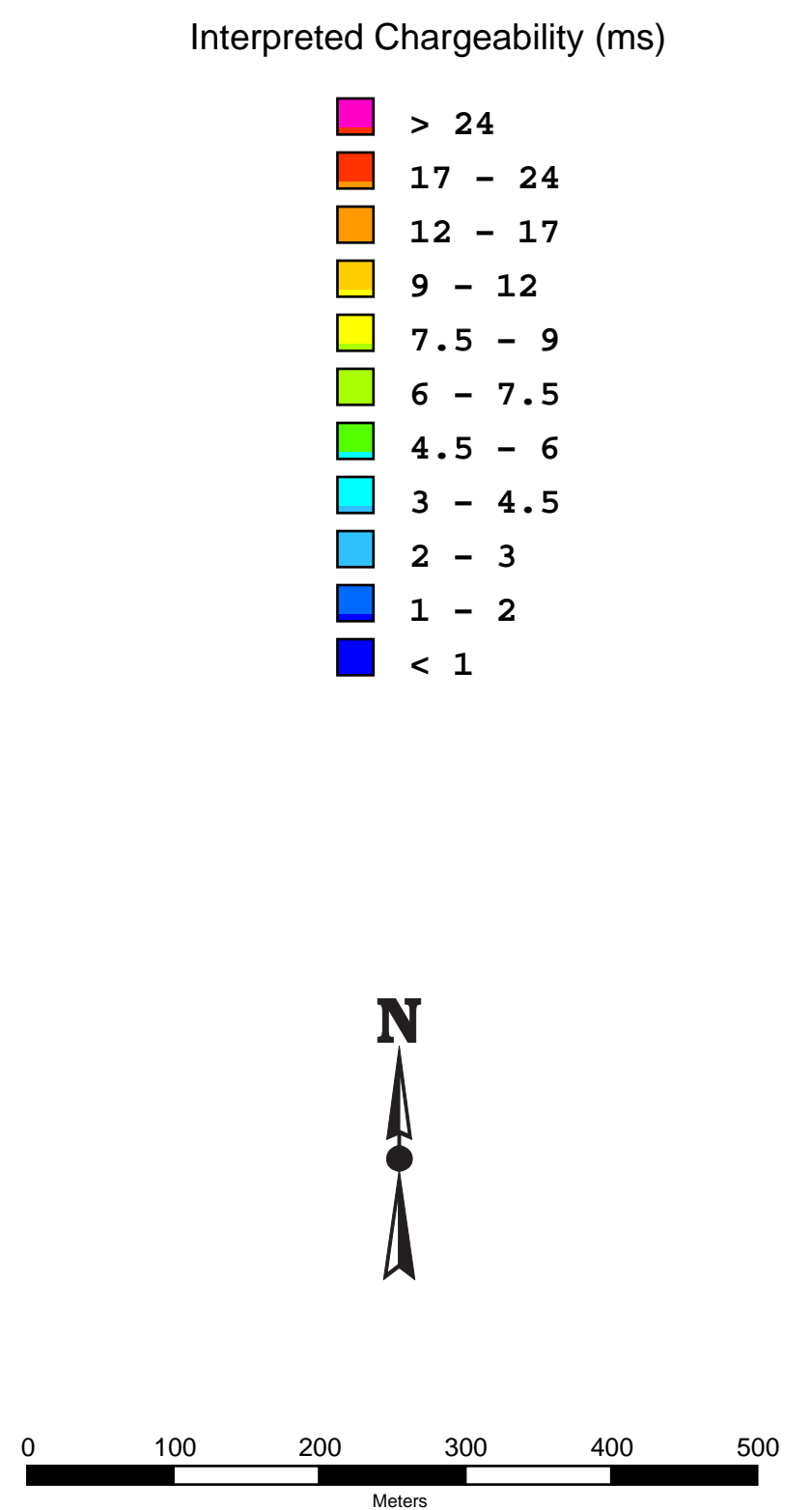
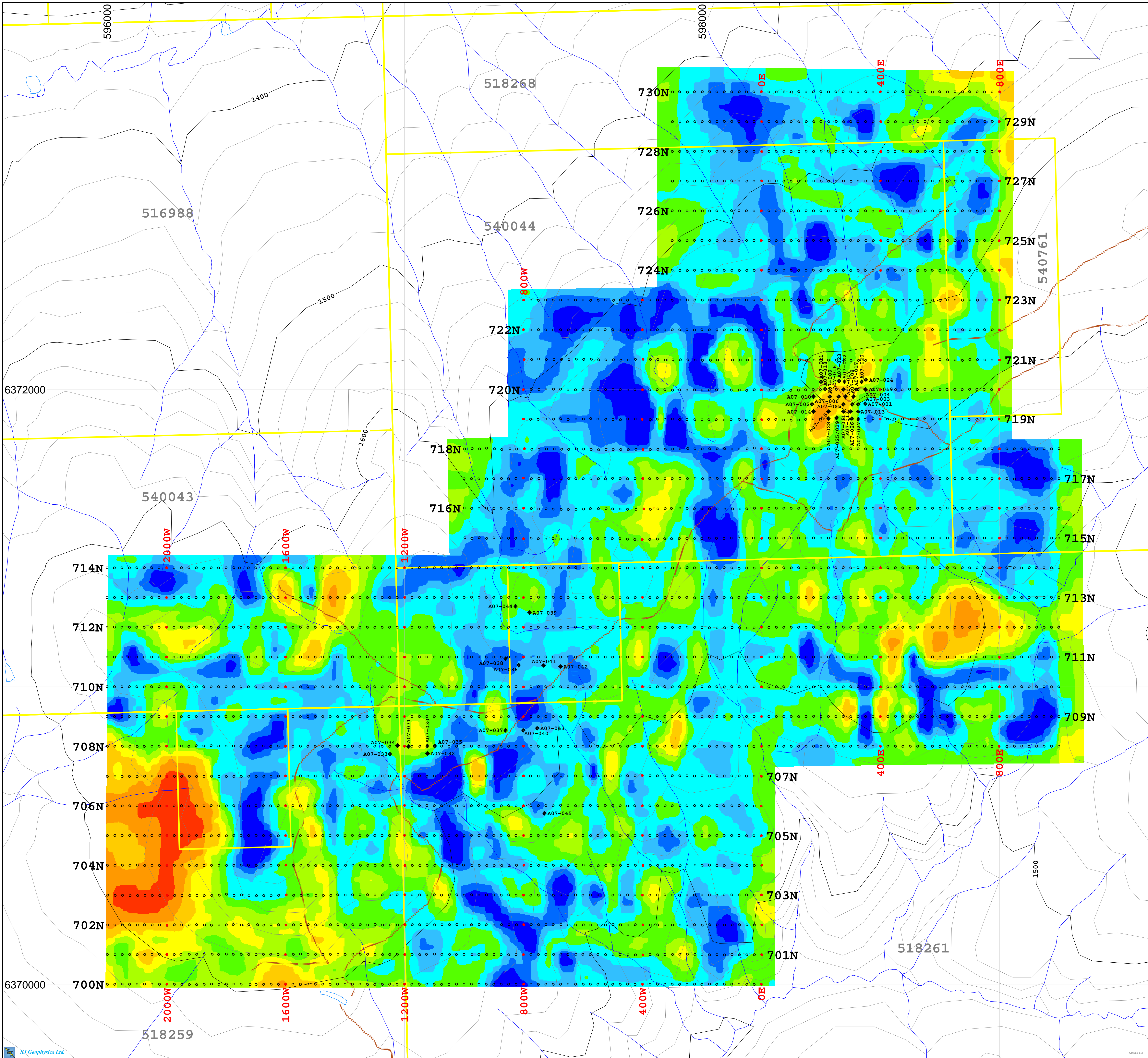
- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC

Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 25m Below Topography



Survey Information

3D IP Array : n=1-16 a=50m and 100m

INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter

Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

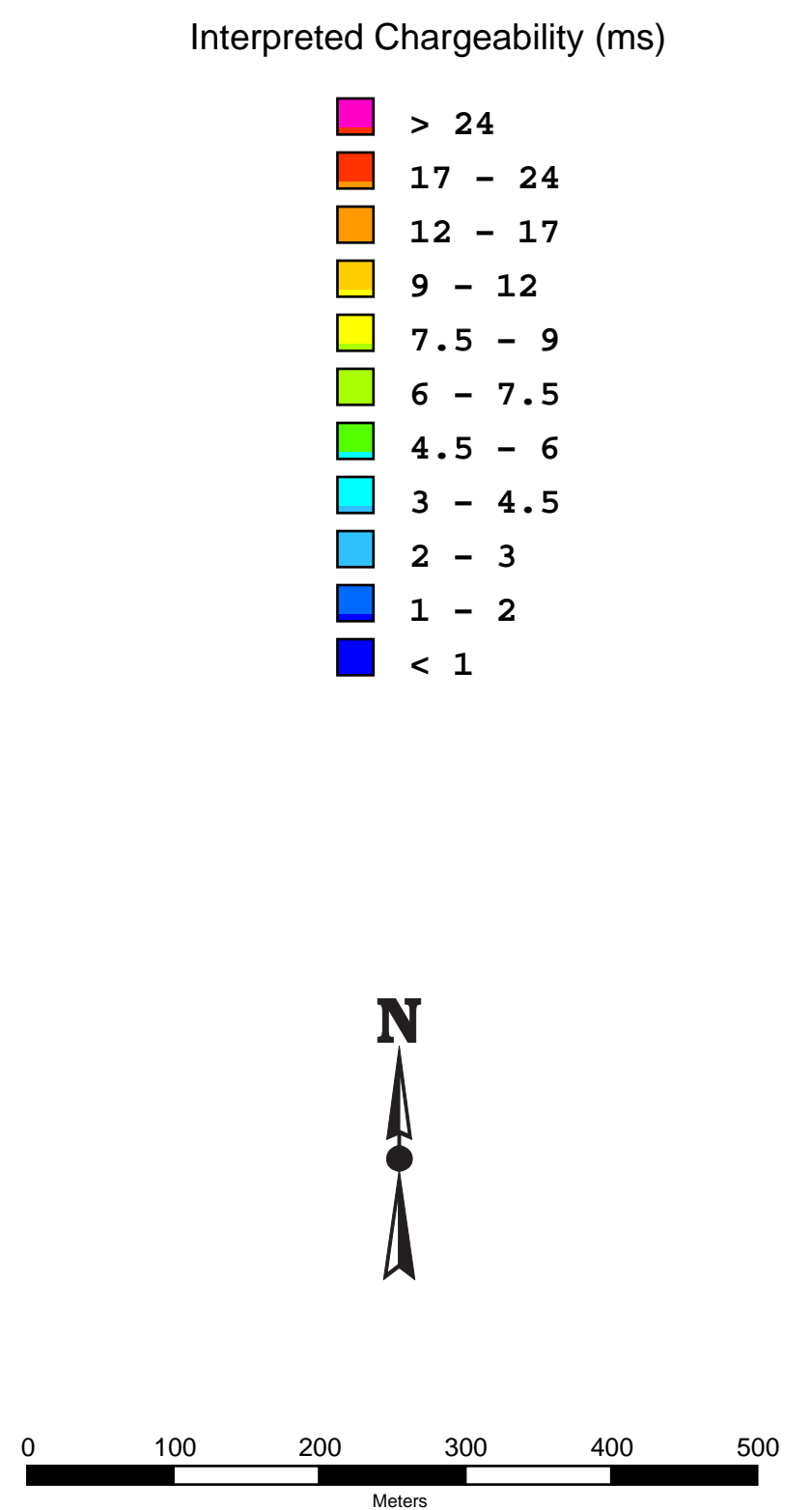
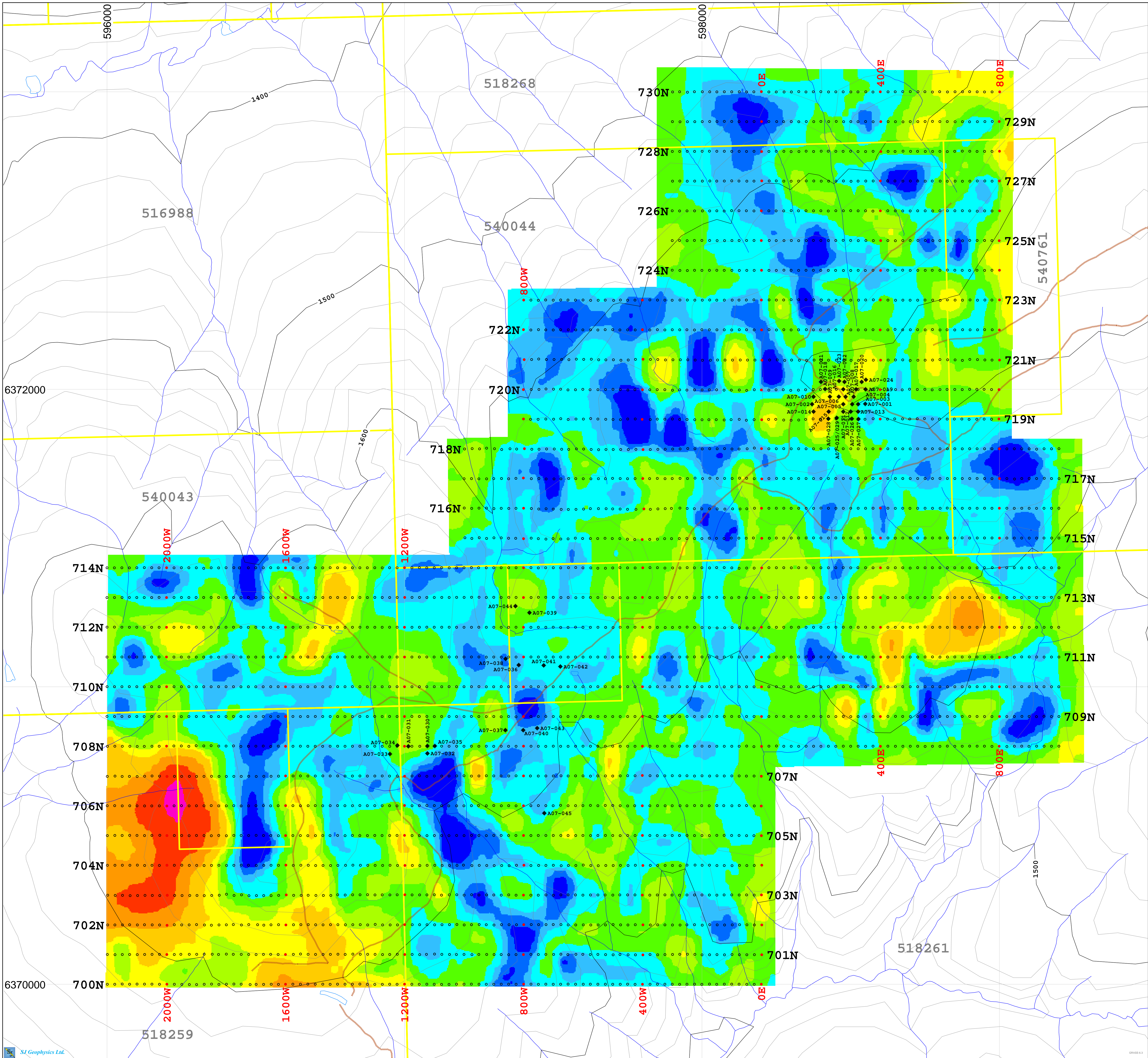
- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC

Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 50m Below Topography



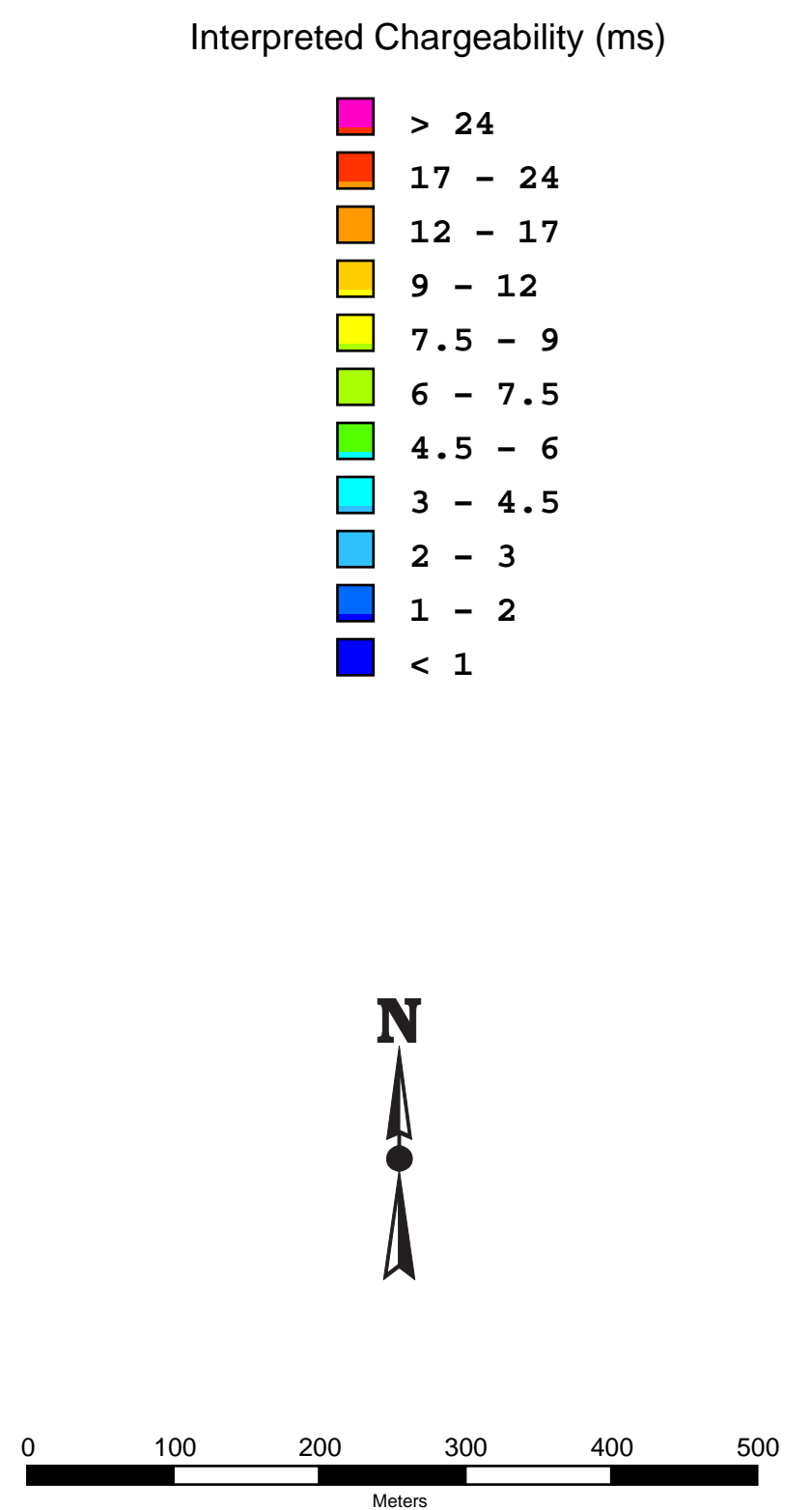
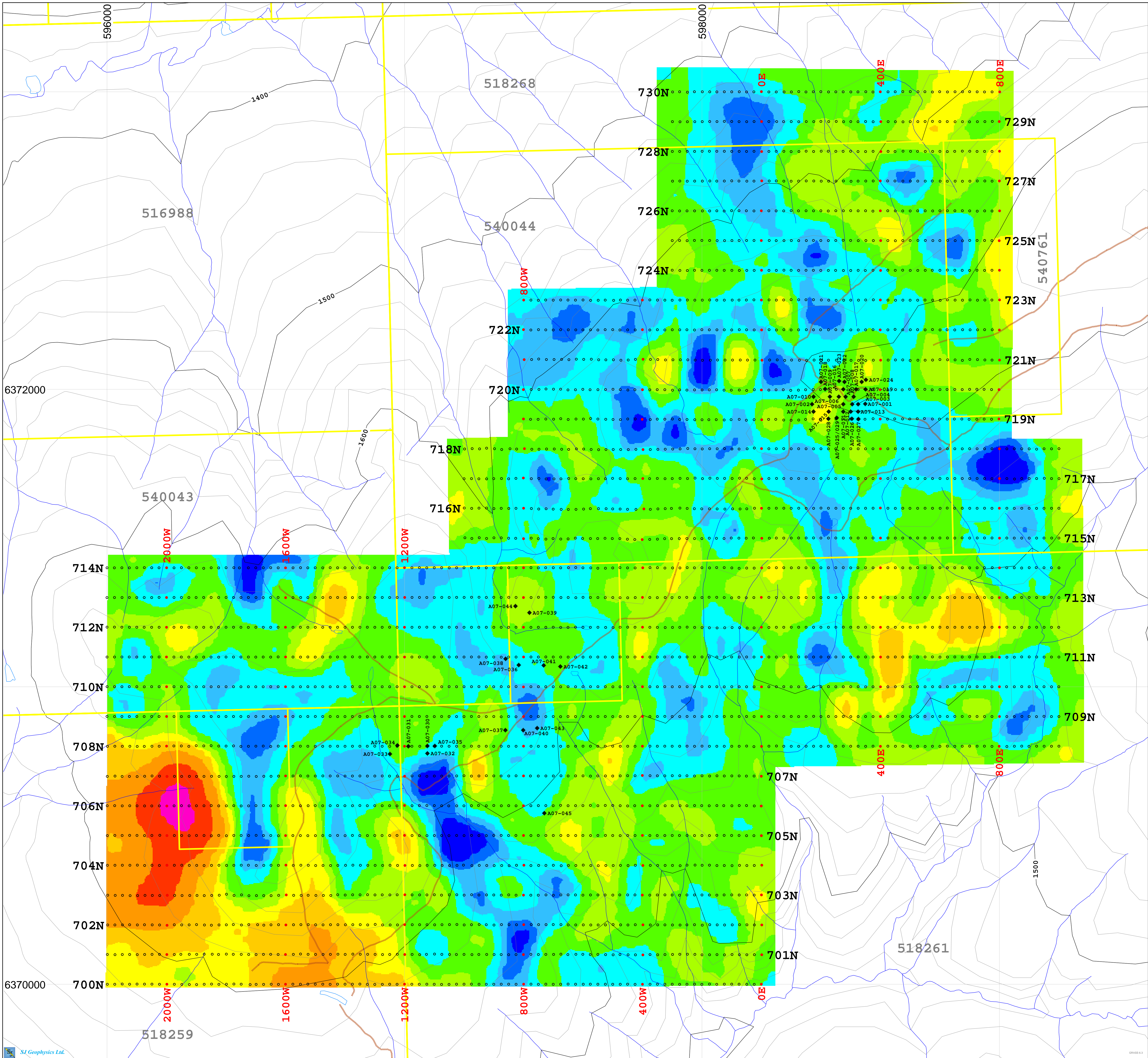
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TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 75m Below Topography



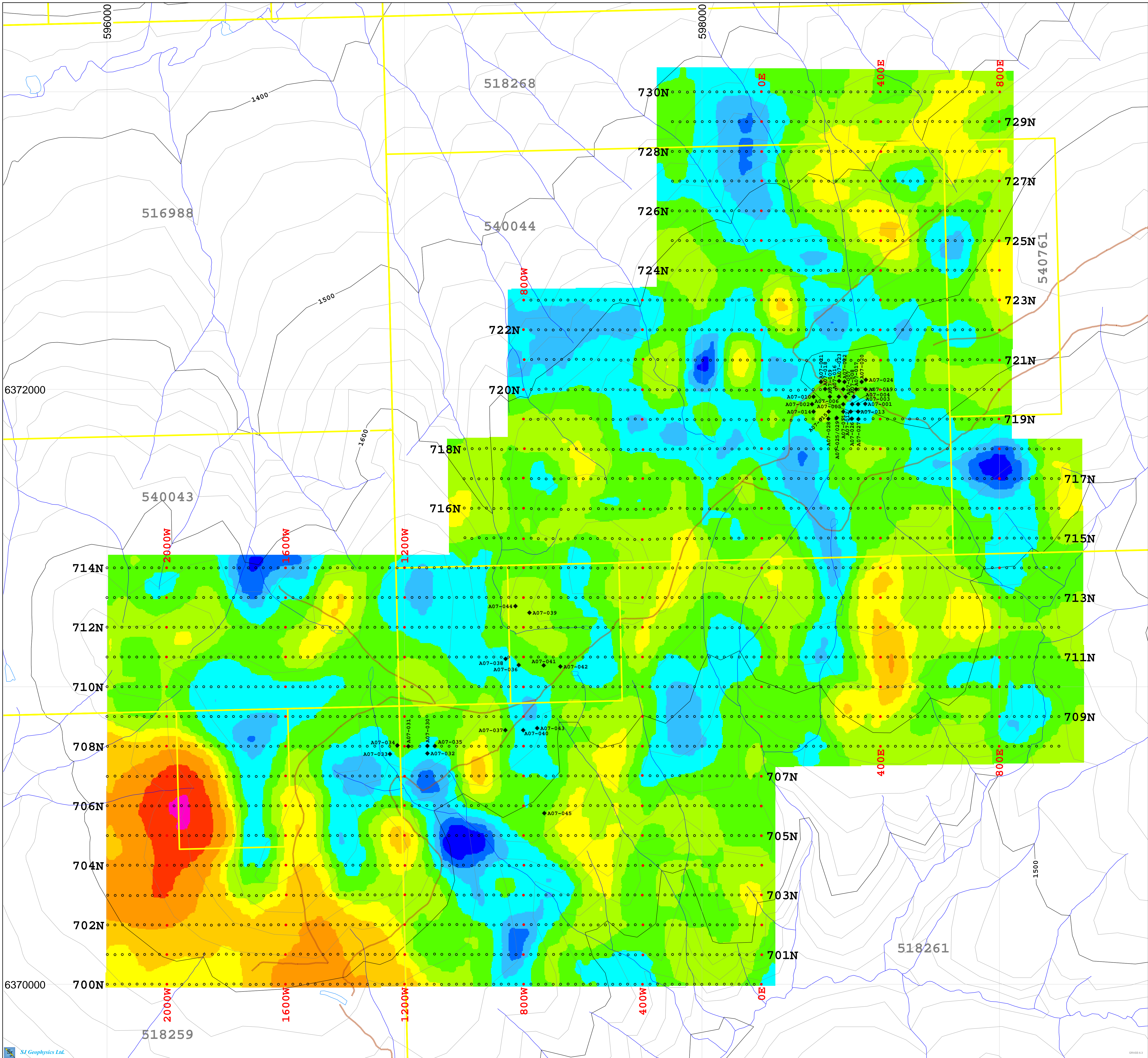
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TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 100m Below Topography



Interpreted Chargeability (ms)

> 24
17 - 24
12 - 17
9 - 12
7.5 - 9
6 - 7.5
4.5 - 6
3 - 4.5
2 - 3
1 - 2
< 1

Survey Information

3D IP Array : n=1-16 a=50m and 100m

INSTRUMENTATION
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TRANSMITTER: VIP IP Transmitter

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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

Legend

- Survey Stations
- Drill Collars
- Claim Areas
- Contour Lines (m)
- Rivers
- Roads
- Lakes

GUARDSMEN RESOURCES INC

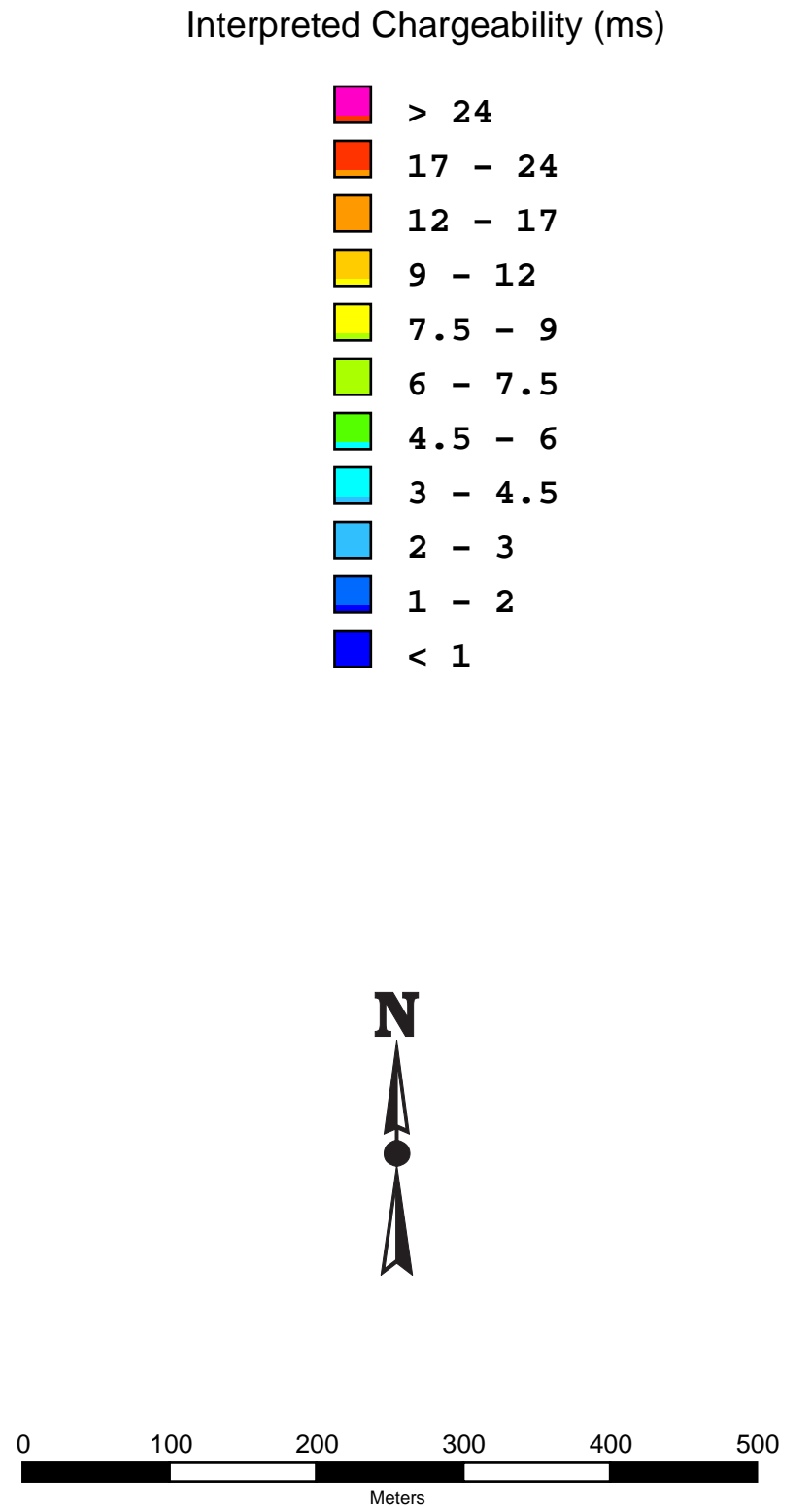
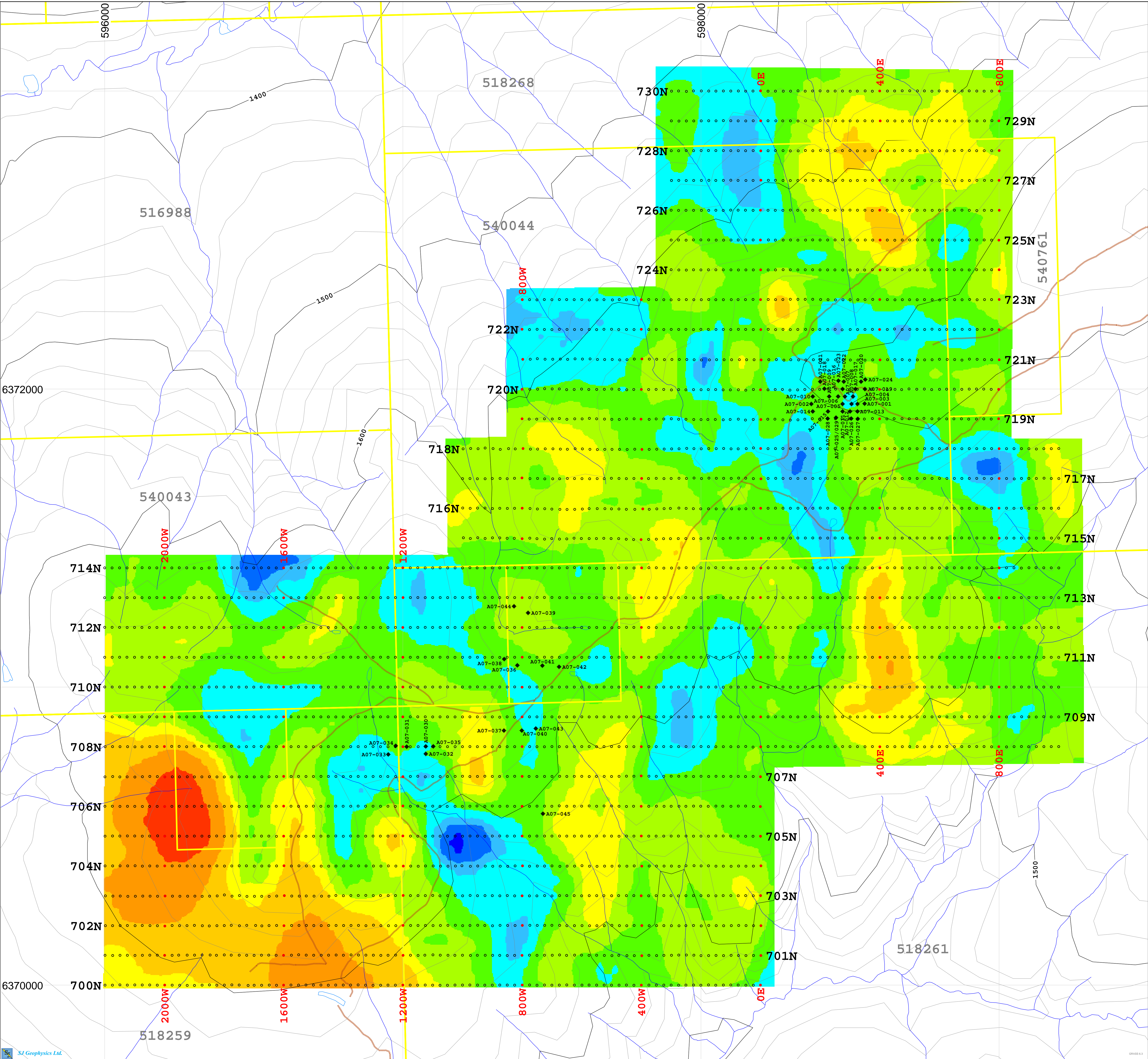
Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 125m Below Topography

OPAS 6.3

Plate C-5



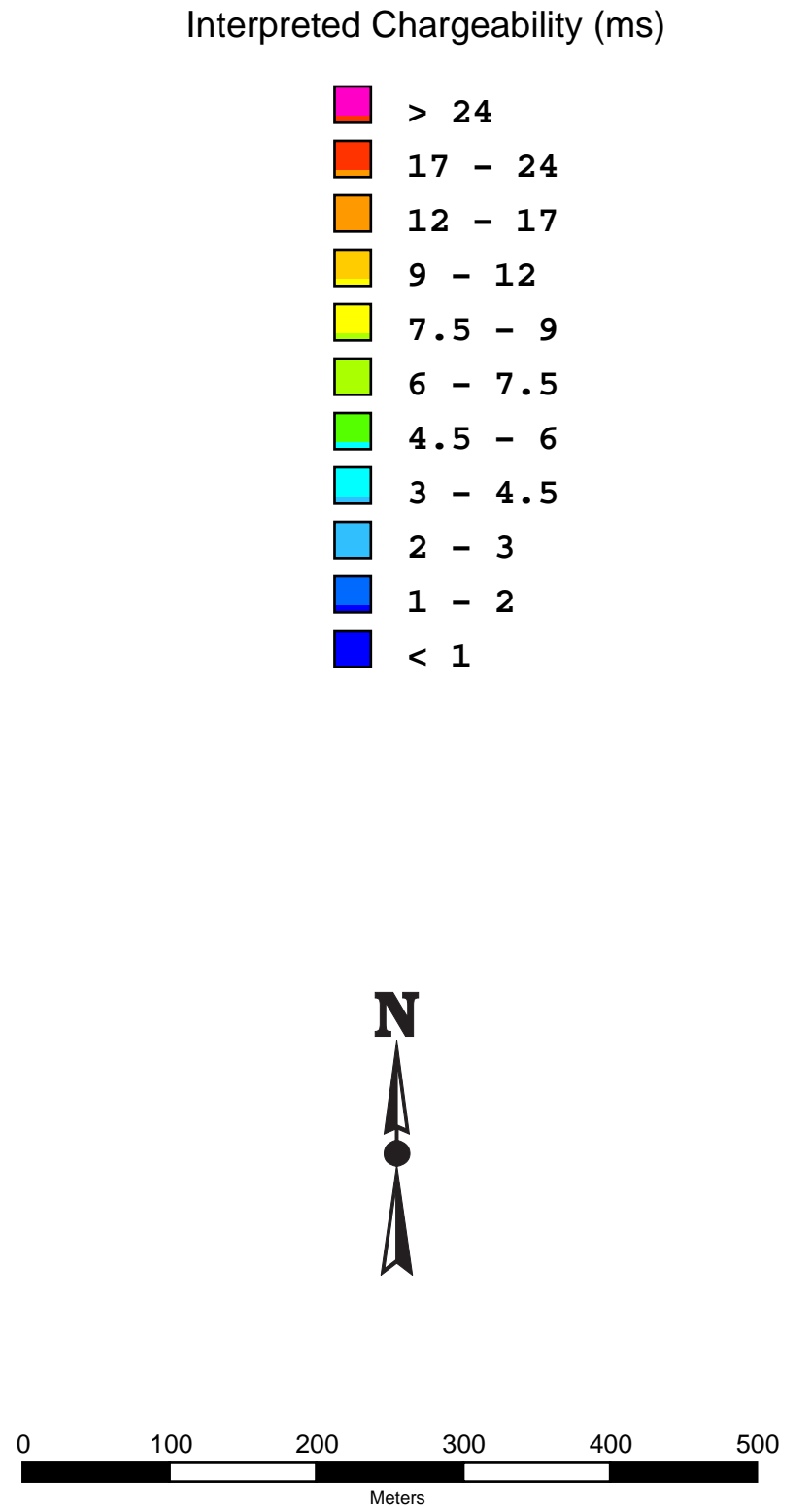
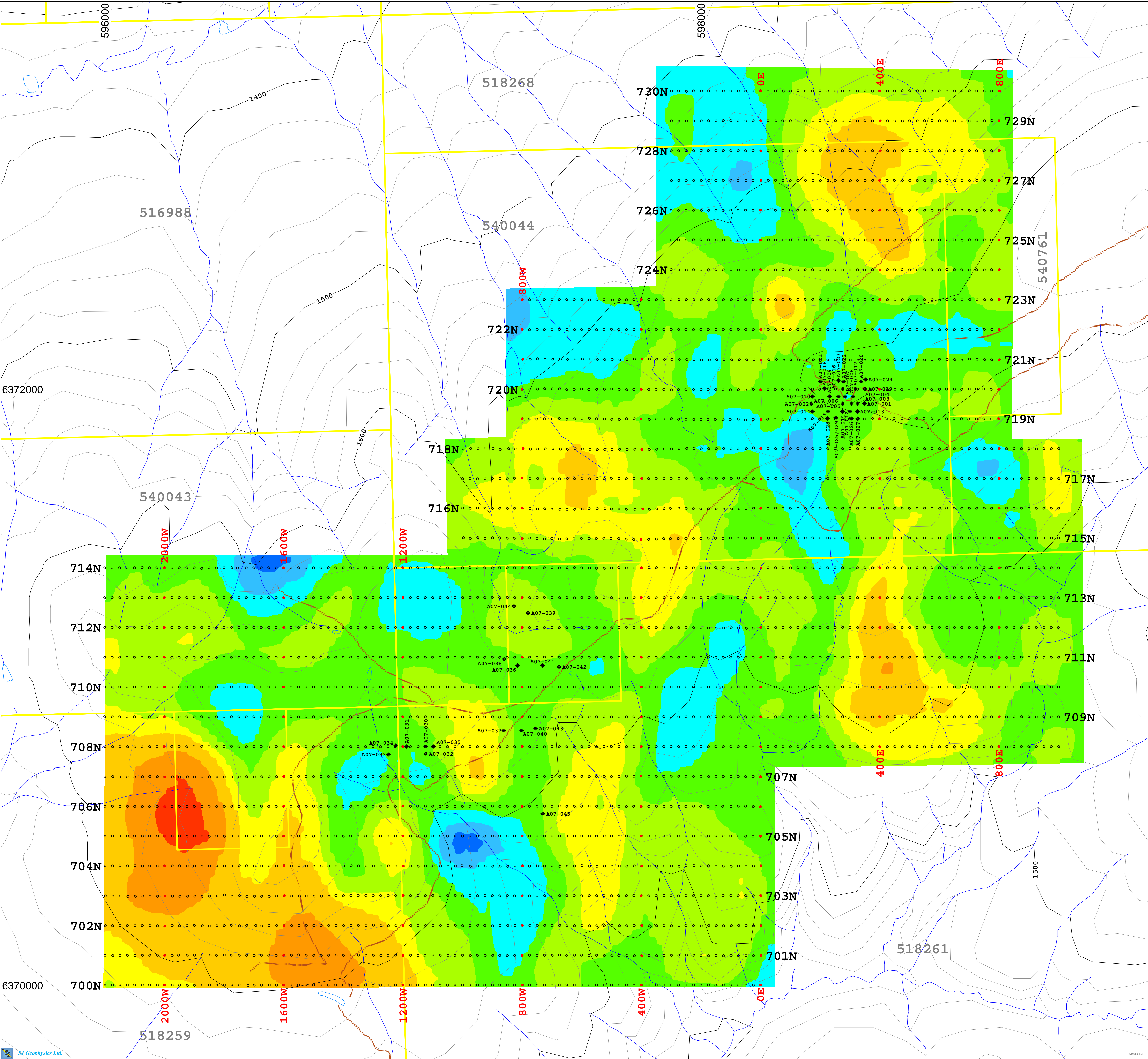
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TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 150m Below Topography



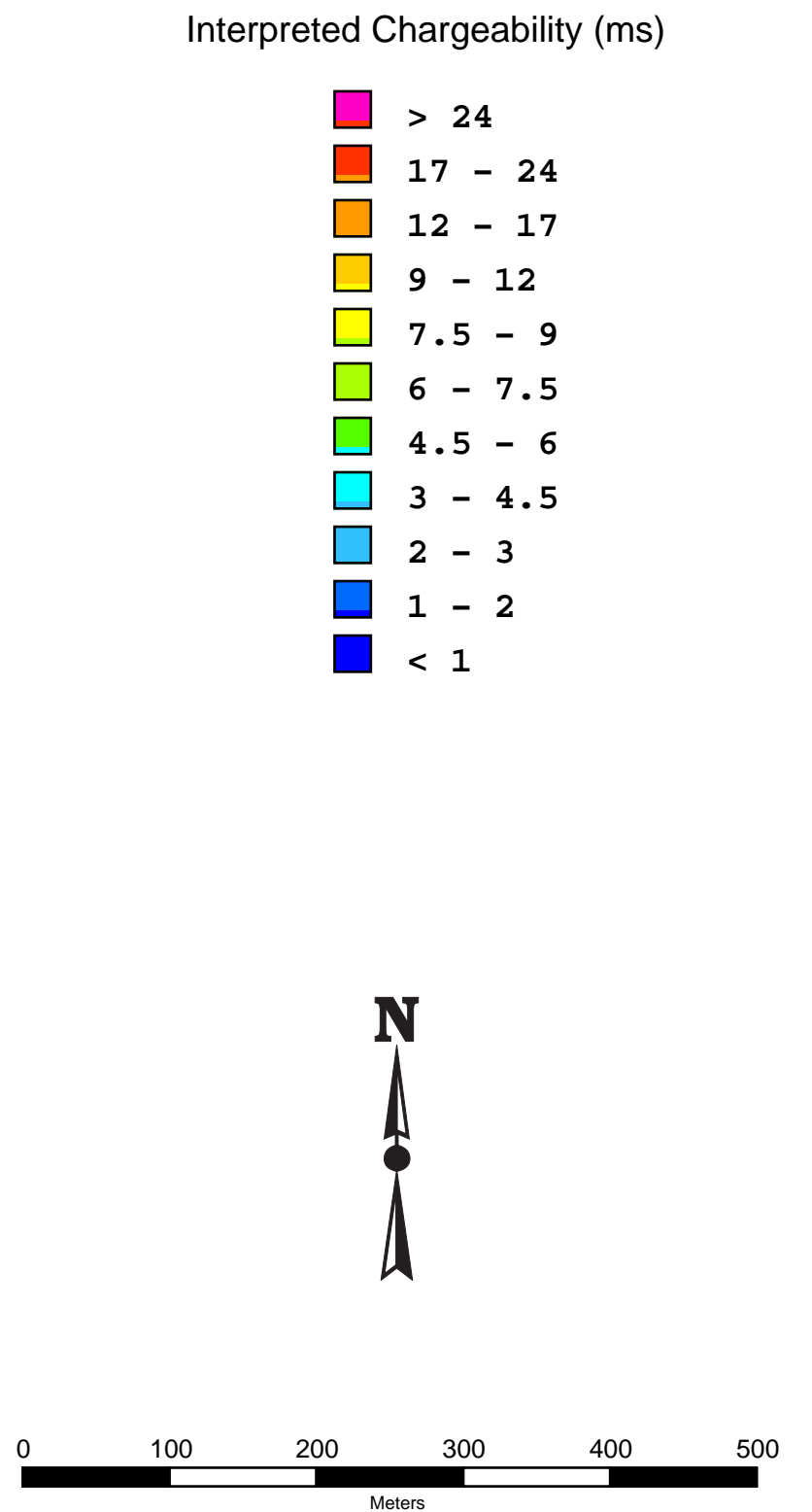
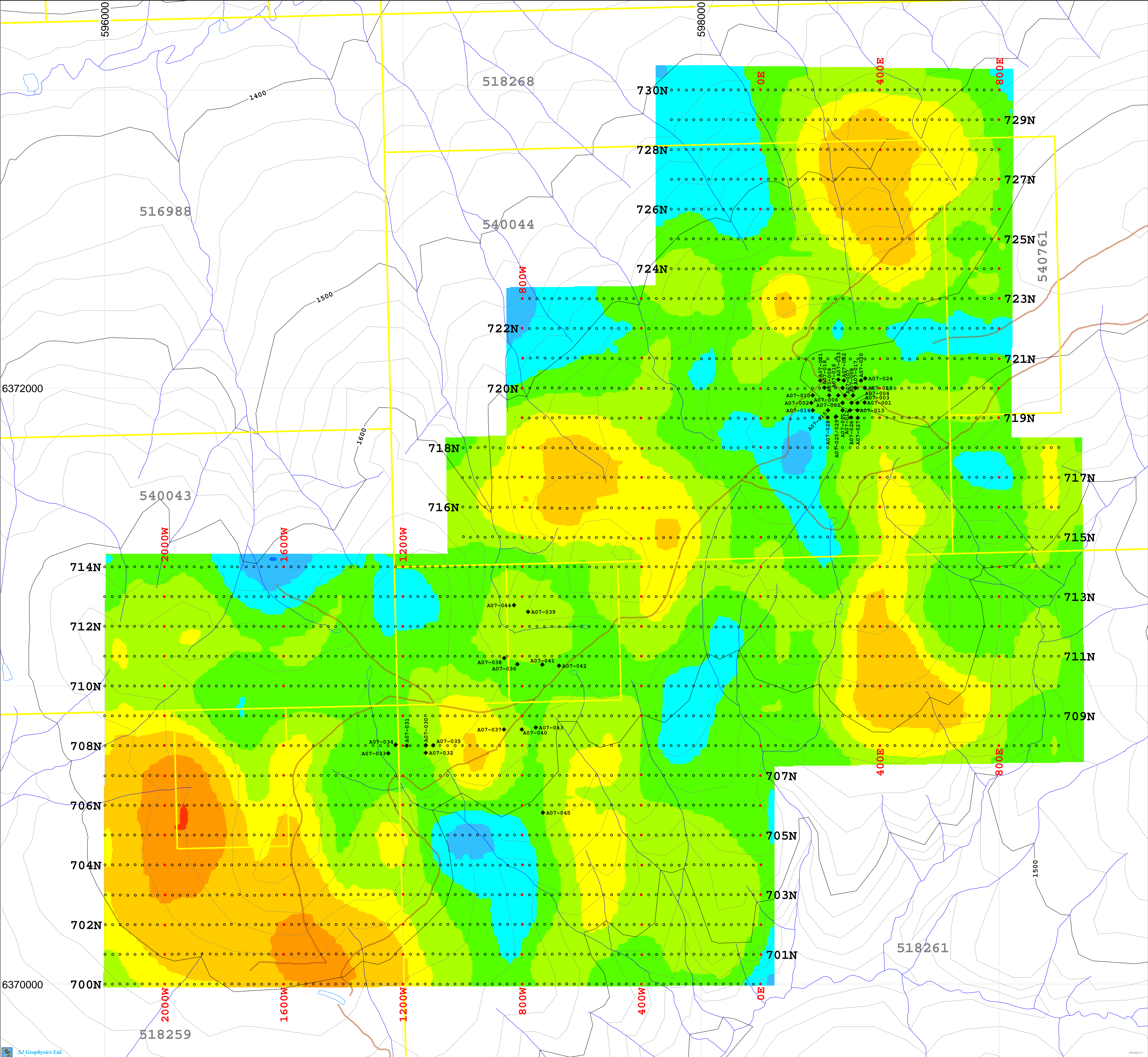
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TRANSMITTER: VIP IP Transmitter
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 175m Below Topography



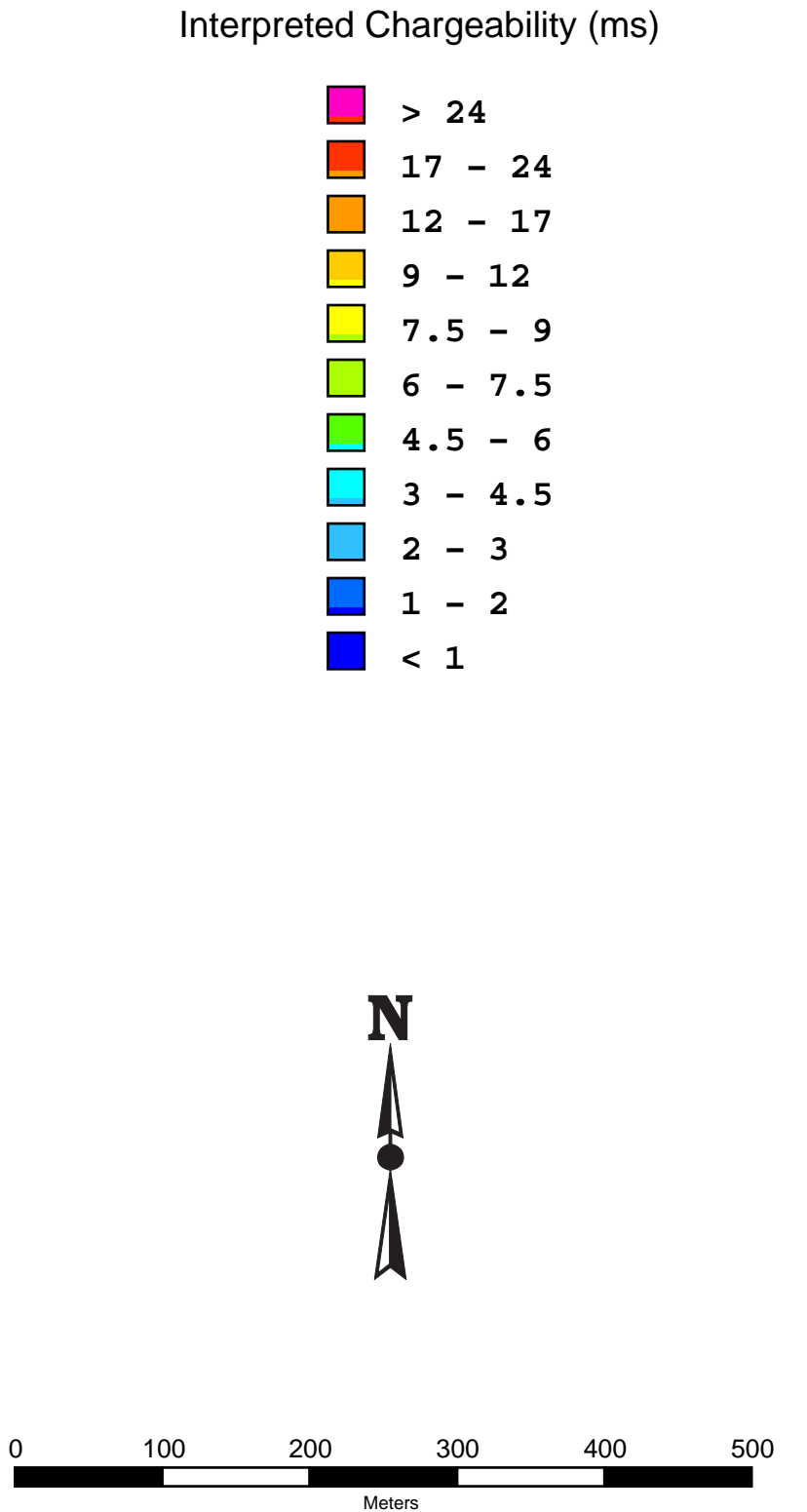
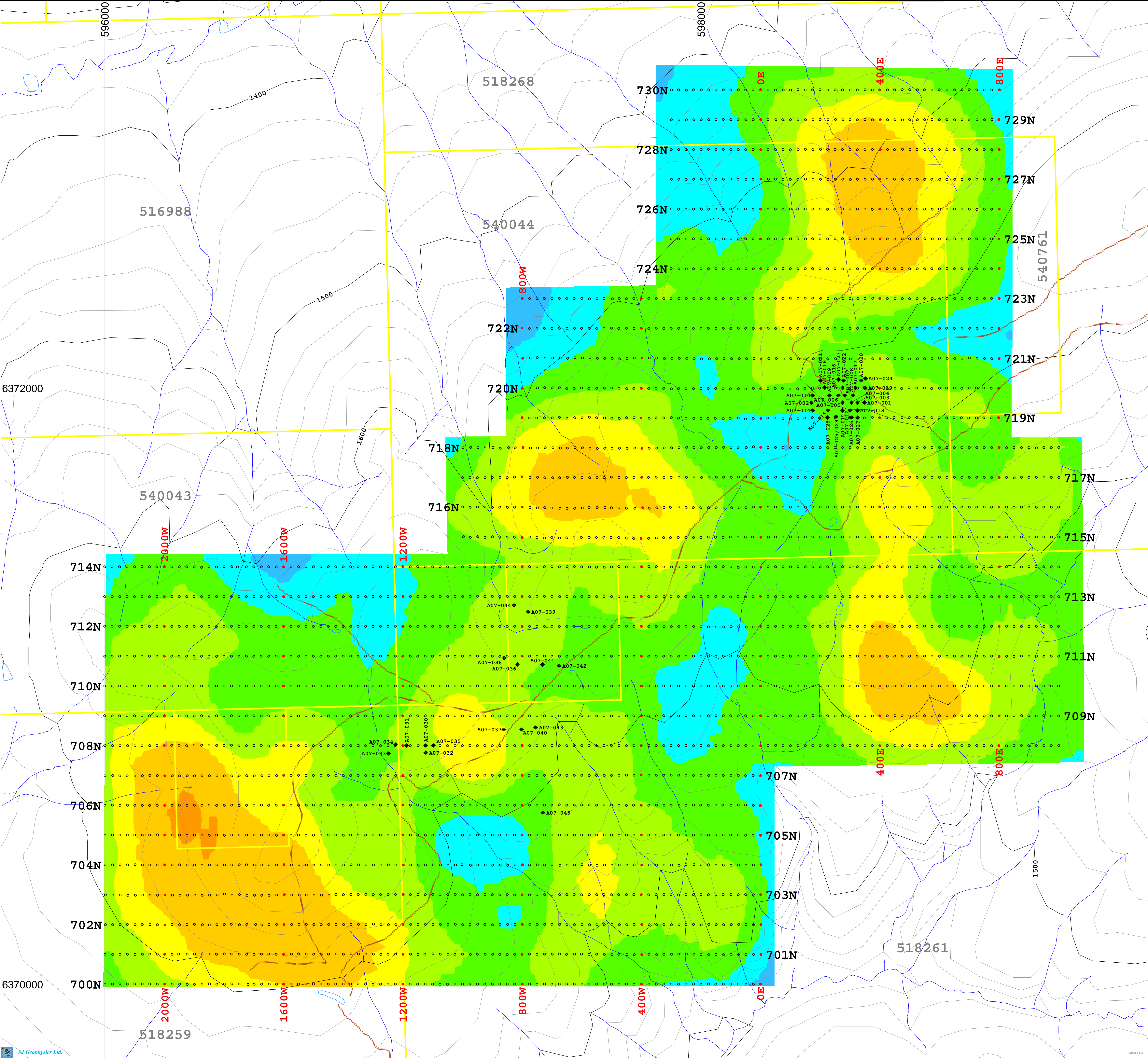
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TRANSMITTER: VIP IP Transmitter
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 200m Below Topography



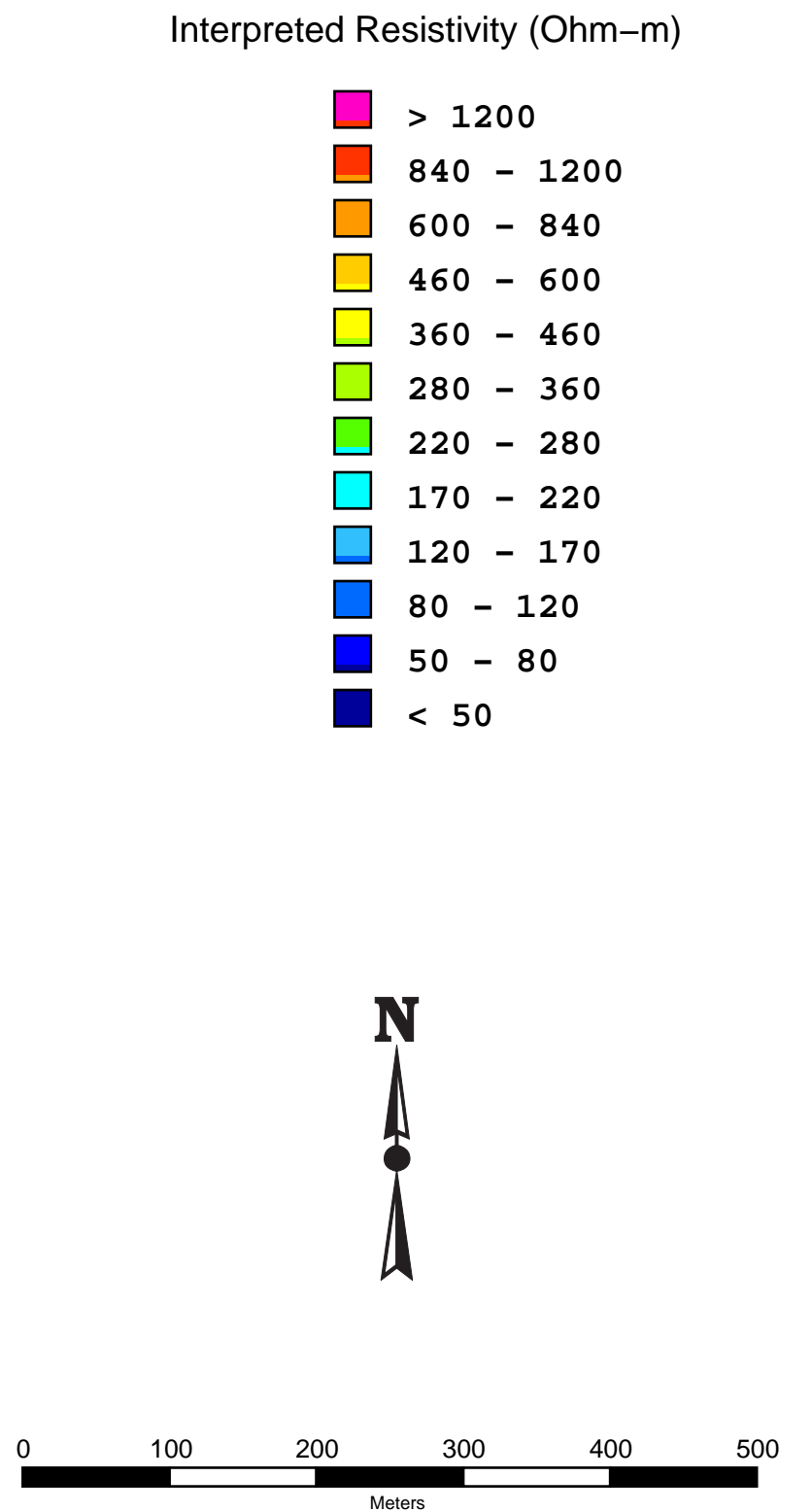
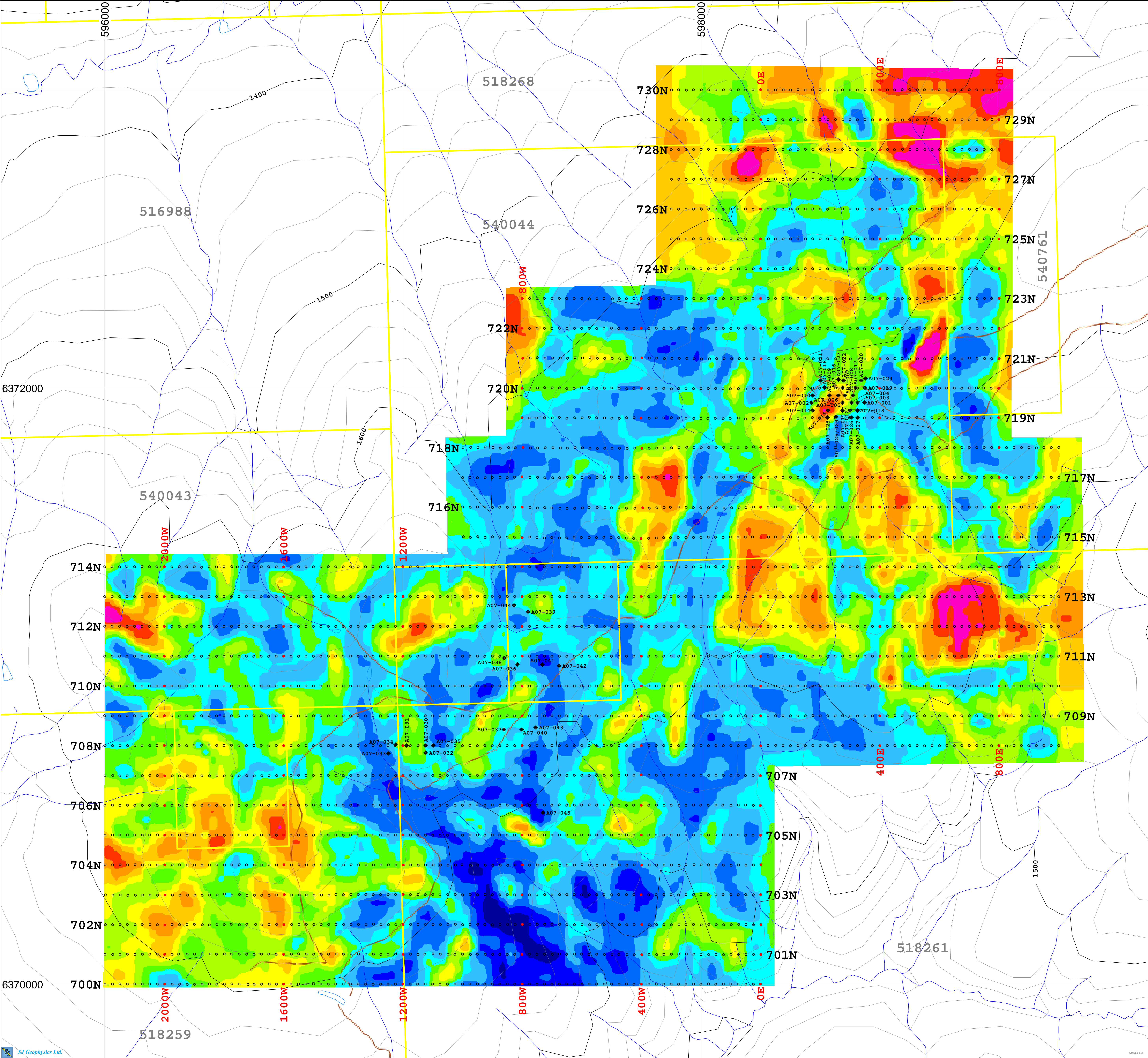
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3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Chargeability (ms)
False Color Contour Map

Depth 250m Below Topography



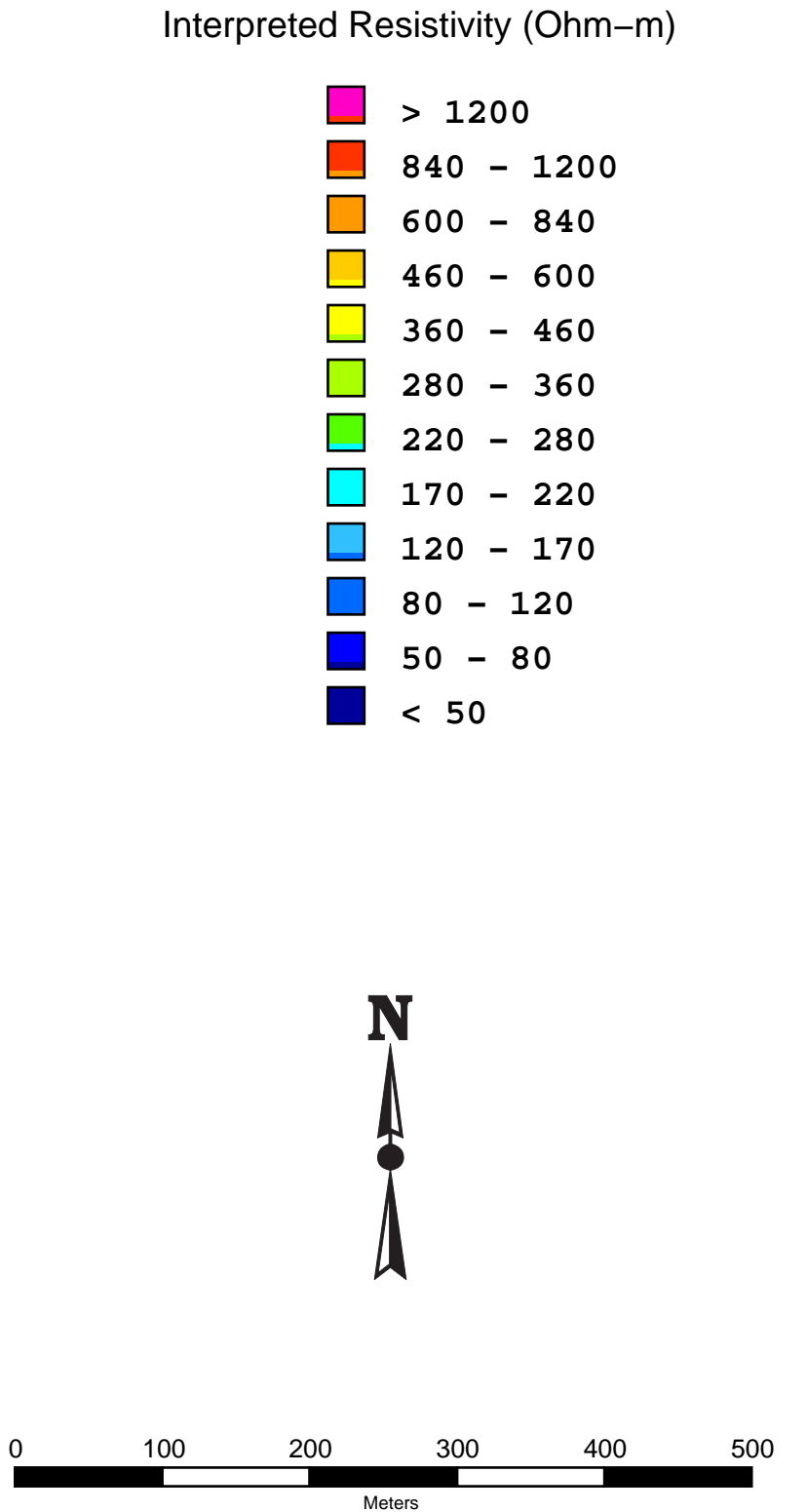
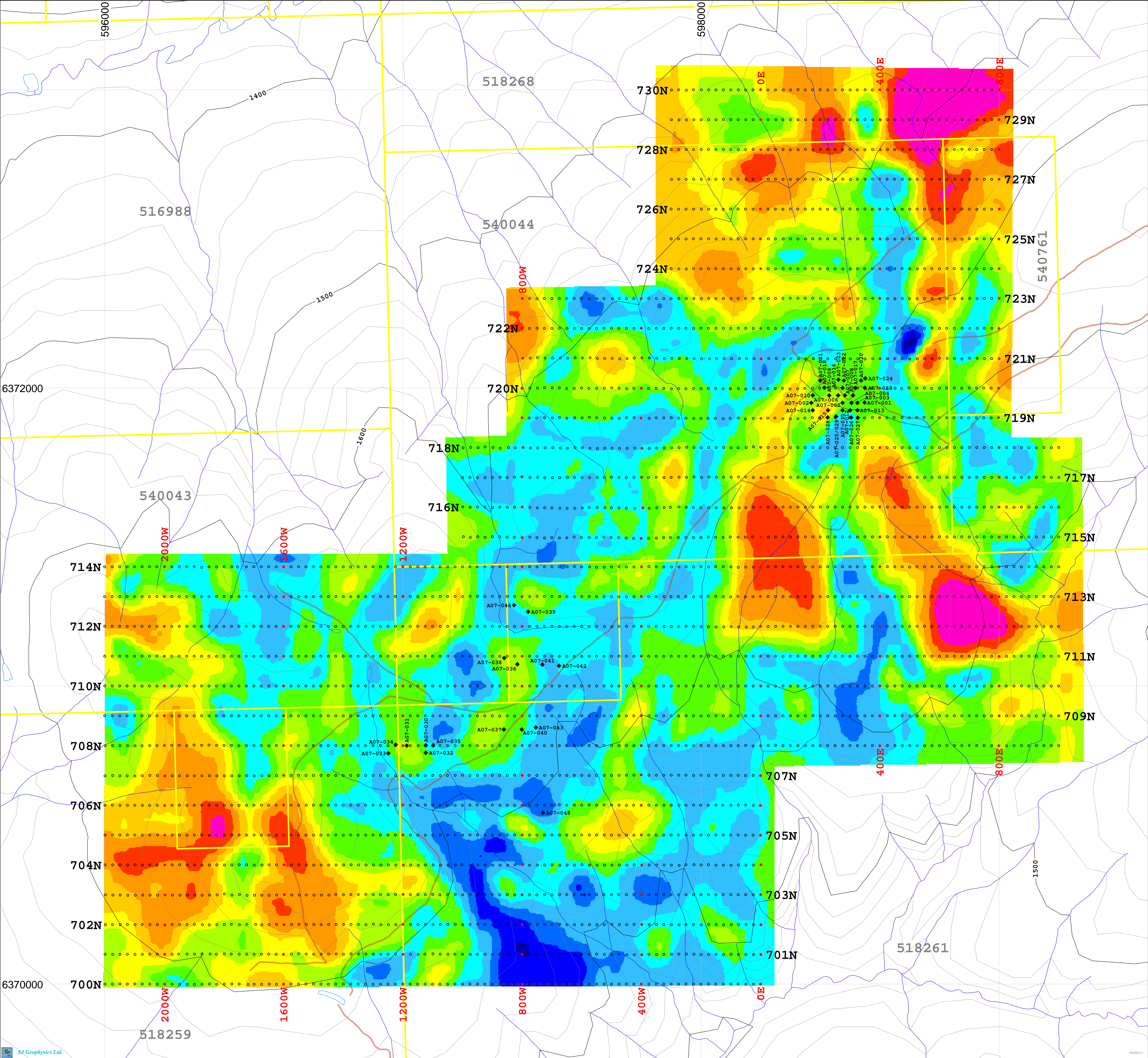
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map
Depth 25m Below Topography



Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

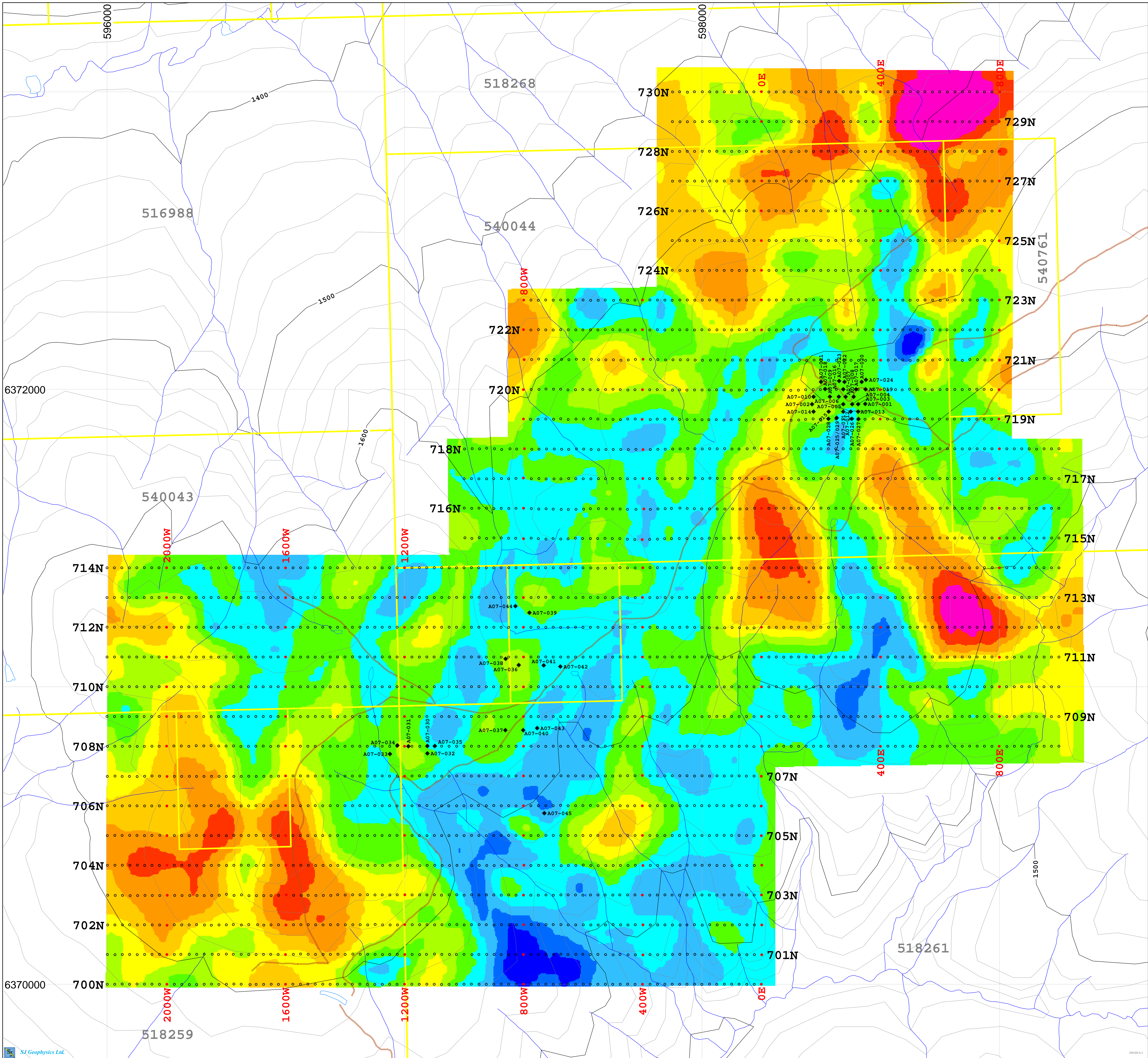
Legend

- Survey Stations
- ◆ Drill Collars
- Claim Areas
- Contour Lines (m)
- Rivers
- Roads
- Lakes

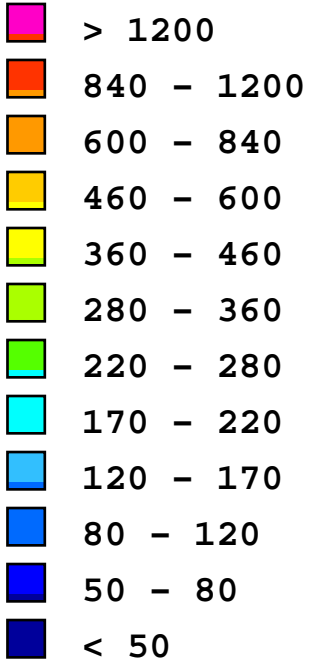
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map

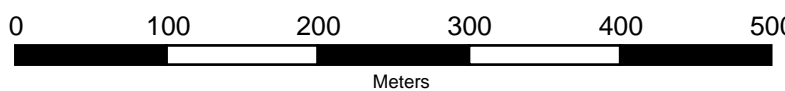
Depth 75m Below Topography



Interpreted Resistivity (Ohm-m)



N



Survey Information

3D IP Array : n=1-16 a=50m and 100m

INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter

Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

Legend

- Survey Stations
- ◆ Drill Collars
- Claim Areas
- Contour Lines (m)
- Rivers
- Roads
- Lakes

GUARDSMEN RESOURCES INC

Ranch Project

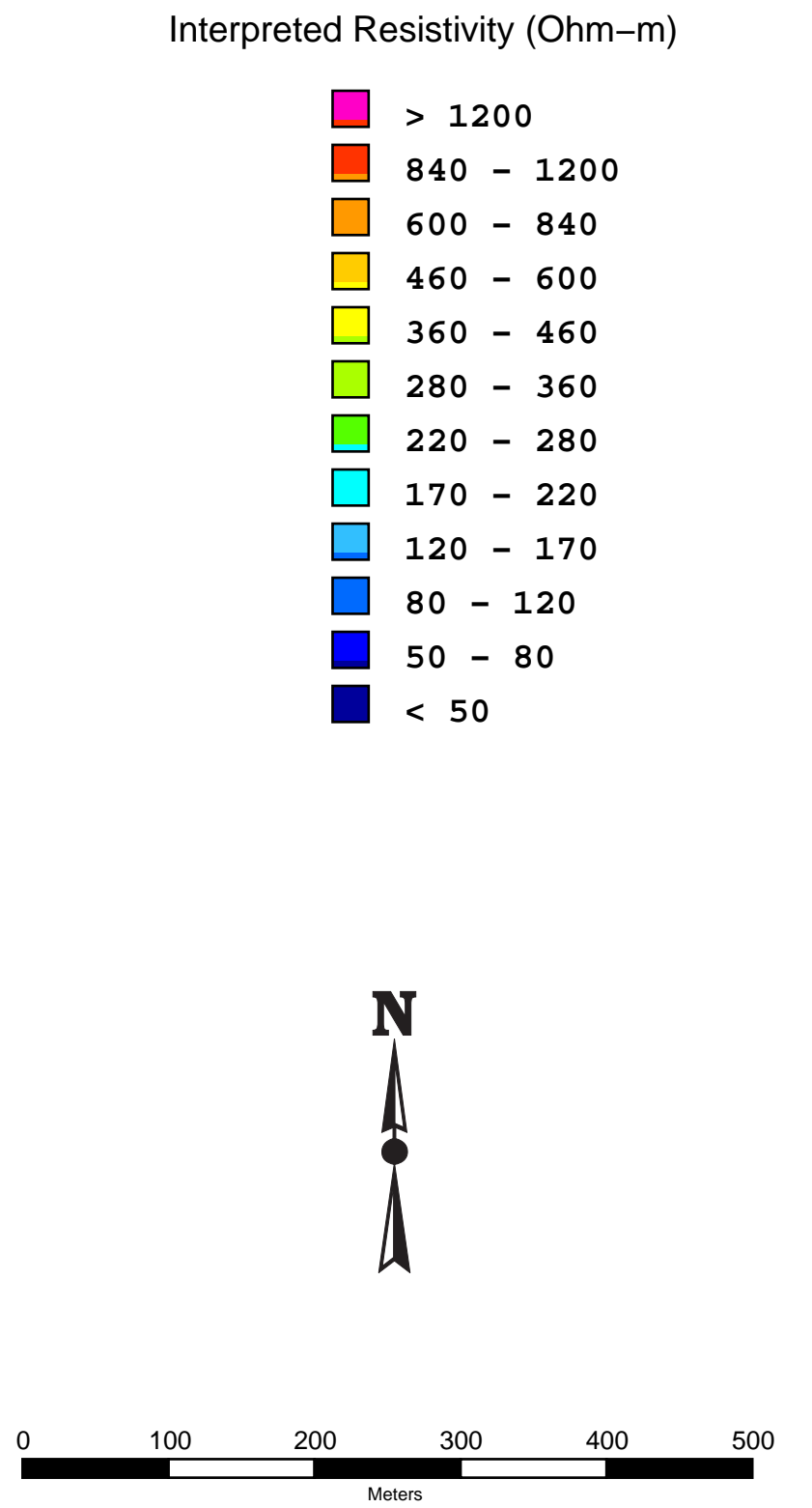
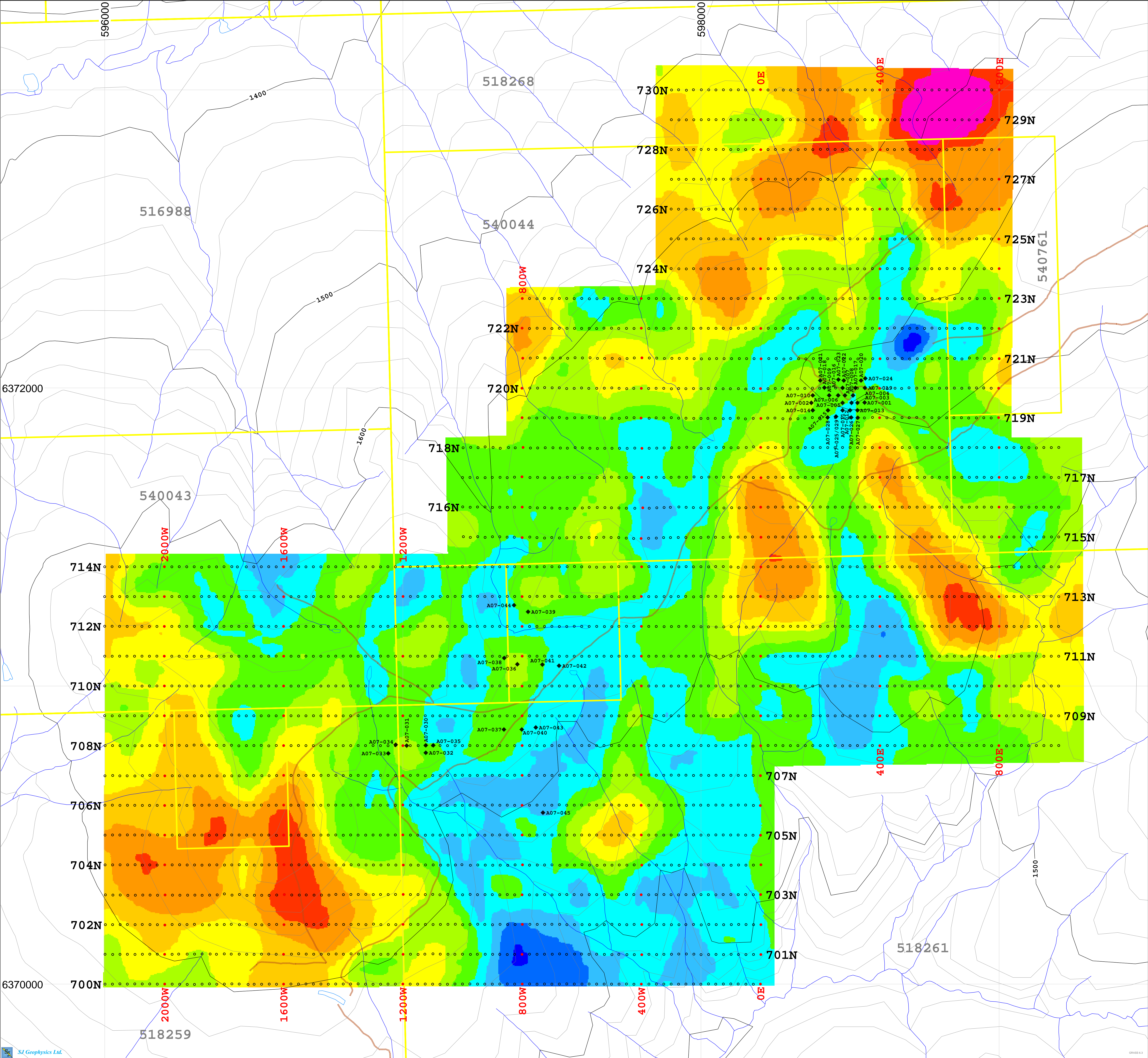
Toodoggone, B.C.

3D Inversion Model

Interpreted Resistivity (Ohm-m)

False Color Contour Map

Depth 100m Below Topography



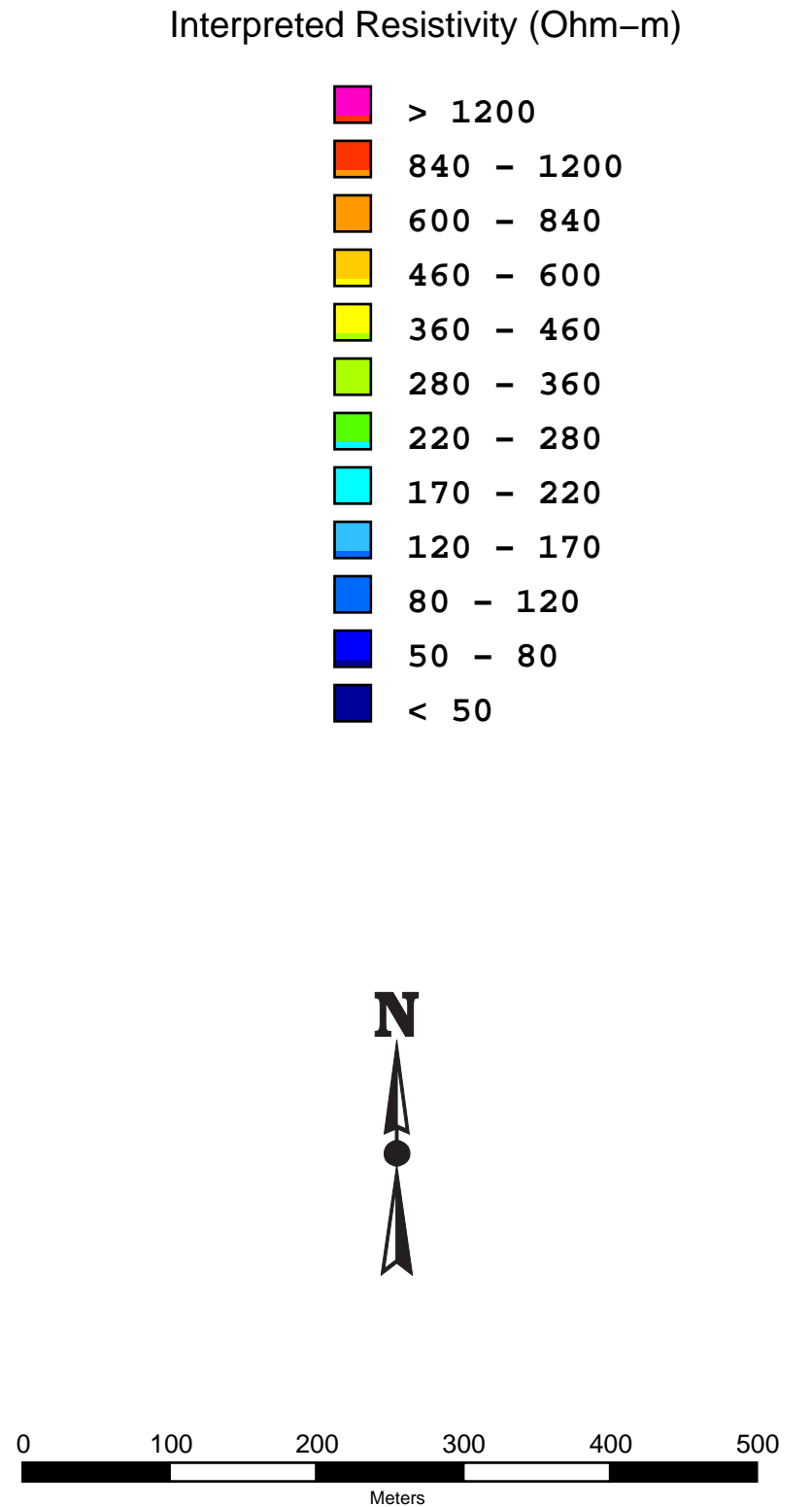
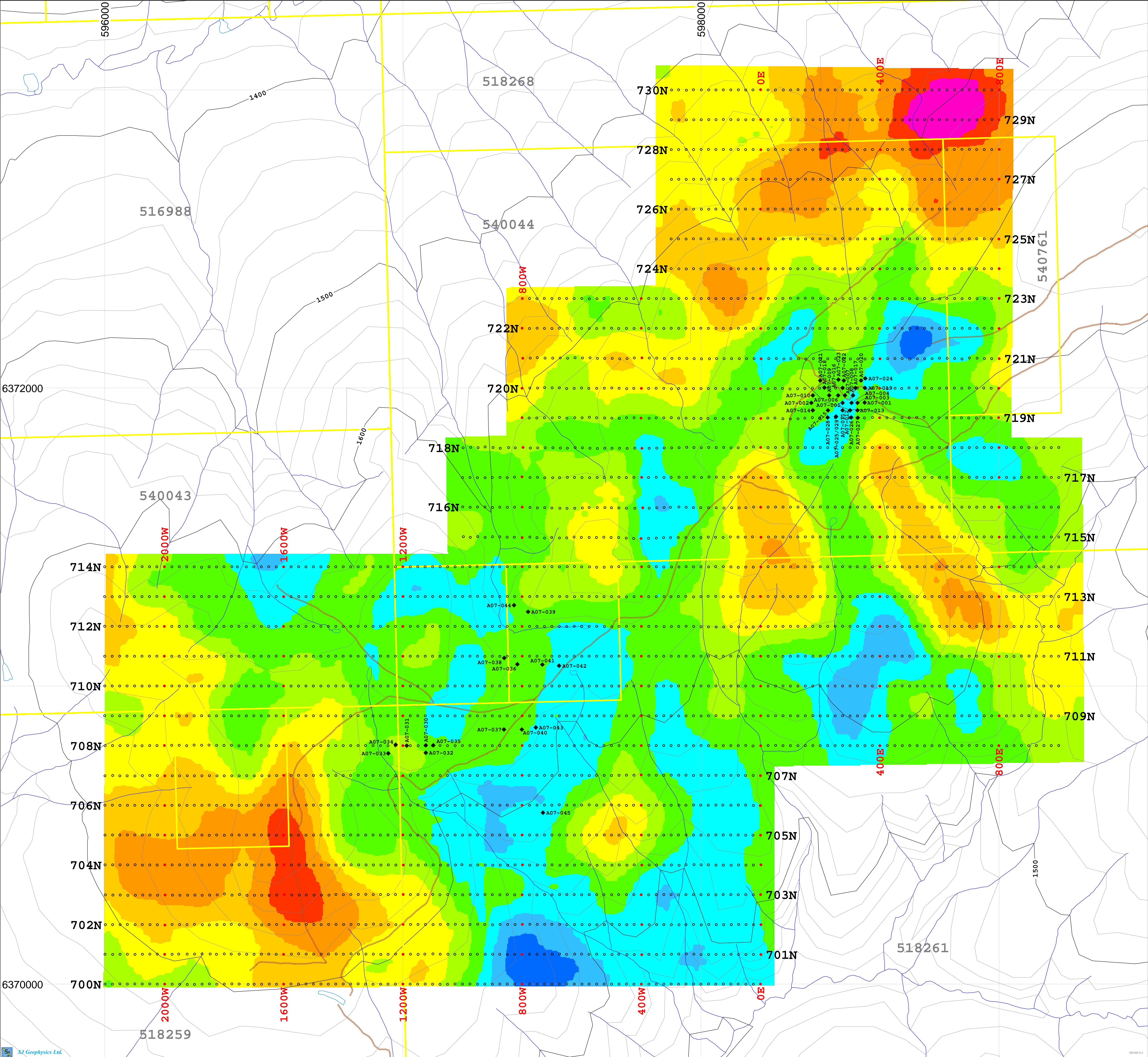
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map

Depth 125m Below Topography



Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

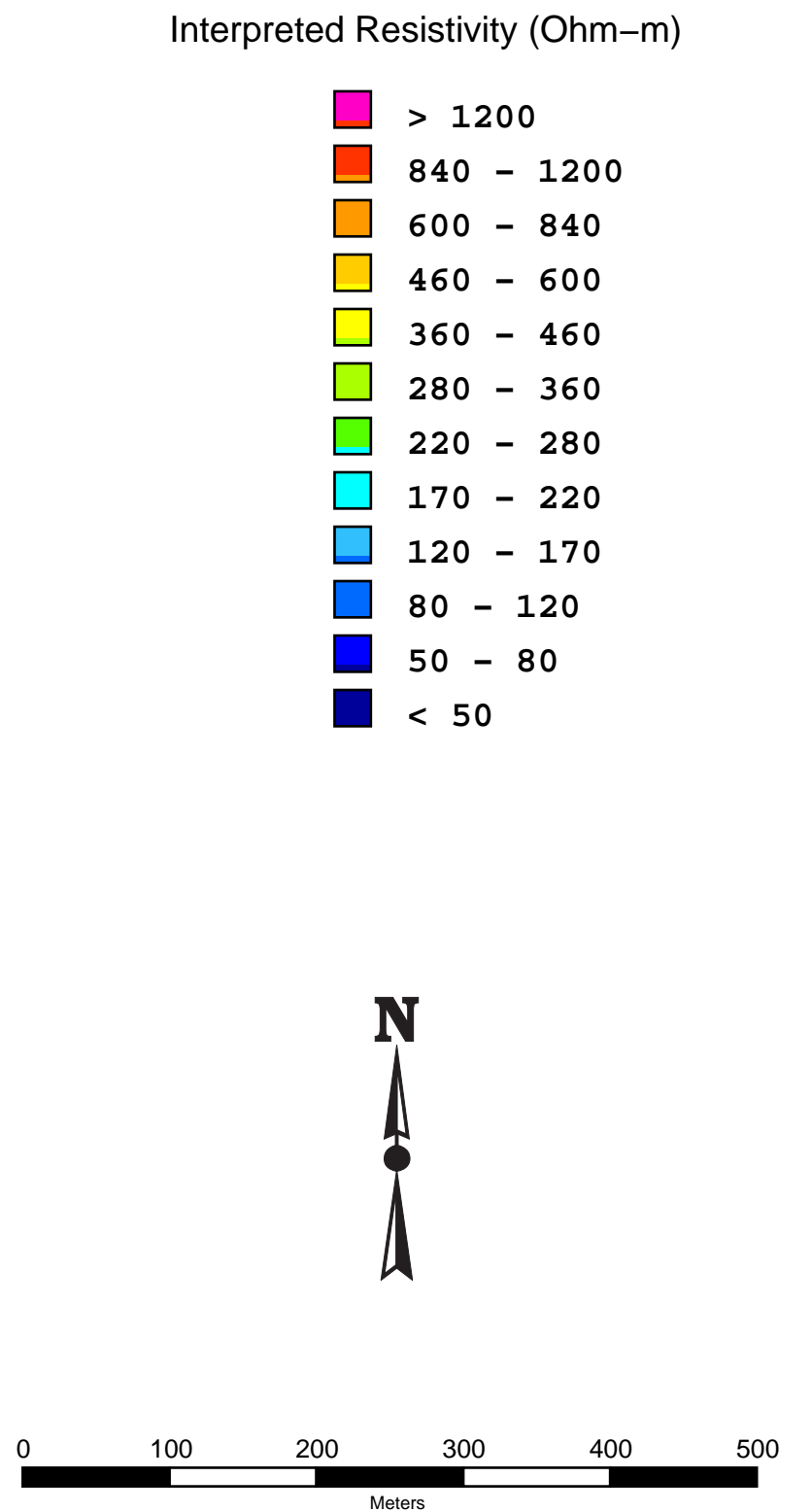
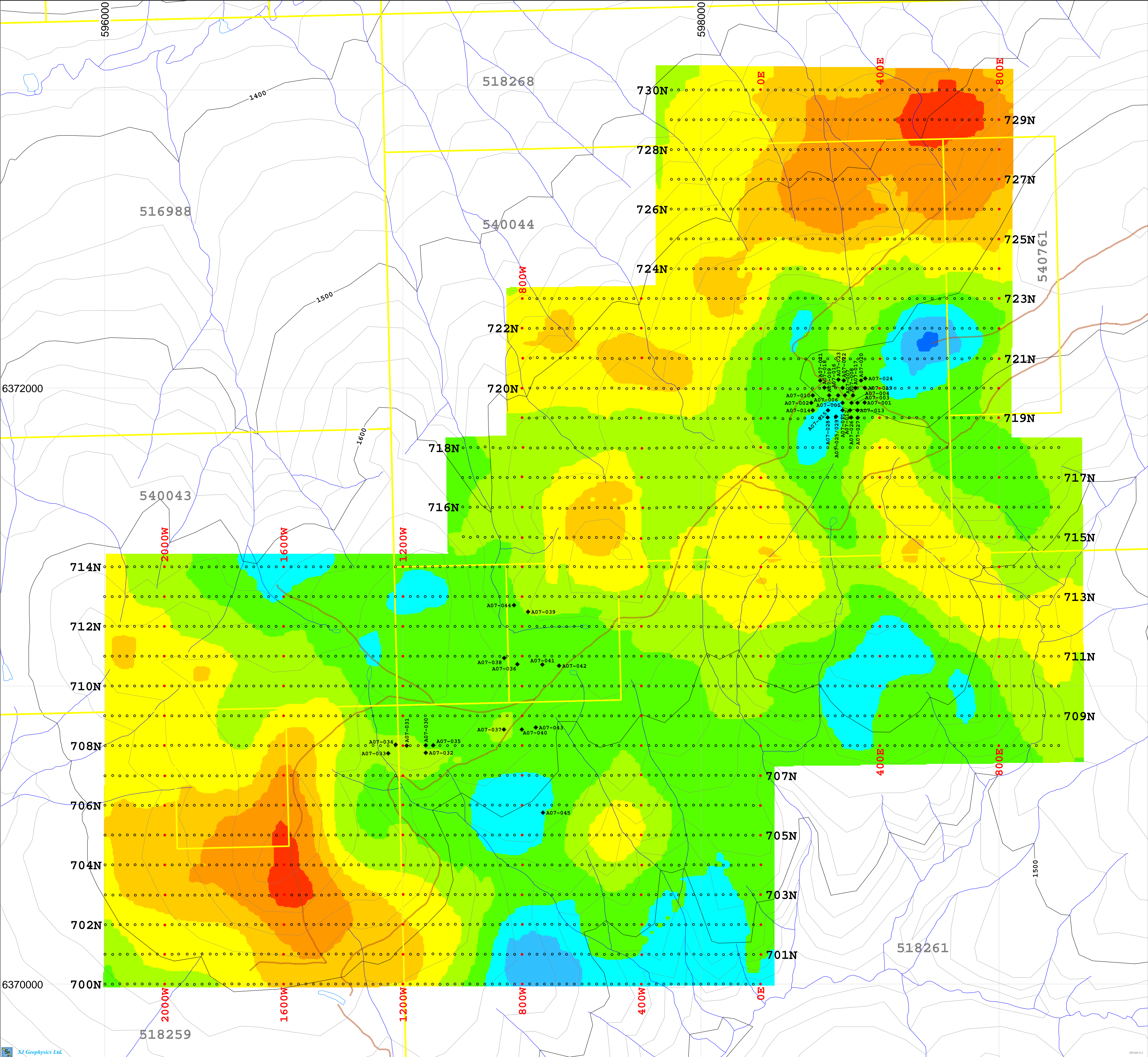
Legend

- Survey Stations
- Drill Collars
- Claim Areas
- Contour Lines (m)
- Rivers
- Roads
- Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map

Depth 150m Below Topography



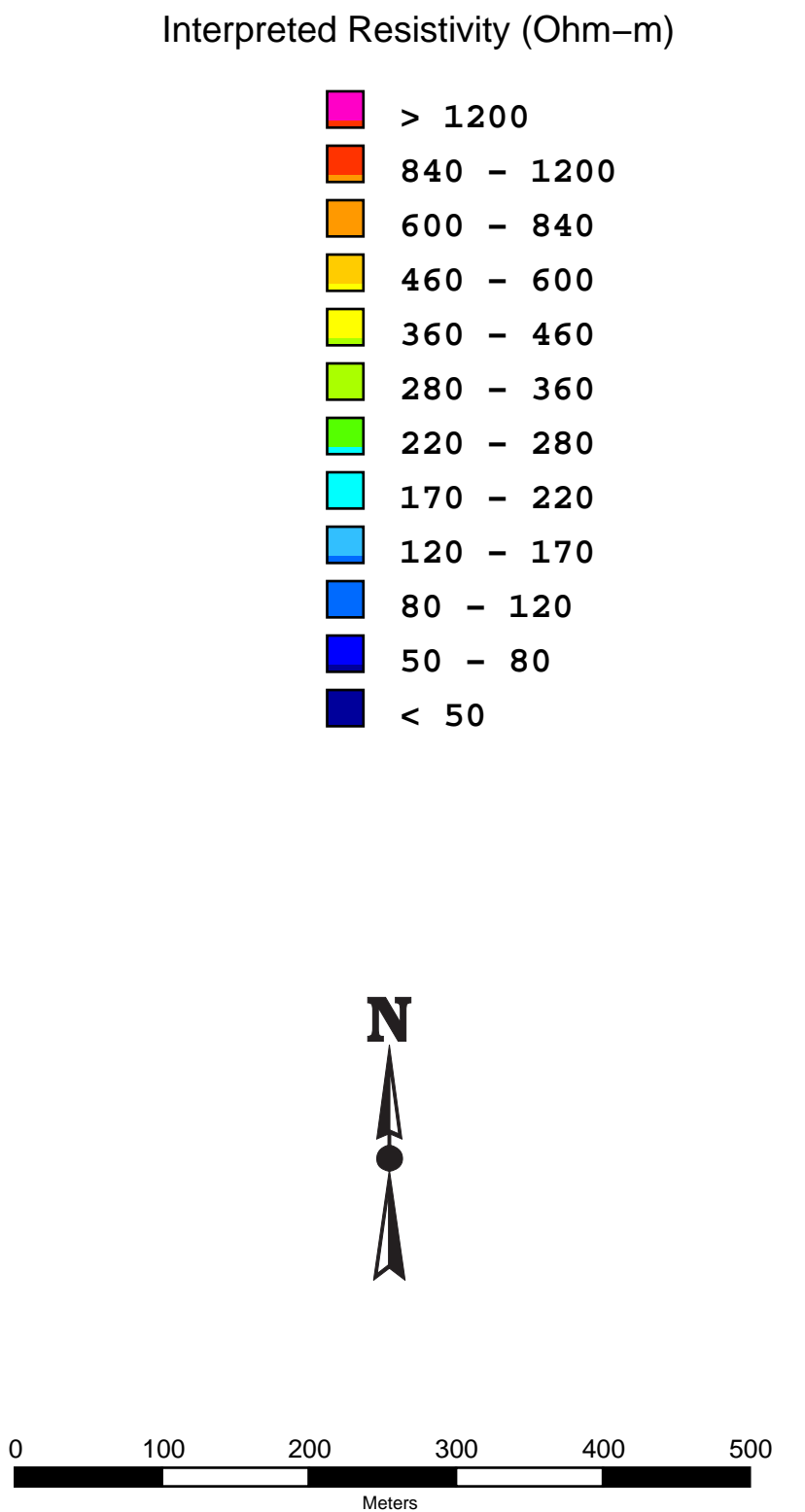
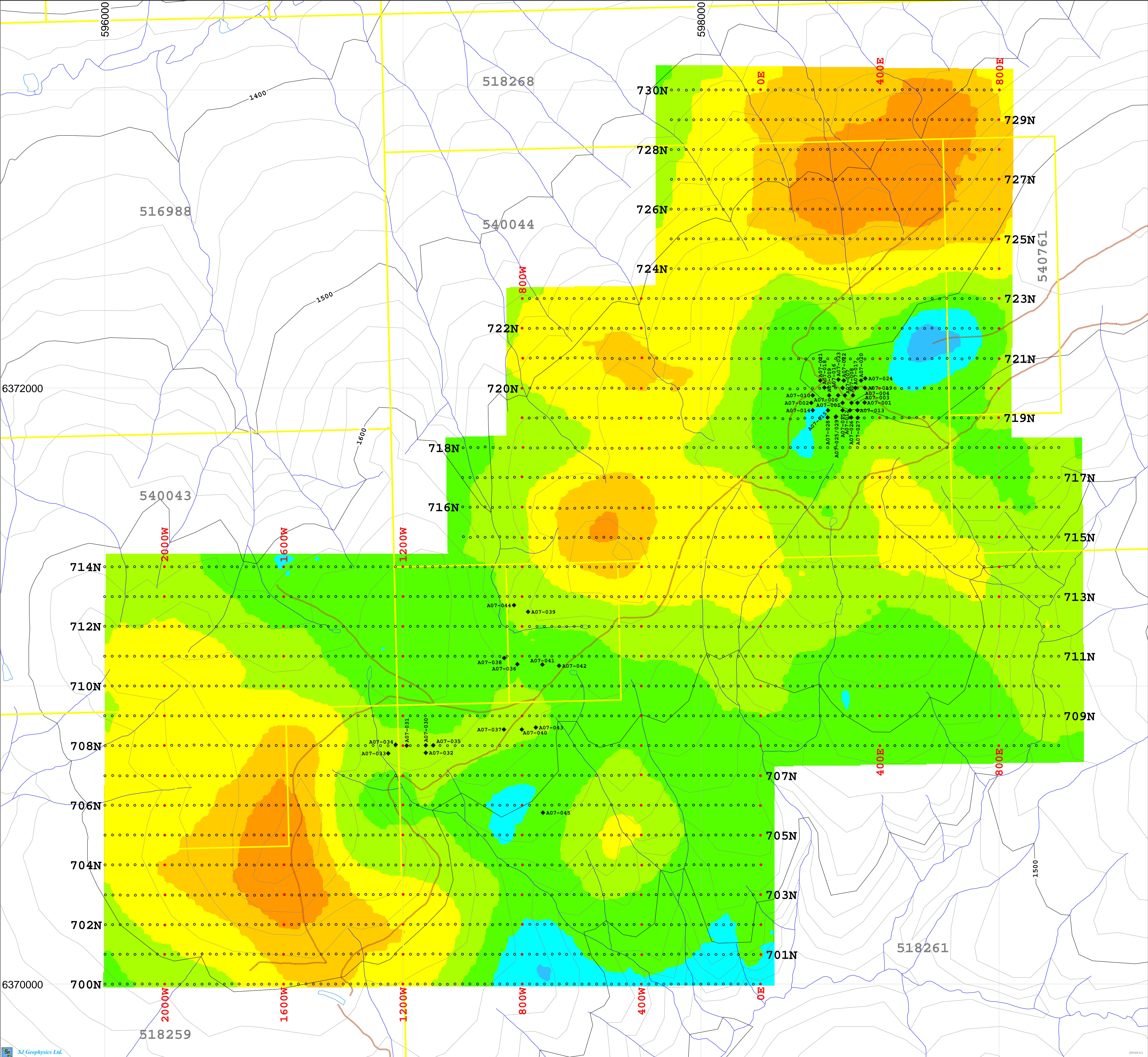
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

- Legend
- Survey Stations
 - ◆ Drill Collars
 - Claim Areas
 - Contour Lines (m)
 - Rivers
 - Roads
 - Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map

Depth 200m Below Topography



Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Base Map: BCGS TRIM Mapsheets 94E043 / 94E044
NTS Sheet Number: 094E06
Omenica Mining Division

Projection: UTM NAD83 Zone 9

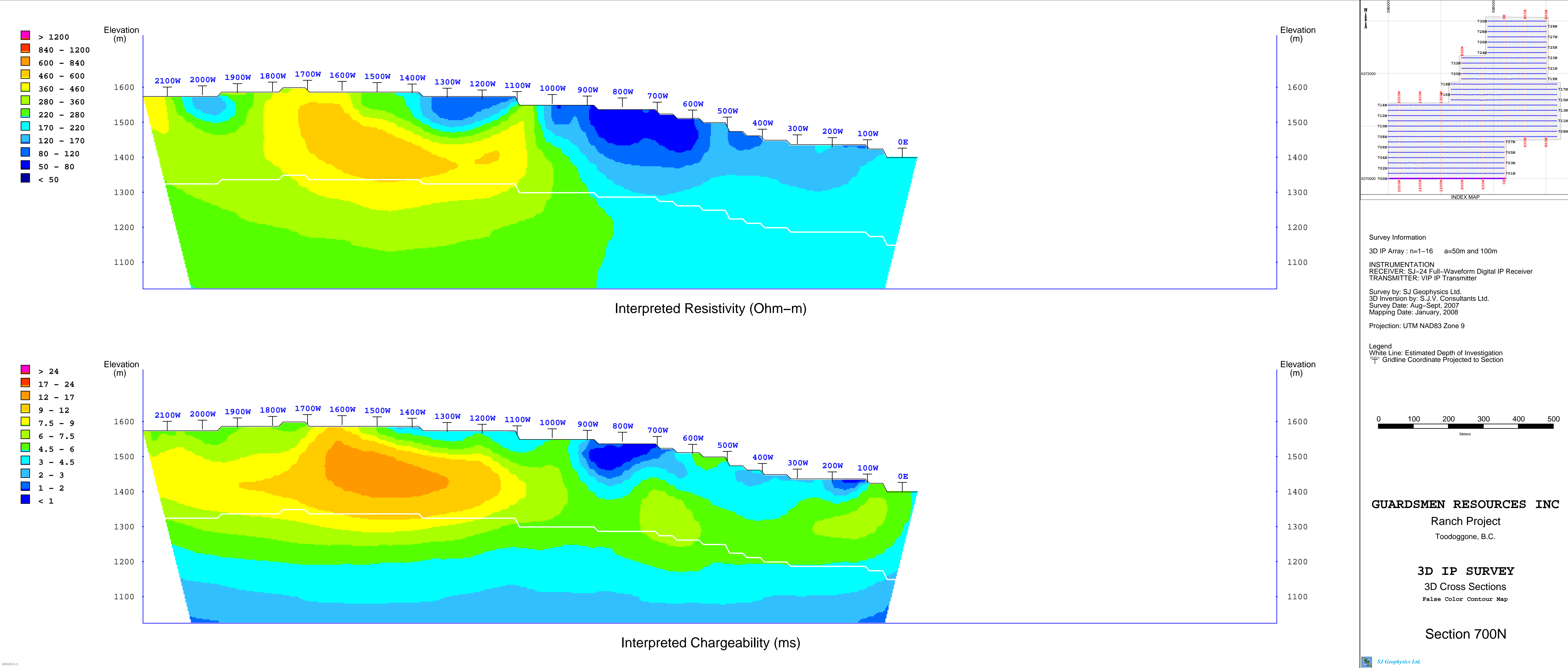
Legend

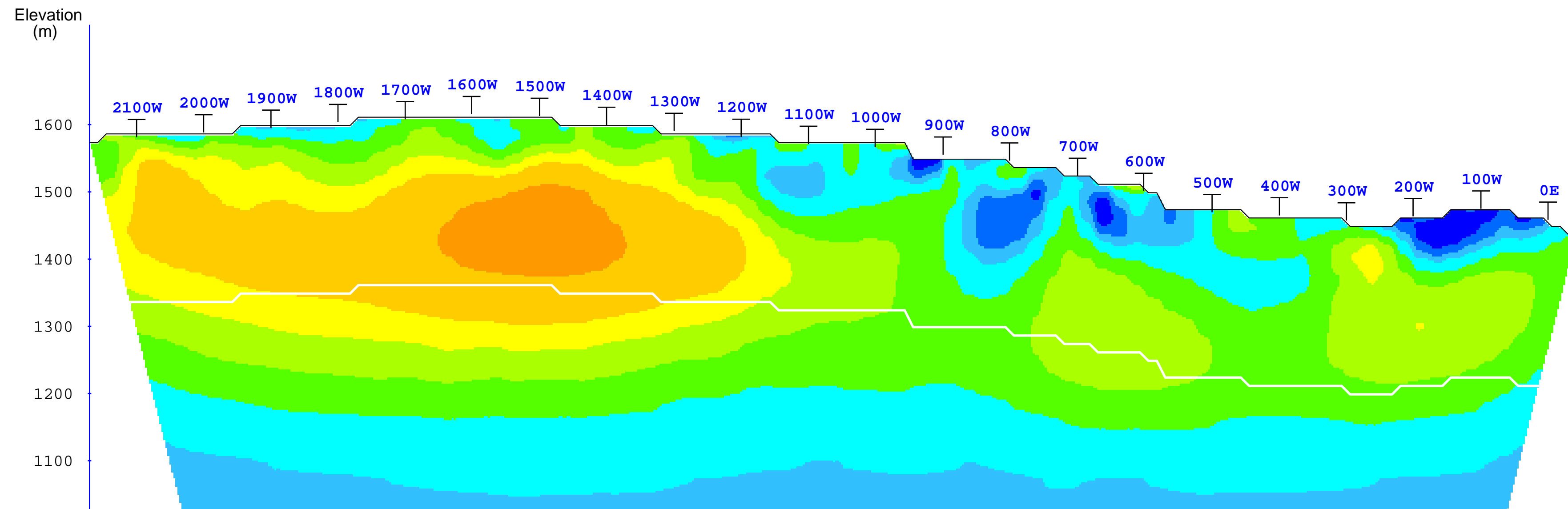
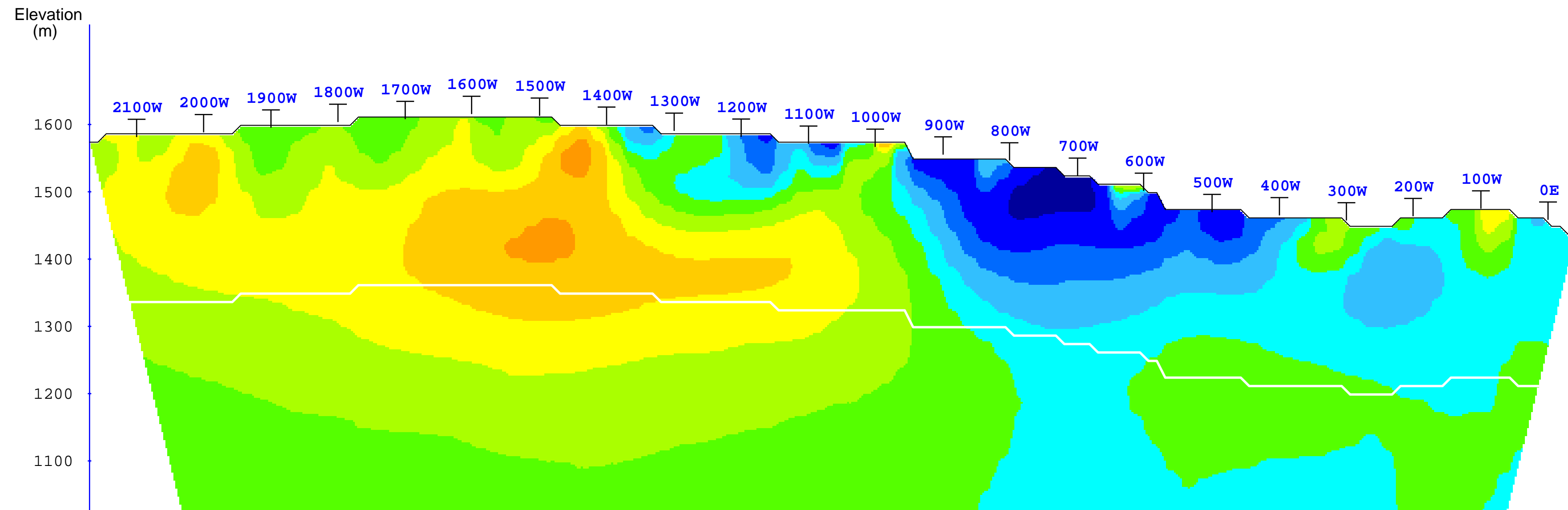
- Survey Stations
- ◆ Drill Collars
- Claim Areas
- Contour Lines (m)
- Rivers
- Roads
- Lakes

GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D Inversion Model
Interpreted Resistivity (Ohm-m)
False Color Contour Map

Depth 250m Below Topography





Elevation (m)

1600

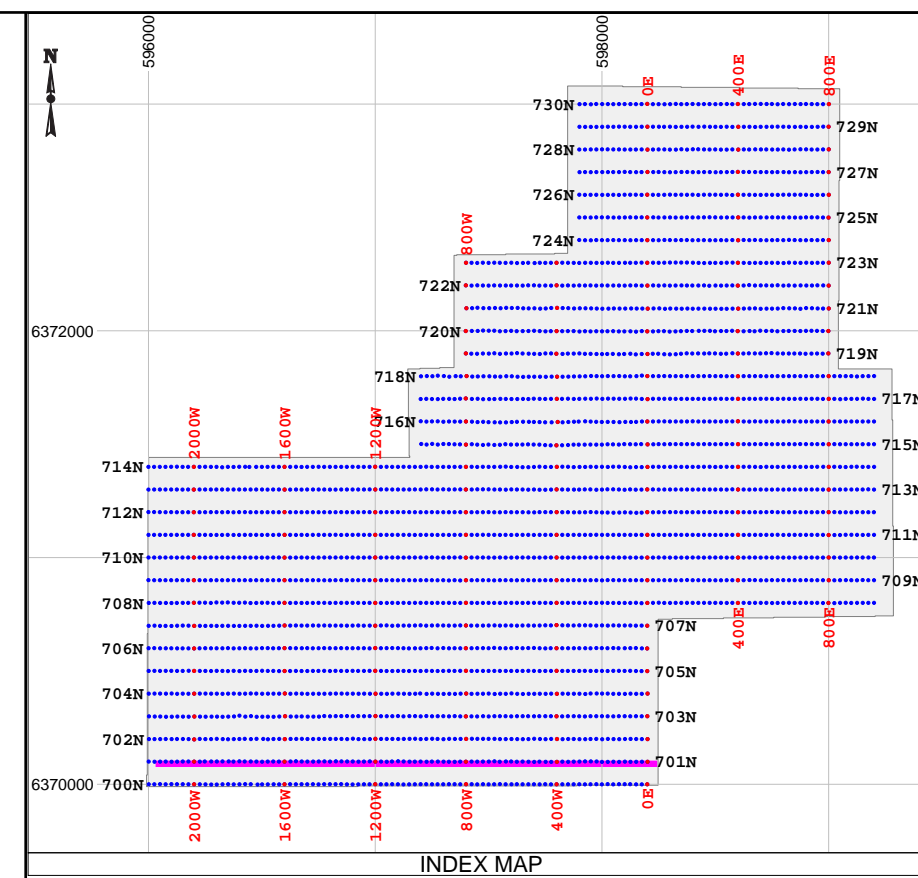
1500

1400

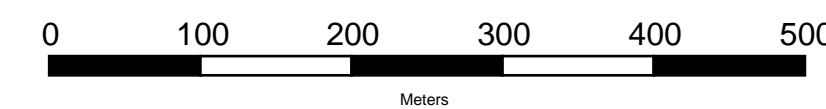
1300

1200

1100



Legend
 White Line: Estimated Depth of Investigation
 Station Gridline Coordinate Projected to Section

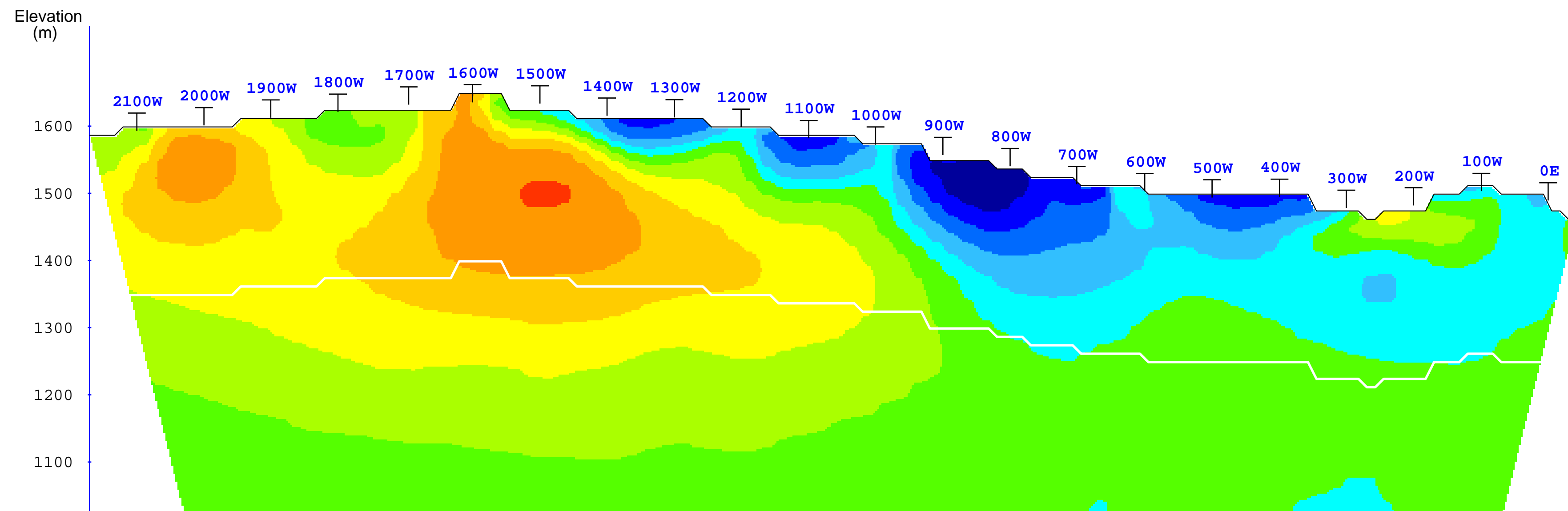


3D IP SURVEY

3D Cross Sections

False Color Contour Map

Section 701N



Elevation (m)

1600

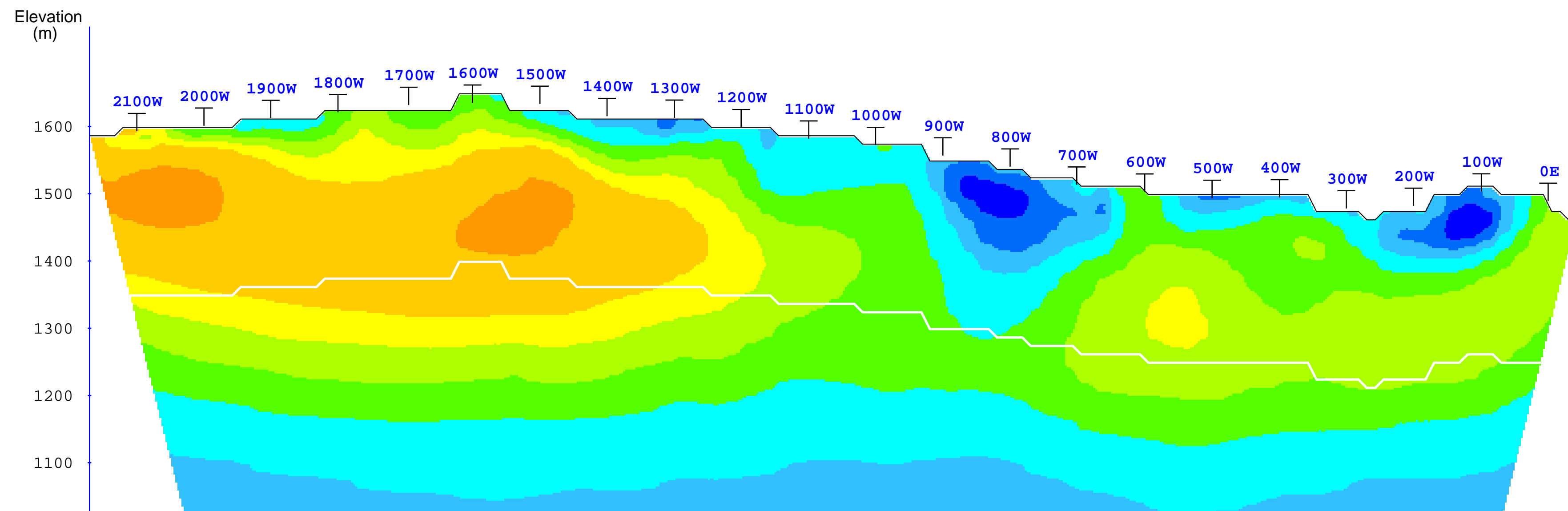
1500

1400

1300

1200

1100



Elevation (m)

1600

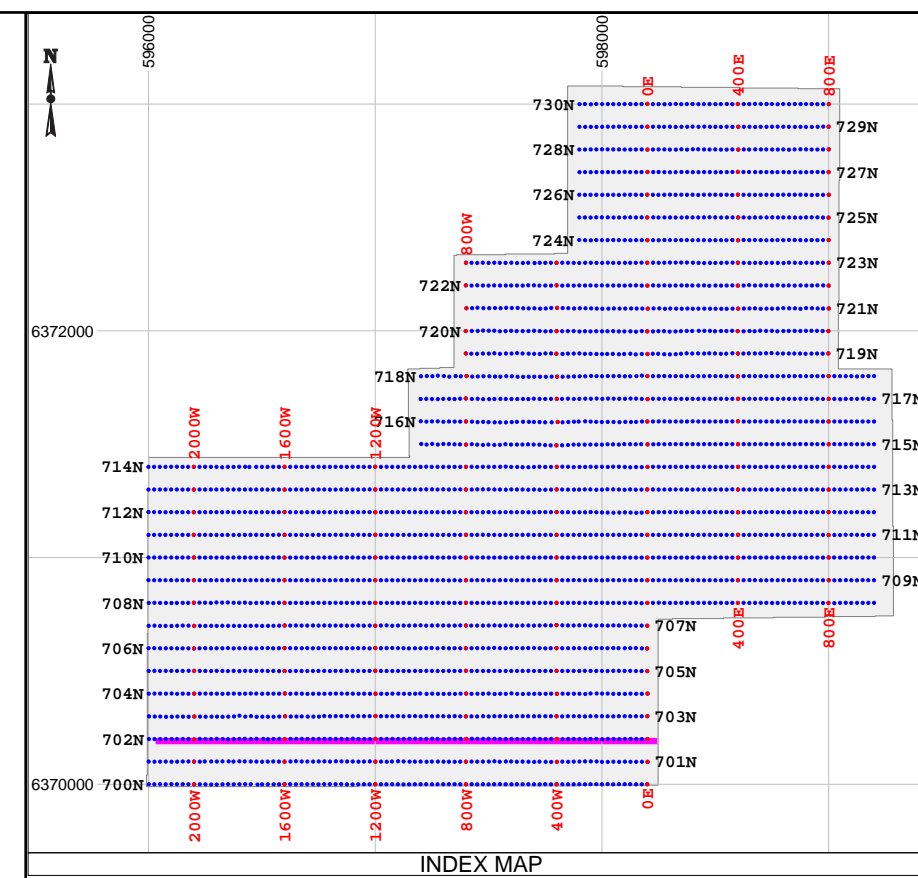
1500

1400

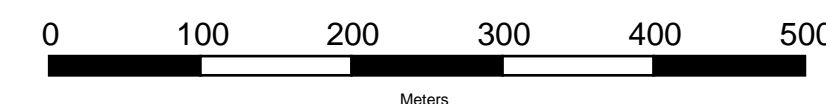
1300

1200

1100



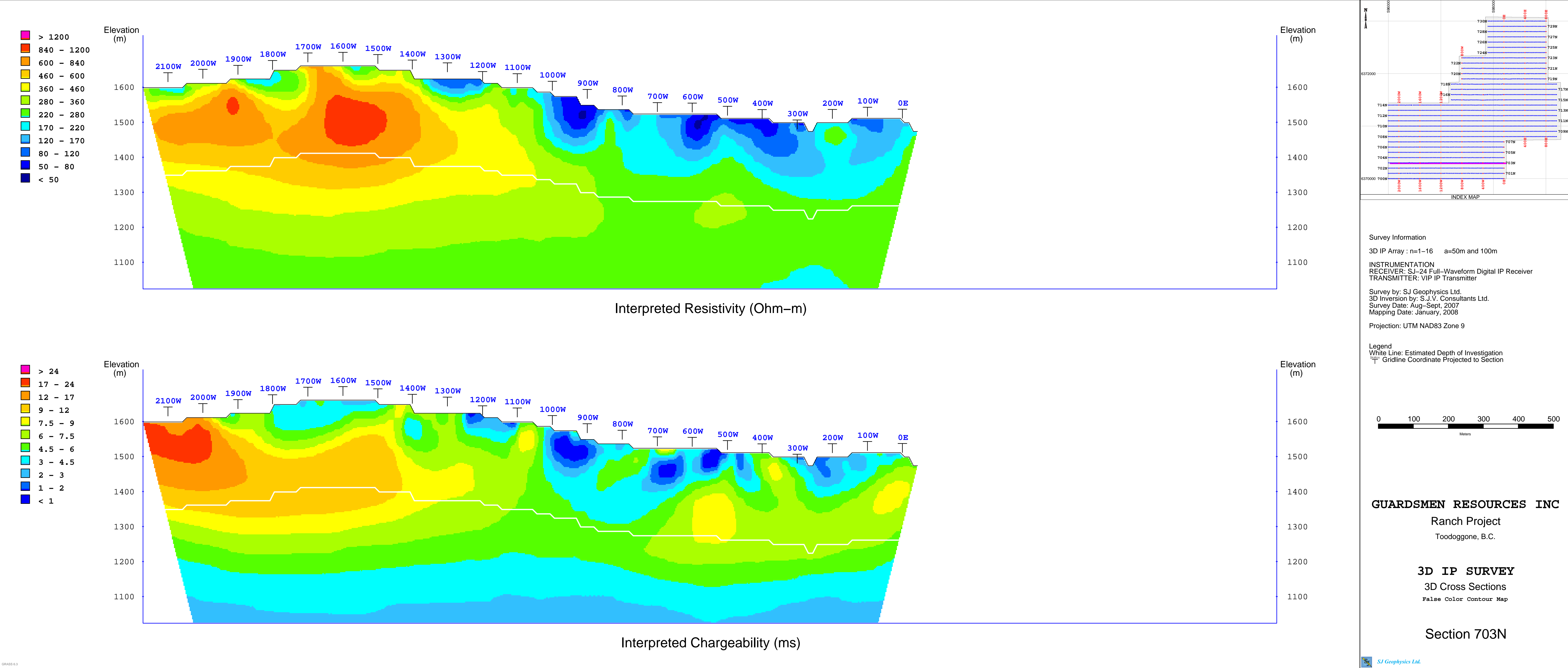
Legend
 White Line: Estimated Depth of Investigation
 Station  Gridline Coordinate Projected to Section

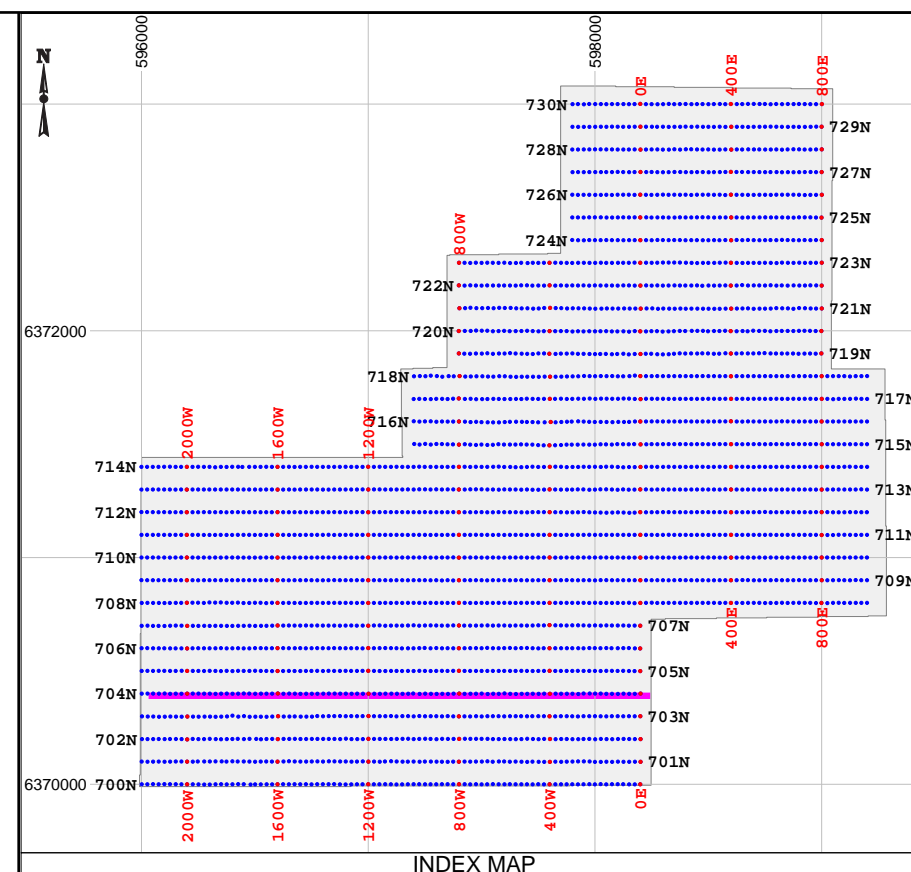
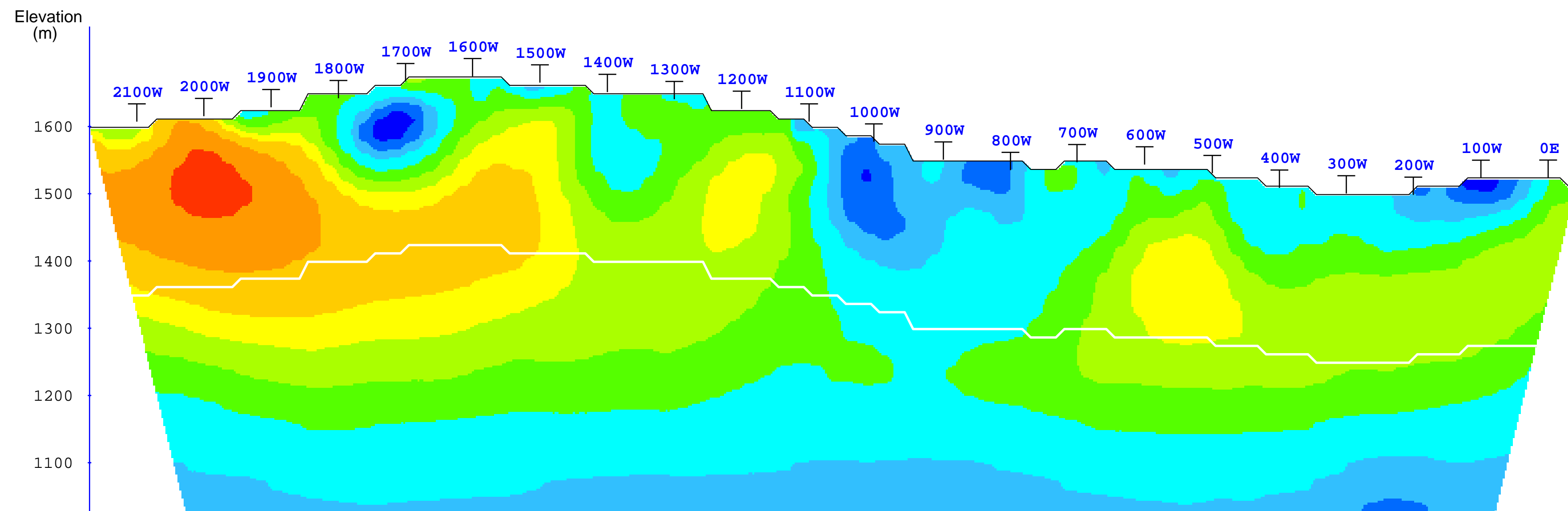
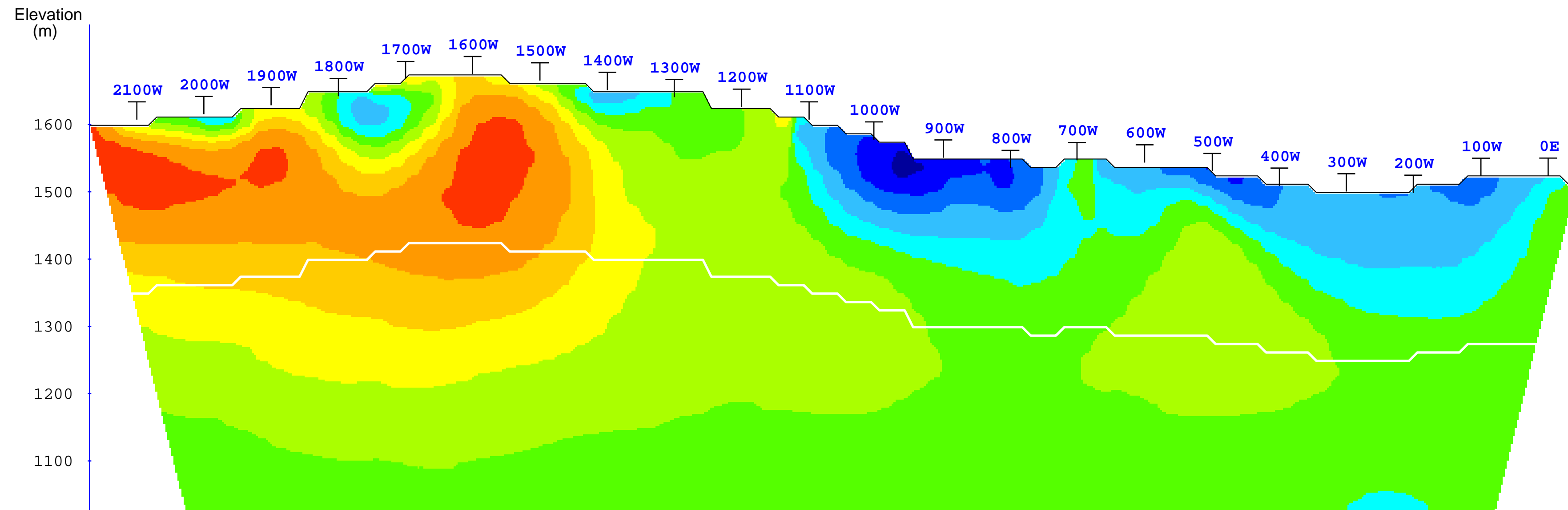


3D IP SURVEY

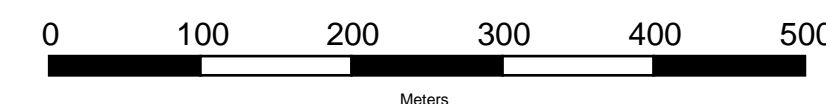
3D Cross Sections
False Color Contour Map

Section 702N



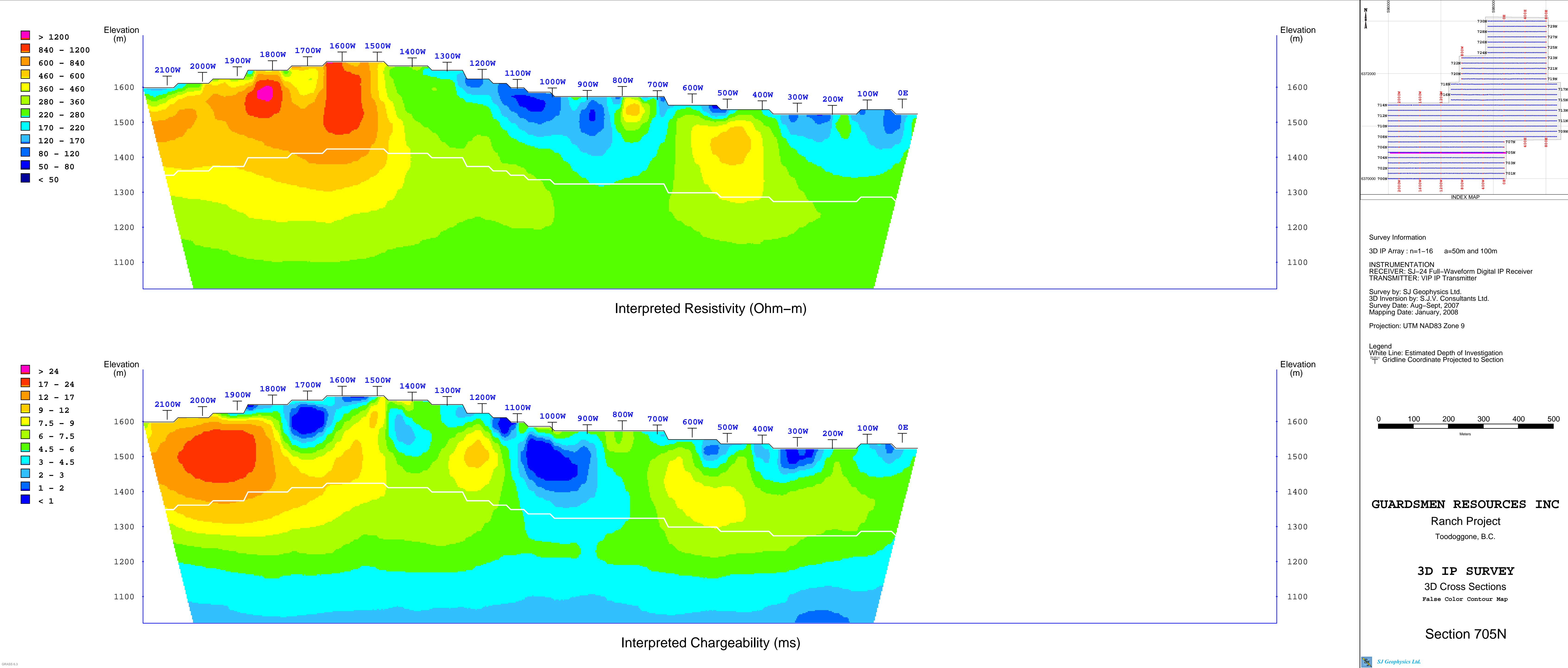


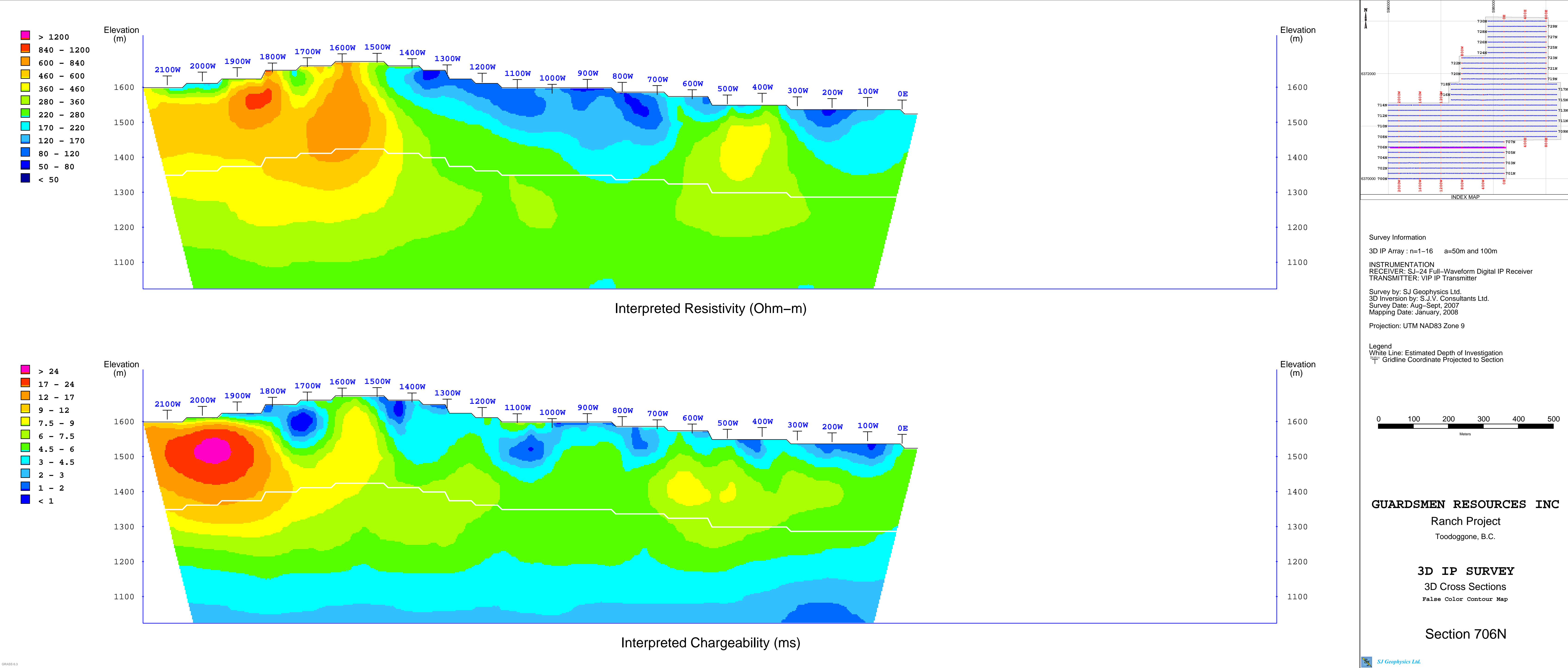
Legend
 White Line: Estimated Depth of Investigation
 Station  Gridline Coordinate Projected to Section

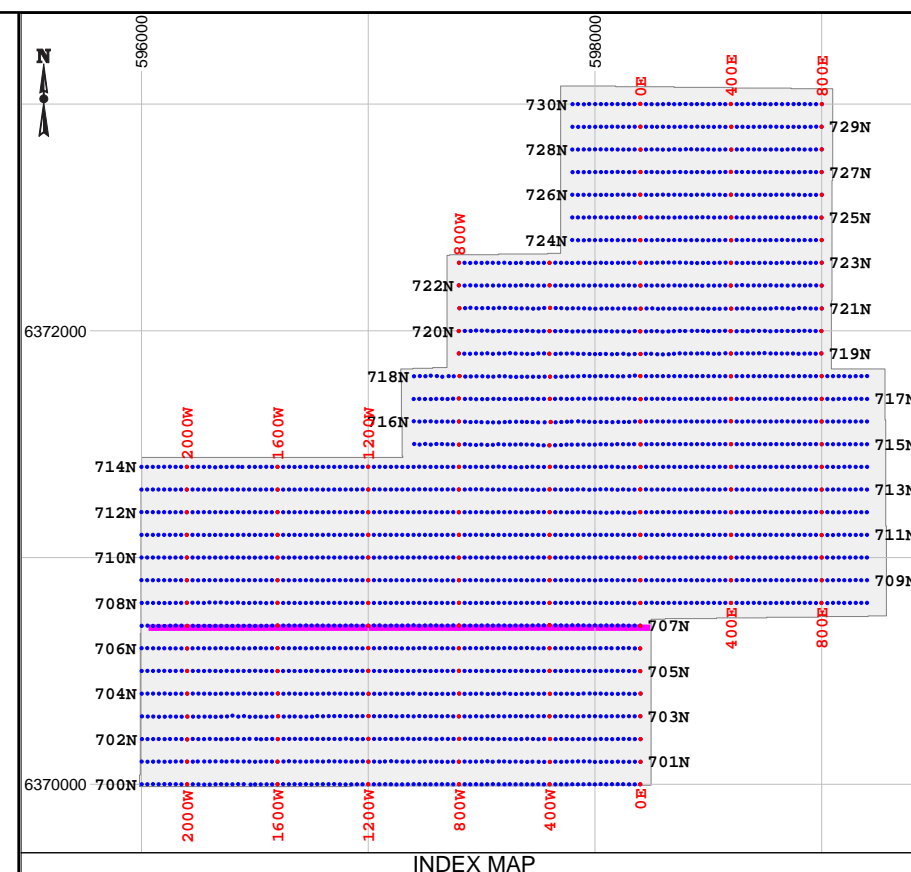
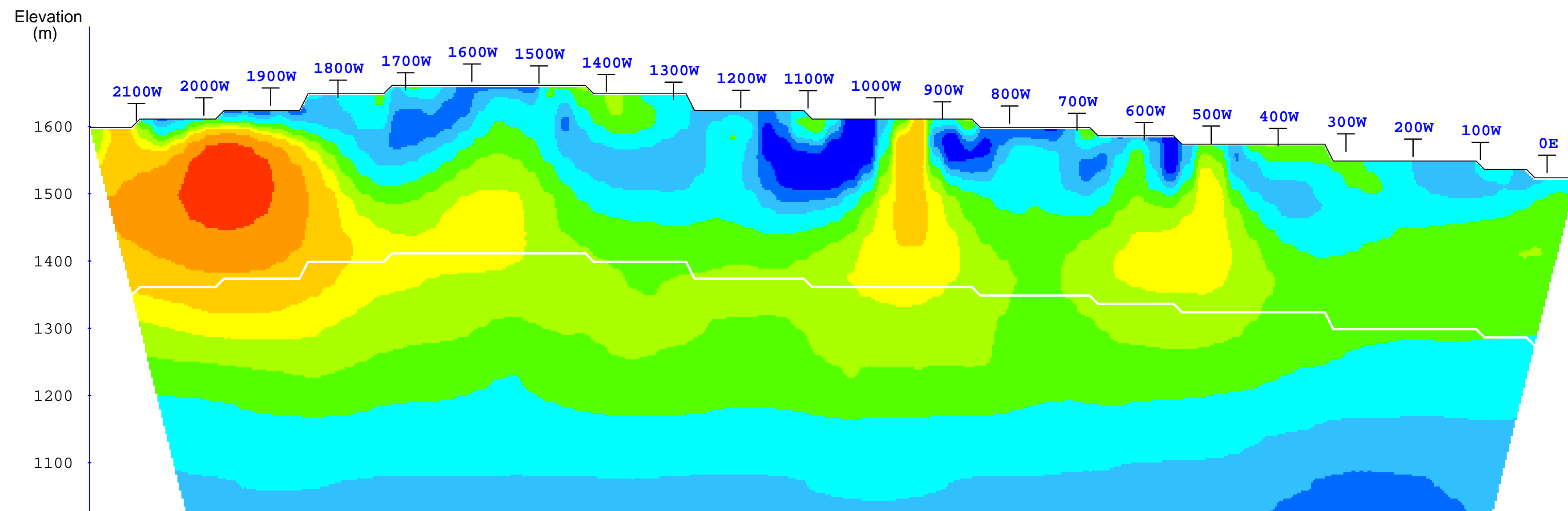
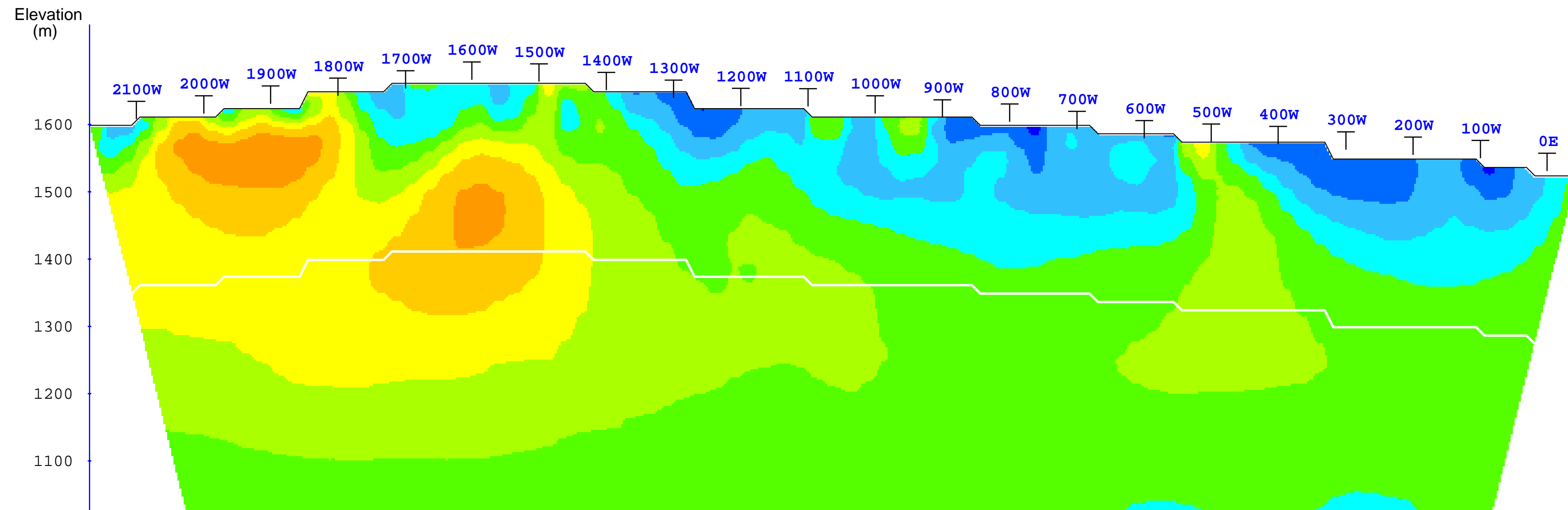


3D IP SURVEY
3D Cross Sections
False Color Contour Map

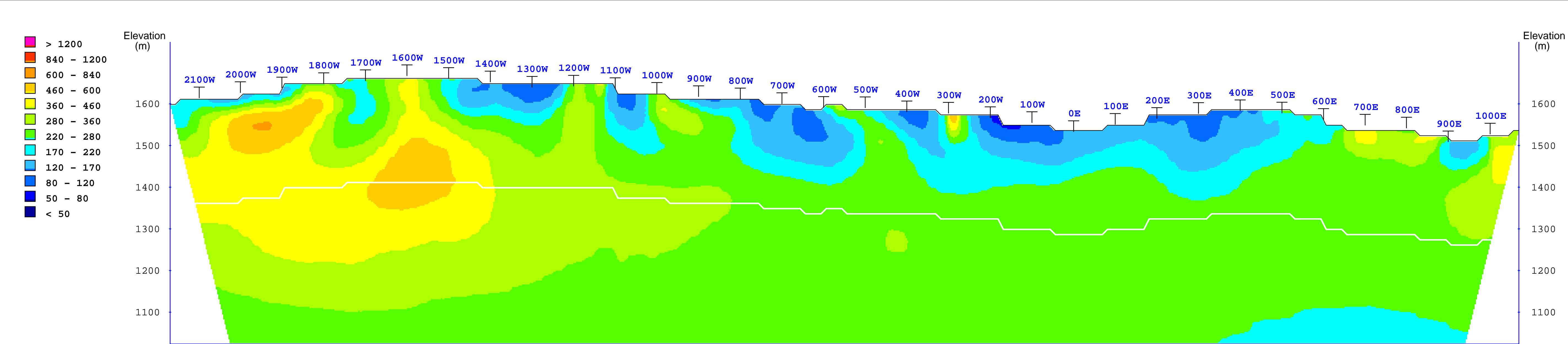
Section 704N



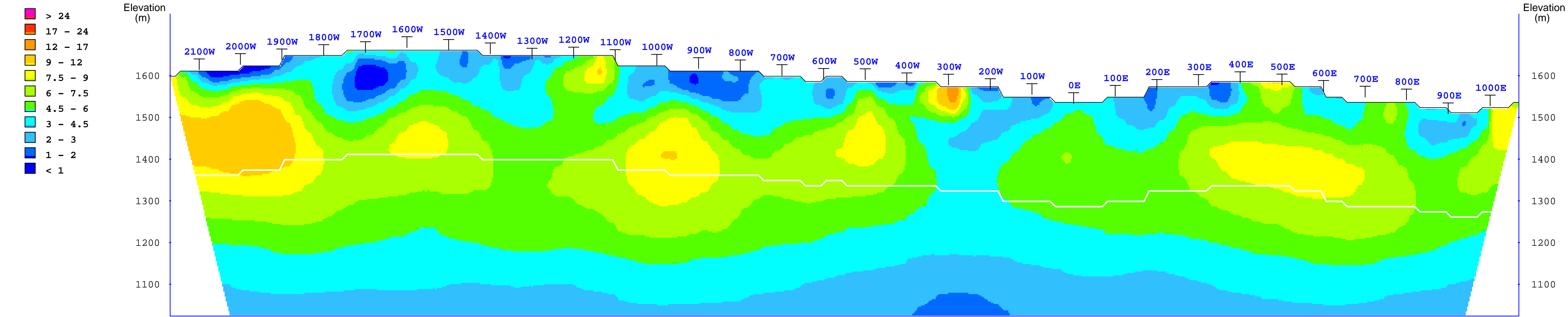




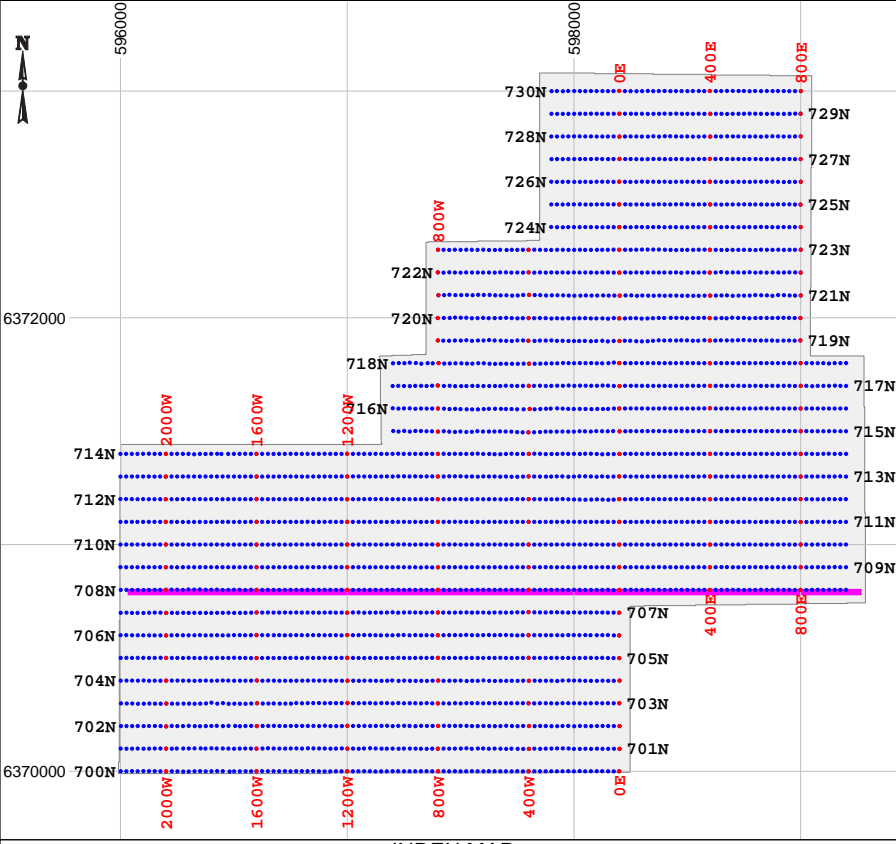
Section 707N



Interpreted Resistivity (Ohm-m)



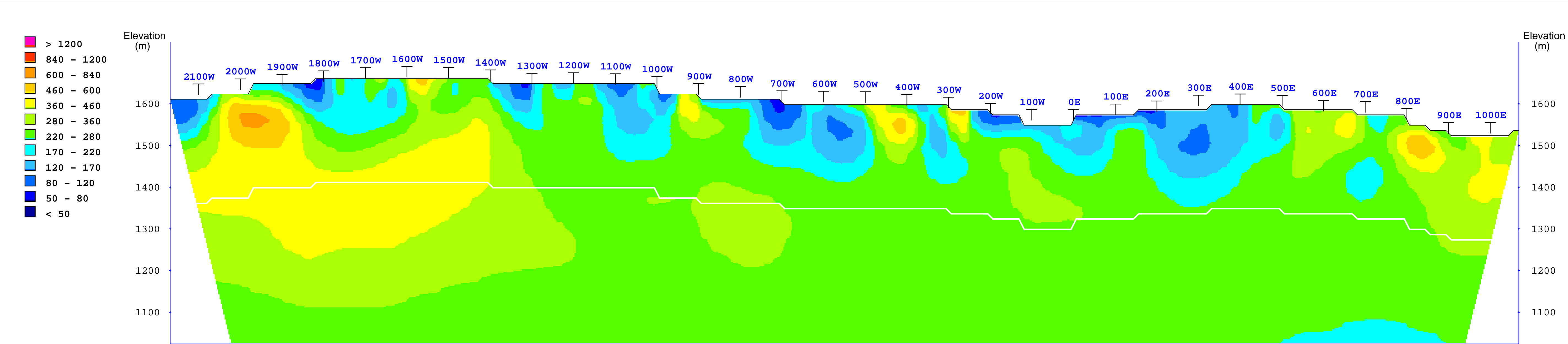
Interpreted Chargeability (ms)



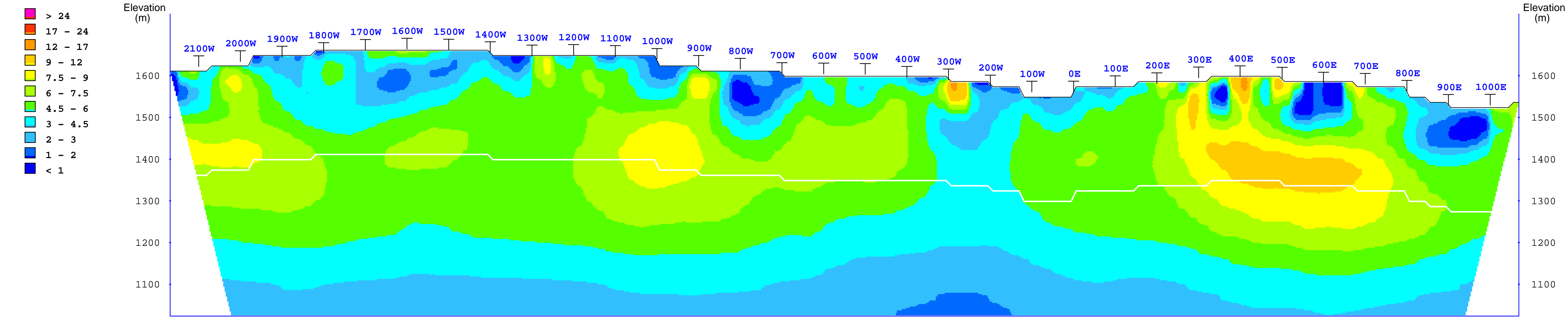
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Projection: UTM NAD83 Zone 9

Legend
White Line: Estimated Depth of Investigation
T: Gridline Coordinate Projected to Section
0 100 200 300 400 500
Meters

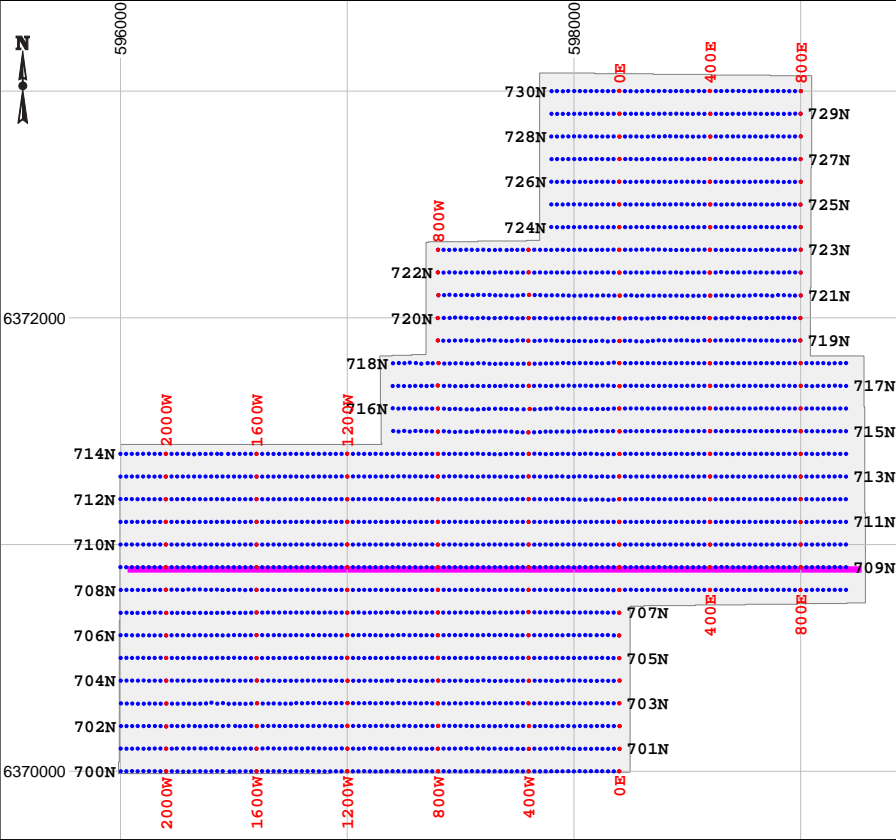
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D IP SURVEY
3D Cross Sections
False Color Contour Map
Section 708N



Interpreted Resistivity (Ohm-m)

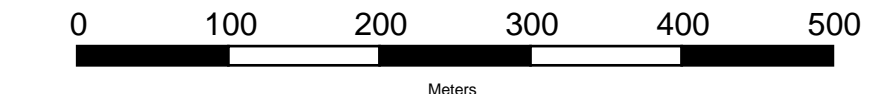


Interpreted Chargeability (ms)



Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Projection: UTM NAD83 Zone 9

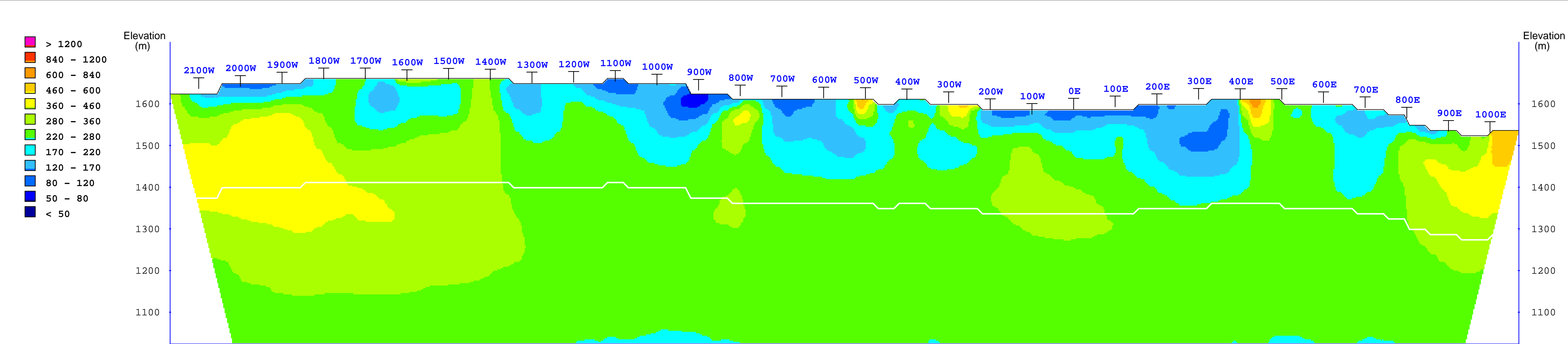
Legend
White Line: Estimated Depth of Investigation
T: Gridline Coordinate Projected to Section



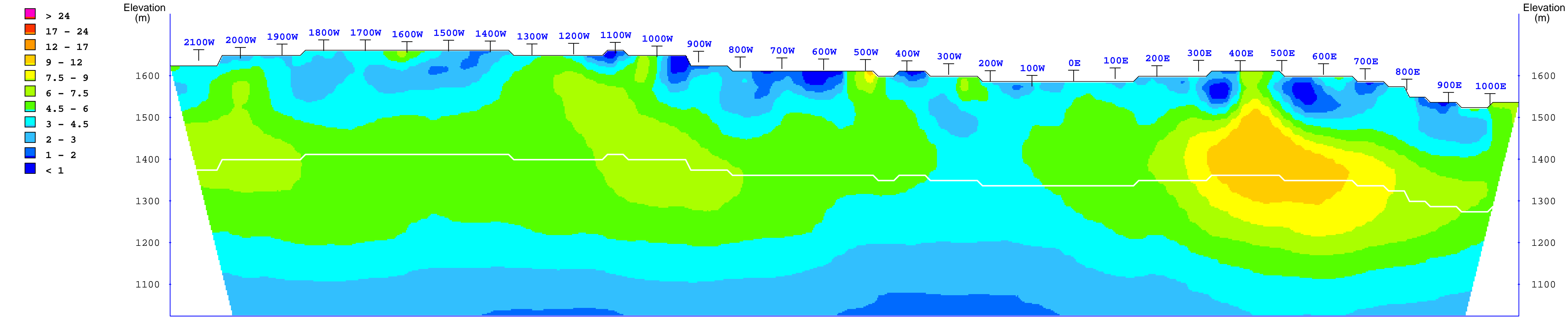
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D IP SURVEY
3D Cross Sections
False Color Contour Map

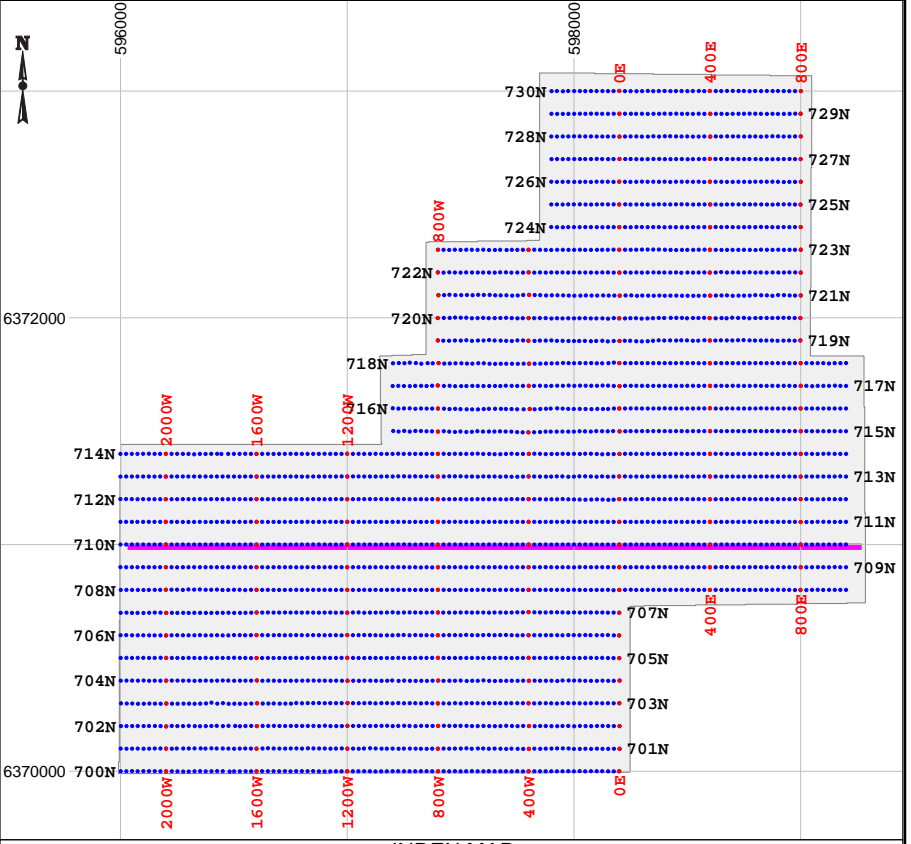
Section 709N



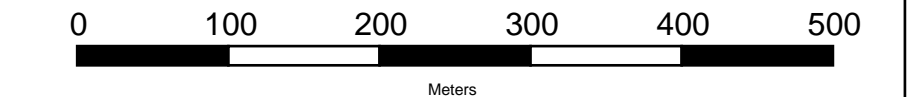
Interpreted Resistivity (Ohm-m)



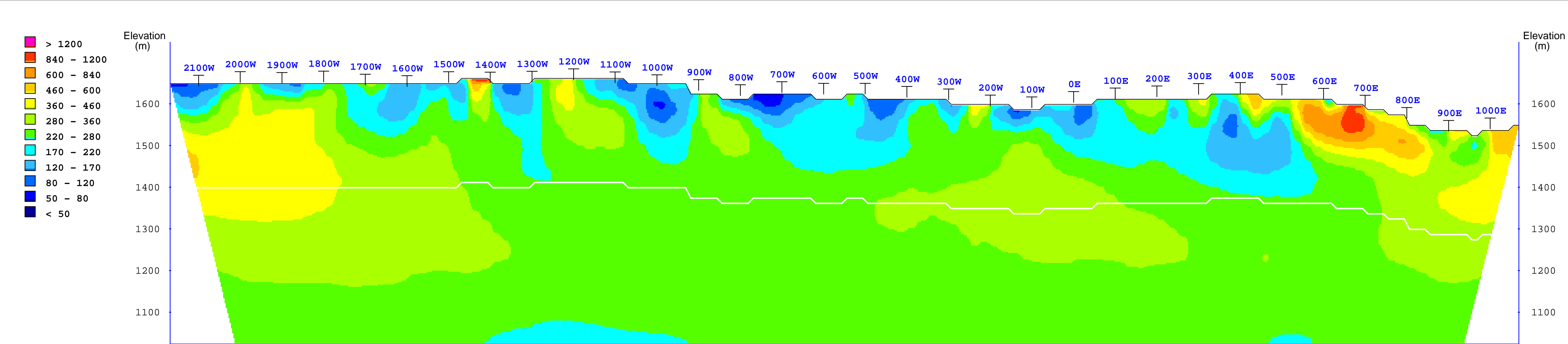
Interpreted Chargeability (ms)



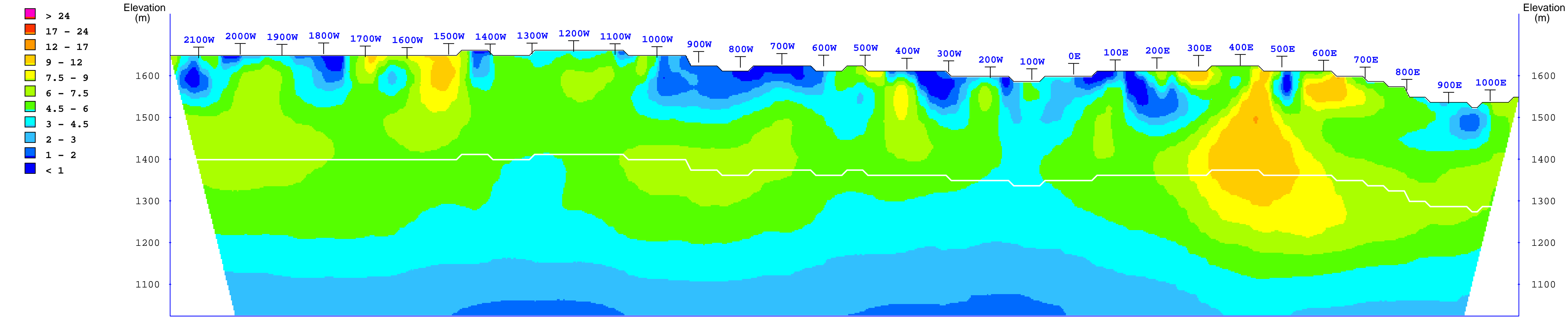
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Projection: UTM NAD83 Zone 9
Legend
White Line: Estimated Depth of Investigation
T: Gridline Coordinate Projected to Section



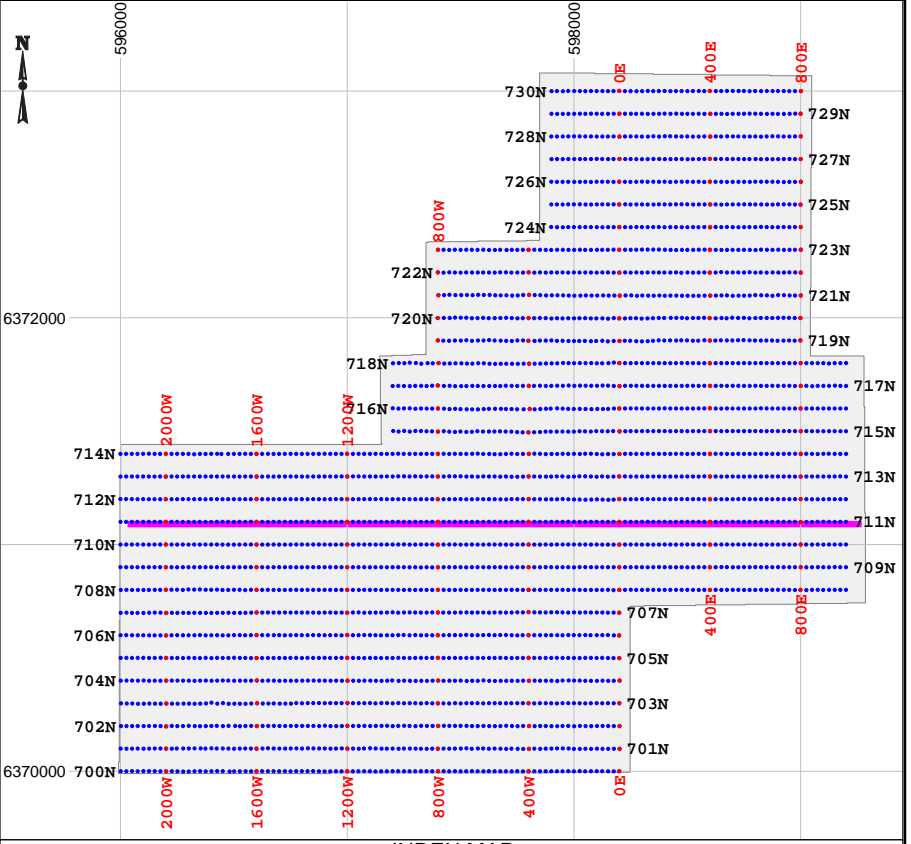
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D IP SURVEY
3D Cross Sections
False Color Contour Map
Section 710N



Interpreted Resistivity (Ohm-m)

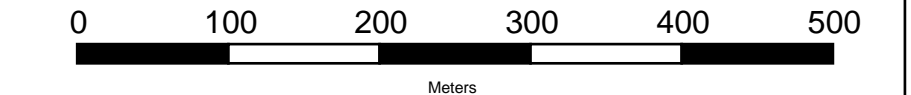


Interpreted Chargeability (ms)

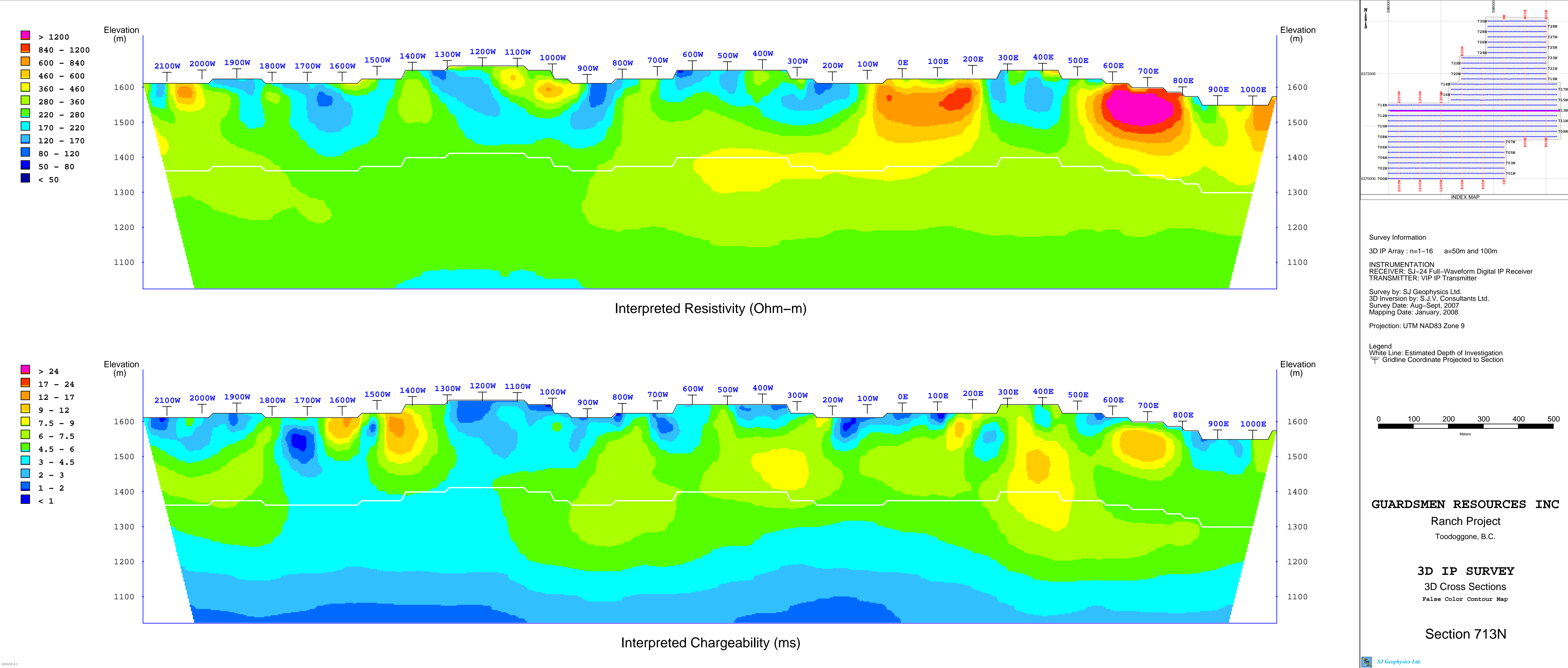


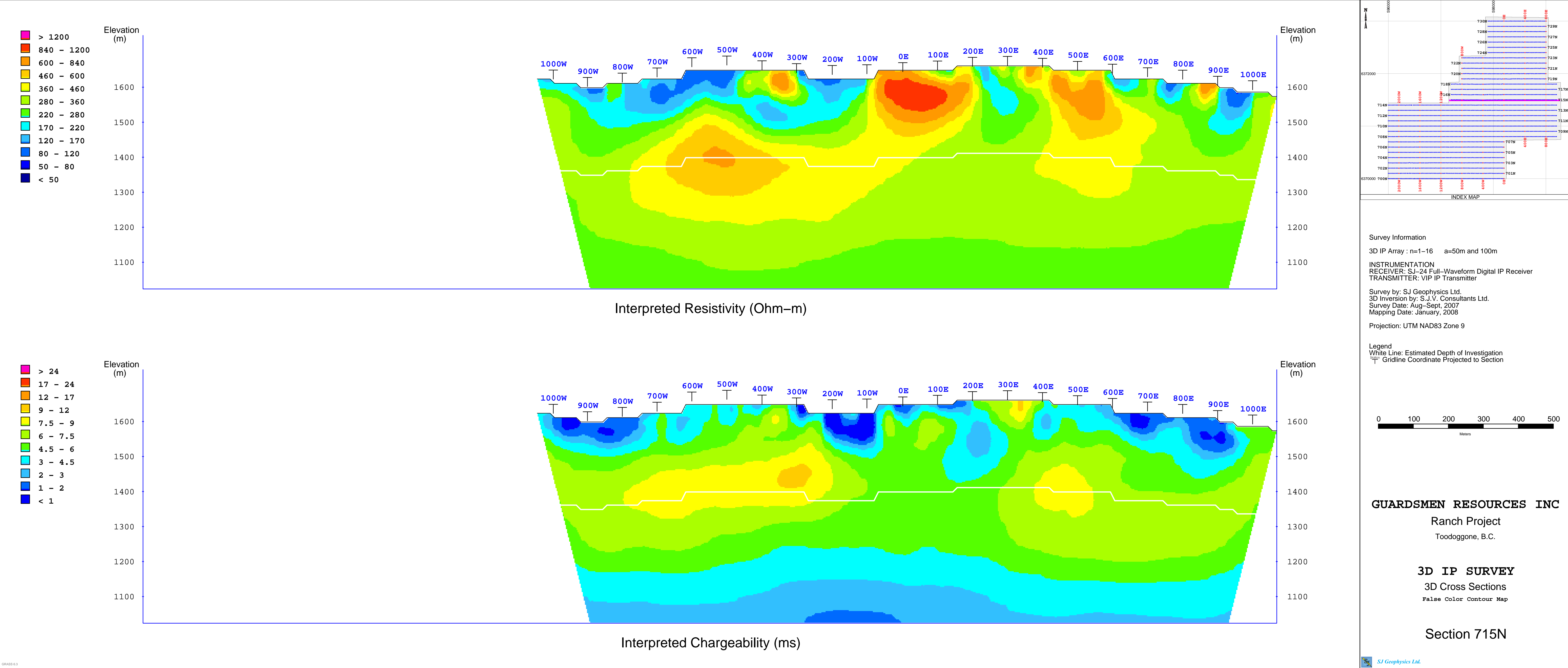
Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008
Projection: UTM NAD83 Zone 9

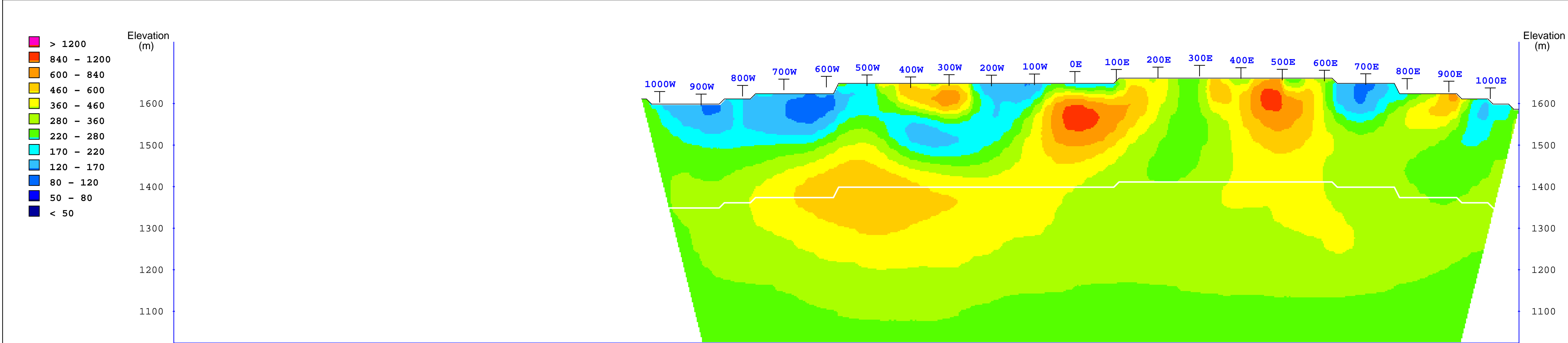
Legend
White Line: Estimated Depth of Investigation
T T T T T Gridline Coordinate Projected to Section



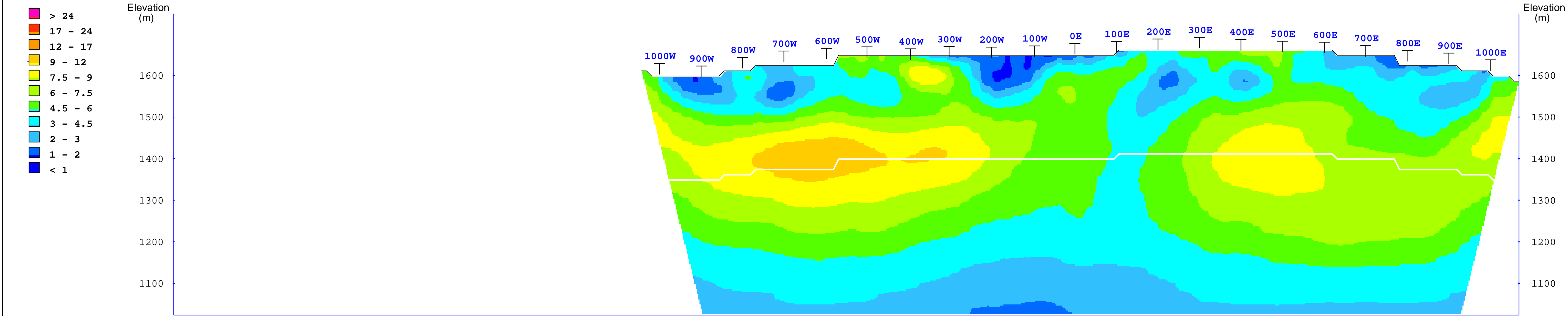
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.
3D IP SURVEY
3D Cross Sections
False Color Contour Map
Section 711N



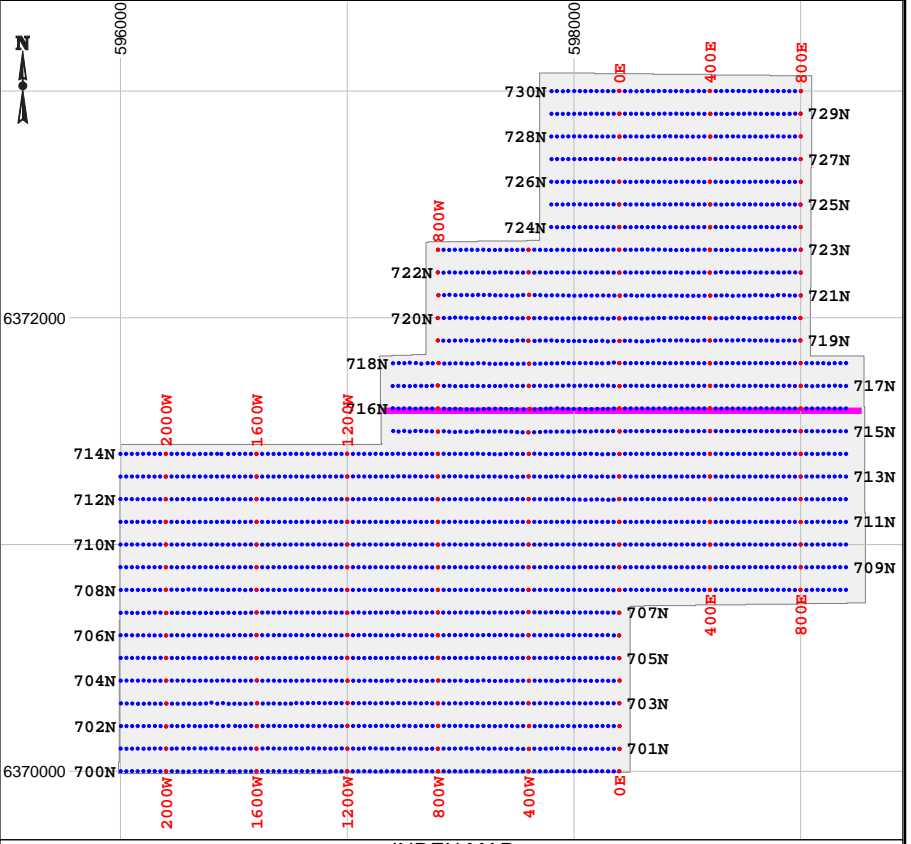




Interpreted Resistivity (Ohm-m)



Interpreted Chargeability (ms)

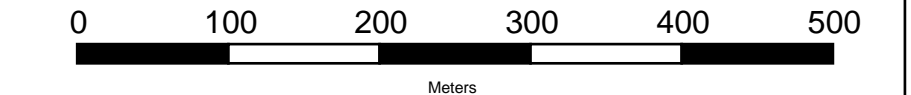


Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter

Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Projection: UTM NAD83 Zone 9

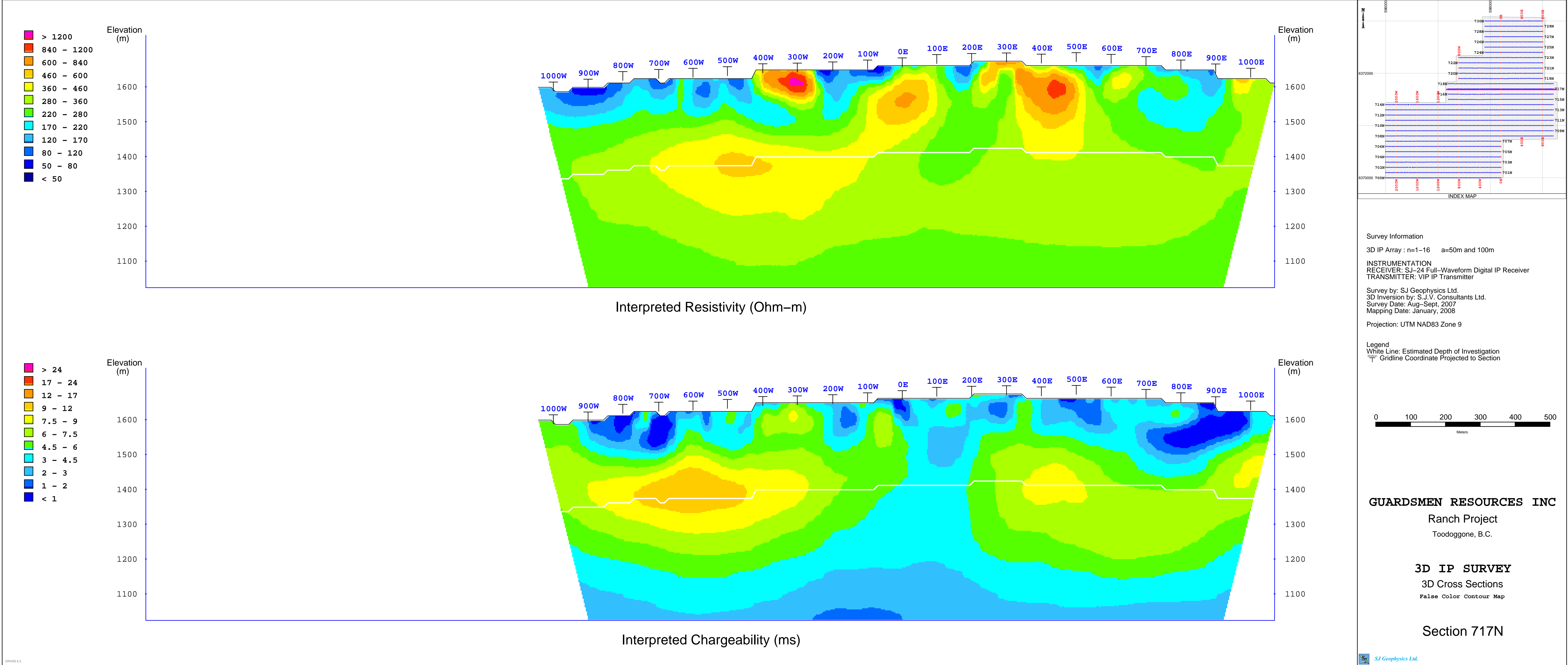
Legend
White Line: Estimated Depth of Investigation
T T T T T Gridline Coordinate Projected to Section

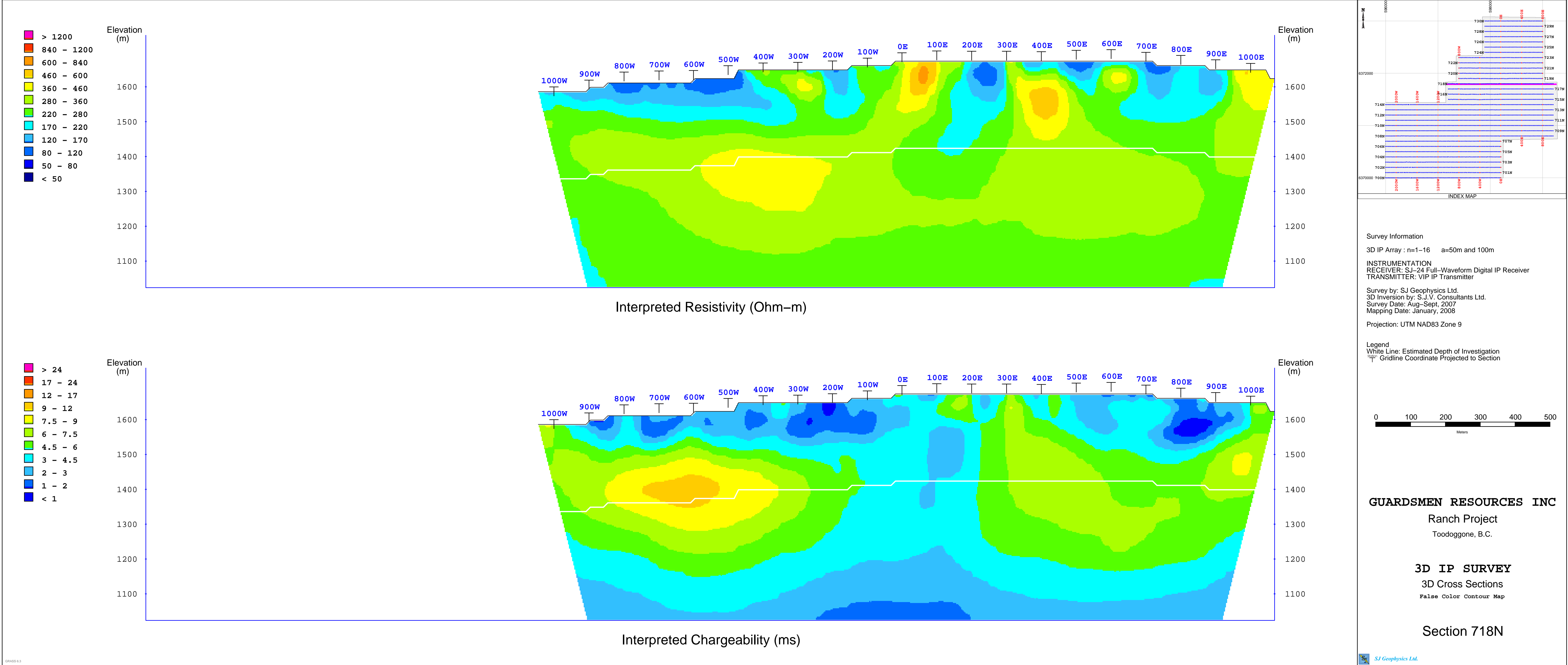


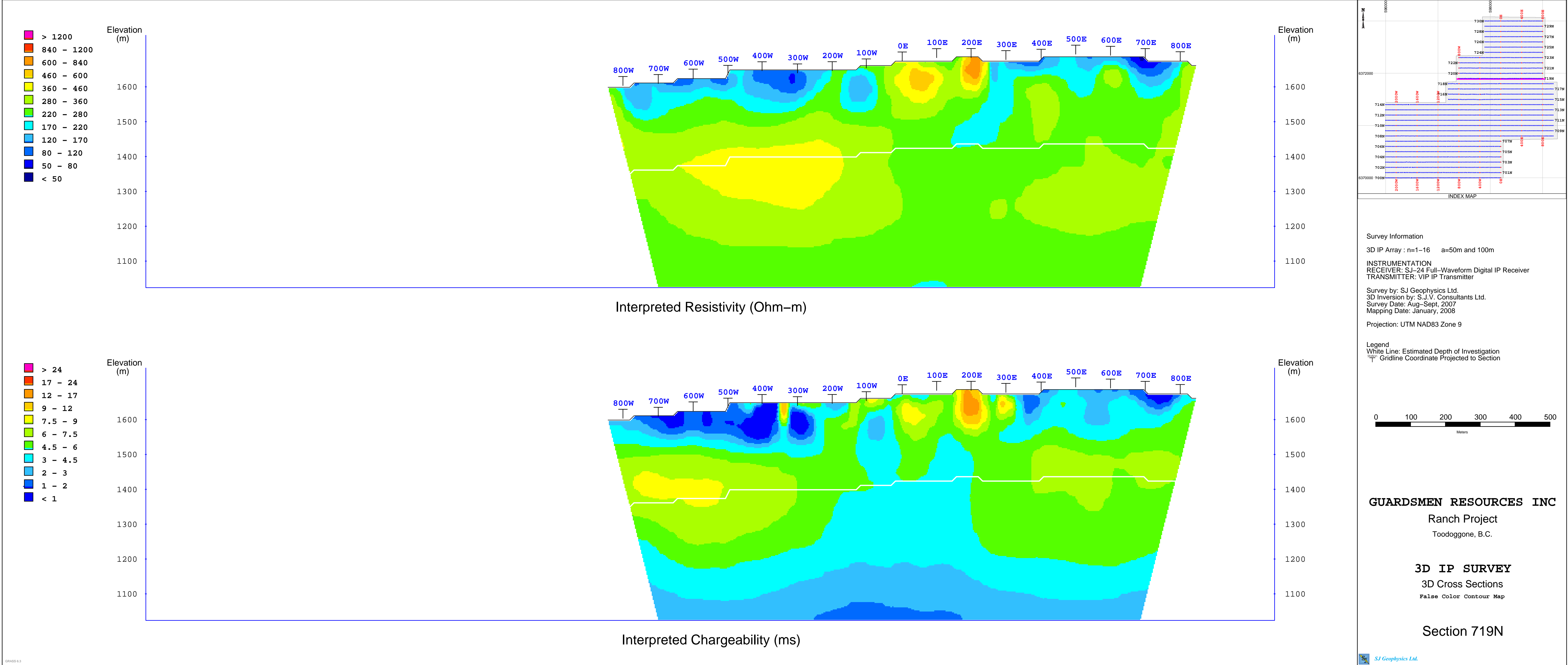
GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

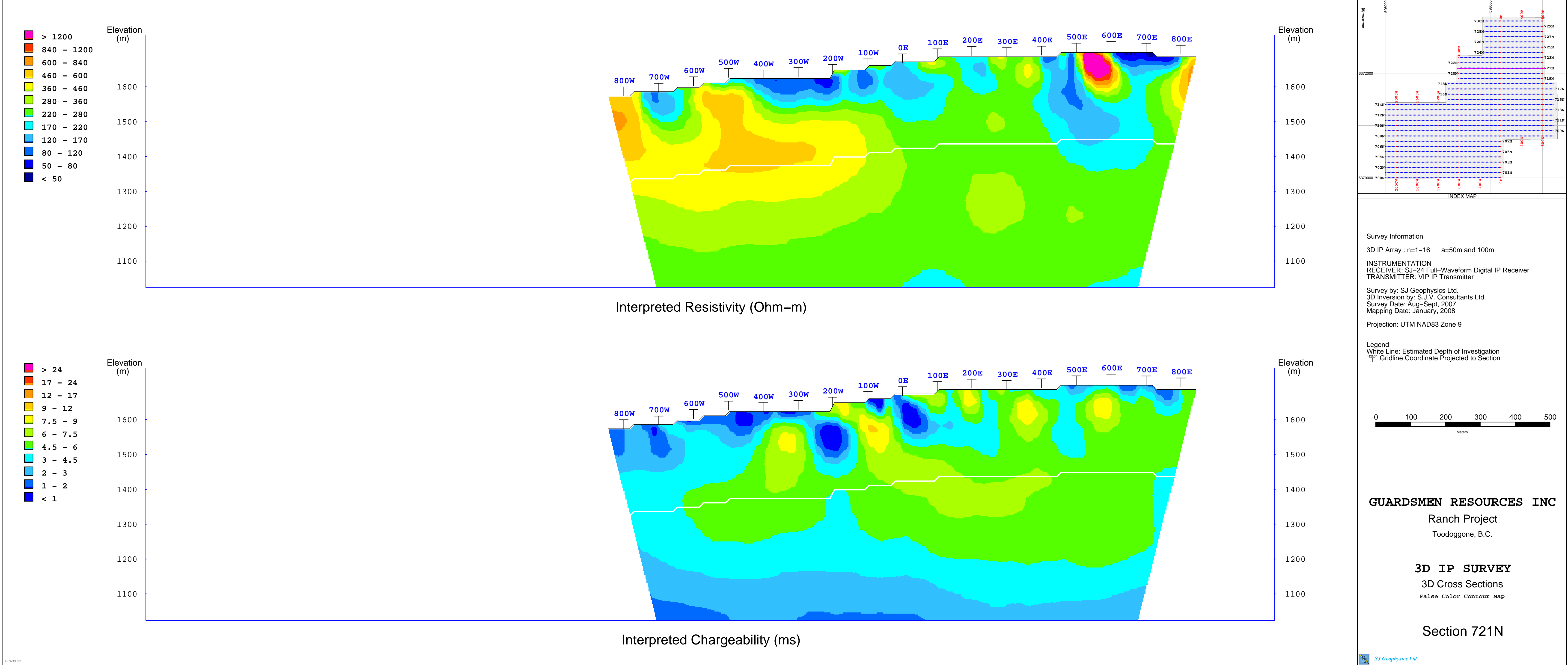
3D IP SURVEY
3D Cross Sections
False Color Contour Map

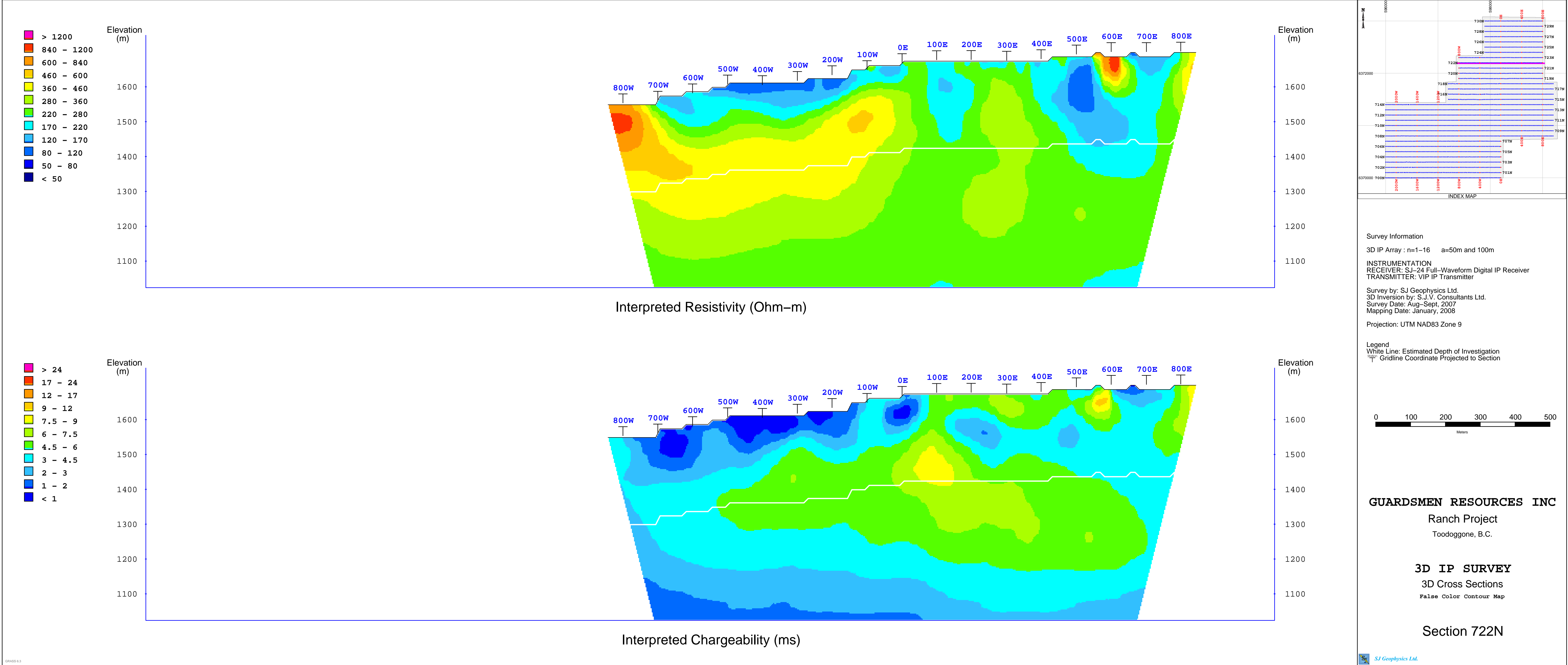
Section 716N

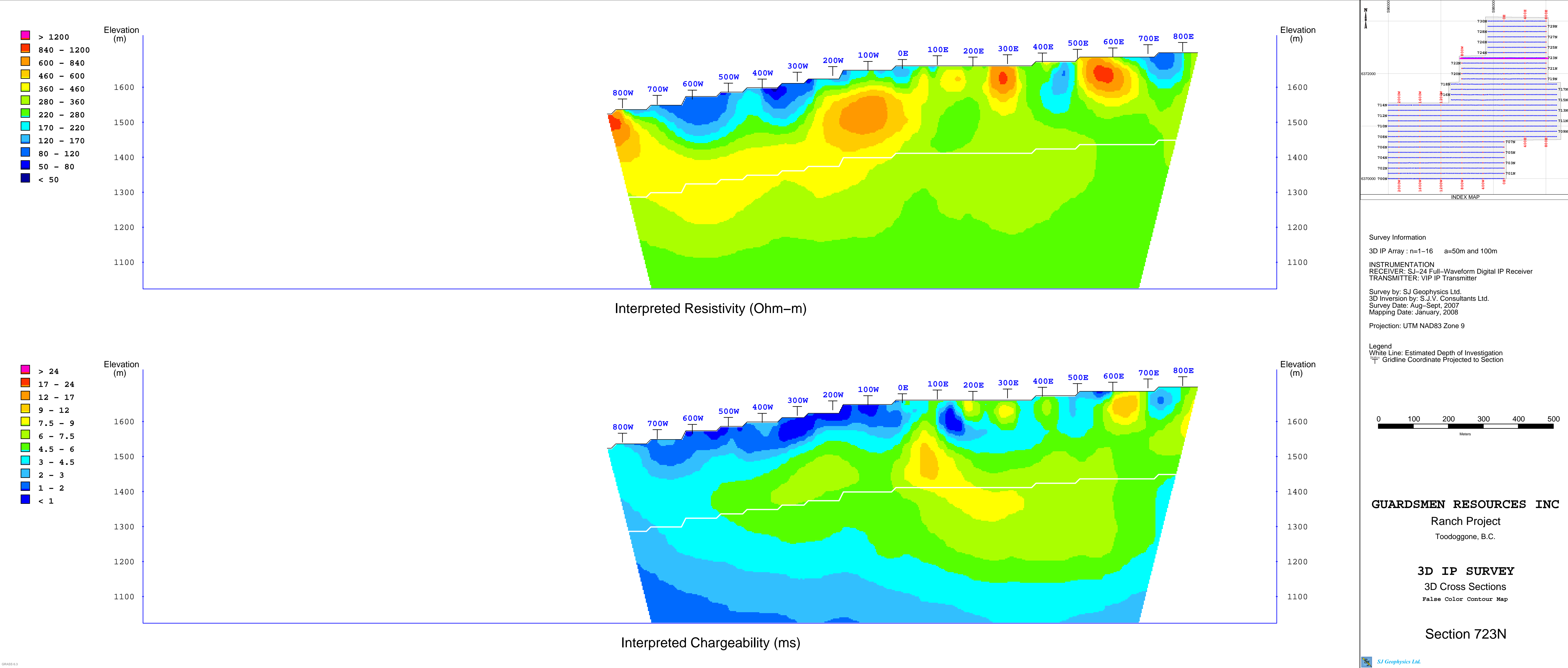


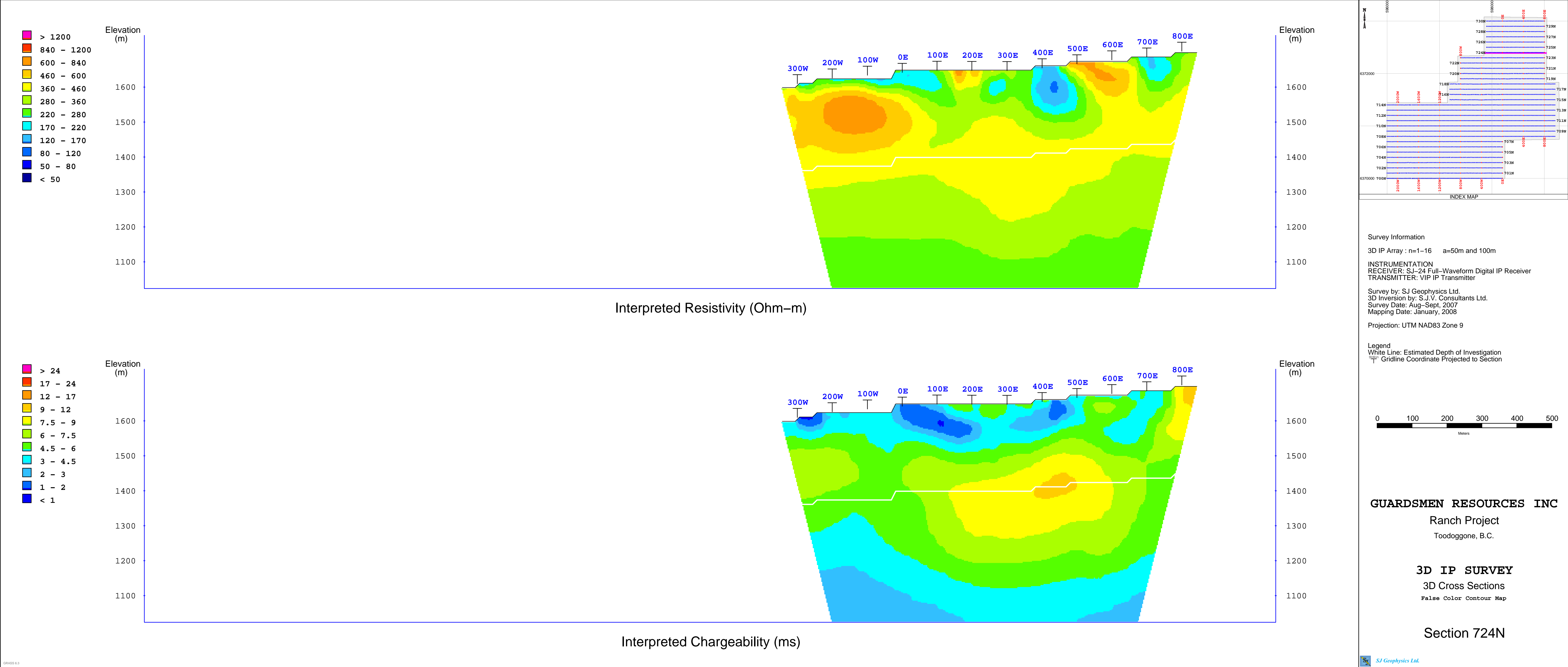


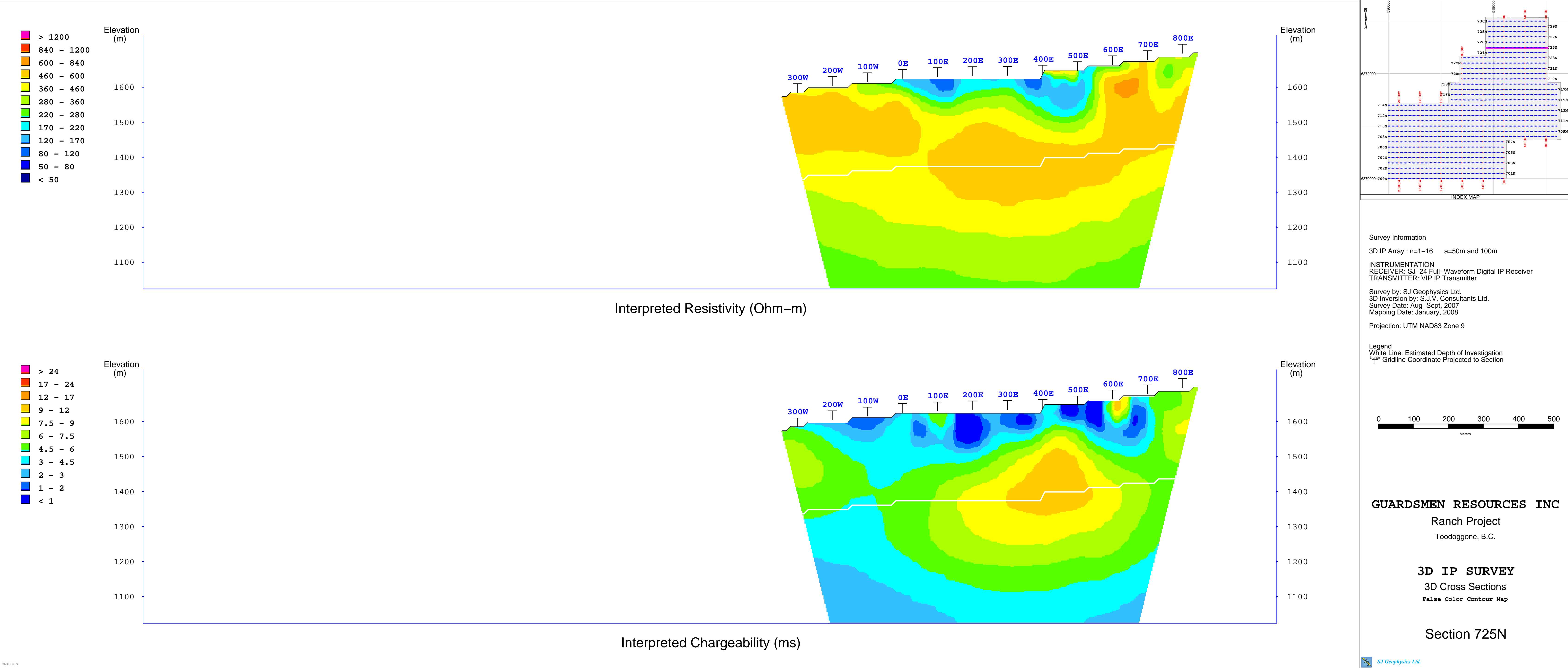


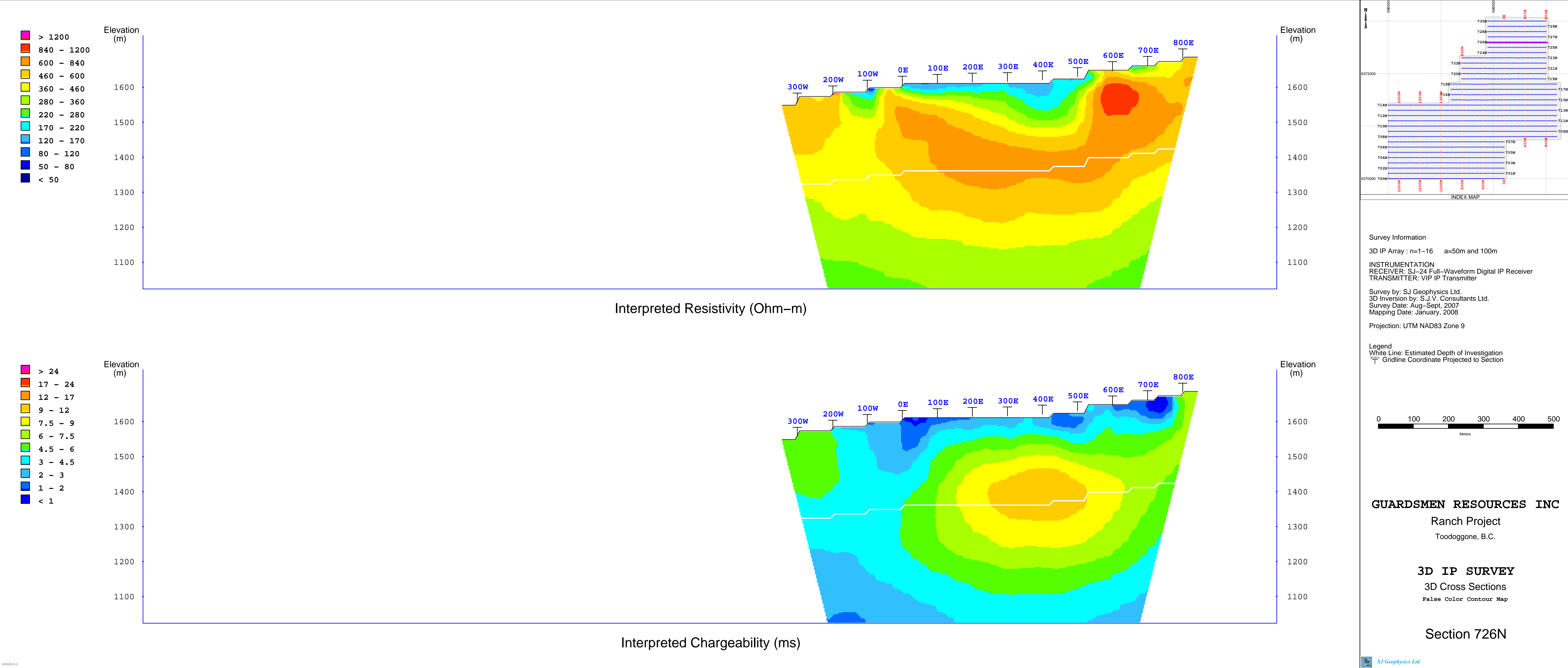


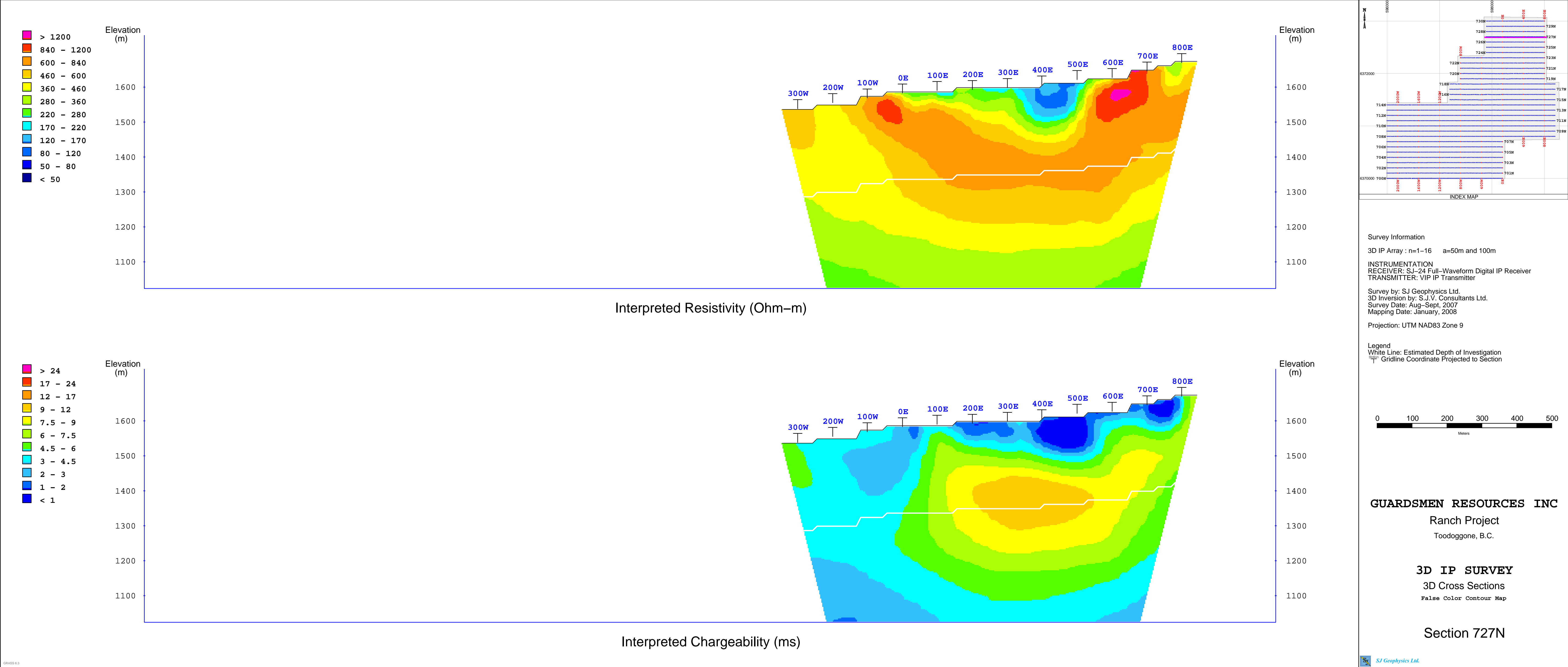






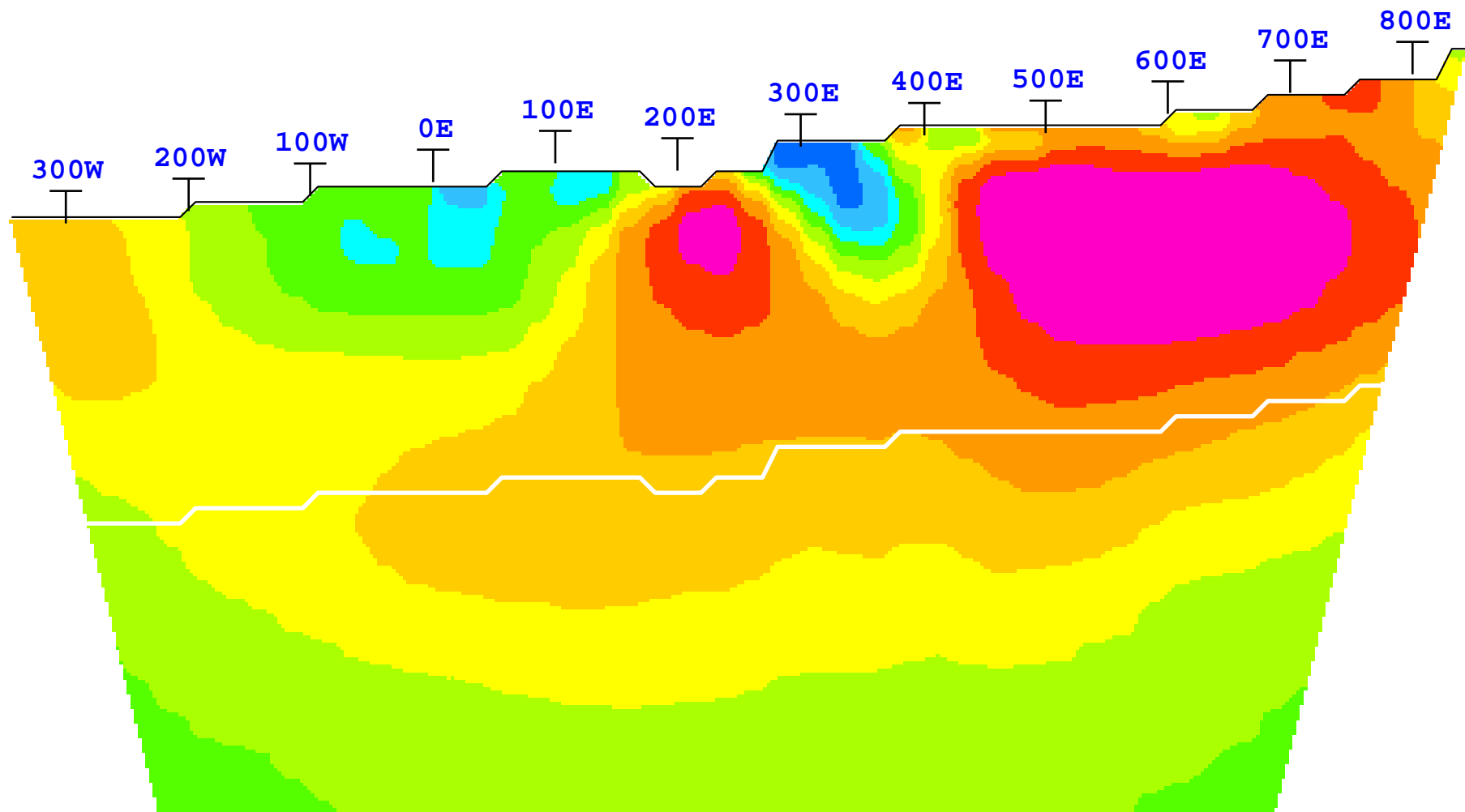
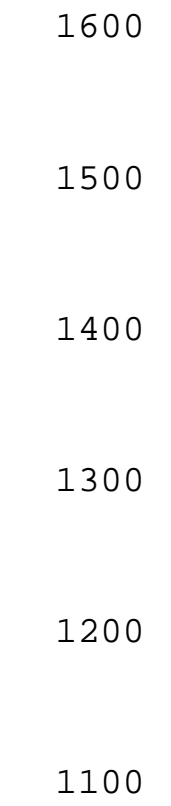








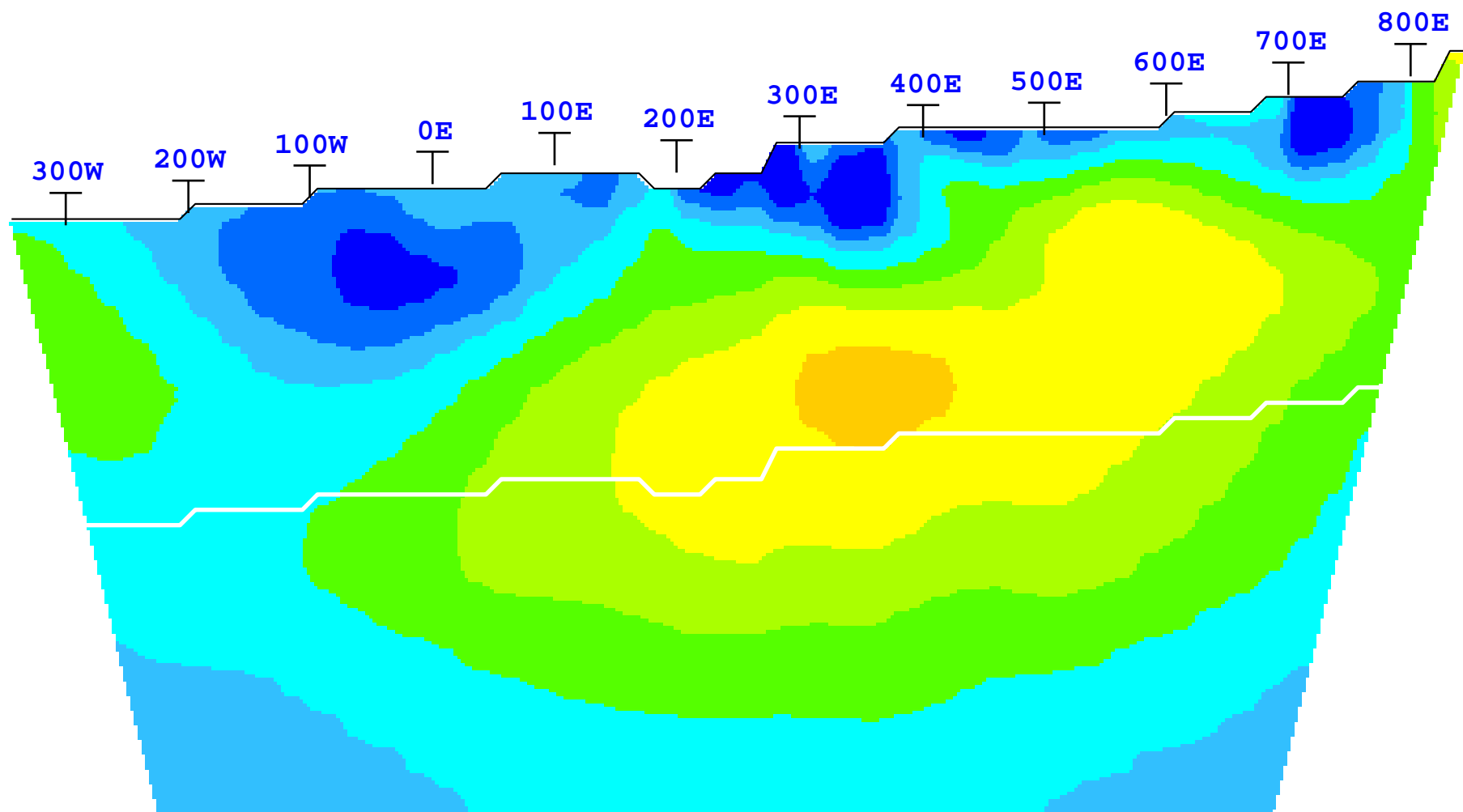
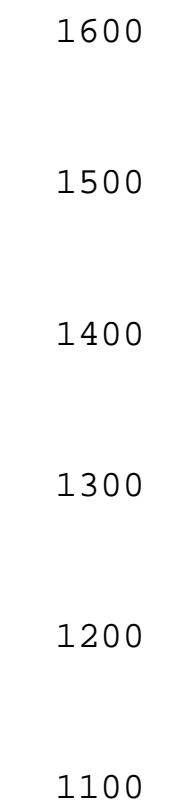
Elevation
(m)



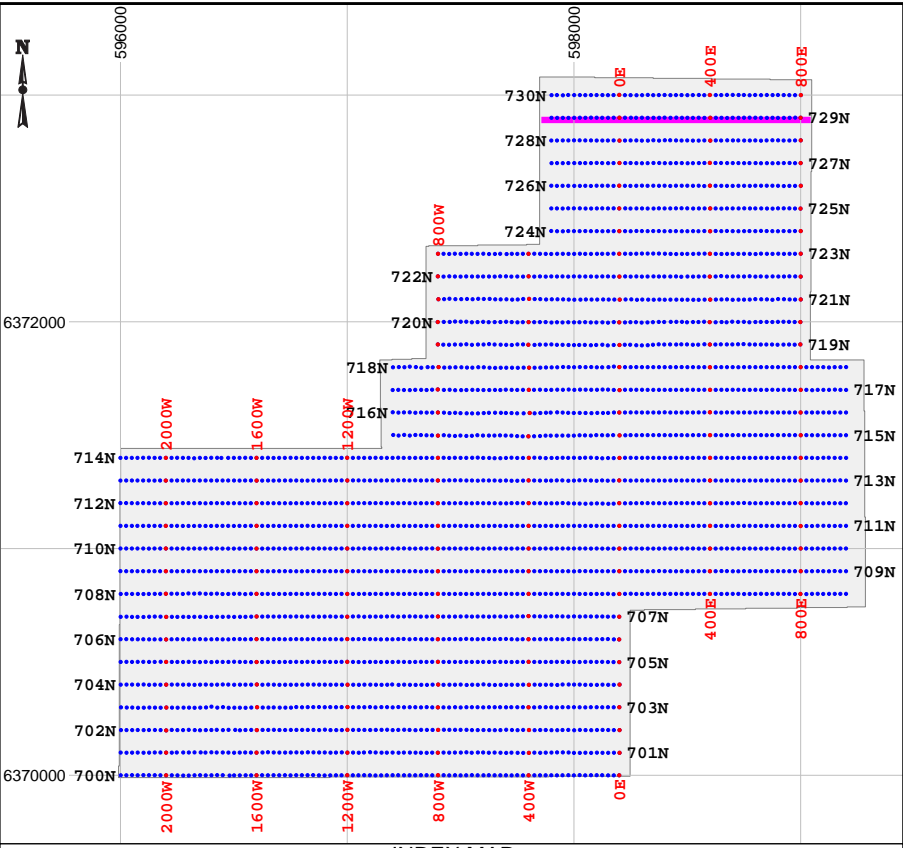
Interpreted Resistivity (Ohm-m)



Elevation
(m)



Interpreted Chargeability (ms)

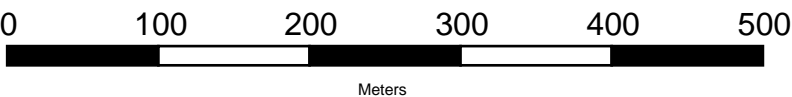


Survey Information
3D IP Array : n=1-16 a=50m and 100m
INSTRUMENTATION
RECEIVER: SJ-24 Full-Waveform Digital IP Receiver
TRANSMITTER: VIP IP Transmitter

Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: Aug-Sept, 2007
Mapping Date: January, 2008

Projection: UTM NAD83 Zone 9

Legend
White Line: Estimated Depth of Investigation
T Gridline Coordinate Projected to Section



GUARDSMEN RESOURCES INC
Ranch Project
Toodoggone, B.C.

3D IP SURVEY
3D Cross Sections
False Color Contour Map

Section 729N

