
**Tagish Lake Gold Corp.
408 - 688 West Hastings St.
Vancouver, BC Canada
V6B 1P1**

Skukum Project

**Exploration Report for 2009
Geochemical and Geophysical**

Work Done On the Following Mineral Claims:

**CHAR 11-12, and 32
CHIEF 32-33, 37-39, and 54 – 59
CL 13 and 18
GLEE 75 – 76
KUKU 4, 18, 22, 27, 29, and 32
LB 3, 4, and 15
MIL 1
MOM 35, 40, 66, and 81
OMNI 7
POP 8, 33, 35-38, 49, 52, 57, 59, 60, 69 – 70, 79 – 82, 91 – 94, and 101 – 104 (FULL CLAIM
FRACTION)
RACA 9
STEN 14, 20, 34, 36, 38, and 43 – 45**

**In The
Whitehorse Mining District
Yukon Territory, CANADA**

**NTS 105 D/3, D4, and D6
Latitude 60°10'N Longitude 135°30'W**

For Work Performed in 2009 from June 9 to September 19

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1.0 SUMMARY

Claims within the Skukum Project are owned by Tagish Lake Gold Corp (TLGC), and are located in the Mt. Skukum area (NTS Sheets 105D03, 105D04, and 105D06) in the Whitehorse Mining District in southwest Yukon Territory. With the approval of TLGC, Yukon-Shaanxi Mining Company (YSMC) conducted exploration work in 2009 throughout the property (including rock-chip sampling and reconnaissance mapping) and an induced polarization (IP)-resistivity geophysical survey centered on the Wheaton River Valley. This report summarizes the results of this work.

The project area hosts several low-sulfidation, structurally-controlled epithermal Au-Ag resources and numerous prospects and occurrences. Previous exploration at the property since 1981 has included: stream-sediment sampling, geochemical soil sampling, geological mapping, ground and airborne geophysical surveys, trenching, and reverse-circulation and diamond drilling.

The 2009 field exploration program was conducted from June 9 to September 19, 2009. The geophysical survey was conducted by Northwest Geological Exploration and Mining Bureau for Non-Ferrous Metals of the People's Republic of China (NWME) from June 9 to July 28, 2009. The geophysical grid that was established in the field covers 2.48 square km and is located between Chieftain Hill and the Goddell Au-Ag resource in the Wheaton River valley area. The IP gradient and section survey is 25.6 km in total line length. This geophysical grid covers the following claims within the Skukum Project: CHIEF 55-59; GLEE 75-76; MIL 1; POP 66-70; POP 79-82; POP 91-94; POP 101-104; STEN 34; STEN 36; STEN 38; and STEN 43-45.

The results of the geophysical survey include: 9 relatively high chargeability anomaly zones, 3 relatively high resistivity anomalies, and 3 low resistivity zones. A total of five geophysical anomalies (targets) that represent potential mineralized and/or silicified zones have been interpreted from the 2009 geophysical work that may help with the next stage of exploration.

The 2009 geochemical work included 93 surface rock-chip samples from throughout the property. The prospects and resources that were sampled include: Mt. Skukum (including Cirque Vein, Lake, Alunite Cap, and Pika), Goddell Gully, Charleston Vein, Chieftain Hill (including Ocean Vein, Evening Vein, and Raca), Antimony Creek, Diamond Gossan, Becker-Cochran, Scar, and Fenwick Creek. The surface rock-chip samples were collected on the following claims in the project area: CHAR 11-12, and 32; CL 13 and 18; CHIEF 32-33, 37-39, 54, 56, 58; KUKU 4, 18, 22, 27, 29, and 32; LB 3-4 and 15; MOM 35, 40, 66, and 81; OMNI 7; POP 8, 33, 35-38, 49, 52, 57, 59-60, and 69; RACA 9; and STEN 14 and 20. The rock samples were collected from June 15 to September 2, and submitted and assayed at ALS-Chemex in North Vancouver where they were analyzed for Au (Au-ICP41 and Au-GRA21), multiple-element ICP (ME-MS41), and base metal overlimits (OG46 for Zn, Ag, Pb, and Sb).

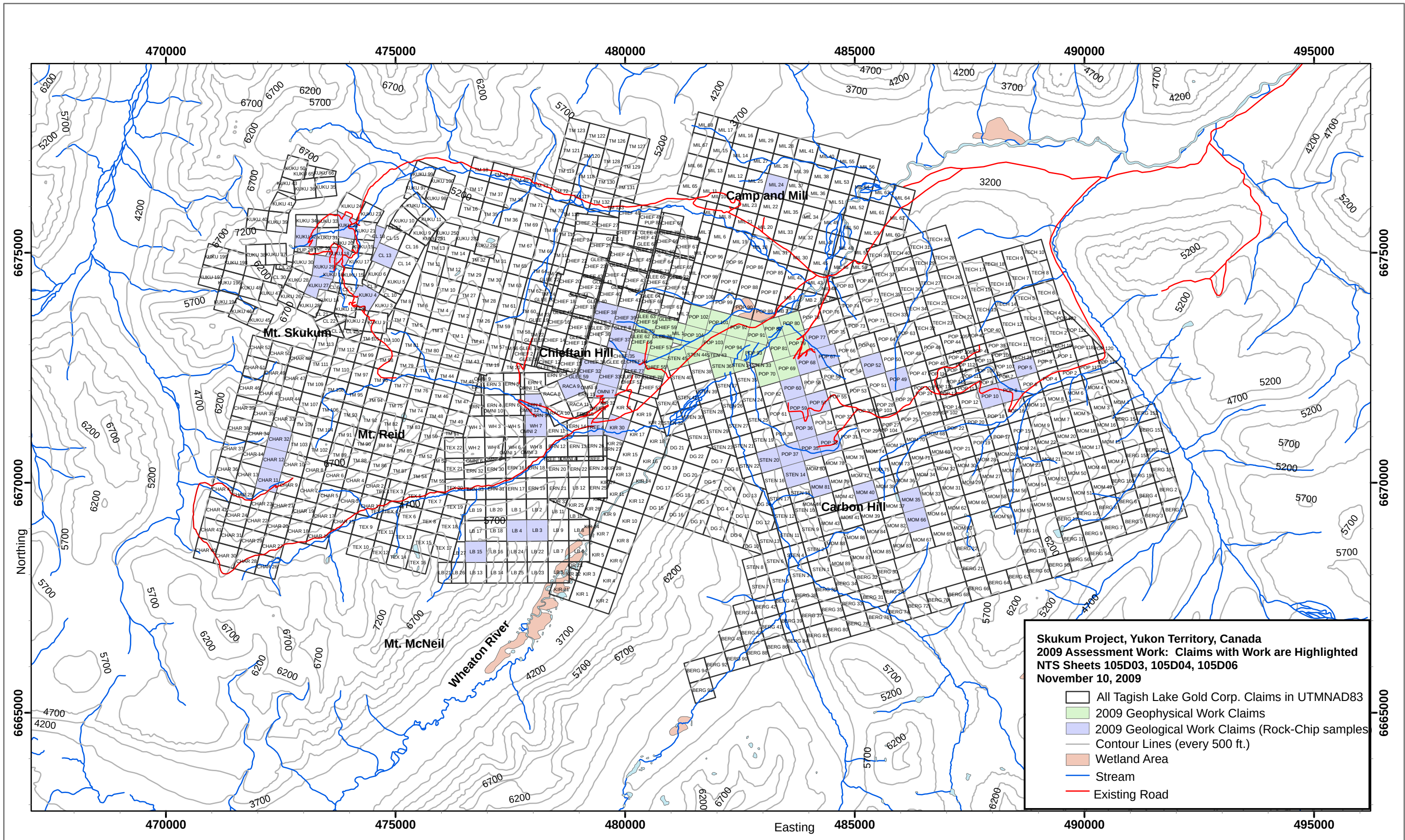
Eleven of the 93 total surface rock samples assayed greater than or equal to 1.0 g/t Au and are from the following prospect areas: Charleston Vein, Lake Vein, and Chieftain Hill (Evening Vein and Ocean Vein). The highest gold assay from the 2009 surface rock chip sampling program was from the Lake Vein in the Mt. Skukum area which assayed up to 30.9 g/t Au.

The following targets at the Skukum Property have been identified for future work:

- (1) Charleston Vein – Geological mapping and rock-chip sampling;
- (2) Antimony Creek - Geological mapping and rock-chip-sampling;
- (3) Chieftain Hill - geological mapping and rock-chip sampling; and drilling of the Ocean Vein at greater depths than previous drilling;
- (4) Skukum Creek – definition and exploration drilling for resource confirmation including metallurgy testing;
- (5) Goddel Gully – definition and exploration drilling for resource confirmation including metallurgy testing;
- (6) Becker-Cochran - Drill test the southern projection of the known Sb-rich mineralization;
- (7) Skukum Creek - Mine feasibility studies to plan for a new access drift for drill platforms lower than the existing 1300 m drift and for eventual use as the main ore development access;
- (8) Mt. Skukum - Compilation of existing drill hole data and existing underground development for the Lake, Brandy, and Cirque Vein areas to help in targeting;
- (9) Data compilation, targeting, and possible drilling on the fault zone that extends from the Goddell Gully Resource area to the Becker-Cochran Zone;
- (10) Drill test the 2009 geophysical anomalies including west of the Goddell Gully resource and east of the Ocean Vein; and
- (11) Conduct geophysical surveys (IP) on an existing cut and surveyed grid southwest of the Goddell Gully Resource and north of the 2009 IP grid.

2.0 INTRODUCTION AND SCOPE OF 2009 WORK

The Skukum Project consists of 982 quartz mineral claims (Figures 1 and 2) and hosts numerous low-sulfidation epithermal Au-Ag (Pb-Zn-Sb) mineral occurrences in the Mount Skukum, Mount Reid, and Carbon Hill areas of the southwest Yukon Territory, Canada (NTS Sheets 105 D/3, D/4, and D/6). The Skukum Creek and Goddell Gully Au-Ag resources have been identified to date in the Skukum Property (Table 1; MineTech, 2007) with historical mining and historical Au-Ag resources present at the Lake, Brandy and Cirque zones. Approximately 80,000 ounces of gold was mined from the Mt. Skukum area from 1986 to 1988. In addition, numerous Au-Ag prospects occur at the Ocean Vein zone in the Chieftain Hill area which has been interpreted to occur along the western projection of an east-west trending fault that controls the Au-Ag mineralization Figure



Map by: Todd Johnson
 Yukon-Shaanxi Minijng Company Inc. (on behalf of Tagish Lake Gold Corp.)
 Base Map from: <http://www.Geogratis.ca>

SCALE
 0 500 1,000 2,000 3,000 4,000 Meters
 1:75,000

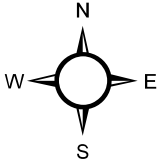
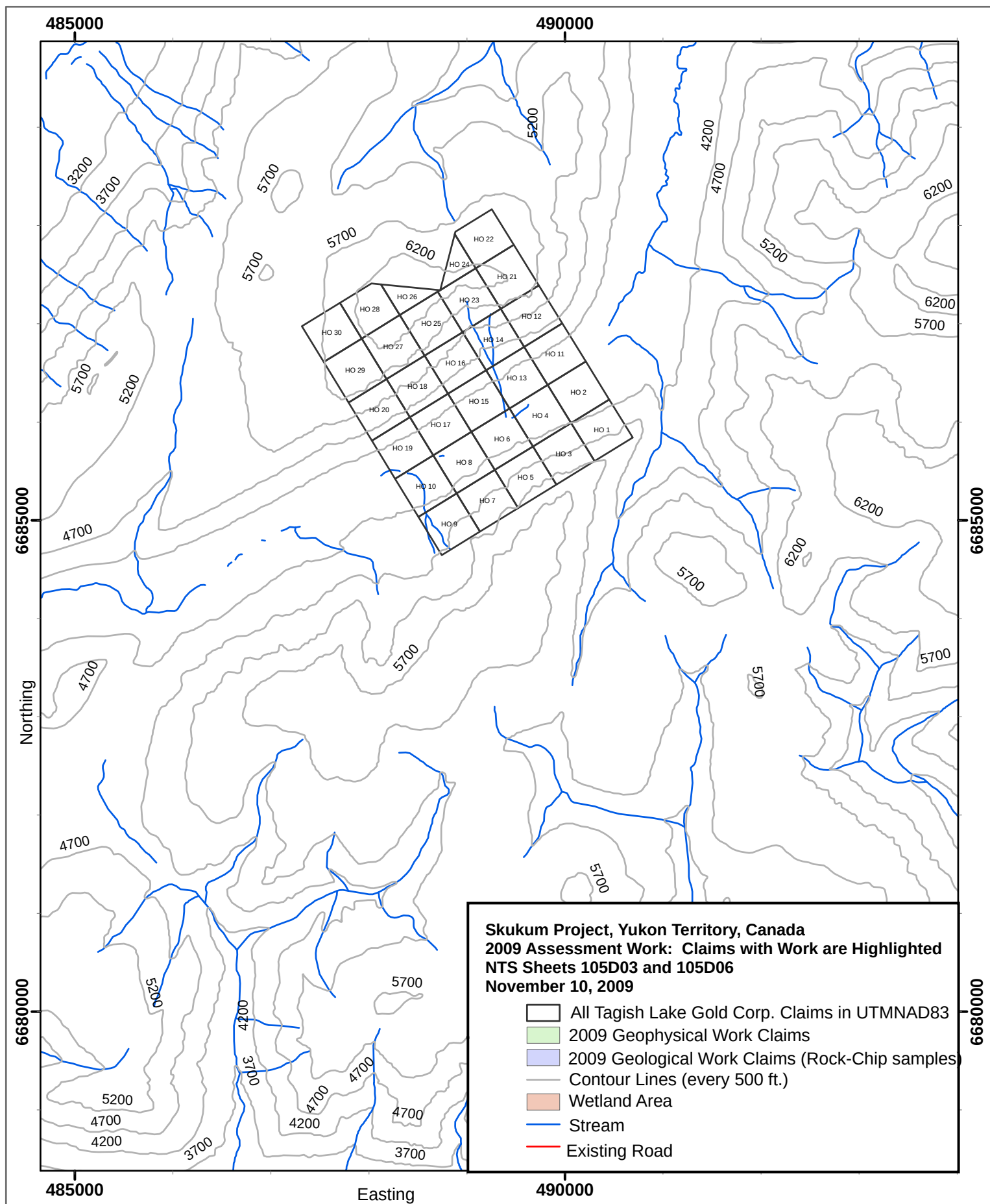


Figure 1. Claim Location Map: Skukum Property
 UTM NAD83 Zone 8N
 Contour Interval = 500 ft.



Map by: Todd Johnson **Figure 2. Claim Location Map (HO CLAIMS) SCALE**
 Yukon-Shaanxi Mining Company Inc. (on behalf of Tagish Lake Gold Corp.) 0 250 500 1,000 1,500 2,000 Meters
 Base Map from: <http://www.Geogratis.ca> UTM NAD83 Zone 8N 1:75,000
 Contour Interval = 500 ft.

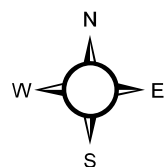


Table 1. Resources at the Skukum Project based on a 4 g/t Au cutoff grade (MineTech, 2007).

Resource Area	Measured			Indicated			Inferred		
	Tonnes	g/t Au	Contained koz Au	Tonnes	g/t Au	Contained koz Au	Tonnes	g/t Au	Contained koz Au
Skukum Creek	195,000	5.8	37	876,000	6.5	183	206,000	6.8	45
Goddell Gully	-	-	-	360,000	10.3	119	310,000	8.8	87
Total	195,000	5.8	37	1,236,000	7.6	302	516,000	8.0	132
Notes: (1) Total contained Au does not consider a metallurgical recovery; (2) Cutoff Au grades used for various zones ranged from \$300 to \$650									

identified at the Goddell Gully resource. The northeast-trending Wheaton River and Wheaton River valley cross the project area and separate the Skukum Creek Au-Ag resource and mineralization identified at the Ocean Vein zone on the western side of the valley, from the Goddell Gully Au-Ag resource located on the eastern side of the valley (Figure 1). The Wheaton River Valley was likely formed by glaciers that occupied the region in the Pleistocene.

Alluvial and glacial soils cover almost all of the bedrock in the Wheaton River valley. In addition, only a small number of drill holes have been conducted near the margins of the valley adjacent to the historical Au-Ag prospects and resources.

Because little exploration data is available in the Wheaton River Valley, Yukon-Shaanxi Mining Company thought it would be worthwhile to conduct an induced polarization and resistivity survey in the area to help identify additional Au-Ag targets and/or identify possible extensions of known nearby mineralized quartz veins and structures.

The Skukum Project is currently owned by Tagish Lake Gold Corp. (TLGC). Yukon-Shaanxi Mining Company Inc. (YSMC) is a mining and exploration company owned by Yukon-Nevada Gold Corporation (YNGC) and the Northwest Non-Ferrous International Investment Company Limited (NWI). NWI is 100% owned by Northwest Geological Exploration and Mining Bureau for Non-Ferrous Metals of the People's Republic of China (NWME). NWME, Yukon-Shaanxi Mining Company staff wishes to thank TLGC management for allowing Yukon-Shaanxi Mining Company (NWME and YNGC) access to the project area in 2009.

The 2009 scope of work for the summer exploration program were to:

- (1) Conduct reconnaissance mapping and rock-chip sampling throughout the Skukum District in order to prioritize future work activities;
- (2) Conduct an induced polarization geophysical survey in the Wheaton River valley that includes the western extension of the Goddell Gully structure and resource area.

The 2009 Geophysical survey was conducted by Northwest Mining And Geological Exploration Bureau For Nonferrous Metals (78 Mid YanTa Road, Xi'an, People's Republic of China 710054) and managed by Mr. Fan Jinsheng. The 2009 Geochemical work was supervised by Todd Johnson, a qualified person as defined by the National Instrument 43-101 guidelines, of Yukon-Nevada Gold Corp. (490 - 688 West Hastings St. Vancouver, BC V6B 1P1 Canada). All 2009 work was done for the benefit of Tagish Lake Gold Corp. (408 - 688 West Hastings St. Vancouver, BC V6B 1P1 Canada).

3.0 PROJECT DESCRIPTION

3.1 Property Location, Claims, and Access

The Skukum Property is located in the southwestern part of the Yukon and may be accessed by an all-weather road from Whitehorse. Road access from Whitehorse is made by traveling southwest via the Alaska Highway for 19 kilometers to Carcross Corner, then south along the South Klondike Highway a further 22 kilometers to the Annie Lake turnoff. The 28 km Annie Lake gravel road is maintained by the Yukon Government and heads west to the Wheaton River. From the Wheaton River Crossing, a four-wheeled drive non-maintained gravel road continues southwest to the property and finally to the Tagish Lake Gold trailer camp. The trailer camp is located in the north-central portion of the property from which numerous roads and trails provide final access to the resource areas and prospects.

Alternatively, the property may be reached by helicopter from the Whitehorse airport which is 65 km north-northwest of the property.

The Skukum property consists of 982 total claims (Figures 1 and 2) and 3 Crown Grants. Appendix A lists all of the claim information as of April 25 from the Yukon Mining Recorder website (<http://www.yukonminingrecorder.ca/>).

The Skukum Property lies in NTS Sheets 105D/03, 105D/04, and 105D/06 with the property center located at approximately Latitude 60°10'N and Longitude 135°30'W. All base maps and project related data are being compiled in map projection and map datum UTM NAD83 Zone 8N.

3.2 Summary of Previous Investigations

Various Au and Sb prospects of the Skukum Property have been explored by various companies since 1922. Yukon Antimony Corp. explored for Cu-Sb from 1964 to 1967 and also staked claims over the veins in the Skukum Creek resource area. Work included the construction of a road to gain access to the main showings and to explore the veins with several bulldozer trenches. The Skukum Creek area was staked again in 1973 by W. Kuhn. In 1980, the claims were transferred from Kuhn to E. Bergvinson and in 1984, from Bergvinson to Omni Resources Inc. In 1985 and continuing into 1986, geological mapping, trenching, soil sampling, diamond drilling, and reverse circulation drilling outlined the Rainbow, Kuhn, and Sterling zones at the Skukum Creek Zone. An adit was driven into the Skukum Creek resource zone in January 1987 at the 1300 m elevation level. Underground diamond drilling at the Skukum Creek zone was conducted in 1987 and 1988 and periodically up to early 2008 by various companies (See Table 2). In addition, underground rock-chip sampling has occurred from 1988 to 2008 and has been partially compiled into one Excel digital file (located in the Skukum field office files).

The Mt. Skukum, Goddell, and Skukum Creek resources were consolidated into one property in 1995 when Omni Resources acquired a 70 percent interest in the Goddell Gully property from Arkona Resources. In 1997 Trumpeter Yukon Gold Inc. (TYG) and Omni Resources jointly explored the Skukum property with TYG acquiring a 50% interest. Surface drilling has been conducted at the Goddell Gully and PD zone resources from 1987 to 2004 (Table 3). An adit was driven into the Goddell Gully resource zone in 1996 at the 1,018 m elevation level. Underground diamond drilling at the Goddell Gully and PD zones was conducted in 1996 and 1997.

Later in December 2000 the TYG and Omni Resources joined together to form Tagish Lake Gold Corp. who is the current owner of the property.

Numerous drill holes were conducted by various companies (AGIP Canada LTD., Total Erickson Resources LTD., Total Energold Corp., Mt. Skukum Gold Mining Corporation) in the Mt. Skukum area and throughout the property from 1981 to 1991. All of these drill holes have not yet been digitally compiled but are in paper copy at the Skukum field office. The Main Cirque vein was successfully mined out from 1986 to 1988. However, the Lake and Brandy veins were only partially mined towards the later part of the mine life and constitute a small historical resource on the property (non NI-43-101 compliant). Mt. Skukum Gold Mines had a difficult time

Table 2. Drilling and drifting conducted at the Skukum Creek Resource area from 1985 to 2008.

Total Number of Drill holes completed	Total amount of drilling completed (m)	Years drilling and or underground development Completed	Amount of Drift Completed (m)	Companies Involved in the drilling Work
23 (s)	2,322.61 (s)	1985	0	Aurum
55 (s)	8,301.47 (s)	1986	0	Aurum
69 UG and 11(s)	2,624.03 (s) 4,821.97 (UG)	1987	823; collar 1300 m portal	Aurum and Omni Resources Inc.
13 UG 24 (s)	1,416 (UG) 5,165 (s)	1988	1,571; collar the 1350 m portal	Skukum Gold Inc. and Omni Resources Inc.
15 UG	1,647 UG	1996	100	Omni Resources Inc.
7 (s)	2,739 (s)	1997	ND	Omni Resources Inc.
5 (s)	1,321.9 (s)	1998	ND	Omni Resources Inc.
4 (s) 15 UG	1,502.35 (s) 2,502.52 UG	2001	ND	TLGC
5 UG	248 UG	2003	586	TLGC
14 UG	913.4 UG	2005	ND	TLGC
72 UG	6,446.21 UG	2006	400	TLGC
13 UG	1,783.4 UG	2007	570	TLGC
3 UG	342.6 UG	2008	0	TLGC
TOTALS 129 (s) 219 UG	23,976.36 (s) 20,121.1 UG	1985-2008	4,050	Various
NOTES: UG = Underground; (s) = surface; TLGC = Tagish Lake Gold Corp.; ND = no data; The Skukum Creek 1300 m portal was collared in January 1987.				

successfully mining the Brandy and Lake veins and stopped all mining at the property in late 1988 as a result.

Table 3. Drilling and drifting conducted at the Goddell Gully Resource area from 1987 to 2004.

Total Number of Drill holes completed	Total amount of drilling completed (m)	Years drilling and or underground development Completed	Amount of Drift Completed (m)	Companies Involved in the drilling Work
13 (s)	2,857.19 (s)	1987	0	Berglynn Resources Inc. and Skukum Gold Inc.; Skukum Ventures
4 (s)	1,976.33 (s)	1988	0	Skukum Gold
7 (s)	1,573.08 (s)	1990	0	Skukum Gold
5 (s)	2,855.4 (s)	1995	0	Aurum
40 UG	9,242.55 (UG)	1996-1997	780	Trumpeter Yukon Gold and Omni Resources
3 (s)	974.74 (s)	2003	0	TLGC
2 (s)	~900 (s)	2004	0	TLGC and Yukon Government
TOTAL 34 (s) 40 UG	~11,136.74 (s) 9,242.55 UG	1987-2004	780	Various
Notes: UG = Underground; (s) = surface; TLGC = Tagish Lake Gold Corp.; ND = no data; The Goddell Gully Resource has also been referred to as the Golden Tusk Zone and the P.D Zone, and the Main Zone in previous reports; the Golden Tusk Zone stratigraphically overlies the P.D. Zone by about 350 m; The Goddell Gully portal was collared in 1996 and is located at 1,017.86 m portal elevation. The two drill holes completed in 2004 are numbers GG03 and GG04 and need to be compiled into the Skukum drill hole database.				

4.0 GEOLOGIC SETTING OF THE SKUKUM PROPERTY

4.1 Regional Geology

The regional geological setting of the Skukum project area is described in Hart and Radloff (1990), from which the following information is summarized. The project area is located within the Intermontane belt of the Canadian Cordillera. Oldest rocks in the area are comprised of domains and screens of probable Paleozoic gneiss, assigned to the Nisling Terrane by Hart and Radloff (1990), and Jurassic andesitic volcanic and siliciclastic sedimentary rocks of the Stikine Terrane and Whitehorse Trough overlap assemblage. Stratigraphic and contact relationships are commonly obscured by the many intrusions associated with the Coast Plutonic Complex. Strata of the Jurassic Whitehorse trough are affected by a series of open to tight, northwest-trending folds that probably formed in Upper Jurassic to Lower Cretaceous time, approximately coeval with activity of the Skeena Fold Belt to the south in British Columbia. The folds are superimposed on earlier, probably pre-

Triassic, metamorphic fabrics and the northwest-trending Tally-Ho shear zone, a major Late Triassic shear zone that is developed approximately 15 km to the northeast of the project area and which forms the easternmost limit of exposures of the Nisling Terrane.

Mesozoic plutonic rocks, which underlie much of the project area, separate the Jurassic units and Nisling Assemblage into isolated domains and screens. Major intrusions include the Alligator Quartz Monzonite and the late Triassic or early Jurassic K-feldspar megacrystic Bennett Granite that are widespread east of the Wheaton River in the Skukum project area. The most abundant rock types in the region comprise metaluminous Cretaceous intrusions of the Coast Plutonic Complex, which are subdivided into several plutonic suites by Hart and Radloff (1990). The dominant Cretaceous suites in the project area include the Mt. McIntyre plutonic suite (96 to 119 Ma), comprising the Mt. Ward granite and Carbon Hill quartz monzonite, and the Whitehorse plutonic suite (116 to 119 Ma), locally represented by the Mt. McNeil granodiorite pluton (Fig. 3). Isolated accumulations of mid- to late-Cretaceous volcanic rocks of intermediate composition of the Mt. Nansen Group are present regionally and are approximately coeval with the Coast Plutonic Complex.

At the Skukum property, these rock types occur on the eastern flanks of Carbon Hill and southeast of Goddell Gully near the Becker-Cochran prospect, where they comprise green tuff and tuff breccia that unconformably overlie the Bennett Granite and Jurassic strata (Fig. 3).

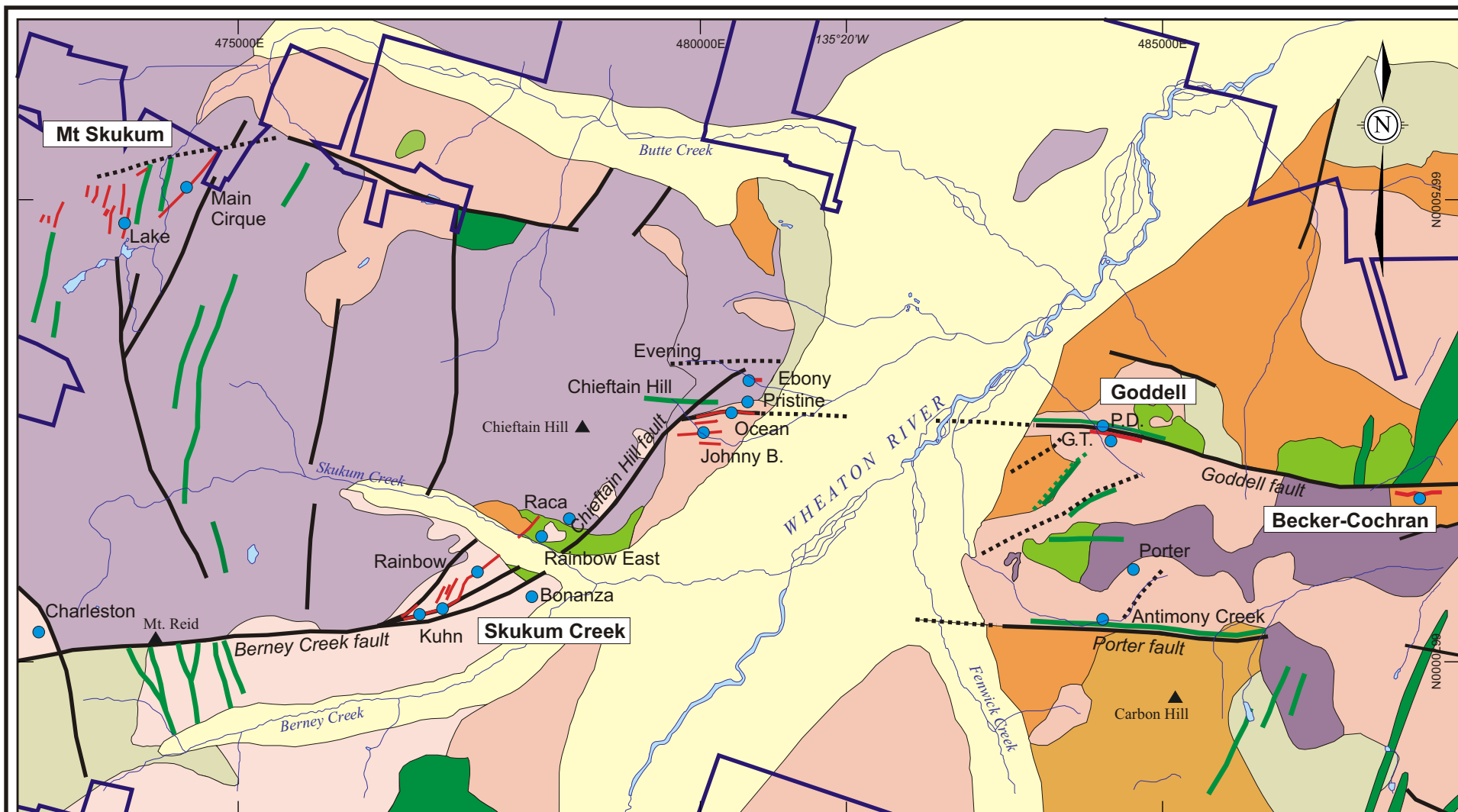
Late Cretaceous and Early Paleocene brittle dextral displacement associated with widespread dextral displacement throughout the Cordillera is related to reactivation of the Triassic Tally-Ho shear zone. This phase of displacement formed a brittle fault system, termed the Llewellyn fault by Hart and Radloff (1990), which exploited parts of the earlier Tally-Ho structure. Subsidiary faults generated during this tectonic episode may subsequently have been remobilized during Eocene volcanic activity to locally form caldera-bounding structures; these may also have acted as permeable structural sites for the formation of the late-volcanic vein deposits hosted by faults and shear zones in the Skukum project area.

4.2 Local Geology

The local geology at the Skukum property is shown in Figure 3. The following local geology descriptions were taken from Naas (2004).

4.21 Proterozoic to Paleozoic Metamorphic Rocks

Metamorphic rocks of the Nisling Terrane underlie the western extent of the property (Charleston area), and occur as isolated roof pendants in the Chieftain Hill and Goddell areas of the property. These metamorphics are comprised of three units, the Nisling and Nasina assemblages as well as undifferentiated gneiss.



LEGEND GEOLOGY

Recent

Alluvium, colluvium

Tertiary

Skukum Group volcanics

Rhyolite to andesite dykes, stocks

Cretaceous

Mt Nansen Group volcanics

Upper Jurassic

Clastic sediments, andesitic volcanics

Mid-Cretaceous Intrusions

Mt. McNeil pluton: granodiorite

Mt. McIntyre Plutonic Suite: quartz monzonite, granite

Late Triassic to Early Jurassic Intrusions

Bennett Granite: K-feldspar megacrystic granite

Alligator quartz monzonite

Paleozoic

Nisling Assemblage metamorphic rocks

SYMBOLS

- Selected deposit or showing
- Skukum Creek Deposit name
- Fault
- Fault, inferred
- Au ± Ag ± Sb or Sb mineralized vein or fault
- Property boundary

0 2.5km

UTM Zone 8 North
NTS 105D/3,4,5,6

TAGISH LAKE GOLD CORP.

Fig. 3 PROPERTY GEOLOGY MAP Skukum Property

Skukum Project
Whitehorse M.D., Yukon Territory, Canada

Project No:	P56G	By:	DR, TV
Scale:	1:62,500	Drawn:	TV
Figure:	3	Date:	July 2007

From Naas (2007)

4.211 Nisling Assemblage

Comprised of rusty-brown weathering, competent, non-fissile biotite-muscovite-quartz feldspar schist, quartzite and marble. A planar foliation is well developed parallel to compositional layering. Compositional layering is observed in the schists and quartzites from 1-2 centimetres wide and from 1-100 metres wide in the marbles.

4.212 Nasina Assemblage

These rocks are very similar to the Nisling Assemblage in composition but distinguishable by graphitic, commonly garnet-bearing quartz schists and lesser marble. The best exposures are seen to the west of Mt. Skukum. The rocks are also well foliated but fissile due to partings on the graphitic layers. The typical lithology is garnet-muscovite, garnet-graphite schists and carbonaceous quartzite.

4.213 Undifferentiated Gneiss

Feldspar-hornblende orthogneiss with minor biotite, epidote, and chlorite are found on Chieftain and Carbon Hills in the Wheaton River area. This unit is not in actual contact with the other two but has been included in the Nisling Terrane based on descriptions and other relationships determined by other workers.

4.22 Probable Jurassic Volcanic and Siliclastic Rocks, Eastern Rainbow Zone

4.221 Conglomerate

Pebble conglomerate is present in several drill holes completed historically at the eastern end of the Rainbow zone, immediately southwest of Skukum Creek. The unit is composed of clast-supported conglomerate with rounded clasts of chert and quartzite in a pale green sericitic matrix. This unit probably belongs to the Jurassic Tantalus Formation (cf., Hart and Radloff, 1990). It is present in an area of no outcrop and core is incomplete and partially lost for the holes containing this unit, so its contact relationships and orientation could not be assessed. Conglomerate that has been mapped along the southeastern flanks of Chieftain Hill by Mt. Skukum Mines (unpublished mine maps; Hart and Radloff 1990), and which is intercalated with Jurassic volcanic rocks, may also correlate with this unit.

4.222 Intermediate Volcanic Rocks

Holes drilled in the Rainbow East zone (RACA97-1 to RACA97-3) first pass through thick, recent talus of fresh Tertiary volcanic rocks, and then intersect pale grey, sericite+pyrite± magnetite altered, locally plagioclase±pyroxene porphyritic volcanic rocks of probable intermediate composition. Main rock types include massive, grey lapilli to block tuff and tuff breccia, and massive porphyritic flows or subvolcanic intrusive rocks. These units are distinct from the fresh Tertiary volcanic units present in talus higher on the slope. Their altered state, close spatial association with Jurassic conglomerate of the Tantalus Formation that is present immediately across Skukum Creek, and occurrence of Cretaceous intrusive rocks within them suggest that they may correlate with Jurassic pyritic andesitic volcanic rocks present on the eastern flank of Chieftain Hill 2 kilometres to the northeast. Since these volcanic units are present in an area of poor exposure under talus, their contact relationships with adjacent rock types are unknown.

4.23 Intrusive Rocks

Ten types of intrusive rock of widely variable composition and texture are identified underlying the Property. In general, the rocks comprise at least three larger intrusive masses and numerous dykes, including andesitic and rhyolitic dykes of Tertiary age. The dykes are most abundant within and immediately adjacent to major fault zones, which probably provided the structural control for their emplacement. In some cases, the appearance of certain types of dykes can be significantly modified by hydrothermal alteration and lead to confusion in assignment.

4.231 Pre-Tertiary Intrusions

Biotite-hornblende granodiorite (Mt McNeil pluton; Cretaceous)

Within the Skukum project area, the Mt. McNeil pluton underlies the valley of Berney Creek, Mt. Reid and the south side of Skukum Creek, immediately to the south of the Mt. Skukum volcanic complex (Fig. 3). Hart and Radloff (1990) report a 111 Ma U-Pb zircon age from the pluton in the Skukum project area. This intrusion is the most common host rock to the Skukum Creek deposits. It is characterized by large, euhedral hornblende grains that locally exceed 1 cm in length but which are mostly 3 to 6 mm long. The unit is coarse-grained and equigranular to seriate. It typically contains approximately 10% hornblende, 5% biotite, 25 to 30% quartz, 30 to 35% plagioclase and 20% K-feldspar, providing an IUGS classification as biotite-hornblende granodiorite. Fresh rock contains abundant magnetite. Partially disaggregated cognate xenoliths of fine-grained diorite are common. Where fresh, it is strongly and evenly magnetic. Hornblende and biotite have been at least partially replaced by greenish chlorite in even the freshest samples. Alteration is pervasive and much stronger close to major shear zones.

K-Feldspar megacrystic biotite-hornblende granite (Bennett Stock; Triassic-Jurassic)

Drill holes completed in the Rainbow East zone on the northeast side of Skukum Creek (holes RACA97-1 to 3) intersected a foliated K-feldspar megacrystic granite, which based on textural and mineralogical similarities is interpreted to be the Bennett granite which is widespread in the region. Doherty and Hart (1988) report a U-Pb zircon age for the Bennett granite of about 220 Ma, although other U-Pb dates in the region return approximately 175 Ma (J. K. Mortensen, pers. comm. 2002). This unit is broadly similar to the biotite-hornblende Mt. McNeil granodiorite at Skukum Creek, but is distinguished by: (i) the presence of megacrysts of euhedral K-feldspar up to several centimetres in size in a coarse-grained, equigranular matrix; and (ii) a higher K-feldspar/plagioclase ratio. It is properly called granite. This unit is invariably altered near veins and shear zones.

Porphyritic hornblende monzonite to quartz monzonite

This unit is present as irregular bodies and dark dykes within the Mt. McNeil pluton in the vicinity of the Skukum Creek deposits. It commonly contains inclusions of the Mt. McNeil granodiorite. The unit typically has a salt and pepper texture that reflects subequal concentrations of euhedral hornblende prisms and equant, white plagioclase phenocrysts. The groundmass is dark and fine-grained. Some variations on this rock type contain minor quartz. Plagioclase phenocrysts typically form approximately 40% of the rock, but locally exceed 50% requiring it to be called a porphyry. The moderate response to K-feldspar staining is

consistent with monzonite. This rock type is common in the Skukum Creek area, but it was not observed at Goddell Gully or Chieftain Hill. Where present within or near mineralized shear zones, this unit is invariably altered. The rock locally contains minor cognate diorite xenoliths, but their concentration is markedly less than in the Mt. McNeil granodiorite.

Biotite-pyroxene monzodiorite

This rock type was observed only in the Skukum Creek area within the Taxi zone, and in DDH 98GE-1 located southeast of the Rainbow and Kuhn zones. In the Taxi zone, a diorite cross cuts the Mt. McNeil granodiorite, whereas at Golden Eagle an opposite relationship was observed. The intrusions in each example are medium-grained and equigranular. Quartz is locally present in minor (<5%) concentrations, and the rock is moderately magnetic. Biotite and pyroxene together make up 30 to 35% of the rock. K-feldspar staining indicates that this rock type is most appropriately described as a biotite-pyroxene monzodiorite or quartz monzodiorite. Both dioritic bodies that were encountered have a weak foliation and are cut by chloritic and/or sericitic veinlets.

Biotite granite

This is a medium-grained, equigranular intrusive rock that occurs locally in the Taxi zone and in drill holes south of the Kuhn Fault. It typically has no or only minor alteration or fabric. Dykes of this rock type cross cut the Mt. McNeil granodiorite, but were not observed in contact with other intrusions. The rock is moderately magnetic and the only ferromagnesian phase is biotite. It is cut locally by chlorite or sericite veinlets.

Hornblende-biotite quartz monzonite (Carbon Hill pluton of Mt. McIntyre Plutonic Suite)

This is the main host rock to the Goddell Gully and Porter fault zones on the east side of the Wheaton River valley. Hart and Radloff (1990) report a poorly constrained K-Ar date of 96 ± 15 Ma for this intrusion, which is broadly consistent with 107 to 110 Ma U-Pb zircon results obtained from other plutons of the same plutonic suite in the area. It is a medium-grained, equigranular rock with subequal K-feldspar and plagioclase and about 20% combined hornblende and biotite. It is moderately magnetic, but less so than the Mt. McNeil stock. It has invariably been affected by strong alteration where close to the Goddell Gully and Porter fault zones. No temporal relationships were observed with other intrusions except for cross-cutting Tertiary rhyolite and andesite dykes.

Pegmatites and aplites

These were observed mainly in the Mt. McNeil granodiorite in the Skukum Creek area. They are most abundant in areas that are also cut by biotite granite dykes, to which they might be related. They are late magmatic features that are cut by minor shear zones and altered. None of these dykes observed during this study exceed 0.5 metres in width (most are <5 cm wide), and they are widely dispersed through the host intrusions. One small aplite graded to a core of clear quartz, a pattern common to aplites in many systems.

4.232 Pre-Tertiary Volcanics (Mt. Skukum Volcanic Complex)

The complex is an early Eocene, bimodal sequence of sub-aerial volcanic and volcanoclastic rocks that have been deposited over approximately 140 sq. kilometres. The complex trends northeast in a 20 by 11 kilometre ellipsoid, bounded by faults to the south and east, and divided into two parts by two north-south trending faults. The eastern part has been downdropped

by as much as 300 metres relative to the western block (Pride, 1986). The eastern portion of the complex is comprised of mainly felsic pyroclastic rocks intercalated with brecciated flow-banded and spherulitic rhyolite lava flows. These felsic units are particularly thick in the northeastern and southeastern parts of the complex where prominent large-scale arcuate fracture systems, large slump blocks, vent facies pyroclastic rocks and other features indicate centres of volcanism and associated margins of nested caldera subsidence. The western block is underlain by at least 850 metres of andesite, which host the Mt. Skukum gold deposit. The andesite unconformably overlies the basement of metamorphic Nisling Terrane and intrusive Coast Plutonic Complex on a highly irregular erosional surface (Jago, 1991). The stratigraphy of the Mt. Skukum Volcanic Complex has evolved over time by the various workers. The following terminology is based on the work of Hart and Radloff (1990):

Ibex Formation: dark, vitreous, flow-banded rhyodacite flows with sparse feldspar phenocrysts and welded tuff and common granitic fragments. This unit may or may not be part of the Skukum Group but is found overlain by Butte Creek Formation.

Mount Reid Formation: Massive, hematitic, clast-supported, cobble and boulder conglomerate with locally derived basement fragments.

Butte Creek Formation: consists of three sub-units of well-bedded, pastel coloured felsic and altered felsic pyroclastic rocks with interbeds of grey, green and purple interbeds, interlayered epiclastic sediments and tuffs, and undivided tuff and epiclastics.

Watson River Formation: massive to poorly-bedded, dark-brown and purple to pale green columnar-jointed andesite and andesite porphyry flows, as well as pale green dacitic to andesitic lithic tuff.

Vesuvius Formation: consists of a variety of rhyolite tuffs and flows, lithic tuffs, and a collapse breccia of large blocks of flow-banded rhyolite. The various sub-units range in colour from dark reddish-brown to green to tan to grey.

4.232 Tertiary Dykes and Stocks

Andesite dykes

These intrusions are widespread throughout the project area, but are generally most common within or adjacent to major fault zones (cf., rhyolite dykes below). The most common types are either aphanitic and dark grey, or have a porphyritic texture defined by hornblende and plagioclase. Both types of dyke may be altered and locally mineralized. Some of the aphanitic dykes may be narrow equivalents of the porphyritic monzonite phase described above. The porphyritic examples are relatively more common at Goddell Gully. Staining indicates that the dykes are actually monzonite and porphyritic hornblende monzonite, with lesser andesite. The andesite was observed to cut most of the pre-Tertiary phaneritic intrusive rocks. Some andesite dykes are older than some rhyolite dykes. Several types of andesite dyke are probably present in the area, but additional work needs to be done. Andesite dykes that intrude pre-Tertiary rocks in the region may represent subvolcanic feeders to the Mt. Skukum volcanic complex.

Rhyolite dykes

These intrusions comprise a diverse group of felsic dykes that are variable in mineralogy, texture, and their spatial and temporal relationships to hydrothermal alteration and mineralization. Rhyolite dykes were observed to cut most intrusions on the property, but have

variable timing relative to andesites as noted above, suggesting multiple pulses of both intrusive types. Like the andesite dykes, rhyolite dykes commonly have a spatial association with, or are developed within, major east- and northeast-trending fault systems. In the Skukum Creek and Chieftain Hill areas, typical rhyolite characteristics include a buff to light grey colour, and a aphanitic texture with up to 10% clear, rounded to square and locally resorbed quartz phenocrysts (mostly <3 to 4 mm in size). Prominent flow banding is well developed near the contacts of many of the larger dykes.

Three distinctive quartz±Kfeldspar porphyritic dykes that are present in the Goddell Gully area along the Goddell fault belong to the rhyolite dyke group. These have been termed the North, Central and South marker dykes in old drill logs, based on a consistent and predictable distribution along strike. The North and South Marker dykes lack flow banding and have a higher concentration of K-feldspar phenocrysts and more variable concentrations of quartz phenocrysts than the Central Marker dyke. The Central Marker dyke has well-developed flow banding, overall texture, equant quartz phenocrysts, and alteration and disseminated pyrite that makes it much more similar to the mineralized rhyolite dykes at Skukum Creek. The relative age of the three rhyolite dykes at Goddell was not established.

A single, narrow spherulitic rhyolite dyke was observed in the Ridge Zone. It is characterized by spherules <4 mm in size and several percent disseminated pyrite; the age of this intrusion relative to other types of rhyolite dyke is unknown but similar intrusions at Mount Skukum were considered by McDonald et al. (1990) to be among the youngest rock types in the area.

Post-hydrothermal amygdaloidal andesite dykes

These occur in several places at Skukum Creek. They are invariably fresh and undeformed, even where located close to known mineralization, and are consequently interpreted as post-hydrothermal.

These dykes range up to several metres in width. They have a fine-grained to aphanitic, dark-colored groundmass, and are distinguished by white to clear amygdules infilled by quartz and/or calcite. Similar dykes were interpreted to be the latest stage of intrusive activity in the vicinity of the Mount Skukum mine (McDonald et al., 1990).

5.0 2009 GEOPHYSICAL SURVEY

The 2009 Geophysical survey was conducted by Northwest Mining And Geological Exploration Bureau For Nonferrous Metals (78 Mid YanTa Road, Xi'an, People's Republic of China 710054) using their own equipment and managed by Mr. Fan Jinsheng. This survey was conducted in the summer of 2009 from June 9 to July 28, 2009.

5.1 Objective, Personnel, and Equipment

The objectives of the 2009 Geophysical survey includes:

1. Establish a staked grid over the Wheaton River Valley (located inbetween exposed Au-Ag mineralized outcrops), that covers the area between Carbon Hill and Chieftain Hill;
2. Conduct an induced polarization and resistivity survey over the established grid, and
3. Review the geophysical results (anomalies) with staff geologists in the field to determine any known geological correlations and to help guide future exploration programs.

The geophysical grid that was established in the field is located between Chieftain Hill and the Goddell Au-Ag resource in the Wheaton River valley area. The coordinates of the 4 corners that mark the boundary of the geophysical grid work area are (Plate 1):

- A. 480590E, 6673392N (Northwest corner) B. 483690E, 6673392N (Northeast corner)
- C. 480590E, 6672592N (Southwest corner) D. 483690E, 6672592N (Southeast corner)

The geophysical method used in this survey is time-domain induced polarization (IP) gradient array. In order to provide information for the geological exploration group, the geophysical team left Xi'an on June 9 and finished the field work on July 28, 2009. The geophysical data results were compiled and analyzed at the project site. The final geophysical report was completed on August 3, 2009 and written in Mandarin by NWME Chinese geologists. The Mandarin report was translated into English by Hua Jin, the Project Geologist for YNGC. Hua also took the geophysical data collected by NWME staff and constructed the maps and plates included in this report using ArcGIS (ESRI) software. Todd Johnson was a contract geologist with YNGC at the time of the fieldwork. Todd was Vice-President of Exploration for YNGC at the time he finalized the written English version of this report (since April 1, 2010).

The entire survey gridded work area was finished as planned. The IP gradient and section survey is 25.6 km in total line length. The established geophysical grid (work area) covers 2.48 square km. Lines on the grid are oriented east-west, spaced every 100 m apart, and have marked (staked) stations located every 20 m along the lines. The stakes consist of short wooden lathe less than 0.5 m long. The results of the geophysical survey include: 9 relatively high chargeability anomaly zones, 3 relatively high resistivity anomalies, and 3 low resistivity zones. We have interpreted 5 geophysical anomalies (targets) that represent potential mineralized and/or silicified zones that

may help with the next stage of exploration in the area.

Fan Jinsheng (Senior NWME Geophysicist) managed the geophysical survey work. Fan's NWME support staff included: Zhang Lei, Li Zengtao, and Wei Xiachang. One YNGC geotechnician helped the NWME geophysicists in the field for logistical support and line cutting. Table 4 lists the equipment used for the 2009 geophysical survey work.

Table 4. Equipment Used for the Geophysical Survey (See Appendix B for more details).

No.	Equipment Type	Manufacturer Name	Model Name
1	Hand-held GPS unit	Garmin	ETrex Venture HC
2	IP Receiver	Scintrex	IPR-12
3	3KW – Rectifier (Direct Current)	Chinese Co.	DZ3-1
4	5 KW Transmitter	Chinese Co.	DJF5-1A
5	2.2 KW Generator	Yamaha (AC output)	EF2600

5.2 Method

Each grid station was measured by a hand-held Global Positional System (GPS) unit (see Appendix C). The map projection and map datum used for this survey is Universal Transmercator System (UTM) NAD83 Zone 8N which is the same as that used by TLGC and Yukon-Shaanxi Mining Co. The difference between the design coordinates and the real (field) coordinates staked in the field were generally within 1 to 2 m of one another. Accuracy for the hand-held GPS unit was generally 3 to 5 m for northing and easting coordinate locations, and 8 to 12 m for elevation.

The individual survey lines are oriented in a north-south direction and spaced 100m apart. Line numbers were labeled in the field and started at 1190 and increased by 10 up to 1500 (every increment of 10 on the line is equivalent to 100 m measured on the ground). 800 m is the length of every line. Stations along each line were staked every 20 m and started at 90 at the south end of the lines and increased by 2 up to 170 on the north end of the lines (every increment of 2 for the stations is equivalent to 20 m measured on the ground). Every station on the ground was marked by a wooden lathe (short stake) with red flagging.

The geophysical survey specifications are presented in Appendix B. Using the time-domain IP method, and a transmitting frequency of 0.125 hz, the potential square wave and receiver measured the natural chargeability. The data was analyzed in the following manner. Data was graphed and subdivided into 14 subunits or slices (see Table 5). Each subunit was then divided into 4 areas M1, M2, M3, and M4. The length of the current line (AB) is 1200 m and the distance

Table 5. Width of Section

Delay by	40 Integral Width [Units = (1/1000)s]
SLICE #1	10
SLICE #2	10
SLICE #3	10
SLICE #4	10
SLICE #5	20
SLICE #6	20
SLICE #7	20
SLICE #8	40
SLICE #9	40
SLICE #10	80
SLICE #11	80
SLICE #12	160
SLICE #13	160
SLICE #14	320

of the electrodes (MN) is equal to 40 m; this equipment (including the generator) was placed wherever it was convenient (typically near the existing dirt road). The line length is equal to $(2/3) \times (AB)$ which is equal to 800 m. Therefore, the measured area was equal to 800 m line length by 500 m width. With this reasoning, 5 different survey lines were completed per equipment setup. The strength of the direct current line is equal to 0.5-2.0 amps which results from the different subsurface rock and soil conditions.

The parameters used for generating the contour maps are (1) apparent resistivity, and (2) the 9th apparent chargeability (M9 slice where the average number is the same as M9; see Table 5).

Table 6 lists the AB charging locations for the survey grid work area.

Table 6. Charging AB locations for the survey grid work area.

AB Setup No.	Charging Location (1) (Station No. /Line No.)	Charging Location (1) (Station No./Line No.)	Survey Lines Measured Using A#B# Equipment Setup
A1B1	70/1480	190/1480	1500\1490\1480\1470\1460
A2B2	70/1430	190/1430	1450\1440\1430\1420\1410
A3B3	70/1390	190/1390	1400\1390\1380
A4B4	70/1210	190/1210	1190\1200\1210\1220
A5B5	70/1250	190/1250	1230\1240\1250\1260\1270
A6B6	70/1300	190/1300	1280\1290\1300\1310\1320
A7B7	70/1350	190/1350	1330\1340\1350\1360\1370

NOTES: (1) See Plate 1 for exact A#B# charging locations.

Appendix D contains the raw geophysical data. Appendix H contains a CD with all of the data and the final Assessment report.

5.3 In-House Data Compilation

Geophysical Surfer 8.0 geological computer software was used to compile the geophysical data, smooth and filter the data and anomalies, looking for data trends, and generate the resulting contour (anomaly) maps (Plates 1 through 6) including section profile maps. All of the data interpretations are based on the apparent chargeability contour map, the apparent resistivity contour map, the anomaly values identified on each cross-section, and geological conditions (e.g. overburden, vegetation, topography). Inferred anomalies reveal general trends with no detailed depths and have lower confidence than the primary identified anomalies.

5.4 Total Work Amount and Quality of Work

Northwest Exploration and Mining Bureau for Nonferrous Metals surveyed the grid and collected the IP and resistivity data on 32 lines from June 11 to July 28, 2009 (Plate 1). General statistics for the survey are listed in Table 7 below.

Table 7. General statistics for the 2009 geophysical survey.

Project Task	Line length	Total No. of Stations	Total Surface Area
Grid setup	25.6 km	1319	2.48 km ²
IP & resistivity data collection	25.6 km	1238	2.48 km ²

This IP and resistivity survey is able to see with confidence approximately 300 m below the surface.

All geophysical work at the project site was done according to the guidelines described in DZ/T 0153-1995 and DZ/T 0070-1993 written by the Republic of China Geochemical and Geophysical Survey (Chinese Government). All geophysical data was measured several times in the field for reliability with more attention given to those data that contained sharply changing points and/or anomaly zones. For example, if data were being collected in an anomaly zone, 4 measured readings (in Ma units) may have been taken (eg. 10, 20, 21, and 5). In this example only the two closest measured readings (20 and 21 Ma) would be averaged and used as the final measured field value.

Duplicate field data for both the survey line/station coordinate locations (using the GPS) and the IP and resistivity data satisfy the requirements defined in the aforementioned government guideline publications (see Table 8).

Table 8. People's Republic of China Government Guidelines for IP Survey Specifications

Work Program		Difference (1)	Average Difference
Measured Location (Station) Coordinates	Average Difference between each point	6.07%	1.64 m
	Difference between distance between 2 adjacent stations	6.06%	8.31%
Geophysical Data	Apparent Resistivity	6.2%	0.01% (2)
	Apparent Chargeability	6.2%	2.38% (2)

NOTES: (1) Amount of data checked

(2) Standard deviation

5.5 Main Anomaly Descriptions and Interpretations

The following text describes the geophysical anomalies and interpretations based on the 2009 work performed at the Skukum property.

5.51 Apparent Chargeability Anomalies and Characteristics

The overall apparent chargeability in the grid (work) area is stronger towards the east and west ends, relatively low in the middle with the west side stronger than the east side. Most of these data range from 7 to 20 per mille (or 0.001 or ‰) unit. Most of the identified anomalies are low to medium in character with wide surface areas. Most of the chargeability data results show very small changes over the survey grid area. The high chargeability anomaly is not significant. Based on the apparent chargeability results, we can interpret 9 individual high chargeability anomalies which belong to 4 anomalous chargeability trending belts shown on Plate 2: belt number 1 (M1-1 and M1-2); belt number 2 (M2-1 and M2-2); belt number 3 (M3-1, M3-2, and M3-3); and belt number 4 (M4-1 and M4-2). The apparent chargeability Section Profile map is shown in Plate 4.

5.511 Number 1 Anomaly Belt

The number one anomaly belt is located in the southwest part of the work area between lines 1190 to 1300 and Stations 100 to 110. Two anomalies are included in this belt: M1-1 and M1-2. The anomaly threshold is 14 ‰. This 1.3 km long anomaly belt trends approximately east-west with the center of the two anomalies located inbetween lines 1190 to 1230, and lines 1270 to 1300, respectively. The highest anomaly is 20 and 15 ‰.

5.512 Number 2 Anomaly Belt

The number two anomaly belt is located north of the number one anomaly belt between lines 1190 and 1330 and Stations 116 to 150. This anomaly belt includes the M2-1 and M2-2 anomalies. The anomaly threshold is equal to 14 ‰. This belt has an irregular shape (lenses) and changes from east-west trending to northeast trending. The length of the anomaly along strike is approximately 1.4 km. The centers of the two anomalies are located between lines 1190 and 1230, and lines 1280 to 1320, respectively.

5.513 Number 3 Anomaly Belt

The number three anomaly belt is located in the northwest corner of the work area between lines 1190 and 1270 and stations 146 to 170. This belt includes anomaly numbers M3-1, M3-2, and M3-3. The anomaly threshold is equal to 14 ‰. This anomaly belt appears to be boudinaged in shape and strikes northeast/north at an azimuth of ~67.5°. The length of this anomaly is approximately 800m. The centers of the three anomalies are located on line 1190 between stations 146 and 152; line 1230 at station 154; and line 1260 at station 174, respectively. The highest ‰ values in the three anomalies are 30, 15, and 16, respectively.

5.514 Number 4 Anomaly Belt

The number four anomaly belt is located in the southeast corner of the work area between lines 1420 and 1500 and stations 100 to 150. This belt includes anomaly numbers M4-1 and M4-2. The anomaly threshold is equal to 10 ‰. This anomaly occurs as an isolated round single spot, and as a northeast-trending subparallel belt that narrows to the west and becomes wider to the east. The length of this anomaly is ~700 m in a discontinuous pattern. The centers of the two anomalies are located at line 1440 at station 122, and at line 1500 at station 128. The highest ‰ value is only 11 which belongs to a low anomaly zone.

5.52 Apparent Resistivity Anomalies and Characteristics

The range of apparent resistivities in the work area ranges from 600 to 2,500 ohm·m. The overall characteristics of the apparent resistivity data results are very similar to the apparent chargeability data results showing a high towards the southeast and a low in the west. At a regional scale, the apparent resistivity anomalies occur mostly as lens-shaped belts with alternating high and low resistivity anomalies, that strike northeast/east.

The apparent resistivity anomalies may be generally characterized into 6 distinct anomalies: R1,

R2, R3, R4, R5, and R6 shown on Plate 3. The apparent resistivity Section Profile map is shown in Plate 5.

5.521 R1 Anomaly

The R1 anomaly is a resistivity high that extends from line 1190 at station 96 and extends eastward to line 1360 at station 144. This anomaly strikes northeast/east and is discontinuous over a strike length of 1.7 km. The apparent width of this anomaly is 120m.

5.522 R2 Anomaly

The R2 apparent resistivity low anomaly is located subparallel and due north of the R1 high resistivity anomaly. The R2 anomaly extends from line 1190 at station 114 to line 1300 at station 136 and covers 1.1 km of total strike length.

5.523 R3 Anomaly

The R3 apparent resistivity high anomaly is located north of the R2 anomaly and consists of several separate anomalies with different strike directions. The overall trend of the R3 apparent resistivity anomalies is NE-E, starts from Line 1190 at station 124 and extends to Line 1310 at Station 166, and covers 1.2 km of total strike length.

5.524 R4 Anomaly

The R4 apparent resistivity low anomaly is located north of the R3 anomaly. The R4 apparent resistivity anomaly starts at Line 1280 at station 170 and extends approximately 900 m to the northeast.

5.525 R5 Anomaly

The R5 apparent resistivity low anomaly is located in the southeast corner of the work area and has a boudinaged shape. The R5 apparent resistivity anomaly is approximately 400 m in total strike length in a northeast direction and extends from Line 1470 at station 94 and continues to Line 1500 at station 118.

5.526 R6 Anomaly

The R6 apparent resistivity high anomaly consists of two separate anomalies that both trend in a northeast direction and subparallel to one another. The R6 apparent resistivity anomalies extend from Line 1500 at station 1300 to Line 1460 at station 110. The R6 anomaly has a total

approximate strike length of 400 m.

5.53 Interpretation of the Anomalies

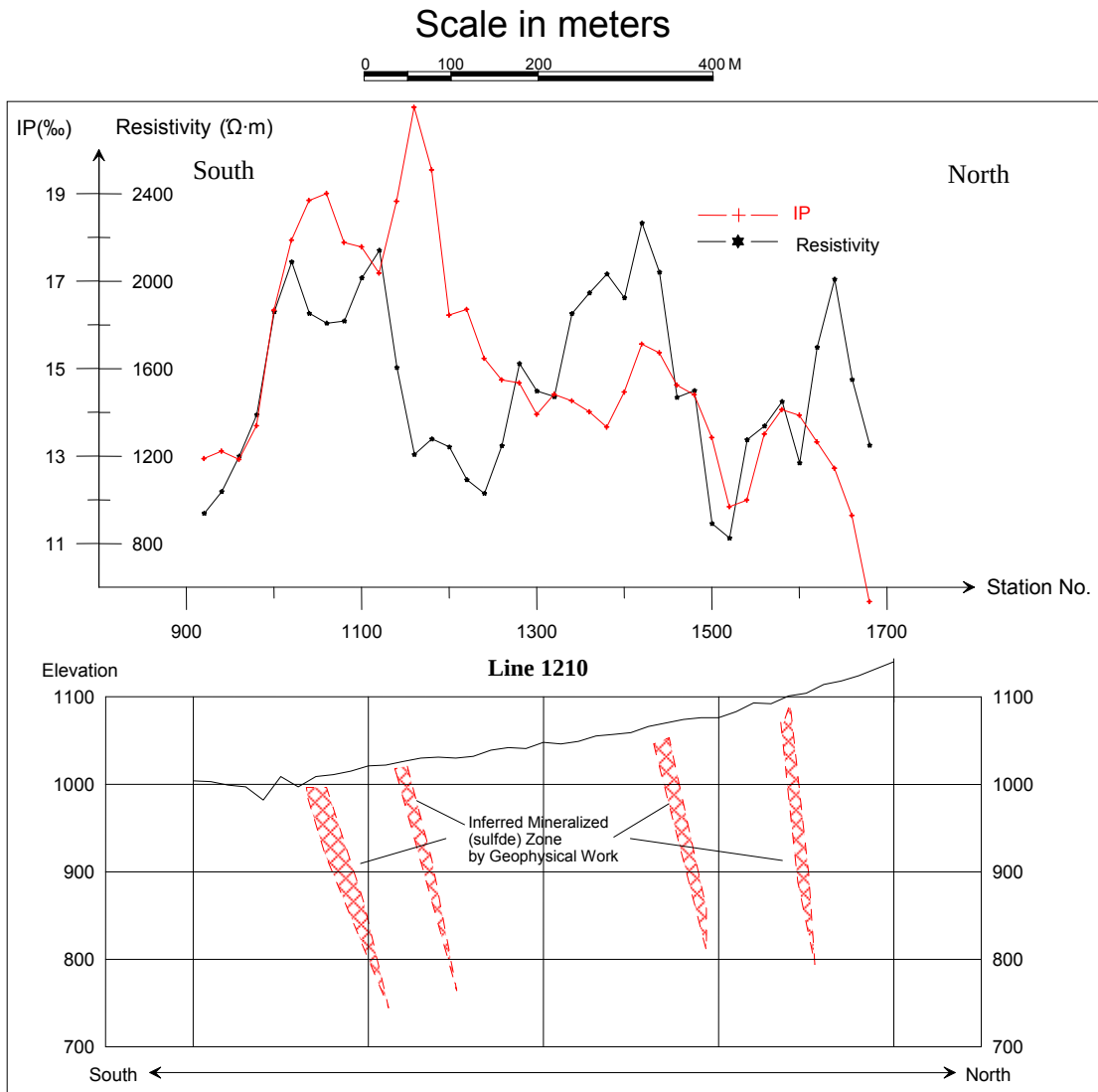
The known Skukum Property Au-Ag mineralized zones (Skukum Creek, Mount Skumum, and Goddell Gully) are characterized by silicification (vein alteration) and sulfidation (pyritization). In general, silicification leads to high resistivity in rocks, shear zones that typically contain ground water are characterized by low resistivity, and pyritization generally leads to chargeability high anomalies in rocks. A previous geophysical study by Tykajlo (1986) in the Mount Skukum mine resource area determined that porous (moisture-bearing) mineralized shear zones contain the aforementioned geophysical and geological characteristics. Based on the overall general characteristics of the anomalies in the work area and the geologic conditions, Tykajlo (1986) believes that the high chargeability anomalies reflect a high concentration of pyrite, the resistivity high anomalies reflect silicified zones; and the resistivity low anomalies within high resistivity anomalies reflect shear zones (moisture-bearing shear zones). Based on the aforementioned understanding, mainly due to chargeability anomalies combined with resistivity anomalies, we believe that the high resistivity zones identified on the eastern and western margins of the work area that contain high chargeability anomalies and narrower resistivity low anomalies are favorable for Au-Ag mineralization in the Wheaton River district. We interpret five separate mineralized anomaly zones from the 2009 geophysical work as shown on Plate 6.

5.531 Mineralized Zone 1

The Mineralized Zone 1 (MZ1) anomaly is located in the southwest corner of the work area near line 1190 at station 108 and extends to Line 1300 at station 116 and corresponds with the number 1 apparent chargeability high anomaly. The west side of this MZ1 anomaly also corresponds with the R1 apparent resistivity high anomaly. East of Line 1230 is the southern part of the R1 apparent resistivity anomaly which corresponds with the 1989 HLEM geophysical anomaly (Geo-Physi-Con Co., Ltd., 1989).

The Better B. vein has already been found in the east end. We believe the MZ1 anomaly is part of an eastern extension based on information from the cross-section map near Line 1210 (Figure 4) where the gradient difference within the high anomaly area is very significant. The margin of this anomaly is not as obvious where it lies near Line 1210 from stations 102 to 108. The mineralized zone starts shallow, trends north, and is very steep.

Figure 4. North-South Cross-Section Showing IP and Resistivity for Line 1210.



5.532 Mineralized Zone 2

The Mineralized Zone 2 (MZ2) anomaly is located north of the MZ1 anomaly and includes the II-1 and II-2 zones and corresponds to the number 2 apparent chargeability anomaly and the resistivity low anomaly (located within the high resistivity area). The MZ2 anomaly strikes east-west at the western end and gradually changes to a northeast strike towards the eastern end. The MZ2 anomaly is located on both sides of the dry river and matches well with the previously identified 1989 HLEM anomaly that corresponds with the known Ocean Vein mineralized occurrence. The MZ2 anomaly is interpreted to be the eastern extension of the Ocean Vein.

Sulfide minerals are possibly concentrated at the eastern and western sides of the MZ2 anomaly. The MZ2 anomaly may be separated into 2 anomalies: II-1 and II-2 as seen on Figure 5. The MZ2 anomaly is interpreted as a mineralized zone that is relatively shallow on the western end and a little bit deeper at the eastern end. The MZ2 anomaly is steeply inclined to the north (Figure 5) which is similar to the attitude of the II-1 anomaly. The II-2 anomaly is steeply inclined to the south (Figure 5).

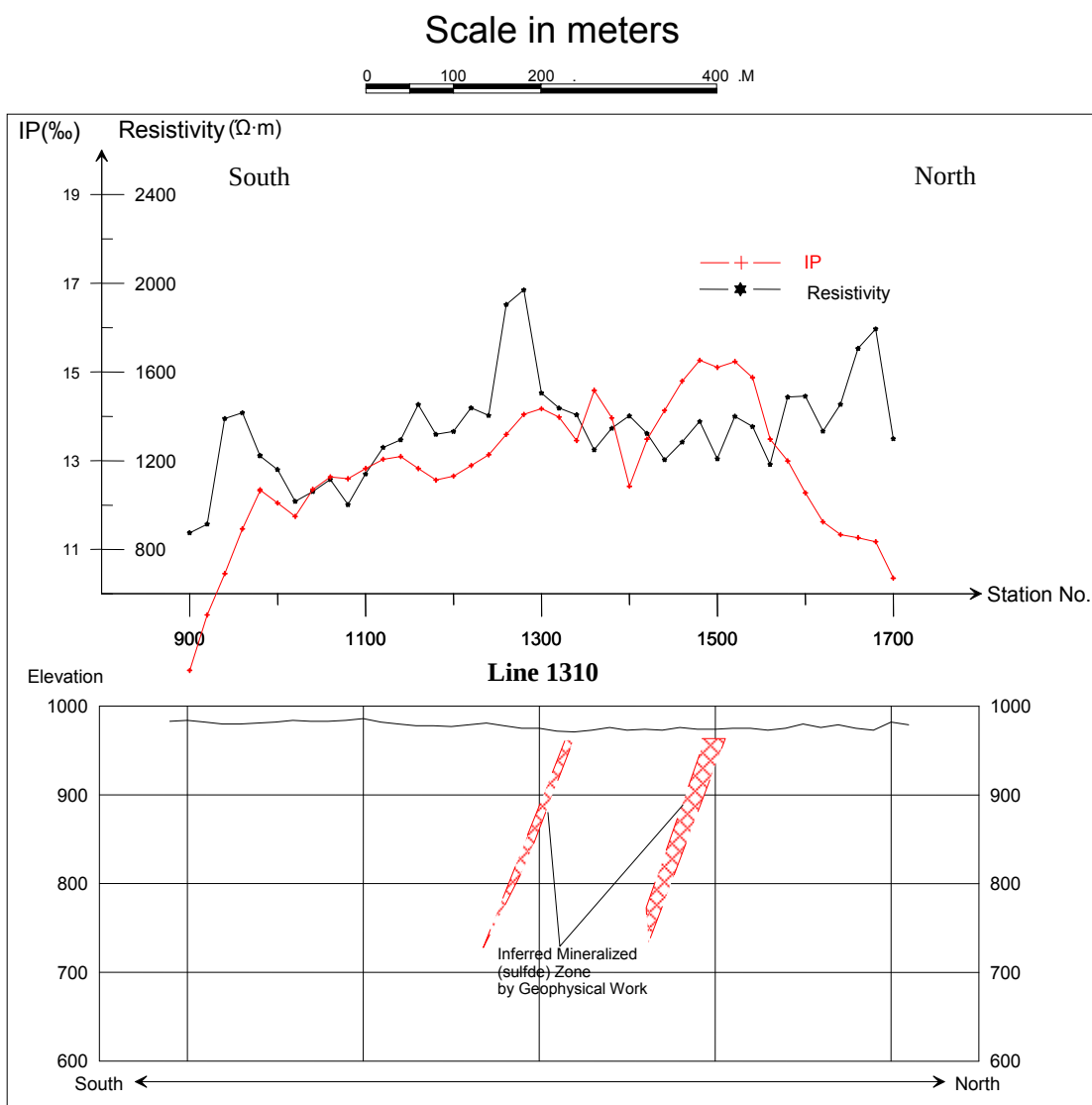
5.533 Mineralized Zone 3

The Mineralized Zone 3 (MZ3) anomaly is located in the northwest corner of the work area and corresponds with the apparent chargeability number 3 anomaly, and the R3 low resistivity anomaly (located within a resistivity high area). Silicified and pyritized andesite was observed on the east end of Line 1140 at station 148 and around Line 1200 at station 150 that occurs along a mapped fault. We interpret the MZ3 anomaly zone to be the northwestern extension of this fault. The MZ3 anomaly continues to the northeast indicating the possible existence of an anomaly that trends outside the work (grid) area. It is difficult to conduct more detailed interpretations on this MZ3 anomaly due to: the challenging topography in the work area, the relatively restricted access due to steep terrain in the northeastern part, and because the MZ3 anomaly remains open to the northeast. We recommend to first determine if there is any gold associated with this anomaly before future work is done.

5.534 Mineralized Zone 4

The Mineralized Zone 4 (MZ4) anomaly is located in the southeast corner of the work area which extends from Line 500 at station 120 to Line 1470 at station 108. The total strike length of the MZ4 anomaly is approximately 300 m and corresponds with the number 4 chargeability anomaly and the southern part of the high resistivity zone. The MZ4 anomaly lies adjacent to and on trend with Au-Ag mineralization of the Goddell Gully resource which suggests the mineralization likely extends to the west.

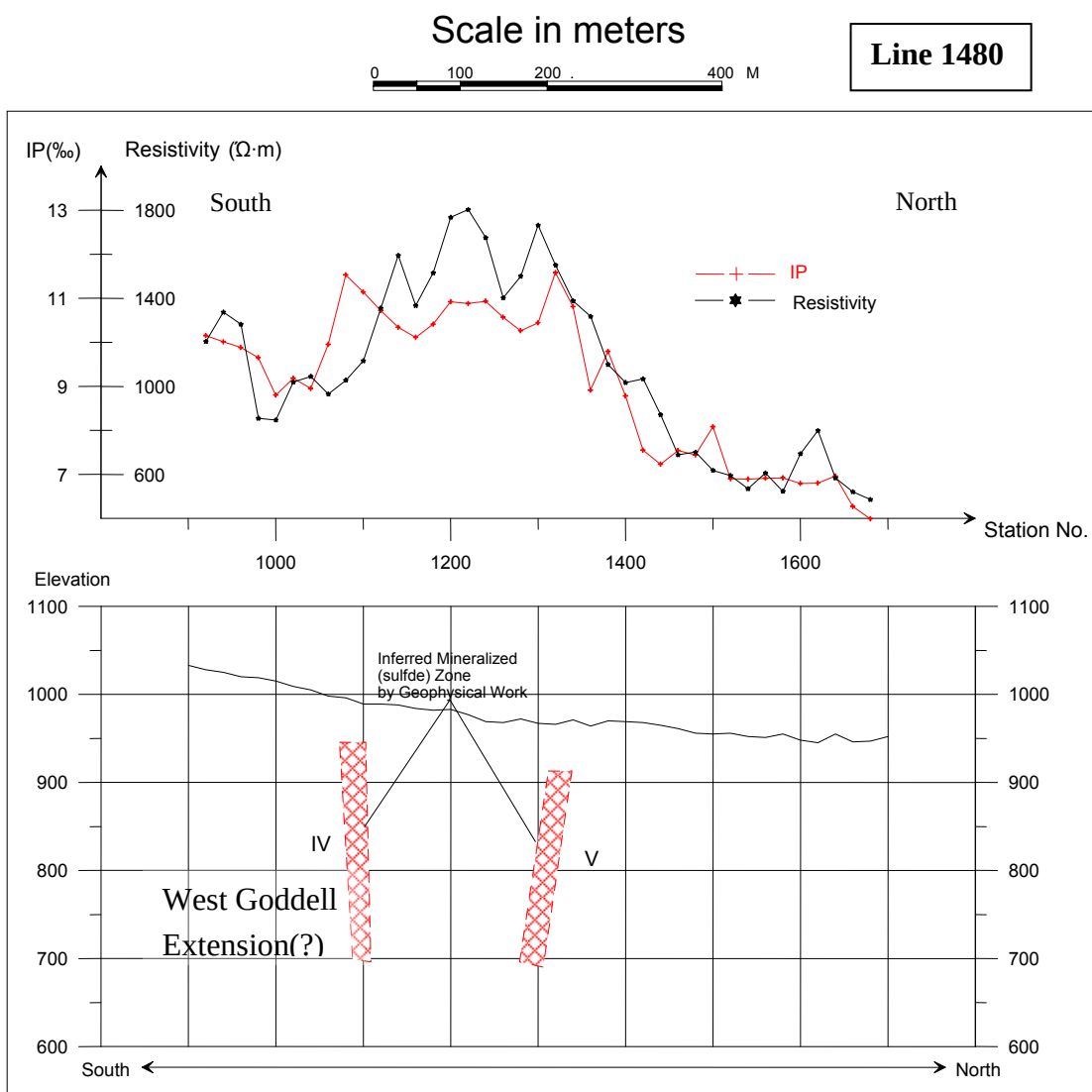
Figure 5. North-South Cross-Section Map of IP and Resistivity for Line 1310.



5.535 Mineralized Zone 5

The Mineralized Zone 5 (MZ5) anomaly is located north of the MZ4 anomaly and extends from Line 1500 at station 128 to Line 1430 at station 124. The MZ5 anomaly has a total strike length of approximately 700 m and occurs along an east-west trend. The MZ5 anomaly is characterized by a high resistivity and high chargeability zones that are interpreted as quartz veins with moderate pyrite that steeply dip to the south (Fig. 6).

Figure 6. North-South Cross-Section Map of IP and Resistivity for Line 1480.



In summary, we believe:

- (1) the high resistivity and high chargeability anomalies on the east and west side of the survey grid should be the focus for additional future geophysical work. We could easily extend the survey grid area to the east and west to search for additional
- (2) anomalies (mineralized zones). We are especially interested in conducting future additional geophysical work on the western side of the interpreted mineralized zones (anomalies) numbers II-1, II-2, and II-3.

- (3) the IP and resistivity anomalies on the east and west sides of the 2009 survey grid area exhibit different characteristics and do not connect with each other. There are no significant (interpreted) resistivity or chargeability anomalies in the center of the survey grid (in the valley) in the area between the noted anomalies.

Therefore, we believe the mineralized zone found at the east and west sides of the survey grid is not likely the same continuous structure. Using this assessment, the interpreted mineralized zones are likely not related with one another. The eastern part of the survey grid exhibits a large area of low resistivity with most of them located on both sides of the Wheaton River. The river shows up as an area of low chargeability that is likely caused by the groundwater.

Because the gold mineralization bodies on the property contain low pyrite concentrations, the relative geophysical anomalies exhibit relatively small variations. The identified anomalies are relatively wide and therefore they are likely not caused by one single vein or structure but instead likely reflect the occurrence of several veins and/or structures. For this reason it is difficult to perform a more detailed interpretation of the anomalies such as thickness and depth of the anomalies.

5.6 Conclusions and Recommendations

The following are conclusions from the 2009 geophysical work:

- (1) Previously identified mineralization in the area is closely associated with silicification, pyritization, and shear zones which are related geophysically by areas of low resistivity, high chargeability, and low resistivity, respectfully. The generalized geophysical signature of the interpreted mineralized zones in the 2009 survey grid area are characterized by high chargeability and low resistivity within a high resistivity area. Low sulfide mineral concentrations in the mineralized zones also result in relatively low overall chargeability anomalies. The mineralized zones interpreted in the 2009 survey grid area are relevant to the previously identified mineralized zones (anomalies) in the area at the Ocean Vein and Goddell Gully. Five additional anomalies representing potential mineralized zones have been identified in this study and are all favorable targets to pursue with additional exploration work.
- (2) No resistivity and chargeability anomalies have been identified between the eastern and western anomalies. In addition, the trends and characteristics of the identified anomalies located on the western and eastern sides of the survey grid area are different. Therefore, based on the results of this 2009 geophysical survey, we believe that these anomalies are

separate and do not connect with one another.

The following recommendations are made based on the 2009 geophysical work:

- (1) Extend the survey grid to the west near anomaly numbers 1, 2, and 3;
- (2) Conduct additional IP geophysical work to the north of the existing survey grid area on the western side between lines 1190 and 1350 (where the identified anomaly continues off of the 2009 survey grid);
- (3) Portions of the 2009 survey grid area have significant overburden consisting of talus and pebbles which results in difficult geophysical data to interpret using grounded electromagnetic techniques. For these areas containing high overburden material, it may be better to use non-grounded electromagnetic geophysical methods.

This 2009 geophysical survey has hopefully helped Yukon-Shaanxi Mining Co., Inc. and Tagish Lake Gold Corp. We would like to thank Todd, Hua, and Wang Shi who have all provided information, materials, and previous reports that helped us focus the work for this geophysical study.

6.0 2009 GEOCHEMICAL SURVEY

Most of the prospects and resource areas were examined from the surface during the 2009 work program. The 2009 Geochemical work was supervised by Todd Johnson, A Qualified Person as defined by the NI-43-101 guidelines, of Yukon-Nevada Gold Corp. (490 - 688 West Hastings St. Vancouver, BC V6B 1P1 Canada).

6.1 Objective, Personnel, and Method

6.11 Objective

The objective of the 2009 Geochemical work was to visit most of the major prospects at the Skukum property and to perform initial reconnaissance mapping and rock-chip sampling. This work was performed in order for all of the Yukon-Shaanxi geological personnel to get acquainted with the prospects and targets of the district which will help in prioritization of future exploration work.

6.12 Personnel

Up to 6 geologists from Northwest Geological Exploration and Mining Bureau for Non-Ferrous Metals group and two geologists from Yukon-Nevada Gold Corp. conducted the 2009 geochemical work. The geologists from the NWME group included Ren Xiaohua, Wan Qi, WangWei, Pan Zhenxing, Zhang Jiu Heng, and Wang Rui. A couple of these Chinese geologists only worked for small time periods at the project (See Expenditure Section that documents each

Geologists time spent at the Skukum Property). The geologists from the Yukon-Nevada Gold Corp. include Todd Johnson and Hua Jin who spent most of the summer at the Skukum camp. A total of 30 days were spent in the field in 2009. The primary methods of accessing the different prospects were by 4WD trucks, one van, 3 rubber-tired ATVS, and lots of hiking on foot. The remaining days worked at camp in 2009 were spent reviewing old project reports and compiling data in certain prospects and resource areas.

6.13 Method

Base maps and previous project data were compiled into ArcMap (ESRI ArcGIS software). The topographic base map information was downloaded from the following website: <http://www.geogratis.ca>. The 2009 Skukum Project data and base maps have been compiled in the following map projection and datum: UTMNAD27 Zone 8N.

Base maps for the 2009 field work were either plotted onto colored 8.5 x 11 inch paper using standard photo copiers, or by using the HP plotter (HP Design Jet 500) at the Skukum Project field office.

Mapping conducted by the Chinese (NWME) and Yukon-Nevada Gold Corp. staff was performed on maps typically at a scale of 1:10,000. Yukon-Nevada Gold Corp. geologists typically used maps plotted on 8.5 x 11 inch paper and mapped lithology, structure, and alteration from specific traverses or areas walked; these maps are in the Yukon-Shaanxi Skukum project files. Rock-chip samples (ours and from previous workers) and old drill holes were also identified on the maps. The verification of the previous work (e.g. locations of previously completed roads, drill holes, and rock-chip samples) was important for the district wide data and map compilation. Much of the drill hole data that was forwarded to the Yukon-Shaanxi staff from Tagish Lake Gold Corp. were in numerous Excel spreadsheets. During the 2009 field season, YSMC was able to compile most of the recent drill hole data information (since 1999) into an Access database. Drill hole data from the 1980's from the Mt. Skukum Gold Mines groups has been only partially entered and will require more time and effort to compile. In addition, numerous old mine maps and cross-sections (including mapped geology and assays) from the Cirque Zone, Brandy, and Lake Zones have been organized but still need to be compiled into a digital format.

NWME geological staff map at a similar 1:10,000 scale map but on larger paper and larger mapping boards. The Chinese mapping method includes walking over an area and stopping every 100 to 200 m to describe the exposed rocks and/or geology in a grid-like fashion.

The 2009 geochemical work included 93 surface rock-chip samples from throughout the project with an additional 3 blanks and 6 commercial standards. The prospects and resources that were sampled include: the Mt. Skukum area (including Cirque Vein, Lake, Alunite Cap, and Pika), Goddell Gully, Charleston Vein, Chieftain Hill (including Ocean Vein, Evening Vein, and Raca), Antimony Creek, Diamond Gossan, Becker-Cochran, Scar, and Fenwick Creek. The surface rock-chip samples were collected on the following claims in the project area: CHAR 11-12, and 32; CL 13 and 18; CHIEF 32-33, 37-39, 54, 56, 58; KUKU 4, 18, 22, 27, 29, and 32; LB 3-4 and 15; MOM 35, 40, 66, and 81; OMNI 7; POP 8, 33, 35-38, 49, 52, 57, 59-60, and 69; RACA 9; and STEN 14 and 20 (see Figures 7 and 8). The rock samples were collected from June 15 to September 2, and assayed at ALS-Chemex in North Vancouver. These samples were submitted in

two separate batches and analyzed for Au (Au-ICP41 and Au-GRA21), multiple-element ICP (ME-MS41), and base metal overlimits (OG46 for Zn, Ag, Pb, and Sb). The description of each of these lab analysis types are shown in Appendix G.

6.2 Results

Figures 7 to 11 show the locations and Au analysis results of the 2009 rock-chip samples.

The final assay results including all sample locations surveyed with a hand held Garmin GPS unit, along with inserted blanks and standards are presented in Appendix E. The final ALS assay certificates are presented in Appendix F.

Eleven of the 93 total surface rock samples assayed greater than or equal to 1.0 g/t Au (see Table 9) and are from the following prospect areas: Charleston Vein, Lake Vein, and Chieftain Hill (Evening Vein and Ocean Vein). The highest gold assays from the 2009 surface rock chip sampling program were from the Lake Vein in the Mt. Skukum area which assayed up to 30.9 g/t Au.

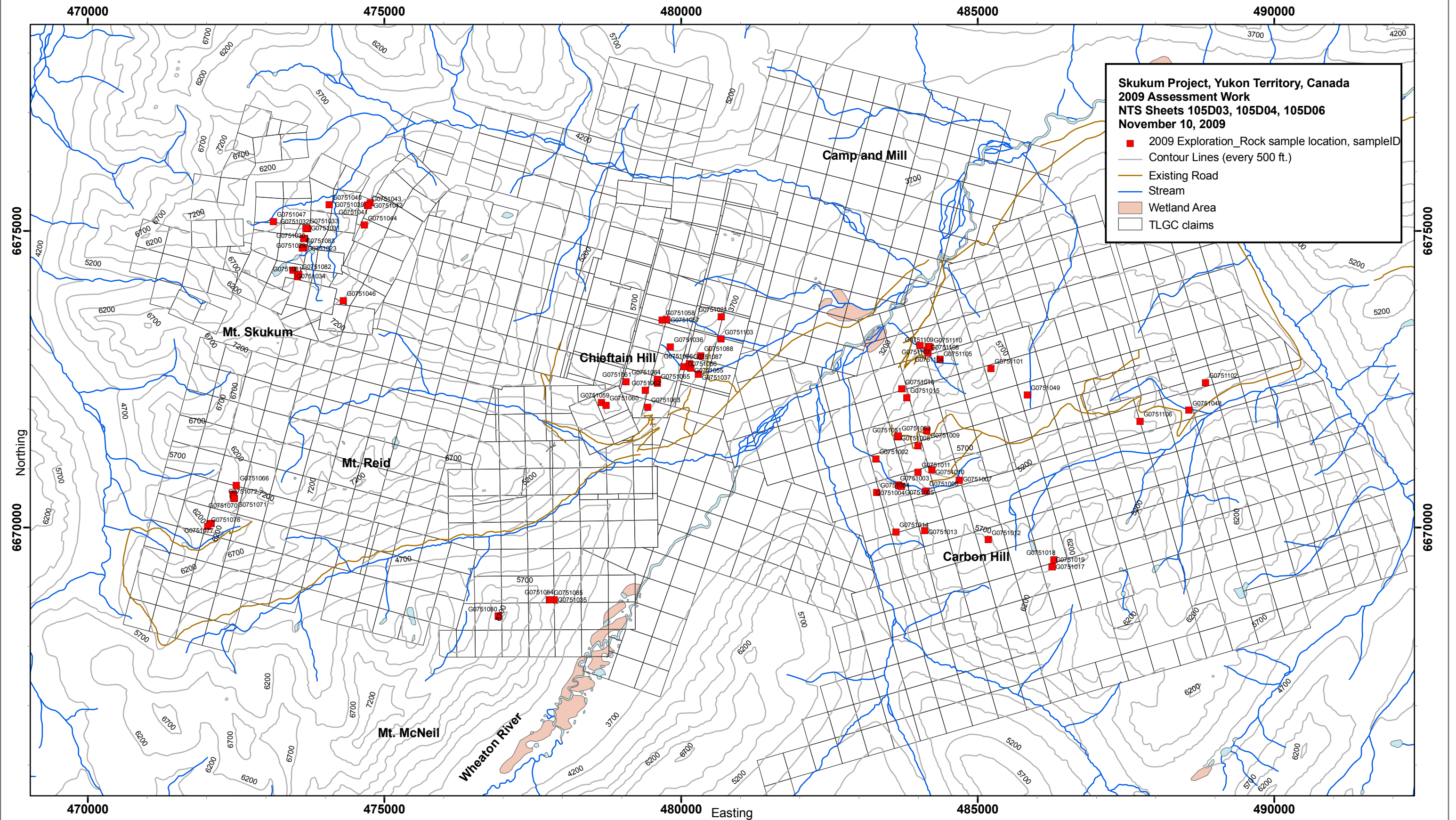
Table 9. Rock-chip sample assay results > 1.0 g/t from the 2009 Skukum property work program.

Sample ID no.	Sample width (m)	Au (g/t)	Ag (g/t)	Prospect or Area	Claim Location of Rock-chip Sample
G0751022	0.3	10.1	18.45	Charleston Vein	CHAR 12
G0751025	0.25	5.37	23.00	Lake Vein (#1)	KUKU 29
G0751028	0.92	4.71	26.9	Lake Vein (#1)	KUKU 29
G0751031	0.2	26.2	25.4	Lake Zone	KUKU 18
G0751033	0.18	30.9	187 *	Lake Vein (#1)	KUKU 18
G0751068	0.3	2.7	39	Charleston Vein	CHAR 12
G0751071	0.72	5.14	17.2	Charleston Vein	CHAR 12
G0751083	1.0	19.35	34.8	Lake Vein (#1)	KUKU 29
G0751087	1.5	1.06	149 *	Ocean Vein	CHIEF 54
G0751088	0.2	1.92	291 *	Evening Vein	CHIEF 56
G0751105	0.6	7.49	49.2	Goddell Gully	POP 37

Notes: All geochemical results were completed by ALS-Chemex Laboratories in North Vancouver (see Appendix G for details): Au assayed using Au-GRA21 method; Ag analyzed using ME-MS41 method or OG46 method (overlimit analysis using aqua-regia digestion and analysis by ICP-AES).

Table 10 lists the commercial standards and blanks (pulp) used for the 2009 geochemical rock-chip sample program. Most of the standards and blanks for the 2009 program were purchased from CDN Resource Laboratories Ltd. The standards identified as CME-TLG were standards present in the Skukum core shack and prepared previously by CME Consultants. Previous reports identify this standard as being 10.0 g/t Au; however, no analysis data has been found to date that indicates multiple labs have been used to certify this standard with confidence.

FIGURE 7. **2009 Exploration - Rock Chip Sample location, Skukum Project, Yukon Territory**

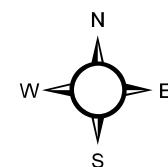


Map by: Todd Johnson
Yukon-Shaanxi Mining Company Inc. (on behalf of Tagish Lake Gold Corp.)
Base Map from: <http://www.Geogratis.ca>

SCALE

0 375 750 1,500 2,250 3,000 Meters

1:60,000



UTN NAD83 Zone 8N
Contour Interval = 500 ft.

FIGURE 8. 2009 Exploration - Rock Chip Samples and Au grade, Skukum Project, Yukon Territory

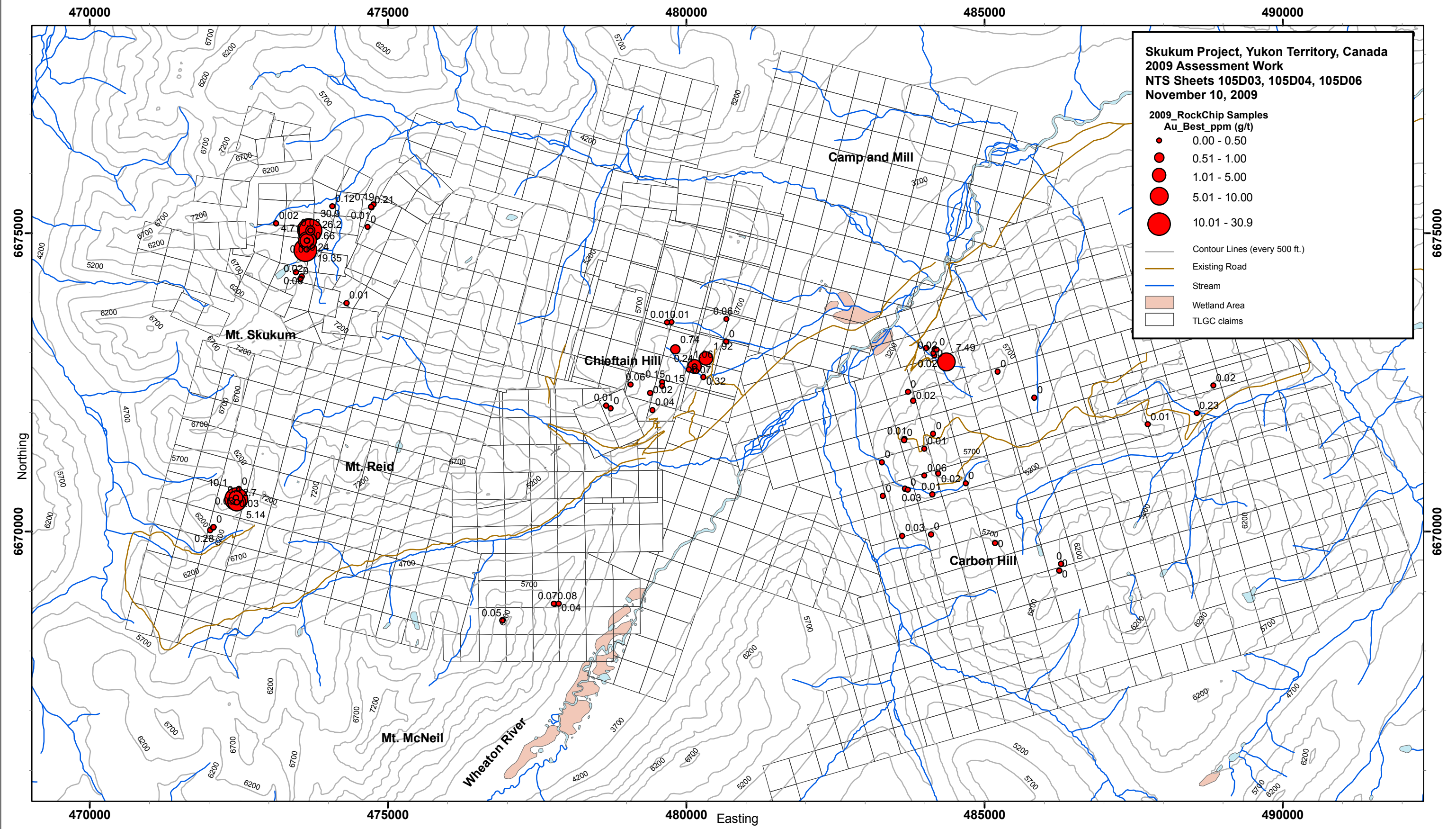


FIGURE 9. 2009 Rock Chip Samples-Mt Skukum and Charleston Vein

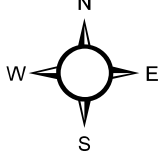
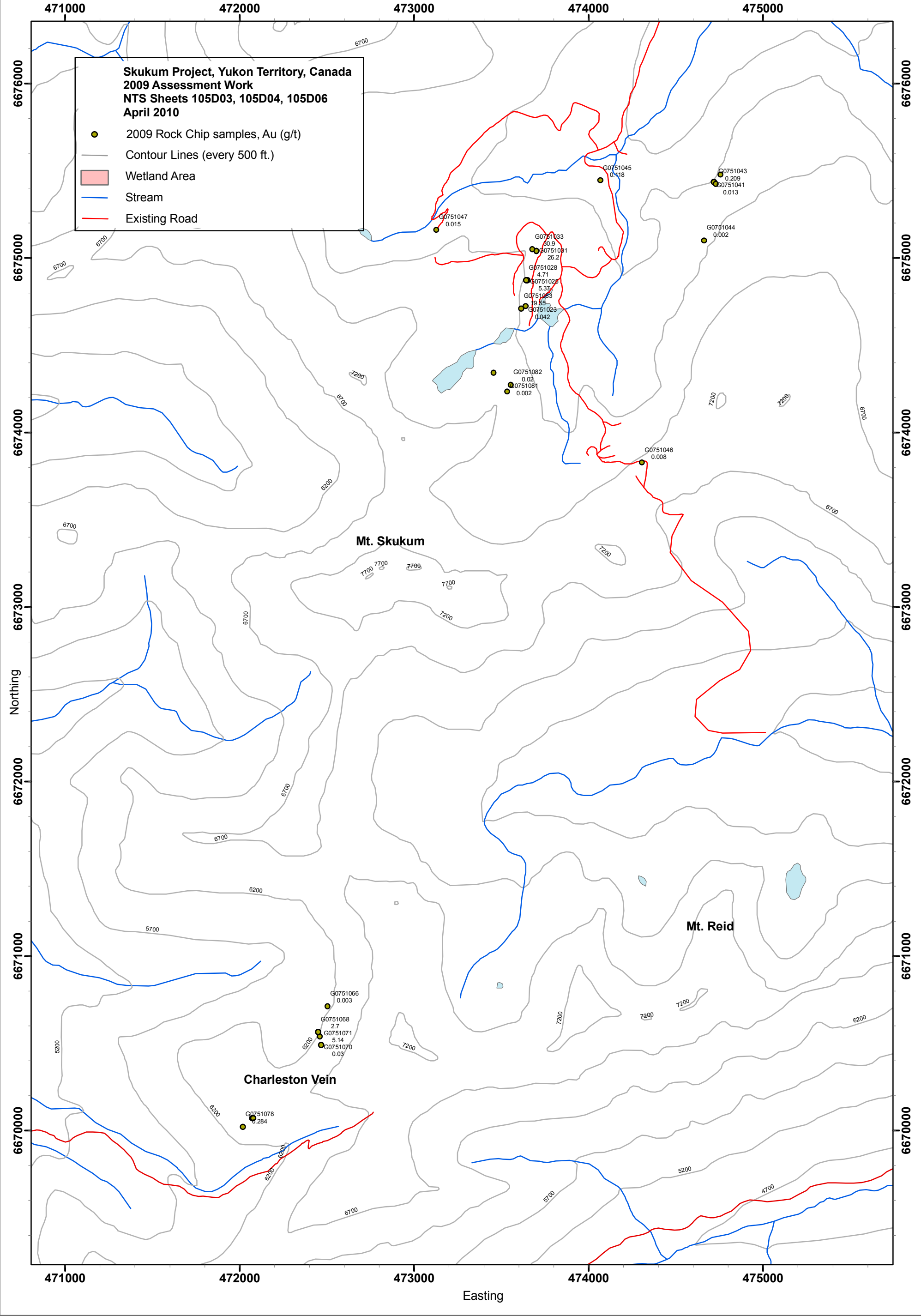


FIGURE 10. 2009 Rock Chip Samples-Chieftain Hill

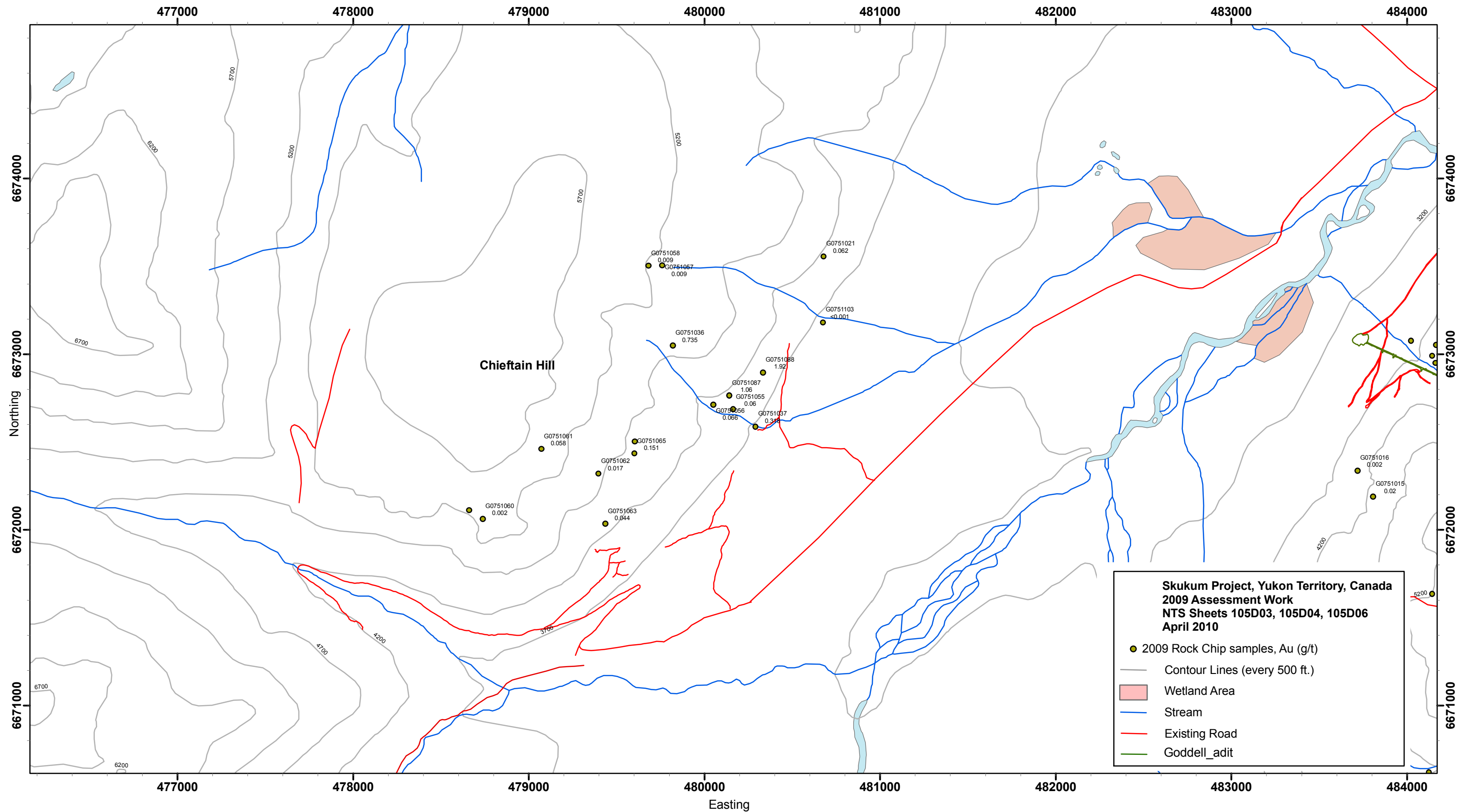


FIGURE 11. 2009 Rock Chip Samples-Goddell and Carbon Hill

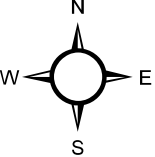
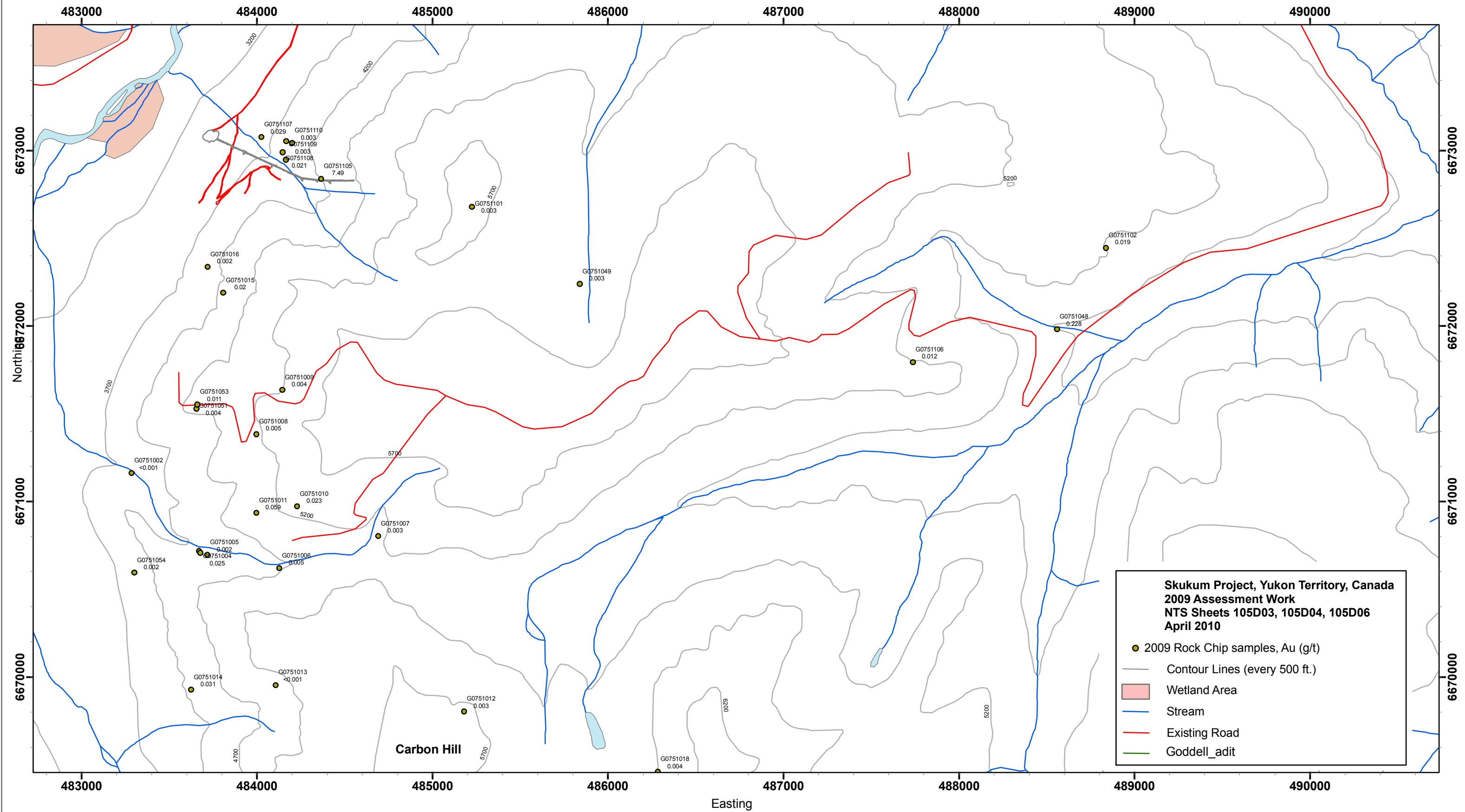


Table 10. List of standard and blank pulps used for the 2009 Skukum Project.

Material ID no.	Type of Material	Recommended Au value ± 2 std. deviations (g/t)
CDN-BL-4	Blank - pulp	<0.01 g/t
CDN-GS-5E	Standard - pulp	4.83 ± 0.37
CDN-GS-11A	Standard - pulp	11.21 ± 0.87
CDN-ME-2	Standard - pulp	2.10 ± 0.11
CME-TLG	Standard - pulp	~10.0
Notes: All 2009 standards and blanks purchased from CDN Resources Laboratories Ltd (certified standards)		

Table 11 lists the standard and blank analysis results that were inserted into the 2009 surface rock-chip sample stream.

Table 11. List of Au analysis results from ALS-Chemex Labs for 2009 standard and blanks.

2009 Sample ID no.	Standard or Blank no.	2009 Au Assay Result (g/t)	Deviation from the Recommended standard or blank value (g/t)	Percentage deviation from Recommended Standard
G0751001	CDN-BL-4	0.003	-	-
G0751020	CDN-ME-2	2.09	-0.01	-0.005%
G0751040	CDN-GS-5E	5.06	+0.23	+4.8%
G0751050	CDN-BL-4	0.001	-	-
G0751052	CDN-ME-2	1.66	-0.44	-21.0%
G0751073	CDN-GS-5E	4.95	+0.12	+2.5%
G0751111	CDN-ME-2	1.50	-0.60	-28.6%
G0751112	CDN-BL-4	0.003	-	-
G0751113	CME-TLG	10.35	+ ~0.35	+ ~3.5%
G0751114	CME-TLG	9.92	- ~0.08	- ~0.8%

Two of the standard assay results listed in Table 11 are disturbingly low (sample numbers G0751052 and G0751111) relative to the recommended Au values from the commercial standards shown in Table 10. All of the Au analyses taken on the commercial blank samples are within acceptable limits of the recommended Au value and performed well.

7.0 2010 EXPLORATION PLANS

Recommended exploration plans for 2010 or the future include the following target areas (with estimated costs in parentheses using an average daily cost for a geologist of \$450-CAN):

- (1) Data Audit of the assay information compiled in the Access drill hole database: 3 weeks (\$9,450);
- (2) Data compilation (soils, rock-chips, geophysics) and initial targeting at the Chieftain Hill zone: 1.5 weeks (\$4,950);
- (3) Chieftain Hill - geological mapping and rock-chip sampling (75 samples): 2 weeks, three geologists (\$20,000);
- (4) Chieftain Hill - Drill test the Ocean Vein at greater depths up to 500 m deeper than previous drilling: 4 helicopter-supported drill holes each 650 m deep @ \$150 per meter cost (\$390,000);
- (5) Antimony Creek - Geological mapping and rock-chip-sampling (75 samples): 2 weeks three geologists (\$20,000);
- (6) Skukum Creek – definition and exploration drilling (1,700 m) from the 1300 m level (935 and 1135 X-cut stations) for resource confirmation: 31 days averaging 60 m per day on 2 shifts (\$170,000 @ \$100/m cost);
- (7) Becker-Cochran - Drill test the southern projection of the known Sb-rich mineralization using helicopter support: 3 dh at 300m each @\$150/m: (\$135,000);
- (8) Skukum Creek - Mine feasibility studies to plan for a new access drift for drill platforms lower than the existing 1300 m drift and for eventual use as the main ore development access (one-half of the proposed development costs for mining of 600 m development @ \$2,400 per m cost = \$1,440,000);
- (9) Mt. Skukum - Compilation of existing drill hole data and existing underground development for the Lake, Brandy, and Cirque Vein areas: 40 days (\$18,000);
- (10) Data compilation targeting on the Goddell to Becker-Cochran Fault zone: 1 week (\$3,150);
- (11) Geological mapping and rock-chip sampling (50 samples) at the Charleston Vein prospect: 2 weeks (\$6,300);
- (12) Geological mapping and rock-chip sampling (50 samples) at the Becker-Cochran prospect: 1.5 weeks (\$4,950);
- (13) Becker-Cochran target – drill test targeting the southern side of the existing underground adit workings (\$5,500 cost for each pad): 3 helicopter supported drill holes at 300 m each @ \$150 per m (\$135,000);

- (14) Drill test the 2009 geophysical anomalies at the Goddell Gully west extension and east of the Ocean Vein prospect: 5 surface drill holes at 250 m each (\$125,000);
- (15) Assays @ \$27.00 each: 250 surface rock-chips and 650 drill hole samples or 900 total samples (\$24,750);
- (16) Conduct IP on an existing cut and surveyed grid southwest of the Goddell Gully Resource consisting of approximately 2,985 line meters (\$10,500);
- (17) Conduct IP on margin of existing 2009 surveyed grid consisting of approximately 6 line km (\$21,070);
- (18) Goddell Gully – definition and exploration drilling for resource confirmation and met testing @\$100/m: 2,500m: (\$250,000);
- (19) Skukum Creek – Metallurgy Studies (\$35,000)
- (20) Goddell Gully – Metallurgy studies (\$50,000)
- (21) Environmental Studies and Permitting to support 1,100 m access portal mine access to Skukum Creek (\$800,000);
- (22) Design and install 4 sets of culverts (some doubled up in larger drainages) for access to the old mining area at Mt. Skukum (\$80,000); includes refurbishing the Becker Ck. Bridge for access to camp and the property;
- (23) Supplies: geologic, 7 hand-held radios, ATVS (\$25,000);
- (24) Road and pad construction @ \$140 per hour (2 months \$334,800):
- (25) 2010 Internet/phone service upgrade (\$450 per month for 7 months: \$3,150)
- (26) Transportation for 3 Yukon-Nevada Gold Corp. Geologists for 2009 from Whitehorse to Vancouver @\$250 roundtrip + misc. travel expenses (\$5,000)

8.0 STATEMENT OF EXPENDITURES: JUNE 9 TO SEPTEMBER 19, 2009

Note: Sunny Purewal, controller, on behalf of the Yukon-Shaanxi Mining Company Inc., has provided and approved the 2009 Skukum Project related filed exploration expenditures statement shown in Table 12 below (in Canadian Currency). The author has not verified these expenditures.

Table 12. List of 2009 Expenditures for the Geophysical and Geochemical Surveys.

2009 Geophysical Costs

IP Survey (26.5 line km) using 4 man NWME crew June 9 to August 3, 2009 (224 man days).....	\$89,907.20
YNGC Geotechnician for logistical support and line cutting; June 9 to July 31, 2009 (55 man days)....	\$17,875.00
Expenses and meals (\$50.00 per day per man; 279 man days).....	\$13,950.00
Field Vehicles (3) including two 2004 Ford F350 SD SLT Long Bed 4WD Pickups, and one Econoline Ford 150 Van used from June 10 to August 3, 2009 for ~2 months (\$1,980 for each truck rental).....	\$7,068.60
Fuel for Field Vehicles.....	\$640.24
Generator for Camp	\$501.70
Diesel Fuel for camp generator	2,400.48

Subtotal	\$132,343.22
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2009 Geochemical Costs

One Yukon-Nevada Gold Geologist (YNG) from June 9 to Sept. 19, 2009 (95.5 man days @\$425/day)....	\$40,587.50
One YNG Contract Senior Geologist from June 9 to Sept. 18, 2009 (98 man days @\$450/day).....	\$44,100.00
Northwest Geological Exploration and Mining Bureau for Non-Ferrous Metals Geologists (6 total)	
Geologist #1 from June 8 to June 28 and from August 6 to Sept. 12, 2009 (59 days @ \$450/day)....	\$26,550.00
Geologist #2 from June 8 to August 8 (62 days @\$425/day)	\$26,350.00
Geologist #3 from June 9 to September 12 (95 days @\$425/day)	\$40,375.00
Geologist #4 from June 8 to June 26 (17 days @ \$425/day)	\$7,225.00
Geologist #5 from June 30 to September 12 (74 days @\$350/day)	\$25,900.00
Geologist #6 from June 50 to August 8 (40 days @\$350/day)	\$14,000.00
Assaying 92 rock-chip samples + 9 standards by ALS-Chemex Labs	\$3,700.00
Expenses and meals (\$50.00 per day per man; 540 man days).....	\$27,000.00
Field Vehicles (3) including two 2004 Ford F350 SD SLT Long Bed 4WD Pickups, and one Econoline Ford 150 Van used from June 10 to September 18, 2009 for 3.5 months (\$1,980 for each truck rental).....	\$13,721.40
Fuel for Field Vehicles.....	\$1,281.04
Generator for Camp	\$1,003.30
Diesel Fuel for camp generator	\$4,671.52
Assessment Report Writing	\$6,750.00
Subtotal	\$283,214.76

TOTAL Geophysical and Geochemical 2009 Costs.....	\$415,557.98
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NOTE: Support Costs for Geophysical Costs were calculated at 34% of total based on the total number of man days in camp during the 2009 field season (279 total man days for the 2009 geophysical work)

9.0 REFERENCES

- Doherty, R.A. and Hart, C.J.R.. 1988, Preliminary Geology of Fenwick Creek (105D/3) and Alligator Lake (105D/6) map areas; Indian and Northern Affairs Canada: Yukon Region, Open File no. 1988-2.
- Geo-Physi-Con Co. Ltd., 1989, Geophysical Surveys, Mt. Skukum Yukon Territory, no. C89-23, (1:1,000 scale maps; HLEM and Magnetics), 15 pp.
- Hart, C.J.R., and Radloff, J.K., 1990, Geology of Whitehorse, Alligator Lake, Fenwick Creek, Carcross, and part of Robinson Map Areas (105D/11, 6, 3, 2, & 7), Indian and Northern Affairs Canada: Yukon Region, Open File no. 1988-2.
- Jago, B.C., 1991, Report on the Chieftain Hill Area of the Mount Skukum Property – Whitehorse Mining District, Wheaton River Area, Yukon Territory, 28 pp.
- McDonald, B.W.R., Reddy, D.G., Zuran, R.J., James, D.R.J., 1990, Mt. Skukum Project, 1989 Exploration, unpublished report for Total Energold Corp. – Agip Canada Ltd. Joint Venture.
- Naas, C., 2004, Technical Report – Phase III Geological, Geochemical, Diamond Drilling and Data Compilation of Carbon Hill, Skukum Property, Whitehorse Mining District, Yukon Territory, Canada: by CME Consulting, for Tagish Lake Gold Corp., April 30, 2004, 75 pp.
- Pride, M.J., 1986, Description of the Mount Skukum Volcanic Complex, Yukon Territory, in Yukon Geology, Vol. 1, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Canada, Canada.
- Reddy, D., and McDonald, B., 1989, Grid Work, Geophysics, and Diamond Drilling on the Ocean Grid, Mt. Skukum Property, Wheaton River Area, Yukon Territory, May 16 to Sept. 14, 1989, Chief 35, 37, 39, 56-58, Glee 62F-64F, 75F, 76F, NTS 105D/3 Latitude 60° 14' and Longitude 135° 25': Report for the Yukon Exploration Incentives Program, Whitehorse Mining District, Mt. Skukum Gold Mining Co., Total Energold – AGIP Canada Ltd., 12 pp.
- Roy, D. and Hannon, P., 2007, Tagish Lake Gold Corp. – Resource Report Update for the Skukum Property, Wheaton River, Yukon, Canada, Mine Tech International Limited, 62 pp.
- Tykajlo, R. 1986, Mount Skukum Geophysical Test Survey: Main-South Grid: Geo-Physi-Con Ltd., unpublished report (tested two electrical and 3 electromagnetic techniques), September, 7 pp.

10.0 AUTHORS CERTIFICATES, SIGNATURES AND CONSENTS

TODD W. JOHNSON, M.S.

STATEMENT OF QUALIFICATIONS

I, Todd W. Johnson, HEREBY CERTIFY THAT:

- 1) I was an independent consulting geologist at the time I conducted field work at the Skukum Project. My business address at that time was 550 N. McCarran Blvd. #254 Sparks, Nevada 89431. At the time I finalized this Assessment report since April 1, 2010, I was employed full time by Yukon-Nevada Gold Corp. as their Vice President of Exploration based at the Jerritt Canyon Mine in Elko, Nevada (HC 31 Box 78 zip code 89801).
- 2) I am a graduate of Washington State University of Pullman, Washington (USA), with a B.Sc. in Geology (1988) and M.Sc. in Geology (1991); and from the University of Nevada-Reno with a M.Sc. in Geological Engineering (2003).
- 3) I am a registered Professional Engineer (P.E.) in the State of Nevada (USA) I am a registered member in good standing with the Australian Institute of Mining and Metallurgy (AusIMM) with member number 227374.
- 4) I have worked as a geologist or geological engineer for a total of 20 years since my 1991 graduation from university.
- 5) I am an active member of the following professional societies: Society of Economic Geologists (since 1989), Association of Engineering Geologists (since 2002), the Geological Society of Nevada (since 2000), the Australian Institute of Mining and Metallurgy (since 2007), and the Association of Civil Engineers (since 2005).
- 6) I am responsible for the preparation of the technical report titled "Skukum Project: Exploration Report for 2009: Geochemical and Geophysical: Yukon Territory, Canada" prepared for Tagish Lake Gold Corp. dated May 15, 2010 (the "Technical Report"). Mr. Fan of NWME is responsible for the preparation of all sections that discuss the 2009 geophysical survey. Mr. Fan prepared an original report titled "Induced Polarization and Resistivity Survey in the Wheaton River Valley, Skukum Property, Yukon Territory" prepared for Yukon-Shaanxi Mining Company Inc. dated August 3, 2009. This geophysical report was written in Mandarin and translated by YNG staff, and incorporated into the final "Technical Report."
- 7) I conducted reconnaissance geological mapping, surface rock sampling, and data compilation at the Skukum Project in 2009 and was active at the project site from June 9 to September 18, 2009.
- 8) I was paid a daily rate from Yukon-Nevada Gold Corp. for geological consulting services performed at the Skukum Project and do not have any other interests relating to the project or nearby projects. After conducting field work at the Skukum project I was granted stock options in Yukon-Nevada Gold Corp.
- 9) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

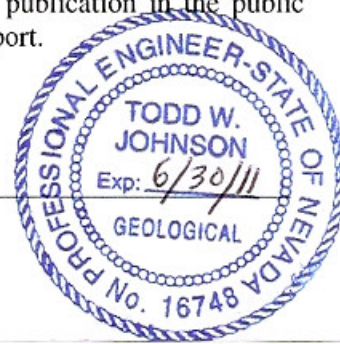
Todd W. Johnson, M.Sc.

Dated in Sparks, Nevada

May 15, 2010

Todd W. Johnson

Tagish Lake Gold Corp.

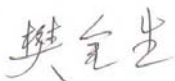


FAN JINSHENG
STATEMENT OF QUALIFICATIONS

I, FAN JINSHENG, HEREBY CERTIFY THAT:

- 1) I am a geophysical crew leader for Northwest Mining and Geological Exploration Bureau for Non-Ferrous Metals (NWME) residing at Shuinen Road no. 5, Xi'an City, Shaanxi Province, People's Republic of China.
- 2) I am a graduate of Guilin University of Technology in Geophysics in 1985.
- 3) I have worked as a geophysicist for NWME on a continuous basis for a total of 24 years since my 1985 university graduation.
- 4) I am responsible for the preparation of all sections of this Geophysical report titled "Induced Polarization and Resistivity Survey in the Wheaton River Valley, Skukum Property, Yukon Territory" prepared by NWME for Yukon-Shaanxi Mining Company Inc. dated August 3, 2009 (the "Technical Report"). The aforementioned geophysical report was incorporated into this "Technical Report."
- 5) I managed the 2009 geophysical field work at the Skukum Project and was active at the project site from June 9 to August 3, 2009. The 2009 geophysical survey grid was located and surveyed by the NWME geophysical team.
- 6) I was paid a daily rate for 2009 geophysical services performed at the Skukum Project and do not have any other interests relating to the project or Yukon-Shaanxi Mining Company Inc. or Tagish Lake Gold Corp. I do not have any interest in adjoining properties in the Wheaton River area (Yukon).
- 7) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public files on their websites accessible by the public.

Fan Jinsheng



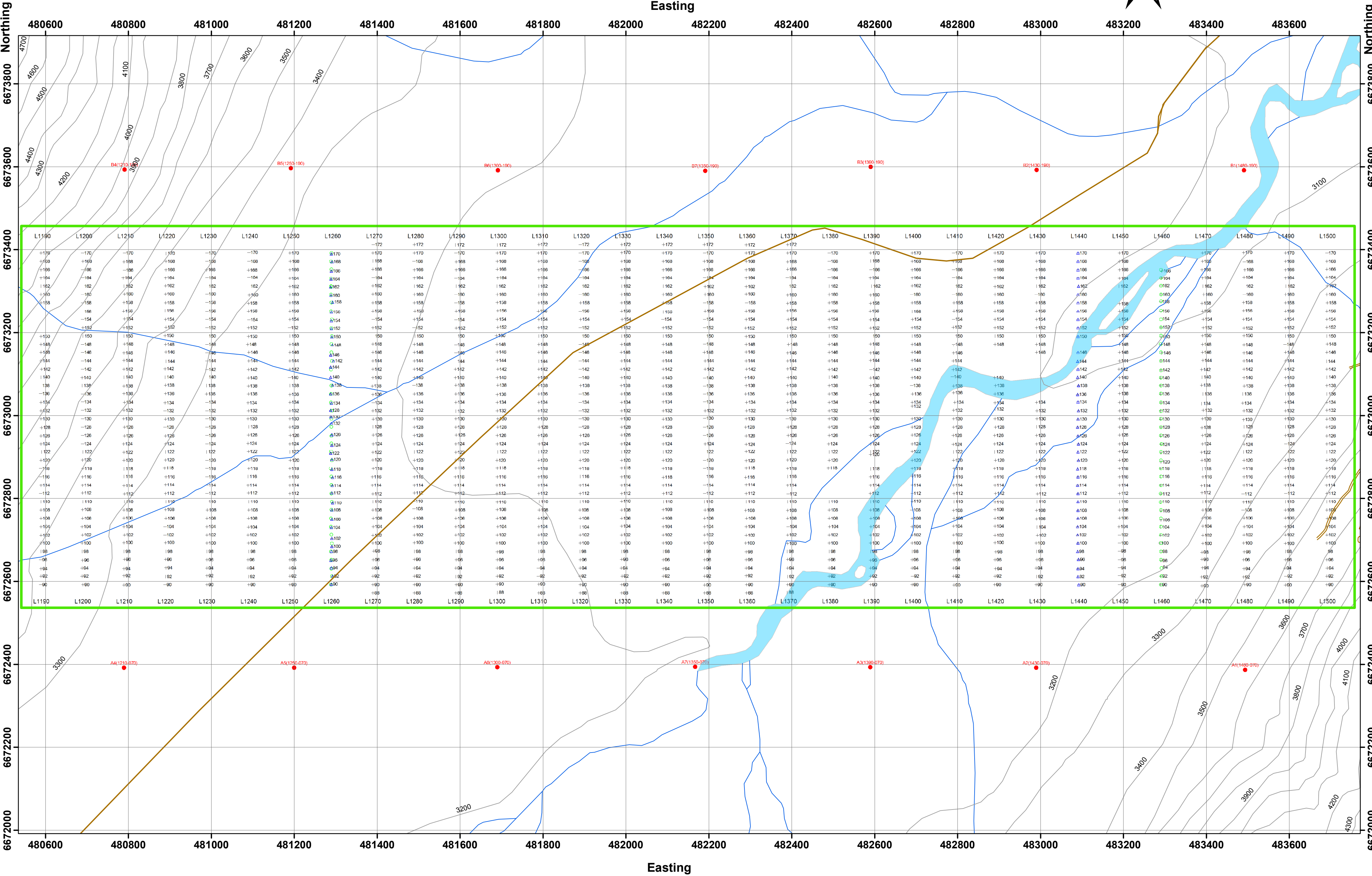
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August 3, 2009

LIST OF PLATES

1. – GRID AND POINT LOCATION MAP (SCALE 1:6,000)
2. – APPARENT CHARGEABILITY CONTOUR PLAN MAP (SCALE 1:6,000)
3. – APPARENT RESISTIVITY CONTOUR PLAN MAP (SCALE 1:6,000)
4. – APPARENT CHARGEABILITY SECTION PROFILE MAP (SCALE 1:6,000)
5. – APPARENT RESISTIVITY SECTION PROFILE MAP (SCALE 1:6,000)
6. – COMBINED APPARENT RESISTIVITY AND APPARENT CHARGEABILITY MAP SHOWING ANOMALIES IN YELLOW (SCALE 1:6,000)

March, 2010
UTM NAD83 Zone 8N

Plate 1. 2009 Geophysical survey grid and point location
Skukum Property, Yukon Territory



Legend

- 100ft interval contour lines
- River
- Road
- 2009 Geophysical Grid Area
- + 170 Geophysical survey station, station number
- L1400 Geophysical survey line number
- Direct Current line 0.125Hz T=8s
- Duplicate Geophysical data collection
- Duplicate GPS Station Coordinates

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

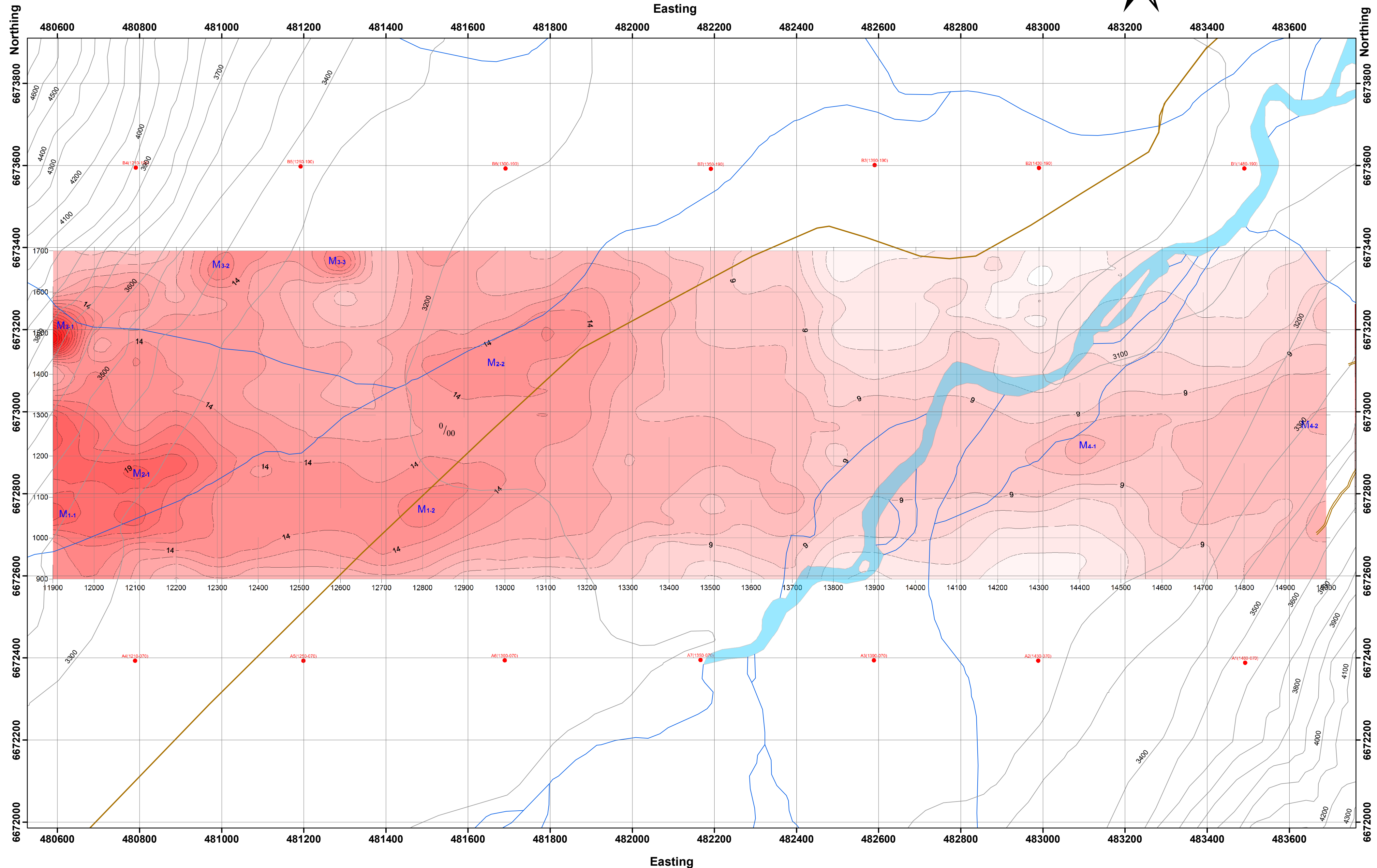
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Drawn by NWME and Yukon-Nevada Gold Corp. staff

March, 2010
UTM NAD83 Zone 8N

**Plate 2. Apparent chargeability contour plan map
Skukum Property, Yukon Territory**



Legend

- 100ft interval contour lines
- River
- Road
- M₁₋₂ Anomalous chargeability trending belt number
- 14 Apparent chargeability contour line and Apparent chargeability data (unit $\frac{0}{100}$)
- 13400 Geophysical survey line number
- Direct Current line 0.125Hz T=8s

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

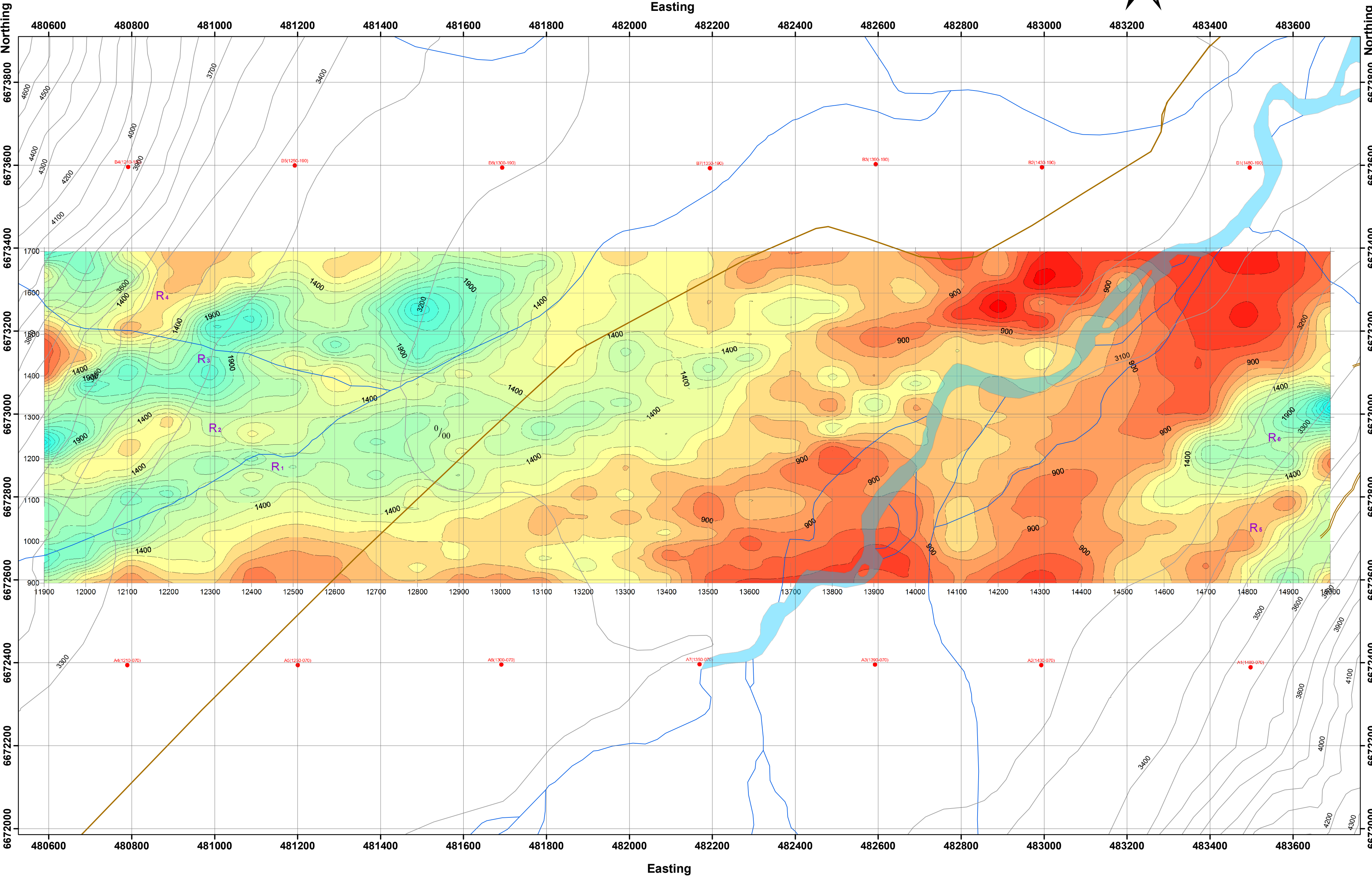
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Drawn by NWME and Yukon-Nevada Gold Corp. staff

March, 2010
UTM NAD83 Zone 8N

Plate 3. Apparent resistivity contour plan map
Skukum Property, Yukon Territory



Legend

- 100ft interval contour lines
- River
- Road
- Apparent resistivity anomaly
- Apparent resistivity contour line and Apparent resistivity data (unit=ohm.m)
- 13400
- Geophysical survey line number
- Direct Current line 0.125Hz T=8s

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

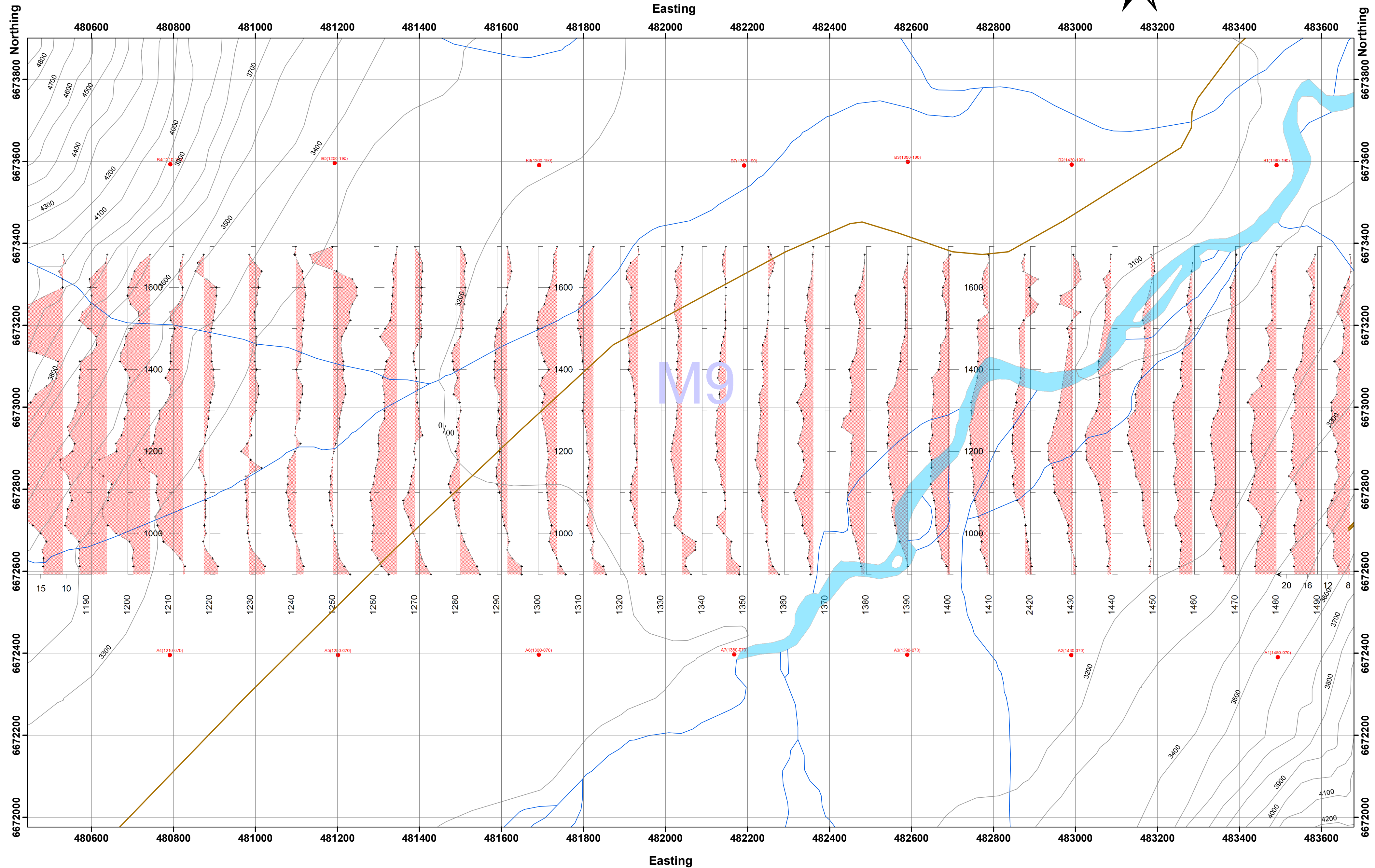
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Drawn by NWME and Yukon-Nevada Gold Corp. staff

March, 2010
UTM NAD83 Zone 8N

Plate 4. Apparent chargability section profile map
Skukum Property, Yukon Territory



Legend

- 100ft interval contour lines
- River
- Road
- Apparent chargability data (unit ρ_{100})
- 13400 Geophysical survey line number
- Direct Current line 0.125Hz T=8s

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

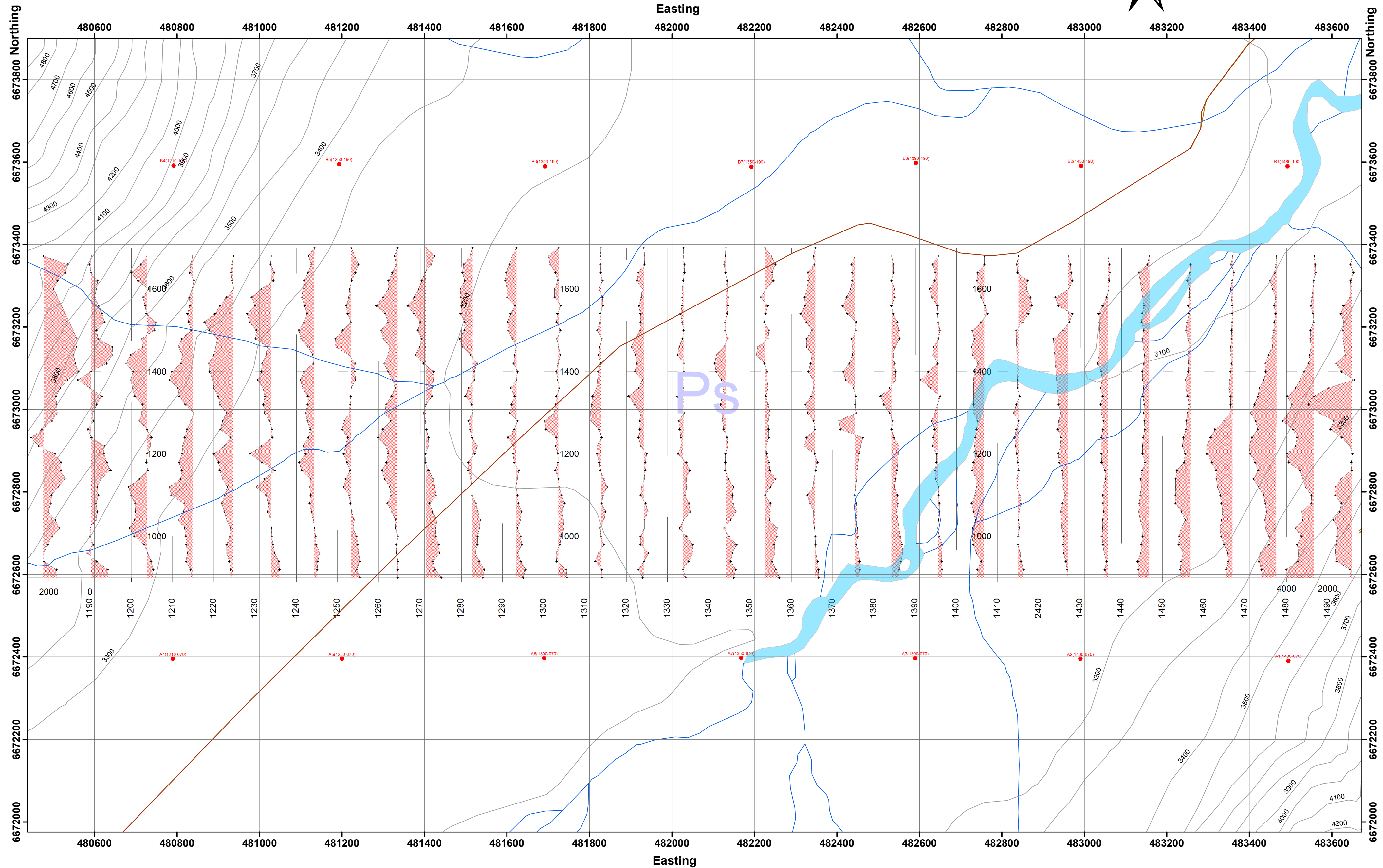
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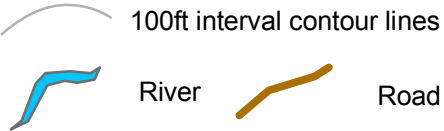
Drawn by NWME and Yukon-Nevada Gold Corp. staff

March, 2010
UTM NAD83 Zone 8N

**Plate 5. Apparent resistivity section profile map
Skukum Property, Yukon Territory**



Legend



Apparent resistivity data
(unit=ohm*m)

13400 Geophysical survey line number
● Direct Current line 0.125Hz T=8s

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

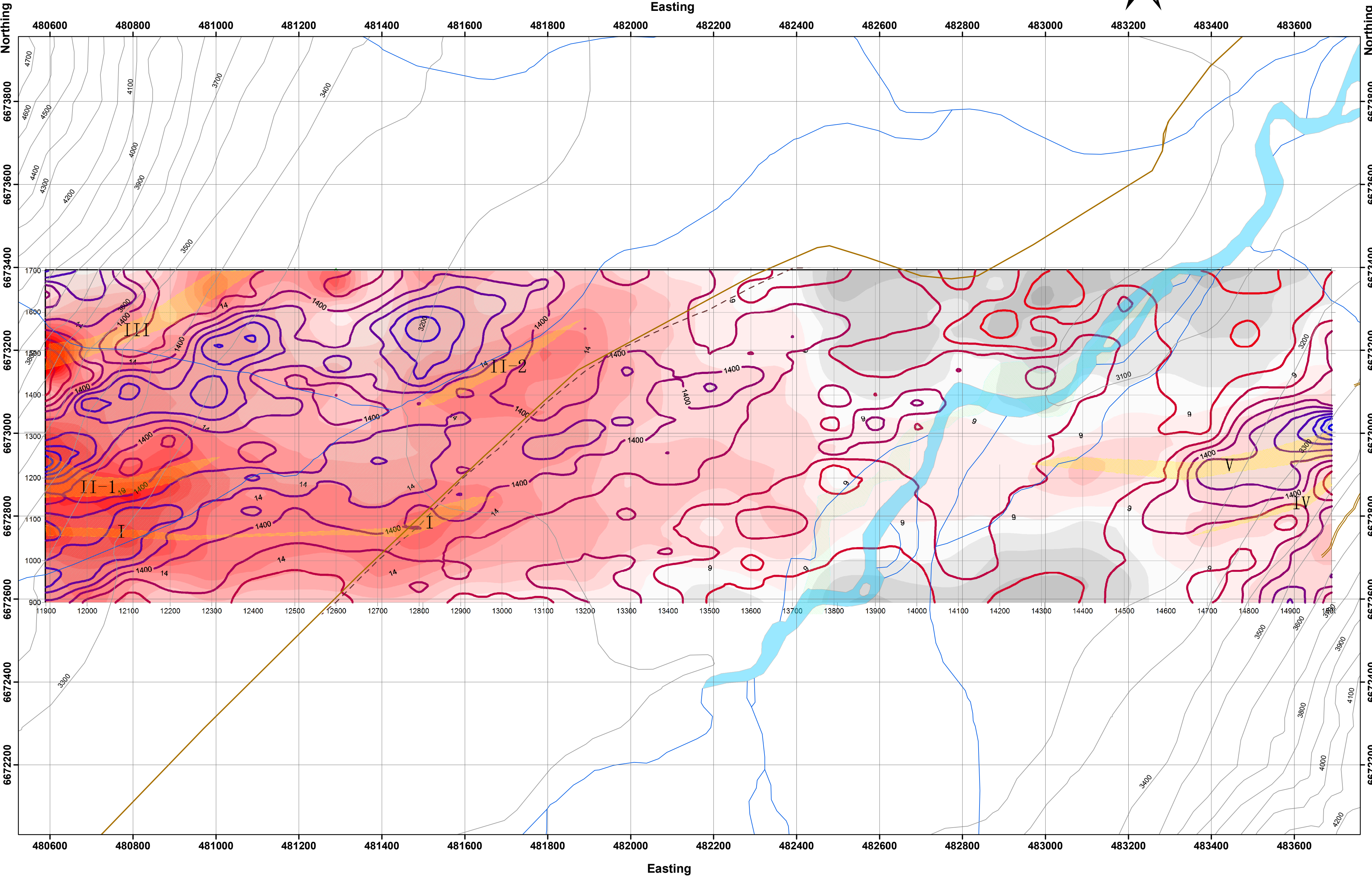
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Drawn by NWME and Yukon-Nevada Gold Corp. staff

March, 2010
UTM NAD83 Zone 8N

Plate 6. Combined apparent resistivity and chargeability map showing anomalies
Skukum Property, Yukon Territory



Legend

- | | | | | | |
|--|------------------------------|--|---|--|--------------------------------|
| | 100ft interval contour lines | | Apparent resistivity contour line and data | | Geophysical survey line number |
| | River | | Apparent chargeability data (unit $\frac{0}{100}$) | | Geophysical anomaly |
| | Road | | | | |

Data collected by NW Geological Exploration
and Mining Bureau for Non-Ferrous Metals
(NWME) in summer 2009

0 100 200 400 Meters

1:6,000

Drawn by NWME and Yukon-Nevada Gold Corp. staff

APPENDIX A.
CLAIM INFORMATION AS OF APRIL 25, 2010

District	GrantNumber	RegType	ClaimName	ClaimNbr	ClaimOwner	OperationRecordingDate	ClaimExpiryDate	Status	NTS MapNumber	NonStdSize	Ops Number
Whitehorse	YB67211	Quartz	MIL	46	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03	Full Quartz fraction (25+ acres)	500088224
Whitehorse	YB67212	Quartz	MIL	47	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088225
Whitehorse	YB67213	Quartz	MIL	48	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088226
Whitehorse	YB67214	Quartz	MIL	49	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088227
Whitehorse	YB67215	Quartz	MIL	50	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088228
Whitehorse	YB67216	Quartz	MIL	51	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088229
Whitehorse	YB67217	Quartz	MIL	52	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088230
Whitehorse	YB67218	Quartz	MIL	53	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088231
Whitehorse	YB67219	Quartz	MIL	54	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088232
Whitehorse	YB67220	Quartz	MIL	55	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088233
Whitehorse	YB67221	Quartz	MIL	56	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088234
Whitehorse	YB67222	Quartz	MIL	57	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03	Full Quartz fraction (25+ acres)	500088235
Whitehorse	YB67223	Quartz	MIL	58	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088236
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Whitehorse	YB67225	Quartz	MIL	60	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03	Full Quartz fraction (25+ acres)	500088238
Whitehorse	YB67226	Quartz	MIL	61	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088239
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Whitehorse	YB67229	Quartz	MIL	64	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088242
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Whitehorse	YB67231	Quartz	MIL	66	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088244
Whitehorse	YB67232	Quartz	MIL	67	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03		500088245
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Whitehorse	YB67234	Quartz	MIL	69	Tagish Lake Gold Corp. - 100%.	7/8/1996	12/1/2013	Active	105D03	Full Quartz fraction (25+ acres)	500088247
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Whitehorse	YA81790	Quartz	MOM	24	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062027
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Whitehorse	YA81837	Quartz	MOM	71	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062072
Whitehorse	YA81838	Quartz	MOM	72	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062073
Whitehorse	YA81839	Quartz	MOM	73	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062074
Whitehorse	YA81840	Quartz	MOM	74	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062075
Whitehorse	YA81841	Quartz	MOM	75	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062076
Whitehorse	YA81842	Quartz	MOM	76	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062077
Whitehorse	YA81843	Quartz	MOM	77	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062078
Whitehorse	YA81844	Quartz	MOM	78	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062079
Whitehorse	YA81845	Quartz	MOM	79	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062080
Whitehorse	YA81846	Quartz	MOM	80	Tagish Lake Gold Corp. - 100%.	5/22/1984	12/1/2013	Active	105D03		500062081

District	GrantNumber	RegType	ClaimName	ClaimNbr	ClaimOwner	OperationRecordingDate	ClaimExpiryDate	Status	NTS MapNumber	NonStdSize	Ops Number
Whitehorse	Y866900	Quartz	TM	36	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087913
Whitehorse	Y866901	Quartz	TM	37	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087914
Whitehorse	Y866902	Quartz	TM	38	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087915
Whitehorse	Y866903	Quartz	TM	39	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087916
Whitehorse	Y866904	Quartz	TM	40	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087917
Whitehorse	Y866905	Quartz	TM	41	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087918
Whitehorse	Y866906	Quartz	TM	42	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087919
Whitehorse	Y866907	Quartz	TM	43	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087920
Whitehorse	Y866908	Quartz	TM	44	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087921
Whitehorse	Y866909	Quartz	TM	45	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03	Full Quartz fraction (25+ acres)	500087922
Whitehorse	Y866910	Quartz	TM	46	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087923
Whitehorse	Y866911	Quartz	TM	47	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087924
Whitehorse	Y866912	Quartz	TM	48	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087925
Whitehorse	Y866913	Quartz	TM	49	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087926
Whitehorse	Y866914	Quartz	TM	50	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087927
Whitehorse	Y866915	Quartz	TM	51	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087928
Whitehorse	Y866916	Quartz	TM	52	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087929
Whitehorse	Y866917	Quartz	TM	53	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087930
Whitehorse	Y866918	Quartz	TM	54	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087931
Whitehorse	Y866919	Quartz	TM	55	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087932
Whitehorse	Y866920	Quartz	TM	56	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087933
Whitehorse	Y866921	Quartz	TM	57	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087934
Whitehorse	Y866922	Quartz	TM	58	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087935
Whitehorse	Y866923	Quartz	TM	59	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087936
Whitehorse	Y866924	Quartz	TM	60	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087937
Whitehorse	Y866925	Quartz	TM	61	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087938
Whitehorse	Y866926	Quartz	TM	62	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087939
Whitehorse	Y866927	Quartz	TM	63	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087940
Whitehorse	Y866928	Quartz	TM	64	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087941
Whitehorse	Y866929	Quartz	TM	65	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087942
Whitehorse	Y866930	Quartz	TM	66	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087943
Whitehorse	Y866931	Quartz	TM	67	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087944
Whitehorse	Y866932	Quartz	TM	68	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087945
Whitehorse	Y866933	Quartz	TM	69	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087946
Whitehorse	Y866934	Quartz	TM	70	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087947
Whitehorse	Y866935	Quartz	TM	71	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087948
Whitehorse	Y866936	Quartz	TM	72	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087949
Whitehorse	Y866937	Quartz	TM	73	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087950
Whitehorse	Y866938	Quartz	TM	74	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087951
Whitehorse	Y866939	Quartz	TM	75	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087952
Whitehorse	Y866940	Quartz	TM	76	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087953
Whitehorse	Y866941	Quartz	TM	77	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087954
Whitehorse	Y866942	Quartz	TM	78	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087955
Whitehorse	Y866943	Quartz	TM	79	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087956
Whitehorse	Y866944	Quartz	TM	80	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087957
Whitehorse	Y866945	Quartz	TM	81	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087958
Whitehorse	Y866946	Quartz	TM	82	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087959
Whitehorse	Y866947	Quartz	TM	83	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087960
Whitehorse	Y866948	Quartz	TM	84	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087961
Whitehorse	Y866949	Quartz	TM	85	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087962
Whitehorse	Y866950	Quartz	TM	86	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087963
Whitehorse	Y866951	Quartz	TM	87	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087964
Whitehorse	Y866952	Quartz	TM	88	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087965
Whitehorse	Y866953	Quartz	TM	89	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087966
Whitehorse	Y866954	Quartz	TM	90	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087967
Whitehorse	Y866955	Quartz	TM	91	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087968
Whitehorse	Y866956	Quartz	TM	92	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087969
Whitehorse	Y866957	Quartz	TM	93	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087970
Whitehorse	Y866958	Quartz	TM	94	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087971
Whitehorse	Y866959	Quartz	TM	95	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087972
Whitehorse	Y866960	Quartz	TM	96	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087973
Whitehorse	Y866961	Quartz	TM	97	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087974
Whitehorse	Y866962	Quartz	TM	98	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087975
Whitehorse	Y866963	Quartz	TM	99	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087976
Whitehorse	Y866964	Quartz	TM	100	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087977
Whitehorse	Y866965	Quartz	TM	101	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087978
Whitehorse	Y866966	Quartz	TM	102	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087979
Whitehorse	Y866967	Quartz	TM	103	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087980
Whitehorse	Y866968	Quartz	TM	104	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087981
Whitehorse	Y866969	Quartz	TM	105	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087982
Whitehorse	Y866970	Quartz	TM	106	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087983
Whitehorse	Y866971	Quartz	TM	107	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087984
Whitehorse	Y866972	Quartz	TM	108	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087985
Whitehorse	Y866973	Quartz	TM	109	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087986
Whitehorse	Y866974	Quartz	TM	110	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087987
Whitehorse	Y866975	Quartz	TM	111	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087988
Whitehorse	Y866976	Quartz	TM	112	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087989
Whitehorse	Y866977	Quartz	TM	113	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087990
Whitehorse	Y866978	Quartz	TM	114	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087991
Whitehorse	Y866979	Quartz	TM	115	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087992
Whitehorse	Y866980	Quartz	TM	116	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087993
Whitehorse	Y866981	Quartz	TM	117	Tagish Lake Gold Corp. - 100%.	5/27/1996	12/1/2013	Active	105D03		500087994
Whitehorse	YC07981	Quartz	TM	118	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090493
Whitehorse	YC07982	Quartz	TM	119	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090494
Whitehorse	YC07983	Quartz	TM	120	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090495
Whitehorse	YC07984	Quartz	TM	121	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090496
Whitehorse	YC07985	Quartz	TM	122	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090497
Whitehorse	YC07986	Quartz	TM	123	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090498
Whitehorse	YC07989	Quartz	TM	126	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090501
Whitehorse	YC07990	Quartz	TM	127	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090502
Whitehorse	YC07991	Quartz	TM	128	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090503
Whitehorse	YC07992	Quartz	TM	129	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090504
Whitehorse	YC07993	Quartz	TM	130	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090505
Whitehorse	YC07994	Quartz	TM	131	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090506
Whitehorse	YC07995	Quartz	TM	132	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090507
Whitehorse	YC07996	Quartz	TM	133	Tagish Lake Gold Corp. - 100%.	7/28/1997	12/1/2013	Active	105D03		500090508
Whitehorse	YA82961	Quartz	TREE	1	Tagish Lake Gold Corp. - 100%.	9/4/1984	12/1/2016	Active	105D03	Full Quartz fraction (25+ acres)	500062693

APPENDIX B.
2009 GEOPHYSICAL SURVEY SPECIFICATIONS

APPENDIX B: 2009 Geophysical Survey Specifications

Generator: 2.2Kw Motor generator YAMAHA, EF2600, AC outputting

Rectifier: 3Kw transformer and rectifier, Input AC, output DC; the range of Voltage: 50V~700V; the range of current: 0.1V~4V

Transmitter: 5Kw; 6A Time Domain, 2 seconds on, 2 seconds off waveform

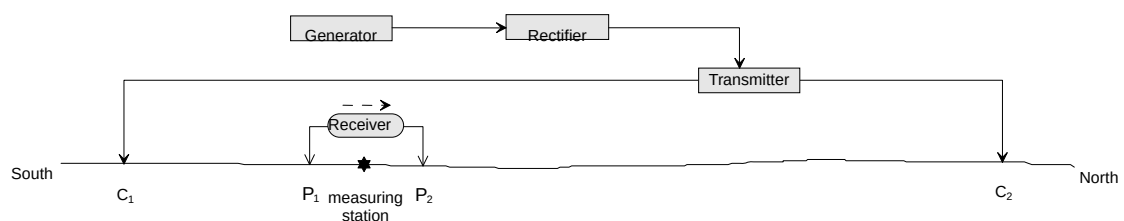
Receiver: Scintrex IPR-12

Current Electrode C1: grounded 200m south out of the survey grid area

Current Electrode C2: grounded 200m north out of the survey grid area

Electrode P1 and Electrode P2: Both mobile. The distance between two electrodes is 40m. The P1 is 20m south of the measuring station while P2 is 20m north of the station on survey grid line.

Station Interval: 20m along survey grid lines



APPENDIX C.
GEOPHYSICAL GRID STATION LOCATIONS (GPS COORDINATES)

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1190-090	480589	6672592	1042
1190-092	480590	6672612	1039
1190-094	480590	6672631	1038
1190-096	480589	6672652	1043
1190-098	480590	6672672	1048
1190-100	480590	6672692	1052
1190-102	480590	6672711	1053
1190-104	480590	6672732	1058
1190-106	480590	6672752	1061
1190-108	480590	6672772	1066
1190-110	480590	6672792	1068
1190-112	480589	6672812	1076
1190-114	480590	6672832	1078
1190-116	480589	6672852	1088
1190-118	480589	6672872	1083
1190-120	480590	6672892	1087
1190-122	480591	6672912	1085
1190-124	480590	6672932	1100
1190-126	480590	6672951	1101
1190-128	480591	6672971	1106
1190-130	480590	6672992	1102
1190-132	480590	6673012	1092
1190-134	480590	6673032	1112
1190-136	480589	6673053	1120
1190-138	480589	6673072	1130
1190-140	480590	6673093	1140
1190-142	480591	6673112	1143
1190-144	480590	6673132	1146
1190-146	480590	6673152	1156
1190-148	480590	6673172	1166
1190-150	480590	6673191	1174
1190-158	480590	6673272	1202
1190-160	480590	6673292	1215
1190-162	480590	6673312	1219
1190-164	480590	6673332	1220
1190-166	480590	6673352	1222
1190-168	480590	6673372	1230
1190-170	480590	6673392	1244
1200-090	480691	6672592	1020
1200-092	480689	6672612	1018
1200-094	480689	6672632	1013
1200-096	480690	6672651	1018
1200-098	480689	6672672	1016
1200-100	480689	6672692	1016
1200-102	480690	6672712	1017
1200-104	480689	6672732	1017
1200-106	480690	6672752	1020
1200-108	480690	6672773	1027
1200-110	480691	6672792	1022
1200-112	480690	6672813	1024
1200-114	480690	6672832	1029
1200-116	480690	6672852	1033
1200-118	480691	6672872	1050
1200-120	480690	6672893	1052
1200-122	480691	6672912	1050
1200-124	480690	6672932	1062
1200-126	480690	6672952	1066
1200-128	480690	6672972	1074
1200-130	480690	6672992	1074
1200-132	480690	6673013	1074
1200-134	480690	6673033	1080
1200-136	480690	6673052	1087
1200-138	480689	6673072	1090
1200-140	480689	6673092	1090
1200-142	480690	6673112	1101

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1200-144	480690	6673132	1104
1200-146	480690	6673152	1112
1200-148	480690	6673172	1115
1200-150	480691	6673192	1119
1200-152	480691	6673212	1132
1200-154	480690	6673232	1140
1200-156	480690	6673251	1145
1200-158	480690	6673272	1146
1200-160	480690	6673292	1154
1200-162	480690	6673312	1152
1200-164	480690	6673332	1161
1200-166	480690	6673352	1172
1200-168	480691	6673372	1183
1200-170	480690	6673392	1187
1210-090	480790	6672591	1004
1210-092	480790	6672613	1003
1210-094	480790	6672631	999
1210-096	480791	6672653	997
1210-098	480790	6672672	982
1210-100	480790	6672693	1009
1210-102	480791	6672712	997
1210-104	480790	6672732	1009
1210-106	480790	6672753	1011
1210-108	480790	6672772	1015
1210-110	480791	6672792	1021
1210-112	480791	6672811	1022
1210-114	480790	6672831	1026
1210-116	480790	6672853	1030
1210-118	480790	6672871	1031
1210-120	480790	6672892	1030
1210-122	480790	6672911	1032
1210-124	480789	6672932	1039
1210-126	480791	6672951	1042
1210-128	480791	6672972	1041
1210-130	480789	6672992	1048
1210-132	480790	6673013	1046
1210-134	480791	6673032	1049
1210-136	480790	6673053	1055
1210-138	480790	6673071	1057
1210-140	480790	6673093	1059
1210-142	480790	6673112	1066
1210-144	480790	6673133	1070
1210-146	480790	6673151	1074
1210-148	480791	6673173	1076
1210-150	480790	6673192	1076
1210-152	480790	6673212	1083
1210-154	480791	6673233	1093
1210-156	480789	6673252	1092
1210-158	480790	6673273	1101
1210-160	480791	6673293	1104
1210-162	480790	6673312	1114
1210-164	480788	6673332	1118
1210-166	480791	6673351	1124
1210-168	480790	6673371	1132
1210-170	480791	6673392	1140
1220-090	480889	6672592	999
1220-092	480890	6672611	1004
1220-094	480891	6672633	1006
1220-096	480890	6672653	1005
1220-098	480891	6672672	1005
1220-100	480890	6672693	1007
1220-102	480889	6672712	1004
1220-104	480889	6672732	1004
1220-106	480891	6672752	1002
1220-108	480890	6672773	1010

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1220-110	480891	6672792	1007
1220-112	480890	6672812	1005
1220-114	480890	6672833	1008
1220-116	480891	6672852	1008
1220-118	480888	6672873	1010
1220-120	480890	6672893	1015
1220-122	480890	6672912	1017
1220-124	480890	6672932	1019
1220-126	480890	6672951	1021
1220-128	480889	6672972	1026
1220-130	480890	6672991	1025
1220-132	480889	6673012	1026
1220-134	480889	6673031	1029
1220-136	480890	6673053	1035
1220-138	480890	6673073	1036
1220-140	480889	6673093	1036
1220-142	480889	6673113	1036
1220-144	480891	6673131	1040
1220-146	480891	6673153	1038
1220-148	480890	6673172	1053
1220-150	480889	6673193	1044
1220-152	480891	6673213	1048
1220-154	480890	6673232	1054
1220-156	480889	6673253	1063
1220-158	480890	6673272	1064
1220-160	480890	6673293	1063
1220-162	480890	6673313	1072
1220-164	480890	6673332	1074
1220-166	480891	6673352	1083
1220-168	480891	6673372	1085
1220-170	480891	6673391	1090
1380-090	482490	6672592	959
1380-092	482490	6672612	957
1380-094	482490	6672632	958
1380-096	482490	6672652	960
1380-098	482490	6672672	957
1380-100	482490	6672692	959
1380-118	482488	6672873	966
1380-120	482490	6672892	971
1380-122	482490	6672912	967
1380-124	482489	6672932	964
1380-126	482490	6672952	965
1380-128	482490	6672972	965
1380-130	482490	6672992	968
1380-132	482490	6673012	971
1380-134	482490	6673032	968
1380-136	482490	6673052	970
1380-138	482490	6673072	967
1380-140	482490	6673093	967
1380-142	482490	6673111	967
1380-144	482490	6673132	968
1380-146	482490	6673152	966
1380-148	482490	6673172	966
1380-150	482490	6673192	966
1380-152	482490	6673212	967
1380-154	482490	6673232	968
1380-156	482490	6673252	968
1380-158	482490	6673272	970
1380-160	482490	6673292	971
1380-162	482490	6673312	969
1380-164	482490	6673332	970
1380-166	482490	6673352	970
1380-168	482490	6673372	968
1380-170	482490	6673392	965
1390-090	482590	6672592	958

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1390-092	482590	6672612	959
1390-094	482590	6672632	960
1390-096	482590	6672651	950
1390-098	482590	6672672	952
1390-100	482590	6672692	952
1390-102	482590	6672712	952
1390-104	482591	6672732	951
1390-106	482591	6672752	951
1390-108	482590	6672772	951
1390-110	482590	6672792	954
1390-112	482589	6672812	954
1390-114	482590	6672832	955
1390-116	482590	6672852	952
1390-118	482590	6672871	953
1390-120	482590	6672906	956
1390-122	482590	6672912	958
1390-124	482590	6672932	961
1390-126	482590	6672952	968
1390-128	482590	6672972	970
1390-130	482590	6672992	971
1390-132	482590	6673012	968
1390-134	482590	6673032	968
1390-136	482590	6673051	969
1390-138	482590	6673072	964
1390-140	482590	6673091	962
1390-142	482591	6673111	963
1390-144	482590	6673133	961
1390-146	482590	6673151	966
1390-148	482590	6673173	970
1390-150	482591	6673192	975
1390-152	482590	6673211	968
1390-154	482590	6673231	969
1390-156	482589	6673252	965
1390-158	482590	6673271	961
1390-160	482590	6673291	960
1390-162	482592	6673312	966
1390-164	482589	6673332	966
1390-166	482591	6673352	968
1390-168	482590	6673373	966
1390-170	482590	6673392	967
1400-090	482690	6672592	962
1400-092	482691	6672612	961
1400-094	482690	6672632	960
1400-096	482690	6672652	959
1400-098	482690	6672672	960
1400-100	482690	6672692	959
1400-102	482690	6672712	959
1400-104	482690	6672732	960
1400-106	482690	6672752	955
1400-108	482689	6672772	957
1400-110	482690	6672793	956
1400-112	482690	6672812	958
1400-114	482690	6672832	958
1400-116	482690	6672854	957
1400-118	482690	6672872	959
1400-120	482690	6672892	958
1400-122	482690	6672913	960
1400-124	482690	6672932	950
1400-126	482690	6672953	953
1400-128	482690	6672972	952
1400-130	482690	6672992	952
1400-132	482690	6673023	949
1400-134	482690	6673032	949
1400-136	482691	6673052	954
1400-138	482689	6673072	954

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1400-140	482690	6673092	964
1400-142	482690	6673111	961
1400-144	482690	6673133	964
1400-146	482690	6673152	966
1400-148	482690	6673172	963
1400-150	482690	6673192	960
1400-152	482690	6673212	972
1400-154	482691	6673232	967
1400-156	482690	6673251	962
1400-158	482690	6673272	963
1400-160	482689	6673292	962
1400-162	482690	6673313	962
1400-164	482690	6673332	960
1400-166	482690	6673352	962
1400-168	482690	6673372	962
1400-170	482690	6673392	964
1410-090	482791	6672591	958
1410-092	482790	6672612	956
1410-094	482790	6672632	961
1410-096	482791	6672652	960
1410-098	482790	6672672	959
1410-100	482791	6672692	960
1410-102	482790	6672712	958
1410-104	482790	6672733	958
1410-106	482791	6672752	959
1410-108	482790	6672771	957
1410-110	482791	6672792	956
1410-112	482791	6672812	956
1410-114	482790	6672832	949
1410-116	482791	6672852	958
1410-118	482791	6672872	953
1410-120	482790	6672892	955
1410-122	482790	6672912	954
1410-124	482789	6672931	955
1410-126	482789	6672952	954
1410-128	482790	6672972	954
1410-130	482790	6672992	953
1410-132	482790	6673013	955
1410-134	482793	6673032	955
1410-136	482790	6673055	951
1410-138	482790	6673071	949
1410-142	482789	6673111	953
1410-144	482789	6673132	948
1410-146	482790	6673151	960
1410-148	482790	6673172	966
1410-150	482790	6673192	967
1410-152	482789	6673213	966
1410-154	482790	6673232	966
1410-156	482791	6673252	967
1410-158	482791	6673272	964
1410-160	482790	6673292	965
1410-162	482790	6673312	968
1410-164	482790	6673332	966
1410-166	482790	6673352	962
1410-168	482789	6673372	966
1410-170	482790	6673392	966
1420-090	482889	6672592	961
1420-092	482890	6672612	962
1420-094	482891	6672631	960
1420-096	482890	6672652	960
1420-098	482892	6672671	959
1420-100	482890	6672693	958
1420-102	482890	6672711	955
1420-104	482890	6672733	959
1420-106	482890	6672752	954

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1420-108	482890	6672773	954
1420-110	482890	6672791	956
1420-112	482891	6672812	954
1420-114	482890	6672832	955
1420-116	482890	6672852	955
1420-118	482889	6672872	953
1420-120	482891	6672892	952
1420-122	482889	6672912	954
1420-124	482889	6672932	953
1420-126	482889	6672952	954
1420-128	482891	6672972	952
1420-130	482890	6672992	954
1420-132	482890	6673016	951
1420-134	482890	6673031	947
1420-136	482890	6673052	954
1420-138	482891	6673072	954
1420-140	482889	6673092	953
1420-148	482890	6673172	954
1420-150	482890	6673192	962
1420-152	482890	6673212	963
1420-154	482890	6673232	962
1420-156	482890	6673252	965
1420-158	482889	6673272	966
1420-160	482890	6673292	965
1420-162	482890	6673311	967
1420-164	482890	6673332	971
1420-166	482890	6673352	969
1420-168	482890	6673372	966
1420-170	482890	6673392	963
1430-090	482989	6672592	969
1430-092	482990	6672611	970
1430-094	482989	6672632	968
1430-096	482991	6672652	962
1430-098	482990	6672672	961
1430-100	482989	6672692	962
1430-102	482992	6672711	962
1430-104	482991	6672731	956
1430-106	482990	6672751	956
1430-108	482990	6672771	958
1430-110	482991	6672792	956
1430-112	482992	6672811	956
1430-114	482990	6672832	956
1430-116	482990	6672852	953
1430-118	482990	6672872	951
1430-120	482990	6672892	948
1430-122	482990	6672912	945
1430-124	482990	6672932	946
1430-126	482990	6672952	948
1430-128	482990	6672973	946
1430-130	482991	6672992	947
1430-132	482991	6673012	950
1430-134	482990	6673032	949
1430-146	482990	6673152	945
1430-148	482990	6673172	952
1430-150	482990	6673192	962
1430-152	482990	6673212	964
1430-154	482990	6673232	965
1430-156	482990	6673252	965
1430-158	482990	6673272	959
1430-160	482989	6673292	960
1430-162	482990	6673312	965
1430-164	482990	6673332	960
1430-166	482990	6673352	965
1430-168	482990	6673372	962
1430-170	482990	6673392	962

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1440-090	483092	6672592	985
1440-092	483090	6672611	979
1440-094	483090	6672631	980
1440-096	483091	6672653	979
1440-098	483089	6672672	971
1440-100	483090	6672692	969
1440-102	483089	6672712	966
1440-104	483089	6672732	968
1440-106	483090	6672752	965
1440-108	483090	6672771	961
1440-110	483090	6672792	959
1440-112	483090	6672812	958
1440-114	483089	6672832	957
1440-116	483090	6672852	957
1440-118	483089	6672871	954
1440-120	483091	6672892	952
1440-122	483090	6672912	952
1440-124	483091	6672932	950
1440-126	483090	6672951	949
1440-128	483089	6672972	952
1440-130	483090	6672991	951
1440-132	483091	6673012	951
1440-134	483090	6673033	948
1440-136	483089	6673051	951
1440-138	483091	6673072	948
1440-140	483089	6673093	950
1440-142	483090	6673112	952
1440-144	483089	6673131	948
1440-146	483090	6673152	947
1440-150	483090	6673191	949
1440-152	483090	6673212	952
1440-154	483090	6673232	962
1440-156	483090	6673252	967
1440-158	483090	6673272	978
1440-160	483090	6673292	979
1440-162	483091	6673292	979
1440-164	483090	6673332	972
1440-166	483090	6673352	972
1440-168	483090	6673372	972
1440-170	483090	6673392	971
1450-090	483190	6672592	992
1450-092	483190	6672613	985
1450-094	483190	6672633	980
1450-096	483190	6672652	979
1450-098	483190	6672673	976
1450-100	483190	6672692	972
1450-102	483190	6672712	973
1450-104	483189	6672732	967
1450-106	483190	6672753	966
1450-108	483190	6672772	962
1450-110	483190	6672792	963
1450-112	483190	6672812	959
1450-114	483190	6672832	959
1450-116	483190	6672852	954
1450-118	483190	6672872	955
1450-120	483190	6672892	947
1450-122	483190	6672913	949
1450-124	483190	6672932	951
1450-126	483190	6672953	952
1450-128	483190	6672972	952
1450-130	483190	6672992	952
1450-132	483190	6673012	952
1450-134	483190	6673032	952
1450-136	483190	6673053	955
1450-138	483190	6673072	951

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1450-140	483190	6673092	950
1450-142	483189	6673112	948
1450-144	483190	6673132	948
1450-146	483190	6673152	948
1450-148	483190	6673172	948
1450-150	483190	6673193	949
1450-152	483190	6673212	944
1450-162	483189	6673312	955
1450-164	483190	6673331	967
1450-166	483190	6673352	968
1450-168	483190	6673372	977
1450-170	483190	6673392	984
1460-090	483290	6672592	992
1460-092	483291	6672612	986
1460-094	483291	6672632	995
1460-096	483290	6672652	991
1460-098	483290	6672672	990
1460-100	483290	6672692	986
1460-102	483290	6672712	983
1460-104	483290	6672732	981
1460-106	483290	6672752	981
1460-108	483290	6672772	977
1460-110	483289	6672791	969
1460-112	483289	6672812	969
1460-114	483290	6672832	967
1460-116	483290	6672853	964
1460-118	483290	6672872	961
1460-120	483290	6672892	957
1460-122	483290	6672912	958
1460-124	483291	6672932	954
1460-126	483290	6672952	953
1460-128	483290	6672972	954
1460-130	483290	6672992	953
1460-132	483290	6673011	952
1460-134	483290	6673032	951
1460-136	483290	6673053	949
1460-138	483290	6673072	950
1460-140	483290	6673092	946
1460-142	483290	6673109	951
1460-144	483290	6673132	952
1460-146	483290	6673152	955
1460-148	483289	6673173	954
1460-150	483290	6673193	953
1460-152	483290	6673213	949
1460-154	483290	6673232	944
1460-156	483290	6673253	941
1460-158	483290	6673276	941
1460-160	483290	6673292	944
1460-162	483290	6673313	945
1460-164	483290	6673332	944
1460-166	483290	6673352	943
1470-090	483389	6672589	1011
1470-092	483388	6672610	1010
1470-094	483390	6672633	1002
1470-096	483389	6672653	1000
1470-098	483389	6672670	991
1470-100	483391	6672691	990
1470-102	483391	6672711	990
1470-104	483391	6672733	988
1470-106	483390	6672753	985
1470-108	483391	6672772	985
1470-110	483391	6672792	983
1470-112	483389	6672814	978
1470-114	483388	6672831	974
1470-116	483391	6672852	966

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1470-118	483390	6672871	967
1470-120	483389	6672892	965
1470-122	483388	6672911	962
1470-124	483390	6672932	959
1470-126	483390	6672952	960
1470-128	483389	6672971	954
1470-130	483390	6672992	957
1470-132	483392	6673013	956
1470-134	483388	6673029	955
1470-136	483391	6673052	954
1470-138	483388	6673073	951
1470-140	483389	6673093	963
1470-142	483388	6673111	955
1470-144	483391	6673133	950
1470-146	483390	6673152	953
1470-148	483390	6673172	954
1470-150	483390	6673193	955
1470-152	483392	6673212	951
1470-154	483392	6673232	950
1470-156	483390	6673252	954
1470-158	483389	6673271	949
1470-160	483393	6673292	952
1470-162	483391	6673312	948
1470-164	483390	6673332	950
1470-166	483389	6673352	950
1470-168	483390	6673372	950
1470-170	483390	6673392	945
1480-070-EA1	483493	6672387	1096
1480-090	483492	6672592	1033
1480-092	483489	6672610	1028
1480-094	483490	6672631	1025
1480-096	483489	6672652	1020
1480-098	483491	6672671	1019
1480-100	483489	6672692	1015
1480-102	483490	6672712	1009
1480-104	483491	6672732	1005
1480-106	483490	6672753	998
1480-108	483488	6672772	996
1480-110	483489	6672791	989
1480-112	483488	6672811	989
1480-114	483490	6672832	988
1480-116	483490	6672852	984
1480-118	483490	6672872	982
1480-120	483490	6672892	983
1480-122	483489	6672912	977
1480-124	483490	6672931	969
1480-126	483490	6672951	968
1480-128	483490	6672973	972
1480-130	483489	6672990	967
1480-132	483490	6673012	966
1480-134	483487	6673030	971
1480-136	483487	6673052	964
1480-138	483491	6673071	970
1480-140	483490	6673092	969
1480-142	483490	6673112	968
1480-144	483490	6673132	965
1480-146	483490	6673151	961
1480-148	483490	6673171	956
1480-150	483490	6673193	955
1480-152	483490	6673211	956
1480-154	483489	6673232	952
1480-156	483489	6673253	951
1480-158	483489	6673273	955
1480-160	483491	6673292	948
1480-162	483491	6673312	945

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1480-164	483490	6673333	955
1480-166	483492	6673352	946
1480-168	483491	6673371	947
1480-170	483489	6673393	952
1480-190-EA-1	483490	6673592	940
1490-090	483590	6672591	1075
1490-092	483591	6672612	1073
1490-094	483589	6672632	1067
1490-096	483590	6672652	1065
1490-098	483590	6672672	1047
1490-100	483590	6672691	1046
1490-102	483590	6672712	1033
1490-104	483590	6672732	1032
1490-106	483590	6672753	1023
1490-108	483590	6672772	1020
1490-110	483590	6672792	1017
1490-112	483591	6672812	1019
1490-114	483590	6672832	1014
1490-116	483590	6672852	1010
1490-118	483590	6672872	1008
1490-120	483590	6672892	1009
1490-122	483591	6672912	998
1490-124	483591	6672932	997
1490-126	483590	6672952	998
1490-128	483590	6672973	994
1490-130	483590	6672992	983
1490-132	483590	6673012	989
1490-134	483590	6673032	986
1490-136	483590	6673052	986
1490-138	483590	6673072	986
1490-140	483590	6673092	981
1490-142	483590	6673112	987
1490-144	483590	6673132	986
1490-146	483590	6673152	989
1490-148	483589	6673172	980
1490-150	483590	6673192	984
1490-152	483590	6673212	989
1490-154	483590	6673232	983
1490-156	483590	6673252	981
1490-158	483590	6673272	980
1490-160	483590	6673292	975
1490-162	483591	6673312	976
1490-164	483590	6673332	970
1490-166	483590	6673352	965
1490-168	483590	6673372	963
1490-170	483590	6673392	962
1500-090	483690	6672592	1130
1500-092	483690	6672612	1126
1500-094	483691	6672632	1119
1500-096	483690	6672652	1099
1500-098	483689	6672672	1093
1500-100	483690	6672692	1092
1500-102	483690	6672712	1080
1500-104	483690	6672732	1080
1500-106	483691	6672752	1077
1500-108	483690	6672772	1068
1500-110	483690	6672792	1059
1500-112	483690	6672812	1048
1500-114	483689	6672832	1046
1500-116	483690	6672852	1044
1500-118	483690	6672872	1032
1500-120	483690	6672892	1039
1500-122	483690	6672912	1032
1500-124	483690	6672932	1028
1500-126	483690	6672951	1023

APPENDIX C: Geophysical Grid Survey Locations (surveyed with a hand-held Garmin GPS unit)

line no. - station no.	easting_utm_nad83 (m)	northing_utm_nad83 (m)	elev (m)
1500-128	483690	6672972	1021
1500-130	483690	6672991	1017
1500-132	483690	6673013	1010
1500-134	483690	6673032	1007
1500-136	483690	6673052	1009
1500-138	483690	6673072	1009
1500-140	483690	6673093	997
1500-142	483690	6673112	1010
1500-144	483689	6673131	1006
1500-146	483690	6673152	1000
1500-148	483691	6673173	997
1500-150	483690	6673192	997
1500-152	483690	6673213	993
1500-154	483690	6673232	987
1500-156	483690	6673252	989
1500-158	483691	6673272	991
1500-160	483690	6673292	988
1500-162	483691	6673313	983
1500-164	483690	6673333	983
1500-166	483690	6673353	980
1500-168	483690	6673372	980
1500-170	483690	6673392	977

APPENDIX D. RAW GEOPHYSICAL DATA

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
11900	920	480590	6672612	1039	30.08	26.49	24.22	20.68	17.59	14.51	12.43	9.91	8.37	7.18	5.58	13.86	41.89	432	-65	1630	700+	1900+
11900	940	480590	6672631	1038	30.03	27.51	24.57	20.26	17.3	14.44	12.23	9.69	7.4	6.33	4.91	13.62	54.74	432	-57	2239	700+	1900+
11900	960	480589	6672652	1043	29.41	26.38	23.05	20.39	17.57	14.73	12.26	10.59	8.68	7.11	6.07	13.63	52	432	-100	2243	700+	1900+
11900	980	480590	6672672	1048	28.4	25.52	23.16	19.61	16.46	13.91	11.33	9.27	8.59	6.13	5.18	12.83	45.05	432	-93	2053	700+	1900+
11900	1000	480590	6672692	1052	30	26.22	24.12	20.4	17.92	15.02	12.67	10.84	9.11	7.52	5.85	14.18	38.22	432	-77	1840	700+	1900+
11900	1020	480590	6672711	1053	33.71	29.82	25.76	22.7	19.48	16.54	14.59	11.82	10.25	7.94	6.56	15.76	29.08	432	-84	1477	700+	1900+
11900	1040	480590	6672732	1058	41.02	37.03	31.56	27.76	23.62	19.51	16.66	13.88	10.96	9.45	7.9	18.38	31.58	432	-78	1690	700+	1900+
11900	1060	480590	6672752	1061	39.66	37.13	32.39	28.18	24.49	20.46	17.51	13.93	11.86	9.66	7.16	19.16	36.05	432	-88	2028	700+	1900+
11900	1080	480590	6672772	1066	34.97	34.03	31.4	24.13	23.13	19.69	16.88	14.37	12.15	9.81	7.5	18.95	32.17	432	-83	1896	700+	1900+
11900	1100	480590	6672792	1068	34.56	29.78	29.09	23.72	20.38	17.84	14.59	12.44	10.45	8.48	6.68	16.89	30.47	432	-66	1876	700+	1900+
11900	1120	480589	6672812	1076	34.03	32.13	26.68	23.26	20.31	17.36	15.09	11.99	9.89	8.08	6.55	16.63	24.23	432	-61	1553	700+	1900+
11900	1140	480590	6672832	1078	35.85	32.14	27.85	24.31	21.5	17.85	14.76	12.54	10.53	8.86	7.25	16.95	18.28	432	-35	1215	700+	1900+
11900	1160	480589	6672852	1088	38.09	33.82	29.59	25.54	23.42	18.35	15.74	13.2	11.83	9.74	8.9	17.64	20.41	432	-63	1402	700+	1900+
11900	1180	480589	6672872	1083	37.97	34.77	30.86	25.79	20.55	19.25	15.15	13.48	11.81	9.43	7.76	17.89	19.95	432	-77	1411	700+	1900+
11900	1200	480590	6672892	1087	38.79	33.23	29.31	24.59	20.14	18.45	16.16	12.7	10.91	8.61	7.15	17.15	23.59	432	-50	1709	700+	1900+
11900	1220	480591	6672912	1085	38.86	33.16	29.92	26.11	23.1	19.14	16.36	13.15	11.15	9.42	8.12	18.08	33.88	432	-95	2503	700+	1900+
11900	1240	480590	6672932	1100	38.24	35.71	32.66	27.17	25.86	20.00	17.9	15.7	12.69	10.76	8.95	18.83	33.85	432	-86	2864	700+	1900+
11900	1260	480590	6672951	1101	37.74	34.22	30.78	25.02	22.87	19.03	16	13.06	11.69	8.4	7.11	18.1	30.87	432	-92	2343	700+	1900+
11900	1280	480591	6672971	1106	38.77	34.47	27.38	26.3	20.3	18.67	16.23	12.76	10.32	9.24	7.37	17.36	24.11	432	-117	1843	700+	1900+
11900	1300	480590	6672992	1102	38.37	32.73	31.15	28.07	25.45	20.64	15.93	15.2	10.55	9.17	7.79	19.03	20.89	432	-90	1600	700+	1900+
11900	1320	480590	6673012	1092	36.29	32.28	28.95	24.29	20.03	16.99	14.71	11.5	8.94	7.63	5.63	16.06	21.17	432	-94	1618	700+	1900+
11900	1340	480590	6673032	1112	31.87	28.7	24.47	20.99	18.47	15.97	13.03	11.02	9.85	7.98	6.96	15.23	21.96	432	-96	1667	700+	1900+
11900	1360	480589	6673053	1120	27.83	24.95	23.65	19.25	16.96	13.83	12.47	11.14	8.65	6.66	5.54	13.12	19.22	432	-64	1443	700+	1900+
11900	1380	480589	6673072	1130	23.93	21.09	20.18	16.04	15.18	11.98	9.65	7.95	6.35	5.47	4.23	10.76	14.84	432	-78	1096	700+	1900+
11900	1400	480590	6673093	1140	24.56	23.15	17.95	15.55	13.88	11.87	9.39	8.69	6.91	5.77	5.15	10.7	7.74	432	-99	561	700+	1900+
11900	1420	480591	6673112	1143	25.31	22.3	18.78	16.28	14.2	11.65	9.75	7.8	6.15	5.32	5.69	11	10.27	432	-114	726	700+	1900+
11900	1440	480590	6673132	1146	32.49	29.59	25.03	21.85	18.97	15.84	13	10.43	8.53	7.21	5.8	14.82	11.56	432	-64	794	700+	1900+
11900	1460	480590	6673152	1156	49.45	43.55	37.69	33.66	28.21	23.32	20.86	17.05	14.04	12.11	9.07	22.23	9.89	432	-92	658	700+	1900+
11900	1480	480590	6673172	1166	61.34	56.54	49.59	42.62	38.79	30.45	27	22.49	19.16	15.69	12.92	28.32	9.9	432	-95	635	700+	1900+
11900	1600	480590	6673292	1215	22.54	18.92	16.85	15.41	12.94	10.74	8.55	7.11	6.43	5.16	4.08	9.75	37.48	440	46	1772	700+	1900+
11900	1620	480590	6673312	1219	23.72	20.47	17.4	14.67	11.7	10.79	9.75	7.83	5.93	5.09	4.05	10.09	35.48	440	54	1587	700+	1900+
11900	1640	480590	6673332	1220	24.42	21.58	18.89	15.9	13.67	11.46	9.4	8.16	7.35	4.86	4.37	10.64	28.49	440	52	1207	700+	1900+
11900	1660	480590	6673352	1222	26.43	23.3	18.87	15.34	12.25	10.22	9.53	9.38	8.15	5.62	4.69	9.62	26.09	421	-40	1095	700+	1900+
11900	1680	480590	6673372	1230	22.11	20.38	17.23	14.91	12.74	10.66	9.27	7.39	5.98	4.86	4.12	9.99	56.8	421	110	2268	700+	1900+
12000	920	480689	6672612	1018	31.58	28.45	24.03	21.2	18.19	15.41	13.24	10.8	9.1	7.33	5.95	14.62	50.76	421	-86	1136	700+	1900+
12000	940	480689	6672632	1013	32	29.08	24.93	21.13	18.28	15.54	13.08	10.88	9.04	7.53	5.95	14.55	66.41	421	-63	1677	700+	1900+
12000	960	480690	6672651	1018	32.67	28.92	23.62	21.75	17.49	15.48	13.37	11.44	9.03	7.43	6.06	14.3	75.99	421	-48	2151	700+	1900+
12000	980	480689	6672672	1016	32.45	28.82	24.36	21.89	18.71	15.54	13.49	11.27	9.06	7.88	6.01	14.78	58.17	421	-90	1832	700+	1900+
12000	1000	480689	6672692	1016	35.51	31.08	28.04	23.42	21.36	17.13	14.63	12.18	9.97	8.62	6.59	16.25	57.7	421	-70	2007	700+	1900+
12000	1020	480690	6672712	1017	37.66	31.63	27.76	25.5	21.44	18.27	15.58	12.64	9.86	9.23	7.47	17.01	52.5	421	-64	2002	700+	1900+
12000	1040	480689	6672732	1017	37.85	32.8	28.43	24.56	20.63	17.90	15.54	12.05	10.74	9.37	7	16.92	41.32	421	-73	1716	700+	1900+
12000	1060	480690	6672752	1020	34.21	32.12	27.32	23.83	21.24	17.76	15.25	12.76	10.23	9	7.09	16.91	36.55	421	-97	1642	700+	1900+
12000	1080	480690	6672773	1027	33.29	31.05	26.81	23.31	20.27	16.96	13.8	11.55	9.89	8.13	6.91	15.81	35.41	421	-105	1709	700+	1900+
12000	1100	480691	6672792	1022	34.74	29.99	25.76	23.83	19.85	17.32	14.47	12.13	9.38	7.92	6.46	16.13	31.06	421	-68	1599	700+	1900+
12000	1120	480690	6672813	1024	35.3	33.44	27.9	21.98	20.01	17.31	15.15	12.61	9.94	8.49	6.64	16.2	30.07	421	-71	1642	700+	1900+
12000	1140	480690	6672832	1029	35.94	31.77	28.66	24.41	21.29	17.66	15.81	12.54	10.5	8.84	7.18	16.77	25.65	421	-85	1476	700+	1900+
12000	1160	480690	6672852	1033	39.11	34.94	29.76	25.51	23.2	19.05	15.98	13.97	13.64	11.59	9.83	17.52	16.78	421	-58	1011	700+	1900+
12000	1180	480691	6672872	1050	40.3	34.75	31.16	27.8	22.67	19.16	16.39	13.68	11.56	9.48	7.77	18.1	18.88	421	-57	1183	700+	1900+
12000	1200	480690	6672893	1052	34.3	30.59	26.67	22.73	19.88	16.84	14.43	11.79	9.78	8.14	6.64	16.16	20.57	421	-38	1333	700+	1900+
12000	1220	480691	6672912	1050	32.67	29.26	27.44	21.28	19.65	16.37	14.15	11.91	9.69	8.1	6.94	15.47	19.67	421	-37	1310	700+	1900+
12000	1240	480690	6672932	1062	35.87	31.38	27.03	23.39	20.75	17.39	14.6	12.37	10.03	8.25	6.63	16.29	28.5	421	-58	1939	700+	1900+
12000	1260	480690	6672952	1066	34.93	31.23	27.33	22.2	20.73	17.72	14.46	13.48	10.5	8.43	6.68	16.08	30.49	421	-61	2106	700+	1900+
12000	1280	480690	6672972	1074	36.96	29.29	24.7	23.07	19.94	16.72	14.33	11.97	10.18	8.46	6.53	15.73	26.5	421	-45	1847	700+	1900+
12000	1300	480690	6672992	1074	32.77	29.15	25.07	22.13	19.55	16.29	13.63	11.23	9.67	8.26	6.68	15.49	26.82	421	-61	1875	700+	1900+
12000	1320	480690	6673013	1074	32.96	28.11	26.96	21.5	17.77	15.64	13.42	9.83	8.41	6.73	5.47							

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
12100	960	480791	6672653	997	25.8	22.64	19.87	17.22	15.1	12.92	10.94	9.01	7.36	6.07	5.09	12.08	52.22	427	-35	1200	700+	1900+
12100	980	480790	6672672	982	27.34	23.91	22.23	18.51	15.97	13.69	11.14	9.14	7.57	6.22	5.17	12.65	52.87	427	-63	1389	700+	1900+
12100	1000	480790	6672693	1009	32.82	28	25.54	21.17	19.41	16.33	13.59	11.08	9.07	7.63	6.11	15.24	62.71	427	8	1861	700+	1900+
12100	1020	480791	6672712	997	37.57	32.52	27.91	24.64	21.07	17.93	14.9	12.88	10.49	8.69	7.48	16.63	62.99	427	-14	2088	700+	1900+
12100	1040	480790	6672732	1009	37.45	33.22	31.14	25.93	22.23	18.84	16.03	13.33	11.22	9.62	7.79	17.52	50.55	427	-49	1853	700+	1900+
12100	1060	480790	6672753	1011	39.4	33.96	29.46	26.34	22.52	19.00	15.72	13.72	11.27	9.68	7.25	17.72	45.02	427	-32	1808	700+	1900+
12100	1080	480790	6672772	1015	36.86	32.19	27.79	24.23	20.85	17.88	14.99	12.55	11.55	8.83	6.94	16.87	41.68	427	-43	1818	700+	1900+
12100	1100	480791	6672792	1021	34.37	31.2	28.23	23.93	20.13	17.78	14.74	12	10.51	8.38	6.74	16.52	42.88	427	-38	2015	700+	1900+
12100	1120	480791	6672811	1022	35.28	31.1	27.48	23.23	21.4	17.18	14.73	12.22	10.22	8.44	6.94	15.92	42.64	427	-36	2141	700+	1900+
12100	1140	480790	6672831	1026	38.92	34.22	29.3	26.09	21.59	18.82	15.62	13.41	11.08	8.84	7.02	17.64	30.14	427	-40	1605	700+	1900+
12100	1160	480790	6672852	1030	43.81	36.8	33.69	29.61	25.25	20.97	17.64	15.38	13.28	10.75	8.9	19.65	21.56	427	-56	1208	700+	1900+
12100	1180	480790	6672871	1031	41.64	34.75	27.98	27.16	22.69	19.54	16.58	13.73	11.22	9.38	7.9	18.27	21.83	427	-66	1279	700+	1900+
12100	1200	480790	6672892	1030	32.19	28.86	25.84	21.98	18.18	16.22	13.54	11.22	9.35	7.38	5.89	15	20.42	427	-29	1242	700+	1900+
12100	1220	480790	6672911	1032	32.34	28.4	26.03	21.56	18.37	16.35	14.09	12.13	9.62	9.25	8.59	15.46	17.43	427	-10	1092	700+	1900+
12100	1240	480789	6672932	1039	30.42	26.62	24.24	21.26	17.96	15.23	12.78	11.08	9.23	7.73	6.32	14.33	16.05	427	-43	1030	700+	1900+
12100	1260	480791	6672951	1042	29.9	24.8	23.03	19.48	16.84	14.74	11.6	10.09	8.7	7.54	6.28	13.75	19.12	427	-29	1248	700+	1900+
12100	1280	480791	6672972	1041	32.45	27.24	23.02	21.76	17.65	14.67	12.71	10.64	9.2	7.74	6.06	13.85	24.62	427	-61	1623	700+	1900+
12100	1300	480789	6672992	1048	29.36	24.9	22.89	19.58	16.46	13.95	12.02	9.9	7.69	6.77	5.65	13.17	22.65	427	-47	1498	700+	1900+
12100	1320	480790	6673013	1046	29.69	25.22	22.86	20.12	17.07	14.41	12.02	10.01	7.82	6.61	5.41	13.32	22.33	427	-37	1472	700+	1900+
12100	1340	480791	6673032	1049	30.06	26.53	23.39	19.97	17.25	14.26	11.54	9.02	7.92	5.93	5.14	13.2	28.38	427	-56	1852	700+	1900+
12100	1360	480790	6673053	1055	29.18	25.58	21.49	19.02	16.24	14.01	11.89	9.6	8	6.72	5.19	12.79	30.31	427	-21	1946	700+	1900+
12100	1380	480790	6673071	1057	27.65	24.36	22.04	18.7	16.65	13.66	11.46	9.83	7.55	6.34	5.31	12.66	32.43	427	-51	2033	700+	1900+
12100	1400	480790	6673093	1059	30.61	27.82	23.35	19.72	16.71	14.46	12.15	10.32	8.03	6.73	5.55	13.64	31.64	427	-22	1924	700+	1900+
12100	1420	480790	6673112	1066	29.74	27.36	24.27	20.79	18	15.56	12.9	11.08	8.59	7.29	5.89	14.26	38.68	427	-32	2266	700+	1900+
12100	1440	480790	6673133	1070	29.75	26.19	24.79	20.7	17.83	15.36	12.87	10.44	8.87	7.07	5.72	14.47	36.41	427	-119	2041	700+	1900+
12100	1460	480790	6673151	1074	28.8	25.79	22.27	19.68	17.8	14.62	11.96	10.04	8.65	7.08	5.59	13.52	27.58	427	-75	1469	700+	1900+
12100	1480	480791	6673173	1076	30.28	27.27	23.12	19.21	17.09	14.40	12.3	10.29	8.76	7.02	6.06	14.13	29.88	427	-6	1500	700+	1900+
12100	1500	480790	6673192	1076	27.8	24.56	21.1	18.43	15.55	13.42	10.68	9.04	7.61	6.17	5.05	12.29	18.98	427	-43	892	700+	1900+
12100	1520	480790	6673211	1083	24.49	21.86	18.99	16.24	14.04	11.84	10.28	8.55	7.29	6.6	5.58	11.13	18.93	427	-38	826	700+	1900+
12100	1540	480791	6673233	1093	25.57	21.95	19.47	16.62	14.15	11.99	10.03	8.36	6.95	5.58	4.52	11.17	31.74	427	-32	1275	700+	1900+
12100	1560	480789	6673252	1092	27.78	23.91	21.09	18.26	15.79	13.50	11.24	9.17	7.79	6.14	5.21	12.76	36.49	427	-97	1338	700+	1900+
12100	1580	480790	6673273	1101	29.12	25.68	22.72	19.44	16.5	14.06	12.06	9.57	8.03	6.59	5.25	13.46	43.74	427	-88	1450	700+	1900+
12100	1600	480791	6673293	1104	29.24	26.23	22.25	19.28	16.36	13.93	11.73	9.93	7.81	6.83	5.73	12.98	39.39	427	-20	1169	700+	1900+
12100	1620	480790	6673312	1114	27.2	23.77	20.46	18.28	15.64	13.32	11.45	9.27	7.75	6.45	5.51	12.57	64.64	427	-22	1698	700+	1900+
12100	1640	480788	6673332	1118	26.52	22.84	20.47	17.62	15.1	12.72	10.77	9.19	7.84	6.5	5.33	11.97	87.46	427	-23	2009	700+	1900+
12100	1660	480791	6673351	1124	25.46	22.72	20.09	17.2	14.12	11.64	8.89	7.57	6.63	5.67	4.81	10.55	78.24	427	-51	1550	700+	1900+
12100	1680	480790	6673371	1132	21.01	18.3	15.82	13.26	11.44	9.67	8.29	6.69	5.69	4.74	3.53	9.12	74.35	427	-55	1250	700+	1900+
12200	920	480890	6672611	1004	21.99	19.25	17.07	14.81	12.21	10.86	9.11	7.52	6.5	5.21	4.32	10.15	52.42	438	41	1127	700+	1900+
12200	940	480891	6672633	1006	23.73	21.53	18.3	16.13	13.42	11.87	9.61	8.33	7.01	5.51	3.98	11.03	55.94	438	49	1358	700+	1900+
12200	960	480890	6672653	1005	27.55	23.64	22.05	18.07	15.88	13.22	11.08	9.12	7.62	6.13	4.9	12.36	46.96	438	40	1278	700+	1900+
12200	980	480891	6672672	1005	31.18	27.33	24.05	21.02	18.1	15.09	11.9	11.56	8.25	7.3	5.97	14.01	44.2	438	44	1338	700+	1900+
12200	1000	480890	6672693	1007	31.96	29.4	26.5	21.76	19.05	15.63	13.73	11.18	8.99	7.53	6.33	15.02	40.78	438	48	1363	700+	1900+
12200	1020	480889	6672712	1004	34.25	29.63	26.94	22.56	19.27	16.23	13.86	12.12	10.25	8.54	6.66	15.21	38.89	438	40	1426	700+	1900+
12200	1040	480889	6672732	1004	34.8	30.52	26.09	23	19.57	16.70	14.03	11.81	9.74	7.91	6.58	15.72	42.82	432	35	1733	700+	1900+
12200	1060	480891	6672752	1002	30.94	28.36	25.2	21.79	18.84	15.68	12.98	10.76	8.88	7.14	5.7	14.5	33.52	432	41	1467	700+	1900+
12200	1080	480890	6672773	1010	29.85	27.65	24.45	21.56	18.8	16.08	12.97	11.85	9.46	7.93	7	14.62	30.56	432	46	1437	700+	1900+
12200	1100	480891	6672792	1007	33.47	30.03	26.17	23.27	18.95	16.51	14.23	11.48	9.59	8.07	6.49	15.44	41.38	432	49	2077	700+	1900+
12200	1120	480890	6672812	1005	33.71	28.96	24.4	21.3	18.16	16.30	13.62	10.74	9.74	7.9	6.36	14.77	40.54	432	44	2157	700+	1900+
12200	1140	480890	6672833	1008	32.27	28.68	25.24	21.19	18.4	16.36	14.25	10.98	9.93	7.47	7.19	15.53	28.81	432	54	1615	700+	1900+
12200	1160	480891	6672852	1008	36.98	31.45	30.48	25.36	23.72	18.86	16.96	11.68	10.72	8.97	6.82	17.99	26.6	432	70	1561	700+	1900+
12200	1180	480888	6672873	1010	38.42	34.44	30.34	27.17	22.1	19.72	15.95	14.27	12.12	10.24	8.48	18.49	27.71	432	51	1692	700+	1900+
12200	1200	480890	6672893	1015	37.05	31.9	26.99	24.77	21.9	18.31	15.26	13.09	10.15	8.87	7.29	17.12	24.35	432	51	1538	700+	1900+
12200	1220	480890	6672912	1017	37.04	30.37	26.4	22.2	19.93	17.06	14.17	11.95	9.25	7.5	6.13	15.87	23.17	432	51	1504	700+	1900+
12200	1240	480890	6672932	1019	35.11	28.94	25.46	24.29	19.19	16.75	14.17	11.82	9.77	7.68	6.62	15.31	21.36	432	49	1416	700+	1900+
12200	1260	480890	6672951	1021	30.69	29.57	25.51	22.3	18.87	16.54	13.6	11.39	9.04	7.89	5.96	15.65	19					

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
12200	1680	480891	6673372	1085	23.21	20.51	18.01	15.45	13.24	11.22	9.39	7.9	6.4	5.33	4.3	10.53	47.12	427	51	1039	700+	1900+
12300	920	480990	6672613	989	26.48	22.75	20.17	16.88	14.87	12.41	10.38	8.62	7	5.87	4.84	11.55	57.67	820	-74	1182	700+	1900+
12300	940	480990	6672632	990	29.17	25.05	21.23	19.17	15.85	13.49	11.43	9.16	7.6	6.21	5.05	12.62	57.82	820	-80	1246	700+	1900+
12300	960	480990	6672652	994	29.19	27.67	24.05	19.65	17.36	14.74	12.39	10.41	8.61	7.1	5.51	13.91	60.52	820	-83	1376	700+	1900+
12300	980	480990	6672672	993	31.35	27.46	24.55	21.25	18.03	15.33	12.86	10.84	9.03	7.48	6.12	14.35	57.68	820	-84	1385	700+	1900+
12300	1000	480990	6672692	993	31.2	27.2	23.46	20.66	17.41	14.71	12.44	10	8.29	6.78	5.26	13.72	48.43	820	-87	1228	700+	1900+
12300	1020	480990	6672712	986	30.54	27.73	23.23	20.87	17.77	15.06	13	10.66	9.07	7.48	6.13	14.25	44.63	820	-85	1194	700+	1900+
12300	1040	480990	6672732	992	30.61	26.73	23.36	20.46	17.42	14.81	12.48	10.47	8.46	7.05	5.62	13.78	48.35	813	-78	1375	700+	1900+
12300	1060	480990	6672752	993	30.58	26.77	23.47	20.34	17.58	14.88	12.58	10.7	8.61	7.23	5.92	13.88	50.05	813	-78	1496	700+	1900+
12300	1080	480991	6672772	993	30.32	26.52	23.62	20.05	17.01	14.80	12.48	10.34	8.49	7.04	5.79	13.72	51.78	813	-80	1622	700+	1900+
12300	1100	480990	6672792	993	30.16	26.88	24.2	20.06	17.85	14.85	12.5	10.54	8.53	7.13	6.02	13.6	45.09	813	-74	1476	700+	1900+
12300	1120	480990	6672812	994	31.34	27.31	23.71	21.07	18.25	14.73	12.54	10.24	8.55	6.9	5.64	13.98	39.63	813	-79	1350	700+	1900+
12300	1140	480990	6672832	986	31.04	26.66	23.2	19.98	17.93	15.18	13.05	10.57	8.86	7.24	6.15	14.25	44.36	813	-87	1568	700+	1900+
12300	1160	480990	6672852	984	32.5	28.58	25.06	21.59	19.03	16.17	13.78	11.66	9.6	8.05	6.8	15.26	47.17	813	-87	1722	700+	1900+
12300	1180	480990	6672872	991	32.57	29.58	25.78	21.78	18.68	16.06	13.58	11.5	9.57	7.77	6.51	15.34	47.31	813	-86	1777	700+	1900+
12300	1200	480990	6672892	992	34.14	28.27	26.28	21.58	18.6	15.91	13.41	11.01	9.06	7.34	6.17	15.15	52.01	813	-79	2002	700+	1900+
12300	1220	480989	6672912	994	32.86	28.79	24.02	21.42	18.11	14.94	13.01	10.94	8.92	7.11	6.1	14.19	38.12	813	-94	1497	700+	1900+
12300	1240	480990	6672932	997	31.32	26.98	23.53	20.76	18	14.86	12.6	10.53	8.68	7.16	5.96	13.95	29.88	813	-107	1192	700+	1900+
12300	1260	480990	6672952	1000	30.03	25.82	23.62	19.66	17.2	14.47	12.25	10.31	8.72	8.46	7.2	13.83	42.15	813	-78	1700	700+	1900+
12300	1280	480990	6672972	997	29.18	25.87	22.42	19.79	16.52	14.25	12.06	9.98	8.34	7	5.62	13.42	38.74	813	-74	1573	700+	1900+
12300	1300	480990	6672992	996	28.26	25.53	22.01	19.59	16.54	14.17	11.91	9.96	8.02	6.59	5.32	13.3	34.16	813	-29	1390	700+	1900+
12300	1320	480990	6673012	1006	28.61	25.59	22.4	19.29	16.55	13.89	12.06	9.97	8.22	6.93	6.04	13.3	42.02	813	-38	1707	700+	1900+
12300	1340	480990	6673032	1003	27.16	24.92	20.79	17.96	15.46	13.49	11.27	9.36	7.91	6.26	5.11	12.56	44.48	813	-76	1794	700+	1900+
12300	1360	480989	6673052	1012	26.11	23.76	21.46	17.54	15.35	13.06	11.05	9.95	8.23	6.9	5.99	12.49	50.26	813	-13	2005	700+	1900+
12300	1380	480989	6673072	1013	27.44	23.77	20.11	17.77	15.44	13.26	10.46	8.63	7.07	5.83	5.15	11.74	52.25	813	-42	2052	700+	1900+
12300	1400	480990	6673092	1017	27.32	24.86	21.08	18.62	15.55	13.29	11.36	9.24	7.76	6.37	5.21	12.27	57.56	813	-61	2215	700+	1900+
12300	1420	480990	6673111	1021	27.29	24.73	21.83	18.28	15.93	13.64	11.58	9.77	8.06	6.31	5.03	13.04	60.04	813	-52	2255	700+	1900+
12300	1440	480990	6673132	1020	28.1	24.36	22.08	18.79	16.08	13.64	11.48	9.7	8.16	6.52	5.47	12.83	55.09	813	-66	2011	700+	1900+
12300	1460	480990	6673152	1026	28.1	24.82	21.75	19.07	15.96	13.75	11.54	9.36	8.04	6.58	5.42	12.86	53.97	813	-90	1907	700+	1900+
12300	1480	480990	6673172	1023	29.65	25.51	22.05	19.35	16.07	13.88	11.53	9.48	8.29	6.72	5.2	12.58	54.01	813	-103	1840	700+	1900+
12300	1500	480990	6673192	1024	28.87	25.35	21.91	19.25	16.27	13.65	11.57	9.77	8.16	6.65	5.54	12.86	68.18	813	-94	2231	700+	1900+
12300	1520	480990	6673212	1026	27.66	24.54	21.92	18.25	15.56	13.35	11.03	9.18	7.72	6.07	4.98	12.37	78.69	813	-58	2465	700+	1900+
12300	1540	480990	6673232	1029	27.66	24.07	20.44	18.13	15.51	13.10	11.23	9.22	7.49	6.21	5	12.45	65.61	813	-40	1961	700+	1900+
12300	1560	480990	6673252	1028	26	23.32	20	17.09	14.61	12.84	10.41	8.84	7.34	5.97	4.88	11.88	59.91	813	-72	1704	700+	1900+
12300	1580	480990	6673273	1033	26.73	23.31	20.68	17.24	14.94	12.75	10.77	8.95	7.47	6.31	5.07	11.99	52.14	813	-63	1407	700+	1900+
12300	1600	480990	6673293	1038	27.05	23.46	20.55	17.72	15.16	12.75	10.71	8.92	7.59	6.13	5.09	11.93	40.32	813	-44	1031	700+	1900+
12300	1620	480990	6673312	1039	31.37	26.96	23.57	20.65	17.36	14.74	12.32	10.24	8.43	6.92	5.66	13.73	46.35	813	-71	1122	700+	1900+
12300	1640	480990	6673332	1046	34.28	30.39	26.26	23.37	19.69	16.83	14.12	11.51	9.89	8.05	6.21	15.66	51.11	813	-82	1172	700+	1900+
12300	1660	480989	6673352	1045	34.97	30.02	26.42	23.16	19.66	16.43	13.94	11.79	9.79	8.06	6.46	15.4	51.6	813	-102	1122	700+	1900+
12300	1680	480990	6673372	1046	32.21	28.55	25.16	21.01	17.93	15.21	12.86	10.47	8.49	7.14	5.57	14.17	50.99	813	-88	1054	700+	1900+
12400	920	481090	6672611	987	24.02	20.71	17.82	15.74	13.5	11.23	9.6	7.86	6.55	5.35	4.4	10.67	72.29	830	65	820	700+	1900+
12400	940	481089	6672632	991	27.08	23.4	20.53	17.68	15.21	12.42	11.06	9.1	7.43	6.03	4.96	11.7	65.34	830	66	837	700+	1900+
12400	960	481089	6672652	991	28.8	25.11	22.26	18.94	16.49	13.79	11.66	9.78	8.15	6.82	5.64	12.99	73.42	830	68	1054	700+	1900+
12400	980	481091	6672672	992	29.76	26.1	22.9	20.05	16.97	14.34	11.94	9.96	8.34	6.81	5.57	13.36	70.99	830	66	1134	700+	1900+
12400	1000	481090	6672692	985	30.6	26.03	23.1	20.34	17.56	14.68	12.15	10.24	8.4	7.21	5.83	13.72	67.47	830	65	1190	700+	1900+
12400	1020	481089	6672712	986	30.96	26.94	23.39	20.1	17.58	14.61	12.54	10.25	8.65	6.97	5.77	13.83	62.55	830	56	1210	700+	1900+
12400	1040	481090	6672731	991	31.65	28.08	23.44	21.47	17.25	14.85	13.13	10.68	8.82	6.81	5.85	14.26	58.48	830	62	1232	700+	1900+
12400	1060	481090	6672752	994	29.77	26.57	24.24	20.38	18.17	14.94	12.5	10.47	8.9	7.38	5.82	13.97	60.69	824	57	1393	700+	1900+
12400	1080	481091	6672772	992	30.48	26.37	22.68	20.22	17.38	14.91	12.68	10.33	8.88	7.2	5.84	14.02	53.76	824	61	1325	700+	1900+
12400	1100	481091	6672792	993	30.14	26.9	24.31	20.05	17.62	15.00	12.48	10.36	8.71	6.97	5.67	14	55.99	824	112	1473	700+	1900+
12400	1120	481090	6672813	991	32.93	28.49	24.34	21.61	18.33	15.17	12.93	10.73	9.01	6.9	5.69	14.1	70.17	824	70	1958	700+	1900+
12400	1140	481089	6672832	992	30.95	26.21	23.49	19.92	17.03	15.01	13.44	11.11	9.41	7.95	6.71	14.28	52.88	824	22	1554	700+	1900+
12400	1160	481089	6672853	991	25.28	22.65	19.26	16.59	14.55	11.96	10.06	8.78	7.28	5.56	4.42	11.17	33.43	824	68	1029	700+	1900+
12400	1180	481091	6672872	995	28.57	25.4	21.96	18.66	16.46	14.07	11.61	9.41	7.53	6.22	5.05	13.13	52.38	824	59	1677	700+	1900+
12400	1200	481091	6672893	991	31.56	28.54	24.8	21.82	18.92	15.92	14.04	11.91	9.64	8.64	7.27	15.23	67.89	824	62	2248	700+	19

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
12400	1620	481091	6673312	1011	25.35	21.96	19.45	17.26	14.71	12.59	9.94	8.21	6.78	5.59	4.36	11.44	69.5	824	90	1118	700+	1900+
12400	1640	481091	6673333	1020	25.2	21.93	19.2	16.55	14.21	11.93	10.12	8.45	6.95	5.67	4.62	11.25	74.76	824	95	1081	700+	1900+
12400	1660	481090	6673351	1027	27.63	24.01	21.16	18.19	15.54	13.13	11.05	9.19	7.58	6.2	5.06	12.3	97.36	824	75	1256	700+	1900+
12400	1680	481091	6673372	1026	30.23	26.47	23.19	19.94	17.07	14.34	12.08	10.02	8.29	6.85	5.6	13.41	107.43	824	71	1228	700+	1900+
12500	920	481190	6672612	998	24.77	21.59	18.85	16.08	13.73	11.74	9.87	8.27	6.77	5.58	4.52	10.98	114.72	830	-113	992	700+	1900+
12500	940	481190	6672632	995	25.92	22.71	19.65	17.37	14.62	12.30	10.46	8.7	7.31	5.95	4.78	11.56	94.64	830	-87	965	700+	1900+
12500	960	481190	6672652	996	26.42	23.4	19.91	17.6	14.89	12.61	10.61	8.78	7.44	5.94	4.78	11.73	73.28	830	-79	866	700+	1900+
12500	980	481190	6672672	994	27.19	24.09	21.03	18.16	15.81	13.19	10.8	9.16	7.68	6.17	5.3	12.29	76.45	830	-67	1033	700+	1900+
12500	1000	481190	6672692	995	28.23	25.14	21.52	18.98	16.3	13.79	11.58	9.35	7.72	6.31	5.16	13.02	69.91	830	-40	1067	700+	1900+
12500	1020	481190	6672712	995	29.01	25.9	22.84	19.74	16.92	14.29	11.85	10.09	8.34	6.82	5.57	13.27	65.78	830	-61	1122	700+	1900+
12500	1040	481190	6672732	993	29.81	25.98	23.29	20.08	17.12	14.58	12.2	10.2	8.35	6.76	5.89	13.8	62.35	830	-78	1176	700+	1900+
12500	1060	481190	6672752	991	30.04	26.22	23.91	20.82	17.47	14.80	12.67	10.57	8.97	7.31	6.3	13.9	61.57	830	-67	1272	700+	1900+
12500	1080	481190	6672772	993	30.74	26.13	23.65	20.25	17.32	14.61	12.34	10.45	8.84	7.2	5.75	13.67	60.66	830	-68	1361	700+	1900+
12500	1100	481190	6672792	995	30.5	27.07	23.4	20.98	17.79	15.11	12.95	10.83	8.83	7.59	6.34	14.31	54.38	830	-65	1315	700+	1900+
12500	1120	481190	6672812	995	30.63	26.87	23.58	20.26	18.22	14.81	12.65	10.38	8.62	6.89	6.33	14.14	52.14	830	-67	1347	700+	1900+
12500	1140	481190	6672832	990	31.18	26.72	23.77	20.27	18.27	14.81	11.71	10.89	8.94	5.54	5.96	13.63	48.32	830	-46	1324	700+	1900+
12500	1160	481190	6672852	990	29.47	26.74	24.09	19.61	17.5	14.80	12.39	10.63	8.85	7.28	5.89	14.01	60.63	830	-34	1748	700+	1900+
12500	1180	481190	6672872	988	29.79	25.73	22.55	19.66	16.64	14.40	11.92	9.94	8.12	6.76	5.59	13.39	61.59	830	-47	1857	700+	1900+
12500	1200	481191	6672892	986	27.09	25.29	22.32	18.06	15.99	13.41	11.66	9.59	8.02	6.54	5.58	12.68	49.55	830	-53	1550	700+	1900+
12500	1220	481190	6672912	990	28.15	24.81	21.45	18.81	15.81	12.34	10.05	8.34	7.01	5.66	5.64	11.39	51.81	830	-52	1671	700+	1900+
12500	1240	481190	6672932	989	28.37	24.39	21.75	18.79	16.11	13.42	11.56	9.55	7.63	6.63	5.7	12.56	43.16	830	-55	1425	700+	1900+
12500	1260	481191	6672952	990	27.45	24.14	21.02	17.96	15.61	13.34	11.12	9.44	8.11	6.63	5.43	12.44	39.68	830	-55	1332	700+	1900+
12500	1280	481190	6672972	990	26.59	23.14	20.42	17.65	15.16	12.54	10.91	9.19	8.03	6.24	5.03	11.79	43.47	830	-52	1474	700+	1900+
12500	1300	481190	6672992	992	26.21	23.44	20.41	16.94	15.08	12.41	10.63	8.54	7.29	5.83	4.66	11.77	45.22	824	79	1550	700+	1900+
12500	1320	481190	6673012	991	26.82	22.61	19.5	17.36	14.9	12.38	10.46	8.58	7.18	5.7	4.62	11.42	42.78	824	77	1461	700+	1900+
12500	1340	481190	6673032	989	24.72	21.45	19.79	16.77	14.26	11.98	10.44	8.51	7.12	5.89	4.88	11.35	43.13	824	52	1459	700+	1900+
12500	1360	481190	6673051	992	25.08	22.1	19.24	16.37	14.25	11.93	10.02	8.53	7.09	5.9	4.9	11.22	51	824	88	1696	700+	1900+
12500	1380	481190	6673072	992	26.94	23.8	20.79	17.98	14.96	12.73	10.56	8.94	7.35	6.25	4.81	12.05	55.74	824	100	1811	700+	1900+
12500	1400	481189	6673092	993	27.79	24.1	21.61	18.56	16.01	13.14	11.18	9.36	7.68	6.46	5.32	12.36	52.23	824	103	1646	700+	1900+
12500	1420	481190	6673112	992	25.97	22.52	19.55	17.2	14.67	12.39	10.22	8.7	7.09	5.89	4.71	11.47	38.97	824	82	1183	700+	1900+
12500	1440	481190	6673132	989	25.14	22.67	19.59	16.38	14.39	12.21	10.27	8.57	7.12	6.04	4.88	11.36	41.71	824	97	1212	700+	1900+
12500	1460	481190	6673152	992	25.03	21.88	18.48	16.42	13.79	11.90	9.99	8.25	6.88	5.63	4.57	11.22	52.54	824	100	1450	700+	1900+
12500	1480	481190	6673172	992	24.99	22.02	19.4	16.79	14.55	12.15	10.4	8.3	6.61	5.68	4.78	11.45	68.74	824	85	1788	700+	1900+
12500	1500	481190	6673192	987	24.88	21.77	19.08	16.3	14.29	11.91	9.9	8.53	7.07	5.91	4.85	11.12	77.75	824	93	1893	700+	1900+
12500	1520	481189	6673212	995	24.21	21.18	18.9	15.78	13.81	11.74	9.77	8.18	6.33	5.14	4.27	10.96	72.01	824	100	1628	700+	1900+
12500	1540	481190	6673232	999	24.37	21.16	18.24	16.26	13.64	11.67	9.78	7.97	6.68	5.5	4.39	10.86	71.47	824	114	1488	700+	1900+
12500	1560	481190	6673252	998	24.65	21.74	18.65	16.19	13.57	11.50	9.8	8.2	6.79	5.55	4.54	10.83	84.66	824	72	1609	700+	1900+
12500	1580	481190	6673272	999	24.39	20.97	18.38	16.14	13.48	11.32	9.91	8.05	6.91	5.49	4.67	10.74	101.7	824	57	1747	700+	1900+
12500	1600	481190	6673292	1001	24.02	20.68	18.55	15.83	13.57	11.48	9.62	7.94	6.59	5.52	4.48	10.7	109.7	824	-75	1687	700+	1900+
12500	1620	481190	6673311	1003	24.57	21.1	18.81	16.23	13.85	11.76	10.4	8.11	6.5	5.58	4.45	11.26	119.71	824	-78	1630	700+	1900+
12500	1640	481190	6673331	1002	24.63	22.07	19.91	16.66	14.33	11.96	10.03	8.45	7.1	5.8	4.76	11.17	121.43	824	-94	1446	700+	1900+
12500	1660	481190	6673352	1006	26.63	23.38	20.29	17.63	15	12.81	10.52	8.84	7.51	5.88	4.92	11.89	125.2	824	84	1285	700+	1900+
12500	1680	481191	6673372	1005	28.38	24.65	21.64	18.72	15.5	13.52	11.36	9.43	7.8	6.39	5.2	12.64	162.45	824	94	1416	700+	1900+
12500	1700	481190	6673392	1002	27.73	24.4	21.26	18.28	15.66	13.25	11.15	9.12	7.42	6.17	4.88	12.43	156.05	824	94	1133	700+	1900+
12600	900	481289	6672592	997	22.38	19.47	17.16	14.86	12.62	10.65	8.98	7.46	6.17	5.04	4.04	10.01	91.65	824	-103	922	700+	1900+
12600	920	481291	6672612	990	24.89	21.88	18.94	16.35	14	11.76	9.95	8.25	6.74	5.57	4.42	11.07	93.97	824	-102	1074	700+	1900+
12600	940	481290	6672631	991	26.03	22.99	20.23	17.61	14.83	12.79	10.85	9.08	7.71	6.56	5.9	12.06	71.92	824	-28	928	700+	1900+
12600	960	481290	6672652	996	27.2	23.89	20.61	18.09	15.32	13.08	11.04	9.14	7.52	6.34	5.2	12.37	67.66	824	-41	978	700+	1900+
12600	980	481289	6672672	994	27.83	24.98	21.76	18.69	16.06	13.59	11.37	9.62	7.83	6.58	5.38	12.75	64.34	824	-25	1035	700+	1900+
12600	1000	481291	6672691	994	29.6	26.1	21.78	19.29	16.03	13.62	11.42	9.35	7.62	6.33	5.16	12.8	60.61	824	-31	1077	700+	1900+
12600	1020	481290	6672713	993	29.12	25.82	22.17	19.54	16.85	14.25	12.1	9.86	8.21	6.77	5.42	13.41	63.95	824	-60	1246	700+	1900+
12600	1040	481289	6672732	990	29.55	24.67	22.32	19.51	16.67	14.01	11.8	9.92	8.26	6.77	5.54	13.08	56.51	824	-69	1199	700+	1900+
12600	1060	481289	6672752	991	29.77	25.86	23.1	19.64	16.83	14.39	12.2	10.16	8.41	6.84	5.61	13.63	57.15	824	-76	1312	700+	1900+
12600	1080	481290	6672773	993	29.84	25.98	23.03	20	17.02	14.64	12.25	10.36	8.66	7	6.12	13.65	56.14	824	-45	1384	700+	1900+
12600	1100	481291	6672792	990	29.71	26.48	23.28	20	17.3	14.73	12.48	10.41	8.59	7.08	5.98	13.89	54.83	824	-55	1443	700+	1900+
12600	1120	48																				

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
12600	1520	481291	6673212	994	21.94	18.48	16.76	14.36	12.31	10.62	8.88	7.17	6.32	5.18	4.19	10	55.51	824	-52	1368	700+	1900+
12600	1540	481289	6673232	994	22.6	19.49	16.6	14.9	12.3	10.80	8.84	7.1	5.83	4.77	3.86	10.03	66.48	824	-77	1526	700+	1900+
12600	1560	481290	6673253	993	21.73	18.87	16.15	13.98	11.86	10.25	8.53	7.01	5.79	4.7	3.9	9.59	75.08	824	-97	1593	700+	1900+
12600	1580	481289	6673272	994	20.46	17.45	15.23	13.12	11.18	9.31	7.85	6.54	5.43	4.48	3.62	8.72	75.18	824	-65	1465	700+	1900+
12600	1600	481289	6673292	992	20.02	17.63	15.19	13.19	11.04	9.37	8.37	6.52	5.23	4.41	3.49	8.8	80.12	824	-72	1424	700+	1900+
12600	1620	481289	6673311	991	20.45	19.13	15.82	14.45	12.25	10.22	8.5	7.09	5.91	4.91	3.93	9.54	82.61	824	-69	1329	700+	1900+
12600	1640	481289	6673331	997	27.02	24.27	20.77	18.21	15.52	13.30	11.29	9.39	7.75	6.32	5.12	12.61	79.34	824	-68	1147	700+	1900+
12600	1660	481290	6673353	997	35.62	31.24	27.75	24.42	20.94	17.95	15.28	12.94	10.79	8.84	7.2	16.91	77.54	824	-65	1000	700+	1900+
12600	1680	481289	6673372	998	37.01	32.51	28.73	25.2	21.82	18.48	15.48	13.06	10.85	9.03	7.5	17.29	102.66	824	-75	1174	700+	1900+
12600	1700	481290	6673392	996	28.87	25.3	22.3	19.34	16.51	14.12	11.83	9.92	8.29	6.78	5.56	13.25	133.93	824	-101	1348	700+	1900+
12700	900	481390	6672592	993	23.96	20.66	17.89	15.58	13.1	11.14	9.23	7.55	6.1	4.96	3.87	10.37	55.93	830	52	1083	700+	1900+
12700	920	481390	6672612	991	25.82	22.65	20.15	17.36	14.79	12.55	10.63	8.8	7.18	5.86	4.8	11.76	53.16	830	79	1077	700+	1900+
12700	940	481390	6672632	993	28.05	24.53	21.66	18.72	15.93	13.38	11.1	9.31	7.65	6.24	5.08	12.47	50.56	830	71	1076	700+	1900+
12700	960	481391	6672652	994	29.98	26.51	22.92	19.98	16.97	14.43	12.15	10.12	8.36	6.85	5.58	13.51	50.7	830	44	1139	700+	1900+
12700	980	481392	6672673	992	30.17	27.07	23.29	19.85	17.16	14.36	12.25	10.18	8.32	6.9	5.63	13.57	48.42	830	81	1148	700+	1900+
12700	1000	481390	6672692	991	30.01	25.97	22.12	20	16.47	14.34	12	10.11	8.39	6.67	5.54	13.16	42.15	824	69	1064	700+	1900+
12700	1020	481390	6672711	991	29.32	25.93	22.06	19.46	16.35	14.09	12.07	10.55	8.53	6.96	5.52	13.25	45.01	824	89	1199	700+	1900+
12700	1040	481391	6672732	990	29.47	26.23	22.99	19.93	16.67	14.39	12.32	10.25	8.37	7.06	5.51	13.61	42.4	824	84	1190	700+	1900+
12700	1060	481391	6672752	992	30.44	25.82	22.51	19.94	17.34	14.38	11.9	10.08	8.55	7.17	5.92	13.46	46.65	824	86	1376	700+	1900+
12700	1080	481390	6672772	992	30.14	26.33	23.37	19.99	17.18	14.64	12.28	10.19	8.71	7.01	5.74	13.7	51.58	824	86	1594	700+	1900+
12700	1100	481390	6672792	991	29.97	26.18	22.88	20.23	17.4	14.76	11.87	10.02	8.33	6.99	5.6	13.5	43.71	824	89	1411	700+	1900+
12700	1120	481390	6672811	991	28.8	25.77	23.09	19.33	17.16	14.14	11.91	9.9	8.47	6.96	5.71	13.28	44.05	824	96	1481	700+	1900+
12700	1140	481389	6672832	992	28.92	24.55	22.39	18.92	16.58	13.91	11.77	9.4	8.06	6.61	5.23	13.07	49.54	824	75	1727	700+	1900+
12700	1160	481389	6672852	990	28.71	25.03	21.54	18.77	15.78	13.64	11.35	9.66	8.06	6.64	5.39	12.74	51.49	824	41	1855	700+	1900+
12700	1180	481391	6672872	991	27.07	23.91	22.07	18.26	16.42	13.30	11.23	9.22	7.81	6.62	5.68	12.52	44.24	824	72	1640	700+	1900+
12700	1200	481390	6672893	992	26.9	23.97	20.84	18.12	15.62	13.04	10.68	8.99	7.66	6.73	5.73	12.23	41.01	824	65	1557	700+	1900+
12700	1220	481390	6672911	990	27.56	24.34	21.38	18.02	15.77	13.19	10.94	9.07	7.63	6.47	5.35	12.33	42.85	824	58	1660	700+	1900+
12700	1240	481391	6672932	988	26.75	23.64	21.29	18.1	15.8	13.11	10.98	9.11	7.5	6.41	5.01	12.25	51.61	824	58	2031	700+	1900+
12700	1260	481391	6672953	988	26.38	23.29	20.62	17.6	15.34	12.87	10.74	9.32	8.87	7.01	5.65	12.01	45.71	824	71	1819	700+	1900+
12700	1280	481390	6672973	989	25.38	21.66	18.94	16.62	14.43	11.99	10.08	8.51	6.89	5.82	4.77	11.28	35.56	824	77	1425	700+	1900+
12700	1300	481391	6672991	988	24.5	22.48	19.43	16.78	14.05	11.97	10.16	8.33	7.12	5.87	4.65	11.13	42.7	824	64	1715	700+	1900+
12700	1320	481390	6673012	994	25.04	22.77	18.7	17.18	14.35	12.05	10.16	8.4	6.77	5.78	4.82	11.26	41.46	824	80	1661	700+	1900+
12700	1340	481391	6673031	990	24.1	21.94	19.34	16.61	14.13	12.01	10.26	8.25	6.83	5.64	4.51	10.93	34.94	824	101	1391	700+	1900+
12700	1360	481390	6673051	991	25.01	22.31	19.59	16.83	14.25	12.28	10.13	8.47	6.8	5.58	4.21	11.35	31.03	824	88	1221	700+	1900+
12700	1380	481389	6673071	991	25.52	22.62	19.45	17.35	14.57	12.31	10.38	8.69	7.05	5.95	4.76	11.43	34.54	824	101	1338	700+	1900+
12700	1400	481390	6673092	991	25.88	22.6	20.1	17.41	13.76	11.89	9.91	9.03	7.81	5.45	5.17	11.01	41.12	824	103	1562	700+	1900+
12700	1420	481390	6673112	990	24.86	20.94	18.64	15.89	13.68	11.58	9.74	8.07	6.69	5.41	4.32	10.89	47.24	824	77	1751	700+	1900+
12700	1440	481390	6673132	990	23.17	20.07	17.89	15.26	13.04	10.67	8.94	7.73	6.36	5.21	4.23	9.87	43.43	824	68	1564	700+	1900+
12700	1460	481390	6673152	993	25.91	21.04	19.21	16.47	14.31	11.81	9.94	8.01	6.74	5.99	4.95	11.1	42.14	824	60	1469	700+	1900+
12700	1480	481390	6673173	987	26.21	22.44	20.86	17.37	14.54	12.81	10.7	8.46	7.32	5.83	4.57	11.86	53.3	824	50	1792	700+	1900+
12700	1500	481391	6673192	988	25.93	22.02	19.63	16.65	14.12	11.81	10.01	8.33	6.69	5.48	4.39	11.16	58.91	824	61	1902	700+	1900+
12700	1520	481390	6673212	989	23.67	20.43	17.72	15.51	13.06	10.84	9.27	7.88	6.38	5.34	4.3	10.6	50.7	824	66	1567	700+	1900+
12700	1540	481391	6673232	991	22.65	20.24	17.36	14.78	12.73	10.65	9	7.45	5.96	5.11	4.11	9.9	57.85	824	64	1706	700+	1900+
12700	1560	481390	6673252	994	22.43	19.95	17.74	14.9	12.46	10.56	8.81	7.32	5.88	4.92	3.92	9.97	75.97	824	80	2131	700+	1900+
12700	1580	481390	6673272	990	23.01	19.86	17.06	14.86	12.37	10.41	8.67	7.42	6	4.83	3.93	9.77	68	824	78	1811	700+	1900+
12700	1600	481390	6673293	990	22.28	19.26	17.44	14.74	12.46	10.33	8.93	7.24	6.05	4.99	4.13	9.8	61.44	824	54	1551	700+	1900+
12700	1620	481390	6673313	990	22.58	19.56	15.99	14.64	12.21	10.20	8.5	7.33	5.72	4.83	3.7	9.47	64.7	824	56	1546	700+	1900+
12700	1640	481391	6673332	989	23.03	19.03	16.78	14.53	12.3	10.45	9.48	7.35	6.21	5.07	4.18	10.05	60.01	824	76	1357	700+	1900+
12700	1660	481390	6673353	988	22.4	19.62	16.77	14.44	12.18	10.18	8.41	6.76	5.57	4.37	3.49	9.48	54.42	824	62	1167	700+	1900+
12700	1680	481390	6673373	989	21.05	18.02	15.87	13.56	11.63	9.74	8.27	6.71	5.61	4.41	3.55	9.25	61.14	824	83	1247	700+	1900+
12700	1700	481390	6673392	992	19.89	16.82	14.45	13.19	11.01	9.52	7.9	6.47	5.27	4.3	3.31	8.92	56.44	824	85	1101	700+	1900+
12800	900	481490	6672592	990	22.46	19.53	17.17	14.97	12.83	10.88	9.2	7.64	6.32	5.17	4.23	10.2	109.22	1810	-62	970	700+	1900+
12800	920	481490	6672612	993	24.66	21.6	18.85	16.38	13.91	11.88	9.96	8.29	6.95	5.71	4.66	11.1	137.28	1810	-71	1275	700+	1900+
12800	940	481490	6672632	992	26.07	22.83	20.16	17.55	14.94	12.66	10.64	8.89	7.33	6.12	4.98	11.84	139.83	1810	-66	1365	700+	1900+
12800	960	481490	6672653	992	27.06	23.91	20.89	17.99	15.42	13.05	11.04	9.2	7.61	6.27	5.18	12.26	103.25	1810	-71	1063	700+	1900+
12800	980	481490	6672672	992	27.32																	

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
12800	1380	481489	6673073	988	28.42	25.03	21.34	18.85	15.93	13.73	11.51	9.67	7.94	6.49	5.33	12.89	75.6	1810	-68	1333	700+	1900+
12800	1400	481490	6673092	986	29.29	25.55	22.28	19.54	16.45	13.90	11.75	9.77	8.09	6.64	5.32	13.03	77.62	1810	-74	1342	700+	1900+
12800	1420	481490	6673112	987	29.48	25.83	22.56	19.67	16.7	14.26	11.96	9.99	8.29	6.83	5.45	13.4	109.46	1810	-78	1847	700+	1900+
12800	1440	481490	6673132	987	29.67	25.79	22.27	19.76	16.68	14.29	11.92	9.98	8.27	6.71	5.52	13.36	136.34	1810	-67	2236	700+	1900+
12800	1460	481490	6673152	986	28.53	24.89	21.85	18.68	16.13	13.55	11.38	9.62	7.95	6.61	5.39	12.72	129.22	1830	-51	2029	700+	1900+
12800	1480	481490	6673172	990	27.14	23.56	20.54	17.75	15.07	12.79	10.76	8.99	7.46	6.17	5.05	12.05	128.09	1830	-66	1939	700+	1900+
12800	1500	481491	6673192	989	26.44	23.2	20.26	17.51	14.68	12.65	10.87	8.98	7.48	6.09	4.89	11.94	145.3	1830	-77	2112	700+	1900+
12800	1520	481489	6673212	988	27.17	23.48	20.63	17.83	15.15	12.86	10.81	9.04	7.46	6.16	4.96	12.08	143.59	1830	-67	1998	700+	1900+
12800	1540	481490	6673232	986	26.78	23.44	20.5	17.61	15.21	12.77	10.79	9.03	7.45	6.16	4.96	11.99	173.73	1830	-61	2307	700+	1900+
12800	1560	481491	6673252	984	26.52	23.22	20.11	17.49	14.91	12.57	10.65	8.86	7.36	5.99	4.92	11.82	206.35	1830	-61	2607	700+	1900+
12800	1580	481490	6673272	983	26.53	23.19	20.39	17.59	15.03	12.71	10.65	8.95	7.36	6.06	4.93	11.89	190.69	1830	-79	2287	700+	1900+
12800	1600	481490	6673292	983	26.83	23.37	20.51	17.71	15.08	12.71	10.79	8.91	7.35	6.06	4.93	11.96	182.41	1830	-92	2073	700+	1900+
12800	1620	481490	6673312	982	26.62	23.09	20.35	17.59	15.08	12.72	10.56	8.92	7.33	5.99	4.89	11.88	179.73	1830	-88	1933	700+	1900+
12800	1640	481490	6673332	983	26.18	22.77	20.07	17.38	14.81	12.54	10.55	8.74	7.26	5.9	4.82	11.75	173.66	1830	-78	1769	700+	1900+
12800	1660	481490	6673352	982	26.2	22.89	20.29	17.36	14.89	12.58	10.57	8.84	7.29	6.02	4.89	11.77	153.37	1830	-77	1481	700+	1900+
12800	1680	481489	6673372	984	27.35	23.72	21.06	18.13	15.57	13.11	11.05	9.17	7.65	6.24	5.09	12.27	142.04	1830	-71	1305	700+	1900+
12800	1700	481490	6673392	985	29.14	25.53	22.39	19.32	16.56	14.04	11.76	9.81	8.16	6.67	5.41	13.15	195.71	1830	-58	1719	700+	1900+
12900	900	481591	6672592	989	19.35	17.11	14.92	12.88	11.02	9.33	7.86	6.57	5.46	4.46	3.64	8.77	209.16	1810	68	958	700+	1900+
12900	920	481590	6672611	988	20.45	18.15	15.83	13.61	11.79	9.90	8.31	6.9	5.73	4.72	3.79	9.31	171.8	1810	72	894	700+	1900+
12900	940	481590	6672632	993	22.48	19.66	17.26	14.97	12.75	10.86	9.18	7.56	6.34	5.17	4.23	10.2	191.9	1810	63	1127	700+	1900+
12900	960	481591	6672652	991	24	21.08	18.41	15.98	13.65	11.64	9.8	8.14	6.7	5.52	4.47	10.94	201.48	1810	58	1326	700+	1900+
12900	980	481591	6672672	992	25.64	22.44	19.84	17.13	14.63	12.42	10.53	8.61	7.22	5.97	4.92	11.68	166.63	1810	67	1220	700+	1900+
12900	1000	481589	6672692	991	26.9	23.45	20.89	18.02	15.53	12.92	10.91	9.15	7.55	6.2	5.15	12.14	149.82	1810	69	1212	700+	1900+
12900	1020	481590	6672712	984	27.99	24.71	21.32	18.63	15.95	13.48	11.42	9.56	7.92	6.57	5.4	12.68	127.89	1810	61	1135	700+	1900+
12900	1040	481590	6672732	988	28.89	25.3	22.23	19.39	16.64	14.00	11.76	9.86	8.2	6.77	5.57	13.09	111.89	1810	70	1081	700+	1900+
12900	1060	481590	6672752	987	29.34	25.77	22.62	19.47	16.71	14.23	12.05	10.02	8.29	6.81	5.59	13.38	114.78	1810	63	1199	700+	1900+
12900	1080	481591	6672772	989	30.05	26.33	23.02	19.8	17.04	14.45	12.19	10.26	8.48	6.99	5.71	13.65	115.01	1810	59	1291	700+	1900+
12900	1100	481590	6672791	988	31.19	27.26	24.04	20.85	17.95	15.07	12.86	10.71	8.91	7.31	5.95	14.28	123.95	1810	69	1485	700+	1900+
12900	1120	481590	6672812	985	31.37	27.73	24.13	21.24	17.98	15.45	12.85	10.64	8.92	7.36	6.06	14.37	116.4	1810	47	1478	700+	1900+
12900	1140	481589	6672832	983	31.15	27.23	24.01	20.49	17.84	15.06	12.62	10.49	8.75	7.14	6.01	14.06	114.91	1810	60	1538	700+	1900+
12900	1160	481589	6672852	983	29.47	26.17	23.08	19.68	17.08	14.36	12.08	10.18	8.47	6.95	5.74	13.47	119.03	1810	77	1667	700+	1900+
12900	1180	481590	6672873	985	28.51	24.89	21.88	18.91	16.08	13.67	11.48	9.61	8.03	6.72	5.39	12.65	114.92	1810	57	1675	700+	1900+
12900	1200	481590	6672893	986	29.11	25.59	22.32	19.35	16.58	14.08	11.85	9.96	8.2	6.75	5.52	13.21	90.93	1830	82	1356	700+	1900+
12900	1220	481590	6672911	986	28.23	24.8	21.84	18.79	16.02	13.60	11.41	9.67	8.05	6.53	5.38	12.78	80.85	1830	82	1239	700+	1900+
12900	1240	481590	6672932	983	28.11	24.3	21.58	18.7	15.66	13.46	11.34	9.5	7.88	6.44	5.22	12.61	94.4	1830	91	1477	700+	1900+
12900	1260	481591	6672953	983	28.86	25.18	21.83	19.05	16.37	13.90	11.68	9.69	8.06	6.58	5.43	13.01	99.07	1830	86	1574	700+	1900+
12900	1280	481590	6672972	982	28.01	24.7	21.47	18.71	16.03	13.53	11.51	9.58	7.94	6.56	5.41	12.73	103.48	1830	78	1659	700+	1900+
12900	1300	481590	6672992	980	27.07	23.77	20.59	18.04	15.39	13.05	10.95	9.16	7.63	6.25	5.14	12.19	90.17	1830	84	1450	700+	1900+
12900	1320	481590	6673011	980	27.71	24.13	21.18	18.48	15.84	13.30	11.19	9.41	7.78	6.37	5.22	12.51	93.18	1830	86	1494	700+	1900+
12900	1340	481590	6673032	979	30.31	26.45	23.1	20.1	17.03	14.46	12.17	10.13	8.36	6.92	5.65	13.61	113.75	1830	84	1807	700+	1900+
12900	1360	481590	6673052	981	29.41	25.82	22.7	19.46	16.77	14.22	11.96	9.98	8.19	6.75	5.55	13.37	106.11	1830	79	1661	700+	1900+
12900	1380	481590	6673073	981	28.68	24.86	21.76	18.86	16.19	13.67	11.54	9.6	8	6.56	5.4	12.8	89.41	1830	76	1370	700+	1900+
12900	1400	481589	6673092	979	29.95	26.09	23.04	19.9	17.01	14.47	12.16	10.17	8.42	6.87	5.67	13.56	92.62	1830	88	1381	700+	1900+
12900	1420	481589	6673112	980	30.17	26.63	23.14	20.19	17.35	14.65	12.4	10.13	8.48	6.97	5.7	13.78	86.14	1830	93	1242	700+	1900+
12900	1440	481590	6673131	981	30.98	27	23.34	20.56	17.6	14.83	12.61	10.46	8.58	7.1	5.77	13.97	112.14	1830	86	1554	700+	1900+
12900	1460	481590	6673151	982	29.72	26.51	23.11	19.61	16.91	14.28	12.15	10.03	8.23	6.81	5.52	13.39	148.15	1830	83	1961	700+	1900+
12900	1480	481590	6673171	984	27.57	24.18	21.17	18.26	15.52	13.18	11.12	9.21	7.67	6.27	5.15	12.36	166.41	1830	83	2090	700+	1900+
12900	1500	481590	6673192	984	26.43	22.96	20.1	17.5	14.83	12.67	10.63	8.87	7.24	6.03	4.92	11.85	157.07	1830	87	1861	700+	1900+
12900	1520	481591	6673211	982	26.72	23.52	20.44	17.58	14.96	12.73	10.69	8.88	7.38	6.07	4.86	11.92	166.44	1830	81	1848	700+	1900+
12900	1540	481590	6673231	983	26.62	23.18	19.78	17.86	14.87	12.70	10.73	8.88	7.36	6.07	4.96	11.9	197.66	1830	70	2043	700+	1900+
12900	1560	481591	6673252	985	25.94	22.56	19.78	17.09	14.62	12.35	10.41	8.64	7.15	5.84	4.75	11.57	209.35	1830	84	2000	700+	1900+
12900	1580	481590	6673272	986	25.64	22.54	19.46	16.92	14.38	12.21	10.15	8.49	7.04	5.8	4.72	11.39	231.39	1830	92	2030	700+	1900+
12900	1600	481590	6673292	985	25.68	22.48	19.56	16.87	14.4	12.20	10.23	8.51	6.99	5.7	4.64	11.44	256.8	1830	83	2055	700+	1900+
12900	1620	481591	6673312	985	25.88	22.53	19.84	17.03	14.53	12.28	10.32	8.57	7.06	5.8	4.72	11.47	255.02	1830	93	1847	700+	1900+
12900	1640	481590	6673331	985	26.03	22.66	19.81	17.16	14.55	12.38	10.39	8.65	7.13									

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13000	1240	481690	6672932	978	29.61	25.6	22.26	19.3	16.51	14.13	11.7	9.9	8.14	6.68	5.62	13.04	115.54	1810	-22	1749	700+	1900+
13000	1260	481690	6672952	979	29.32	25.5	22.29	19.48	16.55	14.08	11.83	9.84	8.14	6.64	5.48	13.24	103.64	1860	-77	1440	700+	1900+
13000	1280	481691	6672972	978	28.04	24.53	21.34	18.56	15.83	13.53	11.42	9.48	7.79	6.41	5.34	12.71	84.45	1860	60	1278	700+	1900+
13000	1300	481691	6672992	978	28.53	24.99	21.85	19.04	16.17	13.75	11.6	9.72	8.12	6.63	5.53	12.93	108.95	1860	60	1654	700+	1900+
13000	1320	481690	6673012	974	28.15	24.83	21.76	18.69	15.95	13.61	11.54	9.66	8.06	6.64	5.36	12.79	103.64	1860	63	1569	700+	1900+
13000	1340	481690	6673032	975	28.37	24.98	21.65	18.86	16.09	13.62	11.57	9.66	7.94	6.48	5.4	12.74	94.83	1860	60	1421	700+	1900+
13000	1360	481690	6673051	975	29.46	26.01	22.7	20.11	17.01	14.42	12.15	10.08	8.4	6.93	5.66	13.5	109.36	1860	66	1611	700+	1900+
13000	1380	481691	6673073	976	30.09	26.42	23.33	19.98	16.97	14.50	12.29	10.04	8.33	6.93	5.59	13.61	92.18	1860	75	1327	700+	1900+
13000	1400	481690	6673092	976	30.16	26.68	23.21	20.08	17.23	14.57	12.27	10.31	8.32	6.9	5.73	13.67	91.91	1860	65	1283	700+	1900+
13000	1420	481691	6673112	976	30.26	26.25	22.72	19.86	17.11	14.47	12.16	10.15	8.45	6.96	5.71	13.47	109.19	1860	65	1469	700+	1900+
13000	1440	481690	6673131	976	29.61	25.71	22.75	19.65	16.92	14.30	12	10.13	8.31	6.75	5.63	13.39	110.8	1860	69	1426	700+	1900+
13000	1460	481690	6673153	978	30.1	26.7	23.48	20	17.29	14.55	12.36	10.3	8.46	6.91	5.7	13.72	110.47	1860	74	1350	700+	1900+
13000	1480	481689	6673172	977	29.86	26.1	22.87	19.78	16.93	14.36	11.99	10.01	8.24	6.84	5.57	13.46	133.25	1860	73	1536	700+	1900+
13000	1500	481688	6673193	982	29.2	25.31	22.35	19.34	16.86	14.09	11.86	9.78	8.26	6.56	5.4	13.2	160.96	1860	72	1736	700+	1900+
13000	1520	481691	6673213	981	28.46	24.64	21.77	18.78	16.15	13.59	11.48	9.47	7.81	6.53	5.27	12.75	175.3	1860	71	1756	700+	1900+
13000	1540	481690	6673232	979	26.56	23.3	20.44	17.69	15.19	12.75	10.68	8.96	7.15	5.98	4.92	11.95	175.63	1860	72	1620	700+	1900+
13000	1560	481691	6673253	977	25.29	22.23	19.46	16.58	14.29	12.04	10.24	8.47	7	5.8	4.79	11.33	167.92	1860	79	1413	700+	1900+
13000	1580	481690	6673273	979	25.73	22.61	19.79	16.95	14.64	12.26	10.13	8.45	6.98	5.77	4.8	11.46	235.37	1860	71	1791	700+	1900+
13000	1600	481690	6673292	978	25.13	21.99	19.31	16.57	14.16	12.00	10	8.33	6.82	5.64	4.53	11.2	263.4	1860	63	1795	700+	1900+
13000	1620	481689	6673312	977	24.04	21.03	18.4	15.76	13.59	11.45	9.65	8.02	6.63	5.44	4.49	10.87	311.65	1860	77	1880	700+	1900+
13000	1640	481691	6673332	976	23.47	20.7	18.08	15.51	13.22	11.18	9.3	7.78	6.46	5.25	4.26	10.45	349.07	1860	77	1841	700+	1900+
13000	1660	481690	6673353	976	24.04	20.88	18.21	15.74	13.36	11.32	9.49	7.88	6.46	5.28	4.31	10.59	366.19	1860	69	1666	700+	1900+
13000	1680	481690	6673372	977	24.67	21.53	18.84	16.18	13.8	11.66	9.8	8.16	6.69	5.48	4.44	10.92	402.79	1860	58	1555	700+	1900+
13000	1700	481690	6673392	980	25.23	22.1	19.35	16.65	14.25	12.01	10.04	8.37	6.92	5.65	4.6	11.23	416.41	1860	67	1340	700+	1900+
13100	900	481790	6672593	984	17.07	14.77	12.98	11.3	9.67	8.27	6.97	5.86	4.89	3.97	3.27	7.76	196.21	1860	-68	875	700+	1900+
13100	920	481789	6672612	982	19.59	17.18	15.09	13.08	11.2	9.52	8.03	6.7	5.56	4.56	3.73	8.93	180.38	1860	-64	914	700+	1900+
13100	940	481789	6672632	980	21.67	18.94	16.74	14.36	12.36	10.45	8.81	7.33	6.07	5	4.09	9.81	243.11	1860	-70	1390	700+	1900+
13100	960	481790	6672652	980	23.65	20.61	18.35	15.75	13.55	11.46	9.63	8.05	6.64	5.43	4.51	10.74	221.01	1860	-69	1416	700+	1900+
13100	980	481790	6672672	981	25.49	22.29	19.62	16.99	14.55	12.34	10.39	8.64	7.2	5.92	4.87	11.59	171.44	1860	-68	1222	700+	1900+
13100	1000	481790	6672692	982	24.56	21.77	19.11	16.49	14.15	12.04	10.11	8.49	7.12	5.78	4.77	11.29	147.36	1860	-61	1160	700+	1900+
13100	1020	481790	6672712	984	24.33	21.3	18.59	16.17	13.85	11.74	9.91	8.28	6.88	5.67	4.65	11.04	117.76	1860	-56	1017	700+	1900+
13100	1040	481790	6672732	983	25.36	22.43	19.59	16.93	14.52	12.35	10.45	8.69	7.24	5.95	4.9	11.6	112.84	1860	-73	1061	700+	1900+
13100	1060	481790	6672752	983	25.79	22.79	20.05	17.31	14.83	12.63	10.67	8.84	7.34	6.06	4.97	11.84	109.67	1860	-78	1115	700+	1900+
13100	1080	481791	6672772	984	25.81	22.78	19.94	17.19	14.85	12.59	10.67	8.93	7.37	6	4.92	11.85	91.71	1860	-74	1002	700+	1900+
13100	1100	481791	6672792	986	26.43	23.14	20.38	17.51	15	12.82	10.81	9.02	7.47	6.17	5.05	12.01	97.8	1860	-71	1140	700+	1900+
13100	1120	481790	6672812	982	26.66	23.39	20.71	17.78	15.4	13.03	10.97	9.14	7.56	6.25	5.17	12.21	101.97	1860	-62	1260	700+	1900+
13100	1140	481790	6672832	980	27.36	23.91	20.3	18.09	15.44	13.09	11.1	9.28	7.72	6.32	5.19	12.27	99.37	1860	-58	1294	700+	1900+
13100	1160	481790	6672852	978	26.47	23.08	20.23	17.71	15.13	12.82	10.78	9.04	7.52	6.19	5.09	12.03	106.6	1860	-81	1453	700+	1900+
13100	1180	481790	6672872	978	26.1	22.79	19.9	17.33	14.89	12.56	10.67	8.94	7.43	6.12	5.05	11.8	93	1860	-86	1319	700+	1900+
13100	1200	481790	6672892	977	25.98	22.57	19.81	17.43	14.86	12.65	10.73	9.09	7.51	6.15	5.08	11.83	90.81	1860	-72	1332	700+	1900+
13100	1220	481790	6672912	979	26.82	23.38	20.72	17.75	15.21	12.89	10.81	8.98	7.43	6.11	5.01	12.12	95.38	1860	-70	1438	700+	1900+
13100	1240	481791	6672932	981	26.72	23.85	21.13	17.92	15.49	13.13	11.04	9.18	7.66	6.34	5.2	12.28	91.2	1860	-76	1404	700+	1900+
13100	1260	481790	6672952	978	28.25	24.76	21.72	18.8	16.04	13.59	11.46	9.52	7.8	6.43	5.21	12.83	121.77	1860	-71	1904	700+	1900+
13100	1280	481791	6672972	975	29.13	25.33	22.41	19.15	16.54	14.04	11.76	9.85	8.08	6.68	5.49	13.15	124.89	1860	-70	1970	700+	1900+
13100	1300	481790	6672992	975	29.31	25.67	22.37	19.53	16.79	14.17	11.97	9.93	8.33	6.79	5.55	13.29	95.08	1860	-77	1505	700+	1900+
13100	1320	481790	6673012	972	28.67	25.41	22.15	19.26	16.51	13.98	11.74	9.86	8.16	6.73	5.52	13.03	91.12	1860	-74	1437	700+	1900+
13100	1340	481790	6673032	971	27.7	24.41	21.65	18.47	15.88	13.45	11.35	9.41	7.73	6.44	5.36	12.58	90.01	1860	-66	1407	700+	1900+
13100	1360	481790	6673052	973	29.38	25.91	22.81	19.76	17.04	14.58	12.29	10.26	8.56	7.07	5.83	13.62	81.14	1860	-78	1249	700+	1900+
13100	1380	481790	6673072	976	28.61	25.09	22	19.15	16.39	13.96	11.77	9.75	8.08	6.72	5.44	13.1	89.29	1860	-80	1346	700+	1900+
13100	1400	481790	6673092	973	26.38	22.72	19.94	17.4	14.6	12.42	10.58	8.69	7.24	5.84	4.84	11.67	95.57	1860	-65	1402	700+	1900+
13100	1420	481790	6673112	974	28.32	24.29	21.54	18.7	15.87	13.48	11.37	9.49	7.85	6.45	5.26	12.65	93.3	1860	-66	1323	700+	1900+
13100	1440	481790	6673131	973	29.27	25.34	22.52	19.54	16.58	14.13	11.88	9.89	8.16	6.78	5.5	13.18	88.34	1860	-80	1204	700+	1900+
13100	1460	481790	6673152	976	30.7	26.86	23.72	20.44	17.55	14.79	12.48	10.43	8.62	7.08	5.75	13.86	98.58	1860	-78	1284	700+	1900+
13100	1480	481790	6673172	974	31.62	27.69	24.37	21.13	18.14	15.26	12.82	10.64	8.88	7.31	5.89	14.28	111.44	1860	-72	1377	700+	1900+
13100	1500	481790	6673192	974	30.87	27.41	23.9	20.67	17.58	15.10	12.59	10.53	8.71	7.22	5.86	14.1	103.69	1860				

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13200	1100	481890	6672792	983	26.01	22.88	20.08	17.33	14.92	12.61	10.65	8.9	7.42	6.07	4.95	11.84	79.61	1860	62	1139	700+	1900+
13200	1120	481890	6672812	983	25.38	22.1	19.4	16.88	14.52	12.22	10.35	8.59	7.14	5.89	4.87	11.49	62.36	1860	67	929	700+	1900+
13200	1140	481890	6672832	984	25.27	22.22	19.43	16.93	14.41	12.36	10.42	8.57	7.12	5.98	4.87	11.63	70.77	1860	77	1093	700+	1900+
13200	1160	481890	6672853	985	25.3	22.04	19.26	16.76	14.32	12.16	10.21	8.59	7.11	5.83	4.75	11.38	79.72	1860	67	1272	700+	1900+
13200	1180	481890	6672872	981	25.46	22	19.1	16.74	14.07	11.98	10.08	8.47	7.01	5.79	4.73	11.2	80.12	1860	71	1316	700+	1900+
13200	1200	481890	6672892	978	25.75	22.41	20.01	17.11	14.71	12.44	10.61	8.78	7.28	5.95	4.9	11.72	85.77	1860	73	1443	700+	1900+
13200	1220	481890	6672912	982	26.11	22.88	20.52	17.26	14.92	12.53	10.58	8.88	7.3	6.03	4.88	11.77	83.52	1860	75	1433	700+	1900+
13200	1240	481890	6672932	986	25.84	22.81	19.91	17.25	14.79	12.47	10.72	8.95	7.46	6.12	5.14	11.83	69.01	1860	75	1203	700+	1900+
13200	1260	481891	6672952	982	26.44	23.28	20.23	17.45	14.91	12.71	10.59	8.89	7.35	6.1	4.98	11.91	75.89	1860	72	1338	700+	1900+
13200	1280	481890	6672972	982	27.52	24.35	21.24	18.28	15.47	13.24	11.1	9.41	7.67	6.38	5.19	12.42	96.88	1860	73	1720	700+	1900+
13200	1300	481890	6672992	981	28.1	24.37	21.97	18.56	16.63	13.33	11.41	9.57	7.87	6.47	5.3	12.64	99.06	1860	68	1762	700+	1900+
13200	1320	481890	6673012	980	27.35	23.89	21.29	18.31	15.64	13.17	11.1	9.29	7.74	6.26	5.09	12.32	95.18	1860	47	1689	700+	1900+
13200	1340	481890	6673032	978	27.19	23.52	20.76	18.01	15.24	13.08	10.91	9.12	7.55	6.25	5.23	12.21	93.54	1860	70	1649	700+	1900+
13200	1360	481890	6673052	978	26.95	23.86	20.53	17.96	15.24	13.10	10.97	9.25	7.74	6.26	5.09	12.27	82.87	1860	70	1445	700+	1900+
13200	1380	481891	6673072	978	27.34	23.93	20.4	18.24	15.64	13.10	11.07	9.21	7.69	6.27	5.16	12.24	81.51	1860	69	1399	700+	1900+
13200	1400	481890	6673092	977	27.22	24.38	21.14	18.19	15.62	13.22	11.25	9.49	7.81	6.35	5.31	12.48	81.82	1860	69	1377	700+	1900+
13200	1420	481890	6673112	975	27.18	24.08	20.95	18.14	15.55	13.32	11.26	9.35	7.7	6.46	5.32	12.46	76.18	1860	68	1251	700+	1900+
13200	1440	481890	6673132	974	27.96	24.51	21.72	18.62	15.98	13.44	11.52	9.51	8.08	6.43	5.47	12.74	85.3	1860	56	1361	700+	1900+
13200	1460	481890	6673152	973	28.34	24.29	21.47	18.72	16.63	13.74	11.52	9.45	8.09	7.06	5.51	12.85	83.78	1860	62	1294	700+	1900+
13200	1480	481890	6673172	970	28.19	24.69	21.83	18.68	16.02	13.74	11.54	9.59	7.99	6.41	5.18	12.89	79.72	1860	68	1187	700+	1900+
13200	1500	481890	6673192	972	29.45	26.04	23.08	19.48	17	14.23	12.05	10.08	8.31	6.81	5.66	13.33	99.57	1860	84	1424	700+	1900+
13200	1520	481890	6673212	974	29.38	25.95	22.82	19.76	16.77	14.26	12.07	10.08	8.28	6.86	5.6	13.37	93.38	1860	35	1278	700+	1900+
13200	1540	481891	6673232	968	29.33	26.09	22.59	19.56	16.8	14.16	11.95	9.84	8.23	6.77	5.45	13.27	97.5	1860	62	1274	700+	1900+
13200	1560	481890	6673252	973	29.32	25.61	22.47	19.43	16.56	14.03	11.74	9.74	8.07	6.6	5.39	13.16	91.53	1860	123	1138	700+	1900+
13200	1580	481891	6673272	974	27.89	24.51	21.27	18.51	15.71	13.26	11.3	9.34	7.71	6.34	5.25	12.55	98.59	1860	77	1163	700+	1900+
13200	1600	481890	6673292	972	27.71	23.94	21.35	18.36	15.84	13.19	11.2	9.3	7.77	6.39	5.18	12.49	119.56	1860	71	1337	700+	1900+
13200	1620	481890	6673312	972	27.16	23.78	20.81	17.98	15.33	13.00	10.87	9.12	7.5	6.16	5.07	12.1	110.23	1860	79	1167	700+	1900+
13200	1640	481890	6673332	972	26.21	22.91	20.05	17.5	14.74	12.55	10.58	8.79	7.26	5.94	4.84	11.75	124.24	1860	84	1245	700+	1900+
13200	1660	481890	6673352	972	25.96	22.6	19.55	16.89	14.42	12.19	10.17	8.61	7.05	5.86	4.71	11.38	133.07	1860	76	1264	700+	1900+
13200	1680	481890	6673372	972	25.42	22.05	19.34	16.63	14.09	12.08	10.13	8.43	6.94	5.72	4.67	11.32	139.93	1860	72	1265	700+	1900+
13200	1700	481890	6673392	973	23.64	20.76	18.12	15.57	13.13	11.19	9.34	7.77	6.42	5.27	4.3	10.43	143.07	1860	54	1237	700+	1900+
13300	900	481890	6672592	979	18.38	16.24	14.34	12.25	10.64	8.98	7.51	6.39	5.31	4.41	3.56	8.43	86.16	1148	-31	1207	700+	1900+
13300	920	481991	6672612	984	19.17	17.01	15.04	12.88	11.02	9.35	7.91	6.7	5.54	4.48	3.77	8.8	97.24	1148	11	1424	700+	1900+
13300	940	481989	6672632	985	19.89	17.56	15.35	13.31	11.36	9.58	8.07	6.68	5.52	4.54	3.69	9.02	73.77	1148	28	1136	700+	1900+
13300	960	481990	6672653	987	19.37	16.9	14.99	12.92	10.93	9.39	8.14	6.88	5.82	4.69	3.68	8.92	57.17	1148	29	928	700+	1900+
13300	980	481990	6672672	985	20.91	19.75	16.92	13.61	11.4	9.53	8.26	6.45	5.16	4.67	3.26	9.05	76.84	1148	-80	1318	700+	1900+
13300	1000	481990	6672692	979	21.81	19.12	16.82	14.57	12.53	10.32	8.65	7.35	6.09	5.05	4.1	9.66	72.82	1148	104	1319	700+	1900+
13300	1020	481990	6672712	979	22.62	19.84	17.47	16.02	12	11.04	9.29	7.68	6.33	5.23	4.17	10.34	59.19	1148	-106	1131	700+	1900+
13300	1040	481990	6672733	974	24.19	21.1	18.45	16	13.78	11.62	9.82	8.19	6.71	5.38	4.39	10.9	55.91	1148	-85	1126	700+	1900+
13300	1060	481990	6672752	975	23.05	19.91	17.72	15.25	13.13	11.19	9.33	7.67	6.45	5.21	4.1	10.46	45.28	1148	-81	958	700+	1900+
13300	1080	481990	6672772	978	24.56	21.69	18.68	16.35	13.82	11.96	10	8.53	7.14	6.04	4.56	11.2	48.16	1148	-71	1068	700+	1900+
13300	1100	481990	6672793	979	25.22	22.2	19.77	16.57	14.36	11.98	9.86	8.72	7.01	5.88	4.94	11.1	56.4	1148	-78	1307	700+	1900+
13300	1120	481990	6672812	979	24.73	21.36	18.73	16.41	13.82	11.83	9.93	8.29	6.89	5.66	4.64	11.05	52.82	1148	-87	1274	700+	1900+
13300	1140	481990	6672832	980	23.89	21.19	18.44	15.91	13.72	11.54	9.59	7.91	6.84	5.66	4.61	10.98	45.56	1148	-89	1140	700+	1900+
13300	1160	481990	6672852	985	24.05	20.65	17.86	15.67	13.04	10.97	9.06	7.46	6.1	5	4.3	10.2	41.9	1148	-76	1083	700+	1900+
13300	1180	481990	6672873	988	22.76	19.96	17.44	15.19	12.84	10.81	9.09	7.62	6.2	5.23	4.19	10.11	40.83	1148	-76	1086	700+	1900+
13300	1200	481990	6672892	986	22.44	19.82	17.36	14.81	12.87	10.74	8.96	7.63	6.15	5.11	4.02	10.09	37.4	1148	-92	1019	700+	1900+
13300	1220	481990	6672912	984	23.52	21.1	18.22	15.59	13.29	11.17	9.5	7.91	6.57	5.36	4.45	10.51	46.62	1148	-102	1296	700+	1900+
13300	1240	481990	6672932	985	23.4	20.36	17.7	15.46	12.99	11.16	9.43	7.9	6.53	5.35	4.44	10.75	50.11	1148	-108	1416	700+	1900+
13300	1260	481990	6672953	984	23.44	20.52	17.63	15.38	13.08	11.13	9.47	7.81	6.37	5.35	4.5	10.5	47.25	1148	-85	1350	700+	1900+
13300	1280	481990	6672972	984	23.97	20.86	18.04	15.9	13.56	11.26	9.54	7.99	6.58	5.2	4.33	10.49	47.37	1148	-63	1362	700+	1900+
13300	1300	481990	6672992	986	23.33	19.99	17.49	15.3	13.07	11.01	9.17	7.66	6.35	5.28	4.37	10.22	45.21	1148	-75	1303	700+	1900+
13300	1320	481990	6673012	986	23.19	20.34	17.26	15.33	13.11	11.06	9.34	7.7	6.29	5.12	4.13	10.41	55.65	1148	-72	1601	700+	1900+
13300	1340	481990	6673032	983	23.89	20.96	18.76	15.6	13.47	11.21	9.49	8.05	6.36	5.28	4.22	10.49	66.57	1148	-83	1902	700+	1900+
13300	1360	481990	6673052	981	23.62	20.69	18.59	15.91	13.99	11.43	9.6	7.93	6.62	5.71	4.03	10.68	50.02	1148	92	1413	700+	1900+
13																						

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13400	960	482090	6672652	974	15.19	13.37	11.65	10.06	8.67	7.34	6.14	5.17	4.26	3.5	2.9	6.9	72.93	1148	65	757	700+	1900+
13400	980	482090	6672672	978	14.42	12.65	10.92	9.62	8.41	7.23	6.03	5.12	4.31	3.56	2.9	6.71	67.86	1148	59	784	700+	1900+
13400	1000	482090	6672692	979	20.54	18	15.68	13.47	11.55	9.85	8.13	6.84	5.68	4.64	3.76	9.22	85.47	1148	55	1090	700+	1900+
13400	1020	482090	6672712	979	23.91	20.82	18.17	15.77	13.3	11.34	9.71	8.16	6.83	5.75	4.79	10.76	101.88	1148	43	1425	700+	1900+
13400	1040	482090	6672732	977	24.01	20.79	18.13	15.8	13.47	11.60	9.76	8.1	6.64	5.42	4.38	10.87	80.1	1148	54	1220	700+	1900+
13400	1060	482090	6672752	978	22.15	19.46	16.97	14.76	12.66	10.75	9.16	7.73	6.44	5.34	4.47	10.11	55.56	1148	49	915	700+	1900+
13400	1080	482090	6672773	978	21.47	19.24	16.66	14.28	12.4	10.49	8.89	7.5	6.27	5.01	4.11	9.92	54.29	1148	71	961	700+	1900+
13400	1100	482091	6672792	976	22.9	19.9	17.46	15.42	13.06	11.16	9.58	8.05	6.69	5.64	4.82	10.49	61.38	1148	67	1159	700+	1900+
13400	1120	482091	6672812	975	23.73	20.58	18.16	15.57	13.32	11.22	9.4	7.8	6.41	5.28	4.24	10.47	53.51	1148	60	1071	700+	1900+
13400	1140	482090	6672832	977	24.62	21.36	18.75	15.7	13.52	11.48	9.75	7.9	6.12	4.59	3.23	10.83	52.65	1148	63	1111	700+	1900+
13400	1160	482090	6672851	979	23.45	20.84	17.84	15.68	13.34	11.62	9.5	8.23	6.74	5.4	4.44	10.84	41.82	1148	59	924	700+	1900+
13400	1180	482090	6672872	973	24.15	21.35	19.22	16.39	14.16	12.05	10.25	8.48	7.06	5.92	4.76	11.31	47.88	1148	71	1100	700+	1900+
13400	1200	482090	6672892	979	25.21	21.63	19.19	16.58	14.33	12.08	10.19	8.51	6.98	5.72	4.79	11.52	63.32	1148	62	1505	700+	1900+
13400	1220	482090	6672912	979	24.68	21.43	18.5	16.31	13.86	11.85	10.04	8.27	6.81	5.65	4.62	11.08	55.17	1148	72	1347	700+	1900+
13400	1240	482090	6672932	981	24.49	21.17	18.01	15.97	13.41	11.55	9.5	8.26	6.73	5.6	4.61	10.76	54.57	1148	79	1361	700+	1900+
13400	1260	482090	6672952	981	23.58	20.64	18.25	15.58	13.47	11.17	9.23	7.75	6.38	5.21	4.35	10.43	56.11	1148	64	1421	700+	1900+
13400	1280	482090	6672972	979	23.02	20.43	18.27	15.37	13.01	10.99	9.33	7.81	6.5	5.45	4.28	10.43	57.4	1148	61	1467	700+	1900+
13400	1300	482090	6672991	980	22.66	20.05	17.43	15.03	12.81	10.92	9.05	7.51	6.48	5.1	4.15	10.2	46.75	1148	45	1198	700+	1900+
13400	1320	482090	6673012	979	22.76	19.24	16.3	14.74	12.75	10.82	9.04	7.69	6.29	5.3	4.52	10.09	53.97	1148	58	1379	700+	1900+
13400	1340	482090	6673033	979	22.33	19.9	17.55	14.96	12.98	10.91	9.1	7.56	6.27	5.12	4.08	10.23	61.08	1148	90	1547	700+	1900+
13400	1360	482090	6673052	979	22.93	20.38	17.36	15.2	12.94	11.05	9.4	7.9	6.62	5.33	4.36	10.36	49.95	1148	81	1246	700+	1900+
13400	1380	482090	6673071	976	22.71	19.55	17.4	14.9	12.56	10.84	9.14	7.53	6.26	5.13	4.15	10.12	57.28	1148	69	1399	700+	1900+
13400	1400	482090	6673091	979	22.35	19.88	17.47	14.85	13.11	10.96	9.25	7.76	6.47	5.24	4.4	10.31	51.47	1148	70	1223	700+	1900+
13400	1420	482090	6673112	979	22.93	20.14	17.34	14.98	12.86	10.86	9.14	7.54	6.2	5.11	4.32	10.2	52.73	1148	57	1212	700+	1900+
13400	1440	482090	6673132	978	23.61	20.13	17.66	15.31	12.67	10.65	9.03	7.88	6.5	5.32	3.97	9.82	68.95	1148	70	1523	700+	1900+
13400	1460	482090	6673152	977	22.72	20	17.21	15.05	12.71	10.99	9.22	7.62	6.36	5.12	4.1	10.32	68.83	1148	82	1452	700+	1900+
13400	1480	482090	6673172	979	22.15	19.58	17	14.71	12.5	10.56	8.64	7.34	5.99	4.93	3.99	9.77	64.35	1148	85	1289	700+	1900+
13400	1500	482090	6673192	979	22.08	19.34	17.08	14.59	12.61	10.68	8.9	7.57	6.09	5.09	4.28	9.95	65.58	1148	65	1238	700+	1900+
13400	1520	482090	6673212	979	22.61	19.94	17.35	15.39	12.87	11.08	9.4	7.65	6.32	5.35	4.2	10.5	73.91	1148	61	1308	700+	1900+
13400	1540	482089	6673232	980	24.11	20.96	18.32	15.97	13.53	11.51	9.81	8.16	6.8	5.61	4.67	10.9	83.76	1148	72	1380	700+	1900+
13400	1560	482090	6673250	975	23.29	20.61	18.13	15.31	13.34	11.36	9.52	7.93	6.58	5.4	4.4	10.71	86.59	1154	-120	1312	700+	1900+
13400	1580	482090	6673272	976	22.8	19.79	17.31	14.83	12.97	10.88	9.21	7.64	6.4	5.22	4.27	10.26	94.39	1154	-72	1313	700+	1900+
13400	1600	482090	6673292	970	22.32	19.59	17.38	14.86	12.98	10.90	9.18	7.73	6.45	5.23	4.36	10.26	102.82	1154	-13	1305	700+	1900+
13400	1620	482090	6673312	969	23.43	20.42	17.86	15.53	13.19	11.32	9.6	8	6.67	5.51	4.58	10.66	108.72	1154	-60	1249	700+	1900+
13400	1640	482090	6673332	971	23.04	20.49	17.66	15.48	13.23	11.18	9.59	8.09	6.75	5.49	4.51	10.53	115.63	1154	-69	1194	700+	1900+
13400	1660	482090	6673352	967	21.1	18.71	16.35	14.03	12.04	10.27	8.67	7.34	6.11	4.99	4.17	9.61	128.67	1154	-82	1185	700+	1900+
13400	1680	482090	6673372	965	20.85	18.01	15.74	13.62	11.65	9.90	8.38	6.91	5.82	4.66	3.87	9.3	153.34	1154	-85	1252	700+	1900+
13400	1700	482090	6673392	967	21	18.11	16.04	13.68	11.71	9.88	8.24	6.84	5.68	4.57	3.7	9.26	172.25	1154	-76	1238	700+	1900+
13500	900	482190	6672591	969	14.31	12.44	10.9	9.45	7.9	6.77	5.65	4.74	3.92	3.21	2.61	6.35	152.28	1148	-91	794	700+	1900+
13500	920	482190	6672612	968	13.53	12.19	10.7	9.02	7.39	6.63	5.69	4.76	3.97	3.26	2.66	6.19	110.87	1148	-85	693	700+	1900+
13500	940	482190	6672632	968	17.21	15.06	13.04	11.41	9.53	8.21	6.95	5.76	4.75	3.9	3.22	7.69	127.8	1148	-96	942	700+	1900+
13500	960	482190	6672652	969	17.72	15.33	13.58	11.78	10.06	8.57	7.31	6.2	5.12	4.24	3.41	8.07	99.99	1148	-83	854	700+	1900+
13500	980	482190	6672672	966	17.41	15.01	12.98	11.25	9.66	8.30	7.08	5.64	4.63	3.89	3.28	7.8	67.55	1148	-77	660	700+	1900+
13500	1000	482190	6672692	967	19.98	17.65	15.64	13.43	11.66	9.81	8.24	6.97	5.8	4.68	3.98	9.2	91.94	1148	-79	1015	700+	1900+
13500	1020	482190	6672712	968	22.91	20.12	17.9	15.31	13.23	11.12	9.32	7.88	6.45	5.3	4.34	10.48	103.9	1148	-70	1281	700+	1900+
13500	1040	482190	6672732	968	22.99	20.08	17.67	15.22	12.94	11.02	9.16	7.67	6.29	5.17	4.24	10.28	69.81	1148	-80	952	700+	1900+
13500	1060	482190	6672752	967	19.59	16.76	14.62	13.17	11.17	9.47	7.94	6.18	5.01	3.97	3.14	8.9	45.74	1148	-72	683	700+	1900+
13500	1080	482191	6672772	968	20.13	17.01	15.79	13.57	11.45	9.56	8.19	6.81	5.62	4.6	3.7	9	50.67	1148	-82	822	700+	1900+
13500	1100	482189	6672792	965	20.45	17.47	15.54	13.71	11.47	9.65	8.17	6.8	5.77	4.44	3.66	9.05	48.91	1148	-71	855	700+	1900+
13500	1120	482190	6672812	965	21.45	18.78	16.62	14.27	12.14	10.31	8.51	7.23	5.97	4.85	3.94	9.68	42.88	1148	-55	801	700+	1900+
13500	1140	482190	6672832	966	22.82	19.52	16.94	14.55	12.66	10.34	8.72	7.19	5.84	4.73	3.87	9.75	53.05	1148	-84	1051	700+	1900+
13500	1160	482190	6672853	970	22.63	19.54	17.89	14.8	13.02	10.70	8.85	7.38	5.83	4.72	3.85	10.04	58.17	1148	-79	1213	700+	1900+
13500	1180	482190	6672872	968	24.25	21.01	18.43	16.08	13.58	11.40	9.7	8.06	6.73	5.43	4.46	10.77	55.18	1148	-78	1203	700+	1900+
13500	1200	482190	6672892	969	23.43	19.78	17.8	15.49	13.11	11.02	9.27	7.65	6.4	5.19	4.17	10.4	53.11	1148	-67	1201	700+	1900+
13500	1220	482190	6672912	969	23.52	20.61	18.03	15.52	13.32	11.23	9.52	7.83	6.33	5.06	3.86	10.55	46.23	1148	73	1078	700+	1900+
13500	1240	482191	6672932	971	23.64	20.49	18.5	15.63	13.56													

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13500	1640	482190	6673332	969	20.63	18.13	15.87	13.78	11.63	9.88	8.35	6.95	5.86	4.78	3.97	9.26	141.88	1154	88	1206	700+	1900+
13500	1660	482189	6673352	969	20.84	18.49	15.91	13.84	11.88	10.08	8.56	7.1	6	4.95	4.11	9.47	173.8	1154	81	1274	700+	1900+
13500	1680	482189	6673372	967	20.23	17.69	15.66	13.57	11.61	9.89	8.42	7.03	5.9	4.83	3.94	9.31	195.24	1154	75	1215	700+	1900+
13500	1700	482190	6673392	967	19.48	17.02	15.11	12.85	11.07	9.36	7.85	6.53	5.42	4.44	3.58	8.78	229.67	1154	80	1191	700+	1900+
13600	900	482291	6672592	970	14.53	12.68	11.04	9.67	8.27	7.03	5.92	4.96	4.08	3.34	2.77	6.57	81.18	1154	-95	583	700+	1900+
13600	920	482290	6672613	970	17.2	15	12.97	11.26	9.41	8.23	6.97	5.64	4.72	4.01	3.28	7.77	91.49	1154	-79	747	700+	1900+
13600	940	482290	6672632	971	18.46	16.03	14.09	12.11	10.33	8.75	7.34	5.97	4.94	4.14	3.3	8.17	102.65	1154	-72	946	700+	1900+
13600	960	482290	6672652	972	18.9	16.35	14.31	12.46	10.62	9.04	7.59	6.37	5.27	4.34	3.6	8.46	76.94	1154	-80	794	700+	1900+
13600	980	482290	6672671	971	20.16	17.41	15.42	13.26	11.32	9.49	7.98	6.63	5.46	4.45	3.76	8.93	72.52	1154	-92	833	700+	1900+
13600	1000	482289	6672692	972	19.77	17.44	15.44	13.19	11.21	9.59	8.09	6.82	5.73	4.59	3.76	8.94	55.87	1154	-92	709	700+	1900+
13600	1020	482290	6672711	977	20.3	17.46	15.3	13.46	11.39	9.58	8.04	6.69	5.66	4.6	3.74	8.99	49.58	1154	-91	690	700+	1900+
13600	1040	482290	6672732	974	21.75	18.98	16.48	14.33	12.07	10.33	8.77	7.34	6.12	5.01	4.14	9.67	69.84	1154	-79	1058	700+	1900+
13600	1060	482291	6672752	974	21.84	18.89	16.88	14.77	12.74	10.51	8.94	6.98	6.36	4.27	3.11	9.93	63.4	1154	-78	1039	700+	1900+
13600	1080	482289	6672771	972	21.39	18.51	16.57	14.06	12.15	10.26	8.55	7.05	6.03	5.01	4.17	9.62	57.7	1154	-85	1016	700+	1900+
13600	1100	482290	6672792	972	22.64	20.29	17.58	15.08	12.99	10.95	8.88	7.21	6.05	4.82	4.07	10.17	67.51	1154	-85	1268	700+	1900+
13600	1120	482290	6672812	972	22.89	19.92	17.2	15.45	12.85	10.96	9.31	7.81	6.41	5.25	4.3	10.31	51.09	1154	-90	1018	700+	1900+
13600	1140	482290	6672832	970	21.7	18.82	16.78	14.56	12.53	10.65	9.09	7.63	6.47	5.28	4.43	10.11	36.07	1154	-89	757	700+	1900+
13600	1160	482289	6672851	970	23.77	21.03	18.28	15.7	13.51	11.30	9.52	7.92	6.45	5.31	4.29	10.65	47.98	1154	-89	1054	700+	1900+
13600	1180	482290	6672873	973	24.21	21.3	18.87	15.98	13.8	11.61	9.76	8.17	6.65	5.27	4.45	10.88	47.21	1154	-87	1079	700+	1900+
13600	1200	482290	6672891	970	23.31	20.38	17.75	15.31	13.25	11.17	9.45	7.85	6.52	5.42	4.47	10.46	50.87	1154	-82	1203	700+	1900+
13600	1220	482290	6672913	970	23.68	20.58	18.02	15.72	13.27	11.17	9.43	7.87	6.52	5.35	4.28	10.49	50.38	1154	-87	1224	700+	1900+
13600	1240	482290	6672931	969	23.38	20.26	17.6	15.62	13.1	11.06	9.49	7.88	6.49	5.21	4.46	10.33	44.42	1154	-86	1102	700+	1900+
13600	1260	482290	6672951	968	22.57	19.64	17.67	14.89	12.8	10.77	9.28	7.79	6.44	5.29	4.19	10.18	43.88	1154	-67	1105	700+	1900+
13600	1280	482289	6672972	969	22.65	19.41	17	14.96	12.61	10.72	8.87	7.72	6.26	5.25	4.42	10	44.53	1154	-79	1132	700+	1900+
13600	1300	482290	6672992	966	21.85	19.21	16.98	14.38	12.2	10.55	8.88	7.56	6.51	5.23	4.42	9.93	40.56	1154	-81	1034	700+	1900+
13600	1320	482291	6673012	968	22.74	20.18	17.56	14.92	12.87	10.92	9.4	7.56	6.33	4.86	4.11	10.41	44.59	1154	-89	1134	700+	1900+
13600	1340	482291	6673032	969	22.49	19.8	17.31	14.66	12.46	10.77	8.97	7.54	6.21	5.16	4.3	10.03	49.4	1154	-84	1245	700+	1900+
13600	1360	482289	6673052	970	21.52	18.88	16.73	14.11	12.13	10.21	8.46	7.15	5.87	4.78	3.84	9.61	45.74	1154	-79	1135	700+	1900+
13600	1380	482290	6673072	970	21.63	18.76	16.56	14.21	12.03	10.15	8.55	7.06	5.8	4.77	3.87	9.53	48.55	1154	-83	1180	700+	1900+
13600	1400	482289	6673092	965	21.37	18.77	16.39	13.95	12.08	10.13	8.49	7.12	5.81	4.76	3.92	9.43	49.79	1154	-88	1177	700+	1900+
13600	1420	482291	6673112	968	21.22	18.64	16.56	14.26	12.36	10.32	8.67	7.23	6.03	4.95	3.98	9.66	57.37	1154	-80	1311	700+	1900+
13600	1440	482290	6673132	967	21.88	19.48	16.54	14.51	12.36	10.38	8.94	7.39	6.17	4.99	4.1	9.77	78.19	1154	-80	1718	700+	1900+
13600	1460	482290	6673153	963	21.44	18.31	16.29	14.37	12.34	10.27	8.71	7.12	5.97	4.87	4.03	9.73	78.22	1154	-73	1641	700+	1900+
13600	1480	482290	6673172	968	20.98	18.28	16.09	13.68	11.72	9.68	8.08	6.97	5.46	4.25	3.47	9	56.96	1154	-93	1135	700+	1900+
13600	1500	482290	6673191	975	19.83	17.52	15.19	13.03	11.28	9.39	8.09	6.73	5.55	4.54	3.66	8.89	58.14	1154	-100	1092	700+	1900+
13600	1520	482289	6673211	972	19.15	16.76	15.03	12.85	11.07	9.20	7.69	6.48	5.18	4.35	3.57	8.66	74.88	1154	5	1318	700+	1900+
13600	1540	482290	6673232	970	19	16.61	14.79	12.56	10.77	9.10	7.64	6.44	5.38	4.41	3.51	8.56	76.78	1154	-33	1258	700+	1900+
13600	1560	482290	6673252	970	19.3	16.65	14.69	12.65	10.82	9.13	7.74	6.34	5.47	4.37	3.62	8.55	75.92	1154	-72	1150	700+	1900+
13600	1580	482291	6673272	973	19.07	17.41	14.77	12.5	10.64	9.11	7.57	6.38	5.26	4.32	3.48	8.43	107.46	1154	-72	1495	700+	1900+
13600	1600	482290	6673293	970	18.85	16.76	14.39	12.46	10.61	8.91	7.42	6.1	5.1	4.27	3.46	8.34	96.62	1154	-76	1226	700+	1900+
13600	1620	482290	6673313	966	18.61	16.19	14.16	12.35	10.49	8.98	7.53	6.25	5.25	4.31	3.5	8.4	76.69	1154	-79	881	700+	1900+
13600	1640	482290	6673332	972	17.45	15.01	13.15	11.43	9.63	8.27	7	5.78	4.79	3.94	3.27	7.76	91.4	1154	-86	944	700+	1900+
13600	1660	482290	6673352	972	16.58	14.59	12.5	10.94	9.34	7.84	6.57	5.46	4.48	3.66	2.89	7.36	85.45	1154	-82	787	700+	1900+
13600	1680	482290	6673372	972	17.68	15.47	13.65	11.75	10.08	8.59	7.23	6	5.02	4.12	3.38	8.07	121.06	1154	-77	988	700+	1900+
13600	1700	482290	6673392	969	19.13	16.52	14.45	12.54	10.65	9.10	7.56	6.33	5.21	4.25	3.4	8.48	178.45	1154	-80	1282	700+	1900+
13700	900	482390	6672592	962	19.19	15.93	13.84	12.51	10.61	8.86	7.92	7.05	5.48	4.05	3.24	8.28	49.03	1154	86	683	700+	1900+
13700	920	482390	6672611	963	18.87	16.51	14.87	12.41	10.7	8.94	7.39	6.12	5.12	4.1	3.23	8.32	47.58	1154	87	693	700+	1900+
13700	940	482390	6672632	961	20.2	17.48	14.73	13.09	11.05	9.42	7.84	6.48	5.25	4.12	3.26	8.7	48.18	1154	107	738	700+	1900+
13700	960	482390	6672653	961	19.75	17.3	14.99	12.81	11.03	9.17	7.54	6.16	5.18	4.08	3.25	8.56	50.72	1154	83	819	700+	1900+
13700	980	482389	6672672	962	20.23	17.53	15.36	12.72	10.55	9.08	8.07	6.41	5.1	4.14	3.65	8.63	49.12	1154	71	838	700+	1900+
13700	1000	482390	6672691	958	21.15	19.01	16.41	14.3	12.04	10.02	8.49	7.05	5.74	4.78	4.06	9.43	46.72	1154	56	842	700+	1900+
13700	1020	482390	6672712	962	21.76	19.5	16.75	14.41	12.52	10.44	8.91	7.84	6.43	5.31	4.95	9.85	46.23	1154	54	879	700+	1900+
13700	1040	482391	6672732	961	22.5	19.84	17.07	14.69	12.44	10.45	8.97	7.77	6.41	5.17	4.3	9.91	48.25	1154	73	967	700+	1900+
13700	1060	482390	6672752	962	21.96	19.69	17.31	15.04	12.93	10.94	9.24	7.73	6.4	5.19	4.37	10.31	43.77	1154	73	922	700+	1900+
13700	1080	482390	6672771	966	23.68	20.66	18.4	15.76	13.92	11.74	9.72	7.87	6.35	5.07	4.62	11	49.8	1154	45	1099	700+	1900+
13700	1100	482390	6672792	974	23.89	21.17	19.59	16.2	14.28	12.06	10.07	8.3										

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13700	1500	482390	6673192	967	20.04	17.38	14.22	12.8	10.95	9.53	7.73	6.38	5.56	4.47	3.76	8.76	43.88	1154	61	1012	700+	1900+
13700	1520	482390	6673211	970	20.32	17.98	15.62	13.5	11.65	9.94	8.22	6.2	5.62	4.7	4.01	9.37	58.29	1154	77	1286	700+	1900+
13700	1540	482391	6673232	970	20.11	17.96	15.96	13.35	11.5	9.69	7.89	6.52	5.43	4.54	3.59	9	74.27	1154	70	1564	700+	1900+
13700	1560	482390	6673253	967	19.14	17.4	15.13	12.62	11	9.33	7.83	6.8	5.41	4.29	3.86	8.83	67.09	1154	71	1344	700+	1900+
13700	1580	482390	6673271	963	20.25	17.68	15.44	13.17	11.44	9.51	8.08	6.83	5.49	4.64	3.59	8.91	71.96	1154	83	1368	700+	1900+
13700	1600	482390	6673291	968	19.31	16.98	14.51	12.44	11.18	9.19	7.73	6.47	5.34	4.18	3.6	8.55	69.37	1154	60	1250	700+	1900+
13700	1620	482389	6673312	969	18.26	15.66	13.73	12.15	10.27	8.75	7.29	5.93	4.97	4.14	3.32	8.09	69.81	1154	75	1191	700+	1900+
13700	1640	482389	6673332	968	18.11	15.98	13.95	12.05	10.24	8.60	7.3	6.1	4.92	4.06	3.11	8.09	74.89	1154	80	1210	700+	1900+
13700	1660	482390	6673353	970	17.1	14.43	13.03	11.31	9.88	8.54	7.08	6.1	5.23	4.05	3.21	7.94	59.08	1154	79	905	700+	1900+
13700	1680	482390	6673371	971	16.78	14.79	13.47	11.31	9.52	8.43	7.13	6.21	5.06	4.1	3.43	8	64.49	1154	99	939	700+	1900+
13700	1700	482390	6673392	971	17.31	14.5	12.21	10.43	8.94	8.34	7.15	5.76	4.94	3.88	2.72	7.88	60.96	1154	90	849	700+	1900+
13800	920	482490	6672612	957	13.73	11.78	10.23	8.79	7.35	6.20	4.71	3.64	2.71	2.1	1.35	5.69	110.23	1565	-13	663	700+	1900+
13800	940	482490	6672632	958	13.92	12.16	10.57	9.05	7.84	6.69	5.64	4.74	4.01	3.46	2.94	6.28	100.81	1565	-51	685	700+	1900+
13800	960	482490	6672652	960	15.11	13.08	11.3	9.76	8.32	7.03	6.06	4.93	3.74	3.31	2.82	6.7	94.2	1565	-34	717	700+	1900+
13800	980	482490	6672672	957	15.87	13.82	12.04	10.58	9.17	7.52	6.1	5.32	4.2	3.55	2.79	6.98	100.25	1565	-55	849	700+	1900+
13800	1000	482490	6672692	959	16.84	14.92	13.24	11.7	10.08	8.26	7.01	5.94	4.75	3.86	3.24	7.76	81.92	1565	-25	766	700+	1900+
13800	1020	482490	6672712	964	18.44	15.71	13.62	11.97	9.97	8.71	7.18	6.04	5.02	4.03	3.4	8.11	76.6	1565	-26	786	700+	1900+
13800	1040	482491	6672732	963	18.3	16.1	14.19	12.17	10.52	8.97	7.69	6.14	4.92	4.2	3.49	8.52	78.08	1565	-23	872	700+	1900+
13800	1060	482490	6672752	961	19.22	16.65	14.86	12.76	11.42	9.12	7.66	6.37	5.32	4.43	3.72	8.6	67.78	1565	-32	819	700+	1900+
13800	1080	482490	6672772	961	19.74	17.15	15.14	12.89	11.19	9.53	7.93	6.48	5.44	4.23	3.47	8.82	66.72	1565	-34	866	700+	1900+
13800	1100	482490	6672792	961	20.04	17.63	15.35	13.27	11.24	9.53	7.91	6.58	5.53	4.56	3.7	8.92	67.28	1565	-27	932	700+	1900+
13800	1200	482490	6672892	971	17.91	15.52	13.61	11.53	9.88	8.55	7.05	5.89	4.92	4.09	3.28	7.98	42.83	1631	50	716	700+	1900+
13800	1220	482490	6672912	967	17.92	15.57	13.44	11.83	9.95	8.71	7.32	6.23	5.09	3.95	3.31	8.1	37.15	1631	51	639	700+	1900+
13800	1240	482489	6672932	964	17.19	14.96	12.78	11.51	9.59	8.22	6.9	5.46	4.62	3.91	2.95	7.77	30.52	1631	57	536	700+	1900+
13800	1260	482490	6672952	965	23.08	20.17	17.55	15.27	13.12	10.99	9.32	7.73	6.26	5.13	4.16	10.35	91.25	1631	45	1627	700+	1900+
13800	1280	482490	6672972	965	22	18.96	17.12	14.41	12.44	10.46	8.94	7.68	6.22	5.09	4.14	9.95	94.45	1631	36	1699	700+	1900+
13800	1300	482490	6672992	968	18.68	16.21	14.32	12.31	10.41	8.89	7.53	6.31	5.11	4.11	3.37	8.34	47.99	1631	50	866	700+	1900+
13800	1320	482490	6673012	971	20.99	16.43	13.77	12.26	10.26	9.01	7.2	6.36	5.15	4.24	3.51	8.35	50.9	1631	61	916	700+	1900+
13800	1340	482490	6673032	968	19.48	15.72	13.98	11.95	10.31	8.70	7.17	6.06	4.99	4.01	3.23	8.1	49.31	1631	38	879	700+	1900+
13800	1360	482490	6673052	970	17.97	15.83	13.64	11.91	10.18	8.45	7.06	5.87	4.72	4.09	3.27	7.82	57.34	1631	48	1007	700+	1900+
13800	1380	482490	6673072	967	19.04	16.58	14.57	12.39	10.66	8.85	7.45	6.19	5.05	4.11	3.38	8.31	80.2	1631	63	1379	700+	1900+
13800	1400	482490	6673092	967	19.46	16.93	14.68	12.75	10.63	9.14	7.76	6.47	5.21	4.25	3.56	8.72	88.83	1631	53	1486	700+	1900+
13800	1420	482490	6673111	967	17.78	15.48	13.41	11.41	9.5	8.33	6.75	5.78	4.68	3.95	3.18	7.7	74.24	1631	36	1201	700+	1900+
13800	1440	482490	6673132	968	16.7	14.49	12.1	10.71	8.95	7.46	6.19	5.1	4.19	3.65	3.11	6.95	67.67	1631	41	1052	700+	1900+
13800	1460	482490	6673152	966	15.84	13.34	11.85	10.04	8.46	7.24	6.05	5	4.12	3.34	2.7	6.81	71.54	1631	54	1062	700+	1900+
13800	1480	482490	6673172	966	15.5	13.11	11.27	9.88	8.29	7.02	5.96	4.76	4.21	3.29	2.68	6.68	77.24	1631	59	1089	700+	1900+
13800	1500	482490	6673192	966	14.89	12.83	11.19	9.59	8.19	6.77	5.71	4.69	3.87	3.12	2.52	6.37	66.31	1631	55	881	700+	1900+
13800	1520	482490	6673212	967	14.61	12.58	10.97	9.48	7.74	6.57	5.46	4.68	3.96	3.29	2.45	6.14	69.02	1631	88	860	700+	1900+
13800	1540	482490	6673232	968	15.56	13.43	12.04	10.1	8.8	7.38	6.17	5.16	4.25	3.48	2.8	6.9	111.76	1631	50	1296	700+	1900+
13800	1560	482490	6673252	968	17.15	14.75	12.99	11.09	9.4	7.90	6.66	5.46	4.48	3.58	2.84	7.42	141.96	1631	15	1522	700+	1900+
13800	1580	482490	6673272	970	16.34	14.22	12.3	10.6	9.08	7.61	6.35	5.29	4.35	3.53	2.86	7.13	135.22	1631	53	1331	700+	1900+
13800	1600	482490	6673292	971	13.5	11.83	10.42	8.93	7.75	6.58	5.54	4.54	3.61	3.07	2.6	6.18	126.64	1631	52	1137	700+	1900+
13800	1620	482490	6673312	969	12.75	11.08	9.61	8.31	7.03	5.97	5.04	4.14	3.41	2.84	2.18	5.6	129.94	1631	53	1056	700+	1900+
13800	1640	482490	6673332	970	12.28	10.65	9.19	7.99	6.83	5.79	4.85	4.21	3.56	3.04	2.48	5.42	145.45	1631	55	1063	700+	1900+
13800	1660	482490	6673352	970	11.45	10.05	8.73	7.55	6.45	5.41	4.55	3.8	3.1	2.57	2.1	5.08	167.46	1631	52	1092	700+	1900+
13800	1680	482490	6673372	968	11.31	9.89	8.53	7.45	6.33	5.37	4.46	3.76	3.07	2.49	2.02	4.99	160.06	1631	53	924	700+	1900+
13900	920	482590	6672612	959	12.58	10.9	9.46	8.26	6.91	5.89	4.92	4.06	3.37	2.73	2.21	5.51	168.42	1565	40	773	700+	1900+
13900	940	482590	6672632	960	13.61	11.85	10.3	8.7	7.58	6.24	5.4	4.51	3.61	2.71	2.86	5.9	127.47	1565	-19	689	700+	1900+
13900	960	482590	6672651	950	14.83	12.76	11.1	9.53	8.12	6.84	5.73	4.72	3.86	3.15	2.59	6.39	94.83	1565	10	594	700+	1900+
13900	980	482590	6672672	952	16.06	13.81	12.09	10.43	8.82	7.49	6.16	5.11	4.14	3.45	2.73	6.93	88.93	1565	13	637	700+	1900+
13900	1000	482590	6672692	952	17.14	15.06	13.25	11.27	9.62	8.05	6.66	5.52	4.53	3.71	3	7.51	89.58	1565	19	725	700+	1900+
13900	1020	482590	6672712	952	18.23	15.59	13.73	11.46	9.92	8.39	7.13	5.84	4.78	3.95	3.24	7.89	86.37	1565	30	781	700+	1900+
13900	1040	482591	6672732	951	18.72	16.12	14.21	12.25	10.44	8.85	7.43	6.14	4.98	3.69	3.68	8.29	82.75	1565	21	828	700+	1900+
13900	1060	482591	6672752	951	18.59	16.31	14.43	12.43	10.79	9.15	7.78	6.58	5.33	4.41	3.45	8.59	81.03	1565	18	888	700+	1900+
13900	1080	482590	6672772	951	18.53	16.24	14.08	12.15	10.28	8.76	7.41	6.18	5.01	4.14	3.39	8.25	70.05	1565	17	834	700+	1900+
13900	1100	482590	6672792	954	18.93	16.4	14.49	12.26	10.34	8.81	7.33	5.98	4.64	3.73	2.49	8.28	66.42	1565	42	852	700+	1900+

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
13900	1540	482590	6673231	969	13.91	11.98	10.44	9.04	7.57	6.41	5.31	4.4	3.6	2.94	2.37	5.94	98.53	1586	-57	1066	700+	1900+
13900	1560	482589	6673252	965	14.22	12.09	10.48	9.01	7.63	6.38	5.35	4.39	3.68	3.02	2.4	5.97	117.66	1586	-50	1161	700+	1900+
13900	1580	482590	6673271	961	13.83	12.01	10.43	8.89	7.64	6.32	5.28	4.36	3.59	2.91	2.36	5.98	111.71	1586	-49	997	700+	1900+
13900	1600	482590	6673291	960	13.9	12.22	10.57	9.12	7.78	6.54	5.45	4.56	3.76	3.06	2.45	6.07	124.16	1586	-58	992	700+	1900+
13900	1620	482592	6673312	966	14.49	12.65	11.01	9.54	8.18	6.87	5.8	4.79	3.97	3.19	2.59	6.43	164.43	1586	-56	1163	700+	1900+
13900	1640	482589	6673332	966	13.6	11.74	10.29	8.95	7.66	6.48	5.43	4.56	3.77	3.05	2.43	6.07	171.14	1586	-49	1058	700+	1900+
13900	1660	482591	6673352	968	12.67	10.96	9.47	8.25	7.04	5.94	4.96	4.12	3.38	2.67	2.18	5.55	198.61	1586	-51	1059	700+	1900+
13900	1680	482590	6673373	966	12.8	11.03	9.52	8.22	6.97	5.84	4.87	4.04	3.33	2.77	2.27	5.47	253.48	1586	-39	1148	700+	1900+
14000	920	482691	6672612	961	13.24	11.7	10.31	8.7	7.65	6.27	5.21	4.35	3.53	2.86	2.31	5.87	115	1565	-26	692	700+	1900+
14000	940	482690	6672632	960	14.83	13.09	11.42	9.76	8.35	6.96	5.9	4.85	4.04	3.36	2.6	6.55	106.11	1565	-32	721	700+	1900+
14000	960	482690	6672652	959	15.93	13.76	11.82	10.3	8.73	7.45	6.07	5.06	4.15	3.38	2.77	6.91	93.48	1565	-25	712	700+	1900+
14000	980	482690	6672672	960	17.17	15.09	13.06	11.02	9.3	7.97	6.93	5.6	4.5	3.66	2.97	7.62	80.89	1565	-35	685	700+	1900+
14000	1000	482690	6672692	959	17.67	15.11	13.21	11.47	9.71	8.20	6.88	5.59	4.65	3.74	3	7.67	88.92	1565	-36	832	700+	1900+
14000	1020	482690	6672712	959	17.11	15.1	13.14	11.31	9.51	8.13	6.84	5.62	4.55	3.31	2.35	7.6	88.21	1565	0	905	700+	1900+
14000	1040	482690	6672732	960	17.86	15.73	13.45	11.65	10	8.50	7.04	5.84	4.84	4.01	3.28	7.88	77.56	1565	55	867	700+	1900+
14000	1060	482690	6672752	955	18.08	15.77	13.84	12.09	10.07	8.49	7.16	6.01	4.94	4.05	3.18	7.94	68.18	1565	-26	824	700+	1900+
14000	1080	482689	6672772	957	18.92	16.37	14.17	12.22	10.39	8.77	7.41	6.05	4.94	4.09	3.42	8.2	63.97	1565	-7	830	700+	1900+
14000	1100	482690	6672793	956	19.69	16.99	14.78	12.76	10.84	9.10	7.56	6.18	5.08	4.18	3.41	8.43	62.36	1565	-29	864	700+	1900+
14000	1120	482690	6672812	958	19.92	17.78	15.66	13.25	11.25	9.45	8.01	6.64	5.43	4.41	3.54	8.94	58.52	1565	-14	859	700+	1900+
14000	1140	482690	6672832	958	19.16	17.14	15.03	12.9	11.2	9.42	7.97	6.57	5.53	4.32	3.26	8.82	66.13	1565	4	1023	700+	1900+
14000	1160	482690	6672854	957	18.89	16.7	14.62	12.71	10.86	9.30	7.76	6.52	5.39	4.36	3.57	8.69	64.19	1565	-11	1040	700+	1900+
14000	1180	482690	6672872	959	19.92	17.02	15.01	13.07	11.01	9.39	7.91	6.5	5.38	4.4	3.63	8.81	57.86	1580	-7	966	700+	1900+
14000	1200	482690	6672892	958	20.4	17.21	15.42	13.34	11.49	9.65	8.01	6.65	5.47	4.51	3.58	8.98	55.67	1580	-14	961	700+	1900+
14000	1220	482690	6672913	960	19.98	17.26	15.53	13.51	11.44	9.70	7.95	6.33	5.24	4.56	3.88	9.08	65.03	1580	-25	1154	700+	1900+
14000	1240	482690	6672932	950	20.3	17.82	15.61	13.26	11.59	9.65	8.09	6.66	5.54	4.5	3.51	9.13	62.75	1600	-12	1123	700+	1900+
14000	1260	482690	6672953	953	20.22	17.46	15.21	13.19	11.26	9.63	8.1	6.69	5.52	4.54	3.68	9	58.69	1600	-24	1067	700+	1900+
14000	1280	482690	6672972	952	19.33	17.17	14.94	12.81	10.89	9.21	7.83	6.43	5.18	4.1	3.2	8.7	65.26	1600	13	1197	700+	1900+
14000	1340	482690	6673032	949	18.74	16.67	14.27	12.31	10.61	8.90	7.36	6.17	5.12	4.22	3.41	8.34	42.88	1586	42	786	700+	1900+
14000	1360	482691	6673052	954	18.64	16.37	14.46	12.36	10.77	8.97	7.55	6.32	5.2	4.26	3.51	8.45	70.76	1586	24	1278	700+	1900+
14000	1380	482689	6673072	954	19.72	17.18	14.79	12.81	10.96	9.26	7.81	6.45	5.42	4.36	3.6	8.7	99.56	1586	12	1760	700+	1900+
14000	1400	482690	6673092	964	19.41	16.74	15.17	12.25	9.45	7.86	7.57	6.07	5.45	4	3.49	7.73	79.64	1586	24	1370	700+	1900+
14000	1420	482690	6673111	961	16.45	13.91	11.87	10.83	8.87	7.60	6.64	5.31	4.42	3.63	2.82	7.19	54.86	1586	34	913	700+	1900+
14000	1440	482690	6673133	964	16.51	14.24	12.63	10.65	9.19	7.66	6.43	5.33	4.44	3.5	2.97	7.19	71.11	1586	10	1137	700+	1900+
14000	1460	482690	6673152	966	16.1	13.97	12.18	10.41	8.89	7.47	6.3	5.23	4.26	3.45	2.76	7.01	73.15	1586	23	1117	700+	1900+
14000	1480	482690	6673172	963	14.4	12.51	10.93	9.27	7.79	6.49	5.69	4.96	4.21	3.32	2.73	6.16	60.36	1586	43	875	700+	1900+
14000	1500	482690	6673192	960	14.19	12.21	10.53	9.08	7.71	6.50	5.3	4.41	3.69	2.92	2.45	6.05	58.48	1586	25	799	700+	1900+
14000	1520	482690	6673212	972	13.91	11.94	10.51	8.84	7.49	6.36	5.46	4.67	3.91	3.06	2.44	6.02	69.83	1586	22	894	700+	1900+
14000	1540	482691	6673232	967	13.51	11.66	10.34	8.95	7.66	6.34	5.3	4.43	3.49	2.95	2.36	5.89	77.06	1586	18	919	700+	1900+
14000	1560	482690	6673251	962	14.1	12.4	10.83	9.23	7.76	6.60	5.57	4.57	3.75	3.08	2.42	6.25	84.55	1586	15	932	700+	1900+
14000	1580	482690	6673272	963	15.67	13.42	11.58	10.04	8.42	7.15	5.9	4.85	3.96	3.19	2.62	6.66	117.66	1586	-3	1191	700+	1900+
14000	1600	482689	6673292	962	15.31	13.3	11.58	10	8.48	7.05	5.89	4.92	3.98	3.29	2.65	6.62	142.3	1586	65	1314	700+	1900+
14000	1620	482690	6673313	962	14.15	12.32	10.75	9.19	7.77	6.51	5.39	4.51	3.68	3.02	2.4	6.09	126.5	1586	47	1057	700+	1900+
14000	1640	482690	6673332	960	14.86	12.92	11.15	9.75	8.19	7.05	5.88	4.9	4.01	3.27	2.66	6.61	138.2	1586	54	1038	700+	1900+
14000	1660	482690	6673352	962	14.8	13.09	11.41	9.66	8.31	7.00	5.87	4.85	3.97	3.25	2.62	6.59	171.51	1591	98	1146	700+	1900+
14000	1680	482690	6673372	962	12.39	10.67	9.3	7.91	6.73	5.65	4.76	3.91	3.2	2.61	2.12	5.3	150.51	1591	91	891	700+	1900+
14100	920	482790	6672612	956	14.25	12.36	10.81	9.23	7.81	6.55	5.46	4.53	3.57	2.99	2.35	6.12	111.18	1910	23	978	700+	1900+
14100	940	482790	6672632	961	15.05	13.18	11.46	9.79	8.28	6.99	5.8	4.78	3.95	3.26	2.57	6.5	86.49	1910	25	800	700+	1900+
14100	960	482791	6672652	960	16.28	13.96	12.31	10.72	9.12	7.77	6.46	5.33	4.36	3.57	2.87	7.24	106.39	1910	-17	1038	700+	1900+
14100	980	482790	6672672	959	16.27	14.1	12.38	10.75	9.19	7.52	6.34	5.3	4.34	3.54	2.84	7.05	114.82	1910	23	1183	700+	1900+
14100	1000	482791	6672692	960	16.62	14.54	12.91	10.9	9.34	7.93	6.56	5.54	4.66	3.53	2.92	7.43	113.9	1910	35	1240	700+	1900+
14100	1020	482790	6672712	958	16.48	14.6	12.71	10.97	9.32	7.97	6.62	5.56	4.58	3.73	2.98	7.45	105.16	1910	43	1208	700+	1900+
14100	1040	482790	6672733	958	17.05	14.9	13.53	11.18	9.68	8.12	6.83	5.61	4.64	3.87	3.16	7.63	89.15	1910	47	1079	700+	1900+
14100	1060	482791	6672752	959	18.73	15.52	13.82	11.75	9.94	8.43	7.01	5.78	4.8	3.86	3.21	7.85	91.98	1910	30	1170	700+	1900+
14100	1080	482790	6672771	957	18.62	15.87	14.24	12.31	10.23	8.85	7.28	6.11	4.97	4.17	3.35	8.24	94.64	1910	6	1262	700+	1900+
14100	1100	482791	6672792	956	19.7	17.14	15.06	12.78	10.99	9.20	7.71	6.37	5.28	4.32	3.54	8.67	79.24	1910	27	1104	700+	1900+
14100	1120	482791	6672812	956	19.61	17.15	14.82	12.72	10.82	9.02	7.64	6.29	5.24	4.11	3.5	8.46	71.81	1910	41	1041	700+	1900+
1																						

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
14100	1560	482791	6673252	967	14.11	12.4	10.43	9.38	8.01	7.24	5.57	4.17	2.95	3.19	2.48	6.74	49.33	1800	7	634	700+	1900+
14100	1580	482791	6673272	964	15.19	13.25	11.9	9.51	8.66	7.05	5.84	4.74	4.03	3.18	2.7	6.62	67.15	1800	13	819	700+	1900+
14100	1600	482790	6673292	965	16.05	14.36	11.95	10.4	8.64	7.46	6.24	5.1	4.22	3.39	2.75	6.96	80.68	1800	-3	932	700+	1900+
14100	1620	482790	6673312	968	16.03	13.94	11.76	10.4	8.85	7.39	6.16	5.11	4.15	3.44	2.9	6.84	92.84	1800	-14	1015	700+	1900+
14100	1640	482790	6673332	966	15.61	13.27	11.49	9.96	8.55	7.06	5.96	4.87	3.95	3.25	2.64	6.65	94.26	1800	-8	976	700+	1900+
14100	1660	482790	6673352	962	13.64	11.77	10.19	8.75	7.56	6.25	5.2	4.27	3.63	3.03	2.36	5.85	66.36	1800	3	652	700+	1900+
14100	1680	482789	6673372	966	13.45	11.4	10.09	8.72	7.28	6.19	5.26	4.37	3.61	3.02	2.62	5.84	70.26	1800	16	656	700+	1900+
14200	920	482890	6672612	962	12.35	10.63	9.16	7.78	6.67	5.71	4.63	3.7	3.14	2.45	1.96	5.29	150.86	1910	-22	744	700+	1900+
14200	940	482891	6672631	960	11.64	10.54	9.27	8.2	7.03	5.97	5.01	4.05	3.25	2.63	2.28	5.62	154.7	1910	-30	861	700+	1900+
14200	960	482890	6672652	960	13.72	11.84	10.41	8.85	7.64	6.31	5.21	4.42	3.61	2.98	2.38	5.87	146.17	1910	-24	912	700+	1900+
14200	980	482892	6672671	959	14.24	12.8	10.77	9.13	7.72	6.52	5.38	4.46	3.82	2.87	2.27	6.07	146.53	1910	-19	1017	700+	1900+
14200	1000	482890	6672693	958	14.55	12.56	11.06	9.35	8.08	6.77	5.6	4.7	3.84	3.12	2.48	6.35	131.59	1910	-26	1009	700+	1900+
14200	1020	482890	6672711	955	14.83	12.9	11.31	9.62	8.29	6.92	5.81	4.8	3.91	3.24	2.61	6.5	111.51	1910	-19	937	700+	1900+
14200	1040	482890	6672733	959	15.19	13.27	11.75	9.89	8.62	7.13	5.94	4.94	4.03	3.29	2.75	6.68	107.12	1910	-16	981	700+	1900+
14200	1060	482890	6672752	954	16.35	14.25	12.57	10.74	9.67	7.45	6.31	5.42	4.39	3.55	3.01	6.75	97.37	1910	-28	964	700+	1900+
14200	1080	482890	6672773	954	17.63	15.54	13.75	11.89	10.16	8.59	7.25	6.01	5.05	4.11	3.26	8.05	82.04	1910	-26	873	700+	1900+
14200	1100	482890	6672791	956	19.05	16.82	14.72	12.67	10.81	9.19	7.67	6.42	5.29	4.39	3.52	8.58	81.27	1910	-16	922	700+	1900+
14200	1120	482891	6672812	954	19.71	17.03	15.39	13.45	11.16	9.31	7.97	6.7	5.6	4.48	3.73	8.8	88.84	1910	-11	1069	700+	1900+
14200	1140	482890	6672832	955	20.18	17.54	15.28	13.24	11.18	9.51	7.97	6.57	5.42	4.4	3.57	8.89	84.16	1910	-16	1067	700+	1900+
14200	1160	482890	6672852	955	19.57	16.77	14.85	12.61	10.84	8.94	7.46	6.13	5.05	3.91	3.1	8.36	75.14	1910	-25	998	700+	1900+
14200	1180	482889	6672872	953	19.53	16.93	15.09	12.76	10.91	9.18	7.64	6.34	5.18	4.35	3.56	8.51	74.43	1910	-26	1028	700+	1900+
14200	1200	482891	6672892	952	20.23	17.58	15.47	13.38	11.29	9.64	8.02	6.76	5.62	4.74	3.9	9.04	75.39	1910	-20	1077	700+	1900+
14200	1220	482889	6672912	954	20.58	18.03	15.97	13.45	12.07	9.48	8.29	6.71	5.64	4.6	3.8	8.93	77.5	1910	-33	1138	700+	1900+
14200	1240	482889	6672932	953	19.97	17.46	15.12	13.14	11.18	9.48	7.97	6.63	5.55	4.5	3.62	8.81	79.11	1910	-4	1186	700+	1900+
14200	1260	482889	6672952	954	19.65	17.37	14.82	12.9	10.84	9.28	7.81	6.47	5.2	4.23	3.48	8.79	72.52	1910	-15	1104	700+	1900+
14200	1280	482891	6672972	952	20.01	17.49	15.23	13.07	11.18	9.42	7.86	6.54	5.44	4.4	3.57	8.86	64.85	1910	-42	996	700+	1900+
14200	1300	482890	6672992	954	19.78	17.32	15.15	13.05	10.95	9.21	7.66	6.33	5.33	4.52	3.59	8.62	79.42	1910	-34	1224	700+	1900+
14200	1320	482890	6673016	951	19.07	16.5	14.19	12.32	10.47	8.71	7.24	6.02	4.88	3.9	3.31	8.09	71.99	1910	-23	1106	700+	1900+
14200	1340	482890	6673031	947	18.92	16.47	14.38	12.3	10.66	8.87	8.1	6.02	5.46	4.34	3.51	8.36	61.64	1910	-6	938	700+	1900+
14200	1360	482890	6673052	954	17.92	15.51	13.71	11.38	8.77	8.27	7.19	5.31	4.67	3.68	3.25	7.9	69.8	1910	-24	1047	700+	1900+
14200	1380	482891	6673072	954	17.43	15.12	13.55	11.84	9.88	7.90	5.99	5.45	5.15	3.37	3.52	7.16	71.38	1902	-17	1052	700+	1900+
14200	1500	482890	6673192	962	17.37	14.97	13.28	11.28	9.55	8.22	6.88	5.73	4.82	3.89	3.15	7.64	92.11	1800	16	1109	700+	1900+
14200	1520	482890	6673212	963	15.92	13.59	12.28	10.15	8.83	7.31	6.07	4.97	4.1	3.27	2.56	6.74	69.09	1800	-45	780	700+	1900+
14200	1540	482890	6673232	962	11.81	10.2	8.62	7.26	6.25	5.25	4.45	3.71	3.04	2.47	2	4.94	48.86	1800	-27	513	700+	1900+
14200	1560	482890	6673252	965	10.21	8.59	7.66	6.47	5.48	4.47	3.67	2.95	2.33	1.81	1.28	4.15	36.03	1800	14	350	700+	1900+
14200	1580	482889	6673272	966	12.91	11.28	9.89	8.5	7.24	6.10	5	4.24	3.44	2.97	2.51	5.71	46.85	1800	7	418	700+	1900+
14200	1600	482890	6673292	965	13.62	11.95	10.27	8.79	7.44	6.25	5.2	4.21	3.45	2.8	2.26	5.89	75.75	1800	3	616	700+	1900+
14200	1620	482890	6673311	967	10.14	8.71	7.67	6.49	5.35	4.48	3.66	3.39	2.76	2.01	1.67	4.16	74.47	1800	15	548	700+	1900+
14200	1640	482890	6673332	971	15.99	13.82	12.16	10.37	8.81	7.39	6.17	5.13	4.17	3.43	2.76	6.88	157.68	1800	14	1044	700+	1900+
14200	1660	482890	6673352	969	16.59	14.49	12.47	10.74	9.11	7.67	6.42	5.36	4.42	3.65	3.02	7.16	183.28	1800	-17	1083	700+	1900+
14200	1680	482890	6673372	966	15.44	13.39	11.74	9.92	8.44	7.09	5.9	4.86	3.98	3.23	2.57	6.61	190.71	1800	-2	998	700+	1900+
14300	920	482990	6672611	970	11.46	10	8.63	7.42	6.23	5.12	4.24	3.45	2.76	2.38	1.77	4.78	167.1	1890	20	635	700+	1900+
14300	940	482989	6672632	968	11.81	10.14	8.76	7.58	6.31	5.28	4.49	3.61	3.07	2.48	1.89	4.96	156.15	1890	13	699	700+	1900+
14300	960	482991	6672652	962	12.58	10.68	9.27	7.89	6.54	6.03	4.88	3.96	2.9	2.69	1.9	5.7	156.66	1890	-1	813	700+	1900+
14300	980	482990	6672672	961	13.95	12.12	10.44	9.02	7.64	6.42	5.45	4.44	3.63	2.94	2.43	6.02	140.42	1890	5	833	700+	1900+
14300	1000	482989	6672692	962	14.62	12.74	11.04	9.46	8.08	6.75	5.63	4.68	3.91	3.23	2.48	6.32	120.58	1890	12	808	700+	1900+
14300	1020	482992	6672711	962	14.4	12.6	10.85	9.31	7.86	6.59	5.54	4.63	3.74	2.95	2.57	6.15	118.08	1890	3	884	700+	1900+
14300	1040	482991	6672731	956	15.79	13.72	11.86	10.5	8.56	7.24	5.85	4.66	3.77	3.28	2.8	6.68	112.26	1890	5	930	700+	1900+
14300	1060	482990	6672751	956	16.8	14.5	12.84	11.04	9.41	7.91	6.6	5.48	4.57	3.7	3.01	7.34	103.03	1890	10	935	700+	1900+
14300	1080	482990	6672771	958	17.6	15.64	13.32	11.66	9.85	8.44	6.93	5.75	4.82	3.94	3.07	7.82	87.6	1890	7	863	700+	1900+
14300	1100	482991	6672792	956	19.69	17.05	14.82	12.87	10.9	9.26	7.74	6.49	5.21	4.4	3.58	8.74	68.64	1890	7	729	700+	1900+
14300	1120	482992	6672811	956	19.86	17.4	15.27	13.15	11.19	9.39	7.91	6.53	5.4	4.41	3.55	8.81	73.34	1890	10	832	700+	1900+
14300	1140	482990	6672832	956	19.84	17.3	15.07	12.99	11.26	9.44	7.87	6.45	5.36	4.47	3.74	8.79	69.64	1890	18	838	700+	1900+
14300	1160	482990	6672852	953	20.42	17.71	15.44	13.4	11.32	9.65	8.11	6.89	5.81	4.71	3.95	9.03	68.39	1890	9	866	700+	1900+
14300	1180	482990	6672872	951	21.59	18.75	16.47	14.11	12.28	10.41	8.79	7.11	5.95	4.91	4.07	9.79	78.2	1890	1	1035	700+	1900+
14300	1200	482990	6672892	948	22.11	19.95	17.16	14.73	12.57	10.55	8.96	7.58	6.34	5.07	4.17	9.99	77.72	1890	14	1068	700+	1900+
14300	1220	482990</																				

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
14400	960	483091	6672653	979	12.78	10.83	9.69	8.25	6.98	5.79	4.84	3.97	3.27	2.66	2.18	5.42	134.25	1890	0	846	700+	1900+
14400	980	483089	6672672	971	13.69	12.01	10.45	8.97	7.56	6.39	5.33	4.41	3.65	2.98	2.33	5.94	129.06	1890	-15	905	700+	1900+
14400	1000	483090	6672692	969	13.97	12.17	10.89	9.07	7.66	6.54	5.41	4.52	3.66	3.02	2.46	6.11	122.02	1890	6	945	700+	1900+
14400	1020	483089	6672712	966	15.14	13.42	11.43	9.86	8.27	7.01	5.86	4.88	3.98	3.23	2.62	6.58	107.45	1890	-3	913	700+	1900+
14400	1040	483089	6672732	968	15.57	13.66	11.49	10.04	8.51	7.00	6.13	5.08	4.08	3.45	2.82	6.6	100.21	1890	-4	927	700+	1900+
14400	1060	483090	6672752	965	15.54	13.58	11.65	10.13	8.56	7.27	6.05	5.06	4.05	3.38	2.73	6.84	86.72	1890	4	868	700+	1900+
14400	1080	483090	6672771	961	16.35	14.19	12.47	10.55	9.26	7.61	6.32	5.25	4.24	3.46	2.93	7.13	84.51	1890	-6	908	700+	1900+
14400	1100	483090	6672792	959	17.37	15.31	13.15	11.2	9.62	8.03	6.8	5.61	4.69	3.83	3	7.59	79.51	1890	-10	912	700+	1900+
14400	1120	483090	6672812	958	18.39	16.03	13.51	11.64	9.87	8.37	7.12	5.94	4.88	3.74	3.13	7.9	73	1890	-1	888	700+	1900+
14400	1140	483089	6672832	957	19.27	16.87	15.08	12.59	10.88	9.20	7.8	6.4	5.13	4.04	3.45	8.67	60.38	1890	-6	774	700+	1900+
14400	1160	483090	6672852	957	22.16	19.11	16.63	14.49	12.28	10.40	8.69	7.29	5.97	4.88	3.95	9.73	59.7	1890	-2	801	700+	1900+
14400	1180	483089	6672871	954	23.17	20.49	18.13	15.56	13.42	11.31	9.59	7.89	6.47	5.42	4.39	10.59	69.01	1890	-1	963	700+	1900+
14400	1200	483091	6672892	952	23.45	20.86	18.16	15.68	13.57	11.44	9.67	8.16	6.83	5.62	4.52	10.8	67.72	1890	-3	977	700+	1900+
14400	1220	483090	6672912	952	23.9	20.89	18.4	15.97	13.39	11.42	9.63	8.1	6.83	5.65	4.8	10.66	66.81	1890	4	991	700+	1900+
14400	1240	483091	6672932	950	24.22	21.11	18.43	16.05	13.78	11.64	9.82	8.17	6.76	5.62	4.54	10.89	64.68	1890	4	980	700+	1900+
14400	1260	483090	6672951	949	22.84	20.31	17.98	15.12	13.15	10.99	9.32	7.82	6.38	5.27	4.39	10.37	58.97	1890	-1	907	700+	1900+
14400	1280	483089	6672972	952	20.58	18.52	16.12	13.6	11.84	9.95	8.4	6.93	5.73	4.7	3.82	9.35	56.5	1890	3	877	700+	1900+
14400	1300	483090	6672991	951	19.19	16.68	14.23	12.31	10.21	8.88	7.36	6.21	5.12	4.14	3.31	8.36	63.07	1890	3	982	700+	1900+
14400	1320	483091	6673012	951	18.19	15.36	13.58	11.51	10.01	8.29	7.03	5.67	4.75	3.83	3.22	7.81	64.8	1890	0	1006	700+	1900+
14400	1340	483090	6673033	948	17.02	14.63	13.81	11.04	9.69	8.11	6.7	5.47	4.51	3.64	2.92	7.65	59.37	1890	-2	913	700+	1900+
14400	1360	483089	6673051	951	16.81	14.76	12.93	11.13	9.62	8.14	6.8	5.85	4.54	3.82	3.12	7.6	66.92	1890	-8	1014	700+	1900+
14400	1380	483091	6673072	948	17.68	15.58	13.8	11.54	9.94	8.23	6.86	5.72	4.66	3.85	3.09	7.75	63.36	1890	-14	940	700+	1900+
14400	1400	483089	6673093	950	19.14	16.23	14.45	12.12	9.9	8.50	7.27	5.88	5.17	4.02	3.23	8.18	68.03	1890	2	982	700+	1900+
14400	1420	483090	6673112	952	17.09	15.17	13.69	11.55	10.08	8.36	7.15	5.81	4.97	3.84	2.99	7.88	83.12	1890	4	1160	700+	1900+
14400	1440	483089	6673131	948	17.3	15.3	13.32	11.52	9.79	8.28	6.93	5.77	4.77	3.94	3.2	7.79	80.99	1890	4	1087	700+	1900+
14400	1520	483090	6673212	952	14.85	12.71	11.04	9.63	8.01	6.83	5.7	4.68	4	2.88	2.54	6.34	94.69	1810	41	1063	700+	1900+
14400	1540	483090	6673232	962	14.12	12.47	11.02	9.22	7.9	6.73	5.57	4.54	3.64	2.93	2.35	6.31	106.44	1810	42	1112	700+	1900+
14400	1560	483090	6673252	967	13.95	12.49	10.82	9.52	7.83	6.73	5.65	4.71	3.93	3.3	2.83	6.26	94.36	1810	-17	912	700+	1900+
14400	1580	483090	6673272	978	13.72	11.93	10.45	9.02	7.67	6.47	5.37	4.44	3.61	2.96	2.33	5.98	82.18	1810	-83	729	700+	1900+
14400	1600	483090	6673292	979	14.4	12.55	10.88	9.14	7.88	6.56	5.44	4.57	3.72	2.96	2.34	6.18	75.87	1810	-62	614	700+	1900+
14400	1620	483091	6673312	979	14.49	12.64	11.2	9.56	8.38	7.23	6.11	5.79	3.5	2.82	2.23	6.71	81.49	1810	6	597	700+	1900+
14400	1640	483090	6673332	972	12.16	10.52	9.26	7.78	6.64	5.66	4.72	3.91	3.24	2.66	2.12	5.33	84.59	1810	18	537	700+	1900+
14400	1660	483090	6673352	972	12.04	10.6	9.06	7.86	6.67	5.54	4.57	3.79	2.98	2.43	1.89	5.16	99.34	1810	-23	584	700+	1900+
14400	1680	483090	6673372	972	11.9	10.63	9.38	7.78	6.6	5.38	4.4	3.57	2.97	2.47	2.04	5	126.41	1810	-13	658	700+	1900+
14500	920	483190	6672613	985	14.47	12.68	10.86	9.47	8.04	6.75	5.63	4.67	3.88	3.16	2.57	6.29	132.23	1880	-1	1182	700+	1900+
14500	940	483190	6672633	980	14.05	12.1	10.62	8.98	7.79	6.47	5.37	4.41	3.53	2.98	2.32	6.1	129.16	1880	5	1214	700+	1900+
14500	960	483190	6672652	979	14.23	12.22	10.44	9.34	7.64	6.52	5.3	4.43	3.75	3.1	2.47	6.03	106.87	1880	2	1060	700+	1900+
14500	980	483190	6672673	976	14.93	13.15	11.28	9.71	8.39	7.02	5.82	4.87	4.06	3.32	2.72	6.5	99.01	1880	1	1037	700+	1900+
14500	1000	483190	6672692	972	15.42	13.49	11.66	10.17	8.74	7.43	6.13	5.05	4.17	3.42	2.83	6.89	87.56	1880	21	969	700+	1900+
14500	1020	483190	6672712	973	17.18	14.95	13	11.11	9.23	7.82	6.55	5.41	4.49	3.64	3.1	7.32	81.96	1880	17	957	700+	1900+
14500	1040	483189	6672732	967	17.75	15.44	13.21	11.52	9.72	8.06	6.83	5.59	4.73	3.7	3.09	7.58	88.75	1880	-5	1091	700+	1900+
14500	1060	483190	6672753	966	17.47	14.99	13.3	11.33	9.62	8.03	6.63	5.5	4.61	3.77	3.09	7.46	89.24	1880	10	1153	700+	1900+
14500	1080	483190	6672772	962	17.41	15.41	13.34	11.49	9.74	8.11	6.82	5.64	4.66	3.69	3	7.75	84.2	1880	-4	1141	700+	1900+
14500	1100	483190	6672792	963	17.88	15.23	13.39	11.49	9.71	8.18	6.76	5.71	4.63	3.79	3.06	7.7	76.56	1880	5	1084	700+	1900+
14500	1120	483190	6672812	959	18.26	16.18	14.27	11.96	10.33	8.65	7.21	5.99	4.91	4.02	3.38	8.12	71.03	1880	8	1046	700+	1900+
14500	1140	483190	6672832	959	19.89	17.32	15.29	13.18	11.1	9.41	7.83	6.47	5.28	4.27	3.42	8.82	70.14	1880	4	1072	700+	1900+
14500	1160	483190	6672852	954	20.54	17.63	16.08	13.34	11.37	9.61	8.07	6.73	5.69	4.66	3.77	9.09	63.13	1880	11	997	700+	1900+
14500	1180	483190	6672872	955	20.85	18.02	16.01	13.75	11.7	9.87	8.26	6.93	5.74	4.79	3.96	9.16	52.68	1880	4	856	700+	1900+
14500	1200	483190	6672892	947	21.18	18.85	16.56	14.13	12.25	10.24	8.47	7.31	5.99	4.95	4.09	9.62	59.17	1880	7	985	700+	1900+
14500	1220	483190	6672912	947	22.29	19.47	17.14	14.75	12.78	10.84	8.87	7.46	6.21	5.28	4.49	10.11	58.15	1880	15	987	700+	1900+
14500	1240	483190	6672932	951	22.54	19.94	17.62	15.09	12.96	11.03	9.31	7.81	6.52	5.47	4.32	10.32	55.08	1880	2	950	700+	1900+
14500	1260	483190	6672953	952	22.18	19.2	16.69	14.6	12.62	10.67	8.96	7.48	6.07	4.86	4.03	9.97	49.89	1880	10	870	700+	1900+
14500	1280	483190	6672972	952	22.52	19.71	17.24	14.93	13.07	10.98	9.38	7.93	6.57	5.45	4.65	10.35	50.69	1880	2	890	700+	1900+
14500	1300	483190	6672992	952	20.97	17.95	16.02	13.77	11.47	9.59	8.12	6.61	5.41	4.34	3.51	8.98	52.99	1880	-3	933	700+	1900+
14500	1320	483190	6673012	952	20.09	17.35	15.08	12.96	11.42	9.40	7.81	6.65	5.39	4.47	3.63	8.75	51.22	1880	5	899	700+	1900+
14500	1340	483190	6673032	952	19.36	17.19	14.95	12.87	11.11	9.50	7.83	6.57	5.63	4.71	3.86	8.84	55.27	1880	1	964	700+	1900+
14500	1360																					

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
14600	1020	483290	6672712	983	20.15	18.61	14.05	13.24	10.96	9.64	7.89	6.26	5.37	4.09	3.42	8.96	31.45	620	8	1113	700+	1900+
14600	1040	483290	6672732	981	20.86	18.33	16.35	13.73	11.72	9.95	8.22	6.71	5.49	4.68	3.56	9.29	24.38	620	4	909	700+	1900+
14600	1060	483290	6672752	981	20.45	18.02	14.26	13.37	10.73	9.21	7.86	6.13	5.03	4.22	3.34	8.78	27.66	620	6	1084	700+	1900+
14600	1080	483290	6672772	977	19.78	17.4	16.02	12.28	11	9.21	7.94	6.27	5.3	4.31	3.68	8.72	33.87	620	2	1391	700+	1900+
14600	1100	483289	6672791	969	22.06	18.72	16.45	14.28	11.3	9.64	8.19	6.55	5.59	4.8	3.91	9.19	32.36	620	-2	1389	700+	1900+
14600	1120	483289	6672812	969	22.36	18.62	16.56	14.12	11.74	9.89	8.35	7.11	5.78	4.43	3.61	9.36	30.76	620	-7	1374	700+	1900+
14600	1140	483290	6672832	967	22.05	18.98	17.54	13.11	12.06	10.04	8.29	6.96	5.88	4.69	3.84	9.36	29.76	620	3	1379	700+	1900+
14600	1160	483290	6672853	964	20.99	18.31	15.14	12.88	12.04	9.69	8.06	7.08	5.95	4.65	4.09	9.44	27.52	620	2	1317	700+	1900+
14600	1180	483290	6672872	961	22.09	18.05	14.53	13.75	11.45	9.41	7.94	6.75	5.92	4.67	3.89	8.9	19.57	620	-14	964	700+	1900+
14600	1200	483290	6672892	957	22.02	20.63	16.34	13.65	11.94	9.79	8.49	7.17	6.9	5.63	2.76	9.2	18.07	620	-17	912	700+	1900+
14600	1220	483290	6672912	958	21.61	19.49	17.41	14.21	12.02	10.08	8.52	6.67	6.04	4.44	3.57	9.68	20.42	620	8	1051	700+	1900+
14600	1240	483291	6672932	954	22.12	18.83	16.58	13.52	11.95	9.78	8.14	6.68	5.47	4.78	3.69	9.06	19.03	620	3	995	700+	1900+
14600	1260	483290	6672952	953	21.13	19.12	16.58	14.16	12.16	9.84	8.43	6.99	5.81	4.61	3.78	9.32	16.53	620	-8	874	700+	1900+
14600	1280	483290	6672972	954	20.94	18.14	16.75	13.43	12.37	10.07	8.39	6.88	5.96	4.66	4.01	9.57	16.15	620	3	860	700+	1900+
14600	1300	483290	6672992	953	22.47	21.21	14.72	14.16	11.1	10.21	8.58	6.76	5.65	4.61	3.71	9.44	15.28	620	5	816	700+	1900+
14600	1320	483290	6673011	952	20.49	17.27	15.14	13.62	11.09	10.01	8.06	6.67	5.72	4.58	3.49	9.1	13.48	620	5	718	700+	1900+
14600	1340	483290	6673032	951	19.29	17.23	15.19	12.21	10.48	9.26	7.23	6.39	4.87	3.96	3.67	8.37	15.2	620	4	804	700+	1900+
14600	1360	483290	6673053	949	20.26	17.05	14.18	12.16	9.13	8.32	6.8	6.05	4.92	4.63	3.35	7.64	16.86	620	0	882	700+	1900+
14600	1380	483290	6673072	950	18.77	15.73	14.21	11.63	10.15	8.69	7.33	5.09	4.2	3.65	2.52	8.08	17.38	620	0	895	700+	1900+
14600	1400	483290	6673092	946	18.2	16.24	14.07	12.07	10.57	8.71	7.09	5.89	5.2	4.14	3.3	8.15	15.14	620	2	764	700+	1900+
14600	1420	483290	6673109	951	18.65	15.78	15.8	11.4	10.47	8.45	7.51	5.98	4.75	4.16	3.49	8.21	15.18	620	1	748	700+	1900+
14600	1440	483290	6673129	952	18.95	15.41	13.38	12.09	10.14	8.36	7.15	5.92	4.89	3.89	3.03	7.9	16.64	620	4	796	700+	1900+
14600	1460	483290	6673152	955	18.32	15	13.25	10.74	9.94	7.84	6.49	5.37	4.58	3.46	2.87	7.4	15.45	620	5	716	700+	1900+
14600	1480	483289	6673173	954	16.16	13.94	12.33	9.74	9.69	7.66	6.32	4.86	3.72	2.43	1.87	7.87	17.34	620	-3	775	700+	1900+
14600	1500	483290	6673193	953	15.99	13.87	11.51	10.02	8.1	6.99	5.28	4.85	4.1	3.25	2.43	6.13	20.59	620	-1	884	700+	1900+
14600	1520	483290	6673213	949	15.25	14.73	12.33	8.96	7.36	6.74	5.79	4.36	3.51	2.7	2.61	6.24	20.09	620	5	825	700+	1900+
14600	1540	483290	6673232	944	16.44	13.97	12.32	10.32	8.56	7.39	5.88	5.11	4.03	3.31	2.85	6.79	18.4	620	1	721	700+	1900+
14600	1560	483290	6673253	941	15.11	13.83	13.11	10.97	9.95	7.50	6.13	5.25	4.38	3.13	2.82	7.15	20.37	620	-4	760	700+	1900+
14600	1580	483290	6673276	941	16.82	14.58	13.29	10.25	10.58	7.35	6.95	5.03	4.48	4.23	2.93	7.29	20	620	-9	708	700+	1900+
14600	1600	483290	6673292	944	15.01	13.37	12.42	11.47	10.15	7.02	6.67	5.3	4.4	3.38	2.74	7.02	20.68	620	-5	694	700+	1900+
14600	1620	483290	6673313	945	15.47	12.66	11.13	9.74	8.17	6.84	6.29	4.6	4	3.22	2.45	6.58	25.82	620	5	820	700+	1900+
14600	1640	483290	6673332	944	13.05	11.79	11.47	9.03	7.43	6.55	5.01	4.6	3.65	2.71	2.31	6.07	22.86	620	-1	687	700+	1900+
14600	1660	483290	6673352	943	13.15	13.02	11.56	8.36	7.02	6.39	5.39	4.13	3.28	3.07	2.4	5.98	22.85	620	-1	651	700+	1900+
14700	920	483388	6672610	1010	17.64	15.49	13.36	11.58	9.83	8.34	6.95	5.65	4.76	3.92	3.26	7.84	60.09	614	-2	922	700+	1900+
14700	940	483390	6672633	1002	19.76	16.78	14.83	12.6	10.47	8.89	7.45	6.23	5.06	4.13	3.34	8.3	47.81	614	0	828	700+	1900+
14700	960	483389	6672653	1000	19.97	17.13	14.83	12.36	10.77	9.03	7.43	6.09	5.04	4.08	3.13	8.35	43.79	614	4	850	700+	1900+
14700	980	483389	6672670	991	19.7	16.67	14.21	12.56	10.05	8.76	7.51	6.01	4.76	4.07	3.11	8.43	47.81	614	-1	1032	700+	1900+
14700	1000	483391	6672691	990	20.01	16.66	14.53	12.9	10.57	8.95	7.65	6.36	5.47	4.45	3.81	8.4	49.01	614	-12	1169	700+	1900+
14700	1020	483391	6672711	990	21.45	17.09	15.59	13.35	11.26	9.71	7.86	6.71	5.38	4.52	3.49	8.96	47.06	614	2	1231	700+	1900+
14700	1040	483391	6672733	988	22.16	19.54	16.83	14.08	12.27	10.27	7.76	5.92	6	4.54	4.09	9.57	40.37	614	21	1150	700+	1900+
14700	1060	483390	6672753	985	22.47	19.92	17.4	15.38	12.61	10.89	8.75	7.91	6.78	5.37	3.8	9.99	35.32	614	-9	1088	700+	1900+
14700	1080	483391	6672772	985	21.93	18.57	15.57	14.22	12.25	10.75	9.78	7.48	6.27	5.15	4.54	10.29	35.04	614	-6	1159	700+	1900+
14700	1100	483391	6672792	983	20.89	18.76	16.27	14.2	11.82	10.15	8.47	7.19	5.84	4.78	3.78	9.66	34.29	614	21	1211	700+	1900+
14700	1120	483389	6672814	978	21.28	18.74	16.91	12.37	11.87	9.87	8.17	6.79	5.37	4.69	3.85	9.28	35.79	614	10	1340	700+	1900+
14700	1140	483388	6672831	974	22.38	18.76	15.13	14.14	11.44	9.95	8.14	6.73	5.45	4.51	3.61	9.24	35.63	614	-7	1405	700+	1900+
14700	1160	483391	6672852	966	22.18	18.9	16.21	14.9	11.75	10.10	9.03	6.95	5.72	4.68	3.71	9.51	34.62	614	12	1430	700+	1900+
14700	1180	483390	6672871	967	22.83	19.41	16.05	14.42	12.31	10.22	8.88	7.07	5.97	5.25	4.04	9.82	37.76	614	4	1622	700+	1900+
14700	1200	483389	6672892	965	23.01	19.93	16.49	14.73	12.68	10.59	8.37	7.02	5.98	4.92	3.72	9.79	42.12	614	-7	1871	700+	1900+
14700	1220	483388	6672911	962	22.68	19.64	17.69	15.68	12.71	10.69	9.24	7.53	6.21	5.29	4.28	10.28	40.99	614	6	1872	700+	1900+
14700	1240	483390	6672932	959	23.28	20.1	17.48	15.44	12.47	10.85	9.12	7.5	6.24	5.18	4.11	10.06	36.13	614	13	1685	700+	1900+
14700	1260	483390	6672952	960	21.85	20.2	17.62	14.88	12.23	10.71	8.86	6.94	5.65	4.32	3.32	9.67	31.16	614	3	1476	700+	1900+
14700	1280	483389	6672971	954	21.46	19.73	17.01	14.21	11.93	10.25	8.33	6.99	5.79	4.56	3.85	9.34	21.65	614	-15	1035	700+	1900+
14700	1300	483390	6672992	957	20.04	17.04	15.3	13.35	10.97	9.46	8.25	7.07	5.55	4.33	2.26	8.89	15.37	614	-5	737	700+	1900+
14700	1320	483392	6673013	956	19.93	17.87	15.87	13.47	10.8	9.03	6.81	5.58	3.16	2.74	2.94	8.59	14.95	614	3	715	700+	1900+
14700	1340	483388	6673029	955	19.19	16.6	15.76	12.53	11.35	9.25	6.84	5.73	5.1	4.08	3.39	8.12	15.18	614	10	719	700+	1900+
14700	1360	483391	6673052	954	20.34	17.01	14.28	13.2	10.58	9.18	7.64	6.2	5.07	4.21	3.26	8.38	16.85	614	-2	786	700+	1900+
14700	1380	483388	6673																			

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
14800	1000	483489	6672692	1015	19.21	16.81	14.69	12.39	10.47	8.80	7.4	6.19	4.98	4.1	3.19	8.3	40.62	608	7	847	700+	1900+
14800	1020	483490	6672712	1009	19.66	17.29	14.89	12.55	10.64	9.18	7.87	6.59	5.15	4.32	3.45	8.79	43.8	608	3	1020	700+	1900+
14800	1040	483491	6672732	1005	20.24	17.53	14.51	12.46	10.13	8.95	6.92	5.76	4.72	3.81	3.13	8.05	40.57	608	-4	1045	700+	1900+
14800	1060	483490	6672753	998	21.73	18.89	16	13.97	11.71	9.95	8.3	6.61	5.32	4.5	3.76	9.42	34.21	608	2	965	700+	1900+
14800	1080	483488	6672772	996	23.08	22.19	16.51	15.75	12.88	11.53	9.5	7.88	6.98	5.36	4.21	10.95	33.54	608	5	1028	700+	1900+
14800	1100	483489	6672791	989	23.72	20.52	18.06	15.42	13.17	11.14	9.45	7.93	6.62	5.5	4.49	10.54	33.81	608	12	1116	700+	1900+
14800	1120	483488	6672811	989	22.33	19.41	17.42	14.65	13.16	10.72	9.15	7.36	6.18	5.13	4.17	10.15	38.44	608	1	1355	700+	1900+
14800	1140	483490	6672832	988	22.99	19.9	16.66	14.47	12.45	10.34	8.55	7.17	5.7	4.75	3.82	9.55	42.64	608	-9	1595	700+	1900+
14800	1160	483490	6672852	984	21.75	19.4	16.76	14.36	12.05	10.11	8.56	6.92	5.92	5.17	3.97	9.51	34.71	608	-4	1367	700+	1900+
14800	1180	483490	6672872	982	23.23	20.28	18.41	14.7	12.1	10.41	7.62	6.86	5.49	4.73	4.24	9.84	36.82	608	4	1515	700+	1900+
14800	1200	483490	6672892	983	21.73	19.89	17.69	14.86	12.41	10.92	9.03	7.53	6.12	4.98	4.28	10.06	41.39	608	-4	1768	700+	1900+
14800	1220	483489	6672912	977	23.72	21.19	17.84	15.35	12.99	10.88	9.52	7.4	5.9	5.17	4.41	10.07	40.95	608	2	1803	700+	1900+
14800	1240	483490	6672931	969	23.42	20.81	17	15.6	12.03	10.93	9.48	7.92	6.58	5.34	4.37	10.21	37.15	608	13	1675	700+	1900+
14800	1260	483490	6672951	968	22.82	20.54	16.75	15.01	12.6	10.57	8.95	7.43	6.42	4.92	4.18	9.83	30.59	608	2	1402	700+	1900+
14800	1280	483490	6672973	972	21.14	18.83	16.92	13.41	11.89	10.26	8.46	7.36	5.75	4.56	3.78	9.61	32.39	608	8	1500	700+	1900+
14800	1300	483489	6672990	967	21.14	18.98	17.76	13.92	13.79	10.44	8.94	7.43	6.11	5.21	4.37	10.04	37.28	608	1	1732	700+	1900+
14800	1320	483490	6673012	966	24.66	23.25	17.44	17.08	13.39	11.58	9.42	7.75	6.38	5.11	4.42	10.46	33.49	608	21	1550	700+	1900+
14800	1340	483487	6673030	971	22.41	19.71	16.76	14.91	12.59	10.81	9.34	8.07	6.42	5.92	5.05	9.7	30.27	608	13	1388	700+	1900+
14800	1360	483487	6673052	964	21.71	18.87	15.53	13.52	10.23	8.91	7.65	5.75	4.99	3.9	3.24	8.39	29.24	608	8	1318	700+	1900+
14800	1380	483491	6673071	970	20.22	18.7	15.26	13.29	11.6	9.79	7.7	6.19	4.94	3.07	2.75	8.76	24.95	608	12	1099	700+	1900+
14800	1400	483490	6673092	969	19.6	15.64	13.68	12.89	10.29	8.78	7.39	5.93	4.88	3.88	3.22	7.98	23.81	608	-3	1017	700+	1900+
14800	1420	483490	6673112	968	17.9	14.64	12.98	11.02	9.62	7.55	6.89	5.68	4.44	3.72	1.93	7.27	25.12	608	-21	1034	700+	1900+
14800	1440	483490	6673132	965	15.4	13.84	11.33	9.19	8.56	7.23	6.29	5.13	4.1	3.68	2.94	6.86	22.93	630	2	871	700+	1900+
14800	1460	483490	6673151	961	15.84	13.54	11.96	10.31	8.83	7.54	6.23	4.89	3.65	2.91	2.43	7.02	19.09	630	-2	689	700+	1900+
14800	1480	483490	6673171	956	16.52	13.82	12.05	10.56	8.78	7.44	6.14	5.22	4.28	3.47	2.97	6.94	20.6	630	-15	701	700+	1900+
14800	1500	483490	6673193	955	16.91	14.36	12.27	10.98	9.57	8.08	6.71	5.97	4.88	3.77	2.95	7.47	19.42	630	-13	618	700+	1900+
14800	1520	483490	6673211	956	14.33	13.01	11.61	9.49	8.31	6.90	6.01	4.13	3.66	2.82	2.21	6.64	20.13	630	4	595	700+	1900+
14800	1540	483489	6673232	952	16.33	12.12	10.84	9.31	8.2	6.89	5.74	4.6	4.08	2.84	2.17	6.59	19.64	630	12	535	700+	1900+
14800	1560	483489	6673252	951	14.79	13.05	10.97	9.65	8.12	6.91	5.78	4.7	4.07	3.25	2.81	6.44	24.37	630	-0	606	700+	1900+
14800	1580	483489	6673273	955	15.59	13.12	11.74	10.36	8.58	6.92	6.32	4.85	4.23	3.46	2.9	6.6	23.28	630	-13	523	700+	1900+
14800	1600	483491	6673292	948	15.08	13.45	11.82	9.44	7.93	6.79	5.2	4.12	3.76	3.02	2.24	6.16	34.48	630	1	694	700+	1900+
14800	1620	483491	6673312	945	14.43	13.59	11.44	9.57	8.24	6.80	5.5	4.81	4.02	3.48	2.58	6.37	44.85	630	-9	799	700+	1900+
14800	1640	483490	6673333	955	14.97	12.46	11.14	9.93	7.63	6.96	5.29	4.45	3.75	2.96	2.28	6.39	37.52	630	-18	584	700+	1900+
14800	1660	483492	6673352	946	13.78	12.5	10.4	9.25	7.64	6.27	5.17	4.27	3.61	2.81	2.24	5.84	38.78	630	4	521	700+	1900+
14800	1680	483491	6673371	947	13.71	11.89	10.39	8.55	7.12	5.99	4.98	3.95	3.08	2.31	1.56	5.56	42.67	630	13	486	700+	1900+
14900	920	483591	6672612	1073	22.85	19.92	17.34	15.33	12.65	10.62	8.69	7.23	5.99	4.93	3.94	9.91	134.29	630	13	2008	700+	1900+
14900	940	483589	6672632	1067	22.23	19.64	17.88	14.67	12.76	10.57	8.78	7.26	5.87	4.86	3.96	9.95	86.19	630	-7	1455	700+	1900+
14900	960	483590	6672652	1065	23.65	20.71	18.37	15.82	13.18	11.28	9.39	7.6	6.2	5.15	4.19	10.27	74.61	630	4	1411	700+	1900+
14900	980	483590	6672672	1047	24.06	21.07	17.76	15.45	12.91	10.19	9.47	7.86	6.4	5.33	4.39	9.93	70.43	630	7	1482	700+	1900+
14900	1000	483590	6672691	1046	22.33	19.25	17.19	13.96	12.11	10.54	8.68	6.66	5.62	4.87	3.38	9.89	54.6	630	11	1269	700+	1900+
14900	1020	483590	6672712	1033	22.31	19.52	17.31	14.54	12.44	10.50	8.77	7.53	5.93	4.84	3.65	9.85	62.1	630	-11	1583	700+	1900+
14900	1040	483590	6672732	1032	21.89	18.96	16.5	13.67	12.63	9.99	8.16	6.82	5.61	4.61	3.58	9.63	43.99	630	-7	1221	700+	1900+
14900	1060	483590	6672753	1023	21.28	18.5	16.37	13.77	11.76	9.85	8.33	6.67	5.47	4.7	3.9	9.26	41.57	630	4	1248	700+	1900+
14900	1080	483590	6672772	1020	20.85	17.84	15.69	13.25	11.28	9.23	7.73	6.53	5.61	4.08	3.15	8.58	24.82	630	-3	800	700+	1900+
14900	1100	483590	6672792	1017	19.66	18	15.78	13.46	11.78	10.19	8.3	6.74	6.03	4	2.97	9.57	23.15	630	6	796	700+	1900+
14900	1120	483591	6672812	1019	21.98	19.15	16.93	14.48	11.49	10.27	8.54	6.96	5.85	4.9	3.73	9.59	29.87	630	6	1090	700+	1900+
14900	1140	483590	6672832	1014	21.79	20.76	19.69	15.05	11.76	11.59	9.92	7.91	6.16	5.22	4.76	10.44	31.31	630	0	1204	700+	1900+
14900	1160	483590	6672852	1010	24.43	20.42	17.28	15.2	12.6	10.67	9.23	7.53	6.32	5.11	4.31	10.46	33.87	630	2	1363	700+	1900+
14900	1180	483590	6672872	1008	24.46	19.83	18.33	14.86	13.23	11.04	8.63	7.41	6.01	5.13	4.09	10.17	45.15	630	-1	1891	700+	1900+
14900	1200	483590	6672892	1009	23.21	20.47	17.36	15.34	12.95	11.02	9.31	7.6	6.34	5.15	4.28	10.28	45.75	630	-4	1981	700+	1900+
14900	1220	483591	6672912	998	22.76	20.82	17.75	14.82	13.26	10.78	9.02	7.64	6.12	5.05	3.94	10.24	35.05	630	1	1560	700+	1900+
14900	1240	483591	6672932	997	23.48	19.47	16.03	15.12	11.64	10.62	8.75	7.53	7.88	4.71	2.11	10.29	32.69	630	10	1486	700+	1900+
14900	1260	483590	6672952	998	23.55	19.67	17.01	15.61	13.3	11.12	9.44	7.53	6.19	4.84	3.68	10.8	36.45	630	5	1682	700+	1900+
14900	1280	483590	6672973	994	22.78	18.68	19.24	14.95	14.26	11.21	9.15	7.96	6.55	5.25	4.12	10.47	47.12	630	-2	2194	700+	1900+
14900	1300	483590	6672992	983	24.49	20.08	16.72	14.96	13.31	10.38	8.67	7.19	6.04	4.73	3.93	9.48	41.3	630	8	1930	700+	1900+
14900	1320	483590	6673012	989	21.86	17.49	15.79	14.69	11.76	10.40	8.36	7.6	6.44	4.48	3.48	9.2	37.41	630	5	1742	7	

APPENDIX D: RAW GEOPHYSICAL DATA (Highlighted Data Used)

line	station	X	Y	H	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	Mx	Vp	I	Sp	Ps	A	B
15000	940	483691	6672632	1119	22.68	20.19	17.9	15.11	12.82	10.96	8.91	7.4	6.2	5.07	4.04	10.11	56.12	635	13	1562	700+	1900+
15000	960	483690	6672652	1099	23.03	20.55	18.16	15.22	13.2	10.79	9.14	7.69	6.23	4.97	4.15	10.13	55.88	635	5	1640	700+	1900+
15000	980	483689	6672672	1093	22.81	19.29	19.92	13.96	13.09	10.80	8.84	7.44	6.12	4.77	3.86	10.25	52.04	635	-6	1613	700+	1900+
15000	1000	483690	6672692	1092	23.22	19.62	18.67	14.71	13.3	10.85	9	7.45	6.14	5.09	4.13	10.09	47.3	635	9	1549	700+	1900+
15000	1020	483690	6672712	1080	25.89	22.33	19.44	16.78	13.69	12.14	10.12	8.24	6.72	5.6	4.67	11.26	44.18	635	3	1527	700+	1900+
15000	1040	483690	6672732	1080	26.32	22.32	20.17	17.02	14.62	12.07	10.28	8.2	6.52	5.56	4.54	11.3	47.51	635	2	1730	700+	1900+
15000	1060	483691	6672752	1077	25.16	21.76	19.13	16.33	14.11	12.01	9.88	8.17	6.33	5.57	4.47	11.34	37.23	635	8	1425	700+	1900+
15000	1080	483690	6672772	1068	24.25	21	18.32	15.39	13.16	11.22	9.04	8.06	6.62	5.3	4.61	10.34	33.36	635	3	1338	700+	1900+
15000	1100	483690	6672792	1059	23	20.04	17.56	14.81	12.82	10.67	9.19	7.5	6.04	5.22	3.94	10.14	39.29	635	-5	1646	700+	1900+
15000	1120	483690	6672812	1048	22.06	18.83	16.94	14.5	12.44	10.61	8.67	7.03	5.9	4.93	3.99	9.7	36.24	608	10	1651	700+	1900+
15000	1140	483689	6672832	1046	21.41	19.38	16.63	14.06	12.33	9.82	8.46	7.09	5.61	4.76	3.87	9.31	29.96	635	21	1356	700+	1900+
15000	1160	483690	6672852	1044	21.44	18.38	16.38	14.14	12.32	10.40	8.66	7.35	5.86	5.32	4.04	9.7	17.92	635	4	838	700+	1900+
15000	1180	483690	6672872	1032	20.71	18.29	16.05	13.04	12.16	9.92	8.01	6.86	6.16	4.73	4.25	9.09	17.21	608	-6	864	700+	1900+
15000	1200	483690	6672892	1039	23.1	19.12	17.15	14.91	12.74	10.52	8.33	5.64	5.6	3.76	2.53	9.69	15.7	608	-13	808	700+	1900+
15000	1220	483690	6672912	1032	21	17.96	16.76	13.82	11.97	9.98	8.56	6.42	4.92	3.41	2.94	9.45	17.59	608	0	923	700+	1900+
15000	1240	483690	6672932	1028	23.77	20.76	17.75	15.54	12.75	10.80	9.22	7.91	6.4	5.48	4.82	10.24	24.67	608	3	1316	700+	1900+
15000	1260	483690	6672951	1023	23.56	20.44	18.55	15.92	13.17	11.40	9.61	8.15	6.64	5.44	4.47	10.79	34.63	608	3	1868	700+	1900+
15000	1280	483690	6672972	1021	24.36	20.33	18.32	15.42	13.06	11.22	9.41	7.72	5.96	5.2	4.16	10.37	31.58	608	-8	1715	700+	1900+
15000	1300	483690	6672991	1017	23.27	20.79	18.86	15.58	13.78	11.22	9.05	7.72	6.67	5.1	4.63	10.34	44.46	608	-13	2420	700+	1900+
15000	1320	483690	6673013	1010	24.11	19.94	16.95	15.43	12.7	11.29	9.04	7.36	5.5	5.34	4.21	10.18	53.91	608	4	2928	700+	1900+
15000	1340	483690	6673032	1007	22.16	19.46	16.82	14.96	11.86	10.24	8.88	6.91	5.83	4.77	4.01	9.64	49.62	608	46	2676	700+	1900+
15000	1360	483690	6673052	1009	23.04	19.08	16.65	14.57	12.57	10.26	8.77	7.08	5.93	4.85	3.86	9.81	37.04	608	7	1976	700+	1900+
15000	1380	483690	6673072	1009	23.13	19.36	17.05	13.7	12.61	10.24	8.61	7.36	5.97	4.74	3.58	9.68	13.65	608	-46	717	700+	1900+
15000	1400	483690	6673093	997	20.44	19.42	14.72	12.66	12.03	9.64	7.97	6.58	5.61	4.33	3.64	9.13	25.88	608	-19	1332	700+	1900+
15000	1420	483690	6673112	1010	23.23	19.58	16.26	15.09	11.93	10.70	8.8	7.4	6.08	5.08	3.85	9.78	31.85	608	-18	1600	700+	1900+
15000	1440	483689	6673131	1006	22.59	18.63	14.61	14.13	10.96	9.13	7.48	7.55	5.65	4.85	3.47	8.1	24.6	630	-39	1159	700+	1900+
15000	1460	483690	6673152	1000	17.59	16.21	13.53	12.62	10.8	8.16	7.18	6.5	5.28	3.88	3.7	7.56	24.39	630	-14	1112	700+	1900+
15000	1480	483691	6673173	997	20.65	18.16	13.85	13.08	8.42	8.97	7.66	7.46	4.92	4.03	2.61	8.11	28.73	630	1	1263	700+	1900+
15000	1500	483690	6673192	997	20.22	16.34	14.87	12.25	10.7	8.79	7.72	6.72	4.84	4.12	3.77	8.66	30.02	630	-12	1268	700+	1900+
15000	1520	483690	6673213	993	18.89	17.8	13.76	12.52	9.87	9.24	7.03	5.65	5.23	4.03	3.38	8.49	30.05	630	7	1215	700+	1900+
15000	1540	483690	6673232	987	21.83	19.95	12.93	14.46	10.64	10.22	7.4	6.46	4.7	3.83	3.75	8.57	35.47	630	24	1368	700+	1900+
15000	1560	483690	6673252	989	21.92	17.9	14.28	14.21	10.94	9.63	7.71	6.57	5.14	4.07	3.25	8.89	33.85	630	14	1242	700+	1900+
15000	1580	483691	6673272	991	20.38	19.22	15.22	13.74	10.88	9.31	8.39	6.21	5.73	3.99	4.13	8.63	26.6	630	9	927	700+	1900+
15000	1600	483690	6673292	988	17.98	16.89	14.74	12.43	9.94	8.71	7.83	6.11	4.86	4.45	2.94	8.27	27.9	630	1	921	700+	1900+
15000	1620	483691	6673313	983	18.71	16.48	12.23	12.18	9.27	8.00	6.71	5.71	4.95	3.86	3.55	7.54	28.82	630	-1	901	700+	1900+
15000	1640	483690	6673333	983	16.2	15.69	12.92	10.86	9.46	7.44	6.77	5.45	4.21	3.5	2.54	6.95	25.7	630	-11	760	700+	1900+
15000	1660	483690	6673353	980	16.05	13.1	13.07	10.42	9.33	7.43	6.11	4.35	4.42	3.25	2.46	6.84	32.64	630	10	915	700+	1900+
15000	1680	483690	6673372	980	15.44	14.36	12.21	10.39	10.27	7.64	6.38	5.7	4.04	3.79	2.78	7.45	30.6	630	-2	816	700+	1900+

Yellow highlight indicates data used for final interpretation and Plates in Appendix

APPENDIX E. SURFACE ROCK CHIP SAMPLE LOCATIONS,
DESCRIPTIONS, AND ASSAYS

APPENDIX E. 2009 Surface Rock-Chip Sample Locations

Sample_ID	Sample_Occurrence	Sample_Type	Sample_Width	project_area	Easting_utm Nad83 Zn8N	Northing_utm Nad83 Zn8N	elev_ft	elev_m	Claim Name and No.	date	collected_by	ALS Shipment no.
G0751001		BLANK										1st shipment July 21 2009
G0751002	outcrop, north side of Ck	Chip	2m	Antimony Ck	483285	6671160	3770	1140	POP 38	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751003	outcrop, south side of Ck	Chip	1m	Antimony Ck	483670	6670716	4270	1302	POP 37	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751004	outcrop, south of Ck	Chip	1m	Antimony Ck	483676	6670707	4273	1303	POP 37	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751005	Float, south of Ck	Chip	2m vertical	Antimony Ck	483717	6670695	4304	1312	POP 37	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751006	outcrop, north of Ck	Chip	1m hor	Antimony Ck	484126	6670618	4649	1417	POP 35	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751007	subcrop?	Chip	20cm	Antimony Ck	484690	6670801	5108	1557	POP 33	6/13/2009	Todd/Wang	1st shipment July 21 2009
G0751008	outcrop	Chip	2m hor	Diamond gossan	483996	6671383	5114	1559	POP 36	6/15/2009	Todd/Wang	1st shipment July 21 2009
G0751009	outcrop	Chip	2m	Diamond gossan	484144	6671635			POP 57		Wang	1st shipment July 21 2009
G0751010	Outcrop	Chip	0.8m	Antimony Ck	484228	6670971			POP 33		Wang	1st shipment July 21 2009
G0751011	Outcrop	Chip	0.2m	Antimony Ck	483996	6670933		1532	POP 35		Wang	1st shipment July 21 2009
G0751012	Outcrop	Chip	1m hor	Carbon Hill	485180	6669802	5883	1794	MOM 40		Todd	1st shipment July 21 2009
G0751013	Outcrop	Chip	1m	Carbon Hill	484107	6669952		1749	MOM 81		Todd	1st shipment July 21 2009
G0751014	Outcrop	Chip	2m	Fenwick Creek	483623	6669926		1309	STEN 14		Pan/Wang/Wang	1st shipment July 21 2009
G0751015	outcrop	Chip	.7m	Diamond gossan	483807	6672188		1347	POP 60		Pan/Wang/Wang	1st shipment July 21 2009
G0751016	outcrop	Chip	2m	Goddell	483719	6672336		1226	POP 69		Pan/Wang/Wang	1st shipment July 21 2009
G0751017	outcrop	Chip	0.70m	Carbon Hill South	486255	6669341		1762	MOM 66		Pan/Wang/Wang	1st shipment July 21 2009
G0751018	outcrop	Chip	2m	Carbon Hill South	486285	6669458		1769	MOM 35		Pan/Wang/Wang	1st shipment July 21 2009
G0751019	float	Grab		Carbon Hill South	486255	6669341		1762	MOM 66		Pan/Wang/Wang	1st shipment July 21 2009
G0751020		Standard										1st shipment July 21 2009
G0751021	outcrop	chip	0.5m	Chieftain Hill	480679	6673556		1289	CHIEF 58		Pan/Wang/Wang	1st shipment July 21 2009
G0751022	outcrop	chip	0.3m	Charleston vn	472460	6670538		1874	CHAR 12		Todd	1st shipment July 21 2009
G0751023	Outcrop	Chip	1m hor	Lake S.	473639	6674724		1864	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751024	Outcrop Hw	Chip	1m hor	Lake Vn#1	473650	6674872		1856	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751025	Outcrop Vn	Chip	0.25m hor (true w)	Lake Vn#1	473650	6674872		1856	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751026	Outcrop Fw	Chip	1m hor	Lake Vn#1	473650	6674872		1856	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751027	Outcrop Hw	Chip	1m hor	Lake Vn#1	473643	6674872		1865	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751028	Outcrop	Chip	0.92m =true hor w (vn lessons to 0.28m to S)	Lake Vn#1	473643	6674872		1865	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751029	Outcrop	Chip	1m hor	Lake Vn#1	473643	6674872		1865	KUKU 29	7/11/2009	Todd	1st shipment July 21 2009
G0751030	Outcrop	Chip	1m	Mt Skukum (Lake zone)	473702	6675041		1870	KUKU 18	7/11/2009	Wang/Pan	1st shipment July 21 2009
G0751031	Outcrop	Chip	0.2m	Mt Skukum (Lake zone)	473702	6675041		1870	KUKU 18	7/11/2009	Wang/Pan	1st shipment July 21 2009
G0751032	Outcrop	Chip	1m	Mt Skukum (Lake zone)	473702	6675041		1870	KUKU 18	7/11/2009	Wang/Pan	1st shipment July 21 2009
G0751033	Outcrop	Chip	0.18m hor	Lake Vn#1	473679	6675050		1891	KUKU 18	7/11/2009	Todd	1st shipment July 21 2009
G0751034	subcrop	Grab	1.0?	Mt Skukum (Lake zone)	473457	6674342		1929	KUKU 27	7/11/2009	Wang/Pan	1st shipment July 21 2009
G0751035	Outcrop	Chip	1m	Scar	477863	6668785		1460	LB 3	7/12/2009	Wang/Pan	1st shipment July 21 2009
G0751036	Outcrop	Chip	1.5m	Chieftain Hill (Morning vn)	479821	6673048		1491	CHIEF 37	7/14/2009	Pan/Wang	1st shipment July 21 2009
G0751037	Outcrop	Chip	0.4m	Chieftain Hill (Johnny B'Vn)	480292	6672587		1143	CHIEF 54	7/14/2009	Pan/Wang	1st shipment July 21 2009
G0751038	Outcrop	Chip	1.2m	Cirque Vn	474719	6675437		1747	CL 18	7/16/2009	Todd	1st shipment July 21 2009
G0751039	Outcrop	Chip	0.8m	Cirque Vn	474722	6675433		1750	CL 18	7/16/2009	Todd	1st shipment July 21 2009
G0751040		Standard										1st shipment July 21 2009
G0751041	Outcrop	Chip	1.0m	Cirque Vn	474719	6675434		1752	CL 18	7/16/2009	Todd	1st shipment July 21 2009
G0751042	Outcrop	Chip	1.7m	Cirque Vn	474758	6675477		1774	CL 18	7/16/2009	Todd	1st shipment July 21 2009
G0751043	Outcrop	Chip	0.4m	Cirque Vn 'split'	474731	6675424		1767	CL 18	7/16/2009	Todd	1st shipment July 21 2009
G0751044	Outcrop	Chip	1.0m hor	Hua Gulch	474663	6675100		1836	CL 13	7/16/2009	Todd	1st shipment July 21 2009
G0751045	Outcrop (trench)	Chip	2.0m	Falls Vn	474068	6675445		1680	KUKU 22	7/16/2009	Todd	1st shipment July 21 2009
G0751046	Outcrop	Chip	1.0m	Alunite cap	474307	6673827		2056	KUKU 4	7/18/2009	Wang/Todd	1st shipment July 21 2009
G0751047	Outcrop	Chip	1.2m	Pika Vn	473128	6675161		1797	KUKU 32	7/18/2009	Wang/Todd	1st shipment July 21 2009
G0751048	Outcrop	Chip	2m	Becker-Cochrane	488560	6671980		1296	POP 8	7/20/2009	Todd	1st shipment July 21 2009
G0751049	Outcrop	Chip	1m	Goldpan Gully	485840	6672239		1683	POP 49	7/27/2009	Wang/Pan	2nd shipment Sept. 2009
G0751050		BLANK										1st shipment July 21 2009
G0751051	outcrop	chip	2m hor	Diamond gossan	483654	6671528	4808	1466	POP 59	6/15/2009	Todd/Wang	1st shipment July 21 2009
G0751052		Standard										1st shipment July 21 2009
G0751053	subcrop?	Chip	1m hor	Diamond gossan	483659	6671552	4832	1473	POP 59	6/15/2009	Todd/Wang	1st shipment July 21 2009
G0751054	Outcrop	Chip	1m	Fenwick Ck	483301	6670593		1212	STEN 20	6/16/2009	Todd	1st shipment July 21 2009
G0751055	outcrop	Chip	1m hor	Chieftain Hill	480164	6672686	3978	1213	CHIEF 54	6/24/2009	Todd/Pan	1st shipment July 21 2009
G0751056	outcrop	Chip	1m hor	Chieftain Hill	480050	6672712	4124	1257	CHIEF 56	6/24/2009	Todd/Pan	1st shipment July 21 2009
G0751057	outcrop	Chip	1m hor	Chieftain Hill/east Gully	479760	6673505	5121	1561	CHIEF 39	6/26/2009	Todd/Pan	1st shipment July 21 2009
G0751058	outcrop	Chip	2m hor	Chieftain Hill/east Gully	479682	6673502	5230	1595	CHIEF 38	6/26/2009	Todd/Pan	1st shipment July 21 2009
G0751059	outcrop	Chip	2m hor	Chieftain Hill, strong Fe Ox zone	478661	6672110	5294	1614	RACA 9	6/28/2009	Todd/Pan	1st shipment July 21 2009
G0751060	outcrop	Chip	2m hor	Chieftain Hill, strong Fe Ox zone	478738	6672062	5271	1607	RACA 9	6/28/2009	Todd/Pan	1st shipment July 21 2009
G0751061	outcrop	chip	1m hor	Chieftain Hill	479071	6672459		1728	CHIEF 32	7/1/2009	Todd/Wang	1st shipment July 21 2009
G0751062	outcrop	Chip	2m hor	Chieftain Hill	479397	6672318		1466	CHIEF 32	7/1/2009	Todd/Wang	1st shipment July 21 2009
G0751063	outcrop	Chip	2m hor	Chieftain Hill	479436	6672034		1361	OMNI 7	7/1/2009	Todd/Wang	1st shipment July 21 2009
G0751064	float	Grab	hor	Chieftain Hill	479603	6672501		1443	CHIEF 33	7/1/2009	Todd/Wang	1st shipment July 21 2009
G0751065	outcrop	Chip	2m hor	Chieftain Hill	479602	6672434		1449	CHIEF 33	7/1/2009	Todd/Wang	1st shipment July 21 2009
G0751066	outcrop	chip	1m hor	Charleston vn	472504	6670712		1849	CHAR 32	7/4/2009	Todd	1st shipment July 21 2009
G0751066	Outcrop	Chip	1m hor	Charleston vn	472504	6670712		1849	CHAR 32	7/4/2009	Todd	1st shipment July 21 2009
G0751067	outcrop	chip	1m hor	Charleston vn, lower adit	472451	6670564	6143	1873	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751068	outcrop	chip	0.3m hor	Charleston vn, lower adit	472451	6670564	6143	1873	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751069	outcrop	chip	1m hor	Charleston vn, lower adit	472451	6670564	6143	1873	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751070	outcrop	chip	1m hor	Charleston vn	472467	6670490		1908	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751071	outcrop	chip	72cm hor	Charleston vn	472467	6670490		1908	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751072	outcrop	chip	1m hor	Charleston vn	472467	6670490		1908	CHAR 12	7/4/2009	Todd	1st shipment July 21 2009
G0751073		Standard										1st shipment July 21 2009
G0751074	Outcrop	Chip	0.65m hor	Charleston vn south	472074	6670068		1975	CHAR 11	7/7/2009	Todd	1st shipment July 21 2009
G0751075	Outcrop	Chip	0.15m	Charleston vn south	472071	6670069		1975	CHAR 11	7/7/2009	Todd	1st shipment July 21 2009

APPENDIX E. 2009 Surface Rock-Chip Sample Locations

Sample_ID	Sample_Occurrence	Sample_Type	Sample_Width	project_area	Easting_utm Nad83_Zn8N	Northing_utm Nad83_Zn8N	elev_ft	elev_m	Claim Name and No.	date	collected_by	ALS Shipment no.
G0751076	Outcrop	Chip	1.0m	Charleston vn south	472078	6670070		1975	CHAR 11	7/7/2009	Todd	1st_shipment_July 21_2009
G0751077	Outcrop	Chip	0.2m	Charleston vn south	472078	6670070		1975	CHAR 11	7/7/2009	Todd	1st_shipment_July 21_2009
G0751078	Outcrop	Chip	0.25m	Charleston vn south	472019	6670020		1953	CHAR 11	7/7/2009	Todd	1st_shipment_July 21_2009
G0751079	Outcrop	Chip	1m hor	Scar (Sil zone)	476923	6668516		1942	LB 15	7/9/2009	Todd	1st_shipment_July 21_2009
G0751080	Outcrop	Chip	1m	Scar (Sil zone)	476918	6668507		1943	LB 15	7/9/2009	Todd	1st_shipment_July 21_2009
G0751081	Outcrop ridge top	Chip	1m hor	Red Ridge	473534	6674234		2008	KUKU 27	7/11/2009	Todd	1st_shipment_July 21_2009
G0751082	Outcrop ridge top	Chip	1m hor	Red Ridge	473555	6674273		2003	KUKU 27	7/11/2009	Todd	1st_shipment_July 21_2009
G0751083	Outcrop	Chip	1m hor	Lake Vn#1	473614	6674710		1894	KUKU 29	7/11/2009	Todd	1st_shipment_July 21_2009
G0751084	Outcrop	Chip	1.1m hor	Scar main sheer zone	477784	6668787		1489	LB 4	7/12/2009	Todd	1st_shipment_July 21_2009
G0751085	Outcrop	Chip	2m hor	Scar main sheer zone	477798	6668783		1490	LB 4	7/12/2009	Todd	1st_shipment_July 21_2009
G0751086	Outcrop/trench	Chip	1.2m	Ocean vn FZ	480143	6672765		1274	CHIEF 54	7/14/2009	Todd	1st_shipment_July 21_2009
G0751087	Outcrop/trench	Chip	1.5m	Ocean vn FZ	480143	6672764		1274	CHIEF 54	7/14/2009	Todd	1st_shipment_July 21_2009
G0751088	Outcrop	Chip	0.2m	Evening Vn	480333	6672895		1249	CHIEF 56	7/14/2009	Todd	1st_shipment_July 21_2009
G0751101	Outcrop	Chip	1m	Goldpan Gully	485225	6672678		1809	POP 52	7/28/2009	Wang/Pan	2nd shipment_Sept_2009
G0751102	Outcrop	Chip	0.9m	Conglomerate Ck	488839	6672444		1453	POP 38	7/29/2009	Wang/Pan	2nd shipment_Sept_2009
G0751103	Outcrop	Chip	1.0m	Chieftian Hill	480675	6673180		1125	POP 37	7/31/2009	Wang/Pan	2nd shipment_Sept_2009
G0751104	Outcrop	Chip	1m	Goddell	484164	6672948		1168	POP 37	8/24/2009	Wang/Pan	2nd shipment_Sept_2009
G0751105	Outcrop	Chip	0.6m hor	Goddell	484366	6672838		1293	POP 37	8/24/2009	Wang/Pan	2nd shipment_Sept_2009
G0751106	Outcrop	Chip	1m	Becker	487738	6671793		1590	POP 35	8/24/2009	Wang/Pan	2nd shipment_Sept_2009
G0751107	Outcrop	Chip	0.24m	Goddell Gully	484025	6673076		1107	POP 33	9/2/2009	Wang/Todd	2nd shipment_Sept_2009
G0751108	Outcrop	Chip	0.1m	Goddell Gully	484145	6672990		1161	POP 36	9/2/2009	Wang/Todd	2nd shipment_Sept_2009
G0751109	Outcrop	Chip	1.4m	Goddell Gully	484166	6673053		1205	POP 57	9/2/2009	Wang/Todd	2nd shipment_Sept_2009
G0751110	Outcrop	Chip	0.15m	Goddell Gully	484199	6673042		1215	POP 33	9/2/2009	Ren	2nd shipment_Sept_2009
G0751111	Standard CDN-ME2	Standard										2nd shipment_Sept_2009
G0751112	Blank CDN-BL-4	BLANK										2nd shipment_Sept_2009
G0751113	STD - CME pulp	Standard										2nd shipment_Sept_2009
G0751114	STD - CME pulp	Standard										2nd shipment_Sept_2009

yellow highlight indicates a standard or blank (pulp).

APPENDIX E. 2009 Surface Rock-Chip Sample Descriptions

Sample_ID	Sample_Description
G0751001	CDN-BL-4
G0751002	Intrusive rock(QMP?), highly fractured, mod to strong orange-brown Fe-Ox on fracture
G0751003	0.7m wide Qtz-py vn @ 52°/80° NE; anastomosing vein w/wk sericite+FeOx
G0751004	Poddy vn, 75°/55-80° NE Qtz+FeOx+5% green Cu Oxide; 35m wide vn, cuts quartz monzonite rocks
G0751005	Ferricrete 20' long with Qtz monz. clasts up to 12cm long
G0751006	Strongly silicified Qtz monzonite/Qtz vein oriented 270/70 S; other silica rich body downhill
G0751007	20cm flat Qtz-rich +30% coarse grain stibnite vein @170/50W; on N side of ck bed; no water
G0751008	lt gray, porphyritic-med gr texture; moderately silicified (pervasive) w/ 4% dis v.fg py; wk-mod sericite to plagi (no veins); no relict mafics
G0751009	surface brown; Fresh rock is grey w/f.g py 2-3%
G0751010	Qtz monzonite grey-light greenish, including copper Qtz vein
G0751011	Qtz vein bearing monzonite w/stibnite, copper oxide
G0751012	lt flesh coloured hb granodiorite with wk chl+ep altn +tr py +mod+FeOx on fracs
G0751013	Very fine gr aphanitic rhyolite dike
G0751014	Yellowish brown, has ~3% of pyrite; iron carbonate on the fracture
G0751015	Qtz vein w/ a little py + Cu Oxide; grey
G0751016	Quartzite, contain 1-3% pyrite, coarse, light yellow
G0751017	Diabase vein, strongly Fred. py as stringers or FR coating
G0751018	Diabase vein, breccia, yellow-brn, w/ 3% py, limonite
G0751019	Diabase, well foliated; limonite on FR surface
G0751020	CDN-ME-2
G0751021	Andesite, silicate-chlorite altn, w/ 1-3% py as stringers or f.g pervasive, greenish
G0751022	Qtz vein w/ yellow-brn FeOx + <1% py
G0751023	Andesite porphyry with mod fracs@198/80w with mod FeOx+wk siln+ser±<2% diss py ±MnOx
G0751024	Hangingwall of Lake vein (uphill) with andesite porphyry with <2% Qtz vnlt adjacent to vein in #G...025
G0751025	0.25m wide (true width) Qtz vein with some banding <2% open-space+vuggy open-space (os) quartz crystals<3mm long+ wk FeOx +<1% OX pyrite
G0751026	Vn @ 187/75°W orientation footwall of vein; andesite porphyry
G0751027	Andesite porphyry with wk epidote altn very hard-hanging wall
G0751028	195°/70W Qtz+FeOx Vn (located 4m west of G0751025 vn); vn anastomoses with variable dip along strike; tr red rhodonite/rhodochrosite in vn; exposed for 35m to S.
G0751029	Andesite porphyry w ep>chl altn
G0751030	Andesite, light brown, green, trace pyrite, limonite
G0751031	Quartz-Carb vein trace pyrite 10-20cm vn width; 204/82
G0751032	Andesite, light green, brown, siliceous alteration
G0751033	12-18cm wide Qtz+ tr FeOx vein 220/65 SW orientation wht; wk banding- no open space
G0751034	Rhyolite, brown-yellow, trace pyrite
G0751035	Granodiorite w/ Qtz veinlets 1-2cm width trace pyrite, limonite
G0751036	15% Qtz+carb + stibnite veins; 85% Andesite wallrock; veins oriented 79°/78N
G0751037	Qtz + FeOx vein oriented 272/53 NW; with some granodiorite wallrock
G0751038	West side of exposed cirque vn continuous chip sample with #G0751039
G0751039	Qtz+cal vein (cirque vein) taken from the east side of the vein; vn oriented 48/53 SE; continuous chip sample with #G0751038
G0751040	CDN-GS-SE
G0751041	Hanging wall andesite to cirque veins; dk green-gray andesite with weak chloritic alteration + occasional Qtz+cal veins <3cm wide+wk pervasive silicification (not continuous chip sample with # G0751039)
G0751042	Cirque Qtz+cal vein with <3% py (old sample tag = #8089)
G0751043	This Qtz+cal vein is an offshoot from the main cirque vn; oriented 30/80w-90
G0751044	Andesite (?) with intense fault-clay gouge with strong dk, brn to or brn FeOx staining (local gossan); with <10% competent mod silicified andesite porphyry with 5%-10% diss py
G0751045	Quartz-Breccia+cal vein oriented 50/80SE; with a 0.23m wide Qtz+cal vein in the footwall of the vn (old sample tags = 5412 (in vn) and 5413 (on east end of wallrock to vn))
G0751046	Quartz-rich felsite (volcanic) with intense pervasive silicification; with weak yellow FeOx surface coatings; gray-white fresh color; trace diss py
G0751047	Coarse-gr calcite-rich sheeted and anastomosing vn zone with local bxa vn textures (clasts up to 0.6m in diam); trace py in vn; outcrop is only ~6m long (vn trends under talus blocks to SW and NE); Pika vn oriented 35/85SE-90; veins make up <80% of sample; veins up to 0.60m wide
G0751048	Fault zone oriented 175°/77E cutting granodiorite; yellow-brown goethite to gray-white with 1-2% py; moderately fractured
G0751049	Rhyolite, strongly siliceous, grey w/ 2-3% pyrite
G0751050	CDN-BL-4
G0751051	Sedimentary Qtzite altered to Qtz+bt+pyx? Spotted hornfels with <1% diss py; wk FeOx on fracs
G0751052	CDN-ME2
G0751053	Qtz-rich sedy rock-Qtzite wht, with wk dk red FeOx coats + Fracs , tr py + ser
G0751054	Monzonite w/pervasive k-spar+Qtz+green chlorite-epidote in fracs +2% oxidized Py
G0751055	lt wht fine-gr aphanitic Andesite porphyry w/ 3% fgr Qtz phenos (clear)-rounded +seuhedral py<3mm wide apophysis; pervasive silification, wk FeOx fracs
G0751056	open space Qtz vein 35cm wide+mod dk brn FeOx planar; recessive weathering up wallrock; grdiorite wallrock
G0751057	Qtz Monz lt grey 3% diss py mod perv silicification + mod or brn FeOx on fracs/coats; mod fracs
G0751058	rhyolite porphyry, w/ 7% fgr Qtz phenos in aphanitic white groundmass + ≤ 2% diss py Q-Sp altn
G0751059	Lithic Tuff; moderately competent rock, with strong goethite + tr hem FeOx coats/FR trace pyrite
G0751060	lithic Tuff; f.gr <15% clasts <2cm w/ strong blch+Qtz-ser altn + mod hem +goethite
G0751061	White rhyolite with trace v. fg clear Qtz eyes+ mod or brn FeOx (<4% oxidized v.fgr py) -old sample tag = 14548 RZ-88 - mod blk MnOx on fracs too
G0751062	Gossan-stained outcrop, fresh rock is pervasive silicification + mod or brn FeOx +<4% dis anhedral py
G0751063	trending 350Az; volcanic? intense pervasive silicification w/ mod or brn to dk brn FeOx on fracs/coatings; +s3% diss py
G0751064	Felsite-Qtz rich, with mod dk brn FeOx on fracs, ±s5% diss py (in steep slope color-Fe anomaly oriented)
G0751065	Qtz-rich felsite w/ strong FeOx on fracs+coats ±s5% diss py high frac
G0751066	wht quartzite-rich vnlt with med FeOx coatings
G0751066	White Qtzite-rich rock, mod FeOx coats
G0751067	Hangingwall of vein; hb granodiorite with wk chl altn to hb+tr py+tr cal vnlt; includes 20cm of str clay+ser+hem+shr by vn
G0751068	30cm wide Qtz-rich vein oriented 325/47 NE with <1% py+<2% galena vein (blebby) + wk goethite
G0751069	Footwall of vein; 20cm of shear+clay/ser/dk hem under vein; rest is hb granodiorite w/ wk-mod perv siln+wk chl± tr diss py
G0751070	Hanging wall of vein; hb granodiorite w/ wk chl+siln
G0751071	Qtz+FeOx vein with trace py+gl oriented 320/45NE (sample tag 376 found) ±accuracy
G0751072	Footwall of vein Hb Granodiorite with wk chl altn
G0751073	CDN-GS-SE
G0751074	Open-space Qtz+strong dk brn FeOx Vein, striking 166
G0751075	Open-space Qtz+mod FeOx vein

APPENDIX E. 2009 Surface Rock-Chip Sample Descriptions

Sample_ID	Sample_Description
G0751076	Hanging-wall-granodiorite wallrock to sample G0751077 with <10% Qtz+FeOx vn
G0751077	whit Qtz > wk FeOx vein striking 130 dipping 40SW (old sample tag#344)
G0751078	Open-space quartz vein breccia with moderate FeOx; vein strikes 110
G0751079	781863 old sample tag; 'silica zone' located 230' Az and 6m away; intense silicification +tr hem+wk or-brn goethite; Rhyolite porphyry with trace relict coarse gr Qtz eyes <4mm diam; <2% Qtz vnits
G0751080	Qtz rhyolite- lt white with, <4% very fine gr Qtz phenos <1mm in wht aphanitic gm+<3% hairline Qtz vnits; +<5% or/brn goethite on fracs + coatings
G0751081	Chalcedonic silica-sinter-laminated w/<3% or brn to rare hem FeOx (mod or-brn FeOx coatings) (35° striking Fracs 20m to E)
G0751082	Strong hem clay soil + silica rich rock-cryptocrystalline silica rock
G0751083	bladed Qtz+carb vn ~3m wide @195/75W (9m long exposure)
G0751084	40% Qtz vns zone 3m-3mm sheeted-wavy-anastomosing 1.5m wide main shear zone=60/75SW 20cm wide; rest rock is pervasive silicifn +<3% ox py +tr MnOx
G0751085	N side of Qtz vein shear zone with 20% Qtz vns <3cm wide <1% FeOx pervasive aphanitic Qtz throughout (granite in footwall)
G0751086	Fault zone located adjacent to G0751087 of strong or-brn FeOx clay gauge Fz+20% wht Qtz vn fragments <2cm (fault gouge of granodiorite)
G0751087	Ocean vein+Fault zone@295 to 305/55NE mod or-brn to wht clay fault gauge + 35% wht Qtz>or-brn FeOx vn fragments <7cm
G0751088	Qtz>tr py + gl+CuOx +Cpy 4cm in granodiorite 260/75NW
G0751101	Quartzite, partly quartzite breccia in Goddell fault zone, grey, little pyrite
G0751102	Rhyolite, wk iron-carbonate, wk siliceous, tr pyrite grey
G0751103	Altered andesite, siliceous trace pyrite, grey-pale yellow limonite in fractures
G0751104	Sheeted Qtz veins ±4% fg py veins<5cm wide over a 1m wide zone on S side of ck; wk silicification adjacent to vns 125°veins (steep)
G0751105	.6m wide Sb>Qtz vn steep 109 stk 80N to 90 in Hw of steep Fz
G0751106	Qtz>FeOx vein by drainage
G0751107	Milky wht Qtz-rich vn with 8% ox med grained py + 2% grn Cu Ox + 0.5% f.gr galena
G0751108	Qtz + tr py + wk FeOx vein oriented 108/42N
G0751109	Open-space Qtz >FeOx vn; anastomosing; 106 and 304-330 strike and 75N to 90 dip
G0751110	Qtz-rich vn + py + cpy + galena + CuOx
G0751111	CDN-ME2
G0751112	CDN-BL-4
G0751113	CME pulp Standard located in Skukum Core Shack
G0751114	CME pulp Standard located in Skukum Core Shack

yellow highlight indicates a standard or blank.

APPENDIX F. FINAL ALS-CHEMEX ASSAY CERTIFICATES
(ROCK-CHIP SAMPLES)



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

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North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: YUKON-SHAANXI PROJECT
C/O KETZA RIVER HOLDINGS LTD.
688 WEST HASTINGS STREET, SUITE 490
VANCOUVER BC V6B 1P1

Page: 1
Finalized Date: 25-AUG-2009
This copy reported on 23-NOV-2009
Account: YUSHAA

CERTIFICATE VA09077176

Project: Skukum District

P.O. No.:

This report is for 87 Rock samples submitted to our lab in Vancouver, BC, Canada on 27-JUL-2009.

The following have access to data associated with this certificate:

HUA JIN

TODD JOHNSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Zn-OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Ag-OG46	Ore Grade Ag - Aqua Regia	VARIABLE
Pb-OG46	Ore Grade Pb - Aqua Regia	VARIABLE
ME-XRF10	Fusion XRF - Ore Grade	XRF
OA-GRA06	LOI for ME-XRF06	WST-SIM
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-MS41	51 anal. aqua regia ICPMS	

To: YUKON-SHAANXI PROJECT
ATTN: TODD JOHNSON
105C PLATINUM RD.
WHITEHORSE YT Y1A 5M3

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Total # Pages: 4 (A - D)

Plus Appendix Pages

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Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.2	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1
G0751001		0.18	0.003		0.16	2.07	7.0	<0.2	<10	70	0.26	0.11	0.72	0.18	13.25	10.1
G0751002		3.24	<0.001		0.06	0.76	1.3	<0.2	<10	420	0.59	0.06	1.15	0.16	43.7	9.5
G0751003		4.56	0.008		0.76	0.36	3.3	<0.2	<10	60	0.47	0.65	0.91	0.34	16.80	11.6
G0751004		2.18	0.025		18.40	0.30	317	<0.2	<10	190	0.53	0.94	0.84	2.22	13.75	5.0
G0751005		2.58	0.002		0.21	0.87	4.3	<0.2	<10	550	0.53	0.35	1.17	0.56	21.4	44.5
G0751006		2.08	0.005		0.10	0.34	1.6	<0.2	<10	880	0.14	0.46	0.03	0.03	20.6	1.1
G0751007		2.16	0.003		3.99	0.07	58.6	<0.2	<10	50	0.09	0.27	0.41	20.7	6.01	2.0
G0751008		2.34	0.005		0.14	1.04	2.9	<0.2	<10	170	0.19	3.62	0.01	0.13	29.9	3.7
G0751009		2.30	0.004		0.08	0.46	2.6	<0.2	<10	560	<0.05	2.61	<0.01	0.06	41.8	1.7
G0751010		2.04	0.023		15.25	0.24	80.7	<0.2	<10	770	0.25	21.3	1.19	10.20	22.1	2.7
G0751011		2.06	0.059		>100	0.10	22.1	<0.2	<10	260	0.18	0.61	1.19	309	3.74	2.1
G0751012		2.18	0.003		0.65	1.28	4.8	<0.2	<10	70	0.18	0.32	0.32	1.02	12.50	4.9
G0751013		1.76	<0.001		0.57	0.99	1.1	<0.2	<10	50	0.21	0.04	0.29	1.03	19.20	4.3
G0751014		1.84	0.031		0.43	0.43	5.2	<0.2	<10	120	0.17	1.12	0.10	0.16	14.45	1.7
G0751015		1.88	0.020		7.82	0.25	7.2	<0.2	<10	570	0.32	12.65	1.64	0.57	25.7	4.0
G0751016		1.66	0.002		0.20	0.29	4.2	<0.2	<10	100	0.40	0.25	0.32	0.16	26.1	0.9
G0751017		1.82	0.002		0.44	1.07	6.3	<0.2	<10	40	0.09	0.13	0.25	0.06	9.35	10.9
G0751018		1.76	0.004		0.11	1.63	1.9	<0.2	<10	70	0.32	0.10	0.31	0.03	18.55	7.7
G0751019		1.56	0.004		0.53	1.53	24.3	<0.2	<10	20	0.07	0.19	0.52	0.05	19.25	93.2
G0751020		0.16	2.13	2.09	14.70	1.01	27.1	2.1	<10	30	<0.05	4.01	0.37	59.1	2.24	12.1
G0751021		1.72	0.062		1.23	1.77	18.7	<0.2	<10	180	0.36	2.70	0.55	1.63	2.19	2.1
G0751022		1.98	>10.0	10.10	18.45	0.08	239	11.4	<10	30	<0.05	0.19	0.08	1.09	2.50	0.9
G0751023		1.46	0.042		0.48	1.30	23.6	<0.2	<10	40	0.16	0.04	0.65	0.09	25.0	4.3
G0751024		1.58	0.078		0.84	2.78	17.8	<0.2	<10	30	0.56	0.07	1.04	0.22	22.5	16.1
G0751025		1.82	5.40	5.37	23.0	0.51	234	5.6	<10	10	0.30	0.04	0.32	0.25	126.5	1.6
G0751026		1.36	0.025		0.85	3.00	14.1	<0.2	<10	30	0.60	0.02	0.99	0.19	30.2	16.8
G0751027		1.06	0.006		3.06	3.52	12.6	<0.2	<10	30	0.82	0.02	1.72	3.10	20.8	17.0
G0751028		2.04	4.24	4.71	26.9	0.69	42.5	3.9	<10	10	0.81	2.45	0.47	1.89	1.80	1.6
G0751029		1.84	0.239		1.52	1.99	20.5	<0.2	<10	30	0.70	0.06	0.77	3.58	17.60	8.8
G0751030		1.78	0.657		1.26	2.75	8.2	0.2	<10	50	0.76	0.09	1.27	0.30	21.4	12.5
G0751031		1.78	>10.0	26.2	25.4	0.47	0.9	22.9	<10	10	0.23	0.06	1.08	0.14	3.22	2.3
G0751032		2.06	0.032		0.45	4.12	3.6	0.2	<10	60	0.70	0.03	1.52	0.18	26.3	15.8
G0751033		2.04	>10.0	30.9	>100	0.58	1.8	>25.0	<10	20	0.27	0.09	0.31	0.07	4.50	2.1
G0751034		1.88	0.055		0.50	0.45	5.6	<0.2	<10	10	0.18	0.03	0.03	0.01	42.1	0.5
G0751035		1.66	0.038		9.19	0.26	0.4	<0.2	<10	20	1.12	11.20	0.11	2.71	38.3	0.7
G0751036		2.36	0.735		0.88	0.85	9120	0.8	<10	130	0.39	0.22	0.27	4.71	50.0	5.5
G0751037		1.98	0.318		4.19	0.36	70.1	<0.2	<10	30	0.54	0.59	0.64	16.25	11.35	0.9
G0751038		1.80	0.132		0.68	0.47	72.0	0.2	<10	50	0.47	0.08	6.97	0.23	16.95	2.5
G0751039		1.60	0.044		1.12	0.69	22.4	<0.2	<10	70	0.36	0.06	2.89	0.22	15.50	6.9
G0751040		0.14	4.86	5.06	3.24	0.23	35.1	4.0	<10	30	0.08	0.43	0.81	0.15	13.85	8.9

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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Total # Pages: 4 (A - D)

Plus Appendix Pages

Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo
		ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
		1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05
G0751001		26	0.48	40.3	3.61	6.71	0.07	0.27	0.02	0.028	0.12	6.5	21.1	0.97	706	2.96
G0751002		11	3.00	8.3	2.37	2.52	0.06	0.10	0.01	0.020	0.21	24.4	7.0	0.44	587	1.67
G0751003		4	0.94	203	2.50	0.77	0.05	0.02	0.02	0.014	0.28	8.4	0.3	0.22	469	5.45
G0751004		4	0.95	1060	1.74	0.68	<0.05	<0.02	0.45	0.009	0.24	7.3	0.3	0.20	359	104.5
G0751005		18	0.71	26.2	4.68	3.50	0.06	0.16	0.11	0.016	0.18	11.3	7.2	0.68	6820	3.27
G0751006		3	0.28	6.4	1.41	0.98	<0.05	<0.02	0.14	0.007	0.23	12.6	0.3	0.02	103	0.97
G0751007		9	0.36	32.4	1.07	0.57	0.06	0.02	95.5	0.010	0.05	5.3	0.5	0.08	433	2.76
G0751008		6	1.95	14.8	2.44	3.20	0.06	0.11	0.32	0.049	0.19	15.8	5.6	0.52	299	3.11
G0751009		8	1.44	7.6	2.05	2.35	0.06	0.03	0.29	0.008	0.05	22.5	7.6	<0.01	28	2.26
G0751010		8	1.30	617	1.05	0.70	<0.05	0.03	13.70	0.007	0.17	12.0	0.5	0.38	319	51.4
G0751011		12	0.23	223	1.22	0.40	0.07	0.03	608	0.023	0.06	2.5	1.1	0.34	360	71.5
G0751012		10	1.31	13.3	2.38	4.81	0.05	0.36	1.83	0.008	0.11	6.5	16.8	0.98	515	6.50
G0751013		11	0.23	6.0	1.30	4.65	0.06	0.75	2.08	0.010	0.10	10.0	8.1	0.64	283	0.76
G0751014		6	0.15	22.4	4.02	4.16	0.08	0.04	0.10	0.005	0.23	8.6	2.1	0.11	195	4.60
G0751015		6	1.38	33.0	1.55	0.89	<0.05	0.06	0.54	0.024	0.19	13.7	0.6	0.36	1560	0.78
G0751016		6	1.76	2.9	0.68	0.89	<0.05	0.50	0.09	<0.005	0.22	12.6	0.6	0.01	439	0.87
G0751017		118	0.36	68.1	3.71	5.23	0.09	0.04	0.10	0.007	0.05	4.5	17.0	1.01	216	1.99
G0751018		8	2.45	52.9	3.63	8.42	0.10	0.19	0.01	0.005	0.11	8.5	25.4	1.08	129	2.91
G0751019		310	0.17	234	14.90	15.65	0.37	0.04	0.03	0.027	0.01	7.8	28.4	2.21	1140	8.19
G0751020		42	<0.05	5100	9.20	2.79	0.11	0.09	1.09	1.830	0.10	0.8	2.3	1.02	348	14.50
G0751021		4	1.27	21.1	3.11	5.64	0.05	0.02	0.03	0.024	0.28	0.9	10.2	0.43	359	1.32
G0751022		11	0.29	22.8	1.74	0.48	<0.05	<0.02	0.08	0.007	0.06	1.3	0.4	0.02	78	7.73
G0751023		39	0.73	15.0	3.33	6.31	0.08	0.78	0.02	0.011	0.11	10.8	15.6	0.63	406	2.43
G0751024		43	0.69	12.2	4.17	9.21	0.12	0.41	0.02	0.011	0.08	9.9	41.7	1.98	811	1.34
G0751025		11	0.94	34.1	1.82	2.77	0.13	0.06	0.02	0.009	0.02	58.2	4.2	0.09	132	1.27
G0751026		48	1.46	5.4	4.23	8.98	0.13	0.42	0.01	0.010	0.08	15.5	51.3	2.14	902	1.00
G0751027		44	1.03	23.8	4.01	9.32	0.12	0.28	0.01	0.007	0.07	9.0	52.3	2.03	904	1.05
G0751028		37	0.53	64.4	1.50	2.42	0.09	0.02	0.02	0.019	0.02	0.9	5.3	0.13	724	1.48
G0751029		26	1.43	25.3	2.87	6.65	0.08	0.27	0.01	0.009	0.12	7.7	32.5	1.27	768	0.31
G0751030		40	1.83	9.9	3.82	8.79	0.10	0.34	0.01	0.012	0.11	9.3	38.3	1.45	692	0.75
G0751031		9	0.94	2.2	0.52	1.40	<0.05	0.02	0.01	<0.005	0.03	1.2	7.8	0.20	202	0.20
G0751032		43	1.22	7.2	4.57	11.85	0.12	0.42	0.01	0.022	0.09	11.2	41.0	1.95	685	0.72
G0751033		16	0.62	8.6	0.74	1.91	0.12	0.11	0.04	0.005	0.04	1.9	5.4	0.21	124	0.16
G0751034		13	1.06	3.6	0.74	2.27	0.05	0.44	0.01	0.009	0.26	20.0	0.9	0.03	50	2.58
G0751035		6	0.46	46.1	0.75	1.97	<0.05	0.13	0.03	0.163	0.12	20.2	1.0	0.02	391	4.66
G0751036		10	13.70	13.7	2.89	1.98	0.06	0.10	0.80	0.040	0.39	24.3	2.1	0.10	536	2.48
G0751037		3	0.88	34.0	0.99	0.95	<0.05	0.15	0.07	0.332	0.30	5.7	0.6	0.05	664	5.05
G0751038		11	0.75	3.8	1.44	1.04	<0.05	0.12	0.04	0.022	0.19	8.2	4.4	0.14	875	1.00
G0751039		12	1.46	4.1	3.50	1.97	0.05	0.06	0.07	0.030	0.18	7.4	8.8	0.36	478	3.26
G0751040		27	0.79	47.5	2.75	1.05	0.05	0.08	2.28	0.013	0.15	5.4	4.2	0.08	129	303

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

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Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
		%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01
G0751001		0.07	0.15	24.2	710	17.9	5.0	0.001	0.03	0.53	5.9	0.5	0.9	36.6	<0.01	0.04
G0751002		0.04	0.07	9.8	660	9.5	10.5	<0.001	0.15	1.49	4.1	0.3	0.3	82.0	<0.01	0.01
G0751003		0.01	<0.05	4.0	650	89.3	11.9	0.001	1.51	0.16	1.6	1.4	<0.2	212	<0.01	0.06
G0751004		0.02	0.05	2.5	400	425	9.7	0.002	0.83	10.35	1.3	1.2	<0.2	522	<0.01	0.08
G0751005		0.04	0.19	18.3	550	16.1	8.4	0.001	0.24	2.14	3.9	0.5	0.2	196.5	<0.01	0.05
G0751006		0.01	<0.05	1.1	100	4.5	7.9	<0.001	0.14	0.53	0.6	1.5	<0.2	63.1	<0.01	0.07
G0751007		0.01	0.11	1.6	90	487	2.4	<0.001	1.59	>10000	1.2	0.3	1.4	70.5	0.03	0.02
G0751008		0.01	<0.05	3.8	470	44.6	7.1	0.001	1.25	24.7	2.1	4.7	<0.2	34.8	<0.01	0.04
G0751009		0.03	<0.05	3.1	270	14.5	1.6	<0.001	0.67	115.5	0.8	1.5	<0.2	150.0	<0.01	0.06
G0751010		0.02	0.06	3.3	280	2480	8.6	0.010	0.06	131.0	0.9	1.3	<0.2	103.0	<0.01	1.39
G0751011		0.01	0.09	3.1	40	>10000	2.4	<0.001	0.52	4710	0.8	1.9	0.2	96.0	<0.01	<0.01
G0751012		0.04	0.31	4.0	670	49.9	5.4	<0.001	0.16	12.75	2.8	0.3	0.3	33.0	<0.01	0.23
G0751013		0.05	0.20	6.6	250	60.0	3.7	<0.001	0.01	23.7	2.9	0.3	0.6	38.1	<0.01	0.01
G0751014		0.08	0.84	2.1	410	59.2	8.0	0.005	1.37	1.32	1.6	1.7	0.4	98.0	<0.01	0.27
G0751015		0.02	0.08	2.5	370	882	11.7	<0.001	0.40	14.10	1.5	0.3	<0.2	54.3	<0.01	0.66
G0751016		0.02	0.11	1.1	40	26.7	12.2	<0.001	0.22	1.33	0.5	0.2	0.2	16.3	<0.01	0.04
G0751017		0.04	0.26	53.7	530	6.8	2.8	0.003	0.46	2.41	6.0	2.0	0.4	27.7	<0.01	0.11
G0751018		0.07	0.18	5.1	600	3.1	7.3	0.005	0.78	0.75	9.8	1.4	0.6	76.4	<0.01	0.06
G0751019		0.01	0.24	66.0	7580	15.3	0.4	0.008	0.98	0.85	11.8	4.5	0.8	10.0	<0.01	0.13
G0751020		0.01	0.06	23.6	110	258	1.3	0.007	9.48	0.67	2.5	4.8	1.3	8.4	<0.01	11.40
G0751021		0.15	0.45	2.4	530	136.5	11.0	<0.001	1.18	0.53	0.9	3.6	1.5	83.6	<0.01	0.47
G0751022		0.01	0.06	1.3	70	346	2.4	<0.001	0.20	4.68	0.4	0.4	<0.2	15.6	<0.01	1.64
G0751023		0.06	0.38	2.1	1100	8.9	6.0	<0.001	0.63	0.95	6.7	2.3	1.0	21.1	<0.01	0.05
G0751024		0.04	0.12	6.3	1180	8.0	4.6	<0.001	0.02	1.25	6.1	0.4	0.6	46.4	<0.01	0.13
G0751025		0.01	0.15	1.3	110	11.8	1.8	<0.001	0.06	2.39	1.1	2.5	0.3	17.0	0.01	4.89
G0751026		0.05	0.14	6.0	1160	7.1	5.4	<0.001	0.02	0.81	5.6	0.6	0.5	44.8	<0.01	0.13
G0751027		0.12	0.11	7.3	1190	21.2	4.5	<0.001	0.11	0.68	5.6	0.6	0.4	81.7	<0.01	0.06
G0751028		0.01	0.12	2.0	110	1205	1.5	<0.001	0.06	4.06	0.6	15.0	8.2	20.2	<0.01	4.51
G0751029		0.02	0.17	3.4	840	43.3	7.7	<0.001	0.02	1.16	4.1	0.4	0.9	36.2	<0.01	0.22
G0751030		0.09	0.20	4.6	1120	13.7	6.2	<0.001	0.19	0.84	5.9	0.9	0.7	67.5	<0.01	0.03
G0751031		0.01	0.12	1.2	70	6.2	1.9	<0.001	0.01	1.10	0.7	0.4	0.8	83.7	<0.01	0.34
G0751032		0.28	0.12	5.2	1220	4.4	5.2	<0.001	0.15	0.56	9.0	0.6	0.8	108.5	<0.01	0.02
G0751033		0.02	0.26	2.0	160	7.7	1.8	<0.001	0.01	2.83	1.4	25.6	4.6	26.5	<0.01	0.11
G0751034		0.07	0.27	1.0	40	10.8	14.0	<0.001	0.11	0.89	0.7	0.3	0.5	2.8	<0.01	0.01
G0751035		0.05	0.14	0.8	160	1110	8.2	<0.001	0.01	0.23	0.8	0.6	2.8	5.2	<0.01	0.35
G0751036		0.01	<0.05	1.6	780	73.9	19.2	<0.001	0.32	1550	4.3	0.6	0.2	14.5	<0.01	0.12
G0751037		0.01	0.19	0.5	40	1955	19.0	<0.001	0.67	7.65	0.5	0.2	0.8	35.2	<0.01	0.04
G0751038		0.01	<0.05	1.4	240	12.0	9.3	<0.001	0.46	8.26	1.5	1.6	0.2	167.5	<0.01	0.08
G0751039		0.02	<0.05	3.2	850	17.7	6.9	<0.001	1.02	2.91	2.9	1.6	0.2	58.7	<0.01	0.05
G0751040		0.01	0.11	34.2	390	129.5	4.1	0.114	2.30	11.75	0.6	1.7	1.0	218	<0.01	0.67

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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C/O KETZA RIVER HOLDINGS LTD.

688 WEST HASTINGS STREET, SUITE 490

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Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Zn-OG46	Ag-OG46	Pb-OG46	ME-XRF10
		Th	Ti	Ti	U	V	W	Y	Zn	Zr	Zn	Ag	Pb	Sb
		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	%
		0.2	0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.001	1	0.001	0.01
G0751001		1.2	0.147	0.04	0.36	59	0.18	10.05	78	8.2				
G0751002		17.2	<0.005	0.07	3.19	22	0.08	11.85	41	2.9				
G0751003		3.3	<0.005	0.09	0.56	4	<0.05	4.37	29	0.6				
G0751004		3.2	<0.005	0.17	1.14	2	0.07	2.86	115	<0.5				
G0751005		6.2	0.034	0.07	16.65	27	0.13	8.23	563	6.2				
G0751006		5.2	<0.005	0.05	0.70	2	<0.05	1.23	9	<0.5				
G0751007		1.6	<0.005	0.15	0.61	3	<0.05	1.71	1790	0.7				4.10
G0751008		7.5	<0.005	0.20	0.82	16	0.05	3.35	33	5.3				
G0751009		8.6	<0.005	0.05	3.23	14	<0.05	2.22	6	1.6				
G0751010		5.0	<0.005	0.09	1.35	4	0.40	4.89	239	1.2				
G0751011		1.2	<0.005	0.13	9.75	4	0.09	1.09	>10000	0.8	1.560	137	1.365	
G0751012		8.0	0.064	0.05	2.02	24	0.09	3.67	157	11.9				
G0751013		10.0	0.025	0.03	2.06	14	<0.05	8.02	78	24.0				
G0751014		5.5	0.052	0.06	2.15	18	0.25	2.38	44	1.1				
G0751015		7.3	<0.005	0.10	2.42	3	0.06	4.32	57	2.2				
G0751016		12.7	<0.005	0.12	4.10	1	0.06	5.67	11	12.8				
G0751017		1.6	0.122	0.03	0.37	84	0.21	3.34	29	1.0				
G0751018		6.7	0.230	0.06	1.31	95	0.15	4.97	21	7.3				
G0751019		3.7	0.075	0.02	0.38	319	0.42	6.84	56	1.1				
G0751020		0.2	0.019	0.10	0.25	16	0.13	3.36	>10000	3.2	1.295			
G0751021		1.4	0.029	0.09	0.25	11	0.54	3.46	171	<0.5				
G0751022		0.6	<0.005	0.04	2.96	4	0.16	0.49	24	<0.5				
G0751023		1.9	0.240	0.06	0.58	54	0.35	11.65	37	22.7				
G0751024		1.4	0.181	0.05	0.44	66	0.59	13.45	95	11.8				
G0751025		0.2	0.013	0.03	0.12	8	0.24	23.0	26	1.1				
G0751026		1.4	0.195	0.05	0.44	66	0.65	14.65	100	11.7				
G0751027		1.4	0.148	0.05	0.40	72	0.74	11.90	259	8.4				
G0751028		0.2	0.007	0.02	0.17	6	0.52	0.80	905	1.2				
G0751029		1.8	0.139	0.07	0.37	46	0.53	9.21	369	8.5				
G0751030		1.4	0.168	0.08	0.81	74	0.45	12.35	99	10.7				
G0751031		0.2	0.015	0.02	0.06	5	0.08	1.37	19	0.9				
G0751032		1.9	0.183	0.05	1.07	103	0.27	16.45	95	13.7				
G0751033		0.3	0.050	0.02	0.10	10	0.15	2.12	18	3.4		187		
G0751034		12.5	<0.005	0.09	1.24	2	0.08	5.02	5	15.5				
G0751035		17.9	<0.005	0.08	4.64	2	0.15	8.47	456	4.1				
G0751036		5.8	<0.005	0.57	1.00	15	0.25	9.71	108	4.6				
G0751037		6.0	<0.005	0.21	2.64	<1	0.16	3.49	555	3.7				
G0751038		1.7	<0.005	0.12	0.28	5	0.08	6.79	37	5.1				
G0751039		1.0	<0.005	0.23	0.18	18	0.08	6.47	67	3.0				
G0751040		0.9	0.021	0.13	0.28	10	1.10	3.31	281	3.5				

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

**** See Appendix Page for comments regarding this certificate ****



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To: YUKON-SHAANXI PROJECT
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Total # Pages: 4 (A - D)
Plus Appendix Pages
Finalized Date: 25-AUG-2009
Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt.	Au-ICP21 Au	Au-GRA21 Au	ME-MS41 Ag	ME-MS41 Al	ME-MS41 As	ME-MS41 Au	ME-MS41 B	ME-MS41 Ba	ME-MS41 Be	ME-MS41 Bi	ME-MS41 Ca	ME-MS41 Cd	ME-MS41 Ce	ME-MS41 Co
		kg	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		0.02	0.001	0.05	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1
G0751041		2.00	0.013		0.58	2.17	14.8	<0.2	<10	90	0.89	0.06	3.75	0.17	29.8	14.7
G0751042		2.16	0.193		1.73	0.54	32.3	0.2	<10	90	0.30	0.04	0.84	0.10	17.70	6.3
G0751043		1.82	0.209		15.70	0.18	2	0.2	<10	10	1.68	<0.01	>25.0	0.11	3.01	0.8
G0751044		1.74	0.002		0.18	1.31	5.3	<0.2	<10	80	0.34	0.04	2.78	0.24	33.3	14.1
G0751045		2.40	0.118		0.73	0.51	19.1	0.2	<10	20	0.43	0.21	3.47	0.09	27.3	1.5
G0751046		1.66	0.008		0.17	0.58	7.9	<0.2	<10	710	<0.05	0.22	0.06	0.01	3.03	0.1
G0751047		2.10	0.015		0.46	0.45	23	<0.2	<10	10	1.20	0.01	21.8	0.12	7.15	4.7
G0751048		2.24	0.228		1.25	0.38	40.9	0.2	<10	270	0.32	0.21	0.27	0.11	119.0	0.2
G0751050		0.16	0.001		0.17	2.11	6.3	<0.2	<10	70	0.27	0.11	0.75	0.19	13.70	10.2
G0751051		1.72	0.004		0.15	1.37	20.9	<0.2	<10	60	0.47	0.19	3.56	0.10	26.0	15.7
G0751052		0.16	2.09	1.66	12.55	0.88	26.3	2.0	<10	30	<0.05	3.65	0.29	52.3	1.98	11.6
G0751053		2.04	0.011		0.22	0.43	48.9	<0.2	<10	180	0.13	0.14	0.29	0.19	10.55	1.7
G0751054		1.30	0.002		0.08	0.22	1.9	<0.2	<10	700	0.17	0.12	0.35	0.07	30.9	0.6
G0751055		1.72	0.060		2.59	0.51	35.7	<0.2	<10	340	0.41	0.45	0.05	3.07	23.4	1.1
G0751056		1.54	0.066		64.7	0.35	42.4	<0.2	<10	480	0.47	111.5	0.31	60.9	28.5	3.9
G0751057		1.70	0.009		0.55	0.44	3.1	<0.2	<10	300	0.20	1.81	0.08	0.22	20.6	3.9
G0751058		1.92	0.009		0.50	0.34	4.2	<0.2	<10	160	0.10	1.68	0.02	0.29	25.2	0.7
G0751059		2.16	0.013		0.38	0.71	14.8	<0.2	<10	120	0.48	0.76	0.02	2.00	35.8	1.2
G0751060		1.36	0.002		0.15	0.74	20.5	<0.2	<10	70	0.35	0.45	<0.01	0.04	36.3	0.4
G0751061		1.50	0.058		11.35	0.44	111.5	<0.2	<10	110	0.32	0.07	0.01	0.80	39.0	0.4
G0751062		2.12	0.017		0.10	0.22	1.7	<0.2	<10	760	<0.05	0.43	0.01	0.04	6.74	0.5
G0751063		1.70	0.044		0.13	0.39	3.2	<0.2	<10	510	<0.05	1.45	0.01	0.03	4.71	0.4
G0751064		1.52	0.153		0.11	1.33	5.3	<0.2	<10	200	0.14	0.58	0.23	0.09	14.50	5.5
G0751065		1.56	0.151		0.12	1.37	13.3	0.2	<10	120	0.18	0.45	0.30	0.16	14.50	5.8
G0751066		1.90	0.003		0.24	0.92	1.6	<0.2	<10	70	0.45	0.05	0.78	0.19	14.60	6.7
G0751067		1.92	0.402		4.49	1.61	53.7	0.3	<10	140	0.63	0.07	2.64	3.39	33.8	8.9
G0751068		2.34	2.49	2.70	39.0	0.12	43.2	1.4	<10	10	0.08	0.08	1.26	8.71	2.07	1.2
G0751069		2.06	0.040		1.03	1.68	67.5	<0.2	<10	130	0.50	0.05	3.22	5.57	30.3	8.5
G0751070		1.86	0.030		0.44	1.70	12.1	<0.2	<10	110	0.31	0.05	2.81	6.87	30.6	9.4
G0751071		2.40	6.01	5.14	17.20	0.36	115.0	4.5	<10	30	0.07	2.66	0.14	3.04	4.13	2.7
G0751072		1.64	0.029		0.71	1.43	10.4	<0.2	<10	80	0.23	0.06	2.69	4.84	29.4	8.3
G0751073		0.16	5.05	4.95	3.30	0.22	36.1	3.6	<10	30	0.09	0.49	0.76	0.39	14.20	8.9
G0751074		1.38	0.025		11.60	0.28	289	<0.2	<10	50	<0.05	52.8	0.06	4.98	5.08	3.0
G0751075		1.30	0.005		1.78	0.04	60.4	<0.2	<10	10	<0.05	9.53	0.02	0.41	0.45	0.6
G0751076		1.56	0.001		2.57	2.54	7.1	<0.2	<10	160	0.26	0.73	0.36	0.96	46.9	16.5
G0751077		2.56	0.111		88.3	0.11	125.0	<0.2	<10	10	<0.05	454	0.04	0.49	6.68	1.7
G0751078		1.40	0.284		83.9	0.30	1550	0.4	<10	20	0.08	115.0	0.02	1.77	7.93	9.5
G0751079		1.52	0.230		3.56	0.35	790	0.2	<10	10	0.38	3.44	<0.01	0.16	18.10	0.5
G0751080		1.54	0.050		3.46	0.31	1350	<0.2	<10	10	0.40	3.74	<0.01	0.15	22.6	0.1
G0751081		1.90	0.002		0.26	0.44	17.3	<0.2	<10	<10	0.28	0.60	<0.01	0.03	38.7	0.3

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

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Total # Pages: 4 (A - D)

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Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo
		ppm 1	ppm 0.05	ppm 0.2	% 0.01	ppm 0.05	ppm 0.05	ppm 0.02	ppm 0.01	ppm 0.005	% 0.01	ppm 0.2	ppm 0.1	% 0.01	ppm 5	ppm 0.05
G0751041		33	3.56	11.6	4.49	7.77	0.08	0.09	0.02	0.041	0.23	13.3	39.0	1.22	880	0.79
G0751042		9	1.57	4.9	3.23	1.72	0.06	0.12	0.03	0.018	0.21	8.4	5.5	0.18	251	2.05
G0751043		1	0.63	1.2	0.25	0.40	<0.05	<0.02	0.01	0.010	0.05	1.8	2.7	0.10	972	0.14
G0751044		10	0.75	11.2	4.36	3.72	0.07	0.44	0.05	0.029	0.14	13.9	6.7	0.71	905	1.28
G0751045		18	1.13	2.4	1.25	1.15	<0.05	0.19	0.02	0.014	0.16	13.5	4.0	0.12	647	4.54
G0751046		1	<0.05	9.0	2.28	2.18	<0.05	0.46	0.41	0.052	0.14	2.4	2.2	0.02	9	9.46
G0751047		11	0.70	2.3	0.99	2.16	<0.05	0.05	0.02	0.013	0.05	3.7	8.1	0.27	696	0.67
G0751048		3	1.12	3.4	0.75	1.90	0.10	0.50	<0.01	0.012	0.30	57.7	0.6	0.01	98	7.53
G0751050		27	0.58	35.1	3.75	6.82	0.08	0.27	<0.01	0.031	0.12	6.7	19.3	0.97	713	3.32
G0751051		15	7.76	18.1	4.10	4.59	0.07	0.13	0.13	0.040	0.24	11.9	12.6	1.28	1240	1.16
G0751052		40	0.06	4650	8.59	2.49	0.11	0.09	1.15	1.710	0.08	0.7	2.0	0.92	316	13.80
G0751053		19	2.48	22.2	1.08	1.02	<0.05	<0.02	0.37	0.012	0.30	5.1	0.7	0.01	31	3.82
G0751054		8	0.42	2.5	0.39	0.62	<0.05	0.33	0.01	<0.005	0.19	17.2	0.3	0.09	142	0.86
G0751055		15	0.90	31.0	0.97	1.31	<0.05	0.24	0.02	0.025	0.37	11.8	1.2	0.02	226	17.10
G0751056		5	2.03	270	2.53	1.16	0.05	0.03	0.66	1.280	0.21	16.2	1.1	0.09	626	68.1
G0751057		25	1.30	10.7	2.04	1.37	<0.05	0.02	0.02	0.014	0.22	10.9	0.9	0.03	114	3.31
G0751058		4	0.60	5.3	1.08	0.90	<0.05	0.02	0.03	0.011	0.23	14.2	0.5	0.02	23	5.78
G0751059		18	0.85	34.1	1.96	2.91	0.05	0.42	0.01	0.096	0.33	20.2	3.9	0.04	129	3.19
G0751060		2	0.82	72.2	3.21	2.40	0.06	0.23	<0.01	0.032	0.31	21.0	2.1	0.02	99	4.80
G0751061		8	1.13	15.1	0.85	1.28	<0.05	0.67	0.04	0.024	0.29	22.5	0.3	0.01	976	9.76
G0751062		4	0.06	4.5	0.51	0.59	<0.05	0.21	0.07	<0.005	0.04	4.1	0.6	<0.01	21	69.2
G0751063		22	0.10	4.2	0.53	0.45	<0.05	0.22	0.09	<0.005	0.09	2.8	0.6	<0.01	33	4.40
G0751064		11	0.86	41.7	3.54	5.61	0.08	0.48	0.01	0.025	0.10	7.8	4.9	1.21	634	3.33
G0751065		16	0.49	48.9	3.55	6.35	0.12	0.23	0.01	0.037	0.10	7.7	2.7	0.92	651	4.04
G0751066		31	0.22	56.7	1.19	4.37	0.09	0.04	<0.01	0.006	0.05	6.9	3.9	0.43	172	2.84
G0751067		16	2.13	47.6	2.76	4.31	0.06	0.03	<0.01	0.016	0.38	20.3	12.3	0.81	807	0.80
G0751068		10	0.18	127.5	0.69	0.36	<0.05	<0.02	<0.01	0.007	0.02	1.1	1.3	0.07	361	0.74
G0751069		12	1.48	23.7	2.53	4.51	0.06	0.04	<0.01	0.018	0.34	17.7	13.8	0.92	908	0.69
G0751070		7	1.77	14.4	2.77	5.02	0.05	0.02	<0.01	0.014	0.22	17.9	17.7	1.06	709	0.75
G0751071		43	0.33	102.5	2.13	2.14	<0.05	<0.02	0.01	0.016	0.07	2.2	3.6	0.14	133	2.47
G0751072		9	1.31	17.7	2.55	4.49	0.05	0.05	0.01	0.013	0.21	18.4	10.2	0.92	752	0.68
G0751073		27	0.72	49.3	2.56	1.03	0.06	0.09	2.44	0.016	0.14	5.8	3.8	0.08	122	285
G0751074		49	0.20	94.8	3.78	5.48	0.05	<0.02	0.01	0.019	0.03	2.9	1.6	0.11	149	2.41
G0751075		9	0.12	20.3	1.06	1.36	<0.05	<0.02	<0.01	<0.005	0.01	0.3	0.3	0.01	46	0.68
G0751076		22	2.00	77.8	4.45	7.78	0.10	0.04	<0.01	0.021	0.29	29.5	19.9	1.56	743	0.67
G0751077		13	0.15	73.3	2.44	1.63	0.05	<0.02	<0.01	<0.005	0.02	3.8	0.5	0.04	64	1.62
G0751078		43	0.89	267	6.21	8.38	0.10	<0.02	0.01	0.012	0.03	4.6	0.5	0.02	73	8.18
G0751079		31	1.82	9.0	0.63	1.67	<0.05	0.33	0.01	0.032	0.31	13.0	0.9	<0.01	37	4.95
G0751080		5	2.01	8.8	0.43	1.23	<0.05	0.32	0.01	0.042	0.30	11.9	0.6	<0.01	23	9.79
G0751081		17	1.76	3.6	0.71	2.15	0.05	0.74	0.01	0.023	0.24	19.2	0.8	<0.01	43	3.49

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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Total # Pages: 4 (A - D)

Plus Appendix Pages

Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
		%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01
G0751041		0.03	<0.05	7.3	1070	9.2	11.0	<0.001	0.75	1.09	6.3	2.1	0.4	136.0	<0.01	0.03
G0751042		0.02	<0.05	3.1	740	10.6	9.8	<0.001	1.72	1.45	2.5	1.7	0.2	33.6	<0.01	0.06
G0751043		0.01	<0.05	<0.2	30	1.5	2.2	<0.001	0.06	0.47	0.6	1.6	<0.2	527	<0.01	4.25
G0751044		0.08	0.44	4.3	1220	9.0	5.3	<0.001	4.14	0.80	4.0	0.8	0.8	73.0	<0.01	0.03
G0751045		0.02	<0.05	1.0	180	11.9	8.1	<0.001	0.27	0.85	0.7	1.2	<0.2	89.8	<0.01	0.10
G0751046		0.02	0.19	<0.2	40	12.9	0.3	<0.001	0.34	0.39	0.9	<0.2	0.7	17.7	<0.01	0.02
G0751047		0.02	0.16	2.5	240	2.7	3.3	<0.001	0.18	0.81	2.2	0.5	0.2	530	<0.01	0.01
G0751048		0.03	0.10	0.5	40	25.0	16.6	<0.001	0.31	0.85	0.8	0.3	0.3	15.0	<0.01	0.01
G0751050		0.07	0.21	23.3	700	20.0	4.9	0.002	0.06	0.47	5.4	0.5	1.0	35.1	<0.01	0.04
G0751051		0.05	<0.05	13.7	970	9.0	10.9	<0.001	1.51	10.70	7.1	0.6	0.2	89.3	<0.01	0.09
G0751052		0.01	0.09	23.0	100	233	1.2	0.007	8.82	0.67	2.3	4.0	1.2	6.7	<0.01	10.55
G0751053		0.01	<0.05	1.7	90	4.4	10.4	<0.001	0.54	23.5	0.9	1.4	<0.2	238	<0.01	0.07
G0751054		0.05	0.17	1.4	70	3.6	9.2	<0.001	0.05	0.55	0.6	<0.2	0.2	61.9	<0.01	0.01
G0751055		0.01	0.41	2.1	60	265	21.4	<0.001	0.35	1.28	0.5	0.2	0.7	13.2	0.01	0.01
G0751056		0.03	0.05	2.3	410	1330	15.6	0.001	0.50	1.48	1.5	1.4	3.5	17.6	<0.01	2.43
G0751057		0.06	0.07	5.1	480	24.4	8.3	<0.001	0.65	1.07	1.2	0.6	0.2	20.9	<0.01	0.41
G0751058		0.03	0.05	2.0	240	30.3	10.0	<0.001	0.39	0.87	0.6	1.4	<0.2	23.9	<0.01	0.22
G0751059		0.03	0.55	1.8	100	16.3	14.8	<0.001	0.26	0.95	0.9	0.3	0.7	6.6	<0.01	0.03
G0751060		<0.01	0.31	0.4	80	4.7	17.0	<0.001	0.04	0.54	0.5	0.3	1.0	1.7	<0.01	0.03
G0751061		0.03	0.51	0.8	60	681	13.8	<0.001	0.01	1.61	0.6	0.2	0.2	3.5	<0.01	<0.01
G0751062		0.02	0.05	0.7	40	13.3	0.7	0.157	0.25	2.26	0.5	2.5	0.2	26.8	<0.01	0.03
G0751063		0.04	<0.05	1.2	60	19.2	1.3	0.002	0.34	0.93	0.9	1.7	0.3	55.6	<0.01	0.07
G0751064		0.06	0.36	2.8	590	14.5	3.7	0.005	1.10	0.26	6.4	2.1	0.6	39.4	<0.01	0.46
G0751065		0.11	0.47	5.1	510	15.5	3.0	0.038	1.18	0.54	5.2	3.9	0.7	52.5	<0.01	1.07
G0751066		0.03	0.44	23.9	470	2.6	3.1	0.003	0.10	0.25	2.4	2.0	0.2	16.1	0.01	0.09
G0751067		0.03	<0.05	4.2	630	662	16.5	<0.001	0.29	1.18	4.0	0.9	0.2	112.0	<0.01	0.04
G0751068		<0.01	0.05	1.1	60	5590	1.0	<0.001	0.31	7.58	0.3	6.4	<0.2	45.0	<0.01	0.15
G0751069		0.03	<0.05	3.7	590	70.4	15.2	<0.001	0.10	0.55	3.7	0.4	0.2	154.5	<0.01	0.02
G0751070		0.02	<0.05	3.7	630	34.5	9.8	<0.001	0.06	0.34	3.9	0.2	<0.2	62.8	<0.01	<0.01
G0751071		0.01	<0.05	2.4	90	816	3.0	<0.001	0.35	1.63	0.8	0.2	<0.2	12.2	<0.01	3.91
G0751072		0.03	0.10	3.6	630	29.9	10.3	<0.001	0.10	0.32	4.0	<0.2	0.2	78.3	<0.01	0.02
G0751073		0.01	0.15	34.5	370	120.5	4.4	0.112	2.20	11.70	0.6	1.3	1.0	214	<0.01	0.77
G0751074		<0.01	0.05	2.9	160	972	1.2	<0.001	0.03	1.38	0.9	0.3	0.2	5.7	<0.01	0.85
G0751075		<0.01	0.05	1.1	30	41.2	0.5	<0.001	<0.01	0.15	0.3	<0.2	<0.2	1.5	<0.01	0.04
G0751076		0.06	0.13	9.0	720	14.6	16.9	<0.001	<0.01	0.18	8.7	0.2	0.3	30.0	<0.01	0.01
G0751077		<0.01	0.07	2.0	100	248	0.8	<0.001	0.01	0.71	0.5	1.8	0.2	3.4	<0.01	1.24
G0751078		0.01	0.13	4.0	250	941	1.8	<0.001	0.02	3.09	0.8	2.8	0.2	8.1	<0.01	4.53
G0751079		<0.01	1.53	1.5	10	93.9	29.6	<0.001	0.04	0.74	0.4	0.3	0.3	1.1	<0.01	0.10
G0751080		<0.01	1.39	0.5	<10	26.7	29.0	<0.001	0.05	1.49	0.4	0.4	0.2	0.7	<0.01	0.14
G0751081		0.05	0.42	0.9	20	17.6	16.9	<0.001	0.03	1.24	0.9	0.2	0.5	1.4	<0.01	<0.01

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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Total # Pages: 4 (A - D)

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Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Zn-OG46	Ag-OG46	Pb-OG46	ME-XRF10
		Th	Ti	Ti	U	V	W	Y	Zn	Zr	Zn	Ag	Pb	Sb
		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	%
		0.2	0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.001	1	0.001	0.01
G0751041		1.5	<0.005	0.16	0.28	52	0.06	12.50	85	4.0				
G0751042		1.5	<0.005	0.21	0.27	15	0.05	7.02	42	6.2				
G0751043		<0.2	<0.005	0.02	<0.05	2	0.98	1.50	9	<0.5				
G0751044		2.1	0.150	0.13	0.50	22	0.23	13.25	96	13.6				
G0751045		5.1	<0.005	0.10	1.02	2	0.07	6.19	32	6.6				
G0751046		3.7	<0.005	0.04	1.54	2	0.42	0.95	6	18.3				
G0751047		0.4	0.025	0.08	0.16	21	0.27	3.47	24	2.3				
G0751048		13.4	<0.005	0.14	1.54	1	0.06	10.05	26	18.9				
G0751050		1.4	0.154	0.04	0.38	60	0.18	10.20	80	8.7				
G0751051		4.4	0.014	0.13	0.73	59	<0.05	11.35	88	7.8				
G0751052		0.2	0.017	0.10	0.21	15	0.12	3.12	>10000	3.1	1.300			
G0751053		1.8	<0.005	0.11	0.26	5	0.14	1.81	9	0.9				
G0751054		12.8	<0.005	0.07	2.03	1	0.05	2.88	7	9.7				
G0751055		9.0	<0.005	0.25	4.70	1	0.45	5.63	166	5.8				
G0751056		10.1	<0.005	0.23	2.39	8	1.18	7.11	2100	1.1				
G0751057		4.1	<0.005	0.07	0.54	10	0.28	2.83	34	0.6				
G0751058		4.3	<0.005	0.07	0.39	4	0.11	2.54	24	0.6				
G0751059		10.6	<0.005	0.18	3.74	3	0.17	5.77	141	11.9				
G0751060		8.7	<0.005	0.22	1.11	<1	0.22	3.43	24	7.5				
G0751061		12.2	<0.005	0.19	2.07	<1	0.08	3.52	224	16.9				
G0751062		2.7	<0.005	0.02	0.36	4	0.09	0.73	2	7.4				
G0751063		1.7	<0.005	0.04	0.44	6	0.12	0.44	3	8.8				
G0751064		8.9	0.163	0.05	3.46	66	0.28	4.90	64	14.9				
G0751065		7.3	0.263	0.05	4.06	92	0.31	2.51	58	6.4				
G0751066		3.7	0.068	<0.02	1.13	45	0.25	6.34	45	1.2				
G0751067		11.7	0.005	0.11	2.08	33	0.26	9.05	146	0.9				
G0751068		0.3	<0.005	<0.02	0.66	2	0.06	1.49	108	<0.5				
G0751069		10.9	0.007	0.09	1.57	32	0.19	10.55	127	0.8				
G0751070		11.3	<0.005	0.06	2.17	36	0.08	6.92	238	<0.5				
G0751071		1.6	<0.005	0.02	1.69	8	0.15	0.86	88	<0.5				
G0751072		13.3	0.045	0.06	4.80	43	0.15	7.23	124	0.9				
G0751073		1.0	0.020	0.12	0.28	10	1.35	3.39	277	3.2				
G0751074		0.6	<0.005	0.02	3.76	38	0.22	2.35	186	<0.5				
G0751075		<0.2	<0.005	<0.02	0.38	7	0.10	0.26	11	<0.5				
G0751076		15.1	0.112	0.12	2.52	82	0.13	12.50	87	0.7				
G0751077		0.6	<0.005	<0.02	1.01	12	0.08	0.79	12	<0.5				
G0751078		0.4	0.005	0.03	3.12	21	0.17	1.69	117	<0.5				
G0751079		9.2	<0.005	0.23	0.97	1	0.32	5.24	12	10.6				
G0751080		11.3	<0.005	0.21	3.27	<1	0.31	12.00	10	9.0				
G0751081		16.0	<0.005	0.09	2.09	<1	0.11	6.89	18	21.5				

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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Total # Pages: 4 (A - D)

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Finalized Date: 25-AUG-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.2	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1
G0751082		2.06	0.020		0.58	0.42	60.9	<0.2	<10	20	0.17	0.60	0.01	0.03	66.8	0.3
G0751083		1.76	>10.0	19.35	34.8	0.08	2	24.2	<10	<10	3.48	0.13	16.65	0.05	2.14	0.4
G0751084		3.48	0.074		32.0	0.25	3.4	<0.2	<10	30	0.86	5.25	0.67	0.61	28.3	2.0
G0751085		2.92	0.078		4.76	0.46	1.6	<0.2	<10	40	0.60	3.59	2.63	0.14	48.3	0.9
G0751086		1.54	0.237		30.4	0.46	1525	0.2	<10	180	0.31	42.0	0.14	10.45	37.9	0.6
G0751087		2.94	1.100	1.06	>100	0.35	3580	1.1	<10	90	0.17	222	0.09	9.33	20.7	0.6
G0751088		1.80	4.32	1.92	>100	0.39	65.1	1.4	<10	240	0.29	411	0.59	29.5	27.4	2.8

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

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Page: 1
Finalized Date: 16-OCT-2009
This copy reported on 19-APR-2010
Account: YUSHAA

CERTIFICATE VA09105546

Project: Skukum District

P.O. No.: Rock-2

This report is for 15 Rock samples submitted to our lab in Vancouver, BC, Canada on 22-SEP-2009.

The following have access to data associated with this certificate:

HUA JIN

TODD JOHNSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
LOG-24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-MS41	51 anal. aqua regia ICPMS	
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Zn-OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Ag-OG46	Ore Grade Ag - Aqua Regia	VARIABLE
Pb-OG46	Ore Grade Pb - Aqua Regia	VARIABLE
As-OG46	Ore Grade As - Aqua Regia	VARIABLE
ME-XRF10	Fusion XRF - Ore Grade	XRF
OA-GRA06	LOI for ME-XRF06	WST-SIM

To: YUKON-SHAANXI PROJECT
ATTN: TODD JOHNSON
105C PLATINUM RD.
WHITEHORSE YT Y1A 5M3

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



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Finalized Date: 16-OCT-2009

Account: YUSHAA

Project: Skukum District

CERTIFICATE OF ANALYSIS VA09105546

Sample Description	Method Analyte Units LoR	WEI-21	Au-ICP21	Au-GRA21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Recvd Wt.	Au	Au	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co
		kg	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		0.02	0.001	0.05	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1
G0751049		2.66	0.003		0.18	1.42	11.4	<0.2	<10	90	0.24	0.15	0.29	0.45	23.6	13.4
G0751101		1.74	0.003		0.06	0.31	239	<0.2	<10	110	0.08	0.52	0.01	0.02	18.35	0.4
G0751102		1.54	0.019		0.27	0.27	18.7	<0.2	<10	110	0.44	0.51	0.02	0.08	28.4	0.4
G0751103		1.98	<0.001		0.09	0.31	22.8	<0.2	<10	50	0.93	0.20	0.98	0.30	66.3	1.0
G0751104		2.88	0.024		2.72	0.25	16.8	<0.2	<10	150	0.25	4.86	1.68	0.39	23.5	5.3
G0751105		2.56	7.04	7.49	49.2	0.13	240	7.4	<10	<10	0.15	0.38	0.38	117.0	1.76	1.5
G0751106		1.76	0.012		1.54	0.14	39.4	<0.2	<10	1300	0.09	1.02	0.03	4.11	4.78	1.0
G0751107		1.82	0.029		6.10	0.16	58.2	<0.2	<10	250	0.14	3.36	1.20	61.5	6.15	3.4
G0751108		1.98	0.021		1.51	0.27	1575	<0.2	<10	660	0.29	0.14	0.18	0.56	28.2	3.8
G0751109		2.32	0.003		0.54	0.17	16.1	<0.2	<10	310	0.12	0.46	5.98	5.17	8.37	11.6
G0751110		2.64	0.003		1.76	0.56	12.9	<0.2	<10	1290	0.36	1.08	2.38	9.28	33.4	6.2
G0751111		0.14	1.980	1.50	14.35	0.96	24.4	1.9	<10	30	<0.05	3.99	0.30	57.9	2.43	10.3
G0751112		0.12	0.003		0.19	2.13	6.4	<0.2	<10	70	0.28	0.11	0.71	0.27	14.15	10.1
G0751113		0.12	9.18	10.35	>100	0.57	>10000	9.2	<10	40	0.28	43.7	0.40	434	9.13	48.3
G0751114		0.14	9.63	9.92	>100	0.58	>10000	10.0	<10	40	0.29	43.7	0.40	437	9.03	49.3





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CERTIFICATE OF ANALYSIS VA09105546

Method	CERTIFICATE COMMENTS
ME-MS41	Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).



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CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn
		ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
		1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5
G0751082		3	2.65	3.8	1.94	2.88	0.07	0.36	0.02	0.044	0.25	36.7	0.4	0.01	25
G0751083		4	0.32	9.5	0.12	0.29	<0.05	<0.02	0.01	0.006	0.04	1.6	0.7	0.03	904
G0751084		8	1.58	125.0	0.93	1.39	<0.05	0.05	0.01	0.023	0.15	16.0	1.8	0.03	420
G0751085		16	0.94	99.9	0.62	2.33	<0.05	0.16	<0.01	0.020	0.20	27.7	2.6	0.04	753
G0751086		2	4.30	153.0	4.58	2.41	0.07	0.04	0.46	1.890	0.86	21.6	3.1	0.08	49
G0751087		42	2.89	175.5	2.12	1.70	<0.05	0.04	1.94	2.71	0.32	11.4	1.3	0.04	66
G0751088		10	0.92	742	1.67	1.59	<0.05	0.04	0.50	0.768	0.12	14.9	8.1	0.18	395

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta
		%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01
G0751082		0.03	0.45	0.6	120	32.3	17.7	<0.001	0.12	5.40	1.5	0.8	0.4	2.8	<0.01
G0751083		0.01	0.09	1.0	20	4.7	2.9	<0.001	0.01	0.38	0.3	0.4	0.4	405	<0.01
G0751084		0.01	0.07	4.4	250	141.5	14.2	<0.001	<0.01	1.53	0.8	0.2	0.3	24.3	<0.01
G0751085		0.04	0.13	1.5	200	20.9	15.5	<0.001	0.01	0.30	1.0	0.2	0.6	96.4	<0.01
G0751086		0.03	<0.05	0.9	640	3150	34.0	0.001	1.46	230	1.3	0.6	3.5	131.0	<0.01
G0751087		0.02	0.05	1.9	170	7380	17.6	0.001	0.48	765	0.8	2.0	8.5	49.0	<0.01
G0751088		0.02	<0.05	2.7	220	9800	8.0	<0.001	0.80	31.2	1.1	2.0	1.0	36.0	<0.01

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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CERTIFICATE OF ANALYSIS VA09077176

Sample Description	Method Analyte Units LOR	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Zn-OG46	Ag-OG46	Pb-OG46	ME-XRF10
		Th	Ti	Tl	U	V	W	Y	Zn	Zr	Zn	Ag	Pb	Sb
		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	%
		0.2	0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.001	1	0.001	0.01
G0751082		18.4	<0.005	0.13	2.13	3	0.08	8.44	5	14.3				
G0751083		0.2	<0.005	0.03	<0.05	1	0.22	0.76	3	<0.5				
G0751084		6.5	<0.005	0.11	3.09	1	0.06	6.42	118	2.0				
G0751085		16.7	<0.005	0.13	2.28	2	0.07	12.50	37	4.5				
G0751086		14.8	<0.005	0.62	2.40	5	0.76	2.07	304	1.8				
G0751087		6.9	<0.005	0.39	3.32	4	0.59	1.11	165	1.9		149		
G0751088		6.5	<0.005	0.09	1.68	8	0.49	6.39	833	1.2		291		

Comments: An additional Au-Grav result for sample G0751088 is 2.77ppm

***** See Appendix Page for comments regarding this certificate *****



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CERTIFICATE OF ANALYSIS VA09077176

Method	CERTIFICATE COMMENTS
ME-MS41 ME-MS41	Interference: Ca>10% on ICP-MS As,ICP-AES results shown. Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).

APPENDIX G.
ALS-CHEMEX LABORATORY ASSAY PROCEDURE DETAILS



Sample Preparation - Logging Procedures

All samples received at ALS Chemex are furnished with a bar code label attached to the original sample bag. The system will also accept client supplied bar coded labels that are attached to sampling bags in the field. The label is scanned and the weight of the sample is recorded together with additional information such as date, time, equipment used and operator name. The scanning procedure is used for each subsequent activity involving the sample from preparation to analysis, through to storage or disposal of the pulp or reject.

Method Code	Description
LOG-21	Log sample in tracking system (Samples received with bar code labels attached).
LOG-22	Log sample in tracking system (Samples received without bar code labels attached).



Sample Preparation - Logging Samples Received as Pulps

All pulp samples received at ALS Chemex are furnished with a bar code label attached to the original sample bag. The system will also accept client supplied bar coded labels that are attached to sampling bags in the field. The label is scanned and the weight of the sample is recorded together with additional information such as date, time, equipment used and operator name. The scanning procedure is used for each subsequent activity involving the sample from preparation to analysis, through to storage or disposal of the pulp.

At least one out of every 50 samples is selected at random for routine pulp QC tests (LOG-QC). For routine pulps, the specification is 85 % passing a 75 micron screen. Other specifications may be checked as per client requirements.

Method Code	Specifications	Description
LOG-23	85 % < 75 μ m	Log received sample pulp in tracking system (Sample pulps received with bar code labels attached).
LOG-24	85 % < 75 μ m	Log received sample pulp in tracking system (Sample pulps received without bar code labels attached).
LOG-25	95 % < 106 μ m	Log received sample pulp in tracking system (Sample pulps received with bar code labels attached).
LOG-26	95 % < 106 μ m	Log received sample pulp in tracking system (Sample pulps received without bar code labels attached).
LOG-QC	See method specifications	Testing Procedure for samples received as pulp.



Fire Assay Procedure - Au-ICP21 and Au-ICP22
Fire Assay Fusion ICP-AES Finish

Sample Decomposition: Fire Assay Fusion (FA-FUSPG1 & FA-FUSPG2)
Analytical Method: Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES)

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 4 mL with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

Method Code	Element	Symbol	Units	Sample Weight (g)	Lower Limit	Upper Limit	Default Overlimit Method
Au-ICP21	Gold	Au	ppm	30	0.001	10	Au-AA25
Au-ICP22	Gold	Au	ppm	50	0.001	10	Au-AA26

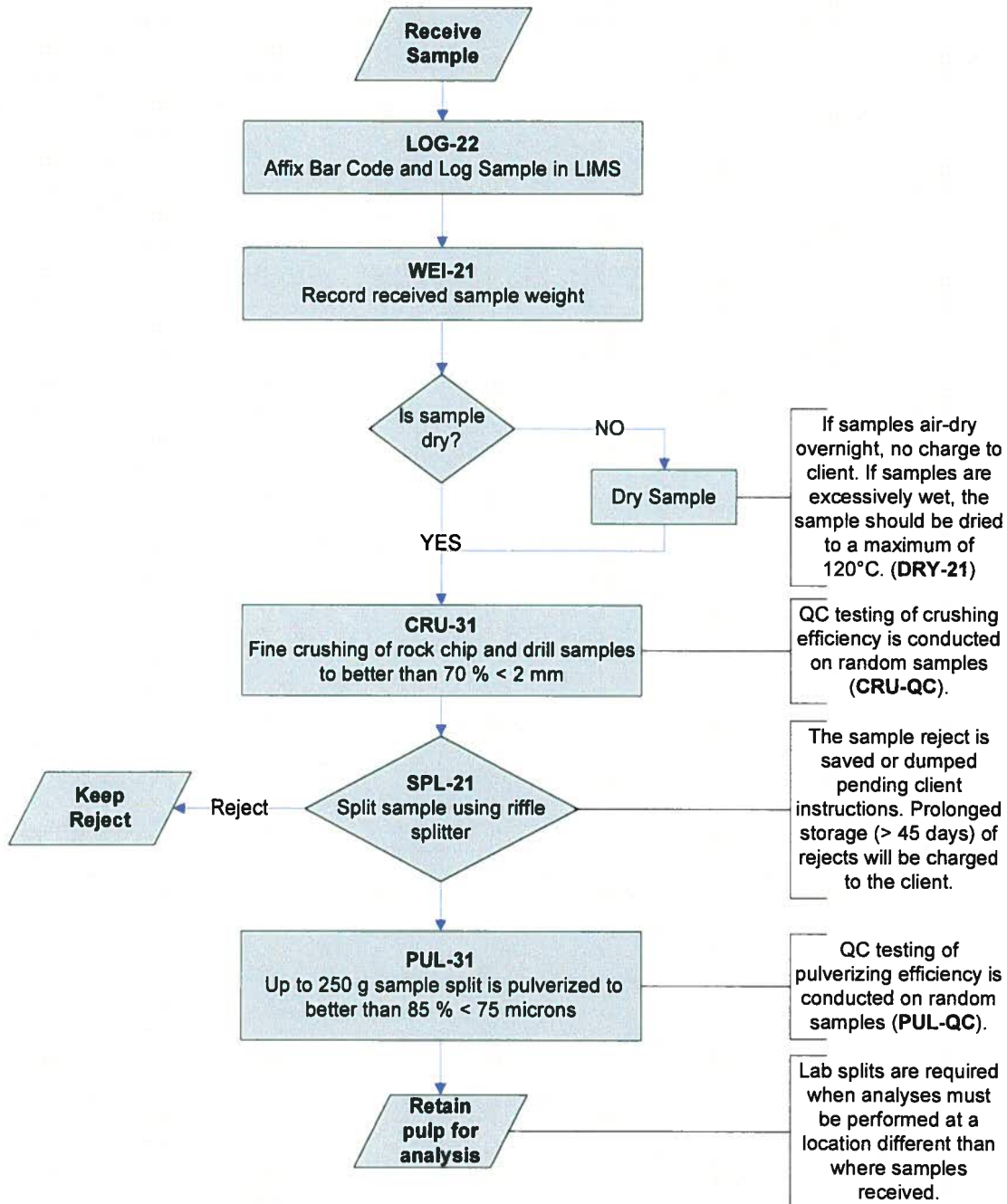
**Sample Preparation Package – PREP-31****Standard Sample Preparation: Dry, Crush, Split and Pulverize**

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 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) 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-31	A sample split of up to 250 g is pulverized to better than 85 % of the sample passing 75 microns.

Flow Chart - Sample Preparation Package – PREP-31
Standard Sample Preparation: Dry, Crush, Split and Pulverize





**Fire Assay Procedure – Ag-GRA21, Ag-GRA22, Au-GRA21 and
Au-GRA22
Precious Metals Gravimetric Analysis Methods**

Sample Decomposition: Fire Assay Fusion (FA-FUSAG1, FA-FUSAG2, FA-FUSGV1 and FA-FUSGV2)
Analytical Method: Gravimetric

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button. The lead button containing the precious metals is cupelled to remove the lead. The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver, if requested, is then determined by the difference in weights.

Method Code	Element	Symbol	Units	Sample Weight (g)	Detection Limit	Upper Limit
Ag-GRA21	Silver	Ag	ppm	30	5	10,000
Ag-GRA22	Silver	Ag	ppm	50	5	10,000
Au-GRA21	Gold	Au	ppm	30	0.05	1000
Au-GRA22	Gold	Au	ppm	50	0.05	1000

Geochemical Procedure – ME-MS41
Ultra-Trace Level Methods Using ICP-MS and ICP-AES

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

A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples are then analysed by ICP-MS for the remaining suite of elements. The analytical results are corrected for inter-element spectral interferences.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	25
Arsenic	As	ppm	0.1	10 000
Gold	Au	ppm	0.2	25
Boron	B	ppm	10	10 000
Barium	Ba	ppm	10	10 000
Beryllium	Be	ppm	0.05	1 000
Bismuth	Bi	ppm	0.01	10 000
Calcium	Ca	%	0.01	25
Cadmium	Cd	ppm	0.01	1 000
Cerium	Ce	ppm	0.02	500
Cobalt	Co	ppm	0.1	10 000



Element	Symbol	Units	Lower Limit	Upper Limit
Chromium	Cr	ppm	1	10 000
Cesium	Cs	ppm	0.05	500
Copper	Cu	ppm	0.2	10 000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10 000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.02	500
Mercury	Hg	ppm	0.01	10 000
Indium	In	ppm	0.005	500
Potassium	K	%	0.01	10
Lanthanum	La	ppm	0.2	10 000
Lithium	Li	ppm	0.1	10 000
Magnesium	Mg	%	0.01	25
Manganese	Mn	ppm	5	50 000
Molybdenum	Mo	ppm	0.05	10 000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.05	500
Nickel	Ni	ppm	0.2	10 000
Phosphorus	P	ppm	10	10 000
Lead	Pb	ppm	0.2	10 000
Rubidium	Rb	ppm	0.1	10 000
Rhenium	Re	ppm	0.001	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10 000
Scandium	Sc	ppm	0.1	10 000
Selenium	Se	ppm	0.2	1 000



Element	Symbol	Units	Lower Limit	Upper Limit
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10 000
Tantalum	Ta	ppm	0.01	500
Tellurium	Te	ppm	0.01	500
Thorium	Th	ppm	0.2	10000
Titanium	Ti	%	0.005	10
Thallium	Tl	ppm	0.02	10 000
Uranium	U	ppm	0.05	10 000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.05	10 000
Yttrium	Y	ppm	0.05	500
Zinc	Zn	ppm	2	10 000
Zirconium	Zr	ppm	0.5	500

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.



Assay Procedure – ME-OG46
Ore Grade Elements by Aqua Regia Digestion Using
Conventional ICP-AES Analysis

Sample Decomposition: HNO₃-HCl Digestion (ASY-4R01)
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)*

Assays for the evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations. Ultra high concentration samples (> 15 -20%) may require the use of methods such as titrimetric and gravimetric analysis, in order to achieve maximum accuracy.

A prepared sample is digested in 75% aqua regia for 120 minutes. After cooling, the resulting solution is diluted to volume (100 mL) with de-ionized water, mixed and then analyzed by inductively coupled plasma - atomic emission spectrometry or by atomic absorption spectrometry.

***NOTE:** ICP-AES is the default finish technique for ME-OG46. However, under some conditions and at the discretion of the laboratory an AA finish may be substituted. The certificate will clearly reflect which instrument finish was used.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	1	1500
Arsenic	As	%	0.01	30
Cadmium	Cd	%	0.001	10
Cobalt	Co	%	0.001	20
Copper	Cu	%	0.001	40
Iron	Fe	%	0.01	100
Manganese	Mn	%	0.01	50
Molybdenum	Mo	%	0.001	10
Nickel	Ni	%	0.001	10
Lead	Pb	%	0.001	20
Zinc	Zn	%	0.001	60



Ore Grade Analysis by XRF – ME-XRF10

Sample Decomposition: 50% $\text{Li}_2\text{B}_4\text{O}_7$ – 50% LiBO_2 (WEI-GRA06)
Analytical Method: X-Ray Fluorescence Spectroscopy (XRF)

A calcined or ignited sample (0.9 g) is added to 9.0g of Lithium Borate Flux (50 % - 50 % $\text{Li}_2\text{B}_4\text{O}_7$ – LiBO_2), mixed well and fused in an auto fluxer between 1050 - 1100°C. A flat molten glass disc is prepared from the resulting melt. This disc is then analysed by X-ray fluorescence spectrometry.

Element	Symbol	Units	Lower Limit	Upper Limit
Barium	Ba	%	0.01	50
Niobium	Nb	%	0.01	10
Antimony	Sb	%	0.01	50
Tin	Sn	%	0.01	60
Tantalum	Ta	%	0.01	50
Thorium	Th	%	0.01	15
Uranium	U	%	0.01	15
Tungsten	W	%	0.01	50
Zirconium	Zr	%	0.01	50



Elements listed below are available upon request

Element	Symbol	Units	Lower Limit	Upper Limit
Iron	Fe_2O_3	%	0.01	100
Potassium	K_2O	%	0.01	100
Magnesium	MgO	%	0.01	100
Sodium	Na_2O	%	0.01	100

APPENDIX H.
DATA CD WITH ALL OF THE REPORTS AND DATA