

NTS map sheets 104I/6-7

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**ASSESSMENT REPORT FOR THE TURNAGAIN RIVER  
PROPERTY, NORTHERN BRITISH COLUMBIA: MINERAL TENURES  
529619, 529697, 529910 to 529913, 534069 to 534070, 542319, 543667  
to 543668, 543743 to 543745, 547600, 554501 to 554504, 554506 to  
554512, 554514 to 554520, and 554522 to 554533**

Event #4171620

29542

VOL 1

Prepared For:

Turnagain River Exploration Ltd.

Prepared By:

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Edmonton, Alberta, Canada

T6E 5V8

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

29,542

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January 2, 2008

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**TABLE OF CONTENTS**

	<u>PAGE</u>
SUMMARY .....	1
INTRODUCTION .....	3
DISCLAIMER .....	3
PROPERTY DESCRIPTION AND LOCATION .....	3
ACCESSIBILITY, CLIMATE, AND LOCAL RESOURCES .....	4
HISTORY .....	8
Exploration Turnagain Region .....	8
Exploration Turnagain Property .....	9
<i>PR CLAIMS</i> .....	9
<i>SPRING / KING KONG CLAIMS</i> .....	11
<i>FALCON CLAIMS</i> .....	11
<i>ALICE SHEA CREEK CLAIMS</i> .....	12
<i>LUX CLAIMS AND WESTERN EXTENT OF PROPERTY</i> .....	12
GEOLOGICAL SETTING .....	13
Regional Geology .....	13
Property Geology .....	13
DEPOSIT TYPES .....	15
High grade placer deposits .....	15
Polymetallic veins .....	15
Listwanite lode gold deposits .....	15
Kutcho massive sulphide deposits .....	16

MINERALIZATION.....	17
2007 TURNAGAIN RIVER EXPLORATION .....	17
PR 7 .....	22
PR 8 .....	22
Spring.....	23
King Kong.....	23
Falcon .....	24
Alice Shea Creek .....	24
Lux .....	25
Western Property .....	25
Letain Lake.....	26
SAMPLING METHOD AND APPROACH .....	26
SAMPLE PREPARATION, ANALYSES AND SECURITY .....	27
DATA VERIFICATION .....	29
EXPLORATION EXPENDITURES.....	29
CONCLUSIONS AND DISCUSSION .....	29
RECOMMENDATIONS.....	31
REFERENCES .....	34
CERTIFICATION .....	37

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**TABLES**

<u>TABLE</u>	<u>PAGE</u>
1 MINERAL TENURE DATASHEET .....	6
2 ANOMALOUS GRAB SAMPLES .....	18
3 ANOMALOUS HMC STREAM SAMPLES .....	19
4 SPRING ANOMALOUS GRAB SAMPLES.....	23
5 RECOMMENDED 2008 PROGRAM AND BUDGET TURNAGAIN PROPERTY .....	32

**FIGURES**

<u>FIGURE</u>	<u>PAGE</u>
1 PROPERTY LOCACTION.....	5
2 2007 TURNAGAIN CLAIMS.....	7
3 HISTORICAL EXPLORATION .....	10
4 REGIONAL GEOLOGY .....	14
5 2007 GRAB SAMPLE LOCATIONS.....	20
6 2007 HMC SAMPLE LOCATIONS.....	21

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554522 to 554533**

**SUMMARY**

APEX Geoscience Ltd. (APEX) was contracted in 2007 as consultants by Turnagain River Exploration Ltd. (Turnagain) to review and complete further mineral exploration on the Turnagain River property. Turnagain River Exploration Ltd. owns an undivided 100% interest in 45 mineral tenures within the Stikine Ranges, British Columbia. Turnagain's claim tenures, comprised of the Alex, Shea, Mab, Ann, and TR groupings, encompass 15,290 hectares (37,785 acres) within in the Kechika Forest of the Stikine Ranges. The Turnagain property is located approximately 60 km east of Dease Lake, British Columbia and is situated adjacent to the Hard Creek Nickel Corp. Turnagain property and the Western Keltic Mines Inc. Kutcho property. Although mineral exploration on the Turnagain property is still in the early stages, the potential for discovery of a listwanite-lode gold or polymetallic vein deposit is considered high based on the regional geological setting in conjunction with the positive results of exploration conducted to date.

The regional setting in the Stikine Ranges is considered favourable for the presence of copper, nickel, and associated gold deposits. The Turnagain property is associated with an upper Mississippian to Permian ultramafic complex within Paleozoic metasedimentary and metavolcanic rocks along the faulted terrane boundary between the cratonic margin and accreted Quesnel and Cache Creek terranes. Fuchsite-mariposite bearing listwanites, identified within the Turnagain property, reflect carbonate alteration of ultramafic packages and may be associated with lode gold deposits. Exploration completed between 1985 and 2007 by various mineral exploration companies has resulted in the discovery of over twenty showings in the Turnagain area, of which three are past producers.

During July and August of 2007, APEX conducted a reconnaissance exploration program over the Turnagain property, consisting of prospecting and heavy mineral concentrate (HMC) stream sediment sampling. The exploration conducted was focused on British Columbia Geological Survey (BCGS) Mineral File (MINFILE) reports, alongside recommendations made in previous assessment and technical reports on Turnagain's property. Prospecting was conducted over 11 MINFILE showings and along topographic highs in the vicinity of the Turnagain property, in order to identify and trace alteration envelopes and mineralization. A total of 73 rock grab samples were collected from a wide range of alteration types and mineralization styles at showing locations and the surrounding regions. Anomalous chromium and nickel values of 1200 to 1600 ppm and 1600 to 3000 ppm respectively, were identified at the PR and Spring showings, and along the western portion of the property. The Spring and King

Kong showings were also characterized by anomalous copper grades of 2300 to 3100 ppm, while the Falcon showing contained anomalous copper, lead, zinc, and antimony.

Additionally, a total of 14 ten-kg and 41 two-kg HMC samples were collected over various drainages, to ensure an even distribution in the geochemical data over the entire property. Estimated gold weights within the HMC samples were corrected to a standard weight of 1 kilogram, in order to compare the gold concentrations between the 2 and 10 kilogram samples. Regions with high sample weight corrected-estimated gold weights include: the Letain drainage along Ferry creek, Wheaton creek south of the Alice Shea junction, northern Wheaton creek near Boulder Camp, Alice Shea creek, and the western portion of the property in a wetland stream.

The majority of the historical work and MINFILE data for the Turnagain region was related to localized mineralization and structures, therefore the development of a broader sampling area over the entire property was implemented in 2007 to help identify other prospective targets. An aggressive, systematic follow up exploration program including rock grab and HMC stream sampling, airborne and ground geophysical surveys, and drilling is warranted to search for gold, nickel, and copper bearing deposits.

## **INTRODUCTION AND TERMS OF REFERENCE**

APEX Geoscience Ltd. (APEX) was retained in 2007 as consultants by Turnagain River Exploration Ltd. (Turnagain) to continue exploration on its Turnagain River property (the Property). The exploration conducted was focused on British Columbia Geological Survey (BCGS) Mineral File (MINFILE) reports, alongside recommendations made in previous assessment and technical reports on Turnagain's property. During the summer of 2007, APEX personnel oversaw the completion of an exploration program entailing prospecting and ground truthing of MINFILE occurrences within the property. This assessment report documents the results of the exploration performed by APEX, on behalf of Turnagain, to date on the Turnagain River property. Mr. K.J. Raffle, B.Sc., P.Geol., Qualified Person, visited the Turnagain River property on August 7, 2007.

## **DISCLAIMER**

The author, in writing this report, used sources of information as listed in the references. The report written by Mr. K.J. Raffle, B.Sc., P.Geol., a Qualified Person, is a compilation of proprietary and publicly available information, as well as, information obtained during a property visit. The government reports were prepared by a person or persons holding post secondary geology, or related university degree(s), prior to the implementation of the standards relating to National Instrument 43-101. The information in those reports is therefore assumed to be accurate. Those reports written by other geologists are also assumed to be accurate based on the property visits and data review conducted by the author, however are not the basis for this report. There are no known mineral reserves or resources on the Property; it remains an early-stage, grass roots exploration property.

## **PROPERTY DESCRIPTION AND LOCATION**

The Turnagain Property claims are located within the the Liard Mining Division in North British Columbia at approximately 58° 20' N 128° 58' W (Figure 1). The Turnagain River property encompasses 45 mineral claims totaling 15,290 hectares (37,785 acres). A complete list of mineral tenures is included in Table 1. The Turnagain claims are situated within the Kechika Forest of the Stikine Ranges, approximately 60 kilometres (km) west of the Town of Dease Lake (Figure 2). Competitor's claims adjacent to the Turnagain River property include the Hard Creek Nickel Corp. Turnagain property, Western Keltic Mines Inc. Kutcho property, and the Eaglehead showing. The Turnagain property is located within 1:50,000 scale National Topographic System (NTS) map sheets 104I/6 and 7 (Snowdrift Creek, Letain Creek). More specifically, the property is located within BCGS map sheets 104I025, 26, 35, 36, 45, and 46.

Initial mineral tenures were held by Percy Floyd Cox in early 2007, who transferred tenure ownership to Albert Arthur Ablett on March 26, 2007. Albert Ablett in turn transferred ownership to Charles Richard Chebry on September 26, 2007.

The mineral tenures are currently held in the name of Charles Richard Chebry (Table 1). Based upon a mineral titles search, the mineral tenures appear to be free of any encumbrances and are 100% owned by Charles Chebry. This technical report is filed for Mineral Tenures 529619, 529697, 529910 to 529913, 534069 to 534070, 542319, 543667 to 543668, 543743 to 543745, 547600, 554501 to 554504, 554506 to 554512, 554514 to 554520, and 554522 to 554533.

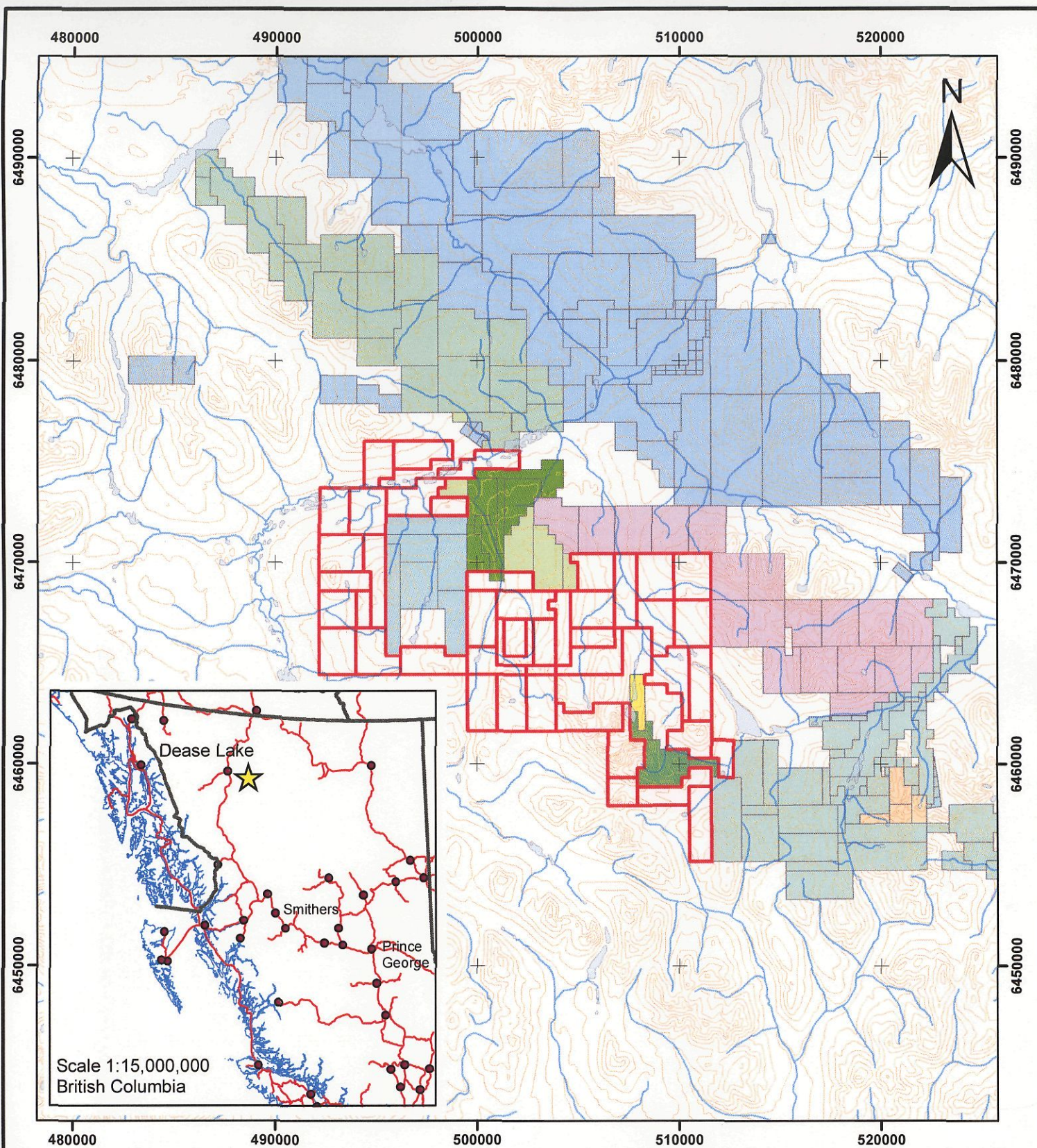
In order to maintain good standing of a British Columbia mineral claim, the permit holder must spend or cause to be spent, with respect to the location of his mineral permit, an amount on assessment work equal to \$100 per mineral claim unit each year during the first three years of ownership. The expenditure amount increases to \$200 per mineral claim unit in the fourth and succeeding years. Cell mineral claims, which vary in size throughout the province, require annual expenditures of \$4 per hectare during the first three years of tenure and \$8 per hectare in subsequent years.

### **ACCESSIBILITY, CLIMATE, AND LOCAL RESOURCES**

The Turnagain River property lies within the Stikine Ranges of the northwest-southeast trending Cassiar Mountain Belt. Relief generally comprises glacial cut valleys with rolling exposures above the treeline (1525 metres). Elevation in the region varies from 1040 metres (m) to 2420 m above sea level (ASL). Major topographic features in the region include King Mountain at an elevation of 2420 m, and the Turnagain River which belongs to the McKenzie River drainage. The property contains numerous rivers and creeks, including the Ferry and Wheaton Creeks, which vary from narrow canyons up to 30 m deep, to low angle gravel bench meanders up to 80 m wide. In the vicinity of the claims, the Turnagain River flows along the valley bottom pockmarked with numerous lakes and marshes. Fixed wing aircraft can land in some of the lakes along the Turnagain River, including Boulder Lake. Water and good quality timber necessary for camp and exploration use is available on the property.

Accommodation, food, fuel, and supplies are best obtained in the local municipality of Dease Lake, approximately 60 km west of the Turnagain claims. Helicopter access to the property from Dease Lake has a 20 minute flight time. Secondary road access to the property from highway 37 near Dease Lake, via a four wheel drive vehicle, is open during dry months and closed during high water periods in the summer. The quality of the access road will be improved by Western Keltic Mines Inc. over the next few years due to increased exploration and mining operations in the vicinity of the Turnagain River. Within the property limits, several scattered dirt roads allow access, but become unusable during the spring due to high water levels and late September or early October when the first snow falls. The





**Legend**

- Turnagain\_Property\_Marker
- Cities
- Highways
- BC Coastline
- Provincial Borders
- Contours (100m)
- Drainage
- Lakes
- 2007\_Turnagain\_Claims
- Private\_owner\_Poloni\_Peters
- Private\_Higgins\_Andrew\_Gordon\_claims
- Continental\_Jade\_claims
- Green\_Rock\_Explorations\_Ltd\_claims
- Glen\_Park\_Enterprises\_Ltd\_claims
- Dynasty\_Jade\_Ltd\_claims
- Hard\_Creek\_Nickel\_Corp\_claims
- King\_Mountain\_Jade\_claims
- Jedway\_Enterprises\_Ltd\_claims
- First\_Point\_Minerals\_Corp\_claims

**TURNAGAIN RIVER EXPLORATION INC.**

**PROPERTY LOCATION**



APEX Geoscience Ltd.  
Nad 83, Zone 9N  
1:250,000

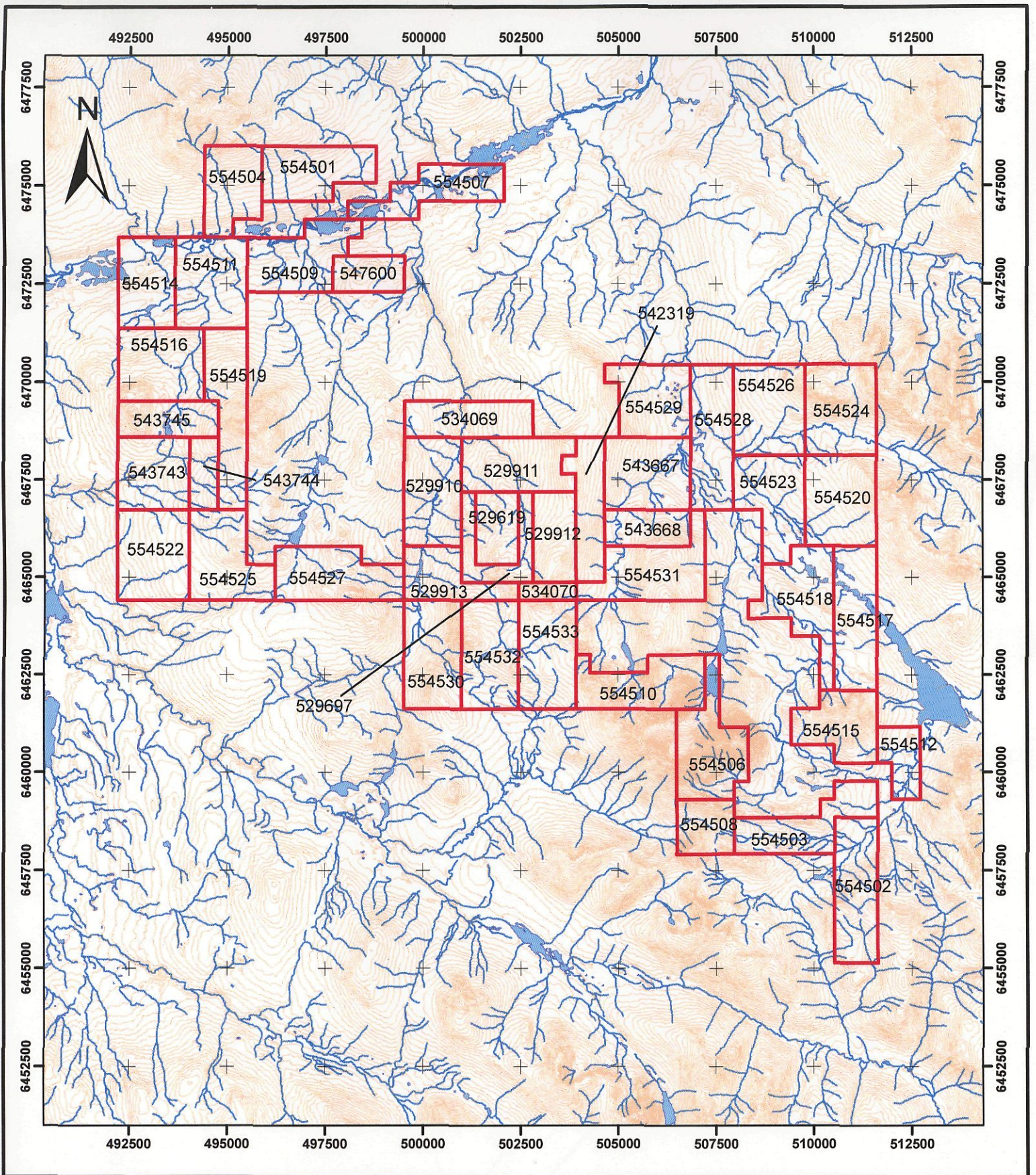
**Figure 1**

Edmonton, AB

November 2007

**TABLE 1: MINERAL TENURE DATASHEET**

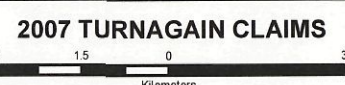
<b>Tenure Number</b>	<b>Claim Name</b>	<b>Area (hectares)</b>	<b>Good To Date (YYYY/MM/DD)</b>
529619	ALEX	203.901	2009/oct/09
529697	ALEX 2	220.919	2009/oct/09
529910	ALEX 3	407.708	2009/oct/09
529911	ALEX 4	390.65	2009/oct/09
529912	ALEX 5	254.89	2009/oct/09
529913	ALEX 6	271.959	2009/oct/09
534069	n/a	305.639	2009/oct/09
534070	n/a	67.995	2009/oct/09
542319	ALEX 2006	288.82	2009/oct/09
543667	SHEA 1	407.664	2009/oct/19
543668	SHEA 2	203.901	2009/oct/19
543743	MAB1	339.723	2009/oct/21
543744	MAB2	135.889	2009/oct/21
543745	MAB3	237.722	2009/oct/21
547600	ANN	169.64	2009/dec/18
554501	TR1	356.007	2009/mar/16
554502	TR29	408.754	2009/mar/16
554503	TR28	357.508	2009/mar/16
554504	TR2	305.183	2009/mar/16
554506		425.395	2009/mar/16
554507	TR3	322.146	2009/mar/16
554508	TR30	204.294	2009/mar/16
554509	TR4	390.134	2009/mar/16
554510	TR17	391.21	2009/mar/16
554511	TR5	424.128	2009/mar/16
554512	TR26	170.173	2009/mar/16
554514	TR6	339.303	2009/mar/16
554515	TR25	323.258	2009/mar/16
554516	TR7	407.379	2009/mar/16
554517	TR24	408.047	2009/mar/16
554518	TR23	424.998	2009/mar/16
554519	TR8	407.498	2009/mar/16
554520	TR22	424.741	2009/mar/16
554522	TR9	424.868	2009/mar/16
554523	TR21	390.747	2009/mar/16
554524	TR20	424.512	2009/mar/16
554525	TR10	407.888	2009/mar/16
554526	TR19	424.487	2009/mar/16
554527	TR11	407.931	2009/mar/16
554528	TR18	407.573	2009/mar/16
554529	TR15	356.543	2009/mar/16
554530	TR12	408.143	2009/mar/16
554531	TR16	424.916	2009/mar/16
554532	TR13	408.142	2009/mar/16
554533	TR14	408.141	2009/mar/16



**Legend**

- 2007 Turnagain Claims
- Contours (20m)
- Drainage
- Lakes

**Turnagain River Exploration Inc.**



APEX Geoscience Ltd.  
Nad 83, Zone 9N  
1:125,000

**Figure 2** EDMONTON, ALBERTA November 2007

Turnagain climate is typical of northern interior British Columbia, with moderate snow fall during the winter months and limited precipitation during the remainder of the year. Field work is best carried out between mid-June and late September when daytime temperatures average 10 to 15 degrees Celcius.

## **HISTORY: PREVIOUS EXPLORATION**

### **Exploration Turnagain Region**

Placer gold was first discovered on Dease Lake in 1873 and on Walker Creek in 1877. By 1886, prospectors began expanding exploration to the Turnagain and Kechika basins. Gold was discovered on Goldpan Creek in 1924, which was followed by claim staking in 1932 on Wheaton (Boulder) and the nearby Bullion, Hall, and Faulkner (Palmer) creeks. Since 1938, placer-mining activity in the vicinity of the Turnagain River, including a dragline operation on Wheaton creek, has been a constant activity. Unfortunately, no geological work was recorded prior to 1940, with the exception of the Turnagain River headwaters. Between 1930 and 1940, nuggets from 30 to 500 grams were reported to the British Columbia Minister of Mines as "common", the largest nugget recorded during that time period reportedly weighed 1600 grams.

Throughout the 1970's and 1980's, several companies working in the Turnagain area completed initial geophysical, geochemical, and geological surveys. In 1972, Cochrane Consultants completed a 13 line-kilometre (line-Km) magnetic survey over an asbestos-bearing serpentinite zone, 70 km east-southeast of Dease Lake. The surveys cross lines were 400 metres long and spaced at 122 metres. . Magnetic readings were taken every 30 metres along the survey lines. Interpretation of the magnetic data resulted in the identification of a vertical tabular feature near surface approximately 45 metres in width (Cochrane, 1972). The feature was interpreted to represent a potential mineralized zone related to the outcropping serpentinite and asbestos altered ultramafics in the survey area. Geological mapping by Mohawk Oil on the King Mountain property (Waldner, 1985), and Imperial Metals along the Wheaton and Alice Shea Creeks (Pesalj, 1986) was completed between 1985 and 1987.

Between 1966 and 1986, drilling completed near the Turnagain claims totaled over 6500 metres in 45 holes by J. Schusslar, Supreme Resources, Kennco Explorations, Imperial Oil, Nuspar Resources, Bridcut, and Falconbridge Nickel Mines. The only published drill result was in 1986 by Supreme Resources and graded 0.101 oz/T gold over 1.5 metres in the Wheaton Creek area (Schusslar, 1987).

The Kutcho Creek deposit reflects one of the most significant metallic mineral discoveries in the Turnagain area. The Kutcho project, managed by Western Keltic Mines Inc., is located 30 km southeast of Turnagain's property. The Kutcho project represents a Triassic copper-zinc volcanogenic massive sulphide (VMS) deposit with proposed production by way of open pit and

underground methods. The Kutcho property geology consists of Kutcho Formation metavolcanics with sericitic alteration belonging to the Cache Creek Complex. The Kutcho assemblage occurs within the fault bounded King Salmon allochthon and has undergone greenschist facies metamorphism. Kutcho mineralization consists of massive sulphide layers within laterally zoned metallic lenses that have copper-rich cores and zinc-rich margins. The three mineralized lenses within the Kutcho deposit yield approximate reserve values of: Kutcho 11.6 million tonnes (mT) of 2.227% copper, 2.98% zinc, and 38.1 grams per tonne (g/T) silver; Sumac 10 mT 1.0% copper, 1.2% zinc; Esso West 2.1 mT grading 3.26% copper, 5.86% zinc, and 75.7 g/T silver (Western Keltic Mines Inc. news release, January 11, 2005).

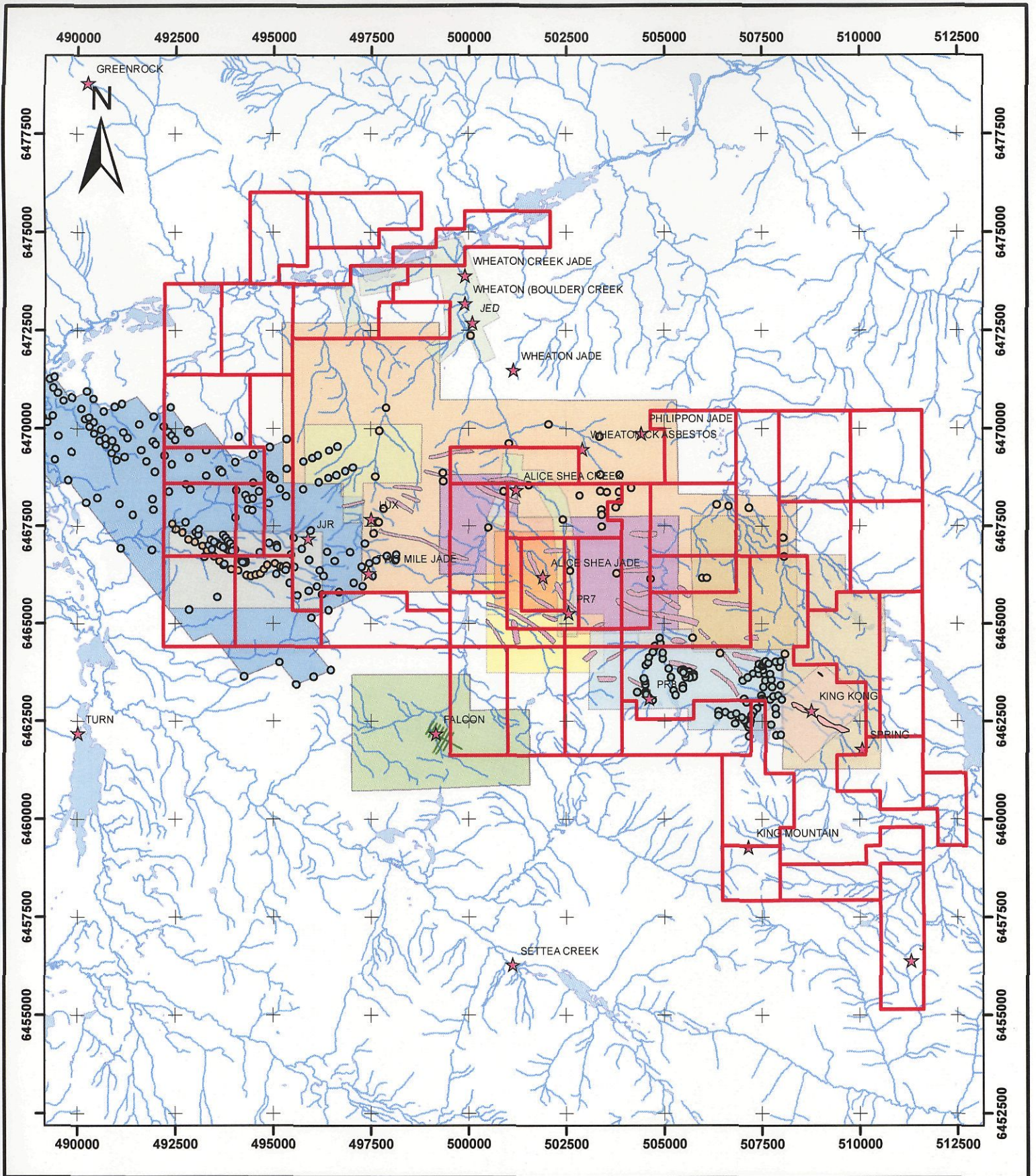
Hard Creek Nickel Corp. is currently exploring for nickel in a zoned, Alaskan-type ultramafic intrusion 15 km to the northeast of the Turnagain property. The Hard Creek Turnagain property consists of an intensely serpentinized ultramafic body, with 8 by 3.5 kilometre dimensions, elongated in a northwest orientation. Nickel mineralization on the property is limited to magmatic originated sulphide minerals, adjacent to the wehrlite to dunite transition within the ultramafic body (Simpson, 2007). Current resource estimates, using a 0.10% sulphide nickel cut-off grade, are based on revised geological interpretations of the Horsetail zone. According to Simpson (2007), the measured resource estimate of the Turnagain Nickel property is 37,629 tonnes grading 0.23% nickel and 0.011% cobalt. Resource values in Simpson's report (2007) were calculated by kriging composites of drill data since 2002 (Simpson, 2007).

The Eaglehead prospect is located 15 km northwest of the Turnagain property and is classified as a copper-molybdenum-gold-silver porphyry deposit. The Eaglehead prospect consists of propylitic-sericitic altered, early Jurassic biotite-hornblende granodiorite, which is cut by numerous mineralized porphyry dykes and in shear contact with lower Jurassic Inklin Formation sedimentary rocks (BCGS Minfile 1041008). According to a Canadian Institute of Mining, Metallurgy and Petroleum (CIM) report, the prospect has approximate reserves of 30 mT grading 0.41% copper, 0.01% molybdenum, 2.71 g/T silver, and 0.2 g/T gold (Note the foregoing resource figure is from BC Minfile and is not in accordance with section 1.3 of NI 43-101).

## **Exploration Turnagain Property**

### *PR CLAIMS*

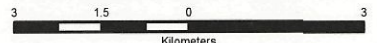
Powder Ridge Resources Inc. performed airborne magnetic and VLF-EM surveys on their PR 1-7 claims in 1985 (Figure 3). The survey results revealed magnetic highs and lows, VLF-EM anomalies, and lineations with predominant northwest trends and strike lengths of 400 to 2000 metres (Mark, 1985). Powder Ridge reported a correlation with magnetic lows and VLF-EM anomalies. The stronger VLF-EM anomalies identified in the 1985 data may reflect graphitic horizons along contacts. Magnetic field strengths ranged from 500 gammas in the PR 7 claim, to 6000 gammas south of the southeast



- Legend**
- |                            |                               |                           |
|----------------------------|-------------------------------|---------------------------|
| 2007 Turmagain Claims      | 1985_AR14000_VLF_EM_anomalies | 1986_AR15494_Claims_Block |
| MINFILE SHOWINGS           | 1984_Mohawk_IP_Anomalies      | 1996_AR24891_Claims_Block |
| Drainage                   | 1984_Mohawk_Oil_IP_Grid       | 1987_AR16148_Claims_Block |
| Lakes                      | 1986_AR14954_survey_grid      | 1992_AR21815_Claims_Block |
| 1971_Jorex_Rock_Samples    | Historical_Placer_Leases      | 1986_AR14954_Claims_Block |
| 1981_Dupont_Stream_Samples | 1985_AR13718_Claims_Block     | 1981_AR9286_Claims_Block  |
| 1987_AR16047_Samples       | 1987_AR16047_Claims_Block     | 1971_AR3530_Claims_Block  |
| 1992_AR21815_Rock_Samples  | 1984_AR13262_Claims_Block     |                           |

**Turmagain River Exploration Inc.**

**HISTORICAL EXPLORATION**



APEX Geoscience Ltd.  
Nad 83, Zone 9N  
1:125,000

**Figure 3** EDMONTON, ALBERTA November 2007

corner of PR 7 (Mark, 1985). Additional exploration was completed in 1987 by D.O. Fredlund on PR claims 8-9 with geological mapping, soil, silt, and rock sampling. Also in 1987, Powder Ridge Resources Inc. performed trenching and soil sampling on their PR claims 4-7. A total of 12 rock grab samples and 11 soil samples were collected and assayed by Powder Ridge, resulting in grades of 0.014 and 0.015 oz/T gold in two rock samples and 167 to 173 parts per million (ppm) copper in 3 soil samples (Smith, 1987).

During 1996, Loumic Resources Ltd. performed trenching, geological mapping, and soil sampling northwest of PR 7 and along the Ferry Creek drainage of King Mountain (Figure 3). The 1996 exploration resulted in the collection of 196 soil and 33 trench samples. Trenching identified faults, shearing, listwanite alteration, copper staining, oxidized pyrite, and anomalous values in copper and arsenic. Unfortunately none of the samples returned results greater than 1 g/T gold (highest value was 161 ppb gold). The soil surveying indicated four or five areas anomalous in copper-arsenic possibly associated with gold (Livgard, 1997).

#### *SPRING / KING KONG CLAIMS*

In 1984 Mohawk Oil completed geological mapping, rock sampling, and a 31.2 line-km induced polarization (IP) survey over their "Spring" claims, 70 km east-southeast of Dease Lake (Figure 3). Based on the geological mapping completed, a target was identified along the limestone/sediment and serpentinite contact on the north side of the central ridge. In total, 35 rock grab, 8 float, and 2 chip samples were collected and "several" samples taken along the central ridge assayed "anomalous" copper and silver values (definition of several and anomalous not defined, although 7 samples returned values over 1000 ppm copper, 5 samples over 1 ppm silver, and 8 samples returned values over 10 ppb gold with one value of 100 ppb gold) (Nagati, 1984). Hand specimen mineralization consisted of malachite, tetrahedrite, and magnetite along the serpentinite/argillite contact. The IP survey resulted in four main anomalies, interpreted to be related to mineralized contacts based on high chargeability and low resistivity along portions of the ridge (Nagati, 1984). The main IP anomaly was located over the King Kong showing with a northwest trend, length of 1.6 km, and was correlated with lithological contacts and mineralization. Based on the silt data collected, fifty percent of the gold and seventy percent of the silver anomalies were also located near the limestone and serpentinite contacts (Nagati, 1984).

#### *FALCON CLAIMS*

In 1985, Miramar Energy Corporation performed geological mapping, VLF-EM and soil geochemistry surveys on their Falcon claims, immediately southwest of the King 2 and 5 claims (Figure 3). A total of 4 rock grab, 167 soil, and 3 silt samples were collected, with only 45 of the 167 soil samples sent for analysis (Christopher, 1986). Sampling from sub-vertical quartz veins, up to 0.5 m wide, crosscutting serpentinized ultramafics, returned values up to 10.3 ppm silver and

0.57% copper (Christopher, 1986). Soil samples yielded up to 1.2 ppm silver, 40 ppm arsenic, 111 ppm copper, 70 ppm lead, and 190 ppm zinc from north trending zones (Christopher, 1986). Sulphide mineralization in quartz veins consisted of tetrahedrite +/- galena +/- sphalerite +/- pyrite and yielded values of 434.7 g silver, >10000 ppm copper, 1400 ppm lead, and 1250 ppm zinc from a 35 centimetre (cm) chip sample (Christopher, 1986). In 1988, Spur Ventures Inc. performed soil sampling analysis and interpretation on previous work performed by Miramar Energy Corporation in 1985 (Scott, 1988).

#### *ALICE SHEA CREEK CLAIMS*

Over 250,000 grams of placer gold have been recovered from the Wheaton and Alice Shea creeks between 1931 and 1945. The Turnagain nugget, found on Alice Shea Creek, weighed 1612 grams and has periodically been on display by the B.C. Government. Placer jade, derived from the Cache Creek ultramafic rocks, has also been produced from the Wheaton and Alice Shea jade showings (BCGS Minfiles 1041085, 1041104, and 1041105).

Goldbank Ventures Ltd. performed geological mapping and rock sampling in 1990 over the central region of the current day Turnagain claims (Figure 3). A total of 41 rock samples were analyzed for gold-ICP and 3 samples for nickel sulphide content. Five HMC stream sediment samples assayed for gold-ICP yielded peak values of 100 ppb gold, 285 ppm copper, 153 ppm lead, 182 ppm zinc, 1.0 ppm silver, 2927 ppm nickel, and 88 ppm cobalt (Neale, 1991).

#### *LUX CLAIMS AND WESTERN EXTENT OF PROPERTY*

In 1971 Jorex Ltd. completed an exploration program near the Turnagain Lake drainage, west of the current day Turnagain property (Figure 3). The program resulted in the collection of 213 rock samples, of which 112 were sent for spectrographic analyses or assay for nickel and chromium. Additionally, silver and/or gold assay results were requested for some of the samples. Analysis results for the 112 samples yielded less than trace amounts of gold or silver. However, most of the serpentinized samples carried low values or more than trace amounts of nickel and chromium. Only one sample contained a significant amount of Chrome (No. P.36 with 10% chrome: Hopkins, 1971). Of the 112 samples assayed, 62 samples contained 0.20% nickel or higher, with the highest percentage of 0.37% nickel (Hopkins, 1971). A total of 144 silt samples were also collected in the 1971 program along various creeks, junctions with tributary streams, rills, and gullies in the Turnagain area. In the Black Mountain region, it was noted that the SW, W, NW, N, and NE sides of the mountain yielded consistently higher than "background" values of copper in the silt samples. While the eastern side of Black Mountain produced values of nickel twice the "background" value (Note the "background" values were not provided in Hopkins, 1971). The southeast branch of Chrome Creek yielded twice the "background" value in chromium, approximately 610 m downstream from the highest assay bedrock sample.



DuPont Canada performed a stream sediment sampling program in 1980 along the westward drainage south of the JJR showing (Figure 3). In total, 22 stream sediment samples were analyzed for gold content by Atomic Absorption Spectrophotometric procedures. All of the samples returned results of less than anomalous values (above 25 ppb gold), except for two samples (4373 and 3482) which returned 30 ppb and 110 ppb gold, respectively (Strain, 1981).

## **GEOLOGICAL SETTING**

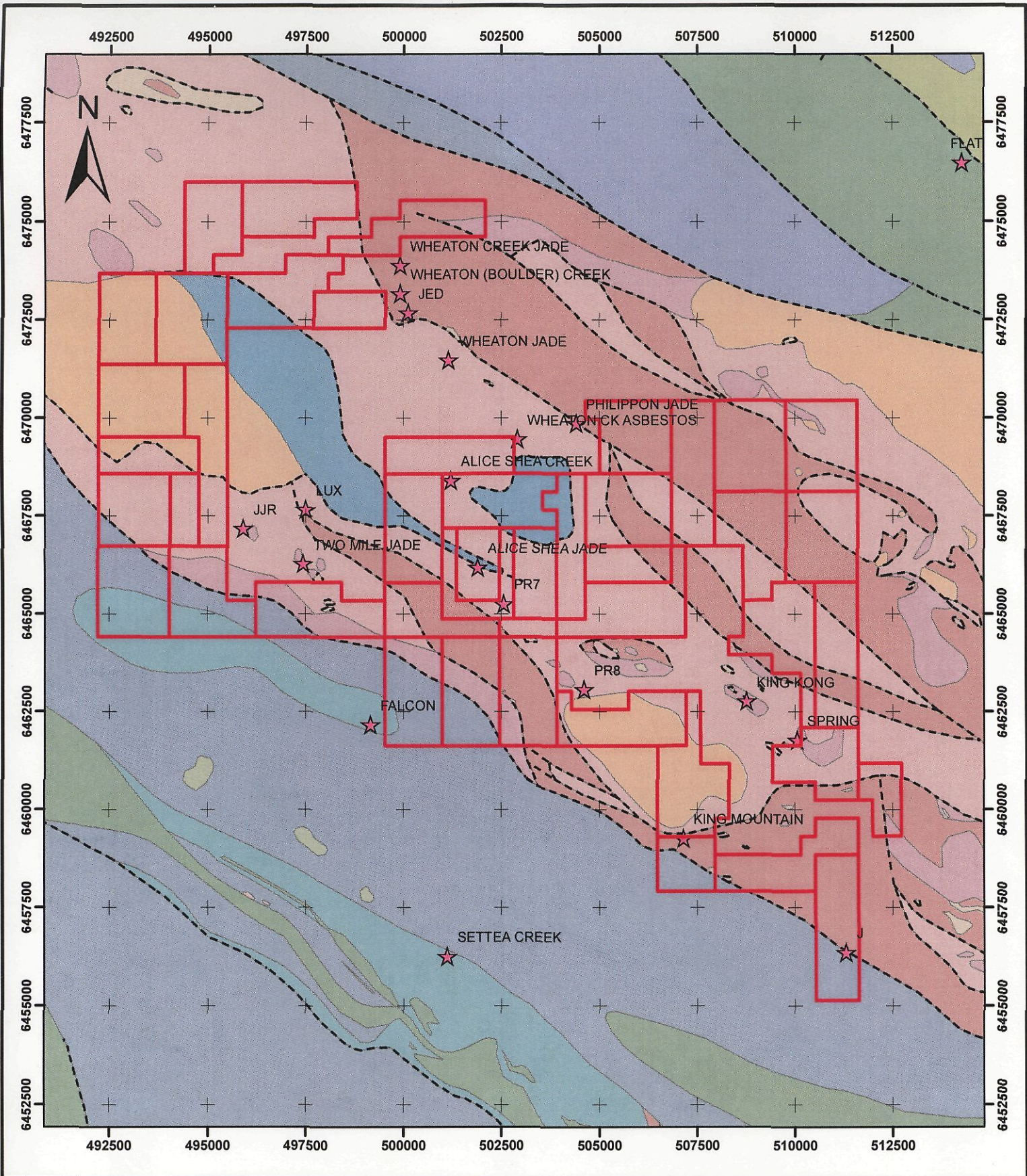
### **Regional Geology**

The Turnagain property lies within the Stikine Ranges of the Cassiar Mountains, which reflect an accretionary package of Paleozoic metasedimentary and metavolcanic rocks. Regional faults in the Cassiar Mountains separate various terranes by creating boundaries between the cratonic margin and accreted terranes (Gabrielse, 1998). Within the Stikine Ranges, the Kutcho and Thibert faults are underlain by miogeoclinal sediments in the northeast, which have been intruded by Late Proterozoic to Mississippian granitic rocks (Gabrielse, 1998). Cratonic rocks in the region are overlain by the allochthonous Slide Mountain and Quesnel Terranes. The general Turnagain area is comprised by the Cache Creek Terrane, upper Mississippian to Jurassic in age, which has been thrust southward along the King Salmon fault onto the Mesozoic Stikine Terrane (Gabrielse, 1998).

### **Property Geology**

The Turnagain property is associated with an upper Mississippian to Permian ultramafic complex within Paleozoic metasedimentary and metavolcanic rocks along the faulted terrane boundary between the cratonic margin and accreted Quesnel and Cache Creek terranes (Gabrielse, 1994). Exposures of the Cache Creek Group within the Turnagain area consist of serpentinized peridotite, dunite, pyroxenite, mafic volcanics, limestone, cherty argillite, siltstone, and volcanic sandstone (Figure 4). Mesozoic assemblages observed on the property include the Inklin Formation consisting of cleaved phyllitic slate, greywacke, and conglomerate, as well as, the Kutcho Formation represented by basaltic to rhyolitic schist and fine grained volcanic sedimentary units (Gabrielse, 1994).

The property scale structural trend is oriented northwest with dominant north-northwest trending quartz veining within metasediment and serpentinized ultramafic units. The Turnagain ultramafic complex measures 12 by 70 km along a northwest orientation and is bound in the north by the Eaglehead and Thibert faults, which reflect local splays of the regional Kutcho fault. In the southern portion of the property, the ultramafic complex is in contact with Mesozoic sedimentary rocks (Inklin Formation) along the northwest oriented Nahlin fault. Fuchsite-mariposite bearing listwanites, identified within the Turnagain property, reflect carbonate alteration of ultramafic packages and may be associated with lode gold deposits.



Legend	
	2007 Turnagain Claims
	MINFILE SHOWINGS
Regional Geology	
ROCK_TYPE	
	andesitic volcanic rocks
	argillite, greywacke, wacke, conglomerate turbidites
	basaltic volcanic rocks
	bimodal volcanic rocks
	chert, siliceous argillite, siliciclastic rocks
	coarse clastic sedimentary rocks
	conglomerate, coarse clastic sedimentary rocks
	dioritic intrusive rocks
	feldspar porphyritic intrusive rocks
	gabbroic to dioritic intrusive rocks
	granite, alkali feldspar granite intrusive rocks
	granodioritic intrusive rocks
	limestone bioherm/reef
	limestone, marble, calcareous sedimentary rocks
	limestone, slate, siltstone, argillite
	marine sedimentary and volcanic rocks
	monzodioritic to gabbroic intrusive rocks
	mudstone, siltstone, shale fine clastic sedimentary rocks
	quartz monzonitic intrusive rocks
	quartzite, quartz arenite sedimentary rocks
	tonalite intrusive rocks
	ultramafic rocks
	undivided sedimentary rocks
	undivided volcanic rocks
	Regional Faults

**Turnagain River Exploration Inc.**

**REGIONAL GEOLOGY**

Kilometers

APEX Geoscience Ltd.  
Nad 83, Zone 9N  
1:125,000

**Figure 4** EDMONTON, ALBERTA November 2007

## **DEPOSIT TYPES**

To understand the significance of mineralization styles in the Turnagain region, it is important to understand the genesis, transportation, and precipitation of mineralized fluids within specific geological settings. The Turnagain property encompasses several deposit models for modes of mineralization.

### **High grade placer deposits**

Placer deposits commonly occur in stable tectonic settings that have undergone glaciation and contain Holocene fluvial deposits. Metallic minerals are often concentrated along erosional contacts near the base of channel sequences or within thin lenses oriented in the direction of paleoflow (Levson and Morison, in press). Grain sizes decrease from source areas, with gold grains commonly well rounded and less than 0.5 millimetres (mm) in diameter. In fluvial settings, placer minerals are concentrated in regions of reduced flow near channel irregularities, bedrock depressions and structures (Levson and Morison, in press). Exploration for placer deposits should involve geochemical surveys along drainages towards lode sources, ground penetrating radar surveys over targeted areas, and gravity sorting of sample materials (Levson and Morison, in press). The Turnagain region has undergone intense historical exploration for high grade gold placer deposits.

### **Polymetallic veins**

Epigenetic veins containing sphalerite, galena, chalcopyrite, and silver in a carbonate and quartz gangue are associated with either a metasediment or igneous host. The Falcon showing, 300 m west of Turnagain's 554530 claim boundary, is an example of polymetallic vein mineralization with chalcopyrite and azurite alteration within a quartz-carbonate vein hosted in Cache Creek limestone. The emplacement of metasediment hosted veins can occur along structures in sedimentary basins that have been deformed and later intruded by igneous rocks (Cox, 1986). Igneous hosted veins typically occur along tectonic structures marginal to an intrusive stock. Polymetallic veins are often characterized by a set of steeply dipping parallel to offset veins that can vary from a few centimetres to more than 3 m wide (Cox, 1986). Alteration of polymetallic vein deposits is typically minimal. Exploration for polymetallic veins should consist of geochemical data analysis with identification of elevated zinc, lead, silver, copper, and arsenic values within alteration aureoles (Cox, 1986). Geophysical exploration methods include locating zones of low magnetic, electromagnetic, and induced polarization responses.

### **Listwanite lode gold deposits**

Listwanite alteration envelopes can occur adjacent to high grade gold-silver veins crosscutting overthrust allocthonous ultramafic rocks. Listwanite lode gold deposits originate from the carbonization of serpentized ultramafic packages. Listwanite deposits are often characterized by distinct alteration halos

and are associated with quartz-carbonate veined lode gold mineralization. According to Ash and Arksey (1989), this particular deposit type is commonly found within and near major fault zones that cut Paleozoic and Mesozoic island arc accretionary terranes affected by tectonism, metamorphism, and plutonism. Listwanite lode gold deposits within British Columbia include the Bridge River, Cassiar, and Atlin areas, as well as, the Snowbird prospect in Fort St. James. The Turnagain property reflects another example of listwanite alteration potentially related to lode gold mineralization. Similar mineralization can also be found throughout the California Mother Lode district and the Mt. Vernon deposit in Washington, United States of America (Ash and Arksey, 1989).

The formation of listwanite lode gold deposits is dependant on collisional orogenic events that generate mineralizing fluids and create fluid conduits through deformation. Within orogenic systems, the primary source of mineralizing fluids is from dehydration reactions in the amphibolite facies, followed by meteoric and magmatic contributions. Carbon dioxide bearing fluids interact with altered ultramafics, resulting in the formation of listwanite, iron-magnesium carbonate, and chromium mica (mariposite/fuchsite) (Ash and Arksey, 1989). The regional geology surrounding listwanite deposits commonly consists of serpentinized ultramafics, metabasalts, gabbro, deep water chert and argillites, and shallow water limestones.

Gold mineralization of listwanite deposits occurs within low salinity hydrothermal fluids rich in carbon dioxide, that transport the metal as a bisulphide complex,  $\text{Au}(\text{HS})_2$  (Ash and Arksey, 1989). Several mechanisms have been suggested by Ash and Arksey (1989) to explain precipitation of gold into listwanite deposits, which are briefly described below:

- 1) Fluctuations in fluid pressure induce carbon dioxide and hydrogen sulphide immiscibility.
- 2) Reduction of mineralized fluids by graphitic rock units.
- 3) Sulphide precipitation due to iron-rich lithologies.

Listwanite gold deposits are often characterized by local variations in associated mineralization of iron, arsenic, lead, copper, zinc, nickel, cobalt, and antimony. Exploration for listwanite lode gold deposits should involve reference to aeromagnetic survey data, in order to identify magnetic lows associated with the reduction of magnetite due to carbonitization of the ultramafics. Additionally, margins of serpentinized peridotites represent potential sites of alteration and mineralization.

### **Kucho massive sulphide deposits**

Kutcho style volcanogenic massive sulphide (VMS) deposits consist of one or more massive sulphide mineralized lenses commonly within felsic volcanic rocks in a calcalkaline arc succession (Cox and Singer, 1986). Mineralized lenses are typically metres to tens of metres thick and tens to hundreds metres in the horizontal dimension (Cox and Singer, 1986). Alteration is commonly zoned from quartz, sericite or chlorite in the core, to clay minerals

within the outer zones. VMS deposit ore mineralogy typically consists of massive to well layered pyrite, sphalerite, galena, and chalcopyrite within zoned lenses.

## **MINERALIZATION**

Mineralization styles within the Turnagain region vary from placer showings to listwanites and associated quartz veins, polymetallic veins, and Alaskan-style ultramafic intrusions. Numerous drainages throughout the Turnagain property have yielded fine gold, magnetite, pyrite, and galena. Historical placer workings along the Alice Shea Creek identified gold nuggets with sizes up to 52 ounces. Additionally, mapped contacts between limestone and argillite or shale units are often associated with silver and sulphide mineralization in polymetallic veins. Metasedimentary units yielding anomalous copper, zinc, and barium have been identified within the property area during previous exploration programs. Nickel-sulphide alteration with magnetite and intense serpentinization of ultramafic packages has also been identified in the Turnagain area during several exploration programs, including the 2007 fieldwork completed by APEX personnel.

Anomalous gold within listwanites and associated quartz veining has been identified on the Turnagain property in previous exploration (Livgard, 1997). Mineralization associated with listwanite alteration zones potentially reflects fluid flow during the Cretaceous thrusting of the Cache Creek terrane over the King Salmon assemblage rocks. This particular set of mineralizing conditions are analogous to the geology of the Erickson gold camp, which is characterized by high grade gold-silver veins of early Cretaceous age crosscutting over-thrusted Sylvester allochthon rocks. The Erickson camp veins contain distinctive listwanite alteration envelopes adjacent to the quartz veining. Ore mineralogy at Erickson consists of gold, pyrite, tetrahedrite, chalcopyrite, arsenopyrite, and sphalerite (Neale, 1991).

Overall, the particular region of the Turnagain property has been exposed to a minimal amount of exploration. To date, the Turnagain region contains only a few gold and jade placer mining operations and one in situ jade mining operation. A number of deposits of varying types are represented in the area, with additional unexplored land areas holding good potential for further discoveries.

## **2007 TURNAGAIN RIVER EXPLORATION**

Exploration in July and August of 2007 on the Turnagain River Exploration claims east of Dease Lake, British Columbia entailed prospecting, heavy mineral concentrate (HMC) stream sampling, and ground truthing British Columbia Geological Survey (BCGS) Mineral File (MINFILE) showings (Figure 3). Apex Geoscience (APEX) personnel arrived to the property on July 23<sup>rd</sup> to complete a reconnaissance exploration program (Appendix 1). Crews were based in Dease Lake for the duration of the program. Daily transport to the property from the

Dease Lake airport was acquired through a Pacific Western Helicopters Bell 206. Daily field traverses varied from prospecting MINFILE showings to heavy mineral concentrate (HMC) stream sampling of various drainages, and prospecting outcrops along topographic highs, in order to identify and trace alteration envelopes and mineralization.

Exploration occurred over each of the 11 MINFILE showings in the vicinity of the Turnagain property. A total of 73 rock grab samples were collected from a wide range of alteration types and mineralization styles at showing locations and the surrounding regions (Table 2, Figure 5). Complete lists of grab samples, with assays, for each showing and mineralized region are available in Appendices 2 and 3.

**TABLE 2: ANOMALOUS GRAB SAMPLES**

Sample Id	Ag	Cr	Cu	Ni	Pb	Zn
	PPM	PPM	PPM	PPM	PPM	PPM
07HCP015	0.2	388	4.7	683.6	0.5	30
07DAP004	0.1	864	410.0	820.9	0.7	37
07DAP007	0.1	541	73.9	47.5	8.0	83
07THP001	<0.1	1313	4.3	2968.6	0.5	25
07THP008	67.3	184	3145.2	15.3	65.8	390
07THP019	0.3	615	912.5	664.0	<0.1	37
07THP020	<0.1	593	8.3	299.6	<0.1	10
07THP023	0.1	1287	25.7	2157.4	0.4	46
07KRP201	0.4	130	2313.7	25.8	0.3	54
07KRP202	0.2	1292	25.5	1632.1	1.0	28
07KRP203	0.5	94	3131.6	64.6	<0.1	106
07KRP206	2.4	74	2674.0	30.8	0.7	39
07KRP207	<0.1	1403	19.2	1739.9	<0.1	9

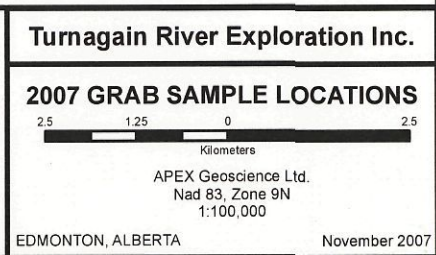
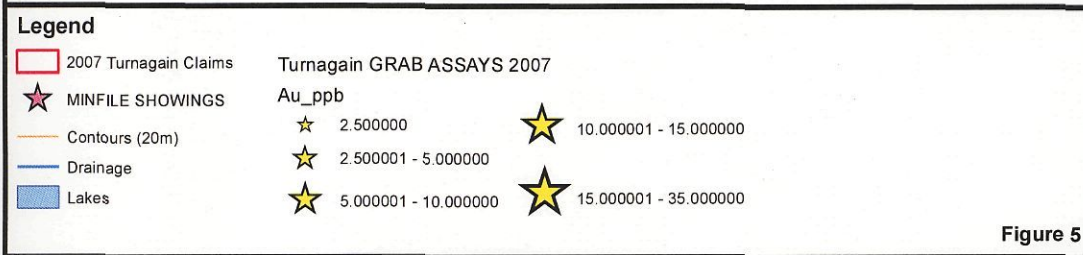
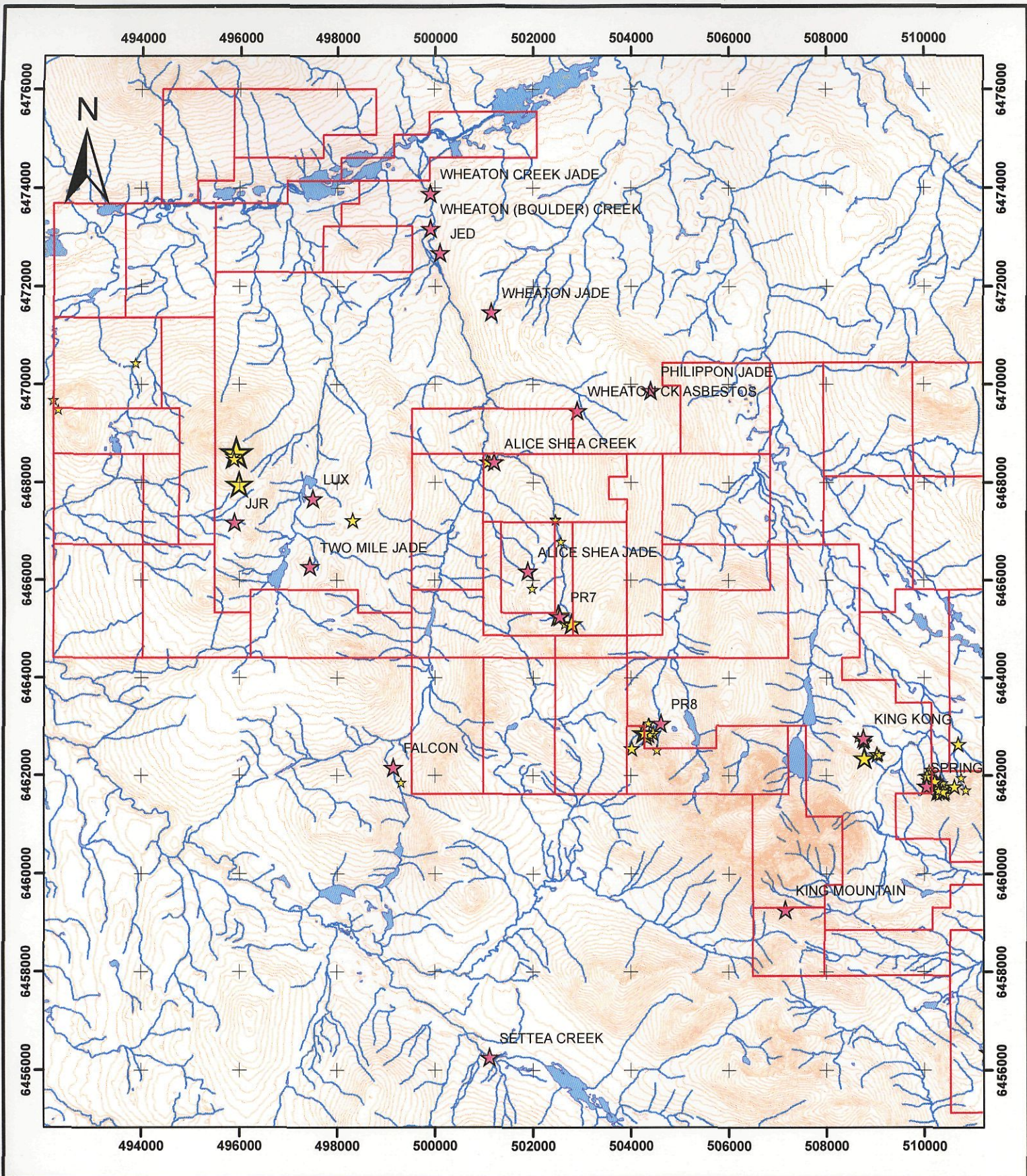
Twenty-one locations were chosen to collect 10 kilogram (kg) heavy mineral concentrate (HMC) samples over various drainages across the property (Figure 6). Unfortunately, only fourteen of the planned twenty-one HMC samples were collected, due to intense tree cover and a lack of silt within stream beds and higher elevation till plain drainages. Collection of 41 two-kg HMC samples ensured an even distribution in the geochemical data over the entire property (Figure 6). All HMC sample data and assay values are provided in Appendices 4 and 5. Estimated gold weights within the HMC samples were corrected to a standard weight of 1 kilogram, in order to compare the gold concentrations between the 2 and 10 kilogram samples (Table 3). The majority of the historical work and MINFILE data for the Turnagain region was related to localized mineralization and structures, therefore the development of a broader sampling area over the entire property was implemented in 2007 to help identify other potential targets

HMC sampling results yielded 6 delicate to irregular gold grains, from 2 out of the 6 samples taken to the west and north of the PR 8 showing. The western portion of the property yielded 7 larger, delicate to irregular gold grains in 2 of the 19 samples collected in that region. The Alice Shea and Wheaton creeks also contained large gold grains ranging from delicate to irregular, within 12 of the 18 samples collected. The Alice Shea sampling yielded a total of 16 grains, the Wheaton creek contained 4 abraded grains, and the junction of the two creeks yielded 3 grains. The Letain drainages sampled yielded the largest grains, as well as, the highest number of grains with 17 delicate to irregular grains identified in 5 of the 9 samples taken.

**TABLE 3: ANOMALOUS HMC STREAM SAMPLES**

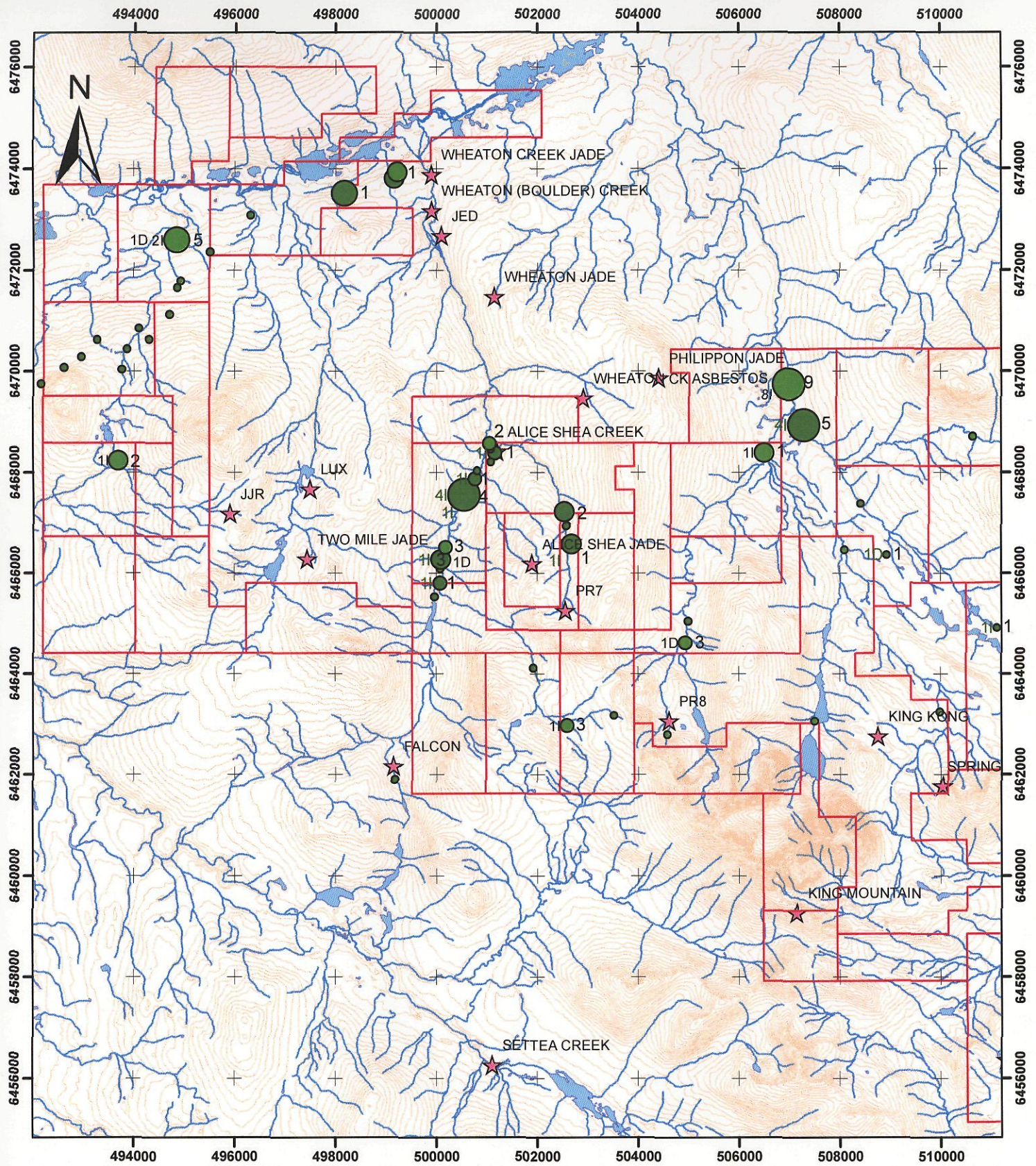
Sample Number	Sample Weight (kg)	Visible Au Grains	Estimated Weight Au (ug/kg)
07HCS012	7	9	97.09
07HCS013	6.3	1	6
07HCS017	6.5	3	3.52
07HCS018	6.9	3	4.13
07HCS019	6.7	2	2.24
07HCS020	8.1	1	8.43
07HCS021	7	5	37.34
07HCS022	7.6	2	7.3
07HCS023	7.8	3	4.76
07DAS002	1.4	5	255.53
07DAS004	3.1	1	0.46
07DAS005	1.7	1	0.71
07DAS007	1.8	1	1.46
07DAS009	2.2	3	5.81
07DAS011	1.7	1	1.96
07DAS012	3.3	4	50.52
07DAS013	2.6	1	1.96
07THS001	1.2	1	9.85
07THS004	1.9	2	5.25
07THS005	1.6	1	4.05
07THS016	1.4	3	6.26
07THS017	3.1	1	35.98

Note: "Anomalous" HMC samples are defined as samples containing visible gold grains  
 Yellow highlight=10kg, Green highlight=2kg samples



**Figure 5**





**Legend**

- 2007 Turnagain Claims
- ★ MINFILE SHOWINGS
- Contours (20m)
- Drainage
- Lakes

**Turnagain HMC ASSAYS 2007**

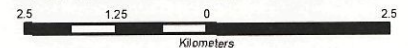
- Estimated\_Weight\_of\_Au\_ug
- |          |             |             |               |
|----------|-------------|-------------|---------------|
| ●        | ●           | ●           | ●             |
| 0 - 1.99 | 2.00 - 4.99 | 5.00 - 9.99 | 10.00 - 99.99 |
| ●        | ●           | ●           | ●             |
| ●        | ●           | ●           | ●             |
| ●        | ●           | ●           | ●             |
| ●        | ●           | ●           | ●             |
| ●        | ●           | ●           | ●             |
| ●        | ●           | ●           | ●             |

- 2kg HMC Sample
- 10kg HMC Sample

Left Label=#delicate(D) or #irregular(I) grains  
Right Label=Total #Au grains

**Turnagain River Exploration Inc.**

**2007 HMC SAMPLE LOCATIONS**



APEX Geoscience Ltd.  
Nad 83, Zone 9N  
1:100,000

**Figure 6** EDMONTON, ALBERTA November 2007

## **PR 7**

In 1985, massive sulphides consisting of pyrite and chalcopyrite were found in outcrop on the PR 7 claim, followed by a sample in 1986 that assayed 0.81% copper, 16.46 g/T silver and 0.41 g/T gold (Smith, 1987). In 2007, the PR 7 showing was found to consist of an altered peridotite with variations in the degree of serpentinization from intensely altered with serpentinite and/or magnetite veins, to massive peridotite with a moderate magnetization. An outcrop of massive disseminated magnetite within veins and along fracture surfaces was identified at the peak of Mt. Shea near the showing. Grid stakes, flagging, tire tracks, and a radio tower at the peak of Mt. Shea were identified and map coordinates were noted to identify locations of previous workings. Additional prospecting over the PR 7 showing located old mineralized trenches in a till plain, northwest of the Mt. Shea peak, which were identified using 1985 and 1987 assessment reports. A total of 5 rock grab samples were taken at the trench and surrounding area. Sample 07THP001 yielded anomalous values, 1313 ppm chromium and 2968.6 ppm nickel, from a serpentinized peridotite boulder along the northeast face of Mt. Shea.

## **PR 8**

The MINFILE data for the PR 8 showing mentioned the presence of a "porphyrite" dike of undetermined extent that displayed a "promising quantity" of pyrite and chalcopyrite. A sample of the outcrop assayed 1.69% copper, 0.31% lead, 6.17 g/T silver and 0.41 g/T gold (Fredlund, 1987). Upon exploration of the region in 2007, the dike was not located; however, a rusty mineralized zone north of King Mountain was identified and 12 grab samples were taken within talus boulders. The samples were taken along the northeast face of a nearby outcrop peak with rusty knobs and serpentinite weathered talus slopes. Sample lithologies included serpentinized ultramafic, graphitic argillite, metasediment, and chlorite silicified altered diorite. Anomalous assay values of 1403 ppm chromium and 1739.9 ppm nickel were identified in sample 07KRP207.

The presence of a blocky limestone unit near PR 8, trending northeast-southwest in a gully, was traced along ridge tops towards the northeast (approximately 1.5 km away) and further on towards the Spring showing. The contact between the limestone and the peridotite was often intensely serpentinized and sulphide mineralization was common within the surrounding peridotites. Prospecting along the PR 8 showing with Mike Dufrense (P.Geol.) and Kris Raffle (P.Geol.) resulted in additional sampling along the altered contact, and identification of new mineralized and altered contacts within the region of the PR 8, Spring, and King Kong showings.

HMC stream sediment sampling was conducted along drainages west and north of the PR 8 showing. One ten-kg and 2 two-kg sediment samples were taken along a westward flowing drainage, off the PR 8 peak, through a glaciated till plain. The ten-kg sample, 07HCS023, contained 3 grains of gold and was taken from a region of seasonal runoff. Sample 07HCP023 contained two

abraded gold grains (smaller leaf shaped grains with smoothed surfaces) 80 by 80 micrometres in size and one irregular grain (small pitted grains with several protusions) with dimensions of 160 by 100 micrometres. North of the showing, an additional two-kg and 2 ten-kg samples were collected along another drainage system. One of the ten-kg samples (07HCS017) contained 3 grains of gold; two grains classified as delicate (pitted granular bedrock masses with smooth protruding crystals) with dimensions of 100 by 100 micrometres, and one abraded grain 40 by 20 micromeres in size.

### Spring

The Spring MINFILE data provided an unknown cause for the malachite mineralization identified previously in assessment reports. During the 2007 exploration, a large rusty zone east of a limestone and marine sediment/altered ultramafic contact was identified and sampled. A total of 26 rock grab samples were taken from various alteration types along the northwest side of the mafic volcanic outcrop peak, 2.5 km east of King Mountain. A single ten-kg HMC stream sediment sample was taken along a north flowing drainage from the Spring showing (07HCS015). Table 4 shows the anomalous values of the samples taken near the Spring showing.

**TABLE 4: SPRING ANOMALOUS GRAB SAMPLES**

Sample	Au ppb	Cr ppm	Cu ppm	Ni ppm
07DAP004	<5	864	410	820.9
07THP019	<5	615	912.5	664
07KRP201	<5		2313.7	
07KRP202	5	1292		1632.1
07KRP203	<5		3131.6	

### King Kong

According to the MINFILE data for the King Kong showing, malachite, tetrahedrite, and magnetite occur at or near the contact of serpentinite and argillite units. A sample was taken from this material in 1984 and it was assayed 1.56% copper, 13.8 g/T silver and 0.08 g/T gold (Nagati, 1984). During the 2007 exploration, 11 rock grab samples were taken from the King Kong showing along the intensely altered serpentinite-argillite contact. Sampling was also completed at the intensely altered, fuchsite and jade bearing contact between 2 small limestone outcrops and the altered serpentinite. Anomalous samples yielded 683.6 ppm nickel (sample 07HCP015), 2.4 ppm silver and 2674 ppm copper (sample 07KRP206). A single ten-kg HMC stream sediment sample was taken in the area, along a north flowing glacial lake drainage stream at the base of King Mountain (07HCS016).

## **Falcon**

The MINFILE data for the Falcon showing stated that mineralization consisted of tetrahedrite, minor galena, sphalerite and pyrite in quartz veins, stockworks and siliceous replacement zones within the limestone near a greywacke contact. Azurite and limonite alteration associated with a hydrothermal vein mineralization style was also noted in the MINFILE data. A 50 centimetre chip sample from 1986 assayed 218 g/T silver, 0.65% copper, 0.055% lead, 0.04% zinc and less than 0.1 g/T gold (Christopher, 1986). The 2007 field exploration observed a limestone cliff with intense sub-vertical veining (quartz +/- calcite) near the Falcon showing coordinates. Azurite, malachite, and coarsely disseminated pyrite, within a 60 cm wide quartz vein, were observed in the country rock. Grab sample 07THP008 was taken across the mineralized section of the vein and assayed 67.3 ppm silver and 3145.2 ppm copper. The region surrounding Falcon consisted of a more crystalline limestone unit with ductile deformation and well defined structural characteristics. A single two-kg HMC stream sediment sample was taken along a north flowing stream that drained the valley containing the Falcon showing (07HCS007).

## **Alice Shea Creek**

The Alice Shea Creek area is historically known for its gold placer workings due to the historic discovery of a 52 ounce nugget in the creek bed. Current placer workings near the Wheaton Creek - Boulder Creek Camp were visited during the 2007 field season with a brief operations tour by J. Schusslar. The geology observed along the Alice Shea Creek was limited to creek bed exposures consisting of a serpentinized peridotite, with local zones of talc to asbestos alteration and rusty outcrops with minor sulphide mineralization (trace pyrite). The occurrence of a "foliated" ultramafic was also noted, possibly reflecting a preferential alignment of the serpentinite within the peridotite. At one particular zone of sulphide mineralization, a 1 m wide strongly serpentinized zone was noted to the north of the pyritic area, potentially representing a shear zone or fracture area that trapped or controlled fluid flow through the rocks at the time of mineralization. Prospecting over outcrops near the headwaters of the Alice Shea Creek and the Alice Shea Jade showing yielded 7 rock grab samples. Anomalous assay values of 541 ppm chromium (sample 07DAP007) and 1199 ppm barium (sample 07DAP008) were identified from boulders near the convergence of the Alice Shea and Wheaton Creeks.

HMC sediment sampling along the Alice Shea and Wheaton Creek systems collected medium to dark brown silt from regions of slightly lower flow within the overall high flowing boulder and coarse gravel streams. A total of 16 two-kg and 2 ten-kg HMC stream samples were taken. Four of those samples were taken at the convergence of the Alice Shea and Wheaton Creek systems. In order to compare the compositional differences in stream silts, each stream was sampled upstream of the convergence. Sampling along the Wheaton Creek began 3.2 km upstream from the convergence with the Alice Shea Creek, while 2.8 km of sampling occurred along the Alice Shea Creek. Iron oxide and

magnetite grains were noted within most of the HMC samples taken along the Alice Shea Creek.

HMC sampling along the Alice Shea Creek yielded an irregular gold grain 240 by 140 micrometres in size (2 kg sample 07THS001) and 2 abraded grains 180 by 120 micrometres and 60 by 60 micrometres in size (2 kg sample 07THS004). Sampling of the Wheaton Creek from its headwaters northward towards the Alice Shea junction resulted in the collection of 1 ten-kg and 5 two-kg samples containing visible gold grains. HMC sediment sample 07DAS007 contained one irregular grain, 07DAS009 one irregular and two abraded grains, 07HSC018 (10 kg sample) one delicate and two abraded grains 100 by 120 micrometres in size, 07DAS011 one irregular grain, 07DAS012 four irregular grains 100 to 380 micrometres in size, and 07DAS013 one irregular grain. At the junction of the Alice Shea and Wheaton creeks, two-kg sample 07THS005 yielded 1 irregular grain, while the ten-kg sample (07HCS019) contained 2 abraded grains 60 by 60 micrometres and 120 by 100 micrometres in size. HMC samples along the Wheaton Creek near the Boulder Creek camp and placer workings, yielded a total of 4 gold grains within a 2 kg and 10 kg sample. Sample 07HCS020 contained 1 abraded grain 220 by 140 micrometres in size, and was collected beside a 2 kg sample with null gold values (07THS015). Along a dirt access road to boulder camp, slightly west of the Wheaton creek, sample 07THS016 yielded 3 abraded grains 60 to 220 micrometres in size.

### **Lux**

The MINFILE and previous exploration reports for the Lux showing, discuss the presence of minor amounts of nickel disseminated in serpentinized peridotite, local magnetite clusters in serpentinite, and chalcopyrite in calcite veinlets near the limestone-serpentinite contact. One previous rock sample assayed 20.57 g/T silver and 1.85% copper (Poliquin, 1970). Prospecting in 2007 over the region surrounding the Lux showing resulted in the identification of an altered peridotite unit. A separate outcrop was identified to exhibit hydrothermal alteration with an orange weathered surface, potassium feldspar and sericite alteration, magnetite disseminations, and strong quartz veining (1 to 10 cm scale). Magnetite veins were observed in the peridotite similar to those at the PR 7 showing. No mineralization was identified at this showing in 2007; however, the strongly altered quartz vein was sampled (07THP020) and assayed 593 ppm chromium. Historically, the Lux showing is related to tholeiitic intrusives with nickel-copper mineralization, although the 2007 exploration crew was unable to locate any mineralization to support this.

### **West property**

Prospecting and HMC sediment sampling was conducted in the west-northwest portion of the Turnagain property, with the collection of 16 two-kg HMC samples and 9 rock grab samples. The majority of the grab samples were taken from above the tree line on the southeast face of a topographic high north of the JJR MINFILE showing. Anomalous sample 07THP023 yielded 1287 ppm

chromium and 2157.4 ppm nickel from a serpentinite altered ultramafic near the JJR showing. A few of the HMC samples taken proximal to the Wheaton Creek placer permits contained flecks of muscovite or phlogopite in areas of silty sand point bars and fine sediment traps near logs within low flow streams. The remaining HMC samples were taken along various streams draining northward from topographic highs along the western edge of the property. Three 10 kg HMC samples were also taken in the same region, west of the Wheaton creek drainage. Two of the ten-kg HMC samples contained gold grains; 07HCS021 contained 5 grains from a boggy area one km south of the Turnagain River, while 07HCS022 yielded 2 grains along a westward stream draining the JJR showing region. Sample 07HCS021 contained 2 irregular grains (200 by 140 micrometres, 120 by 80 micrometres), 2 abraded grains (160 by 100 micrometres, 120 by 80 micrometres), and 1 delicate grain 320 by 200 micrometres in size. Sample 07HSC022 contained 2 grains, one abraded and one irregular with dimensions of 180 by 100 micrometres and 140 by 120 micrometres respectively.

### **Letain Lake**

Prospecting the higher elevation outcrops in the northeast and southeast extents of the property, resulted in the identification of geological units and structural elements that may affect the lack of local mineralization in those regions. Also, the availability of historical data is minimal in this particular region of the Turnagain property.

HMC stream sampling continued along several streams in the eastern region of the property, northwest of Letain Lake, with the collection of 5 two-kg samples and 4 ten-kg samples. Utilization of existing road networks in the Letain area is recommended for future exploration and sampling traverses. HMC sample material consisted of silty sand with minor organics, while a few samples contained pyrite and phlogopite flecks. Out of the 2007 sampling program, three of the 2 kg samples and two of the 10 kg samples yielded gold grains in the Letain region. Of the 2 kg samples, 07DAS002 contained 1 abraded and 4 irregular gold grains ranging in sizes from 80 to 640 micrometres, 07DAS004 and 07DAS005 contained 1 delicate and 1 irregular grain respectively. Sample 07HCS012 (ten-kg sample) was collected proximal to sample 07DAS002 and contained 1 abraded and 8 irregular grains, ranging in sizes from 60 to 380 micrometres. The second ten-kg sample yielding gold was 07HCS013, with one irregular gold grain 220 by 100 micrometres in size.

### **SAMPLING METHOD AND APPROACH**

All APEX samples were collected under the supervision of a registered professional geologist, Mr. Michael Dufresne, P.Geol. A total of 128 samples were collected within the property: 73 rock grab samples, 14 ten kilogram HMC stream sediment samples, and 41 two kilogram HMC stream sediment samples. All rock samples that were collected during the property visit were marked at each sample site using orange arctic grade flagging and a metal marking tag to

insure sample site preservation. Sample locations were determined by hand-held global positioning system (GPS) units set to report locations in UTM coordinates using the North American Datum established in 1983 (NAD 83) and UTM zone 9n. Rock grab sample sizes were, in general, between 0.6 kilograms and 2 kilograms and samples were collected in clear plastic sample bags. HMC stream sediment sample sizes were approximately either 2 or 10 kilograms depending on the availability of material. HMC stream sediment samples were taken with a 2 millimeter mesh screen and metal pan in areas of low to moderate flow along sand bars or meanders in the stream. All sample identifiers were written on the outside of each bag (on both sides). A sample tag marked with the appropriate sample number was placed inside each sample bag. The sample bags were then closed using zip ties. The samples were taken to Dease Lake, BC and transported by freight in sealed poly woven bags, to TSL Laboratories (TSL) and the Saskatchewan Research Council (SRC), Saskatoon, Saskatchewan.

The purpose of the property visit was to: (1) verify existing work; and (2) assess the overall economic base metal and gold potential of the area. Samples, which were collected by the author, tend to be bias towards specific rock types and/or structures that are more likely to contain gold or other base metals. 'Select rock grab' samples were, in general, collected in mineralized zones in order to approximate gold grade. Only fresh, unweathered samples were selected to ensure the maximum quality of the results.

Based on the author's prior exploration experience, samples containing greater than 0.5 g/t Au are considered 'anomalous' and those samples which contain between 0.10 g/t Au and 0.5 g/t Au are 'possibly anomalous'. Anomalous rock samples which contain greater than 0.5 g/t Au should, wherever possible, be followed up to determine if they are associated with important gold-bearing zones. Possibly anomalous rock samples which assay greater than or equal to 0.10 g/t Au may warrant follow-up exploration depending on: (a) whether there are other possibly anomalous samples in their vicinity, (b) favourable geology, and (c) the logistical ease of re-visiting the sample site.

## **SAMPLE PREPARATION, ANALYSES AND SECURITY**

The APEX rock and HMC sediment samples were all placed into sealed plastic bags and then into a sealed poly woven (rice) bag for shipment to the analysing laboratory immediately following collection. All original rock samples were transported by freight from Dease Lake, BC to TSL for gold analysis and multi-element geochemistry. The HMC sediment samples were also transported by freight from Dease Lake to the SRC, to be superpanned, tabled, picked for gold and platinum, followed by gold analysis and multi-element geochemistry of the heavy fraction after picking. The author did not have control over the samples at all times and therefore can not personally verify what happened to the samples during transport and shipping, to the time they were received. However, the author has no reason to believe that the security of the samples was compromised.

The rock samples were analyzed for gold using the Multi-Acid Digestion method set forth by TSL. Prior to analysis, all samples were dried (if necessary) and crushed to -10 mesh (2 mm). A representative split of the sample (approx. 250 g) is then taken, using a riffle splitter, and pulverized to -150 mesh, then hand homogenized. The fire assay method uses an approximate 30 gram aliquot sub-sample from a standard 150-mesh pulp. The samples are mixed with a litharge flux and fused forming a lead button and molten slag. The slag is removed and the lead button containing the precious metals is coupled, resulting in a precious metal bead. The final technique used to determine the gold contents of the residue is by Atomic Absorption Spectrometry (AAS). The final technique used to determine the precious metals (silver, lead and copper) contents of the residue is by aqua regia digestion and the solution is analyzed by Atomic Absorption Spectrometry (AAS). Any assay results deemed erratic by the prospective labs were re-assayed. The samples were also analyzed using the 34-element Induction Coupled Plasma Spectroscopy (ICP) method. The ICP analysis uses an approximate 0.50 gram aliquot, which is digested with hydrochloric and nitric acid in a hot water bath. The sample is then bulked to a volume of 10 ml with 7.2% hydrochloric acid and analyzed by a combination of ICP-MS (Mass Spectroscopy) and ICP-AES (Atomic Emission Spectroscopy).

The HMC stream samples were analyzed for gold and base metals by table picking and the Multi-Acid Digestion method by the SRC. Prior to analysis, the samples are first weighed, and then processed with a Knelson concentrator. The concentrate is then picked for gold and platinum with descriptions made on the characteristics of the gold grains. Grains are classified as delicate, irregular, abraded, or rounded with potential origins and degree of transport noted. Delicate grains reflect bedrock gold mineralization and occur as pitted granular masses with smooth protruding crystals. Short ice transport of gold grains results in an irregular grain shape, pitted with several protusions. Abraded grains are characterized by a smaller leaf shape due to increased transport. Continued abrasion of grains produces small polished rounded or ellipsoidal grains. Once the samples are picked for gold, the SRC places the grains back in the 30 gram heavy metal concentrate for multi-acid digestion and ICP analysis using the wet chemical method.

The TSL rock grab samples include: 07HCP001-07HCP020, 07DAP001-07DAP021, 07THP001-07THP023, and 07KRP201-07KRP209. The SRC HMC stream samples included the 10 kg samples: 07HCS011-07HCS024, as well as, the 2kg samples: 07HCS001-07HCS010, 07DAS001-07DAS014, and 07THS001-07THS017.



## **DATA VERIFICATION**

Specific to this report, all samples were collected by Mr. K. Raffle and APEX personnel. As well, to the best of the author's ability, the samples were kept under the control of APEX; therefore the author believes this data to be of acceptable quality.

In total, 128 rock grab and HMC stream sediment samples were collected and shipped to TSL and the SRC in Saskatoon, Saskatchewan (An ISO/IEC 17025:2005 accredited laboratory). TSL and the SRC perform standard quality assurance/quality control (QA/QC) procedures with respect to all the samples that were sent for analysis. They routinely analyze analytical blank and standard samples. The data for all of these standard analyses were found to be within acceptable limits. Due to the small number of samples collected a rigorous QA/QC program beyond that already established by TSL was not warranted. The author cannot comment on the quality control measures that may or may not have been taken by other companies during previous sampling programs that are discussed in the history section of this report. The author does not see any reason to question the quality, accuracy and security of the historical data.

## **EXPLORATION EXPENDITURES**

The cost to complete 2007 exploration programs at the Turnagain Property was CDN\$ 90,935.81 plus GST. A summary breakdown of the exploration costs is provided in Appendix 6.

## **CONCLUSIONS AND DISCUSSION**

The regional setting of the Turnagain property is considered highly favourable for the presence of copper, nickel, and associated gold mineralization. The Turnagain property is associated with an upper Mississippian to Permian ultramafic complex within Paleozoic metasedimentary and metavolcanic rocks along the faulted terrane boundary between the cratonic margin and accreted Quesnel and Cache Creek terranes. The property scale structural trend is oriented northwest with dominant north-northwest trending quartz veining within metasediment and serpentized ultramafic units. The local bedrock geology and associated structures, such as the King Salmon fault, likely provided a favourable environment for the formation and ascent of mineralized fluids within accreted packages of the Cache Creek complex. Fuchsite-mariposite bearing listwanites, identified within the Turnagain property (King Kong showing), reflect carbonate alteration of ultramafic packages and may be associated with lode gold deposits. Significant alteration and the presence of anomalous base metals in surface samples, strongly indicate that the Turnagain area is underlain by rock units suitable for the formation and preservation of gold and base metal deposit types. Exploration completed between 1985 and 2007 by various mineral exploration

companies has resulted in the discovery of over twenty showings in the Turnagain area, of which three are past producers.

Bedrock exposures of alteration along lithological contacts, is limited due to the presence of extensive glacial deposits in the Turnagain region. The glacial history of the region is complex with areas of thick glacial drift and extensive glacial gravel, which impede exploration for mineralized deposits along lithological or structural contacts. Local bedrock exposed in the area is age correlative to bedrock containing various mineralized deposits in other parts of the Stikine Ranges, such as the Kutcho Creek VMS deposit and the Hard Creek Nickel Alaskan-type ultramafic intrusion.

During July and August of 2007, APEX conducted a reconnaissance exploration program over the Turnagain property, consisting of prospecting, HMC stream sediment sampling, and ground truthing MINFILE showings. The exploration conducted was focused on MINFILE reports, alongside recommendations made in previous assessment and technical reports on Turnagain's property. Prospecting was conducted over 11 MINFILE showings and along topographic highs in the vicinity of the Turnagain property, in order to identify and trace alteration envelopes and mineralization. A total of 73 rock grab samples were collected from a wide range of alteration types and mineralization styles at showing locations and the surrounding regions. Anomalous chromium and nickel values of 1200 to 1600 ppm and 1600 to 3000 ppm respectively, were identified at the PR and Spring showings, and along the western portion of the property. The Spring and King Kong showings were also characterized by anomalous copper grades of 2300 to 3100 ppm, while the Falcon showing contained anomalous copper, lead, zinc, and antimony in a polymetallic vein deposit type. The Falcon and King Kong showings also displayed decent silver values of 67.3 and 2.4 ppm respectively. Limited exposure of alteration zones with sulphide mineralization and contacts with other surrounding lithologies, restricted sampling densities.

In 2007, a total of 14 ten-kg HMC samples and 41 two-kg HMC samples were collected over various drainages to ensure an even distribution in the geochemical data over the entire property. The majority of the historical work and MINFILE data for the Turnagain region is related to localized mineralization and structures, therefore the development of a broader sampling area over the entire property was implemented in 2007 to help identify other potential targets.

Alice Shea and Wheaton Creeks yielded the highest percentage of gold bearing samples (67%) in the region, followed by Letain (56%), PR 8 (33%), and the western property with 11%. HMC sampling along the Alice Shea and Wheaton drainages resulted in the collection of two 10 kilogram samples and eleven 2 kilogram samples, yielding a delicate and four irregular gold grains out of a total of 24 grains (07HCS018, 07DAS012). The Letain region produced a delicate and twelve irregular gold grains from a total of 17 grains, within two 10 kilogram and three 2 kilogram samples (07DAS004, 07HCS017, 07DAS002). A drainage north of the PR 8 showing yielded a delicate gold grain from a total of 6

grains within two 10 kilogram samples (07HCP017). A single delicate gold grain was identified from 7 total grains in the western property from two 10 kilogram samples (07HCS021).

Although mineral exploration on the Turnagain property is still in the early stages, the potential for discovery of a listwanite-lode gold or polymetallic vein deposit is considered high based on the regional geological setting in conjunction with the positive results of exploration conducted to date. A number of anomalous base metal values have been recovered from limited sampling of mineralized lithologies and HMC stream silts on Turnagain's property. The copper, nickel, and associated gold potential of the area cannot be fully assessed with the limited amount of sampling that has been conducted to date. It is expected that further systematic sampling will lead to a better understanding of the gold and base metal potential of the property. However, a number of samples collected from the property and within the Stikine Ranges by various exploration companies, have yielded significant base metal concentrations in several deposit styles. Therefore, there is a strong likelihood that undiscovered base metal and associated gold deposits exist on the Turnagain property

## **RECOMMENDATIONS**

The favourable geological setting and encouraging exploration results to date, within Turnagain's property, warrants an aggressive, systematic follow up exploration program to search for gold and base metal deposits. Such a follow up program should include rock grab and HMC stream sampling, airborne and ground geophysical surveys, and subsequent drill testing. The potential for discovery of listwanite lode gold and polymetallic vein deposits within Turnagain's property is considered high. A follow-up exploration program is warranted and recommended for the Turnagain Property. The summer and fall 2008 exploration program should comprise but not be limited to:

Phase 1 (a): Phase 1 (a) should entail the completion of a DIGEM helicopter-borne magnetic and electromagnetic survey with a 150 metre line spacing over a total of 1122 Line-Km (\$250/line-Km). Lines should be oriented perpendicular to the dominant northwest-southeast structural and lithological trends.


Phase 1 (b): Phase 1 (b) should consist of ground truthing, followed by ground geophysical surveys over high priority targets outlined by the Phase 1(a) airborne data, at a cost of \$10,000 per target. Additional sampling in Phase 1 (b) should involve soil geochemical sampling over the entire property, combined with rock grab and chip sampling. The property soil geochemical grid should consist of 500 metre spaced lines, a 100 metre sampling interval, and result in the collection of 2500 soil samples and 250 duplicates. The estimated cost of soil sampling is \$65/sample all up.

Phase 2: Drill test at least 10 geophysical anomalies using a diamond drill. The estimated cost for each drill hole is \$250/m all up (100m per hole)

**TABLE 5: RECOMMENDED 2008 PROGRAM AND BUDGET**  
**TURNAGAIN PROPERTY**

ITEM	DESCRIPTION	COST
<b>Phase 1 (a)</b>		
	Completion of a DIGEM helicopter-borne magnetic and electromagnetic survey with a 150 metre line spacing over a total of 1122 Line-Km (\$250/line-Km).	\$280,000
<b>Phase 1 (b)</b>		
1	Ground truthing, followed by ground geophysical surveys over high priority targets outlined by the Phase 1(a) airborne data, at a cost of \$10,000 per target	\$100,000
2	Conduct a soil geochemical sampling grid on the entire property, combined with rock grab and chip sampling. Collection of 2500 soil samples and 250 duplicates at an estimated cost of \$65/sample all up.	\$180,000
	<b><u>Total Phase 1 (a) and 1 (b) Project Costs,</u></b> <b><u>Excluding GST</u></b>	<b>\$560,000</b>
<b>Phase 2</b>		
	Drill test at least 10 geophysical anomalies using a diamond drill. The estimated cost for each drill hole is \$250/m all up (100m per hole)	\$250,000
	<b><u>GRAND TOTAL EXPLORATION BUDGET</u></b>	<b>\$810,000</b>

The total estimated cost of the recommended exploration for Turnagain Exploration Ltd.'s Turnagain property is **\$810,000** plus GST.

APEX Geoscience Ltd.  
  
 KRIS RAFFLE, P. GEOL.  
 January 2, 2008  
 EDMONTON, ALBERTA

## **DATA VERIFICATION**

Specific to this report, all samples were collected by Mr. K. Raffle and APEX personnel. As well, to the best of the author's ability, the samples were kept under the control of APEX; therefore the author believes this data to be of acceptable quality.

In total, 128 rock grab and HMC stream sediment samples were collected and shipped to TSL and the SRC in Saskatoon, Saskatchewan (An ISO/IEC 17025:2005 accredited laboratory). TSL and the SRC perform standard quality assurance/quality control (QA/QC) procedures with respect to all the samples that were sent for analysis. They routinely analyze analytical blank and standard samples. The data for all of these standard analyses were found to be within acceptable limits. Due to the small number of samples collected a rigorous QA/QC program beyond that already established by TSL was not warranted. The author cannot comment on the quality control measures that may or may not have been taken by other companies during previous sampling programs that are discussed in the history section of this report. The author does not see any reason to question the quality, accuracy and security of the historical data.

## **EXPLORATION EXPENDITURES**

The cost to complete 2007 exploration programs at the Turnagain Property was CDN\$ 87,913.59 plus GST. A summary breakdown of the exploration costs is provided in Appendix 6.

## **CONCLUSIONS AND DISCUSSION**

The regional setting of the Turnagain property is considered highly favourable for the presence of copper, nickel, and associated gold mineralization. The Turnagain property is associated with an upper Mississippian to Permian ultramafic complex within Paleozoic metasedimentary and metavolcanic rocks along the faulted terrane boundary between the cratonic margin and accreted Quesnel and Cache Creek terranes. The property scale structural trend is oriented northwest with dominant north-northwest trending quartz veining within metasediment and serpentized ultramafic units. The local bedrock geology and associated structures, such as the King Salmon fault, likely provided a favourable environment for the formation and ascent of mineralized fluids within accreted packages of the Cache Creek complex. Fuchsite-mariposite bearing listwanites, identified within the Turnagain property (King Kong showing), reflect carbonate alteration of ultramafic packages and may be associated with lode gold deposits. Significant alteration and the presence of anomalous base metals in surface samples, strongly indicate that the Turnagain area is underlain by rock units suitable for the formation and preservation of gold and base metal deposit types. Exploration completed between 1985 and 2007 by various mineral exploration

A handwritten signature in black ink, appearing to read "Heather Carey". The signature is fluid and cursive, with the first name "Heather" written in a larger, more prominent script than the last name "Carey".

Heather Carey, B.Sc., Geol.I.T.  
Edmonton, Alberta, Canada  
January 2, 2008

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**2007 Turnagain Field Personnel**

<b>Name</b>	<b>Position</b>	<b>Company</b>	<b>Start and Finish dates</b>	<b>Address</b>
Heather Carey	Geologist	APEX Geoscience Ltd.	July 23, 07 to Aug 8, 07	105-2623 Richmond Rd, Victoria, BC V8R 4S8
Dave Arsennault	Geologist	APEX Geoscience Ltd.	July 23, 07 to Aug 8, 08	20 Kilkenny St, St.Johns, NL A1A 4A7
Tom Hidahl	Geologist	APEX Geoscience Ltd.	July 23, 07 to Aug 8, 09	100 Waterloo St, Winnipeg MB R3N 0S2
Kris Raffle	Senior Supervisory	APEX Geoscience Ltd.	Aug 5, 07 to Aug 8, 07	1006-1277 Nelson St, Vancouver, BC V6E 4M8
Mike Dufresne	Senior Supervisory	APEX Geoscience Ltd.	Aug 5, 07 to Aug 8, 08	267 Burton Road, Edmonton, AB T6R 1P5

**2007 Turnagain Office Personnel**

<b>Name</b>	<b>Position</b>	<b>Company</b>	<b>Start and Finish dates</b>	<b>Address</b>
Michael Dufrense	Senior Supervisory	APEX Geoscience Ltd.	July 9, 07 to Dec 1, 07	267 Burton Road, Edmonton, AB T6R 1P5
Kris Raffle	Senior Supervisory	APEX Geoscience Ltd.	July 9, 07 to Dec 1, 08	1006-1277 Nelson St, Vancouver, BC V6E 4M8
Heather Carey	Geologist	APEX Geoscience Ltd.	July 11, 07 to Dec 1, 07	105-2623 Richmond Rd, Victoria, BC V8R 4S8
Tara Gunson	Geologist	APEX Geoscience Ltd.	July 9, 07 to July 13, 07	11923- 129 Ave, Edmonton, AB T5E 0N4
Peter Whyte	Geology Technician	APEX Geoscience Ltd.	July 10, 07 to July 13, 08	12416 - 51 Street, Edmonton, AB T5W 3H5
Dave Arsennault	Geologist	APEX Geoscience Ltd.	July 11, 07 to July 18, 09	20 Kilkenny St, St.Johns, NL A1A 4A7

**APPENDIX 2**  
**2007 TURNAGAIN GRAB SAMPLE DESCRIPTIONS**

Sample Id	Easting (nad83z9)	Northing (nad83z9)	Location	Lithology	Disposition	Description
07HCP001	510045	6461984	SPRING	aphanitic mafic - basalt?	bldr	2% py, fine gr, mnr Si altn, qtz/serpentinite veins, high relief, subang bldr 20x40cm in talus from o/c mtn, rusty bldr, finely dissem 2-5% PY, slight serpentinization of mafics
07HCP002	502467	6467241	AliceShea	serpentinized peridotite	o/c	f gr, 5% PY, minor to moderate serpentinization, moderate relief, linear feature 045 strike 40 dip to SE, aphanitic ultramafic with serpentinite along planes/foliation in rk, results in localized zones with strong planar orientation, serp. Bands/seams roughly parallel and mm thick, rusty o/c along alice shea creek, coarsely dissem PY along FR surface with limonite, coarse dissem and FR controlled minz, minz unit bound to the N by 1m wide band of extremely altered serp. mafic (v.chalky) - potentially bound on minz
07HCP003	504365	6463066	PR8	serpentinized/silicified peridotite	bldr	qtz, flds, pyx,sulp, fine to med gr, 3%PY 2%CPY, moderate alteration (Si and serp.), low veining, talus bldr, high relief, area NW of King Mtn, talus from o/c along mtn peak, appeared rusty fr distance, localized zones of FeOx within o/c, talus bldr sampled v. angular slab 40cmx20cm, rusty and irreg edged bldr, coarsely dissem PY+CPY, rusty orange round dissem CPY minz, serp on FR surfaces, minimal silicification/serpentinization, possible - qtz minz along FR/weaknesses - slightly vuggy with potential xst. Hematite
07HCP004	504345	6463063	PR8	silicified mafic with magnetite bands	bldr	qtz, sulp, ox, f gr, PY, strong silicification, moderate magnetism in overall rk, talus bldr sampled down slope from o/c, near King Mtn, 2% PY coarsely dissem, v intensely silicified with serpentinization evidence of mafics (greenish colour), subangular bldr 60x30cm rusty magnetite veinlets and clusters in rk
07HCP005	504246	6462982	PR8	altered peridotite	bldr	f gr, TR PY, mnr Si alteration, talus bldr within high relief, bronze yellow metallic min (elong) xst shape and TR finely dissem - possibly titanite?, rusty bldr, coarsely dissem PY (trace), minor serp alteration med gr aphanitic (gabbroic look) - magnetite clusters coarsely dissem
07HCP006	510297	6461840	SPRING	altered peridotite	o/c	flds pyx ox serp, f gr, 2% PY, strong CBN alteration, high relief, "rotten" rusty o/c with pockmarked surface evident of leaching - possible sulfides/serpentinite leaching out - resulting in vuggy surface, secondary carbonate minz in vugs (acid fizz) - vuggy area 3x2m, pictures 100_015-021, finely dissem PY
07HCP007	510329	6461760	SPRING	peridotite	bldr	lighter coloured peridotite - plag rich, flds pyx ol sulf, f gr, 2% PY, mnr serp alteration, talus bldr, high relief, rusty bldr in talus o/c 20x60cm, subang bldr, coarsely dissem PY 2% (silver colour)
07HCP008	510752	6461950	SPRING	leucocratic altered peridotite	bldr	plag rich peridotite, f gr, talus bldr, mod relief, rusty subang bldr 1x1m, m-c dissem PY 2-3%, very rusty/weathering with limonite, v light in colour, rusty bldr in area, plag rich altered mafics aphanitic
07HCP009	495932	6468612		altered peridotite	bldr	med gr, TR PY, mod Si alteration, high relief, rusty subrounded bldr 30x20cm within peridotite bldr/o/c, Fe stain, TR finely dissem PY (different Ox stains on PY - gold, grey silver), bldr is likely float
07HCP010	495876	6468542		qtz vein in peridotite	bldr	f m gr, TR PY, mod Si alteration, mod veining qtz, talus bldr, high relief, rusty ang bldr 1x2m within talus bldr of peridotite, qtz vein in bldr 30cm across - rusty vein and country rk, vuggy weathering of vein and host rk, finely dissem TR PY, possible that sulfides have weathered out of the vugs, mod alteration of peridotite along vein, material chipped along vein and host rk for sample
07HCP011	495873	6468539		peridotite	bldr	crs gr, 2% PY, low veining, bldr, high relief, coarse pyx and amphibole, no alteration, finely dissem sulfides 2%, rusty bldr ang-subang just down slope 20m from o/c of peridotite, unaltered non rusty material > rusty bldr in area
07HCP012	510613	6461787	SPRING	chlorite chert sed	bldr	high relief, dissem PY 2%, rusty bldr
07HCP013	510327	6461824	SPRING	gabbro sill	bldr	bldr near o/c, dissem PY 2%, rusty colour, high relief
07HCP014	510302	6461829	SPRING	silicified andesitic dyke (?)	bldr	talus bldr, Bt phenocrysts settled out of melt, TR dissem PY
07HCP015	508767	6462702	KK	fucosite/jade/qtz sheared rock	bldr	surrounding LST, fault region - shear, str Si alteration, mod relief
07HCP016	508653	6462777	KK	siliceous metased (chl cherty rk)	o/c	mod relief, str Si alteration, rusty surface weathering
07HCP017	508771	6462690	KK	qtz/+ calcite vein in LST	o/c	no visible sulf, mod relief
07HCP018	504257	6462875	PR8	serpentinized peridotite	bldr	rusty subang bldr 20x30cm, TR dissem PY, high relief, very altered rusty
07HCP019	504395	6462814	PR8	metased	bldr	talus bldr, rusty metased lense, dissem 5-10% PO, high relief
07HCP020	504379	6462822	PR8	chlorite siliceous altered diorite	bldr	green colour of chl, str Si alteration, possibly altered diorite/metased (or altered mafic?), dissem 5% PO
07DAP001	501116	6468441	Alice Shea	Silicified gabbro	bldr	blueish grey totally silicified igneous rock with relic plagioclase and pyroxene with pyrite. 45% plagioclase, 55% pyroxene.
07DAP002	501076	6468420	Alice Shea	gabbro	bldr	Black gabbro with rusty patches with pyrite. 45% plagioclase and 55% pyroxene.
07DAP003	501068	6468421	Alice Shea	silicified volcanic	bldr	Very silicified light blue volcanic. Total silica replacement with disseminated pyrite.

Sample Id	Easting (nad83z9)	Northing (nad83z9)	Location	Lithology	Disposition	Description
07DAP004	510098	6462112	Spring	Serpentinized peridotite	Talus	Dark green rusty peridotite with pyrite mineralization. 30% amphibole, 30% pyroxene, 40% olivine.
07DAP005	510040	6461906	Spring	Serpentinite	Talus	Dark green serpentinite. Heavily rusted. Disseminated pyrite. 40% pyroxene, 60% olivine.
07DAP006	493878	6470440	little caribou	peridotite	boulder	blueish grey, medium grained, with disseminated pyrite. 50% plagioclase, 10% biotite, 30% pyroxene.
07DAP007	502575	6466791	Alice Shea	peridotite	bldr	50% olivine, 30% plagioclase. boulder found on flood plain of stream.
07DAP008	502466	6467231	Alice Shea	peridotite	o/c	grey/green color. 40% olivine, 20% pyroxene, 30 feldspar. Heavily Fe stained with pyrite and limonite
07DAP009	510149	6461853	Spring	peridotite	Talus	grey/ green color. 40% plagioclase, 40% pyroxene, 20% olivine. Fine to medium grained. 10 % pyrite. High relief.
07DAP010	510276	6461822	Spring	olivine gabbro/ peridotite	talus	grey/ green color. 50% plagioclase, 40% pyroxene, 10% olivine. 15 % pyrite. High relief.
07DAP011	510373	6461853	Spring	olivine gabbro/ peridotite	talus	grey/ green color. 50% plagioclase, 15% pyroxene, 35% olivine. 5% pyrite. High relief.
07DAP012	510248	6461871	Spring	brecciated quartz	talus	highly veined quartz (white, dull, hard) with dark grey vein material (none magnetic)
07DAP013	510219	6461889	Spring	Cr-mica talc schist	boulder	green cr-mica, talc
07DAP014	508784	6462362		olivine gabbro	boulder	30% olivine, 30% pyroxene, 40% plagioclase
07DAP015	508783	6462362		dark green cr-mica talc schist	boulder	Dark green fucsite in talc schist
07DAP016	508775	6462360		olivine gabbro	boulder	heavily oxidized with 10% pyrotite
07DAP017	508765	6462710		silicified argillite	boulder	very silicified. Near the cr - mica talc schist that was sampled.
07DAP018	508820	6462671		very silicified green rock	boulder	very silicified green rock that is foliated and sheared.
07DAP019	502509	6465286	PR7	graphite shale	boulder	very rusty, Fe stained graphite shale
07DAP020	502524	6465288	PR7	graphite shale	boulder	
07DAP021	502522	6465287	PR7	grey blue, cherty, carbonate with dark metallic flecks	bouldr	
07THP001	502786	6465113	PR7	serpentinized peridotite	bldr	aphanitic ultramafic, mm sized magnetite bands, trace sphalerite, sampled enitre bldr, frost heave/talus
07THP002	510098	6462025	spring	quartz	talus	trace pyrite, talus sample within mountain outcrop, outcrop bands of dark serpentinite and light serpentinite
07THP003	510055	6461996	spring	serpentinite	outcrop	trace pyrite, strong silicious alteration
07THP004	510053	6461984	spring	serpentinite	outcrop	less then 5% pyrite, strong silicious alteration, high iron staining
07THP005	492311	6469481		serpentinized mafic (peridotite)	outcrop	1% pyrite, moderate siliceous alteration, near by outcrop has cm size qtz veining
07THP006	492206	6469677		minorly serpentinized mafic	outcrop	trace pyrite, moderate siliceous alteration, quartz veinlets running through sample, heavily weathered and iron staining
07THP007	501988	6465826	PR7	minorly serpentinized mafic	outcrop	less then 1% pyrite, minor siliceous alteration, small rounded bldrs/subcrop, contain silvery pyrite, iron staining
07THP008	499299	6461855	Falcon area	limestone with qtz/calcite veins	outcrop	5% malachite, azurite, and pyrite, minor carbonate alteration, qtz veining mm to cm large, fine grained dark black/grey sedimentary rock, potentially argillite with carbonate cement?? Veins weathering out from less resistive country rock, chip sampled vein
07THP009	504459	6462868	PR8 area	altered peridotite	subcrop	high iron staining, moderate siliceous alteration and serpentinization, 5% pyrite, high relief (slightly serpentinized mafic and moderately silicified peridotite
07THP010	511242	6464582		serpentinized mafic	bldr	trace pyrite, fine grained, moderate siliceous alteration, low relief, mega bldr in till deposit, some magnetic crystals (possibly pyrotite) that have undergone weathering, sample taken in valley north of Letain Lake
07THP011	504535	6462511	PR8 area	moderately serpentinized mafic	talus	less then 5% pyrite, moderate siliceous alteration, medium grain size, high iron staining, sulphides visible with eye, sample taken from talus/subcrop on mountain slope
07THP012	504329	6462777	PR8 area	moderately serpentinized mafic	talus/bldr	10% pyrite, moderately siliceous alteration, medium grain size, high iron staining, sampled part of large bldr, high amoiunts of sulphides that are not all pyrite
07THP013	504386	6462825	PR8 area	moderately serpentinized mafic	outcrop	15% pyrite, some phlogopite, medium grain size, moderately siliceous alteration, high iron staining, cubic pyrite crystals up to 3 mm large, qtz veinlets close to sampled area that are drussy

Sample Id	Easting (nad83z9)	Northing (nad83z9)	Location	Lithology	Disposition	Description
07THP014	510283	6461589	PR8 area	altered peridotite	outcrop	trace pyrite, moderate siliceous alteration, high relief, fine grained, high iron staining, pyrite is a silver colour and finely disseminated
07THP015	510341	6461613	PR8 area	altered peridotite	outcrop	trace pyrite, moderate siliceous alteration, high relief, fine grained, high iron staining, pyrite is a silver colour and finely disseminated
07THP016	510395	6461630	PR8 area	altered peridotite	talus	5% pyrite, moderate siliceous alteration, moderate relief, fine grained, high iron staining, pyrite is a silver colour, moderately disseminated, sampled bldr comes from outcrop that is also heavily iron stained, sampled small portion of bldr around 35 x 30 cm
07THP017	510456	6461610	PR8 area	altered peridotite	talus	less than 5% pyrite, minor siliceous alteration, moderate relief, fine grained, high iron staining, pyrite is a silver colour, finely disseminated, bldr around 75 x 50 cm
07THP018	510698	6462648	PR8 area	altered peridotite	talus	5% pyrite, moderate siliceous alteration, moderate relief, fine grained, high iron staining, pyrite finely disseminated, bldr 10 x 20 cm
07THP019	510840	6461701	PR8 area	highly altered peridotite	talus	trace pyrite, moderate siliceous alteration, moderate/low relief, fine grained, high iron staining, medium grained, pyrite finely disseminated, bldr around 20 x 20 cm and sampled around half of it
07THP020	498326	6467225	LUX area	qtz vein through unknown outcrop	outcrop	possible malachite in qtz vein, medium grained, moderate siliceous or potassic alteration, moderate relief, possible sericite alteration of k-spar crystals, irregular qtz veins through the outcrop
07THP021	495875	6468457	mtn west of 2 mile	altered peridotite	talus	trace pyrite, moderate siliceous alteration, medium grain size, high relief, high iron staining, pyrite finely disseminated, sample whole bldr
07THP022	495885	6468472	mtn west of 2 mile	altered peridotite with qtz vein on surface	talus	finely disseminated unknown black mineral, moderate iron staining, strong weathering around black mineral, drussy qtz vein on surface, medium grain size, high relief, sampled whole bldr
07THP023	495993	6467967	mtn west of 2 mile	serpentinite	talus	10% pyrite, dark green, smooth sample rock, pyrite highly disseminated along fractures, sampled 1/4 bldr, medium grained, high relief
07KRP201	510385	6461630		Gabbro/Pyridotite		pyrite, chalcopyrite, tetrahedrite (?) present, moderate veining, feldspars, amphiboles, and pyroxenes present
07KRP202	510373	6461682		quartz/carbonate vein in fuchsite	bldr	medium grain size, high veining, moderate relief, cr-mica, bright green and orange Fe-carb or ankerite
07KRP203	510285	6461691		serpentinite		fine grained, pyrite and chalcopyrite present, low veining, fine grained green serpentinite, moderate-weakly sheared, py +/- cpy +/- malachite staining +/- Cr. Mica
07KRP204	509035	6462438		graphitic shale/limey argillite	outcrop	fine grained, pyrite, low relief, Fe-oxide laminae parallel to bedding within graphite shale, possible Za (?)
07KRP205	509090	6462396		graphitic shale	talus	fine grained, Fe-oxide, laminated, graphitic shale along contact with limestone
07KRP206	509077	6462417		vein qtz/epidote/calc	talus	medium grained, chalcopyrite, carbonate and siliceous alteration, low veining, qtz epidote/calcite skarn(?) vein, talus below limestone/argillite, contact dissem cpy veining and malachite
07KRP207	504027	6462552		skarn (?) calc-silicate	outcrop	coarse grained, orange ankerite altered, calc-silicate skarn
07KRP208	504284	6462868		graphite argillite	talus	fine grained, sulph present, pyrite present, pyrite +/- silicified banded argillite
07KRP209	502645	6465096		graphitic argillite Fe-oxidized	talus	sulph present, pyrite present, oxidized graphitic argillite

**APPENDIX 3**  
**2007 TURNAGAIN GRAB SAMPLE ASSAYS**

Sample Id	Au	Easting (nad83z9)	Northing (nad83z9)	Location	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	K	La
	PPB				PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	%	PPM
07HCP001	<5	510045	6461984	SPRING	<0.1	2.27	<1	<0.1	9	<1	<0.1	1.06	<0.1	1	26.1	107	43.8	4.35	0.4	0.06	0.5
07HCP002	<5	502467	6467241	AliceShea	<0.1	0.21	2	<0.1	87	<1	0.1	0.45	<0.1	22	6.1	214	40.3	1.08	0.7	0.07	8.7
07HCP003	<5	504365	6463066	PR8	<0.1	3.46	6	<0.1	<1	<1	<0.1	1.35	<0.1	<1	25.8	218	20.9	5.63	0.3	<0.01	0.1
07HCP004	<5	504345	6463063	PR8	<0.1	2.50	<1	<0.1	5	<1	<0.1	1.09	<0.1	<1	20.6	125	49.3	4.08	0.2	<0.01	0.3
07HCP005	<5	504246	6462982	PR8	<0.1	8.02	<1	<0.1	4	<1	<0.1	5.99	<0.1	2	18.5	152	29.5	6.48	0.8	<0.01	0.8
07HCP006	<5	510297	6461840	SPRING	<0.1	10.80	2	<0.1	8	<1	<0.1	15.76	0.1	1	43.3	167	430.8	9.14	0.3	<0.01	0.6
07HCP007	15	510329	6461760	SPRING	<0.1	8.34	1	<0.1	2	<1	<0.1	7.43	<0.1	<1	61.7	53	23.9	13.08	0.3	0.01	0.3
07HCP008	<5	510752	6461950	SPRING	<0.1	9.90	<1	<0.1	1	<1	<0.1	7.28	<0.1	<1	37.8	93	209.5	9.34	<0.1	0.03	0.2
07HCP009	35	495932	6468612		<0.1	8.53	1	<0.1	15	<1	<0.1	6.75	<0.1	<1	37.7	105	180.6	9.81	0.1	0.02	0.3
07HCP010	5	495876	6468542		<0.1	10.84	2	<0.1	19	<1	<0.1	10.88	<0.1	2	38.2	139	261.5	11.63	0.6	0.01	0.7
07HCP010Re					<0.1	11.01	3	<0.1	18	<1	<0.1	10.77	<0.1	2	39.5	145	277.3	11.24	0.5	0.01	0.6
07HCP011	5	495873	6468539		<0.1	9.07	2	<0.1	11	<1	<0.1	10.57	<0.1	<1	42.6	190	318.6	13.58	0.2	<0.01	0.5
07HCP012	5	510613	6461787	SPRING	<0.1	9.21	<1	<0.1	3	<1	<0.1	2.93	<0.1	4	21.7	48	80.0	6.37	1.0	0.03	1.1
07HCP013	<5	510327	6461824	SPRING	<0.1	9.48	<1	<0.1	5	<1	<0.1	4.93	<0.1	4	29.6	81	14.6	5.88	0.6	0.06	1.2
07HCP014	<5	510302	6461829	SPRING	<0.1	11.16	<1	<0.1	9	<1	<0.1	5.52	<0.1	<1	19.3	239	27.4	5.48	<0.1	0.19	0.2
07HCP015	5	508767	6462702	KK	0.2	0.38	2	<0.1	24	<1	<0.1	9.25	0.3	<1	46.5	388	4.7	2.99	<0.1	0.04	0.1
07HCP016	<5	508653	6462777	KK	0.4	5.49	2	<0.1	59	<1	<0.1	16.59	0.6	33	26.9	132	133.9	7.48	2.9	0.01	18.5
07HCP017	<5	508771	6462690	KK	<0.1	2.25	<1	<0.1	58	<1	<0.1	33.70	0.6	3	0.9	11	2.0	0.18	<0.1	<0.01	11.2
07HCP018	10	504257	6462875	PR8	<0.1	10.09	1	<0.1	7	<1	<0.1	7.72	<0.1	<1	19.5	145	28.2	10.76	<0.1	0.02	0.1
07HCP019	<5	504395	6462814	PR8	<0.1	9.34	<1	<0.1	4	<1	<0.1	7.96	<0.1	<1	63.4	251	123.0	12.10	0.1	<0.01	0.2
07HCP020	5	504379	6462822	PR8	<0.1	8.98	<1	<0.1	8	<1	<0.1	6.19	<0.1	2	11.0	221	58.9	3.39	0.1	0.02	0.8
07DAP001	<5	501116	6468441	Alice Shea	<0.1	6.44	<1	<0.1	17	<1	<0.1	0.68	<0.1	10	2.0	89	6.9	2.26	0.9	0.03	3.4
07DAP002	5	501076	6468420	Alice Shea	<0.1	9.55	<1	<0.1	18	<1	<0.1	6.89	<0.1	1	48.2	112	258.8	8.53	0.2	0.02	0.5
07DAP003	5	501068	6468421	Alice Shea	<0.1	6.01	<1	<0.1	20	<1	0.1	0.54	<0.1	9	2.7	67	5.2	2.23	0.6	0.13	3.4
07DAP004	<5	510098	6462112	Spring	0.1	1.33	<1	<0.1	5	<1	<0.1	8.88	<0.1	<1	115.2	864	410.0	8.03	<0.1	0.02	0.2
07DAP005	<5	510040	6461906	Spring	<0.1	9.63	<1	<0.1	7	<1	<0.1	10.14	<0.1	<1	34.9	148	72.4	5.09	0.2	0.01	0.2
07DAP006	<5	493878	6470440	little caribou	<0.1	10.08	1	<0.1	2	<1	<0.1	8.90	<0.1	3	50.6	100	260.6	8.99	0.5	0.02	0.8
07DAP007	<5	502575	6466791	Alice Shea	0.1	5.88	12	<0.1	363	<1	0.2	1.25	0.4	20	13.2	541	73.9	3.61	1.9	0.25	10.1
07DAP008	<5	502466	6467231	Alice Shea	0.1	5.16	2	<0.1	1199	2	0.1	1.45	<0.1	39	3.1	308	37.8	2.40	1.7	1.74	19.5
07DAP009	<5	510149	6461853	Spring	<0.1	9.82	<1	<0.1	11	<1	<0.1	7.70	<0.1	<1	63.0	126	120.8	11.54	0.2	0.03	0.2
07DAP010	5	510276	6461822	Spring	<0.1	8.13	2	<0.1	5	<1	<0.1	5.86	<0.1	<1	69.1	59	192.7	11.80	0.1	0.02	0.2
07DAP011	<5	510373	6461853	Spring	<0.1	9.51	2	<0.1	3	<1	<0.1	5.79	<0.1	2	41.9	40	72.1	11.89	0.2	0.03	0.7
07DAP012	5	510248	6461871	Spring	<0.1	13.44	<1	<0.1	18	<1	<0.1	9.88	<0.1	<1	14.1	107	3.5	2.19	<0.1	0.57	0.3
07DAP013	5	510219	6461889	Spring	0.1	11.31	1	<0.1	1	<1	<0.1	17.97	0.1	3	47.5	205	159.1	5.47	1.0	<0.01	1.2



Sample Id	Au	Easting (nad83z9)	Northing (nad83z9)	Location	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	K	La
	PPB				PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	%	PPM
07DAP014	5	508784	6462362		<0.1	8.42	4	<0.1	45	<1	<0.1	8.03	<0.1	2	36.2	241	78.9	6.00	0.4	0.07	0.6
07DAP015	10	508783	6462362		0.2	2.91	2	<0.1	5	<1	<0.1	18.57	0.7	5	60.5	320	144.7	7.75	1.5	<0.01	2.5
07DAP016	10	508775	6462360		<0.1	8.14	1	<0.1	42	<1	<0.1	5.09	<0.1	3	34.2	163	130.0	7.73	0.7	0.08	0.8
07DAP017	<5	508765	6462710		<0.1	0.07	<1	<0.1	31	<1	<0.1	38.38	0.2	2	0.6	6	2.1	0.11	<0.1	<0.01	7.8
07DAP018	<5	508820	6462671		0.8	5.90	2	<0.1	155	1	<0.1	9.09	0.4	74	31.4	101	289.2	6.41	1.9	0.10	35.9
07DAP019	5	502509	6465286	PR7	0.1	4.98	1	<0.1	89	<1	<0.1	3.58	1.5	51	13.6	264	96.9	4.34	2.3	0.10	27.7
07DAP020	10	502524	6465288	PR7	<0.1	7.04	1	<0.1	326	<1	<0.1	1.93	<0.1	13	2.9	76	16.8	2.80	1.7	0.10	6.5
07DAP021	10	502522	6465287	PR7	<0.1	4.23	5	<0.1	84	<1	0.2	11.25	0.1	39	22.1	72	5.5	2.07	0.8	0.08	8.9
07THP001	10	502786	6465113	PR7	<0.1	0.11	<1	<0.1	5	<1	<0.1	0.03	<0.1	<1	103.5	1313	4.3	4.10	<0.1	<0.01	0.1
07THP002	<5	510098	6462025	spring	<0.1	0.23	2	<0.1	28	<1	<0.1	0.88	0.1	<1	3.7	429	11.1	0.67	<0.1	0.06	0.3
07THP003	<5	510055	6461996	spring	<0.1	9.04	<1	<0.1	161	<1	<0.1	9.58	0.1	1	40.6	138	36.9	10.56	0.3	0.54	0.4
07THP004	5	510053	6461984	spring	<0.1	9.89	<1	<0.1	31	<1	<0.1	4.52	<0.1	2	25.0	78	14.4	5.98	0.5	0.06	0.7
07THP005	<5	492311	6469481		<0.1	9.74	2	<0.1	4	<1	<0.1	7.16	<0.1	3	57.4	87	285.3	10.89	0.5	0.04	1.2
07THP006	<5	492206	6469677		<0.1	6.47	1	<0.1	21	<1	<0.1	1.62	<0.1	2	3.8	245	28.8	1.83	0.1	0.11	0.9
07THP007	<5	501988	6465826	PR7	<0.1	8.85	<1	<0.1	22	<1	<0.1	9.89	<0.1	<1	66.0	100	304.3	11.31	<0.1	0.02	<0.1
07THP008	<5	499299	6461855	Falcon area	67.3	0.57	184	<0.1	15	<1	0.6	9.39	19.2	1	2.0	184	3145.2	0.50	<0.1	0.03	0.5
07THP009	5	504459	6462868	PR8 area	0.2	10.25	1	<0.1	8	<1	<0.1	13.06	<0.1	<1	35.7	146	101.3	10.38	0.2	<0.01	0.2
07THP010	<5	511242	6464582		<0.1	8.11	<1	<0.1	196	<1	<0.1	7.43	0.2	9	37.1	155	35.6	7.80	0.4	0.39	2.5
07THP011	<5	504535	6462511	PR8 area	<0.1	11.12	<1	<0.1	7	<1	<0.1	9.97	<0.1	2	32.1	122	82.7	8.09	<0.1	<0.01	0.8
07THP011Re					<0.1	11.32	1	<0.1	7	<1	<0.1	10.12	<0.1	2	32.5	117	82.7	8.05	0.1	<0.01	0.6
07THP012	5	504329	6462777	PR8 area	<0.1	8.77	3	<0.1	7	<1	<0.1	5.44	<0.1	2	21.8	170	16.1	7.58	0.4	0.02	0.6
07THP013	<5	504386	6462825	PR8 area	<0.1	8.31	3	<0.1	2	<1	<0.1	8.91	0.2	<1	79.8	192	194.5	12.30	0.2	<0.01	0.2
07THP014	<5	510283	6461589	PR8 area	<0.1	9.31	<1	<0.1	1	<1	<0.1	3.59	<0.1	4	28.7	67	112.7	8.04	0.8	0.02	1.3
07THP015	<5	510341	6461613	PR8 area	<0.1	7.67	<1	<0.1	3	<1	<0.1	8.76	<0.1	<1	55.1	114	112.3	9.40	0.3	0.02	0.2
07THP016	<5	510395	6461630	PR8 area	<0.1	8.86	<1	<0.1	5	<1	<0.1	8.45	0.1	<1	77.2	78	144.5	12.76	0.2	0.02	0.3
07THP017	<5	510456	6461610	PR8 area	<0.1	8.41	2	<0.1	3	<1	<0.1	10.61	0.1	<1	63.3	99	53.5	13.67	0.3	0.01	0.3
07THP018	5	510698	6462648	PR8 area	<0.1	10.01	2	<0.1	3	<1	<0.1	8.96	<0.1	<1	38.6	105	145.3	11.63	0.1	0.01	0.2
07THP019	<5	510840	6461701	PR8 area	0.3	1.20	<1	<0.1	2	<1	<0.1	8.54	0.1	<1	102.8	615	912.5	6.40	<0.1	<0.01	<0.1
07THP020	5	498326	6467225	LUX area	<0.1	0.10	1	<0.1	10	<1	<0.1	0.05	<0.1	<1	15.9	593	8.3	1.05	<0.1	0.02	<0.1
07THP021	<5	495875	6468457	mtn west 2 mil	<0.1	7.06	1	<0.1	53	<1	<0.1	1.64	<0.1	2	7.7	200	9.3	2.50	<0.1	0.81	1.3
07THP022	5	495885	6468472	mtn west 2 mil	<0.1	8.40	<1	<0.1	58	<1	<0.1	0.79	<0.1	5	5.6	138	17.1	1.92	<0.1	0.58	1.9
07THP023	15	495993	6467967	mtn west 2 mil	0.1	1.66	140	<0.1	10	<1	<0.1	0.21	0.2	<1	108.7	1287	25.7	5.95	<0.1	<0.01	<0.1
07KRP201	<5	510385	6461630		0.4	9.39	1	<0.1	2	<1	<0.1	10.21	0.2	<1	63.8	130	2313.7	12.77	0.2	<0.01	0.2
07KRP202	5	510373	6461682		0.2	0.52	247	<0.1	61	<1	<0.1	0.64	0.1	<1	93.6	1292	25.5	4.98	<0.1	0.19	0.1

Sample Id	Au	Easting (nad83z9)	Northing (nad83z9)	Location	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	K	La
	PPB				PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	%	PPM
07KRP203	<5	510285	6461691		0.5	8.95	1	<0.1	1	<1	<0.1	0.81	0.3	2	84.1	94	3131.6	12.82	0.6	<0.01	0.4
07KRP204	5	509035	6462438		0.1	6.28	3	<0.1	34	2	<0.1	5.98	0.3	31	10.1	113	110.5	2.65	1.9	0.04	20.1
07KRP205	<5	509090	6462396		<0.1	0.41	6	<0.1	81	<1	<0.1	10.48	0.2	15	5.5	265	90.0	1.87	0.7	0.11	10.7
07KRP206	<5	509077	6462417		2.4	0.23	2	<0.1	19	<1	1.3	6.91	1.8	10	24.4	74	2674.0	1.99	0.9	<0.01	6.0
07KRP207	5	504027	6462552		<0.1	0.19	175	<0.1	19	<1	<0.1	0.55	<0.1	<1	86.9	1403	19.2	4.28	<0.1	<0.01	0.1
07KRP208	5	504284	6462868		<0.1	0.61	1	<0.1	426	<1	0.3	1.18	0.2	22	3.9	287	17.2	2.63	1.4	0.26	11.1
07KRP209	<5	502645	6465096		<0.1	0.57	<1	<0.1	341	<1	0.1	0.79	0.1	13	2.3	107	24.6	2.25	1.0	0.09	6.5

Sample Id	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	S	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Zn	Zr
	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM
07HCP001	21.2	2.39	660	0.6	0.105	0.1	15.1	0.012	<0.1	1.4	0.6	<0.1	10	0.2	10	<0.1	<0.1	0.167	<0.1	100	0.2	4.7	25	6.8
07HCP002	0.8	0.43	304	2.6	0.116	5.2	11.0	0.028	5.4	4.1	0.2	<0.1	4	1.0	4	<0.1	4.0	0.185	0.8	64	0.3	9.6	20	24.7
07HCP003	1.1	2.54	2682	2.2	0.016	<0.1	7.0	0.014	0.6	<0.1	0.7	<0.1	8	0.2	35	<0.1	<0.1	0.312	<0.1	146	<0.1	3.4	68	5.9
07HCP004	0.4	1.89	829	1.2	0.040	<0.1	6.1	0.016	<0.1	<0.1	0.4	<0.1	5	0.2	28	<0.1	<0.1	0.231	<0.1	112	<0.1	2.2	67	2.9
07HCP005	0.8	1.92	1666	1.1	1.381	0.3	7.0	0.018	0.6	0.5	0.4	0.1	32	0.4	234	<0.1	<0.1	0.343	<0.1	306	<0.1	12.7	51	14.7
07HCP006	19.8	2.94	1167	0.7	0.332	0.2	25.9	0.006	0.5	<0.1	0.4	<0.1	43	0.3	418	<0.1	<0.1	0.789	<0.1	444	<0.1	7.1	40	6.4
07HCP007	2.6	5.16	1659	0.1	1.135	0.2	22.6	0.002	0.1	<0.1	0.8	<0.1	54	0.2	119	<0.1	<0.1	1.201	<0.1	914	<0.1	9.9	45	5.2
07HCP008	2.9	5.34	1463	0.2	1.833	<0.1	18.3	0.003	<0.1	0.2	0.6	<0.1	43	0.1	427	<0.1	<0.1	0.750	<0.1	693	<0.1	3.1	32	1.1
07HCP009	16.2	6.80	1081	0.5	1.377	0.1	30.7	0.004	<0.1	<0.1	0.2	0.3	54	0.2	93	<0.1	<0.1	0.693	<0.1	722	<0.1	3.2	58	3.1
07HCP010	18.1	3.16	1175	0.4	1.187	0.4	35.7	0.017	1.8	0.1	0.7	0.4	52	0.8	439	<0.1	<0.1	0.947	<0.1	1072	0.2	10.1	51	11.8
07HCP010Re	16.1	3.17	1176	0.5	1.073	0.5	35.3	0.016	1.7	<0.1	0.7	0.4	48	0.8	438	<0.1	<0.1	0.976	<0.1	1042	0.2	9.4	56	11.7
07HCP011	9.8	4.29	1424	0.5	0.325	0.3	33.1	0.004	1.2	<0.1	1.1	0.6	54	0.4	262	<0.1	<0.1	1.091	<0.1	1693	0.2	4.4	69	5.1
07HCP012	1.1	2.59	965	0.2	5.073	0.4	7.5	0.026	<0.1	0.2	0.4	<0.1	33	0.9	198	<0.1	<0.1	0.581	<0.1	319	<0.1	18.8	41	22.9
07HCP013	3.9	3.23	1304	0.2	4.086	0.4	18.5	0.033	0.1	0.2	0.5	<0.1	29	0.3	41	<0.1	<0.1	0.443	<0.1	260	<0.1	18.6	26	9.9
07HCP014	12.2	3.68	921	0.7	3.401	0.1	7.1	0.001	0.1	<0.1	0.9	<0.1	13	0.2	68	<0.1	<0.1	0.358	<0.1	186	<0.1	0.2	37	0.2
07HCP015	5.1	12.48	802	0.6	0.394	0.1	683.6	<0.001	0.5	<0.1	<0.1	0.3	5	0.1	21	<0.1	<0.1	0.011	<0.1	21	<0.1	0.3	30	0.2
07HCP016	3.8	2.67	1599	0.4	1.878	10.9	88.9	0.176	0.3	0.2	<0.1	0.1	25	1.4	25	0.6	1.4	1.090	1.4	258	<0.1	49.7	116	79.3
07HCP017	0.6	0.48	107	0.5	1.719	0.4	13.1	0.051	2.4	<0.1	<0.1	<0.1	<1	0.1	498	<0.1	0.3	0.012	2.3	11	<0.1	14.0	41	4.4
07HCP018	1.5	3.00	2056	0.5	1.661	0.1	6.3	0.004	1.0	<0.1	0.8	0.1	45	0.2	240	<0.1	<0.1	0.605	<0.1	769	<0.1	2.7	57	1.9
07HCP019	9.6	4.73	1451	0.7	0.157	0.2	12.5	0.004	0.5	<0.1	2.1	<0.1	51	0.2	91	<0.1	<0.1	0.723	<0.1	956	<0.1	3.9	84	2.3
07HCP020	6.7	1.65	638	0.9	2.528	0.3	16.8	0.033	0.3	<0.1	0.4	<0.1	15	0.4	41	<0.1	<0.1	0.187	<0.1	50	<0.1	7.9	37	1.7
07DAP001	0.2	0.43	416	0.6	5.384	1.3	10.1	0.017	0.6	0.2	0.9	<0.1	10	0.9	17	<0.1	0.2	0.119	<0.1	6	<0.1	23.8	42	15.0
07DAP002	20.9	4.57	1121	0.5	3.008	0.1	26.4	0.016	0.4	0.2	1.2	0.1	35	0.2	83	<0.1	<0.1	0.519	<0.1	809	<0.1	5.2	83	4.8
07DAP003	4.4	0.50	390	0.6	4.050	1.0	5.2	0.014	0.5	1.5	1.1	0.1	9	0.8	27	<0.1	0.2	0.111	<0.1	16	<0.1	26.2	42	13.5
07DAP004	9.3	11.40	608	0.3	0.103	<0.1	820.9	<0.001	0.7	0.1	2.5	<0.1	30	<0.1	14	<0.1	<0.1	0.042	<0.1	99	<0.1	1.6	37	1.2
07DAP005	61.7	6.05	1084	0.4	1.953	0.1	37.5	0.002	0.2	<0.1	0.3	0.2	45	0.2	34	<0.1	<0.1	0.097	<0.1	156	<0.1	5.5	35	3.1
07DAP006	21.5	5.47	1127	0.4	1.139	0.5	47.1	0.005	0.8	<0.1	1.5	0.1	54	0.4	697	<0.1	<0.1	0.728	<0.1	670	<0.1	16.5	53	10.2
07DAP007	5.3	1.13	659	5.9	4.355	4.6	47.5	0.045	8.0	6.1	1.1	0.9	13	1.3	49	0.2	2.9	0.286	1.7	107	0.3	25.7	83	60.1
07DAP008	23.4	1.60	1114	3.5	2.130	11.1	12.7	0.036	7.8	52.4	<0.1	0.2	11	2.0	29	0.7	7.4	0.297	1.3	89	0.2	17.1	68	57.9
07DAP009	49.0	4.36	848	0.3	1.629	0.2	15.4	0.002	0.3	0.2	2.5	<0.1	46	0.2	98	<0.1	<0.1	0.763	<0.1	1308	<0.1	4.1	39	3.7
07DAP010	38.8	5.08	1392	0.1	2.535	<0.1	52.9	0.001	<0.1	0.2	1.4	<0.1	49	0.2	32	<0.1	<0.1	0.571	<0.1	1229	<0.1	4.8	71	2.8
07DAP011	7.5	3.68	2086	0.1	2.674	0.3	9.7	0.078	<0.1	<0.1	0.6	<0.1	48	0.2	183	<0.1	<0.1	1.077	<0.1	369	<0.1	12.1	138	5.7
07DAP012	4.1	1.23	427	0.3	2.875	0.2	11.0	0.003	0.3	2.2	<0.1	<0.1	7	0.1	106	<0.1	<0.1	0.055	<0.1	42	<0.1	1.0	13	0.5
07DAP013	72.0	5.45	1414	0.1	0.013	0.5	132.4	0.012	0.1	<0.1	<0.1	0.4	38	0.5	6	<0.1	<0.1	0.435	<0.1	259	0.1	15.7	59	22.9

Sample Id	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	S	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Zn	Zr
	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM
07DAP014	28.9	6.13	1241	0.3	2.720	0.2	93.5	0.009	0.2	0.9	<0.1	0.2	42	0.2	44	<0.1	<0.1	0.285	<0.1	214	<0.1	9.4	46	8.1
07DAP015	10.3	7.92	1597	<0.1	0.028	4.7	274.0	0.016	<0.1	<0.1	<0.1	0.1	33	0.7	5	0.2	0.2	0.533	0.2	193	0.3	19.5	77	47.1
07DAP016	20.9	4.53	1086	0.4	3.717	0.3	54.0	0.021	0.2	1.5	1.8	<0.1	39	0.2	38	<0.1	<0.1	0.542	<0.1	360	<0.1	14.7	59	13.2
07DAP017	0.7	0.37	154	0.7	0.057	0.3	7.8	0.017	1.2	<0.1	<0.1	<0.1	<1	<0.1	1045	<0.1	0.1	0.004	2.5	5	<0.1	11.5	13	2.2
07DAP018	6.4	2.39	474	0.3	3.981	48.2	99.6	0.060	1.7	1.3	<0.1	0.2	15	2.3	198	2.7	4.7	1.045	2.2	119	<0.1	22.8	119	52.8
07DAP019	2.0	2.99	678	12.3	3.776	26.1	44.1	0.238	3.6	1.0	<0.1	0.3	14	2.2	68	1.2	2.9	0.696	4.1	274	0.4	37.3	144	92.3
07DAP020	1.6	1.64	493	2.3	5.592	3.1	7.5	0.081	3.9	2.6	<0.1	0.2	20	1.0	37	0.1	1.1	0.358	0.9	150	0.2	23.1	83	51.0
07DAP021	51.5	0.67	2503	0.4	3.208	3.1	102.8	0.019	1.1	1.0	<0.1	2.5	11	0.7	102	0.2	2.5	0.125	0.5	38	<0.1	12.2	58	26.1
07THP001	0.4	26.43	663	0.2	0.004	<0.1	2968.6	0.001	0.5	1.2	0.2	1.9	2	0.2	1	<0.1	<0.1	0.002	<0.1	11	0.3	<0.1	25	0.4
07THP002	0.9	0.27	223	3.8	0.018	0.5	58.0	0.002	0.5	2.5	0.1	0.1	<1	0.4	55	<0.1	<0.1	0.005	<0.1	<1	<0.1	0.4	15	4.0
07THP003	46.3	3.92	1566	0.9	1.591	0.3	11.1	0.004	0.4	23.6	1.6	0.1	45	0.2	670	<0.1	<0.1	1.110	<0.1	578	0.2	6.6	73	6.1
07THP004	31.3	3.57	1183	0.6	4.732	0.2	16.7	0.011	<0.1	1.1	0.3	<0.1	32	0.2	331	<0.1	<0.1	0.213	<0.1	230	<0.1	7.0	43	13.6
07THP005	2.4	3.60	1227	0.9	2.215	0.3	6.0	0.008	1.1	0.7	0.4	<0.1	36	0.4	564	<0.1	<0.1	0.428	<0.1	850	0.2	6.2	75	9.2
07THP006	0.9	0.35	438	2.4	3.703	0.4	11.1	0.008	0.1	1.3	<0.1	0.2	2	0.3	79	<0.1	0.1	0.114	<0.1	16	0.2	1.6	24	4.4
07THP007	90.5	5.58	1307	1.0	1.038	0.1	37.8	0.001	<0.1	2.5	1.0	0.3	50	0.9	29	<0.1	<0.1	0.500	<0.1	1053	<0.1	2.1	52	1.9
07THP008	1.9	4.31	83	2.0	0.416	<0.1	15.3	0.013	65.8	1.7	0.2	>200.0	<1	0.2	186	<0.1	0.1	0.012	1.2	13	<0.1	0.6	390	3.6
07THP009	1.3	3.46	1335	1.4	0.078	0.2	48.2	0.005	1.7	1.3	0.6	1.1	41	0.3	295	<0.1	<0.1	0.554	<0.1	1043	<0.1	4.1	42	3.9
07THP010	24.6	4.00	1528	0.5	3.250	1.7	53.2	0.050	1.6	9.8	<0.1	0.7	32	1.1	334	0.1	0.1	0.814	0.1	333	0.3	24.9	87	3.9
07THP011	3.6	2.91	1223	1.0	1.795	0.2	8.9	0.334	<0.1	1.5	0.4	0.4	24	0.3	157	<0.1	<0.1	0.709	<0.1	450	<0.1	8.1	63	2.7
07THP011Re	4.0	2.92	1234	1.1	1.872	0.2	9.8	0.333	0.1	1.3	0.3	0.4	25	0.1	158	<0.1	<0.1	0.702	<0.1	449	<0.1	9.1	62	2.5
07THP012	1.4	2.48	2430	1.9	2.119	0.4	7.6	0.014	1.4	0.6	1.2	0.3	34	0.3	130	<0.1	<0.1	0.425	<0.1	380	<0.1	9.8	62	6.7
07THP013	1.3	5.92	1862	1.0	0.295	0.2	41.2	0.001	0.1	1.2	2.2	0.1	55	0.2	125	<0.1	<0.1	0.650	<0.1	733	<0.1	4.4	95	4.5
07THP014	2.8	2.70	1410	0.6	4.910	0.5	10.7	0.028	<0.1	0.5	0.5	<0.1	36	0.2	64	<0.1	<0.1	0.651	<0.1	373	<0.1	17.3	23	19.1
07THP015	8.1	7.03	1586	0.9	1.024	0.2	25.4	0.002	<0.1	0.3	0.6	0.3	69	0.3	38	<0.1	<0.1	0.411	<0.1	641	<0.1	6.1	46	4.6
07THP016	21.6	4.87	1531	0.7	1.401	0.2	25.1	<0.001	0.3	0.8	0.9	0.2	54	0.4	142	<0.1	<0.1	0.711	<0.1	1284	<0.1	6.0	59	5.0
07THP017	1.5	4.28	1629	0.8	0.426	0.3	9.3	0.001	0.4	1.1	0.7	0.3	50	0.2	281	<0.1	<0.1	1.043	<0.1	1048	<0.1	6.5	80	4.8
07THP018	1.6	4.23	1411	0.9	1.146	0.2	11.0	0.001	<0.1	0.7	0.1	0.1	47	0.3	276	<0.1	<0.1	0.656	<0.1	1016	<0.1	4.0	43	4.3
07THP019	0.1	13.79	612	0.1	0.034	<0.1	664.0	<0.001	<0.1	0.4	1.5	<0.1	14	0.2	32	<0.1	<0.1	0.023	<0.1	50	<0.1	0.8	37	0.8
07THP020	1.3	3.44	188	2.0	0.010	0.2	299.6	<0.001	<0.1	0.7	<0.1	0.2	<1	0.2	<1	<0.1	<0.1	0.002	<0.1	2	<0.1	<0.1	10	1.7
07THP021	3.7	1.03	269	1.6	2.850	0.2	6.7	0.015	<0.1	7.6	0.2	0.1	4	0.2	80	<0.1	<0.1	0.118	<0.1	24	<0.1	1.0	3	2.0
07THP022	4.6	0.72	328	1.2	5.363	0.4	11.9	0.016	<0.1	5.9	<0.1	<0.1	5	0.3	39	<0.1	<0.1	0.125	<0.1	52	0.1	3.2	24	3.3
07THP023	11.2	22.71	885	0.2	0.006	<0.1	2157.4	<0.001	0.4	1.1	<0.1	7.1	12	0.2	4	<0.1	<0.1	0.014	<0.1	52	<0.1	1.1	46	0.1
07KRP201	6.7	4.10	1242	0.9	0.763	0.1	25.8	0.001	0.3	0.3	1.7	<0.1	48	0.5	360	<0.1	<0.1	0.604	<0.1	1104	<0.1	6.1	54	3.9
07KRP202	9.8	17.39	572	1.1	0.015	0.2	1632.1	<0.001	1.0	10.1	0.4	31.9	6	0.2	31	<0.1	<0.1	0.009	<0.1	25	0.3	0.5	28	1.1

Sample Id	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	S	Sb	Sc	Sn	Sr	Ta	Th	Ti	U	V	W	Y	Zn	Zr
	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM
07KRP203	48.8	15.93	3509	0.1	0.004	0.4	64.6	0.032	<0.1	0.2	0.2	0.6	64	0.2	2	<0.1	<0.1	1.072	<0.1	501	<0.1	27.3	106	10.0
07KRP204	1.9	1.54	269	4.6	5.216	11.1	38.9	0.089	4.2	0.4	<0.1	0.1	10	1.2	143	0.5	1.9	0.401	2.0	136	0.2	20.2	79	77.8
07KRP205	2.0	0.50	240	2.1	0.167	3.3	28.8	0.024	3.0	1.3	<0.1	0.2	4	0.7	281	<0.1	1.0	0.195	0.9	31	0.1	12.6	61	23.9
07KRP206	1.4	1.44	385	0.7	0.121	3.4	30.8	0.045	0.7	<0.1	0.1	<0.1	6	0.5	61	<0.1	1.2	0.166	1.1	58	<0.1	6.1	39	42.0
07KRP207	3.7	11.04	581	0.1	0.007	<0.1	1739.9	<0.001	<0.1	<0.1	0.2	<0.1	5	<0.1	20	<0.1	<0.1	0.003	<0.1	10	<0.1	0.2	9	0.1
07KRP208	1.6	1.13	443	9.2	0.123	4.6	17.7	0.054	10.9	9.1	<0.1	0.2	12	1.3	16	<0.1	4.3	0.314	1.7	121	<0.1	14.2	46	48.4
07KRP209	<0.1	0.97	517	1.5	0.235	2.4	7.7	0.049	5.2	4.3	<0.1	<0.1	7	0.8	10	<0.1	1.6	0.348	0.8	83	<0.1	18.2	23	32.4

**APPENDIX 4**  
**2007 TURNAGAIN HMC SAMPLE DESCRIPTIONS**

Sample Number	Sample Weight (kg)	Easting (nad83z9)	Northing (nad83z9)	Sand (%)	Silt (%)	Clay (%)	Colour	Vegetative Matter	Comments: (coloured cells represent samples containing visible gold grains)
07HCS001	0.4	492173	6469753	0	0	100	orange med. Brown	high	high relief, mid-slope, venr till, spring runoff from mtn
07HCS002	0.5	492619	6470077	0	5	95	dark brown	moderate	moderate vegetation, med to high relief, mid-slope, venr till, small spring stream, peat cover 10cm from surface/mossy
07HCS003	0.5	492965	6470287	0	0	100	greyish med. Brown	minimal	moderate vegetation, med relief, mid-slope, till venr, med spring stream, active flow, no bldrs
07HCS004	0.4	493280	6470623	0	5	95	dark brown	moderate	mossy area, moderate vegetation, med relief, mid-slope, till venr, stagnant pool of water with coarse gravel and sand, likely higher flow during snowmelt
07HCS005	0.7	493764	6470034	0	5	95	greyish dark brown	minimal	sparse vegetation, med relief, mid-slope, till blanket, moderate sized stream with bldrs and waterfalls, moderate water flow
07HCS006	0.4	493874	6470435	0	5	95	dark brown	minimal	sparse vegetation, low relief, lower-slope, till blanket, moderate sized stream with bldrs, sample taken in tier pool downstream from sample 07HCS005, moderate water flow, rk sample taken nearby 07DAP
07HCS007	1.2	499184	6461891	60	30	10	med brown	moderate	low relief, lower slope, venr till 50 % mafics, 40% detrital, 10% quartz. Some magnetic grains, gravel stream, moderate flow in valley of limestone outcrop near Falcon
07HCS008	1.4	501933	6464108	0	10	90	light brown	sprs	high relief, mid slope, blank till, high flow from mountain peaks, boulder and gravel. Sample taken in calmer low flow pool beside stream = region flows in higher water levels. Higher clay then silt percent. Stream depth is 10 to 50 cm.
07HCS009	3	503526	6463165	5	15	80	med grey brown	sprs	high relief, ridge crest, 5 % quartz, 25 % mafics, 20 % detritals. Sample taken at high elevation drainage from mountain outcrop near King Mountain, low flow from near runoff. Low depth (1 m)
07HCS010	1.2	504987	6465047	80	15	5	med black brown	sprs	low to med relief, lower slope, mod to high flow stream drainage glacial lake north of King Mountain. Sampled sand along edge near curve in stream. Low vegetation. Mafics 80%, detritals 15%, quartz 5%
07HCS011	8.4	510645	6468706	80	20	0	dark brwn blk	minimal	low relief, midslope, mod flow stream drainage tributary into ferry creek system, till venr, fine to med gr sand, water depth 10-60cm, gravel meandering stream, qtz 5% detritals 25% mafics 70%, mod magnetc gr's
07HCS012	7	506991	6469733	70	25	5	dark brwn blk	minimal	low relief, lower slope, till venr, f to m gr sand, moderate stream flow, cobble bldr stream draining Letain Lake into Ferry Creek, 10cm-1m water depth, mod magnetic gr's, qtz 5% detritals 20% mafics 75%
07HCS013	6.3	506508	6468381	55	25	20	med brwn	minimal	low relief, lower slope, till venr, f gr sand, moderate flow, cobble bldr stream draining Letain Lake to N, 20cm-1m depth, mod magnetite gr's, qtz 5% detritals 15% mafics 80%
07HCS014	6.2	508110	6466456	90	10	0	dark brwn blk	minimal	low relief, level, till venr, moderate flow, meandering stream draining Letain Lake, 10cm-1m water depth, mod magnetics, cobble gravel stream, qtz pebbles in stream, qtz 5% detritals 15% mafics 80%
07HCS015	6	509993	6463240	75	20	5	med brwn	minimal	low relief, level, till venr, moderate flow, mod-high magnetic gr's, stream draining Spring minfile region, gravel cobble stream with sand gravel bars, 10-50cm water depth, qtz 5% detritals 25% mafics 70%
07HCS016	6.3	507505	6463053	80	15	5	med grey	minimal	low-mod relief, lower slope, till venr, drainage low-mod flow from glacial lake off of King Mtn, cobble gravel stream, 15cm water depth, qtz5% detritals 15% mafics 80%
07HCS017	6.5	504931	6464613	80	15	5	light grey	minimal	high relief, level, till blnkt, mgr sand, low-mod flow drainage from King Mtn area, water depth 20cm, highly magnetic grains, qtz5% detritals 10% mafics 85%
07HCS018	6.9	500196	6466511	90	10	0	med brwn grey	minimal	med relief, level, till venr, fine to med gr sand, mod flow drainage from mtn area in S, 30-70cm water depth, weakly magnetic grains, WHEATON CREEK, qtz5% detritals 25% mafics 70%
07HCS019	6.7	501060	6468570	90	10	0	med brwn blk	minimal	low relief, level, till venr, med-crs gr sand, 50-70cm water depth, meandering/braided stream at junction of AliceShea and Wheaton creeks, gravel bar, mod flow, mod magnetic gr's, qtz5% detritals 35% mafics 60%
07HCS020	8.1	499224	6473927	70	20	10	medium brown	moderate	low relief, level, blanket till, fine sand, 10-20 cm water depth, 55% mafics, 40% detritals, 5% qtz, moderate flow, some magnetic grains, gravel and minor bldrs, stream running along road
07HCS021	7	494852	6472594	80	15	5	medium brown	moderate	medium relief, level, venir till, gravel, moderate flow, moderate magnetic grains, 10-60 cm water depth, 55% mafics, 40% detritals, 5% qtz, tributary from mountain
07HCS022	7.6	493708	6468231	70	25	5	dark brown	moderate	high relief, mid slope, venir till, moderate flow, high magnetic grains, gravel, fine-medium sand, 50 cm water depth, 75% mafics, 20% detritals, 5% qtz, tributary from mountain
07HCS023	7.8	502599	6462966	75	20	5	dark brown	moderate	high relief, mid slope, venir till, 70% mafics, 25% detritals, 5% qtz, low-moderate flow rate, 10-50 cm water depth, minor magnetics, medium sand size, west ward drainage from PR8
07HCS024	8	504587	6462793	50	30	20	medium grey	sparse	high relief, mid slope, venir till, 60% mafics, 35% detritals, 5% qtz, low-moderate flow rate, minor magnetics, 10-40 cm depth, gravel and bldrs, medium sand size, stream flr from PR8
07DAS001	1.9	507196	6469158	40	60	0	dark brown		low relief, level slope, venr till, lots of magnetics, stream is 0.3 m deep in center. 65% mafics, 30% detritals, 5% quartz. High flow, cobble size boulders. North drainage from Letain lake.
07DAS002	1.4	507299	6468926	50	50	0	dark brown		low relief, level slope, venr till, high flow rate, stream 0.3 m deep with boulders and cobbles. Minor organic matter. 65% mafics, 30% detritals, 5% quartz. North drainage from Letain lake.
07DAS003	1.4	508424	6467368	40	60	0	dark brown		low relief, level slope, venr till, moderate flow, narrow (1m), 1m deep. No organics, 70% mafics, 25% detrital, 5% quartz

Sample Number	Sample Weight (kg)	Easting (nad83z9)	Northing (nad83z9)	Sand (%)	Silt (%)	Clay (%)	Colour	Vegetative Matter	Comments: (coloured cells represent samples containing visible gold grains)
07DAS004	3.1	508946	6466360	75	25	0	dark brown, black		low relief, level slope, venr till. Sample taken at road because of probable pyrite in sediment. Very low flow rate, very shallow, moderate organics. Some magnetics. 80% mafic, 5% quartz, 15% detritals. Lots of quartz float at sample site.
07DAS005	1.7	511118	6464912	40	60	0	dark black		low relief, level slope, venr till. Stream is less than 1m wide. 10-25 cm deep. 80% mafics, 15% detritals, 5% quartz. Moderate flow rate. Some mica. Very few organics.
07DAS006	1.3	499967	6465528	80	10	0	dark green brown		low relief, level slope, venr till. Stream (wheaton creek) is 5 m wide. Very shallow - 5 cm. High flow rate. 85% mafic, 10% quartz, 5% detrital.
07DAS007	1.8	500076	6465793	90	10	0	dark green brown		low relief, level slope, venr till. Stream (Wheaton creek) is about 5 m wide, 5-10 cm deep, high flow rate. Many boulders in creek. 90% mafic, 10% quartz + detritals
07DAS008	3	500092	6466088	80	20	0	dark green brown		low relief, level slope, venr till. Beach sample. 80% mafics, 15% detrital, 5% quartz. Stream (Wheaton creek) is 3 m wide and 0.35 cm deep.
07DAS009	2.2	500100	6466261	80	20	0	dark green brown		low relief, level slope, venr till. Stream is 3 m wide, 0.5 cm deep. High flow rate. 25 m from smaller stream entering Wheaton from the east. 85% mafic, 15% quartz + detritals.
07DAS010	2	500181	6466464	85	15	0	dark green brown		low relief, level slope, venr till. Stream 5 m wide, 20 cm deep. 85% mafics, 15% quartz and detritals. High flow rate. Some magnetics.
07DAS011	1.7	500490	6467382	80	20	0	dark green, brown, black		detrital.
07DAS012	3.3	500556	6467549	85	15	0	dark green brown		low relief, level slope, venr till. 5 m wide, 0.3 m deep. Mod flow rate. 85% mafics, 15 % quartz + detritals.
07DAS013	2.6	500775	6467860	90	10	0	dark green brown		low relief, level slope, venr till. Stream 4 m wide, 0.5 m deep. Moderate flow rate. 85% mafics, 15% quartz + detritals
07DAS014	3	500814	6468023	85	15	0	dark brown green		low relief, level slope, venr till. Stream 4 m wide, 0.5 m deep. Mod flow rate. 85% mafics, 15% quartz + detritals.
07THS001	1.2	502684	6466577	95	5	0	darkish brownish black	sparse	medium relief, lower slope, blanket till, 70% mafics, 20% qtz, 10% detrital, sample taken on Alice Shea Creek, moderate flow, 10-50 cm stream depth, lots of bldrs and gravel
07THS002	2.2	502639	6366755	95	5	0	darkish brownish black	sparse	medium relief, lower slope, blanket till, 60% mafics, 30% detrital, 10% qtz, sample taken on Alice Shea Creek, moderate flow, 10-50 cm depth, lots of bldr and gravel
07THS003	1.6	502589	6466944	75	25	0	darkish brownish black	sparse	medium relief, lower slope, blanket till, 80% mafics, 15% detrital, 5% qtz, sample taken on Alice Shea Creek, sample taken in low flow area of tributary, 10-20 cm depth, small bldrs and gravel
07THS004	1.9	502533	6467217	90	10	0	darkish brownish black	sparse	medium relief, lower slope, blanket till, 75% mafics, 20% detrital, 5% qtz, sample taken in Alice Shea Creek, sample taken from dry area of stream, some magnetic grains, some bldrs and gravel
07THS005	1.6	501164	6468378	90	10	0	darkish brownish black	sparse	low relief, lower slope, blanket till, 75% mafics, 20% detrital, 5% qtz, sample taken at base of Alice Shea Creek on bar in braided stream, boulders are mostly gone, mainly gravel, some magnetic grains
07THS006	1	501088	6468445	90	10	0	darkish brownish black	sparse	low relief, lower slope, blanket till, 75% mafics, 20% detrital, 5% qtz, sample taken past the point where Alice Shea Creek enters Wheaton Creek, high flow, very bouldery and gravel, some magnetic grains
07THS007	1.3	501086	6468199	90	10	0	darkish brownish black	sparse	low relief, level, blanket till, 75% mafics, 20% detrital, 5% qtz, sample taken in Wheaton Creek above where Alice Shea Creek enters it, fast flowing, only gravel, stream profile is horizontal, 50 cm depth, minor magnetic grains
07THS008	0.4	494113	6470841	0	15	85	greyish black	moderate	medium relief, mid slope, venir till, 75% mafics, 20% detritals, 5% qtz, fast flowing, bldr and gravel, fine sand, 10-20 cm depth
07THS009	0.9	494313	6470630	15	30	55	brownish grey	moderate	medium relief, mid slope, venir till, 75% mafics, 20% detritals, 5% qtz, fast flowing, bldr and gravel, med-fine sand size, taken down stream of junction with another stream, 10-20 cm depth
07THS010	0.6	494721	6471126	15	35	50	brownish grey	moderate	medium relief, mid slope, blanket till, 60% mafics, 35% detritals, 5% qtz, low flow, gravel, smaller tributary from mountain, 5 cm depth, lots of magnetic grains
07THS011	1.2	494881	6471654	10	40	50	medium brown	moderate	magnetics
07THS012	2.2	494952	6471782	40	45	15	brownish grey	moderate	tributary
07THS013	2.2	495518	6472355	60	30	10	medium grey	moderate	tributary
07THS014	1.5	496323	6473081	60	40	0	brownish grey	sparse	gravel
07THS015	3.8	499153	6473832	25	40	35	medium grey	moderate	low relief, level, blanket till, 65% mafics, 30% detritals, 5% qtz, lots of magnetic grains, moderate flow, sample taken where stream runs parallel to road, 10-30 cm depth
07THS016	1.4	499169	6473801	40	60	0	brownish grey	moderate	low relief, level, blanket till, 60% mafics, 35% detrital, 5% qtz, moderate flow, fine sand size, 10-50 cm depth, some magnetic grains, NE/SW direction of stream
07THS017	3.1	498174	6473510	15	65	20	brownish grey	moderate	low relief, lower slope, blanket till, 65% mafics, 30% detritals, 5% qtz, moderate flow, 10-50 cm depth, some magnetic grains, NE/SW flow



**APPENDIX 5**  
**2007 TURNAGAIN HMC SAMPLE ASSAY CERTIFICATES**

**Apex Geoscience Ltd**

Attention: Michael Dufresne

PO #/Project:

Samples: 14

**SRC Geoanalytical Laboratories**

125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8

Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Report No: 07-1102

Date of Report: October 01, 2007

**Knelson Concentrates**

## Column Header Details

Original Sample Weight in kilograms (SWT)

+1.7mm in grams (+1.7mm)

Concentrate in grams (Concentrate)

Sample Number	SWT kg	+1.7mm g	Concentrate g
07-HCS-011	8.4	16.6	49.12
07-HCS-012	7.0	9.4	49.17
07-HCS-013	6.3	1.0	53.51
07-HCS-014	6.2	84.5	51.85
07-HCS-015	6.0	24.0	35.72
07-HCS-016	6.3	2.7	42.98
07-HCS-017	6.5	6.2	31.71
07-HCS-018	6.9	9.9	74.04
07-HCS-019	6.7	21.2	41.11
07-HCS-020	8.1	0.5	63.04
07-HCS-021	7.0	3.7	41.94
07-HCS-022	7.6	8.1	0.76
07-HCS-023	7.8	4.9	47.06
07-HCS-024	8.0	6.5	18.34

Sample # 07-HCS-022 had approximately 30g of concentrate spilt.

**Gold Grain Report**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:  
Samples: 14

October 01, 2007

<b>Sample #</b>	<b>Sample Weight in Kg</b>	<b>Visible Gold Grain Count</b>	<b>Estimated Weight of Gold in µg</b>
07-HCS-011	8.4	0	
07-HCS-012	7.0	9	97.09
07-HCS-013	6.3	1	6
07-HCS-014	6.2	0	
07-HCS-015	6.0	0	
07-HCS-016	6.3	0	
07-HCS-017	6.5	3	3.52
07-HCS-018	6.9	3	4.13
07-HCS-019	6.7	2	2.24
07-HCS-020	8.1	1	8.43
07-HCS-021	7.0	5	37.34
07-HCS-022	7.6	2	7.3
07-HCS-023	7.8	3	4.76
07-HCS-024	8.0	0	

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-012**

**Estimated Weight of Gold in micrograms: 97.09**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
380	160	I
280	260	I
280	120	I
260	180	I
240	100	I
160	100	I
140	100	I
140	60	A
120	60	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-013**

**Estimated Weight of Gold in micrograms: 6**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
220	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-018**

**Estimated Weight of Gold in micrograms: 4.13**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
120	100	A
120	40	A
100	100	D

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-019**

**Estimated Weight of Gold in micrograms: 2.24**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
120	100	A
60	60	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-020**

**Estimated Weight of Gold in micrograms: 8.43**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
220	140	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.



**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-021**

**Estimated Weight of Gold in micrograms: 37.34**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
320	200	D
200	140	I
160	100	A
120	80	A
120	80	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-022**

**Estimated Weight of Gold in micrograms: 7.3**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
180	100	A
140	120	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Michael Dufresne  
PO #/Project:

October 01, 2007

**Sample Number: 07-HCS-023**

**Estimated Weight of Gold in micrograms: 4.76**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
160	100	I
100	80	A
80	60	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:  
Samples: 41

**SRC Geoanalytical Laboratories**  
125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8  
Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Report No: 07-1103

Date of Report: October 03, 2007

**Knelson Concentrates**

Column Header Details

Original Sample Weight in kilograms (SWT)  
+1.7mm in grams (+1.7mm)  
Concentrate in grams (Concentrate)

Sample Number	SWT kg	+1.7mm g	Concentrate g
07DAS 001	1.9	3.9	41.79
07DAS 002	1.4	4.9	46.00
07DAS 003	1.4	4.6	66.45
07DAS 004	3.1	1.3	62.59
07DAS 005	1.7	0.0	60.40
07DAS 006	1.3	3.3	63.53
07DAS 007	1.8	0.9	69.52
07DAS 008	3.0	0.0	74.13
07DAS 009	2.2	2.3	71.70
07DAS 010	2.0	3.1	51.53
07DAS 011	1.7	2.3	67.14
07DAS 012	3.3	0.2	65.86
07DAS 013	2.6	5.1	62.89
07DAS 014	3.0	3.1	72.15
07HCS 001	0.4	2.1	25.50
07HCS 002	0.5	1.8	23.33
07HCS 003	0.5	1.6	23.45
07HCS 004	0.4	2.9	33.50
07HCS 005	0.7	4.9	39.00
07HCS 006	0.4	0.7	33.09
07HCS 007	1.2	1.6	52.14
07HCS 008	1.4	0.0	64.93
07HCS 009	3.0	3.6	48.03
07HCS 010	1.2	2.0	39.44
07THS 001	1.2	0.4	47.63
07THS 002	2.2	4.2	48.16
07THS 003	1.6	7.2	58.36
07THS 004	1.9	0.7	58.56
07THS 005	1.6	4.9	50.08
07THS 006	1.0	2.4	57.85
07THS 007	1.3	2.1	66.15
07THS 008	0.4	0.6	22.05
07THS 009	0.9	1.2	37.20
07THS 010	0.6	0.4	46.39

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:  
Samples: 41

**SRC Geoanalytical Laboratories**  
125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8  
Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Report No: 07-1103

Date of Report: October 03, 2007

**Knelson Concentrates**

Sample Number	SWT kg	+1.7mm g	Concentrate g
07THS 011	1.2	0.0	46.43
07THS 012	2.2	0.8	58.93
07THS 013	2.2	2.7	62.27
07THS 014	1.5	1.1	43.07
07THS 015	3.8	3.2	62.82
07THS 016	1.4	1.6	69.31
07THS 017	3.1	0.0	55.46

**Gold Grain Report**

**Apex Geoscience Ltd**  
 Attention: Dean Besserer  
 PO #/Project:  
 Samples: 41

October 03, 2007

<b>Sample #</b>	<b>Sample Weight in Kg</b>	<b>Visible Gold Grain Count</b>	<b>Estimated Weight of Gold in µg</b>
07DAS 001	1.9	0	
07DAS 002	1.4	5	255.53
07DAS 003	1.4	0	
07DAS 004	3.1	1	0.46
07DAS 005	1.7	1	0.71
07DAS 006	1.3	0	
07DAS 007	1.8	1	1.46
07DAS 008	3.0	0	
07DAS 009	2.2	3	5.81
07DAS 010	2.0	0	
07DAS 011	1.7	1	1.96
07DAS 012	3.3	4	50.52
07DAS 013	2.6	1	1.96
07DAS 014	3.0	0	
07HCS 001	0.4	0	
07HCS 002	0.5	0	
07HCS 003	0.5	0	
07HCS 004	0.4	0	
07HCS 005	0.7	0	
07HCS 006	0.4	0	
07HCS 007	1.2	0	
07HCS 008	1.4	0	
07HCS 009	3.0	0	
07HCS 010	1.2	0	
07THS 001	1.2	1	9.85
07THS 002	2.2	0	
07THS 003	1.6	0	
07THS 004	1.9	2	5.25
07THS 005	1.6	1	4.05
07THS 006	1.0	0	
07THS 007	1.3	0	
07THS 008	0.4	0	
07THS 009	0.9	0	
07THS 010	0.6	0	
07THS 011	1.2	0	
07THS 012	2.2	0	
07THS 013	2.2	0	
07THS 014	1.5	0	
07THS 015	3.8	0	
07THS 016	1.4	3	6.26
07THS 017	3.1	1	35.98

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 002**

**Estimated Weight of Gold in micrograms: 255.53**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
640	300	I
420	320	I
420	300	I
160	80	I
100	80	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 004**

**Estimated Weight of Gold in micrograms: 0.46**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
80	60	D

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.



**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 005**

**Estimated Weight of Gold in micrograms: 0.71**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
100	60	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 007**

**Estimated Weight of Gold in micrograms: 1.46**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
100	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 009**

**Estimated Weight of Gold in micrograms: 5.81**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
160	120	I
100	80	A
100	60	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 011**

**Estimated Weight of Gold in micrograms: 1.96**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
120	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 012**

**Estimated Weight of Gold in micrograms: 50.52**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
380	200	I
240	180	I
140	120	I
100	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07DAS 013**

**Estimated Weight of Gold in micrograms: 1.96**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
120	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07THS 001**

**Estimated Weight of Gold in micrograms: 9.85**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
240	140	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07THS 004**

**Estimated Weight of Gold in micrograms: 5.25**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
180	120	A
60	60	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.



**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07THS 005**

**Estimated Weight of Gold in micrograms: 4.05**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
180	100	I

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07THS 016**

**Estimated Weight of Gold in micrograms: 6.26**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
200	60	A
120	100	A
120	60	A

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**Gold Grain Description Detail**

**Apex Geoscience Ltd**  
Attention: Dean Besserer  
PO #/Project:

October 03, 2007

**Sample Number: 07THS 017**

**Estimated Weight of Gold in micrograms: 35.98**

<b>Length in <math>\mu\text{m}</math></b>	<b>Width in <math>\mu\text{m}</math></b>	<b>Description</b>
360	240	R

Delicate (D) - Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals.

Irregular (I) - After short ice transport, crystals are removed leaving smaller pitted grains with several protrusions. Grains may become curled.

Abraded (A) - With increasing transport, protrusions break off irregular grains producing several smaller leaf shaped grains. Pitted surfaces become smooth.

Rounded (R) - results from continued abrasion, producing small polished spherical or ellipsoidal grains.

Please note that combinations of the descriptions may be used if different characteristics within each individual grain are observed.

**APPENDIX 6**  
**2007 TURNAGAIN EXPLORATION EXPENDITURES**

**APEX Geoscience Ltd**  
**January 1 - November 29, 2007**

Item	Memo	Amount
<b>2007 GEOLOGICAL STAFF COSTS</b>		
<b>Consulting/Overhead</b>	Accomodations - Dave Arsenault (July 2007)	300.00
	Accomodations - Heather Carey (July 2007)	200.00
	Accomodations - Tom Hildahl (July 2007)	100.00
	APEX rentals - laptop and GPS units	500.00
		<b>1,100.00</b>
<b>Geological Fieldwork</b>	Geological Services Performed Field - Thomas Hildahl (June 22-July 21/07)	600.00
	Geological Services Performed Field - David Arsenault (June 22-July 21/07)	400.00
	Geological Services Performed Field - David Arsenault (July 22-Aug 21/07)	7,200.00
	Geological Services Performed Field - Heather Carey (July 22-Aug 21/07)	7,200.00
	Geological Services Performed Field - Thomas Hildahl (July 22-Aug 21/07)	5,400.00
	Geological Work Performed Field - Kris Raffle (July 22-Aug 21/07)	950.00
	Geological Services Performed Field - Heather Carey (Aug 22-Sept 21/07)	400.00
		<b>22,150.00</b>
<b>Geological Office Work</b>	Geological Services Performed Office - Tara Gunson (Apr 22-May 21/07)	1,260.00
	Geological Services Performed Office - Peter Whyte (Apr 22-May 21/07)	121.50
	Geological Services Performed Office - Kyle Jordan (Apr 22-May 21/07)	82.50
	Geological Services Performed Office - Tara Gunson (May 22-June 21/07)	360.00
	Geological Services Performed Office - Peter Whyte (May 22-June 21/07)	360.00
	Geological Services Performed Office - Kyle Jordan (May 22-June 21/07)	67.50
	Geological Services Performed Office - Brenden Mock (May 22-June 21/07)	339.00
	Geological Services Performed Office - Peter Whyte (June 22-July 21/07)	2,218.50
	Geological Services Performed Office - Tara Gunson (June 22-July 21/07)	789.00
	Geological Services Performed Office - Heather Carey (June 22-July 21/07)	176.25
	Geological Services Performed Office - Dave Arsenault (June 22-July 21/07)	1,350.00
	Geological Services Performed Office - Kris Raffle (June 22-July 21/07)	425.00
	Geological Services Performed Office - Kris Raffle (July 22-Aug 21/07)	85.00
	Geological Services Performed Office - Tara Gunson (July 22-Aug 21/07)	111.00
	Geological Services Performed Office - Peter Whyte (Aug 22-Sept 21/07)	180.00
		<b>7,925.25</b>
<b>Principals Directly Involved</b>	Principal Directly Involved - Office Dean Besserer (Apr 22-May 21/07)	78.00
	Principal Directly Involved - Office Dean Besserer (June 22-July 21/07)	162.00
	Principal Directly Involved - Office Dean Besserer (Sept 22-Oct 21/07)	78.00
		<b>318.00</b>
	Principals Directly Involved - Office Michael Dufresne (June 22-July 21/07)	435.50
	Principals Directly Involved - Office Michael Dufresne (July 22-Aug 21/07)	344.50
	Principals Directly Involved - Field Michael Dufresne(July 22-Aug 21/07)	1,625.00
	Principals Directly Involved - Office Michael Dufresne (Aug 22-Sept 21/07)	344.50
	Principals Directly Involved - Office Michael Dufresne (Sept 22-Oct 21/07)	910.00
		<b>3,659.50</b>
<b>Staff Subtotal</b>		<b>35,152.75</b>
<b>2007 FIELD COSTS</b>		
<b>Accomodations</b>	Northway Motor Inn: hotel, Dave Arsenault, Tom Hildahl & Heather Carey, Dease Lake,	4,100.80
	Northway Motor Inn: hotel, Michael Dufresne & Kris Raffle, Dease Lake, Aug 6-8/07	324.00
	Dave Arsenault: hotel, Prince George, July 21-22/07	97.20

**APEX Geoscience Ltd**  
**January 1 - November 29, 2007**

	Dave Arsenault: hotel, Tom Hildahl, Prince George, July 21-22/07	91.92
	Dave Arsenault: hotel, Dave Arsenault, Tom Hildahl & Heather Carey, Smithers, July 22	280.50
		<b>4,894.42</b>
<b>Assays/Analyses</b>	TSL Laboratories: assay analysis, Sep 6/07, inv 44509	2,591.50
	SRC: assay analysis, 07-1103, inv 141159	3,109.44
		<b>5,700.94</b>
<b>Other Field Supplies</b>	Deakin Equipment: supplies, July 17/07, inv 40668	525.00
	Commercial Solutions: supplies, July 19/07, inv 001-139327	252.80
	Cansel: supplies, July 20/07, inv I27121	48.95
	Commercial Solutions: supplies, July 20/07, inv 001-140279	264.97
	Kris Raffle: supplies, July 28/07	11.77
	Dave Arsenault: supplies, July 16-26/07	268.06
	Tom Hildahl: supplies, July 20/07	59.49
	Heather Carey: supplies, July 23/07	8.97
		<b>1,440.01</b>
<b>Camp Food</b>	Subway: food, Michael Dufresne, Smithers, Aug 6/07	24.68
	Jade Boulder Cafe: food, Michael Dufresne, Dease Lake, Aug 7/07	123.35
	Jade Boulder Cafe: food, Michael Dufresne, Dease Lake, Aug 7/07	97.75
	Jade Boulder Cafe: food, Michael Dufresne, Dease Lake, Aug 8/07	139.75
	Super A: food, Michael Dufresne, Dease Lake, Aug 8/07	22.19
	Dave Arsenault: food, July 21-Aug 6/07	1,299.44
	Tom Hildahl: food, July 20-Aug 7/07	135.79
	Rob L'Heureux: food, July 22/07	58.65
	Heather Carey: food, July 22-Aug 6/07	1,055.05
		<b>2,956.65</b>
<b>Fuel</b>	Pacific Western Helicopters: fuel, July 24-31/07, inv 24815	2,595.80
	Pacific Western Helicopters: fuel, Aug 1/07, inv 24816	159.60
	Chevron: fuel, Michael Dufresne, Aug 6/07	15.06
	Petro Canada: fuel, Michael Dufresne, Dease Lake, Aug 8/07	122.25
	Pacific Western Helicopters: fuel, Aug 1-7/07, inv 24877	1,899.24
	Dave Arsenault: fuel, July 18-31/07	389.30
	Kris Raffle: fuel, Aug 6/07	53.78
	Heather Carey: fuel, July 23/07	110.64
		<b>5,345.67</b>
<b>Maps/Publications</b>	Base Map Online Store: maps, July 17/07, inv 17573	2,400.00
	Map Town: maps, invoice 115539	124.90
		<b>2,524.90</b>
<b>Airfare</b>	Globetrotter Travel: airfare, Heather Carey, Victoria/Smithers, July 22/07, inv 19832	578.67
	Globetrotter Travel: airfare, Daniel Cederwall, Calgary/Edmonton, July 20/07, inv 19831	115.67
	Globetrotter Travel: airfare, Thomas Hildahl, Winnipeg/Edmonton, July 20/07, inv 19833	268.67
	Pacific Western Helicopters: airfare, July 24-31/07, inv 24815	13,932.00
	Pacific Western Helicopters: airfare, Aug 1/07, inv 24816	860.00
	Pacific Western Helicopters: airfare, Aug 1-7/07, inv 24877	11,610.00
	Air Canada: airfare, Michael Dufresne, Edmonton/Smithers, Aug 6/07	616.67
		<b>27,981.68</b>

**APEX Geoscience Ltd**  
**January 1 - November 29, 2007**

<b>Taxis</b>	Yellow Cab: taxi, Michael Dufresne, Aug 6/07	49.06
		<b>49.06</b>
<b>Communications</b>	Allstream: long distance charges, May/07, inv 6360696	0.05
	Allstream: long distance charges, Jun/07, inv 6471312	0.24
	Allstream: long distance charges, July/07, inv 6582681	4.62
	Northway Motor Inn: telephone, Dease Lake, July 23-Aug 8/07	63.15
	Heather Carey: phone cards & long distance charges, July 26-Aug 8/07	77.62
		<b>145.68</b>
<b>Freight</b>	Kris Raffle: Greyhound courier, July 21/07	22.33
	Bandstra Transportation Systems: freight, inv S109577	31.53
	Greyhound: freight, July 16/07, inv 3558593	23.61
		<b>77.47</b>
<b>Sample Feight</b>	Byers Transportation: freight, samples, Aug 13/07, inv 30950986-00	608.36
	Byers Transportation: freight, samples, Aug 13/07, inv 30950990-00	763.84
		<b>1,372.20</b>
<b>Communication Rentals</b>	Glentel: communication equipment rental, July 18-Aug 7/07, inv R56494	272.16
		<b>272.16</b>
<b>Field Costs Subtotal</b>		<b>52,760.84</b>
<b>TOTAL 2007 EXPENDITURES</b>		<b>87,913.59</b>