

**REPORT OF 1998 FIELD ACTIVITIES  
FUNDED UNDER YMIP GRANT #98-033**

**PREPARED FOR:  
CLAYTON WILSON  
C/O BOX 4375  
WHITEHORSE, YUKON  
Y1A 3T5**

**YUKON ENERGY, MINES  
& RESOURCES LIBRARY  
P.O. Box 2703  
Whitehorse, Yukon Y1A 2C8**

**BY:  
STEVE TRAYNOR, B.Sc. (Honours, Geology)  
NOVEMBER 1998**

## TABLE OF CONTENTS

	PAGE	
<b>INTRODUCTION</b>	1	
<b>TARGET A – RED RIDGE</b>		
PROJECT SUMMARY	1	
AREA LOCATION AND ACCESS	1	
PREVIOUS WORK AND EXPLORATION	4	
REGIONAL AND GENERAL GEOLOGY	4	
DESCRIPTION AND SUMMARY OF WORK	6	
ANALYSIS AND RESULTS	6	
CONCLUSIONS AND RECOMMENDATIONS	7	
<b>TARGET B</b>	PROJECT SUMMARY	7
<b>TARGET C – UPPER SIDNEY CREEK</b>	PROJECT SUMMARY	7
AREA LOCATION AND ACCESS	7	
PREVIOUS WORK AND EXPLORATION	9	
REGIONAL AND GENERAL GEOLOGY	9	
DESCRIPTION AND SUMMARY OF WORK	10	
ANALYSIS AND RESULTS	10	
CONCLUSIONS AND RECOMMENDATIONS	10	
<b>TARGET D, E and F</b>	PROJECT SUMMARIES	11
<b>REFERENCES</b>		12

## LIST OF FIGURES

<b>FIGURE 1 – TESLIN AREA – Project Location Map</b>	2
<b>FIGURE 2 – RED RIDGE – Target Location Map</b>	3
<b>FIGURE 3 – TESLIN AREA – Regional Geology</b>	5
<b>FIGURE 4 – RED RIDGE – Sample Location Map</b>	in Map Pocket
<b>FIGURE 5 – UPPER SIDNEY CREEK – Target Location Map</b>	8
<b>FIGURE 6 – UPPER SIDNEY CREEK – Sample Location Map</b>	in Map Pocket

## LIST OF APPENDICES

<b>APPENDIX A – SUMMARY OF PROSPECTING ACTIVITIES AND FIELD NOTES</b>	13
<b>APPENDIX B – ROCK SAMPLE REPORT</b>	36
<b>APPENDIX C – CERTIFICATES OF ANALYSIS</b>	38

## **INTRODUCTION**

This report prepared for Clayton Wilson, summarizes prospective exploration funded under Grant #98-033 of the Yukon Mineral Incentives Program (YMIP). A detailed summary of 1998 field activities and copies of field notes are included as Appendix A.

The Teslin Area (see Figure 1), which includes targets in and around Mt. Murphy ('Red Ridge') and the upper Sidney Creek valley, is discussed in detail. The prospector was only able to complete work in two of the originally proposed areas due to a potentially serious medical condition that restricted his ability to work in the field following the end of July 1998.

The writer assisted with field work in the area throughout the 1998 season and has reviewed research materials, field notes and rock samples supplied by Mr. Wilson.

## **TARGET A – RED RIDGE**

### **PROJECT SUMMARY**

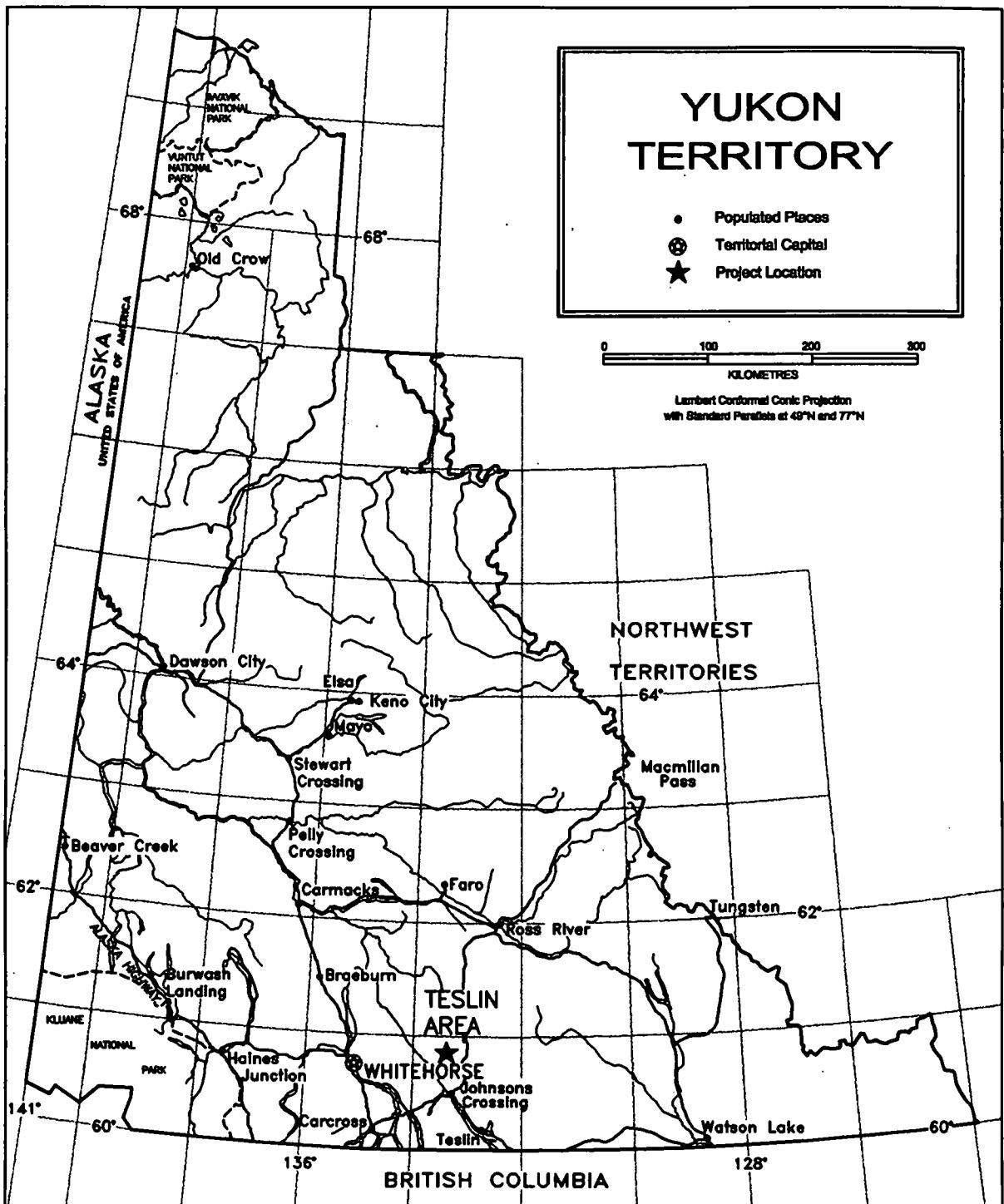
The Red Ridge target area focused on the far westerly extension of the same package of rocks that hosts the Bigtop occurrence, located approximately 20 km to the ESE. Proposed to followup numerous highly anomalous samples collected during the Federally sponsored RGS program, the project investigated an early Mississippian package of terrigenous clastic rocks associated with felsic volcanic rocks of the same age. Detailed ground prospecting and sampling identified volcano-sedimentary lithologies and alteration types that indicate the potential for massive sulfide mineralization in the area.

### **AREA LOCATION AND ACCESS**

The target area is located in the vicinity of Mount Murphy in the upper Boswell River area near its confluence with Red Mountain Creek (see Figure 2), approximately 80km NNE from Whitehorse, Yukon. The area is shown on parts of Claim Map Sheets 105 C 13 and is in the Whitehorse Mining District.

Preferred access is via fixed wing aircraft from Whitehorse, utilizing a well maintained bush strip located 20 km east of the Teslin River at the confluence of the Boswell River and Falls Creek. A bush camp maintained by a local outfitter provided adequate accommodations in the area.

A well defined game trail provided easy, albeit lengthly, access to the most prospective part of this

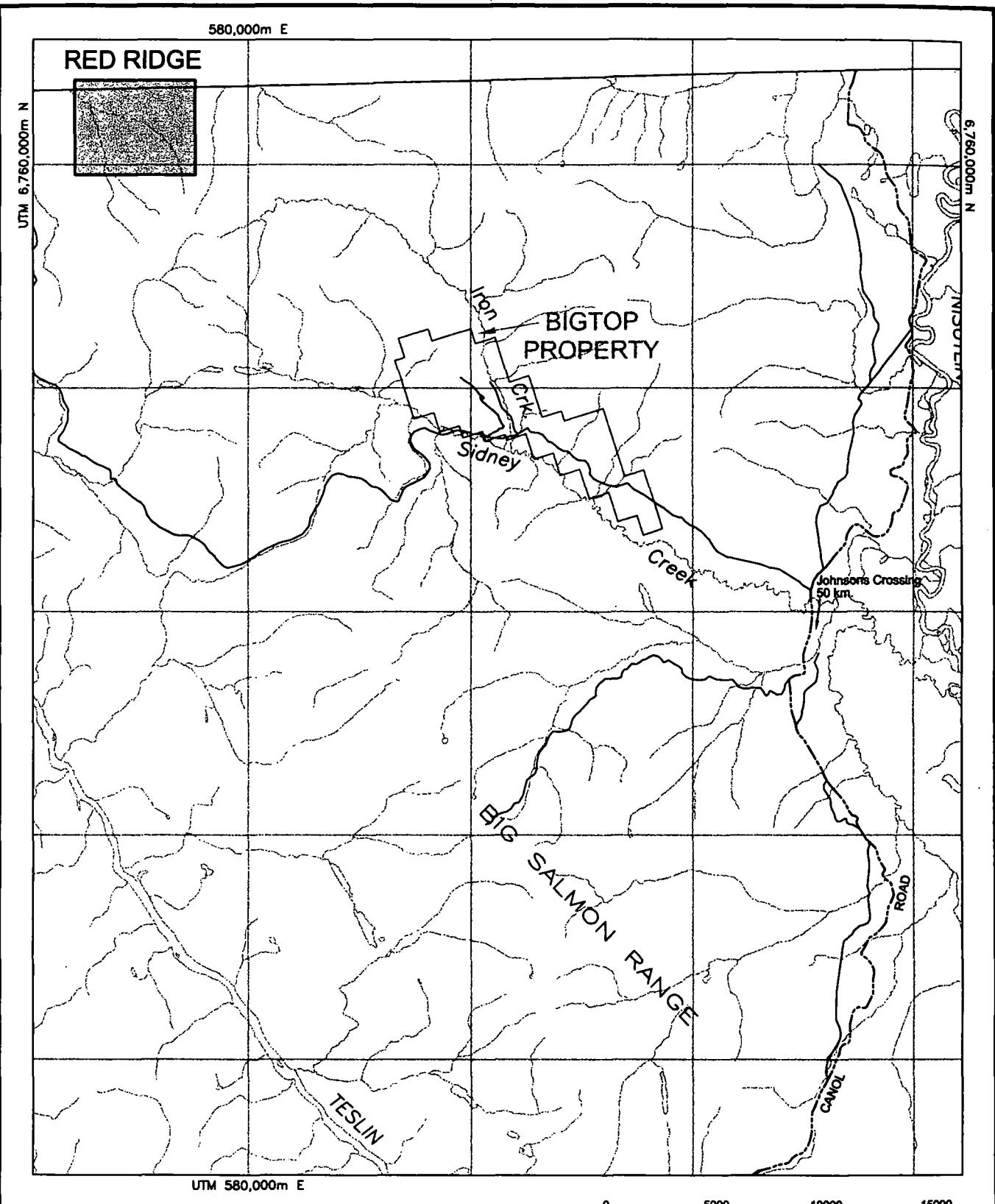


CLAYTON WILSON - YMIP 98-033

**TESLIN AREA**  
Project Location Map

Steve Traynor, Geologist

SCALE: 1 : 6,000,000	FILE: CW98_2	DATE: 98.11.15
NTS: 105 C/14	DRAWN:	FIGURE 1



**LEGEND**

stream, creek  
road, trail  
all weather road  
claim group boundary

target zone

N  
UTM Grid North

**CLAYTON WILSON - YMIP 98-033**

**RED RIDGE**  
**Target Location Map**

*Steve Traynor, Geologist*

SCALE: 1 : 250,000	FILE: CW98_3	DATE: 98.12.06
NTS: 105 C	DRAWN: <i>DP</i>	FIGURE 2

target area starting from a cat road near the confluence of Red Mountain Creek and the Boswell River. Followup work in the area would be carried out most effectively from a fly camp situated within this part of the area. Mobilization of crew and equipment via fixed wing aircraft to the Boswell strip in conjunction with a helicopter supported setout would provide for the most efficient use of time and resources.

### **PREVIOUS WORK AND EXPLORATION HISTORY**

Historically, this area has been explored for Ag-Pb veins at the turn of the century and in the early 1920's when a number of high grade showings were discovered in the Boswell River area. Some uranium exploration was carried out in the early 1970's in the area north of Mount Murphy.

In the mid 1970's the area just south of Red Mountain was explored for Pb-Zn mineralization with the resultant discovery of disseminated sulfide mineralization in one of three holes drilled into a package of schists and shales. Ongoing work by the same company in the surrounding area eventually led to the discovery of the Red Mountain Cu-Mo porphyry deposit, which extensive drilling has shown to contain subeconomic grades of mineralization. Since this time surprisingly little attention has been focused on the area despite its accessibility.

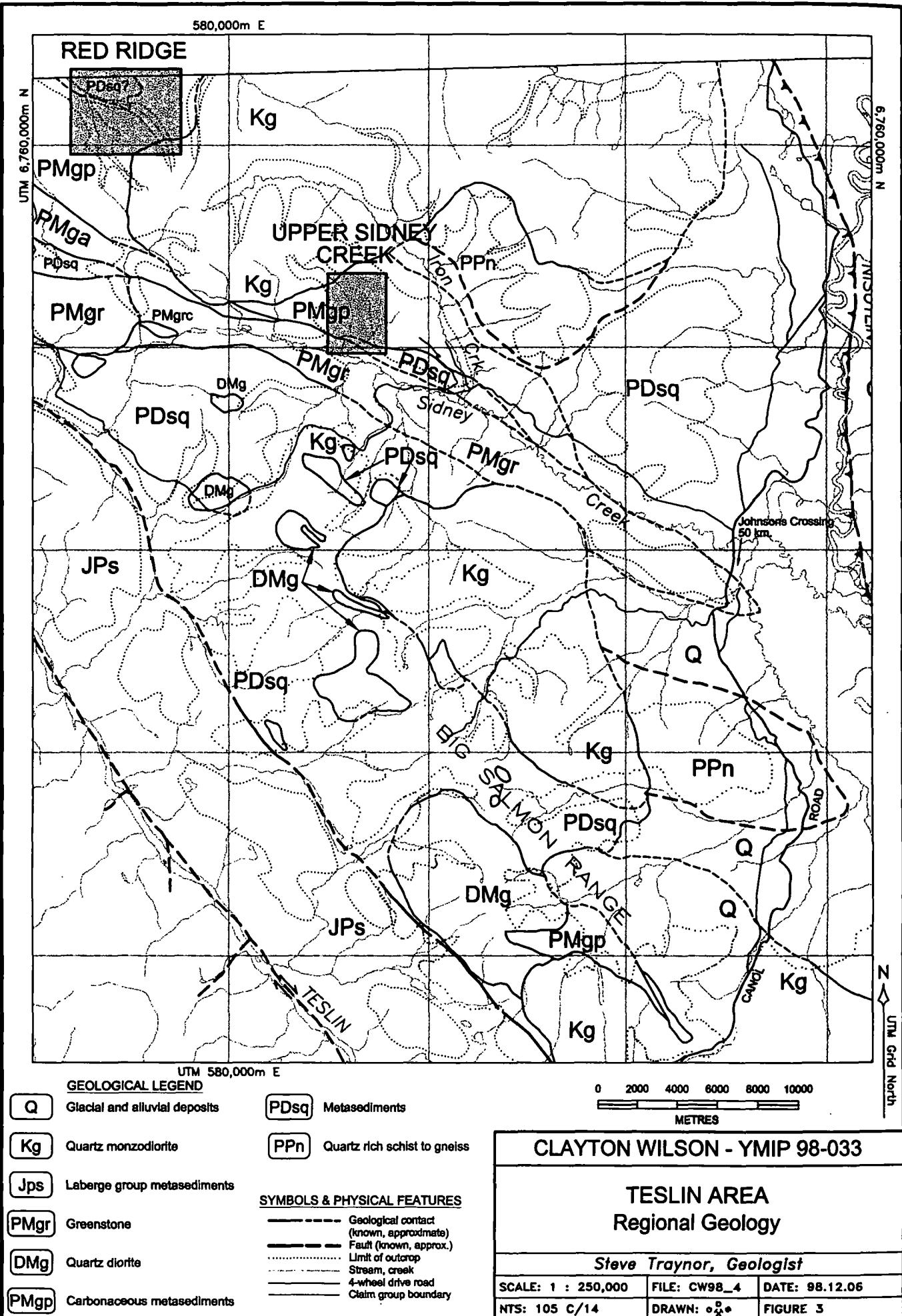
Recent mapping by S. Gordey et al (1974) of the Canada-Yukon Geoscience program during the period from 1990-1993 are reported on in two GSC Open Files, numbered 2768 and 2886.

### **REGIONAL AND GENERAL GEOLOGY**

Regional mapping indicates that the area is predominately underlain by Mississippian aged graphitic phyllites and shales, interbedded with minor quartz-muscovite schists and quartzites. North and east of the area large bodies of Cretaceous aged granite intruded the layered rock. Field observations indicate an increase in the terrigenous component of these units west along the Boswell River valley. A small to mid sized quartz monzonite body hosts the Red Mountain deposit.

The volcano-sedimentary sequence found in the area is part of a broad band of Yukon-Tanana terrane which lies northeast of the Teslin structural zone (see Figure 3). Extensive thrust faulting along this zone in the late Mesozoic period has caused regional deformation and folding which is evident in the steeply inclined schistosity throughout the area.

Most of the rocks in the area especially those in the Red Ridge area (named for the numerous



and prominent rusty red gossans) all showed some degree of alteration, generally evident as silicification, sulfidization and occasionally sericitization of the rocks.

### **DESCRIPTION AND SUMMARY OF WORK**

Work in the area was completed during the period from June 25<sup>th</sup> to July 5<sup>th</sup>, 1998. A total of 11 days were spent completing orientation, reconnaissance and grassroots prospecting of the area, one day within this period was lost due to rain and another was spent in the recovery of an ATV that was wrecked during the course of these reconnaissances.

Traverses of 12 to 15 km a day were not uncommon during the course of the field work in this area and this somewhat limited the effectiveness of the program due to the amount of unproductive time spent walking to and from the area of main interest.

Despite these difficulties a total of 15 lithological grab samples were collected and a basic overall understanding of the local geology and conditions particular to the area was achieved. Followup work in this area would therefore be facilitated by the establishment of a fly camp at the location indicated on the Sample Location Map, Figure 4 (in the map pocket).

Sampling and prospecting in the area targeted the prominent gossans located during previous reconnaissance flights in the area and was specifically focused on the areas that produced the most significant stream sediment anomalies as reported from work completed by the GSC.

### **ANALYSIS AND RESULTS**

Of the 15 samples collected and submitted for assay, samples 98R062 and 98R203 as well as 98R065, 104, 105 and 106 produced the most noteworthy results (see Appendices B and C).

Samples 98R062 and 98R203 collected from the area just south of Mount Murphy on the north side of the main drainage in the area (see Figure 4) both showed elevated Pb levels with Zn and Ba also elevated in 98R062. These samples were taken from quite close together in the stratigraphic sequence and each contained pyrite and galena as disseminations and thin laminae.

Sampling across the valley, in what is assumed to be higher in the the same stratigraphic sequence produced a number of elevated Ba responses over a fairly widespread area that also showed a high degree of sulfidization.

## **CONCLUSIONS AND RECOMMENDATIONS**

The widespread occurrence of various types of alteration, the anomalous character of stream sediment samples collected from the majority of streams in the area, the presence of disseminated sulfide mineralization in the form of pyrite, galena and sphalerite and numerous lithologies containing elevated Ba values are all indicative of the potential of this area to host volcanogenic massive sulfides.

Detailed prospecting of this entire package of rocks from Red Mountain Creek as far east as the intrusive contact is recommended. To facilitate further exploration in the area a program involving the collection of detailed stream sediment data from the entire catchment area is proposed. Owing to difficulties in ready access to the area, a number of fly camps would likely prove to be the most efficient method of continuing to investigate the potential of this target. During the course of collecting stream sediments the drainage courses should be thoroughly prospected and any outcrop encountered should be sampled to provide a better picture of the various lithologies present in the area.

## **TARGET B**

### **PROJECT SUMMARY**

No exploration was completed in this area during the course of the 1998 field season.

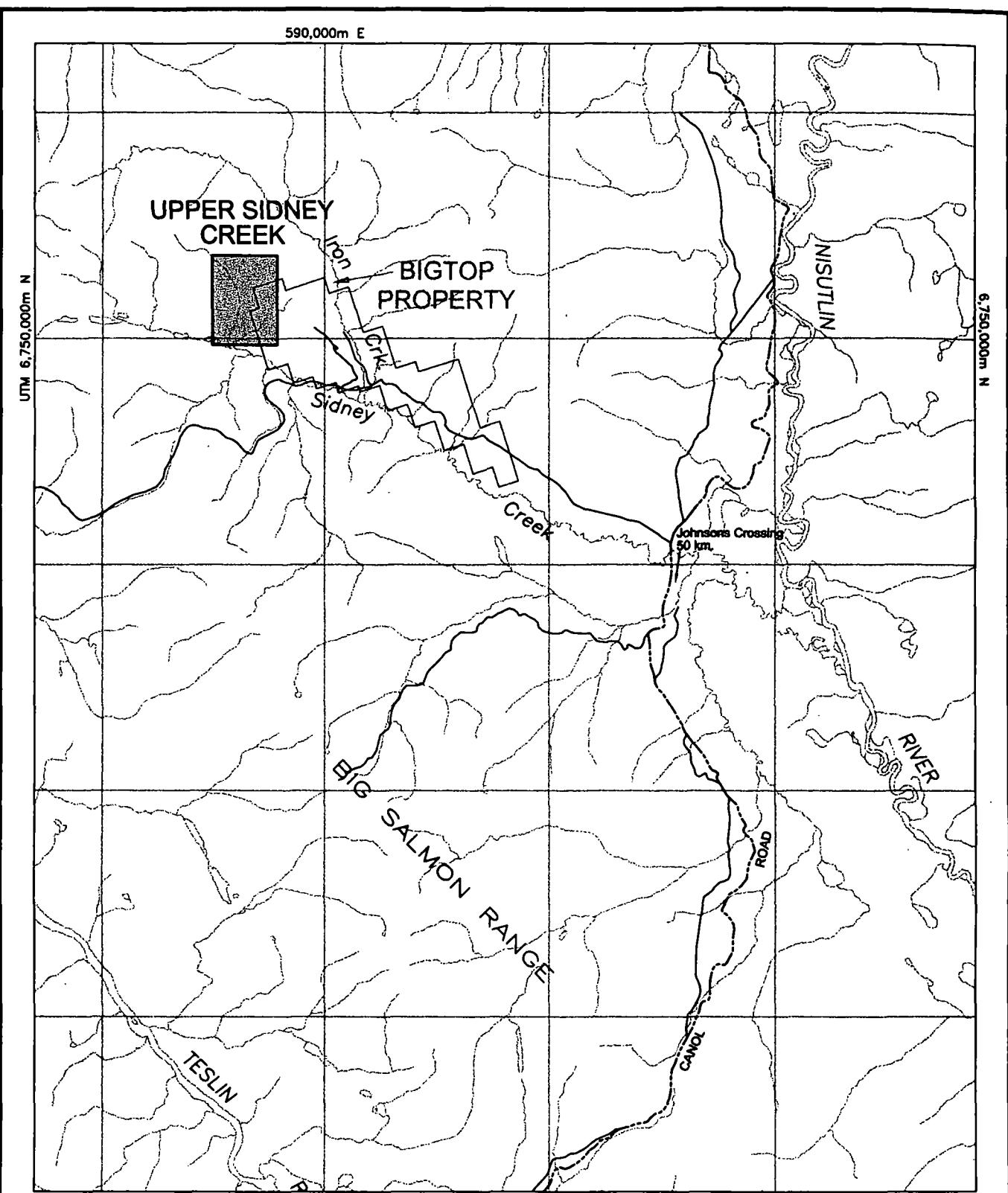
## **TARGET C – UPPER SIDNEY CREEK**

### **PROJECT SUMMARY**

Reconnaissance and prospecting of this target was hampered by extensive Quaternary cover in the area investigated in late July 1998. Prospective lithologies exposed on a WNW trending ridge situated across the northern edge of the target area showed good potential as a result of the degree and types of alteration present.

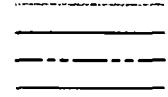
### **AREA LOCATION AND ACCESS**

The target area lies at the beginning of the upper Sidney Creek valley immediately west of the Bigtop property (see Figure 5). Located in the Whitehorse Mining District, it is shown on Claim Sheet Map 105 C 14.



#### LEGEND

- stream, creek
- road, trail
- all weather road
- claim group boundary
- target zone



N  
UTM Grid North

**CLAYTON WILSON - YMIP 98-033**

#### **UPPER SIDNEY CREEK Target Location Map**

*Steve Traynor, Geologist*

SCALE: 1 : 250,000	FILE: CW98_5	DATE: 98.12.06
NTS: 105 C	DRAWN: oXo	FIGURE 5

Access to the area is from Km. 53 on the South Canol Road, north of the Alaska Highway at Johnson's Crossing, along the Sidney Creek tote road for about 20 km. Past this point a number of old pack trails dating from the late 1920's can be used to reach the lower ends of Top and Little Beaver Creeks (local names) near their confluence with Sidney Creek. A cat road located approximately 2 km past Iron Creek can also be followed to the western end of the Bigtop ridge and from there open hiking above treeline provides relatively easy access to the headwaters of both Top and Little Beaver Creeks.

#### **PREVIOUS WORK AND EXPLORATION ACTIVITY**

The Sidney and Iron Creek valleys have historically seen intermittent placer activity since the turn of the century with considerable work focused on Iron Creek during the early 1930's. During the 1960's and early 1970's much of both creeks was held under claim or lease. Today a number of smaller outfits are still active on the lower half of Iron Creek.

Prior to the staking of the Bigtop property which began late in 1995 the area had seen only limited activity related to the staking of Quartz claims. The Bigtop property currently comprises 176 claims and is being explored for volcanogenic massive sulfide mineralization.

The rest of the Sidney Creek valley has received very little interest over the years although it represents one the most accessible parts of the south central Yukon and has seen only limited staking of Quartz claims, most of which lapsed after the first year.

#### **REGIONAL AND GENERAL GEOLOGY**

The rocks underlying the Sidney Creek valley are mainly metasedimentary and include argillites, phyllites, limestones, slates, schists and quartzites of upper Proterozoic to Mississippian age of the Nisutlin subterrane. Interbedded in the metasediments are felsic to mafic volcanic and tuffaceous horizons, and meta-plutonic units. The volcano-sedimentary sequence is part of the broad Yukon-Tanana terrane which lies northeast of the complex Teslin Suture zone (refer back to Figure 3). North and south of the Sidney Creek area large bodies of Cretaceous granite intrude the layered rocks. Conformable lenses and sills of greenstone, probably Triassic in age, occur in profusion in places in the metasediments (especially in the lower Twin Creek area) and a few narrow lamprophyre, diorite and quartz-porphry sills, probably Jurassic or younger, are present locally. Near the granitic intrusions, characteristic replacement mineralization is

developed in calcareous rocks. In the late Mesozoic, extensive thrust faulting along the Teslin Suture caused regional ductile deformation forming tectonites. A later compressional episode caused deformation and folding.

Recent mapping by Gordey and Stevens (1974) of the Canada-Yukon Geoscience program during the period from 1990-1993 is reported in two GSC Open Files, numbered 2768 and 2886.

### **DESCRIPTION AND SUMMARY OF WORK**

Work on this target was completed during the 5 day period from July 27 to July 31, 1998. Detailed prospecting of the area shown in Figure 6 between Top and Little Beaver Creek and the Sidney Creek valley and the high ground overlooking the area was carried out during this period.

Investigation revealed that most of the area is covered by a continuous blanket of glacial till and recent alluvial deposits. The only outcrop exposures occurred in the lowest reaches of Little Beaver Creek and on the WNW trending ridge that forms the high ground across the northern part of the area.

Two grab samples were taken off the upper ridge for analysis and lithological comparison, no other sampling was completed due to limited outcrop exposure. The outcrop in the lower part of Little Beaver Creek was not sampled as no significant mineralization was noted in this area. One section of the creek above this did show a significant accumulation of iron oxide in the peat bogs above the first beaver dam, but no outcrop could be found in or beyond this area.

### **ANALYSIS AND RESULTS**

Both samples collected from the area of the upper ridge showed moderate to strong alteration, particularly in the case of sample 98R351 which was heavily chloritized and silicified, with analytical results indicating strong depletion of Ca and Na (refer to Appendices B and C). This alteration is suggestive of the type that accompanies active fluid pathways often found in areas of known massive sulfide deposits and indicates the potential for VMS style mineralization in the overlying rocks.

### **CONCLUSIONS AND RECOMMENDATIONS**

Continued prospecting is warranted in this area and may be assisted with the use of ground geophysics to locate areas of highest priority. Electromagnetic and magnetic geophysical surveys are the primary tools used in the exploration for this type of target model and may be useful in locating higher

concentrations of sulfide mineralization within or adjacent to the argillite horizons detected during this reconnaissance work.

#### **TARGET D, E and F**

#### **PROJECT SUMMARIES**

Due to health considerations, the projector was unable to complete any exploration in these areas during the 1998 field season. Work on Target E which is considered a highly prospective area was actually completed by Wade Carrell, a part-time prospecting partner of Mr. Wilson, the result of which are reported in separate report titled 'Report of 1998 Filed Activities Funded Under YMIP Grant #98-034'.

## **REFERENCES**

- DIAND, 1993: Yukon Minfile, Exploration and Geological Services Division, Whitehorse, Indian and Northern Affairs, Canada.
- Geological Survey of Canada, 1961: Airborne Magnetic Survey (105C 11, 13 and 14), southern Yukon Territory, Geological Survey of Canada Geophysics Paper 1338, 1344 and 1345.
- Geological Survey of Canada, 1985: Stream Sediment and Water Geochemical Survey (105C), southern Yukon Territory, Geological Survey of Canada Open File 1217.
- Gorday, S.P. and Stevens, R. A., 1994: Preliminary interpretation of bedrock geology of the Teslin area (105C), southern Yukon; Geological Survey of Canada Open File 2886.
- Mulligan, R., 1963: Geology of Teslin map area, Yukon Territory (105C); Geological Survey of Canada, Memoir 326.
- Traynor, S., 1997: Report of the 1997 Field Activities Funded under YMIP Grant #97-023.

**APPENDIX A**

**SUMMARY OF PROSPECTING ACTIVITIES  
AND  
FIELD NOTES**

SUMMARY OF 1998 FIELD ACTIVITIES – CLAYTON WILSON, YMIP 98-033

**RED RIDGE TARGET AREA**

- June 25, 1998    -Mobilization to Boswell River Camp (CRW & WSC in A.M. and SDT in P.M.).  
                  -Orientation of access trail and reconnaissance of creek crossings (CRW and WSC).  
                  -WSC, CRW (and SDT).
- June 26, 1998    -Prospecting and grab sampling of RGS multielement geochemical target on southwest face of Mount Murphy.  
                  -CRW, WSC and SDT.
- June 27, 1998    -Traverse and prospect ridge ('Red Ridge') opposite yesterdays target to the south.  
                  -Detailed prospecting and grab sampling of extensively gossanous scree slope on north facing slope of main body of ridge.  
                  -CRW, WSC and SDT.
- June 28, 1998    -Traverse to prospect gossanous outcrop on lower part of first left limit tributary of Red Mountain Creek ('Red Ridge' Creek).  
                  -Sampled porphyritic intrusive sill for comparison with Red Ridge intrusions.  
                  -CRW, WSC and SDT.
- June 29, 1998    -Prospected ridge northeast of Boswell River and Red Mountain Creek confluence (WSC and SDT).  
                  -Prospected and panned Boswell River east of Red Mountain Creek (CRW).  
                  -CRW, WSC and SDT.
- June 30, 1998    -Prospected lower end of 'Red Ridge Creek' (CRW).  
                  -Prospected Boswell River valley west of Red Mountain Creek (SDT).  
                  -Prospected open ground on lower north face of Red Mountain (WSC).  
                  -CRW, WSC and SDT.
- July 1, 1998      -Rain day and resupply flight in mid morning.  
                  -CRW, WSC and SDT.
- July 2, 1998      -Planned to prospect headwaters of Red Mountain Creek (Target B).  
                  -Wrecked one of the 3 wheelers navigating around Red Mountain (WSC and SDT).  
                  -CRW, WSC and SDT.
- July 3, 1998      -Returned to Red Mountain and recovered 3 wheeler.  
                  -CRW and SDT.
- July 4, 1998      -Prospected and sampled open ground on north side of Boswell River.  
                  -Steady rain by the later part of afternoon, returned to camp to breakdown.  
                  -CRW, WSC and SDT.
- July 5, 1998      -Packed up and closed down camp.  
                  -Returned to Whitehorse via two 206 flights by mid afternoon.  
                  -CRW, WSC and SDT.

**UPPER SIDNEY CREEK TARGET AREA**

- July 27, 1998    -Reconnaissance of historic hiking trail in Sidney Creek valley.  
                  -Prospect benches on north side of Sidney Creek up to Top Creek.  
                  -CRW, SDT and WSC.

**SUMMARY OF 1998 FIELD ACTIVITIES – CLAYTON WILSON, YMIP 98-033**

**UPPER SIDNEY CREEK TARGET AREA – Continued**

- July 28, 1998      -Prospected down Top Creek from Bigtop ridge to the confluence with Sidney Creek.  
                      -CRW, SDT and WSC.
- July 29, 1998      -Prospected upper area between Top Creek and Little Beaver Creek.  
                      -CRW, SDT and WSC.
- July 30, 1998      -Prospected lower and middle sections of Little Beaver Creek (1<sup>st</sup> creek past Top Creek).  
                      -CRW, SDT and WSC.
- July 31, 1998      -Prospected ridge west of Bigtop property and completed limited lithogeochemical sampling of the area.  
                      -CRW, SDT and WSC.

No. Boswell River Recon.

Date May 25 Page

3 P.M.

got 2nd load food etc  
for flight into Boswell  
area. Landed at the  
air strip 9:00

set up camp fueled  
up truck

checked access to  
the left bank of red  
scorpion creek, south  
west face of mountain  
Supply.

flipped in an  
access trail returned  
to camp.

No. Boswell River Recon.

Date May 26 Page

5 P.M.

flipped into the creek  
where red cypresses had  
been sighted. During and  
over several in the spring  
got to the edge at  
2:30 P.M. would have  
crossed the red cypress  
zone I progressed on  
over first south of them  
on a ~~slope~~ scree slope.  
This area contained well  
of a few no volcanic  
blended surface.

Light talus cones with  
black traps  
apple blossom to R 98203  
the sample agrees to  
certain types in prey  
these slopes. Returned to  
camp at 9:30 P.M.

Pkt cloudy tail

No. ....  
Date. June 27. .... Page .....

piked back into the  
same area as, yesterday,  
skipping the outcrop along  
the opposite valley.  
There is a lot of red  
gypsum along this slope.

The gypsum came from  
mass staining  
- there was an outcrop of  
gypsum just around the  
line

The gypsum is good contains  
about 2-5% pyrite but  
no mineralization was found  
interbedded was a purple  
clay and several quartz  
bands.

The rest was fine sand  
and gypsum shale.

No. .... Red Ridge Creek .....  
Date. June 28. .... Page .....

No.

Lyon's Luret Russell  
June 29 Page five

prospected few miles  
upstream off Russell River  
above the confluence of  
the mountain creek.

most rock in the creek  
bed is large irregular  
granite boulders this is  
a fast moving creek so  
only found in the  
less consolidated if  
very fine, and hard  
to identify even with  
a pick

unfortunately our  
concentrator did not  
work better than some  
fine gold in a few  
pans, 6 - 15 colors  
per.

Sunny Hot

No.

Lyon's Real Mountain creek  
June 30 Page

traversed up bed upstream  
creek from Russell miles  
up stream checking the  
area that was impossible  
on the 28 (cut off by a  
canyon).

very little surface is  
exposed above this canyon  
as I cut into the  
glacial till.

Some sand is exposed  
with very fine gravel  
cross bedding 1/8 - 1/4"

This area is very dry  
and difficult to work

Cloudy Rain

No.

Bassett Camp

Date

July 1

Page

No.

July 2

Page

Rain all day.

Axel Carlson finally came  
in to camp with fuel and  
food supply on his  
second attempt.

rain finally stopped  
at around 2:30 so I had  
the day of leisure. The  
next few days were

transferred by 3 wheelers

up past red mountain  
to check up on oil tank  
on the head waters of  
red mountain creek

Made out steer rolled  
a three wheeler up the  
side of the mountain  
~~too~~ great people road  
medium after cuts  
scraps ~~soy~~, trashed  
and possibly broken  
rocks returned to camp.

Sunny

No.

Ogil Mountain

Date.

July 3

Page

Rode the jeep  
downhill the  
whole way about  
a 3500' descent.

Found enough cable  
at red margin camp  
to secure the jeep

Returned to camp 5:30

Lonely flat

No.

Date.

July 4

Page

Prospected the area  
on the north side of  
Barry's River.  
The outcrops along  
this area consist of  
thin units interbedded  
with grey-green shale  
which is stained yellow  
or rusty red and  
traces of sand or silt.  
This material is  
fairly loose and soft  
which can be used as  
the primary material for  
gravel and chippings.

Rain in the afternoon.

Returned to camp.

No.

Roswell river

Date

Aug 5

Page

closed down the  
camp - cleaned up  
- 7:30 p.m. picked up  
- the pack two trips  
to remove all the  
supplies.  
arrived in Whiteley  
cleaned up and planned  
for next trip.

JOB..... Bosque River Recon  
DATE... JUNE 25/98..... PAGE ... 01

MORIGIZED INTO BOSEWELL  
RIVER CAMP

GRAY & I FOUND THE  
MORSE TRAIL INTO THE  
LEFT LIMIT OF RED  
MOUNTAIN CREEK.

RETURNED TO CAMP AT  
7: PM

GOT SET UP FOR STEVE'S  
ARRIVAL AT 9: PM

PARTY CHIEF

WEATHER..... BROKEN CLOUD - WARM



JOB.....BOSWELL RIVER RECON  
DATE....JUNE 26/98 PAGE ...02

PROSPECTED THE SOUTH  
WEST FACE OF MOUNT  
MURPHY.

I TOOK SAMPLE #98R  
103 FROM OUTCROPS NEAR THE  
TOP OF A GOSSEL ON THE  
WEST SIDE OF THE FIRST  
PUP ON MOUNT MURPHY.

SAMPLE IS A VOLCANIC  
SEDIMENTARY MIX WITH 5%  
SURFACE MINERALIZATION.

RETURNED TO CAMP BY  
9:PM



PARTY CHIEF

C. Wilson

WEATHER

BROKEN Cloud  
WARM

JOB.....BOSWELL RIVER AREA  
DATE....JUNE 27/98 PAGE ...03

PROSPECTED RED RIDGE  
SOUTH WEST OF MOUNT  
MURPHY.

I TOOK SAMPLE #98R 104  
FROM AN OUT CROP OF  
DRUSY AGRAVITE BELOW A  
FELSIC UNIT STRIKE. SAMPLED.

STRIKE IS 115° & DIPS  
61° SOUTH

TOOK SAMPLE #98R 105  
50 METERS DOWN SLOPE  
& 100 METERS NORTH WEST  
OF LAST SAMPLE.

SAMPLE IS DRUSY AGRAVITE

SAMPLE #98R 106 TAKEN  
FROM FLOAT AT TOP OF SLOPE

PARTY CHIEF

C. Wilson

WEATHER

BROKEN Cloud - WARM



JOB.....BOSWELL RIVER REGION  
DATE...JUNE 28.....PAGE ...04

STEVE, CLAYTON & I PROSPECTED THE LOWER CANYON ON THE LEFT LIMIT OF RED MOUNTAIN CREEK.

THE UPPER 20 METERS OR OUTCROP IS A MIX OF FELSIC VOLCANICS & SEDIMENTS WITH ABOUT 2% SCHISTOS.

THE STRIKE & DIP ARE THE SAME AS RED RIDGE.

115° STRIKE & 61° DIP SOUTH.

THE REST OF THE CANYON IS MICACIOUS SCHIST WITH QUARTZ BLEBS & VEINLETS.

THE SCHIST UNIT IS OVERLAIN BY A 30 METER THICK PORPHORITIC ANDASITE.

PARTY CHIEF.....  
WEATHER...BROKEN CLOUD - HOT



C. WILSON

JOB.....BOSWELL RIVER AREA  
DATE...JUNE 29/98 PAGE ...05

I PROSPECTED THE RIDGE MOUTH OF THE CONFLUENCE OF RED MTN. CREEK WITH BOSWELL RIVER.

THE RIDGE IS CUT BY A SMALL CREEK THAT RUNS SOUTH TO JOIN BOSWELL RIVER.

THE UPPER END OF THIS CREEK FLOWS OFF GRANITE.

THE GRANITE IS BRODDED WITH PORPHORITIC ANDASITE WITH LARGE QUARTZ EYES. THIS UNIT STRIKES 340° & DIPS 29° SOUTH.

I PROSPECTED DOWN STREAM.

THE ANDASITE GRADES INTO A FINE GRAINED TUFF 100 METERS BEYOND THE GRANITE CONTACT.

PARTY CHIEF.....  
WEATHER...SUNNY - WARM



C. WILSON

JOB..... BOSWELL RIVER AREA  
DATE..... JUNE 29/98..... PAGE..... 06

THE TUFF UNIT CONTINUES  
DOWN SLOPE FOR 300 METERS.

AT THIS POINT THE CANYON  
WIDENS AS IT ENTERS BOSWELL  
RIVER VALLEY.

FLOAT ON THE GRASSY SLOPES  
CONTINUES TO BE SOLELY  
ANGULAR PIECES OF TUFF.

I PROSPECTED NORTH OF THE  
ROAD FROM RED MTN CREEK  
TO THE BOSWELL AIR STRIP.

I FOUND SEVERAL OUTCROPS  
OF MICAUS SCHIST WITH QUARTZ  
BLEBS & VEINETS.

A PORPHORITIC ANDASITE DIKE  
10 METERS WIDE SEPARATES THE  
MICAUS SCHIST FROM A MORE  
HEMATITE RICH SCHIST, ONE  
KILOMETER EAST OF THE AIR STRIP.

PARTY CHIEF..... C. WILSON  
WEATHER..... SUNNY - HOT



JOB..... BOSWELL RIVER REGION  
DATE..... JUNE 30/98..... PAGE..... 07

I PROSPECTED THE LOWER  
NORTH FACE OF RED MOUNT  
AIN, JUST SOUTH OF  
BOSWELL RIVER & WEST OF  
RED MTN. CREEK.

THERE IS AN EXPOSURE OF  
GREENSTONE THREE METERS  
WIDE JUST BELOW THE CREST  
OF THE RIDGE. 1380 M. ELEVATION

THE GREENSTONE IS BEDDED  
WITH PORPHORITIC ANDASITE TO  
THE NORTH.

THE PORPHORITIC ANDASITE GRADES  
INTO A FINE GRAINED TUFF  
WHICH HAS SMALL HORNBLEND  
CRYSTALS AS WELL AS QUARTZ  
REYES & FELDSPAR CRYSTALS.  
EXPOSED INTERMITTENTLY DOWN  
TO 1020 M. ELEVATION

PARTY CHIEF..... C. WILSON  
WEATHER..... SUNNY - HOT



JOB... BOSWELL RIVER REGION

DATE... JUNE 30/98 PAGE ... 08

I CONTINUED PROSPECTING  
DOWN TO 980 METERS ELEVATION  
WHERE I LOST OUTCROP UNDER  
THE DIRT OF BOSWELL VALLEY.

THE LAST OUTCROP WAS TUFF.  
HOWEVER, I WAS FINDING A LOT  
OF ANGULAR FLOAT, THAT IS A  
MIX OF SECIOUS GRAPHITIC SHALE  
& QUARTZ.

ALL OF THE ROCK UNITS HAVE  
THE SAME STRIKE OF  $280^{\circ}$   
& DIP  $30^{\circ}$  SOUTH

RETURNED TO CAMP BY  
5:20 PM

RAIN STRUCK 5:30; Wow  
IT'S WFT.

PARTY CHIEF

C. WILSON

WEATHER... SUNNY - MORNING

RAIN - EVENING



JOB... BOSWELL RIVER REGION

DATE... JULY 1/98 PAGE ... 09

RAINED ALL DAY.

PHONE CAME IN AT

11: AM TO RESUPPLY.

HAPPY CANADA  
DAY!

PARTY CHIEF

C. WILSON

WEATHER

RAIN



JOB... BOSWELL RIVER REGION  
DATE... JULY 2 1981 PAGE ... 10

I GOT WRECKED, ROLLING  
THE THREE WHEEL A.T.V.  
OFF THE EAST SIDE OF  
RED MOUNTAIN.

My CHUTE IS SHOT.



PARTY CHIEF...

WEATHER...

C. Wilson

JOB... BOSWELL RIVER  
DATE... JULY 3 1981 PAGE ... 11

MADE RECAPTURED IN  
CAMP. DUE TO BRUISED  
EGO, ETC.

PARTY CHIEF...

WEATHER...

C. Wilson



JOB..... Boswell River Area  
DATE... July 4 1988 PAGE ... 12

Clayton, Steve & I  
prospected the ridge north  
of Boswell River & Red  
Mtn. Creek  
Steve took samples of  
the schist units for litho-  
geochem.

Returned to Camp 4:30  
PM - RAINING

PARTY CHIEF..... C. Wilson  
WEATHER..... Cloudy - RAIN



JOB..... Boswell River Region  
DATE... July 5 1988 PAGE ... 13

BROKE DOWN CAMP.  
X RETURNED TO TOWN.

PARTY CHIEF..... C. Wilson  
WEATHER..... Sunny - CLEAN



JOB

## Boswell River Recor.

DATE

June 26/98 PAGE

$\textcircled{X}^1$   $60^{\circ}59' \text{ } 84\text{N}$   
 $133^{\circ}36' \text{ } 84\text{W}$  5400ft.

Grossaceous Scree slope  
 containing a variety of gneisses,  
 tuffaceous (?) Volcanics and black  
 siliceous glassy rock that appears  
 to carry abundant disseminated  
 sulfides and sphalerite.

Took grab samples

98R061 & 98R062

Noted porphyritic dykes  
 crosscutting Volcano-sedimentary  
 package. Granitic to  
 granodioritic in composition



wade

PARTY CHIEF

LEADER

JOB

June 27, 1998 PAGE

Flashed up middle ridge.  
 - Contact with graphitic shale  
 from ridge crest south.

Mixed felsics and shales  
 gneisses north cross down  
 Scree slope.

Took samples 98R063  
 and 98R064 of felsic material

98R064 is more siliceous and  
 contains more sulfides than 98R063.

$60^{\circ}58' \text{ } 94\text{N}$

$133^{\circ}37' \text{ } 00\text{W}$

5353 feet.

PARTY CHIEF

WEATHER

115/163/S



JOB.....

9m

Wade

DATE.....

PAGE .....

- Sample 98R065, highly gossanous. Very silicified q. angular float block.

Near source as other smaller pieces of sand nearby. Silicified argillite/felsic mix with ~~sand~~ abundant sulfides.

- Float Sample 98R066 - Poreciated graphitic shale and qtz vein with enclosed breccia pieces. Qtz has altered shale along chit margin to green acicular mineral, possibly actinolite.



PARTY CHIEF.....

WEATHER.....

JOB.....

June 28 /98

PAGE .....

- Traverse to check gossanous outc on lower Red Ridge creek below float.

Country rock is a quartz biotite schist with approx. same orientation as Red Ridge area. Numerous intrusive sills of more mafic material noted. Sampled large X-cutting dike that is a fine grained tan colored matrix ~~filled~~ with feldspar phenocrysts and gt abundant qtz ~~gt~~ eyes.

PARTY CHIEF.....

WEATHER.....

Sample 98R067



JOB.....

DATE June 29 /98 PAGE .....

Prospected with W. Carroll in area of old AG claims of Boswell River Mines. Attempted to locate Phyllite / tuff contact. Located tuff that was buff gray with feldspar phenocrysts. Failed to identify dark green tuff previously mapped, maybe further west. Minor gossans with limited sulfide content were noted.

**W**  
wade

PARTY CHIEF.....

WEATHER.....

JOB.....

DATE June 30 /98 PAGE .....

Worked Boswell River Valley downstream from confluence with Red Mountain Creek on either side of road crossing. Limited exposure as valley widens at this point, was unable to identify any significant contact relationships - Abundance of granitic cobbles and variety of previously identified rock types

PARTY CHIEF.....

WEATHER.....

**W**  
wade

JOB.....

DATE....July 1, 98 PAGE .....

Rain Day (also Canada day) Steady rain till 3 or 4, slowed down enough to get flight in with fuel and more supplies late in morning.

Cleared by dinner time.

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

DATE....July 2, 98 PAGE .....

Took truck and 3wheelers to camp area on Red Mountain and then planned to take 3wheelers to anomalous area at head of ~~Road~~ Red Mountain Creek. Hadn't gone more than 1 km before Wade and I hit rock on badly sloped section of road and tossed the 3wheelers and ourselves off the mountain. Wade ~~safely~~ suffered bruised ribs and multiple contusions and minor concussions. My damage limited to broken right leg.

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

DATE... July 3 198..... PAGE .....

Wade stayed in camp recovering. Clayton, myself and Morgan returned to Red Mountain in the truck to recover 3 wheeler.

Scavenged roll of drill casting recovery cable from old camp and finally dragged the old wheel back up to the road. Damage appeared extensive, but was limited to round my off of handle bars and front and rear fenders. Returned to camp and ~~wade~~ stripped damaged parts off bike to take back to town for repair.

PARTY CHIEF.....

WEATHER.....

JOB.....

DATE... July 4 198..... PAGE .....

Prospected open ground on north side of Boswell River. Predominately gray biotite (sericite?) schists with minor ferrigenous clastic rocks. At times dark green tuffaceous(?) clastic unit interbedded. Sampled 100m off section that could possibly contain piedmontite.

Grab samples 98068, 98069 and 98070 taken in this section. Quit at 4pm when rain started.

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

DATE.....

Little Beaver Creek Recon

July 30 1988

PAGE .....

-Planned (81) prospected and work area of lower creek just above 1st canyon.

Entered canyon with  $\frac{1}{2}$  km at confluence. Wide interbedded to major sequence predominates up to above canyon. It flattens out for 3 or 4 km and is covered by fairly continuous alluvial cover.

Naked creek for 1.5 km at about 1 km above the waterfall there was a new Beaver Dam.

Extensive iron staining in ponds.

NW  
wade

PARTY CHIEF.....

WEATHER.....

JOB.....

DATE.....

July 31 1988

PAGE .....

Prospected main ridge west of Big Top property

98R 350 (float, new source)

Well exposed shales and angularities. Sample appears bleached (?) with abundant sulfides (pyr., chalco. and sphalerite?).

Abundant sericitic noted at times.

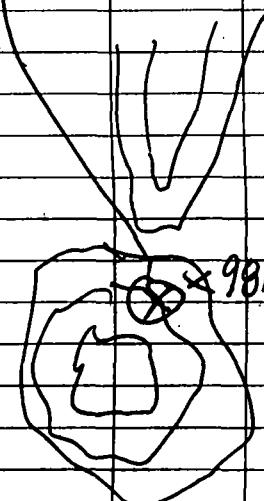
NW  
wade

PARTY CHIEF.....

WEATHER.....

JOB.....  
DATE..... PAGE .....

306/28°S



\*98R350



PARTY CHIEF.....  
WEATHER.....

JOB.....  
DATE..... PAGE .....

98R3511

Chloritically altered  
Sed. silicified argillite,  
Aluminous <sup>5%</sup> felsic. Sulf. tet. Also  
with sericitic.

PARTY CHIEF.....  
WEATHER.....



**APPENDIX B**

**ROCK SAMPLE REPORT**

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	ANALYTICAL HIGHLIGHTS
98R061	Area A	Shaly, silicified argillite with 2 – 3 % sulfides.	
98R062	Area A	Darker, biotite rich argillite with lighter felsic (?) bands. Disseminated sulfides throughout.	Sampled contained elevated levels of Pb Zn and Ba.
98R063	Area A	Well gossanized quartz >> sericite schist with disseminated sulfides and quartz eyes (?).	
98R064	Area A	Felsic containing fragments of argillite and 3% sulfides. Shows a somewhat mottled texture.	
98R065	Area A	Thinly laminated felsic, possibly a quartzite/argillite mix. Contains disseminated sulfides throughout.	Contains Ba values in excess of normal background values.
98R066	Area A	Highly altered, brecciated graphitic shale with greenish alteration product (epidote?) in chill margins of quartz veins.	
98R067	Area A	Fine grained apalite (?) dike material. Tan colored with quartz phenocrysts. Slightly gossanous.	
98R068	Area A	Quartz mica schist showing deep reddish stain that was originally thought to be piedmontite.	
98R069	Area A	Quartz mica schist showing deep reddish stain that was originally thought to be piedmontite.	
98R070	Area A	Quartz mica schist showing deep reddish stain that was originally thought to be piedmontite.	
98R103	Area A	Mottled felsic with darker biotite rich bands carrying 3% sulfides.	
98R104	Area A	Very similar to 98R065.	Contains Ba values in excess of normal background values.
98R105	Area A	Massive, black very silicified argillite.	Contains Ba values in excess of normal background values.
98R106	Area A	Dark black, highly siliceous volcanic (?) containing abundant lighter and sulfide fragments. Near source scree.	Contains Ba values in excess of normal background values. Au value of 43 ppb
98R203	Area A	Felsic volcanic showing thin sulfide laminations and with visible galena along fracture surfaces.	Moderately elevated Pb values.
98R350	Area C	Well gossanized shaly argillite. Sample is brecciated with abundant sulfides and with abundant sericite in the area.	Moderately elevated Cu values.
98R351	Area C	Chloritically altered and silicified argillite with 5% disseminated sulfides and some sericite.	Shows strong Ca and Na depletion.

**APPENDIX C**

**CERTIFICATES  
OF  
ANALYSIS**

ITS

Intertek Testing Services  
Bondar Clegg

TANANA EXPLORATION  
MR. STEVE TRAYNOR  
214 ALSEK RD  
WHITEHORSE YT Y1A 3T5

+

+

+

+

REPORT: V98-01142.0 ( COMPLETE )

REFERENCE:

CLIENT: TANANA EXPLORATION  
PROJECT: RED RIDGE

SUBMITTED BY: S. TRAYNOR

DATE RECEIVED: 10-JUL-98 DATE PRINTED: 29-JUL-98

DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD	DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
980723 1 Al	Gold	15	5 PPB	Fire Assay of 30g	30g Fire Assay - AA	980723 37	Silica (SiO <sub>2</sub> )	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 2 Ag	Silver	15	0.5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 38	Titanium (TiO <sub>2</sub> )	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 3 Cu	Copper	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 39	Al <sub>2</sub> O <sub>3</sub>	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 4 Pb	Lead	15	2 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 40	Fe <sub>2</sub> O <sub>3</sub> * Total Iron (Fe <sub>2</sub> O <sub>3</sub> )	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 5 Zn	Zinc	15	2 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 41	MnO	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 6 Mo	Molybdenum	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 42	MgO	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 7 Ni	Nickel	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 43	CaO	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 8 Co	Cobalt	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 44	Na <sub>2</sub> O	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 9 Cd	Cadmium	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 45	K <sub>2</sub> O	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 10 Bi	Bismuth	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 46	P <sub>2</sub> O <sub>5</sub>	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 11 As	Arsenic	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 47	LOI	2	-2.00 PCT	Ignition 1000 Deg.	GRAVIMETRIC
980723 12 Sb	Antimony	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 48	Total Whole Rock Total	15	0.01 PCT		
980723 13 Fe Tot	Total Iron	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 49	Cr <sub>2</sub> O <sub>3</sub>	2	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
980723 14 Mn	Manganese	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA	980723 50	Ba	3	10 PPM	Pressed Pellet	XRAY FLUORESCENCE
980723 15 Te	Tellurium	15	25 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 16 Ba	Barium	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 17 Cr	Chrome	15	2 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 18 V	Vanadium	15	2 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 19 Sn	Tin	15	20 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 20 W	Tungsten	15	20 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 21 Li	Lithium	15	2 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 22 Ga	Gallium	15	10 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 23 La	Lanthanum	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 24 Sc	Scandium	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 25 Ta	Tantalum	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 26 Ti	Titanium	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 27 Al	Aluminum	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 28 Mg	Magnesium	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 29 Ca	Calcium	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 30 Ca	Calcium	1	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	ATOMIC ABSORPTION						
980723 31 Na	Sodium	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 32 K	Potassium	15	0.01 PCT	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 33 Nb	Niobium	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 34 Sr	Strontium	15	1 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 35 Y	Yttrium	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
980723 36 Zr	Zirconium	15	5 PPM	HF-HNO <sub>3</sub> -HClO <sub>4</sub> -HCl	INDUC. COUP. PLASMA						
*****											
This report must not be reproduced except in full. The data presented in this report is specific to those samples identified under "Sample Number" and is applicable only to the samples as received expressed on a dry basis unless otherwise indicated											
*****											
REPORT COPIES TO: MR. STEVE TRAYNOR											
INVOICE TO: MR. STEVE TRAYNOR											
*****											

**ITS**

# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01142.0 ( COMPLETE )

PROJECT: RED RIDGE

DATE PRINTED: 29-JUL-98

PAGE

1A( 1 / 6 )

DATE RECEIVED: 10-JUL-98

SAMPLE NUMBER	ELEMENT	Al <sub>2</sub> O <sub>3</sub>	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Tot	Mn	Te	Ba	Cr	V	Sn	W	Li	Ga	La	Sc	Ta	Ti	Al	Mg	Ca	Ca	Na	K	Nb	Sr	Y	Zr	SiO <sub>2</sub>	TiO <sub>2</sub>
	UNITS	PPB	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PCT	PC															
98R061		<5	<5	75	10	94	14	52	12	3	<5	7	<5	3.41	376	<25	508	283	135	<20	<20	47	13	18	10	<5	0.24	5.73	1.48	0.72	0.53	1.89	14	51	10	28				
98R062		<5	1.1	64	197	346	4	56	18	14	<5	6	<5	4.49	379	<25	1100	153	122	<20	<20	57	16	37	15	<5	0.41	8.17	2.47	2.49	1.27	2.44	17	144	16	46				
98R063		<5	<5	32	8	27	14	16	8	<1	<5	6	<5	2.54	102	<25	610	317	165	<20	<20	28	10	23	11	<5	0.22	5.81	1.21	0.36	2.67	1.50	16	108	8	70	70.11	0.6		
98R064		<5	<5	59	11	54	3	46	15	<1	<5	<5	<5	2.70	149	<25	485	310	132	<20	<20	20	<10	18	9	<5	0.21	4.45	1.06	0.84	1.96	1.00	13	173	11	54				
98R065		9	<5	36	27	76	19	25	13	<1	<5	56	<5	3.04	356	<25	1612	286	242	<20	<20	35	<10	12	20	<5	0.28	6.59	1.54	2.77	2.11	1.23	19	319	28	61				
98R066		<5	<5	3	<2	76	2	9	<1	<1	<5	5	<5	1.64	1451	<25	73	31	84	<20	<20	55	<10	15	<5	<5	0.07	2.23	6.22	>10.00	22.12	0.04	0.15	7	89	16	23			
98R067		<5	<5	6	16	16	2	1	<1	<1	<5	11	<5	0.34	210	<25	414	114	13	<20	<20	22	<10	21	<5	<5	0.08	5.45	0.10	0.94	1.02	2.60	15	64	6	34				
98R068		<5	<5	23	6	57	3	12	8	<1	<5	<5	<5	3.27	380	<25	711	295	96	<20	<20	25	14	16	13	<5	0.35	7.10	1.25	0.09	0.77	2.42	14	32	6	14				
98R069		<5	<5	20	5	8	20	6	3	<1	<5	<5	<5	0.91	144	<25	142	462	16	<20	<20	18	<10	5	<5	<5	0.08	2.19	0.08	0.02	0.48	0.59	<5	12	<5	6				
98R070		7	<5	23	6	34	3	15	7	<1	<5	<5	<5	2.30	364	<25	364	317	55	<20	<20	24	<10	12	8	<5	0.28	4.94	0.64	0.21	1.42	1.43	11	37	5	8				
98R103		9	0.6	55	78	48	11	9	6	<1	<5	15	<5	2.62	523	<25	746	270	105	<20	<20	31	11	21	10	<5	0.27	6.05	1.58	1.10	0.80	2.47	15	116	12	33	69.19	0.5:		
98R104		15	<5	32	14	203	20	49	7	2	<5	9	<5	2.37	676	<25	1167	288	410	<20	<20	24	<10	28	8	<5	0.23	5.85	2.49	4.27	1.35	1.55	39	296	28	86				
98R105		7	<5	49	11	86	13	56	12	<1	<5	15	<5	2.29	249	<25	1898	215	485	<20	<20	26	12	33	14	<5	0.25	7.05	1.08	2.41	1.77	1.99	42	328	22	109				
98R106		43	0.6	48	10	44	10	57	11	<1	<5	25	<5	2.97	402	<25	1439	283	368	<20	<20	35	11	30	14	<5	0.32	7.57	1.47	2.73	1.79	2.19	35	252	31	108				
98R203		6	1.0	44	147	53	17	27	9	<1	<5	<5	<5	1.73	268	<25	244	423	55	<20	<20	7	<10	14	<5	<5	0.16	1.97	0.87	2.13	0.30	0.75	9	57	9	20				

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01142.0 ( COMPLETE )

PROJECT: RED RIDGE

DATE RECEIVED: 10-JUL-98 DATE PRINTED: 29-JUL-98 PAGE 1B( 2 / 6 )

SAMPLE NUMBER	ELEMENT	Al2O3	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM

98R061

98R062

98R063

12.08 4.38 0.02 2.07 0.58 3.97 1.95 0.22 3.52 99.61 0.11

98R064

98R065

98R066

98R067

98R068

780

98R069

149

98R070

405

98R103

12.43 4.20 0.07 2.74 1.60 1.18 5.53 0.10 2.64 100.28 0.07

98R104

98R105

98R106

98R203



# Intertek Testing Services

## Bondar Clegg

# Geochemical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V98-01142-9 ( COMPLETE )

PROJECT: RED RIDGE

DATE RECEIVED: 10-JUL-98

DATE PRINTED: 29-JUL-9

PAGE TWO 3/6



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01142.0 ( COMPLETE )

PROJECT: RED RIDGE

DATE RECEIVED: 10-JUL-98 DATE PRINTED: 29-JUL-98 PAGE 2B( 4 / 6 )

STANDARD NAME	ELEMENT	Al2O3	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	

ANALYTICAL BLANK

Number of Analyses

Mean Value

Standard Deviation

Accepted Value &lt;.001 &lt;.0001 &lt;.01 &lt;.01 &lt;.01 &lt;.01 &lt;.01 &lt;.001 &lt;.0001 &lt;.001 .005

Gannet Ref.Material

Number of Analyses

Mean Value

Standard Deviation

Accepted Value

BCC GEOCHEM STD 5

Number of Analyses

Mean Value

Standard Deviation

Accepted Value

CANMET SO-2 REF STD

Number of Analyses

Mean Value

Standard Deviation

Accepted Value 14.75 7.69 0.09 0.87 2.64 2.48 2.85 0.67 14.26 - 0.001 1000

1082

1

1082

CANMET STREAM-SED

Number of Analyses

Mean Value

Standard Deviation

Accepted Value 15.69 7.35 0.13 3.05 4.15 1.71 2.12 0.32 10.33 89.33 0.02 -

1

1

1

1

Granite - Cert.Ref.M

Number of Analyses

Mean Value

Standard Deviation

Accepted Value 15.75 7.25 0.14 3.11 4.00 1.72 2.12 0.32 10.30 - 0.01 -

1432

1

1432

1400

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01142.0 ( COMPLETE )

PROJECT: RED RIDGE

DATE RECEIVED: 10-JUL-98

DATE PRINTED: 29-JUL-98

PAGE 3A( 5 / 6)

SAMPLE NUMBER	ELEMENT	Al <sub>2</sub> O <sub>3</sub>	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Tot	Mn	Te	Ba	Cr	V	Sn	W	Li	Ga	La	Sc	Ta	Ti	Al	Mg	Ca	Ca	Na	K	Nb	Sr	Y	Zr	SiO <sub>2</sub>	TiO <sub>2</sub>
	UNITS	PPB	PPM	PPM	PPM	PCT	PPM	PPM	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PCT	PCT																						
98R063	<5 <.5	32	8	27	14	16	8	<1	<5	6	<5	2.54	102	<25	610	317	165	<20	<20	28	10	23	11	<5	0.22	5.81	1.21	0.36	2.67	1.50	16	108	8	70	70.11	0.60				
Duplicate	<5 <.5	36	10	27	14	20	9	<1	<5	8	<5	2.88	114	<25	673	371	182	<20	<20	29	10	29	12	<5	0.24	6.54	1.33	0.42	2.95	1.68	17	122	10	76						
98R066	<5 <.5	3	<2	76	2	9	<1	<1	<5	5	<5	1.64	1451	<25	73	31	84	<20	<20	55	<10	15	<5	<5	0.07	2.23	6.22	>10.00	22.12	0.04	0.15	7	89	16	23		21.86			
Duplicate																																								
98R070	7 <.5	23	6	34	3	15	7	<1	<5	<5	<5	2.30	364	<25	364	317	55	<20	<20	24	<10	12	8	<5	0.28	4.94	0.64	0.21	1.42	1.43	11	37	5	8						
Duplicate																																								

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01142.0 ( COMPLETE )

PROJECT: RED RIDGE

DATE RECEIVED: 10-JUL-98 DATE PRINTED: 29-JUL-98 PAGE 3B( 6/ 6)

SAMPLE NUMBER	ELEMENT	Al2O3	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	

98R063 12.08 4.38 0.02 2.07 0.58 3.97 1.95 0.22 3.52 99.61 0.11

Duplicate

98R066

Duplicate

98R070

Duplicate

405

412

ITS

Intertek Testing Services  
Bondar Clegg

TANANA EXPLORATION  
MR. STEVE TRAYNOR  
P.O. BOX 4375  
STN. MAIN  
WHITEHORSE, YT Y1A 3T5

g



# Intertek Testing Services

## Bondar Clegg

REPORT: V98-01357.1 ( COMPLETE )

REFERENCE:

CLIENT: TANANA EXPLORATION

SUBMITTED BY: S. TRAYNOR

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98

DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD	DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
980813	1 Au30 Gold	2	5 PPB	Fire Assay of 30g	30g Fire Assay - AA	980813	37 SiO <sub>2</sub> Silica (SiO <sub>2</sub> )	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	2 Ag Silver	2	0.2 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	38 TiO <sub>2</sub> Titanium (TiO <sub>2</sub> )	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	3 Cu Copper	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	39 Al <sub>2</sub> O <sub>3</sub> Alumina (Al <sub>2</sub> O <sub>3</sub> )	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	4 Pb Lead	2	2 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	40 Fe <sub>2</sub> O <sub>3</sub> * Total Iron (Fe <sub>2</sub> O <sub>3</sub> )	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	5 Zn Zinc	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	41 MnO Manganese (MnO)	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	6 Mo Molybdenum	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	42 MgO Magnesium (MgO)	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	7 Ni Nickel	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	43 CaO Calcium (CaO)	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	8 Co Cobalt	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	44 Na <sub>2</sub> O Sodium (Na <sub>2</sub> O)	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	9 Cd Cadmium	2	0.2 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	45 K <sub>2</sub> O Potassium (K <sub>2</sub> O)	1	0.05 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	10 Bi Bismuth	2	5 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	46 P <sub>2</sub> O <sub>5</sub> Phosphorous (P <sub>2</sub> O <sub>5</sub> )	1	0.03 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	11 As Arsenic	2	5 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	47 LOI Loss on Ignition	1	0.05 PCT	Ignition 1000 Deg.	GRAVIMETRIC
980813	12 Sb Antimony	2	5 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	48 Total Whole Rock Total	2	0.01 PCT		
980813	13 Hg Mercury	2	0.010 PPM	HCL:HNO <sub>3</sub> (3:1)	COLD VAPOR AA	980813	49 Cr <sub>2</sub> O <sub>3</sub> Chromium Oxide	1	0.01 PCT	BORATE FUSION	INDUC. COUP. PLA:
980813	14 Fe Iron	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	50 Ba Barium	1	10 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	15 Mn Manganese	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	51 Sr Strontium	1	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	16 Te Tellurium	2	10 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	52 Y Yttrium	1	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	17 Ba Barium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	53 Nb Niobium	1	2 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	18 Cr Chromium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	54 Zr Zirconium	1	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	19 V Vanadium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	980813	55 Rb Rubidium	1	2 PPM	Pressed Pellet	XRAY FLUORESCENCE
980813	20 Sn Tin	2	20 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	21 W Tungsten	2	20 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	22 La Lanthanum	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA		SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS NUMBER
980813	23 Al Aluminum	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	24 Mg Magnesium	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA	R ROCK	2	2 -150		2	CRUSH/SPLIT & PULV. 7
980813	25 Ca Calcium	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	26 Na Sodium	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	27 K Potassium	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	28 Sr Strontium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA		REPORT COPIES TO: MR. STEVE TRAYNOR				INVOICE TO: MR. STEVE TRAYNOR
980813	29 Y Yttrium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	30 Ga Gallium	2	2 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	31 Li Lithium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	32 Nb Niobium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	33 Sc Scandium	2	5 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	34 Ta Tantalum	2	10 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	35 Ti Titanium	2	0.01 PCT	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						
980813	36 Zr Zirconium	2	1 PPM	HCL:HNO <sub>3</sub> (3:1)	INDUC. COUP. PLASMA						

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98 PAGE 1A( 1/ 8)

SAMPLE NUMBER	ELEMENT	Au30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Hg	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr	SiO2	TiO2	Al2O3
	UNITS	PPB	PPM	PCT	PPM	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PC																				

98R350	<5	0.9	128	<2	58	2	28	30	0.2	<5	<5	<5	<.010	6.44	380	<10	60	45	44	<20	<20	<1	3.66	0.52	2.43	0.08	0.31	80	4	3	9	<1	6	<10	0.08	<1			
98R355	8	0.4	31	6	265	18	23	3	2.9	<5	<5	<5	0.118	0.60	46	<10	597	172	67	<20	<20	1	0.40	0.05	<.01	0.03	0.20	3	1	<2	1	<1	<5	<10	0.01	7.84	4.00	0.28	7.7:

**ITS****Intertek Testing Services**  
**Bondar Clegg**

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98 PAGE 1B( 2/ 8)

SAMPLE NUMBER	ELEMENT	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM

98R350

98R355

0.93 0.01 0.48 0.12 1.12 1.67 &lt;.03 3.06 99.46 0.04 4885 35 22 5 73 45



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

# Geochemical Lab Report

## PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98

DATE PRINTED: 17-AUG-98 PAGE

PAGE 2A( 3/ 8)



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98 PAGE 2B ( 4 / 8 )

STANDARD NAME	ELEMENT UNITS	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
		PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM
CANMET STD SY-3		6.41	0.33	2.70	8.24	4.10	4.22	0.53	-	98.39	<0.01	-	-	-	-	-	-
Number of Analyses		1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Mean Value		6.41	0.33	2.70	8.24	4.10	4.22	0.53	-	98.39	0.005	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		6.42	0.32	2.67	8.26	4.15	4.20	0.54	1.20	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<0.01	<.01	<.01	<.01	<.01	<.05	<.03	-	-	<0.01	-	-	-	-	-	-
Number of Analyses		1	1	1	1	1	1	1	-	-	1	-	-	-	-	-	-
Mean Value		0.005	.005	.005	.005	.005	.005	.002	-	-	0.005	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		<.0001	<.01	<.01	<.01	<.01	<.01	<.01	<.001	<.001	<.001	.005	.01	.01	.01	.01	.01
Loss on Ignition Std		-	-	-	-	-	-	-	4.16	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	4.16	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	4.24	-	-	-	-	-	-	-	-
Loss On Ignition Std		-	-	-	-	-	-	-	41.00	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	41.00	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	41.08	-	-	-	-	-	-	-	-
CANMET STREAM-SED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Granite - Cert.Ref.M		-	-	-	-	-	-	-	-	-	1411	567	13	23	242	191	-
Number of Analyses		-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-
Mean Value		-	-	-	-	-	-	-	-	-	1411	567	13	23	242	191	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	1400	570	14	21	235	185	-



# Intertek Testing Services

## Bondar Clegg

Geochemical  
Lab  
Report

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98

DATE PRINTED: 17-AUG-98

PAGE 3A( 5 / 8 )

STANDARD NAME	ELEMENT UNITS	Au30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Hg	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr	SiO2	TiO2	Al2O5
		PPB	PPM	PCT	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PC																			

CANMET SO-2 REF STD

Number of Analyses

Mean Value

Standard Deviation

Accepted Value

Gannet Ref.Material

Number of Analyses

Mean Value

Standard Deviation

Accepted Value

53.46

15.2

**ITS****Intertek Testing Services**  
**Bondar Clegg**

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98 PAGE 38( 6/ 8)

STANDARD NAME	ELEMENT UNITS	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
		PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM

CANMET SO-2 REF STD	-	-	-	-	-	-	-	-	-	-	1016	348	41	19	776	74
Number of Analyses	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
Mean Value	-	-	-	-	-	-	-	-	-	-	1016	348	41	19	776	74
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	1000	340	40	22	760	78
Gannet Ref.Material	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

# Geochemical Lab Report

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98

DATE PRINTED: 17-AUG-98 PAGE 4A

3 PAGE 4AC 7/ 83

SAMPLE	ELEMENT	Au	30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Hg	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr	Y	Ga	Li	Nb	Sc	Ta	Ti	Zr	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>
NUMBER	UNITS	PPB	PPM	PCT	PPM	PCT	PCT	PCT	PCT	PPM	PCT	PCT	PCT	PCT																											

98R355 8 0.4 31 6 265 18 23 3 2.9 <5 <5 <5 0.118 0.60 46 <10 597 172 67 <20 <20 1 0.40 0.05 <.01 0.03 0.20 3 1 <2 1 <1 <5 <10 0.01 7 84.00 0.28 7.7:

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.1 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 17-AUG-98 PAGE 4B( 8/ 8)

SAMPLE	ELEMENT	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
NUMBER	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM

98R355		0.93	0.01	0.48	0.12	1.12	1.67	<.03	3.06	99.46	0.04	4885	35	22	5	73	45
Duplicate																	3.05

**ITS**

**Intertek Testing Services**  
**Bondar Clegg**

+

+

+

+

TANANA EXPLORATION  
MR. STEVE TRAYNOR  
P.O. BOX 4375  
STN. MAIN  
WHITEHORSE, YT Y1A 3T5





# Intertek Testing Services

## Bondar Clegg

REPORT: V98-01357.0 ( COMPLETE )

REFERENCE:

CLIENT: TANANA EXPLORATION

PROJECT: BIG TOP

SUBMITTED BY: S. TRAYNOR

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98

DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD	DATE APPROVED	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
980812 1	Au30 Gold	5	5 PPB	Fire Assay of 30g	30g Fire Assay - AA	980812 37	Ti02	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 2	Ag Silver	5	0.5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 38	Al203	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 3	Cu Copper	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 39	Fe203*	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 4	Pb Lead	5	2 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 40	MnO	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 5	Zn Zinc	5	2 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 41	MgO	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 6	Mo Molybdenum	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 42	CaO	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 7	Ni Nickel	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 43	Na20	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 8	Co Cobalt	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 44	K20	5	0.05 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 9	Cd Cadmium	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 45	P205	5	0.03 PCT	BORATE FUSION	INDUC. COUP. PLAS
980812 10	Bi Bismuth	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 46	LOI	5	0.05 PCT	Ignition 1000 Deg.	GRAVIMETRIC
980812 11	As Arsenic	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 47	Total	5	0.01 PCT	Whole Rock Total	
980812 12	Sb Antimony	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 48	Cr203	5	0.01 PCT	Chromium Oxide	
980812 13	Fe Tot Total Iron	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 49	Ba	5	10 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 14	Mn Manganese	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 50	Sr	5	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 15	Te Tellurium	5	25 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 51	Y	5	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 16	Ba Barium	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 52	Nb	5	2 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 17	Cr Chrome	5	2 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 53	Zr	5	1 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 18	V Vanadium	5	2 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA	980812 54	Rb	5	2 PPM	Pressed Pellet	XRAY FLUORESCENCE
980812 19	Tin Tin	5	20 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 20	W Tungsten	5	20 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 21	Li Lithium	5	2 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 22	Ga Gallium	5	10 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 23	La Lanthanum	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 24	Sc Scandium	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 25	Ta Tantalum	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 26	Ti Titanium	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 27	Al Aluminum	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 28	Mg Magnesium	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 29	Ca Calcium	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 30	Na Sodium	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 31	K Potassium	5	0.01 PCT	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 32	Nb Niobium	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 33	Sr Strontium	5	1 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 34	Y Yttrium	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 35	Zr Zirconium	5	5 PPM	HF-HNO3-HClO4-HCl	INDUC. COUP. PLASMA						
980812 36	Si02 Silica (Si02)	5	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA						

REPORT COPIES TO: MR. STEVE TRAYNOR

INVOICE TO: MR. STEVE TRAYNOR

\*\*\*\*\*  
 This report must not be reproduced except in full. The data presented in this report is specific to those samples identified under "Sample Number" and is applicable only to the samples as received expressed on a dry basis unless otherwise indicated  
 \*\*\*\*\*

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 1A( 1 / 8 )

SAMPLE NUMBER	ELEMENT	AL30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Tot	Mn	Te	Ba	Cr	V	Sn	W	Li	Ga	La	Sc	Ta	Ti	Al	Mg	Ca	Na	K	Nb	Sr	Y	Zr	SiO2	TiO2	Al2O3
	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT													
98R351		<5	<.5	20	3	38	6	12	1	<1	<5	<5	<5	1.70	376	<25	652	229	88	<20	<20	14	<10	9	5	<5	0.20	4.06	0.28	0.11	0.32	1.16	<5	42	<5	20	84.11	0.36	7.87	
98R352		32	<.5	36	18	135	22	25	<1	4	<5	16	<5	0.81	.90	<25	>2000	354	989	<20	<20	5	<10	8	6	<5	0.12	2.23	0.28	2.11	0.34	0.69	10	138	27	29	80.64	0.20	4.20	
98R353		<5	0.7	21	<2	57	3	3	<1	<1	<5	<5	<5	3.03	358	<25	>2000	65	151	<20	<20	8	<10	6	18	<5	0.28	7.53	0.81	1.34	3.39	0.71	<5	142	6	50	68.90	0.53	14.32	
98R354		<5	<.5	49	<2	62	15	13	>2	2	<5	12	<5	1.68	136	<25	>2000	203	639	<20	<20	10	11	19	11	<5	0.23	6.26	0.62	0.69	1.21	1.65	7	147	13	104	73.13	0.45	12.20	
98R356		34	<.5	75	4	221	8	31	<1	1	<5	<5	8	4.36	234	<25	1292	398	461	<20	<20	8	<10	6	<5	<5	0.08	1.37	0.40	0.02	0.27	0.44	<5	45	8	32	86.90	0.16	2.62	

**ITS****Intertek Testing Services**  
**Bondar Clegg**

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 1B( 2 / 8)

SAMPLE NUMBER	ELEMENT	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM

98R351		2.48	0.05	0.55	0.18	0.37	1.95	0.06	2.13	100.15	0.04	792	57	14	6	94	68
98R352		1.14	0.01	0.55	2.96	0.33	0.89	1.96	6.68	99.62	0.06	2824	168	34	7	58	24
98R353		4.32	0.05	1.48	1.91	4.85	0.90	0.09	2.34	99.70	0.01	4160	156	21	3	83	25
98R354		2.45	0.02	1.17	1.02	1.72	2.54	0.05	5.62	100.41	0.04	3426	173	18	6	151	75
98R356		6.26	0.03	0.77	0.06	0.32	0.58	0.05	2.74	100.55	0.06	2730	53	15	5	47	28



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 2A( 3 / 8)

STANDARD NAME	ELEMENT UNITS	Au	30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Tot	Mn	Te	Ba	Cr	V	Sn	W	Li	Ga	La	Sc	Ta	Ti	Al	Mg	Ca	Na	K	Nb	Sr	Y	Zr	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>
	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PCT	PCT	PCT										
CANMET STD SY-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.33	0.14	11.77						
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1					
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.33	0.14	11.77						
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Accepted Value	-	-	17	133	244	-	-	-	-	-	-	0.4	-	-	-	-	-	-	27	-	-	6.22	1.61	-	-	-	-	-	-	-	-	59.68	0.15	11.80							
ANALYTICAL BLANK	<5	<.5	2	<2	2	<1	2	<1	<1	<5	<5	<5	0.01	<5	<25	<5	3	<2	<20	<20	<2	<10	<5	<5	<5	<.01	0.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01			
Number of Analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Mean Value	3	0.3	2	1	2	0.5	2	0.5	0.5	3	3	3	0.01	3	13	3	3	1	10	10	1	5	3	3	3	.005	0.01	.005	.005	.005	3	0.5	3	3	0.005	0.005	0.005				
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Accepted Value	5	0.2	1	2	1	1	1	1	1.05	2	5	5	0.05	1	.01	0.005	1	1	1.01	1.01	1.01	1.01	1.01	1.01	1.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01			
Loss on Ignition Std	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Loss On Ignition Std	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
CANMET STREAM-SED	-	<.5	44	56	216	13	51	16	<1	<5	37	<5	4.99	980	<25	489	75	89	<20	<20	61	15	42	11	9	0.39	8.22	1.72	2.87	1.18	1.55	13	373	27	54	-	-				
Number of Analyses	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-				
Mean Value	-	0.3	44	56	216	13	51	16	0.5	3	37	3	4.99	980	13	489	75	89	10	10	61	15	42	11	9	0.39	8.22	1.72	2.87	1.18	1.55	13	373	27	54	-	-				
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Accepted Value	-	-	0.5	47	66	246	13	53	19	0.8	-	42	5	5.20	99	-	540	116	101	5	7	65	-	59	16	2	0.47	8.50	1.88	2.86	1.28	1.76	20	400	37	62	-	-			
CANMET SO-2 REF STD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			



# Intertek Testing Services

## Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 2B( 4/ 8)

STANDARD NAME	ELEMENT UNITS	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
		PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM
CANMET STD SY-3		6.46	0.33	2.66	8.26	4.13	4.19	0.54	-	98.83	<0.01	-	-	-	-	-	-
Number of Analyses		1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Mean Value		6.46	0.33	2.66	8.26	4.13	4.19	0.54	-	98.83	0.005	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		6.42	0.32	2.67	8.26	4.15	4.20	0.54	1.20	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<0.01	<.01	<.01	<.01	<.01	<.05	<.03	-	-	<0.01	-	-	-	-	-	-
Number of Analyses		1	1	1	1	1	1	1	-	-	1	-	-	-	-	-	-
Mean Value		0.005	.005	.005	.005	.005	0.03	0.02	-	-	0.005	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		<.0001	<.01	<.01	<.01	<.01	<.01	<.01	<.001	<.0001	<.001	.005	.01	.01	.01	.01	.01
Loss on Ignition Std		-	-	-	-	-	-	-	4.22	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	4.22	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	4.24	-	-	-	-	-	-	-	-
Loss On Ignition Std		-	-	-	-	-	-	-	41.08	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	41.08	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	41.08	-	-	-	-	-	-	-	-
CANMET STREAM-SED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET SO-2 REF STD		-	-	-	-	-	-	-	-	-	1006	348	40	19	760	76	-
Number of Analyses		-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-
Mean Value		-	-	-	-	-	-	-	-	-	1006	348	40	19	760	76	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	1000	340	40	22	760	78	-

Intertek Testing Services  
Bondar Clegg

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 3A( 5 / 8)

STANDARD NAME	ELEMENT UNITS	Au30	Ag	Cu	Pb	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Tot	Mn	Te	Ba	Cr	V	Sn	W	Li	Ga	La	Sc	Ta	Ti	Al	Mg	Ca	Na	K	Nb	Sr	Y	Zr	SiO2	TiO2	Al2O3
		PPB	PPM	PCT	PPM	PCT	PCT																																	

Granite - Cert.Ref.M

Number of Analyses

Mean Value

Standard Deviation

Accepted Value

Garnet Ref.Material

194

Number of Analyses

1

Mean Value

194

Standard Deviation

Accepted Value

204

**ITS****Intertek Testing Services**  
**Bondar Clegg**

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98 DATE PRINTED: 16-AUG-98 PAGE 3B( 6/ 8)

STANDARD NAME	ELEMENT UNITS	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total PCT	Cr2O3 PCT	Ba PPM	Sr PPM	Y PPM	Nb PPM	Zr PPM	Rb PPM
Granite - Cert.Ref.M	-	-	-	-	-	-	-	-	-	1400	558	14	22	235	190		
Number of Analyses	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	
Mean Value	-	-	-	-	-	-	-	-	-	1400	558	14	22	235	190		
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Accepted Value	-	-	-	-	-	-	-	-	-	1400	570	14	21	235	185		
Garnet Ref.Material	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



# Intertek Testing Services

## Bondar Clegg

# Geochemical Lab Report

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

DATE RECEIVED: 06-AUG-98

DATE PRINTED: 16-AUG-98

PAGE 4A( 7/ 8)

98R351 <5 <.5 20 3 38 6 12 1 <1 <5 <5 <5 1.70 376 <25 652 229 88 <20 <20 14 <10 9 5 <5 0.20 4.06 0.28 0.11 0.32 1.16 <5 42 <5 20 84.11 0.36 7.87  
Duplicate

**ITS****Intertek Testing Services**  
**Bondar Clegg**

CLIENT: TANANA EXPLORATION

REPORT: V98-01357.0 ( COMPLETE )

PROJECT: BIG TOP

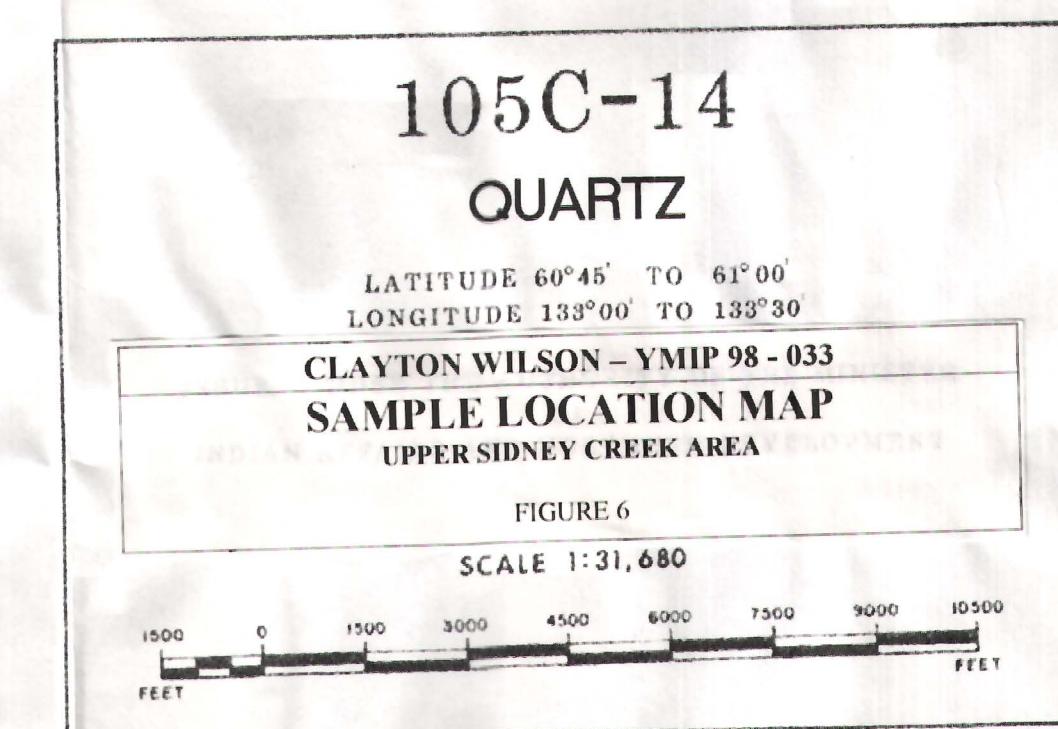
DATE RECEIVED: 06-AUG-98

DATE PRINTED: 16-AUG-98 PAGE 4B( 8/ 8)

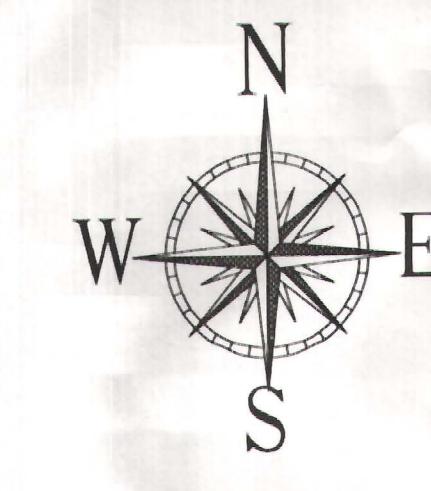
SAMPLE NUMBER	ELEMENT	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3	Ba	Sr	Y	Nb	Zr	Rb
	UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM
98R351 Duplicate		2.48	0.05	0.55	0.18	0.37	1.95	0.06	2.13	100.15	0.04	792	57	14	6	94	68
												2.17					

**YUKON MINES & RESEARCH LIBRARY**  
PO Box 2103  
Whitehorse, Yukon Y1A 2C8

Canada



WILSON LINES MINING & DEVELOPMENT LTD.  
105C-14



**NOTE:**  
THIS MAP IS ISSUED AS A PRELIMINARY GUIDE  
FOR WHICH THE DEPARTMENT OF INDIAN AFFAIRS  
AND NORTHERN DEVELOPMENT WILL ACCEPT NO  
RESPONSIBILITY FOR ANY ERRORS, INACCURACIES  
OR OMISSIONS WHATSOEVER.

TOPOGRAPHY COMPILED FROM 1:50,000  
NATIONAL TOPOGRAPHIC SERIES.  
CONTOUR INTERVAL 100 METRES.  
SURVEY INFORMATION COMPILED FROM  
LEGAL SURVEYS, BY DRAFTING SERVICER.

105F-4	105F-3	105F-2
105C-13	105C-14	105C-15
105C-12	105C-11	105C-10



105C-14

