YEIP 96-002 1996

GEOLOGICAL INVESTIGATION

OF THE

FLAT CREEK CLAIMS

NTS 115 O 16

138' 20" West 63' 20" North

Work done May 15 th through Aug 12 th 1996

BY

G.S. HARTLEY P. GEOL.

for Claim Owners

G. Hartley and A. Hartley

SEPTEMBER 21, 1996

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Map III Soil Surveys

a. Gold

b. Silver

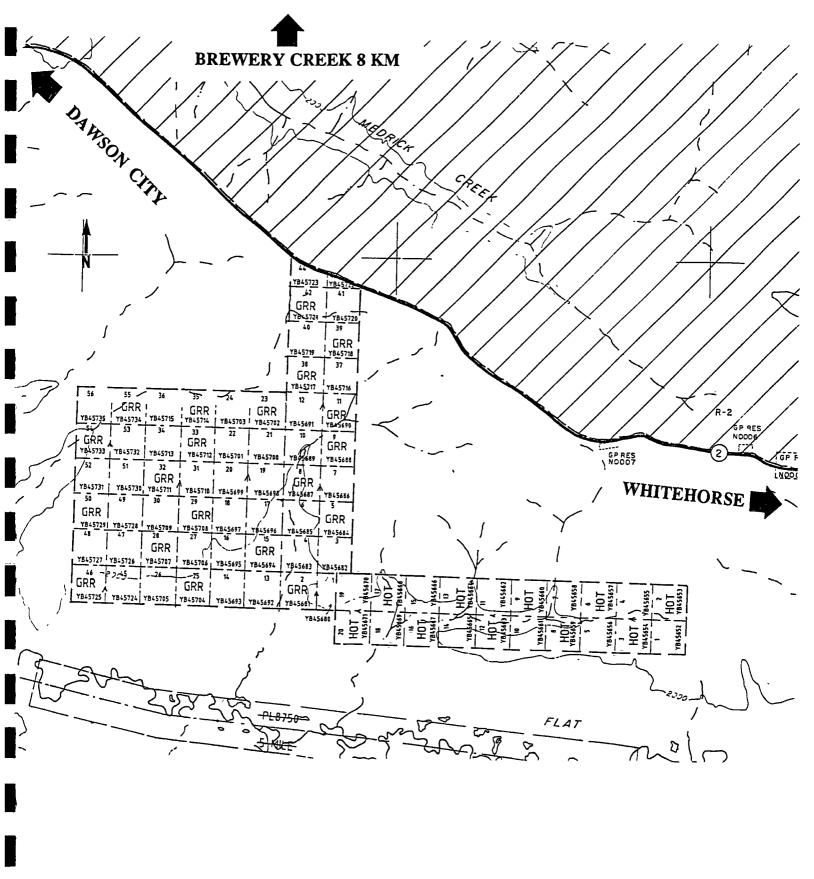
c. Lead

d. Zinc

e. Cadniun

Map IV Magnetic Survey

Map V Trench Locations



LOCATION MAP

FLAT CREEK PROJECT

Map 1

Map 2

PROJECT LANDS: GRR#1 TO #56 HOT#1TO #20

I. Summary

The Flat Creek project claims lie along the Tintina Trench approximately 65 km (35 miles) east of Dawson City. The claim area is bounded by Flat Creek to the south and highway #2 to the North, the claims ajoin the highway.

The claims are approximately 10 km south of the Brewery Creek gold deposit, known to contain 18.9 Million tons at an approximate grade of .042 oz/ton(Northern Miner Press).

The area of the claims contains no outcrop. Geochemical survey data (GSC Open File 1364) indicated the presence of anomalous mercury, arsenic, barium, magnesium, and tin, in an area where strong structural features have been identified (Mortensen et al 1992).

1994

A short field program, conducted by the author, yielded encouraging values of 1.1 ppm silver with associated lead, arsenic and mercury, within stream sediment samples.

1995

Soil samples were collected, access roads and drill sites were also constructed. A short drilling program totaling 250 feet of percussion drilling in six holes was done using an Atlas Copco BRE 5701 pneumatic drill. Drilling in tills yielded values in excess of 500 ppm lead and 2.0 ppm silver over 20 feet, bedrock was not intersected.

Results of the soil geochemical survey were encouraging, values up to 828 ppm lead occur with associated silver (to 1 ppm), only low gold and arsenic values were returned.

1996

A grid was cut over the area tested by drilling in 1995, fourty six "B "horizon soils were collected on the grid and analysed for: Au, Ag, Cu, Pb, Zn, Cd by Northern Analytical Labs of Whitehorse.

A magnetic survey was conducted over the gridded area using a McPhar Proton Precession Magnetometer, a linear magnetic high was located immediatly to the north of drill hole OBD 95-1.

A VLF electromagnetic survey was attempted but had to be abandonded due to equipment failure.

Nine trenches were dug, using a Case 1150 crawler loader (D 6 equivlent). The trenches were grab sampled for Au, Ag, Cu, Pb, Zn, Cd. Samples were seived in the lab and two size fractions, (-80 mesh and -10+80 mesh) were assayed, in order to determine the distribution of values with respect to tills.

II. History

There is no record of lode or placer claims within the area, old placer workings, possibly well in excess of eighty years old were noted in one location. The Yukon Minfile indicated no known mineralization in the area. GSC Open File 1364 indicated the presence of anomalous levels of mercury, arsenic, barium, magnesium and tin in the area.

III. Location

The claims are located north of Flat Creek, and immediately south of Highway #2, on NTS sheet 115 O 16, near latitude 63'53 North and longitude 138'20 West.

Access to the property is by paved Highway #2 approximately 65 km east of Dawson City. Field crew accommodation during the six week program was established in a trailer parked on the property.

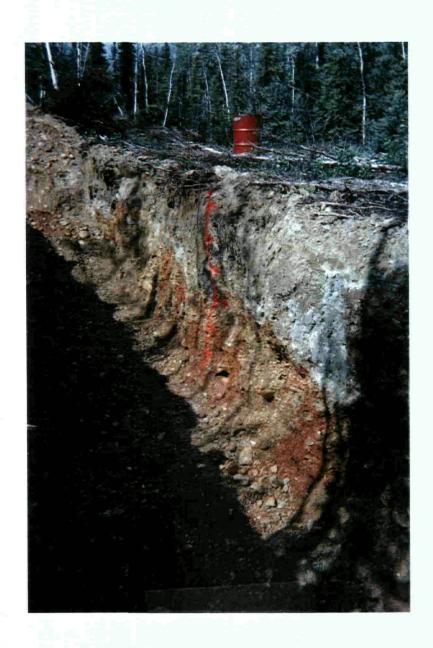


Plate 1: Highly oxidized gravel in trench 1

IV. Physiography

The region in dominated by the Tintina Trench. Thick glacial deposits mantle Paleozoic subcrop (Bostock 1964). Outcrops are not present. The area is designated as a continuous permafrost zone. Topography slopes gently to the south.

V. Regional Geology

The Geology of the region, although poorly exposed, is known to consist of Paleozoic carbonates and shales and related rocks of the Earn and Road River groups intruded by felsic dykes and sills, of Cretaceous to Tertiary age (Bostock 1964).

The project lies within the Tintina Trench structural zone. Lineament studies utilizing Landsat TM thermal imagery, indicate a number of well defined fault splays near the property, the study suggests further evaluation of the region for structurally controlled epithermal gold deposits. (Mortensen and Von Gaza 1992).

Published geology (GSC Map 711A, Bostock 1937) indicates that the area is underlain by gravels, now classified as a pre Reid glacial terrace (B. Labarge, personal communication).

VI. Survey Grid

The area of interest is very thickly treed with new growth following an old burn. To facilitate movment and gain planimetric control a survey grid was cut over the main area of interest, using a case 1150 track loader. Lines provided access to trenches, line 0+00N and the east west trending baseline were cut in the above manner. Cross lines were established every 500 feet east of line 0+00 and every 400 feet west of line 0+00, by pace and compass method, heavily flagged and stations were marked at 100 foot intervals along these lines. The baseline was cut along the location line of the Hot and Wet claims.

VII. Geochemistry

Regional stream sediment sampling data (GSC open file 1364) indicated elevated levels of arsenic, barium, cadmium, mercury, and flourine occur on the property. Sample programs conductedby the author in 1994 and 1995 confirmed an area of anomalous values of lead and silver occur along the upper portions of Hot creek.

In 1996, a survey grid was established over the main zone of interest, a small drainage feature that is parallel to the Hot claims location line, and is named here as Hot Creek. Fourty six samples of "B" horizon soils were collected at 100 foot(30 meter intervals) along three north south lines spaced five hundred feet apart.

Soils samples were delivered to Northern Analytical Labs of Whitehorse and analysed for : Au, Ag, Cu, Pb, Zn, and Cd by atomic adsorption.

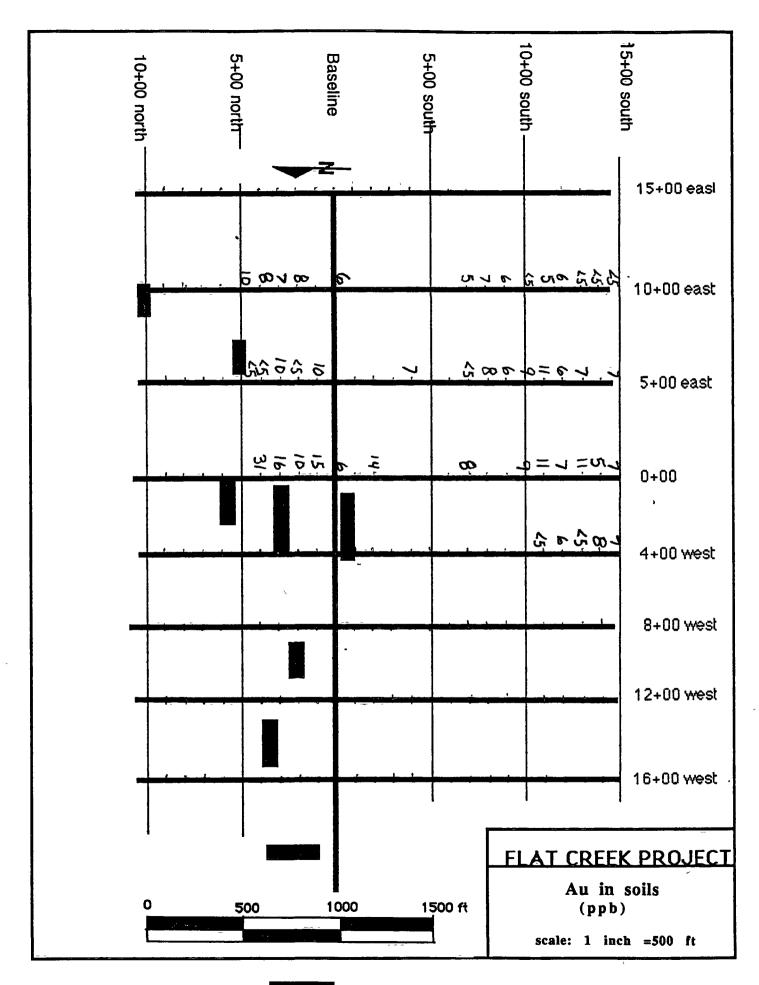
Results of the soil survey were not encouraging. The highest values of gold, lead and arsenic were respectivly 31 ppb, 23 ppm, 30 ppm, were located in the proximity of Drill Hole OBD-95-1 that returned values of 875 ppm Pb over a ten foot interval and averaged 500 ppm Pb over twenty feet in tills.

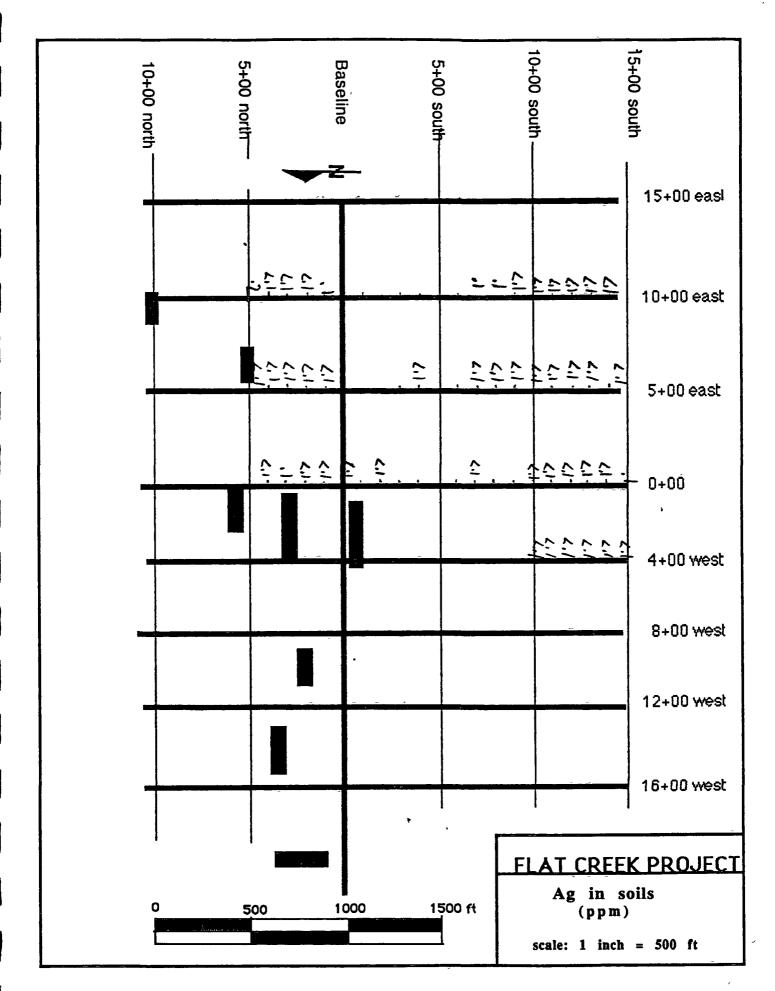
Goechemical surveys of previous years have suggested that the 90 th percentile of lead data for this property is 26 ppm.

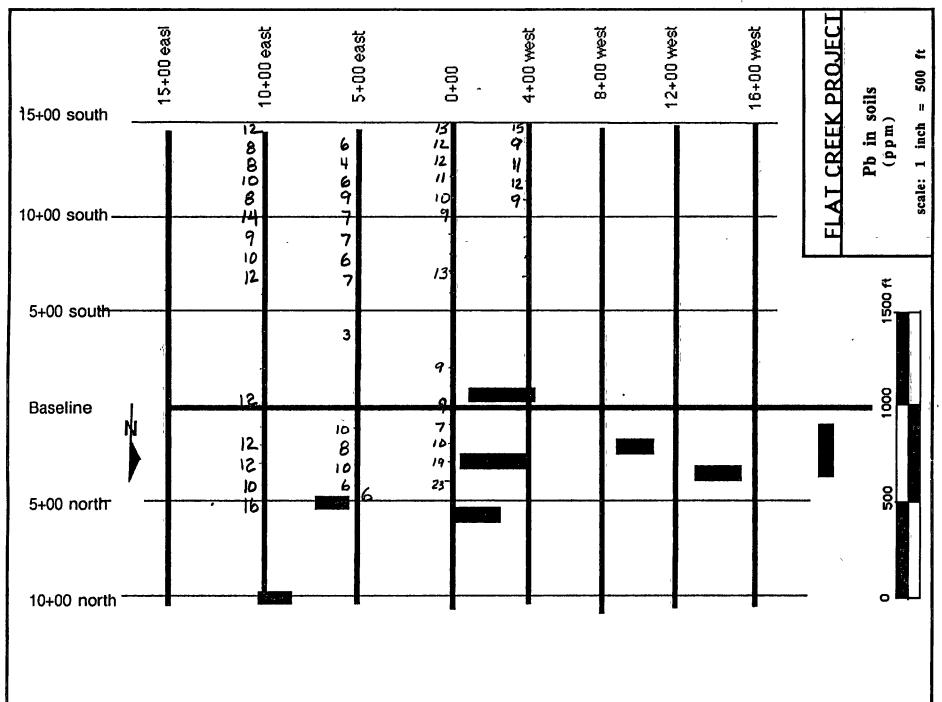
Geochemical survey data is plotted by elements

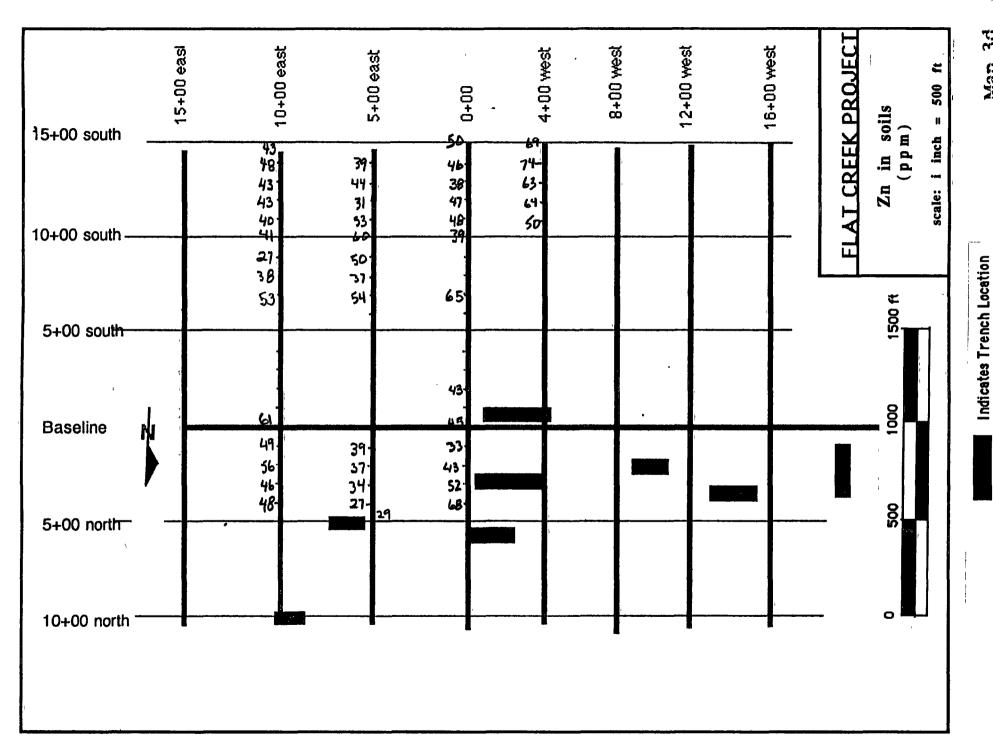
(maps 3a through 3f).

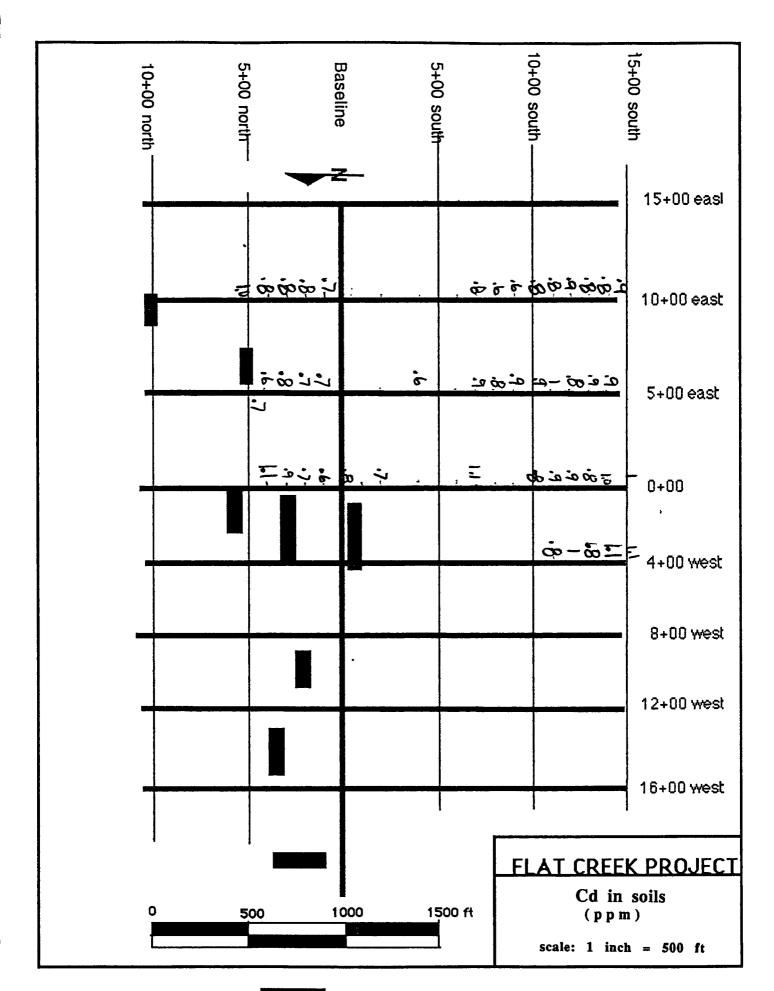
The sample data indicates uniformly low values, suggesting that clays in the overburden effectively mask the bedrock, and till chemistry, as indicated by drilling.











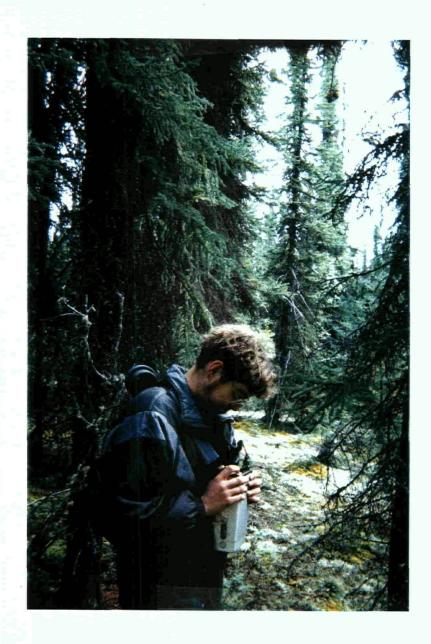


Plate 3: Magnetic survey method

VIII. Magnetics

A total intensity vertical field, magnetic survey was conducted using a Sintrex Proton Precession Magnetometer. Grid lines extended 1500 feet south and 500 feet north of the baseline, individual lines were modified to achieve better anomaly defination.

1

Survey was corrected for diernal drift by the closed loop method. Magnetic field intensity and times were recorded at each station, each survey loop was closed at a base station and drift corrections were applied by the straight line method.

The survey results Map (4) indicate generally low magnetic relief to the south of the baseline, an linear east trending magnetic high occurs to the north of the baseline.

IX. Trenching

A total of nine trenches were dug on the grid using the Case 1150 track loader. Trench width was 7 feet (the width of the loader bucket) depth was from 3 to 9 feet and length varied from 30 to 100 feet.

Trenches were located in the area of drill hole OBD 95-1, that returned 500 ppm lead over 20 feet from till samples. Trench 8 was located 1700 feet west of Obd 95-1 and trench 9 was located to the north east of 0bd 95-1 in the area of a magnetic high.

Trenches 1,2,3,5 encountered strongly hemititic and limonitic gravels. Gravels were stained deep red to black in trenches 1 and 3, suggesting the presence of manganese oxides. The tills in trenches 4, 6, 8, and 9 did not contain oxidation minerals and had the appearance of ordinary sands and gravels.

Trench nine contained a very thick deposit of the fine grained grey silty (possibly tuffaceous) sands. No other tills or lithologies were encountered, and the trench was terminated in grey sand.

Trenches were "grab sampled " with attention to strongly oxidized or gossanous material. All samples were processed by Northern Analytical Labs of Whitehorse. The lab was instructed to analyse two size fractions from each sample. The fractions were -10 + 80 mesh and the -80 mesh portion. (see Map 5)

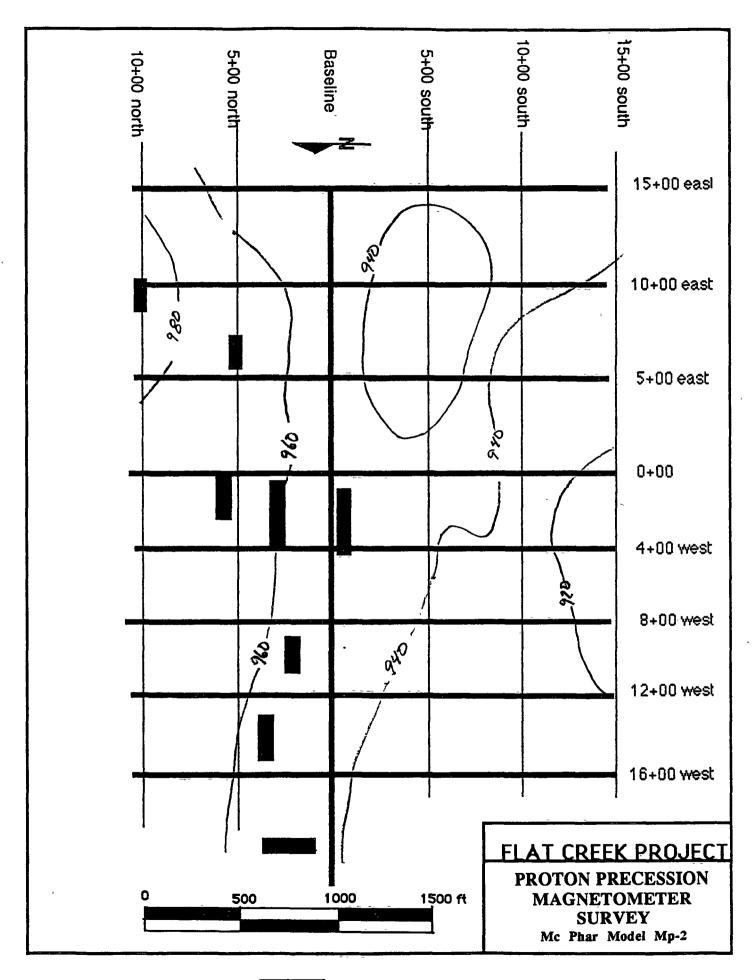
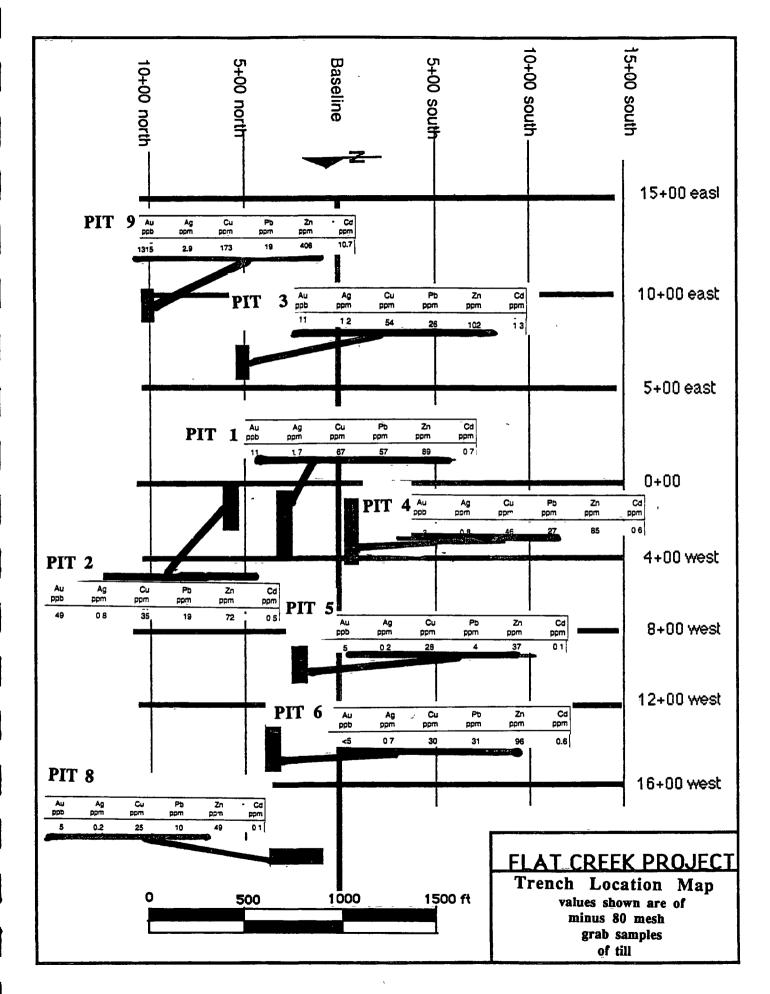




Plate 2: Hemititic gravels of trench 2



X. Conclusions

The magnetic survey indicates that a significant mangetic high occurs, north of the baseline along the upper portion of Hot Creek. The position on this anomaly supports the previous assumption that the linear nature of Hot Creek is controlled by basement structures.

Previous geochemical data indicates values of lead, silver and occasionally gold occur in close proximaty to the upper portion of Hot Creek, data collected as "B" horizon soils over the grid area returned uniformly low values except near Trench one and drill hole OBD 95-1. The paucity of geochemical response elsewhere indicates the the tills and clays in the overburden effectivly mask the geochemistry of the area.

The geophysical , geochemical and trench data collected this season indicate the presence of a magnetic anomaly with a concident geochemical response . Trenching of the location of drill Hole OBD-95-1(500 ppm lead over 20 feet) indicated the weakly anomalous lead, zinc, cadnium and silver values in strongly limonitized and hematized tills, at a depth of 6 feet.

The strong gold value (>1300 ppb), with associated silver(2.9 ppm) encountered in trench nine, near the highest magnetic survey readings, suggests the trench should be deepened and resampled to determine if this value is detrital enrichment, or a expression of inplace mineralisation. The magnetic survey should be extended to the north, to give better definition of this area.

Further evaluation of the property should include: additional magnetic survey, trenching, extension of the grid to the north in the area of trench 9, and additional deep overburden drilling. No further surficial geochemistry is reccomended.

IX. Statement of Expenditure

Truck travel in the Yukon (5000 km@\$00.40)2000.00
Food and accomadation(40 mandays)@ \$55.00/day2200.00
Assay costs1431.66
Geophysical Equimpent Rental McPhar MP2 30 days500.00
Trenching (Case 1150 crawler) 50 hr@\$120.00/hr6000.00
P. Geol fees \$500/day/30 days15000.00
Field help (M.Hartley) 10 days @ \$100/day1000.00
Trucking(mob and demob)425.00
Report preparation500.00

\$29,056.66

References

Bostock, H.S., 1964. Geology, McQuesten, Yukon territory. Geological Survey of Canada, Map 1143A.

Geological Survey of Canada " Open file 1364" Stream Sediment Geochemistry NTS 115 N,0.

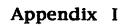
Mortensen, J and G. Von Gaza 1992. Application of Landsat TM thermal Imagery to Structural Interpretations of the Tintina Trench. In Yukon Geology, Vol.3; EGSD, Yukon, Indian and Northern Affairs Canada, p.214-222

CERTIFICATE

- I, Glenn S. Hartley of 7302-118 A street Edmonton, hereby state that:
- 1. I am a graduate of the University of Alberta, Department of Geology (B. Sc. Specialization 1977).
- 2. I am a registered Professional Geologist in the province of Alberta.
- 3. Since 1970, I have been employed by various exploration firms and have conducted field programs in Alberta, British Columbia, Saskatchewan, Northwest Territories, and the Yukon.
- 4. I have a direct interest in the lode claims of this report.

Respectfully submitted,

13





105 Copper Road Whitehorse, Yukon Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

20/06/96

Assay Certificate

Page 1

Glenn Hartley

WO#10292

	Au	Ag	Pb	Zn	Cd	As	
Sample #	ppb	ppm	ppm	ppm	ppm	ppm	
SS-96-1	31	<0.1	23	68	1.1	30	
SS-96-2	16	0.1	19	52	0.9	17	
SS-96-3	10	<0.1	10	. 43	0.7	13	
SS-96-4	15	<0.1	7	33	0.6	<10	
SS-96-5	6	<0.1	9	45	8.0	11 ,	
SS-96-7	14	<0.1	9	43	0.7	17	
SS-96-12	8	<0.1	13	65	1.1	20	
SS-96-15	9	<0.1	9	· 39	0.8	17	
SS-96-16	11	<0.1	10	48	0.9	13	
SS-96-17	7	<0.1	11	47	0.9	19	
SS-96-18	11	<0.1	12	38	0.8	21	
SS-96-19	5 7	<0.1	12	46	1	18	
SS-96-20	7	0.1	13	50	1	10	
SS-96-21	7	<0.1	15	69	1.1	16	
SS-96-23	<5	<0.1	11	63	0.8	11	
SS-96-24	6	<0.1	12	64	1	13	
SS-96-25	<5	<0.1	9	50	0.8	14	
STA-22	8	<0.1	14	74	1.1	13	
L5E-1N	10	<0.1	10	39	0.7	12	
L5E-2N	<5	<0.1	8	37	0.7	15	
L5E-3N	10	<0.1	10	34	0.8	<10	
L5E-4N	<5	<0.1	6	27	0.6	14	
L5E-5N	<5	<0.1	6	29	0.7	13	
L5E-4S	7	<0.1	3 7	39	0.6	11	
L5E-7S	<5	<0.1	7	54	0.9	16	
L5E-8S	8	<0.1	6	37	0.8	16	
L5E-9S	6	<0.1	7	50	0.9	16	
L5E-10S	9	<0.1	7	60	0.9	20	
L5E-11S	11	<0.1	9	53	1	23	
L5E-12S	6	<0.1	6	31	8.0	12	

Certified by





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Page 2

Glenn Hartley

WO#10292

Sample #	Au ppb	Ag ppm	Pb ppm	Zn ppm	Cd ppm	As ppm	
L5E-13S	7	<0.1	4	44	0.9	17	. <u>.</u>
L5E-15S	7	<0.1	6	39	0.9	14	
L10E-BL	- 6 [*]	0.1	12	. 61	0.7	<10	
L10E-2N	8	<0.1	1 2	49	0.8	<10	
L10E-3N	7	<0.1	12	56	0.8	<10	
L10E-4N	8	<0.1	10	46	0.8	12	
L10E-5N	10_	0.2	16	48	1	14	
L10E-7S	5	0.1	12	` 53	0.8	10	
L10E-8S	7	0.1	10	38	0.6	<10	
L10E-9S	6	<0.1	9	27	0.6	<10	
L10E-10S	<5	<0.1	14	41	0.8	<10	
L10E-11S	5	<0.1	8	40	0.8	<10	
L10E-12S	6	<0.1	10	43	0.9	<10	
L10E-13S	<5	<0.1	8	43	0.8	<10	
L10E-14S	<5	<0.1	8	48	8.0	14	
L10E-15S	<5	<0.1	12	43	0.9	13	

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13/09/96

Assay Certificate

Page 1

Glenn Hartley

WO#07008

O-manta t		Au	- Ag	Cu	Pb	Zn	Cd
Sample #		ppb	ppm	ppm	ppm	ppm	ppm
PIT 1 #1	-80	11	1.7	67	57	89	0.7
PIT 1 #1	-10+80	<5	0.5	19	15	30	0.2
PIT 1 #2	-80		Insuff	icient Sampl	е		
PIT 1 #2	-10+80	7	0.6	26	15	39	0.2
PIT 1 #3	-80		Insuff	icient Sampl	е		
PIT 1 #3	-10+80	8	0.6	23	14	36	0.2
PIT 2 #1	-80	49	0.8	, 35	19	72	0.5
PIT 2 #1	-10+80	17	0.5	21	11	42	0.2
PIT 2 #2	-80	8	0.4	25	11	46	0.3
PIT 2 #2	-10+80	5	0.4	21	6	37	0.2
PIT 3 #1	-80	8	0.8	46	27	85	0.6
PIT 3 #1	-10+80	14	0.4	22	10	40	0.3
PIT 4 #1	-80	19	0.8	57	21	85	0.9
PIT 4 #1	-10+80	6	0.6	30	8	55	0.4
PIT 4 #2	-80	11	1.2	54	26	102	1.3
PIT 4 #2	-10+80	<5	0.5	20	7	45	0.3
PIT 4 #3	-80	12	0.9	47	27	96	1.0
PIT 4 #3	-10+80	<5	0.4	22	10	44	0.3
PIT 5 #1	-80	5 .	0.2	28	4	37	0.1
PIT 5 #1	-10+80	<5	0.4	34	7	48	0.1
PIT 6 #1	-80	<5	0.7	30	31	96	0.6
PIT 6 #1	-10+80	8	0.4	14	8	41	0.2
PIT 8 1700W		5	0.2	25	10	49	0.1
PIT 8 1700W	-10+80	<5	0.2	21	7	41	0.1
PIT 99	-80	1315	2.9	173	19	406	10.7
PIT 99	-10+80	39	1.0	63	7	167	1.8
			_				
		_					

Certified by

JLR_



105 Copper Road Whitehorse, Yukon Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

Invoice for Analytical Services

To:	Invoice Date:	30/05/96
Glenn Hartley	WO#	10292

OTV	DECODIDATION	LINIT DDIOE	AMOUNT
QŢY	DESCRIPTION	UNIT PRICE	AMOUNT
	Sample Preparation:		
46	Soil/Sediment Sample Preparation	2.00	92.00
	Analyses:		
46	Au + 5	16.00	736.00
			,
	Subtotal		828.00
	GST @7% (R 121285662))	57.96
	Total due on receipt of invo	pice	\$885.96

2% per month charged on overdue accounts

PAID



105 Copper Road Whitehorse, Yukon Y1A 2Z7 Ph: (403) 668-4968

Fax: (403) 668-4890

Invoice for Analytical Services

To:

Invoice Date: 06/09/96

Glenn Hartley 7302 - 118A Street

WO# 07008

\$545.70

Edmonton, Alta. T6G 1V2

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
13	Sample Preparation: Custom Soil Sample Preparation	7.00	91.00
26	Analyses: Au + 5	16.00	416.00
1 1	Office: Fax set-up charge Fax long distance charge (per page)	2.00 1.00	2.00 1.00
	Subtotal COT 6704 (P.101005000)		510.00
	GST @7% (R 121285662)	ı	35.70

2% per month charged on overdue accounts

Total due on receipt of invoice