091885

HUDSON BAY EXPLORATION AND DEVELOPMENT

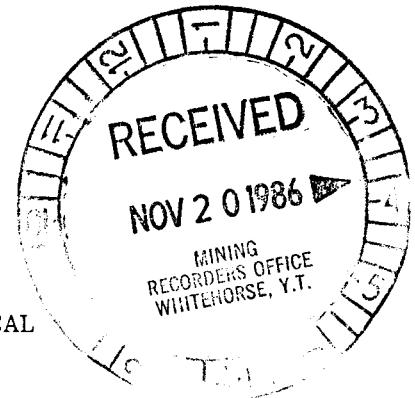
COMPANY LIMITED

REPORT OF

GEOCHEMICAL AND GEOPHYSICAL

SURVEYS

ON THE KM 400 AND KM 410 GRIDS



CANYON CLAIMS

63 - 72	YA81182-YA81191
91 -104	YA81210-YA81223
216 -222	YA81335-YA81341
301 -320	YA85406-YA85425
321 -356	YA92106-YA92141

WHITEHORSE MINING DISTRICT

105 K 2-3

62°05' 133°00'

SEPTEMBER 3-21, 1986

ROBERT STROSHEIN

091885

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 1800.00 .

D A Emond

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION:

Two line grids were established near Km posts 400 and 410 of the Robert Campbell Highway to cover favourable areas indicated by reconnaissance geological, geochemical and geophysical surveys. (For bibliography of previous assessment reports see Appendix II.)

At Km 400 the Grew Creek baseline 20N was extended during June 1986, with the grid lines cut to cover an area of magnetic and electromagnetic anomalies first indicated by reconnaissance style surveys in 1984. Silt sampling of the creek also indicated anomalous levels of mercury and detectable gold in the stream draining the area.

Secant chaining of the lines was carried out between September 2nd and 17th with magnetic and VLF-EM surveys following the chaining. The surveys were carried out by a two person crew in conjunction with other surveys on the nearby GRAND claims. An examination of the magnetic anomaly along line 99-100W near the 15 NBL was carried out by the author on September 5, when 2 silt samples and 1 soil sample were collected in the area (01-03). The surveys were incomplete at this time and other anomalies had not been located.

At Km 410 a baseline was established on a 300^{o} bearing with station 210W arbitrarily set at a 3 foot tree stump on baseline 00. The 6.7 km grid was cut by contract to Eastern Associates of Whitehorse and was completed between September 13-18. The baseline and section lines were chained and surveyed with magnetic and VLF-EM instruments by a two person crew who completed the surveys by September 21.

Previous geological and geochemical surveys of the area had indicated anomalous gold and arsenic values from a trenched area adjacent the highway. (Appendix II). A local flagged grid on a 315^{o} baseline had been established to carry out soil sampling in the immediate area of the trench by the two man crew on August 5, 1986. Additional fill in samples in the anomalous mercury trend were collected on September 17. A total of 67 samples were analyzed for Au, Ag, As and Hg.

The geophysical survey results were processed and compiled on 1:2500 scale plans with a 1:1000 scale plan for the soil survey on grid Km 410. The survey plots were interpreted and the assessment report prepared at the Whitehorse office of Hudson Bay Exploration and Development Company Limited by K. Galambos and the author during the month of October 1986. The report maps included the results of previous surveys which were covered by these grid areas.

CLAIM OWNERSHIP:

The CANYON Claims are wholly owned by Hudson Bay Exploration and Development Company Limited of Box 4280, Whitehorse, Yukon Territory, Y1A 3T3. The claims are owned under the terms of option agreements with Mr. A. Carlos, of Whitehorse, Y. T.

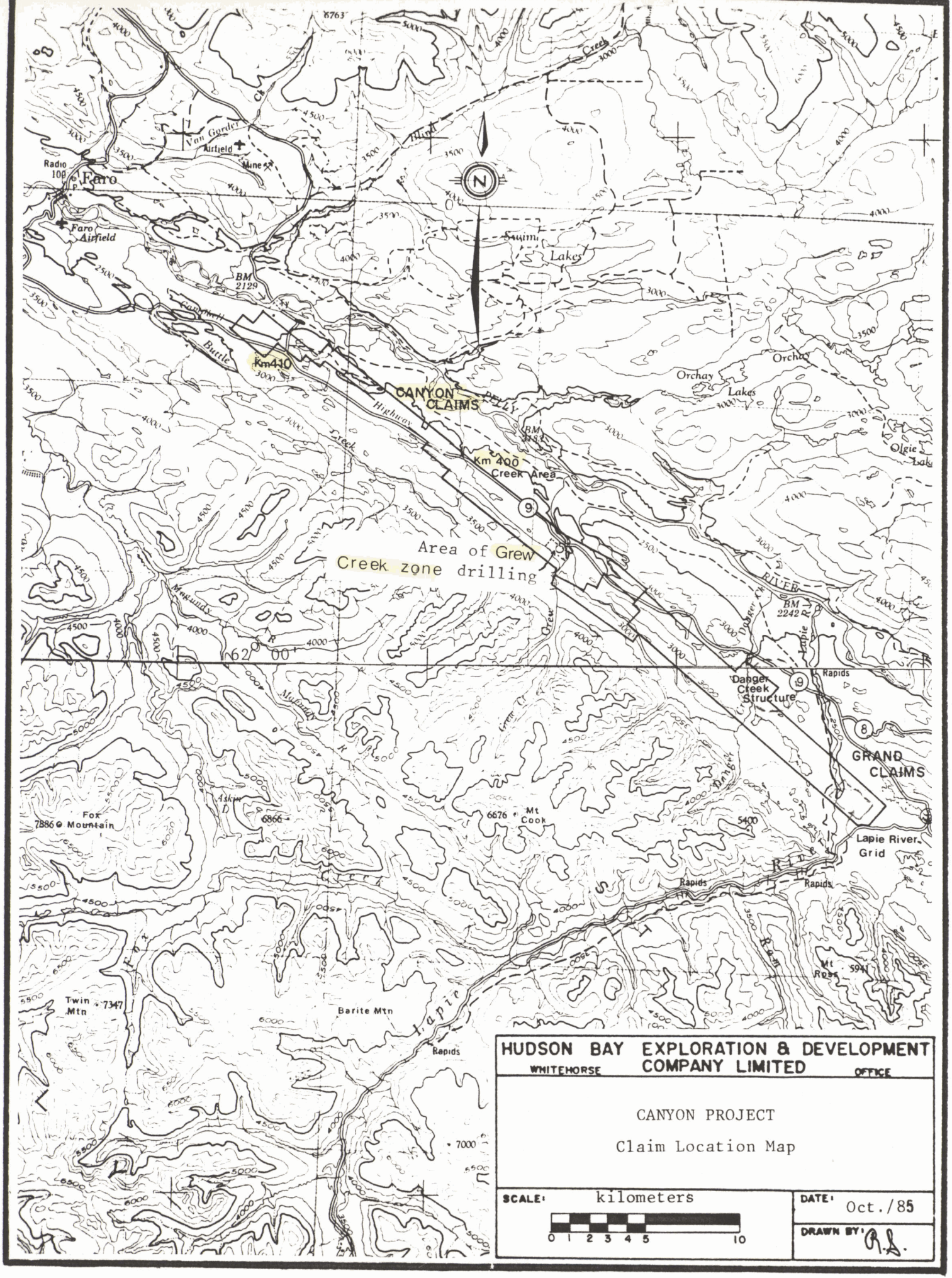
The claims on which the grid surveys were carried out and claims included in the assessment coverage are:

CANYON 63-72	YA 81182 - YA 81191
CANYON 91-96	YA 81210 - YA 81215
CANYON 98	YA 81217
CANYON 100	YA 81219
CANYON 102	YA 81221
CANYON 104	YA 81223
CANYON 216	YA 81335
CANYON 218-222	YA 81337 - YA 81341
CANYON 301-320	YA 85406 - YA 85425
CANYON 321-328	YA 92106 - YA 92113
CANYON 348-356	YA 92133 - YA 92141

Figure 2

LOCATION AND ACCESS:

The CANYON claims are located in the Whitehorse Mining District on claim sheets 105 K 2 and 3. The claims are situated along and adjacent the Robert Campbell Highway between Km 400 and Km 410 southeast of Faro, Yukon Territory. The claims are approximately 375 Km by road from Whitehorse.



HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED	
WHITEHORSE OFFICE	
CANYON PROJECT Claim Location Map	
SCALE: kilometers 0 1 2 3 4 5 10	DATE: Oct./85 DRAWN BY: R.L.

The claims are easily accessible from the highway in a generally well forested area. Figure 1.

PERSONNEL:

The following personnel were employed by Hudson Bay Exploration and Development Company Limited on the Canyon Project Km 400 and Km 410 Grids:

R. Stroshein - Senior Exploration Geologist. Field Supervisor, report and map preparation.

K. Galambos - Field Geologist. Secant chaining, VLF-EM survey, soil sampling, map preparation.

V. Celuszak - Field Assistant. Secant chaining, magnetic survey, soil sampling.

GEOLOGY:

The Canyon claims were staked to cover the interval between the Grew Creek and Danger Creek faults. The faults are components of the Tintina fault system. The interval between the faults formed a graben during Tertiary time which aided in the preservation of the volcanic rocks which outcrop between Grew Creek and Km 400 Creek.

The gold bearing quartz-chalcedony stockwork zone at Grew Creek is hosted by felsic crystal lithic tuff on the Eastern flank of an andesitic-basaltic volcanic complex. The tuff unit is localized over a 700 m x 1000 m area adjacent the Grew Creek fault. The formation of the pyroclastic tuff unit may have been initiated by the intrusion of a series of rhyolite porphyry domes; the emplacement of which was controlled by deep seated structures trending acutely to the Grew Creek fault. These faults intersect the Grew Creek fault near the Grew Creek mineralized zone. This activity and the mineralizing system probably post dated the emplacement of a large quartz-feldspar porphyry sub volcanic stock southeast of Grew Creek. All of these units have been intruded by olivine basalt porphyry dykes or domes.

A variety of sedimentary deposits occur throughout the interval which include siltstone, sandstone and conglomerate. These deposits do not appear to form continuous blanket deposits but are commonly localized. Polymitic conglomerate deposits form along fault scarps which grade outward to finer grained deposits. Fluviatile sandstone deposits occur in localized areas which may have been small beaches or braided stream deposits.

The Km 400 grid is located on the western flank of the andesitic-basaltic volcanic complex west of Grew Creek. This sequence has a distinctive magnetic signature. The outcrop distribution has not been mapped on the grid at present but a series of small domes forms a 120 meter long ridge of olivine basalt porphyry on lines 98W and 99W near the 15 NBL. Low ridges of white moderately lithified sandstone and conglomerate trend subparallel to the baseline and outcrop south of the highway and north of the powerline. Outcrops of metamorphosed sediments and meta-basalts outcrop along the southern extent of the section lines from 110W-116W.

The Km 410 grid covers a small area 1 km west of a rhyolite porphyry to fine grained granodiorite intrusive complex (same age as the quartz-feldspar porphyry sub-volcanic stock southeast of Grew Creek). A small outcrop of light green rusty weathered felsic volcanic rock has been exposed by a cut trench along the Robert Campbell Highway near 2 N on line 213 W. Local blocky talus of polymitic conglomerate with dark grey matrix are exposed north of the highway near 3+50 N along lines 217W and 218W.

GEOCHEMISTRY:

Soil and silt sediment samples were collected from both grid areas. The results of previous sampling in the grid areas have been compiled on the grid maps. The 70 samples collected (3 Grid 400 and 67 Grid 410) were geochemically analyzed for Au, Ag, As, Hg. The samples were collected in 200 gm Kreft paper envelopes and sent to the Whitehorse laboratory of Bondar-Clegg Company Limited. The samples are dried and sieved at the Whitehorse laboratory and the minus 80 fraction is sent to the Vancouver laboratory for analysis. Gold analysis is by fire assay extration and combination fire assay-atomic aborption determination. Results are reported in parts per billion. Siver analysis is by hot aqua-regia extraction

and atomic absorption determination. Results are reported in parts per million. Arsenic analysis is by nitric perchloric acid deigestion and colourmetric determination. Results are reported in parts per million. The mecury analysis is by hot aqua-regia extraction and cold vapour atomic aborption determination. Results are reported in parts per billion.

The sample results on the Km 400 grid are included with the magnetic survey results on Figure 4. The soil geochemical results of the Km 410 grid are plotted on Figure 5. Calculation of mean and standard deviations were carried out for the Hg and As results. The results were a mean value of 53 ppb and standard deviation of 79 ppb for Hg with a mean value of 13 ppm and standard deviation of 4 ppm for the As values.

Samples containing detectable gold are highlighted on the plan. A slight trend for gold above 15 ppb is noted on the figures. The Hg results form a significant dispersion pattern which includes several anomalous values (up to 580 ppb). The outline of the greater than 75 ppb Hg value is indicated on the figure. It is noted that the detailed soil sample grid is not coincident with the cut line grid but it has been tied in to it. The soil sample grid was established along a small ridge which is flanked to the south by moss covered area and northward bounded by the highway. The ridge trends northwesterly (315^{o}) from the rusty westhered and altered outcrop exposed along the highway. A grab sample No. 39665 collected in 1985 yielded a value of 380 ppb gold.

LINECUTTING AND SECANT CHAINING:

The Km 400 grid was previously cut in June 1986. (Assessment applied previously). The 20 NBL was extended from the Grew Creek Grid. The 92W station was arbitrairly set as the baseline was not chained from the Grew Creek area. The distance was estimated from measuring the map distance. The mineralized trench exposure of the Grew Creek zone is at line 28W.

The Km 410 grid was cut by contract to Eastern Associates of Whitehorse. An arbitiary base station was established at 210W on the 00 baseline. The baseline was cut on a bearing of 300^{o}. Section lines were cut at 100 meter intervals from 213W-218W. A tieline was established at 1000 meters north for survey control. Lines 213W and 214W deadhead at the lake.

The two grids were chained by a two person crew using the secant slope correction method. The method involves the use of an inclinometer to measure the terrain slope along the line. Stations are established at 25 meter horizontal intervals. The slope distance is determined by applying the percent slope to a correction table. The slope correction factor is added to the horizontal distance which is measured to one hundredth of a meter. The pickets are labelled in the field with the line location and appropriate station. The slope percent and correction factor is recorded in a field notebook.

The lines are always chained from the common baseline to ensure a constant reference for all stations along the lines.

VLF-EM SURVEYS:

The section lines were surveyed with a Scintrex EM-16 unit. All readings were determined facing south. The transmitting station used was Seattle at 24.8 KH_z which is on an approximate bearing of 150^{o}.

Readings were taken at 12.5 m intervals with quadrature and dip angles in per cent recorded on field note forms. The field data is transferred to a office working sheet where the dip angle readings are tabulated with the terrain slopes. Significant slope intervals (greater than 10%) affect the dip angle reading therefore a correction is applied to the readings based on the terrain slope. The terrain correction factor T is calculated as follows:

$$T = \tfrac{1}{2} \arctan \frac{\sqrt{2}}{\tan \Upsilon - \operatorname{cotan} \Upsilon}$$

$$\text{where } \tan \Upsilon = \tan \Upsilon_1 \times \frac{\sin e_2}{\sin e_1}$$

where Υ_1 = measured terrain slope angle along survey line

e_1 = angle between incoming electromagnetic field and strike of morphology

e_2 = angle between strike of survey line and strike of morphology

The terrain correction factor is applied directly to the per cent dip angle field reading (plus for minus terrain slope and minus for plus terrain slopes).

The corrected dip angles and quadratures are plotted on figures 3 and 6. The dip angles are profiled to identify the anomaly cross overs.

MAGNETIC SURVEYS:

The grids were surveyed using a Geometrics model G-816 proton magnetometer. The readings are corrected to a common datum by relating each to a series of established base stations. Readings are normally taken at 25 meter intervals with intermediate readings in anomalous areas. The readings are recorded in a field notebook with a time log between the base stations.

On the km 400 grid the 15 NBL was used for the base stations with both areas of the grid at a common datum. A contour interval of 50 γ was used to interpret the results on figure 3.

The magnetic survey results of Km 410 grid were corrected to base stations along the 00 baseline. An approximate correction was applied to the reconnaissance results of the 1984 survey by comparison to common grid points. These survey results were not corrected for diurnal drift between stations and therefore present a rough magnetic representation. The figure 7 results have not been contoured as no significant magnetic variations were recorded.

DISCUSSION OF RESULTS:

1. Km 400 Grid

The VLF-EM survey results (Figure 3) are interupted by the presnce of the power transmission line trending across the grid. The most prominent anomaly A-A at approximately 11N on lines 90W to 100W appears to continue to A^1-A^1 on lines 110W to 116W. This strong linear trend is interpreted to represent the Grew Creek fault zone.

Two sub-parallel anomalies B-B and C-C near the 5NTL are within the Pre-Permian meta sedimentary and volcanic sequence.

Scattered discontinuous and weak conductors D-D, E-E and F-F occur within the graben interval north of Grew Creek fault. The area is interpreted to be underlain by Tertiary volcanic rocks.

The magnetic survey results (Figure 4) indicate four anomalous zones that aid the structural setting indicated by the VLF-EM results. The wedge shape strong magnetic anomaly south of the power line on lines 92W-97W are consistent with the recorded response of the surveys carried out over the andesitic-basaltic volcanic complex west of Grew Creek and is probably an extension of these units.

The other intensive anomaly near the 5NTL on lines 110W-114W appears to be in an area south of the Grew Creek fault and probably underlain by Pre-Permain age meta-basalts.

Two lower level anomalies north of the Grew Creek fault zone appear to form a discontinuous trend which forms an acute angle with the Grew Creek fault trend. The anomaly near the 15 NBL on lines 98W and 99W coincide with outcrops of olivine basalt porphyry. The lower response level is consistent with survey results over similar olivine basalt porphyry dykes and domes in the Grew Creek area.

The silt sediment samples from the creeks in the area yielded several detectable gold values (10 ppb) as well as an anomalous arsenic value (110 ppm) and mercury values up to 140 ppb.

2. Km 410 Grid

The anomalous Au-Hg in soils trend is indicated on the VLF-EM plot figure 6 and magnetic plot figure 7.

The VLF-EM response over the Grew Creek fault appears to be masked by the affects of the power transmission line. An anomaly A-A sub-parallels the baseline in the vicinity of the soil anomaly is an interesting target.

Two isolated anomalies B may be a continuous northerly trending zone.

No significant variation in the total magnetic field plot occur throughout the area.

CONCLUSIONS AND RECOMMENDATIONS:

On the 400 grid geophysical surveys have located the Grew Creek fault zone and indicated the presence of Tertiary andesitic-basaltic volcanism. The magnetic survey led to the field identification of late stage olivine basalt porphyry domes on an apparent structural trend similar to the structural trend which lead to the development of the Grew Creek pyroclastic unit and subsequent gold mineralizing event. This evidence of volcanic activity and potential intersecting structures with the Grew Creek fault suggest a potential exploration target area. The detectable gold and above background arsenic and mcercury levels in stream sediments requires additional sampling to determine the potential for a mineralized occurrence.

The gold and mercury anomalous zone associated with a VLF-EM anomaly adjacent the Grew Creek fault zone on the Km 410 is an excellent exploration target. Interpretation of the geological setting has been aided by the geophysical surveys.

It is recommended to:

Km 400 Grid

1. Carry out geological mapping to locate the outcrop distribution on the Km 400 grid.
2. Carry out a reconnaissance style magnetic survey north of the 15 NBL from 93W-98W to appromately 17N. as well as fill in lines south of the 15 NBL to the powerline from 100W-110W. This should trace the implied structural trend from the present survey. VLF-EM could also be carried out but is not practical in the vicinity of the powerline.
3. Carry out soil sampling along the magnetic trend and in the vicinity of the discontinuous VLF-EM anomalies north of the Grew Creek fault zone. Lithogeochemical sampling should be included with the geological mapping.

Km 410 Grid

4. Caterpillar trenching is recommended in the area of the Au-Hg in soils trend with extensive sampling of soils and bedrock.
5. Extending the grid east and west and survey with VLF-EM and magnetic instruments to better determine structural trends. Recommend additonal lines 207W-212W and 219W-224W.
6. Extend the soil sampling coverage along lines 215W-218W from 4+50N to 6+00N. As well as following up other potential anomalous areas on the grid extensions.

Robert Thomson

PELLY RIVER

Quarrying Leases
BOBCAT 1-4

Robert Campbell Highway

Grew Creek

GRAND 1-162
YA 81648 - YA 81695
YA 85284 - YA 85357

TAR-ERN-HELL
YA 75749 - YA 75752
YA 75778 - YA 75799

Buttle Creek

62° 05'
105 K 3
133° 00'
105 K 2

105 K 2
132° 50'
62° 00'
105 F 15

KEY 1-16
YA 24412 - YA 24427

PUG 1-52
YA 8744 - YA 8767
YA 50971 - YA 50998

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED

WHITEHORSE OFFICE

CANYON CLAIMS
LOCATION PLAN
WHITEHORSE MINING DISTRICT 091885

DRAWN BY: RS	DATE: OCT 30/86	PLATE No: 2
REVISED BY:	SCALE: 1 in. = 1/2 mile; Feet 0 1000 3000 5000	

DIP ANGLE PROFILES

+ 25% | - 25%

Quad. | Dip Angle

Facing

Seattle Tx

approximate claim boundary

Robert Campbell Highway

Km 400

gravel pit

powerline

20 NBL

15 NBL

5 NTL

116+00 W
115+00 W
114+00 W
113+00 W
112+00 W
111+00 W
110+00 W
109+00 W
98+00 W
97+00 W
96+00 W
95+00 W
94+00 W
93+00 W
92+00 W
91+00 W
90+00 W

18+00 N
17+00 N
16+00 N
14+00 N
13+00 N
12+00 N
11+00 N
10+00 N
9+00 N
8+00 N
7+00 N
6+00 N

19+00 N

CANYON 322
CANYON 321
CANYON 72
CANYON 71
CANYON 70
CANYON 69
CANYON 68
CANYON 67
CANYON 66
CANYON 65
CANYON 64
CANYON 63
CANYON 62
CANYON 61
CANYON 105
CANYON 102
CANYON 100
CANYON 98
CANYON 97
CANYON 96
CANYON 95
CANYON 94
CANYON 92
CANYON 93

A
A'
B
C
D
E
F

LOCATION PLAN
Whitehorse Mining District
Scale 1:50,000

105 K 3 | 105 K 2

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED

WHITEHORSE OFFICE

CANYON CLAIMS
Km. 400 GRID
VLF-EM DIP ANGLE PROFILES

091885

DRAWN BY: KG RS	DATE: OCT. 30/86	PLATE No: 3
FIELD WORK BY: KG	REVISED BY:	SCALE: 1:2500 metric (0 25 50 75 100)

116 + 00 W
115 + 00 W
114 + 00 W
113 + 00 W
112 + 00 W
111 + 00 W
110 + 00 W
100 + 00 W
99 + 00 W
98 + 00 W
97 + 00 W
96 + 00 W
95 + 00 W
94 + 00 W
93 + 00 W
92 + 00 W
91 + 00 W
90 + 00 W

18 + 00 N
17 + 00 N
16 + 00 N
15 NBL
14 + 00 N
13 + 00 N
12 + 00 N
11 + 00 N
10 + 00 N
9 + 00 N
8 + 00 N
7 + 00 N
6 + 00 N
5 NTL

20 NBL
19 + 00 N

approximate claim boundary

Km 400

Robert Campbell Highway

1352 - 2/6/125/45
1925 - 4/21/50/—
1353 - <2/6/55/45
1354 - 42/3/55/45
1355 - <2/2/100/ 5
1926 - 3/14/140/10
1927 - 3/11/130/10
1356 - <2/<2/105/<5
02 - <2/6/45/10
03 - 3/10/45/10
01 - 2/3/5/45

powerline

CANYON 62
CANYON 61
CANYON 64
CANYON 63
CANYON 66
CANYON 65
CANYON 68
CANYON 67
CANYON 70
CANYON 69
CANYON 72
CANYON 71
CANYON 322
CANYON 321
CANYON 104
CANYON 102
CANYON 100
CANYON 98
CANYON 96
CANYON 95
CANYON 94
CANYON 93
CANYON 92
CANYON 91

LOCATION PLAN
Whitehorse Mining District
Scale 1:50,000

105 K 3 | 105 K 2

INSTRUMENT: Geometrics G-816

Add 58,000γ for total field.

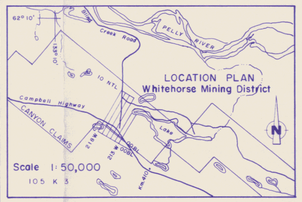
Contour interval 50γ

* Sample No – Ag/As/Hg/Au
ppm ppb

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED
WHITEHORSE OFFICE

CANYON CLAIMS 091885
Km. 400 GRID
TOTAL MAGNETIC FIELD

DRAWN BY: R.S.	DATE: OCT. 30/86	PLATE No.: 4
FIELD WORK BY: V.C.	REVISED BY:	SCALE: 1:2500 metric (0 25 50 75 100)



CANYON 222

CANYON 221

CANYON 312

CANYON 311

Lake

LITHOGEOCHEMISTRY

SAMPLE No.	Au	Ag	As	Hg	Cu	Pb	Zn
39665	380	.7	—	—	5	26	45
39666	10	.2	—	—	7	21	96
39667	< 5	< .2	—	—	8	21	98
39668	< 5	< .2	—	—	5	25	79
39669	< 5	< .2	—	—	10	10	36
39670	< 5	< .2	—	—	11	13	40
39671	< 5	< .2	—	—	11	15	37
39672	< 5	< .2	—	—	13	14	50
59312	10	< .2	20	< 5			
59313	5	< .2	21	< 5			
59314	10	< .2	14	< 5			
59315	5	< .2	30	< 5			
75615	< 5	1.1	6	20			
75616	5	.6	11	30			
99343	< 5	< .2	26	10			
99344	< 5	< .2	11	15			
99345	< 5	< .2	14	60			
99346	< 5	< .2	28	50			
99347	< 5	< .2	18	45			

Birch Creek Road

Sandstone - Conglomerate

39669 - 672

00 BL

00 BL

Au trend

Felsic Volcanic

39665 - 668
39671 - 672
39673 - 675
75615 - 616
99345 - 347
39667 - 668

ROBERT CAMPBELL HIGHWAY

6+00 W
5+50 W
5+00 W
4+50 W
4+00 W
3+50 W
3+00 W
2+50 W
2+00 W
1+50 W
1+00 W

Baseline 00 for cut line grid.

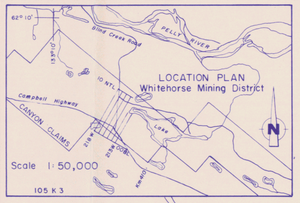
21 W
22 W
23 W

Soil sample location
Ag/As/Hg/Au
ppm ppb

Rock sample location

⊗ Detectable Au

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED		
WHITEHORSE OFFICE		
CANYON CLAIMS Km. 410 GRID GEOCHEMISTRY		091885
DRAWN BY: R.S.	DATE: OCT 30/86	PLATE No: 5
FIELD WORK BY: N.G. R.S. C.C. V.C.	REVISED BY:	SCALE: 1:1000 metric (0 10 20 30 40 50)



LOCATION PLAN
Whitehorse Mining District

Scale 1:50,000

Facing

Seattle Tx

+25% | -25%

Quad. | Dip Angle

DIP ANGLE PROFILES

BIRCH CREEK ROAD

approximate claim boundary

218 W | 217 W | 216 W | 215 W | 214 W | 213 W | 212 W | 211 W | 210 W

10 NTL

9+00 N

8+00 N

7+50 N

7+00 N

6+00 N

5+00 N

4+00 N

3+00 N

2+00 N

1+00 N

00 BL

access road

CANYON 314

CANYON 313

CANYON 312

CANYON 311

CANYON 222

CANYON 221

CANYON 220

CANYON 219

CANYON 218

CANYON 216

CANYON 356

CANYON 355

CANYON 354

CANYON 353

CANYON 302

L84 | L83 | L82 | L57 | L56 | L55 | L54 | L53 | L52 | L51 | L50

LAKE

POND

ROBERT CAMPBELL HIGHWAY

Km. 410

A — A'

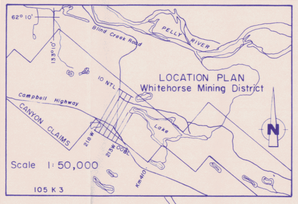
B — B'

Au-Hg trend

* Soil sampling grid baseline

powerline

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED	
WHITEHORSE OFFICE	
CANYON CLAIMS Km. 410 GRID VLF-EM DIP ANGLE PROFILES	091885
DRAWN BY: KG. RS.	DATE: OCT 30/86
PLATE No: 6	
FIELD WORK BY: K.G. C.M.	REVISED BY:
SCALE: 1:2500 metric 0 25 50 75 100	



INSTRUMENT: Geometrics G-816

Add 58,000γ for total field.

BUTTY CREEK ROAD

approximate claim boundary

218 W | 217 W | 216 W | 215 W | 214 W | 213 W | 212 W | 211 W | 210 W

10 NTL

9 + 00 N

8 + 00 N

7 + 00 N

6 + 00 N

5 + 00 N

4 + 00 N

3 + 00 N

2 + 00 N

1 + 00 N

00 BL

7 + 50 N

access road

CANYON 314

CANYON 313

CANYON 312

CANYON 311

CANYON 222

CANYON 221

CANYON 220

CANYON 219

CANYON 218

CANYON 216

CANYON 356

CANYON 355

CANYON 354

CANYON 353

CANYON 302

ROBERT CAMPBELL HIGHWAY

Au-Hg trend

Soil sampling grid baseline

powerline

LAKE

POND

Km. 410

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED

WHITEHORSE OFFICE

CANYON CLAIMS

Km. 410 GRID

091885

TOTAL MAGNETIC FIELD

DRAWN BY: RS. | DATE: OCT 30/86 | PLATE No: 7

FIELD WORK BY: V.C. C.m. R.C.

REVISED BY:

SCALE: 1:2500 metric

0 25 50 75 100

APPENDIX I

SUMMARY OF EXPENDITURES

Km 400 - SALARIES & WAGES Sept. 2-Oct. 30, 1986	
K. Galambos 9 days @ 130$/day	1,170.00
V. Celuszak 6 days @ 110$/day	660.00
R. Stroshein 3 days @ 200$/day	600.00
Geochemical - Bondar Clegg Report # 126-4430	
3 samples (Au Ag As Hg) @ 16.40/sample	49.20
Truck rental	
6 days @ 50$/day	300.00
Camp Supplies - 16 man days @ 30$/day (estimated)	480.00
	$ 3,259.20
Km 410 - SALARIES & WAGES Sept. 13-Oct. 30, 1986	
K. Galambos 5 days @ 130$/day	650.00
V. Celuszak 3 days @ 110$/day	330.00
R. Stroshein 4 days @ 200$/day	800.00
Linecutting - Eastern Associated Reg'd	
Invoice #085556 6.7 km @ 225$/km	1,507.50
Geochemical Bondar-Clegg Report No. 126-4034 & 4897	
67 samples (Au Ag As Hg) @ 16.40$/sample	1,098.80
Truck Rental	
3 days @ 50$/day	150.00
Camp Supplies (estimated)	
7 man days @ 30$/day	210.00
	$ 4,746.30

APPENDIX II

BIBLIOGRAPHY OF ASSESSMENT REPORTS

1. GEOPHYSICAL REPORT OF GROUND MAGNETIC AND ELECTROMAGNETIC SURVEYS ON THE CANYON CLAIM GROUP; Hudson Bay Exploration and Development Company Limited. April 30 to May 20, 1984.

2. ASSESSMENT REPORT OF DIAMOND DRILLING AND TRENCHING ON THE CANYON CLAIM GROUP; Hudson Bay Exploration and Development Company Limited. June 2-6, 1984.

3. REPORT OF BORE HOLES CAN 11 & 12 ON CANYON 2 CLAIM; Hudson Bay Exploration and Development Company Limited. October 10-15, 1984.

4. EXPLORATION REPORT OF GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEYS ON THE CANYON CLAIM GROUP; Hudson Bay Exploration and Development Company Limited. December 4, 1984.

5. ASSESSMENT REPORT OF GEOLOGICAL MAPPING GEOCHEMICAL SAMPLING AND LINECUTTING ON THE GRAND 1-48 CLAIMS AND TRENCHING ON GRAND 1; Hudson Bay Exploration and Development Company Limited. June 23/84 - May 22/85.

6. ASSESSMENT REPORT OF GEOLOCIGAL MAPPING AND GEOCHEMICAL SAMPLING ON THE GRAND 49-162 CLAIMS; Hudson Bay Exploration and Development Company Limited. May to Sept. 6, 1985.

7. ASSESSMENT REPORT OF GEOLOGICAL MAPPING AND GEOCHEMICAL SAMPLING ON THE CANYON 300-320 CLAIMS; Hudson Bay Exploration and Development Company Limited. May to Sept. 6, 1985.

8. CANYON-GRAND CLAIMS - ROTARY DRILL PROGRAM ; Hudson Bay Exploration and Development Company Limited. August 30-September 14, 1985.

9. ASSESSMENT REPORT OF GEOLOGY AND GEOCEMICAL SAMPLING CANYON CLAIMS (216, 218-222, 311-312, 353-356); Hudson Bay Exploration and Development Company Limited. June 10, 1986.

10. GEOPHYSCIAL REPORT OF GRAND MAGNETIC AND ELECTRO-MAGNETIC SURVEYS ON THE DANGER CREEK GRID GRAND 49-158 CLAIMS; Hudson Bay Exploration and Development Company Limited. August 21 - September 6, 1986.

11. REPORT ON GEOCHEMICAL, GROUND MAGNETIC AND ELECTROMAGNETIC ON THE LAPIE RIVER GRID, GRAND CLAIMS; Hudson Bay Exploration and Development Company Limited. September 7 to September 19, 1986.

12. REPORT OF GEOCHEMICAL AND GEOPHYSICAL SURVEYS ON THE KM 400 AND KM 410 GRIDS, CANYON CLAIMS; Hudson Bay Exploration and Development Company Limited. September 3-21, 1986.

APPENDIX III

ROBERT W. STROSHEIN

EDUCATION: B. Sc. (Geological Engineering) from
University of Saskatchewan
Graduated in 1973

EMPLOYMENT: 1973 - 1984 Hudson Bay Exploration & Development Co. Ltd.

Flin Flon Office 1973 - 1975
Drill Geologist - field supervisor of diamond drill projects Northern Manitoba and Saskatchewan.

Whitehorse Office
Project Geologist 1975-1980 - field supervisor of geological mapping, geophysical, geochemical and prospecting programs in the Yukon Territory. Included report preparation and assessment.

Senior Exploration Geologist - 1981 - planning, monitoring and assessing exploration projects conducted in the Yukon Territory.