

REPORT ON THE 1995 WORK PROGRAM
COAL EXPLORATION LICENCES, Y-455 AND Y-456
DAWSON MINING DISTRICT, YUKON
NTS 116 B-2

by

Larry W. Carlyle, F.G.A.C., P. Geol.

Whitehorse, Yukon

September, 1995

TABLE OF CONTENTS

	Page
Introduction	1
Location, Access and Licences	1
1995 Work Program	
Gates Mine Decline Work	2
Trenching	3
1995 Statement of Costs	4
Conclusions	4
Recommendations	4
References	5
Statement of Qualifications	6

FIGURES

	Following Page
Location Map	1
Trench Location Map	3

APPENDICES

Appendix A -- Invoices Supporting Statement of Costs
Appendix B -- Photographs

INTRODUCTION:

The location of the old mine portal had been found near the base of a steep creek bank in 1994. Unfortunately, permafrost action had resulted in a large portion of the hillside sliding down to cover the portal site. The portal site was recognized by the presence of several pieces of equipment, an old mine dump and mine track disappearing under the landslide. Work in the portal area during 1994 had revealed that the landslide material was solidly frozen. It was, therefore, decided to take a small pump into the site and attempt to thaw the material to reveal the old portal and attempt to enter the old mine to obtain better coal samples.

In 1995, Carlyle spent from June 2nd to June 9th at the mine site. The object of this report is to summarize the work performed and the information obtained from the property visit.

LOCATION, ACCESS AND LICENCES:

Coal Exploration Licences, Y-455 and Y-456, were reduced to 22,724 acres at the end of 1994 from their original 59,584 acres. The licences are located in the western half of NTS Map Sheet 116 B-2.

The old wagon road which provided access to the mine during its operation is now heavily overgrown and traverses many areas of swamp so is no longer serviceable (See Location Map). A helicopter pad had been cut out at the mine site in 1994 so Carlyle, his equipment and supplies were placed and removed by

Scale 1:50,000
LOCATION MAP

Mine

Land
Claim

Farm

Dawson
11-12 miles

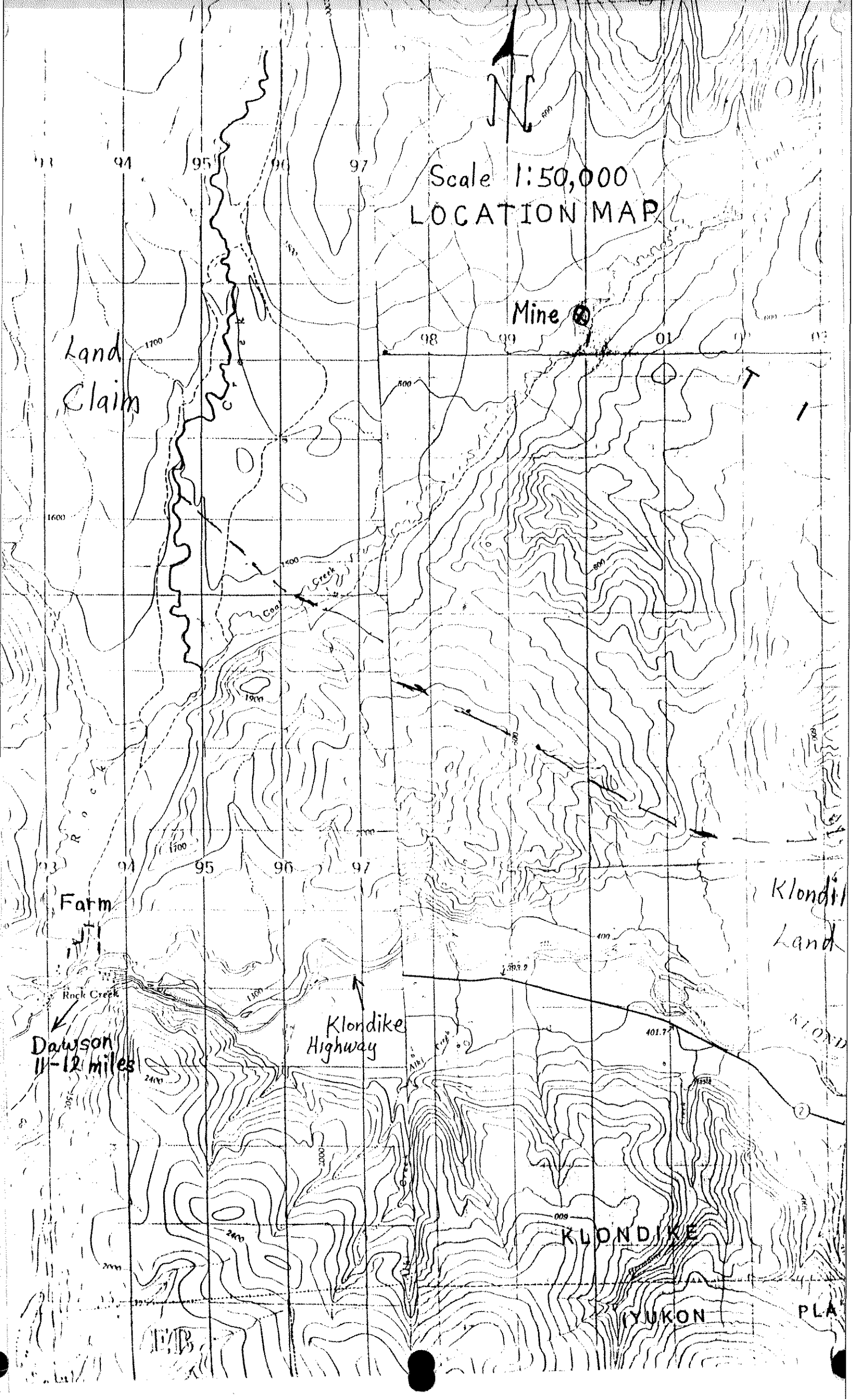
Klondike
Highway

Klondike
Land

KLONDIKE

YUKON

PLA



helicopter.

1995 WORK PROGRAM:

The 1995 work program contained two parts: an attempt to open the old Gates Mine decline to investigate its condition and to obtain better coal samples for analysis, and the digging of two trenches to expose the coal seams at surface.

GATES MINE DECLINE WORK

An area of overgrowth (approx. 1/4 acre) was cleared in front of the mine decline. The rented 2 inch pump was set up near the edge of Coal Creek, discharge hose with a red plastic nozzle was laid out (approx. 40 feet) from the pump to the portal, and a screened intake hose (approx. 15 feet) was placed into Coal Creek. Water was pumped from Coal Creek and directed against the frozen ground around the mine portal. The water sat in a natural depression at the portal until it reached a level high enough to run southward down the hill back toward Coal Creek and into a small area of swamp on the edge of the creek. Knowing of the concern for sediment in creeks, I watched carefully for any discoloration in the water flowing in the creek. None was ever found.

The pump was not as effective as I had hoped it would be at thawing the frozen ground. A high pressure pump may have been more effective. It was still able to thaw about 2 inches of mud per hour which is still faster than natural thawing. Advance in opening the portal was most efficient when holes were cut about 5

inches apart in the frozen ground with the water and the intervening partially frozen ground dug out with the pick and shovel. The pump was operated for a period of five days for approximately 10 hours each day. The amount of frozen ground thawed and removed from the portal mouth is estimated to be 10 - 12 cubic yards. Once the mine was partially opened and the mine timbers could be seen, it became apparent that the mine had been on fire. The portal timbers, as well as the skid and footing timbers of the machinery near the portal, are charred. The layered nature of the ice seen between the portal timbers suggest that the decline had been flooded to put out the fire. See the accompanying photographs which demonstrate these observations. The removal of this ice and the retimbering required to reopen the Gates Mine decline would be too expensive for Carlyle to undertake. The decline opening made has been covered with sheets of corrugated metal to slow any additional thawing and to increase safety.

TRENCHING

Two trenches were excavated on the hilltop above the mine. Trench #1 is located at what was believed to be an old trench in 1994. It now seems that the area is more likely a collapse feature; possibly created from the melting of an ice lense or collapse of a stope in the old mine. The material excavated from the trench was not frozen and consisted of a sandy clay. Trench #2 was dug at 0 E, 93 N in the location where the coal is expected to subcrop. Permafrost was encountered in the trench at

GATES
MINE
DECLINE

1995
Trench
#1

OLD
TRENCH

0 - 2
0 + 2
0 + 1
0 + 2
0 + 4
0 + 3
0 + 1
0 - 1
0 + 1
0 + 2
0 - 4
0 - 2
0 + 2
0 + 2
0 + 2
0 + 3
0 0
0 + 3
0 + 2
0 + 4
0 + 4
0 + 2
0 - 1
0 + 2
0 + 1
0 - 2
0 - 2
0 0
0 + 1
0 - 1
0 - 1

1995
Trench
#2

0 + 2
0 0
0 + 2
0 0
0 + 1
0 + 2
0 - 2
0 + 2
0 + 1
0 + 2
0 + 3
0 + 4
0 + 3
0 + 5
0 + 5
0 + 4
0 + 3
0 + 3
0 + 5
0 + 4
0 + 3
0 + 4
0 + 2
0 + 4
0 + 2
0 + 1
0 + 1
0 + 2
0 - 1
0 + 2

0 + 3
0 + 2
0 + 3
0 + 1
0 + 2
0 + 4
0 + 4
0 0
0 0
0 + 4
0 + 4
0 + 5
0 + 3
0 + 3
0 + 4
0 + 4
0 + 4
0 + 2
0 + 2
0 - 1
0 + 1
0 0
0 - 1
0 0
0 - 2
0 - 1
0 - 2
0 - 1
0 + 1

0 + 5
0 + 3
0 + 4
0 + 1
0 - 2
0 - 1
0 + 2
0 + 3
0 + 2
0 + 2
0 - 1
0 + 2
0 + 3
0 + 3
0 0
0 + 1
0 + 2
0 0
0 - 1
0 - 1

150 N
140 N
130 N
120 N
110 N
100 N
90 N
80 N
70 N
60 N
50 N
40 N
30 N
20 N
10 N
0 N

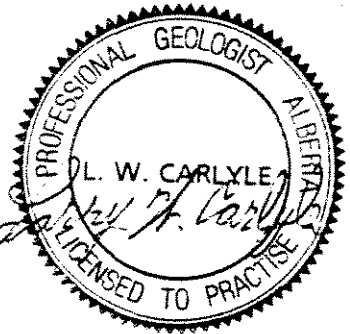


OLD
TRENCH

0 E

50 E

100 E



GATES MINE VLF SURVEY JUNE 8/94
150 E RAW DIP ANGLE DATA SEATTLE TRANS
SCALE: 1: 2000

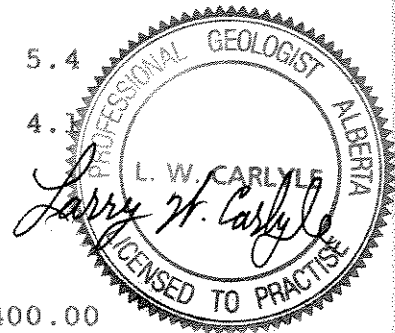
a depth of 2 feet at the southwest end and at 18 inches at the northeast end. See trench locations on 1994 VLF Survey Data Plan.

Trench #	Length (ft)	Width (ft)	Depth (ft)	Volume (yds ³)
1	12	4	3	5.4
2	14	4	2	4.7

1995 STATEMENT OF COSTS:

Labour (8 days @ \$50/day)	\$ 400.00
Report Writing (2 days @ \$200/day)	\$ 400.00
Helicopter	\$ 464.60
Room and Board	\$ 159.83
Pump Rental	\$ 128.40
Vehicle and Pump Gas & Oil	\$ 116.87
Photocopying & Office Supplies	\$ 20.00

Total	\$1,689.70



CONCLUSIONS:

1. The Gates Mine appears to have been on fire at some time and the mine had to be flooded to put out the fire.
2. Substantial expense will be needed to de-ice and rehabilitate the old mine to obtain better access and coal samples. This expense is beyond what Carlyle is able to provide.

RECOMMENDATIONS:

Coal Licences Y-455 and Y-456 be terminated. No further work is recommended.

REFERENCES:

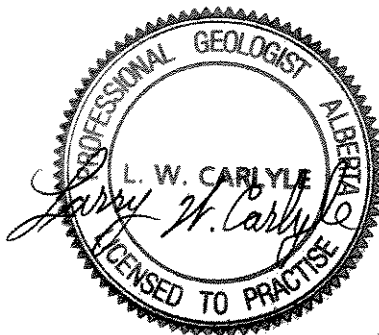
1. Bostock, H.S., "Yukon Territory - Selected Field Reports of the Geological Survey of Canada 1898 to 1933"
GSC Memoir 284, pages 30 - 33.
2. Geological Survey of Canada, (1988) "Geology - Southwestern Dawson Map Area" Map - Open File 1927
3. Hunt, J. A., (1994) "Yukon Coal Inventory 1994" Report for Energy and Mines Branch, Economic Development, Government of Yukon, pages 71 - 73.
4. Yukon Minfile, Northern Cordilleran Mineral Inventory, Dawson Map Sheet, 116 B & C, Occurrence 5.

STATEMENT OF QUALIFICATIONS

I, LARRY W. CARLYLE, do certify:

1. That I am a professional geologist resident at 74 Tamarack Drive, Whitehorse, Yukon Y1A 4Y6.
2. That I hold a B. Sc. degree in geology from the University of British Columbia (1970).
3. That I am a Fellow of the Geological Association of Canada (F - 4355).
4. That I am a Registered Professional Geologist in the Association of Professional Engineers, Geologists and Geophysicists of the Province of Alberta (41097).
5. That I have practiced my profession as a mine and exploration geologist for eighteen years.
6. The conclusions and recommendations in the attached report are based on work I performed on the property and on a review of available private and public reports on the property.

DATED at Whitehorse, Yukon, this 5th day of September, 1995.



APPENDIX A

**INVOICES SUPPORTING
STATEMENT OF COSTS**

FIREWEED

HELICOPTERS

INVOICE

INVOICE #220

TO: Larry Carlyle
74 Tamarack Drive
Whitehorse, Yukon
Y1A 4Y6

DATE INVOICE SENT: June 20, 1995

RE: Helicopter Charter

DATE: June 15, 1995 Ticket #074 HOURS: 0.3

TOTAL HOURS: 0.3

FEES: \$195.00

FUEL: \$ 22.10

SUBTOTAL: \$217.10

GST #128659828 @ 7%: \$ 15.20

TOTAL: **\$232.30**

PAYMENT MADE JUNE 20/95: \$232.30

BALANCE DUE: \$ 0.00

THANK YOU FOR YOUR PROMPT PAYMENT.

WHITEHORSE DAWSON CITY
403-668-5888 403-993-5700
Box 5450, Whitehorse, Yukon Y1A 5H4

INVOICE

NUMBER

PAGE

021463

DATE

06-10-95



SUPPLIES & SERVICES LTD.

Your Water Doctor
 123 Copper Road
 WHITEHORSE, YUKON Y1A 2Z7
 Phone (403) 668-5544
 Fax (403) 668-7182

LARRY CARLYLE

SOLD TO

SHIP TO

GST I.D.# R100241835

ORDERING	ORDER DATE	CUSTOMER NO.	SALES PERSON	PURCHASE ORDER NO.	SHIP VIA	TERMS
	- -		BERT		RENTAL	Visa

QTY ORDERED	QTY SHIPPED	QTY B/O	ITEM NUMBER	DESCRIPTION	UNIT PRICE	U/M	EXTENDED PRICE
1	1		MISC.	TSP-2 PUMP RENTAL C/W 50' DISCHARGE AND 20' SUCTION	120.00	ea	120.00

COMMENTS:

THANK YOU!

MISC CHARGES	120.00
SALES TAX	8.40
FREIGHT	
TOTAL	\$128.40

4510 409 427 444

0003500

LARRY CARLYLE

11/95 CV

Dawson Gas

LICENSE NO / LICENCE
ARF 23
PROV - STATE-ETAT
Y7
AUTHORIZATION/AUTORISATION

990300249

060295

5 890564

SILVER TRAIL SVC
GST 13333019

ITEM	QUANT.	PRICE / PRIX	AMOUNT / MONTANT
GAS / GAZ		21.3500	
OIL / HUILE			
MISC.			
TAX / TAXE			
TOTAL \$			35.00

CHARGEX SALES DRAFT - FACTURE

THE CARDHOLDER WILL PAY TO THE ISSUER OF THE CHARGE CARD PRESENTED HEREWITH THE AMOUNT STATED HEREON IN ACCORDANCE WITH THE ISSUER'S AGREEMENT WITH THE CARDHOLDER.
LE DETENTEUR DE LA CARTE CHARGE MENTIONNEE CI-DESSUS PAIERA A L'EMETTEUR DE LA CARTE LE MONTANT CI-DESSUS CONFORMEMENT AUX CONDITIONS DE LA CONVENTION ENTRE L'EMETTEUR ET LE DETENTEUR DE LA CARTE.

Larry Carlyle
CUSTOMER SIGNATURE / CLIENT



PLEASE RETAIN THIS COPY AS A RECORD OF YOUR TRANSACTION

CONSERVEZ CETTE COPIE COMME PREUVE DE VOTRE TRANSACTION

CUSTOMER COPY - COPIE DU CLIENT

4510 409 427 444 0008187

Sold to / Vendu à

Amount of purchase / Montant de l'achat

Dawson Gas

Account may be assigned to / Ce compte peut être cédé aux:

Imperial Oil
Products Division
Pétrolière Impériale
Division Produits pétroliers

Imperial Oil



Sold by / Vendu par

M/M D/J Y/A

91151101722 P
CITY CENTER
9040 QUEEN
WHITBY ONT
L1R 6Y9

060195

6346409

Retain this copy / Conserver cette copie
This financing is subject to the terms and conditions applicable to your card.
Financement sous réserve des conditions applicables de votre contrat de carte de crédit.

License no. / N° de plaque	Prov. State / Etat
ARF 23	YT
Authorization no. / N° d'autorisation	544430
Customer's Signature / Signature du Client Larry Carlyle	
Odometer Reading / Lecture de l'odomètre	

Product / Produit	Qty. / Qté	Price / Prix	GST / TPS	Amount / Montant
Supreme Diesel		28.1263	1	81.87
Extra Diesel				
Propane				
Motor oil / Huile moteur				/ /
Fuel amount includes PST where applicable. / Carburant T.V.P. incluse, s'il y a lieu.				PST - T.V.P.
				Total 81.87

APPENDIX B

PHOTOGRAPHS



Kenny Bros. Boiler
(End nearest portal)

BEST ATTAINABLE IMAGE





American Hoist & Derrick Co. hoist

BEST ATTAINABLE IMAGE



S. Flory MFG Co. hoist



Pump thawing portal site

BEST ATTAINABLE IMAGE





Mine Car on old Gates Mine dump

BEST ATTAINABLE IMAGE



Gates Mine Portal Site



Pump thawing portal site

BEST ATTAINABLE IMAGE

