

2H03SW0010 2.6915 LENNOX

ASSESSMENT REPORT

ON THE

TWIN LAKES GROUP (4 CLAIMS)

750413, 750436, 750437, 750438

BY

S. L. FUMERTON
CHEVRON CANADA RESOURCES LIMITED
167B WILSON AVENUE
TIMMINS, ONTARIO
P4N 2T2

FOR

HUDBAY MINING LTD.

BOX 200

CALGARY, ALBERTA

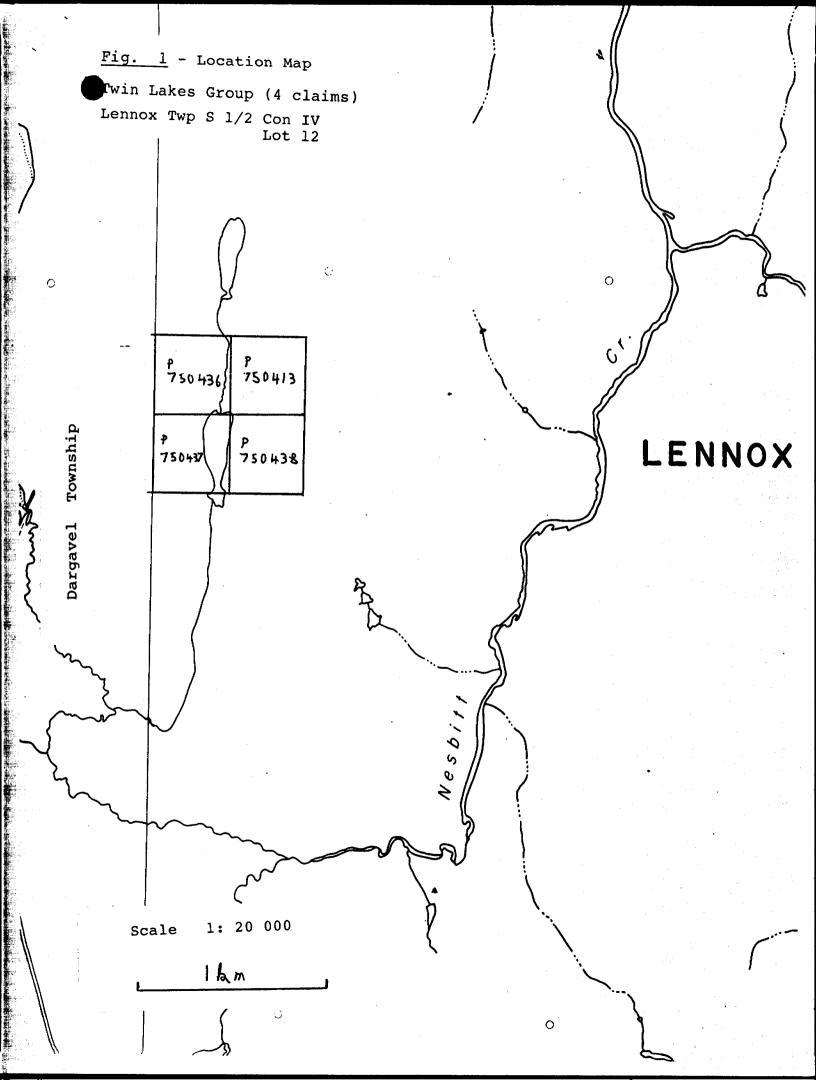
RECEIVED

JUN 29 1984

MINING LANDS SECTION

The 78 days of work credits from the Input survey, and 78 days from the Total Field Magnetic Survey are to be distributed evenly over the total claim group as listed below:

Claim	Input	Mag	Total Days Credit
750413	20	19	39
750436	20	19	39
750437	19	20	39
750438	19	20	39

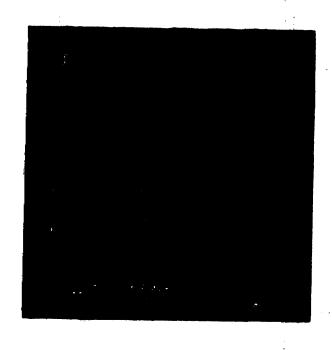


Que tor Mark VI Input Survey, October 1983.

Twin Lakes Group, Lennox Township.

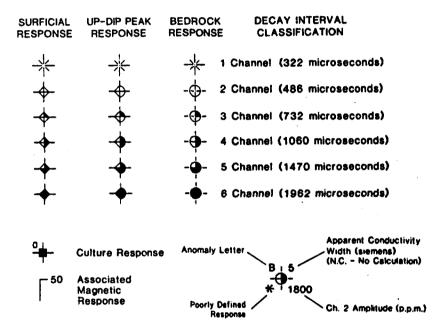
Claim	Km of Continuous Recording
750413	1.2
750436	.79
750437	.86
750438	1.08
	3.93 = 78 Days

Fig. 2 - Input Survey

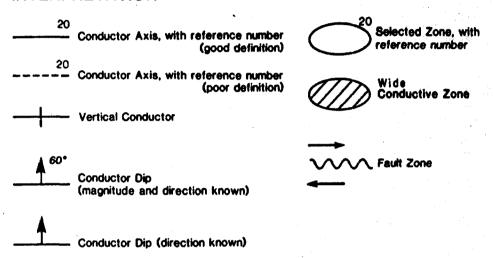


See legend on the following pages. Scale 1:20,000

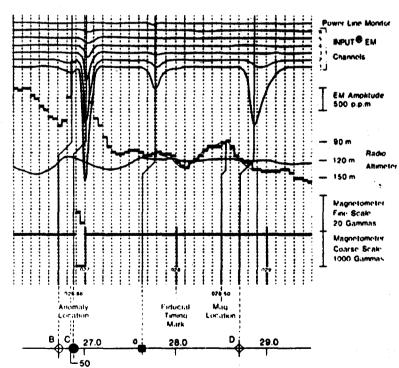
INPUT' PEAK RESPONSE SYMBOLS 1ms PULSE



INTERPRETATION



Representative INPUT* Magnetometer and Altimeter Recording



DESCRIPTIVE NOTES

The aircraft is equipped with the Barringer/Questor Mark VI INPUT* airborne E.M. System and the Sonotek PMH 5010 Proton Precession Magnetometer and Sonotek SDS-1200 Series Data Acquisition System. The INPUT* system will respond to conductive overburden and near-surface horizontal conducting layers in addition to bedrock conductors. Discrimination of conductors is based on the rate of transient decay, magnetic correlation and the anomaly shape, together with the conductor pattern and topography.

* Registered Trade Mark of Barringer Research Limited

INTERPRETATION REFERENCES

Becker, A., Gauvreau, C., and Collett, L.S.
1972: Scale Model Study of Time Domain Electromagnetic Response of Tabular Conductors; Canadian Mining and Metallurgical Bulletin, Volume 65, No. 725, p. 90-98.

Dyck, A.V., Becker, A., and Collett, L.S.
1974: Surficial Conductivity Mapping with the Airborne INPUT*
System: Canadian Mining and Metallurgical Bulletin,
Volume 67, No. 744, p. 104-109.

Lazenby, P.G 1973:

New Developments in the INPUT* Airborne E.M. System; Canadian Mining and Metallurgical Bulletin, Volume 66, No. 732, p. 96-104.

Nelson, Philip, H.

Model Results and Field Checks for a Time-Domain Airborne E.M. System: Geophysics, Volume 38, No. 5, p. 845-853.

Palacky, G.J., and West G.F.

1974: Computer Processing of Airborne Electromagnetic Data: Geophysical Prospecting, Volume 22, No. 3, p. 490-509.

This survey forms part of a larger survey which consisted of 1,826 line km.

Type of instrument was Questor/Barringer MK VI Input System mounted on a Britten-Norman Trislander.

Flight line control was achieved using a 35mm strip camera with fiducial points plotted on a 1:20,000 uncontrolled photo mosaic.

No significant conductors were located in this survey within the claim group.

Sh Fument

S.L. Fumerton, Geologist

for J.P. Steele,
Chief Geophysicist

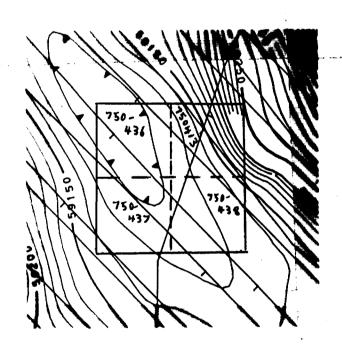
Questor. Total Magnetic Intensity Survey, October 1983.

Twin Lakes Group, Lennox Township

<u>Claim</u>	Approx.	Km of	Continuous	Recording
750413			1.2	
750436			.79	
750437			.86	
750438			1.08	
	4			

3.93 = 78 Days

Fig. 3 - Total Intensity Magnetic Survey



See legend on following page. Scale 1:2,000

MAGNETIC CONTOURS

______ 10 Gamma Contour Line

50 Gamma Contour Line

250 Gamma Contour Line



Magnetic Depression

1 Gamma = 1 Nanotesia in SI Units

This survey forms part of a larger survey which issisted of 1,826 line Km.

Type of instrument was a Sonotek PMP Proton Magnetometer mounted on Britten-Norman Trislander.

Flight line control was achieved using a 35mm strip camera with fiducial points plotted on a 1:20,000 uncontrolled photo mosaic.

Results of the survey indicate that the claims coincide with a northwest trending magnetic low at the northeastern edge of an area with a low magnetic relief (+ 150). The adjacent high relief terrain (+ 1000) extends some distance to the Northeast and this contrast in magnetic suscepterbility probably reflects on the existance of a major lithological contact in the underlying basement.

8h Fuments

S.L. Fumerton, Geologist

for J.P. Steele,
Chief Geophysicist





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Box 200, Cal	gary Alberta	à		Date of Survey	(from & to)	17	otal Miles of lin	a Cut
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Name and Address of Author (o S.L. Fumerto	•		T+A 1	67D Wilcon	·	Mimmin	- 0-4	
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	Geochemical							
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credits do not apply to Airborne Surveys.	Magnetometer	a4 19		IN oo				
	Radiometric			29 1984		\$2.50 PC	PROUPINE MINING	DIVISION
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choice. Enter number of days credits per claim selected in columns at right.			Total Day	For Office Use of Cr. Date Recorded		Misyling Blog	Ger //	
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June 4,1984. The Fine Level Signature			150	Date approved as Recorded Bringing Procedure				
June 4,1984. Certification Verifying Repo		<u>ی</u>	J [107/12	7-1-	WWV	narae	
I hereby certify that I have a or witnessed same during an	personal and intimate d/or after its completio				t of Work ann	exed hereto, h	aving performed	the work
Name and Postal Address of Pe John Steele,	· •	d, R.R	.#2 Tim	mins. Ont:	ario P4	N 7C3		
				Date Certified			y (Signature)	
					4.1984.	Shfm		3 1 M 1 1 1

File No 2.6915

Mining Lands Section Control Sheet

TYPE OF SURVEY	GEOPHYSICAL GEOLOGICAL GEOCHEMICAL EXPENDITURE
MINING LANDS COMMENTS:	

Signature of Assessor

(()

21/09/84

Date

Your File: 222-84 August 10, 1984 Our File: 2.6915 Hudbay Mining Ltd c/o Dome Petroleum Box 200 Calgary, Alberta T2P 2H8 Dear Sirs: Airborne Geophysical (Electromagnetic & Magnetometer) Survey submitted on Mining Claims P 750413 and P 750436 to 38 inclusive in the Township of Lennox Enclosed is the last page of the report, in duplicate, for the above-mentioned survey. Please have the author of the report date and sign each page and return them to this office. In addition, we are endeavouring to compile a list of qualifications of those persons who sign reports of geological, geochemical and geophysical surveys submitted to this Ministry for assessment work credits. I would be appreciated therefore, if you would have Mr. S.L. Fumerton furnish a brief resume of his qualifications for our records. Aug 29, 1984

gesal. on file 2.6744

wil! send signature / ages down

Shortly

Dorre Yours sincerely, S.E. Yundt Director Land Management Branch Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3 Phone: (416)965-4888 D. Kinvig:mc cc: Chevron Canada Ltd 167-B Wilson Avenue Timmins, Ontario P4N 2T2 cc: Mining Recorder Timmins, Ontario Encl.

1984 07 05 Your File: 222 Our File:2.6915

Mr. Bruce Hanley Mining Recorder Ministry of Natural Resources 60 Wilson Avenue Timmins, Ontario P4N 2S7

Dear Sir:

We have receive&dreports and maps for an Airborne Geophysical (Electromagnetic & Magnetometer) Survey submitted on Mining Claims P 750413 in the Township of Lennox.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours sincerely,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3 Phone: (416) 965-1380

A. Barr:sc

cc: Hudbay Mining Limited Box 200 Calgary, Alberta T2P 2H8

THE TOWNSHIP OF CALDER TWP. LENNOX DISTRICT OF COCHRANE 764456 | 764453 PORCUPINE MINING DIVISION 764454 764454 P P SCALE: I-INCH = 40 CHAINS P LEGEND **P** PATENTED LAND P **P P** P CROWN LAND SALE LEASES LOCATED LAND LICENSE OF OCCUPATION ROADS IMPROVED ROADS T W P RAILWAYS POWER LINES MARSH OR MUSKEG ======= TRAIL NOTES 400' Surface Rights Reservation around ``====='; || • P **P** P. **P** P **P** P **P** 619136 | 619135 **P P** S P.O. 619133 | 619134 P P P P **P P** 2 PLAN NO.- M.531 3 10 9 11 12 NIARIO MINISTRY OF NATURAL RESOURCES TWP. NESBITT SURVEYS AND MAPPING BRANCH