PRELIMINARY GEOCHEMICAL REPORT

ON THE

WANDA CLAIM (2932)

HIGGINS PASSAGE

SKEENA MINING DISTRICT, BRITISH COLUMBIA

NATIONAL TOPOGRAPHIC SERIES MAPS 103A/7 & 10 (52° 29' N. LATITUDE & 128° 44' W. LONGITUDE)

FOR

INTERSTATE ENERGY CORPORATION

602 - 626 PENDER STREET

VANCOUVER, BRITISH COLUMBIA

BY

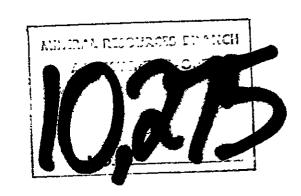
R.T. HEARD, P. ENG.

R.T. HEARD AND ASSOCIATES LTD.

818 CLEMENTS AVENUE

NORTH VANCOUVER, BRITISH COLUMBIA

MAY, 1981



#### SUMMARY

Interstate Energy Corporation controls by purchase an 8 claim unit called the Wanda Mineral Prospect located in Higgins Passage, British Columbia.

A Phase I program of line cutting and geochemistry has been completed over an old showing called the Molly Group.

One very large molybdenum geochemical anomaly has been found as well as several smaller ones on the 8.14 kilometer grid.

This Phase I program has been financed and paid for and these costs are totalled herein with the recommended three additional exploration programs for a total estimate of \$175,000.

Phase II will ascertain the cause of the anomalies, fill-in geochem the areas, expand the grid and provide for trenching, sampling, and assaying to be performed.

Continuing positive results will lead to a Phase III program of geophysics and to a Phase IV program of diamond drilling.

#### TABLE OF CONTENTS

	Page
SUMMARY	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	iv
INTRODUCTION	1
LOCATION AND ACCESSIBILITY	1
HISTORY	2
PROPERTY	2
GEOLOGY	4
General .	4
Mineralization	6
Assay Results	6
GEOCHEMISTRY	7
Field and Analytical Techniques	7
Discussion of Results	7
CONCLUSIONS	8
RECOMMENDATIONS	11

#### TABLE OF CONTENTS

	<u>Page</u>
ESTIMATED COSTS	12
Phase I	12
Phase II	12
Phase III	13
Total Estimated Costs	13
BIBLIOGRAPHY	14
CERTIFICATE	15
APPENDIX I Statement of Expenditures for a Geochemical Survey on the Wanda Mineral Claim	

#### LIST OF FIGURES

		<u>Page</u>
Figure 1.	Location Map	3
Figure 2.	Claim Map	5
Figure 3.	Histogram	9
Figure 4.	Geochemistry - Mo Plot	10

#### INTRODUCTION

The area of the Wanda 8 claim unit was examined on March 7th and March 23rd, 1981.

This field examination was conducted in an attempt to locate a documented molybdenite showing in the area. A claim staking and geochemical survey grid was also to be laid out if results warranted it.

#### LOCATION AND ACCESS

The Wanda claim group is located on the north side of Higgins Passage which separates Swindle Island and Price Island. It is on the east side of Kitæsu Hill at 52° 29' north latitude and 128° 44' west longitude. It is approximately 130 km west of Bella Coola.

Bella Coola is connected by a good road to Williams Lake, 320 km to the east. Williams Lake is situated on Highway 97 between Vancouver and Prince George.

Access to the claim group is either by boat or float equipped aircraft. Charter aircraft are available at Bella Coola, Ocean Falls or Bella Bella.

These places, as well as Klemtu are connected to Vancouver by scheduled seaplane service. See Figure 1, Location Map, page 3.

#### HISTORY

The area was staked originally as the Molly 1-6 group of mineral claims on February, 1973 by a Mr. C.L.M. Giggey. No work was ever done on the claims, payment in lieu having been made, up until 1978.

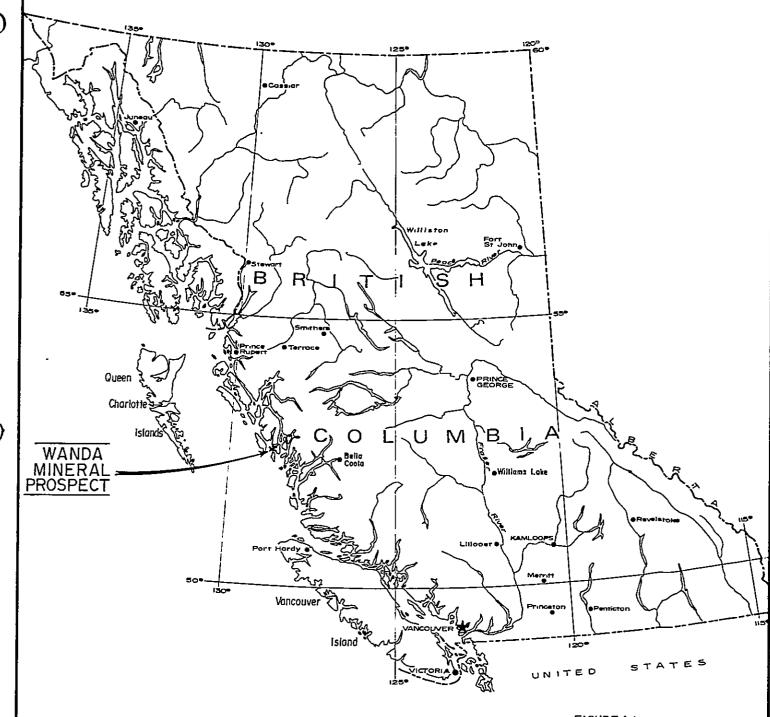
It is reported that a molybdenite showing was found on the claims in the vicinity of a rock quarry excavated during construction of the Kitasu radio tower, now defunct.

On April 1, 1981 an eight unit claim block was staked by V.L. Paulger and Associates Ltd. Subsequent to the claim location a program of line cutting and geochemical soil sampling was conducted over part of the claims.

The results of this work forms the basis for this report.

#### PROPERTY

The claim block contains eight claim units. They are described as follows:



ALTAIR drafting services ltd

FIGURE : I

## INTERSTATE ENERGY CORPORATION

WANDA MINERAL PROSPECT SKEENA MINING DISTRICT, B.C.

LOCATION MAP

RT. HEARD AND ASSOCIATES LTD.

SCALE				
Km. 100 50 0	IÓO	200	300	400 Km.
Miles 100 50	9	100	>	200 Miles
MAY , 1981				

CLAIM NUMBER NAME OF UNITS		RECORD DATE	RECORD NUMBER	
WANDA	8	April 9, 1981	2932	

all documented in claim sheets 103A/7 and 10, Skeena Mining Division, British Columbia.

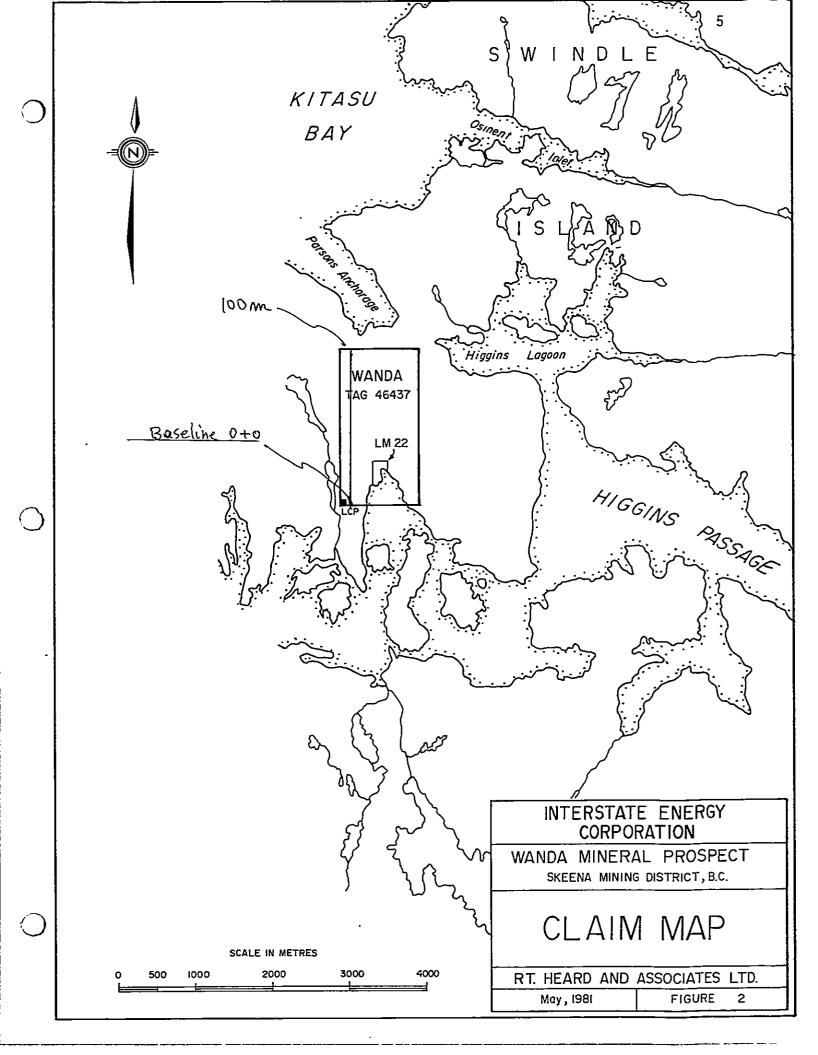
See Figure 2, Claim Map, page 5.

#### GEOLOGY

#### General

Regional geology of the area is shown on Geological Survey of Canada Map 1328 A, Laredo Sound at a scale of 1:250,000 and is described in Memoir 372 by A.J. Baer.

Rocks in the area of the claims are TRiassic (?) metasediments and meta-volcanics in contact or overlain by basaltic flows of the Lake Island Formation to the northeast and by Permain (?) gneissic diorities to the north and west.



#### Mineral ization

The quarry was examined closely but only veins of crushed quartz were found which were collected for character assay.

Pyrite is abundant in the metavolcanics and much iron staining is seen, probably after pyrite.

A large 10 meter wide calcite vein was observed cutting through the meta-volcanics.

#### Assay Results

A description of assay locations and results follows:

SAMPLE	SAMPLE ASSAY RESULTS				<del></del>
LOCATION	<u>TYPE</u>	AU O/T	Ag O/T	<u>Pb %</u>	<u>Zn %</u>
Quarry Qtz vein along fault zone	1 foot chip	< .002	< .02	< .01	< .01

#### **GEOCHEMISTRY**

#### Field and Analytical Techniques

A grid was cut on the property using chain saws, picket lines, horizontal chaining methods and flagging for clarity as the brush is extremely dense. A 990 meter baseline was cut along the west boundary of the claim groups and crosslines were cut every 90 meters and stations were established at 30 meter intervals on all lines.

Soil samples were collected of the "B" soil horizon wherever possible at all stations. These were collected in kraft sample bags. The samples were sent to Bondar - Clegg and Company Limited, North Vancouver, B.C. where they were dried, screened, and part of the 80 mesh fraction was digested using the hot Lefort aqua regia technique and analyzed by atomic absorption. Only the molybdenum content of the samples was determined.

#### Discussion of Results

A histogram of sample results was plotted to determine background. See Figure 3, Histogram, page 9. Sixty-eight percent of the values lie below two ppm, 23% lie between two and four ppm and is considered just over threshold or possibly anomalous, seven percent are weakly anomalous at four to six ppm and two percent are in the definitely anomalous category.

All results were plotted and contoured. See Figure 4, Geochemistry Mo Plot, page 10.

The Mo Plot shows a large weakly anomalous area with semi-isolated highs within it, which has a northerly striking orientation. Several other areas of anomalous values are also found to the west of the main area and one very anomalous zone is located on the baseline, which is in the order of 150 meters long.

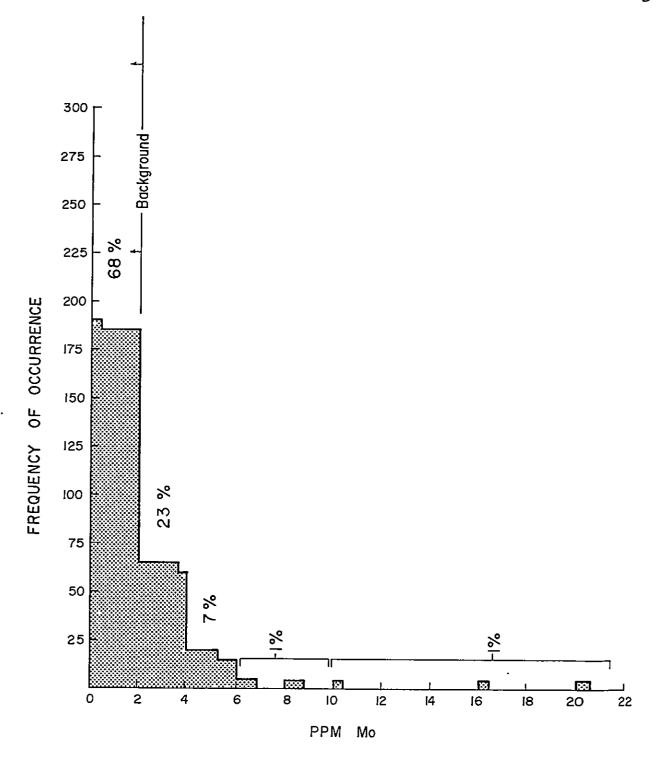
Although the underbrush was extremely thick, soil samples were of good quality as the moss layer was easily breached with the use of a mattock.

#### CONCLUSIONS

The Wanda group of eight claims was located to cover the area of an old showing in the Molly 1-6. A line grid of 8.14 kilometers was cut over the area and 278 soil samples were collected and analyzed for molybdenum.

Several geochemical anomalies were found which warrant some follow-up work to ascertain their cause.

A limited exploration program has been prepared to accomplish this and its implementation is recommended.



# INTERSTATE ENERGY CORPORATION WANDA MINERAL PROSPECT SKEENA MINING DISTRICT, BC. HISTOGRAM MO IN PPM RT. HEARD AND ASSOCIATES LTD. May, 1981 FIGURE 3

#### RECOMMENDATIONS

A four-phase exploration program is proposed. Phase I has been virtually completed and is included to complete the historical record of this project.

The Phase II program of follow-up geochemistry, geology, trenching, sampling and assaying, is recommended.

A Phase III program of geophysics and a Phase IV program of drilling will be predecated by the results of Phase II.

#### ESTIMATED COSTS

#### Phase I (Sunk Costs)

1.	Mobilization and demobolization (including air fares and charters, freight, etc.	ing		\$ 2,817.30
2.	Claim staking Wanda - 8 units			1,000.00
3.	Line cutting - Bareline - 990 m - Crossline - variable - Total - 8.14 kilometers			6,500.00
4.	Geochemistry - 278 samples - collection - analysis		\$1,000.00 791.24	1,791.24
5.	Geology, professional fees			2,000.00
6.	Miscellaneous			
				*\$14,108.54
		Add	Contingency	891.46
		Tot	al	\$15,000.00

<sup>\*</sup>Subject to revision as all invoices have not been received.

1.	Mobilization and demobilization	\$ 5,000.00
2.	Geochemistry, including grid expansion	10,000.00
3.	Geology	3,000.00
4.	Trenching	5,000.00
5.	Sampling and Assaying, MoS <sub>2</sub> , WO <sub>3</sub> , Zn	
	50 samples @ \$25/sample	1,250.00
6.	Supervision	3,000.00
7.	Professional Fees, including reporting	3,000.00
		\$30,250.00

Say, \$35,000

#### Phase III

Geophysics, I.P. Survey

\$25,000

#### Phase IV

Diamond Drilling, all inclusive

\$100,000

#### Total Estimated Costs

Phase I		\$	15,000
Phase II	I		35,000
Phase I	II		25,000
Phase IV	V	_1	00,000
	Tota	a] \$1	75,000

#### **BIBLIOGRAPHY**

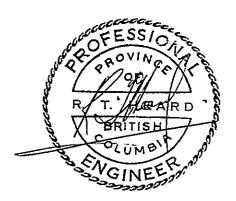
- Baer, A.J. (1973): Bella Coola Laredo Sound Map Areas, British Columbia, Geological Survey of Canada Memoir 372.
- Hutchison, W.W., H.C. Berg, and A.V. Okulitch (1979): Map 1385 A, Skeena River, British Columbia Alaska, Sheet 103, Geological Survey of Canada, Compilation.

#### CERTIFICATE

- I, RICHARD TERRENCE HEARD, with business and residence addresses in North Vancouver, British Columbia, do hereby certify that:
  - I am a registered Professional Engineer in the Association of Professional Engineers of Yukon Territory, a registered Professional Engineer in the Association of Professional Engineers, Geologists and Geophysicists of Alberta, and, a registered Professional Engineer of the Association of Professional Engineers of the Province of British Columbia.
  - 2. I am a graduate of Haileybury School of Mines, Haileybury, Ontario, 1958 and of the Montana College of Mineral Science and Technology, Butte, Montana (Bachelor of Science in Geological Engineering in 1971).
  - 3. I have been practicing my profession as an exploration geologist for 20 years and as a Professional Engineer for the past 8 years.
  - 4. I have no interest, direct or indirect in Interstate Energy Corporation, nor do I expect to receive any interest, either direct or indirect, in the properties or securities pertaining thereto.

- 5. I have conducted a completely independent analysis of all data available for this property.
- 6. I have visited the property reviewed in this report on two occasions, March 7th and 23rd, 1981.
- 7. I hereby grant my permission for Interstate Energy Corporation to use this report for any legal purposes normal to the business of Interstate Energy Corporation Ltd.

Dated at Vancouver, British Columbia this \S\ day of May,



R.T. Heard, P.Eng.

# APPENDIX I STATEMENT OF EXPENDITURES FOR A GEOCHEMICAL SURVEY ON THE WANDA MINERAL CLAIM

INTERSTATE ENERGY CORP.

FINANCIAL STATEMENTS

JUNE 15, 1981

MAfee, Lilly & Co. CHARTERED ACCOUNTANTS

SUITE 900 - 1055 WEST HASTINGS STREET. VANCOUVER, B.C., CANADA, V6E 2G2 TELEPHONE (604) 685-1351

#### AUDITORS' REPORT

The Shareholders, Interstate Energy Corp.

We have examined the balance sheet of Interstate Energy Corp. as at June 15, 1981 and the statements of deferred exploration, development and other expenses and changes in financial position for the period from date of incorporation, January 15, 1981 to June 15, 1981. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at June 15, 1981 and the results of its operations and the changes in its financial position for the period from date of incorporation, January 15, 1981 to June 15, 1981 in accordance with generally accepted accounting principles consistently applied.

Vancouver, B. C. July 8, 1981

Chartered Accountants

Mague Rilly: 60.

#### BALANCE SHEET

JUNE 15, 1981

**ASSETS** 

CURRENT ASSETS

Bank - cash - term deposit	\$ 5,746 - <u>25,334</u> \$31,080
. MINERAL CLAIM (Note 3)	11,500
DEFERRED EXPLORATION, DEVELOPMENT AND OTHER EXPENSES, at cost	14,767
INCORPORATION EXPENSE, at cost	725
	\$58,072

LIABILITIES

CURRENT LIABILITIES

Accounts payable \$ 1,172

SHARE CAPITAL

Authorized

10,000,000 shares without par value

Issued (Note 4)

997,000 shares

56,900

\$<u>58,072</u>

APPROVED BY THE DIRECTORS

Director

Director

The accompanying notes are an integral part of these financial statements.

MAJa, Lilly & Ga

CHARTERED ACCOUNTANTS

STATEMENT OF DEFERRED EXPLORATION, DEVELOPMENT AND OTHER EXPENSES FOR THE PERIOD FROM DATE OF INCORPORATION, JANUARY 15, 1981 to JUNE 15, 1981

#### EXPLORATION AND DEVELOPMENT

Assaying Engineering report Line cutting and soi Travel expense	il sampling	\$ 7,159 447 4,539 1,817	\$13,962
ADMINISTRATION			
Accounting and audit Legal Office	ting	1,000 1,000 500	2,500 16,462
REVENUE FOR THE PERIOD			
Interest income			1,695
EXPENSES FOR THE PERIOD AND DEVELOPMENT AND OTHER EX			\$14,767

The accompanying notes are an integral part of these financial statements.

MAJA, Lily&Ga CHARTERED ACCOUNTANTS

#### STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE PERIOD FROM DATE OF INCORPORATION, JANUARY 15, 1981 TO JUNE 15, 1981

SOURCE OF WORKING CAPITAL

Issuance of share capital for cash

\$49,400

APPLICATION OF WORKING CAPITAL

Deferred exploration, development and other expenses Acquisition of mineral claim for cash Incorporation expense

\$14,767 4,000 725

19,492

INCREASE IN WORKING CAPITAL FOR THE PERIOD AND WORKING CAPITAL, END OF PERIOD

\$29,908

The accompanying notes are an integral part of these financial statements.

MHyL,LIIy&Ga

CHARTERED ACCOUNTANTS

### NOTES TO FINANCIAL STATEMENTS JUNE 15, 1981

#### 1. INCORPORATION

The company was incorporated under the name of "Carlisle Energy Corp." on the 15th day of January 1981, pursuant to the provisions of the British Columbia Company Act. By a directors resolution dated the 23rd day of February 1981, the company changed its name to "Interstate Energy Corp."

#### 2. SIGNIFICANT ACCOUNTING POLICIES

Mineral claims and deferred expenses are capitalized on the company's balance sheet, but are not intended to reflect present or future values. It is the company's policy to defer these costs until such time as the property is placed into production or abandoned.

#### 3. MINERAL CLAIM

On June 9, 1981 the company acquired a 100% interest in 8 units of the Wanda mineral claim situated in the Skeena Mining Division of the Province of British Columbia. The consideration for the purchase was \$4,000 and an allotment of 750,000 escrow shares of the company at a deemed consideration of 1¢ each.

#### 4. SHARE CAPITAL

(i) For the period from date of incorporation, January 15, 1981 to June 15, 1981 the company has issued share capital as follows:

	<ul><li>Number of Shares</li></ul>	Consideration
For cash at 20¢ each	247,000	\$49,400
For mineral claim at		
deemed consideration of 1¢ each	750,000	7,500
	997,000	\$56,900

(ii) The company granted stock options to Vern Paulger for 20,000 shares and Vivienne Muggeridge for 10,000 shares at a price of \$1.00 per share from June 15, 1981 to June 14, 1982, \$1.25 per share from June 15, 1982 to June 14, 1983, and \$1.50 per share from June 15, 1983 to June 14, 1984. These options terminate should the holder cease to be a director of the company during the term of the option.

MAJEE, LILYEGO
CHARTERED ACCOUNTANTS

#### NOTES TO FINANCIAL STATEMENTS

JUNE 15, 1981

#### 5. RELATED PARTY TRANSACTIONS

- 1) During the current period the company acquired from a director the mineral claim referred to in Note 3.
- ii) The company granted stock options to two directors as detailed in Note 4.

#### 6. REMUNERATION OF MANAGEMENT AND OFFICERS

No remuneration was paid by Interstate Energy Corp. to any director or senior officer in the company.