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ASSESSMENT - GEOPHYSICAL REPORT

on the

AIRBORNE MAGNETOMETER
AIRBORNE ELECTROMAGNETIC
AIRBORNE RADIOACTIVITY

SURVEYS

of the

ANDY MINERAL CLAIMS

VANCOUVER MINING DIVISION

BRITISH COLUMBIA

Latitude 49041 North; Longitude 123012 West

CONSHELL RESOURCES LTD., (N.P.L.)

Airborne Surveys by: Waterton Airex Ltd.

Interpretation by: Weymark Engineering Ltd.

15 November 1972

WEYMARK ENGINEERING LTD.

consulting Engineers

west vancouver, B.C.

4363

ASSESSMENT - GEOPHYSICAL REPORT

on the

AIRBORNE MAGNETOMETER
AIRBORNE ELECTROMAGNETIC
AIRBORNE RADIOACTIVITY

SURVEYS of the

ANDY MINERAL CLAIMS

VANCOUVER MINING DIVISION
BRITISH COLUMBIA

Latitude 49° 41' North; Longitude 123° 12' West

CONSHELL RESOURCES LTD., (N.P.L.)

Airborne Surveys by: Waterton Airex Ltd.

Interpretation by: Weymark Engineering Ltd.

15th November 1972

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO 4363 MAP

CONSHELL RESOURCES LTD., (N.P.L.)

ASSESSMENT - GEOPHYSICAL REPORT

HOWE SOUND "ANDY" CLAIMS GROUP
VANCOUVER MINING DIVISION

BRITISH COLUMBIA

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No. 4363 MAP #1

Consulting Engineers
3310 WESTMOUNT ROAD
WEST VANCOUVER, B.C.
CANADA

15th November 1972

Conshell Resources Ltd., (N.P.L.) 206 - 1075 Comox Street Vancouver 5, British Columbia

Gentlemen:

Re: Assessment Geophysical Report Howe Sound "Andy" Claims Group British Columbia

I am pleased to submit for your information, this Assessment Geophysical Report of the results of the Aerial Geophysical Surveys completed on the 27th September 1972 by Waterton Airex Ltd., Sidney, British Columbia and the interpretation by William Chang, M. Sc. Geophysics, McGill University and William J. Weymark P. Eng., of the recorded field readings over the "Andy" 11, 12, 14, 16, 18, 20, 22 and 23 Mineral Claims, Squamish—Howe Sound Area, Vancouver Mining Division, British Columbia.

Background technical references relating to the Andy Mineral Claims are given in Primary Report, Andy Mineral Claims Group Squamish - Howe Sound, Vancouver Mining Division, British Columbia, dated 30 August 1972 by Weymark Engineering Ltd. References to the general area are given in Annual Reports of the B. C. Minister of Mines Reports.

1.0 Property: The area covered by the aerial geophysical surveys involved in the Andy Mineral Claims Group were carried out by Waterton Airex Ltd. The designation details of the claims are given in the following table:

Date of

Claim	Record No.	<u>Staking</u>	Record
Andy 11 - 12	19832 - 33	10 June 1972	22 June/72
Andy 14	19835	10 June 1972	22 June/72
Andy 16, 18,	20 19837, 39, 41	17 June 1972	22 June/72
Andy 22, 23	19843, 44	17 June 1972	22 June/72

The calims were staked by Andy Baby and all interests were conveyed by Bill of Sale to Conshell Resources Ltd. (N.P.L.). The claims are in good standing until 22 June 1973.

No surveys have been made of the claim lines, posts or tags, so compliance with the Regulations of the Mineral Act of the Province of British Columbia cannot be verified at this time. There are no structures or equipment on the property belonging to Conshell Resources Ltd. (N.P.L.).

2.0 Location: The Squamish - Howe Sound "Andy" Claims Group is tituated on the top end of Howe Sound, about two miles west of Squamish. The geographic Reference is North Latitude 49°41', Longitude 123° 12' West. The Land District is New Westminister and the Mining Division is Vancouver. See Figures: 2 and 3.

Access to the claims area is by boat from Squamish or by helicopter from Squamish or Vancouver. Elevations on the claims range from sea level to over 2500-feet. Reference is to Figures: 2, 3 and 4.

3.0 Geology: Geological references are Map 421-01963, Geology, Squamish, Vancouver West Half, B.C. of the Geological Survey of Canada and various Reports of the B. C. Department of Mines. See Fig.

Base formations are granites-granodiorites of Cretaceous Age and volcanics of Basalt and other flows. A large mass of Basalt sites on Claim No. 22, See Figure: 4. This type of Basalt is fine grained and appears suitable for commercial purposes.

Locally, the outcroppings are mostly granites - grano-diorites with younger phases which are fine grained. These mostly occur in sheared and fractured sections and mostly sulphide mineralized.

Structurally, the strike of the major jointing is north-westerly-easterly with a southerly dip. The Basalt rests unconformably on the intrusives.

- 4.0 Mineral Zones: Todate exploration on the Andy claims has been limited to prospecting and shallow trenching in certain oxidized mineral zones. Possible extensions of the copper-molybdenum containing zones occurring on the Kismet Claims appear to be revealed. One such outcropping occurs in the creek bed on claim No. 14 and other possible occurrences appear near the Western Boundary of Andy Claim No. 23.
- 5.0 Geophysical Surveys: As an initial phase of the investigation of the metalliferous possibiliites of the Andy Claims, an airborne geophysical survey was conducted under contract by Waterton Airex Ltd., of Sidney, British Columbia on the 27th September 1972. Flight readings were taken, see Figure 5, and consisted of combined aeromagnetic, electromagnetic and radioactivity testing.

The survey covered an area of about 1000 acres, involving six runs each of 15,000 feet in length. These runs were 500 feet apart and were flown to a true bearing of North 12th East or South 12° West. Readings were taken every 500-foot interval and flight lines were 500 feet above ground level. The plane was captained by Claude Waterton, VRS-536 Senior Commercial, the co-pilot was Arnold Parlee, both of Sidney, British Columbia. The flight plan was filed with the D.O.T. Vancouver, British Columbia. Figure: 6 shows the flight plan pattern and Figure: 5 gives the readings for each of the surveys submitted by Waterton Airex Ltd.

Appendix 1 contains the details relating to the aircraft and instrumentation used.

Referring to Figure: 5, it will be noted

that: -

- the variation in Radioactivity readings ranged from zero to 1/100 Mr/HR
- the variation in Electromagnetic readings ranged from zero to 19 (x .1 microamps)
- the variation in magnetometer readings varied from 20 to 35 (x 100) gammas. Background average was at "0"
- for the Radioactivity and Electromagnetic tests, background was dialed out.

Results: Referring to Figure: 7, it will be noted that there is a higher set of magnetometer readings on claims Nos 22 and 23 corresponding to the location of the Basaltic mass. Coincident also were EM Highs and an increased radioactivity. On Andy Claims Nos 18 and 20 a high EM zone is recorded with low magnetometer sections to the east. South of the Mineral Zone on Andy Claim No 14, an EM high is recorded. This may have been displaced.

The trend of the radioactivity is to the northwest, as also for the EM zones. The magnetometer zones trend north-south.

6.0 Summary Conclusions:

The results of the surveys, as presently interpreted

- i) There is a coincidence of low magnetometer and high electromagnetic readings on Andy Claims Nos 20, 22 and 23 and 18.
- ii) Increased radioactivity concentrates within the boundaries of Andy Claims Nos: 20, 22 and 23, with a north westerly trend.
- iii) There appears to be a relationship between the EM and High Magnetometer readings and the Basaltic Mass
 - iv) An expression of EM highs about the sulphide mineralization on Nady claims Nos 12 and 14 depicts a zone of interest.
 - v) Further ground geological information is required to correlate the geophysical and geological data.

7.0 Recommendations:

On the bases of the results obtained from the relating geophysical surveys referred to in this report, it is considered that further field investigations are warranted and that successively ground geochemical and geophysical, - magnetomter, electromagnetic and induced polarization surveys should be initiated in conjunction with detailed geological mapping to assess the metalliferous possibilities of the Andy Mineral Claims Holdings of Conshell Resources Ltd. (N.P.L.). First attention should be directed toward the anomalous zones indicated on Figure: 7.

Respectfully submitted,

William J. Weymark P. Eng

President

Weymark Engineering Ltd

15 Nov 1972

CERTIFICATE

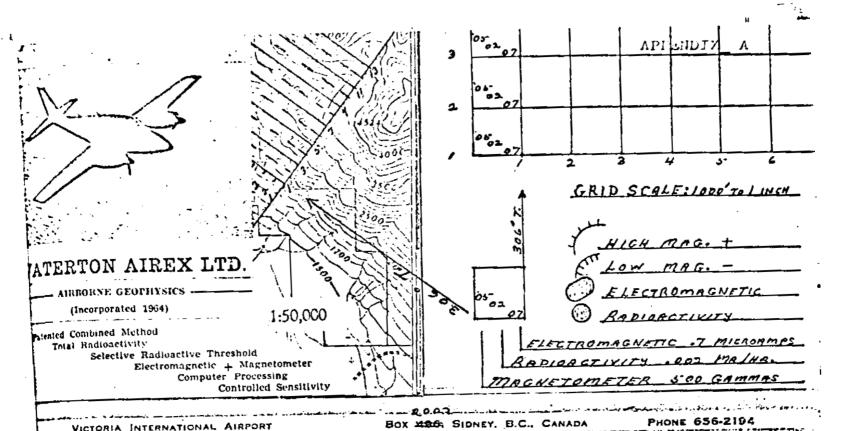
- I, William James Weymark, P. Eng., Consulting Engineer President of Weymark Engineering Ltd., of the District of West Vancouver, of the Province of British Columbia, hereby certify that:
- 1. I am a graduate of Mining Engineering of Queen's University, Kingston, Ontario, B. Sc., 1940 and have been practising my profession for twenty-five years.
- 2. I am a practising Consulting Engineer and reside at 3310 Westmount Road. West Vancouver. Province of British Columbia.
- 3. I am a member of the Association of Professional Engineers of the Province of British Columbia and also of the Consulting Engineers' Division of the Association of Professional Engineers of British Columbia.
- 4. I am a member of the Canadian Institute of Mining and Metallurgy, of the American Institute of Mining, Metallurgical and Petroleum Engineers and of the American Geophysical Union.
- 5. I have no direct or indirect interest whatsoever in Conshell Resources Ltd. (N.P.L.) or do I expect to receive any interest direct or indirect in the properties of Conshell Resources Ltd. (N.P.L.), or any affiliate or any security of the company or affiliate.
- 6. The findings of the accompanying report are based on my personal examinations and study of the geophysical field test readings, the relating geological mineralogical information and my presence on the Andy Claims area on 25th August 1972. The geophysical readings and studies were made together with William Chang, M. Sc. Geophysics McGill University, Montreal, Quebec.

DATED at West Vancouver, British Columbia, this 15th day of November 1972.

pesident

Reymark Engineering Ltd.

APPENDICES



Proven in Western and Morthern Canada for the highest degree of accuracy at the lowest cost. \$10. Per lineal mile including base and positioning expenses on average surveys.

A 400 square mile area costing \$10,000. taking three weeks could put your ground party a year or more ahead in their exploration program.

By the use of the combination method and our E.S. indicetors 80% of the unproductive anomalies can be calculated out of the survey which results in keeping the ground follow up costs to a minimum.

Electromagnetic: Waterton quadrature system.

Tran. on 1,000 CPS. Rec. in umits of .1 Microamps. Sharpe PMF-3 or McPhar M700 modified to our method.

Magnetometer: Sharpe PMF-3 or McPhar M/00 modified to Flux-gate in units of 10 to 100 Gammas.

Radioactivity: Detectron - DR299, 24 tubes.

Rec. in units of .001 MR/HR, total count.

Threshold: McPhar TV-5 Crystal

Positions 1.3 - 1.63 - 2.5 Mev.

Grid supplied in scales of 1,000 to 2,000 feet per inch with clear overlays showing the anomalous areas.

Ground checks over mountain areas have found the accuracy to be within 500 feet on a 500 foot grid and capable of disseminated sulphide detection.

Over 15,000 lineal miles of reconnaissance and assessment assistance completed in 40 different areas by the end of 1970.

Operations range up to 400 miles from base.

Mircraft type: Cherokee 235 - Twin Comanche.



WATERTON AIREX LTD. AIRBORNE GEODIVISIES PAT. No. 750300 CANADA (1967)

Our patented method incorporates the combined readings from a flux-gate magnetometer, a nucliometer and a miniaturized electromagnetic unit. The readings are recorded instantly on film and timed electrically to enable the readings to be entered on a grid of a chosen scale.

To obtain anomalies of most value level lines are flown in a certain plane and a fixed wing aircraft is chosen as the most suitable vehicle for this purpose.

Any inaccuracy in the timed readings due to airspeed error is calculated out before the readings are entered on the grid.

The instruments are set on "0" over a predetermined spot near the survey area and this adjustment is made after each $1\frac{1}{2}$ hours. The survey flying is done in certain condition and at certain times of the day.

Station-keeping is accomplished by electrical counter, reference to topographical features, directional gyro set from compass or astro compass and a set flying technique. Ground checks from over twenty mountainous areas have found the accuracy of this method to be between 250 feet and 500 feet on a 500 foot grid.

Anomalies are plotted from the grid on to transparent sheets and the resulting overlays give us the combination anomalies which, in our experience, have been the most successful.

Magnetometer: PMF-3 Sharpe or McPhar M-700 is used when adjusted to our method. Readings are in units of 100 gammas for mineral reconnaissance and in units of 10 gammas for oil reconnaissance.

Electromagnetic: Built by our company to a miniature scale to enable us to use small aircraft to keep the costof survey to our rates. With the sensitivity set at 30%, dissemenated sulphides usually read in the 3 to 5 range and heavy sulphides in the 10 to 15 range on a scale division of 25.

The transmitted electrical field is from 200 feet of copper wire attached to the bottom of the aircraft in the horizontal plane and power is taken from the aircraft generator and built up to required strength by the field transmitter which operates in the 1,000 CFS range.

A small 10 oz bird is drawn behind the aircraft powered by its own mercury cell and its receiving coil is in the vertical. 90° to the transmitted field. A booster receiver in the aircraft produces the received signal in units of .1 microamperes.

Nucliometer: Detectron - DR299, 24 tubes suited to airborne work to obtain total radicactive readings in units of .001 MR/HR, milliroentgens per hour. Threshold readings are taken from McPhar TV-3B with 3" crystal.

Computer processing is used when requested, but for this the magnetometer average in the areas is set at 3,000 gammas.

(Pat. No. 758,308 Canada 1967)

APPENDIX 11

COST DISTRIBUTION

1.	Waterton Airex Ltd., conducting airborne Aeromagnetic, Electromagnetic and Radio- Activity readings at 500-ft intervals, 18 Miles flight lines Andy Mineral Claims, Vancouver Mining Division	\$400.00
2.	Weymark Engineering Ltd., interpretation of geophysical survey readings and preparation and submission of Report dated 15th November	\$800.00

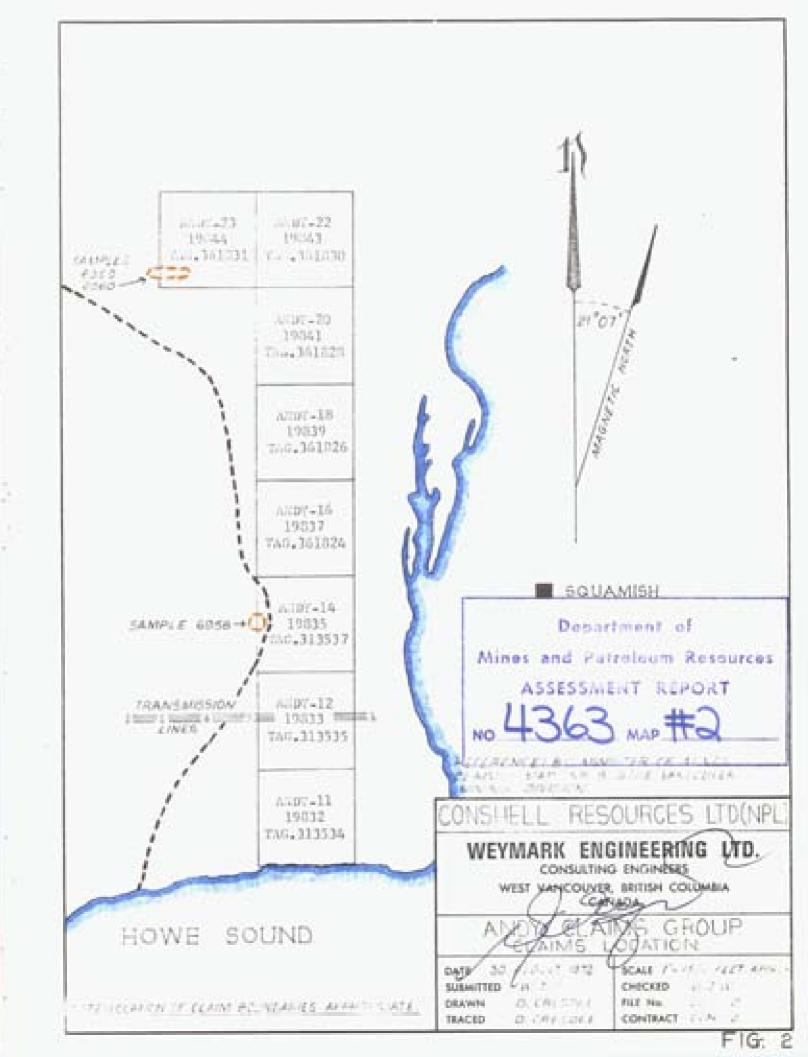
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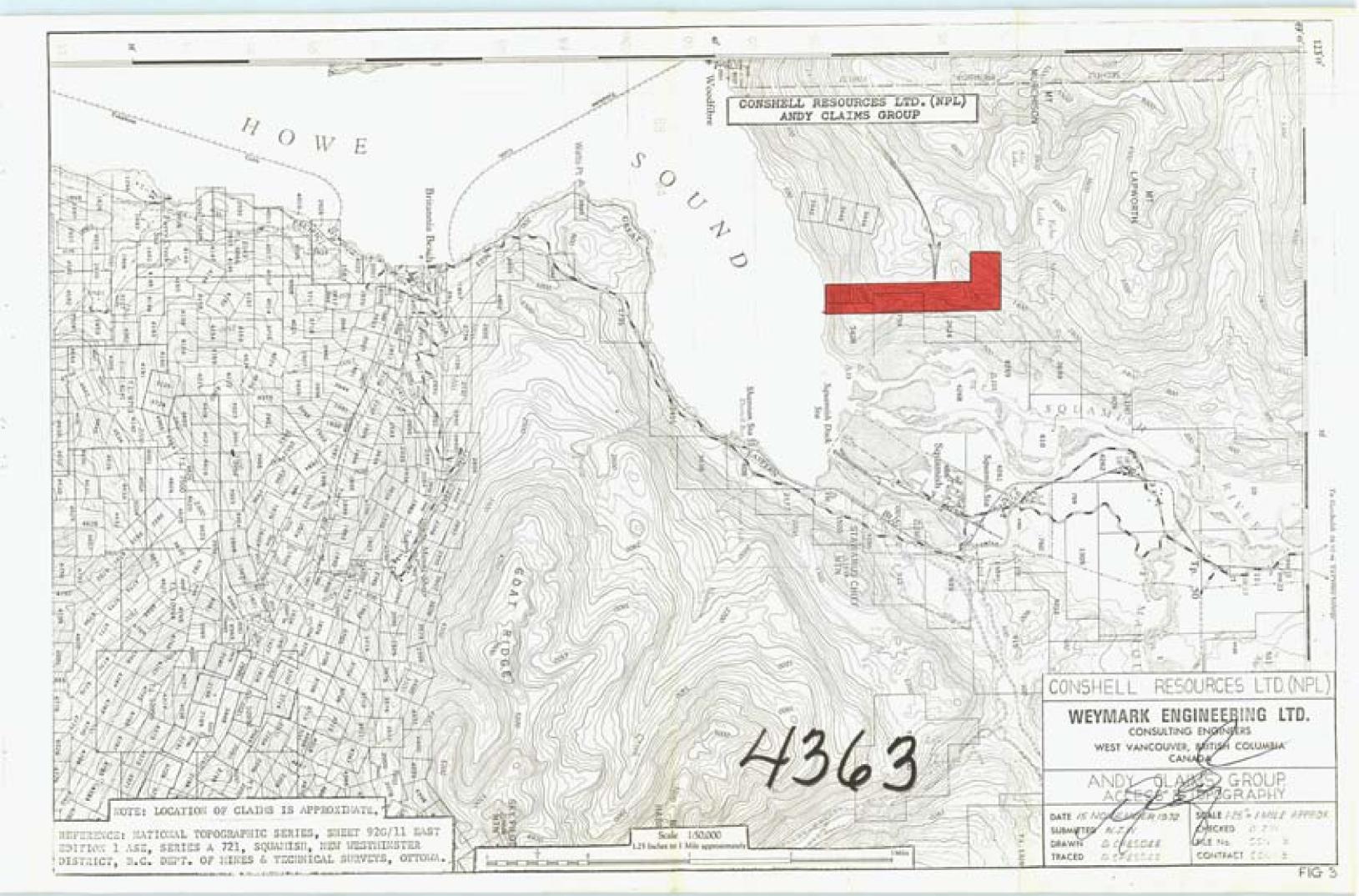
\$1200.00

Veymark Eng.

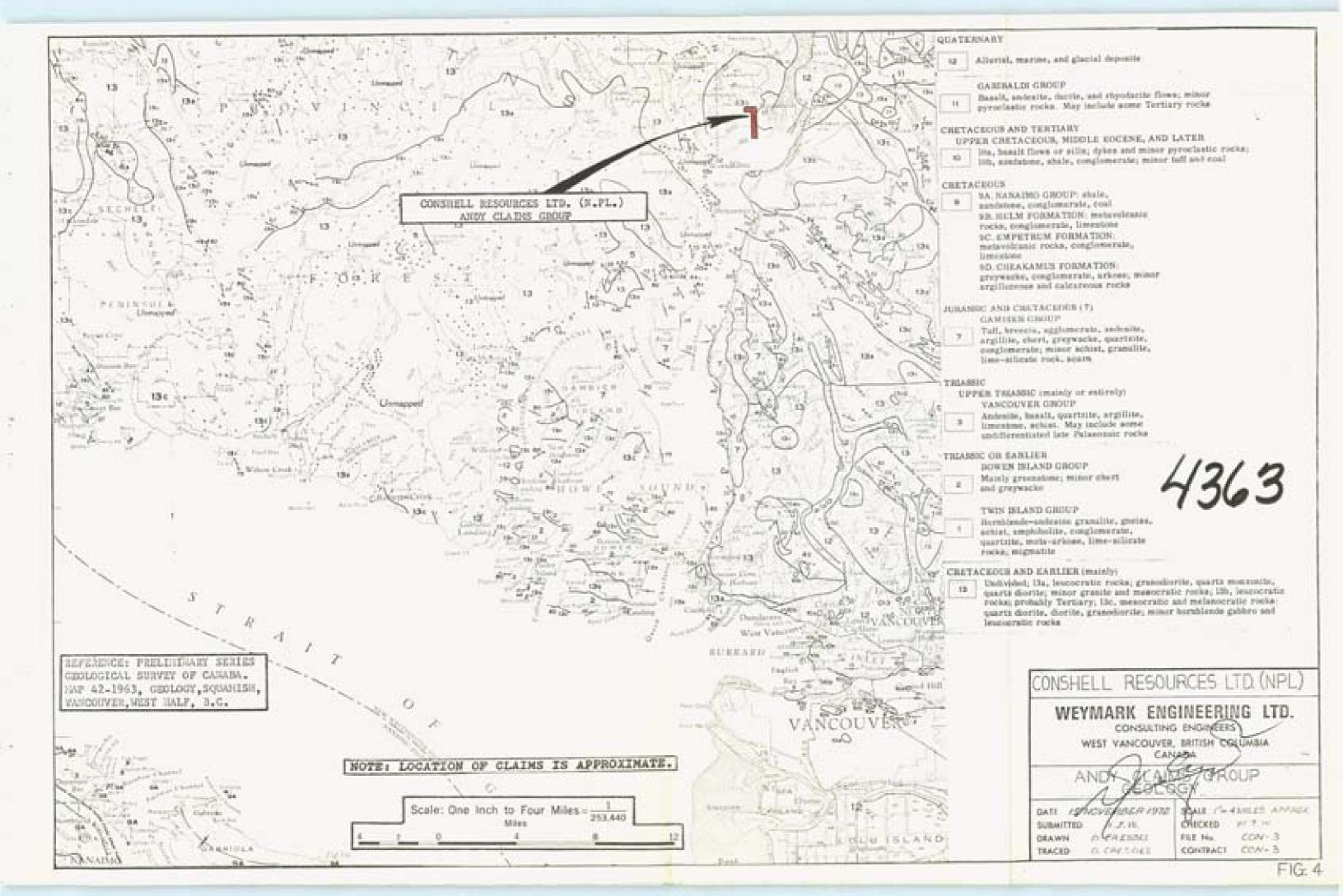
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ILLUSTRATIONS





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Mines and Patroleum Resources

ASSESSMENT REPORT

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ADDESSMENT REPORT

No. 4363 MAP #5

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AMBORNE GEOPHYRICS EAT, NO. 235300 CANADA (1962)

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WEYMARK ENGINEERING, LTD.

CONSULTING ENGINEERS

WEST VANGOUVER, BRITISH COLUMBIA

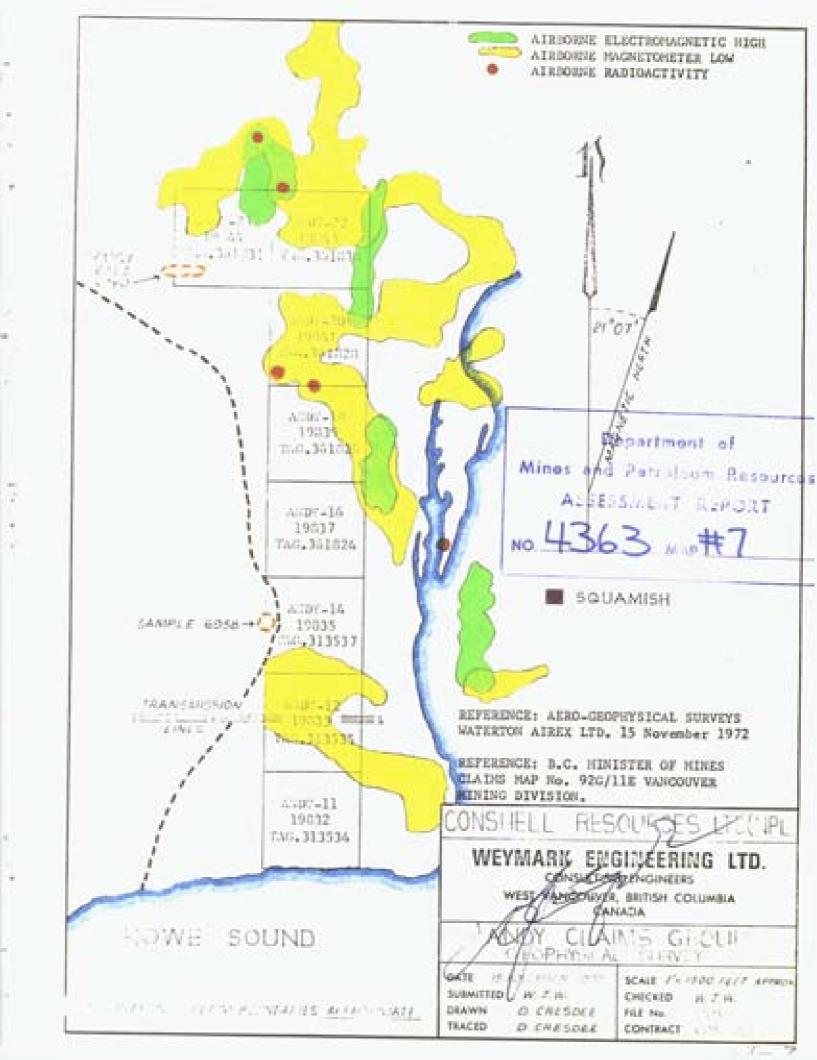
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Congressions of Mines and Petralsum ResourdVINES AND TEC SURVEYS AND A LESSINE IND. COOL PORT NATIONAL TOTAX RAPTRO SERIES To bischold in trice for Februar Gra-121 m. CHEARY 1305 and? Squamish Stag 3642 adjut. 27,1772 PIRBORNE S-DO APART NO. ENGINE SO A Washing AIRBORNE GEOFNTEICS MAT. NO. ZESSOU CANADA agsounces LTD. (N.P.L.) ANDY CLADIS GROUP AERO-GEOPHYSICAL SURVEYS 100400 FLIGHT LINES: Waterton Airex Ltd. FIG. 6 27 September 1972



DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

In the Matter of of Conshell Resources Ltd., NPL

To WIT:

William J. Weymark P. Eng., President of Weymark Engineering Ltd of 3310 Westmount Road, West Vancouver, British Columbia.

of

an aeromagnetic, electromagnetic in the Province of British Columbia do solemily declare that Conducted on Andy Mineral Claims Nos 11, 12, 14, 16, 18, 20, 22 and 23, Record Nos 19832, 33, 25, 19837, 39 41, 43 and 44, Squamish-Howe Sound Area, Vancouver Mining Division, British Columbia between September 25th and 1 Oct 1972. The following expenses were incurred:

 Waterton Airex Ltd., flying, positioning and reading airborne magnetometer, electromagnetic and radioactivity tests on aforesaid mineral claims

Approx. 18 miles @ \$22/mile \$400.00

2. Paid to Weymark Engineering Ltd to cover gep½hysicists supervision, calculating, plotting and fairdrawing data and preparation of reports:

Approx 18 miles at \$44/mile 800.00

Total

\$1200.00

Navigational aids were furnished by Conshell Resources Ltd NPL and Weymark Engineering Ltd to assist flight navigation.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the

CITU

of Vannoun

, in the

Province of British Columbia, this

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100 Alana da 1877 AR

illiam J. Weymark P. Eng.

President

Weymark Engineering Ltd.

A Commissioner for taking Affidavits within British Columbia or A Notary Public in and for the Province of British Columbia.

ARMOLD SIGTSMUND

BARMSTER & SOLISHOR

734 WEST BROADWAY.

VANCOUVER 9, B. G.

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

No. 4363

MAP