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REVIEW OF EXPLORATION DATA

UNITED BEAR AND UNITED TOMMY MINERAL CLAIM GROUPS KENNEDY RIVER AREA ALBERNI MINING DIVISION VANCOUVER ISLAND, B.C. NTS 92 F/3 W LATITUDE 49°10'N, LONGITUDE 125°24'W

Prepared for

INTERNATIONAL COAST MINERALS CORP.

ARCTEX ENGINEERING SERVICES

Locke B. Goldsmith, P.Eng. Consulting Geologist

June 28, 1986

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Spilsbury Maps, Geology and Chip Samples, United Tommy Group, Teck Explorations Limited-International Phoenix Energy Corporation
Statement of Expenditures, International Phoenix Energy Corporation

REVIEW OF EXPLORATION DATA UNITED BEAR AND UNITED TOMMY MINERAL CLAIM GROUPS KENNEDY RIVER AREA ALBERNI MINING DIVISION VANCOUVER ISLAND, B.C.

SUMMARY

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Gold is known to occur in two important zones on the property. Exploration. largely by diamond drilling, is required to test the extent and tenor of mineralization. The United Bear quartz veins have potential for a moderate tonnage of high-grade gold; the shear zone which hosts the quartz should be examined for a higher tonnage-lower grade deposit. The United Tommy sheeted veinlet zone has potential for a bulk tonnagelow grade operation. A program in five Phases is estimated to cost \$1,769.000.

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INTRODUCTION

The claims are located approximately 55 road kilometres west of Port Alberni and 30 road kilometres northeast of the port of Ucluelet. Highway 4 passes through the northwest corner of the Tommy claim. New logging roads extend northwesterly from the highway across Kennedy River into the Bear group to within 150 metres of an adit driven on gold mineralization in quartz veins. One partially overgrown road which departs easterly from the highway onto the Tommy claim leads to the vicinity of sheeted veinlets which contain gold values.

A hydroelectric power line follows Kennedy River valley and passes through the property.

Elevations range from less than 40 m in Kennedy River valley to 1040 m in the southeast corner of Tommy claim.

The property consists of 24 units. 4 reverted crown grants and 1 staked fraction, for a total of 29 units containing approximately 700 hectares.

Claim Name	Lot No.	Record No.	No. of Units	Expiry Date
	U	NITED BEAR GR	OUP	
Black Bear	293	1522(10)	1	Jan. 1989
Cinnamon Bear	294	1580(12)	1	Dec. 1995
Grizzly Bear	300	1599(1)	1	Jan. 1996
Ironsides	487	1601(1)	1	Jan. 1990
Bear Fraction		2882(4)	1	Apr. 1987
	U	NITED TOMMY GI	ROUP	
Tommy		1029(9)	16	Sep. 1992
Golden Gate		1035(9)	6	Sep. 1987
Water Fall		1560(12)	2	Dec. 1987

Owner is Mr. W.W. Ejtel of Vancouver, B.C.

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INTERNATIONAL COAST MINERALS CORP.

UNITED BEAR AND UNITED TOMMY MINERAL CLAIM GROUPS

NTS 92 F/3 W

ARCTEX ENGINEERING SERVICES

To Accompany Report By: Locke B. Goldsmith, P.Eng. Consulting Geologist





June 1986

HISTORY

Early exploration and development activities of the area from around 1900 to 1939 are summarized in B.C. Minister of Mines Annual Reports (see references) and paraphrased by Drummond (1984). By 1913 the adit on the Bear group had been driven to intersect gold-quartz veins. In 1923, the Grant claim group covered a portion of the present Tommy claim on the eatern slope of Kennedy River valley south of Canoe Creek. A quartz vein, 1.22 m in width (4'), contained 1.3 oz/ton Au and 0.70 oz/ton Ag. By 1935 some surface development had been undertaken on the Tommy K group on narrow but high-grade gold-quartz veins and an adit may have been commenced at about this time. A small tonnage (±100 tons) may have been produced prior to 1947 from the Tommy K claims.

In recent years the Bear group has been examined and sampled in 1984 by Teck Explorations Ltd. (assays reported by Groves, June 2, 1985), by Paul Wilton, B.C.D.M. Regional Geologist (assays reported by Grove, December 9, 1985), by Helsen (1985) for Noranda Exploration Company, Limited. and by R. Brown (circa January 1986) for Lac Minerals Ltd. the author of this report examined mineralization and took two samples from the Bear group on June 7, 1986 (results in Appendix).

Narrow quartz veins in the vicinity of the sheeted zone near the adit on the Tommy claim were sampled by W.G. Stevenson in a report dated 1980 (assays reported and reference quoted by Drummond, January 19, 1984); all ten vein samples contain gold, five of which carry in excess of 1.1 oz/ton Au. Drummond (January 19, 1984) sampled three wider intervals in the same area on behalf of International Phoenix Energy Corporation. While investigating surrounding claims on behalf of Rich Lode Gold Corporation, C.J. Brown (August 20, 1982) took two samples in open cuts and three in the adit on the Tommy claim; type of sample is not specified but all contained gold, the highest grade (0.222 oz/ton Au) being in the adit. Of particular interest is Brown's observastion (p. 9) that "oxidation and weathering had leached most of the sulphides". Personnel of Teck Explorations Limited conducted geological, geochemical, electromagnetic, and magnetometer surveys over portions of the United Tommy group (Spilsbury, September 17, 1984), and rock trenching and sampling of the veinlet zone on the Tommy claim (Spilsbury et al., April 4, 1985); both programs were undertaken on behalf of International Phoenix Energy Corporation at a cost of \$82,088.20 (see Appendix). The author of this report inspected the veinlet zone between Adit and Walkout creeks on June 8, 1986.

GEOLOLGY

United Bear Group

Triassic Karmutsen volcanics are shown on the regional geology map (Muller, 1969) as underlying the claims. Field inspection suggests that the northern two-thirds of the claims, particularly north of the shear zone which hosts the gold-quartz veins, is underlain by Karmutsen volcanics, and the southwestern portion of the claims is underlain by Jurassic Island intrusions of diorite or quartz diorite. Geology near the Bear Creek shear zone is shown on maps accompanying the report by Helsen (September 17, 1985) in the Appendix of this report. Felsic dykes hosted by Karmutsen volcanics are cut in new logging roads.

United Tommy Group

Where mapped by personnel of Teck Explorations Limited (Spilsbury, September 17. 1984; see Appendix) the Karmutsen is subdivided into a thick volcanic breccia and an andesite. In the southwestern corner of the Golden Gate claim biotite granite and quartz-feldspar porphyry of the Island Intrusions are shown in a creek valley. One felsite dyke is shown at the west side of the veinlet zone in Adit Creek. Chlorite alteration with discontinuous fine quartz veinlets was noted, generally along the eastern side of the sheeted veinlet zone. Parallel quartz-carbonate-sulphide veinlets in concentrations of up to 5/metre are depicted as trending $030^{\circ}-040^{\circ}$ in Adit Creek, between $040^{\circ}-065^{\circ}$ in Walkout Creek, and 045° in Canyon Creek. These were considered by Spilsbury (September 17, 1984) to postdate chlorite alteration. The veinlet zone could extend southwesterly for 2 km and in Canyon Creek is shown to be +350 metres wide. A fault in Adit Creek appears to truncate the zone on the north end.

MINERALIZATION

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United Bear Group

Gold-bearing quartz veins with appreciable pyrrhotite-pyrite-sphaleritechalcopyrite are hosted within a shear zone which may be of regional extent. All investigators have obtained significant gold values from veins, and gold has been noted in sheared volcanics adjacent to veins (Helsen, September 17, 1985). A composite chip sample of 60 cm of sheared volcanics and 1.5 m of quartz in the No. 2 vein taken by the author of this report assayed 1.228 oz/ton Au and 0.89 oz/ton Ag (location shown on detailed plan, sketch 2B, of Helsen). A value of 0.146 oz/ton Au and 0.21 oz/ton Ag in a chip sample taken by this author over 2.0 metres east-west of quartz and sulphides in the Black vein (location shown on the map of R. Brown, circa January 1986) corresponds reasonably well with a 4.82 ton bulk sample shipped to Cominco which contained 0.280 oz Au/ton and 0.65 oz/ton Ag. Higher grade chip samples (R. Brown, January 1986, and Helsen, September 17, 1984) may have been oriented north-south, perhaps along the strike of the vein, although the attitude is not readily discernible because of soil cover and disturbance from blasting. Gold in the order of 3 gm/tonne is present in a stockwork of veinlets ±300 m downslope from the adit near the new logging roads.

Veins, whether exposed in the adit or on surface, appear to have widely variable grades of gold. Structural controls within the shear zone may be of prime importance in localizing the gold either in quartz or sheared volanics.

With reference to the figure on p. [10], a right lateral movement along a brittle shear zone is assumed to have produced extensional (tension) gash openings diagonal to the direction of shear movement. An early mineralizing event could have provided quartz + gold + sulphides to fill these structures. Later brittle to ductile shearing may have produced open spaces (sub)parallel to the zone. A late stage of quartz with lesser gold and sulphides may have been introduced into these openings. The north side of the shear zone has not been observed, so no estimate of the potential length of gash veins can be made. A similar interpretation is shown in the figure on p. [11] for the Black vein.

Exploration of this shear zone by drilling must be carefully planned to intersect gash veins and to allow interpretation of the geometry of mineralization within the main shear.





June 1986

United Tommy Group

The presence of high-grade gold values in narrow northeasterly trending parallel quartz veins and veinlets is well documented (Stephenson as quoted in Drummond, January 19, 1984; C.J. Brown, August 20, 1982; Spilsbury, September 17, 1984). Sulphides are leached from the veinlets at surface and in shallow rock trenches; presumably gold has also been leached. With reference to gold geochemistry reported from a surface trench on a narrow vein and in the adit which intersects and follows the vein, the tenor of gold is higher in vein samples from the adit, thus tending to support the observation that gold content may increase with depth. The adit does not appear to have intersected the main veinlet zone, but rather followed one narrow quartz vein.

The report of Spilsbury et al. (April 4, 1985) summarizing the results of sampling and assaying in shallow rock trenches concludes that gold values in the veinlet zone across widths which would be required for bulk mining are too low to be economic. However, as noted above, the veinlets where exposed at depths of 0.2 to 0.4 m in these trenches display leaching of sulphides. It appears that below the leached zone the grade of gold may increase.

CONCLUSIONS

General

A considerable amount of work has been completed recently on the properties. Both claim groups are essentially ready for drill tests.

1) United Bear Group

Gold occurs in quartz veins within a wide, persistent, regional shear zone in volcanics. Structural controls are of importance in defining the geometry of quartz veins which appear to trend obliquely across the zone of shearing. Gold may also be hosted in the shear separate from obvious quartz veining. Moderate tonnages of high-grade gold mineralization (assays to 1.626 oz Au/ton) could possibly be developed within the various

discrete quartz veins; a larger, bulk tonnage potential should be investigated by sampling the entire width and length of the shear zone. Stockworks of quartz veinlets also contain gold and should be investigated.

2) United Tommy Group

Exposures of mineralized veinlets more than 350 m wide can be traced for at least 400 m of strike and possibly for 2 km. Various investigators have sampled individual veinlets and obtained very high gold values. Frequency of veinlets is variable but is often in the order of 3 to 5/metre. Surface exposures of veinlets both undisturbed and in shallow rock trenches show leaching of sulphides and thence probable leaching of gold values has occurred. The section which is intersected in the adit is not considered to have crossed the main veinlet zone. A representative valuation of the gold mineralization will require sampling at depths below the surface leaching. If gold values persist to moderate depths, potential exists for an economic bulk tonnage deposit.

RECOMMENDATIONS

1) United Bear Group

Phase 1

Some preliminary geological mapping and soil sampling should be completed to assist in defining drill targets. A preliminary diamond drill program of 500 metres to test both quartz veins and shear zones is recommended.

Phase 2

A second diamond drill program consisting of some 3000 metres might be required if encouragement is obtained from Phase 1.

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2) United Tommy Group

Phase 3

Several long drill holes across the veinlet zone are recommended to provide continuous sample intervals of unleached material. Approximately 2000 metres of drilling may be necessary for an initial test.

Phase 4

Detailed drilling of the veinlet zones should be undertaken if gold values obtained from Phase 3 are encouraging. Approximately 5000 metres might be required.

Phase 5

Fill-in drilling may be required on either of the known targets.

COST ESTIMATE

Phase 1 (United Bear Group)

Geological mapping, sampling	\$ 3,000	
Soil sampling	2,000	
Analyses	2,000	
Roads and drill site preparation	9,000	
Diamond drilling, 500 m at \$75/m	37,500	
Support equipment, services, supplies	3,000	
Supervision, engineering	4,000	
Report	2,000	
-	62,500	
Contingencies at 20%	12.500	
Total, Phase 1	\$ 75,000	\$ 75,000

Diamond drilling, 3000 m at \$75/m	\$225,000	
Assays	10,000	
Support services	10,000	
Supervision, engineering, geology	25,000	
Report	5,000	
	275,000	
Contingencies at 20%	55,000	
Total, Phase 2	\$330,000	\$330,000
Phase 3 (United Tommy Group)		
Diamond drilling, 2000 m at \$75/m	\$150,000	
Assays	25,000	
Support services	10,000	
Supervision, engineering, geology	20,000	
Report	5.000	
	210,000	
Contingencies at 20%	42,000	
Total, Phase 3	\$252,000	\$252.000
Phase 4 (United Tommy Group)		
Diamond drilling, 5000 m at \$75/m	\$375,000	
Assays	50,000	
Support services	25,000	-
Supervision, engineering, geology	50,000	
Report	10.000	
	\$510,000	
Contingencies at 20%	<u>102,000</u>	
Total, Phase 4	\$612,000	\$612,000

Phase 5

A budget of \$500,000 should be available for additional drilling as required on either sector of the property Total, Phases 1-5

\$500,000 \$1,769,000

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Results of each Phase should be compiled into an engineering report; continuance to the subsequent Phase should be contingent upon receiving favourable conclusions and recommendations from an Engineer.

REGISS PROFESSIONAL Respectfully submitted. L. B. GOLDSH EEA P CLIACE OF OHTAR ocke B. Goldsmith, P.Eng. Consulting Geologist 0

Vancouver, B.C. June 26, 1986

ENGINEER'S CERTIFICATE LOCKE B. GOLDSMITH

- I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
 I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining
 - Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
- 3. I have been engaged in mining exploration for the past 27 years.
- 4. I have authored the report entitled, "Review of Exploration Data, United Bear and United Tommy Mineral Claim Groups, Kennedy River Area, Alberni Mining Division, Vancouver Island, B.C.", dated June 26, 1986. The report is based upon fieldwork and research supervised by the author.
- 5. I have no ownership in the property, nor in the stocks of International Coast Minerals Corp..
- 6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.

AL R Respectfully submitted, allsmith PROLINCE OF ONTP Locke B. Goldsmith, P.Eng. Consulting Geologist

Vancouver, B.C. June 26, 1986 16

REFERENCES

Party.

- Bancroft, M.F. 1937. Gold deposits on the west coast of Vancouver Island betwen Esperanza Inlet and Alberni Canal. G.S.C. Memoir 204.
- B.C. Minister of Mines, Annual Reports: 1903, p. H232; 1904, p. H192; 1914, p. K219; 1923, pp. A245-A246; 1935, pp. F46-F48; 1939, p. A42.
- Brown, C.J. August 20, 1982. Report on Kennedy River claims, Alberni Mining Division, British Columbia. Private report for Rich Lode Gold Corporation.
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- Brown, R. <u>Circa</u> January, 1986. Geology map and sampling of Bear mineralization for Lac Minerals Ltd. (reproduced in the Appendix of this report).
- Drummond, A.D. January 19, 1984. Report on the Tommy, Golden Gate, and Waterfall Mineral Claims, Alberni Mining Division. Kennedy River, West of Port Alberni, B.C. <u>In Statement of Material Facts for International Phoenix Energy Corporation, dated</u> May 17, 1984.
- Eastwood, G.E.P. 1968. Geology of the Kennedy Lake area. Vancouver Island, B.C. B.C. Department of Mines and Petroleum Resources, Bull. No. 55.
- Groves, W.D. June 2, 1985. Examination of Bear Group property, Kennedy River area. Alberni Mining Division, Vancouver Island, B.C. Private report for First Coast Minerals Corporation.
- Groves, W.D. December 9, 1985. Letter report documenting a property visit subsequent to June 2, 1985, submitted for First Coast Minerals Corporation.
- Helsen, J.N. September 17, 1985. Property examination report, Bear Group, Alberni Mining Division, B.C. Private report for Noranda Exploration Company. Limited (reproduced in the Appendix of this report; also subsequent sampling October 2, 1985, which has no locations plotted on maps).
- Muller, J.E. and Carson, D.J.T. 1969. Geology and mineral deposits of Alberni Map-Area, B.C. G.S.C. Paper 68-50 and Map 17-1968.
- Spilsbury, T.W. September 17, 1984. Report on the geological, geochemical, electromagnetic, and magnetometer surveys conducted on the Tommy, Golden Gate, and Waterfall claims, Alberni Mining Division. Private report for Teck Explorations Limited and International Phoenix Energy Corporation.

Spilsbury, T.W. et al. April 4, 1985. Report on trenching and sampling program on the Tommy mineral claim, Alberni Mining Division. Private report for Teck Exploration Limited and International Phoenix Energy Corporation.

SAMPLE DESCRIPTIONS, BEAR MINERALIZATION

L.B. GOLDSMITH

SAMPLE DESCRIPTIONS

BEAR MINERALIZATION

		Assays			
Sample No.	Description	oz/ton Au	oz/ton Ag		
2V	Number 2 Vein, chip sample across 60 cm of sheared footwall (south- west side of vein) volcanics and 1.5 m of quartz vein. Volcanics with disseminated pyrite. Vein contains pyrite-pyrrhotite to 5% with lesser chalcopyrite. The vein trends ±300° at an acute angle (±30°) with the main east-west shear zone.	1.228	0.89		
Black-1	Black Vein, chip sample 2.0 m east- west across a quartz vein with sections of massive pyrrhotite, pyrite, variable (½% to 5%) amounts of sphalerite, and lesser chalco- pyrite. Quartz terminates against an east-west shear on the south side; smears of quartz towards the east on the north side of the shear may be of a later generation. Attitude of quartz is not discernible from the exposure but a trend at an angle to the east-west shear is suggested.	0.146	0.21		

ASSAYS, BEAR MINERALIZATION

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L.B. COLDSMITH

KC: C	hemex Labs Ltd	212 Brooksbank Ave North Vancouver, B.C Canada V7J2C			ank Ave. Jver, B.C. V7J 2C1	
Analytic	al Chemists • Geochemists • Registered A	lssayers	Pho Tei	one: .ex:	(604) () 984-0221 043-52597
TD : ARCTEX ENGINEERING 301 - 1855 BALSAM ST VANCOUVER, B.C. V6K 3M3	• •	CERT• # INVGICE # DATE P•C• #	: : : :	A86 I86 11- NGN	1347 1347 JUN- E	2-001- 2 86
CC: L. B. GOLDSMITH						

Sample description	Prep code	Ag oz/T Rush fa	AU OZ/T RUSH FA			
2V	236	0.89	1.228	 	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
BLACK-1	236	0.21	0.146	 		

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Registered Assayer, Province of British Columbia

J.N. HELSEN PROPERTY EXAMINATION REPORT

BEAR GROUP

NORANDA EXPLORATION COMPANY, LIMITED

NORANDA EXPLORATION COMPANY, LIMITED. (No Personal Liability)

NTS : 92F/3W

PROPERTY NAME: BEAR GROUP

PROPERTY EXAMINATION REPORT

DIVISION: CORDILLERA

Commo	dit	y	:	Au-Ag-Zn
Date	of	Report	:	September 17, 1985
Date	of	Exam	:	September 5, 1985
Exami	ned	By	:	J.N. Helsen
				Additional Report/2nd. visit.

1) PROPERTY NAME(S)

BEAR GROUP

2) LOCATION: - General Statement (Attach Location Map)

Province:	B.C.	District: Southern	Mining Division:Pt.	Alberni
Long.: 125	°25'W	Lat.: 49 ⁰ 10'20"N	Additional:	

Accessibility: Accessible via the Alberni-Ucluelet Road #4 (about 40 minutes from Pt. Alberni). At the moment the Kennedy River must be crossed on foot but there are good indications that within a few months the property may be accessible by 4 x 4 via a new logging road. Distance to Pt. Alberni about 60 km and about 30 km to Ucluelet.

3) CONCLUSIONS AND RECOMMENDATIONS:

Additional sampling was carried out on the cleaned newly exposed "Black Vein". Results over 2.9 m (across vein) show 28.97 gpt Au, 13.37 gpt Ag, more than 2% Zn. There are good indications that the gold mineralization extends into the Karmutsen H.W. Gold also occurs in stockworks in the granitic intrusion east of the adit and along the Bear Creek fault zone.

4) ACTION TAKEN:

Meeting with Waldo Ejtel on September 17, 1985 during which he cutlined his conditions for a 60% or alternative 100% ownership for Noranda.

5) SIZE AND LEGAL STATUS OF PROPERTY:

4 reverted Crown Grants i.e. #293, #294, #300, #487.

These claims are surrounded by claims of three other junior companies and are:

Mojo Captain Hook Esthez

6) OWNERSHIP

Waldo EJTEL, President First Coast Mineral Corporation, 1614 - 675 W. Hastings Street, Vancouver, B.C. V6B 1N2 PHONE : (604) 669-0712

7) VENDOR'S PROPOSED TERMS:

[Non-technical data]

8) HISTORY OF DEVELOPMENT AND PRODUCTION:

The Bear Creek property goes back as far as 1902 when a tunnel was driven. Little information, however, is available. The youngest report (Minfile) was written in 1916.

The tunnel, contrary to indications on Figure 5, is not straight but changes directions several times. The tunnel goes into the hillside for 200'.

Several veins are crossed by the tunnel and on one occasion the last vein hit, disappears to reappear again after tunneling through 30' of barren rock.

9) REGIONAL GEOLOGY: (Attach Maps)

The regional geology is made up mainly by:

- Triassic and older Karmutsen Formation: mafic volcanics predominantly with jasperoid tuffs, breccias and conglomerates at the base.
- 2. Upper Triassic Quatsino Formation: predominantly thickly bedded massive limestones.
- 3. Lower Jurassic Bonanza Subgroup: mainly andesitic volcanics with minor amounts of greywackes, argillites, sandstones.
 - 4. Middle to Upper Jurassic Island Intrusions: i.e. granodiorites and diorites.

10) <u>GEOLOGY OF THE DEPOSIT</u>: (Geology, minerology, length, width, dip Strike)

The property lies for about 2/3 in the Karmutsen Group (Triassic) and 1/3 (western part) Younger Island Intrusions (granitic). These intrusions are Jurassic or even younger in age.

A major fault zone strikes in a NW-SE direction south of the property, to form two branches on the property itself. These are named the

i) Bear Creek fault zone forming the contact between younger intrusives and Karmutsen volcanics;

ii) Mine Creek fault zone which runs entirely in intrusive rocks (Figure 3).

The mineralization occurs in and along the Bear Creek fault zone. Gold mineralization has been shown to occur in variable amounts in:

- 1) Quartz veins in tunnel and at surface (Figures 5 & 6)
- 2) Karmutsen H.W. (Sketch #2)
- 3) Stockwork in granitic intrusions F.W. Below adit.

The best mineralization was found in a newly discovered vein west and uphill from the adit @ about 150 m distance. In this new "Black Vein" mineralization consists of pyrite, chalcopyrite, sphalerite, minor galena and apparently also visible gold (not seen by author). This vein is almost vertical and has an E-W strike. Vein #2 in the tunnel also strikes about E-W with a 50° dip to the north and a thickness of 5'. There is no indication how the new vein relates to the older vein system except that it lies along the same fault creek zone. VLF info indicates an anomalous zone of about 40' wide uphill from the Black Vein exposure.

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P. Wilton from observations in the tunnel believes the veins to pinch and swell and they may be even on echelon.

11) SAMPLES TAKEN (Note Sample Numbers and refer to Sample Report)

In addition to previous samples taken (Figures 5 & 6 and Sketch #1), samples were taken across remnants of Vein #2 in the tunnel, from vein exposures at surface and from the newly discovered vein uphill.

The results are in Table #1.

12) ESTIMATE OF RESERVE POTENTIAL: (State dimensions and source of information).

Potential exist for Au mineralization in veins, disseminated in wallrock and in stockwork. The distance between the downhill stock work and uphill black vein exposure is in the order of 200 m.

13) REFERENCES:

- G.S.C. §Map 17-1968, J.E. Muller §Paper 68-50

- W.D. Groves. Archean Resources Corp., "Examination of Bear Group" for First Coast Minerals Corporation, June 1985.

14) APPENDICES:

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Figure	1	Topographic Map
Figure	2	Claim Map.
Figure	3	Geology on and around the Bear Group property.
Figure	4	Claim map with location of projected logging road.
Figure	5	Approximate location of the veins at the surface. (See also Sketches #1 & #2)
Figure	6	Location of Black Vein in relation to other veins.
Sketch	1	Sketch of veins (yellow area on Figure 5)
Sketch	2A	Cross section of vein at 90 m station in tunnel
Sketch	2B	Quartz vein at surface branching out.



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50° dip Vein i Oz E-W ... 20.81 TUNNEL N a about 5 m west of # 9831 parple j. # 9832 B quar 12 vin Ants pample widerales Au/Ag 26.0/13.7 gft at profece branching ou SKETCH # 2 B. Quartz vein volca 9833 - tatern Tred 4 2/2 (0.75 m) handom chip # - JAF 1.228 oz/ton Au 8.19 0.89 oz/ton Ag L.B. Goldsmith June 7, 1986 Bon Ch fault/ vein system (vein # 2).

NORANDA	VANCOUVER	LABORATORY	

	***	*******	****	*********	***	*****	•			
COPERTY/LOCAT	TION:B	ear Grou	ID QI	92F/3			CODE	:	8507-019	
	6. M. M.		GCI	51275						
Project No.	:	127		Sheet:	1		Date	2	rec'd:July.	5
Material	1	Rock		Geol.:R.	. W.		Date	e	compl:July	18
Remarks	13.60 e	ter plante trêje								

Values in PPM, except where noted.

Г. Т.	SAMPLE						PPB			
10.	No.	Cu	Zn	РЬ	Ag	As	Au	TYPE		WIDTH
75	57451	180	23000	24	3.0	24	2400	Chip	sal në 🛶	3(
76	52	22	180	1	0.2	2	10	Chip		45
77	53	12	64	1	0.2	2	10	Chip		60
78	54	68	5000	1	1.0	2	4600	Chip		26
79	55	72	220	1	0.2	2	300	Chip		190
80	56	850	19000	520	32.0	120	√ 36000	Chip		130
81	57	38	260	1	0.2	2	60	Chip		70
82	58	170	860	6	2.0	2	2000	Chip		75
83	59	52	120	4	2.0	2	1100	Random	chip	30
84	60	2600	5400	14	7.2	2	3600	Random	chip	35
85	57461	6500	17000	6	31.0	2	2500	Random	chip	64



8509-048

N.T.S. _____92F/3W

DATE _____September 6, 1985

NORANDA EXPLORATION COMPANY, LIMITED TABLE #1 RESULTS OF ASSAYS (Ag-Au)

AND GEOCHEM (Cu-Pb-Zn) PROPERTY <u>BEAR GROUP (First Coast Minerals Corp)</u>

PROPERTY EVALUATIONS A M PLE REPORT 4	27-A4
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MPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH				ASSAYS			SAMPLEC
				Au	Ag	Cu	Pb	Zn		BY
8 31B	chip sample across vein in adit @ 90' station	chip	± 5'	20.81	16.1	320	660	7000		J. Helser
	(at edge of vein near gange zone) Vein E-W/50 ⁰ N									
8 32B	5 m to W of above - same vein	grab		26.0	13.7	1000	450 >	20,000		
3 33B)	Combine 2 bags. Random chip in volcanics be-	random	3 1/2"	8.19	6.9	920	80	5600		
8 33B)	tween 2 branches of split vein la (taken @ 7 m E	chip								
	from VR 57451 Station									
3 34B	chip sample across vein (Total width 2.9 m)	chip	1 m	38.44	13.7	950	51	12400		
	0-1 m section (with gal; sph; py & Au)							·		
8 35B	Same as 9834B section 1-2 m	chip	1_m	26.64	. 11.7	1540	37 >	20,00	D	 :
3 36B	Same as 9834B section 2-2.9 m	chip	0.9 m	21.84	14.7	1630	57 >	20,00	D	
3 37B	grab of veins (1 cm) in 2 m wide stockwork	grab		3.60	1.0	45	11	1300		
	also host rock included because of tiny veinlets.									
			1		[
	•									
						1				
						1	1			
	· · · · · · · · · · · · · · · · · · ·		1			1				
						1				
		4	- Andrewson and the second	A		A		الم مسجد الد		 4 i i





10 234254 1301 a Ave Certificate h Vancouver, B.C. de V7P 2R5 20 135 of Analysis (604) 985-0681 04-352667 S REPORT: 625-2716 PROJECT: 427 -0 509-028 PAGE 1 BEAR GR (34) SAMPLE SAMPLE SAMPLE SAMPLE 15 AL 1.5240 517 5.5 MPREE PCT 2.48 2.50 4.20 12,98328,24 98358 12 2 9836B 1.2.2.2.6 Sta with tint 1-5-5-5 in the state E Constanting and a state of the second s 2017. 2010-04 ALC: N 1) å. 5. -1 · . . 4. 64.5 17. 1 inc ۰s. ÷. ÷ S it. . . . 4.5 35 19181 DB WM DP 14

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8510-021

NORANDA EXPLOR ION COMPANY, LIMITED

PROPERTY BEAR GROUP

23 500

427-A4

N.T.S. <u>g2 F 3</u> DATE <u>Leak 30.85</u>

SAMPLE REPORT

SAMPLE NO	LOCATION & DESCRIPTION	TYPE	WIDTH					6EO	CHEM	SAMPLEC
				ALL	Ar	Cu	76	Zm	AS	BY
820 W-405	Soils from BEAR Group				0		网络船	1999.64		K. CROSS
<u> </u>	820 W = + 20 m West of Black Vein			1						J.HELS
· - 305	Stowing and then 40 m to S & N						1.36		A States	Server 25 Statistical
<u>" - 155</u>	0						K en	n de de la composition Administration		anti) - Colle Malagaren
1 - 205					-			8. <u>1</u> . 181		
1 155							-1. m			
105				(#)		44 - 14 ⁰		161.69		
055	T_							d de	and the state	an a
	SBC 42/				all a second	1.01	194 <u>1</u> 4	1947	一部 一載	and an arriver of the
05N	9510-021				36-1 Ø -		49.94	±10 /	a liken a 195	
10N	SOIL 0910				Sec.		- 1698		$= - \left\{ a_1, b_2, \cdots, b_n \right\}$	
15N								100 - 00		in all one had a
- 20 N	SBC 427				and the second s		194	4.)4		
1 - 15N	Soil BS10-021			· · ·	に語い		a al y	4,34%		
30N		2			1960		- jaraj2.	1.00		
-35N					- 1183			1.1.5	(1994)[1]	
- 40N						2	A local	1.4 1.2	一般の一般的	
800 N- 0 N	Guis & W. EJTEL					11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	100	- C. 9	2713	
n - 15A					1.14		-122		2.24	an a
825W-15	5 10 4				1		4.4	1.00	1. 원소 1년	pist ^e Pour die fi
" - 0.	\$				1.61			6.46		entre linger als states
" - 151					14		[75]	1. A.S.		
30	N				100		114			in the second states

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: BEAR GROUP

CODE :8510-021

Project No.	:427-A4	Sheet:1 of 1	Date rec'd:SEP.02
Material	:SOIL	Geol.:J.H.	Date compl:NOV.04
Remarks	in the second second		a data sala da ta da antina a casa

Values in PPM, except where noted.

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1. 1.	SHMPLE						PPB	
No.	No.	Cu	Zn	РЬ	Ag	As	Au	ana Norde, et a
43	820W-40S	10	30	2	0.2	1	10	
44	35	14	48	6	0.2	1	10	
45	30	16	60	2	0.2	1	10	
46	25	14	60	2	0.2	1	10	
47	20	38	110	14	0.6	1	10	
48	15	14	70	20	0.2	1	10	
49	10	12	58	14	0.2	1	10	
50	5	12	66	4	0.2	1	50	
51	820W-05	12	46	4	0.2	1	10	
52	820W-5N	10	44	4	0.2	1	10	
53	10	10	200	6	0.2	1	10	
54	15	10	44	4	0.2	1	10	
5	20	34	100	8	0.2	1	10	
	25	12	50	6	0.2	1	10	2
11	30	6	30	2	0.2	1	10	
58	35	10	36	4	0.2	1	10	
59	820W-40N	16	52	2	0.2	1	10	
60	825W-15S	10	44	4	0.2	1	10	
61	825W-0S	14	50	4	0.2	1	10	
62	825W-15N	8	34	2	0.2	1	10	
63	825W-30N	28	94	10	0.2	1	10	
64	BOOW-ON	18	96	18	0.2	1	10	
65	800W-15N	8	34	4	0.2	1	10	

11 RX	TO BAC MORANDA EXPLOR	ATION CO	WLOCK	LIMITED	1 10	4		8	510-4). Oʻ	2 1
	PROPERTY BEAR GROUP	/ .E RE	47 20 R T	27-A	4		N. D/	т.s ате _@	<u>ref. 2. j</u>	1985	
AMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH		-		ASSAYS				SAMPLER
			(m)	Hu	<u>lu</u>	Pb	Zm	AS	-		BV
070	HEAR GROUP	01		Assay	600	chem	6 coch	1955			J.HELd
1/90	Orz Vein / Hz 280 / 80 N / exp. oren I 6m	Chip	0.45	15.87		т. 1 ⁷ К.	a det			age of the second	11 an
9791	ale vice a 105 m how 675 W to week And	hak			• • • • • • • •	· · ·			- jal 49	in dist	Construction of
1 7 - 12	in creek bed & loose material white and here	11312			1.110				-3854	Cont.	
-	quarks (peij containis auffides along packs				- P		민만		신다		
9792	g/2 rein with later py sph, born, falena, chpy	pas	109.6	5.					•	Sanda 	
	for stope a both on for whet Fracklesed ste			·			2000 				
	Vin filled with sulfides along cashs and a										
	Myrile vien waving along there within flavein				<u></u>		5.48		1.000		
9783	hat 1 auce to view a state a 664 on hom	chin	0.8		- 4 ⁸		i, iliş				and the second second
	adit sheard gte sein with chlark/ clay	/			19		1. Star				
-	layers (a few mon to comp within gt 2 sein.				- 19 a		1. And	2.5.6	1.1	16-82 -	Proposed and the
9794	pab in gla vicin (a 2 1 cm from atope)	pab	_	3.53	199					1997 - 38 (1997) 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
1 .	of pyaik filling in Openings (angs) in gt						1.12				di sedit seguri di se
9251-	pab along gt 2 vin from Stope to 49 m	Aab	17.5				1.1				
9786	Station (clong at the									ri, the	
1710	hab of post forth pyrk at som drakon		0.4				1.004		1000	101-00-	•
0798	" " " " S-la a	ang-	5.0		1.1.1.121		1.19			24648	
9755	" " " <i>10.65</i> m		5.0				67				24 <u>-</u> 1997
agan	······		-							1	ligher a daish

()		/		B		<u> 18-</u>	CLEGG	_ of a	Analysis
~	\$-15- 			1					
ORI: 425-	3244					E	PROJECT: 427	PAGE	1
IPLE IPER	ELEMENT UNITS	Au Ght	Ag Ght	Э.П.,		е. " _к			i Bird
9790	1	5.87	8.2	9 F.	ta benda ti		services press of the sec	The State of the second	- San San San
9791		0.65	1.4						
9792	10	9.65	51.8						
9793 9 794	the second of the	0.51 3.53	2.4						
9795		0.96	1.0	er e zerrer a na		Contra 1811	Area an The Manager Trans		
9796		1.71	2.4			- <u>-</u>	n Distant sa serie di		
9797		0.07	<0.7						
9798	а. А.	0.69	<0.7						
9799	(0.07	<0.7		1		2		
9800		0.07	<0.7						
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	14.221								
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UKT: 12	5-2244					GEAR	6R	(JH) [PROJECT: 427	8510-025	PAGE	la e constat
iple ;Fer		element In Its	Cu P.P.M	Pb PPM	Zn PPN							
9790 9791 9792 9793 9794			255 49 2380 74 103	18 18 2600 28 53	670 2700 >20000 1020 1120				ster Cons _{erv} er			
9795 9796 9797 9798 9799			21.0 550 11 24 5	20 19 5 5 3	2300 48 79 1960 85							
3300			4	5	53						3	
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ROBERT BROWN GEOLOGY MAP AND ASSAYS BEAR GROUP LAC MINERALS LTD.

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RESULTS OF 4.82-TON BULK SAMPLE FROM BLACK VEIN SHIPPED TO COMINCO LTD.

· . ..

Cominco Ltd./Trail, British Columbia, Cana Tel. (604) 364-4222/Telex 041-4426	ada V1R 4L8				Cominco
FIRST COAST MINERALS CO 400 - 1455 ROBSON STREE VANCOUVER. B.C. V6G-1C1	DRP•		FIRST COAST MIN PRELIMINARY LOT	18 JUNE ERALS NO 1	1986 AU/PB ORE
CAR NUMBERS: 1 TRUC	RREL)	ATE RECEIN	ED: 1986 05	12	
WEIGHTS: NET WET 97	TOO MOIST O	.5 % NET	DRY 9651	S.D.T.	4.8255
ASSAYS:					
LEAD 0.4 % ZINC COPPER 0.23 % IRON SULPHUR 18.0 % ALUMIN	3.4 % S 24.2 % A NA 0.8 %	ILVER NTIMCNY	0.65 0Z/TN GO 0.14 % AR	LD SENIC	0•280 DZ/T∹ 0•05 %
QUGTATIONS: JUNE	E AVERAGE - L	EAC ZINC S	SILVER GULD CUP	PER	и И 1915 — 17
EXCHANGE: JUNE SUS LABOUR RATE: \$ 19	TO \$CDN 9•13	1.378500	STERLING T CPI: 312	00 SUS	1.481000
CALCULATED PRICES:					•
GOLD 343.20 # 1.37 PAYMENTS: (PER SHORT (785 * •98 Dry TCN)			н с	+63.63918 \$/OZ
GOLD CONTENT		CTIONS 300 OZ	PAID FOR 0.2500 DZ TOTAL PAYMENT	\$ \$	115•91 115•91
DEDUCTIONS: (PER SHORT BASIC TREATMENT CHARGE C.P. INDEX LABOUR: LABOUR RATE TREN PENALTY	T DRY TON) = (312• - 3 = (19•13 - = (24•20 -	00.) + .2 18.25) + (5.+()	25 100• ≠ •05 L•44 ≠ 3•40))	\$	-207•23 -3•00 -4•40
ALUMINA PENALTY		0) * •90		\$	-50.78 -0.27 -265.68
VET VALUE (PER SHORT DE	NET DE		landrad in the second secon	\$	-149.77
GROSS LOT VALUE				\$	-722.72
NET LOT VALUE	and and the second s			\$	-722.72
a an	al anta di sana si si angang sa si	i sina sa ingina sa i Sa ingina sa ingina s	a esta de la companya		
	للعلي فرأتهم وأعبره ومعذوري	$\sum_{k=1}^{n}\sum_{j=1}^{n}\left(2^{j}\left(\frac{1}{2}\right)^{k}\right)^{k}\left(2^{j}\left(\frac{1}{2}\right)^{k}\right)^{k}\left(\frac{1}{2}\right)^{k}\left$	- 1967		
n an Arran an Arran an Arran a Maralan i a t	and a second	an my care	1		
	· Andrew Andrew			· .	
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nalysis (Certificate		Ar	alytical Servic	es, Trail, B.C			Cominco	۲r 86 /
(SP08 8605 H20 % 0.5	12 8406 1ST AU(PULP) DZ/TDN 0.280	COAST MN L AU(MET) DZ/TON (0.001	DT #1 LEAD AU(TOT) OZ/TON 0.280	ORE AG(PULP) OZ/TON 0.65	AG(MET) OZ/TON (0.01	AG(TOT) OZ/TON 0.65	CU % 0.23	РВ % 0.4	
ZN	S	S102	AL203	FE 2	CAD X	SB Z	AS Z	BI	
CD									
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SAMPLING BY W.D. GROVES, MAY 1986

Samples T1 to T4 are from the Tommy claim, locations unspecified.

Samples BP-1 to BP-3 are from the Black vein, taken subsequent to blasting and removal of a bulk sample. Orientation and nature of samples unspecified.

CME ANALYTICAL LABORATORIES LTD. 52 E.HASTINGS ST. VANCOUVER B.C. V6A 1R6 TELEX 04-53124 HONE 253-3158

DATE RECEIVED: DATE REPORT MAILED: June 3/86

MAY 26 1986

ASSAY CERTIFICATE

SAMPLE TYPE: ROCK CHIPS AU** AND AG** BY FIRE ASSAY DEAN TOYE. CERTIFIED B.C. ASSAYER. ASSAYER:

> FILE # 86-0774A FIRST COAST MINERALS

PAGE 1

SAMPLE#	Ag**	Au**
	DZ/T	DZ/T
T-1	1.27	.320
T-2	1.27	.294
T-3	3.42	6.140
T-4	.76	.618
TONY-1	.04	.023
TONY-2	.15	.032
BP-1	.36	.762
BP-2	.31	. 492
BP-3	.55	.942
G-1	.19	.074
WF-1	.55	.768

T.W. SPILSBURY MAPS

GEOLOGY AND CHIP SAMPLES, UNITED TOMMY GROUP

TECK EXPLORATIONS LIMITED -INTERNATIONAL PHOENIX ENERGY CORPORATION

STATEMENT OF EXPENDITURES

INTERNATIONAL PHOENIX ENERGY CORPORATION

INTERNATIONAL PHOENIX ENERGY CORPORATION

*200-595 Hornby Street Vancouver, B.C. V6C 2E8 (604)681-4018

June 17th, 1986

Mr. Waldo Ejtel 316-1045 Haro Street Vancouver, B. C.

Dear Sirs:

Re: United Tommy Group

Per your request, the amount of monies spent on exploration, re the United Tommy Group was \$82,088.20.

If you have any further questions contact the Auditors, MacKay and Partners, 10th floor, 1190 Hornby Street, Vancouver, B. C., V6Z 2H6, to the attention of Liisa.

Sincerely,

INTERNATIONAL PHOENIX ENERGY CORPORATION

Per H. P. Capozzi

President

HPC/dm