CON & CROWHURST LTD.

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October 16th, 1972.

LUC SYNDICATE PROGRESS REPORT THIRD QUARTER

GENERAL PROGRAM

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During July and August six prospecting camps were operated out of LUC Base at Topley Landing with the aid of a 3B-1 helicopter on contract. From the end of August to mid-September, crews dwindled, mainly with return of students to university but also with some loss to operating mines and the oil industry. Unseasonable weather from September 17th led to closing the Babine operation September 28th. Work then continued in the Cariboo area with two crews using 4-wheel-drive vehicles.

#### Fort Fraser Map Area

An area indicated by anomalous levels of molybdenum in (16)silt samples was staked as the PIT claim group. Some prospecting and widely spaced soil sampling was carried out. Rock samples were run geochemically for molybdenum content. No explanation has yet been found for the anomalous samples and no mineralization has been located. There is 10% to 15% rock outcrop, mainly volcanic, close to a body of intrusive of generally syenitic composition. The contact zone of this syenite is anomalous for molybdenum over a wide area but values do not usually reach levels found on the PIT group.

Further prospecting and several soil traverses failed to (17)find anything of importance in an area of copper values in silt samples, mentioned in the Second Quarter Report. Minor mineralization was found in 12/3/12 small quartz veins, mainly in volcanics close to the syenite contact.

(2) Further prospecting around Taltapin Lake failed to locate anything of importance.

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#### Smithers Map Area

- (10) Soil samples, run for copper, molybdenum and mercury, served to confirm earlier results of El Paso crews. Although feldspar porphyry float was found, no definite intrusive body has been located. The only mineralization located occurs in float fragments of fractured volcanics. The environment is not encouraging in light of results on the MINE group to the north.
- as well as two geochemically anomalous areas. Two miles of tractor trail were up-graded to 4-wheel-drive road and the main anomaly was trenched to bedrock. This work revealed fracturing in Takla volcanics containing calcite veining. Sparse chalcopyrite occurs in the volcanics, generally with small fractures and calcite veinlets. Malachite occurs sparingly on fractures and slip faces. No significant mineralization was encountered.
- (18) A camp was located at the site of the old Topley-Richfield workings and a reconnaissance of the area conducted in view of the work being conducted by Ducanex crews based on B.C. Minister of Mines report 1926, p.143. Nothing of interest was found by this reconnaissance.
- intrusives. Some very small copper-bearing floats were found as well as minor pyrite in the volcanics near the contact. Geochem results were generally very low but a single silt sample and a single soil sample were anomalous for copper near the south limit of the area covered where some float was found.

- (20) The 8-claim TAC group was staked and further prospecting done to follow up on results from camp (19). Work was halted by heavy snowfalls starting September 17th.
- (21) Reconnaissance traverses were conducted to investigate aeromagnetic anomalies. Some pyrite and very minor chalcopyrite were located to the southwest of the camp. Anomalies appeared to be due to basic phases of the volcanics.
- (22) This area was investigated in more detail than had been possible early in the season on helicopter-supported traverses. Results were the same, no outcrop and no geochemically anomalous values. This is near the south boundary of the claims being explored by Cities Service Minerals.
- (23) A camp was established to explore an area of schists and highly altered rocks, possibly of Cache Creek age, with minor malachite staining. No mineralization was found.
- The area south of Fulton Lake, and overlapping ground being explored by Nittetsu, Cities Service Minerals and Amax, was prospected and streams silt sampled. Two areas of granitic rocks, possibly of Omineca age, were encountered but no occurrences of biotite feldspar porphyry were found. Meager copper mineralization was located in two places. No anomalous results were obtained in silt-sampling.
- Anomalous silt samples led to staking the ROJO group. Followup mapping and soil sampling revealed one area of volcanic outcrop and generally
  poor geochemical results. Amoco is working on claims to the north and Cities
  Service Minerals is reported to have encountered mineralization on their
  claims directly to the east. This mineralization is apparently close to the
  northeast corner of the ROJO group. No further work has been possible since
  the snowfall of September 18-21.

- (26) General prospecting was carried out to investigate formations along the west side of Babine Lake. Nothing of interest was located.
- The BLOW claim group was staked but initial investigation failed to show any mineralization to support the anomalous results. After the snowfalls of mid-September this claim group was the only one low enough in elevation to allow further work. Some mapping was done in the limited area below the snowline and additional soil sampling was carried out. It appears there is some scattered pyritization of granitic rocks although no copper mineralization was found. Anomalous copper results appear to be restricted to soils and silts taken in particularly boggy areas.

## Hazelton Map Area

- silt and soil sampling. Nothing of interest was found. Geological mapping and IP surveying on surrounding claims by Amoco are reported to have returned nothing of interest. The claims will be allowed to lapse.
- (28) (14) The HOL group was staked to follow up on positive silt sample results. Soil sampling was conducted on tape and compass lines at 800 foot intervals and anomalous areas have been outlined. Pyritization of favourable biotite feldspar porphyry has been found and the claim group warrants further exploration.

A proposed program designed to provide a 3-mile tractor road to the property with trenching of anomalous areas was abandoned after heavy snowfall in mid-September.

This program together with geological mapping and IP surveys should be planned for late June, 1973. The relatively late date is suggested

to allow some drying of extensive swampy areas and rehabilitation of logging roads into the area.

- (29) General prospecting was conducted in this region which was considered advisable due to outcrops of reportedly favourable feldspar porphyry. This area gave us our first real impression of the complexity of the intrusive rocks in the area. No results of economic interest were obtained.
- (30) Investigation of aeromagnetic structures continued in this area. A very local area of silts anomalous for copper was located. Prospecting and follow-up geological work failed to find anything of interest.
- (31) Reconnaissance of this area encountered complicated geological conditions but no indications of mineralization.
- (32) Check silt sampling and prospecting was done between Babine Lake and the FORT group as a result of discovery of alteration and mineralization on the FORT group.
- of apparently small biotite feldspar porphyry intrusions with favourable appearing alteration pyrite mineralization and scattered chalcopyrite. The area was staked as the FORT group and a program of mapping, etc., was planned. Heavy snow during September stopped all work. The claim group deserves intensive exploration.
- (34) This camp was located to carry out general reconnaissance in an area assumed to be underlain by sediments. Sparse outcrop shows diorite intrusives and some alteration. Silt sampling gave anomalous results in four widely separated places along the regional strike northeast of the camp area. Some further prospecting is warranted.

- (35) Minor aeromagnetic anomalies associated with small topographic highs were investigated. These appear to be due to monzonitic intrusives. A number of apparently favourable biotite feldspar porphyry intrusives were located in sparse outcrop in the general area. However, prospecting, silt and soil sampling have so far failed to show any real indications of copper mineralization.
- (36) Minor mineralization in sediments together with scattered anomalous results in silt sampling led to staking the SINTA group. Follow-up work has been negative and no further work is planned.
- (37) Prospecting was carried out in the region of the Trail

  Peak property held by Texas Gulf Sulphur. Although two small bodies of

  biotite feldspar porphyry were found, no new indications of copper mineraliza
  tion were noted.

#### Manson River Area

#### COL Group

McElhanney Associates were retained to carry out a location line survey of the COL claims in the vicinity of the Lorraine showing being explored by Granby Mines. Some geological mapping was done but no significant mineralization was found.

#### RODE Group

Soil sampling was completed over this claim group resulting in the outlining of a copper anomaly as well as several molybdenum anomalies lying generally to the northeast.

Some rock exposures were mapped along the east side of the claim group. The remainder of the claim group is covered by overburden.

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(38) Further prospecting was done in the vicinity of anomalous silt sample results located during 1971. Several small zones of copper mineralization were found but none of these appear to be of economic size or grade.

## GENERAL DEVELOPMENTS - BABINE AREA

Major companies working in the Babine area during summer, 1972 included Ducanex, Amoco, Cities Service Minerals, Quintana, Canadian Superior, Falconbridge and Amax.

Ducanex has carried out detailed geophysics and diamond drilling on a property along the road from Topley to Topley Landing. This work has indicated a zone of low-grade mineralization in Omineca age (?) intrusives. There is no outcrop on the property. Other properties are being investigated.

Amax conducted a linecutting, mapping, IP program on its

Lennac Lake property. This property had presumably been found through normal prospecting methods as copper occurs in outcrops of biotite feldspar porphyry.

IP results are said to be strong and presumably drilling will follow.

of Amax, based on aeromagnetic interpretation. Intrusive rocks have been mapped in sparse outcrop. A geochemical and IP survey is being completed now. A second claim group was staked north of Fulton Lake and mapping apparently located some mineralization - reportedly in biotite feldspar porphyry. An IP survey is being conducted.

Amoco has staked several claim groups and apparently done mapping and IP surveys over all of them. Drilling was to commence on the claims north of the ROJO group early in October.

Quintana staked a large number of claims late last winter located northeast of Old Fort Mountain and extending down the east side of Babine Lake to the vicinity of Granisle. The program apparently consisted mainly of mapping and geochemistry but little contact was had here.

Canadian Superior did mapping and geochemistry in the Babine Lake area and to the north into the Bear Lake Omineca area.

Falconbridge did further IP and tractor trenching on its Old Fort property. General prospecting was conducted north and east of our prospect area.

Of the sixteen most important copper properties in the Babine area, it is interesting to note:

- (1) Thirteen eccur in biotite feldspar porphyry and one in quartz biotite feldspar porphyry.
- (2) Twelve were located through careful prospecting and geochemical (mainly silt) sampling. Two more were located by intensive follow-up of outcrops of favourable but apparently barren rock.

What about Gramsle

#### SPECIFIC PROJECT BURN

(see enclosed map)

On conclusion of linecutting, an IP survey was carried out by McPhar Geophysics over the grid area. The results of this survey were largely negative and indicated from the outset that there was little chance for a large disseminated copper deposit of economic grade, in spite of some very high geochemical copper readings. In other words, it was confirmed before drilling commenced that the objective was essentially a porphyry molybdenum deposit.

Twelve holes were diamond drilled during August and September; the data on these are as follows:

No.	Coordinate Location	Dip	Azimuth	Total Length	Cumulative Total Length
72-1	64N, 30E 72N, 30E	-90°		298 (feet) 303	298 (feet) 601
-3	72N. 38E	-90°		308	909
uly	72N, 38E	-45°	North	450	1,359
-5	84N, 38E	-45°	South	396	1,755
-6	60N, 30E	-550	South	559	2,314
-7	56N, 34E	-55°	South	511	2,825
-8	54N, 30E	-55°	South	383	3,208
-9	32N, 42E	-450	210°	800	4,008
-10	54N, 38E	-55°	South	436	le a labela
-11	50N, 30,25E	-55°	225°	401	4,845
-12	64N, 42E	-550	South	386	5,231
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Some mineralization was cut in Holes 1, 6, 7 and 10 but nothing approached an economic section of ore. Logs of the holes will be available later.

The following observations on the core are from property geologist Mr. Herb Toohey:

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Molybdenum (and copper) mineralization is found predominantly in diorite, with several minor occurrences of disseminated molybdenite in alaskite and syenite.

There are three principal modes of occurrence of mineralization, as follows:

- (1) Molybdenite and chalcopyrite in quartz stringers within the diorite;
  they rarely exceed one half inch in width and are accompanied by a well
  developed potassium feldspar selvage which in some cases is intergrown
  with a moderate amount of epidote. Mineralization occurs principally
  along the quartz and potassium feldspar interface and disseminated a
  short distance into the feldspar zone. Minor chalcopyrite and relatively
  abundant pyrite occur randomly within the entire zone of alteration and
  sometimes closely intergrown with molybdenite.
- (2) Molybdenite in gouge and shear zones most commonly as a thin smear along planes of movement. Frequently remnants of quartz were also observed along the surfaces. The mineralized gouge and shear zones are generally highly epidotized and graphite was seen to be present also.
- (3) Melybdenite in disseminated flakes and rosettes occurs in the more acidic rocks. There is very little accompanying alteration other than moderate to weak pervasive potassium feldspar. Drill results indicated this mode to be erratic in occurrence.

W.R. Bacon,

Manager - LUC Syndicate

# LUC SYNDICATE FINANCIAL REPORT THIRD QUARTER - 1972

# GENERAL PROGRAM

Account	Period - July 1 - Sep. 30	Year to Date
Accounts Receivable	\$894.85 Cr.	\$79.68
Machinery & Equipment	-	1,321.43
Employees Payroll Deductions	6.56 Cr.	6.56 Cr.
Purchases - Food	3,908.36	6,195.09
Purchases - Maps, Photos, Publications, etc.	22.50	551.32
Assessment Recording	*	171.00
Claim Recording	1,785.00	3,445.00
Sub-Contracts	5,270.95	5,270.95
Geochemical	9,265.66	11,252.11
Casual Labour	64.52	505.52
Holiday Pay	537.95	521.69
Workmen's Compensation	1,256.99	1,409.11
Unemployment Insurance	213,01	363.79
C.P.P. Expense	305.12	530.17
Tools & Supplies	1,414.72	2,881.79
Blueprinting, Drafting & Supplies	92.33	161.03
Rent		175.00
Aircraft Rental	27,705.90	34,692.60
Truck Rental	1,568.35	1,868.35
Repairs - Equipment	56.91	491.53
Vehicle Operating Expense	1,122.82	2,366.23
Travel Expense	2,851.61	4,706.32
Salaries	21,369.33	39,821.51
Office Expense	1,500.00	4,500.00
Telephone, Postage, Cartage, Express, etc.	916.71	1,093.02
Insurance		1,125.50
Management Fee	4,500.00	13,500.00
Licenses & Fees	10.00	80.00
Interest, Bank Charges & Accounting	78.75	81.85
Misc. Expenses	95.67	394.77
TOTAL EXPENDITURES	\$85,011.75	\$139,549.80
PLUS BANK BALANCE - end of Third Quarter, 1972		22,490.32
LESS BANK BALANCE - Dec. 31st, 1971		12,040.12
TOTAL CONTRIBUTIONS 1972		\$150,000.00

## LUC SYNDICATE FINANCIAL REPORT THIRD QUARTER - 1972

# SPECIFIC PROJECT BURN

Account	Period - July 1 - Sep. 30	Year to Date
Machinery & Equipment	\$1,113.84	\$1,512.84
Mobilization	3,075.00	3,075.00
Purchases - Sundry (culverts, etc.)	1,152,48	1,152,48
Purchases - Food	910.11	1,036.77
Assessment Recording		1,202,00
Assays	1,359.00	1,359.00
Sub-Contracting (drilling, IP, linecutting, etc.		53,272.05
Casual Labour	50.00	116.64
Holiday Pay	219.23	235.49
Workmen's Compensation	202.32	231.92
Unemployment Insurance	33.96	39.58
Canada Pension Expense	94.45	102.59
Tools & Supplies	799.53	1,575.61
Blueprinting, Drafting & Supplies	18.96	33.88
Equipment Rental	183.75	210.00
Aircraft Rental	4,005.56	6,035.56
Truck Rental	1,324,58	1,324.58
Vehicle Operating Expense	109.00	109.00
Travel Expense	2,640.39	2,779.08
Salaries	5,608.67	6,348.67
Telephone, Postage, Cartage, Express, etc.	1,230.40	1,249.39
Insurance	38.00	38.00
Interest, Bank Charges & Accounting	52.00	52.00
Misc. Expenses	73.00	73.00
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TOTAL EXPENDITURES	\$77,074.61	\$83,165.13
PLUS BANK BALANCE		24,334.87
LESS ROAD ALLOWANCE from Prov. of B.C.		7,500.00
TOTAL CONTRIBUTIONS - Conwest - \$25,000  Dome - 50,000  Western Minerals - 25,000	0.00	\$100,000.00