



CONTACT INFORMATION  
Mining Records Curator  
Arizona Geological Survey  
416 W. Congress St., Suite 100  
Tucson, Arizona 85701  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

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"IRON CREEK AREA" PRELIMINARY REPORT

FOR

SACHEM PROSPECTS CORPORATION

BY

HARRY SUEKAWA AND ROBERT E. COHENOUR

The Iron Creek area consists of three prospects - (1) the copper cobalt occurrence - (2) an arsenic-gold zone - (3) an iron-cobalt-copper stratiform trend. The area is on the North Fork of Iron Creek some 21 miles southwest of Salmon, Lemhi County, Idaho.

The prospect was initially staked in 1946 and at that time only the stratiform iron zone was recognized. Subsequently, in 1967, as a result of construction logging roads, the copper-cobalt prospect was discovered. The arsenic-gold zone was found by local prospectors in mid-1970.

In May, 1970, Sachem Prospects Corporation optioned a nucleus of 14 unpatented lode mining claims of the main copper-cobalt prospect. Later, the Corporation acquired options on an additional 28 claims, two groups comprising 21 claims are contiguous with the initial group. Sachem consolidated its land position by staking a total of 316 contiguous unpatented lode mining claims in the area.

During the Summer of 1970, bulldozer trenching, and a drilling program were conducted by Sachem along with aerial and ground magnetometer and geochemical studies; all of which were primarily designed to determine the aerial extent of the mineral occurrences.

Location

The Iron Creek area lies within T 19 N, R 20 E (unsurveyed) Boise Base and Meridian, Lemhi County, Idaho. The property is in the Salmon River Mountains within the Salmon National Forest and can be reached by a graded Forest Service road up Iron Creek for approximately 12 miles from its junction with U.S. Highway 93 at the Salmon River. Iron Creek joins the Salmon River approximately 23 miles south of Salmon City.

Claims of Sachem Prospects Corporation include all or most of the lands of sections 8, 16, 17, 20, 21 and 27 together with portions of sections 5, 6, 7, 9, 15, 18, 19, T 19 N, R 20 E.

The relief is rugged being near 2,500 feet with elevations ranging from 6,200 feet to 8,700 feet. The lands are forested but have recently been logged.

Previous Operations

Immediately after the nucleus claims were staked in 1967, the prospect was leased on short term options. In the later half of 1968, when Wilson Exploration Company held the property, an I.P. (induced potential) survey was made and three inclined holes were drilled each of which intersected intervals of ore which assayed in excess of 1% copper.

Sachem's Work

Sachem Prospects Corporation drilled six core holes in the area ranging from 100 to slightly more than 800 feet in depth. Five of the holes were drilled in the copper-cobalt prospect and one was

drilled in the stratiform iron-cobalt-copper prospect. All but one intersected ore zones or anomalous mineralization. The hole which did not intersect ore was not continued beyond surficial debris and was cased to 100 feet.

Trenching and road work by use of a D-9 bulldozer exposed gossan zones within the copper-cobalt area and veins in the arsenic-gold zone.

Rock and soil geochemistry supplemented geological and geophysical (S.P. & Resistivity) observations to partially determine the limits of the copper-cobalt mineralization.

Ground magnetometer surveys were used to plot the trend and extent of the iron-cobalt-copper bearing strata.

The arsenic-gold zone was only partially delineated. The area outlined by tracing vein float was trenched by a D-9 bulldozer.

#### General Geology

The Iron Creek area is the southeast end of the Blackpine to Blackbird mineral trend. All the strata within this trend are a part of the Precambrian Belt Series mainly phyllites interbedded with quartzitic phyllites.

Previous workers have presumed that the Cobalt and Blackpine mines occupy positions on the west limb of a broad generally north-south trending syncline. The Iron Creek area appears to fall in the vicinity of the axis of this broad structure. The Iron Creek copper and the iron-copper-cobalt occurrences lie within an area of east-westerly trending belt of rocks which dip steeply to the north;

whereas, the strata of the arsenic-gold zone is approximately one mile northerly from the copper-cobalt zone, it trends northerly and dips steeply to the east.

Tertiary volcanic rocks of the Challis Series occur as plugs and flows principally on the higher elevations, these rocks are deeply eroded and generally do not mask much of the Belt strata.

#### Mineralized Zones

The three main mineral trends within the Iron Creek area are (1) Iron-cobalt-copper zone which is the southern-most zone and has been traced for over 8,000 feet in an east-westerly direction. The minerals within this zone comprise magnetite, pyrite, some chalcopyrite and an unknown cobalt mineral. The mineralization noted to date has been confined to preferred beds in a zone from one hundred to four hundred feet in width. (2) The central zone, the copper-cobalt zone also trends east-west and has been traced by drilling, geochemical and geologic data and observations for a linear distance of 3,000 feet. Minerals identified from drill cutting and surface outcrops are malachite, azurite, tenorite, bornite, calcocite, chalcopyrite, pyrite, pyrrhotite (?), smaltite (?), and cobaltite (?). Assay values ranging from several tenths to as much as 5% were attained from cuttings and surface channel and grab samples from mineralized strata within this zone. Tonnage potentials ranging from 4 to 30 million tons averaging .55% copper mineable by open-pit methods have been calculated for this zone. Cobalt occurs within the copper ore and ranges from 0.1 to 0.5% and silver will average near 0.2 ozs. per ton. (3) The northernmost zone, the arsenic-gold zone is 6,800 feet north of the copper-cobalt trend. It trends east-west and has been traced

for 1,500 feet. Eight veinlets ranging from 10 inches to as much as 6 feet in width occur at intervals across a width of 500 to 600 feet. The veins are parallel and nearly vertical, they cut the Beltian strata almost at right angles. Minerals identified are mainly arsenopyrite and quartz. Assays of vein material show as much as 1.5 ozs. gold, 0.37% bismuth, 0.55% cobalt, 1.10 ozs. silver and up to 70% arsenic.

#### Drill Hole and Outcrop Assays

Weighted average copper grades for each of the drill holes shown on the attached map are as follows:

<u>Hole #</u>	<u>Total Interval</u>	<u>Average Cu%</u>
IC-1	247'	.671
IC-2	175'	.461
IC-3	224'	.26
IC-4		None
IC-5	196'	.242
IC-A1	109'	.635
IC-A2	38'	.535
IC-B1	79'	.883

These averages include the major mineralized zones encountered in each hole and the barren zones separating them. Some weakly mineralized intervals intercepted at greater depth are not included.

An 80 foot channel sample taken across the outcrop on the main road produced assay averages of 1.6% copper, .26% cobalt, and .33 ounces per ton silver. Comparable values were found in IC-1 (the nearest drill hole), but in erratic intervals.

North Fork of Iron Creek  
24 miles SW towards Chellis,  
11 mi. NW up Iron Creek.  
1000 ft. wide, 4000 ft. long.

Bob Cokerour. geol. S.C.

801-278-3162

---

Salmon Bendon Hotel

208-756-2213

COUNTY: Lemhi      COUNTRY: U.S.A.      STATE: Idaho      NAME OF PROPERTY: Iron Creek

DISTRICT OR AREA:      METALS: Copper Cobalt      ACCOUNT NUMBER: I 005      NUMBER: 153

GENERAL DESCRIPTION:

EXAMINED BY:  
DATE:  
BRIEFED BY:  
DATE:  
STATUS:

TYPE OF DEPOSIT:

GEOLOGY  
*Complete sheet  
in Prospect Data book.*

LOCATION:  
ELEVATION:  
LAT:      LONG:  
ACCESS:  
DEVELOPMENT:

MINERALIZATION:

PROPERTY & OWNERSHIP:

GEOPHYSICS:

AERIAL PHOTOGRAPHS:

GEOCHEMISTRY:

TOPOGRAPHIC MAPS:

MAPS & REPORTS:

<p><b>MINERAL PROSPECT</b></p> <p><b>ESSEX INTERNATIONAL, INC.</b></p> <p>1704 WEST GRANT RD., TUCSON, ARIZONA 85705</p> <p>PHONE (602) 624-7421</p>	<p><b>DEPOSIT DATA SHEET</b></p> <p>BY: _____</p> <p>DATE: _____</p>
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SUMMARY OF COOKE CITY  
REPORT

BY  
ULDIS JANSONS

## INTRODUCTION

The Glengarry claim group optioned by Sachem Prospects Corporation is in the New World (or Cooke City) mining district, Park County, Montana. The claims are in sections 2, 3, and 11 of Township 9 South, Range 15 east of the Montana Meridian and Base Line. Location map (Figure 1) shows the position of Cooke City, Montana.

### Land Position

Nineteen lode mining claims, 12 patented and seven unpatented are under option to Sachem Prospects Corporation.

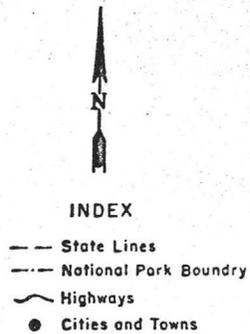
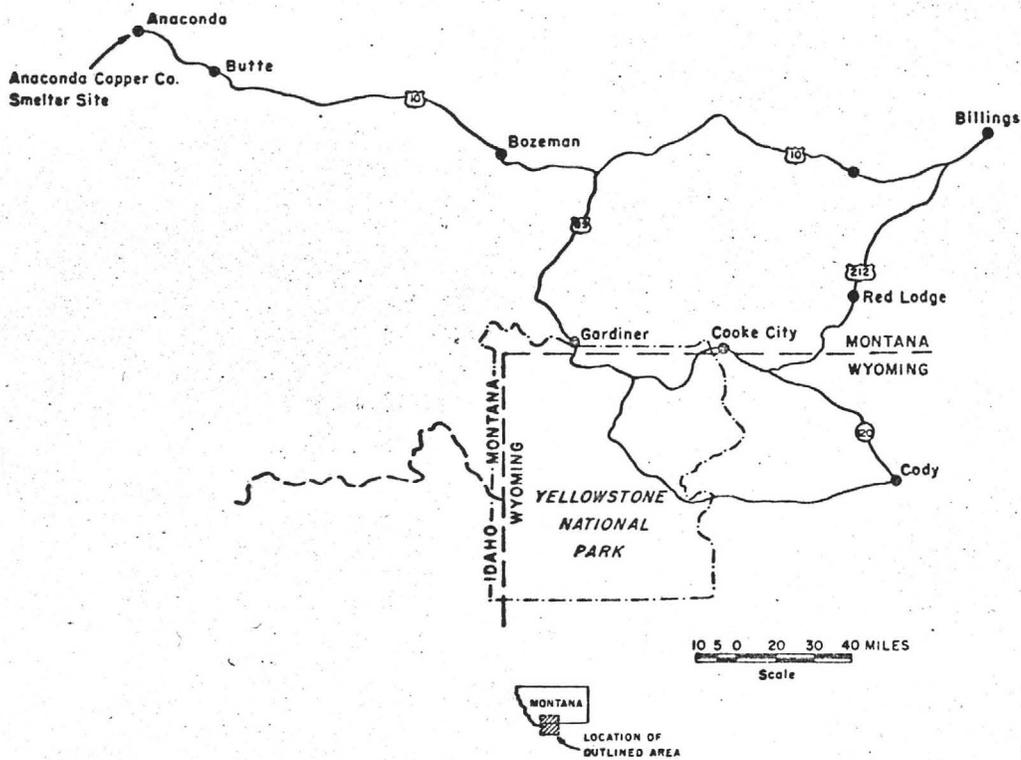
Patented lode mining claims and their mineral survey numbers are:

1.	Katie	7326
2.	East Portland	9170
3.	Jennie	9170
4.	K & K	9170
5.	Lizzie	9170
6.	Maggie	9170
7.	Portland N <sup>o</sup> 4	9170
8.	Spaulding	9170
9.	West Portland	9170
10.	Contact	9974
11.	Lula	9974
12.	Lulu Extension	10284

Unpatented claims and the book and page number where the claims are recorded in the Park County, Montana, Records Office are:

1.	Jane	9	55
2.	Agnes M	9	603
3.	D & G	11	99
4.	S & K	11	101
5.	G & P	11	98
6.	Portland Fraction	11	52
7.	Cora Extension	9	592

*Sachem Prospects Corporation*



**SACHEM PROSPECTS CORPORATION**

COOKE CITY LOCATION  
PARK CO., MONTANA

Fig. 1

Ground to the south and west of the Glengarry group is held by claim staking and purchase by Bear Creek Mining Company. Land acquisition and property consolidation was still in progress in 1968 by Bear Creek Mining Company. Land to the north and east is open with randomly scattered patented lode claims on the mineral shows. Some claims are reportedly available for purchase and the open ground for staking. Mill site claims, and area for claiming for purpose for setting up a mill are available along Fisher Creek in Section 18 and 19, T. 9S., R. 15E., M.B. and M.

#### Summary of Evaluation of Metal in Ground

Sachem Prospects Corporation has an option on 19 lode claims within the New World mining district in Park County, Montana.

The claims partially encompass an area where copper and gold has been deposited in a favorable horizon of the Gros Ventre Formation. Diamond drilling on an approximate 100-foot grid spacing partially outline a near-surface pyritic gold-copper ore body. A minimum of 288,000 short tons averaging 1.4% copper, 1.39 oz. silver, and .24 oz. gold are proven.

Geological extrapolation, supported by diamond drilling and geophysical results in the extension of the ore zone to the south. Calculations based on surface work and geology surrounding the claim group suggests an additional 1,870,000 tons of commercial grade ore on the claim group.

The value of ore in place varies with the metal prices, but the amount of metal in the proven and possible ore can be calculated. The proven ore zone of 288,000 short tons contains 8,064,000 pounds copper, 400,300 oz. silver, and 69,100 oz. gold. Probable and possible ore of 1,870,000 tons contains approximately 51,800,000 pounds of copper, 2,600,000 oz. silver, and 518,000 oz. of gold.

#### Potential Zones of Additional Copper Mineralization

Other copper mineralization in addition to the reserves present in the Gros Ventre Formation may be present on the Glengary claims. Two additional mineral targets are the Cambrian Flathead Quartzite and the Precambrian Goose Creek gneiss. The Flathead Quartzite is not exposed at the surface in the areas where the Gros Ventre Formation is mineralized. However, the Flathead is known to bear copper and gold elsewhere in the district (Lovering, 1929, p.70).

Drilling as indicated by available records did not penetrate the Flathead Quartzite. The potential of this horizon on the Glengary claims has not been tested.

The second target is the Precambrian Goose Creek Gneiss which underlies the Flathead Quartzite in the district. It contains pyrite and chalcopyrite as can be observed within the Glengary tunnel.

Evidence for significant sulfide mineralization above the Glengary tunnel level is indicated by the volume of iron oxide mineral (Goethite) stalagmites and ferrous<sup>(?)</sup>sulfate precipitate present in the tunnel.

# ROBERT E. COHENOUR

CONSULTING GEOLOGIST

CERTIFIED PROFESSIONAL GEOLOGIST No. 1950

Salmon Office

(208) 756-2732

SUITE 519 CONTINENTAL BANK

SALT LAKE CITY, UTAH 84101

OFFICE (801) 521-2480

RES. (801) 364-8634

*Robert E. Cohenour*

CERTIFIED PROFESSIONAL GEOLOGIST

Suite 519 Continental Bank Building Salt Lake City, Utah 84101 (801) 521-2480

October 15, 1970

Mr. H. Lanier  
Essex International Inc.  
2030 East Speedway  
Tuscon, Arizona 85719

Dear Howard:

Enclosed are several preliminary reports on the properties which I mentioned to you by telephone on the 14th. We are in the process of drafting more detailed maps and reports on the Blue Jay and the Iron Creek prospects.

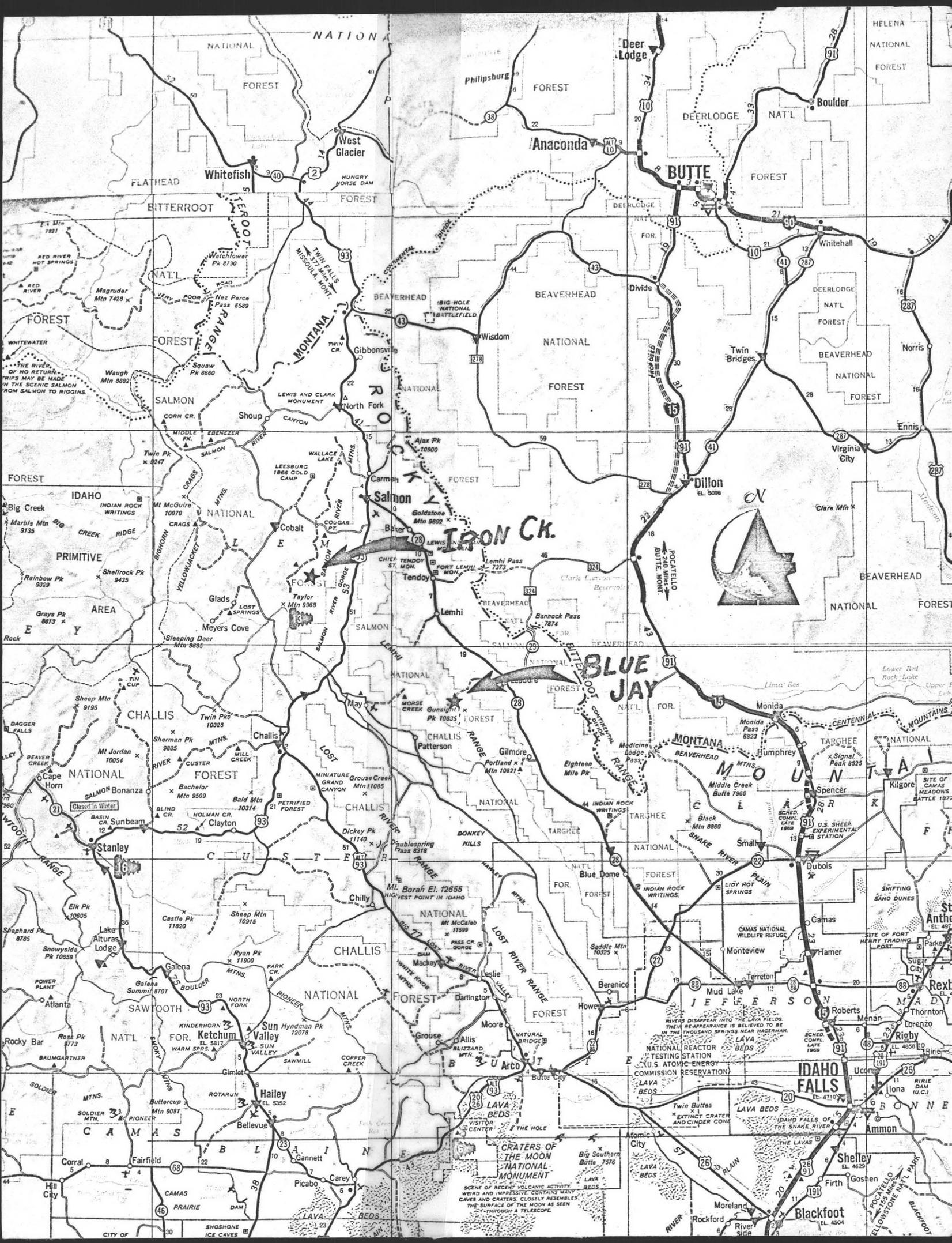
Mr. Grover Heinrichs called and indicated that he would be in touch with me sometime next week. At that time, the maps will probably be completed.

Yours truly,

*Robert E. Cohenour*

Robert E. Cohenour, CPG

REC:db  
Enclosures



NATIONAL FOREST

Whitefish

West Glacier

Philipsburg

Anaconda

Deer Lodge

BUTTE

Boulder

BITTERROOT NATIONAL FOREST

Watchtower Pk 8790

Magruder Mtn 7428 x

Waugh Mtn 8892

CORN CR.

MIDDLE PK.

Twin Pk x 8247

Big Creek

Marble Mtn 9135

Rainbow Pk 9329

Grays Pk 8813 x

Sheep Mtn 9195

Sherman Pk 9985

Mt Jordan 10054

Cape Horn

Bachelor Mtn 9509

Bald Mtn 10314

Blind Cr.

Castle Pk 11800

Sheep Mtn 10915

Ryan Pk 11900

Galeana Summit 9701

Atlanta

Ross Pk 8773

Buttercup Mtn 9081

Corral

Hill City

TWIN HILLS MISSOULA MONT.

BEAVERHEAD

Gibbonsville

North Fork

Salmon

Cobalt

Salmon

Cobalt

Salmon

Glads

Meyers Cove

Challis

Challis

Challis

Challis

Chilly

Wisdom

Divide

Whitehall

Twin Bridges

Ennis

Virginia City

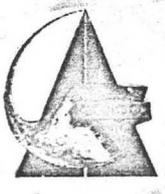
Ennis

IRON CK.

Lemhi

BLUE JAY

Blue Dome



POCATELLO

CRATERS OF THE MOON NATIONAL MONUMENT

SCENE OF RECENT VOLCANIC ACTIVITY

WIND AND IMPRESSIVE CONTAINS MANY

JEFFERSON

JEFFERSON

JEFFERSON

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JEFFERSON

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IDAHO FALLS

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IDAHO FALLS

Blackfoot

Blackfoot

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Blackfoot

"BLUE JAY" PRELIMINARY REPORT  
FOR

SACHEM PROSPECTS CORPORATION

BY  
ULDIS JANSONS

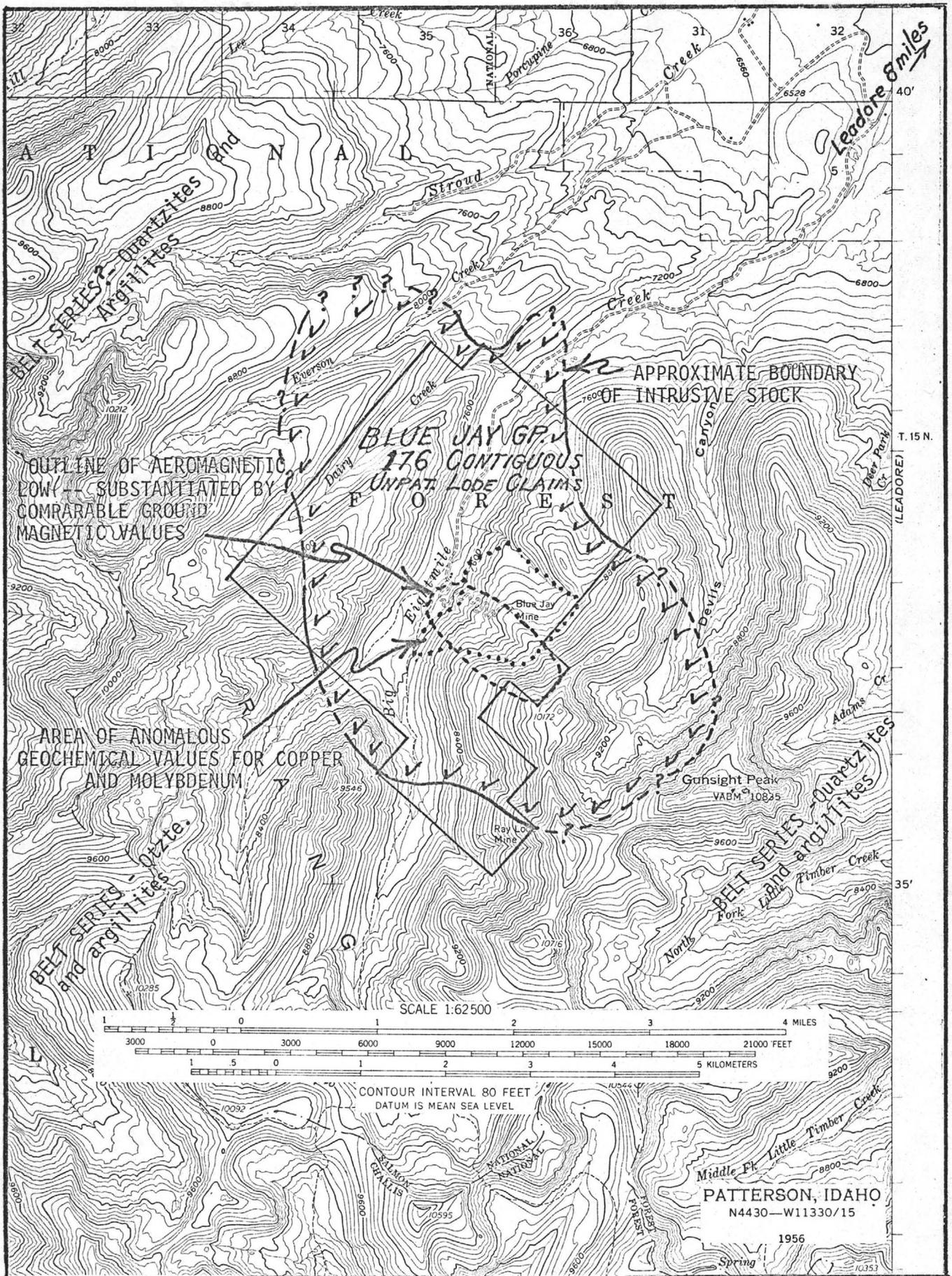
The Blue Jay copper-molybdenum prospect is on Big Eight Mile Creek approximately 12 miles west, southwest of Leadore, Lemhi County, Idaho.

Early work by previous owners and lessees has included road building, trenching, drilling, and mining of principally oxide copper ores.

Sachem Prospects Corporation acquired a nucleus of 12 unpatented lode mining claims; then consolidated the land position by staking 176 contiguous lode mining claims. A copper in soil geochemical survey was undertaken to find the undercover extensions of copper zones. Additional work consisting of rock sampling, ground and aerial magnetometer surveys have disclosed "high" grade copper zones and a magnetic low zone which may be related to hydrothermal alteration and decomposition of primary copper minerals.

Location

The Blue Jay copper-molybdenum prospect is in T 15 N, R 24 E (unsurveyed) Boise Base and Meridian in Lemhi County, Idaho. The property is in the Lemhi Mountain Range and the Salmon National Forest, and can be reached by Forest Service Route 096 which follows Big Eight Mile Creek for approximately 12 miles from Leadore, Idaho.



Map Showing Location of Blue Jay Claims  
Big Eightmile Area, Lemhi County, Idaho

*Sachem Prospects Corporation*

Claims of Sachem Prospects Corporation are in all or parts of sections 12, 23, 24, 25, 26, 35 and 36 in T 15 N, R 24 E (unsurveyed).

#### Previous Work

Copper ores have been known from the Blue Jay prospect as early as 1911. A copper oxide leaching operation was in operation on the property in 1921. By this time, 1,000 feet of underground workings had also been developed. Since the original mining, various individuals and companies have claimed, leased, optioned and examined the property. Production figures have not been located.

More recent work consisting of core drilling by lessees is shown through presence of core fragments at two sites. Evidence indicates some 960+ feet of coring done. Further data relative to coring have not been located. Collected core fragments assayed .009 oz./ton Ag, 0.001 oz./ton Au, 0.065% Cu, 25 ppm Mo.

#### Sachem's Work

Sachem Prospects Corporation acquired a nucleus of unpatented lode mining claims, added to its land position by locating 176 additional lode mining claims and carried out a preliminary geochemical survey. The position and distribution of lode mining claims is shown on the accompanying claim map. Claim staking was started in July and completed August of 1969. All locations and claim corners were surveyed by Brunton and pace.

General Geology

The observed mineralization at the Blue Jay property is spatially and temporally related to a mineralogically and chemically zoned Cretaceous (?) diorite-granodiorite stock which has intruded the underlying Ordovician and Pre-Cambrian quartzite. The location and the generalized outline of the stock is shown on the location map. Textural and compositional zoning of the stock has been recognized. The rock changes from a fine to medium-grained diorite near the contact to a medium-grained granodiorite at the exposed "core". The rock within the core area is a medium-grained granodiorite with 3/4" potassium feldspar phenocrysts. Chemical zoning is represented by increasing abundance of potassium feldspar, the soil geochemical patterns, and by zonal variation in the magnetic susceptibility as shown by results of the ground and airborne magnetic surveys. Hydrothermal alteration can not be directly arranged in a zonal pattern related to primary zoning of the stock.

Incipient hydrothermal alteration was identified within and to the west of the known zones of mineralization. Field examination of sampled outcrops revealed a zonal pattern of hydrothermal alteration changing from propylitic (?) (epidote-chlorite), to kaolinite, to sericite.

The propylitic alteration exemplified by feldspars altering to epidote, biotite altering to chlorite and presence of secondary chlorite along fractures was identified within the Blue Jay mine area. Kaolinite and sericite, with the amount of sericite increasing to the east and

kaolinite decreasing to the east was identified in the 1,300 foot trench leading from the main oxide copper zone. Sericite is also exposed in other trenches and roadcuts near the eastern boundary of the claim group.

Primary sulfides and supergene sulfides and oxide minerals have been identified. Primary sulfide minerals found in the fresh rock at the Blue Jay in order of decreasing abundance are chalcopyrite, pyrite, molybdenite. The approximate relative ratios are 10:5-10:1, both chalcopyrite and pyrite show a similar distribution pattern as disseminations or along fractures. Copper sulfide mineralization has been found along fractures within the rock, disseminated through the groundmass, and associated with biotite clusters and phenocrysts. Molybdenite has been found mainly only along fractures.

Supergene sulfide minerals identified are covellite and chalcocite. All occurrences were as coatings on primary chalcopyrite and possibly pyrite. Supergene copper and molybdenum oxide minerals have also been identified. Copper oxide minerals include malachite, azurite, chrysocolla, tenorite (melanconite) and copper bearing neotocite. The molybdenum oxide mineral identified is ferromolybdite. The mineral is principally present with molybdenite in a sericitized rock and also in minor amounts randomly distributed in the mineralized portions of the intrusive.

## GEOCHEMICAL SURVEY

A soil and rock geochemical survey of samples has been completed. Soil samples were analyzed for copper and molybdenum to delineate zones of anomalous metal content. Rock chip-channel samples were analyzed for silver, gold, copper and molybdenum.

Soil Survey

Upon completion of the claim staking program a soil geochemical survey and rock program was initiated. The orientation soil survey revealed higher copper values in material taken below the organic material. This lower zone was sampled at all locations. Soil geochemical sampling was initially spaced on a 150 foot grid centers which was later expanded to 300 feet. Values ranged from 20 ppm to 3600 ppm in Cu. Values of 200 ppm and less are assumed to be background, values from 200 to 500 ppm and higher are classed as anomalous. Anomalous copper values over 200 ppm are found over an area of 4,000 by 5,000 feet. Six zones of soil containing more than 500 ppm are located within the anomalous Cu (200+ ppm) area. Four areas are multiple station anomalies and two are single station anomalies. The largest multiple station anomaly covers an area of 1400 X 800 feet. A second anomaly spatially closely related to the major anomaly covers approximately 500 by 200 feet. The combined area of the two spatially related covers approximately 2000 X 1200 feet. The two other areas of multiple station copper anomalies are located to the north and south of the major zone cover areas of approximately 900 X 200 feet and 600 X 200 feet respectively.

The molybdenum content in Blue Jay soil samples was determined and the values were plotted to determine the spatial distribution and variation. The molybdenum content in the soil samples ranges from less than one part per million to 375 ppm and averages 11 ppm. Content of 25+ ppm Mo in samples was assumed anomalous. Contouring samples of similar molybdenum content reveals a partial concentric pattern with the higher molybdenum values in a 3800 X 2500 foot zone and molybdenum values decreasing radially from this central zone outward. Eight separate areas of anomalous (25+ ppm) molybdenum content were revealed. Of the eight anomalous areas four contained samples with more than 50 ppm, one area of three samples contained between 25-40 ppm and three areas are one-station anomalies. The four areas with samples containing more than 50 ppm Mo are considered most significant. These four anomalous areas can be grouped "major" and "minor" according to the number of samples containing more than 50 ppm Mo within each and areal distribution of high values. Two "major" areas contain multiple samples containing more than 50 ppm and the two areas contain only one sample with 50 ppm or higher molybdenum, each are noted. The two major areas are spatially closely related and when combined contain an average of 56 ppm and range from 25 ppm to 375 ppm and cover an area of approximately 3,000 feet by 2,000 feet. The two minor anomalies average 50 ppm and ranges from 25 ppm to 225 ppm, and cover two separate areas of 1,000 feet by 500 feet each.

Rock Geochemical Survey

Rock chip-channel samples taken from trenches, prospects, road-cuts, were analyzed for Cu, Mo, Ag, and Au. The sample locations are shown on the accompanying map. The copper content ranged from 0.014% to 1.8% and averaged 0.13% for 60 rock samples. The molybdenum content ranged from 0.0014% to 0.775% and averaged 0.012% for 60 samples. The silver content ranged from 0.03 oz./ton to 0.18 oz./ton and averaged 0.04 oz./ton for 16 samples. The gold content ranged from less than 0.001 oz./ton and averaged 0.001 oz./ton for 16 samples.

Magnetic Surveys

Ground and airborne magnetic surveys were conducted on the Blue Jay property. The soil sampling sites were used as ground magnetometer stations. The variation in the vertical component of the earthy magnetic field was measured with a Scintrex MF-1 fluxgate magnetometer and values are corrected to an accepted base station value of 700 gammas. The ground magnetometer values were plotted and contoured. A partial concentric pattern with low values at the center and increasing radially from the center outward is revealed. The centrally located magnetic "low" is closely related to the main copper and molybdenum in soil anomalies and the zone of sericite alteration. The magnetometer readings increase radially from the central part of the zone with the highest values at the northern and southern parts of the area.

A total intensity aeromagnetic survey of the Blue Jay area was conducted for Sachem Prospects Corporation by Aerial Surveys of Salt Lake

City, Utah. A proton magnetometer with a one second sampling rate at a mean terrain clearance of 500 feet was used. The five 3 1/2 mile northeast-southwest flight lines were spaced at 1,500 feet. The total magnetic field intensity ranged from 56850 gammas to 57905 gammas. The aeromagnetic map is appended to the report. The contoured data reveal elliptically concentric pattern with an east-west trending magnetic low at the center and is located to the south of the known mineralized area and to the south of the soil geochemical anomalies. East-west trending magnetic "high" zones are indicated to the north and south of the magnetic "low". Magnetic values (further to the north and south) then gradually decreased to the north and south of the magnetic highs.

#### Interpretation of Magnetic Survey

The aeromagnetic data can be related to the geology. The magnetic "highs" are related to zones of intrusive-sedimentary rock contacts. The magnetic variations are probably caused by variations in rock type and primary crystallization zoning within the diorite-granodiorite intrusive. Magnetite was detected by a hand magnet in the border zone diorite. Magnetic lows detected by ground magnetometer were related to rock alteration and is probably also the cause of the magnetic "low" detected during the aeromagnetic survey. The aeromagnetic anomalies are off-set approximately 600 feet to the south from the position of the anomalies on the ground as indicated in the ground magnetic survey.

## PUBLISHED REFERENCES TO "BLUE JAY" AREA

Source: Report of the Inspector of Mines, State of Idaho.

- 1911: (p.87) "On the high mountain range west of Leadore on Big Eight Mile Creek, some remarkable ore deposits occur that are being developed at the present time with a small force of men by a local company. These deposits are in eruptive granite or monzonite and consist of quite extensive surface areas of brecciated formation that has been saturated with rich lines of blue and green copper carbonates that are said to carry average values of five to eight percent copper, and rather indicate a probable resource of copper ore of the disseminated class when the fissure source and sulphide horizons are reached."
- 1913: (p.152) "Leadore Copper. - On Eight Mile and Timber Creek, near Leadore, and twenty miles west of Gilmore, on the same range, very interesting deposits of copper carbonate ore have been prospected to a limited extent and show zones of richly stained monzonite formation 100 feet in width that seem worthy of further investigation. . . ."
- 1921: (p.76) "NEW DEPARTURE COPPER MINING CO. . . .  
Property: 3 unpatented claims and 2 claims held under Lease and bond; Junction dist. ; Eight Mile Creek; Leadore.  
Development: Approximately 1,000 feet of underground workings. Plant: 3,000 foot aerial tram, 100-ton steam driven copper leaching plant. Ore: Copper. Men employed: Average, 10."
- 1922: (P.107) "Gold mining remained quite in this county (Lemhi) throughout 1922, although more interest was evidence than was shown in 1921, particularly in the Leesburg, Gibbonsville and Shoup districts, and on Big Eight Mile in the Junction district."
- 1923: (p.118) ". . .A good discovery of new ore was made in the Maryland mine on Little Eight Mile Creek and the gold deposits on Big Eight Mile Creek were actively exploited (Ray Mine (?) )."
- 1924: (p.27) ". . .some (prospectors and lessees) met with very encouraging results, particularly those on Big and Little Eight Mile Creeks."

## SUMMARIES OF PROPERTIES DISCUSSED IN ATTACHED REPORTS

### Iron Creek Property

The Iron Creek property in Lemhi County, Idaho is a partially developed copper-cobalt prospect in a relatively new, previously inaccessible area.

Primary copper sulfide mineralization of ore grade, the nature of which implies a stratiform body of considerable thickness, is seen at the surface and in drill cores.

Seven drill holes intersected ore grade copper within a zone width of 300 feet. Drilling has established a strike length of at least 2,500 feet. Surface geochemical sampling and geophysics indicate additional length to the mineralized zone.

Parallel mineralized zones are suggested by surface outcrop and bulldozer cuts.

### Blue Jay Prospect

The Blue Jay prospect, located in Lemhi County, Idaho, is a potential porphyry copper ore body. Principally copper and molybdenum and subordinate silver and gold mineralization is associated with a zoned diorite-granodiorite stock. A soil geochemical survey shows anomalous (200+ ppm) copper over a 5,000 X 4,000 area, and anomalous (25+ ppm) molybdenum over a 3,000 X 2,000 foot area. Magnetometer surveys, both airborne and ground, show a "low" associated with the anomalous soil geochem values.

### Cooke City Property

The Cooke City property, located in Park County, Montana, contains 300,000 tons of 1.4% copper, 1.39 ounces per ton silver, and 0.24 ounces per ton gold in a stratiform deposit as indicated by drill holes spaced on a 100 foot grid. On the basis of geologic projection, district geology, and other drill holes, 2,000,000 tons of similar grade ore within the same horizon are suggested. Additional copper zones may be present below the drilled out copper horizon.