

1974

GEOCHEMICAL REPORT

LEI MINERAL CLAIMS

NEW DENVER, B.C.

49° 117° NE

T. D. Wilkinson, C. E. T.

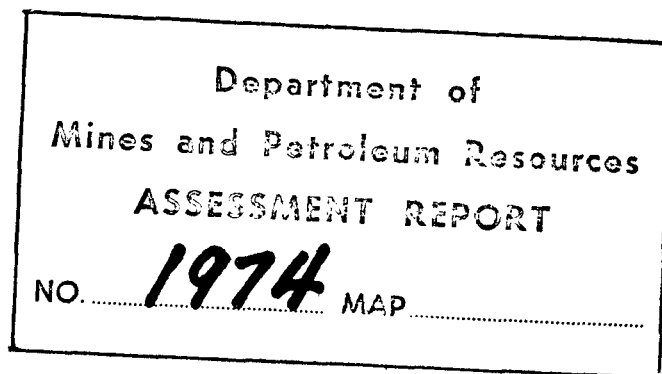
D. P. Arscott, P. Eng.,

August 9, 1969

Vancouver, Canada

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SUMMARY

The first work was carried out on the LEI Mineral Claims in August, 1968, when the writer and a helper carried out a geochemical test survey to study the feasibility of using trace elements in the soil as indicators of vein-type Pb - Zn - Ag mineralization which is typified by old mines in the vicinity. (See Appendix I - Geochemical Test Survey, LEI Mineral Claims by T. D. Wilkinson, C. E. T., May 13, 1969)

The initial work provided sufficient encouragement to carry out parts 1 and 2 of the recommendations in Appendix I. Hence, in July, 1969, a detailed geochemical survey was carried out on the claims. The results of this survey are described in Appendix II - Interim Report - Geochemical Survey, LEI Mineral Claims, New Denver, B.C. by T. D. Wilkinson, C. E. T., August 13, 1969.

LIST OF PERSONS EMPLOYED

| | | |
|------|------------------|--|
| 1968 | L. Underdahl | Port Hammond, B. C. |
| | T. D. Wilkinson | 948 Garrow Drive, Port Moody, B. C. |
| 1969 | T. D. Wilkinson | 948 Garrow Drive, Port Moody, B. C. |
| | P. V. Fitzgibbon | 1327 Robson Street, Vancouver, B. C. |
| | B. Coyle | 47 Albert Crescent, New Westminster, B. C. |
| | T. Drews | 1625 Nelson Street, Vancouver 5, B. C. |

EVIDENCE OF EXPENDITURES

| | | | |
|------|---------------------|------------------------|---------------------|
| 1968 | T. D. Wilkinson | 2 days at \$52.00 | 103.98 |
| | L. Underdall | 3 days at \$25.00 | 75.00 |
| | AGS INVOICE NO: 148 | 10-7-68 | 430.53 |
| | 176 | 12-31-68 | 41.30 |
| 1969 | T. D. Wilkinson | 6 days at \$50.00 | 274.99 |
| | P. V. Fitzgibbon | 18 1/2 days at \$25.00 | 435.46 |
| | B. Coyle | 10 days at \$21.25 | 212.50 |
| | T. Drews | 3 days at \$21.25 | <u>53.13</u> |
| | AGS INVOICE NO: 209 | 5-26-69 | 18.41 |
| | 243 | 7-30-69 | 987.24 |
| | 245 | 8-15-69 | 952.09 |
| | TOTAL EXPENSES | | \$2,429.57 ===== |

417, 558 Howe Street, Vancouver 1 B C

W. D. Wilkinson
417, 558 Howe St
Vancouver 1 B C

INVOICE NO. 245

August 15, 1969

RE: ARCHER/PAULSON SLOGAN PROJECT

Period July 16 - 31, 1969

| | |
|-----------------------|--------|
| Salaries | 313.50 |
| TIC | 1.63 |
| Pension Plan | 2.94 |
| 4% Holiday Pay | 12.54 |
| 4 1/4% WCB | 13.32 |
| Expenses Fitzgibbon | 200.83 |
| Expenses TD Wilkinson | 33.35 |
| Gasoline | 11.35 |
| Sender Clegg | 339.60 |
| Rileys | 4.97 |
| Office Services | 10.80 |

\$952.09

T. D. Wilkinson
#17, 558 Howe St
VANCOUVER 1 B C

INVOICE NO. 243

July 30, 1969

RE: ARCHER/PAULSON SLOGAN PROJECT

Period July 1 - 15, 1969

| | | |
|-----------------|--------|----------|
| Salaries | 662.50 | |
| U. I. C. | 5.60 | |
| Pension Plan | 9.68 | |
| 4% Holiday Pay | 26.50 | |
| 4 1/4 WCB | 28.15 | |
| Rileys | 1.18 | |
| Office Services | 20.00 | |
| Gulf Oil | 9.60 | |
| B C Telephone | 7.60 | |
| Hertz | 195.43 | |
| Office Services | 4.83 | |
| B C Industries | 16.17 | |
| | <hr/> | |
| | 987.24 | \$987.24 |
| | | ===== |

Associated Geological Services Ltd.,
202 - 475 Howe Street,
Vancouver, B. C.

INVOICE NO. 209

May 26, 1969

RE: SLOCAN

Vr. S. O. S.

\$13.41

XX

#100, 535 Thurlow Street, Vancouver 5, B. C.

Mr. T. D. Wilkinson
#100, 535 Thurlow Street,
Vancouver 5, B. C.

INVOICE NO. 148

October 7, 1968

RE: SLOCAN PROJECT

Period September 1st to 15th

| | | |
|-----------------------|--------------|----------|
| Salaries | 178.98 | |
| Pension Plan | 3.03 | |
| U. I. C. | 1.20 | |
| 4% Holiday Pay | 7.15 | |
| 4 1/4% WCB | 7.60 | |
| Bondar-Clegg | 122.09 | |
| Western Parcel | 3.10 | |
| Rileys | 2.48 | |
| Office Services | 40.00 | |
| T. S. L. Laboratories | 51.00 | |
| B. C. Telephone | <u>13.90</u> | |
| | | \$430.53 |
| | | ===== |

XX

202-475 Howe Street, Vancouver 1, B.C.

T.D. Wilkinson
c/o 475 Howe St
Vancouver 1, B.C.

INVOICE NO. 176

December 31, 1968

RE: SLOCAN PROJECT

| | | |
|--------------------|-------------|----------------|
| B.C. Telephone | 6.00 | |
| Bondar Clegg | 29.20 / | |
| Gasoline Purchases | <u>6.10</u> | <u>\$41.30</u> |

STATEMENT OF QUALIFICATION

I, T. D. Wilkinson, with business address at #17-558 Howe Street, Vancouver 1, B. C., do hereby certify:

1. I am a Mining Technologist (B. C. Institute of Technology, 1966), and am a registered member of the Society of Engineering Technologists of British Columbia.
2. I personally carried out the field work and interpretation of the Geochemical Test Survey described in Appendix I of this report.
3. I laid out and supervised the field work described in Appendix II of this report.
4. I acknowledge the assistance of Mr. D. P. Arscott, P. Eng., in the interpretation of the results of the work described in Appendix II.
5. I have been actively engaged in mining and mining exploration in British Columbia since 1958, and have held positions as party chief and exploration manager for a number of companies.
6. I am at this time President of Associated Geological Services Ltd.,

Respectfully,



T. D. Wilkinson, C. E. T.

STATEMENT OF QUALIFICATION AND CONCURRENCE

I, D. P. Arscott, with business address at #17, 558 Howe Street, Vancouver 1, B. C., do hereby certify:

1. I am a Professional Engineer registered in the Province of British Columbia.

2. I have studied the reports described in Appendix I and Appendix II of this report and concur with the methods used and the interpretation and recommendations set forth.

3. To the best of my knowledge the expenses incurred in carrying out the work described herein are correct.

David Arscott

D. P. Arscott, P. Eng.,

SAMPLING AND ASSAYING METHOD

Samples were collected, wherever possible, at a depth of 4" - 6" in the reddish-brown "B" horizon. Sampling was done by digging a hole at each station with a spade, and collecting approximately 1/2 cup of the desired soil. Samples were placed in standard high wet-strength brown paper sampling bags marked with grid co-ordinates corresponding to the markings on lengths of fluorescent flagging tape on each station in the field. Samples were shipped to Bondar-Clegg and Company in Vancouver, where they were dried in proper drying ovens within the bag used for collection. A portion of the -80 mesh fraction of each sample was subjected to hot HNO_3 -HCL solution and the extraction assayed for ppm. silver and/or lead and zinc content by the atomic absorption method.

GEOCHEMICAL TEST SURVEY

LEI MINERAL CLAIMS

NEW DENVER, B. C.

**T. D. Wilkinson, CET
Mining Technologist**

Vancouver, British Columbia

May 13, 1969

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INTRODUCTION

The LEI No's 1-8 mineral claims were located by the writer in July, 1968, in order to test the feasibility of using geochemistry as a prospecting tool to locate the surface expression of lead-zinc-silver veins in the Slocan area.

The LEI claims are, for the most part, on an overburden-covered slope between the Bosun and the Hartney crown-granted properties, both of which produced economic quantities of lead-zinc-silver ore from northeasterly striking and steeply dipping veins. Information gained from old Minister of Mines reports indicates that work stopped on the Bosun property because of the termination of north -east trending mineralized veins at a fault.

The efforts which were made to trace the veins were confined to tunnelling and diamond drilling from underground, which was very costly and soon exhausted the funds available for exploration work.

LOCATION AND ACCESS

The LEI claims are located approximately two miles southeast of New Denver, B.C., in the Slocan Mining Division. Access is by four-wheel drive vehicle from New Denver approximately four miles by road to the Hartney property, thence about 1000 feet easterly to the No. 2 Post LEI #'s 5 and 6, at which point the geochemical test survey was commenced.

HISTORY

1. Bosun Property:

The following excerpts from the Minister of Mines Reports for the years the Bosun property was in operation, give an excellent review of the economic performance of the area and serve to indicate the potential available if, indeed, it is possible to find the continuation of the faulted veins north-east of the Bosun property.

LOCATION MAP

LEI CLAIMS

49° 17' NW

New Denver, B.C.

BRITISH

COLUMBIA

LEI Claims

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO.

1974 MAP #1

#1 1917
 This property is situated near the shore of Slocan lake, half-way between Bosun, New Denver and Silverton, and according to old reports was worked in 1904 by the Bosun Mines, Limited, of 5 Fenchurch street, London; since this time it has apparently lain idle. Shipments were first made from the property in 1898, and from this time until 1901 the mine was a steady producer. The ore then shipped ran as high as 110 oz. in silver and 55 per cent. lead. Mining of the high-grade zinc ores was not attempted in those days, with the result that there was a considerable quantity of zinc ore left in the mine and on the dumps.

The vein is a large fissure filled with crushed and broken country-rock, in which lenses of galena and zinc-blende occur at irregular intervals. A considerable amount of development-work has been done by means of five adit-tunnels driven along the vein, the lowest of which gains a depth of about 400 feet.

Since the Surprise Mining Company took hold of the property this year, the old workings have been cleaned out and some of the old drifts are being extended. There is a considerable quantity of zinc ore available for extraction, and the prospects for opening up new bodies are encouraging. The zinc ore runs high in silver values and assays about as follows: Silver, 70 to 90 oz.; zinc, 45 to 54 per cent. It is estimated that there is 15,000 tons of ore on the dumps, which from numerous samples taken will average: Silver, 10 oz.; lead, 2 per cent.; zinc, 7 per cent.

1917
 A 2-bucket tramway 600 feet long was recently installed and connects the mine with ore-bins on the lake-shore, and in all probability ore shipments will shortly be made to the Rosebery concentrator, where the ore will receive treatment. Forty men were employed on the property at the time of my visit.

NEW DENVER.

1927
 The *Dosun* was operated by the Rosebery-Surprise Mining Company during the year with a crew of about twenty-five men. From the main adit a 140-foot shaft has been sunk and another

1927
 level established. On this lowest level the vein is small but persistent, and ore, which was being stoped along a length of about 230 feet, showed greatest widths where rolls in hanging-wall occurred. Clean silver-lead ore was being sorted for shipment.

NEW DENVER.

49° 17' NE
 1928
 Bosun. This mine, which is situated near New Denver, on Slocan lake, was successfully operated for a number of years by the Rosebery-Surprise Mining Company under the direction of J. P. McFadden. It was bought during the early part of 1928 by Colin Campbell, of New Denver. The history of the mine dates back for many years, and after a long period of inactivity was acquired by the above company in 1917 and turned into a profitable producer.

Until 1927 the ore was won from above the lowest or main adit-level, which has been driven along the direction of the strike of the vein from a point about 50 feet above the lake-shore. In 1927 a shaft was sunk and another level, known as the No. 7, was established at an additional depth of about 100 feet. For the last two years mining operations have been confined to the No. 7 level, where the vein has been drifted on for between 200 and 300 feet. The ore occurs in a fairly wide fractured zone, making in streaks and small tight lenses along the strike and filling small lateral fractures. A characteristic feature of the structural conditions is the faulting of the vein by small porphyry sills; the displacement is not great, but is persistent in the various levels and in each case is in the same direction.

In the east end of the workings, which are furthest into the hill, ore was exposed in the roof of the stope along a length of about 120 feet, varying in thickness from a few inches to about 1 foot. At the east end a slip cut the ore off, but conditions appeared favourable for it being picked up again by a small amount of drifting. About nine leasers were busily engaged in the old upper workings.

The ore is silver-lead-zinc, carrying high silver values. Both clean lead and a milling grade of ore were being mined for shipment to Trail. The values of the milling grade were about as follows: Silver, 63 oz. to the ton; lead, 17 per cent.; zinc, 23 per cent. The lead ore assayed about: Silver, 150 oz. to the ton; lead, 70 per cent.; zinc, 3-4 per cent. Towards the end of the year it is understood that negotiations were being made for the sale of the property to a mining company.

NEW DENVER.

1929 Bosun. The Bosun mine, owned by C. J. Campbell, of New Denver, is situated on the shore of Slocan Lake, about $1\frac{1}{2}$ miles north of Silverton. The property has been worked at intervals since its discovery in 1838 and was owned first by the Bosun Mines, Limited, an English company, and latterly by the Rosebery-Surprise Mining Company until 1928.

The true fissure-vein in which the mineralization makes in small narrow lenses has a strike of N. 55° E. and dips to the south-east at 50°. The width of the vein varies from a few inches to 4 or 5 feet and the commercial section of the vein is from a few inches to a maximum of 2 to 3 feet in width. The ore consists of galena and sphalerite with some grey copper and associated silver values. The country-rocks in the vicinity of the vein are argillites and quartzites of the

Slocan series and the vein is characterized by sheared zones close to narrow porphyry dykes which offset the vein to the right for short distances. The displacement of the vein is invariably in the same direction along a N. 50° W. strike. The vein has been quite difficult to follow on account of the indefinite nature of the foot-wall and the large number of rolls that occur in the vein.

The mine has been opened up by six adit-tunnels and one level 100 feet below the No. 6 (or lowest) adit-level. This No. 7 level is approximately 75 feet below the surface of the lake and the vein has been drifted on for some 500 feet. During 1929 a small stope in the east end of No. 7 level was mined by the owner and a total of 958 tons of milling-ore was shipped to the Trail smelter. The average grade of the ore shipped has been reported as: Silver, 60 oz. to the ton; lead, 20 per cent.; zinc, 25 per cent.

The stope from which the above shipment was made played out, and in order to provide further ground for stoping operations it will be necessary to sink a shaft and start the development of a No. 8 level. This new development-work has not been undertaken to date, efforts having been made to dispose of the property to a company which could handle the necessary development programme with considerably less risk than would be the case were the risk assumed by one man. Since August 1st, when C. J. Campbell discontinued mining operations, fifteen leasers under eight different leases have been working at the mine. Two or three of the leasing parties are jigging the old dumps of the mine and making a product that has assayed \$2 oz. silver, 22 per cent. lead, and 23 per cent. zinc when shipped to the Trail smelter. The remaining leasers are working underground, re-treating the old stope-fill and where possible mining any ground that is accessible and of grade good enough to ship. The latest group of leasers to start work at the dumps has installed a centrifugal pump and a 4-compartment jig operated by a 16-horse-power Crossley engine.

1936 Bosun.—Situated on Slocan Lake, between New Denver and Silverton. Owned by C. J. Campbell and operated by Jos. Beber and Jos. Zamboni, holding separate leases, with a total of five men. On November 8th a crew of five, sent to the property by the newly-organized Bosun Mining Company (with headquarters at Vancouver), began the work of unwatering the winze, which continued until the end of December, when the compressed-air pipe-line was taken up and the place was abandoned again. During the year the lessees shipped 177 tons of ore with metal contents of 3 oz. gold, 12,740 oz. silver, 57,197 lb. lead, and 92,690 lb. zinc.

1937 Bosun.—Lessees (J. Zamboni and J. Beber) shipped 52½ tons from this property, yielding 2,986 oz. silver, 10,928 lb. lead, and 24,547 lb. zinc.

1938 Bosun.—Situated on Slocan Lake, near New Denver. Owned by C. J. Campbell and operated under lease by Louis Vigna and Mike Zatoni, with Thomas Avison, of New Denver, in charge. A total of 92 tons of ore was mined and shipped to Trail from the Lake level tunnel.

1939 Bosun. This property, situated on Slocan Lake, between Silverton and New Denver, is owned by C. J. Campbell and is operated under lease. Six men were engaged throughout the year. A total of 90 tons was shipped to Trail, chiefly from pillars and remnants of former ore-bodies. This yielded 6,779 oz. of silver, 25,690 lb. of lead, and 52,226 lb. of zinc. A 95

1940 Bosun. This property is situated on Slocan Lake, between New Denver and Silverton. It is owned by Colin J. Campbell, of New Denver, and was operated by several small groups of leasers during the year. Hand-steel only was used. A total of 95 tons yielded 2 oz. of gold, 5,856 oz. of silver, as well as lead and zinc.

1941 Bosun.—This property is on Slocan Lake, between Silverton and New Denver. It is owned by J. Colin Campbell, of New Denver, B.C. During the year leasers shipped 32 tons of ore, which yielded 2,520 oz. of silver and some lead and zinc.

1942 Bosun. This property on Slocan Lake, between Silverton and New Denver, is owned by J. Campbell, of New Denver. It was leased by A. Pellegrini, of New Denver. Thirty-nine tons of ore was mined by hand-steel and shipped to Trail. This yielded 3.1 oz. of gold, 2,645 oz. of silver, and some lead and zinc.

1943 Bosun.—(49° 117° N.E.) This property on Slocan Lake, between Silverton and New Denver, was operated by leasers. A total of 8 tons of ore was mined. This yielded 511 oz. of silver and some lead and zinc.

1945 Bosun, Santiago Mines, Ltd. (49° 117° N.E.) Mine office, New Denver, B.C.; head office, 423 Hamilton Street, Vancouver, B.C.; T. R. Buckham, Mine Manager. This company works the Bosun mine on Slocan Lake, about 1½ miles south of New Denver. During the latter part of 1945 a crew of six men was engaged in retimbering and reconditioning the No. 6, or lowest, adit-level. About 430 feet of this level was repaired. No mechanical equipment was used for this work.

SILVERTON-NEW DENVER (49° 117° N.E.).*

Silver-Lead-Zinc.

1946

Bosun, Santiago Mines, Ltd. Company office, 423 Hamilton Street, Vancouver; mine office, New Denver. R. Crowe-Swords, President; T. R. Buckham, Mine Manager. This old property on the shore of Slocan Lake, midway between Silverton and New Denver, had been worked for many years by lessees, and underground work had been confined to upper levels. No. 6, the lowest, adit-level has been reclaimed at considerable cost, as it was necessary to retimber and in part almost redrive about 550 feet through overburden before bed-rock was reached; this work was started in 1945. Except for parts near the inner end, the remainder of the level was found in fair condition, although in places the track was poor. The winze to No. 7 level was pumped out, and although the shaft-timbers were sound, new bins, skipway, and ladderway had to be built. About 5,000 feet of pipe-lines were laid.

No. 6, the longest level, is 550 feet to bed-rock and then follows the vein-zone for a straight-line distance of 2,930 feet in a direction of north 77 degrees east. The vein-

* By M. S. Hedley.

METAL-MINING (LODE).

A 165

strike ranges between north 55 and 80 degrees east and the dip is south-castward at angles between 50 and 80 degrees. The vein is apparently offset by faults striking north 50 to 70 degrees west, but the lack of continuity of some of these and the fact that the vein swings to meet them suggests that they may be related fractures rather than strictly post-mineral faults. Some follow highly altered porphyry dykes. The sediments crossed by the vein are argillites, quartzites, and biotite-argillite. The bedding in these rocks is not as a rule apparent because of their relative uniformity and thickness of bedding, but there is some folding which has not been worked out. Some of these rocks contain finely disseminated pyrrhotite as well as pyrite.

The main vein is followed only in the inner part of the level and has not been recognized with certainty in the outer part. There is also a hanging-wall vein or branch, which has been partly developed by an inaccessible stope. The vein is well defined in most places, but in some is merely a tiny fracture. It has not been found at the inner face of No. 6 level, north-east of a relatively flat shear-zone, which supposedly is represented at the surface by a gully on the hillside. It is not known whether the zone represents a fault of some magnitude or a relatively soft band of sediments.

The outer part of No. 4 adit is accessible, and an escapeway exists between Nos. 4 and 6. An inner section of No. 5 level, driven from a raise above No. 6, is also accessible.

Apart from cleaning up and exploration on No. 6 and the inner section of No. 5 levels, work has been restricted to the north-eastern part of No. 7 level. The face of the level was advanced 45 feet, and a former small stope at the previous face was extended. The vein contains much siderite with a central band of galena from 1 to 18 inches wide and locally some additional mineralization of irregular occurrence. This is coarse- to fine-grained galena, gneissic in part, with little associated sphalerite. Locally the ore contains very small quantities of arsenopyrite and pyrrhotite.

The production from this mine has been on a shipping basis, with the exception of 1918-19, when, under the ownership of the Rosebery Surprise Mining Company, 46,401 tons of relatively low-grade ore was milled at the peak of silver prices. The remainder of production, at no time exceeding 3,000 tons per year, amounted to 21,080 tons with an average grade of 69 oz. of silver, 19 per cent. lead, and 10 per cent. zinc. In 1946 ore mined amounted to 60 tons. Net contents: Gold, 1 oz.; silver, 5,940 oz.; lead, 58,180 lb.; zinc, 2,505 lb. The company reports small assays in tin associated with the sphalerite, an occur-

SLOCAN LAKE (49° 117° N.E.).

Silver-Lead-Zinc.

1947

Bosun (Santiago
Mines, Ltd.).

Company office, 423 Hamilton Street, Vancouver; mine office, New Denver. R. Crowe-Swords, president; T. R. Buckham, mine manager. Diamond-drilling was done to the east of No. 6 level in an attempt to locate the Bosun vein, which had not been recognized in the outer part of the level. A crosscut was driven to an ore intersection, and drifting commenced on a mineralized shear or vein on which stoping was started in December.

Ore was mined from No. 7 level until near the end of 1947. Thereafter all work was centred on the new area to the south-west. Much remains to be done to delimit the possibilities in this area.

Development-work during the year included: Diamond-drilling, 757 feet; cross-cutting, 75 feet; drifting, 482 feet; raising, 170 feet; a new escape-way was driven to No. 5 level.

A new Canadian Ingersoll-Rand diesel-driven compressor of 360 cubic feet capacity was installed to replace the portable plant previously in use. It was housed in a frame building on a concrete base.

A jigging and sorting plant was installed, and development ore and some of the material previously used for stope-filling, amounting to about 2,000 tons, was treated.

METAL-MINING (LODE).

A 171

Whenever possible, sorting to shipping grade was done in the stopes. The plant was operated for 151 shifts; it permitted a more flexible operation, and recovery was greater than had been anticipated.

The average number of men employed was fifteen.

Shipments made to the Trail smelter, mostly in the latter half of 1947, amounted to 291 tons. Net contents: Silver, 26,820 oz.; lead, 173,800 lb.; zinc, 100,017 lb.

SLOCAN LAKE (49° 117° N.E.).*

Silver-Lead-Zinc.

1948

Bosun (Santiago
Mines, Ltd.).

Company office, 423 Hamilton Street, Vancouver; mine office, New Denver. R. Crowe-Swords, president; T. R. Buckham, mine manager. Capital: 6,000,000 shares, 50 cents par value. This property was operated throughout the year on a small scale. Development-work and stoping were restricted to a vein on No. 6 level about 1,000 feet from the portal. Foundations were poured for a 40- to 50-ton mill, and ore shipments were made to the White-

* By J. W. Peck.

A 146

REPORT OF THE MINISTER OF MINES, 1948.

1948

water mill to obtain data on the milling requirements. Higher-grade ore was also shipped direct to Trail. Production: Ore shipped, 1,194 tons. Gross contents: Gold, 6 oz.; silver, 30,848 oz.; lead, 178,504 lb.; zinc, 236,236 lb.; cadmium, 759 lb.

SLOCAN LAKE (49° 117° N.E.).*

Silver-Lead-Zinc.

1949

Bosun (Santiago
Mines, Limited).

Company office, 423 Hamilton Street, Vancouver; mine office, New Denver. R. Crowe-Swords, president; T. R. Buckham, mine manager. Capital: 6,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway.

Early in 1949 mining was continued in two small stopes on the western end of the mine about 1,000 feet in from the main No. 6 level portal. This section is mostly mined out above No. 5 level. Some exploration was done in the centre section of the mine, but this was not successful. Efforts were then concentrated on the eastern ore block, where a winze has been sunk to No. 7 level. The winze was unwatered, and drifting was done in an easterly direction from the bottom of the winze, 30 feet below No. 7 level. This

* By J. W. Peck.

Bosun
1949

A 190

REPORT OF THE MINISTER OF MINES, 1949.

drive encountered a short section of ore near the winze that was underhand-stopped on No. 7 level about two years before. During the summer the property was turned over to lessees, but late in the year the company again resumed operations with the intention of deepening the winze.

On the surface a new office building was erected, but mill construction, begun in 1948, was stopped after the foundation was poured. A small jig plant was used to sort the ore before it was trucked to the smelter at Trail. About 600 tons was also trucked to the Whitewater mill.

Production: Ore shipped, 1,208 tons. Gross contents: Gold, 10 oz.; silver, 40,792 oz.; lead, 416,246 lb.; zinc, 124,241 lb.

SLOCAN LAKE (49° 117° N.E.)†

Silver-Lead-Zinc

1950
Bosun (Santiago
Mines Limited)

Company office, 423 Hamilton Street, Vancouver; mine office, New Denver. R. Crowe-Swords, president; T. R. Buckham, mine manager. Capital: 6,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage level, No. 6 adit, is driven beneath the highway from a site 40 feet above Slocan Lake.

Operations were on a small scale in 1950. During the first half of the year, production came from the eastern section of the mine, where a winze, 2,730 feet from the portal, had been sunk on the vein to No. 7 level. In 1949 drifting was done in an easterly direction from the bottom of the winze 30 feet below No. 7 level, and another winze sunk on this sublevel 35 feet from the main winze. The area near the winze was stoped out, but in 1950 it was sunk further and a new sublevel called "No. 8" established. On this new No. 8 level about 100 feet of drifting was done. Some of the back was taken down, and it was the intention to raise from this No. 8 level to connect with the bottom of the main winze. The vein, however, was not as high grade as it was where mined out in the small winze, and therefore the project was abandoned. No. 8 level was flooded at the end of the year.

In the latter half of 1950 ore was produced from No. 5 level and from the western block on No. 6 level. No. 5 level was opened up by the rehabilitation of a raise on No. 6 level about 3,100 feet in from the portal. Sphalerite was more noticeable in this area than in other sections of the mine. In the western block on No. 6 level a stope about 1,000 feet in from the portal was worked on a small scale.

The small jig mill was not operated, but ore was crushed to 1½-inch size before shipment. About 230 tons of ore was trucked to the Western Exploration mill at Silverton, and crude lead ore amounting to 152 tons was trucked to the Trail smelter. In December eight men were employed.

* By M. S. Hedley.

† By J. W. Peck, except as noted.

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REPORT OF THE MINISTER OF MINES, 1950

1950

Two lessees, J. Zambon and W. D. Pengelly, worked in the western part of the mine during the first half of 1950. They shipped 51 tons of crude lead ore to the Trail smelter and 7 tons to the Whitewater mill.

Production: Total crude ore shipped to Trail, 198 tons. Gross content of crude ore shipped to Trail, and of concentrates from 237 tons of ore milled: Gold, 4 oz.; silver, 19,170 oz.; lead, 138,371 lb.; zinc, 104,161 lb.

SLOCAN LAKE (49° 117° N.E.)*

9

Silver-Lead-Zinc

1951

Bosun (New
Santiago Mines
Limited)

Company office, Suite 4, 423 Hamilton Street, Vancouver; mine office, New Denver. W. Postlethwaite, superintendent. Capital: 1,500,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver, on the Nelson-Nakusp Highway. The main haulage level, No. 6 adit, is driven beneath the highway from a site 40 feet above Slocan Lake.

Except for some maintenance and leasing operations, this mine was inactive from March until November. During January and February Santiago Mines Limited mined ore from No. 5 level in the same area as at the end of 1950. This ore was crushed in the small crushing plant at the portal and sold to the Western Exploration mill at Silverton. In November New Santiago Mines Limited began operations with a crew of five men. The main winze remained flooded approximately 20 feet above No. 7 level, but a sublevel below No. 6, 800 feet west of the main winze, was drifted on for about 50 feet. Other work was in the central part of the mine, where a crosscut was started on No. 6 level to investigate the results of previous diamond drilling.

Leasing was done in the western part of the mine about 1,000 feet from the portal, where N. Scribchuck, S. Cluff, and O. Johnson mined ore by underhand stoping.

1952

Bosun
(New Santiago
Mines Limited)

(49° 117° N.E.) Company office, Suite 4, 423 Hamilton Street, Vancouver; mine office, New Denver; W. Postlethwaite, superintendent. Capital: 1,500,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver, on the Nelson-Nakusp Highway. The main haulage level, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. Operations were on a small scale during 1952. Most of the work was in the vicinity of the main winze. A high-grade pillar was removed from the hangingwall of the winze on No. 7 level station. The number of men employed averaged three.

* By J. W. Peck, except as noted.

SLOCAN LAKE*

Silver-Lead-Zinc

1953

Bosun
(New Santiago
Mines Limited)

(49° 117° N.E.) Company office, Suite 4, 423 Hamilton Street, Vancouver. W. Postlethwaite, superintendent. Capital: 1,500,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver, on the Nelson-Nakusp Highway. The No. 6 or main haulage level is driven beneath the highway from a site 40 feet above the lake. In the winze zone a raise was driven on the vein from No. 7 to No. 6 level from a point about 200 feet east of the winze. From the raise two intermediate levels were driven 30 and 70 feet above No. 7 level. These were driven 20 feet west and 35 feet east respectively. About 3 tons of zinc ore was obtained from the west intermediate but was not shipped. In the centre zone of the mine a crosscut was extended about 100 feet to investigate old diamond-drill intersections. Three men were employed in this work. The mine was inactive during the latter half of 1953, and the winze was allowed to flood.

1955

Bosun (New
Santiago Mines
Limited)

(49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. At 2,730 feet from the portal an inclined winze extends to No. 7 and No. 8 levels. The mine has been idle since 1953. In 1955 a small crew was engaged to unwater the winze, but the project was abandoned after a few weeks. J. Zambon was in charge of this work.

1956

Bosun (New
Santiago Mines
Limited)

(49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. R. Crowe-Swords, president. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. The mine has been idle since 1953, except for a small crew engaged to unwater the winze section in 1955. In 1956 a lease

* By J. W. Peck.

LODE METALS

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1956 was given to W. H. McLeod, of Silverton, who, with the aid of two partners, started an exploratory crosscut in the south centre section of the mine to investigate a vein reported to have been intersected by a diamond-drill hole many years ago. The crosscut was driven beneath the hole, which had been drilled slightly upward. The crosscut was driven 132 feet and an additional 35 feet was diamond drilled from the face, but no vein was encountered. A raise was then started to locate the exact position of the old diamond-drill hole.

1957 **Bosun (New Santiago Mines Limited)** (49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. R. Crowe-Swords, president. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. W. H. McLeod, with the aid of a partner, has operated a lease intermittently since 1956. Exploration, consisting of crosscutting and raising, was continued in the south central section of the mine to investigate the findings of diamond drilling done many years ago, but was unsuccessful. Ore remnants were mined on No. 6 level near the main winze, in the central section above the main drift, and in the east section near the portal. This ore was milled at the Carnegie mill at Sandon. Production: Ore milled, 76 tons. Gross content: Gold, 1 oz.; silver, 1,251 oz.; lead, 6,566 lb.; zinc, 12,049 lb.; cadmium, 63 lb.

1958 **Bosun (New Santiago Mines Limited)** (49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. R. Crowe-Swords, president. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. W. H. McLeod, of Silverton, with the aid of a partner, has operated a lease intermittently since 1956. A small amount of

• By J. E. Merrett.

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REPORT OF THE MINISTER OF MINES, 1958

1958 exploratory raising and diamond drilling was done in the west central section. However, the main work completed was the sinking of a winze 40 feet on the vein in the centre section at the intersection of the main vein and No. 6 level crosscut. A 2-foot vein, mineralized with galena and sphalerite, was exposed on the east wall of the winze. Additional sulphide mineralization was disclosed above a false hangingwall and will be mined with the vein material.

1959 **Bosun (New Santiago Mines Limited)** (49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. R. Crowe-Swords, president. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp Highway. The main haulage, No. 6 adit, is driven beneath the highway from a site 40 feet above the lake. W. H. McLeod, of Silverton, with the aid of two partners, is sinking a winze on the main vein to a proposed depth of 100 feet.

1962 **Bosun (New Santiago Mines Limited)** (49° 117° N.E.) Company office, 511, 850 West Hastings Street, Vancouver. R. Crowe-Swords, president. Capital: 3,000,000 shares, 50 cents par value. The Bosun mine is on the east shore of Slocan Lake, 1½ miles south of New Denver on the Nelson-Nakusp highway. W. H. MacLeod, of Silverton, did some development work off the winze which was sunk previously. A small amount of stoping was done on the vein. A total of 42 tons of ore was shipped to the Western Exploration mill.

A brief summary of the pertinent information in these reports is as follows:

1. Geology and Mineralization (from 1929 report)

The country rocks in the vicinity of the Bosun vein are argillites and quartzites of the Slocan series. The vein is a true fissure, with ore in small, narrow lenses striking $N55^{\circ}E$ and dipping $S50^{\circ}E$. The ore consists of galena and sphalerite with some grey copper and associated silver values.

2. Faulting

The vein is characterized by sheared zones close to narrow porphyry dykes which offset the vein to the right for short distances. . . . the displacement of the vein is invariably in the same direction - $N50^{\circ}W$.

3. Production

Between the years 1898 and 1943, 21,080 tons of ore were mined, which yielded an average of 69 oz/ton silver. From 1944 to 1957, 3,264 tons were mined, mostly by leasers. The average grade of this material was 38 oz/ton silver.

The following report on the Hartney property is the only one available from the Minister of Mines Reports still in print.

The fact that this property lies to the North-east of the Bosun, and during the period 1900-1917, produced 282 tons of ore averaging 59 oz/ton silver is significant for the purposes of this report.

#163

#7

This company controls the old Hartney group of three Crown-granted claims and, between the Hartney and Bosun groups, owns five other claims held by record. The workings, including adits and stopes which came through to the surface, are between elevations of about 4,000 and 4,500 feet a mile east of the Bosun, and are reached by a branch from the New Denver-Sandon Road.

Production between 1900 and 1917 amounted to 282 tons, containing 16,809 oz. of silver and 180,506 lb. of lead. Zinc was apparently discarded from most shipments, although 23 tons shipped in 1914 contained 30 per cent. zinc.

The vein strikes easterly in argillites and dips steeply to the south, but locally has a reverse dip. It appears to be largely stoped out in most of the upper levels. The two lowest adits were cleaned out in 1916, and the lowest was found to be off the vein. The second lowest adit, referred to as No. 3, is about 645 feet long, with a stoped section 220 feet long, largely inaccessible. A winze is sunk below the stope and was reportedly pumped out.

Three samples were taken at the west end of the stoped section, about 18 feet above the track. The foot-wall, 6 inches on the west face of a small stope, assayed: Silver,

8.3 oz. per ton; lead, 3.1 per cent.; zinc, 33.7 per cent.; cadmium, 0.49 per cent.; tin, 0.03 per cent. The succeeding 5 inches at the same point assayed: Silver, 10.7 oz. per ton; lead, 4.2 per cent.; zinc, 31.3 per cent.; cadmium, 0.21 per cent.; tin, 0.07 per cent. A third sample taken 20 feet to the east across 18 inches assayed: Silver, 1.6 oz. per ton; lead, 0.36 per cent.; zinc, 9.5 per cent.; cadmium, 0.06 per cent.; tin, 0.04 per cent.

SOIL SAMPLING ON LEI CLAIMS

A total of fifty-six soil samples were collected along the LEI #5; 6; 7 and 8 location line (designated 0 + 00) and along a parallel line 400 feet uphill (east). Sampling was done across the hillside, which slopes 30°-40° to the west. Spacing between samples was 100 feet. Samples were collected wherever possible from the reddish-brown "B" horizon, at depths varying from 3"-10", however the texture and humus content of the samples varied considerably between the two sample lines.

The samples were assayed by Bondar-Clegg & Company for ppm silver, lead and zinc by the atomic absorption method, and the results plotted in plan and profile. A statistical treatment of the samples was not possible with so few samples. Threshold values of 1.6 ppm Ag., 80 ppm Pb. and 400 ppm. Zinc were selected by inspection from the profiles.

ORIENTATION SURVEY

In order to establish the ppm content in the soil which is indicative of a mineralized vein, the writer visited a neighbouring property where a vein had been stoped out from underground. A limited number of samples (13 in all) were collected directly over and up-slope from the surface expression of the vein.

These samples were assayed for ppm Silver, lead and zinc. The results of 12 of the 13 samples were averaged, to give the following values:

| | | |
|--------|---------|---------|
| Silver | average | 1.80ppm |
| Lead | average | 43 ppm |
| Zinc | average | 459 ppm |

For comparison purposes, the threshold values selected from the profile graph of the sampling done on the LEI claims are as follows:

| | |
|--------|---------|
| Silver | 1.6 ppm |
| Lead | 80 ppm |
| Zinc | 400 ppm |

Three samples of vein material were collected from the neighbouring property as well. Assays were obtained for Au, Ag, Cu, Pb and Zn as follows:

| Sample No: | Description | Au oz/ton | Ag oz/ton | Cu % | Pb % | Zn % |
|------------|-----------------|--------------|--------------|---------|---------|---------|
| 4475 | 20 a cross vein | tr | 13.22 | 0.01 | 0.61 | 0.29 |
| 4476 | grab | 0.01 | 11.97 | 0.08 | 0.33 | 3.05 |
| 4477 | grab | 0.01 | 15.25 | 0.12 | 0.35 | 36.41 |

DISCUSSION OF RESULTS

Threshold values selected from the profiles on the test survey lines indicate that there are two areas which are anomalous for silver, lead and zinc in the area of the geochemical test survey. Furthermore, the threshold values are of approximately the same magnitude in parts per million content of these elements as are found in the soil directly over a stoped out vein on a neighbouring property, samples of which assayed 13 oz/ton silver.

Generally, there is a good correlation between silver, lead and zinc values in the soil. In future surveys, silver assays alone should be sufficient to provide the necessary information.

CONCLUSIONS

1. The correlation between threshold values in anomalous areas on the LEI claims and the typical ppm values over a productive vein on a neighbouring property suggests that two possible silver veins have already been indicated on the LEI claims.
2. Geochemistry should provide an economical and effective exploration method in the Slocan area.

RECOMMENDATIONS

In view of the encouraging results obtained from the very limited amount of work done on the LEI claims to date, the following programme of exploration and development is recommended.

| <u>STAGE I</u> | Cost |
|---|--------------------|
| (1) Staking approximately twenty additional claims on open ground surrounding LEI No's 1-8 | \$500-\$1,000.00 |
| (2) Geochemistry further define the possible veins on the LEI claims by sampling both anomalous areas on a tighter grid - i. e. 100 foot line spacing, 25 foot sample interval. Approximately 500 more samples should be collected in this manner and assayed for parts per million silver | \$2,000.00 approx. |
| (3) Trenching and Sampling based on the results of (2) above, the veins | |

STAGE I (Continued)

Cost

indicated by geochemistry should be exposed by hand-trenching, using a plugger to drill blast-holes. Any veins found in this way should be carefully channel-sampled

\$1500-\$4,000

TOTAL COST STAGE I - \$4,000.00 to \$8,000.00

STAGE II (possibly following public financing)

(1) Geochemistry

carry out detailed geochemistry on the remainder of the claims, with line spacing 400 feet and 100 foot sample intervals.

Cost - assuming 28 claims sampled

\$10,000-\$15,000.00

(2) Diamond Drilling

BQ wireline - 5000 feet at \$10.00 per foot

\$50,000.00

(3) Research and Reconnaissance Geochemical Exploration

pursue an active programme of research and reconnaissance geochemical exploration throughout the Slocan area similar to that carried out thus far on the LEI claims. This programme should ideally be initiated immediately following the first positive indications that commercial quantities of ore are available on the LEI claims. i. e. employ one geologist and a helper during the summer months to acquire property and carry out initial reconnaissance geochemical exploration. Successive properties to be

developed as needed to provide a continuous supply of ore.

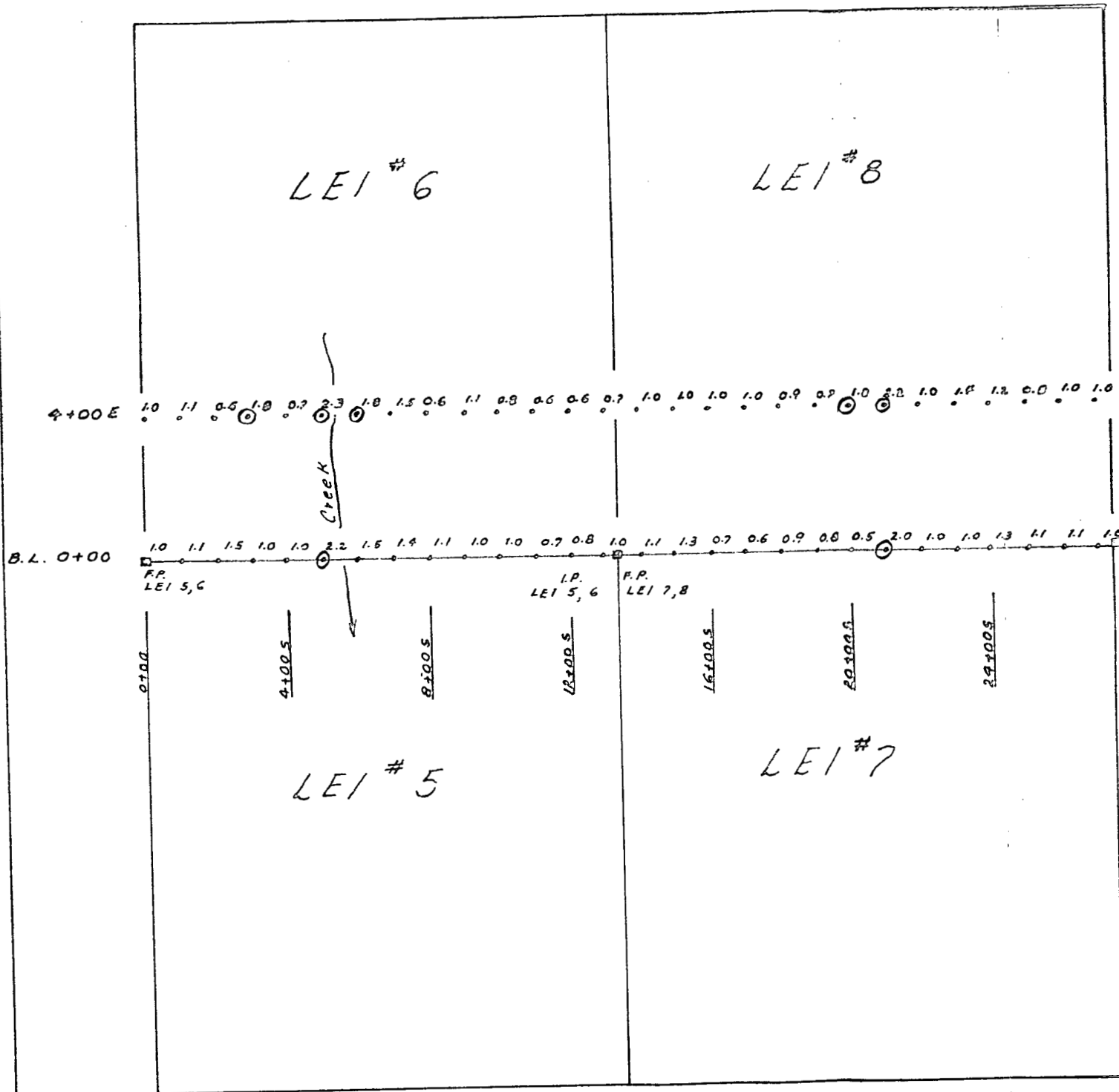
Cost - allow \$3,000.00 per month.

Respectfully submitted,



T. D. Wilkinson, CET
Mining Technologist

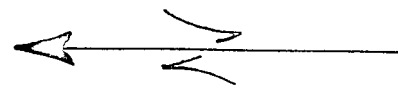
May 13, 1969



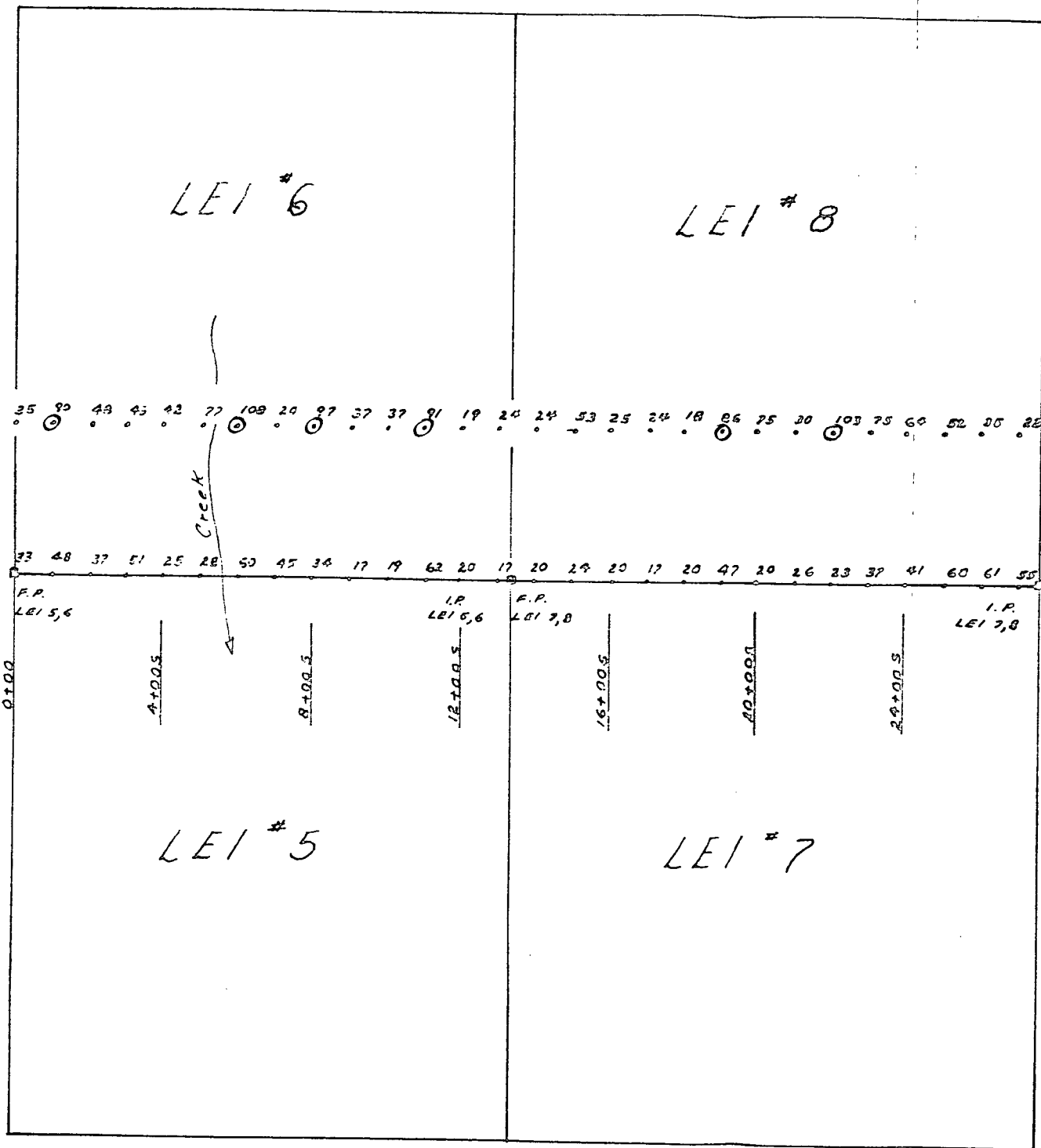
1

GEOCHEMICAL TEST SURVEY
 .11 SILVER, parts per million
 T.D. Wilkinson 9 May, 1969

SCALE: 1" = 400'

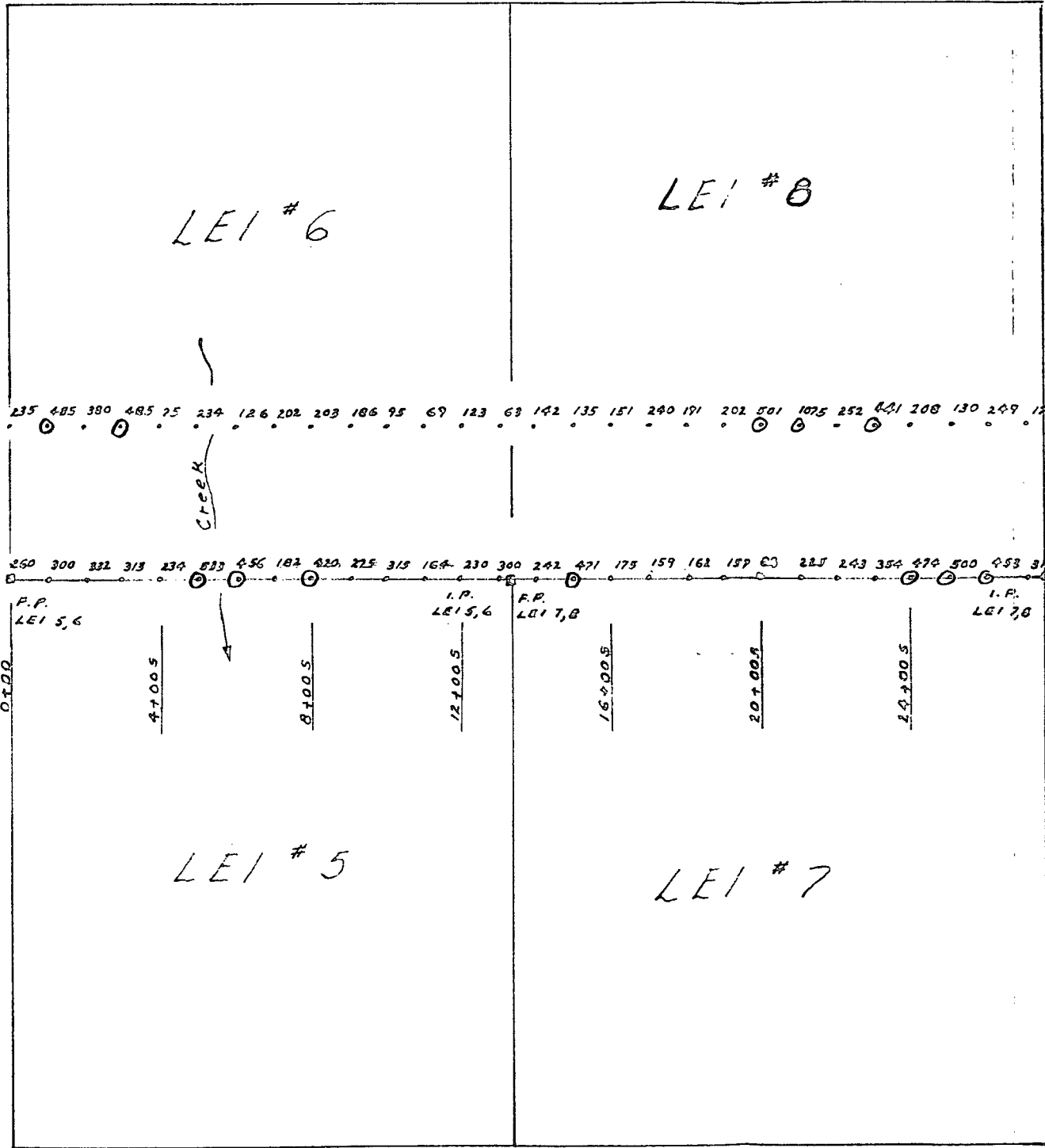
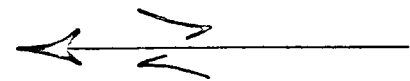


Slope 30°-40°



2

GEOCHEMICAL TEST SURVEY
 25 Lead, parts per million
 T.D. Wilkinson 9 May 1969



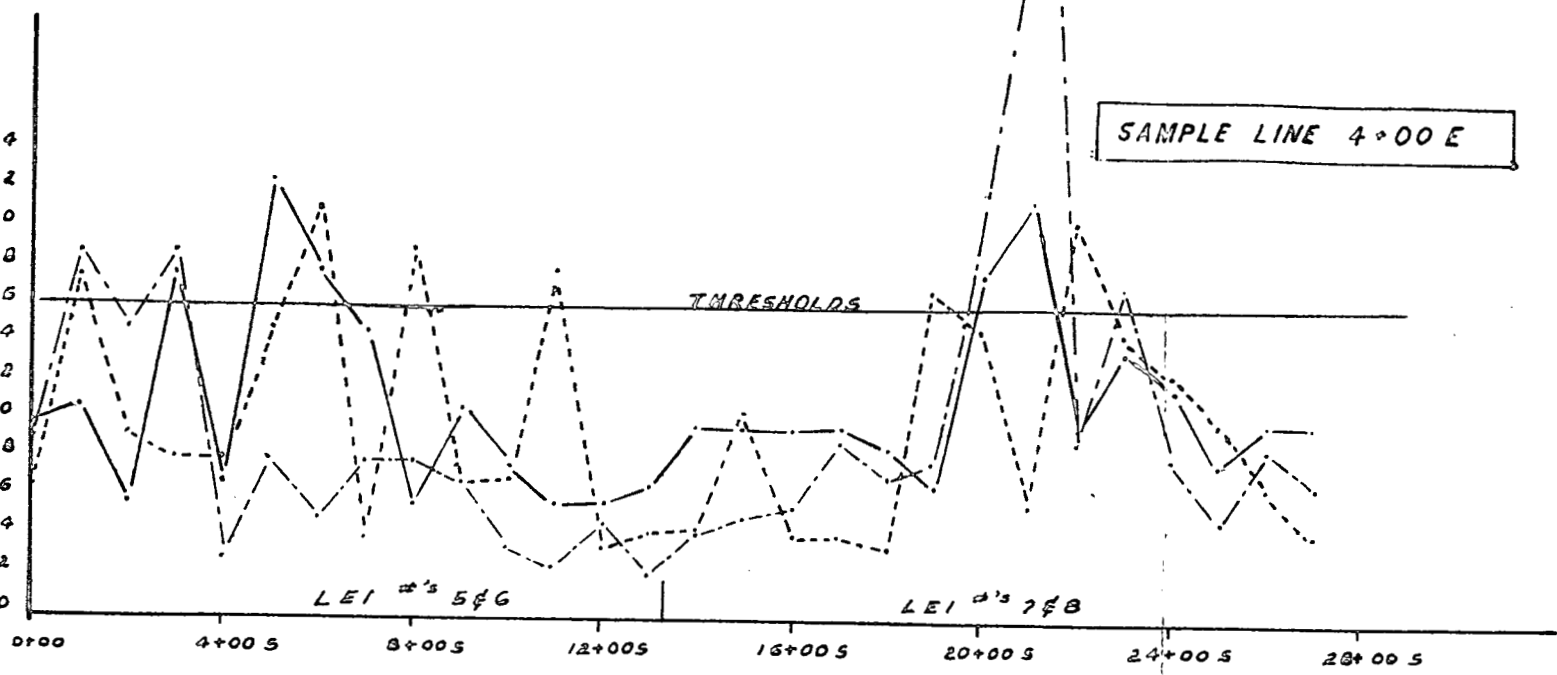
Slope 30°-40°

3

GEOCHEMICAL TEST SURVEY
 .053 Zinc, parts per million
 T.D. Wilkinson 9 May 1969

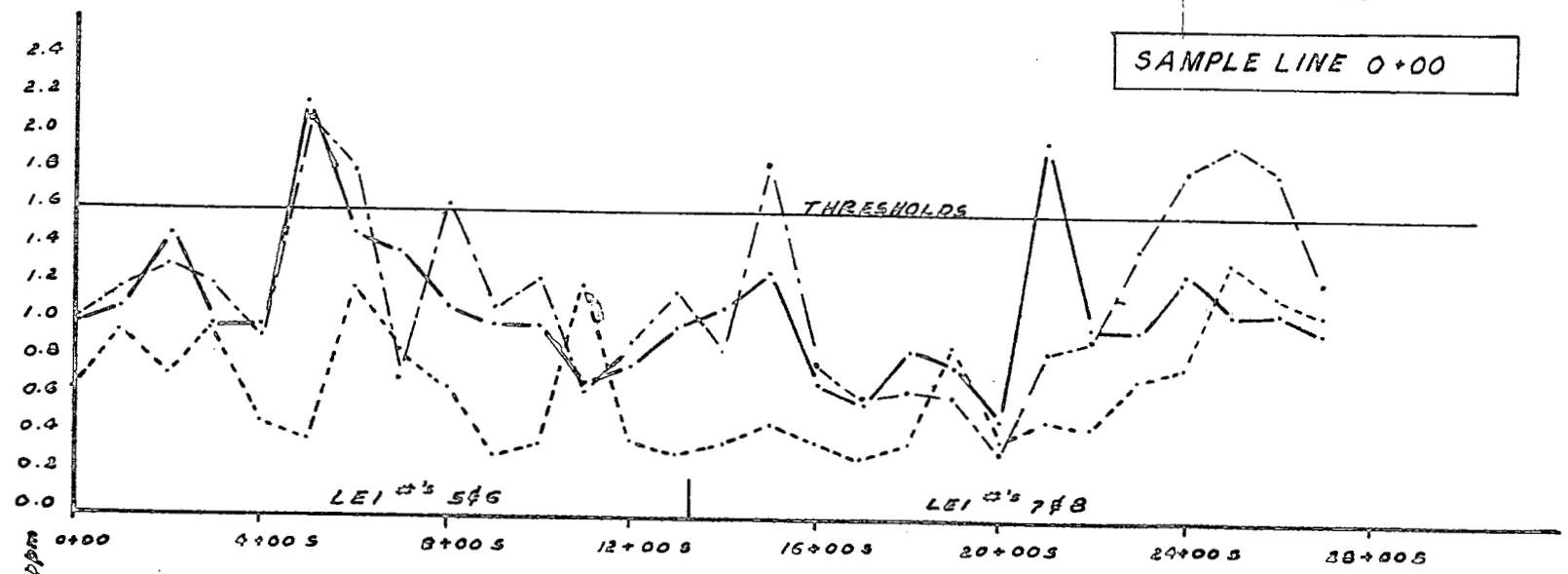
SAMPLE LINE 4+00 E

600 120 2.4
 550 110 2.2
 500 100 2.0
 450 90 1.8
 400 80 1.6
 350 70 1.4
 300 60 1.2
 250 50 1.0
 200 40 0.8
 150 30 0.6
 100 20 0.4
 50 10 0.2
 0 0 0.0



SAMPLE LINE 0+00

600 120 2.4
 550 110 2.2
 500 100 2.0
 450 90 1.8
 400 80 1.6
 350 70 1.4
 300 60 1.2
 250 50 1.0
 200 40 0.8
 150 30 0.6
 100 20 0.4
 50 10 0.2
 0 0 0.0



--- Zinc Assays, ppm

--- Lead Assays, ppm

--- Silver Assays, ppm

GEOCHEMICAL TEST SURVY - LEI CLAIM
 PROFILES

T.D. WILKINSON

9 May, 1969

4

INTERIM REPORT

GEOCHEMICAL SURVEY

LEI MINERAL CLAIMS

NEW DENVER, B. C.

T. D. Wilkinson, CET.,
Mining Technologist

Vancouver, British Columbia

August 13, 1969

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INTRODUCTION

During the period July 9 to 17, 1969, 2.27 line-miles of detailed geochemical surveying was carried out on the LEI No's 6 and 8 mineral claims. This work followed encouraging results obtained from a reconnaissance geochemical survey carried out by the writer in August, 1968, and described in a report entitled "Geochemical Test Survey, LEI Mineral Claims, New Denver, B.C., May 13, 1969."

GEOCHEMICAL SURVEY

Field Work (See Figure No. 1)

Four hundred and thirty-nine soil samples were collected at depths varying between 2" - 6" from the "B" horizon along four 3000 foot sample lines spaced 100 feet apart. Sample spacing was 25 feet. Parts per million assay for silver were obtained from 244 of these samples and were plotted on Figure 1.

RESULTS

A frequency distribution plot (Figure No. 2) of the results was used to produce a cumulative percentage frequency distribution curve (Figure No. 3), from which the following statistical information was obtained:

FIG. No. 2
HISTOGRAM -- FREQUENCY
DISTRIBUTION OF SILVER
LEI CLAIMS
NEW DENVER
JH
AUGUST 1969

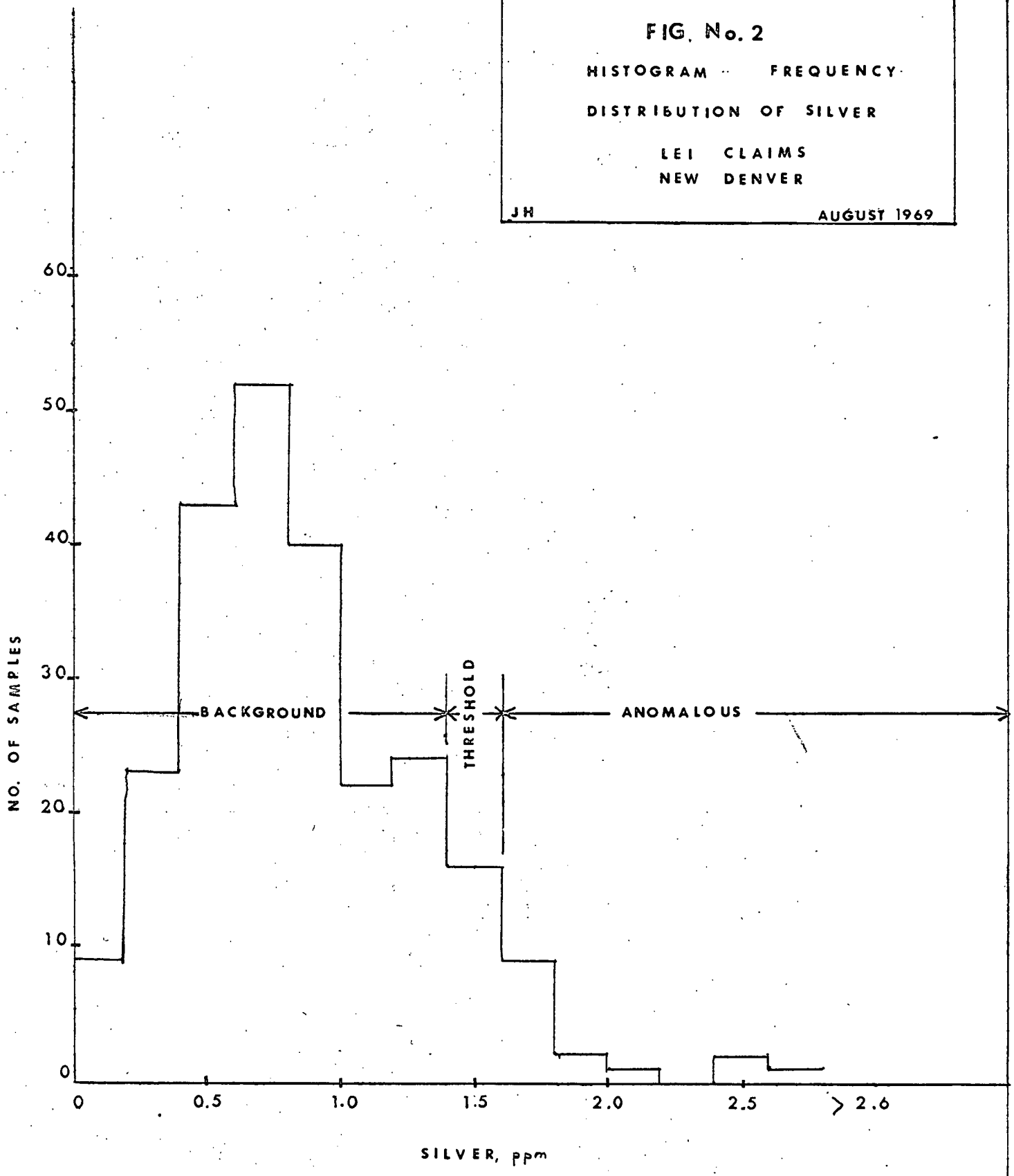
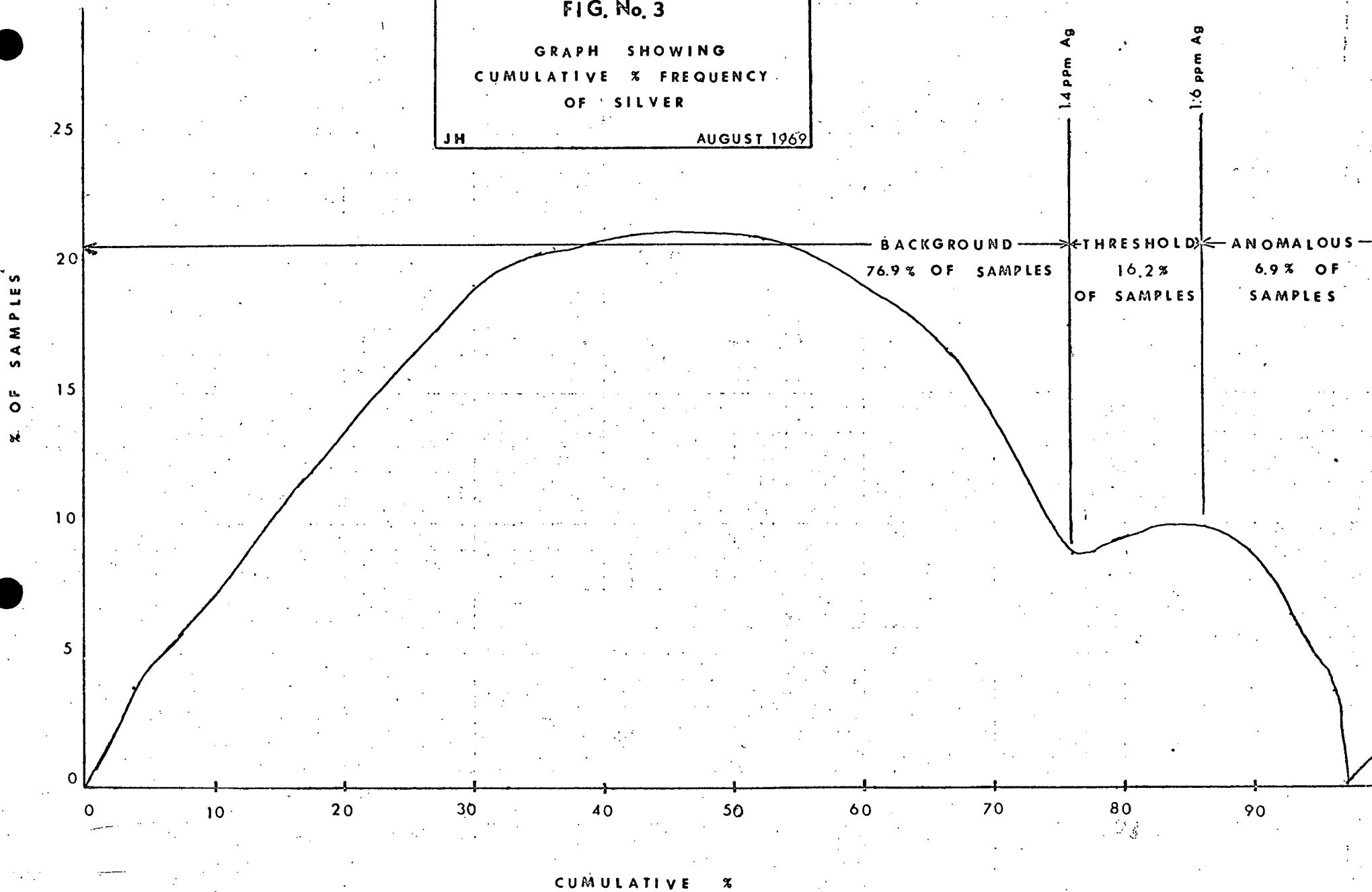


FIG. No. 3
GRAPH SHOWING
CUMULATIVE % FREQUENCY
OF SILVER
JH AUGUST 1969



1. Background values are in the range 0.0 - 1.4 ppm Ag.
2. Threshold values are in the range 1.4 - 1.6 ppm Ag.
3. Anomalous values exceed 1.6 ppm Ag.

Parts per million contours of 1.6 ppm Ag. and 2.0 ppm Ag. were used to outline nine anomalous zones on the grid. These zones are designated No's A-I on Figure No. 1. Pertinent information relating to these anomalies are contained in the following Table No. 1.

TABLE NO. 1 - Geochemical Anomalies

| Anomaly No: | Location | Size | Peak Value (ppm Silver) | Comment |
|-------------|---|--|----------------------------|--|
| A | 4+00E from 3+00S to 4+00S Between | 75' x 100' | 2.5 | Anomaly open to East. Some organic material in samples. Possible contamination due to proximity of Hartney workings |
| B | 1+50E & 3+75E from 5+15S-5+50S | 35' x 225' | 3.2 | Significant anomaly. Soil type typical of general area, i. e. dark brown, sandy, very little organic material in sample. |
| C & D | Between BL and 4+00E from 6+00S- 8+00S | C: 20' x 50' + D: 20' x 50' + | 2.4 2.3 | Very broad anomalous zone which coincides with local drainage pattern. Anomalies designated C and D probably due to concentration by creek. Open to east and west. |
| E | Between 2+25E & 4+00E from 8+50S-9+15S | 65' x 175' | 5.0 | Very significant anomaly. Peak value 3.5 times background. |
| F | 4+00E from 10+00S - 10+40S | 40' x 60' + | 2.1 | Anomaly deserves attention. Open to east. Fine, greyish soil |
| G | 4+00E from 23+80S - 24+40 S | 60' x 50' + | 2.2 | Significant anomaly, open to west. |
| H | From 1+00E- 2+50E between 22+00S&23+00S | 35' x 150' | 3.5 | Significant anomaly |
| I | From 1+25E- 2+75E between 24+75S&25+25S | 50' x 150' | 5.7 | This anomaly considered most important. Peak value four times background. Soil dark brown, typical of general area. |

CONCLUSIONS

1. Anomaly No's B, E, F, G, H and I are considered significant in terms of representing the surface soil expression of overburden-covered lead-zinc-silver veins.
2. Anomalies D and G are consistent with the geochem highs noted in the original test survey work.
3. Part (3) of Phase I of the recommendations in the previous report should now be initiated.

RECOMMENDATIONS

Trenching and Sampling:

Approximately 135 lineal feet of blast-hole trenching should be carried out on the four most significant geochemical anomalies, as follows:

| | |
|--------------|--------------------------|
| Trench No. 1 | 35 feet across anomaly I |
| Trench No. 2 | 30 feet across anomaly E |
| Trench No. 3 | 35 feet across anomaly H |
| Trench No. 4 | 35 feet across anomaly G |

Any veins located should be carefully channel-sampled and assayed for oz/ton Au and Ag and for % Pb and Zn.

COSTS

The following is a detailed breakdown of the estimated costs to complete the trenching and channel-sampling programme.

| | | |
|----|---|------------|
| 1. | <u>Mobilization and Demobilization</u> - includes expediting, travelling, wages and expenses while travelling | \$ 850.00 |
| 2. | <u>Trenching</u> | |
| | 1) Labour 10 days at \$150/crew day four-man crew | \$1,500.00 |
| | 2) Room and board @ \$10/man/day | \$ 400.00 |
| | 3) Truck rental (4 x 4 @ \$20/day) 12 days | \$ 240.00 |
| | 4) Drill rental (2 Copco drills for 2 weeks) allow | \$ 200.00 |
| | 5) Powder, fuse, caps - allow | \$ 150.00 |
| | 6) Assays - allow | \$ 150.00 |
| 3. | <u>Report</u> - drafting, report writing, accounting and secretarial services - allow | \$ 400.00 |
| | ESTIMATED COST | \$3,890.00 |
| | ADD 15% Contingency | 427.00 |
| | TOTAL ESTIMATED COST | \$4,317.00 |

Respectfully submitted,
ASSOCIATED GEOLOGICAL SERVICES LTD.,

T. D. Wilkinson

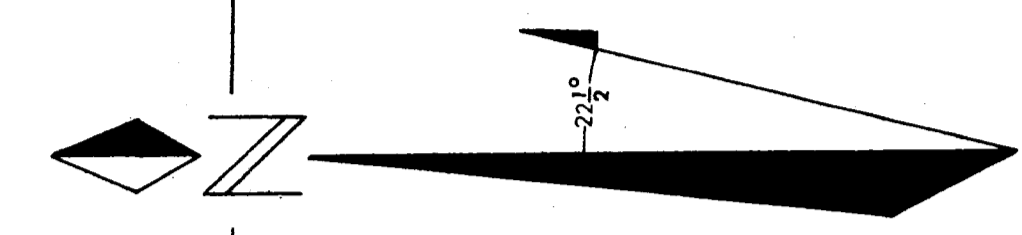
T. D. Wilkinson

APPENDIX II

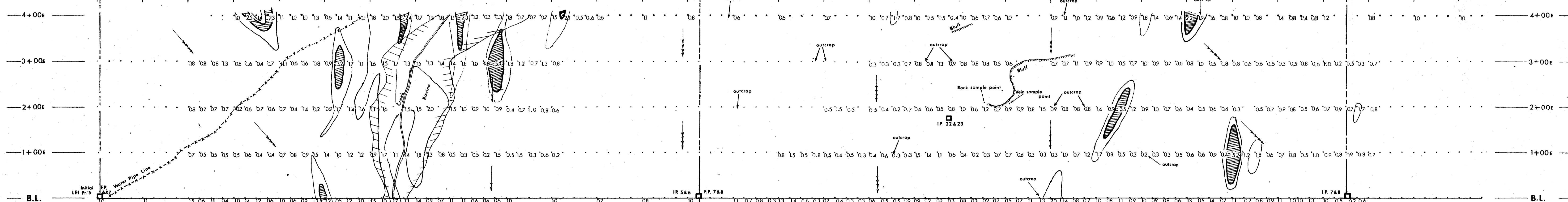
APPENDIX I

LEI 6

LEI 8



0+00s 1+00s 2+00s 3+00s 4+00s 5+00s 6+00s 7+00s 8+00s 9+00s 10+00s 11+00s 12+00s 13+00s 14+00s 15+00s 16+00s 17+00s 18+00s 19+00s 20+00s 21+00s 22+00s 23+00s 24+00s 25+00s 26+00s 27+00s 28+00s 29+00s 30+00s



LEGEND

Background 0.0-1.3 ppm Ag
 Threshold 1.4-1.5 ppm Ag
 ANOMALOUS >1.5 ppm Ag

— 1.4 ppm Ag
 — 2.0 ppm Ag

LEI 5

LEI 7

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **1974** MAP **#2**

S.D. Walker

To ACCOMPANY:
 GEOCHEMICAL REPORT
 LEI MINERAL CLAIMS
 NEW DENVER, B.C.
 49° 47' N
 by T.D. WINNISON, C.E.T.
 and D.P. ARSCOTT, P.ENG.
 SEPT. 9, 1969

David Arscott

ASSOCIATED GEOLOGICAL SERVICES LTD.
 VANCOUVER CANADA

GEOCHEMICAL SURVEY
 LEI MINERAL CLAIMS **1974**

DATE: JULY 1969 SCALE: 1 in to 100 ft FIELD WORK: P. FISCHBORN, R. SCOTT DRAWN BY: T. DREWS