622

9 March 1965

TO ACCOMPANY Geological Report on Mineral Claims BIK 1 to BIK 86 and BIK 221 to BIK 226 Inclusive, herein called the Stikine East Group, Liard Mining Division, British Columbia.

BY: R.E. GALE
DATED: 22 December 1964

QUALIFICATIONS OF AUTHOR

R.E. Gale is a graduate of the University of Alberta (BSc in Honors Geology - 1955) and the University of British Columbia (MSc in Geology - 1957). He was employed by the Vancouver Exploration Office of American Smelting and Refining Company for a period of seventeen months during 1957-1958 and has been employed in the same office for the past eight months.

Keith Whiting

Keith Whiting, ~~P.~~ Eng.,
(B.C. Reg. No. 4284)
Supervisor.

EVIDENCE OF EXPENDITURES INCURRED

SALARIES		
Engineers in Charge		
W. St.C. Dunn	4 days @ $35/day	$ 140.00
P.I. Conley	10 days @ $35/day	350.00
Geologist		
R.E.Gale	39 days @ $700/mo	909.87
Jr. Geologist		
L. Meech	39 days @ $400/Mo	519.87
Surveyor		
P. Wright	10 days @ $500/Mo	170.00
Surveyor's Helper		
T. Buckham	12 days @ $375/Mo	150.00
TOTAL SALARIES		$ 2,239.74
LIVING EXPENSES		1,874.26
ASSAYING		146.00
HELICOPTER	38 hrs @ $130/hr	4,940.00
	TOTAL EXPENDITURES:	$ 9,200.00

Declared before me at the

City of Vancouver in the

province of British Columbia

this 10 of March A.D. 1965

W. St.C. Dunn

STIKINE EAST GROUP

C O N T E N T S

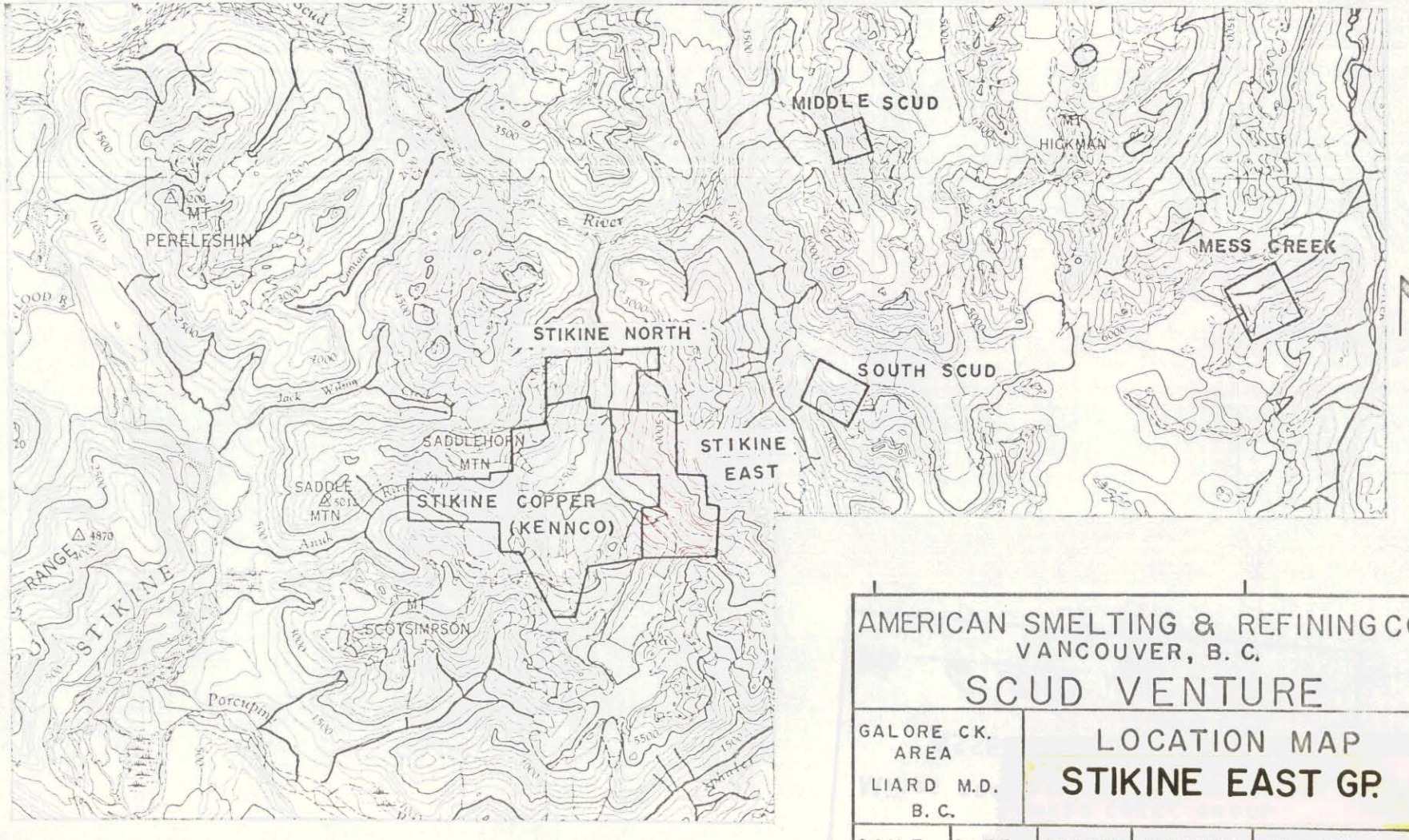
ATTACHMENTS

Statement of Qualifications

Evidence of Expenditures Incurred

Map No. 1	Location Map	1" = 4 Miles
Map No. 2	Geology - Stikine East Group (in pocket)	1" = 500'

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 622 MAP



AMERICAN SMELTING & REFINING CO.
VANCOUVER, B. C.

SCUD VENTURE

GALORE CK. AREA
LIARD M.D.
B. C.

LOCATION MAP
STIKINE EAST GP.

SCALE	DATE	DRAWN	APPROVED	FILE NR.
1"=4miles	NOV 64			MAP NR. One

22 December 1964

GEOLOGICAL REPORT

ON

MINERAL CLAIMS BIK 1 TO BIK 86 & BIK 221 TO BIK 226 INCLUSIVE

57° 131° S.E.

SUMMARY

The Stikine East claim group is made up of 92 claims and is located in the Stikine River area of B.C., about 200 miles north of Prince Rupert. The Stikine East group borders the eastern side of Stikine Copper (Kennco) ground along a 4 mile length, and to the north the group adjoins the Stikine North claim group.

Triassic andesitic volcanic rocks underlie much of the claims, but a one mile long by one-half mile wide sill of syenite porphyry which appears to be an off-shoot of the Galore Creek syenite stock, intrudes the volcanics near the center of the group.

There are no economically important occurrences of copper mineralization in outcrops on the claims, but traces of disseminated mineralization do occur in syenite and andesite bordering a large covered area in the northern section of the claims. Mineralization here is associated in part with easterly trending faults and shears which strike into altered and mineralized east-west shear zones near Kennco's "Central Orebody", one and one-half miles west of Stikine East claims.

Faulting and shearing may be strongly developed beneath this cover on Stikine East ground (Zone D on accompanying map), and it is also possible that part of the Galore Creek syenite stock may be concealed here.

It is therefore recommended that further exploration consisting of an Induced Polarization survey be carried out to assess the possible occurrence of disseminated sulfide mineralization in this covered area.

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LOCATION - PHYSIOGRAPHY

The Stikine East claim group, comprising 92 claims, covers an area measuring approximately two to three miles east to west by four miles north to south. The claims lie on the eastern side of Galore Creek about five miles south of its junction with the Scud River. The Stikine East claims border the Stikine Copper Co. (Kennco) claims along their eastern margin and lie south of the Stikine North claim group. The majority of the Stikine East claims were staked by BIK Syndicate in February 1964. Six claims were staked in August 1964, to cover a gap between the Stikine East and Kennco claim groups. Geology of the Stikine East claims was mapped during the period June 28 to August 15, 1964 by R.E. Gale, Geologist, assisted by L. Meech, Junior Geologist.

During the summer of 1964, base camp for all Asarco-Silver Standard operations (Anuk base camp), accommodating from 12 to 15 men, was set up on the East Fork of Galore Creek, near its junction with the West Fork. Supplies were flown from Prince Rupert or brought up by barge from Wrangell to the Anuk River camp of Midwest Drilling Co. on the Stikine River. From Anuk River, supplies were then flown by helicopter ten miles to the base camp. Fog conditions often necessitated a round-about flight from Anuk River to the base camp via Contact Creek - Scud River - Galore Creek, a total distance of about 23 miles.

Elevations in the area range from 1500' to 6000' above sea level. Most of the East Fork valley bottom is covered by glacial moraine for 300' to 500' above the creek. The head of the valley is occupied by a 1500' wide glacier fed by two branches, one from the east and one from the south.

Outcrop exposures are good above 4500' elevation, except where permanent snowfields fill depressions. Below the 4500' elevation, good exposures are obtained only in the largest gullies carved by streams. Along small creeks and on ridges between gullies, little bed rock is exposed. There is a dense growth of scrubby juniper below 4500' which is succeeded by a jungle of devils club, alders and spruce at lower elevations. In the northern third of the claim group, outcrop is very scarce at lower elevations, except along Galore Creek itself. Part of Galore Creek canyon and also the cliffs in the southern

third of the claim group were inaccessible and could not be mapped.

During the period June 28 to August 15, when the Stikine East claims were mapped, weather conditions were extremely poor. Only seven days were clear and sunny, out of the total forty-eight days. Six days of field work were lost because of fog and rain.

GEOLOGY

General Summary

Mapping was carried out on 500 scale topographic maps supplied by V. Zay Smith Associates, Calgary. Map locations were made by using aneroid barometer for elevation control points. The base maps were often found to have insufficient detail to make locations, and in such cases, point locations, (accompanied by detailed notes), were made on 1" = ½ mile aerial photographs. The latter information was transferred to the 500 scale base map later when the traverse location was accurately known.

The dominant type of rock outcropping on the claims is volcanic tuff and breccia, of andesitic composition. Similar rocks in other areas of the Coast Range have been dated as Triassic. Intercalated with the volcanic rocks is a thin sequence of calcareous sedimentary rocks, which probably mark an unconformity in the Triassic volcanic sequence. The oldest Triassic volcanics occupy valleys and lower slopes of hills, and are generally more strongly pyritized and epidotized than the younger volcanics which outcrop on high ridges and peaks over much of the Stikine area.

The only other rock outcropping over large areas is syenite porphyry. A sill-like mass of syenite one-half mile wide and one mile long is exposed in the central part of the claim group. The northern contact of the syenite with andesite is formed by a northeast striking fault. On the east and south, few contacts between syenite and andesite are exposed, but the syenite is chilled against andesite close to the eastern contact. To the west, the Stikine East syenite probably grades into the Galore Creek syenite stock. There is apparently no such

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gradation or joining of the Stikine East syenite sill with the Copper Canyon syenite stock, one and one-half miles southeast.

Altered syenite is the host rock for copper mineralization in both the Galore Creek and the Copper Canyon stocks. Traces of disseminated chalcopyrite and bornite were noted in the Stikine East sill in small patches of feldspathized syenite at the northern end of the intrusive. The latter occurrences were the best sulfide mineralization noted on the claims. Strongly propylitized andesite and/or syeno-diorite occur along the western fringe of outcrops of Stikine East syenite. These strongly chloritized rocks carry abundant pyrite but no chalcopyrite.

A late phase of coarse-grained syenite porphyry forms dikes and plugs cutting andesite at varying distances from the main syenite mass. Other dikes, which are post mineral, are both basic and felsic. Most of these dikes strike easterly.

Faulting and fracturing are moderately well developed in all rocks. The most important faulting is developed along easterly to east-northeast trends. These trends are reflected topographically, in the strike of major gullies. The amount of offset on these faults cannot be determined, but some show a possible right lateral displacement of 1000'. Most of the faults are of pre-mineral origin. At the northern end of the claims, magnetite veins and weakly disseminated chalcopyrite are associated with some easterly trending faults. A major fault zone, the Scud Fault zone, borders the eastern side of the claims.

Triassic Rocks

Volcanic and sedimentary rocks of presumed Triassic age are the most common rocks on the claims. These rocks are similar in appearance to Triassic rocks which are of widespread occurrence in the northern Coast Range. Dark green to red andesitic tuffs and breccias, including many beds of water-lain tuff, occur on the Stikine East claims. Andesitic flows are less common, but porphyritic and spherulitic flows form possibly 25% of the exposures at the southern end of the claims.

The whole series of Triassic rocks may be 5000', or more, thick. In the upper half of the series, an unconformity is present and is marked by a basal conglomerate and a thin sequence of sedimentary rocks. The sedimentary rocks are

unconformably overlain by andesitic volcanics which tend to be less strongly pyritized and altered than the older volcanic beneath the sedimentary horizon. As on Stikine North ground, the youngest rock in the Triassic sequence appears to be augite porphyry basalt. Outcrops of this basalt occur on high ground just east of the claims.

The band of sedimentary rocks, 100 to 200' thick, rests unconformably on the older volcanic rocks. At the base of the sedimentary rocks, the older volcanics are notably channelled by the sediments along an undulating contact. A basal conglomerate, possibly 50' thick, is composed of large boulders of andesite, limestone and quartzite in a fine-grained calcareous cement. The conglomerate is overlain by 50 to 100 feet of thin bedded calcareous quartzite and limestone, or in some outcrops a sequence of massive highly impure biotite greywacke. The limestone bands are fossiliferous, containing what appear to be cephalopods, but no good fossils were obtained. The sedimentary rocks pass into the overlying volcanics quite abruptly, although the volcanics do include some calcareous tuffs near the contact.

Syenite

Several phases of syenite are included in the outcrops of the Stikine East sill which cover an area one mile long by one-half mile wide. There is a suggestion of certain phases of syenite being restricted to different zones of the intrusive. The most common syenite is an equigranular medium grained, to medium grained porphyritic, hornblende syenite. This rock is most notably developed along the eastern half or upper most margin of the intrusive. Euhedral grains of medium to coarse-grained white feldspar are enclosed in a medium grained groundmass composed of equal parts of subhedral to anhedral white feldspar and dark green hornblende or chlorite. Anhedral epidote is associated with chlorite and hornblende in some outcrops and the rock is then termed epidote syenite porphyry. A further variation consists of dike-like zones of dark green to grey syenite porphyry which show fairly sharp gradational contacts with the lighter colored syenites. The dark porphyry consists of white feldspars in a fine-grained drak grey to green groundmass of chlorite and hornblende.

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As is true with the dark porphyry, described above, a phase containing well-formed crystals of black garnet is most common along the western, west central and northern exposures of syenite porphyry.

Another phase of syenite which may be an alteration and which is exposed only over small areas, is an equigranular fine-grained variety which is closely associated with disseminated copper mineralization. Its color varies from pink to violet, depending on the amount of violet colored K-feldspar which it contains. This violet colored, potash feldspar replacement becomes almost 100% in some zones and stronger chalcopyrite and magnetite often accompany strong replacement. Other constituents in these pink to lavender colored syenites are epidote and actinolitic amphibole, and both these minerals have a tendency to be associated with chalcopyrite. Dikelets of violet colored aplite are also associated with this type of syenite.

On Kennco ground, on the east side of the East Fork of Galore Creek, fine to medium grained white hornblende syenite or syeno-diorite outcrops. This rock is strongly altered to violet K-feldspar-magnetite-chalcopyrite in some outcrops. This syeno-diorite is probably another phase of the syenite complex.

The contact of the Stikine East syenite with Triassic andesite was seen in only one outcrop. At this point the syenite contact is conformable with the general attitude of the andesite striking north and dipping 20° east. But, in the same outcrop at another point, the syenite appears to crosscut this trend. In other outcrops along the eastern side of the syenite exposures the syenite becomes dark and very fine grained, and a general coarsening in grain size is noted going west, away from these contacts. There is, thus, a suggestion of chilling of the syenite against andesite and the syenite appears to be a sill rather than a flow.

Late Dikes and Sills

Both basic and felsic dikes and sills cut Triassic rocks and syenite. A swarm of basic dikes, mainly basalt dikes, 3' to 20' wide, strike easterly through andesite in the northern part of the claims. This dike swarm is probably the same as that cutting syenite in the northern part of Kennco's claims. A few dikes and small masses of hornblende andesite and hornblende and biotite lamprophyre constitute the remaining types of basic dikes.

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Felsic dikes are mainly orange to pink or white rhyolite and most strike easterly, paralleling the basic types. Thin dikelets of violet colored aplite cut syenite in a few outcrops.

The felsic and basic dikes are mainly post mineral in age and apparently have little importance concerning copper mineralization.

Syenite porphyry sills, dikes and plugs are much less numerous than the basic and felsic intrusives, but are of pre-mineral age. In outcrops at the mouth of Doghouse Creek, and in one other outcrop, one mile northwest of the latter point, syenite porphyry sills are mineralized with disseminated chalcopyrite. This porphyry consists of numerous white to pink euhedral orthoclase crystals, up to 2" long in a dense dark green groundmass. It is correlated with the Orthoclase Porphyry of Dobell. (Southwest Potash Report on Copper Canyon 1957)

Structure

In the northern part of the claims there is little information regarding structure in the Triassic rocks. In a few exposures, tuff beds are seen to strike northeast or northwest, and dip to the east. It is probable that in this area these beds constitute the east limb of a north trending anticline. These same conditions apply to the central part of the claims, but here the anticlinal structure is interrupted by a series of northeasterly trending faults and syenite instrusions. In the east central part of the claims, volcanic beds strike northwest and dip northeast at about 50°. Farther south, on the east side of the claims, the same attitude persists, but in the south central area, a consistent ENE strike and south dip in the volcanics is apparent. The change from east dips to south dips in the rocks in the southern half of the claims probably indicates that the structure here is a south plunging anticline, or domal structure, dipping south away from the Galore Creek stock.

Eight, east to northeast striking faults are noted on the Stikine East claims. Except for the Camp, Canyon, North 110 and Southeast faults, the existence of these breaks is mainly interpreted from incomplete evidence.

The Canyon fault, near the north end of the claims, outcrops as a 1' wide, vertical, east-west shear zone in andesite.

The fault is mineralized with a 3" veinlet of massive magnetite containing traces of chalcopyrite - pyrite, and a small basalt dike follows the fault. About 2200' east along the trend of the fault, a 5' wide shear zone in andesite contains disseminated chalcopyrite. At wide intervals for 1500' north and south of the Canyon fualt, a number of easterly striking, weakly mineralized shears outcrop. This area is largely covered, so the importance, continuity and limits of mineralization here is unknown.

The best exposed of the faults in the Stikine East claims is the Camp fault which strikes N. 70°E and dips 40° south. This fault forms the northern boundary of the Stikine East sill. The ground to the north of the fault is largely covered, but appears to be underlain by andesite. Quartz pyrite veining is associated with the fault and judging by one exposure, the fault may consist of a gouge and shear zone 20' wide. It is inferred that the Camp fault, or a branch of it, extends north-eastward and is terminated by the Scud fault. To the west, it is possible that the Camp fault continues as a shear zone striking along Dendritic Creek on Kennco ground.

Evidence of faulting was found in most of the large valleys in the mile-long hillside southeast of the Camp fault gully. No significant copper mineralization is directly associated with the faults shown on the accompanying map. As indicated by apparent right lateral displacements of the syenite-andesite contact and the Triassic sedimentary horizons, there may be successive en-echelon, right hand horizontal displacements of about 1000' on these faults.

Alteration and Mineralization

Along the southwest margin of the outcrops of the Stikine East sill, and on the southwest side of the East Fork-Galore Creek, there are numerous outcrops of chlorite-pyrite-epidote altered rocks. These rocks are heavily stained with iron oxide because of weathering of their abundant pyrite. On a fresh surface the rocks are dark green and very fine grained and are composed almost entirely of chlorite and pyrite with lesser epidote. No trace of chalcopyrite was seen in strongly propylitized rocks, on Stikine East ground.

The parent rock for this propylitic alteration is not

definitely known. In some outcrops the propylite alteration grades into a chlorite-potash feldspar rock which in turn grades into syenite porphyry. Other outcrops of propylite show textures suggesting that the host rock was andesite breccia. On the west side of the East Fork-Galore Creek, strong propylitic alteration is superimposed on hornblende syeno-diorite. It appears, therefore, that much of the propylite was originally a syeno-diorite intrusive rock and is part of the syenitic complex.

Chlorite or chlorite-potash feldspar alteration is also the most common form of alteration in the Triassic volcanics. This alteration is commonly not as intense as that termed propylitic, and the original pyroclastic texture is readily discernible. Weak disseminated chalcopyrite usually accompanies pink feldspar alteration of andesite. The main occurrence of this type of alteration and mineralization on the claims is along shear zones in andesite in and near the Canyon fault.

What may be an alteration of syenite or a feature of late stage crystallization is the previously described occurrence of violet colored syenite. The occurrence of this distinctively colored rock is closely related to chalcopyrite, bornite and magnetite mineralization and also to other alteration minerals, epidote, biotite, actinolite and garnet. It occurs as veinlets, dikes or irregular plugs replacing hornblende syenite or syeno-diorite.

The only interesting occurrence of chalcopyrite and bornite, in the Stikine East sill, outcrops near the northern end of the intrusive. Here, the disseminated sulfides are associated with veinlets of violet feldspar and aplite. Disseminated bornite and chalcopyrite, along with quartz-chalcopyrite hematite veining occurs in syenite on Kennco ground in this locality. Disseminated chalcopyrite occurs in syenite on Stikine East ground at a point 600' north of the Kennco boundary, at the Murray Showing. A 39' sample cut east-west across syenite outcrops here has an average assay of 0.10% copper.

Violet feldspar replacement associated with strong magnetite occurs on Kennco ground near the head of the West Fork of Galore Creek, and also in outcrops on the West side of the East Fork 1500' south of Anuk base camp. The most common copper bearing rock in the Copper Canyon stock is an equigranular syenite composed of equal amounts of crystals of violet colored feldspar and irregular mafic grains. Occurrence of this unusual

colored feldspar apparently indicates proximity to copper mineralization and may be useful as a rough guide to areas of important copper localization.

Near the southeast border of the Stikine East claims, along what is termed the Southeast fault, the rocks are strongly sericitized and pyritized and have a bleached, oxidized appearance. This type of alteration is not common over large areas and appears to be confined to fault zones. The altered rock in one area along the fault has a porphyritic texture and is possibly an altered syenite porphyry intrusive. The average of an 86' sample cut across this intrusive is 0.03% Cu, with Tr. Au and Ag.

Twelve stream sediment samples from streams on Stikine East ground and eight from Copper Canyon and South 110 Creeks were collected by Mr. Lammle. These samples 71 through 78, 675 through 680 and 707 through 712 are shown on the accompanying map, along with their PPM Cu values.

The samples taken in the southern part of the Stikine East ground, 675, 707, and 708 all have values below the local threshold value of 180 PPM. On the other hand, except for samples 680 and 712, the stream sediments in the area of syenite outcrops are all well above threshold, and 710, with 800 PPM, compares with some values obtained in the Copper Canyon area. But in general, the highest values on Stikine East ground are 5 to 10 times less than the highest values from Copper Canyon and South 110 Creeks, which drain areas of relatively strong copper mineralization. The anomalous stream sediment values on East Stikine ground cannot, therefore, be considered indicative of the presence of important copper mineralization but they do justify further investigation of covered areas in the vicinity of syenite outcrops.

Mr. Lammle has pointed out the fact that syenitic rocks contain anomalous amounts of Pb as Pb atoms in the lattices of potash feldspars. The high Pb values in samples 75 through 78 and 707 through 711 may be explained in this way.

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SUMMARY OF GEOCHEM RESULTS - EAST STIKINE AREA

LOCALITY	Sample No.	ml. HM	P. P. M. Cu	Zn	Pb	Mo	Ni
South 110 Creek	71	20	5000	250	12	4	0
	72	18	2000	150	0	2	0
	73	1	150	12	0	2	0
	74	5	125	50	0	2	0
Copper Canyon	75	20	2500	100	50	24	0
	76	20	500	250	50	24	0
	77	20	250	150	37	16	0
	78	6	900	300	125	2	0
Stikine East Group	675	2	125	0	50	0	0
	676	5	400	0	0	1	5
	677	5	350	0	0	4	0
	678	11	300	0	0	8	0
	679	7	500	0	6	8	0
	680	4	125	0	25	1	0
	707	3	150	0	38	1	0
	708	1	75	0	12	0	0
	709	26	300	25	50	4	0
	710	10	800	25	38	2	0
	711	8	500	0	12	0	0
	712	2	0	0	6	2	0

N.B. Regional Threshold Values -PPM

HM	-	2	
*Cu	-	90	*Local Threshold
Zn	-	35	for Cu- Galore
Pb	-	12	Creek and vicinity
Mo	-	2	180 PPM.

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CONCLUSIONS AND RECOMMENDATIONS

There are no occurrences of economically interesting copper mineralization outcropping on the Stikine East claims, but there are covered areas worthy of further exploration. Syenite underlying covered areas between the North 110 fault and Camp fault may be more strongly altered and mineralized than outcrops would suggest. I.P. investigation of this area, especially over the ground west of the Murray Showing and south of the Camp fault (Zone E) would indicate the limits of sulfide mineralization here. Stripping with bulldozer might be feasible in this locality.

The large covered area between the Camp fault, Canyon fault and Galore Creek (Zone D) should be covered by I.P. survey. In this area it is possible that a large zone of east-west trending mineralized fractures and shears in andesite may be present. This mineralization would have to be of much higher grade and tonnage than that exposed along Galore Creek to be of economic interest. Another factor which makes Zone D interesting is the possibility that it could be underlain by mineralized syenite. Except for small outcrops of andesite along part of Galore Creek, there are no outcrops between this covered area and outcrops of syenite along the West Fork of Galore Creek, about one mile to the west. Although the "Central Orebody" on Kennco ground strikes northerly, the strong east-west structures associated with the Camp fault -- Dendritic Creek trend may also be favourable for mineralization.

Respectfully submitted,

R.E. Gale

R.E. Gale.

REG:sm

STIKINE EAST

(KENNCO) STIKINE COPPER

BIK 226 BIK 81 BIK 82 BIK 83 BIK 84 BIK 85 BIK 86

BIK 225 BIK 75 BIK 76 BIK 77 BIK 78 BIK 79 BIK 80

BIK 224 BIK 69 BIK 70 BIK 71 BIK 72 BIK 73 BIK 74

BIK 223 BIK 63 BIK 64 BIK 65 BIK 66 BIK 67 BIK 68

BIK 222 BIK 57 BIK 58 BIK 59 BIK 60 BIK 61 BIK 62

BIK 221 BIK 51 BIK 52 BIK 53 BIK 54 BIK 55 BIK 56

BIK 45 BIK 37 BIK 29

BIK 44 BIK 36 BIK 28

BIK 43 BIK 35 BIK 27

BIK 50 BIK 42 BIK 34 BIK 26

BIK 49 BIK 41 BIK 33 BIK 25

BIK 48 BIK 40 BIK 32 BIK 24 BIK 16

BIK 47 BIK 39 BIK 31 BIK 23 BIK 15

BIK 46 BIK 38 BIK 30 BIK 22 BIK 14

GALORE CREEK

CANYON FAULT

ZONE D

ZONE E

CAMP FAULT

NORTH 110 FAULT

SCUD FAULT ZONE

SNOWFIELD GLACIER

MORAINE

UNCONFORMITY

MURRAY SHOWING 39'-0.10% Cu

ASARCO-SILVER STANDARD BASE CAMP (ANUK BASE)

EAST FORK GALORE CREEK

SOUTH 110 CREEK

Cpy Py Mag Gal Moly Bn

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 622 MAP 2

LEGEND

- OVERBURDEN
- 10 MORAINE
- 9 SYENITE PORPHYRY SYENO-DIORITE
- 8 LATE-SYENITE PORPHYRY DIKE
- 7 BASIC DIKE
- 6 FELSIC DIKE
- 5 AUGITE PORPHYRY BASALT
- 4 ANDESITIC VOLCANIC ROCKS
- 3 UNDIFFERENTIATED SEDIMENTARY ROCK
- 2 CALCAREOUS SHALE

  — TRIASSIC
- 1 PROPYLITE
- FAULT (DASHED - INFERRED)
- BEDDING
- ROCK CONTACT (DASHED - INFERRED)
- COPPER OCCURRENCE
  Cpy - CHALCOPYRITE Bn - BORNITE
  Py - PYRITE Moly - MOLYBDENITE
  Mag - MAGNETITE Gal - GALENA
- CLAIM POST
- CLAIM LINE
- MAGNETOMETER SURVEY LINE
- CLAIM BOUNDARY
- DIAMOND DRILL HOLE COLLAR
- HELICOPTER PAD

STREAM SEDIMENT SAMPLES - Cu. PPM

- 0 - 46
- 46 - 90
- 91 - 180
- 181 - 360
- 361 - 500
- 501 - 1000
- 1001 - 5000

GLACIER

SCUD FAULT

ZONE FAULT

BIK 85 BIK 86 BIK 79 BIK 80 BIK 73 BIK 74 BIK 68 BIK 67 BIK 62 BIK 61 BIK 56 BIK 55 BIK 37 BIK 29 BIK 21 BIK 13 BIK 36 BIK 28 BIK 20 BIK 12 BIK 35 BIK 27 BIK 19 BIK 11 BIK 34 BIK 26 BIK 18 BIK 10 BIK 5 BIK 33 BIK 25 BIK 7 BIK 9 BIK 4 BIK 32 BIK 24 BIK 16 BIK 8 BIK 3 BIK 31 BIK 23 BIK 15 BIK 7 BIK 2 BIK 30 BIK 22 BIK 14 BIK 6 BIK 1

MORAINE

UNCONFORMITY

SNOWFIELD

PENNY GP.

STIKINE EAST

SOUTHEAST FAULT

COPPER CANYON FAULT

DOGHOUSE CK.

COPPER CANYON CK.

COPPER CANYON CAMP

86' Sample 0.03% Cu

Cpy

S.W. POTASH

622

TO ACCOMPANY REPORT
Dated: DEC 22, 1964
By: R.E. GALE
Loc: 57° 131° S.E.

R.E. Gale

AMERICAN SMELTING & REFINING CO.
VANCOUVER B.C.
SCUD VENTURE

SCUD RIVER DISTRICT
LIARD M.D. B.C.

STIKINE EAST GP.
GEOLOGY

DATE	SCALE	DRAWN	APPROVED	FILE NO.
DEC 21 1964	1"=500' CONTOURS 50'	R.E.G.		MAP NO. TWO

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