COMINCO LTD.

EXPLORATION

NTS: 93L/7E

WESTERN DISTRICT

24 February 1982

ASSESSMENT REPORT

OF

GEOLOGICAL MAPPING, AND SOIL, SILT AND ROCK GEOCHEMISTRY

ON THE BUCK CREEK PROPERTY

GODFREY, 5 UNITS; BUCK, 20 UNITS; BETH 3, 10 UNITS; LORNE, 8 UNITS; HC, 4 UNITS;

BETH 2, 2 UNITS; BETH 5, 1 UNIT, CLOUD, 3 UNITS; BETH 4, 8 UNITS: BETH 1, 9 UNITS;

BUCK-BOB CREEK JUNCTION AREA, OMINECA M.D.

WORK PERFORMED: JUNE 9 TO 22, 1981

LATITUDE: 54°18'N LONGITUDE: 126°38'W

PART 1 & 2

REPORT BY: J.C. CAELLES

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ATTACHMENTS

PLATES

COMINCO LTD.

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ASSESSMENT REPORT

1. INTRODUCTION

The Buck property consists of 70 units located about 12 km southwest of Houston, B.C. The prospect was optioned by Bethlehem from Lorne Hansen and Gerry Creech in February 1981. Cominco conducted exploration work for Bethlehem in 1981.

The Buck property is a low-grade, large tonnage Au-(Ag) prospect with small amounts of Zn, Pb and Cu. The mineralization occurs in veinlet fillings and disseminations in felsic volcanics, possibly a volcanic dome, lithologically correlated with the Jurassic portion of the Hazelton Group. The property has been prospected for its precious metals content, and as a prophyry copper prospect, a massive sulphide situation, and presently a large-tonnage, low-grade gold deposit.

In 1981 Cominco mapped the property and collected 468 soil, 11 silt and 38 rock samples and completed about 10 km of IP survey. Field work was carried out between June 9 and 22, 1981; a detail breakdown of expenditures is shown in Exhibit "A"

2. LOCATION AND ACCESS

The Buck Creek property is located in the Omineca Mining Division, B.C. sheet 92L/7E, about 12 km southwest of Houston (Plate 1). Access is by the Buck Flats Road that leaves Highway #16 about 1.6 km west of Houston. Total distance from Houston is 15 km of good gravel road.

The western half of the property has a subdued relief, gradually rising in elevation from 2,500 ft. to 3,200 ft.; the eastern part of the property is steep and ranges in elevation from 3,200 ft. to 4,400 ft. The lower parts of the claims have been logged at least 30 years ago and are covered with new growth of conifers; several hayfields exists along the Buck Creek, where the buildings are (Plate 2). Access to any place of the western part of the property could be easily gained.

3. PROPERTY AND OWNERSHIP

The Buck Creek property consists of 70 unit grouped in ten claims: Godfrey (5 units), Buck (20 units), Beth 3 (10 units), Lorne (8 units), HC (4 units), Beth 2 (2 units), Beth 5 (1 unit), Cloud (3 units), Beth 4 (8 units) and Beth 1 (9 units). Originally, Bethlehem Copper Corporation optioned Godfrey, Buck, Lorne, HC and Cloud claims from Lorne Hansen and Gerry Creech in February 1981; subsequently, that Corporation staked the Beths claims, which, due to the 2-km perimeter clause, are subject to the agreement (Plate 2).

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4. HISTORY

Placer gold was found in Bob Creek, tributary of Buck Creek, in 1914 when it was traced back to its source, a 600m long gossan outcropping along the Bob Creek gorge. Since the discovery of the mineralized outcrop the property has had a long history of exploration, mainly as a Au-Ag-Zn prospect, as a prophyry copper showing, recently as a massive sulphide situation, and presently as a large-tonnage, low-grade Au-Ag deposit. Five diamond drilling programs have completed 5,633 feet of BQ drilling. A small scale mining attempt by Houston Gold Mines in 1936 produced 85 tons of "ore" from a 30 ft. adit with an estimated grade of 0.064 oz/ton Au, 1.0 oz/ton Ag, and 1.1% Zn.

The mineralized gossan situated along the Bob Creek gorge remained the focus of exploration programs until 1968, where 18 drill holes were bored totalling 3,388 ft.

Exploration programs, apparently in search for massive sulphides, focussed on the area south of Bob Creek gorge. Three soil geochemical and one IP surveys were carried out in the post-1968 period.

In 1981, Cominco sampled the property and collected 648 soil, 11 silt and 38 rock samples from an area that essentially covered the old Dupont grid; the silt and soil samples were analysed for gold and arsenic and the rock samples for copper, lead, zinc, silver, gold, and arsenic. Approximately 10 km of IP survey were carried out over the geochemical grid.

5. GEOLOGY

5.1 Regional Geological Setting

The regional geology around the Buck Creek property consists of a diverse suite of Mesozoic and Tertiary volcanic rocks and a number of small intrusions. The volcanic rocks have been divided into a lower sequence of probable Early-Middle Mesozoic age (Church, 1973), believed to be equivalent to the Hazelton Group, and an upper sequence formed by strata emplaced in the Upper Cretaceous, the Eocene, and the Miocene Periods.

The igneous intrusions are made up of acidic, intermediate, and basic alkaline types that are likely younger than the lower volcanic series and some appear to be volcanic necks and feeders to the Tertiary volcanic strata (Church, 1970; 1973).

5.2 Local Geology

Outcrops are very scarce in the western half of the property, resulting in about 3-5% rock exposure. Conversely, the eastern half with its steep relief consists of almost continuous outcrops.

The property is underlain by mainly acidic and intermediate volcanics, considered to be Early to Middle Mesozoic in age by Church (1973) and a part of the Jurassic portion of the Hazelton Group by others (e.g., Ney et al., 1972), and Upper Cretaceous (?) and Eocene basalt and andesite flows (Plate 2).

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The acidic to intermediate volcanic rocks, which host the Au-Ag (Zn-Pb - Cu) mineralization, are the oldest rocks in the property. The most conspicuous outcrop is exposed in a 600 m long canyon along the Bob Creek. It is made up of fine-to coarse-grained dacite to rhyolite tuffs and flows, in parts brecciated and containing variable amounts of angular and rounded fragments of the same rock composition. To the west and south of the gorge numerous trenches and few outcrops expose mainly dacite to rhyolite tuffs and flows with subordinate amounts of "green" andesite; some of the outcrops are composed of rhyolite breccia containing rounded fragments. To the south, in the Lorne claims, a small creek exposes dacitic tuffs, very similar in macroscopical appearance to the ore-hosting "dust tuff" described from the Sam Goosly deposit. To the west of the main road that leads to Houston, few outcrops are made of dacitic tuffs, "green" andesite, and "green" andesite porphyry; the latter two volcanic rocks are considered essentially coeval with the more acidic volcanic rocks.

A gabbro stock about 500m in diameter, located straddling the Lorne-Buck claim boundary, has intruded the acidic volcanics. The gabbro is medium grained, massive, equigranular, fresh and composed of about equal amounts of plagioclase and amphibole (pyroxene?). Its age is considered to be post-mineralized volcanics.

Feldspar porphyry dykes of monzonitic composition were observed in two places: in a roadcut about 60 m to the west of the Houston-Bob Creek road junction, and in a trench by a logging road north of Bob Creek. In the first place it cuts "green" andesite and in both places is made up of medium-to coarse-grained matrix with about 30-35% feldspar phenocrysts measuring up to 6-8 mm in length. Its age is post-felsic volcanics and possibly pre-Eocene basalt.

The Upper Cretaceous (?) to Eocene extrusive rocks consists of predominantly basalt flows and subordinate amounts of "red" andesite flows. These andesites have been assigned to the younger volcanic unit because of its "red" colour indicative of an oxidizing environment of emplacement, condition that apparently did not prevail during the extrusion of the older (?) "green" andesites. The writer believes that the younger volcanics are resting unconformably upon the older extrusive rocks based on the known outcrop distribution of the two units; the only contact observed between the two sequences, located at the Buck-Bob Creek junction, is small and leaves the possibility of a fault contact open.

Although the exposure of the acidic volcanics is very poor, it appears that they overlay a felsite dome, possibly an ancient eruption centre with its vent located in and around the altered and mineralized part of the Bob Creek gorge. This interpretation is substantiated by the occurrence of rhyolite breccias in only this area, as well as by a noticeable decrease in their fragment size away from the gorge.

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6. MINERALIZATION AND ALTERATION

Sulphide mineralization is widespread in the acidic volcanics. The scarce outcrops show strong lixiviation; the conversion of sulphides to iron oxides (limonite) has developed an impressive gossan along the Bob Creek gorge. Sulphides have been preserved only in patches where the host rock is less altered or more pervasively silicified.

The sulphide minerals in order of abundance are pyrite, sphalerite, galena and chalcopyrite. The distribution of total sulphides is depicted in Plate 2. The patchy and spotty pyrite content,, in most cases deduced by the amount and nature of "limonite", varies between 1% and 10%.

The economic sulphides are much less abundant and only traces have been preserved in some outcrops. In flows and tuffs, the metallic minerals occur in veinlets, stringers, and, less prominently, as disseminations. In breccias, the sulphides are present in veinlets, disseminations, and coarse aggregates of grains within the matrix, and as fracture fillings in the fragments.

The strongly-oxidized and leached rocks show a gossan mineral assemblage of jarosite, hematite, hydrozincite, and gypsum flakes in fractures. The "limonites" are both transported and indigneous.

The felsic volcanics, exposed in the Bob Creek gorge and in trench exposures south of the canyon, exhibit intense hydrothermal alteration; mainly sericitization and subordinate kaolinization of feldspars is very extensive. In the andesites, ferromagnesian minerals have been locally chloritized. Along the small creek on the central part of the Lorne claim, dacite tuffs show variable degrees of kaolinization, sericitization, and possibly ankeritization. Outside these two areas the rocks are fresh and void of sulphides.

The writer postulates that the Au-Ag (Zn-Pb-Cu) mineralization in the Buck Creek property is epignetic, deposited by circulation of hydrothermal fluids that are very likely genetically related to the predominantly felsic volcanism. If that hypothesis is correct lithological control of mineralization could be important, mainly through control of mineralizing fluid circulation by rock porosity and permeability.

7. GEOCHEMISTRY

The Buck property, specially the area around the Bob Creek gorge and immediately to the south, has been soil sampled three times prior to Cominco 1981 survey. Although the claims were mainly explored for its precious metals content, gold was never determined. It was hoped that the new soil geochemistry together with a more detailed IP survey would spot drill targets.

A grid of flagged lines was put on the property using a compass. The lines were spaced trying to duplicate Dupont's 1978 grid to make use of the available Ag, Zn, and Cu measurements. In 1981 a total of 468 soil, 11 silt, and 38 rock samples

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were taken. The soil samples were taken at 25 m intervals along 17 lines, each approximately 1.2 km long (Plate 4). All samples from lines running over known mineralization were analyzed, but only every second sample (50 m interval) from lines farther away. The soil samples were taken with a shovel at a depth of 20 - 25 cm, always below the organic horizon and presumably from the B-horizon, and put in 3" x 5" kraft paper bags. The soil and silt samples were dried and sieved to <80 mesh and the rock samples pulverzied to <200 mesh in the Cominco Laboratory (Vancouver). The methods of sample digestion and geochemical analysis utilized at the Cominco Laboratory were:

Material	Elements	Digestion Method	Determination Method
rock	Cu, Pb, Zn, and Ag.	aqua regia	atomic absorption spectrometry.
silt	Cu, Pb and Zn	dilute nitric acid	atomic absorption spectrometry.
rock, silt, soil	Au	aqua regia and solvent extraction.	atomic absorption spectrometry.
rock, silt, soil	As	potassium pyrosulfate fusion and arsene evolution.	colorimetric determination

The results obtained are shown in Appendices 1, 2, and 3 and the sample locations are depicted in Plates 3 and 4.

The summary of Cominco soil data is:

	Au (ppb)	As (ppm)
Number of analyses	468	425
Highest value	1460	398
Lowest value	<10	<2
Geometric value	6.5	21.0
Standard deviation	13.3	49.5

The soil samples were analyzed in duplicate and, arbitrarily, a sample was considered anomalous when at least one of the two determinations was $\geq$10 ppb, that is, above detection limit. A threshold of 50 ppm was chosen for arsenic based on the cumulative probability plot.

The arsenic results of Plate 4 define three anomalous areas containing >50 ppm As. The arsenic geochemistry mimics that of gold quite closely.

The "anomalous" gold values obtained from soil samples are not very high. The writer believes that because the anomalous values are grouped defining "anomalous" areas and the main gold anomalies A, B, and C occupy a zone of high IP, a drill test of the newly defined zones is warranted.

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8. GEOPHYSICS

Cominco carried out about 10 km of IP survey in 1981. The geophysical program confirmed a broad IP anomaly reported by Nevin (1977), and provided more detailed information.

The interpretation of the 1981 geophysical data suggests that values of 20 milliseconds are possibly anomalous and of 30 milliseconds definitely anomalous (Jan Klein, pers. comm.). In summary, the IP results delineated two anomalous areas, defined by the 20 millisecond contour, of which the most extensive one is partly coextensive with gold soil anomalies A, B, and C.(See assmt. Rept.) This overlapping strongly suggests that the gold geochemical anomaly is associated with sulphides at depth, fact known by outcrop and drill core observations in other areas.

9. DISCUSSION OF RESULTS AND RECOMMENDATIONS

The geological environment of the Buck Creek property is considered to be favourable for the deposition of a large-tonnage, low grade gold deposit. The precious-base metals mineralization is physically related to a dome of predominantly felsic-intermediate volcanics and occurs accompanied by variable but often intense sericitization, kaolinization, and possibly minor ankeritization. The volcanics have been correlated with similar rocks that occur at the Sam Goodly deposit, located 27 km to the SE, generally considered to belong to the Jurassic portion of the Hazelton Group.

The consideration of all the information makes the writer conclude that the property has not been adequately tested for a low-grade, large-tonnage gold deposit, as the data warrants. A percussion drill program will be proposed for 1982 to test that possibility, as there is plenty of untested potential ground for ore-grade mineralization.

Report by: Juan C. Caelles
S.C. Caelles, Project Geologist

Endorsed by: W. J. Wolfe
W.J. Wolfe, Assistant Manager

Approved for Release by W. J. Wolfe for
G. Harden, Manager
Exploration
Western District

DISTRIBUTION

Western District	(1)
Mining Recorder's	(2)
Lorne Hansen	(1)
JCC	(1)

JCC/ls

IN THE MATTER OF THE B.C. MINERAL ACT

AND IN THE MATTER OF A GEOLOGICAL PROGRAMME

CARRIED OUT ON MINERAL CLAIMS BUCK, LORNE, CLOUD AND BETH #4

ON THE BUCK CREEK PROPERTY

LOCATED 12 KM SOUTHWEST OF HOUSTON IN THE OMINECA MINING DIVISION

OF THE PROVINCE OF BRITISH COLUMBIA MORE PARTICULARLY

NTS: 92L/7E

A F F I D A V I T

I, Juan C. Caelles, of the City of Vancouver in the Province of British Columbia make oath and say: -

1. THAT I am employed as a geologist by Cominco Ltd. and, as such, have personal knowledge of the facts to which I hereafter depose;

2. THAT annexed hereto and marked as "Exhibit A" to this my affidavit is a true copy of expenditures incurred on geological mapping and soil/rock survey on the mineral claims BUCK, LORNE, CLOUD, AND BETH #4.

3. THAT the said expenditures were incurred between the 9th and 22nd day of June 1981, and between the 14th day of August and 13th day of October 1981 for the purpose of the mineral exploration on the above noted claims.

Juan C. Caelles

J.C. Caelles

JCC/ls
24 February 1982

EXIHIBIT "A"

GEOLOGICAL AND GEOCHEMICAL SURVEY COSTS

SALARIES

J.C. Caelles, project geologist	13 days field 16 days office	June 9-22 Aug. 14,17,18,26;Sept 22,23, 24,25,28,29,30;Oct.1,2,5,6,13		
P.N. Robertson, geologist assistant	13 days field	June 9-22		
D.R. Brox, sampler	13 days field	June 9-22		
S.A. Knight, sampler	13 days field	June 9-22		
R.Y. Watanabe, senior geologist	3 days field	June 19-21		
H. Hamilton, draftsperson		Oct:34½ hrs x $18.00		$9,949.43

ROOM AND BOARD

4 people x 13 days x $37.89 per day	$1,970.28	
1 person x 3 days x $50.00	150.00	
		$2,120.28

COMINCO LABORATORY (VANCOUVER)

468 soils x $6.85	$3,205.80	
11 silts x $12.80	140.80	
38 rocks x $13.00	494.00	
		$3,840.60

TRANSPORTATION

Truck rental, 2 trucks	$1,596.86	
Fuel	461.47	
		$2,058.33

MOBILIZATION AND DEMOBILIZATION

3 days for everybody excluding RYW and HH	$1,379.85	
3 days board and room (4 people x 3 x $37.89 per day)	454.68	
		$1,834.53
	TOTAL	$ 19,803.17

JCC/ls
24 February 1982

COMINCO LTD.

EXPLORATION WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

I, JUAN C. CAELLES, OF THE CITY OF VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:

1. THAT I am a geologist residing at 2930 West 33rd Avenue, Vancouver, British Columbia, with a business address at 409 Granville Street, Vancouver, British Columbia.

2. THAT I graduated with a.B.Sc. in Geology from Universidad de Córdoba, Córdoba, Argentina in 1965 and with a PhD. in Geology from Queen's University, Kingston, Ontario in 1979.

3. THAT I have practised Geology with Sherritt Gordon Mines from 1968 to 1968 and with Cominco from 1974 to present.

DATED THIS _____DAY OF_____1982 AT VANCOUVER, BRITISH COLUMBIA.

Signed: Juan C. Caelles
J.C. CAELLES, Ph.D.

APPENDIX 1

COMINCO 1981 SOIL GEOCHEMICAL ANALYSES

BUCK CREEK JOB 081 - 00005

REPORTING DATE 20 AUG 1981 PAGE 1

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu ppm	Pb ppm	Zn ppm	Au ppm	As ppm
S81 10415	S	93L7E -1	-10050	+10850	29	9	77	<10	23
S81 10414	S	93L7E -1	-10100	+10850	37	20	112	<10	22
S81 10413	S	93L7E -1	-10150	+10850	19	6	72	<10	12
S81 10412	S	93L7E -1	-10200	+10850	12	7	93	<10	8
S81 10411	S	93L7E -1	-10250	+10850	14	7	103	<10	16
S81 10410	S	93L7E -1	-10300	+10850	42	20	103	<10	14
S81 10409	S	93L7E -1	-10350	+10850	61	16	125	<10	4
S81 10416	S	93L7E -1	-10400	+10850	68	<4	98	10	17
S81 10417	S	93L7E -1	-10450	+10850	14	12	156	<10	13
S81 10418	S	93L7E -1	-10500	+10850	47	42	302	<10	13
S81 10419	S	93L7E -1	-10550	+10850	21	18	134	<10	17
S81 10420	S	93L7E -1	-10600	+10850	27	12	96	<10	10
S81 10421	S	93L7E -1	-10650	+10850	10	8	145	<10	15
S81 10422	S	93L7E -1	-10700	+10850	10	<4	98	<10	13
S81 10423	S	93L7E -1	-10750	+10850	18	7	95	<10	9
S81 10424	S	93L7E -1	-10800	+10850	25	7	92	<10	9
S81 10425	S	93L7E -1	-10850	+10850	14	6	126	<10	5
S81 10426	S	93L7E -1	-10900	+10850	12	5	108	<10	4
S81 10427	S	93L7E -1	-10950	+10850	15	<4	43	<10	2

BUCK CREEK JOB: 0811 -- 00005

REPORTING DATE 20 AUG 1981 PAGE 2

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10396	S	93L7E -1	-9950	+10450	17	6	88	<10	7
S81 10395	S	93L7E -1	-10000	+10650	18	5	56	<10	18
S81 10394	S	93L7E -1	-10050	+10650	18	12	88	<10	12
S81 10393	S	93L7E -1	-10100	+10650	14	4	144	<10	12
S81 10392	S	93L7E -1	-10150	+10650	53	25	213	10	26
S81 10391	S	93L7E -1	-10200	+10650	29	43	201	<10	11
S81 10390	S	93L7E -1	-10250	+10650	13	8	89	<10	7
S81 10389	S	93L7E -1	-10300	+10650	10	10	79	<10	18
S81 10388	S	93L7E -1	-10350	+10650	37	22	127	<10	24
S81 10397	S	93L7E -1	-10400	+10650	19	10	105	<10	7
S81 10398	S	93L7E -1	-10450	+10650	18	6	56	<10	10
S81 10399	S	93L7E -1	-10500	+10650	10	26	123	<10	17
S81 10400	S	93L7E -1	-10550	+10650	20	13	101	<10	27
S81 10401	S	93L7E -1	-10600	+10650	35	10	93	<10	10
S81 10402	S	93L7E -1	-10650	+10650	25	6	108	<10	14
S81 10403	S	93L7E -1	-10700	+10650	13	6	104	<10	14
S81 10404	S	93L7E -1	-10750	+10650	13	6	97	<10	4
S81 10405	S	93L7E -1	-10800	+10650	14	5	64	<10	7
S81 10406	S	93L7E -1	-10850	+10650	14	5	163	<10	9

RUCK CREEK

JOB 0831 - 00003

REPORTING DATE 20 AUG 1981

PAGE 3

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10407	S	93L7E	-1	-10900	+10650	14	5	101	<10	9
S81 10408	S	93L7E	-1	-10950	+10650	16	4	71	<10	2
S81 08030	S		-1	-0010000	+0010000				<10	23
S81 08031	S		-1	-0010050	+0010000				<10	12
S81 08032	S		-1	-0010100	+0010000				<10	15
S81 08033	S		-1	-0010150	+0010000				<10	19
S81 08034	S		-1	-0010200	+0010000				<10	15
S81 08035	S		-1	-0010250	+0010000				<10	11
S81 08036	S		-1	-0010300	+0010000				<10	15
S81 08037	S		-1	-0010350	+0010000				<10	11
S81 08038	S		-1	-0010400	+0010000				<10	20
S81 08039	S		-1	-0010450	+0010000				<20	5
S81 08040	S		-1	-0010500	+0010000				<10	19
S81 08041	S		-1	-0010550	+0010000				<10	28
S81 08042	S		-1	-0010600	+0010000				<10	43
S81 08043	S		-1	-0010650	+0010000				80	200
S81 08044	S		-1	-0010700	+0010000				<10	15
S81 08045	S		-1	-0010750	+0010000				<10	15
S81 08046	S		-1	-0010800	+0010000				<10	4

BUCK CREEK

JOB UNI = 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08047	S		-1	-0010850	+0010000			<10	15
S81 08048	S		-1	-0010900	+0010000			<10	15
S81 08049	S		-1	-0010950	+0010000			240	187
S81 08050	S		-1	-0011000	+0010000			220	25
S81 08051	S		-1	-0010000	+0009775			<10	19
S81 08052	S		-1	-0010025	+0009775			<10	11
S81 08053	S		-1	-0010050	+0009775			<10	13
S81 08054	S		-1	-0010100	+0009775			<10	17
S81 08055	S		-1	-0010125	+0009775			<10	11
S81 08056	S		-1	-0010150	+0009775			<10	13
S81 08057	S		-1	-0010175	+0009775			<10	17
S81 08058	S		-1	-0010200	+0009775			<10	21
S81 08059	S		-1	-0010225	+0009775			<10	11
S81 08060	S		-1	-0010250	+0009775			<10	9
S81 08061	S		-1	-0010275	+0009775			<10	8
S81 08062	S		-1	-0010300	+0009775			<10	20
S81 08063	S		-1	-0010325	+0009775			22	15
S81 08064	S		-1	-0010350	+0009775			<10	11
S81 08065	S		-1	-0010375	+0009775			<10	15

BUCK CREEK JOB . 0111 — 00005

REPORTING DATE 20 AUG 1981 PAGE 5

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08066	S	-1	-0010400	+0009775				<10	5
S81 08067	S	-1	-0010425	+0009775				<10	7
S81 08068	S	-1	-0010450	+0009775				<10	19
S81 08069	S	-1	-0010475	+0009775				80 <10	15
S81 08070	S	-1	-0010500	+0009775				<10	21
S81 08071	S	-1	-0010525	+0009775				<10	21
S81 08072	S	-1	-0010550	+0009775				<10	15
S81 08073	S	-1	-0010575	+0009775				<10	35
S81 08074	S	-1	-0010600	+0009775				40 <10	23
S81 08075	S	-1	-0010625	+0009775				<10	30
S81 08076	S	-1	-0010650	+0009775				<10	49
S81 08077	S	-1	-0010675	+0009775				<20 <50	22
S81 08078	S	-1	-0010700	+0009775				<10	25
S81 08079	S	-1	-0010725	+0009775				<10	23
S81 08080	S	-1	-0010750	+0009775				<10	24
S81 08081	S	-1	-0010775	+0009775				10 82	59
S81 08082	S	-1	-0010800	+0009775				<10	26
S81 08083	S	-1	-0010825	+0009775				<10 340	23
S81 08084	S	-1	-0010850	+0009775				<10 <10	30

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08085	S		-1	-0010875	+0009775			<10	40
								<10	
S81 08086	S		-1	-0010900	+0009775			<10	24
								<10	
S81 08087	S		-1	-0010925	+0009775			100	218
								70	
S81 08088	S		-1	-0010950	+0009775			<10	41
								140	
S81 08089	S		-1	-0010975	+0009775			<10	53
								20	
S81 08090	S		-1	-0011000	+0009775			<10	69
								40	
S81 08091	S		-1	-0011025	+0009775			<10	66
								<10	
S81 08092	S		-1	-0011050	+0009775			<10	21
								<10	
S81 08093	S		-1	-0011075	+0009775			60	218
								<10	
S81 08094	S		-1	-0011100	+0009775			10	27
								<10	
S81 08095	S		-1	-0011125	+0009775			<10	15
								<10	
S81 08096	S		-1	-0011150	+0009775			<10	23
								<10	
S81 08097	S		-1	-0010000	+0009650			<10	5
								<10	
S81 08098	S		-1	-0010025	+0009650			<20	6
								<50	
S81 08099	S		-1	-0010050	+0009650			<10	13
								<10	
S81 08100	S		-1	-0010075	+0009650			<10	13
								<10	
S81 08101	S		-1	-0010100	+0009650			20	4
								<10	
S81 08102	S		-1	-0010125	+0009650			<10	15
								<20	
S81 08103	S		-1	-0010150	+0009650			<10	8
								<10	

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08104	S	-1	-0010175	+0009650				<10	10
S81 08105	S	-1	-0010200	+0009650				<10	9
S81 08106	S	-1	-0010225	+0009650				<10	9
S81 08107	S	-1	-0010250	+0009650				<10	4
S81 08108	S	-1	-0010275	+0009650				<10	4
S81 08109	S	-1	-0010300	+0009650				<10	7
S81 08110	S	-1	-0010325	+0009650				<10	2
S81 08111	S	-1	-0010350	+0009650				<10	5
S81 08112	S	-1	-0010375	+0009650				230	4
S81 08113	S	-1	-0010400	+0009650				<10	9
S81 08114	S	-1	-0010425	+0009650				<10	25
S81 08115	S	-1	-0010450	+0009650				<10	13
S81 08116	S	-1	-0010475	+0009650				24 <10	8
S81 08117	S	-1	-0010500	+0009650				<10	7
S81 08118	S	-1	-0010525	+0009650				10 <10	7
S81 08119	S	-1	-0010550	+0009650				<10	4
S81 08120	S	-1	-0010600	+0009650				<10	17
S81 08121	S	-1	-0010625	+0009650				<10	16
S81 08122	S	-1	-0010650	+0009650				<10	18

BUCK CREEK — JOB 081 — 00005

REPORTING DATE 20 AUG 1981 — PAGE 8

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08123	S	=1	=0010675	+0009650				<10	20
								<10	
S81 08124	S	-1	-0010700	+0009650				<10	30
								<10	
S81 08125	S	-1	-0010725	+0009650				<10	24
								<10	
S81 08126	S	=1	=0010750	+0009650				<10	54
								40	
S81 08127	S	-1	-0010775	+0009650				20	52
								<10	
S81 08128	S	-1	-0010800	+0009650				10	2
								40	
S81 08129	S	=1	=0010825	+0009650				<10	44
								<10	
S81 08130	S	-1	-0010850	+0009650				<10	12
								<10	
S81 08131	S	-1	-0010875	+0009650				<10	30
								<10	
S81 08132	S	=1	=0010900	+0009650				10	30
								<10	
S81 08133	S	-1	-0010925	+0009650				<10	42
								<10	
S81 08134	S	-1	-0010950	+0009650				560	23
								30	
S81 08135	S	=1	=0010975	+0009650				<10	14
								<10	
S81 08136	S	-1	-0011000	+0009650				200	23
								<10	
S81 08137	S	-1	-0011025	+0009650				<10	10
								<10	
S81 08138	S	=1	=0011050	+0009650				<10	10
								<10	
S81 08139	S	-1	-0011075	+0009650				<10	5
								24	
S81 08140	S	-1	-0011100	+0009650				<10	5
								<10	
S81 08141	S	=1	-0011125	+0009650				<10	4
								<10	

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08142	S	-1	-0011150	+0009450				<10	22
								<10	
S81 08144	S	-1	-0010000	+0009550				<10	15
								10	
S81 08145	S	-1	-0010025	+0009550				<10	6
								<10	
S81 08146	S	-1	-0010050	+0009550				<10	4
								<10	
S81 08147	S	-1	-0010075	+0009550				20	3
								<10	
S81 08148	S	-1	-0010100	+0009550				<10	11
								<10	
S81 08149	S	-1	-0010125	+0009550				<10	7
								<10	
S81 08150	S	-1	-0010150	+0009550				<10	15
								<10	
S81 08151	S	-1	-0010175	+0009550				<10	15
								<10	
S81 08152	S	-1	-0010200	+0009550				<10	12
								<10	
S81 08153	S	-1	-0010225	+0009550				<10	5
								<20	
S81 08154	S	-1	-0010250	+0009550				<10	12
								<10	
S81 08155	S	-1	-0010275	+0009550				<10	11
								<10	
S81 08156	S	-1	-0010300	+0009550				<10	5
								<10	
S81 08157	S	-1	-0010325	+0009550				<10	51
								<10	
S81 08158	S	-1	-0010350	+0009550				<10	4
								<10	
S81 08159	S	-1	-0010375	+0009550				<10	12
								<10	
S81 08160	S	-1	-0010400	+0009550				<10	7
								<10	
S81 08161	S	-1	-0010425	+0009550				<10	4
								<10	

ROCK CREEK — BHP UNIT — 00005

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu ppm	Pb ppm	Zn ppm	Au ppb	As ppm
S81 08162	S		-1	-0010450	+0009550			<10	9
S81 08163	S		-1	-0010475	+0009550			<10	8
S81 08164	S		-1	-0010500	+0009550			<10	12
S81 08165	S		-1	-0010525	+0009550			<10	9
S81 08166	S		-1	-0010550	+0009550			<10	4
S81 08167	S		-1	-0010575	+0009550			<10	39
S81 08168	S		-1	-0010600	+0009550			54	63
S81 08169	S		-1	-0010625	+0009550			20	62
S81 08170	S		-1	-0010650	+0009550			280	57
S81 08171	S		-1	-0010675	+0009550			<10	42
S81 08172	S		-1	-0010700	+0009550			26	61
S81 08173	S		-1	-0010725	+0009550			<10	55
S81 08174	S		-1	-0010750	+0009550			<10	59
S81 08494	S	93L7E	-1	-10775	+9550			20	44
S81 08495	S	93L7E	-1	-10800	+9550			300	58
S81 08496	S	93L7E	-1	-10825	+9550			<10	44
S81 08497	S	93L7E	-1	-10850	+9550			10	25
S81 08498	S	93L7E	-1	-10875	+9550			<10	43
S81 08499	S	93L7E	-1	-10900	+9550			<10	41
								842	

BUCK CREEK

JOB 081 — 00001

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08500	S	93L7E -1	-10925	+9550				<10	76
S81 08501	S	93L7E -1	-10950	+9550				116 <10	31
S81 08502	S	93L7E -1	-10975	+9550				<10 <10	20
S81 08503	S	93L7E -1	-11000	+9550				<10 <10	27
S81 08504	S	93L7E -1	-11025	+9550				<10 <10	48
S81 08505	S	93L7E -1	-11050	+9550				<10 <10	46
S81 08506	S	93L7E -1	-11075	+9550				<10 <10	45
S81 08507	S	93L7E -1	-11100	+9550				<10 <10	35
S81 08508	S	93L7E -1	-11125	+9550				<10 <20	31
S81 08509	S	93L7E -1	-11150	+9550				<10 <10	32
S81 08510	S	93L7E -1	-11175	+9550				<10 <10	187
S81 08511	S	93L7E -1	-11200	+9550				<10 <10	39
S81 08512	S	93L7E -1	-10000	+9475				<10 20	13
S81 08513	S	93L7E -1	-10025	+9475				<10 <10	18
S81 08514	S	93L7E -1	-10050	+9475				<10 <10	22
S81 08515	S	93L7E -1	-10075	+9475				<10 <10	24
S81 08516	S	93L7E -1	-10100	+9475				<10 <10	15
S81 08517	S	93L7E -1	-10125	+9475				<10 <10	14
S81 08518	S	93L7E -1	-10150	+9475				<10 <10	21

BUCK CREEK

JOB V81 - 00005

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SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08519	S	93L7E -1	-10175	+9475				<10	29
S81 08520	S	93L7E -1	-10200	+9475				<10	24
S81 08521	S	93L7E -1	-10225	+9475				<10	37
S81 08522	S	93L7E -1	-10250	+9475				<10	18
S81 08523	S	93L7E -1	-10275	+9475				<10	13
S81 08524	S	93L7E -1	-10300	+9475				32	21
S81 08525	S	93L7E -1	-10325	+9475				<10	15
S81 08526	S	93L7E -1	-10350	+9475				<10	9
S81 08527	S	93L7E -1	-10375	+9475				<10	18
S81 08528	S	93L7E -1	-10400	+9475				<10	20
S81 08529	S	93L7E -1	-10425	+9475				<10	28
S81 08530	S	93L7E -1	-10450	+9475				<10	20
S81 08531	S	93L7E -1	-10475	+9475				<10	23
S81 08532	S	93L7E -1	-10500	+9475				32	24
S81 08533	S	93L7E -1	-10525	+9475				510	75
S81 08534	S	93L7E -1	-10550	+9475				20 <10	50
S81 08535	S	93L7E -1	-10575	+9475				10	71
S81 08536	S	93L7E -1	-10600	+9475				20 22	52
S81 08537	S	93L7E -1	-10625	+9475				70 266	32
								<10	

JOB . 081 — 00005

BUCK CREEK

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08538	S	93L7E -1	-10650	+9475				<10	61
S81 08539	S	93L7E -1	-10675	+9475				<10	
S81 08540	S	93L7E -1	-10700	+9475				34	130
S81 08541	S	93L7E -1	-10725	+9475				74	
S81 08542	S	93L7E -1	-10750	+9475				<10	50
S81 08543	S	93L7E -1	-10775	+9475				<10	
S81 08544	S	93L7E -1	-10800	+9475				<10	39
S81 08545	S	93L7E -1	-10825	+9475				<10	
S81 08546	S	93L7E -1	-10850	+9475				<10	37
S81 08547	S	93L7E -1	-10875	+9475				<10	
S81 08548	S	93L7E -1	-10900	+9475				<10	78
S81 08549	S	93L7E -1	-10925	+9475				<10	
S81 08550	S	93L7E -1	-10950	+9475				<10	87
S81 08551	S	93L7E -1	-10975	+9475				<10	
S81 08552	S	93L7E -1	-11000	+9475				<10	134
S81 08553	S	93L7E -1	-11025	+9475				<10	
S81 08554	S	93L7E -1	-11050	+9475				<10	48
S81 08555	S	93L7E -1	-11075	+9475				<10	
S81 08556	S	93L7E -1	-11100	+9475				<10	78
								<10	
								22	71
								<20	
								<10	34
								<10	
								<10	21
								<10	
								<10	54
								<20	
								<10	35
								<10	
								<10	30
								80	
								<10	56
								<10	
								<10	68
								<10	
								<10	47
								<10	

RUCK CREEK

JOB 0181 - 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08557	S	93L7E -1	-11125	+9475				<10	19
S81 08558	S	93L7E -1	-11150	+9475				<10	43
S81 08559	S	93L7E -1	-11175	+9475				<10	26
S81 08560	S	93L7E -1	-11200	+9475				<10	37
S81 08561	S	93L7E -1	-10000	+9350				<10	8
S81 08562	S	93L7E -1	-10025	+9350				<10	13
S81 08563	S	93L7E -1	-10050	+9350				<10	20
S81 08564	S	93L7E -1	-10075	+9350				<10	18
S81 08565	S	93L7E -1	-10100	+9350				<10	15
S81 08566	S	93L7E -1	-10125	+9350				<10	24
S81 08567	S	93L7E -1	-10150	+9350				<10	21
S81 08568	S	93L7E -1	-10175	+9350				<10	20
S81 08569	S	93L7E -1	-10200	+9350				<10	25
S81 08570	S	93L7E -1	-10225	+9350				<10	21
S81 08571	S	93L7E -1	-10250	+9350				<10	30
S81 08572	S	93L7E -1	-10275	+9350				<10	28
S81 08573	S	93L7E -1	-10300	+9350				<10	19
S81 08574	S	93L7E -1	-10325	+9350				12 <10	29
S81 08575	S	93L7E -1	-10350	+9350				<10 <10 <20	1

BUCK CREEK

JOB . 0131 - 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu ppm	Pb ppm	Zn ppm	Au ppb	As ppm
S81 08576	S	93L7E	-1	-10375				<10	25
S81 08577	S	93L7E	-1	-10400				<10	38
S81 08578	S	93L7E	-1	-10425				<10	41
S81 08579	S	93L7E	-1	-10450				<10	30
S81 08580	S	93L7E	-1	-10475				<10	23
S81 08581	S	93L7E	-1	-10500				<10	31
S81 08582	S	93L7E	-1	-10525				20	57
S81 08583	S	93L7E	-1	-10550				<10	45
S81 08584	S	93L7E	-1	-10575				<10	48
S81 08585	S	93L7E	-1	-10600				<10	43
S81 08586	S	93L7E	-1	-10625				<10	49
S81 08587	S	93L7E	-1	-10650				<10	52
S81 08588	S	93L7E	-1	-10675				20	57
S81 08589	S	93L7E	-1	-10700				30	105
S81 08590	S	93L7E	-1	-10725				30	114
S81 08591	S	93L7E	-1	-10750				<10	49
S81 08592	S	93L7E	-1	-10775				<10	41
S81 08593	S	93L7E	-1	-10800				<10	29
S81 08594	S	93L7E	-1	-10825				<10	46

144
16
36
46
<50
<20

BUCK CREEK

JOB 0B1 — 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu ppm	Pb ppm	Zn ppm	Au ppb	As ppm
S81 08595	S	93L7E -1	-10850	+9350				112	27
								<10	
S81 08596	S	93L7E -1	-10875	+9350				<10	51
								<10	
S81 08597	S	93L7E -1	-10900	+9350				<10	72
								<10	
S81 08598	S	93L7E -1	-10975	+9350				<10	53
								40	
S81 08599	S	93L7E -1	-11000	+9350				<10	57
								<10	
S81 08600	S	93L7E -1	-11025	+9350				<10	70
								<10	
S81 08601	S	93L7E -1	-11050	+9350				44	36
								<10	
S81 08602	S	93L7E -1	-11075	+9350				<10	35
								<10	
S81 08603	S	93L7E -1	-11100	+9350				<10	30
								<10	
S81 08604	S	93L7E -1	-11125	+9350				<10	40
								<10	
S81 08605	S	93L7E -1	-11150	+9350				<10	31
								<10	
S81 08606	S	93L7E -1	-11175	+9350				<10	56
								<10	
S81 08607	S	93L7E -1	-11200	+9350				<10	39
								<20	
S81 08608	S	93L7E -1	-10000	+9175				<10	24
								<10	
S81 08609	S	93L7E -1	-10050	+9175				<10	18
								<20	
S81 08610	S	93L7E -1	-10100	+9175				<10	19
								<10	
S81 08611	S	93L7E -1	-10150	+9175				<10	46
								<10	
S81 08612	S	93L7E -1	-10200	+9175				<10	30
								<10	
S81 08613	S	93L7E -1	-10250	+9175				<10	31
								32	

BUCK CREEK

JOB 0111 -- 00005

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08614	S	93L7E -1	-10300	+9175				<10	9
S81 08615	S	93L7E -1	-10350	+9175				<10	46
S81 08616	S	93L7E -1	-10400	+9175				<10	38
S81 08617	S	93L7E -1	-10450	+9175				<10	8
S81 08618	S	93L7E -1	-10500	+9175				<10	267
S81 08619	S	93L7E -1	-10550	+9175				20	398
S81 08620	S	93L7E -1	-10600	+9175				<10	33
S81 08621	S	93L7E -1	-10650	+9175				<10	135
S81 08622	S	93L7E -1	-10700	+9175				<50	62
S81 08623	S	93L7E -1	-10750	+9175				<10	27
S81 08624	S	93L7E -1	-10800	+9175				<10	29
S81 08625	S	93L7E -1	-10850	+9175				<10	35
S81 08626	S	93L7E -1	-10900	+9175				<10	67
S81 08627	S	93L7E -1	-10950	+9175				36	70
S81 08628	S	93L7E -1	-11000	+9175				80	49
S81 08629	S	93L7E -1	-11050	+9175				10	35
S81 08630	S	93L7E -1	-11100	+9175				<10	19
S81 08631	S	93L7E -1	-11150	+9175				42	31
S81 08632	S	93L7E -1	-11200	+9175				12	1
								<10	
								<10	
								<10	
								<10	
								<10	
								<10	
								<10	

BUCK CREEK

JOB 081 - 00005

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08633	S	93L7E -1	-10000	+9015				<10	19
S81 08634	S	93L7E -1	-10050	+9015				<10	7
S81 08635	S	93L7E -1	-10100	+9015				<10	6
S81 08636	S	93L7E -1	-10150	+9015				<10	6
S81 08637	S	93L7E -1	-10200	+9015				<10	6
S81 08638	S	93L7E -1	-10250	+9015				<10	20
S81 08639	S	93L7E -1	-10300	+9015				<10	13
S81 08640	S	93L7E -1	-10350	+9015				20	36
S81 08641	S	93L7E -1	-10400	+9015				26	22
S81 08642	S	93L7E -1	-10450	+9015				<10	17
S81 08643	S	93L7E -1	-10500	+9015				<10	30
S81 08644	S	93L7E -1	-10550	+9015				20	35
S81 08645	S	93L7E -1	-10600	+9015				16	24
S81 08646	S	93L7E -1	-10650	+9015				<10	33
S81 08647	S	93L7E -1	-10700	+9015				722	13
S81 08648	S	93L7E -1	-10750	+9015				404	<2
S81 08649	S	93L7E -1	-10800	+9015				<10	3
S81 08650	S	93L7E -1	-10850	+9015				<10	22
S81 08651	S	93L7E -1	-10750	+9015				<10	8

26. contin.

APPENDIX 1

BUCK CREEK

JOB V81 - 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 08652	S	93L7E -1	-11000	+9015				<10 <10	5
S81 08653	S	93L7E -1	-11050	+9015				<10 <10	7
S81 08654	S	93L7E -1	-10000	+8815				<10 <10	4
S81 08655	S	93L7E -1	-10050	+8815				<10 <10	24
S81 08656	S	93L7E -1	-10100	+8815				<10 <10	2
S81 08657	S	93L7E -1	-10150	+8815				<10 <10	41
S81 08658	S	93L7E -1	-10200	+8815				<10 <10	32
S81 08659	S	93L7E -1	-10250	+8815				<10 <10	16
S81 09357	S	93L7E -1	-10450	+8815				<10 <20	
S81 09358	S	93L7E -1	-10550	+8815				<10 <50	
S81 09359	S	93L7E -1	-10600	+8815				1460 <10	
S81 09360	S	93L7E -1	-10650	+8815				<10 <20	
S81 09361	S	93L7E -1	-10700	+8815				<10 <10	
S81 09362	S	93L7E -1	-10750	+8815				<10 <10	
S81 09363	S	93L7E -1	-10900	+8815				<10 <10	
S81 09364	S	93L7E -1	-10950	+8815				20 <10	
S81 09365	S	93L7E -1	-11000	+8815				<10 <10	
S81 09366	S	93L7E -1	-11050	+8815				<10 <10	
S81 09367	S	93L7E -1	-11200	+8815				<10 <10	

BUCK CREEK — JOB 0011 — 00005

REPORTING DATE 20 AUG 1981 — PAGE 20

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 09368	S	93L7E -1	-10000	+8615				<10	
								20	
S81 09369	S	93L7E -1	-10050	+8615				<10	
								<10	
S81 09370	S	93L7E -1	-10100	+8615				<10	
								<10	
S81 09371	S	93L7E -1	-10150	+8615				<10	
								<10	
S81 09372	S	93L7E -1	-10200	+8615				<10	
								<10	
S81 09373	S	93L7E -1	-10250	+8615				<10	
								<10	
S81 09374	S	93L7E -1	-10400	+8615				<10	
								<10	
S81 09375	S	93L7E -1	-10600	+8615				<10	
								<10	
S81 09376	S	93L7E -1	-10800	+8615				<10	
								<10	
S81 09377	S	93L7E -1	-10850	+8615				<10	
S81 09378	S	93L7E -1	-11050	+8615				<10	
								<10	
S81 09379	S	93L7E -1	-11100	+8615				<10	
								20	
S81 09380	S	93L7E -1	-11150	+8615				<10	
								<10	
S81 09381	S	93L7E -1	-11200	+8615				<10	
								<10	
S81 09382	S	93L7E -1	-10000	+8465				<10	
								<10	
S81 09383	S	93L7E -1	-10050	+8465				<10	
								<20	
S81 09384	S	93L7E -1	-10100	+8465				<10	
								230	
S81 09385	S	93L7E -1	-10150	+8465				<10	
								<10	
S81 09386	S	93L7E -1	-10200	+8465				<10	
								<10	

ROCK CREEK JOB 081 - 00005

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 09387	S	93L7E -1	-10750	+8465				44	
S81 09388	S	93L7E -1	-10300	+8465				12	
S81 09389	S	93L7E -1	-10700	+8465				<10	
S81 09390	S	93L7E -1	-10800	+8465				<10	
S81 09391	S	93L7E -1	-10850	+8465				100	
S81 09392	S	93L7E -1	-10900	+8465				30	
S81 09393	S	93L7E -1	-10950	+8465				<10	
S81 09394	S	93L7E -1	-11000	+8465				<10	
S81 09395	S	93L7E -1	-11050	+8465				<10	
S81 09396	S	93L7E -1	-11100	+8465				<10	
S81 09397	S	93L7E -1	-11150	+8465				<10	
S81 10344	S	93L7E -1	-10940	+8265	62	49	283	<10	35
S81 10349	S	93L7E -1	-10000	+8265	17	20	222	<10	29
S81 10350	S	93L7E -1	-10050	+8265	17	25	172	<10	20
S81 10351	S	93L7E -1	-10100	+8265	25	24	169	<10	40
S81 10352	S	93L7E -1	-10150	+8265	17	19	94	<10	16
S81 10353	S	93L7E -1	-10200	+8265	16	9	82	<10	19
S81 10354	S	93L7E -1	-10250	+8265	18	12	103	<10	23
S81 10355	S	93L7E -1	-10300	+8265	9	10	76	60	9
								<10	
								<10	

ROCK CREEK

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10356	S	93L7E -1	-10350	+8265	41	21	187	<10	18
S81 10357	S	93L7E -1	-10400	+8265	64	28	509	<10	44
S81 10358	S	93L7E -1	-10750	+8265	20	34	273	<10	53
S81 10359	S	93L7E -1	-10800	+8265	34	21	180	20	39
S81 10360	S	93L7E -1	-10850	+8265	33	20	172	<10	31
S81 10361	S	93L7E -1	-10900	+8265	19	26	200	<10	53
S81 10362	S	93L7E -1	-10950	+8265	29	29	155	<10	47
S81 10363	S	93L7E -1	-11000	+8265	13	21	250	40	6
S81 10364	S	93L7E -1	-11050	+8265	20	21	404	<10	42
S81 10365	S	93L7E -1	-11100	+8265	56	20	351	<10	20
S81 10366	S	93L7E -1	-11150	+8265	263	27	485	<10	27
S81 10367	S	93L7E -1	-11200	+8265	111	26	348	26	18
S81 10368	S	93L7E -1	-10000	+8065	22	51	324	<10	50
S81 10369	S	93L7E -1	-10050	+8065	26	43	484	10	47
S81 10370	S	93L7E -1	-10100	+8065	16	15	103	<10	15
S81 10371	S	93L7E -1	-10150	+8065	15	10	103	<10	22
S81 10372	S	93L7E -1	-10200	+8065	14	13	94	<10	18
S81 10373	S	93L7E -1	-10250	+8065	17	9	83	<10	18
S81 10374	S	93L7E -1	-10300	+8065	16	10	90	<10	15

BUCK CREEK JOB 0181 — 00005

REPORTING DATE 20 AUG 1981 PAGE 23

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10375	S	93L7E -1	-10350	+8065	18	10	88	<10	20
S81 10376	S	93L7E -1	-10400	+8065	18	12	103	<10	22
S81 10377	S	93L7E -1	-10450	+8065	43	26	183	<10	35
S81 10378	S	93L7E -1	-10500	+8065	93	70	242	10	76
S81 10379	S	93L7E -1	-10650	+8065	71	28	321	40	38
S81 10380	S	93L7E -1	-10700	+8065	34	51	166	30	97
S81 10381	S	93L7E -1	-10750	+8065	91	47	316	<10	56
S81 10382	S	93L7E -1	-10800	+8065	80	114	227	30	122
S81 10383	S	93L7E -1	-11000	+8065	107	30	351	<10	29
S81 10384	S	93L7E -1	-11050	+8065	52	33	287	<10	18
S81 10385	S	93L7E -1	-11100	+8065	18	12	118	<10	22
S81 10386	S	93L7E -1	-11150	+8065	45	55	139	36	42
S81 10387	S	93L7E -1	-11200	+8065	145	82	475	<10	17
S81 10428	S	93L7E -1	-10100	+7865	25	29	202	<10	21
S81 10429	S	93L7E -1	-10150	+7865	16	15	120	<10	19
S81 10430	S	93L7E -1	-10200	+7865	18	16	109	<10	11
S81 10431	S	93L7E -1	-10250	+7865	27	13	134	<10	20
S81 10432	S	93L7E -1	-10300	+7865	83	16	274	<10	20
S81 10433	S	93L7E -1	-10350	+7865	38	14	123	<10	23

JOB 0131 -- 00005

BUCK CREEK

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10434	S	93L7E -1	-10400	+7865	26	26	108	20	42
S81 10435	S	93L7E -1	-10450	+7865	128	32	368	44 <10	53
S81 10436	S	93L7E -1	-10500	+7865	56	30	206	<10 10	41
S81 10437	S	93L7E -1	-10800	+7865	25	12	256	<10 <10	14
S81 10438	S	93L7E -1	-10850	+7865	25	20	362	<10 <10	16
S81 10439	S	93L7E -1	-10900	+7865	66	37	339	<10 <10	20
S81 10440	S	93L7E -1	-10950	+7865	27	17	130	<10 20	11
S81 10441	S	93L7E -1	-11000	+7865	100	20	250	<10 <10	11
S81 10442	S	93L7E -1	-11050	+7865	34	39	314	<10 <10	14
S81 10443	S	93L7E -1	-11100	+7865	85	30	275	<10 <10	28
S81 10444	S	93L7E -1	-11150	+7865	68	34	300	20 60	47
S81 10445	S	93L7E -1	-11200	+7865	46	116	432	48 50	115
S81 10446	S	93L7E -1	-10100	+7665	25	31	395	<10 <10	38
S81 10447	S	93L7E -1	-10150	+7665	21	72	382	<10 20	17
S81 10448	S	93L7E -1	-10300	+7665	38	33	186	<10 <10	40
S81 10449	S	93L7E -1	-10350	+7665	47	15	224	<10 <10	6
S81 10450	S	93L7E -1	-10400	+7665	26	17	123	10 20	16
S81 10451	S	93L7E -1	-10450	+7665	18	20	96	<10 <10	11
S81 10452	S	93L7E -1	-10500	+7665	21	23	165	<10 <10	28

ROCK CREEK

.ROC VOL — 00003

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REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu PPM	Pb PPM	Zn PPM	Au PPB	As PPM
S81 10453	S	93L7E -1	-10650	+7665	28	20	202	<10	21
S81 10454	S	93L7E -1	-10700	+7665	41	21	195	<10 80 10	27
S81 10455	S	93L7E -1	-10750	+7665	28	21	146	30	19
S81 10456	S	93L7E -1	-10800	+7665	80	32	328	<10	14
S81 10457	S	93L7E -1	-10850	+7665	25	38	194	<10	42
S81 10458	S	93L7E -1	-10900	+7665	53	31	192	<10	29
S81 10459	S	93L7E -1	-10950	+7665	67	20	414	<10	16
S81 10460	S	93L7E -1	-11000	+7665	83	29	351	<10	12
S81 10461	S	93L7E -1	-11050	+7665	53	32	256	<10	24
S81 10462	S	93L7E -1	-11100	+7665	11	18	117	14	15
S81 10463	S	93L7E -1	-11150	+7665	60	31	287	<10	12
S81 10464	S	93L7E -1	-11200	+7665	41	39	193	<10	22

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW
I - INSUFFICIENT OR MISSING SAMPLE

ANALYTICAL METHODS

Cu Pb Zn 20% HNO3 DIGESTION / AA
Au AQUA REGIA DIGESTION / SOLVENT EXTRACTION / AA
As PYROSULPHATE FUSION / COLORIMETRIC

APPENDIX 2

COMINCO 1981 SILT GEOCHEMICAL ANALYSES

ROCK CREEK

JOB 0811 - 00005

REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	TYPE	MAP	E/W	N/S	Cu ppm	Pb ppm	Zn ppm	Au ppb	As ppm
S81 10347	S	93L7E	-1	-10510	+10850	26	11	130	<10	9
								<10	
S81 08174	ST		-1	-0010000	+0010100	17	5	76	<10	36
								<10	
S81 08662	ST		-1	-0010415	+0009550	34	15	180	<10	16
								<10	
S81 08663	ST		-1	-0010700	+0009175	32	13	174	<10	19
								<10	
S81 08175	ST		-1	-0010000	+0008629	20	31	191	<10	11
								<10	
S81 09398	ST	93L7E	-1	-10825	+8615				120	
									40	
S81 10344	S	93L7E	-1	-10940	+8265	62	49	283	<10	35
								<10	
S81 10343	S	93L7E	-1	-10580	+8065	30	24	254	150	36
								<10	
S81 10348	S	93L7E	-1	-10280	+7865	51	43	339	<10	52
								<10	
S81 08176	ST	SBC	-6			32	<4	57	<10	2
								<10	
S81 08177	ST	SBC	-7			14	<4	49	<10	7
								<10	
S81 08178	ST	SBC	-8			13	9	50	<10	4
								<10	
S81 08660	ST	SBC	-18			14	5	48	<10	5
								<10	
S81 08661	ST	SBC	-19			30	48	391	2000	101
									28	
S81 10345		93L7E	SBC	-42		19	12	109	<10	15
									<50	
S81 10346		93L7E	SBC	-45		26	19	99	<10	42
									<10	

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW

APPENDIX 3

COMINCO 1981 ROCK GEOCHEMICAL ANALYSES

ROCK CREEK JOB 081 - 0000R

REPORTING DATE 20 AUG 1981 PAGE 1

SAMPLE NUMBER	FIELD NUMBER	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Sn ppm	Hg ppb	Au ppb	As ppm
R81 07211	10000N 10650W	20	53	186	<.4			<10	67
R81 07212	RBC- 1	42	27	118	<.4			<10	47
R81 07213	RBC- 2	67	<4	89	<.4			<10	6
R81 07214	RBC- 3	35	<4	77	<.4			<10	17
R81 07215	RBC- 4	14	18	47	<.4			<10	68
R81 07216	RBC- 9	26	8	95	<.4			<10	14
R81 07217	RBC- 10	10	<4	131	<.4			<10	14
R81 07218	RBC- 11	13	<4	108	<.4			<10	13
R81 07219	RBC- 12	2	9	83	<.4			<10	13
R81 07220	RBC- 13	23	10	245	1.0			<10	62
R81 07221	RBC- 14	15	11	84	4.8			<10	37
R81 07252	RBC- 15	15	18	49	1.8			<10	152
R81 07253	RBC- 16	4	26	119	<.4			<10	14
R81 07254	RBC 20	20	28	209	1.4			10	58
R81 07255	RBC 21	151	200	193	19.0			280	133
R81 07256	RBC 22	170	950	742	15.0			700	>632
R81 07257	RBC 23	68	1800	2310	10.4			50	>510
R81 07258	RBC 24	33	10	363	0.4			<10	20
R81 07259	RBC 25	13	46	428	1.0			<10	45
R81 07260	RBC 26	16	16	253	0.6			<10	93
R81 07261	RBC 27	26	730	208	2.6			260	347
R81 07262	RBC 28	15	18	298	1.3			<10	121
R81 07263	RBC 29	8	20	297	0.7			<10	52
R81 07264	RBC 30	9	68	143	1.9			22	258
R81 07265	RBC 31	12	210	279	1.1			<10	89
R81 07266	RBC 32	47	4	113	<.4			<10	11
R81 07267	RBC 33	40	4	89	<.4			<10	7
R81 07268	RBC 34	35	<4	372	.5			<10	19
R81 07269	RBC 35	3	6	92	<.4			<10	16
R81 07270	RBC 36	28	<4	134	<.4			<10	27
R81 07271	RBC 37	15	4	182	0.9			<10	70
R81 07563	RBC- 38	2	<4	81	<.4			<10	
R81 07564	RBC- 39	3	<4	104	<.4			<10	
R81 07650	RBC- 40	84	<4	66	<.4			<10	6
R81 07651	RBC- 41	28	5	70	<.4			<10	20
R81 07652	RBC- 43	26	12	144	<.4			<10	53
R81 07653	RBC- 44	32	16	88	<.4			<10	21
R81 07654	RBC- 45	144	30	432	<.4			<10	177

PAGE 2

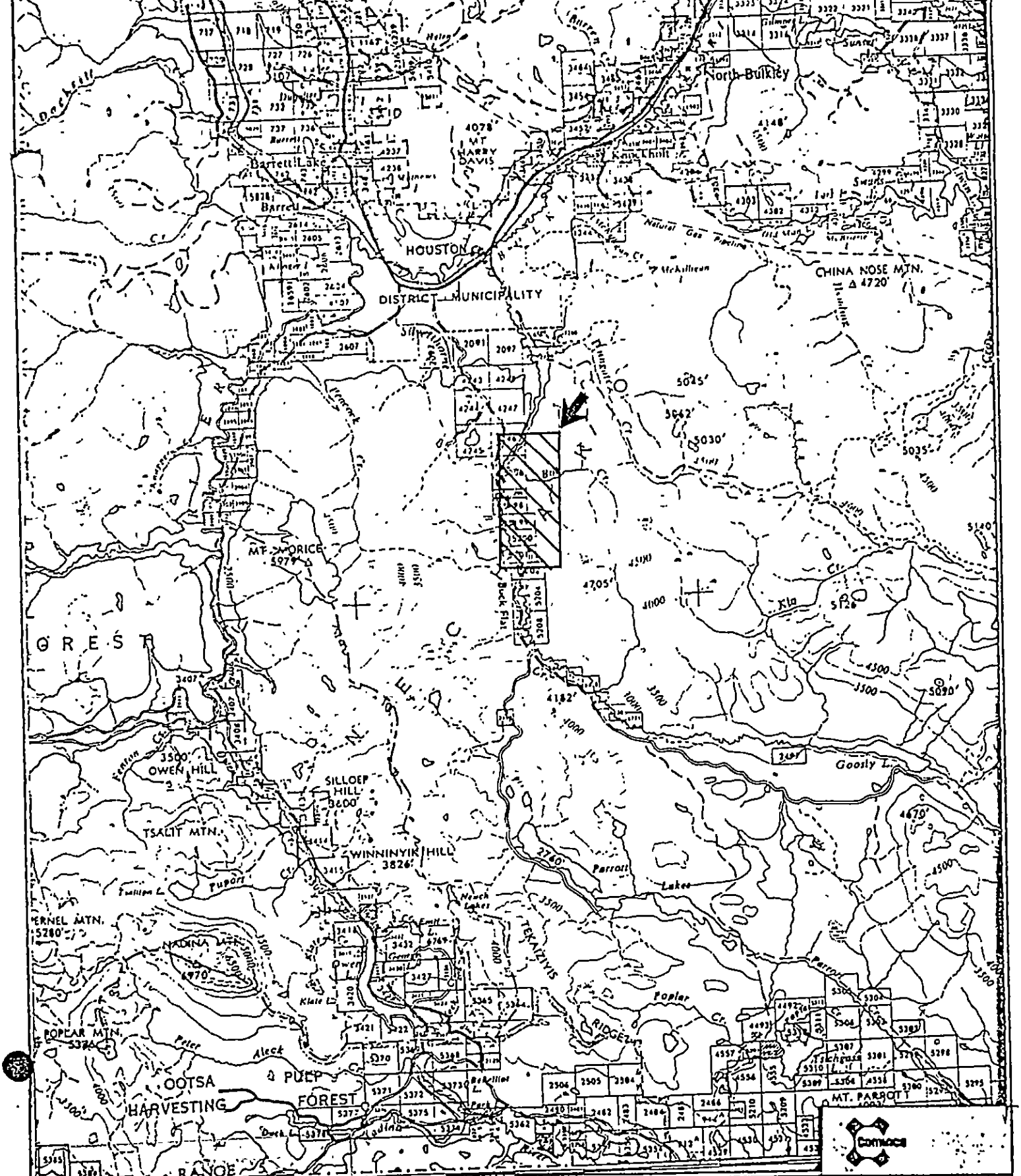
REPORTING DATE 20 AUG 1981

SAMPLE NUMBER	FIELD NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Sb PPM	Hg PPB	Au PPB	As PPM
R81 07655	RBC- 46	59	960	1390	6.3			<10	66
R81 07656	RBC- 47	21	283	1370	1.5			<10	70
R81 07657	RBC- 48	27	796	277	12.0			20	83
R81 07658	RBC- 49	200	137	384	1.9			10	50
R81 07659	RBC- 50	88	74	933	1.5			<10	60
R81 07660	RBC- 51	34	37	274	1.0			<10	38
R81 07661	RBC 53	40	13	215	0.5			<10	14
R81 07662	RBC 54	10	50	176	0.4			<10	34
R81 07663	RBC 55	9	15	103	<.4			<10	21
R81 07664	RBC 56	26	12	204	<.4			<10	23
R81 07665	RBC 57	94	330	1350	2.0			22	62
R81 07666	RBC 58	30	213	287	0.8			90	253
R81 07667	RBC 59	19	29	377	<.4			<10	127

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW
E - VALUE EXCEEDS OPTIMUM WORKING RANGE, ESTIMATE ONLY, REQUEST ASSAY IF PRECISE VALUE REQUIRED

ANALYTICAL METHODS

Au Aqua Regia Digestion / Solvent Extraction / AA
As Pyrosulphate Fusion / Colorimetric
Cu Pb Zn Ag Hg Aqua Regia Digestion / AA
Sb Aqua Regia Digestion / AA (Semi Quantitative)



Drawn by:

Traced by:

Revised	Date	Revised by	Date

10,166 PART 1 of 2

Buck Creek Property

LOCATION MAP

Scale: 1:250,000

Date: Nov. 5/81

Plate: 1

BCIL-2187 C

210-0610

LEGEND and SYMBOLS

EOCENE

4 Ba : Basalt

An_2 : red andesite porphyry

3 FP : Feldspar porphyry

2 Ga : gabbro

EARLY AND MIDDLE MESOZOIC (Jurassic Hagelton Group ?)

1 F_1 : Rhyolite; a : rhyolite porphyry
F_2 : Rhyolite tuff; a : lithic ; b : crystal
F_3 : Rhyolite breccia ; a : round fragments; b : angular fragments
F_4 : Dacite (flow ?)
F_5 : Dacite tuff; a : lithic , b : crystal
F_6 : Porphyritic dacite
F_7 : Chert
An : green andesite ; a : green porphyritic andesite
(≤ 1%) : Pyrite content, present or inferred from limonites

Logging road or cat track

Building

Trench

BETH 3

BETH 2

BETH 1

HC

BUCK

GODFREY

LORNE

CLOUD

BETH 4

BETH 5

PLATE 2

Bob Creek

Buck Creek

CLAIM BOUNDARIES

4400

4300

4200

3500

3100

3000

2900

2600

2500

to Houston 13 km

Felds - biotite porphyry

MW-1 (?)

SCALE

0 100 200 300 400 500

METRES

BUCK CREEK N.T.S. 93 L/7 E

Drawn by J.C.C. Traced by H.H.

Revised by Date Revised by Date

GEOLOGICAL MAP

Scale 1 : 5000 Date OCTOBER, 1981 Plate 2

#210.0640

10,166
PART
1 of 2

BETH 3

BETH 2

BETH 1

HC

BUCK

GODFREY

LORNE

CLOUD

BETH 4

BETH 5

LEGEND and SYMBOLS

CLIP ROCK SAMPLE
Au/As/Cu/Pb Zn Ag
ppb ppm

TRENCH

LOGGING ROAD

BUILDING

CLAIM BOUNDARIES

Bob Creek

Buck Creek

to Houston 13 km

SCALE
0 100 200 300 400 500
METRES

PLATE 4

10,166

PART 1 of 2

BUCK CREEK NTS 93 / 7E

GEOCHEMISTRY
ROCK SAMPLES

Drawn by: J.C.C. Traced by: H.H.
Revised by: Date: Revised by: Date:
Scale 1:5000 Date: AUGUST, 1981 Plate 3

LEGEND and SYMBOLS

○ -10-13 — SILT SAMPLE
h Au(ppb) - As(ppm)

□ -10/36/17/5/76 — SILT SAMPLE
h Au(ppb) - As(ppm)/Cu/Pb/Zn

≥10 Au — COMINCO 1981 data: ≥10 ppb Au contour

≥50 As — COMINCO 1981 data: ≥50ppm As contour

≥75 Cu — DUPONT 1978 data: ≥75 ppm Cu contour

≥1.0 Ag — DUPONT 1978 data: ≥1.0 ppm Ag contour

≥1000 Zn — DUPONT 1978 data: ≥1000ppb Zn contour

TRENCH

LOGGING ROAD

BUILDING

BETH 3

BETH 2

BETH 1

HC

BUCK

GODFREY

LORNE

CLOUD

BETH 4

BETH 5

CLAIM BOUNDARIES

Bob Creek

Buck Creek

to Houston 13 km

4400

4300

4200

3500

3300

3100

3000

2900

2800

2600

SBC-6

SBC-7

SBC-8

SBC-18

SBC-19

SBC-42

SBC-52

10,940 W

10,825 W

10,580 W

10,510

10,415 W

10,070 W

10,050 W

10,000 W

9,950 W

10,100 W

10,106 S

8615 N

8629 N

10,450 N

10,000 N

9,775 N

9,650 N

9,550 N

9,475 N

9,350 N

9,175 N

9,015 N

8,815 N

8,615 N

8,465 N

8,265 N

8,065 N

7,865 N

7,665 N

A

B

C

D

E

G

H

≥10 AU

≥50 As

≥75 Cu

≥1000 Zn

SCALE

0 100 200 300 400 500

METRES

PLATE 5

10,166

PART 1 of 2

BUCK CREEK	N.T.S. 93 L/7 E	
Drawn by: J.C.C.	Traced by: D.M.C.	GEOCHEMISTRY SILT and SOIL SAMPLES
Revised by / Date	Revised by / Date	
Scale: 1:5000	Date: AUG 1981	Plate: 4