

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,459

ASSESSMENT REPORT

ON THE

1984 GEOLOGICAL AND GEOCHEMICAL EXPLORATION ACTIVITIES

GOLDWAY 11 CLAIM GROUP

Omineca Mining Division
NTS 94/D15E

Located Approximately 35 km Northwest of Johanson Lake
Latitude: $56^{\circ}48'N$; Longitude: $126^{\circ}36'W$

Owned and Operated by
Selco Division - BP Resources Canada Limited

D. R. Heberlein
Geologist

December, 1984.

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SUMMARY AND RECOMMENDATIONS

The Goldway 11 claim group was staked to cover two low contrast base (Cu-Zn-As) and precious metal (Au-Ag) anomalies located by reconnaissance stream sediment sampling program in the early 1970's.

No further work is recommended for the Goldway 11 and 12 claims.

INTRODUCTION

1. Location and Access

The Goldway 11 Claim Group is located in the McConnell Ranges at $56^{\circ} 48'$ north latitude, and $126^{\circ} 36'$ east longitude, on NTS mapsheet 94D (Fig. 1).

Access is by fixed wing aircraft based in Smithers to the Moose Valley airstrip, 7 km southwest of the property. A helicopter is required for the remaining distance.

Alternative access to Moose Valley is via the seasonal Omineca Road; from Fort St. James (320 km south). The road is suitable for two-wheel drive pick up trucks or trucks up to five ton capacity. Driving time is approximately nine hours and extra fuel must be carried.

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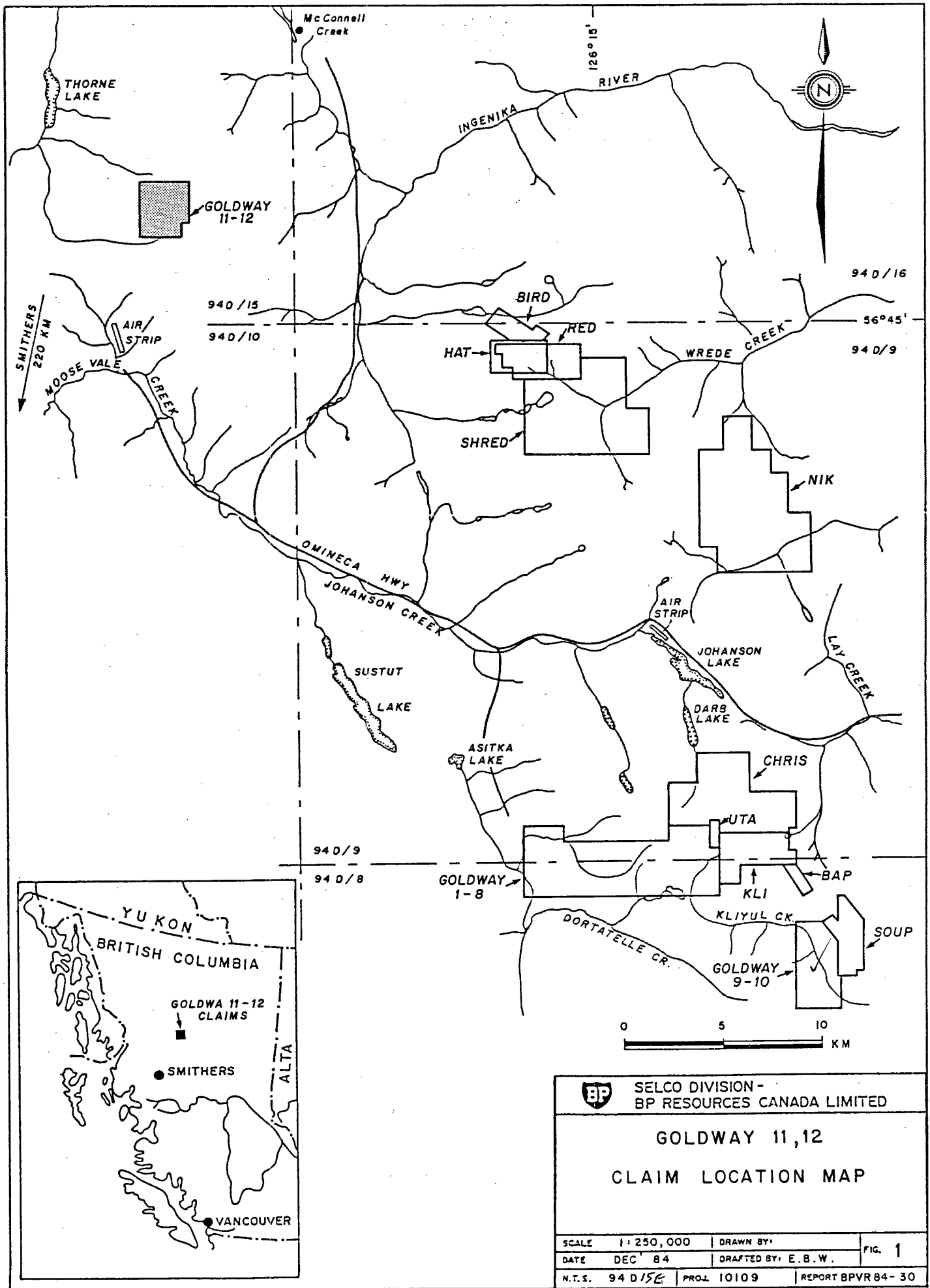
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INTRODUCTION1. Location and Access

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 SELCO DIVISION - BP RESOURCES CANADA LIMITED		
GOLDWAY 11,12 CLAIM LOCATION MAP		
SCALE	1:250,000	DRAWN BY:
DATE	DEC '84	DRAFTED BY: E.B.W.
N.T.S.	94 D 152	PROJ. 10109
		REPORT BPVR 84-30
		FIG. 1

2. Topography

The claims are located above treeline on two alpine cirques that drain west and northwest into Thorne Lake. Cirque walls are steep (35 to 90°) and talus covered at lower elevations. Cliffs are present higher up. Cirque floors are buried by glacial till deposits that form grass covered mounds that separate numerous small creeks. Relief on the property is approximately 400 metres with a maximum elevation of 2190 metres.

3. 1984 Field Program

Field work in 1984 set out to evaluate the source and extent of two low contrast gold, copper, arsenic, silver and zinc stream sediment anomalies, discovered by reanalysis of samples collected in an earlier regional reconnaissance program. This was undertaken by detailed stream sediment sampling, in talus fine sampling, and rock chip sampling in conjunction with preliminary geological mapping.

4. Claim Status

The Goldway 11 Claim Group is in the Omineca Mining Division and consists of 30 units that are wholly owned by BP

Resources Canada Limited. Claim names and record numbers are listed below:

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Record Date</u>
GOLDWAY 11	15	6215	May 4, 1984
GOLDWAY 12	15	6216	May 4, 1984

REGIONAL GEOLOGY

The Goldway 11 claim group is situated in the Quesnel Trough, a linear belt of Upper Triassic (Takla Group - Monger, 1977) to Lower Jurassic calc-alkaline to alkaline volcanic and sedimentary rocks that extends 2000 km from the U.S. border to the Stikine River. The Quesnel Trough is at the east margin of the Intermontane Belt, adjacent to the Omineca crystalline belt.

Volcanic rocks consist of basaltic andesite flows and fragmentals with a preponderance of augite porphyry. They are predominantly submarine and typical of fissure eruptions associated with large faults. Subaerial volcanic rocks are present locally in complex volcanic centres (Monger, 1977). Sedimentary rocks are intercalated with the volcanics and consist of volcanic sandstones and greywackes that grade into laminated siltstones and argillites. Lenses of conglomerate, tuffaceous limestone and limestone breccia are present in the sequence.

Intrusive complexes, consisting of stocks and plutons of diorite, monzonite, syenite and pyroxenite intrude the volcanosedimentary pile. These intrusions are thought to be consanguineous with the volcanic rocks.

PROPERTY GEOLOGY (Fig. 3)

1. Volcanic Rocks

The property is underlain, for the most part, by basic (basaltic andesite) augite porphyry flows (unit 1) which form prominent bluffs and cliffs around the cirque walls. Typical specimens have a fine grained, pale green groundmass surrounding euhedral augite phenocrysts. Plagioclase phenocrysts are generally smaller than the augites, averaging 3 to 5 mm. At one area on the property (Fig. 3; Unit 2), trachitoid feldspar porphyry flows with euhedral plagioclase phenocrysts up to 15 mm long, set in a medium to fine grained groundmass, dominate the sequence.

Fragmental rocks are very restricted in their distribution and consist of lapilli tuffs (Unit 3) containing subangular fragments of augite and feldspar porphyry in a basic ashy matrix. These rocks are mostly fragment supported with

clasts ranging between 5 and 50 mm in diameter. Bedding, if present, is not well developed.

2. Intrusive Rocks

Several intrusions are present on the property. The largest is a hornblende diorite (Dh) pluton that intrudes the volcanic rocks at the southwest corner of the claims. Exposure is limited to a 2 km long northwest trending ridge and poor frost heaved outcrops on lower slopes. The rock is porphyritic with euhedral hornblende phenocrysts up to 15 mm in length set in a coarse to medium grained groundmass containing 70% - plagioclase, 10% - orthoclase, 2% - quartz, 15% - hornblende, and 5% - biotite. Close to the contact the intrusion is granitic in composition with an equigranular, medium grained texture. Aplitic dykes of this material with widths ranging from 10 cm to 2 m extend into the country rock. The volcanic rocks adjacent to the pluton are weakly hornfelsed up to a distance of 40 metres from the contact.

Several monzonite (Mz) and monzondiorite (Md) dykes occur on the property. These in composition resemble the hornblende diorite and texture suggesting a common origin. In general, they are porphyritic with phenocrysts of plagioclase in a

medium to coarse grained groundmass composed of: orthoclase (10%-15%), quartz (1%-5%), biotite 1%-2%) and hornblende (10%-15%).

3. Structure

Due to the complexity of faulting and the massive nature of the flow rocks, consistent bedding attitudes are hard to find. Based on a very few measurements from the feldspar porphyry flows, it appears that the dominant strike is to the southeast with dips of the southwest. A doubtful bedding measurement in the fragmental rocks suggests a strike of 114° and a dip of 45° to the northeast.

Steeply dipping normal and reverse faults criss cross the back walls of the cirques. Dominant trends are towards the north (0° to 10°) and to the east (90° to 100°). Offsets, though hard to measure because of a lack of suitable marker units, probably do not exceed a few tens of metres. An offset dyke in the north cirque headwall suggests a maximum downthrow in the order of 20 metres. No evidence of folding has been recognized.

4. Alteration and Mineralization

Altered volcanic rocks are widespread on the property. Weak pervasive epidotization of the flow rocks and chloritization of mafic phenocrysts can be attributed to greenschist facies metamorphism. Intense pervasive epidotization is superimposed on the regional metamorphism adjacent to several fault zones and dykes. Replacement of the host rock by up to 50% epidote is commonly accompanied by K-feldspar veining. These zones reach a maximum of five metres in width and pyrite is commonly present in trace quantities (Fig. 3). Rock chip samples from two such zones (861503, 861531) returned background values for all elements (e.g., 96 ppm copper, 5 ppb gold). Two zones of pyrite veining were also sampled. The largest, Zone A, is located at the backwall of the northern cirque. It consists of a 15 metre wide, east trending, shear zone with stringers and pods of semi-massive pyrite (up to 2 cm in diameter) hosted in epidotized and chloritized flow rocks. Pyrrhotite and chalcopyrite occur in trace amounts with the pyrite. A chip sample across this zone returned 1011 ppm copper and 10 ppb gold.

The second zone, Zone B (Fig. 3), consists of a single, north trending pyrite vein in weakly bleached and silicified

feldspar porphyry flows. Here pyrite forms discontinuous pods up to 10 cm long and 5 cm wide along an exposed length of 8 metres. Traces of malachite occur on fracture surfaces with abundant limonite. Chip samples returned 1388 ppm copper and 15 ppb gold. No other mineralization was found.

GEOCHEMISTRY (Fig. 4)

The geochemical survey of the Goldway 11, 12 claims was conducted in late July. All drainages within the west facing cirques were silt sampled at 100 metre intervals. Talus fines were collected at two elevations; 1800 and 1900 metres; also at 100 metre spacings (Fig. 4). Rock chip samples were taken from altered and sulphide bearing outcrops.

Results were disappointing in that they failed to indicate any significant Au enrichment. Stream sediments and talus fines mostly returned background values for Au (5-25 ppb) and Cu (25 to 200 ppm), however, samples collected downslope from Zones A and B were moderately enhanced (i.e., 85 and 120 ppb Au; 905 and 1878 ppm Cu respectively). These values are comparable with results from rock samples at these locations.

Geochemical anomalies found by the original survey can thus be attributed to the presence of detrital material from Zones A and B in the drainages.

REFERENCES

Monger, J.W.H., 1977. The Triassic Takla Group in the McConnell Creek Map Area, North-Central, British Columbia, GSC Paper 76-29, pp 45.

APPENDIX 1
LIST OF ANALYTICAL RESULTS

SAMPLE #	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	KM PPM	FE I	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA I	P I	LA PPM	CR PPM	MG I	BA PPM	TI I	B PPM	AL I	NA I	K I	W PPM	AU** PPB
STD C	21	40	40	123	7.2	49	28	1052	3.82	43	15	8	39	48	19	17	21	58	.44	.14	40	57	.88	175	.06	40	1.43	.06	.12	15	-
854079	1	361	8	49	.7	40	31	480	12.99	72	5	ND	2	9	1	2	5	104	.53	.12	2	41	.57	26	.08	8	.96	.01	.05	2	60
854080	3	127	9	49	.1	17	20	592	2.92	16	5	ND	2	27	1	2	2	57	1.06	.08	3	56	.81	15	.18	2	1.04	.03	.02	2	30
854081	1	129	9	35	.2	15	13	439	3.68	7	5	ND	2	35	1	2	2	54	.72	.10	4	38	1.19	34	.09	5	1.32	.03	.06	2	10
854082	1	116	1	43	.3	25	21	664	4.28	2	5	ND	2	22	1	2	2	110	.56	.08	3	55	2.66	41	.12	4	2.41	.02	.10	2	50
854083	1	66	3	34	.1	30	13	627	3.35	2	11	ND	2	48	1	2	2	105	2.71	.10	2	92	2.32	56	.11	3	1.85	.02	.19	2	13
854084	1	69	1	43	.1	12	15	510	3.45	3	5	ND	2	26	1	2	2	97	.54	.09	3	25	1.78	104	.11	3	1.76	.03	.29	2	5
854085	1	129	1	40	.1	13	17	402	4.28	4	5	ND	2	34	1	2	2	66	.44	.09	4	26	1.52	64	.13	5	1.74	.03	.09	2	10
854086	1	154	1	41	.1	42	18	459	4.38	2	5	ND	2	23	1	2	2	54	.35	.11	5	95	1.92	63	.08	3	1.92	.02	.08	2	5
BETDOT	1	66	10	91	.1	17	10	3140	4.27	3	37	ND	2	104	1	4	2	55	14.89	.03	2	33	4.22	42	.01	5	1.15	.01	.02	2	80
861002	5	8	20	17	2.1	5	4	45	3.11	4	5	ND	3	7	1	2	2	2	.09	.08	5	28	.12	40	.01	3	.29	.04	.12	2	90
861003	1	1444	811	295	24.3	12	6	798	8.30	215	5	ND	2	23	3	2	52	145	1.50	.10	2	31	1.99	61	.10	10	2.26	.01	.09	2	50
861004	3	22485	208	436	63.6	23	54	1356	9.29	64	8	ND	2	32	6	2	6	54	2.37	.01	2	60	1.05	18	.06	9	1.66	.01	.10	2	120
861005	6	9613	502	923	133.3	26	22	382	29.25	1220	5	ND	2	2	19	2	401	48	.12	.04	4	16	.90	7	.02	13	2.54	.01	.01	2	10
STD C	20	59	39	123	7.0	49	27	1052	3.82	43	16	8	39	48	19	17	20	58	.44	.14	40	57	.88	175	.06	41	1.43	.06	.12	15	-

SAMPLE #	MO PPK	CU PPM	PI PPM	ZK PPM	AG PPM	XI PPM	CO PPM	KM PPM	FE I	AS PPM	U PPK	AU PPK	TH PPK	SR PPK	CD PPK	SD PPK	BT PPM	V PPK	CA I	P I	LA PPM	CR PPM	MG I	BA PPM	TI I	B PPK	AL I	XA I	X I	V PPM	AU** PPM
861522	1	73	8	60	.1	20	3	815	3.48	5	5	ND	2	59	1	2	2	86	.86	.10	18	43	.77	120	.10	5	2.05	.02	.06	2	10
861525	1	98	9	57	.1	15	5	577	2.88	2	5	ND	2	119	1	2	5	56	2.07	.07	10	21	1.15	39	.06	2	4.31	.03	.10	2	ND
861526	1	67	11	77	.2	20	4	963	4.15	3	5	ND	2	58	1	2	2	104	.73	.09	17	44	1.12	100	.11	3	3.20	.01	.06	2	ND
861527	1	167	16	111	.3	33	12	1058	4.41	2	5	ND	2	108	1	2	3	95	1.66	.09	11	65	2.29	13	.10	5	3.84	.01	.06	2	35
861529	1	118	5	53	.1	13	7	868	3.15	3	5	ND	2	167	1	2	3	73	1.99	.09	11	21	1.13	51	.07	3	4.10	.03	.09	2	10
861530	1	84	12	78	.1	18	10	1708	5.49	12	5	ND	2	91	1	2	3	156	.94	.15	14	40	1.42	85	.16	2	4.32	.01	.07	2	10
861531	1	96	21	103	.1	21	8	996	4.43	4	5	ND	2	71	1	2	4	124	.83	.10	15	47	1.49	90	.19	2	3.41	.01	.06	2	5
861532	1	330	41	150	.5	31	19	1670	4.59	10	5	ND	2	103	1	2	13	154	.84	.12	14	45	2.54	108	.18	2	3.84	.01	.07	2	15
861533	1	40	4	47	.1	15	1	855	3.35	2	5	ND	2	67	1	4	2	81	.39	.14	18	46	.61	117	.05	5	2.47	.01	.04	2	10
861534	1	122	13	58	.1	27	10	1387	4.15	2	5	ND	2	162	1	2	2	103	1.20	.19	12	59	1.51	118	.08	2	3.70	.01	.07	2	5
861535	1	124	10	71	.1	24	7	1231	4.70	3	5	ND	2	43	1	2	2	120	.59	.11	17	63	1.32	219	.09	4	3.31	.01	.07	2	5
861536	1	283	26	102	.1	25	30	1701	5.70	11	5	ND	2	211	1	2	4	140	1.15	.17	12	41	2.05	312	.13	3	3.47	.01	.07	2	10
861601	1	80	6	54	.1	18	6	694	4.96	6	5	ND	2	59	1	2	4	125	.82	.12	12	45	2.00	20	.24	4	2.20	.05	.07	2	10
861602	1	52	2	63	.1	20	6	561	4.24	3	5	ND	2	42	1	2	2	105	.44	.09	11	56	2.10	42	.20	2	2.08	.04	.09	2	15
861604	10	905	583	326	20.0	14	33	986	15.86	560	5	ND	2	135	2	2	94	108	1.09	.14	2	21	1.27	112	.11	2	3.66	.01	.19	2	85
861605	1	157	16	76	.6	16	6	727	2.68	3	5	ND	2	111	1	2	2	50	1.81	.06	9	29	1.28	32	.04	2	3.34	.01	.08	2	25
861606	1	106	12	70	.1	22	11	763	3.44	7	5	ND	2	153	1	2	2	70	1.87	.07	9	48	1.54	19	.04	2	4.07	.01	.08	2	5
861607	1	90	16	92	.1	36	10	1108	5.05	13	5	ND	2	70	1	2	2	123	.88	.10	13	44	1.93	89	.15	3	3.85	.02	.04	2	20
861608	1	22	6	66	.1	16	2	441	2.81	4	5	ND	2	41	1	2	4	61	.53	.05	10	52	1.20	44	.14	2	1.78	.05	.04	2	10
861609	1	108	13	74	.1	14	5	829	3.35	4	5	ND	2	158	1	2	2	76	1.67	.14	10	24	.95	171	.08	3	5.49	.03	.12	2	15
510	20	173	45	96	2.2	747	7	673	3.71	10	5	ND	2	25	1	11	2	45	1.55	.12	13	74	.64	51	.04	27	.79	.04	.20	2	-
862510	1	171	15	46	.2	18	11	639	2.70	4	5	ND	2	211	1	3	8	58	2.77	.08	7	14	1.02	48	.02	2	5.63	.06	.16	2	20
862501	1	180	11	84	.4	18	7	721	3.62	4	5	ND	2	207	2	2	3	105	1.97	.11	9	31	1.38	51	.05	4	5.00	.05	.16	2	10
862502	1	153	6	53	.2	16	5	700	2.87	2	4	ND	2	212	1	2	4	67	1.96	.07	8	30	1.29	45	.04	2	3.99	.04	.11	2	15
862503	1	46	7	53	.1	18	2	717	3.37	2	5	ND	2	67	1	4	2	89	.86	.07	18	45	.74	136	.14	2	1.96	.02	.05	2	10
862504	1	44	12	83	.2	19	1	763	3.92	4	5	ND	2	58	1	4	2	90	.49	.09	16	44	.87	101	.11	2	3.53	.02	.05	2	10
862505	1	95	9	76	.1	22	9	893	3.92	3	5	ND	2	83	1	2	2	96	1.12	.09	17	43	1.10	138	.11	2	3.28	.02	.06	2	5
862506	1	214	31	181	.4	17	1	818	4.36	4	5	ND	2	85	-1	2	3	111	.81	.13	15	44	1.03	95	.13	2	3.06	.01	.07	2	10
862507	1	253	38	98	1.4	17	10	851	3.61	112	5	ND	2	128	1	3	2	71	1.62	.11	13	35	1.05	115	.04	2	3.44	.01	.09	2	20
862508	1	254	22	74	.3	29	15	2012	4.89	13	5	ND	2	137	1	2	3	106	.98	.18	22	59	1.75	203	.07	2	3.83	.01	.09	2	20
862509	1	42	14	56	.1	16	1	862	3.88	4	5	ND	2	60	1	2	2	105	.56	.10	14	42	.74	117	.11	5	2.52	.01	.05	2	5
862510	1	53	7	76	.1	19	1	612	3.54	5	5	ND	2	60	1	3	2	93	.87	.08	16	48	.82	139	.09	4	2.30	.02	.05	2	10
862511	1	87	4	58	.4	21	1	522	3.79	6	5	ND	2	64	1	2	2	103	1.17	.10	12	58	1.36	51	.16	2	2.30	.10	.08	2	5
862512	1	130	8	59	.3	22	7	575	4.69	19	5	ND	3	63	1	2	2	127	1.07	.09	12	49	1.12	55	.13	5	2.12	.03	.04	2	50
862513	1	147	13	58	.3	23	13	625	4.08	18	5	ND	2	78	1	2	2	104	1.22	.10	12	52	1.14	67	.11	5	2.45	.04	.05	2	30
862514	1	138	10	62	.3	23	9	658	3.78	22	5	ND	2	81	1	2	2	89	1.22	.08	10	47	1.17	66	.07	4	2.51	.03	.06	2	50
862515	1	77	4	63	.3	20	2	513	4.04	25	5	ND	2	46	1	2	2	106	.94	.10	11	50	1.50	44	.15	12	2.14	.05	.07	2	ND
862516	1	152	18	65	.3	23	10	793	3.70	37	5	ND	2	99	1	2	2	82	1.40	.09	11	35	1.20	84	.07	4	2.95	.03	.07	2	15
862517	1	152	12	98	.3	20	6	934	3.68	10	5	ND	2	96	1	2	2	88	1.38	.10	12	35	1.11	104	.09	2	2.96	.02	.08	2	15
862518	1	99	6	54	.1	19	2	544	3.75	12	5	ND	2	67	1	2	2	99	1.08	.09	11	44	1.24	57	.15	2	2.34	.11	.08	2	15
510 5-1	92	123	115	184	33.1	153	79	498	3.16	116	96	35	179	126	84	80	91	59	.56	.12	136	61	.58	123	.08	170	1.49	.21	.20	67	-

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
 THIS LEACH IS PARTIAL FOR: CA, P, MG, AL, TI, LA, K, N, BA, SI, SR, CR AND B. AU DETECTION 3 PPM.
 AU** ANALYSIS BY FA/AAS FINISH FROM 20 GRAM SAMPLE. SAMPLE TYPE - ROCK CHIPS

NOTE: IS = INSUFFICIENT SAMPLE
 ND = NON DETECTED
 - = NOT ANALYZED

DATE RECEIVED AUG 9 1984 DATE REPORTS MAILED Aug 24/84 ASSAYER [Signature] DAVID CHIU, CERTIFIED B.C. ASSAYER

BP - SELCO MINING PROJECT# 81-84-557 REPORT# 84-20-064 JOB# 84-356 INVOICE# 8188 FILE# 84-2247 PAGE # 1

SAMPLE #	MO	CU	PI	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU**
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
STD 5-1	88	121	115	182	31.3	151	80	479	3.17	111	93	34	172	126	78	68	86	59	.56	.12	125	63	.58	122	.08	161	1.49	.21	.20	61	-
861501	1	7	4	21	.1	8	1	224	1.88	5	5	ND	2	96	1	2	2	47	2.22	.11	2	17	.85	5	.19	6	1.22	.03	.02	2	ND
861503	1	66	6	30	.2	17	5	307	3.14	4	5	ND	2	163	1	2	2	93	2.00	.12	2	41	1.33	18	.26	5	1.43	.03	.03	2	5
861508	2	1878	8	36	.5	54	22	303	3.33	14	5	ND	2	88	1	2	2	95	1.98	.11	3	54	1.00	23	.18	5	2.35	.13	.03	2	120
861509	5	1388	17	40	.4	24	51	433	11.67	53	5	ND	2	30	1	2	2	117	.60	.09	2	51	1.42	13	.12	2	2.88	.10	.02	2	15
861523	1	127	3	54	.1	26	21	497	4.58	2	5	ND	2	54	1	2	2	120	.95	.18	2	67	2.50	117	.24	2	2.31	.03	.03	2	25
861524	1	31	5	73	.1	20	8	766	4.23	2	5	ND	2	50	1	2	3	93	1.19	.11	4	37	1.83	29	.21	5	1.87	.03	.04	2	5
861528	1	81	4	60	.1	17	9	625	3.59	2	6	ND	2	125	1	2	2	92	1.38	.11	4	23	1.63	10	.23	7	2.02	.02	.01	2	ND
861603	3	1011	423	140	10.4	4	1	599	8.75	141	5	ND	3	9	1	2	43	146	.30	.11	7	33	1.66	81	.12	2	2.54	.01	.15	2	10
STD 5-1	90	122	115	182	31.1	151	80	479	3.17	109	90	34	175	126	79	71	87	58	.56	.12	125	63	.58	122	.08	163	1.49	.22	.20	61	-

BP - SELCO MINING PROJECT# 557 REPORT# 84-20-051 JOB# 84-359 INVOICE# 8161 FILE# 84-2149 PAGE # 5

SAMPLE #	NO	CU	PI	IX	AG	XI	CO	TK	FE	AS	U	AU	TR	SR	CO	SI	BT	Y	CA	P	LA	CR	MG	BA	TI	B	AL	KA	K	V	AU10
	PPK	PPK	PPK	PPK	PPK	PPK	PPK	PPK	I	PPK	PPK	PPK	PPK	PPK	PPK	PPK	PPK	PPK	I	I	PPK	PPK	I	PPK	I	PPK	I	I	I	PPK	PPK
842519	1	70	12	81	.1	23	8	961	4.02	8	5	XD	2	65	1	2	2	102	.88	.09	18	42	1.05	140	.11	3	2.87	.01	.07	2	10
842520	1	85	4	67	.1	20	7	620	3.93	2	5	XD	2	54	1	2	5	104	.98	.09	15	48	1.36	75	.13	4	2.76	.01	.07	2	10
842521	1	115	14	96	.1	18	9	935	3.06	10	5	XD	2	72	1	2	2	75	1.00	.08	14	29	.79	113	.07	3	2.26	.01	.06	2	25
842522	1	46	6	62	.1	22	4	607	3.45	3	5	XD	3	36	1	2	2	87	.67	.08	16	51	1.14	84	.10	2	1.88	.03	.06	2	5
842523	1	90	6	106	.2	20	8	746	3.86	4	5	XD	2	67	1	2	2	95	.87	.09	18	55	1.17	106	.12	9	2.11	.03	.07	2	10
842524	1	120	12	114	.1	23	13	902	4.31	5	5	XD	2	69	1	2	4	110	.91	.09	18	71	1.41	94	.15	5	2.29	.01	.08	2	XD
842525	1	135	20	121	.4	23	13	1115	4.21	18	5	XD	2	88	1	2	2	107	1.20	.10	18	41	1.15	121	.11	4	3.03	.01	.08	2	25
842526	1	58	3	78	.1	23	10	944	4.02	5	5	XD	2	53	1	2	2	101	.88	.09	14	70	1.32	93	.12	5	2.33	.01	.09	2	5
842527	1	46	11	67	.1	21	8	694	4.08	3	5	XD	2	67	1	2	2	104	.76	.08	17	64	1.18	86	.12	2	1.97	.03	.07	2	20
842528	1	46	5	64	.1	20	8	587	3.42	4	5	XD	2	51	1	2	2	91	.66	.08	17	43	.85	125	.08	5	2.44	.01	.05	2	5
842529	1	55	12	76	.1	21	11	702	3.71	6	5	XD	2	53	1	2	2	97	.71	.08	19	50	.93	117	.07	7	2.61	.01	.05	2	10
842530	1	63	9	56	.1	17	9	625	3.49	5	5	XD	2	48	1	2	2	98	.79	.08	18	46	.75	91	.10	2	1.64	.01	.04	2	5
842531	1	61	7	58	.1	22	6	618	3.66	6	5	XD	2	59	1	2	4	96	.97	.08	14	59	1.33	64	.13	6	2.07	.05	.08	2	15
842532	1	58	6	57	.1	20	8	585	3.54	3	5	XD	2	54	1	2	2	91	.94	.08	15	56	1.15	79	.12	4	1.92	.01	.06	2	10
842533	1	65	4	63	.1	20	9	625	3.61	4	5	XD	2	55	1	2	2	93	.98	.10	15	62	1.24	85	.12	6	2.03	.04	.06	2	XD
842534	1	65	13	58	.1	12	6	869	3.25	5	5	XD	2	131	1	2	2	71	1.34	.09	17	21	.80	241	.04	3	3.84	.01	.09	2	5
842535	1	86	8	73	.1	16	10	973	4.05	5	5	XD	2	62	1	2	2	97	.56	.09	20	31	1.04	229	.04	4	3.04	.01	.07	2	10
842536	1	106	14	40	.3	8	6	476	2.01	4	5	XD	2	29	1	2	2	61	.27	.05	10	17	.50	153	.01	2	1.45	.01	.04	2	25
842537	1	100	19	100	.1	23	14	1136	4.57	11	5	XD	3	60	1	2	2	110	.39	.14	19	64	.93	140	.08	5	2.96	.01	.04	2	18
842538	1	29	12	68	.2	10	11	777	2.82	3	5	XD	2	53	1	2	2	69	.80	.06	12	53	1.28	38	.09	6	2.06	.02	.05	2	15
S10	18	176	47	98	2.1	779	11	655	3.64	10	5	XD	2	24	1	12	2	65	1.58	.11	14	64	.45	50	.03	28	.78	.03	.19	3	-
842539	1	362	21	111	1.3	44	32	1936	5.97	8	5	2	2	242	1	2	10	136	1.12	.10	7	173	2.89	219	.10	2	3.36	.01	.07	2	25
S10 S-1	83	122	113	181	31.0	150	78	482	3.17	109	93	34	153	125	75	79	97	57	.56	.11	131	62	.58	121	.07	169	1.48	.19	.19	63	-

VANGEOCHEM LAB LTD.
1521 Pemberton Ave.
North Vancouver, B.C.
V7P 2S

RECEIVED

NOV 28 1984

SELCO - BP EXPLORATION
VANCOUVER, B.C.

TO: Dr. Stan Hoffman
BP - Selco Mining
Suite 700 - 890 West Pender Street
Vancouver, B.C. V6C 1K5

FROM: Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine elements in hot acid soluble by Induction Couple Plasma Spectrometer (ICP) analysis.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

- (a) 0.500 gram of -80 mesh sample was used.
- (b) Samples were digested in a hot water bath with conc. HNO₃ and conc. HCl acids.
- (c) The digested samples were diluted to a fixed volume and shaken well.

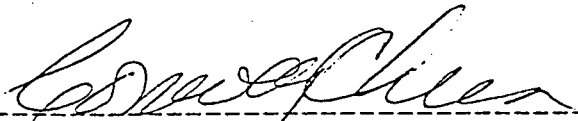
APPENDIX 2

GEOCHEMICAL PREPRATION AND ANALYTICAL TECHNIQUES

3. Method of Analysis

The ICP analyses elements were determined by using Jarrel Ash, model 885. Direct reading emission spectrograph of a inductive coupled plasma excitation source. All major matrix and trace elements are interelement corrected to trace elements. All data is entered into Apple II plus, stored on floppy disks, and printed by Epson 100.

4. The analyses were supervised by Mr. Dean Toye and Mr. Conway Chun of Vangeochem Lab Ltd. and their staff.



Conway Chun
VANGEOCHEM LAB LTD.

VANGEOCHEM LAB LTD.
1521 Pemberton Ave.
North Vancouver, B.C.
V7P 2S3

TO: Dr. Stan Hoffman
BP - Selco Mining
Suite 700 - 890 West Pender Street
Vancouver, B.C. V6C 1K5

FROM: Vangoechem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine Aqua Regia
soluble gold in geochemical samples

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Digestion

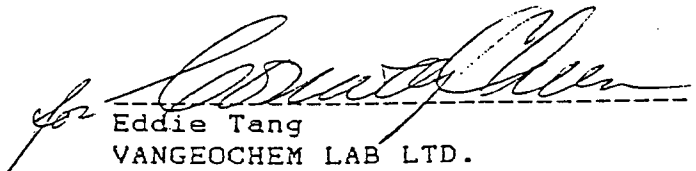
- (a) 5.00 - 10.00 grams of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance into beakers.
- (b) 20 ml of Aqua Regia (3:1 HCl : HNO₃) were used to digest the samples over a hot plate vigorously.
- (c) The digested samples were filtered and the washed pulps were discarded and the filtrate was reduced to about 5 ml.

- (d) The Au complex ions were extracted into diisobutyl ketone and thiourea medium. (Anion exchange liquids "Aliquot 336").
- (e) Separate Funnels were used to separate the organic layer.

3. Method of Detection

The gold analyses were detected by using a Techtron model AAS Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

- 4. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.


Eddie Tang
VANGEOCHEM LAB LTD.

VANGEOCHEM LAB LTD.
1521 Pemberton Ave.
North Vancouver, B.C.
V7P 2S3

TO: Dr. Stan Hoffman
BP - Selco Mining
Suite 700 - 890 West Pender Street
Vancouver, B.C. V6C 1K5

FROM: Vangeochem Lab Ltd.
1521 Pemberton Ave.
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire-assay method and detected by atomic absorption spec. in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method of Extraction

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900 degrees F and a lead button is formed.

(c) The gold is extract by cupellation and part with diluted nitric acid.


(d) The gold bead is saved for measurement later.

3. Method of Detection

(a) The gold bead is dissolved by boiling with sodium cyanide, hydrogen peroxide and amonium hydroxide.

(b) The gold analyses were detected by using a Techtron model AAS Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

4. The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu and his laboratory staff.


David Chiu
VANGEOCHEM LAB LTD.

APPENDIX 3
STATEMENT OF COSTS

COST STATEMENT

GOLDWAY 11 CLAIM GROUP

GEOLOGICAL SURVEY; (Mapping, sample collection)

6 man/days @ \$103.57/day	- \$	621.42
6 man/days @ \$ 68.78/day	-	412.68
1 man/day @ \$141.33/day	-	141.13
1 man/day @ \$300.00/day	-	300.00

\$ 1,475.23

OPERATING COSTS (Room and board, food equipent,
radio rentals, expediting etc.)

14 man/days @ \$75.00/day

1,050.00

GEOCHEMICAL ANALYSIS (Au + 30 element ICP;
Vangeochem Labs).

13 Rock chip samples @ \$16.00/sample	\$208.00
51 Soil samples @ \$12.13/sample	618.63
24 Stream sediment samples @ \$12.13/sample	291.12

1,117.75

Computing Costs

88 Samples @ \$2.00/sample

176.00

Sample Shipment Costs

100.00

TRANSPORT

Helicopter (Horizon): 4 hours @ \$450.00/hour	1,800.00
(Glacier): 3.1 hours @ \$486.00/hour	1,506.60

Truck (rental, fuel, insurance, repairs)
6 days @ \$86.00/day

516.00

REPORT PREPARATION

Project Geologist: 4 days @ \$103.57/day \$414.28
Drafting: 8 hours @ \$18.00/hour 144.00
Materials: 50.00

608.28

TOTAL COSTS: \$8,349.86

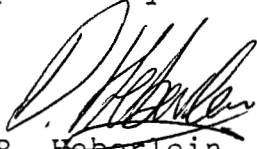
APPENDIX 4
CERTIFICATE OF AUTHORS

CERTIFICATE

I, David Rudi Heberlein of 2206 Stephens Street, Vancouver, B.C., hereby certify that:

1. I am a qualified geologist residing at the above address.
2. I have been practicing my profession since graduation from the University of Southampton, England with a B.Sc Honours degree in Geology (1980).
3. That I am presently an employee of Selco Division - BP Resources Canada Limited as a geologist.
4. That I personally supervised geological and geochemical examination of the Goldway 11, 12 group of Claims and interpreted results herein.
5. I hold no interest, direct or indirect in the Goldway 11, 12 Claims.

Respectfully submitted



D. R. Heberlein
Geologist

Vancouver, B.C.
November, 1984

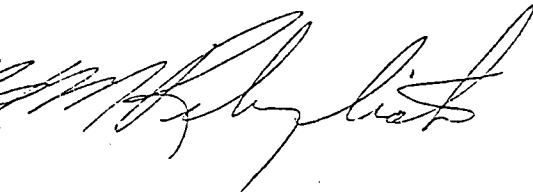
CERTIFICATE

I, C.M. Rebagliati, of Vancouver, in the Province of British Columbia, hereby certify the following:

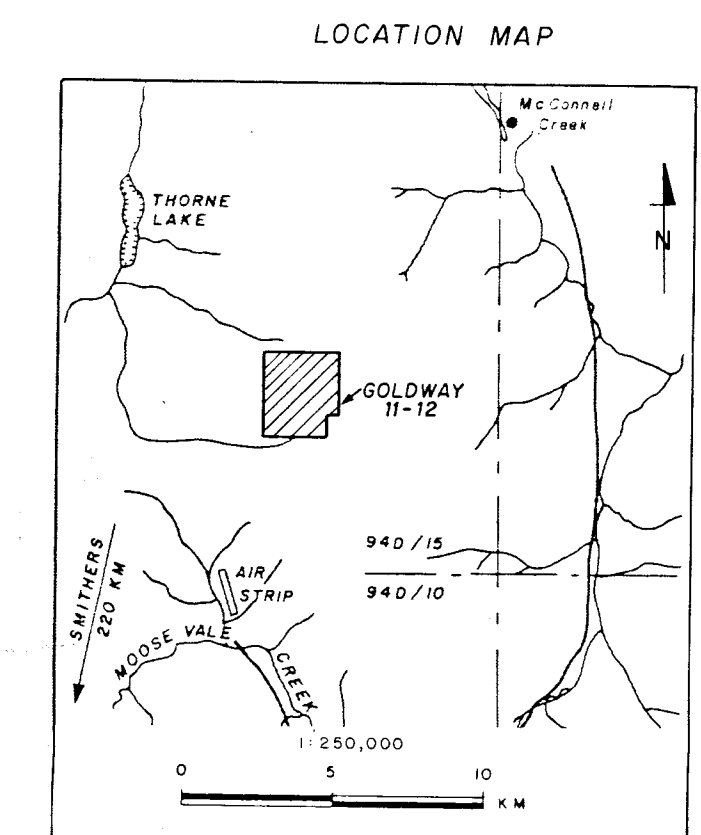
1. That I am a registered Professional Engineer in the Province of British Columbia.
2. That I have practised my profession since graduation from the Haileybury School of Mines of Ontario in 1966 and from the Michigan Technological University in 1969 with a B.Sc. degree in Geological Engineering.
3. That I am presently employed by Selco Division - BP Resources Canada Limited in Vancouver as Senior Geologist.
4. That I personally examined the property to confirm and evaluate the exploration program.

Respectfully submitted,

C.M. Rebagliati, P. Eng.



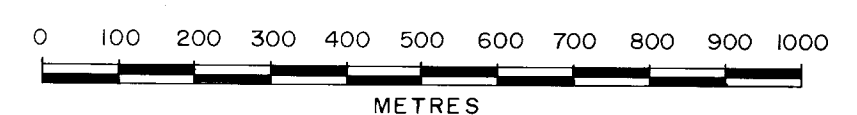
Vancouver, B.C.
December, 1984



- LEGEND**
- x STREAM SEDIMENT
 - TALUS FINE
 - ROCK CHIP

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

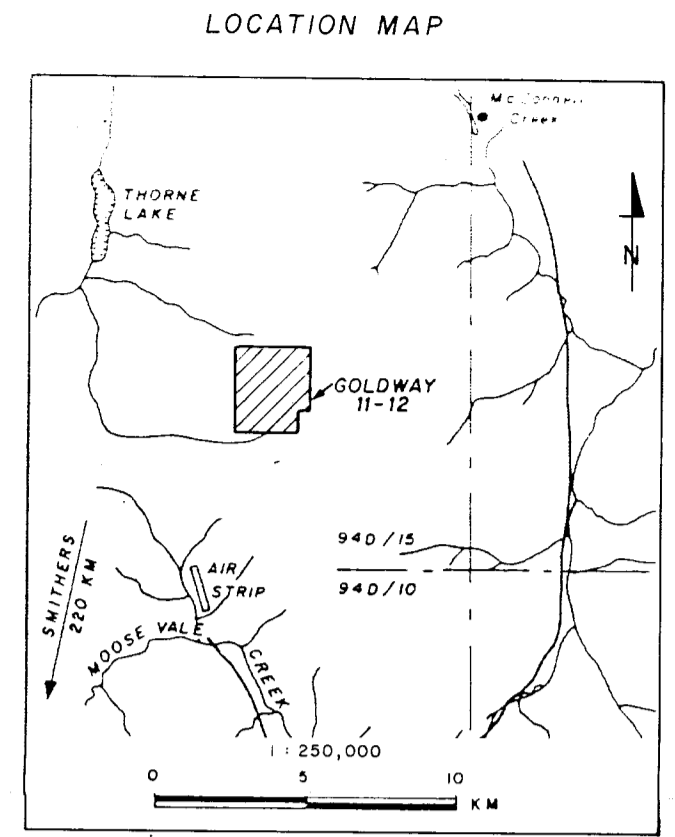
13,459



BP SELCO DIVISION -
BP RESOURCES CANADA LIMITED

**GOLDWAY 11,12 CLAIMS
GOLDWAY PROJECT
SAMPLE LOCATION MAP**

SCALE	10,000	DRAWN BY:	D. H.	FIG. 3
DATE	DEC '84	DRAFTED BY:	E. B. W.	
N.T.S.	94 D / 15	PROJ.	10109	REPORT BPVR 84 - 30



LEGEND

INTRUSIVE ROCKS

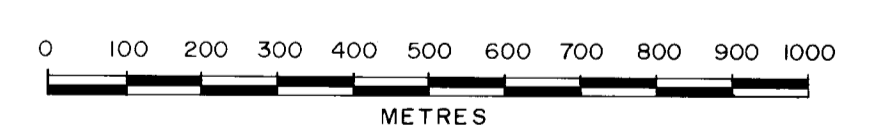
- Gd GRANODIORITE / GRANITE
- Md MONZODIORITE
- Mz MONZONITE
- Dh HORNBLLENDE DIORITE

VOLCANIC ROCKS

- 3 BASIC LAPILLI TUFFS
- 2 TRACHITOID FELDSPAR PORPHYRY FLOWS
- 1 BASIC AUGITE PORPHYRY & AUGITE FELDSPAR PORPHYRY FLOWS

GEOLOGIC SYMBOLS

- GEOLOGIC CONTACT (KNOWN, INFERRED)
- ~ ~ ~ FAULT
- ↗ THRUST FAULT
- 52 105 BEDDING ATTITUDE
- LIMIT OF OUTCROP
- ← GULLY (DRY)



13459

BP SELCO DIVISION -
BP RESOURCES CANADA LIMITED

GOLDWAY 11,12 CLAIMS
GOLDWAY PROJECT

GEOLOGY

SCALE	10,000	DRAWN BY:	D. H.	FIG. 2
DATE	DEC '84	DRAFTED BY:	E. B. W.	
N.T.S.	94 D / 15	PROJ.	10109	REPORT BPVR 84 - 30