

# UMEX

UNION MINIERE EXPLORATIONS  
AND MINING CORPORATION LIMITED

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## DIAMOND DRILL REPORT

SEVEN, SEVEN SOUTH, SEVEN WEST, SEVEN EAST,  
FIVE WEST, FIVE SOUTH, DUB CLAIMS

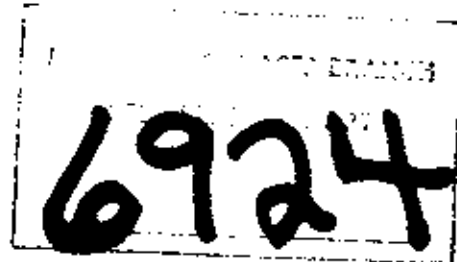
Record Numbers 409, 410, 462, 411, 413, 634, 461

N.T.S. 103F/8E

Latitude  $53^{\circ}28'N$   
Longitude  $132^{\circ}11'W$

by

A.A. Burgoyne, P.Eng.  
R.S. Tolbert, B.Sc.



Owner and Operator: Union Miniere Explorations and  
Mining Corporation Limited

Date: October, 1978

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DIAMOND DRILL REPORT  
SEVEN, SEVEN SOUTH, SEVEN WEST, SEVEN EAST,  
FIVE WEST, FIVE SOUTH, DUB CLAIMS

INTRODUCTION

The Seven, Seven South, Seven West, Seven East, Five West, Five South, and Dub claims totalling 39 units are located 22 air kilometers south of Port Clements, Queen Charlotte Islands, B.C. in the Skeena Mining Division. The claims are in N.T.S. 103F/8E with approximate latitude and longitude coordinates for the centre of the property being  $53^{\circ}28'N$  and  $132^{\circ}11'W$ , respectively.

The elevation of the claims varies from 60 to 335 meters and the topography is plateau-like and gently undulating although locally the creeks have produced precipitous canyons. The property is located within the Skidegate Plateau of the Insular Mountains Physiographic Subdivision.

The southwestern and northern parts of the property can be reached by logging roads from either Port Clements or Queen Charlotte City. MacMillan Bloedel Branch 44C logging road gives access to the Seven West, Seven, and Seven South claims whereas Branch 43 logging road terminates some 1.5 kilometers north of the Five West claim.

During the period of May 26 to July 10, 1978 diamond drill surveys were completed on the Seven, Seven South, and Seven West claims. The drilling contract was completed by H. Allen Diamond Drilling Ltd., P.O. Box 1397, Merritt, B.C. A total of six BQ size drill holes over 621.5 meters (2039 feet) were cored.

The whole core for drill holes 4, 5, and 6 and the split core for holes 1, 2, and 3 were geochemically analysed for gold by Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C.

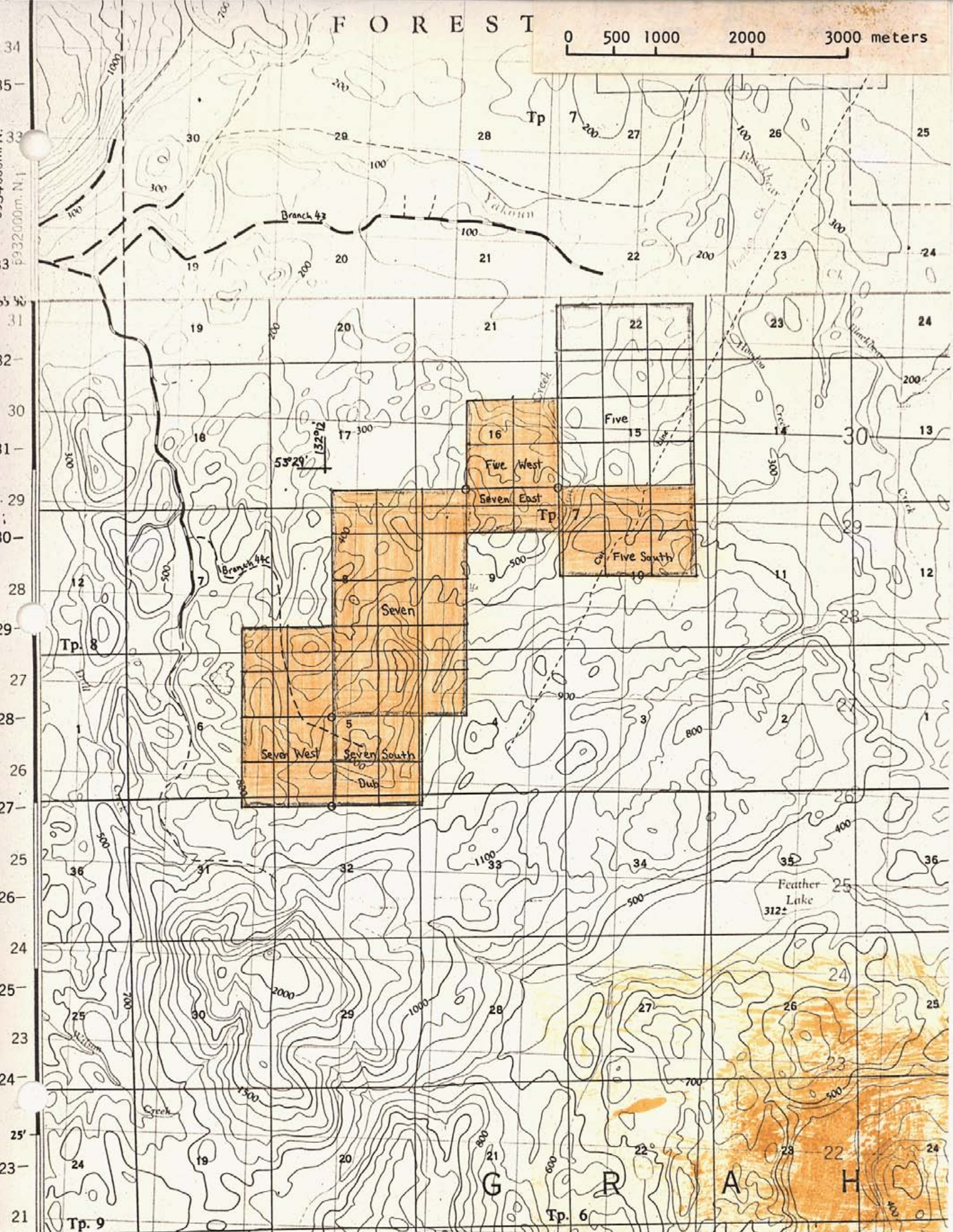
The drill core for holes 1, 2, and 3 and the reject chips from Chemex Labs for holes 4, 5, and 6 are currently stored at the UMEX warehouse, 928 Railway Avenue, Richmond, B.C. The drill surveys were under the immediate supervision of Mr. R. Tolbert, B.Sc., Geologist, who in turn was under the supervision of Mr. A.A. Burgoyne, P.Eng.

The Seven, Seven South, Seven East, and Five West claims were staked during July/August, 1977 and recorded on August 11, 1977. The Dub and



# FOREST

0 500 1000 2000 3000 meters





Seven West claims were staked on November 9 and 10, 1977 and recorded on November 14, 1977. The Five South claim was staked on May 28, 1978 and recorded on June 16, 1978.

## DIAMOND DRILLING

### Purpose

The area underlying the Seven, Seven South, and Seven West claims has been mapped by A. Sutherland Brown<sup>1</sup> as underlain by volcanics belonging to the Yakoun Formation of Jurassic Age.

UMEX completed geochemical soil, geological, and limited ground magnetic, and resistivity surveys during August, 1977 and April, 1978.

The purpose of the 1978 drilling program was to test the potential for gold mineralization underlying parts of the Seven, Seven South, and Seven West claims as defined by the above surveys.

### Results

The detailed geology and geochemistry is described in the drill logs in Appendix I.

Figure 2 illustrates the location of the drill holes with respect to the claim boundaries. Also illustrated in Figure 2 is the drill hole geology and geochemistry.

The drill holes penetrated two formations:

- 1) Porphyritic andesite tuffs and agglomerates and volcano-sedimentary rocks of the Yakoun Formation of Jurassic Age

These volcanic rocks, generally grey in colour, were variably altered, especially in and peripheral to shears and fractures, by chlorite, epidote and calcite, imparting to them various shades of green and grey. Pyrite was sometimes noted within veins, shears, and fractures and rarely as disseminations within the volcanics. In short sections, within fracture and shear zones, up to 15% pyrite was noted.

- 2) Intrusive hornblende andesite

This rock is dark grey in colour with little or no alteration and rarely fractured or veined. It is fine grained with prominent hornblende phenocrysts.

This intrusive rock is tentatively correlated with the Masset Formation(?) of Tertiary Age.

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<sup>1</sup>Sutherland Brown, A., 1968, Geology of the Queen Charlotte Islands, B.C.D.M. Bulletin 54

After geochemical analysis of the core, it was found that in general anomalous gold values (>5 ppb Au) were related to fractures, shears, and veins within the Yakoun Formation in which abundant pyrite was present. Except for one section (DDH 78-3, 103.63 meters - 106.63 meters) of three meters with 1400 ppb Au (0.04 oz/ton), the drilling resulted in no significantly interesting gold values.

#### CONCLUSIONS

The anomalies outlined by the surveys conducted during 1977 and 1978 can be explained by narrow pyritised shear, fracture, and vein zones within volcanic rocks of the Yakoun Formation carrying anomalous but economically insignificant amounts of gold.

Respectfully submitted,

*G. D. Burgoyne*

A.A. Burgoyne, P.Eng.

*R. S. Tolbert*

R.S. Tolbert, B.Sc.

APPENDIX I

## UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

## DRILL RECORD

AREA: Yakoun      Hole No.: 78-1      Depth: 121.3 m      Drilled By: H. Allen Diamond Drilling Ltd  
 ANOMALY: Y5-Y7      Bearing and Dip: 150°, -47°      Started: June 5, 1978      Machine: Longyear 38      Described By:  
 CLAIM: Seven, Seven South      Local Coord. X=      Y=      Z=      Completed: June 12/78      Diam. Drill: BQ      R.S. Tolbert

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
0 m	9.5	Overburden		30	7-10
9.5	11.4	Brown weathering, grey chloritic andesite tuff		5	10-13
11.4	11.5	Calcite centered K-spar rimmed veinlets 10° to core axis (c.a.)		15	13-16
11.5	23.78	Greenish-grey chloritized, feldspar porphyritic andesite agglomerate typical of Yakoun Fm., occasional thin calcite veinlets. Minor diss. py. Weakly magnetic. Dark fine grained lithic fragments, 2-4 cm across, rimmed in places by fine grained pyrite. Rock is propylitically altered around veinlets.	Diss. py. and py. rimming fragments	25 175	16-19 19-22
23.47		4 mm qtz. filled fracture at 30° to c.a.		30	22-24.2
23.78	28.7	Greenish-grey fine grained tuff grading from 3 mm to 1 cm course grained band. Fine tuff, <1 mm, grades to courser tuff, 1-2 mm, at 23.98 m, to course tuff to agglomerate at 25.88 m. Dark grey porphyritic fragments 1-4 cm across in greenish-grey porphyritic matrix. Non-magnetic.		15 10	24.2-27.2 27.2-29.3
28.7	32.9	Fine grained greenish-grey tuff coursening from <1 mm to 1 cm over 25 cm. 40 cm or less propylitised zones at 20° to c.a. are lighter green in colour.		5	29.3-32.3
32.9	33.36	Light greenish tuff 2 mm - 1 cm banded perpendicular to c.a.		10	32.3-33.9
33.36	35.34	Course greenish-grey tuff-agglomerate with dark lithic fragments 1-2 cm.		<5	33.9-35.9
35.34	46.01	Light grey to light greenish-grey to dark greenish-grey, course tuff to agglomerate. Varying amount of propylitic alteration. Occasional calcite, chlorite and pinkish mineral (zoisite?) veinlets 1-2 mm. Fragments porphyritic, 3-8 cm in size, larger fragments towards bottom of section.	Minor py. over 1 m at 40.3	<5 <5 10 5	35.9-38.9 38.9-41.9 41.9-44.9 44.9-46.1



Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
46.01		Fault at 40° to c.a.			
46.01	46.72	Dark greenish-grey porphyritic andesite tuff with calcite filled vugs with pyritic rims over short lengths.	Py. rimmed calcite veinlets	15	46.1-47.8
47.72	50.29	Brecciated dark greenish-grey porphyritic andesite tuff. Calcite or occasionally pyrite filling voids. Pyrite also rims some calcite filled fractures.	Pyrite rimmed or filled breccia zone	5	47.8-50.4
50.29		Fracture zone at 60° to c.a.			
50.29	51.10	Greenish-grey porphyritic andesite tuff, occasional calcite veinlets and minor pyrite.	Minor pyrite	10	50.4-51.4
51.10	52.58	Greenish-grey porphyritic andesite tuff, 1-2 mm calcite veinlets about 1 cm apart, 50% of which are pyrite rimmed.	Py. rimming calcite veinlets.	20	51.4-52.6
52.58	52.8	Rusty coloured fracture zone.			
52.8	53.86	Dark greenish-grey porphyritic andesite tuff, Minor py. veinlets and calcite rimmed veinlets. (A)	Py.	5	52.6-55.6
53.86	54.06	Calcite stringer-breccia vein zone.			
54.06	56.64	Same as (A).		10	55.6-57.1
56.64	57.50	Crackle breccia, calcite, minor py. except lower 20 cm where pyrite along axis of core.	Py.	15	57.1-59.96
57.5	64.8	Same as (A). Fractures approximately every 10-15 cm.	Py.	<5	59.96-60.96
64.81	66.45	Grey-green porphyritic andesite tuff, fragments average 1-2 cm. Pyritised in 2-3 mm veinlets avg. 10 cm spacing. Some py. rimming calcite. Increasing hornblende visible >1%.		5	60.96-63.0
				5	63.0-64.6
				5	64.6-66.0
66.45	68.73	As above with fewer py. veinlets. Bedding 40° to c.a.			
				160	66.0-68.65

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
68.73	75.59	Pervasive pyritization along fractures up to 10 cm within brecciated rock.	5-10% py. to	10	68.65- 71.6
		Larger voids filled with calcite, minor quartz with pyrite rimming. 5-10% py. up to 20% over short sections. Fractures along to 20° to c.a.	20% py.	25	71.6- 74.45
				15	74.45- 75.6
75.59		Rock becomes noticeably magnetic.			
75.59	80.89	There is change from above to feldspar-hornblende andesite tuff. Generally dark greenish-grey, less propylitically altered. Fragments to 2 cm avg. <1 cm below 80.89. Few pyrite filled fractures.	Minor pyrite	295	75.6- 78.45
				20	78.45- 80.75
80.89	87.48	Dark greenish-grey feldspar-hornblende andesite tuff. Dark lithic fragments 1-2 cm avg. <.5 cm.		<5	80.75- 83.6
				10	83.6- 86.55
87.48	92.0	Greenish-grey to light greenish-grey brecciated feldspar porphyritic andesite tuff, magnetic to slightly magnetic where propylitised.		5	86.55- 89.45
				25	89.45- 92.3
92.0	93.88	Greenish-grey feldspar porphyritic andesite tuff. Fragments to 3 cm avg. <1 cm.			
				30	92.3- 95.2
93.88	94.18	Calcite veining with peripheral propylitisation.			
94.18	96.93	Brecciated feldspar-hornblende andesite tuff.			
96.93	102.0	Brecciated feldspar andesite, calcite veined 1-20 cm, light greenish-grey. Four 2 cm veinlets in lower 1 m.		<5	95.2- 98.1
				<5	98.1- 101.0
102.0	103.0	Upper .5 m chloritised propylitised calcite veinlets. Lower .5 m appears fine grained light greenish-grey tuff.		10	101.0- 102.08
103.0	106.0	Continuation of highly calcite veined propylitic zone within f.g. tuff.		<5	102.08- 105.15
106.0	108.12	Dark greenish-grey fine grained tuff calcite veined propylitised tuff in contact with porphyritic hornblende andesite. Very magnetic.		10	105.15- 108.0
108.12	117.26	Dark grey hornblende andesite, very magnetic, calcite, potassium feldspar veined. K-spar rimming occasional sparse pyrite veinlet. Hornblende phenocrysts to 15-20%. Calcite veinlets avg. every 5 cm.		10	108.0- 108.3
				<5	108.3- 110.9
				<5	110.9- 113.9
				10	113.9- 116.9



## UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

## DRILL RECORD

AREA: Yakoun

Hole No.: 78-2

Depth: 92.05 m

Drilled By: H. Allen Diamond Drilling Ltd

ANOMALY: Y5-Y7

Bearing and Dip: 330° True, -47°

Started: June 13/78

 Machine: Longyear 38  
 Described By: R.S. Tolbert

CLAIM: Seven

Local Coord. X= Y= Z=

Completed: June 18/78

Diam. Drill: BQ

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth(m)
From	To				
0	9.6	Overburden.			
9.6	13.23	Light grey altered porphyritic andesite tuff with 30% feldspar phenocrysts. Minor pyrite <1%. Rusty weathering fractures.	Py.	165	9.6-12.6
13.23	20.73	Light grey-green feldspar porphyritic andesite tuff propylitised. Larger fragments to 1 cm. Remnant hornblende(?) up to 20% stands out as peppery (<1 mm) texture.		50 20	12.6-15.6 15.6-21.6
20.73	41.96	Whitish-grey to greenish-white propylitised porphyritic andesite tuff. Larger dark fragments >1 cm, avg. 4.5 cm. Calcite-chlorite dominates. Bedding at 50° to core axis (c.a.). Calcite filled fractures. Colour varies with calcite or chlorite content.	sparse py.	50 <5 10 70	21.6-24.6 24.6-27.6 27.6-30.6 30.6-33.6
41.96	43.87	Light grey volcanic breccia, fine tuff 1-2 mm grading at bottom to 3 cm fragments grain supported to supported in fine grained grey matrix of section below. Fragments variable greenish to dark grey, fine grained, porphyritic to dioritic appearing.		10 20 <5 5	33.6-36.6 36.6-39.6 39.6-42.6 42.6-45.6
43.87	45.31	Greenish-grey fine to medium grained waterlain(?) tuff grading into two courser members at 44.87 and 45.37. Grading, cross-bedding common. Grades at 45.31 to greenish-grey fragmental tuff, fragments 2-4 mm avg.			
45.31	51.10	Above grades over 1 m to tuff with fragments up to 3 cm in size of varied composition. Overall appears greenish-grey fragments sub-rounded to sub-angular. At 47.22 for 45 cm rusty weathered section.		<5 <5	45.6-48.6 48.6-51.6





## UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

## DRILL RECORD

AREA: Yakoun      Hole No.: 78-3      Depth: 124.36 m      Drilled By: H. Allen Diamond Drilling Ltd.  
 ANOMALY: Y5-Y7      Bearing and Dip: 150° True, -50°      Started: June 20, 1978      Machine: Longyear 38      Described By: R.S. Tolbert  
 CLAIM: Seven, Seven South      Local Coord. X=      Y=      Z=      Completed: June 23/78      Diam. Drill: BQ

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
0	2.13	Overburden.			
2.13	11.28	Weathered greyish to pinkish heterolithic potassic volcanic breccia ranging in size from <1 cm to >10 cm. Generally light greenish grey volcanics with pinkish to white feldspar phenocrysts, making up 20% of rock 2-3 mm in size, hornblende <1 mm 15%. Potassic matrix. Minor calcite veinlets.	Avg. 1% diss. pyrite	5 30 25	2.13-5.13 5.13-8.13 8.13-11.13
11.28	13.33	Greenish-grey K-spar phyrlic (15%) potassic volcanic flow rock, fractured 60-70% K-spar, 20-30% plagioclase, 10% hornblende.	1-2% py.	20	11.13-14.13
13.33	17.68	Greenish-grey to fleshy coloured K-spar rich heterolithic breccia. Most fragments similar to above rock. Calcite veinlet at 20° to c.a.	Minor py.	15	14.13-17.13
17.68	20.22	Above rock blocky broken calcite veined more plagioclase rich than above. Up to 10% pyrite.	10% py.	30	17.13-20.13
20.22	20.42	White gouge.		15	20.13-21.33
20.42	23.32	Grey hornblende-feldspar phyrlic andesite tuff. Magnetic. Fractured.		5	21.33-24.33
23.32	37.49	Above rock blocky-broken gougy in fault zone, 50° to 70° to c.a. (23.46-26.82 m - 77% recovery). 3 gouge zones in lower part 1 m wide each.		<5 <5	24.33-27.33 27.33-30.33
37.49	51.20	Heterolithic volcanic conglomerate(?). Reddish-maroon to greenish-grey jaspery fragments to +10 cm, avg. 2 cm. Very little chloritic matrix. Mostly fragment supported. Up to 3-4% py., avg. 1%. Few carbonate veinlets.	3-4% py. Avg. 1% py.	10 5 5	30.33-33.33 33.33-36.33 36.33-39.33
51.2	54.58	Reddish-maroon volcanic breccia grading to darker greenish colour. Upper part blocky and broken.		55 35	39.33-42.33 42.33-45.33

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
54.58	66.35	Contact 45° to c.a. Dark grey magnetic hornblende. Andesite calcite veined, one per 10-15 cm. Strongly veined in lower 2 m parallel to 45° to c.a. Chloritised in and short distance from veinlets.		40	45.33-47.33
				45	47.33-50.33
				65	50.33-52.28
66.35	66.45	Contact zone 35° to c.a., gougy chloritised, carbonitised in upper part brecciated in lower part with red fragments from below.	very minor py.	20	52.28-55.78
				10	55.78-58.78
66.45	68.60	Non-magnetic. Dark greenish altered conglu-agglomerate. Very few reddish maroon fragments visible.		5	58.78-61.78
				15	61.78-64.78
68.60	72.20	Greenish porphyritic agglomerate with reddish porphyritic to non-porphyritic fragments. Avg. size 4 cm, some >10 cm. Few fractures and calcite veinlets.		5	64.78-67.28
				5	67.28-69.43
72.20	72.54	Greenish to grey-green gouge breccia zone minor calcite veining. Slickensides cross core axis.		<5	69.43-72.43
72.54	76.59	Greenish heterolithic tuff. Avg. size <1 cm, some red fragments. Minor calcite veinlets.		10	72.43-75.43
				5	75.43-78.43
76.59	81.94	Fault zone in above tuff. Light greenish cataclasite, calcite veined, slickensided, broken parallel to 45° to c.a. 81.79 pyrite veinlet 3 mm. 20° to c.a.	Pyrite	<5	78.43-80.03
				20	80.03-83.03
81.94	87.78	Greenish to greenish-grey porphyritic agglomerate up to 10 cm in size. Avg. 1-2 cm. Very few red fragments. Calcite veinlets 45° to c.a.		5	83.03-84.83
				5	84.83-87.83
87.78	89.93	Greenish to maroon tuff. Avg. size 1 cm. 25% red fragments. Lower portion greener, larger less red fragments.		<5	87.83-90.83
				10	90.83-91.73
89.93	103.2	Light grey feldspar porphyritic andesite tuff similar to Holes 1 and 2. Upper 2 meters quite fragmental. Avg. size of fragments .5-1 cm. Minor pyrite in lower 1 meter 35° to c.a.	Minor pyrite.	20	91.73-93.13
				15	93.13-96.13
				10	96.13-99.13
103.2	107.92	Grey andesite tuff. Calcite veining 1/15 cm. Pyrite seams and occasionally rimming calcite veinlets.	2% pyrite	5	99.13-102.13
				10	102.13-103.63



## UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

## DRILL RECORD

AREA: Yakoun      Hole No.: 78-4      Depth: 90.83 m      Drilled By: H. Allen Diamond Drilling Ltd.  
 ANOMALY: Y5-Y7      Bearing and Dip: 50° True, -45°      Started: June 28, 1978      Machine: Longyear 38      Described By:  
 CLAIM: Seven West      Local Coord. X=      Y=      Z=      Completed: June 30, 1978      Diam. Drill: BQ      R.S. Tolbert

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
0	7.93	Overburden		45	7.93-10.97
7.93	22.53	Greyish-green, greenish to maroon tuff to agglomerate. Average fragment size <1 cm to 3 cm. Fine <1-2 mm feldspar phenocrysts (40%) give granular appearance. Hornblende to 10% in some sections. Varying proportions of varied coloured fragments determine colour of any section. Calcite veined <1-2mm, 10° to 60° to core axis (c.a.). Propylitic alteration gives some short sections olive green colour. Bedding features 55° to c.a. (A)		<5	10.97-14.63 14.63-17.68 17.68-20.73 20.73-23.77
22.53	22.83	Black fault gouge 45° to c.a.			
22.83	23.77	Fine grained grey-green, grainy tuff <.3 cm grading to (A).			
23.77	30.48	Grainy appearance and colour similar to (A). Large fragments especially maroon up to 16 cm, comprise 10-20% of rock in finer grained matrix (B). At 29.07 m is 30 cm hornblende andesite dyke 50° to c.a.		10 5 5	23.77-26.82 26.82-29.87 29.87-32.92
30.48	45.05	Similar to (A) and (B). Greater proportion of maroon fragments. Average size 5-7 cm in similar grainy matrix.		<5 5	32.92-35.97 35.97-39.01
45.05	45.10	Calclitic, chloritic shear zone 20° to c.a.		5	39.01-42.06
45.10	48.46	(A) to (B) type rock continues.		<5	42.06-45.11
48.46	49.0	Dark grey-green rock similar to (A) and (B) but with fewer large fragments.		<5	45.11-48.16
49.0	49.46	Greenish to white calclitic, chloritic shear zone 20° to c.a.		5	48.16-51.21
49.46	50.90	Similar to (A) and (B) with more hornblende-rich fragments near base.			





## UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

## DRILL RECORD

AREA: Yakoun      Hole No.: 78-5      Depth: 89.92      Drilled By: H. Allen Diamond Drilling Ltd.  
 ANOMALY: Y5-Y7      Bearing and Dip: 120° True, -47°      Started: July 1/78      Machine: Longyear 38      Described By:  
 CLAIM: Seven West      Local Coord. X=      Y=      Z=      Completed: July 2/78      Diam. Drill: BQ      R.S. Tolbert

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth (m)
From	To				
0	5.49	Overburden			
5.49	12.38	Brown, weathered, highly broken calcite veined hornblende andesite.		<5	5.49-8.53
12.38	21.53	Dark grey hornblende andesite, strongly magnetic. Epidote rimmed calcite veins 10° to 60° to core axis (c.a.)		<5	8.53-11.58 11.58-14.63
21.53	21.83	Calcite vein 20° to c.a.		<5	14.63-17.68
21.83	33.20	Terracotta - maroon altered porphyritic andesite ruff. calcite veined (1 mm to 2 cm)		5 <5	17.68-20.73 20.73-23.77
33.20	34.2	Altered fault gouge zone 30° to c.a., upper half olive green, lower light blue-green, calcitic. Minor pyrite.		<5	23.77-26.82
			Minor py.	<5	26.82-29.57
34.2	38.56	Dark grey-green feldspar porphyritic andesite ruff. Feldspar not as prominent as in Hole 1.		<5	29.57-32.31
				<5	32.31-35.36
38.56	54.25	Similar to A and B of Hole 4. One >15 cm fragment is of plagioclase-phyric andesite. Pyrite in fault at 43.59 m 20° to c.a.	Py. in fault	5	35.36-38.56
				5	38.56-41.76
54.25	57.30	Brownish maroon to greenish fragmental tuff (avg. size 1 cm) with 30% porphyritic matrix. Dark colour overall. Lower 1 m has 6 m fragments, matrix (60%) supported.		5 <5	41.76-45.11 45.11-48.16
				5	48.16-51.21
57.30	87.47	Terracotta-maroon to greenish-grey muddy appearing porphyritic andesite agglomerate, in which are up to 20 cm fragments of greenish fine porphyritic texture. Rare large maroon fragments. Matrix predominantly maroon-terracotta compact. A few broken sections around minor calcite veining.		<5	51.21-54.25
				5	54.25-57.30
				<5	57.30-60.35
				<5	60.35-63.40



UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED  
DRILL RECORD

AREA: Yakoun      Hole No.: 78-6      Depth: 103.02      Drilled By: H. Allen Diamond Drilling Ltd  
 ANOMALY: Y5-Y7      Bearing and Dip: 35° True, -47°      Started: July 3/78      Machine: Longyear 38      Described By:  
 CLAIM: Seven West      Local Coord. X=    Y=    Z=      Completed: July 5/78      Diam. Drill: BQ      R.S. Tolbert

Depth (meters)		Description & Lithology	Mineralization	Assay Au ppb	No. of Sample Depth(m)
From	To				
0	3.05	Overburden.			
3.05	5.49	Brownish weathered broken hornblende andesite, calcite veined (70% recovery)		5	3.05-5.49
5.49	33.49	Dark greenish-grey to dark grey, highly magnetic, hornblende andesite, calcite veined (2 mm) 30° to c.a.		5	5.49-8.53
33.49	37.41	Terracotta to maroon, altered tuff, broken and calcite veined		5	11.58-14.63
37.41	44.20	Gougy, broken, greyish to yellowish green, weathered tuff, calcite veined 0 to 20° to c.a.		<5	14.63-17.68
44.20	44.85	Light greenish to white, calcitic, gougy fault zone 10° to 30° to c.a. Minor pyrite associated with calcite. Some brecciated calcite veining.	Minor py.	<5	20.73-23.77
44.85	46.25	1 mm to 2 mm calcite veined stockwork 10° to 30° to c.a. in tuff		<5	23.77-26.82
46.25	53.95	Greenish-grey fine porphyritic, matrix-supported agglomerate generally magnetic. Minor pyrite. Fragments to 5 cm, generally dark though some are brownish maroon.	Minor py.	5	26.82-29.87
53.95	66.39	Brownish to yellowish-green fault zone 20° to c.a., with some calcite veining.		5	29.87-32.92
66.39	71.32	Same rock as before above fault. Almost no calcite veins. Two of 1 cm each with minor pyrite.	Minor py.	<5	32.92-35.97
71.32	78.76	Dark greenish agglomerate with green, maroon 1-2 cm angular fragments generally non to slightly porphyritic. Bedding 70° to c.a.		<5	35.97-39.01
				<5	39.01-42.06
				<5	42.06-44.2
				<5	44.2-47.4
				<5	47.4-50.6
				<5	50.6-53.65
				<5	53.65-57.3
				<5	57.3-60.35



## APPENDIX II

## ITEMIZED COST STATEMENT

Diamond Drilling - H. Allen Diamond Drilling Ltd.	\$39,723.25
Labour - Core splitting and drill hole survey, R. Durrance, June 19-30, July 3-7, 1978 - 94 hours @ \$5/hr.	\$ 470.00
Transportation -	
Hauling bombardier, Mijo Services Ltd., Queen Charlotte City, B.C. - 12 hours @ \$20/hr.	\$ 240.00
Bombardier rental, Wm. R. Pringle, Queen Charlotte City, B.C. - 12 hours @ \$30/hr.	\$ 360.00
Tilden truck rental (includes fuel) - 25 days @ \$44.70/day	\$ 1,117.50
Airline travel, R. Tolbert, H. Allen, (Vancouver- Sandspit/return)	\$ 288.00
Accommodation (motel and meals) - 25 days @ \$26.45/day	\$ 661.25
Analysis (includes sample preparation, sample bags) 212 samples for Au @ \$5.35 each	\$ 1,134.20
Freight - Shipping drill core (Sandspit to Vancouver)	\$ 175.37
Planning and Supervision -	
A. Burgoyne, June 21-22, 2 days @ \$175.36/day	\$ 350.72
R. Tolbert, May 29-30, June 5-14, 23-28, 29-30, July 2, 5, 8-10, 1978 - 25 days @ \$89.40/day	\$ 2,235.00
Office - Drafting, interpretation, report R. Tolbert, July 29-31, 1978 - 3 days @ \$83.40/day	\$ 250.20
Secretarial, Miscellaneous	\$ 50.00
	<hr/>
TOTAL	\$47,055.49
	<hr/> <hr/>



VOK 2B0.

INVOICE NO. 352.

June 26, 1978.

To: Umex and Mining Corp. Ltd.  
Suite 200 - 4299 Canada Way,  
Burnaby, B.C. V5G 1H4.

In Account With:

H. Allen Diamond Drilling Ltd.,  
Box 1397,  
Merritt, B.C. VOK 2B0.

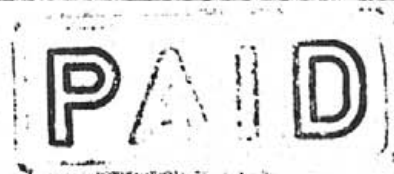
This invoice is for drilling your Queen Charlotte Islands property:

Hole No. 1 -	398 ft.		
" " 2 -	302 ft.		
" " 3 -	<u>408 ft.</u>		
	1108 ft. @ \$14.75 per ft.....	\$	16,343.00
47 core boxes @ \$4.50 .....		\$	211.50
6 ft. B casing left in hole #3 @ \$10.00 per ft.....		\$	60.00
1 Bw casing shoe @ \$160.00 per shoe.....		\$	160.00
5 boxes Quik Trol @ \$66.00 per box.....		\$	330.00
Transportation costs -			
Merritt to off loading point - 1000 miles @ \$2.00 per mile.....		\$	2,000.00
Air fare to Sandspit - 3 fares @ \$31.00 each.....		\$	93.00
Ferry costs.....			366.00
		\$	<u>19,563.50</u>

Contractor's representative

Company's representative

*Check #4 07302  
June 29/78*



VOK 280.

INVOICE NO. 359.

July 10th. 1978.

To: Umex and Mining Corp. Ltd.,  
Suite 200 - 4299 Canada Way,  
Burnaby, B.C. V5G 1B4.

In Account With:

H. Allen Diamond Drilling Ltd.,  
Box 1397,  
Merritt, B.C. VOK 2B0.

This invoice is for drilling your Queen Charlotte  
Island property:

Hole No. 4 - 298 ft.	
" No. 5 - 295 ft.	
" No. 6 - 338 ft.	
931 ft. @ \$14.75 per ft.....	\$13,732.25
37 core boxes @ \$4.50 per box.....	166.50
2 boxes Quik Trol @ \$66.00 per box.....	132.00
Mobe cost from job site back to Merritt - 1,000 miles @ \$2.00 per mile.....	2,000.00
Air fare Sandspit to Rupert.... 3 fares @ \$31.00 each.....	93.00
Ferry cost to Rupert.....	366.00
	<u>\$16,499.75</u>

Contractor's Representative      Company's Representative

**PAID**

Cheque #4 07352  
July 12/78

2262-270-11

H. ALLEN DIAMOND DRILLING LTD.

TELEPHONE 276-4494

P.O. BOX 1397  
MERRITT, B.C.  
VOK 2B0.

INVOICE NO. 373.

August 28th. 1978.

To: Umex and Mining Corp. Ltd.,  
Suite 200 - 4299 Canada Way,  
Burnaby, B.C. V5G 1H4.

In Account With:

H. Allen Diamond Drilling Ltd.,  
Box 1397,  
Merritt, B.C. VOK 2B0.

This invoice is for work at your Queen Charlotte  
Islands property:

Hole No.1 -	70 man hours.	
" No.4 -	40 man hours.	
" No. 5-	20 man hours	
" No.6 -	12 man hours	
	<u>16 man hours</u> moving out.	
	158 man hours @ \$15.00 per hour.....	\$ 2,370.00
Flex track rent.....		\$ 1,000.00
Hauling flex track to Rupert and then to Massett.....		\$ 300.00
		<u>\$ 3,670.00</u>

Contractor's Representative

Company's Representative

*Ken Allen*

\_\_\_\_\_

*Cheque #4 03597*

*Sept. 5/78*

*2262-270-11*

**PAID**

APPENDIX III

AUTHOR'S QUALIFICATIONS

I, A.A. Burgoyne of 7924 Burnlake Drive, Burnaby, B.C., hereby certify:

- (1) I am a graduate of the University of British Columbia, B.Sc., Geology in 1962, and of the University of New Mexico, M.Sc., Geology in 1967.
- (2) I am registered as a Professional Engineer of the Province of British Columbia and Yukon Territory.
- (3) I am a founding member of the Association of Exploration Geochemists.
- (4) I have practised my profession since 1962 with the Geological Survey of Canada, Falconbridge Nickel Mines Ltd., Anaconda American Brass Ltd., Crest Laboratories Ltd., and Union Miniere Explorations and Mining Corporation Limited (UMEX).
- (5) Since 1970 I have been Exploration Manager, Western Canada, for UMEX.

### APPENDIX III

#### AUTHOR'S QUALIFICATIONS

I, Robin S. Tolbert of 1102 - 1740 Comox Street, Vancouver, B.C. hereby certify that:

- 1) I am a graduate of the University of Edinburgh, Edinburgh, Scotland, B.Sc. Geology in 1972.
- 2) I have practised my profession since 1969 with seasonal work (1969-1971) for various mining companies in British Columbia and Northwest Territories.
- 3) Since 1974 I have been employed as Project Geologist with Union Miniere Explorations and Mining Corporation Limited (UMEX), in mineral exploration in British Columbia, Yukon, and Western U.S.A.

June 14/78

In account with  
Wm. R. Puzle

Bombardier rental

12 hours @ \$30. **\$360.00**

3972325	1956350
T	T
	1648975
	3670000

Mijo Services Ltd.  
Box 393  
Queen Charlotte City, B.C.  
V0T 1S0

**PAID**

Wm. R. Puzle  
Box 546  
Queen Charlotte City  
B.C. V0T 1S0

2262-270-11

Date: June 14 1978

M. Officers Mineral Explorations  
GEO MINING CORP LTD. - Burnaby B.C.

NOED BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FIG.
1				
2		Hauling Charges		
3		12 hrs. @ 20 <sup>00</sup>		
4		P/H		240 <sup>00</sup>
5				
6				
7				
8				
9		Check #407307		
10		June 29/78		
11				
12		2262-270-11		
13				

**PAID** 240<sup>00</sup>



