

LOG NO:	JAN 20 1995 U
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**ASSESSMENT REPORT**  
on a  
**SILT SAMPLING**  
and  
**SOIL SAMPLING PROGRAM**  
on the  
**ASPEN PROPERTY**  
**ASP 1-8 MINERAL CLAIMS**  
**SALMO AREA**  
**NELSON MINING DIVISION, B.C.**

NTS: 082F/03E  
LATITUDE: 49° 11'08"N  
LONGITUDE: 117° 11'15"W  
OWNER: W.R. Gilmour  
OPERATOR: Discovery Consultants  
AUTHORS: T.H. Carpenter, P.Geo  
DATE: October 20, 1994

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**23,717**

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## APPENDICES

APPENDIX 1	Silt Sampling Survey Analytical Procedures and Results
APPENDIX 2	Soil Sampling Survey Analytical Procedures and Results

## SUMMARY

The Aspen is a probable manto-type silver, gold, lead and zinc deposit hosted by limestone of the Lower Cambrian Laib Formation. The deposit is located on the east side of upper Aspen Creek, 65 kilometres east of Salmo and 40 kilometres south of Nelson in the Nelson Mining Division.

Exploration work has been carried out on the property since 1912 and has defined three distinct ore-bearing breccia horizons, which have been strongly affected by folding, faulting and by the emplacement of the Middle to Late Jurassic Nelson Intrusions.

In 1993, programs of silt and soil sampling were carried out on the property.

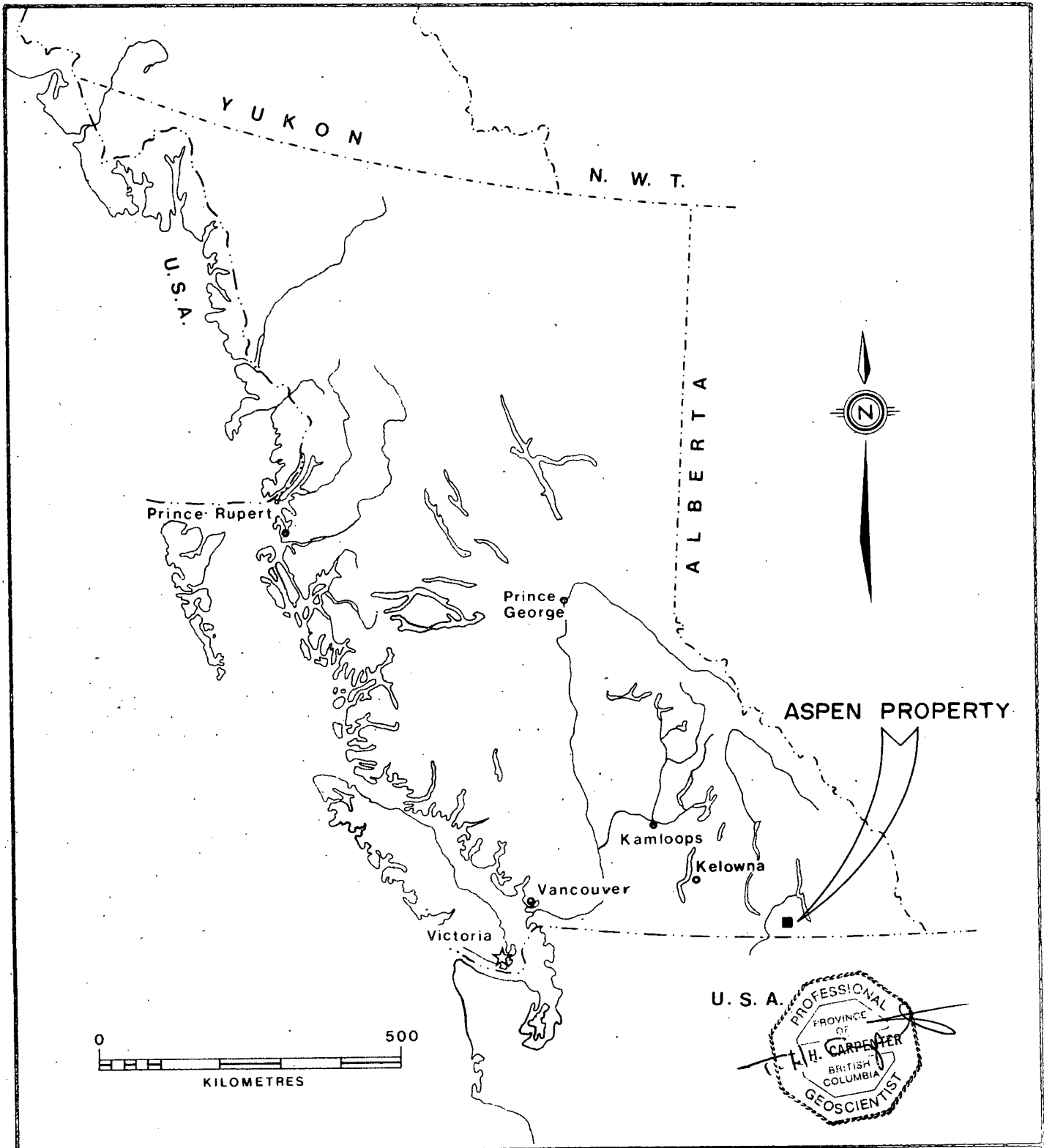
## LOCATION AND ACCESS

The Aspen property is centred at latitude 49°11'08"N and longitude 117°11'15" W. The property is located 6.5 km east by east-southeast of Salmo and 4.8 km north of the junction of Aspen and Sheep Creeks (Figure 1).

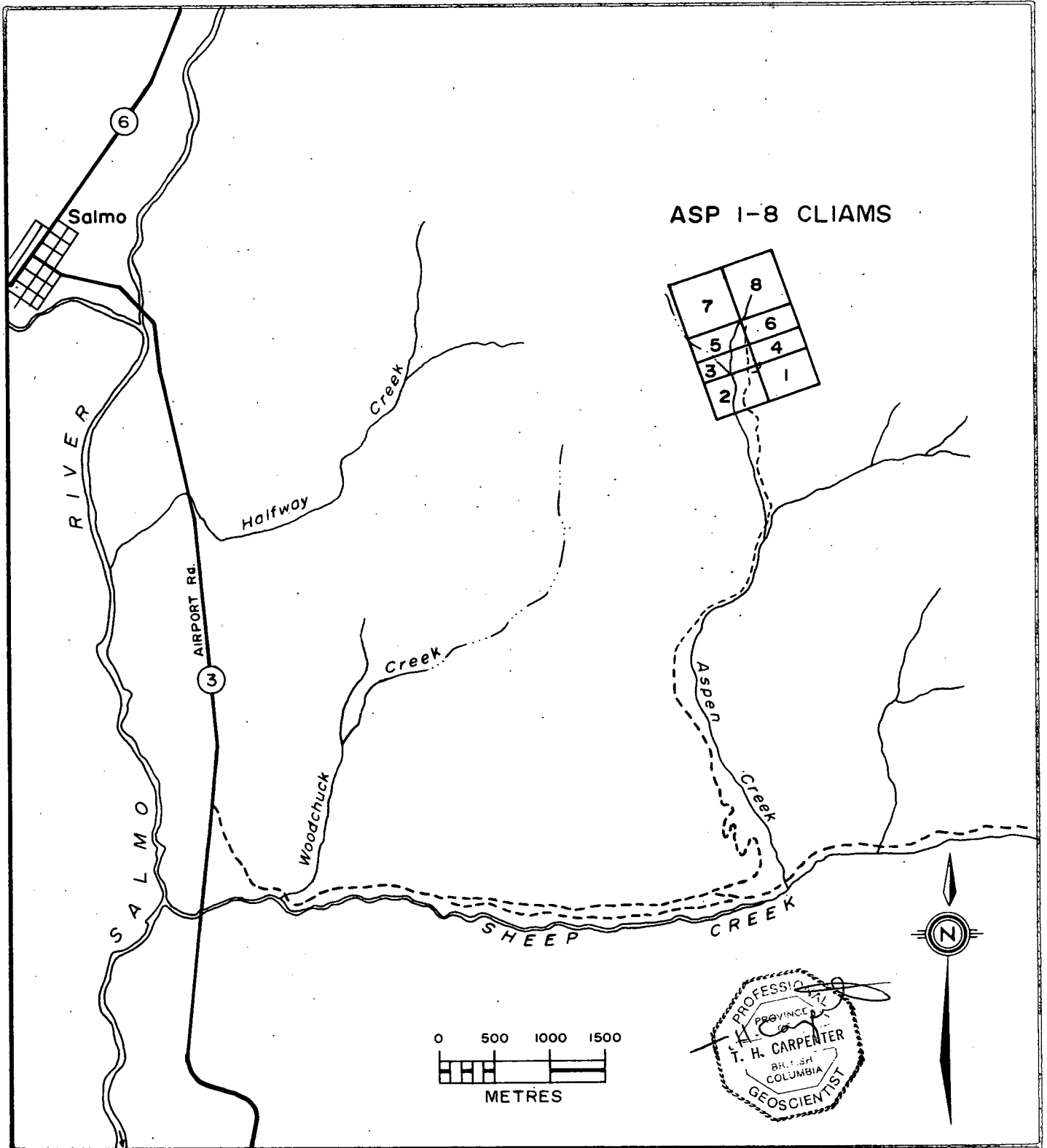
Access to the property can be gained via a four-wheel drive road up Aspen Creek from the Sheep Creek road off Highway 3/6.

## TOPOGRAPHY

The Asp claims are principally located on the east side of Aspen Creek. Elevations range from 4500 feet (1372 metres) to 5000 feet (1524 metres). Slopes are moderate.



<b>DISCOVERY</b>	Consultants	<b>PREDATOR SYNDICATE</b>	
<b>ASPEN PROPERTY</b>		<b>LOCATION MAP</b>	
DATE: MAR. 5/1994	PROJECT: 610	SCALE: As Shown	NTS. 82F/3E
M.D.: NELSON		FIGURE: 1	



**DISCOVERY** Consultants

PREDATOR SYNDICATE

ASPEN PROPERTY

CLAIM LOCATION MAP

## PROPERTY

The Aspen property comprises eight two-post claims, designated Asp 1 to 8, located by Richard G. Mitchell and John G. Beggs on October 18, 1993.

<u>Claim Name</u>	<u>Record #</u>	<u>Owner of Record</u>	<u>Anniversary Date</u> *
Asp 1	321805	W.R. Gilmour	October 18, 1999
Asp 2	321806	W.R. Gilmour	October 18, 1999
Asp 3	321807	W.R. Gilmour	October 18, 1999
Asp 4	321808	W.R. Gilmour	October 18, 1999
Asp 5	321809	W.R. Gilmour	October 18, 1999
Asp 6	321810	W.R. Gilmour	October 18, 1999
Asp 7	321811	W.R. Gilmour	October 18, 1999
Asp 8	321812	W.R. Gilmour	October 18, 1999

The claims are owned by W.R. Gilmour in trust for the Predator Syndicate. There is a section 35 dispute involving the Aspen 1 to 4 claims which cover some of the same ground also staked as the Asp claims.

\* Pending acceptance of this report.



## HISTORY

The Aspen deposit was first discovered by prospecting in 1896. From 1912 to 1928 considerable development work was done on the property by private interests, including trenching, drifting, cross-cutting and diamond drilling.

Between 1928 and 1937 work was continued by Salmo-Malartic Mines Ltd.

Recorded production for three years during this period totalled 28 tonnes grading 31 grams of gold, 36,359 grams of silver, 431 kilograms of lead and 365 kilograms of zinc.

Reserves published in 1937 indicated 29,030 tonnes averaging about \$9 per tonne combined silver and gold (1937 prices) and 90,720 tonnes of low-grade zinc.

In 1951 Sheep Creek Gold Mines Limited conducted 3019 feet (920 metres) of diamond drilling which outlined a considerable tonnage of marginal material.

Extotal Resources Inc. carried out a further 1545 metres of diamond drilling in 1980.

In 1984 Greenwich Resources completed a program of rock, soil and silt sampling combined with a ground electromagnetic survey.

## WORK DONE

Work carried out on the property in 1993 comprised silt sampling and soil sampling. The individual surveys are discussed below.

### 1. Silt Sampling

#### a). Program Parameters

A total of 6 silt samples was collected from drainages on the Asp 5, 7 and 8 claims. Samples of stream silt were collected at 200 metre intervals, placed in kraft sample bags and sent to Bondar-Clegg and Company Ltd. in North Vancouver, B.C. At Bondar-Clegg, analyses were carried out for gold and 27 element ICP. Sample locations and gold and zinc values are shown on Figures 3 and 4. Results are contained in Appendix 1.

#### b). Program Results

Anomalous zinc values to 302 ppb were detected in a northeast trending drainage on the Asp 5 and 8 claims.

Anomalous gold values to 36 ppb were detected in a northwest trending drainage on the Asp 5 and 7 claims.

### 2. Soil Sampling

#### a). Program Parameters

Twenty-four soil samples were collected on the Asp 5, 7 and 8 claims. The samples were taken at 25 metre intervals along two contour lines.

The samples were collected by shovel from the "B" horizon, placed in 9 cm x 25 cm kraft sample bags and sent to Bondar Clegg and Company Ltd. in North Vancouver, B.C. At Bondar-Clegg, analyses were carried out for gold and 27 element ICP. Sample locations with gold and zinc values are shown on Figures 3 and 4. Results are contained in Appendix 2.

#### b). Program Results

An anomalous gold value of 968 ppb was noted in the soil sampling program. Zinc values to 631 ppm were also detected. Copper and lead values were at or near background levels.

## GENERAL GEOLOGY

The Aspen occurrence has been described as a manto-type deposit hosted by limestone of the Lower Cambrian Formation (Reeves Member) correlative with the Lower Cambrian Badshot Formation. The deposits have been strongly affected by folding, faulting, and by the emplacement of the Middle to Late Jurassic Nelson Intrusions. Three distinct stratabound, dolomitic ore-bearing breccia horizons have been recognized.

These are:

1. Upper Zinc dolomitic breccia. Sphalerite, pyrite and pyrrhotite are hosted in a calcite-dolomite-olivine-serpentine-talc gangue.
2. Middle Silver dolomitic breccia. Pyrite, sphalerite, galena and tetrahedrite occurs in a diopside-quartz-calcite-wollastonite-serpentine-humite gangue. The unit is 1 to 8 metres thick and is traced about 1100 metres on the surface. Tetrahedrite occurs as small, irregular aggregates easily mistaken for carbonaceous material in an otherwise unmineralized, silicified dolomite. The Middle Silver Zone may locally contain up to 15% zinc, 14 grams per tonne gold and 1371 grams per tonne silver.
3. Lower Lead-Zinc-Silver dolomitic breccia. Sphalerite, galena and tetrahedrite occur in a calcite-dolomite-olivine-wollastonite gangue. Assay values range from 2.3 to 6% zinc, 2 to 25% lead, and 291 to 2057 grams per tonne silver.

The zones have a general north-northwest trend and dips about 40 to 50 degrees northeast.

## CONCLUSIONS

Significant gold and zinc values were detected on the Asp claims in silt and soil samples. Gold and zinc values were found in silt samples in separate drainages at the headwaters of Aspen Creek.

The anomalous gold values in silts are contained in the northwest trending fork, which drains the area of a metamorphosed limestone/granite contact.

The northeast trending drainage, which is anomalous in zinc, drains metamorphosed limestones, phyllites and argillites of the Emerald member of the Laib Formation and limestones and dolomites of the Reeves Member of the Laib Formation.

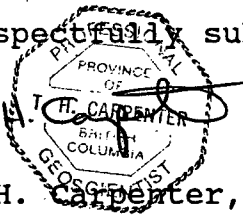
Anomalous zinc values in soils also appear to be largely confined to the drainage area of the northeast trending drainage while the most anomalous gold value in soil is contained within the northwest drainage area.

RECOMMENDATIONS

Further exploration to trace the source of anomalous gold and zinc values in silt and soil samples on the Asp claims is recommended.

This work should comprise further soil sampling and a detailed mapping & prospecting program

Respectfully submitted,

T. A. 

T.H. Carpenter, P. Geo.

Vernon, B.C.  
October 20, 1994

## REFERENCES

British Columbia Ministry of Energy, Mines and Petroleum Resources (MEMPR) Annual Report.

1896 pg. 73  
1912 pg. 155  
1913 pg. 131  
1914 pg. 329  
1915 pg. 162  
1917 pg. 170, 195  
1918 pg. 173, 198  
1920 pg. 133  
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1927 pg. 308  
1928 pg. 348  
1933 pg. 232  
1934 pg. E22  
1935 pg. A31, G50  
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1984 pg. 36

Fyles, J.T. and Hewlett, C.G. - Stratigraphy and structure of the Salmo Lead-Zinc Area. British Columbia Department of Mines, Bulletin No. 41, 1959

Geological Survey of Canada, Memoir 172, pg. 65

Geological Survey of Canada, Memoir 308, pg. 134

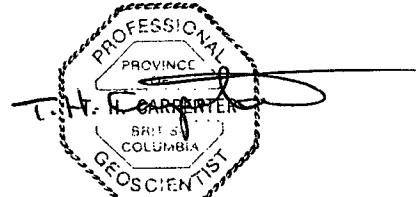
## STATEMENT OF COSTS

1.	Professional Services		
	K.L. Daughtry		
	Supervision, data compilation		
	1 day @ \$350/day	\$ 350.00	
	T.H. Carpenter		
	Data compilation and report		
	writing		
	2.5 days @ \$380/day	<u>950.00</u>	\$ 1300.00
2.	Field Personnel		
	Rick Mitchell (Oct 18-20)		
	Silt & soil sampling		
	2.5 days @ \$235.57/day	588.92	
	John Beggs (Oct 18-20)		
	Silt & soil sampling		
	2 days @ \$213.50	<u>427.00</u>	1015.92
3.	Transportation (4x4 vehicle)		
	(Oct 18-20)		438.50
4.	Lodging & Meals		100.65
5.	Geochemical Analysis		
	Soil samples - Au + 27 element ICP		
	24 @ \$13.70	328.80	
	Silt samples - Au + 27 element ICP		
	6 @ \$13.70	<u>82.20</u>	411.00
6.	Drafting		400.00
7.	Data compilation, secretarial		300.00
8.	Field Supplies		75.00
9.	Printing, data processing, telephone, shipping		<u>150.00</u>
			\$ 4191.07
10.	G.S.T.		<u>293.37</u>
		sub-total	\$ 4484.44
11.	PAC Withdrawal		<u>1115.56</u>
		Total	<u>\$ 5600.00</u>

## STATEMENT OF QUALIFICATIONS

I, THOMAS H. CARPENTER of 3902 14th Street, Vernon, B.C.,  
V1T 3V2, DO HEREBY CERTIFY that:

1. I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, B.C.
2. I have been practising my profession for 23 years.
3. I am a graduate of the Memorial University of Newfoundland with a Bachelor of Science degree in geology.
4. I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
5. This report is based upon knowledge of the Aspen property gained from supervision.
6. I hold no interest either directly or indirectly in the Aspen property.



T.H. Carpenter, P. Geo.

Vernon, B.C.  
October 20, 1994



**APPENDIX 1**

Date of Report: 93.11.15

Project 610

Aspen

Silt Sampling Results  
1993

Reference: BC v9301113.0

Sample ID	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Mo ppm	As ppm	Sb ppm	Bi ppm	Ni ppm	Co ppm	Cr ppm	Fe %	Mn ppm
ASPSS-01	36	<0.2	13	30	81	<1.0	<1	9	6	<5	17	5	41	2.11	895
ASPSS-02	<5	0.3	21	24	302	3.6	2	9	6	<5	34	7	28	1.86	507
ASPSS-03	7	0.3	26	17	284	3.0	2	14	<5	<5	37	7	32	1.84	479
ASPSS-04	28	<0.2	10	28	84	<1.0	<1	6	<5	<5	16	6	37	2.43	886
ASPSS-05	<5	<0.2	11	27	99	<1.0	2	13	<5	<5	9	7	24	2.97	1003
ASPSS-06	<5	<0.2	18	17	257	3.0	2	17	<5	<5	27	6	21	1.97	585

Duplicate:

ASPSS-03 6

Project 610

Silt Sampling Results (part 2)

Sample ID	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
ASPSS-01	744	36	121	12	39	<10	<20	<20	1.42	0.32	1.29	0.02	0.08
ASPSS-02	178	45	33	23	45	<10	<20	<20	1.65	0.48	1.00	0.02	0.08
ASPSS-03	199	47	34	24	48	<10	<20	<20	1.76	0.46	0.98	0.02	0.08
ASPSS-04	780	40	106	10	36	<10	<20	<20	1.49	0.37	1.14	0.02	0.09
ASPSS-05	802	47	90	9	41	<10	<20	<20	1.45	0.52	0.96	0.02	0.12
ASPSS-06	158	50	30	21	45	<10	<20	<20	1.58	0.42	0.73	0.01	0.08

**APPENDIX 2**

Date of Report: 93.11.17

Project 610

Aspen

Soil Sampling Results  
1993

Reference: BC v93-01113.0

Sample ID	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Mo ppm	As ppm	Sb ppm	Bi ppm	Ni ppm	Co ppm	Cr ppm	Fe %	Mn ppm
ASP-01	<5	<0.2	19	19	131	<1.0	1	24	<5	5	29	11	30	3.54	523
ASP-02	<5	<0.2	15	31	107	<1.0	<1	24	<5	6	25	9	24	2.60	551
ASP-03	<5	<0.2	22	16	98	<1.0	<1	15	<5	5	41	11	26	2.99	604
ASP-04	6	<0.2	19	16	113	<1.0	1	12	<5	6	40	12	42	3.31	636
ASP-05	<5	<0.2	24	22	136	<1.0	<1	17	<5	6	34	14	29	3.00	297
ASP-06	<5	<0.2	24	21	135	<1.0	<1	15	<5	5	62	19	84	3.94	1194
ASP-07	<5	<0.2	50	16	523	<1.0	2	5	<5	5	127	29	58	4.14	1125
ASP-08	9	<0.2	26	20	143	<1.0	1	17	<5	6	60	22	54	3.51	1541
ASP-09	<5	0.9	46	20	631	1.2	5	23	<5	5	127	22	58	3.60	1204
ASP-21	<5	<0.2	8	13	101	<1.0	<1	<5	8	<5	12	7	15	2.29	626
ASP-22	<5	<0.2	12	15	90	<1.0	<1	5	<5	5	17	10	23	2.79	1015
ASP-23	968	0.2	37	20	86	<1.0	<1	21	9	6	33	12	26	3.16	989
ASP-24	<5	<0.2	14	12	61	<1.0	<1	13	<5	<5	16	9	16	2.49	548
ASP-25	<5	<0.2	12	18	134	<1.0	<1	7	<5	5	14	10	18	2.73	899
ASP-26	<5	<0.2	19	19	108	<1.0	<1	5	<5	6	20	10	24	2.82	647
ASP-27	<5	<0.2	14	13	160	<1.0	<1	9	<5	<5	22	11	21	2.79	342
ASP-28	<5	<0.2	17	18	187	<1.0	1	25	<5	7	28	11	25	2.89	402
ASP-29	<5	<0.2	10	15	141	<1.0	<1	6	<5	5	19	10	21	2.70	437
ASP-30	<5	<0.2	17	24	139	<1.0	1	10	6	8	31	12	29	2.71	1115
ASP-31	<5	<0.2	14	35	181	<1.0	<1	11	<5	6	25	9	23	2.61	549
ASP-32	<5	<0.2	22	32	248	<1.0	<1	17	<5	5	53	14	40	2.87	578
ASP-33	<5	<0.2	19	16	66	<1.0	1	14	<5	<5	18	8	18	2.43	382
ASP-34	6	<0.2	13	12	88	<1.0	<1	<5	<5	<5	22	8	21	2.43	798
ASP-35	12	<0.2	15	15	87	<1.0	1	10	<5	<5	18	8	21	2.85	457

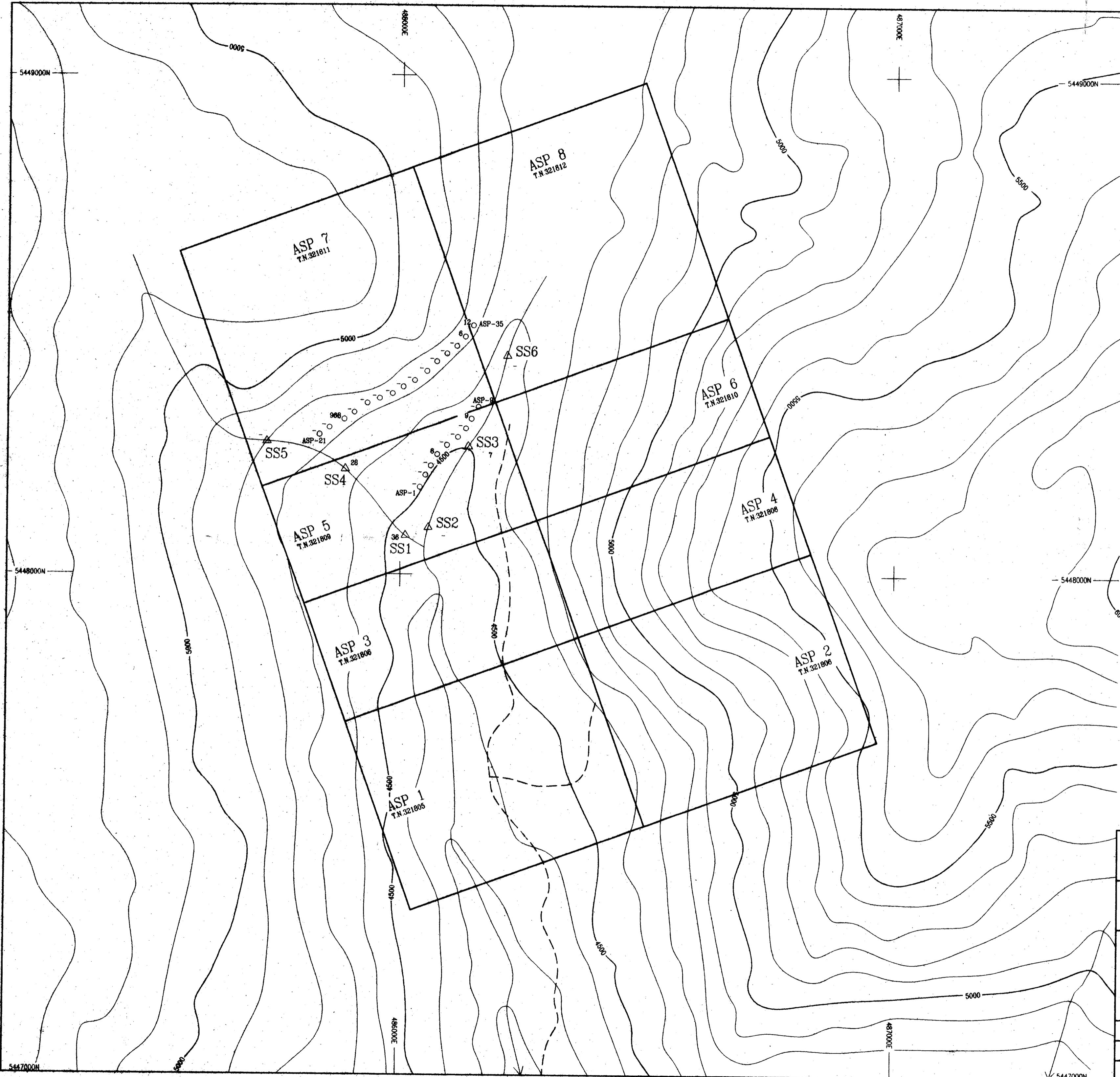
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ASP-04	<0.2	22	18	125	<1.0	2	12	<5	5	43	12	46	3.59	700
ASP-32	<0.2	25	36	280	<1.0	<1	18	8	7	60	15	46	3.29	640

Project 610

Soil Sampling Results (part 2)

Sample ID	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
ASP-01	129	67	13	2	12	<10	<20	<20	2.50	0.56	0.19	0.01	0.09
ASP-02	101	41	8	3	6	<10	<20	<20	4.46	0.38	0.15	0.02	0.07
ASP-03	120	57	8	6	13	<10	<20	<20	3.70	0.62	0.10	0.02	0.09
ASP-04	155	63	9	3	10	<10	<20	<20	3.11	0.85	0.11	0.01	0.15
ASP-05	138	47	11	5	8	<10	<20	<20	4.66	0.48	0.31	0.02	0.12
ASP-06	145	62	7	5	16	<10	<20	<20	3.19	1.09	0.10	0.01	0.33
ASP-07	232	140	13	9	16	<10	<20	<20	3.33	0.94	0.30	0.01	0.31
ASP-08	246	66	22	6	14	<10	<20	<20	3.18	0.85	0.28	0.01	0.21
ASP-09	299	143	17	9	15	<10	<20	<20	2.53	0.89	0.46	0.01	0.13
ASP-21	178	44	27	3	16	<10	<20	<20	1.84	0.39	0.44	0.02	0.07
ASP-22	147	53	20	3	14	<10	<20	<20	1.88	0.38	0.22	0.01	0.09
ASP-23	211	61	29	23	41	<10	<20	<20	2.80	0.55	0.44	0.02	0.13
ASP-24	240	51	30	9	27	<10	<20	<20	2.06	0.52	0.56	0.02	0.13
ASP-25	312	47	28	3	13	<10	<20	<20	1.96	0.37	0.34	0.02	0.10
ASP-26	110	52	20	12	25	<10	<20	<20	2.49	0.44	0.40	0.02	0.08
ASP-27	128	48	9	2	8	<10	<20	<20	2.70	0.44	0.19	0.02	0.07
ASP-28	147	54	12	3	9	<10	<20	<20	2.58	0.49	0.31	0.02	0.08
ASP-29	153	52	12	3	12	<10	<20	<20	1.99	0.54	0.28	0.01	0.08
ASP-30	258	49	12	4	8	<10	<20	<20	3.20	0.68	0.29	0.02	0.11
ASP-31	1444	52	12	6	13	<10	<20	<20	2.66	2.53	0.63	0.02	0.10
ASP-32	701	51	21	4	7	<10	<20	<20	3.56	1.51	0.96	0.04	0.12
ASP-33	107	40	5	6	9	<10	<20	<20	3.95	0.30	0.06	0.01	0.05
ASP-34	156	45	7	3	6	<10	<20	<20	2.69	0.30	0.12	0.01	0.06
ASP-35	136	62	10	4	15	<10	<20	<20	2.19	0.46	0.18	0.01	0.08
Duplicate:													
ASP-04	175	66	11	3	10	<10	<20	<20	3.47	0.90	0.12	0.02	0.16
ASP-32	841	59	26	5	9	<10	<20	<20	4.05	1.74	0.95	0.04	0.14

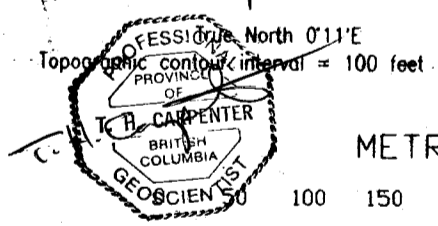


**LEGEND**

- △ SS1 Silt sample location
- 36 Values shown in ppb Gold
- Indicates value less than detection limit for element
- Soil sample location
- 36 Values shown in ppb Gold
- Indicates value less than detection limit for element

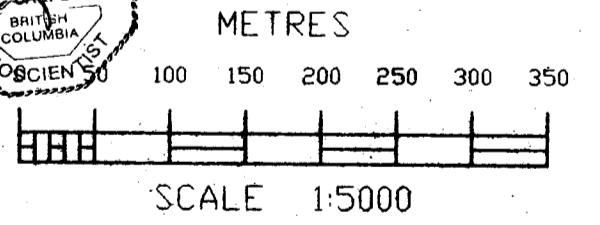
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**23,717**

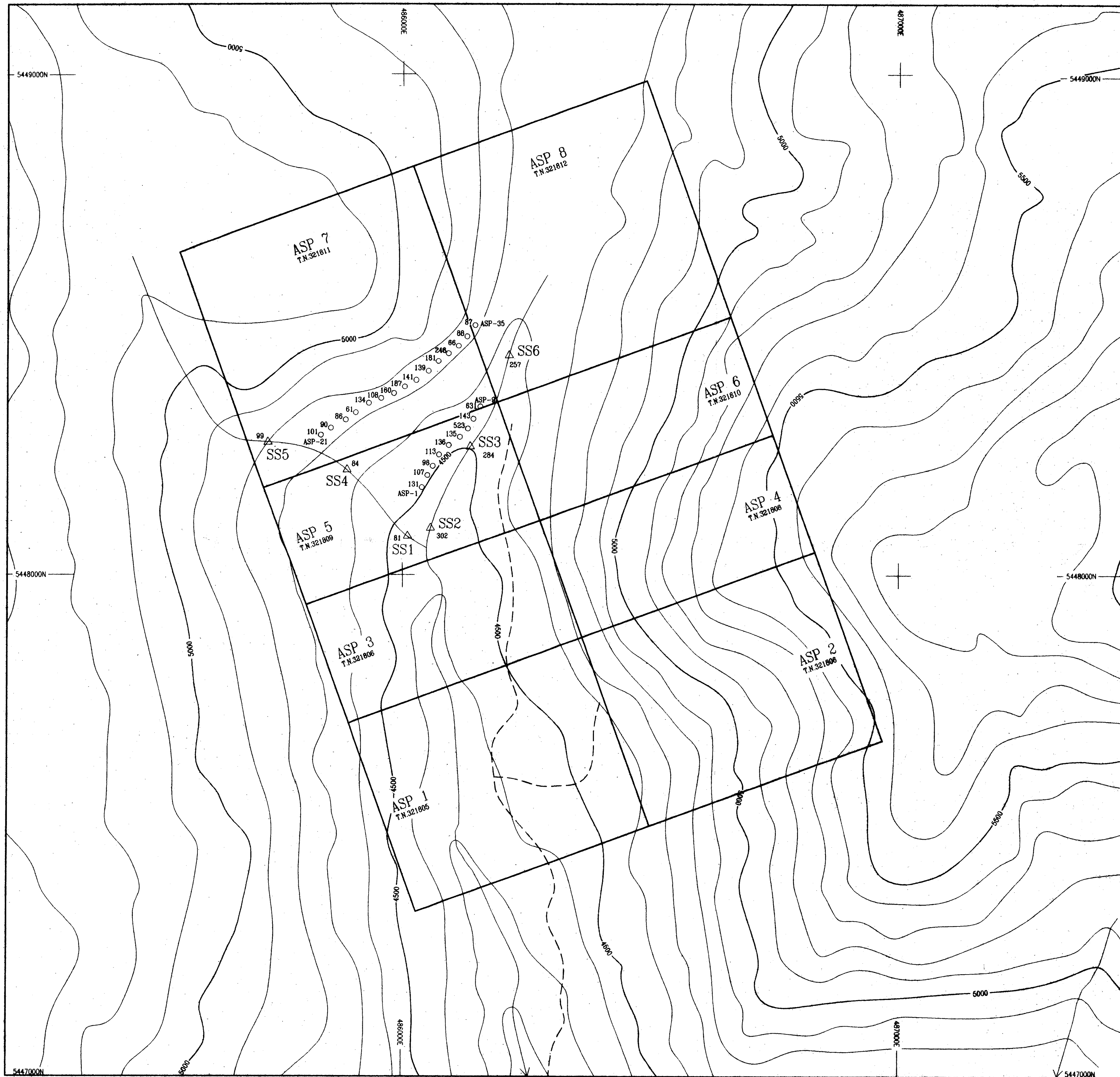


DRAWN: September 28/1994
Revised:

DWG - 619 - 003



DISCOVERY CONSULTANTS	
PREDATOR SYNDICATE	
ASPEN PROPERTY SOIL & SILT SAMPLING GOLD VALUES	
Date:	Scale: 1:5000
Project: 610	NTS: 82F/3E
M.D.: Nelson	Figure: 3



**LEGEND**

- △ SS1 Silt sample location
- 36 Values shown in ppm Zinc
- Indicates value less than detection limit for element
- Soil sample location
- 36 Values shown in ppm Zinc
- Indicates value less than detection limit for element

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

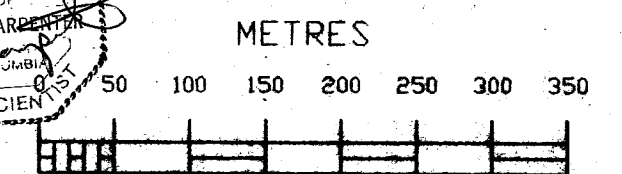
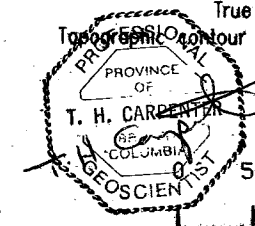
**23,717**



True North 0°11'E  
Magnetic North 0°11'E  
Hour interval = 100 feet

Drawn	September 28/1994
Revised	

DWG - 619 - 003



SCALE 1:5000

DISCOVERY CONSULTANTS	
PREDATOR SYNDICATE	
ASPEN PROPERTY SOIL & SILT SAMPLING ZINC VALUES	
Date:	Scale: 1:5000
Project: 610	NTS: 82F/3E
M.D.: Nelson	Figure: 4