

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORTS

DATE RECEIVED  
AUG 23 1995

**GEOCHEMICAL  
ASSESSMENT REPORT**

**ON THE  
PAYCO & CINCINNATTI PROPERTIES**

**PAYCO 1-4 AND CINCINNATTI 1-6 MINERAL CLAIMS**

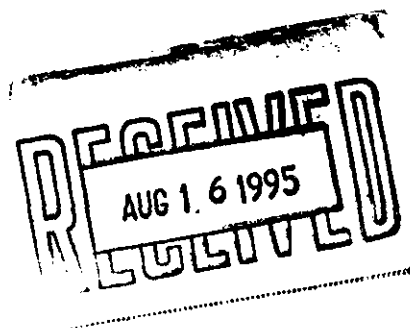
**ASPEN GROVE AREA**

**NICOLA MINING DIVISION, B.C.**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**24,019**

NTS: 092H/15E  
LATITUDE: 49° 54'35"N  
LONGITUDE: 120° 35'15"W  
OWNER: W.R. Gilmour  
OPERATOR: Discovery Consultants  
AUTHORS: T.H. Carpenter, P.Geo.  
DATE: August 2, 1995



**FILMED**

## TABLE OF CONTENTS

SUMMARY .....	Page 1
LOCATION AND ACCESS .....	Page 2
TOPOGRAPHY .....	Page 2
PROPERTY .....	Page 3
HISTORY .....	Page 4
GENERAL GEOLOGY .....	Page 5
WORK COMPLETED .....	Page 6
1.    ROCK SAMPLING	
a)    PROGRAM PARAMETERS	
b)    PROGRAM RESULTS	
2.    SOIL SAMPLING	
a)    PROGRAM PARAMETERS	
b)    PROGRAM RESULTS	
CONCLUSIONS .....	Page 9
RECOMMENDATIONS .....	Page 10
REFERENCES .....	Page 11
STATEMENT OF COSTS .....	Page 12
STATEMENTS OF QUALIFICATIONS .....	Page 13

## LIST OF FIGURES

FIGURE 1	Property Location	Following Page 2
FIGURE 2	Claim Location (1:50,000)	Following Page 3
FIGURE 3	Copper Values in Soil and Rock Samples (1:5,000)	In Pocket
FIGURE 4	Gold Values in Soil Samples (1:5,000)	In Pocket

## APPENDICES

APPENDIX 1	Soil Sample Analytical Results
APPENDIX 2	Rock Sample Descriptions
APPENDIX 3	Rock Sample Analytical Results
APPENDIX 4	Analytical Procedures

## SUMMARY

The Payco/Cincinnati property is host to porphyry copper type mineralization within the central volcanic facies of Upper Triassic Nicola volcanic rocks.

The property is located immediately west of Alleyne Lake in the Fairweather Hills, 4.5 km southeast of Aspen Grove.

Exploration has been carried out on the property since 1899 and has included open cuts and tunnelling on the former Cincinnati and Bank of England Crown-granted claims and extensive trenching and drilling.

The prospect was estimated in 1966 to contain measured, indicated and inferred reserves of 1,800,000 tonnes of 1% Cu. A later reserve estimate placed drill indicated reserves at 54,000 tonnes of 0.9% Cu.

## LOCATION AND ACCESS

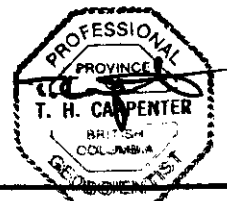
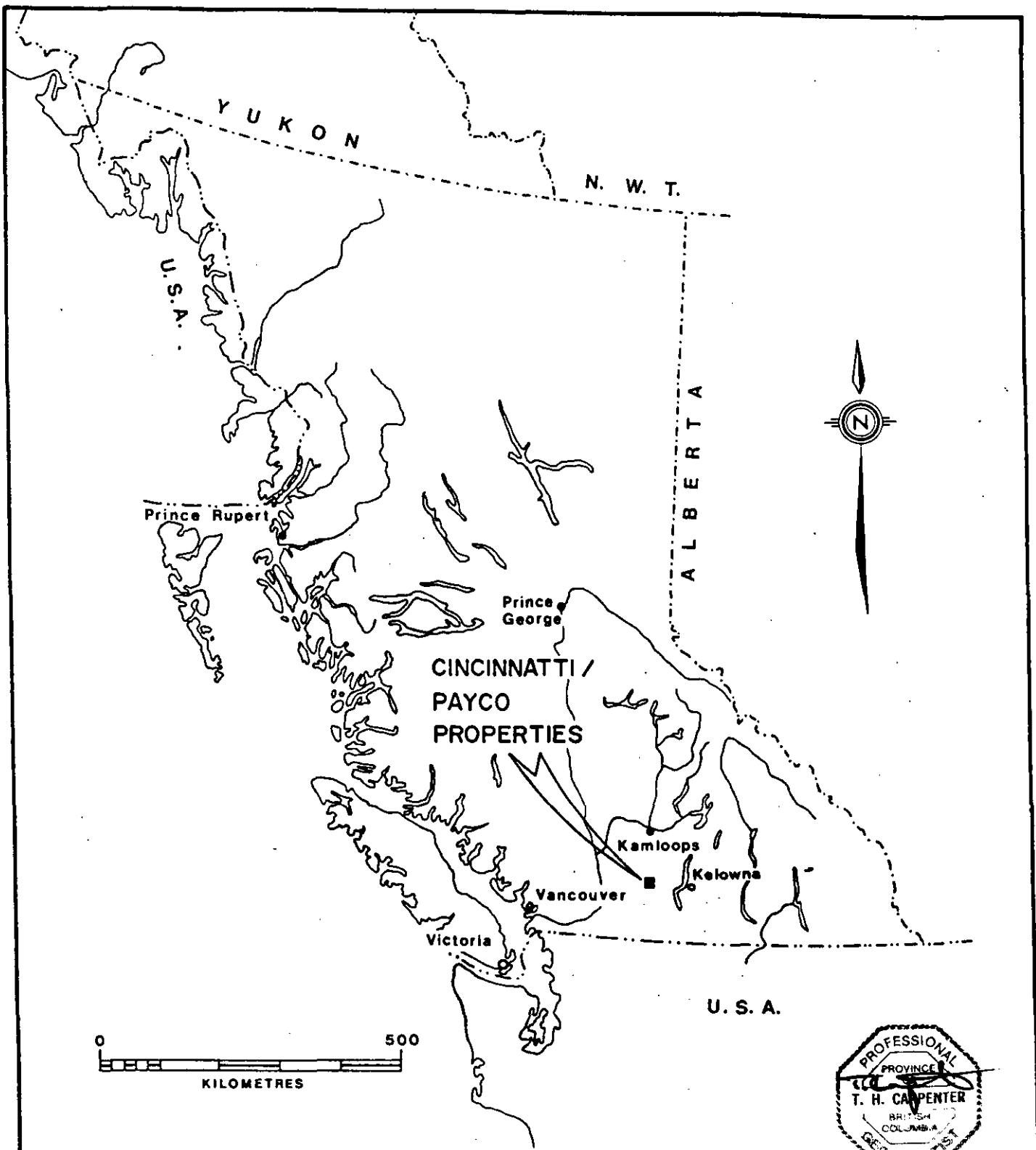
The Payco/Cincinnati property is located in NTS map sheet 092H/15E and is centred at latitude 49°54'35" north and longitude 120°35'15" west, 1.5 km west of the south end of Alleyne Lake (Figure 1).

Access to the property can be gained via the Kentucky-Alleyne Lake road which leaves highway 5 approximately 35 kilometres south of Merritt.

## TOPOGRAPHY

The Payco/Cincinnati claims are located at the southern end of the Fairweather Hills.

This is an area of predominantly rolling hills with elevations ranging from 1000 m at Alleyne Lake to 1300 m on the highest part of the claims.



<b>DISCOVERY</b> Consultants		PHOENIX SYNDICATE		
CINCINNATTI / PAYCO PROPERTIES		LOCATION MAP		
DATE: 95.8.02	PROJECT: 618	SCALE: As Shown	N.T.S.: 92H/15E	M.D.: NICOLA
				FIGURE: 1

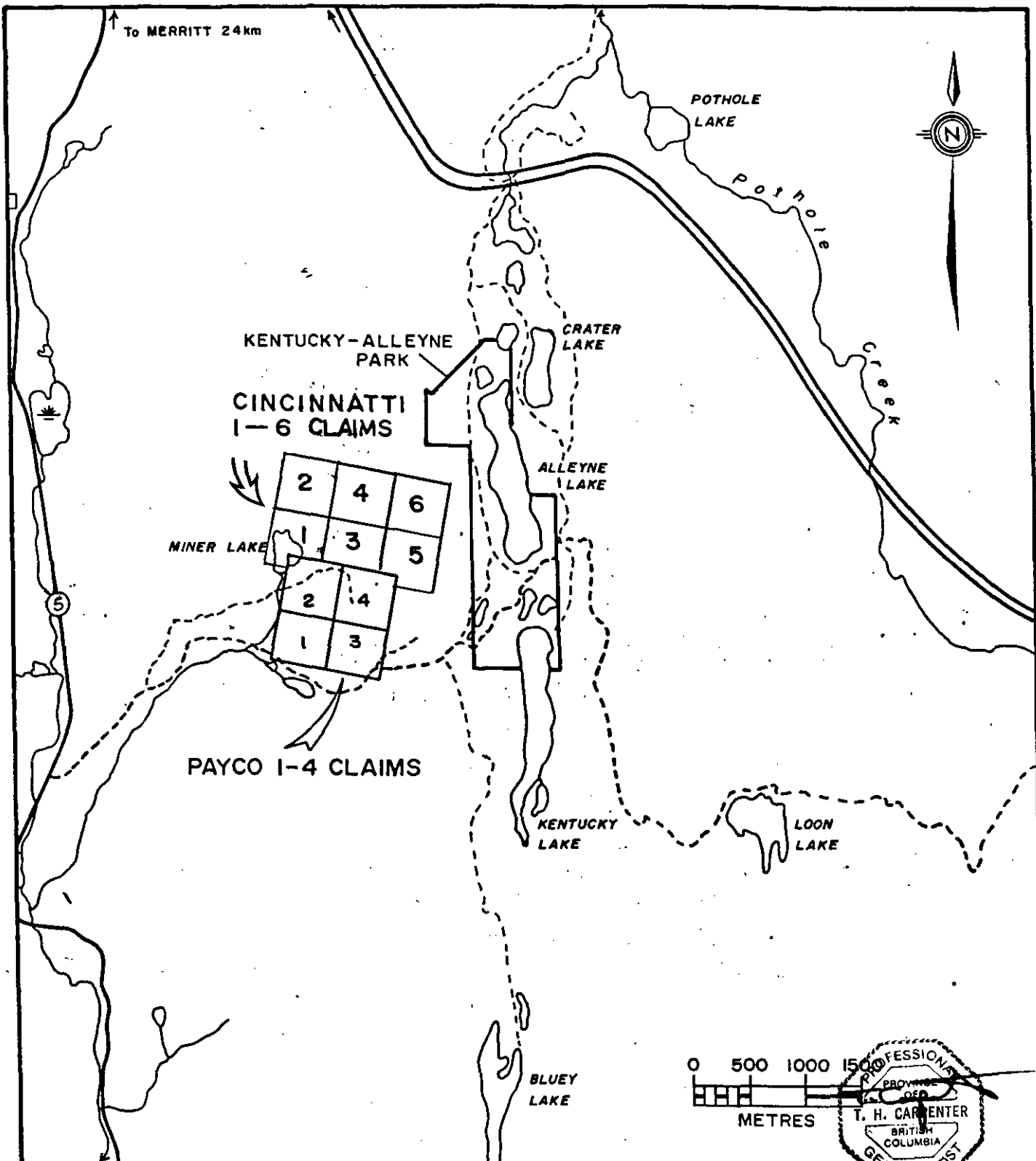
## PROPERTY

The Payco/Cincinnati property (Figure 2) comprises ten two-post claims designated Payco 1-4 and Cincinnati 1-6 located by Richard G. Mitchell on May 18 and September 1, 1994 and recorded in Vernon, B.C. on June 2 and September 1, 1994.

<u>Claim Name</u>	<u>Record No.</u>	<u>Owner of Record</u>	<u>Anniversary Date *</u>
Payco 1	325867	W.R. Gilmour	May 18, 1999
Payco 2	325868	W.R. Gilmour	May 18, 1999
Payco 3	325869	W.R. Gilmour	May 18, 1999
Payco 4	325870	W.R. Gilmour	May 18, 1999
Cincinnati 1	330586	W.R. Gilmour	September 1, 1999
Cincinnati 2	330587	W.R. Gilmour	September 1, 1999
Cincinnati 3	330588	W.R. Gilmour	September 1, 1999
Cincinnati 4	330589	W.R. Gilmour	September 1, 1999
Cincinnati 5	330590	W.R. Gilmour	September 1, 1999
Cincinnati 6	330591	W.R. Gilmour	September 1, 1999

The claims are owned by W.R. Gilmour in trust for the Phoenix Syndicate.

\* Pending acceptance of this report.



<b>DISCOVERY</b> Consultants		PHOENIX SYNDICATE	
CINCINNATTI / PAYCO PROPERTIES		CLAIM LOCATION MAP	
DATE: 95.8.02	PROJECT: 618	SCALE: 1:50,000	NTS: 92H/15E
		M.D.: NICOLA	FIGURE: 2



## HISTORY

Between 1899 and 1903 considerable development work was carried out on the former Cincinnatti (L.1127) and Bank of England (L. 1130) Crown-granted claims on what is now the Payco/Cincinnatti property.

From 1963 to 1967 the claims were part of a larger property explored by Payco Mines Ltd. Work included trenching, diamond and percussion drilling, surface exploration and an IP survey.

In 1973 Gold River Mines & Enterprises Ltd. carried out geological mapping, magnetic and electromagnetic surveys over 39 line kilometres and 1000 metres of diamond and percussion drilling.

No further work was undertaken until 1979 when Sienna Developments Ltd. carried out a limited drill program based on the results of the 1973 work.

In 1992 the occurrence was sampled by Pacific Copperfields.

The Cincinnatti/Payco prospect was estimated in 1966 to contain measured, indicated and inferred reserves of 1,800,000 tonnes of 1% Cu. A later reserve estimate indicated reserves at 54,000 tonnes of 0.9% copper.

## GENERAL GEOLOGY

The Payco/Cincinnati prospect is located in the southern portion of an area of hilly upland, known as the Fairweather Hills, which is situated in the centre of the Aspen Grove Copper Camp. The Fairweather Hills area is underlain by the central volcanic facies of the Upper Triassic Nicola Group which is composed of intermediate, feldspar and feldspar augite porphyritic pyroclastic rocks and flows and associated alkaline intrusions. The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to early Jurassic.

The Aspen Grove Copper Camp is part of a large structural zone known as the Princeton-Kamloops Copper Belt. This belt extends from Copper Mountain at Princeton to the Iron Mask batholith near Kamloops. Mineralization is strongly controlled along this belt by faults of the Allison Creek and Summers Creek fault systems.

## WORK COMPLETED

The 1995 work program on the Payco/Cincinnatti property comprised the collection and analysis of 39 soil and 15 rock samples. The results of the soil and rock sampling are discussed below.

### **Soil Sampling**

#### a) Program Parameters

Soil samples on the Payco/Cincinnatti claims were collected at 50 metre intervals on approximately east-west lines on the Cincinnatti 2, 4 & 6 claims and on the Payco 1 claim. These lines are approximately 1175 metres apart and were designed to crosscut potentially mineral bearing structures.

Samples were collected by shovel from the "B" horizon at an average depth of 30 cm, placed in 4"x9" kraft sample bags and shipped to Bondar-Clegg & Company Ltd. in North Vancouver. At Bondar-Clegg the samples were dried and sieved to -80 mesh preparatory to 30g, fire assay/A.A. gold geochemistry and standard 34 element ICP analysis.

#### b) Program Results

The maximum copper values detected on the soil line 200N across the Cincinnatti claims were 136, 100 and 143 ppm Cu respectively from 100E to 200E.

The maximum gold value obtained was 39 ppb Au at 050E bounding to the west of the anomalous copper.

Other base metal values are generally low, with a maximum of 16 ppm Pb and 119 ppm Zn. Analytical results are contained in Appendix 1. Copper and gold values are shown on Figures 3 and 4.

Sampling appears to indicate a potential copper zone near the west boundary of the Cincinnatti 2 claim, bounded to the west by anomalous gold values. Line orientation does not permit a trend for this mineralization but presumably it would be parallel to mineralized structures in the area.

### **Rock Sampling**

#### a) Program Parameters

Fifteen rock samples were collected from the Payco/Cincinnatti claims, nine on the Cincinnatti 5 & 6 claims and six on the Payco 1-3 claims.

Rock samples were collected from mineralized and non-mineralized outcrops on the claims. The rock samples were also shipped to Bondar-Clegg in North Vancouver. The rock samples were crushed and as with the soil samples were assayed for 30g, fire assay/A.A. gold geochemistry and by standard 34 element ICP analysis.

#### b) Program Results

Three of fifteen rock samples collected on the Payco/Cincinnatti claims contained in excess of 2% Cu. The maximum value obtained was 2.99% Cu in sample 618-L.

As with the soil samples, accompanying Pb and Zn values were

uniformly low. Gold values were also low with a maximum value of 18 ppb.

Rock geochemical analysis and sample descriptions are contained in Appendices 2 and 3. Sample locations and copper values are shown on Figure 3.

## CONCLUSIONS

Anomalous copper and gold values in soils have been detected in the western part of the Cincinnatti claim. The gold values appear to be peripheral to the copper values in soils. The orientation of the mineralization is undetermined.

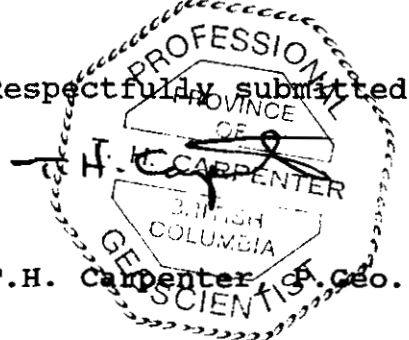
Copper in outcrop with values to 3% was detected on the Cincinnatti 5 & 6 claims. This mineralization is contained in an area of old workings. No associated gold values were noted with this mineralization.

## RECOMMENDATIONS

Additional soil sampling is recommended on the Payco/Cincinnati claims to determine the lateral extent of anomalous copper and gold detected in soil samples.

Magnetometer and electromagnetic surveys are recommended to delineate potentially mineralized structures in the area.

Data from previous surveys should also be examined and integrated into the present survey.

Respectfully submitted,  
  
T.H. Carpenter, G. Geo.

Vernon, B.C.  
August 2, 1995

## REFERENCES

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

1899 - pg. 742 - 743  
1900 - pg. 899  
1901 - pg. 1089, 1182  
1903 - pg. 246  
1904 - pg. 239  
1905 - pg. 203  
1913 - pg. 223  
1915 - pg. 226  
1928 - pg. 223  
1963 - pg. 55-56  
1964 - pg. 96  
1965 - pg. 156  
1966 - pg. 168-169  
1967 - pg. 174

British Columbia Ministry of Energy, Mines and Petroleum Resources - Geology, Exploration and Mining in British Columbia.

1977 - pg. 125

British Columbia Ministry of Energy, Mines and Petroleum Resources - Exploration in British Columbia

1978 - pg. E152  
1979 - pg. 156

British Columbia Ministry of Energy, Mines and Petroleum Resources - Assessment Reports

#3758, 7029, 7050, 7654, 14108, 21678

Preto, V.A., Geology of the Nicola Group between Merritt and Princeton, BCMEMPR Bulletin #69, 1979.



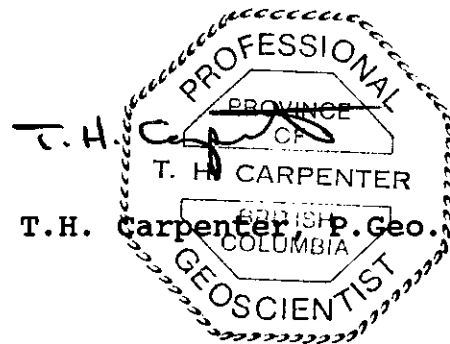
## STATEMENT OF COSTS

1.	Professional Services		
	W.R. Gilmour, P.Geo.		
	0.25 days @ \$400/day	\$ 100.00	
	T. Carpenter, P.Geo.		
	Supervision & report writing		
	2.5 days @ \$380/day	<u>950.00</u>	\$ 1050.00
2.	Field Personnel		
	Soil & rock sampling (Apr 10-12)		
	R. Mitchell		
	3 days @ \$256.36/day		769.08
3.	Transportation: 4 x 4 truck -		
	(April 10-12)		290.10
4.	Geochemical Analyses		
	a) sample preparation		
	39 soils samples @ 3.70	\$ 144.30	
	15 rock samples @ 4.25	63.75	
	b) analyses		
	30g gold geochem; 34-element ICP		
	39 soil samples @ \$16/sample	624.00	
	15 rock samples @ \$16/sample	240.00	
	3 copper assays @ \$9.50	<u>28.50</u>	1100.55
5.	Drafting		400.00
6.	Data compilation, secretarial		200.00
7.	Field supplies and equipment rental		123.05
8.	Printing, data processing, telephone,		
	shipping		<u>150.00</u>
		Total	<u>\$ 4082.78</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 24 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 Payco/Cincinnati property gained from supervision.
6. I hold no interest either directly or indirectly in the Payco/Cincinnati property.



Vernon, B.C.  
August 2, 1995

**APPENDIX 1**

**Soil Sample Analytical Results**

Date of Report: 95.05.08

## Payco/Cincinnati Properties

Project 623

Soil Sample Analyses  
1995

Reference: v95-0417.0

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 %
0200N 0400W	<5	<0.2	55	6	89	<0.2	3	<5	<5	<5	25	13	47	3.69
0200N 0350W	<5	<0.2	43	3	75	<0.2	2	<5	<5	<5	22	12	40	3.51
0200N 0300W	<5	0.2	70	3	62	<0.2	3	<5	<5	<5	30	16	54	4.26
0200N 0250W	<5	<0.2	72	7	119	<0.2	2	<5	<5	<5	24	15	25	2.79
0200N 0200W	<5	<0.2	88	5	86	<0.2	3	<5	<5	<5	23	16	40	3.76
0200N 0150W	7	<0.2	55	5	78	<0.2	2	<5	<5	<5	21	14	35	3.76
0200N 0100W	<5	<0.2	87	6	92	<0.2	2	<5	<5	<5	17	11	19	2.24
0200N 0050W	<5	0.2	55	7	94	<0.2	2	<5	<5	<5	20	12	30	3.21
0200N 0000E	26	0.3	80	16	76	0.3	4	<5	<5	<5	22	14	42	3.75
0200N 0050E	39	<0.2	85	14	79	0.2	3	<5	<5	<5	28	16	50	4.31
0200N 0100E	8	<0.2	136	5	67	<0.2	2	<5	<5	<5	20	13	34	3.45
0200N 0150E	6	<0.2	100	5	76	<0.2	3	<5	<5	<5	24	16	47	4.23
0200N 0200E	6	<0.2	143	7	61	<0.2	2	<5	<5	<5	25	13	38	3.47
0200N 0250E	<5	<0.2	45	3	64	<0.2	2	<5	<5	<5	18	11	48	3.34
0200N 0300E	<5	<0.2	41	5	66	<0.2	2	<5	<5	<5	20	11	48	3.43
0200N 0350E	6	<0.2	53	5	62	<0.2	3	<5	<5	<5	23	13	52	3.73
0200N 0400E	<5	<0.2	43	3	61	<0.2	2	<5	<5	<5	20	12	46	3.65
0200N 0450E	<5	<0.2	30	5	75	<0.2	2	<5	<5	<5	16	11	36	3.09
0200N 0500E	<5	<0.2	54	3	67	<0.2	2	<5	<5	<5	23	14	59	3.89
0200N 0550E	<5	<0.2	42	5	78	<0.2	2	<5	<5	<5	18	11	38	3.45
0200N 0600E	<5	0.2	57	6	84	<0.2	3	<5	<5	<5	18	13	31	3.50
0200N 0650E	6	<0.2	70	6	86	<0.2	3	<5	<5	<5	20	14	35	3.73
0200N 0700E	<5	<0.2	54	6	81	<0.2	3	<5	<5	<5	18	13	34	3.78
0200N 0750E	11	0.3	90	6	67	<0.2	3	<5	<5	<5	23	13	38	4.03
0200N 0800E	<5	<0.2	48	5	73	<0.2	2	<5	<5	<5	18	12	31	3.51
0200N 0850E	<5	<0.2	75	6	90	<0.2	3	<5	<5	<5	18	13	26	3.52
0200N 0900E	<5	<0.2	21	5	65	<0.2	2	<5	<5	<5	13	8	20	2.53
0200N 0950E	<5	0.2	56	5	68	<0.2	2	<5	<5	<5	16	11	26	3.39
0200N 1000E	<5	<0.2	71	5	70	<0.2	2	<5	<5	<5	15	11	25	3.40
0200N 1050E	<5	<0.2	18	5	51	<0.2	1	<5	<5	<5	8	6	10	1.93
0200N 1100E	<5	<0.2	22	5	98	<0.2	2	<5	<5	<5	10	10	16	2.96
0200N 1150E	<5	<0.2	51	7	72	<0.2	2	<5	<5	<5	14	8	20	2.71
0200N 1200E	<5	<0.2	21	3	52	<0.2	2	<5	<5	<5	12	8	26	2.82
1000S 0200E	9	<0.2	81	3	57	<0.2	2	<5	<5	<5	24	13	48	3.80
1000S 0250E	<5	<0.2	48	5	64	<0.2	2	<5	<5	<5	17	11	37	3.25
1000S 0300E	<5	<0.2	71	9	87	<0.2	3	<5	<5	<5	23	14	34	3.75
1000S 0350E	<5	<0.2	27	6	86	<0.2	2	<5	<5	<5	56	13	70	2.46
1000S 0400E	<5	<0.2	35	7	68	<0.2	2	<5	<5	<5	21	11	34	2.98
1000S 0450E	14	<0.2	71	3	70	<0.2	2	<5	<5	<5	24	14	53	3.81

## Reruns:

0200N 0350E	6	<0.2	56	5	64	<0.2	3	<5	<5	<5	24	13	56	3.89
0200N 1200E		<0.2	21	3	52	<0.2	2	<5	<5	<5	12	8	26	2.79
0200N 0300W	7													

## Payco/Cincinnati Properties

## Soil Sample Analyses (part 2)

Sample ID	Mn ppm	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
0200N 0400W	722	149	84	55	6	5	<10	<20	<20	2.16	0.99	0.65	0.03	0.14
0200N 0350W	484	113	83	53	3	4	<10	<20	<20	2.01	0.92	0.59	0.03	0.14
0200N 0300W	375	106	103	57	6	5	<10	<20	<20	2.09	1.28	0.68	0.02	0.13
0200N 0250W	951	210	57	54	3	3	<10	<20	<20	2.80	1.21	0.66	0.03	0.11
0200N 0200W	792	162	88	59	7	5	<10	<20	<20	2.58	1.27	0.74	0.04	0.15
0200N 0150W	474	164	84	51	3	5	<10	<20	<20	2.68	1.14	0.53	0.02	0.11
0200N 0100W	840	180	46	47	3	3	<10	<20	<20	2.57	1.03	0.63	0.04	0.07
0200N 0050W	673	163	66	45	3	4	<10	<20	<20	2.44	0.86	0.57	0.02	0.14
0200N 0000E	712	131	86	60	6	5	<10	<20	<20	2.16	1.00	0.81	0.04	0.12
0200N 0050E	705	117	105	62	9	6	<10	<20	<20	2.01	1.18	0.84	0.03	0.23
0200N 0100E	662	159	75	61	9	5	<10	<20	<20	2.12	1.05	0.94	0.04	0.15
0200N 0150E	733	116	108	72	8	5	<10	<20	<20	1.93	1.06	0.85	0.03	0.18
0200N 0200E	550	236	69	58	9	5	<10	<20	<20	2.85	0.97	0.87	0.04	0.14
0200N 0250E	521	119	77	53	5	4	<10	<20	<20	1.67	0.69	0.82	0.03	0.13
0200N 0300E	475	121	79	48	7	5	<10	<20	<20	1.75	0.70	0.67	0.03	0.18
0200N 0350E	580	126	85	53	8	5	<10	<20	<20	1.90	0.87	0.71	0.03	0.18
0200N 0400E	666	131	86	49	6	5	<10	<20	<20	1.80	0.87	0.68	0.03	0.18
0200N 0450E	511	132	66	42	4	4	<10	<20	<20	1.80	0.60	0.54	0.03	0.17
0200N 0500E	519	116	85	56	6	5	<10	<20	<20	1.78	0.97	0.75	0.03	0.18
0200N 0550E	519	146	76	51	6	5	<10	<20	<20	1.96	0.81	0.66	0.03	0.17
0200N 0600E	601	150	75	55	8	5	<10	<20	<20	2.08	0.78	0.70	0.03	0.15
0200N 0650E	679	145	83	57	9	5	<10	<20	<20	2.06	0.93	0.82	0.03	0.23
0200N 0700E	456	139	85	56	8	5	<10	<20	<20	2.22	0.87	0.67	0.03	0.14
0200N 0750E	441	173	88	65	13	7	<10	<20	<20	2.71	1.06	0.80	0.03	0.13
0200N 0800E	623	152	75	48	6	5	<10	<20	<20	2.24	0.86	0.59	0.03	0.13
0200N 0850E	945	203	84	54	7	5	<10	<20	<20	2.53	1.01	0.67	0.02	0.08
0200N 0900E	470	129	54	38	2	3	<10	<20	<20	1.67	0.42	0.43	0.02	0.11
0200N 0950E	519	127	78	54	6	4	<10	<20	<20	2.02	0.71	0.65	0.03	0.18
0200N 1000E	695	212	79	101	5	4	<10	<20	<20	2.42	0.88	0.65	0.03	0.12
0200N 1050E	362	122	41	33	2	2	<10	<20	<20	1.45	0.21	0.42	0.04	0.08
0200N 1100E	1256	201	70	65	6	4	<10	<20	<20	2.01	0.61	0.72	0.03	0.18
0200N 1150E	339	165	50	45	9	5	<10	<20	<20	2.48	0.42	0.73	0.03	0.08
0200N 1200E	323	105	64	38	3	3	<10	<20	<20	1.59	0.49	0.47	0.03	0.11
1000S 0200E	558	97	95	57	8	5	<10	<20	<20	1.61	1.08	0.81	0.03	0.11
1000S 0250E	594	130	76	50	5	4	<10	<20	<20	1.83	0.70	0.62	0.02	0.16
1000S 0300E	875	153	88	41	6	5	<10	<20	<20	3.49	0.95	0.58	0.02	0.10
1000S 0350E	1065	161	55	50	3	3	<10	<20	<20	1.98	1.40	1.00	0.03	0.05
1000S 0400E	615	157	63	40	4	4	<10	<20	<20	2.26	0.78	0.56	0.03	0.15
1000S 0450E	572	170	89	62	10	5	<10	<20	<20	2.23	1.09	0.98	0.03	0.18

## Reruns:

0200N 0350E	602	135	87	54	8	5	<10	<20	<20	1.98	0.91	0.73	0.03	0.19
0200N 1200E	334	109	63	40	3	3	<10	<20	<20	1.66	0.48	0.49	0.03	0.12

## Payco/Cincinnati Properties

## Soil Sample Analyses (part 3)

Sample ID	Ga ppm	Li ppm	Tl %	Ta ppm	Sc ppm	Nb ppm	Zr ppm
0200N 0400W	<2	11	0.14	<10	7	<1	8
0200N 0350W	2	11	0.14	<10	5	<1	9
0200N 0300W	3	12	0.16	<10	7	<1	12
0200N 0250W	<2	14	0.10	<10	<5	<1	6
0200N 0200W	<2	13	0.12	<10	7	<1	7
0200N 0150W	3	13	0.15	<10	6	<1	16
0200N 0100W	<2	13	0.06	<10	<5	<1	2
0200N 0050W	<2	13	0.11	<10	5	<1	7
0200N 0000E	<2	13	0.12	<10	6	<1	7
0200N 0050E	<2	12	0.13	<10	8	<1	5
0200N 0100E	<2	15	0.11	<10	6	<1	7
0200N 0150E	<2	12	0.16	<10	8	<1	7
0200N 0200E	2	22	0.14	<10	7	<1	15
0200N 0250E	<2	9	0.12	<10	<5	<1	7
0200N 0300E	<2	10	0.13	<10	5	<1	8
0200N 0350E	<2	10	0.13	<10	7	<1	9
0200N 0400E	<2	10	0.13	<10	6	<1	8
0200N 0450E	<2	9	0.12	<10	<5	<1	7
0200N 0500E	<2	10	0.14	<10	6	<1	8
0200N 0550E	<2	10	0.12	<10	6	<1	7
0200N 0600E	<2	11	0.13	<10	6	<1	7
0200N 0650E	<2	11	0.14	<10	7	<1	12
0200N 0700E	3	12	0.15	<10	7	<1	10
0200N 0750E	5	14	0.15	<10	9	<1	22
0200N 0800E	<2	11	0.13	<10	6	<1	10
0200N 0850E	<2	12	0.12	<10	6	<1	5
0200N 0900E	<2	9	0.10	<10	<5	<1	5
0200N 0950E	<2	11	0.14	<10	6	<1	10
0200N 1000E	<2	12	0.14	<10	6	<1	9
0200N 1050E	<2	10	0.08	<10	<5	<1	5
0200N 1100E	<2	11	0.15	<10	6	<1	10
0200N 1150E	4	26	0.11	<10	<5	<1	14
0200N 1200E	2	9	0.12	<10	<5	<1	5
1000S 0200E	<2	10	0.12	<10	6	<1	7
1000S 0250E	<2	10	0.13	<10	5	<1	8
1000S 0300E	3	16	0.14	<10	6	1	7
1000S 0350E	<2	15	0.10	<10	<5	<1	6
1000S 0400E	<2	13	0.10	<10	<5	<1	4
1000S 0450E	2	12	0.13	<10	7	<1	7

## Reruns:

0200N 0350E	<2	11	0.14	<10	7	<1	11
0200N 1200E	2	9	0.12	<10	<5	<1	6
0200N 0300W							

**APPENDIX 2**

**Rock Sample Descriptions**

## Payco/Cincinnati

### Rock Sample Descriptions

- 618-A Medium grained andesite. Moderate to high epidote alteration. Float from cliff trending 100° for ~ 350 m.
- 618-B Andesite. Mafic phenos to 2mm in fine grained red brown fine grained matrix. Similar composition to 618-D. Relatively unaltered.
- 618-C Fragmental. Medium red grey to red. Medium grained. Fragments to 3mm. Cut by calcite veinlets.
- 618-D Medium to coarse grained. Mafic phenos to 4mm in fine grained reddish grey matrix. Relatively unaltered.
- 623-E Fine to medium grained andesite with dark rusty brown limonite on fractures. Cut by occasional epidote stringers to 1mm.
- 623-F Medium to dark grey fine to medium grained andesite. 1 m chip from pit above 25 m long trench trending 060°. Malachite and carbonate on fractures. Minor epidote alteration.
- 623-G From long trench 5 m below road. Trends N-S for 20 m. Varies from fine grained andesitic rock to light brown highly epidotized andesite with ubiquitous malachite.
- 623-H To north of G. 20 m trench trending 170° 10 m above road. Red brown fine grained andesite (?) cut by epidote stringers. Cut by veinlets to 3 cm of pale grey fine grained siliceous material.
- 623-I 15 m chip sample along trench trending 166°. Medium grained, weakly to moderately epidotized. Spotty malachite. Limonite after pyrite on fractures.
- 623-J 10 m chip from trench trending 160° Fine to medium grained. Rusty brown with ubiquitous limonite weathering. Patchy epidote alteration with occasional malachite staining on fractures. Andesite to basalt.
- 623-K Test pit or infilled shaft. Shear zone trending 050° /90° measures 2 m wide. Sample comprises malachite stained dark grey basalt/andesite. Weak to moderate limonite staining.
- 623-L 4 m chip sample from cliff face northwest of sample K. Cut by 1 m wide rusty zone. Ubiquitous pale green malachite. Fine to medium grained andesite/basalt.
- 623-M 5 m chip sample. Brecciated rusty andesite with spotty malachite. Weak to moderate epidote alteration. Fine to medium grained.
- 623-N 5 m chip sample from outcrop. Heavily fractured with flat-lying shear zone. Dark rusty brown with ubiquitous malachite. Andesite. Fine to medium grained.
- 623-O Red brown vesicular andesite/basalt. Vesicles filled with light grey carbonate. Fine to medium grained. Possible flow top?



**APPENDIX 3**

**Rock Sample Analytical Results**

Date of Report: 95.05.08

Payco/Cincinnati Properties

Project 618/623

Rock Sample Analyses  
1995

Reference: v95-0417.0 (.6)

Sample ID	Au ppb	Ag ppm	Cu ppm	Cu %	Pb ppm	Zn ppm	Cd ppm	Mo ppm	As ppm	Sb ppm	Bi ppm	Ni ppm	Co ppm	Cr ppm
618-A	8	<0.2	153		2	54	<0.2	4	<5	<5	<5	7	22	40
618-B	6	<0.2	46		3	87	<0.2	3	9	<5	<5	13	23	25
618-C	<5	<0.2	43		5	62	<0.2	3	8	<5	<5	18	18	41
618-D	<5	<0.2	88		<2	68	<0.2	3	<5	<5	<5	21	22	55
623-E	6	<0.2	30		<2	86	<0.2	4	<5	<5	<5	6	23	18
623-F	11	3.1	>20000	2.06	18	12	<0.2	3	<5	<5	<5	6	19	19
623-G	10	4.7	11283		9	43	0.3	4	14	<5	<5	7	16	28
623-H	9	<0.2	152		2	108	<0.2	3	18	<5	<5	7	21	23
623-J	8	2.4	7582		8	70	<0.2	4	<5	<5	<5	5	24	24
623-J	9	7.9	10691		8	68	0.3	3	<5	<5	<5	7	18	26
623-K	16	1.6	>20000	2.38	17	21	<0.2	3	<5	<5	<5	5	52	12
623-L	9	1.4	>20000	2.99	18	12	<0.2	3	<5	<5	<5	3	22	17
623-M	10	2.9	5411		7	40	<0.2	4	<5	<5	<5	5	16	32
623-N	18	3.5	9202		6	41	<0.2	5	<5	<5	<5	5	57	18
618-O	8	<0.2	381		<2	80	<0.2	3	<5	<5	<5	35	24	65

Retuns:

618-O	6													
623-F		3	>20000	2.07	16	11	<0.2	3	<5	<5	<5	6	18	18

## Payco/Cincinnati Properties

## Rock Sample Analyses (part 2)

Sample ID	Fe %	Mn ppm	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %
618-A	5.58	1167	36	224	62	9	7	<10	<20	<20	2.73	1.54	4.04	0.05
618-B	4.66	1449	70	142	46	9	6	<10	<20	<20	1.73	1.86	4.07	0.05
618-C	3.14	837	43	72	77	9	5	<10	<20	<20	2.08	1.72	3.91	0.07
618-D	4.45	874	28	169	24	7	6	<10	<20	<20	1.65	1.90	2.51	0.06
623-E	5.86	1234	61	182	39	9	7	<10	<20	<20	2.34	1.98	2.00	0.05
623-F	3.57	584	80	112	193	10	4	<10	<20	<20	2.19	1.60	2.42	0.04
623-G	4.13	752	151	147	246	11	5	<10	<20	<20	2.80	1.77	2.86	0.07
623-H	4.60	1158	53	143	121	10	6	<10	<20	<20	2.21	1.86	3.92	0.04
623-I	4.60	988	69	172	124	10	6	<10	<20	<20	3.35	1.87	4.07	0.05
623-J	3.67	636	68	124	166	11	5	<10	<20	<20	2.38	1.64	2.31	0.05
623-K	4.61	733	72	96	172	14	5	<10	<20	<20	1.95	1.91	1.25	0.04
623-L	3.85	590	56	136	215	9	5	<10	<20	<20	1.82	1.38	1.75	0.06
623-M	3.67	1539	704	165	572	9	5	<10	<20	<20	2.53	1.44	9.28	0.04
623-N	6.08	775	127	150	166	9	7	<10	<20	<20	2.68	2.03	1.29	0.06
618-O	4.62	1055	37	108	69	8	6	<10	<20	<20	2.37	2.40	2.26	0.06
<i>Reruns:</i>														
618-O														
623-F	3.5	565	78	109	180	10	4	<10	<20	<20	2.11	1.54	2.3	0.04

## Payco/Cincinnati Properties

## Rock Sample Analyses (part 3)

Sample ID	K %	Ga ppm	Li ppm	Ti %	Ta ppm	Sc ppm	Nb ppm	Zr ppm
618-A	0.07	4	12	0.12	<10	8	<1	7
618-B	0.41	<2	30	0.19	<10	10	<1	10
618-C	0.09	2	12	0.15	<10	8	<1	12
618-D	0.08	<2	14	0.15	<10	6	<1	7
623-E	0.11	<2	14	0.18	<10	10	<1	10
623-F	0.12	<2	9	0.23	<10	8	<1	8
623-G	0.17	3	14	0.27	<10	9	<1	14
623-H	0.14	<2	15	0.20	<10	11	<1	11
623-I	0.09	3	12	0.21	<10	10	<1	12
623-J	0.11	<2	11	0.23	<10	7	<1	10
623-K	0.16	<2	14	0.23	<10	9	<1	6
623-L	0.15	<2	11	0.21	<10	8	<1	9
623-M	0.09	<2	8	0.22	<10	10	<1	15
623-N	0.14	<2	17	0.26	<10	10	<1	11
618-O	0.08	<2	16	0.20	<10	6	<1	12

Reruns:

618-O								
623-F	0.11	<2	9	0.22	<10	7	<1	8

**APPENDIX 4**

**Analytical Procedures**

# ANALYTICAL PROCEDURES

## Geochemical Analysis

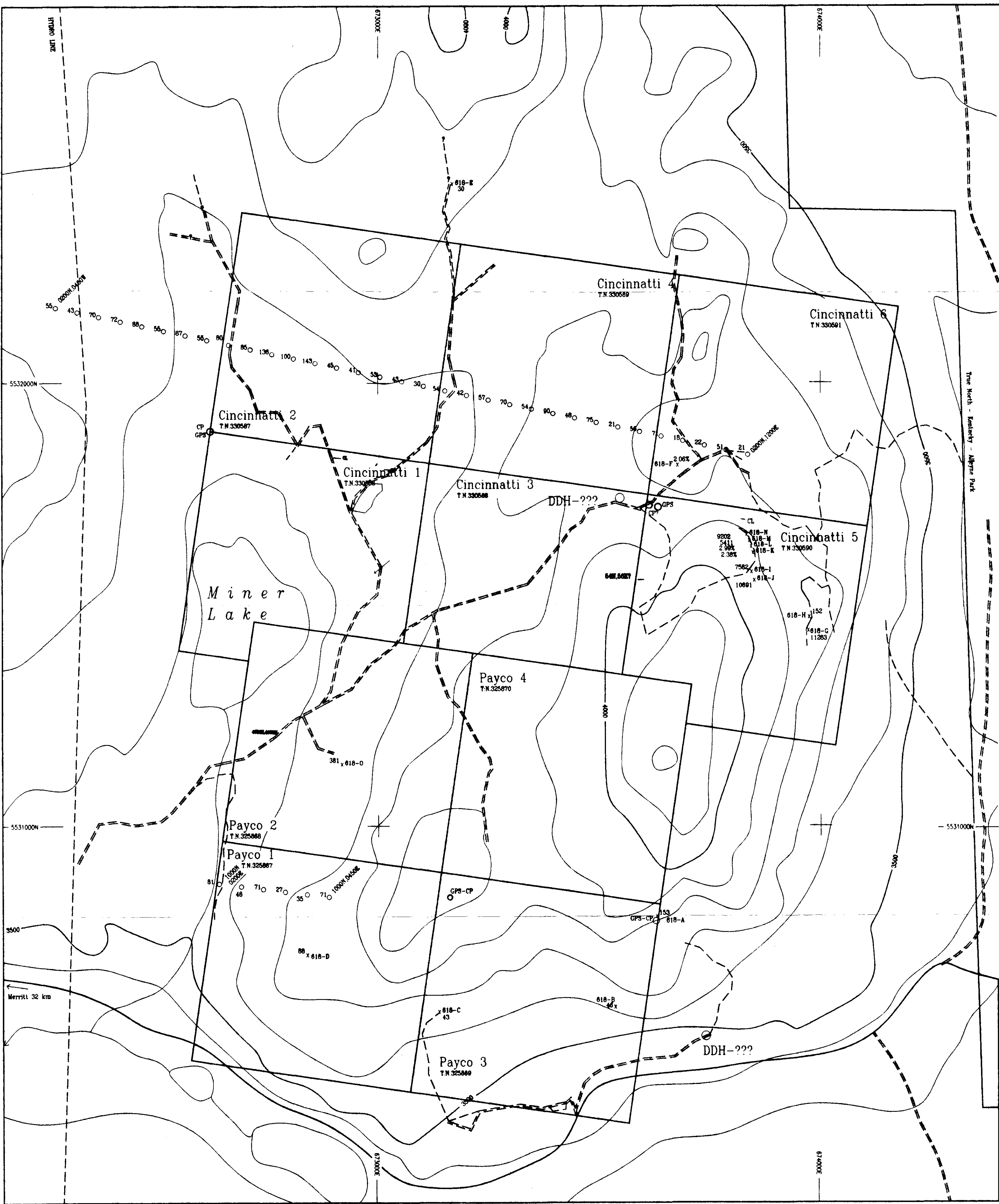
by Bondar-Clegg :

ELEMENT		LOWER DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5.0 ppb	fire-assay	atomic absorption
Ag	Silver	0.2 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Al*	Aluminum	0.02 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
As	Arsenic	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ba*	Barium	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Bi	Bismuth	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ca*	Calcium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cd	Cadmium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Co*	Cobalt	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cr*	Chromium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cu	Copper	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Fe*	Iron	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ga	Gallium	2.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
K*	Potassium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
La*	Lanthanum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Li	Lithium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mg*	Magnesium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mn*	Manganese	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mo*	Molybdenum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Na*	Sodium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Nb	Niobium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ni*	Nickel	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Pb	Lead	2.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sb*	Antimony	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sc	Scandium	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sn*	Tin	20.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sr*	Strontium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ta	Tantalum	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Te*	Tellurium	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ti	Titanium	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
V*	Vanadium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
W*	Tungsten	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Y	Yttrium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Zn	Zinc	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Zr	Zirconium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma

- Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HNO<sub>3</sub>/HCl extraction. The ICP data will be low biased.

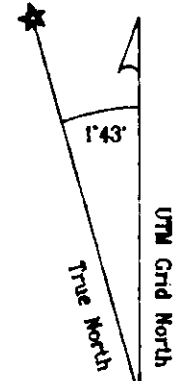
**LEGEND**

- 25 Soil sample location  
Values shown in parts per million Copper
- - Indicates value less than detection limit for element
- x 618-A Rock sample location  
Values shown in parts per million Copper
- x - Indicates value less than detection limit for element



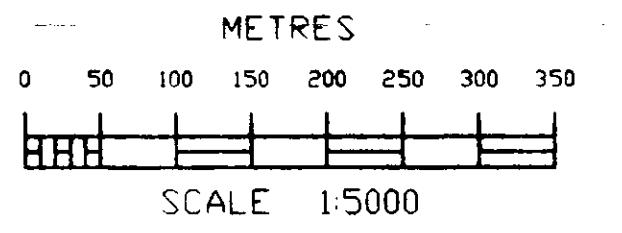
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**24,019**



DRAWN	October 7/1994
Revised	
April	18/1995
June	6/1995

Topographic contour interval = 100 feet  
D:\G-C\checked\disc\618\618.dwg



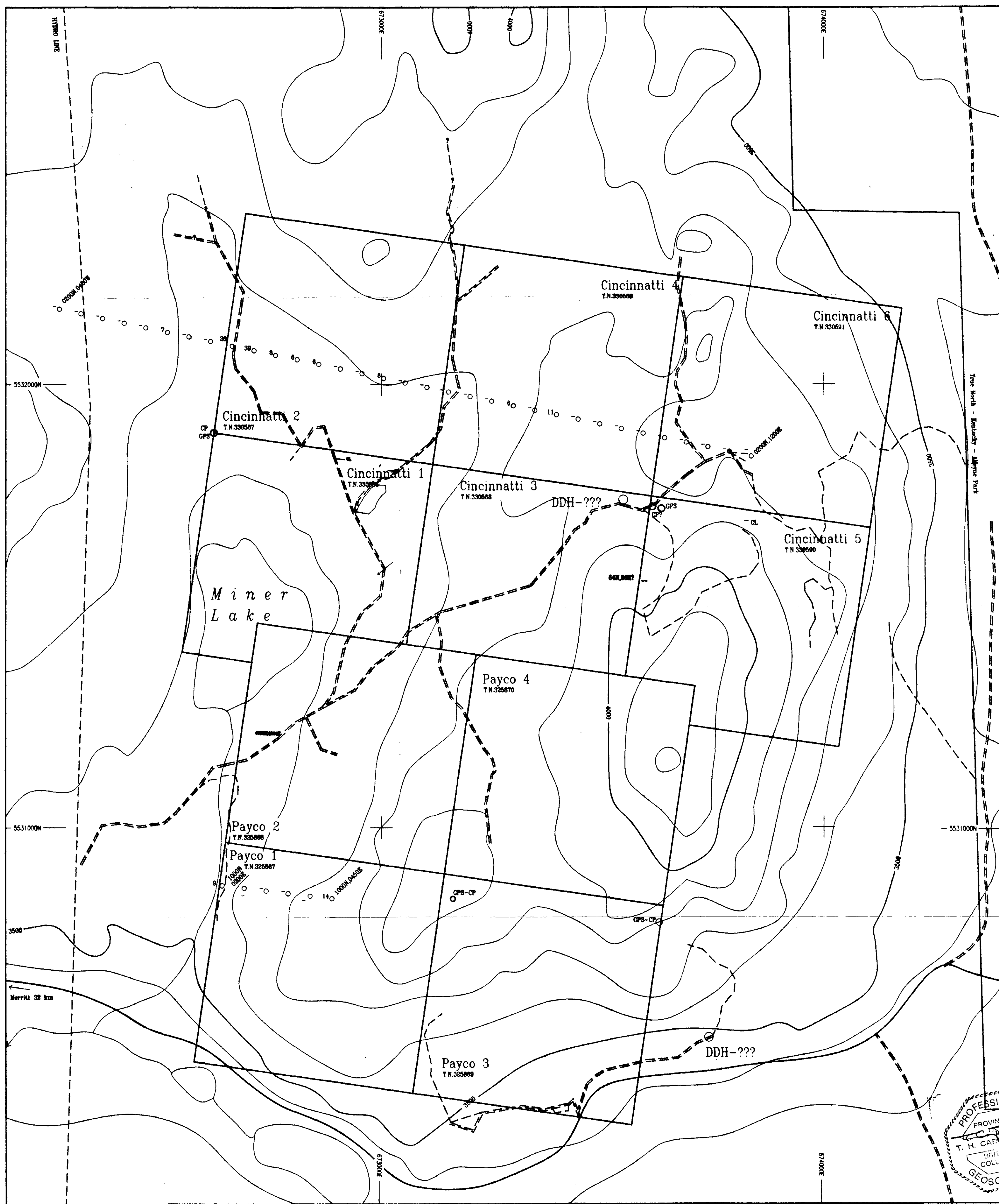
**DISCOVERY Consultants**  
PROVINCIAL  
T. H. CARPENTER  
PHOENIX SYNDICATE  
GEOLOGICAL

**PAYCO-CINCINNATTI PROPERTY  
Copper Values  
in Soil and Rock Samples** ①

DATE: Oct. 7/1994	SCALE: 1:5000
PROJECT: 618	NTS: 92H/15E
FIGURE: 3	Nicola Mining Division

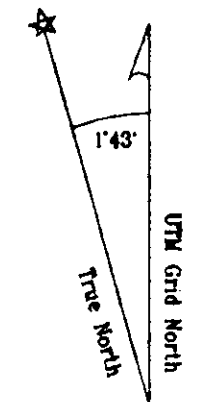
**LEGEND**

- 11 Soil sample location  
Values shown in parts per million Copper
- - Indicates value less than detection limit for element



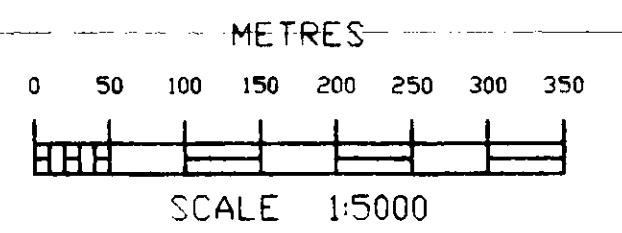
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**24,019**



DRAWN	October 7/1994
Revised	
April	18/1995
June	6/1995

Topographic contour interval = 100 feet



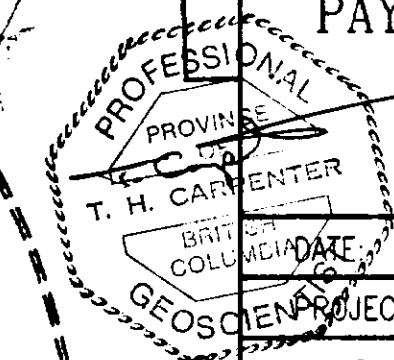
**DISCOVERY Consultants**

**PHOENIX SYNDICATE**

**PAYCO-CINCINNATTI PROPERTY**

**Gold Values  
in Soil Samples**

**2**



DATE: Oct. 7/1994

SCALE: 1:5000

PROJECT: 618

NTS: 92H/15E

FIGURE: 4

Nicola Mining Division