MAP NO.: 116 B /01

ASSESSMENT REPORT X

PROSPECTUS

CONFIDENTIAL X

OPEN FILE

DOCUMENT NO: 093009

MINING DISTRICT: Dawson

TYPE OF WORK: Geochemical Sampling

REPORT FILED UNDER: Tombstone Explorations Co. Ltd.

DATE PERFORMED: August 10, 1991.

DATE FILED: January 27, 1992

LOCATION: **LAT.:** 64°07'N

LONG.: 138°24'W

AREA: Lee Creek Area

VALUE $: 3,723.60

CLAIM NAME & NO.: Mik 1 - 26 YB30032 - YB30057,
Mik 33 - 40 YB30058 - YB30065.

WORK DONE BY: David Strain

WORK DONE FOR: Tombstone Explorations Co. Ltd.

DATE TO GOOD STANDING:	

REMARKS: # 116 - B - Lee Creek Area
One day was spent collecting soil and rock samples on the property and conducting reconnaissance geology. None of the samples returned economic values and no mineralization was observed. Author recommends that no further work be carried out on the property.

REPORT ON THE

1991 ASSESSMENT WORK

ON THE MIK CLAIMS

Dawson Mining District
Yukon Territory

NTS 116B/1
Latitude 64° 07' Longitude 138° 24' W
Owner of claims: Tombstone Explorations Co. Ltd.

By: David M. Strain
Placer Dome Exploration Ltd.
January 13, 1992

SUMMARY

Tombstone Explorations Company Ltd's. Mik Property consists of 34 contigous mineral claims in the Dawson Mining Distric, Yukon(NTS 116B/1). The claims were staked in December, 1989 to cover a small areomagnetic high suggesting the presence of syenite intrusion.

On August 10, 1991 three person days were spent conducting a detailed stream sediment(silt) sampling program on and around the Mik Claims. A total of 40 silt samples, two soil samples and two rock samples were collected. The overall cost of the program was $3723.60.

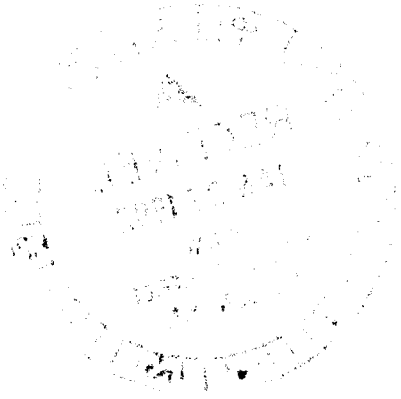
As the sampling failed to return any significant metal anomalies, no further work is recommended for the property.

093009

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 3,723.60 .

Robert Dekleck

for. Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.



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LIST OF FIGURES

APPENDIX

1.0 INTRODUCTION

1.1 LOCATION, ACCESS AND TOPOGRAPHY

The Mik Property is located in central Yukon approximately 57 km northeast of Dawson City, centred on 64° 07' north latitude, 138° 24' west longitude, at the headwaters of Lee Creek (Figure 1). It is accessible by helicopter.

The claim group is situated in the southern fringe of the Ogilvie Mountains. Topography in the immediate area is not as rugged as areas to the north, and becomes even more subdued south toward the Tintina Trench. The precipitous north-facing slopes and sharp peaks and ridges, common to the north, are absent here, with less exposed bedrock (10%). Elevations range from 728 meters(2390') to 1280 meters(4200'), with all slopes covered by mixed deciduous-conifer forest.

1.2 MINERAL CLAIMS (Figure 2)

The Mik Property is comprised of 34 contiguous, unsurveyed mineral claims in the Dawson Mining District.

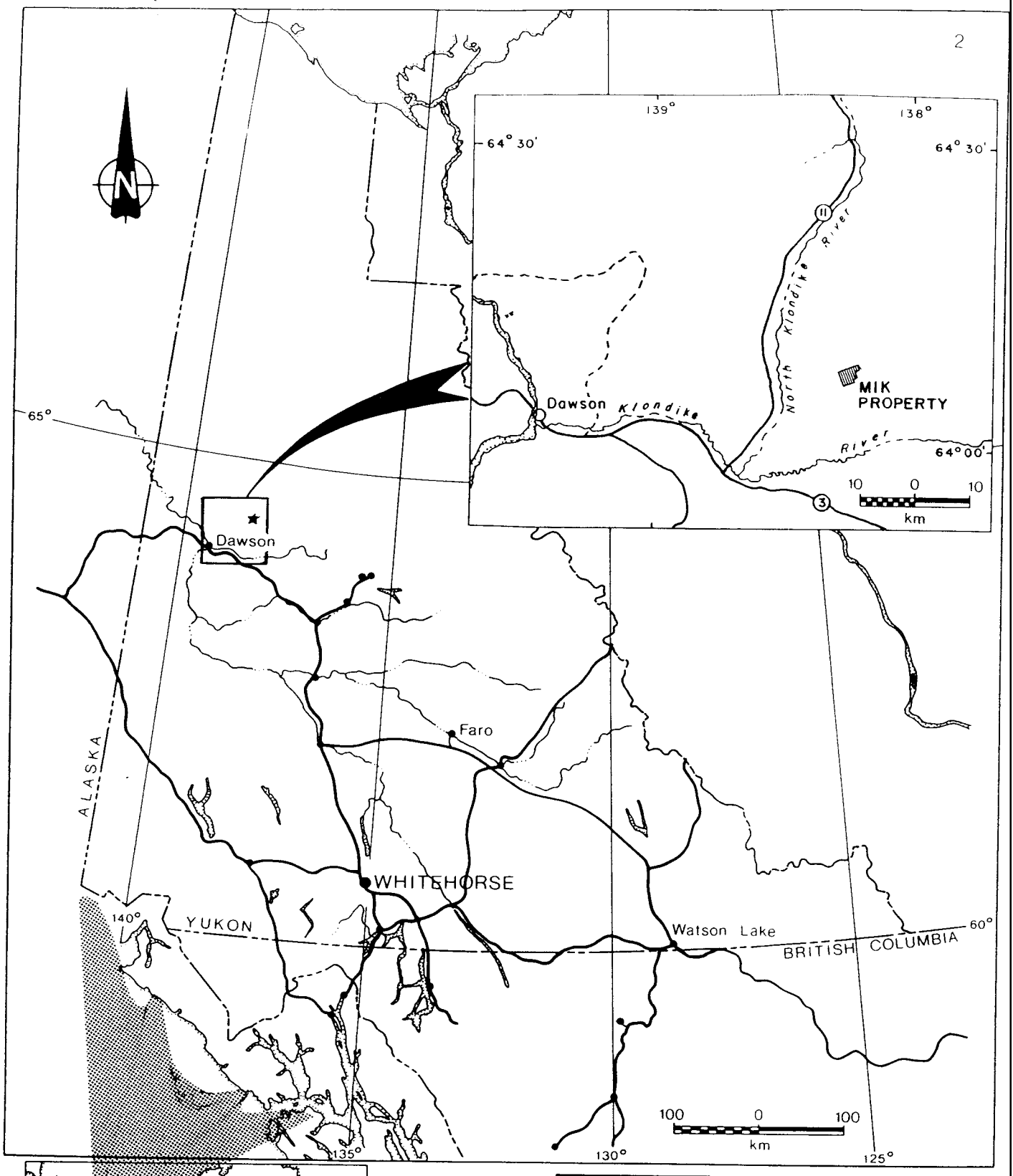
Claim Name	Grant No.	Expiry Date
Mik 1 -26	YB30032-57	Dec. 31, 1992
Mik 33-40	YB30058-65	Dec. 31, 1992

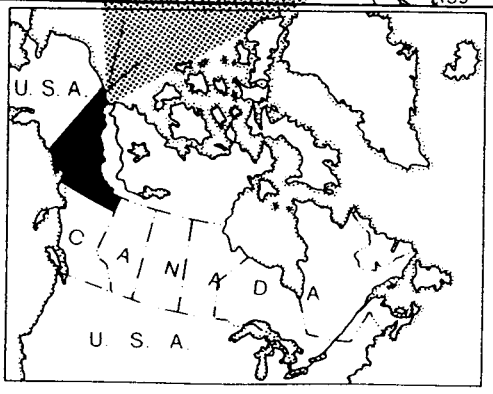
The claims are owned fully by Tombstone Explorations Co. Ltd.

1.3 HISTORY

Records of prospecting in the area go back to 1917 when claims were staked on Antimony Mountain, some 18 km to the northeast of the Mik claims. The antimony, gold (Cu, Ag, Pb, Zn) veins on Antimony Mountain have received sporadic exploration throughout the years, culminating in 1000m of diamond drilling by Anaconda in 1980, and mapping, soil sampling and geophysics by Total Energold in 1989.

There has been intermittent exploration in the Mike Lake area, some 25 km northeast of the Mik Claims, since the mid 1960's. Various types of mineralization were evaluated near Mike Lake, including auriferous quartz-arsenopyrite-tourmaline veins, disseminated chalcopyrite and narrow arsenopyrite veins within and near porphyritic syenite, and silver rich jamesoite





TOMBSTONE EXPLORATIONS CO. LTD.

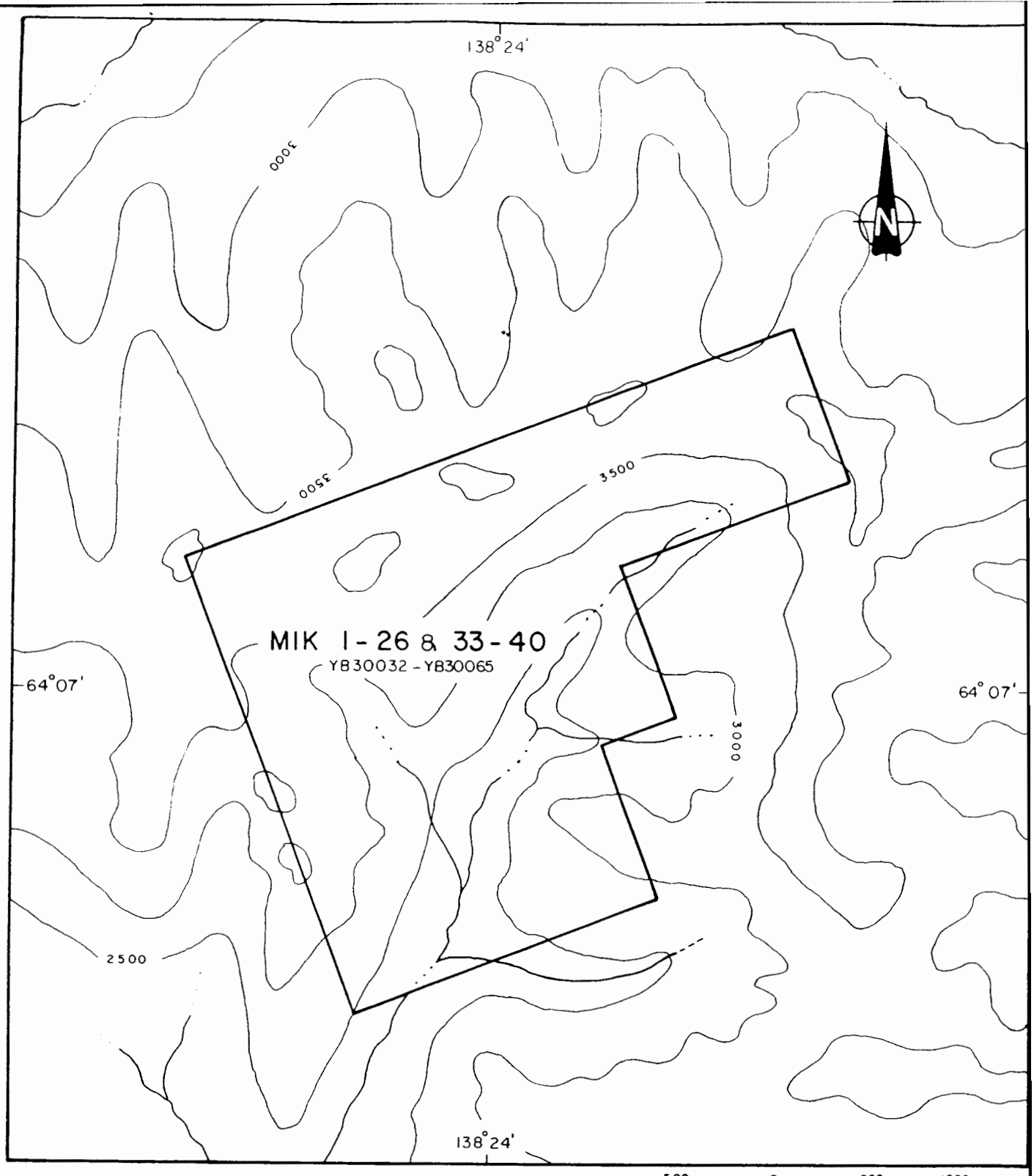
MIK PROPERTY

Dawson Mining District, Yukon

LOCATION

PLACER DOME EXPLORATION LTD

NTS	116B		Figure 1



LEGEND

Approximate claim group perimeter

3000 Elevation contour; Interval 500 feet

Creek

NOTE: Claim data modified from D.I.A.N.D Quartz Sheet 116B-1

TOMBSTONE EXPLORATIONS CO. LTD.			
MIK PROPERTY			
CLAIM LOCATION			
PLACER DOME EXPLORATION LTD			
NTS 116B/1		Scale 1:32680	Figure 2

veins. Tombstone Exploration presently holds a large block of ground (395 contiguous claims-the Lorrie Property) around Mike Lake, which received significant reconnaissance exploration in 1990 and 1991.

In 1989, Noranda discovered gold-antimony mineralization at Brewery Creek, 15 km southeast of the Mik Property. Ongoing exploration there has outlined a significant reserve of low-grade, mainly intrusive-hosted, thrust related epithermal gold.

The Mik Claims were staked in 1989 to cover a relatively small areomagnetic anomaly. In 1990, Tombstone Explorations carried out a reconnaissance stream sediment sampling program on the property. There are no prior records of exploration being conducted on this ground.

2.0 ECONOMIC ASSESSMENT

The geologic setting at the Mik Property is similar to that at Brewery Creek, and this style of mineralization is the main target. Other mineralization types known to occur in the area are: stibnite with associated gold values hosted in aplite cutting syenite on Antimony Mountain; quartz veins containing pyrite, arsenopyrite, pyrrhotite and minor chalcopyrite and sphalerite, also on Antimony Mountain.

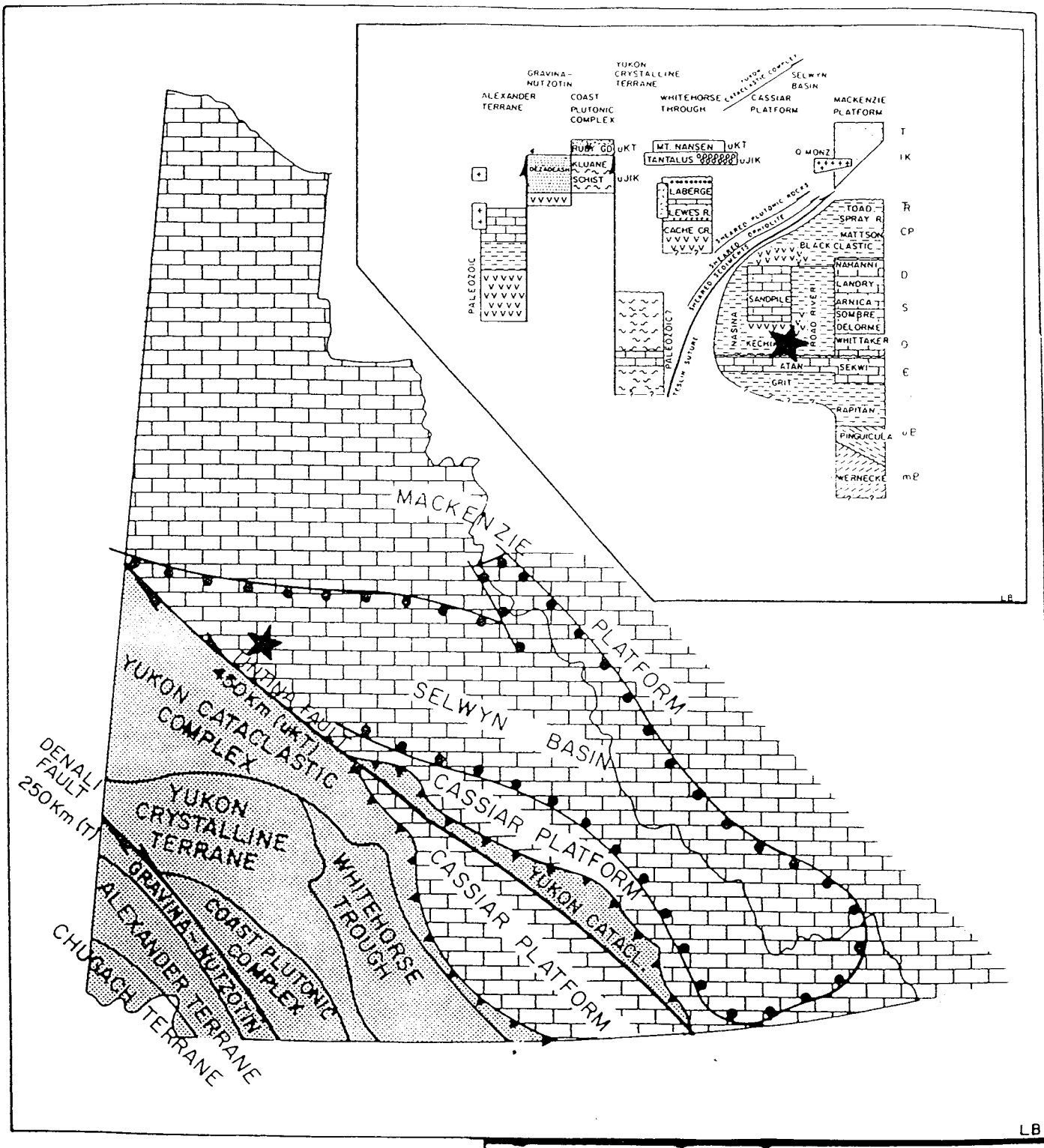
A number of styles of mineralization occur on Tombstone Explorations' Lorrie Property which can be classified as either pyrometasomatic or shear related.

3.0 GEOLOGY AND MINERALIZATION

3.1 REGIONAL GEOLOGY (Figure 3)

The Mik Property is situated over Lower Palaeozoic miogeosynclinal sediments of the Selwyn Basin, between the Robert Service Thrust to the northeast and the Tintina Fault to the southwest. West of the Tintina trench lie crystalline rocks of the Yukon-Tanana terrane, and north of the Robert Service Thrust, Mesozoic strata of the Selwyn Basin.

The Proterozoic-Palaeozoic sediments are intruded by mid-Cretaceous stocks, dykes and sills, members of the Tombstone intrusions. These mainly discordant bodies occur in a belt parallel to and approximately 45 km east of the Tintina Trench.



PLACER DOME EXPLORATION LIMITED	
MIK PROPERTY	
REGIONAL GEOLOGY	
Scale = 1 : 6,336,000	NTS: 116 B Fig.# 3

3.2 PROPERTY GEOLOGY

The Property is underlain by chert and lesser siltstone and mudstone of the Cambro-Ordovician Road River Formation. The cherts are thin bedded, tan to orangish to dark blueish grey weathering, fractured to brecciated, and in most places contain tiny quartz veinlets. Mudstone to siltstone occurs interbedded with chert and is grey weathering, earthy olive green, soft, and locally fissile.

No intrusive rocks were seen in place or in float, but fairly abundant, subrounded cobbles and boulders of vesicular to amygdaloidal basalt were noted in the main creek bed, near silt sample B-4670.

Measurements of bedding are fairly consistent with strike ranging from 095° to 122° (average 110°), and dips from 32°S to 59°S. One north dip of 25° was obtained from the northeast part of the property.

No faults were observed in any exposures visited.

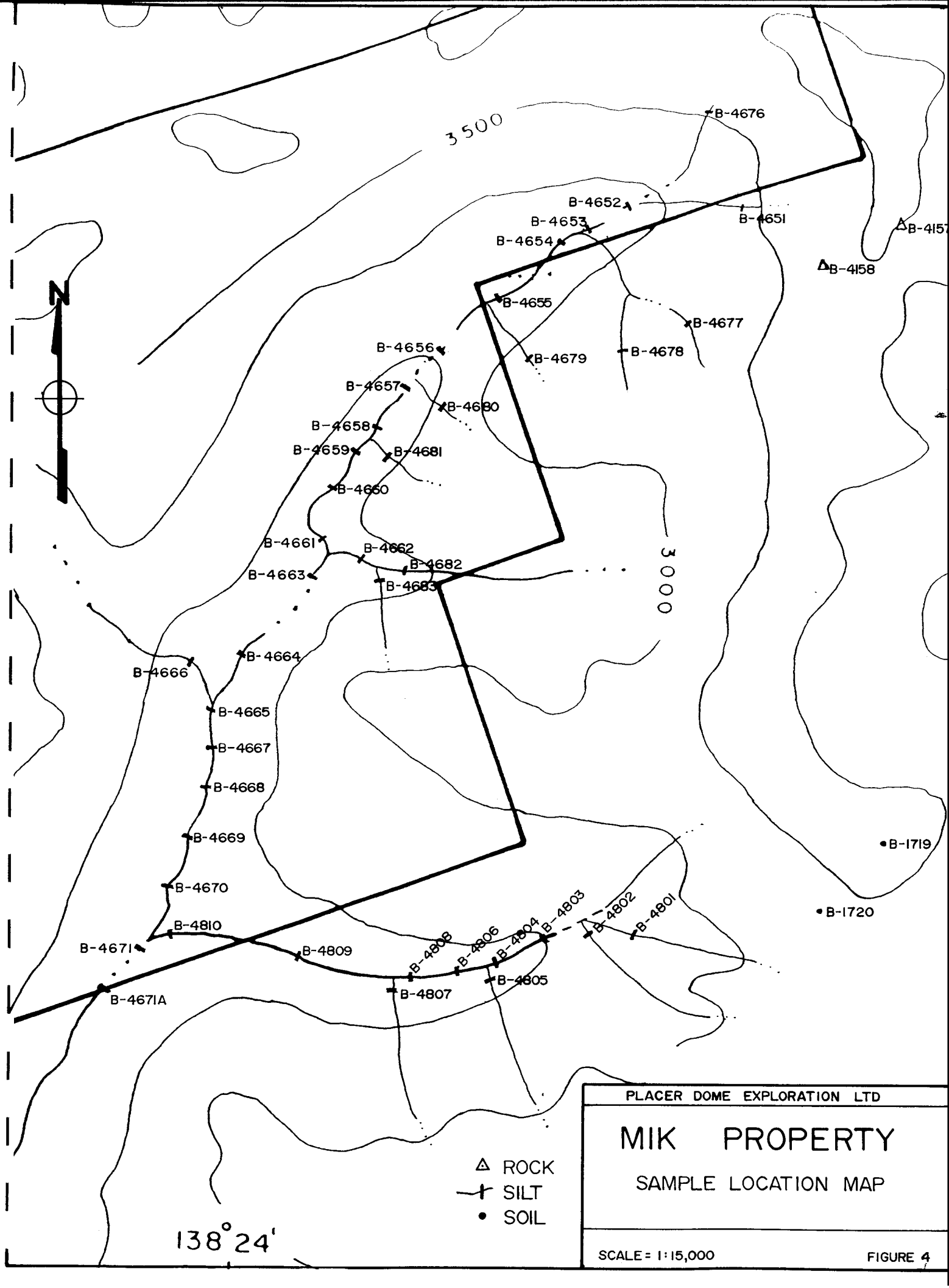
3.3 MINERALIZATION

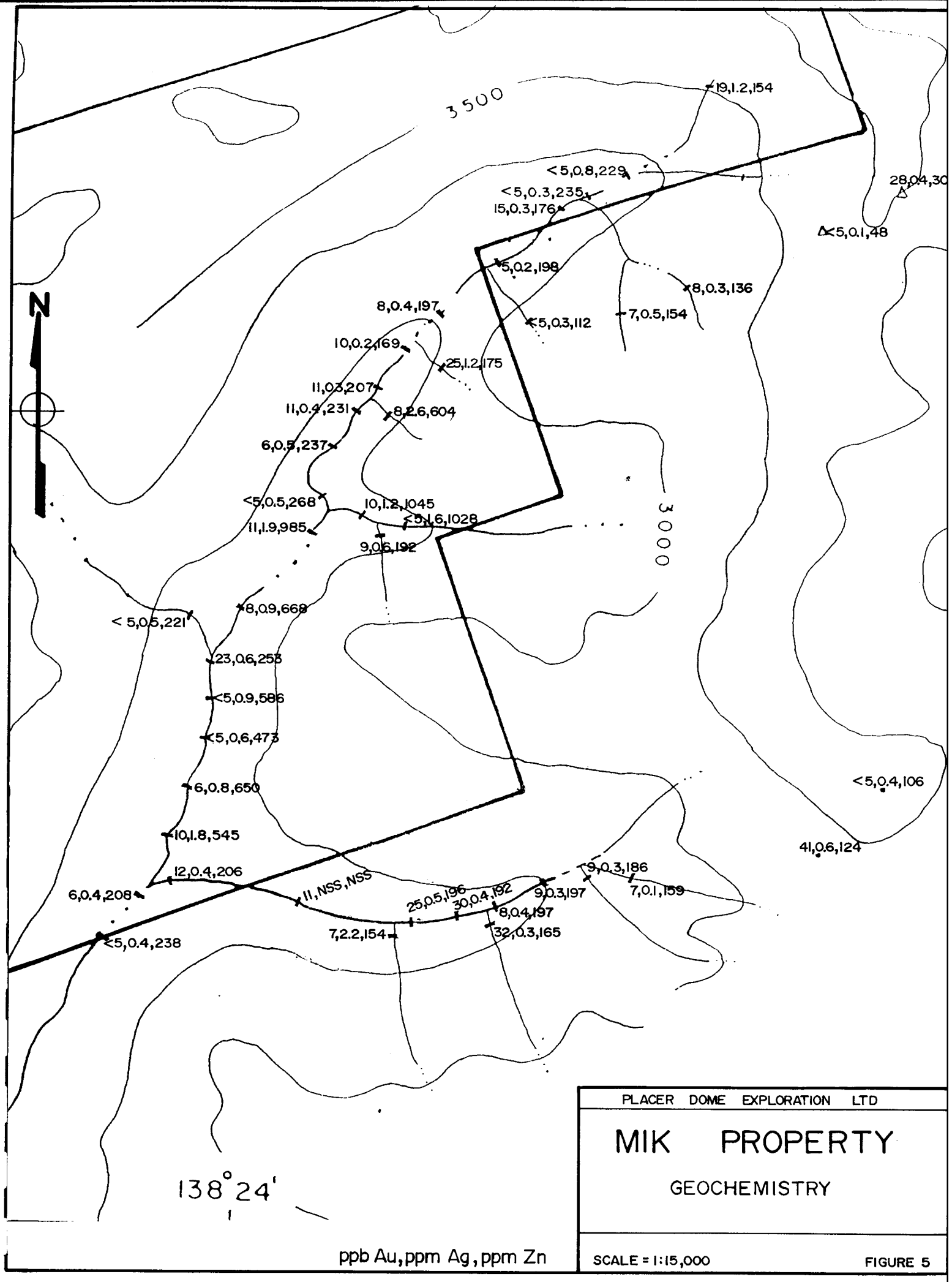
No sulphide mineralization was noted in any outcrop or float. Weakly rusty weathering chert probably contains small amounts of very fine grained pyrite. Barren quartz veinlets are ubiquitous within fractured chert. Minor "oxide cemented" chert breccia float was noted in a creek bed near samples B-4807 and B-4808.

4.0 GEOCHEMICAL SURVEYS

Forty conventional silt samples were collected from on and around the claims. The purpose of this work was to obtain more detailed stream sediment geochemistry from the main drainage, and to follow-up weakly anomalous silt sample MS-01, taken during a reconnaissance silt sampling program in 1990.

All samples were submitted to Northern Analytical Laboratories of Whitehorse, Yukon for preparation and gold analyses, and pulps were then forwarded to Placer Dome Research Centre, Vancouver and analyzed by ICP for 27 elements(see Appendix A for analytical procedure).


3500
3000
N
B-4676
B-4652
B-4653
B-4654
B-4651
B-4158
B-4655
B-4677
B-4679
B-4678
B-4656
B-4657
B-4680
B-4658
B-4659
B-4681
B-4660
B-4661
B-4662
B-4682
B-4663
B-4683
B-4664
B-4666
B-4665
B-4667
B-4668
B-4669
B-4670
B-4810
B-4671
B-4809
B-4808
B-4806
B-4804
B-4803
B-4802
B-4801
B-4807
B-4805
B-4671A
B-1719
B-1720
ROCK
SILT
SOIL
138°24'
PLACER DOME EXPLORATION LTD
MIK PROPERTY
SAMPLE LOCATION MAP
SCALE = 1:15,000
FIGURE 4



PLACER DOME EXPLORATION LTD

MIK PROPERTY

GEOCHEMISTRY

SCALE = 1:15,000

FIGURE 5

Results of the 1991 silt sampling show low background levels for gold, silver, arsenic, copper, lead and zinc. Anomalous values were returned for gold, silver and zinc only; the response for all other elements is flat. Of the 40 silt samples taken, six returned gold values greater than 15 ppb (high of 32 ppb-B-4805), ten with greater than 0.8 ppm silver (high of 2.6 ppm-B-4681), and nine with greater than 500 ppm zinc (high of 1045 ppm-B-4662). A coincident silver-zinc anomaly occurs in samples B-4662 to B-4664, and B-4681 and 82, and the source would appear to be isolated to the Mik 24 and 26 claims. Silt sample B-4805 was taken from a small first order creek off the claims to the south, and all other samples downstream from this creek contain slightly elevated gold. Weak gold silver anomalies occur in silt samples B-4680 and B-4676.

5.0 STATEMENT OF EXPENSES

Labour:		
D.Strain 1 day @ $315.00		
D.Brownlee 1 day @ $225.00		
B.Brown 1 day @ $224.00		
		$764.00
Helicopter Cost:		$1,125.30
Analytical Costs:		
40 silt @ $10.90/sample	436.00	
2 soil @ $10.90/sample	21.80	
2 rocks @ $13.25/sample	26.50	
		$484.30
Consumables and Freight:		$200.00
Accomodation:		
1 day @ $50.00/man day		
		$150.00
Report Preparation and Data Compilation:		$1,000.00
TOTAL:		**$3723.60**

6.0 CONCLUSIONS AND RECOMMENDATIONS

The Mik Property is underlain by chert, siltstone and mudstone of the Road River Formation.

No mineralization, alteration, faults or intrusive rocks were observed on the property. Background geochemical values in stream sediments are low, and anomalies are low order, suggesting that no significant mineralization occurs in the drainages sampled.

No further work is recommended for the property.

7.0 LIST OF REFERENCES

Green, L.H.; 1972:
Geology of Nash Creek, Larsen Creek, and Dawson Map-Areas, Yukon Territory, G.S.C. Memoir 364.

Keyser, H.J. and Laudon, J.L.; Aurum Geological Consultants.
Report on the 1990 Geological and Geochemical Exploration work on the Lorrie Property, November 30,1990.

Strain, D.M.; Placer Dome Exploration Ltd.
Geological and Geochemical Report on the Lorrie Property.

8.0 STATEMENT OF QUALIFICATIONS (D.M.S.)

I, DAVID M. STRAIN, hereby certify that:

1. I am a graduate of Cambrian College of Applied Arts and Technology, Sudbury,Ontario, with a diploma in Geological Engineering Technology (1978).

2. I was enroled in Geological Sciences at the University of British Columbia from 1980 to 1983.

3. I have been involved in geology and mineral exploration continuously since 1975.

4. I supervised and participated in the exploration program on which this report is based.

January 16, 1992 David M. Strain

APPENDIX

Geochemical Results, Analytical Procedures and Rock Sample Descriptions

Northern Analytical Laboratories ltd.

September 9,1991
Placer Dome Exploration
103 Platinum Road
Whitehorse, Yukon
Y1A 5M3

Work Order # 13327

File # 13327b

Project # Lorrie 275

Assay Certificate for Samples Provided

Sample #	Au ppb
B4674	<5
B4676	19
B4677	8
B4678	7
B4679	<5
B4680	25
B4681	8
B4682	<5
B4683	9
B4801	7
B4802	9
B4803	9
B4804	8
B4805	32

Certified by _____

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

Northern Analytical Laboratories ltd.

September 9,1991

Work Order # 13327

Placer Dome Exploration
103 Platinum Road
Whitehorse, Yukon
Y1A 5M3

File # 13327c

Project # Lorrie 275

Assay Certificate for Samples Provided

Sample #	Au ppb
B4806	30
B4807	7
B4808	25
B4809	11
B4810	12

MK

Certified by _____

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

Northern Analytical Laboratories ltd.

September 9,1991

Work Order # 13327

File # 13327

Project # Lorrie 275

Placer Dome Exploration Limited
103 Platinum Road
Whitehorse, Yukon
Y1A 5M3

Assay Certificate for Samples Provided

Sample #	Au ppb
B1719	<5
B1720	41
B4651	6
B4652	<5
B4653	<5
B4654	15
B4655	5
B4656	8
B4657	10
B4658	11
B4659	11
B4660	6
B4661	<5
B4662	10
B4663	11
B4664	8
B4665	23
B4666	<5
B4667	<5
B4668	<5
B4669	6
B4670	10
B4671	6
B4671A	<5
B4672	8
B4673	<5

Mik (B1719–B1720)

Silts Mik Cl's. (B4651–B4671A)

Cerified by ______

PLACER DOME RESEARCH CENTRE
Geochemical Analysis

Project/Venture: V275 | Geol.: D STRAIN | Date Received: SEPT 17, 1991 | Page 1 of 1
Area: MIK 116B1 | Lab Project No.: D1562 | Date Completed: OCT 16, 1991 | Attn: D STRAIN, J KOWALCHUK, E KIMURA, R HODGSON
Remarks: PREPARED PULPS SHIPPED FROM NORTHERN ANALYTICAL LABS
Au – 10.0 g sample digested with Aqua Regia and determined by A.A. (D.L. 5 PPB)
ICP – 0.5 g sample digested with 4 ml Aqua Regia at 100 Deg. C for 2 hours.
N.B. The major oxide elements and Ba, Be, Cr, La and W are rarely dissolved with this acid dissolution method.

SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Tl %	V ppm	W ppm	Zn ppm
B4651		0.4	1.09	<5	693	<1	<2	0.64	1.5	15	17	36	2.17	0.04	15	0.46	2636	<1	<0.01	26	0.10	16	<5	50	0.01	34	<10	123
B4652		0.8	0.80	<5	376	<1	<2	2.27	2.2	5	16	49	1.48	0.06	10	0.49	387	1	0.01	134	0.13	17	<5	111	0.01	21	<10	229
B4653		0.3	1.01	<5	380	<1	<2	0.64	3.1	37	17	64	2.41	0.06	16	0.43	1441	2	<0.01	68	0.11	15	<5	48	0.02	33	<10	235
B4654		0.3	1.08	<5	362	<1	<2	0.71	1.5	17	18	47	2.34	0.07	17	0.54	1023	<1	<0.01	43	0.11	16	<5	54	0.01	35	<10	176
B4655		0.2	1.10	<5	334	<1	<2	0.75	1.5	16	18	50	2.52	0.07	18	0.59	1073	<1	<0.01	44	0.11	17	<5	59	0.01	35	<10	198
B4656		0.4	1.10	<5	373	<1	<2	1.04	1.8	15	19	56	2.49	0.07	18	0.63	1073	<1	<0.01	44	0.11	19	<5	69	0.01	35	<10	197
B4657		0.2	1.09	<5	370	<1	<2	0.90	1.0	12	20	54	2.35	0.08	17	0.59	749	1	<0.01	38	0.11	17	<5	63	0.01	35	<10	169
B4658		0.3	1.11	5	507	<1	<2	0.72	1.0	13	19	56	2.62	0.09	18	0.71	602	4	<0.01	38	0.13	17	<5	66	0.01	38	<10	207
B4659		0.4	1.36	7	890	<1	<2	0.89	1.2	14	21	78	3.30	0.12	22	0.96	512	3	<0.01	45	0.16	22	<5	88	0.01	49	<10	231
STD-P1		0.3	0.98	20	200	<1	<2	0.81	0.4	6	99	24	2.18	0.36	7	0.82	561	40	0.06	32	0.06	59	<5	77	0.09	32	<10	147
B4660		0.5	1.31	<5	948	<1	<2	0.81	1.1	14	22	78	3.23	0.11	22	0.86	507	6	0.01	44	0.15	24	<5	83	0.02	54	<10	237
B4661		0.5	1.30	<5	708	<1	<2	0.87	1.2	14	25	71	3.07	0.10	21	0.85	620	4	<0.01	48	0.15	21	<5	84	0.02	66	<10	268
B4662		1.2	0.92	10	579	<1	<2	0.74	7.0	13	30	77	3.11	0.09	17	0.35	2283	8	<0.01	112	0.13	22	<5	98	0.01	198	<10	1045
B4663		1.9	1.11	16	645	<1	<2	0.92	7.0	16	31	85	3.47	0.10	19	0.57	2399	13	<0.01	119	0.14	24	8	106	0.02	171	<10	985
B4664		0.9	1.04	<5	502	<1	<2	0.77	3.7	12	27	65	2.99	0.08	17	0.56	977	4	<0.01	78	0.13	18	<5	83	0.02	119	<10	668
B4665		0.6	0.92	10	361	<1	<2	1.67	1.4	16	23	75	3.45	0.09	21	0.89	444	4	<0.01	51	0.14	20	<5	96	0.01	69	<10	253
B4666		0.5	0.85	13	290	<1	<2	1.90	1.0	17	22	73	3.59	0.08	21	0.91	396	3	<0.01	48	0.14	19	<5	96	<0.01	70	<10	221
B4667		0.9	1.04	6	460	<1	<2	1.13	3.3	13	27	68	3.00	0.10	17	0.60	1053	5	0.01	72	0.13	20	<5	88	0.02	97	<10	586
B4668		0.6	0.99	8	392	<1	<2	0.80	2.4	11	24	55	2.82	0.08	17	0.60	820	2	<0.01	60	0.13	19	<5	73	0.02	82	<10	473
B4668*		0.6	0.98	6	382	<1	<2	0.80	2.4	12	24	55	2.82	0.08	17	0.60	816	4	<0.01	60	0.13	18	<5	74	0.02	81	<10	475
B4669		0.8	1.07	22	492	<1	<2	1.01	3.8	15	25	68	3.18	0.09	19	0.67	1365	8	<0.01	80	0.13	21	<5	89	0.02	99	<10	650
B4670		1.8	0.98	20	403	<1	<2	0.93	3.2	12	25	58	2.83	0.08	16	0.56	1022	8	<0.01	67	0.11	16	<5	79	0.02	95	<10	545
B4671		0.4	0.93	7	390	<1	<2	0.65	1.0	9	18	48	2.54	0.08	14	0.53	464	5	<0.01	37	0.11	13	<5	72	0.01	49	<10	208
B4671A		0.4	0.98	12	411	<1	<2	0.64	1.0	10	18	51	2.76	0.09	14	0.58	520	6	<0.01	39	0.12	17	<5	77	0.01	52	<10	238
B4676		1.2	1.21	10	226	<1	<2	0.53	0.7	10	25	60	2.83	0.08	15	0.39	1134	3	<0.01	72	0.10	25	<5	36	0.02	38	<10	154
B4677		0.3	1.12	10	470	<1	<2	0.57	0.5	8	15	32	2.14	0.08	16	0.62	321	2	<0.01	26	0.10	15	<5	54	<0.01	36	<10	136
B4678		0.5	1.22	11	358	<1	<2	0.50	0.5	10	17	36	2.48	0.07	17	0.76	562	3	<0.01	34	0.08	16	<5	49	<0.01	39	<10	154
B4679		0.3	1.16	5	457	<1	<2	0.50	0.4	8	16	25	2.09	0.07	16	0.87	388	2	<0.01	25	0.08	11	<5	43	<0.01	32	<10	112
B4680		1.2	1.08	<5	902	<1	<2	0.90	1.4	11	17	76	2.34	0.08	16	0.46	1780	6	<0.01	38	0.13	23	<5	82	0.01	42	<10	175
B4680*		1.3	1.09	<5	898	<1	<2	0.88	1.4	11	17	76	2.38	0.08	16	0.47	1709	5	<0.01	38	0.13	22	<5	82	0.01	43	<10	177
B4681		2.6	0.72	17	1496	<1	<2	1.09	6.0	9	38	92	1.95	0.05	16	0.22	1082	8	<0.01	63	0.15	23	<5	179	0.01	270	<10	604
B4682		1.6	0.87	14	624	<1	<2	0.71	7.4	14	31	80	3.06	0.08	15	0.33	3089	13	<0.01	121	0.12	17	<5	100	0.01	227	<10	1028
B4683		0.6	1.01	<5	694	<1	<2	0.73	0.8	10	16	70	2.68	0.10	18	0.40	537	5	<0.01	41	0.15	17	<5	92	0.01	43	<10	192
B4801		0.1	1.16	<5	639	<1	<2	0.57	0.4	8	16	32	2.24	0.09	13	0.61	281	4	<0.01	28	0.10	13	<5	51	<0.01	42	<10	159
B4802		0.3	1.03	<5	756	<1	<2	0.58	0.9	8	16	43	2.19	0.07	10	0.49	516	3	<0.01	30	0.10	13	<5	61	0.01	52	<10	186
B4803		0.3	1.08	<5	701	<1	<2	0.66	1.1	9	17	44	2.40	0.07	11	0.53	623	5	<0.01	32	0.10	14	<5	66	0.01	52	<10	197
B4804		0.4	0.98	7	682	<1	<2	0.62	1.1	10	19	59	3.03	0.12	12	0.48	616	3	<0.01	36	0.11	17	<5	103	0.01	60	<10	197
B4805		0.3	1.23	<5	806	<1	<2	0.57	0.5	10	17	42	2.56	0.11	13	0.75	422	3	<0.01	31	0.12	16	<5	73	<0.01	45	<10	165
B4806		0.4	1.03	8	644	<1	<2	0.57	0.9	9	17	52	2.83	0.11	12	0.57	544	3	<0.01	34	0.11	14	<5	90	0.01	53	<10	192
B4806*		0.3	1.06	<5	649	<1	<2	0.58	0.8	10	18	52	2.91	0.11	12	0.59	553	3	<0.01	35	0.11	17	<5	92	0.01	55	<10	197
B4807		2.2	1.18	6	645	<1	<2	0.56	0.5	9	18	44	2.45	0.09	15	0.66	354	4	<0.01	29	0.12	16	<5	65	<0.01	44	<10	154
B4808		0.5	1.02	<5	586	<1	<2	0.56	0.8	10	18	55	2.76	0.09	14	0.54	497	5	<0.01	36	0.11	18	<5	80	0.01	52	<10	196
B4809		NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
B4810		0.4	1.11	8	497	<1	<2	0.57	0.7	10	17	57	3.03	0.12	14	0.64	491	5	<0.01	39	0.13	15	<5	88	<0.01	55	<10	206
STD-P1		0.3	1.07	18	211	<1	<2	0.88	0.4	6	104	26	2.32	0.36	8	0.87	613	51	0.07	34	0.08	57	<5	85	0.10	36	<10	150

PLACER DOME RESEARCH CENTRE
Geochemical Analysis

Project/Venture: V275 | Geol.: D STRAIN | Date Received: SEPT 17, 1991 | Page 1 of 2
Area: LORRIE | Lab Project No.: D1561 | Date Completed: OCT 16, 1991 | Attn: D STRAIN, J KOWALCHUK, E KIMURA, R HODGSON
Remarks: PREPARED PULPS SHIPPED FROM NORTHERN ANALYTIC LABS
Au – 10.0 g sample digested with Aqua Regia and determined by A.A. (D.L 5 PPB)
ICP – 0.5 g sample digested with 4 ml Aqua Regia at 100 Deg. C for 2 hours.
N.B. The major oxide elements and Ba, Be, Cr, La and W are rarely dissolved with this acid dissolution method.

SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Ti %	V ppm	W ppm	Zn ppm
B1719		0.4	2.30	<5	349	<1	<2	0.08	0.5	9	42	29	3.47	0.05	9	0.42	477	<1	0.02	30	0.05	21	<5	9	0.04	68	<10	106
B1720		0.6	1.77	<5	801	<1	<2	0.14	0.5	9	39	37	3.04	0.08	9	0.42	810	<1	0.01	30	0.09	15	<5	36	0.02	68	<10	124
B1721		1.1	1.06	23	334	<1	<2	2.10	1.8	11	26	53	3.34	0.07	33	0.58	792	4	0.01	30	0.13	100	<5	95	<0.01	26	<10	371
B1722		1.2	1.28	68	328	2	<2	1.77	1.8	14	39	50	4.26	0.09	46	0.73	1005	4	0.01	35	0.14	127	17	88	0.01	39	<10	409
B1723		1.0	0.95	22	300	<1	<2	1.96	1.1	11	30	43	3.51	0.07	28	0.56	611	1	0.01	31	0.10	82	5	88	<0.01	26	<10	277
B1724		0.6	1.33	8	278	<1	<2	0.77	0.5	22	39	63	4.10	0.08	37	0.74	768	1	<0.01	41	0.13	44	<5	46	<0.01	35	<10	190
B1839		0.1	2.76	280	250	3	2	0.30	0.3	25	45	99	4.37	0.20	26	0.68	923	2	0.01	33	0.09	48	<5	79	0.06	50	<10	92
B1840		<0.1	2.04	92	216	1	3	0.24	<0.1	21	42	69	3.89	0.16	21	0.50	981	<1	0.01	41	0.07	27	<5	32	0.04	39	<10	82
B1841		<0.1	2.19	51	193	1	<2	0.18	0.3	18	47	67	3.52	0.08	17	0.53	1125	<1	0.01	33	0.09	27	<5	15	0.06	56	<10	90
B1841*		<0.1	2.19	50	193	1	2	0.18	0.2	18	48	67	3.55	0.08	17	0.53	1121	<1	0.01	33	0.10	24	<5	16	0.06	57	<10	91
B1842		<0.1	2.26	46	170	1	<2	0.13	0.6	15	44	52	3.71	0.08	23	0.58	708	<1	<0.01	35	0.08	23	<5	14	0.05	52	15	87
B1843		<0.1	1.95	193	246	1	<2	0.18	0.2	17	44	56	3.83	0.11	23	0.55	738	<1	<0.01	34	0.08	27	<5	20	0.05	49	<10	80
B1844		0.2	2.29	6	122	1	<2	0.08	0.1	10	26	29	3.26	0.06	13	0.39	379	<1	0.01	23	0.06	16	3	10	0.08	45	5	63
B1845		0.1	1.67	26	150	<1	<2	0.07	0.1	8	31	23	2.87	0.05	14	0.38	330	<1	<0.01	20	0.03	15	<5	9	0.04	40	<10	59
B1846		0.1	1.83	202	123	<1	<2	0.18	0.2	15	43	74	3.52	0.09	20	0.59	947	<1	0.02	25	0.08	26	<5	33	0.04	37	<10	82
B4672		0.7	1.10	<5	237	<1	<2	0.30	1.2	11	29	30	3.29	0.04	18	0.44	1064	<1	<0.01	23	0.08	136	3	10	0.06	45	<10	241
B4673		0.7	0.93	11	205	1	<2	0.19	0.8	11	24	38	4.24	0.07	30	0.19	1309	<1	<0.01	30	0.10	224	12	12	<0.01	24	<10	501
B4674		0.8	1.23	15	212	<1	<2	0.72	0.8	14	30	51	4.23	0.08	36	0.76	517	<1	0.01	33	0.10	87	5	41	<0.01	20	<10	233
B4684		0.2	1.68	107	135	<1	<2	0.12	0.4	7	34	20	3.01	0.04	12	0.38	321	<1	<0.01	19	0.04	71	11	16	0.05	51	<10	74
B4684*		0.2	1.69	108	138	<1	<2	0.12	0.5	7	34	20	3.03	0.05	13	0.39	326	<1	<0.01	19	0.04	70	6	16	0.05	51	<10	75
B4685		0.5	1.65	544	286	1	<2	0.39	1.3	14	43	53	3.79	0.20	48	0.87	705	1	0.02	25	0.14	129	65	34	0.12	66	17	209
B4686		2.7	1.87	996	643	1	<2	0.40	1.0	19	48	94	4.52	0.15	29	0.82	827	2	0.02	51	0.12	490	106	45	0.07	67	<10	216
B4687		0.5	1.70	386	252	<1	<2	0.35	1.4	15	48	53	3.58	0.10	27	0.71	720	<1	0.01	31	0.12	72	16	37	0.09	59	<10	220
B4688		0.5	1.79	75	186	<1	<2	0.31	0.5	11	40	38	3.35	0.08	22	0.57	479	<1	0.02	29	0.12	138	48	26	0.07	58	<10	140
B4689		0.6	2.17	314	225	<1	<2	0.64	0.8	14	35	53	3.12	0.06	19	0.52	664	1	0.02	35	0.10	64	17	41	0.04	45	<10	127
B4690		1.0	2.76	217	329	1	<2	0.42	0.9	23	48	109	5.04	0.10	24	0.98	1145	3	0.04	59	0.11	125	52	37	0.06	75	<10	192
B4691		0.4	2.39	926	246	1	4	0.47	0.6	15	37	78	3.52	0.06	20	0.59	1216	3	0.03	36	0.13	44	12	53	0.04	50	<10	160
B4692		0.9	1.77	802	197	1	<2	0.40	0.5	16	35	78	3.68	0.06	26	0.68	801	1	0.02	43	0.10	47	24	41	0.04	52	<10	126
B4693		0.3	2.01	1307	186	1	<2	0.45	0.5	16	36	97	3.70	0.07	19	0.75	544	4	0.02	40	0.11	74	13	53	0.03	55	10	143
STD-P1		0.3	1.06	21	211	<1	<2	0.90	0.4	6	118	25	2.23	0.36	10	0.88	617	51	0.07	33	0.08	54	<5	91	0.11	34	<10	149
B4694		5.0	1.47	1.41%	299	2	341	1.05	1.3	24	39	285	7.43	0.08	59	0.72	2117	4	0.01	49	0.12	145	53	98	0.01	68	41	213
B4695		1.8	2.76	620	239	3	9	0.30	2.3	30	46	135	5.17	0.13	24	1.19	1170	5	0.02	57	0.17	245	33	42	0.04	78	<10	383
B4696		1.5	2.29	69	205	1	<2	0.21	1.7	14	44	40	3.68	0.08	20	0.83	821	3	0.02	34	0.08	199	25	31	0.05	57	<10	313
B4697		1.3	1.62	18	152	1	<2	0.39	0.7	13	35	30	3.51	0.06	22	0.61	1103	2	0.01	29	0.07	146	17	20	0.02	45	<10	195
B4698		7.0	0.84	237	127	2	<2	0.36	24.2	16	22	41	5.96	0.07	41	0.41	5601	3	<0.01	20	0.12	1613	222	27	<0.01	32	<10	2633
B4699		0.7	3.13	30	185	1	<2	1.29	1.3	10	58	40	3.58	0.35	22	2.23	760	2	0.07	32	0.11	96	19	60	0.06	82	<10	316
B4700		0.8	1.31	24	249	1	<2	0.70	1.3	11	35	32	3.85	0.07	29	0.65	942	2	0.01	26	0.14	119	8	38	0.01	37	<10	323
10000E-9675N		1.7	1.58	1500	377	2	5	0.76	1.4	25	40	397	5.58	0.15	44	0.94	776	5	0.02	39	0.22	129	53	59	0.02	85	<10	223
10000E-9700N		3.5	1.67	1338	190	2	11	0.54	0.5	21	42	701	5.08	0.12	49	0.58	591	4	0.02	43	0.25	457	37	52	0.01	64	<10	116
10000E-9700N*		3.4	1.75	1358	192	2	13	0.56	0.6	22	43	724	5.17	0.13	49	0.59	604	4	0.02	44	0.25	470	44	52	0.01	67	<10	119
10000E-9725N		2.8	2.50	2025	296	2	17	0.94	0.3	20	48	1042	6.47	0.19	54	0.77	532	5	0.05	57	0.36	138	29	79	0.02	92	<10	111
10000E-9750N		3.2	1.96	1370	351	2	4	0.66	0.5	33	44	1018	5.67	0.11	35	1.04	1019	4	0.03	50	0.25	58	53	77	0.05	101	<10	121
10000E-9775N		8.0	2.29	0.52%	251	2	83	0.72	3.9	38	42	775	6.29	0.07	24	0.86	1212	2	0.03	50	0.15	897	195	121	0.02	60	11	523
10000E-9800N		14.0	1.87	2.13%	316	2	262	0.90	4.3	104	33	2163	7.96	0.06	30	0.94	964	3	0.02	66	0.14	488	119	122	0.01	62	19	385
10000E-9825N		1.0	2.52	0.29%	300	1	55	0.62	0.4	30	38	613	5.12	0.10	26	0.79	514	3	0.03	62	0.13	77	26	133	0.04	59	73	128
10000E-9850N		0.2	2.64	209	333	<1	<2	0.39	0.2	13	39	119	4.03	0.09	16	0.69	531	<1	0.02	31	0.13	39	7	150	0.05	54	<10	124
10000E-9875N		0.3	2.60	380	248	1	17	0.44	0.2	16	43	111	4.05	0.08	21	0.86	605	3	0.02	40	0.11	44	7	124	0.05	65	<10	110
10000E-9900N		0.4	2.17	322	189	1	2	0.74	0.3	15	41	116	4.64	0.08	28	0.73	680	1	0.02	42	0.11	50	16	100	0.04	65	<10	123
10000E-9925N		0.7	2.40	716	241	1	<2	0.47	0.4	22	41	322	4.07	0.11	21	0.84	574	3	0.03	45	0.13	51	14	115	0.06	62	11	123
10000E-9925N*		0.7	2.35	687	238	1	<2	0.47	0.4	21	40	317	4.02	0.11	21	0.83	569	3	0.02	44	0.13	52	10	114	0.06	61	<10	121

Northern Analytical Laboratories ltd.

September 6,1991

Work Order # 13327

File # 13327a

Project # Lorrie 275

Placer Dome Exploration Limited
103 Platinum Road
Whitehorse, Yukon
Y1A 5M3

Assay Certificate for Samples Provided

Sample #	Au ppb
B4157	28
B4158	<5

mik

Certified by C Hykoski

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

PLACER DOME RESEARCH CENTRE
Geochemical Analysis

Project/Venture: V275 | Geol.: D STRAIN | Date Received: SEPT 17, 1991 | Page 1 of 1
Area: LORRIE | Lab Project No.: D1563 | Date Completed: OCT 16, 1991 | Attn: D STRAIN
Remarks: PREPARED PULPS SHIPPED FROM NORTHERN ANALYTICAL LABS | J KOWALCHUK
Au – 10.0 g sample digested with Aqua Regia and determined by A.A. (D.L. 5 PPB) | E KIMURA
ICP – 0.5 g sample digested with 4 ml Aqua Regia at 100 Deg. C for 2 hours. | R HODGSON
N.B. The major oxide elements and Ba, Be, Cr, La and W are rarely dissolved with this acid dissolution method.

SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Ti %	V ppm	W ppm	Zn ppm
B4094		4.6	0.65	2244	49	<1	28	3.35	0.7	16	33	1186	2.13	0.03	8	0.49	314	3	0.08	15	0.07	56	11	55	0.01	15	<10	61
B4138		4.8	0.08	2469	37	<1	377	0.15	<0.1	16	160	40	1.22	0.01	4	<0.01	61	11	<0.01	6	0.03	666	19	5	<0.01	2	<10	12
B4139		0.7	1.29	32	27	<1	2	0.54	0.2	13	34	262	6.72	0.08	54	0.74	295	5	0.02	14	0.10	36	<5	30	0.05	88	<10	65
B4141		0.1	0.95	371	24	<1	<2	1.44	0.1	3	44	37	1.00	0.07	7	0.19	201	3	0.23	14	0.07	24	<5	49	0.06	11	<10	22
B4142		0.7	0.90	942	21	<1	4	6.03	0.2	4	37	246	0.52	0.04	14	0.02	196	3	0.36	3	0.08	14	<5	73	0.02	12	<10	25
B4143		3.0	3.34	4.44%	1	<1	56	2.80	0.8	167	37	3792	13.27	0.01	7	0.08	145	2	0.10	36	0.20	36	36	51	<0.01	10	<10	74
B4144		0.6	2.20	1260	29	<1	4	2.52	<0.1	16	87	366	4.75	0.10	10	0.15	480	5	0.21	24	0.07	20	<5	112	0.03	31	<10	36
B4145		0.6	2.10	253	31	<1	5	1.82	0.2	11	58	430	6.92	0.21	10	0.28	549	3	0.14	24	0.10	30	<5	64	0.03	39	<10	64
B4157		0.4	0.23	369	196	<1	5	0.02	<0.1	4	221	39	1.05	0.03	2	0.09	561	18	<0.01	20	0.02	31	13	17	<0.01	13	<10	30
STD-P1		0.2	0.92	▽	197	<1	<2	0.77	0.5	8	106	26	2.18	0.34	5	0.82	565	39	0.05	33	0.08	56	<5	72	0.08	31	<10	152
B4158		0.1	0.20	<5	94	<1	<2	0.03	0.2	3	163	32	2.23	0.04	5	0.09	96	13	<0.01	22	0.02	8	<5	4	<0.01	11	<10	48
B4159		0.5	3.85	346	118	<1	9	1.33	0.2	45	675	191	6.35	3.56	5	6.56	303	<1	0.02	574	0.08	33	17	18	0.07	99	<10	53
B4161		0.8	0.78	3484	52	<1	18	4.59	0.4	10	56	134	1.93	0.05	12	0.73	429	4	0.09	18	0.08	29	32	47	0.01	36	<10	53
B4162		0.6	0.92	197	51	<1	<2	0.86	0.3	5	59	129	2.42	0.07	20	0.25	156	5	0.10	8	0.10	72	<5	68	0.02	15	<10	53
B4162*		0.6	0.94	210	52	<1	<2	0.88	0.3	6	58	129	2.47	0.07	19	0.26	156	4	0.10	6	0.10	73	<5	70	0.02	15	<10	52

PLACER DOME INC. RESEARCH CENTRE

GEOCHEM LABORATORY

GEOCHEM GOLD TESTS

Procedure

1. Weigh 10.0 g sample into a Coors 07 crucible.
2. Heat in muffle furnace for 4 h @ 600°C.
3. Cool, transfer to 150 mL glass beaker and add 30 mL Aqua Regia (3 parts HCl, 2 parts H_2O, 1 part HNO_3).
4. Digest at just off the boil for 2 hours.
5. Cool, and bulk up to 110 mL mark on beaker.
6. Stir and leave overnight to settle.
7. Decant 50 mL of sample solution into 25 x 200 mm screw cap test tube.
8. Add 7 mL MIBK, cap and turn tube upside down and back at least 25 times.
9. Read organic layer on A.A.

Standards

1. In 250 mL separatory funnel add 10 mL H_2O, 1 mL HCl, 2 drops of HNO_3 and the following amounts of Au:

   0.1 mL of 1000 µg/mL Au stock solution = 1000 ppb
   0.2 mL of 1000 µg/mL Au stock solution = 2000 ppb
   0.4 mL of 1000 µg/mL Au stock solution = 4000 ppb

2. Add 100 mL MIBK and shake for 2 min.
3. Drain aqueous layer.
4. Use saturated MIBK for blank.
5. Set 1000 ppb std on reading of 200 and multiply readings by 5. Detection limit is 5 ppb.
6. For higher samples, standards can be made in 30% aqua and the remaining half of the original sample solution can be run in the aqueous phase.

PLACER DOME INC. RESEARCH CENTRE

GEOCHEM LABORATORY

STANDARD ICP GEOCHEM PACKAGE METHOD

Elements

Ag Ar As Ba Be Bi Ca Cd Co Cr Cu Fe K

La Mg Mn Mo Na Ni P Pb Sb Sr Ti V W Zn

Procedure

1. Weigh 0.50 g of -80 mesh soil, sediment or -100 mesh pulverized rock into numbered 16 x 150 mm test tubes. Every tenth sample should be a duplicate sample or an internal known reference standard.

2. Add 4 mL Aqua Regia ($HCl:H_2O:HNO_3$ - 3:2:1) at least 12 hours before digestion.

3. Place test tubes in racks in a hot water bath making sure that the water level in the pan is above the level of the sample solution. Digest at 95° C for 2 hours.

4. Cool the sample and bring up to the 10 mL mark with H_2O. Cap, shake and centrifuge the samples.

5. Using a 10 mL Oxford macro pipettor take a 3.0 mL aliquot of the sample solution and transfer it to a clean 16 X 100 mm autosampler tube. Add 4.5 mL H_2O and shake to mix sample.

6. Analyze sample on a Leeman Labs Inductively Coupled Plasma (ICP) model PS 3000 using matrix matched calibration standards.

7. Ag only is determined by Atomic Absorption using a Perkin Elmer model 3100 AA, analyzing the original sample solution. Background correction is used for this determination

ROCK SAMPLE DESCRIPTIONS

B-4157	Grab sample of rusty weathering cherty argillite with small quartz veinlets.
B-4158	Grab sample of rusty weathering chert.