Summary Report

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For YMIP 98-018

By ,

Bernie Kreft

On The

Hit, Pit, Sixtymile, Clear East, Grew Creek and Fiddler Projects

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YUKON ENERGY, MINES & RESOURCES LIBRARY PO. Box 2703 Whitehoree, Yukon Y1A 2C6 Summary Report On

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Hit 1-8 Quartz Claims NTS 105-P-5

> For YMIP

By Bernie Kreft

January 6, 1999

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History And Previous Exploration

The majority of previous work in this area was directed towards assessing a copper-tungsten skarn located just inside the NWT border. This showing was initially worked by a subsidiary of Cyprus Mining Corp. during 1970-71. It was re-staked in 1982 by a joint venture between Amax Mining and Canada Tungsten, who continued exploration until the end of 1984. The Amax/Cantung work resulted in the staking of six claims in the Yukon, over what is now the Hit claims main zone area. Documentation of the historical work is not in the public domain.

The area was re-assessed by the writer for its gold potential during the summer of 1998. This work consisted of three, one day visits and a 6 day program, which were used to follow up on a RGS Au stream sediment anomaly.

Location And Access

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The property is located in the central Yukon Territory, 27 kilometres N.N.E. of MacMillan Pass, just west of the Yukon/NWT border. The Mactung tungsten skarn deposit is situated approximately 23 kilometres to the south. Access was by helicopter from Ross River, a distance of 210 kilometres. Helicopter charter services are also occasionally available during the summer months at MacPass. Topography varies from moderate to extreme, with several areas impassable due to frequent avalanches and cliffs.

Regional Geology

The Hit Project is located within the Selwyn Basin, a large sedimentary depocenter active from the Precambrian to the Mississippian. The mid-late Cretaceous Tombstone Suite (90-92 Ma), consisting of stocks, sills and dykes of granitic composition has been emplaced within these sediments. Tombstone Suite intrusives are commonly associated with bulk-tonnage gold targets within an east-southeast trending belt which extends from north of Dawson to the Yukon/NWT border, a total distance of almost 600 kilometres. Significant Yukon targets hosted by, or associated with, the Tombstone Suite include: Brewery Creek, Dublin Gulch, McQuesten/Wayne and Scheelite Dome. The granitic intrusion located at the Hit property likely belongs to the Tombstone Suite; age dating is currently in progress and should provide a definitive answer.

Property Geology

Strata underlying the claims consists of Cambrian aged black shale, argillaceous limestone, calcareous siltstone, green silty slate and rare quartzite, belonging to the Road River Formation. The Hit pluton has extensively hornfelsed these sediments. This has resulted in the development of widespread skarn and calc-silicate minerals/effects as well as numerous gossans.

Faulting is common in the area of the Hit Claims. The main structural features are NW trending normal faults and joint sets, the development of which likely occurred during the emplacement of

the Hit Pluton. Post-dating the NW trending set are several NE trending cross-faults. These faults usually exhibit weak epithermal characteristics, and often contain anomalous gold values. A third set of faults consists of small-scale, flat lying structures. This type is best recognized in the area of the main showing and has caused several slight displacements of the auriferous beds.

The Hit pluton contains several phases, which vary from a fine-grained granodiorite border to a coarse porphyritic core. Weak porphyry style molybdenum mineralization has been noted within the core. Alteration is limited to bleaching, and the development of trace sericite along vein margins and adjacent to fractures. Contacts with the surrounding sediments are steep where exposed.

Mineralization

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Highly anomalous gold values have been returned from several mineralized showings located within the pluton and its hornfels aureole. Highly anomalous gold values within silt and talus/soil samples suggest additional mineralized showings and strike extensions to the existing occurrences.

Best values to date have been returned from replacement type mineralization within interbedded, hornfelsed, calcareous siltstone and green silty slate. Five consecutive channel samples taken across the main showing (Gully Zone) returned a weighted average of 7.85 g/t Au over 7.0 metres, resampling of the same interval by Placer Dome returned 6.93 g/t Au over 7.0 metres. Chip samples taken on either side of the zone returned only traces of gold. Potential for a parallel zone exists within the overburden covered footwall of the showing. Anomalous elements in relative order of abundance are: calcium, arsenic, antimony and tungsten. A stream sediment sample taken approximately 80 metres downstream from this zone returned 606 ppb Au; re-sampling of this site later in the season returned 511 ppb Au. A high value of 10834 ppb Au in silt was returned from a tributary stream approximately 150 metres east of the main showing. This high value is likely a result of strike extensions of the main showing.

Numerous NE trending, steeply dipping faults occur across the property. They often exhibit epithermal characteristics such as weakly developed, banded chalcedonic quartz and minor vuggy veining, and are best developed within granite. A chip sample from the Ridge Zone returned 1298 ppb Au over 6.0m, while selected grab samples of what was thought to be the best mineralized samples returned only traces of gold. A single soil sample line across the zone 100 metres along strike to the SW of the showing returned values up to 383 ppb Au. Soil data as well as an increasing abundance of fault zone material suggests a widening of the structure in this direction.

Skarn type mineralization is widespread throughout the claims area. Most occurrences are restricted in size except for the zones which occur just inside the NWT, and within an area along the NW edge of the pluton. The NWT showings (TWN) consist of at least four pyrrhotite mineralized horizons 1.0 to 8.0 metres wide and traceable for at least 100 metres, occurring within a 100 metre stratagraphic interval. High copper and tungsten values are likely attainable, unfortunately, gold values are only slightly anomalous with a peak of 168 ppb Au over 3.0 metres. Along the NW edge of the pluton are several heavily mineralized skarn pods/horizons within a large area of pyrrhotite mineralized (2%) hornfelsed sediments (Discovery Zone). Samples of skarn returned up to 3482 ppb Au from a representative grab sample, and up to 854 ppb Au over a 2.0 metre width. A line of talus fine samples taken at 50 metre spacings along the base of the slope below the showings returned 12 consecutive samples with values from 129 ppb to 1097 ppb Au. Further anomalies to 904 ppb Au occur along the line, and suggest additional mineralized occurrences.

The intrusion is host to several styles of mineralization, all of which would be expected within a Fort Knox type system. Grades of up to 0.670 oz/ton Au have been returned from several 2.0 to 6.0 centimetre wide quartz-sulphide (arsenopyrite dominant) veins. The distribution and extent of the known veins suggests they are currently of mineralogical interest only. Sheeted veining and highly fractured areas with associated anomalous gold values were found in two main locations in the pluton. Mineralization is weak and consists of pyrite-pyrrhotite and occasionally molybdenum within veins as well as on, and disseminated adjacent to, fractures. Alteration is also weak, and consists of trace sericite along with some minor bleaching of wallrock adjacent to veins and fractures. Values up to 719 ppb Au were returned from a 2.0 metre chip of fractured granite, while a representative grab sample of a 1.0cm qtz-py-mo vein returned 793 ppb Au. Other anomalous elements include bismuth and occasional copper. Some clustering of anomalous intrusive hosted gold values is noted along the NW edge of the stock in the vicinity of the Discovery Zone skarn horizons.

Conclusions

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Significant gold values and numerous showing types have been found associated with an intrusion probably belonging to the Tombstone Suite. Numerous showings and un-explained geochem anomalies have been located within a short period of time. Previous exploration work on the property was conducted prior to the discovery of Fort Knox and Brewery Creek.

Recommendations

Further work is recommended for this occurrence. Detailed soil and rock sampling should be conducted in the vicinity of the Ridge Zone, Gully Zone and Discovery Zone. Further prospecting is required for the remaining untested areas of the pluton and hornfels aureole. Claim staking is also a priority, and should ideally be conducted prior to the commencement of any further work programs.

Certification

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I, Bernie Kreft, was present and witnessed the exploration work described herein. I have twelve years experience prospecting in the Yukon.

This report is based on fieldwork conducted or witnessed by myself.

This report is based on work completed on and in the vicinity of the Hit 1-8 quartz claims.

This work was completed on June 2nd, July 14th-19th, August 18th and September 2nd 1998.

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Respectfully Submitted,

Rock Sample Descriptions

- Hit-1 Rep grab rusty fine-grained felsic dyke
- Hit-2 rep grab siltstone min with trace Po adjacent to above
- Hit-3 rep grab miarolitic qtz vein cutting granite
- Hit-4 rep grab fine-grained granite cut by several rusty fractures
- Hit-5 rep grab banded hfls with around 2% diss Po/Cu
- Hit-6 as above

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- Hit-7 rep grab po-cu mineralized dark green-black skarn
- Hit-8 rep grab rusty granite cut by a fracture with abundant Po/Py along a fracture
- Hit-9 black shale with minor diss Po
- Hit-10 rep grab rusty granite
- Hit-11 rusty thin-bedded siltstone with abundant Po/Cu along bedding planes
- Hit-12 qtzite with po/cu along fracture surfaces
- Hit-20 as per Hit-12 less sulphide
- Hit-21 as above
- Hit-22 as above
- Hit-23 as above
- Hit-24 as above
- Hit-25 rep grab dolomitic limestone
- Hit-26 2.5m chip as per Hit-24
- Hit-40 6cm sample across 1cm qtz vein in granite, trace pyrite
- Hit-41 4cm sample across 2mm qtz vein trace py/Mo
- Hit-42 3cm sample across 1cm quartz vein
- Hit-43 1.3m chip of fractured granite with epidote and trace pyrite
- Hit-44 rep grab as above
- Hit-45 6.0m chip across recessive gossanous fault zone cutting granite
- Hit-46 rep grab Qtz tremolite brx in vicinity of above
- Hit-47 rep grab brx granite with weak chalcedonic filling and veining 0.4% sulphide Py/Po
- Hit-48 rep grab as above with 0.8% sulphide Py/Po
- 45 to 48 are part of same zone
- Hit-49 5.0cm sample of granite cut by a dry fracture
- Hit-50 rep grab porphyritic monzonite cut by a weak qtz stkwk with trace black sulphide in veins
- Hit-51 0.7m chip granite cut by 30 rusty fractures
- Hit-52 rep grab green silty slate cut by a weak carbonate stockwork
- Hit-53 rep grab Po/Cu skarn pod
- Hit-54 1.5m chip across calcareous siltstone cut by several qtz calcite veins
- Hit-55 1.5m chip across rusty fault zone with chalcedonic qtz cutting granite
- Hit-56 rep grab qtz py veins cutting granite at above
- Hit-57 rep grab of fractured and epidote flooded granite
- Hit-58 as above
- Hit-59 rusty fine-grained granite
- Hit-60 0.8m chip po/cu skarn pod
- Hit-61 grab of best min in vicinity of above

Hit-62 rep grab qtz veined and silicified sed near granite contact

Hit-63 1.5m chip Po/Cu skarn

Hit-64 1.4m chip as above

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Hit-65 rep grab hflsd sediment which is host to above sample

Hit-66 grab Po/Cu skarn 40m along strike from Hit-64

Hit-67 banded sed with Po in x-cutting quartz veins

Hit-68 rep grab banded and vuggy chalcedonic qtz vein

Hit-69 rep grab dark green diopside skarn with trace diss po

Hit-70 rep grab rusty and leached as above

Hit-71 3.0m chip across Po skarn horizon with 8% sulphides

Hit-72 grab fine-grained granite with trace diss po/py

Hit-73 rep grab granite cut by milky grey qtz vein min with trace pyrite

Hit-74 Milky grey qtz vein stockwork in granite

Hit-75 rep grab 6.0cm wide qtz-as vein

Hit-76 6cm pc granite cut by 5 rusty fractures

Hit-77 sericitic zone n granite with trace py

Hit-78 0.5m chip granite cut by several fractures with weak alteration envelopes trace diss py on

fracture surfaces and diss adjacent to fractures

Hit-79 as above

Hit-80 2.0m chip as above

Hit-81 as per -79

Hit-82 2.0m chip as per -80 slightly greater fracture density

Hit-83 as above

Hit-84 2.3m chip as above with slightly increased sulphide content

Hit-85 2.0m chip po/cu skarn with 7% sulphide

Hit-86 rep grab black shale with trace po

Hit-87 light grey sed with bleached alteration envelopes adjacent to fractures

Hit-88 1.0m chip Po skarn with 2% sulphide po/cu

Hit-89 rep grab of 2.0m square diopside skarn boulder

Hit-90 fractured granite with abundant py/po along fracture

Hit-91 6cm pc granite cut by 2mm qtz vein with abundant py/po/cu

Hit-92 as above with Mo

Hit-93 as per -90 with Aspy

Hit-94 rep grab granite cut by a qtz-tourmaline-Moly vein

Hit-95 low grade qtz-As vein

Hit-96 high-grade qtz-As vein

Hit-97 rep grab granite in vicinity of above two samples

HTF-1 to 19 and 32 are talus fine samples which are mainly sedimentary in origin

HTF-20 to 31 are talus fine samples which are strictly granitic in origin

HS-1 to 9 are silt samples

It-1 rep grab of rusty gossaned granite

It-2 1.5m chip pale calcareous weakly banded hflsd siltstone with tace fine diss Po

It-3 2.0m chip as above cut by several qtz-calcite veins and with an increase in Po content possible epidote altered or scorodite staining??? material has a greenish tint, adjacent to It-2

It-4 1.5m chip as per above and adjacent

It-5 1.5m chip as above and adjacent, less Po

It-6 1.0m chip as above and adjacent

It-7 1.0m chip as above and adjacent

It-8 3.0m chip as above and adjacent, minimal green tint and reduced Po content

It-9 rep grab as per It-5

It-10 grab as above

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It-11 calcite veined shale

It-12 calcite veined shale

It-13 rep grab qtz calcite vein from It-3

It-14 different property

It-15 as above

It-Silt-1 to 12 are silt samples

It-SS-1 to 5 soils across trend of Ridge Zone

It-SS-6 to 18 rep soil line across granite





Costs

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Truck Costs (1840 km x \$0.42/km)	= \$772.80
Living Expenses (2 people x 8 days x \$35/day)	= \$560.00
Wages For Helper (8 days x \$125/day)	= \$1000.00
Helicopter Charter (TNTA; 5 hours)	= <u>\$4038.17</u>
TOTAL	\$6370.97



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10/06/98			Assay Certificate		Pag
Ber	nie Kreft				WO#07990
				Certified by	-R
Sample #	·	Au ppb		0	
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Assay Certificate

Page 2

Northern Analytical Laboratories Itd.

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Sample #	Au ppb			
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HIT - 23 HIT - 24 HIT - 25 HIT - 26 HIT - 30	5 11 <5 <5 39,			
HIT - 31 OLD - 1 OLD - 2 OLD - 3 OLD - 4				
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• Certificate of Analysis

Page 1

	Berr	nie Kreft	WO# 05538
			Certified by
			
	Sample #	ppb	V
r	HIT - 41	<5	
r	HIT - 42	89	
r	HIT - 44	14	
r	HIT - 46	55	
r	HIT - 47	191	
r	HIT - 48	51	
r	HIT - 49	<5	
	HIT - 51	<5	
Г	HIT - 52	<5	
r	HIT - 53	14	
r	HIT - 54	>7000	
r	HIT - 55	167	
r	HIT - 56	. 7	
r	HIT - 57	21	•
r	HIT - 59	<5	
r	HIT - 60	6	
r	HIT - 61	7	
r ·	HIT - 62	<5	
r .	HIT - 63	122	
r	HIT - 65	7	
r	HIT - 66	8	
r	HIT - 67	9	
r	HIT - 68	7	
r	HIT - 69	<5	
r	HIT - 73A	<5	
r	HIT - 73B	<5	
۰. ۱	HIT - 74	<5	
_	HIT - 75	>7000	
r	HIT - 76	133	
r	HIT - 77	29	
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Certificate of Analysis

Page 2

			Certified by
		Au	0
	Sample #	ppb	
r	HIT - 78	227	
r	HIT - 79	13	
r	HIT - 80	719	
r	HIT - 81	8	
r	HIT - 82	186	
r	HIT - 85	854	
r	HIT - 86	26	
r	HIT - 87	41	· · ·
r	HIT - 88	39	
r	HIT - 89	9	
r	HIT - 90	5	
r ·	HIT - 91	793	
r	HIT - 94	16	
r	HIT - 95	298	÷
r	HIT - 96	4916	
r	HIT - 97	33	
ss	HS - 1	24	•
ss ·	HS - 2	606	
ss	HS - 3	13	
ss	HS - 4	44 .	
ss	HS - 5	1015	
ss	HS - 6	136	
SS	HS - 7	36	
SS	HS - 8	30	
SS	HS - 9	61	
s	HTF - 1	230	
s	HTF - 2	645	
s	HTF - 3	669	
s	HTF - 4	129	
s	HTF - 5	413	
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Page 3

			Certified by
		Au	()
	Sample #	ppb	`
s	HTF - 6	1097	
S	HTF - 7	399	
S	HTF - 8	337	
S	HTF - 9	157	
S	HTF - 10	125	
s	HTF - 11	131	
S	HTF - 12	258	
s	HTF - 13	61	
s	HTF - 14	366	
S	HTF - 15	904	
s	HTF - 16	. 84	
S	HTF - 17	32	
s	HTF - 18	60	
s	HTF - 19	7	
S	HTF - 20	46	
S	HTF - 21	73	
s	HTF - 22	63	
S	HTF - 23	176	
S	HTF - 24	273	
S	HTF - 25	141	
S	HTF - 26	48	
S	HTF - 27	47	
s	HTF - 28	42	
S	HTF - 29	66	
s	HTF - 30	37	
s	HTF - 31	27	
S	HTF - 32	12	



WO#05538a

24/07/98

Assay Certificate

Page 1

			Ce	ertified by	<u>fi n</u>	
Sample #	Au ppb)	
HIT - 40	13					
HIT - 43	47					
HIT - 45	1298					
HIT - 50	<5					
HIT - 58	<5					
HIT - 64	8					
-IIT - 70	11					
HIT - 71	168					
HIT - 83	12					
-IIT - 84	292					
HIT - 92	561					
-IIT - 93	14					
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105 Copper Road Whitehorse, Yukon Y1A 227 Ph: (867) 668-4968 Fax: (867) 668-4890 E-mail: NAL@hypertech.yk.ca

Certificate of Analysis Page 1 03/08/98 WO#05538b Bernie Kreft Certified by Au grav Sample # oz/ton HIT - 54 0.421 **p** HIT - 75 0.670 p



WO# 05569

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24/08/98

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Certificate of Analysis

Page 1

			Certified by
		Au	\bigcup
	Sample #	ррр	
r	IT-1	12	
r	IT-2	67	
r	IT-3	>7000	
r	IT-4	5432	
r	IT-5	1402	
r	IT-6	>7000	
r	IT-7	>7000	
r	IT-8	83	
r	IT-9	41	
r	IT-10	17	
r	IT-11	5	
r ·	IT-12	<5	
r	IT-13	5118	
r	IT-14	8	· ·
r	IT-15	15	•
ss	IT-SILT-1	511	
ss	IT-SILT-2	>7000	
ss -	IT-SILT-3	102	
ss	IT-SILT-4	77	
SS	IT-SILT-5	21	
ss	IT-SILT-6	12	
ss	IT-SILT-7	8	
ss	IT-SILT-8	12	
ss	IT-SILT-9	9	
ss	IT-SILT-10	9	
ss	IT-SILT-11	13	
ss	IT-SILT-12	17	
s	IT-SS-1	32	•
s	IT-SS-2	145	
s	IT-SS-3	383	



WO#05569

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24/08/98

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Certificate of Analysis

Page 2

Bernie Kreft

			Certified by	
	_			
		Au		-0
	Sample #	ppb		
s	IT-SS-4	25		
s	IT-SS-5	28		
s	IT-SS-6	31		
S	·IT-SS-7	46		
s	IT-SS-8	143		
S	IT-SS-9	19		
s	IT-SS-10	181		
s	IT-SS-11	152		
s	IT-SS-12	122		
S	IT-SS-13	28		
S	IT-SS-14	36		
S	IT-SS-15	48		
S	IT-SS-16	13		
S	IT-SS-17	51		
S	IT-SS-18	11		

Note: Poor repeatability of replicate Au analyses was noted for soil samples, indicating probable nugget effects from coarse gold.



WO#05569a

27/08/98

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51.

Certificate of Analysis

Page 1

			Certified by
	Sample #	Au grav oz/ton	<u>J</u>
Þ Þ	IT-3 IT-6 IT-7 IT-SILT-2	0.215 0.568 0.306 0.316	
		. .	
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NOV 10 '98 10:39AM PLACER DOME KAMLOOPS

P.13/18



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ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2. Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecolech@mail.wkpowerlink.com

CERTIFICATE OF ASSAY AK 98-560

22-Sep-98

PLACER DOME CANADA LTD. 1440 HUGH ALLEN DRIVE KAMLOOPS, B.C. V1S 1L8

CATTENTION: BRIAN FOWLER

0/08

No. of samples received: 6 Sample type: Rcck PROJECT #: MARS HIT PROPERTY SHIPMENT #: None Given Sample submitted by: B. Fowler

*0			Au	Au					
ET #.	Tag #		(g/t)	(oz/t)					
1	59212		6.68	0.195	1.5m)			
2	59213		15.90	0.464	1.0m	1192	11	^	7
3	59214		7.42	0.216	1.5 m	7 6	917	Hr.	1.05
4	59215		6.84	0.199	1.5m)			
5	59216		0.80	0.023	1.5m	-			
6	59217		<.03	<.001					
	ATA:	·							
Resp	lit:								
R/S 1	59212		6.38	0.186					
**		· ·							
#R epea	at:			•					
1	59212	• • • • • • • • • • • • • • • • • • • •	6.54	0.191					
Stano	lard:								
STD-N	M	•	1.61	0.047					
						N I			
			;			1.h		_	

D-TECH LABORATORIES LTD. per Righk J. Pezzotti, A.Sc.T.

P.14/18

ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4

Phone: 604-573-5700 Fax : 604-573-4557

23-Sep-98

ICP CERTIFICATE OF ANALYSIS - AK98-560

PLACER DOME CANADA LTD. 1440 HUGH ALLEN DRIVE KAMLOOPS, B.C. V1S 1L8

ATTENTION: BRIAN FOWLER

No. of samples received: 6 Sample type: Rock PROJECT 8: MARS HIT PRO27Y SHIPMENT 8: Noue Given Sample submitted by: B. Fowler

ECO-TECH LABORATORIES LTD.

Der Prahk J. Pezzotti, A.Sc.T.

B.C. Certified Assayer

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	AI %	As	Ba	Bi	<u>Ca %</u>	Cd	Co	Cr	Cu	Fe %	Lal	Mg %	Mn	Ma	Na %	Ni	<u>P</u>	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	59212	1.0	0.35	6535	40	10	>10	<1	6	71	31	1.80	10	3.52	698	3	0.01	13	770	4	100	<20	213 <	0.01	<10	54	<10	. 10	45
2	59213	1.4	0.39	9710	25	<5	>10	<1	6	61	154	1.79	10	1.58	724	3	0.01	21	960	32	370	<20	135 <	0.01	<10	55	860	13	122
3	59214	0.6	0.68	6015	60	<5	>10	<1	5	55	32	1.38	10	1.67	454	3	0.04	13	790	4	100	<20	287 <	:0.01	<10	41	<10	8	64
4	59215	0.4	0.66	6115	70	<5	>10	<1	5	31	20	1.47	10	1.95	379	4	0.03	18	710	2	95	<20	316 <	0.01	<10	71	<10	8	115
5	59216	0.2	1.25	740	160	<5	9.31	<1	2	28	15	0.43	10	2.17	175	<1	0.10	5	720	8	35	<20	257	0.03	<10	18	<10	7	15
6	59217	<0.2	1.61	30	130	<5	3.10	<1	5	48	24	0.75	<10	0.99	49	<1	0.11	14	1030	24	15	<20	180	0.10	<10	53	<10	4	13
QC/DAI Resplit: R/S 1	A: 59212	0.6	0.30	6400	40	<5	>10	<1	6	75	28	1.76	10	3.34	675	5	0.01	13	760	4	100	<20	197 <	:0.01	<10	51	_<10	9	44
Repeat: 1	59212	1.0	0.35	6325	40	5	>10	<1	6	70	31	1.76	10	3.42	683	3	0. 02	13	770	4	100	<20	206 <	0.01	<10	53	<10	9	44
Stendar GEO'98	d:	0.8	1.62	60	160	5	1.62	<1	19	56	74	3.87	<10	0.88	661	<1	0.03	24	630	20	<5	<20	54	0.10	<10	74	<10	4	64

dl/548B XLS/93Piacer

Page 1

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P.12/18

5-Oct-98

ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4

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Phone: 604-573-5700 Fax : 604-573-4557 ICP CERTIFICATE OF ANALYSIS - AK98-591R

PLACER DOME CANADA LTD. 1440 HUGH ALLEN DRIVE KAMLOOPS, B.C. V1S 1L8

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ATTENTION: BRIAN FOWLER

No. of samples received: 7 Sample type: Rock PROJECT #: HIT SHIPMENT #: None Given Sample submitted by: B. Fowler

Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	ها	Mg %	Ma	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	<u>v</u>	w	Y	Zn
1	59007	5	<0.2	2.00	5	140	<5	2.03	<1	4	40	31	0.72	<10	1.35	36	<1	0.20	16	990	4	15	<20	166	0.12	<10	65	<10	2	<1
2	59008	45	<0.2	2.09	20	135	<5	2.62	<1	6	78	37	1.21	<10	1.30	51	<1	0.19	18	1320	2	20	<20	137	0.11	<10	59	<10	3	7
3	59009	25	<0.2	1.21	35	85	<5	>10	<1	<1	48	16	0.16	10	0.15	54	1	0.24	3	680	<2	10	<20	354	0.04	<10	7	10	7	<1
4	59010	75	<0.2	0.73	40	105	<5	>10	<1	<1	45	22	0.30	20	0.34	207	4	0.16	6	890	4	10	<20	188	0 03	<10	6	<10	8	<1
5	59011	>1000	1.0	0.53	>10000	25	<5	>10	<1	8	43	7	2.06	10	2.45	633	5	<0.01	23	960	20	130	<20	220	<0.01	<10	78	<10	10	101
6	59012	15	<0.2	1.41	20	210	<5	0.84	<1	14	127	18	2.36	30	0.90	242	<1	0.10	13	870	12	<5	<20	48	0.27	<10	68	<10	<1	14
7	59013	120	<0.2	1.19	50	10	100	>10	<1	3	46	2	0.43	20	0.11	204	4	0.05	5	1510	<2	25	<20	132	0.06	<10	30	<10	8	7
QCIDA Respli R/S 1 R/S 2 Repeat 1 2 Standa GEO'98	IA: 59007 59008 t: 59007 59008 <i>rd</i> :	5 30 5 25 150	<0.2 <0.2 <0.2 <0.2 <0.2	2.09 2.16 2.01 2.14 1.76	10 25 10 20 65	140 - 140 135 135 160		2.12 2.76 2.05 2.67 1.74	বা বা বা বা	4 6 19	40 87 40 80 60	33 37 31 37 81	0.77 1.23 0.71 1.22 4.14	<10 <10 <10 <10 <10	1.44 1.35 1.37 1.32 0.99	39 30 40 688	<1 <1 <1 <1	0.21 0.19 0.20 0.19 0.02	15 19 15 19 26	1010 1380 1010 1360 650	6 6 4 18	15 20 15 20 <5	<20 <20 <20 <20 <20	168 138 162 137 56	0.13 0.12 0.12 0.11 0.11	<10 <10 <10 <10 <10	69 61 65 60 77	<10 <10 <10 <10	3 3 3 2	<ୀ ତ <1 8 58
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NDV 10 '96

10:394M PLACER DOME KAMLOOPS

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XLS/98Placer

ECC-TECH LABORATORIES LTD. Frank J. Pezzotti, A.Sc. T. B.C. Certilied Assayer

Page 1

P.11/18



ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY **ENVIRONMENTAL TESTING**

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecotech@mail.wkpowerlink.com NOV 10 '98 10:37AM PLACER DOME KAMLOOPS

P.9/18

HIT PROPERTY SAMAE DESCRIPTIONS Satza/58 9007 - Cham Itan, lamineted skam / calc silicite. Hovey, man socie banding (prob 50), Nen calcaneous, Broats a program tanding. Cappo xin, non-magnific, - shall cheed for W. 2-3% fine, offiss suffice, - larks like pyrhitte with mining eberapying. No fracture fill sulfitter a voining. CRAB Sogne from champel sample face. Sticit and low sele building separated by proceed stand cate sticit and low sele building separated by white it and builde (rypte xin, non - cale point magnetic. Highly fractioned -thackly appearance - pointime that the day. 2-3% time, diss & childed suffixe - pyrhilite? Take from channel for 1009 Gral sample - Hell landed (mm/im stale) white it spay cale silicate rock. Mid frac - bajinline / dry & the filled. Pseudo by texture in place due to patch, replacement - silica? If geln, no vis sulficles. Grab snaple - as 59009, but parsiding slightly dispoppied. white longing and gray using sub banding. Most face w calcy in filling, days, bounding has very fing, diss sulfich - p. Typel sulfield cuptury = 3-5°. 7 hock, looks life a market that, went for fan. Nodelen curbants canonetim on weathand face. bral sample. Bundled skann rick. Ven calconers. min soch blotches (sing) of day file sulfide - pr? - apparis knyrze Colorect. Non magnific - = 5,7%. Mid guy white in order sien wiegeneoing - opid-to?. Mid fine a calcite & sulfide more. Min is trac and the

212 - GEAB - HIT WIEVSIVE Rock, Mafie, white fine grainger Encontrolity 10-12% boundards 5% birting. Kfuld phanos in f.g. play 1572 surveilmoss. Sample telen upstern from ouriferious skarn. Dead Tooling, no fracs, no vis sulphids. Almandine samed skann, cale silved rock. It shann mi sale bands with clots I min thick them I prik garnet kands Very hang rock - very advisions. Light green company, cale siliget radicticity tremolite on face. There taminice parties posted very fin sulfide - pyrhetite ... · · · · · · · · ·

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Pit Target Area

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Location – This target is centered on a gravel pit adjacent to the North Canol Highway at kilometre 38.8. It is located on NTS mapsheet 105-J-4 in the Mayo Mining District, at its border with the Watson Lake Mining District. Work was performed in a 3.0 kilometre wide corridor centered on the Canol road in the vicinity of the discovery showing.

Access – Access was by truck to the target, a distance of approximately 419 kilometres one way. Ground traverses were run from the road.

Work Program – Work was to consist of prospecting and a soil sample grid centered over the showing. Due to the heavy and highly variable till, overburden and swamp cover in the area, the intended soil-sampling program was scrapped, shortening the trip to 3 days. Day one was spent driving to the area, setting up camp and general prospecting in the immediate area of the showing. Day two was spent running traverses along the Canol road for approximately 6.0 kilometres on either side of the showing. Day three was spent finishing the traverses and doing detailed rock sampling in the pit. Subsequent to the aforementioned work, two one-day visits were made to acquire samples for cutting and polishing as well as for assay.

Results – Prospecting traverses failed to locate any new mineralized showings or outcrops. Geology encountered in the vicinity of the pit is predominantly granite and it appears that the showing may be hosted within a roof pendant. Farther to the south are outcrops of sediments, which are in places quite carbonaceous and may be considered prospective for coal.

Results of the detailed sampling in the pit were generally negative. Of the 19 samples taken to represent all lithologies present; only three were greater than 100 ppb Au. Sample Pit-13, a pyrrhotite and chalcopyrite mineralized skarn lense approximately 0.6m by 3.0m hosted by quartzite returned 1337 ppb Au. Sample Pit-10, a proximally derived boulder (0.6m by 0.8m) of tan dolomite cut by pyritic chalcedonic veinlets returned 575 ppb Au. Sample Pit-3, a rusty sediment mineralized with pyrite and chalcopyrite returned 137 ppb Au. None of the above rock types occur in abundance in the pit area. The remaining samples were taken to represent wallrock to the above anomalous samples, or the different rock types in the pit.

The two one-day visits resulted in a further 8 samples. Three of the samples returned anomalous gold values (270, 279 and 453 ppb), but these samples were all similar in composition. Prospecting completed at the time of the visits failed enlarge the size of the occurrence.

Conclusions – Highly anomalous gold values have been returned from silicified pyrrhotite mineralized skarn? lenses as well as epithermal veining within dolomite. This is a new discovery in a predominantly overburden covered area. Size and grade potential of both types of mineralization appears to be limited at the main showing. Further potential lies in expanding the known mineralization along strike or at depth.

YUKON ENERGY, MINES & RESOURCES LIBRARY P.O. Box 2703 Whitehoree, Yukon Y1A 2C6 **Recommendations** – Further work is recommended, but will be of a low priority due to the limited size and grade of the discovery showing. Work should consist of geophysics (magnetometer and VLF/EM) to be followed by excavator trenching.

Costs		
Truck Costs (860 km x \$0.42/km)	=	\$361.20
Living Expense (2 people x 5 days x \$35/day)	=	\$350.00
Wages For Helper (5 days x \$125/day)	=	<u>\$625.00</u>
TOTAL	, = 1	\$1336.20

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Pit-1 > 0.3m chip across weakly rusty siltstone

Pit-2 > 0.6m chip of sandy dolomite with trace disseminated pyrite

Pit-3 > 0.3 m chip as -1 with pyrite in veins and along fractures

Pit-4 > rep grabs of limy sediment

Pit-5 > meta siltstone cut by qtz py veins and fractures with trace epidote

Pit-6 > as above 1.0m chip

Pit-7 > as Pit-5 1.0m chip

Pit-8 > 1.0m chip adjacent to Pit-7 grey quartzite

Pit-9 > 1.0m chip adjacent to Pit-8 same as with trace diss. Pyrite

Pit-10 > 0.4m chip tan dolomite cut by pyritic chalcedonic veinlets

Pit-11 > rep sample of 10cm wide limonitic gouge zone

Pit-12 > grab sample of limonitic grey quartzite

Pit-13 > 0.4m x 2.0m skarn lense 10% sulphides within quartzite

Pit-14 > host-rock to Pit-13, 0.3m chip limey quartzite with trace diss. pyrrhotite

Pit-15 > 1.0m chip as per Pit-14 trace diss pyrrhotite

Pit-16 > rep grab limey quartzite

Pit-17 > 0.5m chip as per Pit-16 about 0.5% pyrrhotite

Pit-18 > 1.0m chip as above with trace pyrrhotite diss. and coating fractures

Pit-19 > 2.0m chip weakly silicified dolomite

Pit-20 > altered green volcanic rock with 3% disseminated pyrite

Pit-21 > numerous quartz eyes and small black prisms set in dark grey fine groundmass

Pit-22 > rounded to sub-angular fragments of pyrrhotite mineralized quartz set in a groundmass of creamy white, sucrosic hard stuff with 0.5% po

Pit-23 > Brx black chert/sed fragments set in a groundmass similar to -22, rock is silicified and cut by a weak qtz vein stockwork; rock contains about 3% py/po which is mostly within groundmass.

Pit-24 > black sed with diss and blebby po to 5%

Pit-25 > as per -22 with about 1% po

Pit-26 > silicified sed? Cut by a well developed stockwork of weakly chalcedonic quartz veinlets; at least two distinct episodes of veining are present, trace diss po in country rock Pit-27 > as per -22 with about 1.0 % po



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105 Copper Road Whitehorse, Yukon Y1A 2Z7 Ph: (867) 668-4968 Fax: (867) 668-4890 E-mail: NAL@hypertech.yk.ca

02/09/98	Certificate of Ana	lysis	Page
Ben	nie Kreft	WO# 05586 Certified by	_
Sample #	Au ppb	0	
Sample # PIT-20 PIT-21 PIT-22 PIT-23 PIT-24 PIT-25 PIT-26 PIT-27 PIT-27	27 5 453 270 26 279 41 40	3	

Page 1



05/06/98

Assay Certificate

Page 1

WO#07985

			Cert	ified by \int	ΔD	
Sample #	Au ppb			0		
PIT - 1 PIT - 2 PIT - 3 PIT - 4 PIT - 5	<5 30 137 9 11	· .		·		
PIT - 6 PIT - 7 PIT - 8 PIT - 9 PIT - 10	5 41 6 575					
PIT - 11 PIT - 12 PIT - 13 PIT - 14 PIT - 15	54 15 1337 44 56					e true
PIT - 16 PIT - 17 PIT - 18 PIT - 19	6 7 20 22					
		•				





CERTIFICATE OF ANALYSIS iPJ 98F0542

2036 Columbia Street Vancouver, B.C. Canada V5Y Phone (604, -7878

INTERNATIONAL PLASMA LABORATORY LTD. Fax (604) 879-7898 **19 Samples** Out: Jun 12, 1998 1 of 1 Client : Northern Analytical Laboratories Page 19=Pulp [054212:29:48:89061298] Project: W.O. 7985 In : Jun 09, 1998 Section 1 of 1 Cu Pb Bi Cd Со Cr Mg P Sample Name Ag Zn As Sb Hg Mo Tl Ni Ba W V Mn La Sr Zr Sc Τi A1 Ca Fe K Na ppm ppm ррт ppm ppm ppm ppm ppm ppm ppm ppm X X X X X X X ppm 22 2 PIT 1 P P 62 3 3 0.01 0.68 2.17 1.06 0.50 0.12 < 0.05 52 10 21 31 11 < < 0.7 5 51 80 210 90 17 8 < < V V V < 162 95 7 Ž × < 5 12 10 347 16 676 34 PIT 0.6 26 4 < 7.6 8 < 0.01 0.20 101 1.49 6.61 < ेे ं k < < < 25 31 24 64 86 84 PIT 3 P 0.9 32 2.4 17 81 54 4 10 7 1116 155 < 24 < 2 0.03 0.98 0.18 4.66 0.61 0.21 < 0.05 < < 12 50 523 43 PIT 4 P 0.4 30 6 30 18 < < 21 0.9 4 7 3 < 0.62 8.89 1.51 0.73 0.06 < 0.06 7 1.1 10 91 162 90 9 29 PIT 5 P 0.2 90 8 24 36 < < 46 166 10 5 0.05 1.72 1.54 1.65 0.85 0.33 0.05 0.08 PIT 6 0.1 53 5 45 < 15 < < 0.6 4 55 50 80 73 105 126 16 15 26 < 0.46 184 1.07 0.50 0.03 < 0.03 15 < ~ ~ ~ ~ ~ P 5 62 36 6 89 93 324 86 PIT 7 616 15 66 < 3.4 203 0.8 45 19 < 9 6 0.01 1.50 1.90 5.31 1.13 0.10 < 0.09×. PIT 8 22 92 327 26 17 ĪŌ 35 91 65 0.3 36 0.9 134 40 < < < 11 3 0.01 0.96 129 1.68 0.82 0.11 < 0.06 25 3 P 7 32 26 < 5 36 7 61 59 63 14 156 10 51 94 10 13 PIT 9 0.3 74 < < 10 < 1.0 277 3 0.01 1.00 5.75 1.69 1.07 0.05 < 0.05 11 3.8 847 PIT 10 1.3 597 16 86 17 < < 9 < 1 0.01 0.36 21 5.62 5.89 < 🕅 🗧 < < 24 19 3.0 5 8 **v** v v 43 PIT 11 P. 0.7 85 22 30 52 31 < 8 < 9 43 20 127 10 6 5 < 0.49 0.35 5.92 0.17 0.07 < 0.05 121 78 164 P 0.4 10 37 34 9 1.3 40 67 192 24 PIT 12 < < 10 < 0.09< 4 0.01 1.27 2.17 2.07 1.07 0.22 5 11 P P 2.6 476 94 7 < 117 8.8 12 7 726 5 21 **PIT 13** 164 < 19 < 1 0.02 0.26 1.05 < < 6 15% 17% < < < 1.2 5.4 17 73 4 292 < < 1 0.01 0.41 20* 0.43 3 92 37 5 < < 3 10 546 8 6 < 0.01 < **PIT 14** 0.3 < < 13* P 1.9 496 154 253 28 7 11 8 22 14 6 661 2 22 **PIT 15** < < 2 0.03 0.57 0.53 5.13 1740.03 < 🔆 📉 3 17 V V V V 5 5 6 3 7 58 27 2 FIT 16 0.2 5 5 Ρ 8 5 < 0.2 3 24 296 < < < < 1 < < 0.15 25% 0.49 14*0.02 0.01 0.01 PIT 17 P 0.3 18 16 59 < < 4 0.8 10 3 140 37 330 3 4 0.05 3.51 2.14 1.62 11*0.03 < 0.05 1.4 7 15 10 15 14 112 11 26 < 219 P < 4 < 🏼 15 **₽IT 18** < 8 1 0.03 0.60 0.83 2.98 6.12 < < < PIT 19 P 0.2 20 40 100 41 < < 4 1.4 2 6 18 13 55 488 10 44 16 1 0.02 0.64 22¥ 0.56 11* < 0.01 0.01 .

2 1 1 5 5 3 1 10 2 0.1 2 - 5 2 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 Sin Limit 0.1 2 1 1 1 1 Max Reported* ICP ICP ICP ICP ICP Method ICP



CERTIFICATE OF ANALYSIS iP_ ___8I0942

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2036 Colum⁺ [^]treet Vancouver, L

DNAL PLASMA LABORATORY LTD.

Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

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Sixtymile Target Area

Location – This target is located in the Dawson Mining District on NTS mapsheet 115-N-15. Work was to have been concentrated on the silver-lead veins located south of the Sixtymile River.

Access – Access was by truck via the Top Of The World Highway and the local placer mining roads. These roads are all in good condition up to the Sixtymile River. Miners have recently diverted the river and the local bridge now sits high and dry 200m north of it. Several local fords were also impassable due to diversions, washouts and/or high water.

Work Program – Work on the property was completed during the period June 23-24. June 23^{rd} was spent driving from Whitehorse to the target area, and then trying to find a way across the river. June 24^{th} was spent trying to get someone to re-divert the river and/or take us across the river on a highboy. We did not manage to get across. On the way back to Whitehorse, we took an 80lb sample of quartz pebble conglomerate from an outcrop located adjacent to the Sixtymile access road 1.5 km north of the confluence of Little Gold and Big Gold Creeks (NTS 116-C-2). This sample was taken to NAL, crushed to –20 mesh and panned to assess its freegold content. Approximately 40lbs were washed in a standard gold pan, no gold was recovered. No further processing of the bulk sample was undertaken.

A return trip was planned to the original target area later in the summer when the Sixtymile River water levels would be lower. A check of the pertinent quartz claim sheet prior to our return trip showed about 80 recently staked claims over the target. Based on this information, our return trip was cancelled.

Conclusions And Recommendations – No further work is recommended in this area.

Costs

Truck Costs (1200km x \$0.42/km)	=	\$504.00
Living Expenses (2 people x 2 days x \$35/day)	=	\$140.00
Wages For Helper (2 days x \$125/day)	=	<u>\$250.00</u>
Total		\$894.00



Clear East Target Area

Location – This target is in the Dawson Mining District on NTS mapsheet 115-P-14, just east of the headwaters of Clear Creek. Work was performed along the upper 5 kilometres of the creek.

Access – Access was by truck via a branch off of the Left Clear Creek road in the vicinity of the uppermost placer mining camp. The road was in generally poor condition east of the pass, and some handwork was needed to facilitate vehicular access.

Work Program – Work on the property was undertaken during the period June 12-16. Originally I had planned a ten-day trip into the area, which was to cover Josephine Creek as well as the headwaters of the Little South Klondike River. This trip was shortened due to poor test results on Josephine as well as poor local road conditions.

A total of five bulk samples totaling 8 cubic yards were taken. Sample sites were chosen on the basis of positive results from panning in areas thought favorable for gold deposition. Samples were taken across all strata exposed in each particular pit, and are therefore thought to be representative of the average grade of the gravels. All excavated material was screened to minus 1.0 centimetre. It was washed in a one foot wide by five feet long sluice lined with expanded metal (1.5-10h) and un-backed nomad matting, set at a gradient of 1.5 inches per foot and fed with gravity flow water. This set-up allowed for proper riffle formation, with excellent sorting action observed at each set-up.

Results – General prospecting located numerous areas where traces of extremely fine gold could be panned. Gold did not appear to be concentrated in any one particular horizon, but rather, was dispersed throughout the entire section with a slight increase towards bedrock. No coarse gold (greater than 40 mesh) was encountered during the testing program.

Depth to bedrock is highly variable along the creek. Along the upper 2.0 kilometres the gradient of the creek is steep, and bedrock is frequently exposed. Down from this, the gradient decreases and gravels begin to accumulate. Where measured, thicknesses in this area vary from 1.5 to 3.6 metres. Gravels consist of lenses and irregular layers of sand, gravel and boulders up to 1.5m in diameter. Occasional lenses of iron and manganese stained gravel were encountered, these were nowhere consistent, and likely represent the remnants of what were once continuous units now disrupted by periods of flooding and deposition. Clay content is negligible within the upper half of the section, but rapidly increases as bedrock is approached, to the point where gold recovery would be hindered if care was not taken during testing.

Test site #1 - Approximately 5.3 km down from the headwaters, opposite the mouth of a left limit tributary. A one cubic yard sample from one foot to four feet depth yielded 5 pieces of fine gold.

Test site #2 – Approximately 4.95 km down from the headwaters. A one cubic yard sample was taken at random from material pushed up by a bulldozer. Nine pieces of fine gold were recovered.

Test site #3 - Approximately 4.1 km down from the headwaters. A two cubic yard sample was taken from the left bank of a large trenched area. This sample represents material from one foot to five feet in depth. Fifteen pieces of fine gold were recovered.

Test site #4 – Approximately 2.65 km down from the headwaters. A two cubic yard sample was taken from the lower 2.5 feet of gravel and upper 0.5 feet of broken bedrock. Twentynine pieces of fine gold were recovered, with a weight of approximately 100 milligrams. This equals a value of 1.6 ounces per 1000 cubic yards.

Test site #5 - Approximately 2.35 km down from the headwaters. A two cubic yard sample was taken from a natural bank exposure from a depth of 1 foot to 5 feet. Five pieces of fine gold were recovered.

Conclusions – Grades encountered during the sampling program were well below economic consideration. There is potential for a nugget effect to perhaps increase the average grade of the gravel, but the opposite is also possible. Fine-grained gold is common throughout the drainage basin, but only the most sophisticated sluicing system would be able to consistently retain the extremely fine gold.

Recommendations – No further work is recommended at this site.

<u>Costs</u>

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-	Truck Costs (850 km x \$0.42/km)	=	\$357.00
-	Living Expense (2 people x 5 days x \$35/day)	=	\$350.00
-	Wages For Helper (5 days x \$125/day)	=	\$625.00
-	Testing Equipment	=	<u>\$100.00</u>
	TOTAL	=	\$1,432.00



Grew Creek Target Area

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Location – This target is located in the Whitehorse Mining District on NTS mapsheet 105-K-3. Work was performed in an area extending from 800 metres below the highway crossing to a point 1.6 kilometres above the highway crossing.

Access – Access was by truck from Whitehorse to the target area, a one way distance of 370 kilometres. Several local 4wd roads provide access to the areas prospected. These roads are in good condition except for several small washouts.

Work Program – Work on the property was completed during the period June 26-30, and on September 4th 1998. During the initial trip, prospecting and small-scale bulk samples were taken upstream of the highway crossing. September 4th was spent following up recommendations outlined during the first visit, specifically, further hand testing and prospecting immediately below the highway crossing.

A total of four bulk samples totaling 10 cubic yards were taken. Sample sites were chosen on the basis of positive results from panning in areas thought favorable for gold deposition. Samples were taken across all strata exposed in each particular pit, and are therefore thought to be representative of the average grade of the gravels. All excavated material from the first two sites was screened to minus 1.0 centimetre, while the last two sites were screened to minus 0.5 centimetre. Screened material was washed in a one foot wide by five feet long sluice lined with expanded metal (1.5-10h) and un-backed nomad matting, set at a gradient of 1.5 inches per foot and fed with gravity flow water. This set up allowed for proper riffle formation, with excellent sorting action observed at each sample site.

Results – General prospecting located numerous areas where the occasional flake of fine gold could be panned. Gold is concentrated in various layers throughout the entire section with no discernible increase in values occurring on bedrock. Gold is fine and flat with the rare piece of coarse (30 mesh) gold that may be in fact folded flakes.

Depth to bedrock is extremely variable along the creek. Gravels were noted to be as thin as 0.6m on a low rock cut bench, and as thick as 3.5m in a nearby bulldozer trench. Fluvial deposits are thawed and vary from a jumbled poorly sorted boulder gravel to finely interbedded sand and pea-sized gravel. Clay content of the gravels is negligible. Bedrock along most of the creek is heavily clay altered and decomposed, and therefore, easily eroded during flood events. Down cutting and the subsequent re-deposition of the sediments is likely the cause of the erratic distribution of placer gold. For example, a gold-bearing horizon located upstream on bedrock may be partially eroded through and re-deposited on top of barren gravel in a downstream location. There are three possible sources for the placer gold:

- A) the Grew Creek epithermal gold deposit
- B) a recently cemented conglomerate occurring for half a mile up from the highway (old channel?)
- C) concentrated by stream action from the glacial till which covers much of the area

Test Site #1 – Approximately 110 metres upstream from the highway crossing. A 4.0 cubic yard sample was taken from surface gravels. Sixteen pieces of fine gold were recovered.

Test Site #2 - Approximately 140 metres upstream from the highway crossing. A 2.5 cubic yard sample was taken from the streambed and a small gravel bar. Fourteen pieces of fine gold were recovered.

Test Site #3 – Approximately 900 metres upstream from the highway crossing. A 1.5 cubic yard sample was taken from a bank at a depth of from two to five feet. Height of the bank from bedrock to surface is 6.5 feet. Sixty-two pieces of fine gold were recovered, weighing about 490 milligrams; this equals a value of 1.05 ounces per 100 cubic yards.

Test Site #4 – Approximately 850 metres upstream of the highway crossing. A 2.0 cubic yard sample was taken from a low rock cut bench. Material on the bench averaged 0.5 metres deep. Twenty-six pieces of fine gold were recovered, weighing about 490 milligrams. This equals a value of 0.27 ounces per 100 cubic yards.

Prospecting downstream of the highway crossing was conducted as it appeared that down cutting was minimal in this area and therefore gold would possibly have a chance to deposit and form a continuous defined paystreak in this area. Panning of surface gravels encountered less gold than what was recovered from surface upstream of the highway crossing. A significant amount of recent excavator trenching was located in this area.

Conclusions – The best grades encountered during the testing program were approaching, or just at, economic consideration, given the good ground conditions (no permafrost, minimal overburden and low clay content) and ease of access. The narrow valley, undulating bedrock surface and disrupted paystreak would make mining difficult in the vicinity of the best test results. It appears that there has been sufficient, recent, excavator trenching to properly test the area downstream from the highway crossing.

Recommendations – No further work is recommended at this site. Based on the low but encouraging results obtained from Grew Creek, further work is warranted on other reported gold-bearing drainages in the area (Starr Creek, Lapie River and Hoole River).

<u>Costs</u>

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Truck Costs (740km x \$0.42/km)	= \$310.80
Living Expenses (2 people x 5 day; 1 person x 1 day)	= \$385.00
Wages For Helper (5 days x \$125/day)	= \$625.00
Testing Equipment	= <u>\$100.00</u>
TOTAL	\$1420.80



Fiddler Target Area

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Location – This target is located in the Watson Lake Mining District on NTS mapsheet 105-B-1. Work was concentrated in two main areas: 1.7km S.S.E. of the Fiddler adit and adjacent to the Alaska Highway, approximately 6.5km east of Rancheria.

Access – Access was by truck. A rough 10km long 4wd road leaving the Alaska Highway just west of Boulder Creek provided access to the Fiddler area. Traverses were run by foot from the roads.

Work Program – Work was directed towards testing the theory that significant gold mineralization may be located peripheral to the Fiddler W-Sn deposit. This theory was based on the fact that previous workers had identified values of up to 0.04 oz/ton Au from narrow qtz-galena-aspy veins in the area to be prospected.

Prospecting located the historical showing, which was found to be a single narrow, discontinuous qtz-galena-aspy vein. This vein was not sampled due to its low economic potential. Located in the immediate vicinity of the sulphide vein was a 10m wide N.E trending stockwork and sheeted chalcedonic quartz vein system. Trace amounts of pyrite and pyrrhotite were found within the veins and disseminated in the adjacent wallrock. A total of 12 widespread grab and chip samples were taken of both types of mineralization, with no anomalous gold results returned.

A second area of stockwork and sheeted quartz veining was located adjacent to the north side of the Alaska Highway, approximately 6.5km east of Rancheria. Veining was located in scattered outcrops along an 850m strike length. Exposure is poor, but where exposed the vein system is about 12m wide with a N.W. trend. Mineralization consists of trace amounts of pyrite, galena and chalcopyrite disseminated within a few of the veins. The host sediments are occasionally highly silicified. Three samples were taken of this mineralization, with no anomalous gold results returned.

Conclusions - Significant gold does not appear to be associated with the Fiddler W-Sn deposit.

Recommendations - No further exploration for gold is recommended for the area.

Costs		
Travel Costs (576 km x \$0.42/km)	=	\$241.92
Living Expenses (2 days x 1 person x \$35/day)	=	<u>\$70.00</u>
Total		\$311.92

Rock Sample Descriptions

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Fid-1> 1.5m chip sample of limonitic schist Fid-2> as above and adjacent to Fid-3> 1.5m chip of weak qtz stkwk cutting schist Fid-4> 1.5m chip of sheeted and stkwk chacedonic qtz veins, schist wallrock is weakly silicified Fid-5> 0.6m chip across a 0.2m banded vuggy qtz vein and its silicified wallrock Fid-6> 2.0m chip as per Fid-4 Fid-7> 0.6m chip as per Fid-5 Fid-8> grab sample of a pyritic lense in schist Fid-9> grab sample of qtz stkwk cutting limonitic schist Fid-10> qtz veined limonitic schist grab sample Fid-11> 2.0m chip of limonitic meta-phyllite mineralized with 2% diss po Fid-12> 2.0m chip as above Fid-13> 4.0m chip of highly silicified sed cut by a well developed stkwk of qtz veins mineralized with trace Py/Cu/Pb Fid-14> 3.0m chip as above, less sulphide; approximately 675m west of Fid-13 Fid-15> 3.0m chip as above; approximately 75m west of Fid-14



Page 1 Certificate of Analysis 05/10/98 WO#05619 **Bernie Kreft** Certified by Au Sample # ppb FID-1 20 FID-2 7 6 FID-3 5 FID-4 FID-5 6 FID-6 <5 FID-7 <5 FID-8 <5 FID-9 <5 **FID-10** <5 <5 FID-11 FID-12 <5 FID-13 <5 FID-14 <5 FID-15 <5



Stewart Crossing Target Area

A two day trip was undertaken to assess a moderate single point gold stream sediment anomaly. The anomalous sample site was found to be located within a wide, flat, heavily overburden covered area. No prospecting was undertaken as it was thought that the anomaly was likely a result of minor placer gold within the original sample. The anomaly is located on NTS mapsheet 115-P-1 at 136 27.5' and 63 06.1', just east of the Klondike Highway.

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