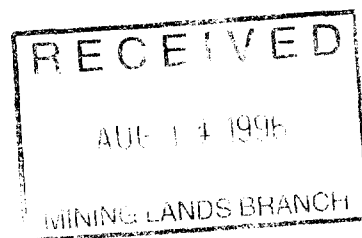


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PLACER DOME CANADA LIMITED
PROJECT 514 - GOLDEN ARM PROPERTY
GEOLOGICAL REPORT - 1994 WORK PROGRAMME
TODD TOWNSHIP, ONTARIO
NTS: 52M/1



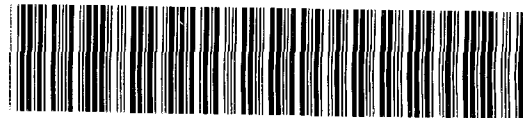
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JULY 1996

STUART W. DEVEAU



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(in back pocket)

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PLACER DOME CANADA LIMITED
PROJECT 514 - GOLDEN ARM PROPERTY
GEOLOGICAL REPORT - 1994 WORK PROGRAMME
TODD TOWNSHIP, ONTARIO
NTS: 52M/1

SUMMARY AND CONCLUSIONS

Examination of the Golden Arm property (GAP) during 1994 defined the lithology of the area and located a previously trenched area at the northeastern end of Wolf Bay. The GAP was mapped at a scale of 1:2500 and a detailed sampling programme was conducted to document lithology, mineralization and/or alteration. All samples were analysed for gold (Au) plus nine other elements. The highest Au value returned was 235 ppb from a small pit at the northeast corner of claim KRL 1197144. The data from ground and airborne geophysical surveys conducted during 1994 indicate that the GAP is located over two northeasterly trending magnetic highs; these may be in response to ultramafic units which occur in the area.

In conclusion, the 1994 work programme defined the geology of the GAP and suggested that magnetic highs on the east and west sides of Golden Arm are in response to ultramafic rocks which outcrop in the area. Other magnetic highs that occur under the waters of Golden Arm may also be due to ultramafic rocks and remain possible future drilling targets (see Recommendations on Page 9).

INTRODUCTION

The GAP is located approximately 20 km west of the town of Red Lake, Ontario (Fig. 1). The 13 contiguous claims, consisting of 63 16-hectare claim units, were staked in September 1993. During the spring of 1994 approximately 100 km of line were cut. The lines were cut at 100m spacing tied to a base line with an azimuth of 45° true north. Between July 15, 1994 and August 15, 1994 an exploration programme under the direction of Reginald P. Seyler (P.O. Box 158, Balmertown, Ontario, P0V 1C0) was conducted on the GAP consisting of prospecting, geological mapping and lithochemical sampling. Where continuous outcrops were noted,

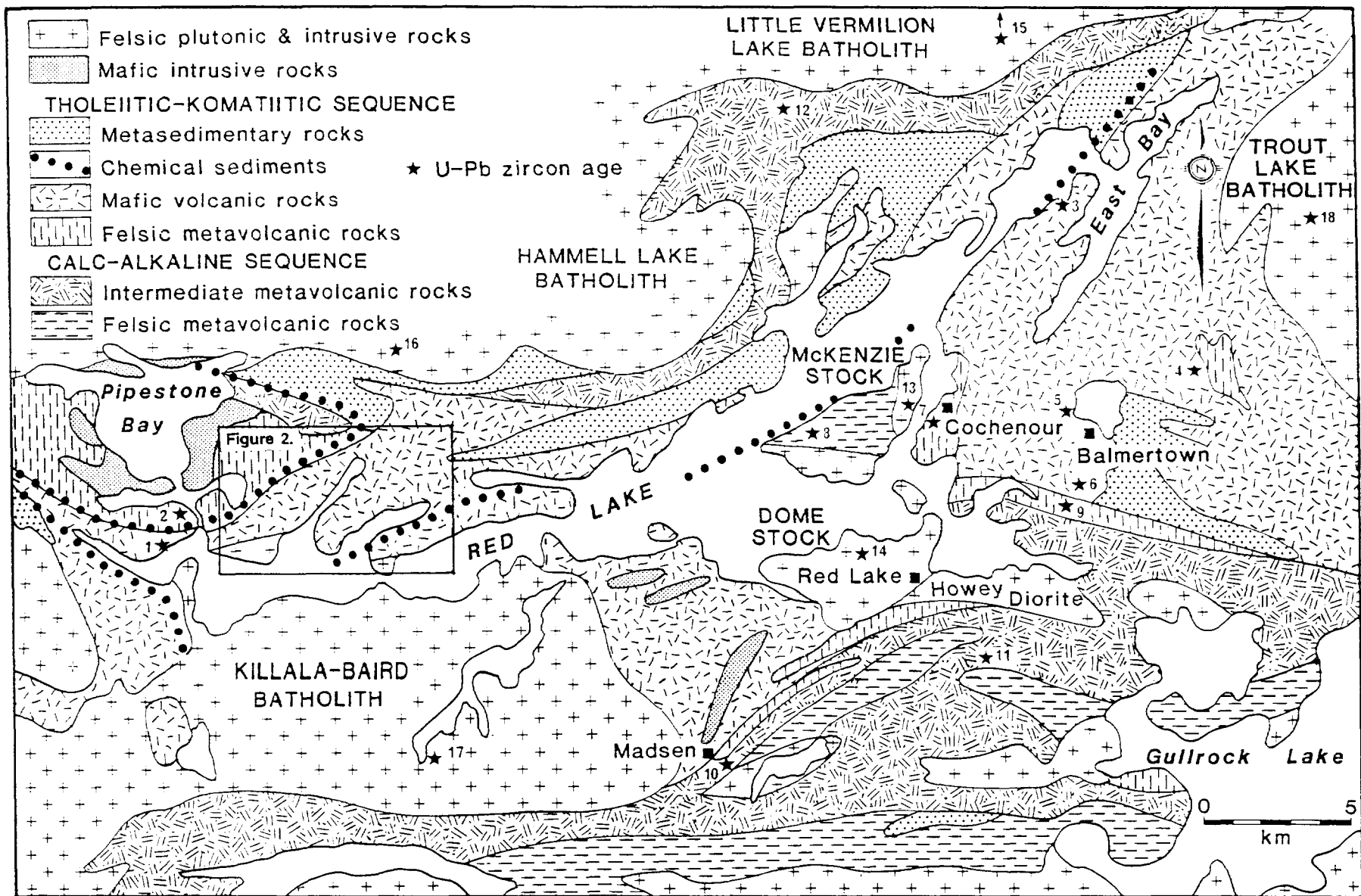


Figure 1. Location map and generalized geology map (after Andrews *et al.*, 1986). Box shows location of Figure 2.

samples were taken at 50m intervals.

PROPERTY

The GAP consists of 13 contiguous unpatented mining claims, totalling 63 16-hectare claim units, located in Todd Township, Red Lake Mining Division, District of Kenora, Ontario (Fig. 2).

Table 1 shows a listing of the mining claims included in the GAP.

TABLE 1
Golden Arm Property Claims

<u>Claim Number</u>	<u>No. of Claim Units</u>	<u>Recording Date</u>
1197133	10	09/28/1993
1197134	2	09/28/1993
1197135	10	09/28/1993
1197136	12	09/28/1993
1197137	4	09/28/1993
1197138	1	09/28/1993
1197139	6	09/28/1993
1197140	2	09/28/1993
1197141	2	09/28/1993
1197142	10	09/28/1993
1197143	2	09/28/1993
1197144	1	09/28/1993
1197145	1	09/28/1993

LOCATION AND ACCESS

The GAP lies approximately 20 km west of the town of Red Lake, Ontario between latitudes 51°01'30" and 51°03'20", and longitudes 94°03'28" and 94°08'42". Depending upon the season, the property is accessible by either snowmobile or boat from the town of Red Lake.

PREVIOUS WORK

The first recorded work in the area was by Red Wolf Gold Mines Limited who conducted 625 feet of diamond drilling in the eastern part of the property. The holes intersected

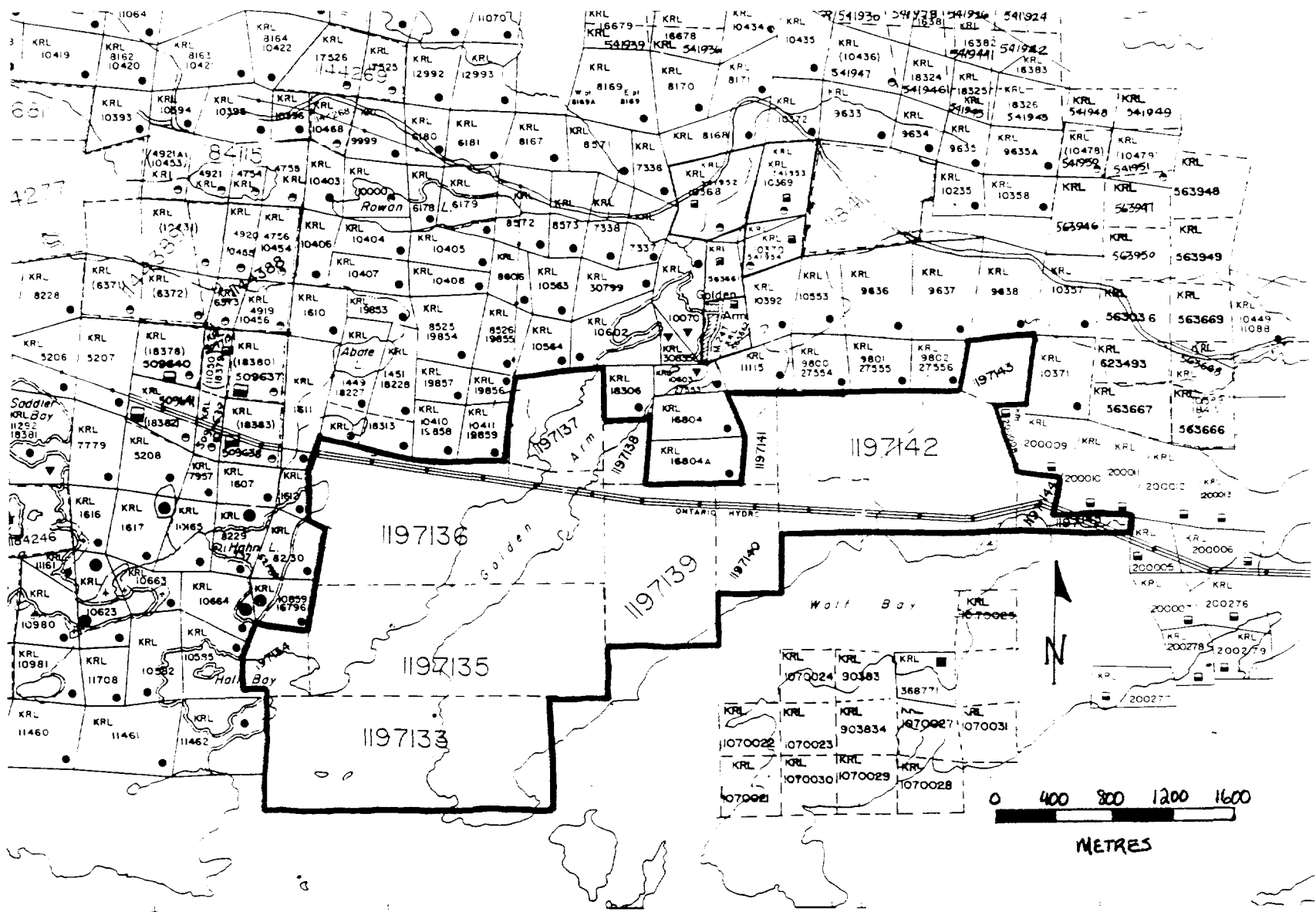


Figure 2: Claim map for the Golden Arm claims.

sedimentary rocks, diorite, volcanics and iron formation; no assays were reported. In 1958, a property exam was conducted by Donald A. Bourne on the George Elliott Red Lake Property covering parts of claims KRL1197135 through 1197139 (Bourne, 1958). He recommended that a magnetic survey be conducted followed by detailed geological mapping and intensive prospecting. In 1968, Aiken Russett Red Lake Gold Mines Limited conducted geological mapping over their Wolf Bay Property (now covered by parts of KRL1197140 through 1197144)(Kuryliw, 1968). They noted a shear zone within mafic volcanics on claim KRL1197144; the zone trends at 075° and dips steeply south.

In 1979, Dome Exploration (Canada) Limited contracted Geosearch Consultants Limited to conduct an electromagnetic and magnetic survey over parts of KRL1197133 through 1197135 (Woodard, 1979). Two conductors were outlined and it was recommended that they be drilled. The stronger of these conductors was drilled in 1980; the drilling intersected a zone of cherty sediments containing layers of massive pyrite. In 1982, Canadian Nickel Company Limited conducted airborne electromagnetic, magnetic and radiometric surveys over an area covered by claims KRL1197133, 1197135 through 1197145 (Krause, 1982). Several electromagnetic anomalous areas were identified and ground follow-up was recommended.

Between 1983 and 1987, Noranda Exploration Company Limited conducted work over parts of claims KRL1197135 and 1197136. Their work included geological mapping (Maxwell, 1983), a magnetometer survey (Carriere, 1985), one diamond drill hole to test an electromagnetic anomaly, an electromagnetic survey (Carriere, 1987a) and magnetometer and VLF surveys (Carriere, 1987b). In 1994, Placer Dome Canada Limited contracted Techterrex Incorporated to conduct a ground magnetometer survey over the entire property (Wilson, 1994).

GENERAL GEOLOGY

The GAP is located in the west part of the Red Lake Greenstone Belt in the western portion of the Uchi Subprovince, a tabular, east-west trending series of metavolcanics and

lesser metasedimentary rocks (Stott and Corfu, 1991; Fig. 1). The belt is comprised of three distinct sequences (Gulson *et al.*, 1993): a lower sequence of mainly tholeiitic and komatiitic volcanic rocks formed between 2800 and 3000 Ma; a middle sequence comprised of felsic to intermediate pyroclastic rocks, dated at 2830 Ma; and, an upper sequence of tholeiitic volcanics dated around 2740 to 2760 Ma and younger calc-alkaline rocks with an age of 2730 to 2740 Ma (Corfu and Andrews, 1987).

PROPERTY GEOLOGY

The GAP is underlain predominantly by massive to pillowed mafic volcanic rocks, with lesser amounts of intermediate to felsic volcanic rocks, mafic to ultramafic intrusives, felsic intrusives and sedimentary rocks (Drawing 1). These rocks, as defined by Andrews *et al.* (1986), have been metamorphosed within the greenschist facies. A summary of the rock types encountered is shown in Table 2:

TABLE 2

Lithological Units

<u>Rock code</u>		<u>Rock Type</u>
3	-	MAFIC TO INTERMEDIATE METAVOLCANICS 3a - Mafic Flow 3c - Pillowed Basalt
4	-	INTERMEDIATE TO FELSIC METAVOLCANICS 4a - Intermediate Flow 4b - Intermediate Tuff
5	-	FELSIC METAVOLCANICS 5a - Felsic Flow 5b - Felsic Tuff
6	-	METASEDIMENTS 6e - Argillite 6f - Quartzite 6j - Chert

TABLE 2 (cont'd)

<u>Rock code</u>		<u>Rock Type</u>
7	-	IRON FORMATION 7a - Oxide Facies I.F. (Chert - Magnetite)
8	-	LIMESTONE DOLOMITE 8a - Marble
10	-	MAFIC TO INTERMEDIATE INTRUSIVES 10a - Gabbro 10b - Diorite
11	-	FELSIC TO INTERMEDIATE INTRUSIVES 11a - Granite
13	-	ULTRAMAFIC INTRUSIVES

The sedimentary rock package consists of argillite, quartzite, chert and iron formation (chert-magnetite). These rocks are of limited extent and occur near the southern end of the property on the east side of Golden Arm at the north end of property. Sulphide mineralization within the sedimentary rocks consists of pyrite, is generally disseminated in amounts less than one percent, but is also massive (up to 50%) in argillite. Minor carbonate alteration is also present.

Felsic volcanic rocks consist of felsic flows and tuffs and occur predominantly on the west side of Golden Arm in the north-central part of the property (Drawing 1). These rocks are generally fine grained, light green to tan coloured, contain minor carbonate alteration and pyrite (less than one percent), and are relatively undeformed (a slight foliation was noted trending east-west and dipping steeply south). Intermediate volcanic rocks (flows and tuffs) occur in the southwest part of the property, are generally fine grained, medium green in colour, relatively undeformed and contain pyrite and pyrrhotite (less than one percent). Minor silicification and carbonate alteration are also present.

Mafic flows occur predominantly on the east side of Golden Arm, but also occur on the west side within the mafic and ultramafic intrusive rocks (Drawing 1). These are fine to medium grained, dark green in colour and massive to pillowed. The foliations trend 005° to 120° (average 073°) with variable dip steeply to the north and south. Within this mafic unit are isolated exposures of mafic intrusive rocks (gabbro and diorite) and intermediate to felsic volcanic rocks (flow and tuff). Sulphide mineralization consists of disseminated pyrite, pyrrhotite and chalcopyrite (generally less than one percent); carbonate alteration occurs locally within the mafic flow units. Quartz and quartz-carbonate veining occurs locally and is oriented northeast-southwest.

Mafic intrusive rocks occur in the western portion of the property and locally within the mafic volcanic unit. They consist of fine to coarse grained, dark green to black massive gabbro with less than one percent sulphide minerals (pyrite, pyrrhotite and chalcopyrite), and medium to coarse grained porphyritic diorite containing less than one percent pyrite. Ultramafic intrusive rocks outcrop on the east and west sides of Golden Arm. These are generally dark green, altered to fine to medium grained serpentinite and locally contain up to 15% magnetite. Iron carbonate alteration is also common. Coarse grained granite occurs in the southwestern portion of the property. This is light pink in colour and contains quartz and potassium feldspar with lesser amounts of plagioclase and biotite.

ROCK GEOCHEMISTRY

A total of 144 rock samples were collected from the GAP, sent to Chemex Labs in Toronto, Ontario and analysed for Au plus nine elements; sample descriptions for these are given in Appendix I. Nearly 90% of the gold analyses were below the detection limit (5ppb); one sample from a narrow quartz vein with pyrite at the eastern edge of the property returned a gold value of 230 ppb; this vein is apparently of limited extent. Table 3 lists some of the anomalous Au geochemistry results; a complete list of the geochemistry results is given in Appendix II.

TABLE 3
Geochemistry Results 10 ppb or Greater

<u>Sample No.</u>	<u>Location</u>	<u>Rock Code</u>	<u>Au (ppb)</u>
E50692	35+00N/24+50E	3a	10
E50693	34+00N/24+75E	3a	15
E58407	59+60N/38+45E	3a	35
E58408	59+60N/38+45E	qtz	230
E58409	58+00N/39+20E	3a	15
E58411	57+30N/34+50E	3c	10
E50643	23+00N/19+45E	3a	30
E50776	18+85N/27+30E	6e	10
E50778	24+10N/20+20E	3a	40
E50783	27+00N/22+85E	3a	20
E50800	46+25N/23+85E	3c	40
E50802	30+75N/10+65E	3a	10
E58252	50+00N/27+25E	qtz	10
E58254	50+75N/24+25E	3c	10
E50741	24+00N/8+25E	13	10
E50750	18+00N/12+45E	13	10

RECOMMENDATIONS

Based on the 1994 work, high magnetic anomalies on the east and west sides of Golden Arm are likely in response to mafic and ultramafic intrusive rocks which outcrop in these areas. High magnetic anomalies under the waters of Golden Arm are also likely due to mafic and ultramafic rocks; these could be tested by future diamond drilling. The quartz vein at the eastern edge of the property that returned a gold value of 230 ppb is apparently of limited extent; this area could be stripped and/or trenched to look for possible extensions to this vein or other veins in the area. However, no further work is recommended at this time.

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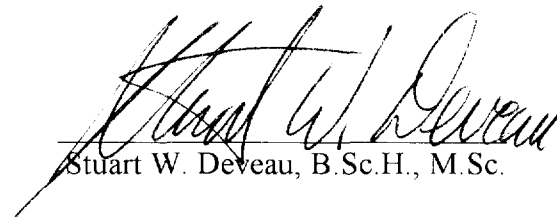
Report on a Ground Magnetometer Survey, Todd, Dome and McDonough Townships, Red Lake Mining Division, District of Kenora, Ontario, for Placer Dome Canada Limited.

CERTIFICATE OF QUALIFICATIONS

I HEREBY STATE THAT:

1. I currently reside at 212 Hammell Road, Red Lake, Ontario.
2. I am employed as a Contract Geologist/Assistant Landsperson with Placer Dome Canada Limited, in Cochenour, Ontario.
3. I possess a Bachelor of Science (Honours) Degree in Geology from Acadia University, where I graduated in 1988, and a Master of Science Degree in Earth Sciences (Geology) from Memorial University of Newfoundland, where I graduated in 1992, and have practiced in my profession since 1993.
4. I am an Associate of the Geological Association of Canada.
5. This report is based upon published and unpublished sources of information, and field work conducted during 1994.
6. To the best of my knowledge, all of the information contained with this report is factual and true.
7. At no time, have I received or expect to receive any interest, directly or indirectly in the property.

Dated at Cochenour, Ontario, Canada this 24th day of July, 1996.


Stuart W. Deveau, B.Sc.H., M.Sc.

APPENDIX I

SAMPLE DESCRIPTIONS

The following abbreviations are used in the Sample Descriptions below:

UM - ultramafic
interm./Inter. - intermediate
w/w - with
serp - serpentinite
carb/cc - carbonate
Fe-carb - iron carbonate
qtz - quartz
volc. - volcanic
cpy/chalco - chalcopyrite
IF - iron formation
tr - trace
fm - formation
xl - crystalline
int. - intrusive
lt - light
xls - crystals
hem - hematite
alter. - alteration
py - pyrite

PROJECT : 514 - GOLDEN ARM

SAMPLE NO.	LINE (N)	CHAINAGE (E)	ROCK CODE	Au (ppb)	Cu (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	COMMENTS
E50776	18+85N	27+30E	6e	10	180	26	1.0	6	Argillite, weakly magnetic, massive Sulfides
E50777	22+00N	20+40E	3b	45	124	64	<0.2	<2	MAFIC TUFF at contact w/ ULTRAMAFICS
E50778	24+10N	20+20E	3a	40	201	40	"	<2	MAFIC Flow, tr Sulfides (BLEBS)
E50779	25+25N	22+15E	3a	45	335	46	"	<2	MAFIC Flow w/ Qtz & CARB. stringers, tr. sulf
E50780	26+85N	17+65E	13	45	13	24	"	<2	Green QUARTZITE? at contact w/ serpentinite
E50781	27+75N	20+10E	10a	45	39	52	"	<2	Qtz vein in a Gabbro unit
E50782	28+00N	23+30E	3a	45	91	48	"	<2	mafic flow w/ Fe carb., some shearing
E50783	27+00N	22+85E	3a	20	325	28	"	<2	mafic flow w/ sulfides (pyrite)
E50784	31+00N	20+00E	10b	45	6	32	"	<2	Diorite Porphyry w/ tr. sulfides
E50785	30+00N	19+90E	10b	45	4	4	"	<2	Quartz vein in Diorite Porphyry
E50786	32+20N	18+50E	13	45	92	140	"	2	Sheared Serpentine on a Sinistral Strike-Slip
E50787	32+50N	24+85E	3a	45	98	34	"	<2	MAFIC Flow w/ tr. Sulfides
E50788	32+00N	21+00E	3a	45	54	18	"	2	MAFIC Flow, calcitic, tr. Sulfides
E50789	36+55N	19+85E	3a	45	27	38	"	<2	MAFIC flow w/ tr. Sulfides
E50790	35+60N	20+10E	3a	45	226	56	"	2	MAFIC Flow, tr. Sulfides, Blue Quartz?
E50791	39+00N	19+00E	10b	45	7	30	"	<2	Diorite Porphyry w/ tr. Sulfides
E50792	39+00N	19+00E	3a	45	89	56	"	<2	MAFIC Flow, Sheared, Fe staining
E50793	40+50N	15+20E	7a	45	31	8	"	<2	IRON FM, lots of Sulfides, Gossanous
E50794	39+50N	19+50E	3b	45	40	46	"	<2	TUFF in contact w/ MAFIC Flow, tr chalc & py
E50795	41+25N	15+00E	10a	45	502	46	"	2	Gabbro w/ tr. Sulfides (chalc)
E50796	38+00N	26+00E	3a	45	79	28	"	<2	MAFIC Flow w/ tr. Sulfides & calcite string
E50797	39+00N	23+75E	3a	45	143	28	"	<2	MAFIC Flow w/ tr Sulfides
E50798	42+00N	25+00E	3a	45	167	38	"	2	mafic flow w/ calcite stringers, tr pyrite & S
E50799	bu post #3	1197142	3a	45	160	82	"	<2	mafic flow w/ tr. Sulfides
E50800	46+25N	23+85E	3c	40	16	6	<0.2	<2	Quartz lens in Pillowed flow
E50801	31+15N	10+65E		45	35	94	<0.2	14	Fe-carb w trace sulfides
E50802	30+75N	10+65E	3a	10	69	58	<0.2	50	mafic flow w carb + trace sulfides

PROJECT : 514 - GOLDEN ARM

SAMPLE NO.	LINE (N)	CHAINAGE(E)	ROCK CODE	Au (ppb)	Cu (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	COMMENTS
ES8301	18+95	10+28	10	<5	41	10	<0.2	2	mafic intrusive w pyrrhotite
ES8302	19+00	11+45	3a	<5	146	38	<0.2	20	foliated mafic flow
ES8303	20+00	11+75	13	<5	49	56	<0.2	8	UM
ES8304	26+00	12+50	13	<5	37	46	<0.2	22	UM w magnetite
ES8305	26+05	6+25	13	<5	165	44	"	<2	UM
ES8306	26+35	6+05	13	<5	2	20	"	<2	UM
ES8307	26+25	2+25	8	<5	<1	<2	"	2	massive carbonate
ES8308	27+00	3+80	13	<5	7	30	"	82	UM w magnetite + Fe-carb stringers
ES8309	27+00	5+40	13	<5	10	40	"	6	UM w magnetite + carb.
ES8310	27+00	6+50	3a	<5	57	88	"	<2	mafic flow w magnetite
ES8311	27+00	11+25	13	<5	69	72	"	10	UM, carbonatized, chloritized, minor sulfide
ES8312	28+00	9+00	3a	<5	228	38	"	<2	mafic flow
ES8313	28+00	5+50	13	<5	18	58	"	4	serpentinite w magnetite
ES8314	28+00	5+00	3a	<5	4	20	"	<2	mafic flow w carb.
ES8315	27+85	4+35	10	<5	148	42	"	<2	mafic intrusive, minor carb, serp. + magnetite
ES8316	28+90	6+00	13	<5	3	26	"	<2	UM, serpentinization & carb.
ES8317	29+10	6+75	13	<5	4	36	"	4	UM, sheared, serpentinized w magnetite
ES8318	29+00	10+75	13	<5	24	76	"	<2	UM, Fe-carb, minor sulfides
ES8319	30+00	9+50	3a	<5	19	28	"	10	mafic w abundant Fe-carb
ES8320	29+90	7+50	13	<5	56	52	"	6	UM w magnetite + minor carb.
ES8321	30+00	5+25	10	<5	2	30	"	<2	mafic intrusive w pervasive carb.
ES8322	30+85	12+40	5a	<5	4	24	"	2	rhyolite
ES8323	35+05	13+30	13	<5	51	16	"	26	UM, finely xl w magnetite + Fe-carb
ES8324	33+60	13+25	10a	<5	73	12	"	2	mafic int. w pyrite + carb
ES8325	37+75	shoreline		<5	27	12	"	<2	Fe-carb & calcite vein in ES8326
ES8326	37+75	shoreline		<5	11	14	"	<2	lt. green fibrous w black lined xls.
ES8327	39+70	8+75	5a	<5	2	36	"	6	felsic (Orthoite?) w horn. + minor carb.
ES8328	42+05	10+10	13	<5	9	46	<0.2	<2	UM rusty weathering, magnetite

PROJECT : 514 - GOLDEN ARM

SAMPLE NO.	LINE (N)	CHAINAGE(E)	ROCK CODE	Au (ppb)	Cu (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	COMMENTS
ES8329	42+75	shoreline	13	<5	45	48	40.2	8	serpentine w magnetite + minor cc ^{cc-atter.}
ES8330	34+90	20+30	3a	<5	26	20	40.2	18	mafic flow w magnetite + cc-atter.
ES8331	34+10	23+80	3a	<5	209	82	40.2	8	mafic flow w minor sulfide (sheared)
ES8251	50+00	27+75	3a	5	202	26	"	12	mafic flow w trace sulfide
ES8252	50+00	27+25		10	139	30	"	14	6" qtz stringer zone in mafic flow
ES8253	50+25	26+80		<5	132	70	"	6	6" qtz-cc vein in pillow basalt
ES8254	50+75	24+25	3c	10	61	34	"	6	siliceous cherty pillow selunge in 3c
ES8255	51+00	24+20		<5	67	26	"	4	asbestos dyke? see notes for Aug 4
ES8256	51+00	19+50	3a/4a	<5	147	212	"	20	felsic-intermediate volc. or silicified mafic flow
ES8257	52+25	28+60	3a	<5	190	58	"	14	mafic flow, carbonatized, qtz veining
ES8258	52+00	22+00		<5	12	28	"	4	cherty qtz vein (6") near 3c (float?)
ES8259	53+00	27+25	3a	<5	122	44	"	8	interm.-mafic flow w trace sulfide (silicified)
ES8260	54+25	23+75	3c	<5	169	72	"	8	shear zone through pillow basalt
ES8261	54+25	27+50	3a	5	43	48	"	6	qtz-carb veins in carbonatized mafic flow
ES0729	20+00	11+75	13	<5	17	34	40.2	<2	UM
ES0730	19+90	7+25	3a	<5	222	64	"	"	mafic dyke
ES0731	19+90	7+25	10	<5	111	58	"	"	mafic intrusive
ES0732	21+00	12+55	10	<5	1	46	"	"	mafic intrusive
ES0733	22+00	12+75	13	<5	10	36	"	"	UM
ES0734	21+00	11+95	13	<5	33	68	"	"	UM w carb. + magnetite
ES0735	21+00	12+50		<5	16	2	"	"	qtz vein in mafic/UM
ES0736	22+00	12+75	13	<5	54	42	"	"	UM w carb. + magnetite
ES0737	22+00	9+45	3a	<5	4	34	"	"	carbonatized mafic
ES0738	22+00	7+05	3a	<5	69	50	"	"	mafic volc. w carb.
ES0739	23+00	4+10	11	<5	2	14	"	"	felsic-intermediate intrusive
ES0740	23+00	11+00	3a	<5	34	36	"	"	carbonatized mafic
ES0741	24+00	8+25	13	10	14	26	<0.2	<2	UM

PROJECT : 514 - GOLDEN ARM

SAMPLE NO.	LINE (N)	CHAINAGE (E)	ROCK CODE	Au (ppb)	Cu (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	COMMENTS
ES0242	21+00	6+25	13	<5	3	30	<0.2	<2	UM
ES0243	24+00	4+50	13	<5	29	40	"	"	UM
ES0244	24+00	3+80	13	<5	6	<2	"	"	UM
ES0245	25+00	6+25	13	<5	94	54	"	"	UM
ES0246	11+25	11+00	3a	<5	6	20	"	"	mafic flow
ES0247	10+50	9+95	3a	<5	2	38	"	"	foliated mafic flow
ES0248	15+00	12+30	11	<5	4	20	"	"	felsic-inter. intrusive
ES0249	17+00	11+85	13	<5	6	52	<0.2	"	UM w magnetite
ES0250	18+00	12+40	13	10	152	34	0.2	<2	UM w serp., carb & magnetite
ES0619	18+00	21+25	3a	<5	111	34	<0.2	<2	mafic flow
ES0620	18+10	20+20	3a	<5	72	14	"	<2	mafic flow w py
ES0621	18+10	20+30	13	<5	95	68	"	"	brecciated serpentinite
ES0622	17+60	20+50	13	<5	96	132	"	"	brecciated serp., Fe-carb, slightly magnetic
ES0623	19+00	20+15	3a	<5	44	44	"	"	mafic flow
ES0624	19+00	22+55	3a	<5	145	40	"	"	mafic flow
ES0625	19+00	23+60	3a	<5	71	18	"	"	mafic flow
ES0626	19+50	25+85	3a	<5	158	20	"	"	mafic flow w extensive carbonatization w py
ES0627	20+00	19+10	3a	<5	37	48	"	"	mafic flow w carb.
ES0628	20+05	18+75	13	<5	93	18	"	"	UM (serpentinite)
ES0629	21+05	19+30	10a	<5	4	52	"	"	gabbro
ES0630	20+85	25+55	3a	<5	146	20	"	"	mafic flow
ES0631	20+08	23+80	3a	<5	164	50	"	"	mafic flow
ES0632	17+00	22+90	3a	<5	105	38	"	"	mafic flow w minor carb.
ES0633	17+05	22+10	3a	<5	106	30	"	"	mafic flow w extensive carb
ES0634	16+50	21+45		<5	32	30	"	"	qtz vein in mafic flow
ES0635	16+00	21+25	3a	<5	99	40	"	"	mafic flow w sulfides, silicified + carbonatization
ES0636	16+00	21+20	3a	<5	128	28	<0.2	<2	mafic flow

PROJECT : 514 - GOLDEN ARM

SAMPLE NO.	LINE (N)	CHAINAGE(E)	ROCK CODE	Au (ppb)	Cu (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	COMMENTS
E50689	25+05	18+90	3a	<5	84	20	<0.2	<2	mafic volc w trace sulfides
E50690	25+00	17+95	13	<5	29	46	<0.2	<2	serpentinite w magnetite
E50691	24+90	16+35	13	<5	17	26	<0.2	6	serpentinite w 20% magnetite
E50692	35+00	24+50	3a	10	519	16	<0.2	<2	mafic volc w qtz veining, gossan (float?)
E50693	34+00	24+75	3a	15	218	56	<0.2	<2	mafic flow w qtz stringers
E50694	44+00	25+00	3c	<5	60	36	<0.2	<2	pillow basalt w pyrite in pillow selvages
E50695	49+10	22+25	4a	<5	171	44	<0.2	<2	intermediate-felsic volcanic flow w sulfides
E50696	49+40	21+00	4a	<5	131	60	<0.2	<2	intermediate flow w sulfide, sheared, Fe-carb
E58401	36+75	12+00	5a	<5	4	10	<0.2	<2	rhyolite w sulfides
E58402	39+75	19+50	5b/6j	<5	140	606	<0.2	28	tuft/chert w pyrrhotite + much gossan
E58403	46+25	24+75		<5	16	14	<0.2	<2	qtz vein in chert w pillow basalt
E58404	56+25	38+00	3a	<5	198	40	<0.2	6	mafic flow w trace sulfides, qtz + carb.
E58405	56+25	34+50	3a	<5	191	24	<0.2	2	mafic flow w sulfides + qtz stringers + carb.
E58407	59+60	38+45	3a	35	809	60	1.2	68	gossanous mafic flow w pyrite + cpy
E58408	59+60	38+45		230	563	36	2.0	200	qtz vein w pyrite
E58409	58+00	39+20	3a	15	174	48	<0.2	50	mafic flow w pyrite + pyrrhotite
E58410	56+00	28+00	3a	<5	231	46	<0.2	8	mafic flow w trace sulfide
E58411	57+30	34+50	3c	10	220	42	<0.2	6	pillow basalt w trace sulfide (pyrrhotite?)
E58412	59+00	30+95	3c	<5	200	174	0.4	80	sheared pillow basalt w sulfides

APPENDIX II
GEOCHEMISTRY RESULTS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 5175 Timberlea Blvd., Mississauga,
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 PHONE: 905-624-2806

To: PLACER DOME CANADA LIMITED

P.O. BOX 158
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Project : 514
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CERTIFICATE OF ANALYSIS

A9423013

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
E50801	205 226	< 5	< 0.2	14	< 2	35	< 1	1	< 2	4	94
E50802	205 226	10	< 0.2	50	< 2	69	< 1	< 1	4	< 2	58
E58251	205 226	5	< 0.2	12	< 2	202	< 1	1	4	< 2	26
E58252	205 226	10	< 0.2	14	< 2	139	< 1	1	2	< 2	30
E58253	205 226	< 5	< 0.2	6	< 2	132	< 1	< 1	8	4	70
E58254	205 226	10	< 0.2	6	< 2	61	< 1	< 1	< 2	< 2	34
E58255	205 226	< 5	< 0.2	4	< 2	67	< 1	< 1	< 2	< 2	26
E58256	205 226	< 5	< 0.2	20	2	147	< 1	1	6	10	212
E58257	205 226	< 5	< 0.2	14	< 2	190	< 1	1	8	< 2	58
E58258	205 226	< 5	< 0.2	4	< 2	12	< 1	1	14	< 2	28
E58259	205 226	< 5	< 0.2	8	< 2	122	< 1	1	14	2	44
E58260	205 226	< 5	< 0.2	8	< 2	169	< 1	< 1	4	6	72
E58261	205 226	5	< 0.2	6	< 2	43	< 1	1	2	< 2	48
E58404	205 226	< 5	< 0.2	6	< 2	198	< 1	1	< 2	< 2	40
E58405	205 226	< 5	< 0.2	2	< 2	191	< 1	1	12	< 2	24
E58407	205 226	35	1.2	68	< 2	809	< 1	7	12	< 2	60
E58408	205 226	230	2.0	200	< 2	563	< 1	5	30	< 2	36
E58409	205 226	15	< 0.2	50	< 2	174	< 1	1	< 2	< 2	48
E58410	205 226	< 5	< 0.2	8	< 2	231	< 1	1	14	6	46
E58411	205 226	10	< 0.2	6	< 2	220	< 1	2	18	4	42
E58412	205 226	< 5	< 0.4	80	< 2	200	< 1	1	32	4	174
E58452	205 226	< 5	< 0.2	18	< 2	68	< 1	< 1	< 2	2	38

CERTIFICATION:

Hart Bichler



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CERTIFICATE OF ANALYSIS

A9421465

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
E58301	205 226	< 5	< 0.2	2	< 2	41	< 1	1	< 2	2	10
E58302	205 226	< 5	< 0.2	20	8	146	1	< 1	2	< 2	38
E58303	205 226	< 5	< 0.2	8	< 2	49	< 1	< 1	< 2	4	56
E50619	205 226	< 5	< 0.2	< 2	< 2	111	< 1	< 1	4	4	34
E50620	205 226	< 5	< 0.2	< 2	< 2	72	< 1	< 1	2	4	14
E50621	205 226	< 5	< 0.2	< 2	2	95	< 1	< 1	4	< 2	68
E50622	205 226	< 5	< 0.2	< 2	4	96	< 1	< 1	4	< 2	132
E50623	205 226	< 5	< 0.2	< 2	8	44	< 1	< 1	< 2	< 2	44
E50624	205 226	< 5	< 0.2	< 2	< 2	145	< 1	< 1	2	2	40
E50625	205 226	< 5	< 0.2	< 2	2	71	< 1	< 1	< 2	< 2	18
E50626	205 226	< 5	< 0.2	< 2	< 2	158	< 1	< 1	< 2	4	20
E50627	205 226	< 5	< 0.2	< 2	6	37	< 1	< 1	< 2	2	48
E50628	205 226	< 5	< 0.2	< 2	4	93	< 1	< 1	2	2	18
E50629	205 226	< 5	< 0.2	< 2	4	4	< 1	< 1	< 2	2	52
E50630	205 226	< 5	< 0.2	< 2	< 2	146	< 1	1	< 2	2	20
E50631	205 226	< 5	< 0.2	< 2	< 2	164	< 1	< 1	< 2	6	50
E50632	205 226	< 5	< 0.2	< 2	< 2	105	< 1	< 1	2	< 2	38
E50633	205 226	< 5	< 0.2	< 2	< 2	106	< 1	< 1	4	2	30
E50634	205 226	< 5	< 0.2	< 2	6	32	< 1	< 1	< 2	2	30
E50635	205 226	< 5	< 0.2	< 2	4	99	< 1	1	< 2	< 2	40
E50636	205 226	< 5	< 0.2	< 2	2	128	< 1	< 1	< 2	4	28
E50637	205 226	< 5	< 0.2	< 2	4	8	< 1	< 1	< 2	2	50
E50638	205 226	< 5	< 0.2	14	< 2	21	< 1	< 1	4	14	< 2
E50639	205 226	< 5	< 0.2	< 2	4	216	1	< 1	< 2	2	42
E50640	205 226	< 5	< 0.2	< 2	4	74	< 1	< 1	< 2	6	36
E50641	205 226	< 5	< 0.2	< 2	< 2	130	< 1	1	8	12	222
E50642	205 226	< 5	< 0.2	6	< 2	275	< 1	1	4	6	14
E50644	205 226	< 5	< 0.2	6	4	47	< 1	< 1	< 2	2	44
E50645	205 226	< 5	< 0.2	< 2	4	200	< 1	< 1	< 2	4	22
E50646	205 226	< 5	< 0.2	< 2	4	138	< 1	< 1	< 2	2	84
E50647	205 226	< 5	< 0.2	< 2	6	89	< 1	< 1	< 2	6	56
E50648	205 226	< 5	< 0.2	< 2	6	13	< 1	1	4	4	36
E50649	205 226	< 5	< 0.2	< 2	2	333	< 1	< 1	2	4	44
E50650	205 226	< 5	< 0.2	< 2	2	43	< 1	< 1	< 2	4	26
E50689	205 226	< 5	< 0.2	< 2	< 2	84	< 1	< 1	< 2	4	20
E50690	205 226	< 5	< 0.2	< 2	2	29	< 1	< 1	2	2	46
E50691	205 226	< 5	< 0.2	6	< 2	17	< 1	< 1	< 2	2	26
E50729	205 226	< 5	< 0.2	< 2	2	17	< 1	< 1	2	4	34

CERTIFICATION:

Hart Bickler



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To: PLACER DOME CANADA LIMITED

P.O. BOX 158
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Project : 514
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CERTIFICATE OF ANALYSIS A9421465

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
E50730	205 226	< 5	< 0.2	< 2	< 2	222	< 1	< 1	16	12	64
E50731	205 226	< 5	< 0.2	< 2	< 2	111	< 1	< 1	18	4	58
E50732	205 226	< 5	< 0.2	< 2	< 2	1	< 1	< 1	8	6	46
E50733	205 226	< 5	< 0.2	< 2	12	10	< 1	< 1	38	14	36
E50734	205 226	< 5	< 0.2	< 2	4	33	< 1	< 1	30	18	68
E50735	205 226	< 5	< 0.2	< 2	< 2	16	< 1	< 1	< 2	< 2	2
E50736	205 226	< 5	< 0.2	< 2	6	54	< 1	< 1	50	6	42
E50737	205 226	< 5	< 0.2	< 2	< 2	4	< 1	< 1	14	12	34
E50738	205 226	< 5	< 0.2	< 2	< 2	69	< 1	< 1	10	< 2	50
E50739	205 226	< 5	< 0.2	< 2	< 2	2	< 1	< 1	8	< 2	14
E50740	205 226	< 5	< 0.2	< 2	< 2	34	< 1	< 1	< 2	8	36
E50741	205 226	10	< 0.2	< 2	4	14	< 1	< 1	20	6	26
E50742	205 226	< 5	< 0.2	< 2	6	3	< 1	< 1	36	6	30
E50743	205 226	< 5	< 0.2	< 2	4	29	< 1	< 1	58	6	40
E50744	205 226	< 5	0.2	< 2	< 2	6	< 1	< 1	14	2	< 2
E50745	205 226	< 5	< 0.2	< 2	2	94	< 1	< 1	22	4	54
E50746	205 226	< 5	< 0.2	< 2	< 2	6	< 1	< 1	2	2	20
E50747	205 226	< 5	< 0.2	< 2	< 2	2	< 1	< 1	4	4	38
E50748	205 226	< 5	< 0.2	< 2	< 2	4	< 1	2	4	2	20
E50749	205 226	< 5	< 0.2	< 2	6	6	< 1	< 1	30	16	52
E50750	205 226	10	0.2	< 2	10	152	< 1	< 1	32	12	34

CERTIFICATION: *Handwritten Signature*



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CERTIFICATE OF ANALYSIS

A9422500

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
E50643	205 226	30	< 0.2	< 2	< 2	15	< 1	< 1	< 2	< 2	42
E50692	205 226	10	< 0.2	< 2	2	519	< 1	< 1	10	< 2	16
E50693	205 226	15	< 0.2	< 2	< 2	218	< 1	< 1	< 2	< 2	56
E50694	205 226	< 5	< 0.2	< 2	< 2	60	< 1	< 1	12	< 2	36
E50695	205 226	< 5	< 0.2	2	< 2	171	< 1	< 1	6	< 2	44
E50696	205 226	< 5	< 0.2	< 2	< 2	131	< 1	< 1	< 2	< 2	60
E50776	205 226	10	1.0	6	< 2	180	< 1	< 1	< 2	< 2	26
E50777	205 226	< 5	< 0.2	< 2	2	124	< 1	< 1	< 2	< 2	64
E50778	205 226	40	< 0.2	< 2	< 2	201	< 1	< 1	< 2	< 2	40
E50779	205 226	< 5	< 0.2	< 2	< 2	335	< 1	< 1	< 2	< 2	46
E50780	205 226	< 5	< 0.2	< 2	< 2	13	< 1	< 1	< 2	< 2	24
E50781	205 226	< 5	< 0.2	< 2	< 2	39	< 1	< 1	< 2	< 2	52
E50782	205 226	< 5	< 0.2	< 2	< 2	91	< 1	< 1	< 2	< 2	48
E50783	205 226	20	< 0.2	< 2	2	325	< 1	< 1	< 2	< 2	28
E50784	205 226	< 5	< 0.2	< 2	< 2	6	< 1	< 1	4	< 2	32
E50785	205 226	< 5	< 0.2	< 2	< 2	4	< 1	< 1	< 2	< 2	4
E50786	205 226	< 5	< 0.2	2	2	92	< 1	< 1	< 2	< 2	140
E50787	205 226	< 5	< 0.2	< 2	< 2	98	< 1	< 1	< 2	< 2	34
E50788	205 226	< 5	< 0.2	2	< 2	54	< 1	< 1	< 2	< 2	18
E50789	205 226	< 5	< 0.2	< 2	< 2	27	< 1	< 1	< 2	< 2	38
E50790	205 226	< 5	< 0.2	2	< 2	226	< 1	< 1	< 2	< 2	56
E50791	205 226	< 5	< 0.2	< 2	< 2	7	< 1	< 1	42	< 2	30
E50792	205 226	< 5	< 0.2	< 2	< 2	89	< 1	< 1	< 2	< 2	56
E50793	205 226	< 5	< 0.2	< 2	< 2	31	< 1	< 1	< 2	< 2	8
E50794	205 226	< 5	< 0.2	< 2	< 2	40	< 1	< 1	4	< 2	46
E50795	205 226	< 5	< 0.2	2	< 2	502	< 1	< 1	< 2	< 2	46
E50796	205 226	< 5	< 0.2	< 2	< 2	79	< 1	< 1	< 2	< 2	28
E50797	205 226	< 5	< 0.2	< 2	< 2	143	< 1	< 1	< 2	< 2	28
E50798	205 226	< 5	< 0.2	2	< 2	167	< 1	< 1	< 2	< 2	38
E50799	205 226	< 5	< 0.2	< 2	< 2	160	< 1	< 1	< 2	< 2	82
E50800	205 226	40	< 0.2	< 2	< 2	16	< 1	< 1	< 2	< 2	6
E58304	205 226	< 5	< 0.2	22	2	37	< 1	< 1	< 2	< 2	46
E58305	205 226	< 5	< 0.2	< 2	< 2	165	< 1	< 1	2	< 2	44
E58306	205 226	< 5	< 0.2	< 2	< 2	2	< 1	< 1	< 2	< 2	20
E58307	205 226	< 5	< 0.2	2	< 2	< 1	< 1	< 1	< 2	< 2	< 2
E58308	205 226	< 5	< 0.2	82	< 2	7	< 1	< 1	< 2	< 2	30
E58309	205 226	< 5	< 0.2	6	< 2	10	< 1	< 1	< 2	< 2	40
E58310	205 226	< 5	< 0.2	< 2	< 2	57	< 1	< 1	< 2	< 2	88

CERTIFICATION:

John Beckler



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SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
E58311	205 226	< 5	< 0.2	10	< 2	69	< 1	< 1	2	4	72
E58312	205 226	< 5	< 0.2	< 2	< 2	228	< 1	< 1	< 2	< 2	38
E58313	205 226	< 5	< 0.2	4	< 2	18	< 1	< 1	2	< 2	58
E58314	205 226	< 5	< 0.2	< 2	< 2	4	2	< 1	< 2	< 2	20
E58315	205 226	< 5	< 0.2	< 2	< 2	148	< 1	< 1	< 2	< 2	42
E58316	205 226	< 5	< 0.2	< 2	< 2	3	< 1	< 1	< 2	< 2	26
E58317	205 226	< 5	< 0.2	4	< 2	4	< 1	< 1	< 2	< 2	36
E58318	205 226	< 5	< 0.2	< 2	< 2	24	< 1	< 1	2	4	76
E58319	205 226	< 5	< 0.2	10	< 2	19	< 1	< 1	2	< 2	28
E58320	205 226	< 5	< 0.2	6	< 2	56	< 1	< 1	4	2	52
E58321	205 226	< 5	< 0.2	< 2	< 2	2	< 1	< 1	20	< 2	30
E58322	205 226	< 5	< 0.2	2	< 2	4	< 1	< 1	6	2	24
E58323	205 226	< 5	< 0.2	26	< 2	51	< 1	< 1	4	< 2	16
E58324	205 226	< 5	< 0.2	2	< 2	73	1	1	28	2	12
E58325	205 226	< 5	< 0.2	< 2	< 2	27	< 1	< 1	6	4	12
E58326	205 226	< 5	< 0.2	< 2	< 2	11	1	< 1	6	< 2	14
E58327	205 226	< 5	< 0.2	6	< 2	2	< 1	< 1	4	< 2	36
E58328	205 226	< 5	< 0.2	< 2	< 2	9	< 1	< 1	8	2	46
E58329	205 226	< 5	< 0.2	8	< 2	45	< 1	< 1	< 2	< 2	48
E58330	205 226	< 5	< 0.2	18	< 2	26	< 1	< 1	< 2	< 2	20
E58331	205 226	< 5	< 0.2	8	< 2	209	< 1	< 1	< 2	2	82
E58401	205 226	< 5	< 0.2	< 2	< 2	4	< 1	< 1	< 2	2	10
E58402	205 226	< 5	< 0.2	28	< 2	140	< 1	2	28	< 2	606
E58403	205 226	< 5	< 0.2	< 2	< 2	16	< 1	< 1	4	< 2	14
E58451	205 226	< 5	< 0.2	32	< 2	49	< 1	< 1	2	< 2	24

CERTIFICATION: *Heath Bichler*

APPENDIX III
LIST OF PERSONNEL

Appendix III
List of Personnel

The following personnel were involved in the acquisition, processing, interpretation and presentation of data relating to the 1994 work programme conducted on the Golden Arm Property, Red Lake, Ontario.

Anthony Stechishen	Interim Senior Geologist
Reginald P. Seyler	Geologist
Stuart W. Deveau	Geologist
Howard B. Langier	Geologist
Darren L. O'Brien	Geologist
Robert Baldwin	Geologist

Report of Work Conducted After Recording Claim
Mining Act

Transaction Number
W9620.00079

"AMENDED"

2.16716

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions:
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations Recorder.
 - A separate copy of this form must be completed.
 - Technical reports and maps must accompany.
 - A sketch, showing the claims the work is performed on.



900

Recorded Holder(s) PLACER DOME CANADA LIMITED	Client No. 300210
Address SUITE 3201, 130 ADELAIDE STREET WEST, P.O. BOX 43, TORONTO, ONT. M5H 3P5	Telephone No. (416) 363-4962
Mining Division RED LAKE	M or G Plan No. CR-1789
Township/Area TOWN OF HANMELL LAKE AREA	
Dates Work Performed From: JULY 15, 1994	To: JULY 25, 1996

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	GEOLOGY & LITHOGEOCHEMISTRY
<input type="checkbox"/> Physical Work, including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

RECEIVED
AUG 14 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ ~~1763.00~~ **15,663.00**

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
STUART W. DEVEALL	212 HANMELL ROAD, BOX 499, RED LAKE, ONT. P0V 2N0

Attach a schedule if necessary)

Verification of Beneficial Interest * See Note No. 1 on reverse side

I certify that as the date the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.

Date: **July 25/96** Recorded Holder or Agent (Signature): *[Signature]*

Verification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: **STUART W. DEVEALL, 212 HANMELL ROAD, BOX 499, RED LAKE, ONT. P0V 2N0**

Telephone No.: **(505) 927-3086** Date: **July 25/96** Certified By (Signature): *[Signature]*

Recorder Office Use Only

Total Value Cr. Recorded \$ 00	Date Recorded July 25, 1996	Mining Recorder <i>[Signature]</i>	Received Stamp RECEIVED RED LAKE MINING DIV. JUL 25 1996
1763.00	Deemed Approval Date October 23, 1996	Date Approved	

Report of Work Conducted After Recording Claim
Mining Act

Transaction Number
W9620 00099
' AMENDED '

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) LEADER JAMES CANADA LIMITED		Client No. 300210
Address SUITE 3201, 130 HAVELAND STREET, WEST, P.O. BOX 43, TORONTO, ON M5H 3P5		Telephone No. (416) 363-4912
Mining Division RED LAKE	Township/Area TADD TOWNSHIP / HANMILL LAKE AREA	M or G Plan No. G-1754
Dates Work Performed From: JULY 15, 1994		To: JULY 25 1996

Work Performed (Check One Work Group Only)

Work Group	Type
<input checked="" type="checkbox"/> Geotechnical Survey	GEOLOGY & LITHOGEOCHEMISTRY 2.16717
<input type="checkbox"/> Physical Work, Including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

RECEIVED
AUG 14 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ ~~17163.00~~ \$15,663.00

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
STUART W. DEVEAL	212 HANMILL ROAD P.O. BOX 499 RED LAKE ON P3E 2M0

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date July 25/96	Recorded Holder or Agent (Signature) <i>[Signature]</i>
--	--------------------	--

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying STUART W. DEVEAL 212 HANMILL ROAD P.O. BOX 499 RED LAKE ON P3E 2M0		
Telephone No. 416-363-2006	Date July 25/96	Certified By (Signature) <i>[Signature]</i>

For Office Use Only

Total Value Cr. Recorded \$ 17,163.00 \$15,663.00	Date Recorded July 25/96	Mining Recorder	Received RECEIVED RED LAKE MINING DIV. JUL 25 1996 AM 7, 8, 9, 10, 11, 12, 1, 2, 3, 4, 5, 6, PM
	Deemed Approval Date October 23/96	Date Approved	
	Date Notice for Amendments Sent		



Ministry of
Northern Development
and Mines
Ministère du
Développement du Nord
et des mines

**Statement of Costs
for Assessment Credit**

**État des coûts aux fins
du crédit d'évaluation**

Mining Act/Loi sur les mines

Transaction No / N° de transaction

U19626-00099

"AMENDED"
2.16717

RECEIVED
AUG 1 1996
MINING LANDS BRANCH

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, Ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour 1345 days Main-d'oeuvre 1345	10,950 13,450	10,950 13,450
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Geochemical	2,131	2,131
	Analyses		
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type 3-A1 & MOTOR	189	189
Total Direct Costs Total des coûts directs		16,270	16,270

SW 13,270

2. Indirect Costs/Coûts indirects

Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work. Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type Gas for Boat	375	375
	& Truck		
Food and Lodging Nourriture et hébergement	Food	518	518
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			893
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			893
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)			17,163
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			15,663

SW

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
\$30000	\$15000
$\times 0.50 =$	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Robert W. Dureau I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Valeur des coûts demandés
$\times 0.50 =$	

Attestation de l'état des coûts JUL 25 1996

J'atteste par la présente : 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de Robert W. Dureau je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature: Robert W. Dureau Date: July 25/96

July 15, 1994 to July 24, 1994

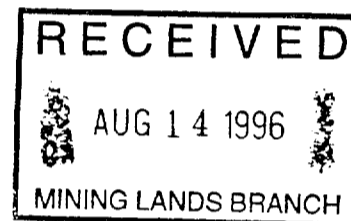
20 man days @ \$150.00 day = \$3000.00

Reduced by 50%, work is more than 2 years old = \$1500.00

KRL.1197133	-	\$334.00
KRL.1197134	-	150.00
KRL.1197135	-	209.00
KRL.1197136	-	391.00
KRL.1197144	-	124.00
KRL.1197145	-	292.00

Total reduced \$1500.00

2.16717



W 96-30-00099

AMENDED.

SCHEDULE
REPORT OF WORK CONDUCTED
AFTER RECORDING CLAIM

Work Report Number for Applying Reserve	Claim Number	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve Work to be Claimed at a Future Date
- KRL 1197133		10	792.00	4000.00	0.00	0.00
- KRL 1197134		2	226.00	0.00	226.00	0.00
- KRL 1197135		10	2420.00	2379.00	41.00	0.00
- KRL 1197136		12	2990.00	0.00	2990.00	0.00
KRL 1197137		4	750.00	0.00	750.00	0.00
KRL 1197138		1	281.00	0.00	281.00	0.00
KRL 1197139		6	2144.00	2400.00	0.00	0.00
KRL 1197140		2	750.00	800.00	0.00	0.00
KRL 1197141		2	750.00	800.00	0.00	0.00
KRL 1197142		10	3568.00	4000.00	0.00	0.00
KRL 1197143		2	750.00	800.00	0.00	0.00
KRL 1197144		1	158.00	400.00	0.00	0.00
KRL 1197145		1	84.00	84.00	0.00	0.00
Total	13	63	15663.00	15663.00	4288.00	0.00

Amended

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AUG 14 1996
MINING LANDS BRANCH

2.16717

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RED LAKE MINING DIV.

AUG 01 1996 PM
7:18:10 AM
11/21/213/45/6

Handwritten signature

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines



October 18, 1996

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Scott A. Rivett
Mining Recorder
Ontario Government Building
227 Howey Street, Box 324
Red Lake, ON
P0V 2M0

Telephone: (705) 670-5853
Fax: (705) 670-5863

Dear Sir or Madam:

Submission Number: 2.16717

Subject: Transaction Number(s): W9620.00099

After reviewing the Work Report(s) we have prepared this letter and the attached summary, which lists the results of our review. Requirements of the Assessment Work Regulation may not have been fully met. Please examine the summary to determine the next course of action concerning the identified Work Report(s).

NOTE: The 90 day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, is no longer in effect for this submission.

PLEASE NOTE ANY REQUESTED REVISIONS MUST BE SUBMITTED IN DUPLICATE.

If the anniversary dates for the mining claims affected by this correspondence have not passed, a number of options are available. Please contact the Mining Recorder to discuss these options.

If you have any questions regarding this correspondence, please contact Steve Beneteau at (705)670-5855.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Ron C. Gashinski".

ORIGINAL SIGNED BY
Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

Work Report Assessment Results

Submission Number: 2.16717

Date Correspondence Sent: October 18, 1996

Assessor: Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9620.00099	1197133	TODD, HAMMELL LAKE	Approval	October 17, 1996

Section:

12 Geological GEOL

Correspondence to:

Mining Recorder
Red Lake, ON

Resident Geologist
Red Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

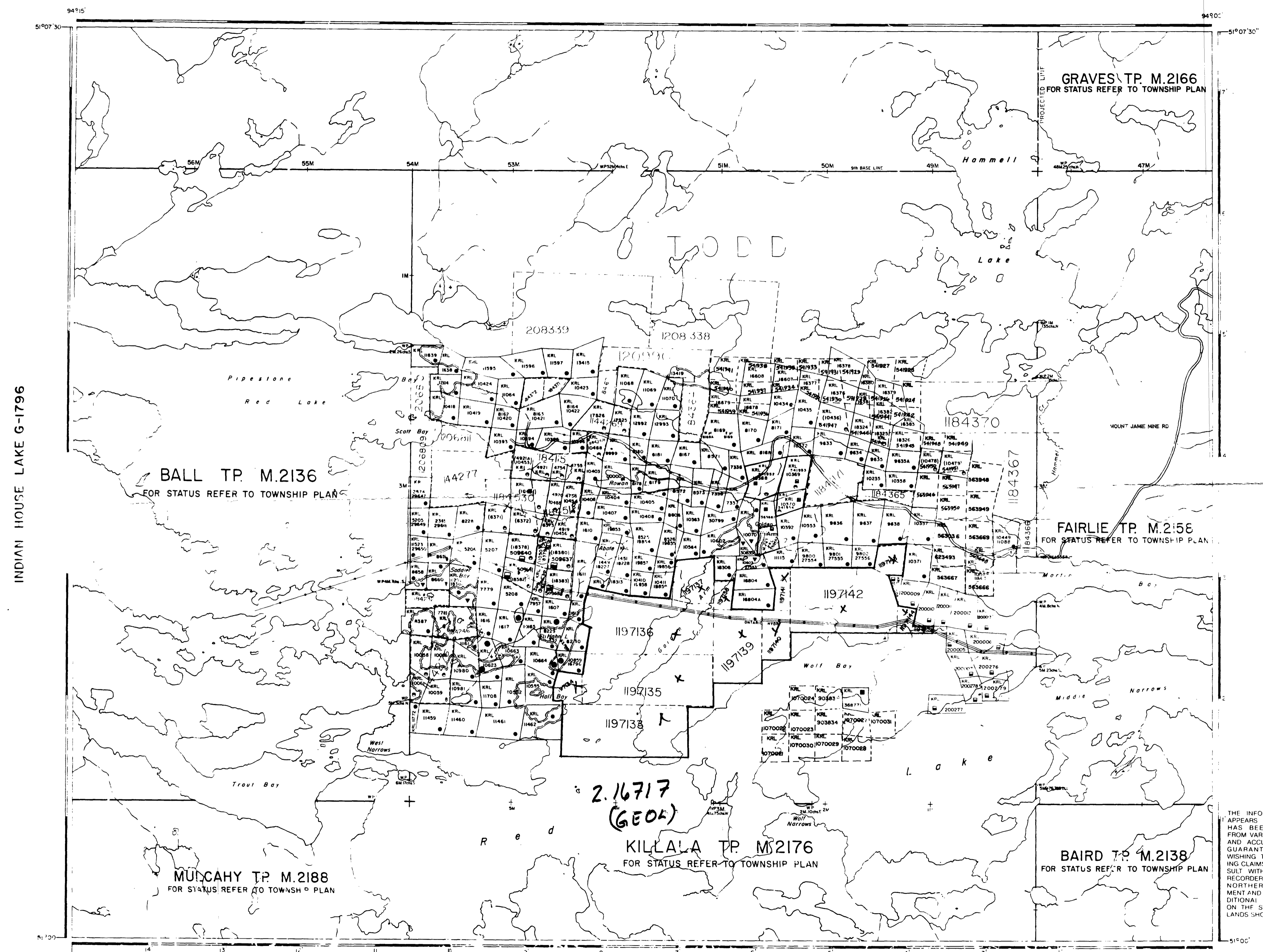
Stuart Deveau
RED LAKE, ONTARIO

PLACER DOME CANADA LIMITED
TORONTO, ON

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

Disposition	Order No.	Date	Disposition	File
M.R.O. - MINING RIGHTS ONLY				
S.R.G. - SURFACE RIGHTS ONLY				
M.+S. - MINING AND SURFACE RIGHTS				
SEC 36	W4 / 86	17/01/86	SRMR	18050
SEC 36	O-178	17/01/86	M + S	18055
SEC 36	W4 / 86	17/01/86	M + S	18055



INDIAN HOUSE LAKE G-1796

RED LAKE MINING DIVISION
AUG 12 1996
RED LAKE, ONTARIO

FOREST ACTIVITY INFORMATION
THIS TOWNSHIP/AREA FALLS WITHIN THE
RED LAKE CROWN
AND MAY BE SUBJECT TO FORESTRY OPERATIONS
THE M.N.R. UNIT FORESTER FOR THIS AREA CAN BE
CONTACTED AT:
P.O. BOX 5003
RED LAKE, ONTARIO P1W 2M0
TEL: 777-0553

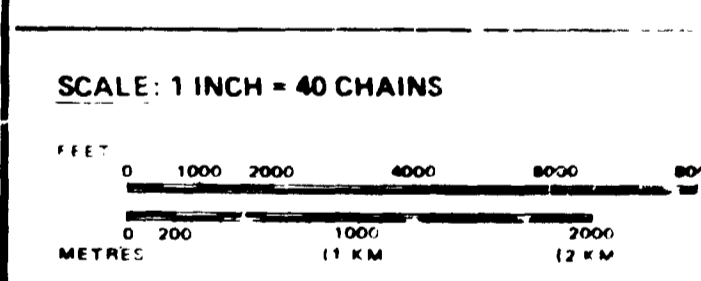
LEGEND

HIGHWAY AND ROUTE NO.	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON PERENNIAL STRIAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPROMISE PLAN	
RESERVATION	
ORIGINAL SHORELINE	
MARSH OR MUDFLAT	
MINE	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	
SURFACE RIGHTS ONLY	
MINING RIGHTS ONLY	
LEASE SURFACE & MINING RIGHTS	
SURFACE RIGHTS ONLY	
MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MARCH 1873, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT P.O. 1870 CHAP 380 SEC 53 SIMPLY



AREA
HAMMELL LAKE

M.N.R. ADMINISTRATIVE DISTRICT
RED LAKE

MINING DIVISION
RED LAKE

LAND TITLES / REGISTRY DIVISION
KENORA / PATRICIA



DATE: FEBRUARY 14, 1982

G-1789

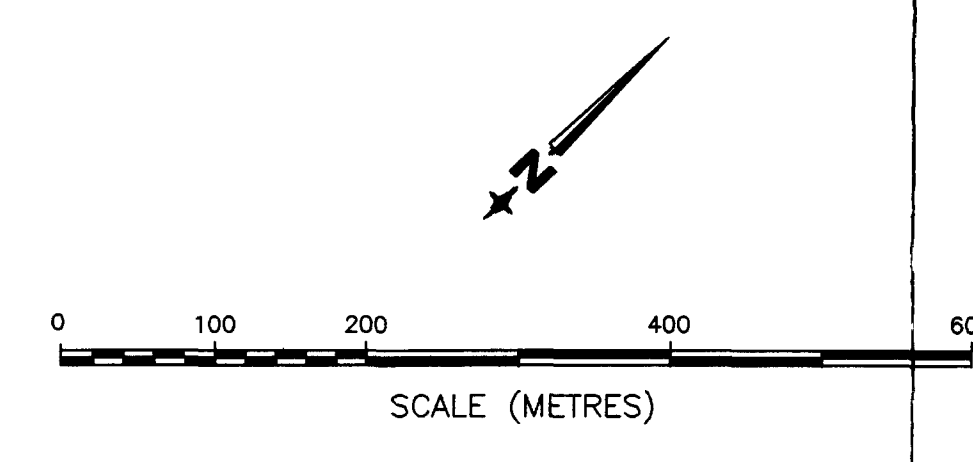
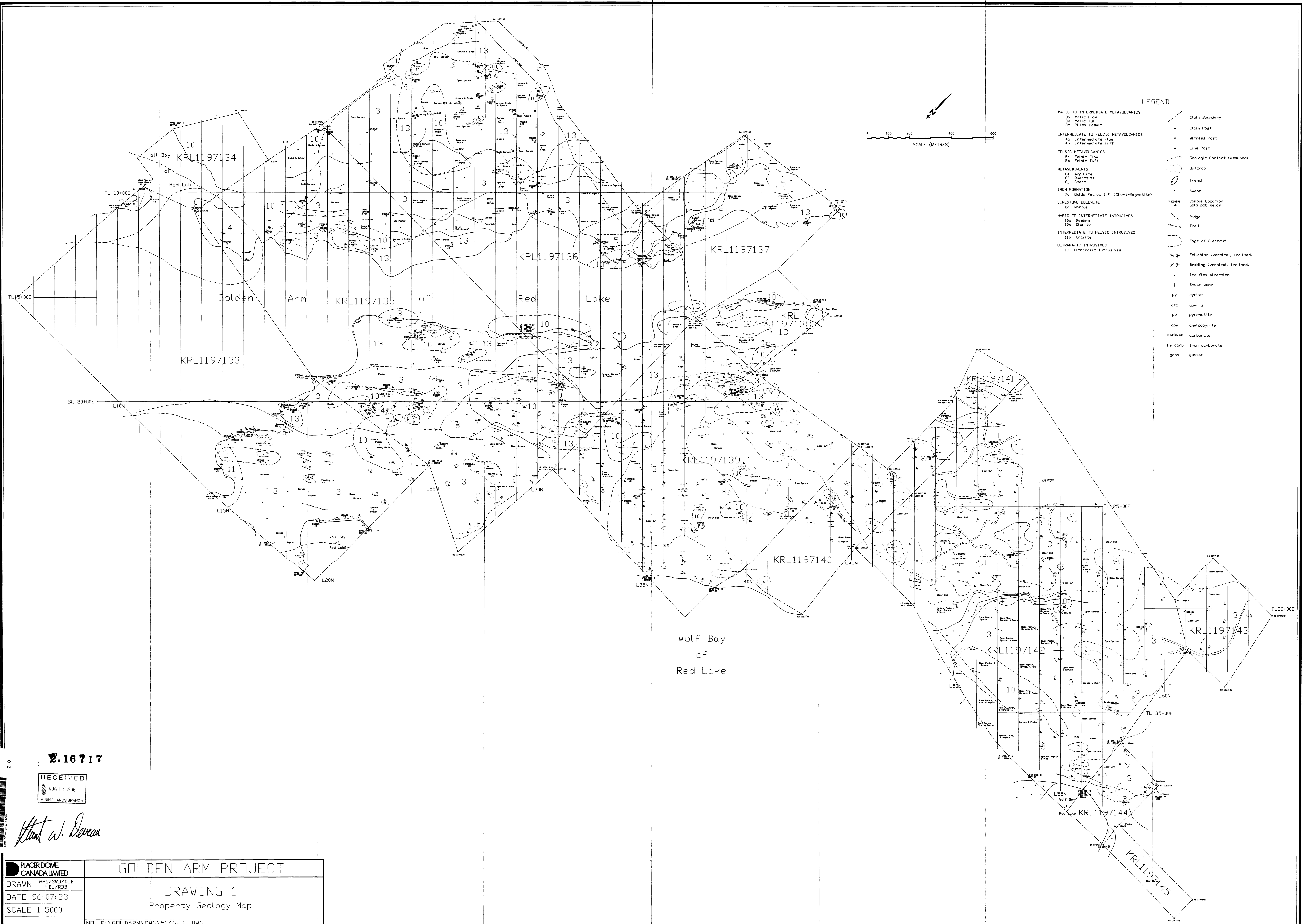
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.



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LEGEND

MAFIC TO INTERMEDIATE METAVOLCANICS	—	Clain Boundary
3a Mafic Flow	•	Clain Post
3b Mafic Tuff	•	Witness Post
3c Pillow Basalt	•	Line Post
INTERMEDIATE TO FELSIC METAVOLCANICS	—	Geologic Contact (assumed)
4a Intermediate Flow	—	Outcrop
4b Intermediate Tuff	—	Trench
FELSIC METAVOLCANICS	—	Swamp
5a Felsic Flow	•	Sample Location
5b Felsic Tuff	•	Gold pbb below
METASEDIMENTS	—	Ridge
6a Argillite	—	Trail
6f Quartzite	—	Edge of Clearcut
6j Chert	—	Foliation (vertical, inclined)
IRON FORMATION	—	Bedding (vertical, inclined)
7a Dike Facies I.F. (Chert-Magnetite)	—	Ice flow direction
LIMESTONE DOLOMITE	—	Shear zone
8a Marble	—	py pyrite
MAFIC TO INTERMEDIATE INTRUSIVES	—	qtz quartz
10a Gabbro	—	po pyrrhotite
10b Diorite	—	cpy chalcopyrite
INTERMEDIATE TO FELSIC INTRUSIVES	—	carb, cc carbonate
11a Granite	—	Fe-carb iron carbonate
ULTRAMAFIC INTRUSIVES	—	goss gossan
13 Ultramafic Intrusives	—	

210

16717

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AUG 14 1996
MINING LANDS BRANCH

Alan W. Doreau

 PLACER DOME CANADA LIMITED DRAWN RPS/SWB/DOB HBL/RDB DATE 96/07/23 SCALE 1:5000 NO. E:\GOLDARM\DWG\514GEO.DWG	GOLDEN ARM PROJECT
	DRAWING 1 Property Geology Map