TEST PIT SAMPLING

AND

DIAMOND DRILL CORE SAMPLING

on the

OX LAKE PROPERTY

OMINECA MINING DIVISION

N.T.S. 93E/11E
Lat. 53° 40.2' N
Long. 127° 03' W

CLAIMS

Ox 1-13, 17-18, 37-38, 52-60
Hi 1-4 Frs., 7-9 Frs., 12 Fr.

OWNERS

ASARCO Exploration Company of Canada Ltd.
6 Adelaide Street East, Suite 210
Toronto, Ontario
M5C 1H6

and

Consolidated Silver Standard Mines Limited
400 - 1199 West Hastings Street
Vancouver, B.C.
V6E 3T5

OPERATOR

Consolidated Silver Standard Mines Limited

M. Holtby

August, 1989

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1. INTRODUCTION

The Ox Lake property is a porphyry copper-molybdenum deposit containing drill indicated geological reserves of 25.97 million tons grading 0.35% copper equivalent (copper equivalent calculated in 1970 using a 2.3 multiplicating factor for MoS_2 values). The property, a joint venture between Asarco (55%) and Consolidated Silver Standard Mines (45%), was explored in the late 1960's and in 1981 for its porphyry copper potential and in 1986 for precious metals in peripheral polymetallic veins.

During August 1989 fresh rock samples were collected from five test pits blasted in old trenches within the copper-molybdenum mineralized zone. Core from five 1969 drill holes was also sampled and analyzed for gold and silver.

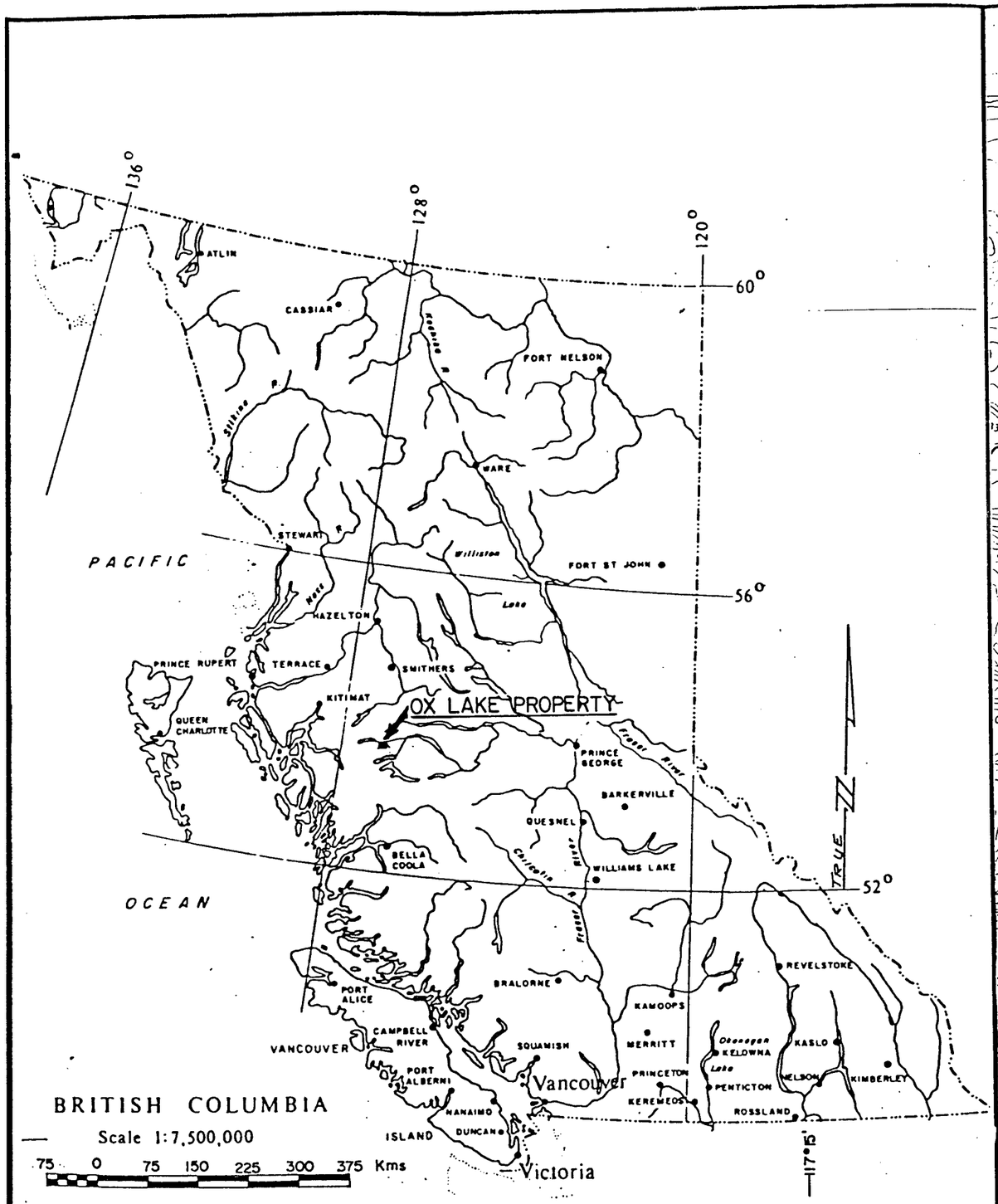
In 1968 and 1969 the drill core was not analyzed for gold or silver. The objective of the 1989 programme was to determine the precious metal content of the copper-molybdenum mineralization by analyzing core for three of the better cu-mo mineralized holes and two weaker cu-mo mineralized holes near the copper-molybdenum zone - pyrite halo boundary.

2. LOCATION AND ACCESS

The Ox Lake property is located approximately 100 km south-southwest of Houston, B.C. on the south shore of Tahtsa Reach. A location and claim map, Figure 1, follows this page.

The claims are located around the 1.5 km long Ox Lake, 2 km south of Tahtsa Reach. Elevations on the claims extend from 850 m, the mean level of Tahtsa-Ootsa-Whitesail Lake system to 1190 m on the ridge between Ox Lake and Tahtsa Reach. Ox Lake is at 939 m with most of the drilling having been done in the 940 to 1,000 m range.

The claims were accessed for this programme by helicopter from Houston. Alternatively, one can truck equipment and supplies from Houston to Tahtsa Reach and then helicopter them the final 16 km to the property. For a larger programme the most economical access is to truck equipment from Burns Lake to Wistoria on Ootsa Lake and barge 70 km to the claims access road. A 4 km tote road extends from Tahtsa Reach to Ox Lake. The barging distance could be shortened to 13 km if equipment was trucked to the end of the Houston-Tahtsa Lake road. Logging roads extend westward from Wistoria, along the north shore of Ootsa Lake and Tahtsa Reach, to about 10 km northeast of Ox Lake.



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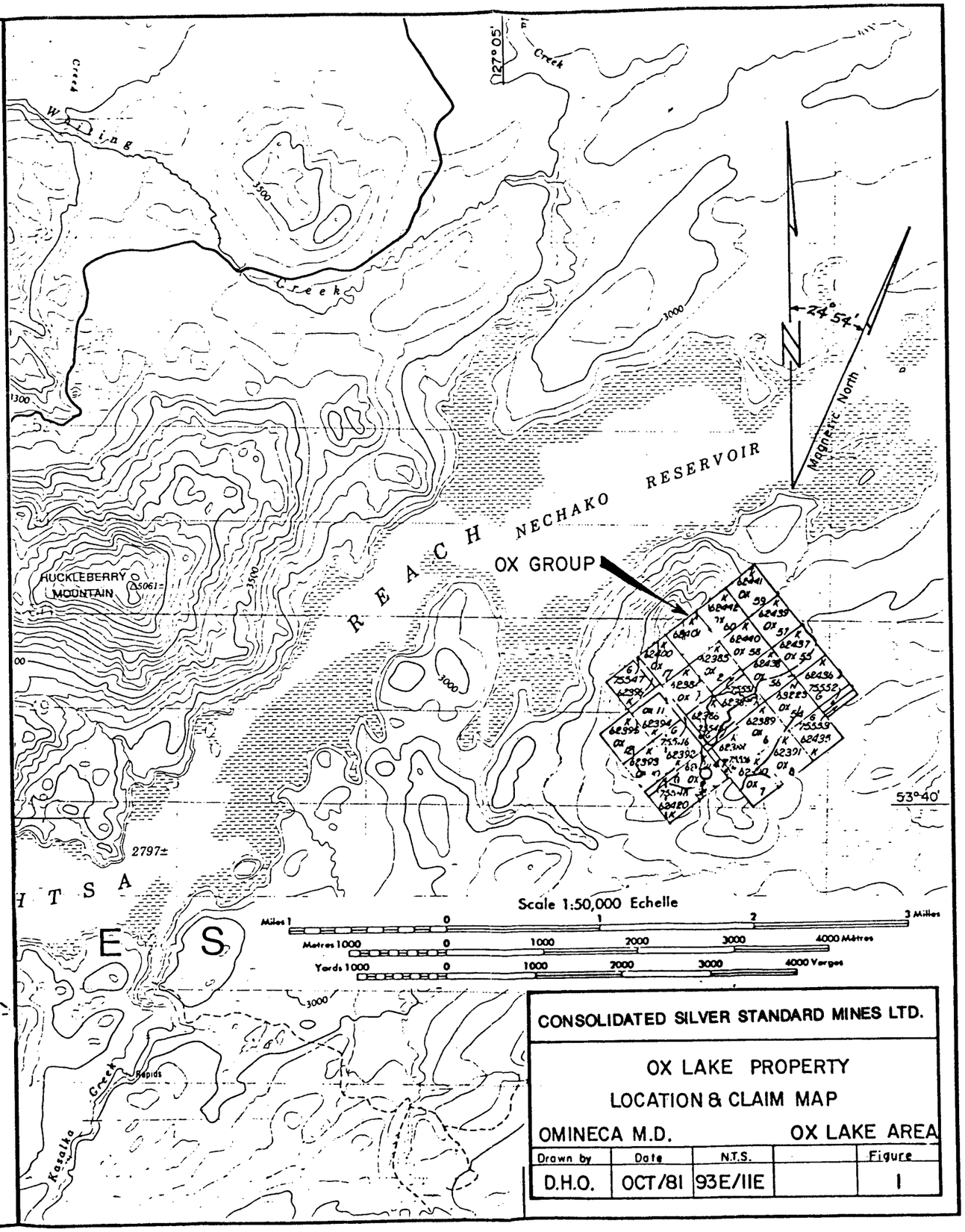


CONSOLIDATED SILVER STANDARD MINES LTD.

OX LAKE PROPERTY
LOCATION & CLAIM MAP
OMINECA M.D. OX LAKE AREA

Drawn by	Date	N.T.S.		Figure
D.H.O.	OCT/81	93E/11E		1

VanCal

3. HISTORY

Copper mineralization was originally found at Ox Lake in June 1968 by prospectors for the Sweeney Lake Joint Venture, American Smelting and Refining Company (55%) and Silver Standard Mines Limited (45%). Diamond drilling was undertaken in 1968, 1969 and 1981. Thirty-seven holes totalling 5,161.1 m were drilled to outline 25.97 million tons grading 0.35% copper equivalent. Between 1968 and 1981 work has included geological mapping, 32.2 km magnetometer surveying, 14.3 km I.P. surveying, 2.4 km VLF-EM surveying, a 843 soil sample survey and 61 m bulldozer trenching, all to investigate the copper-molybdenum mineralization.

In 1986, 42.6 m of trenching was undertaken to investigate precious metal bearing quartz-sulphide veins peripheral to the copper-molybdenum mineralized zone.

4. CLAIMS

The property now consists of 34 full and fractional two-post claims in the Omineca Mining Division. Ownership is 55% Asarco Exploration Company of Canada Limited and 45% Consolidated Silver Standard Mines Limited. Consolidated Silver Standard Mines is the current operator. The claims are grouped as the Ox Group (No. 4699) recorded August 27, 1981.

Claim	Record No.	Anniversary Date	Expiry*
Ox 1-6	62384-89	August 29	1993
7-8	62390-91	"	1992
9	62392	"	1993
10	62393	"	1992
11	62394	"	1993
12-13	62395-96	"	1992
17-18	62400-01	"	1992
37	62420	"	1992
38	62421	"	1993
52-53	62435-36	"	1992
54	63223	October 4	1992
55	62437	August 29	1992
56	62438	"	1993
57-60	62439-42	"	1992
Hi 1-2 Frs.	75545-46	June 23	1993
3-4 Frs.	75547-48	"	1992
7-9 Frs.	75551-53	"	1992
12 Fr.	75556	"	1993

*Expiry date includes credits for this assessment report.

5. 1989 PROGRAMME

The 1989 programme was carried out to determine the gold and silver content of the copper-molybdenum mineralized zone. Rock samples were collected from five test pits blasted in trenches bulldozed in 1969. These samples were assayed for copper, molybdenum, gold and silver and analysed by 32 multi-element I.C.P.

The drill core from the 1969 and 1981 drill programmes is stored on the property and was found to be in fairly good condition. While the core boxes are disintegrating and porcupines are burrowing into the core box pile, most of the core should remain

in fairly good condition for a few more years if it is not further disturbed.

Diamond drill holes 13, 15, 16, 18 and 33 were sampled this year. Due to the rotten nature of many core boxes it was not feasible to quarter split the core and attempt to store the last quarter, therefore the remaining half was taken for analyses. The original sample interval marks were visible, for the most part, so, except for a few sample intervals, this year's samples conform to the original ten-foot sample intervals.

6. GEOLOGY

The Ox Lake claims are underlain by Jurassic Hazelton Group felsic to intermediate tuffs, siltstones and sandstones which have been intruded by a Late Cretaceous porphyritic biotite-hornblende granodiorite stock. Hazelton Group rocks near the stock have been strongly hornfelsed. The stock dips about 50° to the west, is relatively unaltered and contains only minor sulphides near the contact and minor gold and silver values in quartz-sulphide veins.

The copper-molybdenum deposit forms a crescent-shaped zone where quartz veins bearing chalcopyrite, bornite, molybdenite and pyrite and disseminations of the same sulphides occur in biotitic hornfelsed andesitic tuffs peripheral to the west and southwest margins of the granodiorite stock.

Alteration, typical of that associated with porphyry copper-molybdenum deposits, is propylitic, argillic (locally strong), phyllic and minor potassic. A large pyrite halo extends beyond the copper-molybdenum mineralization and encloses the stock.

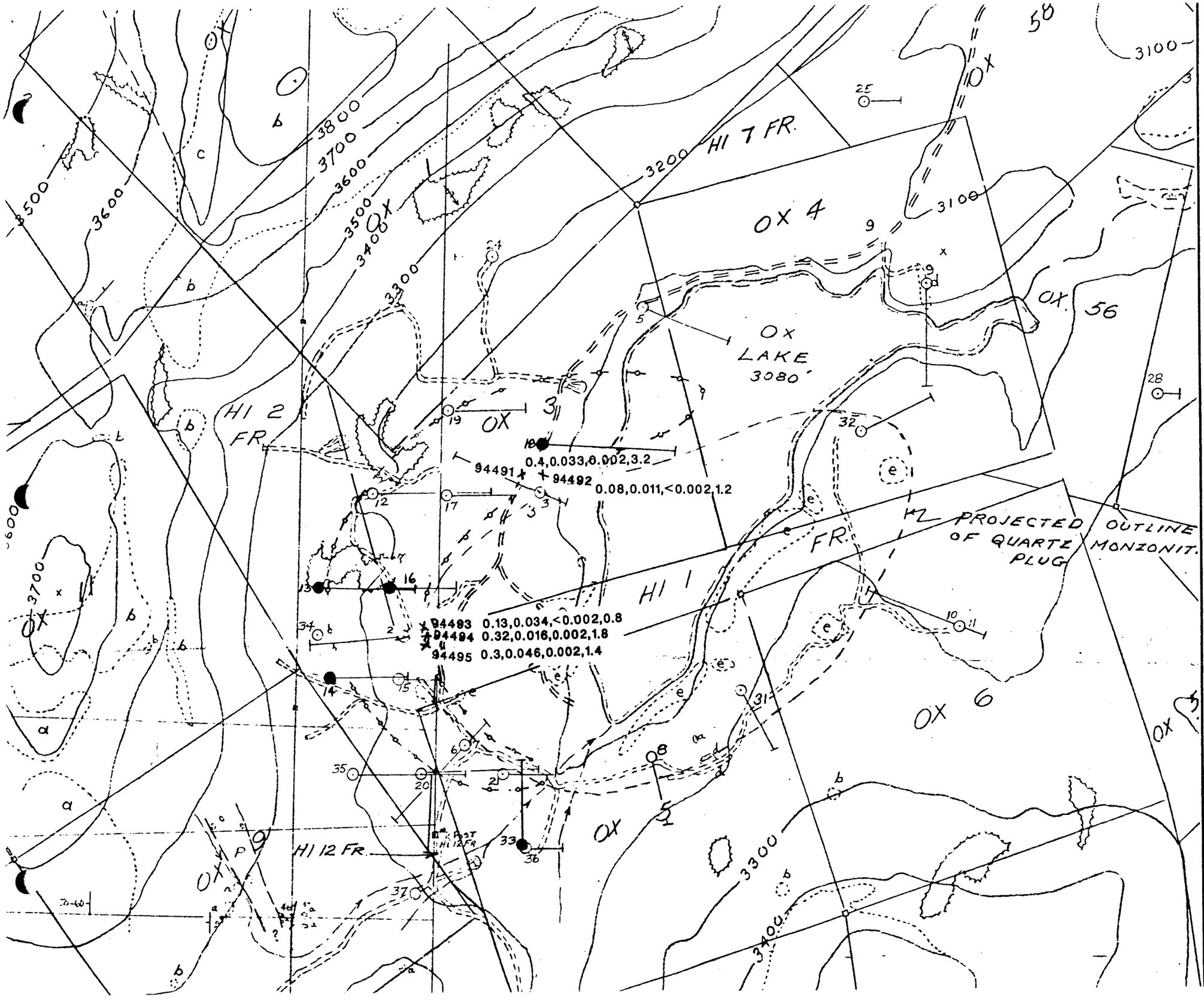
7. TEST PITS

The five test pits blasted in old trenches are shown on Figure 2, following this page.

PIT	COORDINATES	DIMENSIONS W x L x D (m)	SAMPLE NO.	ASSAYS Cu%	Mo%	Au oz/T	Ag ppm
1	50 + 740 N 50 + 360 E	3 x 1.5 x 0.7	94491	0.40	0.033	0.002	3.2
2	50 + 740 N 50 + 410 E	2 x 2 x 1	94492	0.08	0.011	<0.002	1.2
3	50 + 160 N 49 + 980 E	1 x 1 x 0.5	94493	0.13	0.034	<0.002	0.8
4	50 + 150 N 49 + 970 E	1 x 1 x 0.5	94494	0.32	0.016	0.002	1.8
5	50 + 135 N 49 + 970 E	1 x 1 x 0.5	94495	0.30	0.046	0.002	1.4

Sample Descriptions

94491 granodiorite porphyry; quite weathered; malachite and azurite stained; pervasive argillic alteration, often strong; white to clear sugary quartz veinlets with chalcopyrite, molybdenite, pyrite, hematite, trace



LEGEND

X 94492- 0.9,0.1,10,3
Test pit sample number
Cu%,Mo%,Au oz/T,Ag ppm

Core samples
DDH No.s 13,15,16,18,33

0 100 300 400 m

SCALE 1:4800

CONSOLIDATED SILVER STANDARD MINES LIMITED

OX LAKE PROPERTY

1989 SAMPLING

Figure 2

bornite and trace galena; chalcopyrite and pyrite disseminations and molybdenite as fine fracture fillings in granodiorite; total pyrite about 0.5%; total quartz veinlets 5%; much of this exposure has a breccia appearance, especially in the more weathered areas.

94492 granodiorite porphyry; more weathered than at 94491 site; leached appearance; strong pervasive argillic alteration; fewer quartz veinlets than at 94491 site; molybdenite, chalcopyrite and pyrite in quartz veinlets; pyrite and chalcopyrite in pebble-sized breccia fragments with strongly weathered carbonate alteration around fragments.

94493 fresher granodiorite porphyry; moderate to strong argillic alteration of feldspars; sugary quartz veinlets total about 0.5% and contain minor chalcopyrite and molybdenite; traces of disseminated molybdenite and chalcopyrite in granodiorite; malachite staining.

94494 very similar to 94493 but less argillic alteration of feldspars and more sulphides both in veins and as disseminations.

94495 same as 94494 but less sulphides

8. DIAMOND DRILL CORE SAMPLES

Drill holes 1969 - 13, 15, 16, 18 and 33 were sampled using the same sample intervals as the original assays. Gold and silver values were analysed by A.A geochemical techniques.

Copper and molybdenite values listed in the following table are taken from the 1969 report of diamond drilling. Diamond drill hole logs for these holes are in Appendix 2.

D.D.H	SAMPLE NUMBER	FOOTAGE FROM - TO	Cu %	MoS_2 %	Au ppb	Ag ppm
13-69	83051	47.5 - 100	0.09	0.008	<5	<0.2
	52	100 - 110	0.08	0.008	<5	<0.2
	53	110 - 120	0.08	0.008	<5	<0.2
	54	120 - 130	0.08	0.03	<5	0.2
	55	130 - 140	0.11	0.03	<5	<0.2
	56	140 - 150	0.13	0.015	<5	<0.2
	57	150 - 160	0.13	0.015	10	<0.2
	58	160 - 170	0.13	0.015	10	<0.2
	59	170 - 180	0.20	0.015	20	0.3
	60	180 - 190	0.17	0.02	20	0.3
	61	190 - 200	0.11	0.015	15	<0.2
	62	200 - 210	0.14	0.02	10	0.2
	63	210 - 220	0.17	0.03	10	<0.2
	64	220 - 230	0.13	0.03	15	0.2
	65	230 - 240	0.20	0.015	35	0.8
	66	240 - 250	0.13	0.02	20	0.4
	67	250 - 260	0.16	0.03	10	0.3
	68	260 - 270	0.17	0.03	30	0.5
	69	270 - 280	0.16	0.015	25	0.4
	70	280 - 290	0.16	0.03	20	0.2
	71	290 - 300	0.25	0.03	35	0.7
	72	300 - 310	0.18	0.03	30	0.6
	73	310 - 320	0.31	0.05	45	0.8
	74	320 - 330	0.47	0.065	60	1.1
	75	330 - 340	0.54	0.06	70	1.2
	76	340 - 350	0.21	0.10	30	0.6
	77	350 - 360	0.33	0.03	35	0.7

D.D.H	SAMPLE NUMBER	FOOTAGE FROM - TO	Cu %	MoS_2 %	Au ppb	Ag ppm
	78	360 - 370	0.51	0.065	40	0.7
	79	370 - 390	0.24	0.045	35	1.9
	80	390 - 400	0.30	0.05	30	0.8
	81	400 - 410	0.40	0.03	30	0.7
	82	410 - 420	0.25	0.03	20	0.4
	83	420 - 430	0.23	0.03	65	2.9
	84	430 - 440	0.47	0.12	30	0.8
	85	440 - 450	0.30	0.05	15	0.7
	86	450 - 460	0.14	0.05	30	1.0
	87	460 - 470	0.30	0.28	30	0.7
	88	470 - 480	0.21	0.13	60	1.6
	89	480 - 490	0.16	0.12	35	0.5
	90	490 - 500	0.11	0.07	25	0.6
	91	500 - 510	0.13	0.065	25	0.8
	92	510 - 520	0.12	0.095	20	0.4
	93	520 - 530	0.07	0.03	10	0.2
	94	530 - 540	0.08	0.015	5	0.8
	95	540 - 550	0.08	0.015	<5	0.7
	96	550 - 560	0.05	0.015	<5	0.4
	97	560 - 570	0.04	0.008	<5	0.4
	98	570 - 580	0.04	0.008	<5	0.8
	99	580 - 590	0.04	0.015	<5	1.4
15-69	94401	23 - 30	0.44	0.06	70	1.2
	02	30 - 40	0.23	0.015	45	0.5
	03	40 - 50	0.31	0.06	95	0.5
	04	50 - 60	0.87	0.14	50	0.8
	05	60 - 70	0.25	0.06	40	0.9
	06	70 - 80	0.23	0.065	30	0.4
	07	80 - 90	0.40	0.05	40	0.4
	08	90 - 100	0.40	0.05	130	1.6
	09	100 - 110	0.42	0.13	100	1.0
	10	110 - 120	0.35	0.13	45	0.5
	11	120 - 130	0.39	0.208	45	0.8
	12	130 - 140	0.31	0.208	60	0.6
	13	140 - 150	1.06	0.14	145	1.6
	14	150 - 160	0.90	0.08	145	1.7
	15	160 - 170	0.52	0.06	95	1.2
	16	170 - 180	0.17	0.03	10	0.5
	17	180 - 190	0.09	0.008	5	0.5
	18	190 - 200			<5	0.3
	19	200 - 210			<5	<0.2
	20	210 - 220	0.04	0.008	<5	<0.2
	21	220 - 230			<5	<0.2
	22	230 - 240			20	<0.2
	23	240 - 250	0.03	0.008	<5	<0.2

D.D.H	SAMPLE NUMBER	FOOTAGE FROM - TO	Cu %	MoS_2 %	Au ppb	Ag ppm
16-69	94424	26 - 40	0.21	0.03	25	0.2
	25	40 - 50	0.30	0.03	35	0.4
	26	50 - 60	0.31	0.02	30	0.3
	27	60 - 70	0.28	0.06	15	0.2
	28	70 - 80	0.39	0.03	30	0.6
	29	80 - 90	0.47	0.03	75	1.2
	30	90 - 100	0.33	0.04	30	0.4
	31	100 - 110	0.62	0.08	40	1.0
	32	110 - 120	1.03	0.05	45	0.7
	33	120 - 130	0.13	0.07	20	0.5
	34	130 - 140	0.16	0.03	15	0.6
	35	140 - 150	0.35	0.06	60	0.9
	36	150 - 160	0.27	0.105	35	1.1
	37	160 - 170	0.31	0.04	35	0.8
	38	170 - 180	0.23	0.015	35	6.3
	39	180 - 190	0.27	0.04	20	0.8
	40	190 - 200	0.58	0.065	55	1.3
	41	200 - 210	0.28	0.09	40	0.8
	42	210 - 220	0.28	0.065	55	1.1
	43	220 - 230	0.66	0.06	85	1.4
	44	230 - 240	0.68	0.05	100	1.7
	45	240 - 250	0.56	0.05	45	1.1
	46	250 - 260	0.26	0.05	30	0.7
	47	260 - 270	0.28	0.04	25	0.7
	48	270 - 280	0.60	0.13	120	2.2
	49	280 - 290	0.54	0.07	75	2.1
	50	290 - 300	0.33	0.03	40	1.3
	51	300 - 310	0.23	0.015	30	1.6
	52	310 - 315	0.60	0.04	65	0.9
18-69	105751	73 - 80	0.30	0.013	40	0.7
	52	80 - 90	0.13	0.021	20	0.2
	53	90 - 100	0.19	0.057	40	0.5
	54	100 - 110	0.31	0.061	55	1.0
	55	110 - 120	0.23	0.053	40	0.8
	56	120 - 130	0.20	0.032	45	1.2
	57	130 - 140	0.16	0.011	25	0.4
	58	140 - 150	0.21	0.028	30	0.7
	59	150 - 160	0.28	0.033	40	0.9
	60	160 - 170	0.20	0.026	25	0.5
	61	170 - 180	0.36	0.016	55	1.8
	62	180 - 190	0.42	0.008	55	1.5
	63	190 - 200	0.24	0.037	30	0.7
	64	200 - 210	0.50	0.022	85	3.1
	65	210 - 220	0.50	0.037	55	1.4
	66	220 - 230	0.13	0.064	25	0.5
	67	230 - 240	0.10	0.032	15	0.3
	68	240 - 250	0.08	0.063	25	0.4

D.D.H	SAMPLE NUMBER	FOOTAGE FROM - TO	Cu %	MoS_2 %	Au ppb	Ag ppm
	69	250 - 260	0.10	0.037	15	0.4
	70	260 - 270	0.12	0.061	10	0.4
33-69	94453	58 - 70	0.09	0.003	10	0.2
	54	70 - 80	0.20	0.02	25	0.6
	55	80 - 90	0.16	0.018	15	0.4
	56	90 - 100	0.26	0.15	30	0.7
	57	100 - 110	0.23	0.22	20	0.5
	58	110 - 120	0.33	0.13	30	0.6
	59	120 - 130	0.24	0.09	15	0.6
	60	130 - 140	0.19	0.18	25	0.5
	61	140 - 150	0.24	0.24	20	0.5
	62	150 - 160	0.33	0.09	35	0.7
	63	160 - 170	0.31	0.09	100	0.5
	64	170 - 180	0.26	0.07	50	0.6
	65	180 - 190	0.25	0.03	30	0.6
	66	190 - 200	0.30	0.008	80	0.5
	67	200 - 210	0.60	0.03	60	1.2
	68	210 - 220	0.55	0.04	5	1.0
	69	220 - 230	0.10	0.03	10	0.2
	70	230 - 240	0.12	0.03	20	0.2
	71	240 - 250	0.64	0.04	100	1.4
	72	250 - 260	0.90	0.03	120	1.6
	73	260 - 270	0.87	0.04	125	2.3
	74	270 - 280	0.82	0.015	130	1.9
	75	280 - 290	0.53	0.18	100	2.2
	76	290 - 300	0.44	0.10	75	1.3
	77	300 - 310	0.54	0.02	105	1.8
	78	310 - 320	0.51	0.04	75	1.4
	79	320 - 330	0.49	0.06	90	2.1
	80	330 - 340	0.29	0.02	45	0.9
	81	340 - 350	0.28	0.015	40	0.9
	82	350 - 360	0.32	0.05	50	0.9
	83	360 - 370	0.39	0.02	50	1.0
	84	370 - 380	0.31	0.03	45	0.9
	85	380 - 390	0.32	0.04	90	1.0
	86	390 - 400	0.31	0.015	55	1.0
	87	400 - 410	0.29	0.02	55	1.1
	88	410 - 420	0.34	0.02	60	0.7
	89	420 - 430	0.10	0.008	25	0.3
	90	430 - 436	0.10	0.008	10	0.2

	Mean	Standard Deviation
Cu	0.30%	0.20%
MoS_2	0.052%	0.049%
Au	39.59 ppb	32.19 ppb
Ag	0.81 ppm	0.72 ppm

Correlation Coefficients

	Cu	MoS_2	Au	Ag
Cu	1	-	-	-
MoS_2	0.244	1	-	-
Au	0.785	0.224	1	-
Ag	0.477	0.072	0.581	1

Mean gold and silver values for the five drill holes analysed this year suggest that the gold and silver content at Ox Lake is lower than average for B.C. copper-molybdenum deposits.

The strong correlation between copper and gold suggests that minor gold credits could be expected in a copper concentrate.

9. CONCLUSIONS

It is concluded that the gold and silver content of the Ox Lake copper-molybdenum deposit is below average for B.C. copper-molybdenum deposits.

Mean gold values of 39.6 ppb and mean silver values of 0.81 ppm are indicated by this year's analyses.

10. RECOMMENDATIONS

In 1981 a limited number of check assays were carried out by Chemex Labs on core samples originally assayed by Coast Eldridge. These check assays were consistently 20% higher than the original assays.

It is recommended that the core samples collected this year be assayed for copper and molybdenum to determine if the original assays were incorrectly low.

11. COST STATEMENT

Travel - August 9, 10, 19, 20		
M. Holtby 2 days @ 231.50 (incl. benefits)	=	926.00
A. Potter 2 days @ 127.50	=	510.00
Core sampling - August 11-13, 17		
M. Holtby 4 days @ 231.50	=	926.00
A. Potter 4 days @ 127.50	=	510.00
Test pits - August 14, 16		
M. Holtby 2 days @ 231.50	=	463.00
A. Potter 2 days @ 127.50	=	255.00
Report Preparation		
M. Holtby 3 days @ 231.50	=	694.50
Truck Rental		1,000.00
Helicopter - Invoice 33923 - 697.88 33916 - 1,078.55 31759 - 951.66		2,728.09
Freight		395.60
Fuel		563.88
Food and Accommodation		738.85
Explosives		373.94
Equipment and Supplies - includes rock drill, camp equipment, radio antennae		946.04
Sample Analysis - Chemex Labs		
Invoice I8924126 159 core samples for Au & Ag		2,305.50
Invoice I8924122 5 rock samples for Cu, Mo, Ag, Au		141.25
Invoice I8924123 5 rock samples for 32 element I.C.P.		33.75
Report, Drafting and Reproduction 4 hrs. @ $25		100.00
	Total	$13,611.40

Exclusive - test pit related costs

1 - explosives	373.94
2 - rock drill	388.07
3 - rock sample analyses	175.00
	$937.01

Exclusive - core sample related costs

1 - core sample analyses	2,305.50
2 - core sample freight	315.00
	$2,620.50

General costs ($10,053.89)

General costs are divided between test pits (physical work) and core samples (geological work) one-third and two-thirds, respectively, based upon the percentage of work days on each activity.

Cost Apportioning:

Physical (test pits) $937.01 + $3,351.30 = $4,288.31

Geological (core samples) $2,620.50 + $6,702.59 = $9,323.09

Value of Assessment Work Filed:

Physical costs	=	$ 4,288.31
Geological costs $9,323.09 + $2,788.60 (PAC)	=	$12,111.69
		$16,400.00

12. REFERENCES

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Ox Lake in Porphyry Deposits of the Canadian Cordillera, A. Sutherland Brown, editor, C.I.M. Special Vol. 15, pp. 289-298.

13. STATEMENT OF QUALIFICATIONS

I, Max H. Holtby, residing at 103 - 1026 Queens Avenue, New Westminster, B.C. hereby certify that:

1. I graduated from the University of British Columbia in 1972 with a B.Sc. in Honours Geology.

2. I am Geological Association of Canada Fellow and Geological Society of Malaysia Member in good standing.

3. The work described herein was done under my direct supervision.

4. I have worked since graduation as an exploration geologist and in mine management in Canada, Malaysia and Liberia, West Africa.

Max H. Holtby, F.G.A.C.

GEOLOGICAL ASSOCIATION OF CANADA · M. H. HOLTBY · FELLOW ·

M/OXLK
August/89

APPENDIX 1

Assays, Analyses and Analytical Procedures

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CONSOLIDATED SILVER STANDARD MINES LIMITED
400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5
Project : C1015
Comments: ATTN: R QUARTERMAIN CC: M HOLTBY

Page No. : 1
Tot. Pages: 1
Date : 6-SEP-89
Invoice # : I-8924122
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924122

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Ag oz/T	Cu %	Mo %
94491	208 --	0.002	0.07	0.40	0.033
94492	208 --	< 0.002	0.04	0.08	0.011
94493	208 --	< 0.002	0.01	0.13	0.034
94494	208 --	0.002	0.04	0.32	0.016
94495	208 --	0.002	0.02	0.30	0.046

CERTIFICATION : W. Stewart Brownie

Chemex Labs Ltd.
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212 BROOKSBANK AVE., NORTH VANCOUVER,
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PHONE (604) 984-0221

To : CONSOLIDATED SILVER STANDARD MINES LIMITED
400 - 1199 W. HASTINGS ST.
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Comments: ATTN: R. QUARTERMAIN CC: M. HOLTBY

Date : 6-SEP-89
Invoice # : I-8924123
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924123

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
94491	299	238	1.05	3.2	< 5	10	< 0.5	2	2.30	< 0.5	13	356	4030	1.98	< 10	< 1	0.14	< 10	0.75	880	319
94492	299	238	1.01	1.2	< 5	40	< 0.5	< 2	0.97	1.0	3	111	797	1.11	< 10	< 1	0.24	10	0.22	1110	111
94493	299	238	0.84	0.8	< 5	100	< 0.5	< 2	0.35	< 0.5	4	192	1280	0.92	< 10	< 1	0.18	20	0.44	205	345
94494	299	238	0.64	1.8	5	40	< 0.5	< 2	0.14	< 0.5	9	77	3090	1.15	< 10	< 1	0.11	20	0.37	180	184
94495	299	238	0.59	1.4	< 5	50	< 0.5	< 2	0.15	< 0.5	8	90	3130	1.00	< 10	< 1	0.12	30	0.29	255	498

CERTIFICATION : B. Grégoli

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CONSOLIDATED SILVER STANDARD MINES LIMITED
400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5
Project : CI015
Comments: ATTN: R QUARTERMAIN CC: M HOLTBY

Page : 1-B
Tot. Pages: 1
Date : 6-SEP-89
Invoice # : I-8924123
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924123

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
94491	299	238	0.01	8	190	6	< 5	4	12	< 0.01	< 10	< 10	17	< 10	64
94492	299	238	< 0.01	6	460	30	5	6	17	< 0.01	< 10	< 10	21	< 10	166
94493	299	238	0.07	7	330	4	< 5	2	7	0.02	< 10	< 10	15	< 10	24
94494	299	238	0.04	4	310	4	< 5	2	5	0.01	< 10	< 10	14	< 10	44
94495	299	238	0.03	5	260	< 2	< 5	2	5	0.01	< 10	< 10	9	< 10	58

CERTIFICATION : B. Caughlin

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CONSOLIDATED SILVER STANDARD MINES LIMITED
400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5
Project : C1015
Comments: ATTN: R QUARTERMAIN CC: M. HOLTBY

Date : 4-SEP-89
Invoice # : I-8924126
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924126

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm Aqua R
83051	205	--	< 5	< 0.2
83052	205	--	< 5	< 0.2
83053	205	--	< 5	< 0.2
83054	205	--	< 5	0.2
83055	205	--	< 5	< 0.2
83056	205	--	< 5	< 0.2
83057	205	--	10	< 0.2
83058	205	--	10	< 0.2
83059	205	--	20	0.3
83060	205	--	20	0.3
83061	205	--	15	< 0.2
83062	205	--	10	0.2
83063	205	--	10	< 0.2
83064	205	--	15	0.2
83065	205	--	35	0.8
83066	205	--	20	0.4
83067	205	--	10	0.3
83068	205	--	30	0.5
83069	205	--	25	0.4
83070	205	--	20	0.2
83071	205	--	35	0.7
83072	205	--	30	0.6
83073	205	--	45	0.8
83074	205	--	60	1.1
83075	205	--	70	1.2
83076	205	--	30	0.6
83077	205	--	35	0.7
83078	205	--	40	0.7
83079	205	--	35	1.9
83080	205	--	30	0.8
83081	205	--	30	0.7
83082	205	--	20	0.4
83083	205	--	65	2.9
83084	205	--	30	0.8
83085	205	--	15	0.7
83086	205	--	30	1.0
83087	205	--	30	0.7
83088	205	--	60	1.6
83089	205	--	35	0.5
83090	205	--	25	0.6

CERTIFICATION : Gavin Bichler

Chemex Labs Ltd.
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TO: CONSOLIDATED SILVER STANDARD MINES LIMITED
400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5
Project : C1015
Comments: ATTN: R. QUARTERMAIN CC: M. HOLTBY

Date : 4-SEP-89
Invoice # : I-8924126
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924126

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm Aqua R
83091	205	--	25	0.8
83092	205	--	20	0.4
83093	205	--	10	0.2
83094	205	--	5	0.8
83095	205	--	< 5	0.7
83096	205	--	< 5	0.4
83097	205	--	< 5	0.4
83098	205	--	< 5	0.8
83099	205	--	< 5	1.4
94401	205	--	70	1.2
94402	205	--	45	0.5
94403	205	--	95	0.5
94404	205	--	50	0.8
94405	205	--	40	0.9
94406	205	--	30	0.4
94407	205	--	40	0.4
94408	205	--	130	1.6
94409	205	--	100	1.0
94410	205	--	45	0.5
94411	205	--	45	0.8
94412	205	--	60	0.6
94413	205	--	145	1.6
94414	205	--	145	1.7
94415	205	--	95	1.2
94416	205	--	10	0.5
94417	205	--	5	0.5
94418	205	--	< 5	0.3
94419	205	--	< 5	< 0.2
94420	205	--	< 5	< 0.2
94421	205	--	< 5	< 0.2
94422	205	--	20	< 0.2
94423	205	--	< 5	< 0.2
94424	205	--	25	0.2
94425	205	--	35	0.4
94426	205	--	30	0.3
94427	205	--	15	0.2
94428	205	--	30	0.6
94429	205	--	75	1.2
94430	205	--	30	0.4
94431	205	--	40	1.0

CERTIFICATION : Ian R. Bichler

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VANCOUVER, BC
V6E 3T5
Project : C1015
Comments: ATTN: R QUARTERMAIN CC: M. HOLTBY

Date : 4-SEP-89
Invoice # : I-8924126
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924126

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm Aqua R
94432	205	--	45	0.7
94433	205	--	20	0.5
94434	205	--	15	0.6
94435	205	--	60	0.9
94436	205	--	35	1.1
94437	205	--	35	0.8
94438	205	--	35	6.3
94439	205	--	20	0.8
94440	205	--	55	1.3
94441	205	--	40	0.8
94442	205	--	55	1.1
94443	205	--	85	1.4
94444	205	--	100	1.7
94445	205	--	45	1.1
94446	205	--	30	0.7
94447	205	--	25	0.7
94448	205	--	120	2.2
94449	205	--	75	2.1
94450	205	--	40	1.3
94451	205	--	30	0.6
94452	205	--	65	0.9
94453	205	--	10	0.2
94454	205	--	25	0.6
94455	205	--	15	0.4
94456	205	--	30	0.7
94457	205	--	20	0.5
94458	205	--	30	0.6
94459	205	--	15	0.6
94460	205	--	25	0.5
94461	205	--	20	0.5
94462	205	--	35	0.7
94463	205	--	100	0.5
94464	205	--	50	0.6
94465	205	--	30	0.6
94466	205	--	80	0.5
94467	205	--	60	1.2
94468	205	--	5	1.0
94469	205	--	10	0.2
94470	205	--	20	0.2
94471	205	--	100	1.4

CERTIFICATION : Stan Bichler

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T[illegible] CONSOLIDATED SILVER STANDARD MINES LIMITED
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VANCOUVER, BC
V6E 3T5
Project : C1015
Comments: ATTN: R. QUARTERMAIN CC: M. HOLTBY

Page N[illegible] :4
Tot. Pages: 4
Date : 4-SEP-89
Invoice # : I-8924126
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8924126

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R
94472	205 --	120	1.6
94473	205 --	125	2.3
94474	205 --	130	1.9
94475	205 --	100	2.2
94476	205 --	75	1.3
94477	205 --	105	1.8
94478	205 --	75	1.4
94479	205 --	90	2.1
94480	205 --	45	0.9
94481	205 --	40	0.9
94482	205 --	50	0.9
94483	205 --	50	1.0
94484	205 --	45	0.9
94485	205 --	90	1.0
94486	205 --	55	1.0
94487	205 --	55	1.1
94488	205 --	60	0.7
94489	205 --	25	0.3
94490	205 --	10	0.2
105751	205 --	40	0.7
105752	205 --	20	0.2
105753	205 --	40	0.5
105754	205 --	55	1.0
105755	205 --	40	0.8
105756	205 --	45	1.2
105757	205 --	25	0.4
105758	205 --	30	0.7
105759	205 --	40	0.9
105760	205 --	25	0.5
105761	205 --	55	1.8
105762	205 --	55	1.5
105763	205 --	30	0.7
105764	205 --	85	3.1
105765	205 --	55	1.4
105766	205 --	25	0.5
105767	205 --	15	0.3
105768	205 --	25	0.4
105769	205 --	15	0.4
105770	205 --	10	0.4

CERTIFICATION : Hart Bichler

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To: CONSOLIDATED SILVER STANDARD MINES LIMITED MAY

400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5

A8924122

Comments: ATTN: R QUARTERMAIN CC: M. HOLTBY

CERTIFICATE A8924122

CONSOLIDATED SILVER STANDARD MINES LIMITED
PROJECT : C1015
P O # : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 6-SEP-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	5	Assay: Crush,split,ring

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
398	5	Au oz/T: 1/2 assay ton	FA-AAS	0.002	20.00
385	5	Ag oz/T: Aqua regia digestion	AAS	0.01	20.0
301	5	Cu %: HClO4-HNO3 digestion	AAS	0.01	100.0
306	5	Mo %: HClO4-HNO3 digestion	AAS	0.001	100.00

RECEIVED SEP 0 8 1989

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CONSOLIDATED SILVER STANDARD MINES LIMITED

400 - 1199 W. HASTINGS ST.
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V6E 3T5

A8924123

Comments: ATTN: R. QUARTERMAIN CC: M. HOLTBY

CERTIFICATE A8924123

CONSOLIDATED SILVER STANDARD MINES LIMITED
PROJECT : C1015
P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 6-SEP-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	5	Sample split from other certif
238	5	ICP: Aqua regia digestion

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
921	5	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	5	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	5	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	5	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	5	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	5	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	5	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	5	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	5	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	5	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	5	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	5	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	5	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	5	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	5	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	5	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	5	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	5	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	5	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	5	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	5	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	5	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	5	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	5	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	5	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	5	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	5	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	5	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	5	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	5	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	5	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	5	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

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To: CONSOLIDATED SILVER STANDARD MINES LIMITED

400 - 1199 W. HASTINGS ST.
VANCOUVER, BC
V6E 3T5

A8924126

Comments: ATTN: R. QUARTERMAIN CC: M. HOLTBY

CERTIFICATE A8924126

CONSOLIDATED SILVER STANDARD MINES LIMITED
PROJECT : C1015
P O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 4-SEP-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	159	Rock Geochem: Crush,split,ring

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	159	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
6	159	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0

RECEIVED SEP 07 1989

APPENDIX 2

Diamond Drill Hole Logs (1969)

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY Ox Lake HOLE NO. 13-69

LATITUDE 50.250 ELEVATION 3222' BEARING 090° DEPTH 590' STARTED ..... COMPLETED 1969

DEPARTURE 49.450 SECTION 4 DIP -50° DRILLED BY Longyear LOGGED BY M Lancaster

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
0-47½	Overburden					
47½-135	Mottled Hornfels · Py (5-7%) as pervasive fg diss blebs and on fracture planes, wk cpy as diss blebs on fracture planes, moly as fg diss flakes in qtz stringers. Grey color with green and purple bands and blotches, aphanitic to fg, intense random oriented fractures, qtz or cal healed; mafics partly alt. to chlorite, intense silicification, mod wk K-feld alt, wk argillic alt, wk epidote alt					
	47.5'-90' Ground extremely blocky					
	101'-111' · 10' core missing · core tube did not lock					
	127'-131' · qtz stringers with moly subparallel to axis of core					
	The mottled hornfels was originally a fine tuff interbedded with minor					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	cg. tuffs.					
135-147	Breccia - Wk py or fg dis blebs in some of the hornfels fragments, very wk py or fg dis blebs in some of the hornfels fragments. one qtz stringer with minor dis moly. Fragments to 1" in size, buff colored, very fine grained, white gypsum cement. Ihis may have originally been a dyke which was then faulted and altered					
147-236	Mottled Hornfels similar to 47½-135 164-167' Cc lapilli breccia, fracture mineralization cuts fragments and cement. 208.5-208.8' White calcite veinlet 209' - small 2" mud seam 223-236 - Very strong fracturing, possibly a small shear zone					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 13-60

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	The py content steadily decreases with increasing depth - 3-4% by 215'								
236-444	Mottled Hornfels - similar to 147-236 py (2-4%) as fg. diss. blebs and mg. diss blebs on fractures, wk to mod cpy as very fg. diss. blebs and on fracture planes, mod as diss flakes in qtz stringers and very minor as diss. flakes throughout the rock. Grey and purplish bands with green blotches, fg. to aphanitic, intense random oriented frac., qtz. or cal. healed, cal to ¼" thick; mafics alt. to chlorite, intense silicification and hydrothermal biotite alt. gives the core a banded appearance wk to intense kaolinization in alternating bands of various thickness, wk epidote alt; in general, the intensity of kaolinization								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	increased with depth					
	252'-264' Fault zone - fault breccia in parts, extreme fracturing in other parts; cal healed					
	289'-290' - Fault gouge					
	299'-300' Slightly ground core fault?					
	307.5'-313' Extremely intense kaolinization, numerous qtz and moly stringers					
	376.5'-377.0' Ground Core - fault?					
	378'-378.5' Ground Core - fault?					
	380'-381' Ground Core - fault?					
	384'-384.5' Feldspar porphyry dyklet					
	384.5'-385.5' Fault breccia					
	434.5' - White calcite veinlet with sphalerite lining contact between hornfels and calcite					
	Vein sequence according to Dr Sutherland-Brown, oldest to younger					
	① Pyrite - chlorite					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	② Qtz - Moly - Moly (pyrite)					
	③ Chalcopyrite, qtz					
	④ Qtz					
	⑤ Calcite (qtz pyrite)					
444-445	Porphyritic Granodiorite Dyklet subparallel to drill hole, true thickness is 2"-4" intense chloritization					
445-450	Mottled Hornfels as for 236-444					
450-495	Feldspar Porphyry (Hornfelsic?) Py (1%) as fg. diss blebs & on frac. & Wk to med. qty as very fg. diss blebs or on frac.; mod to heavy moly as diss flakes and blebs in qtz stringers, moly also as fg. diss blebs throughout core. Pinkish to greenish grey aphanitic groundmass with cream or green feld phenos. intense random oriented frac.					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	qtz or cal healed, chlorite on some frac's, mafics (1-2%) alt. to chlorite, mod. silicification and K-feld alt along frac. intense kaolinization and sericitization of groundmass and feld. phenocrysts. feld. phenos have very indistinct xl borders					
495.5'-496.5'	Porphyritic Granodiorite Dyke. Wk pg, qpg, and mdpg as less interstitial blebs and flakes. Grey colored, cg. feld phenos, siliceous fg matrix, mafics alt. to chlorite, feld has mod argillic alt.					
496.5'-501'	Mottled Hornfels similar to 236'-444' Pg << 1%. Hornfels was originally a tuff.					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
501'-505'	Porphyritic Granodiorite Py ≈ 1%, very wk. cpy and moly as very fg diss blebs and flakes, very wk fracturing mafics (15%) partly alt. to chlorite plag. (50-60%) and K-feld (10-15%) are relatively unaltered					
505'-524'	Mottled Hornfels Py ≈ 1% as fg diss blebs or in fractures, wk cpy as fg. diss blebs or on frac., mod to heavy moly as diss flakes in qtz stringers. Grey to green blotches in a pinkish fg-mg. matrix, intense random oriented frac. qtz or cal healed; mafics alt. to chlorite, intense argillic alt., wk silicification and hydrothermal biotite alt., mod to intense K-feld flooding - 90% K-feld for 6" zone at granodiorite contact					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY ..... HOLE NO. 13-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
524-590	Porphyritic Quartz Monzonite Py <1% as fg interstitial blebs, wk cpy and moly as fg interstitial blebs and flakes. Pinkish-grey color, m-cg. wk fracturing, plag phenos (4 mm) 30% K-feld phenos (1 mm) 30%. fresh biotite 10% interstitial chlorite 10%, qtz matrix 20%, intense kaolinization and sericitization of feld in some places, rock very fresh looking in other places. With increasing depth penetration into the intrusive, the porphyritic qtz monzonite grades into a porphyritic granodiorite					
	586': Calcite veinlet with 3 zones					
	① Calcite core					
	② Botryodal sphalerite envelope					
	③ Qtz + pyrite envelope					
	End of Hole - 590'					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY Oz Lake ..... HOLE NO. 15-69

LATITUDE 49.850 ELEVATION 3173' BEARING 090° DEPTH 250' STARTED ..... COMPLETED 1969

DEPARTURE 49.800 SECTION 2 DIP -50° DRILLED BY Longyear LOGGED BY M. Lancaster

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
0-23'	Overburden					
23'-110'	Mottled Hornfels fg (1-2%) ser frac or ser fg. diss blebs, mod to strong cpy ser fg diss blebs, wk cpy ser frac, strong cpy ser cg. irregular masses in a ½" wide cal veinlet, very strong (.10-.15 oz) moly ser diss blebs and flakes in qtz. stringers Generally a grey color with pinkish-purple bands and greenish blotches, fg., intense random assorted frac. qtz + cal healed, mafics partly alt to chlorite, bands of intense silicification and bands of intense hydrothermal alt. wk epidote ser frac. and ser diss blotches, wk sericite + chlorite ser some frac. This hornfels was originally a fg. tuff with a few interbedded mg. tuffs					
	53'-57' 2' core missing - broken core - fault?					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 15-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	62 2' mud seam					
	68.5'-69 broken core					
	70 71' broken core					
	30-32' 1' core missing - fault gouge?					
	71-73.6' 1' " " "					
	78-81' 1' " "					
	81-83 1' " "					
	86-91' 1½' " "					
	91-97' 5½' " " core tube deluxe lock					
	97-98 shear zone					
110'-142'	Humpback Feldspar Porphyry Py 1% as frac. & as fg. diss blebs, mod cpy as diss blebs & as frac, very strong moly (.10-.20) as diss blebs and flakes in qtz stringers, wk moly as diss flakes throughout the rx Pinkish grey aphanitic groundmass with greenish blotches and white feld. xls, intense					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 15-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	random oriented frac. qtz or cal healed. mofic 2% alt to chlorite, strong silicification, strong kaolinization and serecitization of feld's, wk epidote alt, wk hydrothermal biotite?					
192'-172'	Mottled Hanfels similar to 23'-110' Py (1-2%) as cg-fg. disc blebs or in frac. cpy (1.0%) as cg-fg. disc blebs or in fractures; py, cpy, epidote, and chlorite often occur together in cg. clumps, mod moly on disc plates or dry fractures and in qtz stringers. Dark purplish grey color with green patches, aphanitic to fg., intense random oriented frac., qtz or cal healed, mofic (5%) alt to chlorite, intense silicification, mod. hydrothermal biotite alt, minor argillic alt., wk-mod epidote alt.					
	143' 143.5' - fault					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY .....

HOLE NO. 15-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	145 - minor fault & shear					
	153'-154' fault gouge					
172'-250	Porphyritic Granodiorite Wk pg and qpg as fg-mg interstitial blebs & on frac | Grey color, cg, wk random oriented frac 1" or more apart, cal & qtz healed, plag phenos (1-8mm) 50%, qtz 10%, euhedral fresh biotite 5%, chlorite 10%, fg matrix 25%, mod argillic alt of feld phenos, feld (plag) phenos have very serrate xl borders, wk epidote alt, very wk gypsum on a few frac., wk K feld alt. along some frac. With increasing depth into the intrusive, small K feld xls gradually become more numerous. Bot 225' the xls have sharp euhedral borders and the rx has almost grades into a Dtz Monzonite					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY ..... HOLE NO. 15-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	Plag (1-2 mm) 35%, K-feld (1 mm) 20%					
	biotite (1 mm) (5%) hb = chlorite 5%,					
	qtz eyes 10%, fg matrix 25%					
	End of Hole					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY Ox Lake HOLE NO. 16-69

LATITUDE 50 250 ELEVATION 3190' ? BEARING 090° DEPTH 450' STARTED ..... COMPLETED 1969

DEPARTURE 40,700 SECTION 4 DIP -50° DRILLED BY Longyear LOGGED BY M Lancaster

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
0-23.5'	Overburden					
23.5-272'	Mottled Hornfels · Py 1-2% as c-fg diss blebs + as frac. mod-heavy qtz as fractures and as f-mg diss blebs, mod molyb as diss flakes in qtz stringers. Grayish pink to purplish green color, greenish blotches, aphanitic to fg intense random oriented frac, qtz + cal healed, some fractures contain chlorite, epidote, pyrite and qtz, mafics alt to chlorite, intense bleached silicification and hydrothermal biotite alt, minor argillic alt. and epidote alt., epidote, chlorite, py. ± qtz often occur together as small patches. The rock was originally an interbedded sequence of f-cg tuffs and possibly argillites 68'-69' fault gouge 176.5'-177' fault gouge					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 16-62

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	The argillic alt. becomes more intense close to the intrusive contact 250'-300' - core is very broken up - numerous small shears?								
272 281'	Mottled Hornfels similar to 23.5'-272', however this section has intense K-feld alt similar to hornfels found at the intrusive contact, K-feld probably was introduced along fractures, minor small (1 mm) veins, otherwise the same as for 23.5'-272'								
281'-297'	Mottled Hornfels as for 23.5'-272'								
297'-306'	Porphyritic Granodiorite Dyke Py and cpy as fg. diss. interstitial blebs, no moly visible Grey colour, soke fracturing, some fresh biotite, some mafics partly alt. to chlorite								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 16-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	feld phenos (2-3 mm) have irregular xl borders, feld relatively unaltered wk K-feld alt. along some of the fractures								
306-334	Mottled Hornfels as for 23.5'-272'								
339-350	Hornfelsic Breccia. Py (1%) as fg. diss blebs in fragments and cement, heavy cpy as fg. diss blebs in fragments and in cement, wk spy and py as fine Greyish-pinkish-purplish color, very angular frag. to ½" dia. frag of feld. porphyry and hornfels, intense random oriented fracturing thru frag. and cement, qtz or cal healed mafics alt. to chlorite, mod silicification, wk epidote alt., mod K-feld alt along some fractures								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 16-62

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
350-356	Porphyritic Granodiorite, Wk py and cpy as fg. interstitial blebs Grey color, eq. wk frac, cal healed, silicious matrix, plag phenos (4 mm) have intense kaolinization and minor sericitization. mod chloritization of mafics					
356-367	Mottled Hornfels as for 235-272 except this section is slightly granitized					
367-450	Porphyritic Granodiorite Wk py and cpy as fg. interstitial blebs on frac. Grey color, eq-fg., wk frac. cal & qtz healed, variable alt, wk to intense kaolinization and sericitization of feld., fresh biotite book, other mafics alt. to chlorite in part, wk-mod K-feld alt. on some fractures, fg. matrix very silicious					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY ..... HOLE NO. 16-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	With increasing penetration of the intrusive, the porphyritic granodiorite may grade into a porphyritic monzonite or quartz monzonite.								
	End of Hole								

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY Ox Lake HOLE NO. 18-62

LATITUDE 50, 850 ELEVATION 3106' BEARING 090° DEPTH 991' STARTED ..... COMPLETED 1969

DEPARTURE 50, 420 SECTION 6 DIP -50° DRILLED BY Longyear LOGGED BY M Lancaster

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
0 - 73'	Overburden					
73' - 219	Mottled Hornfels - Py (2%) fg diss blebs & on frac, wk - mod cpy as fg diss blebs & on frac, wk - mod moly as diss flakes and blebs in qtz stringers. Generally a grey color with minor greyish green & brownish purple bands fg with minor areas that are aphanitic, intense random oriented frac qtz & cal healed, chlorite on some frac, mafics alt. to chlorite, bands of intense chloritization, mod - strong hydrothermal biotite, intense silicification, minor magnetite, wk K feld alt along some frac. The original pervasive hydrothermal biotite alt has nearly all been destroyed by the addition of silica along fractures The hornfels was originally interbedded fg. tuff and tuffaceous argillite with					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	a few small mg and cg. feldspathic tuff beds.					
	104'-107' - no core as tube didn't lock					
	109'-110' fault zone?					
	130'-134' fault gouge					
	136'-138' fault gouge					
	126'-126.5' calcite vein					
	154.5'-155' fault zone					
	173'-176' fault gouge + breccia					
	176'-178' cg. intense hydrothermally biotite alt. xl tuff - 10% sulphides					
	181'-186' intense hydrothermal biotite alt.					
218'-306.5'	Feldspar Porphyry 1-2% as fg. disc blebs or on frac - wet & dry, wk cgy as fg. disc blebs or on frac., wk-mod. moly as fg qtz as disc flakes on alt stringers or on dry frac. Pinkish-					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-62

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	grey aphanitic matrix with cream colored feld phenos, intense random oriented frac. qtz. or cal. healed, almost a qtz stockwork, mod kaolinization of feld phenos. wk kaolinization & sericitization of groundmass, strong silicification along frac margins (< 1%) alt to chlorite. upper contact (218') at 55° to axis of core. sharp contact					
	226.5-228' some fault gouge					
	230-230.5' fault gouge					
	247-248' fault ?					
	270-270.5' - fault gouge					
	272-272.5' fault gouge					
	292-293' fault gouge					
	295-297' fault gouge in part.					
	Sericitization increases with depth, py, cpy and moly often sheared or dry frac. Most of the moly frac. are at 45° to core axis. Lower					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-62

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	contact (306.5') is at 40-45 to core axis					
306.5-387	Mottled K-feld similar to 73-128					
	Py (2-3%) as fg-mg disc blebs or as					
	frac. wk-mod Cpy as fg disc blebs; mg					
	bleby with epidote, chlorite & py; & as					
	frac, wk-mod moly as disc flakes in qtz					
	stringers and as dry frac. Grey					
	color with greyish pink and brownish					
	bands along with greenish blotches.					
	aphanitic to fg, strong random					
	oriented frac., qtz & cal healed,					
	mafics (2-3%) alt. to chlorite, intense					
	silicification, strong hydrothermal					
	biotite alt., wk epidote and K-					
	feld alt. strong to intense					
	kaolinization and sericitization of					
	feld. frags. in cg. sections, along					
	frac K-feld, epidote, chlorite, qtz,					
	pyrite, cpy, and moly may occur together					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 12-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	Epidotization may occur in large irregular shaped patches associated with strong chloritization and cg blebs of py and cpy. The hornfels zone regionally interbedded cg-fg xl? tuff and tuffaceous argillite. The cg tuff and tuffaceous argillite comprise only a minor part of the sequence.					
	310-311'. White xline calcite vein					
	306.5-310' Slight brecciation of hornfels - healed by calcite veinlets					
	394.5' 3" white xline cal. veinlet					
387-419'	Hornfelsic feldspar Porphyry Py 1% as fg. diss blebs or as fine (wet or dry), wk cpy or fg diss blebs or as fine (wet or dry), mod moly as diss. flakes in qtz stringers and as borders					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	or qtz. stringers. Pinkish-greenish grey aphanitic matrix with cream colored feld xls and feld xl "ghosts", intense random oriented frac. cal + qtz healed, strong kaolinization of feld xls, prod to strong kaolinization + sericitization of the matrix, intense silicification, mafics (<1%) alt. to chlorite. Contact at 397' approx. 40° to core axis. The feld phenos give a slight hint of a chill zone in the hornfelsic feld porphyry.								
	372'-379' slight gouge zone.								
419'-594	Mottled Hornfels as for 300.5'-387'								
	436'-437' fault gouge								
	430'-430.5' white calcite veinlet								
	438' ankm-good qtz stockwork								
	~~- from 430 to 453 in~~								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-60

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	438 - 453' - cg homfelsic xl tuff					
	451 - 452' - fault gouge					
	530' - bedding 30° to core axis					
594-596.5'	Feldspar Porphyry Dyke - Pg 5% or frag and as pervasive fg-mg. diss blebs, no qtz or moly visible Brownish color, fg. matrix with mafics and feld phenos ghosted; well frac. qtz or cal healed, mafic phenos alt to a soft brownish mineral (fg. brown biotite ???), intense argillic alt. of feld phenos, wk. mod argillic alt of groundmass, most of which may be feld., no chlorite or epidote alt., no silicious alt. Contact at 596.5' at 45° to core axis.					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
306.5'-682'	Mottled Hornfels as for 306.5'-387'					
	608.5'-609.5' fault gouge					
	622.5'-623' fault gouge					
	637' bedding 60° to core axis					
	628'-655' cg. hornfelsed tuff bed - a few K-feld xls now present					
	655'-656' fault gouge					
682'-824'	Mottled Hornfels similar to 306.5'-387', but with less alt. Pg 1-2% as fg. diss blebs & in wet & dry frac., wk cpy or fg. diss. blebs & in wet & dry frac., wk moly as diss flakes in qtz stringers & in dry frac. Greyish-purplish aphanitic groundmass, white relatively fresh feld xl frag. to 1 mm in size, intense random oriented frac., qtz & cal healed, mod hydrothermal biotite alt. mafics (1%) alt to					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-60

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	chlorite, strong silicification, mod epidote alt. feld xl frag have extensely wk argillic alt. Chlorite, epidote, qtz, cal, py, cpy, and moly all occur on frac. Minor xx frag to 1 cm in size occur throughout the section. With increasing depth, the amount of cpy and moly decrease, while the py content increases to 3-5%. frac intensity decreases slightly with depth. By 750' the degree of alt has decreased so that zones of strong silicification with mod epidote & chlorite alt and wk K-feld alt can be seen as envelopes around the frac. The xx itself has pervasive hydrothermal biotite alt. Originally this mottled homfels was a cg to vcg. feldspathic xl tuff					
	304-827 Major fault zone, xx is					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	nearly all fault gouge								
824'-876'	Mottled Porphyry as for 306.5'-387'								
	804'-827' Major fault zone								
	865'-874' Very badly shattered core								
	874'-876' Fault gouge								
876'-884'	Porphyritic Quartz Monzonite (by 44.05%), as interstitial blebs, extremely wk qtz as interstitial blebs & in dry fine negative moly. Grey color, eq. wk fine, fresh euhedral black biotite phenos to 2 mm, plag. phenos to 4-5 mm, small K feld xls in the groundmass, mafics partly alt. to chlorite, very wk epidote alt., wk kaolinization of plag., wk. hematite and chlorite on fine., groundmass fairly siliceous								
	876'-882' Large shear zone mod. chloritization								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 18-60

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
854'-885'	Basalt Dyke - No metallic minerals, blackish color, aphanitic, cal filled vesicles, wk fracturing - cal healed, chill margins on either side, sharp contacts, 50° to axis of core and 45° to axis of core (885')					
885'-886.5'	Porphyritic Quartz Monzonite as for 876'-884'					
886.5'-887'	Basalt Dyke as for 884'-885'					
887'-888'	Porphyritic Quartz Monzonite as for 876'-884'					
888'-889'	Basalt Dyke as for 884'-885'					
889'-936'	Porphyritic Quartz Monzonite as for 876'-884'					
936'-991'	Granodiorite by ~1% as fg. interstitial blebs or as dry fract. very wk cpy as fg interstitial blebs or as disc blebs or fract.					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY ..... HOLE NO. 18-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS			
	negative moly. Grey color, cg-mg, porphyritic in places, wk frac, cal healed, fresh euhedral biotite ids to 2 mm (5%), chlorite alt mafics 10%, plagioclase appears very fresh, wk hematite alt on a few dry frac.								
	End of Hole								

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY Ox Lake HOLE NO. 33-69

LATITUDE 49.145 ELEVATION 3138' BEARING 000° DEPTH 517' STARTED ..... COMPLETED 1969

DEPARTURE 50.350 SECTION 1 DIP -45° DRILLED BY Longyear LOGGED BY M. Lancaster

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
0-17	Av					
17-58'	Overburden					
58'-62'	Gabbroic Dyke? Pyr (1%) as fg diss blebs, no cpy or moly visible. Dark grey color, fg, very wk frac, cal healed mafics (>50%) partially alt. to chlorite, chill borders on contact at 62', contact at 70° to core axis.					
62'-88	Mottled Hornfels Pyr (3%) and wk cpy as pervasive fg diss blebs and on frac wet and dry, very wk moly as diss flakes in qtz stringers and also on dry frac, trace of moly as diss blebs throughout the rx. Pink to greyish colored, aphanitic, intense random oriented frac, qtz & cal healed, mafics alt. to chlorite					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	strong silicification, mod wk epidote and hematite alt. along some frac. wk K-feld alt in frac, mod to strong hydrothermal biotite alt small bands of cg xl tuff can still be distinguished. Some of the fractures are faintly vuggy. The hornfels was originally an interbedded sequence of fg-cg tuff and tuffaceous argillite					
88'-90'	Quartz Monzonite Dyke Pcy (2%) and wk. cpy on frac. and as fg. disc blebs, no moly visible. Pinkish grey color cg., wk frac, fresh euhedral black biotite books (3%), plag. xls are unaltered, K-feld and qtz form an aphanitic matrix mafics alt. to chlorite, chlorite along frac., strong K-feld along frac.					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
90'-222'	Breccia - Large angular fragments of mottled hornfels held in a porphyritic quartz monzonite cement. Qtz monzonite cement mineralization - py (2%) as diss blebs and in frac wk-mod cpy as py diss blebs and in frac, very ~~bn~~ strong moly as diss blebs in the cement and as diss flakes and blebs in qtz stringers. Hornfels fragment mineralization - py (<1%) and wk cpy as pervasive diss blebs and in frac trace moly in frac Stark colored aphanitic frag. in a pinkish grey cement, fragments range up to 5' in size, numerous veins in the qtz monzonite cement, some frac. pass through both the matrix and cement. Fragments of hornfels are strongly frac., qtz and cal healed Cement alt - mafics alt to chlorite, mod					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	epidote alt, mod silicification of matrix, strong hydrothermal biotite alt. Fragment alt is typical for mottled hornfels (silicification hydrothermal biotite, chlorite epidote, argillic alt) Fragments compose well over 50% of the breccia					
	143'-157' - 70% of the frag are feldspar porphyry.					
	157' on - the amount of cement gradually decreases as the frag become larger					
	190'-200' - 10' fragment					
	176'-177' - fault?					
	178'-179' - fault?					
	184'-185' - fault gouge					
	191'-196' 5' core missing					
	198'-199' - ground core					
	207'-209' - ground core - fault?					
	210 on - the rx is now essentially					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	a mottled hornfels					
222'-241'	Quartz Monzonite ? Dyke ? Py (<<0.1%) as fg. diss blebs, wk gpy as fg. diss py blebs and as diss blebs on dry frac. very wk moly as diss flakes in qtz stringers. Pinkish grey colored aphanitic matrix with greyish white plag xls and black biotite xls, wk frac. qtz or cal healed, fresh black biotite books (3%) very slightly alt. to chlorite, hornblende (3%) alt. to chlorite, feld xls unaltered except for wk kaolinization, matrix very siliceous. a few small (½") angular xenoliths occur in the dyke. No chill zones were observed at the contacts. Contact at 60° to core axis.					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
241-404'	Breccia - Mottled Hornfels - Very large fragments (5") of mottled hornfels cemented by qtz magnetite ± granodiorite (fragment - 90% cement 10%) Hornfels - Py (1%) and strong epy as fg. diss blebs and on frac, wk to strong moly as diss flakes in qtz stringers Grey color, aphanitic, intense random oriented frac, qtz ± cal healed, strong silicification, strong hydrothermal biotite alt wk epidote, mafics alt to chlorite, wk sericitization, mod K-feld alt along a few of the frac Cement - Py as large diss blebs, mod to strong epy as large (¼") blebs and on frac, wk-mod moly as diss flakes in qtz stringers. More of the mineralization is in the cement than in the hornfels. K feld alt around					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	the edges of some frag. wk epidote alt, mafics partially alt to chlorite, in general the cement appears to be fresh.					
	279'-270' fault zone - ground core					
	280' · cement now 5%					
	360' hornfels looks slightly granitized					
	367'-382' 3 small qtz-magnetite dykelets ½" wide run subparallel to the core for about 5'					
403'-409'	Granodiorite ~~Dyke~~ ? Py (< 1%) and wk-mod cpy as diss. blebs and in frac. wet or dry, wk moly as diss blebs in qtz stringers Grey color, mg-cg wk frac, qtz healed fresh black biotite books (5%). other mafics (hb+bio.) alt to chlorite. large anhedral plag. wk hem verg					

CLAIM NO. ..... **DIAMOND DRILL RECORD** PROPERTY ..... HOLE NO. 33-62

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
	wk kaolinization, K-feld alt along frac contacts at 85°-90° to core axes					
409'-412.5'	Rhyodacite? or Granitized Hornfels? Pg as very fg diss spec and alt on frac, mod qtz on frac and as fg diss blebs, no moly visible. Dark grey color, fg, mod frac., qtz or cal healed, fg fresh biotite flakes, other mafics alt to chlorite, siliceous matrix, wk kaolinization and sericitization of feld. wk K-feld alt along frac. Unit may have been a xenolith which has been intensely granitized or it may be a fg dyke separate from the granodiorite. A third possibility is that this is a chilled border facies of the granodiorite					

DIAMOND DRILL RECORD

CLAIM NO. ..... PROPERTY ..... HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
412.5-414'	Granodiorite as for 404-409'					
414'-415'	Rhyodacite? or Granitized Hornfels? as for 409-412.5'					
415-438'	Granodiorite as for 404-409' With increasing depth the kaolinization and sericitization becomes stronger					
438'-446'	Brecciated Rhyodacite or Brecciated Granitized Hornfels Py (<1%) as fg. diss blebs and very wk. as diss blebs on frac., mod cpy as fg. diss blebs and as diss blebs on frac, no moly visible. Grey color, fg., strong random oriented frac. qtz or cal healed, mafics alt. to chlorite, wk kaolinization and sericitization, wk K-feld alt along frac, very wk epidote					

CLAIM NO. .....

DIAMOND DRILL RECORD

PROPERTY .....

HOLE NO. 33-69

LATITUDE ..... ELEVATION ..... BEARING ..... DEPTH ..... STARTED ..... COMPLETED .....

DEPARTURE ..... SECTION ..... DIP ..... DRILLED BY ..... LOGGED BY .....

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS
446 517'	Porphyritic Quartz Monzonite Pqy (<1%) and very wk gry ss fg interstitial blebs and ss disc blebs or dsg frac no moly visible Pinkish-grey color, mg, wk random oriented frac, some qtz healed, fresh euhedral black biotite books (5%), hb alt to chlorite, very wk kaolinization and sericitization of plag, small (1mm) K feld xls strong K feld alt along most frac The qtz monzonite is part of the Ox Lake Plug.					
	468 - 469' fault gouge					
	519 - 517' fault gouge					
	Bit fused to bottom of hole					
	End of Hole					