

LOG NO: 'APR 13 1992 RD.

ACTION:

KOKANEE EXPLORATIONS LTD.

REPORT ON DIAMOND DRILLING  
Holes D91-1, D91-2, D91-3 & D91-6

DARLIN 26, 63 & 64 CLAIMS

FORT STEELE MINING DIVISION  
KIMBERLEY AREA

ASSESSMENT REPORT

N.T.S. 82F/9E

LAT: 49°36'

LONG: 116°6'

OWNER

GLEN M. RODGERS  
Box 63,  
Skookumchuck, B.C.  
VOB 2E0

OPERATOR

KOKANEE EXPLORATIONS LTD.  
#104 - 135 - 10th Ave. S.,  
Cranbrook, B.C.  
VIC 2N1

Worked Performed from October 3, 1991 to October 24, 1991

**GEOLOGICAL BRANCH**

Report by: David L. Fisher  
Submitted: March, 1992

22,252

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KOKANEE EXPLORATIONS LTD.

REPORT ON DIAMOND DRILLING

DARLIN PROPERTY

FORT STEELE MINING DIVISION

D.L. Pighin

March, 1992

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**1.00      Introduction**

This report summarizes the results of the drilling of four holes on the Darlin property.

Kokanee Explorations Ltd. is the operator of the project on the property. Kokanee Explorations has the right to earn back-in 60% to production. A total of 1138.8 metres of diamond drilling was completed in the four holes.

**2.00      Property Description, Location and Access**

The Darlin property consists of 68 2-Post claims which are located 14 kilometres southwest of Kimberley, B.C. Road access to the property is best gained via all weather logging from Cranbrook, B.C. The property is serviced by numerous Forestry roads.

**3.00      Regional Geology**

The Purcell Supergroup in southeastern B.C. is a thick prism of dominantly clastic sediments, deposited in a large epicratonic Middle Proterozoic basin. These sedimentary rocks form a monotonous succession of drab coloured siltstone, mudstone, lesser quartz arenite, dolomite and limestone. The maximum thickness of the Purcell Supergroup exceeds 10,000 metres with the base unexposed.

In Canada, the Purcell Supergroup is subdivided into eight distinct Formations. The base of the Supergroup is marked by the Fort Steele Formation, consisting mainly of cross-bedded quartzites and mudstones. The Fort Steele Formation is at least 200 metres thick. The Aldridge Formation is 5000 metres thick in the Purcell Mountains. The Aldridge Formation conformably overlies the Fort Steele Formation and consists of mainly siltstone and mudstone. The Creston Formation is 1800 metres thick and conformably overlies the Aldridge Formation. The Creston Formation

consists of green and maroon siltstone, quartzite, mudstone and minor arenite. Conformably overlying the Creston Formation are 1200 metres of green and grey dolomitic mudstone, dolomite, minor quartzite of the Kitchener Formation. The Kitchener in turn is overlain by 200 to 400 metres of green, slightly dolomitic and calcareous mudstone of the Siyeh Formation. Resting with conformity on the Purcell rocks are about 1200 metres of calcareous and dolomitic mudstone, black slates and minor siltstone of the Dutch Creek Formation. The Dutch Creek Formation is overlain by about 1000 metres of grey, green and maroon mudstone, calcareous mudstone, dolomite and white quartzite of the Dutch Creek Formation.

Middle Proterozoic igneous activity in the Purcell Basin is dominated by intrusion of gabbroic sills and lesser dykes. The pegmatitic Hellroaring Creek stock and related satellites intruded metamorphosed and deformed Aldridge sediments. The Hellroaring stock is Proterozoic in age (Ryan and Blenkinson, 1971). Cretaceous batholiths, stocks, plugs and dykes are relatively common throughout the Purcell Basin.

Purcell rocks are folded about a north-trending axis to form the Purcell anticlinorium. Folds comprising the large structure are open and gentle with north plunging axis. Major faults with complex movement cut the Purcell terrain and separate the area in large regions further disrupted by block faulting.

#### 4.00 Property Geology

The Darlin claims are underlain by Proterozoic clastic sediments of the Middle and Lower Aldridge Formations. These sediments are intruded by gabbroic sills and dykes, pegmatite sills and dykes.

The Lower Aldridge Formation is principally thin to medium bedded meta-siltite, interbedded phyllitic siltite, phyllitic argillite and/or muscovite schist.

The Middle Aldridge Formation is formed by medium to thick bedded, rarely very thick bedded meta-siltstone, minor quartz arenite interbedded thin to very thin bedded siltites, argillites and minor muscovite schist.

Gabbroic sills account for approximately 1/3 of the total section. The gabbroic sills range from 11 metres to 170 metres in thickness and are typically medium to coarsely crystalline commonly grading to finely crystalline towards the contacts.

Pegmatite sills and dykes occur mainly in the Lower Aldridge Formation. These pegmatite sills and dykes generally range in thickness between 1 and 2 metres. The pegmatites are composed of very coarsely crystalline feldspar, quartz, muscovite, biotite and minor tourmaline.

Structure on the property is dominated by a large north-east trending synform which is complicated by a zone of northwest dipping? thrust faults.

A northeast belt of high grade metamorphism cuts the northern portion of the property. The south end of the metamorphic belt is terminated against the Hellroaring stock. The northern end of the belt ends near the mouth of Matthew Creek where it is marked by sillimanite schist.

#### 5.00 Mineralization

On the Darlin property, massive sulphide beds are found near the top of the Lower Aldridge. Groups of sulphide beds have been identified in two separate stratigraphic horizons. The sulphide beds range from 2 to 30cm in thickness. The sulphides consist of mainly massive pyrrhotite with minor sphalerite and rare galena. Sediments which form the footwall and hanging wall of the sulphide beds are commonly albitized? (silicified) and chloritized.

#### 6.00 Diamond Drillholes

Diamond drillholes D91-1 to D91-3 were collared near the top of the Lower Aldridge Formation. All of the above holes drilled through the same stratigraphic package. Therefore, the following description of the meta-sediments in hole D91-2 will be referred to in the other 2 holes.

##### 6.01 Diamond Drillhole D91-2

Diamond drillhole D91-2 is located on the Darlin 63 claim. The sediments cored by this hole are typical of the Lower Aldridge Formations. They are medium to very thin bedded meta-siltites interbedded phyllitic siltite, argillite with minor interbeds of muscovite schist. The sediments are typically very fine grained. Colours are generally grey, greenish grey and maroon. Bedding planes are commonly flat and sharp. Biotite and lesser sericite is abundant in most of the siltite beds. Silicification is intense in some sections but generally it is patchy throughout the section. Chloritization of the sediments is weakly pervasive. Weakly disseminated pyrrhotite is present in most of the sediments.

Hole D91-2 cored a gabbroic diorite sill from the collar to 49 metres. The sill is generally coarsely crystalline and pyrrhotiferous. A similar sill occurs in the hole between 386.8 and 422.6 metres.

Several pegmatite sills were cut by the hole. These sills are rarely more than a metre thick. The pegmatite consists mainly of coarsely crystalline biotite, feldspar, quartz, muscovite, scattered tourmaline needles and pink garnets.

A fault zone at 432 metres cuts the core axis at 42°. The fault consists of gouge and brecciated sediments 30cm thick.

Mineralization in the hole consists of massive sulphide beds scattered throughout the stratigraphy from 139.0 metres to 350 metres. The sulphide beds consist principally of pyrrhotite with minor sphalerite and rare galena. Sulphide beds range from 4 to 30cm in thickness. Alteration zones up to a metre thick consisting of chloritization and albitization? (silicification?) occur along the footwall and hanging walls of the various sulphide beds.

At 432.0 metres a fault cuts the core axis at 40°. The fault is marked by 30cm of gouge and breccia sediments.

#### 6.02 Diamond Drillhole D91-1

Diamond drillhole D91-1 is located on the Darlin 26 claim. This hole cored Middle Aldridge meta-sediments from 24.5m to 47.9m as described for hole D91-2.

A large pegmatite sill occurs in the hole between 47.9m and 95.4m. The sill consists mainly of quartz, feldspar, muscovite, minor pink garnets, rare disseminated pyrrhotite and pyrite.

A gabbroic diorite sill immediately underlies the pegmatite sill. The gabbroic sill is medium to coarsely crystalline and pyrrhotiferous. The hole was stopped in the sill.

Sphalerite and molybdenite is very weakly disseminated in pegmatite sill adjacent to its lower contact.

### 6.03 Diamond Drillhole D91-3

Diamond drillhole D91-3 is located on the Darlin 64 claim. The hole cored Lower Aldridge stratigraphy as described in D91-2. The hole intersected a gabbroic diorite at 135.7m. The sill is coarse grained and pyrrhotiferous. The hole was stopped in gabbroic diorite.

Mineralization in the hole consisted of one massive sulphide bed at 67.3m in the hole. The sulphide bed is 20cm thick and consists of mainly pyrrhotite with minor sphalerite and galena.

### 6.04 Diamond Drillhole D91-6

Diamond drillhole D91-6 is located on the Darlin 64 claim. This hole cored Lower Aldridge stratigraphy as described for hole D91-2.

A fault between 112.8 m and 113.6 m cuts the core axis at 45°. The fault zone consists of gouge brecciated sediments.

A pyrrhotiferous gabbroic-diorite sill occurs from 233.7 m to 278.8 m. A meta-siltite bed at 295.0 m hosts 30 cm of heavily disseminated pyrrhotite associated with strong albitization? (silicification?) and chloritization. A massive sulphide bed mainly pyrrhotite 20 cm thick occurs at 312.2 m and at 310.5 m a graphite garnet vein cuts core axis at 55°.

### 7.00 Conclusion

Diamond drilling on the Darlin claims has discovered a number of massive beds which are grouped in at least two stratigraphic horizons. The manner and type of massive sulphide deposition is similar to the sulphide beds which are distal to the Sullivan Orebody. The best lead and zinc values were found in holes drilled in the southeast area of the property. This suggests that the southeast holes are nearest to a potential economic deposit.

### 8.00 Recommendations

Further down dip, drilling is warranted especially in the southeast area of the Darlin claim group.

Report by:



David L. Pighin  
Senior Geologist

Kokanee Explorations Ltd.

EXHIBIT "A"

STATEMENT OF EXPENDITURES

DIAMOND DRILLING PROGRAM  
(Drill holes D91-1, D91-2, D91-3 & D91-6)

ON DARLIN 26, 63 + 64 CLAIMS  
Ft. Steele M.D.

Covering the period of October 3rd to October 24th, 1991

DIRECT

Connor's Drilling Ltd.  
2007 West Trans Canada Highway,  
Kamloops, B.C.

- 4 diamond drillholes totalling 1138.4 m 85,671.17  
(invoices #16527 & #16533)

TOTAL DIRECT = \$ 85,671.17



DAVID L. PISHIN  
Senior Geologist

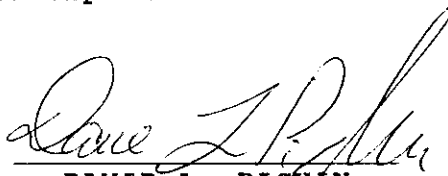


IN THE MATTER OF THE  
B.C. MINERAL ACT  
AND  
IN THE MATTER OF A DIAMOND DRILL PROGRAM  
CARRIED OUT ON THE DARLIN 26, 63 AND 64 CLAIMS  
KIMBERLEY AREA  
in the Fort Steele Mining Division of  
the Province of British Columbia  
More Particularly N.T.S. 82F/9E

A F F I D A V I T

I, David L. Pighin, of the City of Cranbrook, in the Province of British Columbia, make oath and say:


1. That I am employed as a Geologist by Kokanee Explorations Ltd. and as such, have a personal knowledge of the facts to which I hereinafter depose;
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a diamond drill program, on the Darlin 26, 63 and 64 Mineral Claims;
3. That the said expenditures were incurred between the 3rd day of October, 1991 and the 24th day of October, 1991 for the purpose of mineral exploration.

  
DAVID L. PIGHIN  
Senior Geologist

AUTHOR'S QUALIFICATIONS

I, David L. Pighin, of the City of Cranbrook, in the Province of British Columbia, do hereby certify that:

1. I was employed by Cominco Ltd. as a exploration geologist for 15 years;
2. I am employed by Kokanee Explorations Ltd. as Senior Geologist;
3. I have had over 26 years experience in the field of mining exploration.

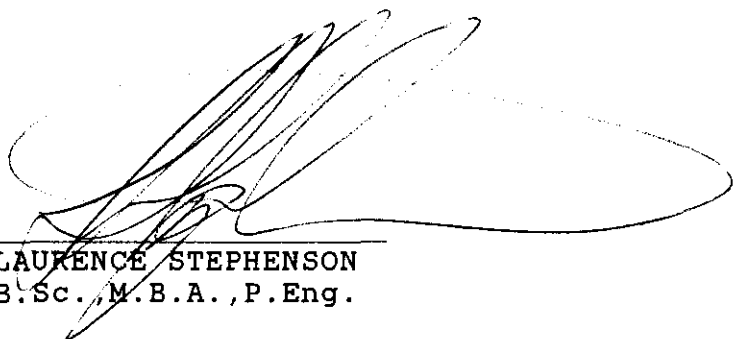


DAVID L. PIGHIN  
Senior Geologist

ENDORSER'S QUALIFICATIONS

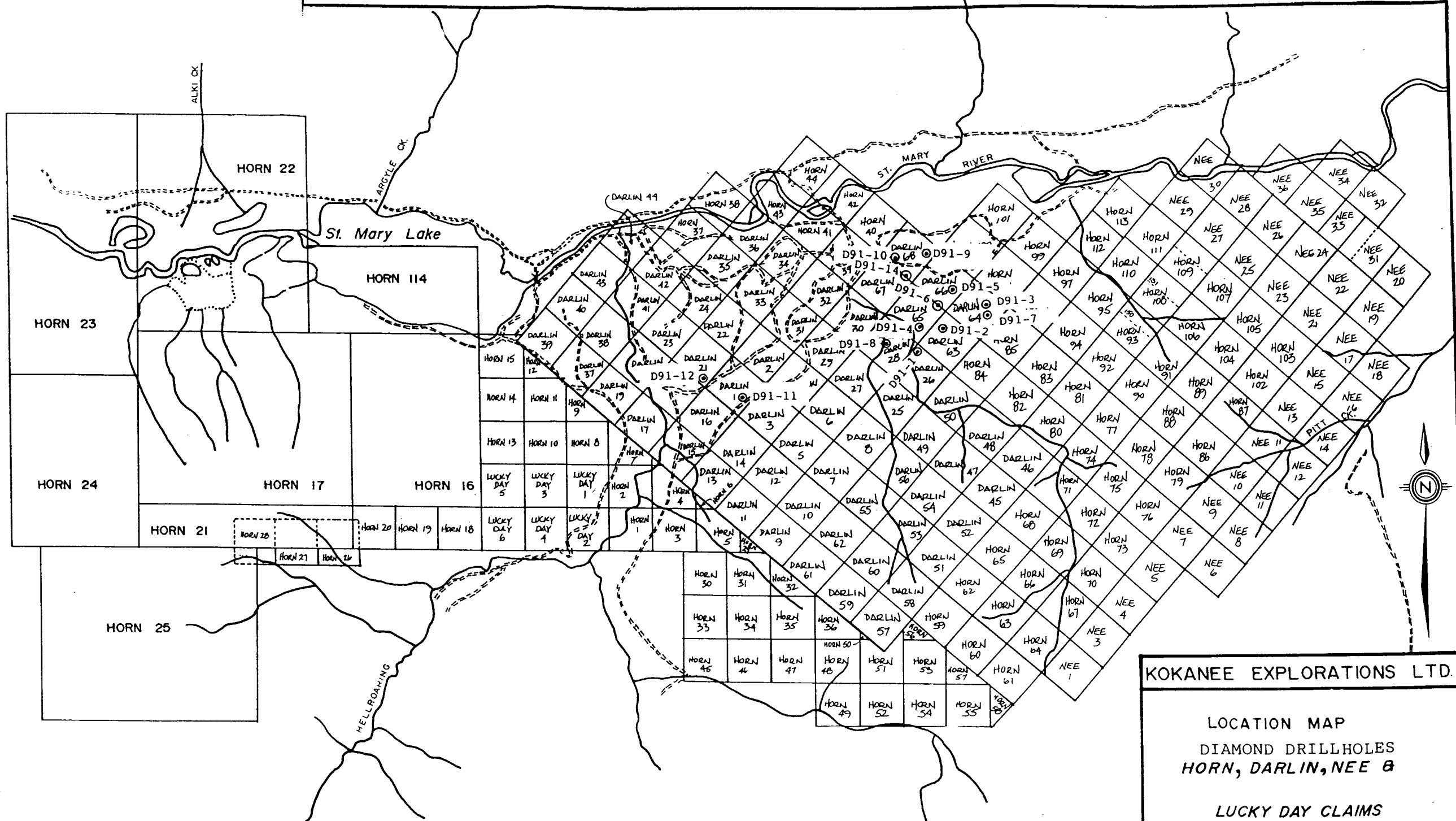
I, Laurence Stephenson, of the City of Cranbrook, in the Province of British Columbia, do hereby certify that:

1. I graduated from Carleton University in 1975 with a Bachelor of Science degree in Geology then, in 1985, graduated from York University with a Masters of Business Administration;
2. I am registered as a Professional Engineer for the Province of Ontario (1981) and currently a member in good standing;
3. I have had over 24 years experience in the field of mining exploration.
4. I have known and worked with Mr. David Pighin professionally since 1988.



---

LAURENCE STEPHENSON  
B.Sc., M.B.A., P.Eng.



• Horn 150 + 151 are staked over Horn 93,108 + 109

NTS 82F/9E

**KOKANEE EXPLORATIONS LTD.**

LOCATION MAP  
DIAMOND DRILLHOLES  
HORN, DARLIN, NEE &  
LUCKY DAY CLAIMS  
(Holes D91-1 to 12 + 14)

Scale: 1:50,000	Mar/92
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# KOKANEE EXPLORATIONS LTD.

## DRILL HOLE RECORD

Page: 3

Property: DARLIN

Hole No.: D91-1

Location: DARLIN 26 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au	Ag	Pb	Zn	Cu
From	To		No.	From	To	ppb	ppm	%	%	ppm
95.4	97.5	<u>Fault Zone</u> : consists of sheared and slickensided gabbro and pegmatite along with chloritic gougy material. Shear to core angle 14°?								
97.5	161.5	<u>Gabbro</u> : finely crystalline at top contact grading to coarsely crystalline at end of hole. The unit also becomes pyrrhotiferous with depth. Occasional cross cutting quartz and pyrrhotite veins occur throughout unit. A massive pyrrhotite vein occurs from 131.5m - 131.8m and cuts the core at 27°.	3850	131.50	131.80	5	1	0.001	0.005	564
			3851	146.30	146.80	3	0	0.001	0.005	55
		END OF HOLE								
		Core stored in racks at Vine Property								

# KOKANEE EXPLORATIONS LTD.

## DRILL HOLE RECORD

Page No. 1

Name of Property: DARLIN

Corr. Dip:

Remarks:

Hole No.: D91-2

Length: 451.2m

Co-ordinates: Lat.: 49° 36' 10"  
Long.: 116° 6' 10"

Location: DARLIN 63 Claim

Start Date:

Finish Date: October 10, 1991

Elevation: 1176m

Azimuth: 060°

Collar Dip: -45°

Core Size: NQ

Tests at:

Logged by: DLP Date:

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
0.0	6.0	<u>Overburden.</u>	3852	10.20	10.35	9	0	.002	.01	59
6.0	29.0	<u>Gabbro:</u> phaneritic, equigranular, dark grey, mainly hornblende and plagioclase from 6.0m to 17.0m; abundant pyrrhotite as 2mm to 1cm sized blebs, rare specks of chalcopyrite, up to 3% pyrrhotite. At 16.6m, 4cm thick quartz pyrrhotite vein cuts core at 40°.	3853	14.00	14.15	5	0	.001	.006	37
			3854	16.60	16.64	4	0	.001	.009	330
29.0	49.2		<u>Gabbro:</u> fine grained, strongly foliated at 25° to core; abundant sericite and leucoxsin; some sideritization along foliation plains. From 30.4 to 30.9 oxidized siderite-quartz vein cuts core at 6°.	3855	30.50	30.90	6	0	.001	.01



**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 2

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
49.2 - 93.6		Sericite-Biotite Phyllite: medium to thin bedded, bedding plains flat-sharp, biotite and sericite coarsely crystalline. Some thin interbeds of muscovite schist, 1 to 3% disseminated pyrrhotite through-out section. (Meta-Lower Aldridge alteration consists of silicification as at 61.4m, 64.3m, 71.2m - 72.1m, 75.1m; Albitization as at 50.8m, 53.2m, 54.1m, 55.2m, 57.3m, 60.7m, 67.5 - 68.0m, 68.8 - 69.2m, 72.7 - 72.9m. Pegmatites occur from 62.7 - 63.0m and 74.0 - 74.3m - pegmatites are albite, muscovite and garnet and occur as dykes. The contacts are wavy and appear to cut the core at 42° for the lower unit and 69° for the upper unit. Bedding to core at 76.6m is 63°, foliations cut the core at 44°.	3856	62.70	63.00	6	0	.001	.003	3
			3857	74.00	74.30	4	0	.001	.001	5
93.6 - 145.4		Siltstone: grey, thin bedded, biotitic, frequently demonstrating characteristics of previous unit with regard to metamorphism but over very short intervals. Bedding to core 75°. This unit is more typical of Lower Aldridge formation. Alteration consists primarily of silicification in infrequent occurrences. Sulphide occurs as disseminated pyrrhotite and in rare	3858	106.60	106.80	6	0	.006	.001	7
			3859	142.60	143.10	6	3	.135	.02	88

**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 3

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

METERAGE		DESCRIPTION	S a m p l e			Au	Ag	Pb	Zn	Cu
From	To		No.	From	To	ppb	ppm	%	%	ppm
		veinlets throughout unit. Where foliations are obvious, they cross-cut the bedding.								
		A pegmatite unit that is sub-parallel to bedding occurs from 106.6 to 106.8m. The upper contact is sharp but appears to have partially eroded the bed at an angle other than the bedding plane; the lower contact is wispy and appears to be sub-parallel to bedding. Bedding to core 69°, dyke to core 74°, 106.6m.								
		Sulphides also occur in bands of mostly pyrrhotite up to 10cm thick as at 142.9m as well as in veinlets up to 3mm thick as at 142.7m - galena, sphalerite.								
145.4 - 179.3		<u>Siltstone</u> : light grey, thin to medium bedded; thin bands of medium crystalline biotite, muscovite phyllite occur throughout unit but are more common near the top of the unit. Disseminated pyrrhotite is common throughout unit and averages 1 to 3%. Where foliations are discernable, they cross-cut the bedding, foliation to core angle 28°, bedding to core 74° (at 152.8m). Alteration consists of silicification and albitization.	3860	157.60	157.90	6	1	.01	.05	495
			3861	161.50	161.80	1	0	.001	.006	163
			3862	162.00	162.10	5	0	.001	.009	167

**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 4

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
		The albitization appears to coincide with the presence of banded sulphides. Bedded sulphides occur as follows: 151.6m - 4cm - pyrrhotite bands 157.6m - 30cm - pyrrhotite bands and massive pyrrhotite 161.5m - 30cm - pyrrhotite bands, nearly massive 162.0m - 10cm - pyrrhotite bands, nearly massive 167.6m - 3cm - nearly massive pyrrhotite band								
179.3	245.1	<u>Siltstone</u> : grey to light grey, thin to medium bedded, occasional muscovite biotite phyllites tending to schists up to 30cm thick are present throughout unit. Pyrrhotite is common and present in volumes of 1% to 3% as in all units logged to date. The top of the unit is marked by a crushed and fractured zone with minor shearing. Alteration consists commonly of silicification throughout the unit and rare albitization. Bedding to core 73°. As in previous unit, foliations cross-cut the bedding at a high angle. Foliation to core 21°. Mud seam at 243.8m	3863	195.30	195.60	7	0	.002	.67	102
			3864	233.40	233.60	6	0	.001	.006	381

**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 5

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
		195.3 - 195.6 - bedded sphalerite pyrrhotite. 233.4 - 233.6 - bedded pyrrhotite.								
245.1	246.9	<u>Pegmatite Sill</u> : albite, muscovite are the main minerals with minor iron sulphides. Contacts are clean and sharp and cut the core at 75°.	3865	246.65	246.90	3	0	.001	.003	4
246.9	253.0	<u>Meta-Siltstone</u> : typical of the Lower Aldridge as described previously.								
253.0	254.6	<u>Minette?</u> : dyke cuts the core at 39° with clean, sharp contact.								
254.6	256.5	<u>Meta-Siltstone</u> : as previously described.								
256.5	257.4	<u>Minette? Sill?</u> : contacts are wavy and cut the core at 75°.								
257.4	285.4	<u>Siltstone</u> : grey, thin bedded, sericitic and biotitic, as in previous units 1% to 3% pyrrhotite is present throughout. Occasional layers of schist occur throughout unit. Silicification is common and much more frequent than in previous units. Mineralization consists of various bands of heavily disseminated to near	3866	285.00	285.10	5	0	.002	.004	268



**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 7

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
320.0	337.5	<u>Siltstone</u> : as described above, alteration consists of silicification and albitization. Albitized sediments are more common than in previous unit. Mineralization consists of disseminated pyrrhotite throughout (1% - 3%) and occasional veinlets or pyrite and pyrrhotite. Pyrrhotite is also present in bands as follows: 321.1m - 4cm band of strongly disseminated; 326.4m - 20cm band of heavily disseminated to massive pyrrhotite; 321.1m - 6cm of strongly disseminated; 321.5m - 5cm of strongly disseminated. Bedding to core 75°.	3868	326.40	326.60	8	0	.001	.007	218
337.5	338.6	<u>Lamprophyre Dyke</u> : contact angle 47° to core sub-parallel to bedding. Contacts are clean and distinct.								
338.6	374.9	<u>Siltstone</u> : as described previously. Alteration consists primarily of albitization and silicification. Occasionally chloritic alteration is present as well and in particularly noticeable on fracture surfaces. Minor crushing/shearing occurs at 345.9m, 346.3, 351.7m. Mineralization consists of 1% - 3%	3869	344.90	345.00	5	0	.005	.02	320
			3870	347.30	347.40	69	1	.005	.01	594

# KOKANEE EXPLORATIONS LTD.

## DRILL HOLE RECORD

Page: 8

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au	Ag	Pb	Zn	Cu
From	To		No.	From	To	ppb	ppm	%	%	ppm
		disseminated pyrrhotite and pyrrhotite in bands as follows: 347.3m - 8cm of massive pyrrhotite. Bedding to core at 357.5m, 72°.								
374.9	386.8	<u>Meta-Siltstone</u> : thin to very thin bedded, grey. Bedding to core 79°. Unit is chloritic sericitic and biotitic. Mineralization consists of disseminated pyrrhotite (1% - 3%) as well as bands of heavily disseminate nearly massive pyrrhotite up to 1cm thick as at 382.7m. Occasional disseminations of sphalerite are also present as at 382.8m.								
386.8	422.6	<u>Gabbro Sill?</u> : upper contact is wavy, bedding in adjoining unit is contorted lower contact is also wavy but is estimated at 78°. Contact is much cleaner than upper contact. The unit exhibits various crystallinity from fine to coarse. It also contains possible xenoliths of sedimentary country rock e.g. 480.2 - 480.5. Veins of quartz, calcite and pyrite are common throughout unit; examples include 394.3/3cm/39° - calcite; 396.9/10cm/63° - calcite quartz; 405.9/2cm/20° - pyrite calcite; 420.0/10cm/63° - calcite,	3880	388.20	388.40	3	0	.006	.004	60
			3881	405.80	406.00	1	0	.002	.004	181
			3882	408.20	408.50	1	0	.002	.002	278
			3883	409.30	409.60	1	0	.001	.003	113

**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 9

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e							
From	To		No.	From	To	Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
		quartz, pyrite. The unit also demonstrates granitic tendencies as observed from 388.2 - 389.8m.								
422.6	448.2	<u>Meta-Siltstone (phyllite)</u> : thin to very thin bedded. Core is very blocky. Unit is sericitic, biotitic and chloritic. Chloritization increases drastically from 445 to 448.2m. Some of the bedding is crenulated, silicification and albitization occur primarily near the top of the unit. Gougy material occurs at 432.0m and 431.7m. The last gougy unit is approximately 30cm thick and could indicate a fault plane contact angle estimated at 17° or 40°. Mineralization consists of 1% - 3% disseminated pyrrhotite as well as bands of heavily disseminated pyrrhotite as at 443.3m. A pyrrhotite fragmental? occurs from 431.7 - 431.8m. A 2cm bedding parallel quartz sulphide vein occurs at 435.5 and contains quartz, calcite, pyrite, sphalerite and galena. Calcareous alteration occurs throughout unit.	3884	431.60	431.80	1	0	.001	.002	105



KOKANEE EXPLORATIONS LTD.

DRILL HOLE RECORD

Page: 10

Property: DARLIN

Hole No.: D91-2

Location: DARLIN 63 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
448.2	451.2	<u>Gabbro Sill</u> : contact to core is 78°. Gabbro is pyrrhotiferous and is cross-cut by quartz pyrrhotite veins as at 450.1/5mm/9°	3885	450.10	450.40	4	0	.006	.006	48
		END OF HOLE								
		Core stored in racks at the Vine Property.								





KOKANEE EXPLORATIONS LTD.  
DRILL HOLE RECORD

Page: 3

Property: DARLIN

Hole No.: D91-3

Location: DARLIN 62 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au ppb	Ag ppm	Pb %	Zn %	Cu ppm
From	To		No.	From	To					
88.5	135.7	<u>Meta-Siltstone</u> : thin bedded, grey, sericitic, biotitic, extremely chloritic. Bedding planes are commonly twisted and folded. Sulphides (primarily pyrrhotite, minor chalcopyrite, sphalerite and arsenopyrite) occur in veinlets that run along bedding planes and give the feeling of remobilization. Examples occur at 88.5m, 88.9 - 89.2m, 90.7m, 91.0m, 92.6m. Bedding to core 70°. At 100m, 5cm thick quartz-chlorite vein hosts abundant pyrrhotite and rare sphalerite. 118.9 - 123.0: strong silicification, olive green, scattered thin to very thin. Quartz-carbonate, rarely 5cm thick, host abundant pyrrhotite, rare galena and sphalerite, scattered blebs of massive pyrrhotite rarely more than 3mm thick. At 135.0m bedding to core 76°.								
135.7	176.8	<u>Gabbro Sill</u> : contact is wavy and cuts core at approximately 80°. 135.7 - 139.2: altered gabbro with bleached appearance. Quartz vein at 168.8m cuts core at 43°/true width 7cm upper contact has sheared appearance. END OF HOLE Core stored in racks at the Vine Property.	3874	137.20	137.40	6	0	.002	.009	35
			3875	148.90	149.10	2	0	.001	.006	13
			3876	152.20	152.40	2	0	.001	.007	22
			3877	168.80	169.00	2	0	.003	.006	60
			3878	169.40	169.60	41	0	.004	.005	56
			3879	173.30	173.55	6	0	.002	.003	54











**KOKANEE EXPLORATIONS LTD.**  
**DRILL HOLE RECORD**

Page: 5

Property: DARLIN

Hole No.: D91-6

Location: DARLIN 66 Claim

M E T E R A G E		D E S C R I P T I O N	S a m p l e			Au	Ag	Pb	Zn	Cu
From	To		No.	From	To	ppb	ppm	%	%	ppm
		indicating local fold. At 212.2m, a 15cm intrusion containing quartz and abundant biotite, predominantly a distinctive green colour in lower half.								
233.7	278.8	<u>Intrusion</u> : diorite sill. Fine to medium grained rock with various concentrations of biotite and amphibole throughout. Some irregular, elliptical and lenticular forms included in upper portion of this body are suggestively sediment remnants. This intrusion is similar to that in D91-5 hole from 49.5 - 119.2. Fault from 264.6 to 264.8 contains calcite healed diorite fragments with some crushed rock and gouge. Finer grained diorite in base 4m commonly contains erratic, calcite healed fractures up to 1cm thick.								
278.8	328.0	<u>Meta-Sediments</u> : similar to those described above foregoing diorite. Bedding immediately below diorite 60 - 65° to core. A segment from 287.2 - 287.6 displays bleaching or albitization effects and includes a few thin beds containing abundant disseminated pyrite/pyrrhotite. Minor slumping indicated by distorted beds	3899	310.50	310.70	1	0	.003	.007	4
			3900	312.54	312.65	1	0	.008	.003	307



GEOCHEMICAL ANALYSIS CERTIFICATE

Kotane Exploration Ltd. PROJECT D91-1 File # 91-4934  
104 - 135 - 10th Ave S., Cranbrook BC V1C 2H1 Submitted by: D.L. FIGHT



HRC  
Darlin  
D91-1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	K	Na	Au	M	Sr	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	%	ppm	ppm	%
02734 S.A.C.	31	558	10	595	2.7	190	10	11.7	2	6	ND	3	43	6.6	2	5	130	2	1.72	0.07	2	25	107	20	104	2	172	104	102	1	5	101	101
02783 J	20	373	11	127	2.3	182	1	0.67	6.95	2	5	ND	3	37	1.3	2	2	17	1.77	0.12	2	16	104	26	104	2	51	101	104	1	12	101	101
03045	2	12	41	10	2	10	1	176	1.43	7	5	ND	1	19	1.2	2	6	1	51	0.56	2	8	102	14	101	3	132	107	119	2	3	101	101
03846	1	34	30	8	1	7	2	205	1.86	24	5	ND	1	10	1.2	2	56	1	1.41	0.59	2	6	101	6	101	2	119	103	103	1	9	101	101
03847	2	7	7	1	1	8	1	348	1.31	2	18	ND	1	6	1.2	2	3	1	1.32	0.59	2	9	101	1	101	2	125	110	112	2	3	101	101
03848	2	41	56	18	1.2	19	4	428	1.43	2	5	ND	1	12	4	2	134	1	1.43	0.26	2	9	115	11	101	2	131	104	115	2	50	101	101
03849	1	17	178	142	1.7	8	2	108	1.64	105	5	ND	1	9	1.1	2	14	1	1.29	0.39	2	7	106	7	104	2	128	108	112	1	5	101	101
03850	1	564	12	47	1.9	73	112	263	18.95	7	13	ND	1	10	1.1	2	3	31	1.05	0.86	2	15	106	11	108	2	132	103	107	1	3	101	101
03851	1	55	4	55	1.3	57	51	302	3.95	14	5	ND	2	31	3	4	2	43	0.97	0.20	2	24	1.07	39	120	2	2.02	117	104	1	3	101	101
STANDARD C/M-R	20	63	42	130	7.1	72	34	1031	3.95	43	12	8	40	54	17.2	16	21	50	1.68	0.90	40	57	185	177	109	33	1.05	104	104	11	470		

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 7-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 20 ML WITH WATER. THIS LEACH IS PARTIAL FOR NA FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. ALL DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPM

- SAMPLE TYPE: ROCK Samples beginning 'DE' are duplicate samples. W- Na<sub>2</sub>O fusion, analysis by ICP Sn- nitric fusion.

DATE RECEIVED: OCT 7 1991 DATE REPORT MAILED: Oct 10/91 SIGNED BY: [Signature] G. TOBE, C. LEONG, J. WANG; CERTIFIED U.C. ANALYSTS

D91-1  
DARLIN

06/01/82 16:48 0994 438 1121 ROTANE EXPLORATION 0100-003



GEOCHEMICAL ANALYSIS CERTIFICATE

Ekane Exploration Ltd. File # 91-5167

104-155-10th Ave S., Cranbrook BC V1C 2J1 Submitted by: G. COLLISON

SAMPLE#	No	Cu	Pb	Zn	Ag	Ki	Co	Mn	Fe	As	V	Au	Hg	Sr	Cl	Sb	Bi	Mo	P	La	Cr	Mg	Ba	Ti	B	Al	Ni	K	Na
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	%	%	ppm
3871	1	20	90	72	.2	13	10	145	2.69	15	5	ND	1	19	.6	2	2	1	.38	.655	2	4	.10	11	.01	4	.21	.01	.15
3872	1	173	13	114	.5	34	52	514	9.30	2	5	ND	4	21	2	2	2	31	.51	.064	36	39	2.20	34	.16	3	2.59	.01	1.30
3873	1	29.7	21	2560	.2	37	50	276	12.55	2	5	ND	1	26	23	7	2	9	.73	.060	37	16	.65	13	.07	4	.27	.01	.17
3874	1	35	20	86	.2	2	17	734	7.09	2	5	ND	2	20	.9	2	2	148	1.57	.019	10	8	.03	32	.33	3	0.72	.01	.43
3875	1	13	10	53	.2	6	11	547	4.32	2	5	ND	6	9	.2	2	2	79	.03	.052	22	25	.05	54	.34	1	1.20	.01	1.48
3876	1	22	13	67	.2	7	12	500	4.47	2	5	ND	6	11	.3	2	2	77	.39	.052	21	17	.07	46	.32	6	1.66	.06	1.29
3877	2	60	30	56	.2	15	70	358	2.69	76	5	ND	1	20	.2	2	2	30	2.20	.015	4	13	.50	19	.08	2	.93	.01	.15
3870	1	36	62	51	.5	22	272	476	3.76	1344	5	ND	3	27	.2	2	2	64	1.61	.037	12	29	.50	20	.03	3	1.43	.06	.21
3879	1	54	24	13	.2	37	19	487	2.30	30	5	ND	2	10	.2	2	2	40	.96	.059	7	18	.63	15	.24	2	.95	.04	.12
3820	1	60	60	50	.1	7	40	320	3.16	1601	5	ND	3	17	.2	2	2	35	.97	.039	12	11	.36	58	.17	3	1.07	.04	.29
3834	1	107	9	17	.2	80	64	405	9.39	38	3	ND	2	103	.4	2	2	16	4.32	.024	5	35	.65	10	.01	3	.74	.01	.32
3831	1	191	21	39	.1	57	192	561	8.45	172	5	ND	1	177	.2	2	2	48	6.33	.029	6	26	.77	19	.32	5	1.43	.01	.32
3882	1	238	22	36	.1	78	57	202	5.61	51	5	ND	1	12	.2	2	2	19	.33	.010	2	20	.38	30	.97	2	.54	.01	.34
3883	1	113	31	28	.2	14	52	283	3.36	32	5	ND	2	21	.2	2	2	51	.92	.049	12	11	.56	15	.39	3	1.02	.05	.35
3894	1	105	12	17	.2	79	44	490	9.45	19	5	ND	2	105	.9	2	2	17	4.38	.073	5	34	.66	9	.01	4	.71	.01	.11
3895	1	46	55	51	.2	9	21	415	4.57	2	5	ND	5	15	.2	2	2	46	.85	.016	16	41	.59	49	.25	2	1.33	.05	.01
3887	1	48	2	2	.1	17	5	90	.89	14	5	ND	4	5	.7	2	2	1	.20	.036	5	46	.07	13	.01	2	.33	.01	.29
3898	1	107	3	32	.5	43	31	422	5.27	2	5	ND	1	25	.6	2	2	7	2.39	.065	7	13	.11	1	.01	1	.73	.01	.01
3899	1	161	51	210	.7	62	29	302	4.31	2	5	ND	13	33	1.2	2	2	10	.70	.049	63	24	.93	57	.10	2	.95	.01	.70
3890	1	252	102	175	.5	37	28	323	9.45	2	5	ND	5	29	.5	2	2	70	.53	.014	26	43	1.03	33	.16	2	1.46	.01	.63
3891	2	7	5	8	.1	4	1	203	.35	2	9	ND	1	12	.2	2	2	1	.92	.410	2	8	.93	10	.01	7	.47	.01	.53
3892	2	6	6	16	.1	3	1	114	.21	2	5	ND	1	12	.2	2	2	1	.59	.142	2	3	.91	5	.01	4	.31	.01	.22
3893	4	45	35	574	.3	14	15	218	5.93	10	5	ND	6	34	2.5	2	2	16	2.69	.043	28	35	.70	50	.21	3	1.23	.01	.69
3894	1	121	52	77	.1	7	27	493	8.24	5	5	ND	2	19	.3	2	2	18	.51	.061	31	30	.82	66	.17	2	1.53	.06	.01
3895	2	4	38	5	.1	4	1	177	.23	2	7	ND	2	11	.2	2	2	1	.46	.169	2	7	.02	14	.01	5	.33	.01	.27
STANDARD C/AU-R	19	64	41	134	.73	72	32	1973	3.97	62	18	7	16	53	17.0	16	11	61	.56	.030	39	52	.86	175	.09	37	1.92	.06	.16

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 5ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR Hg FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA X AND AL. AN DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPM. SAMPLE TYPE: CORE. AUP\* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE. Samples beginning '95' are duplicate assays.

DATE RECEIVED: OCT 21 1991 DATE REPORT MAILED: Oct 25/91 SIGNED BY: G. JOYE, C. GEORG, J. SANG; CERTIFIED S.E. ASSAYERS

DARLIN  
D91-2 + 3

06/01/92 16:19 0004 FOR LIST 0003 0002



GEOCHEMICAL ANALYSIS CERTIFICATE

Rokanga Explorations Ltd. PROJECT DARLIN D91-8/D91-9 File # 91-5536  
104 - 135 - 10th Ave S., Cranbrook BC V1C 2H1 Submitted by: D.L. PLOMIN

SAMPLE#	As	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	Al	U	Au	Ti	Sr	Bi	Sb	Bl	V	Ca	P	La	Cr	Mg	Ba	Tl	B	M	K	Li
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	
00702	2	322	22	127	5	57	102	162	2.57	2	5	ND	2	26	13	3	2	22	.88	.031	4	16	.13	33	.11	2	.77	.08	.02
00703	2	22	220	32	1	6	3	80	.74	76	5	ND	1	4	7	2	2	3	.56	.005	2	13	.95	9	.05	2	.24	.01	.02
00704	4	11	13	13	1	7	2	71	.47	25	5	ND	1	2	5	2	2	5	.22	.005	2	44	.05	10	.02	2	.16	.03	.02
00705	1	1284	367	5	2	64	105	63	27.07	9	5	ND	1	1	2	2	2	4	.83	.004	2	15	.07	10	.02	4	.12	.01	.09
RE 00710	3	52	28	49	3	23	14	239	2.18	116	5	ND	11	14	2	2	2	11	.60	.004	2	42	.08	37	.09	2	1.20	.02	.25
00706	1	27	24	61	1	5	10	115	1.24	96	5	ND	1	5	4	2	2	13	.43	.002	2	10	.15	7	.01	2	.35	.02	.03
00707	5	21	9	10	1	19	5	166	1.63	91	5	ND	5	29	2	2	2	1	.60	.012	6	34	.46	24	.01	4	.42	.01	.15
00708	2	14	7	10	1	7	7	641	2.96	853	5	ND	7	22	2	2	2	1	2.82	.005	2	10	.95	14	.01	3	.32	.02	.08
00709	2	20	2	70	1	18	7	632	3.55	6	5	ND	3	39	3	2	2	75	2.66	.022	17	51	1.66	22	.32	2	2.12	.02	.13
00710	2	47	27	50	3	30	15	253	3.41	109	5	ND	12	14	2	2	1	11	.90	.010	23	35	.86	37	.09	2	1.17	.01	.12
00711	1	10	6	49	1	28	18	233	2.94	342	5	ND	4	25	2	3	3	20	.79	.003	4	85	1.40	30	.02	3	1.01	.01	.12
00712	2	130	16	25	1	45	20	319	5.26	7	5	ND	7	21	2	2	2	11	1.04	.030	12	3	.65	33	.09	2	.66	.03	.28
00713	3	34	2	63	1	91	67	1018	3.83	3185	5	ND	2	168	6	2	2	42	10.67	.028	10	145	1.85	16	.05	2	1.84	.01	.09
00714	2	167	28	40	6	42	38	337	11.31	34	5	ND	7	45	2	2	11	10	2.17	.070	21	20	.56	21	.11	2	.93	.04	.21
03897	2	270	8	21	2	25	67	429	13.65	239	5	ND	3	52	17	4	20	13	5.01	.019	5	17	.29	21	.11	2	.23	.01	.11
03899	2	4	28	67	1	11	8	1526	4.06	50	5	ND	3	24	2	2	2	13	1.34	.017	10	18	1.09	19	.03	2	2.73	.01	.19
03900	2	307	77	33	6	47	49	275	10.94	2	5	ND	7	27	2	4	4	9	.55	.030	19	15	.61	33	.09	3	.91	.03	.19
STANDARD C	19	50	37	135	7.2	71	34	1064	4.00	43	18	7	40	52	18.9	15	20	56	.49	.091	38	58	.90	104	.09	35	1.90	.09	.17

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPM. SAMPLE TYPE: CORE AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE. Samples beginning 'RE' are duplicate samples.

DDI-b

DATE RECEIVED: NOV 20 1991 DATE REPORT MAILED: Nov 25/91 SIGNED BY: [Signature] D. TOIE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

DARLIN