BRITISH NEWFOUNDLAND EXPLORATION LIMITED
Geological and Geochemical Report
Perkins, Westoll, Dickie, Grimley, & Burnett
Groups of Mineral Claims
Lake Lady Laurier Liard M.D. B.C.

57° 124° S.E.

94B/12E

By; Dr. Neil Westoll
and Joseph Sullivan of Vancouver B.C.

Claim owner:
BRITISH NEWFOUNDLAND EXPLORATION LIMITED
Field Period June 27 to August 25 1972
Report Period; August 28 to December 22 1972

Report Date: December 22 1972

2414

BRITISH NEWFOUNDLAND EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

4142

LAKE LADY LAURIER

LIARD M D., B.C.

57° 124° S.E.

By:

DR. NEIL WESTOLL

and

JOSEPH SULLIVAN P. ENG.,

VANCOUVER B.C.

Field Period: June 16th to October 3, 1972

Report Period: September 28th to December 22, 1972

TABLE OF CONTENTS.

INTRODUCTION

This report is to supplement the geological and geochemical plan maps to be found in the back envelope.

The key map, following this page, gives the location of all the plans and sections with respect to the claim groups involved and to the geographic co-ordinates. For ease in map reading the same co-ordinate systems appear in each plan.

The principals included in the program are:

Dr. Neil Westoll, Box 668, West Vancouver B.C.

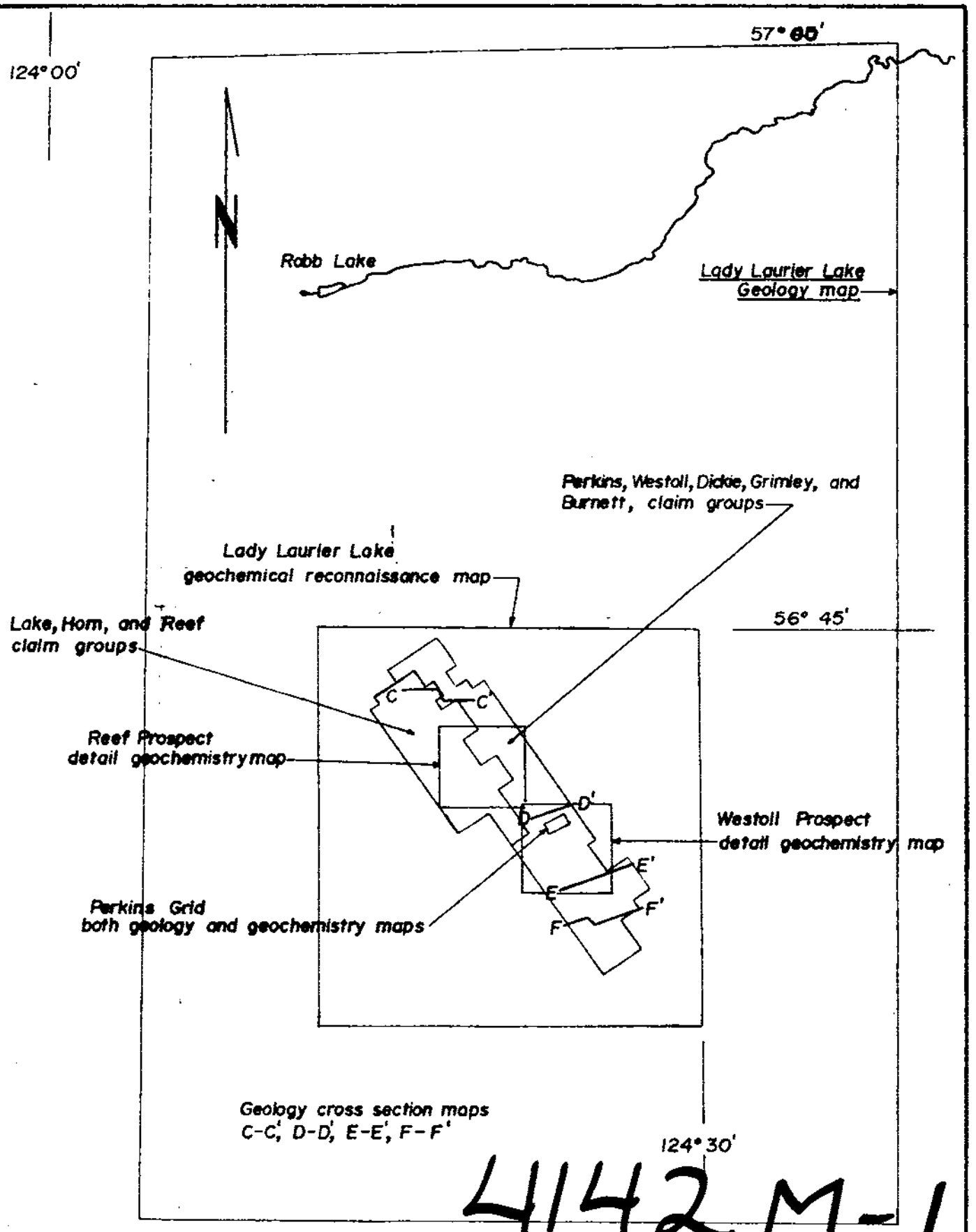
Dr. G.J. Dickie, University of Windsor, Ontario.

Dr. Matti Tavela, 1909 West Broadway, Vancouver, B.C.

Evan Burnett, 1909 West Broadway, Vancouver, B.C.

Joseph Sullivan, P.Eng., 3908 S.E. Marine Drive, Burnaby,B.C.

Contributions made by the individual is acknowledged throughout the text.



4142 M-1

British Newfoundland Exploration Limited

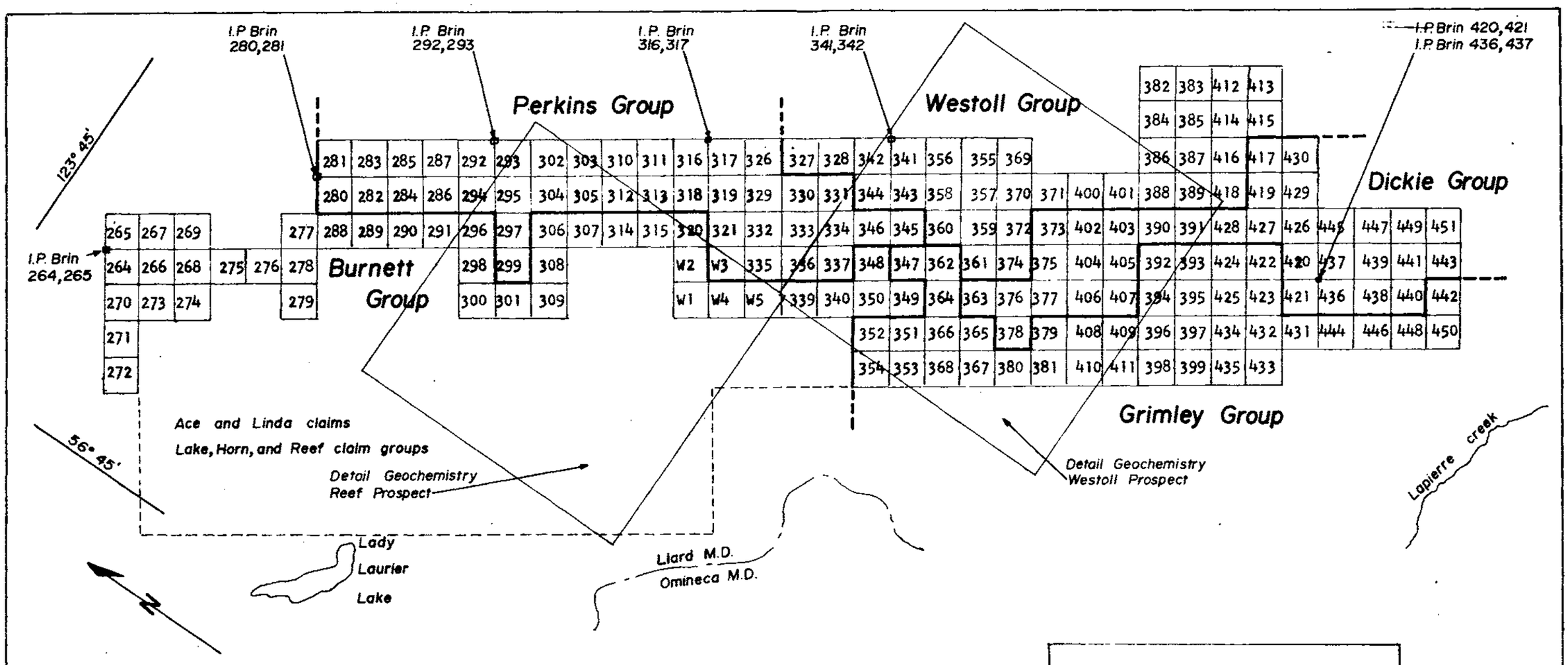
Key Location map of Geology and Geochemical map sheets

Date: November 1972 Scale: 1" = 4 miles Drawn by: E.B.

Properties and Locations (57° 124° S.E.)

There are 188 mineral claims divided into three 40 claim groups and two 34 claim groups listed on the following location sketch as the Perkins, Westoll, Dickie, Grimley and Burnett groups.

The groups trend from 1½ miles north of Lady Laurier Lake southeasterly for 9½ miles, in the Liard Mining Division. The area is in the centre of the Rocky Mountain crest, 80 miles north of MacKenzie and 110 miles west-north-west of Ft.St.John. It is accessible by light fixed wing aircraft, landing on Lake Lady Laurier or on the adjoining dirt airstrip. A horse trail leads to the area from Christina Falls, 20 miles to the east. The elevation is from 4000 to 6500 feet of rugged youthful topography, half of which lies above the timber line. Traversing can be easy locally, but on a larger scale only a helicopter can provide suitable transportation, outside of horse trails.



Grouping

W1, W2 . . . = West Claims
280, 410, etc = Brin Claims

PERKINS	WESTOLL	DICKIE	GRIMLEY	BURNETT
40 claims	34 claims	34 claims	40 claims	40 claims
Brin 280-287	Brin 327-328	Brin 363,373	Brin 347	Brin 264-279
292-295	341-344	375-378	351-354	288-291
297,299	355-361	390-391	362	296,298
302-305	369-372	402-407	364-368	300-301
310-313	374	417,419	379-381	306-309
316-319	382-389	420-421	392-399	314-315
321,326	400-401	426-430	408-411	320
329-337	412-416	436-441	422-425	339-340
345-346	418	443,445	431-435	348-350
West 3		447,449,451	442,444 446,448,450	West 1,2,4,5

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4142 MAP #2

British Newfoundland Exploration Limited		
Location Sketch Brin & West Claims	Perkins Group	Grimley Group
	Westoll Group	Burnett Group
	Dickie Group	October 1972.
Base: Mineral claim map 94B/12E (M)	0 1 miles 2	

Mapping Controls.

Geological observations were plotted on the existing topographic maps of 1:50,000, controlled by altimeter and such topographic features as streams, lakes and ridges.

Geochemical surveys were based on the same topographic maps as the geology, plus pace-compass traverses, tape-compass traverses, and lightly worked grids.

Some observations, both geologically and geochemically, were plotted on nylon film overlying air photographs. Claim posts were tied to the surveys when encountered.

Survey Procedures.

(a) Geological

The map area affords 50 to 70 percent rock exposure. Large outcrops visited have been outlined fully on the plan, other outcrops and outcrop areas are designated by the attitudes plotted along traverse lines. In many areas the rugged topography adds the third dimension to the observations.

(b) Geochemical

The geochemical surveys proceeded first as reconnaissance, then in more detail if the analyses indicated positive results, and finally along grid lines where the first two procedures showed groupings of positive results.

Rock float boulders were collected whenever warranted by reconnaissance geochemistry but where the slopes were steep this

was done by average chip sampling along traverses. Stream silts taken at close intervals and close to their source provided much reconnaissance material. Soil samples were taken in many instances instead of silts. Detail soils are from lines or grids on level ground or along contours on slopes.

Sample preparation and analysis was performed by Chemex Labs. Ltd.,North Vancouver B.C. using standard geochemical procedures. the 80 mesh fractions were digested by hot nitric/perchloric acid and read by Atomic Absorption Spectroscopy for several base metals and silver. For gold the digestion was made by Aqua Regia and after extraction the reading was made as above. Values are appended.

Survey Results.

(a) Geological * (See accompanying geological plan).

Stratigraphy.

Silurian (1)

The oldest confirmed rocks in the study area are of Silurian age and occur in the centre of major anticlines and in overthrust blocks from the west. As a general rule, the Silurian rocks are dark grey in outcrop and consist of fossiliferous dolomite, cherty dolomite, sandstone and shale. The most conspicuous and useful fossils are corals and brachiopods, in particular the coral genus Halysites which does not occur in the Devonian. The corals generally occur in a fine-tomicro crystalline dolomite and indicate clear, shallow water deposition while the brachiopods are found in a shaly dolomite, indicating muddy depositional conditions.

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* Dr. G.J. Dickie,University of Windsor, Ontario.

Interbedded Silurian dolomites and sandstones form resistant units and occur widely in the core of the Bernard Anticline and as thrust sheets west of Mt. Bertha. More shaly sections are found in the thrust blocks to the west and north of the Bernard Anticline. It appears that the muddy depositonal conditions predominated to the west, and the clear shallow seas were more to the east.

Lower Devonian

Interbedded black limestone and shale. (2)

Unit 2 in the Marini claims area is an interbedded black limestone and shale with minor calcareous sandstone. Regionally, it is lithologically most similar to a black dolomite and limestone unit found underlying the sandy dolomite (Unit 3) in the south of the Bernard Anticline and in the Mt. Bertha area. The Devonian strata in the cross section C-C' are very different lithologically from the Devonian strata in other parts of the area and appear to be westerly equivalents of units 2, 3, 4 and 5. However, direct correlation of these units with the strata in cross section C-C' is difficult, and the identification of Unit 2 is on the basis of some lithologic similarity.

The Lower Devonian age is suggested by the presence in the limestone of "two-hole crinoids", crinoid stems with two or more holes in the centre. These fossils are found only in rocks of Lower Devonian or possibly Lower Mid Devonian age.

Sandstone (3a)

A section of quartz sandstone overlies the known Silurian dolomites in the area west of Mt.Bertha and may be equivalent to the Wokkpash Formation defined by Taylor and Mackenzie (1970). No fossils were found in or near the sandstone but in a stratigraphically equivalent position north of Lake Lady Laurier, fossils of early Devonian or late Silurian age were collected.

Dolomite and Sandy Dolomite (3)

The quartz sandstone in most occurrences grades upward into a dolomitic quartz sandstone to a sandy dolomite over approximately 100 feet. Overlying the very sandy sequence is approximately 800 feet of alternating dolomitic sandstone, sandy dolomite,and crinoidal, microcrystalline dolomite with no age significant fossils. Various horizons in this formation (which correlates with the Stone Formation of Taylor and Mackenzie) have been partly recrystallised to white coarse crystalline dolomite with large quartz crystals formed in vugs. The recrystallised zones are less resistant and often occur under talus and show the "breccia" texture.

Middle Devonian (Dunedin Formation)(4) (4a)

Middle Devonian rocks are black shaly limestones with the development of dark grey fossiliferous "reefal" dolomites at various stratigraphic levels. In some cases, these dolomites directly overlie the light grey Lower Devonian dolomites and the boundary must be drawn on the colour of the rock and the indications of fossils. Where extensive recrystallisation has occurred, the boundary cannot be distinguished. The "reefs"in the Mt. Bertha area

are small in area and are about 50 feet thick, resembling scattered patch reefs which were subsequently covered by shaly limestone -- a deep water environment. The area of patch reefs grades south into the thicker reefs of the Robb Lake area and the Reef Mountain area. The carbonate build up on Reef Mountain which appears to be reefal is about 200 feet and a similar thickness is found 1½ miles south of the Westoll prospect. In the Nabesche area, reefal developments are again numerous but small in area and in thickness.

Good faunal samples established that all of the reefs were equivalent to the Pine Point Formation (C.R. Stelck) and that the overlying shaly limestones were the same age or only slightly younger.

The reefal dolomites were strongly recrystallised in many places and showed the "zebra" banded texture. However, only minor visible mineralisation was found in these dolomites.

Middle Devonian to Mississippian (Besa River Shale) (5) (5a)

The black, non-calcareous shales of the Besa River Formation are very widespread in the area and overlie either the shaly limestone or recrystallised dolomite. The contact is usually conformable but the lithologic change is always distinct. The shales underlie the broad flat knolls in the West Bertha area and probably underlie the entire valley west of Mt.Bertha. The dolomite in the Robb Lake area is terminated to the east by the black shales as are the Middle Devonian formations in the Laurier area. In the Nabesche area, the black shales overlie the Middle Devonian reefs and also contain Upper Devonian reefs. The Besa River Formation could be subdivided in this area.

The Besa River shales outcrop only in creeks and usually are very fissile and contorted. Consequently, it is difficult to interpret any structures in the shale. It apparently reacted very pliably to stress.

Mississippian. (Prophet Formation) (7)

These rocks were not examined in outcrop, but from the air they appear to be dark, shaly and cherty dolomites. Part of the formation is recessive and forms valleys in conjunction with the Besa River shales. Other parts form low, linear ridges in these valleys so are slightly more resistant.

Structure.

There are two main structural features in the area:

1. a series of NNW - SSE trending anticlines and synclines;
2. a very strong thrusting from the WSW

In the Laurier and Nabesche areas, the broad, gently folded Bernard Anticline is the prominent structure. On the east limb of the anticline the dips steepen rapidly and there appears to have been under-thrusting within the strata on the east, causing a repetition of section in places. On the west a majorthrust plate of Silurian and Ordovician shales and carbonates overrides the anticline and covers the western equivalents of the Devonian rocks on the east. In the south, a second thrust sheet containing Devonian rocks parallels the anticlinal structure but there is no evidence that this outer sheet containing Devonian rocks extends further north than the Nabesche River.

North of Lady Laurier Lake, the thrusting carries Devonian and Silurian rocks well to the east forming a multiple thrust block, and cutting off the nose of the Bernard Anticline. Between Lady Laurier Lake and Robb Lake, Silurian rocks are thrust over to the Besa River Shales and there are no Devonian carbonates present. At Robb Lake, there appear to be two anticlines in the Devonian carbonates, but on the west a major Silurian thrust block overrides much of the Devonian section.

The structure at the Cusker cliffs south of Sidenius Creek is unclear and complex. A large mountain of flat lying Silurian and Ordovician rocks seems to be adjacent to outcrops of Devonian sandy dolomites. A normal fault has been drawn on the geological map but it is not definite. The Devonian carbonates are tightly folded in an overturned anticline which can be traced to the northern limit of the map. Further to the west, one thrust sheet carries a section of Silurian and Devonian rocks over Middle Devonian limestone and then another thrust brings Silurian over Devonian.

The axis of the overturned anticline in Devonian carbonates may become a thrust plane in places in response to further compression. The east limb of the anticline produces further, gentler folds until it is thrust on to Besa River shales.

Mount Bertha and the hill to the south is a gently dipping thrust block in which the west edge has high dips and could pass into a structurally complex zone in the valley west of the mountain.

SUMMARY.

The area has been subjected to large-scale compression in a west-east direction and the resulting structures indicate multiple periods of deformation. Initially, the rocks were folded into large anticlines and synclines but continued pressure caused steepening of the limbs and overturning. Thrusting occurred both with very large blocks and also as smaller structures within blocks. Compression may still have continued because some of the thrust planes appear to be deformed, e.g. Mount Bertha.

Porosity, Recrystallisation and Possible Host Rocks.

The host rocks from the Robb Lake ore body were originally grey fine to medium crystalline dolomite possibly with some fossil fragments. The dolomite has subsequently been extensively re-crystallised to white, coarse crystalline dolomite along a series of small fractures in the rock. The resulting rock has the appearance of dolomite "breccia", but shows no characteristics of a true breccia apart from the angular fragments.

Much dolomite of a very similar type was found in all of the claim areas, particularly in the east of the Laurier area on the Reef Mountain and in the Perkins prospect. Two differences are apparent - the Laurier rocks still have very high porosity while most of the Robb Lake rocks have been fully cemented, and there are abundant quartz crystals in the Laurier rocks while quartz is rare at Robb Lake.

The main recrystallised zone is between the sandy dolomites of (?) Lower Devonian age and the fossiliferous dolomites of the Middle Devonian. Apparently, rocks of both units were affected by the recrystall-

isation which may have been caused by subaerial exposure of the rocks and the passage of evaporite formation waters at the end of the period of reef growth.

Another type of recrystallisation is a more local effect where fine (o.2 inch) alternating bands of grey original dolomite and white, coarse crystalline dolomite occur. This "zebra" rock is found near the ore zone at Robb Lake, and it was thought that it may be a useful feature. The banding was found, in this survey, closely associated with Stromatoporoids in the dolomite reefs and the fine bands probably originate in the layered structure of the Stromatoporoids. Therefore the "zebra" banding will point to a reef, but it is unclear whether a reef points to an ore concentration.

(b) Geochemical ** (See accompanying maps 5 and 6)

A geochemical discovery was made on the area designated as the Perkins Grid. The rocks are characterised by a zinc distribution of from 5 to 30 ppm and a lead distribution of 45 ppm. The soils for zinc have two peaks, one from 20 to 30 ppm and a second at 100 ppm while the lead soil distribution peaks in the 55 to 60 ppm range. If the soil is local the origin of the zinc culminating at 100 ppm is uncertain. It may be an expression of eroded ore-bodies or it may indicate that several bedrock anomalies exist. The distribution of this high zinc soil is not restricted to areas of high bedrock counts but encompasses most of the grid.

** Dr. Matti Tavela, 1909 West Broadway, Vancouver, B.C.

In the Westoll area, one half mile south and east of the Perkins Grid (Map 6) the dolomites are brecciated and carry zinc values only in the mixed carbonates filling the thin fractures. It is thought, therefore, that geochemistry will not be effective here for the zinc in the fractures is unlikely to come from the barren country rock, but may be substantiating a very distant source.

CONCLUSIONS.

Strongly recrystallised dolomite is widespread in the Perkins group area. The structure here is relatively simple, that is, beds dipping easterly at 30 degrees. High zinc values found in the rock samples in the northeast quadrant of the Perkins Grid give a contourable anomaly if they are combined with the surrounding zinc-soil values and with the zinc-rock threshold placed at 100 ppm. The resulting anomaly coincides with a re-crystallised breccia zone making the Perkins area a good geological-geochemical risk for more intensive exploration programmes.

Respectfully submitted,

Dr. N. Westoll

Joseph Sullivan P.Eng.

Vancouver B.C.
December 22 1972

ITEMISED MANDAYS OF WORK

LADY LAURIER LAKE CLAIMS

Claim Group.		Perkins (40 claims)	Westoll (34 claims)	Dickie (34 claims)	Grimley (40 claims)	Burnett (40 claims)	Total per person.	
Personnel.	Salary. ($ day)							
Sullivan	125.00	1	1	1	1	1	5	652
McCormack	75.00	-	-	1	-	-	1	80
Dickie	75.00	1	-	-	-	1	2	161
Tavela	56.50	7	6	7	8	6	34	2160
Westoll (N)	50.00	7	6	9	7	9	38	2160
Burnett	27.50	15	14	10	13	11	63	2080
Hastings	23.40	2	6	3	1	4	16	462
Sharp	23.40	3	2	2	4	4	15	433
Walker	23.40	2	2	2	3	3	12	347
Carne	16.70	5	4	3	4	4	20	444
Sinke	16.70	1	2	2	3	6	14	313
Perkins	15.00	5	2	6	1	3	17	349
Lee	15.00	8	3	4	6	3	24	492
Westoll (M)	15.00	2	2	2	3	2	11	226
Mah (Cook)	25.00	1	1	1	1	1	5	125
								10484
Total per claim block		60	51	53	55	58	277	Total man days.

2064.50
1778.20
1932.30
1939.60
2042.40
9757

SUB-MINING RECORDER
RECEIVED
FEB 5 1973
M.R. # 80633 $ 925.00
VANCOUVER, B. C.

Declared before me at the VANCOUVER, B.C. , in the

of

Province of British Columbia, this FEB 5 1973 , A.D.

day of

Neil Brailsford

Sub-Mining Recorder

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

CONSOLIDATED DECLARATION OF COSTS

LADY LAURIER LAKE CLAIMS

PERKINS, WESTOLL, DICKIE, GRIMLEY AND BURNETT CLAIM GROUPS

	CLAIM GROUP				
EXPENSES	PERKINS (40 claims)	WESTOLL (34 claims)	DICKIE (34 claims)	GRIMLEY (40 claims)	BURNETT (40 claims
Wages & Board	$ 2,064.50	$ 1,778.20	$ 1,932.30	$ 1,939.60	$2,042.40
Helicopter Costs	875.67	826.33	789.33	900.33	875.67
Geochemical Analysis	1,182.80	849.40	711.80	1,287.70	1,108.80
TOTALS	$ 4,122.97	$ 3,453.93	$ 3,433.43	$ 4,127.63	$4,026.87

Declared before me at the VANCOUVER, B. C.,
of
Province of British Columbia, this FEB 5 1973 in the
day of

Sub - Mining Recorder.

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA. } In the Matter of The Perkins Group of mineral claims. Laurier Lake area of the Liard M.D.

TO WIT:

I, Neil Westoll

of 615 Burley Drive, West Vancouver

in the Province of British Columbia, do solemnly declare that

on behalf of British Newfoundland Exploration Ltd., Four Thousand One Hundred and Twenty-two Dollars ($4122.00) were spent on geological and geochemical surveys on the above mentioned claim group during the period February 1, 1972 and January 31, 1973. The work report and distribution of expenses are submitted herewith.

Wages & Board	$2,064.50
Helicopter Costs	875.67
Geochemical Analysis	1,182.80
TOTAL:	$4,122.97

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of VANCOUVER, B. C. Vancouver in the Province of British Columbia, this FEB 5 1973 day of , A.D.

Neil Westoll

Sub - Mining Recorder

A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.

Sub - mining Recorder

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of

The Westoll Group of mineral claims
Laurier Lake Area of the Liard M.D.

I,

Neil Westoll

of

615 Burley Drive, West Vancouver,

in the Province of British Columbia, do solemnly declare that

on behalf of British Newfoundland Exploration Ltd., Three Thousand Four Hundred and Fifty-three Dollars ($3453.00) were spent on geological and geochemical surveys on the above mentioned claim group during the period February 1,1972 and January 31,1973. The work report and distribution of expenses are submitted herewith.

Wages & Board	$ 1,778.20
Helicopter Costs	826.33
Geochemical Analysis	849.40
TOTAL:	$ 3,453.93

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver VANCOUVER, B.C. in the Province of British Columbia, this FEB 5 1973 day of A.D.

Neil Westoll

Sub - Mining Recorder

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

Sub - mining Recorder

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA. } In the Matter of The Dickie Group of mineral claims Laurier Lake Area of the Liard M. D.

TO WIT:

I, Neil Westoll

of 65 Burley Drive, West Vancouver,

in the Province of British Columbia, do solemnly declare that

on behalf of British Newfoundland Exploration Ltd., Three Thousand Four Hundred and Thirty-three Dollars ($3433.00) were spent on geological and geochemical surveys on the above mentioned claim group during the period February 1, 1972 and January 31, 1973. The work report and distribution of expenses are submitted herewith.

Wages & Board	$ 1,932.30
Helicopter Costs	789.33
Geochemical Analysis	711.80
TOTAL:	$ 3433.43

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 5 day of FEB 1973 A.D.

VANCOUVER, B. C.

Sub-Mining Recorder

Neil Westoll

A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.

Sub-mining Recorder

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
TO WIT:

In the Matter of The Grimley Group of mineral claims Laurier Lake Area of the Liard M.D.

I, Neil Westoll

of 615 Burley Drive, West Vancouver

in the Province of British Columbia, do solemnly declare that

on behalf of British Newfoundland Exploration Ltd., Four Thousand One Hundred and Twenty-seven Dollars (4127.00) were spent on geological and geochemical surveys on the above mentioned claim group during the period February 1,1972 and January 31,1973 . The work report and distribution of expenses are submitted herewith.

Wages & Board	$ 1,939.60
Helicopter Costs	900.33
Geochemical Analysis	1,287.70
TOTAL:	$ 4,127.63

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of VANCOUVER, B. C. Vancouver, in the Province of British Columbia, this FEB 5 1973 day of A.D.

Neil Westoll

Sub - Mining Recorder

A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.

Sub - mining Recorder

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of The Burnett Group of mineral claims Laurier Lake Area Liard M. D.

I, Neil Westoll

of 615 Burley Drive, West Vancouver,

in the Province of British Columbia, do solemnly declare that

on behalf of British Newfoundland Exploration Ltd., Four Thousand and Twenty-six Dollars ($4026.00) were spent on geological and geochemical surveys on the above mentioned claim group during the period February 1, 1972 and January 31, 1973. The work report and distribution of expenses are submitted herewith.

Wages & Board	$ 2,042.40
Helicopter Costs	875.67
Geochemical Analysis	1,108.80
TOTAL:	$ 4,026.87

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the VANCOUVER, B. C. of Vancouver, in the Province of British Columbia, this 7 day of FEB 5 1973

Neil Westoll

Sub - Mining Recorder

A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.

Sub - mining Recorder

LIST OF GEOCHEMICAL ANALYSIS

BY CHEMEX LABS LTD., NORTH VANCOUVER B.C.

BRIN CLAIMS LAURIER BLOCK

JUNE, JULY, AUGUST AND SEPTEMBER 1972.

VALUES IN PPM EXCEPT FOR Au IN PPB

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
600		37	102	0.5	1			644		91	41	0.5	3		
601		37	102	0.5	2			645		69	43	0.5	4		
612		40	148	0.5	2			646		69	18	0.5	4		
603		44	155	0.5	2			647		67	18	0.5	4		
604		50	218	0.5	3			648		69	60	0.5	2		
605		42	164	0.5	2			649		69	20	0.5	4		
606		42	115	0.5	2			650		91	62	0.5	4		
607		46	131	0.5	2			651		63	225	0.5	1.5		
608		48	108	0.5	2			652		72	112	0.5	1.5		
609		44	98	0.5	2			653		84	65	0.5	2		
610		48	179	0.5	3			654		74	36	0.5	4		
611		48	155	0.5	2			655		94	80	0.5	2		
612		42	148	0.5	2			656		50	92	0.5	1		
613		42	160	0.5	2			657		84	95	0.5	2		
614		42	135	0.5	2			658		62	65	0.5	1		
615		44	112	0.5	2			659		37	55	0.5	1		
616		42	115	0.5	2			660		81	95	0.5	2		
617		42	120	0.5	2			661		48	70	0.5	2		
618		62	30	0.5	3			662		79	140	0.5	2		
619		65	11	0.5	4			663		69	29	0.5	4		
620		65	14	0.5	3			664		81	95	0.5	2		
621		62	9	0.5	4			665		84	98	0.5	2		
622		63	5	0.5	3			666		40	60	0.5	1		
623		64	13	0.5	4			667		91	65	0.5	2		
624		69	16	0.5	4			668		64	14	0.5	5		
625		69	16	0.5	4			669		81	112	0.5	1.5		
626		67	32	0.5	3			670		69	22	0.5	4		
627		72	45	0.5	4			671		46	98	0.5	1		
628		65	4	0.5	4			672		69	32	0.5	4		
629		62	225	0.5	2			673		64	22	0.5	4		
630		52	115	0.5	2			674		84	55	0.5	2.5		
631		93	184	0.5	2			675		67	16	0.5	5		
632		74	18	0.5	3			676		62	9	0.5	4.5		
633		74	11	0.5	4			677		140	92	0.5	2.5		
634		74	13	0.5	4			678		52	62	0.5	1		
635		74	7	0.5	4			679		67	127	0.5	2		
636		60	45	0.5	1			680		65	14	0.5	4.5		
637		77	32	0.5	3			681		69	18	0.5	5		
638		79	11	0.5	4			682		82	75	0.5	3		
639		76	22	0.5	3			683		54	98	0.5	2		
640		76	36	0.5	3			684		33	55	0.5	1		
641		93	120	0.5	1.5			685		96	123	0.5	2.5		
642		67	16	0.5	4.5			686		79	144	0.5	2		
643		65	16	0.5	4.5			687		80	65	0.5	3.5		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
688		89	112	0.5	2			743		84	31	0.5	3		
689		60	14	0.5	5			744		74	110	0.5	1		
690		76	22	0.5	4			745		88	66	0.5	2		
691		54	108	0.5	2			746		81	55	0.5	2		
692		82	131	0.5	1.5			747		72	44	0.5	3		
693		91	115	0.5	3			748		74	25	0.5	4		
694		58	102	0.5	1			749		67	120	0.5	2		
695		96	127	0.5	1.5			750		54	22	0.5	4		
696		76	135	0.5	2			751		76	46	0.5	3		
697		54	75	0.5	1.5			752		65	18	0.5	4		
698		76	115	0.5	1.5			753		69	23	0.5	3		
699		77	41	0.5	4			754		72	18	0.5	4		
700		69	83	0.5	2			755		46	78	0.5	1		
701		69	24	0.5	5			756		54	76	0.5	1		
702		74	24	0.5	4			757		62	78	0.5	2		
703		65	16	0.5	5			758		70	17	0.5	3		
704		84	39	0.5	4			759		67	31	0.5	3		
707		37	80	0.5	1			760		62	104	0.5	1		
708		65	140	0.5	2			761		65	15	0.5	3		
709		22	72	0.5	1			762		60	15	0.5	4		
710		77	98	0.5	2			763		56	68	0.5	2		
711		62	16	0.5	4.5			764		56	22	0.5	4		
712		63	65	0.5	3.5			765		62	42	0.5	3		
713		82	169	0.5	1.5			766		67	18	0.5	4		
714		76	108	0.5	3			767		70	28	0.5	3		
715		62	95	0.5	2			768		62	74	0.5	2		
716		62	135	0.5	2			769		74	22	0.5	3		
717		50	95	0.5	1.5			770		62	78	0.5	1		
718		54	98	0.5	3			773		69	25	0.5	3		
719		50	95	0.5	2			774		72	117	0.5	2		
720		52	95	0.5	1.5			775		50	82	0.5	1		
721		72	148	0.5	2			776		105	93	0.5	2		
722		42	92	0.5	1.5			777		110	63	0.5	2		
723		60	102	0.5	2			778		65	31	0.5	3		
724		31	77	0.5	1			779		63	32	0.5	4		
725		69	72	0.5	1.5			780		62	95	0.5	1		
726		67	55	0.5	4			781		62	23	0.5	3		
727		56	92	0.5	2			782		54	130	0.5	1		
728		69	92	0.5	2			783		94	82	0.5	1		
729		69	22	0.5	4			784		84	82	0.5	2		
730		93	102	0.5	2			785		62	30	0.5	1		
731		76	60	0.5	3.5			786		77	168	0.5	2		
732		70	105	0.5	2			787		52	87	0.5	1		
733		82	25	0.5	4			788		100	149	0.5	1		
734		81	32	0.5	3			789		84	66	0.5	2		
735		70	31	0.5	3			790		39	126	0.5	1		
736		74	29	0.5	3			791		54	40	0.5	3		
737		81	25	0.5	4			792		63	57	0.5	3		
738		84	173	0.5	2			793		63	58	0.5	3		
739		63	130	0.5	1			794		63	50	0.5	3		
740		74	63	0.5	3			795		63	56	0.5	2		
741		70	28	0.5	3			796		70	110	0.5	1		
742		77	58	0.5	2			797		82	63	0.5	3		
								798		56	90	0.5	1		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
799		82	58	0.5	3			852		60	144	0.5	2		
800		67	55	0.5	4			853		58	112	0.5	1		
801		65	48	0.5	3			854		35	89	0.5	2		
802		65	38	0.5	3			855		81	108	0.5	2		
803		62	95	0.5	3			856		82	127	0.5	2		
804		65	48	0.5	3			857		54	174	0.5	1		
805		63	104	0.5	2			858		74	89	0.5	2		
806		74	23	0.5	4			859		63	80	0.5	2		
807		60	90	0.5	2			860		60	89	0.5	2		
808		70	25	0.5	3			861		77	179	0.5	2		
809		67	63	0.5	3			862		79	70	0.5	3		
810		69	34	0.5	3			863		69	65	0.5	2		
811		60	120	0.5	2			864		39	86	0.5	1		
812		63	40	0.5	3			865		77	65	0.5	3		
813		74	95	0.5	2			866		40	65	0.5	2		
814		63	110	0.5	3			867		50	112	0.5	2		
815		62	113	0.5	3			868		94	67	0.5	2		
816		62	95	0.5	3			869		60	92	0.5	1		
817		65	21	0.5	4			870		39	120	0.5	1		
818		67	98	0.5	3			871		48	148	0.5	2		
819		62	110	0.5	3			872		50	105	0.5	2		
820		69	130	0.5	3			873		89	155	0.5	2		
821		52	123	0.5	2			874		35	80	0.5	1		
822		72	34	0.5	1			875		50	144	0.5	1		
823		65	18	0.5	4			876		52	218	0.5	2		
824		44	93	0.5	1			877		50	102	0.5	2		
825		56	140	0.5	1			878		60	174	0.5	2		
826		54	110	0.5	2			879		39	86	0.5	2		
827		63	62	0.5	2			880		39	89	0.5	1		
828		52	138	0.5	1			881		48	148	0.5	2		
829		67	32	0.5	4			882		48	206	0.5	2		
830		65	18	0.5	4			883		52	57	0.5	3		
831		81	50	0.5	4			884		191	144	0.5	3		
832		67	21	0.5	4			885		76	275	0.5	2		
833		48	138	0.5	1			886		52	89	0.5	3		
834		50	140	0.5	1			887		46	144	0.5	2		
835		63	133	0.5	1			888		60	135	0.5	1		
836		67	36	0.5	3			889		77	92	0.5	3		
837		63	55	0.5	3			890		62	34	0.5	3		
838		69	163	0.5	2			891		77	13	0.5	3		
839		62	107	0.5	2			892		60	18	0.5	3		
840		62	101	0.5	2			893		79	127	0.5	2		
841		67	23	0.5	3			894		65	120	0.5	1		
842		54	102	0.5	1			895		93	86	0.5	2		
843		70	131	0.5	1			896		76	60	0.5	2		
844		62	98	0.5	1			897		88	50	0.5	2		
845		40	120	0.5	1			898		88	102	0.5	2		
846		40	77	0.5	1			899		54	83	0.5	1		
847		40	95	0.5	1			900		70	75	0.5	2		
848		63	36	0.5	3			901		69	77	0.5	2		
849		48	233	0.5	2			902		81	62	0.5	2		
850		58	123	0.5	1			903		76	50	0.5	3		
851		40	105	0.5	1			904		42	115	0.5	1		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
905		82	105	0.5	1			959		65	115	0.5	2		
906		89	75	0.5	2			960		62	131	0.5	1		
907		52	120	0.5	1			961		60	18	0.5	3		
908		58	108	0.5	2			962		69	70	0.5	2		
909		42	65	0.5	1			963		63	18	0.5	3		
910		54	80	0.5	1			964		72	45	0.5	2		
911		52	77	0.5	1			965		67	28	0.5	3		
912		74	47	0.5	2			966		42	127	0.5	1		
913		46	65	0.5	1			967		62	127	0.5	1		
914		62	92	0.5	1			968		44	131	0.5	1		
915		67	92	0.5	1			969		58	52	0.5	2		
916		62	80	0.5	2			970		44	123	0.5	1		
917		67	127	0.5	1			971		62	164	0.5	1		
918		67	43	0.5	3			972		52	155	0.5	1		
919		35	67	0.5	1			973		28	89	0.5	1		
920		56	135	0.5	1			974		82	189	0.5	2		
921		76	28	0.5	3			975		44	131	0.5	1		
922		63	72	0.5	2			976		63	230	0.5	1		
923		65	65	0.5	2			977		40	131	0.5	1		
924		50	127	0.5	1			978		44	123	0.5	1		
925		82	194	0.5	2			979		44	160	0.5	1		
926		58	75	0.5	1			980		39	174	0.5	1		
927		65	105	0.5	1			981		52	206	0.5	2		
928		67	98	0.5	1			982		72	248	0.5	2		
929		81	189	0.5	1			983		79	206	0.5	1		
930		98	135	0.5	2			984		63	52	0.5	3		
931		74	155	0.5	1			985		72	65	0.5	3		
932		63	112	0.5	1			986		69	135	0.5	1		
933		65	102	0.5	1			987		62	25	0.5	3		
934		74	205	0.5	2			988		67	169	0.5	2		
935		74	144	0.5	1			989		63	152	0.5	2		
936		67	102	0.5	1			990		46	140	0.5	1		
937		89	98	0.5	1			991		65	179	0.5	2		
938		48	127	0.5	1			992		96	127	0.5	1		
939		33	89	0.5	1			993		81	98	0.5	1		
940		48	80	0.5	1			994		48	184	0.5	1		
941		88	184	0.5	1			995		56	152	0.5	1		
942		50	108	0.5	1			996		54	148	0.5	1		
943		42	75	0.5	1			997		76	248	0.5	2		
944		72	105	0.5	1			998		39	70	0.5	1		
945		44	112	0.5	1			999		79	155	0.5	3		
946		58	189	0.5	2			1000		77	148	0.5	3		
947		56	115	0.5	2			1084	10	48	41	0.5	4		
948		65	70	0.5	2			1085	8	50	41	0.5	4		
949		67	80	0.5	2			1115		56	34	0.5	5		
950		48	123	0.5	1			1116		60	90	0.5	2		
951		52	105	0.5	1			1117		67	31	0.5	4		
952		62	127	0.5	1			1118		69	40	0.5	3		
953		20	34	0.5	1			1119		65	32	1.0	4		
954		31	52	0.5	1			1120		67	22	0.5	4		
955		62	20	0.5	3			1121		67	53	0.5	3		
956		39	92	0.5	1			1122		58	44	1.0	3		
957		50	127	0.5	1			1123		58	48	1.0	3		
958		52	144	0.5	1			1124		54	46	0.5	3		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
1125		50	74	0.5	2			1177		58	42	0.5	3		
1126		56	68	0.5	3			1178		56	123	0.5	2		
1127		52	40	1.0	4			1179		54	31	0.5	3		
1128		52	31	1.0	4			1180		52	42	0.5	4		
1129		50	31	0.5	4			1181		54	58	0.5	3		
1130		58	42	1.0	5			1182		56	31	1.0	4		
1131		52	34	1.0	4			1183		52	38	0.5	4		
1132		60	34	0.5	4			1184		54	31	1.0	4		
1133		48	66	0.5	3			1185		54	44	0.5	4		
1134		56	40	1.0	4			1186		58	48	1.0	4		
1135		50	66	1.5	3			1187		54	66	1.0	4		
1136		48	44	0.5	3			1188		52	58	1.0	4		
1137		39	42	0.5	1			1189		56	48	1.0	4		
1138		44	63	0.5	3			1190		65	58	0.5	4		
1139		58	50	0.5	4			1191		84	66	0.5	4		
1140		54	107	0.5	3			1192		56	57	0.5	3		
1141		52	101	0.5	2			1193		54	42	0.5	4		
1142		48	78	0.5	2			1194		52	42	0.5	3		
1143		56	48	0.5	3			1195		54	23	0.5	4		
1144		44	42	0.5	2			1196		44	50	0.5	4		
1145		58	32	0.5	3			1197		58	62	1.0	4		
1146		63	36	0.5	3			1198		50	29	0.5	5		
1147		82	46	0.5	2			1199		58	44	1.0	5		
1148		48	76	0.5	3			1200		58	31	1.0	4		
1149		56	34	0.5	4			1201		56	53	1.0	4		
1150		50	34	0.5	3			1202		54	34	1.0	4		
1151		42	31	1.0	4			1203		58	32	0.5	4		
1152		46	38	0.5	4			1204		54	44	0.5	4		
1153		48	66	0.5	4			1205		54	38	0.5	4		
1154		63	78	1.0	2			1206		40	28	0.5	3		
1155		40	87	0.5	2			1207		48	28	0.5	4		
1156		58	98	1.0	3			1208		50	34	1.0	4		
1157		31	84	0.5	1			1209		74	110	1.0	3		
1158		52	55	0.5	3			1210		52	29	0.5	4		
1159		54	25	0.5	3			1211		50	36	0.5	4		
1160		37	66	0.5	1			1212		52	36	0.5	4		
1161		59	48	0.5	3			1213		54	40	1.0	4		
1162		60	23	1.0	4			1214		56	44	1.0	4		
1163		63	17	0.5	4			1215		56	44	1.0	4		
1164		63	25	0.5	4			1216		50	42	0.5	4		
1165		62	28	1.0	4			1217		52	40	0.5	4		
1166		58	44	0.5	4			1218		54	34	0.5	4		
1167		48	21	0.5	4			1219		50	32	0.5	4		
1168		56	38	1.0	4			1220		52	32	0.5	4		
1169		50	58	0.5	4			1221		52	22	1.0	5		
1170		46	58	0.5	3			1222		54	29	1.0	4		
1171		42	58	0.5	2			1223		48	28	0.5	4		
1172		48	53	1.0	3			1224		46	23	0.5	4		
1173		62	34	0.5	4			1225		52	57	0.5	3		
1174		58	48	0.5	3			1226		52	57	0.5	2		
1175		54	34	1.0	4			1227		54	34	0.5	4		
1176		48	53	1.0	4			1228		48	32	0.5	4		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
1229		50	44	0.5	3			2062	20	54	86	0.5	4	22	
1230		48	31	0.5	4			2063	22	39	123	0.5	2	18	
1231		46	55	0.5	3			2064	20	300	2080	0.5	12	20	
1232		48	36	0.5	4			2065	18	191	1240	0.5	10	22	
1233		44	44	0.5	3			2066	10	62	135	0.5	3	14	
1234		54	50	0.5	3			2067	22	40	140	0.5	2	16	
1235		52	44	0.5	3			2068	38	81	194	0.5	4	46	
1236		56	44	0.5	3			2069	50	94	200	0.5	5	40	
1237		48	40	0.5	3			2070	13	60	89	0.5	2	14	
1238		54	32	0.5	4			2071	6	62	16	0.5	5	20	
2019	4	58	22	0.5	5	22		2072	18	63	233	0.5	2	20	
2020	51	237	57	2.0	8	34		2073	12	58	189	0.5	2	13	
2021	7	52	28	0.5	4	18		2074	18	37	105	0.5	2	18	
2022	14	65	89	1.0	3	18		2075	21	65	115	0.5	2	22	
2023	8	50	50	0.5	4	16		2076	22	37	73	0.5	2	15	
2024R	12	22	11	0.5	2	7		2077	30	39	160	0.5	2	18	
2025	7	67	18	0.5	5	22		2078	20	39	108	0.5	2	14	
2026	6	39	20	0.5	3	20		2079	21	60	140	0.5	2	14	
2027	7	54	25	0.5	4	20		2080	26	40	108	0.5	2	14	
2028	14	52	155	0.5	2	14		2081	31	50	152	0.5	2	24	
2029	8	56	28	0.5	4	16		2087	14	63	75	0.5	3	13	30
2030	7	46	47	0.5	4	16		2088	12	117	95	0.5	3	13	30
2031	16	30	160	0.5	2	10		2089	7	82	34	0.5	4	10	30
2032	30	35	152	0.5	2	14		2090	13	50	63	0.5	3	10	30
2033	12	26	65	0.5	1	9		2091	12	56	72	0.5	3	10	30
2034	18	31	112	0.5	1	9		2092	12	63	75	0.5	3	10	30
2035R	26	70	70	2.0	6	44		2093	16	72	113	0.5	4	13	30
2036	28	40	194	0.5	2	13		2094	14	63	113	0.5	3	10	30
2037	31	39	95	0.5	2	18		2095	10	42	104	0.5	2	7	30
2038	6	52	22	0.5	5	20		2096	16	56	89	0.5	4	13	30
2039	12	44	41	0.5	2	14		2097	18	30	292	0.5	4	10	30
2040	7	60	47	0.5	4	18		2098	44	37	100	0.5	2	20	30
2041	4	58	43	0.5	5	20		2124	13	22	155	0.5	3	10	30
2042	4	60	28	0.5	5	20		2125	10	31	72	0.5	3	14	30
2043	10	82	43	0.5	3	18		2126	14	31	155	0.5	4	13	30
2044	10	63	115	0.5	3	16		2127	13	39	95	0.5	4	16	30
2045	4	60	28	0.5	5	18		2128	14	40	115	0.5	5	16	30
2046	3	54	24	0.5	5	18		2129	21	40	80	0.5	2	10	30
2047	6	60	34	0.5	5	18		2130	12	31	120	0.5	3	13	30
2048	3	62	24	0.5	5	18		2131	12	39	102	0.5	5	16	30
2049	3	60	20	0.5	5	20		2132	14	42	112	0.5	4	16	30
2050	4	63	30	0.5	5	20		2133	18	39	179	0.5	4	18	30
2051	13	69	148	0.5	3	14		2134	12	39	102	0.5	4	18	30
2052	12	60	52	0.5	4	16		2137	7	40	30	0.5	2	14	30
2053	7	40	83	0.5	1	7		2138	10	60	62	0.5	2	16	30
2054	8	62	115	0.5	4	16		2139	10	72	47	0.5	3	20	30
2055	8	58	67	0.5	3	14		2140	7	76	43	0.5	4	20	30
2056	21	60	75	0.5	4	22		2141	7	63	34	0.5	4	20	30
2057	13	79	77	0.5	2	14		2142	8	91	102	0.5	4	22	30
2058	22	60	75	0.5	4	20		2143	8	63	60	0.5	3	18	30
2059	14	67	160	0.5	3	14		2144	18	31	225	0.5	2	18	30
2060	21	40	108	0.5	2	13		2145	46	40	98	0.5	2	26	30
2061	14	62	72	0.5	4	18		2146	38	40	80	0.5	2	22	30

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
2147	7	60	24	0.5	1	9	30	2220		82	184	0.5	2		
2148	14	40	152	0.5	2	16	30	2221		67	169	0.5	2		
2149	18	35	86	0.5	2	20	30	2222		39	47	0.5	1		
2150	22	37	70	0.5	2	24	30	2223		56	105	0.5	1		
2151	20	44	108	0.5	3	22	30	2224		67	123	0.5	3		
2152	22	42	112	0.5	2	24	30	2225		96	80	0.5	1		
2153	18	46	83	0.5	3	18	30	2226		62	184	0.5	1		
2154	12	37	123	0.5	2	16	30	2227		74	135	0.5	2		
2155	14	37	105	0.5	2	18	30	2228		74	89	0.5	3		
2156	24	42	83	0.5	3	22	30	2229		54	144	0.5	1		
2157	22	35	77	0.5	2	22	30	2230		65	92	0.5	1		
2158	14	37	108	0.5	2	18	30	2231		63	120	0.5	1		
2159R	1	48	12	0.5	4	22	30	2232		56	127	0.5	2		
2160	20	44	149	0.5	2	20	30	2233		82	248	0.5	2		
2161	22	37	207	0.5	2	22	30	2234		98	11	0.5	4		
2162	38	18	10	0.5	1	2	30	2235		58	98	0.5	1		
2163	20	35	183	0.5	2	16	30	2236		67	89	0.5	1		
2164	14	39	138	0.5	2	16	30	2237		69	144	0.5	1		
2165	10	18	55	0.5	1	7	30	2238		84	105	0.5	2		
2166	31	37	188	0.5	2	20	30	2239		86	105	0.5	1		
2167	16	20	76	0.5	1	9	30	2240		56	95	0.5	1		
2168	18	48	265	0.5	2	13	30	2241		58	108	0.5	1		
2169R	3	63	29	0.5	4	28	30	2242		60	65	0.5	1		
2170	18	30	250	0.5	2	16	30	2243		65	77	0.5	1		
2171	14	20	48	0.5	1	7	30	2244		58	86	0.5	1		
2172	12	26	178	0.5	1	10	30	2245		63	77	0.5	1		
2173	13	20	138	0.5	1	10	30	2246		108	50	0.5	2		
2174	28	28	74	0.5	2	26	30	2247		86	39	0.5	3		
2175	18	22	110	0.5	2	14	30	2248		48	120	0.5	1		
2176	18	22	101	0.5	2	18	30	2249		58	98	0.5	1		
2177	8	14	23	0.5	1	6	30	2250		59	105	0.5	1		
2178	7	14	50	0.5	1	6	30	2251		63	80	0.5	1		
2179	7	12	36	0.5	1	6	30	2252		81	43	0.5	3		
2180	12	26	82	0.5	2	13	30	2253		58	120	0.5	1		
2181	10	20	76	0.5	1	9	30	2254		63	77	0.5	2		
2182R	1	48	8	0.5	4	22	30	2255		62	131	0.5	1		
2183	13	52	107	0.5	4	24	30	2256		88	24	0.5	3		
2184	10	50	82	0.5	3	22	30	2257		115	72	0.5	2		
2185	13	60	104	0.5	4	24	30	2258		88	43	0.5	3		
2186	600	237	480	2.5	6	158	30	2259		77	55	0.5	2		
2207		69	102	0.5	2			2260		77	24	0.5	3		
2208		100	265	0.5	3			2261		62	127	0.5	1		
2209		94	535	0.5	3			2262		52	112	0.5	1		
2210		82	211	0.5	2			2263		58	127	0.5	1		
2211		74	240	0.5	1			2264		52	108	0.5	1		
2212		86	152	0.5	2			2265		70	67	0.5	2		
2213		89	317	0.5	2			2266		39	57	0.5	1		
2214		88	169	0.5	3			2267		86	50	0.5	3		
2215		89	140	0.5	1			2268		112	164	0.5	2		
2216		100	470	0.5	3			2269		62	80	0.5	1		
2217		65	123	0.5	2			2270		72	140	0.5	2		
2218		60	155	0.5	1			2271		48	65	0.5	2		
2219		77	108	0.5	1			2272		77	98	0.5	2		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
2273		50	108	0.5	1			2326		52	86	0.5	4		
2274		58	72	0.5	1			2327		42	80	0.5	1		
2275		50	115	0.5	1			2328		56	112	0.5	2		
2276		62	77	0.5	1			2329		62	30	0.5	3		
2277		30	39	0.5	1			2330		50	47	0.5	1		
2278		62	95	0.5	1			2331		84	39	0.5	2		
2279		46	75	0.5	1			2332		69	28	0.5	2		
2280		77	112	0.5	1			2333		63	20	0.5	3		
2281		42	67	0.5	1			2334		76	18	0.5	3		
2282		62	135	0.5	1			2335		79	22	0.5	3		
2283		96	70	0.5	2			2336		67	22	0.5	3		
2284		84	57	0.5	2			2337		70	20	0.5	4		
2285		86	30	0.5	3			2338		79	24	0.5	4		
2286		106	160	0.5	2			2339		69	22	0.5	4		
2287		62	305	0.5	2			2340		65	16	0.5	4		
2288		60	200	0.5	2			2341		72	14	0.5	3		
2289		96	45	0.5	3			2342		81	18	0.5	3		
2290		118	184	0.5	2			2343		60	18	0.5	3		
2291		65	184	0.5	2			2344		63	20	0.5	3		
2292		98	640	0.5	3			2345		62	18	0.5	3		
2293		67	95	0.5	3			2346		63	25	0.5	3		
2294		63	360	0.5	3			2347		76	36	0.5	3		
2295		42	123	0.5	2			2348		67	22	0.5	3		
2296		58	83	0.5	3			2349		77	16	0.5	3		
2297		40	184	0.5	1			2350		79	25	0.5	3		
2298		54	86	0.5	4			2351		81	34	0.5	3		
2299		81	152	0.5	2			2352		67	32	0.5	3		
2300		63	75	0.5	2			2353		67	22	0.5	3		
2301		42	41	0.5	1			2354		70	25	0.5	3		
2302		56	144	0.5	2			2355		69	25	0.5	3		
2303		42	120	0.5	1			2356		70	28	0.5	3		
2304		50	200	0.5	2			2357		74	22	0.5	3		
2305		52	174	0.5	2			2358		60	22	0.5	4		
2306		70	16	0.5	1			2359		70	30	0.5	3		
2307		39	41	0.5	1			2360		58	13	0.5	3		
2308		77	184	0.5	1			2361		70	25	0.5	3		
2309		35	80	0.5	1			2362		72	25	0.5	3		
2310		54	233	0.5	1			2363		69	25	0.5	3		
2311		26	67	0.5	1			2364		69	28	0.5	3		
2312		42	89	0.5	1			2365		74	43	0.5	3		
2313		50	174	0.5	2			2366		88	65	0.5	2		
2314		58	265	0.5	3			2367		81	47	0.5	1		
2315		50	20	0.5	4			2368		79	47	0.5	3		
2316		48	89	0.5	3			2369		81	95	0.5	1		
2317		63	135	0.5	2			2370		77	83	0.5	1		
2318		94	218	0.5	2			2371		96	77	0.5	2		
2319		60	155	0.5	1			2532	13	24	155	0.5	2	9	30
2320		31	92	0.5	1			2533	14	26	127	0.5	2	13	30
2321		44	112	0.5	1			2534	13	22	131	0.5	2	10	30
2322		40	211	0.5	2			2535	13	24	123	0.5	2	10	30
2323		26	55	0.5	1			2536	13	24	105	0.5	2	10	30
2324		39	148	0.5	3			2537	16	31	132	0.5	2	13	30
2325		31	105	0.5	1			2538	13	26	112	0.5	2	10	30

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
2539	13	22	105	0.5	2	10	30	2724R	3	60	13	0.5	4	22	30
2540	13	22	108	0.5	2	9	30	2725	7	30	66	0.5	1	10	30
2541	13	26	112	0.5	2	10	30	2726	14	191	275	0.5	3	24	30
2542	12	37	102	0.5	2	14	30	2727	7	18	130	0.5	2	6	30
2543	13	37	194	0.5	3	18	30	2728	16	48	234	0.5	1	18	30
2544	10	22	108	0.5	1	7	30	2729	18	237	28	0.5	4	24	30
2545	24	31	440	0.5	5	18	30	2730	10	79	98	0.5	3	20	30
2546	21	30	89	0.5	2	16	30	3113	22	37	98	0.5	2	20	
2680R	8	93	20	0.5	5	26		3114	13	22	123	0.5	1	10	
2681R	6	70	7	0.5	5	22		3115	12	26	95	0.5	2	10	
2682R	200	1552	57	3.0	7	74		3116	14	31	77	0.5	2	16	
2683	13	93	20	0.5	5	22		3117	24	26	95	0.5	2	24	
2684R	18	42	14	0.5	1	10		3118	28	44	72	0.5	4	28	
2685R	7	72	13	0.5	5	22		3119	26	26	92	0.5	2	20	
2686R	8	84	22	0.5	5	24		3120	22	33	98	0.5	2	26	
2687R	13	122	9	0.5	6	24		3121	14	28	112	0.5	2	16	
2688R	8	76	14	0.5	4	18		3122	33	35	115	0.5	2	28	
2689R	4	63	9	0.5	6	28		3123	24	31	92	0.5	2	24	
2690R	7	88	7	0.5	6	22		3124	30	35	86	0.5	2	24	
2691	10	65	43	0.5	5	22		3125	46	33	77	0.5	2	20	
2692R	4	67	11	0.5	5	22		3126	10	22	72	0.5	2	9	
2693	10	58	43	0.5	4	20		3127	14	28	102	0.5	2	16	
2694R	12	40	2	0.5	2	13		3128R	4	42	7	0.5	5	18	
2695	8	60	41	0.5	5	20		3129	14	48	155	0.5	2	18	
2696R	6	74	16	0.5	5	20		3130	13	35	95	0.5	2	18	
2697R	8	81	18	0.5	5	20		3131	26	40	233	0.5	2	26	
2698R	6	50	9	0.5	5	20		3132	22	31	95	0.5	2	20	
2699R	21	180	14	0.5	5	22		3133	28	54	200	0.5	2	28	
2700R	4	50	13	0.5	5	20		3134	28	31	89	0.5	2	22	
2701R	6	62	7	0.5	5	22		3135	26	26	67	0.5	1	18	
2702R	7	58	7	0.5	5	24		3136	22	46	70	0.5	3	30	
2703	13	56	105	0.5	1	14		3137	24	24	65	0.5	1	18	
2704R	6	52	7	0.5	5	20		3138	30	40	86	0.5	2	30	
2705	13	70	86	0.5	1	14		3139	13	69	174	0.5	2	18	
2706R	7	31	45	0.5	2	18		3140	8	40	67	0.5	1	13	
2707R	20	42	9	0.5	4	32		3141	10	56	112	0.5	2	20	
2708R	3	56	5	0.5	6	22		3142	8	28	112	0.5	2	9	
2709	7	58	74	0.5	1	14	30	3300		40	45	0.5	3		
2710	1	48	13	0.5	4	22	30	3301		62	65	0.5	2		
2711	13	172	90	0.5	3	24	30	3302		60	65	0.5	3		
2712	8	63	78	0.5	2	2	30	3303		24	83	0.5	2		
2713	1	6	10	0.5	1	20	30	3304		24	47	0.5	2		
2714	12	72	138	0.5	2	16	30	3305		24	115	0.5	2		
2715	8	44	173	0.5	2	4	30	3306		26	155	0.5	1		
2716R	4	14	8	0.5	1	13	30	3307		26	140	0.5	1		
2717	7	31	178	0.5	2	22	30	3308		63	112	0.5	1		
2718	3	54	13	0.5	4	20	30	3309		58	140	0.5	1		
2719	20	172	120	0.5	2	13	30	3310		62	77	0.5	2		
2710	7	42	113	0.5	1	14	30	3311		89	98	0.5	1		
2721	21	212	960	0.5	5	14	30	3312		37	57	0.5	1		
2722	13	91	153	0.5	2	22	30	3313		39	102	0.5	1		
2723	10	103	73	0.5	2	16	30	3314		30	95	0.5	1		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
3314		30	95	0.5	1		
3315		33	95	0.5	1		
3316		26	123	0.5	1		
3317		28	135	0.5	1		
3318		58	77	0.5	1		
3319		30	77	0.5	1		
3320		33	112	0.5	1		
3321		48	164	0.5	1		
3322		39	83	0.5	1		
3323		30	62	0.5	2		
3324		39	83	0.5	2		
3325		28	98	0.5	2		
3326		33	112	0.5	2		
3327		35	83	0.5	2		
3328		46	39	0.5	3		
3329		48	57	0.5	3		
3558R	6	54	32	0.5	6	24	
3559R	4	54	25	0.5	6	22	
3561R	6	50	25	0.5	5	18	
3562R	4	65	16	0.5	6	22	
3563R	8	40	45	0.5	4	14	
3564R	4	60	25	0.5	6	22	
3565R	6	54	36	0.5	6	20	
3566R	4	54	32	0.5	6	22	
3567R	86	260	2600	2.5	29	83	
3568R	18	466	285	0.5	8	28	
3569	18	60	600	0.5	6	42	
3570	12	67	255	0.5	8	44	
3611		24	127	0.5	1		
3612		40	22	0.5	2		
3613		48	24	0.5	3		
3614		44	65	0.5	3		
3615		50	30	0.5	3		
3616		52	105	0.5	1		
3617		42	41	0.5	2		
3627							30
3628							30
3629							30
3630							30
3631							30
3632							30
3633							30
3745	3	62	15	0.5	4	16	
3746		54	22	0.5	3		
2747		52	34	0.5	3		
3748		56	32	0.5	3		
3749		63	28	0.5	4		
3750		105	7	0.5	4		
3751		77	34	0.5	3		
3752		69	62	0.5	3		
3753		63	65	0.5	3		
3754		62	11	0.5	4		
3755		69	11	0.5	4		
3756		72	13	0.5	3		
3757		58	16	0.5	3		
3758		52	12	0.5	4		
3759		77	34	0.5	4		
3760		63	28	0.5	3		
4601		172	89	0.5	6		
4602		77	14	0.5	5		
4603		74	24	0.5	6		
4604		67	9	0.5	5		
4605		65	43	0.5	6		
4606		58	11	0.5	5		
4607		58	11	0.5	5		
4608		54	9	0.5	4		
4609		58	7	0.5	5		
4610		60	11	0.5	6		
4611		56	9	0.5	6		
4612		58	36	0.5	5		
4613		58	18	0.5	6		
4614		54	7	0.5	5		
4615		50	7	0.5	5		
4616		50	7	0.5	5		
4617		50	7	0.5	5		
4618		50	9	0.5	5		
4619		52	11	0.5	5		
4620		52	14	0.5	6		
4621		52	11	0.5	5		
4622		52	11	0.5	5		
4623		50	16	0.5	5		
4624		48	9	0.5	5		
4625		48	9	0.5	5		
4626		50	13	0.5	5		
4627		56	7	0.5	5		
4628		52	11	0.5	5		
4629		54	9	0.5	5		
4630		50	9	0.5	5		
4631		48	9	0.5	5		
4632		48	5	0.5	5		
4633		48	5	0.5	5		
4634		48	11	0.5	5		
4635		50	5	0.5	5		
4636		50	9	0.5	5		
4637		50	7	0.5	5		
4638		52	7	0.5	5		
4639		50	4	0.5	5		
4640		54	4	0.5	5		
4641		44	5	0.5	4		
4642		44	4	0.5	5		
4643		50	6	0.5	5		
4644		48	4	0.5	5		
4645		48	4	0.5	5		
4646		48	4	0.5	5		
4647		50	4	0.5	5		
4648		46	4	0.5	5		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
4649		50	11	0.5	5			4750		70	18	1.0	4		
4650		62	13	0.5	5			4751		81	50	0.5	3		
4651		52	10	0.5	4			4752		86	101	0.5	1		
4652		52	7	0.5	4			4753		69	55	0.5	3		
4701		56	18	0.5	4			4754		79	120	0.5	1		
4702		48	12	0.5	5			4755		76	42	0.5	3		
4703		60	10	1.0	5			4756		88	104	0.5	2		
4704		56	10	0.5	4			4757		72	57	0.5	2		
4705		58	8	0.5	4			4758		63	50	0.5	1		
4706		58	15	0.5	5			4759		64	68	0.5	1		
4707		76	50	0.5	3			4760		61	76	0.5	1		
4708		60	21	0.5	4			4761		65	38	0.5	1		
4709		60	13	0.5	4			4762		67	25	0.5	4		
4710		65	78	0.5	2			4763		74	31	0.5	3		
4711		60	10	0.5	4			4764		70	34	0.5	2		
4712		60	8	0.5	4			4765		77	53	0.5	4		
4713		50	8	0.5	4			4766		74	29	0.5	4		
4714		58	8	0.5	4			4767		63	44	0.5	3		
4715		48	17	0.5	5			4768		52	28	0.5	3		
4716		56	8	0.5	5			4769		67	98	0.5	2		
4717		54	10	0.5	5			4770		60	123	0.5	1		
4718		60	13	0.5	5			4771		82	93	0.5	2		
4719		72	62	0.5	3			4772		69	21	0.5	4		
4720		65	13	0.5	4			4773		50	93	0.5	1		
4721		65	74	0.5	1			4774		93	32	0.5	2		
4722		56	21	0.5	4			4775		58	82	0.5	1		
4723		56	13	0.5	4			4776		42	82	0.5	1		
4724		63	8	0.5	4			4777		46	95	0.5	1		
4725		60	12	0.5	4			4778		67	250	0.5	1		
4726		52	12	0.5	4			4779		44	66	0.5	1		
4727		52	15	0.5	4			4780		67	31	0.5	4		
4728		67	13	0.5	4			4781		69	23	0.5	4		
4729		54	15	0.5	4			4782		58	57	0.5	1		
4730		54	21	0.5	4			4783		54	68	0.5	1		
4731		52	13	0.5	4			4784		76	98	0.5	2		
4732		54	12	0.5	4			4785		50	84	0.5	1		
4733		58	12	0.5	5			4786		62	76	0.5	1		
4734		56	8	0.5	4			4787		76	66	0.5	2		
4735		60	17	0.5	4			4788		67	21	0.5	4		
4736		62	21	0.5	4			4789		69	63	0.5	1		
4737		67	17	0.5	5			4790		63	95	0.5	2		
4738		58	10	0.5	5			4791		52	57	0.5	1		
4739		63	13	0.5	4			4792		52	71	0.5	1		
4740		56	15	0.5	4			4793		50	120	0.5	1		
4741		58	18	0.5	4			4794		81	48	0.5	1		
4742		67	13	0.5	4			4795		81	31	0.5	4		
4743		52	13	0.5	4			4796		52	66	0.5	1		
4744		65	13	0.5	4			4797		56	133	0.5	1		
4745		72	32	0.5	4			4798		82	76	0.5	2		
4746		74	25	0.5	4			4799		76	17	0.5	4		
4747		69	22	0.5	4			4800		70	28	0.5	4		
4748		67	22	0.5	4			4801		67	13	0.5	4		
4749		69	36	0.5	4			4802		62	50	0.5	1		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
4803		54	84	0.5	1			4856		81	45	0.5	3		
4804		79	38	0.5	3			4857		93	144	0.5	3		
4805		72	78	0.5	1			4858		46	70	0.5	1		
4806		50	78	0.5	1			4859		54	148	0.5	2		
4807		86	74	0.5	1			4860		65	135	0.5	2		
4808		54	32	0.5	1			4861		50	120	0.5	1		
4809		76	25	0.5	4			4862		48	80	0.5	2		
4810		84	50	0.5	2			4863		69	30	0.5	4		
4811		65	50	0.5	1			4864		69	72	0.5	2		
4812		52	110	0.5	1			4865		58	95	0.5	1		
4813		44	48	0.5	1			4866		65	140	0.5	2		
4814		54	63	0.5	1			4867		79	57	0.5	2		
4815		69	15	0.5	4			4868		82	83	0.5	2		
4816		77	50	0.5	2			4869		84	77	0.5	3		
4817		63	22	0,5	4			4870		52	95	0.5	2		
4818		72	25	0.5	3			4871		54	95	0.5	2		
4819		62	13	0.5	4			4872		76	52	0.5	3		
4820		58	40	0.5	1			4873		76	92	0.5	2		
4821		62	42	0.5	1			4874		63	67	0.5	2		
4822		69	55	0.5	2			4875		112	98	0.5	2		
4823		62	17	0.5	4			4876		67	60	0.5	2		
4824		69	42	0.5	3			4877		76	80	0.5	2		
4825		58	15	0.5	3			4878		62	102	0.5	2		
4826		52	65	0.5	1			4879		48	89	0.5	2		
4827		67	32	0.5	4			4880		89	43	0.5	4		
4828		58	127	0.5	2			4881		44	105	0.5	1		
4829		50	105	0.5	1.5			4882		54	123	0.5	2		
4830		67	144	0.5	2			4883		105	102	0.5	3		
4831		62	127	0.5	2			4884		65	105	0.5	2		
4832		67	20	0.5	5			4885		62	70	0.5	1		
4833		44	95	0.5	1.5			4886		54	102	0.5	2		
4834		50	89	0.5	2.5			4887		82	123	0.5	3		
4835		70	135	0.5	2			4888		44	108	0.5	2		
4836		65	123	0.5	2			4889		54	112	0.5	2		
4837		46	140	0.5	1			4890		58	144	0.5	2		
4838		52	102	0.5	1.5			4891		46	65	0.5	2		
4839		35	102	0.5	1.5			4892		50	148	0.5	2		
4840		67	102	0.5	1.5			4893		62	160	0.5	2		
4841		58	112	0.5	1			4894		56	115	0.5	2		
4842		52	123	0.5	1.5			4895		58	83	0.5	2		
4843		37	83	0.5	1.5			4896		101	164	0.5	3		
4844		50	112	0.5	2			4897		65	140	0.5	2		
4845		46	140	0.5	1.5			4898		54	115	0.5	2		
4846		72	92	0.5	2			4899		63	131	0.5	2		
4847		54	115	0.5	1			4900		37	148	0.5	2		
4848		67	123	0.5	2			4901		86	83	0.5	3		
4849		50	70	0.5	1			4902		39	75	0.5	2		
4850		77	75	0.5	2			4903		74	140	0.5	3		
4851		58	77	0.5	2			4904		39	80	0.5	2		
4852		37	105	0.5	1			4905		79	102	0.5	3		
4853		42	72	0.5	1			4906		69	57	0.5	4		
4854		79	140	0.5	3			4907		46	131	0.5	2		
4855		72	34	0.5	4			4908		63	83	0.5	2		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
4909		69	105	0.5	2			4961		54	24	0.5	4		
4910		46	102	0.5	3			4962		69	95	0.5	3		
4911		103	152	0.5	2			4963		40	92	0.5	2		
4912		52	102	0.5	3			4964		88	169	0.5	5		
4913		63	86	0.5	2			4965		48	86	0.5	2		
4914		67	123	0.5	2			4966		86	164	0.5	4		
4915		96	179	0.5	2			4967		155	179	0.5	5		
4916		62	131	0.5	2			4968		89	105	0.5	5		
4917		40	95	0.5	2			4969		60	28	0.5	5		
4918		63	112	0.5	2			4970		62	102	0.5	2		
4919		44	95	0.5	2			4971		76	127	0.5	5		
4920		129	140	0.5	3			4972		96	206	0.5	4		
4921		76	108	0.5	2			4973		84	140	0.5	4		
4922		76	112	0.5	2			4974		132	206	0.5	5		
4923		136	169	0.5	3			4975		86	83	0.5	4		
4924		139	105	0.5	2			4976		76	92	0.5	3		
4925		200	160	0.5	3			4977		48	152	0.5	2		
4926		98	112	0.5	2			4978		58	211	0.5	2		
4927		155	102	0.5	3			4979		65	32	0.5	5		
4928		139	135	0.5	2			4980		60	24	0.5	4		
4929		134	140	0.5	3			4981		62	47	0.5	3		
4930		89	164	0.5	5			4982		46	131	0.5	2		
4931		109	148	0.5	2			4983		44	108	0.5	1		
4932		116	83	0.5	2			4984		46	184	0.5	1		
4933		126	92	0.5	2			4985		60	148	0.5	1		
4934		107	72	0.5	2			4986		46	164	0.5	2		
4935		116	102	0.5	2			4987		46	155	0.5	2		
4936		88	105	0.5	2			4988		52	148	0.5	2		
4937		60	98	0.5	2			4989		44	169	0.5	2		
4938		70	102	0.5	2			4990		58	115	0.5	2		
4939		121	108	0.5	2			4991		48	102	0.5	2		
4940		94	120	0.5	2			4992		44	127	0.5	2		
4941		79	108	0.5	2			4993		50	115	0.5	2		
4942		77	95	0.5	2			4994		50	184	0.5	2		
4943		70	105	0.5	2			4995		54	144	0.5	2		
4944		63	105	0.5	3			4996		54	194	0.5	3		
4945		96	152	0.5	5			4997		60	174	0.5	3		
4946		60	140	0.5	2			4998		54	115	0.5	1		
4947		52	98	0.5	2			4999		50	95	0.5	2		
4948		52	123	0.5	2			5501	7	67	25	0.5	5		
4949		52	77	0.5	2			5502	10	58	34	0.5	4		
4950		67	112	0.5	2			5503	6	65	18	0.5	5		
4951		76	98	0.5	2			5504	7	69	32	0.5	4		
4952		70	102	0.5	2			5505	1	18	28	0.5	2		
4953		89	148	0.5	5			5506	8	68	40	0.5	4		
4954		72	211	0.5	3			5507	6	56	55	0.5	5		
4955		67	120	0.5	2			5508	7	63	29	0.5	5		
4956		67	140	0.5	2			5509	7	67	28	0.5	4		
4957		84	115	0.5	2			5510	7	62	44	0.5	4		
4958		40	77	0.5	2			5511	10	54	34	0.5	5		
4959		63	211	0.5	3			5512	14	69	55	0.5	5		
4960		91	174	0.5	5			5513	12	58	74	0.5	5		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
5514	16	54	1480	0.5	11			5566	7	70	25	0.5	4		
5515	12	76	149	0.5	5			5567	8	69	50	0.5	3		
5516	16	84	600	0.5	4			5568	14	72	74	0.5	2		
5517	10	76	349	0.5	3			5569	7	76	29	0.5	4		
5518	8	48	213	0.5	2			5570	12	63	153	0.5	3		
5519	14	69	168	0.5	2			5571	14	65	30	0.5	5		
5520	22	65	120	0.5	3			5572	18	67	50	0.5	5		
5521	14	89	520	0.5	5			5573	8	67	28	0.5	5		
5522	16	300	1000	0.5	8			5574	7	65	55	0.5	5		
5523	18	101	760	0.5	6			5575	28	50	68	0.5	2		
5524	20	270	1840	0.5	8			5576	12	63	66	0.5	3		
5525	12	70	560	0.5	5			5577	13	48	71	0.5	2		
5526	6	62	50	0.5	4			5578	10	65	34	0.5	4		
5527	12	79	200	0.5	3			5579	10	62	48	0.5	3		
5528	12	79	163	0.5	3			5580	20	40	153	0.5	3		
5529	13	180	250	0.5	5			5608	14	31	75	0.5	1		
5530	7	65	36	0.5	4			5609	14	42	179	0.5	1		
5531	7	63	25	0.5	4			5610	12	42	211	0.5	1		
5532	7	65	23	0.5	5			5611	18	48	120	0.5	2		
5533	7	67	29	0.5	4			5612	14	40	102	0.5	2		
5534	8	67	36	0.5	4			5613	21	50	305	0.5	2		
5535	6	63	38	0.5	5			5614	18	89	194	0.5	2		
5536	7	63	28	0.5	5			5615	20	89	206	0.5	2		
5537	4	62	18	0.5	5			5616	18	44	560	0.5	4		
5538	6	58	23	0.5	4			5628		69	10	1.0	5		
5539	4	58	21	0.5	4			5629		65	10	1.0	5		
5540	6	60	22	0.5	4			5630		62	12	1.0	5		
5541	6	63	28	0.5	5			5631		65	10	1.0	5		
5542	6	62	28	0.5	4			5632		69	12	1.0	5		
5543	6	56	25	0.5	5			5633		67	13	1.5	5		
5544	4	69	18	0.5	4			5634		63	12	1.5	5		
5545	6	63	32	0.5	4			5635		58	12	1.0	5		
5546	6	67	29	0.5	4			5636		62	13	1.0	5		
5547	7	67	32	0.5	4			5637		63	12	0.5	5		
5548	6	65	22	0.5	4			5638		63	10	1.0	5		
5549	6	62	25	0.5	4			5639		67	10	1.0	5		
5550	6	44	62	0.5	3			5640		70	10	1.0	5		
5551	7	60	101	0.5	5			5641		62	10	0.5	4		
5552	12	79	93	0.5	2			5642		58	12	0.5	5		
5553	6	63	57	0.5	3			5643		65	22	1.0	5		
5554	16	100	1480	0.5	8			5644		67	57	0.5	5		
5555	13	225	1240	0.5	9			5645		76	22	1.0	6		
5556	7	81	145	0.5	6			5646		67	25	0.5	4		
5557	7	70	76	0.5	4			5647		115	55	1.0	5		
5558	4	44	66	0.5	2			5648		58	25	0.5	4		
5559	12	58	40	0.5	4			5649		63	40	1.0	6		
5560	18	67	46	0.5	4			5650		65	28	1.0	6		
5561	7	72	32	0.5	4			5651		65	38	1.0	5		
5562	7	81	31	0.5	5			5652		60	31	1.0	5		
5563	10	82	117	0.5	3			5653		60	32	1.0	6		
5564	6	69	25	0.5	4			5654		62	23	1.5	5		
5565	7	79	25	0.5	4			5655		62	17	1.0	5		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
5656		62	17	1.0	5		
5657		58	34	1.0	5		
5658		63	62	1.5	6		
5659		58	44	1.0	5		
5660		58	50	1.0	6		
5661		60	63	1.0	5		
5662		56	38	1.0	5		
5663		56	40	1.0	6		
5664		54	28	1.0	5		
5665		52	50	0.5	3		
5666		54	18	0.5	5		
5667		52	23	1.0	4		
5668		52	21	0.5	4		
5669		46	23	0.5	3		
5670		60	17	1.5	5		
5671		62	66	1.5	5		
5672		65	17	1.5	5		
5673		58	25	1.0	5		
5674		62	15	1.0	5		
5675		62	18	1.5	5		
5676		56	15	1.0	5		
5677		60	13	1.0	5		
5678		58	31	1.5	4		
5679		52	83	0.5	2		
5680		62	41	0.5	2		
5681		50	47	0.5	1		
5682		60	92	0.5	3		
5683		76	39	0.5	3		
5684		54	70	0.5	3		
5685		48	9	0.5	3		
5686	1	56	20	0.5	4		
5687	1	54	9	0.5	4		
5688	1	58	11	0.5	4		
5689	1	54	11	0.5	4		
5690	6	12	34	0.5	1		
5691	1	56	16	0.5	4		
5692	1	52	13	0.5	4		
5693	1	48	13	0.5	5		
5694	1	54	7	0.5	4		
5695	1	62	9	0.5	4		
5696	1	54	16	0.5	4		
5697	3	67	7	0.5	5		
5698	1	58	5	0.5	5		
5699	1	58	9	0.5	5		
5700	1	48	5	0.5	4		
5701	1	56	9	0.5	5		
5702	1	56	7	0.5	5		
5703	1	52	7	0.5	5		
5704	1	54	7	0.5	4		
5705	1	58	9	0.5	4		
5706	1	54	7	0.5	5		
5707	1	54	7	0.5	5		
5708	1	56	5	0.5	4		
5709	1	172	5	0.5	4		
5710	1	60	5	0.5	4		
5711	1	56	5	0.5	5		
5712	1	56	5	0.5	5		
5713	1	52	5	0.5	4		
5714	1	54	7	0.5	5		
5715	4	58	25	0.5	4		
5716	1	52	5	0.5	5		
5717	1	56	4	0.5	5		
5801	8	58	135	0.5	4		
5802	8	65	77	0.5	3		
5803	10	65	127	0.5	2		
5804	14	67	140	0.5	2		
5805	12	37	105	0.5	1		
5806	8	46	148	0.5	3		
5807	6	52	62	0.5	3		
5808	7	42	108	0.5	1		
5809	3	58	16	0.5	4		
5810	6	63	18	0.5	4		
5811	4	67	18	0.5	4		
5812	4	65	24	0.5	4		
5813	8	62	55	0.5	3		
5814	7	52	86	0.5	3		
5815	8	70	50	0.5	3		
5816	6	58	32	0.5	4		
5817	4	50	16	0.5	3		
5818	10	62	57	0.5	3		
5819	7	56	83	0.5	2		
5820	6	42	86	0.5	1		
5821	4	31	89	0.5	1		
5822	4	58	39	0.5	3		
5823	7	35	92	0.5	1		
5824	7	42	127	0.5	1		
5825	7	35	140	0.5	1		
5826	7	54	174	0.5	1		
5827	7	35	98	0.5	1		
5828	12	54	140	0.5	2		
5829	8	62	120	0.5	2		
5830	12	52	135	0.5	2		
5831	4	62	20	0.5	4		
5832	7	63	112	0.5	1		
5833	7	76	41	0.5	3		
5834	1	42	18	0.5	2		
5835	3	58	24	0.5	3		
5836	7	48	30	0.5	2		
5837	3	58	14	0.5	4		
5838	4	52	24	0.5	3		
5839	4	52	16	0.5	3		
5840	3	58	25	0.5	4		
5841	12	42	45	0.5	2		
5842	6	60	18	0.5	3		
5843	7	58	18	0.5	3		
5844	8	58	36	0.5	2		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
5845	10	70	98	0.5	3			5898	12	76	86	0.5	2		
5846	8	65	98	0.5	2			5899	10	65	18	0.5	4		
5847	13	50	115	0.5	3			5900	3	62	18	0.5	4		
5848	12	40	194	0.5	3			5901	1	58	18	0.5	4		
5849	18	60	92	0.5	3			5902	8	58	80	0.5	3		
5850	8	50	164	0.5	2			5903	8	46	98	0.5	3		
5851	3	69	22	0.5	4			5904	1	60	50	0.5	4		
5852	8	58	218	0.5	2			5905	3	69	34	0.5	4		
5853	4	56	28	0.5	4			5906	8	60	65	0.5	3		
5854	12	69	55	1.0	4			5907	14	46	115	0.5	2		
5855	18	89	75	0.5	2			5908	8	48	131	0.5	2		
5856	7	44	105	0.5	1			5909	13	46	140	0.5	2		
5857	6	60	24	0.5	4			5910	10	44	179	0.5	2		
5858	6	65	135	0.5	2			5911	7	60	98	0.5	3		
5859	7	65	98	0.5	1			5912	6	65	28	0.5	4		
5860	10	117	179	0.5	3			5913	3	48	12	0.5	3		
5861	3	67	20	0.5	4			5914	3	58	11	0.5	3		
5862	4	82	34	0.5	4			5915	7	35	140	0.5	1		
5863	6	69	95	0.5	2			5916	6	40	25	0.5	2		
5864	8	72	144	0.5	2			5917	4	46	14	0.5	2		
5864	4	72	62	0.5	4			5918	6	46	14	0.5	2		
5866	3	65	25	0.5	4			5919	3	46	13	0.5	3		
5867	4	60	28	0.5	4			5920	3	58	16	0.5	3		
5868	6	48	67	0.5	1			5921	8	70	16	0.5	4		
5869	8	58	72	0.5	3			5950	8	58	77	0.5	3		
5870	20	70	70	0.5	3			5951	6	37	123	0.5	1		
5871	6	58	50	0.5	1			5952	10	52	115	0.5	2		
5872	4	449	41	0.5	2			5953	4	39	131	0.5	1		
5873	8	70	50	0.5	2			5954	4	42	75	0.5	1		
5874	7	35	144	0.5	1			5955	6	65	32	0.5	4		
5875	7	700	179	0.5	2			5956	8	37	108	0.5	1		
5876	12	62	164	0.5	2			5957	4	52	34	0.5	3		
5877	10	128	410	0.5	3			5958	6	56	105	0.5	3		
5878	18	400	975	0.5	5			5959	10	40	89	0.5	1		
5879	4	123	233	0.5	5			5960	7	65	45	0.5	4		
5880	8	40	160	0.5	2			5961	8	67	112	0.5	2		
5881	28	56	45	0.5	3			5962	3	65	39	0.5	3		
5882	22	58	75	0.5	1			5963	7	69	39	0.5	3		
5883	22	65	43	0.5	4			5964	6	65	98	0.5	3		
5884	24	65	43	1.0	4			5965	6	63	50	0.5	3		
5885	26	39	108	0.5	2			5966	6	58	50	0.5	3		
5886	12	67	65	0.5	3			5967	4	54	32	0.5	4		
5887	6	60	41	0.5	3			5968	4	54	75	0.5	4		
5888	10	63	140	0.5	3			5968R		200	98	0.5	4		
5889	7	69	89	0.5	2			5969R		84	20	0.5	3		
5890	6	70	120	0.5	2			5970R		70	20	0.5	3		
5891	4	39	43	0.5	4			5971R		22	25	0.5	1		
5892	4	65	45	0.5	4			5972R		58	7	0.5	3		
5893	10	62	89	0.5	3			5973		40	13	0.5	4		
5894	8	72	160	0.5	2			5974		37	7	0.5	4		
5895	8	58	89	0.5	1			5975		35	2	0.5	3		
5896	16	72	102	0.5	1			5976		39	2	0.5	4		
5897	7	70	70	0.5	3			5977		35	7	0.5	4		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
5978		35	7	0.5	4			6031		40	3	0.5	4		
5979		39	3	0.5	3			6032		39	2	0.5	4		
5980		33	3	0.5	4			6033		37	3	0.5	3		
5981		31	2	0.5	3			6034		37	3	0.5	4		
5982		33	3	0.5	3			6035		39	2	0.5	4		
5983		31	3	0.5	3			6036		37	3	0.5	3		
5984		35	3	0.5	4			6037		37	2	0.5	4		
5985		35	3	0.5	4			6038		40	3	0.5	3		
5986		33	3	0.5	4			6039		42	2	0.5	4		
5987		33	3	0.5	4			6040		40	3	0.5	3		
5988		35	3	0.5	4			6041		40	2	0.5	4		
5989		33	3	0.5	4			6042		42	2	0.5	4		
5990		35	5	0.5	4			6043		42	5	0.5	4		
5991		33	7	0.5	4			6044		42	3	0.5	4		
5992		39	3	0.5	4			6045		48	5	0.5	4		
5993		42	3	0.5	4			6046		44	2	0.5	4		
5994		40	3	0.5	3			6047		42	3	0.5	4		
5995		40	3	0.5	3			6048		39	3	0.5	3		
5996		39	2	0.5	3			6049		42	3	0.5	3		
5997		33	2	0.5	3			6050		39	3	0.5	3		
5998		35	2	0.5	3			6051		38	2	0.5	3		
5999		42	3	0.5	3			6052		35	3	0.5	3		
6000		39	2	0.5	3			6053		38	2	0.5	3		
6001		39	3	0.5	4			6054		33	7	0.5	3		
6002		42	2	0.5	3			6055		44	8	0.5	3		
6003		47	7	0.5	3			6056		42	7	0.5	3		
6004		40	3	0.5	4			6057		39	10	0.5	3		
6005		44	2	0.5	3			6058		40	7	0.5	3		
6006		33	2	0.5	3			6059		42	7	0.5	3		
6007		46	3	0.5	3			6060		40	7	0.5	3		
6008		35	2	0.5	3			6061		40	8	0.5	3		
6009		35	2	0.5	3			6062		40	7	0.5	3		
6010		44	2	0.5	4			6063		42	10	0.5	3		
6011		35	2	0.5	3			6064		40	7	0.5	3		
6012		37	2	0.5	3			6065		39	7	0.5	3		
6013		39	2	0.5	3			6066		39	7	0.5	3		
6014		40	2	0.5	4			6067		40	7	0.5	3		
6015		35	2	0.5	3			6068		39	7	0.5	3		
6016		39	2	0.5	3			6069		40	8	0.5	3		
6017		39	2	0.5	3			6070		40	10	0.5	3		
6018		39	2	0.5	4			6071		40	8	0.5	3		
6019		35	2	0.5	3			6072		42	8	0.5	3		
6020		37	3	0.5	3			6073		40	8	0.5	3		
6021		35	2	0.5	3			6074		44	10	0.5	3		
6022		37	3	0.5	3			6075		39	7	0.5	3		
6023		37	2	0.5	3			6076		40	7	0.5	3		
6024		37	2	0.5	3			6077		39	7	0.5	3		
6025		40	3	0.5	3			6078		40	8	0.5	3		
6026		40	3	0.5	4			6079		40	12	0.5	3		
6027		40	3	0.5	3			6080		39	7	0.5	3		
6028		40	3	0.5	4			6081		40	10	0.5	3		
6029		40	3	0.5	4			6082		39	10	0.5	3		
6030		40	2	0.5	3			6083		37	8	0.5	3		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
6084		40	10	0.5	3			6137		37	7	0.5	3		
6085		39	7	0.5	3			6138		37	7	0.5	3		
6086		39	10	0.5	3			6139		42	5	0.5	3		
6087		40	7	0.5	3			6140		40	10	0.5	3		
6088		39	8	0.5	3			6141		33	7	0.5	3		
6089		37	5	0.5	3			6142		39	7	0.5	3		
6090		39	7	0.5	3			6143		33	7	0.5	3		
6091		39	7	0.5	3			6144		35	13	0.5	3		
6092		40	46	0.5	4			6145		37	17	0.5	3		
6093		39	28	0.5	3			6146		39	12	0.5	3		
6094		40	13	0.5	3			6147		39	12	0.5	3		
6095		42	8	0.5	3			6148		39	10	0.5	3		
6096		42	38	0.5	4			6149		37	8	0.5	3		
6097		39	18	0.5	4			6150		37	10	0.5	3		
6098		39	22	0.5	3			6151		39	13	0.5	3		
6099		39	15	0.5	3			6152		37	8	0.5	3		
6100		44	23	0.5	4			6153		39	10	0.5	3		
6101		40	17	0.5	3			6154		35	8	0.5	3		
6102		42	29	0.5	3			6155		37	8	0.5	3		
6103		37	13	0.5	3			6156		35	7	0.5	3		
6104		39	10	0.5	3			6157		37	7	0.5	3		
6105		39	10	0.5	3			6158		39	8	0.5	3		
6106		39	8	0.5	3			6159		37	8	0.5	3		
6107		39	8	0.5	3			6160		35	7	0.5	3		
6108		39	7	0.5	3			6161		40	10	0.5	3		
6109		37	7	0.5	3			6162		39	8	0.5	3		
6110		35	7	0.5	3			6163		37	8	0.5	3		
6111		39	8	0.5	3			6164		37	8	0.5	3		
6112		37	8	0.5	3			6165		39	7	0.5	3		
6113		39	7	0.5	3			6166		33	34	0.5	3		
6114		39	8	0.5	3			6167		40	29	0.5	3		
6115		37	7	0.5	3			6168		31	38	0.5	2		
6116		35	8	0.5	3			6169		40	13	0.5	3		
6117		35	10	0.5	3			6170		35	12	0.5	3		
6118		37	10	0.5	3			6171		39	8	0.5	3		
6119		35	10	0.5	3			6172		40	13	0.5	3		
6120		37	7	0.5	3			6173		39	15	0.5	3		
6121		30	5	0.5	2			6174		54	50	0.5	3		
6122		10	7	0.5	1			6175		48	28	0.5	3		
6123		31	8	0.5	2			6176		39	8	0.5	3		
6124		37	7	0.5	3			6177		54	36	0.5	3		
6125		37	7	0.5	3			6178		35	7	0.5	3		
6126		31	7	0.5	2			6179		34	7	0.5	3		
6127		35	7	0.5	3			6180		37	7	0.5	3		
6128		50	10	0.5	3			6181		37	5	0.5	3		
6129		38	7	0.5	3			6182		42	5	0.5	3		
6130		35	7	0.5	3			6183		42	7	0.5	3		
6131		37	7	0.5	3			6184		48	18	0.5	3		
6132		33	7	0.5	3			6185		40	8	0.5	3		
6133		6	3	0.5	1			6186		33	7	0.5	3		
6134		40	5	0.5	3			6187		48	31	0.5	3		
6135		33	7	0.5	3			6188		40	8	0.5	3		
6136		33	7	0.5	3			6189		42	8	0.5	3		
								6190		40	13	0.5	3		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
6191		48	18	0.5	3			6243		39	5	0.5	3		
6192		41	17	0.5	3			6244		44	7	0.5	3		
6193		40	34	0.5	3			6245		39	8	0.5	3		
6194		40	13	0.5	3			6246		93	15	0.5	4		
6195		39	12	0.5	3			6247		39	10	1.0	3		
6196		40	17	0.5	3			6248		35	10	0.5	3		
6197		40	10	0.5	3			6249		22	22	0.5	2		
6198		40	10	0.5	3			6250		37	8	0.5	3		
6199		37	7	0.5	3			6251		41	17	0.5	3		
6200		35	21	0.5	3			6252		42	12	0.5	3		
6201		35	8	0.5	3			6253		40	8	0.5	3		
6202		37	10	0.5	3			6254		40	8	0.5	3		
6203		35	7	0.5	3			6255		40	7	0.5	3		
6204		40	7	0.5	3			6256		40	7	0.5	3		
6205		39	8	0.5	3			6257		40	7	0.5	3		
6206		39	8	0.5	3			6258		44	7	0.5	3		
6207		39	8	0.5	3			6259		39	8	0.5	3		
6208		37	10	0.5	3			6260		105	173	0.5	2		
6209		39	7	0.5	3			6261		37	17	0.5	2		
6210		39	10	0.5	3			6262		39	12	0.5	3		
6211		39	10	0.5	3			6263		40	15	0.5	3		
6212		39	7	0.5	3			6264		40	13	0.5	3		
6213		39	7	0.5	3			6265		39	7	0.5	3		
6214		40	7	0.5	3			6266		40	12	0.5	3		
6215		39	7	0.5	3			6267		46	8	0.5	3		
6216		40	8	0.5	3			6268		37	7	0.5	3		
6217		40	8	0.5	3			6269		40	12	0.5	3		
6218		40	8	0.5	3			6270		39	7	0.5	2		
6219		42	10	0.5	3			6271		39	8	0.5	2		
6220		39	10	0.5	3			6272		46	7	0.5	2		
6221		40	7	0.5	3			6273		40	7	0.5	2		
6222		39	7	0.5	3			6274		40	9	0.5	3		
6223		40	7	0.5	3			6275		40	9	0.5	3		
6224		35	8	0.5	3			6276		46	7	0.5	3		
6225		37	8	0.5	3			6277		44	9	0.5	3		
6226		37	8	0.5	3			6278		44	7	0.5	3		
6227		37	7	0.5	3			6279		46	11	0.5	3		
6228		56	9	0.5	3			6280		44	9	0.5	3		
6229		50	5	0.5	3			6281		44	7	0.5	3		
6230		48	5	0.5	3			6282		42	9	0.5	3		
6231		46	9	0.5	3			6283		42	7	0.5	3		
6232		52	5	0.5	2			6284		40	14	0.5	3		
6233		44	2	0.5	3			6285		40	11	0.5	3		
6234		46	11	0.5	3			6286		37	11	0.5	2		
6235		42	9	0.5	3			6287		40	7	0.5	3		
6236		37	7	0.5	3			6288		42	7	0.5	2		
6237		44	8	0.5	3			6289		44	7	0.5	2		
6238		40	7	0.5	3			6290		40	7	0.5	2		
6239		40	7	0.5	3			6291		44	9	0.5	3		
6240		39	5	0.5	3			6292		40	9	0.5	3		
6241		42	8	0.5	3			6293		42	16	0.5	3		
6242		44	7	0.5	3			6294		40	7	0.5	3		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
6295		35	7	0.5	3			6346		48	5	0.5	3		
6296		42	11	0.5	3			6347		46	4	0.5	3		
6297		40	11	0.5	3			6348		46	4	0.5	2		
6298		40	7	0.5	3			6349		42	2	0.5	3		
6299		33	7	0.5	2			6350		42	4	0.5	3		
6300		44	5	0.5	3			6351		39	4	0.5	2		
6301		40	7	0.5	3			6352		33	2	0.5	2		
6302		37	7	0.5	2			6353		40	2	0.5	3		
6303		37	14	0.5	2			6354		39	4	0.5	3		
6304		42	9	0.5	3			6355		40	4	0.5	3		
6305		44	9	0.5	3			6356		40	4	0.5	3		
6306		42	5	0.5	2			6357		40	4	0.5	3		
6307		46	20	0.5	2			6358		35	4	0.5	2		
6308		46	9	0.5	2			6359		40	4	0.5	2		
6309		50	9	0.5	3			6360		39	4	0.5	3		
6310		50	9	0.5	2			6361		44	4	0.5	3		
6311		42	5	0.5	2			6362		39	2	0.5	3		
6312		52	9	0.5	2			6363		42	4	0.5	3		
6313		46	5	0.5	2			6364		35	4	0.5	3		
6314		50	5	0.5	2			6365		40	5	0.5	3		
6315		50	5	0.5	2			6366		37	4	0.5	3		
6316		50	9	0.5	2			6367		37	4	0.5	3		
6317		40	9	0.5	2			6368		44	4	0.5	3		
6318		52	5	0.5	2			6369		44	4	0.5	3		
6319		48	8	0.5	3			6370		44	4	0.5	3		
6320		50	4	0.5	3			6371		52	5	0.5	3		
6321		46	5	0.5	3			6372		50	5	0.5	3		
6322		40	5	0.5	2			6373		54	4	0.5	4		
6323		33	4	0.5	2			6374		52	5	0.5	3		
6324		49	4	0.5	3			6375		52	5	0.5	4		
6325		46	4	0.5	3			6376		50	4	0.5	3		
6326		44	4	0.5	3			6377		50	4	0.5	3		
6327		40	4	0.5	3			6378		46	135	0.5	6		
6328		48	5	0.5	3			6379		50	9	0.5	3		
6329		42	4	0.5	2			6380		54	5	0.5	3		
6330		46	4	0.5	3			6381		50	7	0.5	3		
6331		50	4	0.5	3			6382		54	5	0.5	3		
6332		48	4	0.5	3			6383		50	5	0.5	3		
6333		46	5	0.5	3			6384		52	16	0.5	3		
6334		42	5	0.5	3			6385		50	9	0.5	3		
6335		44	4	0.5	3			6386		50	7	0.5	3		
6336		40	4	0.5	3			6387		54	5	0.5	3		
6337		44	4	0.5	3			6388		50	5	0.5	3		
6338		46	4	0.5	3			6389		52	4	0.5	3		
6339		44	4	0.5	3			6390		50	4	0.5	3		
6340		39	2	0.5	3			6391		46	9	0.5	3		
6341		42	4	0.5	2			6392		50	9	0.5	3		
6342		42	4	0.5	3			6393		50	5	0.5	3		
6343		42	4	0.5	3			6394		46	5	0.5	3		
6344		46	4	0.5	3			6395		44	5	0.5	2		
6345		42	4	0.5	2			6396		46	5	0.5	3		

FD#	Cu	Pb	Zn	Ag	Cd	Co	Au	FD#	Cu	Pb	Zn	Ag	Cd	Co	Au
6397		46	5	0.5	2			6451		62	16	0.5	6		
6398		46	5	0.5	3			6452		50	9	0.5	5		
6399		48	5	0.5	2			6453		65	20	0.5	5		
6400		46	5	0.5	3			6454		54	45	0.5	5		
6401		44	14	0.5	2			6455		70	39	0.5	5		
6402		46	5	0.5	3			6456		1387	4000	0.5	31		
6403		46	14	0.5	3			6457		81	102	0.5	5		
6404		46	14	0.5	3			6458		60	20	0.5	5		
6405		48	52	0.5	3			6459		69	30	0.5	5		
6406		46	28	0.5	3			6460		16	22	0.5	1		
6407		46	4	0.5	3			6461		16	13	0.5	1		
6408		46	5	0.5	2			6462		56	7	0.5	5		
6409		46	14	0.5	3			6463		52	11	0.5	5		
6410		48	5	0.5	3			6464		56	9	0.5	5		
6411		48	4	0.5	2			6465		56	22	0.5	5		
6412		63	9	0.5	2			6466		56	22	0.5	5		
6413		50	11	0.5	3			6467		52	9	0.5	5		
6414		49	9	0.5	2			6468		58	18	0.5	5		
6415		44	5	0.5	3			6469		63	24	0.5	5		
6416		48	5	0.5	2			6470		58	13	0.5	5		
6417		46	5	0.5	2			6471		56	11	0.5	5		
6418		42	4	0.5	2			6472		60	11	0.5	5		
6419		42	4	0.5	2			6473		58	13	0.5	5		
6420		48	5	0.5	3			6474		58	14	0.5	5		
6421		52	5	0.5	3			6475		56	820	0.5	8		
6422		46	5	0.5	2			6476		60	25	0.5	5		
6423		50	5	0.5	3			6477		54	9	0.5	6		
6424		50	5	0.5	3			6478		54	14	0.5	5		
6425		50	4	0.5	2			6479		52	14	0.5	5		
6426		46	5	0.5	2			6480		56	32	0.5	6		
6427		42	5	0.5	2			6481		54	24	0.5	6		
6428		50	5	0.5	2			6482		54	11	0.5	5		
6429		46	7	0.5	2			6483		52	22	0.5	6		
6430		46	11	0.5	2			6484		52	22	0.5	6		
6431		44	7	0.5	2			6485		52	32	0.5	6		
6432		46	4	0.5	2			6486		172	4000	3.0	108		
6433		50	9	0.5	2			6487		56	105	0.5	6		
6434		46	5	0.5	2			6488		62	86	0.5	6		
6435		48	5	0.5	3			6489		54	70	0.5	6		
6436		46	7	0.5	2			6490		58	330	0.5	7		
6437		46	5	0.5	2			6491		58	65	0.5	6		
6438		46	7	0.5	2			6492		58	16	0.5	6		
6439		46	22	0.5	2			6493		58	131	0.5	6		
6440		54	28	0.5	5			6494		56	9	0.5	6		
6441		56	28	0.5	6			6495		56	14	0.5	6		
6442		54	30	1.0	6			6496		54	13	0.5	5		
6443		52	14	0.5	6			6497		60	14	0.5	5		
6444		50	5	0.5	5			6498		56	18	0.5	5		
6445		56	14	0.5	5			6499		52	127	0.5	6		
6446		52	7	0.5	6			6500		58	55	0.5	6		
6447		56	9	0.5	5										
6448		52	7	0.5	5										
6449		58	43	0.5	6										
6450		74	62	0.5	6										

British Newfoundland Exploration Limited

PERKINS GRID MAP

LOCATION NUMBERS

Date: NOVEMBER 1972	Scale: 1" = 125'	Drawn by: E.B.
Data by: Chemex	Map No:	Traced by: E.B.
	Map Ref:	Checked by: J.S.

6049 2366 2367 2368 2369 2370 2371 5977 5976 5975 597ℓ 5973 6000 5999 5998 5997 5996 5995 599ℓ 5993

6050 6045

6046 6044 6043

6048

6047

6487 6486 2209 2210 ℓ601 2212 2213 2216 229ℓ 2295 2310 2311

6483 220S 6ℓ8ℓ 6ℓ85 6500 2211 221ℓ 2215 2293 2296 2309 2312 2322

2207 6ℓ82 6ℓ81 6ℓ80 6ℓ99 6ℓ98 ℓ612 ℓ613 2292 2297 2308 2313 2321

6ℓ76 6ℓ77 6ℓ78 6ℓ79 6ℓ96 6ℓ97 ℓ611 ℓ610 2291 2298 2307 231ℓ 2320

6ℓ75 6ℓ7ℓ 6ℓ73 6ℓ72 6ℓ95 6ℓ9ℓ ℓ608 ℓ609 2290 2299 2306 2315 2319 2323

1000 6ℓ69 6ℓ70 6ℓ71 6ℓ72 6ℓ93 ℓ607 ℓ606 2289 2300 2305 2316 2318 232ℓ

0998 0999 6ℓ68 6ℓ67 6ℓ91 6ℓ90 ℓ605 ℓ60ℓ 2288 2301 230ℓ ℓ650 2317 2325 2328

0997 6ℓ6ℓ 6ℓ65 6ℓ66 6ℓ88 6ℓ89 ℓ602 ℓ603 2287 2302 2303 ℓ651 ℓ652 2326 2327 2329

2222 2221 2220 2219 2218 2217 0992 0993 099ℓ 0995 0996 6ℓ63 ℓ63ℓ 0886 0887 0892 0621 0620 0619 0618 ℓ979 ℓ971 ℓ963 ℓ955 ℓ9ℓ7 ℓ939 ℓ931 ℓ923

2223 222ℓ 6391 2225 2226 2227 0991 0990 0989 0988 0987 6ℓ62 0883 0885 0888 0891 0625 062ℓ 0623 0622 ℓ980 ℓ972 ℓ96ℓ ℓ956 ℓ9ℓ8 ℓ9ℓ0 ℓ932 ℓ92ℓ

2229 2228 6390 6389 6399 6ℓ05 0983 098ℓ 0985 0986 6ℓ60 6ℓ61 ℓ633 088ℓ 0889 0890 0629 0628 0627 0626 ℓ981 ℓ973 ℓ965 ℓ957 ℓ949 ℓ9ℓ1 ℓ933 ℓ925

2230 2231 6387 6388 6ℓ00 6ℓ06 0982 0981 0980 0979 6ℓ59 6ℓ58 ℓ629 ℓ630 ℓ631 ℓ632 ℓ6ℓℓ ℓ6ℓ5 ℓ6ℓ6 0630 ℓ982 ℓ97ℓ ℓ966 ℓ958 ℓ950 ℓ9ℓ2 ℓ93ℓ ℓ926

2232 6386 6385 638ℓ 6ℓ01 6ℓ07 0975 0976 0977 0978 6ℓ56 6ℓ57 ℓ628 ℓ627 ℓ626 ℓ625 ℓ6ℓ1 ℓ6ℓ2 ℓ6ℓ3 ℓ6ℓ8 ℓ6ℓ9 ℓ975 ℓ967 ℓ959 ℓ951 ℓ9ℓ3 ℓ935 ℓ927

2223 6281 6382 6383 6ℓ02 6ℓ08 0972 0973 6ℓ5ℓ 6ℓ53 ℓ621 ℓ622 ℓ623 ℓ62ℓ ℓ637 ℓ638 ℓ6ℓ0 ℓ6ℓ7 ℓ983 ℓ976 ℓ368 ℓ960 ℓ952 ℓ9ℓℓ ℓ936 ℓ928

2232 6288 6385 638ℓ 6ℓ01 6ℓ07 0975 0976 0977 0978 6ℓ56 6ℓ57 ℓ628 ℓ627 ℓ626 ℓ625 ℓ6ℓ1 ℓ6ℓ2 ℓ6ℓ3 ℓ6ℓ8 ℓ6ℓ9 ℓ975 ℓ967 ℓ959 ℓ951 ℓ9ℓ3 ℓ935 ℓ927

2230 2231 6387 6388 6ℓ00 6ℓ06 0982 0981 0980 0979 6ℓ59 6ℓ58 ℓ629 ℓ630 ℓ631 ℓ632 ℓ6ℓℓ ℓ6ℓ5 ℓ6ℓ6 0630 ℓ982 ℓ97ℓ ℓ966 ℓ958 ℓ950 ℓ9ℓ2 ℓ93ℓ ℓ926

2229 2228 6390 6389 6399 6ℓ05 0983 098ℓ 0985 0986 6ℓ60 6ℓ61 ℓ633 088ℓ 0889 0890 0629 0628 0627 0626 ℓ981 ℓ973 ℓ965 ℓ957 ℓ949 ℓ9ℓ1 ℓ933 ℓ925

2223 222ℓ 6391 2225 2226 2227 0991 0990 0989 0988 0987 6ℓ62 0883 0885 0888 0891 0625 062ℓ 0623 0622 ℓ980 ℓ972 ℓ96ℓ ℓ956 ℓ9ℓ8 ℓ9ℓ0 ℓ932 ℓ92ℓ

2222 2221 2220 2219 2218 2217 0992 0993 099ℓ 0995 0996 6ℓ63 ℓ63ℓ 0886 0887 0892 0621 0620 0619 0618 ℓ979 ℓ971 ℓ963 ℓ955 ℓ9ℓ7 ℓ939 ℓ931 ℓ923

0997 6ℓ6ℓ 6ℓ65 6ℓ66 6ℓ88 6ℓ89 ℓ602 ℓ603 2287 2302 2303 ℓ651 ℓ652 2326 2327 2329

0998 0999 6ℓ68 6ℓ67 6ℓ91 6ℓ90 ℓ605 ℓ60ℓ 2288 2301 230ℓ ℓ650 2317 2325 2328

1000 6ℓ69 6ℓ70 6ℓ71 6ℓ72 6ℓ93 ℓ607 ℓ606 2289 2300 2305 2316 2318 232ℓ

6ℓ75 6ℓ7ℓ 6ℓ73 6ℓ72 6ℓ95 6ℓ9ℓ ℓ608 ℓ609 2290 2299 2306 2315 2319 2323

6ℓ76 6ℓ77 6ℓ78 6ℓ79 6ℓ96 6ℓ97 ℓ611 ℓ610 2291 2298 2307 231ℓ 2320

2207 6ℓ82 6ℓ81 6ℓ80 6ℓ99 6ℓ98 ℓ612 ℓ613 2292 2297 2308 2313 2321

6ℓ83 220S 6ℓ8ℓ 6ℓ85 6500 2211 221ℓ 2215 2293 2296 2309 2312 2322

6487 6ℓ86 2209 2210 ℓ601 2212 2213 2216 229ℓ 2295 2310 2311

0610 0602 ℓ99ℓ ℓ986

0611 0603 ℓ995 ℓ987

0612 060ℓ ℓ996 ℓ988

0613 0605 ℓ997 ℓ989

061ℓ 0606 ℓ998 ℓ990

0615 0607 ℓ999 ℓ991

0616 0608 0600 ℓ992

0617 0609 0601 ℓ993

LAKE

LAKE

Department of Mines [illegible]

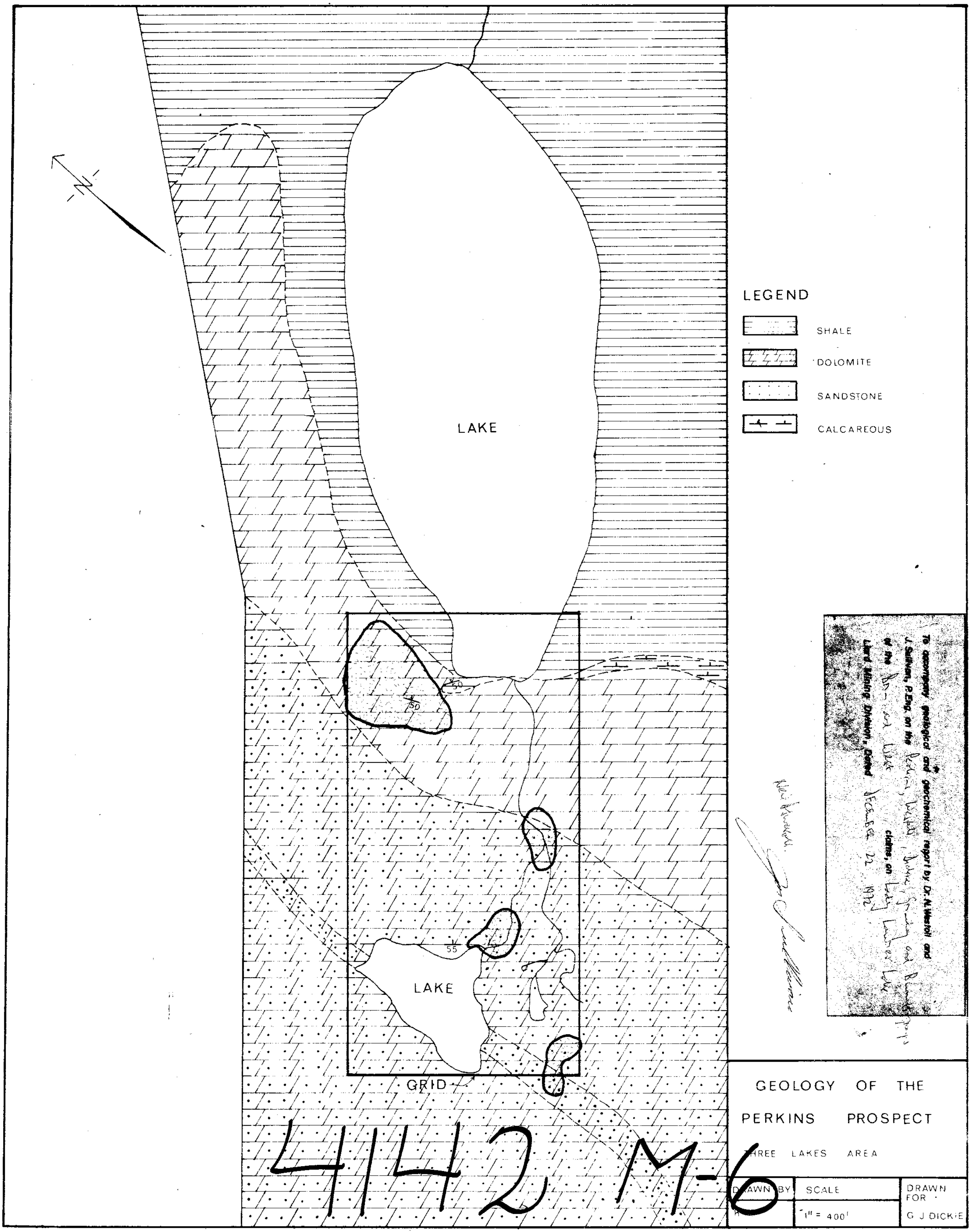
NO. ℓ1ℓ2 MAP #7

To accompany geological and geochemical report by Dr. N. Westbell and J. Sullivan P.Eng. on the Perkins, Westbell, Dickie Grimsley and Burnie-H groups of the Brin and West claims on Land Quarter-Acre Lake

Alvard M.D. Dated DECEMBER 22, 1972

Approved

Map Reference


LAKE
LAKE
GRID
50
50
55
LEGEND
SHALE
DOLOMITE
SANDSTONE
CALCAREOUS
To accompany geological and geochemical report by Dr. N. Westoll and
J. Sullivan, P.Eng. on the
of the
claims, on
Lard Mining Division, Dated
4142 M-6
GEOLOGY OF THE
PERKINS PROSPECT
THREE LAKES AREA
DRAWN BY
SCALE
1" = 400'
DRAWN FOR
G J DICKIE

British Newfoundland Exploration Limited

RECONNAISANCE GEOCHEMISTRY
BRIN CLAIMS PROJECT B.C.
LAURIER GROUP

Date: Sept 1972	Scale: 1:50,000	Drawn by: DL
Data by: Chemex	Map No: 1A	Traced by: EB
	Map Ref:	Checked by M.T.

56° 45'

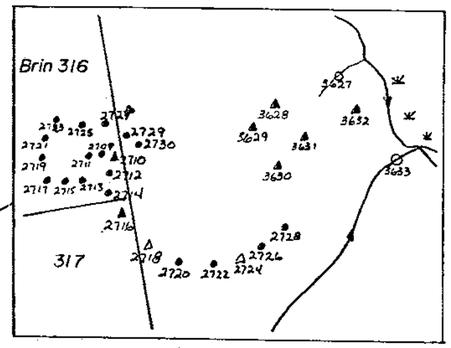
56° 40'

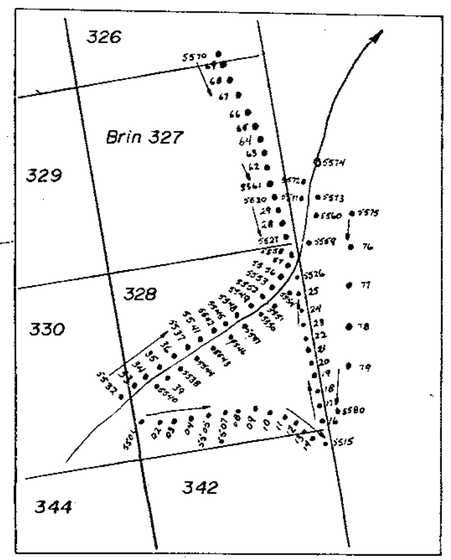
123° 45'

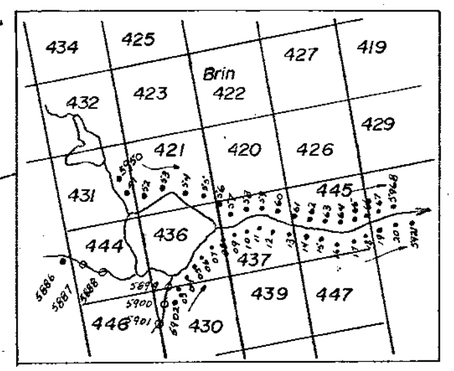
123° 35'

LAURIER GROUP

Lake Laurier







LEGEND

- Silt Sample
- Soil Sample
- Rock (Float) Sample
- Rock (Outcrop) Sample

ANOMALIES
- Zn and/or Cd, Zn >250 ppm, Cd >7ppm
- Pb and/or Ag, Pb >80ppm, Ag >1 ppm
- Cu and/or Co, Cu >50 ppm, Co >30ppm

To accompany geological and geochemical report by Dr. N. Westall and J. Sullivan, P.Eng. on the Parkins, Westall, Dickie, Grimley, Barnett of the Brin and West claims, on Lady Laurier Lake Laird Mining Division, Dated December 22, 1972.

MAP No. 1A

Joe Sullivan

Neil Westall

MAP No. 6

I.P. Brin 341 & 342

Lake

Lake

Lake

Perkins Grid

Approximate claim boundaries

ROCK SAMPLING LINE
COMPOSITE CHIP SAMPLES
SAMPLING UNIT 50'

BLASTING SITES
COMPOSITE SAMPLES

ROCK SAMPLING LINE
COMPOSITE CHIP SAMPLES

To accompany geological and geochemical report by Dr. N. Westoll and J. Sullivan, P.Eng. on the Perkins, Dicette, Grawbay, Westoll and Antcott claims of the Brin and West claims, on Lady Laurier Lake, Laurier Mining Division, Dated DECEMBER 22, 1972

N. Westoll

J. Sullivan

SAMPLE SITES and NUMBERS

- ○ Silt
- ● Soil
- △ Float boulder
- ▲ Rock

⊠ Claim Post

▭ Claim Group in this Report

362 = Brin Claim No.

4142 #9

British Newfoundland Exploration Limited

DETAIL GEOCHEMISTRY and
SAMPLE SITES, PERKINS – WESTOLL AREA, LAURIER GROUP

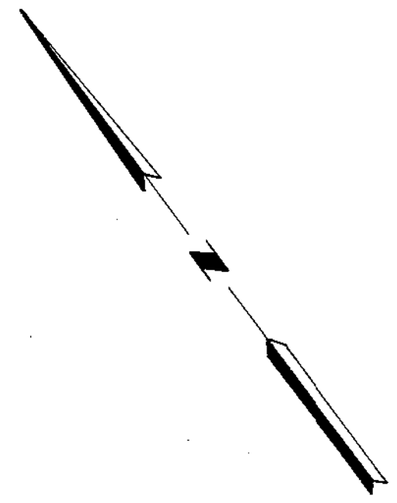
Date: Sept. 1972	Scale: 1" = 400'	Drawn by: E.B.
Data by:	Map No. 6	Traced by: E.B.
	Map Ref.	Checked by: J.S.

MAP No. 5

Lake

Lake

Lake



LEGEND

SOIL

ROCK

SAMPLING UNIT
OF 50 x 50 FOOT

Zn
Cd
Pb
Ag — ppm

CONTOURING INTERVAL
AS INDICATED:

Zn (ppm) 250, 500, 1000 ——
Pb (ppm) 100, 200, 800 - - - -

Zn

Pb

To accompany geological and geochemical report by Dr. H. Westoll and J. Sullivan, P.Eng. on the Perkins, Westoll, Dickie, Grimley and Burnett groups of the Brin and West claims, on Lady Laurier Lake, Liard Mining Div., Dated DECEMBER 22, 1972.

Jno Sullivan.

British Newfoundland Exploration Limited

GEOCHEMISTRY
OF
SOILS AND ROCKS
IN
PERKINS GRID — LAURIER GROUP

DATE : Nov., 1972	SCALE : 1 Inch = 125 Feet	MAP No. 5

To accompany geological and geochemical report by Dr. N. Mantei and J. Sullivan, P.Eng. on the [illegible] claims, on [illegible] Laird Mining Division, Dated [illegible]

[illegible]

SYMBOLS

- Strike and dip (measured)
- Strike and dip (estimated)
- Strike and dip of overturned beds
- Synclinal axis
- Anticlinal axis (with plunge)
- Overturned anticline (with plunge)
- Thrust fault (dip indicated by ▼)
- Thrust fault suspected
- Normal fault D = downthrown block
- Trace of cross section

LEGEND

		FORMATION	AGE
7	Black, cherty dolomite and shale	PROPHET	MISSISSIPPIAN
6	Light gray fossiliferous reefal dolomite	SLAVE POINT	UPPER DEVONIAN
5a	Light gray dolomite siltstone	BESA RIVER	MISSISSIPPIAN to MID DEVONIAN
5	Black non-calcareous fissile shale		
4	Dark gray to black limestone shaly and very fossiliferous in part	DUNEDIN	MID DEVONIAN
4a	Gray dolomite, reefal fossils, strongly recrystallised in part		
3 - 4	Light gray to buff dolomite very strongly recrystallised original lithologies of units 3 and 4		MID DEVONIAN
3	Light gray, fine crystalline dolomite and dolomite sandstone strongly recrystallised and mineralised in part	STONE	LOWER DEVONIAN
3a	Sandstone, medium to coarse grained		
2	Black, fossiliferous fine crystalline thick bedded minor dolomite conglomerate strongly recrystallised and bituminous in part		LOWER DEVONIAN
1	Dark gray, finely crystalline dolomite cherty, sandy, shaly in part minor sandstone beds		SILURIAN

Strongly recrystallised unit

SANDSTONE UNIT

SHALE UNIT

GEOLOGY OF THE

LADY LAURIER LAKE AREA

NORTH EAST B.C.

SCALE: 1:50000

SEPT 72 G.J. DICKIE

SILURIAN AND DOLOMITES

ORDOVICIAN AND SHALES

Laurier claim groups

Rokh Lake

Lady Laurier Lake

Halfway River

Graham River

Gutbeard Creek

Chowika Creek

C

C'

7,000

6,500

6000

5,500

5,000

4,500

SILURIAN | MID DEVONIAN | LOWER DEVONIAN | MID DEVONIAN

WEST

< HASTINGS PROSPECT

< LEE ANOMALY

EAST

LEGEND

- SHALE
- LIMESTONE
- DOLOMITE
- SANDSTONE
- SILTSTONE
- CALCAREOUS
- FOSSILIFEROUS
- DOLOMITIC
- BRECCIA

To accompany geological and geochemical report by Dr. N. Westoll and J. Sullivan, P.Eng. on the [illegible] claims, on the [illegible] of the Liard Mining Division, Dated [illegible]

N. Westoll J. Sullivan

W

SILURIAN | MID DEVONIAN | LOWER DEVONIAN | MID DEVONIAN | E

SECTION FIGURED

Department of Mines

GEOLOGIC CROSS SECTION NO. 4142 #4

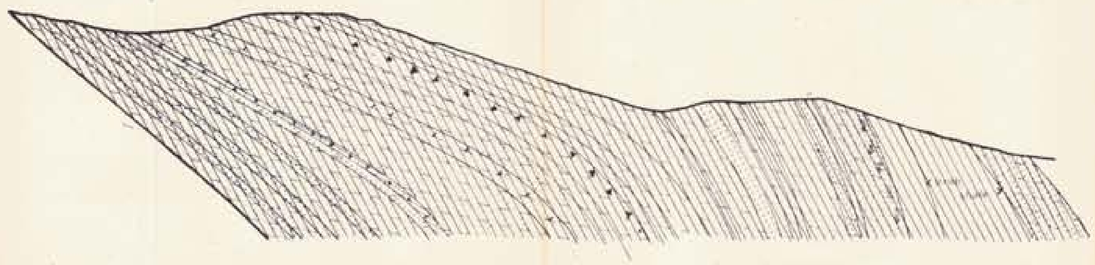
RIDGE NORTH - EAST OF LADY LAURIER LAKE

DRAWN BY	DATE	DRAWN FOR	SCALE	HOR	1"= 400'
R.H.	SEPT 72	G J DICKIE		VERT	1"= 400'

4

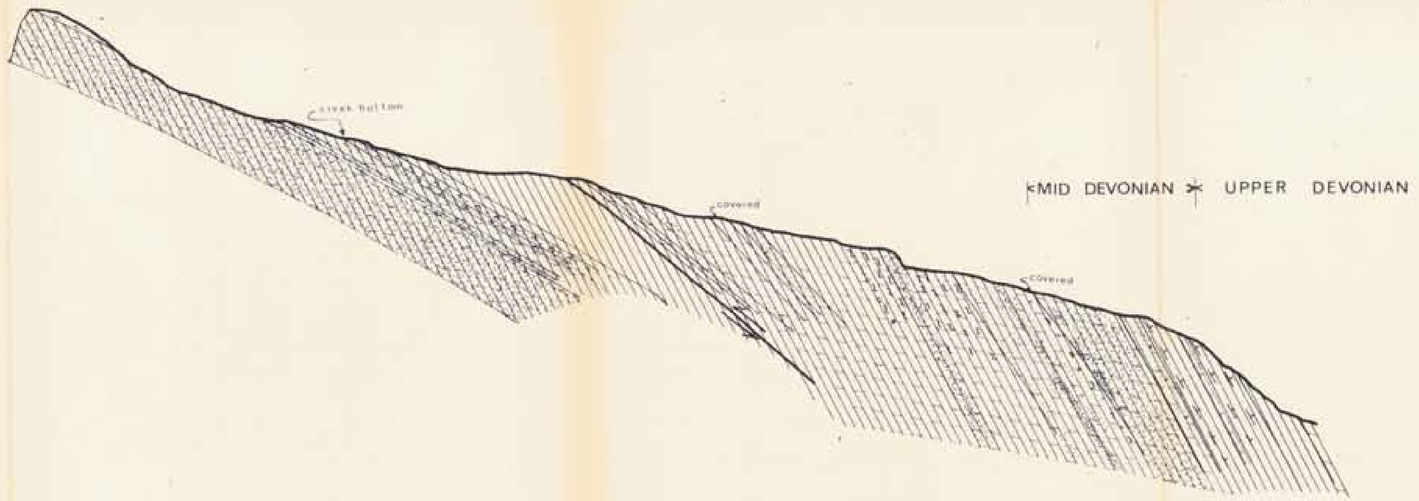
SECTION ACROSS PERKINS ANOMALY

D SW — SILURIAN — LOWER DEVONIAN — MID DEVONIAN — D' NE



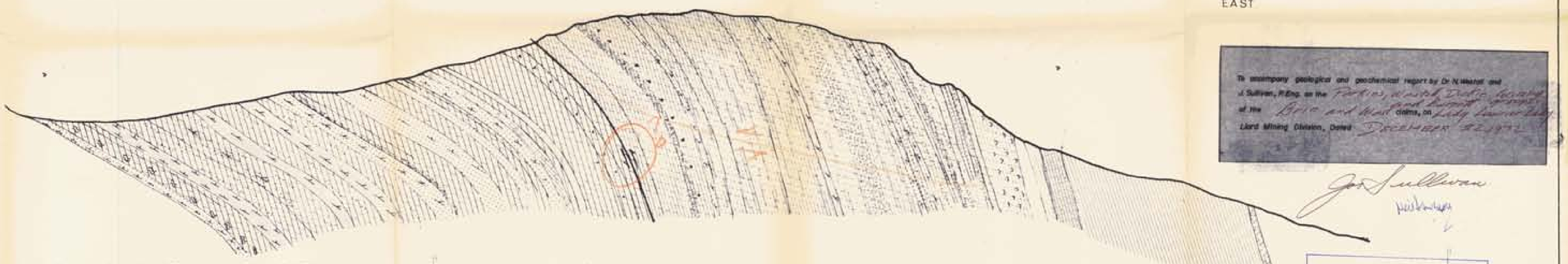
SECTION IN CREEK ON WESTOLL PROSPECT

E WEST — MID DEVONIAN — ? UPPER DEVONIAN — LOWER DEVONIAN — E' EAST



MID DEVONIAN — UPPER DEVONIAN

F WEST — SILURIAN — LOWER DEVONIAN — MID DEV — SILURIAN — LOWER DEVONIAN — MID DEVONIAN — UPPER DEVONIAN — F' EAST



SECTION ON RIDGE 1-5 MILES SOUTH ON WESTOLL PROSPECT

LEGEND

- SHALE
- LIMESTONE
- DOLOMITE
- SANDSTONE
- SILTSTONE
- RECRYSTALLISED
- FOSSILIFEROUS
- CHERTY
- ALGAL STRUCTURES
- INTRAFORMATION BRECCIA
- DOLOMITIC
- CALCAREOUS

To accompany geological and geochemical report by Dr. N. Westoll and J. Sullivan, P.Eng. on the Perkins, Westoll, Dickie, Laurier and Lizzy claims, on the Boss and West claims, on Lizzy Lake in the Liard Mining Division, Dated DECEMBER 22, 1972.

Jos Sullivan

GEOLOGIC CROSS SECTIONS
EASTERN LAURIER CLAIMS
NORTH EAST B.C

SCALE 1" = 400'

SEPT '72 G.J. DICKIE