



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

FILMED

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
Geological 	\$2100.00

AUTHOR(S) Edward M. Lyons SIGNATURE(S) *[Signature]*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED Nov. 12, 1985 YEAR OF WORK 1985

PROPERTY NAME(S) Loupy

COMMODITIES PRESENT

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Alberni NTS 92F/2E

LATITUDE 49° 08' LONGITUDE 124° 36' 5"

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:
Loupy (6 units)

OWNER(S)
(1) Westmin Resources Ltd. (2)

MAILING ADDRESS
P.O. Box 49066 Bentall Centre
Vancouver, B.C. V7X 1C4

GEOLOGICAL BRANCH ASSESSMENT REPORT

OPERATOR(S) (that is, Company paying for the work)
(1) same as above (2)

MAILING ADDRESS
same as above

14,389

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

The Property is underlain by *The* Paleozoic Sicker Group. The Myra consists of *Formation* calc-alkaline massive and pillowed flows and clastic equivalents with minor bedded jasper, chert and tuffs. The Buttle Lake *Formation* overlies the Myra bedded tuffs, black argillite, chert, and chert pebble beds grading upward to micritic and crinoidal limestone marbles. Bedding dips uniformly to *the west-southwest, northeast of fault* and dips *northeast, southwest of the faults*. Two steep angle faults strike *north-south* through the southwest corner of the claims; down throwing Buttle Lake *Formation* to the *southwest*. No mineral- was observed.

REFERENCES TO PREVIOUS WORK

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
✓ GEOLOGICAL (scale, area) Ground <u>GEOL</u> Photo	1:4800 (1.2 km ²)	Loupy XXXXXXXXXX	\$2100.00
GEOPHYSICAL (line-kilometres) Ground Magnetic Electromagnetic Induced Polarization Radiometric Seismic Other Airborne			
GEOCHEMICAL (number of samples analysed for) Soil Silt Rock <u>ROCK</u> Other	5; Cu, Pb, Zn, Ag, As, Au 2; Whole Rock Analysis	Loupy	
DRILLING (total metres; number of holes, size) Core Non-core			
RELATED TECHNICAL Sampling/assaying Petrographic Mineralogic Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL Legal surveys (scale, area) Topographic (scale, area) Photogrammetric (scale, area) Line/grid (kilometres) Road, local access (kilometres) Trench (metres) Underground (metres)			
	Balance - nil		TOTAL COST \$2100.00

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report) 2100.00				✓ Analytical method required
Value of work approved 2100.00				2/ Title Page & Summary needs signature
Value claimed (from statement) 2400.00	WESTMIN RESOURCES LTD.			
Value credited to PAC account 300.00				
Value debited to PAC account 300.00		300.00		
Accepted GO Date May 29/96	Rept. No. 85-1119-14389			Information Class (4)

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1. Introduction

The six unit Loupy Claim (record no. 637 (11)) is the most southerly of a group of claims held 100% by Westmin Resources Limited (P.O. Box 49066, Bentall Centre, Vancouver, B.C. V7X 1C4), collectively known as the Debbie-Sicker property.

Geological mapping that comprises this report was carried out by Edward M. Lyons and Gordon Harris on Westmin's behalf between 30 October and 2 November, 1985. Data was plotted in the field on a topographic base map at a scale of 1:4800 (1 inch = 400 feet) derived from ortho photography done for MacMillan Bloedel Co. in 1971. Samples for assay and geochemical analyses and for whole rock analyses were sent to Chemex Laboratories, Ltd. in North Vancouver.

2. Property Description (see figure 1)

- | | |
|-------------------------|------------------------------|
| a. Name: Loupy | c. Latitude: 49° 08'30"N |
| b. Record No.: 637 (11) | d. Longitude: 124° 38'30"W |
| c. No. of Units: 6 | e. Mining Division:: Alberni |

3. Physiography

The claim lies on the north and northwest slopes of Douglas Peak (1799m elevation) between 840 and 1330m elevation, at the head of several cirques (Duck Lake, Duck Lake Creek, "Jenny Creek"). The western half of the property has been clearcut by MacMillan Bloedel as recently as 1984. The eastern part is covered by Douglas fir, spruce and minor cedar at lower elevations, yielding to fir and spruce at higher levels interspersed with boggy heather meadows with small lakes less than 0.3 hectares area.

The property is wholly within the China Creek watershed area.

4. Access (see Figure 2)

The property is readily accessible by a network of logging roads 19.5 kilometers southeast of Port Alberni. Best access is via the Bamfield road 8 kilometers to Cameron (MacMillan Bloedel yard) thence north and southeast along China Creek road 9 kilometers to Duck Main road. A long climb (approx. 2.5 kilometers) to the highest point on the road lies near the north boundary of the claims. Spur roads (Duck 400, Duck 500, Duck 600, and Duck 700) enter the north and west parts of the claims giving access to the 3800 meter elevation.

5. Exploration History

Westmin Resources Limited (formerly Western Mines Limited (N.P.L.) has held and explored claims in the Debbie - Sicker property since 1973. The current series of programs has been ongoing since 1979. G. Benvenuto filed geochemical and geophysical (induced polarization surveys) on a grouped block of claims which included the Loupy claim in 1982 on the behalf of Westmin Resources, Ltd.

No history of mining has been recorded on the claim.

6. Purpose

The present report presents the results of geological mapping carried out by the author and an assistant 30 October - 2 November 1985.

7. Geology

7a. Stratigraphy

The property lies in the northwestern part of the Cowichan-Horne Lake uplift of the Paleozoic Sicker Group. This suite of volcanic and lesser sedimentary rocks is part of the Wrangellia terrane postulated to have accreted on the western margin of North America in Mesozoic time. Work by J.E. Muller (1980) has led to a stratigraphic framework for Sicker Group (see Figure 3).

The claim is underlain by Myra and Buttle Lake Formations of the Sicker Group. The older (Ordovician to Mississippian?) Myra Formation is defined by Muller as "massive tuffs with local banding and heterogenous volcanic breccias". Mapping by Westmin staff indicates that variable amounts of pillowed basalt flour and their epiclastic and volcanoclastic equivalents also form an integral part of the Myra Formation. These pillowed flows underlie 95% of the Loupy claim.

The early Permian Buttle Lake Formation unconformably overlies the Myra formation. Benvenuto has concluded that the structure of the older units (Myra and Nitnat Formations) are more complexly folded than the Buttle Lake sediments. Stratigraphic sections indicate that the Buttle Lake Formation may have overlapped to an already - folded volcanic package, as the sediments are in contact with various stratigraphic depths of the Myra Formation. On the property, Buttle Lake limestone and cherty tuffs occupy downfaulted blocks in the southwest corner of the claim.

7b. Description (see Figure 4)

Myra Formation on the claim consists of massive and pillowed basalt flows, pillow breccias and lesser amounts of aquagene volcanoclastic and epiclastic rocks. Pillows are up to 70cm diameter and round with vesicular and amygdaloidal outer margins. Locally they may be variolitic. Selvages are thin with chlorite and epidote common. Interpillow hyaloclastite is quite uncommon. Because of the roundness, determination of pillow tops is difficult.

Basalt in these smaller pillows (larger ones occur in the region NNW of the claim), is fine grained, with small lathy plagioclase phenocrysts to 1.2mm and minor amounts of pyroxene(?) phenocrysts to 0.7 - 1 mm with rectangular prism sections. Amygdules to 8mm diameter are filled with chlorite, carbonate and epidote.

Chemical analysis of massive basalt (sample 28248 - see Appendix 1) shows it to be a high - alumina, calc-alkaline basalt.

Other basalt lithologies include restricted areas of hematite-altered basalts clastics ("purple & green") with purple to purple-green matrix and rimming of clasts. Minor areas of laminated crystal tuffs and fine to medium tuffs and lapilli tuffs also outcrop. One jasper and hematitic fine tuff interval occurs on Duck Main road north of the claim.

"Dacite" (field term) is limited to a narrow series of outcrops along the

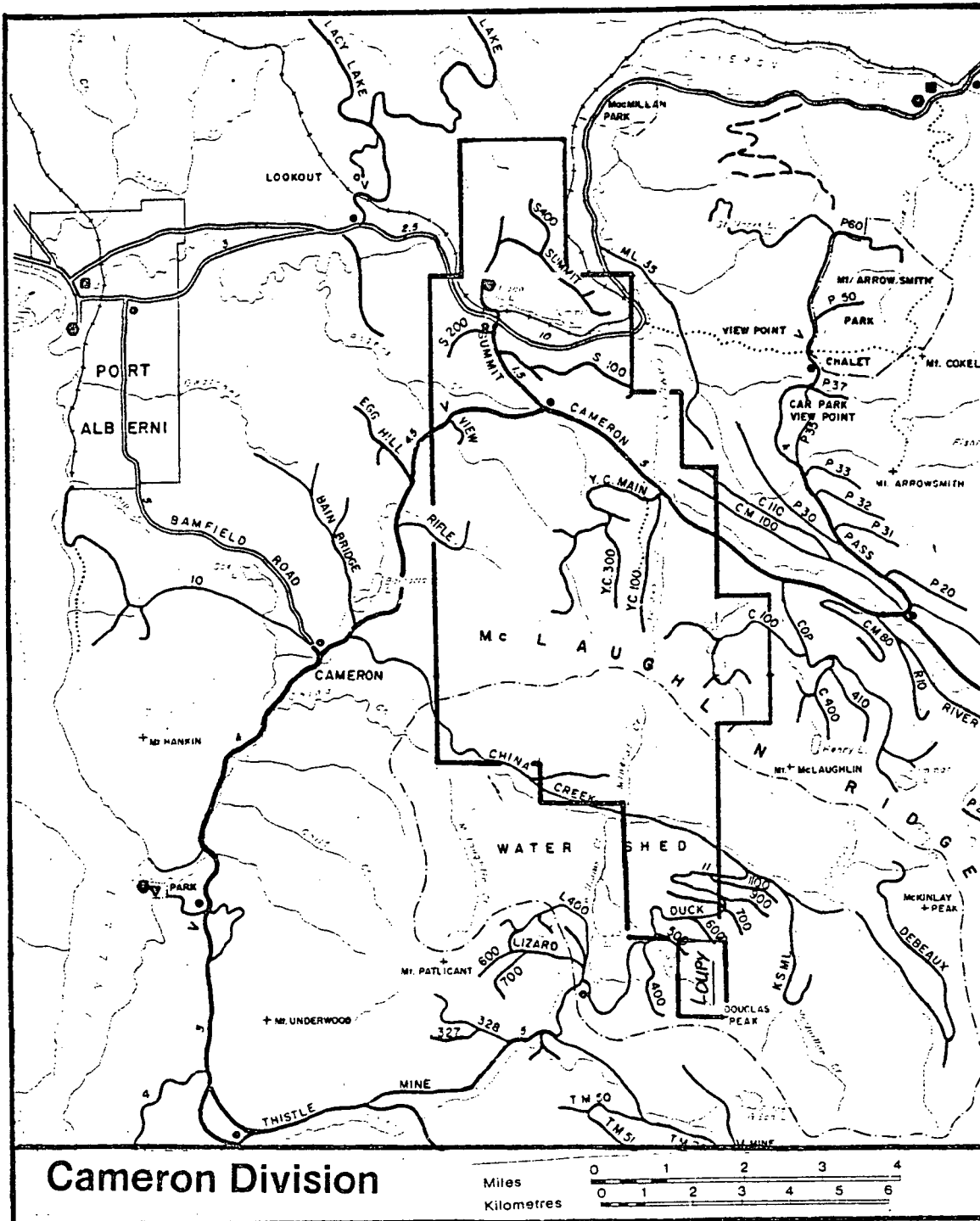


Figure 2. Access Map:

LOGGING ROAD MAP OF CAMERON DIVISION OF MAC MILLAN-BLOEDEL COMPANY AND PROPERTY BOUNDARY.

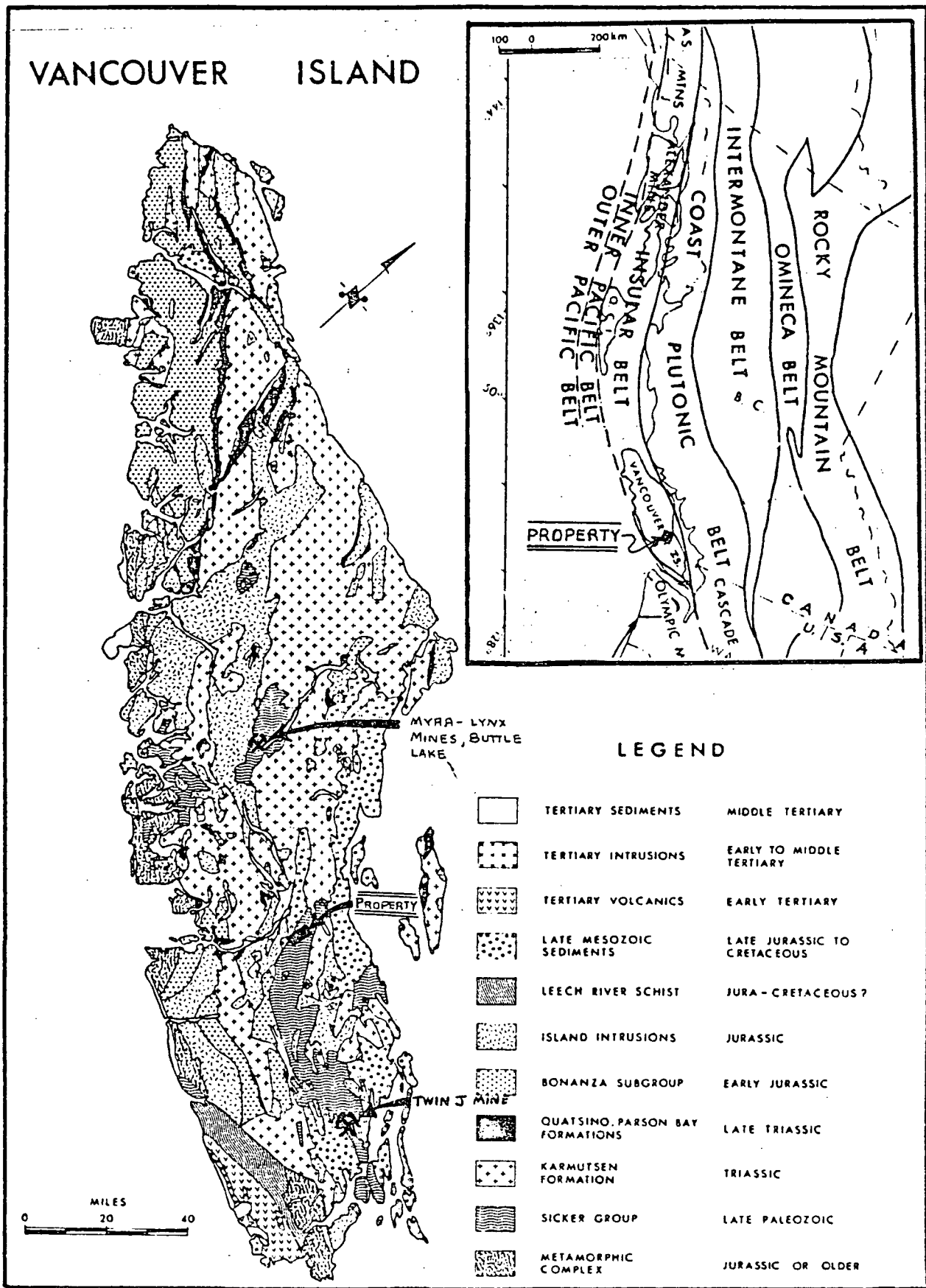


Figure 3.
GEOLOGIC MAP OF VANCOUVER ISLAND AND TECTONO STRATIGRAPHIC BELTS
WITHIN CANADIAN CORDILLERA (INSET MAP)

end of Duck 310, near "Duck Lake Creek". It is light gray and fine-grained with 3% altered phenocrysts (albite?) 0.7 - 1mm. finely disseminated pyrite (1-2%) is common. Erratic stringers of quartz + carbonate are common. Whether it is massive or clastic is difficult to tell from the blasted roadcuts; the same rock to the northwest has shown both textures, but they are difficult to determine in the fresh rock.

Chemical analysis of the "dacite" (sample 28249 - see Appendix 1) indicates its composition is transitional between dacite and quartz keratophyre, especially because of the moderately high Na₂O (3.53 %) and low K₂O (3.96%) and MgO (1.10%) contents. No petrographic work was done to determine the degree of albitization. However, field appearance closely resembles Benvenuto's description of quartz keratophyre on the Jenny claim to the north.

Buttle Lake Formation is represented by limey fine to coarse tuffs, cherty black argillites and pebble beds, often well bedded. Locally, graded beds occur, topping normally. These grade rapidly and conformably to crinoidal and micritic limestone marble with crystals up to 4mm.

7c. Metamorphism

Lithologies in the Sicker Group have undergone regional greenschist and prehnite-pumpellyite facies metamorphism. Diagnostic mineralogy, ie. presence of pumpellyite or clinozoisite, was not observed. Metamorphism has recrystallized the limestone to marble.

7d. Structure

Loupy claim lies on the southwest flank of a large anticlinorium centered over China Creek and McLaughlin Ridge. Sicker Group volcanics on the property show monotonous dips 20° - 70° to the southwest over 95% of the claim. Buttle Lake sediments occur in the two fault blocks in the southwest corner of the claim; they dip 15° - 28° to the northeast.

Two faults striking approximately 310° cross the southwest corner of the claim. Both blocks are downthrown to the southwest relative to the northeast, but the slice between the faults is downthrown more than the most southwesterly block. The more southwesterly of the two faults appears to be an offshoot of the other which continues on to intersect the Lizard Lake fault northwest of the property on the Lizard claim.

7e. Mineralization

The only sulfide seen on the Loupy claim was 1 - 2% finely disseminated pyrite in possible dacite/quartz keratophyre. The whole rock analysis yields 2.86% Fe₂O₃ (L.O.I. corrected); this indicates that iron as pyrite was not added. Rather the pyrite may be due to sulfidization of iron present in the original rock.

Geochemical assays for silver, copper, lead, zinc and arsenic show only normal background levels. Assays for gold were less than or equaly 0.004 oz/ton. (See appendix)

8. Conclusions

No economic mineralization has been observed on the claim to date. The presence of quartz keratophyre/dacite indicates a possible environment for gold or base metal mineralization. It should be noted that parts of the property above 3800 meters elevation were not traversed due to the presence of 70cm of wet snow. Prospecting and mapping along the fault system to the southeast toward Douglas Peak should be undertaken.

9. References

Muller, J.E. 1980. The Paleozoic Sicker Group of Vancouver Island, British Columbia, G.S.C. Paper 79-30, 23p.

10. Statement of Costs

a. Field Personnel: (30/10 - 2/11/85)			
E. Lyons (geologist)	3.5 days @ 160/day	\$560	
G. Harris (assistant geologist)	3.5 days @ 110/day	\$383	
		<u>\$945</u>	\$945
b. Food & Accomodation: (Port Alberni: 30/10 - 2/11/85)			\$280
6 man-days: motel \$120, food \$160			
c. Mobilization/demobilization: G. Harris from/to Vancouver			\$ 70
d. Vehicle Rental: Westmin GMC 4WD: 4 days @ \$33/day			\$132
e. Equipment & Supplies: Gas \$83.00, tire repairs \$20.00			\$103
f. Laboratory Analyses: (Chemex Laboratories Ltd. North Vancouver, B.C.)			
5 assay & geochemical samples		\$ 80	
2 whole rock analyses		\$ 40	
		<u>\$120</u>	\$120
g. Report Preparation:			
E. Lyons, author & drafting 2.5 days @ 160/day		\$400	
Typing, printing, binding costs		\$ 50	
		<u>\$450</u>	<u>\$450</u>
Total Costs			<u>\$2100.00</u>

Respectfully submitted,

Edward M. Lyons

Edward M. Lyons

Geologist

10 February 1986

Statement of Qualifications

I, Edward M. Lyons, of Box 3346 Courtenay, British Columbia, hereby certify that

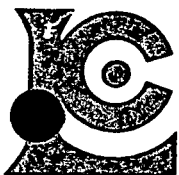
1. I am a graduate of the University of Missouri at Rolla in 1970 with a Bachelor of Science (Honors) in Geology, with further graduate studies in economic geology at the University of Toronto in 1974 - 75.
2. I have actively practiced my profession in exploration geology for the part sixteen years.
3. I am a fellow as the Geological Association of Canada.
4. I hold 430 shares of Westmin Resources Limited on my behalf.

Edward M. Lyons

Edward M. Lyons

Port Alberni,
February 1986

APPENDIX 1
CERTIFICATES OF ANALYSES



Chemex Labs Ltd.

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Analytical Chemists • Geochemists • Registered Assayers

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : WESTMIN RESOURCES LTD.
WESTERN MINES DIVISION
P.O. BOX 8000
CAMPBELL RIVER, B.C.
V9W 5E2

CERT. # : A8518090-001-A
INVOICE # : I8518090
DATE : 18-NOV-85
P.O. # : NONE
50075

ATTN: E. LYONS & R. WALKER

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AS ppm	
LPY-1	207	33	1	11	0.1	--	--
LPY-3	207	19	1	34	0.1	--	--
LPY-4	207	29	1	34	0.1	5	--
LPY-5	207	27	1	58	0.1	6	--
LPY-6	207	11	1	14	0.1	--	--

VOI rev. 4/85

Certified by *Hart Buchler*

CERTIFICATE OF ASSAY

TO : WESTMIN RESOURCES LTD.
WESTERN MINES DIVISION
P.O. BOX 8000
CAMPBELL RIVER, B.C.
V9W 5E2

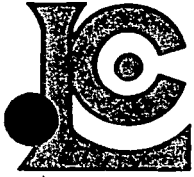
CERT. # : A8518090-001-A
INVOICE # : I8518090
DATE : 18-NOV-85
P.O. # : NONE
50075

ATTN: E. LYONS & R. WALKER

Sample description	Prep code	Au FA oz/T					
LPY-1	207	<0.002	--	--	--	--	--
LPY-3	207	<0.002	--	--	--	--	--
LPY-4	207	0.002	--	--	--	--	--
LPY-5	207	0.004	--	--	--	--	--
LPY-6	207	<0.002	--	--	--	--	--

VOI rev. 4/85

W. Sturmanini
Registered Assayer, Province of British Columbia



Chemex Labs Ltd.

•Analytical Chemists •Geochemists •Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

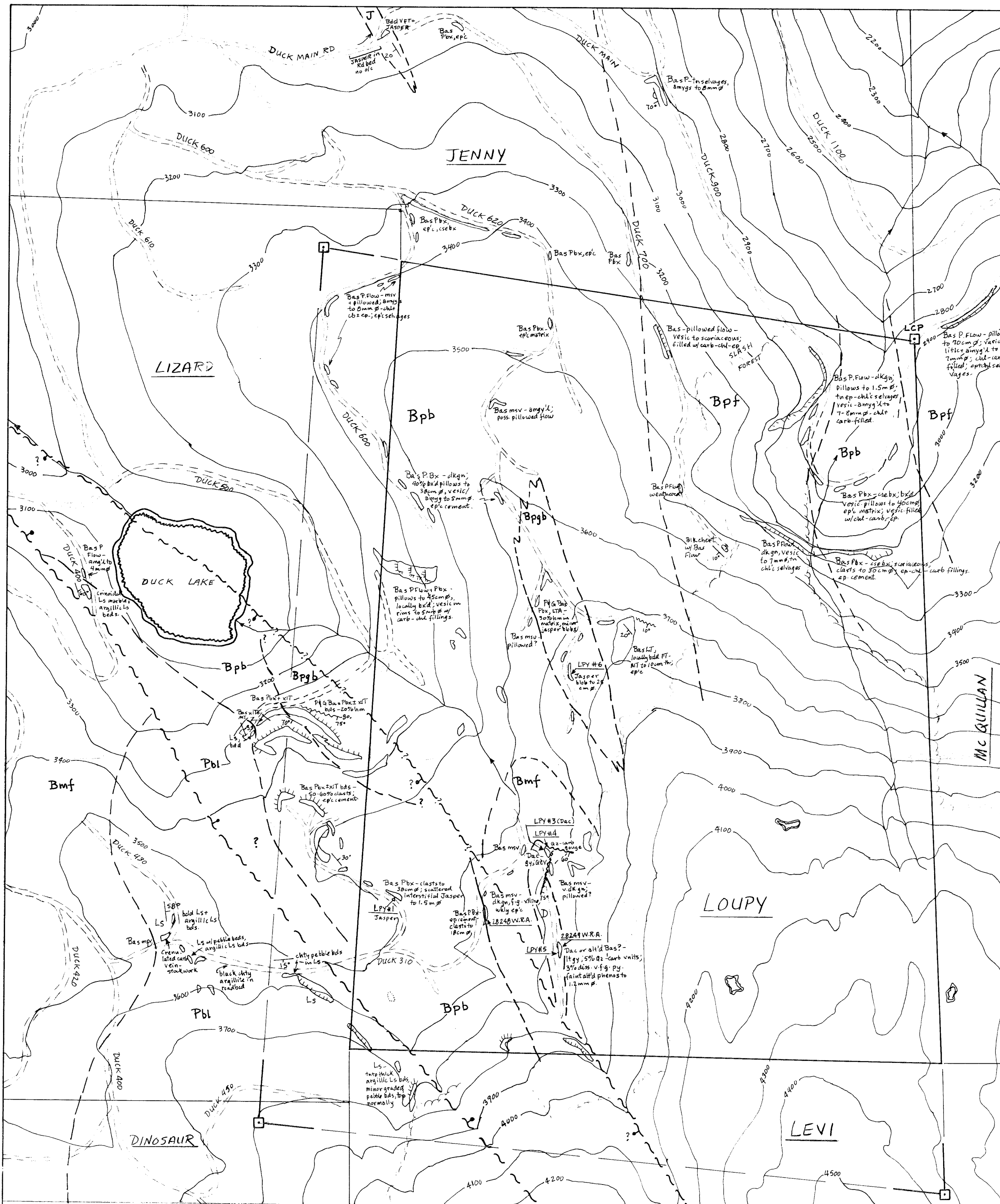
Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : WESTMIN RESOURCES LTD.
WESTERN MINES DIVISION
P.O. BOX 8000
CAMPBELL RIVER, B.C.
V9W 5E2

CERT. # : A8610246-001
INVOICE # : I8610246
DATE : 29-JAN-86
P.O. # : 50026
SICKER PROJECT

Sample description	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	L.O.I. %	TOTAL		
28248 W.R.A.	51.02	18.21	9.12	4.83	3.12	3.95	1.50	0.820	0.42	0.18	5.52	98.69	--	--
28249 W.R.A.	69.75	12.34	2.70	1.04	2.24	3.33	1.85	0.410	0.18	0.05	4.47	98.36	--	--
										43.89				



PALEOZOIC
SICKER GROUP

- Pbl** BUTTLE LAKE FM. - gray, crystalline massive bedded limestone marble; locally crinoidal; interbeds of argillitic and tuffaceous limestone and cherty fine tuffs, pebble beds (of chert pebbles) and black argillitic chert with minor disseminated pyrite.
- MYRA FM** (order below does not imply age-relationship?)
- Bmf** Basalt massive flow - dark green; fine-grained, often vesicular/amygdaloidal - chlorite + carbonate ± epidote filled; epidote also in veinlets and patches.
- Bpf** Basalt pillowed flow - dark to medium green; interfingers with units above and below; pillows to 70 cm Ø, round - often difficult to ascertain tops; vesicles + amygdalites concentrated at rims; locally variolitic; green mass dk green chlorite + epidote; selvages thin (2 cm), chloritic + epidotitic.
- Bpb** Basalt pillow breccia - brecciated version of above; broken pillows to 50 cm Ø, vesicular to (locally) scoriaceous; epidotic; may include minor beds of crystal tuff, jasper blobs to 1.5 m Ø, black cherty tuff (well laminated), and lapilli tuffs.
- Bpgb** "Purple/green" basalt pillow breccia - hematitic altered variant of Bpb; hematite dust colours matrix and (sometimes) clasts deep purple to purple-green; blebs of jasper interstitial is common (not laminated).
- J** Jasper & hematitic fine tuffs - brick-red to light pink and green; well laminated, delicate graded beds preserved; primary sediment features preserved.
- D** Dacite, massive - light gray, fine-grained; small phenocrysts to 1.2 mm sericitic-altered, 3-5%; white to creamy quartz-carbonate stringers erratically throughout; 3% very finely disseminated pyrite. (May be an altered massive basalt.)

- LPY #4** Assay sample (ident. + location)
- 28248 W.R.A.** Whole rock sample (ident. + location)
- 70°/15°** Strike & dip of bedding
- Pillow top & dip**
- Outcrop outline**
- Scarp**
- Geological contact (solid = known; dashed = inferred)**
- Fault (dip, if known; ball on downthrown block)**
- Claim corner post; boundaries (solid = reduced, validated; (LCP = legal corner post) (dashed = original border)**
- Claim boundaries - adjoining claims**
- Logging road**
- Lake**
- Creek w/flow direction**
- Forest slash boundary**

GEOLOGICAL BRANCH ASSESSMENT REPORT

14,389

WESTMIN
Westmin Resources Limited
MINING DIVISION

Work By	ED LYONS
Date Drafted	6/11/85
Drafted By	ED LYONS
Date Revised	
Revised By	

LOUPY CLAIM 637(II)

GEOLOGY MAP

N.T.S. Number
92 F/2 - 63 W
ORTHOPHOTO BASE:
1471 MAC-BLO

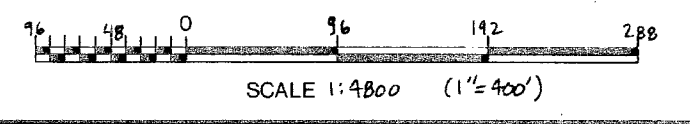


Figure
4