

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

DIAMOND DRILLING REPORT

ON

LEW NO. 6 MINERAL CLAIM

N.T.S. 82F/8

Fort Steele Mining Division

March, 1981

D.D. HOLE L-80-1

Latitude: 49° 18'

Longitude: 116° 04'

Report By:

G.L. WEBBER

Geologist

Cominco Ltd. - Kootenay Exploration  
#1051, Industrial Road No. 2  
Cranbrook, B.C. V1C 4K7

Under the supervision of:

D. Anderson

Geologist, P.Eng.

part 2  
of 2

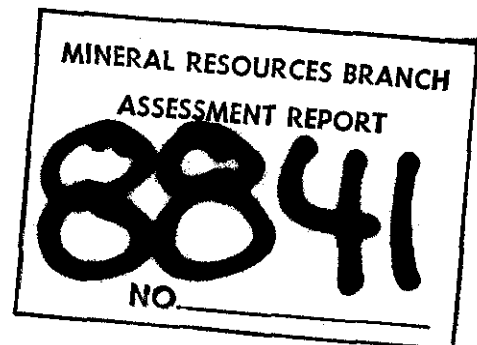


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ATTACHMENTS

Plate 1 D.D. Section)  
Location Map Plate 2) in pocket

COMINCO LTD.

Exploration

Western District

Lew No. 6 Claim

Fort Steele Mining Division

General Statement

This report describes the results and expenditures relating to diamond drilling on the Lew No. 6 claim.

Diamond drilling was performed during Oct. 1st to Nov. 7th, 1980. Total expenditures relating to this drill program amounted to \$69,952 - Total PAC plus D.D. Program - \$85,500  
PAC withdrawal 15,548

It is requested that 85,500 be applied as follows:

LEW 6 Record No. 911 (20 units) 3 years @ 100/3 years @ 200	18,000
LEW 10 Record No. 915 (15 units) " "	13,500
LEW 12 Record No. 917 (20 units) " "	18,000
LEW 13 Record No. 918 (20 units) " "	18,000
LEW 15 Record No. 920 (20 units) " "	<u>18,000</u>
	85,500

INTRODUCTION

One N.Q. diamond drill hole, totalling 648.4 metres was drilled to test for Pb-Zn mineralization and to obtain information on stratigraphy. This hole was collared on October 1st, 1980 and completed November 7, 1980.

The drill program was under the direction of D.L. Pighin and supervised by D. Anderson.

Location and Access

Lew Claim No. 6 is located between Lewis and Ridgeway Creeks, tributaries of Moyie River. Access is via good gravel road down Ridgeway Creek to the Moyie river and Highway 3/95 at Lumberton, a distance of 22.5 km. Elevations on the claim range from 1,524m. to 1,980m.

Sperry Sun Single Shot Test of D.D. Hole L-80-1

At Collar Dip  $-90^{\circ}$   
At 171m. bearing  $075^{\circ}$  Az. Dip  $-82^{\circ}$   
At 328.0m. bearing  $280^{\circ}$  Az. Dip  $-78^{\circ}$   
At 617.3m. bearing  $279^{\circ}$  Az. Dip  $-75^{\circ}$

Core stored at the Sullivan mine in Kimberley.

CONCLUSIONS

The relevant data for the geology of D.D. Hole L-80-1 is contained on the accompanying graphic log (plate 1). The hole intersected generally mixed lithologies interpreted to be dominantly Middle Aldridge sediments, as well as a moderately thick Moyie sill. This hole intersected traces of Pb, Zn mineralization in veinlets and fractures with sparse disseminations at several locations throughout the hole (Plate 1). No significant sulphide mineralization was intersected.

Reported by: G.L. Webber  
G.L. WEBBER  
Geologist, Cominco Ltd.

Endorsed by: D. Anderson  
D. ANDERSON  
Geologist, P. Eng.

Approved for  
Release by: J.M. Hamilton  
J.M. HAMILTON, P. Eng.  
Chief Geologist, Sullivan Mine  
Cominco Ltd.

EXHIBIT "A"

STATEMENT OF EXPENDITURES

LEW NO. 6 CLAIM

Diamond Drilling - Indirect	
Salaries (field)	
D.L. Pighin (Geologist) 38 days @ 130/day	4,940
D. Anderson (Geologist) 5 days @ 170/day	850
Salaries (Office)	
G.L. Webber (Geologist) Report and Map Preparation 3 days @ 135/day	405
Diamond Drilling - Indirect - Drill Support	
Core Boxes - E.G. Whalley & Sons Ltd., Burnaby, B.C.	595
Transportation: 4x4 1/2 ton 43 days @ \$25/day	1,075
Mobilization and D.D. Site	
Henderson Heavy Hauling	1,221
Baron Contracting D-8 tractor (preparing drill site)	182
Peavine Farms - D-6 (reclamation)	720
Diamond Drilling - Direct	
Acadia Drilling Inc., 501 McBride Street Cranbrook, B.C. V1C 4H3	
D.D. Hole L-80-1: 648.4m. @ \$92.48/m.	59,964
Total Expenditures - Indirect =	\$ 9,988
Total Expenditures - Direct =	\$ 59,964
	\$ 69,952

This is Exhibit "A" to the Statutory Declaration of G.L. Webber declared before me this 6th day of April, 1981.

*G. L. Webber*

L. Sinclair  
A Commissioner for taking Affidavits  
for the Province of British Columbia  
A Commissioner for taking  
Affidavits for British Columbia

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A DIAMOND DRILL PROGRAM

CARRIED OUT ON THE LEW 6 MINERAL CLAIM

RIDGEWAY CREEK AREA

in the Fort Steele Mining Division  
of the Province of British Columbia

More Particularly N.T.S. 82F/8W

A F F I D A V I T

I, G.L. WEBBER, of the City of Kimberley, in the Province  
of British Columbia, make Oath and say:

1. That I am employed as a Geologist by Cominco Ltd.  
and as such, have a personal knowledge of the  
facts to which I hereinafter depose:
2. That annexed hereto and marked as Exhibit "A" to  
this my Affidavit is a true copy of expenditures  
incurred on a diamond drill programme, on the  
Lew 6 Mineral Claim.
3. That the said expenditures were incurred between  
the 15th day of September, 1980 and the 15th day of  
November, 1980, for the purpose of mineral exploration  
on the above noted claim.

Sworn Before Me at Lebanbrook )  
 in the Province of British Columbia, )  
 this 6th day of April, 1981. )

G.L. Webber  
 G.L. WEBBER

L. Sinclair  
 A Commissioner for taking affidavits )  
 in the Province of British Columbia. )

**L. SINCLAIRE**  
 A Commissioner for taking  
 Affidavits for British Columbia

COMINCO LTD.

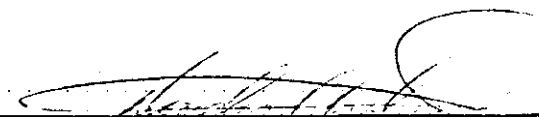
EXPLORATION

WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

G.L. WEBBER has personally conducted many types of mineral exploration work for Cominco Ltd. over the last twenty-five years.

I consider him well qualified to prepare this report.

  
\_\_\_\_\_  
DOUGLAS ANDERSON, P. Eng.  
Project Geologist

# Diamond Drill Geological Log

FOR D.D.H. L-80-1



LAT.  $49^{\circ} 18'$  DEP.  $116^{\circ} 04' 15''$  ELEV. 1,850m.  
 AZIM.  $279^{\circ}$  LENGTH  
 VERT COMP. 642.0m.  
 DATE COMPLETED: Oct. 19/80  
 DATE COLLARED: Sept. 30, 1980  
 CORE STORAGE: Sullivan Mine, Kimberley, B.C.  
 FILLED ON CLAIM(S): Lev 6  
 OBJECTIVE: To test for Pb-Zn mineralization and to gain information on stratigraphy.  
 CAVINED LENGTH: 400m.  
 TERMINATION COMMENTS: Hole was sloped due to Drill rig problems.

## GENERAL COMMENTS:

See Drill Logs and Plate.

FILLED BY: Acadia Drilling, Cranbrook, B.C.  
 TYPE DRILL: Longyear 44  
 CORE SIZE(S): HQ & NQ  
 PERFORMANCE COMMENTS: Good core recovery, drill in poor mechanical condition, very poor communication between drill foreman and company. Poor communication between foreman and drill crew.

ROCK REMAINING IN HOLE (LENGTH & SIZE): 6.73m. H.Q.

TYPE OF CAP & METHOD OF SEALING: None

OTHER MATERIAL REMAINING IN HOLE: None

DIAMETER INSTRUMENT USED: Sperry Sun Single Shot

ADDITIONAL DOWN HOLE TESTS: None

## LOG LEGEND

### BED THICKNESS CLASSIFICATION

BEDS	Very Thick Bedded
	100 cm
	Thick Bedded
	30 cm
	Medium Bedded
	10 cm
LAMINAE	Thin Bedded
	3 cm
	Very Thin Bedded
	1 cm
	Laminated
	0.3' cm

### LITHOLOGY ABBREVIATIONS

OQ - Orthoquartzite  
 QA - Quartz Arenite  
 QW - Quartz Wacke  
 QCW - Quartzitic Wacke  
 W - Wacke  
 SW - Sub Wacke  
 AG - Argillite

D.D.H.





## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at								
Completed		Core Size	Corr. Dip								
Co-ordinates			True Brg.								
Objective			% Recov.								
Footage	Description	Sample	Length	Analysis							
From To		No.									
Box 3	16.28 to 16.40	Quartzitic wacke; med. bedded, med. grained, contains large									
16.28	20.4m	biotite enriched concretion.									
	16.40 to 16.93	Wacke; thin bedded? badly broken core.									
	16.93 to 17.26	Quartzitic wacke; med. bedded, med. grain.									
	17.26 to 19.34	Wacke; thin bedded, thin subwacke tops bdg. to Core 90°.									
	19.34 to 20.4	Quartzitic wacke; thick bedded, grading from fine grain to med. grained at base.									
Box 4											
20.4	24.53	20.4 to 22.16	Wacke; thick bedded, fine grained. Bdg. to Core 85°								
		22.16 to 24.28	Quartzitic wacke; thick bedded grading from med. grained top to fine gr. base.								
		24.28 to 24.53	Quartzitic wacke; see next Box.								
		22.16	Sphalerite & galena fills tension fracture 5 cm. long by 2 mm wide.								
Box 5											
24.53	29.0	24.53 to 27.06	Quartzitic wacke; thick bedded (+ 1 metre thick), gen. fine grained, gen. light grey to mottled light grey & dark grey.								
		27.06 to 27.13	Wacke; very thin bedded, fine grain to med. grained.								
		27.13 to 29.0	Wacke; med. bedded, med. to fine gr., rare quartzitic wacke base.								

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1												
Commenced		Location	Tests at		Hor. Comp.											
Completed		Core Size	Corr. Dip		Vert. Comp.											
Co-ordinates			True Brg.		Logged by											
Objective			% Recov.		Date											
Footage	Description		Sample No.	Length	Analysis											
From	To															
Box 6																
29.0	33.6	29.0 to 30.38	Quartzitic wacke; thick bedded, med. to fine grain, small patches of sericitization, appear related to concretions.													
		30.38 to 30.49	Wacke; med. bedded, med. grained.													
		30.49 to 31.37	Quartzitic wacke; thin bedded, fine gr.													
		31.37 to 31.84	Wacke; thin bedded, med. grained with fine grained tops.													
		31.84 to 33.6	Quartzitic wacke; med. bedded, gen. fine grained. Bdg. to Core 85°.													
		@ 32.20	Sphalerite disseminated in pyrrhotite rich lense 4 cm. x 4mm.													
		@ 32.60	Sphalerite occupies hair line fracture for 4 cm.													
		@ 32.76	Sphalerite disseminated in pyrrhotite rich concretion 6 cm. x 1.5cm.													
		@ 32.87	Sphalerite & Galena (coarsely crystalline) occurs in a biotite-sericite rich concretion 10 cm. in size.													
Box 7																
33.6	37.8	33.6 to 34.21	Quartzitic wacke; thick bedded med. grained.													
		34.21 to 36.12	Wacke; med. bedded, med. grained, rare rip-up clasts generally at bed tops.													
		36.12 to 37.8	Quartzitic wacke; thick bedded, med. grained.													

Scale

Colour Plot  
& Dip

## Drill Hole Record



Page 4

Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates		True Brg.	Logged by								
Objective		% Recov.	Date								
Footage	Description	Sample No.	Length	Analysis							
From To											
Box 8											
37.8 41.7m	37.8 to 41.7m Quartzitic wacke; med. bedded and fine grained.										
Box 9											
41.7 42.7	41.7 to 42.5 Wacke; thin bedded, fine gr., cross laminated tops.										
	42.5 to 42.7 Wacke; med. bedded, fine to med. gr., flame structure tops silicified in part; tension crack quartz veining (1 cm. wide) parallel to core, contains small patches of pyrrhotite, biotite and chlorite.										
	Bedding to Core 85°. END OF H.Q. Core.										
Box 10											
42.7 50.07	Start on NQ Core.										
	42.7 to 43.77 Quartzitic wacke; med. bedded, med. to fine grained.										
	43.77 to 43.90 Conglomeratic zone, clasts tabular to subround, largest clast. 6 cm. x 2 cm., clasts are lithologically similar.										
1.37 metres core loss	43.90 to 47.32 Quartzitic wacke; med. bedded, thin laminated subwacke tops.										
	47.32 to 47.72 Wacke; slump structured, fine wacke clasts along the base of unit. 1.37 meters core loss.										
	47.72 to 49.14 Quartzitic wacke; med. bedded, gen. med. grain, subwacke tops up to 5 cm. thick.										



## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1																
Commenced		Location	Tests at	Hor. Comp.																
Completed		Core Size	Corr. Dip	Vert. Comp.																
Co-ordinates			True Brg.	Logged by																
Objective			% Recov.	Date																
Footage		Description	Sample	Length	Analysis															
From	To		No.																	
Box 14																				
66.15	72.2	66.15 to 69.54			Wacke and quartzitic wacke; strongly silicified, sericitic in part, chloritic in part.															
					Core badly broken, but no evidence of shearing.															
Core Loss	5cm	69.54 to 69.82			Quartz vein; strong sericitic alteration of sed. at contact. Sparse pyrite occurs in Quartz vein. (@ 30° to Core.)															
		69.82 to 70.56			Quartzitic wacke; strongly silicified, chloritic and sericitic.															
		70.56 to 72.2			Gabbro; very fine grain, chilled contact.															
					Hanging-wall contact can not be observed in core.															
Box 15																				
72.2	78.26	72.2 to 78.26			Gabbro; generally fine grained.															
		6 cm. core loss																		
Box 16																				
78.26	84.33	78.26 to 83.30			Gabbro; generally fine grained. Lower contact relationship to sediments not discernible, due to broken core.															
		7 cm. core loss																		
		83.30 to 84.33			Altered wacke; silicified, albitized?, with some chloritized lamina.															

## Drill Hole Record



Property	LEW	District	Hole No. L-80-1	Tests at	Hor. Comp.	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location										
Completed		Core Size	Corr. Dip -90°		Vert. Comp.							
Co-ordinates			True Brg.		Logged by							
Objective			% Recov.		Date							
Footage	Description		Sample No.	Length	Analysis							
From	To											
Box 17												
84.33	89.95	84.33 to 85.24	Quartzitic wacke; thick bedded, fine grained, contains biotite rich concretion.									
		85.24 to 85.6	Conglomeratic wacke; angular clasts which are bent and contorted. Clasts are lithologically homogeneous, matrix very biotitic.									
		85.6 to 88.43	Wacke interbed subwacke; thin bedded, laminated wacke to subwacke 50/50. @ 86.90 Biotite - Sulphide layer 2.5 cm. thick 50% pyrrhotite sparse chalcopyrite.									
		88.43 to 88.63	Quartzitic wacke; med. bedded fine grained.									
		88.63 to 88.8	Wacke; thin bedded.									
		88.8 to 89.95	Quartzitic wacke; thick bedded, med. grained fining upwards. Bdg. to Core 85°.									
Box 18												
89.95	95.6	89.95 to 95.6	Quartzitic wacke; thin wacke tops; med. bedded generally fine gr. wacke, beds generally current laminated, but rarely are more than 6 cm. thick. Quartzitic wacke contains silicified, biotitic concretions.									

## Drill Hole Record



Property	LEW	District	Hole No.	J-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Footage		Description	Sample	Length	Analysis						
From	To		No.								
Box 19											
95.6	101.44	95.6 - 96.44 Quartzitic wacke; med. bedded, med. grained, @ 96.30 conglomeratic quartzitic wacke 4 cm. thick, clasts small and subangular. Lithologically homogeneous.									
		96.44 - 97.56 Wacke; very thin bedded, and laminated. Bedding to core 90°.									
		97.56 - 99.3 Quartzitic wacke; thin wacke tops; thin bedded, wacke tops are laminated.									
		99.3 - 100.4 Quartzitic wacke; med. bedded, med. grained.									
		100.4 - 100.72 Wacke; thin bedded, laminated. @ 100.72 slumped zone 8 cm. thick.									
		100.72 - 101.44 Quartzitic wacke; thin bedded, fine grained.									
Box 20											
101.44	107.30	101.44 - 101.71 Wacke; very thin bedded, and laminated.									
		101.71 - 102.80 Quartzitic wacke, rare subwacke tops; med. bedded, med. grained bases fining upwards.									
		102.80 - 103.58 Wacke; med. bedded, laminated tops @ 103.40 two small biotite rich concretions contain disseminate pyrrhotite and rare chalcopyrite.									
		103.58 - 104.07 Quartzitic wacke; subwacke tops; med. bedded, med. grained fining upwards									





# Drill Hole Record

Property	LEW	District	Hole No. L-80-1
Commenced		Location	Tests at
Completed		Core Size	Corr. Dip
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim  
T. Brg.  
Collar Dip  
Elev.  
Length  
Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
Box 23					
119.22	124.69	119.22 - 120.68 Quartzitic wacke; thin bedded, rare med. beds, very fine grain, very fine parallel lamination. Slump structured from 120.30m. to 120.69m. disseminated pyrrhotite 120.24 to 120.28 < 1%.			
		120.68 - 122.83 Quartzitic wacke; silicified & laminated wacke tops, gen. med. grained.			
		122.83 - 124.69 Quartzitic wacke; silicified & laminated wacke tops, thin bedded, med. grain, cross bedding in tops common, rare subwacke top.			
Box 24					
124.69	130.60	124.69 - 125.3 Quartzitic wacke; med. grained, rare silicified top.			
		125.3 - 125.73 Wacke; very thinly bedded, very thinly laminated bedding to Core 90°.			
		125.73 - 128.0 Quartzitic wacke; silicified, laminated wacke tops; thin bedded, med. and fine grained. Rip-up clasts common in tops. Load Casting on bedding plains common.			
		128.0 - 130.2 Quartzitic wacke; med. bedded, generally med. grain, rare laminated, silicified wacke top.			
		130.2 - 130.50 Gabbro, fine grain, light colored.			
		130.50 - 130.60 Quartzitic wacke; fine grained.			









## Drill Hole Record

Property	LEV	District	Hole No.	L-80-1								
Commenced		Location	Tests at		Hor. Comp.							
Completed		Core Size	Corr. Dip		Vert. Comp.							
Co-ordinates			True Brg.		Logged by							
Objective			% Recov.		Date							
Footage		Description			Sample No.	Length	Analysis					
From	To											
Box 72												
395.12	400.30	395.12 - 397.0	Quartzitic wacke, rare quartz wacke; med. bedded, med. to fine grained, core generally broken.									
		397.0 - 400.30	Wacke, rare quartz wacke; med. bedded, rare parallel lamination. Numerous hairline tension fractures contain pyrrhotite associated with biotite and chlorite. @ 398.60 2 cm. thick pyritic gauge zone - 40° to core. Bedding to core 80°.									
Box 73												
400.30	405.17	400.30 - 402.45	Quartzitic wacke, interbedded quartz wacke; med. bedded, rare laminated wacke top, rare rip-up clasts.									
		402.45 - 403.30	Wacke; mainly very thin bedded, parallel laminated.									
		403.30 - 404.07	Quartz wacke; med. bedded, med. grained, rare wacke tops.									
		404.07 - 405.17	Quartz wacke; thick bedded, med. grain base, fining upwards, no wacke tops.									
Box 74												
405.17	411.46	405.17 - 406.25	Wacke; thin bedded, parallel laminated.									
		406.25 - 407.0	Quartzitic wacke; med. bedded, broken core.									
		407.0 - 407.59	Wacke; thin bedded, laminated, minor pyrrhotite mineralization along inceptent fractures.									

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

Sheet

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1									
Commenced		Location	Tests at		Hor. Comp.								
Completed		Core Size	Corr. Dip		Vert. Comp.								
Co-ordinates			True Brg.		Logged by								
Objective			% Recov.		Date								
Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet	
Box 74 cont'd	407.59 - 411.46	Quartz wacke; thick bedded, med. grain rare wacke tops.											
Box 75													
411.46	417.35	411.46 - 417.35 Quartz wacke, minor quartzitic wacke; med. bedded, med. to fine grained, generally good parallel laminated wacke tops @ 412.0m, bedding to Core 78°											
Box 76													
417.35	423.10	417.35 - 421.72 Quartz wacke interbedded quartzitic wacke; fine to med. grained laminated wacke tops.											
		421.72 - 422.20 Wacke; thin bedded, gen. parallel laminated, rare convolute laminations.											
		422.20 - 423.10 Quartzitic wacke, rare quartz wacke; med. bedded at 417.50. Disseminated to massive pyrrhotite and weakly disseminated sphalerite 5 cm. thick at 418.75.3 small specks of sphalerite, at 422.20 bedding to Core 80°.											
Box 77													
423.10	428.72	423.10 - 428.72 Quartz wacke, interbedded quartzitic wacke; med. bedded, rare laminated wacke tops.											
Box 78													
428.72	434.40	428.72 - 428.5 Quartz wacke; med. bedded, med. grained rare convolute wacke tops.											



## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1									
Commenced		Location	Tests at		Hor. Comp.								
Completed		Core Size	Corr. Dip		Vert. Comp.								
Co-ordinates			True Brg.		Logged by								
Objective			% Recov.		Date								
Footage From	To	Description	Sample No.	Length	Analysis								
Box 78 cont'd	428.5	- 430.5	Wacke; thin bedded, rare parallel laminations.										
	430.5	- 432.75	Quartzitic wacke; thin bedded, fine grained, rare parallel laminations.										
			@ 430.8, 4 cm. band of heavy diss. pyrrhotite 30% FeS.										
	432.75	- 434.40	Quartz wacke; med. bedded, med. grained.										
Box 79													
434.40	440.2	434.40 - 436.06	Wacke; thin bedded to very thin bedded, generally parallel laminated, some disseminated pyrrhotite along bedding planes.										
		436.06 - 440.2	Quartz wacke, interbedded quartzitic wacke; med. bedded wacke tops, rare biotite concretions contain disseminated pyrrhotites.										
		437.8 - 438.14	Slumped unit with 4 cm. conglomerate at top, clasts small and angular, lithologically homogeneous.										
Box 80													
440.2	447.38	440.2 - 443.19	Quartz wacke; interbedded quartzitic wacke, med. grained.										
		443.19 - 447.38	Quartz wacke; thick bedded, thin wacke tops.										
		1.17m. core loss											
Box 81													
447.38	451.55	447.38 - 448.90	Wacke; thin bedded, parallel laminated, rare thin quartz wacke interbeds.										



Scale  
Colour Plot  
& Dip

# Drill Hole Record



Property	LEW	District	Hole No. L-80-1	
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Claim  
T Brg.  
Collar Dip  
Elev.  
Length  
Hole No.  
Sheet

Footage From	To	Description	Sample No.	Length	Analysis
<b>Box 84</b>					
463.35	469.06	463.35 - 467.3 Wacke; minor interbeds of quartzitic wacke. Thin bedded generally laminated, to thinly laminated. at 467.85, 5 cm. thick conglomerate zone. at 465.10, 1 cm. band of disseminated pyrrhotite (25% FeS) and rare chalcopyrite.			
	467.3 - 469.06	Quartz wacke; med. bedded, med. to fine grained rare convoluted wacke top.			
<b>Box 85</b>					
469.06	474.0	469.06 - 474.0 Quartzitic wacke; med. bedded, generally fine grained, rare rip clasts, rare silicified, biotitic concretion contain abundant pyrrhotite, parallel laminated wacke tops.			
<b>Box 86</b>					
474.0	480.24	480.24 - 475.21 Quartzitic wacke; med. bedded, fine grained.			
	475.21 - 476.8	Wacke; thin bedded, parallel laminated. Bedding to Core 76°.			
	476.8 - 480.24	Quartz wacke, and quartzitic wacke; med. bedded gen. fine grained.			



## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1									
Commenced		Location	Tests at		Hor. Comp.								
Completed		Core Size	Corr. Dip		Vert. Comp.								
Co-ordinates			True Brg.		Logged by								
Objective			% Recov.		Date								
Footage	Description		Sample	Length	Analysis								
From	To		No.										
Box 89													
491.90	497.34	491.90 - 492.10	Quartz wacke; med. bedded.										
		492.10 - 495.4	Gabbro Dyke; contact 12° to core, gen. fine grained light green grading to grayish green coarser grained gabbro towards footwall. Irregular quartz filled fractures occur through out the dyke, fractures generally contain patches of massive pyrrhotite and pyrite, along the footwall of the Dyke Quartz veining, silicification and albitization alter 40 cm. of sediment.										
		495.4 - 496.6	Quartz wacke; med. bedded.										
		496.6 - 497.34	Wacke; thin bedded, parallel laminated, bdg. to core 83°.										
Box 90													
497.34	503.0	497.34 - 499.70	Wacke; thin bedded, parallel laminated in part.										
		499.70 - 500.72	Quartz wacke; med. bedded, med. grained.										
		500.72 - 503.0	Wacke; rare quartz wacke; thin bedded, laminated in part @ 501.0m. band of disseminated pyrrhotite with rare chalcopyrite 25% FeS. @ 502.53 2 cm. bed of quartz wacke contains 25% disseminated pyrrhotite.										

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

Sheet

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Footage		Description	Sample	Length	Analysis						
From	To		No.								
Box 91											
503.0	508.85	503.0 - 503.4 Wacke; thin bedded, thin laminated.									
		503.4 - 507.0 Quartz wacke interbedded quartzitic wacke; med. bedded tops are rare.									
		507.0 - 507.64 Wacke; thin bedded, parallel laminated.									
		507.0 - 507.20 - pyrrhotite disseminated along bedding (< 2%) planes, pyrrhotite also occurs along thin irregular fractures.									
		507.64 - 508.85 Quartz wacke; med. bedded, med. grained, sericitic in part.									
Box 92											
508.85	514.77	508.85 - 509.50 Quartzitic wacke; med. bedded.									
		509.50 - 511.05 Wacke; thin bedded, mainly parallel laminated, with rare cross laminated sections.									
		511.05 - 514.77 Quartz wacke; thick bedded, med. grained, no wacke tops.									
Box 93											
514.77	520.20	514.77 - 514.90 Quartz wacke; thick bedded.									
		514.90 - 515.80 Wacke; thin bedded, parallel laminated									
		515.70 to 515.80. Disseminated pyrrhotite lamina, parallel to bedding less than 1 mm thick (bdg. to Core 84 <sup>o</sup> ).									
		515.80 - 520.0 Quartz wacke; med. bedded, med. grained, some beds graded fining upwards.									
		520.0 - 520.20 Wacke; thin bedded, laminated, weakly disseminated pyrrhotite.									

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Role No.	Sheet
Commenced	Location	Tests at	Hor. Comp.								
Completed	Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates	True Brg.	Logged by									
Objective	% Recov.	Date									
Footage	Description	Sample No.	Length	Analysis							
From To											
Box 97											
537.1 543.14	537.1 - 540.6 Quartzitic wacke, interbedded wacke; thin bedded. wacke beds parallel laminated.										
	532.0 - 532.20 disseminated pyrrhotite lamina.										
	540.6 - 542.40 Quartzitic wacke; med. bedded, rare thin bedded laminated wacke tops.										
	542.40 - 542.8 Conglomerate; generally thin tabular clasts, oriented to the plan of bedding. Wacke matrix.										
	542.8 - 543.14 Quartzitic wacke; thin bedded.										
Box 98											
543.14 548.7	543.14 - 544.25 Quartzitic wacke, interbedded wacke; thin bedded.										
	544.25 - 546.50 Quartzitic wacke, interbedded wacke; med. bedded wacke beds generally laminated and thin bedded.										
	546.50 - 547.5 Wacke - Subwacke; thin bedded parallel laminated. Bdg. to Core 85°.										
	547.5 - 548.7 Quartz wacke; med. bedded, med. grained, thin parallel laminated wacke-subwacke tops.										
Box 99											
548.7 554.48	548.7 - 553.8 Quartzitic wacke; med. bedded, laminated wacke tops.										
	553.8 - 554.48 Wacke and subwacke; thin bedded, very thin laminated convolute laminations in part.										

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates		True Brg.	Logged by								
Objective		% Recov.	Date								
Footage From To	Description	Sample No.	Length	Analysis							
Box 100											
554.48 560.2	554.48 - 554.8 Wacke; thin bedded, mainly parallel laminations.										
	554.8 - 557.3 Quartzitic wacke, interbedded wacke; thin bedded wacke interbeds laminated.										
	557.3 - 560.2 Quartzitic wacke, interbedded quartz wacke; med. to fine grained @ 555.0, 2 cm. band disseminated pyrrhotite rare chalcopyrite est. 15% FeS. @ 558.4, 2 cm. band of disseminated chalcopyrite est. 2% Cu.										
Box 101											
560.2 566.0	560.2 - 566.0 Quartz wacke, interbedded quartzitic wacke; med. bedded, med. to fine grained patches of very weak pyrrhotite dissemination common. Bedding to Core 75°.										
Box 102											
566.0 571.3	566.0 - 568.65 Quartz wacke, interbedded quartzitic wacke; med. bedded, thin wacke-subwacke tops, rare rip-up clasts, very weakly disseminated pyrrhotite through section.										
	568.65 - 570.9 Quartz arenite to litho quartz arenite; thick bedded, coarse grained one single bed.										
	570.9 - 571.34 Wacke; thin bedded, parallel laminated.										



## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Tests at	Hor. Comp.	Claim	T Br.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location			Corr. Dip	Vert. Comp.							
Completed		Core Size			True Brg.	Logged by							
Co-ordinates					% Recov.	Date							
Objective													
Footage	Description	Sample No.	Length	Analysis									
From To													
Box 103													
571.34 577.0	571.34 - 577.0 Quartz wacke, interbedded quartzitic wacke; med. bedded, med. to fine grained, parallel laminated wacke-subwacke tops, convoluted in part, rare rip-up clasts. @ 572.19, 1 cm. band disseminated pyrrhotite est. 25% FeS @ 576.8, 3x4 cm. concretion, contain abundant disseminated pyrrhotite is common through out most of the Quartz wacke units.												
Box 104													
577.0 582.7	577.0 - 580.2 Quartzitic wacke, interbedded quartz wacke; med. bedded, wacke tops are rare, quartz wacke commonly sericitic, weakly disseminated pyrrhotite common.												
	580.2 - 581.4 Quartzitic wacke; thick bedded, med. grained (one single bed) generally sericitic.												
	581.4 - 582.7 Quartzitic wacke, interbedded wacke; thin bedded, wacke beds parallel laminated. Bdg. to Core 82° @ 581.7, 3 cm. quartz vein, contains Euhedral black tourmaline tourmaline crystallites impregnated the host sediment for 4 cm. from the H.W. of the vein.												

## Drill Hole Record



Property	LEW	District	Hole No. L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						
Completed		Core Size	Corr. Dip	Vert. Comp.						
Co-ordinates		True Brg.	Logged by							
Objective		% Recov.	Date							
Footage	Description		Sample No.	Length	Analysis					
From To										
Box 105										
582.7	588.5	582.7 - 588.5	Quartzitic wacke; interbedded wacke, med. bedded rare thin beds wacke generally laminated. Weakly disseminated pyrrhotite and rare chalcopyrite is common through-out the quartzitic beds.							
			@ 584.1 sphalerite, occurs in 3 mm wide quartz vein parallel to bedding, sed. adjacent to vein are strongly chloritized, immediately below the vein, a 2 cm. band of heavy disseminated pyrrhotite.							
			@ 585.9, 1.5 cm. quartz vein parallel to core contains pyrrhotite, chalcopyrite and Euhedral tourmaline crystals.							
			@ 587.5 a 2.5 cm. band of heavy disseminated pyrrhotite with some chalcopyrite.							
Box 106										
588.5	593.5	588.5 - 589.5	Quartz wacke; med. bedded, slump structured wacke-subwacke tops. Weakly disseminated pyrrhotite common in quartz wacke beds @ 589.50 - 5 cm. pyrrhotite concretions 40% FeS.							
		589.5 - 590.75	Wacke-subwacke; thin bedded, parallel laminated in part and flame structure in part, rare rip-up clasts. Bdg. to core 81°							

## Drill Hole Record



Property	LEW	District		Hole No.	L-80-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

Sheet

Footage From	To	Description	Sample No.	Length	Analysis
Box 108 cont'd					
	605.0 - 605.98	Wacke; slump conglomerate best clast development near base of unit, clasts, long axis oriented parallel to bedding, clasts range in size from tiny (3mm) fragments to large elliptic 4 cm. x 2 cm. fragments.			
Box 109					
605.98 609.1	605.98 - 606.24	Wacke slump conglomerate; as previously described.			
Note Core Box only 1/2 full	606.24 - 607.35	Quartz wacke; med. bedded, med. grained rare pyrrhotite rich concretions.			
	607.35 - 607.70	Wacke; med. bedded, none laminated, contains thin zones of tiny clasts.			
	607.70 - 609.1	Quartzitic wacke; med. bedded, fine grained.			
Box 110					
609.1 614.9	609.1 - 612.0	Quartz wacke; thick bedded, upper unit coarse grained, lower unit fine grained, upper unit sericitic rare cross bedded zones, one 4 cm. x 2 cm. pyrrhotite rich concretion.			
	612.0 - 613.7	Wacke interlayered subwacke; thin bedded thin sandy lenses, gen. pyrrhotite rich, parallel laminated in part.			
	613.50 - 613.60	Conglomerate zone, clasts are tabular			

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location		Tests at		Hor. Comp.					
Completed		Core Size		Corr. Dip		Vert. Comp.					
Co-ordinates		True Brg.		Logged by							
Objective		% Recov.		Date							
Footage	Description	Sample No.	Length	Analysis							
From	To										
Box 110 cont'd											
	612.0 - 613.7	and thin, oriented to the plane of bedding.									
	Cont'd	Bdg. to Core 80°									
	613.7 - 614.9	Quartzitic wacke; med. bedded, fine grained.									
Box 111											
614.9	620.75	614.9 - 615.78 Quartzitic wacke; med. bedded, fine grained.									
		615.78 - 617.57 Quartz wacke; thick bedded, med. grained thin convolute structured wacke-subwacke tops. Sericitic in part, rare zones of disseminated pyrrhotite.									
		617.57 - 618.40 Wacke interlayered subwacke; thin bedded, generally convolute structured, rare parallel laminated zone.									
		618.40 - 618.60 Conglomeratic wacke; clasts are rounded to tabular generally less than 1 cm. in size. Clasts are lithologically similar.									
		618.60 - 620.75 Wacke; thin bedded, rare med. bed of quartzitic wacke, rare patches of disseminated pyrrhotite.									
		Hole Surveyed at 617.3 meters, bearing 279° azimuth, dip -75°									
Box 112											
620.75	626.2	620.75 - 621.45 Wacke; med. bedded, laminated in part.									
		621.45 - 623.12 Quartzitic wacke; med. bedded, fine grain at 621.9, 20 cm. concretion, strongly silicified,									

# Drill Hole Record



Property	LEW	District	Hole No.	L-80-1
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

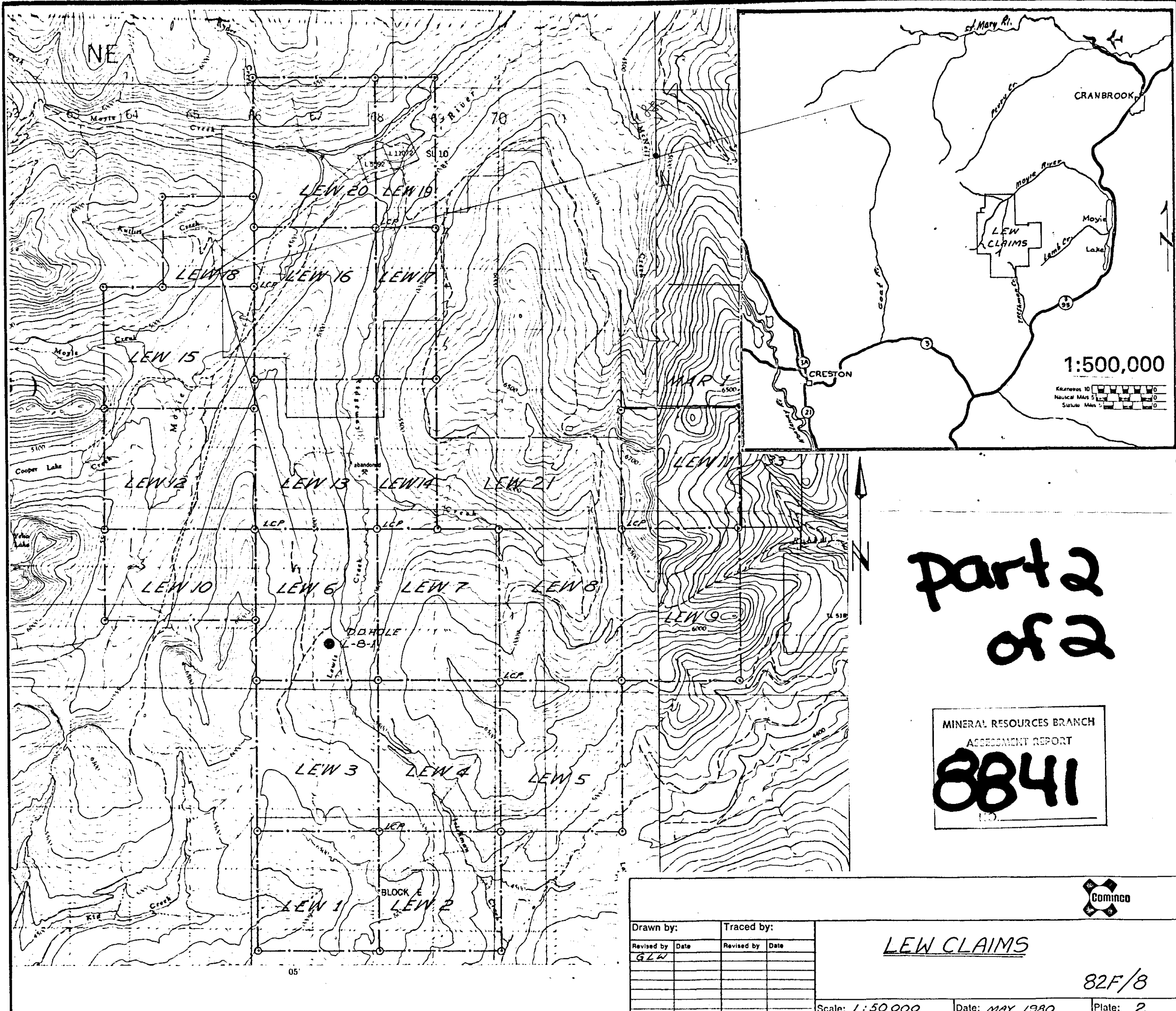
Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
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Footage From	To	Description	Sample No.	Length	Analysis
Box 112 cont'd					
	621.45 - 623.12	and biotitized, with abundant pink subhedral garnet development, rare pyrrhotite rich concretions, 30% FeS.			
	623.12 - 624.1	Wacke; thin bedded, laminated in part rare disseminated pyrrhotite.			
	624.1 - 625.42	Gabbro sill; sed. at upper contact strongly silicified, irregularly chloritized in part for 30 cm. lower contact simularly altered. Gabbro generally fine grained.			
	625.42 - 626.2	Quartz wacke; thick bedded, med. grained contains abundant pyrrhotite, with minor chalcocopyrite, as disseminations and as massive pyrrhotite filling thin irregular fractures.			
Box 113					
	626.2 - 632.27	Quartz wacke interbedded quartzitic wacke; med. bedded, rare wacke tops, some beds strongly silicified and chloritized, rare patches of disseminated pyrrhotite. Bdg. to Core 80°.			
Box 114					
	632.27 - 638.26	Quartzitic wacke, rare interbedded wacke; med. bedded, rare patch of sericitic alteration rare rip-up clasts.			

## Drill Hole Record



Property	LEW	District	Hole No.	L-80-1						
Commenced		Location	Tests at		Hor. Comp.					
Completed		Core Size	Corr. Dip		Vert. Comp.					
Co-ordinates			True Brg.		Logged by					
Objective			% Recov.		Date					
Footage From	To	Description	Sample No.	Length	Analysis					
Box 114 cont'd										
	635.67 - 636.60	Wacke; thin bedded, thin laminated.								
	636.60 - 637.83	Quartz wacke; med. bedded, med. to fine grained silicified and chloritic in part, minor disseminated pyrrhotite. Shear zone 1 cm. thick at 634.30, at 30° to core.								
	637.83 - 638.26	Gabbro sill; finely crystalline.								
Box 115										
638.26	643.70	638.26 - 638.61 Gabbro sill, finely crystalline, minor silicification and chlorization, alters sed. at basal contact.								
		638.61 - 643.70 Quartz wacke; thick bedded, med. to coarse grained, rare laminated wacke top.								
Box 116										
643.70	648.4	643.70 - 648.4 Quartz wacke; med. bedded, med. grained, Wacke-subwacke tops common, zones of widely dispersed fine lithic fragments are common. Conglomerate wacke (slump conglomerate) occurs between 646.50 and 646.9. Clasts range in size from 5cm. to 5cm. thick generally lenticular shaped, long axis oriented to the plane of bedding, clasts are lithologically similar. Sphalerite occurs weakly disseminated in a silicified concretion 4 cm. in size. Bdg. to Core 80°.								
END		END OF HOLE								
		Core stored at the Sullivan Mine in Kimberley.								



part 2  
of 2

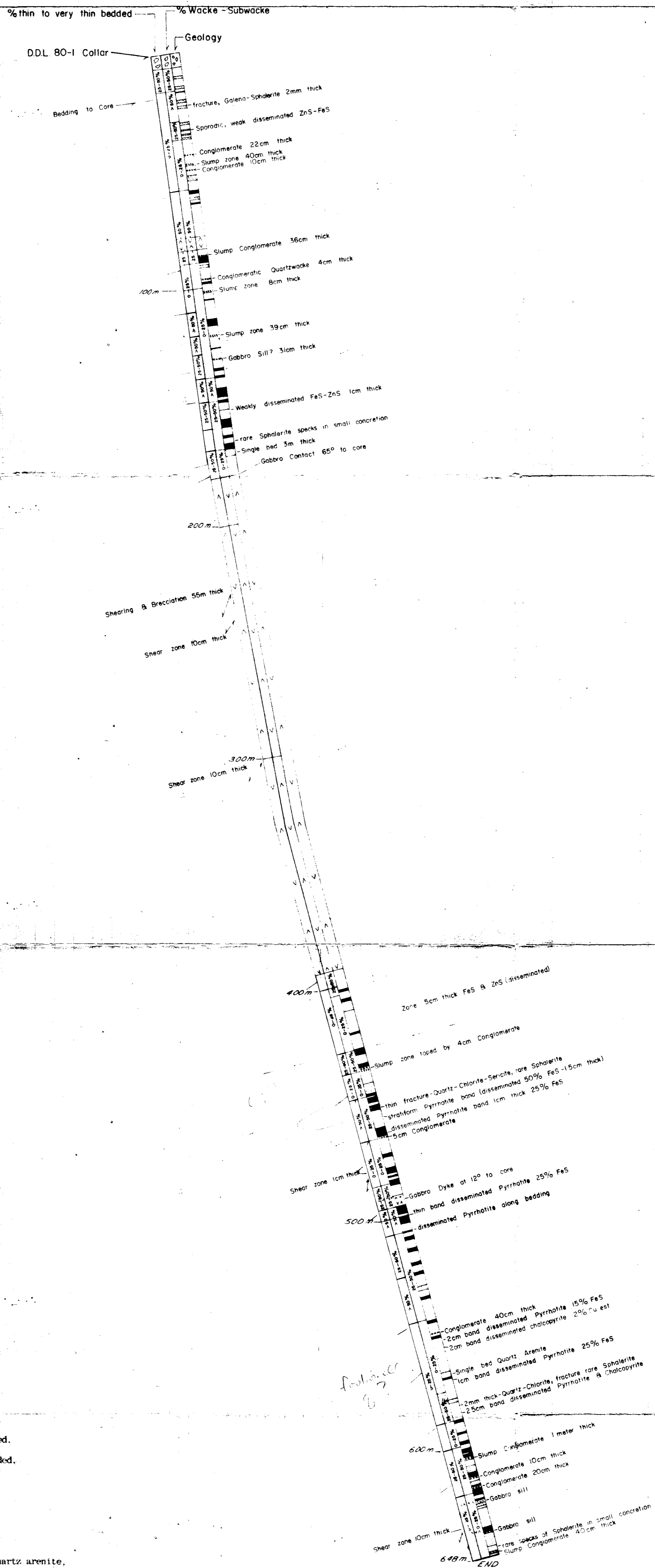
MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8841**



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date
GLW			

LEW CLAIMS

82F/8



LEGEND

- 0-25% thin bedded & very thin bedded.
- 25%-50% thin bedded & very thin bedded.
- 50%-100% thin bedded & very thin bedded.
- 0-25% wacke & subwacke.
- 25%-50% wacke & subwacke.
- 50%-100% wacke & subwacke.
- Quartzitic wacke, Quartz wacke and Quartz arenite, thick bedded to very thick bedded.
- Wacke through to Quartz arenite undivided, medium bedded.
- Interturbidite wacke and interturbidite subwacke, medium to very thin bedded.
- Intraformational Conglomerate and Intraformational breccia.
- Slumped sediments.
- Gabbro

Bed thickness: 100 cm and up - very thick, 30-100 cm - thick, 10-30 cm - medium, 3-10 cm - thin, 1-3 cm - very thin.

NOTE:

The above percentage categories for thin bedded versus medium and thick bedded, and for wacke-subwacke versus Quartzitic wacke, Quartz wacke, Quartz arenite, are calculated for continuous intervals of Core which range from 8 to 12 meters.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**884**  
NO.

Lot: 49° 8'  
Long: 116° 04' 15"  
Elev: 1650m  
Dip: 90°-75°  
Brq: 279°

**Part 2**  
**of 2**

LEW PROPERTY	
Drawn by D.D.H.	Traced by D.D.H.
Reviewed by D.D.H.	Reviewed by D.D.H.
D.D.H. L80-1	
Scale	Date
	Page 1