

87-408  
5/88

REPORT ON DIAMOND DRILL PROGRAM  
ON PART OF CAMERON GROUP  
PORT ALBERNI AREA, BRITISH COLUMBIA

CLAIMS INVOLVED: OETS, Debbie 2, Cam, Linda 2 (Alberni M.D.)  
Lucy 1, Lucy 2, Cop (Nanaimo M.D.)

TOTAL CLAIM UNITS: 87

LOCATION: Alberni and Nanaimo Mining Districts  
N.T.S.: 92 F/2E  
Latitude: 49° 11'  
Longitude: 124° 40' 39" 30"  
China Creek - McLaughlin Ridge area, 15 air-kms  
east southeast of Port Alberni, Vancouver Island, B.C.

OWNER OF CLAIMS: Westmin Resources Limited

OPERATOR OF CLAIMS: Nexus Resource Corporation

REPORT BY: Edward Lyons

DATE: 17 July 1987

FILMED

G E O L O G I C A L B R A N C H  
A S S E S S M E N T R E P O R T

15,909

## TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	
1. INTRODUCTION	
1.1 Property Definition	1
1.2 Location, Access and Physiography	1
1.3 Property History	4
1.4 Objectives of This Study	4
2. DETAILED TECHNICAL DATA	
2.1 Geology	
2.1.1 Regional Setting	5
2.1.2 Property Setting	7
2.2 Work Summary	9
2.3 Drill Logs	10
3. DISCUSSION AND CONCLUSIONS	97
4. ITEMIZED COST STATEMENT	98
5. STATEMENT OF QUALIFICATION	99
6. REFERENCES	100

## TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	
1. INTRODUCTION	
1.1 Property Definition	1
1.2 Location, Access and Physiography	1
1.3 Property History	4
1.4 Objectives of This Study	4
2. DETAILED TECHNICAL DATA	
2.1 Geology	
2.1.1 Regional Setting	5
2.1.2 Property Setting	7
2.2 Work Summary	9
2.3 Drill Logs	10
3. DISCUSSION AND CONCLUSIONS	156
4. ITEMIZED COST STATEMENT	157
5. STATEMENT OF QUALIFICATION	158
6. REFERENCES	159

## LIST OF FIGURES

	<u>Page</u>
Figure 1    Property Definition, Cameron Group	2
Figure 2    Location Map, Cameron Group	3
Figure 3    Geology Map, Vancouver Island	6
Figure 4    Drill hole locations (1:5000)	(in back pocket)

## APPENDIX

1. Analytical Results of Core Samples

## SUMMARY

Twelve BQ diamond drill holes, totalling 1 687.9m, tested two gold-bearing zones.

The Mineral Creek fault zone lies on a major north-trending lineament which passes from Lizard Lake (south) through Cameron Lake (north). It displaces lithologies as young as Cretaceous (Nanaimo Group). In the present program, ankerite-sericite-silica alteration is strongest in the center of the fault zone accompanied by cataclastic brecciation and gouge. The east side (hanging-wall) shows a gradual decrease in alteration and veining away from the fault to relatively unaltered basalt volcaniclastics of the Myra Formation. The west side (footwall) is schistose, with a rapid decrease in alteration away from the fault of unaltered basalt flows.

Au and As is associated with quartz-calcite veinlets and disseminations of pyrite and arsenopyrite in the fault zone. Values drop off erratically to the east and quite rapidly to the west of the fault zone. Within the fault zone, values to 0.15 oz/t Au and 3 000 ppm As are reported.

The Linda zone, east of the Mineral Creek fault zone, consists of several quartz-calcite veins with visible gold in basalt volcaniclastics. The veins dip moderately to the east. Gold up to 0.944 oz/t over 1.0m was discovered. Geometry and mineralogy indicates that these are probably part of the vein set mined on the Yellow claim by Vancouver Island Gold Mines Ltd. in the 1930's.

Further drilling is recommended.

## 1. INTRODUCTION

### 1.1 Property Definition

Seven contiguous claim blocks, totalling 87 units, comprise the Cameron Group per the Notice to Group filed on 4 May 1987. The claims are:

Name	Units	Record No.	Anniv. Date	Mining District
Oets	20	487 (6)	June 28	Alberni
Debbie 2	12	452 (5)	May 2	Alberni
Cam	6	930 (6)	January 20	Alberni
Linda 2	12	455 (5)	May 1	Alberni
Lucy 1	15	372 (5)	May 2	Nanaimo
Lucy 2	12	373 (5)	May 2	Nanaimo
Cop	10	1002 (8)	August 24	Nanaimo

All are owned by Westmin Resources Limited of 904-1055 Dunsmuir Street, Vancouver, B.C., V7X 1C4.

### 1.2 Location, Access and Physiography

The claim group covers part of McLaughlin Ridge and the drainages of the headwaters of Mineral Creek, all of Yellow Creek and part of the Cameron River, as well as the head of Roger's Creek. The northerly claims include Highway 4 at the Alberni Summit. Distances from Port Alberni are seven kilometers (to the Summit) up to 20 km via logging roads (Yellow Creek and Cop networks of MacMillan Bloedel) to reach various parts of the Group.

Topography ranges from gently undulating at the tops of ridges to precipitous in box canyons along Mineral and Yellow Creeks and Cameron River. Cirques form the basin central to the Cop claim. Elevations range from 250 to 1 450m. Much of the area has been logged with recent slash to old second growth being common. Virgin timber still exists in the steeper terrains along the north-trending drainages.

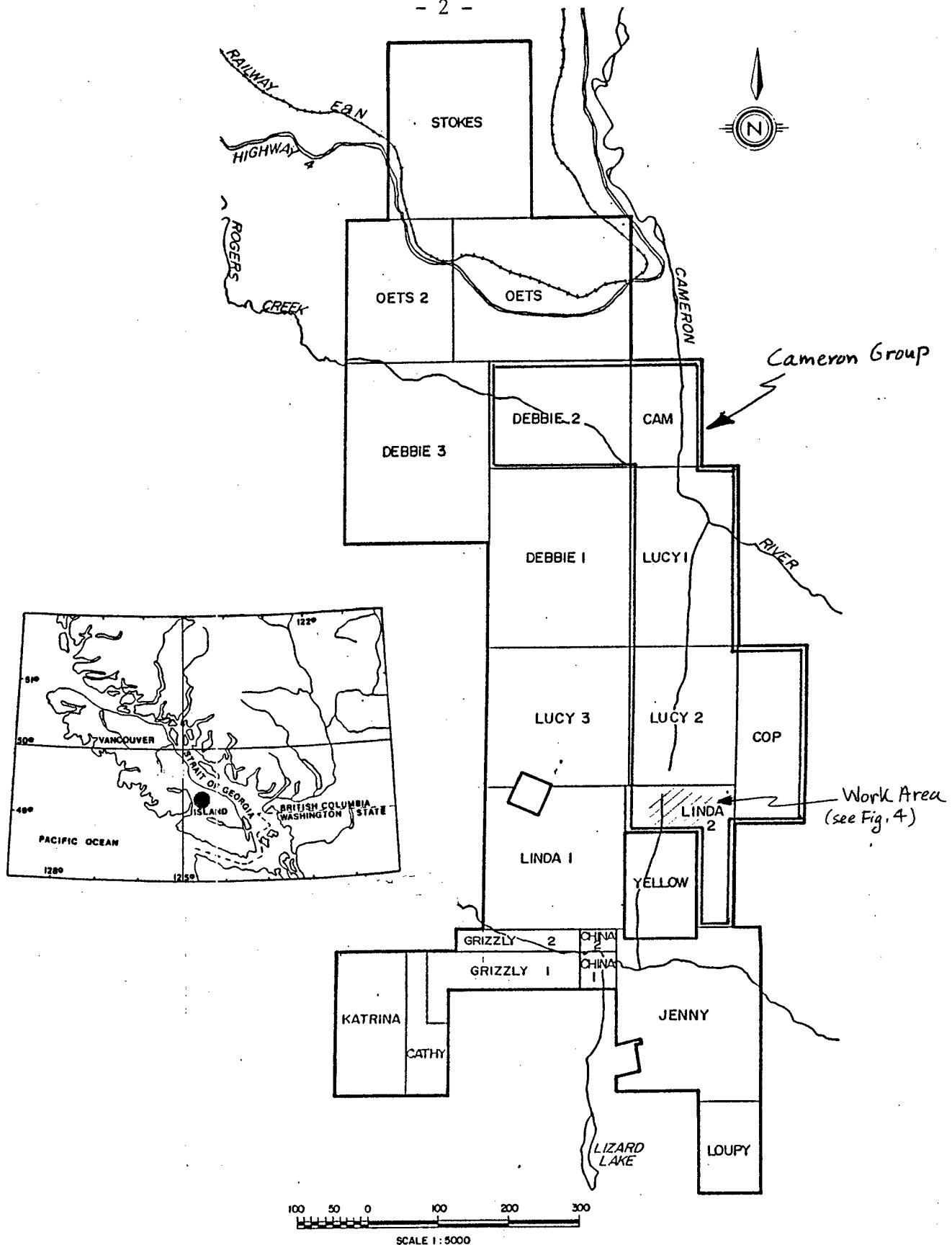


Figure 1. Property Definition, Cameron Group

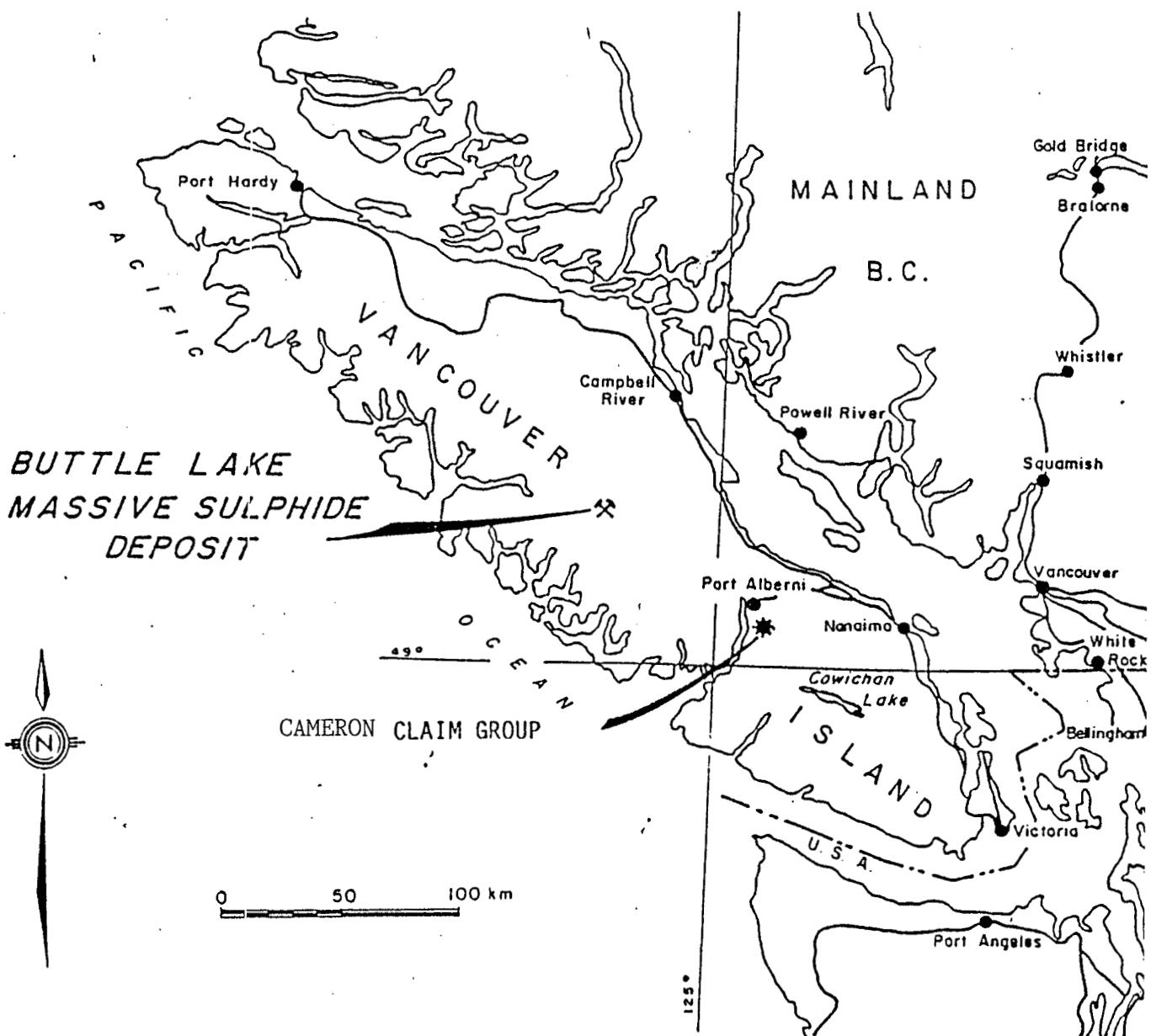


Figure 2. Location of Cameron Group, Vancouver Island

### 1.3 Property History

The China Creek area has a long history of mineral exploitation and exploration, beginning as early as 1862 with placer mining. Lode mining near Mineral Creek by Consolidated Alberni Gold Mining Co. and later by Vancouver Island Gold Mines Ltd., in the 1890's and mid-1930's respectively, recovered 303 ounces of gold and 52 ounces of silver from 403 tons mined (Stevenson, 1944). These old workings now lie within the Yellow claim northeast of and contiguous with, the Jenny group (Figure 1).

On the old Regina group, now part of the China Group and Crown Grant L556 (Figure 1), the Alberni Gold Development Syndicate in the late 1890's drove several adits into "silicified and pyritized andesite" and reported gold values to 0.64 ounces per ton along with chalcopyrite and galena (Stevenson, 1945).

Westmin Resources Ltd. staked the Lucy 3, Linda 1, Jenny and Loupy claims in 1979 in their search for Buttle Lake-type (Walker, 1983) exhalative sulphide ores. To date, Westmin has carried out airborne geophysics, reconnaissance geological mapping, soil geochemical surveys, and detailed induced polarization surveys in certain areas.

### 1.4 Objectives of This Study

The purpose of this program was to drill test Au and As soil geochemical anomalies coincident with induced polarization and resistivity anomalies which occur along the Mineral Creek fault as an extension of the old Vancouver Island Gold Mines Ltd. workings on the Yellow claims, contiguous to the south border of the Group.

## 2. DETAILED TECHNICAL DATA

### 2.1 Geology

#### 2.1.1 Regional Setting

The Cameron claim group lies within rocks of the Sicker Group (Figure 3), the oldest stratigraphic unit recognized on Vancouver Island. Sicker Group rocks are basement to at least two depositionally stacked, lower Mesozoic tectonostratigraphic assemblages which now define a terrane called Wrangellia by Jones and others (1977). Wrangellia apparently persisted as a discreet entity until Late Jurassic time, when it coalesced with a second terrane, Alexander, to form a composite terrane that now corresponds closely with the Insular Belt, one of five geologic and physiographic belts of the Canadian Corillera. Sicker Group rocks appear to be a consequence of a Late Devonian-Permian volcanic arc.

The claim group lies at the northwest edge of a 10 kilometer wide belt of Sicker Group rocks, the "Cowichan-Horne Lake uplift" best described by Muller (1980) as a complex anticlinal uplift. Immediately west of the claim group, Sicker group rocks are in fault contact with both younger Wrangellia rocks, flood basalts of the Karmutsen Formation, and with post-Wrangellian Late Mesozoic non-marine grading to marine clastic sediments of the Nanaimo Group and Jurassic batholithic granitoid rocks. A large, possibly early Tertiary, feldspar porphyritic stock of intermediate composition intrudes Nanaimo Group rocks four kilometers east of the claim group.

This area of Vancouver Island is dominated by steep long-lived north and northwesterly directed fault systems. Faulting in a northeastern direction has affected younger Mesozoic and Tertiary rocks.

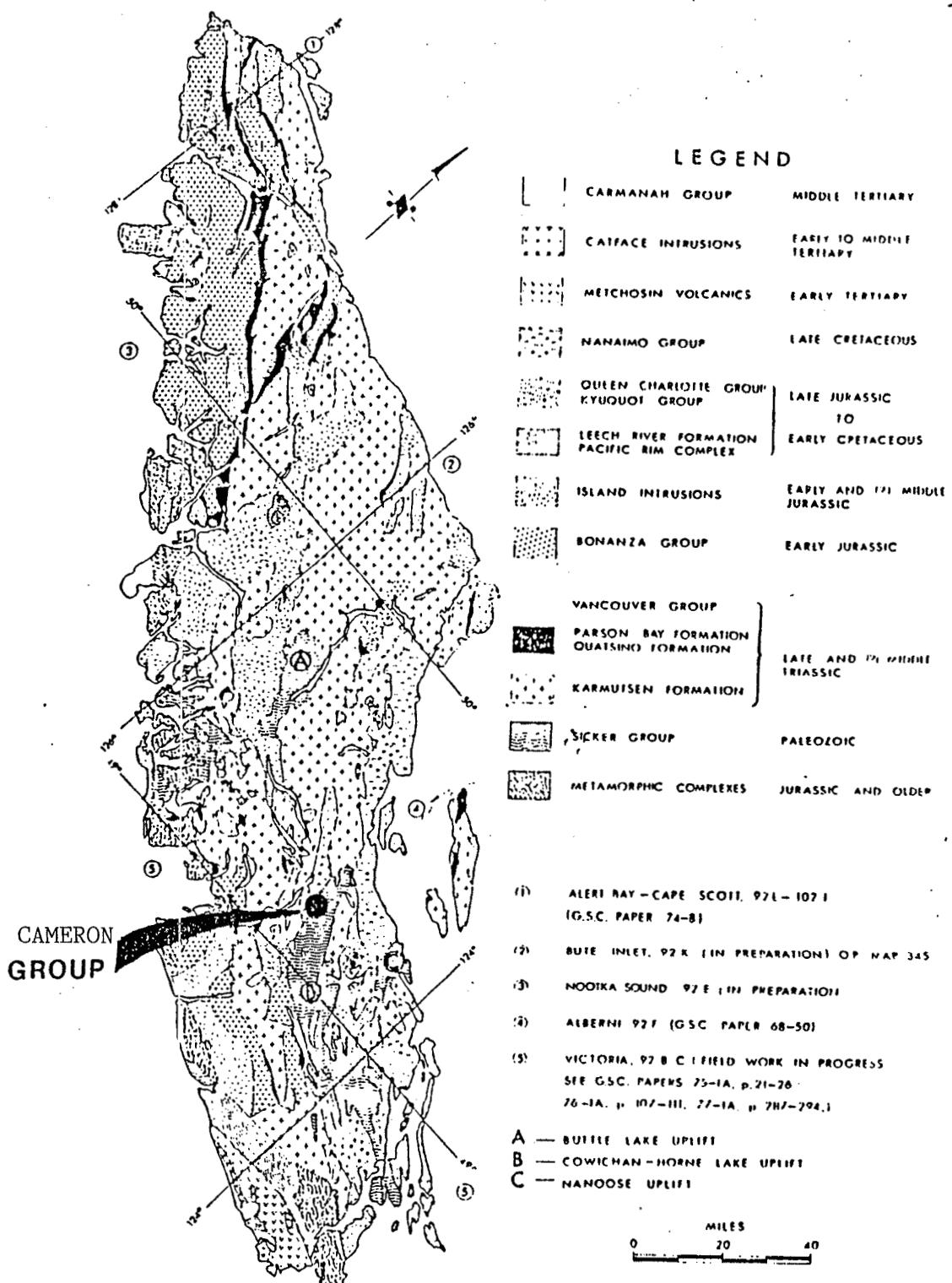


Figure 3. Geology map Vancouver Island

### 2.1.2 Property Setting

Most of the claim group is underlain by basaltic flow and volcanioclastic rocks, and less extensively by massive crystalline dacitic flows and lapilli tuffs that are best developed at higher elevations on the Lucy 1 and Debbie 2 claims. Intercalated with basalts are narrow magnetite-bearing tuffaceous units with associated sedimentary chert.

In the area examined, lithologic units generally trend at approximately  $140^{\circ}$  and dip  $20^{\circ}$  to  $40^{\circ}$  easterly. Masking primary depositional features is a superimposed foliation trending about  $155^{\circ}$  and dipping easterly  $70^{\circ}$  to  $80^{\circ}$  with rare steep dips. A conspicuous mineral lineation is locally well developed on this later schistosity, trending about  $160^{\circ}$  and plunging  $10^{\circ}$  northwest.

It is interpreted that the central part of the claim group occupies the east limb of a shallow, north-plunging open anticlinal fold. The fold has basaltic flows and flow breccias, intercalated tuffaceous sediments and sedimentary chert in the core, and overlain stratigraphically by more siliceous, dacitic flows and associated clastics.

Further complicating stratigraphic relationships is a north-south fault occupying the channel of Mineral and Yellow Creeks. The Mineral Creek fault is probably the north extension of a fault that now follows Lizard Lake and Williams Creek, where it is a boundary between Sicker Group and Karmutsen Formation rocks. If at one time a continuous structure, the Williams Creek-Mineral Creek fault is now offset left-laterally by a west trending fault following China Creek. However, no westerly trending faults were seen in the channel of China Creek. Of possible economic significance is the spatial association to the Mineral Creek-Williams Creek fault of the lode gold veins on the Yellow claim and the pyritized volcanics at the Regina workings.

## 2.2 Work Summary

The present work consists of 12 BQ wireline diamond drill holes totalling 1 687.9m. The drilling was performed by D.W. Coates Enterprises Limited of Delta, B.C. using a helicopter supported Longyear Super 38 drill. Analytical work was performed by Acme Analytical Laboratories Limited of Vancouver, B.C. Core assay pulps and rejects are stored at Toms Brothers Limited warehouse in Port Alberni, B.C.

John W. Watkins logged most of the core with the exception of DM9-86, DM12-86 and DM15-86 which were logged by J. Garfield MacVeigh of Westmin Resources Limited.

HOLE	DEBBIE PROPERTY GRID LOCATION	COLLAR ELEVATION	LENGTH (m)	COLLAR DIP	COLLAR AZIMUTH	DATES DRILLED	SAMPLES
DM9-86	10,164.29N 10,513.79E	995	184.7	275	-75°	1-3/12/86	61*
DM12-86	10,164.29N 10,512.72E	995	239.0	270°	-50°	3-5/12/86	51*
DM15-86	10,164.31N 10,513.96E	995	236.0	281°	-85°	6-9/12/86	89*
DM29-87	10,093.71N 10,470.38E	957	99.4	275°	-71°	21-22/01/87	48
DM32-87	10,093.85N 10,470.86E	957	148.1	281°	-80°	22-24/01/87	74
DM35-87	10,093.99N 10,471.34E	957	137.5	270°	-87°	24-26/01/87	77
DM36-87	10,094.54N 10,473.28E	957	135.9	090°	-45°	26-30/01/87	44
DM38-87	10,094.41N 10,472.78E	957	153.9	090°	-60°	30/01-2/02/87	52
DM42-87	10,094.13N 10,471.82E	957	206.3	090°	-80°	2-6/02/87	71
DM43-87	10,094.27N 10,472.30E	957	171.3	090°	-70°	6-7/02/87	64

\* Au (assay), As geochemical analyses. The rest are Au (assay), 30 element ICP analyses.

HOLE	DEBBIE PROPERTY GRID LOCATION	COLLAR ELEVATION	LENGTH (m)	COLLAR DIP	COLLAR AZIMUTH	DATES DRILLED	SAMPLES
DM57-87	10,040.63N 10,715.79E	1080	134.4	270°	-55°	25-26/02/87	25
DM62-87	10,040.63N	1080	171.3	270°	-68°	26-28/02/87	30

### 2.3 Drill Logs

	<u>Page</u> ..
DM9-86	10-25
DM12-86	27-38
DM15-86	39-57
DM29-87	58-64
DM32-87	65-73
DM35-87	74-84
DM36-87	85-95
DM38-87	96-106
DM42-87	107-120
DM43-87	121-135
DM57-87	136-144
DM62-87	145-155

## MINERALS

albite (ab)  
 andesite (and)  
 aragonite (arg)  
 arsenopyrite (asp, asp)  
 calcite (cal, cd)  
 carbonate (carb, cb)  
 chalcocite (chc, chp)  
 chlorite (chl)  
 epidote (ep, epid)  
 feldspar (fsp)  
 galena (gl, gs, PbS)  
 goethite (go)  
 hematite (hem)  
 hornblende (hb, hbd)  
 jasper (J.)  
 leucozane (leuc, leuco)  
 magnetite (mag)  
 plagioclase (plag)  
 pyrite (py)  
 pyroxene (px)  
 pyrofyllite (pyo)  
 quartz (qtz, Q)  
 sericite (ser)  
 sphalerite (sph, sp)  
 sulphide (sulph)  
 visible gold (VG)

## LITHOLOGIES

andesite (And)  
 argillite (arg)  
 basalt (Bas, bas)  
 chert (cht, ch)  
 diabase (db, dia)  
 diorite (dia)  
 feldspar porphyry (FP)  
 keratophyre (Ker, K)  
 limestone (lat)  
 rhyolite (Rhy, R)

## COLOURS

black (blk)  
 bleached (bl'd)  
 brown (bwn, brn, bn)  
 creamy (crmy)  
 dark (dk)  
 green (gm, gn)  
 grey (gr, gry)  
 light (lt)  
 medium (med)  
 white (whl)

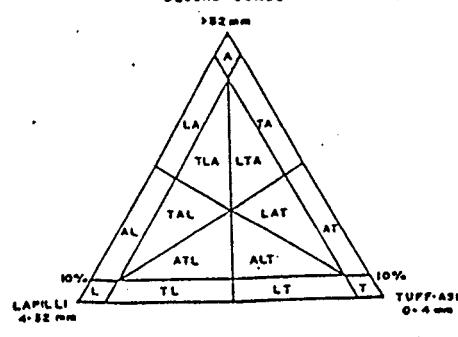
## OTHER

altered (alt)  
 associated (assoc)  
 average (avg, ave)  
 component (comp)  
 composition (comp)  
 concentrated (conc, con)  
 cross-cut (xc, x-cut)  
 especially (esp)  
 footwall (fw)  
 hangingwall (hw)  
 Intermediate (Inter)  
 interval (int)  
 irregular (irreg)  
 local (loc)  
 lost core (lc)  
 occasionally (occ)  
 parallel (//)  
 possibly (poss)  
 very (V, v)  
 with (/w, wi, w)

## FEATURES / STRUCTURES

agglomerate (A, agg)  
 amygdaloidal (amyg, amygl, amy)  
 angular (ang)  
 anhedral (anh)  
 bedded (bd, bd'd)  
 breccia (br, bre)  
 broken core (bc, bkn)  
 coarse (c, C, cse)  
 contact (ct)  
 core axis (CA)  
 crystal (xlt, xl)  
 diameter (O)  
 disseminated (diss)  
 dyke (Dy)  
 elongated (elong)  
 fault (flt)  
 fine grained (fg, F)  
 flow (Fl, f)  
 foliated (fol)  
 fractures (fract, frcts)  
 fragments (frag)  
 gouge (go, Go)  
 gradational (grad)  
 groundmass (gdmss)  
 hyaloclastite (hycl)  
 hydraulic fracture (hyfrac)  
 laminated (lam, lam'd)  
 lapilli (L, lap)  
 lapillistone (lapst)  
 monitic (m'mc)  
 massive (msv)  
 matrix (mx)  
 medium grained (mg, M)  
 moderate (mod)  
 mottled (mot)  
 network (ntwk)  
 oxidized (ox'd)  
 pervasive (perv)  
 phenoecrys (pheno)  
 pillow (pill, pil)  
 porphyritic (P, porph)  
 pseudomorph (pseudo)  
 rock (rx)  
 rounded (rnd, rd)  
 scattered (scatt)  
 sharp (shp)  
 speckled (spk'd)  
 strong (strg, str, strng)  
 subangular (subang)  
 subhedral (subhd)  
 subround (subrd, submd)  
 texture (tex, ta)  
 trace (tr)  
 tuff (T, t)  
 vein (vn)  
 veinlet (vnlt)  
 vesicular (vesic)  
 volcanic (volc)  
 volcanioclastic (Vc)  
 weak (wk)

## AGGLOMERATE BLOCKS BOMBS



Co: WESTMIN RESOURCES LTD. Map Grid N : 10,164.29 Date Drilled : Dec. 1, 1987 Survey Type Depth Dip Azi Objective/Comments: Upper Mineral Creek test  
 Project: DEBBIE E : 10,513.79 Contractor : Coates Pajari 14.3 -75 277 hanging wall to Mineral Creek fault and  
 Length (m) : 184.71 Field Grid : Mineral Hill Logged by : G. MacVeigh Acid 60.96 -76 test trend to mineralization intersected  
 Dip : -75° N : 20 + 65 Date Logged : Dec. 16, 1986 Acid 123.7 -75 in holes DM3 and DM5.  
 Azimuth : 265 E : 7 + 50 Pajari 142.3 -75 275  
 Diller elev (m) : 995  
 Core size : BQ

From - To meters	Lithology	Alteration	Mineralization/Structure	No.	Sample Interval m	Lghth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
0-6.10	Casing - No core recovered										
6.10-8.25	MAF-DAC CHTY TUFF -> FLT, light to med grn-gy - thin to thick bedded minor dk grey argillaceous bands & beds										
6.10-6.50	Broken fractured core note some org. component in bc	lim'c fractures	ground & broken								
6.50-8.60	med gy msv FT-MT	wk mod fizzy perv. cb & 2-3% fract	some lim'c vuggy zone & lim'c fract.								
8.60-8.74	Gy VFT, one 3mm argill bed @ 40°										
8.74-9.05	Maf-dac LT, ob patches & veining - note clasts of VFT		lower ct brdgn & lim;c with strong fizzy cb								
9.05-12.1	Maf-dac FI-chty I, thin to med bedded lam'd@ 40-65° (15-20%) -> chty I, lim'c fractures and cb- qtz veining parallel core	chc-perv cb 10% & wk									
12.1-12.75	lim'c broken core - sandy clay zone @ 12.25-12.50		lim'c gouge & broken								
12.75-13.0	VFT with 15-20% dk gy argill comp (lam'n @ 55°)		argillareous & lam'n @ 55°								
13.06-14.05	Dac (And Lithic - Vitric FLT to VFT - single graded unit: msv fg pyrite lapilli @ 14.83 (base of unit)	broken & lim'c core 13.20-14.00, wk ch 3% cb-qtz fractures mainly 0-20° CA	thick graded out uphole tops (LT-FLT-CT-MF) VFT								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	14.85-15.13 Cy FT-MT (not lam'd) 15.13-17.30 light med gy mottled clastic possible IL And - Dac IL lower of sharp 40° upper of broken 17.30-18.25 mod grn gy VFT grades into mottled clastic - lower ct of interval is broken Qtz-cb-chl vein	lim'c fractures mottled character - possibly sil'd 1-3% cb-qtz fract.	V minor pyrite - 17.50-18.25 broken core with lim'c fractures								
18.25-20.00	MAFIC FLOW / MSV (L)?: med dk grn-gy to bl-grn: fract. if flow it is fract'd and insitu bx'd with irregular fizzy cb fracture fillings - occ small lepilli size epid'c clot which looks like a clast; upper ct is veined lower ct is very sharp possible missing core.	ch-chl filling in fractures	insitu bv'd								
20.00-21.65	DAC-AND VITRIC-LITHIC FLT-CT pale grn-gy - no obvious grading or lam'n - contacts are not preserved	mod-perv fizzy cb & 3-5% cb-qtz	core broken on strong intersecting fractures								
21.65-23.00	MAFIC FLOW/MAFIC MSV LT ? med dkish grn-gy: occ. lighter coloured epid'c blebs which look like lepilli also 1-2% dk (chl'c?) speckles after phenos or amygd 22.20 - sample for T.S. N.B.! very delicate feathery xtal texture from 22.16-22.30 (zeolite ?)	wk mod perv fizzg cb & 8% cb - qtz fractures									
23.00-23.95	DAC AND FLT -CT: med gy vitric	wk perv fizzy cb									

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	lithic component - suggestion of slight fining uphole - lower ct is sharp 65° change to indistinct clastic texture.										
23.95-24.90	INDISTINCT CLASTIC - gy grn LT-CT(?) some jasper colouration 24.25-24.40 mod perv fizzy cb: lower contact is a slip along and parallel to ct with mafic flows or msy mafic I	hairline cb fractures & cb patches	locally broken on cb veining parallel to core								
24.90-35.40	MSV MAFIC FLOW OR MSV MAFIC (L)?: med grn-gy occ. bl'd epd'c patch (rare but clast like) occ. zone with thin qtz veins (25.58-26.00) upper ct along a slip @ shallow CA @ 15°, lower ct with dyke cb veined & sharp @ 15°; 28.50-29.5 several bl'd lapilli clast like patches also scattered mafic phenos (pyx ?) 25.58-26.00 bleached mafic with several parallel distinct qtz-cb veins @ high CA 65-75° (12-15% veins) largest vein is 4cm with distinct lam'd character-thin gy sulfidic seams (possible arseno) 32.90-33.40 distinctive spotted and veinlike patchy epid. core cut by criss crossing qtz=cb fractures.	5-7% cb qtz fracture fillings: local perv fizzy cb wk epid. note blk chl'c fract & assoc. with cb-qtz		33.53	25.50 26.00 0.42	0.004		1144			
33.40-34.45	MAFIC DYKE: med gy-grn - dense mafic porph'c texture (after fsp) waxy grn min cb qtz fractures	12.15 cb-ch vein strongly Q'd with py Aspy adjacent veins green sericite adjacent veins sericite	2-4% fg med g py stronger adjacent vein - occ the sulfidic gouge fracture films								
		34.20 fg diffuse seam of pyrite									

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgh m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	colour - both contacts veined by cb-qtz @ 15-20° dense cb-qtz on lower contact @ 10-15°.										
34.45-37.90	MSV MAFIC FLOW OR (MSV MAFIC TUFF) med. dk grn-gy, sparse mafic spkl'd 35.44-35.59 Mafic dyke veining flow very irreg. upper ct - lower displays good drill @ 25° to CA	5-7% thin cb fractures & 3-5% epid seams and veins	no significant sulf. core breaks on high fracture & occ. on strong slip // to CA								
37.90-39.17	MAFIC PROP'C DYKE: gy-grn dense mafic porph'c (after fsp ?) upper ct runs along core for approx. 5m irregular chilled ct. (note lack of phenos @ contact) - lower ct @ 30° adjacent bl'd py'c vein zone.	5% cb & qtz fract.	v minor pyrite								
39.12-40.12	VEIN ZONE in bleached Mafic Int Flow 15% to 20% qtz-cb veins strongest veins are parallel @ 50° CA, irregular mafic clots to .8cm after mafic phenos amygd ? - largest vein @ lower ct (11cm) upper ct @ 35° (vein ct) lower ct @ 50° (tn gougey films)	20% & Qtz ± cb veins (best developed @ 50°CA minor distinct grn sericite in more intense bl'd zones	3% diss mg py - poss Aspy	3354	39.12	40.12	1.00	0.45		593	
40.12-52.80	(PORPH'C) MAFIC INTRUSIVE with narrow interbands of Mafic Flow (Tuff?) occ. bleached and veined zone (see sample descript) Mafic intrusive displays variable textures locally with a dis- tinct case mottled texture (diabasic										

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	alligator skin texture) grn-gy										
40.12-42.38	medium to cse grained diabasic feldspathic with mafic spkling (mafic component intersti- tial to fsp) 41.30-42.00 cse mottled texture veins lower contact of interval is diffuse & indistinct	very weak -mod fizzy cb; 5% cb-qtz fract veins	minor py								
42.38-44.81	alt'd intrusive ? or flows) med dk gy carb'd possibly contains both flow and intrusive. 42.38-44.81 (cont'd) mafic flow locking intervals are 42.38- 42.93, 44.50-44.81 lower contact is 10cm qtz cb vein with chl'c patches (lower ct of vein is gouge @30°.	mod strong fizzy cb	wkly fol'd (lam'd) zones @ 30° with epidote								
44.81-47.70	Mafic intrusive med-cseg diabasic textures - note abrupt grain size changes (patches of variable grain size) (eg. 46.00- 46.40) 46.40 hem'c comp in cb veins & diss grains	wk local mod fizzy cb 5-10% irreg. qtz ct veins and fractures minor hem comp.	nil rare pg, 45.31-45.6 broken core								
47.70-48.50	Beached and veined zone (in Int ?)	12% Qtz ± cb vein minor nil perv. cb Q V high CA & some qtz patches and thin fractures.	3% diss mg py - minor Aspy especially rimming veins	3355	47.70	48.50	0.80	0.051		2559	
48.50-49.88	wkly bl'd (intrusive ?) 3-5% cb qtz vein fracture comp. 12-15% dies py, 49.68-49.88 stronger bl'd zone	5% qtz-cb veins, wkly bl'd wk perv. cb	.5-1.5 diss py	3356	48.50	49.88	1.38	0.005		52	
49.88-50.41	possible mafic flow clastic upper ct is bleached but lower ct is sharp with csc g feld- spathic Int.	perv fizzy cb & some epid.									

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	50.41-50.87 med cseg diabasic intrusive both cts sharp upper @ 30° lower on a slip @ 50°.	perv. fizzy cb	nil py								
	50.87-51.05 fine to med mafic porp'c wk fizzy cb "blob" similar to dykes noted higher in a lower cont abrupt with thin mafic flow? band		v. minor py - cts of interval not parallel								
	51.05-51.20 Mafic flow ? hint of clastic texture lower ct. with diabasic int. is sharp @ 45-50°.	perv. fizzy cb									
	51.20-51.43 csc g feldspathic - mafic wk fizzy cb spkl'd intrusive, both contacts sharp some chilling suggested on upper ct no evident of chill on lower ct.		v. minor py								
	51.43-51.54 chl'c veined and foliated band	mod strong cb, strong chl	3-5% py, 30% Qtz-cb	3357	51.43	51.54	0.027			635	
	51.54-52.80 cseg. mottled, feld- spathic intrusive (diabasic) becomes finer @ 52.60 hole abrupt change to porpc dyke (52.60-62.80)	perv. fizzy cb	3-5% cb-qtz fract								
52.80-62.70	MAFIC PORPH'C PYX ± AMYGD FLOW: msv grn-gry to gy-grn(g-ner down hole) - local altered bleached and veined zones			3358	52.80	53.70	0.90	0.059		344	
	52.80-53.70 Qtz-cb veined (not) some brecciated qtz component with chl gangue upper ct. sharp @ 18° - qtz veining is white to med gy - hole lam'd portion @ 53°	70% qtz-cb-fizzy ch in gangue-minor grn sericite, bl'd some bx'd qtz-chl	2-3% py - 2 spk VG noted	3359	53.70	55.08	1.38	0.005		74	
VG*	- 2 spks VG - 53.70-55.08 Bx'd; wkly bl'd mafic flow-possible flow contact zone?	10-15% qtz-cb, some epid'c alt'n-min grn	min py								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	grn-gy patchy and fracture qtz-cb, minor epid comp in bl'd zones-min py 55.08-62.04 porph'c smyg mafic flow wk perv. Fizzy cb med gy to 57.25 with 15% cb qtz after 57.25 grn in colour with 3-5% cb-qtz fract.			3360	62.04	62.61	0.57	.303		283	
	62.04-62.61 Qtz + cb veined + bl'd mafic flow (could be Tuff?) white and grey qtz-some lam'd-vein contacts 40-60°	50-60% qtz(± cb) veining some gn sericite	3% fg-mg py-no Aspy noted								
	62.61-62.70 Mafic porp'c dyke, dense fine mafic porph'c texture (after fap?) cts sharp @ 50°										
62.70-64.50	MSV MAFIC TUFF(?) OR FLOW(?), grn-gy to gy-grn includes wkly bl'd veined interval @ 63.30 distinct aph'c grn lapilli 5cm) actual contact between flow and tuff may be @ 63.10(?)			3361	63.10	64.01	0.91	.005		247	
	63.10-64.01 wkly bleached 10-12% cb-qtz veins (fractures) + chl'c fractures contact with definite tuffs @ 64.50 on fracture	10-12% qtz-cb 5% chl'c fractures	minor py (1%)								
64.50-71.64	AND-DAC I-LT-TL, med gy-gry-gy locally bl'd altered, mainly thick bedded with indistinct bedding contacts, probably has a significant vitric component.			3362	64.50	65.48	0.98	.023		1098	
	64.50-65.48 altered VFT: FT, pale med grn to bl'd pale brn 5-10% qtz (±) cb veins fractures-upper ct is is VFT (distinct grn colour grades	very weak cb, loc'd bl'd to pale brn	2-3% fg-mg py irregular tension fractures preferred angle of QV 30-45°	3363	66.17	66.38	0.21	.039		1338	

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date: Dec. 16/86

DM9-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	down hole to MT)										
65.48-68.10	And-dac lithic vitric MT-LT, lower contact arbitrary @ appearance of dk vitric(?) clasts	5% qtz-cb vein + fract some irreg qtz-cb veins	minor diss py								
66.17-66.38	bleached MT, centered on 1.5cm QV @ 30° CA										
68.10-71.64	And-dac LT-TL, in part has a crispy vitric appearance, some bleached dacite lapilli-change @ 70.50 in goo FIL with 5% dacitic lapilli	3% cb-qtz fractures wk perv. fizzy cb	v. minor pyrite								
71.64-73.93	BEDDED TUFF (Dac-Maf) thin-thick bedded lam'd gy-grn tuff, VFT-CT thickest bed 40cm bedded/lam'd @ 40-55° CA; 71.70-71.84 Maf-dac TL- note! soft sediment deform of underlying bed.	v. wk cb 2-3% thin cb fractures									
77.89-73.08	bleached CT-FT 3cm cb-qtz vein @ 30°, Cf adjacent vein is bleached & py'c	bl'd	3-5% diss. mg pyrite	3364	72.89	73.08	0.19	0.112		579	
73.15	Bedding effect on cb filled x-fractures/soft sed?										
73.93-79.94	AND-DAC FT->TL; gy-grn appears to be two or three graded bed 5-10% bleached dacitic lapilli sometimes with fine py'c dusting-minor diss mg-cg pyrite 76.70-77.53 10-12% Qtz ± cb veins with ~2% diss mg-cg py lower contact is highly bl'd over 10cm actual base of unit is probably a fault	<5% qtz-cb veins wk fizzy cb	minor & mg-diss pg								
				3365	76.77	77.53	0.76	0.047		321	

Hole No: DM9-86 Page 8 of 16

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
79.94-83.76	AND (MAF)-DAC VF-LT (min Li) gy to gy-grn thin to med bedded (lam'd) occ thick bed-some very delicate soft sed structures-load features, excellent uphole graded sequences beds locally displaced on high angle x-fractures	mod fizzy cb minor VF-T (mainly thick beds) lower break marks abrupt change to thinner distinctly bedded/tuffs	minor gy (py'c) seams v. wk bl'd wsp upper ct 3% cb-qtz fract								
	79.94-86.60 med-lgt gy CT-LT with v. wk bl'd wsp upper ct break marks abrupt change to thinner distinctly bedded/tuffs	mod fizzy cb v. wk bl'd wsp upper ct 3% cb-qtz fract	minor gy (py'c) seams								
	81.60-83.76 very well bedded and graded VF-CT sequence-probable vitric component, distinct bedding planes @ 40-50° CA 82.55-82.85 dyke, mafic spkl'd contacts not parallel @ 45 & 60°; 82.55 6cm cb-qtz vein; Lower contact deholes change to more prevalent thicker bedded CT with less FT component.	wk perv. fizzy cb 3% cb-qtz fract cut bdding @ high CA-often offset beds	v. min. py - bedded @ 40-50°								
83.76-113.80	AND (BAS)-(DAC) CT-LT with FT-VFT bands; grn-gy with intensely bl'd veined zones	5-7% cb-qtz veins lower ct is an alteration ct-	minor -1% diss. py. fractures, perv fizzy cb	3366 3367 3368 3369 3370	85.22 85.86 87.10 87.70 88.32	85.86 87.10 87.70 88.32 89.37	0.64 1.24 0.60 0.62 1.05	.009 .241 .013 .088 .007		152 797 125 714 75	
	83.76-85.86 graded FT-LT downhole 85.22-85.86 7% qtz-cb fractures in LT, not bleached, 2% diss mg py	65-70% qtz vn + flooding bl'd gangue-v. minor cb	7% mg-cg pyrite 86.75-87.10 gougey & broken								
	86.86-87.70 Highly qtz veined and flooded (65% qtz) 35% py'd bl'd brn gangue	wkly bl'd	1-2% fg-mg pyrite - offset on cb vein								
	87.10-87.70 weakly bleached MT-CT wk lam'd(bedding) @ 50° 87.43 - 4cm layer @ 50° with lcm qtzose blebs										

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
83.70-88.32	highly bl'd (tuff to pale brn) 10% qtz veining flooding dk grey blk soft seams assoc	highly b'l'd, blk soft fractures 10% qtz	5-7% mg-cg py								
87.87	bx'd qtz vein with blk matrix										
88.32-89.32	Med gy: MT-CT, 15% grn FT (uphole grading in one bed)	not bl'd - 10% cb ± qtz veins & fracture	minor cg pyrite patchy								
89.32-91.80	Grn gy thick graded Tuff FT-CT, cb-qtz veining increases @ 90.40, minor disrupted FT (-50°)	perv. fizzy cb	minor pyrite	3371	90.40	91.80	1.40	.010	66		
90.40-91.80	15% cb-qtz vns-pale has		≤1% py	3372	91.80	92.40	0.60	.138	762		
91.80-92.40	intensely bl'd-qtz vn'd fractured bl'd with py'c fratures and qtz flooding	20% qtz, pale brn nil-v. minor cb wkly bl'd, 5-7% cb-qtz perv. cb	7% mg-cg py	3373	92.40	92.91	0.51	.008	136		
92.40-92.91	Bedded VFT-CT										
92.91-98.64	Mainly thick bedded VF-CT-LT graded beds, 15-20% VFT comp unit appears to have increased healed fractured texture bedding @ high CA 75-90°	7-10% cb qtz fractures	minor diss py								
98.64-99.87	Variably bleached & veined tuff, <u>bluish grn</u> siliceous (chty?) tuff comp. (40-50%)	mod fizzy ct + cb veining in upper part	@ 99 gy py'c gougey seam @ 25, msv pyrite slip (fracture) @ 10° @ 99.85m	3374	98.64	99.26	0.62	.019	175		
99.87-100.43	gy brn bleached py'c qtz veined & fractured tuff	intense bleaching (ser)	7% mg pyrite	3375	99.26	99.87	0.61	.034	309		
100.43-100.83	Cb-qtz vein with irreg dk fractures	10-15% Qtz fract + veins	3376	99.87	100.43	0.56	.095	561			
100.83-101.80	pale brn bleached tuff dk py'c fract + 1-2 Qtz fract + veins 101.80-102.75 strongly bleached, pale brn & fractured	strong bleach	3377	100.43	100.83	0.40	.108	310			
102.75-103.32	pale mod grn to brn wk-mod bleached tuff-distinct bedding locally evident	v. wk cb, 8%, 5% py (mg) qtz fractures-veins 10% qtz fractures & veins ≤5% qtz fractures	3378	100.83	101.80	0.97	.071	483			
			3379	101.80	102.75	0.95	.378	577			
			3380	102.75	103.32	0.57	.137	476			

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From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	103.32 Bedded grn to grn-gy CI->VFT often thick graded beds with VF lam'd tops-occ thicker than lam'd interval-good uphole tops bedding mainly 70-85°, locally to 55° 111.47-111.70 more sil->chty (fractured-broken) Lower ct, is broken	5-10% cb qtz fract	minor pyrite 110-111 mod-highly bc								
113.80-134.50	MAFIC FLOW (CLASTIC?) BASALT, gy-grn variably alt'd highly fractured & healed with cb (+ qtz) upper ct is broken cse cb amygd 113.80-113.94 113.94-115.69 gy-grn to bleached pale grn ser'c rock, strong cb healed fractures fractures-cb amyg locally evident 115.69-116.00 grey silica vein cut cb-dk fratures in silica + hint of red jasper (could be chert?) @ 115.69 dk gy gouge @ 45° (3cm) 116.00-117.15 cb healed fractured amg basalt (clastic) 117.15-118.37 intensely bleached, pale brn to grn brn qtz veined and qtz fractures + min cts fractures & py'c seams 118.37-125.30 Amy Bas. gy-grn cb healed fratured basalt - local zones with distinct cb amy'd, sparse scattered mafic phenos	ser'c + strong bedded cb cb veins cutting silica 10-15% cb-qtz	minor 1% esp more ser'c intervals eg 114.60 - breaks on irreg ser'c slips 1% mg py-3cm dk grey gouge @ 115.69	3381 3382 3383 3384	113.94 115.69 116.00 117.15	115.69 0.31 117.15 1.22	1.75 .031 1.15 1.22	.269 .009 .152 .152	715 992 159 1733		

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval #	Lgth #	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
125.30-128.20	altered grn-gy healed fractured basalt, highly cb + qtz veined-local narrow bleached sections with more qtz and pyrite eg (125.30-125.60 & 126.47-126.90)	intense cb healed & veined 20% + occ. bleached & sil'd intense	minor py - more perv - in @ sil'd bands (bl'd)	3385	125.30	126.80	1.50	.017	601		
128.20-129.26	strongly bleached, pale grnish fractured and veined + qtz flooded minor carb	bl'd + qtz fract vns (20%) 3% mg py with min cb		3386	126.80	128.20	1.60	.016	67		
129.26-130.85	carb healed fractured basalt, localized narrow, bl'd (sil'd) zones centered on zones of stronger bx'n	10-15% cb fract + veins		3387	128.20	129.26	1.06	.037	1740		
130.85-131.28	intensely bl'd fractured & veined with qtz, pale army grn colouration qtz veining along core and to 30° CA	strong bleached (ser'c)+ qtz veined 50%	3-5% mg pyrite, several strong dk slips 30-40° CA	3388	129.26	130.85	1.59	.010	223		
131.40-131.95	gy-grn CT to VFT, 131.70-131.95 gy FV-chty fract'd tuff min py	very wk-mod cb	2-3% mg py	3389	130.85	131.40	0.55	.026	830		
131.95-132.48	mainly bleached bx'd qtz veined basalt(?) + gy grn fractured ct healed basalt	bleached-bx'd qtz flooded bands (minor ct)	3-4% py	3390	131.40	131.95	0.55	.005	67		
132.48-133.26	grn-gy fractured cb healed basalt, occ. amygd	10% cb		3391	131.95	132.48	0.53	.037	955		
133.26-134.25	bl'd pale yellow grn to grn-gy fractured & bx'd basalt dk gy sulfidic bx'd bands *133.98-134.25 hard sil'd with wk fizzy cb light grn gy could be sil'd T(?)	bl'd (ser'c)-wk-mod fizzy cb + vns - 10% qtz	2-4% pyrite 133.58-133.98 strong slips + thin gougey seams @ 15-30°	3392	132.48	133.26	0.74	.008	184		
134.25-134.50	cb healed bx'd basalt ct with CT is fract'd and veined but quite sharp @ 35-45°			2293	133.26	134.25	0.99	.012	200		
				3394	134.25	135.42	1.17	.019	354		
				3395	135.42	135.94	0.52	.063	432		

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Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date: Dec. 16/86

DM9-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	lghth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
134.50-140.05	MAF - (VF CHTY) TUFF, drab gy-grn CT to VF gy chty Tuff - delicate lam'd zones (60°) possible high vitric component ? (134.25) - 135.42 mainly light gy to 5-10% cb gy grn tuff VF-CT, 5-10% cb fractures (sample includes minor mafic volc)		v. minor py-indistinct bedding- above grain size changes								
	135.42-135.94 bl'd (ser'c) sil'd, bl'd & sil'd short bx'd sections with gy py'c int		2-5% fg-mg py tr gouge @ 135.50								
	135.94-138.85 gy-gm->gy VF-CT, med bedded local thin lam'd(60°) v. sil chty comp (10-15%)										
	138.85-139.33 gy-grn-gy mainly sil chtty I(80%) with minor py-remainder is drab gy-grn FT, lam'n @ high Ca(80%)			3396	138.35	139.33	0.98	.011	85		
	139.33-140.05 Mixed zone, mafic porp'c flow with patches of siliceous chty I 50% bl'd mafic with grn ser spkles- 50% chty tuff		2-3% py lower ct is gougey and crusted over 15cm-main gouge @ 65-70°	3397	139.33	140.05	0.72	.022	185		
				3398	140.05	141.35	1.30	.012	158		
				3399	141.35	142.15	0.80	.010	144		
				3400	142.15	143.53	1.38	.015	165		
				3451	143.53	143.97	0.44	.139	461		
				3452	143.97	145.43	0.46	.076	301		
				3453	145.43	146.30	0.87	.038	572		
				3454	146.30	148.13	0.83	.017	524		
				3455	148.13	149.50	1.37	.015	736		
				3456	149.50	150.06	0.56	.006	384		
				3457	150.06	151.00	0.96	.001	84		
				3458	151.00	152.32	1.32	.001	69		
				3459	152.32	153.84	1.52	.003	110		
140.05-143.53	BLEACHED MSV FLOW OR (20 MSV (L)T: pale grn (bleached) with 10-15% qtz healed fractures with 2-4% pyrite; 3% mafic spkles after phenos(?) + rare distinct crmy clast like chips- these could be alt'n but contacts usually v sharp-some distinctive grn ser'c colouration	10-15% qtz veins fractures bl'd pale grn-some distinctive grn sericite									
	140.05-141.35	10% qtz veins, bl'd	minor py 140.27 gougey fract @ 20°								
	141.35-142.15	10-15% qtz veins fractures bl'd	2% py-gougy seams 141.35-141.70 (25-40°) 141.85 gougey crushed 142.00 gouge(1cm) @ 50° 142.10-3cm crushed zone								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
142.15-143.53		12% qtz veining, bl'd, minor distinct grn ser	Py in fract + qtz 2-3%, lower ct @ gouge, 143.28 gougey seam // CA								
143.53-143.97	FAULT ZONE: Fault breccia, gouge and crushed, bl'd altered py'c rock + broken qtz vein (possible cht fragment comp)	bl'd ser'c and dk gy sulfidic gouge	2-5% py, dk gougey matrix in part, upper ct of fault @ 60°, fol'n in fault @ 25°, lower ct not preserved								
143.97-145.43	CHERT, dk grey fractured cherty siliceous wk, py'c fractures throughout, bl'd mafic(?) comp @ lower ct		5-8% fg mg py'c fractures rock is quite fractured-breaks easily								
145.43-150.06	FAULT ZONE - gouge and fault breccia upper ct of fault @ 30°, fol'n in fault breccia zone is variable from 40-47°										
145.43-146.30	Fault bx & gouge 50% fault bx 50% sandy gouge-only 48cm recovered in this interval, 10% sil frags		minor diss. py.								
146.30-148.13	Fault breccia + gougey crushed rock 35% siliceous fragments (after chert?) 146.44-146.67 fractured wkly crushed mafic volc band		diss. py. throughout + grey gougey fold mx (sulfidic) + 10% py (?)								
148.13-149.50	Fault bx 25% gougey mx, mainly siliceous bleached fragments- some very chty frags		possibly 10% + py very fine py in gougey mx								
149.50-150.06	Fault bx (15% mx) + sandy gouge (50% of interval)										
150.06-155.05	CHL-CB (SER) CONTORTED SCHIST - locally altered structured mafic volcanic very soft almost gougey, broken disrupted										

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date: Dec. 16/86

DM9-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	cb & gb veined sections										
150.06-151.00	dull grn-gy gougey	minor py.	v. minor py, fol'd @ 20-25°								
chl-cb sch. minor qtz v. minor py											
151.00-157.32	gougey cb-gb										
veined schist-irregular coloured &											
broken veining											
152.32-153.84	Contorted qtz veined	-15% qtz	minor py								
schist, crushed contorted fractures											
locally crusted with gouge and											
gougey schist matrix (20-25%)											
153.84-155.05	highly contorted chl-cb		schist very soft->gougey v.	3460	153.84	155.30	1.46	.001	37		
schist with low angle fractures			minor py	3461	155.30	156.80	1.50	.001	53		
cutting schistosity-lower ct make				3462	156.80	158.30	1.50	.001	42		
change to more competent schist with				3463	158.30	159.80	1.50	.001	38		
more uniform CA (less contorted)											
155.05-160.44	CHL-CB SCHIST (AFTER BAS D); grn gy,	mod-strong perv. cb + 20% mod. fol'd with local contorted	very minor py, local broken gouge								
fol'd zones lower ct marks abrupt	cb ± qtz veining	sections, eg (155.30-155.50)									
decrease in veining and schistosity	irregular disrupted-	gougey sch @ 55°)									
	cont'd	158.50-159.23 bc + gouge seams									
160.44-175.56	BAS TLA: grn gy, prominent mafic	wk perv ct;	rare py, interval lacks								
porph'c texture, wk perv. cb occ.	160.44-168.00 10% cb	penetrate sch noted above									
slightly paler coloured clasts but	veins & fractures, 166.42										
unit appears monolithic; occ short	-169.47 some reddish hem.										
bleached ch-epid section as (eg	colour + on fractures										
171.43-171.90)											
175.56-184.71	BAS TLA: gy-grn more epid'c, very	20% Qtz-cb-chl fractures	rare py								
prominent highly vesiculated bas	& veins-no bleaching assoc										
component + occ. cse amyg clasts-	with veining-wk epid pen +										
dense vesic, comp not noted in	in amyg.										
overlying interval 177.95-178.34 Qtz-											
chl-cb vein 178.97-179.37 Qtz-chl cb vein.											

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Hole No: DM9-86 Page 15 of 16

24

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date: Dec. 16, 1986

DM9-86

Core Boxes

Core Recovery

Box No.	<u>Interval (m)</u>		<u>Interval (m)</u>		Core Lgth		Amount Present	Recovery %	<u>Interval (m)</u>		Core Lgth		Amount Present	Recovery %	<u>Interval (m)</u>		Core Lgth		Amount Present	Recovery %	
	From	To	From	To	From	To			From	To	From	To			From	To	From	To			
1	6.10	14.35	6.10	7.92	1.82	1.16			74.98	78.03	3.05	3.06			151.18	154.23	3.05	2.90			
2	14.34	21.57	7.92	9.75	1.83	1.55			81.08	83.05	3.05	2.90			154.23	157.28	3.05	2.95			
3	21.57	28.58	9.75	12.50	2.75	2.30			84.12	87.04	3.04	3.02			157.28	160.32	3.04	3.10			
4	28.58	35.73	12.50	13.87	1.37	1.10			87.17	90.05	3.05	3.10			160.32	163.27	3.05	3.03			
5	35.73	42.93	13.67	16.31	2.44	2.08			90.22	93.05	3.05	2.97			163.37	166.42	3.05	3.02			
6	42.93	50.18	16.31	18.29	1.98	2.10			93.26	96.04	3.04	3.00			166.42	169.47	3.05	2.99			
7	50.18	57.25	18.29	20.12	1.83	1.56			96.32	99.04	3.06	3.04			169.47	172.52	3.05	3.05			
8	57.25	64.32	20.12	23.16	3.04	3.06			99.36	102.05	3.04	3.01			172.52	175.56	3.04	2.85			
9	64.32	71.48	23.16	26.21	3.05	2.96			102.41	105.05	3.05	3.06			175.56	178.61	3.05	3.04			
10	71.48		29.26	3.05	3.05				105.46	108.05	3.05	3.04			178.61	181.66	3.05	3.04			
11	78.60	85.74	32.31	3.05	3.05				108.51	111.05	3.05	3.05			181.66	184.71	3.05	3.07			
12			35.36	3.05	3.05				111.56	114.04	3.05	3.05									
13			38.40	3.04	3.04				114.60	117.05	3.04	3.05			EOH @ 184.71						
14			41.45	3.05	3.05				117.65	120.70	3.05	2.80									
15			113.80	44.50	3.05	3.05			120.70	123.75	3.05	3.05									
16			113.80	121.00	47.55	3.05	2.91			123.75	126.80	3.05	3.10								
17			121.00	128.30	50.60	3.05	3.00			126.80	129.84	3.04	3.05								
18			128.30	135.28	53.64	3.04	2.91			129.84	132.89	3.05	3.06								
19			135.28	142.50	56.69	3.05	2.92			132.89	135.94	3.05	2.97								
20			142.50	150.06	59.74	3.05	3.07			135.94	138.99	3.05	2.94								
21			150.60	157.28	60.96	1.22	1.22			138.99	142.04	3.05	3.05								
22			157.28	164.33	64.01	3.05	3.09			142.04	145.08	3.04	2.90								
23			164.33	171.43	67.06	3.05	3.05			145.08	146.30	1.24	0.86								
24			171.43	178.41	60.88	.182	1.79			146.30	151.18	3.05	3.05								
25			178.41	184.71	71.93	3.05	3.05			151.18	151.18	3.05	3.05								
			EOH		74.98	3.05	2.98														

Hole No: DM9-86 Page 16 of 16

JL

85

Co: WESTMIN RESOURCES LTD. Map Grid N : 10,164.29 Date Drilled : Dec, 3, 5/86 Survey Type Depth Dip Azi Objective/Comments: Test for U.M.C zone.  
 Project: DEBBIE E : 10,512.72 Contractor : Coates Acid 61 -48.5  
 Length (m) : 92.96 Field Grid : Mineral Hill Logged by : G. MacVeigh Pajari 78 -48 258  
 Dip : -50 N : 20 + 65 Date Logged : Dec. 1986 Acid 92.96 -47  
 Azimuth : 265 E : 7 + 50  
 Collar elev (m) : 995  
 Core size : BQ

From - To meters	Lithology	Alteration	Mineralization/Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
0-13.30	Casing - No core recovered	pervasive wk mod fizzy	v. minor py < .5%								
13.30-15.91	AND-(DAC) MT-CT-LT, minor FT-VFT, med gy-lghtgy 5% cb-qtz fractures minor tan leucox 1% to 1mm 13.30-13.86 ground core pieces of TL (And-Bas) 13.30-13 AS (could be boulder) 13.45-13.60 sil'd I-LT v. minor py - to flecks 13.60-13.86 Ande (Maf) MT	cb, 5% cb-qtz fractures - lim'c stained fractures - last lim'c fracture noted @ 22.68	14.26-14.84 (.19m rec) brn earthy fracture - lim'c fractures mainly @ 60°								
• Inland 13.86-15.91 80% MT-CT 20% LT 13.30-15.91 graded from VFT to CLT downhole with lepilli and cse lapilli size clasts of VF-chty I - lower contact sharp @ 24° with chty T bed.											
15.91-17.40	MT-FT-CHTYT; grn-gy, minor dk gy bands and light gy to grn-gy chty beds 35% VF-CHTY T, thin to medium bed'd & lam'd @ 20-25°CA. Lower chty band is probably top of underlying CT-Mt bed.	wk fizzy cb; 2-3% to cb cb fractures	minor rare pyrite Bedding fairly uniform @ 20-25°CA core occasionally breaks on x'fract @ high <angle to bedding (wk bc) 16.58 thin brn gouge @ 50°								
17.40-20.46	MT-CT; med gy, quite uniform with vague paler lam'd zones flecked with 1 to leucox (7.5mm) - appears to grade into FT-then dk of overlying unit.	pervasive mod cb; 3-5% qtz-cb vn & fract.	v. minor pyrite								

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM12-86

From ~ To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
20.46-27.30	T-CHTY t, med gy - light gy & grn gy, thin lam'd to thick bedded 90% & MI, 30 to FI-chty T, bedding angles and fractures 25-38% (avg 30°) zones of disrupted irregular bedding; 3-5% cb qtz veins and fractures @ 22.60-8cm cb qtz-chl vn @ 26.70 5cm gouge cb vein @ 30° CA	wk mod perv. cb 3-5% cb-qtz veins	.5-1.0% diss fg mg py								
27.30-29.46	GRADED VITRIC BAS OR AND T; grnish-gy; appears to be single graded unit graded from chty T to MI-CT; has a granular texture in cser phase which is distinctive from above units (hyalotuff) - minor .5 to (.5mm) leucox.	2-3% cb-qtz vns fractures -pervasive fizzy cb	1-1.5% diss py, wkly broken core; note discordant lam'n in chty T @ 27.50								
29.46-30.69	INTERBEDDED SILICEOUS ARGILLITE - argillaceous T & gy-grn MI, black to med gy to grngy - 35% dk gy - blk argillite component	2-3% thin cb fractures	minor 1.0% pyrite fracturing mod bc - occ sooty fracture plane	3301 3302 3303	29.46 30.69 32.30	30.69 32.30 33.53	1.23 1.61 1.23	0.008 0.032 0.022	121 152 259		
30.69-32.30	MT-VFT, gy-grn, bx'd (clastic) phases with argillaceous T frags and MT frags in VFT mx (eg 31.0-31.21) @ 31.3 10cm block (?) of hard blk argillite		1% pg - increasing @ lower contact	3304 3305 3306 3307 3308	33.53 35.00 36.50 38.15 39.32	35.00 36.50 38.15 39.32 40.70	1.47 1.50 1.65 1.17 1.38	0.037 0.015 0.004 0.051 0.026	138 135 167 442 443		
32.30-38.15	DAC-AND CT-FLT; med to pale gy-grn to watery grn - looks like some significant vitric clast (T) component diss and fract. controlled pyrite shot watery grn siliceous zones(VFT?) - @ 33.65 argillaceous (blk) fragments & chips.	serc & sil'd (variable 5-8% qtz-cb fractures & veins	3-5% mg py & some fracture contacted py wkly broken - gouge @ 37.00 @ 40°	3309 3310 3311 3312 3313 3314	40.70 42.00 43.55 43.85 44.40 45.14	42.00 43.55 43.85 44.40 45.14	1.30 1.55 0.30 0.65 0.74 0.68	0.001 0.021 0.018 0.019 0.004 0.036	72 91 224 2009 261 1587		

Hole No: DM12-86 Page 2 of 12

N  
28

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample			Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
					Interval m	m	Lgth					
38.15-39.32	Broken core & gouge - grey FLT-CT crusted broken & gouged	wk perv. cht qtz cb fractures/veins	2-5% fg py & palely core broken & gougey core main gouge 39.00-39.32 also gouge @ 38.15-38.35	3315 3316 3317 3318 3319 3320 3321 3322 3323 3324 3325 3326 3327 3328 3329 3330 3331 3332 3333 3334	45.82 46.88 47.60 48.60 49.30 49.77 50.71 51.30 52.21 52.70 54.05 55.20 56.60 57.50 58.80 59.68 61.06 62.52 64.19 65.06	46.88 47.60 48.60 49.30 49.77 50.71 51.30 52.21 52.70 54.05 55.20 56.60 57.50 58.80 59.68 61.06 62.52 64.19 65.06	1.06 0.72 1.00 0.70 0.47 0.94 0.59 0.91 0.49 1.35 1.15 1.40 0.90 1.30 0.88 1.38 1.46 1.67 0.87 0.74	0.031 0.039 0.029 0.032 0.023 0.044 0.017 0.023 0.001 0.078 0.265 0.009 0.036 0.088 0.033 0.039 0.067 0.002 0.031 0.039	674 290 384 422 433 253 2938 699 122 1032 451 98 112 162 244 81 113 83 462 341			
39.32-45.82	ALTERED MT-FT-VFT (cht) - some LT variably altered & bx'd fractured 39.32-40.70 med gy-brnsh (MT) fractured/bx'd 5% fg-mg pyrite 40.40-40.50 aph'c gy chty silica (T) 40.70-42.0 gy-grn MT VFT (cht) 40.70-41.30 veined/bx'd disrupted VFT MT 41.30-42.00 gy-grn MT 3% cb-qtz 42.00-43.55 Gy gns VF-chty T (sil'd) from 42.00-42.80 (shpbreak) 42.80-43.20 MT-CT (gy-grn) 43.20-43.55 VF-chty T (fract'd)lower ct cts qtz veined 43.55-43.85 bl'd & pervasive silica CT-FLT occ. gy chty bl'd veined and bx'd - possibly bx'd volcanic ?? upper ct is gougey some high @ CA 44.40-45.14 bl'd & bx'd FT-FT, fine diss py (pale grn-gy) - m 45.14-45.82 strongly bleached - fract'd sill'd	5 cb qtz 5% fg-mg pyrite 5% qtz & cb veins fractures	2-5% fg-mg py 1-3% py									

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM12-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgh m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
45.82-49.30	Interlayered Dense mafic (fep) porph'c zones and bleached and altered VFT-MT bands - cts between units usually sharp										
45.82-46.88	bl'd dense mafic porphic band (mafic, phenos have good fep habit and are either chlorite or waxy and/or gypsum grn sericite sometimes with pyrite upper ct sharp with altered I @ 48° lower ct thin gouge @25°	bl'd 5-10% cb-qtz fractures & sericite	3-5% mg & cg & fractures dense fracture network								
46.88-47.60	Altered light med gy-brn FT, fractured veined with qtz & min cb	10% qtz & cb & pervasive bl'd (lam'd med bl'd zones and bl'd	3-5% fg-cg pyrite								
47.60-48.60	Altered mafic porphic unit with sil'd bld zones 48.40-48.6 highly bl'd sil'd FT?	fractures	3% fg-cg pyrite								
48.60-49.30	Dense mafic porphic dull or mg grn matrix looks quenched upper ct lower ct in strong slip @ 40°	≤ 3% cb & Qtz, bl'd	1-3% py								
49.30-50.71	VFT-MT grn-gy to bleached (variable alt'n) upper ct is qtz veined with gougey @ 18°										
49.30-49.77	bl'd with mg diss py some bedding evident		bl'd lgt gy 5-7% mg-cgf py								
49.77-50.71	Gn-gy to light gy VFT-FT some thin to thick bedding - some bedding @ 25-30	7% cb-qtz bl'd & bx'd lower ct	some qtz veining upper & lower contacts minor py								
50.71-52.21	Highly altered - bleached & qtz-(cb) veined (I?)		5% py qtz(cb) veining & bleaching increasing								
50.71-51.30	weakly bl'd gy-grn to strongly bl'd with spkl'd fg-mg py										

Hole No: DM12-86 Page 4 of 12

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM12-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
	51.30-52.21 intensely bl'd and veined & fractured (upper ct abrupt increase in veining - lower ct very gradational decrease in bleaching NB-minor argillite (?) comp.	strongly bl'd & sil'd 20-25% white silica & sph'c gy silica	5-8% fg-cg py								
52.21-52.70	VFT-MT grn-gy fract'd & cb-qtz fract. upper ct grad. - lower ct sharp - marking abrupt increase in silica.	5-7% cb-qtz fract. wk bil bleaching	minor py								
52.70-55.20	BX'D ALT'D: variable bleaching intense to weak 52.70-54.05 intensely alt'd (bleached) sil'd ser'c gy to pale yellow grn to brnsh - quite bx'd fract'd looking 5% mg-cg py, minor bk argillaceous component near lower contact: @ 53.25 bx'd disrupted lam'd band with Argillaceous component. 54.05-55.20 weak to moderate bl'd VF-FT grades grner from 54.05-54.45 abrupt change @ 54.45 along dk gy (sulphidic) gougeg seam @ 18° CA 54.45-55.20 bleached & bx'd with sil'd diss py & mg-cg py'c conc. minor arg (carbon) component in some fractures.		5% mg-cg py 53.00 crushed gougeg seam @ 50°								
55.20-57.68	VFT-MT, gy grn to light med gy, thin med bedd'd generally disrupted broken beds-irregular bedding angles 40-45° 55.20-56.60 gy-gm to gy VF-MT, thin to med bedded (40-45°)	irregular cb-qtz fractures fresher looking 5-7% cb-qtz fract	minor pyrite occ. patch cg py ≤ 1%								

9/6

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DM12-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lghth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
	56.60-57.68 grn-gy to gy VF-MT increasing gy argillaceous (?) component towards lower ct (gy chty tuff with qtz-cb fractures)	10% cb qtz fractures & pale creamy grn fractures	minor pyrite weakly broken on fractures								
57.68-58.80	ALT'D TUFF CLASTIC (?) dull gy-grn (contorted) bx'd character irregular thin gougey seams and fractures 57.68-57.85 qtz vein with py & dk seams with some Aspy	no fizzy cb, bleached creamy fractures & zones	occ. dk gougey sulphidic creams - loudly crushed eg. 58.50-58.80								
58.80-62.52	ALT'D VEINLETS (QZ) AND FRACTURED TUFFS with mottled light dk grey silica (chert) with argillaceous (chl) component 58.80-59.68 fractured light dk grey chtty silica veined with white qtz fractures and dull carbonaceous fract- ures minor dull grn MT layers (?) 59.68-61.06 dull grn alt'd & veined Tuff (?) no distinct textures more prominent fol'n defined fg in part by veining only minor argillaceous (carbon) component. 61.06-62.52 Med dk gy chty silica (chat) veined and fractured with qtz- cb some grn tuff component dk grey carbonaceous looking (but ch'tc) fractures some grn tuff component (25%)	some distinctive yellow grn sericitic minor 15-20% qtz cb veins fractures veins one bx'd	py 3-5% conc. in dk carbon fractures 2-4% fg-cg pyrite								
62.52-66.14	VARIABLY ALT'D AND VEINED TUFF (LT)Bx'd Tuff (?) varicoloured gy-grn to creamy 62.52-64.19 possibly qtz-clinozoisite dense white qtz-clin.		py 1%								

Hole No: DM12-86 Page 6 of 12

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample		Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
					Interval m	Lgth m					
	altered and veined tuff - quite bx'd with dense vein network	fracture & vein network distinctive grn sericite?									
62.52-66.14	64.19-65.06 Strongly qtz veined & sil'd some gougey crushed seams (irregular) minor argillaceous component wit assoc. dense fg. pyrite @ 64.50'	strongly sil'd some minor distinctive grn sericite	5% fg-mg py irregular dk seams & some gougey crushed fractures @ high CA								
	65.06-66.14 Bx'd qtz-sericite zone (crushed almost gougey rock)	serricite (grn) & qtz bx'd considerable grn sericite	3-5% fg-mg py possible Aspy (?)								
	distinctive grnish colour to sericite component		65.53-65.80 Gougey & broken with bx'd Qtz (broken)								
66.14-67.55	GRN-GY LT; (not bleached) occ. pale lapilli fragments - dk speckled texture (look like mafic phenos) veinlike discontinues patches of blk chlorite (after argillite ?) 3-5% Qtz cb fractures - interval is msy	not bleached minor qtz cb fractures/patches	minor l to py core breaks on variable oriented fractures - gougey seam @ 67.40 @ 60-65°	3335 3336 3337 3338 3339 3340	66.14 67.55 68.00 69.05 70.50 71.87	67.55 68.00 69.05 70.50 71.87 73.96	1.41 0.45 1.05 1.45 1.37 1.09	0.041 0.031 0.389 0.042 0.070 0.021	96 102 63 112 794 164		
67.55-68.00	ARG FT, med -dk grey, healed brecciated texture with qtz & cb patches	5% Qtz-cb fract. & patches	3-5% mg-cg pyrite	3341 3342	72.96 73.81	73.81 74.48	0.65 0.67	0.007 0.033	116 427		
68.00-75.46	VARIABLY ALT'D HEALED BX'D TUFF (?) 68.00-69.05 dull gy-grn healed Bx'd T (or LT) some clasts of VF-CHTY which are fract'd and veined (possible clinoz?) 69.05-70.50 bl'd (mottled) med grn to buff qtz veined healed Bx'd FT - hole qtz & py vein mvs quite continuously along core pinches and swells @ 70.30 70.50-71.87 Highly bl'd silica veined	bl'd non fizzy patches and veins possibly qtz & clinoz	minor pyrite irregular crushed (gougey) seams @ lower ct.	3343 3344 3345 3346	74.48 75.46 76.68 78.00	75.46 76.68 78.00 79.23	0.94 1.22 1.32 1.23	0.008 0.029 0.048 0.112	114 383 567 418		
	Qtz veining & flooding (15%) & poss. clinoz.	core med to fine bx'd	3-5% mg-cg py & q.v. along core	3347 3348 3349 3350 3351	79.23 79.90 81.50 83.00 84.80	79.90 81.50 83.00 84.80 85.90	0.67 1.60 1.50 1.80 1.10	0.093 0.045 0.031 0.010 0.003	497. 985 465 93 106		

96

W

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
	and flooded (30° white silica as free tured patches and flooded zones		cse bx'd texture superimposed on fine bx'n 71.70-71.87 gougey seams @ 35° & bc	3352	85.90	86.62	0.72	0.001	72		
71.86-72.96	med gy-grn & locally bl'd VFT & FT (healed bx'd tuff ?) may be lost core @ 72.96	cb-qtz fractures (10%) local short bl'd interval	1-2% py local conc. upper ct crushed and gougey 72.46-72.96 Crushed and gougey zones (50%) @ 240°C								
72.96-73.81	pale grn to dull yellow grn healed bx'd tuff (?) VF-chty I & some more siliceous zones which may be silica flooding or tuff patches @ 73.15 dk gy seam @ 40° (chl after arg. comp.?)	weakly mod bl'd patchy silica (flooding) some grn sericite (?) component no fizzy cb fizzy cb	2-3% patchy diss pyrite occ. thin gougey fractures lower contact is a blk gouge zone @ 20°								
73.18-74.48	Fault - gouge and crusted zone - upper fault contact blk gouge @ 20° followed by gougey cse crushed zone	qtz fractures and gougey sulfidic fract.	3-5% mg py - only .46m recovered								
74.48-75.46	Gy-grn healed bx'd tuff some definite VFT clast which are fract'd and veined undependent of mx possible qtz vein fragments pieces) 74.40-74.68 could be sil'd chty tuff ?	some qtz-cb alt'n patches & veins (fractures)	minor pyrite; fol'd zone 75.00-75.10 with dk py & seams (very sharp contacts @ 260°)								
75.46-76.68	HIGHLY BL'D ALT'D FOL'D (Tuff) grnish brn->brnish grn - prominent fol'n emphasized by veining and blk old laminae & bands (after arg?) 10 to bx'd qtz veins with local minor colouration 10-15% veins cb note obvious change in colour and pyrite content @ 76.00 @ thin gouge beam AS@ 76.30-76.68 rounded siliceous	highly bl'd & alt'd blk sulfidic chl'c laminae & some distinct- ive sericite grn and patches qtz ± cb	3-5% pyrite obvious @ 76.30 this interval distinguished by prevalent fol'n @ 45-55° occ thin gougey fractures								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
	pieces qtz vein or cht - in part look like amygdular fillings ??										
76.68-86.62	FAULT ZONE - healed brecciated & foliated component & fault breccia (gouge foliated rock) - actual foliated structured zone starts @ 75.46 fol'n often wraps around more competent fragments. 76.68-79.90 Brecciated chert unit with remnants of Jasper colouration dull grn contorted foliated matrix this interval subdivided into 3 samples as described below										
76.68-78.00	35-40% sil clast (chert) distinctive altered component some with jasper colouration dull yellowish grn altered matrix component (40%) & 15% dk gy sulfidic seams.		5-7% fg to mg py yellow grn matrix		≤ 5% gouge crushed seams						
78.00-79.23	70% sil blocks (chert) with minor Jasper colouration 30% dull yellow grn alt'd matrix fol'd around more competent chert clasts	drab grn altered fol'd mx	5-8% stringey conc & diss fg-mg py rare py'c in mx		78.90 vuggy leached zone						
79.23-79.90	Chert bx, 30% sil (cht) clasts more jasper colouration crushed and gougey		5-10% fg-mg py crushed gougey core (poor ground)								
79.90-81.50	pale grn to yellow grn contorted fol'd interval 79.90-80.10 gouge and crushed core; 20% hard white vein like patches occ. distinct	bl'd yellow grn & broken up vein/sil tuff component	2-3% pyrite contorted fol'n (70°-20°) occ. thin gouge fracture; minor dk gy (chlc) sulfidic								
	distinct cherty frag (block)										

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
81.50-83.00	fol'd zone with chert clasts 40% gougey crushed rock (fault breccia) remainder healed mylonitic looking rock 25% chty clast component After 82.32 healed clastic interval more competent ground drab grn to gy non fol'd to well foliated mylonitic looking matrix.	bl'd pale grn & soft dk gy sulfidic component	81.5-82.32 Gougey crushed zone dk gy soft sulfidic clay component 15% (fol'd 50-70° in gougey interval)								
83.00-84.30	30% varicoloured sil- iceous clast component minor fizzy cb - dk grey to dull gy grn con- torted fol'd mx - colour more drab grn after 83.82 (probable alt'd volc. component	mod fizzy cb dk grey sulfidic (arg) component & dull grn component in mx	84 -84.5 core more broken with thin gougey seams								
84.80-85.90	Healed fol'd rock & fol- iated crushed gougey rock - rounded boudined clasts of silica (chert)	mainly crushed gougey with 20-25% dk fg component - v. minor cb	20-25% dk grey soft (sulfidic) comp - fol'n 55-70° CA 85.00-85.80 crushed weak ground -> gouge - mod bc section 5% fg-mg py, 7% dk grey seams - QV 86.10-86.20 @ 60° CA								
85.90 -86.67	bl'd pale brown rock with gougey seams & crushed @ 86.10 10cm wht QV with occ. irregular sulfidic seams 86.62 marks lower contact of fault zone - underlying mafic volc is bl'd for 30cm.	highly bl'd wk fizzy cb - minor spks seams gm ser (fuchsite?) thin dk grey seams (sulfidic?)									

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM12-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
86.62-92.96	MAFIC VOLCANIC (CLASTIC); med gy to dk grn-gy, indistinct to distinct mafic spkl'd texture which is definitely in part mafic phenos - occ. hint of clastic texture indicated by indistinct bl'd patches.										
86.67-89.50	mainly med gy weakly bl'd mafic volc (And?) 12 to cb qtz fractures - more perv. fizzy cb after 88.00 lower ct is abrupt colour change @ thin gouge @ 70° CA	weakly bl'd more intense at upper ct with some grn py	complex cb-qtz filled fracture network - v. minor sericite - more perv fuzzy cb after 88.00								
89.50-92.96	med dk grn-gy with 10-2% fizzy complex cb fracture network note siliceous chunks (chty silice)	dinoz dk colouration 10-17% complex cb fractures									
89.97 (3cm) @ 92.43 (10cm) mafic porph'c texture - occ. bleached clast.											
92.96	EOH										

Hole No: DM12-86 Page 11 of 12

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM12-86

Core Boxes

Core Recovery

Box No.	Interval (m)		Core Lgth	Amount Present	Recovery %	Interval (m)		Core Lgth	Amount Present	Recovery %	Interval (m)		Core Lgth	Amount Present	Recovery %
	From	To				From	To				From	To			
1	13.3	20.63	13.30	13.22	Collar ground core pieces	86.87	89.92	2.96							
2	20.63	27.81	13.72	16.76	3.04	2.63			92.96	3.03					
3	27.81	34.80		19.81	3.05	2.98					End of Hole				
4	34.80	41.87		22.25	2.44	2.38									
5	41.87	49.09		24.69	2.44	2.46									
6	49.09	56.39		27.89	3.20	3.00									
7	56.39	63.35		30.48	2.56	2.60									
8	63.35	70.70		33.53	3.05	3.01									
9	70.70	78.10		37.03	3.50	3.52									
10	78.10	85.35		39.32	2.29	2.00									
11	85.35	92.47		42.37	3.05	3.13									
12	92.47	92.96		45.42	3.05	2.90									
				47.24	1.82	1.77									
				50.29	3.05	3.03									
				53.34	3.05	2.98									
				56.39	3.05	3.05									
				59.43	3.04	3.05									
				62.48	3.05	3.05									
				65.53	3.05	3.05									
				68.58	3.05	2.67									
				71.63	3.05	3.00									
				74.68	3.05	2.60									
				77.72	3.04	2.90									
				80.77	3.05	3.00									
				83.82	3.05	3.00									
				86.87	3.05	3.05									

Co: WESTMIN RESOURCES LTD. Map Grid N : 10,164.31 Date Drilled : Dec. 6-9, 1987 Survey Type Depth Dip Azi Objective/Comments: Test north extension  
 Project: DEBBIE E : 10,513.96 Contractor : Coates Pajari 32.6 -84 286° of UMC Zone.  
 Length (m) : 236.83 Field Grid : Mineral Hill Logged by : G. MacVeigh Acid 63.1 -84 -  
 Dip : -85° N : 20 + 65 Date Logged : Nov-Dec. 1986 Pajari 124.0 -84 278°  
 Azimuth : 265 E : 7 + 50 Acid 184.4 -84 -  
 Collar elev (m) : 995 Pajari 232.2 -84 297°  
 Core size : BQ

From - To meters	Lithology	Alteration	Mineralization/Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
0-6.10	Casing - no core recovered										
6.10-21.56	Bedded VF -> MT-CT light gy-grn-gy local black & argillaceous 6.10-6.32 broken fractured MT 6.38-8.78 Thin med bedded gy to grn lim'c fractures wk fizzy gy VF-MT bedding 40-55°, lim'c cb in MT minor qtz-cb fractures very minor argillaceous fractures component suggested by dker grey beds some uphole grading 8.70-11.50 Broken lim'c core - gy-gy MT & thin lam'd tuff with minor argillete comp.		rare py & quite broken very lim'c some ground core								
11.50-12.83	Argillaceous FT, dk grey blk less argillaceous downhole, laminations @ 55-60°										
12.83-13.47	Graded FT-CT downhole, grn-gy 13.41-13.47 piece of FT-out of place?	lim'c fractures	rare py								
13.47-14.00	sil'd ser'c Tuff - light grn-gy		quite broken gougey lim'c broken QV @ 13.90	3464 3465 3466	13.47 14.00 15.43	14.00 15.43 1.61	0.53 1.43 1.61	0.001 0.001 0.022	23 22 130		
14.00-15.43 (1.20 rec)	VF-chty gy T looks in part sil'd qtz-cb fractures (10%)		v. min. pyrite								
15.43-17.04	gy VF (chty) T MT, minor arg. comp veined with Qtz cb & 2 wider Qtz-chl-cb veins										

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	17.04-21.56 VF-FT, gy-grn mainly thick bedded (bedding @ 30°) gnish py'c almost chty beds minor very weakly argill. comp. lower contact to thin broken core	some qtz fractures in bc & thin cts	16.80-18.59 mod bc some lim'c staining 25.90 26.64 core broken or shallow dipping fractures								
21.56-27.50	DAC-AND (Bas) IL; gy-grn probably significant tuff clast component & high vitric component very irregular clast - no obvious grading 22.87-10cm basalt "block" or dyke (gy-grn veined & perv. cb) irreg. cts 25.52-25.92 Mafic porph dyke along one side of core - note finding py'c dyke margin (ct is chilled); 25.35- 25.45 bleached narrow py'c band	3% cb qtz fractures	v. minor py 25.35-25.45 bleached py'c zone								
27.50-35.97	COMPLEX MAFIC DYKE ZONE; minor Basalt Comp. 27.50-27.74 gy-grn finely mafic spkl'd dyke cts @ 15-30° upper ct drilled lower ct veined with cb qtz @ 40° (dense 1-2mm mafic porph'c text) 27.74-28.00 Basalt interband grn gy lower contact with dyke runs along core for 20cm 28.00-28.40 grn gy alt'd mafic perv. fizzy cb & porphc dyke 5-10% irreg mafic grains qtz to fract. to 4mm lower ct 30° 28.40-28.69 grn-gy Basalt 2-3% mafic perv. fizzy cb spkls & occ. epid'c fsp lower ct abrupt @ 65°										

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DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
28.69-29.70	Gy-grn alt'd mafic porph'c dyke or flow (?) similer to 28.00-28.40 upper ct looks bx'd suggesting flow lower ct is broken on strong slip @ 40°	perv. wk mod fizzy cb	very fine py dusty brn colour								
29.70-32.78	Varitextured mottled dyke zone	perv. fizzy cb									
29.70-30.92	Cse mottled texture described as diabasic but possibly large fsp grains enclosing mafic grains (poikilitic) ct @ 30.92 abrupt with finer textured phase of mottled unit (string slip @ 15) note mottled texture is finer approaching 30.12										
30.92-32.78	Mottled dyke with excel- lent size grading displayed @ upper contact (layered) dyke or multiple intrusive lower ct sharp @ 48°	perv. fizzy ch 3-5% cb-qtz fract.									
32.78-33.65	Alt'd Basalt dk grn-gy epid'd fg msy looking	epid'c	core fract'd & bc								
33.65-33.98	Mafic spkl'd dyke; gy-grn dense fine mafic speckling sharp cts @ 20-30°		gougey and bc in dyke 33.70-33.85								
33.98-35.43	Msv Bas., dk gy-grn dense mafic porph'c texture	perv. fizzy ctz	mod-highly broken core								
35.97-50.25	BASALT dk mod grn-gy, mainly MSV looking with bx'd sections variably epid'c bx'd sections accentuated by strong epid, locally a fine spotted epidote, wk mafic porph'c texture short bl'd altered sections.	minor cts in thin fractures 10-15% epid hem'c seams 46.37-46.55	rare py								

Hole No: DM15-86 Page 3 of 19

From - To meters	Lithology	Alteration	Mineralization/Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	46.56-47.33 strongly bleached may include some intense alt'd dyke	no fizzy cb distinctive grn sericite	1-2% fine diss py 46.79 thin gougey seam @ 65°								
	46.56-46.93										
	47.70-48.47 bleached basalt	wk fizzy cb 10% Qtz ± cb veins & fractures	2-3% diss py min grn								
	49.2 10cm pale of dense porph'c mafic dyke lower ct marks sharp change into different textured distinctive mafic unit.	ser									
50.25-57.05	Mafic (pxx) Porph'c and Basalt flow (clastic) med dk gy-grn characterized by distinctive creamy epid'c clast like patches mafic phenos (pyx) to 1cm 3% much stronger epid'c approaching lower ct.	local silc cts thin cb fractures crmy epid'c patches & threads & pervasive	minor v. fine py in fractures								
57.05-61.	Mottled mafic dyke; gy-grn distinctive pale grn mottles in dker gy-grn matrix, note fine and cse segregations/layers; sometimes gradational	pervasive cb 2% cb-qtz fractures occ rddish tone fractures rddish colour in CV.									
	58.70-59.00 gy mafic volc. band (vbc)										
	Upper ct sharp @ 15° (brkn) lower contact is complex over 28cm										
61.70-71.77	Mafic porph'c Bas dk grey -> med gy-grn variably epid'c	perv. cb									
	61.70-65.42 epid veined dk grey basalt note creamy epid'c patches (alt'n not clasts?) note @ 65 cse grained segregation (inclusive) cse leuco.	10% epid vn & spots 2% CV with some hem.									
	65.42-65.80 Mafic dyke veining contact 20-30°		broken core								

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DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	65.80-71.77 med gy to gy-grn grades grner @ 67.00 mafic porph'c text, more prevalent in grner interval 69.60 epid'c patches 66.8-67.25 strong cb veining & core broken @ shallow CA Increase qtz veins & fractures @ lower ct - lower ct with Tuff veined and not well defined 71.00-71.77 Qtz-cb veined 15% qtz minor py			3467	71.00	71.85	0.85		0.011		130
71.77-80.07	AND (DAC) MT-FLT, med grn-gy thick bedded weakly graded units - no dis- tinct bedding planes or stratifica- tion - occ. brecciated qtz flooded zone with minor pyrite eg. 76.67- 77.04, 78.02-78.33 77.04-77.23 grn gy mafic dyke, fine dense mafic porph'c texture contacts @ shallow CA	mod fizzy cb to nil downhole 79.46 bleached ep'c zone adjacent thin gouge @ high CA		3468	76.67	77.04	0.37		0.017		263
86.07-102.18	BEDDED GY-GRN TUFFS VF -> MT-FLT thin to thick bedded. Numerous well graded beds, bedding mainly 45-55°; beds to 2m thick -typically med to thick beds with vfg lam'd tops generally display good uphole grading occ. qtz-cb vein with fine pyrite e. 87.10 (3cm) @ 30° (high angle to bedding) & 23.60 (4cm) @ 30° 82.34-82.87 mafic dyke lgt grn gy, fine mafic porph'c texture, contacts @ shallow CA	Very wk to local mod fizzy cb, 3-5% narrow qtz- cb fractures	local minor py note delicate scalloped texture on top of some VFT beds, bedding generally 45-55°, locally contorted disrupted								

Hole No: DM15-86 Page 5 of 19

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	87.60-88.18 bx'd disrupted tuff beds with qtz-cb veins & fractures (no evident bleaching)			3699	87.58 88.18	0.60	0.049			210	
	99.52-102.18 generally thin bedded and lam'd some beds almost chty lower contact is at a gougey zone within a bleached altered interval			3470	101.78 102.33	0.55	0.038			332	
	101.78-102.33 bl'd gy brn sil'd @ contact of flow & tuff contact is gougey zone										
	102.18-102.33										
102.18-124.70	AMY MAFIC FLOWS (Basalt) Med grn gy with csely amygdaloidal zone Several well defined flow cts often marked by stronger epidote ± chl alteration - short bleached & silicified veined sections (py'c) 102.33-103.25 wkly bleached & fract'd 10-12% qtz-cb veins amygd flow - flow ct @ 103.25 fractured sil'd 103.67-104.28 vein qtz-cb veined 40% qtz-cb veining (40%) & bl'd flow - quite fractured possible epid'c flow contacts @ 105.30 and 105.63, 105.23? 108.70 20cm highly epid'c flow ct grades from F. Top into csely amygd flow 108.70 excellent flow contact grades down hole into csely amygd flow amygd show crude size decrease downhole 110.42-111.23 intensely bl'd and fractured & veined flow strongly py'c alt'n is centered on a flow contact @ 110.48 (intensely epid'c & blk chl		≤ 1 to mg -cg pyrite	3473	102.33 103.25	0.92	0.036		266		
			minor py	3471	103.62 104.28	0.66	0.021		243		
				3472	110.45 111.23	0.78	0.039		553		

h7  
JW  
Hole No: DM15-86 Page 6 of 19

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	with cse pyrite. 113.00-15cm epid'c mottled flow contact.	slight pinkish colour in some amygd									
	113.90-115.82 (116.34) single flow or pillow well defined bleached epid'c upper ct @ 113.90 grades down into amy flow to 114.50 then into epidote spkl'd msy flow lower ct of flow not defined because of mismatch @ 115.82.	epid perv. to spkl'd var. cb (amg qtz & cb) thin cb epid ± qtz fractures some hem in veins	nil py								
	116.34-117.70 csely amy & msy flow very cse amy 116.70 (amy to lcm) 117.70-118.28 highly cb pervasive & veining appears to be shallow to CA 118.28-124.70 Mafic flow with amy zones & occ. flow ct; eg (119.71, 120.27, 121.20) flow cts tend to be more epid'c and mark abrupt change in amygd. 120.62-120.85 fg dyke like bx'd band, strongly epid'c & chty silica cementing open fractures - contacts very irregular 121.38-121.74 bl'd strongly epid'c zone, thin cb & hem'c fractures.	perv. cb & cb-qtz fract. & dk tension fractures -cb qtz amy (occ chl amy) 60% cb minor hem (or pinkish colour) perv. cb & chl qtz amy to lcm perv. wk mod epid & conc. bands minor pinkish colour in cb (hem) hem fract.	minor 1% blebby py nil rare py, core broken partly or shallow fract. nil rare py @ 6-10% cb amy & 10% cb fract. & veining	3475 3476	116.34 117.70 117.70 118.28	0.36 0.58	0.005 0.001			70 11	
124.70-137.42	VARIABLY ALTERED FRACTURED VEINED BX'D MAFIC FLOW, gy-grn -> epidote grn to grey & highly silicified, local amygd sections 124.70-126.67 alt'd gy-grn mafic flow pervasive fizzy cb; 125.53-125.73 65% qtz-cb vein	Epid sil (qtz) cb perv. cb. epid'c esp 125.27-125.73 10% cb-qtz fractures	variable py (see samples) rare aspy (?) some VG esp 126.67-17.70 1/2% py	3477 3478 3479	124.70 125.27 125.27 125.73 125.73 126.67	0.57 0.46 0.94	0.024 0.058 0.073			156 292 124	

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm
	lower ct abrupt increase in intensity of silica			3480	126.67	127.60	0.93	1.290		212	
126.67-133.85	sil'd & wkmmod cb'd	sil (50-60%) wk mod cb	py 1-5%	3481	127.60	128.46	0.86	0.016		93	
mafic flow; sil'n as pervasive zones				3482	128.46	129.74	1.28	0.004		58	
& vein bx pyrite is variable; amy loc ruled				3483	129.74	131.15	1.41	0.004		119	
126.67-127.60	sil'd veined fractured	50% to SiO <sub>2</sub>	6 spks VG noted esp 126.67	3484	131.15	132.38	1.23	0.005		68	
mafic flow some amyg - strongly sil'd			126.77 (5 spkd & 127.21; 3% py)	3485	132.80	133.85	1.47	0.012		96	
but remnant mafic component not				3486	133.85	135.57	1.72	0.002		39	
apparently bl'cd											
127.60-128.46	intense gy silica - wk	intense silica (occ thin cb in thin fractured lower ct is cb fractures)	1-3% py'c seams	3487	135.57	137.42	1.85	0.004		41	
abrupt @ 30° vein (?)											
128.46-129.74	Qtz-(cb) veined (bx'd)	30-40% Qtz ± cb	minor 1% to py @ 128.73								
mafic flow in part vein bx - occ.			thin gouge @ 40° (core broken)								
amy. in mafic flow frag.											
129.74-132.38	Mainly Qtz-(cb) vein	50% Qtz ± cb 50% bx gy-grn mafic frags 50% sil & cb matrix (50%) N.B. @ 130.50 there is a fragment of py'c vitric T (this frag is much more py'c than any surrounding material)	mafic frags								
132.38-133.85	alt'd gy-grn flow, 10-15% cb-qtz fractures some amy. @ 132.38	10-15% qtz-cb some ser (?) 133.20 (irreg. fractures)	2% - 3% py several thin gougey slips @ 30-55°								
133.48	contorted (shear) zone bounding gougey slips @ 40-55° 133.70-133.75 shear zone with gy gougey bounding slips @ 30-35°										
133.45-135.57	Amyg & vitric flow wkly mod bc, wk bl'd bl'd & some epid. - 133.85-139.2 &	& epid'c zones distinctive crackled vitric looking band - lower ct with amygd flow is	minor py								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	sharp @ high CA; 139.24-135.57 amy flow wkly bl'd 15-20% cb amy - probable flow ct @ 135.38	wk cb - less veined (7% cb qtz) & less altered	minor blebby diss pyrite								
135.57-137.42	med dk grn-gy amyg flow, more bl'd and veined approaching lower ct										
137.42-144.40	BEDDED VITRIC TUFF Chty CT thin med bedded varicoloured pale grn gy to med gy-grn, variably alt'd fract'd and veined note cser tuff beds usually display uphole grading & display excellent quenched glassy textures.			3488 3489 3490 3491 3492 3493	137.42 138.20 138.20 138.56 138.56 139.85 139.85 141.32 141.32 142.20 142.20 142.83	0.78 0.36 1.29 1.47 0.88 0.63	0.014 0.061 0.005 0.054 0.038 0.042	239 1090 59 891 1315 1965			
	137.42-138.20 vitric tuff with chty bl'd top veined & flooded with qtz. 138.20-138.56 strongly bl'd & sil'd msv. py seams & fractures some qtz veins with minor cb with gougey slip cts.	25-30% cb & minor cb (not bl'd but flooded with silica highly bl'd (sil'd) 10% Qtz-cb veins & fractures some very soft msv mineral (pale yellow grn-ser/ gyp thin cb-qtz fract.	3-4% blebby py 5-7% fg py diss & seams	3494	142.38 143.79	1.41	0.007	62			
	138.56-139.85 thin bedded/graded vitric I (chty-CT) 50% VF-CHTY lam'd 40-60°		minor py - bedding @ 40-60% fract. cut bedding @ high CA								
	139.85-141.32 Bleached vitric VF-CT quite py'c diss in tuff & in veins grnish yellow grn to tan colour 141.32-142.20 variably alt'd py'c VF-CT (vitric) 30% VFI, fractured & disrupted beds, drab grn colour	10-15% Qtz (+ cb) veins some qtz is lam'd white to grey 10% qtz, minor grn mica	10% med g. pyrite minor Aspy - possibly replacing pyrite. 8% py								

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DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lghth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
142.20-142.83	VF-CHTY pole watery grn to bl'd brnsh grn	15% Qtz fract. & veins some bl'd zones	5% fg-cg py								
142.38-143.79	gy-grn VF-MT med to thick bedded (not very altered look- ing)	less altered (3-5% thin cb-qtz fract.).	minor py								
143.79-144.40	(not sampled) grn-gy MT-CT minor VFT; lower ct disrupted & irreg.	wk perv. cb	v. minor								
144.40-160.40	MSV MAFIC FLOW (BAS); med dk gy, locally wkly bl'd mainly fine grained bl'd 3-5% cb fract. with fine mafic spkl'd texture - some amyd. conc. towards upper ct (note delicate trains of fizzy cb amyg parallel upper ct. after 152.5 unit is more bleached	wk perv. cb - locally poss. gyp 153.70- epid	rare except 1-3% in bl'd zones 10% qtz-cb veins (fract) poss. gyp 153.70- epid	3495	152.92	154.10	1.08	0.014	288		
152.92-154.10	dull med grn-msv		153.86-154.10 shear zone with gougey seams @35° some crmy cb in gouge	3496	154.10	155.30	1.20	0.003	75		
154.10-155.30	med gy-grn with cb qtz fractures very weak bleaching	perv. mod cb & cb ± qtz fract. & veins 10%	1-2% py in shallow angle tension fractures	3497	155.30	156.43	1.13	0.007	82		
155.30-156.43	grn-gy msy flow with cb-qtz fractures & py'c tension fract. @ shallow CA	v. wk cb; @ 156.08 ch with minor qtz between two gougey slips	min py (1%) conc. in shallow tension fractures gougey slips @ 15-20% (10cm apart)								
156.43-160.40	med dk (grn) gy msy flow. lower contact not well defined could be slightly higher than indicated possibly in bc @160.10 some alt'd fsp noted above indicated ct.	perv mod fizzy cb 5% cb fractures	rare py 159.20-159.53 bc								

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
160.40-166.16	PORPH'C MAFIC FLOW; med dk grn-gy to paler grn - characterized by paler grey altered clast like patches which are thought to be altered fsp & fsp clusters 5-8mm occ. lger unit is locally amygd	wk loc. mod cb mainly weakly bl'd with grnish colour to many phenos 5-10% cb-qtz veining	.5-20% py								
160.20-161.92	paler grn wkly bl'd local amygd	5-8% cb qtz veins fractures distinct grn phenos < 1% py		3498	160.20	161.92	1.72	0.002	51		
161.92-163.42	as above slightly more bl'd	5% cb qtz veins 162.76 very soft grn gypsum (?) ser (?) silica patches (30%) minor jasp. colour silica cut by fizzy cb veins	1% py v. min. espy	3499	161.92	163.42	1.50	0.004	93		
163.42-164.20	mafic flow with 30% patches of fg gy silica (irreg. contacts)	minor cb fract & 5% min qtz-cb veins (30-50%) min bl'd zones grnish		3500	163.42	164.20	0.78	0.003	31		
164.20-165.72	Mafic flow grn-gy with 5-8% thin cb fract.	wk mod perv cb other cb fract & 5% min qtz-cb veins (30-50%) min bl'd zones grnish	minor py	3501	164.20	165.72	1.52	0.002	19		
165.72-166.16	bl'd mafic flow etched fractures	bl'd some grn mica	1-2% pyrite	3502	165.72	166.16	0.44	0.013	197		
166.16-170.34	BEDDED TUFFS; VF-MT-CT with minor IL coarser tuff beds look quite vitric thin med bedded 40-45° bedding locally contorted			3503	166.16	167.00	0.84	0.016	590		
166.16-167.00	thin lam'd VFT and stratified vitric F-CT, bedding @ 40° fizzy note delicate contorted shards & occ. very fine tuff chip, some disrupted broken VFT beds near lower CT	minor qtz fract. not distinct thin laminae 40° @ upper ct - distinctly stratified below with indistinct bedding phenos	2-3% diss mg py	3504	167.00	168.56	1.56	0.062	2679		
167.00-168.56	75% vitric MT-CT 25% thin lam'd FI, bedding disrupted by fractures	5% qtz-cb veins wk cb	1-3% Aspy loc. noted esp 168.10-168.40	3505	168.56	169.34	0.78	0.020	1970		
				3506	169.34	170.34	1.00	0.044	8192		

Hole No: DM15-86 Page 11 of 19

67

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	168.56-169.34 VF-Ft, pale crmy to grn bedding 30-45% local contorted beds offset on discord. slips (soft sed)										
	169.34-170.34 bl'd altered VFT-CT minor TL	15% gy-white qtz fractures bl'd & perv sil & qtz fract. minor grn mica	5% py minor Aspy /spk gold @ 170.20								
170.34-171.45	BANDED CHT-FT & ARG FT; 60%-70% grn-gy cht comp. 10% argillaceous comp.	minor cb in arg comp.	3-5% py more perv in Arg. sections bedding contorted 30-60% CA	3507	170.34 171.45	1.11	0.102			1008	
171.45-186.78	MAFIC FLOW - occ. CHTY-FT interbeds grn-gy mafic flow locally amyg lacks alt'd phenos noted in overlying mafic flow usually has a fine mafic spkl'd texture.	perv. wk mod cb 5-10% cb fractures		3508 3509 3510 3511 3512 3513 3514 3515 3516	171.45 172.75 172.75 173.06 173.06 173.85 173.85 175.18 175.18 175.87 175.87 177.19 177.19 178.76 178.76 179.06 179.06 180.62	1.30 0.31 0.79 1.33 0.69 1.32 1.57 0.30 1.56	0.004 0.029 0.001 0.009 0.009 0.001 0.001 0.001 0.001			90 1331 27 130 50 24 51 41 27	
	171.45-175.18 grn-gy flow (msv) with cb fractures	5% cb fractures perv. cb	1-2% Aspy in interval 172.75-173.06 assoc. cb qtz vein @ 35°	3513 3514 3515 3516	175.87 177.19 177.19 178.76 178.76 179.06 179.06 180.62	1.32 1.57 0.30 1.56					
	175.18-175.40 Chty T Bed, light gy very finely pr'y'c larger	veined with cb-qtz	minor very fine py bedding 30-60°								
	175.40-175.87 wkly bl'd highly cb fract'd										
	175.87-177.19 grn gy flow, some amy decrease in veining @ lower ct.	10% cb-qtz fractures									
	177.19-178.76 grn-gy massive flow, min. amy	wk cb fract. < 3% locally wk bl'd (ep?)									
	178.76-179.06 VF-CHTY grn T, v. minor Arg. comp. (jelly bean) lower ct is 4cm QV @ high CA	minor fizzy cb patches	1-2% py								
	179.06-180.62 grn-gy flow, msv with cb fract more highly veined upper ct (cb qtz) with some cse may lower ct wkly bl'd	5-10% cb fract. wk med perv. cb local wk bl'd	minor py 179.21 6cm cb vein & tn go @ 30°								

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	180.62-186.73 grn-gy to med gy msv mafic flow (basalt) 3-5% mafic phenos to occ. amygd - colour changes to grey @ 183.20	wk perv. cb 3-5% 3-5% cb fract.									
	186.13-186.78 cb ± qtz veined mafic flow bleach	cb qtz veined serc chl'c		3517	186.13 186.78	0.65	0.001			113	
186.78-193.05	MAF (BAS) MSV & TUFF; mainly gy-grn with indistinct texture - no evident bedding but unit has intervals with clastic texture - see sample descriptions for details										
	186.78-188.06 grn-gy low(?) tuff(?) narrow chty tuff (1.5cm) @ upper ct.	wk mod cb 3-5% cb fract.	v. minor py - core wk mod bc	3518 3519 3520	186.78 188.06 188.06 189.56 189.56 190.93	1.28 1.50 1.37	0.001 0.012 0.003			38 819 72	
	188.06-189.56 Grn-gy Bas (?) very indistinct texture	v. wk. cb. irregular cb fractures (pitted 3%)	minor py core mod broken on fractures	3521	190.63 193.05	2.42	0.003			56	
			188.17 bl'd gouge seam @ 40-50°								
			188.90 gougey seams 25-40°								
			189.46 gougey seam 25%/some cb qtz adj. gouge c py								
	189.56-190.93 Bas LT, occ. more distinct slightly bl'd clast	wk mod cb minor cb fract.	v. minor py 190.52-190.93 bc. lower ct @ 190.43 gougey cb slip @ 40°								
	190.93-193.05 Bas (L)T; MSV grn gy possible A to 192.50 then MSV ?? Gouge @ 193.05 marks start of a more structured and bleached rocks approaching main fault zone.	v. wk cb 3%-5% cb fractures	v. minor py - lower ct is 5mm gouge @ 30° marks rock type change								
193.05-194.11	VEINED - BLEACHED - ALTERED FLOW; dk mafic phenos & bleached grnish cse fst ? 193.77-194.11 intense chl	contorted cb-qtz veins (15%)	minor py - note contorted veins lower ct broken & gougey	3522	193.05 194.11	1.06	0.009			81	

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	and fractured qtz-cb veining lower ct with cht broken & gougey			3523	194.11	194.50	0.39	0.004		100	
194.11-194.50	CHERT, grn-gy msv. fine lam'n & lower thin cb fractures ct 50° with some band of fg pyrite		nil except fine py'c band @ lower ct								
194.50-195.15	DENSE PORPH'C DYKE with chl'c selvage; 194.50-194.75 msv chl'c band, dk grn 194.72-195.15 dense waxy grn fsp(?) in very pale matrix upper ct irreg. lower ct @ 45°	v. wk cb	v. minor (rare) py	3524	194.50	195.15	0.65	0.003		186	
195.15-201.07	ALT'D PORPH'C FLOW, bleached drab gy-grn with prominent alt'd grnnish fsp phenos & clusters 15-20% to 5mm & scattered mafic phenos (3%)			3525	195.15	196.07	0.92	0.001		44	
	195.15-196.07 dull grn-gy strongly amyg some mafic porph'c texture	intense cb-amyg fract. & perv.	rare py upper ct dyke lower ct 5mm go & vein @ 40° CA	3526	196.07	197.50	1.42	0.001		103	
	evident but not as prominent as noted after thin gouge @ 196.07			3527	197.50	198.78	1.28	0.001		99	
	196.07-201.07 drab grn-gy bl'd colour very minor cb (discoloured) dk sooty (sulfidic) seams @ 201.03 @ 25° CA gouge seam @ 196.07 marks abrupt colour change.		thin gougey to schistose slips occ dk grey gouge coating slips eg., 197.21 @ 10° also 199.46 199.56-200.25 broken veined & gougey core @ 10°	3528	198.78	200.25	1.47	0.004		101	
				3529	200.25	201.07	0.82	0.010		47	
201.07-227.69	FAULT ZONE - GOUGEY SCHIST & FAULT BRECCIA - Bx'd & contorted Qtz veins occ. chert fragments	brn yellow ch colour only wk fizzy but soft - mixture of cb & sericite	minor pyrite crude to well defined fol'n 30-45°	3530	201.07	202.57	1.50	0.003		155	

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	ated schist (cb-sericite) irreg. gougey seams 201.40 6cm rounded cht frag. 201.80 sil py'c fragment (vein/cht?)	patches & irreg. qtz veins		3531	202.57	203.13	0.55	0.003		127	
	202.57-203.63 brn yellow to yellow grn fractured bleached to gougey schist	cb-ser-qtz in part gougey cb-ser-qtz sch. irreg. fract'd qtz		3532	203.63	204.40	0.77	0.011		188	
	203.63-204.48 brn-yellow fractured schistose & gougey - contorted (ptygmatic) qu @ 203.67	cb-ser-qtz sulfidic gougey seams	minor py minor dk grey sulphidic seams	3533	204.40	206.06	1.66	0.026		462	
			203.81-204.20 gougey bc	3534	206.06	207.16	1.10	0.026		519	
			205.30 dk gn gouge @ 20°	3535	207.16	208.35	1.19	0.015		549	
			cuts across schistosic (fol'n)	3536	208.35	209.69	1.34	0.006		197	
	204.48-214.70 Fault Bx - MSV with soft dk sulfidic mx to gougey schistose fol'd cb ser alt'd disrupted Qtz vein rich sections see sample descriptions below			3537	209.69	211.14	1.45	0.024		228	
				3538	211.14	212.30	1.16	0.002		71	
				3539	212.30	213.40	1.10	0.021		160	
				3540	213.40	214.70	1.30	0.019		230	
	204.68-206.06 Fault bx 25-30% qtz (vein/cht) component grnish ct ser gougey mx in part alt'd volc comp	cb-ser gougey mx some dk gy sulfidic mx	py(to 5%) difficult to estimate variable fol'n defined by gougey seams								
	206.06-208.35 Fault breccia with 35% L and A chunks 30% siliceous (Qtz) frags 70% alt'd volc. frags note brnish ch'd colour to volc frags with fuchsite green phenos	cb-ser alt'd frags with fuchsite to grn plane mx dk gy sulfidic 30% sil frags after Qtz	3-8% py very finely ground up in mx								
	matrix 65% dk grey sulfidic										
	208.35-209.69 cb gougey ch-ser-qtz sch & fault bx with blk mx (sulfidic)	30% gougey cb-ser-qtz sch 60% fault bx with bkl mx	blk matrix highly sulfidic								
	209.69-211.14 Gougey cb-ser qtz schist 30% contorted broken white QV with py	cb-ser-qtz 30% cont'd broken qtz	5-7% fg py not py rimming qtz								

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
	4min greyish sulfidic siliceous frags										
211.14											
211.14-212.30	ser-ct-qtz sch drab grn gougey schist some bl'd (cb'd)	ser-cb-qtz 10% qtz (?)	min py crude fol'n var (20° - 65°)								
volc. 212.-212.3	msv hard to pale										
grn-gy (Dacite !)											
212.30-213.40	gougey crusted ser-cb-qtz (chl) sch, 10-15% broken qtz esp lower ct.	ser-cb-qtz gouge	dk grey sulfidic gouge (minor) 3% py (?) gougey crushed contorted schist.								
213.40-214.20	Fracture qtz (70%) and gougey crushed ser-cb sch. minor	Qtz (70%) ser-cb	1-3% py (?)								
dk grey sulfidic seams - sulfidic seams and fractures in qtz lower contact with msv unit @ 55-68°											
214.20-216.22	grn-gy msv, mod hand. no cts except thin could be Dacite (?) contacts lighter fractures		nil py	3541	214.70	216.20	2.02	0.001	13		
than interior thin hairline cb				3542	216.72	217.83	1.11	0.031	391		
fractures - abrupt irreg cts with				3543	217.83	218.83	1.00	0.022	380		
crushed gougey schist				3544	218.83	220.33	1.50	0.001	25		
216.72-217.83	80% gy white fract'd Qtz 20% ser-cb gougey crushed schist	ct-ser-cb-qtz	5-10% py mx and fractures in bx'd Qtz	3545	220.33	221.83	1.50	0.001	19		
significant py'c mx and fractures in			goodlooking qtz	3546	221.83	223.45	1.62	0.012	484		
qtz				3547	223.45	224.84	1.39	0.014	163		
217.83-218.83	Gougey crushed ser-cb schist (75%) 25% bx'd Qtz (Qtz frags)		crude fol'n in gouge 15-50°	3548	224.84	226.33	1.89	0.003	110		
local sections dk grey sulfidic gougey matrix				3549	226.33	227.24	0.91	0.004	128		
218.83-221.83	Crushed Dacite(?) same as interval 214.70-216.72 but this interval is highly crushed (10-20% gouge mx) 1gt grn-gy-upper ct with gougey schist @ 40°, lower ct @ 20° with blk sulfidic gouge	wk fizzy cb 10-20% gougey crushed mx	minor sulfide as blk sulfidic gouge esp. sample interval 218.83-220.33	3550	227.24	228.81	1.57	0.001	55		

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date:

DM15-86

From - To meters	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval m	Lgth m	Au oz/T	Ag ppm	As ppm	Cu ppm	Zn ppm
221.83-223.45	ser-cb qtz gougey sch with 15% dk grey seams (sulfidic) 15% siliceous frags some grnish dacitic looking comp.	ser-cb ± chl(?) qtz gouge sulfidic seams (soft)	fol'n py - no estimate 10-15% dk grey comp. crude fol'n //CA to 35° CA								
223.45-224.84	drab yellow grn ser-cb- qtz-ser(chl?) cb rounded qtz schist 20-30% broken & contorted knots of qtz qtz-cb component, minor dk grey sulfidic comp.		minor py - fol'n = //CA warps around qtz-cb patches								
224.84-226.33	ser (+ chl)-cb-qtz schist =30% broken & contorted qtz ± cb comp	ser-cb-(chl?)-qtz distinctive sulphur yellow colour on slip surface @ 226.13	minor dk grey seams-fol'n 0-30°								
226.33-227.24	Qtz-ser-(chl)-cb schist more evident fizzy cb 20% qtz as disrupted contorted & broken veins @ 226.58 10cm dk grey blk band (sulfidic) =chl'c 227.24-228.81 (only .70 recovered) med-dk grn-gy alt'd bas. + chl-ser- cb-qtz schist-lower ct. of fault taken as footage block @ 227.69 - core could be mixed up in this sample in interval most lost core from 227.69-228.81 (only .32 rec)-first dk Bas comp noted @ 227.24										
227.69-236.83	VITRIC BASALT CLASTIC: TAL-TLA mod dk grn-gy - many clasts appear to be densely porph'c (translucent fsp) + some clasts quite vesiculated 228.81-230.31 gy-grn vitric Bas	5-10% cb ± qtz fractures wk perv. cb	rare pyrite	3551	228.81 230.31	1.50	0.001			8	
		10-12% cb veining & fractures	nil-rare py								
236.83	E.O.H.										

Hole No: DM15-86 Page 17 of 19

## Core Boxes

## Core Recovery

Box No.	Interval (m)				Core Recovery				Interval (m)				Core Recovery				
	From	To	Core Lgth	Amount Present	Recovery %	From	To	Core Lgth	Amount Present	Recovery %	From	To	Core Lgth	Amount Present	Recovery %	From	
1	6.10	14.47	6.10	8.23	2.13	1.74		74.68	75.59	0.81	0.81		145.39	184.44	3.05	3.04	
2	14.47	21.93		9.75	1.52	1.15		78.33	79.24	2.74	2.74		151.49	151.49	3.04	3.10	
3	21.93	28.88		11.28	1.53	0.65		81.58	83.05	3.05	3.07		154.53	154.53	3.04	3.00	
4	28.88	35.97		13.41	2.13	1.90		84.43	86.05	3.05	3.03		157.58	157.58	3.05	3.07	
5	35.97	42.80		16.46	3.05	2.62		87.48	89.05	3.05	3.02		159.72	159.72	2.14	2.06	
6	42.80	50.05		18.59	2.13	2.03		90.53	92.05	3.05	3.01		162.76	162.76	3.04	3.06	
7	50.05	57.07		21.64	3.05	3.00		93.57	95.04	3.04	2.85		165.96	165.96	3.20	3.00	
8	57.07	78.02		24.69	3.05	3.06		96.62	98.05	3.05	3.07		169.16	169.16	3.20	3.08	
9	64.29	70.76		27.74	3.05	3.05		99.67	101.05	3.05	3.05		172.06	172.06	2.90	2.98	
10	70.96	78.02		30.78	3.04	2.80		102.71	104.04	3.04	3.06		175.26	175.26	3.10	3.07	
11	78.82	85.14		33.83	3.05	3.05		105.77	107.06	3.06	3.03		178.31	178.31	3.05	3.03	
12	85.14	92.50		35.97	2.14	2.20		108.81	110.04	3.04	3.03		181.36	181.36	3.05	3.07	
13	92.50	99.52		38.71	2.74	2.63		111.86	113.05	3.05	3.05		184.40	184.40	3.04	3.05	
14	99.52	106.46		40.84	2.13	2.15		113.39	114.53	1.53	1.65		187.60	187.60	3.20	3.10	
15	106.46	113.39		41.76	0.92	0.88		114.60	115.82	1.21	1.29		189.28	189.28	1.68	1.70	
16	113.39	120.53		44.81	3.05	3.00		(mislabel)	115.82	1.22	1.08			191.11	191.11	1.83	1.70
17	120.53	127.50		47.85	3.04	3.06			117.96	2.14	1.90						
18	127.50	134.61		50.90	3.05	2.98			121.01	3.05	3.05						
19	134.61	141.94		53.95	3.05	2.95			124.05	3.04	3.00						
20	141.94	148.92		57.00	3.05	3.16			127.10	3.05	3.00						
21	148.92	156.08		60.05	3.05	3.00			130.15	3.05	3.00						
22	156.08	162.96		63.09	3.04	2.90			133.20	3.05	3.05						
23	162.96	170.34		66.14	3.05	3.32			136.25	3.05	2.95						
24	170.34	177.61		69.19	3.05	3.00			139.29	3.04	3.10						
25	177.61	184.62		71.63	2.42	2.35			142.34	3.05	2.92						
26	184.62	191.88		74.68	3.05	3.06			145.39	3.05	3.00						

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: G. MacVeigh Date: Dec. 19, 1986

DM15-86

Core Boxes

Core Recovery

Box No.	Interval (m)		Core Lgth	Amount Present	Recovery %	Interval (m)		Core Lgth	Amount Present	Recovery %	Interval (m)		Core Lgth	Amount Present	Recovery %	
	From	To				From	To				From	To				
27	191.88	199.05	191.11	194.16	3.05	2.90										
28	199.05	206.35		197.21	3.05	3.07										
29	206.35	213.40		200.25	3.04	2.80										
30	213.40	220.59		203.30	3.05	3.05										
31	220.59	227.74		206.35	5.05	2.90										
32	227.74	235.50		209.40	3.05	2.90										
33	235.50	236.83		212.45	3.05	3.05										
	E.O.H.			215.49	3.04	3.05										
				218.54	3.05	3.06										
				221.59	3.05	3.06										
				224.64	3.05	3.07										
				227.69	3.05	2.88										
				230.73	3.04	2.29										
				233.78	3.05	3.08										
				236.83	3.05	2.94										
					236.83	E.O.H.										

## HOLE NO. DM29-87

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,093.71 Date Drilled: Jan.21/22/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,470.38 Contractor : Coates Pajari 94.8 -66° 278° Test upper Mineral Creek zone  
 Length (m) : 99.4 Field Grid: Mineral Hill Logged by : J.Watkins  
 Dip : -71° N: 20+00 Date Logged : Feb. 23/87 Case left in hole  
 Azimuth : 275° E: 7+25  
 Collar elev (m) : 957  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 10.60	CASING - no core										
10.60 - 13.45	FG BEDDED TUFF Well sorted uphole beds @ 65° Lower cont broken	perv cc 10% cc vn'd 13.00 to 13.45: dk grey siliceous with 20 grading to 60% white qtz.	Minor sulph	3883	13.00 13.45	0.45	.015	0.3	142	7	13
13.45 - 57.30	INTENSELY ALTERED ank-rich with intervals of perv. sil. ser enrichment locally; in part alt. on shattered host and stwk silt py -all cut by zones of sheared schist at low angles to core and by narrow gouge seams at various angles to core axis  Primary features gone, same vague tuff? bedding	13.45-14.70: ank-rich with perv. ser, 20% crmy qtz + (AsPy) stwk 14.70-22.32: crmy silicified cut by tight sulph shear, 10% grading down to 17.00 of white qtz stwk	5% diss Py, vfg AsPy in some qtz vnning 3% diss Py; sulph shear @ 30° @ 18.40, 18.50, 18.60, 18.70 At 20.00, 10 cm of whispy ser shear @ 60°	3884 3885 3886 3887 3888 3889 3890 3891 3892	13.45 14.70 15.70 16.70 17.70 18.70 19.70 20.70 21.70 22.32	1.25 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.62	.021 .006 .001 .009 .008 .001 .001 .001 .001	0.8 0.5 0.5 1.0 1.7 1.0 0.9 0.4 0.1	368 816 159 539 584 183 218 147 41	26 30 38 40 45 63 74 77 15	65 30 38 40 45 63 74 77 30

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)		Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
tuffaceous?		22.32 to 27.75: sil+ser-rich schist + ank 3-5% diss Py throu.	low angle schist zone with schist variable @ low angle, At 23.60: 10° broken gouge with dk grey sulph streakl to 1 cm At 25.80: broken by low angle shear at 26.00: tight 30° sh at 26.65: crushed gouge 5 cm wide @ 5-20° From 26.70 to 27.75: schist undulating @ 0° to C.A.	3893 3894 3895 3896 3897	22.32 23.00 24.00 25.00 26.00	23.00 24.00 25.00 26.00 27.75	0.68 1.00 1.00 1.00 1.75	.009 .014 .189 .177 .078	0.3 0.3 2.1 1.5 0.7	130 211 285 408 289	33 19 59 11 38	49 40 77 42 64
tuff? bedded @ 0°		27.75 to 29.65: med grey grn, less altered (wk bl ank + ser?)	27.75 to 29.65: mod grey grn, less altered (not strongly bl) ank + ser Lower contact sharp tight sh @ 10°	3898 3899	27.75 28.75	28.75 29.65	1.00 0.90	.019 .004	0.5 0.3	175 55	30 36	65 78
29.65-33.30: upper and lower contacts schistose at low angle to C.A., over 1 m cored by wk schist imposed on 10-20% Q+ank+Py stwk		29.65 to 33.30: perv. ser + ank sil-rich stwk	5 to 10% py Lower cont sharp tight sh @ 0-10°	3900 3901 3902 3903	29.65 30.65 31.65 32.65	30.65 31.65 32.65 33.30	1.00 1.00 1.00 0.65	.011 .058 .052 .103	0.5 1.0 0.6 1.1	168 364 272 331	29 30 19 25	66 69 53 61

HOLE NO. DM29-87 Page 2 of 7

96  
65

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
		33.30 to 37.55: perv. ank + ser with patches of cc, 10% QC pseudo stwk	33.30-37.55: 5% Py broken by low angle parting planes light shears @ 10-30° From 36.00 to 36.60: low angles undulating gouge seam of rock chips and flour in med grey host	3904 3905 3906	33.30 34.80 36.30	34.80 36.30 37.55	1.50 1.50 1.25	.049 .097 .046	0.9 7.1 1.2	599 704 1015	22 100 38	65 93 95
		37.55 to 43.00: uniform altered ank-rich pale yellow with mottled grn.	37.55 to 43.00: pseudo-stwk of Py(5%) cut by 1-2mm Q(C) veinlets with tr AsPy all disrupted by wk penetrative fibre - wk sch. @ 60-75° At 40.25: 5 cm qtz vn heeled by cc + ank fw cont 5 mm of dk grey gouge and rk chips all @ 70°	3907 3909 3910 3911 3912 3913 3914	37.55 38.60 39.60 40.25 40.65 41.50 42.50	38.60 39.60 40.25 40.65 41.50 42.50 43.00	1.05 1.00 0.65 0.40 0.85 1.00 0.50	.040 .044 .054 .062 .042 .052 .042	1.0 2.3 1.6 2.4 0.9 1.0 0.8	038 2856 2226 1019 895 1503 821	30 93 57 54 58 54 28	93 90 84 75 93 93 75
		From 40.55 to 40.65: grey mottled dk grey chert, broken now heeled with Q + chl? cont's @ 75°										

9W

60

HOLE NO. DM29-87 Page 4 of 7

g.w

19

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		48.50 to 49.30: apple grn perv ank with 20% cc vning patches	5% diss Py wk sh throu. @ 55°	3920	48.50 49.30	0.80	.068	2.0	918	27	85
			From 49.30 to 49.60: strong shear with dk grey gouge								
		49.30 to 52.70: perv ank-rich	49.30 to 52.70: pseudo stwk of Py	3921	49.30 50.50	1.20	.059	1.7	1449	47	107
		Lower cont broken, prob. 20° crushed sh	(7%), all cut by 5% narrow QC Aspy vnlets, broken by 30° to 45° tight sh	3922	50.50 51.50	1.00	.029	1.1	1532	41	95
		52.70 to 55.00: broken through. dk grey chert, cc heeled, 5% Py		3923	51.50 52.70	1.20	.030	0.6	1283	26	88
		from 54.00 to 54.50: msv perv ank sheared with chert frags, sh @ 20° to 40°		3924	52.70 54.00	1.30	.008	1.3	330	34	34
				3925	54.00 54.50	0.50	.024	1.4	675	37	45
				3926	54.50 55.00	0.50	.014	0.7	479	16	50
		55.00 to 57.30: msv perv ank light apple green wk cc stwk, wk crushed seams, cc-rich @ 35°		3927	55.00 56.15	1.15	.004	0.3	121	13	45
				3928	56.15 57.30	1.15	.001	0.1	15	3	38

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
57.30 - 58.60	FAULT GOUGE: predom. rock flour @ 40° to 57.90: ank-rich flow from 57.90 to 58.60: dk grey flour with ank-rich bands @ 40°	ank	minor py	3929	57.30 58.60	1.30	.003	0.3	86	38	53
58.60 - 60.30	ALT ALT grades to typical ALT	perv ank (cc) decreases to depth	minor py	3930	58.60 60.30	1.70	.001	0.2	86	83	63
60.20 - 99.36	ALT typical  88.50 to 99.36: unschistose typical with amyg juvenile frags	strg. perv 10-15% cc vning, partly parellel with sch	58.60 to 88.50: cc heeled schist @ 45 to 60°, locally contorted	3931	60.30 61.80	1.50	.001	0.1	22	80	60
99.36	END OF HOLE										

96

8

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: Bill Randles Date: Feb. 16/87

Hole No. DM29-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lngth	Amount Present	Recovery %	Interval (m)		Core lngth	Amount present	Recovery %	Interval (m)		Core lngth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	10.30	17.52	10.30	10.97	0.67	0.53	79.0	84.12	87.17	3.05	3.02	99.0					
2	17.52	25.09	10.97	13.72	2.75	2.27	83.0	87.17	90.22	3.05	3.05	100.0					
3	25.09	32.69	13.72	16.76	3.04	2.82	93.0	90.22	93.27	3.05	3.02	99.0					
4	32.69	38.70	16.76	19.81	3.05	2.47	81.0	93.27	96.32	3.05	3.01	99.0					
5	38.70	46.33	19.81	22.86	3.05	2.83	93.0	96.32	99.36	3.04	3.00	99.0					
6	46.33	52.78	22.86	25.91	3.05	2.54	83.0										
7	52.78	60.14	25.91	28.96	3.05	2.64	87.0										
8	60.14	67.27	28.96	32.00	3.04	2.79	92.0										
9	67.27	74.55	32.00	35.05	3.05	3.05	100.0										
10	74.55	81.80	35.05	38.10	3.05	2.99	98.0										
11	81.80	88.93	38.10	41.15	3.05	2.34	77.0										
12	88.93	96.15	41.15	44.20	3.05	2.97	97.0										
H 13	96.15	99.32	44.20	47.24	3.04	2.74	90.0										
			47.24	50.29	3.05	3.02	99.0										
			50.29	53.34	3.05	2.49	82.0										
			53.34	56.39	3.05	2.54	83.0										
			56.39	56.69	0.30	0.26	87.0										
			56.69	59.74	3.05	3.05	100.0										
			59.74	62.79	3.05	3.05	100.0										
			62.79	65.84	3.05	3.00	98.0										
			65.84	68.88	3.04	3.04	100.0										
			68.88	71.93	3.05	3.01	99.0										
			71.93	74.98	3.05	3.05	100.0										
			74.98	78.03	3.05	2.98	98.0										
			78.03	81.08	3.05	2.99	98.0										
			81.08	84.12	3.04	2.97	98.0										

Hole No. DM29-87 Page 7 of 7

96

40

Hole No. D32-87

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,093.85 Date Drilled: Jan. 22-24/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DÉBBIE E: 10,470.86 Contractor : Coates Pajari 65.5 -79° 286° Test hanging wall of Mineral  
 Length (m) : 148.1 Field Grid: Mineral Hill Logged by : J.Watkins Pajari 143.3 -79° 274° Creek fault.  
 Dip : -80° N: 20+00 Date Logged : Feb. 14,15/87 - -  
 Azimuth : 275° E: 7+25 - Casing left in hole  
 Collar elev (m) : 957  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 6.10	CASING - no core										
6.10 - 11.70	INTERCALATED VFG TUFF AND MSV CG TUFF to 7.50: msv cg unsorted tuff, 7.50-11.70: fg to vfg tuff msv with bedded intervals @ 70-80° Lower cont. broken	strg perv cc in tuff, mod to patchy strg cc in fg and vfg tuff	No sulph								
11.70 - 14.45:	MSV DK GREY CHERT msv chert, dk grey featureless Lower cont sheared @ 45°	10% cc vn'd	No sulph badly broken								
14.45 - 19.20	INTENSELY ALTERED HETROLITHIC LAP TUFF: prob mixed felsic-mafic la, tuff, vague felsic frags, mafic frags may be pseudo- morphed in part by dker patches: primary features gone lower cont sheared @ 25°	strgly bleached ank + ser 10% cc vnlets	1% diss. py 18.20-19.20: wkly sch @ 30°	1393 1394 1395 1396 1397	14.45 15.45 16.45 17.45 18.45 14.45 16.45 17.45 18.45 19.20	1.00 1.00 1.00 1.00 0.75	.001 .002 .005 .001 .002	0.1 0.1 0.1 0.1 0.4	6 38 208 40 78	10 14 11 15 80	49 48 44 44 49

960

59

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
19.20 - 21.65	SHEAR ZONE badly broken throu. by 30° and 45° shears X-cutting strgly altered hydro frac. (10%) Lower contact sharp 45° shear with 1 mm dk gouge	strg. ser. tank	3% diss py At 20.50 broken gouge with qtz chips	1398 1399	19.20 - 20.40 20.40 - 21.65	1.20 1.25	.010 .027	0.8 2.1	417 1572	57 66	48 62
21.65 - 30.10	PX.P ANDESITE (BASALT) msv fg feldspathic gdmss with 1-2-mm phenos through.	21.65-25.90: wk bl, minor cc as vns  25.90-30.10 grades to irreg ank vning and patches at +/-30°  Lower cont. gradational	cut by scattered 1 m tight shears @ 30° with 1 mm dk grey gouge  At 27.20: tight 30° shear with 1 cm cc vn and black gouge painting	1400 1401 1402 1403 1404 1405	21.65 23.15 24.65 26.15 27.65 29.15	23.15 1.50 1.50 1.50 1.50 30.10	.009 .003 .006 .008 .007 .001	1.2 1.1 1.3 0.8 1.0 0.6	567 175 177 1271 811 138	72 64 79 58 59 54	49 52 80 49 72 54
30.10 - 38.10	STRGLY ALTERED PX.P ANDESITE prob alt. Px.P, primary features totally gone due to intense perv. alteration	very intense ser + ank + (py)	5% narrow med grey QC vning strwk to 30° vns. 31.10-31.30: 20° 1 mm to 5 mm dk grey sulph-rich shear. 31.50-31.75: insituted bx with dk grey sulph- rich and qtz heeled @ low angle?	1406 1307 1408	30.10 31.10 32.10	31.10 1.00 1.00	.029 .006 .008	1.6 1.1 2.0	1659 1318 786	58 31 64	50 48 62

960

96

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
			32.10-32.20: crmy grey qtz-rich vn @ 60°									
			32.30-32.38: fault bx subrd wall rk frags in 20% fine gouge with 1 cm dk qtz-rich vn @ bottom cont @ 65°									
			At 32.53: 2 cm py + QC sh @ 70°									
			32.53-33.00: wk sch @ 70-80°									
			33.00-33.35: 60% dk grey qtz (chert) with wall rk, 20% white QC, lower cont sh @ 75°	1409	33.00	33.35	0.35	.021	2.0	362	54	44
			34.00-34.10: strg py-rich sh @ 30°	1411	34.10	35.10	1.00	.065	1.0	849	35	66
			1412	35.10	36.10	1.00	.267	1.2	1156	24	91	
			34.60-34.70: clay gouge, broken with dk grey chert?	1413	36.10	37.10	1.00	.031	0.8	1106	20	94
			34.70-38.10: to 7% py as fine pseudo-strwk	1414	37.10	38.10	1.00	.029	0.6	3130	18	83
			Lower cont sharp tight sh @ 30°									

JW

67

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)		Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
38.10 - 43.20	ALTERED LAPILLI TUFF (HETROLITHIC?) primary texture and composition nearly gone, vague clasts throu., unsorted Lower cont grades	perv ank + ser dk apple grn (darker than previous interval) scattered cc vning	1-3% diss Py rare med grey QC vn @ 90°	1415 1416 1417 1418 1419	38.10 39.10 40.10 41.10 42.10	39.10 40.10 41.10 42.10 43.20	1.00 1.00 1.00 1.00 1.10	.014 .022 .061 .024 .007	0.1 0.4 0.2 0.4 0.1	136 685 324 453 115	24 21 22 24 24	97 85 .90 93 86
43.20 - 66.10	INTENSE ALTERED primary textures and comp. totally gone, rare lapilli tuff visible, 40.40-40.50: vague fg tuff @ 70°	strg perv. ser + ank + py	43.20-47.00: to 10% crse diss py., fine hairline fractures <1mm grey QC filled At 46.70: 5 cm QC vn @ 60° 47.00-47.25: fault, dk grey gouge, sharp sh conts @ 35° 47.25-50.25: v wk sch (ser-rich) @ 35° to 10% py near pseudo stwk 50.25-51.50: insituied broken QC + dk sulph (15%) heeled, wk sch @ 35°	1420 1421 1422 1423 1424 1425 1426 1427 1428	43.20 44.20 45.20 46.20 47.00 48.00 49.00 50.00 51.00	44.20 45.20 46.20 47.00 48.00 49.00 50.00 51.00 51.50	1.00 1.00 1.00 0.80 1.00 1.00 1.00 1.00 0.50	.054 .042 .038 .024 .027 .023 .041 .028 .014	1.6 0.6 0.3 0.6 0.8 0.5 1.2 0.7 0.5	607 569 541 787 840 1141 916 1520 1033	54 31 65 .31 32 19 35 29 19	69 88 68 .70 78 19 62 83 61

96

88

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lghth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
			51.50-55.70: mod sheared throu. now healed by light to med grey QC vning @ 40-45°	1429 1430 1431 1432 1433	51.50 52.50 53.50 54.50 55.10	52.50 53.50 54.50 55.10 55.70	1.00 1.00 1.00 0.60 0.60	.016 .011 .019 .029 .104	0.8 0.3 0.1 0.7 1.7	1123 1031 583 563 738	26 16 15 16 46	64 62 51 62 86
			At 54.90: 5 cm flt, dk gouge with subrd wall rk frags	1434 1435	55.70 56.70	56.70 57.50	1.00 0.80	.015 .026	0.1 0.2	236 285	57 64	81 83
55.70-57.50: msv unsorted mg tuff	55.70-57.50: strg perv cc leucoxene spotted		55.70-57.50: 1-2% diss py									
			57.50-58.50: msv with occasional tight sh @ 40°, 1% py	1436	57.50	58.50	1.00	.013	0.1	236	17	88
58.50-59.00: possible sil tuff, sh @ 48° lower cont ragged at low angle	60% Q(C) rich bands (beds?) @ 40° ser + ank host		58.50-59.00: 3% py in Q(C) beds	1437	58.50	59.00	0.50	.005	0.1	243	11	71
			59.00-59.75: insituited (hydro- frac?) 15% py-rich QC matrix	1438	59.00	59.75	0.75	.016	0.7	1749	26	76
59.75-60.90: poss amygd flow	59.75-60.90: strg ank (Ser)		59.75-60.90: 10% QC vning at 60.25: 4 cm Q(C) vn @ 80° At 60.90: dk py-rich 2 cm seam, flt with some Q frags @ 30°	1439	59.75	60.90	1.15	.012	1.3	1100	46	43

JW

69

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)		Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	60.90-64.20: msv lapilli stone unsorted, partly masked by alteration	60.90-64.20: strg perv. cc rock ank + ser 10% cc vn'd	<1% py	1440 1441 1442	60.90 62.00 63.10	62.00 63.10 64.20	1.10 1.10 1.10	0.12 .006 .013	0.1 0.1 0.2	200 54 172	37 29 43	72 69 92
		strg ank + ser	64.20-65.02: insituied fractured (hydro-frac) 20% py + QC matrix	1443	64.20	65.02	0.82	.121	1.1	2305	48	94
	65.02-66.10: prob msv lapilli tuff (stone)	strg ank + ser	65.02-66.10: 5% py as scattered 30° vnning									
66.10-78.45	INTENSELY ALTERED, FAULT BRECCIA badly broken throu., cut by gouge seams, primary textures gone		66.10-67.00: broken, partly heeled with 10% py + cc. 67.00-67.55: strg dk gouge seam @ 40° with ank + ser frags floating	1444 1445 1446	65.02 66.10 67.00	66.10 67.00 67.45	1.08 0.90 0.45	.038 .051 .053	0.6 3.4 1.6	527 1218 1314	83 65 55	90 79 77
			At 68.5: broken gouge At 68.75-69.00: crushed, 20% dk clay gouge, 10% qtz frags	1447 1448	67.45 68.45	68.45 69.45	1.00 1.00	.051 .036	1.1 1.3	1352 2018	43 50	80 85

glw  
10

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm		
			67.45-78.45: 5-10% py as matrix to bx frags, partly heels bx, badly broken, crushed with irregular seams of more intense crushing, 5% qtz clast floaters	1449 1450 1451 1452 1453 1454 1455 1456 1457	69.45 70.45 71.45 72.45 73.45 74.45 75.45 76.45 77.45	70.45 1.00 72.45 1.00 73.45 1.00 75.45 1.00 78.45	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	.051 .096 .087 .023 .020 .021 .024 .055 .074	0.5 1.2 2.2 0.6 1.1 0.1 0.2 1.3 1.0	3199 1350 1603 2057 2335 1131 609 805 590	20 37 43 27 39 50 36 47 44	59 68 22 46 70 67 67 55 72	
Lower cont broken													
78.45 - 84.80	MSV SIL ROCK: msv fg, light apple green, featureless	silicified? 5% narrow cc fracture filling @ 80°	minor py broken throu. 81.80-84.80: badly broken crushed with rock flour	1458 1459 1460 1461	78.45 79.00 80.00 81.00	79.00 80.00 81.00 82.00	0.55 1.00 1.00 1.00	.002 .001 .001 .011	0.1 0.1 0.1 0.1	22 18 8 16	9 3 3 45	33 43 39 77	
	Lower cont strong gouge over 20 cm @ 40°				1463 1464	82.00 84.00	84.00 84.80	2.00 0.80	.046 .004	0.4 0.1	202 73	23 22	56 56
84.80 - 86.50	SCH + SHEARED SIL ROCK: as before, but with sh & schist intervals @ 45° Lower cont sh @ 45°	sil patchy cc	minor py broken	1465 1466	84.80 85.80	85.80 86.50	1.00 0.70	.002 .002	0.1 0.3	38 74	29 34	63 60	
86.50 - 87.90-	MILLED ZONE: rock frags cc + qtz-rich in 80% dk grey, cc-rich augen-like schist	strg perv. cc.	2% py	1467	86.50	87.90	1.40	.006	0.8	147	106	82	

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
87.90 - 106.	CARB HEELED MAFIC SCHIST typical with 10-15% boudin vn of cc in mod to strg. sch @ 45° (are) with strg focal centred schist.	strg cc.	to 1% diss py.								
106.00 - 147.83	MAFIC ALT typical	strg to mod with depth perv. cc	minor py								
147.83	END OF HOLE										

JW  
ZL

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: B Bachmier

Date: Feb. 26, 1987

Hole No. DM32-87

## Core boxes

## Core Recovery

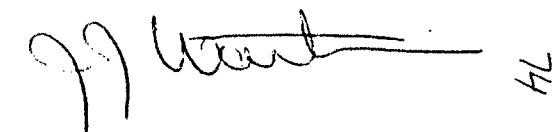
Box No	Interval (m)		Interval (m)		Core lghth	Amount Present	Recovery %	Interval (m)		Core lghth	Amount present	Recovery %	Interval (m)		Core lghth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	00.0	15.2	0.00	7.62	7.62	1.45	19.0	83.42	86.87	3.05	3.05	3.05	100				
2	15.2	23.3	7.62	10.67	3.05	1.92	62.9	86.87	89.92	3.05	3.05	3.05	100				
3	23.3	30.3	10.67	13.72	3.05	1.84	60.3	89.92	92.96	3.04	3.00	3.00	98.7				
4	30.3	37.4	13.72	16.76	3.04	2.72	89.5	92.96	96.01	3.04	2.91	2.91	95.4				
5	37.4	44.3	16.76	19.81	3.05	2.82	92.5	96.01	99.06	3.05	3.08	3.08	100				
6	44.3	50.5	19.81	22.86	3.05	2.53	82.9	99.06	102.11	3.05	2.99	2.99	98.0				
7	50.5	58.6	22.86	25.91	3.05	3.02	99.0	102.11	105.16	3.05	3.03	3.03	99.3				
8	58.6	65.5	25.91	28.96	3.05	3.05	100.0	105.16	108.20	3.04	3.10	3.10	100				
9	65.5	72.6	28.96	32.00	3.04	3.08	100.0	108.20	111.25	3.05	3.06	3.06	100				
10	72.6	79.5	32.00	35.05	3.05	2.82	92.5	111.25	114.30	3.05	2.90	2.90	95.1				
11	79.5	87.4	35.05	38.15	3.05	2.79	91.5	114.30	117.35	3.05	3.06	3.06	100				
12	87.4	94.7	38.15	41.15	3.05	2.94	96.4	117.35	120.40	3.05	2.89	2.89	94.7				
13	94.7	101.8	41.15	44.20	3.05	3.05	100.0	120.4	123.44	3.04	2.90	2.90	95.4				
14	101.8	108.9	44.20	47.24	3.04	3.05	100.0	123.44	126.50	3.06	3.24	3.24	100.0				
15	108.9	116.1	47.24	50.29	3.05	3.03	99.3	126.50	129.54	3.04	2.98	2.98	98.0				
16	116.1	123.3	50.29	53.34	3.05	2.95	96.7	129.54	132.59	3.05	3.06	3.06	100.0				
17	123.3	130.3	53.34	56.39	3.05	3.05	100.0	132.59	135.64	3.05	3.06	3.06	100.0				
18	130.3	137.4	56.39	59.44	3.05	3.02	99.0	135.64	138.68	3.04	3.00	3.00	98.7				
19	137.4	144.7	59.44	62.48	3.04	3.05	100.0	138.68	141.73	3.05	3.01	3.01	98.7				
20	144.7	147.8	62.48	65.53	3.05	3.05	100.0	141.73	144.78	3.05	3.09	3.09	100.0				
		65.53	68.58	3.05	3.03	99.3	144.78	147.83	3.05	2.96	2.96	97.0					
		68.58	71.63	3.05	2.97	97.4											
		71.63	74.68	3.05	3.05	100.0											
		74.68	77.72	3.04	3.04	100.0											
		77.72	80.77	3.05	3.05	100.0											
		80.77	83.82	3.05	1.76	57.7											

JW

B

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,093.99 Date Drilled: Jan. 24-26/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,471.34 Contractor : Coates Pajari 62.5 -85° 356° Test hanging wall of Mineral  
 Length (m) : 137.5 Field Grid: Mineral Hill Logged by : J.Watkins Pajari 132.9 -85° 300° Creek fault and on trend with  
 Dip : -87° N: 20+00 Date Logged : Feb. 15-16/87 - mineralization (UMC zone)  
 Azimuth : 275° E: 7+25  
 Collar elev (m) : 957 Casing left in hole  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 6.00	CASING - no core										
6.00 - 14.45	INTERCALATED MSV CG TUFF AND FG BEDDED TUFF as in earlier holes; to 10.38: msv cg tuff unsorted to 11.40: bed fg-mg tuff @ 70° to 14.45: msv (mg) tuff	mg tuff with perv. cc; fg tuff wk to patchy cc; all with 5-10% irreg cc vning.									
	Lower cont. sharp cusp at high angle.										
14.45 - 15.85	BLACK RHYOLITE LAPILLI TUFF earlier logged as chert and/or sil tuff appears to characterize interval with strg (ank+ser) attraction below and pervasive cc of cg to fg tuffs to 15.50 cg tuff to lapilli tuff with light cherts	sil	tr. py	1468	14.45	15.85	1.40	.032	0.2	13	31



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
15.85 - 25.95	<p>in black fg host and grades sharply to msv black chert (looks similar to Kidd Cr. rhyolite) Lower cont broken</p> <p>ALTERED HETROLITHIC      wk to mod perv. cc LAPILLI TUFF + MSV TO WKLY mod ank(ser) BEDDED TUFF</p> <p>primary textures and comp partly gone with alteration, ghost frags very evident, mafic frag component now as mottled chloritic patches to 21.75 grading from lapilli tuff to c/s lapilli tuff with sharp 80° cont with msf fg tuff; at 17.35 fg tuff 10 cm; to 23.75 faintly bedded msv fg tuff @ 50° to 25.70 msv lapilli tuff to 25.80? mixed bl sil tuff with cc-rich frags and wall rock - fault? to 25.95 bedded siliceous exhalite and vfg pyritic tuff (grey)</p> <p>Lower cont. sh? @ 35°</p>		1-2% py, better to depth									
				1469	15.85	16.85	1.00	.003	0.1	12	8	56
				1470	16.85	17.85	1.00	.001	0.1	12	9	43
				1471	17.85	18.85	1.00	.001	0.1	5	10	44
				1472	18.85	19.85	1.00	.001	0.1	2	15	41
				1473	19.85	20.85	1.00	-	.02	8	10	46
				1474	20.85	21.85	1.00	.004	0.1	56	8	43
				1475	21.85	22.75	0.90	.047	0.3	79	9	35
				1476	22.75	23.75	1.00	.019	0.4	165	10	44
				1477	23.75	24.75	1.00	.009	0.1	38	10	38
				1478	24.75	25.70	0.95	.001	0.2	17	13	41
				1479	25.70	25.95	0.25	.037	0.3	322	11	41

9w  
SL

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
25.95 - 27.55	MAFIC FLOW: broken and cc vn'd with cc filled amygdules, chl pseudo alter mafic phenos;	perv. cc chl. spotted cc + (Q) stwk 10-15%	minor py  broken through	1480	25.95 - 27.55	1.60	.002	0.3	94	21	76
	Lower cont broken										
27.55 - 27.90	STRG ANK-SER ALTERED original text: comp gone	strg ank + ser	wk sch @ 40°  5-7% diss cubic py	1481	27.55 - 27.90	0.35	.031	0.8	583	29	78
	Lower cont. broken										
27.90 - 28.70	ZONE OF QTZ VNING to 28.45: broken and sh with mixed grey qtz vns and wall rk; to 28.70: well formed vn of grey qtz with 1-2 mm wall rk frags cut by dk gouge seams to 2 mm all at 40°		7-10% py in vns + matrix	1482	27.90 - 28.70	0.80	.035	0.8	769	23	34
28.70 - 30.45	MOTTLED DYKE: cg altered dyke? msv crs xl ank with cc grdmss Lower cont. sh? @ 30°		At 29.05: 10 cm grey qtz vn with broken conts; at 29.55: gouge seam 1 cm @ 25°	1483	28.70 - 30.45	1.75	.018	4.4	503	74	44

94

9L

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
30.45 - 33.00	PX P ANDESITE: typical vn'd with ank, cc + qtz, cc	no perv. cc patchy wk ank	minor py in cc + qtz vns	1484 1485	30.45 31.70 31.70 33.00	1.25 1.30	.019 .023	1.2 1.1	215 563	60 64	60 50	
	Lower cont sharp tight shear @ 35°											
33.00 - 34.85	SHEARED FELSIC AGGL, LAPILLI STONE to 33.50: shear throu. @ 60° with py (5%) concentrated on shear planes to 34.85: distinctly pyroclastic with subrd grey to light grn felsic frags to 3 cm in felsic lapilli host, 7% irregular py seams to 2 mm		ank + ser with ser seams to 33.50	5-7% py in seams	1486 1487 1488	33.00 33.50 33.50 34.50 34.50 34.85	0.50 1.00 0.35	.030 .056 .079	1.4 1.0 2.1	595 432 750	36 26 93	64 80 66
34.85 - 58.80	PX P ANDESITE as before, typical to 35.70: msv, relatively fresh, in sharp tight shear cont @ 30° with cc + ank vn'd Px P	35.70-36.70 strg ank + (cc) vnd. Patches of cc @ 80°	minor py	1489 1490	34.85 35.70 35.70 36.70	0.85 1.00	.021 .014	0.8 1.2	111 216	42 64	54 52	
			At 36.05: 2 mm py-rich sh w 5 cm ank vn all at 80°									

9W

LL

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
At 37.25, 37.65: patches of dk grey chert as floaters in broken ank- rich and ank-heeled shears	36.70-38.10: strg ank as perv and sh vns	At 36.70: strg py-rich shear, 5 mm $\theta 40^\circ$ 36.70-38.10: broken and shear and ank heeled	1491	36.70 38.10	1.40	.053	1.1	186	37	61	
	38.10-40.60: 10-15% ank + cc vn'd of relative fresh PxP	light heeled shear throu $\theta 40^\circ$	1492	38.10 39.30	1.20	.001	1.2	69	58	69	
		40.60-40.80: shear zone with sharp $45^\circ$ contact	1493	39.30 40.80	1.50	.001	1.2	84	73	65	
40.80-41.10: broken and shear band 70% black pyrite chert, ank-rich host	Ank, sil.	40.80-41.10: 7% diss py	1494	40.80 41.10	0.30	.017	1.5	144	56	53	
At 42.30: possible frag chert, light to med grey	40.10-42.40: strg ank + cc vn, patch strg bl.	minor py	1495	41.10 42.40	1.30	.004	1.1	165	54	85	
	42.40-48.35	wk sh'd throu. $\theta$ $30-40^\circ$	1496	42.40 43.40	1.00	.020	0.4	14	17	92	
	wk ank		1497	43.40 44.40	1.00	.001	0.2	29	36	85	
Lower cont sharp, <u>fault</u> with blk gouge, with broken qtz $\theta 48^\circ$ , 5 cm wide	At 47.65: med shear $\theta 45^\circ$		1498	44.40 45.40	1.00	.010	0.4	115	50	75	
			1499	45.40 46.40	1.00	.011	0.3	127	70	56	
			1500	46.40 47.40	1.00	.079	0.6	350	37	49	
			1501	47.40 48.35	0.95	.057	1.0	1042	32	86	

9W  
8L

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
			48.35-48.80: H shear									
			48.80-50.75: strg ank best with 35° sh, ank- rich shears. wkly crushed Lower cont sharp sh @ 40°									
50.70-52.20: prob msv flow		50.70-52.20: wk stwk ank? 5% cc vn'd	minor py	1552	50.70	52.20	1.50	.011	0.3	127	70	56
					At 51.90: cc vn, wk gouge sh @ 50°, 5 mm thick							
		52.20-53.15: med to strg perv ank + ser att'd	1-2% py concentrated in 1-2 mm seams	1553	52.20	53.15	0.95	.079	0.6	350	37	49
53.15-53.60: 40% med. grey sil. bands @ 30° sil vns		sil as 40% vning or banding	10% py diss and x-cutting vns and host to vns	1554	53.15	53.60	0.45	.057	1.0	1042	32	86

HOLE NO. DM35-87 Page 6 of 11

940

19

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	53.60-58.05: broken throu. by py-rich shears @ 40-30° with crushed intervals	strg ank + ser + py	10% py throu. with irregular narrow fractures and in strg shears	1555 1556 1557 1558	53.60 54.70 55.40 55.73	54.70 55.40 55.73 56.70	1.10 0.70 0.33 0.97	.039 .043 .122 .031	2.0 7.1 3.0 0.5	1713 2846 1093 1225	57 171 65 17
			53.55-54.70: crushed (pseudo-fault gouge) @ 80°	1559 1560	56.70 57.70	57.70 58.05	1.00 0.35	.023 .011	0.9 2.4	1068 257	36 91
	Lower cont grades over 40 cm.		55.40-55.73: crushed and shear @ 75° At 57.44: 8 cm vn @ 90° of cc + Q + Py seam on lower contact								
	57.52-58.05: polyzonal fracts w 10% QC + sdp matrix	wk ank		1561	58.05	58.80	0.75	.007	2.5	150	97
	58.05-58.80: msv flow with 20% poor dev white bull qtz vns @ 80°	wk ank									
58.80 - 61.55	LAPILLI TUFF/HYCL hycl-rich to 60.10 with sharp cont at 65°, lap tuff to 61.40. At 60.10: in lap tuff sulph-rich vn bx to 2 mm, bed?? 61.40-61.55: broken fg tuff	wk ank		1562 1563 1564	58.80 59.70 60.60	59.70 60.60 61.40	0.90 0.90 0.80	.014 .015 .016	0.3 0.2 0.2	280 128 257	53 62 32
		strg ank	61.40-61.55: 10% py vns								

JW 8

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	Lower cont sharp with insituited fractured and py vein over 5 cm.										
61.55 - 70.20	ALTERED MSV FLOW WITH QTZ VNS primary features vague, intervals of ank altered fels clusters; unit may have been a polygonal flow. komatiitic basalt??	pervasive strg ank	20% well dev. grey to med dk grey qtz-rich vns plus rock frag vns to 5 cm through. Some at 80°; 5% sulph-rich seams through. best on contacts with qtz vns;	1565 61.40 1566 62.55 1567 63.55 1568 64.55 1569 65.55 1570 66.55 1571 67.55 1572 68.55 1573 69.25	62.55 1.00 64.55 1.00 66.55 1.00 67.55 1.00 68.55 0.70 69.25 0.95	1.15 1.00 1.00 1.00 1.00 1.00 1.00 0.70 0.70 0.70 0.95	.069 .041 .068 .064 .070 .077 .039 .051 .146	0.9 0.7 0.7 0.7 0.8 0.8 0.7 1.2 1.1	1435 1692 1774 2332 693 1286 3738 700 1291	44 82 58 19 56 52 49 112 47	68 58 78 42 69 75 81 73 69
70.20 - 73.30	HEELED FAULT BX distinctly fragmental qtz - and ank-rich frags in 20-30% finer clastic and sulph-rich matrix; could be Vc? all elongated and orientated @ 20-30°	py, ank qtz	At 65.40: 5 cm bx vn with 20% sulph-matrix @ 80°	1574 70.20 1575 71.10 1576 72.20	71.10 72.20 73.30	0.90 1.10 1.10	.041 .045 .082	0.7 0.4 1.1	600 1523 514	43 19 55	69 68 90

9W

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
73.30 - 74.37	MSV ANDESITE FLOW: msv fg feldspar-rich gdms	2k ank 10% qtz + ank + cc vning	minor py	1577	73.30	74.37	-1.07	.082	0.1	369	10	77
	Lower cont. broken											
74.37 - 86.10	HEELED FAULT BX hetrolithic qtz-and ank-rich frags in dk grey pyritic, fg bx matrix (10-20% matrix), Vc?? shears with black gouge throu. most at 30°	qtz, ank, py	76.35-76.50; black gouge with rock chip best formed at conts all @ 35°	1578	74.37	75.30	0.03	.020	0.3	333	18	87
	Lower cont sharp and cuspatate		79.00-79.30; sharp shear with black gouge and rock chips in flo, sh @ 15-20°	1579	75.30	76.20	0.90	.054	0.9	437	43	85
			1-2% py through.	1580	76.20	77.10	0.90	.044	1.0	1493	25	44
				1581	77.10	78.10	1.00	.030	0.8	966	34	45
				1582	78.10	79.10	1.00	.036	1.1	2857	83	69
				1583	79.10	80.10	1.00	.032	0.9	1227	40	59
				1584	80.10	81.10	1.00	.066	0.7	1216	39	62
				1585	81.10	82.10	1.00	.048	1.2	217	48	61
				1586	82.10	83.10	1.00	.030	1.0	907	53	62
				1587	83.10	84.10	1.00	.047	0.4	368	53	57
				1588	84.10	85.10	1.00	.050	0.4	388	44	56
				1589	85.10	86.10	1.00	.059	0.8	451	44	52
86.10 - 90.20	ALTERED MSV FP DYKE med. grey grn msv with vague ghost fds phenos, vague flow banding @ 20-30 best near upper cont; upper cont sharp cuspatate, chilled figuring into flt-bx.	patchy cc, silicified?	no sulph breaks through. @ 60°	1590	86.10	87.60	1.50	.001	0.1	18	7	45
			Walkers qtz kerata?	1591	87.60	89.10	1.50	.001	0.2	4	4	64
				1592	89.10	89.60	0.50	.001	0.1	24	10	50
				1593	89.60	90.20	0.60	.025	0.5	891	65	62

9W

28

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	(in earlier holes msv apple grn felsic unit in flit is probably the same unit)										
90.20 - 92.75	FAULT BRECCIA similar to above but less sulph and qtz, and more soft ank.	ank	2% py soft, badly broken	1594 90.20 1595 91.40	91.40 92.75	1.20 1.35	.033 .032	0.6 0.6	899 971	56 26	60 65
92.75 - 104.20	BROKEN ALTERED F.P. DIKE? as before but badly broken, vague flow bding.	sil; patchy cc	from 98.75-99.25: strg ank-rich shear @ 35°								
104.20 - 114.60	HEELED MAFIC SCHIST cc heeled schist sch variable from 45-0°	cc rich	111.90-113.40: fault bs with gouge @ 0° to 20°								
	Lower cont grades										
114.60 - 137.47	BAS ALT typical	per cc	minor py								
137.47	END OF HOLE										

96

28

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: B. Bachmier

Date: Feb. 27, 1987

Hole No. DM35-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lgth	Amount Present	Recovery %	Interval (m)		Core lgth	Amount present	Recovery %	Interval (m)		Core lgth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	00.0	16.2	0.00	8.23	8.23	0.99	12.0	78.33	81.38	3.05	2.96	97.0					
2	16.2	23.0	8.23	11.28	3.05	1.42	46.6	81.38	84.43	3.05	2.97	97.4					
3	23.0	29.9	11.28	14.33	3.05	2.94	96.4	84.43	87.48	3.05	2.95	96.7					
4	29.9	37.0	14.33	17.37	3.04	3.00	98.7	87.48	90.53	3.05	2.14	70.2					
5	37.0	44.4	17.37	20.42	3.05	3.05	100.0	90.53	93.57	3.04	2.50	82.2					
6	44.4	52.1	20.42	23.47	3.05	3.05	100.0	93.57	96.62	3.05	3.05	100.0					
7	52.1	59.1	23.47	26.52	3.05	3.03	99.3	96.62	99.67	3.05	2.94	96.4					
8	59.1	66.2	26.52	29.57	3.05	3.05	100.0	99.67	102.72	3.05	3.05	100.0					
9	66.2	73.3	29.57	32.61	3.04	3.11	100.0	102.72	105.77	3.05	2.91	95.4					
10	73.3	80.5	32.61	35.66	3.05	2.97	97.4	105.77	108.81	3.04	3.05	100.0					
11	80.5	87.6	35.66	38.71	3.05	3.05	100.0	108.81	111.86	3.05	2.49	81.6					
12	87.6	96.0	38.71	41.76	3.05	3.05	100.0	111.86	114.91	3.05	2.87	94.1					
13	96.0	102.7	41.76	44.81	3.05	2.56	83.9	114.91	117.96	3.05	2.96	97.0					
14	102.7	109.7	44.81	47.85	3.04	2.56	84.2	117.96	121.01	3.05	2.99	98.0					
15	109.7	117.6	47.85	50.90	3.05	3.01	98.7	121.01	124.05	3.04	3.05	100.0					
16	117.6	124.7	50.90	53.95	3.05	3.07	100.0	124.05	127.10	3.05	3.04	99.7					
17	124.7	131.9	53.95	56.08	2.13	2.26	100.0	127.10	130.15	3.05	2.98	97.7					
18	131.9	137.5	56.08	58.52	2.44	2.42	99.2	130.15	133.20	3.05	3.05	100.0					
			58.52	60.05	1.53	1.48	96.7	133.20	136.25	3.05	3.00	98.4					
			60.05	63.09	3.04	3.05	100.0	136.25	137.46	1.21	1.22	100.0					
			63.09	66.14	3.05	3.03	99.3										
			66.14	69.19	3.05	2.96	97.0										
			69.19	71.32	2.13	2.36	100.0										
			71.32	74.37	3.05	3.05	100.0										
			74.37	75.29	0.92	0.74	80.4										
			75.29	78.33	3.04	3.04	100.0										

Hole No. DM35-87 Page 11 of 11

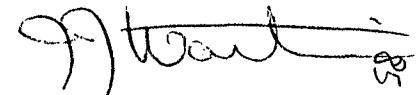
JW

tg

## Hole No. D36-87

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,094.54 Date Drilled: Jan. 26-30/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,473.28 Contractor : Coates Pajari 10.7 -45° 90.5° test stratigraphy in hanging  
 Length (m) : 135.9 Field Grid: Mineral Hill Logged by : J.Watkins " 57.9 -45° 91.0° wall to Mineral Creek fault  
 Dip : -45° Date Logged : Feb. 7/8/10/ " 135.9 -41° 93.0°  
 Azimuth : 090° 1987 Casing left in hole  
 Collar elev (m) : 957  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
0 - 4.88	CASING - NO CORE		minor Py									
4.88 - 16.12	MSV CG TUFF WITH BEDDED FG TUFF pred. msy cg tuff (f.g. lapilli tuff with 30% well bedded fg tuff interbeds @ 70°	perv. cc of msy cg tuff; fg bedded tuff in part siliceous; 5% irreg cc vning										
16.12 - 16.20	BLACK CHERT msv, no primary textures	20% cc as patches and irreg fine vning	1-2% whispy Py	3932	16.12	16.20	0.08	.001	0.1	7	57	47
16.20 - 18.70	ALT. CG LAPILLI STONE primary textures vague due to alteration and low angle cc-rich shear	perv. cc wk ser.	Lower 1 cm cut and broken by low angle cc-rich shear tr py	3933	16.20	17.35	1.15	.001	0.1	7	11	50
18.70 - 19.45	MSV FG TUFF: msv fg tuff, no bedding; lower contact grad.	perv cc	no sulph	3934	17.35	18.70	1.35	.001	0.1	8	7	48
19.45 - 20.55	CG LAPILLI STONE: as above Lower contact broken	perv cc	no sulph									



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
20.55 - 23.75	SPOTTED BASALT FLOW? msv, fine mafic spots peppered throu, scattered amygdalites over 0.5 m at upper contact - same as spotted dykes of previous holes logged Lower cont. broken	fine chl spotted after mafic phenos; strg perv. cc 5% cc vnd	no sulph									
23.75 - 25.08	MSV CHERT light green, very faint banding at 70°, light green; unit cored with 0.4 m cc vn with 5% angular chl frags, vn @ 45° upper contact marked by 5 cm of black ch Lower cont. broken sharp @ 70°	5% fine cc filled fract	no sulph									
25.08 - 31.65	SPOTTED BASALT FLOW? as before Lower cont sharp sh @ 30°	perv. cc 5% cc vn'd	no sulph									
31.65 - 33.83	BROKEN & SHEARED SPOTTED BASALT? prob. same litho unit as above, sh throu. by undulating 30° shears	strg. perv. cc; wk wispy ser; 5% cc most low angle vnlets	3% diss Py badly broken	3935 3936	31.65 32.83	32.83 33.83	1.18 1.00	.012 .006	0.1 0.4	77 216	45 29	55 49

76  
28

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)		Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
33.83 - 34.50	SHEAR & QTZ VN SYSTEM QC vns in broken and sheared host all @ 45° strg sh @ lower contact	perv. cc of non vn'd host, 30% cc with Q vns; 60% vn material	5% py in host 1% fine py + tr AsPy in vns	3937	33.83	34.50	0.67	.012	0.7	518	21	36
34.50 - 36.20	ALT. BASALT? original lith. vague  Lower cont. sharp cc shear @ 70°	strg. perv. cc with 10-15% fine cc vning, 1-3% QC vning @ 30°	2% diss Py	3938	34.50	35.35	0.85	.002	1.5	216	106	77
36.20 - 41.55	PX PORPH ANDESITE: typical with 5% sub angular chl frags? floating  Lower cont. sharp @ 75°	strg. perv. cc. 5% cc vns and large patches chl	QC vn 30% to 5% to 36.70 with 1-2% Py	3940 1701 1702 3703	36.20	36.70	0.50	.834	7.7	158	52	52
41.55 - 42.50	FG TUFF msv featureless Lower cont. grad.	perv. cc.	no sulph								76	50
42.50 - 47.55	BASALT WITH RHYOLITE AGGL. LAP STONE mixed basalt frags with scattered feldspar perph. frags to 2 cm unsorted interally but grades										11	79

96 8

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
	to fg tuff over total unit Lower cont. sharp @ 80°	perv. cc of finer host 5% cc vning	minor py									
47.55 - 49.10	BASALT LAP TUFF: wkly graded upper cont dense packed lap shards in fg host	perv cc	no sulph									
49.10 - 65.13	FG TO MG LAPILLI TUFF WITH FG TUFF INTER BEDS pred. mg lap tuff, unsorted and msv with fg well bedded @ 80° interbeds best developed from 64.30	perv. cc throu. <5% cc vning	At 51.85: 5 cm banded grey QC vn @ 40° with 10 cm diss Py (5%) haloe plus 5% QC stwk	1704 1705 3941 1706 1707	49.35 50.35 51.35 52.35 53.35	50.35 51.35 52.35 53.35 54.35	1.00 1.00 1.00 1.00 1.00	.001 .042 .485 .001 .001	0.1 0.3 66.0 0.1 0.1	34 12 248 17 5	26 18 29 28 8	92 89 83 91 75
			At 53.30: 10 cm bl (ank-rich) haloe on 3 cm cc vn @ 35°									
			At 54.30: " 5 cm cc vn @ 85° with 10 cm bl (ank-rich) haloe in fw									
			From 58.40 to 59.00: ank-rich, no sulph									

9W  
88

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
65.13 - 66.65	SCHIST ZONE cc heeled mafic schist with whispy ser. centred on banded light grey QC vn from 65.72 to 65.84	perv. cc ser + ank best devel. in fw to vn	3% diss Py throu. dk grey hue to QC vn - Aspy?  all @ 40°	3942 3943	65.13 66.13 66.65	66.13 0.52	1.00 .052	.041 .005	0.2 0.2	330 147	25 6	67 57
66.65 - 71.05	PX PORPH BASALT primary features vague but best toward lower cont. Lower cont vague	strg. perv. cc 10-20% cc vned patch chl toward lower contact	minor Py									
71.05 - 86.10	MSV CG TUFF WITH FG TUFF INTERBEDS predominantly msy cg tuff with well bedded (@ 80°) fg to vfg tuff interbeds throu.	strg. perv. cc. <5% cc vning	minor sulph  At 84.65: strg. 5 cm cc heeled shear with 5% Py @ 30° From 84.65 to 86.10 wkly sh throu. @ 30° and 60°	3944	84.62 86.10	1.48	.001	0.2	8	43	68	
86.10 - 88.15	(ALT) AMYG. BASALT msv. with rare cc filled amyg.	wkly bl, 10-15% cc stwk. wk chl to 86.10	broken throu. by low angle fractures 1% Py diss best to flow cont.	3945 3946	86.10 87.10 88.15	1.00 1.05	.001 .001	0.1 0.2	5 23	36 63	68 62	

9W

68

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
88.15 - 97.30	SHEARED & ALTERED BASALT? primary textures gone, broken & sheared @ 40° with msv bl (cc +ser) intervals to 1 mm	strg. bl to 88.90 centred on broken 5 cm Q(C) vn	7% diss with strg. bl, strong cc-rich sh from 89.40 to 89.60 @ 40°	3947 3948 3949 3950 3951	88.15 89.60 91.10 92.60 94.10	89.60 91.10 92.60 94.10 95.60	1.45 1.50 1.50 1.50 1.50	.023 .001 .001 .038 .005	1.1 0.1 0.1 0.4 0.2	854 65 68 273 173	41 50 68 63 64
		from 90.00 to 82.70: wk to locally mod ser. with sch.	from 90.00 to 92.70: mod. sh (sch) @ 30° to 45° From 93.15 to 93.60: badly broken From 94.70 to 97.30: badly broken in part bedded tuff @ 97.00	3952 9353	95.60 96.60	96.60 0.70	1.00 0.70	.002 .011	0.3 0.4	112 441	43 22
97.30 - 97.75	FAULT: broken & shear cc-rich patches with gouge seam to 3 cm wide @ 20°(?)	cc-rich	2% diss Py	3954	97.30	97.75	0.45	.059	1.3	145	42
97.75 - 100.26	ALTERED CG LAPILLI STONE? from 97.75 to 98.00 black chert From 98.00 to 99.41: probably coarse lapilli (agg!) of basalt and felsic frags all cc-rich in cg lapilli host	97.75 to 100.00: 10% cc vnd		3955 3956 3957	97.75 98.25 98.75	98.25 0.50 0.50	0.50 0.66	.009 .003 .013	0.3 0.1 0.3	145 58 143	22 12 50

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06

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	from 99.41 to 100.20: vgc lapilli (aggl) of pred. felsic frags with rare large broken mafic frag in dk grey to black cherty host (all cc-altered).	10% fine cc vning	5-7% diss Py	3958	99.41 100.26	0.85	.003	0.4	93	109	72
	Lower cont. gradational										
100.26 - 111.82	MSV CG TUFF WITH BEDDED VFG TUFF INTERBEDS: 100.26 to 102.41: msv cg tuff, unsorted 102.41 to 106.85: fg well bedded tuff with 1-2 cm bed of dk grey chert (15% of total vol.) @ 80° 106.85 to 110.60: three individual beds of msv cg tuff unsorted grading to fg bedded tuffs to 20 cm thick 110.00 to 111.82: msv to vaguely bed fg tuff	perv. cc 5% cc vn'd	minor py	3959 3960 3961 3962 3963 3964 3965	100.26 101.26 101.26 102.26 102.26 103.26 103.26 104.26 104.26 105.26 105.26 108.26 106.26 106.85	1.00 1.10 1.00 1.00 1.00 1.00 0.59	.001 .001 .001 .001 .001 .001 .001	0.2 0.2 0.3 0.2 0.1 0.2 0.1	17 29 86 29 25 111 82	47 41 48 38 29 34 32	83 90 81 75 55 89 96
111.82 - 116.65	MSV FG BASALT (FLOW OR DYKE) msv fg, vague fine amygdules, rare 1 mm stubby feldspar; prob. flow Lower cont. sharp @ 30°	perv. cc. 5% vnd	no sulph								

96

16

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
116.65 - 117.50	MSV CG MIXED MAFIC/FELSIC TUFF: mod. perv. cc sil? msv tuff, altered and prob. 5% cc vn'd pred. mafic but with distinct vfg felsic subangular frags to 2 mm		1% fine py	3966	116.65 117.50	0.85	.001	0.1	8	16	61
117.50 - 118.25	MSV FG BASALT (FLOW?) as before Lower cont. sharp @ 30°	perv cc	minor py								
118.25 - 119.43	HETROLITHIC (MAFIC AND FELSIC) CG LAPILLI STONE: partly masked by strong perv. cc but with subrd to subangular felsic frags to 5 mm at 18.95; msv py frag. 5 mm long Lower cont. sharp (sh?) @ 40°	strg. perv. cc leucoxene spotted	<1% py as diss of frags	3967	118.25 119.43	1.18	.001	0.1	19	8	44
119.43 - 120.05	MSV FG BASALT FLOW as before lower contact sharp @ 35° (sh?)	perv cc	minor py								
120.05 - 122.90	VFG-MG BEDDED HETROLITHIC TUFF: as before, finer grained and bedded @ 80°	wk perv. cc	tr py								

96

26

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
	Lower cont gradational	wk perv. cc.	tr Py									
122.90 - 123.80	HETROLITHIC FELSIC-MAFIC LAPILLI STONE prob. single bed wk graded up hole Lower cont sharp @ 80° with vfg tuff											
123.80 - 124.85	BEDDED FG TO VFG TUFF prob. hetrolithic, bedded @ 80° from 124.40: vfg well bedded cherty	wk perv. cc	1% vfg py									
124.85 - 128.10	FG MSV BASALT WITH INTERCALATED BLACK CHERT msv fg basalt, as before with intervals of black chert totalling 30%, msv basalt not chilled (not pillowed) large basalt blocks? flows? from 127.05 to 127.30: graphitic slips with black cherty interval	no perv. cc 10-15% cc patches of vns	minor py									
		from 127.05 to 127.30: 10% py with black graphitic chert		3968	127.05	127.30	0.25	.004	0.2	362	79	98

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E3

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
128.10 - 135.94	HETROLITHIC MAFIC-FELSIC AGGL. LAP STONE fg bedded tuff to 128.80, bedded @ 80° grading to coarse unsorted A.L. Stone Mixed lith. predom. mafic but with 30-40% FP felsic, some frags with distinct alteration haloes, F.P. felsic frags prob. crystal tuff in part										
135.94	END OF HOLE										

JL

h6

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: Bill Bachman Date: Feb. 27/87

Hole No. DM36-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core 1gth	Amount Present	Recovery %	Interval (m)		Core 1gth	Amount present	Recovery	Interval (m)		Core 1gth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	4.80	12.30	4.80	4.88	0.08	0.08	100.0	80.16	81.08	0.92	0.98	100.0					
2	12.30	19.50	4.88	7.92	3.04	2.30	75.7	81.08	84.12	3.04	3.12	100.0					
3	19.50	26.90	7.92	10.97	3.05	3.05	100.0	84.12	86.56	2.44	2.29	93.8					
4	26.90	34.50	10.97	14.02	3.05	2.85	93.4	86.56	88.85	2.29	2.54	100.0					
5	34.50	41.40	14.02	17.07	3.05	2.92	95.7	88.85	90.22	1.37	1.39	100.0					
6	41.40	48.30	17.07	20.12	3.05	2.91	95.4	90.22	93.27	3.05	3.00	98.4					
7	48.30	55.60	20.12	23.16	3.04	2.94	96.7	93.27	94.95	1.68	1.39	82.7					
8	55.60	62.70	23.16	26.21	3.05	2.82	92.5	94.95	96.32	1.37	1.36	99.3					
9	62.70	69.50	26.21	29.26	3.05	3.05	100.0	96.32	99.36	3.04	2.99	98.4					
10	69.50	76.20	29.26	32.31	3.05	2.66	87.2	99.36	102.41	3.05	2.98	97.7					
11	76.20	83.00	32.31	35.36	3.05	2.91	95.4	102.41	205.46	3.05	3.03	99.3					
12	83.00	89.60	35.36	38.40	3.04	3.05	100.0	105.46	108.51	3.05	3.05	100.0					
13	89.60	96.40	38.40	41.45	3.05	3.05	100.0	108.51	111.56	3.05	2.78	91.1					
14	96.40	103.90	41.45	44.50	3.05	2.85	93.4	111.56	114.60	3.04	2.99	98.3					
15	103.90	110.40	44.50	47.55	3.05	3.05	100.0	114.60	117.65	3.05	3.05	100.0					
16	110.40	119.80	47.55	50.60	3.05	2.87	94.1	117.65	120.70	3.05	3.05	100.0					
17	119.80	124.80	50.60	53.64	3.04	2.63	86.5	120.70	123.75	3.05	3.02	99.0					
18	124.80	131.60	53.64	56.69	3.05	2.94	96.4	123.75	126.80	3.05	3.05	100.0					
OH 19	131.60	135.90	56.69	59.74	3.05	3.05	100.0	126.80	129.54	2.74	3.04	100.0					
			59.74	62.79	3.05	3.05	100.0	129.54	130.15	0.61	0.60	98.4					
			62.79	65.84	3.05	3.05	100.0	130.15	132.28	2.13	2.34	100.0					
			65.84	68.88	3.04	3.05	100.0	132.28	133.50	1.22	1.39	100.0					
			68.88	71.93	3.05	3.05	100.0	133.50	134.72	1.22	1.36	100.0					
			71.93	74.98	3.05	3.05	100.0	134.72	135.94	1.22	1.13	92.6					
			74.98	78.03	3.05	2.71	88.8										
			78.03	80.16	2.13	2.10	98.6										

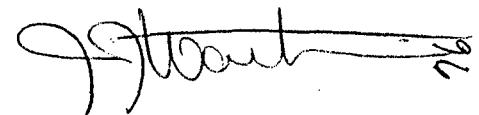
Hole No. DM36-87 Page 11 of 11

Jte

Sb

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,094.41 Date Drilled: Jan 30-Feb 2/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,472.78 Contractor : Coates Pajari 10.7 -59 90° Test up-dip stratigraphy in  
 Length (m) : 153.9 Field Grid: Mineral Hill Logged by : J.Watkins 74.7 -57 93 hanging wall to Mineral Creek  
 Dip : -60° N: 20+00 Date Logged : Feb. 18,19/87 149.3 -57 100 fault  
 Azimuth : 090° E: 7+25  
 Collar elev (m) : 957 Casing left in hole  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 5.69	CASING - no core	strg perv. cc.	tr sulph								
5.60 - 14.40	MSV CG TUFF WITH VFG-FG TUFF BEDS (DEBRIS) to 7.63: cg tuff unsorted, possibly with some felsic frags to 9.10: fg to mg bedded tuff, coarsest with ank spotting to 1 mm, beds well graded; up; to 10.00: cg tuff with ank spots; to 14.40: well bedded vfg to mg tuff	perv. cc, ank spots	tr sulph								
	Lower cont sharp bedded		tr sulph								
14.40 - 14.85	BLACK CHERT fg Vc? faintly bedded with fg lapilli	cc vning in bull qtz	At 14.50: 12 cm bull qtz vn with broken contacts prob. @ +/-90°	1596	14.40	14.85	0.45	.001	0.2	15	31
	Lower cont sharp bedded @ 80°										



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
14.85 - 18.20	ALTERED LAP STONE prob. heterolithic mafic- (felsic), mottled with dk gr. patches of chlorite pseudo. some mafic clasts.	strg cc in disereata patches throu.  chl of mafic clasts  leuc. spotted	<1% vfg py	1597 1598 1599	14.85 16.35 17.50	16.35 17.50 18.20	1.50 1.15 0.70	.001 .003 .001	0.2 0.1 0.1	8 9 12	13 16 12	57 9 12
18.20 - 18.82	SIL TUFF vfg with vague banding @ 50°, light grey, fg tuff at lower contact	sil 10% cc tension vns @ 40° and 20°	<1% vfg py	1600	18.20	18.82	0.62	.001	0.1	6	21	14
	Lower cont. grades to mg tuff											
18.82 - 20.90	ALTERED LAP STONE similar to above but without mottled dk gry patches	perv cc leuc. spotted	tr py	1601 1602	18.82 19.90	19.90 21.00	1.08 1.10	.001 .001	0.1 0.3	11 10	15 13	48 47
20.90 - 21.00	BLACK CHERT 40% vn cc throu. in black hard chert	90% cc vning	tr py									
21.00 - 21.83	VFG TO FG, TUFF BED grading from vfg to fg with depth	grading from wk to strg perv. cc. sil top?	tr py									

JLW

LL

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgh (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
21.83 - 27.70	MSV (PX P) FLOW: msv fg with scattered px phenos to 1 mm in fds-rich gdms Lower cont intact but vague	strg perv. cc 10% cc vn'd	minor py in QC vns from 26.70 - 27.70, cleaves @ 60-70°	1603	26.70 27.70	1.00	.001	0.4	69	45	62
27.70 - 29.40	ALTERED LAPILLI TUFF masked primary textures, unsorted lapilli, composition mafic? Lower cont broken	wk perv. cc 5% cc vn	<1% diss py, badly broken from 28.80-28.96	1604	27.70 29.40	1.70	.007	0.3	35	24	60
29.40 - 29.85	VFG SIL. TUFF msv, apple green, siliceous Lower cont. grades	silicified? 5% cc vn'ng	minor py	1605	29.40 29.85	0.45	.001	0.1	4	49	38
29.85 - 32.17	FG TUFF AND LAPILLI TUFF unsorted msv fg tuff and lapilli tuff with possible felsic clasts Lower cont distinct @ 80°	no perv. cc. 5% cc vn'ng	minor py	1606 1607	29.85 31.00 31.00 32.17	1.15 1.17	.001 .001	0.1 0.1	13 13	28 31	56 38
32.17 - 35.20	MSV (PX P) FLOW: rare 2 mm amygdules, msv as before with rare Px pheno.	5% cc vn'd strg perv. cc.	minor py								
35.20 - 38.45	VFG - FG SIL. TUFF to 35.80 vfg crmy gry sil tuff, msv.	no perv. cc minor cc vn'd	minor py								

HOLE NO. DM38-87 Page 3 of 11

JLW  
86

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	35.80-38.25: fg msv tuff	wk perv. cc. 5% cc vn'd	36.40-36.80: broken, possible crushed zone								
	38.25-38.30: 80% white cc with 20% black chert whisps, possible sh. @ 90° @ 38.30	80% cc	no sulph								
	38.30-38.45: vfg tuff	strg. perv. cc	no sulph								
	Lower cont sharp @ 40°										
38.45 - 39.65	FG MAFIC (Db) DYKE: msv fg, mafic, uniform textured	strg perv. cc.	39.40-39.50: cc + qtz sh. vn @ 40°	1608	39.40	39.50	0.10	.001	0.1	17	62
39.65 - 40.55	FG TUFF msv to wkly bedded @ 35°, slight grain size increase after 39.95.	wk grade to strg perv. cc.	no sulph								
	Lower cont bound by well developed, 5 cm gouge @ 90°										
40.55 - 41.90	PX P ANDESITE typical with chl spherules (amyg) to 2 mm	strg. perv cc; chl spotted	no sulph								

JW

6

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
41.90 - 60.95	HETROLITHIC LAPILLI STONE WITH VFG-FG TUFF INTERVALS: to 42.30: fg msv tuff	to 42.30: 10% fine cc vnning	no sulph minor py	1609	42.30	42.55	0.25	.001	0.2	14	26	67
		to 42.55: vfg, msv sil tuff with lower cont sharp @ 45°	5% cc vn'd									
		to 43.50: mafic lapilli tuff with scattered vfg felsic subang. frags.	mod. perv. cc.		no sulph At 43.50: 1 cm clay gouge @ 60°							
		to 43.85: vfg msv tuff Lower cont sheared?	bleached to ank silicified	1610 1611 1612 1613	43.50 43.85 45.00 45.60	43.85 45.00 45.60 46.60	0.35 1.15 0.60 1.00	.004 .019 .007 .001	0.1 0.2 0.3 0.3	45 109 160 6	24 27 19 20	63 102 101 88
		To 51.85: cg lapilli spine mafic with 20% subangular felsic frags to 3 cm.	perv. cc 45.00-45.60: ank-rich centred on 5 cm cc vn @ 80°	1614 1615 1616 1617 1618 1619	46.60 47.60 48.60 49.60 50.60 51.85	47.60 48.60 49.60 50.60 51.85 52.85	1.00 1.00 1.00 1.00 1.25 1.00	.004 .001 .001 .001 .006 .004	0.3 0.1 0.3 0.3 0.1 0.5	4 16 6 3 24 50	18 15 20 17 10 9	93 85 81 86 75 72
		to 52.85: vfg grading to mg tuff	perv. cc wk bl of vfg tuff		tr' py							

J.H.

100

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
			52.85-54.15: irregular qtz vnning 20% prob. centred on badly broken ground at 53.35°	1620	52.85	54.15	1.30	.025	0.1	28	19	58
	54.15-60.95: msy lapilli tuff, unsorted, minor felsic component At 52.55: 5 cm of well bedded vfg-fg tuff @ 80°(top cont.) & 45° (tzp cont)	mod. perv. cc; 2% cc vnning	tr py	1621	54.15	55.15	1.00	.004	0.5	50	9	72
60.95 - 62.30	VFG MSV TUFF slightly graded to depth	sil? no perv. cc	unit irregularly cut by low angled Q vnning increasing markedly to depth 5% py in host and Q vns, total qtz vnning @ 50%	1622	60.95	62.30	1.35	.025	0.1	281	19	58
62.30 - 65.40	MONOLITHIC, MAFIC, LAPILLI STONE massive wkly sorted to mg tuff, juvenile hycl-rich? Lower cont grades sharply @ 80°	mod perv cc; 5% cc vn'd	1% py	1623	62.30	63.85	1.55	.007	0.1	91	21	79
				1624	63.85	65.40	1.55	.056	0.8	412	10	44

JW

101

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
65.40 - 77.10	MSV MG MAFIC TUFF: msv, unsorted with rare lap. floater. At 67.35: sharp cont @ 80° with fg tuff grading to mg tuff over 10 cm.	strg. perv. cc.	1-2% diss py 66.22-66.35: QC vn with 1% py @ 35° At 73.35: 4 cm cc vn @ 40°	1625 1626 1627 1628 1629 1630 1631 1632	65.40 66.22 66.35 67.35 68.85 70.35 71.85 73.35	66.22 66.35 67.35 68.85 70.35 71.85 73.35 74.70	0.78 0.13 1.00 1.50 1.50 1.50 1.50 1.35	.016 .181 .003 .004 .002 .001 .001 .001	0.1 0.6 0.1 0.2 0.1 0.1 0.2 0.1	225 296 92 47 12 7 13 54	23 22 41 45 49 53 43 23	88 51 85 81 72 84 72 57
	73.55-73.95: strg ank centred on 2 cm ank bx vn @ 90° and 7 cm at sil tuff @ 80°											
			At 74.05: 10 cm cc vn @ 20°	1633 1634	74.70 76.20	76.20 77.10	1.50 0.90	.001 .001	0.1 0.1	6 8	20 20	92 93
	74.70-77.10: msv, unsorted mg tuff											
77.10 - 80.20	BEDDED VFG-FG TUFF well bedded vfg-fg tuff, bedded @ 70-80° 5-10 cm intervals of mg tuff	patchy perv. cc 3% cc vn'd ank + sil 79.50-80.20	minor py	1635 1636 1637	77.10 78.60 79.50	78.60 79.50 80.20	1.50 0.90 0.70	.001 .001 .001	0.1 0.1 0.1	17 16 9	35 51 22	81 82 85

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102

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
80.20 - 111.35	AMYG PIL BASALT FLOW distinctly amyg. with amyg to 3 mm (cc filled), pillowed conts hyal poor and generally marked by ep-rich skin	to 99.95: strg perv. cc. minor patchy ep 5% cc vning										
		85.95-86.90: strg ank to strg cc to depth on 5 cm flt bx	At 86.00: 5 cm fault bx with 1 mm gouge seam @ 35°	1638	85.95	86.90	0.95	.001	0.1	7	20	42
		89.15-89.50: mottled ank + cc + (Q)	tr py	1639	89.15	89.50	0.35	.001	0.1	2	16	26
			92.10-92.30: 50% QC (Asp) vning @ 30° with bl host.	1640	91.60	92.10	0.50	.002	0.2	73	14	66
				1641	92.10	92.30	0.20	.012	0.6	1122	48	43
				1642	92.30	92.80	0.50	.001	0.2	46	84	59
			98.95-99.45: cc-rich with 10% qtz vn, 5% black pyritic seams all @ 30° At 99.95: broken vn? @ 30°	1643	98.95	99.95	1.00	.001	0.2	864	36	36

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103

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		99.95-110.60: strg perv. cc 10% cc vn'd; minor patchy ep	minor py								
				1644	109.60	110.60	1.00	.001	0.2	16	24
			110.60-111.35: broken throu. 20% qtz vnning @ 20-30d, 5% diss py in wkly bl host	1645	110.60	111.35	0.75	.009	0.1	677	8
		Lower cont broken									
111.35 - 126.85	MOTTLED DYKE characterized by what appears to be closely packed to coalesced patches of stubby feldspar now ank??, matrix poor of dk grey chl? and cc, cg grading and intercalated with mg and fg Lower cont vague	strg perv. cc gdms ank-rich wk to mod whispy and gdms chl; 10% cc vn'd	minor py	1646	111.35	112.35	1.00	.001	0.1	140	7
126.85 - 140.75	SPOTTED ALTERED MAFIC FLOW: fg, msv characterized by fine chl spots throu.	chl spotted; 5% cc + ep? (ank?) vn'd strg to mod. perv. cc.	minor py								

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt ppm	Ag ppm	As ppm	Cu ppm	Zn ppm
	Lower cont sharp against vfg tuff @ 80°	140.30-140.65: strg b1 (ank + cc)									
140.75 - 141.53	BASALT VFG TUFF AND HYCL: vfg bedded tuff @ 85° to 140.95 to 141.53: fg hycl Lower cont broken	wk patchy cc	no sulph								
141.53 - 141.95	CHERTY TUFF: msv, vague banding @ 80° Lower cont broken	20% Q(C) patches	tr py, cpy?	1647	141.53	141.95	0.42	.001	0.1	12	198
141.95 - 153.92	FLOW BANDED BASALT FLOW: distinctly banded to 146.00 with 1 mm light grn bands spaced 1-2 cm @ 40-30°, scattered amyg.	minor patchy QC, 5% narrow cc vns throu.  host not perv cc altered	tr py								41
153.92	END OF HOLE										

JW

501

Co: WESTMIN RESOURCES LTD. Project: DEBBIE - SICKER Logged by: B Bachmeer Date: Feb. 18,19, 1987 Hole No. DM38-87

Core boxes

Core Recovery

Box No	Interval (m)		Interval (m)		Core lngth	Amount Present	Recovery %	Interval (m)		Core lngth	Amount present	Recovery %	Interval (m)		Core lngth	Amount Present	Recovery %
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	
1	00.0	12.4															
2	12.4	19.6															
3	19.6	26.5															
4	26.5	33.4															
5	33.4	40.1															
6	40.1	47.3															
7	47.3	53.7															
8	53.7	60.2															
9	60.2	67.2															
10	67.2	74.0															
11	74.0	80.8															
12	80.8	87.7															
13	87.7	95.0															
14	95.0	101.9															
15	101.9	108.6															
16	108.6	115.7															
17	115.7	123.0															
18	123.0	129.8															
19	129.8	137.0															
20	137.0	144.0															
21	144.0	150.9															
22	150.9	153.9															

Hole No. DM38-87 Page 11 of 11

JL

901

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,094.13 Date Drilled: Feb. 2-6/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,471.82 Contractor : Coates Pajari 163.1 -80° 096° Test stratigraphy in hanging  
 Length (m) : 206.3 Field Grid: Mineral Hill Logged by : J.Watkins wall of Mineral Creek Fault  
 Dip : -80° N: 20+00 Date Logged : Feb. 10,11/87 - -  
 Azimuth : 090° E: 7+25 - Casing left in hole  
 Collar elev (m) : 957  
 Core size : BQ

Hole No. D42-87

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 6.09	CASING - no core										
6.09 - 14.30	MSV FG TUFF AND BEDDED VFG TUFF: msv fg, unsorted to 7.90; vfg-fg well bedded @ 80° to 8.35. 8.35-9.70: msv fg tuff, unsorted; 9.70-10.25: fg-vfg bedded; 10.25-11.00: msv, unsorted, fg tuff 11.00-14.30: fg to vfg bedded @ 85-90° with msv fg intervals Lower cont sharp @ 90°		strg. perv. cc 10% irregular cc vn'd minor py								
14.30 - 15.20	BLACK CHERT predom. black, vaguely banded chert, 20% fg tuff intervals lower cont. sharp @ 90°		minor cc vn'd	minor py	3969	14.30	15.20	0.90	.001	0.2	26
15.20 - 20.60	HETROLITHIC CG LAPILLI STONE: primary clastic features, partly masked by alteration, prob. mixed felsic and mafic frags,		strg perv. cc fine leucoxene spotted some chl + cc-rich frags	tr. Py as rare py-rich patches poss. after pyrotic clasts							37
											66

HOLE NO. DM42-87 Page 1 of 14

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	10% mottled dk grey to black patches to 1 cm of chl + cc prob. after mafic clasts Lower contact broken.										
20.60 - 27.30	FELSIC-RICH HETROLITHIC VFG TUFF TO TUFFACEOUS LAPILLI STONE: primary features partly masked by perc. cc, vfg grading to mg lapilli stone, poss. more felsic to depth. Lower cont. broken	strg perv. cc 10% cc vn'd	tr py								
27.30 - 32.77	BASALT FLOW distinctly amygd to 28.30, fg, msy med to light green Lower cont broken	strg. perv. cc 5-10% cc vn'd	minor py								
32.77 - 36.00	MSV FG TUFF: vaguely bedded tuff, bedded @ 90°, becomes slightly coarser grained to depth from 35.30-35.40: black chert bed @ 90° Lower cont. grades	strg perv. cc 10-15% cc vn'd	At 34.95: 10 cm QC vn @ 90°								

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201

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)			Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
36.00 - 37.33	VFG SIL TUFF: Cherty, grn siliceous tuff with minor fg tuffaceous intervals Lower cont indistinct	patchy perv cc 5% cc vn'd silicified?	1-2% vfg py	3970	36.00	37.33	1.33		.001	0.5	41	39	57
37.33 - 40.65	BASALT FLOW (DYKE?) light grn, fg uniform texture of insituted broken with cc vnning Lower cont ragged, mixed? with cherty tuff	perv. cc 10-15% cc vn'd	minor py moderately broken throu.										
40.65 - 45.08	FG TO MG TUFF: primary features masked by perv. cc. cc(Q) vnning and perv. cc; slight frag size increase to depth  From 44.30-45.08: fg grading to mg tuff with 2% diss py.  Lower cont sharp at 80°	from 41.30-42.10: broken by low angle shear with dark grey tuff from 42.10-42.60: 80% cc (Q) vn'd with irregular conts 42.60-43.20: badly broken with 25% cc vnning From 44.05-44.30: Q-rich vn, white bull @ 70°	3971	44.05	45.08	1.03		.001	0.5	61	42	64	

HOLE NO. DM42-87 Page 3 of 14

JW

601

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)		Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
45.08 - 45.53	INTERCALATED BLACK PYRITIC CHERT AND TUFF? 50% black chert bands with 5% py concentrated on bedding planes @ 85°, 50% textureless tuff (poss. basalt).	20% cc and fine vns and patches	5% py in black chert	3972	45.08	45.53	0.45	.004	0.8	128	113	62
45.53 - 48.10	VFG SIL TUFF TO MG TUFF: vfg vaguely bedded tuff @ 75°, siliceous grading to mg msy tuff, minor dk grey cherty beds to 1 cm in vfg tuff Lower cont broken, gradational?	mod perv cc 5-10% cc vn'd	<1% diss Py	3973	45.53	47.00	1.47	.002	0.3	60	2	82
48.10 - 66.10	ALTERED MSV MG TUFF: primary textures strgly masked by perv. alteration, unit appears to be msy, poorly sorted mg tuff and probably mixed felsic grading to mafic-rich to depth, wk mottled dk grey patches possible after mafic clasts.	perv. cc 5-10% cc(Q) vn'ng	minor to 1% py badly broken from 60.50-62.00	3975 3976 3977 3978 3979 3980 3981 3982 3983 3984 3985 3986	48.10 49.60 51.10 52.60 54.10 55.60 57.10 58.60 60.10 61.60 63.10 64.60	49.60 51.10 52.60 54.10 55.60 57.10 58.60 60.10 61.60 63.10 64.60	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	.001 .009 .006 .002 .005 .004 .001 .012 .001 .056 .001 .015	0.1 0.3 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.4 0.1 0.1	19 47 26 9 31 16 9 62 100 235 24 132	22 25 18 13 9 16 9 21 21 40 24 50	77 90 95 78 74 94 89 93 81 85 41 92

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
66.10 - 69.19	STRONG SHEAR ZONE: interval cut by several 0°-10° shears bleached throu. with dk grey gouge plus host frags	strg. bl. cc + ank + (ser)	broken throu. 5-10% diss py in both bl. haloe to shears and within dk grey gouge	3987	66.10 69.19	3.09	.058	0.9	946	28	71
69.19 - 81.80	ALTERED MSV FG TUFF WITH BEDDED INTERVALS predom msv tuff, primary features masked by alteration, short bedded intervals, bedding contorted.	perv. cc 5-10% vn'd and patchy cc from 78.33-79.80: 50% patchy cc probably shear related	<1% fine diss py 78.33-79.80: cc heeled low angle shear 80.80-81.38: mod shear @ 28-30°	3988 3989 3990 3991 3992 3993 3994 3995 3996	69.19 70.70 70.70 72.20 72.20 73.70 73.70 75.20 75.20 76.70 76.70 78.20 78.20 79.70 79.70 80.75 80.75 81.80	1.51 1.50 1.50 1.50 1.50 1.50 1.50 1.05 1.05	.001 .003 .001 .005 .011 .048 .001 .006 .007	0.1 0.2 0.1 0.2 0.3 0.1 0.1 0.3 0.1	35 27 15 146 51 20 73 92 47	15 21 28 51 41 46 38 51 33	76 75 75 51 56 41 62 51 67
81.80 - 108.47	MSV AMYGD PILLOWED BASALT FLOW: distinctly amygdaloidal with amygd intervals to 30%, some amygd to 5 mm in dia. with msv intervals to 1 m, poorly formed interpillowed hycl; 5% interpillowed chert + cc from 98.00-98.45: vfg interpillowed tuff, bleach w 2% py.	strg perv. cc. amygd cc filled from 86.40-86.90 80% epidote	From 81.80-84.70: broken and shear @ 20-30° with strg cc-rich gouge seam @ 84.40 @ 20° all with 1-2% diss py.	3997 3998 3999 4000	81.80 82.80 82.80 83.80 83.80 84.70 98.00 98.45	1.00 1.00 0.90 0.45	.023 .001 .024 .001	0.4 0.2 0.8 0.2	40 35 531 57	17 34 48 8	61 60 38 63

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
Lower cont sharp @ 45°											
108.47 - 113.45	BASALT TUFF pred fg bedded tuff with broken siliceous beds floating in mg shardy tuff to 113.80, fairly well bedded @ 70° to 111.20 From 111.20-113.45: insituted broken and heeled	strg perv cc from 111.90-112.40: strg bl ank + ser	from 108.97-111.20: 1% py from 111.20-113.45: to 5% py From 111.40-111.70: 70% cc + Q with angle host floaters  At 112.70: strg tight shear @ 25° with 5 cm bl fw	1351 1352 1353 1354 1355	108.47 109.45 109.45 110.45 110.45 111.20 111.20 112.20 112.20 113.45	0.98 1.00 0.75 1.00 1.25	.006 .005 .008 .041 .008	0.1 0.2 0.1 0.7 0.1	53 36 169 323 139	55 45 24 51 49	76 69 55 44 47
113.45 - 116.50	MSV PX PORPH BASALT fg msv with rare micro px pheno, wky shattered, insituted fracture, to 5% chl-rich fracture filling	strg perv cc 5% cc vn'd chl fracture filling 115.95-116.50: moderately bleach and insituted shattered (hydro frac) with 15% Q-rich matrix	minor py  115.95-116.50: 5% py with bl and hydro-fractures	1356	115.95 116.50	0.55	.007	0.5	189	57	53

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112

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
116.50 - 117.20	LAPILLI TUFF: msv unsorted with minor siliceous lapilli, mafic-rich	5% extension fractures to 2 mm med grey qtz + carb filled; cut by 5% cc vning & perv cc	1% py patches and with qtz + carb vns	1357	116.50 117.20	0.70	.002	0.1	51	34	76
	Lower cont sharp with fg tuff @ 80°										
117.20 - 117.65	BEDDED FG TUFF Well bedded @ 80°	5% extension fractures to 2 mm with qtz + carb	5% py	1358	117.20 117.65	0.45	.001	0.1	17	65	94
	Lower cont grades to crs	filling 5% x-cutting cc vns									
117.65 - 118.55	LAPILLI TUFF as before	wk to local mod. b1 (ank + ser + py) on several 60° tight shears;	to 5% py with mod b1	1359	117.65 118.55	0.90	.018	0.3	297	59	66
	Lower cont grades to hydro fracture, b1 and As Py-rich	5% qtz + carb extension fractures cut by ank + ser + py									

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
118.55 - 118.85	QTZ VN: centred on 2 mm py + Aspy + base metal?-rich seam @ 40° hw: of bl hydro fracture with Aspy filling fw qtz-rich with 10% altered wall rock frags Lower cont broken	sil: + bl	2% Py, 2% As Py Zn?	1360	118.55 118.85	0.30	.012	0.3	386	11	15
118.85 - 119.35	SHEAR strg shear @ 0-10° with strg altered wall rock of qtz and ser + ank Lower cont sharp pyritic break @ 40°	Sil. strong ser + ank wall rk	5% py all in 3 cm shear	1361	118.85 119.35	0.50	.031	0.8	686	49	36
119.35 - 121.65	BEDDED CHERT: bedded, broken qtz heeled chert bed, 5% black chert bands, bl basalt from 120.55 to 120.90, bedded @ 70-80°	sil	5-7% py	1362 1363	119.35 120.55 120.55 121.65	1.20 1.10	.025 .009	0.7 0.3	399 202	61 87	53 74
121.65 - 131.05	PX PORPH BASALT: msv, uniform textured, fg, characterized by 1 mm px pheno throu.	121.65-123.25: wk to mod bl. 2% QC hydro fr with py 123.25-126.75 fresh to wk bl	1-3% py, minor Aspy in hydro frac minor QC tension frac, 1% py	1364 1365 1366 1367 1368	121.65 122.45 122.45 123.25 123.85 124.75 124.75 126.25 126.25 126.75	0.80 0.80 1.50 1.50 0.50	.006 .016 .001 .001 .001	0.1 0.2 0.2 0.2 0.2	105 323 68 34 6	60 35 44 48 59	72 68 58 51 59

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		126.75-130.55: mod grading to strg bl.	1-3% py At 130.00: 10 cm broken qtz-rich vn @ 30°?	1369 1370 1371 1372 1373	126.75 127.75 127.75 128.75 128.75 129.75 129.75 130.55 130.55 131.05	1.00 1.00 1.00 0.80 0.50	.001 .001 .001 .001 .024	0.3 0.3 0.4 0.3 0.5	54 64 141 1228 2100	34 48 40 48 11	52 84 141 1228 2100
		130.55-131.05: beautiful hydro- frac. 20% dk grey QC vn'd with conc to 5% py, host intensely alt. ser + ank	5% py								
		Lower cont strong shear at 40° 2 cm wide QC + py									
131.05 - 134.50	SILICEOUS TUFF (CHERT) sil fg bedded tuff in part;	sil tuff? 5% cc vn'd	At 132.50: 15 cm grey with dk grey cont area @ 45°	1374 1375 1376 1377	131.05 132.05 132.05 133.05 133.05 134.05 134.05 134.50	1.00 1.00 1.00 0.45	.022 .032 .016 .014	1.0 0.5 0.7 0.3	2849 1267 476 235	1057 66 59 63	86 88 80 46
134.50 - 156.00	(PX) PORPHYRY BASALT FLOW: msv, typical with rare hycl at prob. flow tops	perv. cc	134.50-135.05: strg bl ser + ank with 5% hydro frac with dk grey QC	1378	134.50 135.05	0.55	.007	0.3	222	22	35
	Low contact very gradational										

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
		135.05-140.00: wk to local mod. bl	1-2% dk grey QC in local hydro-frac, 3% Py At 139.65: 7 cm Q(C) vn banded at 45° with 10 cm bl haloes	1379 1380 1381 1382 1383 1384	135.05 136.00 137.00 138.00 139.00 139.50	136.00 1.00 1.00 1.00 139.50 140.00	0.95 1.00 1.00 1.00 0.50 0.50	.003 .005 .016 .006 .001 .008	0.2 0.5 0.8 0.3 0.3 0.4	116 215 570 271 186 927	39 42 63 49 41 37	53 53 61 48 50 37
156.00 - 160.00	MSV TO BEDDED FG BASALT TUFF: msv grades to bedded to lower cont, bedded @ 50°	140.00-156.00: perv. cc; 5% cc vn'd, wk spotted chl.  perv. cc, 10-15% cc vn'd; patchy mod chl	minor py  At 149.27: 10 cm QC vn @ 80° with no alteration haloe  tr py	1385	149.27	149.37	0.10	.001	0.1	70	80	63
	Lower cont broken		157.75-158.05: QC vn, conts irregular no bleached haloe; At 159.80: tight shear @ 20° throu bedding	1386	157.75	158.05	0.30	.001	0.2	7	28	6
160.00 - 172.95	BASALT LAPILLI TUFF: msv unsorted juvenile basalt lapilli, with rare clasts to 2 cm	wk patchy chl, perv. cc 5% cc vn'd	minor diss. py									

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911

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	157.20-168.18: msv spotted mafic dyke, fg with mafic (chl) spots throu., cont chilled (no spotting) conts @ 30°?	perv cc									
172.95 - 179.30	MSV FG TO POORLY BEDDED BASALT TUFF: pred. msv fg tuff with poorly bedded (@ 40°) intervals, minor short intervals of lapilli tuff as before Lower cont grades	perv cc wk chl on irreg. fractures 5% cc vn'd	minor py								
179.30 - 200.75	ALTERED PX P BASALT FLOW: msv with no primary features, px p now chl, giving unit mottled spotted appearance	perv. cc									
	188.60-188.80: b1 bedded tuff @ 80°, 20% sil (exhalative) component	b1 sil	tr py								
	192.10-193.50: wk to mod b1 centred on 10 cm white cc vn	at 192.45: 2 cm py hydro-frac. @ 40° with 10 cm cc vn in	1387	188.60	188.80	0.20	.001	0.1	7	26	42
	194.75-195.30: wk-mod b1 on 10% hydro frac.	fw 194.75-195.30: 2% py	1388	192.10	193.50	1.40	.001	0.2	214	38	29
			1389	194.75	195.30	0.55	.005	0.5	281	69	53

HOLE NO. DM42-87 Page 11 of 14

JL  
117

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgh (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	Lower cont sheared @ 40°		At 198.10: 10 cm irregular cc vning @ 30°								
200.75 - 201.50	FG BEDDED BASALT TUFF: fg bedding centred to 30° Lower cont ragged	bl by cc minor chl on bedding planes	tr py								
201.50 - 202.55	MSV BASALT As before lower cont sheared at 30°	perv cc wk chl spotting	tr py								
202.55 - 203.30	BROKEN & SHEARED BASALT: badly broken by 30° shears	perv cc, wk chl, 10% cc vning	minor py								
203.30 - 204.65	SIL TUFF? broken throu., pred. banded cherty tuff @ 20-40° with 20-30% bas. tuff component	strg perv cc	badly broken @ 20-30° minor py	1390	203.30	204.65	1.35	.020	0.5	55	69
204.65 - 206.35	MSV FG BASALT: msv fg with no primary textures, poss fg msv tuff	perv cc, 20% irreg cc	tr py vning								
206.35	END OF HOLE										

HOLE NO. DM42-87 Page 12 of 14

JMC

8/11

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: B Bachmier

Date: Feb. 27, 1987 Hole No. DM42-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lgth	Amount Present	Recovery %	Interval (m)		Core lgth	Amount present	Recovery %	Interval (m)		Core lgth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	00.0	13.2	0.00	8.23	8.23	2.21	26.8	75.29	78.33	3.04	2.70	88.8	136.25	139.29	3.04	2.90	95.4
2	13.2	20.4	8.23	11.28	3.05	2.88	94.4	78.33	81.38	3.05	3.10	100.0	139.29	142.34	3.05	3.20	100.0
3	20.4	27.4	11.28	14.33	3.05	2.98	97.7	81.38	84.43	3.05	2.96	97.0	142.34	145.38	3.04	2.86	94.1
4	27.4	34.3	14.33	17.37	3.04	3.08	100.0	84.43	87.48	3.05	3.06	100.0	145.38	148.44	3.06	3.06	100.0
5	34.3	41.8	17.37	20.42	3.05	3.19	100.0	87.48	90.53	3.05	2.80	91.8	148.44	151.49	3.05	2.81	92.1
6	41.8	48.9	20.42	23.47	3.05	2.79	91.5	90.53	193.57	3.04	3.10	100.0	151.49	154.53	3.04	2.97	97.7
7	48.9	56.0	23.47	26.52	3.05	2.96	97.0	93.57	96.01	2.44	2.46	100.0	154.53	157.58	3.05	3.04	99.7
8	56.0	63.1	26.52	28.35	1.83	1.69	92.3	96.01	98.15	2.14	2.41	100.0	157.58	160.32	2.74	2.70	98.5
9	63.1	70.3	28.35	31.39	3.04	3.06	100.0	98.15	99.06	0.91	0.82	90.1	160.32	162.15	1.83	2.07	100.0
10	70.3	77.9	31.39	32.61	1.22	1.10	90.2	99.06	100.58	1.52	1.52	100.0	162.15	165.20	3.05	3.04	99.7
11	77.9	84.8	32.61	35.05	2.44	2.63	100.0	100.58	102.41	1.83	1.76	96.2	165.20	166.72	1.52	1.36	89.5
12	84.8	92.4	35.05	38.10	3.05	3.02	99.0	102.41	105.46	3.05	3.01	98.7	166.72	168.25	1.53	1.62	100.0
13	92.4	99.2	38.10	41.14	3.05	3.06	100.0	105.46	107.14	1.68	1.73	100.0	168.25	169.01	.76	1.05	100.0
14	99.2	106.4	41.15	44.20	3.05	3.03	99.3	107.14	108.81	1.67	1.70	100.0	169.01	171.14	2.13	1.95	91.5
15	106.4	113.7	44.20	47.24	3.04	2.96	97.4	108.81	111.86	3.05	2.91	95.4	171.14	172.82	1.68	1.72	100.0
16	113.7	120.6	47.24	50.29	3.05	2.83	92.8	111.86	114.45	2.59	2.47	95.4	172.82	175.87	3.05	3.05	100.0
17	120.6	127.4	50.29	50.90	0.61	0.57	93.4	114.45	116.13	1.68	1.52	90.5	175.87	178.92	3.05	2.98	97.7
18	127.4	134.5	50.90	53.34	2.44	2.51	100.0	116.13	117.96	1.83	1.85	100.0	178.92	181.97	3.05	3.10	100.0
19	134.5	141.6	53.34	55.47	2.13	1.95	91.5	117.96	121.01	3.05	3.06	100.0	181.97	185.01	3.04	2.17	71.4
20	141.6	148.5	55.47	57.00	1.53	1.43	93.5	121.01	123.14	2.13	2.07	97.2	185.01	188.06	3.05	3.05	100.0
21	148.5	156.0	57.00	60.05	3.05	2.98	97.7	123.14	124.05	0.91	0.85	93.4					
22	156.0	162.7	60.05	63.09	3.04	3.14	100.0	124.05	127.10	3.05	3.05	100.0					
23	162.7	169.5	63.09	66.14	3.05	2.76	90.5	127.10	129.84	2.74	2.71	98.9					
24	169.5	176.4	66.14	69.19	3.05	2.98	97.7	129.84	130.15	0.31	0.41	100.0					
25	176.4	183.2	69.19	72.23	3.04	3.01	99.0	130.15	133.20	3.05	3.06	100.0					
26	183.2	191.5	72.23	75.29	3.06	2.95	96.4	133.20	136.25	3.05	2.98	97.7					

Hole No. DM42-87 Page 13 of 14

JL  
6/11

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: B Bachmier

Date: Feb. 27, 1987 Hole No. DM42-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lghth	Amount Present	Recovery %	Interval (m)		Core lghth	Amount present	Recovery %	Interval (m)		Core lghth	Amount Present	Recovery %	
	From	To	From	To				From	To				From	To				
27	191.5	198.6	188.06	191.11	3.05	3.07	100.0											
28	198.6	205.3	191.11	194.16	3.05	2.78	91.1											
29	205.3	206.4	194.16	197.21	3.05	3.06	100.0											
			197.21	199.19	1.98	2.01	100.0											
			199.19	200.71	1.52	1.55	100.0											
			200.71	202.08	1.37	1.32	96.3											
			202.08	203.00	.92	1.15	100.0											
			203.00	204.52	1.52	1.52	100.0											
			204.52	206.35	1.83	1.82	99.4											

Hole No. DM42-87 Page 14 of 14

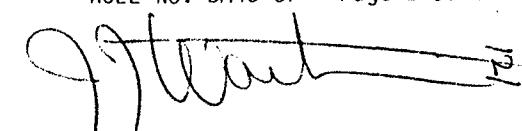
*JL*

120

Hole No. D43-87

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,094.27 Date Drilled: Feb. 6-9/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,472.30 Contractor : Coates Pajari 80.5 -70° 076° Test stratigraphy in Hanging  
 Length (m) : 171.3 Field Grid: Mineral Hill Logged by : J.Watkins Pajari 168.2 -69° 038° Wall to Mineral Creek Fault  
 Dip : -70° Date Logged : March 12-13/87 - -  
 Azimuth : 090° - Casing left in hole  
 Collar elev (m) 50 1080  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 6.53	CASING - no core										
6.53 - 14.63	MSV MG and FG (VFG) TUFF to 7.50: msv mg unsorted mafic tuff to 8.95: well bedded graded fg - mg tuff, bedded @ 80° to 10.40: msv mg unsorted tuff as before to 10.75: bedded mg - fg @ 80° to 11.55: msv mg unsorted tuff as before to 14.63: predom. fg bedded with 10-20 cm mg intervals, bedded @ 75-85°	strg. perv. cc at mg tuff; wk perv cc of fg tuff 5% cc vn'd	Tr py.								
	Lower cont. sharp @ 90°										



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
14.63 - 15.38	DK GREY SILICEOUS FG LAP TUFF wk bedding near upper cont, unsorted rhyolite? tuff	wk perv. cc. 3% cc vn'd	tr. py.									
15.38 - 20.10	ALTERED HETROLITHIC AGGL LAP ST as in previous holes, primary features partly masked by pervasive alt, irregular dk grn patches throu (10%) prob. pseudo after mafic clasts, light grey to apple grn sil clasts vague; unsorted.  Lower cont broken, prob gouge @ 65°	strg perv. cc of gdmss 10% chl? frags fine leucox spotting 5% cc vnning	minor py	1881 1882 1883	15.38 16.90 18.50	16.90 18.50 20.10	1.52 1.60 1.60	.001 .001 .001	0.1 0.1 0.1	8 5 6	16 14 13	57 42 52
20.10 - 21.90	ALTERED LAP TUFF: similar to above, finer clast size, no chl-rich frags, msv, unsorted, primary textures and comp partly masked, lower cont sharp break @ 80°	strg perv cc, leucox spotted	tr. py.	1884	20.10	21.90	1.80	.001	0.1	7	46	2

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122

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
21.90 - 22.00	CC + CHERT VEIN 70% cc with wispy dk grey to black chert all @ 85°	cc-rich	tr py								
22.00 - 22.40	VFG SIL TUFF finely bedded near upper cont @ 80°, otherwise msv lower cont grades to fg tuff.	mod. perv. cc, sil?	tr py	1885	21.90 22.40	0.50	.001	0.4	6	12	30
22.40 - 23.30	MSV ALTERED FG TUFF: msv, unsorted, masked by alteration; slight grain size increase with depth.	strg. perv. cc; leucox spotted 5% cc vnd	tr py	1886	22.40 23.30	0.90	.001	0.2	5	12	43
22.30 - 27.10	MSV PX P FLOW msv fg with fg px phenos, rare amyg.	strg perv. cc grading to no perv. cc	no sulph								
	Lower cont. badly broken	5% cc vnd									
27.10 - 29.30	SIL FG TUFF light grey grn, msv to vaguely banded @ 80°	sil wk perv. cc.	tr vfg py badly broken to 27.50	1887 1888	27.10 28.20 28.20 29.30	1.10 1.10	.001 .001	0.4 0.4	23 43	22 36	45 37
	Lower cont intact but vague.	fine cc filled fractures									

996

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
29.30 - 30.50	MSV PX P FLOW BASALT: as before, fg msv flow, primary features partly masked	strg. perv. cc; 10% cc vn'd	badly broken, no sulph	1889	29.30	30.50	1.20	.001	0.3	31	62	97
30.50 - 33.65	SIL TUFF: pred. msv sil tuff, vague sil? banding @ 80°, locally insituted broken and healed; at 32.30: low angle 1-2 cm 10% cc vn bx vn with sil frags in several 5 cm wide @ 60% cc host in contact 60-80° with PxP flow to 32.52 (large clast of basalt?) 33.15-33.35: dk grey chert upper cont grades to apple grn sil tuff, lower cont broken.	patchy strg. cc.	tr py	1890 1891	30.50 32.00	32.00 33.65	1.50 1.65	.001 .001	0.1 0.3	23 13	55 56	59 39
33.65 - 40.70	PX P BASALT FLOW as before, altered with rare amygdule	10-20% cc vn'd strg perv cc	tr py									
	Lower cont sharp @ low angle against bedded tuff @ 90°											

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
40.10 - 42.50	MIXED BLACK CHERT & BEDDED FG TUFF: 40% black chert, 60% well bedded pyritic fg tuff; graphitic slips	10% cc vn'd	vfg pyrite in bedded tuff-5% badly broken	1892 1893 1894	40.10 40.90 41.70	40.90 41.70 42.50	0.80 0.80 0.80	.014 .042 .006	0.8 1.1 0.4	101 178 184	80 63 17	51 45 58
	Lower contact broken											
42.50 - 47.85	ALTERED PX P BASALT? strongly altered to 44.90; to 46.15: msv PxP with rare amygd. to 47.85: primary textures vague, could be clastic	42.50-44.90: strg bl (ank-rich) centred on crushed (5 cm) interval @ 43.15	minor py	1895 1896	42.50 43.70	43.70 44.90	1.20 1.20	.006 .002	0.1 0.3	85 29	22 12	5 8
	Lower cont. gouge seam at 45°?	46.15-47.85: strg perv. cc; 10-15% cc vn'd										
47.85 - 51.40	HETROLITHIC MSV LAP TUFF WITH FG(VFG) TUFF INTER BEDS: Mafic rich with minor felsic component decreasing to depth; primary features masked partly by alteration	wk perv. cc; 5% cc vn'd wk ank-ser.	<1% diss py at 49.90: broken cc-rich sh @ 30°, 5 cm wide? at 51.30: crushed zone 2 cm wide at 40°	1897 1898 1899	47.85 49.35 50.35	49.35 50.35 51.40	1.50 1.00 1.05	.006 .001 .001	0.3 0.1 0.1	74 39 7	25 5 3	84 50 36

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
51.40 - 57.10	VFG GRADING TO MSV: HETROLITHIC LAPILLI STONE: to 52.10: vfg tuff, vaguely bedded @ 80°, lower cont is shear @ 38° but grades to fg lapilli stone. to 57.10: msv lapilli stone mafic and 20% felsic vn'd comp.	to 52.10: mod. b1 with 3% py, no perv cc. 52.10-57.10: mod perv cc 10% cc vn'd	to 52.10: 3% diss py. 52.10-57.10: tr py minor py	1900 1004	51.40 52.10 53.10	0.70 1.00	.006 .003	0.1 1.9	64 73	19 27	65 71
57.10 - 59.39	FG BEDDED TUFF: vfg well bedded @ 80° with mg msv intervals  58.93 - 59.39: with orientated elongated clasts of vfg tuff floating in mg msv tuff (rip-up clasts)  Lower cont grades										
59.39 - 62.80	CG LAPILLI STONE: differs from above, appears juvenile basalt with angular to subangular frags, some amyg in creamy grey (10%) vfg host; rare subrd felsic frag to 2 cm	mod. perv. cc best in host	minor py								

Lower cont grades

HOLE NO. DM43-87 Page 6 of 15

9/14

9/14

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
62.30 - 64.05	VFG BEDDED TUFF WITH MSV FG - MG TUFF 30% vfg tuff bedded @ 80° intercalated with msv mg tuff Lower cont grades	wk perv. cc.	tr py									
64.05 - 82.58	MSV CG - MG TUFF WITH VFG-FG TUFF INTER BEDS predom. msv cc-mg tuff with rare lapilli bedded fg tuff intervals through @ 1-1.5 m intervals.	64.05 - 75.36: wk perv. cc; 1-2% cc vn'd	64.05-75.36: minor py									
		75.36 - 75.95: ser + ank shear related to 25°	75.36-75.95: mineralized shear @ 25°, 5% diss py	1005 1006 1007 1008 1009 1010	74.36 75.36 75.95 76.95 78.55 79.55	75.36 75.95 76.95 78.55 79.55 80.55	1.00 0.59 1.00 1.60 1.00 1.00	.001 .115 .009 .010 .936 .003	0.1 1.1 0.3 0.1 6.1 0.1	35 847 123 35 145 19	45 18 34 21 11 33	84 30 86 82 31 66
		75.98 - 82.58 perv cc.	76.45-76.65: cc rich sh @ 20° with 5% diss py.  78.55-79.55 hydro-frac bx, angular frags in vn? @ 20°, 5-7% diss py.									
	Lower cont. sharp @ 80°		At 82.18: 5 cm cc-rich sh @ 30°									



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
82.58 - 103.80	AMYGD BASALT FLOW May be in part pillowled with rare hyal., strongly amyg. with cc filled to 2 mm.  90.00-90.15: vfg tuff @ 85°, wkly siliceous  93.05-93.17: vfg sil tuff conts broken  95.35-95.65: fg to vfg tuff @ 70°  Lower cont. grad.	strong perv. cc.  to 90.00: 20% cc vn'd with vns @ 30°	minor py  At 98.05: cc-rich shear @ 20°, 5 cm wide								
103.80 - 130.65	MSV BAS FLOW: 103.80-107.65: msv, poss intrusive characterized w leuc. spotting. 107.65-108.70: broken, vague amyg at upper cont.	strg perv. cc leuc. spotting  wk bl. strg perv. cc.	no sulph  1% grad 2% fg py  broken + healed w 60% cc+qtz grading to 20% w depth 5% grading to 1% diss py; upper cont sharp tight sh @ 30°	1011 1012	107.65 108.70 108.70 110.30	108.70 110.30 1.05 1.60	.001 .007	0.1 0.3	37 219	66 41	55 57

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821

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	110.30-110.60: msv bas										
		strg perv. cc.	110.60 - 111.90: mottled w vague cc qtz stwk? w 1-2% diss py. tr sulph	1013	110.60 111.90	1.30	.013	0.4	266	40	63
	111.90-113.55: msv bas, wk amygd.	20% cc vn strg perv. cc.	113.55-115.20: mottled w patchy ch, strg perv. cc	1014	113.55 115.20	1.65	.001	0.1	21	38	41
	At 115.20: sharp 90° cont w msv bas (intrusive)										
		115.20-121.80: msv, strg perv cc, 2% chl vning, 10% cc vn'd.	at 116.40: 3 cm cc-rich sh @ 25°								
		121.80-123.20: wkly bl. strg perv. cc.	2% diss py	1015	121.80 123.20	1.40	.007	0.1	161	47	66
			123.20-123.35: qtz+cc vn w 2% py @ 45°, upper cont 1 cm go.	1016	123.20 123.35	0.15	.013	0.8	210	26	26


 A handwritten signature or mark consisting of a stylized 'J' and 'H' followed by a vertical line and the number '62'.

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
		123.20-124.00: v strg perv cc wkly fel @ 40°										
			At 124.00: tight sharp sh @ 25°									
124.00-125.30: msv flow?	strg perv. cc w 3% chl vning		125.30-125.50: instued bx w 10% patchy cc, matrix perv, upper & lower cont sharp sh @ 30°, no sulph									
	125.50-130.65: msv, fg fractures	strg perv. cc 5% cc vn'd	no sulph									
130.65 - 133.60	FG BEDDED TUFF: pred. fg tuff, well bedded wk-mod perv cc, @ 80-90° w silicified intervals, intervals to 30 cm of msv. mg unsorted tuff.	silicified bedded tuff best toward lower cont.	1-2% diss py	1017 1018 1019	130.65 131.65 132.65	131.65 132.65 133.60	1.00 1.00 0.95	.001 .006 .007	0.1 0.1 0.2	24 114 151	49 63 56	89 79 65
	Lower cont. sharp @ 85°											
133.60 - 134.90	MSV BAS msv, vague amyg.	perv. cc.	no sulph									

JRW

130

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
134.90 - 135.15	FG BEDDED TUFF: fg well bedded @ 85° siliceous	10% patchy cc; silicified?	3% diss py	1020	134.90 135.15	0.25	.004	0.4	105	63	82
135.15 - 136.15	MSV BAS FLOW: wkly amygd at upper cont.	20% cc stwk, wkly b1 patchy cc	1 % diss py	1021	135.15 136.15	1.00	.005	0.1	174	42	56
136.15 - 138.40	BEDDED SIL TUFF: vfg sil banded tuff, w 30% mg msv tuff, bedded @ 50-70°	strg. perv. cc. best in msv mg tuff; bedded tuff silicified?	1-2% diss py	1022 1023	136.15 137.75 137.25 138.40	1.10 1.15	.001 .001	0.1 0.1	30 23	43 51	66 87
138.40 - 147.40	MSV BAS FLOW msv w rare amygd.  At 139.80: 15 cm FP dyke @ 35°	138.40-144.20: wkly b1 w strg perv. cc. 10% cc stwk  144.20 - 147.40 mod to locally strg b1 (ank)	tr py  At 145.15: sharp 35° sh, 3 mm cc w strg b1 and insituted bx in hw to 144.90 145.40-146.40: 5% qtz-rich vnlts w diss Asp.	1024 1025 1026 1027	143.20 144.20 144.20 144.90 144.90 145.40 145.40 146.40	1.00 0.70 0.50 1.00	.001 .001 .028 .010	0.1 0.3 0.5 0.2	42 97 1430 1756	48 34 38 45	47 46 35 43

996  
161

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
147.40 - 149.00	BEDDED CHERTY TUFF: 50% cherty bands w fg-mg tuff, bd'd @ 70°	sil: perv. cc in tuff	1% grades to 3% diss py.	1028	147.90 149.00	1.60	.001	0.3	94	61	76
	Lower cont broken @ 40°										
149.00 - 151.15	ALTERED MSV BAS msv, primary txt masked	wk to patchy strg bl	1% grades to 3% diss py	1029	149.00 150.15	1.15	.001	0.2	99	76	58
			tight ser sh @ 30° @ 149.90	1030	150.15 151.15	1.00	.004	0.1	615	29	47
151.15 - 152.40	MSV FG TUFF + CHERTY TUFF to 151.50: vfg bedded tuff to 151.90: msv, fg tuff unsorted to 152.10: fg bed tuff to 152.40: 70% cherty banded w fg tuff all bedded @ 65°	perv. cc sil	1% grades to 2% diss py	1031	151.15 152.40	1.25	.003	0.3	155	59	76
152.40 - 171.30	MSV BAS FLOW to 164.90: fg msv- flow, veined and altered after 164.90: changes to altered mealy textured flow chl + cc										

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132

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	152.40-153.60: msv w vague tuff frags?	strg. perv cc.  153.60-155.50: mod to strg bl (ank) 10% ineg qtz vning w Asp  155.50-157.20 wk (mod) bl (ank)	152.70-152.90: 70% bull qtz w 10% cc no sulph  3% diss py Asp in qtz vning 1% diss py  155.65-155.90: 70% bull qtz (cc) @ 60°	1032  1033 1034  1035	152.40 153.60  153.60 154.60 154.60 155.50  155.50 157.20	1.20 1.00 0.90 1.70	.005  .013 .008  .001	0.1 0.4 0.8 0.1	346 344 234 48	60 42 44 21	66 53 37 54
	157.20-157.63: sil flooded w vague grdmss frags light green, sil on ank; 10% whispy ser + py		3% py best in ser whisps	1036	157.20 157.63	0.43	.007	0.2	245	22	15
	157.63-158.10: 80% bull qtz best to upper cont w ank + ser + (ch1)		1% py	1037	157.63 158.10	0.47	.008	0.3	278	45	22

JW

133

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	158.10-158.60: grey mealy text. chert with bands whispy ank + ser best at depth.	ank + ser host	2% py best w ank + ser	1038	158.10 158.60	0.50	.009	0.2	486	38	42
	158.60-159.50: mod to wk b1.		5% fine qtz-rich vnlets w Asp	1039	158.60 159.50	0.90	.013	0.3	1364	42	45
	159.50-164.40: wkly altered strg perv. cc., wk chl spots and stringers		minor py	1040	159.50 160.50	1.00	.005	0.3	97	42	49
				1041	160.50 161.00	1.00	.001	0.2	27	34	53
				1042	161.50 162.50	1.00	.001	0.2	22	37	48
			At 162.10: 2 cm cc b1 sh @ 30°	1043	162.50 163.50	1.00	.001	0.1	8	67	44
	164.40-171.30: mealy textured bands cc-rich and strg cc, spotted chl. Minor chl spotted		1044	163.50 164.40	0.90	.001	0.3	43	45	64	
	165.10-165.60: chert, cc-rich w 2% diss py. vague banding @ 80-90°		1045	164.40 165.10	0.70	.001	0.1	23	17	82	
			1046	165.10 165.60	0.50	.002	0.5	73	15	60	
			1047	165.60 166.60	1.00	.001	0.3	66	9	42	

171.30

END OF HOLE

JRW

134

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: Bill Randles Date: Feb. 16, 1987 Hole No. DM43-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lgth	Amount Present	Recovery %	Interval (m)		Core lgth	Amount present	Recovery %	Interval (m)		Core lgth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	6.33	13.56	6.33	8.23	1.90	1.77	93.0	67.97	69.95	1.98	1.93	97.0	135.64	137.77	2.13	2.09	98.0
2	13.56	20.42	8.23	9.45	1.22	1.17	96.0	69.95	71.32	1.37	1.37	100.0	137.77	139.29	1.52	1.46	96.0
3	20.42	27.47	9.45	12.19	2.74	2.48	91.0	71.32	73.46	2.14	2.14	100.0	139.29	142.34	3.05	2.89	95.0
4	27.47	35.41	12.19	14.33	2.14	2.14	100.0	73.46	75.29	1.83	1.83	100.0	142.34	145.39	3.05	3.00	98.0
5	35.41	42.60	14.33	17.37	3.04	2.95	97.0	75.29	78.33	3.04	3.00	99.0	145.39	148.44	3.05	2.89	95.0
6	42.60	49.69	17.37	20.42	3.05	2.79	91.0	78.33	81.38	3.05	2.89	95.0	148.44	151.49	3.05	2.91	95.0
7	49.69	56.70	20.42	23.47	3.05	2.96	97.0	81.38	84.43	3.05	2.92	96.0	151.49	154.53	3.04	2.84	93.0
8	56.70	63.84	23.47	26.52	3.05	2.75	90.0	84.43	87.48	3.05	3.05	100.0	154.53	157.58	3.04	2.68	88.0
9	63.84	70.76	26.52	29.57	3.05	2.36	77.0	87.48	90.53	3.05	2.97	97.0	157.58	160.63	3.05	3.05	100.0
10	70.76	77.36	29.57	32.61	3.04	2.68	88.0	90.53	93.57	3.04	2.71	89.0	160.63	163.68	3.05	2.90	95.0
11	77.36	84.56	32.61	35.66	3.05	3.01	99.0	93.57	96.62	3.05	2.92	96.0	163.68	166.73	3.05	2.77	91.0
12	84.56	91.27	35.66	38.71	3.05	2.61	86.0	96.62	99.67	3.05	2.96	97.0	166.73	169.77	3.04	2.95	97.0
13	91.27	98.51	38.71	41/87	3.05	2.90	95.0	99.67	102.72	3.05	2.79	91.0	169.77	171.30	1.53	1.40	92.0
14	98.51	105.77	41.76	42.37	0.61	0.55	90.0	102.72	105.77	3.05	3.05	100.0					
15	105.77	112.48	42.37	44.20	1.83	1.60	87.0	105.77	108.81	3.04	3.04	100.0					
16	112.48	119.48	44.20	45.57	1.37	1.37	100.0	108.81	111.86	3.05	3.00	98.0					
17	119.48	126.50	45.57	47.55	1.98	1.73	87.0	111.86	114.00	2.14	1.83	86.0					
18	126.50	133.25	47.55	50.29	2.74	2.57	94.0	114.00	116.43	2.43	2.43	100.0					
19	133.25	140.72	50.29	51.82	1.53	1.49	97.0	116.43	119.48	3.05	2.90	95.0					
20	140.72	147.73	51.82	53.95	2.13	2.08	98.0	119.48	122.53	3.05	3.05	100.0					
21	147.73	155.01	53.95	56.39	2.44	2.39	98.0	122.53	124.05	1.52	1.39	91.0					
22	155.01	162.10	56.39	59.44	3.05	2.88	94.0	124.05	127.10	3.05	2.93	96.0					
23	162.10	169.28	59.44	61.87	2.43	2.39	98.0	127.10	129.24	2.14	2.14	100.0					
H 24	169.28	171.30	61.87	63.09	1.22	1.15	94.0	129.24	130.76	1.52	1.52	100.0					
			63.09	66.14	3.05	3.00	98.0	130.76	132.59	1.83	1.72	94.0					
			66.14	67.97	1.83	1.79	98.0	132.59	135.64	3.05	2.51	82.0					

Hole No. DM48-87 Page 15 of 15

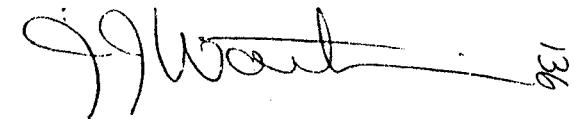
*JW*

535

Hole No. D57-87

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,040.63 Date Drilled: Feb. 25-26/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,715.79 Contractor : Coates Pajari 60.0 -57° 278° Test anomalous As and Au in  
 Length (m) : 134.41 Field Grid: Mineral Hill Logged by : J.Watkins Pajari 121.9 -55° 280° soils coincident with weak IP  
 Dip : -55° N: 19+50 Date Logged : March 10/87 -  
 Azimuth : 270° E: 10+00 -  
 Collar elev (m) 50 1080 Casing left in hole  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 7.00	CASING - left in										
7.00 - 7.36	ALTERED VC: Light creamy tan, prim. text. totally masked, lapilli? possible boulders?	intense ank + ser. + (py); some 2 mm cc vning @ 30°, 3 mm ank vn @ 45°  Lower cont sheared @ 40° in strgly oxidized rock - fault?	3% diss. py.	1811	7.00	7.36	0.36	.001	0.1	11	37
7.36 - 13.90	BROKEN BAS. A.L.T.: badly broken and oxidized; pred. L.T. to ALT intervals.	oxidized cc vn'd	No sulph.								
13.90 - 21.90	BAS. A.L.T.: juvenile aggl. frags. strongly amyg. and pheno rocks floating in L.T., unsorted.	13.90-14.60: 15% ank + cc vns to ank haloes widest @ lower cont., lower cont broken on oxidized surface.  Lower cont. broken	Minor py.	1812	13.90	14.60	0.70	.001	0.1	2	23



From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		14.60-21.90: strg. poor cc best in LT gdms.	tr. py.								
21.90 - 22.55	MSV. DB. DIKE fg, msv. typical	strg. perv. cc.  Lower cont marked by 5 cm cc vn. @ 30° centred on bleaching over 10 cm.	minor cc vning		No sulph.						
22.55 - 36.15	BAS. L.T. msv. L.T. w rare amyg. juvenile aggl. clast, unsorted to poorly sorted to depth; strgly amyg. lapilli clasts.	v. strg. perv. cc	tr. py.								
36.15 - 53.35	BAS. L.T. to T. msv. unsorted L.T. w amyg. lapilli 38.42. grade to msv. T., no bedding; rare amygd. aggl. floaters.	strg. perv. cc to 38.42-55.35: wk perv. cc.	tr. py.								

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From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
		38.42-39.45: strg. perv. ank centred on Q.C. vn from 38.75-38.95		1813 1814 1815	38.42 38.75 38.95	38.75 38.95 39.95	0.33 0.20 0.50	.016 4.895 .016	0.7 57.4 0.1	292 9170 116	55 14 37	62 351 58
		vn: qtz-rich to 38.85; to 38.95 ank (gypsum?) 1-2% vfg. py.	1% Py.									
		44.10-44.50: 20% ank vn stwk and strg. perv. ank 44.50-53.35: 5% irreg. ank vning w wk ank haloes	No sulph	1816	44.10	44.50	0.40	.044	0.1	37	12	35
53.35 - 80.60 BAS. T.A. (L.T.A.) rich in aggl. of strgly amyg + pheno-rich juvenile clasts, tuffaceous gdmss grading to frag supported msv, unsorted.	wk to patchy strg. perv. cc, scattered cc vns most @ 45°	tr. py.										
	53.40-53.80: 30% ank stwk @ 40°											

99W

83

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm		
			61.46-61.60: cc-rich bx vn; crmy white frags in pale grey gdms cont sharp @ 55°										
		68.47-69.65: strg. ank + ser. + py w qtz vns cond. sh.	At 68.47: upper cont 1817 bound by 30 m Q+cc 1818 vn @ 80° From 68.77-68.88: bone qtz flooded w vague frags. At 69.00: 3 cm cc + sulph whisps @ 80° At 69.30: 5 cm cc + qtz + sulph whisp sh @ 80° At 69.65: sharp tight sh @ 75°	1817 1818	68.47 69.00	69.00 69.65	0.53 0.65	.089 .073	4.8 4.5	7947 5211	54 49	66 77	
78.40-78.55:	large stubby fds-rich frags possibly intruded by fg intermediate dike.				1819	69.65	70.65	1.00	.002	0.1	20	52	61

JRW

139

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	78.55-79.35: fg. to mg. inter. dyke w chilled conts; upper cont sharp @ 10-15°, lower cont. broken.	strg. perv. cc; wk p.	no sulph.								
	79.35-80.60: stubby fels-rich, mg w fels-rich gdmss, some clasts fg. chilled, others strgly amygd. Lower cont. sharp. 5 cm cc vn (sh) @ 40°	minor gdmss cc.	no sulph.								
80.60 - 128.17	BAS - TLA juvenile strgly amyg. agg. clasts floating in lapilli (tuff); amyg. content of individual clasts highly variable.	strg. perv. cc. in gdmss	tr. py in some clasts.								
	95.00-105.29: 10-15% patchy and vn'd cc.										
	NOTE!: At 94.80: prob. 7 cm clasts of pyritic altered (sil) felsic (10% vfg. py) conts sharp.	strg. perv. cc.	Py-rich sil clast @ 94.80. No sulph.								
	105.25-106.50: fg. dk grn db dyke, upper cont vague, lower cont broken @ 30°										

JRW

dh

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		107.40-107.66: bl (ank + ser + py) centred on 5 cm qtz-rich vn; cont. gradational.	qtz-rich vn @ 107.60, 5 cm @ 45°, broken contacts, 5% diss. py in vn and wall rk.	1820 106.50 107.40 0.50 1821 107.40 107.66 0.26 1822 107.66 108.66 1.00 1823 108.66 109.70 1.04 1824 109.70 110.80 1.10 1825 110.80 111.80 1.00	.004 .185 .008 .001 .001 .001	26 3.0 0.1 0.1 0.1 0.1	40 881 35 6 4 14	64 40 37 53 46 48	40 38 45 69 62 72	64	
		111.80-112.40: bl (ank + ser + py) centred on 7 cm qtz vn; conts gradational	qtz-rich vn @ 112.15, 7 cm @ 60° broken conts, 5-7% diss py in wall rk, 2% py in vn.	1826 111.80 112.40 0.60	.033	0.9	1967	29	41		
115.42-117.40:	inter (db?) dyke, fg w scattered 1 mm fels, conts sharp @ 50°	wk-mod perv. cc.	No sulph.	1827 112.40 113.40 1.00 1828 113.40 114.40 1.00 1829 114.40 115.42 1.02	.001 .001 .001	0.1 0.1 0.1	56 7 2	47 49 54	69 71	64	
117.40-128.17:	T.L.A. as before w some frags w amygd to 5mm.	5% cc vn'd.	Minor sulph.								
128.17 - 131.60	ALTERED, QTZ VN'D T.L.A. Primary features masked by qtz vning and alt.	Lower cont. sharp, fault bound @ 40°									

JH

1/1

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu	Zn	
			128.17-128.25: dk cc-rich gouge @ 40°	1830	127.17 128.17	1.00	.004	0.2	422	52	68	
			128.25-128.60: qtz vn, broken; VG (5 specks)	1831	128.17 128.60	0.43	1.367	9.3	1538	14	21	
			128.60-129.40 bl (ank+ser+py) amyg. agg1. cut by 10% 5mm qtz vns @ 45°	5% diss. Py.	1832	128.60 129.40	0.80	.111	2.2	4972	39	44
			129.60-130.25: strg. perv. ank+ser+py, broken.	129.40-129.60: qtz-rich vn, broken @ 40°, 20% py-rich wall rk frags.	1833	129.40 130.25	0.85	.052	0.9	1337	39	49
				5-7% diss. py.								
				130.25-130.80: broken qtz-rich vn, poorly banded @ 40°, 10% ank+ser wall rk, 5-7% diss. py.	1834	130.25 131.60	1.35	.057	1.2	4232	22	34

JJW

241

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		130.80-131.60: strg perv. ank+ser+py, 10% irreg. qtz vns to 3 mm.	5-7% diss. py.								
131.60 - 134.42	MAFIC TL Broken core, unsorted lapilli + tuff, rare clast to 2 cm.	Lower cont. sharp @ 35°  strg. perv. cc. 10% cc vn'd.	Minor py.	1835	131.60 132.60	1.00	.021	0.7	518	50	64
134.42	END OF HOLE	Hole stopped due to broken and hole squeezing.									

HOLE NO. DM57-87 Page 8 of 9

996

143

Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: Bill Randles Date: Mar. 17, 1987

Hole No. DM57-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lgth	Amount Present	Recovery %	Interval (m)		Core lgth	Amount present	Recovery %	Interval (m)		Core lgth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	7.00	15.71	7.00	7.62	0.62	0.62	100.0	74.98	78.02	3.04	2.95						
2	15.71	24.60	7.62	9.14	1.52	1.07		78.02	81.08	3.06	2.94						
3	24.60	31.82	9.14	10.37	1.23	0.81		81.08	84.12	3.04	3.04						
4	31.82	38.99	10.37	14.02	3.65	1.73		84.12	87.17	3.05	2.92						
5	38.99	45.90	14.02	17.07	3.05	1.69		87.17	90.22	3.05	2.96						
6	45.90	52.56	17.07	19.50	2.43	2.21		90.22	93.27	3.05	2.94						
7	52.56	59.40	19.50	23.16	3.66	2.92		93.27	96.31	3.04	3.55						
8	59.40	66.51	23.16	26.21	3.05	2.94		96.31	98.14	1.83	2.26						
9	66.51	73.78	26.21	29.27	3.06	2.78		98.14	101.19	3.05	2.17						
10	73.78	80.96	29.27	32.31	3.04	2.93		101.19	103.02	1.83	1.83	100.0					
11	80.96	88.03	32.31	35.36	3.05	3.01		103.02	105.46	2.44	2.31						
12	88.03	95.45	35.36	38.40	3.04	2.84		105.46	107.28	1.82	1.59						
13	95.45	101.40	38.40	41.45	3.05	3.05	100.0	107.28	108.50	1.22	0.95						
14	101.40	109.20	41.45	44.50	3.05	3.05	100.0	108.50	110.99	2.49	3.29						
15	109.20	116.50	44.50	46.02	1.52	1.57		110.99	112.16	1.17	1.17	100.0					
16	116.50	123.15	46.02	47.55	1.53	1.43		112.16	114.60	2.44	2.44	100.0					
17	123.15	129.86	47.55	50.30	2.75	2.75	100.0	114.60	116.43	1.83	1.74						
H 18	129.86	134.33	50.30	53.34	3.04	3.04	100.0	116.43	119.30	2.87	2.87	100.0					
			53.34	56.08	2.74	2.66		119.30	121.30	2.00	2.00	100.0					
			56.08	58.22	2.14	2.14	100.0	121.30	122.50	1.20	1.20	100.0					
			58.22	61.26	3.04	3.04	100.0	122.50	123.70	1.20	1.14						
			61.26	62.79	1.53	1.49		123.70	126.80	3.10	3.10	100.0					
			62.79	65.83	3.04	2.94		126.80	129.80	3.00	3.00	100.0					
			65.83	68.88	3.05	2.90		129.80	132.80	3.00	2.70						
			68.88	71.93	3.05	2.97		132.80	134.41	1.61	1.53						
			71.93	74.98	3.05	3.05	100.0										

Hole No. DM53-87 Page 9 of 9

J96

hhl

Co: WESTMIN RESOURCES LTD. Map Grid N: 10,040.63 Date Drilled: Feb. 26-28/87 Survey Type Depth Dip Azi Objective/Comments:  
 Project: DEBBIE E: 10,716.20 Contractor: Coates Pajari 14.6 -70° 278° Test gold veins reported in  
 Length (m) : 171.31 Field Grid: Mineral Hill Logged by: J.Watkins Pajari 162.1 -69° 280° DM57-87  
 Dip : -68° Date Logged: March 10-11/87 - -  
 Azimuth : 270° - Casing left in hole  
 Collar elev (m) 50 1080  
 Core size : BQ

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
0 - 11.00	CASING - left in										
11.00 - 12.85	AMYG. BAS. T.L.A. Broken, pred. juvenile amygd. agg1. Lower cont. broken	Perv. cc.	no sulph.								
12.85 - 14.45	OX'D SH. broken, oxidized, primary features masked, cc vn'd.	cc-rich strg. oxidized.	no sulph.								
14.45 - 15.60	BAS. T.L. msv. unsorted, rare amyg-rich juvenile clast to 2 cm. Lower cont sharp oxidized shear @ 35°	perv. cc	no sulph.								
15.60 - 16.77	AMYGD. MAFIC FLOW? msv. w large cc filled amyg to 3 mm, possible aggl. with no gdmss. Lower cont. broken	mod. perv. cc.	tr. py.								

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm	
16.77 - 29.25	BAS L.T.: msv. unsorted, v. rare 1-2 cm amyg. juvenile clast.	strg. to mod. perv. cc, scattered 5 mm to 1 cm cc (qtz) vns @ 20-30° At 22.55: 15 cm b1 (ank) w 20% cc vn @ 40°	At 19.80: broken oxidized shear @ 20°									
	Lower cont. broken.											
29.25-29.85	INTER DIKE: badly broken, some F.P.	No perv. cc.	No sulph									
29.85 - 78.00	BASALT T.L.A. pred. juvenile, amyg. aggl. in lapilli + tuff gdnss, msv, unsorted, through.	strg. to mod. perv. cc.	pred. sulph free									
		40.35-40.55: ser + ank haloe on qtz-rich vn.	40.40-40.50: qtz-rich vn @ 75° with 20% Asp as two bands to 1 cm, at cont between Asp. band and qtz+cc vn host one 1 mm speck of VG.	1836 1837 1838 1839 1840	38.35 39.35 40.35 41.35 42.35	39.35 40.35 41.35 42.35	1.00 1.00 1.00 1.00 1.00	.001 .001 .608 .182 .944	0.1 0.1 2.6 3.2 2.0	11 31 12250 1128 8212	47 51 74 95 67	75 65 81 82 92
		At 40.85: 4 cm qtz(cc) vn @ 80° w Asp over 5 mm at lower cont.										

JJ. W

191

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
			2 specks of VG								
			At 41.95: 2 cm grey qtz vn @ 65° w 2 speck vfg VG.								
			42.60-42.70: 30% qtz stwk @ 60° w vfg. Asp.	1841	43.35	44.85	1.50	.001	0.2	19	51
				1842	44.85	46.35	1.50	.001	0.1	16	51
				1843	46.35	47.85	1.50	.001	0.2	44	47
				1844	47.85	49.35	1.50	.002	0.2	45	56
				1845	49.35	50.85	1.50	.001	0.3	8	54
				1846	50.85	52.35	1.50	.002	0.1	10	49
				1847	52.35	53.85	1.50	.001	0.2	6	48
				1848	53.85	55.35	1.50	.005	0.1	28	42
			43.05-43.35: b1(ank) centred on 3 tight shears @ 60°								
			71.10-71.60: qtz- rich banded (@75°) vn w cc-rich upper and lower conts to 3% diss. Py, conts sharp @ 80°								
			71.60-71.83: ser + ank + Py alt VC text. vague.	1849	70.10	71.10	1.00	.001	0.1	14	41
				1850	71.10	71.95	0.85	.043	0.6	1540	10
			71.83-71.95: qtz-rich banded vn @ 80°; lower cont marked by 5 mm gouge @ 80°								



Lhl

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		71.95-73.00: strg grading to wkly bl(ank) 5% irreg. cc. vning.	71.95-73.00: 5% grading to 1% diss. py.	1851 1852	71.95 73.00 73.00 74.00	1.05 1.00	.014 .001	1.2 0.1	1592 15	57 48	100 60
		73.00-77.20: 15% cc vn'd to msv cc vn @ 76.00 - 15 cm @ 76.75 - 15 cm. both @ 40°	perv. cc.								
	Lower cont sharp sh @ 30°		77.20-78.00: crushed and bleached @ 30°, no sulph.	1853	77.20 78.00	0.0	.001	0.1	6	13	21
78.00 - 131.25	BASALT (A) T.L. msv. unsorted with scattered juvenile blocks, distinctly amygd, to 25 cm.	5% scattered cc vns @ 45° + 30° wk to mod. patchy perv. cc.	no sulph.								
	aggl.-rich to grad contacts from 96.00 to 98.50; 101.50 to 102.00, 104.50 to 109.00.	120.15 - 120.25: bl(ank+ser+py)	At 80.20: 5 cm cc sh @ 35° At 91.45: 2 cm cc sh @ 60° 120.25-120.50: qtz-rich vn @ 30° to 1% vfg pv, in situated bx at low cont. to cc filling	1854 1855 1856	119.15 120.15 120.15 121.25 121.25 122.25	1.00 1.10 1.00	.002 .012 .001	0.1 0.7 0.1	87 423 7	52 51 47	81 53 74

JW  
SP

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		120.50-121.25: med. to 1. (ank)	3% diss. py.	1857	122.25	123.75	.1.50	.001	0.1	8	44
				1858	123.75	124.75	1.00	.001	0.1	10	55
				1859	124.75	125.60	0.85	.001	0.1	10	67
		125.60-126.00: med b1 on strg. sh.	At 125.70: 5 cm py- rich cc sh @ 45°	1860	125.60	126.60	1.00	.011	1.0	1109	43
				1861	126.60	127.25	0.65	.002	0.3	1465	54
				1862	127.25	128.35	1.10	.002	0.3	180	52
		126.60-126.70: wk to med. b1.	5% diss. py.								83
			126.70-127.25: 3% diss. py.								
			At 127.25: 2 cm QC vn @ 60°								
		128.35-128.40: b1 w 5% py.	128.40-128.55: flt bx. 5 cm gouge at lower cont. 50% cc + qtz clasts in dk go. all @ 50°								
			128.55-128.90: qtz- rich vn @ 50°, 1% vfg py.	1863	128.35	128.90	0.55	.838	1.7	1900	15
											20

JW  
6/14

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
		128.90-129.95: strg. bl (ser-rich + ank); poss. alt hydro frac, 10 cm of 50% patchy cc at lower cont.	5% diss. py.								
				1864	128.90 129.95	1.05	.037	2.2	3296	48	58
			129.75-129.95: broken qtz-rich vn, 2% fg. py.								
		129.95-131.25: strg. to mod. bl (ank+ser +py)	5% diss. py; qtz vns @ 75° @: 130.22 - 1 cm 130.53 - 4 cm 130.82 - 4 cm 130.97 - 1 cm	1865	129.95 131.25	1.30	.035	1.7	4507	34	49
		contact between unit above and unit below prob. fault bound in vn and alt. interval above.									
131.25 - 137.05	BASALT AMYGD. AGGL. (Fbx) Juvenile aggl. frags, frag supported, strgly amyg, prob. flow bx.	wk cc; cc filled amygd; 5% cc vn'd	no sulph.  At 137.05: fault go, broken.								

961

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
137.05 - 148.75	ALTERED PXP; INTRUSIVE?  msv. w crse granular text of closely packed lapilli? vning; chl mixed w chl alt px phenos to 2 mm throu. all cut by several dykes: 138.05-138.30: cc alt fg. to mg inter dyke @ 70° At 140.70: 5 cm, cc alt, fg int. dyke @ 70° 141.30-141.70(?) fg int dyke w chilled ragged upper cont., lower cont indistinct. 146.90-147.55: db(?) dyke @ 30° chilled conts. fg.-mg fds pheno core. 147.90-148.75: db or FP dyke fg w scattered fds phenos lower cont. sh @ 40°	strg. perv. cc; 5% patch cc spotted alter. px.	no sulph.  At 140.05: broken over 10 cm, oxidized frac. surfaces.								
148.75 - 151.55	CG BASALT TUFF:  msv, unsorted cg tuff, vague bedding to lower cont. @ 45° Lower cont. sharp, ragged.	mod. to wk perv. cc.	no sulph								

JL

151

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
151.55 - 152.00	AMYG BAS FLOW msv, strgly amygd, possible large blocks w minor hyd.  Lower cont. sharp @ 20°	wk perv. cc; amyg cc filled	no sulph								
152.00 - 153.00	Db (FP?) DYKE: msv, chilled contacts @ low angle, scattered 1 mm fob phenos.	strg. perv. cc.	no sulph								
153.00 - 153.40	FP AMYGD BAS: msv to both 1-2 mm fels phenos and amygdules poss. blocky flow.	wk perv. cc amyg cc filled	no sulph								
153.40 - 154.50	Db (FP?) DYKE: As before, contacts at low angle, slivers of FP + amyg. wall rk.										
154.50 - 156.15	FG LAP. ST. BASALT: fg lapilli stone w occasional juvenile amygd clasts to 1 cm. Some lap clasts felsic?? unsorted massive lower cont. trades.	no perv. cc.	no sulph								

HOLE NO. DM62-87 Page 8 of 11

JL

152

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
156.15 - 156.60	FP + AMYGD BASALT msv, distinct FP to 2 mm w amygdules, prob. blocks Lower cont. ragged, sharp.	some amygd cc filled	no sulph								
156.60 - 157.75	Db (FP) DYKE msv as before, contacts sharp, ragged @ 60° - 30°	wk cc	no sulph								
157.75 - 163.20	AMYGD BAS FLOW msv, vague fds phenos best near upper cont becomes distinctly amygd to depth.	wk - mod. perv. cc, 5% cc vn'd @ 60°	no sulph								
163.20 - 165.00	Db (FP) DYKE: msv as before, @ 20° 163.90-164: chilled Db (FP) dyke cutting Db (FP) dyke @ 40° (upper cont.) 20% lower cont.	No perv. cc.	no sulph								
	163.45-163.65: amygd lapilli tuff @ 30-40°, xenolith?										
165.00 - 170.80	AMYGD + FP FLOW as before msv w pds phenos to 2 mm and locally clustered	wk cc	no sulph								

JL

ES1

From - To (m)	Lithology	Alteration	Mineralization/ Structure	No.	Sample Interval (m)	Lgth (m)	Au opt	Ag ppm	As ppm	Cu ppm	Zn ppm
	cut along edge of core vn several places by db dyke.										
170.80 - 171.30	Db (FP) DYKE as before, upper cont. broken.	Non	No sulphides								
171.30	END OF HOLE										



Co: WESTMIN RESOURCES LTD.

Project: DEBBIE

Logged by: Bill Randles Date: Mar. 17, 1987

Hole No. DM62-87

## Core boxes

## Core Recovery

Box No	Interval (m)		Interval (m)		Core lghth	Amount Present	Recovery %	Interval (m)		Core lghth	Amount present	Recovery %	Interval (m)		Core lghth	Amount Present	Recovery %
	From	To	From	To				From	To				From	To			
1	10.90	17.39	10.90	11.28	0.38	0.25	66.0	70.10	72.24	2.14	1.79	84.0	140.36	142.34	1.98	1.98	100.0
2	17.39	23.99	11.28	12.34	1.06	0.92	87.0	72.24	75.29	3.05	3.00	98.0	142.34	145.40	3.06	2.99	98.0
3	23.99	31.55	12.34	14.02	1.68	1.54	92.0	75.29	78.33	3.04	3.04	100.0	145.40	148.43	3.03	3.03	100.0
4	31.55	39.50	14.02	16.76	2.74	2.60	95.0	78.33	81.38	3.05	3.05	100.0	148.43	150.20	1.77	1.85	105.0
5	39.50	46.91	16.76	17.98	1.22	1.12	92.0	81.38	83.97	2.59	2.49	96.0	150.20	153.16	2.96	2.72	92.0
6	46.91	53.95	17.98	18.89	0.91	0.91	100.0	83.97	86.87	2.90	2.90	100.0	153.16	154.50	1.34	1.37	102.0
7	53.95	61.03	18.89	19.81	0.92	0.53	58.0	86.87	88.70	1.83	1.87	102.0	154.50	157.60	3.10	2.99	96.0
8	61.03	68.05	19.81	21.03	1.22	1.15	94.0	88.70	90.53	1.83	1.73	95.0	157.60	160.60	3.00	3.00	100.0
9	68.05	74.74	21.03	22.25	1.18	1.18	100.0	90.53	93.57	3.04	2.95	97.0	160.60	163.70	3.10	2.96	95.0
10	74.74	81.73	22.25	23.47	1.22	1.05	86.0	93.57	96.62	3.05	3.12	102.0	163.70	166.72	3.02	2.94	97.0
11	81.73	88.50	23.47	26.52	3.05	2.47	81.0	96.62	99.67	3.05	3.00	98.0	166.72	169.80	3.08	2.98	97.0
12	88.50	95.52	26.52	29.57	3.05	2.66	87.0	99.67	102.72	3.05	3.02	99.0	169.80	171.30	1.50	1.43	95.0
13	95.52	102.72	29.57	32.61	3.04	2.51	83.0	102.72	105.77	3.05	2.93	96.0					
14	102.72	110.12	32.61	35.66	3.05	2.62	86.0	105.77	108.81	3.04	3.01	99.0					
15	110.12	117.25	35.66	38.71	3.05	2.87	94.0	108.81	111.86	3.05	3.05	100.0					
16	117.25	124.56	38.71	41.76	3.05	2.86	94.0	111.86	114.91	3.05	1.83	96.0					
17	124.56	130.95	41.76	44.81	3.05	3.05	100.0	114.91	117.95	3.04	2.88	95.0					
18	130.95	137.70	44.81	47.85	3.04	2.98	98.0	117.95	121.00	3.05	2.91	95.0					
19	137.70	144.47	47.85	50.90	3.05	3.01	99.0	121.00	124.05	3.05	3.83	93.0					
20	144.47	151.37	50.90	53.95	3.05	3.05	100.0	124.05	127.10	3.05	3.21	105.0					
21	151.37	158.58	53.95	57.00	3.05	2.99	98.0	127.10	130.15	3.05	3.14	103.0					
22	158.58	165.74	57.00	59.89	2.89	2.80	97.0	130.15	131.81	1.66	1.66	100.0					
23	165.24	171.23	59.89	62.94	3.05	2.95	97.0	131.81	133.20	1.39	1.39	100.0					
			62.94	65.99	3.05	3.05	100.0	133.20	136.24	3.04	3.04	100.0					
			65.99	69.04	3.05	3.13	103.0	136.24	137.92	1.68	1.68	100.0					
			69.04	70.10	1.05	1.21	114.0	137.92	140.36	2.44	2.44	100.0					

Hole No. DM62-87 Page 11 of 11

*JL*

### 3. DISCUSSION AND CONCLUSIONS

Twelve BQ diamond drill holes, totalling 1 687.9m, tested two zones. The Mineral Creek fault zone (DM9-43) is a complex system of alteration, brecciation and structural movement with associated disseminated pyrite and arsenopyrite. Drilling was done east to west across the north-trending structure with a steep east dip. The east side shows progressive ankerite-sericite-silica alteration of basalt volcanics approaching the fault. The fault is represented by cataclastic and gougey breccias, which include milled siliceous clasts (chert?). The west side is schistose basalts flows. The degree of a schistosity decreases rapidly away from the main structure.

Gold and arsenic mineralization is associated with quartz-calcite veining and sulfide disseminations most prominently developed in the fault zone. Values to 0.15 oz/t Au and 3,000 ppm As occur. Au is more erratically distributed in the east block and generally increases with the degree of alteration. West of the fault, gold decreases rapidly to only geochemically anomalous values, less than 0.01 oz/t.

A second zone, the Linda zone, was encountered in DM57 and 63. It consists of several quartz-calcite veins with visible gold, assaying up 0.944 oz/t over 1.0m. Basalt volcanoclastic wall rocks are ankerite-silica altered only less than a meter from the veins. The veins dip moderately to the east on section. These are probably the same series of veins mined on the Yellow claim, immediately to the south, by Vancouver Island Gold Mines Ltd. in the 1930's.

In conclusion, the presence of well-defined and broad structures carrying gold make this an encouraging area for further drilling. The nature of offset(s) along the fault is still not resolved. Detailed mapping plus drilling will help to resolve the problem.

4. ITEMIZED STATEMENT OF COSTS

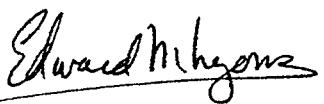
A. <u>Geology</u>	\$
John J. Watkins-drill supervision and core logging: 3-11/12/87; 21-31/01/87; 1-7, 14-19, 25-28/02/87; 10-13/03/87: total 40 days      40 days @ \$200.00/day	8,000.00
J. Garfield MacVeigh - core logging: 16-20/12/86 5 days 5 days @ \$200.00/day	1,000.00
Support: 45 days (see above) @ \$30.00/day	<u>1,350.00</u>
	10,350.00
B. <u>Transportation</u>	
Long Beach Helicopters Ltd. 24.1 hours @ \$534.60/hr	<u>12,884.00</u>
	12,884.00
C. <u>Drilling Charges</u>	
D.W. Coates Enterprises Ltd.      1687.9m	<u>137,873.00</u>
	137,873.00
D. <u>Analytical Costs</u>	
Acme Analytical Laboratories Ltd. 201 Au (fine assay) + As geochem @ \$13.25 each	2,663.00
485 Au (fire assay) + 30 element ICP @ \$17.50 each	8,488.00
<u>686 samples</u>	
Sampling: D. Boyd 686 samples at 33 samples/day = 21 days      21 days @ \$75.00/day	<u>1,575.00</u>
	12,726.00
E. <u>Assessment Report Preparation</u>	
Edward Lyons 15-19/07/87 5 days @ \$265.00/day	1,325.00
Typing, collating, copying, binding	<u>250.00</u>
	1,575.00
F. <u>Total Costs</u>	\$175,408.00
G. <u>Total Costs Applied for Assessment Credit</u>	\$164,700.00

5. STATEMENT OF QUALIFICATIONS

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

1. I am a graduate of the University of Missouri at Rolla, Rolla, Missouri, with a B.Sc. (Honours) in Geology in 1970. I did one year of graduate studies in economic geology at the University of Toronto in 1973.
2. I have practiced my profession since 1970.
3. I have been a practicing consulting geologist since 1976.
4. I personally have overseen the drilling on the China claim group.

16 July 1987  
Courtenay, B.C.

  
Edward M. Lyons

6. REFERENCES

Benvenuto, G. (1980) Results of geologic, geochemical soil, and induced polarization surveys on the McLaughlin Ridge property, Port Alberni, Vancouver, B.C., 1980 (Sicker-Debbie project); Westmin Resources Ltd., unpublished company report.

Jones, D.L., Silberling, N.J. and Hillhouse, J.W. (1977) Wrangellia - A displaced terrane in northwestern North American; Can. Jour. Earth. Sci., Vol. 14, pp. 2565-2577.

Kerrich, R., and Fyfe, W.S. (1981) The gold-carbonate association: Source of CO<sub>2</sub>, and CO<sub>2</sub>-fixation reactions in Archean lode deposits; Chem. Geology, V.33, pp. 265-294.

Muller, J.E. (1980) The Paleozoic Sicker Group of Vancouver Island, B.C.; Geol. Surv. Can. Pap. 79-30.

Stevenson, J.S. (1945) Geology and ore deposits of the China Creek area, Vancouver Island, B.C.; Annual Report of the Minister of Mines, 1944, pp. A143-A161.

Walker, R.R. (1985) Westmin Resources' massive sulphide deposits, Vancouver Island in Mineral Deposits of Vancouver Island by J. Fleming, R. Walker, and P. Wilton. GAC-MAC-CGU Field Trip Guidebook Trip 9, May 13-16, 1983.

## **APPENDIX 1**

### **Analytical Results of Core Samples**

ACME ANALYTICAL LTD.  
FILE NO.

DRILL HOLE

SAMPLE NOS.

DM 9-86	3353-3366 3367-3394 3395-3400 3451-3463	87-0033A and 87-0033AR 87-0045A and 87-0045AR 87-0050
DM 12-86	3301-3327 3302,03,5,7,10,12,14,16,20,21 3324-3327 3328-3352	86-4049A 86-4049AR 87-0033A
DM 15-86	3464-3480 3481-3510 3511-3551 3519,29,32,34,42,46	870050 and 870050R 870062A and 87-0062AR 87-0069A 87-0069AR
DM 29-87	3883-3931	87-0261
DM 32-87	1393-1467	87-0353
DM 35-87	1468-1491 1492-1595	87-0382 87-0388A
DM 36-87	3932-3941 3940-3941 3942-3968	87-0388A 87-0388AR 87-0397A
DM 38-87	1701-1707 1596-1635 1636-1647	87-0637A 87-0497 87-0547
DM 42-87	3969-3982 3983-4000 1351-1355 1385-1390 1368-1384 1356-1367	87-0397A 87-0416A 87-0334 87-0322

<u>DRILL HOLE</u>	<u>SAMPLE NOS.</u>	<u>ACME ANALYTICAL LTD. FILE NO.</u>
DM 43-87	1881-1883 1884-1900 1004-1010 1011-1034 1035-1047	87-0804 87-0820  87-0849 87-0871
DM 53-87	1748-1758 1759-1793 1794-1810	87-0658 87-0671 87-0692
DM 57-87	1811-1822 1823-1830 1831-1835 1813-1818 & 1821	87-0692 87-0744 87-0658A 87-0692R
DM 62-87	1836-1840 1841-1858 1859-1865 1863-1865	87-0658A 87-0751 87-0779 87-0779R

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0033A

PAGE 2

SAMPLE#	As PPM	Au** OZ/T
3343	114	.008
3344	383	.029
3345	567	.048
3346	418	.112
3347	497	.093
3348	985	.045
3349	465	.031
3350	93	.010
3351	106	.003
3352	72	.001
3353	1144	.004
3354	593	.045
3355	2559	.051
Dm9	3356	.005
	3357	.027
V <sup>1</sup>	3358	.059
	3359	.005
	3360	.303
	3361	.005
	3362	.023
	3363	.039
	3364	.112
	3365	.047
	3366	.009
	STD C	40

RCME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED FEB 18 1987

852 E. HASTINGS, VANCOUVER B.C.

FAX(604)253-3158 COMPUTER LINE:251-1011

DATE REPORTS MAILED

Feb 27/87

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0033A R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3353	370	.010	ND	.010
3354	460	.024	ND	.024
3355	510	.033	ND	.033
3358	530	.069	.22	.081
3359	400	.005	ND	.005
Dm9				
3360	330	.288	.39	.323
3362	500	.022	ND	.022
3363	70	.212	.21	.294
3365	530	.050	ND	.050

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Tr,Ce,Sn,Y,Nb AND Ta. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: *Feb 25/87* ASSAYER... *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES FILE # 87-0033A R

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
3353	1	44	9	58	.3	56	18	1077	3.79	1144	5	ND	4	251	1	2	2	50	9.00	.102	5	95	1.68	36	.01	5	1.82	.01	.14	1
3354	1	56	8	51	1.1	98	22	859	4.07	593	5	ND	6	311	1	2	2	35	10.39	.123	6	104	2.29	28	.01	5	1.33	.01	.17	1
3355	1	37	7	77	.8	27	12	695	4.22	2559	5	2	3	193	1	5	2	17	5.61	.089	5	11	1.29	36	.01	8	.55	.01	.21	1
3357	1	56	10	70	1.2	315	34	1130	5.37	635	5	ND	5	428	1	2	2	123	12.38	.075	5	464	4.84	27	.01	7	3.29	.01	.05	1
3358	1	39	11	32	1.2	59	15	901	3.40	344	5	2	5	279	1	2	2	38	9.74	.087	5	68	2.21	45	.01	6	1.66	.01	.13	1
3359	1	76	6	50	.5	83	22	825	4.21	74	6	ND	4	250	1	2	2	66	6.33	.098	5	146	3.08	37	.01	5	2.62	.01	.17	1
3360	1	29	8	29	2.4	74	13	744	2.54	238	5	9	5	254	1	2	2	25	8.97	.065	5	68	1.83	37	.01	8	.94	.01	.14	1
3362	1	31	9	64	.3	28	13	860	4.14	1089	5	ND	3	157	1	2	2	19	4.85	.101	4	32	2.16	46	.01	5	1.10	.02	.21	1
3363	1	41	12	78	.6	21	14	1044	4.72	1338	5	ND	3	164	1	2	2	21	4.77	.099	4	28	1.80	41	.01	7	1.09	.02	.18	1
3365	1	15	9	93	.4	1	9	862	4.56	321	5	2	2	191	1	2	2	29	4.15	.094	3	3	.97	32	.01	7	1.57	.03	.10	1
STD C	19	61	37	129	6.9	67	27	960	3.94	40	17	7	32	47	16	15	19	61	.48	.102	34	56	.88	177	.08	35	1.72	.06	.14	13

CME ANALYTICAL LABORATORIES LTD.  
857 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 12 1987

DATE REPORT MAILED: Jan 19/87...

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0045A PAGE 1

SAMPLE#	As PPM	Au** OZ/T
2333	5	.001
3367	797	.241
3368	125	.013
3369	714	.088
3370	75	.007
3371	66	.010
3372	762	.138
3373	136	.008
3374	175	.019
3375	309	.034
3376	561	.095
3377	310	.108
Dm9 3378	483	.071
3379	577	.378
3380	476	.137
3381	715	.031
3382	992	.269
3383	159	.009
3384	1733	.152
3385	601	.017
3386	67	.016
3387	1740	.037
3388	223	.010
3389	830	.026
3390	67	.005
3391	955	.037
3392	184	.008
3393	200	.012
3394	354	.019
STD C	38	-

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
(604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 18 1987

DATE REPORTS MAILED

*Feb 25/87*

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0045A R

PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3367	550	.199	.48	.224
3368	380	.013	ND	.013
3369	430	.071	.02	.072
3372	480	.076	.40	.100
3375	370	.058	.08	.065
3376	470	.112	ND	.112
3377	260	.054	ND	.054
3378	610	.081	.02	.082
3379	500	.149	.22	.162
3380	430	.153	.25	.170
3381	470	.036	.02	.037
3382	250	.088	.03	.092
3383	490	.008	ND	.008
3384	390	.152	.31	.175
3385	460	.018	ND	.018
3386	480	.005	ND	.005
3387	540	.114	.36	.133
3388	450	.007	ND	.007
3389	430	.041	.09	.047
3391	370	.060	.08	.066

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: *Feb 25/87* ASSAYER: *D. Toye*, DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0045A R

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe PPM	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca PPM	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	W
3367	1	22	10	36	1.7	4	10	618	4.11	797	5	6	2	154	1	2	2	15	4.24	.042	3	2	.78	32	.01	5	.57	.02	.10	1
3368	2	19	9	82	.2	42	11	952	3.93	125	5	ND	4	173	1	2	2	31	5.06	.088	5	50	1.62	56	.01	6	1.71	.03	.15	1
3369	2	36	12	65	1.0	6	12	934	5.00	714	5	2	4	236	1	2	2	14	6.70	.072	4	1	1.08	35	.01	9	.69	.02	.16	1
3372	1	28	9	61	.9	2	12	971	4.53	762	5	2	4	241	1	2	2	12	7.16	.062	3	1	1.11	36	.01	4	.46	.02	.14	1
3375	2	42	6	58	.6	9	8	526	3.78	309	5	ND	2	120	1	2	2	14	3.22	.038	3	8	.73	39	.01	3	.81	.02	.10	1
3376	2	19	18	30	1.6	8	7	887	4.51	561	5	2	5	250	1	2	2	6	7.18	.047	4	2	.59	36	.01	4	.37	.02	.13	1
3377	2	35	9	38	.8	2	6	1282	2.64	310	5	2	6	634	1	2	2	5	18.30	.040	3	1	.62	56	.01	4	.37	.02	.14	1
3378	2	20	6	61	.9	1	9	1094	3.82	483	5	2	4	190	1	2	2	6	6.79	.079	3	1	1.24	46	.01	4	.36	.02	.15	1
3379	2	24	7	40	3.1	4	7	1271	3.06	577	5	10	5	272	1	2	2	7	8.62	.064	3	1	1.36	43	.01	2	.31	.02	.14	1
3380	1	15	13	'81	1.5	4	13	786	4.64	476	5	5	4	125	1	2	2	28	3.95	.081	3	3	1.38	63	.01	4	1.28	.02	.19	1
3381	1	44	8	65	.6	76	22	716	3.80	715	5	ND	5	234	1	2	2	52	8.18	.058	3	100	1.90	57	.01	11	1.68	.03	.13	1
3382	1	18	5	21	.9	24	7	728	2.56	992	5	3	5	393	1	2	2	19	11.49	.038	3	30	.60	57	.01	6	.60	.01	.09	1
3383	1	54	8	55	.3	68	19	600	3.65	159	5	ND	5	195	1	2	2	64	9.11	.046	3	106	2.03	43	.01	6	1.79	.02	.10	1
3384	2	18	4	38	1.1	49	13	746	3.05	1733	5	3	5	259	1	2	2	13	8.96	.042	3	22	1.71	43	.01	2	.41	.01	.12	1
3385	1	52	8	56	.1	67	20	750	3.73	601	5	ND	5	325	1	2	2	44	10.82	.086	5	93	2.40	49	.01	2	1.54	.02	.11	1
3386	1	46	2	61	.1	49	17	641	3.41	67	5	ND	6	214	1	2	2	38	7.56	.076	7	64	2.21	79	.01	5	1.80	.02	.14	1
3387	2	32	7	32	.6	60	15	813	3.10	1740	5	ND	5	273	1	2	2	18	9.53	.043	4	39	2.47	47	.01	5	.67	.01	.15	1
3388	2	38	6	48	.2	45	17	674	3.65	223	5	ND	4	206	1	2	2	35	6.87	.057	6	48	2.51	56	.01	9	1.72	.02	.14	1
3389	3	18	8	29	.4	27	10	576	2.77	830	5	ND	4	185	1	2	2	11	6.32	.073	5	9	1.19	53	.01	3	.64	.01	.13	1
3391	2	35	5	48	.2	39	15	739	3.02	955	5	ND	4	211	1	2	2	18	7.07	.063	5	21	1.88	55	.01	7	.93	.02	.14	1
STD C	21	60	39	141	7.1	67	29	983	3.94	38	21	8	34	49	16	15	21	62	.46	.101	35	55	.88	184	.09	35	1.71	.06	.15	13

^CME ANALYTICAL LABORATORIES LTD.  
52 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 12 1987

DATE REPORT MAILED:

Jan 15/87

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0050

PAGE 1

SAMPLE#	As PPM	Au** OZ/T
3395	432	.063
3396	85	.011
3397	185	.022
3398	158	.012
3399	144	.010
3400	165	.015
3451	461	.139
3452	301	.076
Dm9 3453	572	.038
3454	524	.017
3455	736	.015
3456	383	.006
3457	84	.001
3458	69	.001
3459	110	.003
3460	37	.001
3461	53	.001
3462	42	.001
3463	38	.001
3464	11	.001
3465	23	.001
3466	22	.022
3467	130	.011
3468	263	.017
Dm15 3469	210	.049
3470	332	.038
3471	243	.021
3472	553	.039
3473	266	.036
3475	70	.005
3476	11	.001
3477	156	.024
3478	292	.058
3479	124	.073
3480	212	1.290

STD C

39 -

ACME ANALYTICAL LABORATORIES LTD.  
752 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
HOME 253-3158 DATA LINE 251-1011

DATE RECEIVED: DEC 22 1986

DATE REPORT MAILED:

Jan. 6/87....

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE Au\*\* ANALYSIS BY FA+AA

ASSAYER: *D. Toye*, DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 86-4049A

PAGE 1

SAMPLE#	As PPM	Au** OZ/T
2219	298	.001
2220	479	.004
2221	76	.002
2222	24	.001
2223	38	.001
2224	34	.028
2225	82	.004
2226	2070	.311
2227	1022	.113
2228	124	.001
2229	217	.001
2230	9	.001
2231	9	.001
2232	5	.001
2233	2	.001
2234	2	.001
2235	2	.001
2236	4	.001
2237	327	.001
2238	10	.001
3163	14	.001
3164	24	.006
3165	261	.061
3166	252	.091
3167	73	.013
3168	23	.001
3204	120	.039
3205	44	.002
3206	50	.005
3207	155	.006
3208	111	.011
3209	68	.001
3210	342	.006
3301	121	.008
3302	152	.032
3303	259	.022
STD C	38	-

WESTMIN RESOURCES

PROJECT - DEBBIE FILE# 86-4049A

PAGE - 2

SAMPLE#	As PPM	Au** OZ/T
3304	138	.037
3305	135	.015
3306	167	.004
3307	442	.051
3308	443	.026
3309	72	.001
3310	91	.021
3311	224	.018
3312	2009	.019
3313	261	.004
3314	1587	.036
3315	674	.031
3316	290	.039
3317	384	.029
3318	422	.032
3319	433	.023
3320	253	.044
3321	2938	.017
3322	699	.023
3323	122	.001
3324	1032	.078
3325	451	.265
3326	98	.009
<u>3327</u>	112	.036
STD C/AU-R	37	-

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH JML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: *Feb 25/87* ASSAYER... *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER.

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 86-4049A R

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe PPM	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca PPM	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	R PPM	Al PPM	Na PPM	K PPM	
3165	2	14	8	59	.8	4	5	686	2.61	261	5	2	1	132	1	2	2	7	3.47	.056	5	1	.59	45	.01	2	.65	.08	.11	1
3166	1	19	11	59	1.2	4	6	706	3.09	252	5	3	2	168	1	2	2	7	3.89	.064	5	3	.66	48	.01	3	.64	.06	.13	1
3167	1	27	8	54	.5	6	6	787	2.75	73	5	ND	2	192	1	2	2	15	4.91	.055	6	6	.85	41	.01	2	1.09	.07	.09	1
3204	3	52	6	70	.4	10	11	608	3.56	120	5	ND	2	94	1	2	2	18	2.51	.064	4	7	1.02	59	.01	5	1.12	.07	.15	1
3302	2	38	9	69	.7	13	8	695	3.90	152	5	ND	2	117	1	2	2	28	3.09	.097	6	17	.82	55	.01	2	1.35	.08	.12	1
3303	2	11	5	55	.5	6	6	848	3.67	259	5	ND	2	157	1	2	2	14	4.22	.071	5	8	.79	66	.01	2	1.23	.07	.14	1
3305	1	22	8	52	.4	3	5	536	2.71	135	5	ND	2	88	1	2	2	10	2.50	.051	5	2	.55	66	.01	3	.97	.05	.16	1
3307	5	16	9	46	1.1	8	7	381	3.35	442	5	2	1	63	1	2	2	9	2.15	.071	4	4	.47	41	.01	3	.72	.06	.16	1
3310	4	29	5	62	.5	12	7	685	3.35	91	5	ND	2	120	1	2	2	35	4.07	.090	5	13	.91	35	.01	2	1.36	.06	.10	1
3312	2	26	10	72	.6	10	10	763	3.56	2009	5	ND	2	126	1	2	2	7	4.07	.069	3	1	1.11	41	.01	3	.37	.06	.17	1
3314	2	40	9	77	.8	23	15	945	4.78	1587	5	ND	1	165	1	2	3	13	5.31	.082	3	8	1.75	49	.01	2	.46	.07	.20	1
3316	1	42	8	58	.6	17	13	849	3.32	290	5	ND	1	184	1	2	2	14	5.47	.068	3	7	1.52	53	.01	4	.64	.07	.16	1
3318	3	39	10	63	1.2	330	34	1510	5.17	422	5	ND	1	365	1	6	4	51	13.29	.125	5	222	5.95	30	.01	2	1.55	.09	.08	1
3320	2	46	10	51	1.0	14	12	752	3.88	253	5	ND	2	228	1	2	2	27	7.19	.068	4	9	1.17	44	.01	2	1.29	.07	.14	1
3321	1	35	9	54	.5	10	7	467	3.11	2938	5	ND	2	71	1	3	2	10	2.22	.084	5	5	.71	44	.01	4	.74	.05	.17	1
3324	2	50	7	64	1.1	11	10	953	3.61	1032	5	ND	1	147	1	2	2	7	5.32	.064	2	1	1.34	45	.01	2	.29	.06	.16	1
3325	2	54	9	82	2.9	8	13	871	4.73	451	5	8	1	146	1	2	2	23	4.44	.089	3	3	1.33	48	.01	2	.91	.07	.16	1
3327	2	22	5	67	.5	10	9	775	4.07	112	5	ND	2	178	1	2	2	34	4.15	.086	5	6	1.20	58	.01	2	1.53	.07	.14	1
STD C	20	57	38	131	7.0	69	29	1035	3.98	37	15	7	33	46	17	15	21	61	.40	.101	35	56	.88	173	.08	36	1.73	.09	.13	13

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 18 1987

DATE REPORTS MAILED

*Feb 28/87*

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# B6-4049A R PAGE# 1

SAMPLE	Sample wt.gm	Au-100 oz/t	Native Au mg	Average oz/t
3165	370	.044	ND	.044
3166	420	.101	ND	.101
3167	450	.015	ND	.015
3204	420	.021	ND	.021
<u>3302</u>	550	.035	ND	.035
3303	490	.022	ND	.022
3305	540	.019	ND	.019
3307	440	.044	ND	.044
3310	570	.028	ND	.028
3312	300	.031	ND	.031
3314	220	.030	ND	.030
3316	480	.031	ND	.031
3318	490	.016	.01	.017
3320	520	.038	.02	.039
3321	370	.016	ND	.016
3324	560	.041	ND	.041
3325	450	.103	ND	.103
<u>3327</u>	470	.029	ND	.029
2226	440	.163	.16	.174
2227	370	.096	.21	.112

ACME ANALYTICAL LABORATORIES LTD.  
85 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 9 1987

DATE REPORT MAILED: Jan 15/87...

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: CORE AU\*\* ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Debye*, DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0033A

PAGE 1

SAMPLE#	As PPM	Au** OZ/T
2239	5	.001
2241	7	.001
2242	12	.001
2243	6	.001
2244	4	.001
2245	10	.001
2246	7	.001
2247	5	.001
2248	8	.001
2249	4	.001
2301	11	.001
2302	11	.001
2303	16	.001
2304	18	.001
2305	20	.001
2306	29	.001
2307	56	.002
2308	188	.005
2309	5	.001
2310	3	.001
2311	203	.007
3328	162	.088
3329	244	.033
3330	81	.039
3331	113	.067
DM12		
3332	83	.002
3333	462	.031
3334	341	.039
3335	96	.041
3336	102	.031
3337	63	.389
3338	112	.042
3339	794	.070
3340	164	.021
3341	116	.007
3342	427	.033
STD C	37	-

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0033A

PAGE 2

SAMPLE#	As PPM	Au** OZ/T
3343	114	.008
3344	383	.029
3345	567	.048
3346	418	.112
3347	497	.093
<u>Dm 12</u>		
3348	985	.045
3349	465	.031
3350	93	.010
3351	106	.003
3352	72	.001
3353	1144	.004
3354	593	.045
3355	2559	.051
3356	52	.005
3357	635	.027
3358	344	.059
3359	74	.005
3360	238	.303
3361	247	.005
3362	1089	.023
3363	1338	.039
3364	579	.112
3365	321	.047
3366	152	.009
STD C	40	-

CME ANALYTICAL LABORATORIES LTD.  
52 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 12 1987

DATE REPORT MAILED: Jan 15/87.

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0050

PAGE 1

SAMPLE#	As PPM	Au** OZ/T
3395	432	.063
3396	85	.011
3397	185	.022
3398	158	.012
3399	144	.010
3400	165	.015
3451	461	.139
3452	301	.076
3453	572	.038
3454	524	.017
3455	736	.015
3456	383	.006
3457	84	.001
3458	69	.001
3459	110	.003
3460	37	.001
3461	53	.001
3462	42	.001
3463	38	.001
3464	11	.001
3465	23	.001
3466	22	.022
3467	130	.011
3468	263	.017
3469	210	.049
Dm15		
3470	332	.038
3471	243	.021
3472	553	.039
3473	266	.036
3475	70	.005
3476	11	.001
3477	156	.024
3478	292	.058
3479	124	.073
3480	212	1.290

STD C

39 -

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 18 1987

DATE REPORTS MAILED

Feb 25/87

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0050 R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3466	590	.061	.03	.062
3468	260	.021	ND	.021
3469	470	.046	ND	.046
3470	420	.038	ND	.038
Dm 15 3473	570	.033	ND	.033
3478	280	.050	ND	.050
3479	570	.022	ND	.022
3480	650	.470	1.45	.535

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: Feb 25/87 ASSAYER. *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0050 R

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K PPM	W
3466	1	36	12	52	.2	8	9	764	3.51	22	5	ND	3	114	1	2	2	34	4.24	.058	4	8	1.01	43	.01	3	1.56	.02	.11	1
3468	1	21	12	54	.5	3	14	565	4.47	263	5	ND	3	180	1	2	2	43	4.66	.037	3	5	1.26	41	.01	3	1.68	.02	.15	1
3469	1	30	10	56	.4	4	11	575	4.27	210	5	ND	3	130	1	2	2	45	3.59	.031	4	6	1.13	51	.01	5	1.68	.02	.14	1
3470	1	45	12	42	.6	9	8	583	3.42	332	5	ND	2	113	1	2	2	16	4.96	.047	4	7	1.04	54	.01	7	1.03	.02	.15	1
3473	2	60	8	68	.8	95	27	1222	5.50	266	5	ND	5	268	1	2	2	59	11.95	.056	5	132	3.55	40	.01	5	2.68	.02	.10	1
<i>Dm15</i>																														
3478	1	22	8	29	.5	73	18	1120	3.64	292	5	ND	6	402	1	2	2	33	16.38	.036	4	70	2.30	60	.01	10	1.42	.01	.12	1
3479	1	50	7	52	.6	104	27	976	4.57	124	5	ND	5	267	1	2	2	70	11.68	.050	3	147	3.48	32	.01	5	2.67	.02	.11	1
3480	1	44	10	53	1.6	60	16	510	3.23	212	5	5	4	164	1	2	2	36	6.27	.079	4	49	1.61	44	.01	9	1.48	.01	.15	1
STD C	19	61	39	133	6.7	68	29	1028	3.90	39	18	7	35	49	17	15	20	60	.46	.084	36	53	.88	175	.09	37	1.71	.07	.14	14

CME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 13 1987

DATE REPORT MAILED:

Jan 15/87

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES

70087 DEBBIE FILE# 87-0062A

PAGE 1

SAMPLE#	As PPM	Au** OZ/T
---------	-----------	--------------

2334	54	.005
2335	52	.006
2336	15	.001
2337	13	.001
2338	44	.001

2339	23	.001
2340	102	.001
2341	20	.002
2342	61	.001
2343	106	.003

2344	50	.005
2345	7	.001
2346	23	.003
2347	30	.001
2348	15	.006

2349	12	.004
2350	58	.002
3481	93	.016
3482	58	.004
3483	119	.004

3484	68	.005
3485	96	.012
3486	39	.002
3487	41	.004
3488	239	.014

Dm15

3489	1090	.061
3490	59	.005
3491	891	.054
3492	1315	.038
3493	1965	.042

3494	62	.007
3495	288	.014
3496	75	.003
3497	82	.007
3498	51	.002

3499	93	.004
STD C	40	-

WESTMIN RESOURCES

70087 DEBBIE FILE# 87-0062A

PAGE 2

	SAMPLE#	As PPM	Au** OZ/T
V	3500	31	.003
	3501	19	.002
	3502	197	.013
	3503	590	.016
	3504	2679	.062
Dm 15	3505	1970	.020
	3506	8192	.044
	3507	1008	.102
	3508	90	.004
	3509	1331	.029
	3510	27	.001
	STD C	38	-

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Tl,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: *Feb 25/87* ASSAYER, *D. Toye*, DEAN TOYE, CERTIFIED B.C. ASSAYER.

SAMPLE#	WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0062A R																				PAGE	1								
	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Ca PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
3481	1	14	3	13	.6	20	8	381	1.49	93	5	ND	2	100	1	2	3	17	4.14	.025	2	20	.77	24	.01	4	.67	.01	.06	1
3489	1	17	15	27	1.0	14	8	498	3.39	1090	5	ND	3	175	1	2	2	9	5.90	.054	5	4	.62	47	.01	7	.56	.02	.18	1
3491	1	47	13	76	.7	5	10	493	5.34	891	5	ND	2	141	1	2	2	26	3.66	.047	4	3	1.28	58	.01	6	1.24	.02	.25	1
3492	1	58	8	65	.5	15	9	394	4.24	1315	5	ND	2	81	1	2	2	27	2.60	.050	5	10	.99	51	.01	7	.99	.02	.18	1
3493	1	22	2	28	.3	8	7	337	2.90	1965	5	ND	1	71	1	2	2	12	2.55	.033	5	6	.62	83	.01	2	.75	.03	.11	1
<i>Dm 15</i>																														
3495	1	69	6	52	.2	60	21	834	4.16	288	5	ND	4	228	1	2	2	38	7.83	.078	6	68	2.87	79	.01	7	1.49	.02	.19	1
3502	1	54	5	55	.3	83	19	891	3.71	197	5	ND	7	185	1	2	2	44	8.60	.105	9	140	2.90	74	.01	9	1.64	.03	.14	1
3503	1	51	13	87	.2	15	17	764	5.71	590	5	ND	3	86	1	2	2	88	3.21	.090	7	12	2.43	130	.01	8	2.66	.04	.25	1
3504	1	43	11	71	.3	8	14	693	5.04	2679	5	ND	4	131	1	2	2	54	4.98	.076	4	10	1.35	135	.01	13	1.85	.05	.27	1
3505	1	60	14	73	.2	13	15	554	4.95	1970	5	ND	2	72	1	2	2	43	2.81	.055	5	10	1.22	148	.01	12	1.81	.03	.28	1
3506	1	28	14	.57	.5	19	9	488	3.74	8192	5	ND	4	124	1	7	2	15	4.92	.073	5	10	.61	122	.01	10	.90	.01	.24	1
3507	1	74	20	68	1.3	28	12	396	5.99	1008	5	2	3	95	1	2	2	48	3.54	.124	4	18	.98	70	.01	8	1.51	.02	.12	1
3509	1	38	11	75	.3	19	21	833	5.35	1331	5	ND	7	274	1	2	2	72	8.13	.113	7	8	2.39	154	.01	9	2.82	.05	.21	1
STD C	20	60	37	132	6.8	68	28	986	3.94	38	22	8	33	48	16	15	19	61	.48	.097	35	56	.88	181	.08	36	1.72	.06	.14	13

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 18 1987

DATE REPORTS MAILED

*Feb 25/87*

### ASSAY CERTIFICATE

SAMPLE TYPE : REJECT  
AU BY FIRE ASSAY  
ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0062A R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average dz/t
3481	430	.022	ND	.022
3489	190	.039	ND	.039
3491	500	.054	ND	.054
3492	570	.038	ND	.038
3493	400	.036	ND	.036
3495	430	.009	ND	.009
3502	360	.011	ND	.011
3503	490	.012	ND	.012
3504	510	.026	.09	.031
3505	430	.015	ND	.015
3506	450	.060	.21	.073
3507	490	.095	ND	.095
3509	200	.032	.02	.034

*Dm15*

ACME ANALYTICAL LABORATORIES LTD.  
35 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JAN 14 1987

DATE REPORT MAILED: Jan 21/87..

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0069A PAGE 1

SAMPLE#	As PPM	Au** OZ/T
3511	130	.009
3512	50	.009
3513	24	.001
3514	51	.001
3515	41	.001
3516	27	.001
3517	113	.001
3518	38	.001
3519	819	.012
3520	72	.003
3521	56	.003
3522	81	.009
3523	100	.004
3524	186	.003
3525	44	.001
3526	103	.001
3527	99	.001
3528	101	.004
3529	147	.010
3530	155	.003
3531	127	.003
3532	188	.011
3533	462	.026
3534	519	.026
3535	549	.015
3536	197	.006
3537	228	.024
3538	71	.002
3539	160	.021
3540	230	.019
3541	13	.001
3542	391	.031
3543	380	.022
3544	25	.001
3545	19	.001
3546	484	.012
STD C	36	-

WESTMIN RESOURCES

PROJECT-DEBBIE FILE# 87-0069A

PAGE 2

SAMPLE#	As PPM	Au** OZ/T
3547	163	.014
3548	110	.003
3549	128	.004
Dm15 ✓ 3550	55	.001
3551	8	.001
STD C	37	-

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
F (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 18 1987

DATE REPORTS MAILED

Feb 25/87

### ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0069A R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3519	570	.016	ND	.016
3529	540	.008	.01	.009
3532	390	.015	ND	.015
3534	470	.036	ND	.036
3542	430	.046	ND	.046
3546	570	.017	ND	.017

Dm15

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: PULP

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: Feb 25/87 ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0069A R

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Ca PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V %	Ca PPM	P %	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
3519	1	33	7	77	.3	9	15	605	5.82	819	5	ND	3	122	1	2	2	81	4.11	.082	5	11	2.19	89	.01	2	2.68	.03	.15	1
3529	1	27	7	44	.5	82	23	997	4.53	147	5	ND	5	284	1	2	2	45	9.10	.247	17	63	3.58	73	.01	5	1.39	.02	.20	1
3532	1	59	6	54	.5	84	23	745	4.37	188	5	ND	5	248	1	2	2	53	7.81	.251	16	68	3.23	65	.01	12	1.62	.03	.20	1
3534	1	87	6	79	1.2	98	24	954	3.85	519	7	2	5	299	1	2	2	29	10.83	.133	9	42	1.56	61	.01	18	.60	.04	.20	1
3542	1	59	15	47	.9	72	18	723	3.96	391	5	ND	4	208	1	2	2	32	7.35	.112	8	45	1.36	31	.01	18	1.14	.04	.15	2
3546	1	77	12	83	.8	83	22	816	4.12	484	6	ND	4	237	1	2	2	45	6.83	.060	5	68	2.45	63	.01	41	1.72	.06	.20	1
STD C	19	59	39	128	6.9	68	27	961	3.95	36	20	8	31	45	15	17	18	60	.46	.097	34	55	.88	176	.08	38	1.71	.06	.15	15

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN,FE,CA,P,CR,MG,BA,TI,B,AL,NA,K,W,Si,Zr,CE,Sn,Y,NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AUE# BY FIRE ASSAY

DATE RECEIVED: FEB 6 1987 DATE REPORT MAILED: Feb 10/87 ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0261

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Ri PPM	V PPM	Ca %	P PPM	La PPM	Cr %	Mo PPM	Ba PPM	Ti %	R PPM	Al %	Na %	r %	M PPM	Au# DZ/T
2480	1	57	6	84	.1	6	12	1104	4.78	22	5	ND	2	182	1	17	2	29	10.79	.113	9	2	2.17	84	.01	?	.42	.15	.19	1	.001
2481	1	49	6	116	.1	5	13	1124	4.60	7	5	ND	2	73	1	13	2	35	5.35	.148	11	4	1.01	42	.01	8	.53	.13	.18	1	.001
2482	5	29	11	319	.1	14	23	3217	18.17	105	5	ND	4	10	1	9	3	90	.28	.098	14	10	1.11	132	.01	19	2.98	.95	.14	1	.004
2483	9	57	14	384	.1	11	26	2692	22.88	3	5	ND	3	16	1	2	2	120	.72	.103	9	6	2.09	19	.01	11	5.76	.12	.08	1	.002
2484	7	18	11	404	.1	25	30	2348	19.49	2	5	ND	3	35	1	2	2	115	2.80	.109	10	32	1.94	19	.01	12	5.08	.14	.08	1	.001
2485	15	26	9	211	.1	20	26	1717	17.50	40	5	ND	3	55	1	2	2	134	2.80	.093	22	49	1.02	6	.01	10	3.21	.13	.02	1	.001
2486	1	45	9	57	.7	34	14	515	5.23	318	5	ND	2	72	1	5	2	30	3.70	.114	9	34	.78	76	.02	5	1.46	.11	.30	1	.001
2487	1	11	2	53	.1	108	19	837	3.41	56	7	ND	2	173	1	2	2	21	11.99	.126	8	29	1.64	45	.01	2	.72	.15	.22	1	.001
2488	2	55	3	51	.9	91	20	1097	4.15	89	5	ND	1	233	1	15	2	17	12.62	.123	8	29	2.23	44	.01	2	.64	.15	.23	1	.001
2650	1	8	4	121	.1	9	13	1510	6.03	18	5	ND	1	71	1	2	2	21	6.07	.100	6	5	1.13	36	.01	2	.70	.12	.20	1	.004
3883	1	7	4	13	.3	7	2	356	1.14	142	5	ND	1	109	1	2	2	4	3.06	.054	2	1	.32	14	.01	2	.15	.07	.06	1	.015
3884	1	26	7	65	.8	53	14	943	3.18	2368	5	ND	1	223	1	3	2	8	7.39	.074	4	15	2.37	32	.01	2	.28	.13	.14	1	.021
3885	1	30	6	67	.5	85	19	802	3.83	816	5	ND	1	213	1	4	2	31	6.81	.091	5	101	3.32	32	.01	2	1.29	.14	.14	1	.006
3886	1	38	8	54	.5	77	18	967	3.59	159	5	ND	1	225	1	3	2	33	8.28	.090	5	98	3.37	30	.01	2	1.14	.14	.12	1	.001
3887	1	40	6	47	1.0	68	19	1136	3.94	539	5	ND	1	264	1	5	2	20	10.34	.090	4	47	3.00	32	.01	2	.57	.15	.12	1	.009
3888	1	45	4	35	1.7	82	18	932	3.60	584	8	ND	2	307	1	12	2	16	10.29	.082	5	56	3.54	32	.01	2	.45	.14	.15	1	.008
3889	1	63	6	41	1.0	91	19	865	3.80	183	5	ND	2	237	1	9	2	26	8.12	.091	6	113	3.63	35	.01	2	1.08	.14	.15	1	.001
3890	1	74	3	65	.9	99	23	1150	4.44	218	5	ND	1	212	1	5	2	37	7.63	.076	4	104	3.26	49	.01	2	1.26	.14	.16	1	.001
3891	1	77	7	75	.4	49	18	1116	4.32	147	5	ND	1	204	1	2	2	24	7.93	.077	4	31	2.29	43	.01	2	.82	.13	.15	1	.001
3892	1	15	6	30	.1	5	5	500	1.83	41	5	ND	1	130	1	2	2	4	4.01	.055	6	1	.52	62	.01	3	.57	.09	.17	1	.001
3893	1	33	6	49	.3	12	8	619	2.88	130	5	ND	1	116	1	2	2	7	3.81	.062	5	9	.84	65	.01	3	.58	.10	.17	1	.009
3894	3	19	8	40	.3	9	6	573	2.61	211	5	ND	1	96	1	3	2	3	3.64	.060	5	1	.68	64	.01	2	.29	.09	.17	1	.014
3895	1	59	11	77	2.1	37	13	1026	3.66	285	5	4	1	193	1	9	2	9	7.43	.087	3	8	1.93	48	.01	2	.27	.13	.18	1	.189
3896	2	11	8	42	1.5	10	10	639	3.91	408	6	5	2	125	1	2	2	5	4.37	.070	3	2	1.09	45	.01	2	.25	.11	.16	1	.177
3897	1	38	9	64	.7	18	13	1001	4.49	289	5	2	1	190	1	9	2	8	6.84	.076	4	3	1.81	47	.01	2	.27	.13	.18	1	.078
3898	2	30	8	65	.5	16	16	672	4.77	175	5	ND	2	132	1	2	2	24	4.36	.082	4	5	1.43	63	.01	2	1.05	.12	.17	1	.019
3899	1	38	8	78	.3	17	22	553	5.52	55	5	ND	1	83	1	2	2	41	2.73	.081	4	10	1.49	99	.01	2	1.78	.11	.19	1	.004
3900	1	29	8	66	.5	26	16	745	4.57	168	5	ND	1	146	1	2	2	12	5.45	.097	4	5	1.36	58	.01	2	.41	.12	.17	1	.011
3901	2	30	10	69	1.0	15	14	841	4.54	364	5	2	1	154	1	7	2	10	5.41	.089	4	1	1.49	60	.01	3	.31	.12	.17	1	.052
3902	1	19	6	53	.6	11	10	772	3.87	272	5	ND	1	148	1	3	2	7	5.49	.105	4	1	1.49	56	.01	2	.28	.13	.18	1	.052
3903	1	25	7	61	1.1	21	13	889	4.12	331	5	2	1	174	1	4	2	10	6.41	.093	4	4	1.73	50	.01	2	.34	.15	.16	1	.103
3904	1	22	5	65	.9	12	12	716	4.42	599	5	ND	2	138	1	4	2	6	4.67	.106	3	1	1.18	48	.01	2	.27	.12	.18	1	.049
3905	2	100	9	93	7.1	66	20	909	5.40	704	5	3	1	224	1	41	2	9	8.02	.120	4	8	2.25	39	.01	2	.26	.15	.16	1	.097
3906	1	38	9	95	1.2	82	22	943	5.96	1015	5	ND	1	247	1	8	2	10	8.54	.107	2	8	2.64	40	.01	2	.24	.15	.14	1	.046
3907	1	30	14	93	1.0	90	23	760	5.96	938	5	ND	1	226	1	9	2	11	8.73	.107	3	8	2.22	49	.01	2	.27	.15	.17	1	.040
STD C	20	59	40	136	7.1	69	29	1012	3.96	39	15	7	35	47	18	16	21	64	.41	.103	36	58	.83	179	.08	37	1.71	.11	.14	13	-

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0261

PAGE 2

SAMPLE#	Mc PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Ni PPM	Cc PPM	Mn %	Fe PPM	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mo %	Ba PPM	Ti %	P PPM	Al %	Na %	V PPM	W PPM	Aut OZ/T
3909	1	93	16	90	2.3	109	25	558	5.69	2856	5	ND	1	165	1	14	2	10	5.59	.122	3	7	1.65	46	.01	1	.29	.14	.18	1	.044
3910	1	57	11	84	1.6	85	22	691	5.76	2226	5	ND	1	191	1	9	2	10	6.84	.124	3	7	2.10	47	.01	2	.28	.14	.19	1	.054
3911	1	54	9	75	2.4	29	14	624	4.54	1019	5	ND	1	131	1	18	3	9	5.11	.113	3	3	1.24	42	.01	2	.28	.13	.19	1	.062
3912	1	58	7	93	.9	94	25	686	5.09	895	5	ND	1	178	1	5	2	17	6.93	.123	2	11	1.97	71	.01	3	.32	.14	.17	1	.042
3913	1	54	7	93	1.0	97	25	721	5.62	1503	5	ND	1	206	1	5	2	29	7.83	.120	3	27	2.12	55	.01	3	.54	.15	.16	1	.052
3914	1	28	9	75	.8	75	21	706	5.03	821	6	ND	1	194	1	2	2	22	7.67	.126	3	12	1.89	76	.01	3	.33	.15	.17	1	.042
3915	1	24	6	66	1.6	48	13	355	5.05	1425	5	5	1	134	1	5	2	15	5.18	.275	5	8	.96	44	.01	2	.31	.12	.21	1	.130
3916	1	56	5	78	1.2	73	20	667	4.62	3087	5	2	1	194	1	7	2	20	7.37	.112	3	14	1.85	53	.01	2	.30	.14	.15	1	.108
3917	2	51	7	54	1.0	33	9	344	4.19	1468	5	2	1	154	1	9	2	18	5.28	.219	5	8	.88	42	.01	2	.29	.11	.13	1	.116
3918	1	83	7	97	1.3	102	27	797	5.95	961	5	ND	1	235	1	5	3	27	9.17	.113	3	17	2.38	64	.01	6	.34	.16	.15	1	.068
3919	1	48	9	58	2.5	73	19	622	5.19	2173	5	4	1	173	1	7	2	12	6.79	.124	3	8	1.83	51	.01	2	.27	.14	.17	1	.417
3920	1	27	8	85	2.0	94	22	619	4.39	918	5	3	1	189	1	7	2	9	7.79	.120	3	8	1.58	38	.01	2	.26	.14	.16	1	.068
3921	1	47	10	107	1.7	99	23	798	5.43	1449	5	ND	1	217	1	17	2	11	8.37	.121	2	8	2.65	38	.01	2	.27	.15	.18	1	.059
3922	1	41	12	95	1.1	88	25	726	6.04	1532	5	ND	1	181	1	14	2	10	6.93	.132	2	9	2.37	38	.01	2	.28	.14	.19	1	.029
3923	1	26	11	88	.6	100	24	716	5.99	1283	5	ND	1	182	1	6	2	10	7.25	.121	2	9	2.53	50	.01	2	.27	.15	.18	1	.030
3924	1	34	3	34	1.3	45	13	809	3.61	330	5	ND	1	197	1	13	3	14	10.54	.070	3	4	3.07	41	.01	2	.11	.15	.05	1	.008
3925	2	37	8	45	1.4	94	22	1034	5.40	675	5	ND	1	211	1	11	2	16	10.38	.063	3	17	3.03	37	.01	5	.24	.17	.15	1	.024
3926	2	16	10	50	.7	56	15	847	3.85	479	7	ND	1	215	1	5	2	22	9.06	.060	4	13	1.71	27	.01	4	.21	.15	.10	2	.014
3927	1	13	7	45	.3	26	7	502	2.36	121	5	ND	2	143	1	2	2	8	3.57	.052	9	14	.78	112	.01	11	.35	.16	.16	1	.004
3928	1	3	4	38	.1	2	3	298	1.86	15	5	ND	2	69	1	2	2	3	.77	.052	11	1	.35	120	.01	14	.39	.13	.19	1	.001
3929	1	38	8	53	.3	28	11	730	2.48	86	5	ND	1	300	1	5	2	31	7.14	.048	5	21	1.82	176	.01	21	.41	.19	.13	1	.003
3930	1	83	7	63	.2	68	24	856	4.83	81	5	ND	1	483	1	3	3	110	8.24	.062	5	91	3.22	90	.01	4	.34	.17	.07	1	.001
3931	1	80	7	60	.1	57	23	1031	4.24	22	6	ND	1	345	1	3	2	146	10.59	.070	5	158	3.62	50	.01	2	2.09	.17	.04	1	.001
T87-2	1	38	10	54	.1	18	6	391	8.46	6	8	ND	2	13	1	2	2	34	.27	.025	3	26	1.33	56	.10	2	1.56	.07	.08	1	.001
T87-3	1	29	7	67	.1	29	9	464	8.97	2	5	ND	2	39	1	2	2	42	.30	.023	5	18	1.15	41	.07	2	1.38	.07	.05	1	.001
STD C	21	61	42	138	7.1	67	30	1064	3.96	38	19	8	36	50	19	18	23	67	.48	.107	38	61	.88	189	.09	35	1.71	.12	.15	12	-

DM29

ACME ANALYTICAL LABORATORIES LTD.  
81 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 26 1987

DATE REPORTS MAILED File 28/87

### ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0261 R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3895	500	.129	ND	.129
3896	420	.202	.19	.215
3897	520	.081	.05	.084
3901	470	.049	ND	.049
3902	450	.046	ND	.046
3903	470	.082	.02	.083
3904	520	.044	ND	.044
3905	530	.079	ND	.079
3906	420	.044	ND	.044
3907	570	.033	ND	.033
DM29 3909	370	.039	ND	.039
3910	490	.041	ND	.041
3911	270	.048	ND	.048
3912	490	.046	ND	.046
3913	480	.060	ND	.060
3914	390	.045	ND	.045
3915	570	.105	.05	.108
3916	370	.098	.01	.099
3917	590	.156	.02	.157
3918	560	.048	ND	.048
3919	540	.137	.35	.156
3920	470	.082	.12	.089
3921	450	.045	.01	.046
3922	520	.036	ND	.036

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Tl,B,Al,Na,K,Ni,Zr,CE,Sn,Y,Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AUR BY FIRE ASSAY

DATE RECEIVED: FEB 16 1987 DATE REPORT MAILED: Feb 20/87 ASSAYER. *D. Toye*, DEAN TOYE. CERTIFIED B.C. ASSAYER.

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0353

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au\$ OZ/T
1391	1	29	11	79	.2	3	18	988	6.08	53	5	ND	3	140	1	2	2	91	5.14	.077	4	5	2.17	92	.01	9	2.97	.03	.15	1	.001
1392	1	98	8	58	.1	78	27	953	5.22	13	5	ND	3	169	1	2	5	161	7.54	.065	3	199	4.12	18	.01	9	3.19	.04	.03	1	.001
1393	1	10	10	49	.1	5	7	596	2.84	6	5	ND	1	124	1	2	2	15	3.26	.056	8	6	.96	70	.01	7	1.54	.02	.16	1	.001
1394	1	14	10	48	.1	4	6	514	2.79	38	5	ND	1	119	1	2	2	10	3.07	.053	6	5	.92	50	.01	6	1.26	.02	.13	1	.002
1395	1	11	6	44	.1	3	5	434	2.73	208	5	ND	1	95	1	2	2	5	2.55	.061	5	1	.62	52	.01	6	.91	.01	.16	1	.005
1396	2	15	7	44	.1	8	7	461	2.63	40	5	ND	1	113	1	2	2	9	3.27	.055	6	5	.87	52	.01	7	1.28	.02	.14	1	.001
1397	1	80	6	49	.4	94	21	838	3.81	78	5	ND	3	208	1	2	2	54	6.50	.076	5	153	3.24	42	.01	2	1.76	.01	.13	1	.002
1398	1	57	10	48	.8	93	21	965	3.96	417	5	ND	4	288	1	3	2	36	8.49	.091	4	106	3.65	38	.01	8	.98	.01	.17	1	.010
1399	2	66	11	62	2.1	73	20	896	3.78	1572	5	ND	4	342	1	8	2	21	9.35	.095	4	46	3.34	48	.01	6	.46	.01	.19	1	.027
1400	1	72	9	49	1.2	78	25	820	4.79	567	5	ND	3	280	1	11	2	44	7.50	.105	5	104	4.18	42	.01	9	1.43	.01	.20	1	.009
1401	1	64	7	52	1.1	77	25	824	4.68	175	5	ND	3	251	1	5	2	57	7.23	.098	5	135	4.36	44	.01	2	1.79	.01	.19	1	.003
1402	1	79	10	50	1.3	76	26	777	4.66	177	5	ND	3	244	1	8	2	53	6.76	.109	6	117	4.16	49	.01	6	1.71	.02	.19	3	.006
1403	1	58	10	49	.8	73	23	840	4.38	1271	5	ND	4	280	1	8	2	47	7.79	.098	5	103	4.02	47	.01	4	1.41	.02	.17	2	.008
1404	1	59	12	54	1.0	72	24	871	4.48	811	5	ND	4	269	1	11	2	46	7.58	.104	5	115	3.99	48	.01	9	1.47	.02	.18	1	.007
1405	1	54	6	54	.6	87	21	852	3.82	138	5	ND	3	201	1	7	2	39	6.44	.095	6	151	3.59	50	.01	10	1.70	.02	.18	1	.001
1406	1	58	5	50	1.6	75	18	851	3.34	1859	5	ND	5	300	1	12	2	12	8.06	.075	4	31	3.15	45	.01	4	.32	.02	.19	1	.029
1407	1	31	11	48	1.1	74	19	888	4.14	1318	5	2	3	292	1	3	2	22	8.08	.076	4	34	3.09	51	.01	7	.48	.02	.17	1	.006
1408	2	64	11	62	2.0	30	17	885	4.58	786	5	ND	2	211	1	19	2	8	5.86	.108	3	5	1.89	51	.01	4	.31	.02	.21	1	.008
1409	5	54	13	44	2.0	15	13	482	3.97	364	5	ND	2	143	1	17	2	7	3.71	.176	4	3	.70	56	.01	7	.35	.02	.21	1	.021
1410	2	70	12	73	2.4	34	19	846	4.43	745	5	ND	3	183	1	10	4	23	5.69	.135	5	24	1.97	62	.01	7	.76	.03	.21	1	.016
1411	2	35	9	66	1.0	11	13	706	4.47	849	5	2	2	116	1	3	2	14	3.49	.152	4	3	1.13	53	.01	11	.60	.02	.19	1	.065
1412	1	24	19	91	1.2	7	13	659	4.73	1156	5	2	1	91	1	5	2	6	2.61	.117	2	1	.79	45	.01	12	.32	.02	.19	1	.267
1413	1	20	10	94	.8	2	13	904	5.36	1106	5	2	2	103	1	5	3	5	3.60	.100	3	1	1.11	44	.01	8	.30	.02	.21	1	.031
1414	1	18	9	83	.6	10	13	1085	4.26	3130	5	ND	3	161	1	2	2	7	5.22	.089	3	8	1.66	43	.01	7	.33	.02	.19	1	.029
1415	1	24	8	97	.1	5	13	732	5.15	136	5	ND	1	92	1	2	2	36	2.68	.097	5	3	1.21	66	.01	10	1.80	.03	.18	1	.014
1416	1	21	7	85	.4	4	11	846	4.69	685	5	ND	4	176	1	3	2	19	5.40	.089	3	2	.91	49	.01	6	.95	.03	.18	1	.022
1417	1	22	11	90	.2	3	12	903	4.75	324	5	ND	3	180	1	2	2	25	4.75	.098	4	1	1.05	70	.01	8	1.26	.03	.19	1	.061
1418	1	24	8	93	.4	4	13	848	5.12	453	5	ND	2	181	1	2	4	28	4.25	.100	3	3	1.01	65	.01	6	1.54	.03	.21	1	.024
1419	1	24	11	86	.1	5	10	870	4.63	115	5	ND	3	175	1	2	3	34	4.99	.096	5	3	.97	64	.01	11	1.79	.03	.19	1	.007
1420	1	54	4	69	1.6	4	8	677	3.12	607	5	4	2	130	1	6	2	2	3.83	.063	4	1	.59	64	.01	6	.34	.02	.21	1	.054
1421	1	31	8	88	.6	5	12	901	4.79	569	5	ND	3	153	1	2	2	5	4.63	.106	3	1	.98	55	.01	8	.42	.02	.22	1	.042
1422	1	65	8	68	.3	4	13	1198	4.25	541	5	ND	4	239	1	2	2	9	7.43	.104	4	1	1.02	56	.01	6	.49	.02	.21	1	.038
1423	1	31	10	70	.6	3	11	886	4.11	787	5	ND	2	173	1	4	3	3	5.19	.088	3	2	.90	50	.01	7	.29	.02	.20	1	.024
1424	1	32	10	78	.8	5	12	872	4.85	810	6	ND	3	153	1	5	3	4	4.60	.100	3	2	1.07	45	.01	8	.30	.02	.20	1	.027
1425	1	19	4	62	.5	3	7	687	3.03	1141	6	ND	3	170	1	3	5	2	4.54	.066	4	1	.70	63	.01	13	.29	.02	.20	1	.023
1426	1	35	7	83	1.2	1	12	834	4.84	916	5	ND	3	170	1	6	3	5	4.68	.098	3	1	.91	59	.01	11	.34	.03	.22	1	.041
STD C/AU-R	21	60	38	133	6.8	65	29	1001	3.95	36	17	8	33	48	17	16	20	63	.47	.101	35	59	.88	179	.08	35	1.72	.07	.14	13	-

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0353

PAGE 2

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B %	Al %	Na %	K %	N PPM	Au# OZ/T
1427	2	29	9	61	.7	3	10	837	3.91	1520	5	ND	3	320	1	6	2	4	7.19	.091	3	1	.63	61	.01	10	.28	.02	.20	1	.028
1428	1	19	2	59	.5	3	8	620	3.40	1033	5	ND	2	234	1	4	2	2	4.93	.076	4	1	.51	61	.01	12	.26	.03	.18	1	.014
1429	2	26	7	64	.8	4	8	644	3.01	1123	5	ND	2	199	1	6	2	2	5.27	.070	4	1	.48	52	.01	8	.26	.02	.18	1	.016
1430	2	16	2	62	.3	5	8	635	2.90	1031	5	ND	2	189	1	2	3	2	5.63	.059	4	2	.44	53	.01	8	.25	.02	.19	1	.011
1431	2	15	4	51	.1	6	8	503	3.18	383	5	ND	1	167	1	2	2	3	4.29	.098	4	1	.43	64	.01	15	.32	.02	.22	1	.019
1432	2	16	3	62	.7	8	9	574	3.20	563	5	ND	1	175	1	3	3	4	4.71	.079	3	2	.52	59	.01	14	.30	.02	.21	1	.029
1433	2	46	2	86	1.7	11	14	813	4.14	738	5	ND	3	167	1	9	2	7	5.97	.076	3	3	.94	56	.01	8	.30	.02	.22	1	.104
1434	1	57	5	81	.1	9	14	900	3.96	236	5	ND	3	225	1	2	2	32	8.99	.073	4	10	.88	64	.01	11	1.57	.02	.19	1	.015
1435	1	64	2	83	.2	11	20	813	5.22	285	5	ND	3	201	1	4	2	36	7.82	.073	4	12	1.14	61	.01	9	1.67	.02	.19	1	.026
1436	4	17	5	88	.1	3	5	599	2.43	236	5	ND	2	153	1	3	2	5	4.94	.062	6	1	.43	71	.01	12	.67	.02	.21	1	.013
1437	2	11	7	71	.1	5	5	593	2.12	243	5	ND	3	144	1	2	2	3	5.90	.066	5	1	.32	68	.01	9	.39	.02	.20	1	.005
1438	1	26	12	76	.7	8	13	859	4.69	1749	5	ND	2	138	1	6	2	7	5.04	.100	3	3	1.30	53	.01	8	.32	.02	.23	1	.045
1439	1	46	5	43	1.3	66	20	992	3.86	1100	5	ND	3	279	1	14	2	28	8.60	.052	3	59	3.47	46	.01	11	.89	.02	.16	1	.016
1440	1	37	5	72	.1	21	26	748	4.82	200	5	ND	3	198	1	2	2	86	8.29	.071	4	7	1.58	54	.01	10	2.07	.04	.18	1	.012
1441	1	29	6	69	.1	15	22	918	4.16	54	5	ND	5	281	1	2	2	89	12.10	.066	4	5	1.40	41	.01	8	1.97	.04	.11	1	.006
1442	1	43	4	92	.2	15	22	915	4.58	172	5	ND	4	268	1	9	2	84	9.60	.048	4	4	1.43	40	.01	10	1.82	.04	.11	1	.013
1443	1	48	11	94	1.1	8	22	836	5.18	2305	5	2	3	172	1	16	2	24	5.66	.052	2	1	1.52	53	.01	11	.60	.03	.18	1	.121
1444	1	83	7	90	.6	7	17	992	4.20	527	5	ND	4	246	1	37	2	41	9.66	.075	4	4	1.58	51	.01	11	1.12	.03	.16	1	.038
1445	1	65	5	79	3.4	14	22	852	5.32	1218	5	ND	2	182	1	29	2	12	5.85	.059	3	2	1.62	48	.01	10	.36	.03	.20	1	.051
1446	1	55	11	77	1.6	39	22	736	4.97	1314	6	2	3	220	1	21	2	19	6.67	.064	3	8	1.76	48	.01	20	.33	.04	.18	1	.053
1447	1	43	13	80	1.1	11	21	844	5.43	1352	5	ND	3	143	1	15	2	21	4.94	.052	3	3	1.61	49	.01	12	.52	.03	.19	1	.051
1448	2	50	7	85	1.3	39	22	859	4.59	2018	5	ND	3	229	1	18	2	12	7.36	.073	3	7	1.90	52	.01	13	.31	.03	.19	1	.036
1449	1	20	2	59	.5	56	18	862	3.89	3199	5	ND	2	232	1	3	2	9	6.94	.077	3	9	2.34	44	.01	9	.23	.02	.15	1	.051
1450	2	37	2	68	1.0	72	21	955	4.55	1350	5	3	3	297	1	5	2	13	8.36	.072	3	18	2.89	46	.01	13	.29	.02	.14	1	.096
1451	2	43	7	72	2.2	54	22	958	5.04	1603	5	2	3	305	1	11	2	11	8.61	.113	4	10	3.01	39	.01	8	.26	.02	.18	1	.087
1452	2	27	11	46	.6	73	18	809	3.96	2057	5	ND	4	273	1	3	2	14	8.21	.077	6	16	1.33	62	.01	11	.38	.04	.18	1	.023
1453	1	39	2	70	1.1	82	24	948	4.33	2335	5	ND	3	310	1	8	2	21	9.25	.063	5	27	2.05	57	.01	16	.46	.04	.19	1	.020
1454	1	50	6	67	.1	87	23	1124	4.31	1131	5	ND	3	324	1	2	2	50	11.10	.062	6	62	2.10	63	.01	18	1.24	.04	.18	1	.021
1455	1	36	7	67	.2	64	20	1092	4.12	609	5	ND	4	289	1	2	2	22	9.68	.060	4	21	2.50	54	.01	11	.31	.03	.16	1	.024
1456	2	47	6	75	1.3	55	20	988	5.06	805	7	2	4	234	1	6	2	16	7.64	.073	3	16	2.18	44	.01	10	.29	.03	.19	1	.055
1457	1	44	7	72	1.0	48	20	1105	4.66	590	5	2	3	298	1	6	3	23	8.23	.074	5	16	2.10	61	.01	18	.34	.04	.21	1	.074
1458	5	9	9	33	.1	4	3	409	1.83	22	5	ND	1	100	1	2	3	3	2.39	.051	10	1	.34	78	.01	16	.36	.07	.17	1	.002
1459	1	3	7	43	.1	2	4	419	1.97	18	5	ND	1	89	1	2	2	2	2.07	.053	11	1	.36	80	.01	14	.33	.07	.16	1	.001
1460	1	3	3	39	.1	1	3	366	1.86	8	5	ND	1	84	1	2	2	2	1.80	.051	11	2	.32	89	.01	12	.46	.07	.18	1	.001
1461	2	16	2	45	.1	15	6	491	2.26	77	5	ND	2	122	1	2	3	8	3.17	.059	8	8	.65	86	.01	14	.72	.07	.18	2	.011
STD C/AU-R	21	61	41	140	7.2	65	30	1052	3.95	42	15	8	35	51	18	16	22	66	.47	.109	37	60	.88	188	.09	34	1.72	.08	.15	13	-

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0353

PAGE 3

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Aut
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	OZ/T										
1463	1	23	7	56	.4	41	10	768	2.92	202	5	ND	3	240	1	2	2	15	7.25	.061	6	26	1.24	72	.01	13	.91	.05	.17	1 .046	
1464	1	22	5	56	.1	21	8	501	2.38	73	5	ND	2	176	1	2	2	18	4.24	.051	8	25	.80	87	.01	19	.97	.07	.16	1 .004	
1465	1	29	9	63	.1	17	8	514	2.39	38	5	ND	2	166	1	2	4	14	3.60	.052	9	24	.85	126	.01	25	1.23	.09	.18	1 .002	
1466	1	34	5	60	.3	25	10	621	2.71	74	5	ND	2	175	1	2	2	16	3.94	.050	7	23	1.09	154	.01	28	1.30	.10	.17	1 .002	
1467	1	106	9	82	.8	91	26	898	5.02	147	5	ND	4	302	1	2	2	106	7.88	.052	5	195	3.47	72	.01	22	3.27	.05	.12	1 .006	
DM32																															
2768	23	24	15	293	.8	156	30	2570	13.06	161	5	ND	3	81	1	5	3	70	4.63	.134	5	101	2.03	25	.01	13	.54	.01	.16	1 .039	
2769	3	24	5	53	.6	16	9	742	3.34	179	5	ND	3	96	1	7	2	8	4.94	.034	6	9	1.25	37	.01	3	.29	.01	.16	1 .017	
2770	2	42	10	94	1.2	12	10	871	4.00	895	5	ND	3	123	1	16	4	11	5.35	.062	6	2	1.33	45	.01	12	.28	.01	.20	1 .029	
2771	1	10	4	73	.1	110	25	1030	4.57	97	5	ND	3	173	1	3	2	77	8.05	.045	4	169	4.64	27	.01	11	1.46	.01	.14	1 .004	
2772	1	50	6	127	.2	49	19	938	3.80	81	5	ND	3	116	1	2	2	67	5.38	.069	6	84	2.58	25	.01	8	1.57	.03	.12	1 .005	
2773	1	52	10	89	.6	12	13	735	4.47	711	5	ND	3	86	1	2	2	19	4.12	.060	4	7	1.26	68	.01	6	.96	.01	.18	1 .029	
2774	1	28	8	71	.4	22	10	706	2.87	727	5	ND	3	88	1	3	2	12	4.62	.057	7	26	1.42	61	.01	9	.46	.01	.17	1 .009	
2775	1	31	6	40	1.2	34	15	730	4.39	10303	5	ND	3	121	1	12	2	22	6.05	.052	4	37	1.88	38	.01	5	.47	.01	.18	1 .035	
STD C/AU-R	21	62	39	137	7.1	68	30	1034	3.96	38	16	8	34	49	17	15	22	65	.46	.105	37	60	.88	183	.09	34	1.72	.07	.14	12	

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3:1:2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.ND AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AU# BY FIRE ASSAY AU# BY FIRE ASSAY

DATE RECEIVED: FEB 17 1987 DATE REPORT MAILED: *Feb 23/87* ASSAYER: *N. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0382

PAGE 1

SAMPLE#	No	Cu PPM	Pb PPM	In PPM	Ro PPM	Mn PPM	Fe PPM	Ag PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca PPM	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	W PPB	Aut# OZ/T				
DM 35	1468	2	31	8	59	.2	13	9	606	3.67	13	6	ND	4	119	1	2	2	28	4.03	.098	8	13	.94	62	.01	2	1.83	.03	.15	2	32	-
	1469	3	8	7	56	.1	5	7	706	3.28	12	5	ND	4	123	1	2	2	19	4.57	.068	9	6	.90	77	.01	5	1.80	.05	.21	1	3	-
	1470	1	9	7	43	.1	4	6	594	2.53	12	5	ND	3	106	1	2	2	11	3.45	.051	8	3	.70	75	.01	8	1.42	.02	.19	2	11	-
	1471	1	10	10	44	.1	1	5	602	2.52	5	5	ND	4	114	1	2	3	10	3.85	.053	10	3	.74	91	.01	7	1.53	.02	.23	1	1	-
	1472	1	15	6	41	.1	3	4	672	2.29	2	5	ND	4	154	1	2	2	10	4.99	.049	10	5	.66	70	.01	6	1.38	.03	.19	1	8	-
	1473	1	10	12	46	.2	2	6	684	2.63	8	5	ND	4	157	1	2	2	13	4.71	.053	11	4	.74	75	.01	6	1.51	.03	.20	2	1	-
	1474	1	8	6	43	.1	2	6	650	2.54	56	5	ND	3	140	1	2	2	11	4.70	.053	7	5	.66	80	.01	7	1.42	.02	.21	1	38	-
	1475	1	9	9	35	.3	6	6	635	2.13	79	5	ND	3	163	1	2	2	7	4.78	.048	5	2	.58	72	.01	5	.99	.01	.19	2	475	-
	1476	1	10	8	44	.4	3	5	533	2.32	165	5	ND	3	108	1	2	2	8	3.77	.055	6	1	.73	101	.01	10	1.37	.02	.25	2	195	-
	1477	1	10	7	38	.1	1	4	534	2.22	38	5	ND	3	138	1	2	3	7	4.32	.048	5	1	.68	98	.01	11	1.36	.02	.23	1	94	-
	1478	1	13	10	41	.2	1	5	525	2.45	17	5	ND	3	164	1	2	3	8	4.33	.053	6	2	.80	96	.01	11	1.55	.02	.25	2	12	-
	1479	4	11	11	41	.3	8	8	449	2.80	322	5	ND	2	118	1	2	2	3	3.29	.076	3	2	.68	56	.01	7	.41	.01	.14	1	375	-
	1480	1	21	10	76	.3	90	24	1099	4.52	94	5	ND	4	207	1	2	2	73	6.80	.059	4	139	3.71	37	.01	3	2.15	.02	.12	1	15	-
	1481	1	29	9	78	.8	79	21	1290	3.75	583	5	ND	4	259	1	8	2	11	7.59	.061	3	18	2.70	30	.01	3	.29	.02	.15	1	1090	.031
	1482	1	23	6	34	.8	26	9	667	2.75	769	5	2	4	210	1	5	2	4	5.40	.058	3	6	1.71	38	.01	9	.20	.02	.11	2	1295	.035
	1483	1	74	4	44	4.4	272	29	923	4.07	503	5	ND	5	369	1	21	2	43	10.74	.075	4	213	4.83	34	.01	6	1.02	.01	.08	1	475	.018
	1484	1	60	15	60	1.2	83	25	876	4.70	215	5	ND	4	230	1	5	2	65	6.92	.100	5	173	4.56	39	.01	6	2.10	.02	.16	1	195	-
	1485	1	64	12	50	1.1	77	22	808	4.33	563	5	ND	5	244	1	7	2	51	7.32	.103	6	139	4.01	42	.01	5	1.63	.02	.15	2	650	.023
	1486	1	36	6	64	1.4	63	15	1110	4.09	595	5	ND	4	197	1	13	2	14	6.38	.092	3	39	2.16	43	.01	4	.53	.02	.15	1	1150	.030
	1487	1	26	6	80	1.0	1	11	927	4.51	432	5	2	3	110	1	6	2	16	3.60	.100	3	3	1.37	48	.01	6	.86	.03	.17	1	2190	.056
	1488	1	93	7	66	2.1	12	14	871	4.18	750	5	3	3	154	1	28	2	9	4.81	.087	3	10	1.53	41	.01	7	.37	.02	.14	1	2730	.079
	1489	1	42	5	54	.8	67	21	911	4.26	111	5	ND	5	250	1	8	2	47	8.12	.094	6	120	4.08	36	.01	8	1.55	.02	.14	1	215	-
	1490	1	64	5	52	1.2	68	22	852	4.20	216	5	ND	5	257	1	6	2	52	8.09	.091	6	117	3.84	42	.01	8	1.53	.02	.15	1	495	.014
	1491	1	37	4	61	1.1	58	18	1159	3.97	186	5	2	3	343	1	6	2	26	10.32	.087	5	45	3.18	42	.01	9	.53	.02	.13	1	1795	.053
	2596	1	42	13	77	.1	86	23	679	4.85	4	5	ND	4	72	1	2	2	93	7.85	.106	3	121	2.23	8	.42	5	2.51	.07	.02	1	18	-
	2597	1	41	7	84	.1	87	26	656	5.38	2	5	ND	4	59	1	2	2	98	6.65	.103	4	128	2.43	9	.44	2	2.73	.07	.02	1	4	-
	2598	1	65	10	84	.1	60	21	512	5.76	5	5	ND	3	56	1	2	2	102	5.07	.081	3	104	1.95	87	.41	6	2.45	.05	.06	1	2	-
	2599	1	19	5	17	.1	22	5	353	3.17	2	5	ND	5	72	1	2	2	71	10.99	.023	2	33	.41	26	.20	3	.64	.01	.07	1	1	-
	2651	1	9	2	13	.1	13	4	706	.98	2	5	ND	2	123	1	2	2	17	28.61	.017	2	19	.35	6	.11	2	.45	.01	.01	1	1	-
	2652	1	23	10	51	.1	55	13	624	2.72	2	5	ND	6	90	1	2	2	61	16.80	.062	2	79	1.13	13	.37	2	1.40	.06	.01	1	2	-
	2653	1	46	14	76	.1	66	18	739	3.99	4	5	ND	6	159	1	2	2	44	14.17	.074	4	66	1.97	20	.28	5	2.38	.01	.09	1	3	-
	2654	1	16	4	68	.1	54	15	452	5.14	4	5	ND	3	47	1	2	2	47	4.63	.156	5	102	1.58	32	.33	4	1.94	.05	.21	1	2	-
	2655	1	15	2	50	.1	26	9	266	2.94	5	5	ND	2	118	1	2	2	33	3.97	.186	4	37	.69	38	.35	8	1.35	.03	.23	1	3	-
	2656	1	16	5	49	.1	28	9	279	3.03	7	5	ND	2	143	1	2	2	35	4.59	.224	5	39	.67	52	.37	8	1.50	.03	.28	2	1	-
	2657	1	16	6	66	.1	50	14	667	3.84	4	5	ND	4	127	1	2	2	48	9.46	.103	5	73	1.72	39	.09	6	2.13	.03	.12	1	1	-
	2658	1	20	10	81	.1	64	17	706	4.85	7	5	ND	4	88	1	2	2	49	8.98	.104	5	76	2.23	38	.04	3	2.58	.04	.14	1	1	-
STD C/AU-R	21	57	38	132	6.8	67	30	996	3.95	37	16	7	33	48	17	16	21	62	.45	.104	36	60	.88	179	.08	37	1.71	.07	.14	12	505	-	

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCl-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,Nb AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

SAMPLE TYPE: CORE AU# BY FIRE ASSAY

DATE RECEIVED: FEB 18 1987 DATE REPORT MAILED: Feb 24/87 ASSAYER D. C. Bevers...DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0388A

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	W PPM	Au# OZ/1
1492	1	58	4	69	1.2	70	23	1009	4.29	89	5	ND	4	250	1	2	2	66	7.67	.090	7	143	3.70	48	.01	8	1.71	.03	.16	1	.001
1493	1	73	11	65	1.2	83	29	893	4.62	81	5	ND	4	233	1	2	2	75	6.91	.100	7	179	3.91	64	.01	4	2.14	.03	.18	1	.001
1494	2	56	6	53	1.5	32	12	670	3.60	144	5	ND	3	241	1	11	2	27	6.71	.255	5	21	1.28	58	.01	10	.97	.03	.19	1	.017
1495	1	54	10	85	1.1	131	29	1296	4.10	185	5	ND	3	250	1	10	2	49	7.70	.061	3	122	2.63	66	.01	6	1.47	.03	.17	1	.004
1496	1	28	12	89	.4	10	13	696	4.77	67	5	ND	3	124	1	2	2	38	3.25	.094	6	5	1.26	68	.01	12	1.77	.04	.19	1	.020
1497	1	18	4	64	.3	9	8	828	3.61	99	5	ND	3	198	1	2	2	20	4.41	.080	5	9	.95	77	.01	10	1.24	.03	.21	1	.009
1498	1	18	4	75	.1	8	9	979	3.81	107	5	ND	3	181	1	2	2	20	4.45	.075	5	9	1.11	65	.01	6	1.36	.04	.18	1	.003
1499	1	17	7	92	.1	6	12	772	4.80	14	5	ND	2	167	1	2	2	45	3.82	.101	7	10	1.18	104	.01	11	2.24	.05	.22	1	.002
1500	1	36	14	85	.2	5	12	895	4.55	29	5	ND	3	179	1	2	2	43	4.48	.093	5	5	1.26	80	.01	14	1.90	.05	.20	1	.001
1551	1	50	7	75	.4	7	15	880	4.86	115	5	ND	3	162	1	2	2	46	4.37	.073	3	3	1.44	62	.01	10	1.60	.04	.21	1	.010
1552	1	70	8	56	.3	7	13	872	4.41	127	5	ND	2	174	1	2	2	39	4.84	.080	4	7	1.34	45	.01	5	1.25	.04	.15	1	.011
1553	1	37	8	49	.6	48	18	1110	4.00	350	5	2	3	277	1	2	2	16	7.91	.066	3	16	2.40	57	.01	8	.47	.03	.20	1	.079
1554	1	32	13	86	1.0	13	16	862	5.26	1042	5	2	3	148	1	2	2	11	4.67	.090	2	7	1.48	45	.01	10	.35	.03	.21	1	.057
1555	1	57	6	68	2.0	36	17	995	4.57	1713	5	ND	3	192	1	8	2	10	6.29	.074	3	8	1.95	45	.01	8	.31	.02	.21	1	.039
1556	1	171	7	77	7.1	24	22	1034	5.12	2846	5	2	3	212	1	35	2	12	7.23	.061	2	8	2.18	42	.01	14	.27	.02	.20	1	.043
1557	1	65	11	81	3.0	7	22	782	6.18	1093	5	3	3	160	1	10	2	14	4.89	.051	2	2	1.21	33	.01	11	.31	.02	.24	1	.122
1558	1	17	7	71	.5	7	7	488	2.98	1225	5	ND	2	59	1	5	2	3	2.00	.062	4	2	.60	52	.01	12	.32	.02	.21	1	.031
1559	1	36	7	52	.9	83	22	939	4.02	1068	5	ND	4	257	1	10	3	21	7.90	.053	3	52	3.25	42	.01	9	.68	.02	.19	1	.023
1560	1	91	6	69	2.4	105	29	1008	4.58	257	5	ND	2	173	1	29	2	46	6.02	.053	2	131	3.88	43	.01	9	1.82	.03	.16	1	.011
1561	1	97	5	71	2.5	42	24	597	4.51	150	5	ND	2	151	1	30	2	64	3.43	.069	3	53	2.30	39	.01	11	2.03	.04	.15	1	.007
1562	1	53	4	65	.3	13	23	674	4.66	280	5	ND	4	248	1	2	2	65	9.10	.065	4	6	1.28	50	.01	13	2.01	.04	.20	1	.014
1563	1	62	9	77	.2	17	23	856	4.23	128	5	ND	5	246	1	2	2	85	10.31	.046	3	4	1.37	38	.01	9	1.94	.04	.12	1	.015
1564	1	32	3	127	.2	11	24	731	7.07	257	5	ND	2	106	1	2	2	113	2.45	.049	4	4	2.57	52	.01	14	3.20	.05	.17	1	.016
1565	1	44	7	68	.9	63	23	826	5.03	1435	5	4	4	285	1	7	2	34	8.41	.058	3	56	2.16	45	.01	11	1.08	.03	.18	1	.069
1566	1	82	9	58	.7	97	26	789	4.33	1692	5	ND	4	267	1	12	2	18	10.48	.045	3	53	2.61	41	.01	7	.60	.02	.18	1	.041
1567	2	58	14	78	.7	87	22	845	4.61	1774	5	2	4	255	1	11	2	15	8.13	.082	4	38	2.85	40	.01	5	.48	.02	.20	1	.068
1568	1	19	7	42	.7	67	18	763	4.51	2332	5	4	3	211	1	5	3	10	7.05	.067	3	15	2.32	43	.01	8	.26	.02	.17	1	.064
1569	2	56	8	69	.8	111	23	943	4.57	693	5	ND	3	230	1	17	2	20	7.80	.105	4	52	2.95	38	.01	7	.74	.02	.16	1	.070
1570	2	52	8	75	.8	67	22	840	5.94	1286	5	2	4	191	1	10	2	15	6.40	.111	4	15	2.37	42	.01	8	.57	.02	.18	1	.077
1571	2	49	9	81	.7	63	20	826	4.99	3738	5	ND	4	233	1	14	2	9	7.11	.113	4	10	2.42	43	.01	11	.30	.02	.20	1	.039
1572	1	112	8	73	1.2	56	25	670	4.22	700	5	2	3	175	1	17	2	11	5.77	.080	3	9	1.79	56	.01	13	.40	.02	.21	1	.051
1573	1	47	8	69	1.1	64	23	761	5.90	1291	5	ND	2	176	1	9	2	16	5.79	.136	3	17	2.14	41	.01	9	.51	.02	.19	1	.146
1574	2	43	10	69	.7	50	20	899	5.31	600	5	ND	3	237	1	12	2	25	6.27	.130	4	30	2.91	41	.01	6	1.05	.02	.16	1	.041
1575	2	19	9	68	.4	64	19	837	4.66	1523	5	ND	3	249	1	4	2	19	6.54	.098	4	26	2.89	45	.01	11	.86	.02	.17	1	.045
1576	2	55	12	90	1.1	48	22	867	5.33	514	5	2	3	226	1	14	2	21	6.37	.138	4	21	2.63	41	.01	2	.81	.02	.17	1	.082
1577	1	10	12	77	.1	294	34	1019	5.65	369	5	ND	3	311	1	2	2	65	7.76	.076	4	252	6.21	28	.01	9	2.90	.01	.08	1	.016
STD C	22	61	40	136	6.9	65	30	1014	3.84	40	14	B	33	48	17	16	20	63	.44	.097	36	59	.84	180	.08	35	1.66	.07	.15	12	-

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0388A

PAGE 2

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	N PPM	Alts OZ/T
1578	1	18	9	87	.3	211	30	896	5.60	333	5	ND	2	251	1	2	3	63	7.49	.108	4	152	4.89	35	.01	8	2.52	.03	.12	1	.020
1579	1	43	8	85	.9	140	28	793	5.50	437	5	2	2	218	1	2	2	60	6.72	.111	3	104	3.83	43	.01	7	1.95	.03	.16	1	.054
1580	1	25	8	44	1.0	135	25	693	4.36	1493	5	ND	3	297	1	3	2	16	8.73	.081	3	66	3.01	51	.01	7	.44	.02	.16	1	.044
1581	1	34	3	45	.8	59	19	692	4.08	966	5	ND	3	214	1	2	2	11	7.98	.113	4	11	2.13	52	.01	12	.38	.02	.17	1	.030
1582	1	83	13	69	1.1	78	28	725	4.54	2857	5	ND	2	223	1	5	2	13	8.07	.110	4	16	2.31	54	.01	7	.36	.02	.19	1	.036
1583	1	40	8	59	.9	75	22	665	4.26	1227	5	ND	3	278	1	2	2	17	8.54	.070	4	27	2.38	49	.01	15	.57	.02	.18	1	.032
1584	1	39	5	62	.7	72	21	680	4.41	1216	5	2	3	244	1	2	2	11	7.66	.076	3	15	2.38	52	.01	8	.38	.02	.20	1	.066
1585	1	48	8	61	1.2	101	24	777	4.16	637	5	ND	2	217	1	4	2	9	7.58	.096	3	10	2.37	54	.01	13	.30	.02	.18	1	.048
1586	1	53	6	62	1.0	92	25	794	4.64	907	5	ND	2	247	1	3	2	13	8.03	.091	4	19	2.79	51	.01	14	.48	.02	.17	1	.030
1587	1	53	11	57	.4	72	20	730	3.94	368	5	ND	3	292	1	2	2	19	8.26	.075	3	39	2.72	46	.01	9	.68	.02	.14	1	.047
1588	1	44	5	56	.4	83	23	752	4.20	388	5	ND	3	300	1	2	2	24	7.85	.069	3	49	2.99	51	.01	16	.86	.02	.15	1	.050
1589	1	36	7	53	.8	79	22	764	4.02	451	5	ND	3	312	1	2	2	14	8.47	.091	4	21	2.29	59	.01	15	.47	.03	.18	1	.059
1590	1	7	6	45	.1	4	4	421	1.99	18	5	ND	1	89	1	2	2	3	2.14	.047	9	3	.44	99	.01	8	.95	.08	.21	1	.001
1591	1	4	8	64	.2	2	4	491	1.99	4	5	ND	2	63	1	2	2	2	1.53	.050	10	1	.34	84	.01	6	.90	.08	.16	1	.001
1592	1	10	5	50	.1	3	4	413	2.02	24	5	ND	1	108	1	2	2	3	2.33	.051	9	3	.45	83	.01	10	.98	.08	.19	1	.001
1593	1	65	6	62	.5	48	17	819	3.57	891	5	ND	3	278	1	2	2	20	8.88	.071	5	22	2.17	53	.01	10	.86	.03	.17	1	.025
1594	1	56	15	60	.6	58	19	834	3.81	899	5	ND	3	286	1	2	2	21	9.08	.063	5	31	2.35	56	.01	13	.81	.03	.15	1	.033
1595	1	26	6	65	.6	120	23	917	4.27	971	5	ND	3	307	1	2	2	30	9.29	.084	5	65	3.17	46	.01	11	1.26	.03	.14	1	.032
3932	3	57	8	47	.1	13	7	843	2.84	7	5	ND	3	186	1	2	2	38	6.77	.131	5	17	.69	31	.01	2	1.22	.02	.06	1	.001
3933	1	11	8	50	.1	6	7	609	2.81	7	5	ND	2	69	1	2	2	16	2.65	.060	8	3	.76	78	.01	9	1.37	.04	.13	1	.001
3934	1	7	6	48	.1	8	8	896	2.77	8	5	ND	2	135	1	2	2	15	5.99	.059	5	10	.75	58	.01	5	1.30	.02	.13	1	.001
3935	1	45	4	55	.2	41	15	788	3.51	77	5	ND	2	149	1	2	2	41	4.12	.062	6	68	2.09	49	.01	6	2.08	.02	.14	1	.012
3936	1	29	14	48	.4	45	17	997	3.58	216	5	ND	3	217	1	2	2	43	7.08	.064	4	58	1.88	56	.01	2	1.72	.02	.13	1	.006
3937	1	21	12	36	.7	51	15	1006	3.49	518	5	ND	3	281	1	2	2	38	8.17	.070	5	72	2.26	38	.01	3	1.53	.01	.10	1	.012
3938	1	106	9	47	1.5	77	22	901	3.67	216	5	ND	3	295	1	2	2	40	8.93	.083	8	152	2.77	44	.01	7	2.03	.01	.15	1	.002
3939	1	9	7	44	.1	82	18	947	3.24	152	5	ND	4	306	1	2	2	36	9.48	.089	7	135	2.51	42	.01	5	1.71	.01	.16	1	.001
3940	1	52	7	52	7.7	76	23	857	3.87	158	5	24	3	270	1	2	2	67	8.94	.105	7	176	2.92	36	.01	7	2.38	.01	.15	1	.034
3941	3	29	13	83	66.0	7	12	654	4.54	248	5	533	2	86	1	2	2	36	2.58	.085	4	8	1.04	40	.01	8	1.64	.03	.14	1	.485
STD C	22	63	41	141	6.8	72	31	1055	3.96	42	15	8	34	51	18	16	23	66	.47	.108	37	60	.88	188	.09	35	1.71	.08	.14	12	-

~ native Au

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0388A

PAGE 2

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	W PPM	U OZ/T
1578	1	18	9	87	.3	211	30	896	5.60	333	5	ND	2	251	1	2	3	63	7.49	.108	4	152	4.89	35	.01	8	2.52	.03	.12	1	.020
1579	1	43	8	85	.9	140	28	793	5.50	437	5	2	2	218	1	2	2	60	6.72	.111	3	104	3.83	43	.01	7	1.95	.03	.16	1	.054
1580	1	25	8	44	1.0	135	25	693	4.36	1493	5	ND	3	297	1	3	2	16	8.73	.081	3	66	3.01	51	.01	7	.44	.02	.16	1	.044
1581	1	34	3	45	.8	59	19	692	4.08	966	5	ND	3	214	1	2	2	11	7.98	.113	4	11	2.13	52	.01	12	.38	.02	.17	1	.030
1582	1	83	13	69	1.1	78	28	725	4.54	2857	5	ND	2	223	1	5	2	13	8.07	.110	4	16	2.31	54	.01	7	.36	.02	.19	1	.036
1583	1	40	8	59	.9	75	22	665	4.26	1227	5	ND	3	278	1	2	2	17	8.54	.070	4	27	2.38	49	.01	15	.57	.02	.18	1	.032
1584	1	39	5	62	.7	72	21	680	4.41	1216	5	2	3	244	1	2	2	11	7.66	.076	3	15	2.38	52	.01	8	.38	.02	.20	1	.066
1585	1	48	8	61	1.2	101	24	777	4.16	637	5	ND	2	217	1	4	2	9	7.58	.096	3	10	2.37	54	.01	13	.30	.02	.18	1	.048
1586	1	53	6	62	1.0	92	25	794	4.64	907	5	ND	2	247	1	3	2	13	8.03	.091	4	19	2.79	51	.01	14	.48	.02	.17	1	.030
1587	1	53	11	57	.4	72	20	730	3.94	368	5	ND	3	292	1	2	2	19	8.26	.075	3	39	2.72	46	.01	9	.68	.02	.14	1	.047
1588	1	44	5	56	.4	83	23	752	4.20	388	5	ND	3	300	1	2	2	24	7.85	.069	3	49	2.99	51	.01	16	.86	.02	.15	1	.050
1589	1	36	7	53	.8	79	22	764	4.02	451	5	ND	3	312	1	2	2	14	8.47	.091	4	21	2.29	59	.01	15	.47	.03	.18	1	.059
1590	1	7	6	45	.1	4	4	421	1.99	18	5	ND	1	89	1	2	2	3	2.14	.047	9	3	.44	99	.01	8	.95	.08	.21	1	.001
1591	1	4	8	64	.2	2	4	491	1.99	4	5	ND	2	63	1	2	2	2	1.53	.050	10	1	.34	84	.01	6	.90	.08	.16	1	.001
1592	1	10	5	50	.1	3	4	413	2.02	24	5	ND	1	108	1	2	2	3	2.33	.051	9	3	.45	83	.01	10	.98	.08	.19	1	.001
1593	1	65	6	62	.5	48	17	819	3.57	891	5	ND	3	278	1	2	2	20	8.88	.071	5	22	2.17	53	.01	10	.86	.03	.17	1	.025
1594	1	56	15	60	.6	58	19	834	3.81	899	5	ND	3	286	1	2	2	21	9.08	.063	5	31	2.35	56	.01	13	.81	.03	.15	1	.033
1595	1	26	6	65	.6	120	23	917	4.27	971	5	ND	3	307	1	2	2	30	9.29	.084	5	65	3.17	46	.01	11	1.26	.03	.14	1	.032
3932	3	57	8	47	.1	13	7	843	2.84	7	5	ND	3	186	1	2	2	38	6.77	.131	5	17	.69	31	.01	2	1.22	.02	.06	1	.001
3933	1	11	8	50	.1	6	7	609	2.81	7	5	ND	2	69	1	2	2	16	2.65	.060	8	3	.76	78	.01	9	1.37	.04	.13	1	.001
3934	1	7	6	48	.1	8	8	896	2.77	8	5	ND	2	135	1	2	2	15	5.99	.059	5	10	.75	58	.01	5	1.30	.02	.13	1	.001
3935	1	45	4	55	.2	41	15	788	3.51	77	5	ND	2	149	1	2	2	41	4.12	.062	6	68	2.09	49	.01	6	2.08	.02	.14	1	.012
3936	1	29	14	48	.4	45	17	997	3.58	216	5	ND	3	217	1	2	2	43	7.08	.064	4	58	1.88	56	.01	2	1.72	.02	.13	1	.006
3937	1	21	12	36	.7	51	15	1006	3.49	518	5	ND	3	281	1	2	2	38	8.17	.070	5	72	2.26	38	.01	3	1.53	.01	.10	1	.012
3938	1	106	9	47	1.5	77	22	901	3.67	216	5	ND	3	295	1	2	2	40	8.93	.083	8	152	2.77	44	.01	7	2.03	.01	.15	1	.002
3939	1	9	7	44	.1	82	18	947	3.24	152	5	ND	4	306	1	2	2	36	9.48	.089	7	135	2.51	42	.01	5	1.71	.01	.16	1	.001
3940	1	52	7	52	7.7	76	23	857	3.87	158	5	24	3	270	1	2	2	67	8.94	.105	7	176	2.92	36	.01	7	2.38	.01	.15	1	.834
3941	3	29	13	83	66.0	7	12	654	4.54	248	5	533	2	86	1	2	2	36	2.58	.085	4	8	1.04	40	.01	8	1.64	.03	.14	1	.485
STD C	22	63	41	141	6.8	72	31	1055	3.96	42	15	8	34	51	18	16	23	66	.47	.108	37	60	.88	188	.09	35	1.71	.08	.14	12	-

native Au

HOME ANALYTICAL LABORATORIES LTD.  
852 HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED FEB 27 1987

DATE REPORTS MAILED

Mar 6/87

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU\*\* BY FIRE ASSAY

ASSAYER D Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0388A R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
3940	330	.840	.09	.848
3941	470	.113	1.19	.187

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.YNb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE . ASSAY BY FIRE ASSAY

DATE RECEIVED: FEB 19 1987 DATE REPORT MAILED: Feb 23/87 ASSAYER. N. A. DEAN TOYE. CERTIFIED B.C. ASSAYER.

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # B7-0397A

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	As/1T
3942	1	25	14	67	.2	183	26	1078	5.00	330	5	ND	3	306	1	2	2	67	8.37	.084	4	267	3.87	36	.01	2	2.18	.01	.15	1	.041
3943	1	6	8	57	.2	78	22	931	4.23	147	5	ND	4	217	1	2	2	57	7.47	.090	4	150	3.27	47	.01	3	1.92	.02	.20	1	.005
3944	1	43	6	68	.2	44	18	815	4.29	8	5	ND	4	160	1	2	2	60	6.24	.094	8	97	2.37	76	.01	4	2.69	.03	.19	1	.001
3945	1	36	11	68	.1	82	24	812	4.13	5	5	ND	4	130	1	2	2	89	7.37	.092	6	201	2.76	51	.01	2	2.78	.03	.15	1	.001
3946	1	63	10	62	.2	89	26	862	4.49	23	5	ND	4	137	1	2	2	123	7.64	.061	4	222	3.43	27	.01	3	3.14	.03	.10	1	.001
3947	1	41	11	56	1.1	68	21	934	4.16	854	5	ND	4	249	1	3	2	49	9.30	.073	6	64	1.99	34	.01	6	1.73	.01	.14	1	.023
3948	1	50	8	68	.1	66	21	857	4.32	65	5	ND	4	216	1	2	2	69	8.25	.084	6	113	2.42	56	.01	6	2.68	.03	.18	1	.001
3949	1	60	9	70	.1	65	21	905	4.08	68	5	ND	4	219	1	2	2	67	7.71	.129	8	94	2.53	56	.01	8	2.66	.02	.19	1	.001
3950	1	63	3	60	.4	28	15	754	3.72	273	5	ND	4	174	1	2	2	26	6.02	.135	7	19	1.71	50	.01	10	1.84	.02	.17	1	.038
3951	1	64	10	77	.2	52	20	857	4.15	173	5	ND	4	205	1	2	2	51	6.67	.116	6	63	2.24	59	.01	4	2.35	.02	.19	1	.005
3952	1	43	5	74	.3	48	16	850	3.83	112	5	ND	4	198	1	2	2	45	7.15	.101	6	59	2.00	60	.01	5	2.29	.02	.18	1	.002
3953	1	22	12	66	.4	14	11	589	3.42	441	5	ND	3	118	1	2	2	13	4.57	.111	5	5	.98	63	.01	10	1.01	.02	.21	1	.011
3954	2	42	15	57	1.3	16	13	786	4.10	673	5	ND	3	124	1	5	2	17	6.27	.088	4	6	.66	45	.01	12	.66	.02	.18	1	.059
3955	1	22	8	74	.3	16	13	877	4.17	145	5	ND	3	151	1	2	2	45	6.16	.099	5	15	1.55	83	.01	11	1.59	.02	.22	1	.009
3956	1	12	9	91	.1	22	18	683	4.97	58	5	ND	2	154	1	2	2	69	4.56	.120	5	28	2.17	136	.01	9	2.81	.02	.30	1	.003
3957	1	50	7	72	.3	13	14	805	4.06	143	5	ND	3	202	1	2	2	44	6.02	.096	5	10	1.58	103	.01	9	1.97	.03	.22	1	.013
3958	5	109	8	72	.4	17	16	651	4.87	93	5	ND	2	142	1	2	2	58	4.39	.076	4	16	1.29	126	.01	3	2.14	.01	.18	1	.003
3959	1	47	6	83	.2	9	17	930	4.97	17	5	ND	4	174	1	2	2	76	5.92	.084	5	10	1.73	114	.01	2	2.49	.04	.18	1	.001
3960	1	41	10	90	.2	11	17	744	5.05	29	5	ND	2	129	1	2	2	62	4.08	.092	8	13	1.65	144	.01	9	2.53	.03	.24	1	.001
3961	1	48	18	81	.3	11	11	734	4.54	86	5	ND	2	120	1	2	2	52	4.35	.052	6	14	1.12	103	.01	2	1.90	.02	.15	1	.001
3962	1	38	12	75	.2	10	15	720	4.43	29	5	ND	3	86	1	2	2	50	3.52	.091	10	15	1.45	78	.01	5	2.09	.03	.17	1	.001
3963	1	29	7	55	.1	10	12	726	3.27	25	5	ND	3	140	1	2	2	31	6.85	.057	8	10	1.09	63	.01	8	1.66	.03	.20	1	.001
3964	1	34	10	89	.2	5	13	689	4.42	111	5	ND	3	84	1	2	2	72	3.80	.091	7	9	1.28	45	.01	2	1.94	.05	.16	1	.001
3965	2	32	14	98	.1	15	9	526	3.24	82	5	ND	3	55	1	2	2	41	2.74	.088	10	13	.98	46	.01	5	1.41	.05	.15	1	.001
3966	1	16	4	61	.1	5	12	927	4.17	8	5	ND	2	91	1	2	2	75	4.17	.098	10	13	1.17	63	.01	2	1.91	.07	.13	1	.001
3967	1	8	9	44	.1	3	6	696	2.77	19	5	ND	3	107	1	2	2	20	3.85	.056	8	2	.69	56	.01	5	1.33	.04	.18	1	.001
3968	26	79	11	98	.2	20	10	604	3.07	364	5	ND	2	120	1	3	2	36	5.34	.095	4	7	.54	69	.01	6	1.07	.02	.15	1	.004
3969	2	37	10	66	.2	12	9	680	3.64	26	5	ND	1	96	1	2	2	29	3.17	.078	5	11	.81	65	.01	6	1.55	.02	.13	1	.001
3970	3	39	11	57	.5	11	13	628	3.57	41	5	ND	2	158	1	7	2	52	3.90	.085	4	10	1.11	55	.01	2	1.44	.05	.09	1	.001
3971	1	42	13	64	.5	10	13	681	3.84	61	5	ND	2	130	1	2	2	45	3.87	.116	4	8	1.02	76	.01	6	1.59	.04	.13	1	.001
3972	3	113	10	62	.8	48	15	833	3.92	128	5	ND	4	200	1	6	2	46	7.37	.266	4	41	1.05	66	.01	8	1.46	.02	.18	1	.004
3973	3	22	11	82	.3	22	13	847	4.29	60	5	ND	2	115	1	3	2	50	3.77	.093	5	38	1.55	64	.01	3	2.01	.06	.15	1	.002
3974	1	17	9	83	.1	2	10	803	4.31	48	5	ND	1	116	1	2	2	39	3.43	.084	5	5	1.04	65	.01	4	1.86	.05	.18	1	.002
3975	1	22	8	77	.1	4	12	948	4.62	19	5	ND	2	156	1	2	2	53	4.18	.098	4	3	1.13	66	.01	6	2.15	.06	.16	1	.001
3976	1	25	11	90	.3	6	12	996	4.99	47	5	ND	2	130	1	2	2	53	4.10	.096	6	4	1.19	75	.01	7	2.26	.07	.18	1	.009
3977	1	18	5	95	.1	2	12	1016	4.72	26	5	ND	1	129	1	2	2	56	3.84	.090	7	3	1.18	46	.01	5	2.21	.06	.11	1	.006
STD C	21	60	39	139	7.1	69	30	1051	3.96	40	18	8	34	49	18	16	21	65	.47	.106	37	60	.08	183	.08	36	1.71	.07	.15	12	-

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SH.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: CORE Au80 BY FIRE ASSAY

DATE RECEIVED: MAR 10 1987 DATE REPORT MAILED: *Mar 16/87* ASSAYER: *D. Toye*...DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0637A

PAGE 1

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au80
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	OZ/T										
1701	1	76	4	50	.2	63	22	731	4.66	13	5	ND	2	159	1	2	2	107	7.68	.096	8	218	4.34	80	.01	2	3.33	.02	.11	2 .001	
1702	1	79	14	52	.4	74	24	736	4.76	11	5	ND	2	179	1	2	2	107	7.06	.114	8	245	4.43	45	.01	2	3.33	.02	.14	1 .001	
1703	1	57	6	51	.1	75	24	786	4.82	4	5	ND	2	209	1	2	3	102	8.38	.109	8	262	4.61	54	.01	3	3.32	.02	.12	1 .001	
1704	1	26	14	92	.1	6	11	1202	5.18	34	5	ND	2	101	1	2	2	54	4.57	.103	9	6	1.43	64	.03	4	2.16	.04	.12	1 .001	
1705	1	18	4	89	.3	6	12	858	4.87	220	5	ND	1	70	1	2	2	37	3.54	.088	5	5	1.12	38	.01	2	1.69	.04	.12	1 .042	
1706	1	28	2	91	.1	6	13	1046	5.30	17	5	ND	2	93	1	2	3	42	4.73	.100	8	7	1.54	73	.01	7	2.03	.04	.15	2 .001	
1707	1	8	5	75	.1	7	12	1047	4.52	5	5	ND	2	148	1	2	4	38	5.27	.090	9	8	1.58	1004	.04	8	2.04	.04	.11	1 .001	
1926	3	36	2	20	.1	40	6	309	2.51	15	5	ND	1	13	1	2	3	64	.50	.028	4	20	1.07	42	.05	2	.92	.01	.01	1 .001	
1927	1	66	11	55	.5	136	28	895	6.22	140	5	ND	1	81	1	3	2	59	3.12	.042	4	155	3.01	30	.01	4	1.98	.01	.10	1 .001	
1928	1	56	10	58	.1	228	33	787	5.37	87	5	ND	2	126	1	2	2	56	6.71	.048	3	283	5.73	16	.01	2	2.48	.01	.10	2 .001	
1929	1	63	7	62	.4	90	22	526	5.82	39	5	ND	2	128	1	2	4	45	7.84	.058	4	174	2.24	20	.03	2	2.55	.01	.16	1 .060	
1931	1	81	11	61	.1	114	27	673	3.99	6	5	ND	3	78	1	2	3	87	8.35	.076	4	189	3.23	13	.26	2	2.63	.02	.02	1 .001	
1932	1	67	11	70	.2	130	28	805	5.38	37	5	ND	3	112	1	2	2	68	10.80	.109	5	163	2.19	46	.15	2	2.61	.01	.11	1 .006	
1934	1	53	5	69	.1	143	30	764	5.31	72	5	ND	2	103	1	2	2	68	10.19	.111	4	166	2.07	32	.13	2	2.50	.02	.11	1 .014	
1936	1	51	9	78	1.5	90	26	645	5.48	369	5	ND	2	115	1	7	2	24	7.93	.085	3	30	1.74	25	.01	6	.40	.01	.21	1 .006	
1937	1	49	7	48	2.4	61	21	718	4.36	145	5	ND	2	138	1	11	3	17	9.79	.069	3	23	1.79	21	.01	10	.34	.01	.22	1 .002	
1939	1	57	18	62	.1	361	45	1005	5.76	158	5	ND	2	164	1	2	2	77	9.18	.043	3	353	6.31	15	.01	2	3.08	.01	.06	1 .001	
1940	2	80	4	134	.3	129	23	1053	4.68	182	5	ND	3	273	1	5	4	31	14.12	.048	3	76	3.66	25	.01	5	.67	.01	.14	1 .001	
1941	2	27	6	36	.7	99	17	887	4.02	138	11	ND	3	218	1	3	3	28	15.47	.027	2	74	2.33	21	.01	5	.45	.01	.09	2 .001	
1942	1	46	5	70	.2	108	29	809	5.38	58	5	ND	3	152	1	2	2	62	11.71	.109	5	125	1.82	26	.07	2	2.23	.02	.13	1 .009	
STD C	21	56	37	136	6.7	65	29	1010	3.99	43	17	7	32	47	17	17	19	62	.44	.102	35	59	.88	175	.08	36	1.72	.07	.14	13 -	

PM 36

DN 56

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.E.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE ASSAY BY FIRE ASSAY

DATE RECEIVED: FEB 25 1987 DATE REPORT MAILED: May 5/87 ASSAYER: D. DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0497

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mo %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au88 PPM
1596	2	31	8	62	.2	10	7	627	3.28	15	5	ND	3	122	1	2	2	25	3.92	.070	5	10	.73	44	.01	2	1.38	.02	.12	1	.001
1597	1	13	8	57	.2	8	6	637	2.68	8	5	ND	3	80	1	2	2	18	3.39	.076	8	6	.69	62	.01	2	1.36	.04	.19	1	.001
1598	1	16	7	54	.1	3	6	595	2.54	9	5	ND	2	82	1	2	3	10	3.60	.053	9	2	.68	72	.01	14	1.35	.02	.24	1	.003
1599	1	12	5	59	.1	5	6	577	2.81	12	5	ND	3	71	1	2	2	13	3.29	.057	8	3	.80	81	.01	15	1.57	.02	.26	1	.001
1600	2	6	2	21	.1	9	5	556	1.54	14	5	ND	2	98	1	2	2	4	5.06	.053	5	2	.33	60	.01	2	.75	.01	.21	1	.001
1601	1	15	5	48	.1	10	7	556	2.33	11	5	ND	3	95	1	2	2	8	3.96	.069	7	1	.64	78	.01	10	1.35	.01	.28	1	.001
1602	2	13	5	47	.3	8	5	640	2.39	10	5	ND	5	124	1	2	3	11	5.38	.067	8	2	.73	77	.01	14	1.46	.01	.26	1	.001
1603	2	45	8	62	.4	108	24	1372	4.45	69	5	ND	5	306	2	2	2	102	8.52	.059	4	201	3.74	39	.01	3	2.72	.03	.12	1	.001
1604	2	24	6	60	.3	26	10	904	3.53	35	5	ND	6	194	1	2	4	46	5.34	.069	7	50	1.40	33	.01	2	1.75	.08	.11	1	.007
1605	1	49	3	38	.1	8	7	571	2.40	4	5	ND	2	108	2	2	3	26	3.25	.044	7	10	.74	27	.01	6	1.17	.06	.07	1	.001
1606	1	28	9	56	.1	51	15	1025	3.64	13	5	ND	6	169	1	2	2	71	6.94	.054	6	104	1.64	57	.01	2	1.99	.06	.12	1	.001
1607	2	31	4	38	.1	13	8	513	2.59	13	5	ND	2	109	2	2	2	27	2.57	.045	7	17	.98	76	.01	2	1.36	.06	.09	1	.002
1608	2	62	5	47	.1	18	10	774	2.97	17	5	ND	2	158	1	2	2	40	5.25	.111	4	23	.91	52	.01	2	1.49	.03	.14	1	.001
1609	2	26	14	67	.2	5	11	614	4.03	14	5	ND	4	69	2	2	2	36	2.24	.105	9	3	1.22	43	.01	9	1.89	.06	.16	1	.001
1610	1	24	6	63	.1	10	9	780	3.64	45	5	ND	4	123	2	2	2	25	3.71	.086	7	12	1.30	33	.01	8	.71	.05	.15	1	.004
1611	2	27	15	102	.2	6	10	713	4.74	109	5	ND	2	80	1	2	2	44	2.44	.094	6	4	1.29	37	.01	2	1.87	.06	.14	1	.019
1612	1	19	8	101	.3	3	12	1222	5.17	160	5	ND	6	165	2	2	2	28	6.23	.088	5	2	1.64	43	.01	13	.52	.04	.19	1	.007
1613	1	20	7	88	.3	4	12	1260	4.80	6	5	ND	5	151	1	2	2	50	5.19	.089	11	3	1.25	131	.02	4	2.19	.07	.19	1	.001
1614	1	18	7	93	.3	4	12	1271	4.98	4	5	ND	6	119	1	2	2	46	4.06	.094	11	3	1.30	213	.01	4	1.74	.06	.16	1	.004
1615	1	15	6	85	.1	1	10	1132	4.40	16	5	ND	4	106	1	2	2	48	2.99	.083	10	3	1.13	190	.01	17	1.78	.06	.13	1	.001
1616	1	20	10	81	.3	1	9	1189	3.88	6	5	ND	7	99	1	2	3	38	5.56	.089	10	1	1.07	44	.03	5	1.85	.07	.09	1	.001
1617	1	17	6	86	.3	2	8	1100	3.60	3	5	ND	3	102	2	2	2	38	3.18	.079	9	1	.99	92	.04	4	1.78	.06	.18	1	.001
1618	2	10	6	75	.1	3	5	839	2.93	24	5	ND	3	97	1	2	6	11	3.43	.061	13	1	.70	97	.01	16	1.42	.04	.26	1	.006
1619	5	9	6	72	.5	3	10	1044	4.54	50	5	ND	6	151	1	2	3	38	4.74	.102	7	3	1.28	70	.01	4	2.13	.05	.20	1	.004
1620	2	19	7	58	.1	6	10	677	4.34	281	5	ND	1	74	1	2	2	32	3.02	.086	5	3	.94	60	.01	2	1.65	.05	.18	1	.025
1621	2	21	11	79	.1	6	11	987	4.95	91	5	ND	5	82	1	2	6	45	5.06	.105	6	7	1.32	50	.01	5	2.19	.06	.21	1	.007
1622	1	10	8	44	.8	2	6	439	3.17	412	5	ND	3	72	1	2	2	15	2.21	.053	3	2	.45	34	.01	6	.74	.03	.11	1	.056
1623	1	17	12	93	.2	1	11	1047	4.84	10	5	ND	6	95	1	2	2	54	3.32	.093	8	2	1.29	44	.11	8	2.18	.05	.13	1	.001
1624	1	24	8	93	.1	2	10	1049	4.79	10	5	ND	4	91	2	2	3	53	3.47	.088	8	2	1.25	28	.13	4	2.07	.06	.13	1	.003
1625	1	23	14	88	.1	5	15	942	5.54	225	5	ND	6	154	1	2	2	61	4.58	.077	6	3	1.36	38	.04	4	2.12	.05	.17	1	.016
1626	1	22	10	51	.6	3	11	746	3.85	296	5	ND	8	203	1	2	2	50	7.59	.047	3	2	.80	38	.01	4	1.36	.03	.15	1	.181
1627	1	41	11	85	.1	2	16	924	5.66	92	5	ND	8	133	2	2	2	88	6.18	.051	4	2	1.52	41	.01	14	2.41	.05	.19	1	.003
1628	1	45	7	81	.2	4	17	874	5.51	47	5	ND	7	127	1	2	2	100	6.00	.055	5	4	1.81	59	.04	2	2.66	.04	.20	1	.004
1629	1	49	12	72	.1	5	14	751	4.75	12	5	ND	7	117	1	2	2	74	4.75	.055	7	4	1.56	53	.10	15	2.46	.04	.15	1	.002
1630	1	53	16	84	.1	5	15	935	5.39	7	5	ND	6	123	1	2	2	85	5.21	.073	9	3	1.99	126	.13	2	2.86	.04	.17	1	.001
1631	1	43	11	72	.2	9	14	766	4.83	13	5	ND	6	142	1	2	2	71	3.62	.080	9	5	1.70	178	.12	6	2.53	.05	.17	1	.001
STD C	21	59	41	132	7.0	66	29	984	3.76	41	18	8	32	46	16	15	20	62	4.45	.099	34	57	.84	169	.08	36	1.62	.07	.15	13	-

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0497

PAGE 2

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	As88
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	OZ/T										
1632	1	23	5	57	.1	3	9	975	4.27	54	11	ND	8	232	1	2	3	31	8.49	.058	5	1	1.39	95	.01	15	1.10	.03	.20	1 .001	
1633	1	20	3	92	.1	1	10	868	4.62	6	8	ND	4	91	1	2	2	40	2.83	.088	9	3	1.47	95	.03	5	2.17	.05	.12	1 .001	
1634	1	20	7	93	.1	2	9	879	4.35	8	5	ND	5	80	1	2	2	48	3.88	.082	8	2	1.45	40	.14	6	2.09	.04	.11	1 .001	
1635	1	35	6	81	.1	7	9	747	4.32	17	6	ND	5	120	2	2	2	45	3.69	.064	8	11	1.29	66	.08	9	2.07	.03	.13	1 .001	
STD C	19	60	35	134	6.8	61	27	961	3.95	40	17	7	33	47	18	15	21	59	.47	.096	35	56	.88	174	.08	36	1.72	.07	.14	13	

DM 38

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,Ce,Sn,Y,Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AUS BY FIRE ASSAY

DATE RECEIVED: FEB 25 1987 DATE REPORT MAILED: *Mar 10/87* ASSAYER: *N. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0547

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au88 DZ/T	
1901	1	99	11	114	.1	83	21	1307	5.38	5	5	ND	4	145	1	2	2	61	21.28	.016	2	154	2.80	137	.04	2	2.30	.01	.01	1	.001	
1902	2	16	2	37	.4	30	9	979	3.45	77	6	ND	4	164	1	2	2	6	8.87	.081	7	5	2.25	40	.01	6	.41	.02	.19	1	.001	
1903	1	44	7	49	.3	53	17	517	5.08	226	5	ND	3	155	1	2	2	16	7.31	.077	3	27	1.85	28	.01	10	.51	.01	.19	1	.001	
1904	1	41	8	33	.8	49	17	487	5.43	197	5	ND	3	150	1	2	2	11	9.28	.055	3	19	1.63	17	.01	6	.45	.01	.21	2	.002	
1905	1	26	5	52	.2	87	25	562	4.08	16	5	ND	4	112	1	2	3	34	9.69	.070	5	99	1.75	255	.01	3	2.30	.01	.18	1	.003	
1906	2	37	7	48	.3	73	21	649	4.26	61	5	ND	4	145	1	4	3	28	9.71	.058	4	60	1.99	89	.01	7	1.29	.02	.17	2	.001	
1907	2	24	8	52	.4	194	25	749	4.40	236	5	ND	3	187	1	6	2	41	9.55	.037	3	169	3.13	29	.01	9	1.33	.01	.11	1	.022	
1908	1	66	8	54	.1	128	25	773	5.19	68	6	ND	3	110	1	7	2	74	9.12	.038	3	181	4.08	15	.01	5	2.87	.01	.07	1	.016	
1909	1	51	7	52	.3	218	28	836	5.00	259	6	ND	4	211	1	8	3	47	10.48	.037	3	182	3.92	19	.01	9	1.44	.01	.11	2	.001	
1910	1	95	7	56	.2	147	26	873	5.19	85	5	ND	4	117	1	2	3	88	10.75	.038	3	225	3.49	13	.01	5	2.59	.02	.06	1	.002	
1911	1	57	4	56	.1	140	27	815	5.26	60	5	ND	3	128	1	2	2	78	8.39	.043	3	210	3.96	21	.01	4	2.61	.02	.09	1	.001	
1920	1	59	9	55	.1	81	23	787	5.19	21	5	ND	2	124	1	2	3	105	6.66	.060	4	144	3.87	23	.09	2	3.25	.02	.04	1	.001	
1921	1	62	8	57	.1	128	26	841	5.42	58	6	ND	3	126	1	2	3	91	7.58	.068	4	197	3.99	23	.02	2	3.47	.01	.08	1	.001	
1923	1	54	9	65	.1	118	26	884	5.69	51	5	ND	3	142	1	2	2	103	7.51	.098	6	178	3.83	30	.10	7	3.49	.02	.07	1	.001	
1924	2	56	10	38	2.2	29	14	793	4.03	94	5	ND	4	176	1	17	2	22	11.40	.054	5	16	2.20	29	.01	11	.48	.01	.16	2	.001	
1925	2	34	6	35	1.0	36	17	779	4.00	116	5	ND	4	165	1	9	2	14	10.76	.063	5	13	2.46	19	.01	13	.40	.01	.22	2	.001	
1636	1	51	8	82	.1	17	11	591	4.38	16	7	ND	2	64	1	2	4	41	2.77	.059	8	21	1.19	159	.06	8	1.81	.03	.10	1	.001	
1637	1	22	11	85	.1	21	11	587	3.65	9	5	ND	2	77	1	2	3	41	2.76	.108	8	35	1.39	54	.15	6	1.97	.03	.09	1	.001	
1638	1	20	8	42	.1	57	13	545	2.96	7	5	ND	4	144	1	2	2	62	9.63	.038	2	121	1.77	60	.15	9	2.18	.02	.07	1	.001	
1639	1	16	4	26	.1	58	10	493	2.21	2	5	ND	4	150	1	2	2	51	10.16	.038	2	125	1.28	29	.10	6	1.61	.01	.07	1	.001	
1640	1	14	11	66	.2	64	22	695	4.90	73	5	ND	3	130	1	2	2	96	7.69	.099	6	124	3.13	30	.01	5	3.10	.02	.09	1	.002	
1641	1	48	9	43	.6	43	17	822	3.49	1122	5	ND	5	259	1	2	2	58	15.16	.065	6	100	1.76	47	.01	6	1.95	.02	.12	1	.012	
1642	1	84	8	59	.2	74	20	726	4.37	46	5	ND	4	175	1	2	2	78	10.68	.074	5	149	2.75	39	.01	7	2.85	.02	.10	1	.001	
1643	1	36	11	36	.2	52	14	696	2.84	864	5	ND	5	249	1	2	2	56	17.70	.052	5	127	1.68	35	.08	3	1.65	.02	.09	1	.001	
1644	1	24	5	61	.2	70	17	668	3.61	16	5	ND	4	84	1	2	2	60	6.50	.178	13	79	2.56	39	.15	4	2.47	.04	.11	1	.001	
1645	1	8	9	59	.1	25	11	497	4.08	677	5	ND	3	106	1	2	2	22	3.89	.078	6	18	2.31	56	.01	4	2.03	.02	.17	1	.009	
1646	1	7	10	61	.1	293	30	878	5.09	140	5	ND	3	265	1	2	2	115	11.10	.111	6	347	5.46	57	.01	7	3.52	.02	.03	1	.001	
1647	8	198	9	41	.1	39	7	357	3.50	12	5	ND	2	51	1	2	2	81	2.44	.228	7	31	1.37	12	.01	4	1.51	.01	.03	1	.001	
1648	1	37	6	46	.1	9	13	734	4.54	8	5	ND	4	140	1	2	2	53	6.83	.120	6	6	1.79	22	.01	4	1.18	.04	.09	1	.001	
1649	1	36	8	60	.1	14	13	687	4.48	6	5	ND	4	129	1	2	2	63	5.89	.092	8	23	2.17	38	.01	5	2.49	.03	.12	1	.001	
1650	1	36	10	64	.1	41	16	718	4.20	11	5	ND	3	147	1	2	2	54	7.48	.092	7	80	2.39	30	.01	4	2.69	.02	.12	1	.001	
1651	1	10	9	67	.1	82	17	694	3.55	26	5	ND	3	148	1	2	2	43	7.57	.079	8	183	3.28	42	.01	2	2.98	.01	.11	1	.001	
1652	1	21	10	83	.2	82	18	632	3.90	77	5	ND	3	143	1	2	2	44	6.31	.088	8	158	3.20	42	.01	9	2.90	.01	.12	1	.006	
1653	1	73	8	88	.6	43	15	1166	3.98	141	5	ND	5	341	1	2	2	52	22.76	.048	6	94	2.14	28	.01	3	1.95	.01	.08	1	.009	
1654	1	120	12	77	.4	66	17	823	4.25	272	5	ND	4	180	1	2	2	44	8.36	.078	6	123	3.07	28	.01	6	2.53	.01	.11	1	.007	
1655	1	33	6	53	.1	12	12	1008	4.70	178	6	ND	7	33	46	1	3	21	28	7.79	.083	5	13	1.61	71	.01	5	.70	.02	.19	1	.001
STD	20	58	39	129	6.9	66	27	958	3.96	42	16	7	ND	33	46	1	15	21	58	.47	.096	34	55	.88	172	.08	33	1.73	.07	.13	13	

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
SAMPLE TYPE: CORE Au18 BY FIRE ASSAY

DATE RECEIVED: FEB 19 1987 DATE REPORT MAILED: Feb 23/87 ASSAYER: N. S. Toy. DEAN TOYE. CERTIFIED B.C. ASSAYER.

SAMPLE#	WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0397A																						PAGE	1							
	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V %	Ca PPM	P PPM	La PPM	Cr %	Mg PPM	Ba PPM	Ti %	B PPM	Al %	Na %	K %	M PPM	Au18 %
3942	1	25	14	67	.2	183	26	1078	5.00	330	5	ND	3	306	1	2	2	67	8.37	.084	4	267	3.87	36	.01	2	2.18	.01	.15	1	.041
3943	1	6	8	57	.2	78	22	931	4.23	147	5	ND	4	217	1	2	2	57	7.47	.090	4	150	3.27	47	.01	3	1.92	.02	.20	1	.005
3944	1	43	6	68	.2	44	18	B15	4.29	8	5	ND	4	160	1	2	2	60	6.24	.094	8	97	2.37	76	.01	4	2.69	.03	.19	1	.001
3945	1	36	11	68	.1	82	.24	812	4.13	5	5	ND	4	130	1	2	2	89	7.37	.092	6	201	2.76	51	.01	2	2.78	.03	.15	1	.001
3946	1	63	10	62	.2	89	26	862	4.49	23	5	ND	4	137	1	2	2	123	7.64	.061	4	222	3.43	27	.01	3	3.14	.03	.10	1	.001
3947	1	41	11	56	1.1	68	21	934	4.16	854	5	ND	4	249	1	3	2	49	9.30	.073	6	64	1.99	34	.01	6	1.73	.01	.14	1	.023
3948	1	50	8	68	.1	66	21	857	4.32	65	5	ND	4	216	1	2	2	69	8.25	.084	6	113	2.42	56	.01	6	2.68	.03	.18	1	.001
3949	1	60	9	70	.1	65	21	905	4.08	68	5	ND	4	219	1	2	2	67	7.71	.129	8	94	2.53	56	.01	8	2.66	.02	.19	1	.001
3950	1	63	3	60	.4	28	15	754	3.72	273	5	ND	4	174	1	2	2	26	6.02	.135	7	19	1.71	50	.01	10	1.84	.02	.17	1	.038
3951	1	64	10	77	.2	52	20	857	4.15	173	5	ND	4	205	1	2	2	51	6.67	.116	6	63	2.24	59	.01	4	2.35	.02	.19	1	.005
3952	1	43	5	74	.3	48	16	850	3.83	112	5	ND	4	198	1	2	2	45	7.15	.101	6	59	2.00	60	.01	5	2.29	.02	.18	1	.002
3953	1	22	12	66	.4	14	11	589	3.42	441	5	ND	3	118	1	2	2	13	4.57	.111	5	5	.98	63	.01	10	1.01	.02	.21	1	.011
3954	2	42	15	57	1.3	16	13	786	4.10	673	5	ND	3	124	1	5	2	17	6.27	.088	4	6	.66	45	.01	12	.66	.02	.18	1	.059
3955	1	22	8	74	.3	16	13	877	4.17	145	5	ND	3	151	1	2	2	45	6.16	.099	5	15	1.55	83	.01	11	1.59	.02	.22	1	.009
3956	1	12	9	91	.1	22	18	683	4.97	58	5	ND	2	154	1	2	2	69	4.56	.120	5	28	2.17	136	.01	9	2.81	.02	.30	1	.003
3957	1	50	7	72	.3	13	14	805	4.06	143	5	ND	3	202	1	2	2	44	6.02	.096	5	10	1.58	103	.01	9	1.97	.03	.22	1	.013
3958	5	109	8	72	.4	17	16	651	4.87	93	5	ND	2	142	1	2	2	58	4.39	.076	4	16	1.29	126	.01	3	2.14	.01	.18	1	.003
3959	1	47	6	83	.2	9	17	930	4.97	17	5	ND	4	174	1	2	2	76	5.92	.084	5	10	1.73	114	.01	2	2.49	.04	.18	1	.001
3960	1	41	10	90	.2	11	17	744	5.05	29	5	ND	2	129	1	2	2	62	4.08	.092	8	13	1.65	144	.01	9	2.53	.03	.24	1	.001
3961	1	48	18	81	.3	11	11	734	4.54	86	5	ND	2	120	1	2	2	52	4.35	.052	6	14	1.12	103	.01	2	1.90	.02	.15	1	.001
3962	1	38	12	75	.2	10	15	720	4.43	29	5	ND	3	86	1	2	2	50	3.52	.091	10	15	1.45	78	.01	5	2.09	.03	.17	1	.001
3963	1	29	7	55	.1	10	12	726	3.27	25	5	ND	3	140	1	2	2	31	6.85	.057	8	10	1.09	63	.01	8	1.66	.03	.20	1	.001
3964	1	34	10	89	.2	5	13	689	4.42	111	5	ND	3	84	1	2	2	72	3.80	.091	7	9	1.28	45	.01	2	1.94	.05	.16	1	.001
3965	2	32	14	98	.1	15	9	526	3.24	82	5	ND	3	55	1	2	2	41	2.74	.088	10	13	.98	46	.01	5	1.41	.05	.15	1	.001
3966	1	16	4	61	.1	5	12	927	4.17	8	5	ND	2	91	1	2	2	75	4.17	.098	10	13	1.17	63	.01	2	1.91	.07	.13	1	.001
3967	1	8	9	44	.1	3	6	696	2.77	19	5	ND	3	107	1	2	2	20	3.85	.056	8	2	.69	56	.01	5	1.33	.04	.18	1	.001
3968	26	79	11	98	.2	20	10	604	3.07	364	5	ND	2	120	1	3	2	36	5.34	.095	4	7	.54	69	.01	6	1.07	.02	.15	1	.004
3969	2	37	10	66	.2	12	9	680	3.64	26	5	ND	1	96	1	2	2	29	3.17	.078	5	11	.81	65	.01	6	1.55	.02	.13	1	.001
3970	3	39	11	57	.5	11	13	628	3.57	41	5	ND	2	158	1	7	2	52	3.90	.085	4	10	1.11	55	.01	2	1.44	.05	.09	1	.001
3971	1	42	13	64	.5	10	13	681	3.84	61	5	ND	2	130	1	2	2	45	3.87	.116	4	8	1.02	76	.01	6	1.59	.04	.13	1	.001
3972	3	113	10	62	.8	48	15	833	3.92	128	5	ND	4	200	1	6	2	46	7.37	.266	4	41	1.05	66	.01	8	1.46	.02	.18	1	.004
3973	3	22	11	82	.3	22	13	847	4.29	60	5	ND	2	115	1	3	2	50	3.77	.093	5	38	1.55	64	.01	3	2.01	.06	.15	1	.002
3974	1	17	9	83	.1	2	10	803	4.31	48	5	ND	1	116	1	2	2	39	3.43	.084	5	5	1.04	65	.01	4	1.86	.05	.18	1	.002
3975	1	22	8	77	.1	4	12	948	4.62	19	5	ND	2	156	1	2	2	53	4.18	.098	4	3	1.13	66	.01	6	2.15	.06	.16	1	.001
3976	1	25	11	90	.3	6	12	996	4.99	47	5	ND	2	130	1	2	2	53	4.10	.096	6	4	1.19	75	.01	7	2.26	.07	.18	1	.009
3977	1	18	5	95	.1	2	12	1016	4.72	26	5	ND	1	129	1	2	2	56	3.84	.090	7	3	1.18	46	.01	5	2.21	.06	.11	1	.006
STD C	21	60	39	139	7.1	69	30	1051	3.96	40	18	B	34	49	18	16	21	65	.47	.106	37	60	.88	183	.08	36	1.71	.07	.15	12	-

DM42

1102-61

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0397A

PAGE 2

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K PPM	W OZ/T	Mo#42
3978	1	13	7	78	.1	2	7	942	3.69	9	5	ND	3	138	1	2	3	29	4.11	.073	9	1	.88	78	.01	7	1.94	.08	.22	1 .002	
3979	1	9	5	74	.1	1	6	782	3.31	31	5	ND	2	113	1	2	2	16	3.20	.063	9	1	.77	91	.01	8	1.75	.06	.26	1 .005	
3980	1	26	7	94	.1	3	11	1036	4.67	16	5	ND	5	156	1	2	2	47	5.11	.093	6	3	1.13	58	.01	8	2.24	.08	.16	1 .004	
3981	1	14	7	89	.1	1	11	1047	4.52	9	5	ND	4	175	1	2	2	43	5.25	.085	7	4	1.12	65	.01	13	2.24	.07	.16	1 .001	
3982	1	21	6	93	.2	5	10	1037	4.83	62	5	ND	5	172	1	2	2	52	5.58	.094	5	4	1.21	59	.01	14	2.31	.08	.17	1 .012	

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU# BY FIRE ASSAY

DATE RECEIVED: FEB 20 1987 DATE REPORT MAILED: *Feb 24/87* ASSAYER: *D. Toye*, DEAN TOYE, CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0416A

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Aut GIZ/T
1351	1	55	4	76	.1	15	14	643	4.27	53	5	ND	2	111	1	3	2	49	7.14	.082	4	14	1.86	50	.01	7	2.35	.03	.16	2	.006
1352	2	45	10	69	.2	14	12	455	3.97	36	5	ND	2	88	1	2	2	29	3.54	.079	11	16	1.39	56	.01	14	1.98	.04	.17	1	.005
1353	1	24	8	55	.1	15	9	328	3.41	169	5	ND	2	73	1	2	2	18	2.47	.066	10	8	1.10	65	.01	17	1.49	.03	.18	1	.008
1354	1	51	6	44	.7	26	13	634	3.62	323	5	ND	2	196	1	3	2	24	6.23	.078	5	25	1.33	67	.01	6	1.29	.02	.19	2	.041
1355	2	49	2	47	.1	11	9	547	3.78	139	5	ND	2	154	1	2	2	25	4.59	.064	5	9	1.09	61	.01	14	1.47	.02	.14	2	.008
1385	1	80	12	63	.1	189	42	772	5.01	70	5	ND	2	95	1	2	2	97	5.35	.076	10	97	3.23	56	.19	5	2.82	.04	.04	1	.001
1386	1	28	2	6	.2	7	4	305	1.28	7	5	ND	1	97	1	3	2	8	5.71	.010	2	3	.15	166	.01	4	.38	.01	.10	1	.001
1387	1	26	6	42	.1	27	11	514	3.07	7	5	ND	1	126	1	3	3	51	3.48	.067	11	53	2.32	138	.22	9	2.06	.03	.06	2	.001
1388	1	38	2	29	.2	90	20	824	2.82	214	5	ND	3	352	1	2	2	44	12.67	.069	6	116	1.59	53	.01	11	1.56	.02	.10	2	.001
1389	1	69	7	53	.5	119	30	739	3.94	281	5	ND	3	461	1	2	2	41	9.94	.082	7	101	2.36	49	.01	12	2.05	.02	.15	1	.005
1390	1	69	17	69	.5	88	17	711	5.00	55	5	ND	3	126	1	2	2	79	6.50	.099	5	179	2.51	21	.01	7	2.56	.01	.04	1	.020
2641	1	47	7	78	.1	48	18	919	4.19	11	5	ND	3	142	1	2	3	72	4.17	.078	10	92	2.62	182	.10	7	2.23	.02	.12	1	.001
2642	1	51	3	56	.1	14	8	493	4.00	2	5	ND	2	83	1	2	2	30	2.42	.034	12	18	1.72	207	.01	6	1.74	.02	.12	1	.001
2643	1	88	19	76	.7	36	22	609	7.57	53	5	ND	2	83	1	2	2	76	2.94	.101	7	36	1.88	75	.01	7	2.63	.01	.06	1	.009
2644	1	81	12	43	.2	16	11	746	9.94	23	5	ND	1	49	1	2	3	45	2.91	.018	4	17	.74	7	.01	11	1.26	.01	.01	2	.013
2645	1	43	4	85	.1	3	12	1356	4.74	2	5	ND	3	93	1	2	2	76	2.83	.175	17	5	1.49	100	.06	3	2.14	.03	.11	1	.001
2646	1	38	16	77	.2	97	24	861	4.78	47	5	ND	1	142	1	3	2	89	4.85	.113	10	170	4.03	36	.01	9	2.41	.02	.09	1	.001
3983	1	21	6	81	.1	4	13	1086	5.38	100	5	ND	2	201	1	2	2	55	6.15	.078	5	7	1.57	43	.01	8	2.36	.03	.11	1	.001
3984	1	40	7	65	.4	8	16	930	5.74	235	5	ND	1	182	1	2	3	69	5.03	.078	4	13	1.65	40	.01	14	2.38	.03	.10	1	.056
3985	1	41	10	88	.1	4	18	876	6.35	24	5	ND	2	153	1	2	2	111	5.27	.073	5	4	1.68	31	.01	12	2.73	.04	.08	1	.001
3986	1	50	7	92	.1	3	19	1011	5.99	132	5	ND	2	173	1	2	2	93	6.62	.071	4	4	1.89	39	.01	13	2.39	.03	.12	1	.015
3987	1	28	13	71	.9	6	17	1049	5.91	946	5	2	1	231	1	3	2	14	5.98	.074	3	2	1.31	24	.01	15	.46	.03	.17	1	.058
3988	1	15	3	76	.1	5	14	983	5.13	35	5	ND	2	197	1	2	2	59	6.09	.076	5	5	1.57	56	.01	7	2.38	.03	.14	1	.001
3989	1	21	4	75	.2	5	13	825	4.97	27	6	ND	1	148	1	3	3	49	4.41	.085	5	5	1.46	47	.01	9	2.28	.03	.12	1	.003
3990	1	28	7	75	.1	3	11	835	5.05	15	5	ND	2	154	1	2	2	48	3.83	.068	7	7	1.41	73	.01	7	2.31	.03	.10	1	.001
3991	1	51	7	66	.2	3	14	768	4.99	148	5	ND	2	141	1	2	2	39	3.88	.081	4	7	1.24	65	.01	6	1.98	.03	.13	1	.005
3992	1	41	5	56	.3	8	10	614	4.10	51	5	ND	1	125	1	2	2	28	3.45	.062	3	13	1.02	39	.01	4	1.68	.02	.07	1	.011
3993	1	48	2	52	.1	8	9	530	3.51	20	5	ND	1	110	1	2	2	23	3.41	.085	5	8	1.00	44	.01	14	1.60	.02	.09	1	.048
3994	1	38	8	62	.1	65	18	974	4.03	73	5	ND	2	256	1	2	2	51	9.52	.053	4	110	2.08	46	.01	12	2.00	.02	.10	1	.001
3995	1	51	6	67	.3	30	14	625	4.43	92	5	ND	2	164	1	3	2	39	5.21	.061	5	40	1.47	66	.01	13	1.96	.03	.12	1	.006
3996	1	33	7	65	.1	45	15	738	4.62	47	5	ND	2	205	1	2	2	56	7.11	.065	5	104	1.82	56	.01	7	2.26	.03	.12	1	.007
3997	1	17	8	61	.4	79	21	836	4.49	40	5	ND	3	239	1	2	2	68	9.61	.051	4	124	2.38	49	.01	13	2.50	.03	.10	1	.023
3998	1	34	4	60	.2	95	24	830	4.60	35	5	ND	3	221	1	2	2	74	11.11	.052	4	179	2.84	49	.01	12	2.86	.03	.10	1	.001
3999	1	48	9	38	.8	65	17	824	3.43	531	5	ND	4	398	1	3	2	23	12.43	.053	5	39	1.29	44	.01	14	.98	.02	.14	2	.024
4000	2	8	10	63	.2	21	12	539	3.75	57	5	ND	2	111	1	2	2	30	5.42	.096	6	14	1.83	39	.01	7	2.02	.02	.15	1	.001
STD C	21	60	37	133	6.8	65	29	1002	3.95	36	16	7	33	48	17	16	21	62	.48	.102	36	58	.88	180	.08	37	1.72	.07	.14	12	-

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AU\$# BY FIRE ASSAY

DATE RECEIVED: FEB 13 1987 DATE REPORT MAILED: Feb 18/87 ASSAYER: N. Toye, DEAN TOYE. CERTIFIED B.C. ASSAYER.

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # B7-0334

PAGE 1

SAMPLE#	No PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca PPM	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	H PPM	Au\$# DZ/T
1368	1	59	8	59	.2	104	23	727	4.68	6	5	ND	3	130	1	2	2	100	5.75	.147	21	196	4.44	259	.01	5	3.21	.04	.13	1 .001	
1369	1	34	4	52	.3	96	21	811	4.27	54	5	ND	2	185	1	2	2	47	7.11	.142	17	113	3.89	90	.01	9	2.13	.02	.19	1 .001	
1370	1	48	2	52	.3	97	23	763	4.29	84	5	ND	3	170	1	2	2	47	6.27	.139	17	119	3.94	89	.01	4	2.07	.02	.18	1 .001	
1371	1	40	2	53	.4	93	22	788	4.31	141	5	ND	3	186	1	2	2	38	7.27	.134	11	103	3.55	78	.01	2	1.79	.02	.17	1 .001	
1372	1	48	7	57	.3	80	20	704	4.24	1228	5	ND	2	161	1	2	2	30	6.21	.129	7	71	2.72	71	.01	6	1.16	.02	.17	1 .001	
1373	1	11	13	28	.5	77	18	698	3.79	2100	5	ND	2	219	1	2	2	10	7.39	.114	6	17	2.39	40	.01	7	.36	.02	.21	1 .024	
1374	1	1057	4	86	1.0	18	897	362	4.01	2849	5	ND	1	92	1	2	2	25	3.28	.031	4	15	1.24	36	.01	17	.75	.01	.09	688 .022	
1375	1	66	8	88	.5	65	18	554	4.26	1267	5	ND	1	129	1	3	2	28	5.32	.041	3	31	2.34	49	.01	5	1.01	.01	.12	4 .032	
1376	1	59	14	80	.7	31	9	341	3.53	476	5	ND	1	83	1	2	2	29	3.32	.067	4	17	1.11	28	.01	2	.73	.01	.08	1 .016	
1377	1	63	12	48	.3	26	9	294	4.41	235	5	ND	1	73	1	2	2	39	2.66	.042	4	27	1.05	17	.01	2	1.12	.01	.03	2 .014	
1378	1	22	6	35	.3	74	23	807	3.52	222	5	ND	3	262	1	2	2	19	8.38	.115	8	39	2.99	91	.01	8	.62	.02	.17	6 .007	
1379	1	39	4	53	.2	84	21	759	4.30	116	5	ND	3	190	1	2	2	45	6.54	.136	13	110	3.68	87	.01	8	1.69	.03	.16	1 .003	
1380	1	42	10	53	.5	93	23	820	4.37	215	5	ND	3	190	1	3	2	36	6.81	.142	12	88	3.76	71	.01	10	1.57	.02	.18	1 .005	
1381	1	63	5	61	.8	91	22	744	4.32	570	5	ND	3	179	1	2	2	43	6.30	.140	11	97	3.69	97	.01	10	1.74	.02	.17	1 .016	
1382	1	49	6	48	.3	90	21	761	4.10	271	5	ND	2	220	1	2	2	35	6.99	.134	9	91	3.45	88	.01	5	1.41	.02	.17	2 .006	
1383	1	41	4	50	.3	93	21	764	4.20	186	5	ND	3	177	1	2	2	40	6.07	.134	11	105	3.83	78	.01	4	1.71	.02	.18	1 .001	
1384	1	37	6	37	.4	75	17	715	3.47	927	5	ND	3	235	1	2	2	24	7.28	.111	9	55	2.93	62	.01	6	.85	.02	.18	1 .008	
2557	1	29	9	77	.8	75	25	703	5.35	79	5	ND	2	106	2	3	2	25	9.85	.073	3	28	1.84	37	.01	3	.62	.01	.16	1 .002	
2558	1	38	2	75	.1	81	25	746	5.48	8	5	ND	2	100	1	2	2	52	7.87	.115	7	117	3.51	31	.01	5	2.36	.02	.11	1 .001	
2559	1	59	7	90	.1	82	25	582	5.63	3	5	ND	1	84	1	2	2	75	6.64	.112	5	112	2.32	37	.05	2	2.66	.02	.09	1 .001	
2560	1	48	12	82	.7	76	22	769	4.97	57	5	ND	2	93	1	2	2	59	10.43	.072	3	99	2.06	14	.10	5	2.03	.02	.10	1 .001	
2561	1	54	5	91	.1	93	26	486	4.46	8	5	ND	2	82	1	2	2	75	6.23	.125	3	117	1.64	37	.39	5	2.06	.03	.06	1 .001	
2562	1	31	2.	59	.1	86	20	570	3.37	5	5	ND	2	105	1	2	2	45	9.47	.116	3	80	1.18	130	.32	2	1.46	.02	.11	1 .001	
2563	1	59	5	55	.7	22	16	615	4.03	13	5	ND	2	95	1	5	2	27	7.85	.105	6	14	2.20	24	.01	2	.93	.02	.17	1 .001	
2564	1	56	2	52	.6	20	17	651	4.18	36	5	ND	2	85	1	4	2	24	10.00	.111	5	9	1.22	38	.01	4	.74	.01	.19	1 .001	
2565	1	53	6	65	.2	80	21	553	3.67	2	5	ND	2	73	1	2	2	34	11.29	.132	4	63	1.55	23	.01	2	2.22	.01	.12	1 .001	
2566	1	59	2	77	.2	100	23	595	3.84	2	5	ND	2	75	1	2	2	37	10.95	.101	3	86	1.75	19	.01	2	2.41	.01	.10	1 .001	
2567	1	49	8	82	.1	88	21	668	3.45	4	5	ND	3	90	1	2	2	36	12.83	.121	4	63	1.65	28	.01	3	2.28	.01	.13	1 .001	
2568	1	15	10	107	.1	73	18	594	3.95	3	5	ND	2	99	1	2	3	45	10.70	.114	3	73	1.99	18	.01	3	2.49	.01	.11	1 .001	
2569	1	9	10	192	.1	85	17	697	3.47	3	5	ND	2	171	2	2	2	50	13.71	.099	3	67	2.86	16	.01	6	2.52	.01	.08	1 .001	
2570	1	14	12	198	.2	88	17	664	3.35	2	5	ND	3	186	2	2	2	62	13.24	.085	3	108	3.02	17	.01	2	2.54	.01	.10	1 .001	
2571	1	11	12	160	.1	115	20	659	3.60	3	5	ND	3	172	2	2	3	64	12.55	.059	2	175	3.15	18	.01	4	2.79	.01	.11	1 .001	
2735	1	87	43	182	9.2	154	36	553	4.45	336	5	ND	2	120	2	4	2	40	6.84	.099	4	76	2.32	21	.01	8	1.30	.01	.20	1 .011	
2736	1	52	10	94	1.0	70	26	787	5.22	135	5	ND	2	128	1	2	2	63	8.98	.115	5	90	2.09	51	.02	7	2.32	.02	.15	1 .003	
2737	4	88	212	4823	29.4	90	25	822	4.96	721	5	ND	3	172	73	15	2	26	9.16	.088	3	42	2.69	24	.01	11	.66	.01	.21	1 .008	
2738	1	26	5	83	.5	59	25	401	4.85	175	5	ND	1	93	1	2	2	35	4.82	.143	3	38	1.21	25	.01	17	.80	.02	.25	1 .001	
STD C	20	59	38	132	6.7	64	29	990	3.94	38	18	7	33	48	17	15	20	61	.46	.101	35	58	.88	176	.08	36	1.72	.07	.14	12 -	

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Mn,K,W,Si,Zr,CE,Sn,Y,Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU88 BY FIRE ASSAY

DATE RECEIVED: FEB 12 1987 DATE REPORT MAILED: *Feb 17/87* ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0322

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al %	Na %	K %	W PPM	Au88 %
1356	1	57	8	53	.5	71	22	927	4.85	189	7	ND	4	230	1	2	2	42	5.33	.088	7	93	3.55	83	.01	4	1.88	.02	.15	1	.007
1357	1	34	5	76	.1	8	15	745	5.47	55	5	ND	3	151	1	2	2	66	3.65	.081	5	10	2.43	110	.01	7	2.67	.02	.16	1	.002
1358	1	65	4	94	.1	11	19	709	6.97	17	5	ND	3	90	1	2	2	92	2.28	.085	9	13	2.44	94	.01	2	3.18	.03	.11	1	.001
1359	1	59	11	66	.3	9	17	653	5.56	297	5	ND	2	116	1	2	2	49	2.87	.085	4	7	1.61	95	.01	8	1.84	.02	.17	1	.018
1360	1	11	5	15	.3	6	4	343	2.07	386	5	ND	1	77	1	2	2	6	2.07	.027	3	4	.58	71	.01	3	.40	.01	.10	1	.012
<i>DM42</i>																															
1361	2	49	14	36	.8	16	8	392	4.05	686	5	ND	2	106	1	2	5	7	2.80	.070	3	6	.76	31	.01	11	.28	.01	.10	1	.031
1362	1	61	11	53	.7	16	7	278	4.21	399	5	ND	2	80	1	2	2	17	2.23	.117	3	11	.86	44	.01	2	.68	.01	.09	1	.025
1363	1	87	13	74	.3	69	17	506	5.86	202	5	ND	2	122	1	2	2	53	3.26	.071	3	52	2.08	47	.01	5	1.61	.01	.10	1	.009
1364	1	60	8	72	.1	100	23	888	5.85	105	5	ND	4	155	1	2	2	64	3.93	.149	13	146	4.15	75	.01	11	2.59	.02	.13	1	.006
1365	1	35	10	68	.2	34	14	730	4.92	323	5	ND	4	124	1	2	2	36	4.17	.175	9	41	2.07	73	.01	3	1.58	.02	.16	1	.016
1366	1	44	9	58	.2	65	18	709	4.62	68	5	ND	3	132	1	2	2	51	3.21	.121	10	91	3.36	72	.01	2	2.26	.02	.12	1	.001
1367	1	48	9	51	.1	97	24	803	4.63	34	5	ND	3	152	1	2	2	75	3.82	.144	17	151	4.27	76	.01	11	2.62	.03	.14	1	.001
2601	1	51	14	67	.8	45	22	1078	5.32	39	5	ND	4	124	1	2	2	125	6.70	.056	6	76	2.70	27	.01	2	2.70	.02	.05	1	.037
2602	1	92	5	35	.3	20	14	703	4.38	61	5	ND	2	138	1	2	2	32	3.83	.070	3	12	1.39	28	.01	2	.88	.01	.08	1	.003
2603	1	58	5	29	.1	22	10	497	3.89	15	5	ND	1	91	1	2	2	36	1.84	.090	9	28	1.18	44	.04	2	1.45	.01	.08	1	.001
2604	1	59	4	61	.1	15	9	538	4.56	8	5	ND	2	65	1	2	2	30	1.34	.032	5	13	1.97	25	.08	3	2.05	.01	.06	1	.001
2605	1	47	11	52	.2	17	9	835	6.03	31	5	ND	1	45	1	2	2	34	1.66	.024	4	16	.97	57	.01	2	1.36	.01	.05	1	.001
2606	1	58	17	64	.1	19	10	2568	8.01	37	5	ND	2	18	1	2	4	48	.77	.054	4	21	.61	21	.01	2	1.03	.01	.03	1	.004
2607	1	64	12	58	.3	18	14	2752	6.88	25	5	ND	2	93	1	2	2	64	2.66	.075	3	18	1.44	146	.01	4	1.67	.01	.09	1	.001
2608	1	64	19	48	.1	20	10	2658	7.36	20	5	ND	1	39	1	2	2	49	1.24	.056	4	20	.61	15	.01	2	1.27	.01	.01	1	.002
2609	1	80	29	53	.3	17	10	3237	6.78	56	5	ND	2	55	1	2	2	39	1.98	.068	3	16	.85	54	.01	2	1.25	.01	.03	1	.016
2610	1	72	22	59	.3	13	10	2175	7.04	39	5	ND	1	20	1	2	2	41	.87	.025	3	17	.86	107	.01	3	1.68	.01	.06	1	.017
2611	4	70	39	137	.2	36	12	2435	6.20	129	5	ND	1	31	2	2	2	66	1.17	.107	4	22	.76	96	.01	2	1.54	.01	.05	1	.001
2612	1	69	22	56	.3	18	10	2744	7.71	27	5	ND	2	59	1	2	2	46	2.61	.059	3	21	.97	76	.01	2	1.80	.01	.05	1	.009
2613	1	68	8	70	.5	60	19	2317	9.54	28	5	ND	1	61	1	2	3	72	2.81	.103	3	89	1.94	30	.01	2	2.56	.01	.07	1	.014
2614	1	114	18	67	.1	25	14	1124	10.38	5	5	ND	1	34	1	2	2	59	1.28	.051	7	30	1.39	72	.03	2	1.47	.17	.36	1	.001
2615	1	77	36	63	.1	18	11	484	7.36	8	5	ND	2	46	1	2	2	64	1.65	.083	9	31	1.47	23	.08	2	2.12	.03	.06	1	.001
2616	1	51	7	24	.1	17	7	407	4.02	52	5	ND	2	51	1	2	5	24	4.81	.030	4	15	.82	8	.02	5	.86	.01	.01	1	.001
STD C	20	60	43	133	6.9	67	29	1015	3.97	36	15	8	34	49	17	15	20	63	.46	.100	36	58	.88	182	.08	36	1.72	.07	.14	14	-

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158 , DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn Fe Ca P Cr Mg Ba Ti B Al Na K Si Zr Ce Sn Y Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: Core AUSS BY FIRE ASSAY

DATE RECEIVED: MAR 26 1987 DATE REPORT MAILED: Mar 31/87 ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

## WESTMIN RESOURCES PROJECT - DEBBIE File # 87-0804

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	SR	CD	SB	BI	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	N	AUSS
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	X	PPM	%	PPM	PPM	OZ/T								
1866	1	57	2	39	.2	25	14	654	3.53	11	5	ND	1	88	1	2	2	67	7.98	.100	6	32	1.22	121	.01	3	.70	.07	.12	2 .001	
1867	1	56	5	63	.3	33	16	796	4.58	3	5	ND	2	118	1	2	3	84	5.96	.117	7	57	2.67	171	.01	2	2.86	.07	.11	2 .001	
1868	1	71	5	69	.3	38	18	713	4.94	2	5	ND	1	120	1	2	2	92	5.52	.113	5	58	2.79	38	.01	3	3.14	.07	.10	1 .001	
1869	1	66	4	58	.3	23	16	778	4.44	7	6	ND	1	135	1	2	4	80	8.11	.104	5	37	2.16	46	.01	3	2.58	.09	.13	1 .004	
1870	1	64	8	51	.2	78	18	725	3.54	26	5	ND	1	152	1	2	2	43	7.92	.100	6	140	2.93	51	.01	2	2.51	.05	.14	1 .001	
1871	1	35	8	82	.2	12	15	815	5.44	30	5	ND	1	126	1	2	4	62	6.91	.100	4	19	1.63	49	.01	2	2.16	.05	.16	1 .002	
1872	1	51	10	95	.8	5	19	771	6.32	174	5	ND	1	112	1	2	2	71	5.15	.100	3	5	1.64	55	.01	3	2.57	.04	.21	4 .019	
1873	1	32	8	57	1.1	5	14	856	5.20	544	5	ND	1	193	1	3	2	32	7.66	.100	4	1	.69	39	.01	3	.99	.05	.19	2 .031	
1874	1	19	8	66	.9	3	13	1030	4.57	172	6	ND	1	213	1	2	2	55	7.76	.100	5	3	1.32	55	.01	4	2.11	.06	.21	1 .048	
1875	1	25	14	72	1.4	3	10	756	4.94	1735	5	ND	1	116	1	3	2	10	4.47	.100	3	1	.91	19	.01	2	.38	.03	.11	1 .051	
1876	1	34	6	66	.2	3	16	866	6.11	76	5	ND	2	94	1	14	2	61	4.59	.100	6	1	1.39	87	.01	3	.42	.05	.13	2 .001	
1877	2	25	5	48	.2	3	9	818	4.29	47	5	ND	1	76	1	3	2	18	3.76	.100	6	1	1.01	44	.01	2	.40	.04	.12	2 .001	
1878	1	10	7	42	.3	3	8	1025	4.42	39	5	ND	2	112	1	2	2	18	5.67	.100	7	1	1.24	43	.01	2	.35	.05	.14	3 .001	
1879	1	11	5	61	.2	3	9	1180	5.03	57	5	ND	1	145	1	2	2	20	6.66	.100	6	1	1.57	57	.01	2	.55	.05	.14	2 .001	
1880	2	19	5	74	.4	4	9	1046	4.91	27	5	ND	2	150	1	8	2	31	5.86	.100	5	2	1.60	41	.01	3	.44	.05	.12	1 .001	
1881	1	16	8	57	.1	3	6	851	2.68	8	5	ND	2	95	1	2	2	18	3.84	.100	5	3	.69	66	.01	4	1.39	.05	.17	1 .001	
1882	1	14	5	42	.1	2	5	572	2.28	5	5	ND	1	85	1	2	2	9	3.69	.100	5	5	.60	72	.01	4	1.25	.03	.17	4 .001	
1883	1	13	6	52	.1	4	5	657	2.37	6	5	ND	1	98	1	2	2	10	4.74	.100	6	7	.61	61	.01	6	1.27	.04	.16	1 .001	
STD C	21	59	41	137	7.2	71	29	1028	3.99	41	19	8	35	49	18	18	23	65	.48	.102	37	60	.88	182	.08	37	1.74	.07	.12	12 -	

DMC-87

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## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE CA P CR MG BA TI B AL NA K W SI ZR CE SN Y NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core      ASSAY BY FIRE ASSAY

DATE RECEIVED: MAR 27 1987 DATE REPORT MAILED: Apr 1/87 ASSAYER.. D. L. DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT - DEBBIE File # 87-0820 Page 1

SAMPLE#	NO PPM	CU PPM	FB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SR PPM	SI PPM	V PPM	CA %	P PPM	LA %	CF PPM	MG %	BA PPM	Tl %	B PPM	AL %	NA %	K PPM	W PPM	Au88 D2/T
DM43-B7-1004	1	27	9	71	1.9	5	10	774	4.95	73	5	9	1	96	1	2	2	49	3.33	.086	4	1	1.30	40	.01	13	2.17	.06	.10	2	.033
1005	1	45	11	84	.1	3	14	767	6.19	35	5	ND	2	74	1	2	2	86	3.53	.070	6	1	1.86	52	.01	6	2.68	.05	.12	1	.001
1006	2	18	14	30	1.1	1	10	831	4.52	847	5	2	2	198	1	2	2	17	7.21	.090	6	1	.74	36	.01	7	.81	.05	.12	2	.115
1007	1	34	7	86	.3	2	12	1035	5.40	123	5	ND	1	149	1	2	2	64	5.78	.078	4	1	1.82	61	.01	4	2.46	.05	.13	2	.009
1008	1	21	11	82	.1	4	9	899	4.84	35	5	ND	2	95	1	2	2	41	3.91	.067	5	1	1.24	43	.01	4	2.09	.05	.12	1	.010
1009	1	11	17	31	6.1	5	6	564	3.12	145	5	24	1	144	1	2	2	17	5.32	.039	3	1	.63	33	.01	4	.98	.04	.07	1	.936
1010	1	33	10	66	.1	10	0	489	3.82	19	5	ND	2	56	1	2	2	35	2.33	.051	6	8	1.01	187	.01	3	1.59	.03	.08	1	.003
1081	1	15	7	45	.1	1	6	1176	3.39	9	9	ND	1	208	1	2	2	11	11.60	.040	4	1	1.10	126	.01	14	.31	.08	.06	3	.002
1082	1	319	3	18	.3	3	8	344	1.74	362	5	ND	2	46	1	2	2	14	4.68	.032	11	1	.61	13	.01	2	.76	.06	.03	1	.002
1083	3	112	5	80	.1	34	20	910	5.88	26	5	ND	2	71	1	2	2	143	5.99	.103	8	52	3.05	15	.01	3	3.14	.06	.05	2	.001
1084	1	10	2	19	.2	1	2	246	1.85	7	5	ND	3	11	1	2	2	6	.82	.027	14	1	.56	5	.01	3	.80	.05	.01	1	.001
1085	1	7	2	15	.1	1	2	308	1.54	38	5	ND	2	21	1	2	2	8	2.08	.024	12	1	.55	5	.01	2	.59	.04	.01	2	.001
1086	1	58	4	48	.5	47	20	837	4.37	222	9	ND	1	119	1	2	2	99	9.72	.042	5	93	3.00	17	.01	6	2.32	.06	.06	2	.001
1087	1	76	7	49	.3	50	21	859	4.56	146	8	ND	1	115	1	2	3	123	9.46	.041	4	134	3.34	15	.01	5	2.68	.06	.04	5	.001
1088	1	80	10	57	.5	47	21	806	4.65	191	5	ND	2	130	1	2	2	128	8.49	.045	6	102	2.95	23	.01	11	2.61	.07	.05	2	.001
1089	1	56	9	64	.5	53	16	895	4.34	90	6	ND	2	160	1	2	2	77	7.87	.050	7	84	2.35	65	.01	25	2.18	.08	.07	1	.002
1090	1	7	5	43	.1	1	3	301	1.81	4	5	ND	1	42	1	2	2	5	1.27	.045	9	1	.45	55	.01	17	.84	.06	.12	1	.002
1091	1	28	7	66	.2	30	8	527	2.39	34	5	ND	1	88	1	2	2	27	4.10	.045	8	59	1.00	102	.01	22	1.31	.07	.08	1	.001
1092	2	61	11	66	.6	70	19	903	3.62	84	5	ND	2	145	1	2	3	60	6.30	.055	6	106	2.40	196	.01	39	1.71	.12	.09	1	.001
1093	1	72	6	75	.2	44	18	802	5.14	71	5	ND	1	136	1	2	2	126	6.65	.038	4	91	3.33	93	.01	19	2.84	.06	.04	1	.001
1094	2	82	7	67	.6	89	22	887	4.47	44	7	ND	2	154	1	2	2	81	6.54	.073	8	157	3.41	193	.01	32	2.84	.09	.09	3	.001
1095	1	29	3	19	.1	7	5	249	1.81	2	5	ND	1	66	1	2	2	11	4.30	.034	4	1	.60	98	.01	8	.81	.03	.10	2	.001
1096	1	15	2	9	.4	4	5	212	1.48	2	5	ND	1	47	1	2	2	6	3.75	.028	4	1	.31	42	.01	6	.46	.03	.11	1	.001
1084	1	7	7	46	.1	2	5	596	2.26	2	5	ND	1	114	1	2	3	8	4.49	.050	6	1	.69	58	.01	6	1.25	.03	.13	4	.001
1085	2	12	4	30	.4	3	3	540	1.73	6	6	ND	1	175	1	2	2	7	5.91	.040	6	1	.51	45	.01	9	.92	.04	.12	1	.001
1086	1	12	4	43	.2	18	7	824	2.44	5	5	ND	1	211	1	2	2	25	7.41	.047	6	28	1.21	294	.01	4	1.52	.05	.12	4	.001
1087	1	22	4	45	.4	20	8	664	2.79	23	8	ND	1	123	1	2	2	40	4.27	.050	5	31	1.27	12	.01	2	1.33	.05	.03	3	.001
1088	1	36	4	37	.4	12	7	782	2.23	43	5	ND	1	194	1	4	2	26	6.08	.040	4	7	.72	28	.01	2	.95	.07	.05	1	.001
1089	1	62	9	97	.3	115	25	1291	4.36	31	5	ND	1	225	1	4	2	110	8.38	.063	3	194	2.81	36	.01	3	2.64	.06	.07	3	.001
1090	3	55	6	59	.1	17	9	613	3.10	23	5	ND	1	133	1	5	2	33	3.44	.047	5	12	1.17	31	.01	2	1.45	.06	.05	1	.001
1091	2	56	5	39	.3	24	9	789	2.46	13	5	ND	1	225	1	5	2	44	7.61	.067	4	34	1.09	36	.01	2	1.22	.06	.05	4	.001
1092	3	80	9	51	.8	23	9	601	3.69	101	5	ND	1	139	1	7	2	39	4.74	.308	4	10	1.01	59	.01	4	1.54	.05	.10	2	.014
1093	4	63	9	45	1.1	21	7	648	3.29	178	5	ND	2	146	1	11	2	29	5.67	.224	4	1	.82	42	.01	4	1.08	.05	.10	3	.042
1094	3	17	11	58	.4	16	9	843	3.80	127	5	ND	1	184	1	2	3	37	5.72	.197	4	12	1.31	64	.01	4	1.63	.06	.12	1	.006
1095	1	22	5	64	.1	18	10	889	3.99	85	5	ND	1	168	1	2	3	30	4.84	.076	4	20	1.33	50	.01	9	.88	.05	.11	1	.006
1096	2	12	8	54	.3	3	9	1032	4.27	29	6	ND	1	243	1	2	2	32	6.69	.068	4	1	1.64	35	.01	8	.26	.06	.12	3	.002
STD C	20	58	37	134	7.1	71	28	1000	3.97	41	17	7	34	47	17	15	21	63	.46	.101	36	58	.88	178	.08	36	1.73	.07	.12	13	-

DM43-B7

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0620

Page 2

SAMPLE#	Mo PPM	Cu PPM	Fe PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Se PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Tl %	R PPM	Al %	Na %	I PPM	N PPM	AsH3	Cl/HF
1897	2	25	6	84	.3	1	9	865	4.34	74	5	ND	2	132	1	3	4	43	3.97	.087	5	1	1.14	27	.01	5	1.74	.05	.09	2	.096	
1898	1	5	6	50	.1	1	6	1066	2.05	39	5	ND	2	179	1	2	2	18	6.72	.068	7	1	.81	59	.01	6	1.26	.06	.04	2	.091	
1899	1	3	2	36	.1	1	4	647	2.46	7	5	ND	2	119	1	2	2	8	3.99	.051	10	1	.61	59	.01	6	1.14	.05	.14	2	.091	
1900	4	19	6	65	.1	2	8	716	4.31	64	5	ND	2	127	1	2	2	33	3.62	.094	5	1	1.17	49	.01	6	1.98	.05	.12	2	.098	

Dug 43-85

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn Fe Ca P Cr Mg Ba Ti Al Na K W Si Zr Ce Sn Y Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: Core AU18 BY FIRE ASSAY

DATE RECEIVED: MAR 30 1987 DATE REPORT MAILED: Apr 3/87

ASSAYER: *D. Toye*, DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT - DEBBIE File # 87-0849

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	Mn	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	Mg	Ba	Tl	B	Al	Na	K	N	AU18
		PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	OZ/T								
1011	1	66	2	55	.1	76	18	644	3.72	37	5	ND	3	107	1	2	2	65	9.16	.073	6	196	2.31	40	.05	15	2.34	.04	.17	1 .001	
1012	1	41	0	57	.3	35	12	566	7.60	219	5	ND	2	129	1	2	2	37	6.87	.039	4	58	1.64	34	.01	5	1.66	.02	.14	1 .007	
1013	1	40	8	63	.4	46	18	668	3.82	266	5	ND	3	138	1	2	2	41	7.03	.050	5	66	2.12	37	.01	7	2.03	.02	.16	1 .013	
1014	1	38	3	41	.1	30	13	638	3.15	21	5	ND	3	137	1	2	2	34	8.73	.093	14	40	1.43	56	.03	11	1.84	.03	.20	1 .001	
1015	1	47	5	66	.1	89	24	961	4.85	161	5	ND	3	277	1	2	2	71	8.00	.100	8	124	4.09	41	.01	9	3.08	.02	.13	1 .007	
1016	1	26	3	28	.8	36	11	707	2.40	210	5	ND	2	189	1	2	4	33	7.53	.051	5	40	1.58	39	.01	5	1.29	.01	.13	1 .013	
1017	1	49	.7	69	.1	10	17	759	6.14	24	5	ND	2	65	1	2	2	107	3.32	.077	8	13	2.16	68	.05	11	2.79	.04	.13	1 .001	
1018	1	63	6	79	.1	8	13	666	5.03	114	5	ND	2	132	1	2	4	54	5.77	.074	5	12	1.32	104	.01	8	2.13	.03	.21	1 .006	
1019	1	56	14	65	.2	30	11	388	4.50	151	5	ND	2	66	1	2	2	38	3.91	.116	7	36	1.18	97	.01	11	1.83	.01	.21	1 .007	
1020	2	63	14	82	.4	37	12	463	4.85	105	5	ND	2	56	1	2	2	64	2.96	.062	6	59	2.05	50	.01	7	2.20	.02	.10	1 .004	
1021	1	42	4	56	.1	41	14	691	3.68	174	5	ND	4	152	1	2	2	38	8.97	.073	6	72	1.91	92	.01	9	2.03	.02	.16	1 .005	
1022	1	43	.8	66	.1	12	9	401	3.93	30	5	ND	1	58	1	2	3	38	2.18	.059	9	18	1.49	74	.01	5	1.84	.03	.13	1 .001	
1023	1	51	14	87	.1	22	15	607	5.24	23	5	ND	3	81	1	2	2	80	4.75	.087	9	48	2.26	100	.01	13	2.66	.04	.16	1 .001	
1024	1	48	5	47	.1	90	21	752	3.49	42	8	ND	4	151	1	2	2	60	10.99	.072	7	166	2.70	64	.01	9	2.26	.03	.14	1 .001	
1025	1	34	6	46	.3	100	23	846	3.90	97	6	ND	4	163	1	2	3	45	10.33	.075	8	126	3.29	49	.01	9	1.78	.03	.16	1 .001	
1026	2	38	7	35	.5	104	21	939	3.93	1430	9	ND	3	242	1	2	3	28	10.37	.072	6	84	3.59	67	.01	14	1.24	.02	.21	1 .003	
1027	1	45	2	43	.2	112	21	872	3.86	1756	5	ND	3	204	1	5	2	32	8.26	.069	6	133	4.25	55	.01	7	1.57	.02	.17	1 .010	
1028	1	61	13	76	.3	22	10	406	4.54	94	5	ND	2	83	1	2	2	40	3.92	.076	7	40	1.59	90	.01	10	1.93	.02	.13	2 .001	
1029	1	76	5	58	.2	67	21	665	4.36	99	5	ND	3	120	1	2	2	60	6.83	.083	7	131	2.99	60	.01	6	2.34	.03	.14	1 .001	
1030	1	29	2	47	.1	77	18	782	3.66	615	5	ND	3	178	1	2	2	47	9.02	.075	6	138	2.93	51	.01	6	1.65	.03	.13	1 .004	
1031	1	59	10	76	.3	13	16	576	5.49	155	5	ND	2	104	1	2	2	72	3.62	.163	6	14	2.29	78	.01	8	2.51	.03	.16	1 .003	
1032	2	60	8	66	.1	44	14	599	4.07	346	5	ND	3	136	1	2	2	45	6.08	.097	8	97	1.93	62	.01	7	1.84	.03	.11	1 .005	
1033	1	42	7	53	.4	68	17	738	3.95	344	6	ND	3	173	1	2	2	28	7.50	.122	8	83	3.11	58	.01	7	1.01	.03	.15	1 .013	
1034	1	44	3	37	.8	69	17	747	3.61	234	5	ND	3	182	1	3	2	22	7.60	.120	10	75	3.14	51	.01	6	.93	.02	.15	1 .008	
STD C	21	58	38	135	6.7	69	29	1007	3.95	40	19	8	33	47	17	16	20	60	.46	.104	35	58	.67	174	.08	36	1.73	.07	.14	12	

DM 93-87

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY

DATE RECEIVED: MAR 31 1987 DATE REPORT MAILED:

Apr 3/87

ASSAYER: D. Toye...DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0871

PAGE 1

SAMPLE#	Mo	Cu	Pb	In	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	St	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Aut
	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	OZ/T								
1035	1	21	6	54	.1	76	16	635	3.63	48	5	ND	2	148	1	2	2	43	7.36	.120	12	141	2.92	40	.01	8	1.61	.04	.12	2 .001	
1036	1	22	9	15	.2	20	6	650	2.36	245	6	ND	1	233	1	3	2	9	10.74	.060	3	12	1.34	69	.01	9	.27	.02	.16	3 .007	
1037	1	45	5	22	.3	22	5	345	2.00	278	5	ND	1	141	1	2	3	9	7.03	.061	3	8	.57	80	.01	9	.38	.02	.14	2 .008	
1038	2	38	14	42	.2	47	11	452	3.31	486	5	ND	1	105	1	2	2	24	5.38	.072	3	33	1.65	57	.01	8	.93	.02	.13	4 .009	
1039	1	42	5	45	.3	83	20	687	4.01	1364	5	ND	1	156	1	6	2	37	7.30	.090	6	91	3.41	62	.01	8	1.48	.03	.15	3 .013	
<i>DYK 43-87</i>																															
1040	1	42	9	49	.3	75	21	724	4.35	97	5	ND	1	134	1	2	2	61	6.07	.095	7	123	4.11	59	.01	8	2.13	.03	.12	4 .005	
1041	1	34	6	53	.2	67	19	649	3.71	27	6	ND	2	165	1	2	2	37	8.63	.079	6	83	3.21	103	.01	6	1.74	.03	.17	1 .001	
1042	1	37	8	48	.2	67	19	625	3.74	22	7	ND	1	146	1	2	2	41	7.79	.088	8	92	3.17	81	.01	7	2.26	.03	.20	5 .001	
1043	1	67	6	44	.1	69	18	569	3.64	8	5	ND	1	112	1	3	2	44	8.04	.090	8	94	3.03	86	.01	9	2.45	.02	.19	4 .001	
1044	1	45	14	64	.3	79	22	529	3.96	43	7	ND	1	126	1	2	2	38	8.92	.093	6	76	1.80	112	.01	8	2.13	.02	.21	1 .001	
1045	1	67	17	82	.1	66	15	599	4.09	23	5	ND	1	136	1	2	2	50	11.89	.071	4	60	1.59	84	.01	4	2.07	.02	.13	2 .001	
1046	5	182	15	60	.5	69	14	577	3.13	73	5	ND	1	147	1	2	2	47	13.09	.044	2	100	1.46	23	.01	2	1.43	.02	.03	2 .002	
1047	1	32	9	54	.3	280	32	788	4.73	66	7	ND	4	152	1	5	5	107	9.48	.147	16	592	6.50	17	.01	5	3.68	.01	.04	1 .001	
1997	1	64	7	58	.1	178	30	699	3.42	2	5	ND	1	71	1	2	2	78	11.99	.062	2	231	2.41	15	.42	3	2.27	.03	.02	2 .001	
1998	1	46	10	67	.1	120	24	677	4.04	2	5	ND	1	79	1	2	2	75	9.80	.096	5	144	2.31	10	.39	2	2.39	.03	.06	3 .011	
STD C	21	62	40	137	7.1	69	29	1031	3.98	44	19	8	36	49	18	16	20	65	.45	.105	37	60	.88	183	.09	36	1.72	.07	.14	12	

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH JML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Tl,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE ASSAY BY FIRE ASSAY

DATE RECEIVED: MAR 11 1987 DATE REPORT MAILED: Mar 13/87 ASSAYER... *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-065BA

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V %	Ca PPM	P %	La PPM	Cr %	Mg PPM	Ba PPM	Tl %	B PPM	Al %	Na %	K PPM	W %	Au88 PPM
1748	1	47	4	70	.1	14	15	617	4.98	2	5	ND	4	91	1	2	2	92	5.72	.115	11	16	2.15	206	>.01	5	2.96	.06	.07	1	.001
1749	1	45	9	39	.1	13	10	1085	3.15	19	5	ND	5	162	1	2	2	49	13.82	.049	7	6	1.16	169	.01	4	1.86	.04	.13	1	.001
1750	1	58	11	78	.1	13	18	665	5.65	2	5	ND	3	81	1	2	2	89	5.56	.097	12	17	2.48	90	.01	9	3.33	.05	.10	1	.001
1751	1	37	9	64	.1	45	17	869	4.45	11	5	ND	4	159	1	2	2	81	9.33	.105	10	98	2.13	96	.01	6	2.79	.02	.11	1	.001
1752	1	18	10	55	.1	79	20	762	4.42	26	5	ND	4	196	1	2	2	76	8.09	.104	7	174	3.73	34	.01	2	2.39	.02	.12	1	.001
1753	1	40	8	54	.1	72	22	673	4.44	21	5	ND	4	170	1	2	2	78	7.62	.103	6	147	3.05	47	.01	4	2.28	.02	.12	2	.001
1754	1	10	8	36	.2	51	15	759	3.07	259	5	ND	4	162	1	2	2	34	8.48	.081	6	54	1.36	78	.01	4	.54	.01	.09	2	.001
1755	1	27	5	42	.1	82	20	671	4.23	55	5	ND	3	138	1	2	2	74	7.42	.102	9	172	2.88	45	.01	3	2.35	.01	.10	2	.001
1756	1	15	7	38	.1	45	17	962	3.77	157	5	ND	5	224	1	5	2	37	13.21	.092	7	45	2.34	70	.01	6	.49	.01	.14	1	.001
1757	1	39	5	37	.1	59	19	756	4.28	70	5	ND	4	196	1	10	2	40	9.20	.113	8	54	3.13	51	.01	4	.61	.01	.17	1	.001
1758	1	46	6	36	.1	60	20	749	4.49	40	5	ND	3	193	1	2	2	65	8.12	.101	7	106	3.76	45	.01	2	1.43	.02	.18	1	.001
STD C	21	57	41	134	6.8	65	28	999	3.96	43	16	7	33	47	17	16	21	62	.44	.103	35	58	.87	178	.08	33	1.72	.07	.14	13	-

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: CORE AU# BY FIRE ASSAY

DATE RECEIVED: MAR 12 1987 DATE REPORT MAILED: Mar 16/87 ASSAYER: D. Toye...DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0671

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V %	Ca PPM	P %	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B %	Al %	Na %	K %	W PPM	Au#/ OZ/T
1759	1	56	9	46	.1	77	23	685	5.06	6	5	ND	2	143	1	2	2	116	5.99	.116	9	231	4.73	54	.01	5	3.35	.03	.07	1	.001
1760	1	30	8	13	.6	33	11	931	2.29	141	7	ND	4	363	1	2	2	21	12.79	.060	5	36	1.53	27	.01	5	.62	.01	.14	1	.037
1761	1	49	3	44	.1	74	23	709	4.70	9	5	ND	3	156	1	2	4	91	6.87	.108	8	204	4.34	99	.01	2	3.05	.03	.11	1	.001
1762	1	46	4	49	.1	83	23	717	5.10	3	5	ND	2	132	1	2	5	115	5.84	.111	8	255	5.09	42	.01	2	3.18	.03	.10	1	.002
1763	1	244	2	57	.2	80	23	781	4.52	3	5	ND	3	240	1	3	2	95	6.89	.108	9	232	4.26	44	.01	4	3.13	.02	.14	1	.001
1764	1	67	3	52	.1	83	23	715	4.76	2	5	ND	2	132	1	2	2	109	4.85	.122	11	277	5.06	41	.01	3	3.49	.04	.11	1	.001
1765	1	51	7	66	.1	87	24	638	4.98	2	5	ND	1	74	1	2	4	111	2.81	.131	11	300	5.12	28	.01	4	3.61	.03	.11	2	.001
1766	1	23	6	69	.1	64	20	567	4.68	2	5	ND	1	55	1	2	2	78	1.54	.110	10	202	3.65	30	.01	5	2.96	.02	.13	1	.001
1767	1	85	4	38	.1	38	14	720	3.36	56	5	ND	3	210	1	14	2	34	7.80	.086	7	44	2.31	41	.01	7	.54	.01	.21	1	.001
1768	1	35	3	53	.1	83	20	771	4.23	2	5	ND	3	121	1	2	3	91	5.96	.102	11	295	4.48	43	.01	7	3.02	.03	.10	2	.001
1769	1	59	4	56	.1	85	24	806	4.61	2	5	ND	3	103	1	2	3	120	5.11	.115	10	323	5.12	38	.03	4	3.47	.04	.09	1	.001
1770	1	49	2	53	.1	94	21	761	4.20	2	5	ND	2	94	1	2	2	103	3.81	.094	9	320	5.53	55	.10	2	3.47	.05	.08	1	.001
1771	1	82	8	55	.1	89	20	747	4.00	2	5	ND	2	112	1	2	2	91	5.12	.092	8	301	4.77	57	.06	3	3.12	.03	.08	1	.001
1772	1	56	6	93	.2	94	22	870	4.41	3	5	ND	3	100	1	2	2	101	4.87	.103	9	297	5.17	132	.04	4	3.07	.03	.06	1	.001
1773	1	88	3	85	.1	87	19	680	3.30	2	5	ND	2	145	1	2	2	84	5.90	.091	7	317	3.93	56	.09	2	2.53	.04	.05	1	.001
1774	1	62	2	70	.1	86	22	796	4.47	2	5	ND	3	167	1	2	3	81	6.19	.101	9	258	4.41	37	.01	2	3.25	.03	.13	1	.001
1775	1	48	2	56	.3	80	20	751	3.89	301	5	ND	3	173	1	2	2	47	7.62	.090	6	158	2.58	30	.01	2	2.12	.01	.15	1	.007
1776	1	59	2	68	.1	83	20	732	3.83	3	5	ND	3	114	1	2	2	86	6.23	.088	10	283	4.36	60	.05	4	2.93	.03	.10	1	.001
1777	1	165	2	78	.2	77	18	814	3.99	2	5	ND	3	159	1	2	2	77	6.42	.094	9	247	3.93	77	.01	4	2.88	.03	.10	1	.001
1778	1	48	2	68	.1	87	18	639	3.54	2	5	ND	1	72	1	2	2	86	2.95	.094	6	269	4.08	65	.12	3	2.80	.04	.05	1	.001
1779	1	98	3	64	.1	86	21	649	3.70	4	5	ND	1	83	1	2	2	90	3.00	.107	6	272	4.18	30	.16	2	2.90	.05	.05	1	.001
1780	1	114	2	63	.1	80	19	609	3.52	4	5	ND	2	74	1	2	2	91	3.26	.104	6	223	3.82	154	.14	3	2.84	.06	.04	1	.001
1781	1	60	2	54	.2	81	18	577	3.42	3	5	ND	2	65	1	2	2	91	2.49	.109	7	204	3.45	20	.14	3	2.68	.04	.08	1	.001
1782	1	102	7	59	.2	77	22	669	4.02	4	5	ND	2	98	1	2	2	104	4.56	.121	7	147	3.96	30	.16	4	3.60	.04	.06	1	.001
1783	1	27	6	49	.1	72	22	711	4.98	5	5	ND	3	196	1	2	2	82	7.29	.116	9	150	4.28	24	.01	4	3.31	.02	.14	2	.001
1784	1	15	5	14	.5	34	10	677	2.00	93	8	ND	4	267	1	3	2	25	12.47	.049	5	40	.86	21	.01	5	.87	.01	.12	1	.010
1785	1	31	7	39	.1	74	22	695	4.19	103	5	ND	4	212	1	2	2	58	9.50	.111	9	129	2.58	27	.03	2	2.23	.02	.16	1	.001
1786	1	61	3	48	.1	74	22	887	4.65	22	5	ND	3	221	1	2	3	82	8.73	.093	8	136	4.42	34	.01	9	1.70	.02	.18	1	.001
1787	1	9	2	58	.1	83	24	1128	5.13	17	5	ND	3	228	1	2	2	62	9.12	.055	6	131	4.40	42	.01	4	2.35	.01	.15	1	.001
1788	1	113	7	44	.2	71	22	797	3.99	88	5	ND	2	169	1	2	2	47	7.15	.050	5	98	2.67	46	.01	8	1.42	.02	.18	1	.001
1789	1	18	6	48	.1	76	21	948	4.38	38	5	ND	3	191	1	2	2	53	8.96	.047	6	115	3.39	46	.01	11	1.78	.02	.17	1	.002
1790	1	96	6	51	.2	72	20	695	3.55	15	9	ND	4	110	1	2	2	89	9.08	.095	4	126	2.41	242	.09	4	3.00	.04	.13	1	.001
1791	1	35	6	9	.3	17	5	362	1.18	28	5	ND	4	143	1	3	2	40	11.02	.014	2	22	.36	89	.02	7	.84	.02	.18	1	.001
1792	1	49	7	74	.1	18	8	593	4.69	19	5	ND	2	74	1	2	2	44	3.48	.076	12	36	2.02	56	.03	7	2.36	.03	.16	1	.002
1793	1	24	3	56	.2	19	9	513	3.00	5	5	ND	3	71	1	2	2	24	3.92	.072	16	24	1.36	75	.01	9	1.70	.03	.18	1	.001

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH JML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AU#4 BY FIRE ASSAY

DATE RECEIVED: MAR 13 1987 DATE REPORT MAILED: Mar 18/87 ASSAYER: D. Toye DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0692

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	W Au#4
1794	1	14	10	68	.1	12	6	490	3.01	4	7	ND	3	61	1	2	2	20	3.20	.056	18	12	1.18	72	.01	22	1.58	.02	.15	1 .001
1795	2	36	31	84	.1	9	10	633	4.56	18	6	ND	3	93	1	3	2	47	4.20	.067	10	8	1.37	79	.01	34	2.17	.01	.19	2 .001
1796	1	53	11	89	.1	7	13	666	5.23	19	5	ND	3	88	1	2	3	74	3.88	.081	5	4	1.55	52	.01	29	2.27	.01	.11	1 .001
1797	3	60	33	63	1.0	20	15	439	5.53	127	5	ND	3	78	1	4	2	43	3.70	.087	4	12	1.03	79	.01	16	1.59	.01	.22	1 .009
1798	1	36	10	72	.3	10	9	593	4.43	116	5	ND	3	93	1	2	2	35	4.45	.060	5	8	1.31	57	.01	5	1.73	.01	.17	1 .007
1799	1	5	24	18	.1	7	5	553	2.13	157	6	ND	2	175	1	2	2	12	6.98	.046	4	2	.91	43	.01	4	.59	.01	.10	2 .007
1800	1	29	12	80	.4	6	10	503	4.62	255	5	ND	2	61	1	9	3	33	1.60	.069	5	8	1.40	65	.01	3	1.67	.02	.14	1 .014
1801	1	14	22	49	.5	10	9	353	4.13	566	5	ND	2	101	1	2	2	13	2.90	.062	4	5	.77	50	.01	4	.84	.01	.20	2 .030
1802	2	81	8	60	.2	52	17	645	3.89	107	7	ND	3	126	1	3	3	33	5.57	.075	7	62	2.68	62	.01	5	1.29	.01	.14	1 .001
1803	2	70	10	37	.3	84	17	743	3.51	104	5	ND	3	228	1	4	2	30	8.80	.076	6	63	2.79	66	.01	6	.60	.01	.13	3 .001
1804	1	57	9	58	.2	219	29	891	4.72	38	7	ND	3	219	1	2	3	69	8.33	.078	5	407	5.80	43	.01	4	2.24	.01	.07	2 .001
1805	1	17	10	13	.1	43	11	834	2.58	53	5	ND	2	327	1	2	4	14	11.29	.049	4	33	2.79	238	.01	5	.34	.01	.15	2 .001
1806	2	46	6	43	.1	49	11	533	3.20	2	7	ND	3	148	1	2	2	62	4.49	.045	8	165	2.25	69	.04	2	1.67	.01	.04	2 .001
1807	1	20	10	37	.1	47	13	488	4.15	2	5	ND	3	74	1	2	2	76	2.58	.111	16	151	2.06	39	.04	2	2.00	.03	.04	2 .001
1808	2	51	15	61	.1	61	15	651	4.97	2	5	ND	3	61	1	2	3	97	4.48	.123	10	190	2.78	43	.11	4	2.78	.01	.03	2 .001
1809	2	47	13	57	.1	71	18	705	4.76	2	5	ND	4	68	1	2	3	119	4.70	.143	10	189	3.47	68	.15	12	3.38	.03	.02	1 .001
1810	1	50	11	51	.1	68	15	664	4.02	8	5	ND	3	72	1	4	3	109	5.40	.130	10	178	3.06	51	.16	9	2.88	.02	.02	3 .001
1811	2	37	13	43	.1	19	15	720	4.11	11	5	ND	3	137	1	2	2	49	8.02	.114	7	19	1.65	56	.02	4	1.13	.01	.12	3 .001
1812	1	23	7	44	.1	18	13	1031	3.55	2	5	ND	3	93	1	3	2	50	10.25	.090	9	20	1.57	31	.01	2	1.28	.01	.10	3 .001
1813	3	55	9	62	.7	22	13	637	3.87	292	5	ND	2	126	1	21	2	30	6.85	.106	6	11	1.44	169	.01	2	.58	.01	.17	2 .016
1814	14	14	35	351	57.4	9	8	787	4.06	9170	5	199	2	271	2	21	3	18	11.72	.015	3	1	2.69	18	.01	2	.15	.01	.06	14 .895
1815	1	37	5	58	.1	8	12	641	3.95	116	5	ND	2	114	1	10	2	34	5.48	.141	6	1	1.32	97	.01	3	.53	.01	.22	1 .016
1816	1	12	5	35	.1	5	6	317	1.75	37	5	ND	1	132	1	2	2	52	1.72	.135	5	3	.79	8	.20	2	1.22	.04	.01	2 .044
1817	2	54	15	66	4.8	13	15	439	4.94	7947	5	3	2	141	1	13	2	10	6.98	.078	4	1	.39	22	.01	2	.25	.01	.14	1 .089
1818	1	49	12	77	4.5	14	15	511	5.18	5211	5	2	2	149	1	13	2	18	7.15	.103	6	1	.84	24	.01	2	.32	.01	.15	1 .073
1819	1	52	6	61	.1	12	14	568	4.57	20	5	ND	2	105	1	2	2	66	5.89	.105	8	12	1.91	77	.01	3	2.42	.01	.16	2 .002
1820	1	40	7	64	.1	12	14	703	4.19	26	5	ND	2	96	1	2	2	95	4.87	.127	7	10	1.87	53	.13	5	2.66	.01	.09	1 .004
1821	1	40	6	38	3.0	8	10	550	3.14	881	5	6	2	100	1	2	2	17	8.73	.088	6	2	.68	34	.01	2	.83	.01	.11	1 .185
1822	1	37	6	45	.1	9	11	619	2.70	35	5	ND	2	162	1	2	2	39	9.00	.101	6	2	.96	25	.05	3	1.41	.01	.12	4 .008
STD C	22	59	40	135	7.1	70	29	1025	3.98	43	17	7	35	49	18	15	21	65	.46	.104	37	60	.88	183	.08	37	1.72	.07	.13	13

IE ANALYTICAL LABORATORIES LTD.  
852 HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED MAR 24 1987

DATE REPORTS MAILED

Mar 26/87

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0692 R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
1813	250	.016	ND	.016
1814	110	1.980	3.44	2.891
1815	390	.014	ND	.014
1816	220	.002	ND	.002
1817	460	.117	ND	.117
1818	470	.071	ND	.071
1821	160	.092	ND	.092

DM57

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H<sub>2</sub>O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR HH FE CA P CR MG BA TI B AL NA K W SI ZR CE SN Y NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: Core AU# BY FIRE ASSAY

DATE RECEIVED: MAR 19 1987 DATE REPORT MAILED: Mar 24/87 ASSAYER: *D. Toye*, DEAN TOYE, CERTIFIED B.C. ASSAYER

## WESTMIN RESOURCES PROJECT - DEBBIE File # 87-0744 Page 1

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	V	AU#	
	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	%	PPM	PPM	PPM							
1823	1	53	4	69	.1	13	15	665	3.44	6	5	ND	2	82	1	2	2	71	4.76	.097	6	8	1.71	29	.22	6	2.18	.09	.10	1 .001		
1824	1	46	5	62	.1	14	15	641	3.65	4	5	ND	2	98	1	2	2	71	4.33	.096	9	14	1.64	35	.12	4	2.24	.07	.10	1 .001		
1825	1	48	3	72	.1	14	16	772	4.67	14	5	ND	3	93	1	2	2	79	4.94	.124	10	11	1.92	36	.15	4	2.69	.08	.16	1 .001		
1826	4	29	5	41	.9	11	13	526	4.04	1967	5	ND	2	85	1	2	2	17	8.24	.101	5	3	.28	37	.01	4	.65	.06	.28	1 .033		
1827	1	47	7	64	.1	12	14	728	4.50	56	5	ND	2	79	1	2	2	62	6.76	.112	9	12	1.60	40	.06	4	2.31	.08	.19	1 .001		
1828	1	49	6	69	.1	13	15	704	4.16	7	5	ND	2	89	1	2	2	88	4.45	.118	7	10	1.78	45	.20	6	2.53	.09	.11	1 .001		
1829	1	54	3	71	.1	12	15	659	3.45	2	5	ND	2	79	1	2	2	78	2.74	.133	5	10	1.84	25	.26	3	2.28	.07	.06	1 .001		
1830	1	52	6	68	.2	18	17	713	4.80	422	6	ND	3	113	1	4	2	71	6.71	.124	7	14	2.33	42	.06	2	2.50	.06	.21	3 .004		
1943	1	71	4	40	3.2	91	26	1055	5.28	377	5	ND	2	140	1	18	2	34	7.28	.063	5	49	2.07	41	.01	9	.97	.06	.35	3 .001		
1944	1	51	3	53	.6	431	39	853	4.87	374	5	ND	1	173	1	3	2	46	8.54	.033	2	419	6.19	9	.01	3	2.19	.05	.09	2 .013		
1945	1	39	5	61	.1	394	38	782	5.27	174	5	ND	1	146	1	2	2	76	6.93	.036	2	541	7.15	4	.01	2	3.79	.04	.01	1 .001		
1946	1	61	10	60	.1	333	35	782	5.33	10	5	ND	2	208	1	2	2	82	7.19	.039	2	490	6.74	13	.06	2	4.08	.04	.01	1 .001		
1962	1	4	3	54	.1	109	19	577	3.10	2	5	ND	3	103	1	2	2	35	8.99	.129	9	72	1.36	46	.08	4	1.63	.07	.22	1 .001		
1963	2	53	9	69	.1	69	18	429	8.31	6	5	ND	2	71	1	2	2	59	2.54	.173	4	70	1.56	53	.25	3	1.90	.03	.16	1 .001		
1964	1	49	7	59	.2	102	25	895	5.25	33	5	ND	2	169	1	2	2	128	10.21	.070	5	173	3.12	14	.14	2	2.91	.09	.02	3 .001		
1965	1	53	7	65	.1	130	26	875	5.72	53	5	ND	2	129	1	2	2	120	9.07	.094	6	215	3.52	18	.04	2	3.11	.08	.06	1 .001		
1966	1	83	6	49	.1	73	13	449	6.05	5	5	ND	1	17	1	3	2	73	.63	.138	5	105	2.41	126	.17	2	2.18	.02	.01	3 .001		
1967	3	165	5	53	.2	59	13	346	6.13	11	5	ND	2	19	1	2	2	81	1.15	.106	7	91	2.32	10	.07	2	2.14	.01	.01	1 .002		
1968	1	96	6	66	.3	90	20	578	5.36	100	5	ND	2	89	1	2	2	80	9.07	.112	7	140	1.39	24	.17	2	2.08	.08	.16	1 .031		
1969	1	21	4	34	.5	80	15	425	2.48	217	5	ND	1	101	1	2	2	22	8.23	.057	3	57	.76	19	.01	2	1.02	.06	.11	1 .048		
1970	1	64	4	45	.4	107	22	903	3.21	642	5	ND	2	167	1	2	2	42	20.67	.087	5	80	.98	21	.06	2	1.42	.06	.15	4 .052		
1971	1	57	3	62	.2	129	26	816	3.60	54	5	ND	2	162	1	2	2	52	17.23	.099	6	108	1.24	46	.11	2	1.78	.08	.15	1 .014		
1972	1	30	5	47	.1	61	19	704	4.24	10	5	ND	2	196	1	2	2	39	13.41	.054	3	73	1.80	238	.01	6	1.52	.08	.15	1 .002		
1973	1	39	3	43	.1	91	26	642	4.01	8	5	ND	2	151	1	2	2	73	14.57	.068	4	97	1.22	60	.04	3	1.80	.09	.15	5 .001		
1974	1	51	4	48	.1	77	22	603	3.39	4	5	ND	2	158	1	2	2	49	13.58	.066	4	99	1.49	189	.05	5	1.76	.08	.15	2 .002		
1975	1	56	3	46	.4	71	20	582	3.87	58	5	ND	2	202	1	4	2	29	12.87	.050	3	68	1.58	115	.01	5	1.23	.07	.18	2 .012		
1980	2	522	7	57	.7	88	18	878	3.68	39	5	ND	2	146	1	2	2	36	15.08	.079	3	57	1.88	13	.01	2	1.90	.07	.09	2 .002		
1981	1	28	3	63	.3	106	20	675	3.72	912	5	ND	3	124	1	2	2	40	10.41	.116	4	90	2.05	18	.01	2	2.30	.07	.13	1 .003		
1982	1	37	8	44	.4	87	17	658	3.61	1478	5	ND	2	300	1	2	2	40	12.18	.107	4	98	1.44	22	.01	2	1.82	.08	.12	3 .017		
1983	1	21	3	21	.3	46	8	703	1.42	10	5	ND	2	132	1	2	2	20	16.92	.059	5	32	.64	8	.01	12	.85	.07	.07	3 .001		
1984	2	80	8	33	.1	62	11	658	2.15	10	5	ND	2	130	1	2	2	33	15.19	.063	5	56	1.01	9	.08	9	1.33	.09	.06	3 .001		
1985	1	30	6	36	.2	73	12	609	2.47	5	5	ND	2	135	1	2	2	31	13.47	.089	13	59	1.06	20	.02	5	1.55	.08	.17	2 .001		
1986	1	45	4	43	.3	107	18	656	3.56	147	5	ND	2	105	1	8	2	27	10.78	.108	7	49	1.32	23	.01	9	.84	.07	.23	2 .001		
1987	1	12	6	58	.2	99	18	646	3.62	2	5	ND	3	113	1	2	2	53	10.31	.085	11	110	2.14	21	.03	2	2.37	.08	.10	3 .001		
1988	1	52	9	62	.2	271	34	921	5.43	182	5	ND	2	147	1	2	2	85	7.83	.054	3	375	5.90	10	.01	2	3.65	.05	.06	1 .002		
1989	1	34	11	60	.2	169	27	816	5.16	125	5	ND	3	155	1	2	2	93	6.80	.055	3	271	5.19	15	.01	2	3.32	.05	.08	1 .002		
STD C	22	59	39	137	7.1	70	29	1032	3.99	43	18	7.4	34	49	18	16	19	65	.46	.102	36	59	.87	183	.08	37	1.72	.07	.13	12		

## WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0658A

PAGE 2A

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
1831	1	14	5	21	9.3	12	7	466	2.08	1538	6	.36	3	63	1	2	2	11	5.23	.034	3	11	.39	19	.01	4	.45	.01	.11	1
1832	1	39	8	44	2.2	22	18	668	4.63	4972	8	4	4	112	1	2	2	22	7.24	.110	6	6	.99	29	.01	7	.98	.01	.22	1
1833	1	39	8	49	.9	17	16	667	4.73	1337	8	ND	4	94	1	2	2	57	5.93	.089	7	28	1.99	27	.01	7	2.11	.01	.16	1
1834	1	22	9	34	1.2	13	14	598	4.06	4232	6	ND	4	130	1	8	3	15	7.65	.066	5	4	.47	28	.01	7	.60	.01	.19	1
1835	1	50	10	64	.7	15	16	585	5.07	518	8	ND	5	141	1	6	2	54	6.60	.096	7	17	2.26	33	.01	3	2.50	.01	.21	1
1836	1	47	11	75	.1	16	16	575	5.03	11	7	ND	2	72	1	2	2	108	3.12	.092	7	15	2.54	64	.25	9	3.36	.04	.11	1
1837	1	51	.9	65	.1	11	15	519	4.41	31	5	ND	3	95	1	2	2	64	3.99	.115	8	15	2.11	65	.13	7	2.65	.04	.13	1
1838	1	74	13	81	2.6	12	13	408	4.96	12250	5	8	2	75	1	23	2	41	3.94	.096	5	8	1.44	41	.01	7	1.61	.03	.20	1
1839	1	95	5	82	3.2	15	17	498	5.08	1128	5	11	2	72	1	2	2	55	3.33	.104	7	12	2.02	79	.01	6	2.30	.03	.23	1
1840	1	67	20	92	2.0	15	16	410	5.18	8212	5	6	2	112	1	23	4	42	3.31	.102	6	8	1.42	59	.01	12	1.24	.02	.23	1
STD C	21	56	38	134	6.8	67	28	1010	3.95	43	19	7	33	47	17	18	19	61	.48	.101	35	59	.88	176	.08	41	1.73	.07	.14	15

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED Mar 11 1987

DATE REPORTS MAILED

Mar 13/87

### ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PULVERIZED TO -100 MESH.

AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER

Dean Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

Westmin Resources PROJECT Debbie FILE# 87-0658A PAGE# 2B

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
1831	520	.820	9.76	1.367
1832	550	.078	.62	.111
1833	530	.035	.31	.052
1834	480	.056	.01	.057
1835	490	.021	ND	.021
1836	460	.001	ND	.001
1837	520	.001	ND	.001
1838	480	.363	4.04	.608
1839	480	.176	.09	.182
1840	550	.542	7.58	.944

Dm57

Dm62

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,Nb AND Ta. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: CORE AU#4 BY FIRE ASSAY

DATE RECEIVED: MAR 20 1987 DATE REPORT MAILED: Mar 25/87 ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

WESTMIN RESOURCES PROJECT - DEBBIE FILE # 87-0751

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	N Autt PPM	OZ/T
1841	1	51	17	90	.2	15	16	551	4.88	19	5	ND	1	101	1	2	4	90	3.96	.098	8	13	2.11	195	.12	5	2.76	.05	.12	1	.001
1842	2	51	10	71	.1	16	15	538	4.73	16	5	ND	2	81	1	2	2	97	3.86	.107	6	17	2.18	59	.15	5	2.94	.06	.10	3	.001
1843	1	47	10	78	.2	17	16	533	4.82	44	6	ND	1	61	1	2	3	91	3.20	.100	6	16	2.21	39	.14	3	2.82	.05	.12	2	.001
1844	2	56	2	72	.2	17	17	551	4.75	45	5	ND	2	62	1	2	2	97	3.54	.118	6	15	2.21	37	.19	4	2.90	.05	.10	1	.002
X 1845	1	54	10	77	.3	17	17	587	5.00	8	5	ND	2	56	1	2	2	129	2.49	.102	7	16	2.37	48	.26	6	3.27	.05	.07	1	.001
Q 1846	1	49	2	71	.1	17	18	618	4.78	10	5	ND	2	52	1	2	2	98	2.57	.108	6	12	2.22	34	.19	4	2.95	.05	.09	1	.002
1 1847	2	48	11	74	.2	18	16	714	3.96	6	5	ND	2	52	1	3	2	105	4.25	.124	5	20	1.87	33	.21	5	2.99	.05	.06	3	.001
2 1848	1	42	6	66	.1	14	14	1032	3.85	28	5	ND	1	102	1	2	2	84	8.32	.128	7	12	1.63	61	.08	9	2.58	.05	.12	3	.005
1849	1	41	8	53	.1	13	13	1456	3.09	14	5	ND	1	112	1	2	2	64	10.47	.121	8	7	1.29	77	.08	4	1.83	.04	.15	2	.001
1850	1	10	9	22	.6	9	8	740	3.24	1540	5	ND	1	141	1	2	3	16	7.85	.077	3	1	.66	22	.01	2	.34	.02	.09	3	.043
1851	2	57	8	100	1.2	12	14	1198	3.98	1592	5	ND	1	171	1	5	2	37	11.31	.128	5	4	1.04	40	.01	3	1.33	.04	.17	9	.014
1852	1	48	3	60	.1	12	14	1384	3.69	15	5	ND	2	164	1	2	2	71	10.12	.118	9	9	1.52	121	.04	3	2.25	.07	.15	1	.001
1853	1	13	6	21	.1	4	6	663	2.93	6	5	ND	1	359	1	2	2	54	9.22	.090	6	2	.83	27	.01	3	1.58	.04	.03	1	.001
1854	1	52	5	81	.1	21	18	689	5.42	87	5	ND	2	59	1	2	3	90	2.73	.085	11	32	3.19	35	.10	2	3.04	.05	.11	1	.002
1855	1	51	10	53	.7	16	14	520	4.04	423	5	ND	1	85	1	2	2	47	5.43	.074	7	15	1.81	50	.05	2	1.77	.04	.22	2	.012
1856	2	47	6	74	.1	20	18	738	4.67	7	5	ND	2	.70	1	2	2	102	3.32	.108	8	31	2.86	38	.20	2	2.99	.05	.08	1	.001
1857	1	44	4	66	.1	19	18	620	4.31	8	5	ND	2	76	1	2	2	85	2.57	.099	7	28	2.58	73	.19	2	2.69	.04	.07	1	.001
1858	2	55	5	75	.1	21	20	628	4.79	10	5	ND	2	50	1	2	3	103	2.12	.093	7	33	2.89	31	.21	3	2.98	.04	.05	1	.001
STD C	20	58	35	136	7.2	71	28	1033	3.99	41	14	7	35	48	18	15	20	66	.48	.100	37	61	.88	182	.08	33	1.72	.08	.13	12	-

## **THE ANALYTICAL LABORATORIES**

852 E. HASTINGS ST. V.A. COUVER B.C. V6A 1E6

PHONE 253-3158

DATA LINE 251-1011

**GEOCHEMICAL/ASSAY CERTIFICATE**

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR Mn Fe Ca P Cr Mg Ba Ti B Al Na K Si Zr Ce Sn Y Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: Core AU88 BY FIRE ASSAY

DATE RECEIVED: MAR 24 1987 DATE REPORT MAILED: *Mar 26/87* ASSAYER: *N. J. Deery* DEAN TOYE, CERTIFIED B.C. ASSAYER

ASSAYER. *N. D. Deley* DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT - DEBBIE File # 87-0779 Page 1

SAMPLE#	MD PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P PPM	LA PPM	CR PPM	M6 %	BA PPM	Tl %	B PPM	AL %	NA %	K PPM	N PPM	AU800 O2/T	
1541	1	41	2	11	.1	1	3	199	1.56	5	5	ND	1	14	1	2	2	1	1.02	.015	16	2	.31	13	.01	2	.50	.05	.05	1	.001	
1542	1	40	2	13	.2	3	3	224	1.55	15	5	ND	1	16	1	2	4	3	1.46	.019	14	2	.41	13	.01	3	.56	.05	.06	1	.001	
1543	1	58	2	33	.1	20	7	413	3.03	11	5	ND	1	27	1	2	2	36	2.93	.039	12	53	1.46	10	.01	2	1.51	.05	.05	1	.001	
1859	1	67	2	83	.1	19	19	624	5.00	10	5	ND	1	55	1	2	2	100	4.17	.101	9	27	3.13	109	.25	2	3.17	.04	.06	3	.001	
1860	1	43	8	71	1.0	16	17	587	5.78	1109	5	ND	3	90	1	2	2	48	7.68	.089	9	17	2.24	41	.01	8	2.19	.02	.18	1	.011	
1861	1	54	10	68	.3	17	16	612	5.23	1465	5	ND	2	97	1	2	2	57	7.75	.091	8	19	2.38	50	.02	3	2.56	.02	.16	1	.022	
1862	1	52	3	83	.1	17	20	716	6.42	180	5	ND	3	68	1	2	2	75	7.65	.093	9	28	3.26	57	.01	7	3.33	.02	.17	1	.002	
1863	1	15	10	20	8.2	14	8	641	2.80	1900	5	32	2	86	1	2	3	14	10.42	.044	4	7	.56	26	.01	8	.62	.01	.11	1	.83	
1864	1	48	13	58	2.2	25	20	721	5.74	3296	5	ND	3	121	1	2	4	35	10.70	.132	7	17	1.45	33	.01	6	1.37	.01	.19	1	.037	
1865	1	34	11	49	1.7	24	21	789	5.82	4507	5	ND	3	129	1	2	2	40	11.33	.142	9	17	1.54	37	.01	6	1.38	.01	.21	2	.035	
STD C	19	55	38	126	6.8	66	26	944	3.96	40	17	7	31	45	16	16	21	57	.42	.095	33	55	.85	166	.08	36	1.73	.06	.13	12		

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED APRIL 6 1987

DATE REPORTS MAILED Apr 8/87

## ASSAY CERTIFICATE

SAMPLE TYPE : REJECT

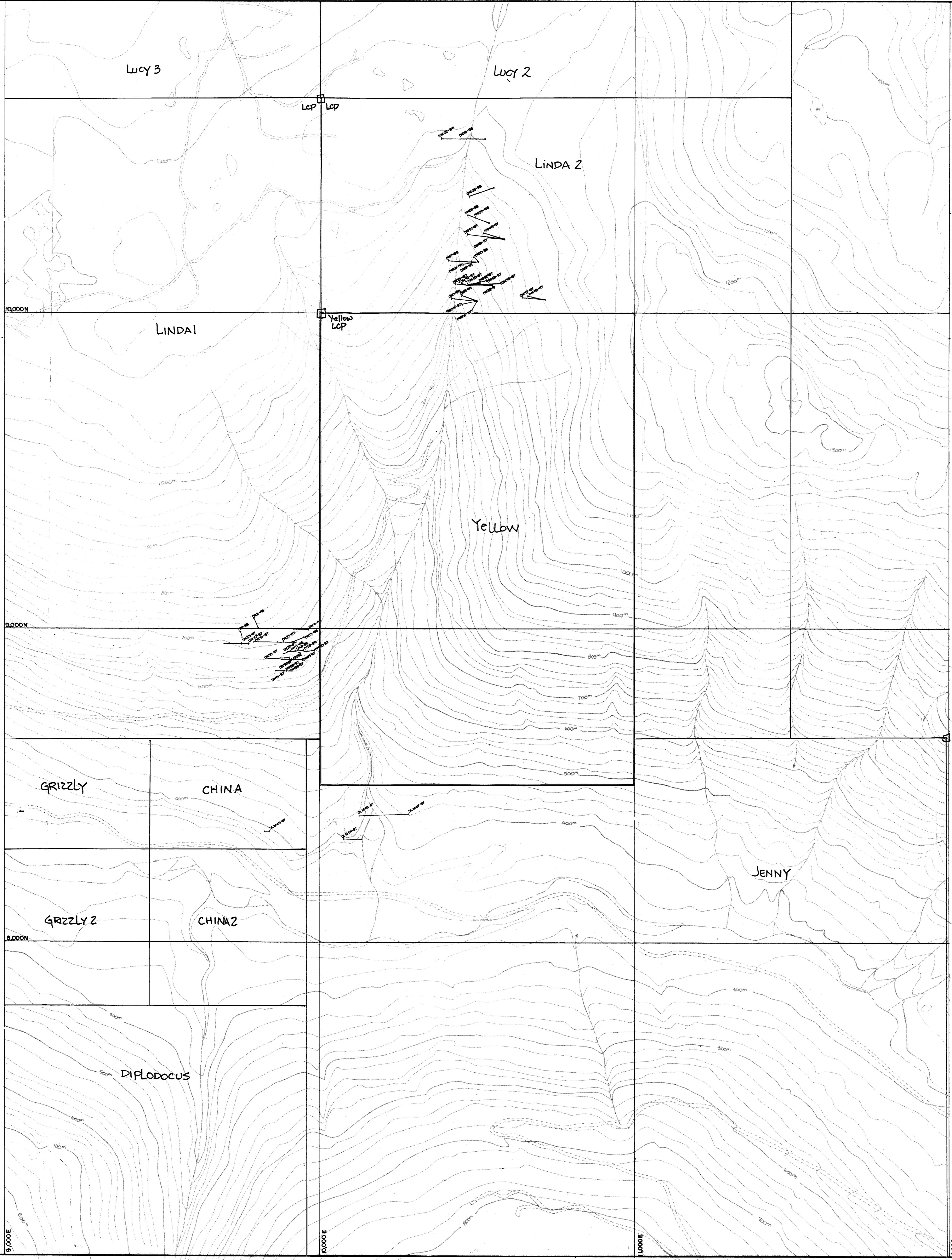
AU BY FIRE ASSAY

ND = NONE DETECTED

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

WESTMIN RESOURCES PROJECT DEBBIE FILE# 87-0779 R PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
Dm62 1863	460	.630	2.90	.814
1864	650	.034	ND	.034
1865	590	.032	ND	.032



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**15,909**

Westmin Resources Limited	Mining Division
Work By	J. WATKINS
Date Drafted	JUNE 1991
Reviewed By	J. WATKINS
Date Reviewed	JULY 1991
Revised By	
N.T.S. Number	
DRILL HOLE LOCATIONS	
Scale 1:5000	

Figure 4