



WELLINGTON DUMPS

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

801279

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO: W. M. Sharp, P. Eng.
3280 Chesterfield Ave.,
North Vancouver, B.C.

CERTIFICATE NO. 30364
INVOICE NO. 14849
RECEIVED August 19, 1975
ANALYSED August 26, 1975

ATTN:

SAMPLE NO. :	% Lead	% Zinc	Oz/Ton Silver	Tons	AVERAGES																														
					Ag oz/T	Pb %	Zn %																												
WELLINGTON TOP (#0) DUMP 9576	0.40	0.27	4.16	* 1500 @	4.68	0.83	0.61																												
9577	0.96	1.01	6.22																																
9578	0.61	0.78	2.14																																
9579	1.57	0.37	6.20																																
9580	0.19	0.10	0.80	* 2000 @	3.56	0.84	0.54																												
WELLINGTON ROAD (#1) DUMP 9581	0.25	0.12	1.42																																
9582	0.31	0.16	1.64																																
9583	0.81	0.28	4.88																																
9584	1.58	1.15	4.98																																
9585	0.28	1.34	4.52	* (250 @	2.77	1.02	2.03																												
9586	2.43	0.63	10.60																																
9587	0.83	1.46	2.84																																
SUNSET TOP (#1) DUMP 9588	1.22	2.61	2.70																																
<table border="0"> <tr> <td></td> <td>1.10</td> <td>5.70</td> <td>6.56</td> <td rowspan="2">* 1750 @</td> <td rowspan="2">3.45</td> <td rowspan="2">0.97</td> <td rowspan="2">3.30</td> </tr> <tr> <td></td> <td>0.70</td> <td>1.40</td> <td>1.04</td> </tr> <tr> <td>AVG.</td> <td>1.10</td> <td>2.80</td> <td>2.76</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.97</td> <td>3.30</td> <td>3.45</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>									1.10	5.70	6.56	* 1750 @	3.45	0.97	3.30		0.70	1.40	1.04	AVG.	1.10	2.80	2.76						0.97	3.30	3.45				
	1.10	5.70	6.56	* 1750 @	3.45	0.97	3.30																												
	0.70	1.40	1.04																																
AVG.	1.10	2.80	2.76																																
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	0.80	2.20	1.20	* (5650 @	2.63	0.83	1.33																												
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AVG.	0.83	1.33	2.63																																
<p>GROSS: WEIGHTED-AVERAGE --- 11,150 Tons @ 3.24% Pb, 0.87% Zn, 1.42% Ag</p> <p>* SELECT: WEIGHTED-AVERAGE --- 5,250 Tons @ 3.89% Pb, 0.90% Zn, 1.48% Ag</p>																																			
<p>BY SELECTIVE MINING OF BEST 70% OF EACH DUMP, FOR UP-GRADE @ $\frac{10}{7}$ = 1.43x</p> <p><u>7630 TONS @ Ag. 4.6 oz/TON Pb. 1.2% Zn. 2.0%</u></p>																																			



MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

New Wellington Dumps

Sept 12/75. ①

	<u>Ag</u>	<u>Pb</u>	<u>Zn</u>
Sunset #2 Dump (W) #1	6.56	1.10	5.70
(main) C #2	1.04	0.70	1.40
E #3	2.76	1.10	2.80
Avg	3.45	0.97	3.30 ✓ ←

Wellington #2 Dump W. #1	1.20	0.80	2.20
(main & largest) C #2	5.76	1.10	0.90
E #3	0.92	0.60	0.90
Avg	2.63	0.83	1.33 ✓ ←

Wellington #0	4.16	0.40	0.27
	6.22	0.96	1.01
	2.14	0.61	0.78
	6.20	1.57	0.37 ✓
Avg	4.68	0.89	0.61 ✓ ←

Wellington (Road) #1	0.80	0.19	0.40
	1.42	0.25	0.12
4.98	1.64	0.31	0.16
4.52	4.88	0.81	0.28
10.60	4.98	1.58	1.15
120.10	4.52	0.28	1.34
	6.70	2.43	0.63 ✓
	3.56	0.84	0.54 ✓ ←

Sunset (Top) #1	2.84	0.83	1.46
	2.70	1.22	2.61
	2.77	1.02	2.03 ✓ ←

New Wellington Dumps

Sept. 12/75

	<u>TONS</u>	<u>Ag. oz/t</u>	<u>Pb. %</u>	<u>Zn. %</u>
WELLINGTON # 0. * 1500 @	4.68 = * 7020.0	0.89 = * 1335.0	0.61 = * 915.0	
WELLINGTON # 1. * 2000 @	3.56 = * 7120.0	0.84 = * 1680.0	0.54 = * 1080.0	
SUNSET # 1. 250 @	2.77 = 692.5	1.02 = 255.0	2.03 = 507.5	
SUNSET # 2 * 1750 @	3.45 = * 6037.5	0.97 = * 1697.5	3.30 = * 5775.0	

WELLINGTON # 2 5650 @	2.63 = 14,859.5	0.83 = 4689.5	1.33 = 7514.5
<u>Gross</u>	<u>11,150 tons</u>	<u>35,729.5</u>	<u>9657.0</u>
$\frac{1}{11,150} = .0000895$	$\rightarrow 3.20.02 \checkmark$	0.87%	1.42%

<u>Select.</u>				
5250 tons	20177.5	4712.5	7770.0	
$\frac{1}{5250} = 0.00019$	3.84 oz. \checkmark	0.90 \checkmark	1.48 \checkmark	

Up-grade by selective mining.

70% x tonnage x $\frac{1.42857}{70} \times$ sampled grades:

	<u>Ag. oz.</u>	<u>Pb. %</u>	<u>Zn. %</u>
Wellington # 0 - 1050 x	6.68 = 7014	x 1.27 = 1333.5	x 0.87 = 913.5
Wellington # 1 - 1400 x	5.09 = 7126	x 1.20 = 1680.0	x 0.77 = 1078.0
Sunset # 2 - 1225 x	4.93 = 6039	x 1.38 = 1690.5	x 4.71 = 5769.5

Wellington # 2 - 3955 x	3.76 = 14871	x 1.18 = 4667.0	x 1.90 = 7514.
(7630)	35050	9371.0	15275.0
$\frac{1}{7630} = 0.000131$	7630 tons @ 4.6 oz/t.	1.23 %	2.0 %

Sept 12/75

(3)

Estimated Recoveries / Flot-concr alternatives:
per ton of dump ore (7630 basis)

Ag, $4.6 \text{ oz} \times 66\% = 3.04 \text{ oz}$

Pb, $1.2\% = 1.2\% \times 70\% = 0.84\%$

Zn, $2.0\% = 40\% \times 60\% = 24\%$

Cd, $0.04\% = 0.8\% \times 60\% = 0.48\%$

Crush + Jig 7630 tons of above grade.

to produce 3815 tons @ Ag = $2 \times 4.6 \times 65\% = 6.0 \text{ oz/ton}$

Pb. = $2 \times 1.2\% \times \text{"} = 1.56\%$

Zn = $2 \times 2.0\% \times 60\% = 2.4\%$

Cd = $2 \times 0.04\% \times \text{"} = 0.048\%$

Net Smelter Value Jig Product: (7630 tons yield 3815 tons)

per ton Ag = $6.0 \text{ oz} \times \$4.00 = \24.00

3.1.2 Pb, $1.56\% = 31.2\% \times 0.08 = 2.50$

Zn, $2.4\% = 48\% \times 0.125 = 6.00$

Cd, $0.048\% = 0.96\% \times 1.27 = 1.22$

960

33.72/ton

Gross Revenue, P.O.B. mill = $3815 \times \$33.72 = \$128,642$

Estimate - Production Costs	Re. Ansonville Mill	Re. Sardinia Mill
Plant + Install Plant, (7630 T.)	\$ 1,000.00	\$ 1,000.00
Load, Fuel + Operate, 7630 @ \$1.50	11,445.00	11,445.00
Sub-total	\$ 12,445.00	\$ 12,445.00
Load jig product, 3815 T. @ 1.00	3,815.00	3,815.00
Truck product to mill, 3815 T. @ 4.00	15,260.00	9,538.00 @ 2.50
Mill product, 3815 T. @ 10.00	38,150.00	38,150.00
Estimate Tot. Production Costs	69,670.00	63,948.00
Estimate Gross Profit, (7630 tons)	\$ 58,972	\$ 64,694

" " Profit/ton (7630 tons) = \$ 7.72/ton or \$ 8.51/ton.

000131

Dump - samples by Peter Leontovics - plotted see Sept 10/75.

		Ag	pb	Zn	
3 on Sunset No. 2 Dump	# 1 -	6.56	1.1	5.7	} 3.45 0.96 0.97 3.3 3.02 1.88 2.30
	taken west → center → east	# 2 - 1.04	0.7	1.4	
	(#1) (#2) (#3)	# 3 - 2.76	1.1	2.8	
Hill # 2	W-#1	1.2	0.8	2.2	} 2.6 .8 1.3
	Center #2	5.76	1.1	0.9	
	E-#3	0.92	0.6	0.9	

② Pan American Jig - Placer Type
 Mfg by American Engineering Corp Ltd
 Berkeley, Cal.
 Type P.E-26
 Size 42" x 42"
 Model 23. ① Ser. No. T169
 ② " " T170

2.5
 12
 50
 25
 300

872.50
 395.24
 1267.74
 25