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801282

NEW WELLINGTON RESOURCES LTD.
614 - 4TH A PIKE BLDG.
SEATTLE, WASHINGTON 98101
ATTN: MR. JACK EVANS

AUGUST 27, 1975

PRELIMINARY FEASIBILITY ESTIMATE
MINING - NEW WELLINGTON DUMPS.

GROSS RECOVERABLE TONNAGE, NEW WELLINGTON NO'S 0, 1, & 2
SUNSET NO's 1 & 2

= 11,150 TONS

ESTIM. NET RECOVERABLE TONNAGE - - - - - 10,000 TONS ←

AVERAGE GRADE: BETTER PARTS AG = 4.55 oz/TON
PB = 1.08%
ZN = 0.72%

PENDING P. LIDDELL
SAMPLE RESULTS.

(A) ESTIM RECOVERY VIA FLOTATION CONCENTRATION (SEMI-OR. MATERIAL)

AG, 4.55 oz/TON x 66% = 3.0 oz PER TON MILLED.
PB, 1.08% = 21.6# x 70% = 15# MAX. TON MILLED
ZN, 0.72% = 14.4# x 60% = 8.6# "

ESTIM. NET SELLER VALUES, F.O.B. ANNSWORTH OR SANDON MILLS

AG 0.425/oz	AFTER SELLER CHARGES, CONCENTRATE TRANSPORT, HANDLING CHARGES, & B.C. ROYALTIES
PB .04309/LB.	
ZN .00.13/LB.	

NET SELLER VALUE, PER TON OF AVG. DUMP MATERIAL MILLED:

AG, 3.0 oz x 4.25	\$ 12.75
PB, 15# x 0.09	- 1.35
ZN, 8.6# x 0.13	- 1.12
CD, 50% = 0.16# x 1.27	- 0.21
\$ 15.43 ←	

ESTIMATED PRODUCTION COSTS

	ANNSWORTH MILL	SANDON MILL
ACCESS PREPARATION & LOADING	\$ 1.00 PER TON	\$ 1.00 PER TON
HAUL TO MILL	0.10\$/T.M. 4.00	" 0.12 2.40 "
MILLING & PROCESS. FEE-CHARGE	10.00	10.00 "
TOTALS	- - - 15.00 PER TON	\$ 13.40 PER TON

Possible Gross Profit, using SANDON MILL = 10,000 x \$ 2.03 = \$ 20,100 APPROX.
(ASSUMING ALL OF NET-RECOV. MATERIAL @ \$ 15.43/TON)

(B) JIG-CONCENTRATION ON PROPERTY

ESTIM JIG PRODUCTION, 5000 TONS: AG, 5.021TON x 4.25 = \$ 106,250
(CRUSH & JIG 10,000 TONS)

AG, 2.5# / " 0.09	11,250
ZN, 1.5# / " 0.13	3,750
CD, 0.25# / " 0.127	1,587
\$ 126,037 ←	

FURCHI SET UP JIG, ALLOW 10,000 @ 0.10 = 1000
LOAD & FEED 10,000 x 1.50 = 15,000 = 16,000

HAUL TO MILL 5000 TONS:
LOAD TRUCKS @ 1.00/TON = 5,000 = 5,000
HAUL TO MILL @ ANNSWORTH 161.5 miles @ 20,000 = 1612,500
MILL 161 " 161 " = 50,000 = 50,000

ESTIM. GROSS PROFIT RESULTING -- = \$ 38,000 or \$ 45,000 → \$ 3.80 TO \$ 4.50 PER TON
(a) via ANNSWORTH MILL
(b) via SANDON "

Wm Sharp, P

New Wellington - Fearnley Calc			0.85	1.13	15	8.6	21.6
Pb.	Zn	Ag	05	104	1512		
0.40	0.27	4.16	12.75	11.18	1,08	20	
0.96	1.01	6.22			4.22	21.60	
0.61	0.78	2.14			3	14.4	
1.57	0.37	6.20			12.66	.6	
0.81	0.28	4.88			2.27	4000	816.4
1.58	1.15	4.98			9.08		4.55
0.28	1.34	4.52					.65
8) 2.43	0.63	5.30					2275
) 8.64	5.83	38.40					2730
With Avg. - 1.08	0.72	4.55					2.9375

$$Pb - 1.08\% = 21.6 \text{#} \times 70\% \text{ recover} = 15 \text{#} / \text{ton milled}$$

$$Zn - 0.72\% = 14.4 \text{#} \times 60\% \text{ " } = 8.6 \text{#} / \text{ton milled}$$

$$Ag - 4.55 \text{ oz.} - @ 65\% \text{ " } = 2.96, \text{ say } 3.0 \text{ oz milled.}$$

Net Smelter Values, F.O.B. Anchorage per Scranton report:
(after heat., coke, transport, etc & royalties)

Pb. 15 lbs recover. @ \$5.44/lb. - - -	\$ 1.28 / ton
Zn, 8.6 " " @ 139/lb - - -	1.12 / ton
Ag - 3.0 oz. " @ \$4.22/oz - - -	12.66 / ton
Cd - @ \$0.88/lb @ 0.16# @ 1.27/lb. - - -	0.21 / ton
Total N.S.V. - - -	\$ 15.27 per ton
Add. var. to - - -	\$ 15.90 per ton

Blue Star
Estim access prep & loading @ \$1.00/ton
" haul @ 40 mi @ 12¢/ton-mile \$4.00/ton
" milling @ prob. toll charge 10.00/ton \$15.00 per ton
Profit, say 4000 tons x \$0.40 - - - \$1600; too little!

Hence try to arrange milling @ Keweenaw @ say
access prep & loading @ \$1.00/ton - \$1.00
truck to mill, 20 mi @ 12¢/ton-mile - 2.40
milling @ prob. toll charge (197.5 - 7.85)/ton - 10.00 \$13.40/ton
Profit @ say 4000 tons x \$2.00 - \$8,000 (just adequate)

Operation would be justified if a sink-float
plant were available to reduce tonnage milled @
\$10/ton toll charge; (Even a high capacity jig or propeller might do it)
Anyway - possibilities worth cost of bunch mill-tests.
recovery may be nipped.

New Wellington ~~#1~~⁰ Dump - long flat ~~smeared out~~ dump
 Avg. Dm⁵ $\frac{100' \times 50' \times 8' \frac{1}{2}}{220'}$ = 2000 tons fair looking
 above the road. much.

New Wellington - ~~#1~~⁰ (top) Dump - generally "wastey"
 Avg. Dm²⁰ $\frac{75' \times 50' \times 8' \frac{1}{2}}{20}$ = 1500 Tons $\frac{375}{1875}$ 2000 tons
 $\frac{20}{20}$

New Wellington #2 Dump (largest).
 per plan & cut estima. = 5000 tons. --

#1 (Upper) Summit - - - - - = 250 Tons
 # 2 Summit (double by 2 lots) 2000 Tons

Aug. 27/75 OFFICE ESTIMATE --

$\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$	$\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$	$\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$ $\frac{1}{2} \text{ ft. cut}$
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New Wellington No. 0 (top or Surf shaft) - 1500 Tons
 " " No. 1 (road) Dump - 2000 Tons
 " " No. 2 (largest) Dump - 5650 Tons
 Summit No. 1 (top or surf shaft) Dump - 250 Tons
 " No. 2 (at level below No. 1) Dump 1750 Tons

Total, main dumps 11,150 TONS.

MINE New Wellington

GEOLOGY BY

N

Rite in the Rain®

WEATHERPROOF

LOCATION All main dumps

SURVEY

E

LEVEL Sart Dumps

DATE Aug 17/75

SCALE -

EL.

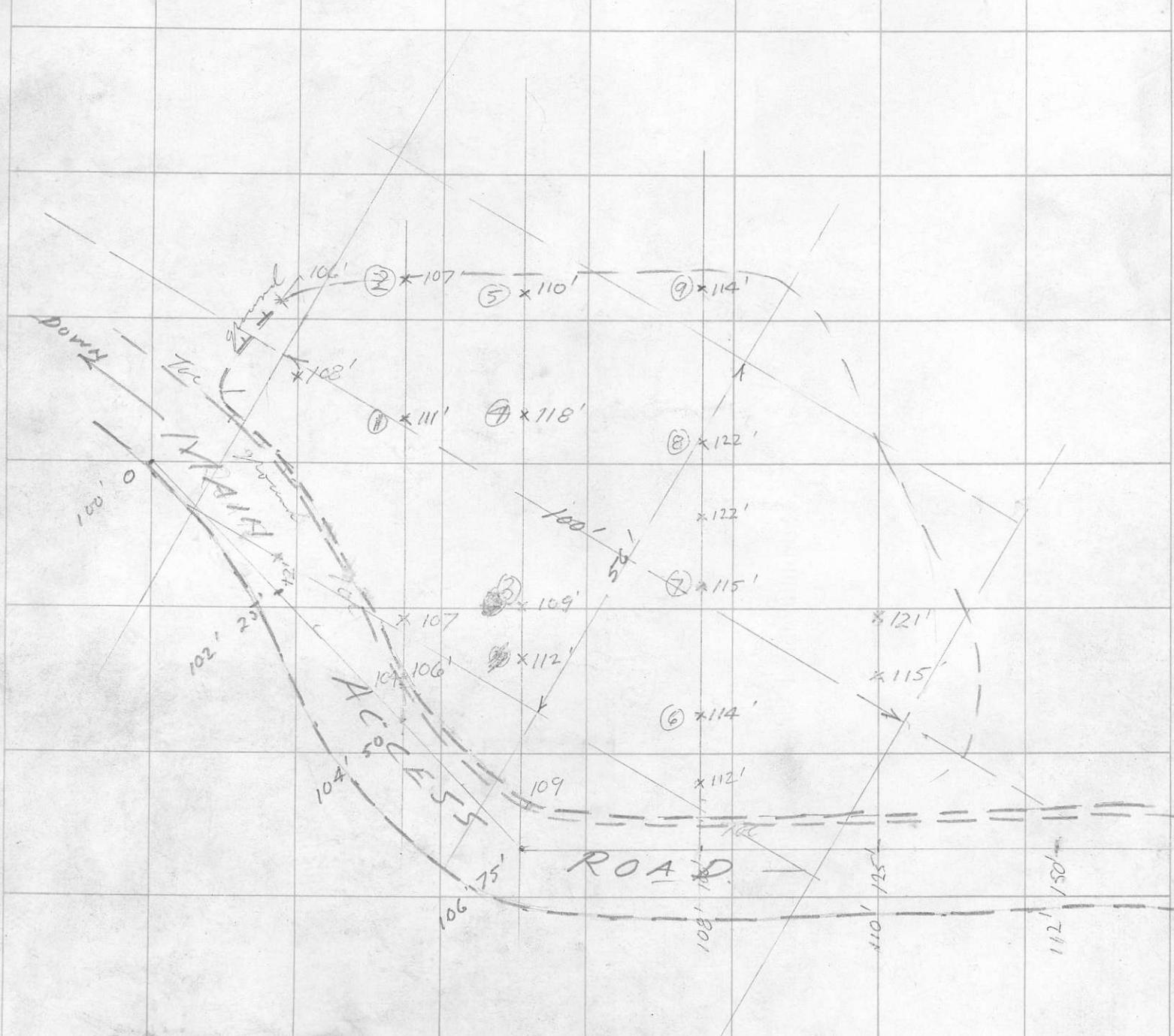
No. 1101

J. L. DARLING CO., INC.
TACOMA, WASH. U.S.A.

NEW WELLINGTON No. 1 DUMP.

ESTIM. GROSS TONS = $\frac{100' \times 56' \times 8'}{20} = 2240$ TONS, EXCL SHALLOW
FRINGE SECTS. & SECTS BELOW ROAD

NET - RECOVERABLE TONS @ 80% = $2500 \times 0.8 = 2000$ TONS



MINE New Wellington LOCATION _____
GEOLOGY ~~at the dump~~ SURVEY _____ DATE Aug 17/75 SCALE 1"=20'
N re-designated as No. 1 dump EL. _____
Rite in the Rain®
WEATHERPROOF

Sunset Shaft 'g' face
(caved)

2
3
2.
3
4
5.
4.5
2.
2.5
3.
8.

13 36.0
± 3.0'

Note occurrence here, as observed
elsewhere on N.W. side of
Pb/2m filling fracture in
slaty cleavage (books) as well
as with 92-cbt vein mat'l.

Old Sunset (#1)
Shaft Collar
Caved

OTC loste

$$\text{Vol} = \frac{3}{20} \times 60 \times 40 \times 3 = 260, \text{ say } 250 \text{ Tons.}$$

(group)

MINE "New Wellington" LOCATION Sunset No. 1 (topping shaft) Tmp LEVEL _____
GEOLOGY BY M.M.S SURVEY Brunton tape DATE Aug 18/75 SCALE 1"=20'