

Summary: B.W.W.M.P. - Big Four Silver Mine; Aug 2, 1950

Big Four Silver

801049

Premier Gold product. period - +100,000 oz/mo for 17 mo. = Prosperity production.

ops suspended @ 28% Ag (1931); at that time mine only partly developed and consid blocks of lower grade remained on certain developed sections pending Co's decision on installing a mill.

Economics:

Climate; avg ann. rainfall 75" at Stewart (accumulative?) which includes water from 220" of snow.

January coldest w sub zero temp (1917 @ -22°F)

Mine prep gen. free of snow July - late October.

Timber; none at mine.

water; consid flows from "I", "D", pump #3 etc.

Tramway; No 3 - Forks = 2 mi H.D. } angle sta.  
Forks - Beach = 3 mi H.D.

(Note Forks - Beach truck road could be (500' E.L.) satisfactorily rehabilitated).

1928 Cost, all steel towers on concrete, \$315,000<sup>03</sup>

8 men/sh to op. Ore conveyed 2,20/ton <sup>work</sup> cost.

Power (Premier)

350 H.P. diesel generator at beach. 6900/440V

Note Canex 3 HP/mine-day mill-mill based on 500T but prob. greater for ops in 100-200T class.

1200 cfm compress off 200 HP synch. motor.

History

Porter Idaho;

Clay mtn 1924 -- 500T sorted @ 250 - 400 oz/ton.  
1924-31 - - 5,256 T w. 276 <sup>17</sup> 563,466 <sup>16</sup> 723,781 <sup>2m</sup> (7)

Prosperity

1926-39 - - 24,648 568 1,765,598 2,277,658 (6070) <sup>Smith reported</sup>

Silverado

29,884 T  
100T @ +100 oz.  
30,000 T.

② - BCW H.C.D. - Big Four

Reconstructed. of tramway not recommended by reason of:

1. - High cost + length of time to effect repairs.
2. - High cost of tramway transport
3. - Vulnerability to snow, rocks, slides, wind etc.
4. Does not solve problem of transport of more personnel.
5. Second Pioneer tramway adds extra cost.

6. A permanent stress cutting avenue of transport can be had.  
 → A 5000' X-C from Silver Bell ground @ elev 4000'.  
 Access to portal would be by additional road from Silverado tractor road + new tramway from adit to lower Silver Bell. (mill, sawmill site, etc).  
 Notes also such a X-C would provide further exploration.

Ore - Op (variably) down to depths of 750'; Believes secondary silver enrichment may extend well into fresh sulfide zones (note "D" silver O.K.)

mine workings (P.L. + Prop.)

on nethe L., Lucille, Prosperity, Grayoyle Fr., Sunday, + Teapot Mine claims - total ± 15,000' In ore shoots areas much over width of 35' map. but gen less than half this.

Galena + blende gen carry the high silver values. usually the more sulf. on one or both walls, at H.C.D. X-C (D vein).

16" of PbS-ZnS assay	179.6 g Ag.	on a w.
next 18" soft, gougy	}	"
worked sulf.		
next 15" black blende	"	168.4 g Ag.
49" w. arg assay of	142 g / T.	

Sulfides occur erratically.  
 Some of Premier shipment of entirely op. mat'l.  
 Ore shoots rarely over 200' long but greater in depth dimension.

Premier moving I to develop "D" shoot at time of shut-down.

3- B.C.W.M.P. Big Four, 1950.

\* During 1949 the Big Four Co drove at a little east of the upper camp (Wake View?) & this yielded 77 high grade sorted on 25' length. A.S. & K. owned Premier & ore shipped to Tacoma w. sacrifice of Pb & Zn for low smelter charges.

Ore Reserves:

\* Impossible to compute ore reserves even w. assay mps. Premier conducted strip to 75 oz. average - necessarily a mixing of hgr & lgr ore. A portion of lgr ore left in strips or hauled to dumps, or left in slope margins & pillars.

'D' ore sheet computed @ 22 oz/ton on the level w 3000 sq ft @ slope sill elev. If it points at this width & length (??) to I → 165,000 tons @ 22 oz in this block alone.

Prospectivity & blind veins intact below #3 level (note upper decrease in size & grade of ore shoots from etc. - Sherl report). Prob. grade @ #3 in range 25-30 oz/ton.

Note Premier left 1000 T block on Blind Vein above level @ 75 oz/ton.

Ore in Dumps (Premier "D") est. @ 10,000 T. } 16 oz  
" @ Sherl dump - 5,000 T }

Ore marginal to part slopes etc. - 40,000 T @ 16-20 oz.  
" in virgin areas below strip 50,000 T @ 25-30 oz.  
B.C.W.M.P. (conservative) 105,000 T.

Metallurgy

Big Four Silver Co has a schedule (A.S. & K. Tacoma) which for lgr ore, smelter charge = 50¢/ton.  
Bulk Sea-borne freight Sitwat - Tacoma 4.50/ton.

Development Costs

Surveys & Prelim investigations	\$ 5,000.00
Repairs to Silverado Road & extension to Silver Bell lower camp site	10,000.00
Camp & facilities at 4000' adit & lower tunnel terminal	5,000.00 (low)
Reinstall Silverado tramway & S.B.	25,000.00
Sawmill near lower tunnel	10,000.00
Camp & plant @ adit portal	15,000.00
Complete tunnel plant	(low) 25,000.00
Drive adit 8' x 8' x 5400' (?)	(low) 162,000.00
expense 250' @ 40 <sup>00</sup> (?)	10,000.00
Reserve for estimated errors etc.	35,000.00
	<u>\$ 300,000.00</u>