

812889

Report on ACTEON GOLD MINES
LIMITED of CANADA made by
Glenvil Collins of Vancouver-

93-K

No. 104-054 Va

File - #034-628.

BARTLETT & WILKINSON
LOS ANGELES, CA

PROPERTY #6
of
ACTEON GOLD MINES LTD.

NOVEMBER 29, 1951.

REPORT ON

Sauchi Creek Placers

By

Glenville A. Collins

Registered Professional

Mining Engineer

513 Royal Bank Building

Vancouver, British Columbia.

PROPERTY OF BARTLETT & WEIKEL -LOS ANGELES.

- MERRITT BUILDING -

ACTEON GOLD -
No. 034-628.

- Copy # 2 -

LOCATION

The Sauchi Placer Claims are located on Sauchi Creek which flows into Stuart Lake, B.C.

The nearest town is Fort St. James which is an air line is approximately 6 miles to the north east and by road is about 9 miles around the lake to it.

Vanderhoof is the nearest railroad station, approximately 43 miles from Fort St. James and on the main line of the Canadian National Railway. The main road from Vanderhoof to Fort St. James is a good gravel surfaced highway that is well maintained and kept open all the year around.

The Sauchi Creek branch takes off near the crossing of Stuart River about 2 miles south of Fort St. James. From this point it is about 8 miles to the present end of this road which is in lease No. 1368. This is a dirt road usable in ordinary weather.

AREA

The leases held for the benefit of ~~Acton~~ **ACTON** Gold Mines, Ltd., ^{S.} N.P.L. starting from the up-stream end and consecutively down stream are as follows. Leases numbered 1365, 1186, 853, 909, 1364, 1369, 1370, 1366, 1367, 1368, plus 3 full leases below 1368 that have been staked out but not yet issued. These last 3 are on the delta area of Sauchi Creek.

Leases 853 and 909 are referred to as the Andrews leases, having been owned by C. G. & M. A. Andrews for a considerable time. A total number of 13 leases comprising an area of about 1040 acres and being about 6½ miles in length.

HISTORY

Sauchi Creek was reported on 1940 by Horace McN. Fraser, a Registered Professional Engineer of Vancouver, B. C.

According to him C. C. Andrews in 1934 owned leases 853 and 909 and did considerable work on them taking out about 100 of gold in testing. In 1938 more testing was done by pits and open cuts supervised by Fraser. This work is represented to indicate an average of 87¢ a cubic yard, and embrace approximately 500,000 cubic yards. Some 300,000 additional yards are also reported as indicated in the Felterly lease, number 1186.

Fraser's Report tabulates as bulk tests as taken from his report as follows:

Pit	Cu. Yds.	Net of Gold	Value Per Cu. Yard	Check Pan by Fraser in Mgs	Value Per Yd.
1	115	20 oz. 3dwt.	"5.25	22.2	" 3.52
2	80	2 oz. 10 dwt.	".91	not tested	panning
3	429	32 oz. 8 dwt.	"2.26	163 in 2 samples	"13.85
4	617	30 Oz. -	"1.46	30 in 2 samples	"2.40
5	237	20 oz. -	"2.50	12.6	"2.08

Fraser estimates 2,400,000 cu. yds laying between the King Lease No. 1369 and the Delta - on which he reports no tests.

A report by W.R. Baker of Totonto, an engineer employed by Quebec Gold Mining Corporation, and dated November 1946, describes the area and some of the geology more especially around leases 909 and 853. He indicates granitic rocks south of 909 and claims that to the north the creek is underlaid by sedimentary rocks. Some quartz veins were also noted. A false bed rock underlays a large part of the stream area. Generally speaking, from a dragline dredging operation standpoint, this would be satisfactory bedrock to work to.

In the Annual Report of the Minister of Mines for B.C., 1934, Page C 15, are the following comments:-

"Sauchi Creek flows easterly in its upper portion, and finally about 5 miles above its mouth bends north-easterly, flowing into the south end of Stuart Lake. It is a large creek with several tributaries.

In dry weather a car can be driven from Vanderhoof - Fort St. James over a branch road about 6 miles in length. The lower 8 miles of this creek were examined.

The accurrence of placer gold on this creek has apparently been known locally for some years, but it was not until the fall of last year that the occurrence was reported to the writer.

For the lower 5 miles the creek occupies a deep valley cut in glacial debris. About 6 miles above its mouth, slightly pyritized quartzites of presumably Carboniferous age are exposed on the left bank of the creek. Just above this point the valley widens, and large low-lying benches flank both sides of the creek for about half a mile, when the valley narrows, cutting through a large stock of granodiorite, above which it again widens to the point at which it is joined by a north flowing tributary about 8 miles above its mouth. The fall of the creek in the lower 5 miles is about 73 feet per mile and above this the gradient is somewhat less.

Placer gold in coarse flakes occurs on a false bed-rock concentration of Post-Glacial type on the low-lying benches mentioned above. Panning at several points disclosed quite good values, and at one point a pan indicating a value of \$8.10 per cu. yard (gold valued at \$32.00 per ounce) was obtained.

Unfortunately these benches are overlain with many very large boulders which are so frequently present in this type of deposit and which are a great handicap to development. However, careful testing of this ground is fully warranted."

The Quebec Gold Mining Corporation did considerable work on this creek in the way of testing during the summer of 1946.

Their test results have been made available and are shown as tabulated herein:-

<u>Test No. 1</u>	<u>Depth</u>		<u>Total Value</u>				
Pit 6' x 4'	3 ft.	2.66 cu. yds.	\$1.76	\$.66	average per		
					cubic yard.		
<u>Test No. 2</u>							
Pit 10.5' x 3	5 ft.	5.83 cu. yds.	\$2.04	.35	"	"	
To pay streak	2'3"	2.62 " "	-	.78	"	"	
<u>Test No. 3</u>							
3' x 6'	4.4'	2.93 " "	\$7.82	2.67	"	"	
	On pay streak at 10'	6.66 " "	-	1.17	"	"	
<u>Test No. 4</u>							
5.75' x 6'	1 ft.	1.33 " "	\$1.57	1.18	"	"	
<u>Test No. 5</u>							
7' x 3'	23 ft.	incomplete		.26	"	"	
<u>Test No. 6</u>							
35' x 5.5'	4.2 ft.	2.99 " "	.55	.186	"	"	
<u>Test No. 7</u>							
5.5' x 5.75	5.3 ft.	3.5 " "	1.15	.328	"	"	
<u>Test No. 8</u>							
6' x 4'	2 ft.	1.77 " "	2.11	1.19	"	"	
<u>Test No. 9</u>							
5.8' x 3.8'	3.5 ft.	2.86 " "	1.19	.42	"	"	
<u>Test No. 10</u>							
5' x 2.8'	2.5 ft.	1.3 " "	.82	.63	"	"	

<u>Test No. 11</u> 6' x 3.7'	8 ft.	6.67 cu. yds.	\$.447	\$.067	average per cubic yard.		
<u>Test No. 12</u> 5' x 3.6'	2.9 ft.	1.93 " "	.164	.086	" "		
<u>Test No. 13</u> 6' x 2.9'	2.7 ft.	1.74 " "	.01	.006	" "		
<u>Test No. 14</u> 5.5' x 3.5'	2.4 ft.	1.8 " "	.303	.168	" "		
<u>Test No. 15</u> 4.3' x 2.17'	3.2 ft.	1.4 " "	.35	.25	" "		
<u>Test No. 16</u> 5.3' x 2.9'	1.3 ft.	.74 " "	.046	.062	" "		
<u>Test No. 17</u> 6.3' x 3.6'	1.4 ft.	1.18 " "	.80	.68	" "		
<u>Test No. 18</u> 5.5' x 3.5'	1.4 ft.	1.0 " "	.372	.372	" "		
<u>Test No. 19</u> 5.8' x 3.2'	3 ft.	2.1 " "	.575	.274	" "		
<u>Test No. 20</u> 5.3' x 3.8'	4.2 ft.	3.13 " "	.156	.05	" "		
<u>Test No. 21</u> 5.8' x 3.3'	4.3 ft.	3.05 " "	2.157	.707	" "		
<u>Test No. 22</u> 6.3' x 3'	3.1 ft.	2.2 " "	.02	.01	" "		
<u>Test No. 23</u> 6.8' x 4.5'	3.2 ft.	3.62 " "	5.30	1.464	" "		
<u>Test No. 24</u> 5.9' x 5.6'	1.5 ft.	1.84 " "	.26	.141	" "		
<u>Test No. 25</u> 6' x 4.4'	4.5 ft.	4.4 " "	.61	.114	" "		
<u>Test No. 26</u> 7' x 3.4'	1.13 ft.	1.0 " "	.835	.835	" "		
<u>Test No. 27</u> 6' x 6'	1.5 ft.	2.0 " "	9.60	4.80	" "		
<u>Test No. 28</u> 6.5' x 3.3'	2.3 ft.	1.8 " "	.95	.53	" "		

<u>Test No. 29</u> 5.8' x 3.1'	2.8 ft.	1.86 cu. yds.	\$ 1.15	\$.618	average per cubic yard		
<u>Test No. 30</u> 6.8' x 3'	4.5 ft.	3.4 " "	.603	.177	" "		
<u>Test No. 31</u> 5.5' x 3.2'	5.8 ft.	3.78 " "	4.156	1.10	" "		
<u>Test No. 32</u> 6' x 3.3'	2.6 ft.	1.8 " "	.503	.317	" "		
<u>Test No. 33</u> 6.9' x 3.6'	2.8 ft.	2.6 " "	1.52	.585	" "		
<u>Test No. 34</u> 6.5' x 4'	4.5 ft.	4.3 " "	.783	.18	" "		
<u>Test No. 35</u> 7' x 4'	9.8 ft.	10.2 " "	1.79	.175	" "		
<u>Test No. 36</u> 6' x 3'	6 ft.	6 " "	hole was lost by flooding				
<u>Test No. 37</u> 6.6' x 3'	5.5 ft.	5.8 " "	.94	.162	" "		
<u>Test No. 38</u> 7' x 4'	5 ft.	5.2 " "	1.273	.244	" "		
<u>Test No. 39</u> 5.8' x 3.6'	2 ft.	Pan Tested	-	.616	" "		
<u>Test No. 40</u> 7' x 4'	2.5 ft.	2.59 " "	2.48	.958	" "		
<u>Test No. 41</u> 7' x 4'	2 ft.	?	.282	.136	" "		
<u>Test No. 42</u> 7' x 4'	1.9 ft.	?	.239	.132	" "		
<u>Test No. 43</u> 7' x 4'	3 ft.	?	.125	.041	" "		
<u>Test No. 44</u> <u>Test No. 45</u> Channel Test	6 ft.	-	-	.089	" "		
<u>Test No. 46</u> Channel Test	3 ft.	-	-	.653	" "		
<u>Test No. 47</u> Channel Test	-	-	-	.519	" "		
<u>Test No. 48</u> 7' x 4'	4.8 ft.	4.8 cu. yds.	.17	.0318	" "		

<u>Test No. 49</u> 7' x 4'	4.4 ft.	4.41 cu. yds.	\$.684	\$.156	average per cubic yard.	
<u>Test No. 50</u> Channel Cut	3 ft.	-	.846	.761	" "	
<u>Test No. 51</u> Channel Cut	1 ft.	-	-	.904	" "	
<u>Test No. 52</u> Sand 7' x 4'	5.2 ft.	5.29 cu. yds.	.495	.09	" "	
<u>Test No. 53</u> Sand 7' x 4'	4.8 ft.	5.01 " "	.572	.114	" "	
<u>Test No. 54</u> Channel Cut	3 ft.	-	5.5	.742	" "	
<u>Test No. 55</u> Channel Cut	1 ft.	-	5.61	.757	" "	
<u>Test No. 56</u> Sand 7' x 4'	4.7 ft.	4.84 " "	6.92	.143	" "	
<u>Test No. 57</u> Channel Cut	2 ft.	-	-	.623	" "	
<u>Test No. 58</u> 6' x 3'	4 ft.	2.66 " "	-	.96	" "	
<u>Test No. 59</u> Channel	4 ft.	-	-	.83	" "	
<u>Test No. 60</u> Sand	5 ft.	-	-	.52	" "	
<u>Test No. 61</u> Incomplete	6 ft.	-	-	.668	" "	
<u>Test No. 62</u> Incomplete	5 ft.	-	-	.638	" "	
<u>Test No. 63</u> Incomplete	4 ft.	-	-	1.59	" "	
<u>Test No. 64</u> Incomplete	4 ft.	-	-	1.10	" "	
Test No. 65	5.5 ft.	-	-	.46	" "	

(Note by G.A.C. last 5 tests are probably by multiple pans).

The following tests are reported from pits on the leases on and just above the delta from lease 1367, 1368, 1366 and 1370.

<u>Pit No.</u>	<u>Depth</u>	<u>Value</u>
101	12.3 ft.	\$.84
102	12 "	.51
103	12 "	.28
104	11.8 "	.31
105	12 "	.49
106	12 "	.36
107	12.7 "	.73
108	12.3 "	.81
109	12 "	.26
110	12 "	.60
111	12 "	.29
112	12 "	.78

I have no personal verification of these tests except as shown on maps and field book and having talked with the Superintendent for the Quebec Gold Mining Corporation who supervised most of them. I have good reason to believe however that they represent the facts.

DISCUSSION

This type of project, to be successful needs to be adaptable to the use of a dragline dredge and floating washing plant.

A large sized diesel dragline machine is advantageous over the smaller plants as will be discussed later.

The limitations to such an operation would be excessive boulders and too shallow pay yardage. They need a large yardage that can be handled on a 3000 to 5000 yard a day basis.

Some of the area on lease 909 is of too limited yardage and depth in the stream area, but the side benches and the areas above 909 appear to offer the yardage needed. The upstream area above 909 and the down stream leases below the canyon appear to have a very large yardage that is easily dredgeable.

A 3 cu. yd. dragline plant would easily handle 4000 cubic yards per 24 hour day, in ground from 10 to 30 feet deep and the larger sized plants are cheaper to operate and more satisfactory than the small units. They require the same number of men as one half the size. Also the 3 yard bucket is large enough to pick up and handle a good sized boulder where the small unit couldn't touch it.

A plant for this project should be substantially as follows and at the costs indicated.

Dragline Dredge of 4,000 Cubic Yards per day capacity.
Everything New

- 1 - Dragline Shovel of 3 cubic yards capacity, either a 1201 Lima Marion or Northurst is preferable.
Cost f.o.b. Vanderhoof \$75,000.00
To be equipped with extended tracks and
2 KW Kohler light plant and 80 foot boom.

- 2 - 3 Cu. yd. buckets. 1 an Esco and the other a Page
(No other make advisable) Cost f.o.b. Vanderhoof. 8,000.00

- 1- D8 or TD 18 Cat. & Dozer. (No other make or size) 18,000.00

- 1 - Electric Welding Unit complete. Mounted on wheels and with adequate rod material 2,000.00

- 1 - Gas Welding Outfit complete, with accessories and rod material 800.00

- 1 - Field Shed, complete on skids with shop tools
set up 1,000.00
Repair parts for Dragline Shovel to keep on hand 2,000.00

- 1 - Complete Floating washing plant 34' x 42' pontoon, either wood or steel (steel preferred).
A 60" x 40' steel trommel with 3/8 holes pinched in plate screen.
A 10' x 10' steel hopper with liners.
A 30" x 60' stacker of steel and with 30" belt & pulleys.
150 H.P. Diesel Engine and 100 KVA Generator.
AC current with switchboard panel and controls

- 1 - 50 H.P. motor on trommel.
- 1 - 50 H.P. motor on pump.
- 1 - 20 H.P. motor on stacker.
- 1 - 12" low head centrifugal pump, piping and valves.
- 20- Steel sluice boxes to fit design of boat.

Necessary structural steel or timber for superstructure to complete pontoon and boat.
Complete cost, approximately. 50,000.00

Cost of freight to Vanderhoof and hauling site.
Approximately 4,000.00

Field erection costs 5,000.00
Camp suitable for operations and equipment for same 2,500.00

Fuel Oil Tanks 1,500.00
1 Pick-up Truck 2,000.00

Operating Capital pending receipt of mint returns 10,000.00

TOTAL CAPITAL NEEDED \$181,000.00

Any road work required to be added. However having the equipment above this item would not be large.

A plant as outlined could be built and installed in about 60 days on the ground after delivery of equipment.

The cost of operation at rated capacity would be approximately 22¢ a cubic yard under present conditions of fuel costs and labor and supplies. Therefore, any values recovered over that amount would represent profit except for taxes. The 22¢ figure would include amortization of plant investment on a 7 year basis.

This sort of plant would require for 24 hour operation, 3 dragline shovel operators, 3 boat winchmen, 1 dozer operator 1 welder and repair man, 1 panner and clean up man, 3 laborers and a superintendent.

The wear and tear on this sort of equipment is considerable so the purchase of new equipment is strongly urged and the keeping on hand of a good stock of ordinary repair parts.

The success of operating comes in having a high per cent of hours each and every day and no shut downs that are avoidable.

Sauchi Creek offers two distinct alternatives - one to work from lease 909 up-stream or from the upper end of the pay gravel down stream to lease 909, whichever way seems best after a closer study of the ground above the tested area.

Two - to work down stream from near 909 to and into the delta area, there being a strip of canyon in the upper portion of this group of leases that needs to be studied to find out if there would be any difficulties in taking a dredge boat thru same. A casual examination did not seem to indicate any difficulty.

CONCLUSIONS

The testing done on Sauchi Creek definitely indicates a large yardage of dredgable ground and values that should prove very profitable.

To endeavor to reduce the tests given to a proven yardage and value would be difficult without further testing, and surveying to tie it all together into a carefully measured yardage with depths and areas.

A drilling project planned with a systematic checkerboard layout for the holes should be carried out on claims having deeper gravels and the side benches.

Contemplating a plant as outlined, a closely drilled area showing at least enough yardage to repay all capital and operating costs should be proven up in one block.

In undertaking such a test program the area above lease 909 would seem to be most promising and if the testing done already is an indication of what to expect it should turn out very satisfactory.

From what I know of Sauchi Creek I believe a further study and testing of it will substantiate the type and size of project herein discussed.

Possibly two dragline dredges are justified, one to operate up stream from the lease 909 and one to operate on the lower end of the leases either down from 909 or up from and on the delta.

I am confident that the tests have proven the advisability of the project and a satisfactory yardage of excellent values, needing only the further work to determine location of site for starting.

Respectfully submitted,

(signed) Glenville A. Collins,

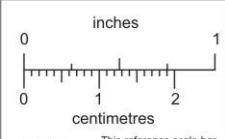
Registered Professional Mining
Engineer in British Columbia.

November 29, 1951

REG. SEAL.

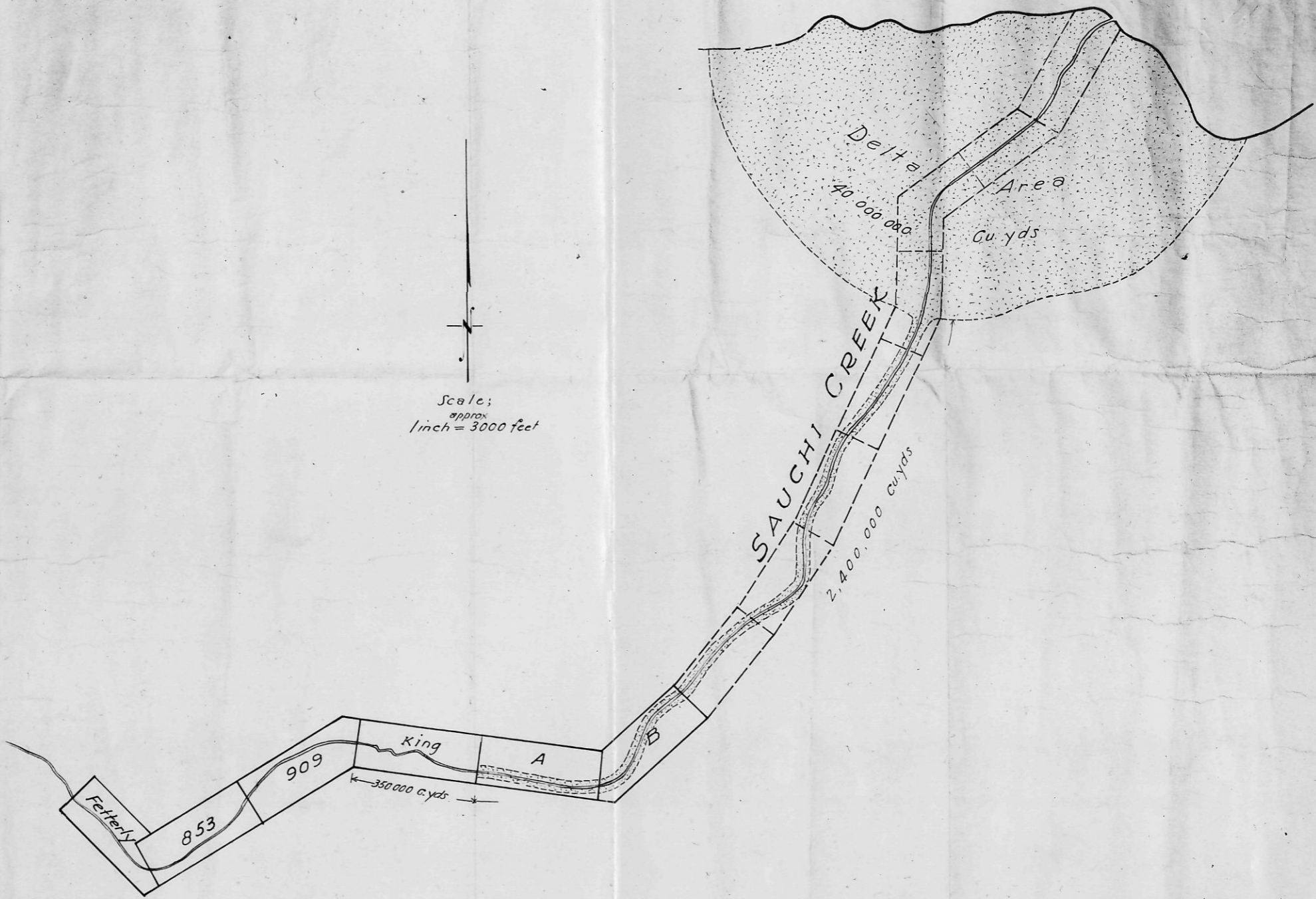
A true copy-(signed)

Neil H. Stewart
MAJOR NEIL H. STEWART
Cm.



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

STUART LAKE



Underhill Underhill & Fraser
Engineers & Surveyors,
Vancouver

