Cottonwood Cr. Mn 92-79
84-83

0073794

92C/16E
92B/13W
92F/1W

Oct 27
Cedar Cabins Bar 510 - 8:10 Am 565
5 00 4:00 Pm 920-27
92F-186

Cottonwood Camp 780 - 7:15 Am 840'
790 3:20 pm

Traverse up Widow Cr.
@ 700 paces crossed tributary from NW

2200 paces in Cr. banded grey sediments
Str 330° dips low to West

2500 paces important fork coming in from
the east Storing 280°-290°
main creek here Storing due S above fork)

West up fork
@ mouth banded sediments Str 50° dips 35° NW

Mn occurrence 100 ± 110 paces up stream
Bar 2120 - 10:50 Am
2175

Returned to main trail entered NW
@ 2850 paces - Bar 2200 - 11:10 Am
2253
NW + NNW crossed SE Storing Cr 0185 paces
@ 225 paces Bar 2715 - 11:50 2760
Mn Oz

return trip Branch Cr to NW @ 1950 paces
Widow Cr Bridge ± 450 ±
Cottonwood Rd 2725 ±

Ashnwood cr P. 84-86

Oct 31.

Cedar Caben	Br 700	8:20	3-65-
	690	8.00	
Ashnwood Camp	780	9:05	860
	1000	5:20	
Mn Occurrence	2850	3:10	2730
	2865-	5:50	
Main Trail	2365	-4:10	2230

Take Ashnwood Camp

Elev 850'

Main Trail below Mn 2210

Mn OC 2750

Mn on branch cr 2175

Wilson Brook. Oct 16. 55 – 56
58 80 – 83

-235 Cedar Cabins Bar 800 – 7:50 AM. 565
-295 860 3:15 580
Forks Ck. Hose 815 8:15 AM

corr
8:20 – -235
9 244
10 253
11 262
12 271
1 280
2 289
3 -295

Eastaboy 245 paces thence NW 1000 paces
Bar 1750 – 1000'

Faithfull Ck 1750 paces
Cabin Ck 2025 paces Bar 2680 10:50 AM
12:00 M
2420 2400
Ry Grade Ck 1825 paces
Car Ck 2075

Oct 28 P80 – 83.
Cedar Cabins Bar 330 – 8:00 AM 565
Ry crossing 355 8:20 575
350 1:30
230 paces to Gate
1050 " beginning of canyon Bar 830 – 8:55 AM
1050
1860 paces Forks of
Camp Bar 2175 – 10:05 AM 2400'
2100 2150 12:00
thence went SE climbing steeply crossed branch cr
100 paces. From 350 paces went east to 460 paces
thence SW to 1st cr Ck 630 paces
Bar 2915 – 10:45 AM
3100'

Meade Cr. P 33 → 37

Wed Oct 11

Cedar Cabins Bar 285 : 805 565
310 255 4:15
+330
75

Crossed Cr @ 2.65 mi

Camp @ 4050 paces. 895-1010AM 1205 } 1215
950 2:20pm 1220

1st mistwong is 1050 paces to Cr
Bar 2600 - 11:20 2900

2nd cat 2660 1:15 ~~2940~~ 2960

lower Dc 2465 1.25

Oct 17. 57-52
220

Cedar Cabins Bar 785 - 7:55AM 5.65
700 4:45
135

Camp 8300 paces to Ry 1400 11:05 1210 } 1215
1380 2:40 1230

3150 - 12:45 ~~2980~~ 2960

2nd Cat 100 paces

Shaw Cr

Lake level Yrbra Bar 685 12:15 Fri Oct 13 5-30
← Hawes 695 1:25
730 4:45 Sat Oct 14 5-30
(1500 pace ↑ end grade
15

Cabin 1560 5:10 PM
1630 7:50 AM Sat Oct 14
1600 11:45 } 14.20
1600 12:45

Cab Approx Δ B 2080 8:35 Aq
2050 11:20 1885

Cabin about opp Δ 3550 ft.

14 800 3m

N End starting 600 paces
← rough clearing 840 ← Bar 1470 1:10 ~~1440~~ 1240
← bull dozer grade 1050 ←
← graded roadbed 1270 ←
← steel 1675 1320 1:30 1140

Grade crosses N fork of Wside 200 paces
← opp East Fork 250 ft.

On W side grade 2750 paces post marked "L 110 n Post 21"

Rig Junction (N & W Forks) Bar 1025 - 7:50 PM 860
1015 4:15
730 - 4:45 5-50

Hawes Lake Level Bar

Shaw. Cr. Oct 13 & 14.

Lake Terel Bar 685 - 12:15 pm 555
695 1:25 555

Dispatch office 740 - 2:55

1560 5:10 pm

Fr. Cabin

Sat 1630 7:50 Am -
1600 11:20 & 11:45 - -

CRs 2080 8:55 a.m.

B 2052 11:20

Return Trip
Cabin Bar 1600 - 11:45

3580+00 opp 3555+00'

7:00 N End slashing 600 paces

1:30 / - rough clearing 840 - Bar 1420 - 1:10

Baldonius 1050

Grade 1270

Steel 1675 1320 - 1:30

Grade Crosses of Eastside Cr 2200

East Fork 2500
Post #21 2750

Junction 1025 - 2:50 pm
1015 4:15

Lake Terel - Hawks 555 - 175 730 - 4:45

8 240
9 215
10 220
11 225
12 230
1 235
2 240
3 245
4 250
5 255
5A 260

Oct 25 Cloud

Cedar Cabins

Short Adit

mm seam

Anticline

Bl Hom Canyon

Car

△ B

△B - W1

△B - △A

830 - 5:40 pm
775 | 8:40 AM

Bar 2700 - 2:55 | 2450

2300 3:15 - 1050

1330 3:45 - 1080

940 - 4:05 - 690

915 - 8:35 - 700

905 4:10 655

265
565
210

07°

68° +23°

W1 Bar 1980 9:50 1760

W1 - △B 187° - 18½°

√D W1 ∠△B = 10 40' √D 1100 horiz 3285

rL = 18½°

Horiz Dist = 3100 √D = 10 40'

2875

△C Bar 3110 - 12:40 pm

X1 (oppos △D) 2925 - 2:00 pm 2685

△12 2950 2:45 pm 2705

Δ 12 El 2705 per Bar Oct 25

Δ B ~ 655

Diff El. 2050

$\sqrt{L}\,(12 - B) - 24' 20'$

$\therefore$ Horiz Dist $= (2050)(2.2 \times 137)$

$= 4F30'$

Thur Oct 19

Cedar Cabins -160 -60	Bar	715 615	- 800 Ans 5 1 25 - pm	555
End Hill 60 Rd		1640	900	15 00
Hill 60 Camp		2830 2715	9:45 4:30	2645
△ A		2650 180	- 10:20	2510
△ 11		2775	12:10 pm	260
△ 12		2730	1:45 pm	2630
△ 6		2885	1:30 p.m	2785
△ C		2930	2:30 pm	2840
△ D		2960	4:00 pm	2880

9 16
8 160
9 160
10 140
11 130
12 120
1 110
2 100
3 90
4 80
5 70

Survey East End, Hell 60

	Meas Dist	Bring	Vert L	Horiz D	Vert D	
1-A					-18	2925
B					-19	2925
C					-10	2933
					Δ1	2943
1-2			-17		Δ2	2926
2-3			-5		Δ3	2920
3-4				349.5	Δ4	2920
1-5	356.7	278°	-11½°	350.4	71.3	71.13 2892
				18.66		
5-5A	22.0	178°	-32°	16.7	11.7	
				197.4	34.8	2837
5-6	200.5	292°	-10°		131.9	2705
6-12	451'	299°	-17°	431.3		
6-7		202°	-37°			
6-4pt	96.7'		-42°	97.8	76.5	2760
4pt-7	28.5'		-24½°			
				56.1	28.6	2731
7-7A	63'	307°	-27°			
	68.5'	295½°	-6°	68.1	7.2	2753
7-8						
		277°	-12°	37.4	7.9	2745
8-9	38.2					
	33'	155°	-28°	30.4	13.1	2732
9-10				52.5	22.3	
		200°	-23°	16.29		2723
9-11	57'					
	19'	53°	-31°	12.3	9.8	2723
10-10A						
	39.8	286½°	-15°	38.4	10.3	
10-11						

Mag — 69

Wb West of Hill 60

Oct 25 some rain & snow

8 30 – 5:40 PM

Cedar Cabins Bar 775 – 8:40 Am

left of car on branch rd Bar 915 – 8:35

9.40 4:05

△B 905 – 4:10

Lowest at Bar 1930 – 9:25 Am

			Brng	Vert ∠	V.	H.
E1 1760	W1 – B					
	W1 Bar 1980 – 9:50 AM					
1730	W1 – W2	63½	185°	−28°	29.8 ✓	56.06 ✓
					29.33 ✓	52.9 ✓
1700	W2 – W3	60.5	225°	−29°	28.87 ✓	47.45 ✓
1700	W4	53	201°	−33°	1.9 ✓	21.7 ✓
1728	W5	21.8	71°	−05°	24.25 ✓	42 ✓
1705	W6	48.5	151°	−38°		
W6 1705						
1705	W6 – W6A	16	250°	0°	0	16
✓	6B	12½	70°	0°	0	12.5
✓	6C	11	26°	0°	0	11
	W3		270°			
W3 1700					0	13 ✓
1700	W3 – W3A	13	338°	0°	15.37 ✓	24.59
1715	3B	29	28°	+32°	0	9
	3C	9	48°	0°	0	21
	– W4	21	90°	0°		
	W3 Bar	1930	10:45			
	△C	3110	– 12:40			
	△12	2950	2:45			

checked & route g.s.

Mon Oct 2

Lake Conchan	9:30	755	1801 –	Elev 595
Bottom Hill 60 Rd	10:00	880		700
Typ – –	10:40	1710		1530
	4 15	1650		
Camp	11:25	2850		
Adult Portal	11:40	2870		2700
	3:18	2850		
Forest Exp Sta	4:53	750	185	565

Tue Oct 3

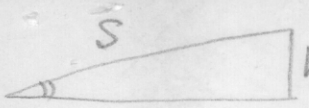
Forest Exp Stn	9:45	730		565
Typ Hill 60 Rd	10:25	1710		
	4:25	1760		
Adult Portal	11:15	2910		2725

Thurs Oct 5

Forest Exp Stn	9:30	775		565
End Hill 60 Rd	10:15	1890		1675
	4:25	1880		2880
Adult Portal	2:00 pm	3090		

Oct 8

End H 60 Rd	8:30	1685		
	4:25	1625		
Adult	10:00	2900		
	2:05	2860		
H 60 Camp	10:10	2880		
	2:15	2855		
	3:50	2850		
Mtn Wdl Hill 60	1:20	2190		
Camp	5:15	700		565



$V = S \sin d$

$H = S \cos d$

1-5 $V = 356.7 \sin 11°30' = 356.7 \times .1994 = 71.13$

$H = 356.7 \cos 11°30' = 356.7 \times .97992 = 349.54$ (.537 46)

1-6 H = 543 ft

5-6 $V = 200.5 \sin 10° = 200.5 \times .1736 = 34.8068$

$H = 200.5 \cos 10° = 200.5 \times .9848 1 = 197.4524$

6-7 $V = 96.7 \sin 42° = 96.7 \times .6691 = 64.7019$

$H = 96.7 \cos 42° = 96.7 \times .74314 = 71.8577$

71.80
25.93
97.78

$V = 28.5 \sin 24°30' = 28.5 \times .4147 = 11.8189$

$H = 28.5 \cos 24°30' = 28.5 \times .90996 = 25.932$

7-8 $V = 68.5 \sin 6° = 68.5 \times .1045 = 7.158$

$H = 68.5 \cos 6° = 68.5 \times .99452 = 68.123$

8-9 $V = 38.2 \sin 12° = 38.2 \times .2079 = 7.9217$

$H = 38.2 \cos 12° = 38.2 \times .97812 = 37.363$

* 9-10 $V = 33 \sin 23° = 33 \times .3907 = 13.09$

$H = 33 \cos 23° = 33 \times .92050 = 30.3765$

10-10A $V = 19 \sin 31 = 19 \times .5150 = 9.785$

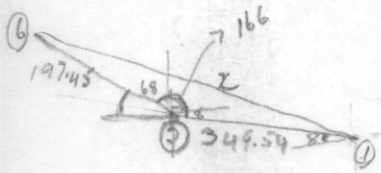
$H = 19 \cos 31 = 19 \times .85717 = 16.2849$

12-6 $V = 451 \sin 17° = 451 \times .2924 = 131.8724$

$H = 451 \cos 17° = 451 \times .95630 = 431.29$

* 9-11. $V = 57 \sin 23° = 57 \times .3907 = 22.27$

$H = 57 \cos 23° = 57 \times .9205 = 52.47$



6-11 H = 187

7-7A $V = 63 \sin 27° = 63 \times .4540 = 28.602$

$H = 63 \cos 27° = 63 \times .89101 = 56.13$

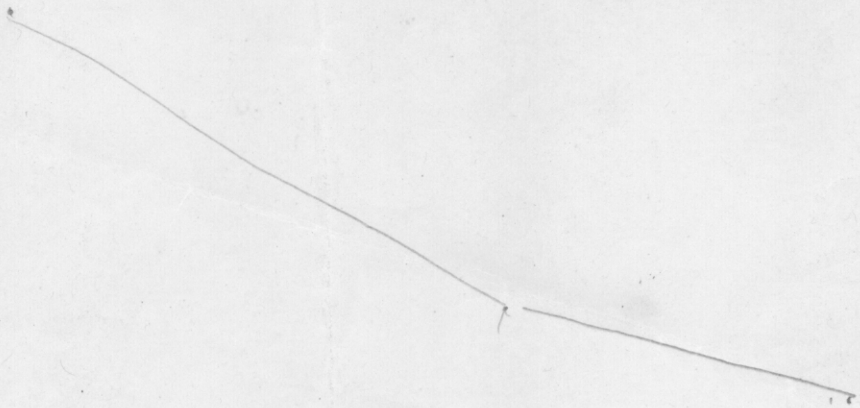
Ref No 67-68

X1 2685

Survey - West Side Hill 60 Canyon

		Meas Dist	Brng	Vert ∠	Horiz Dist	Vert Dist
2650	$X_1 - X_2$	67'	193°	-33°	57.2 ✓	(35.1) → 36.49
2685	$X_1 - \Delta D$	45'	252°	-13°	43.8 ✓	10.1 ✓
2702	$X_1 - X_3$	60'	02°	+17°	57.4 ✓	17.5 ✓
X2 2652						
	X2 - X1		14° ✓			
2650	X2 - X2A	14'	269°	0°	14.0 ✓	0 ✓
2658	X2 - X2B	16'	186°	-48°	10.7 ✓	11.9 ✓
X3 2702						
	X3 - X1		180°			
2730	X3 - X4	60.5'	50°	+28°	53.4 ✓	28.4 ✓
	X4 - X3		230°			
2720	X4 - X4A	16'	265°	-37°	12.8 ✓	9.6 ✓

Course	Meas Dist	Azimuth	Vert ∠	HI	HP	#	V
1-5	356.7	278°	-11½°	°	°		
5-6	200.5	292°	-10°				
6-7	96.7'	202°	-42'	4	°		
	28.5'		-24½°	°	°		
7-8	68.5	295½°	-6	°	°		-7.2
8-9	38.2	271°	-12°				-7.9
~~9-11~~	5'7'	200°	-23°	°	°		22
9-10	33'	155°	-23°				-13.1
10-10A	19'	55° 5°30'	-31°				-9.8
12-6	451'	99°	+17°	°	°		
>-7A	63'	307°	-27°				-28'



Shaw Creek & tributaries

4789/24 -	"Wren" M.C. located by M. L. Douglas Duncan. BC. The claim is situate on the west Forks of Shaw Creek adjoining Fall side and 8 miles from Cowichan Lake.
4790/24	"North Star" M.C. located by John Knybel Youbou. BC. The claim is situate near source of West Fork of Shaw Creek.
4791/24	"Fallside" M.C. located by Duncan Powell Duncan. BC. The claim is situate near the source of the West Fork of Shaw Creek, approx. 8 miles from Cowichan Lake.

Shaw Creek & Tributaries.

4813/24 "Manganese" M/C - located by
R St. Wyllie
Blubber Bay. B.C.
and
1012 - Hornby St. Vancouver BC

Situate towards the headwaters of N. Fork of Shaw Creek which flows into Cowichan Lake and about 8 miles from the Lake:

4814/24 "Manganese No. 1." M/C - Located by
R. A. Wyllie.
Blubber Bay, B.C.

Situate towards headwaters of N. Fork of Shaw Creek, etc -

(same as 4813/24)

4815/24 "Manganese No. 2" M/C - Located by
R. A. Wyllie
Blubber Bay. B.C.

Situate - etc. (same as above)

4816/24 "Manganese No. 3" M/C located by
A. H. Wyllie
Blubber Bay. B.C.

Situate, etc. (same as above)

Cattonwood Creek:

#196/21	"El Capitan" m/c	- Edward D. Miller, Jr. Duncan, B.C.
	on a mountain between a branch of Chemainus River near headwaters of Chemainus River & a branch of Cattonwood creek, flowing into Cowichan Lake.	
#274/21	"El Capitan No. 2" m/c	- A. H. Lomas. Duncan, B.C.
	on a mountain to the West of headwaters of Chemainus River and lying to the East & adjoining El Capitan m/c.	
#275/21	"El Capitan No. 3" m/c	- Edward D. Miller Duncan, B.C.
	near headwaters of Boulder crk. a branch of Cattonwood Crk. Cowichan Lake, and lying to West of & adjoining "El Capitan" m/c.	
#316/21	"El Capitan No. 4" m/c	- E. D. Duncan Duncan, B.C.
	adjoining N. side of El Capitan #3 m.c. & situated near headwaters of Boulder crk. a branch of Cattonwood Crk. which flows into Cowichan Lake near Youbou.	

Cottonwood Creek:

4854/24 — "Ace" M/C - Located by Duncan Powal
Duncan, B.C.,

Situate on east fork of Cottonwood Crk. on N. side of Cowichan Lake, adjoining the "Chico" M/C on the Northern boundary formerly known as the "Jack Pot."

4387/22 — "Paint Pot" M/C - Located by Martin M. Smith.
Duncan, B.C.

Located on a mountain side to the east of Boulder Creek a tributary of Cottonwood Creek adjoining the "El Capitan" #2 and "El Capitan" #3 M/C's on the south side and to the easterly of "Clover Leaf" M/C.

4559/22 — "Chico" M/C. - Located by A. H. Lomas.

address at date of Oct. 31/33 → 940 Fairfield Rd. Victoria, BC. and Duncan, BC

Situated on the east fork of Cottonwood Creek on the North side of Cowichan Lake & adjoining the "El Capitan" group of M/C's on the West boundary.

Cowichan Lake

4853/24

Gold Bird M/C

Located by:
Emma Pennock
611 East 7th Ave
Vancouver, B.C.

about 2 miles N. of Yarhan & Cowichan Lake
adjoining "Red Top" claim

4878/24

Manrico 11 M/C

T. Galloway.
Rounds, B.C.

along N. & S. boundary line of Blocks 75 & 106
between Cowichan Lake & Gordon River.

4879/24

Cougar M/C

A.R. Pearson.
Lake Cowichan, B.C.

Situate
as in 4878/24

4880/24

"Head" M/C

L.H. Chumlea
Lake Cowichan, B.C.

along the N. & S. boundary line of Blks. 106 & 75
between Nixon Crk. to N. & Sutton Crk. to South
both emptying into Cowichan Lake.

Cowichan Lake (continued)

4885/24 "Montana" M/C — H. H. Chumlea.
Lake Cowichan, B.C.

Situated along the boundary line of Blocks 106 & 75 just South of Lake Cowichan.

4897/24 "Dixie Lee" M/C — B. Johnson
Lake Cowichan, B.C.

Situated
along north & South boundary lines of Blocks 106 & 75
Lake Cowichan Dist.

4916/24 "Snow White" M/C — Chas. Hamstrom.
Rounde, B.C.

adjoins Dixie Lee M/C on S.E. side along N. & S.
boundary line of Blocks 106 & 75, South of
Lake Cowichan.

Cowichan Lake (continued)

4881/24 "White Eagle" M/C. – Charlotte Chumlea, Lake Cowichan, B.C.

Situated same as 4880/24

4882/24 Cobalt M/C – H. D. Murphy, Lake Cowichan, B.C.

along the N. and S. boundary lines of Blocks 106 & 75. Lake Cowichan District.

4883/24 Blue Ribbon M/C – H. S. Chumlea, Lake Cowichan, B.C.

Situated same as 4882/24

4884/24 "Heather" M/C – Neil MacDonald, Lake Cowichan, B.C.

Situated same as 4883/24