



August 7, 1996

Weston Conservation Commission  
c/o Mr. Carl Sherman  
P.O. Box 62  
Weston, Vermont 05161-0062

Re: Cold Brook Dams - Monitoring  
DH 415003

Dear Commission Members:

Dufresne-Henry submitted dam evaluation reports on the Upper and Lower Cold Brook Dams in August 1993. The dams were judged to be in poor to fair condition with the Lower Dam the worse of the two. It was a recommendation that a monitoring program be established at the Lower Dam to quantify movement, if any, over time. At the direction of the Commission, a monitoring program was established at both of the Cold Brook Dams.

The initial field work took place on May 3, 1995. Bench marks were established at the ends of each dam to establish a base line across the crest. Monitoring points consisting of shallow holes drilled in the cap stones were established at various locations on those lines. Distances to the points from known references were determined to facilitate recovery of the marks. A site plan annotated with the approximate locations and point designations will be found attached.

The monitoring points at both dams were checked on July 12, 1996. The bench marks were all located and found to be in good condition. All of the monitoring points on the dam crests were also found. Changes in the monitoring point locations was determined by sighting between the bench marks and measuring the offset with a graduated scale. A summary of the offsets is presented in the attached table.

The results indicate that some offset in the downstream direction has occurred at virtually every point. At the Lower Dam the distance ranged from 0.00 feet to 0.04 feet with an average of .021 feet for the 14 points. At the Upper Dam the distance ranged from 0.00 feet to 0.04 feet with an average of .019 feet for the 8 points. With only one observation since the monitoring points were established, we feel it is too soon to say the dams are moving and that a dangerous condition exists. If additional displacement is noted at the next observation, further recommendations may be made.

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Please feel free to call us if you have any questions.

Very Truly Yours,

DUFRESNE-HENRY, INC.

Bruce H. Cox, P.E.  
Environmental Services Division

BHC/dim  
WCCDAMS6.LTR

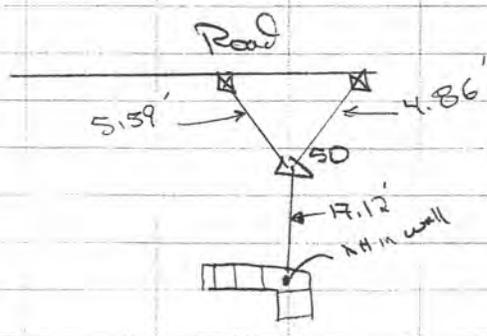
set-up

Upper Dam 5/3/95

85 reof	45 reof		
(50)	(51)	100.81	
Drill Hble	(71)	17.11	
"	(72)	27.74	
"	(73)	38.12	
"	(74)	47.52	
"	(75)	56.23	
"	(76)	64.30	
"	(77)	72.62	
"	(78)	74.00	
Traverse	(1)	38.81	(-) 103-42-34

J. DANIELSON  
 1010 1/2 ST. N.  
 S.W. ALBUQUERQUE, N.M. 87102

(50) (1) 60.58 229.2748 / 1.365<sup>Vert</sup>  
 UP across street w/turn



Lower Dam

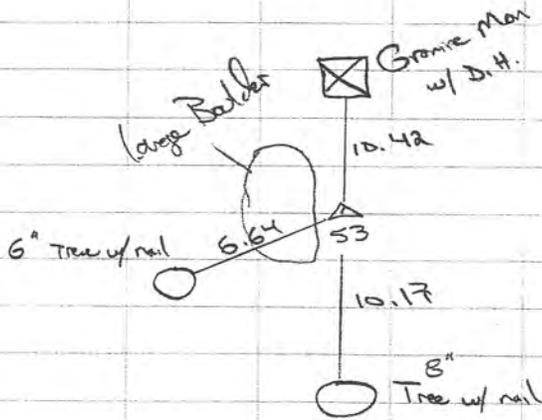
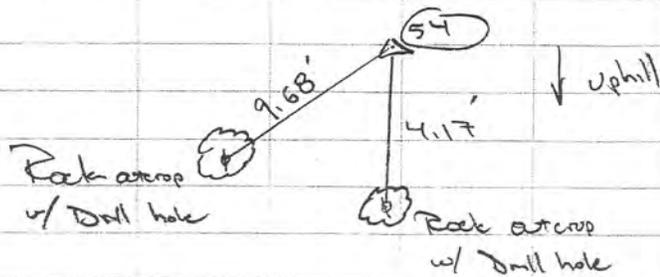
(52)	(53)	174.070	
Drill Hole	79	42.360	
"	80	50.050	
"	81	56.545	
"	82	61.055	
"	83	66.940	
"	84	74.885	
"	85	80.960	
"	86	85.780	
"	87	89.305	
"	88	94.495	

(52) (2) Hor. 64.875  
 (53) 52.3810

(54)	(55)	229.160	
Drill Hole	(89)	42.515	
	(90)	63.715	
	(91)	79.640	
	(92)	92.805	

(2) (1) 463.45  
 Peral (52) 64.895 38-48-46  
 31-47-32  
 34-47-38





~~8 5 17 8  
80 96  
65 82~~

79 0.04 to left  
 80 0.04 left  
 81 0.025 left  
 82 0.03 H  
 83 0.03 H  
 84 0.035 H  
 85 0.035 H  
 86 0.015 H  
 87 on line  
 88 0.01 H

Across Spillway

1" to gap bs so figure often  
 (Not enough off to adjust)

71 on line  
 72 "  
 73 0.03 to right  
 74 0.04 to left  
 75 on line  
 76 0.02 to left  
 77 0.03 to left  
 78 0.03 to left

Upper Dam

7/12/96  
 OSG/BHC

First dock

6

53 54

Right leg

9a

on line

9i

0.01' left

9p

0.01' left

9q

0.08' left