May 15, 1954

Dr. Melvin L. Levine
Honolulu Office

Dear Mel:

Thank you very much for the Well 1 water analysis.
I compared the sum of the equivalents of the anion with the
sum of the cations and they did not agree. What anions
could have mixed?

Sincerely,

W. W. Aldrich

WWA/mn

May 11, 1954

RECEIVED
MAY 13 1954
Ans'd _____

Mr. W. W. Aldrich
Lanai Office

Dear Bill:

The three samples of water from Well No. 1, as mentioned
in your teletype to George Felton, No. 14, dated April 13, 1954,
have been received and analyzed. The accompanying table gives
the results of the analysis.

We will be expecting the additional samples at the end of
the 1954 pumping period, presumably some time next fall. Would
you inform Mr. C. H. Wells directly at the time those samples are
being sent?

If there is other information which you would like relative
to these samples we would be glad to do what we can to furnish it.

Sincerely,

Melvin L. Levine

cc: NEW
    WLT
    CHW

encl.

Analysis of Water from Lanai Well No. 1

Sample received			4-21-54	4-26-54	5-4-54	Av
Calcium (Ca)	40.8	ppm	51	66	50	56 ✓
Magnesium (Mg)		"	106	162	136	135 ✓
Sodium (Na)		"	95	100	85	93 ✓
Boron (B)		"	13	23	27	21
Chloride (Cl)		"	311	446	394	384 ✓
Sulfate (SO$_4$)		"	68	76	68	71 ✓
Bicarbonate (HCO$_3$)		"	123	132	127	127 ✓
Phosphate (PO$_4$)		"	4	1	0	2 ✓
pH			8.0	7.7	7.5	7.7

rc/5/11/54

Cations

Ca   56
Mg 1135
Na   193
    284

Anions

Chlorides 384
Sulfate 71
HCO$_3$ 127
    02
   585

$$\frac{384}{35} = 10$$

$$\frac{71}{48} = 2$$

$$\frac{127}{62} = 2$$

   14

$$Cal. \quad \frac{56}{20} = 2.5 \text{ equivalent}$$

$$Mag \quad \frac{135}{12} = 10 \quad "$$

$$Na \quad \frac{93}{11} = 8 \quad "$$

   20