HYDROLOGIC ASSOCIATES U.S.A., INC.
ENVIRONMENTAL CONSULTANTS

February 2, 1995

Mr. Gene McLoughlin, P.E.
MDWASA
P.O. Box 330316
Miami, Florida 33233-0316

Dear Mr. McLoughlin,

The purpose of this letter report is to describe the procedures used and the results obtained from quantitative hydraulic analysis of possible monitoring zones penetrated by Injection well I-3N. The straddle packer tests and subsequent hydraulic analyses were conducted in the zones of the aquifer between 2060 to 2120, 1420 to 1480, 1320 to 1380 and 1210 to 1270 feet below land surface (BLS).

METHOD

A straddle packer was used to isolate the test zone for drawdown and recovery tests. Stress was imposed on the hydraulic system with a 4 inch submersible pump and water level changes were measured in the drill stem with a pressure transducer and recorded on a Hermit 1000-C data logger. Prior to each test, the well was developed by pumping the formation fluid until the specific conductance stabilized. Specific conductance readings taken during development and the tests are included in Appendix I. Please note that due to the high transmissivity of these zones over recovery with subsequent sinusidal oscillations of water levels occured making analysis difficult. Values should be considered an estimate. The well was allowed to recover from development before performing the tests.

Water quality samples were collected at the end of each test. Parameters included; chlorides, total dissolved solids, alkalinity, hydrogen sulfide, all nitrogen species, ammonia, zinc, sulfate, ph and color. Laboratory analysis sheets are included in Appendix III.

BACKGROUND

A 12 inch pilot hole was drilled below casing to a depth of 2200 feet below land surface. A suite of geophysical logs were run and, together with the borehole cutting samples, the test zones were selected by the WASA project hydrogeologist. Zones were selected between 2060-2120, 1420-1480, 1320-1380 and 1210-1270 feet below land surface. Each zone was isolated with an inflatable straddle packer. The packer is made up of 2, 15 foot packers separated by a 60 foot length of drill stem. Ten feet of perforated drill stem is open to the formation between the two packer elements.

The packer assembly was lowered on the drill stem into the original pilot hole to the tested interval of 2060-2120 feet B.L.S. The packer elements were then inflated. A submersible pump was then installed in the drill stem to develop the formation fluids between the packer elements. After seven hours of pumping, a constant specific conductance of 35,000 umhos was reached. The well was allowed to recover to its initial antecedent conditions. The well was then pumped while drawdown data was recorded. After the pumping was discontinued, recovery data were recorded until formation water level had again reached antecedent conditions. Background, drawdown and recovery water level data is graphed on Figure 1. Raw data are presented in Appendix II.

The packer assembly was then raised to the 1420-1480 feet below land surface zone. The same procedure as above was then followed for this and subsequent zones. Background, drawdown and recovery water level data is graphed on Figure 2, for zone 1420 to 1480, Figure 3 for zone 1320 to 1380 and Figure 4 for zone 1210 to 1270.
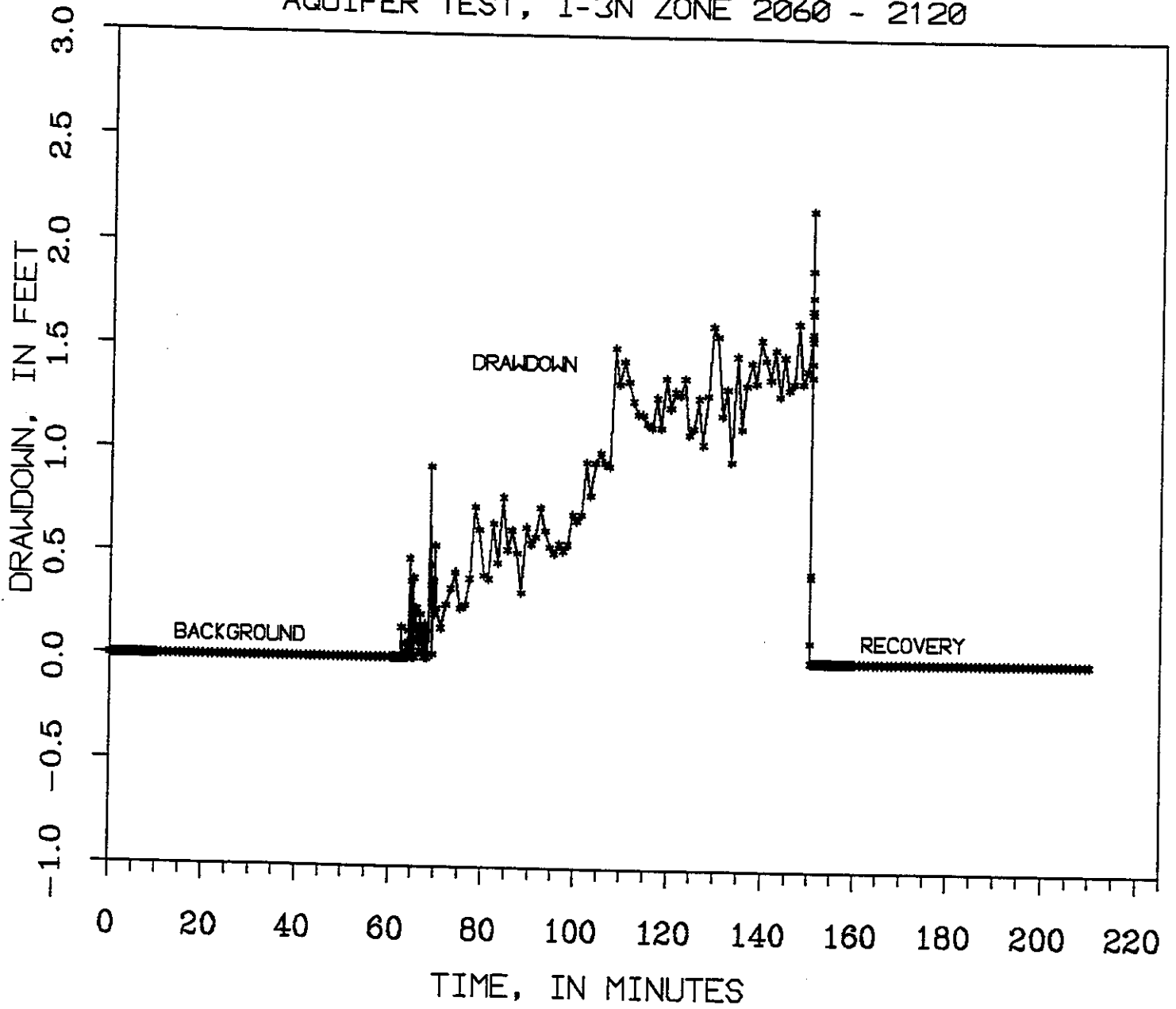
Figure 1. -- Background, drawdown and recovery data from I-3N, zone 2060-2120
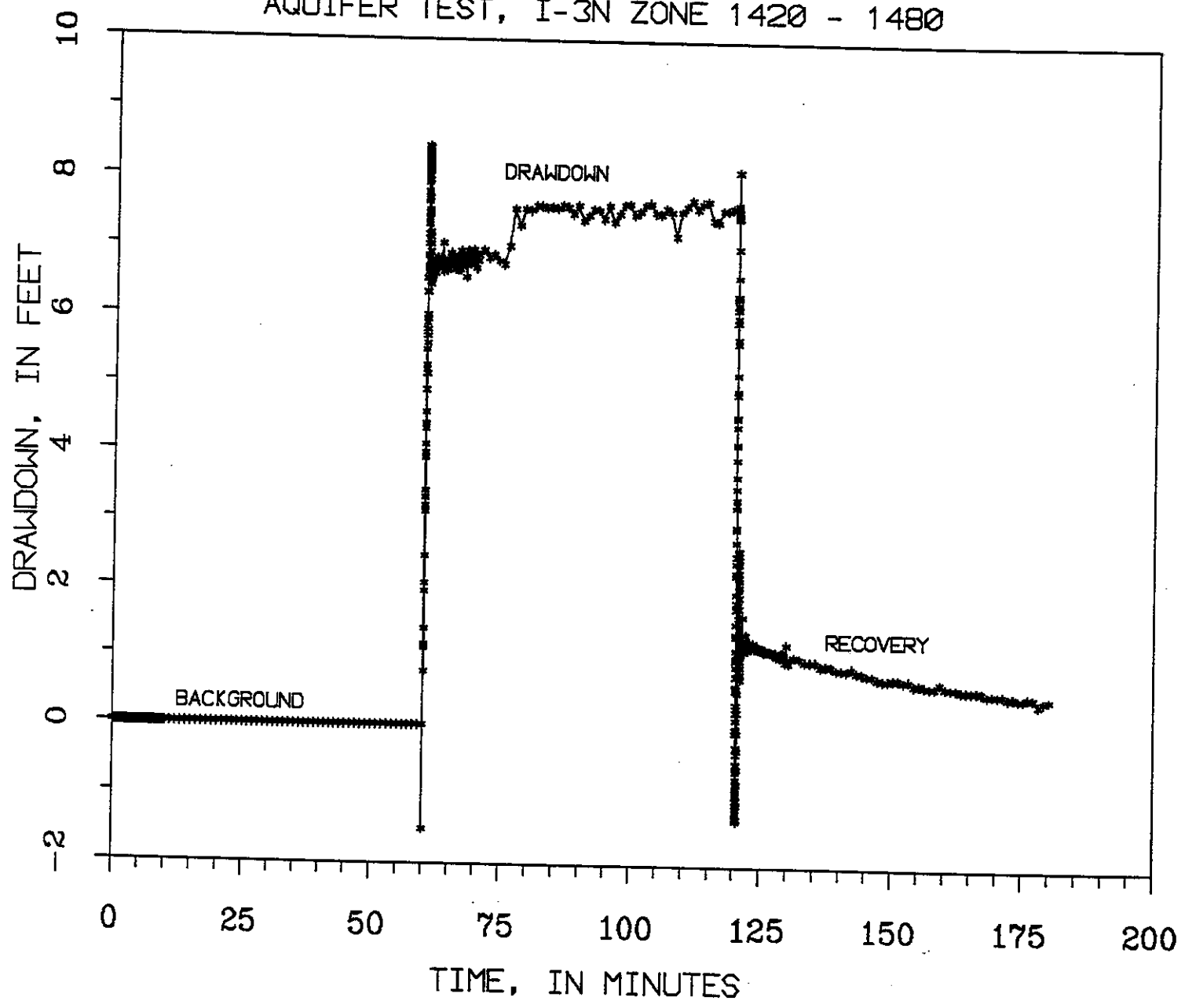
Figure 2.-- Background, drawdown and recovery data from I-3N, zone 1420-1480

Figure 3. -- Background, drawdown and recovery data from I-3N, zone 1320-1380

AQUIFER TEST I-3N, ZONE 1210 - 1270

DRAWDOWN, IN FEET

TIME, IN MINUTES

BACKGROUND
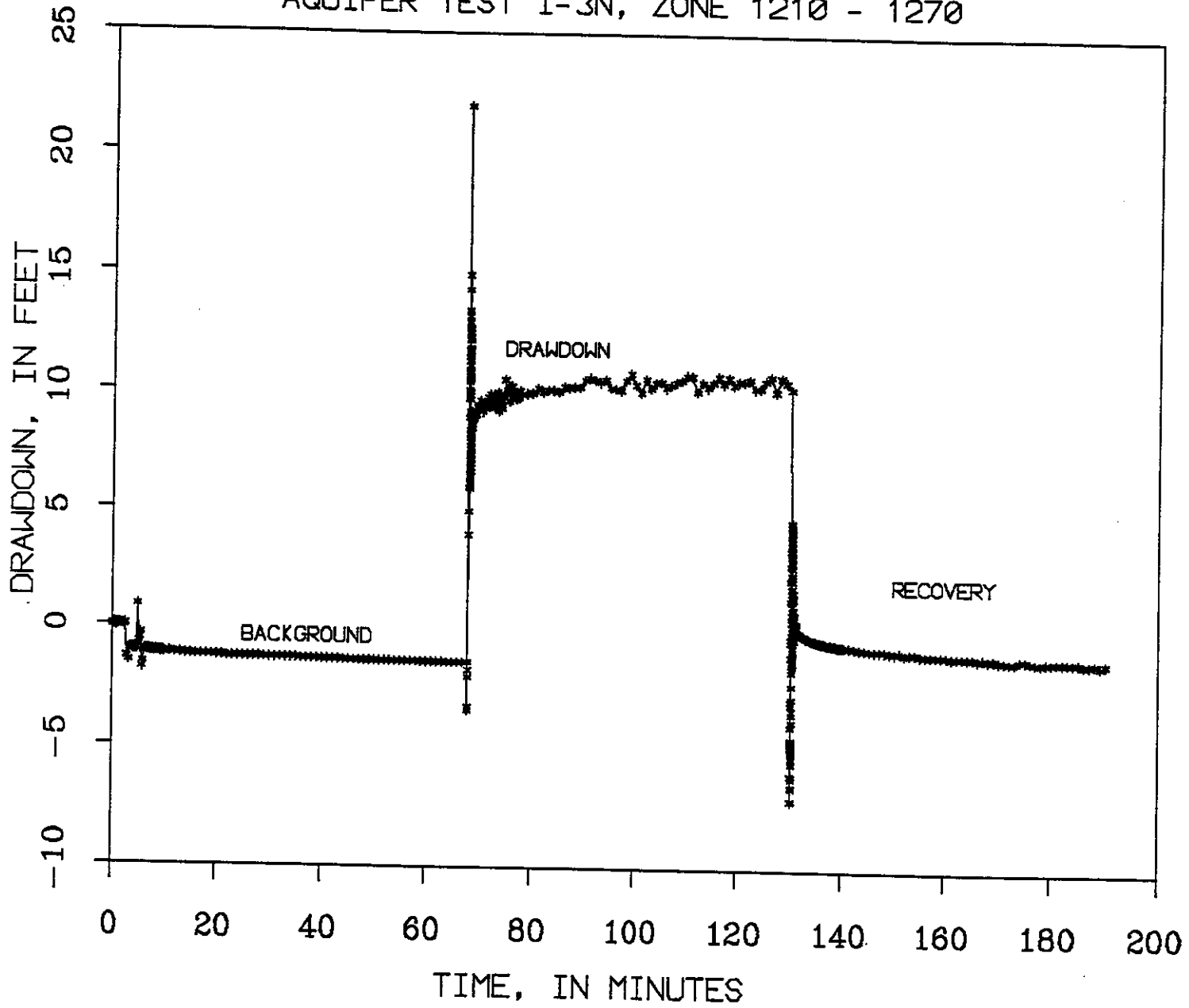
DRAWDOWN

RECOVERY

Figure 4. -- Background drawdown and recovery data from I-3N, zone 1210 to 1270

DATA ANALYSIS

Two methods of data analysis are used to calculate the transmissivity for each packer setting.

1. Cooper-Jacob Analysis
2. Theis Recovery Analysis

1. Cooper-Jacob Analysis

The Cooper-Jacob method (figures 5, 6, 7, and 8) (Todd, 1980 p. 129) was used to compute a transmissivity value. The equation is as follows:

$$T = \frac{(2.3)\ (Q)}{(4)\ (\pi)\ (\Delta S_i)}$$
where Q=discharge in cubic feet per day
ΔS_f=drawdown over one log cycleof time

The data were plotted on semi-log paper (s verses log t) and a straight line fitted to the data.

Using the observed drawdown over a single log cycle, (ΔS_i), the transmissivity can be determined from the equation given by Todd (1980, p. 130) as:

Zone.2060-2120   Zone 1420-1480

$$T = \frac{(2.3)\ (18191.2)\ ft^3/day}{(4)\ (3.1416)\ (1.35\ ft)}$$ $$T = \frac{(2.3)\ (16324)\ ft^3/day}{(4)\ (3.1416)\ (.25\ ft)}$$

T = 2461 ft^2/day   T= 11957 ft^2/day

<div style="display: flex; justify-content: space-between;">

Zone 1320-1380

Zone 1210-1270

</div>

$$T = \frac{(2.3)\ (18072.2)\ ft^3/day}{(4)\ (3.1416)\ (1.8\ ft)}$$

$$T = \frac{(2.3)\ (18691.7)\ ft^3/day}{(4)\ (3.1416)\ (1\ ft)}$$

T =   1836 ft^2/day

T =   3412 ft^2/day

Using a unit thickness of 60 ft., the horizontal hydraulic conductivity is:

Zone 2060-2120

Zone 1420-1480

K =   41 ft/day

K =   199.3 ft/day

K =   1.5 X 10^{-2} cm/sec.

K =   7.1 X 10^{-2} cm/sec.

Zone 1320-1380

Zone 1210-1270

K =   30.6 ft/day

K =   56.9 ft/day

K =   1.1 X 10^{-2} cm/sec

K =   2.0 X 10^{-2} cm/sec

COOPER-JACOB ANALYSIS, I-3N ZONE 2060 - 2120
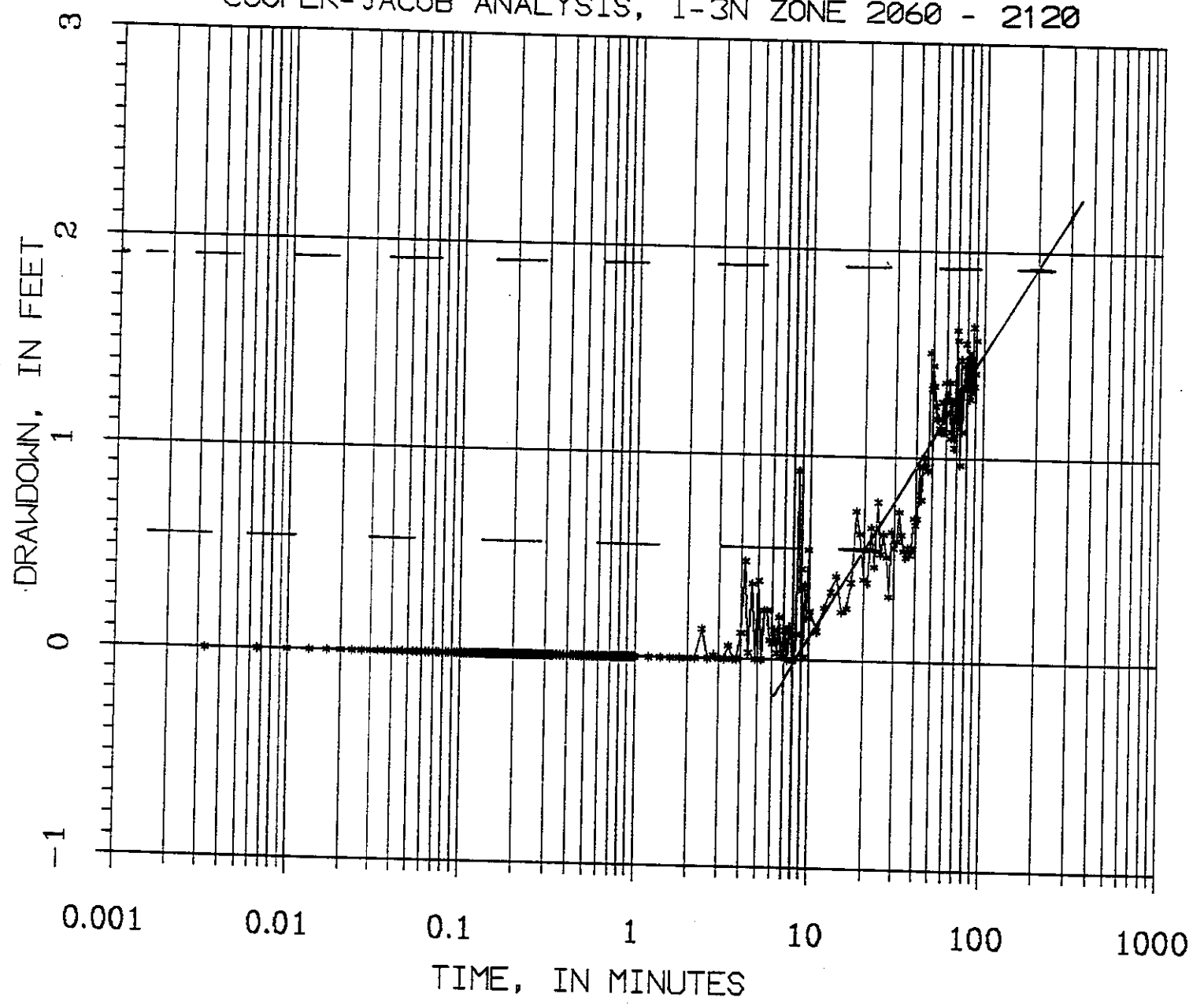
Figure 5. -- Cooper-Jacob Drawdown Analysis, I-3N, zone 2060-2120

COOPER-JACOB ANALYSIS, I-3N ZONE 1420 - 1480

DRAWDOWN, IN FEET

TIME, IN MINUTES
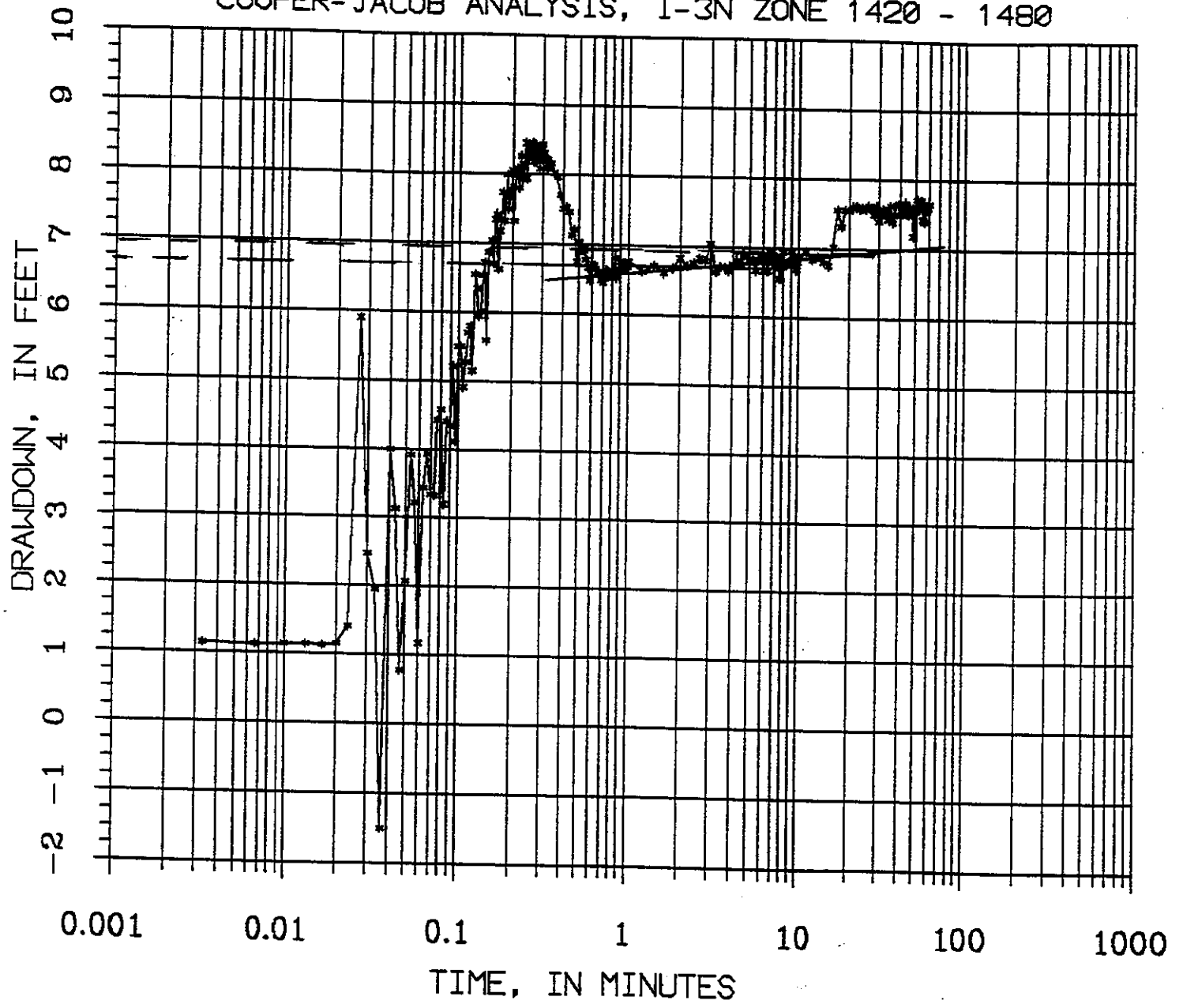
Figure 6. -- Cooper-Jacob Drawdown Analysis, I-3N, zone 1420-1480
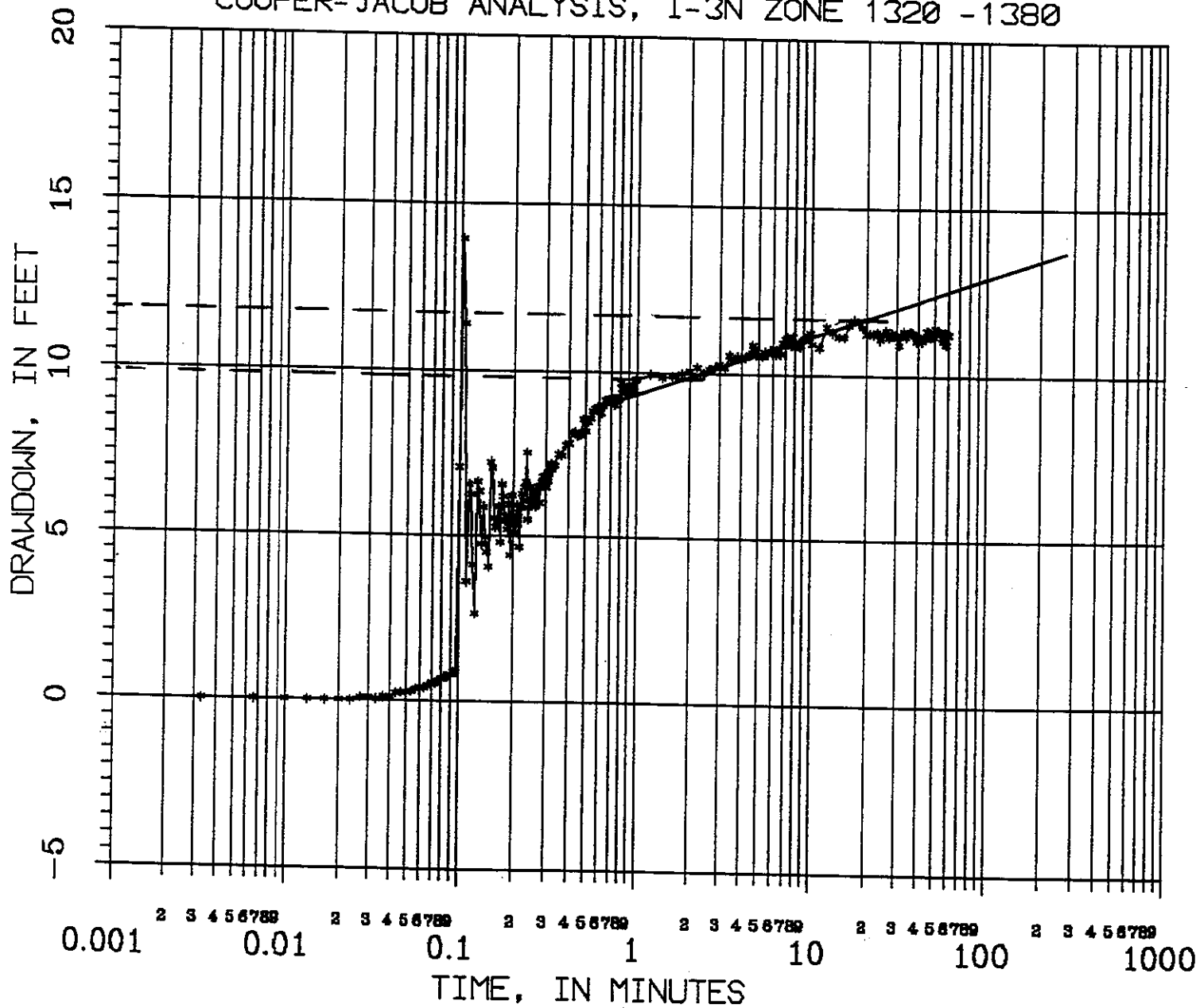
Figure 7. -- Cooper-Jacob Drawdown Analysis, I-3N, zone 1320-1380

COOPER-JACOB ANALYSIS, I-3N ZONE 1210 - 1270

DRAWDOWN, IN FEET

TIME, IN MINUTES
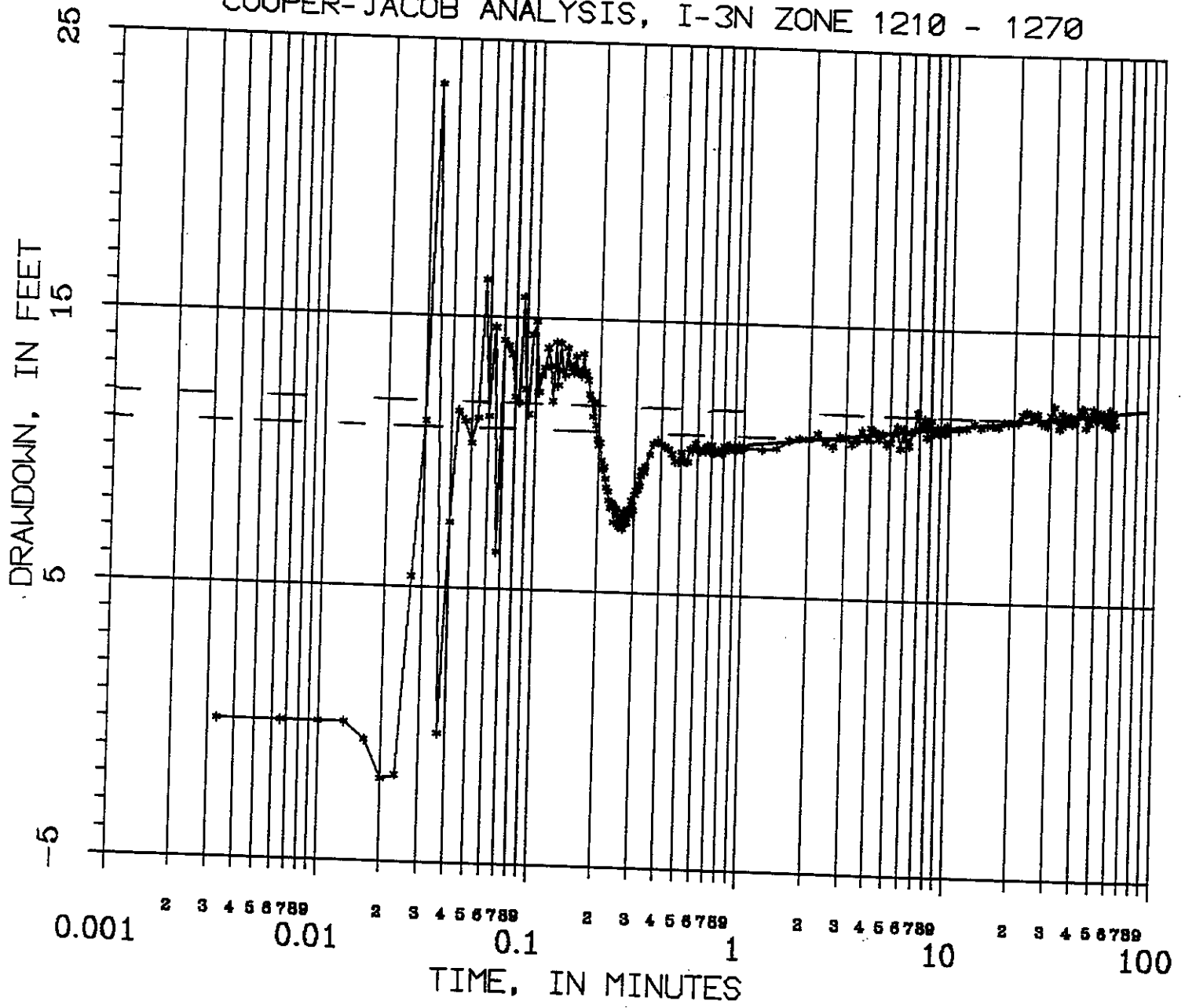
Figure 8. -- Cooper-Jacob Drawdown Analysis, I-3N, zone 1210-1270

2. Theis Recovery Analysis

The Theis Method was used to analyze recovery in the well after the pump was shut down, using the method as described in Todd (1980 p. 133). Residual drawdown, s˝, was plotted against the log of the ratio of time from the start of pumping to the time of shut down (t/t') (see Figures 9, 10, 11, and 12).

A straight line was fitted to the early time data and the change in residual drawdown over a single log cycle (s˝) was calculated. Transmissivity was then determined from the equation: Todd (1980, p.134):

$$T = \frac{2.3 \ (Q) \ ft^3/day}{(4)(\pi)(S'/ft)}$$

Zone 2060-2120

Due to rapid recovery, this analysis could not be used for this zone. This indicates a very high T value.

Zone 1420-1480

$$T = \frac{(2.3) \ (16324) \ ft^3/day}{(4) \ (3.1416) \ (.52 \ ft)}$$

$$T = 5776 \ ft^2/day$$

Zone 1320-1380

$$T = \frac{(2.3) \ (18037.2) ft^3/day}{(4) \ (3.1416) \ (.75 \ ft)}$$

$$T = 4413 \ ft^2/day$$

Zone 1210-1270

$$T = \frac{(2.3) \ (18691.7) ft^3/day}{(4) \ (3.1416) \ (.65 \ ft)}$$

$$T = 5243 \ ft^2/day$$

Horizontal hydraulic conductivity is calculated by dividing T by the unit thickness of 60 ft.

	Zone 2010-2120 ✓		Zone 1420-1480
K =	N/A	=	96 ft/day
K =	N/A	=	3.4×10^{-2} cm/sec

	Zone 1320-1380		Zone 1210-1270
K =	73.6 ft/day	=	87.4 ft/day
K =	2.6×10^{-2} cm/sec	=	3.1×10^{-2} cm/sec

THEIS RECOVERY ANALYSIS I-3N, ZONE 2060 - 2120
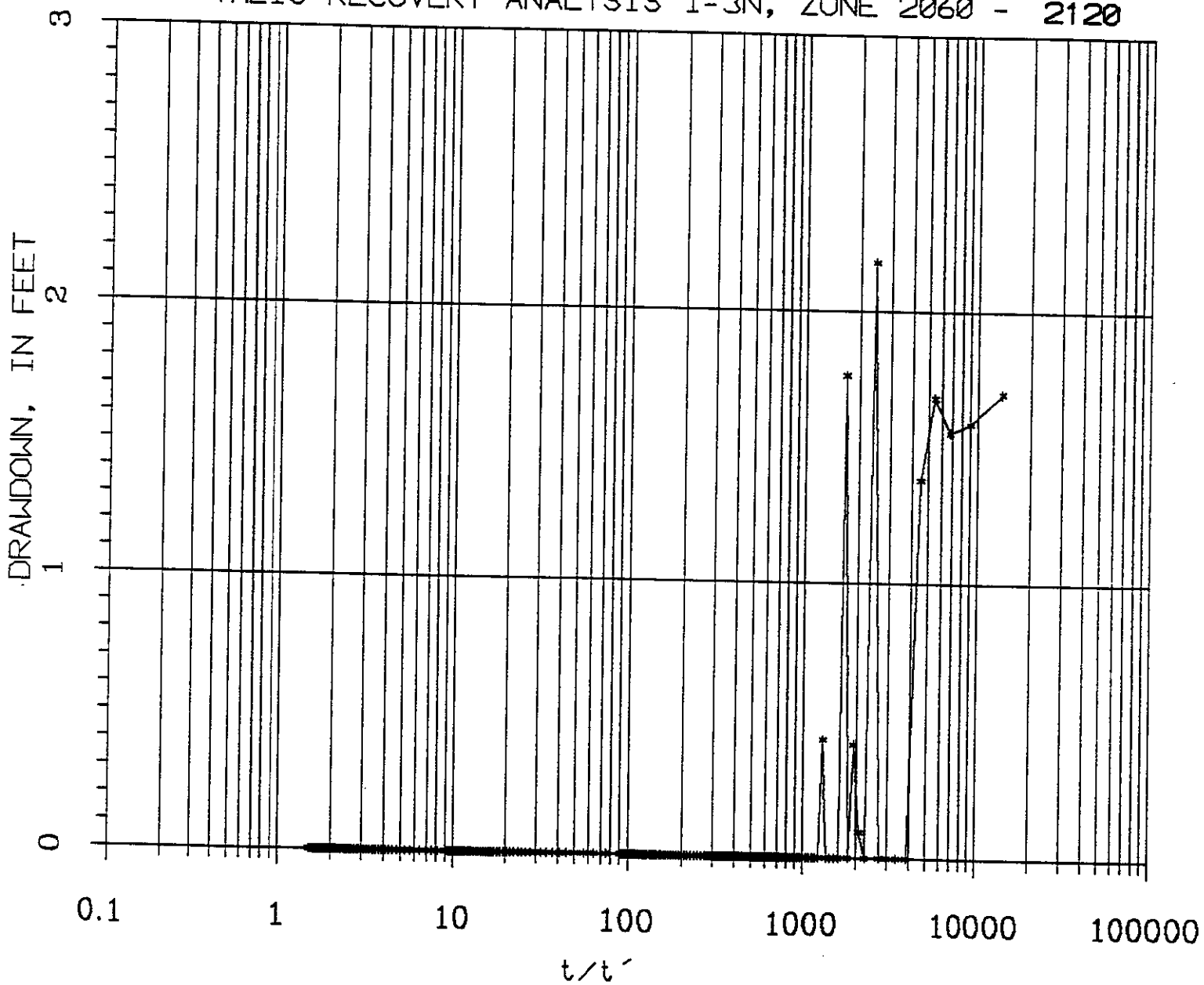
Figure 9. -- Theis Recovery Analysis I-3N, zone 2060-2120

THEIS RECOVERY ANALYSIS, I-3N ZONE 1420 - 1480
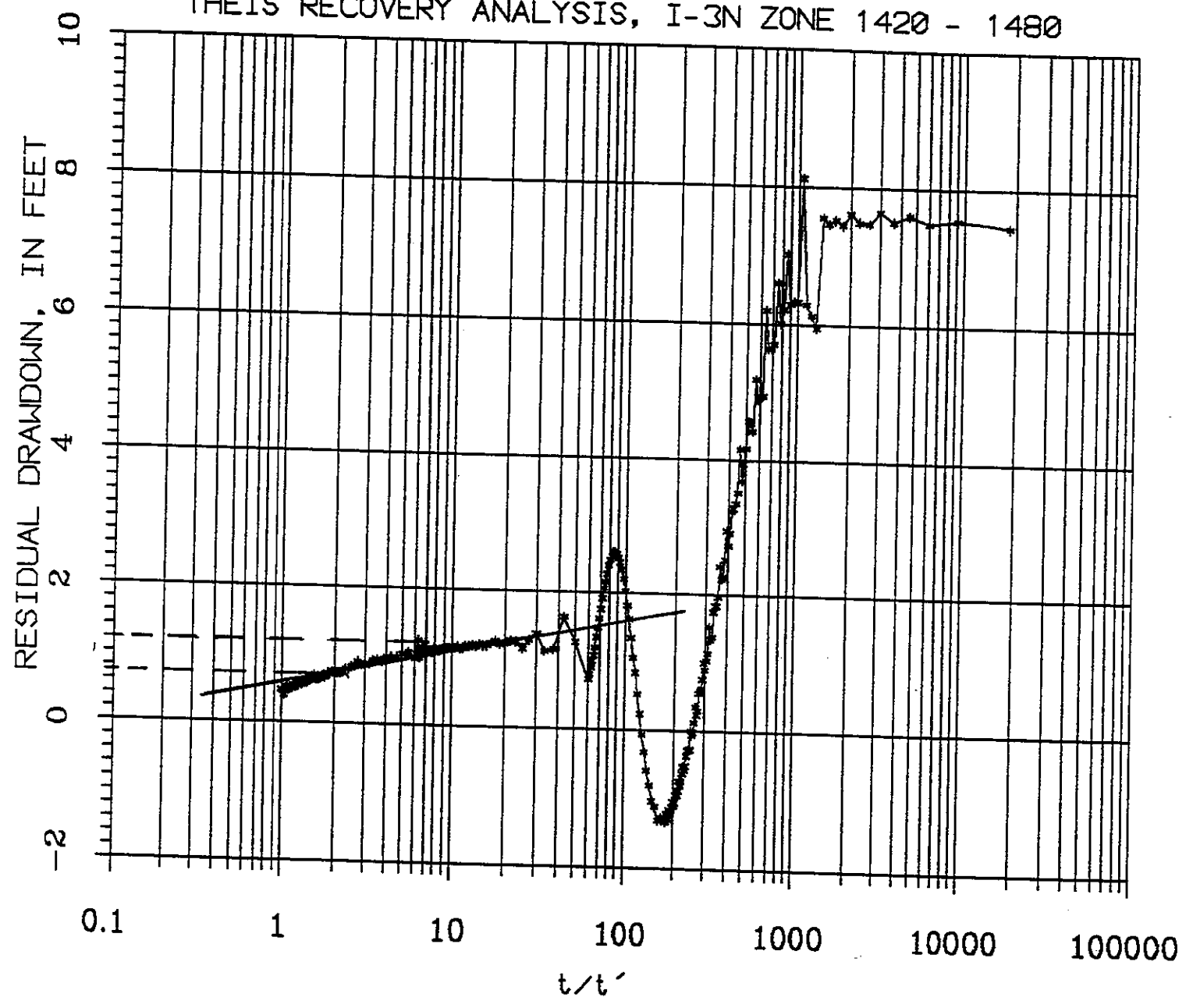
Figure 10 -- Theis Recovery Analysis I-3N, zone 1420-1480

THEIS RECOVERY ANALYSIS, I-3N ZONE 1320 - 1380
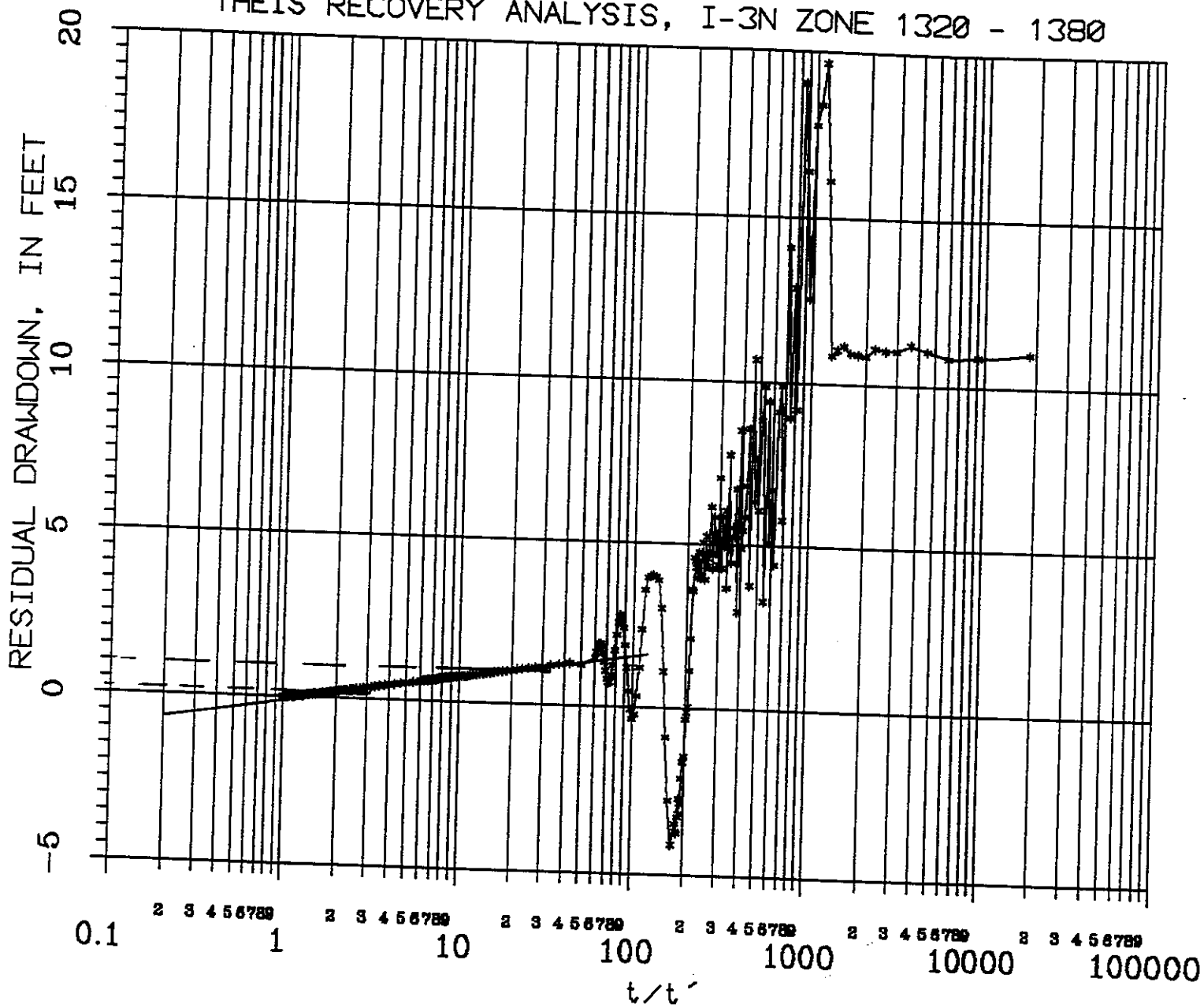
Figure 11. -- Theis Recovery Analysis I-3N, zone 1320-1380
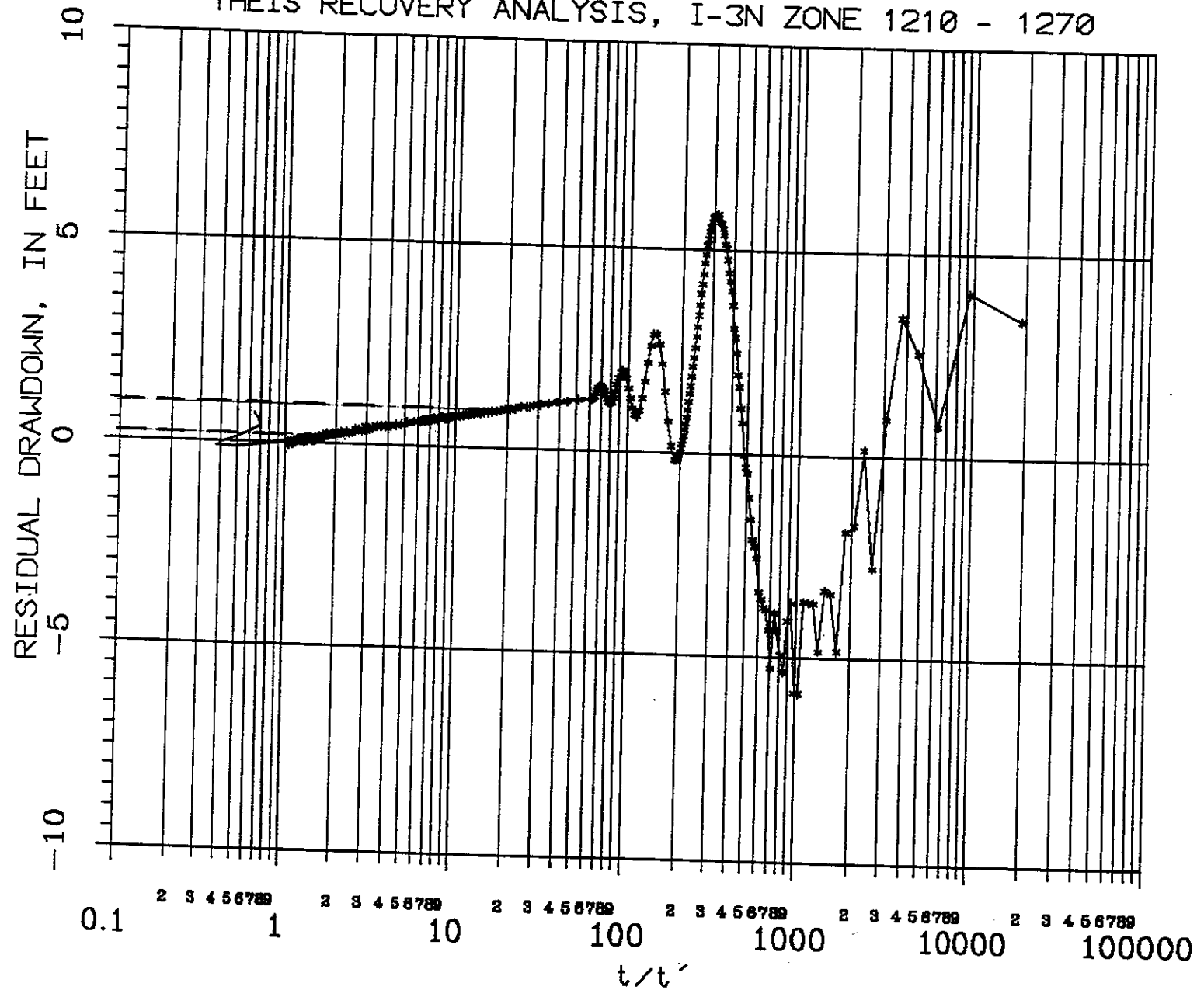
Figure 12. -- Theis Recovery Analysis I-3N, zone 1210-1270

Analytical results of the tests are summarized as follows:

Hydraulic Conductivity

Zone 2060-2120

Cooper-Jacob	=	1.5×10^{-2} cm/sec
Theis Recovery	=	N/A

Zone 1420-1480

=	7.1×10^{-2} cm/sec
=	3.4×10^{-2} cm/sec

Zone 1320-1380
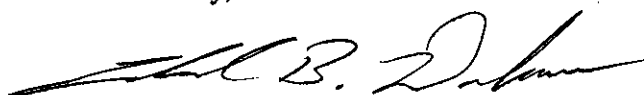
Cooper-Jacob	=	1.1×10^{-2} cm/sec
Theis Recovery	=	2.6×10^{-2} cm/sec

Zone 1210-1270

=	2.0×10^{-2} cm/sec
=	3.1×10^{-2} cm/sec

If you have any questions or comments please feel free to contact me or Leo Swayze.

Sincerely,
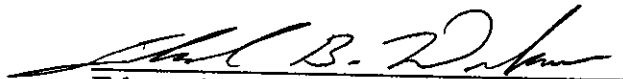
Edmand B. Workman, P.G.
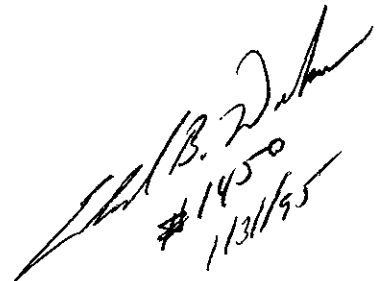
EBW/lb

CERTIFICATION

I hereby certify that I have examined this document, and attest that it has been prepared in accordance with good geological practices.

_____
Edmand B. Workman, P.G.
Hydrogeologist/Project Manager

Date: 01/31/95   Registration # 1450   State: Florida

Appendix I
Specific Conductance Stabilization Data

I-3N
Zone 2060' - 2110
1/16/95

TIME	TEMP °C	SALINITY (ppt NaCl)	CONDUCTIVITY umhos X 100K
10:00	21	24	.35
10:15	20	25	.34
12:30	21	25	.34
12:45	21	26	.36
1:00	21	26	.34
1:15	21	26	.35
1:30	21	26	.35
1:45	21	26	.35
2:00	21	26	.36
2:15	21	26	.36
2:30	20.5	26	.36
2:45	20.5	26	.35
3:00	20	26	.35
3:15	20	26	.35
3:30	20	26	.35
3:45	20	26	.35
4:00	20	26	.35
4:15	20	26	.35
4:30	20	26	.35
4:45	20	26	.35
5:00	20	26	.35

Packer Test

6:41	20	27	.36
6:55	21	27	.36
7:10	19	26	.35
7:25	19	26	.34
7:40	19	27	.34
7:55	19	27	.34
8:05	19	27	.34

I-3N
Zone 1420-1480
1/17/95

TIME	TEMP⁰C	SALINITY (ppt NaCl)	CONDUCTIVITY X 100K
5:15 am	22	23.5	.34
5:30	20	22.5	.32
5:45	20	22.5	.32
6:00	20	22.5	.32
6:15	20	22.5	.32
6:30	20	22.5	.32
7:00	20	22.5	.32
7:15	20	24	.32
7:30	17	25	.33
7:45	17	25	.33
8:00	17	25	.33
8:15	17	25	.33
8:30	17	25	.33
8:45	17	25	.33
9:00	17	25	.33
9:30	17	25	.33
10:00	17	25	.33
10:30	17	25	.33
11:00	18	24	.33

Packer Test

TIME	TEMP⁰C	SALINITY (ppt NaCl)	CONDUCTIVITY X 100K
1:10	21	24	.34
1:25	21	24	.34
1:40	20	24	.33

Restart

4:55	23	24	.35
5:05	20	22	.32
5:20	19	22	.31

Restart again

5:45	19	22	.31
6:00	20	22	.31
6:15	19	22	.31
6:30	19	22	.31
6:45	19	18	.26

I-3N
Zone 1320-1380
1/18/95

TIME	TEMP^{0}C	SALINITY (NaCl)	CONDUCTIVITY X100K
7:30	16.5	12	.17
7:40	16	12	.17
7:50	16	12	.17
8:00	17	12	.17
8:10	17	12	.17
8:20	17	11	.17
8:30	18	11	.16
8:40	18	11	.16
8:50	18	11	.15
9:00	18	11	.16
9:00	18	11	.16
9:10	18	11	.16
9:20	17	11	.16
9:30	18	11	.16
9:40	18	11	.16
9:50	18	11	.16
10:00	18	11	.16
10:10	18	11	.16
10:20	18	11	.16
10:30	18	11	.16.5
10:40	18	11	.16.5
10:50	18	11	.16.5
11:00	18	11	.16.5
11:10	18	11	.16.5
11:20	18	11	.16.5

Appendix II
Raw Aquifer Test Data

```
        SE1000C
  Environmental Logger
     01/17 08:16

  Unit# 91513   Test 0

Setups:          INPUT   1
------------     ---------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference          0.000
Linearity          0.090
Scale factor      50.170
Offset             0.120
Delay mSEC        50.000

Step 0   01/16 17:36:03

Elapsed Time     INPUT   1
------------     ---------
   0.0000           0.000
   0.0033           0.000
   0.0066           0.000
   0.0100           0.000
   0.0133           0.000
   0.0166           0.000
   0.0200           0.000
   0.0233           0.000
   0.0266           0.000
   0.0300           0.000
   0.0333           0.000
   0.0366           0.000
   0.0400           0.000
   0.0433           0.000
   0.0466           0.000
   0.0500           0.000
   0.0533           0.000
   0.0566           0.000
   0.0600           0.000
   0.0633           0.000
   0.0666           0.000
   0.0700           0.000
   0.0733           0.000
   0.0766           0.000
   0.0800           0.000
   0.0833           0.000
   0.0866           0.000
   0.0900           0.000
   0.0933           0.000
   0.0966           0.000
   0.1000           0.000
   0.1033           0.000
   0.1066           0.000
   0.1100           0.000
   0.1133           0.000
   0.1166           0.000
   0.1200           0.000
```

0.1233	0.000
0.1266	0.000
0.1300	0.000
0.1333	0.000
0.1366	0.000
0.1400	0.000
0.1433	0.000
0.1466	0.000
0.1500	0.000
0.1533	0.000
0.1566	0.000
0.1600	0.000
0.1633	0.000
0.1666	0.000
0.1700	0.000
0.1733	0.000
0.1766	0.000
0.1800	0.000
0.1833	0.000
0.1866	0.000
0.1900	0.000
0.1933	0.000
0.1966	0.000
0.2000	0.000
0.2033	0.000
0.2066	0.000
0.2100	0.000
0.2133	0.000
0.2166	0.000
0.2200	0.000
0.2233	0.000
0.2266	0.000
0.2300	0.000
0.2333	0.000
0.2366	0.000
0.2400	0.000
0.2433	0.000
0.2466	0.000
0.2500	0.000
0.2533	0.000
0.2566	0.000
0.2600	0.000
0.2633	0.000
0.2666	0.000
0.2700	0.000
0.2733	0.000
0.2766	0.000
0.2800	0.000
0.2833	0.000
0.2866	0.000
0.2900	0.000
0.2933	0.000
0.2966	0.000
0.3000	0.000
0.3033	0.000
0.3066	0.000
0.3100	0.000
0.3133	0.000
0.3166	0.000
0.3200	0.000

0.3233	0.000
0.3266	0.000
0.3300	0.000
0.3333	0.000
0.3500	0.000
0.3666	0.000
0.3833	0.000
0.4000	0.000
0.4166	0.000
0.4333	0.000
0.4500	0.000
0.4666	0.000
0.4833	0.000
0.5000	0.000
0.5166	0.000
0.5333	0.000
0.5500	0.000
0.5666	0.000
0.5833	0.000
0.6000	0.000
0.6166	0.000
0.6333	0.000
0.6500	0.000
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0.6833	0.000
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0.7166	0.000
0.7333	0.000
0.7500	0.000
0.7666	0.000
0.7833	0.000
0.8000	0.000
0.8166	0.000
0.8333	0.000
0.8500	0.000
0.8666	0.000
0.8833	0.000
0.9000	0.000
0.9166	0.000
0.9333	0.000
0.9500	0.000
0.9666	0.000
0.9833	0.000
1.0000	0.000
1.2000	0.000
1.4000	0.000
1.6000	0.000
1.8000	0.000
2.0000	0.000
2.2000	0.000
2.4000	0.000
2.6000	0.000
2.8000	0.000
3.0000	0.000
3.2000	0.000
3.4000	0.000
3.6000	0.000
3.8000	0.000
4.0000	0.000
4.2000	0.000

4.4000	0.000
4.6000	0.000
4.8000	0.000
5.0000	0.000
5.2000	0.000
5.4000	0.000
5.6000	0.000
5.8000	0.000
6.0000	0.000
6.2000	0.000
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6.6000	0.000
6.8000	0.000
7.0000	0.000
7.2000	0.000
7.4000	0.000
7.6000	0.000
7.8000	0.000
8.0000	0.000
8.2000	0.000
8.4000	0.000
8.6000	0.000
8.8000	0.000
9.0000	0.000
9.2000	0.000
9.4000	0.000
9.6000	0.000
9.8000	0.000
10.0000	0.000
11.0000	0.000
12.0000	0.000
13.0000	0.000
14.0000	0.000
15.0000	0.000
16.0000	0.000
17.0000	0.000
18.0000	0.000
19.0000	0.000
20.0000	0.000
21.0000	0.000
22.0000	0.000
23.0000	0.000
24.0000	0.000
25.0000	0.000
26.0000	0.000
27.0000	0.000
28.0000	0.000
29.0000	0.000
30.0000	0.000
31.0000	0.000
32.0000	0.000
33.0000	0.000
34.0000	0.000
35.0000	0.000
36.0000	0.000
37.0000	0.000
38.0000	0.000
39.0000	0.000
40.0000	0.000
41.0000	0.000

42.0000	0.000
43.0000	0.000
44.0000	0.000
45.0000	0.000
46.0000	0.000
47.0000	0.000
48.0000	0.000
49.0000	0.000
50.0000	0.000
51.0000	0.000
52.0000	0.000
53.0000	0.000
54.0000	0.000
55.0000	0.000
56.0000	0.000
57.0000	0.000
58.0000	0.000
59.0000	0.000
60.0000	0.000

```
          SE1000C
     Environmental Logger
        01/17 08:20

   Unit# 91513   Test 1

Setups:          INPUT  1
------------     ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference          0.000
Linearity          0.090
Scale factor      50.170
Offset             0.120
Delay mSEC        50.000

Step 0   01/16 18:36:55

Elapsed Time     INPUT  1
------------     ----------
    0.0000           0.000
    0.0033           0.000
    0.0066           0.000
    0.0100           0.000
    0.0133           0.000
    0.0166           0.000
    0.0200           0.000
    0.0233           0.000
    0.0266           0.000
    0.0300           0.000
    0.0333           0.000
    0.0366           0.000
    0.0400           0.000
    0.0433           0.000
    0.0466           0.000
    0.0500           0.000
    0.0533           0.000
    0.0566           0.000
    0.0600           0.000
    0.0633           0.000
    0.0666           0.000
    0.0700           0.000
    0.0733           0.000
    0.0766           0.000
    0.0800           0.000
    0.0833           0.000
    0.0866           0.000
    0.0900           0.000
    0.0933           0.000
    0.0966           0.000
    0.1000           0.000
    0.1033           0.000
    0.1066           0.000
    0.1100           0.000
    0.1133           0.000
    0.1166           0.000
    0.1200           0.000
```

0.1233	0.000
0.1266	0.000
0.1300	0.000
0.1333	0.000
0.1366	0.000
0.1400	0.000
0.1433	0.000
0.1466	0.000
0.1500	0.000
0.1533	0.000
0.1566	0.000
0.1600	0.000
0.1633	0.000
0.1666	0.000
0.1700	0.000
0.1733	0.000
0.1766	0.000
0.1800	0.000
0.1833	0.000
0.1866	0.000
0.1900	0.000
0.1933	0.000
0.1966	0.000
0.2000	0.000
0.2033	0.000
0.2066	0.000
0.2100	0.000
0.2133	0.000
0.2166	0.000
0.2200	0.000
0.2233	0.000
0.2266	0.000
0.2300	0.000
0.2333	0.000
0.2366	0.000
0.2400	0.000
0.2433	0.000
0.2466	0.000
0.2500	0.000
0.2533	0.000
0.2566	0.000
0.2600	0.000
0.2633	0.000
0.2666	0.000
0.2700	0.000
0.2733	0.000
0.2766	0.000
0.2800	0.000
0.2833	0.000
0.2866	0.000
0.2900	0.000
0.2933	0.000
0.2966	0.000
0.3000	0.000
0.3033	0.000
0.3066	0.000
0.3100	0.000
0.3133	0.000
0.3166	0.000
0.3200	0.000

0.3233	0.000
0.3266	0.000
0.3300	0.000
0.3333	0.000
0.3500	0.000
0.3666	0.000
0.3833	0.000
0.4000	0.000
0.4166	0.000
0.4333	0.000
0.4500	0.000
0.4666	0.000
0.4833	0.000
0.5000	0.000
0.5166	0.000
0.5333	0.000
0.5500	0.000
0.5666	0.000
0.5833	0.000
0.6000	0.000
0.6166	0.000
0.6333	0.000
0.6500	0.000
0.6666	0.000
0.6833	0.000
0.7000	0.000
0.7166	0.000
0.7333	0.000
0.7500	0.000
0.7666	0.000
0.7833	0.000
0.8000	0.000
0.8166	0.000
0.8333	0.000
0.8500	0.000
0.8666	0.000
0.8833	0.000
0.9000	0.000
0.9166	0.000
0.9333	0.000
0.9500	0.000
0.9666	0.000
0.9833	0.000
1.0000	0.000
1.2000	0.000
1.4000	0.000
1.6000	0.000
1.8000	0.000
2.0000	0.000
2.2000	0.000
2.4000	0.142
2.6000	0.000
2.8000	0.016
3.0000	0.000
3.2000	0.000
3.4000	0.064
3.6000	0.000
3.8000	0.000
4.0000	0.126
4.2000	0.476

4.4000	0.031
4.6000	0.366
4.8000	0.000
5.0000	0.382
5.2000	0.000
5.4000	0.238
5.6000	0.238
5.8000	0.095
6.0000	0.080
6.2000	0.142
6.4000	0.031
6.6000	0.206
6.8000	0.016
7.0000	0.080
7.2000	0.142
7.4000	0.000
7.6000	0.159
7.8000	0.142
8.0000	0.000
8.2000	0.016
8.4000	0.126
8.6000	0.922
8.8000	0.349
9.0000	0.444
9.2000	0.016
9.4000	0.366
9.6000	0.206
9.8000	0.540
10.0000	0.238
11.0000	0.142
12.0000	0.254
13.0000	0.333
14.0000	0.412
15.0000	0.238
16.0000	0.254
17.0000	0.382
18.0000	0.730
19.0000	0.620
20.0000	0.397
21.0000	0.382
22.0000	0.652
23.0000	0.461
24.0000	0.778
25.0000	0.525
26.0000	0.620
27.0000	0.508
28.0000	0.318
29.0000	0.635
30.0000	0.556
31.0000	0.588
32.0000	0.730
33.0000	0.620
34.0000	0.540
35.0000	0.508
36.0000	0.556
37.0000	0.525
38.0000	0.556
39.0000	0.699
40.0000	0.668
41.0000	0.699

42.0000	0.952
43.0000	0.794
44.0000	0.952
45.0000	1.001
46.0000	0.952
47.0000	0.937
48.0000	1.509
49.0000	1.335
50.0000	1.446
51.0000	1.351
52.0000	1.254
53.0000	1.191
54.0000	1.191
55.0000	1.144
56.0000	1.127
57.0000	1.271
58.0000	1.127
59.0000	1.366
60.0000	1.223
61.0000	1.303
62.0000	1.287
63.0000	1.366
64.0000	1.096
65.0000	1.127
66.0000	1.271
67.0000	1.049
68.0000	1.287
69.0000	1.620
70.0000	1.573
71.0000	1.191
72.0000	1.318
73.0000	0.968
74.0000	1.477
75.0000	1.127
76.0000	1.335
77.0000	1.446
78.0000	1.351
79.0000	1.556
80.0000	1.462
81.0000	1.366
82.0000	1.509
83.0000	1.287
84.0000	1.477
85.0000	1.318
86.0000	1.351
87.0000	1.636
88.0000	1.351
89.0000	1.413
90.0000	1.573

```
              SE1000C
        Environmental Logger
            01/17 08:27

     Unit# 91513   Test 2

Setups:          INPUT   1
-----------      ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference          0.000
Linearity          0.090
Scale factor      50.170
Offset             0.120
Delay mSEC        50.000

Step 0   01/16 20:08:06

Elapsed Time     INPUT   1
------------     ----------
    0.0000         1.891
    0.0033         1.446
    0.0066         1.700
    0.0100         1.589
    0.0133         1.556
    0.0166         1.684
    0.0200         1.382
    0.0233         0.000
    0.0266         0.000
    0.0300         0.000
    0.0333         0.000
    0.0366         2.176
    0.0400         0.000
    0.0433         0.095
    0.0466         0.412
    0.0500         0.000
    0.0533         1.764
    0.0566         0.000
    0.0600         0.000
    0.0633         0.000
    0.0666         0.000
    0.0700         0.428
    0.0733         0.000
    0.0766         0.000
    0.0800         0.000
    0.0833         0.000
    0.0866         0.000
    0.0900         0.000
    0.0933         0.000
    0.0966         0.000
    0.1000         0.000
    0.1033         0.000
    0.1066         0.000
    0.1100         0.000
    0.1133         0.000
    0.1166         0.000
    0.1200         0.000
```

0.1233	0.000
0.1266	0.000
0.1300	0.000
0.1333	0.000
0.1366	0.000
0.1400	0.000
0.1433	0.000
0.1466	0.000
0.1500	0.000
0.1533	0.000
0.1566	0.000
0.1600	0.000
0.1633	0.000
0.1666	0.000
0.1700	0.000
0.1733	0.000
0.1766	0.000
0.1800	0.000
0.1833	0.000
0.1866	0.000
0.1900	0.000
0.1933	0.000
0.1966	0.000
0.2000	0.000
0.2033	0.000
0.2066	0.000
0.2100	0.000
0.2133	0.000
0.2166	0.000
0.2200	0.000
0.2233	0.000
0.2266	0.000
0.2300	0.000
0.2333	0.000
0.2366	0.000
0.2400	0.000
0.2433	0.000
0.2466	0.000
0.2500	0.000
0.2533	0.000
0.2566	0.000
0.2600	0.000
0.2633	0.000
0.2666	0.000
0.2700	0.000
0.2733	0.000
0.2766	0.000
0.2800	0.000
0.2833	0.000
0.2866	0.000
0.2900	0.000
0.2933	0.000
0.2966	0.000
0.3000	0.000
0.3033	0.000
0.3066	0.000
0.3100	0.000
0.3133	0.000
0.3166	0.000
0.3200	0.000

0.3233	0.000
0.3266	0.000
0.3300	0.000
0.3333	0.000
0.3500	0.000
0.3666	0.000
0.3833	0.000
0.4000	0.000
0.4166	0.000
0.4333	0.000
0.4500	0.000
0.4666	0.000
0.4833	0.000
0.5000	0.000
0.5166	0.000
0.5333	0.000
0.5500	0.000
0.5666	0.000
0.5833	0.000
0.6000	0.000
0.6166	0.000
0.6333	0.000
0.6500	0.000
0.6666	0.000
0.6833	0.000
0.7000	0.000
0.7166	0.000
0.7333	0.000
0.7500	0.000
0.7666	0.000
0.7833	0.000
0.8000	0.000
0.8166	0.000
0.8333	0.000
0.8500	0.000
0.8666	0.000
0.8833	0.000
0.9000	0.000
0.9166	0.000
0.9333	0.000
0.9500	0.000
0.9666	0.000
0.9833	0.000
1.0000	0.000
1.2000	0.000
1.4000	0.000
1.6000	0.000
1.8000	0.000
2.0000	0.000
2.2000	0.000
2.4000	0.000
2.6000	0.000
2.8000	0.000
3.0000	0.000
3.2000	0.000
3.4000	0.000
3.6000	0.000
3.8000	0.000
4.0000	0.000
4.2000	0.000

4.4000	0.000
4.6000	0.000
4.8000	0.000
5.0000	0.000
5.2000	0.000
5.4000	0.000
5.6000	0.000
5.8000	0.000
6.0000	0.000
6.2000	0.000
6.4000	0.000
6.6000	0.000
6.8000	0.000
7.0000	0.000
7.2000	0.000
7.4000	0.000
7.6000	0.000
7.8000	0.000
8.0000	0.000
8.2000	0.000
8.4000	0.000
8.6000	0.000
8.8000	0.000
9.0000	0.000
9.2000	0.000
9.4000	0.000
9.6000	0.000
9.8000	0.000
10.0000	0.000
11.0000	0.000
12.0000	0.000
13.0000	0.000
14.0000	0.000
15.0000	0.000
16.0000	0.000
17.0000	0.000
18.0000	0.000
19.0000	0.000
20.0000	0.000
21.0000	0.000
22.0000	0.000
23.0000	0.000
24.0000	0.000
25.0000	0.000
26.0000	0.000
27.0000	0.000
28.0000	0.000
29.0000	0.000
30.0000	0.000
31.0000	0.000
32.0000	0.000
33.0000	0.000
34.0000	0.000
35.0000	0.000
36.0000	0.000
37.0000	0.000
38.0000	0.000
39.0000	0.000
40.0000	0.000
41.0000	0.000

42.0000	0.000
43.0000	0.000
44.0000	0.000
45.0000	0.000
46.0000	0.000
47.0000	0.000
48.0000	0.000
49.0000	0.000
50.0000	0.000
51.0000	0.000
52.0000	0.000
53.0000	0.000
54.0000	0.000
55.0000	0.000
56.0000	0.000
57.0000	0.000
58.0000	0.000
59.0000	0.000
60.0000	0.000

```
            SE1000C
      Environmental Logger
          01/18 08:20

     Unit# 91513   Test 0

Setups:          INPUT   1
-------------    ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/17 12:03:30

Elapsed Time   INPUT   1
-------------  ----------
   0.0000         0.000
   0.0033         0.000
   0.0066         0.000
   0.0100         0.000
   0.0133         0.000
   0.0166         0.000
   0.0200         0.000
   0.0233         0.000
   0.0266         0.000
   0.0300         0.000
   0.0333         0.000
   0.0366         0.000
   0.0400         0.000
   0.0433         0.000
   0.0466         0.000
   0.0500         0.000
   0.0533         0.000
   0.0566         0.000
   0.0600         0.000
   0.0633         0.000
   0.0666         0.000
   0.0700         0.000
   0.0733         0.000
   0.0766         0.000
   0.0800         0.000
   0.0833         0.000
   0.0866         0.000
   0.0900         0.000
   0.0933         0.000
   0.0966         0.000
   0.1000         0.000
   0.1033         0.000
   0.1066         0.000
   0.1100         0.000
   0.1133         0.000
   0.1166         0.000
   0.1200         0.000
   0.1233         0.000
   0.1266         0.000
   0.1300         0.000
   0.1333         0.000
   0.1366         0.000
```

0.1466	0.000
0.1500	0.000
0.1533	0.000
0.1566	0.000
0.1600	0.000
0.1633	0.000
0.1666	0.000
0.1700	0.000
0.1733	0.000
0.1766	0.000
0.1800	0.000
0.1833	0.000
0.1866	0.000
0.1900	0.000
0.1933	0.000
0.1966	0.000
0.2000	0.000
0.2033	0.000
0.2066	0.000
0.2100	0.000
0.2133	0.000
0.2166	0.000
0.2200	0.000
0.2233	0.000
0.2266	0.000
0.2300	0.000
0.2333	0.000
0.2366	0.000
0.2400	0.000
0.2433	0.000
0.2466	0.000
0.2500	0.000
0.2533	0.000
0.2566	0.000
0.2600	0.000
0.2633	0.000
0.2666	0.000
0.2700	0.000
0.2733	0.000
0.2766	0.000
0.2800	0.000
0.2833	0.000
0.2866	0.000
0.2900	0.000
0.2933	0.000
0.2966	0.000
0.3000	0.000
0.3033	0.000
0.3066	0.000
0.3100	0.000
0.3133	0.000
0.3166	0.000
0.3200	0.000
0.3233	0.000
0.3266	0.000
0.3300	0.000
0.3333	0.000
0.3500	0.000
0.3666	0.000
0.3833	0.000
0.4000	0.000
0.4166	0.000
0.4333	0.000
0.4500	0.000

0.5000	0.000
0.5166	0.000
0.5333	0.000
0.5500	0.000
0.5666	0.000
0.5833	0.000
0.6000	0.000
0.6166	0.000
0.6333	0.000
0.6500	0.000
0.6666	0.000
0.6833	0.000
0.7000	0.000
0.7166	0.000
0.7333	0.000
0.7500	0.000
0.7666	0.000
0.7833	0.000
0.8000	0.000
0.8166	0.000
0.8333	0.000
0.8500	0.000
0.8666	0.000
0.8833	0.000
0.9000	0.000
0.9166	0.000
0.9333	0.000
0.9500	0.000
0.9666	0.000
0.9833	0.000
1.0000	0.000
1.2000	0.000
1.4000	0.000
1.6000	0.000
1.8000	0.000
2.0000	0.000
2.2000	0.000
2.4000	0.000
2.6000	0.000
2.8000	0.000
3.0000	0.000
3.2000	0.000
3.4000	0.000
3.6000	0.000
3.8000	0.000
4.0000	0.000
4.2000	0.000
4.4000	0.000
4.6000	0.000
4.8000	0.000
5.0000	0.000
5.2000	0.000
5.4000	0.000
5.6000	0.000
5.8000	0.000
6.0000	0.000
6.2000	0.000
6.4000	0.000
6.6000	0.000
6.8000	0.000
7.0000	0.000
7.2000	0.000
7.4000	0.000
7.6000	0.000

8.2000	0.000
8.4000	0.000
8.6000	0.000
8.8000	0.000
9.0000	0.000
9.2000	0.000
9.4000	0.000
9.6000	0.000
9.8000	0.000
10.0000	0.000
11.0000	0.000
12.0000	0.000
13.0000	0.000
14.0000	0.000
15.0000	0.000
16.0000	0.000
17.0000	0.000
18.0000	0.000
19.0000	0.000
20.0000	0.000
21.0000	0.000
22.0000	0.000
23.0000	0.000
24.0000	0.000
25.0000	0.000
26.0000	0.000
27.0000	0.000
28.0000	0.000
29.0000	0.000
30.0000	0.000
31.0000	0.000
32.0000	0.000
33.0000	0.000
34.0000	0.000
35.0000	0.000
36.0000	0.000
37.0000	0.000
38.0000	0.000
39.0000	0.000
40.0000	0.000
41.0000	0.000
42.0000	0.000
43.0000	0.000
44.0000	0.000
45.0000	0.000
46.0000	0.000
47.0000	0.000
48.0000	0.000
49.0000	0.000
50.0000	0.000
51.0000	0.000
52.0000	0.000
53.0000	0.000
54.0000	0.000
55.0000	0.000
56.0000	0.000
57.0000	0.000
58.0000	0.000
59.0000	0.000
60.0000	0.000

```
              SE1000C
        Environmental Logger
             01/18 08:16

        Unit# 91513   Test 4

Setups:            INPUT   1
-------------      ---------

Type               Level (F)
Mode               TOC
I.D.               00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/17 17:43:25

Elapsed Time   INPUT   1
------------   ---------
    0.0000        1.140
    0.0033        1.140
    0.0066        1.125
    0.0100        1.140
    0.0133        1.140
    0.0166        1.125
    0.0200        1.156
    0.0233        1.410
    0.0266        5.894
    0.0300        2.471
    0.0333        1.948
    0.0366       -1.505
    0.0400        3.992
    0.0433        3.121
    0.0466        0.776
    0.0500        2.075
    0.0533        3.913
    0.0566        3.216
    0.0600        1.172
    0.0633        3.438
    0.0666        3.929
    0.0700        3.343
    0.0733        3.327
    0.0766        4.420
    0.0800        4.579
    0.0833        3.200
    0.0866        4.404
    0.0900        4.341
    0.0933        5.212
    0.0966        4.119
    0.1000        5.498
    0.1033        5.498
    0.1066        4.911
    0.1100        5.276
    0.1133        5.703
    0.1166        5.799
    0.1200        5.149
    0.1233        6.543
    0.1266        6.337
    0.1300        5.941
    0.1333        6.005
    0.1366        6.527
```

0.1466	6.860
0.1500	6.876
0.1533	7.034
0.1566	6.702
0.1600	7.335
0.1633	7.414
0.1666	6.622
0.1700	7.177
0.1733	7.335
0.1766	7.731
0.1800	7.319
0.1833	7.652
0.1866	7.985
0.1900	7.494
0.1933	7.684
0.1966	7.763
0.2000	8.048
0.2033	7.319
0.2066	7.969
0.2100	7.985
0.2133	8.080
0.2166	7.795
0.2200	8.096
0.2233	8.254
0.2266	7.921
0.2300	8.096
0.2333	8.254
0.2366	8.444
0.2400	7.937
0.2433	8.333
0.2466	8.349
0.2500	8.254
0.2533	8.286
0.2566	8.286
0.2600	8.444
0.2633	8.175
0.2666	8.412
0.2700	8.191
0.2733	8.302
0.2766	8.254
0.2800	8.222
0.2833	8.349
0.2866	8.080
0.2900	8.286
0.2933	8.333
0.2966	8.428
0.3000	8.191
0.3033	8.254
0.3066	8.302
0.3100	8.191
0.3133	8.207
0.3166	8.080
0.3200	8.207
0.3233	8.159
0.3266	8.111
0.3300	8.127
0.3333	8.159
0.3500	8.016
0.3666	7.953
0.3833	7.700
0.4000	7.509
0.4166	7.525
0.4333	7.462
0.4500	7.129

0.5000	7.034
0.5166	6.923
0.5333	6.923
0.5500	6.781
0.5666	6.670
0.5833	6.480
0.6000	6.670
0.6166	6.702
0.6333	6.654
0.6500	6.607
0.6666	6.575
0.6833	6.495
0.7000	6.448
0.7166	6.543
0.7333	6.638
0.7500	6.543
0.7666	6.607
0.7833	6.559
0.8000	6.607
0.8166	6.575
0.8333	6.813
0.8500	6.527
0.8666	6.622
0.8833	6.638
0.9000	6.765
0.9166	6.733
0.9333	6.654
0.9500	6.733
0.9666	6.717
0.9833	6.686
1.0000	6.765
1.2000	6.622
1.4000	6.717
1.6000	6.607
1.8000	6.686
2.0000	6.828
2.2000	6.717
2.4000	6.765
2.6000	6.828
2.8000	6.797
3.0000	7.050
3.2000	6.638
3.4000	6.717
3.6000	6.702
3.8000	6.654
4.0000	6.749
4.2000	6.813
4.4000	6.749
4.6000	6.908
4.8000	6.860
5.0000	6.828
5.2000	6.813
5.4000	6.670
5.6000	6.828
5.8000	6.844
6.0000	6.670
6.2000	6.844
6.4000	6.670
6.6000	6.939
6.8000	6.797
7.0000	6.892
7.2000	6.749
7.4000	6.781
7.6000	6.559

8.2000	6.765
8.4000	6.765
8.6000	6.797
8.8000	6.813
9.0000	6.955
9.2000	6.797
9.4000	6.860
9.6000	6.686
9.8000	6.797
10.0000	6.876
11.0000	6.955
12.0000	6.844
13.0000	6.892
14.0000	6.797
15.0000	6.749
16.0000	7.018
17.0000	7.557
18.0000	7.319
19.0000	7.557
20.0000	7.541
21.0000	7.604
22.0000	7.604
23.0000	7.573
24.0000	7.589
25.0000	7.573
26.0000	7.620
27.0000	7.589
28.0000	7.494
29.0000	7.620
30.0000	7.399
31.0000	7.478
32.0000	7.573
33.0000	7.557
34.0000	7.430
35.0000	7.620
36.0000	7.383
37.0000	7.509
38.0000	7.636
39.0000	7.652
40.0000	7.494
41.0000	7.541
42.0000	7.636
43.0000	7.668
44.0000	7.525
45.0000	7.509
46.0000	7.589
47.0000	7.541
48.0000	7.193
49.0000	7.541
50.0000	7.620
51.0000	7.715
52.0000	7.589
53.0000	7.668
54.0000	7.700
55.0000	7.430
56.0000	7.399
57.0000	7.573
58.0000	7.573
59.0000	7.604
60.0000	7.652

```
          SE1000C
     Environmental Logger
        01/18 08:11

   Unit# 91513   Test 5

Setups:           INPUT   1
------------      ----------
Type              Level (F)
Mode              TOC
I.D.              00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/17 18:43:49

Elapsed Time   INPUT   1
------------   ----------
    0.0000        7.494
    0.0033        7.446
    0.0066        7.541
    0.0100        7.494
    0.0133        7.604
    0.0166        7.509
    0.0200        7.652
    0.0233        7.478
    0.0266        7.494
    0.0300        7.620
    0.0333        7.446
    0.0366        7.525
    0.0400        7.462
    0.0433        7.557
    0.0466        5.941
    0.0500        6.131
    0.0533        6.290
    0.0566        8.127
    0.0600        6.321
    0.0633        6.321
    0.0666        6.290
    0.0700        7.018
    0.0733        6.210
    0.0766        6.005
    0.0800        6.591
    0.0833        5.703
    0.0866        5.640
    0.0900        5.640
    0.0933        6.195
    0.0966        4.943
    0.1000        4.943
    0.1033        4.895
    0.1066        5.181
    0.1100        4.420
    0.1133        4.547
    0.1166        4.563
    0.1200        4.167
    0.1233        3.945
    0.1266        3.691
    0.1300        4.151
    0.1333        3.517
    0.1366        3.359
```

0.1466	2.915
0.1500	2.725
0.1533	2.947
0.1566	2.519
0.1600	2.265
0.1633	2.234
0.1666	2.424
0.1700	1.964
0.1733	1.838
0.1766	1.838
0.1800	1.743
0.1833	1.378
0.1866	1.346
0.1900	1.521
0.1933	1.140
0.1966	1.030
0.2000	0.903
0.2033	0.998
0.2066	0.760
0.2100	0.617
0.2133	0.586
0.2166	0.554
0.2200	0.301
0.2233	0.237
0.2266	0.348
0.2300	0.126
0.2333	-0.015
0.2366	-0.063
0.2400	0.000
0.2433	-0.269
0.2466	-0.285
0.2500	-0.285
0.2533	-0.364
0.2566	-0.507
0.2600	-0.570
0.2633	-0.523
0.2666	-0.617
0.2700	-0.729
0.2733	-0.792
0.2766	-0.729
0.2800	-0.871
0.2833	-0.935
0.2866	-0.903
0.2900	-0.935
0.2933	-1.045
0.2966	-1.093
0.3000	-1.029
0.3033	-1.109
0.3066	-1.156
0.3100	-1.204
0.3133	-1.141
0.3166	-1.220
0.3200	-1.283
0.3233	-1.235
0.3266	-1.204
0.3300	-1.315
0.3333	-1.331
0.3500	-1.267
0.3666	-1.299
0.3833	-1.109
0.4000	-1.029
0.4166	-0.792
0.4333	-0.586
0.4500	-0.316

0.5000	0.522
0.5166	0.839
0.5333	1.061
0.5500	1.346
0.5666	1.616
0.5833	1.822
0.6000	2.028
0.6166	2.202
0.6333	2.345
0.6500	2.455
0.6666	2.519
0.6833	2.582
0.7000	2.598
0.7166	2.598
0.7333	2.535
0.7500	2.487
0.7666	2.408
0.7833	2.281
0.8000	2.170
0.8166	2.075
0.8333	1.917
0.8500	1.758
0.8666	1.616
0.8833	1.489
0.9000	1.346
0.9166	1.188
0.9333	1.077
0.9500	0.998
0.9666	0.903
0.9833	0.808
1.0000	0.728
1.2000	1.267
1.4000	1.632
1.6000	1.156
1.8000	1.125
2.0000	1.378
2.2000	1.283
2.4000	1.156
2.6000	1.251
2.8000	1.267
3.0000	1.220
3.2000	1.204
3.4000	1.251
3.6000	1.220
3.8000	1.188
4.0000	1.188
4.2000	1.204
4.4000	1.172
4.6000	1.188
4.8000	1.172
5.0000	1.172
5.2000	1.140
5.4000	1.125
5.6000	1.156
5.8000	1.140
6.0000	1.140
6.2000	1.140
6.4000	1.140
6.6000	1.140
6.8000	1.125
7.0000	1.109
7.2000	1.093
7.4000	1.109
7.6000	1.125

8.2000	1.093
8.4000	1.045
8.6000	1.109
8.8000	1.125
9.0000	1.109
9.2000	1.014
9.4000	0.982
9.6000	1.235
9.8000	1.030
10.0000	0.966
11.0000	1.061
12.0000	1.030
13.0000	0.982
14.0000	0.982
15.0000	0.982
16.0000	0.919
17.0000	0.934
18.0000	0.919
19.0000	0.871
20.0000	0.871
21.0000	0.855
22.0000	0.903
23.0000	0.839
24.0000	0.824
25.0000	0.792
26.0000	0.792
27.0000	0.744
28.0000	0.728
29.0000	0.728
30.0000	0.744
31.0000	0.744
32.0000	0.713
33.0000	0.728
34.0000	0.665
35.0000	0.681
36.0000	0.649
37.0000	0.633
38.0000	0.633
39.0000	0.697
40.0000	0.633
41.0000	0.617
42.0000	0.617
43.0000	0.586
44.0000	0.586
45.0000	0.586
46.0000	0.586
47.0000	0.570
48.0000	0.522
49.0000	0.538
50.0000	0.522
51.0000	0.538
52.0000	0.491
53.0000	0.507
54.0000	0.475
55.0000	0.475
56.0000	0.507
57.0000	0.491
58.0000	0.395
59.0000	0.443
60.0000	0.475

```
              SE1000C
        Environmental Logger
           01/18  17:17

      Unit# 91513   Test 0

Setups:          INPUT   1
-------------    ---------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/18 12:38:17

Elapsed Time     INPUT   1
-------------    ---------
   0.0000         -20.796
   0.0033         -20.796
   0.0066         -20.796
   0.0100         -20.796
   0.0133         -20.796
   0.0166         -20.811
   0.0200         -20.796
   0.0233         -20.796
   0.0266         -20.811
   0.0300         -20.796
   0.0333         -20.796
   0.0366         -20.796
   0.0400         -20.796
   0.0433         -20.796
   0.0466         -20.796
   0.0500         -20.796
   0.0533         -20.796
   0.0566         -20.796
   0.0600         -20.796
   0.0633         -20.796
   0.0666         -20.796
   0.0700         -20.796
   0.0733         -20.796
   0.0766         -20.796
   0.0800         -20.796
   0.0833         -20.796
   0.0866         -20.796
   0.0900         -20.796
   0.0933         -20.796
   0.0966         -20.796
   0.1000         -20.796
   0.1033         -20.796
   0.1066         -20.796
   0.1100         -20.796
   0.1133         -20.796
   0.1166         -20.796
   0.1200         -20.796
```

0.1233	-20.796
0.1266	-20.796
0.1300	-20.796
0.1333	-20.796
0.1366	-20.796
0.1400	-20.796
0.1433	-20.796
0.1466	-20.796
0.1500	-20.796
0.1533	-20.796
0.1566	-20.796
0.1600	-20.796
0.1633	-20.796
0.1666	-20.796
0.1700	-20.796
0.1733	-20.796
0.1766	-20.796
0.1800	-20.796
0.1833	-20.796
0.1866	-20.796
0.1900	-20.796
0.1933	-20.780
0.1966	-20.796
0.2000	-20.796
0.2033	-20.796
0.2066	-20.796
0.2100	-20.796
0.2133	-20.796
0.2166	-20.796
0.2200	-20.796
0.2233	-20.796
0.2266	-20.796
0.2300	-20.796
0.2333	-20.796
0.2366	-20.796
0.2400	-20.796
0.2433	-20.796
0.2466	-20.796
0.2500	-20.796
0.2533	-20.796
0.2566	-20.796
0.2600	-20.796
0.2633	-20.811
0.2666	-20.796
0.2700	-20.796
0.2733	-20.796
0.2766	-20.796
0.2800	-20.796
0.2833	-20.811
0.2866	-20.796
0.2900	-20.796
0.2933	-20.796
0.2966	-20.796
0.3000	-20.796
0.3033	-20.796
0.3066	-20.811
0.3100	-20.796
0.3133	-20.796
0.3166	-20.796
0.3200	-20.796

0.3233	-20.796
0.3266	-20.796
0.3300	-20.796
0.3333	-20.796
0.3500	-20.796
0.3666	-20.796
0.3833	-20.796
0.4000	-20.796
0.4166	-20.796
0.4333	-20.796
0.4500	-20.796
0.4666	-20.796
0.4833	-20.796
0.5000	-20.796
0.5166	-20.796
0.5333	-20.796
0.5500	-20.796
0.5666	-20.796
0.5833	-20.796
0.6000	-20.796
0.6166	-20.796
0.6333	-20.796
0.6500	-20.796
0.6666	-20.811
0.6833	-20.796
0.7000	-20.796
0.7166	-20.796
0.7333	-20.796
0.7500	-20.827
0.7666	-20.796
0.7833	-20.811
0.8000	-20.796
0.8166	-20.796
0.8333	-20.811
0.8500	-20.796
0.8666	-20.811
0.8833	-20.796
0.9000	-20.796
0.9166	-20.796
0.9333	-20.796
0.9500	-20.796
0.9666	-20.811
0.9833	-20.796
1.0000	-20.796
1.2000	-20.811
1.4000	-20.811
1.6000	-20.811
1.8000	-20.811
2.0000	-20.811
2.2000	-20.811
2.4000	-20.811
2.6000	-20.811
2.8000	-20.811
3.0000	-20.811
3.2000	-20.811
3.4000	-20.827
3.6000	-20.827
3.8000	-20.827
4.0000	-20.827
4.2000	-20.811

4.4000	-20.827
4.6000	-20.827
4.8000	-20.827
5.0000	-20.843
5.2000	-20.843
5.4000	-20.843
5.6000	-20.843
5.8000	-20.843
6.0000	-20.859
6.2000	-20.843
6.4000	-20.811
6.6000	-20.859
6.8000	-20.827
7.0000	-20.843
7.2000	-20.843
7.4000	-20.843
7.6000	-20.859
7.8000	-20.859
8.0000	-20.859
8.2000	-20.859
8.4000	-20.859
8.6000	-20.859
8.8000	-20.859
9.0000	-20.859
9.2000	-20.843
9.4000	-20.843
9.6000	-20.859
9.8000	-20.859
10.0000	-20.875
11.0000	-20.875
12.0000	-20.875
13.0000	-20.875
14.0000	-20.891
15.0000	-20.891
16.0000	-20.891
17.0000	-20.907
18.0000	-20.907
19.0000	-20.923
20.0000	-20.923
21.0000	-20.923
22.0000	-20.923
23.0000	-20.939
24.0000	-20.939
25.0000	-20.939
26.0000	-20.939
27.0000	-20.939
28.0000	-20.939
29.0000	-20.954
30.0000	-20.954
31.0000	-20.970
32.0000	-20.970
33.0000	-20.970
34.0000	-20.970
35.0000	-20.970
36.0000	-20.986
37.0000	-20.986
38.0000	-20.986
39.0000	-20.986
40.0000	-20.986
41.0000	-20.986

42.0000	-21.002
43.0000	-21.002
44.0000	-21.002
45.0000	-21.002
46.0000	-21.018
47.0000	-21.018
48.0000	-21.018
49.0000	-21.018
50.0000	-21.002
51.0000	-21.018
52.0000	-21.034
53.0000	-21.034
54.0000	-21.034
55.0000	-21.034
56.0000	-21.034
57.0000	-21.034
58.0000	-21.049
59.0000	-21.049
60.0000	-21.049
61.0000	-21.049
62.0000	-21.065
63.0000	-21.049
64.0000	-21.065
65.0000	-21.065

```
           SE1000C
     Environmental Logger
         01/18  17:13

    Unit#  91513   Test  1

Setups:          INPUT   1
------------     ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/18 13:44:27

Elapsed Time     INPUT   1
------------     ----------
    0.0000         -21.065
    0.0033         -21.065
    0.0066         -21.065
    0.0100         -21.065
    0.0133         -21.065
    0.0166         -21.065
    0.0200         -21.065
    0.0233         -21.065
    0.0266         -20.970
    0.0300         -20.970
    0.0333         -21.018
    0.0366         -20.954
    0.0400         -20.954
    0.0433         -20.827
    0.0466         -20.811
    0.0500         -20.811
    0.0533         -20.780
    0.0566         -20.700
    0.0600         -20.669
    0.0633         -20.653
    0.0666         -20.605
    0.0700         -20.510
    0.0733         -20.510
    0.0766         -20.463
    0.0800         -20.368
    0.0833         -20.320
    0.0866         -20.320
    0.0900         -20.257
    0.0933         -20.177
    0.0966         -20.177
    0.1000         -13.978
    0.1033          -7.131
    0.1066          -9.667
    0.1100         -17.450
    0.1133         -14.502
    0.1166         -14.803
    0.1200         -16.943
```

0.1233	-18.418
0.1266	-14.407
0.1300	-14.708
0.1333	-16.309
0.1366	-15.183
0.1400	-16.103
0.1433	-16.547
0.1466	-16.991
0.1500	-13.820
0.1533	-13.994
0.1566	-15.532
0.1600	-15.786
0.1633	-15.706
0.1666	-15.167
0.1700	-16.245
0.1733	-14.486
0.1766	-14.866
0.1800	-15.596
0.1833	-15.469
0.1866	-15.849
0.1900	-15.088
0.1933	-16.642
0.1966	-14.834
0.2000	-15.437
0.2033	-15.944
0.2066	-15.690
0.2100	-15.120
0.2133	-15.342
0.2166	-16.388
0.2200	-15.199
0.2233	-14.771
0.2266	-14.977
0.2300	-14.581
0.2333	-14.407
0.2366	-13.519
0.2400	-15.548
0.2433	-15.199
0.2466	-14.565
0.2500	-15.025
0.2533	-14.945
0.2566	-14.644
0.2600	-14.803
0.2633	-15.152
0.2666	-14.929
0.2700	-14.692
0.2733	-14.565
0.2766	-15.040
0.2800	-14.517
0.2833	-14.407
0.2866	-14.438
0.2900	-14.248
0.2933	-14.216
0.2966	-14.502
0.3000	-14.581
0.3033	-14.201
0.3066	-14.121
0.3100	-14.391
0.3133	-14.153
0.3166	-13.883
0.3200	-13.867

0.3233	-14.026
0.3266	-13.947
0.3300	-13.915
0.3333	-13.915
0.3500	-13.566
0.3666	-13.598
0.3833	-13.281
0.4000	-13.233
0.4166	-12.916
0.4333	-12.900
0.4500	-12.996
0.4666	-12.964
0.4833	-12.504
0.5000	-12.853
0.5166	-12.568
0.5333	-12.456
0.5500	-12.250
0.5666	-12.171
0.5833	-12.124
0.6000	-12.266
0.6166	-12.282
0.6333	-12.060
0.6500	-11.918
0.6666	-11.918
0.6833	-11.886
0.7000	-11.949
0.7166	-11.854
0.7333	-12.044
0.7500	-11.854
0.7666	-11.918
0.7833	-11.886
0.8000	-11.395
0.8166	-11.696
0.8333	-11.474
0.8500	-11.632
0.8666	-11.585
0.8833	-11.537
0.9000	-11.601
0.9166	-11.648
0.9333	-11.442
0.9500	-11.442
0.9666	-11.521
0.9833	-11.284
1.0000	-11.268
1.2000	-11.125
1.4000	-11.204
1.6000	-11.157
1.8000	-11.078
2.0000	-10.998
2.2000	-10.887
2.4000	-11.062
2.6000	-10.951
2.8000	-10.872
3.0000	-10.761
3.2000	-10.887
3.4000	-10.507
3.6000	-10.634
3.8000	-10.539
4.0000	-10.570
4.2000	-10.555

4.4000	-10.459
4.6000	-10.190
4.8000	-10.396
5.0000	-10.539
5.2000	-10.507
5.4000	-10.396
5.6000	-10.443
5.8000	-10.348
6.0000	-10.269
6.2000	-10.459
6.4000	-10.412
6.6000	-10.443
6.8000	-10.095
7.0000	-10.000
7.2000	-9.952
7.4000	-10.047
7.6000	-10.190
7.8000	-9.920
8.0000	-10.206
8.2000	-10.158
8.4000	-10.126
8.6000	-10.206
8.8000	-10.016
9.0000	-9.968
9.2000	-9.936
9.4000	-9.936
9.6000	-9.920
9.8000	-9.794
10.0000	-10.126
11.0000	-10.222
12.0000	-9.619
13.0000	-9.778
14.0000	-9.905
15.0000	-9.905
16.0000	-9.540
17.0000	-9.397
18.0000	-9.461
19.0000	-9.603
20.0000	-9.809
21.0000	-9.794
22.0000	-9.809
23.0000	-9.746
24.0000	-9.968
25.0000	-9.809
26.0000	-9.699
27.0000	-9.889
28.0000	-9.778
29.0000	-9.841
30.0000	-9.873
31.0000	-10.126
32.0000	-9.825
33.0000	-9.714
34.0000	-9.873
35.0000	-9.778
36.0000	-9.730
37.0000	-9.762
38.0000	-9.825
39.0000	-10.016
40.0000	-9.968
41.0000	-9.920

42.0000	-10.000
43.0000	-9.889
44.0000	-9.889
45.0000	-9.699
46.0000	-9.730
47.0000	-9.873
48.0000	-9.825
49.0000	-9.857
50.0000	-9.619
51.0000	-9.746
52.0000	-9.683
53.0000	-9.714
54.0000	-9.778
55.0000	-9.889
56.0000	-9.984
57.0000	-9.762
58.0000	-10.095
59.0000	-9.778
60.0000	-9.809

```
        SE1000C
  Environmental Logger
     01/18  17:10

  Unit# 91513   Test 2

Setups:          INPUT   1
------------     ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference          0.000
Linearity          0.090
Scale factor      50.170
Offset             0.120
Delay mSEC        50.000

Step 0   01/18 14:45:40

Elapsed Time   INPUT   1
------------   ----------
    0.0000        -9.778
    0.0033        -9.778
    0.0066        -9.905
    0.0100        -9.936
    0.0133        -9.746
    0.0166        -9.572
    0.0200        -9.762
    0.0233        -9.762
    0.0266        -9.699
    0.0300        -9.936
    0.0333        -9.905
    0.0366        -9.857
    0.0400        -9.635
    0.0433        -9.762
    0.0466        -9.952
    0.0500       -36.909
    0.0533        -1.141
    0.0566        -2.408
    0.0600        16.982
    0.0633        -8.240
    0.0666        -4.421
    0.0700        -1.759
    0.0733       -11.616
    0.0766        -7.924
    0.0800       -11.854
    0.0833        -6.719
    0.0866       -14.993
    0.0900       -10.919
    0.0933       -11.696
    0.0966       -16.372
    0.1000       -14.089
    0.1033       -15.690
    0.1066       -11.395
    0.1100       -17.498
    0.1133       -10.951
    0.1166       -11.981
    0.1200       -14.708
```

0.1233	-13.170
0.1266	-14.454
0.1300	-10.126
0.1333	-17.022
0.1366	-12.219
0.1400	-13.978
0.1433	-14.914
0.1466	-15.342
0.1500	-15.897
0.1533	-12.298
0.1566	-17.831
0.1600	-14.089
0.1633	-15.564
0.1666	-15.247
0.1700	-16.341
0.1733	-15.897
0.1766	-13.043
0.1800	-17.117
0.1833	-14.739
0.1866	-15.833
0.1900	-14.929
0.1933	-16.499
0.1966	-15.627
0.2000	-13.757
0.2033	-16.404
0.2066	-15.484
0.2100	-16.055
0.2133	-14.945
0.2166	-16.531
0.2200	-15.722
0.2233	-14.644
0.2266	-16.008
0.2300	-16.214
0.2333	-16.451
0.2366	-15.548
0.2400	-16.864
0.2433	-16.309
0.2466	-15.738
0.2500	-16.087
0.2533	-16.832
0.2566	-16.737
0.2600	-16.039
0.2633	-16.816
0.2666	-16.499
0.2700	-16.309
0.2733	-16.198
0.2766	-17.228
0.2800	-17.165
0.2833	-18.671
0.2866	-19.654
0.2900	-20.748
0.2933	-20.907
0.2966	-21.113
0.3000	-22.239
0.3033	-22.413
0.3066	-22.397
0.3100	-22.905
0.3133	-23.634
0.3166	-23.951
0.3200	-23.507

0.3233	-24.062
0.3266	-24.538
0.3300	-24.474
0.3333	-24.253
0.3500	-24.887
0.3666	-23.571
0.3833	-21.668
0.4000	-19.686
0.4166	-17.767
0.4333	-16.911
0.4500	-16.816
0.4666	-16.769
0.4833	-16.800
0.5000	-16.832
0.5166	-17.228
0.5333	-18.418
0.5500	-19.591
0.5666	-20.463
0.5833	-21.002
0.6000	-21.145
0.6166	-20.859
0.6333	-20.320
0.6500	-19.606
0.6666	-18.925
0.6833	-18.386
0.7000	-18.068
0.7166	-18.021
0.7333	-18.243
0.7500	-18.608
0.7666	-19.084
0.7833	-19.543
0.8000	-19.860
0.8166	-20.050
0.8333	-20.066
0.8500	-19.955
0.8666	-19.717
0.8833	-19.448
0.9000	-19.178
0.9166	-18.988
0.9333	-18.893
0.9500	-18.893
0.9666	-18.988
0.9833	-19.162
1.0000	-19.353
1.2000	-19.559
1.4000	-19.527
1.6000	-19.559
1.8000	-19.606
2.0000	-19.638
2.2000	-19.686
2.4000	-19.702
2.6000	-19.733
2.8000	-19.749
3.0000	-19.781
3.2000	-19.813
3.4000	-19.829
3.6000	-19.844
3.8000	-19.860
4.0000	-19.892
4.2000	-19.892

4.4000	-19.908
4.6000	-19.924
4.8000	-19.940
5.0000	-19.955
5.2000	-19.971
5.4000	-19.987
5.6000	-20.003
5.8000	-20.003
6.0000	-20.019
6.2000	-20.019
6.4000	-20.035
6.6000	-20.050
6.8000	-20.050
7.0000	-20.066
7.2000	-20.050
7.4000	-20.082
7.6000	-20.098
7.8000	-20.114
8.0000	-20.114
8.2000	-20.130
8.4000	-20.130
8.6000	-20.146
8.8000	-20.146
9.0000	-20.161
9.2000	-20.161
9.4000	-20.177
9.6000	-20.177
9.8000	-20.177
10.0000	-20.193
11.0000	-20.241
12.0000	-20.272
13.0000	-20.288
14.0000	-20.320
15.0000	-20.336
16.0000	-20.352
17.0000	-20.383
18.0000	-20.415
19.0000	-20.431
20.0000	-20.447
21.0000	-20.463
22.0000	-20.479
23.0000	-20.495
24.0000	-20.510
25.0000	-20.526
26.0000	-20.542
27.0000	-20.542
28.0000	-20.558
29.0000	-20.574
30.0000	-20.589
31.0000	-20.605
32.0000	-20.605
33.0000	-20.621
34.0000	-20.637
35.0000	-20.653
36.0000	-20.653
37.0000	-20.653
38.0000	-20.669
39.0000	-20.685
40.0000	-20.685
41.0000	-20.685

42.0000	-20.700
43.0000	-20.716
44.0000	-20.700
45.0000	-20.732
46.0000	-20.748
47.0000	-20.748
48.0000	-20.748
49.0000	-20.748
50.0000	-20.748
51.0000	-20.780
52.0000	-20.796
53.0000	-20.780
54.0000	-20.764
55.0000	-20.780
56.0000	-20.811
57.0000	-20.811
58.0000	-20.796
59.0000	-20.796
60.0000	-20.796

```
            SE1000C
      Environmental Logger
         01/19 10:58

     Unit# 91513   Test 0

Setups:          INPUT   1
------------     ---------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference           0.000
Linearity           0.090
Scale factor       50.170
Offset              0.120
Delay mSEC         50.000

Step 0   01/19 05:16:59

Elapsed Time     INPUT   1
------------     ---------
   0.0000           0.000
   0.0033          -0.015
   0.0066           0.030
   0.0100           0.030
   0.0133           0.015
   0.0166           0.047
   0.0200          -0.015
   0.0233          -0.031
   0.0266           0.047
   0.0300           0.030
   0.0333           0.000
   0.0366           0.015
   0.0400           0.000
   0.0433           0.000
   0.0466          -0.031
   0.0500           0.015
   0.0533           0.015
   0.0566          -0.015
   0.0600           0.000
   0.0633           0.015
   0.0666          -0.015
   0.0700          -0.015
   0.0733           0.047
   0.0766           0.030
   0.0800           0.000
   0.0833           0.047
   0.0866           0.015
   0.0900           0.015
   0.0933          -0.015
   0.0966           0.030
   0.1000           0.047
   0.1033           0.000
   0.1066           0.015
   0.1100           0.030
   0.1133           0.047
   0.1166          -0.015
   0.1200           0.030
```

0.1233	0.030
0.1266	0.015
0.1300	0.030
0.1333	0.030
0.1366	0.000
0.1400	-0.015
0.1433	0.015
0.1466	0.047
0.1500	0.030
0.1533	0.030
0.1566	0.030
0.1600	0.030
0.1633	-0.015
0.1666	0.015
0.1700	0.047
0.1733	0.015
0.1766	0.030
0.1800	0.047
0.1833	0.015
0.1866	-0.015
0.1900	0.030
0.1933	0.030
0.1966	0.030
0.2000	0.015
0.2033	0.015
0.2066	0.000
0.2100	0.000
0.2133	0.047
0.2166	0.000
0.2200	0.015
0.2233	0.030
0.2266	-0.031
0.2300	0.015
0.2333	0.047
0.2366	0.030
0.2400	0.015
0.2433	0.030
0.2466	0.030
0.2500	-0.015
0.2533	-0.015
0.2566	0.030
0.2600	0.047
0.2633	0.015
0.2666	0.030
0.2700	0.047
0.2733	0.000
0.2766	-0.015
0.2800	0.015
0.2833	0.047
0.2866	0.030
0.2900	0.015
0.2933	0.030
0.2966	0.015
0.3000	0.000
0.3033	0.030
0.3066	0.047
0.3100	0.015
0.3133	0.047
0.3166	0.047
0.3200	-0.015

0.3233	0.000
0.3266	0.030
0.3300	0.047
0.3333	0.015
0.3500	0.015
0.3666	−0.015
0.3833	0.000
0.4000	0.000
0.4166	0.030
0.4333	0.015
0.4500	0.015
0.4666	0.000
0.4833	0.030
0.5000	0.030
0.5166	0.015
0.5333	0.030
0.5500	0.030
0.5666	0.015
0.5833	0.062
0.6000	0.015
0.6166	−0.015
0.6333	0.015
0.6500	0.047
0.6666	0.000
0.6833	0.015
0.7000	−0.015
0.7166	0.015
0.7333	0.000
0.7500	0.047
0.7666	0.030
0.7833	0.000
0.8000	0.000
0.8166	0.015
0.8333	0.000
0.8500	0.015
0.8666	−0.047
0.8833	0.000
0.9000	−0.031
0.9166	0.000
0.9333	0.000
0.9500	0.047
0.9666	0.047
0.9833	0.047
1.0000	0.030
1.2000	0.030
1.4000	0.030
1.6000	0.030
1.8000	0.015
2.0000	0.015
2.2000	0.015
2.4000	−0.031
2.6000	0.030
2.8000	−1.333
3.0000	−1.365
3.2000	−1.507
3.4000	−1.015
3.6000	−0.967
3.8000	−0.967
4.0000	−1.015
4.2000	−0.984

4.4000	-1.015
4.6000	-1.031
4.8000	-1.015
5.0000	0.872
5.2000	-0.698
5.4000	-0.555
5.6000	-0.349
5.8000	-1.793
6.0000	-1.555
6.2000	-1.158
6.4000	-1.031
6.6000	-1.031
6.8000	-1.031
7.0000	-1.031
7.2000	-1.079
7.4000	-1.047
7.6000	-1.095
7.8000	-1.063
8.0000	-1.110
8.2000	-1.110
8.4000	-1.079
8.6000	-1.063
8.8000	-1.095
9.0000	-1.095
9.2000	-1.095
9.4000	-1.126
9.6000	-1.095
9.8000	-1.095
10.0000	-1.142
11.0000	-1.095
12.0000	-1.158
13.0000	-1.142
14.0000	-1.174
15.0000	-1.174
16.0000	-1.190
17.0000	-1.190
18.0000	-1.206
19.0000	-1.190
20.0000	-1.222
21.0000	-1.222
22.0000	-1.269
23.0000	-1.253
24.0000	-1.253
25.0000	-1.253
26.0000	-1.253
27.0000	-1.253
28.0000	-1.253
29.0000	-1.269
30.0000	-1.285
31.0000	-1.285
32.0000	-1.269
33.0000	-1.285
34.0000	-1.285
35.0000	-1.285
36.0000	-1.317
37.0000	-1.317
38.0000	-1.317
39.0000	-1.317
40.0000	-1.333
41.0000	-1.333

```
42.0000        -1.333
43.0000        -1.333
44.0000        -1.349
45.0000        -1.349
46.0000        -1.349
47.0000        -1.365
48.0000        -1.365
49.0000        -1.365
50.0000        -1.365
51.0000        -1.380
52.0000        -1.380
53.0000        -1.380
54.0000        -1.396
55.0000        -1.396
56.0000        -1.396
57.0000        -1.396
58.0000        -1.396
59.0000        -1.412
60.0000        -1.412
61.0000        -1.412
62.0000        -1.412
63.0000        -1.412
64.0000        -1.428
65.0000        -1.428
66.0000        -1.428
67.0000        -1.428
68.0000        -1.428
```

```
              SE1000C
        Environmental Logger
           01/19 10:55

    Unit# 91513   Test 1

Setups:          INPUT   1
------------     ---------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference          0.000
Linearity          0.090
Scale factor      50.170
Offset             0.120
Delay mSEC        50.000

Step 0   01/19 06:27:07

Elapsed Time    INPUT   1
------------    ---------
    0.0000        -1.428
    0.0033        -1.428
    0.0066        -1.428
    0.0100        -1.428
    0.0133        -1.428
    0.0166        -2.062
    0.0200        -3.459
    0.0233        -3.301
    0.0266         3.965
    0.0300         9.708
    0.0333        21.934
    0.0366        -1.761
    0.0400         5.980
    0.0433        10.104
    0.0466         9.739
    0.0500         8.930
    0.0533         9.850
    0.0566        14.894
    0.0600         9.929
    0.0633        13.181
    0.0666         4.949
    0.0700        12.737
    0.0733        12.515
    0.0766        12.214
    0.0800        10.659
    0.0833        10.453
    0.0866        14.291
    0.0900        10.945
    0.0933        10.041
    0.0966        12.943
    0.1000        13.435
    0.1033        10.850
    0.1066        11.468
    0.1100        11.770
    0.1133        12.483
    0.1166        11.817
    0.1200        10.548
```

0.1233	12.689
0.1266	11.119
0.1300	12.658
0.1333	11.674
0.1366	11.484
0.1400	12.499
0.1433	11.881
0.1466	11.754
0.1500	11.611
0.1533	12.198
0.1566	11.722
0.1600	11.563
0.1633	11.484
0.1666	12.293
0.1700	11.659
0.1733	11.516
0.1766	11.341
0.1800	10.834
0.1833	10.627
0.1866	10.025
0.1900	10.548
0.1933	9.708
0.1966	9.184
0.2000	8.978
0.2033	9.073
0.2066	8.422
0.2100	8.090
0.2133	8.201
0.2166	7.756
0.2200	7.424
0.2233	7.297
0.2266	6.947
0.2300	6.694
0.2333	6.884
0.2366	6.821
0.2400	6.154
0.2433	6.551
0.2466	6.646
0.2500	6.138
0.2533	5.996
0.2566	6.265
0.2600	6.360
0.2633	5.932
0.2666	6.535
0.2700	6.503
0.2733	6.138
0.2766	6.170
0.2800	6.646
0.2833	6.440
0.2866	6.694
0.2900	6.979
0.2933	6.805
0.2966	6.614
0.3000	7.185
0.3033	7.360
0.3066	7.360
0.3100	7.392
0.3133	7.614
0.3166	7.519
0.3200	7.883

0.3233	8.074
0.3266	8.122
0.3300	8.026
0.3333	8.249
0.3500	8.692
0.3666	9.104
0.3833	9.200
0.4000	9.104
0.4166	9.009
0.4333	8.930
0.4500	8.740
0.4666	8.471
0.4833	8.471
0.5000	8.819
0.5166	8.502
0.5333	8.454
0.5500	8.946
0.5666	8.883
0.5833	9.152
0.6000	8.915
0.6166	8.883
0.6333	8.946
0.6500	8.867
0.6666	9.089
0.6833	8.883
0.7000	9.120
0.7166	8.835
0.7333	8.851
0.7500	8.915
0.7666	8.851
0.7833	8.819
0.8000	9.104
0.8166	8.883
0.8333	9.089
0.8500	9.104
0.8666	9.009
0.8833	9.009
0.9000	9.041
0.9166	8.946
0.9333	9.009
0.9500	9.120
0.9666	8.993
0.9833	9.026
1.0000	9.073
1.2000	8.993
1.4000	9.057
1.6000	9.374
1.8000	9.454
2.0000	9.438
2.2000	9.660
2.4000	9.327
2.6000	9.184
2.8000	9.581
3.0000	9.549
3.2000	9.311
3.4000	9.438
3.6000	9.802
3.8000	9.517
4.0000	9.929
4.2000	9.771

4.4000	9.533
4.6000	9.724
4.8000	9.343
5.0000	9.406
5.2000	9.724
5.4000	9.993
5.6000	9.200
5.8000	9.914
6.0000	9.533
6.2000	9.311
6.4000	9.786
6.6000	9.898
6.8000	10.532
7.0000	9.929
7.2000	10.025
7.4000	10.279
7.6000	9.644
7.8000	10.072
8.0000	10.263
8.2000	9.786
8.4000	9.850
8.6000	9.993
8.8000	9.802
9.0000	9.755
9.2000	9.945
9.4000	9.786
9.6000	10.072
9.8000	9.945
10.0000	9.945
11.0000	9.945
12.0000	9.993
13.0000	10.184
14.0000	10.025
15.0000	10.136
16.0000	10.120
17.0000	10.056
18.0000	10.263
19.0000	10.215
20.0000	10.279
21.0000	10.247
22.0000	10.548
23.0000	10.643
24.0000	10.564
25.0000	10.469
26.0000	10.596
27.0000	10.247
28.0000	10.215
29.0000	10.152
30.0000	10.548
31.0000	10.850
32.0000	10.390
33.0000	10.056
34.0000	10.627
35.0000	10.247
36.0000	10.469
37.0000	10.516
38.0000	10.279
39.0000	10.405
40.0000	10.516
41.0000	10.596

42.0000	10.802
43.0000	10.770
44.0000	10.136
45.0000	10.516
46.0000	10.310
47.0000	10.516
48.0000	10.770
49.0000	10.469
50.0000	10.739
51.0000	10.422
52.0000	10.580
53.0000	10.548
54.0000	10.659
55.0000	10.279
56.0000	10.295
57.0000	10.611
58.0000	10.786
59.0000	10.152
60.0000	10.739
61.0000	10.532
62.0000	10.247

```
          SE1000C
    Environmental Logger
        01/19 10:52

    Unit# 91513   Test 2

Setups:          INPUT   1
------------     ----------
Type             Level (F)
Mode             TOC
I.D.             00000

Reference            0.000
Linearity            0.090
Scale factor        50.170
Offset               0.120
Delay mSEC          50.000

Step 0   01/19 07:30:19

Elapsed Time    INPUT   1
------------    ----------
    0.0000          3.442
    0.0033          2.157
    0.0066          2.807
    0.0100         -0.444
    0.0133          1.332
    0.0166          2.205
    0.0200         -0.301
    0.0233         -3.983
    0.0266         -1.063
    0.0300         -2.935
    0.0333         -3.094
    0.0366         -6.046
    0.0400         -4.633
    0.0433         -4.554
    0.0466         -6.061
    0.0500         -4.887
    0.0533         -4.855
    0.0566         -4.839
    0.0600         -7.093
    0.0633         -7.077
    0.0666         -4.871
    0.0700         -5.316
    0.0733         -6.554
    0.0766         -6.157
    0.0800         -5.569
    0.0833         -5.125
    0.0866         -6.474
    0.0900         -5.537
    0.0933         -5.062
    0.0966         -4.998
    0.1000         -4.792
    0.1033         -4.617
    0.1066         -3.792
    0.1100         -3.490
    0.1133         -3.316
    0.1166         -2.824
    0.1200         -2.285
```

0.1233	-1.698
0.1266	-1.555
0.1300	-1.253
0.1333	-0.444
0.1366	-0.095
0.1400	0.427
0.1433	0.729
0.1466	1.252
0.1500	1.650
0.1533	1.855
0.1566	2.427
0.1600	2.775
0.1633	3.014
0.1666	3.220
0.1700	3.537
0.1733	3.807
0.1766	3.902
0.1800	4.124
0.1833	4.282
0.1866	4.410
0.1900	4.441
0.1933	4.537
0.1966	4.632
0.2000	4.568
0.2033	4.616
0.2066	4.599
0.2100	4.552
0.2133	4.441
0.2166	4.314
0.2200	4.219
0.2233	4.028
0.2266	3.870
0.2300	3.664
0.2333	3.442
0.2366	3.172
0.2400	2.934
0.2433	2.696
0.2466	2.411
0.2500	2.157
0.2533	1.887
0.2566	1.634
0.2600	1.364
0.2633	1.125
0.2666	0.904
0.2700	0.650
0.2733	0.427
0.2766	0.237
0.2800	0.030
0.2833	-0.159
0.2866	-0.349
0.2900	-0.492
0.2933	-0.651
0.2966	-0.794
0.3000	-0.920
0.3033	-1.015
0.3066	-1.110
0.3100	-1.206
0.3133	-1.269
0.3166	-1.317
0.3200	-1.365

0.3233	-1.412
0.3266	-1.412
0.3300	-1.412
0.3333	-1.412
0.3500	-1.063
0.3666	-0.460
0.3833	0.269
0.4000	0.951
0.4166	1.443
0.4333	1.681
0.4500	1.665
0.4666	1.395
0.4833	0.967
0.5000	0.507
0.5166	0.094
0.5333	-0.206
0.5500	-0.349
0.5666	-0.317
0.5833	-0.159
0.6000	0.079
0.6166	0.332
0.6333	0.570
0.6500	0.713
0.6666	0.761
0.6833	0.713
0.7000	0.570
0.7166	0.412
0.7333	0.237
0.7500	0.079
0.7666	-0.031
0.7833	-0.047
0.8000	-0.031
0.8166	0.047
0.8333	0.158
0.8500	0.253
0.8666	0.316
0.8833	0.364
0.9000	0.364
0.9166	0.332
0.9333	0.253
0.9500	0.189
0.9666	0.110
0.9833	0.062
1.0000	0.030
1.2000	0.015
1.4000	-0.031
1.6000	-0.047
1.8000	-0.095
2.0000	-0.127
2.2000	-0.142
2.4000	-0.190
2.6000	-0.190
2.8000	-0.238
3.0000	-0.270
3.2000	-0.254
3.4000	-0.301
3.6000	-0.317
3.8000	-0.333
4.0000	-0.349
4.2000	-0.349

4.4000	-0.381
4.6000	-0.349
4.8000	-0.397
5.0000	-0.412
5.2000	-0.428
5.4000	-0.412
5.6000	-0.444
5.8000	-0.476
6.0000	-0.444
6.2000	-0.460
6.4000	-0.476
6.6000	-0.492
6.8000	-0.524
7.0000	-0.524
7.2000	-0.524
7.4000	-0.508
7.6000	-0.508
7.8000	-0.555
8.0000	-0.571
8.2000	-0.555
8.4000	-0.540
8.6000	-0.571
8.8000	-0.587
9.0000	-0.603
9.2000	-0.571
9.4000	-0.603
9.6000	-0.603
9.8000	-0.603
10.0000	-0.619
11.0000	-0.635
12.0000	-0.667
13.0000	-0.714
14.0000	-0.730
15.0000	-0.762
16.0000	-0.778
17.0000	-0.778
18.0000	-0.778
19.0000	-0.825
20.0000	-0.857
21.0000	-0.794
22.0000	-0.920
23.0000	-0.872
24.0000	-0.857
25.0000	-0.936
26.0000	-0.967
27.0000	-0.936
28.0000	-0.967
29.0000	-0.952
30.0000	-0.967
31.0000	-1.015
32.0000	-0.999
33.0000	-0.999
34.0000	-1.031
35.0000	-0.999
36.0000	-1.095
37.0000	-1.031
38.0000	-1.110
39.0000	-1.063
40.0000	-1.142
41.0000	-1.158

42.0000	-1.190
43.0000	-1.190
44.0000	-1.079
45.0000	-1.095
46.0000	-1.158
47.0000	-1.190
48.0000	-1.237
49.0000	-1.174
50.0000	-1.190
51.0000	-1.158
52.0000	-1.174
53.0000	-1.174
54.0000	-1.206
55.0000	-1.174
56.0000	-1.269
57.0000	-1.253
58.0000	-1.222
59.0000	-1.301
60.0000	-1.222

Appendix III
Laboratory Analysis Reports

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

414 SW 12th Avenue • Deerfield Beach, Florida 33442 • (305) 421-7400 • Fax (305) 421-2584

LOG NO: D5-80229

Received: 18 JAN 95

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS   Page 1

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80229-1	I-3N, 2060-2110	01-16-95

PARAMETER	80229-1
Zinc	
Zinc, mg/l	<0.020
Date Analyzed	01.24.95
Method Number	EPA 200.7
Alkalinity (to pH 4.5) as CaCO3 (310.1)	
Alkalinity (to pH 4.5) as CaCO3, mg/l	140
Date Analyzed	01.23.95
Method Number	EPA 310.1
Chloride (325.3)	
Chloride (325.3) , mg/l	15000
Date Analyzed	02.01.95
Method Number	EPA 325.3
Color	
Color, c.u.	5.0
Date Analyzed	01.19.95
Method Number	EPA 110.2
Ammonia-N (350.1)	
Ammonia-N, mg/l	<0.030
Date Analyzed	01.25.95
Method Number	EPA 350.1
Nitrogen Series	
Total Kjeldahl Nitrogen-N, mg/l	<0.10
Nitrate + Nitrite-N, mg/l	<0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.15
Method Number	353/351

Laboratories in Savannah, GA • Tallahassee, FL • Tampa, FL • Deerfield Beach, FL • Mobile, AL • New Orleans, LA

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& ENVIRONMENTAL SERVICES, INC.

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LOG NO: D5-80229

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Received: 18 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80229-1	I-3N, 2060-2110	01-16-95

PARAMETER	80229-1
pH	
pH , units	7.5
Date Analyzed	01.18.95
Method Number	EPA 150.1
Sulfide	
Sulfide , mg/l	<0.40
Date Analyzed	01.20.95
Method Number	EPA 376.2
Sulfate as SO4	
Sulfate as SO4, mg/l	2400
Date Analyzed	01.31.95
Method Number	EPA 375.4
Solids, Total Dissolved	
Solids, Total Dissolved, mg/l	31000
Date Analyzed	01.23.95
Method Number	EPA 160.1

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LOG NO: D5-80229

Received: 18 JAN 95

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
80229-2	Lab Blank
80229-3	Accuracy - % Recovery (Mean)
80229-4	Precision - Relative % Difference
80229-5	Detection Limit

PARAMETER	80229-2	80229-3	80229-4	80229-5
Zinc				
Zinc, mg/l	<0.020	90 %	3.4 %	0.020
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 200.7	---	---	---
Chloride (325.3)				
Chloride (325.3) , mg/l	<1.0	97 %	2.1 %	1.0
Date Analyzed	02.01.95	---	---	---
Method Number	EPA 325.3	---	---	---
Ammonia-N (350.1)				
Ammonia-N, mg/l	<0.030	100 %	9.0 %	0.030
Date Analyzed	01.25.95	---	---	---
Method Number	EPA 350.1	---	---	---
Nitrogen Series				
Total Kjeldahl Nitrogen-N, mg/l	<0.10	88 %	4.5 %	0.10
Nitrate + Nitrite-N, mg/l	<0.050	94 %	0 %	0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.15	---	---	0.15
Method Number	353/351	---	---	---
Sulfide				
Sulfide , mg/l	<0.40	95 %	9.5 %	0.40
Date Analyzed	01.20.95	---	---	---
Method Number	EPA 376.2	---	---	---
Sulfate as SO4				
Sulfate as SO4, mg/l	<5.0	97 %	1.0 %	5.0
Date Analyzed	01.31.95	---	---	---
Method Number	EPA 375.4	---	---	---

SL Environmental HRS Cert. #E86221 and SL Drinking Water HRS Cert. #86371.
Method Reference: EPA 600/4-79-020.

Laboratories in Savannah, GA • Tallahassee, FL • Tampa, FL • Deerfield Beach, FL • Mobile, AL • New Orleans, LA

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LOG NO: D5-80228

Received: 18 JAN 95

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80228-1	I-3N, 1420-1480	01-16-95

PARAMETER	80228-1
Zinc	
Zinc, mg/l	<0.020
Date Analyzed	01.24.95
Method Number	EPA 200.7
Alkalinity (to pH 4.5) as CaCO3 (310.1)	
Alkalinity (to pH 4.5) as CaCO3, mg/l	150
Date Analyzed	01.23.95
Method Number	EPA 310.1
Chloride (325.3)	
Chloride (325.3) , mg/l	13000
Date Analyzed	02.01.95
Method Number	EPA 325.3
Color	
Color, c.u.	5.0
Date Analyzed	01.19.95
Method Number	EPA 110.2
Ammonia Nitrogen as N	
Ammonia-N, mg/l	<0.030
Date Analyzed	01.26.95
Method Number	EPA 350.1
Nitrogen Series	
Total Kjeldahl Nitrogen-N, mg/l	<0.10
Nitrate + Nitrite-N, mg/l	<0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.15
Method Number	353/351

SL SAVANNAH LABORATORIES
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LOG NO: D5-80228

Mr. Leo Swayze   Received: 18 JAN 95
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS   Page 2

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80228-1	I-3N, 1420-1480	01-16-95

PARAMETER	80228-1
pH	
pH , units	7.3
Date Analyzed	01.18.95
Method Number	EPA 150.1
Sulfide (376.2)	
Sulfide , mg/l	0.60
Date Analyzed	01.20.95
Method Number	EPA 376.2
Sulfate as SO4 (375.4)	
Sulfate (Turbidimetric) 375.4, mg/l	1300
Date Analyzed	01.31.95
Method Number	EPA 375.4
Solids, Total Dissolved	
Solids, Total Dissolved, mg/l	27000
Date Analyzed	01.23.95
Method Number	EPA 160.1

SL SAVANNAH LABORATORIES
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LOG NO: D5-80228

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176
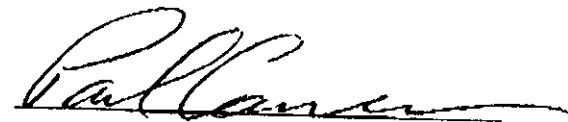
Received: 18 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
80228-2	Lab Blank
80228-3	Accuracy - % Recovery (Mean)
80228-4	Precision - Relative % Difference
80228-5	Detection Limit

PARAMETER	80228-2	80228-3	80228-4	80228-5
Zinc				
Zinc, mg/1	<0.020	90 %	3.4 %	0.020
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 200.7	---	---	---
Chloride (325.3)				
Chloride (325.3) , mg/1	<1.0	97 %	2.1 %	1.0
Date Analyzed	02.01.95	---	---	---
Method Number	EPA 325.3	---	---	---
Ammonia Nitrogen as N				
Ammonia-N, mg/1	<0.030	100 %	7.0 %	0.030
Date Analyzed	01.26.95	---	---	---
Method Number	EPA 350.1	---	---	---
Nitrogen Series				
Total Kjeldahl Nitrogen-N, mg/1	<0.10	88 %	4.5 %	0.10
Nitrate + Nitrite-N, mg/1	<0.050	95 %	0 %	0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/1	<0.15	---	---	0.15
Method Number	353/351	---	---	---
Sulfide (376.2)				
Sulfide , mg/1	<0.40	95 %	9.5 %	0.40
Date Analyzed	01.20.95	---	---	---
Method Number	EPA 376.2	---	---	---
Sulfate as SO4 (375.4)				
Sulfate (Turbidimetric) 375.4, mg/1	<5.0	97 %	1.0 %	5.0
Date Analyzed	01.31.95	---	---	---
Method Number	EPA 375.4	---	---	---

SL Environmental HRS Cert. #E86221 and SL Drinking Water HRS Cert. #86371.
Method Reference: EPA 600/4-79-020.

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LOG NO: D5-80265

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Received: 20 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80265-1	I-3N, 1320-1380	
		01-19-95
PARAMETER		
		80265-1

Zinc
 Zinc, mg/l   <0.020
 Date Analyzed   01.24.95
 Method Number   EPA 200.7
Alkalinity (to pH 4.5) as CaCO3 (310.1)
 Alkalinity (to pH 4.5) as CaCO3, mg/l
 Date Analyzed   120
 Method Number   01.24.95
Chloride (325.3)   EPA 310.1
 Chloride (325.3)   , mg/l
 Date Analyzed   7700
 Method Number   02.01.95
Color   EPA 325.3
 Color, c.u.
 Date Analyzed   <5.0
 Method Number   01.20.95
Ammonia Nitrogen as N   EPA 110.2
 Ammonia-N, mg/l
 Date Analyzed   0.49
 Method Number   01.26.95
Nitrogen Series   EPA 350.1
 Total Kjeldahl Nitrogen-N, mg/l
 Nitrate + Nitrite-N, mg/l   0.79
 Total Nitrogen (EPA 351.2 + 353.2), mg/l   <0.050
 Method Number   0.79
                                                           353/351

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LOG NO: D5-80265

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Received: 20 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80265-1	I-3N, 1320-1380	01-19-95

PARAMETER	80265-1
pH	
pH , units	7.2
Date Analyzed	01.23.95
Method Number	EPA 150.1
Sulfide (376.2)	
Sulfide , mg/l	2.0
Date Analyzed	01.24.95
Method Number	EPA 376.2
Sulfate as SO4 (375.4)	
Sulfate (Turbidimetric) 375.4, mg/l	640
Date Analyzed	01.31.95
Method Number	EPA 375.4
Solids, Total Dissolved	
Solids, Total Dissolved, mg/l	15000
Date Analyzed	01.23.95
Method Number	EPA 160.1

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414 SW 12th Avenue • Deerfield Beach, Florida 33442 • (305) 421-7400 • Fax (305) 421-2584

LOG NO: D5-80265

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
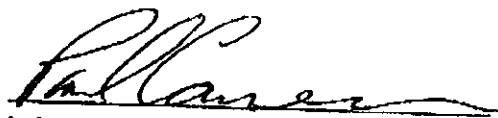Miami, FL 33176

Received: 20 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
80265-2	Lab Blank
80265-3	Accuracy - % Recovery (Mean)
80265-4	Precision - Relative % Difference
80265-5	Detection Limit

PARAMETER	80265-2	80265-3	80265-4	80265-5
Zinc				
Zinc, mg/l	<0.020	92 %	1.1 %	0.020
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 200.7	---	---	---
Chloride (325.3)				
Chloride (325.3) , mg/l	<1.0	97 %	2.1 %	1.0
Date Analyzed	02.01.95	---	---	---
Method Number	EPA 325.3	---	---	---
Ammonia Nitrogen as N				
Ammonia-N, mg/l	<0.030	98 %	8.2 %	0.030
Date Analyzed	01.26.95	---	---	---
Method Number	EPA 350.1	---	---	---
Nitrogen Series				
Total Kjeldahl Nitrogen-N, mg/l	<0.10	89 %	0 %	0.10
Nitrate + Nitrite-N, mg/l	<0.050	98 %	9.2 %	0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.15	---	---	0.15
Method Number	353/351	---	---	---
Sulfide (376.2)				
Sulfide , mg/l	<0.40	87 %	4.6 %	0.40
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 376.2	---	---	---
Sulfate as SO4 (375.4)				
Sulfate (Turbidimetric) 375.4, mg/l	<5.0	97 %	1.0 %	5.0
Date Analyzed	01.31.95	---	---	---
Method Number	EPA 375.4	---	---	---

SL Environmental HRS Cert. #E86221 and SL Drinking Water HRS Cert. #86371.
Method Reference: EPA 600/4-79-020.

Laboratories in Savannah, GA • Tallahassee, FL • Tampa, FL • Deerfield Beach, FL • Mobile, AL • New Orleans, LA

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

414 SW 12th Avenue • Deerfield Beach, Florida 33442 • (305) 421-7400 • Fax (305) 421-2584

LOG NO: D5-80266

Mr. Leo Swayze
Hydrologic Associates U.S.A., Inc.
8925 S.W. 148th St., Suite 212
Miami, FL 33176

Received: 20 JAN 95

Project: #HA93-379 (WASA North District)
Sampled By: E. Workman

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80266-1	I-3N, 1210-1270	
		01-18-95

PARAMETER	80266-1
Zinc	
Zinc, mg/l	
Date Analyzed	<0.020
Method Number	01.24.95
	EPA 200.7
Alkalinity (to pH 4.5) as CaCO3 (310.1)	
Alkalinity (to pH 4.5) as CaCO3, mg/l	
Date Analyzed	140
Method Number	01.24.95
	EPA 310.1
Chloride (325.3)	
Chloride (325.3) , mg/l	
Date Analyzed	3100
Method Number	02.01.95
Color	EPA 325.3
Color, c.u.	
Date Analyzed	10
Method Number	01.20.95
	EPA 110.2
Ammonia Nitrogen as N	
Ammonia-N, mg/l	
Date Analyzed	0.37
Method Number	01.26.95
	EPA 350.1
Nitrogen Series	
Total Kjeldahl Nitrogen-N, mg/l	
Nitrate + Nitrite-N, mg/l	0.71
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.050
Method Number	0.71
	353/351

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REPORT OF RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
80266-1	I-3N, 1210-1270	
		01-18-95

PARAMETER	80266-1	
pH		
pH , units	7.4	
Date Analyzed	01.23.95	
Method Number	EPA 150.1	
Sulfide (376.2)		
Sulfide , mg/l	2.4	
Date Analyzed	01.24.95	
Method Number	EPA 376.2	
Sulfate as SO4 (375.4)		
Sulfate (Turbidimetric) 375.4, mg/l	380	
Date Analyzed	01.31.95	
Method Number	EPA 375.4	
Solids, Total Dissolved		
Solids, Total Dissolved, mg/l	5000	
Date Analyzed	01.23.95	
Method Number	EPA 160.1	

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REPORT OF RESULTS   Page 3

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
80266-2	Lab Blank
80266-3	Accuracy - % Recovery (Mean)
80266-4	Precision - Relative % Difference
80266-5	Detection Limit

PARAMETER	80266-2	80266-3	80266-4	80266-5
Zinc				
Zinc, mg/l	<0.020	92 %	1.1 %	0.020
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 200.7	---	---	---
Chloride (325.3)				
Chloride (325.3) , mg/l	<1.0	97 %	2.1 %	1.0
Date Analyzed	02.01.95	---	---	---
Method Number	EPA 325.3	---	---	---
Ammonia Nitrogen as N				
Ammonia-N, mg/l	<0.030	98 %	8.2 %	0.030
Date Analyzed	01.26.95	---	---	---
Method Number	EPA 350.1	---	---	---
Nitrogen Series				
Total Kjeldahl Nitrogen-N, mg/l	<0.10	89 %	0 %	0.10
Nitrate + Nitrite-N, mg/l	<0.050	98 %	9.2 %	0.050
Total Nitrogen (EPA 351.2 + 353.2), mg/l	<0.15	---	---	0.15
Method Number	353/351	---	---	---
Sulfide (376.2)				
Sulfide , mg/l	<0.40	87 %	4.6 %	0.40
Date Analyzed	01.24.95	---	---	---
Method Number	EPA 376.2	---	---	---
Sulfate as SO4 (375.4)				
Sulfate (Turbidimetric) 375.4, mg/l	<5.0	97 %	1.0 %	5.0
Date Analyzed	01.31.95	---	---	---
Method Number	EPA 375.4	---	---	---

SL Environmental HRS Cert. #E86221 and SL Drinking Water HRS Cert. #86371.
Method Reference: EPA 600/4-79-020.