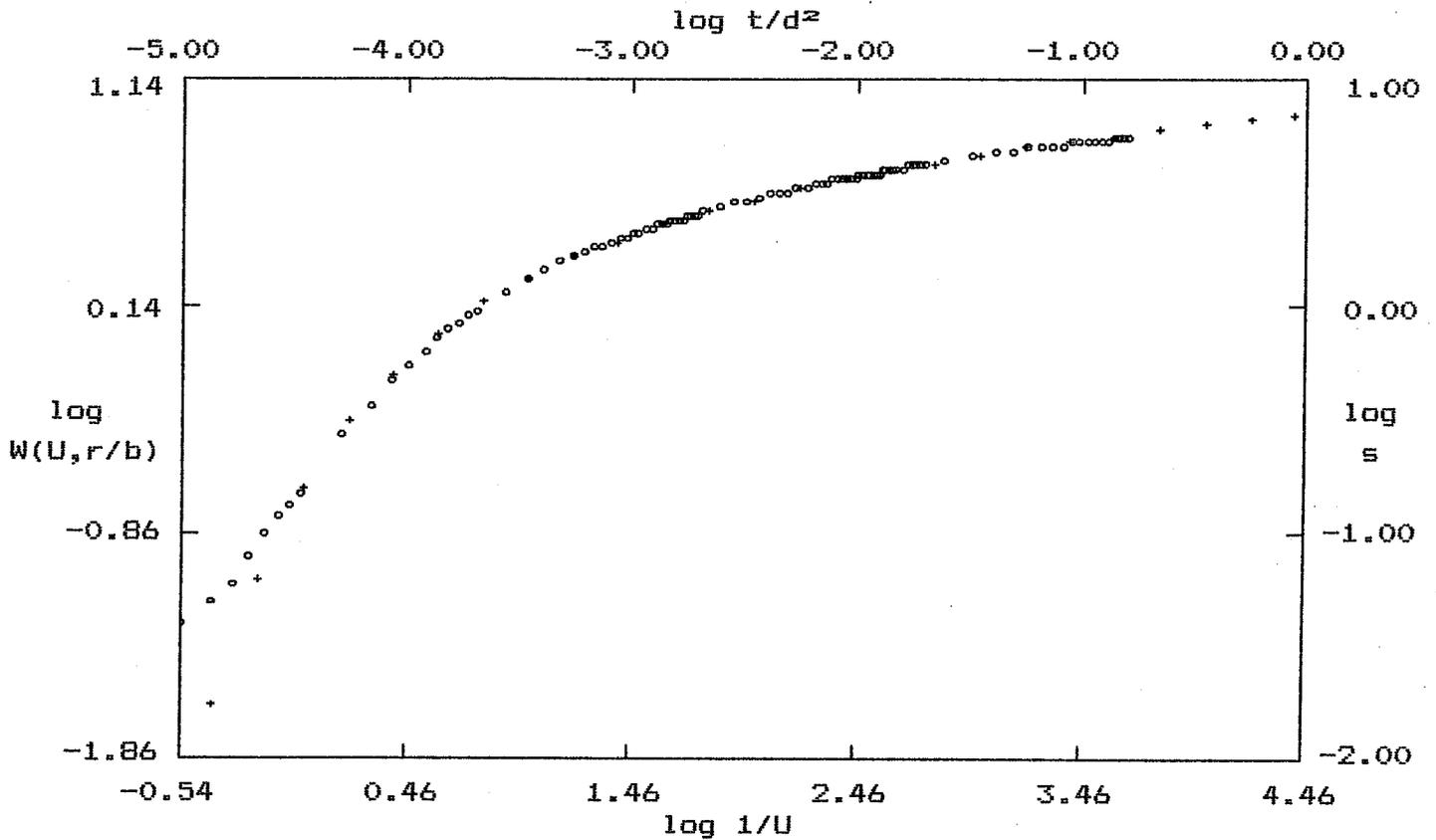


PUMP TEST DATA



o - Data
 + - Type Curve
 Confined Leaky: $r/B = \text{Theis}$

SOLUTION

Transmissivity = $1.322E+00$ ft.²/min. = *14,239 gpd/ft*
 Storativity = $1.833E-04$

RTA 9I

OPTIMIZATION BY LEVENBERG-MARQUARDT MINIMIZATION ALGORITHM

ITER	FUNCTION	TRANSMISS	STORTIVITY	SPEC_LEAK
1	.133E-01	1904.	.1833E-03	.1000E-04
3	.131E-02	1881.	.1569E-03	.1426E-03
5	.953E-03	1920.	.1483E-03	.1020E-03
7	.871E-03	1929.	.1451E-03	.9315E-04
9	.863E-03	1934.	.1437E-03	.8885E-04
11	.862E-03	1935.	.1434E-03	.8782E-04
13	.862E-03	1935.	.1433E-03	.8748E-04

TERMINATION DUE TO PARAMETER CONVERGENCE

FINAL RESULTS

ITER	FUNCTION	TRANSMISS	STORTIVITY	SPEC_LEAK
17	.862E-03	1935.	.1433E-03	.8748E-04

FRACTIONAL COMPONENTS OF FUNCTION VALUE

WELL # 1
1.000

DO YOU WANT A SENSITIVITY ANALYSIS ? (Y/N)

BTA 9I

$T = 14,474 \text{ gpd/ft}$

$S = 1.433 \times 10^{-4}$

$\frac{h''}{b} = 8.748 \times 10^{-4} \text{ day}^{-1}$

SENSITIVITY ANALYSIS

TWO STANDARD DEVIATION CONFIDENCE INTERVALS

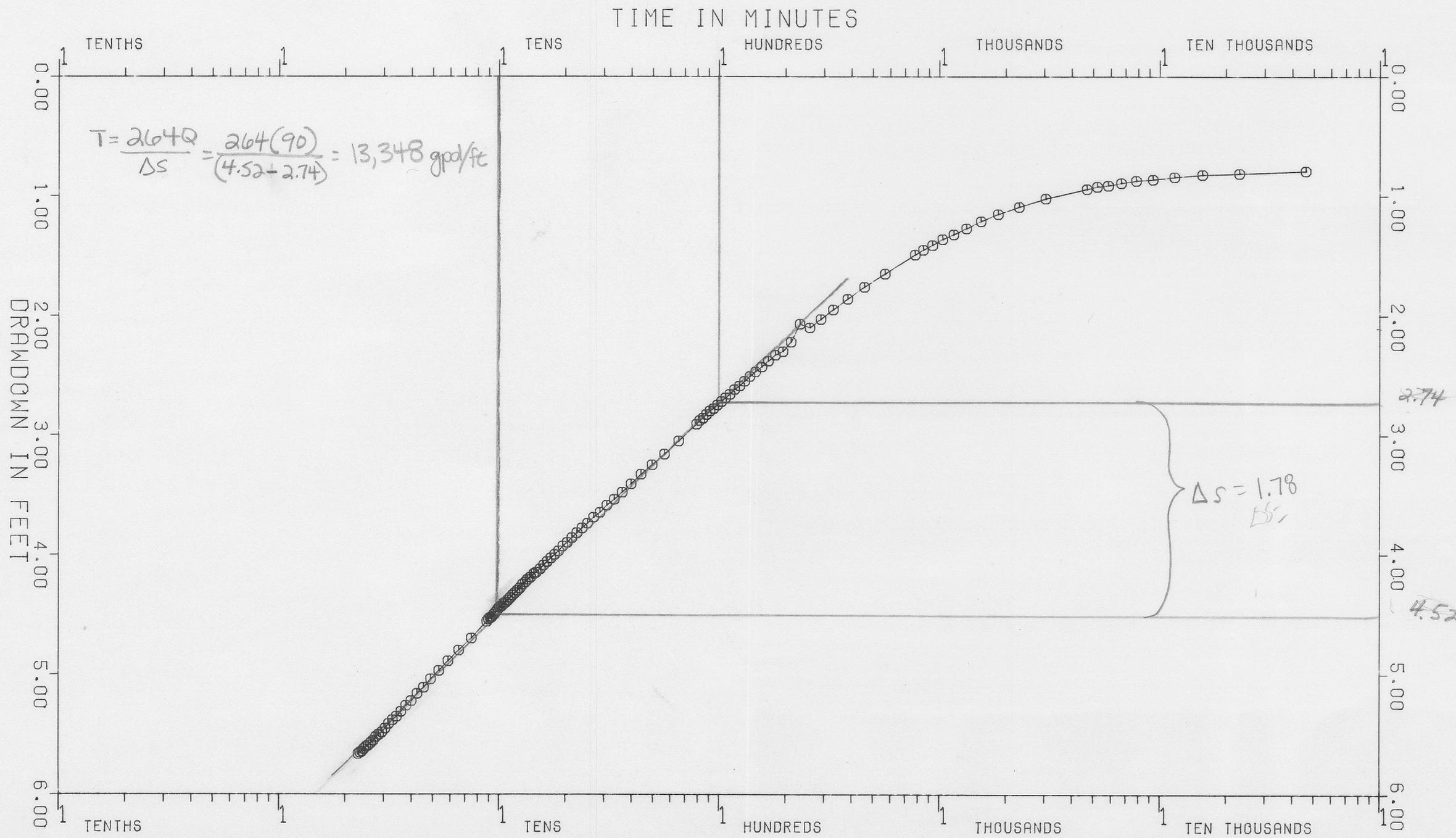
PARAMETER	VALUE	LOWER LIMIT	UPPER LIMIT
TRANSMISS	1935.	1924.	1945.
STORTIVITY	.1433E-03	0.0000	0.5121E-03
SPEC_LEAK	.8740E-04	0.0000	0.2574E-02

TO CONTINUE ENTER "RETURN"

RTA 91 RECOVERY

OBSERVATION WELL: OBS 1

R= 70.5 Q= 90



$$L_{u,v} = 1$$

$$\frac{1}{u} = 1$$

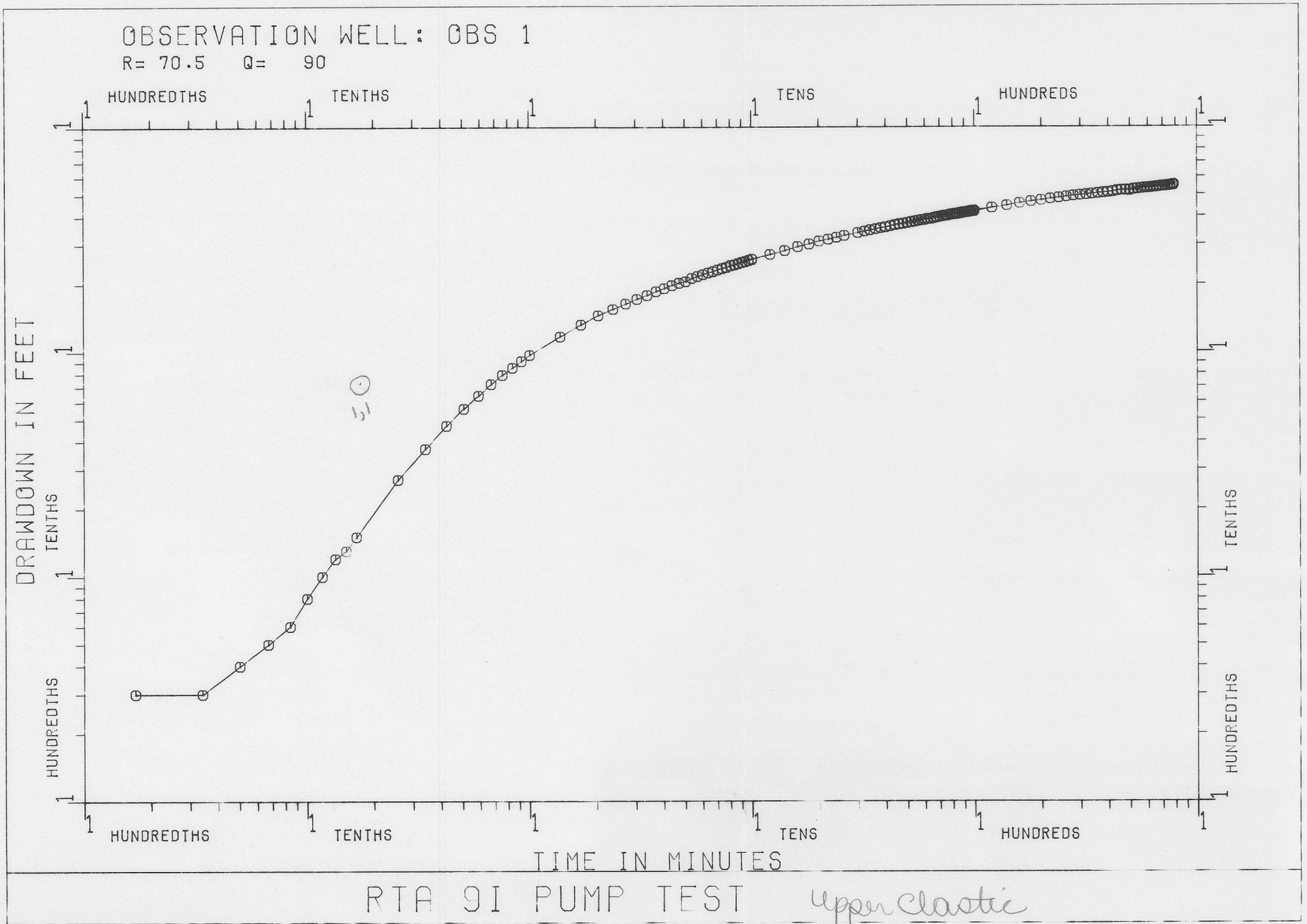
$$t = \frac{.175}{1440}$$

$$S = .73$$

$$T = \frac{1440 Q L_{u,v}}{4\pi s (7.48)} = \frac{1440 (90) (1)}{4\pi (.73) (7.48)} = 1888.7 \text{ ft}^2/\text{day}$$

$$= 14,128 \text{ gpd}/\text{ft}$$

$$S = \frac{4T t/r^2}{1/u} = \frac{4(1888.7) \frac{.175}{1440}}{70.5^2} = 1.82 \times 10^{-4}$$



HENRY CO. (RTA-91)

Run 1
05/09/84

SE200A DATA
constant rate test

TRANSDUCER TABLE

Input 1: OB #1
Transducer s/n: 38
Scale factor: 9.96
Initial level: 7.27 feet

FAST DATA

Input 2: OB #2
Transducer s/n: 171
Scale factor: 49.38
Initial level: 6.72 feet

Input 3: PUMPED WELL
Transducer s/n: 113
Scale factor: 9.96
Initial level: 6.67 feet

PUMP SCHEDULE

Drawdown for 1440 min
Pump at 95 GPM

Recovery for 600 min

SAMPLING SCHEDULE

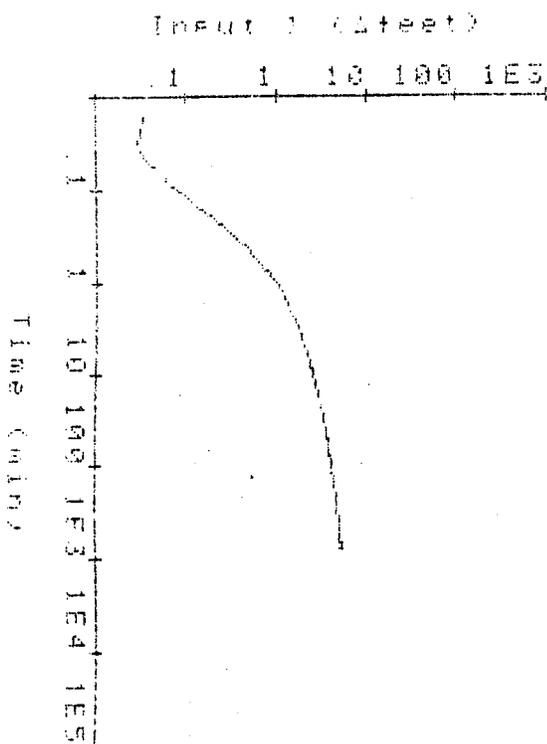
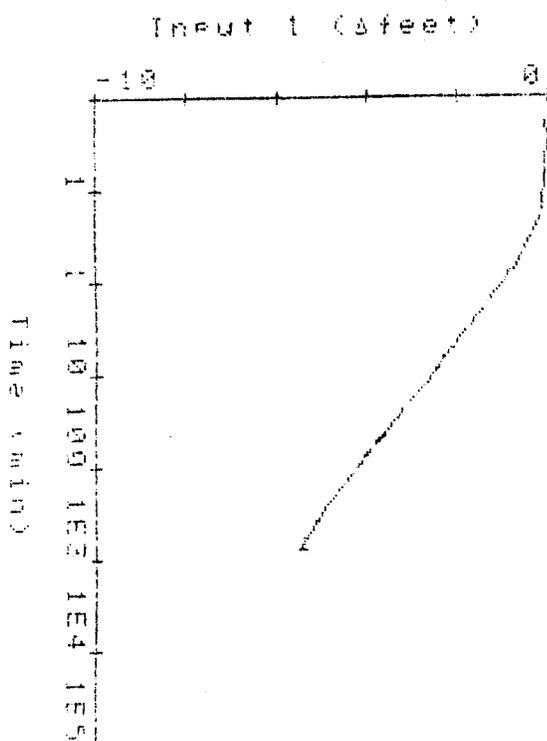
0-10	sec	@	1 sec
10-60	sec	@	5 sec
1-10	min	@	20 sec
10-100	min	@	2 min
100-1000	min	@	20 min
1000-10000	min	@	60 min
10000-99999	min	@	200 min

DRAWDOWN REPORT

Started at 0913
 lasted 784.73 min

Input 1 (feet):

Time	ET (min)	level	Alevel
0913	0.000	7.27	0.00
0913	0.017	7.30	-0.03
0913	0.034	7.30	-0.03
0913	0.050	7.31	-0.04
0914	0.067	7.32	-0.05
0914	0.084	7.33	-0.05
0914	0.100	7.35	-0.05
0914	0.117	7.37	-0.10
0914	0.134	7.39	-0.12
0914	0.150	7.41	-0.13
0914	0.167	7.42	-0.15
0914	0.257	7.54	-0.27
0914	0.341	7.64	-0.37
0914	0.424	7.74	-0.47
0914	0.507	7.83	-0.56
0914	0.591	7.91	-0.64
0914	0.674	7.99	-0.72
0914	0.757	8.06	-0.79
0914	0.841	8.12	-0.85
0914	0.924	8.18	-0.91
0914	1.007	8.24	-0.97
0915	1.091	8.31	-1.03
0915	1.174	8.37	-1.09
0915	1.257	8.43	-1.15
0915	1.341	8.49	-1.21
0915	1.424	8.55	-1.27
0915	1.507	8.61	-1.33
0915	1.591	8.67	-1.39
0915	1.674	8.73	-1.45
0915	1.757	8.79	-1.51
0915	1.841	8.85	-1.57
0915	1.924	8.91	-1.63
0915	2.007	8.97	-1.69
0915	2.091	9.03	-1.75
0915	2.174	9.09	-1.81
0915	2.257	9.15	-1.87
0915	2.341	9.21	-1.93
0915	2.424	9.27	-1.99
0915	2.507	9.33	-2.05
0915	2.591	9.39	-2.11
0915	2.674	9.45	-2.17
0915	2.757	9.51	-2.23
0915	2.841	9.57	-2.29
0915	2.924	9.63	-2.35
0915	3.007	9.69	-2.41
0915	3.091	9.75	-2.47
0915	3.174	9.81	-2.53
0915	3.257	9.87	-2.59
0915	3.341	9.93	-2.65
0915	3.424	9.99	-2.71
0915	3.507	10.05	-2.77
0915	3.591	10.11	-2.83
0915	3.674	10.17	-2.89
0915	3.757	10.23	-2.95
0915	3.841	10.29	-3.01
0915	3.924	10.35	-3.07
0915	4.007	10.41	-3.13
0915	4.091	10.47	-3.19
0915	4.174	10.53	-3.25
0915	4.257	10.59	-3.31
0915	4.341	10.65	-3.37
0915	4.424	10.71	-3.43
0915	4.507	10.77	-3.49
0915	4.591	10.83	-3.55
0915	4.674	10.89	-3.61
0915	4.757	10.95	-3.67
0915	4.841	11.01	-3.73
0915	4.924	11.07	-3.79
0915	5.007	11.13	-3.85
0915	5.091	11.19	-3.91
0915	5.174	11.25	-3.97
0915	5.257	11.31	-4.03
0915	5.341	11.37	-4.09
0915	5.424	11.43	-4.15
0915	5.507	11.49	-4.21
0915	5.591	11.55	-4.27
0915	5.674	11.61	-4.33
0915	5.757	11.67	-4.39
0915	5.841	11.73	-4.45
0915	5.924	11.79	-4.51
0915	6.007	11.85	-4.57
0915	6.091	11.91	-4.63
0915	6.174	11.97	-4.69
0915	6.257	12.03	-4.75
0915	6.341	12.09	-4.81
0915	6.424	12.15	-4.87
0915	6.507	12.21	-4.93
0915	6.591	12.27	-4.99
0915	6.674	12.33	-5.05
0915	6.757	12.39	-5.11
0915	6.841	12.45	-5.17
0915	6.924	12.51	-5.23
0915	7.007	12.57	-5.29
0915	7.091	12.63	-5.35
0915	7.174	12.69	-5.41
0915	7.257	12.75	-5.47
0915	7.341	12.81	-5.53
0915	7.424	12.87	-5.59
0915	7.507	12.93	-5.65
0915	7.591	12.99	-5.71
0915	7.674	13.05	-5.77
0915	7.757	13.11	-5.83
0915	7.841	13.17	-5.89
0915	7.924	13.23	-5.95
0915	8.007	13.29	-6.01
0915	8.091	13.35	-6.07
0915	8.174	13.41	-6.13
0915	8.257	13.47	-6.19
0915	8.341	13.53	-6.25
0915	8.424	13.59	-6.31
0915	8.507	13.65	-6.37
0915	8.591	13.71	-6.43
0915	8.674	13.77	-6.49
0915	8.757	13.83	-6.55
0915	8.841	13.89	-6.61
0915	8.924	13.95	-6.67
0915	9.007	14.01	-6.73
0915	9.091	14.07	-6.79
0915	9.174	14.13	-6.85
0915	9.257	14.19	-6.91
0915	9.341	14.25	-6.97
0915	9.424	14.31	-7.03
0915	9.507	14.37	-7.09
0915	9.591	14.43	-7.15
0915	9.674	14.49	-7.21
0915	9.757	14.55	-7.27
0915	9.841	14.61	-7.33
0915	9.924	14.67	-7.39
0915	10.007	14.73	-7.45
0915	10.091	14.79	-7.51
0915	10.174	14.85	-7.57
0915	10.257	14.91	-7.63
0915	10.341	14.97	-7.69
0915	10.424	15.03	-7.75
0915	10.507	15.09	-7.81
0915	10.591	15.15	-7.87
0915	10.674	15.21	-7.93
0915	10.757	15.27	-7.99
0915	10.841	15.33	-8.05
0915	10.924	15.39	-8.11
0915	11.007	15.45	-8.17
0915	11.091	15.51	-8.23
0915	11.174	15.57	-8.29
0915	11.257	15.63	-8.35
0915	11.341	15.69	-8.41
0915	11.424	15.75	-8.47
0915	11.507	15.81	-8.53
0915	11.591	15.87	-8.59
0915	11.674	15.93	-8.65
0915	11.757	15.99	-8.71
0915	11.841	16.05	-8.77
0915	11.924	16.11	-8.83
0915	12.007	16.17	-8.89
0915	12.091	16.23	-8.95
0915	12.174	16.29	-9.01
0915	12.257	16.35	-9.07
0915	12.341	16.41	-9.13
0915	12.424	16.47	-9.19
0915	12.507	16.53	-9.25
0915	12.591	16.59	-9.31
0915	12.674	16.65	-9.37
0915	12.757	16.71	-9.43
0915	12.841	16.77	-9.49
0915	12.924	16.83	-9.55
0915	13.007	16.89	-9.61
0915	13.091	16.95	-9.67
0915	13.174	17.01	-9.73
0915	13.257	17.07	-9.79
0915	13.341	17.13	-9.85
0915	13.424	17.19	-9.91
0915	13.507	17.25	-9.97
0915	13.591	17.31	-10.03
0915	13.674	17.37	-10.09
0915	13.757	17.43	-10.15
0915	13.841	17.49	-10.21
0915	13.924	17.55	-10.27
0915	14.007	17.61	-10.33
0915	14.091	17.67	-10.39
0915	14.174	17.73	-10.45
0915	14.257	17.79	-10.51
0915	14.341	17.85	-10.57
0915	14.424	17.91	-10.63
0915	14.507	17.97	-10.69
0915	14.591	18.03	-10.75
0915	14.674	18.09	-10.81
0915	14.757	18.15	-10.87
0915	14.841	18.21	-10.93
0915	14.924	18.27	-10.99
0915	15.007	18.33	-11.05
0915	15.091	18.39	-11.11
0915	15.174	18.45	-11.17
0915	15.257	18.51	-11.23
0915	15.341	18.57	-11.29
0915	15.424	18.63	-11.35
0915	15.507	18.69	-11.41
0915	15.591	18.75	-11.47
0915	15.674	18.81	-11.53
0915	15.757	18.87	-11.59
0915	15.841	18.93	-11.65
0915	15.924	18.99	-11.71
0915	16.007	19.05	-11.77
0915	16.091	19.11	-11.83
0915	16.174	19.17	-11.89
0915	16.257	19.23	-11.95
0915	16.341	19.29	-12.01
0915	16.424	19.35	-12.07
0915	16.507	19.41	-12.13
0915	16.591	19.47	-12.19
0915	16.674	19.53	-12.25
0915	16.757	19.59	-12.31
0915	16.841	19.65	-12.37
0915	16.924	19.71	-12.43
0915	17.007	19.77	-12.49
0915	17.091	19.83	-12.55
0915	17.174	19.89	-12.61
0915	17.257	19.95	-12.67
0915	17.341	20.01	-12.73
0915	17.424	20.07	-12.79
0915	17.507	20.13	-12.85
0915	17.591	20.19	-12.91
0915	17.674	20.25	-12.97
0915	17.757	20.31	-13.03
0915	17.841	20.37	-13.09
0915	17.924	20.43	-13.15
0915	18.007	20.49	-13.21
0915	18.091	20.55	-13.27
0915	18.174	20.61	-13.33
0915	18.257	20.67	-13.39
0915	18.341	20.73	-13.45
0915	18.424	20.79	-13.51
0915	18.507	20.85	-13.57
0915	18.591	20.91	-13.63
0915	18.674	20.97	-13.69
0915	18.757	21.03	-13.75
0915	18.841	21.09	-13.81
0915	18.924	21.15	-13.87
0915	19.007	21.21	-13.93
0915	19.091	21.27	-13.99
0915	19.174	21.33	-14.05
0915	19.257	21.39	-14.11
0915	19.341	21.45	-14.17
0915	19.424	21.51	-14.23
0915	19.507	21.57	-14.29
0915	19.591	21.63	-14.35
0915	19.674	21.69	-14.41
0915	19.757	21.75	-14.47
0915	19.841	21.81	-14.53
0915	19.924	21.87	-14.59
0915	20.007	21.93	-14.65
0915	20.091	21.99	-14.71
0915	20.174	22.05	-14.77
0915	20.257	22.11	-14.83
0915	20.341	22.17	-14.89
0915	20.424	22.23	-14.95
0915	20.507	22.29	-15.01
0915	20.591	22.35	-15.07
0915	20.674	22.41	-15.13
0915	20.757	22.47	-15.19
0915	20.841	22.53	-15.25
0915	20.924	22.59	-15.31
0915	21.007	22.65	-15.37
0915	21.091	22.71	-15.43
0915	21.174	22.77	-15.49
0915	21.257	22.83	-15.55
0915	21.341	22.89	-15.61
0915	21.424	22.95	-15.67
0915	21.507	23.01	-15.73
0915	21.591	23.07	-15.79
0915	21.674	23.13	-15.85
0915	21.757	23.19	-15.91
0915	21.841	23.25	-15.97
0915	21.924	23.31	-16.03
0915	22.007	23.37	-16.09
0915	22.091	23.43	-16.15
0915	22.174	23.49	-16.21
0915	22.257	23.55	-16.27
0915	22.341	23.61	-16.33
0915	22.424	23.67	-16.39

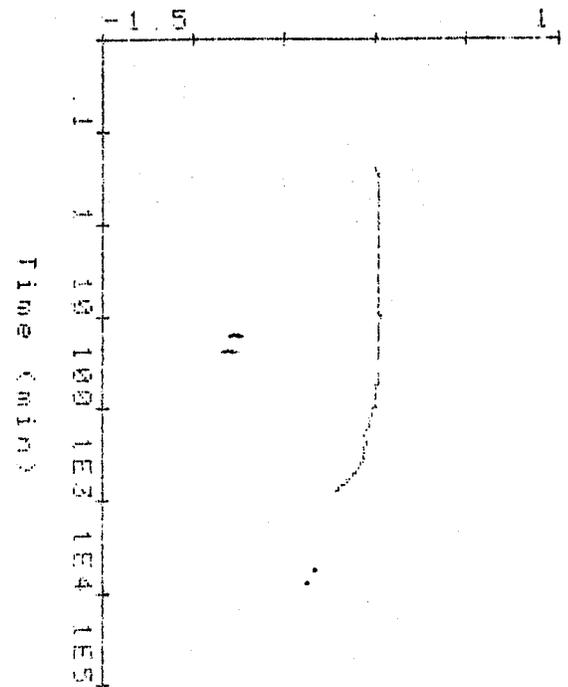


Time	ET (min)	level	dlevel
0913	0.000	6.72	0.00
0914	0.287	6.72	0.00
0914	0.341	6.71	0.01
0914	0.424	6.71	0.01
0914	0.507	6.71	0.01
0914	0.591	6.71	0.01
0914	0.674	6.71	0.01
0914	0.757	6.71	0.01
0914	0.841	6.71	0.01
0914	0.924	6.71	0.01
0914	1.007	6.71	0.01
0915	1.381	6.71	0.01
0915	1.714	6.71	0.01
0915	2.047	6.71	0.01
0916	2.381	6.71	0.01
0916	2.714	6.71	0.01
0916	3.047	6.71	0.01
0917	3.381	6.71	0.01
0917	3.714	6.71	0.01
0917	4.047	6.71	0.01
0918	4.381	6.71	0.01
0918	4.714	6.71	0.01
0918	5.047	6.71	0.01
0919	5.381	6.71	0.01
0919	5.714	6.71	0.01
0919	6.047	6.71	0.01
0920	6.381	6.71	0.01
0920	6.714	6.71	0.01
0920	7.047	6.71	0.01
0921	7.381	6.71	0.01
0921	7.714	6.71	0.01
0921	8.047	6.71	0.01
0922	8.381	6.71	0.01
0922	8.714	6.71	0.01
0922	9.047	6.71	0.01
0923	9.381	6.71	0.01
0923	9.714	6.71	0.01
0923	10.047	6.69	0.03
0926	12.135	6.71	0.01
0928	14.135	6.71	0.01
0930	16.135	6.71	0.01
0932	18.135	6.71	0.01
0934	20.135	6.71	0.01
0936	22.135	6.71	0.01
0938	24.135	6.71	0.01
0940	26.118	6.71	0.01
0942	28.397	6.71	0.01
0944	30.063	6.71	0.01
0946	32.208	6.71	0.01
0948	34.065	6.71	0.01
0950	36.098	6.71	0.01
0952	38.098	6.71	0.01
0954	40.098	6.71	0.01
0956	42.098	6.71	0.01
0958	44.098	6.71	0.01
1000	46.098	6.71	0.01
1002	48.098	6.71	0.01
1004	50.098	6.71	0.01
1006	52.098	6.71	0.01
1008	54.120	6.71	0.01
1010	56.062	6.72	0.00
1012	58.120	6.71	0.01
1014	60.126	6.72	0.00
1016	62.113	6.72	0.00
1018	64.113	6.72	0.00
1020	66.113	6.72	0.00
1022	68.113	6.72	0.00
1024	70.113	6.72	0.00

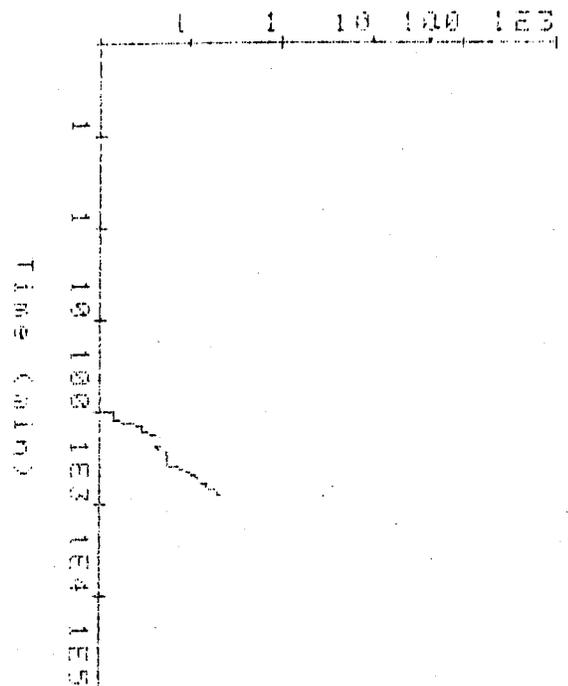
10320	76.4	1110	0.00	7.22	0.00	0.00
10330	76.0	4000	0.00	7.22	0.00	0.00
10340	0.00	3445	0.00	7.22	0.00	0.00
10350	0.02	0002	0.00	7.22	0.00	0.00
10360	0.04	0002	0.00	7.22	0.00	0.00
10400	0.01	0002	0.00	7.22	0.00	0.00
10420	0.00	0002	0.00	7.22	0.00	0.00
10440	0.00	0002	0.00	7.22	0.00	0.00
10460	0.02	0002	0.00	7.22	0.00	0.00
10480	0.04	0002	0.00	7.22	0.00	0.00
10500	0.06	0002	0.00	7.22	0.00	0.00
10520	0.08	0002	0.00	7.22	0.00	0.00
10540	1.00	0000	0.00	7.23	-0.01	0.01
11114	1.20	2500	0.00	7.23	-0.01	0.01
11134	1.40	2500	0.00	7.25	-0.01	0.03
11154	1.60	2300	0.00	7.25	-0.01	0.03
10114	1.80	2200	0.00	7.26	-0.01	0.04
10344	2.00	2200	0.00	7.28	-0.01	0.06
10554	2.20	2200	0.00	7.28	-0.01	0.06
10714	2.40	7000	0.00	7.28	-0.01	0.04
10934	2.60	1500	0.00	7.28	-0.01	0.04
10954	2.80	1500	0.00	7.28	-0.01	0.06
14114	3.00	1500	0.00	7.28	-0.01	0.06
14344	3.20	2300	0.00	7.28	-0.01	0.06
14544	3.40	2300	0.00	7.28	-0.01	0.06
15114	3.60	0000	0.00	7.28	-0.01	0.06
15344	3.80	2000	0.00	7.28	-0.01	0.06
15644	4.00	2000	0.00	7.29	-0.01	0.07
15114	4.20	4500	0.00	8.01	-0.01	0.09
15344	4.40	2200	0.00	8.02	-0.01	0.10
15554	4.60	1500	0.00	8.02	-0.01	0.10
15714	4.80	1500	0.00	8.02	-0.01	0.10
15934	5.00	1500	0.00	8.03	-0.01	0.11
15954	5.20	1500	0.00	8.03	-0.01	0.11
16114	5.40	1500	0.00	8.05	-0.01	0.13
16344	5.60	1500	0.00	8.05	-0.01	0.13
16544	5.80	1500	0.00	8.05	-0.01	0.13
16714	6.00	2000	0.00	8.06	-0.01	0.14
16934	6.20	2000	0.00	8.08	-0.01	0.16
16954	6.40	2000	0.00	8.08	-0.01	0.16
17114	6.60	2000	0.00	8.09	-0.01	0.17
17344	7.00	2000	0.00	9.01	-0.01	0.19
17114	7.20	2000	0.00	9.01	-0.01	0.19
17344	7.40	2000	0.00	9.02	-0.01	0.20
17544	7.60	2000	0.00	9.02	-0.01	0.20
17714	7.80	2000	0.00	9.02	-0.01	0.20
17944	7.84	7000	0.00	9.03	-0.01	0.21

Average level: 6.81

INPUT 2 (feet)



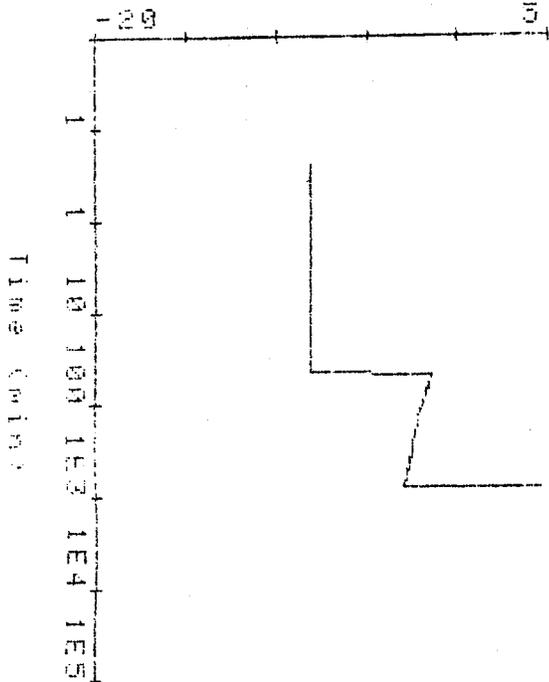
INPUT 2 (feet)



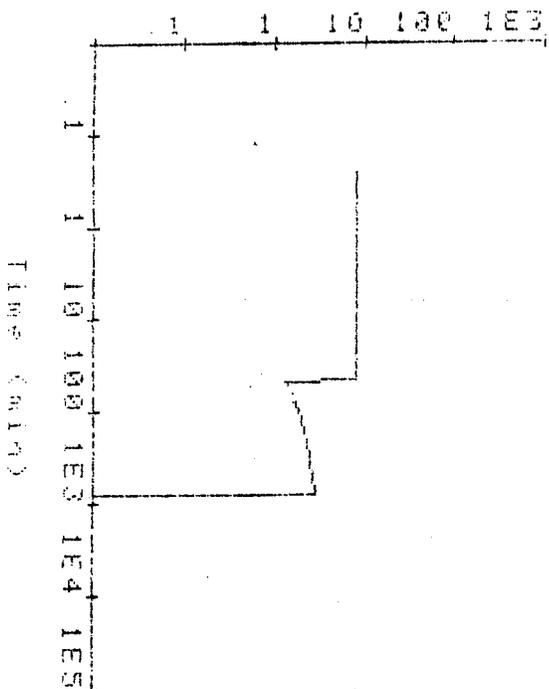
RECOVERY REPORT

Started at 1218
Lasted 600.13 min

Input 3 (Δfeet)

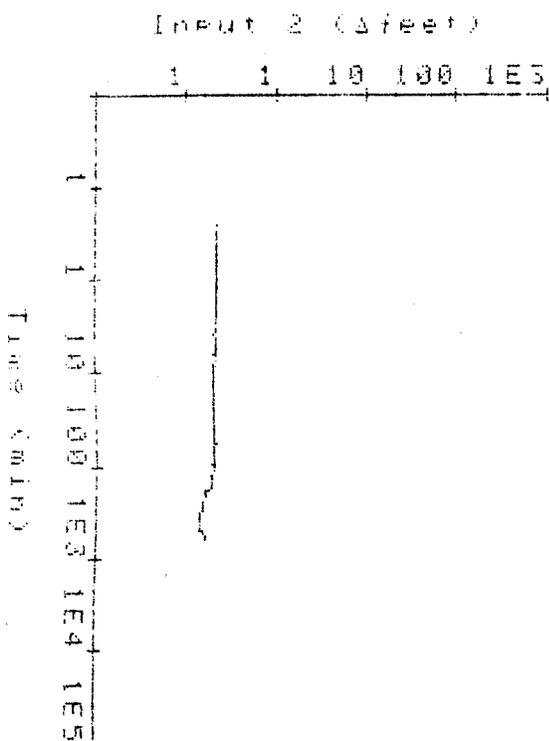
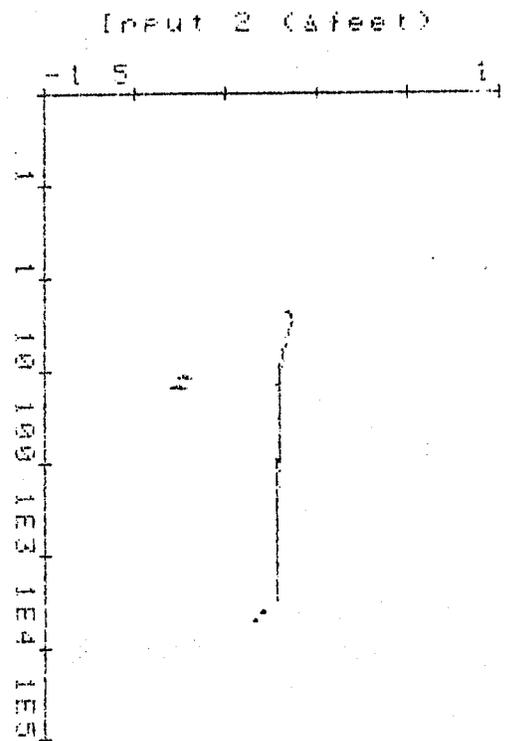
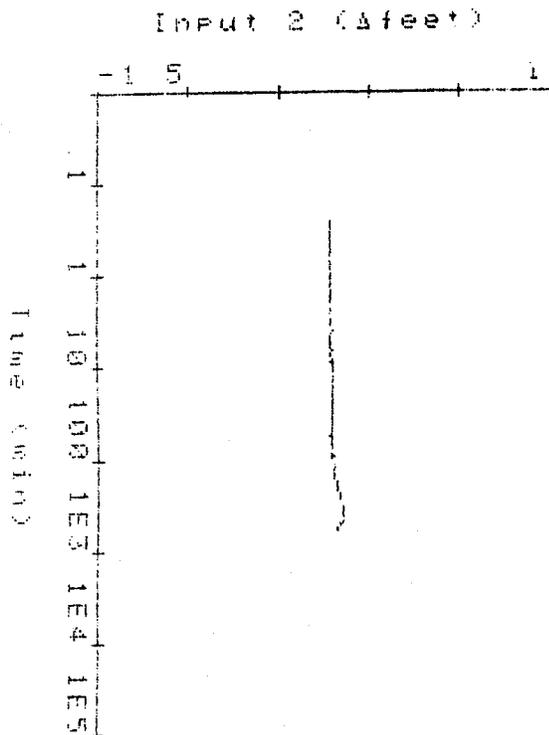


Input 3 (Δfeet)



Input 1 (feet)

Time	ET (min)	level	Δlevel
2218	0	12.48	-5.21
2218	0	12.46	-5.19
2218	0	12.45	-5.18
2218	0	12.43	-5.16
2218	0	12.41	-5.14
2218	0	12.40	-5.13
2218	0	12.38	-5.11
2218	0	12.36	-5.09
2218	0	12.35	-5.08
2218	0	12.33	-5.06
2218	0	12.25	-4.98
2219	0	12.18	-4.91
2219	0	12.12	-4.85
2219	0	12.06	-4.79
2219	0	12.00	-4.73
2219	0	11.95	-4.68
2219	0	11.91	-4.64
2219	0	11.86	-4.60
2219	0	11.82	-4.55
2219	0	11.78	-4.51
2219	0	11.62	-4.35
2219	1	11.51	-4.24
2219	1	11.41	-4.14
2219	1	11.32	-4.05
2219	1	11.24	-3.97
2219	1	11.17	-3.90
2219	1	11.10	-3.83
2219	1	11.05	-3.78
2219	1	10.97	-3.70
2219	1	10.94	-3.67
2219	1	10.89	-3.62
2219	1	10.84	-3.57
2219	1	10.80	-3.53
2219	1	10.76	-3.49
2219	1	10.72	-3.45
2219	1	10.69	-3.41
2219	1	10.65	-3.38
2219	1	10.61	-3.34
2219	1	10.58	-3.31
2219	1	10.55	-3.28
2219	1	10.52	-3.25
2219	1	10.49	-3.22
2219	1	10.48	-3.20
2219	1	10.44	-3.17
2219	1	10.41	-3.14
2219	1	10.39	-3.12
2219	1	10.36	-3.09
2219	1	10.32	-3.05
2219	1	10.31	-3.04
2219	1	10.30	-3.03
2219	1	10.28	-3.01
2219	1	10.27	-3.00
2219	1	10.25	-2.98
2219	1	10.22	-2.95
2219	1	10.21	-2.94
2219	1	10.20	-2.93
2219	1	10.19	-2.92
2219	1	10.18	-2.91
2219	1	10.17	-2.90
2219	1	10.16	-2.89
2219	1	10.15	-2.88
2219	1	10.14	-2.87
2219	1	10.13	-2.86
2219	1	10.12	-2.85
2219	1	10.11	-2.84
2219	1	10.10	-2.83
2219	1	10.09	-2.82
2219	1	10.08	-2.81
2219	1	10.07	-2.80
2219	1	10.06	-2.79
2219	1	10.05	-2.78
2219	1	10.04	-2.77
2219	1	10.03	-2.76
2219	1	10.02	-2.75
2219	1	10.01	-2.74
2219	1	10.00	-2.73
2219	1	10.00	-2.72
2219	1	10.00	-2.71
2219	1	10.00	-2.70
2219	1	10.00	-2.69
2219	1	10.00	-2.68
2219	1	10.00	-2.67
2219	1	10.00	-2.66
2219	1	10.00	-2.65
2219	1	10.00	-2.64
2219	1	10.00	-2.63
2219	1	10.00	-2.62
2219	1	10.00	-2.61
2219	1	10.00	-2.60
2219	1	10.00	-2.59
2219	1	10.00	-2.58
2219	1	10.00	-2.57
2219	1	10.00	-2.56
2219	1	10.00	-2.55
2219	1	10.00	-2.54
2219	1	10.00	-2.53
2219	1	10.00	-2.52
2219	1	10.00	-2.51
2219	1	10.00	-2.50
2219	1	10.00	-2.49
2219	1	10.00	-2.48
2219	1	10.00	-2.47
2219	1	10.00	-2.46
2219	1	10.00	-2.45
2219	1	10.00	-2.44
2219	1	10.00	-2.43
2219	1	10.00	-2.42
2219	1	10.00	-2.41
2219	1	10.00	-2.40
2219	1	10.00	-2.39
2219	1	10.00	-2.38
2219	1	10.00	-2.37
2219	1	10.00	-2.36
2219	1	10.00	-2.35
2219	1	10.00	-2.34
2219	1	10.00	-2.33
2219	1	10.00	-2.32
2219	1	10.00	-2.31
2219	1	10.00	-2.30
2219	1	10.00	-2.29
2219	1	10.00	-2.28
2219	1	10.00	-2.27
2219	1	10.00	-2.26
2219	1	10.00	-2.25
2219	1	10.00	-2.24
2219	1	10.00	-2.23
2219	1	10.00	-2.22
2219	1	10.00	-2.21
2219	1	10.00	-2.20
2219	1	10.00	-2.19
2219	1	10.00	-2.18
2219	1	10.00	-2.17
2219	1	10.00	-2.16
2219	1	10.00	-2.15
2219	1	10.00	-2.14
2219	1	10.00	-2.13
2219	1	10.00	-2.12
2219	1	10.00	-2.11
2219	1	10.00	-2.10
2219	1	10.00	-2.09
2219	1	10.00	-2.08
2219	1	10.00	-2.07
2219	1	10.00	-2.06
2219	1	10.00	-2.05
2219	1	10.00	-2.04
2219	1	10.00	-2.03
2219	1	10.00	-2.02
2219	1	10.00	-2.01
2219	1	10.00	-2.00
2219	1	10.00	-1.99
2219	1	10.00	-1.98
2219	1	10.00	-1.97
2219	1	10.00	-1.96
2219	1	10.00	-1.95
2219	1	10.00	-1.94
2219	1	10.00	-1.93
2219	1	10.00	-1.92
2219	1	10.00	-1.91
2219	1	10.00	-1.90
2219	1	10.00	-1.89
2219	1	10.00	-1.88
2219	1	10.00	-1.87
2219	1	10.00	-1.86
2219	1	10.00	-1.85
2219	1	10.00	-1.84
2219	1	10.00	-1.83
2219	1	10.00	-1.82
2219	1	10.00	-1.81
2219	1	10.00	-1.80
2219	1	10.00	-1.79
2219	1	10.00	-1.78
2219	1	10.00	-1.77
2219	1	10.00	-1.76
2219	1	10.00	-1.75
2219	1	10.00	-1.74
2219	1	10.00	-1.73
2219	1	10.00	-1.72
2219	1	10.00	-1.71
2219	1	10.00	-1.70
2219	1	10.00	-1.69
2219	1	10.00	-1.68
2219	1	10.00	-1.67
2219	1	10.00	-1.66
2219	1	10.00	-1.65
2219	1	10.00	-1.64
2219	1	10.00	-1.63
2219	1	10.00	-1.62
2219	1	10.00	-1.61
2219	1	10.00	-1.60
2219	1	10.00	-1.59
2219	1	10.00	-1.58
2219	1	10.00	-1.57
2219	1	10.00	-1.56
2219	1	10.00	-1.55
2219	1	10.00	-1.54
2219	1	10.00	-1.53
2219	1	10.00	-1.52
2219	1	10.00	-1.51
2219	1	10.00	-1.50
2219	1	10.00	-1.49
2219	1	10.00	-1.48
2219	1	10.00	-1.47
2219	1	10.00	-1.46
2219	1	10.00	-1.45
2219	1	10.00	-1.44
2219	1	10.00	-1.43
2219	1	10.00	-1.42
2219	1	10.00	-1.41
2219	1	10.00	-1.40
2219	1	10.00	-1.39
2219	1	10.00	-1.38
2219	1	10.00	-1.37
2219	1	10.00	-1.36
2219	1	10.00	-1.35
2219	1	10.00	-1.34
2219	1	10.00	-1.33
2219	1	10.00	-1.32
2219	1	10.00	-1.31
2219	1	10.00	-1.30
2219	1	10.00	-1.29
2219	1	10.00	-1.28
2219	1	10.00	-1.27
2219	1	10.00	-1.26
2219	1	10.00	-1.25
2219	1	10.00	-1.24
2219	1	10.00	-1.23
2219	1	10.00	-1.22
2219	1	10.00	-1.21
2219	1	10.00	-1.20
2219	1	10.00	-1.19
2219	1	10.00	-1.18
2219	1	10.00	-1.17
2219	1	10.00	-1.16
2219	1	10.00	-1.15
2219	1	10.00	-1.14
2219	1	10.00	-1.13
2219	1	10.00	-1.12
2219	1	10.00	-1.11
2219	1	10.00	-1.10
2219	1	10.00	-1.09
2219	1	10.00	-1.08
2219	1	10.00	-1.07
2219	1	10.00	-1.06
2219	1	10.00	-1.05
2219	1	10.00	-1.04
2219	1	10.00	-1.03
2219	1	10.00	-1.02
2219	1	10.00	-1.01
2219	1	10.00	-1.00
2219	1	10.00	-0.99
2219	1	10.00	-0.98
2219	1	10.00	-0.97
2219	1	10.00	-0.96
2219	1	10.00	-0.95
2219	1	10.00	-0.94
2219	1	10.00	-0.93
2219	1	10.00	-0.92
2219	1	10.00	-0.91
2219	1	10.00	-0.90
2219	1	10.00	-0.89
2219	1	10.00	-0.88
2219	1	10.00	-0.87
2219	1	10.00	-0.86
2219	1	10.00	-0.85
2219	1	10.00	-0.84
2219	1	10.00	-0.83
2219	1	10.00	-0.82
2219	1	10.00	-0.81
2219	1	10.00	-0.80
2219	1	10.00	-0.79
2219	1	10.00	-0.78
2219	1	10.00	-0.77
2219	1	10.00	-0.76
2219	1	10.00	-0.75
2219	1	10.00	-0.74
2219	1	10.00	-0.73
2219	1	10.00	-0.72
2219	1	10.00	-0.71
2219	1	10.00	-0.70
2219	1	10.00	-0.69
2219	1	10.00	-0.68
2219	1	10.00	-0.67
2219	1	10.00	-0.66
2219	1	10.00	-0.65
2219	1	10.00	-0.64
2219	1	10.00	-0.63
2219	1	10.00	-0.62
2219	1	10.00	-0.61
2219	1	10.00	-0.60
2219	1	10.00	-0.59
2219	1	10.00	-0.58
2219	1	10.00	-0.57
2219	1	10.00	-0.56
2219	1	10.00	-0.55
2219	1	10.00	-0.54
2219	1	10.00	-0.53
2219	1	10.00	-0.52
2219	1	10.00	-0.51
2219	1	10.00	-0.50
2219	1	10.00	-0.49
2219	1	10.00	-0.48
2219	1	10.00	-0.47
2219			



Input 3 (feet)

Time	DT (min)	level	Δlevel
2218	0.257	1.00	5.67
2219	0.348	0.90	5.77
2219	0.424	0.77	5.96
2219	0.507	0.66	6.01
2219	0.599	0.56	6.11
2219	0.674	0.49	6.16
2219	0.757	0.42	6.25
2219	0.848	0.35	6.32
2219	0.924	0.29	6.38
2219	1.007	0.24	6.43
2220	1.380	0.04	6.53
2220	1.713	-0.19	6.77
2220	2.046	-0.21	6.86
2221	2.380	-0.31	6.98
2221	2.713	-0.39	7.06
2221	3.046	-0.47	7.14
2222	3.380	-0.54	7.21
2222	3.713	-0.60	7.27
2222	4.046	-0.66	7.33
2223	4.380	-0.71	7.38
2223	4.713	-0.76	7.43
2223	5.046	-0.81	7.48
2224	5.380	-0.85	7.52
2224	5.713	-0.89	7.56
2224	6.046	-0.93	7.59
2225	6.380	-0.97	7.64
2225	6.713	-1.01	7.68
2225	7.046	-1.04	7.71
2226	7.380	-1.08	7.75
2226	7.713	-1.10	7.77
2226	8.047	-1.14	7.81
2227	8.380	-1.16	7.83
2227	8.713	-1.19	7.86
2227	9.047	-1.22	7.89
2228	9.380	-1.24	7.91
2228	9.713	-1.27	7.94

022336	12	146	-1	43	00	00	18
022338	14	146	-1	53	00	00	20
022340	16	146	-1	61	00	00	22
022342	18	147	-1	69	00	00	24
022344	20	162	-1	75	00	00	26
022346	22	162	-1	81	00	00	28
022348	24	162	-1	85	00	00	30
022350	26	162	-1	89	00	00	32
022352	28	162	-1	94	00	00	34
022354	30	162	-1	97	00	00	36
022356	32	162	-2	91	00	00	38
022358	34	162	-2	85	00	00	40
022360	36	162	-2	78	00	00	42
022362	38	162	-2	71	00	00	44
022364	40	162	-2	64	00	00	46
022366	42	162	-2	57	00	00	48
022368	44	162	-2	50	00	00	50
022370	46	162	-2	43	00	00	52
022372	48	162	-2	36	00	00	54
022374	50	162	-2	29	00	00	56
022376	52	162	-2	22	00	00	58
022378	54	162	-2	15	00	00	60
022380	56	133	-2	8	00	00	62
022382	58	403	-2	1	00	00	64
022384	60	500	-2	4	00	00	66
022386	62	500	-2	7	00	00	68
022388	64	500	-2	10	00	00	70
022390	66	500	-2	13	00	00	72
022392	68	500	-2	16	00	00	74
022394	70	500	-2	19	00	00	76
022396	72	500	-2	22	00	00	78
022398	74	500	-2	25	00	00	80
022400	76	500	-2	28	00	00	82
022402	78	500	-2	31	00	00	84
022404	80	500	-2	34	00	00	86
022406	82	500	-2	37	00	00	88
022408	84	500	-2	40	00	00	90
022410	86	500	-2	43	00	00	92
022412	88	500	-2	46	00	00	94
022414	90	500	-2	49	00	00	96
022416	92	500	-2	52	00	00	98
022418	94	500	-2	55	00	00	100
022420	96	500	-2	58	00	00	102
022422	98	500	-2	61	00	00	104
022424	100	500	-2	64	00	00	106
022426	102	250	-2	67	00	00	108
022428	104	250	-2	70	00	00	110
022430	106	250	-2	73	00	00	112
022432	108	250	-2	76	00	00	114
022434	110	250	-2	79	00	00	116
022436	112	250	-2	82	00	00	118
022438	114	250	-2	85	00	00	120
022440	116	250	-2	88	00	00	122
022442	118	250	-2	91	00	00	124
022444	120	250	-2	94	00	00	126
022446	122	250	-2	97	00	00	128
022448	124	250	-2	100	00	00	130
022450	126	250	-2	103	00	00	132
022452	128	250	-2	106	00	00	134
022454	130	250	-2	109	00	00	136
022456	132	250	-2	112	00	00	138
022458	134	250	-2	115	00	00	140
022460	136	250	-2	118	00	00	142
022462	138	250	-2	121	00	00	144
022464	140	250	-2	124	00	00	146
022466	142	250	-2	127	00	00	148
022468	144	250	-2	130	00	00	150
022470	146	250	-2	133	00	00	152
022472	148	250	-2	136	00	00	154
022474	150	250	-2	139	00	00	156
022476	152	250	-2	142	00	00	158
022478	154	250	-2	145	00	00	160
022480	156	250	-2	148	00	00	162
022482	158	250	-2	151	00	00	164
022484	160	250	-2	154	00	00	166
022486	162	250	-2	157	00	00	168
022488	164	250	-2	160	00	00	170
022490	166	250	-2	163	00	00	172
022492	168	250	-2	166	00	00	174
022494	170	250	-2	169	00	00	176
022496	172	250	-2	172	00	00	178
022498	174	250	-2	175	00	00	180
022500	176	250	-2	178	00	00	182
022502	178	250	-2	181	00	00	184
022504	180	250	-2	184	00	00	186
022506	182	250	-2	187	00	00	188
022508	184	250	-2	190	00	00	190
022510	186	250	-2	193	00	00	192
022512	188	250	-2	196	00	00	194
022514	190	250	-2	199	00	00	196
022516	192	250	-2	202	00	00	198
022518	194	250	-2	205	00	00	200
022520	196	250	-2	208	00	00	202
022522	198	250	-2	211	00	00	204
022524	200	250	-2	214	00	00	206
022526	202	250	-2	217	00	00	208
022528	204	250	-2	220	00	00	210
022530	206	250	-2	223	00	00	212
022532	208	250	-2	226	00	00	214
022534	210	250	-2	229	00	00	216
022536	212	250	-2	232	00	00	218
022538	214	250	-2	235	00	00	220
022540	216	250	-2	238	00	00	222
022542	218	250	-2	241	00	00	224
022544	220	250	-2	244	00	00	226
022546	222	250	-2	247	00	00	228
022548	224	250	-2	250	00	00	230
022550	226	250	-2	253	00	00	232
022552	228	250	-2	256	00	00	234
022554	230	250	-2	259	00	00	236
022556	232	250	-2	262	00	00	238
022558	234	250	-2	265	00	00	240
022560	236	250	-2	268	00	00	242
022562	238	250	-2	271	00	00	244
022564	240	250	-2	274	00	00	246
022566	242	250	-2	277	00	00	248
022568	244	250	-2	280	00	00	250
022570	246	250	-2	283	00	00	252
022572	248	250	-2	286	00	00	254
022574	250	250	-2	289	00	00	256
022576	252	250	-2	292	00	00	258
022578	254	250	-2	295	00	00	260
022580	256	250	-2	298	00	00	262
022582	258	250	-2	301	00	00	264
022584	260	250	-2	304	00	00	266
022586	262	250	-2	307	00	00	268
022588	264	250	-2	310	00	00	270
022590	266	250	-2	313	00	00	272
022592	268	250	-2	316	00	00	274
022594	270	250	-2	319	00	00	276
022596	272	250	-2	322	00	00	278
022598	274	250	-2	325	00	00	280
022600	276	250	-2	328	00	00	282
022602	278	250	-2	331	00	00	284
022604	280	250	-2	334	00	00	286
022606	282	250	-2	337	00	00	288
022608	284	250	-2	340	00	00	290
022610	286	250	-2	343	00	00	292
022612	288	250	-2	346	00	00	294
022614	290	250	-2	349	00	00	296
022616	292	250	-2	352	00	00	298
022618	294	250	-2	355	00	00	300
022620	296	250	-2	358	00	00	302
022622	298	250	-2	361	00	00	304
022624	300	250	-2	364	00	00	306
022626	302	250	-2	367	00	00	308
022628	304	250	-2	370	00	00	310
022630	306	250	-2	373	00	00	312
022632	308	250	-2	376	00	00	314
022634	310	250	-2	379	00	00	316
022636	312	250	-2	382	00	00	318
022638	314	250	-2	385	00	00	320
022640	316	250	-2	388	00	00	322
022642	318	250	-2	391	00	00	324
022644	320	250	-2	394	00	00	326
022646	322	250	-2	397	00	00	328
022648	324	250	-2	400	00	00	330
022650	326	250	-2	403	00	00	332
022652	328	250	-2	406	00	00	334
022654	330	250	-2	409	00	00	336
022656	332	250	-2	412	00	00	338
022658	334	250	-2	415	00	00	340
022660	336	250	-2	418	00	00	342
022662	338	250	-2	421	00	00	344
022664	340	250	-2	424	00	00	346
022666	342	250	-2	427	00	00	348
022668	344	250	-2	430	00	00	350
022670	346	250	-2	433	00	00	352
022672	348	250	-2	436	00	00	354
022674	350	250	-2	439	00	00	356
022676	352	250	-2	442	00	00	358
022678	354	250	-2	445	00	00	360
022680	356	250	-2	448	00	00	362
022682	358	250	-2	451	00	00	364
022684	360	250	-2	454	00	00	366
022686	362	250	-2	457	00	00	368
022688	364	250	-2	460	00	00	370
022690	366	250	-2	463	00	00	372
022692	368	250	-2	466	00	00	374
022694	370	250	-2	469	00	00	376
022696	372	250	-2	472	00	00	378
022698	374	250	-2	475	00	00	380
022700	376	250	-2	478	00	00	382
022702	378	250	-2	481	00</		

If the pump shuts off before I get back in the morning (runs out of gas, or just dies) 8

1. Hold down the **SHIFT** key (lower left hand corner) and at the same time press the key **K₅** (dark key; fifth key from left, top row, just below screen) which is right below the word RECVRY on screen.

2. The screen will read:

Press **START** to begin recovery
Press **ENABLE** to enable starting by remote switch....etc, etc

START

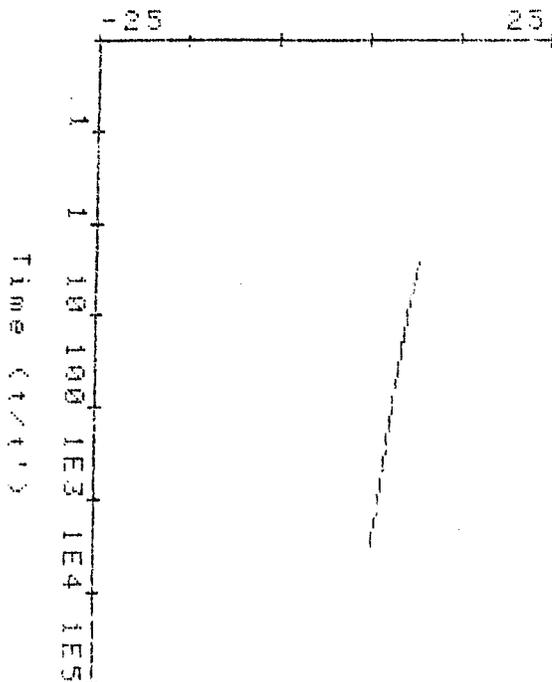
ENABLE

quit

3. Hit the dark key directly below the word **START** immediately - it will begin on its own.

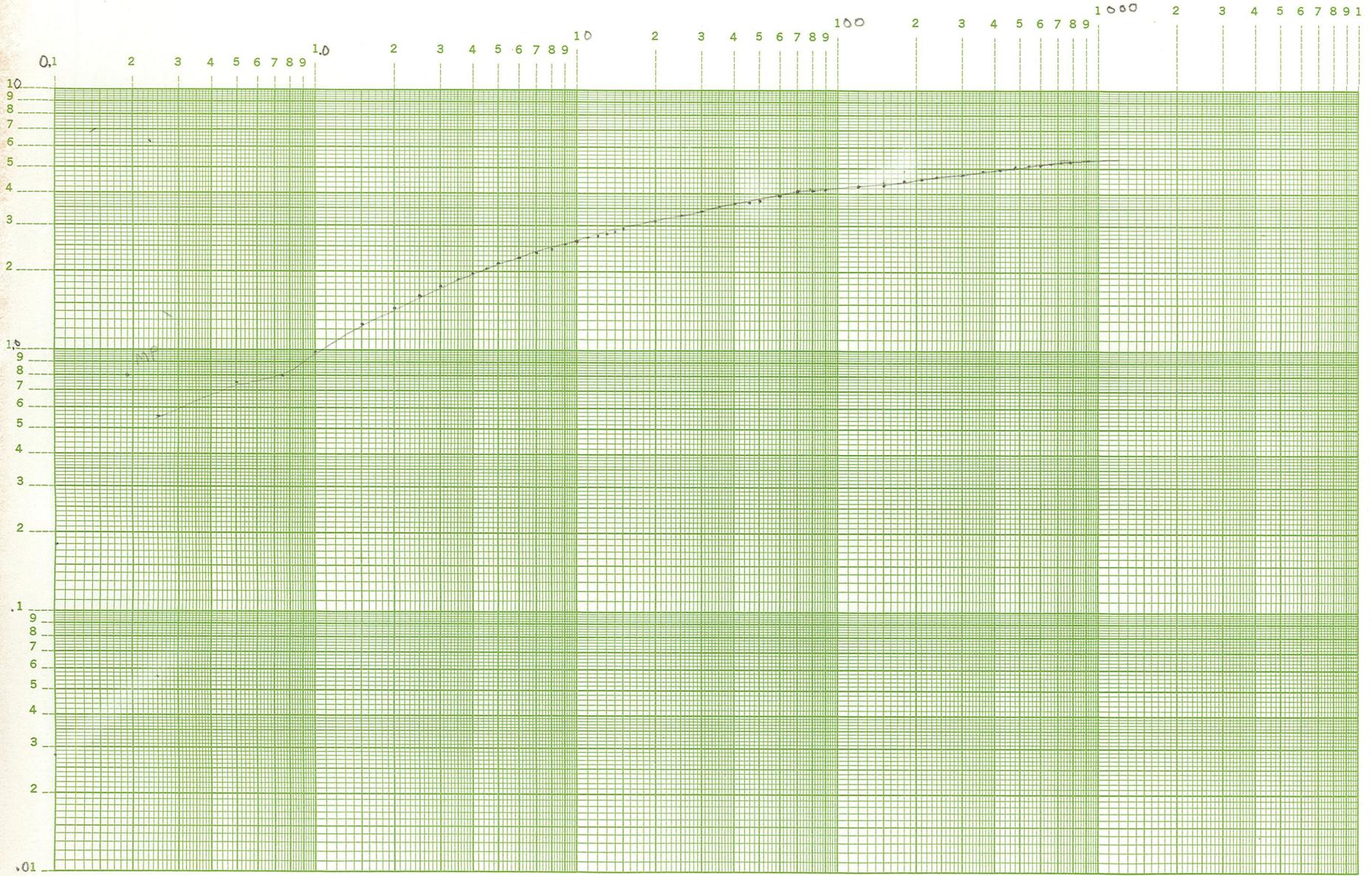
4. Try to get hand readings as accurately as you can - especially the 2" well.

Input 3 (Δfeet)

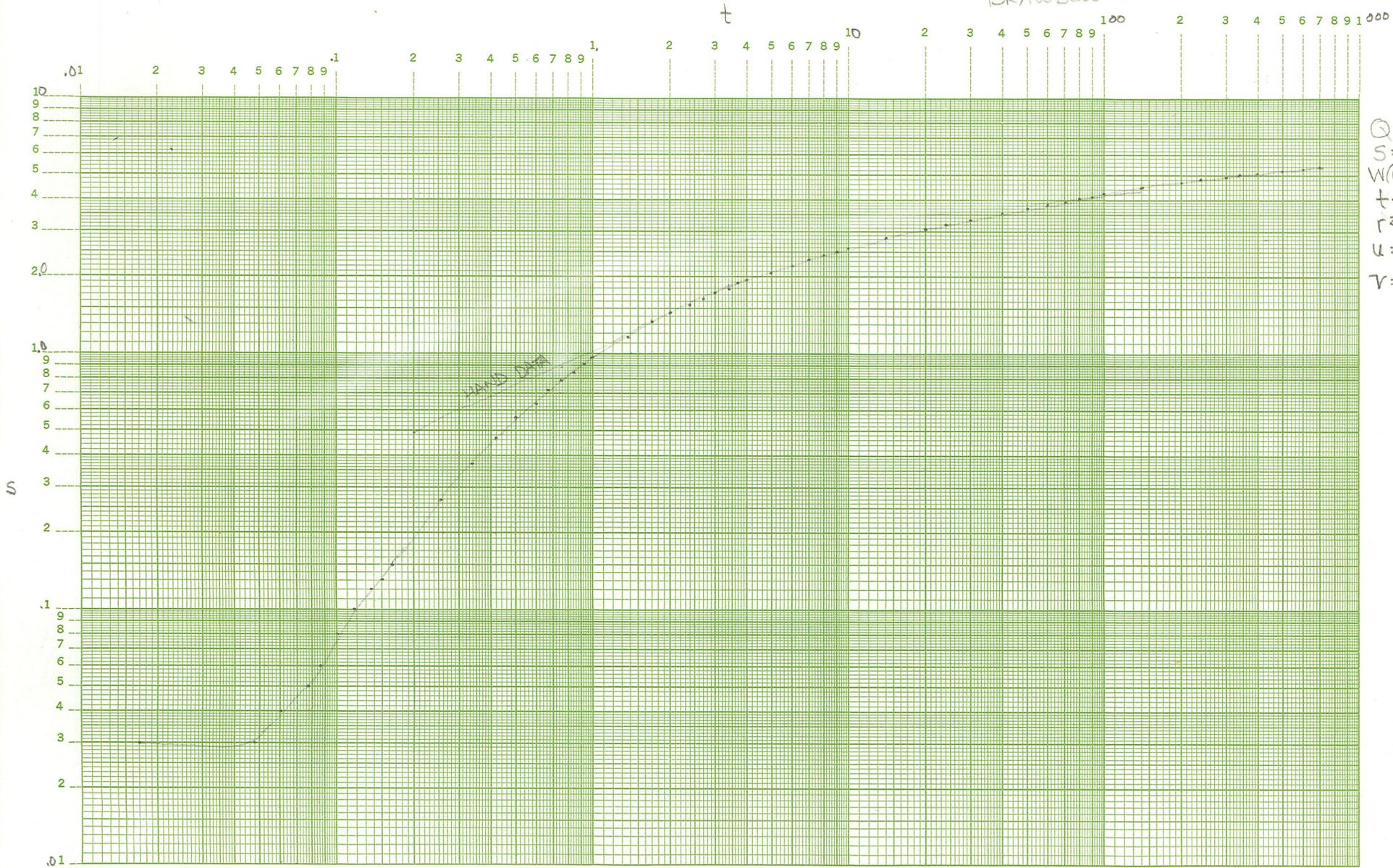


SE200A manufactured by
In-situ, Inc.
Laramie Wyoming

RTA-9I
DRAWDOWN
OB#1



46 7522 RTA-9I
INSTTU
OB#1
DRAWDOWN



Q = 90
S = 0.80
W(u) = 1
t = 0.19
r² = (70.5)²
u = 1
V = 0.25

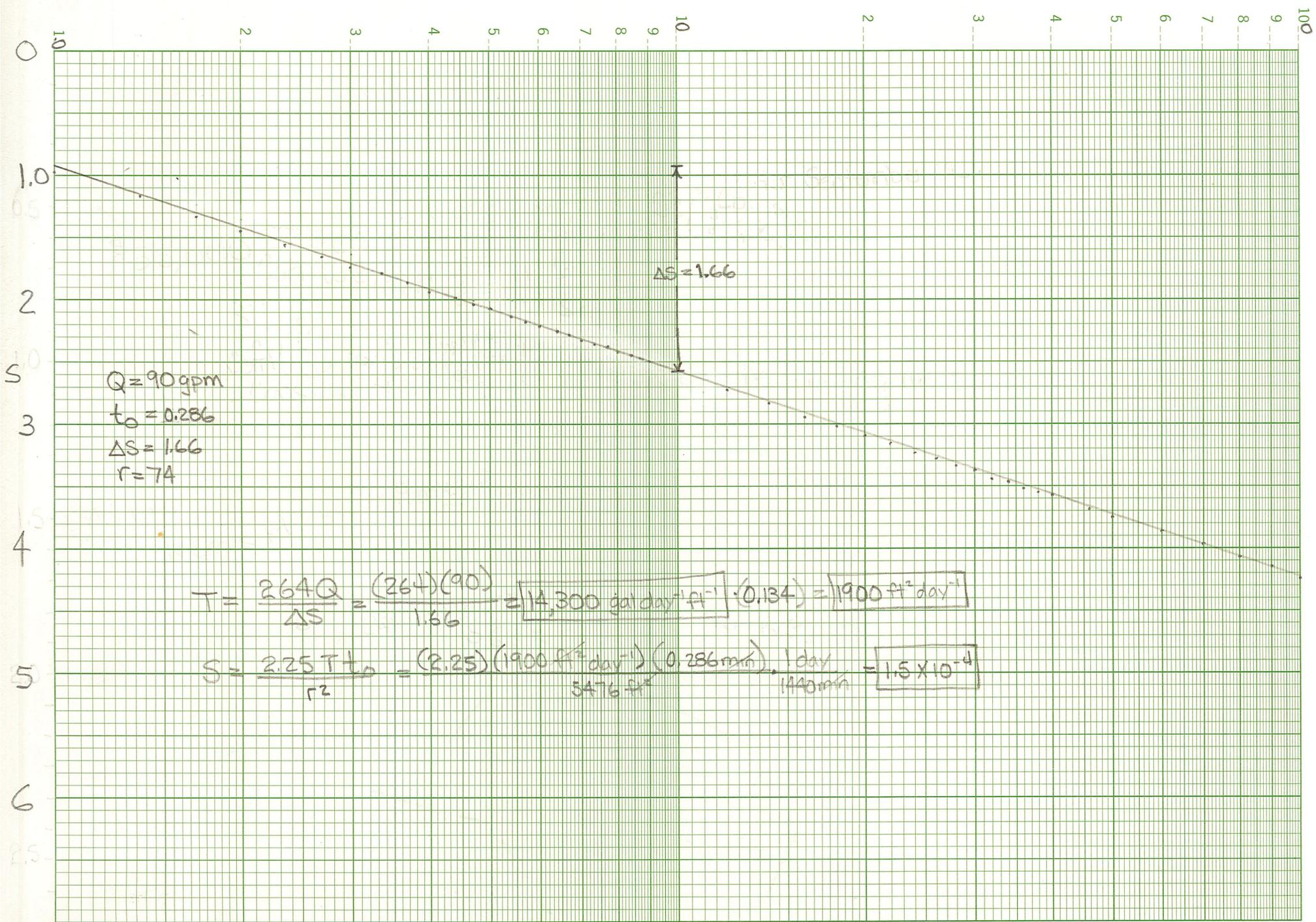
$$T = \frac{Q}{4\pi S} W(u) = \frac{90 \text{ Gal min}^{-1}}{(4)(\pi)(0.8 \text{ ft})} \cdot 1 \cdot \frac{1440 \text{ min}}{1 \text{ day}} = \boxed{12,900 \text{ gal day}^{-1} \text{ ft}^{-1}} \cdot 0.134 \text{ ft}^3 \text{ gal}^{-1} = \boxed{1730 \text{ ft}^2 \text{ day}^{-1}}$$

$$S = 4T \left(\frac{tu}{r^2} \right) = \frac{(4)(1730 \text{ ft}^2 \text{ day}^{-1})(1)(0.19 \text{ min})}{(4970 \text{ ft}^2)} \cdot \frac{(1 \text{ day})}{(1440 \text{ min})} = \boxed{1.8 \times 10^{-4}} \quad \frac{K'}{b'} = 4T \frac{V^2}{r^2} = 6.5 \times 10^{-3} \text{ gpd/ft}^3$$

t

46 4970

RTA-9I



$Q = 90 \text{ gpm}$
 $t_0 = 0.286$
 $\Delta S = 1.66$
 $r = 74$

$$T = \frac{264Q}{\Delta S} = \frac{(264)(90)}{1.66} = \boxed{14,300 \text{ gal day}^{-1} \text{ ft}^{-1}} \cdot (0.134) = \boxed{1900 \text{ ft}^2 \text{ day}^{-1}}$$

$$S = \frac{2.25 T t_0}{r^2} = \frac{(2.25)(1900 \text{ ft}^2 \text{ day}^{-1})(0.286 \text{ min})}{5476 \text{ ft}^2} \cdot \frac{1 \text{ day}}{1440 \text{ min}} = \boxed{1.5 \times 10^{-4}}$$

+



PUMPING TEST DATA

Location: RTA-9I Date: 5/9

Pumped Well:

Depth 80 ft. Casing To 50 ft. Diameter 6 in.
 Casing 0 to 50 ft. Diameter 6 in.
 Disc. Pipe Diameter 4 in. Orifice Diameter 2 in.
 Q 90 gpm.

Observation Wells:

Depth: 1=80 ft. 2=180 ft. 3=___ ft. 4=___ ft.
 Casing Diameter: 1=2 in. 2=2 in. 3=___ in. 4=___ in.
 Casing To: 1=50 ft. 2=150 ft. 3=___ ft. 4=___ ft.
 Dist. (r): 1=70.5 ft. 2=6.5 ft. 3=___ ft. 4=___ ft.
 Screen: 1=50 to 80 ft. 2=___ to ___ ft. 3=___ to ___ ft.
 Screen Diameter: 1=2 in. 2=___ in. 3=___ in. 4=___ in.

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)			
				Obs. 1 Pumped	Obs. 1	Recovery	Obs. 3
0913	0	In. H ₂ O	Q gpm	7.51	0.28		
	15s			7.79	0.56		
	30s			7.98	0.75		
	45s			8.03	0.80		
0914	1.0M	43	96	8.72	0.98		
	1.5			8.50	1.26	11.77	
915	2.0			8.69	1.45	11.39	
	2.5			8.85	1.61	11.28	
916	3.0			9.00	1.76	11.14	
	3.5			9.10	1.86	11.0	
917	4.0			9.20	1.96	11.00	
	4.5			9.29	2.05	10.91	

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)			
				Obs. 1 Pumped	Obs. 1	Obs. 2 RECOVERY	Obs. 3 RECOVERY
918	5	in.	Q	9.37	2.13	10.85	
919	6			9.51	2.27	10.67	
920	7			9.62	2.38	10.52	
921	8			9.69	2.45	10.43	
922	9			9.80	2.56	10.34	
923	10	4 1/2"	94	9.86	2.62	10.25	
924	11			9.91	2.70	10.18	
925	12			10.00	2.76	10.15	
926	13			10.07	2.80	10.12	
927	14			10.10	2.86	10.06	
928	15			10.17	2.93	10.02	
933	20			10.10	3.16	9.87	
938	25			10.09	3.30	9.71	
943	30	3 1/2"	91	10.66	3.42	9.62	
948	35			10.82	3.58	9.45	
953	40			10.91	3.67	9.39	
958	45			10.95	3.71	9.31	
1003	50			11.03	3.79	9.21	
1013	60	3 7/4"	89	11.18	3.94	9.03	
1023	70			11.29	4.05	8.96	
1033	80			11.35	4.11	8.86	
1043	90			11.43	4.19	8.78	
1113	120			11.61	4.27	8.57	
1143	150			11.78	4.34	8.42	
1213	180			11.92	4.48	8.29	
1243	210			12.03	4.53	8.18	
1313	240			12.11	4.61	8.09	
1413	300			12.23	4.73	7.94	
1513	360	3 5/2"	87	12.35	4.86	7.84	
1613	420	3 1/2"	86	12.47	4.98	7.75	
1713	480			12.53	5.04	7.68	
1813	540			12.59	5.10	7.61	
1913	600			12.65	5.16	7.54	

PUMPING TEST DATA

Location: RTA-9 I Date: 5/9

Pumped Well:

Depth 80 ft. Casing To 50 ft. Diameter 6 in.
 Casing 0 to 50 ft. Diameter 6 in.
 Disc. Pipe Diameter 4 in. Orifice Diameter 2 in.
 Q 90 gpm.

Observation Wells:

Depth: 1= 80 ft. 2= 180 ft. 3= ft. 4= ft.
 Casing Diameter: 1= 2 in. 2= 2 in. 3= in. 4= in.
 Casing To: 1= 50 ft. 2= 150 ft. 3= ft. 4= ft.
 Dist. (r): 1= 70.5 ft. 2= 6.5 ft. 3= ft. 4= ft.
 Screen: 1= 50 to 80 ft. 2= to ft. 3= to ft.
 Screen Diameter: 1= 2" in. 2= in. 3= in. 4= in.

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)				
				Pumped	Obs. 1	Obs. 2	Obs. 3	Obs. 4
0913	0	In. H ₂ O	Q gpm	6.67	-			
	15s			14.94	8.27			
	30s			15.32	8.65			
	45s			15.70	9.03			
0914	1mi			16.00	9.33			
	1.5			16.27	9.60			
0915	2.0			16.53	9.86			
	2.5			16.70	10.03			
0916	3.0			16.79	10.12			
	3.5			16.94	10.27			
0917	4.0			16.99	10.32			
	4.5			17.07	10.40			

Time	Elapsed Time (t)	Manometer Reading (in.)	gpm	Drawdown or Recovery (ft.)				
				Pumped	Obs. 1	Obs. 2	Obs. 3	Obs. 4
0918	5.0	in.	Q	17.16	10.49			
0919	6			17.28	10.61	9.75		
0920	7			17.38	10.71	9.50		
0921	8			17.47	10.80	9.36		
0922	9			17.54	10.87	9.24		
0923	10			17.59	10.92	9.20		
0924	11			17.65	10.98	9.15		
0925	12			17.76	11.01	9.08		
0926	13			17.76	11.01	9.05		
0927	14			17.80	11.11	8.99		
0928	15			17.92	11.23	8.96		
0933	20			18.17	11.48	8.84		
0938	25			18.33	11.64	8.67		
0943	30			18.40	11.81	8.62		
0948	35			18.57	11.89	8.48		
0953	40			18.65	11.96	8.39		
0958	45			18.78	12.09	8.30		
1003	50			18.87	12.18	8.25		
1013	60			18.92	12.23	8.08		
1023	70			19.02	12.33	8.00		
1033	80			19.12	12.43	7.94		
1043	90			19.18	12.49	7.85		
1113	120			19.37	12.68	7.59		
1143	150			19.50	12.81	7.44		
1213	180			19.60	12.91	7.31		
1243	210			19.69	13.00	7.19		
1313	240			19.75	13.06	7.11		
1413	300			19.84	13.15	6.96		
1513	360			19.95	13.26	6.85		
1613	420			20.07	13.33	6.77		
1713	480			20.11	13.42	6.71		
1813	540			20.14	13.45	6.67		
1913	600			20.20	13.51	6.61		

LIMESTONE

RTA-9 ①

TOC = 15' L.S. 180' w/ 150' casing
4 inch pipe / 3" orifice
Initial water level → 6.2' TOC

Temp. - 24.8°C Cond - 2700

Begin pumping @ 1120 4" pipe / 3" orf

Time	Flow	Ft. below L.S.
0:00	0.0	4.7
1:00	3.2	14.6
2:00	3.2	14.6
3:00	3.2	14.7
4:00	3.2	14.9
5:00	3.2	15.0
6	3.2	↓
7	3.2	15.0
		↓
9		16.5
11		16.5
		↓
15	↓	16.6
16	5.5	20.1

LEVEL

17	5,5		20,1
18			20,1
19			20,1
20			20,1
22			20,1
24	5,2		20,1
26	5,2		20,2
30	5,2		20,1

← LOST PRIME →

- 31
- 32
- 33
- 34
- 35
- 37
- 39
- 41
- 43
- 46
- 47
- 48
- 49

RTA - 9I DRAWDOWN 5/9-5/10

Well	Input No.	TRANSDUCER		Length of Hole (ft)	Distance (r) (ft)	WT
		S/N	Scale Factor			
PUMPED	3	113	9.96	25'	0	6.67
OB#1	1	38	9.96	30'	70.5'	7.27
OB#2	2	171	49.38	30'	6.5'	6.72

$$Q = KA \cdot 8.025 \sqrt{h} = (0.58)(\pi)(8.025)(\sqrt{h}) = 14.62(\sqrt{h})$$

$$h = \left(\frac{Q}{14.62}\right)^2$$

Note: At 1002 - put more transducer line in pumped well due to fact that the change recorded by hand vs. the insitu ^{was off} - I was afraid that it was too shallow. So take drawdown from that point on.

HRS	Tony	Joan	#1	#2	#3	
			1026	4.00	0.0	171
M	10	8	1614	5.13	0.09	263
T	9 1/2 (10)	14 1/2		1.13	0.09	263
W	4 1/2 (5)	11				
R	(12)					

2220 Pump shut off for the third time w/ still a half of tank of gasoline - pumps fucked! Had to restart twice before I add gas w/ ~~1/2~~ 1/2 tank remaining - would die out, then pick up & repeat - what night!

missed the first min of readings on OB*/
missed the first 5 min on the pumped - Oh well
w/ only one man... to bad so sad!

RTA-5 I

TD 43.5

4" ~~sch. 80~~ pvc / 2" orifice

~~Q₁~~

initial water level → 10.30

Water Sample

S5A

29" = Q₁ 13.21 20 min

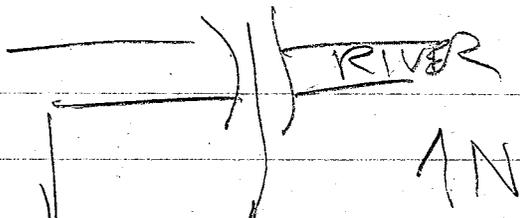
1510

63" = Q₂ 17.14 20 min

1-2

98" Q₃ 19.27 20 min

PH Myers



LABELLER

SR 80

Z9

~~RTR-9~~

12-13 miles

~~RTR-8~~

SEARS RD

A
DUDA'S
SON

CR 832

SR 29

CHURCH RD

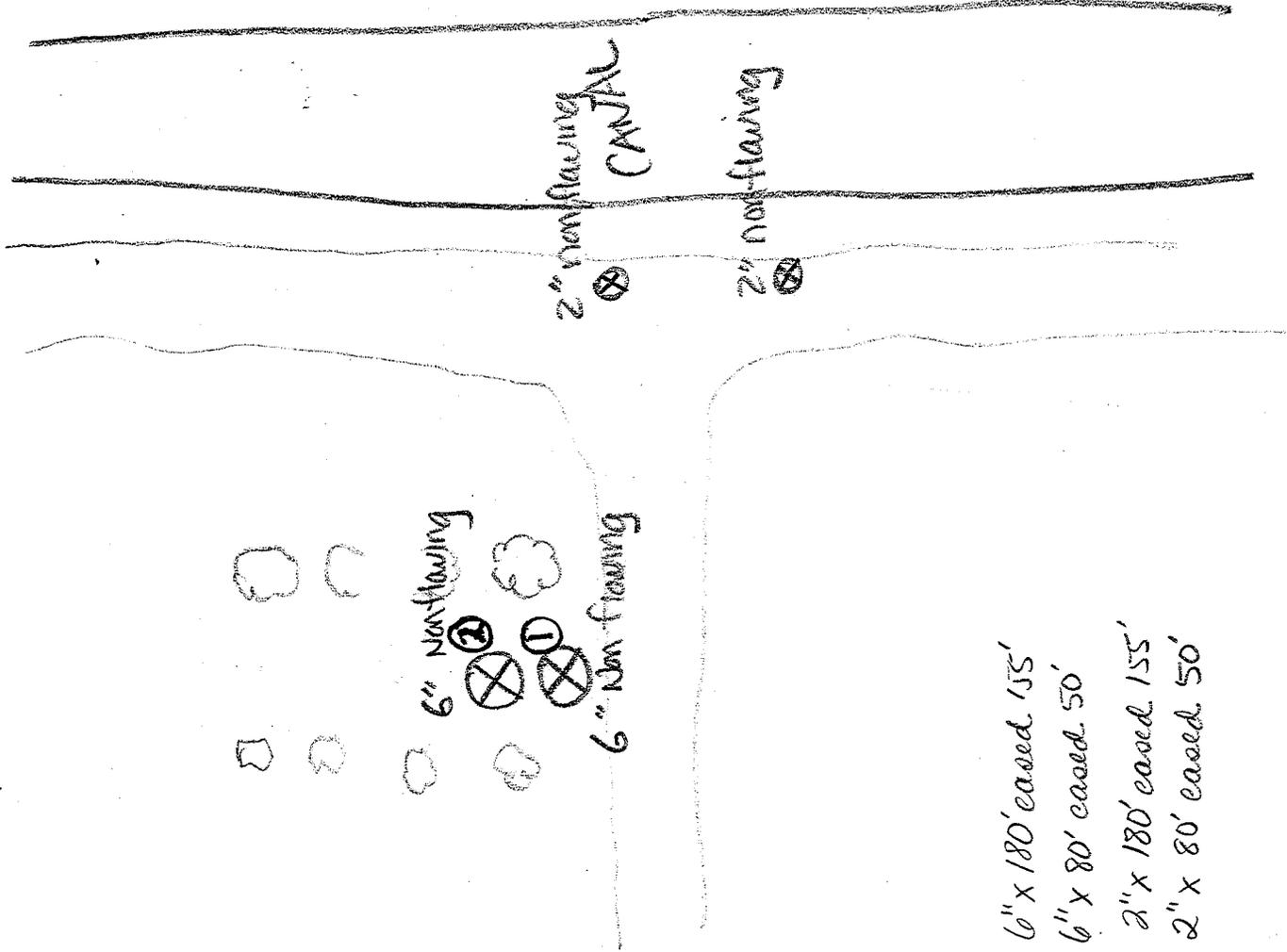
~~RTR-5~~

SHELL
ECLA

RTA-9

DUDA'S PROPERTY

56 T44 R28



6" x 180' cased 155'

6" x 80' cased 50'

2" x 180' cased 155'

2" x 80' cased 50'

WELL CONSTRUCTION PERMIT APPLICATION AND PERMIT

Send to: WATER WELL PERMITTING, R.C.
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX "V"
3301 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA 33402
PHONE: (305) 686-8800 TOLL FREE: 1-800-432-2045

For use by SWMD personnel only
Date: 2/19/85
Permit No. SFOA195-C
Well #:

FEE SCHEDULE
Public Supply less than 6 inches \$35.00
Public Supply six inches or greater \$35.00
Non-Public Supply six inches or greater \$30.00
Abandonment No Fee

APPLICATION TO SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR: New Well Construction Well Abandonment Repair
WATER USE PERMIT: Request submitted concurrently; Permit granted; Permit No. 26005510

OWNER, BUSINESS, OR CORPORATION

NAME DUDA & SON
ADDRESS RT. 29 PO BOX 788
CITY LABELLE STATE FL ZIP 33906
PHONE (813) 675-0545

CONSULTING ENGINEER OR GEOLOGIST

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE () _____

WELL CONTRACTOR

NAME Mc GREGOR PUMP CO. INC
ADDRESS P.O. BOX 6577
CITY FT. MYERS STATE FL ZIP 33906
PHONE (813) 481-0033
LICENSE NUMBER 2020

DRILLER

NAME KEU LOVEJOY
ADDRESS SAME
CITY _____ STATE _____ ZIP _____
PHONE () _____
REGISTRATION NUMBER _____

WELL LOCATION RT. 80 - ACROSS FROM PT. LABELLE
SITE ADDRESS OR CLOSEST TWO ROADS WITH DISTANCE TO WELL

COUNTY HENDRY TWP S RGE 29 E
-OR- 1/4 SE 1/4 NW 1/4 SEC 12
LATITUDE _____ LONGITUDE _____
(to nearest second)

PWS well location must be staked in the field for inspection purposes.

WELL USE: Private Well Public Water Supply Test Monitor
Irrigation Fire Well Other _____

Note: For PWS attach SWMD Form 0195 and 4 copies of site plan.

PUMP SPECIFICATIONS: Pump Type Cent Capacity 100 GPM
Pump Size 5 H.P. Intake Depth 30 FT (from ground) _____

SPECIFIC CAPACITY: _____ GPM/FT

EXPECTED USAGE: 75000 Gallons per day DURING DRY SEASON

CONSTRUCTION SPECIFICATIONS: Rotary with MUD or Air , Casing Driven , Cable Tool , Jetting

Borehole 12" diameter.

Surface or outside Casing will be _____ (in) diameter x _____ (ft) depth.

Grouted bottom to top Bottom 5, Top 20 with _____ # of bags.

Single or inside casing will be 8" (in) diameter x 30 (ft) depth.

Grouted bottom to top Bottom 5, Top 20 with _____ # of bags. TOP TO BOTTOM

Grout composition with % additives: PORTLAND FL

Total depth of well 40 (ft). Open hole from 30 (ft) to 40 (ft).

Screen, s. steel PVC Fiberglass , slot size _____ , diameter _____ (in) x _____ (ft)

Screened from _____ (ft) to _____ (ft).

Casing Material: PVC Scudule _____
Black Steel Galv. _____ lbs/ft.

ANTICIPATED STARTING DATE: FEB 22, 1985

METHOD OF PLUGGING OR ABANDONMENT _____

DESCRIPTION OF WELL REPAIR _____

I HEREBY CERTIFY THAT THE CONSTRUCTION, ABANDONMENT OR REPAIR OF THE WELL WILL COMPLY WITH THE RULES OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT, WILL NOT ADVERSELY AFFECT THE WATER RESOURCES, AND THAT A WATER USE PERMIT, IF NEEDED, HAS OR WILL BE OBTAINED FOR THIS PROJECT PRIOR TO COMMENCEMENT OF WELL CONSTRUCTION. I FURTHER AGREE TO PROVIDE A WELL COMPLETION REPORT TO SOUTH FLORIDA WATER MANAGEMENT DISTRICT WITHIN 30 DAYS FROM COMPLETION OF THE WELL. ISSUANCE OF A PERMIT PURSUANT TO THIS APPLICATION DOES NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY TO ACQUIRE ANY NECESSARY APPROVALS FROM ANY OTHER FEDERAL, STATE, OR LOCAL GOVERNMENTAL AGENCIES.

Mark W. Gatt
SIGNATURE OF OWNER OR AUTHORIZED AGENT

DATE 2/12/85
DO NOT WRITE BELOW THIS LINE

Bernetha Lovejoy
CONTRACTOR'S SIGNATURE

DATE 2/6/85
PERMIT ACTION

Permit Rejected () Reason _____

Permit Granted () Conditions or Variances _____

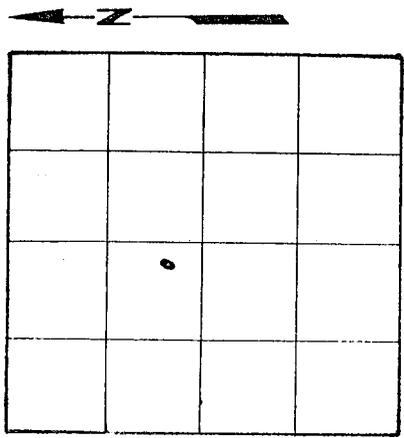
Well Cuttings Required: () No () Yes

SIGNATURE OF AUTHORIZED DISTRICT REPRESENTATIVE: _____

PERMIT VALID FOR SIX MONTHS FROM THIS DATE: _____

APPLICATION FEE ENCLOSED \$ _____

Planar Coordinates _____ E _____ N



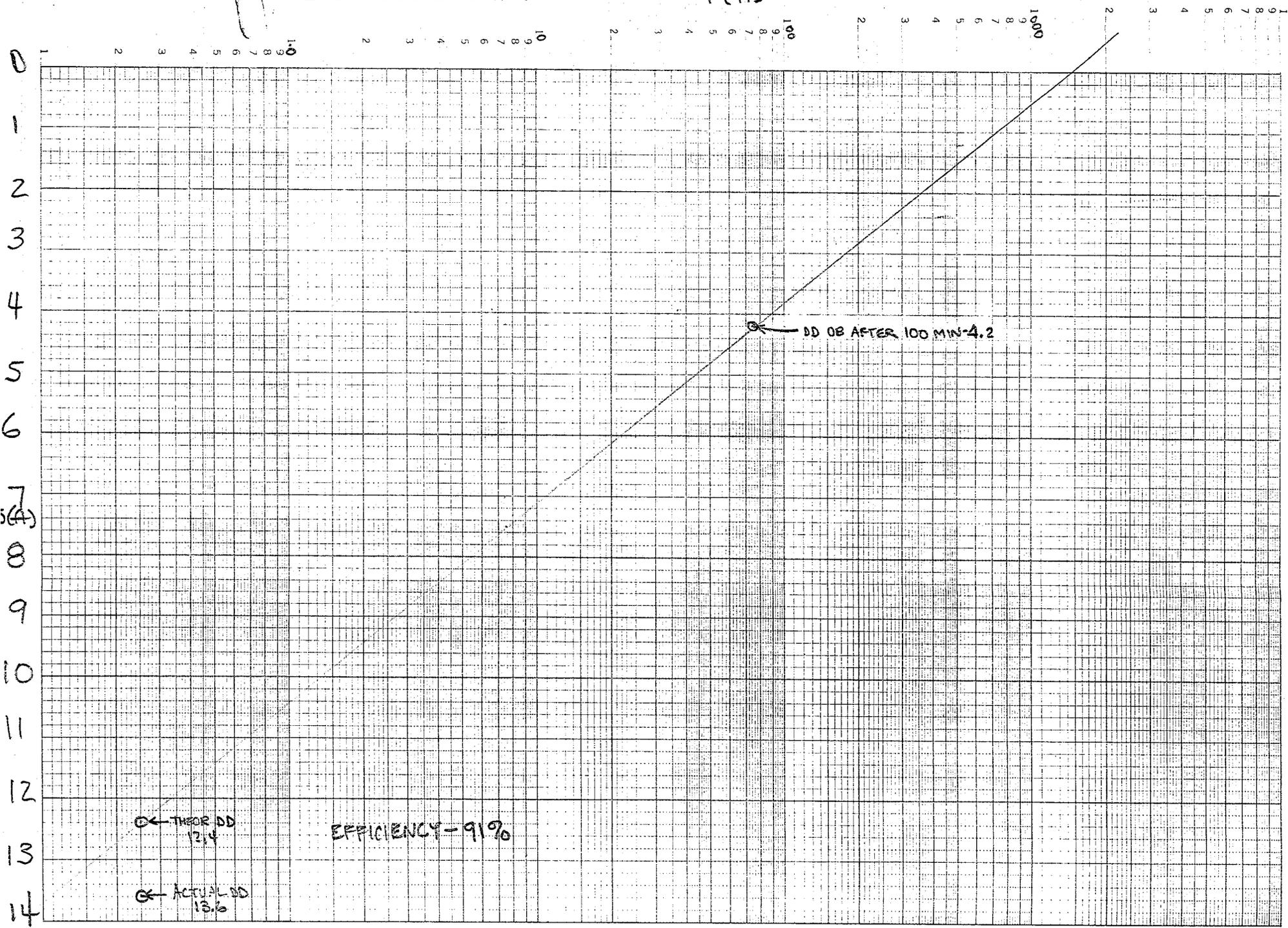
RECEIVED
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RESOURCE CONSERVATION DISTRICT

DISTANCE-DRAWDOWN

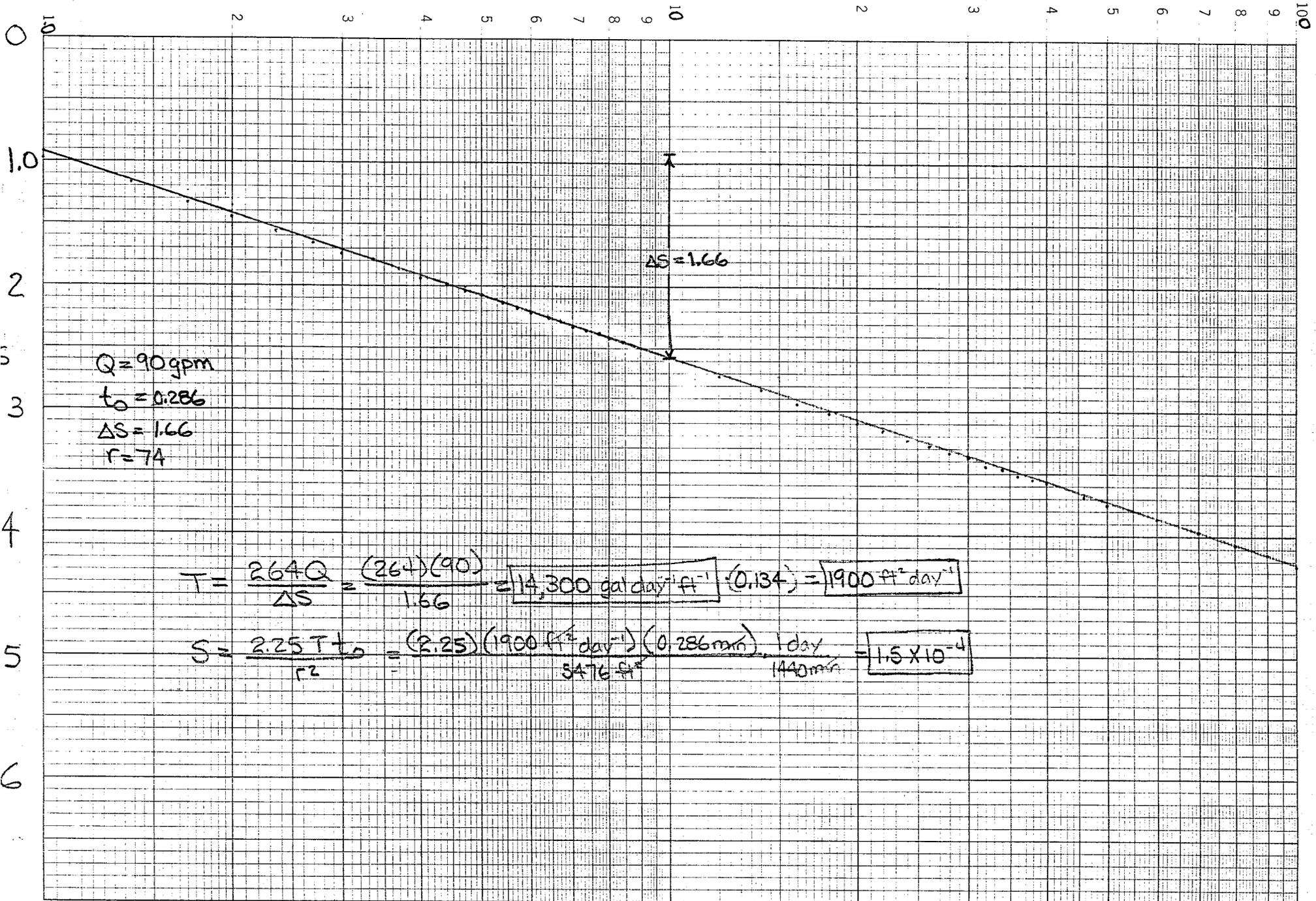
K-M SEMI-LOGARITHMIC 5 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

$r(r)$

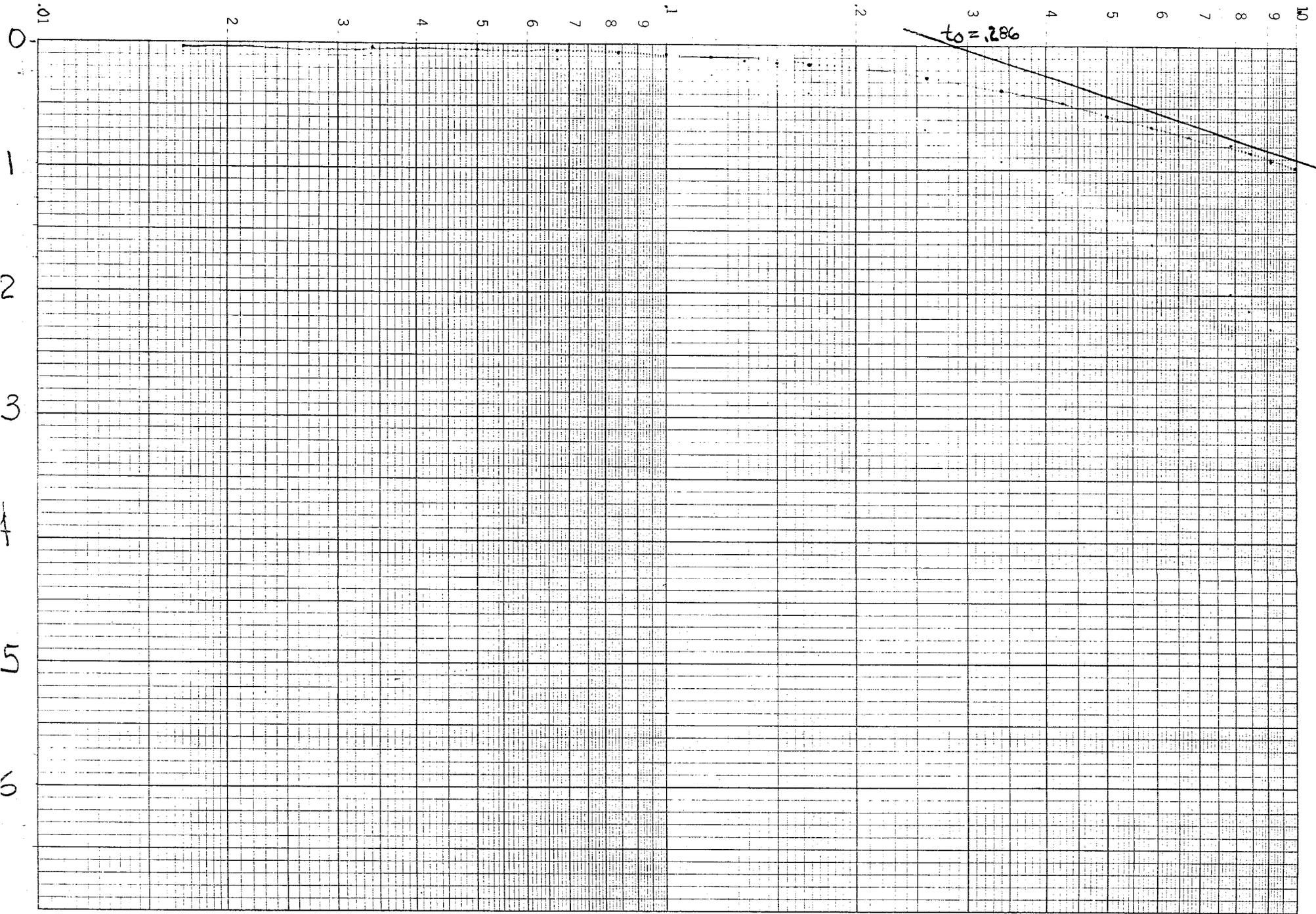
46 6210



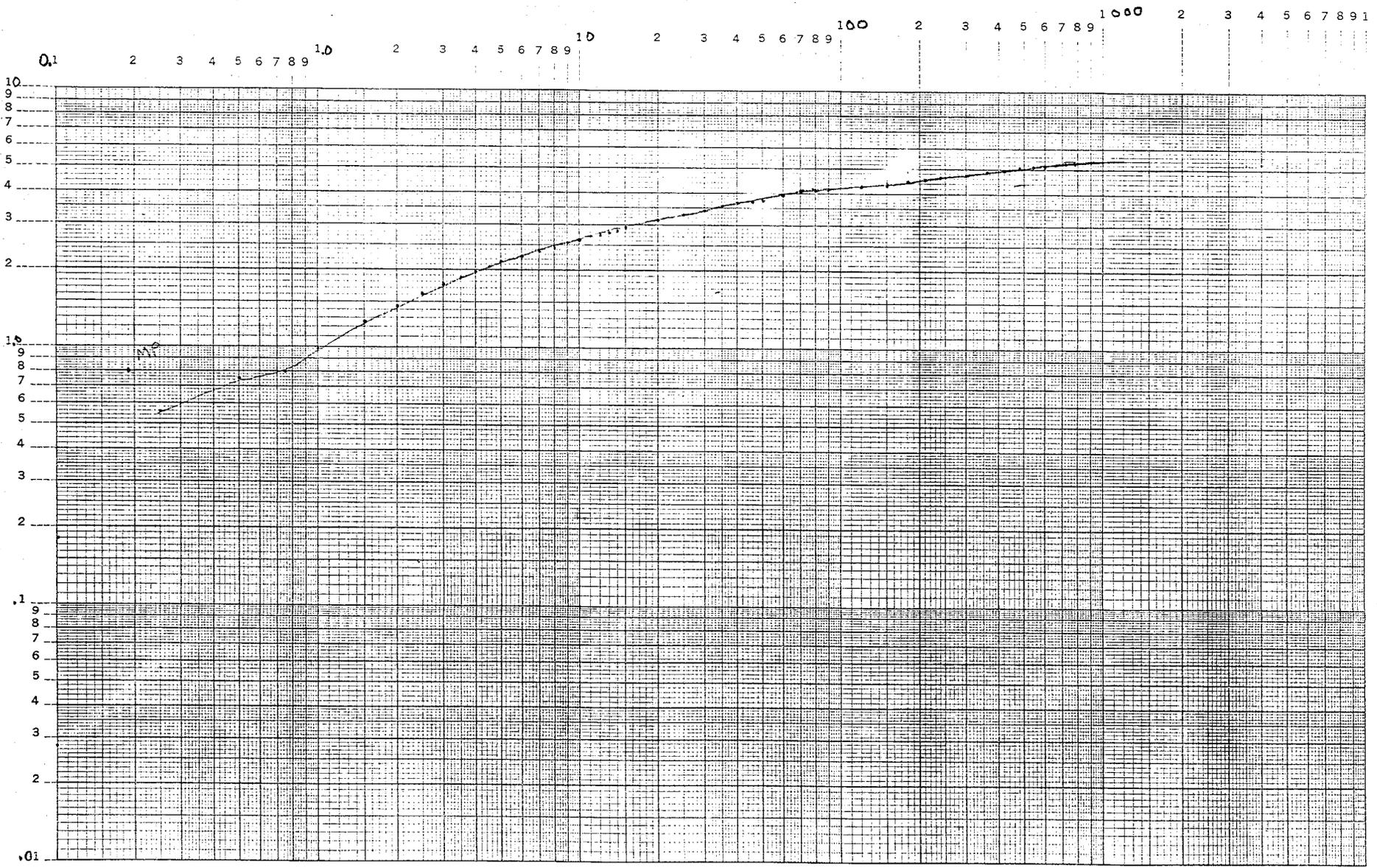
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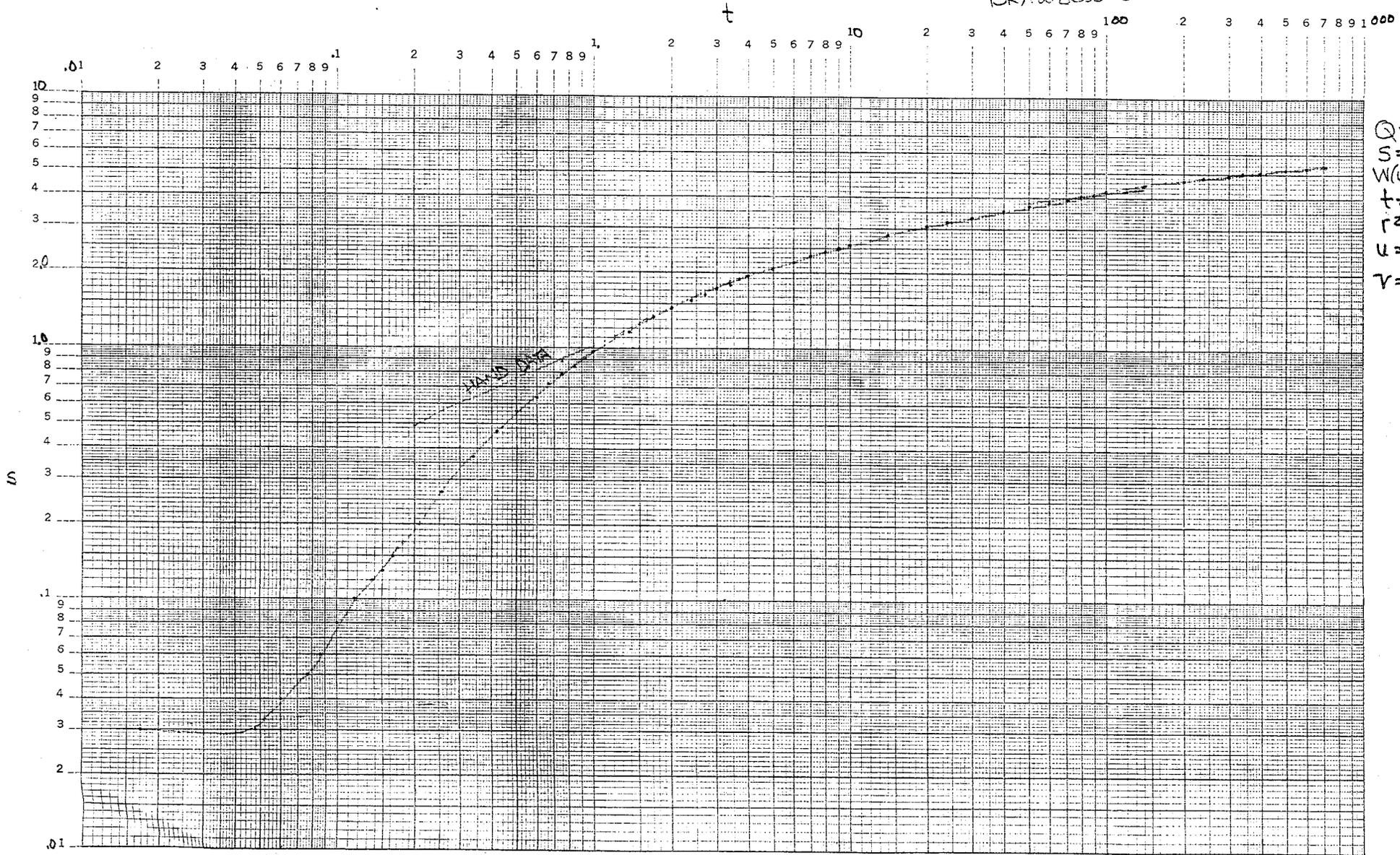
f



RTA-9I
DRAWDOWN
OB#1



46 7522 RTA-41
INSITU
OB#1
DRAWDOWN



Q = 90
S = 0.80
W(u) = 1
t = 0.19
r² = (70.5)²
u = 1
V = 0.025

$$T = \frac{Q}{4\pi S} W(u) = \frac{90 \text{ Gal min}^{-1}}{(4)(\pi)(0.8\text{ft})} \cdot 1 \cdot \frac{1440 \text{ min}}{1 \text{ day}} = \boxed{12,900 \text{ gal day}^{-1} \text{ft}^{-1}} \cdot 0.134 \text{ ft}^3 \text{ gal}^{-1} = \boxed{1730 \text{ ft}^2 \text{ day}^{-1}}$$

$$S = 4T \left(\frac{tu}{r^2} \right) = \frac{(4)(1730 \text{ ft}^2 \text{ day}^{-1})(1)(0.19 \text{ min})}{(4970 \text{ ft}^2)} \cdot \frac{(1 \text{ day})}{(1440 \text{ min})} = \boxed{1.8 \times 10^{-4}}$$

$$\frac{K'}{b'} = 4T \frac{v^2}{r^2} = 6.5 \times 10^{-3} \text{ gpd/ft}^3$$

RTA - 9I DRAWDOWN

5/9-5/10

Well	Input No.	TRANSDUCER		Length of Hole (ft)	Distance (r) (ft)	W _I
		S/N	Scale Factor			
PUMPED	3	113	9.96	25'	0	6.67
OB#1	1	38	9.96	30'	70.5'	7.27
OB#2	2	171	49.38	30'	6.5'	6.72

$$Q = KA \cdot 8.025 \sqrt{h} = (0.58)(\pi)(8.025)(\sqrt{h}) = 14.62(\sqrt{h})$$

$$h = \left(\frac{Q}{14.62}\right)^2$$

Note: At 1000 ~~h~~ put more transducer line in pumped well due to fact that the change recorded by hand vs. the insity ^{was off} - I was afraid that it was too shallow. So take drawdown from that point on.

HRS	Tony	Joan	#1	#2	#3	
			1026	1400	0.0	1.71
M	10	8	1614	5.13	0.09	2.63
T	9 1/2 (10)	14 1/2	1.13	0.09	.92	
W	4 1/2 (5)	11				
R	(12)					

2220 Pump shut off for the third time w/ still a half of tank of gasoline - pumps fucked! (Had to restart twice before $\frac{1}{2}$ add gas w/ ~~1/2~~ $\frac{1}{2}$ tank remaining - would die out, then pick up & repeat - what night.

PUMPING TEST DATA

Location: RTA-9I Date: 5/9

Pumped Well:

Depth 80 ft. Casing To 50 ft. Diameter 6 in.
 Casing 0 to 50 ft. Diameter 6 in.
 Disc. Pipe Diameter 4 in. Orifice Diameter 2 in.
 Q 90 gpm.

Observation Wells:

Depth: 1= 80 ft. 2= 180 ft. 3= ft. 4= ft.
 Casing Diameter: 1= 2 in. 2= 2 in. 3= in. 4= in.
 Casing To: 1= 50 ft. 2= 150 ft. 3= ft. 4= ft.
 Dist.(r): 1= 70.5 ft. 2= 6.5 ft. 3= ft. 4= ft.
 Screen: 1= 50 to 80 ft. 2= to ft. 3= to ft.
 Screen Diameter: 1= 2 in. 2= in. 3= in. 4= in.

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)			
				Obs. 1 Pumped 7.23	Obs. 1	Obs. 2 RECOVERY	Obs. 3
0913	0	In. H ₂ O	Q gpm	7.51	0.28		
	15s			7.79	0.56		
	30s			7.98	0.75		
	45s			8.03	0.80		
0914	1.0m	43	96	8.22	0.98		
	1.5			8.50	1.26	11.77	
915	2.0			8.69	1.45	11.39	
	2.5			8.85	1.61	11.28	
916	3.0			9.00	1.76	11.14	
	3.5			9.10	1.86	11.10	
917	4.0			9.20	1.96	11.00	
	4.5			9.29	2.05	10.91	

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)			
				Obs. 1 Pumped	Δ	Obs. 2 RECOVERY	Obs. 3 RECOVERY
918	5	in.	Q	9.37	2.13	10.85	
919	6			9.51	2.27	10.67	
920	7			9.62	2.38	10.52	
921	8			9.79	2.45	10.43	
922	9			9.80	2.56	10.34	
923	10	4 1/2"	94	9.86	2.62	10.25	
924	11			9.91	2.70	10.18	
925	12			10.00	2.76	10.15	
926	13			10.07	2.80	10.12	
927	14			10.10	2.86	10.06	
928	15			10.17	2.93	10.02	
933	20			10.40	3.16	9.87	
938	25			10.51	3.30	9.71	
943	30	39."	91	10.66	3.42	9.62	
948	35			10.82	3.58	9.45	
953	40			10.91	3.67	9.39	
958	45			10.95	3.71	9.31	
1003	50			11.03	3.79	9.21	
1013	60	37 1/4"	89	11.18	3.94	9.03	
1023	70			11.29	4.05	8.96	
1033	80			11.35	4.11	8.86	
1043	90			11.43	4.19	8.78	
1113	120			11.61	4.27	8.57	
1143	150			11.78	4.34	8.42	
1213	180			11.92	4.48	8.29	
1243	210			12.03	4.53	8.18	
1313	240			12.11	4.61	8.09	
1413	300			12.23	4.73	7.94	
1513	360	35 1/2"	87	12.35	4.86	7.84	
1613	420	34 1/2"	86	12.47	4.98	7.75	
1713	480			12.53	5.04	7.68	
1813	540			12.59	5.10	7.61	
1913	600			12.65	5.16	7.54	

PUMPING TEST DATA

Location: RTA-9I Date: 5/9

Pumped Well:

Depth 80 ft. Casing To 50 ft. Diameter 6 in.
 Casing 0 to 50 ft. Diameter 6 in.
 Disc. Pipe Diameter 4 in. Orifice Diameter 2 in.
 Q 90 gpm.

Observation Wells:

Depth: 1= 80 ft. 2= 180 ft. 3= ft. 4= ft.
 Casing Diameter: 1= 2 in. 2= 2 in. 3= in. 4= in.
 Casing To: 1= 50 ft. 2= 150 ft. 3= ft. 4= ft.
 Dist.(r): 1= 70.5 ft. 2= 6.5 ft. 3= ft. 4= ft.
 Screen: 1= 50 to 80 ft. 2= to ft. 3= to ft.
 Screen Diameter: 1= 2" in. 2= in. 3= in. 4= in.

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)				
				Pumped	Obs. 1	Obs. 2	Obs. 3	Obs. 4
913	0	In. H ₂ O	Q gpm	6.67	-			
	15s			14.94	8.27			
	30s			15.32	8.65			
	45s			15.70	9.03			
0914	1mi			16.00	9.33			
	1.5			16.27	9.60			
0915	2.0			16.53	9.86			
	2.5			16.70	10.03			
0916	3.0			16.99	10.12			
	3.5			16.94	10.27			
0917	4.0			16.99	10.32			
	4.5			17.07	10.40			

Time	Elapsed Time (t)	Manometer Reading (in.)		Drawdown or Recovery (ft.)				
				Pumped	Obs. 1	Obs. 2	Obs. 3	Obs. 4
0918	5.0	in.	Q	17.16	10.49			
0919	6			17.28	10.61	9.75		
0920	7			17.38	10.71	9.50		
0921	8			17.47	10.80	9.36		
0922	9			17.54	10.87	9.24		
0923	10			17.59	10.92	9.20		
0924	11			17.65	10.98	9.15		
0925	12			17.76	11.07	9.08		
0926	13			17.76	11.07	9.05		
0927	14			17.80	11.11	8.99		
0928	15			17.92	11.23	8.96		
0933	20			18.17	11.48	8.84		
0938	25			18.33	11.64	8.67		
0943	30			18.40	11.71	8.62		
0948	35			18.57	11.83	8.48		
0953	40			18.65	11.96	8.39		
0958	45			18.78	12.09	8.30		
1003	50			18.87	12.18	8.25		
1013	60			18.92	12.23	8.08		
1023	70			19.02	12.33	8.00		
1033	80			19.12	12.43	7.94		
1043	90			19.18	12.49	7.85		
1113	120			19.37	12.68	7.59		
1143	150			19.50	12.81	7.44		
1213	180			19.60	12.91	7.31		
1243	210			19.69	13.00	7.19		
1313	240			19.75	13.06	7.11		
1413	300			19.84	13.15	6.96		
1513	360			19.95	13.26	6.85		
1613	420			20.07	13.38	6.77		
1713	480			20.11	13.42	6.71		
1813	540			20.14	13.45	6.67		
1913	600			20.20	13.51	6.61		

HENDRY CO. RTA-91
Run 1
05/09/84

SE200A DATA
constant rate test

TRANSDUCER TABLE

Input 1: OB #1
Transducer s/n: 38
Scale factor: 9.96
Initial level: 7.27 feet

FAST DATA

Input 2: OB #2
Transducer s/n: 171
Scale factor: 49.38
Initial level: 6.72 feet

Input 3: PUMPED WELL
Transducer s/n: 113
Scale factor: 9.96
Initial level: 6.67 feet

PUMP SCHEDULE

Drawdown for 1440 min
Pump at 95 GPM

Recovery for 600 min

SAMPLING SCHEDULE

0-10	sec	@	1	sec
10-60	sec	@	5	sec
1-10	min	@	20	sec
10-100	min	@	2	min
100-1000	min	@	20	min
1000-10000	min	@	60	min
10000-99999	min	@	200	min

DRAWDOWN REPORT

Started at 0913
Lasted 784.73 min

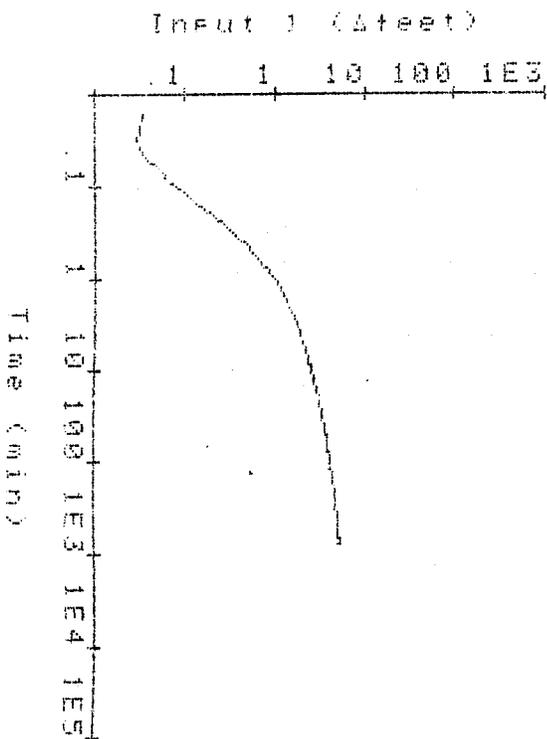
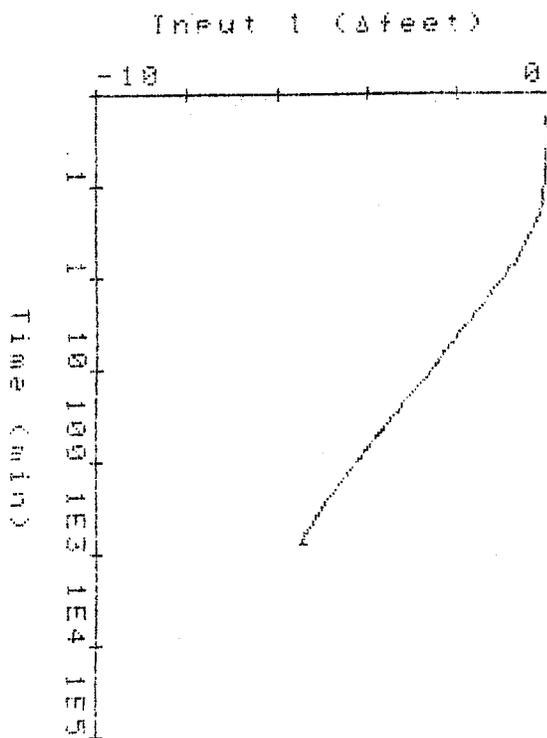
Input 1 (feet):

Time	ET (min)	level	Δlevel
0913	0.000	7.27	0.00
0913	0.017	7.30	-0.03
0913	0.034	7.30	-0.03
0913	0.050	7.31	-0.04
0914	0.067	7.32	-0.05
0914	0.084	7.33	-0.06
0914	0.100	7.35	-0.08
0914	0.117	7.37	-0.10
0914	0.134	7.39	-0.12
0914	0.150	7.41	-0.13
0914	0.167	7.42	-0.15
0914	0.257	7.54	-0.27
0914	0.341	7.64	-0.37
0914	0.424	7.74	-0.47
0914	0.507	7.83	-0.56
0914	0.591	7.91	-0.64
0914	0.674	7.99	-0.72
0914	0.757	8.06	-0.79
0914	0.841	8.12	-0.85
0914	0.924	8.18	-0.91
0914	1.007	8.24	-0.97
0915	1.381	8.44	-1.17
0915	1.714	8.59	-1.32
0915	2.047	8.72	-1.45
0916	2.381	8.82	-1.55
0916	2.714	8.91	-1.54
0916	3.047	8.99	-1.72
0917	3.381	9.06	-1.79
0917	3.714	9.13	-1.86
0917	4.047	9.19	-1.92
0918	4.381	9.25	-1.98
0918	4.714	9.30	-2.03
0918	5.047	9.35	-2.08
0919	5.381	9.40	-2.13
0919	5.714	9.44	-2.17
0919	6.047	9.48	-2.21
0920	6.381	9.53	-2.25
0920	6.714	9.55	-2.28
0920	7.047	9.59	-2.32
0921	7.381	9.62	-2.35
0921	7.714	9.65	-2.38
0921	8.047	9.69	-2.42
0922	8.381	9.71	-2.44
0922	8.714	9.74	-2.47
0922	9.047	9.77	-2.50
0923	9.381	9.79	-2.52
0923	9.714	9.82	-2.55
0923	10.047	9.85	-2.58
0926	12.135	9.98	-2.71
0928	14.135	10.09	-2.82
0930	16.135	10.20	-2.93
0932	18.135	10.28	-3.01
0934	20.135	10.37	-3.10
0936	22.135	10.43	-3.16
0938	24.135	10.49	-3.22
0940	26.118	10.55	-3.28

0944	30.063	10.63	-3.38
0946	32.208	10.70	-3.43
0948	34.065	10.74	-3.47
0950	36.098	10.78	-3.51
0952	38.098	10.82	-3.55
0954	40.098	10.85	-3.58
0956	42.098	10.89	-3.62
0958	44.098	10.93	-3.66
1000	46.098	10.96	-3.69
1002	48.098	10.98	-3.71
1004	50.098	11.01	-3.74
1006	52.098	11.04	-3.77
1008	54.120	11.06	-3.79
1010	56.062	11.09	-3.82
1012	58.120	11.11	-3.84
1014	60.120	11.13	-3.86
1016	62.113	11.16	-3.89
1018	64.113	11.18	-3.91
1020	66.113	11.21	-3.93
1022	68.113	11.23	-3.96
1024	70.113	11.25	-3.98
1026	72.113	11.27	-4.00
1028	74.113	11.29	-4.02
1030	76.113	11.31	-4.03
1032	78.408	11.33	-4.06
1034	80.345	11.35	-4.08
1036	82.082	11.36	-4.09
1038	84.082	11.37	-4.10
1040	86.082	11.39	-4.12
1042	88.082	11.41	-4.14
1044	90.082	11.42	-4.15
1046	92.082	11.44	-4.17
1048	94.082	11.45	-4.18
1050	96.082	11.47	-4.20
1052	98.082	11.49	-4.22
1054	100.080	11.50	-4.23
1114	120.250	11.63	-4.36
1134	140.250	11.73	-4.46
1154	160.230	11.84	-4.57
1214	180.220	11.92	-4.65
1234	200.220	11.98	-4.71
1254	220.220	12.05	-4.78
1314	240.700	12.10	-4.83
1334	260.150	12.15	-4.88
1354	280.150	12.20	-4.93
1414	300.150	12.23	-4.96
1434	320.230	12.26	-4.99
1454	340.230	12.29	-5.02
1514	360.300	12.32	-5.05
1534	380.200	12.35	-5.08
1554	400.200	12.37	-5.10
1614	420.450	12.40	-5.13
1634	440.200	12.45	-5.18
1654	460.150	12.48	-5.21
1714	480.150	12.48	-5.21
1734	500.150	12.47	-5.20
1754	520.150	12.53	-5.26
1814	540.150	12.55	-5.28
1834	560.150	12.57	-5.30
1854	580.150	12.59	-5.32
1914	600.200	12.60	-5.33
1934	620.200	12.62	-5.35
1954	640.200	12.64	-5.37
2014	660.200	12.65	-5.38
2034	680.200	12.68	-5.40
2054	700.200	12.69	-5.42
2114	720.200	12.70	-5.43
2134	740.200	12.72	-5.45
2154	760.200	12.74	-5.47
2214	780.200	12.75	-5.48
2218	784.730	12.57	-5.36

Average level: 12.17

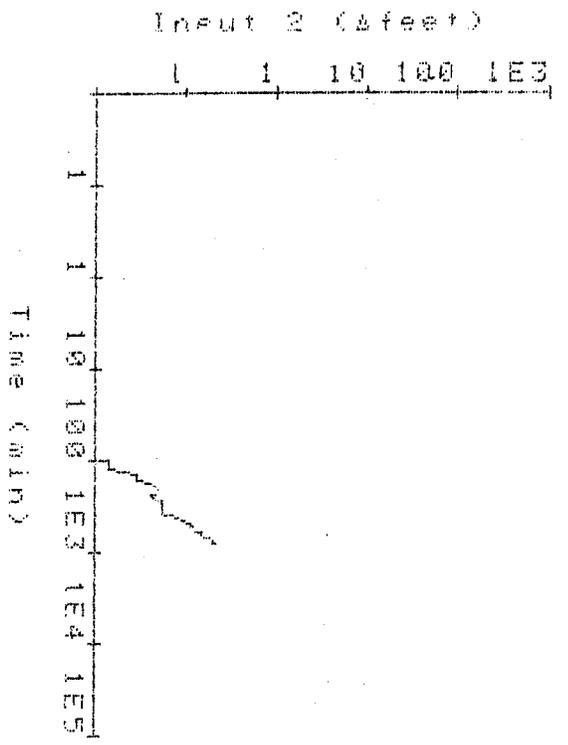
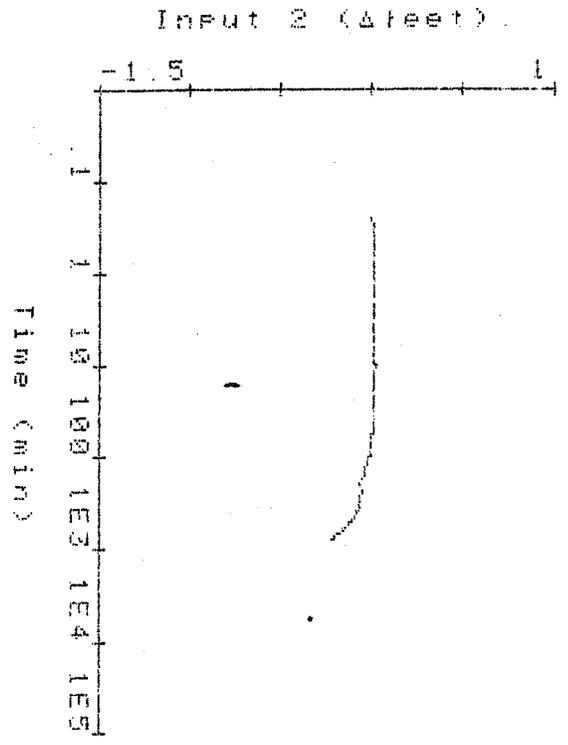
Input 2 (feet):



Time	ET (min)	level	Δlevel
0913	0.000	6.72	0.00
0914	0.237	6.72	0.00
0914	0.341	6.71	0.01
0914	0.424	6.71	0.01
0914	0.507	6.71	0.01
0914	0.591	6.71	0.01
0914	0.674	6.71	0.01
0914	0.757	6.71	0.01
0914	0.841	6.71	0.01
0914	0.924	6.71	0.01
0914	1.007	6.71	0.01
0915	1.381	6.71	0.01
0915	1.714	6.71	0.01
0915	2.047	6.71	0.01
0916	2.381	6.71	0.01
0916	2.714	6.71	0.01
0916	3.047	6.71	0.01
0917	3.381	6.71	0.01
0917	3.714	6.71	0.01
0917	4.047	6.71	0.01
0918	4.381	6.71	0.01
0918	4.714	6.71	0.01
0918	5.047	6.71	0.01
0919	5.381	6.71	0.01
0919	5.714	6.71	0.01
0919	6.047	6.71	0.01
0920	6.381	6.71	0.01
0920	6.714	6.71	0.01
0920	7.047	6.71	0.01
0921	7.381	6.71	0.01
0921	7.714	6.71	0.01
0921	8.047	6.71	0.01
0922	8.381	6.71	0.01
0922	8.714	6.71	0.01
0922	9.047	6.71	0.01
0923	9.381	6.71	0.01
0923	9.714	6.71	0.01
0923	10.047	6.69	0.03
0926	12.135	6.71	0.01
0928	14.135	6.71	0.01
0930	16.135	6.71	0.01
0932	18.135	6.71	0.01
0934	20.135	6.71	0.01
0936	22.135	6.71	0.01
0938	24.135	6.71	0.01
0940	26.118	6.71	0.01
0942	28.397	6.71	0.01
0944	30.663	6.71	0.01
0946	32.208	6.71	0.01
0948	34.065	6.71	0.01
0950	36.098	6.71	0.01
0952	38.098	6.71	0.01
0954	40.098	6.71	0.01
0956	42.098	6.71	0.01
0958	44.098	6.71	0.01
1000	46.098	6.71	0.01
1002	48.098	6.71	0.01
1004	50.098	6.71	0.01
1006	52.098	6.71	0.01
1008	54.120	6.71	0.01
1010	56.062	6.72	0.00
1012	58.120	6.71	0.01
1014	60.120	6.72	0.00
1016	62.113	6.72	0.00
1018	64.113	6.72	0.00
1020	66.113	6.72	0.00
1022	68.113	6.72	0.00
1024	70.113	6.72	0.00

1020	74.113	6.72	0.00
1030	76.113	6.72	0.00
1032	78.408	6.72	0.00
1034	80.345	6.72	0.00
1036	82.002	6.72	0.00
1038	84.002	6.72	0.00
1040	86.002	6.72	0.00
1042	88.002	6.72	0.00
1044	90.002	6.72	0.00
1046	92.002	6.72	0.00
1048	94.002	6.72	0.00
1050	96.002	6.72	0.00
1052	98.002	6.72	0.00
1054	100.000	6.73	-0.01
1114	120.250	6.73	-0.01
1134	140.250	6.75	-0.03
1154	160.230	6.75	-0.03
1214	180.220	6.76	-0.04
1234	200.220	6.78	-0.06
1254	220.220	6.78	-0.06
1314	240.700	6.76	-0.04
1334	260.150	6.76	-0.04
1354	280.150	6.78	-0.06
1414	300.150	6.78	-0.06
1434	320.230	6.78	-0.06
1454	340.230	6.78	-0.06
1514	360.300	6.79	-0.07
1534	380.200	6.79	-0.07
1554	400.200	6.81	-0.09
1614	420.450	6.82	-0.10
1634	440.220	6.82	-0.10
1654	460.150	6.82	-0.10
1714	480.150	6.83	-0.11
1734	500.150	6.83	-0.11
1754	520.150	6.85	-0.13
1814	540.150	6.85	-0.13
1834	560.150	6.85	-0.13
1854	580.200	6.85	-0.14
1914	600.200	6.88	-0.16
1934	620.200	6.88	-0.16
1954	640.200	6.88	-0.16
2014	660.200	6.89	-0.17
2034	680.200	6.91	-0.19
2054	700.200	6.91	-0.19
2114	720.200	6.92	-0.20
2134	740.200	6.92	-0.20
2154	760.200	6.92	-0.20
2214	780.200	6.93	-0.21
2218	784.730	6.93	-0.21

Average level: 6.91



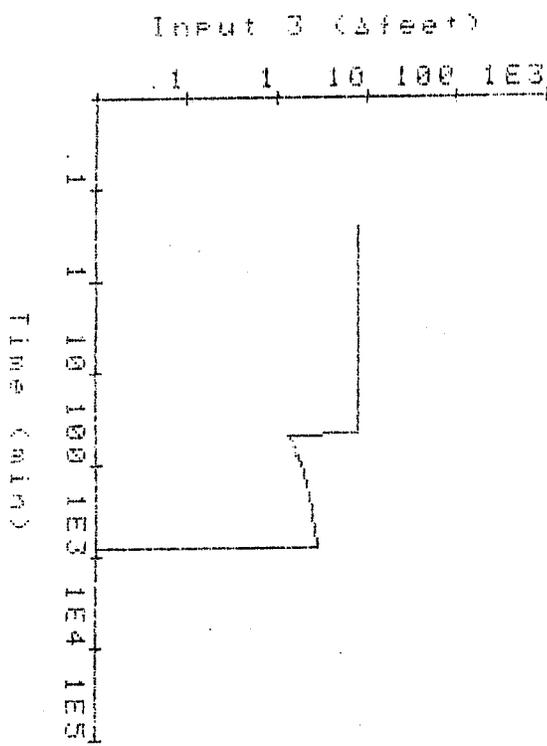
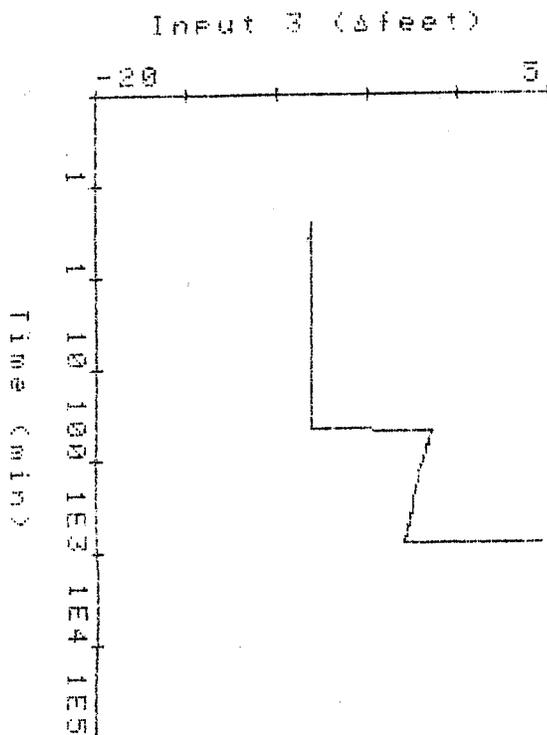
Input 3 (feet):

Time	ET (min)	level	Δlevel				
0913	0.600	6.67	0.00	1018	64.113	0.25	-1.58
0914	0.257	14.75	-0.08	1020	66.113	0.29	-1.61
0914	0.341	14.74	-0.07	1022	68.113	0.29	-1.62
0914	0.424	14.74	-0.07	1024	70.113	0.31	-1.64
0914	0.507	14.75	-0.06	1026	72.113	0.32	-1.65
0914	0.591	14.75	-0.08	1028	74.113	0.33	-1.66
0914	0.674	14.75	-0.08	1030	76.113	0.35	-1.68
0914	0.757	14.75	-0.08	1032	78.400	0.38	-1.71
0914	0.841	14.75	-0.08	1034	80.745	0.40	-1.73
0914	0.924	14.75	-0.08	1036	82.082	0.41	-1.74
0914	1.007	14.75	-0.06	1038	84.082	0.43	-1.76
0915	1.381	14.75	-0.08	1040	86.082	0.44	-1.77
0915	1.714	14.75	-0.08	1042	88.082	0.47	-1.79
0915	2.047	14.75	-0.08	1044	90.082	0.48	-1.81
0916	2.381	14.75	-0.06	1046	92.082	0.49	-1.82
0916	2.714	14.75	-0.08	1048	94.082	0.50	-1.83
0916	3.047	14.75	-0.08	1050	96.082	0.52	-1.85
0917	3.381	14.75	-0.08	1052	98.082	0.54	-1.87
0917	3.714	14.75	-0.08	1054	100.000	0.55	-1.88
0917	4.047	14.75	-0.08	1114	120.250	0.68	-2.01
0918	4.381	14.75	-0.06	1134	140.250	0.78	-2.11
0918	4.714	14.75	-0.08	1154	160.230	0.85	-2.18
0918	5.047	14.75	-0.08	1214	180.220	0.91	-2.24
0919	5.381	14.75	-0.08	1234	200.220	0.99	-2.32
0919	5.714	14.75	-0.06	1254	220.220	0.95	-2.38
0919	6.047	14.75	-0.08	1314	240.700	0.97	-2.46
0920	6.381	14.75	-0.08	1334	260.150	0.11	-2.44
0920	6.714	14.75	-0.08	1354	280.150	0.16	-2.49
0920	7.047	14.75	-0.08	1414	300.150	0.18	-2.51
0921	7.381	14.75	-0.08	1434	320.230	0.18	-2.51
0921	7.714	14.75	-0.08	1454	340.230	0.19	-2.52
0921	8.047	14.75	-0.08	1514	360.300	0.22	-2.55
0922	8.381	14.75	-0.08	1534	380.200	0.25	-2.58
0922	8.714	14.75	-0.08	1554	400.200	0.27	-2.60
0922	9.047	14.74	-0.07	1614	420.450	0.30	-2.63
0923	9.381	14.74	-0.07	1634	440.220	0.34	-2.67
0923	9.714	14.74	-0.07	1654	460.150	0.37	-2.70
0923	10.047	14.74	-0.07	1714	480.150	0.37	-2.70
0926	12.135	14.74	-0.07	1734	500.150	0.33	-2.66
0928	14.135	14.74	-0.07	1754	520.150	0.38	-2.71
0930	16.135	14.73	-0.06	1814	540.150	0.40	-2.73
0932	18.135	14.73	-0.06	1834	560.150	0.42	-2.75
0934	20.135	14.73	-0.06	1854	580.150	0.46	-2.79
0936	22.135	14.73	-0.06	1914	600.200	0.45	-2.78
0938	24.135	14.73	-0.06	1934	620.200	0.49	-2.82
0940	26.116	14.73	-0.06	1954	640.200	0.51	-2.84
0942	28.397	14.73	-0.06	2014	660.200	0.53	-2.86
0944	30.063	14.73	-0.06	2034	680.200	0.54	-2.87
0946	32.288	14.72	-0.05	2054	700.200	0.56	-2.89
0948	34.065	14.72	-0.05	2114	720.200	0.58	-2.91
0950	36.098	14.74	-0.07	2134	740.200	0.59	-2.92
0952	38.098	14.74	-0.07	2154	760.200	0.61	-2.94
0954	40.098	14.74	-0.07	2214	780.200	0.63	-2.96
0956	42.098	14.75	-0.08	2218	784.730	0.66	4.62
0958	44.098	14.75	-0.08				
1000	46.098	14.75	-0.08				
1002	48.098	0.85	-1.38				
1004	50.098	0.88	-1.41				
1006	52.098	0.12	-1.45				
1008	54.120	0.13	-1.46				
1010	56.062	0.16	-1.49				
1012	58.120	0.18	-1.51				
1014	60.120	0.21	-1.54				
1016	62.113	0.23	-1.56				

Average level: 9.50

-----RECOVERY REPORT-----

Started at 2218
 Lasted 600.13 min

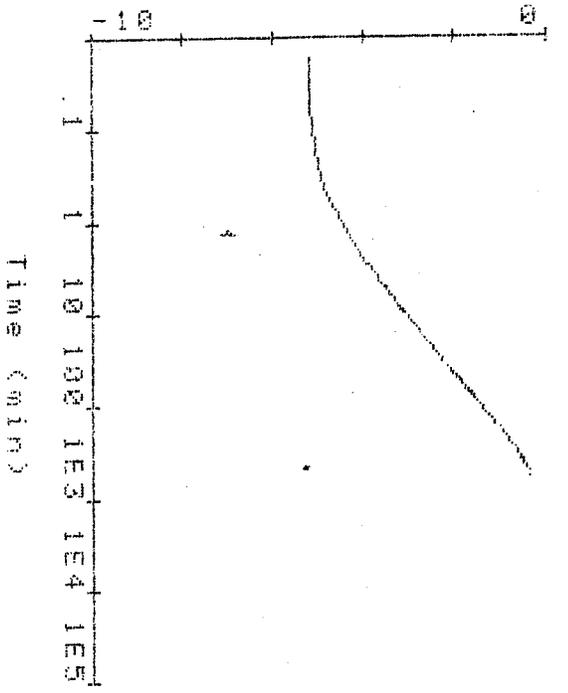


Input 1 (feet):

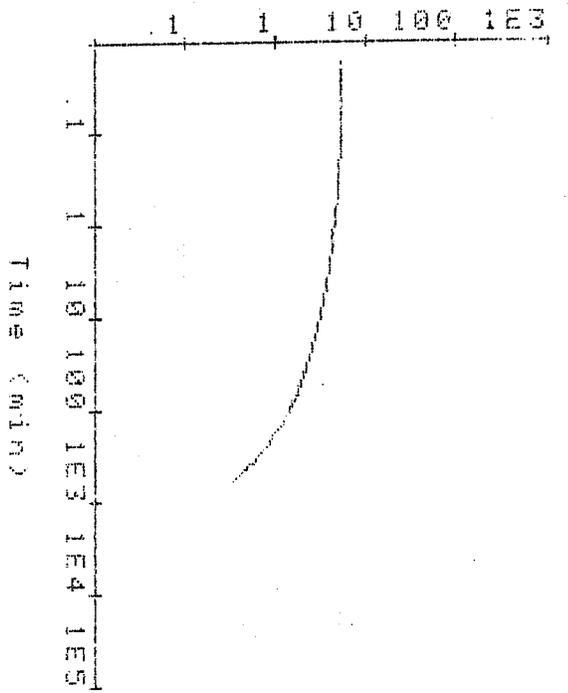
Time	ET (min)	level	Δlevel
2218	0.017	12.48	-5.21
2218	0.034	12.46	-5.19
2218	0.050	12.45	-5.18
2218	0.067	12.43	-5.16
2218	0.084	12.41	-5.14
2218	0.100	12.40	-5.13
2218	0.117	12.38	-5.11
2218	0.134	12.36	-5.09
2218	0.150	12.35	-5.08
2218	0.167	12.33	-5.06
2218	0.257	12.25	-4.98
2219	0.348	12.18	-4.91
2219	0.424	12.12	-4.85
2219	0.507	12.06	-4.79
2219	0.590	12.00	-4.73
2219	0.674	11.95	-4.68
2219	0.757	11.91	-4.64
2219	0.840	11.86	-4.59
2219	0.924	11.82	-4.55
2219	1.007	11.78	-4.51
2220	1.300	11.62	-4.35
2220	1.713	11.51	-4.24
2220	2.046	11.41	-4.14
2221	2.380	11.32	-4.05
2221	2.713	11.24	-3.97
2221	3.046	11.17	-3.90
2222	3.380	11.10	-3.83
2222	3.713	11.05	-3.78
2222	4.046	10.97	-3.70
2223	4.380	10.94	-3.67
2223	4.713	10.89	-3.62
2223	5.046	10.84	-3.57
2224	5.380	10.80	-3.53
2224	5.713	10.76	-3.49
2224	6.046	10.72	-3.45
2225	6.380	10.69	-3.41
2225	6.713	10.65	-3.38
2225	7.046	10.61	-3.34
2226	7.380	10.58	-3.31
2226	7.713	10.55	-3.28
2226	8.047	10.52	-3.25
2227	8.380	10.49	-3.22
2227	8.713	10.48	-3.20
2227	9.047	10.44	-3.17
2228	9.380	10.41	-3.14
2228	9.713	10.39	-3.12
2228	10.046	10.36	-3.09
2230	12.146	10.22	-2.95
2232	14.146	10.11	-2.84
2234	16.146	10.02	-2.75
2236	18.147	9.94	-2.67
2238	20.162	9.86	-2.59
2240	22.162	9.78	-2.52
2242	24.162	9.73	-2.46

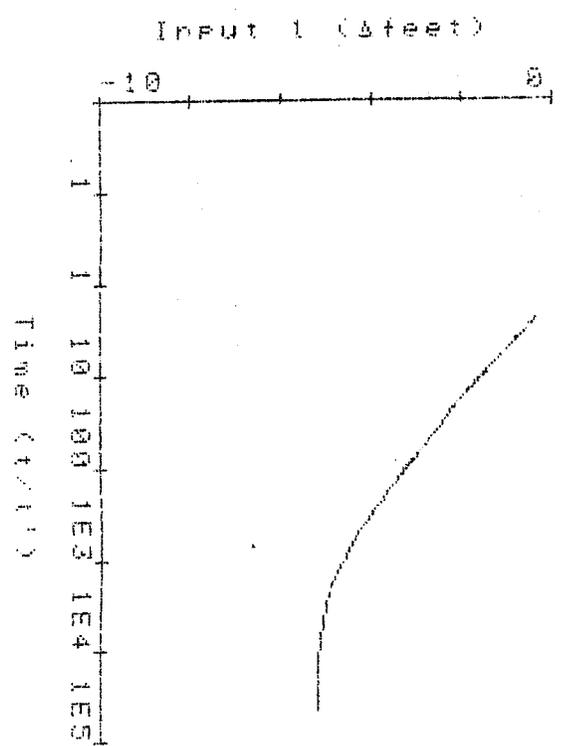
2246	28	162	9	62	-2	35
2248	30	162	9	58	-2	31
2250	32	162	9	53	-2	26
2252	34	162	9	49	-2	22
2254	36	162	9	45	-2	18
2256	38	162	9	41	-2	14
2258	40	162	9	37	-2	10
2300	42	162	9	34	-2	07
2302	44	162	9	30	-2	03
2304	46	162	9	27	-2	00
2306	48	162	9	24	-1	97
2308	50	162	9	21	-1	94
2310	52	162	9	18	-1	91
2312	54	162	9	15	-1	88
2315	56	768	9	12	-1	85
2316	58	133	9	11	-1	84
2319	60	403	9	08	-1	81
2321	62	502	9	06	-1	79
2322	64	080	9	04	-1	77
2324	66	080	9	02	-1	75
2326	68	080	0	99	-1	72
2328	70	080	0	97	-1	70
2330	72	080	0	95	-1	68
2332	74	080	0	93	-1	66
2334	76	080	0	91	-1	64
2336	78	080	0	89	-1	62
2338	80	080	0	87	-1	60
2340	82	080	0	86	-1	59
2342	84	080	0	84	-1	57
2344	86	080	0	83	-1	56
2346	88	080	0	81	-1	54
2348	90	080	0	79	-1	52
2350	92	080	0	77	-1	50
2352	94	080	0	75	-1	48
2354	96	080	0	74	-1	47
2356	98	080	0	73	-1	46
2358	100	080	0	71	-1	44
0010	120	250	0	58	-1	31
0030	140	250	0	47	-1	20
0050	160	250	0	38	-1	11
0110	180	250	0	30	-1	03
0130	200	250	0	23	-0	96
0150	220	250	0	16	-0	89
0210	240	250	0	11	-0	84
0230	260	250	0	05	-0	78
0250	280	250	0	01	-0	74
0310	300	250	7	96	-0	69
0330	320	250	7	92	-0	65
0350	340	250	7	89	-0	62
0410	360	250	7	86	-0	59
0430	380	250	7	82	-0	55
0450	400	250	7	79	-0	52
0510	420	250	7	77	-0	50
0530	440	250	7	75	-0	48
0550	460	250	7	72	-0	45
0610	480	250	7	70	-0	43
0630	500	250	7	68	-0	41
0650	520	250	7	67	-0	40
0710	540	250	7	65	-0	38
0730	560	250	7	63	-0	36
0750	580	250	7	62	-0	35
0810	600	130	7	61	-0	34

Input 1 (Δfeet)



Input 1 (Δfeet)

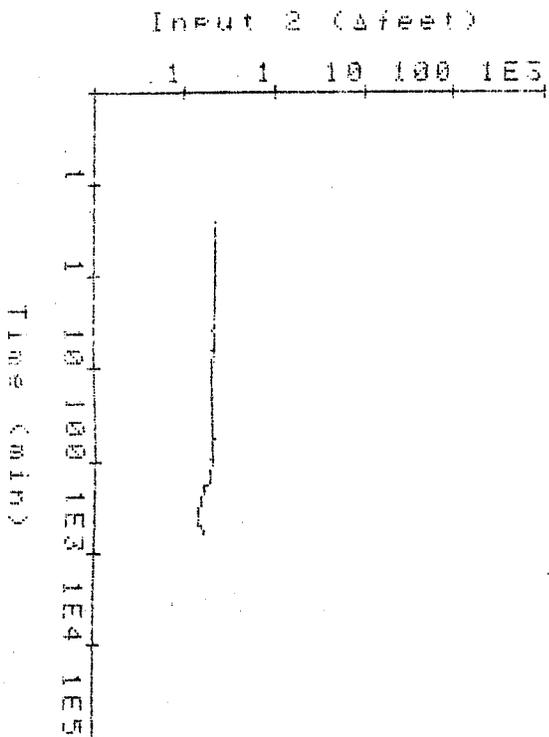
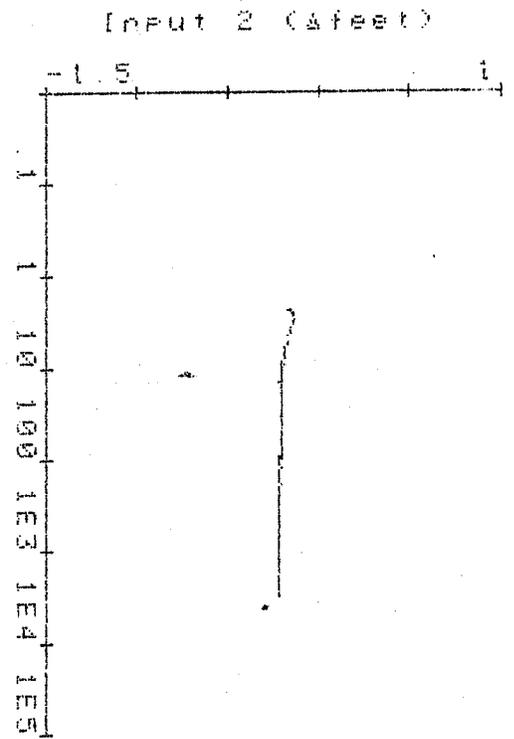
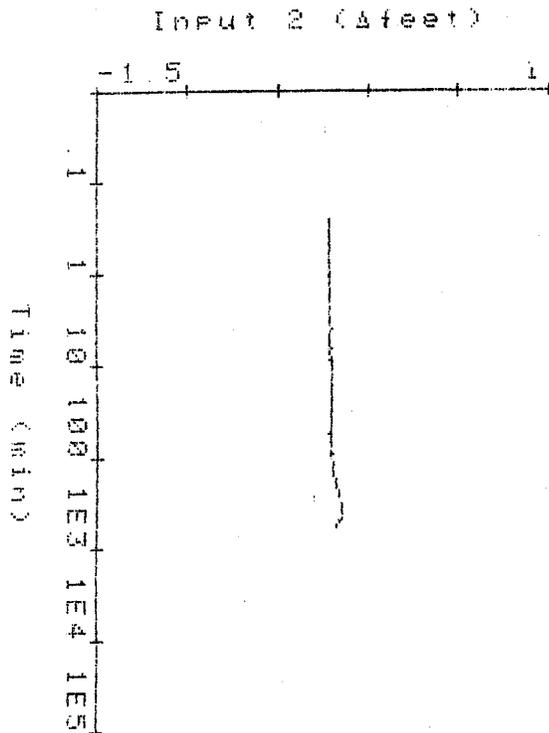




Input 2 (feet):

Time	ET (min)	level	Δlevel
2218	0.257	6.93	-0.21
2219	0.340	6.93	-0.21
2219	0.424	6.93	-0.21
2219	0.507	6.93	-0.21
2219	0.590	6.93	-0.21
2219	0.674	6.93	-0.21
2219	0.757	6.93	-0.21
2219	0.840	6.93	-0.21
2219	0.924	6.93	-0.21
2219	1.007	6.93	-0.21
2220	1.380	6.93	-0.21
2220	1.713	6.93	-0.21
2220	2.046	6.93	-0.21
2221	2.380	6.93	-0.21
2221	2.713	6.93	-0.21
2221	3.046	6.93	-0.21
2222	3.380	6.93	-0.21
2222	3.713	6.93	-0.21
2222	4.046	6.92	-0.26
2223	4.380	6.93	-0.21
2223	4.713	6.93	-0.21
2223	5.046	6.93	-0.21
2224	5.380	6.93	-0.21
2224	5.713	6.93	-0.21
2224	6.046	6.93	-0.21
2225	6.380	6.92	-0.30
2225	6.713	6.93	-0.21
2225	7.046	6.93	-0.21
2225	7.380	6.93	-0.21
2225	7.713	6.93	-0.21
2226	8.047	6.92	-0.26
2227	8.380	6.93	-0.21
2227	8.713	6.92	-0.26
2227	9.047	6.92	-0.26
2228	9.380	6.92	-0.26

2230	12.146	6.92	-0.26
2232	14.146	6.92	-0.26
2234	16.146	6.92	-0.26
2236	18.147	6.92	-0.26
2238	20.162	6.92	-0.26
2240	22.162	6.92	-0.26
2242	24.162	6.92	-0.26
2244	26.162	6.92	-0.26
2246	28.162	6.92	-0.26
2248	30.162	6.92	-0.26
2250	32.162	6.92	-0.26
2252	34.162	6.92	-0.26
2254	36.162	6.92	-0.26
2256	38.162	6.92	-0.26
2258	40.162	6.92	-0.26
2300	42.162	6.92	-0.26
2302	44.162	6.92	-0.26
2304	46.162	6.92	-0.26
2306	48.162	6.92	-0.26
2308	50.162	6.92	-0.26
2310	52.162	6.92	-0.26
2312	54.162	6.92	-0.26
2315	56.768	6.93	-0.21
2316	58.133	6.92	-0.26
2319	60.403	6.92	-0.26
2321	62.582	6.92	-0.26
2322	64.880	6.92	-0.26
2324	66.880	6.92	-0.26
2326	68.880	6.92	-0.26
2328	70.880	6.92	-0.26
2330	72.880	6.92	-0.26
2332	74.880	6.92	-0.26
2334	76.880	6.92	-0.26
2336	78.880	6.92	-0.26
2338	80.880	6.92	-0.26
2340	82.880	6.92	-0.26
2342	84.880	6.92	-0.26
2344	86.880	6.92	-0.26
2346	88.880	6.92	-0.26
2348	90.880	6.91	-0.19
2350	92.880	6.92	-0.26
2352	94.880	6.92	-0.26
2354	96.880	6.92	-0.26
2356	98.880	6.92	-0.26
2358	100.880	6.92	-0.26
0010	120.250	6.91	-0.19
0030	140.250	6.91	-0.19
0050	160.250	6.91	-0.19
0110	180.250	6.89	-0.17
0130	200.250	6.89	-0.17
0150	220.250	6.89	-0.17
0210	240.250	6.88	-0.16
0230	260.250	6.88	-0.16
0250	280.250	6.88	-0.16
0310	300.250	6.88	-0.16
0330	320.250	6.86	-0.14
0350	340.250	6.86	-0.14
0410	360.250	6.86	-0.14
0430	380.250	6.86	-0.14
0450	400.250	6.86	-0.14
0510	420.250	6.86	-0.14
0530	440.250	6.86	-0.14
0550	460.250	6.86	-0.14
0610	480.250	6.88	-0.16
0630	500.250	6.86	-0.14
0650	520.250	6.88	-0.16
0710	540.250	6.88	-0.16
0730	560.250	6.89	-0.17
0750	580.250	6.89	-0.17
0810	600.130	6.89	-0.17

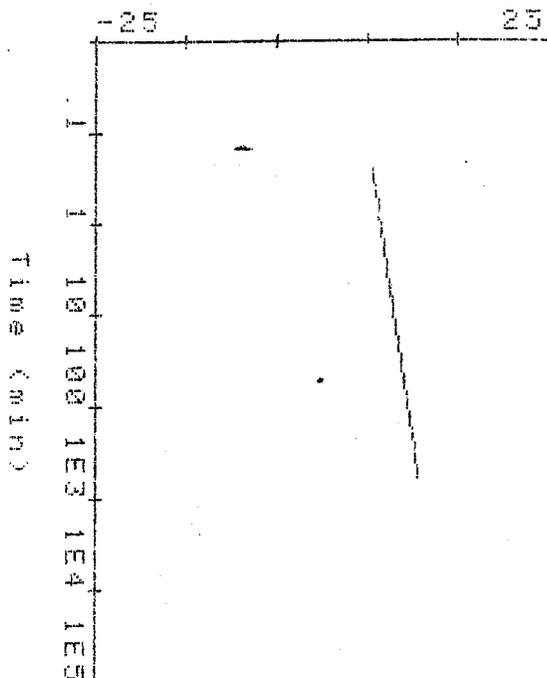


Input 3 (feet):

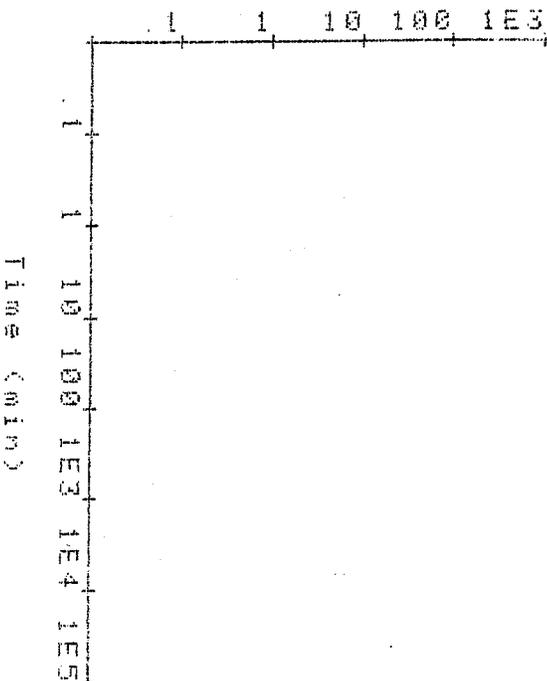
Time	CT (min)	level	Δlevel
2218	0.257	1.00	5.67
2219	0.348	0.90	5.77
2219	0.424	0.77	5.98
2219	0.507	0.66	6.01
2219	0.590	0.56	6.11
2219	0.674	0.49	6.16
2219	0.757	0.42	6.25
2219	0.840	0.35	6.32
2219	0.924	0.29	6.38
2219	1.007	0.24	6.43
2220	1.380	0.04	6.63
2220	1.713	-0.10	6.77
2220	2.046	-0.21	6.88
2221	2.380	-0.31	6.98
2221	2.713	-0.39	7.06
2221	3.046	-0.47	7.14
2222	3.380	-0.54	7.21
2222	3.713	-0.60	7.27
2222	4.046	-0.66	7.33
2223	4.380	-0.71	7.38
2223	4.713	-0.76	7.43
2223	5.046	-0.81	7.48
2224	5.380	-0.85	7.52
2224	5.713	-0.89	7.56
2224	6.046	-0.93	7.60
2225	6.380	-0.97	7.64
2225	6.713	-1.01	7.68
2225	7.046	-1.04	7.71
2226	7.380	-1.08	7.75
2226	7.713	-1.10	7.77
2226	8.047	-1.14	7.81
2227	8.380	-1.16	7.83
2227	8.713	-1.19	7.86
2227	9.047	-1.22	7.89
2228	9.380	-1.24	7.91
2228	9.713	-1.27	7.94

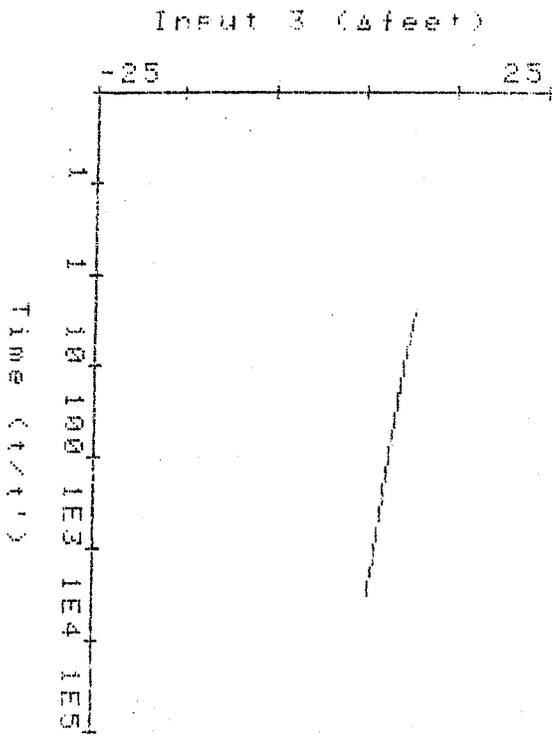
2230	12.146	-1.43	8.10
2232	14.146	-1.53	8.20
2234	16.146	-1.61	8.28
2236	18.147	-1.69	8.36
2238	20.162	-1.75	8.42
2240	22.162	-1.81	8.48
2242	24.162	-1.85	8.52
2244	26.162	-1.90	8.57
2246	28.162	-1.94	8.61
2248	30.162	-1.97	8.64
2250	32.162	-2.01	8.68
2252	34.162	-2.05	8.72
2254	36.162	-2.10	8.77
2256	38.162	-2.14	8.81
2258	40.162	-2.17	8.84
2300	42.162	-2.21	8.88
2302	44.162	-2.24	8.91
2304	46.162	-2.27	8.94
2306	48.162	-2.30	8.97
2308	50.162	-2.33	9.00
2310	52.162	-2.36	9.03
2312	54.162	-2.39	9.06
2313	56.768	-2.42	9.09
2316	58.133	-2.44	9.11
2319	60.403	-2.47	9.14
2321	62.582	-2.49	9.16
2322	64.000	-2.51	9.18
2324	66.000	-2.53	9.20
2326	68.000	-2.55	9.22
2328	70.000	-2.58	9.25
2330	72.000	-2.60	9.27
2332	74.000	-2.62	9.29
2334	76.000	-2.64	9.31
2336	78.000	-2.66	9.33
2338	80.000	-2.67	9.34
2340	82.000	-2.69	9.36
2342	84.000	-2.71	9.38
2344	86.000	-2.73	9.40
2346	88.000	-2.74	9.41
2348	90.000	-2.76	9.43
2350	92.000	-2.78	9.45
2352	94.000	-2.80	9.47
2354	96.000	-2.81	9.48
2356	98.000	-2.83	9.50
2358	100.000	-2.84	9.51
0018	120.250	-2.97	9.64
0030	140.250	-3.08	9.75
0050	160.250	-3.17	9.84
0110	180.250	-3.26	9.93
0130	200.250	-3.33	10.00
0150	220.250	-3.39	10.06
0210	240.250	-3.45	10.12
0230	260.250	-3.50	10.17
0250	280.250	-3.55	10.22
0310	300.250	-3.59	10.26
0330	320.250	-3.63	10.30
0350	340.250	-3.67	10.34
0410	360.250	-3.70	10.37
0430	380.250	-3.73	10.40
0450	400.250	-3.76	10.43
0510	420.250	-3.79	10.46
0530	440.250	-3.81	10.48
0550	460.250	-3.83	10.50
0610	480.250	-3.85	10.52
0630	500.250	-3.87	10.54
0650	520.250	-3.89	10.56
0710	540.250	-3.90	10.57
0730	560.250	-3.91	10.58
0750	580.250	-3.92	10.59
0810	600.130	-3.93	10.60

Input 3 (Δfeet)



Input 3 (Δfeet)





SE200A manufactured by
 In-situ, inc.
 Laramie Wyoming