TRANSMITTAL SHEET

Dames & Moore

Data in Separate File

SDMS Document
68015

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To: USEPA Region II
26 Federal Plaza
New York, NY 10278

Date 04/04/89

Your Order No.

Our Job No. 14485-002

Attention: Janet Feldstein

Subject: SCP Carlstadt

We are sending you via Fed Ex the following

Slug test data & results

This is
These are for your review

No. of copies submitted: Eight

Copies to: file
SCP tech. Com.

Dames & Moore

By T Toskos

004111

114.6

PROGRAM SLUGT, VERSION 4.2, MARCH, 1987

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS")

WELL NO.: MW-2D

DATE OF TEST: 1/31/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 46.09 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 39.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 14.91 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 159

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	13.930	.980
.53	14.020	.890
.65	14.070	.840
.77	14.090	.820
.88	14.140	.770
1.00	14.140	.770
1.25	14.150	.760
1.42	14.150	.760
1.58	14.160	.750
1.75	14.170	.740
2.00	14.180	.730
2.17	14.180	.730
2.33	14.190	.720
2.50	14.190	.720
2.67	14.200	.710
2.83	14.200	.710
3.00	14.220	.690

004112

3.17	14.220	.690
3.33	14.230	.680
3.50	14.240	.670
3.67	14.240	.670
3.83	14.250	.660
4.00	14.250	.660
4.17	14.260	.650
4.33	14.260	.650
4.50	14.270	.640
4.67	14.280	.630
4.83	14.290	.620
5.00	14.290	.620
5.17	14.300	.610
5.33	14.300	.610
5.50	14.310	.600
5.67	14.310	.600
5.83	14.320	.590
6.00	14.320	.590
6.17	14.330	.580
6.33	14.330	.580
6.50	14.340	.570
6.67	14.340	.570
6.83	14.340	.570
7.00	14.350	.560
7.17	14.350	.560
7.33	14.350	.560
7.50	14.360	.550
7.67	14.360	.550
7.83	14.360	.550
8.00	14.370	.540
8.17	14.370	.540
8.33	14.370	.540
8.50	14.380	.530
8.67	14.380	.530
8.83	14.390	.520
9.00	14.390	.520
9.17	14.390	.520
9.33	14.400	.510
9.50	14.400	.510
9.67	14.410	.500
9.83	14.410	.500
10.00	14.420	.490
10.17	14.420	.490
10.33	14.430	.480
10.50	14.430	.480
10.67	14.430	.480
10.83	14.440	.470
11.00	14.440	.470
11.17	14.440	.470
11.33	14.440	.470
11.50	14.450	.460
11.67	14.450	.460
11.83	14.460	.450
12.00	14.460	.450
12.17	14.460	.450
12.33	14.470	.440
12.50	14.470	.440
12.67	14.470	.440
12.83	14.480	.430
13.00	14.480	.430
13.17	14.490	.420
13.33	14.490	.420
13.50	14.490	.420
13.67	14.500	.410
13.83	14.500	.410
14.00	14.500	.410

14.17	14.500	.410
14.33	14.500	.410
14.50	14.500	.410
14.67	14.510	.400
14.83	14.510	.400
15.00	14.520	.390
15.50	14.520	.390
16.00	14.530	.380
16.50	14.540	.370
17.00	14.550	.360
17.50	14.560	.350
18.00	14.570	.340
18.50	14.570	.340
19.00	14.580	.330
19.50	14.580	.330
20.00	14.590	.320
20.50	14.590	.320
21.00	14.600	.310
21.50	14.610	.300
22.00	14.620	.290
22.50	14.630	.280
23.00	14.630	.280
23.50	14.640	.270
24.00	14.640	.270
24.50	14.650	.260
25.00	14.650	.260
25.50	14.660	.250
26.00	14.670	.240
26.50	14.670	.240
27.00	14.670	.240
27.50	14.680	.230
28.00	14.680	.230
28.50	14.690	.220
29.00	14.690	.220
29.50	14.690	.220
30.00	14.700	.210
30.50	14.710	.200
31.00	14.720	.190
31.50	14.720	.190
32.00	14.730	.180
32.50	14.730	.180
33.00	14.730	.180
33.50	14.740	.170
34.00	14.740	.170
34.50	14.740	.170
35.00	14.740	.170
35.50	14.750	.160
36.00	14.750	.160
36.50	14.750	.160
37.00	14.750	.160
37.50	14.750	.160
38.00	14.760	.150
38.50	14.770	.140
39.00	14.770	.140
39.50	14.770	.140
40.00	14.780	.130
41.00	14.780	.130
42.00	14.790	.120
43.00	14.790	.120
44.00	14.790	.120
45.00	14.800	.110
46.00	14.810	.100
47.00	14.810	.100
48.00	14.820	.090
49.00	14.820	.090
50.00	14.830	.080

(3)

004114

51.00	14.830	.080
52.00	14.840	.070
53.00	14.840	.070
54.00	14.840	.070
55.00	14.840	.070
56.00	14.850	.060
57.00	14.850	.060
58.00	14.850	.060
59.00	14.860	.050
60.00	14.860	.050

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.7868
.7861

004115

WELL NO: MW-2D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .99 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.466E-03	3.758E-05	2.050004	12.93
1.000E-02	1.000E-02	2.747E-03	7.043E-05	2.421276	4.27
1.000E-03	1.000E-03	4.103E-03	1.052E-04	2.764060	3.16
1.000E-04	1.000E-04	5.431E-03	1.393E-04	2.906175	4.34
1.000E-05	1.000E-05	6.696E-03	1.717E-04	2.999207	6.17
1.000E-06	1.000E-06	7.940E-03	2.036E-04	3.060916	7.38
1.000E-07	1.000E-07	9.203E-03	2.360E-04	3.094905	7.70
1.000E-08	1.000E-08	1.048E-02	2.686E-04	3.113942	7.66
1.000E-09	1.000E-09	1.174E-02	3.010E-04	3.129001	7.57
1.000E-10	1.000E-10	1.299E-02	3.331E-04	3.143713	7.58

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.49E-04 FT/MINUTE = 4.53E-03 CM/MINUTE

TRANSMISSIVITY = 5.79E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.74E-04 FT/MINUTE = 5.29E-03 CM/MINUTE

TRANSMISSIVITY = 6.77E-03 FT**2/MINUTE

004116

WELL NO.: MW-2D

DATE OF TEST: 1/31/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 46.09 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 39.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 14.86 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 147

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	15.950	1.090
.58	15.870	1.010
.92	15.870	1.010
1.00	15.830	.970
1.17	15.820	.960
1.33	15.820	.960
1.50	15.810	.950
1.67	15.800	.940
1.83	15.790	.930
2.00	15.790	.930
2.17	15.780	.920
2.33	15.770	.910
2.50	15.770	.910
2.67	15.760	.900
2.83	15.760	.900
3.00	15.750	.890
3.17	15.740	.880
3.33	15.740	.880
3.50	15.730	.870
3.67	15.730	.870
3.83	15.720	.860
4.00	15.720	.860
4.17	15.710	.850
4.33	15.710	.850
4.50	15.700	.840
4.67	15.690	.830
4.83	15.680	.820
5.00	15.680	.820
5.17	15.670	.810
5.33	15.670	.810
5.50	15.670	.810
5.67	15.660	.800

5.83	15.660	.800
6.00	15.650	.790
6.17	15.640	.780
6.33	15.640	.780
6.50	15.630	.770
6.67	15.630	.770
6.83	15.620	.760
7.00	15.610	.750
7.17	15.610	.750
7.33	15.610	.750
7.50	15.600	.740
7.67	15.590	.730
7.83	15.580	.720
8.00	15.580	.720
8.17	15.570	.710
8.33	15.570	.710
8.50	15.570	.710
8.67	15.560	.700
8.83	15.560	.700
9.00	15.560	.700
9.17	15.550	.690
9.33	15.540	.680
9.50	15.540	.680
9.67	15.540	.680
10.00	15.530	.670
10.25	15.530	.670
10.50	15.520	.660
10.75	15.510	.650
11.00	15.510	.650
11.25	15.500	.640
11.50	15.490	.630
11.75	15.490	.630
12.00	15.480	.620
12.25	15.470	.610
12.50	15.470	.610
12.75	15.470	.610
13.00	15.460	.600
13.25	15.450	.590
13.50	15.440	.580
13.75	15.440	.580
14.00	15.430	.570
14.25	15.430	.570
14.50	15.420	.560
14.75	15.420	.560
15.00	15.410	.550
15.25	15.410	.550
15.50	15.400	.540
15.75	15.390	.530
16.00	15.390	.530
16.25	15.380	.520
16.50	15.380	.520
16.75	15.370	.510
17.00	15.370	.510
17.25	15.370	.510
17.50	15.360	.500
17.75	15.350	.490
18.00	15.350	.490
18.25	15.340	.480
18.50	15.340	.480
18.75	15.330	.470
19.00	15.330	.470
19.25	15.330	.470
19.50	15.320	.460
19.75	15.320	.460
20.00	15.320	.460
20.50	[illegible]	[illegible]

21.00	15.300	.440
21.50	15.290	.430
22.00	15.280	.420
22.50	15.270	.410
23.00	15.270	.410
23.50	15.260	.400
24.00	15.250	.390
24.50	15.240	.380
25.00	15.230	.370
25.50	15.230	.370
26.00	15.220	.360
26.50	15.210	.350
27.00	15.210	.350
27.50	15.200	.340
28.00	15.190	.330
28.50	15.190	.330
29.00	15.180	.320
29.50	15.170	.310
30.00	15.170	.310
31.00	15.170	.310
32.00	15.150	.290
33.00	15.140	.280
34.00	15.130	.270
35.00	15.130	.270
36.00	15.120	.260
37.00	15.110	.250
38.00	15.100	.240
39.00	15.090	.230
40.00	15.080	.220
41.00	15.080	.220
42.00	15.070	.210
43.00	15.070	.210
44.00	15.060	.200
45.00	15.060	.200
46.00	15.050	.190
47.00	15.040	.180
48.00	15.040	.180
49.00	15.030	.170
50.00	15.030	.170
51.00	15.030	.170
52.00	15.020	.160
53.00	15.020	.160
54.00	15.020	.160
55.00	15.010	.150
56.00	15.010	.150
57.00	15.010	.150
58.00	15.000	.140
59.00	15.000	.140
60.00	15.000	.140

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.9528
.9554

WELL NO: MW-2D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.10 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	8.146E-04	2.089E-05	1.611940	11.54
1.000E-02	1.000E-02	1.662E-03	4.261E-05	1.311998	3.30
1.000E-03	1.000E-03	2.586E-03	6.632E-05	1.691864	.79
1.000E-04	1.000E-04	3.505E-03	8.988E-05	1.868554	2.13
1.000E-05	1.000E-05	4.408E-03	1.130E-04	1.962947	3.02
1.000E-06	1.000E-06	5.297E-03	1.358E-04	2.020553	3.59
1.000E-07	1.000E-07	6.173E-03	1.583E-04	2.062094	4.10
1.000E-08	1.000E-08	7.011E-03	1.798E-04	2.102465	5.15
1.000E-09	1.000E-09	7.838E-03	2.010E-04	2.134983	5.88
1.000E-10	1.000E-10	8.674E-03	2.224E-04	2.158111	6.11

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.17E-04 FT/MINUTE = 3.56E-03 CM/MINUTE

TRANSMISSIVITY = 4.56E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.37E-04 FT/MINUTE = 4.16E-03 CM/MINUTE

TRANSMISSIVITY = 5.32E-03 FT**2/MINUTE

WELL NO.: MW-5D

DATE OF TEST: 1/31/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 48.11 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 38.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 13.89 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 102

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.17	12.950	.940
.45	13.020	.870
.67	13.140	.750
.83	13.170	.720
1.00	13.190	.700
1.17	13.220	.670
1.33	13.240	.650
1.50	13.250	.640
1.67	13.270	.620
1.83	13.290	.600
2.00	13.300	.590
2.17	13.310	.580
2.33	13.310	.580
2.50	13.310	.580
2.67	13.330	.560
2.83	13.330	.560
3.00	13.340	.550
3.17	13.350	.540
3.33	13.370	.520
3.67	13.380	.510
3.83	13.400	.490
4.00	13.400	.490
4.17	13.410	.480
4.50	13.410	.480
4.67	13.420	.470
4.83	13.430	.460
5.00	13.480	.410
5.25	13.450	.440
5.50	13.460	.430
5.75	13.480	.410
6.00	13.500	.390
6.25	13.510	.380
6.50	13.510	.380

7.00	13.520	.370
7.25	13.520	.370
7.50	13.540	.350
7.75	13.550	.340
8.00	13.570	.320
8.25	13.580	.310
8.50	13.590	.300
8.75	13.590	.300
9.00	13.590	.300
9.25	13.600	.290
9.50	13.600	.290
9.75	13.610	.280
10.00	13.630	.260
10.25	13.640	.250
10.50	13.640	.250
10.75	13.640	.250
11.00	13.650	.240
11.25	13.650	.240
11.50	13.660	.230
11.75	13.660	.230
12.00	13.670	.220
12.25	13.670	.220
12.50	13.680	.210
12.75	13.680	.210
13.00	13.690	.200
13.25	13.690	.200
13.50	13.700	.190
13.75	13.700	.190
14.00	13.710	.180
14.25	13.720	.170
14.50	13.720	.170
14.75	13.720	.170
15.00	13.730	.160
15.50	13.730	.160
16.00	13.740	.150
16.50	13.740	.150
17.00	13.750	.140
17.50	13.750	.140
18.00	13.760	.130
18.50	13.760	.130
19.00	13.770	.120
19.50	13.770	.120
20.00	13.780	.110
21.00	13.780	.110
22.00	13.800	.090
23.00	13.800	.090
24.00	13.810	.080
25.00	13.820	.070
26.00	13.830	.060
27.00	13.830	.060
28.00	13.840	.050
29.00	13.840	.050
30.00	13.850	.040
31.00	13.850	.040
32.00	13.850	.040
33.00	13.850	.040
34.00	13.860	.030
35.00	13.870	.020
36.00	13.870	.020
37.00	13.870	.020
38.00	13.870	.020
39.00	13.870	.020
40.00	13.880	.010
41.00	13.880	.010
42.00	13.880	.010

43.00	13.880	.010
44.00	13.880	.010
45.00	13.880	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.7374
.7388

WELL NO: MW-5D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .95 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.618E-03	1.215E-04	3.855271	29.07
1.000E-02	1.000E-02	6.949E-03	1.829E-04	2.708520	17.07
1.000E-03	1.000E-03	9.325E-03	2.454E-04	2.059456	11.06
1.000E-04	1.000E-04	1.163E-02	3.062E-04	1.654967	7.99
1.000E-05	1.000E-05	1.387E-02	3.651E-04	1.736163	6.18
1.000E-06	1.000E-06	1.613E-02	4.244E-04	1.805932	5.00
1.000E-07	1.000E-07	1.847E-02	4.860E-04	1.847283	4.21
1.000E-08	1.000E-08	2.081E-02	5.477E-04	1.876624	3.74
1.000E-09	1.000E-09	2.308E-02	6.074E-04	1.904793	3.62
1.000E-10	1.000E-10	2.531E-02	6.661E-04	1.930929	3.47

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.26E-04 FT/MINUTE = 9.94E-03 CM/MINUTE

TRANSMISSIVITY = 1.24E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 3.81E-04 FT/MINUTE = 1.16E-02 CM/MINUTE

TRANSMISSIVITY = 1.45E-02 FT**2/MINUTE

004124

WELL NO.: MW-5D

DATE OF TEST: 1/31/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 48.11 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 38.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 13.89 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 159

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	14.850	.960
.50	14.840	.950
.58	14.850	.960
.67	14.850	.960
.83	14.830	.940
1.00	14.800	.910
1.17	14.800	.910
1.45	14.770	.880
1.58	14.770	.880
1.67	14.760	.870
1.75	14.750	.860
1.83	14.740	.850
1.92	14.740	.850
2.00	14.730	.840
2.17	14.720	.830
2.25	14.710	.820
2.33	14.710	.820
2.42	14.700	.810
2.50	14.690	.800
2.58	14.680	.790
2.67	14.670	.780
2.75	14.670	.780
2.83	14.660	.770
2.92	14.660	.770
3.00	14.660	.770
3.17	14.650	.760
3.33	14.640	.750
3.50	14.630	.740
3.67	14.620	.730
3.83	14.610	.720
3.92	14.600	.710
4.00	14.600	.710
4.08	14.590	.700

4.25	14.590	.700
4.42	14.570	.680
4.50	14.570	.680
4.58	14.560	.670
4.67	14.560	.670
4.75	14.560	.670
4.83	14.550	.660
4.92	14.550	.660
5.00	14.540	.650
5.17	14.540	.650
5.33	14.530	.640
5.50	14.520	.630
5.67	14.510	.620
5.83	14.510	.620
6.00	14.500	.610
6.17	14.490	.600
6.33	14.480	.590
6.50	14.470	.580
6.67	14.470	.580
6.83	14.460	.570
7.00	14.450	.560
7.17	14.440	.550
7.33	14.440	.550
7.50	14.430	.540
7.67	14.420	.530
7.83	14.420	.530
8.00	14.410	.520
8.17	14.400	.510
8.33	14.400	.510
8.50	14.380	.490
8.67	14.380	.490
8.83	14.370	.480
9.00	14.370	.480
9.17	14.370	.480
9.33	14.360	.470
9.50	14.350	.460
9.67	14.350	.460
9.83	14.340	.450
10.00	14.340	.450
10.17	14.330	.440
10.33	14.330	.440
10.50	14.320	.430
10.67	14.320	.430
10.83	14.310	.420
11.00	14.310	.420
11.17	14.300	.410
11.33	14.290	.400
11.50	14.290	.400
11.67	14.280	.390
11.83	14.270	.380
12.00	14.270	.380
12.17	14.270	.380
12.33	14.270	.380
12.50	14.260	.370
12.67	14.260	.370
12.83	14.250	.360
13.00	14.250	.360
13.17	14.240	.350
13.33	14.240	.350
13.50	14.230	.340
13.67	14.230	.340
13.83	14.220	.330
14.00	14.220	.330
14.17	14.220	.330
14.33	14.210	.320

14.50	14.210	.320
14.67	14.210	.320
14.83	14.200	.310
15.00	14.200	.310
15.50	14.190	.300
16.00	14.180	.290
16.50	14.170	.280
17.00	14.150	.260
17.50	14.150	.260
18.00	14.140	.250
18.50	14.130	.240
19.00	14.120	.230
19.50	14.120	.230
20.00	14.110	.220
20.50	14.110	.220
21.00	14.090	.200
21.50	14.080	.190
22.00	14.070	.180
22.50	14.070	.180
23.00	14.070	.180
23.50	14.060	.170
24.00	14.060	.170
24.50	14.050	.160
25.00	14.040	.150
26.00	14.030	.140
27.00	14.030	.140
28.00	14.010	.120
29.00	14.010	.120
30.00	14.000	.110
31.00	13.980	.090
32.00	13.980	.090
33.00	13.970	.080
34.00	13.970	.080
35.00	13.960	.070
36.00	13.960	.070
37.00	13.950	.060
38.00	13.950	.060
39.00	13.940	.050
40.00	13.940	.050
41.00	13.940	.050
42.00	13.930	.040
43.00	13.930	.040
44.00	13.930	.040
45.00	13.930	.040
46.00	13.920	.030
47.00	13.920	.030
48.00	13.920	.030
49.00	13.920	.030
50.00	13.920	.030
51.00	13.910	.020
52.00	13.910	.020
53.00	13.910	.020
54.00	13.910	.020
55.00	13.910	.020
56.00	13.900	.010
57.00	13.900	.010
58.00	13.900	.010
59.00	13.900	.010
60.00	13.900	.010
67.00	13.900	.010

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

004127

SUCCESSIVE COMPUTED
VALUES FOR HO

.9521
.9578

WELL NO: MW-5D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .97 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.284E-03	6.010E-05	5.704473	56.68
1.000E-02	1.000E-02	3.448E-03	9.074E-05	4.014151	35.69
1.000E-03	1.000E-03	4.667E-03	1.228E-04	3.093625	24.61
1.000E-04	1.000E-04	5.864E-03	1.543E-04	2.536582	18.36
1.000E-05	1.000E-05	7.037E-03	1.852E-04	2.175938	14.29
1.000E-06	1.000E-06	8.227E-03	2.165E-04	1.927243	11.55
1.000E-07	1.000E-07	9.454E-03	2.488E-04	1.750307	9.64
1.000E-08	1.000E-08	1.070E-02	2.815E-04	1.628359	8.37
1.000E-09	1.000E-09	1.192E-02	3.138E-04	1.533804	7.42
1.000E-10	1.000E-10	1.312E-02	3.453E-04	1.445332	6.42

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.48E-04 FT/MINUTE = 7.57E-03 CM/MINUTE

TRANSMISSIVITY = 9.44E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.90E-04 FT/MINUTE = 8.84E-03 CM/MINUTE

TRANSMISSIVITY = 1.10E-02 FT**2/MINUTE

PROGRAM SLUGT, VERSION 4.2, MARCH, 1987

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS")

WELL NO.: MW-10S (EARLY P

DATE OF TEST: 2/1/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.89 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 9.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 5.61 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 83

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	5.240	.370
.37	5.300	.310
.43	5.310	.300
.50	5.320	.290
.58	5.350	.260
.67	5.330	.280
.75	5.340	.270
.83	5.350	.260
1.00	5.350	.260
1.08	5.350	.260
1.17	5.360	.250
1.33	5.360	.250
1.50	5.370	.240
1.67	5.380	.230
1.83	5.380	.230
2.00	5.380	.230
2.17	5.390	.220

004130

2.33	5.390	.220
2.50	5.400	.210
2.67	5.400	.210
2.83	5.400	.210
3.00	5.400	.210
3.17	5.400	.210
3.33	5.410	.200
3.50	5.410	.200
3.67	5.410	.200
3.83	5.410	.200
4.00	5.420	.190
4.17	5.420	.190
4.33	5.420	.190
4.50	5.420	.190
4.67	5.420	.190
4.83	5.420	.190
5.00	5.420	.190
5.25	5.430	.180
5.50	5.430	.180
5.75	5.430	.180
6.00	5.430	.180
6.25	5.430	.180
6.50	5.430	.180
6.75	5.430	.180
7.00	5.430	.180
7.25	5.430	.180
7.50	5.440	.170
7.75	5.440	.170
8.00	5.440	.170
8.25	5.440	.170
8.50	5.440	.170
8.75	5.440	.170
9.00	5.440	.170
9.25	5.440	.170
9.50	5.440	.170
9.75	5.440	.170
10.00	5.440	.170
10.50	5.440	.170
11.00	5.440	.170
11.50	5.450	.160
12.00	5.450	.160
12.50	5.450	.160
13.00	5.450	.160
13.50	5.450	.160
14.00	5.450	.160
14.50	5.450	.160
15.00	5.450	.160
16.00	5.450	.160
17.00	5.460	.150
18.00	5.460	.150
19.00	5.460	.150
20.00	5.460	.150
21.00	5.460	.150
22.00	5.460	.150
23.00	5.460	.150
24.00	5.460	.150
25.00	5.460	.150
26.00	5.460	.150
27.00	5.460	.150
28.00	5.460	.150
29.00	5.470	.140
30.00	5.470	.140
35.00	5.470	.140
40.00	5.470	.140
45.00	5.480	.130
50.00	5.480	.130

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.2196
.2220

WELL NO: MW-10S (EARLY P FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .37 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.114E-03	2.225E-04	3.217350	9.73
1.000E-02	1.000E-02	4.663E-03	4.908E-04	3.626392	10.50
1.000E-03	1.000E-03	7.397E-03	7.787E-04	3.757003	10.78
1.000E-04	1.000E-04	1.011E-02	1.064E-03	3.789082	10.93
1.000E-05	1.000E-05	1.276E-02	1.343E-03	3.809824	11.01
1.000E-06	1.000E-06	1.537E-02	1.618E-03	3.836996	11.06
1.000E-07	1.000E-07	1.796E-02	1.891E-03	3.857949	11.09
1.000E-08	1.000E-08	2.053E-02	2.161E-03	3.874099	11.12
1.000E-09	1.000E-09	2.308E-02	2.429E-03	3.886541	11.14
1.000E-10	1.000E-10	2.562E-02	2.696E-03	3.895086	11.15

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.69E-04 FT/MINUTE = 5.16E-03 CM/MINUTE

TRANSMISSIVITY = 1.61E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004133

PERMEABILITY = 1.20E-04 FT/MINUTE = 3.66E-03 CM/MINUTE

TRANSMISSIVITY = 1.14E-03 FT**2/MINUTE

WELL NO.: MW-10S(EARLY PT

DATE OF TEST: 2/2/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.89 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 9.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 5.66 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 63

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.12	6.150	.490
.42	6.050	.390
.53	6.030	.370
.58	6.010	.350
.67	6.000	.340
.75	6.000	.340
.92	5.980	.320
1.08	5.980	.320
1.33	5.970	.310
2.00	5.970	.310
2.25	5.970	.310
2.50	5.970	.310
2.75	5.950	.290
3.00	5.940	.280
3.25	5.930	.270
3.50	5.930	.270
3.75	5.930	.270
4.00	5.920	.260
4.25	5.920	.260
4.50	5.920	.260
4.75	5.910	.250
5.00	5.910	.250
5.25	5.900	.240
5.50	5.900	.240
5.75	5.890	.230
6.00	5.890	.230
6.25	5.880	.220
6.50	5.880	.220
6.75	5.880	.220
7.00	5.880	.220

7.25	5.880	.220
7.50	5.880	.220
7.75	5.870	.210
8.00	5.870	.210
8.50	5.870	.210
9.00	5.870	.210
9.50	5.870	.210
10.00	5.860	.200
10.50	5.860	.200
11.00	5.860	.200
11.50	5.860	.200
12.00	5.850	.190
13.00	5.850	.190
14.00	5.840	.180
15.00	5.840	.180
16.00	5.840	.180
17.00	5.840	.180
18.00	5.830	.170
19.00	5.830	.170
20.00	5.830	.170
21.00	5.830	.170
22.00	5.830	.170
24.00	5.820	.160
26.00	5.820	.160
28.00	5.820	.160
30.00	5.820	.160
32.00	5.810	.150
34.00	5.810	.150
36.00	5.810	.150
38.00	5.810	.150
40.00	5.800	.140
45.00	5.790	.130
50.00	5.790	.130

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.2849
.2880

WELL NO: MW-10S(EARLY PT RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .49 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.231E-03	2.348E-04	2.797578	10.01
1.000E-02	1.000E-02	4.770E-03	5.021E-04	3.290763	11.22
1.000E-03	1.000E-03	7.485E-03	7.879E-04	3.413568	11.71
1.000E-04	1.000E-04	1.017E-02	1.071E-03	3.487488	11.95
1.000E-05	1.000E-05	1.280E-02	1.348E-03	3.552371	12.08
1.000E-06	1.000E-06	1.540E-02	1.621E-03	3.590281	12.17
1.000E-07	1.000E-07	1.797E-02	1.891E-03	3.617865	12.23
1.000E-08	1.000E-08	2.051E-02	2.159E-03	3.639333	12.27
1.000E-09	1.000E-09	2.305E-02	2.426E-03	3.656010	12.30
1.000E-10	1.000E-10	2.557E-02	2.691E-03	3.668823	12.33

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.35E-04 FT/MINUTE = 7.17E-03 CM/MINUTE

TRANSMISSIVITY = 2.24E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.68E-04 FT/MINUTE = 5.13E-03 CM/MINUTE

TRANSMISSIVITY = 1.60E-03 FT**2/MINUTE

WELL NO.: MW-10S

DATE OF TEST: 2/1/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.89 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 9.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 5.61 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 109

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	5.240	.370
.37	5.300	.310
.43	5.310	.300
.50	5.320	.290
.58	5.350	.260
.67	5.330	.280
.75	5.340	.270
.83	5.350	.260
1.00	5.350	.260
1.08	5.350	.260
1.17	5.360	.250
1.33	5.360	.250
1.50	5.370	.240
1.67	5.380	.230
1.83	5.380	.230
2.00	5.380	.230
2.17	5.390	.220
2.33	5.390	.220
2.50	5.400	.210
2.67	5.400	.210
2.83	5.400	.210
3.00	5.400	.210
3.17	5.400	.210
3.33	5.410	.200
3.50	5.410	.200
3.67	5.410	.200
3.83	5.410	.200
4.00	5.420	.190
4.17	5.420	.190
4.33	5.420	.190
4.50	5.420	.190

4.83	5.420	.190
5.00	5.420	.190
5.25	5.430	.180
5.50	5.430	.180
5.75	5.430	.180
6.00	5.430	.180
6.25	5.430	.180
6.50	5.430	.180
6.75	5.430	.180
7.00	5.430	.180
7.25	5.430	.180
7.50	5.440	.170
7.75	5.440	.170
8.00	5.440	.170
8.25	5.440	.170
8.50	5.440	.170
8.75	5.440	.170
9.00	5.440	.170
9.25	5.440	.170
9.50	5.440	.170
9.75	5.440	.170
10.00	5.440	.170
10.50	5.440	.170
11.00	5.440	.170
11.50	5.450	.160
12.00	5.450	.160
12.50	5.450	.160
13.00	5.450	.160
13.50	5.450	.160
14.00	5.450	.160
14.50	5.450	.160
15.00	5.450	.160
16.00	5.450	.160
17.00	5.460	.150
18.00	5.460	.150
19.00	5.460	.150
20.00	5.460	.150
21.00	5.460	.150
22.00	5.460	.150
23.00	5.460	.150
24.00	5.460	.150
25.00	5.460	.150
26.00	5.460	.150
27.00	5.460	.150
28.00	5.460	.150
29.00	5.470	.140
30.00	5.470	.140
35.00	5.470	.140
40.00	5.470	.140
45.00	5.480	.130
50.00	5.480	.130
55.00	5.480	.130
60.00	5.490	.120
65.00	5.490	.120
70.00	5.490	.120
75.00	5.500	.110
80.00	5.500	.110
85.00	5.500	.110
90.00	5.510	.100
95.00	5.510	.100
100.00	5.510	.100
105.00	5.510	.100
110.00	5.520	.090
115.00	5.520	.090
120.00	5.520	.090

130.00	5.530	.080
135.00	5.530	.080
140.00	5.530	.080
145.00	5.530	.080
150.00	5.530	.080
155.00	5.540	.070
160.00	5.540	.070
165.00	5.540	.070
170.00	5.540	.070
175.00	5.540	.070
180.00	5.550	.060

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.2004
.2005

WELL NO: MW-10S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .37 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.692E-03	1.781E-04	4.018808	49.10
1.000E-02	1.000E-02	3.689E-03	3.883E-04	4.584188	52.16
1.000E-03	1.000E-03	5.825E-03	6.132E-04	4.770961	53.32
1.000E-04	1.000E-04	7.942E-03	8.360E-04	4.888839	53.86
1.000E-05	1.000E-05	1.002E-02	1.054E-03	4.952915	54.16
1.000E-06	1.000E-06	1.206E-02	1.269E-03	4.990903	54.35
1.000E-07	1.000E-07	1.408E-02	1.482E-03	5.019866	54.48
1.000E-08	1.000E-08	1.609E-02	1.693E-03	5.042134	54.57
1.000E-09	1.000E-09	1.808E-02	1.903E-03	5.061567	54.70
1.000E-10	1.000E-10	2.006E-02	2.111E-03	5.078848	54.89

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 6.77E-05 FT/MINUTE = 2.06E-03 CM/MINUTE

TRANSMISSIVITY = 6.44E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.81E-05 FT/MINUTE = 1.47E-03 CM/MINUTE

TRANSMISSIVITY = 4.57E-04 FT**2/MINUTE

004140

WELL NO.: MW-7D

DATE OF TEST: 2/1/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 46.03 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 32.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 13.97 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 148

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	13.350	.620
.42	13.400	.570
.58	13.450	.520
.75	13.450	.520
.92	13.440	.530
1.00	13.450	.520
1.25	13.440	.530
1.42	13.450	.520
1.67	13.470	.500
1.83	13.470	.500
2.00	13.480	.490
2.17	13.510	.460
2.33	13.510	.460
2.50	13.520	.450
2.67	13.530	.440
2.83	13.530	.440
3.00	13.540	.430
3.17	13.540	.430
3.33	13.550	.420
3.50	13.550	.420
3.67	13.560	.410
3.83	13.570	.400
4.00	13.570	.400
4.17	13.580	.390
4.33	13.580	.390
4.50	13.590	.380
4.67	13.600	.370
4.83	13.610	.360
5.00	13.620	.350
5.17	13.620	.350
5.33	13.630	.340
5.50	13.630	.340
5.67	13.640	.330

5.83	13.640	.330
6.00	13.640	.330
6.17	13.650	.320
6.33	13.650	.320
6.50	13.660	.310
6.67	13.670	.300
6.83	13.670	.300
7.00	13.670	.300
7.17	13.670	.300
7.33	13.680	.290
7.50	13.680	.290
7.67	13.690	.280
7.83	13.690	.280
8.00	13.690	.280
8.17	13.700	.270
8.33	13.700	.270
8.50	13.700	.270
8.67	13.710	.260
8.83	13.710	.260
9.00	13.710	.260
9.17	13.720	.250
9.33	13.720	.250
9.50	13.720	.250
9.67	13.730	.240
9.83	13.730	.240
10.00	13.730	.240
10.17	13.730	.240
10.33	13.740	.230
10.50	13.740	.230
10.67	13.740	.230
10.83	13.740	.230
11.00	13.750	.220
11.17	13.750	.220
11.33	13.750	.220
11.50	13.750	.220
11.67	13.760	.210
11.83	13.760	.210
12.00	13.760	.210
12.17	13.760	.210
12.33	13.770	.200
12.50	13.770	.200
12.67	13.770	.200
12.83	13.770	.200
13.00	13.770	.200
13.17	13.770	.200
13.33	13.770	.200
13.50	13.770	.200
13.67	13.780	.190
13.83	13.780	.190
14.00	13.780	.190
14.50	13.780	.190
14.67	13.780	.190
14.83	13.790	.180
15.00	13.790	.180
15.25	13.790	.180
15.50	13.790	.180
15.75	13.790	.180
16.00	13.790	.180
16.25	13.790	.180
16.50	13.790	.180
16.75	13.790	.180
17.00	13.790	.180
17.50	13.800	.170
18.00	13.800	.170
18.50	13.810	.160
19.00	13.810	.160

19.50	13.810	.160
20.00	13.820	.150
20.50	13.820	.150
21.00	13.820	.150
21.50	13.830	.140
22.00	13.830	.140
23.00	13.830	.140
24.00	13.840	.130
25.00	13.840	.130
26.00	13.840	.130
27.00	13.850	.120
28.00	13.850	.120
29.00	13.850	.120
30.00	13.860	.110
31.00	13.860	.110
32.00	13.860	.110
33.00	13.870	.100
34.00	13.870	.100
35.00	13.870	.100
36.00	13.880	.090
37.00	13.880	.090
38.00	13.880	.090
39.00	13.880	.090
40.00	13.890	.080
41.00	13.890	.080
42.00	13.890	.080
43.00	13.890	.080
44.00	13.900	.070
45.00	13.900	.070
46.00	13.900	.070
47.00	13.900	.070
48.00	13.900	.070
49.00	13.910	.060
50.00	13.910	.060
51.00	13.910	.060
53.00	13.910	.060
54.00	13.920	.050
55.00	13.920	.050
56.00	13.920	.050
57.00	13.920	.050
58.00	13.930	.040
59.00	13.930	.040
60.00	13.930	.040
61.00	13.930	.040
62.00	13.930	.040
65.00	13.930	.040
67.00	13.940	.030
69.00	13.940	.030
72.00	13.940	.030

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED
VALUES FOR H0
(FEET)

.3946
.3961

WELL NO: MW-7D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .63 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.850E-03	5.692E-05	1.495665	6.31
1.000E-02	1.000E-02	3.347E-03	1.030E-04	1.988351	3.43
1.000E-03	1.000E-03	4.919E-03	1.513E-04	2.427345	6.18
1.000E-04	1.000E-04	6.457E-03	1.987E-04	2.638862	8.29
1.000E-05	1.000E-05	7.926E-03	2.439E-04	2.772739	10.31
1.000E-06	1.000E-06	9.376E-03	2.885E-04	2.860701	11.41
1.000E-07	1.000E-07	1.083E-02	3.332E-04	2.919002	11.71
1.000E-08	1.000E-08	1.230E-02	3.783E-04	2.956415	11.57
1.000E-09	1.000E-09	1.377E-02	4.238E-04	2.981205	11.37
1.000E-10	1.000E-10	1.525E-02	4.693E-04	3.000359	11.25

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.31E-04 FT/MINUTE = 3.98E-03 CM/MINUTE

TRANSMISSIVITY = 4.25E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.53E-04 FT/MINUTE = 4.65E-03 CM/MINUTE

TRANSMISSIVITY = 4.96E-03 FT**2/MINUTE

WELL NO.: MW-7D

DATE OF TEST: 2/1/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 46.03 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 32.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 13.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 207

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.32	14.970	1.030
.45	14.920	.980
.60	14.910	.970
.67	14.900	.960
.87	14.890	.950
.92	14.880	.940
1.00	14.880	.940
1.08	14.870	.930
1.17	14.870	.930
1.25	14.870	.930
1.33	14.870	.930
1.50	14.860	.920
1.67	14.860	.920
1.83	14.860	.920
2.00	14.850	.910
2.17	14.840	.900
2.33	14.840	.900
2.50	14.830	.890
2.67	14.830	.890
2.83	14.830	.890
3.00	14.820	.880
3.17	14.820	.880
3.33	14.810	.870
3.50	14.810	.870
3.67	14.800	.860
3.83	14.800	.860
4.00	14.790	.850
4.17	14.780	.840
4.33	14.780	.840
4.50	14.770	.830
4.67	14.770	.830
4.83	14.770	.830
5.00	14.760	.820

5.17	14.760	.820
5.33	14.750	.810
5.50	14.750	.810
5.67	14.740	.800
5.83	14.740	.800
6.00	14.740	.800
6.17	14.730	.790
6.33	14.730	.790
6.50	14.730	.790
6.67	14.730	.790
6.83	14.720	.780
7.00	14.720	.780
7.17	14.710	.770
7.33	14.710	.770
7.50	14.700	.760
7.67	14.700	.760
7.83	14.690	.750
8.00	14.690	.750
8.17	14.680	.740
8.33	14.680	.740
8.50	14.680	.740
8.67	14.680	.740
8.83	14.670	.730
9.00	14.670	.730
9.17	14.670	.730
9.33	14.670	.730
9.50	14.660	.720
9.67	14.660	.720
9.83	14.650	.710
10.00	14.650	.710
10.25	14.650	.710
10.50	14.640	.700
10.75	14.640	.700
11.00	14.630	.690
11.25	14.630	.690
11.50	14.620	.680
11.75	14.620	.680
12.00	14.610	.670
12.25	14.610	.670
12.50	14.600	.660
12.75	14.590	.650
13.00	14.580	.640
13.25	14.580	.640
13.50	14.580	.640
13.75	14.570	.630
14.00	14.570	.630
14.25	14.570	.630
14.50	14.570	.630
14.75	14.570	.630
15.00	14.560	.620
15.25	14.560	.620
15.50	14.550	.610
15.75	14.540	.600
16.00	14.540	.600
16.25	14.540	.600
16.50	14.530	.590
16.75	14.530	.590
17.00	14.530	.590
17.25	14.520	.580
17.50	14.520	.580
17.75	14.520	.580
18.00	14.510	.570
18.25	14.510	.570
18.50	14.500	.560
18.75	14.500	.560
19.00	14.490	.550

19.25	14.490	.550
19.50	14.480	.540
19.75	14.480	.540
20.00	14.470	.530
20.25	14.470	.530
20.50	14.470	.530
20.75	14.470	.530
21.00	14.460	.520
21.25	14.460	.520
21.50	14.460	.520
21.75	14.450	.510
22.00	14.450	.510
22.50	14.440	.500
23.00	14.440	.500
23.50	14.440	.500
24.00	14.430	.490
24.50	14.420	.480
25.00	14.410	.470
25.50	14.410	.470
26.00	14.400	.460
26.50	14.390	.450
27.00	14.390	.450
27.50	14.380	.440
28.00	14.380	.440
28.50	14.370	.430
29.00	14.370	.430
29.50	14.370	.430
30.00	14.360	.420
30.50	14.350	.410
31.00	14.350	.410
31.50	14.340	.400
32.00	14.340	.400
32.50	14.330	.390
33.00	14.330	.390
33.50	14.330	.390
34.00	14.320	.380
34.50	14.320	.380
35.00	14.310	.370
35.50	14.310	.370
36.00	14.300	.360
36.50	14.290	.350
37.00	14.290	.350
37.50	14.280	.340
38.00	14.280	.340
38.50	14.280	.340
39.00	14.270	.330
39.50	14.270	.330
40.00	14.270	.330
40.50	14.260	.320
41.00	14.260	.320
41.50	14.260	.320
42.00	14.260	.320
42.50	14.250	.310
43.00	14.240	.300
43.50	14.240	.300
44.00	14.240	.300
44.50	14.240	.300
45.00	14.230	.290
45.50	14.230	.290
46.00	14.230	.290
46.50	14.220	.280
47.00	14.220	.280
47.50	14.220	.280
48.00	14.210	.270
48.50	14.210	.270
49.[illegible]	14.210	.270

49.50	14.200	.260
50.00	14.200	.260
51.00	14.190	.250
52.00	14.190	.250
53.00	14.180	.240
54.00	14.180	.240
55.00	14.170	.230
56.00	14.170	.230
57.00	14.170	.230
58.00	14.160	.220
59.00	14.160	.220
60.00	14.150	.210
61.00	14.150	.210
62.00	14.140	.200
63.00	14.140	.200
64.00	14.140	.200
65.00	14.130	.190
66.00	14.130	.190
67.00	14.130	.190
68.00	14.120	.180
69.00	14.120	.180
70.00	14.120	.180
71.00	14.110	.170
72.00	14.110	.170
73.00	14.110	.170
74.00	14.100	.160
75.00	14.100	.160
76.00	14.100	.160
77.00	14.090	.150
78.00	14.090	.150
79.00	14.090	.150
80.00	14.080	.140
81.00	14.080	.140
82.00	14.080	.140
83.00	14.080	.140
84.00	14.070	.130
85.00	14.070	.130
90.00	14.070	.130
95.00	14.070	.130
100.00	14.050	.110
105.00	14.040	.100
110.00	14.030	.090

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.8863
.8895

WELL NO: MW-7D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.04 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	5.724E-04	1.761E-05	1.719303	17.54
1.000E-02	1.000E-02	1.180E-03	3.630E-05	1.434841	3.67
1.000E-03	1.000E-03	1.860E-03	5.723E-05	1.849534	3.02
1.000E-04	1.000E-04	2.540E-03	7.814E-05	2.092603	5.72
1.000E-05	1.000E-05	3.207E-03	9.868E-05	2.220193	7.26
1.000E-06	1.000E-06	3.860E-03	1.188E-04	2.301706	8.65
1.000E-07	1.000E-07	4.502E-03	1.385E-04	2.424827	9.94
1.000E-08	1.000E-08	5.124E-03	1.577E-04	2.497115	11.10
1.000E-09	1.000E-09	5.743E-03	1.767E-04	2.559687	11.73
1.000E-10	1.000E-10	6.366E-03	1.959E-04	2.591062	11.89

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 7.74E-05 FT/MINUTE = 2.36E-03 CM/MINUTE

TRANSMISSIVITY = 2.52E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 9.05E-05 FT/MINUTE = 2.76E-03 CM/MINUTE

TRANSMISSIVITY = 2.94E-03 FT**2/MINUTE

WELL NO.: MW-10S

DATE OF TEST: 2/2/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.89 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 9.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 5.66 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 81

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.12	6.150	.490
.42	6.050	.390
.53	6.030	.370
.58	6.010	.350
.67	6.000	.340
.75	6.000	.340
.92	5.980	.320
1.08	5.980	.320
1.33	5.970	.310
2.00	5.970	.310
2.25	5.970	.310
2.50	5.970	.310
2.75	5.950	.290
3.00	5.940	.280
3.25	5.930	.270
3.50	5.930	.270
3.75	5.930	.270
4.00	5.920	.260
4.25	5.920	.260
4.50	5.920	.260
4.75	5.910	.250
5.00	5.910	.250
5.25	5.900	.240
5.50	5.900	.240
5.75	5.890	.230
6.00	5.890	.230
6.25	5.880	.220
6.50	5.880	.220
6.75	5.880	.220
7.00	5.880	.220
7.25	5.880	.220

7.75	5.870	.210
8.00	5.870	.210
8.50	5.870	.210
9.00	5.870	.210
9.50	5.870	.210
10.00	5.860	.200
10.50	5.860	.200
11.00	5.860	.200
11.50	5.860	.200
12.00	5.850	.190
13.00	5.850	.190
14.00	5.840	.180
15.00	5.840	.180
16.00	5.840	.180
17.00	5.840	.180
18.00	5.830	.170
19.00	5.830	.170
20.00	5.830	.170
21.00	5.830	.170
22.00	5.830	.170
24.00	5.820	.160
26.00	5.820	.160
28.00	5.820	.160
30.00	5.820	.160
32.00	5.810	.150
34.00	5.810	.150
36.00	5.810	.150
38.00	5.810	.150
40.00	5.800	.140
45.00	5.790	.130
50.00	5.790	.130
55.00	5.780	.120
60.00	5.780	.120
65.00	5.780	.120
70.00	5.770	.110
75.00	5.770	.110
80.00	5.770	.110
85.00	5.770	.110
95.00	5.770	.110
105.00	5.760	.100
120.00	5.760	.100
135.00	5.750	.090
181.00	5.720	.060
211.00	5.720	.060
241.00	5.720	.060
286.00	5.710	.050
331.00	5.700	.040
376.00	5.690	.030
421.00	5.680	.020

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.2317
.2326

WELL NO: MW-10S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .49 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.842E-03	1.939E-04	3.388609	73.70
1.000E-02	1.000E-02	3.875E-03	4.078E-04	4.050883	81.56
1.000E-03	1.000E-03	6.043E-03	6.361E-04	4.347401	84.63
1.000E-04	1.000E-04	8.186E-03	8.616E-04	4.512260	86.24
1.000E-05	1.000E-05	1.029E-02	1.083E-03	4.607212	87.23
1.000E-06	1.000E-06	1.236E-02	1.301E-03	4.660318	87.74
1.000E-07	1.000E-07	1.441E-02	1.516E-03	4.696272	87.98
1.000E-08	1.000E-08	1.644E-02	1.730E-03	4.720230	88.07
1.000E-09	1.000E-09	1.846E-02	1.943E-03	4.737424	88.18
1.000E-10	1.000E-10	2.048E-02	2.155E-03	4.749228	88.10

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 6.70E-05 FT/MINUTE = 2.04E-03 CM/MINUTE

TRANSMISSIVITY = 6.37E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.80E-05 FT/MINUTE = 1.46E-03 CM/MINUTE

TRANSMISSIVITY = 4.56E-04 FT**2/MINUTE

PROGRAM SLUGT, VERSION 4.2, MARCH, 1987

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS")

WELL NO.: MW-8S

DATE OF TEST: 2/2/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.17 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 7.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.33 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 104

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	.600	.730
.33	.500	.830
.42	.510	.820
.50	.510	.820
.58	.520	.810
.67	.520	.810
.75	.520	.810
.83	.530	.800
.92	.530	.800
1.00	.540	.790
1.17	.540	.790
1.33	.550	.780
1.50	.560	.770
1.67	.560	.770
1.83	.570	.760
2.00	.570	.760
2.17	.570	.760

2.50	.580	.750
2.67	.580	.750
2.83	.580	.750
3.00	.580	.750
3.25	.580	.750
3.50	.590	.740
3.75	.590	.740
4.00	.600	.730
4.25	.600	.730
4.50	.610	.720
4.75	.610	.720
5.00	.610	.720
5.50	.620	.710
6.00	.620	.710
6.50	.620	.710
7.00	.630	.700
7.50	.630	.700
8.00	.630	.700
9.00	.640	.690
10.00	.640	.690
11.00	.650	.680
12.00	.650	.680
13.00	.660	.670
14.00	.660	.670
15.00	.660	.670
16.00	.670	.660
17.00	.670	.660
18.00	.670	.660
19.00	.670	.660
20.00	.680	.650
22.00	.690	.640
24.00	.700	.630
26.00	.700	.630
28.00	.710	.620
30.00	.720	.610
32.00	.720	.610
34.00	.730	.600
36.00	.730	.600
38.00	.730	.600
40.00	.740	.590
42.00	.740	.590
44.00	.750	.580
46.00	.750	.580
48.00	.760	.570
50.00	.760	.570
52.00	.770	.560
54.00	.770	.560
56.00	.770	.560
60.00	.790	.540
63.00	.790	.540
66.00	.800	.530
69.00	.810	.520
72.00	.820	.510
75.00	.820	.510
78.00	.830	.500
81.00	.830	.500
84.00	.840	.490
87.00	.840	.490
90.00	.850	.480
94.00	.850	.480
99.00	.860	.470
104.00	.860	.470
109.00	.870	.460
114.00	.870	.460
124.00	.880	.450

144.00	.910	.420
154.00	.920	.410
164.00	.930	.400
174.00	.940	.390
180.00	.950	.380
185.00	.960	.370
190.00	.960	.370
195.00	.960	.370
200.00	.970	.360
210.00	.980	.350
220.00	.990	.340
230.00	1.000	.330
240.00	1.010	.320
250.00	1.020	.310
260.00	1.030	.300
290.00	1.060	.270
300.00	1.060	.270
310.00	1.070	.260
320.00	1.080	.250
330.00	1.080	.250

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.7209
.7220

WELL NO: MW-8S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .84 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.429E-04	1.905E-05	21.546962	44.48
1.000E-02	1.000E-02	4.452E-04	5.936E-05	24.118520	70.73
1.000E-03	1.000E-03	8.721E-04	1.163E-04	23.186750	80.54
1.000E-04	1.000E-04	1.314E-03	1.752E-04	22.860090	84.31
1.000E-05	1.000E-05	1.752E-03	2.336E-04	22.709960	86.22
1.000E-06	1.000E-06	2.173E-03	2.898E-04	22.706640	87.23
1.000E-07	1.000E-07	2.596E-03	3.461E-04	22.641020	87.95
1.000E-08	1.000E-08	3.005E-03	4.007E-04	22.657312	88.39
1.000E-09	1.000E-09	3.420E-03	4.560E-04	22.615341	88.78
1.000E-10	1.000E-10	3.830E-03	5.107E-04	22.595780	89.06

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.85E-05 FT/MINUTE = 5.64E-04 CM/MINUTE

TRANSMISSIVITY = 1.39E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.40E-05 FT/MINUTE = 7.31E-04 CM/MINUTE

TRANSMISSIVITY = 1.80E-04 FT**2/MINUTE

WELL NO.: MW-8S

DATE OF TEST: 2/3/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 5.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.17 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 7.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.33 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 120

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	2.250	.920
.33	2.250	.920
.42	2.250	.920
.50	2.240	.910
.58	2.240	.910
.67	2.230	.900
.75	2.220	.890
.83	2.210	.880
.92	2.210	.880
1.00	2.200	.870
1.17	2.200	.870
1.33	2.190	.860
1.50	2.180	.850
1.67	2.170	.840
1.83	2.160	.830
2.00	2.160	.830
2.17	2.150	.820
2.33	2.140	.810
2.50	2.140	.810
2.67	2.140	.810
2.83	2.140	.810
3.00	2.140	.810
3.25	2.140	.810
3.50	2.140	.810
3.75	2.140	.810
4.00	2.140	.810
4.50	2.130	.800
5.00	2.130	.800
6.00	2.130	.800
7.00	2.120	.790

9.00	2.110	.780
10.00	2.100	.770
11.00	2.100	.770
12.00	2.090	.760
13.00	2.090	.760
15.00	2.080	.750
17.00	2.070	.740
19.00	2.070	.740
21.00	2.070	.740
24.00	2.060	.730
27.00	2.050	.720
29.00	2.040	.710
31.00	2.030	.700
33.00	2.030	.700
35.00	2.020	.690
37.00	2.010	.680
39.00	2.000	.670
41.00	2.000	.670
43.00	1.990	.660
45.00	1.980	.650
47.00	1.980	.650
49.00	1.970	.640
51.00	1.970	.640
53.00	1.960	.630
55.00	1.960	.630
57.00	1.950	.620
59.00	1.950	.620
61.00	1.950	.620
64.00	1.940	.610
67.00	1.930	.600
70.00	1.930	.600
73.00	1.920	.590
79.00	1.910	.580
82.00	1.900	.570
85.00	1.890	.560
88.00	1.880	.550
91.00	1.880	.550
93.00	1.870	.540
96.00	1.870	.540
99.00	1.870	.540
102.00	1.860	.530
105.00	1.860	.530
108.00	1.850	.520
111.00	1.850	.520
114.00	1.840	.510
118.00	1.830	.500
122.00	1.820	.490
125.00	1.820	.490
128.00	1.810	.480
131.00	1.810	.480
135.00	1.800	.470
139.00	1.790	.460
143.00	1.790	.460
147.00	1.780	.450
151.00	1.770	.440
155.00	1.770	.440
159.00	1.760	.430
163.00	1.760	.430
168.00	1.750	.420
173.00	1.750	.420
178.00	1.740	.410
188.00	1.730	.400
193.00	1.730	.400
198.00	1.720	.390
203.00	1.710	.380

213.00	1.700	.370
218.00	1.700	.370
223.00	1.690	.360
228.00	1.690	.360
233.00	1.680	.350
238.00	1.670	.340
243.00	1.660	.330
248.00	1.660	.330
253.00	1.650	.320
258.00	1.650	.320
263.00	1.650	.320
268.00	1.640	.310
273.00	1.640	.310
278.00	1.640	.310
283.00	1.630	.300
293.00	1.630	.300
303.00	1.620	.290
313.00	1.610	.280
323.00	1.600	.270
333.00	1.590	.260
343.00	1.580	.250
353.00	1.580	.250
363.00	1.580	.250

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.8033
.8047

WELL NO: MW-8S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .93 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.123E-04	1.498E-05	2.606981	29.61
1.000E-02	1.000E-02	3.232E-04	4.310E-05	3.133618	70.90
1.000E-03	1.000E-03	6.109E-04	8.145E-05	3.168911	87.62
1.000E-04	1.000E-04	9.122E-04	1.216E-04	3.280492	94.61
1.000E-05	1.000E-05	1.209E-03	1.611E-04	3.337210	98.10
1.000E-06	1.000E-06	1.499E-03	1.999E-04	3.418183	100.13
1.000E-07	1.000E-07	1.786E-03	2.381E-04	3.468753	101.46
1.000E-08	1.000E-08	2.070E-03	2.760E-04	3.505253	102.39
1.000E-09	1.000E-09	2.351E-03	3.135E-04	3.532827	103.09
1.000E-10	1.000E-10	2.631E-03	3.508E-04	3.553668	103.62

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.88E-05 FT/MINUTE = 5.72E-04 CM/MINUTE

TRANSMISSIVITY = 1.41E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004160

PERMEABILITY = 2.43E-05 FT/MINUTE = 7.41E-04 CM/MINUTE

TRANSMISSIVITY = 1.82E-04 FT**2/MINUTE

WELL NO.: MW-8D

DATE OF TEST: 2/3/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 43.06 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 19.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 10.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 32

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	9.710	1.230
.50	9.720	1.220
.67	9.720	1.220
.83	9.720	1.220
1.17	9.720	1.220
1.33	9.720	1.220
1.50	9.720	1.220
2.00	9.720	1.220
2.50	9.720	1.220
3.00	9.720	1.220
3.42	9.730	1.210
4.00	9.730	1.210
4.50	9.730	1.210
5.00	9.730	1.210
6.00	9.730	1.210
7.00	9.730	1.210
9.00	9.730	1.210
11.00	9.730	1.210
13.00	9.730	1.210
18.00	9.730	1.210
23.00	9.730	1.210
28.00	9.730	1.210
38.00	9.730	1.210
48.00	9.730	1.210
63.00	9.730	1.210
78.00	9.720	1.220
83.00	9.720	1.220
113.00	9.710	1.230
143.00	9.710	1.230
173.00	9.700	1.240

233.00	9.680	1.260

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
1.2126
1.2131

WELL NO: MW-8D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = 1.26 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.287E-05	1.204E-06	5.049471	74.52
1.000E-02	1.000E-02	1.277E-04	6.723E-06	5.058407	74.53
1.000E-03	1.000E-03	3.420E-04	1.800E-05	5.337181	74.51
1.000E-04	1.000E-04	5.893E-04	3.102E-05	5.523736	74.48
1.000E-05	1.000E-05	8.345E-04	4.392E-05	5.610388	74.47
1.000E-06	1.000E-06	1.074E-03	5.655E-05	5.663214	74.46
1.000E-07	1.000E-07	1.310E-03	6.893E-05	5.683967	74.46
1.000E-08	1.000E-08	1.541E-03	8.113E-05	5.704615	74.45
1.000E-09	1.000E-09	1.772E-03	9.326E-05	5.716970	74.45
1.000E-10	1.000E-10	2.000E-03	1.053E-04	5.727546	74.45

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.52E-07 FT/MINUTE = 1.07E-05 CM/MINUTE

TRANSMISSIVITY = 6.69E-06 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN: 004163

PERMEABILITY = 4.12E-07 FT/MINUTE = 1.26E-05 CM/MINUTE

TRANSMISSIVITY = 7.83E-06 FT**2/MINUTE

WELL NO.: MW-8D

DATE OF TEST: 2/3/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 43.06 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 19.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 9.68 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 29

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	10.730	1.050
.33	10.740	1.060
.42	10.740	1.060
.50	10.740	1.060
.58	10.740	1.060
.67	10.740	1.060
.75	10.740	1.060
.83	10.730	1.050
.92	10.730	1.050
1.00	10.730	1.050
1.17	10.730	1.050
1.33	10.730	1.050
1.50	10.730	1.050
2.00	10.730	1.050
3.00	10.730	1.050
4.00	10.730	1.050
5.00	10.730	1.050
7.00	10.720	1.040
9.00	10.720	1.040
11.00	10.720	1.040
16.00	10.710	1.030
21.00	10.710	1.030
26.00	10.710	1.030
31.00	10.700	1.020
36.00	10.700	1.020
41.00	10.690	1.010
46.00	10.690	1.010
51.00	10.680	1.000
56.00	10.680	1.000

SUCCESSIVE COMPUTED
VALUES FOR HO
(FEET)

1.0540
1.0541

WELL NO: MW-8D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = 1.07 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.517E-05	7.987E-07	5.906874	16.32
1.000E-02	1.000E-02	7.302E-05	3.843E-06	6.813305	16.44
1.000E-03	1.000E-03	2.385E-04	1.255E-05	6.631880	17.86
1.000E-04	1.000E-04	4.562E-04	2.401E-05	6.479151	18.41
1.000E-05	1.000E-05	6.774E-04	3.565E-05	6.414016	18.63
1.000E-06	1.000E-06	8.936E-04	4.703E-05	6.372248	18.75
1.000E-07	1.000E-07	1.105E-03	5.816E-05	6.356901	18.81
1.000E-08	1.000E-08	1.314E-03	6.918E-05	6.341459	18.85
1.000E-09	1.000E-09	1.519E-03	7.995E-05	6.339795	18.88
1.000E-10	1.000E-10	1.723E-03	9.070E-05	6.337414	18.90

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.33E-06 FT/MINUTE = 1.01E-04 CM/MINUTE

TRANSMISSIVITY = 6.32E-05 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004166

PERMEABILITY = 3.89E-06 FT/MINUTE = 1.19E-04 CM/MINUTE

TRANSMISSIVITY = 7.40E-05 FT**2/MINUTE

WELL NO.: MW-9S

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 4.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.65 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.35 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 18

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	2.760	.590
.33	2.820	.530
.42	2.860	.490
.50	2.910	.440
.58	2.970	.380
.67	3.000	.350
.75	3.020	.330
.83	3.070	.280
.92	3.110	.240
1.00	3.130	.220
1.17	3.180	.170
1.33	3.250	.100
1.50	3.270	.080
1.67	3.300	.050
1.83	3.310	.040
2.00	3.330	.020
2.08	3.340	.010
2.17	3.340	.010

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
1.3868
1.3079
1.1592
1.0687
1.0382

004167

WELL NO: MW-9S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = 1.04 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	9.740E-02	1.217E-02	3.543710	2.06
1.000E-02	1.000E-02	1.259E-01	1.574E-02	2.678808	1.56
1.000E-03	1.000E-03	1.527E-01	1.908E-02	2.141525	1.24
1.000E-04	1.000E-04	1.775E-01	2.219E-02	1.791993	1.04
1.000E-05	1.000E-05	2.023E-01	2.529E-02	1.540777	.89
1.000E-06	1.000E-06	2.281E-01	2.851E-02	1.362447	.78
1.000E-07	1.000E-07	2.570E-01	3.212E-02	1.234850	.69
1.000E-08	1.000E-08	2.879E-01	3.599E-02	1.089817	.62
1.000E-09	1.000E-09	3.159E-01	3.949E-02	1.002868	.55
1.000E-10	1.000E-10	3.435E-01	4.294E-02	.964229	.50

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 9.41E-03 FT/MINUTE = 2.87E-01 CM/MINUTE

TRANSMISSIVITY = 7.53E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004168

PERMEABILITY = 1.26E-02 FT/MINUTE = 3.83E-01 CM/MINUTE

TRANSMISSIVITY = 1.01E-01 FT**2/MINUTE

WELL NO.: MW-9S

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 4.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.65 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.37 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 28

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	3.900	.530
.33	3.840	.470
.42	3.780	.410
.50	3.720	.350
.58	3.700	.330
.67	3.640	.270
.75	3.620	.250
.83	3.580	.210
.92	3.570	.200
1.00	3.570	.200
1.17	3.530	.160
1.25	3.510	.140
1.33	3.490	.120
1.42	3.470	.100
1.50	3.450	.080
1.58	3.450	.080
1.67	3.430	.060
1.75	3.430	.060
1.83	3.430	.060
1.92	3.420	.050
2.00	3.420	.050
2.08	3.410	.040
2.17	3.400	.030
2.25	3.400	.030
2.33	3.400	.030
2.50	3.390	.020
2.67	3.380	.010
2.83	3.380	.010

004169

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED
VALUES FOR HO
(FEET)

.7998
.7840

WELL NO: MW-9S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .78 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	6.919E-02	8.649E-03	2.969965	1.67
1.000E-02	1.000E-02	9.262E-02	1.158E-02	2.096399	1.16
1.000E-03	1.000E-03	1.140E-01	1.425E-02	1.577999	.87
1.000E-04	1.000E-04	1.350E-01	1.687E-02	1.252575	.71
1.000E-05	1.000E-05	1.546E-01	1.932E-02	1.070071	.64
1.000E-06	1.000E-06	1.750E-01	2.187E-02	1.039043	.58
1.000E-07	1.000E-07	1.977E-01	2.472E-02	.881186	.49
1.000E-08	1.000E-08	2.223E-01	2.778E-02	.748958	.41
1.000E-09	1.000E-09	2.476E-01	3.095E-02	.661176	.36
1.000E-10	1.000E-10	2.743E-01	3.429E-02	.623055	.33

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 8.17E-03 FT/MINUTE = 2.49E-01 CM/MINUTE

TRANSMISSIVITY = 6.54E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004171

PERMEABILITY = 1.09E-02 FT/MINUTE = 3.33E-01 CM/MINUTE

TRANSMISSIVITY = 8.74E-02 FT**2/MINUTE

WELL NO.: MW-11D

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 27.96 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 24.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 11.04 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 140

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	10.070	.970
.33	10.100	.940
.42	10.090	.950
.50	10.080	.960
.58	10.110	.930
.67	10.120	.920
.75	10.120	.920
.83	10.130	.910
.92	10.140	.900
1.00	10.150	.890
1.08	10.160	.880
1.17	10.170	.870
1.25	10.170	.870
1.33	10.180	.860
1.42	10.190	.850
1.50	10.190	.850
1.58	10.190	.850
1.67	10.200	.840
1.75	10.220	.820
1.83	10.220	.820
1.92	10.230	.810
2.00	10.230	.810
2.08	10.240	.800
2.17	10.250	.790
2.25	10.250	.790
2.42	10.260	.780
2.58	10.260	.780
2.67	10.270	.770
2.83	10.280	.760
2.92	10.280	.760
3.00	10.290	.750

3.17	10.300	.740
3.25	10.310	.730
3.33	10.320	.720
3.50	10.330	.710
3.67	10.340	.700
3.83	10.340	.700
4.00	10.350	.690
4.17	10.360	.680
4.33	10.370	.670
4.50	10.380	.660
4.67	10.390	.650
4.83	10.400	.640
5.00	10.410	.630
5.17	10.420	.620
5.33	10.430	.610
5.50	10.440	.600
5.67	10.440	.600
5.83	10.450	.590
6.00	10.460	.580
6.17	10.460	.580
6.33	10.470	.570
6.50	10.480	.560
6.67	10.490	.550
6.83	10.500	.540
7.00	10.510	.530
7.17	10.520	.520
7.33	10.520	.520
7.50	10.530	.510
7.67	10.540	.500
7.83	10.540	.500
8.00	10.550	.490
8.17	10.560	.480
8.33	10.560	.480
8.50	10.560	.480
8.67	10.570	.470
8.83	10.570	.470
9.00	10.580	.460
9.17	10.590	.450
9.33	10.600	.440
9.50	10.600	.440
9.67	10.610	.430
9.83	10.620	.420
10.00	10.630	.410
10.17	10.630	.410
10.33	10.630	.410
10.50	10.640	.400
10.67	10.640	.400
10.83	10.650	.390
11.00	10.650	.390
11.17	10.660	.380
11.33	10.660	.380
11.50	10.660	.380
11.75	10.670	.370
12.00	10.670	.370
12.25	10.680	.360
12.50	10.690	.350
12.75	10.700	.340
13.00	10.710	.330
13.25	10.720	.320
13.50	10.720	.320
13.75	10.730	.310
14.00	10.730	.310
14.25	10.740	.300
14.50	10.740	.300
15.00	10.750	.290

16.00	10.770	.270
16.50	10.770	.270
17.00	10.780	.260
17.50	10.800	.240
18.00	10.810	.230
18.50	10.820	.220
19.00	10.830	.210
19.50	10.830	.210
20.00	10.840	.200
20.50	10.840	.200
21.00	10.850	.190
21.50	10.860	.180
22.00	10.860	.180
22.50	10.870	.170
23.00	10.870	.170
23.50	10.880	.160
24.00	10.890	.150
24.50	10.890	.150
25.00	10.900	.140
26.00	10.910	.130
27.00	10.920	.120
28.00	10.930	.110
29.00	10.930	.110
30.00	10.940	.100
31.00	10.940	.100
32.00	10.950	.090
34.00	10.960	.080
36.00	10.970	.070
38.00	10.970	.070
40.00	10.980	.060
42.00	10.980	.060
45.00	10.990	.050
48.00	11.000	.040
51.00	11.010	.030
54.00	11.010	.030
57.00	11.020	.020
60.00	11.020	.020
65.00	11.030	.010
70.00	11.030	.010
75.00	11.030	.010
80.00	11.030	.010
85.00	11.030	.010

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.8237
.8403

WELL NO: MW-11D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .98 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.989E-03	8.288E-05	5.688592	59.77
1.000E-02	1.000E-02	3.302E-03	1.376E-04	3.614294	32.60
1.000E-03	1.000E-03	4.728E-03	1.970E-04	2.564949	19.85
1.000E-04	1.000E-04	6.146E-03	2.561E-04	1.953552	13.06
1.000E-05	1.000E-05	7.513E-03	3.130E-04	1.583655	9.11
1.000E-06	1.000E-06	8.867E-03	3.695E-04	1.341098	6.68
1.000E-07	1.000E-07	1.021E-02	4.256E-04	1.176874	5.04
1.000E-08	1.000E-08	1.158E-02	4.826E-04	1.062341	3.94
1.000E-09	1.000E-09	1.296E-02	5.399E-04	.968600	3.09
1.000E-10	1.000E-10	1.432E-02	5.968E-04	.915979	2.40

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.97E-04 FT/MINUTE = 6.01E-03 CM/MINUTE

TRANSMISSIVITY = 4.73E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004175

PERMEABILITY = 2.33E-04 FT/MINUTE = 7.09E-03 CM/MINUTE

TRANSMISSIVITY = 5.58E-03 FT**2/MINUTE

WELL NO.: MW-11D

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 27.96 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 24.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 11.03 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 106

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	12.030	1.000
.42	11.990	.960
.50	11.950	.920
.58	11.940	.910
.67	11.930	.900
.75	11.910	.880
.83	11.890	.860
.92	11.870	.840
1.00	11.860	.830
1.08	11.840	.810
1.25	11.830	.800
1.33	11.820	.790
1.42	11.810	.780
1.50	11.790	.760
1.58	11.770	.740
1.67	11.770	.740
1.83	11.750	.720
1.92	11.730	.700
2.00	11.730	.700
2.08	11.720	.690
2.17	11.700	.670
2.25	11.690	.660
2.33	11.670	.640
2.42	11.670	.640
2.50	11.660	.630
2.58	11.660	.630
2.67	11.650	.620
2.75	11.640	.610
2.83	11.630	.600
2.92	11.620	.590
3.00	11.610	.580
3.17	11.590	.560
[illegible]	[illegible]	[illegible]

3.50	11.560	.530
3.67	11.550	.520
3.83	11.530	.500
4.00	11.520	.490
4.17	11.500	.470
4.33	11.490	.460
4.50	11.470	.440
4.67	11.460	.430
4.83	11.460	.430
5.00	11.450	.420
5.17	11.440	.410
5.33	11.430	.400
5.50	11.420	.390
5.67	11.400	.370
5.83	11.390	.360
6.00	11.380	.350
6.17	11.370	.340
6.33	11.360	.330
6.50	11.360	.330
6.67	11.350	.320
6.83	11.340	.310
7.00	11.330	.300
7.17	11.330	.300
7.33	11.320	.290
7.50	11.310	.280
7.67	11.300	.270
7.83	11.300	.270
8.00	11.290	.260
8.17	11.280	.250
8.33	11.270	.240
8.50	11.270	.240
8.67	11.260	.230
8.83	11.260	.230
9.00	11.250	.220
9.25	11.240	.210
9.50	11.240	.210
9.75	11.230	.200
10.00	11.230	.200
10.25	11.220	.190
10.50	11.210	.180
10.75	11.200	.170
11.00	11.190	.160
11.25	11.190	.160
11.50	11.180	.150
11.75	11.180	.150
12.00	11.170	.140
12.33	11.170	.140
12.67	11.160	.130
13.00	11.160	.130
13.33	11.150	.120
13.67	11.150	.120
14.00	11.150	.120
14.50	11.140	.110
15.00	11.130	.100
15.50	11.130	.100
16.00	11.130	.100
17.00	11.120	.090
18.00	11.110	.080
19.00	11.100	.070
20.00	11.090	.060
21.00	11.080	.050
22.00	11.080	.050
23.00	11.080	.050
24.00	11.070	.040
26.00	11.070	.040
28.00	11.070	.040

30.00	11.060	.030
35.00	11.060	.030
40.00	11.060	.030
50.00	11.050	.020
60.00	11.050	.020
70.00	11.050	.020
80.00	11.050	.020

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.5225
.5691
.6259
.6886
.7440
.7864
.8184

WELL NO: MW-11D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.01 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.220E-03	1.758E-04	2.226075	10.22
1.000E-02	1.000E-02	6.909E-03	2.879E-04	1.599778	4.45
1.000E-03	1.000E-03	9.683E-03	4.035E-04	1.292539	4.19
1.000E-04	1.000E-04	1.237E-02	5.155E-04	1.085203	4.94
1.000E-05	1.000E-05	1.503E-02	6.263E-04	1.040815	6.07
1.000E-06	1.000E-06	1.773E-02	7.387E-04	1.010793	6.71
1.000E-07	1.000E-07	2.034E-02	8.476E-04	.999646	6.97
1.000E-08	1.000E-08	2.293E-02	9.554E-04	1.008099	7.04
1.000E-09	1.000E-09	2.555E-02	1.065E-03	1.013105	7.04
1.000E-10	1.000E-10	2.820E-02	1.175E-03	1.021151	7.35

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.94E-04 FT/MINUTE = 1.20E-02 CM/MINUTE

TRANSMISSIVITY = 9.46E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.65E-04 FT/MINUTE = 1.42E-02 CM/MINUTE

TRANSMISSIVITY = 1.12E-02 FT**2/MINUTE

PROGRAM SLUGT, VERSION 4.2, MARCH, 1987

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS")

WELL NO.: MW-11D(EARLY)

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 27.96 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 24.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 11.04 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 131

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	10.070	.970
.33	10.100	.940
.42	10.090	.950
.50	10.080	.960
.58	10.110	.930
.67	10.120	.920
.75	10.120	.920
.83	10.130	.910
.92	10.140	.900
1.00	10.150	.890
1.08	10.160	.880
1.17	10.170	.870
1.25	10.170	.870
1.33	10.180	.860
1.42	10.190	.850
1.50	10.190	.850
1.58	10.190	.850
1.67	10.200	.840
1.75	10.220	.820

004180

1.92	10.230	.810
2.00	10.230	.810
2.08	10.240	.800
2.17	10.250	.790
2.25	10.250	.790
2.42	10.260	.780
2.58	10.260	.780
2.67	10.270	.770
2.83	10.280	.760
2.92	10.280	.760
3.00	10.290	.750
3.08	10.300	.740
3.17	10.300	.740
3.25	10.310	.730
3.33	10.320	.720
3.50	10.330	.710
3.67	10.340	.700
3.83	10.340	.700
4.00	10.350	.690
4.17	10.360	.680
4.33	10.370	.670
4.50	10.380	.660
4.67	10.390	.650
4.83	10.400	.640
5.00	10.410	.630
5.17	10.420	.620
5.33	10.430	.610
5.50	10.440	.600
5.67	10.440	.600
5.83	10.450	.590
6.00	10.460	.580
6.17	10.460	.580
6.33	10.470	.570
6.50	10.480	.560
6.67	10.490	.550
6.83	10.500	.540
7.00	10.510	.530
7.17	10.520	.520
7.33	10.520	.520
7.50	10.530	.510
7.67	10.540	.500
7.83	10.540	.500
8.00	10.550	.490
8.17	10.560	.480
8.33	10.560	.480
8.50	10.560	.480
8.67	10.570	.470
8.83	10.570	.470
9.00	10.580	.460
9.17	10.590	.450
9.33	10.600	.440
9.50	10.600	.440
9.67	10.610	.430
9.83	10.620	.420
10.00	10.630	.410
10.17	10.630	.410
10.33	10.630	.410
10.50	10.640	.400
10.67	10.640	.400
10.83	10.650	.390
11.00	10.650	.390
11.17	10.660	.380
11.33	10.660	.380
11.50	10.660	.380
11.75	10.670	.370

12.25	10.680	.360
12.50	10.690	.350
12.75	10.700	.340
13.00	10.710	.330
13.25	10.720	.320
13.50	10.720	.320
13.75	10.730	.310
14.00	10.730	.310
14.25	10.740	.300
14.50	10.740	.300
15.00	10.750	.290
15.50	10.760	.280
16.00	10.770	.270
16.50	10.770	.270
17.00	10.780	.260
17.50	10.800	.240
18.00	10.810	.230
18.50	10.820	.220
19.00	10.830	.210
19.50	10.830	.210
20.00	10.840	.200
20.50	10.840	.200
21.00	10.850	.190
21.50	10.860	.180
22.00	10.860	.180
22.50	10.870	.170
23.00	10.870	.170
23.50	10.880	.160
24.00	10.890	.150
24.50	10.890	.150
25.00	10.900	.140
26.00	10.910	.130
27.00	10.920	.120
28.00	10.930	.110
29.00	10.930	.110
30.00	10.940	.100
31.00	10.940	.100
32.00	10.950	.090
34.00	10.960	.080
36.00	10.970	.070
38.00	10.970	.070
40.00	10.980	.060
42.00	10.980	.060
45.00	10.990	.050
48.00	11.000	.040

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.8908
.8972

WELL NO: MW-11D(EARLY) FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .98 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.569E-03	6.537E-05	2.848518	16.11
1.000E-02	1.000E-02	2.931E-03	1.221E-04	1.809143	7.77
1.000E-03	1.000E-03	4.416E-03	1.840E-04	1.222910	3.92
1.000E-04	1.000E-04	5.885E-03	2.452E-04	.998114	2.02
1.000E-05	1.000E-05	7.296E-03	3.040E-04	.868594	1.74
1.000E-06	1.000E-06	8.687E-03	3.620E-04	.841402	2.00
1.000E-07	1.000E-07	1.007E-02	4.197E-04	.872646	1.85
1.000E-08	1.000E-08	1.148E-02	4.782E-04	.892314	1.56
1.000E-09	1.000E-09	1.288E-02	5.365E-04	.907179	1.36
1.000E-10	1.000E-10	1.427E-02	5.947E-04	.919251	1.32

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.18E-04 FT/MINUTE = 6.64E-03 CM/MINUTE

TRANSMISSIVITY = 5.23E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.57E-04 FT/MINUTE = 7.84E-03 CM/MINUTE

TRANSMISSIVITY = 6.17E-03 FT**2/MINUTE

WELL NO.: MW-11D(EARLY)

DATE OF TEST: 2/6/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 27.96 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 24.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 11.03 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 99

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	12.030	1.000
.42	11.990	.960
.50	11.950	.920
.58	11.940	.910
.67	11.930	.900
.75	11.910	.880
.83	11.890	.860
.92	11.870	.840
1.00	11.860	.830
1.08	11.840	.810
1.25	11.830	.800
1.33	11.820	.790
1.42	11.810	.780
1.50	11.790	.760
1.58	11.770	.740
1.67	11.770	.740
1.83	11.750	.720
1.92	11.730	.700
2.00	11.730	.700
2.08	11.720	.690
2.17	11.700	.670
2.25	11.690	.660
2.33	11.670	.640
2.42	11.670	.640
2.50	11.660	.630
2.58	11.660	.630
2.67	11.650	.620
2.75	11.640	.610
2.83	11.630	.600
2.92	11.620	.590
3.00	11.610	.580
3.17	11.590	.560
3.33	11.570	.540
3.50	11.560	.530
3.67	11.550	.520

4.00	11.520	.490
4.17	11.500	.470
4.33	11.490	.460
4.50	11.470	.440
4.67	11.460	.430
4.83	11.460	.430
5.00	11.450	.420
5.17	11.440	.410
5.33	11.430	.400
5.50	11.420	.390
5.67	11.400	.370
5.83	11.390	.360
6.00	11.380	.350
6.17	11.370	.340
6.33	11.360	.330
6.50	11.360	.330
6.67	11.350	.320
6.83	11.340	.310
7.00	11.330	.300
7.17	11.330	.300
7.33	11.320	.290
7.50	11.310	.280
7.67	11.300	.270
7.83	11.300	.270
8.00	11.290	.260
8.17	11.280	.250
8.33	11.270	.240
8.50	11.270	.240
8.67	11.260	.230
8.83	11.260	.230
9.00	11.250	.220
9.25	11.240	.210
9.50	11.240	.210
9.75	11.230	.200
10.00	11.230	.200
10.25	11.220	.190
10.50	11.210	.180
10.75	11.200	.170
11.00	11.190	.160
11.25	11.190	.160
11.50	11.180	.150
11.75	11.180	.150
12.00	11.170	.140
12.33	11.170	.140
12.67	11.160	.130
13.00	11.160	.130
13.33	11.150	.120
13.67	11.150	.120
14.00	11.150	.120
14.50	11.140	.110
15.00	11.130	.100
15.50	11.130	.100
16.00	11.130	.100
17.00	11.120	.090
18.00	11.110	.080
19.00	11.100	.070
20.00	11.090	.060
21.00	11.080	.050
22.00	11.080	.050
23.00	11.080	.050
24.00	11.070	.040
26.00	11.070	.040
28.00	11.070	.040

SUCCESSIVE COMPUTED
VALUES FOR H0
(FEET)

.8344
.8535

WELL NO: MW-11D(EARLY) RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.01 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.025E-03	1.677E-04	2.292921	7.70
1.000E-02	1.000E-02	6.860E-03	2.858E-04	1.611224	3.69
1.000E-03	1.000E-03	9.784E-03	4.077E-04	1.279211	1.66
1.000E-04	1.000E-04	1.258E-02	5.244E-04	1.066773	1.13
1.000E-05	1.000E-05	1.536E-02	6.398E-04	1.018860	1.47
1.000E-06	1.000E-06	1.815E-02	7.561E-04	.987602	1.45
1.000E-07	1.000E-07	2.088E-02	8.701E-04	.973793	1.32
1.000E-08	1.000E-08	2.358E-02	9.824E-04	.980425	1.22
1.000E-09	1.000E-09	2.627E-02	1.094E-03	.985435	1.30
1.000E-10	1.000E-10	2.902E-02	1.209E-03	.992570	1.30

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 4.17E-04 FT/MINUTE = 1.27E-02 CM/MINUTE

TRANSMISSIVITY = 1.00E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.92E-04 FT/MINUTE = 1.50E-02 CM/MINUTE

TRANSMISSIVITY = 1.18E-02 FT**2/MINUTE

SUMMARY OF SLUG-TEST RESULTS

FORMER SCP SITE, CARLSTADT, NJ

WELL NO.	FALLING (F) OR RISING (R) HEAD CASE	PERMEABILITY (FT/MIN) USING ALL THE DATA POINTS BY: METHOD 1	METHOD 2	PERMEABILITY (FT/MIN) USING EARLY DATA POINTS ONLY BY: METHOD 1	METHOD 2
2D	F	1.05E-04	1.74E-04		
2D	R	6.63E-05	1.37E-04		
5D	F	6.66E-04	3.81E-04		
5D	R	3.45E-04	2.90E-04		
7D	F	1.03E-04	1.53E-04		
7D	R	5.72E-05	9.05E-05		
8S	F	1.90E-05	2.40E-05		
8S	R	1.50E-05	2.43E-05		
8D	F	1.20E-06	4.12E-07		
8D	R	7.99E-07	3.89E-06		
9S	F	4.29E-02	1.26E-02		
9S	R	3.43E-02	1.09E-02		
10S	F	1.78E-04	6.77E-05	2.23E-04	1.69E-04
10S	R	1.94E-04	6.70E-05	2.35E-04	2.35E-04
11S	F	8.85E-06	2.19E-05		
11S	R	1.33E-04	2.83E-05		
11D	F	5.97E-04	2.33E-04	5.95E-04	2.57E-04
11D	R	4.04E-04	4.65E-04	5.24E-04	4.92E-04
12S	F	2.05E-04	2.37E-04	6.69E-04	4.40E-04
12S	R	1.25E-04	1.57E-04	1.27E-04	2.57E-04
12D	F	4.11E-06	7.92E-06		
12D	R	6.10E-06	7.69E-06		
13D	F	2.99E-03	1.10E-03		
13D	R	2.23E-03	9.91E-04		

NOTE: (1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

(2) METHOD OF BOUWER AND RICE

* USED DIAMETER OF DRILLED HOLE BECAUSE THE STATIC WATER LEVEL WAS BELOW TOP OF SCREEN.

SUMMARY OF SLUG-TEST RESULTS
FORMER SCP SITE, CARLSTADT, NJ

WELL NO.	FALLING (F) OR RISING (R) HEAD CASE	PERMEABILITY (FT/DAY) USING ALL THE DATA POINTS B METHOD 1	METHOD 2	PERMEABILITY (FT/DAY) USING EARLY DATA POINTS ONL METHOD 1	METHOD 2
2D	F	1.51E-01	2.51E-01		
2D	R	9.55E-02	1.97E-01		
5D	F	9.59E-01	5.49E-01		
5D	R	4.97E-01	4.18E-01		
7D	F	1.48E-01	2.20E-01		
7D	R	8.24E-02	1.30E-01		
8S	F	2.74E-02	3.46E-02		
8S	R	2.16E-02	3.50E-02		
8D	F	1.73E-03	5.93E-04		
8D	R	1.15E-03	5.60E-03		
9S	F	6.18E+01	1.81E+01		
9S	R	4.94E+01	1.57E+01		
10S	F	2.56E-01	9.75E-02	3.21E-01	2.43E-01
10S	R	2.79E-01	9.65E-02	3.38E-01	3.38E-01
11S	F	1.27E-02	3.15E-02		
11S	R	1.92E-01	4.08E-02		
11D	F	8.59E-01	3.36E-01	8.57E-01	3.70E-01
11D	R	5.82E-01	6.70E-01	7.55E-01	7.08E-01
12S	F	2.95E-01	3.41E-01	9.63E-01	6.34E-01
12S	R	1.80E-01	2.26E-01	1.83E-01	3.70E-01
12D	F	5.92E-03	1.14E-02		
12D	R	8.78E-03	1.11E-02		
13D	F	4.30E+00	1.58E+00		
13D	R	3.21E+00	1.43E+00		

NOTE: (1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS
(2) METHOD OF BOUWER AND RICE
* USED DIAMETER OF DRILLED HOLE BECAUSE THE STATIC WATER LEVEL WAS BELOW TOP OF SCREEN

SUMMARY OF SLUG-TEST RESULTS

FORMER SCP SITE, CARLSTADT, NJ

WELL NO.	FALLING (F) OR RISING (R) HEAD CASE	PERMEABILITY (CM/SEC) USING ALL THE DATA POINTS B METHOD 1	METHOD 2	PERMEABILITY (CM/SEC) USING EARLY DATA POINTS ONLY BY: METHOD 1	METHOD 2
2D	F	5.34E-05	8.84E-05		
2D	R	3.37E-05	6.96E-05		
5D	F	3.38E-04	1.94E-04		
5D	R	1.75E-04	1.47E-04		
7D	F	5.23E-05	7.77E-05		
7D	R	2.91E-05	4.60E-05		
8S	F	9.65E-06	1.22E-05		
8S	R	7.61E-06	1.23E-05		
8D	F	6.10E-07	2.09E-07		
8D	R	4.06E-07	1.98E-06		
9S	F	2.18E-02	6.40E-03		
9S	R	1.74E-02	5.54E-03		
10S	F	9.04E-05	3.44E-05	1.13E-04	8.59E-05
10S	R	9.86E-05	3.40E-05	1.19E-04	1.19E-04
11S	F	4.50E-06	1.11E-05		
11S	R	6.76E-05	1.44E-05		
11D	F	3.03E-04	1.18E-04	3.02E-04	1.31E-04
11D	R	2.05E-04	2.36E-04	2.66E-04	2.50E-04
12S	F	1.04E-04	1.20E-04	3.40E-04	2.24E-04
12S	R	6.35E-05	7.98E-05	6.45E-05	1.31E-04
12D	F	2.09E-06	4.02E-06		
12D	R	3.10E-06	3.91E-06		
13D	F	1.52E-03	5.59E-04		
13D	R	1.13E-03	5.03E-04		

NOTE: (1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS
(2) METHOD OF BOUWER AND RICE

* USED DIAMETER OF DRILLED HOLE BECAUSE THE STATIC WATER LEVEL WAS BELOW TOP OF SCREEN.

PROGRAM SLUGT, VERSION 4.2, MARCH, 1987

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS")

WELL NO.: MW-12S

DATE OF TEST: 2/7/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.36 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.64 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 95

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	.830	.810
.33	.850	.790
.42	.860	.780
.50	.870	.770
.58	.880	.760
.67	.890	.750
.75	.910	.730
.83	.920	.720
.92	.930	.710
1.00	.930	.710
1.08	.940	.700
1.17	.950	.690
1.25	.960	.680
1.33	.970	.670
1.42	.980	.660
1.50	.980	.660
1.58	.990	.650
1.67	.990	.650
1.75	1.000	.640
1.83	1.010	.630

004191

1.92	1.010	.630
2.17	1.030	.610
2.33	1.040	.600
2.50	1.050	.590
2.67	1.060	.580
2.83	1.070	.570
3.00	1.080	.560
3.17	1.080	.560
3.33	1.100	.540
3.50	1.110	.530
3.67	1.120	.520
3.83	1.130	.510
4.00	1.140	.500
4.17	1.140	.500
4.33	1.150	.490
4.50	1.160	.480
4.67	1.160	.480
4.83	1.170	.470
5.00	1.170	.470
5.25	1.180	.460
5.50	1.200	.440
5.75	1.220	.420
6.00	1.230	.410
6.25	1.230	.410
6.50	1.240	.400
6.75	1.250	.390
7.00	1.260	.380
7.25	1.260	.380
7.50	1.270	.370
7.75	1.270	.370
8.00	1.280	.360
8.50	1.290	.350
9.00	1.310	.330
9.33	1.320	.320
9.67	1.330	.310
10.00	1.330	.310
10.33	1.340	.300
10.67	1.340	.300
11.00	1.350	.290
11.33	1.360	.280
11.67	1.360	.280
12.00	1.360	.280
12.50	1.370	.270
13.00	1.380	.260
13.50	1.380	.260
14.00	1.390	.250
14.50	1.400	.240
15.00	1.410	.230
15.50	1.420	.220
16.00	1.430	.210
16.50	1.430	.210
17.00	1.430	.210
17.50	1.440	.200
18.00	1.440	.200
19.00	1.450	.190
20.00	1.460	.180
21.00	1.460	.180
22.00	1.470	.170
23.00	1.470	.170
25.00	1.480	.160
27.00	1.500	.140
29.00	1.510	.130
31.00	1.520	.120
33.00	1.520	.120
35.00	1.530	.110
37.00	1.530	.110

42.00	1.540	.100
45.00	1.550	.090
50.00	1.560	.080
55.00	1.560	.080
60.00	1.560	.080
65.00	1.570	.070
75.00	1.580	.060
85.00	1.590	.050

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.5476
.5623

WELL NO: MW-12S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .82 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.642E-03	2.052E-04	1.321475	3.99
1.000E-02	1.000E-02	3.269E-03	4.086E-04	1.157207	4.72
1.000E-03	1.000E-03	5.062E-03	6.328E-04	1.085222	7.32
1.000E-04	1.000E-04	6.849E-03	8.561E-04	1.099264	8.68
1.000E-05	1.000E-05	8.591E-03	1.074E-03	1.102766	10.03
1.000E-06	1.000E-06	1.029E-02	1.286E-03	1.106079	11.12
1.000E-07	1.000E-07	1.195E-02	1.494E-03	1.110295	11.68
1.000E-08	1.000E-08	1.360E-02	1.700E-03	1.113850	11.74
1.000E-09	1.000E-09	1.527E-02	1.908E-03	1.113967	11.53
1.000E-10	1.000E-10	1.695E-02	2.119E-03	1.113453	11.29

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.84E-04 FT/MINUTE = 5.60E-03 CM/MINUTE

TRANSMISSIVITY = 1.47E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.37E-04 FT/MINUTE = 7.22E-03 CM/MINUTE

TRANSMISSIVITY = 1.89E-03 FT**2/MINUTE

WELL NO.: MW-12S

DATE OF TEST: 2/7/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.36 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.59 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 71

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	2.090	.500
.33	2.070	.480
.42	2.060	.470
.50	2.050	.460
.58	2.040	.450
.67	2.040	.450
.75	2.030	.440
.92	2.020	.430
1.00	2.020	.430
1.08	2.010	.420
1.17	2.010	.420
1.25	2.010	.420
1.33	2.000	.410
1.42	2.000	.410
1.50	2.000	.410
1.58	1.990	.400
1.67	1.980	.390
1.75	1.980	.390
1.83	1.970	.380
1.92	1.970	.380
2.00	1.970	.380
2.17	1.970	.380
2.33	1.970	.380
2.50	1.960	.370
2.67	1.960	.370
2.83	1.960	.370
3.00	1.960	.370
3.25	1.950	.360
3.50	1.950	.360
3.75	1.950	.360
4.00	1.940	.350
4.33	1.940	.350
4.67	1.930	.340

004195

5.33	1.920	.330
5.67	1.920	.330
6.00	1.910	.320
6.50	1.900	.310
7.00	1.890	.300
7.50	1.880	.290
8.00	1.870	.280
8.50	1.870	.280
9.00	1.870	.280
10.00	1.860	.270
11.00	1.850	.260
12.00	1.840	.250
13.00	1.830	.240
14.00	1.820	.230
15.00	1.820	.230
16.00	1.810	.220
17.00	1.800	.210
18.00	1.790	.200
19.00	1.780	.190
20.00	1.780	.190
21.00	1.770	.180
22.00	1.770	.180
24.00	1.760	.170
26.00	1.750	.160
28.00	1.740	.150
30.00	1.740	.150
32.00	1.730	.140
34.00	1.730	.140
37.00	1.720	.130
40.00	1.720	.130
45.00	1.710	.120
50.00	1.700	.110
55.00	1.690	.100
60.00	1.680	.090
65.00	1.680	.090
70.00	1.670	.080
75.00	1.670	.080

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.3864
.3903

WELL NO: MW-12S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .50 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.001E-03	1.252E-04	1.392832	2.62
1.000E-02	1.000E-02	2.398E-03	2.997E-04	1.551818	8.99
1.000E-03	1.000E-03	4.029E-03	5.036E-04	1.575538	11.49
1.000E-04	1.000E-04	5.662E-03	7.077E-04	1.636034	12.59
1.000E-05	1.000E-05	7.262E-03	9.078E-04	1.661776	13.17
1.000E-06	1.000E-06	8.836E-03	1.105E-03	1.677318	13.53
1.000E-07	1.000E-07	1.039E-02	1.299E-03	1.698738	13.77
1.000E-08	1.000E-08	1.193E-02	1.491E-03	1.731722	13.97
1.000E-09	1.000E-09	1.345E-02	1.681E-03	1.781022	14.33
1.000E-10	1.000E-10	1.496E-02	1.870E-03	1.807945	14.61

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.22E-04 FT/MINUTE = 3.72E-03 CM/MINUTE

TRANSMISSIVITY = 9.77E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.57E-04 FT/MINUTE = 4.79E-03 CM/MINUTE

TRANSMISSIVITY = 1.26E-03 FT**2/MINUTE

WELL NO.: MW-11S

DATE OF TEST: 2/7/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.63 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 7.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.87 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 55

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	3.480	.390
.33	3.470	.400
.42	3.480	.390
.50	3.480	.390
.58	3.480	.390
.67	3.480	.390
.75	3.480	.390
.83	3.480	.390
.92	3.490	.380
1.00	3.490	.380
1.08	3.490	.380
1.17	3.490	.380
1.25	3.490	.380
1.33	3.490	.380
1.50	3.490	.380
1.67	3.490	.380
1.83	3.490	.380
2.00	3.490	.380
2.33	3.490	.380
2.67	3.490	.380
3.00	3.490	.380
3.50	3.490	.380
4.00	3.490	.380
5.00	3.490	.380
6.00	3.490	.380
8.00	3.500	.370
10.00	3.500	.370
15.00	3.510	.360
20.00	3.510	.360
25.00	3.520	.350
30.00	3.530	.340

40.00	3.540	.330
48.00	3.540	.330
50.00	3.550	.320
60.00	3.560	.310
70.00	3.570	.300
80.00	3.570	.300
90.00	3.580	.290
100.00	3.580	.290
110.00	3.590	.280
120.00	3.590	.280
135.00	3.600	.270
150.00	3.610	.260
165.00	3.620	.250
180.00	3.630	.240
195.00	3.630	.240
210.00	3.640	.230
230.00	3.640	.230
250.00	3.650	.220
270.00	3.650	.220
300.00	3.660	.210
330.00	3.670	.200
360.00	3.680	.190
390.00	3.690	.180

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.3751
.3758

WELL NO: MW-11S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .40 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	6.640E-05	8.853E-06	3.455203	57.64
1.000E-02	1.000E-02	2.826E-04	3.768E-05	4.531222	93.49
1.000E-03	1.000E-03	6.567E-04	8.756E-05	5.296320	105.40
1.000E-04	1.000E-04	1.069E-03	1.425E-04	5.616738	109.46
1.000E-05	1.000E-05	1.476E-03	1.968E-04	5.765722	111.26
1.000E-06	1.000E-06	1.874E-03	2.499E-04	5.844055	112.25
1.000E-07	1.000E-07	2.265E-03	3.019E-04	5.899668	112.86
1.000E-08	1.000E-08	2.652E-03	3.535E-04	5.929855	113.28
1.000E-09	1.000E-09	3.036E-03	4.047E-04	5.955119	113.59
1.000E-10	1.000E-10	3.416E-03	4.555E-04	5.974123	113.83

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.19E-05 FT/MINUTE = 6.66E-04 CM/MINUTE

TRANSMISSIVITY = 1.64E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004200

PERMEABILITY = 1.56E-05 FT/MINUTE = 4.76E-04 CM/MINUTE

TRANSMISSIVITY = 1.17E-04 FT**2/MINUTE

WELL NO.: MW-11S

DATE OF TEST: 2/8/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 3.63 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 7.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.95 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 37

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	4.420	.470
.50	4.340	.390
.67	4.340	.390
.75	4.330	.380
.83	4.320	.370
.92	4.310	.360
1.00	4.300	.350
1.17	4.300	.350
1.33	4.300	.350
1.50	4.300	.350
1.83	4.290	.340
2.17	4.290	.340
2.50	4.290	.340
3.00	4.280	.330
3.50	4.280	.330
4.00	4.280	.330
5.00	4.270	.320
6.00	4.260	.310
7.00	4.260	.310
8.00	4.260	.310
10.00	4.260	.310
12.00	4.250	.300
15.00	4.250	.300
20.00	4.250	.300
25.00	4.240	.290
30.00	4.240	.290
35.00	4.240	.290
65.00	4.220	.270
95.00	4.200	.250
125.00	4.180	.230
155.00	4.180	.230

004201

215.00	4.150	.200
245.00	4.130	.180
275.00	4.120	.170
305.00	4.120	.170
335.00	4.100	.150

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.3400
.3403

004202

WELL NO: MW-11S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .47 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.000E-03	1.333E-04	2.918457	104.36
1.000E-02	1.000E-02	2.645E-03	3.526E-04	3.182285	107.14
1.000E-03	1.000E-03	4.549E-03	6.065E-04	3.392023	108.07
1.000E-04	1.000E-04	6.444E-03	8.592E-04	3.488154	108.47
1.000E-05	1.000E-05	8.297E-03	1.106E-03	3.538413	108.68
1.000E-06	1.000E-06	1.012E-02	1.349E-03	3.569026	108.80
1.000E-07	1.000E-07	1.192E-02	1.589E-03	3.589353	108.89
1.000E-08	1.000E-08	1.370E-02	1.827E-03	3.603613	108.95
1.000E-09	1.000E-09	1.547E-02	2.063E-03	3.614281	109.00
1.000E-10	1.000E-10	1.724E-02	2.299E-03	3.622272	109.04

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.83E-05 FT/MINUTE = 8.63E-04 CM/MINUTE

TRANSMISSIVITY = 2.12E-04 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.04E-05 FT/MINUTE = 6.21E-04 CM/MINUTE 004203

TRANSMISSIVITY = 1.53E-04 FT**2/MINUTE

WELL NO.: MW-12S(EARLY PT

DATE OF TEST: 2/7/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.36 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.64 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 78

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	.830	.810
.33	.850	.790
.42	.860	.780
.50	.870	.770
.58	.880	.760
.67	.890	.750
.75	.910	.730
.83	.920	.720
.92	.930	.710
1.00	.930	.710
1.08	.940	.700
1.17	.950	.690
1.25	.960	.680
1.33	.970	.670
1.42	.980	.660
1.50	.980	.660
1.58	.990	.650
1.67	.990	.650
1.75	1.000	.640
1.83	1.010	.630
1.92	1.010	.630
2.17	1.030	.610
2.33	1.040	.600
2.50	1.050	.590
2.67	1.060	.580
2.83	1.070	.570
3.00	1.080	.560
3.17	1.080	.560
3.33	1.100	.540
3.50	1.110	.530

004204

3.67	1.120	.520
3.83	1.130	.510
4.00	1.140	.500
4.17	1.140	.500
4.33	1.150	.490
4.50	1.160	.480
4.67	1.160	.480
4.83	1.170	.470
5.00	1.170	.470
5.25	1.180	.460
5.50	1.200	.440
5.75	1.220	.420
6.00	1.230	.410
6.25	1.230	.410
6.50	1.240	.400
6.75	1.250	.390
7.00	1.260	.380
7.25	1.260	.380
7.50	1.270	.370
7.75	1.270	.370
8.00	1.280	.360
8.50	1.290	.350
9.00	1.310	.330
9.33	1.320	.320
9.67	1.330	.310
10.00	1.330	.310
10.33	1.340	.300
10.67	1.340	.300
11.00	1.350	.290
11.33	1.360	.280
11.67	1.360	.280
12.00	1.360	.280
12.50	1.370	.270
13.00	1.380	.260
13.50	1.380	.260
14.00	1.390	.250
14.50	1.400	.240
15.00	1.410	.230
15.50	1.420	.220
16.00	1.430	.210
16.50	1.430	.210
17.00	1.430	.210
17.50	1.440	.200
18.00	1.440	.200
19.00	1.450	.190
20.00	1.460	.180
21.00	1.460	.180
22.00	1.470	.170

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.7090
.7134

WELL NO: MW-12S(EARLY PT FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .82 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.571E-03	1.964E-04	1.380855	2.92
1.000E-02	1.000E-02	3.358E-03	4.197E-04	1.126629	.75
1.000E-03	1.000E-03	5.352E-03	6.690E-04	1.026487	.70
1.000E-04	1.000E-04	7.340E-03	9.175E-04	1.025729	1.12
1.000E-05	1.000E-05	9.290E-03	1.161E-03	1.019830	1.38
1.000E-06	1.000E-06	1.121E-02	1.402E-03	1.015108	1.55
1.000E-07	1.000E-07	1.311E-02	1.639E-03	1.012168	1.66
1.000E-08	1.000E-08	1.500E-02	1.875E-03	1.010177	1.75
1.000E-09	1.000E-09	1.687E-02	2.109E-03	1.008062	1.81
1.000E-10	1.000E-10	1.873E-02	2.341E-03	1.007758	1.87

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.42E-04 FT/MINUTE = 1.04E-02 CM/MINUTE

TRANSMISSIVITY = 2.73E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004206

PERMEABILITY = 4.40E-04 FT/MINUTE = 1.34E-02 CM/MINUTE

TRANSMISSIVITY = 3.52E-03 FT**2/MINUTE

WELL NO.: MW-12S(EARLY PT

DATE OF TEST: 2/7/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 6.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 6.36 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 8.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 1.59 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 56

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	2.090	.500
.33	2.070	.480
.42	2.060	.470
.50	2.050	.460
.58	2.040	.450
.67	2.040	.450
.75	2.030	.440
.92	2.020	.430
1.00	2.020	.430
1.08	2.010	.420
1.17	2.010	.420
1.25	2.010	.420
1.33	2.000	.410
1.42	2.000	.410
1.50	2.000	.410
1.58	1.990	.400
1.67	1.980	.390
1.75	1.980	.390
1.83	1.970	.380
1.92	1.970	.380
2.00	1.970	.380
2.17	1.970	.380
2.33	1.970	.380
2.50	1.960	.370
2.67	1.960	.370
2.83	1.960	.370
3.00	1.960	.370
3.25	1.950	.360
3.50	1.950	.360
3.75	1.950	.360

004207

4.00	1.940	.350
4.33	1.940	.350
4.67	1.930	.340
5.00	1.930	.340
5.33	1.920	.330
5.67	1.920	.330
6.00	1.910	.320
6.50	1.900	.310
7.00	1.890	.300
7.50	1.880	.290
8.00	1.870	.280
8.50	1.870	.280
9.00	1.870	.280
10.00	1.860	.270
11.00	1.850	.260
12.00	1.840	.250
13.00	1.830	.240
14.00	1.820	.230
15.00	1.820	.230
16.00	1.810	.220
17.00	1.800	.210
18.00	1.790	.200
19.00	1.780	.190
20.00	1.780	.190
21.00	1.770	.180
22.00	1.770	.180

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.4315
.4327

WELL NO: MW-12S(EARLY PT RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF HO = .50 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.019E-03	1.274E-04	1.369009	.41
1.000E-02	1.000E-02	2.623E-03	3.279E-04	1.418553	2.16
1.000E-03	1.000E-03	4.527E-03	5.659E-04	1.401977	3.00
1.000E-04	1.000E-04	6.437E-03	8.046E-04	1.439011	3.38
1.000E-05	1.000E-05	8.308E-03	1.038E-03	1.452717	3.58
1.000E-06	1.000E-06	1.015E-02	1.268E-03	1.460850	3.70
1.000E-07	1.000E-07	1.196E-02	1.495E-03	1.466339	3.78
1.000E-08	1.000E-08	1.376E-02	1.720E-03	1.470157	3.83
1.000E-09	1.000E-09	1.555E-02	1.943E-03	1.472824	3.88
1.000E-10	1.000E-10	1.733E-02	2.166E-03	1.475842	3.91

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.00E-04 FT/MINUTE = 6.09E-03 CM/MINUTE

TRANSMISSIVITY = 1.60E-03 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

004209

PERMEABILITY = 2.57E-04 FT/MINUTE = 7.84E-03 CM/MINUTE

TRANSMISSIVITY = 2.06E-03 FT**2/MINUTE

WELL NO.: MW-12D

DATE OF TEST: 2/14/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 22.97 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 10.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 11.03 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 46

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	10.070	.960
.58	10.090	.940
.67	10.090	.940
.83	10.090	.940
.92	10.080	.950
1.00	10.080	.950
1.08	10.080	.950
1.17	10.080	.950
1.25	10.080	.950
1.50	10.080	.950
1.75	10.080	.950
2.00	10.090	.940
2.17	10.090	.940
2.33	10.100	.930
2.75	10.110	.920
3.50	10.110	.920
4.00	10.120	.910
4.50	10.120	.910
5.00	10.120	.910
6.00	10.130	.900
7.00	10.140	.890
8.00	10.140	.890
10.00	10.160	.870
12.00	10.160	.870
14.00	10.170	.860
16.00	10.180	.850
18.00	10.200	.830
20.00	10.220	.810
25.00	10.240	.790
30.00	10.260	.770
35.00	10.270	.760
40.00	10.280	.750
45.00	10.310	.720

55.00	10.330	.700
60.00	10.340	.690
75.00	10.370	.660
90.00	10.390	.640
105.00	10.400	.630
120.00	10.410	.620
150.00	10.440	.590
180.00	10.460	.570
210.00	10.470	.560
270.00	10.500	.530
330.00	10.520	.510
390.00	10.540	.490

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.8841
.8910

WELL NO: MW-12D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .97 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.319E-05	4.113E-06	1.625730	26.81
1.000E-02	1.000E-02	1.611E-04	1.534E-05	2.580092	55.74
1.000E-03	1.000E-03	3.656E-04	3.482E-05	3.322853	69.88
1.000E-04	1.000E-04	5.965E-04	5.681E-05	3.611226	75.32
1.000E-05	1.000E-05	8.255E-04	7.861E-05	3.740019	77.75
1.000E-06	1.000E-06	1.049E-03	9.995E-05	3.815844	79.10
1.000E-07	1.000E-07	1.270E-03	1.209E-04	3.854486	79.95
1.000E-08	1.000E-08	1.488E-03	1.417E-04	3.881362	80.52
1.000E-09	1.000E-09	1.704E-03	1.623E-04	3.902826	80.95
1.000E-10	1.000E-10	1.918E-03	1.827E-04	3.919495	81.27

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 6.68E-06 FT/MINUTE = 2.04E-04 CM/MINUTE

TRANSMISSIVITY = 7.01E-05 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 7.92E-06 FT/MINUTE = 2.41E-04 CM/MINUTE

TRANSMISSIVITY = 8.31E-05 FT**2/MINUTE

004217

WELL NO.: MW-13D

DATE OF TEST: 2/14/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 31.09 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 17.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 10.91 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 46

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.33	11.530	.620
.58	11.440	.530
.75	11.380	.470
.83	11.330	.420
1.00	11.300	.390
1.08	11.270	.360
1.17	11.250	.340
1.25	11.230	.320
1.33	11.210	.300
1.42	11.190	.280
1.50	11.180	.270
1.67	11.160	.250
1.75	11.140	.230
1.83	11.130	.220
1.92	11.120	.210
2.00	11.110	.200
2.17	11.090	.180
2.33	11.080	.170
2.50	11.070	.160
2.67	11.060	.150
2.83	11.050	.140
3.00	11.040	.130
3.17	11.030	.120
3.33	11.020	.110
3.50	11.020	.110
3.67	11.010	.100
3.83	11.000	.090
4.00	10.990	.080
4.17	10.990	.080
4.33	10.990	.080
4.50	10.980	.070
4.75	10.980	.070
5.00	10.980	.070

004213

6.00	10.970	.060
6.50	10.960	.050
7.00	10.960	.050
8.00	10.950	.040
9.00	10.940	.030
10.00	10.940	.030
11.00	10.930	.020
12.00	10.930	.020
13.00	10.920	.010
14.00	10.920	.010
15.00	10.920	.010
16.00	10.920	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME.

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.3460
.3584

WELL NO: MW-13D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .63 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.584E-02	9.320E-04	2.347678	4.93
1.000E-02	1.000E-02	2.337E-02	1.375E-03	1.763434	2.56
1.000E-03	1.000E-03	3.075E-02	1.809E-03	1.411512	1.35
1.000E-04	1.000E-04	3.784E-02	2.226E-03	1.192442	1.03
1.000E-05	1.000E-05	4.492E-02	2.642E-03	1.180856	1.12
1.000E-06	1.000E-06	5.192E-02	3.054E-03	1.199718	1.16
1.000E-07	1.000E-07	5.855E-02	3.444E-03	1.220140	1.12
1.000E-08	1.000E-08	6.509E-02	3.829E-03	1.237501	1.14
1.000E-09	1.000E-09	7.214E-02	4.244E-03	1.242213	1.20
1.000E-10	1.000E-10	7.964E-02	4.684E-03	1.239016	1.25

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 8.42E-04 FT/MINUTE = 2.57E-02 CM/MINUTE

TRANSMISSIVITY = 1.43E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 9.91E-04 FT/MINUTE = 3.02E-02 CM/MINUTE

TRANSMISSIVITY = 1.68E-02 FT**2/MINUTE

WELL NO.: MW-13D

DATE OF TEST: 2/14/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 31.09 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 17.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 10.91 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 43

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.42	10.070	.840
.58	10.120	.790
.75	10.160	.750
.92	10.190	.720
1.00	10.230	.680
1.17	10.240	.670
1.42	10.300	.610
1.50	10.320	.590
1.67	10.350	.560
1.83	10.370	.540
2.00	10.410	.500
2.17	10.440	.470
2.33	10.470	.440
2.50	10.470	.440
2.75	10.520	.390
3.00	10.550	.360
3.25	10.580	.330
3.50	10.600	.310
3.75	10.630	.280
4.00	10.650	.260
4.25	10.670	.240
4.50	10.690	.220
4.75	10.700	.210
5.00	10.720	.190
5.25	10.740	.170
5.50	10.750	.160
5.75	10.760	.150
6.00	10.770	.140
6.25	10.780	.130
6.50	10.790	.120
6.75	10.800	.110
7.00	10.810	.100
7.25	10.820	.090

7.75	10.830	.080
8.00	10.840	.070
8.50	10.850	.060
9.00	10.850	.060
10.00	10.870	.040
11.00	10.880	.030
12.00	10.880	.030
14.00	10.890	.020
16.00	10.900	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.8652
.8862

WELL NO: MW-13D FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .89 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	9.748E-03	5.734E-04	4.245834	9.47
1.000E-02	1.000E-02	1.441E-02	8.474E-04	2.984743	5.96
1.000E-03	1.000E-03	1.905E-02	1.121E-03	2.283925	4.09
1.000E-04	1.000E-04	2.366E-02	1.392E-03	1.868811	3.07
1.000E-05	1.000E-05	2.816E-02	1.656E-03	1.592386	2.47
1.000E-06	1.000E-06	3.230E-02	1.900E-03	1.399061	2.02
1.000E-07	1.000E-07	3.670E-02	2.159E-03	1.254655	1.77
1.000E-08	1.000E-08	4.107E-02	2.416E-03	1.159361	1.49
1.000E-09	1.000E-09	4.577E-02	2.693E-03	1.088917	1.33
1.000E-10	1.000E-10	5.074E-02	2.985E-03	1.016668	1.21

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 9.32E-04 FT/MINUTE = 2.84E-02 CM/MINUTE

TRANSMISSIVITY = 1.58E-02 FT**2/MINUTE

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.10E-03 FT/MINUTE = 3.35E-02 CM/MINUTE

TRANSMISSIVITY = 1.87E-02 FT**2/MINUTE

004218

WELL NO.: MW-12D

DATE OF TEST: 2/16/89

PROJECT NO.: 14485-002

CLIENT: SCIENTIFIC CHEMICAL PROCE

SITE LOCATION: CARLSTADT, NJ

FIELD INVESTIGATOR: M.CLARK

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 15.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 22.97 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 10.50 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 10.79 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 53

TIME (MINUTE)	DEPTH TO WATER (FEET)	HEAD (FEET)
.25	11.820	1.030
.42	11.820	1.030
.50	11.820	1.030
.67	11.820	1.030
.83	11.820	1.030
1.00	11.820	1.030
1.33	11.820	1.030
1.67	11.820	1.030
2.00	11.810	1.020
2.50	11.810	1.020
2.83	11.810	1.020
3.00	11.810	1.020
4.00	11.810	1.020
5.00	11.800	1.010
6.00	11.800	1.010
7.00	11.790	1.000
8.00	11.780	.990
9.00	11.780	.990
10.00	11.780	.990
12.00	11.770	.980
14.00	11.770	.980
16.00	11.770	.980
18.00	11.760	.970
23.00	11.750	.960
28.00	11.740	.950
33.00	11.730	.940
38.00	11.710	.920
43.00	11.700	.910
48.00	11.690	.900
53.00	11.670	.880
58.00	11.660	.870
63.00	11.660	.870
68.00	11.640	.850

73.00	11.630	.840
78.00	11.630	.840
83.00	11.620	.830
89.00	11.600	.810
98.00	11.580	.790
113.00	11.550	.760
128.00	11.530	.740
143.00	11.510	.720
158.00	11.470	.680
173.00	11.460	.670
188.00	11.440	.650
203.00	11.420	.630
218.00	11.400	.610
248.00	11.360	.570
278.00	11.330	.540
308.00	11.310	.520
338.00	11.270	.480
368.00	11.260	.470
398.00	11.240	.450
428.00	11.230	.440

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
1.0069
1.0097

WELL NO: MW-12D RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.04 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/MINUTE AND PERMEABILITY UNITS ARE FT/MINUTE)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.116E-05	2.015E-06	1.970730	112.23
1.000E-02	1.000E-02	6.408E-05	6.103E-06	2.150057	28.92
1.000E-03	1.000E-03	1.469E-04	1.399E-05	3.686284	29.49
1.000E-04	1.000E-04	2.480E-04	2.362E-05	4.784014	52.70
1.000E-05	1.000E-05	3.501E-04	3.334E-05	5.352213	63.11
1.000E-06	1.000E-06	4.503E-04	4.288E-05	5.662819	68.66
1.000E-07	1.000E-07	5.487E-04	5.226E-05	5.850945	72.07
1.000E-08	1.000E-08	6.457E-04	6.150E-05	5.977021	74.36
1.000E-09	1.000E-09	7.424E-04	7.070E-05	6.074343	76.07
1.000E-10	1.000E-10	8.370E-04	7.972E-05	6.133200	77.25

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 6.49E-06 FT/MINUTE = 1.98E-04 CM/MINUTE

TRANSMISSIVITY = 6.82E-05 FT**2/MINUTE

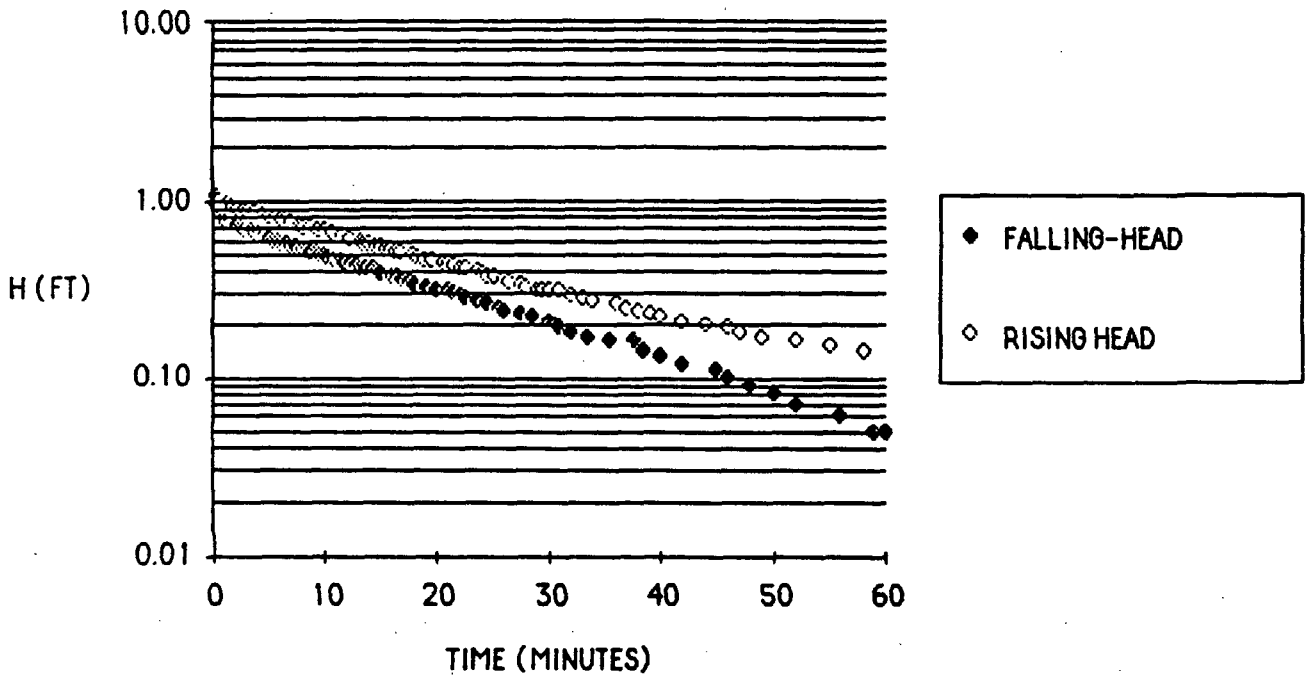
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 7.69E-06 FT/MINUTE = 2.34E-04 CM/MINUTE

TRANSMISSIVITY = 8.08E-05 FT**2/MINUTE

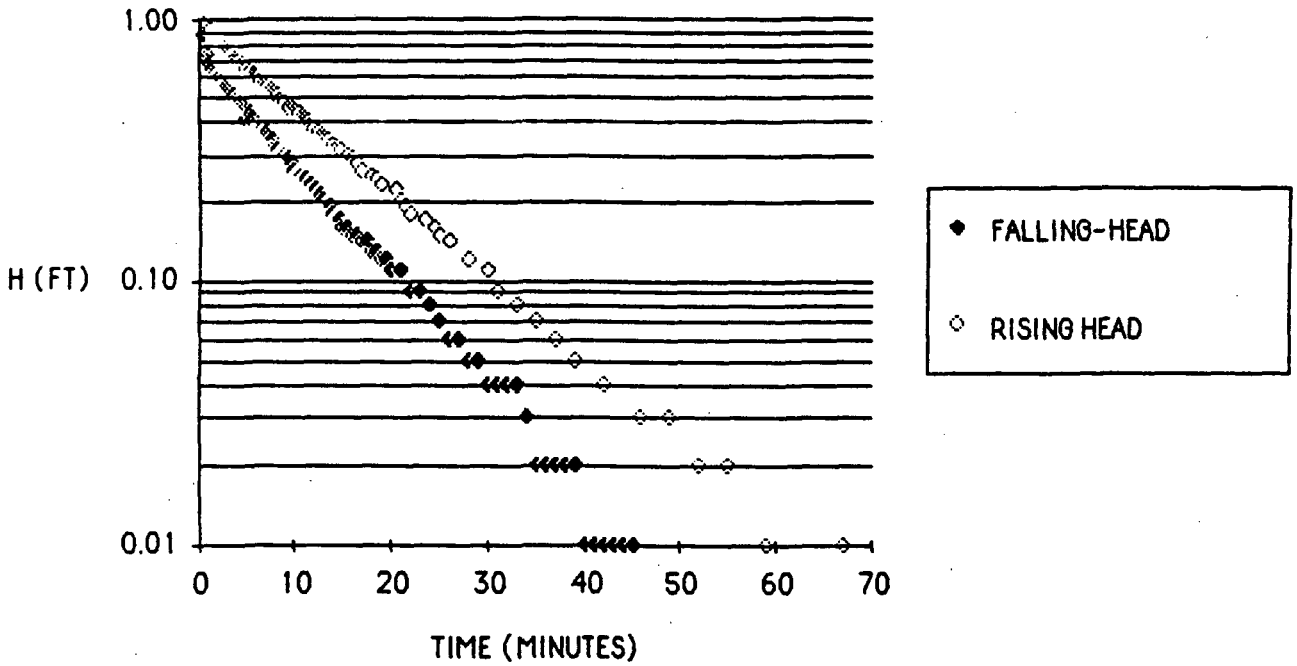
004221

SLUG-TEST RESULTS
WELL MW-2D



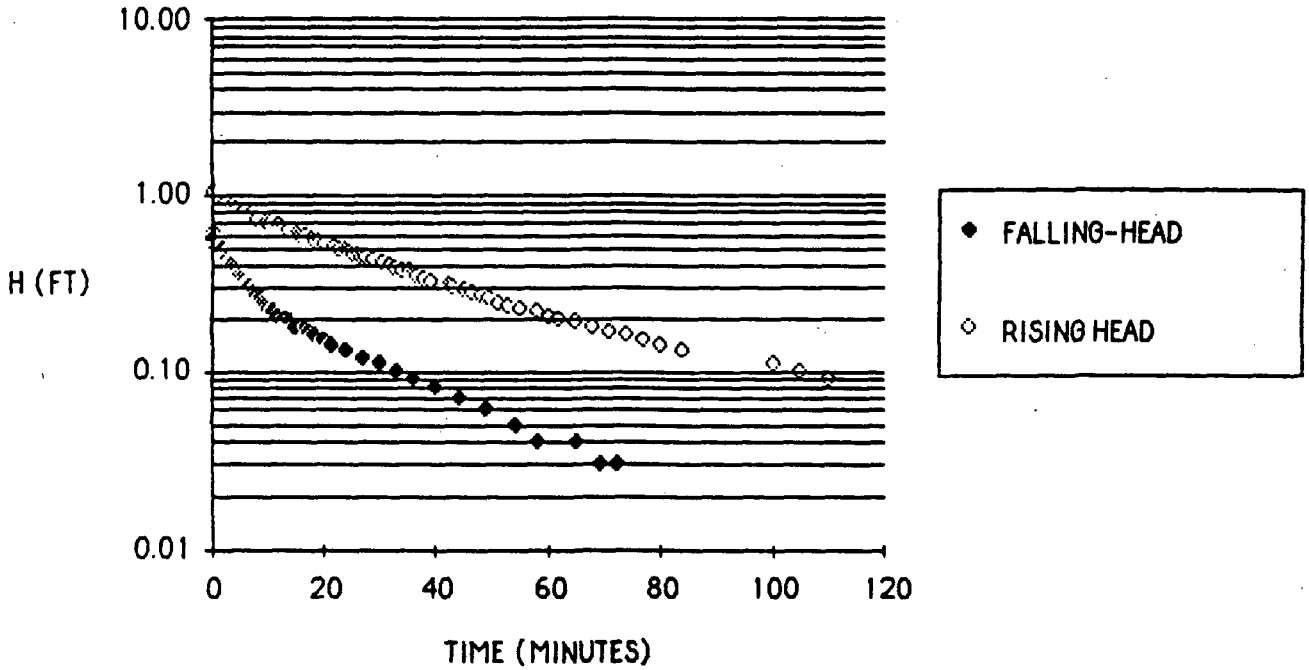
004222

SLUG-TEST RESULTS
WELL MW-5D



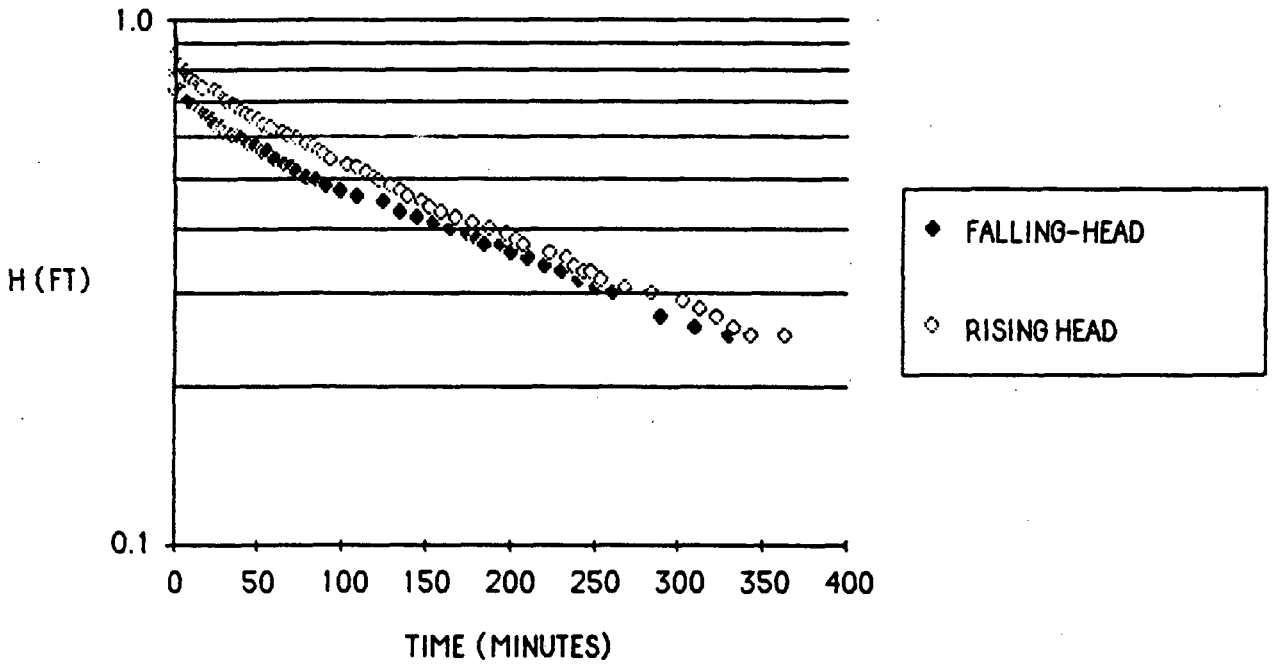
004223

SLUG-TEST RESULTS
WELL MW-7D

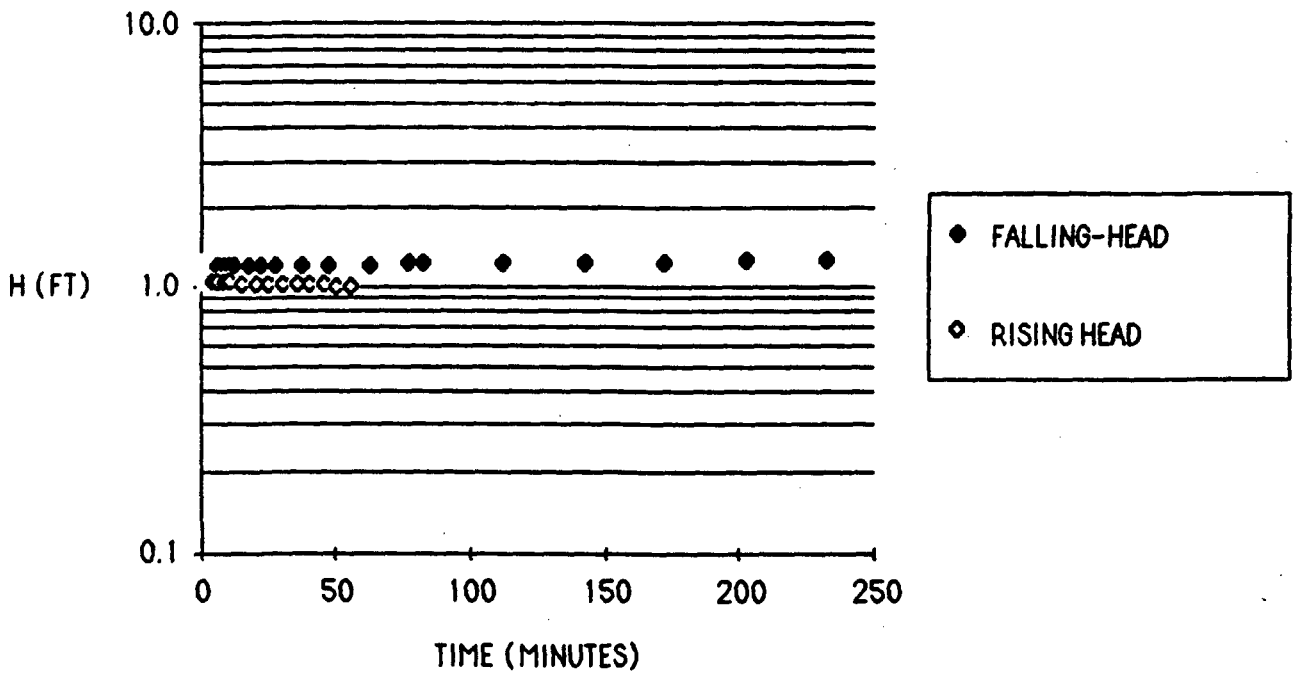


004224

SLUG-TEST RESULTS
WELL MW-8S

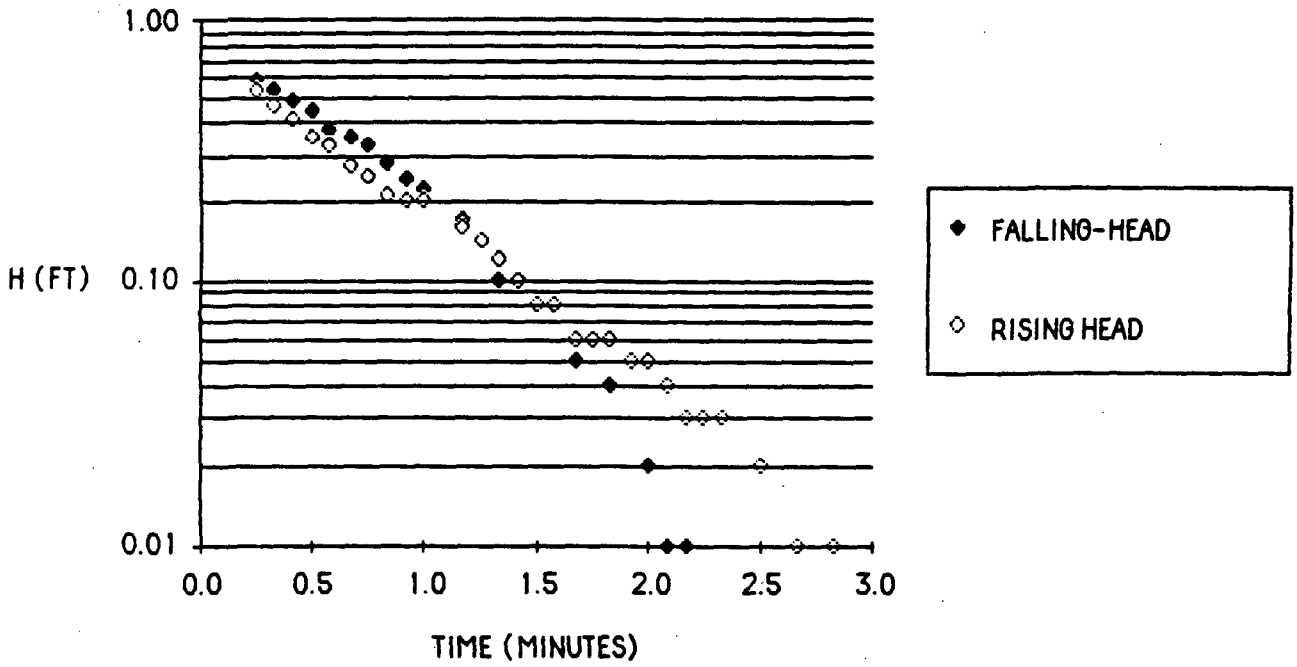


SLUG-TEST RESULTS
WELL MW-8D

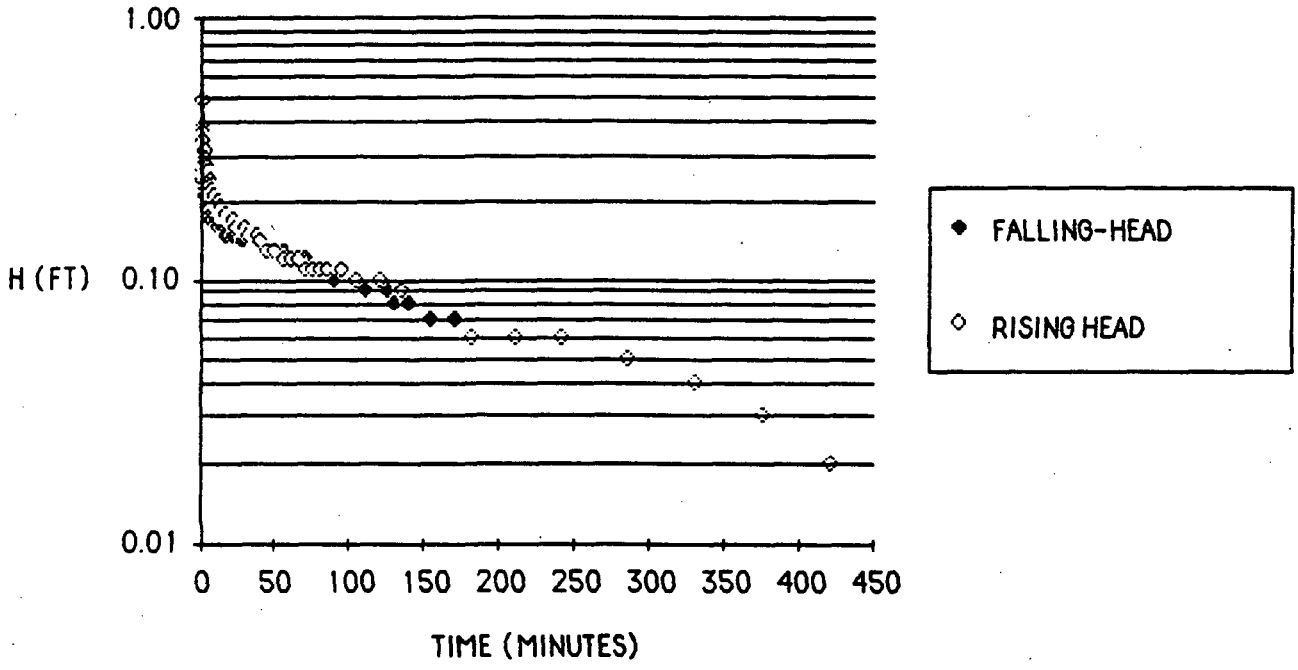


004226

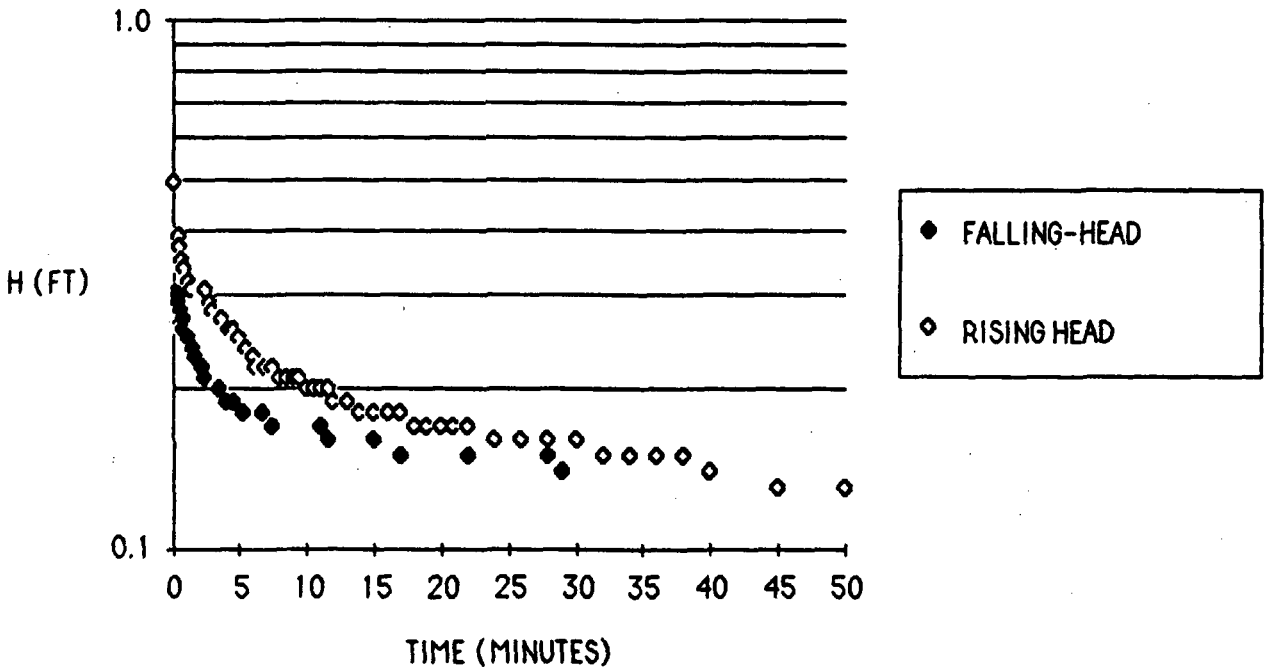
SLUG-TEST RESULTS
WELL MW-9S



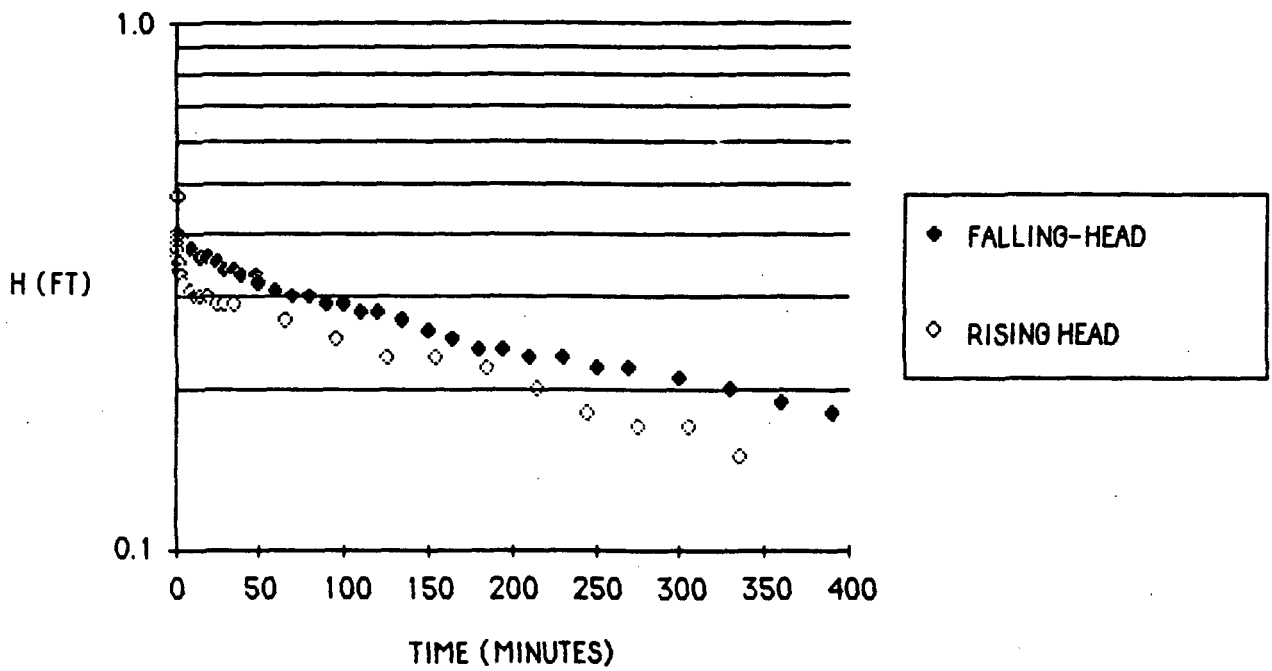
SLUG-TEST RESULTS
WELL MW-10S



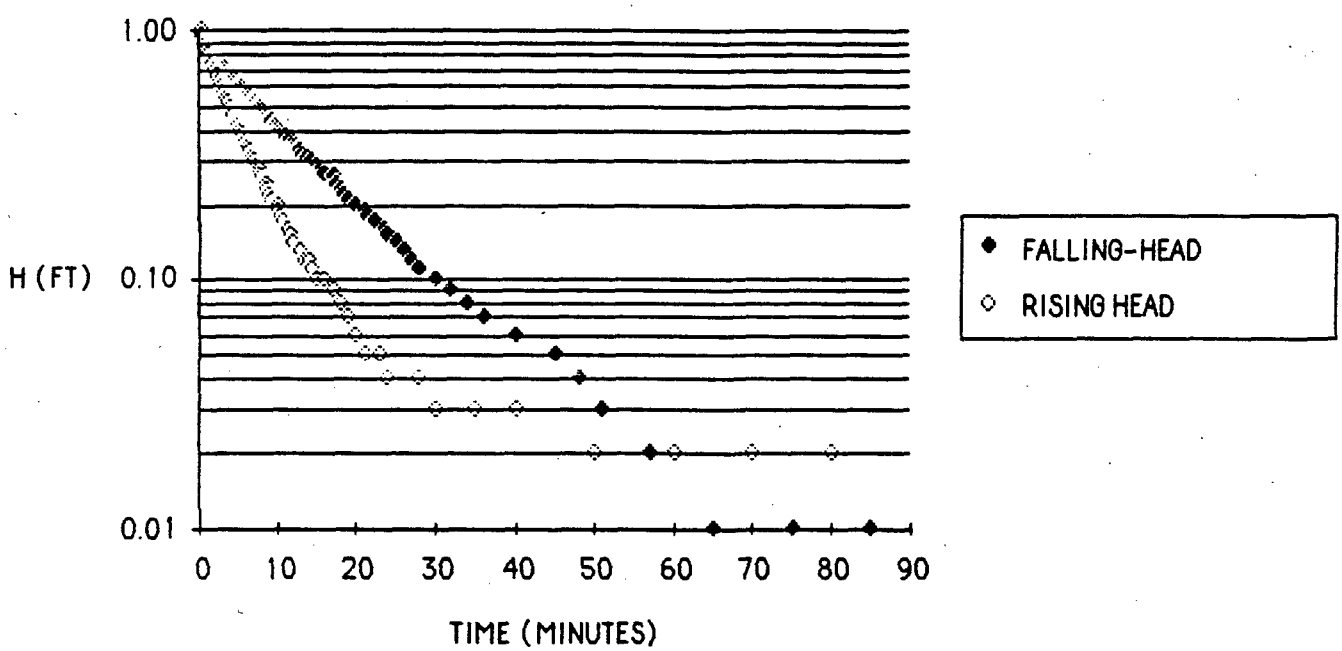
SLUG-TEST RESULTS
WELL MW-10S
EARLY-TIME DATA



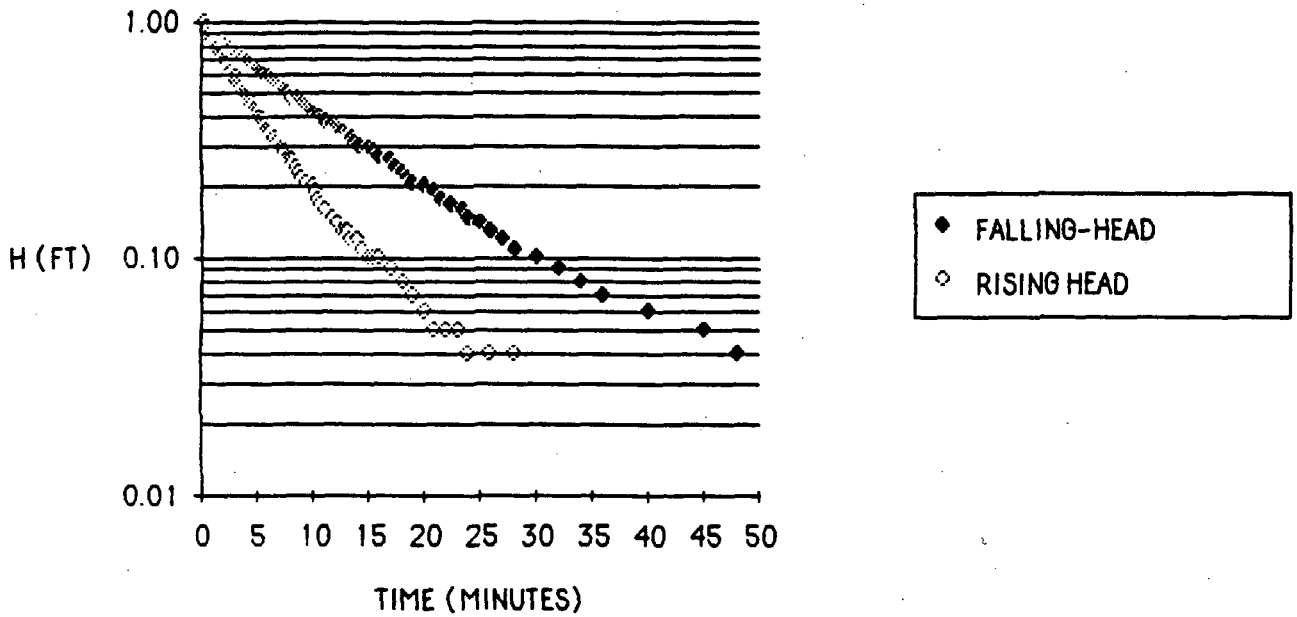
SLUG-TEST RESULTS
WELL MW-11S



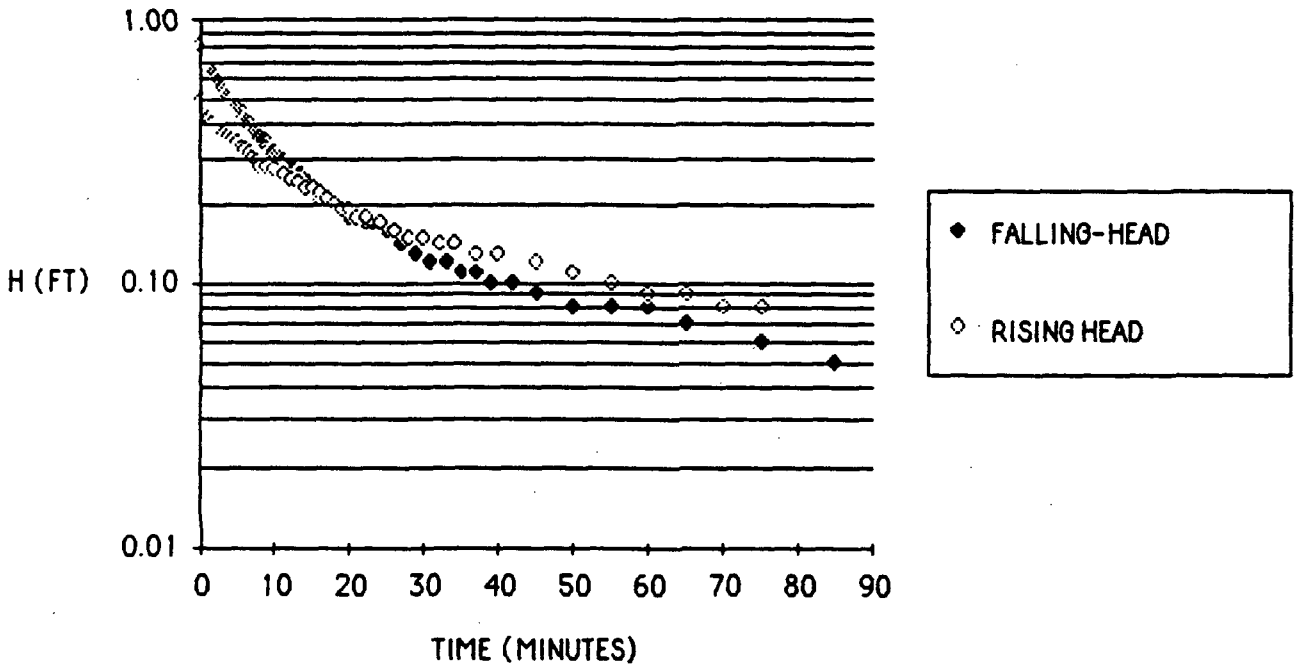
SLUG-TEST RESULTS
WELL MW-11D



SLUG-TEST RESULTS
WELL MW-11D
EARLY-TIME DATA

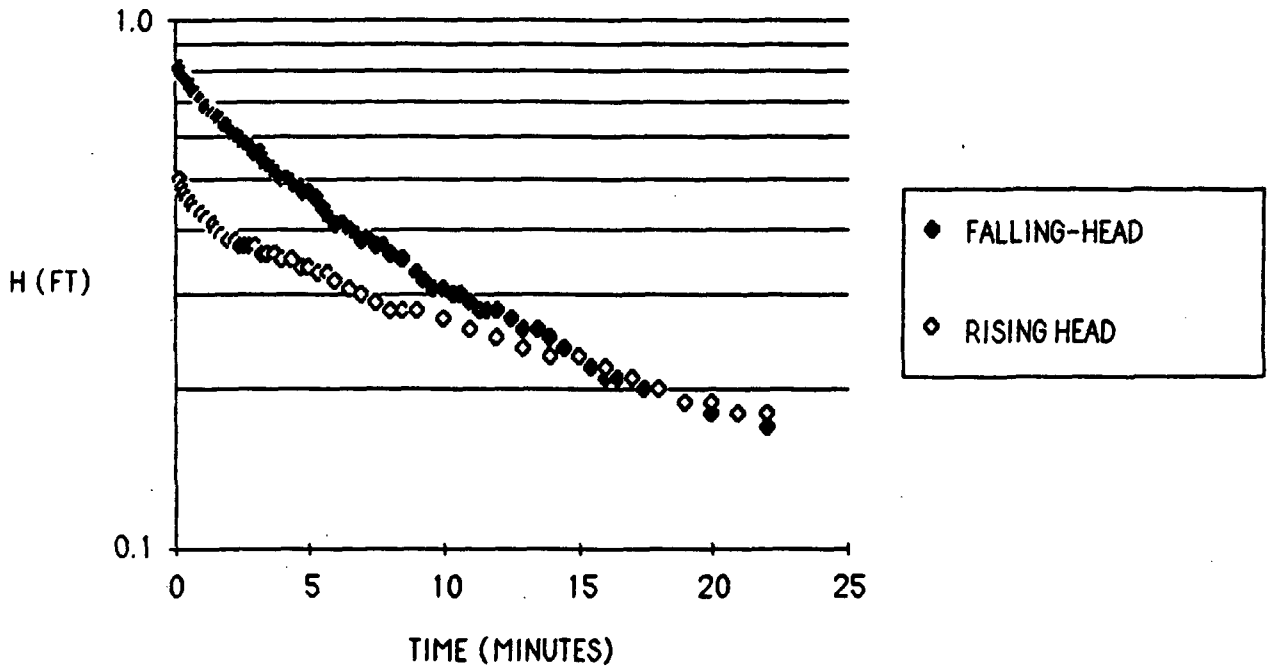


SLUG-TEST RESULTS
WELL MW-12S



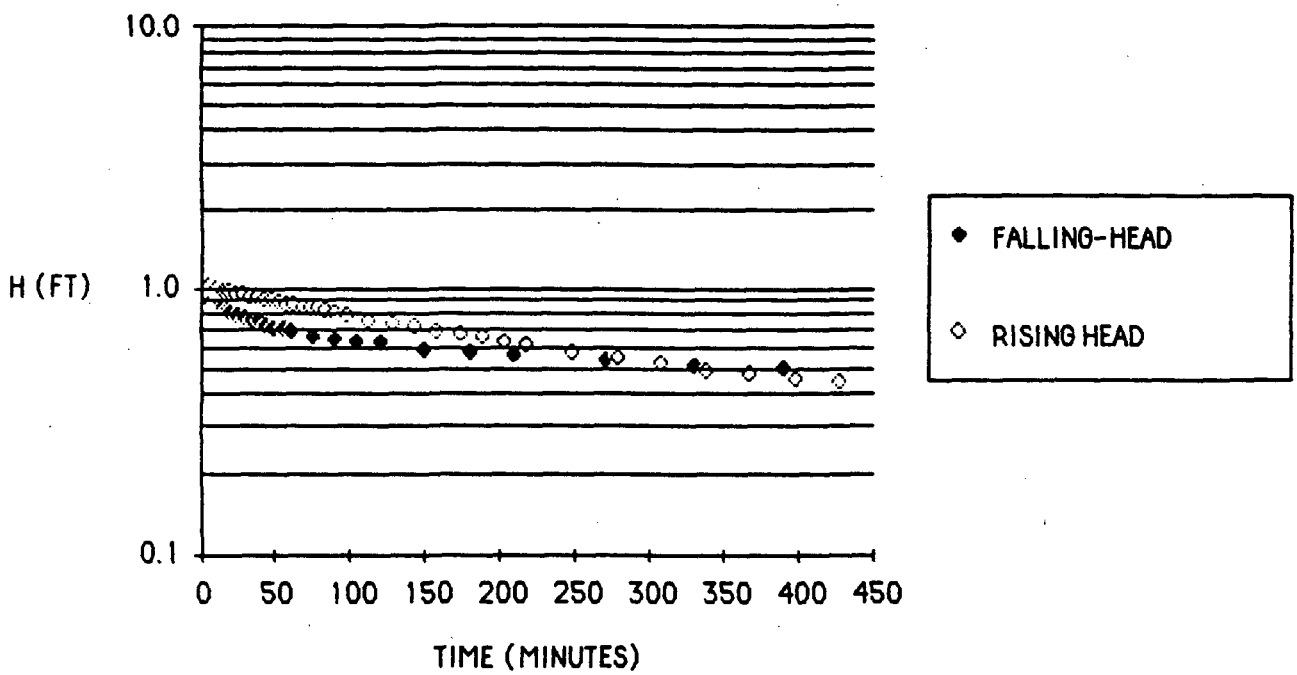
004233

SLUG-TEST RESULTS
WELL MW-12S
EARLY-TIME DATA



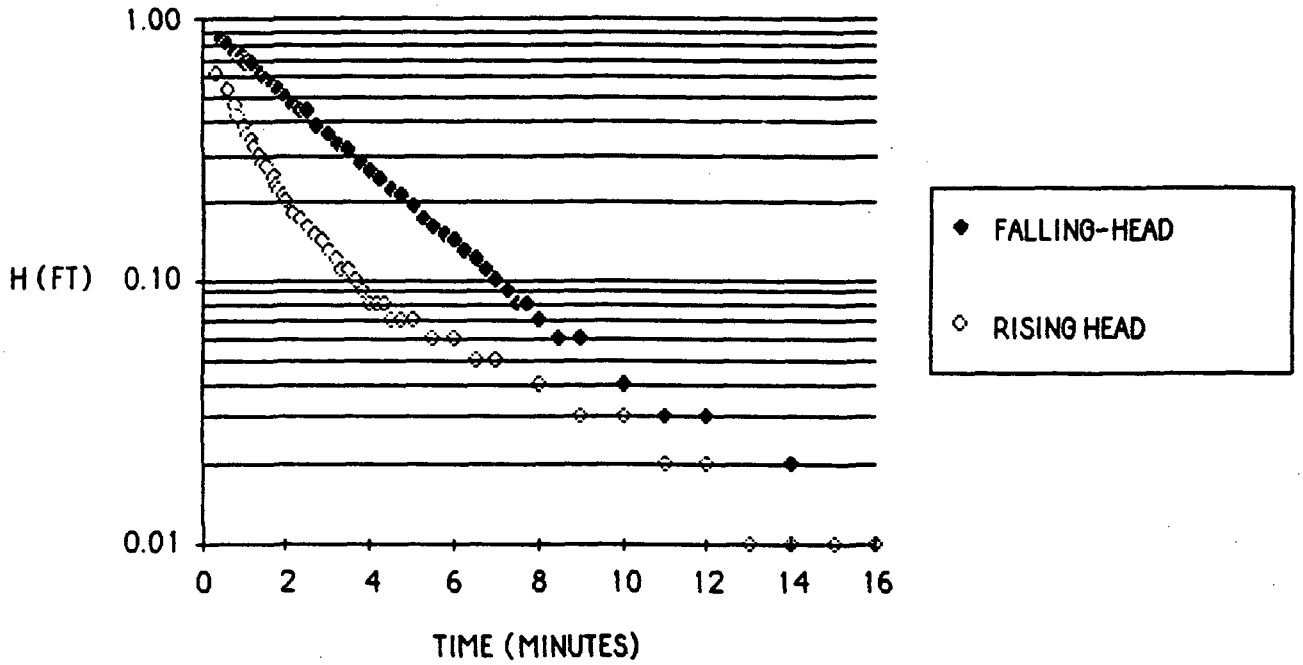
004234

SLUG-TEST RESULTS
WELL MW-12D



004235

SLUG-TEST RESULTS
WELL MW-13D



004236

NATURAL RESOURCE TRUSTEES

Notices Issued

P. 4487-4488 Notification of Federal Natural Resource Trustees for the SCP Carlstadt site to Ms. Anita Miller, U.S. EPA, and Mr. Thor Cutler, U.S. Department of Commerce, from Ms. Janet Feldstein, U.S. EPA, 10/16/87.

P. 4489-4490 Notification of Federal Natural Resource Trustees for the SCP Carlstadt site to Ms. Anita Miller, U.S. EPA, and Mr. Thor Cutler, U.S. Department of Commerce, from Ms. Janet Feldstein, U.S. EPA, 4/25/88.

Findings of Facts

P. 4491-4504 Letter to Mr. Norman Vogelsang, U.S. EPA, from Mr. Robert Pavia, National Oceanic and Atmospheric Administration, re: Preliminary Natural Resource Survey, 5/11/89. The Findings of Fact are attached.

Correspondence

P. 4505-4509 Memorandum to Ms. Janet C. Feldstein, U.S. EPA, Mr. Ray Basso, U.S. EPA, and Mr. John V. Czapor, U.S. EPA, from Mr. Thor Cutler, U.S. Department of Commerce, re: National Oceanic and Atmospheric Administration recommendations for the Final Project Operations Plan, 10/19/87.

PUBLIC PARTICIPATION

Community Relations Plans

P. 4510-4533 Report: Community Relations Plan, SCP Carlstadt Site, Carlstadt Township, New Jersey, prepared by NUS Corporation, 9/86.

Documentation of Other Public Meeting

P. 4534-4545 Report: Final Public Information Meeting Summary for the Scientific Chemical Processing Carlstadt Site, Carlstadt Borough, New Jersey, prepared by Ebasco Service, Inc., 8/87.

Fact Sheets and Press Releases

P. 4546-4548 Fact Sheet: Scientific Chemical Processing Site, Carlstadt Borough Hall, Carlstadt, New Jersey, 4/87.

Correspondence

P. 4549-4551 Letter to Mr. Barry Skokowski, New Jersey Department of Community Affairs, from William J. Librizzi, U.S. EPA, re: Notification of Superfund Project, 4/24/85.

P. 4552-4552 Letter to Ms. Christine Cheng, Hackensack Meadowlands Development Commission, from Ms. Janet C. Feldstein, U.S. EPA, re: Transmittal of the Site Operations Plan for the Remedial Investigation, 10/8/87.

P. 4553-4553 Letter to Ms. Christine Cheng, Hackensack Meadowlands Development Commission, from Ms. Janet Feldstein, U.S. EPA, re: Data summaries from the Remedial Investigation, 3/23/88.

P. 4554-4554 Letter to Ms. Christine Cheng, Hackensack Meadowlands Development Commission, from Ms. Janet Feldstein, U.S. EPA, re: Transmittal of the Draft Remedial Investigation, 5/9/88.

P. 4555-4556 Letter to Ms. Lillian Johnson, U.S. EPA, and Ms. Janet Feldstein, U.S. EPA, re: status of the site clean-up, 6/22/89.

P. 4557-4557 Letter to Ms. Lillian Johnson, U.S. EPA, and Ms. Janet Feldstein, U.S. EPA, from Mr. John J. Langan, DeCotiis & Pinto, re: Request for documents pertaining to the site, 7/28/89.

P. 4558-4558 Letter to Mr. John J Langan, DeCotiis & Pinto, from Ms. Lillian Johnson, U.S. EPA, re: Response to request for information, 9/1/89.

SCIENTIFIC CHEMICAL PROCESSING SITE
CARLSTADT, NEW JERSEY
ADMINISTRATIVE RECORD FILE
UPDATE*
INDEX OF DOCUMENTS

PROPOSED PLAN

P. 4559-4566 Report: Proposed Plan for Interim Remedy, SCP Carlstadt, New Jersey, prepared by U.S. EPA, 5/90.

* Administrative Record File Update Available 5/18/90.

SCIENTIFIC CHEMICAL PROCESSING SITE
CARLSTADT, NEW JERSEY
ADMINISTRATIVE RECORD FILE
UPDATE*
INDEX OF DOCUMENTS

RECORD OF DECISION

Record of Decision

P. 4567-4650 Report: Record of Decision, Scientific Chemical Processing Site. September 14, 1990

* Administrative Record File Update Available 7/1/91