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INSTALLATION/TESTING OF AREA A GROUNDWATER EXTRACTION WELLS

AT

NAVAL AIR WARFARE CENTER

WARMINSTER, PENNSYLVANIA

PREPARED FOR:

NORTHERN DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

10 INDUSTRIAL HIGHWAY

LESTER, PENNSYLVANIA 19113

CONTRACT NO. N62472-94-D-0398

DELIVERY ORDER NO. 0018

JUNE 30, 1999

PREPARED BY:

FOSTER WHEELER ENVIRONMENTAL CORPORATION
One Oxford Valley, Suite 200
Langhorne, PA 19047-1829

Revision	Date	Prepared by	Approved By	Pages Affected
1	June 30, 1999	T. Fowler, P.G.	J. Gorgol, P.E.	All

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EXECUTIVE SUMMARY

In order to contain and remediate contaminated groundwater in the northwest corner (Area A) of the Naval Air Warfare Center in Warminster, PA, fourteen 6-inch diameter groundwater extraction wells were completed in the Stockton sandstone aquifer. Each well was tested and evaluated to ensure capture of the existing on-site groundwater contaminant plume.

The testing at each of 14 locations (EW-A1 through EW-A13 and EW-A15) consisted of an approximate six-hour yield test at constant or stepped rates, followed by a one hour recovery period. Water level measurements were collected using automated dataloggers and hand-held instruments in the pumping wells, observation wells and background wells prior to, during, and following the pumping period. Periodic groundwater samples were collected from the pumping well during each test for field gas chromatograph (GC) analysis targeting trichloroethylene (TCE) and tetrachloroethylene (PCE). A sample from each test was sent to a laboratory for a full volatile organic compound (VOC) scan. Maximum yield test rates ranged from 1 to 15 gallons/minute (gpm). Total drilled depths were between 67 to 102 feet below ground surface (bgs), ensuring that the underlying target mudstone was not penetrated. Surface casing depths ranged from 10 to 20 feet bgs.

Laboratory analyses of yield test samples revealed TCE concentrations ranging from a high of 423,900 parts per billion (ppb) at EW-A6 in the central portion of Area A, to 490 ppb at EW-A15 in the eastern end and 380 ppb at EW-A13 in the western end of Area A. TCE concentrations exceeded 10,000 ppb throughout much of the central portion of the extraction well network (EW-A2 through EW-A10). The southern and eastern limits of the on-site plume were delineated via observation wells OW-A2 and OW-A16. Oil Red O dye was applied to fluids from boreholes, where significant FID readings occurred during drilling. Red staining from the dye indicated substantial presence of hydrocarbon (and potential free-product) in samples from EW-A6, EW-A7 and EW-A10. To prevent possible DNAPL migration, recovery operations were implemented at EW-A6 and EW-A7 using a bottom-loading pneumatic pump. These wells were pumped intermittently beginning February 17, then continuously from April 7 to 23, 1999, after which permanent system construction began. Downgradient monitoring wells were sampled periodically during the drilling program for VOC analyses by field GC and fixed laboratory to evaluate potential downgradient impacts (contaminant migration) induced by drilling activities. No adverse downgradient impacts were observed in the data; in fact, concentrations at monitoring wells HN-11I and HN-55I decreased substantially.

The yield test data were plotted, analyzed for transmissivity and storage coefficient, and evaluated immediately following completion of each test. Field GC data were tabulated. The data package was faxed to the Technical Evaluation Group (TEG) to determine (via conference call the next day) the viability for completion as an extraction well (EW) and capture zone spacing for the next well location/test. Typical transmissivity values averaged 242 ft^2/day range, as had been indicated from previous site work. Data from these tests indicate the shallow bedrock aquifer is confined. The resultant capture zone well spacing ranged from 11 feet between EW-A6 and EW-A7, to approximately 100 feet at the eastern and western ends of the well network. Lower yields in the more contaminated central portion of Area A account for the

closer well spacing. The EWs were completed using six-inch diameter, 0.030-inch slot continuous wound-wire stainless steel screen and stainless steel riser casing, with a Morie No. 3-equivalent sand pack. No loss of well efficiency was noted during development of completed wells. Low-flow groundwater samples for metals on selected wells indicated that metals will not present a water treatment problem. These EWs are suitable for connection to the existing on-site water treatment system located at the western end of Area A.

NAVAL AIR WARFARE CENTER - WARMINSTER
INSTALLATION/TESTING OF AREA A GROUNDWATER EXTRACTION WELLS

1.0 INTRODUCTION

Foster Wheeler Environmental Corporation (Foster Wheeler Environmental) has been contracted by Northern Division, Naval Facilities Engineering Command to provide various remedial actions at the Naval Air Warfare Center, located in Warminster, Pennsylvania (NAWC-Warminster). This document has been prepared to satisfy requirements of Remedial Action Contract Number N62472-94-D-0398, Delivery Order No. 0018 for various removal actions. This report specifically documents the procedures used to install and test groundwater extraction wells at Area A. Results from yield tests conducted at each extraction well are also detailed.

1.1 OVERVIEW OF FIELD PROCEDURES

Approximately nine (9) groundwater extraction wells (EWs) were scheduled to be drilled and installed in the northern location of Area A, as prescribed in the Area A Interim Record of Decision (ROD) (Figure 1-1). The actual number of EWs installed was 14 (EW-A1 through EW-A13 and EW-A15), based on the groundwater quality conditions and results from yield tests conducted at each extraction well. Three additional boreholes were completed as observation wells; OW-A14, OW-A16 and OW-A17. A yield test was also conducted at OW-A14. Observation well OW-A2 was installed north of well "D" as part of the original Work Plan. OW-A2 was initially drilled with a 10-inch borehole into competent bedrock to set a finish steel casing, and then a 6-inch borehole was drilled. The number of wells was greater than anticipated because of low yields in a central area containing high levels of TCE contamination. In addition, a Technical Evaluation Group (TEG) decision added several EWs to the southwest along the railroad. The same drilling, testing, and decision process used for the Area C and Area D extraction systems was employed at Area A.

Drilling was initiated at EW-A4, located approximately 7 feet south of monitoring well HN-11I. Subsequent EWs were located on either side of EW-A4, with the spacing/distance determined by subsequent yield test results. Based upon hydraulic characteristics presented in the Area A Work Plan (FWENC, 1998), assuming an 8 gallons per minute (gpm) yield per well, the required well spacing had been estimated to be on the order of 100 feet. Actual well spacing was slightly smaller.

Yield tests consisted of short-term (6 to 8-hour duration) pumping tests at each of the newly installed extraction well boreholes. The pumping rates were sufficient to induce significant drawdown in the pumping well and nearby observation wells, and enabled long-term sustainable yields and capture zone projections to be estimated (described below).

Air-hammer drilling techniques were used to install Area A wells to depths of 67 to 102 feet below ground surface (bgs). Well depths were required not to penetrate a target mudstone unit (4th mudstone at well HN-11I) in the Stockton Formation, which forms the base of the upper

bedrock aquifer unit. Ten-inch diameter black steel surface casing was installed 5 to 10 feet into competent bedrock (depth to competent bedrock ranged from approximately 5 to 15 feet bgs). Air, water, and cuttings from each well were monitored at 5-foot intervals via flame ionization detector (FID). FID readings exceeded background at several locations during the Area A drilling. Inflatable packer assemblies were not required because there did not appear to be diluting sources of cleaner groundwater inflowing from shallow intervals. Groundwater produced during drilling operations was pumped to a sump in the existing on-site groundwater treatment system. Following each yield test, six-inch diameter stainless steel wound-wire screen and risers were installed to total depth at locations designated to be completed as EWs.

Each EW was developed via air lift in the open borehole and via submersible pump in the completed well, generally at a drawdown of less than one-third the total available drawdown. All downhole tools/equipment were decontaminated between each well location.

1.2 EXTRACTION WELL CONSTRUCTION

1.2.1 Drilling Methodology

Air-hammer drilling techniques were used to install Area A extraction wells. Using conventional air-hammer drilling, each extraction well was initially drilled utilizing a 14-inch diameter bit to a depth of 5 to 10 feet into competent bedrock (bedrock lies approximately 8 to 35 feet bgs). After surface casing was grouted in place, drilling proceeded to total depth using a 10-inch diameter bit.

The drilling subcontractor used vegetable oil-based lubricants on drill pipe joints. The drilling subcontractor containerized all drill cuttings in a specified roll-off dumpster located at Area A. The Foster Wheeler Environmental Project Hydrogeologist and Health and Safety Officer monitored cuttings continuously for lithologic variation, and for the presence of volatile organic compounds (VOCs) and/or dense non-aqueous phase liquid (DNAPL). Groundwater produced during drilling operations was pumped into a sump leading to the existing groundwater treatment system.

1.2.2 Well Construction

Area A wells were completed to depths ranging between 67 to 102 feet bgs. The target mudstone and/or associated siltstone occurs at greater depths traveling northwestward in Area A. Lithologic logs and well construction details for the Area A extraction wells are presented in Appendix A. Based upon the lithologic logs from the EWs, Figure 1-2 presents a geologic cross section of Area A.

1.2.3 Extraction Wells

Ten-inch diameter Schedule 20, Grade A black steel pipe was installed within the 14-inch borehole. The annulus between the surface casing and the borehole was tremie grouted from the bottom of the borehole to ground surface. Grout consisted of Type I Portland cement, with

approximately three pounds of granular bentonite per 94-pound bag of cement, mixed with approximately 6.5 gallons of water. Wellhead vaults have been installed at each EW in conjunction with the Area D/Area A transfer system.

After installation of the surface casing, extraction wells were drilled below the surface casing with a 10-inch air-hammer. Upon reaching total depth, extraction well boreholes were air-lift developed until discharge water was visibly free of fines. The roll-off, which served as a holding tank for cuttings, allowed suspended solids to settle out and be disposed of, along with drill cuttings. Development fluids were pumped to a sump, and treated in the existing on-site groundwater treatment system.

Yield tests, described below, were conducted in open EW boreholes, prior to well completion.

1.2.4 Extraction Well Screen Installation

Extraction wells (EWs) were completed using 6-inch diameter stainless steel casing and screen. Extraction well screens consisted of continuous wound-wire stainless steel, with a slot size of 0.030 inches. Casing material is Schedule 5 or better, with screen of compatible strength. Screen and casing connections are threaded. The EW screens extend from approximately five feet below the surface casing to the bottom of the borehole. The screen bottom is fitted with a stainless steel screw-on plug. Casing and screen are equipped with PVC bolt-on centralizers, spaced approximately 40 feet apart.

EW casing and screen were carefully lowered into the borehole(s) and remained suspended in-place until sufficient support was provided by the gravel pack to prevent damage to the screen. The stainless steel inner casing was cut to fit within the outer surface steel casing, and temporarily capped with a PVC slip-on cap. When the screen was in position, the gravel pack was installed around the screen, to a height of approximately three feet above the top of the screen. A weighted tape was used to determine the height of the gravel pack. The weighted tape also served to tamp down the gravel pack material and prevent bridging. The gravel pack consists of clean silica sand with uniformity coefficient of 2.5, and at least a 90 percent retention for the 0.030-slot screen (Morie No. 3 equivalent).

1.2.5 Observation Wells

Observation well OW-A2 was drilled ten feet into competent bedrock with a 10-inch air-hammer. Six-inch diameter surface casing (Schedule 20, Grade A black steel pipe) was installed into bedrock. The surface casing annulus will be tremie grouted to ground level. The grout consists of Type I Portland cement, with three pounds of granular bentonite per 94-pound bag of cement, mixed with 6.5 gallons of water.

After installation of the surface casing, open hole drilling proceeded after surface grout had been applied for a minimum of 24 hours. Observation well drilling proceeded to a total depth using a 6-inch diameter hammer. OW-A2 was completed as an open hole well (no screen or riser pipe). A concrete pad was installed at ground surface around the well casing. The surface pad is sloped

away from the well, to allow rain water to drain away from the wellhead. OW-A2 was developed as described previously for EWs.

Note that wells OW-A14, OW-A16 and OW-A17 were drilled to EW size (10-inch open borehole) and subsequently, following yield tests and/or groundwater sampling, the decision to maintain them as open-hole observation wells was made.

1.2.6 Final Well Development for Screened Extraction Wells

Following an approximate 72-hour grout curing period, each EW was developed until discharge water was visibly free of fines. Development was accomplished using a submersible pump for approximately one hour per well. The development flow rate was controlled to ensure drawdown did not exceed one-third of the maximum available drawdown. Development fluids were pumped to a tank truck, then transferred and treated in the existing on-site groundwater treatment system. Development flow rates and drawdowns are presented in Section 2.0.

1.2.7 Response to FID Readings

DNAPL dye tests were performed on groundwater samples for boreholes where FID readings above background occurred. This test involves the use of hydrophobic Oil Red O dye, which stains the fluid red if significant hydrocarbons are present.

1.2.8 Monitoring Requirements for Well Being Drilled

An FID was used to continuously monitor air, water, and drill cuttings discharged from the borehole during drilling. The FID readings and times were recorded for every five feet of drilling penetration. The FID was calibrated daily, in accordance with the manufacturer's specifications. Calibration records are maintained in the site files. Since FID readings of 20 ppm or greater were not detected in the drilling discharge stream, packer sampling was not performed. Field screening for DNAPL using Oil Red O dye was performed on groundwater samples from boreholes with FID readings above background.

1.2.9 Monitoring of Downgradient Monitoring Wells

The following downgradient wells were samples throughout the duration of Area A drilling: HN-11S, HN-11I, HN-14S, HN-14I, HN-59S, HN-59I and HN-55I. Water samples from these wells were obtained via submersible pumps in accordance with low "stress" low-flow groundwater sampling procedures. Groundwater samples were preserved in 40 ml VOA vials, and analyzed via field gas chromatograph (GC).

While drilling in suspected DNAPL source areas, groundwater samples were obtained from the above-listed wells before drilling was initiated; frequently during the drilling process; and, for two weeks after the drilling program was completed. In addition, as each well was installed, it was added to this sampling program.

These samples were field analyzed (via GC) on the same day they were obtained, and confirmatory samples were sent to a fixed laboratory. Cumulative sample results are presented for each well (sampling) location in Appendix B.

1.3 YIELD TESTS

The Area A extraction well network is designed to intercept and prevent contaminated groundwater from migrating downgradient (north-northwest) and off-site. Well spacing was chosen (based on yield tests) to ensure a continuous capture zone is created and sustained by the extraction well network. Yield tests (6 to 8 hour duration) were conducted for each EW to measure the hydraulic characteristics and estimate the radius of influence (capture zone) produced by each EW. In addition, final pump selection for each EW will be based on the specific capacity (Q/s) of each well, and the required combined pumping rate for the extraction well network.

1.3.1 Yield Test Schedule

Yield tests were conducted in each EW to aid in determining the next EW location, immediately after completing preliminary development procedures to clean out the borehole. Analysis of yield test results was conducted in the field, so the well placement decisions for the next well to be drilled could be made expeditiously by the TEG.

1.3.2 Yield Test Assumptions

Based on the Halliburton/NUS April 1994 Design Analysis Report, the following hydrogeologic conditions were assumed prior to the start of the program:

1. The overburden and bedrock are hydraulically connected.
2. The relatively high frequency of bedrock fractures result in a pumping response similar to a porous medium (i.e., similar to an unconsolidated, unconfined or semi-confined aquifer).
3. The aquifer is of infinite areal extent and uniform thickness.

Based upon the conditions observed during well installation/testing (described below), the shallow bedrock aquifer is confined, with preferential flow patterns controlled by the frequency and orientation of fractures/joints.

1.3.3 Yield Test Setup Requirements

A submersible pump capable of delivering approximately 20 gpm (or 5 gpm in low yielding areas) at 200 psi was positioned approximately five (5) feet above the bottom of the borehole. Discharge fittings were secure and leak proof. Test pump discharge piping included, in order of placement from the pump site: a flow adjustment valve, a flow meter (turbine type with totalizer), and a sample port. To ensure measuring accuracy, the discharge pipe included an

appropriate length of straight, blank pipe before and after the metering devices. Discharge piping was routed to a sump leading to the on-site groundwater treatment system.

An FID was used to monitor the discharge water quality during each yield test. The FID was properly calibrated prior to each test, with the calibration and monitoring results recorded in the field logbook. Field GC analyses were performed on discharge samples every one to two hours. A confirmatory sample was sent to a fixed laboratory.

1.3.4 Water Level Measurement Equipment

Water levels were measured with an electronic monitoring device at each well relative to a clearly marked, surveyed point at the top of the inner casing. Water levels in the newly-installed EWs were measured relative to the top of surface casing.

Automatic water level data loggers using pressure transducers (TELOG 2109 or 2102) were used to monitor/record water levels in the pumping well and several nearby wells located within 300 feet of the pumping well. Each transducer was secured to the surface well casing to prevent movement during the test.

All field personnel involved in the pump tests used synchronized watches, enabling data recording to the nearest second. Water level measurements collected manually were recorded for each individual observation well on "Pump Test Data Forms".

1.3.5 Pre-Test Measurements

Discharge rate was controlled by valving. Equipment/pump testing was conducted the day before each yield test, with pumping time approximately five minutes. Testing parameters were recorded in the field logbook.

Total available drawdown is defined as the distance from the bottom of the well to static water level. The design pumping level is considered to be 30 percent of the total available drawdown. These levels were determined prior to the start of the yield test(s).

Static water levels were measured by hand (using electronic water level indicators) in all wells located within 500 feet of the pump well. Any significant variations in water levels were noted, and if appropriate, investigated (i.e., barometric effects, nearby pumping, surface discharges, etc.).

The automated data loggers (TELOG 2109 or 2102) were installed in the observation wells and the pumping well with recorders programmed to record data at one minute intervals. Depth to water (DTW) via hand measurements and data logger readouts were recorded for comparison.

1.3.6 Starting a Yield Test

Manpower for each yield test included two Foster Wheeler Environmental personnel (a hydrogeologist and a health and safety officer), and one or more operators from the drilling subcontractor to operate the pump and maintain the generator. When the pump operators started the pump, personnel hand gauged the pumping and the observation wells, and monitored the discharge flow rate. The discharge flow rate was monitored approximately every five minutes for the first 30 minutes of the pump test, at ten minute intervals for the first hour, and at least once/hour for the remainder of the pump test. Flow rates were adjusted, as needed, to maintain a constant rate. All measurements, adjustments, and times were recorded in the field logbook.

Water levels in the pumping well were hand-measured approximately at one minute intervals for ten minutes; at two minute intervals from 10 to 30 minutes; every five minutes from 30 to 60 minutes; and, at 30 minute intervals for the remainder of the test.

Water levels in the wells nearest to the pumping well were hand-measured at least four times during the first hour of the test, and hourly thereafter. All other wells within 500 feet of the pumping well were hand-measured at least four times during the test.

If it was determined that the well was capable of yielding a much higher rate, the test was run at the design rate or more until the water level stabilized (less than 0.15 feet of change/hour) for at least two hours. Actual pumping rates are presented in Section 2.0.

1.3.7 Water Quality Testing

The discharge water quality was field tested at least once every 2 hours, using a portable PhotoVac 10S70 GC.

Discharge samples were collected for laboratory analyses (Section 5.0) immediately prior to terminating the yield test. Laboratory samples were collected from the discharge sampling port, and placed into two labeled and preserved (HCl) 40 ml VOA vials. The sample vials were placed in an iced cooler and shipped to the laboratory for analyses via EPA Method 601. Forty-eight (48) hour turnaround time was performed for laboratory results.

1.3.8 Yield Test Recovery Data

At the conclusion of each pumping test, water level recovery data were obtained when the pump was shut off (to measure rising head). Recovery data at the pump well, and the nearest observation wells with appreciable pumping influence, were recorded for a minimum of one hour, using the frequency intervals specified for the start of the test.

1.3.9 Yield Test Data Analysis

Semi-logarithmic plots of time versus drawdown and distance versus drawdown were prepared for the pumping well and the nearest wells that showed appreciable pumping influence. Data for

graph preparation include both hand-measured water level data and depth-converted data logger readings.

The Cooper-Jacob (1946) straight-line method was used to determine transmissivity (T) and storage coefficient (S) using the distance-drawdown and time-drawdown plots. Recovery data were used to estimate T using Driscoll's (1986) method. Greatest emphasis is given to the determination of T using distance-drawdown data, since this data provides averages over the greatest area of the aquifer, and can best account for axial variations.

The relevant equations for the Cooper-Jacob method using time-drawdown are as follows:

$$T = \frac{264Q}{\Delta s}$$

$$S = \frac{0.3\,Tt_0}{r^2}$$

where, T = Transmissivity (gpd/ft)
Q = change in drawdown over
Δs = one log cycle (feet)

S = Storage Coefficient (dimensionless)
T = Transmissivity (gpd/ft)
t_0 = intercept of straight line at zero drawdown (days)
r = distance (feet) from the pumped well to the observation well

The relevant equations for the Cooper-Jacob Method using distance-drawdown data are as follows:

$$T = \frac{528Q}{\Delta s}$$

$$S = \frac{0.3\,Tt}{r_0^2}$$

where, T = Transmissivity (gpd/ft)
Q = pumping rate (gpm)
Δs = change in drawdown over one log cycle (feet)

S = Storage Coefficient (dimensionless)
T = Transmissivity (gpd/ft)
t = time since pumping started (days)
r_0 = intercept of extended straight line at zero drawdown (feet)

All aquifer test methods specified above are described in detail in Groundwater and Wells (Driscoll, 1986) and Analysis and Evaluation of Pumping Test Data (Kruseman and deRidder, 1990).

A capture zone analysis (Keely and Tsang, 1983 and Javandel & Tsang, 1986) was performed for each EW using calculated T values, estimated sustainable yield, and the local hydraulic gradient (determined from pre-pumping potentiometric maps). Based on a conservative use of the single well capture zone results, and the results from adjacent well pumping, appropriate well spacing was determined for subsequent "step-out" extraction wells.

Water quality results from the field GC and outside laboratory analyses were reviewed with the objective of ensuring that the EWs, with the highest readings will be more vigorously pumped, where feasible, when the entire extraction well network is completed.

1.3.10 Yield Test Decisions

The field-derived yield test analyses and recommended locations for "step-out" extraction wells were presented to the TEG the day after each test. Conference calls were held to discuss the results and to determine if variations in well yield and/or water quality at different pumping levels indicated adjustments to the field program (Work Plan) were needed.

1.4 INTERIM PUMPING AT EW-A6 AND EW-A7

Since very high TCE concentrations (indicating potential free-product) were detected and appeared to be higher in bottom samples, bottom-loading pneumatic pumps were installed in EW-A6 and EW-A7 to implement product/groundwater recovery.

The product recovery system is temporary and has run intermittently since February 17, 1999. Continuous operation occurred from April 7 through 23, 1999. The average long-term pumping rates for EW-A6 and EW-A7 during this period were 4.2 gpm and 1.6 gpm, respectively. TCE concentrations declined somewhat during this period, although remaining in the 100,000 ppb range.

2.0 YIELD TEST PUMPING RATES AND DURATIONS

Yield test data are summarized for the extraction wells in Table 2-1, which also includes well depths, depths of 10-inch casings (6-inch for OW-A2), well screen interval depths, groundwater yield zones encountered during drilling, pumping rates and duration for each yield test, and drawdown observed at the end of each test.

Extraction wells EW-A1 through EW-A13 and EW-A15 were completed to depths ranging from 67 to 102 feet. Penetration of the target mudstone was typically little to none, and did not exceed 5 feet in any case. EW-A1, EW-A2, EW-A4, EW-A5, EW-A6, EW-A9, EW-A10 and EW-A15 all have 60 feet of well screen installed. EW-A3 and EW-A7 have 55 feet of screen, EW-A8 has 80 feet, EW-A11 and EW–A13 has 70 feet and EW-A12 has 40 feet of screen. Fractured zones contributing to increased airlift yield were noted at various depths, particularly in the 60 to 70 feet bgs range, especially for wells in the high-TCE-concentration low yielding area near EW-A4, EW-A5, EW-A6, EW-A9 and EW–A10.

At EW-A1, EW-A2, EW-A3, EW-A8, EW-A11 and EW-A12, the yield tests consisted of a constant rate for six hours followed by an hour of recovery measurements; pumping rates were 15 gpm, 12.5 gpm, 10 gpm, 8 gpm, 15 gpm and 11 gpm, respectively.

EW-A4, EW-A5, EW-A6, EW-A10, EW-A13 and EW-A15 were tested for six hours at lower rates of 3 gpm, 2 gpm, 1.1 gpm, 5 gpm, 2 gpm and 3 gpm, respectively. The rates were more variable at EW-A9, which averaged 1.4 gpm over six hours; and EW-A7, which was run at 1 gpm for 4.5 hours and increased to 2.5 gpm for the final 1.5 hours. OW-A14 was pumped for six hours at 1.5 gpm.

3.0 DRAWDOWNS IN THE PUMPING AND THE OBSERVATION WELLS

Depth to water was typically in the range of 20 feet below top of casing (TOC) from EW-A4 westward and closer to 15 feet from EW-A5 eastward. Available drawdowns are therefore in the 50 feet range for these wells. EW-A4, EW-A5, EW-A6, EW-A7 and EW-A9 demonstrated that pumping rates in excess of 1 to 3 gpm produced excessive drawdown. These low-yielding wells are located in the area with high TCE contamination in groundwater. EW-A10 barely maintained 5 gpm. EW-A8, EW-A3, EW-A13, EW-A2, EW-A1 and EW-A11 maintained 8 gpm, 10 gpm, 11 gpm, 12.5 gpm, 15 gpm, and 15 gpm, respectively, with sufficient remaining drawdown. Yields at EW-A13, OW-A14 and EW-A15 were in the 1 to 3 gpm range.

After screen and riser installation, the wells were typically pumped for a one-hour period to complete well development. Since coarser grained Morie No. 3 equivalent sand pack was used in all Area A EWs, the specific capacity, i.e., pumping rate per feet of drawdown (gpm/ft Q/S) in the completed wells remained comparable to, or even improved over, open borehole following one or more hours of well development. Following screen and riser completion of the higher yielding EW-A5, EW-A1, EW-A3 and EW-A11, well yields showed moderate to substantial improvement. EW-A2, EW-A8 and EW-A12 maintained fairly constant in yield from open borehole to completed well. Of the lower yielding wells, EW-A15 remained fairly constant. Post-development yields at EW-A9, EW-A10 and EW-A13 appeared to have improved. Yields at EW-A4 and EW-A5 improved substantially with two hours of pumping each. EW-A6 and EW-A7, which have had intermittent pneumatic pumping for possible DNAPL since February 17 (and continued from April 7 through April 23), have shown marked improvement to maintain 4.2 gpm and 1.6 gpm, respectively.

Drawdown values measured by hand for the pumping and observation wells are presented in Tables 8-1 through 8-15. Drawdown plots that were used for analysis and interpretation, including time-drawdown, distance-drawdown, and recovery plots, are discussed in Section 6.0.

Figures 3-1 through 3-15 illustrate drawdown observed in observation wells at the end of each yield test. These plots indicate that each well produces significant drawdown in observation wells tens of feet away. The radial influence appears to be several hundred feet for most wells; even for low yielding wells, where the OW drawdown values are small although the influence appears to be present. The pattern tends to be circular with some elongation northeastward, particularly in the more southwesterly wells.

4.0 FIELD WATER QUALITY DATA

During the yield tests, groundwater discharge samples were collected at approximately one to two hour intervals from a sample port at the wellhead. The data resulting from on-site GC (PhotoVac 10570) headspace analyses are presented by extraction well (with data and collection time) on Table 4-1. Results from outside laboratory analyses are also presented.

During the initial weeks of the program, the field GC data tended to yield significantly lower concentrations than that of the fixed laboratory. The correlation improved greatly during the course of the program.

Field GC data were collected during downgradient monitoring well sampling (low stress) as described in Section 1.0. These data are compared to corresponding laboratory analyses in Table 4-2.

Table 4-3 presents results from dye testing (Oil Red O) for presence of DNAPL (free-product). Groundwater samples were collected from the bottom of boreholes exhibiting elevated FID readings using double-check-valve bailers.

A small quantity (one gram) of powdered dye was mixed with the sample(s). Samples exhibiting a reddish stain (EW-A6, EW-A7, and EW-A10) appear to correlate with laboratory analyses showing TCE concentrations of 100,000 ppb or greater.

5.0 LABORATORY WATER QUALITY ANALYSES

The water quality results for 48-hour turnaround-time VOC laboratory analyses performed by Chemtech from December 1998 through March 1999 indicate the highest concentrations occurring during the yield test (Table 4-1) of 495,500 ppb trichloroethylene (TCE) occurred at the central extraction well EW-A6 and located 10 feet east of EW-A7 (490,400 bbp). Concentrations declined to less than 10 ppb TCE at EW-A16 and 210 ppb and 380 ppb, respectively at EW-A11 and EW-A13. EW-A13 is approximately 700 feet downgradient from the northern end of the Area D extraction well network.

Form I data from the laboratory analyses are provided in Appendix B. Groundwater analyses for metals collected from EW-A6, EW-A7, EW-A15 and OW-A2 are also included. Elevated (low ppb range) concentrations of carbon tetrachloride, chloroform, 1,1,1,2-tetrachloroethane, 1,1,2-trichloroethane, toluene and xylenes were detected in areas containing high concentrations of TCE. No significant concentrations of inorganics were detected at Area A.

Downgradient monitoring well sampling did not reveal significant discernible trends overall, nor any particular pattern related to drilling activity. There appears to be some overall decrease in VOCs in some wells toward the end of the period, some of which may result from high seasonal water levels. However, substantial reductions in TCE concentrations are noted in HN-11I and HN-55I in February 1999 data. EW-A1 concentrations declined abruptly the first week following yield testing, suggesting that yield testing may have purged a localized pocket of contamination.

6.0 YIELD TEST PLOTS AND CALCULATIONS

Semi-logarithmic data plots used for aquifer analysis are presented in this section. Analyses include distance-drawdown, time drawdown, residual drawdown vs. t/t'; and calculated recovery, which are found in Driscoll (1986). Aquifer parameter estimates for these plots are summarized in Table 6-1. The graphical plots for each extraction well and associated observation well are provided in Figures 6-1 through 6-64.

Beginning west of the main contaminant plume, the distance-drawdown plot for EW-A1 (Figure 6-1) indicates a transmissivity of 261 ft^2/d, which is typical of the main area of the contaminant plume. However, time-drawdown plots for the observation wells HN55I, EW-A2 and EW-A3 indicate transmissivities of 588 ft^2/d, 609 ft^2/d and 557 ft^2/d, respectively, which are more representative of Area D. All storage coefficient values indicate a confined aquifer system.

Proceeding southwestward along the west end of Area A extraction wells, EW-A8 distance-drawdown indicates a transmissivity of 582 ft^2/d. Observation wells HN-55S, EW-A1, HN-55I and HN-14I (to the north) provide transmissivities of 101 ft^2/d, 398 ft^2/d, 455 ft^2/d and 642 ft^2/d, respectively. Further southwestward, EW-A11 indicates a high transmissivity of 882 ft^2/d. However, observation wells EW-A8, HN-55I, MW-02, MW-03 and HN-55S indicate transmissivity values more in line with the area at 546 ft^2/d, 509 ft^2/d, 123 ft^2/d, 482 ft^2/d and 546 ft^2/d, respectively.

Yield testing at EW-A13, at the southwestern end of Area A, provides lower transmissivity values for distance-drawdown, with time-drawdown for MW-02 and EW-A11, at 243 ft^2/d, 40 ft^2/d, and 252 ft^2/d, respectively. All storage coefficient values are for a confined aquifer.

EW-A2, moving eastward toward the center of contamination, yielded a distance-drawdown transmissivity of 158 ft^2/d. Observation wells EW-A3, EW-A6, HN-55I, EW-A2, EW-A5 and EW-A4 show consistent transmissivities of 353 ft^2/d, 368 ft^2/d, 432 ft^2/d, 324 ft^2/d, 232 ft^2/d and 334 ft^2/d, respectively.

EW-A3 shows a similar pattern with a distance-drawdown transmissivity value of 176 ft^2/d. Observation well time-drawdown transmissivity values for EW-A5, HN-55I, EW-A4 and HN-55I are 252 ft^2/d, 333 ft^2/d, 321 ft^2/d and 271 ft^2/d, respectively.

Continuing eastward through the area of highest TCE contamination from EW-A4 through EW-A5, EW-A6, EW-A7, and EW-A9 to EW-A10, transmissivity values are in a lower range. Distance-drawdown values from these tests are 210 ft^2/d, 133 ft^2/d, 123 ft^2/d, 84 ft^2/d, 153 ft^2/d, and 136 ft^2/d, respectively. Note that EW-A6 was tested during heavy rain and drawdown values were corrected using background well data. Also, note that observation wells in some cases were in such close fracture interconnection with the pumping well, e.g., HN-11I with EW-A4 pumping, that their data was not considered representative of the overall aquifer.

For EW-A4, observation well HN-55I shows a time-drawdown transmissivity of 321 ft^2/d and a residual drawdown value of 294 ft^2/d. The storage coefficient indicates a semi-confined system,

whereas the other data in this central area indicate confined conditions. Transmissivities at EW-A5 observation wells HN-11I, EW-A3, EW-A4 and HN-55I are 104 ft^2/d, 191 ft^2/d, 99 $ft/^2d$ and 271 ft^2/d, respectively. For EW-A6 observation wells EW-A5 and EW-A5, transmissivities are 121 ft^2/d and 194 ft^2/d, respectively.

In addition, EW-A7 observation wells EW-A6, EW-A5 and OW-A2 indicate transmissivities of 59 ft^2/d, 147 ft^2/d and 176 ft^2/d, respectively. For EW-A9 observation wells OW-A2 and EW-A5 showed transmissivities of 157 ft^2/d and 109 ft^2/d, respectively. EW-A10 observation wells OW-A2, EW-A6 and EW-A7 showed transmissivities from time-drawdown plots of 208 ft^2/d, 31 ft^2/d and 28 ft^2/d, respectively.

As contaminant concentrations decline to the east of this central area, transmissivities generally increase. At EW-A12 distance-drawdown transmissivity is 299 ft^2/d. Observation wells EW-A10, OW-A2 and EW-A9 yielded T values of 396 ft^2/d, 571 ft^2/d and 413 ft^2/d, respectively. Storage coefficient values indicate confined conditions, except for distance-drawdown plots which indicated semi-confined conditions.

At OW-A14, transmissivity values declined, with distance-drawdown at 26 ft^2/d and observation wells time-drawdown for MW-D, OW-A2 and MW-E at 25 ft^2/d, 294 ft^2/d and 104 ft^2/d, respectively.

EW-A15, at the eastern end of the Area A well network, distance-drawdown transmissivity is 81 ft^2/d. Observation wells MW-E, MW-D and EW-A14 were at 264 ft^2/d, 106 ft^2/d and 38 ft^2/d, respectively. Storage coefficient values are indicative of a confined aquifer.

7.0 ESTIMATED SUSTAINABLE YIELD AND CAPTURE ZONE ANALYSIS

Based upon the yield test results, it is likely that EW-A1, EW-A2, EW-A3, EW-A8, EW-A11 and EW-A12 can sustain or exceed, if needed, 11 gpm or more. EW-A4, EW-A5 and EW-A6 appear to be capable of maintaining 3 gpm upon further development. EW-A7, EW-A13 and EW-A15 appear dependable for 1 to 2 gpm each. It is also possible that pumping rates will decline if groundwater storage is relatively high in the vicinity of some of these wells and, once depleted, receives recharge from areas with less groundwater in storage. This situation should not be a problem since lower pumping rates would then be producing the same groundwater capture zone.

Within a day following each yield test, subsequent well spacings were evaluated based upon a combination of sustainable pumping rate, aquifer transmissivity and field GC data. The well spacings were evaluated using Javandel and Tsang (1986), where:

$$\boxed{W_{sp} = 1.26\, Q_w/(\pi T I)}$$ for 3 or more wells.

W_{sp} = well spacing in feet

Q_w = pumping rate in ft^3/day

T = transmissivity in ft^2/day

I = horizontal gradient in ft/ft, 0.04 ft/ft in Area A (Brown and Root, 1986)

Table 7-1 presents a well spacing matrix for the range of pumping rates observed during the yield testing versus a range of transmissivities calculated for the testing results using the above capture zone equation, with an area-wide horizontal hydraulic gradient of 0.04 ft/ft. Incorporating this data for the TEG conference calls, capture zone spacings varying from 10 feet to more than 100 feet between extraction wells were determined. Slightly smaller spacing was estimated for the north end of Area A, where some higher transmissivity values were indicated. With adjustments for buried utilities and other logistical constraints, the well spacings from south to north, as measured in the field, are as follows:

	A	B	C
1	**Warminster**		
2	**Area A GW Extraction Wells**		
3			
4	**From:**	**To:**	**Distance (feet)**
5	EWA13	EWA11	106
6	EWA11	EWA8	190
7	EWA8	EWA1	77
8	EWA1	EWA2	81
9	EWA2	EWA3	82
10	EWA3	EWA4	27
11	EWA4	EWA5	24
12	EWA5	EWA6	36
13	EWA6	EWA7	11
14	EWA7	EWA9	16
15	EWA9	EWA10	14
16	EWA10	EWA12	39
17	EWA12	EWA15	98

Figure 7-1 presents a QUICKFLOW capture zone model assuming isotropic, homogeneous confined conditions, a transmissivity of 141 ft/day, a 60 ft saturated thickness and pumping rates for EW-A1, EW-A2, EW-A3, EW-A4, EW-A5, EW-A6, EW-A7, EW-A8, EW-A9, EWA-10, EW-A11, EW-A12, EW-A13 and EW-A15 at 6 gpm, 10 gpm, 8 gpm, 3 gpm, 0 gpm, 1 gpm, 1 gpm, 8 gpm, 0 gpm, 5 gpm, 10 gpm, 8 gpm, 2 gpm and 3 gpm, respectively. This "idealized" model indicates the extraction well network will effectively capture TCE-contaminated groundwater upgradient (and slightly downgradient) from the line of extraction wells.

8.0 WATER LEVEL DATA FROM HAND MEASUREMENTS AND TELOGS

This section includes tables of hand-held water level measurements of the pumping well and observation wells, i.e., Tables 8-1 through 8-15 for EW-A1 through EW-A-15, respectively. In addition, plots that were not used directly in the aquifer calculations are presented in Figures 8-1 through 8-233 for these tests. The data includes arithmetic and semilogarithmic plots of the pumping wells and selected time-drawdown, residual drawdown, and calculated recovery semilogarithmic plots of observation wells.

REFERENCES

Driscoll, 1986, Groundwater and Wells, Johnson Division, St. Paul, MN.

Foster Wheeler Environmental, June 1998, Addendum No. 4 to the Work Plan for Various Source Removal Sites at the Naval Air Warfare Center, Warminster, PA.

Halliburton NUS, 1995, Focused Remedial Investigation Report for Naval Air Warfare Center, Warminster, PA.

Javandel and Tsang, 1986, Capture-Zone Type Curves: A Tool for Aquifer Cleanup in Ground Water, Sept/Oct 1986, Vol. 24, No. 6.

Kruseman and deRidder, 1990, Analysis and Evaluation of Pumping Test Data.

TABLE 2-1A (Page 1 of 2)

AREA A EXTRACTION WELLS SUMMARY

Extraction Well	Fractured Yield Zones (ft).	Total Depth (ft.)	10-inch Casing Depth (ft.)	Screened Interval (ft.)	Yield Test Steps Rate (gpm)/ Duration (hours)	Drawdown in Extraction Well (ft.)	Drawdown Projected for 90 Days at Rate of Last Step	Rate (gpm) Drawdown (ft.) after Approx. One Hour of Pumping After Completion with Screen and Riser Casing	Remarks
EW-A1	22 - 24, 28, 47, 64, 67	80	20	20-80	15/6	13.33	16	11/5.27	
EW-A2	24, 25 – 30, 62 – 63, 76	80	20	20-80	12.5/6.5	5.18	10	11/4.40	0.5 ppm FID in sample at 55 ft.
EW-A3	27, 30, 43, 48, 53, 61, 63	75	20	25-75	10/6	5.14	10	11.436	
EW-A4	22-23, 41, 46, 63-64, 69 - 70	76	15.5	16-76	3/6	12.19	20	10/33.22 (2 hrs to clear)	0.8 ppm FID in sample 40 ft., 1 to 2 ppm in rolloff 60 to 70 ft.
EW-A5	23, 62, 72	77	15	16-76	2/6	9.65	18	5/~20 (2 hrs w/surging)	
EW-A6	45, 57, 70 (minor)	80	20	20-80	1.1/6	6.96	20	4.2/~30 (continuous pumping)	20 ft, 0.2 ppm sample, ~2 ppm in rolloff, 35 ft., ~15 ppm in rolloff, 60 ft.
EW-A7	22, 23, 25, 56	75	20	20-75	1/4 @ 4.5 and 2.5/1.5	22.14 (2.5 gpm)	10 (1 gpm)	1.6/~30 (continuous pumping)	Hydrocarbon odor 15 to 20 ft, 8 ppm in rolloff at 60 ft and 1 ppm in sample
EW-A8	23, 28 – 30, 34 – 40, 45, 70	102	20	22-102	8/6	8.40	10	11/13.63	
EW-A9	~70	75	16	15-75	1.4 avg/6	31.20 (1 gpm)	32 (1 gpm)	5/47.26 (2 hrs)	
EW-A10	65-67	75	20	15-75	5/6	18.88	30	12/48.70	8 ppm FID at 25 ft., 3-5 at 30 ft, 3.6 ppm at 40 ft.

TABLE 2-1A (Page 2 of 2)

AREA A EXTRACTION WELLS SUMMARY

Extraction Well	Fractured Yield Zones (ft).	Total Depth (ft.)	10-inch Casing Depth (ft.)	Screened Interval (ft.)	Yield Test Steps Rate (gpm)/ Duration (hours)	Drawdown in Extraction Well (ft.)	Drawdown Projected for 90 Days at Rate of Last Step	Rate (gpm) Drawdown (ft.) after Approx. One Hour of Pumping After Completion with Screen and Riser Casing	Remarks
EW-A11	28-30, 84	87	16	17-87	15/6	10.87	20	30/9.79	
EW-A12	13, 62	67	15	27-67	11/6	3.16	8	11/4.09	
EW-A13	36-38, 69, 86	87	15	17-87	2/6	18.35	40	5/30.07	
EW-A15	41, 56, 60 – 67	77	16	17-77	3/6	24.50	45	4/36.58	

*All depths measured from ground surface

TABLE 2-1B

AREA A OBSERVATION WELLS SUMMARY

Extraction Well	Fractured Yield Zones (ft).	Total Depth (ft.)	10-inch Casing Depth (ft.)	Screened Interval (ft.)	Yield Test Steps Rate (gpm)/ Duration (hours)	Drawdown in Extraction Well (ft.)	Drawdown Projected for 90 Days at Rate of Last Step	Rate (gpm) Drawdown (ft.) after Approx. One Hour of Pumping After Completion with Screen and Riser Casing	Remarks
Observation Well									
OW-A2	50 - 52, 60 – 62	70 (6")	14 (6")	Open hole	~3 to 4 gpm air lift yield	---	---	---	
OW-A14	15, 48, 51 – 55	61	19	Open hole	1.5/6	16.35	35	---	
OW-A16	40 – 48 (50 ft), 61	61	16	Open hole	10 to 15 gpm air lift yield	---	---	---	
OW-A17	43, 58-59, 68-69, 71.5	72	16	Open hole	~3 to 4 gpm air lift yield	---	---	---	

TABLE 4-1

Field GC Results Compared with Laboratory Results for
Trichloroethene and Tetrachloroethene

EXTRACTION WELL EW-A1
Yield Test Date: 01/22/1999

	Time	TCE, ppb	PCE, ppb
	09:00	4200	ND
	10:00	4600	ND
	11:05	4400	ND
	13:05	4000	ND
	13:50	10300	26
Lab result	13:50	11300	60

EXTRACTION WELL EW-A2
Yield Test Date: 01/14/1999

	Time	TCE, ppb	PCE, ppb
	09:00	8600	ND
	10:05	11200	ND
	11:10	10900	ND
	12:00	15400	ND
	13:00	16000	ND
	13:50	13800	ND
Lab result	13:50	26600	110

EXTRACTION WELL EW-A3
Yield Test Date: 01/06/1999

	Time	TCE, ppb	PCE, ppb
	09:00	1840	ND
	10:00	2630	ND
	11:00	2800	ND
	12:00	3600	ND
	13:00	7930	ND
	14:00	8490	ND
	14:15	8610	ND
Lab result	14:15	14800	75

EXTRACTION WELL EW-A4
Yield Test Date: 12/22/1998

	Time	TCE, ppb	PCE, ppb
	08:30	1540	ND
	09:30	3290	ND
	10:30	3220	ND
	11:30	3750	ND
	13:15	2750	ND
	14:30	3140	ND
Lab result	14:30	49700	97

EXTRACTION WELL EW-A5
Yield Test Date: 01/07/1999

	Time	TCE, ppb	PCE, ppb
	07:58	27200	ND
	09:00	23000	ND
	10:00	16400	ND
	11:00	32300	ND
	12:00	22000	ND
	13:00	18000	ND
	14:10	24600	ND
Lab result	14:10	99100	130

EXTRACTION WELL EW-A6
Yield Test Date: 01/18/1999

	Time	TCE, ppb	PCE,ppb
	10:40	600000	96
	11:35	640000	112
	12:40	485000	45
Lab result	12:40	495500	360
	13:40	795000	47
	14:35	300000	181
	15:30	575000	285
Lab result	15:30	423900	430

EXTRACTION WELL EW-A7
Yield Test Date: 01/27/1999

	Time	TCE, ppb	PCE,ppb
	09:00	517000	ND
	10:00	314000	ND
	11:00	392000	ND
	11:55	632000	ND
	13:00	248000	ND
	13:55	789000	ND
Lab result	13:55	490400	ND

EXTRACTION WELL EW-A8
Yield Test Date: 01/29/1999 (80')

	Time	TCE, ppb	PCE,ppb
	08:55	1400	ND
	09:50	1063	ND
	11:00	1950	ND
	11:50	890	ND
	14:10	2500	ND
Lab result	14:10	1800	30

EXTRACTION WELL EW-A9
Yield Test Date: 02/4/1999

	Time	TCE, ppb	PCE,ppb
	09:30	28400	113
	10:30	37800	274
	11:30	42100	141
	12:30	48500	549
	13:15	30400	113
	14:30	36400	254
Lab result	14:30	141200	Diluted out

EXTRACTION WELL EW-A8
Yield Test Date: 02/08/1999 (102')

	Time	TCE, ppb	PCE,ppb
	11:00	1399	ND
	12:00	978	ND
	13:00	452	ND
	14:00	490	ND
	15:00	394	ND
	16:00	920	ND
Lab result	16:00	1300	68

TABLE 4-1

Field GC Results Compared with Laboratory Results for
Trichloroethene and Tetrachloroethene

EXTRACTION WELL EW-A10			
Yield Test Date: 02/11/1999			
	Time	TCE, ppb	PCE,ppb
	09:30	74200	135
	10:30	81600	690
	11:30	62700	68
	12:30	56600	63
	13:30	58400	66
	14:30	35300	180
Lab result	14:30	113100	Diluted out

EXTRACTION WELL EW-A11			
Yield Test Date: 02/16/1999			
	Time	TCE, ppb	PCE,ppb
	10:30	775	ND
	11:30	260	ND
	12:30	332	34
	13:30	266	30
	14:30	290	88
	15:30	200	69
Lab result	15:30	210	140

EXTRACTION WELL EW-A12			
Yield Test Date: 02/18/1999			
	Time	TCE, ppb	PCE,ppb
	10:00	150	ND
	11:00	130	ND
	12:00	240	ND
	13:00	410	ND
	14:00	320	ND
	15:00	240	19
Lab result	15:00	360	56

EXTRACTION WELL EW-A13			
Yield Test Date: 02/22/1999			
	Time	TCE, ppb	PCE,ppb
	11:00	710	ND
	12:00	490	ND
	13:00	310	ND
	14:00	170	ND
	15:00	170	ND
	16:00	160	ND
Lab result	16:00	380	ND

OBSERVATION WELL OW-A14			
Yield Test Date: 02/24/1999			
	Time	TCE, ppb	PCE,ppb
	09:15	480	ND
	10:15	600	ND
	11:15	150	ND
	12:15	610	50
	13:15	240	ND
	14:15	160	ND
Lab result	14:15	840	140

EXTRACTION WELL EW-A15			
Yield Test Date: 03/03/1999			
	Time	TCE, ppb	PCE,ppb
	09:00	300	ND
	10:00	120	ND
	11:00	120	ND
	12:00	140	ND
	13:00	440	ND
	14:00	57	ND
Lab result	14:00	490	44

EXTRACTION WELL EW-A16			
Sample Date: 03/05/1999			
	Time	TCE, ppb	PCE,ppb
Lab result	13:22	6.5	2.9

EXTRACTION WELL EW-A17			
Sample Date: 03/05/1999			
	Time	TCE, ppb	PCE,ppb
Lab result	16:03	6800	530

EXTRACTION WELL EW-A17			
Sample Date: 03/08/1999			
	Time	TCE, ppb	PCE,ppb
Lab result	16:37	13700	580

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-11I					
	12/14/98	6391	ND		
	12/16/98	5804	262	73200	110
	12/17/98	5541	ND	13300	11
	12/18/98	7445	62	74300	110
	12/21/98	4949	ND	51700	74
	1/5/99	23100	9	23400	29
	1/8/99	43200	ND	43900	58
	1/19/99	15170	ND	25200	ND
	1/25/99	15300	7	37400	ND
	2/3/99	10700	ND	10900	15
	2/23/99	770	ND	2600	90
	3/16/99	NA	NA	3700	18

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-11 D					
	12/15/98	ND	ND		
	12/16/98	ND	ND		
	12/17/98	3	ND	7	ND
	12/18/98	ND	ND	5 B	ND
	12/21/98	20	ND		
	1/28/99	ND	ND	16	ND

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-14 S					
	12/15/98	607	ND		
	12/16/98	108	ND	370	4
	12/17/98	262	ND	380	4
	12/18/98	152	ND	450	ND
	12/21/98	138	ND		
	1/4/99	529	ND	950	9
	1/12/99	334	ND	220	ND
	1/21/99	69	ND	65	ND
	1/26/99	146	ND	240	ND
	2/17/99	100	ND	85	0.9
	2/26/99	49	ND	200	4.5
	3/11/99	NA	NA	450	0.9
	3/16/99	NA	NA	400	1.6

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-14 I					
	12/15/98	3420	89		
	12/16/98	1080	40		
	12/17/98	2625	55	3900	44
	12/18/98	2122	32	3800	47
	12/21/98	740	ND		
	1/4/99	1830	29	5900	51
	1/11/99	5300	25	5200	59
	1/13/99	5020	ND	4800	64
	1/21/99	4050	ND	4000	ND
	1/26/99	2800	25	5400	65
	2/17/99	8460	ND	2200	85
	2/26/99	650	ND	16300	90
	3/11/99	NA	NA	2300	81
	3/16/99	NA	NA	4700	100
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-55 I					
	12/17/98	2600	175	5500	230
	1/4/99	1500	165	11600	290
	1/11/99	11060	130	11200	280
	1/13/99	9200	182	11900	290
	1/19/99	8100	58	11400	ND
	2/3/99	2830	ND	3800	71
	2/11/99	2530	8	4300	450
	3/10/99			1100	260
	3/15/99	NA	NA	1400	280
	3/25/99	NA	NA	1600	410
	2/5/99	185	ND	750	ND
	2/18/99	150	ND	340	14
	3/2/99	220	ND	140	4.5
	3/12/99	NA	NA	140	2.1
	3/17/99	NA	NA	270	14
	3/27/99	NA	NA	180	ND

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
HN-59 I					
	12/15/98	4627	61		
	12/16/98	1266	4		
	12/21/98	1367	ND		
	1/5/99	12900	200	16500	190
	1/12/99	18300	241	17300	210
	1/21/99	15000	89	15700	ND
	1/28/99	6022	ND	16400	ND
	2/3/99	14800	140	16500	200
	2/17/99	6350	ND	2300	180
	3/1/99	21000	ND	9800	180
	3/16/99	NA	NA	4500	150
	3/26/99	NA	NA	6900	220
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
OW-2					
	1/4/99	270	74	530	89
	1/13/99	230	60	190	120
	1/26/99	580	45	910	100
	2/5/99	190	21	250	100
	2/23/99	550	150	250	71
	3/11/99	NA	NA	810	230
	3/26/99	NA	NA	4200	340
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A1					
	1/22/99	10300	26	11300	60
	1/26/99	ND	ND	97	ND
	1/28/99	ND	ND	ND	ND
	2/1/99	170	ND	78	ND
	2/3/99	31	ND	43	ND
	2/10/99	56	ND	44	0.9
	2/19/99	ND	ND	29	0.9
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A2					
	1/14/99	13800	ND	26600	110
	1/19/99	14050	52	21000	ND
	1/25/99	11400	83	19200	ND
	2/3/99	17300	136	12000	140
	2/10/99	7100	56	9300	90

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-3					
	1/6/99	8600	ND	14800	75
Unpurged	1/8/99	3400	ND	4200	5
	1/11/99	7700	ND	6200	6
	1/13/99	6500	ND	5700	5
	1/19/99	1300	ND	3100	ND
	1/25/99	3000	ND	8100	ND
	2/1/99	2990	ND	3100	ND
	2/9/99	2460	ND	2400	90
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A4					
	12/21/98	4300	ND		
	12/22/98	3140	ND	49700	97
	1/5/99	2800	ND	3900	5.5
Unpurged	1/8/99	9540	ND	11400	14
	1/20/99	6500	ND	10100	ND
	1/25/99	7440	ND	42600	ND
	2/1/99	5450	ND	7300	ND
	2/23/99	320	ND	2100	4.5
	3/12/99			4300	45
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A5					
	1/7/99	24600	ND	99100	130
Unpurged	1/8/99	10500	ND	12500	10
	1/11/99	19300	ND	17200	12
	1/20/99	4100	ND	8900	ND
	1/25/99	1800	ND	3900	ND
	2/2/99	1400	ND	2800	ND
	2/9/99	1000	ND	1800	90
	3/12/99			6800	45
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A6					
	1/18/99	575000	285	423900	430
	1/20/99	1105000	181	612900	ND
	1/26/99	440000	95	646700	ND
	1/29/99	326600	ND	NA	
	2/1/99	483000	ND	1219200	350
	2/9/99	267200	ND	168600	290
	2/25/99	80000	ND	184900	440

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A7					
	1/27/99	789000	ND	490400	ND
	1/29/99	300400	ND	NA	NA
	2/2/99	214000	ND	689200	ND
	2/25/99	26000	112	91300	380
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A8	1/29/99	1890	ND	1800	30
	2/8/99	920	10	1300	68
	2/8/99	19	ND	35	0.9
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A9					
	1/24/99				
	1/29/99	2170	ND	1800	30
	2/4/99	36400	254	141200	4500
	2/9/99	5900	ND	38100	90
	2/17/99	78770	97	4700	1100
	2/23/99	63890	110	116200	530
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A10					
	2/11/99	35300	180	113100	4500
	9/24/22	154400	ND	4200	860
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A11					
	2/16/99	200	69	210	140
	2/19/99	ND	ND	2.1	0.9
WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A12					
	2/18/99	285	23	340	56
	2/26/99	94	92	170	200

TABLE 4-2

MONITORING WELL DATA
Field and Laboratory Results
For Trichloroethene and Tetrachloroethene

WELL ID	SAMPLE DATE	FIELD TCE	FIELD PCE	LAB TCE	LAB PCE
EW-A13					
	2/22/99	160	ND	380	4.5
WELL ID	**SAMPLE DATE**	**FIELD TCE**	**FIELD PCE**	**LAB TCE**	**LAB PCE**
EW-A14					
	2/24/99	160	ND	720	140
	2/26/99	560	270	370	180
	3/12/99			180	73
WELL ID	**SAMPLE DATE**	**FIELD TCE**	**FIELD PCE**	**LAB TCE**	**LAB PCE**
EW-A15					
	3/3/99	57	ND	390	44

TABLE 4-3

DNAPL DYE TESTS

	(+) Positive	(-) Negative	Comments
12/17/98			
1150 "C"		-	
1200 HN11i		-	
1340 HN11D		-	
1530 "D" -		-	
1630 "E" -		-	
12/18/98			
1255 "D" -		-	
1322 HN11D		-	
1310 HN11i		-	
1335 "C" -		-	
1250 "E" -		-	
12/21/98			
1600 "E" -		-	
1615 "D" -		-	
1635 HN11D		-	
1645 HN11D		-	
1625 "C" -		-	
12/23/98			
1430 EQA4		-	
1445 OW2		-	
1/4/99			
1640 HN11I		-	
1650 OW2		-	
1/29/99			
1357 EWA6	+		Some reddish stain throughout- no breakout
1603 EWA7	+		Slight reddish stain throughout
2/1/99			
0845 EWA6	+		Reddish stain throughout (less than 1/29 sample)
0903 EWA7	+		
2/10/99			
1345 EWA10	+		Very slight reddish stain
1345 EWA7	+		Noticeable reddish color sticking to sides
1400 EWA9		-	
2/11/99			
EWA6	+		Noticable reddish color sticking differentially to sides
EWA9		-	
EWA10	+		
1515 EWA10 (purge sample)		-	
1530 EWA10 (LNAPL)		-	
1345 EWA7		-	
2/17/99			
1515 EWA10 (DNAPL)		-	
1530 EWA10 (LNAPL)		-	
1345 EWA7	+		Trace reddish color

TABLE 4-3

DNAPL DYE TESTS

	(+) Positive	(-) Negative	Comments
2/25/99			
1011 EWA6 (Pumped)			
1000 EWA7 (Pumped)			
2/26/99			
0911 EWA9		-	
0920 EWA10		-	Very slight reddish tinge
3/2/99			
1500 EWA15		-	
3/5/99			
1600 EWA17		-	

TABLE 6-1

SUMMARY OF ANALYTICAL RESULTS OF FIELD TESTS

Test Location	Plot	Distance (r) in Feet From Pumping Well	Transmissivity (T) gpd/ft	Transmissivity (T) Ft^2/d	Storage Coefficient (S)
EW-A1	Distance-drawdown	490*	1,956	261	0.0006
	Time-drawdown for HN-55I	88	4,400	588	0.00002
	Time-drawdown for EW-A2	101	4,552	609	0.00003
	Time-drawdown for EW-A3	190	4,168	557	0.00001
EW-A2	Distance-drawdown	310*	1,178	158	0.001
	Time-drawdown for EW-A3	81	2,640	353	0.00013
	Time-drawdown for EW-A6	171	2,750	368	0.0001
	Time-drawdown for HN-55I	157	3,235	432	0.00003
	Time-drawdown for EW-A2	108	2,426	324	0.0002
	Time-drawdown for EW-A5	132	1,774	237	0.00009
	Time-drawdown for EW-A4	108	2,500	334	0.0002
EW-A3	Distance-drawdown	800*	1,320	176	0.00015
	Time-drawdown for EW-A5	52	1,886	252	0.0015
	Time-drawdown for HN-55I	227	2,490	333	0.00003
	Time-drawdown for EW-A4	27.5	2,400	321	0.0013
	Time-drawdown for HN-55I	27	2,030	271	0.0003
EW-A4	Distance-drawdown	900*	1,568	210	0.00015
	Time-drawdown for HN-55I	63	2,400	321	0.073
	Residual drawdown for HN-55I		2,200	294	---
EW-A5	Distance-drawdown	550*	996	133	0.0002
	Time-drawdown for HN-11I	34	776	104	0.0006
	Time-drawdown for EW-A3	50	1,427	191	0.0002
	Time-drawdown for EW-A4	25	774	99	0.0009
	Time-drawdown for HN-55I	285	2,030	271	0.0002
EW-A6	Distance-drawdown (corrected)	125*	922	123	0.0001
	Time-drawdown for EW-A5	30	908	121	0.0003
	Time-drawdown for EW-A4	55	1,452	194	0.001

* = radius of influence defined by distance-drawdown plot

TABLE 6-1 (Cont'd)

SUMMARY OF ANALYTICAL RESULTS OF FIELD TESTS

Test Location	Plot	Distance (r) in Feet From Pumping Well	Transmissivity (T) gpd/ft	Transmissivity (T) Ft^2/d	Storage Coefficient (S)
EW-A7	Distance-drawdown	110*	632	84	0.004
	Time-drawdown for EW-A6	10	440	59	0.003
	Time drawdown for EW-A5	45	1,100	147	0.0002
	Time drawdown for OW-A2	68	1,320	176	0.003
EW-A8	Distance-drawdown	1,700*	4,355	582	0.00011
	Time-drawdown for HN-55S	32	754	101	0.00018
	Time-drawdown for EW-A1	98	2,975	398	0.00026
	Time-drawdown for HN-55I	38	3,407	455	0.0009
	Time-drawdown for HN-14I	373	4,800	642	0.00005
EW-A9	Distance-drawdown	160*	1,148	153	0.003
	Time-drawdown for OW-A2	42	1,173	157	0.004
	Time-drawdown for EW-A5	78	812	109	0.001
EW-A10	Distance-drawdown	160*	1,015	136	0.003
	Time-drawdown for OW-A2	42	1,553	208	0.0007
	Time-drawdown for EW-A6	47	232	31	0.0004
	Time drawdown for EW-A7	35	213	28	0.0008
EW-A11	Distance-drawdown	270*	6,600	882	0.007
	Time-drawdown for EW-A8	185	4,082	546	0.0002
	Time-drawdown for HN-55I	150	3,808	509	0.0003
	Time drawdown for MW-02	149	921	123	0.0002
	Time drawdown for MW-03	109	3,600	482	0.001
	Time drawdown for HN-55S	160	4,082	546	0.0005
EW-A12	Distance-drawdown	90*	2,234	299	0.02
	Time drawdown for EW-A10	40	2,963	396	0.003
	Time-drawdown for OW-A2	41	4,271	571	0.001
	Time-drawdown for EW-A9	52	3,089	413	0.006

* = radius of influence defined by distance-drawdown plot

TABLE 6-1 (Cont'd)

SUMMARY OF ANALYTICAL RESULTS OF FIELD TESTS

Test Location	Plot	Distance (r) in Feet From Pumping Well	Transmissivity (T) gpd/ft	Transmissivity (T) Ft^2/d	Storage Coefficient (S)
EW-A13	Distance-drawdown	1,080*	1,821	243	0.0001
	Time-drawdown for MW-02	21	320	40	0.016
	Time drawdown for EW-A11	120	1,886	252	0.0002
OW-A14	Distance-drawdown	215*	198	26	0.0003
	Time-drawdown for MW-D	33.5	189	25	0.0004
	Time-drawdown for OW-A2	76	2,200	294	0.0008
	Time-drawdown for MW-E	84	776	104	0.0002
EW-A15	Distance-drawdown	180*	609	81	0.0014
	Time-drawdown for MW-E	101	1,842	264	0.0008
	Time-drawdown for MW-D	63	792	106	0.0009
	Time-drawdown for EW-A14	29	283	38	0.0008

* = radius of influence defined by distance-drawdown plot

TABLE 7-1

CAPTURE ZONE WELL SPACING MATRIX

Wsp = 1.26Qw/(3.1416*T*I) for 3 or more wells

Well Spacing for wells aligned perpendicular to GW flow

	Estimated Transmissivity (ft2/day)						
Rate (gpm)	**100**	**200**	**300**	**400**	**500**	**1000**	**1500**
1	19	10	6	5	4	2	1
3	58	29	19	14	12	6	4
5	97	48	32	24	19	10	6
8	154	77	51	39	31	15	10
12	232	116	77	58	46	23	15
15	290	145	97	72	58	29	19
20	386	193	129	97	77	39	26

Horz.Grad = ***0.04 feet/ft*** ***at Area A***

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.57	-
1	22.38	1.81
2	23.43	2.86
3	24.75	4.18
4	25.31	4.74
5	25.98	5.41
6	26.56	5.99
7	26.86	6.29
10	28.32	7.75
12	29.29	8.72
14	29.98	9.41
16	30.42	9.85
18	30.51	9.94
20	30.56	9.99
24	30.76	10.19
29	30.91	10.34
35	31.06	10.49
40	31.04	10.47
45	30.92	10.35
50	30.56	9.99
55	30.23	9.66
60	30.00	9.43
82	32.80	12.23
90	33.22	12.65
103	33.42	12.85
118	33.24	12.67
144	32.41	11.84
184	33.54	12.97
214	32.84	12.27
240	33.75	13.18
305	33.12	12.55
342	33.99	13.42
355	33.90	13.33

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, JANUARY 22, 1999

Time in Minutes Since Pumping Stopped from 1400	Depth to Water (ft.)
1	30.86
2	28.52
3	26.64
4	25.28
6	23.86
7	23.64
8	23.30
9	23.08
10	22.89
12	22.64
14	22.50
16	22.38
18	22.29
20	22.19
40	21.64
60	21.38

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.07	0
08	15.08	0.01
23	15.12	0.05
39	15.18	0.11
103	15.42	0.35
134	15.52	0.45
199	15.65	0.58
309	15.79	0.72
341	15.82	0.75
361	15.84	0.77

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	15.82
35	15.78
52	15.73

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.17	0
06	16.21	0.04
22	16.30	0.13
37	16.42	0.25
105	16.81	0.64
135	16.92	0.75
226	17.14	0.97
315	17.26	1.09
346	17.29	1.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
21	17.23
33	17.15
50	17.03

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.61	0
05	16.68	0.07
20	17.19	0.58
34	17.51	0.90
108	18.18	1.57
137	18.28	1.67
229	18.46	1.85
312	18.57	1.96
348	18.64	2.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	18.07
32	17.76
49	17.51

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.80	0
04	15.87	0.07
19	16.37	0.57
35	16.76	0.96
110	17.41	1.61
138	17.50	1.70
230	17.69	1.89
314	17.78	1.98
349	17.85	2.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	17.28
30	16.96
48	16.70

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.04	0
01	20.15	0.11
17	20.93	0.89
33	21.31	1.27
111	22.05	2.01
139	22.11	2.07
234	22.32	2.28
320	22.42	2.38
351	22.49	2.45

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	21.55
29	21.21
46	20.94

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.31	0
01	19.40	0.09
14	20.51	1.20
31	21.01	1.70
65	21.25	1.94
116	21.81	2.50
144	21.82	2.51
240	22.07	2.76
259	22.12	2.81
324	22.15	2.84
353	22.20	2.89

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
03	21.87	2.56
13	20.93	1.62
27	20.45	1.14
42	20.20	0.89

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	10.28	0
46	10.33	0.05
113	10.49	0.21
140	10.54	0.26
236	10.64	0.36
321	10.68	0.40

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	10.69

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.08	0
15	18.09	0.01
45	18.12	0.04
114	18.23	0.15
142	18.28	0.20
238	18.46	0.38
322	18.61	0.53

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	18.71

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
-	20.38	0
50	20.39	0.01
120	20.39	0.01
147	20.35	0.01
245	20.32	-0.06
327	20.30	-0.08

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
56	20.30

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	13.10	0
51	13.93	0.83
121	14.38	1.28
148	14.46	1.36
246	14.69	1.52
328	13.82	1.59

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
57	13.82	0.72

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.42	0
54	17.70	1.28
124	18.20	1.78
150	18.25	1.83
249	18.45	2.03
331	18.57	2.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
11	18.06
59	17.14

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	25.31	0
55	25.16	-0.15
126	25.03	-0.28
152	24.99	-0.32
250	24.81	-0.50
332	24.67	-0.64

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
60	24.51

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.67	0
57	17.87	1.20
128	18.17	1.50
156	18.23	1.56
252	18.39	1.72
335	18.50	1.83

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
62	17.43

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	21.23	0
10	22.27	1.04
28	22.89	1.66
42	23.10	1.87
59	23.18	1.95
129	23.77	2.54
158	23.84	2.61
253	24.06	2.83
336	24.13	2.90
356	24.16	2.93

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
08	23.24
25	22.45
38	22.22
63	21.93

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.52	0
60	19.22	0.70
130	19.57	1.05
159	19.65	1.13
255	19.84	1.32
337	19.32	1.41

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
65	19.32

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.51	0
15	15.53	0.02
140	15.57	0.06
305	15.54	0.03
336	15.55	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
27	15.55	0.04
57	15.55	0.04

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.87	0
16	17.87	0
146	17.99	0.04
306	18.17	0.03
337	18.20	0.33

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	18.24
58	18.24

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.36	0
28	14.42	0.06
145	14.68	0.32
315	14.85	0.49
341	14.86	0.50

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	14.84
62	14.77

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.23	0
27	15.26	0.03
144	15.34	0.11
314	15.41	0.18
340	15.43	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	15.44
61	15.42

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN 0W-2, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	11.91	0
26	11.95	0.04
144	11.98	0.07
313	12.05	0.14
339	12.06	0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
31	12.07
60	12.06

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.97	0
30	8.97	0
148	8.97	0
317	8.99	0.02
344	9.00	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	8.99
64	8.99

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.48	0
31	8.48	0
149	8.49	0.01
318	8.49	0.01
345	8.50	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	8.50
65	8.50

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.19	0
33	9.20	0.01
151	9.21	0.02
320	9.18	-0.01
347	9.17	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
41	9.17
68	9.18

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	7.75	0
35	7.77	0.02
152	7.77	0.02
321	7.75	0
349	7.75	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	7.75
59	7.75

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN SMP2, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.13	0
37	17.16	0.03
153	17.21	0.07
323	17.39	0.26
350	17.42	0.29

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	17.47
75	17.50

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.32	0
38	20.37	0.05
154	20.77	0.45
326	21.72	0.80
353	21.16	0.84

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	21.14
78	21.07

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN17I, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	1.28	0
46	1.38	0
158	1.41	0.03
329	1.42	0.04
356	1.43	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	1.43
81	1.43

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN17S, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	13.42	0
47	13.43	0.01
159	13.45	0.03
330	13.46	0.04
357	13.47	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
50	13.51
82	13.50

TABLE 8-1

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A1 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 22, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.99	0
50	9.02	0.03
161	9.03	0.04
332	9.02	0.03
359	9.02	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
54	9.04
84	9.03

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	23.10	0
0.1	23.86	0.76
1	24.74	1.64
2	24.86	1.76
3	25.34	2.24
4	25.56	2.46
5	25.79	2.69
6	25.93	2.83
7	26.04	2.94
8	26.12	3.02
9	26.24	3.14
10	26.28	3.18
12	26.39	3.29
14	26.48	3.38
16	26.58	3.48
18	26.64	3.54
20	26.70	3.60
22	26.75	3.65
24	26.79	3.69
26	26.84	3.74
28	26.90	3.80
33	26.98	3.88
38	27.06	3.96
43	27.10	4.00
48	27.16	4.06
53	27.21	4.11
58	27.28	4.18
68	27.38	4.28
73	27.41	4.31
78	27.43	4.33
83	27.50	4.40
98	27.58	4.48
131	27.76	4.66
157	27.84	4.74
186	27.87	4.77

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
278	28.16	5.06
300	28.18	5.08
308	28.20	5.10
347	28.27	5.17
379	28.28	5.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
0	27.52
1	26.44
2	26.04
3	25.72
4	25.51
5	25.42
6	25.29
7	25.21
8	25.13
9	25.09
10	25.01
12	24.93
15	24.84
17	24.76
20	24.70
25	24.57
29	24.49
38	24.36
56	24.13

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EWA-5, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.62	0
07	18.56	0
45	18.92	0.36
75	19.17	0.61
90	19.27	0.71
138	19.55	0.99
163	19.66	1.10
192	19.80	1.24
219	19.94	1.38
316	20.16	1.60
357	20.33	1.77
388	20.36	1.80

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
07	20.38
17	20.35
28	20.27

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EWA-6, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.79	0
08	17.77	-0.02
44	17.91	0.12
74	18.02	0.23
89	18.11	0.32
137	18.28	0.49
162	18.35	0.56
254	18.44	0.65
277	18.49	0.70
282	18.64	0.85
356	18.75	0.96

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	18.79
15	18.80
27	18.77

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EWA-4, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.01	0
04	20.02	0.01
46	21.30	1.29
76	21.61	1.60
92	21.69	1.68
139	21.93	1.92
165	22.13	2.12
195	22.13	2.12
220	22.19	2.18
285	22.36	2.35
314	22.42	2.41
359	22.50	2.49
387	22.54	2.53

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
04	22.48
18	21.85
31	21.54

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-11I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.21	0
06	19.34	0.13
48	20.58	1.37
93	20.96	1.75
141	21.20	1.99
166	21.27	2.06
197	21.39	2.18
221	21.45	2.24
286	21.58	2.37
315	21.67	2.46
360	21.74	2.53
385	21.78	2.57

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
05	21.58
19	20.99
32	20.70

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN DG-12, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
20	9.27	0
119	9.28	0.01
291	9.27	0
365	9.27	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
53	9.26

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
17	9.91	0
121	9.91	0
293	9.88	-0.03
367	9.85	-0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
50	9.84

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
15	8.51	0
122	8.50	-0.01
294	8.48	-0.03
368	8.46	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
49	8.46

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-82S, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	10.50	0
124	10.50	0
274	10.46	-0.04
341	10.44	-0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	10.45
72	10.45

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-17S, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.21	0
127	15.21	0
275	15.21	0
344	15.21	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	15.21
70	15.22

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-17I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	3.96	0
128	3.95	-0.01
298	3.90	-0.06
346	3.88	-0.08

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	3.87
69	3.88

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	23.53	0
129	24.13	0.60
280	24.44	0.91
347	24.56	1.03
393	24.64	1.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
41	24.69
67	24.61

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN SMP-2, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.42	0
130	19.45	0.03
282	19.58	0.16
350	19.65	0.23
374	19.66	0.24

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
39	19.72
63	19.72

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-12I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.40	0
111	16.40	0
284	16.40	0
353	16.42	0.02
376	16.41	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	16.41
61	16.40

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN DG-26, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
21	10.28	0
118	10.27	-0.01
291	10.27	-0.01
364	10.28	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
54	10.27

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN BG-4, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.79	0
113	19.85	0.06
285	19.99	0.20
355	20.08	0.29
377	20.11	0.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	20.13
60	20.15

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.67	0
114	16.92	0.25
285	17.12	0.45
357	17.17	0.50
378	17.18	0.51

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
31	17.15
58	17.10

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.17	0
116	14.25	0.08
288	14.35	0.18
361	14.39	0.22
380	14.39	0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
29	14.40
57	14.40

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.23	0
115	17.32	0.09
287	17.42	0.19
358	17.45	0.22
379	17.46	0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
30	17.46
58	17.44

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN DG-1, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	11.91	0
49	11.95	0.04
95	12.09	0.18
168	12.20	0.29
198	12.25	0.34
223	12.27	0.36
287	12.31	0.40
361	12.38	0.47

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	12.40

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	21.68	0
53	21.72	0.04
96	21.83	0.15
109	21.98	0.30
199	22.05	0.37
224	22.10	0.42
288	22.22	0.54
362	22.38	0.70

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	22.47

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN EWA-3, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	23.67	0
03	23.76	0.09
36	25.60	1.93
98	25.91	2.24
143	26.13	2.46
171	26.21	2.54
200	26.28	2.61
226	26.34	2.67
290	26.49	2.82
312	26.52	2.85
364	26.62	2.95
383	26.65	2.98

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	26.41
21	25.32
36	25.04

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-14S, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	26.48	0
59	26.48	0
148	26.46	-0.02
176	26.47	-0.01
204	26.50	0.02
230	26.39	-0.09
295	26.48	0
367	26.47	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
48	26.46

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-14I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.26	0
60	18.32	1.06
149	18.80	1.54
177	18.88	1.62
205	18.98	1.72
231	19.01	1.75
295	19.12	1.86
368	1923	1.97

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
49	18.40

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-59S, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.22	0
62	21.78	1.56
151	22.24	2.02
179	22.31	2.09
208	22.39	2.17
233	22.45	2.23
298	22.59	2.37
370	22.71	2.49

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
51	21.36

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-59I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	24.25	0
63	24.20	-0.05
152	24.14	-0.06
182	24.15	-0.10
209	24.16	-0.09
235	24.15	-0.10
299	24.11	-0.14
371	24.11	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
52	24.08

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-55S, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.92	0
66	20.00	0.08
155	20.10	0.18
184	20.33	0.41
212	20.16	0.24
237	20.19	0.27
304	20.23	0.31
375	20.27	0.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
43	20.26

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN HN-55I, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	25.00	0
65	27.21	2.21
156	27.65	2.65
186	27.72	2.72
213	27.81	2.81
238	27.89	2.89
306	28.02	3.02
377	28.12	3.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	26.86
24	26.54
40	26.28
54	26.44

TABLE 8-2

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A2 AT 12.5 GPM
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 14, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	22.19	0
214	22.94	0.75
290	22.98	0.79
307	23.05	0.85
378	23.10	0.90

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
41	22.81

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0820)	20.06	-
0	20.06	0
1	21.02	0.76
2	21.62	1.52
3	27.02	1.96
4	22.30	2.24
5	22.50	2.44
6	22.62	2.56
7	22.76	2.70
8	22.92	2.86
9	23.02	2.96
10	23.10	3.04
12	23.30	3.24
14	23.32	3.26
16	23.38	3.32
18	23.43	3.37
20	23.56	3.50
25	23.66	3.60
30	23.80	3.74
35	23.98	3.92
40	24.00	3.94
45	24.02	3.96
50	24.11	4.05
55	24.20	4.14
60	24.27	4.21
75	24.41	4.35
90	24.50	4.44
105	24.61	4.55
120	24.69	4.63
180	24.89	4.83
240	25.00	4.94
300	25.11	5.05
359	25.00	5.14

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 6, 1999

Time in Minutes Since Pumping Stopped from 1500	Depth to Water (ft.)
0.5	24.35
1	23.85
2	23.30
3	22.85
4	22.50
5	22.40
6	22.38
7	22.28
10	22.05
15	21.75
30	21.32
42	21.15
52	21.02
68	20.92

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0820)	14.01	-
0	14.01	0
14	14.02	0.01
85	14.03	0.02
194	14.08	0.07
272	14.10	0.09
351	14.12	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	14.13
45	14.12
70	14.12

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0824)	17.13	-
0	17.14	0
14	17.16	0.02
95	17.00	0.06
195	17.25	0.11
273	17.27	0.13
350	17.31	0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	17.31
46	17.30
71	17.30

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0822)	16.73	-
0	16.74	0
16	16.76	0.02
96	16.93	0.19
196	17.00	0.32
275	17.12	0.38
349	17.19	0.45

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
21	17.16
47	17.12
72	17.08

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	19.87	0
18	19.87	0
100	19.88	0.01
198	19.96	0.09
276	20.02	0.15
345	20.11	0.24

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	20.16
48	20.16
73	20.17

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	16.54	0
19	16.55	0.01
101	16.55	0.01
200	16.56	0.02
277	16.55	0.01
344	16.56	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	16.56
49	16.57
74	16.57

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.96	0
21	9.96	0
102	9.96	0
182	9.97	0.01
284	9.97	0.01
347	10.00	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	9.99
50	9.97

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.42	0
22	9.43	0.01
103	9.43	0.01
203	9.43	0.01
283	9.43	0.01
347	9.43	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
27	9.43
51	9.43

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.92	0
24	9.91	-0.01
105	9.89	-0.03
204	9.77	-0.15
280	9.85	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
30	9.85
53	9.85

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	8.61	0
25	8.60	-0.01
106	8.59	-0.02
205	8.57	-0.04
281	8.57	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
31	8.57
54	8.57

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	10.34	0
58	10.35	0.01
179	10.36	0.02
251	10.36	0.02
314	10.36	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	10.39
55	10.37

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HNI7S, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	15.51	0
61	15.51	0
182	15.55	0.04
257	15.59	0.08
317	15.58	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	15.61
60	15.60

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN17I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	4.74	0
62	4.77	0.03
183	4.74	0
278	4.75	0.01
318	4.75	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	4.75
61	4.75

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN17D, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	0.14	0
63	0.13	-0.01
184	0.08	-0.06
259	0.04	-0.10
315	0.05	-0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	0.04
63	0.04

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0804)	17.70	-
0	17.77	0
01	17.80	0.03
04	18.02	0.25
07	18.31	0.54
13	18.78	1.01
18	19.17	1.40
24	19.47	1.70
33	19.78	2.01
58	20.31	2.54
94	20.66	2.89
114	20.80	3.03
184	21.06	3.29
256	21.24	3.47
277	21.28	3.51
310	21.33	3.56
334	21.38	3.61

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	21.41
4	21.16
8	20.75
12	20.38
20	19.85
31	19.40
53	18.97

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	24.26	0
65	24.47	0.21
188	24.94	0.68
261	25.12	0.86
321	25.18	0.92

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
39	25.21
65	25.07

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	17.72	0
2	17.73	0.01
5	17.75	0.03
9	17.79	0.07
14	17.84	0.12
19	17.92	0.20
27	18.04	0.32
36	18.21	0.49
60	18.58	0.86
96	18.98	1.26
117	19.15	1.43
187	19.46	1.74
258	19.67	1.95
279	19.70	1.98
313	19.77	2.05
332	19.81	2.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
03	19.86
07	19.84
11	19.81
15	19.75
22	19.65
34	19.49
56	19.21

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0700)	19.87	-
0	19.97	-
0	19.98	0
3	20.03	0.05
8	20.53	0.55
16	21.30	1.32
21	21.58	1.60
25	21.78	1.80
34	22.05	2.07
61	22.54	2.56
97	22.87	2.89
116	22.99	3.01
185	23.25	3.27
255	23.41	3.43
278	23.44	3.46
312	23.51	3.53
335	23.54	3.56
359	23.59	3.61

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	23.47
06	23.04
10	22.66
14	22.28
21	21.89
32	21.50

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0817)	22.63	-
0	22.62	0
17	22.66	0.04
22	22.67	0.05
28	22.71	0.09
37	22.75	0.13
64	22.88	0.26
99	23.04	0.42
119	23.11	0.49
190	23.30	0.68
201	23.47	0.85
282	23.52	0.90
316	23.61	0.99
338	23.66	1.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	23.73
24	23.73
37	23.73
60	23.72

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
92	12.15	0
120	12.23	0.8
189	12.33	0.18
259	12.39	0.24
291	12.40	0.25
314	12.41	0.26
336	12.44	0.29

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	12.46
35	12.42
58	12.32

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0823)	29.23	
0	29.21	0
67	29.17	-0.04
102	29.16	-0.05
124	29.17	-0.04
193	29.14	-0.07
264	29.11	-0.10
286	29.09	-0.12
319	28.08	-0.13
341	28.07	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	29.05
63	29.03

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0824)	18.31	-
0	18.31	0
68	19.05	0.74
104	19.22	0.91
125	19.30	0.99
195	19.48	1.17
265	19.59	1.28
287	19.61	1.30
321	19.65	1.34
343	19.69	1.38

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	19.18
64	19.01

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0827)	21.11	-
0	21.11	0
70	22.23	0.12
106	22.41	0.30
127	22.49	0.38
196	22.68	1.57
269	22.80	1.69
289	22.83	1.72
322	22.88	1.77
345	22.91	1.80

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	22.03
66	21.88

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0821)	26.28	-
0	26.27	0
72	26.16	-0.11
107	26.14	-0.13
128	26.13	-0.14
198	26.07	-0.20
270	25.99	-0.28
290	25.99	-0.28
324	25.96	-0.31
346	25.95	-0.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	25.90
67	25.87

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0832)	20.01	
0	20.01	0
74	20.04	0.03
109	20.07	0.06
130	20.10	0.09
199	20.14	0.13
272	20.16	0.15
292	20.17	0.16
326	20.19	0.18
349	20.21	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	20.21
69	20.19

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0833)	25.88	
0	25.86	0
30	26.99	1.13
40	27.14	1.28
75	27.43	1.57
111	27.61	1.75
131	27.69	1.83
140	27.89	2.03
273	28.01	2.15
413	28.04	2.18
327	28.09	2.23
350	28.12	2.26

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	27.06
48	26.30
70	26.68

TABLE 8-3

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A3 AT 10 GPM
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 6, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0 (@0835)	22.55	-
0	22.54	0
76	22.93	0.39
112	23.00	0.46
133	23.04	0.56
201	23.11	0.57
274	23.16	0.62
295	23.19	0.65
329	23.21	0.67
351	23.21	0.67

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
49	22.93	0.39
72	22.87	0.33

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)	
0 (@ 0730)	20.76		
0	20.73	0	
1	21.28	0.55	
2	21.62	0.89	
3	22.44	1.71	
4	23.12	2.39	
5	23.62	2.89	
6	24.42	3.69	
7	24.72	3.99	
8	25.22	4.49	
9	25.58	4.85	
10	26.68	5.95	
12	26.82	6.09	
14	27.60	6.87	
16	28.36	7.63	
18	29.02	8.29	~4 gpm
20	30.11	9.38	
25	33.68	12.95	
30	33.58	12.85	Adjust to 3 gpm
35	36.14	15.41	
40	35.34	14.61	
45	34.60	13.87	
50	34.12	13.39	
55	33.78	13.05	
60	33.48	13.75	
75	32.36	11.63	
90	31.88	11.15	
105	31.68	10.95	
120	31.58	10.85	
150	32.14	11.41	
180	31.88	11.15	
280	32.90	12.17	
316	32.92	12.19	
359	32.92	12.19	

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, DECEMBER 22, 1998

Time in Minutes Since Pumping Stopped from 1400	Depth to Water (ft.)
1	32.20
3	31.02
6	29.30
8	28.42
10	27.42
12	26.72
15	25.92
17	25.28
30	23.20
110	21.05

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN11I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0735)	22.35	
0 (@ 0820)	22.96	
0	22.95	0
1	23.22	0.27
2	23.50	0.57
3	23.97	1.02
4	24.82	1.87
5	25.06	2.11
6	25.66	2.71
7	25.86	2.91
8	26.25	3.32
12	27.33	4.38
16	28.40	5.45
22	29.06	6.11
27	31.88	8.93
30	32.55	9.60
35	33.13	10.18
37	32.97	10.02
47	32.24	9.29
122	30.65	7.70
200	30.61	7.66
285	31.35	8.40
308	31.37	8.42
357	31.38	8.43

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	30.84
4	29.99
7	29.07
9	28.44
11	27.97
13	27.43
16	26.89
18	26.50
29	25.14
109	23.25

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN11D, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0738)	6.04	
0	6.06	0
21	6.10	0.04
40	6.10	0.05
46	6.11	0.05
126	6.20	0.14
197	6.23	0.17
307	6.26	0.20
355	6.27	0.21

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	6.30
107	6.39

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-C, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0739)	25.05	
0	25.06	0
18	25.06	0
28	25.06	0
39	25.06	0
50	25.06	0
134	25.09	0.03
209	25.11	0.05
315	25.17	0.11
356	25.20	0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	25.18
111	25.20

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN59I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0740)	34.75	0
53	34.47	-0.28
943	34.25	-0.50
211	34.07	-0.68
318	33.80	-0.95

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
22	33.67
112	33.45

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN59S, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0740)	24.60	0
54	24.88	0.28
137	24.96	0.36
212	24.97	0.37
319	25.02	0.42

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	24.98
113	24.78

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN14I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	21.38	0
57	21.58	0.20
140	21.66	0.28
215	21.69	0.31
322	21.72	0.34

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	21.72
115	21.55

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN14S, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	30.73	0
58	30.75	0.02
141	30.75	0.02
216	30.76	0.03
323	30.75	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	30.75
116	30.78

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN55I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	29.43	0
61	29.82	0.39
145	29.88	0.45
220	29.91	0.48
327	29.97	0.54

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	29.81
119	29.62

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN55S, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	27.42	0
60	27.43	0.01
143	27.43	0.01
219	27.44	0.02
326	27.46	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	27.47
118	27.47

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-03, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	28.37	0
63	28.41	0.04
146	28.41	0.04
221	28.41	0.04
329	28.43	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	28.44

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-02, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	26.92	0
65	27.02	0.10
148	27.14	0.22
222	27.20	0.28
330	27.30	0.38

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	27.30

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN82I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	2.06	0
75	2.16	0.01
157	2.22	0.16
233	2.21	0.15
339	2.24	0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
48	2.28

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN82S, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
	11.00	0
76	11.05	0.05
156	11.06	0.06
232	11.05	0.05
338	11.06	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	11.08

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN17S, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	16.61	0
69	16.66	0.04
153	16.71	0.09
228	16.75	0.13
334	16.77	0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
43	16.81

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN17I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	6.80	
69	6.92	0.12
152	6.96	0.16
227	6.97	0.17
333	7.02	0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	7.04

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN17D, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
	1.67	
68	1.67	0
150	1.66	-0.01
226	1.67	0
332	1.68	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
41	1.69

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW07, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	10.29	0
115	10.41	0.12
183	10.44	0.15
291	10.45	0.16
345	10.47	0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
91	10.50

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-04, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.22	0
115	9.28	0.06
182	9.30	0.08
290	9.30	0.08
344	9.32	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
90	9.34

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN DG26, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	10.58	0
118	10.59	0.01
186	10.59	0.01
295	10.58	0
346	10.59	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
93	10.59

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN DG12, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.90	0
117	9.94	0.04
185	9.94	0.04
296	9.95	0.05
347	9.95	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
94	9.96

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN12D, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	0.89	0
120	1.01	0.12
190	1.04	0.15
297	1.07	0.18
	1.09	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
97	1.15

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN12I, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.07	0
121	17.10	0.03
189	17.11	0.04
298	17.12	0.05
349	17.13	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
96	17.15

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN BG4, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	21.29	0
121	21.32	0.03
191	21.35	0.06
299	21.39	0.10
350	21.41	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
98	21.43

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-E, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.26	0
122	18.33	0.07
193	18.36	0.10
302	18.38	0.12
351	18.40	0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
99	18.37

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-D, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.28	0
15	18.27	-0.01
24	18.31	0.03
44	18.32	0.04
130	18.34	0.06
195	18.35	0.07
303	18.38	0.10
352	18.39	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
102	18.35	-

TABLE 8-4

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A4 AT 3 GPM
WATER LEVEL MEASUREMENTS IN OW-2, DECEMBER 22, 1998

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.50	0
14	15.51	0.01
23	15.51	0.01
45	15.56	0.06
131	15.58	0.08
196	15.60	0.10
304	15.62	0.12
353	15.63	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
103	15.56

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.21	0
1	19.00	0.79
2	19.40	1.19
3	21.31	3.10
4	22.92	4.71
5	24.08	5.87
6	24.48	6.27
7	24.84	6.63
8	24.86	6.65
9	24.89	6.68
10	24.83	6.61
12	24.78	6.57
14	24.68	6.47
16	24.59	6.38
18	24.53	6.32
20	24.49	6.28
25	24.43	6.22
30	24.28	6.07
35	24.12	5.81
40	24.13	5.82
45	23.98	5.77
50	23.95	5.74
55	23.86	5.65
60	23.82	5.61
75	23.80	5.59
90	23.92	5.71
105	24.06	5.85
120	24.58	6.37
180	26.30	8.09
236	27.18	8.97
300	27.78	9.67
360	27.76	9.65

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 7, 1999

Time in Minutes Since Pumping Stopped from 1400	Depth to Water (ft.)
1	27.56
3	26.84
4	26.28
5	25.76
6	25.42
7	25.02
8	24.66
9	24.31
10	24.04
12	23.44
18	22.29
23	21.63
28	21.05
33	20.65
38	20.36
43	20.16
48	20.00
53	19.86
58	19.76

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.14	-
3	20.14	0
13	20.21	0.07
20	20.26	0.12
32	20.31	0.17
80	20.42	0.28
100	20.45	0.31
119	20.47	0.33
199	20.57	0.43
298	20.62	0.48
317	20.63	0.49
341	20.65	0.51
364	20.65	0.51

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	20.65
8	20.65
14	20.63
20	20.62
40	20.54
62	20.46

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
-	17.97	-
0	17.96	0
6	18.06	0.10
14	18.37	0.41
21	18.53	0.57
30	18.63	0.67
79	18.81	0.85
97	18.85	0.89
121	18.92	0.96
138	19.21	1.25
297	19.33	1.37
318	19.36	1.40
342	19.37	1.41
365	19.37	1.41

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	19.38
5	19.35
9	19.29
15	19.20
21	19.08
43	18.72
64	18.52

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
	20.16	-
0	20.16	0
5	20.23	0.07
16	20.58	0.42
23	20.69	0.53
29	20.76	0.60
78	20.93	0.77
98	20.98	0.82
122	21.04	0.88
197	21.31	1.15
296	21.43	1.27
320	21.45	1.29
344	21.46	1.30
367	21.46	1.30

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	21.47
6	21.43
11	21.36
17	21.26
22	21.16
42	20.87
65	20.68

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	12.35	0
34	12.39	0.04
82	12.50	0.15
102	12.52	0.17
124	12.53	0.18
201	12.60	0.25
300	12.70	0.35
321	12.71	0.36
345	12.73	0.38

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	12.76
44	12.78

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
-	23.09	0
8	23.07	0.02
17	23.07	0.02
33	23.07	0.02
81	23.05	0.04
101	23.05	0.04
125	23.04	0.05
202	23.03	0.06
301	23.03	0.06
323	23.04	0.05
347	23.03	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	23.04
46	23.04

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	28.76	0
38	28.76	0
86	28.75	-0.01
106	28.75	-0.01
128	28.74	-0.02
206	28.72	0.04
305	28.68	0.08
326	28.71	
351	28.70	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
29	28.69
49	28.68

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.33	0
39	18.37	0.04
87	18.41	0.08
107	18.42	0.09
130	18.44	0.11
207	18.46	0.13
306	18.48	0.15
327	18.48	0.15
352	18.49	0.16

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
30	18.49
50	18.48

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	21.19	0
41	21.25	0.06
89	21.29	0.10
109	21.31	0.12
132	21.32	0.13
209	21.36	0.17
308	21.39	0.20
331	21.40	0.21
354	21.40	0.21

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	21.40
52	21.38

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
-	24.89	0
43	24.84	0.05
90	24.81	0.08
115	24.78	0.11
133	24.77	0.12
210	24.71	0.18
309	24.62	0.27
333	24.61	0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	24.55
54	24.54

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.16	0
45	20.18	0.02
92	20.19	0.03
111	20.20	0.04
135	20.21	0.05
213	20.26	0.10
312	20.25	0.09
336	20.27	0.11
356	20.27	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	20.29
58	20.29

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
-	25.95	0
10	25.96	0.01
26	25.99	0.04
46	26.04	0.09
93	26.08	0.13
112	26.10	0.15
136	26.12	0.17
214	26.17	0.22
313	26.21	0.26
337	26.21	0.26
360	26.22	0.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	26.20
59	26.16

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	22.64	0
47	22.68	0.04
94	22.70	0.06
113	22.71	0.07
137	22.72	0.08
215	22.73	0.09
314	22.77	0.13
338	22.77	0.13
362	22.78	0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	22.80
60	22.79

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.12	-
2	14.11	-0.01
21	14.13	0.01
62	14.14	0.02
226	14.21	0.09
316	14.25	0.13
322	14.25	0.13
348	14.25	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	14.25
80	12.23

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.24	0
4	17.23	-0.01
23	17.25	0.01
63	17.28	0.04
225	17.32	0.09
315	17.35	0.12
346	17.36	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	17.36
77	17.33

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.84	0
5	16.85	0.01
20	16.87	0.03
64	16.89	0.05
223	16.97	0.13
312	17.00	0.16
374	17.01	0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	17.01
16	17.00

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.93	0
7	19.94	0.01
26	19.94	0.01
65	19.95	0.02
222	19.99	0.06
311	20.01	0.08
343	20.02	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	20.02
76	20.04

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.57	0
8	16.57	0
66	16.58	0.01
220	16.60	0.03
310	16.60	0.03
342	16.60	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	16.60
75	16.61

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.44	0
217	9.47	0.03
326	9.46	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	9.49
82	9.48

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	10.05	0
218	10.07	0.02
325	10.11	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
12	10.09	0.04
81	10.13	0.08

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.97	0
215	10.02	0.05
328	10.03	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	10.03
83	10.04

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.66	0
215	8.69	0.03
329	8.70	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	8.69
85	8.71

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	10.49	0
197	10.53	0.04
295	10.53	0.04
330	10.54	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
65	10.55

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN17S, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
50	15.63	0
201	15.68	0.05
298	15.70	0.07
335	15.73	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
67	15.76

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN17I, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
51	4.72	0
201	4.81	0.09
299	4.84	0.12
335	4.84	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
68	4.90

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	24.24	0
12	24.24	0
54	24.24	0
205	24.31	0
301	24.47	0.07
337	24.51	0.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
72	24.52

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN SMP2, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.61	0
16	19.61	0
53	19.61	0
215	19.65	0.04
304	19.68	0.07
340	19.69	0.08

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
72	19.70

TABLE 8-5

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A5 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 7, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.84	0
5	16.85	0.01
20	16.87	0.03
64	16.89	0.05
223	16.97	0.13
312	17.00	0.16
374	17.01	0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	17.01
16	17.00

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0800)	16.02	--
0	16.11*	--
1	16.59	0.48
2	17.04	0.93
3	17.16	1.05
4	17.33	1.22
5	17.55	1.44
6	17.73	1.62
7	17.86	1.75
8	17.96	1.85
9	18.17	2.06
10	18.36	2.25
12	18.57	2.46
14	19.11	3.00
18	19.47	3.36
20	19.68	3.57
26	20.07	3.96
30	20.25	4.14
35	20.40	4.29
40	20.55	4.44
45	20.64	4.53
50	20.77	4.66
55	20.86	4.75
60	20.96	4.85.
86	21.03	4.92
111	21.07	4.96
134	21.23	5.12
177	22.45	6.34
214	23.00	6.89
240	23.08	6.97
295	23.20	7.09
356	23.07	6.96

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A6 (Cont'd), JANUARY 18, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
0	23.04
1	22.90
2	22.65
3	22.41
4	22.18
5	22.02
6	21.76
7	21.64
8	21.42
9	21.25
10	21.07
12	20.82
14	20.48
16	20.16
18	19.96
20	19.68
38	18.11
60	17.21

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)	Corrected* Drawdown (ft.)
0 (@0803)	17.86		
0	17.80		
03	17.79	0	0
32	17.86	0.07	0.10
41	17.88	0.09	0.12
59	17.90	0.11	0.15
63	17.84	0.05	0.10
219	17.78	-0.01	0.17
283	17.69	-0.10	0.15
306	17.66	-0.13	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
01	17.58
12	17.55
24	17.51
55	17.34

*Corrected for precipitation +0.05 ft/hr

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)	Corrected* Drawdown (ft.)
0 (@0801)	16.76	0	
0	16.71	0	
01	16.70	0	
29	16.82	0.12	0.15
40	16.86	0.16	0.20
57	16.91	0.21	0.26
60	16.90	0.20	0.25
212	16.90	0.20	0.37
280	16.84	0.14	0.36
305	16.82	0.12	0.37
358	16.75	0.05	0.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	16.72
22	16.66
50	16.51

*Corrected for precipitation +0.05 ft/hr

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0809)	21.43	0
0	21.36	0
10	21.35	-0.01
33	21.35	-0.01
45	21.35	-0.01
60	21.35	-0.01
125	21.28	-0.08
222	21.15	-0.20
285	21.03	-0.30
309	21.00	-0.36

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
03	20.92
15	20.91
27	20.90
54	20.81

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0811)	20.78	
0	20.74	0
11	20.73	-0.01
36	20.71	-0.03
47	20.70	-0.04
65	20.69	-0.05
127	20.61	-0.13
227	20.46	-0.28
289	20.33	-0.41
315	20.28	-0.46

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	20.22
17	20.21
31	20.18
64	20.12

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0808)	19.79	0
0	19.74	0
08	19.75	0.01
34	19.74	0
63	19.73	-0.01
128	19.69	-0.05
225	19.64	-0.10
288	19.61	-0.13
313	19.60	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	19.56
29	19.55
58	19.54

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0		
35	12.95	0
80	12.95	0
214	12.90	-0.05
308	12.85	-0.10
350	12.87	-0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	12.79
55	12.70

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0	16.11	
2	16.08	0
36	16.08	0
82	16.10	0.02
216	16.05	-0.03
307	16.01	-0.07
349	15.95	-0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	15.94
52	15.85

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0756)	15.30	
2	15.23	0
30	15.23	0
83	15.23	0
217	15.16	-0.07
306	15.10	-0.13
347	15.07	-0.16

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
13	15.03
51	14.97

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0757)	18.63	0
4	18.61	0
32	18.60	-0.01
86	18.59	-0.02
218	18.53	-0.08
306	18.48	-0.13
346	18.46	-0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	18.45
50	18.43

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.75	
6	15.74	0
33	15.73	-0.01
87	15.71	-0.03
218	15.64	-0.10
304	15.65	-0.09
345	15.60	-0.16

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	15.59
49	15.56

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN SMP2, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@ 0800)	17.92	
10	17.90	0
65	17.88	-0.02
118	17.84	-0.06
229	17.76	-0.14
326	17.71	-0.19
353	17.70	-0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	17.68
70	17.63

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0802)	21.64	
11	21.60	0
67	21.33	-0.27
117	21.11	0.49
228	20.82	-0.78
325	20.55	-1.05
353	20.55	-1.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	20.51
72	20.34

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN17I, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
15	2.35	0
70	2.33	-9.02
226	2.25	-0.10
323	2.15	-0.20
357	2.12	-0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	2.10

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN17S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0805)	13.97	
17	13.95	0
71	13.92	-0.03
226	13.80	-0.15
322	13.72	-0.23
358	13.68	-0.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	13.66

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
22	9.42	0
73	9.38	-0.04
126	9.35	-0.07
223	9.23	-0.19
310	9.16	-0.26

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	9.13
26	9.09
79	9.09

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
27	7.90	0
76	7.86	-0.04
222	7.77	-0.13
318	7.72	-0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	7.68
116	7.73

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0811)	9.33	
25	9.22	0
75	9.16	-0.06
2221	8.94	-0.28
317	8.82	-0.40

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	8.77
115	8.76

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
32	9.31	0
103	9.26	-0.05
219	9.02	-0.29
313	8.84	-0.47

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	8.72
56	8.47

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
32	8.69	0
102	8.67	-0.02
220	8.59	-0.10
314	8.55	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	8.54
58	8.50

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0807)	10.38	
0	10.32	0
62	10.28	-0.04
139	10.22	-0.10
224	10.12	-0.20
287	10.07	-0.25
313	10.06	-0.26

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	10.00
57	9.98

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0814)	23.73	
69	23.59	0
133	23.51	-0.08
230	23.36	-0.23
293	23.31	-0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	23.30
49	23.27
95	23.24

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	23.73	
69	23.59	0
133	23.51	-0.08
230	23.36	-0.23
293	23.31	-0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	23.30
49	23.27
95	23.24

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0815)	14.85	
71	14.69	0
134	14.61	-0.08
232	14.44	-0.25
294	14.33	-0.36
320	14.28	-0.41
350	14.25	-0.44

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	14.18

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0818)	17.93	
73	17.78	0
136	17.72	-0.06
234	17.56	-0.22
296	17.41	-0.37
322	17.37	-0.41
351	17.35	-0.43

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	17.27

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0819)	20.27	
75	20.17	0
137	20.14	-0.03
235	20.07	-0.10
297	20.04	-0.13
323	20.02	-0.15
352	20.02	-0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	19.96

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0820)	17.00	0
139	16.88	-0.07
237	16.81	-0.19
299	16.69	-0.26
325	16.62	-0.29
354	16.59	-0.33

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	16.53

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 18, 1999

Time in Minutes Since Pumping Started From 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0822)	22.74	
38	22.65	0
49	22.64	-0.01
140	22.54	-0.11
239	22.39	-0.26
301	22.26	-0.39
326	22.22	-0.43
355	22.16	-0.49

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	22.18
19	22.16
46	22.09

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
0 (@0823)	19.36	
78	19.25	0
141	19.17	-0.08
240	19.06	-0.19
302	18.99	-0.26
327	18.93	-0.32
356	18.90	-0.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
48	18.85

TABLE 8-6

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A6 AT 1.1 GPM
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 18, 1999

Time in Minutes Since Pumping Started from 0940	Depth to Water (ft.)	Drawdown (ft.)
06	17.02	0
31	17.08	0.06
43	17.08	0.06
58	17.10	0.10
122	17.05	0.03
215	17.00	-0.08

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	16.78
13	16.74
23	16.72

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A7, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)	
0	13.60		1 GPM
1	13.84	0.24	
2	14.04	0.44	
4	14.18	0.58	
5	14.21	0.61	
7	14.64	1.04	
9	14.80	1.20	
11	14.94	1.34	
13	15.15	1.55	
16	15.71	2.11	
25	16.75	3.15	
30	17.13	3.53	
40	18.03	4.43	
52	18.92	5.32	
85	20.36	6.76	
112	18.25	4.65	
142	17.92	4.32	
173	17.32	3.72	Rate
216	17.50	3.90	increased
235	16.27	2.67	to
261	15.53	1.93	2.5 GPM
297	24.54	10.94	at 270 min.
343	33.80	20.20	
346	35.74	22.14	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	35.30
2	34.88
5	33.95
6	33.51
7	33.19
10	32.20

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A7 (Cont'd), JANUARY 27, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	31.48
14	31.05
17	30.08
20	29.20
27	27.39
40	24.60
50	22.90
60	21.32
70	20.12

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A6, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.16	0
3	14.24	0.08
6	14.28	0.12
10	14.36	0.20
15	14.49	0.33
28	14.91	0.75
42	15.40	1.24
54	15.76	1.60
87	16.45	2.29
115	16.39	2.23
155	16.04	1.88
218	15.86	1.70
253	15.29	1.13
300	16.68	2.52
345	19.04	4.88

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	19.68
8	19.75
15	19.72
22	19.60
30	19.36
51	18.61
62	18.02

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.06	0
09	15.08	0.02
19	15.09	0.03
29	15.11	0.05
64	15.20	0.14
133	15.27	0.21
162	15.25	0.19
236	15.21	0.15
335	15.36	0.30
358	15.46	0.40

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
0	15.46
10	15.50
18	15.53
26	15.52
49	15.52

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.38	0
10	15.38	0
20	15.39	0.01
30	15.40	0.02
71	15.45	0.07
135	15.47	0.09
164	15.47	0.09
237	15.43	0.05
336	15.50	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
01	15.55	0.17
11	15.57	0.19
19	15.57	0.19
27	15.58	0.20
50	15.57	0.19

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.58	0
12	14.58	0
21	14.59	0.01
32	14.60	0.02
68	14.64	0.06
136	14.66	0.08
165	14.65	0.07
238	14.62	0.04
337	14.70	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	14.73
12	14.75
20	14.75
28	14.75
51	14.75

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.44	0
33	9.45	0.01
75	9.46	0.02
137	9.45	0.01
166	9.46	0.02
239	9.43	-0.01
338	9.44	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
29	9.46
52	9.47

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.74	0
34	16.74	0
76	16.74	0
138	16.74	0
167	16.74	0
240	16.73	-0.01
339	16.73	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
30	16.73
53	16.73

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.75	0
13	18.75	0.01
22	18.75	0
35	18.76	0.01
73	18.77	0.02
77	18.77	0.02
139	18.77	0.02
168	18.76	0.01
241	18.74	-0.01
340	18.75	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
03	18.76
13	18.77
22	18.77
32	18.77
55	18.78

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.99	0
14	18.00	0.01
24	18.00	0.01
37	18.00	0.01
79	18.00	0.01
141	18.00	0.01
170	17.99	0
243	17.97	-0.02
341	17.97	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
05	17.97
15	17.97
23	17.97
33	17.98
56	17.98

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN EW-A1, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.17	0
25	19.17	0
44	19.17	0
80	19.17	0
142	19.17	0
172	19.16	-0.01
244	19.14	-0.03
343	19.13	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
06	19.13
16	19.13
24	19.14
34	19.15
57	19.15

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.68	0
52	16.67	-0.01
85	16.64	-0.02
145	16.59	-0.09
174	16.57	-0.11
246	16.50	-0.18
345	16.43	-0.25

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	16.39
60	16.38

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	11.21	0
53	11.21	0
86	11.21	0
146	11.20	-0.01
175	11.18	-0.03
248	11.14	-0.07
346	11.11	-0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	11.10
61	11.10

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.97	0
55	14.97	0
87	14.97	0
147	14.97	0
177	14.95	-0.02
249	14.92	-0.05
348	14.91	-0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	14.92
63	14.93

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.00	0
56	16.98	-0.02
88	16.97	-0.03
149	16.95	-0.05
178	16.93	-0.07
250	16.90	-0.10
349	16.86	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
43	16.84
65	16.82

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.33	0
58	15.34	0.01
91	15.34	0.01
151	15.32	-0.01
181	15.31	-0.02
252	15.29	-0.04
351	15.29	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	15.29
66	15.30

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
06	19.90	0
16	19.91	0.01
27	19.91	0.01
60	19.92	0.02
93	19.91	0.01
152	19.91	0.01
182	19.90	0
253	19.88	-0.02
352	19.88	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
07	19.88
45	19.88
67	19.89

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FROM 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.12	0
61	17.13	0.01
94	17.12	0
160	17.11	-0.01
183	17.10	-0.02
254	17.08	-0.04
353	17.08	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	17.07
58	17.07

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.12	0
31	15.12	0
62	15.12	0
90	15.12	0
253	15.19	0.07
320	15.08	-0.04
356	15.07	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
58	15.08

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.18	0
32	17.19	0.01
61	17.19	0.01
88	17.21	0.03
254	17.28	0.10
319	17.36	0.18
358	17.31	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
59	17.31

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	11.05	0
35	11.06	0.01
58	11.08	0.03
85	11.11	0.06
256	11.21	0.16
317	11.29	0.24
359	11.38	0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
61	11.37

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.47	0
34	14.48	0.01
59	14.51	0.04
84	14.54	0.07
257	14.64	0.17
315	14.68	0.21
359	14.75	0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
62	14.75

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	13.56	0
36	13.57	0.01
60	13.61	0.05
81	13.62	0.06
258	13.68	0.12
313	13.71	0.15
360	13.74	0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
65	13.74

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.67	0
39	8.67	0
80	8.71	0.04
259	8.83	0.16
310	8.85	0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	8.85
67	8.81

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.11	0
40	8.10	-0.01
79	8.11	0
260	8.09	-0.02
308	8.09	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	8.08
67	8.07

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.85	
42	8.83	-0.02
78	8.83	-0.02
262	8.77	-0.08
305	8.76	-0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	8.73
70	8.73

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	7.37	0
44	7.38	0.01
72	7.38	0.01
263	7.33	-0.04
304	7.33	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	7.30
71	7.30

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN SMP2, JANUARY 27, 1999

Time in Minutes Since Pumping Started From 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.38	0
46	16.39	0.01
65	16.39	0.01
266	16.40	0.02
323	16.38	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	16.38
72	16.39

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.31	0
47	18.48	0.17
66	18.66	0.35
249	19.17	0.86
267	19.18	0.87
325	19.15	0.84

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
22	19.17
75	19.18

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN17S, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	12.66	
52	12.65	
71	12.63	
249	12.60	
270	12.59	
328	12.57	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	12.57
78	12.58

TABLE 8-7

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A7 AT 1 GPM FOR 4.5 HRS AND 2.5 GPM FOR 1.5 HRS
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 27, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.52	
55	8.52	0
73	8.52	0
272	8.50	
331	8.49	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
27	8.47
81	8.47

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A8, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.30	0
1	21.14	2.84
2	22.04	3.74
7	23.90	5.60
8	24.31	6.01
9	24.92	6.62
13	25.57	7.27
15	26.37	8.07
19	27.67	9.37
20	27.90	9.60
25	29.13	10.83
35	30.48	12.18
40	30.88	12.58
50	31.20	12.90
65	31.10	12.80
80	30.66	12.36
101	31.28	12.98
130	32.16	13.86
140	32.24	13.94
160	32.32	14.02
188	32.61	14.31
225	33.27	14.97
350	33.25	14.95

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	32.16
2	31.31
6	28.38
7	27.24
12	24.80
15	23.66
18	22.45
22	21.48
36	20.05
49	19.56
60	19.34

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN12I, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.24	0
10	15.26	0.02
100	15.27	0.03
203	15.26	0.02
355	15.24	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	15.25
56	15.26

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN BG4, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	17.49	0
11	17.51	0.02
101	17.54	0.05
204	17.57	0.08
356	17.60	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	17.60
57	17.60

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN OW-2, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	11.56	0
12	11.58	0.02
103	11.61	0.05
207	11.61	0.05
358	11.65	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	11.66
58	11.67

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-D, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.92	0
13	14.94	0.02
104	14.95	0.03
209	14.99	0.07
359	15.02	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
21	15.02
59	15.03

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-E, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.90	
15	13.92	0.02
105	13.99	0.09
210	14.00	0.10
360	14.02	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
22	14.04
60	14.02

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG26, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	8.94	0
16	8.94	0
107	8.94	0
212	8.97	0.03
363	8.97	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	8.98
63	8.98

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG12, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	8.23	0
17	8.23	0
108	8.25	0.02
213	8.24	0.01
366	8.23	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	8.23
64	8.23

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-07, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	9.10	0
19	9.12	0.02
110	9.13	0.03
215	9.14	0.04
368	9.11	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	9.11
66	9.11

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-04, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	7.65	0
20	7.66	0.01
111	7.69	0.04
216	7.67	0.02
369	7.65	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	7.65
68	7.65

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN SMP2, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.69	
21	16.70	0.01
133	16.74	0.05
217	16.76	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	16.78
35	16.80
71	16.80

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-02, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	19.41	0
25	19.43	0.02
127	19.52	0.11
221	19.34	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	18.40
38	18.22
73	17.96

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN17S, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	12.89	0
26	12.91	0.02
139	12.92	0.03
223	12.90	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	12.87
40	12.89
77	12.89

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN82S, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	8.87	0
29	8.92	0.05
143	8.90	0.03
226	8.90	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	8.90
44	8.90
90	8.90

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN14S, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.37	0
65	16.39	0.02
128	16.39	0.02
153	16.36	-0.01
203	16.37	0
363	16.28	-0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	16.29
59	16.29

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN14I, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	11.10	0
66	11.25	0.15
129	11.31	0.21
155	11.31	0.21
204	11.33	0.23
364	11.30	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	11.24
60	11.18

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN59S, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.97	0
17	15.06	0.09
31	15.11	0.14
68	15.20	0.23
131	15.26	0.29
157	15.27	0.30
208	15.28	0.31
365	15.28	0.30

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
08	15.27
17	15.24
37	15.14
61	15.08

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN59I, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	20.73	0
15	20.70	-0.03
69	20.62	-0.11
132	20.53	-0.20
158	20.49	-0.24
209	20.42	-0.31
366	20.21	-0.52

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	20.16
62	20.13

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-03, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	17.68	0
71	18.62	0.94
134	18.85	1.17
160	18.92	1.24
211	19.01	1.33
219	19.03	1.35
368	19.16	1.48

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
0	19.16
06	19.14
14	19.02
31	18.70
55	18.36

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN55S, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.64	0
3	17.95	1.29
10	18.98	2.34
16	19.56	2.92
22	20.14	3.50
36	21.08	4.44
52	21.39	4.75
66	21.44	4.80
82	21.35	4.71
103	21.57	4.93
130	21.90	5.26
161	22.02	5.38
191	22.11	5.47
226	22.36	5.72
353	22.45	5.81

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	21.84
10	20.32
16	19.35
24	18.44
38	17.81
50	17.54
61	17.42

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN55I, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	20.00	0
5	20.04	0.04
11	20.10	0.10
17	20.14	0.14
22	20.17	0.17
37	20.22	0.22
53	20.27	0.27
69	20.28	0.28
84	20.31	0.31
105	20.33	0.33
132	20.35	0.35
163	20.39	0.39
192	20.38	0.38
228	20.37	0.37
355	20.40	0.40

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	20.40
13	20.36
20	20.30
40	20.17
52	20.14
62	20.10

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A7, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.88	0
09	13.88	0
28	13.91	0.03
42	13.91	0.03
61	13.93	0.05
115	13.96	0.08
137	13.97	0.09
187	13.99	0.11
350	14.02	0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
29	14.03
51	14.03
73	14.03

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A6, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.48	0
09	14.48	0
27	14.49	0.01
41	14.51	0.03
60	14.51	0.03
116	14.55	0.07
139	14.56	0.08
171	14.58	0.10
351	14.60	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	14.61
50	14.61
72	14.61

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A5, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.44	0
08	15.44	0
26	15.46	0.02
40	15.47	0.03
58	15.49	0.05
117	15.54	0.10
140	15.56	0.12
190	15.58	0.14
354	15.51	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	15.57
39	15.55
71	15.54

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A4, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.56	0
06	15.57	0.01
24	15.64	0.08
39	15.68	0.12
57	15.73	0.17
118	15.79	0.23
142	15.80	0.24
192	15.83	0.27
354	15.83	0.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	15.81
48	15.73
70	15.69

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN11I, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.74	0
05	14.76	0.02
23	14.82	0.08
38	14.87	0.13
56	14.91	0.17
120	14.98	0.24
144	14.99	0.25
194	15.02	0.28
355	15.02	0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	14.99
46	14.91
69	14.87

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG1, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	9.75	0
55	9.78	0.03
120	9.80	0.05
145	9.81	0.06
195	9.82	0.07
356	9.81	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	9.83
68	9.83

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-C, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.79	
54	16.79	0
121	16.81	0.02
146	16.82	0.03
196	16.84	0.05
357	16.88	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	16.90
67	16.91

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A3, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.88	0
04	18.91	0.03
22	19.01	0.13
36	19.06	0.18
53	19.11	0.23
123	19.18	0.30
147	19.19	0.31
197	19.22	0.34
217	19.22	0.34
358	19.23	0.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
04	19.23
12	19.21
22	19.17
43	19.06
67	19.02

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A2, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.10	0
03	18.13	0.03
11	18.19	0.09
20	18.24	0.14
35	18.29	0.19
51	18.34	0.24
124	18.42	0.32
149	18.44	0.34
199	18.45	0.35
215	18.46	0.36
359	18.47	0.37

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
03	18.47
11	18.44
20	18.39
41	18.28
65	18.23

TABLE 8-8

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 4 GPM (80 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A1, JANUARY 29, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	19.34	0
01	19.34	0
13	19.46	0.12
19	19.50	0.16
33	19.59	0.25
45	19.65	0.31
125	19.77	0.43
150	19.79	0.45
200	19.82	0.48
213	19.83	0.49
360	19.85	0.51

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	19.85
10	19.81
19	19.73
40	19.57
64	19.50

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0 @ 0846	19.70	0
1	20.60	0.90
2	21.40	1.70
3	21.80	2.10
4	22.40	2.70
5	22.80	3.10
6	23.20	3.50
7	23.40	3.70
8	23.80	4.10
9	24.40	4.70
10	24.80	5.10
11	25.30	5.60
12	25.80	6.10
13	26.10	6.40
14	26.80	7.10
15	27.10	7.40
16	27.70	8.00
17	28.00	8.30
18	27.00	7.30
19	27.00	7.30
20	27.00	7.30
22	27.00	7.30
24	27.20	7.50
26	27.30	7.60
28	27.40	7.70
30	27.50	7.80
32	26.00	6.30
34	27.50	7.80
36	27.50	7.80
38	27.50	7.80
40	27.60	7.90
42	27.70	8.00
44	27.70	8.00
46	27.70	8.00
48	27.70	8.00
50	27.70	8.00

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A8 (Cont'd), FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
55	27.70	8.00
65	27.80	8.10
70	27.80	8.10
75	27.80	8.10
80	27.90	8.20
85	27.90	8.20
90	27.90	8.20
95	27.90	8.20
100	27.90	8.20
105	28.00	8.30
110	28.00	8.30
115	28.00	8.30
120	28.00	8.30
135	28.10	8.40
150	28.10	8.40
165	28.10	8.40
180	28.10	8.40
195	28.10	8.40
210	28.10	8.40
225	28.10	8.40
240	28.10	8.40
255	28.10	8.40
270	28.10	8.40
285	28.10	8.40
300	28.10	8.40
315	28.10	8.40
330	28.10	8.40
345	28.10	8.40
360	28.10	8.40

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	27.80
2	24.45
3	24.25

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A8 (Cont'd), FEBRUARY 8, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	23.60
5	22.20
6	21.80
7	21.20
8	21.10
9	21.05
10	20.90
11	20.80
12	20.75
13	20.65
14	20.60
15	20.55
16	20.50
17	20.45
18	20.40
19	20.35
21	20.30
22	20.28
24	20.26
26	20.26
28	20.26
30	20.25
35	20.18
40	20.15
45	20.12
50	20.06
60	20.05

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.41	0
33	15.49	0.08
59	15.56	0.15
91	15.59	0.18
212	15.63	0.22
326	15.61	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	15.60
37	15.52

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.29	0
34	15.68	0.39
60	15.82	0.53
93	15.89	0.60
213	16.00	0.71
327	16.00	0.71

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
11	15.93
40	15.59

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.44	0
35	14.88	0.44
62	15.01	0.57
93	15.08	0.64
214	15.16	0.72
328	15.17	0.73

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	15.11
41	14.74

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	10.03	0
36	10.03	0
63	10.04	0.01
95	10.04	0.01
216	10.01	-0.02
329	9.98	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
9	9.98
42	9.94

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	16.42	0
37	16.43	0.01
64	16.44	0.02
95	16.47	0.05
215	16.55	0.13
330	16.63	0.21

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	16.66
44	16.68

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.47	0
38	19.07	0.60
65	19.19	0.72
96	19.27	0.80
218	19.37	0.90
331	19.37	0.90

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	19.24
45	18.75

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.62	0
03	17.69	0.07
10	17.93	0.31
21	18.14	0.52
39	18.31	0.69
68	18.42	0.80
98	18.47	0.85
220	18.57	0.95
332	18.58	0.96
353	18.60	0.98

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	18.49
14	18.22
46	17.89

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.99	0
01	19.00	0.01
09	19.25	0.26
19	19.50	0.51
41	19.72	0.73
73	19.85	0.86
99	19.91	0.92
222	20.00	1.01
333	20.04	1.05
354	20.05	1.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	19.95
22	19.50
48	19.29

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.12	0
44	14.14	0.02
76	14.13	0.01
224	14.11	-0.01
335	14.14	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	14.14
51	14.14

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	10.00	0
46	10.37	0.37
76	10.47	0.47
225	10.60	0.60
336	10.60	0.60

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	10.36
52	10.21

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.33	
18	14.68	0.35
30	14.83	0.50
48	14.94	0.61
78	15.03	0.70
229	15.15	0.82
338	15.16	0.83

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	14.68
54	14.55

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.99	0
17	15.97	-0.02
49	15.97	-0.02
79	15.97	-0.02
230	15.97	-0.02
339	15.98	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	15.96
55	15.96

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.94	0
06	19.97	2.03
14	21.13	3.19
27	21.76	3.82
52	22.08	4.14
82	22.23	4.29
101	22.33	4.39
233	22.55	4.61
343	22.64	4.70

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	22.47
4	20.93
24	18.72
58	18.41

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	19.50	0
05	19.76	0.26
13	20.00	0.50
26	20.21	0.71
54	20.39	0.89
83	20.47	0.97
102	20.52	1.02
234	20.58	1.08
345	20.61	1.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	20.57
24	19.93
59	19.73

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.31	0
04	18.33	0.02
12	18.52	0.21
23	18.85	0.54
56	19.27	0.96
86	19.45	1.14
105	19.52	1.21
235	19.79	1.48
347	19.91	1.60

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	19.91
25	19.34
61	18.93

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A6, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.80	0
80	14.88	0.08
180	14.98	0.18
260	15.00	0.20
338	15.00	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	14.99
72	14.94

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A7, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.00	0
81	14.29	0.09
181	14.36	0.16
262	14.39	0.19
339	14.40	0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
39	14.38
74	14.36

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.12	0
84	14.18	0.06
184	14.22	0.10
265	14.28	0.16
342	14.28	0.16

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	14.26
75	14.24

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN OW-2, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	12.26	0
85	12.28	0.02
185	12.30	0.04
266	12.31	0.05
343	12.32	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	12.32
76	12.31

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.53	0
82	15.58	0.05
183	15.58	0.05
268	15.59	0.06
345	15.60	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	15.59
77	15.59

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
7	14.29	0
89	14.41	0.11
190	14.46	0.17
271	14.46	0.17
348	14.48	0.19

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	14.45
78	14.40

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
10	17.84	0
91	17.88	0.04
192	17.99	0.15
273	17.99	0.15
348	18.01	0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
46	18.00
80	18.00

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HNI12, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
12	15.47	0
93	15.44	0.03
194	15.42	0.05
275	15.42	0.05
350	15.45	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	15.45
81	15.41

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
14	9.46	0
95	9.46	0
196	9.48	0.02
275	9.49	0.03
352	9.49	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
49	9.47

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
16	8.41	0
96	8.40	-0.01
199	8.40	-0.01
276	8.41	0
354	8.42	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
51	8.42

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
19	9.36	0
100	9.35	-0.01
202	9.34	-0.02
278	9.35	-0.01
356	9.36	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
55	9.34

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
23	7.86	
104	7.88	0.02
202	7.90	0.04
279	7.90	0.04
358	7.90	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
56	7.89

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN SMP2, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
25	16.99	0
121	17.04	0.05
205	17.07	0.08
281	17.10	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	17.11
57	17.12

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	13.11	0
116	13.07	-0.04
208	13.08	-0.03
288	13.00	-0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	13.06
65	

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	9.35	
81	9.38	
176	9.35	
254	9.30	
326	9.32	

TABLE 8-8a

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A8 AT 8 GPM (102 FEET DEEP)
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 8, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
	18.82	
	18.88	
	18.90	
	18.60	
	18.44	

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)	
0	13.50	0	
1	14.70	1.20	3 gpm
2	15.80	2.30	
3	16.20	2.70	
4	16.60	3.10	
5	17.20	3.70	
6	17.80	4.30	
7	18.00	4.50	
8	18.20	4.70	
9	18.60	5.10	
10	19.10	5.60	
12	20.10	5.60	
14	21.10	6.60	
16	22.10	7.60	
18	23.10	8.60	
20	24.10	9.60	
22	25.10	10.60	
24	26.10	11.60	
26	27.10	12.60	
28	27.80	13.30	
30	28.80	14.30	
32	29.60	15.10	
34	30.40	15.90	
36	31.26	17.76	
38	32.00	18.50	
40	32.70	19.20	
42	33.56	20.06	
44	34.16	20.66	
46	34.90	21.40	
48	35.64	22.14	
50	36.26	22.76	
55	37.98	24.48	
60	38.96	25.46	cut back to 2 gpm
65	40.10	26.60	
70	40.50	27.00	

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A9 (Cont'd), FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)	
75	41.14	27.64	
80	41.60	28.10	
85	42.34	28.84	
90	43.44	29.94	
105	44.42	30.92	
120	45.60	32.10	
135	46.30	32.80	
140	46.88	33.38	
145	47.06	33.56	
150	47.30	33.80	
155	47.60	34.10	
160	47.96	34.46	
165	48.14	34.64	
170	48.40	34.90	
175	48.62	35.12	
180	48.80	35.30	
185	49.06	35.56	
190	49.26	35.76	
195	49.44	35.94	
200	49.64	36.14	
205	49.86	36.36	
210	50.00	36.50	
225	50.58	37.08	
240	50.80	37.30	
270	58.60	45.10	
285	64.00	50.50	
60	38.96	25.46	cut back to 1 gpm
290	64.68	51.18	
295	62.72	49.22	
300	60.58	47.08	
305	59.52	46.02	
310	57.52	44.02	
315	56.28	42.78	
320	55.20	41.70	
325	53.80	40.30	

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A9 (Cont'd), FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
330	50.00	36.50
345	46.60	33.10
360	44.70	31.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
05	43.80
10	39.56
15	38.96
20	37.00
25	35.70
30	34.00
45	30.30
60	27.50

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A7, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0 @ 0735	13.65	0
0	13.49	0
16	14.02	0.53
26	14.35	0.86
54	15.57	2.08
89	16.71	3.22
148	17.90	4.41
222	18.67	5.18
320	19.68	6.19
358	19.19	5.70

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	19.05
6	19.00
12	18.91
54	17.88
72	17.30

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A6, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.27	0
01	14.34	0.07
17	14.77	0.50
28	15.21	0.94
55	16.33	2.06
94	17.50	3.23
151	18.55	4.28
224	19.24	4.97
321	20.13	5.86
357	19.60	5.33

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	19.42
7	19.39
13	19.29
55	18.22
88	17.65

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.98	0
03	14.98	0
18	15.00	0.02
29	15.02	0.04
60	15.11	0.13
97	15.20	0.22
153	15.36	0.38
225	15.45	0.47
322	15.57	0.59
356	15.57	0.59

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
14	15.56
56	15.49
78	15.44

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.12	0
05	15.12	0
19	15.14	0.02
30	15.15	0.03
61	15.21	0.09
98	15.27	0.15
156	15.35	0.23
226	15.39	0.27
323	15.45	0.33
355	15.42	0.30

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	15.42
57	15.36

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.30	0
6	14.30	0
20	14.31	0.01
31	14.34	0.04
62	14.39	0.09
99	14.45	0.15
158	14.53	0.23
227	14.56	0.26
324	14.59	0.29
355	14.56	0.26

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	14.55
58	14.50

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.57	0
65	9.56	-0.01
100	9.55	-0.02
159	9.59	0.02
228	9.60	0.03
325	9.62	0.05
354	9.64	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	9.65
59	9.64

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN C, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	16.49	0
66	16.47	-0.02
101	16.47	-0.02
160	16.47	-0.02
229	16.46	-0.03
326	16.45	-0.04
353	16.45	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	16.47
60	16.46

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.39	0
08	18.38	0.01
22	18.38	-0.01
33	18.39	0.
67	18.40	0.01
102	18.42	0.03
161	18.45	0.06
230	18.45	0.06
328	18.48	0.09
352	18.45	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	18.48
61	18.45

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.58	0
11	17.59	0.01
69	17.59	0.01
103	17.60	0.02
162	17.62	0.04
231	17.61	0.03
330	17.60	0.02
351	17.60	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	0.03
62	0.02

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.86	0
12	18.85	-0.01
72	18.85	-0.01
105	18.86	0
164	18.87	0.01
232	18.87	0.01
332	18.86	0
350	18.86	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	18.86
64	18.86

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.57	0
75	14.51	-0.06
107	14.50	-0.07
166	14.50	-0.07
235	14.46	-0.11
336	14.41	-0.16

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	14.40
67	14.38

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	10.14	0
16	10.14	0
108	10.14	0
167	10.14	0
235	10.12	-0.02
337	10.07	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	10.07
66	10.07

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.33	0
78	14.33	0
110	14.33	0
169	14.34	0.01
237	14.33	0
278	14.31	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	14.31
68	14.32

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	20.93	0
79	20.72	-0.21
112	20.67	-0.26
170	20.57	-0.36
238	20.45	-0.48
339	20.27	-0.66

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	20.18
69	20.14

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.59	0
81	17.53	-0.06
113	17.53	-0.06
171	17.56	-0.03
239	17.54	-0.05
345	17.54	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	17.54
71	17.54

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	16.20	0
82	16.15	-0.05
115	16.15	-0.05
172	16.17	-0.03
240	16.15	-0.05
345	16.15	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
43	16.15
72	15.16

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	19.47	0
83	19.48	0.01
116	19.49	0.02
173	19.49	0.02
241	19.49	0.02
347	19.47	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	19.48
72	19.47

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN MW-03 FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.38	0
84	17.35	-0.03
117	17.36	-0.02
174	17.36	-0.02
242	17.35	-0.03
349	17.33	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	17.35
73	17.35

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN OW-2, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0 @ 0744	11.71	
0	11.71	0
80	11.93	0.22
165	12.05	0.34
247	12.10	0.39
352	12.08	0.37

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
110	11.91

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN D FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.02	0
5	14.87	-0.15
82	15.02	0
171	15.25	0.23
249	15.30	0.28
355	15.33	0.31

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	15.21

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN E, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	13.85	0
7	13.81	-0.04
87	13.94	0.09
173	14.00	0.15
251	14.00	0.15
347	14.10	0.25

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
27	13.98

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.50	0
72	17.48	-0.02
90	17.49	-0.01
173	17.53	0.04
255	17.50	0.01
355	17.53	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
119	17.54

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.11	0
24	15.10	-0.01
92	15.10	-0.01
175	15.11	0
257	15.11	0
359	15.10	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
31	15.15

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.04	0
21	9.05	0.01
113	9.06	0.02
177	9.05	0.01
259	9.10	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
02	9.08
32	9.10

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	8.08	0
13	8.05	-0.03
85	8.08	0
180	8.10	0.02
261	8.10	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
04	8.10
33	8.07

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	8.96	0
30	8.95	-0.01
93	8.95	-0.01
180	8.93	-0.03
263	8.93	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
07	8.93
35	8.92

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	8.50	0
30	7.47	-0.03
96	7.45	-0.05
183	7.50	0
265	7.50	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
08	7.50
36	7.50

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN SMP2, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	16.63	0
35	16.60	-0.03
96	16.60	-0.03
185	16.60	-0.03
268	16.63	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	16.61
38	16.64

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.71	0
40	18.95	0.24
104	18.50	-0.21
190	18.45	-0.26
270	18.40	-0.31

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
14	18.38
41	18.39

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	12.63	0
44	12.63	0.01
106	12.63	0.01
194	12.64	0.02
273	12.63	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	12.63
44	12.65

TABLE 8-9

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A9 AT 1.4 GPM (AVG)
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 4, 1999

Time in Minutes Since Pumping Started From 0830	Depth to Water (ft.)	Drawdown (ft.)
0	8.89	0
53	8.90	0.01
116	8.88	-0.01
198	8.90	0.01
277	8.88	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
22	8.88
47	8.88

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A10, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.00	0
1	15.40	0.40
2	16.40	1.40
3	16.40	1.40
4	17.40	2.40
5	18.54	3.54
6	19.24	4.24
7	19.76	4.76
8	20.38	5.38
9	20.96	5.96
10	21.38	6.38
11	21.88	6.88
12	22.28	7.28
13	22.64	7.64
14	23.08	8.08
15	23.40	8.40
16	23.76	8.76
17	24.08	9.08
18	24.40	9.40
19	24.66	9.66
20	24.98	9.98
22	25.48	10.48
24	26.00	11.00
26	26.38	11.38
28	26.76	11.76
30	27.18	12.18
32	27.48	12.48
34	27.74	12.74
36	28.00	13.00
38	28.34	13.34
40	28.60	13.60
42	28.84	13.84
44	29.00	14.00
46	29.24	14.24
50	29.52	14.52
55	29.88	14.88

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A10 (Cont'd), FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
60	30.26	15.26
65	30.56	15.56
70	30.78	15.78
75	30.98	15.98
80	31.08	16.08
85	31.24	16.24
90	31.46	16.76
105	31.80	16.80
120	32.18	17.18
135	32.40	17.40
150	32.64	17.64
165	33.00	18.00
180	33.06	18.06
195	33.16	18.16
210	33.30	18.30
225	33.40	18.40
240	33.50	18.50
255	33.60	18.60
270	33.70	18.70
300	33.80	18.80
330	33.88	18.88

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A10 (Cont'd), FEBRUARY 11, 1999

Time in Minutes Since Pumping Stopped from 0830	Depth to Water (ft.)
3	32.84
4	32.45
5	31.46
6	30.61
7	29.78
9	28.01
10	27.49
12	25.35
14	25.20
16	24.20
18	23.52
20	22.56
25	21.15
30	20.04
35	19.23
42	18.35
45	18.05
55	17.40
60	17.17

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF 0W-2 AT 5 GPM
WATER LEVEL MEASUREMENTS IN 0W-2, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	12.39	0
3	12.54	0.15
11	12.78	0.39
37	13.26	0.87
56	13.44	1.05
140	13.76	1.37
210	13.90	1.51
336	13.98	1.59

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
9	13.88
15	13.61
22	13.39
67	12.81
124	12.66

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.92	0
2	14.94	0.02
15	15.34	0.42
41	16.66	1.74
49	17.04	2.12
135	19.66	4.74
223	20.72	5.80
327	21.11	6.19

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	21.17
12	21.09
19	20.87
60	18.56
120	16.72

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	8.40	0
90	8.40	0
175	8.42	0.02
267	8.42	0.02
372	8.39	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	8.40
73	8.40

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.34	0
90	9.36	0.02
177	9.35	0.01
281	9.30	-0.04
373	9.27	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
78	9.22

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	7.90	0
90	7.90	0
178	7.88	-0.02
276	7.88	-0.02
352	7.81	-0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
79	7.85

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN SMP2, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.05	0
88	17.06	0.01
176	17.08	0.03
261	17.08	0.03
354	17.09	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
83	17.10

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.25	0
91	18.25	0
175	18.26	0.01
261	18.28	0.03
357	18.29	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
85	18.30

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	13.00	0
90	13.00	0
179	12.97	-0.03
265	12.97	-0.03
360	12.94	-0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
88	13.00

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.44	0
91	9.44	0
176	9.44	0
261	9.41	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	9.39
91	9.40

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.55	0
93	9.55	0
187	9.55	0
280	9.30	-0.20
383	9.54	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
75	9.53
141	9.55

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.92	0
92	17.95	0.03
149	17.96	0.04
239	18.00	0.08
347	18.02	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
72	18.01
127	18.01

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.44	0
94	15.44	0
178	15.44	0
280	15.41	-0.03
345	15.42	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
73	15.42

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.38	0
90	14.66	0.28
144	14.79	0.41
236	14.83	0.45
342	14.89	0.51

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
71	14.62
126	14.55

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.68	0
58	15.26	-0.42
142	16.54	-0.14
233	16.63	-0.05
340	16.71	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
69	16.07
125	15.89

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.63	0
05	15.65	0.02
16	15.66	0.03
42	15.76	0.13
50	15.79	0.16
72	15.88	0.25
153	16.14	0.51
174	16.18	0.55
268	16.28	0.65
334	16.31	0.68

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	16.33
21	16.33
28	16.30
48	16.24

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.38	0
6	15.39	0.01
17	15.42	0.04
43	15.51	0.13
51	15.53	0.15
75	15.60	0.22
154	15.74	0.36
176	15.76	0.38
270	15.80	0.42
335	15.80	0.42

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	15.81
23	15.79
29	15.75
49	15.68

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.54	0
7	14.56	0.02
18	14.59	0.05
44	14.69	0.15
52	14.72	0.18
76	14.77	0.23
155	14.89	0.35
177	14.92	0.38
271	14.96	0.42
336	14.96	0.42

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	14.95
23	14.94
30	14.91
51	14.83

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.53	0
8	18.53	0
19	18.53	0
45	18.55	0.02
53	18.55	0.02
77	18.58	0.05
157	18.63	0.10
178	18.63	0.10
272	18.64	0.11
337	18.64	0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	18.65
25	18.64
31	18.63
52	18.61

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	10.33	0
54	10.33	0
78	10.34	0.01
158	10.39	0.06
179	10.41	0.08
273	10.42	0.09
338	10.43	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	10.46
53	10.44

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	16.52	0
55	16.52	0
79	16.51	-0.01
158	16.53	0.01
180	16.54	0.02
273	16.54	0.02
339	16.54	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	16.54
54	16.54

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	17.67	0
9	17.67	0
20	17.66	-0.01
46	17.68	0.01
57	17.69	0.02
80	17.70	0.03
160	17.72	0.05
181	17.72	0.05
275	17.73	0.06
340	17.71	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	17.71
26	17.72
34	17.72
55	17.70

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	19.03	0
21	19.03	0
48	19.04	0.01
58	19.04	0.01
82	19.05	0.02
161	19.08	0.05
182	19.08	0.05
276	19.08	0.05
344	19.06	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	19.04
56	19.06

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	13.86	0
62	13.86	0
84	13.85	-0.01
163	13.83	-0.03
278	13.75	-0.11
351	13.71	-0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	13.69

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	9.93	0
63	9.94	0.01
85	9.93	0
164	9.94	0.01
279	9.92	-0.01
352	9.88	-0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	9.88

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	14.33	0
64	14.34	0.01
87	14.34	0.01
166	14.36	0.03
280	14.35	0.02
354	14.34	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	14.33
58	14.33

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	15.34	0
65	15.33	-0.01
87	15.33	-0.01
167	15.33	-0.01
281	15.31	-0.03
355	15.31	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
41	15.31

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	19.76	0
67	19.77	0.01
89	19.78	0.02
168	19.80	0.04
183	19.80	0.04
283	19.79	0.03
356	19.79	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
43	19.78	0.02
59	19.77	0.01

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.07	0
68	18.07	0
90	18.08	0.01
169	18.09	0.02
184	18.09	0.02
284	18.08	0.01
357	18.08	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	18.08

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	19.53	0
69	19.55	0.02
91	19.56	0.03
170	19.58	0.05
185	19.58	0.05
285	19.58	0.05
358	19.58	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
45	19.57
60	19.56

TABLE 8-10

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A10 AT 5 GPM
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 11, 1999

Time in Minutes Since Pumping Started from 0830	Depth to Water (ft.)	Drawdown (ft.)
0	18.47	0
70	18.47	0
92	18.47	0
171	18.49	0.02
186	18.49	0.02
285	18.47	0
359	18.47	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
46	18.47

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	18.17	0
1	20.68	2.51
2	21.46	3.29
3	22.02	3.85
4	22.50	4.33
5	22.90	4.73
6	23.28	5.11
7	23.68	5.51
8	23.96	5.79
9	24.06	5.89
10	24.28	6.11
11	24.46	6.29
12	24.58	6.41
13	24.66	6.49
14	24.76	6.59
15	24.80	6.63
16	24.88	6.71
17	24.92	6.75
18	25.00	6.83
19	25.08	6.91
20	25.16	6.99
22	25.18	7.01
24	25.22	7.05
26	25.28	7.11
28	25.36	7.19
30	25.44	7.27
32	25.50	7.33
34	25.60	7.43
36	25.70	7.53
38	25.80	7.63
40	25.90	7.73
42	26.00	7.83
44	26.06	7.89
46	26.12	7.95
48	26.18	8.01
50	26.20	8.03

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
52	26.22	8.05
54	26.28	8.11
56	26.32	8.15
60	26.40	8.23
65	26.54	8.37
70	26.60	8.43
75	26.70	8.53
80	26.80	8.63
85	27.08	8.91
90	27.30	9.13
100	27.62	9.45
110	27.80	9.63
120	27.92	9.75
130	28.02	9.85
140	28.12	9.95
150	28.18	10.01
160	28.22	10.05
170	28.32	10.15
180	28.46	10.29
195	28.48	10.31
210	28.54	10.37
225	28.56	10.39
240	28.56	10.39
255	28.68	10.51
270	28.76	10.59
285	28.82	10.65
300	28.86	10.69
315	28.92	10.75
330	28.98	10.81
345	29.00	10.83
360	29.04	10.87

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 16, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	27.42
2	25.70
3	25.08
4	24.56
5	24.40
6	23.82
7	23.42
8	23.22
9	23.00
10	22.88
11	22.66
12	22.48
13	22.28
14	22.02
15	21.88
17	21.66
19	21.52
20	21.50
22	21.48
24	21.46
26	21.42
28	21.34
30	21.28
35	21.02
40	20.76
50	20.56
60	20.24

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	17.94	0
6	17.98	0.04
13	18.06	0.12
27	18.21	0.27
47	18.39	0.45
72	18.55	0.61
125	18.78	0.84
219	19.00	1.06
260	19.07	1.13
325	19.17	1.23
346	19.22	1.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	19.20
11	19.13
30	18.92
54	18.71

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	19.02	0
5	19.09	0.07
12	19.26	0.24
28	19.57	0.55
48	19.80	0.78
73	19.99	0.97
127	20.29	1.27
220	20.51	1.49
261	20.57	1.55
325	20.65	1.63
347	20.68	1.66

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	20.61
10	20.42
31	19.99
55	19.75

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	19.36	0
7	19.42	0.06
14	19.56	0.20
26	19.75	0.39
45	19.99	0.63
70	20.19	0.83
114	20.43	1.07
217	20.67	1.31
259	20.73	1.37
324	20.82	1.46
344	20.85	1.49

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	20.81
12	20.67
29	20.37
53	20.11

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	18.57	0
2	18.60	0.03
11	18.63	0.06
29	18.78	0.21
49	18.93	0.36
74	19.08	0.51
128	19.33	0.86
221	19.59	0.98
262	19.66	1.05
326	19.78	1.21
348	19.81	1.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	19.83
9	19.80
32	19.61
56	19.45

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	15.37	0
22	15.49	0.12
36	15.64	0.27
52	15.79	0.42
104	16.14	0.77
198	16.51	1.14
226	16.56	1.19
307	16.82	1.45
329	16.84	1.47

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	16.86
35	16.64

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.94	0
21	15.23	0.29
38	15.49	0.55
53	15.65	0.71
106	16.00	1.06
200	16.31	1.37
236	16.37	1.43
308	16.54	1.60
330	16.55	1.61

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	16.38
39	15.99

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.11	0
20	14.39	0.28
39	14.68	0.57
55	14.83	0.72
107	15.16	1.05
202	15.46	1.35
237	15.52	1.41
309	15.69	1.58
331	15.70	1.59

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	15.50
40	15.11

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	10.33	0
56	10.38	0.05
109	10.48	0.15
202	10.59	0.26
238	10.63	0.30
310	10.68	0.35
332	10.71	0.38

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	10.75
41	10.72

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	16.04	0
57	16.07	0.03
109	16.12	0.08
203	16.24	0.20
239	16.29	0.25
312	16.38	0.34
333	16.39	0.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	16.46
42	16.48

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	18.01	0
19	18.44	0.43
40	18.79	0.78
58	18.97	0.96
111	19.30	1.29
204	19.59	1.58
241	19.64	1.63
313	19.76	1.75
334	19.79	1.78

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	19.33
43	18.95

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	17.18	0
17	17.49	0.31
42	17.82	0.64
60	17.98	0.80
112	18.26	1.08
206	18.52	1.34
243	18.57	1.39
314	18.66	1.48
335	18.69	1.51

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
21	18.29
44	17.98

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	18.59	0
08	18.69	0.10
16	18.84	0.25
43	19.20	0.61
61	19.35	0.76
114	19.62	1.03
208	19.88	1.29
247	19.93	1.34
315	20.02	1.43
337	20.05	1.46

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	19.97
22	19.68
45	19.40

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	13.21	0
64	13.22	0.01
117	13.20	-0.01
211	13.19	-0.02
253	13.17	-0.04
318	13.17	-0.04
340	13.15	-0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	13.16
48	13.17

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	9.39	0
65	9.83	0.44
118	10.02	0.63
212	10.21	0.82
254	10.24	0.85
319	10.31	0.92
341	10.32	0.93

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	10.16
49	9.96

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	13.84	0
67	14.53	0.69
121	14.79	0.95
214	14.99	1.15
256	15.03	1.19
321	15.11	1.27
342	15.11	1.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	14.74
50	14.50

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.71	0
69	14.73	0.02
122	14.74	0.03
215	14.77	0.06
257	14.78	0.07
322	14.79	0.08
343	14.80	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
27	14.81
51	14.83

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MP2, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	16.80	0
9	16.80	0
17	16.80	0
25	16.80	0
35	16.82	0.02
120	17.06	0.26
218	17.58	0.78
308	18.07	1.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
3	18.32	1.52
14	18.37	1.57
24	18.40	1.60
33	18.44	1.64
60	18.50	1.70

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	19.09	0
5	19.15	0.06
13	19.27	0.18
19	19.39	0.30
30	19.67	0.58
123	22.31	3.22
220	23.64	4.55
310	24.16	5.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)	
0	24.33	5.24
10	24.26	5.17
20	23.88	4.79
30	23.36	4.27
62	22.09	3.0

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	9.33	0
47	9.33	0
135	9.33	0
241	9.29	-0.04
319	9.30	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
73	9.30

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	8.41	0
2	8.41	0
140	8.42	0.01
242	8.41	0
322	8.40	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
75	8.41

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	9.44	0
39	9.46	0.02
130	9.46	0.02
176	9.48	0.04
316	9.47	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
69	9.46

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	12.89	
34	12.90	
125	12.90	0
163	12.91	0.01
312	12.93	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
67	12.99

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.10	0
62	15.19	1.09
150	15.87	1.77
249	16.19	2.09
329	16.32	2.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
80	15.24

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	13.17	0
69	14.36	1.19
156	14.69	1.52
255	14.90	1.73
335	15.75	2.58

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
88	17.90

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A7, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.22	0
70	14.47	0.25
156	14.81	0.59
257	15.03	0.81
337	16.22	2.00

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	14.80	0
71	15.08	0.28
158	15.44	0.64
258	14.68	-0.12
338	16.72	1.92

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	7.90	0
46	7.92	0.02
133	7.92	0.02
239	7.90	0
317	7.89	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
72	7.89

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	15.40	0
59	15.41	0.01
143	15.45	0.05
246	15.45	0.05
325	15.47	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
77	15.49

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	17.67	0
61	17.95	0.28
144	18.68	1.01
247	19.29	1.62
328	19.54	1.87

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
78	19.31

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	15.60	0
64	15.80	0.20
152	16.00	0.40
251	16.10	0.50
331	16.18	0.58

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
82	16.02

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN OW-2, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	12.32	0
64	12.39	0.07
154	12.46	0.14
254	12.53	0.21
333	12.61	0.29

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
84	12.86

TABLE 8-11

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A11 AT 15 GPM
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 16, 1999

Time in Minutes Since Pumping Started from 0930	Depth to Water (ft.)	Drawdown (ft.)
0	9.58	0
55	9.60	0.02
141	9.59	0.01
238	9.60	0.02
324	9.61	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
75	9.63

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)	
0 (@ 0815)	14.54	0	
0	14.56	0	
1	14.96	0.40	
2	15.92	1.36	
3	16.46	1.90	
4	16.92	2.36	
5	17.06	2.50	
6	17.10	2.54	
7	17.18	2.62	
8	17.22	2.66	
9	17.28	2.72	
10	17.32	2.76	
11	17.38	2.82	
12	17.40	2.84	
13	17.42	2.86	
14	17.48	2.92	
15	17.52	2.96	Intermittent pumping at EW-A6 and EW-A7
17	17.56	3.00	
19	17.52	2.96	
21	17.56	3.00	
23	17.62	3.06	
25	17.60	3.04	
30	17.66	3.10	
35	17.70	3.14	
40	17.72	3.16	
45	17.74	3.18	
50	17.76	3.20	
55	17.80	3.24	
60	17.82	3.26	
70	17.88	3.32	
80	17.90	3.34	
90	17.92	3.36	
100	17.92	3.36	
110	17.92	3.36	
120	17.94	3.38	
135	17.94	3.38	
150	17.92	3.36	

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
165	17.90	3.34
186	17.88	3.32
195	17.88	3.32
210	17.86	3.30
225	17.84	3.28
240	17.82	3.26
255	17.80	3.24
270	17.76	3.20
285	17.76	3.20
300	17.76	3.20
315	17.76	3.20
330	17.74	3.18
345	17.72	3.16
360	17.72	3.16

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, FEBRUARY 18, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	16.40
2	15.72
3	15.32
4	15.18
5	15.08
6	14.98
7	14.90
8	14.86
9	14.84
10	14.78
12	14.74
14	14.68
16	14.66
18	14.64
20	14.60
25	14.54
30	14.46
35	14.42
40	14.40
45	14.36
50	14.34
50	14.30
60	14.26

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)	Corrected Drawdown* (ft.)
0	31.34	0	
3	31.28	-0.06	
15	31.31	-0.03	-
29	31.38	0.04	0.07
82	31.70	0.36	0.44
157	31.93	0.59	0.75
251	31.94	0.60	0.85
293	31.90	0.56	0.86
334	31.86	0.52	0.85

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	31.83
13	31.77
21	31.72
42	31.54

*Precipitation Correction is 0.06 ft/hr

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN 0W-2, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)	Corrected Drawdown* (ft.)
	13.42	0	
0	13.40	-0.02	
13	13.95	0.53	0.54
25	14.13	0.71	0.74
80	14.41	0.99	1.07
156	14.48	1.06	1.22
250	14.44	1.02	1.27
332	14.40	0.98	1.31
360	14.38	0.96	1.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
9	13.80
18	13.66
39	13.45

*Precipitation Correction is 0.06 ft/hr

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A10, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)	Corrected Drawdown* (ft.)
0	20.96	0	
1	20.94	-	
14	21.25	0.29	0.30
27	21.53	0.57	0.60
79	21.93	0.97	1.05
158	22.04	1.08	1.24
249	22.01	1.05	1.30
291	21.97	1.01	1.30
333	21.95	0.99	1.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	21.91
11	21.63
20	21.41
41	21.08

*Precipitation Correction is 0.06 ft/hr

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	17.13	0
8	17.07	-0.06
17	17.04	-0.06
30	17.02	-0.11
87	16.94	-0.19
159	16.85	-0.25
253	16.70	-0.33
295	16.64	-0.49
337	16.59	-0.54

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	16.57
14	16.57
22	16.56
45	16.54

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	15.94	0
9	15.89	-0.05
18	15.90	-0.04
31	15.89	-0.05
88	15.86	-0.08
160	15.81	-0.13
254	15.75	-0.19
296	15.72	-0.22
338	15.69	-0.25

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	15.67
15	15.67
23	15.66
46	15.64

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	15.06	0
10	15.04	-0.02
19	15.03	-0.03
32	15.02	-0.04
89	14.99	-0.07
161	14.97	-0.09
255	14.90	-0.16
296	14.87	-0.19
339	14.84	-0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	14.83
16	14.82
24	14.82
46	14.80

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	10.43	0
33	10.31	-0.12
90	10.10	-0.33
162	10.04	-0.39
255	9.68	-0.75
297	9.53	-0.90
346	9.43	-1.00

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	9.37
47	9.35

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	16.51	0
34	16.50	-0.01
91	16.48	-0.03
163	16.47	-0.04
256	16.45	-0.06
298	16.44	-0.07
341	16.44	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	16.42
48	16.43

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	18.37	0
20	18.35	-0.02
35	18.34	-0.03
94	18.32	-0.05
164	18.28	-0.09
257	18.22	-0.15
299	18.19	-0.18
342	18.17	-0.20

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	18.16
27	18.14
49	18.14

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	17.39	0
36	17.36	-0.03
95	17.34	-0.05
165	17.31	-0.07
258	17.27	-0.12
300	17.24	-0.15
343	17.22	-0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	17.20
50	17.19

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	18.82	0
37	18.79	-0.03
96	18.77	-0.05
167	18.74	-0.08
259	18.68	-0.14
301	18.65	-0.17
345	18.63	-0.19

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
29	18.61
51	18.60

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	13.18	0
41	13.14	-0.04
98	13.13	-0.05
169	13.10	-0.08
262	13.03	-0.15
305	13.00	-0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	12.95
54	12.94

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.48	0
42	9.45	-0.03
99	9.43	-0.05
170	9.39	-0.09
263	9.33	-0.15
306	9.30	-0.18

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	9.25
55	9.24

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	13.99	0
43	13.97	-0.02
101	13.95	-0.04
172	13.90	-0.09
265	13.84	-0.15
308	13.82	-0.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	13.79
56	13.77

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	20.26	0
44	20.17	-0.09
102	20.05	-0.21
173	19.92	-0.34
266	19.79	-0.47
309	19.72	-0.54

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	19.57
57	19.54

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	18.70	0
82	18.65	-0.05
172	18.59	-0.11
268	18.51	-0.19
347	18.45	-0.25

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
39	18.40

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	19.00	0
45	19.26	0.26
142	18.89	-0.11
230	18.83	-0.17
325	18.74	-0.24
360	18.70	-0.30

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	19.23	0
46	19.16	-0.07
144	19.13	-0.10
231	19.09	-0.14
327	19.00	-0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	19.00

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	18.31	0
48	18.24	-0.07
144	18.18	-0.13
231	18.13	-0.19
323	18.04	-0.27
358	18.05	-0.26

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	19.59	0
50	19.52	-0.07
143	19.48	-0.11
236	19.43	-0.16
330	19.37	-0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	19.35

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	16.27	0
59	17.51	1.24
149	17.65	1.38
240	17.57	1.30
332	17.50	1.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
9	17.19

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	14.69	0
61	15.01	0.32
152	15.00	0.31
242	14.89	0.20
302	14.80	0.11
340	14.61	-0.08

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	17.98	0
63	17.95	-0.03
155	17.92	-0.06
243	17.87	-0.11
335	17.79	-0.19

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
13	17.76

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	15.38	0
65	15.34	-0.04
157	15.31	-0.07
245	15.27	-0.11
336	15.24	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	15.26

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.61	0
66	9.55	-0.06
160	9.35	-0.26
247	9.05	-0.56
338	8.61	-1.00

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	8.58

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0900	8.36	0
67	8.31	-0.05
163	8.29	-0.07
249	8.27	-0.09
339	8.24	-0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	8.22

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.36	0
69	9.25	-0.11
165	9.04	-0.32
251	8.93	-0.39
340	8.86	-0.50

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	8.86

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	7.93	0
71	7.88	-0.05
165	7.85	-0.08
252	7.79	-0.14
341	7.74	-0.19

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	7.72

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	12.92	0
78	12.85	-0.07
167	11.77	-0.15
261	11.66	-0.26
349	12.60	-0.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
25	12.58

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	9.45	0
75	9.39	-0.06
169	9.30	-0.15
255	9.22	-0.23
343	9.17	-0.28

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	9.15

TABLE 8-12

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A12 AT 12 GPM
WATER LEVEL MEASUREMENTS IN SMP-2, FEBRUARY 18, 1999

Time in Minutes Since Pumping Started from 0900	Depth to Water (ft.)	Drawdown (ft.)
0	17.08	0
73	17.05	-0.03
170	17.04	-0.04
257	17.00	-0.08
345	16.97	-0.11

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
28	16.95

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A13, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.75	0
1	19.60	0.85
2	19.94	1.19
3	20.25	1.50
4	20.55	1.80
5	20.85	2.10
6	21.15	2.40
7	21.38	2.63
8	21.65	2.90
9	21.88	3.13
10	22.15	3.40
11	22.38	3.63
12	22.61	3.86
13	22.81	4.06
14	23.04	4.29
15	23.23	4.48
16	23.42	4.67
17	23.63	4.88
18	23.80	5.05
19	23.97	5.22
20	24.16	5.41
22	24.44	5.69
24	24.74	5.99
26	25.04	6.29
28	25.31	6.56
30	25.58	6.83
35	26.15	7.40
40	26.68	7.93
45	27.15	8.40
50	27.56	8.81
55	27.90	9.15
60	28.25	9.50
65	28.65	9.90

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A13 (Cont'd), FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
70	29.15	10.40
75	29.41	10.66
80	29.73	10.98
85	30.05	11.30
90	30.35	11.60
95	30.60	11.85
100	30.85	12.10
105	31.08	12.33
110	31.31	12.56
115	31.55	12.80
120	31.85	13.10
135	32.48	13.73
150	33.05	14.30
165	33.61	14.86
180	34.08	15.33
195	34.45	15.70
210	34.85	16.10
225	35.20	16.45
240	35.52	16.77
260	35.90	17.15
280	36.12	17.37
300	36.36	17.61
324	36.70	17.90
340	36.78	18.03
360	37.10	18.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	36.60
2	36.24
3	35.85

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A13 (Cont'd), FEBRUARY 22, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	35.45
5	35.00
6	34.60
7	34.18
8	33.77
9	33.34
10	32.98
12	32.22
14	31.44
16	30.75
18	30.05
20	29.40
25	27.82
30	26.46
35	25.24
40	24.24
50	22.65
60	21.42

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN OW-2, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	12.71	0
14	12.71	0
62	12.71	0
172	12.73	0.02
244	12.62	-0.09
302	12.45	-0.26

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
23	12.23
62	12.16

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	13.74	0
15	13.75	0.01
63	13.74	0
173	13.75	0.01
245	13.66	-0.09
306	13.70	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
21	13.65
61	13.62

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A10, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	19.74	0
18	19.79	0.05
66	19.79	0.05
175	19.82	0.08
247	19.00	-0.74
308	17.50	-2.24

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	15.85
60	15.31

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	28.90	0
19	29.00	0.10
68	29.10	0.20
177	29.07	0.17
248	25.67	-3.23
310	21.45	-7.45

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	17.89
59	16.09

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	16.58	0
21	16.58	0
130	16.59	0.01
179	16.61	0.03
251	16.38	-0.20
313	16.08	-0.50

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	15.73
57	15.54

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.36	0
23	15.35	-0.01
72	15.37	0.01
181	15.39	0.03
252	15.22	-0.14
315	15.04	-0.32

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
14	15.87
56	14.77

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.48	0
25	14.50	0.02
74	14.51	0.03
183	14.53	0.05
252	14.36	-0.12
317	14.19	-0.29

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
12	14.05
54	13.95

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	10.18	0
27	10.20	0.02
76	10.20	0.02
184	10.20	0.02
254	10.19	0.01
318	10.17	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
11	10.15
53	10.12

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.84	0
28	15.85	0.01
77	15.86	0.02
185	15.87	0.03
254	15.87	0.03
320	15.88	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	15.89
52	15.90

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.88	0
31	17.87	--
81	17.90	0.02
188	17.94	0.06
255	17.90	0.02
321	17.86	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	17.83
50	17.77

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	16.91	0
33	16.91	0
83	16.93	0.02
190	16.96	0.05
258	16.95	0.04
323	16.93	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
6	16.92
49	16.90

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.29	0
35	18.27	--
85	18.29	0
191	18.31	0.02
261	18.31	0.02
325	18.30	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	18.30
46	18.28

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	11.91	0
44	11.91	0
88	11.91	0
195	11.89	-0.02
263	11.88	-0.03
329	11.87	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
30	11.87
67	11.88

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	8.89	0
46	8.88	-0.01
90	8.87	-0.02
196	8.87	-0.02
264	8.86	-0.03
331	8.85	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	8.81
69	8.79

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	13.47	0
44	13.48	0.01
92	13.50	0.03
199	13.51	0.04
266	13.50	0.03
333	13.49	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	13.47
71	13.44

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.18	0
51	15.15	-0.03
94	15.14	-0.04
201	15.13	-0.05
267	15.11	-0.07
336	15.04	-0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
37	15.08
72	15.07

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.72	0
2	17.55	-0.17
12	17.51	-0.21
22	17.48	-0.24
32	17.45	-0.27
40	17.45	-0.27
95	17.65	-0.07
171	18.05	0.33
247	18.35	0.63
332	18.56	0.84
360	18.61	0.89

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	18.62
20	18.63
30	18.64
60	18.58

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.99	0
65	17.98	-0.01
140	18.00	0.01
220	18.01	0.02
305	18.03	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	18.01

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.73	0
67	18.72	-0.01
142	18.77	0.04
222	18.77	0.04
307	18.76	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
33	18.71

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.41	0
69	17.41	0
144	17.44	0.03
224	17.45	0.04
309	17.47	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	17.42

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.94	0
71	18.93	-0.01
146	18.99	0.05
226	18.96	0.02
311	18.96	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	18.91

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.63	0
79	15.66	0.03
155	15.68	0.05
233	15.68	0.05
319	15.61	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	15.49

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	15.21	0
80	15.20	-0.01
157	15.20	-0.01
234	15.21	0
320	15.23	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	15.22

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	9.18	0
82	9.18	0
160	9.19	0.01
236	9.19	0.01
322	9.19	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
46	9.20

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	8.20	0
89	8.19	-0.01
161	8.19	-0.01
238	8.19	-0.01
324	8.19	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
47	8.20

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	9.19	0
87	9.18	-0.01
163	9.17	-0.02
240	9.15	-0.04
325	9.17	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
49	9.17

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	9.71	0
89	7.71	0
164	7.70	-0.01
241	7.69	-0.02
326	7.73	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
50	7.74

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	12.60	0
98	12.57	-0.03
173	12.59	-0.01
245	12.61	0.01
335	12.66	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
56	12.66

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	9.07	0
91	9.03	-0.04
166	9.06	-0.01
242	9.06	-0.01
328	9.08	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
58	9.09

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN SMP2, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	16.56	0
93	16.57	0.01
168	16.59	0.03
249	16.65	0.09
330	16.70	0.14

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
52	16.75

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	18.04	0
100	18.37	0.33
178	18.48	0.44
252	18.51	0.47
338	18.49	0.45

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
58	18.26

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	14.07	0
76	14.15	0.06
153	14.24	0.17
230	14.26	0.19
316	14.20	0.15

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	14.12

TABLE 8-13

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A13 AT 2 GPM
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 22, 1999

Time in Minutes Since Pumping Started from 1000	Depth to Water (ft.)	Drawdown (ft.)
0	17.44	0
78	17.47	0.03
155	17.55	0.11
232	17.60	0.16
318	17.66	0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	17.68

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A14, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)	
0	14.28		
1	15.28	1.00	
2	15.62	1.34	
3	15.84	1.56	
4	16.18	1.90	
5	16.42	2.14	
6	16.68	2.40	
7	16.96	2.68	
8	17.24	2.96	
9	17.41	3.13	
10	17.74	3.46	Intermittent
11	17.97	3.69	pumping at
12	18.24	3.96	EW-A6 and
13	18.43	4.15	EW-A7
14	18.72	4.44	
15	19.03	4.75	
16	19.27	4.99	
17	19.41	5.13	
18	19.73	5.45	
19	20.05	5.77	
20	20.31	6.03	
22	20.64	6.36	
24	21.08	6.80	
26	21.57	7.29	
28	22.05	7.77	
30	22.58	8.30	
32	22.78	8.50	
34	23.07	8.79	
36	23.57	9.29	
38	23.78	9.50	
40	24.03	9.75	
45	24.51	10.23	
50	25.37	11.09	

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A14 (Cont'd), FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
55	25.64	11.36
60	26.07	11.79
65	26.24	11.98
70	26.58	12.30
75	26.82	12.54
80	26.92	12.64
85	27.02	12.74
90	27.15	12.87
95	27.34	13.06
120	27.68	13.40
135	27.84	13.56
150	27.95	13.67
165	28.01	13.73
180	28.04	13.76
205	28.04	13.76
225	28.64	14.36
240	29.40	15.14
255	29.92	15.64
270	30.04	15.76
285	30.22	15.94
300	30.34	16.06
330	30.35	16.07
360	30.63	16.35

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	29.56
2	29.28
3	28.88

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A14 (Cont'd), FEBRUARY 24, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	28.44
5	28.17
6	27.83
7	27.48
8	26.95
9	26.65
10	26.23
11	25.95
12	25.56
13	25.17
14	24.87
15	24.36
17	23.77
19	23.28
21	22.84
23	22.42
25	21.94
27	21.36
29	21.03
55	18.32
60	17.12

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN OW-2, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	12.01	0
6	12.02	0.01
12	12.04	0.03
17	12.05	0.04
25	12.08	0.07
39	12.11	0.10
66	12.15	0.14
119	12.18	0.17
200	12.25	0.24
311	12.48	0.47
344	12.40	0.39

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	12.36
53	12.25
63	12.22

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.54	0
7	13.55	0.01
13	13.55	0.01
18	13.56	0.02
26	13.57	0.03
40	13.59	0.05
67	13.61	0.07
120	13.63	0.09
201	13.67	0.13
312	13.79	0.25
345	13.77	0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	13.76
54	13.71
64	13.40

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.11	0
23	15.12	0.01
125	15.14	0.03
205	15.36	0.25
322	15.66	0.55

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
11	15.44

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.59	0
25	14.59	0
126	14.60	0.01
207	14.72	0.13
323	14.82	0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
13	14.72

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN11I, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.75	0
26	13.76	0.01
127	13.76	0.01
209	13.90	0.15
324	13.98	0.23

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
13	13.88

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG1, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	10.07	0
47	10.10	0.03
130	10.09	0.02
210	10.10	0.03
325	10.19	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
14	10.17

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-E, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.85	0
2	13.86	0.01
5	13.88	0.03
9	13.91	0.06
16	13.97	0.12
24	14.04	0.19
35	14.14	0.29
65	14.31	0.46
115	14.42	0.57
148	14.46	0.61
198	14.49	0.64
303	14.63	0.78
344	14.64	0.79
360	14.62	0.77

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
3	14.62
52	14.26
62	14.20
67	14.18

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-D, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.42	0
1	15.42	0
7	15.45	0.03
8	15.56	0.14
14	15.74	0.32
22	16.07	0.65
34	16.53	1.11
63	17.35	1.93
114	17.86	2.44
150	17.95	2.53
196	17.99	2.57
302	18.44	3.02
343	18.45	3.03
358	18.43	3.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	18.43
44	16.95
54	16.69
66	16.51

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A10, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.56	0
19	14.58	0.02
28	14.59	0.03
41	14.60	0.04
68	14.63	0.07
121	14.69	0.13
202	15.11	0.55
314	16.28	1.72
346	15.61	1.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	15.44
56	15.03

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A9, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	13.83	0
20	13.83	0
29	13.84	0.01
42	13.84	0.01
69	13.86	0.03
122	13.89	0.06
203	14.91	1.07
315	18.29	4.46
356	16.47	2.64

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
9	15.95
57	14.83

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A7, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	
122	13.98	Intermittent
316	19.05	pumping

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	
123	14.56	Intermittent
318	13.43	pumping

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-C, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.71	0
48	15.70	-0.01
131	15.70	-0.01
211	15.71	0
326	15.73	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	15.72

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	17.66	0
49	17.65	-0.01
132	17.67	0.01
212	17.70	0.04
327	17.72	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
16	17.69

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.81	0
51	16.82	0.01
133	16.82	0.01
231	16.85	0.04
329	16.85	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	16.84

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.22	0
52	18.22	0
134	18.24	0.02
232	18.25	0.03
289	18.26	0.04
330	18.25	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
19	18.23

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14S, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	11.96	
55	11.98	0.02
137	11.96	0
292	11.93	-0.03
334	11.92	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	11.90

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN14I, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	8.83	0
56	8.84	0.01
138	8.85	0.02
293	8.82	-0.01
333	8.81	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	8.79

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59S, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	13.42	0
58	13.42	0
140	13.42	0
295	13.44	0.02
337	13.43	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
7	13.41

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN59I, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	14.62	0
59	14.61	-0.01
141	14.61	-0.01
297	14.58	0.04
338	14.58	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
38	14.57

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN BG4, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.36	0
17	17.38	0.02
103	17.40	0.04
201	17.44	0.08
298	17.48	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
8	17.50

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-03, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.08	0
5	18.09	0.01
95	18.10	0.02
190	18.10	0.02
290	18.11	0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
0	18.10

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55I, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.61	0
8	18.61	0
96	18.61	0
193	18.60	-0.01
292	18.66	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	18.64

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN55S, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	17.45	0
11	17.46	0.01
88	17.47	0.02
185	17.45	0
284	17.49	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	17.46

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A8, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.83	0
14	18.82	-0.01
100	18.84	0.02
207	18.84	0.02
305	18.87	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
5	18.85

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN12I, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	15.27	0
19	15.27	0
104	15.28	0.01
203	15.28	0.01
290	15.28	0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
10	15.27

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG26, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	9.30	0
21	9.31	0.01
106	9.31	0.01
205	9.32	0.02
302	9.32	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
13	9.33

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN DG12, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	8.21	0
23	8.28	0.07
107	8.29	0.08
216	8.28	0.07
299	8.28	0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
15	8.28

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-04, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	7.84	0
28	7.85	0.01
51	7.83	-0.01
150	7.83	-0.01
305	7.82	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	7.81

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-07, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	9.25	0
26	9.28	0.03
109	9.28	0.03
208	9.27	0.02
304	9.24	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
17	17.69

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN17S, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	12.68	0
39	12.68	0
120	12.67	-0.01
214	12.66	-0.02
315	12.65	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
53	12.67

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN HN82S, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	9.21	0
31	9.21	0
114	9.21	0
212	9.20	-0.01
307	9.20	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
50	9.20

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN SMP2, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.52	0
34	16.53	0.01
116	16.54	0.02
214	16.55	0.03
301	16.56	0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
53	16.58

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	17.82	0
43	17.84	0.02
123	17.85	0.03
224	17.90	0.08
295	17.94	0.12

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
58	17.90

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN EW-A13, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	18.57	0
38	18.60	0.03
125	18.60	0.03
217	18.58	0.01
318	18.56	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
56	18.65

TABLE 8-14

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A14 AT 2 GPM
WATER LEVEL MEASUREMENTS IN MW-02, FEBRUARY 24, 1999

Time in Minutes Since Pumping Started from 0810	Depth to Water (ft.)	Drawdown (ft.)
0	16.79	0
36	16.75	-0.04
118	16.56	-0.23
215	16.99	0.20
312	16.38	-1.61

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
55	18.40

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A15, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)	
0 (@0745)	12.20		
0	12.20	0	
1	13.08	0.88	
2	13.69	1.49	
3	14.36	2.16	
4	14.84	2.64	
5	15.42	3.22	
6	15.94	3.74	EW-A6 is
7	16.48	4.28	pumping
8	16.96	4.76	(pneumatic
9	17.68	5.48	cycling)
10	18.08	5.88	
11	18.08	5.88	
12	18.46	6.26	
13	18.60	6.40	
14	18.72	6.52	
15	18.72	6.52	
16	18.72	6.52	
17	18.80	6.66	
18	18.95	6.75	
19	19.05	6.85	
20	19.15	6.95	
22	19.52	7.32	
24	19.98	7.72	
26	20.70	8.50	
28	21.20	9.00	
30	21.75	9.55	
32	22.20	10.00	
34	22.60	10.40	
36	22.95	10.75	
38	23.35	11.15	
40	23.65	11.45	
45	24.36	12.16	
50	25.00	12.80	

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A15 (Cont'd), MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
55	25.45	13.25
60	26.00	13.80
70	26.72	14.52
80	27.32	15.12
90	27.72	15.52
100	28.00	15.80
110	28.10	15.90
120	28.20	16.00
130	31.60	19.40
140	34.60	22.40
150	36.75	24.55
160	37.04	24.84
170	36.94	24.74
180	36.75	24.55
195	36.60	24.40
210	36.36	24.16
225	36.10	23.90
240	35.90	23.70
260	35.65	23.45
280	35.42	23.22
300	36.03	23.83
330	36.58	24.38
360	36.70	24.50

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	36.36
2	35.54
3	34.75

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A15 (Cont'd), MARCH 3, 1999

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
4	33.95
5	33.05
6	32.95
7	32.39
8	31.96
9	31.42
10	30.95
12	30.06
14	29.13
16	28.25
18	27.42
20	26.62
25	24.42
30	23.13
35	21.44
40	20.32
50	18.32
60	16.96
118	13.17

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-E, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.25	0
35	14.36	0.11
94	14.54	0.29
164	14.67	0.42
281	14.70	0.45
333	14.71	0.46

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
115	14.37

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A14, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.42	0
31	15.31	0.89
92	16.82	2.40
162	17.93	3.51
274	18.39	3.97
341	18.45	4.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
1	18.48
118	15.18

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-D, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.82	0
31	16.00	0.18
93	16.46	0.64
163	16.78	0.96
280	16.95	1.13
334	16.99	1.17

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
2	16.99
120	16.13

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN59I, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.92	0
54	16.92	0
116	16.92	0
314	16.65	-0.27

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
128	16.51

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN59S, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	13.55	0
54	13.55	0
114	13.55	0
304	13.53	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
137	13.50

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN14I, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.89	0
53	8.89	0
113	8.88	-0.01
303	8.87	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
136	8.82

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN14S, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	11.74	0
53	11.74	0
112	11.71	-0.03
302	11.65	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
135	11.56

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A1, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.96	0
51	20.96	0
109	20.97	0.01
179	20.97	0.01
299	20.95	-0.01
356	20.95	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
124	20.93

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A2, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	21.14	0
50	21.14	0
108	21.14	0
177	21.14	0
297	21.14	0
354	21.12	-0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
123	21.11

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A3, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.96	0
49	17.96	0
107	17.97	0.01
176	17.97	0.01
296	17.98	0.02
353	17.96	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
122	17.94

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-C, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.04	0
47	16.04	0
106	16.04	0
175	16.04	0
295	16.03	-0.01
351	16.03	-0.01

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
121	16.04

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN DG1, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	10.43	0
46	10.48	0.05
105	10.50	0.07
175	10.51	0.08
294	10.57	0.14
352	10.56	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
130	10.57

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN11I, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.57	0
76	14.58	0.01
104	14.58	0.01
174	14.58	0.01
293	14.61	0.04
349	14.60	0.03

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A4, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.41	0
45	15.44	0.03
103	15.45	0.04
173	15.45	0.04
292	15.47	0.06
348	15.46	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
129	15.45

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A5, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.61	0
43	16.63	0.02
102	16.65	0.04
172	16.66	0.05
291	16.72	0.11
347	16.71	0.10

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
128	16.71

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A6, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)	
0	34.90	0	Pneumatic
42	34.80	-0.10	pump
100	34.85	-0.05	is
170	34.97	0.07	cycling
290	36.15	1.25	
346	36.00	1.10	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
127	35.90

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A7, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)	
0	33.29	0	EW-A7 is
40	33.11	-0.18	not pumping
99	33.15	-0.14	EW-A6 is
169	33.21	-0.08	pumping
289	33.90	0.61	
345	33.95	0.66	

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
123	34.82

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A9, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	28.44	0
38	28.39	-0.05
97	28.41	-0.03
168	28.44	0
285	29.02	0.58
343	28.92	0.48

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
122	28.83

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A10, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	19.17	0
37	19.17	0
96	19.19	0.02
167	19.22	0.05
284	19.42	0.25
343	19.39	0.22

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
121	19.30

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A12, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	14.00	0
36	14.00	0
95	14.01	0.01
165	14.03	0.03
283	14.07	0.07
342	14.05	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
120	14.04

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN DG26, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.45	0
42	9.46	0.01
116	9.45	0
187	9.45	0
255	9.46	0.01
328	9.45	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
42	9.44
88	9.41
117	9.41

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN DG12, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	8.28	0
41	8.28	0
115	8.30	0.02
177	8.34	0.06
254	8.36	0.08
327	8.37	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
40	8.37
86	8.35
116	8.29

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN55S, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.86	0
19	17.86	0
94	17.86	0
159	17.85	-0.01
233	17.86	0
308	17.86	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
18	17.86
65	17.85

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-03, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	20.95	0
21	20.95	0
95	20.96	0.01
160	20.95	0
235	20.96	0.01
310	20.95	0

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
20	20.95
66	20.93

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A11, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.23	0
23	18.23	0
96	18.25	0.01
161	18.25	0.01
238	18.26	0.02
312	18.26	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
22	18.27
68	18.25

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN EW-A13, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.88	0
25	18.90	0.02
99	18.92	0.04
163	18.91	0.03
239	18.93	0.05
314	18.93	0.05

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
24	18 93
70	18.90

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-02, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	18.05	0
26	18.05	0
101	18.06	0.01
165	18.08	0.03
240	18.10	0.05
315	18.11	0.06

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	18.11
72	18.11

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN17S, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	12.70	0
28	12.71	0.01
105	12.75	0.05
165	12.77	0.07
242	12.79	0.09
316	12.79	0.09

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
26	12.79
75	12.77

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN SMP2, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	16.77	0
32	16.77	0
108	16.77	0
169	16.79	0.02
246	16.79	0.02
320	16.79	0.02

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
32	16.79
78	16.80

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN82S, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.27	0
35	9.25	-0.02
109	9.25	-0.02
172	9.26	-0.01
248	9.27	0
322	9.24	-0.03

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
34	9.25
80	9.22

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-04, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	7.76	0
36	7.75	-0.01
111	7.77	0.01
174	7.75	-0.01
250	7.74	-0.02
324	7.72	-0.04

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
35	7.72
83	7.70

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN MW-07, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	9.19	0
38	9.19	0
112	9.17	-0.02
175	9.16	-0.03
252	9.16	-0.03
325	9.12	-0.07

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
36	9.12
84	9.11

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN HN12I, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	15.27	0
44	15.30	0.03
118	15.35	0.08
182	15.40	0.13
257	15.44	0.17
330	15.40	0.13

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
44	15.40
90	15.35

TABLE 8-15

NAVAL AIR WARFARE CENTER, WARMINSTER, PA
AREA A EXTRACTION WELL YIELD TESTS
OF EW-A15 AT 3 GPM
WATER LEVEL MEASUREMENTS IN BG4, MARCH 3, 1999

Time in Minutes Since Pumping Started from 0800	Depth to Water (ft.)	Drawdown (ft.)
0	17.61	0
46	17.61	0
119	17.65	0.04
185	17.66	0.05
258	17.69	0.08
331	17.69	0.08

Time in Minutes Since Pumping Stopped	Depth to Water (ft.)
46	17.70
92	17.70

TABLE 8-16

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A1 1/22/99

Well ID	Distance (r)	Max. DD (ft)
HN-55S	78	1.83
HN-55I	88	2.93
EW2	101	2.89
MW03	122	1.41
HN-59S	133	2.15
C	185	0.53
EWE3	190	2.45
DG12	217	0.4
HN-11I	217	2.05
EW-A4	228	2.03
EW-A5	271	1.12
EW-A6	294	0.77
HN-14I	316	1.59
HN-14S	334	0.01
OW-A2	341	0.15
MW02	368	0.84
D	378	0.2
E	383	0.5
BG4	427	0.33
HN-12I	467	0.06
DG26	571	0.03
DG12	582	0.02
HN-82S	682	0.03
MW07	727	0.02
MW04	730	0.02
HN-17I	751	0.05
HN-17S	768	0.05

TABLE 8-17

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A2 1/14/99

Well ID	Distance (r)	Max. DD (ft)
EWA6	171	0.96
EWA5	132	1.8
EWA4	108	2.53
HN11I	108	2.57
DG1	75	0.47
C	46	0.7
EW3	81	2.98
HN14I	359	1.97
HN59S	203	2.49
HN55S	182	0.35
HN55I	157	1.54
NW03	196	0.9
NW02	395	1.11
SMP2	369	0.24
HN12I	331	0.01
DG4	298	0.32
E	238	0.51
D	232	0.23
OWA2	230	0.22

TABLE 8-18

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A3 1/6/99

Well ID	Distance (r)	Max. DD (ft)
EW-A3	0	5.14
EW-A4	27	3.61
OW-A2	27	0.11
HN-11I	27.5	3.61
MWC	28	1.04
DGOT	31	0.29
EW-A5	52	2.09
MWD	182	0.17
MWE	183	0.45
HN-55I	227	2.26
HN-55S	230	0.2
HN-59I	240	0.67
HN-59S	245	1.8
BG4	250	0.24
HN-12I	268	0.02
HN-14S	375	0.03
HN-14I	385	1.38
DG-26	385	0.01
MW-02	410	0.92
HN-82S	570	0.02
HN-17I	768	0.01
HN-17S	783	0.07

TABLE 8-19

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A4 12/22/98

Well ID	Distance (r)	Max. DD (ft)
BG4	225	0.12
C	47	0.14
D	165	0.11
DG12	370	0.05
DG26	360	0.01
E	160	0.14
HN11D	15	0.24
HN12D	248	0.2
HN12I	255	0.06
HN14I	413	0.34
HN14S	420	0.02
HN17I	940	0.24
HN17S	945	0.19
HN55I	263	0.54
HN55S	268	0.05
HN59S	270	0.42
HN82I	563	0.22
HN82S	570	0.08
MW02	420	0.38
MW03	263	0.07
MW04	550	0.1
MW07	545	0.18
OWA2	140	0.13

TABLE 8-20

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A5 1/7/99

Well ID	Distance (r)	Max. DD (ft)
HN-55S	283	0.11
HN-55I	285	0.27
EW-A3	50	0.51
MW-03	284	0.14
HN-59S	302	0.21
DG1	39	0.38
SMP2	336	0.08
HN-11I	34	1.3
EW-A4	25	1.41
HN-14I	430	0.16
OW-A2	96	0.12
MW-02	427	0.27
D	130	0.12
E	144	0.14
BG4	106	0.08
HN-12I	233	0.03
DG26	333	0.06
DG12	337	0.02
HN-82S	559	0.05
MW-07	525	0.06
MW-04	331	0.04
HN-17I	792	0.12
HN-17S	803	0.1

TABLE 8-21

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A6 1/18/99

Well ID	Distance (r)	Uncorrected Drawdown	Corrected* Max. DD (ft)
EWA5	35	0.05	0.35
EWA4	73	-0.13	0.13
HN11I	84	-0.24	0.06
D	92	-0.13	0.17
E	100	-0.16	0.14
C	83	-0.14	0.12
OWA2	75	-0.13	0.17
HN12I	205	-0.16	0.13

* Recharge correction = 0.05 ft/hr

TABLE 8-22

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A7 1/27/99

Well ID	Distance (r)	Max. DD (ft)
HN-55S	329	0.01
HN-55I	334	0.01
EW-A2	178	0.01
MW-03	333	0.01
HN-11I	84	0.01
EW-A4	83	0.12
EW-A5	45	0.4
OW-A2	68	0.24
MW-02	467	0.87
D	82	0.28
E	92	0.18
BG4	163	0.18
HN-12I	197	0.07
DG26	270	0.18
DG1	88	0.02
EW-A3	101	0.02
SMP2	342	0.02

TABLE 8-23

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A8 (First Test) 1/29/99

Well ID	Distance (r)	Max. DD (ft)
OWA2	398	0.09
HN-55S	32	4.7
HN-55I	38	1.1
EW-A2	163	0.37
MW03	85	1.48
HN-59S	187	0.31
SMP2	424	0.09
EWA7	347	0.14
DG12	623	0.02
HN-11I	309	0.28
EW-A4	271	0.27
EW-A5	291	0.14
EW-A6	336	0.12
HN-14I	373	0.23
HN-14S	386	0.02
DG1	276	0.06
MW02	336	0.11
D	432	0.1
E	411	0.12
BG4	457	0.11
HN-12I	491	0.02
DG26	622	0.03
C	237	0.09
HN-82S	675	0.03
MW07	741	0.04
MW04	753	0.04
EW-A3	241	0.35
HN-17S	732	0.03
EW-A1	98	0.51

TABLE 8-23a

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A8 (Second Test) 2/8/99

Well ID	Distance (r)	Max. DD (ft)
BG4	457	0.17
OWA2	398	0.06
D	432	0.07
E	411	0.19
DG26	622	0.03
DG12	623	0.01
MW04	753	0.04
SMP2	424	0.12
HN55I	38	1.11
EWA7	347	0.2
EWA6	336	0.2
EWA5	291	0.2
EWA4	271	0.71
EWA9	372	0.16
HN11I	309	0.73
C	237	0.21
EWA3	241	0.9
EWA2	163	1
EWA1	98	1.06
HN14S	386	0.02
HN14I	373	0.6
HN59S	187	0.83
MW03	86	1.6

TABLE 8-24

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A9 2/4/99

Well ID	Distance (r)	Max. DD (ft)
EWA5	78	0.59
EWA4	136	0.3
HN11I	103	0.2
OWA2	42	0.47
EWA3	120	0.07
EWA2	197	0.02
D	64	0.31
E	91	0.25
BG4	165	0.04
HN12I	192	0.01
DG26	264	0.06
DG12	269	0.02

TABLE 8-25

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A10 2/11/99

Well ID	Distance (r)	Max. DD (ft)
EWA5	81	0.68
EWA4	117	0.42
HN11I	123	0.42
EWA3	158	0.11
DG1	129	0.1
EWA2	251	0.06
EWA1	348	0.05
HN59S	385	0.02
EWA8	371	0.04
HN55I	375	0.05
EWA6	47	6.25
OWA2	42	1.59
EWA9	13	9.05
EWA7	35	9.04
SMP2	343	0.04
MW02	483	0.04
BG4	141	0.1
E	73	0.51
D	35	1.03

TABLE 8-26

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A11 2/16/99

Well ID	Distance (r)	Max. DD (ft)
EWA5	353	1.47
EWA4	332	1.61
HN11I	347	1.59
DG1	349	0.38
C	328	0.35
EWA3	311	1.78
EWA2	275	1.51
EWA1	234	0.93
HN14I	538	0.93
HN59S	351	1.27
HN59I	342	0.09
EWA8	185	1.49
HN55S	160	1.28
HN55I	150	1.66
MW03	109	1.23
SMP2	306	1.52
MW02	149	5.24
E	423	2.22
EWA9	420	2.58
EWA7	310	2
EWA6	386	1.92
HN12I	371	0.07
BG4	442	1.87
D	463	0.58
OWA2	451	0.29

TABLE 8-27

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A12 2/18/99

Well ID	Distance (r)	Max. DD (ft)
OWA2	41	1.02
EWA10	40	1.01
EWA9	52	0.6
D	28	1.3
E	74	0.2

TABLE 8-28

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A13 2/22/99

Well ID	Distance (r)	Max. DD (ft)
MW02	21	0.98
EWA11	200	0.5
BG4	450	0.24
E	450	0.1

TABLE 8-29

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT OW-A14 2/24/99

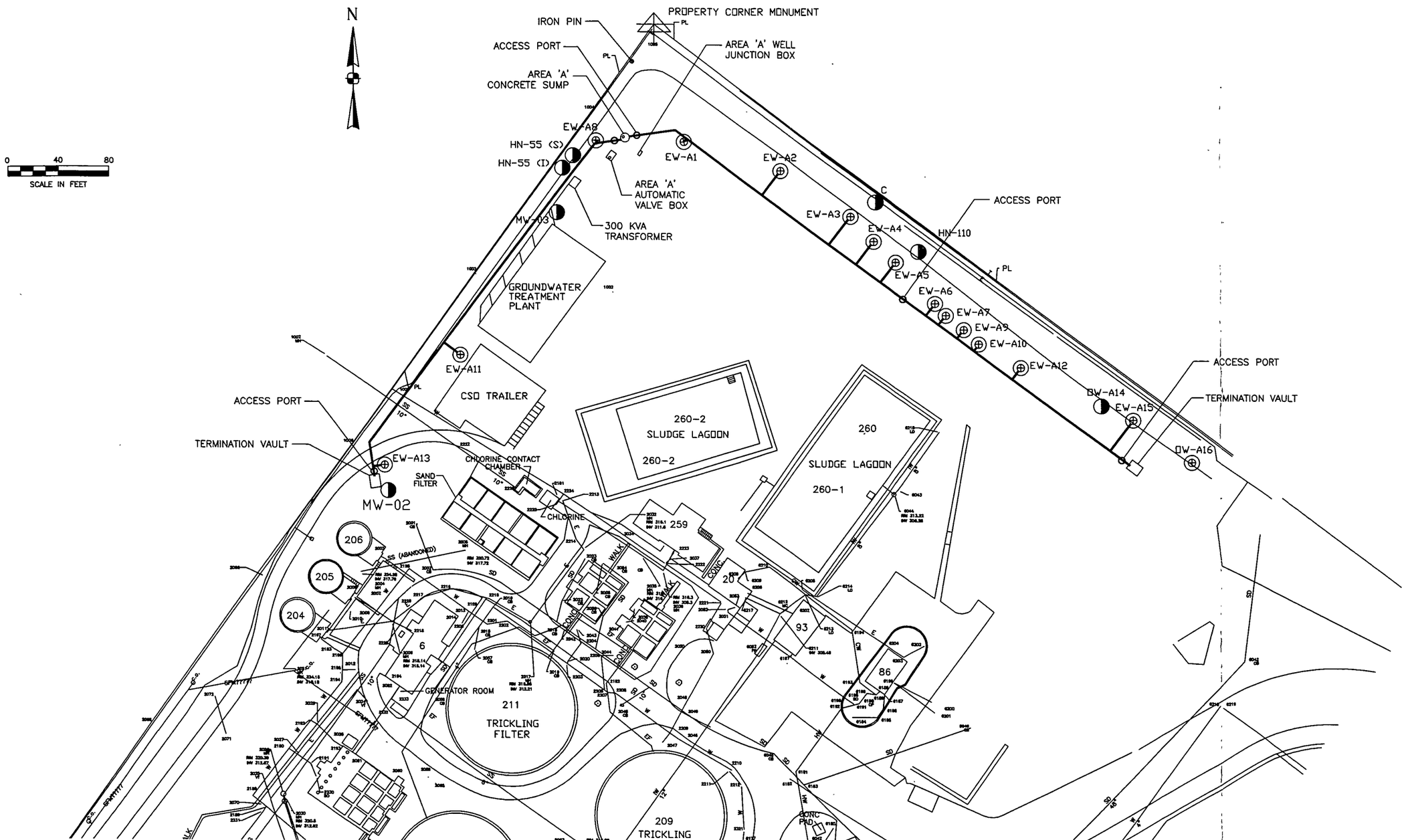
Well ID	Distance (r)	Max. DD (ft)
D	33.5	3.01
E	83.9	0.77
OWA2	76.2	0.39
EWA12	70.4	0.23
EWA5	150	0.55
EWA4	190	0.23
HN11I	195	0.23
DG1	200	0.12

TABLE 8-30

DRAWDOWN VERSUS DISTANCE FROM PUMPING WELL AT END OF YIELD TEST AT EW-A15 3/3/99

Well ID	Distance (r)	Max. DD (ft)
DG12	141	0.1
EWA14	29	4.03
D	63	1.17
E	101	0.46
EWA12	109	0.07
EWA10	143	0.25
EWA9	166	0.58
EWA7	182	0.66
EWA6	192	1.25
EWA5	213	0.11
EWA4	230	0.06
HN11I	229	0.04
DG1	232	0.05
EWA13	571	0.05
MW02	577	0.06
HN17S	913	0.09
HN12I	149	0.17
BG4	148	0.08

REV.	DESCRIPTION	PREP BY	DATE	APPRVD



FOSTER WHEELER ENVIRONMENTAL

DSGN: DR: CH ENG: CNC:

SUPR: SUBMITTED BY: (FROM HOURLY) (TITLE) (DATE)

NORTHDIV DN: HD: HD: DR: FPE:

OFFICER IN CHARGE DATE

APPROVED

NAVAL FACILITIES ENGINEERING COMMAND

NORTHERN DIVISION

DEPARTMENT OF THE NAVY

LESTER PENNSYLVANIA

NAWC – Warminster, PA
Figure 1-1
Area A Extraction Well Network

DATE

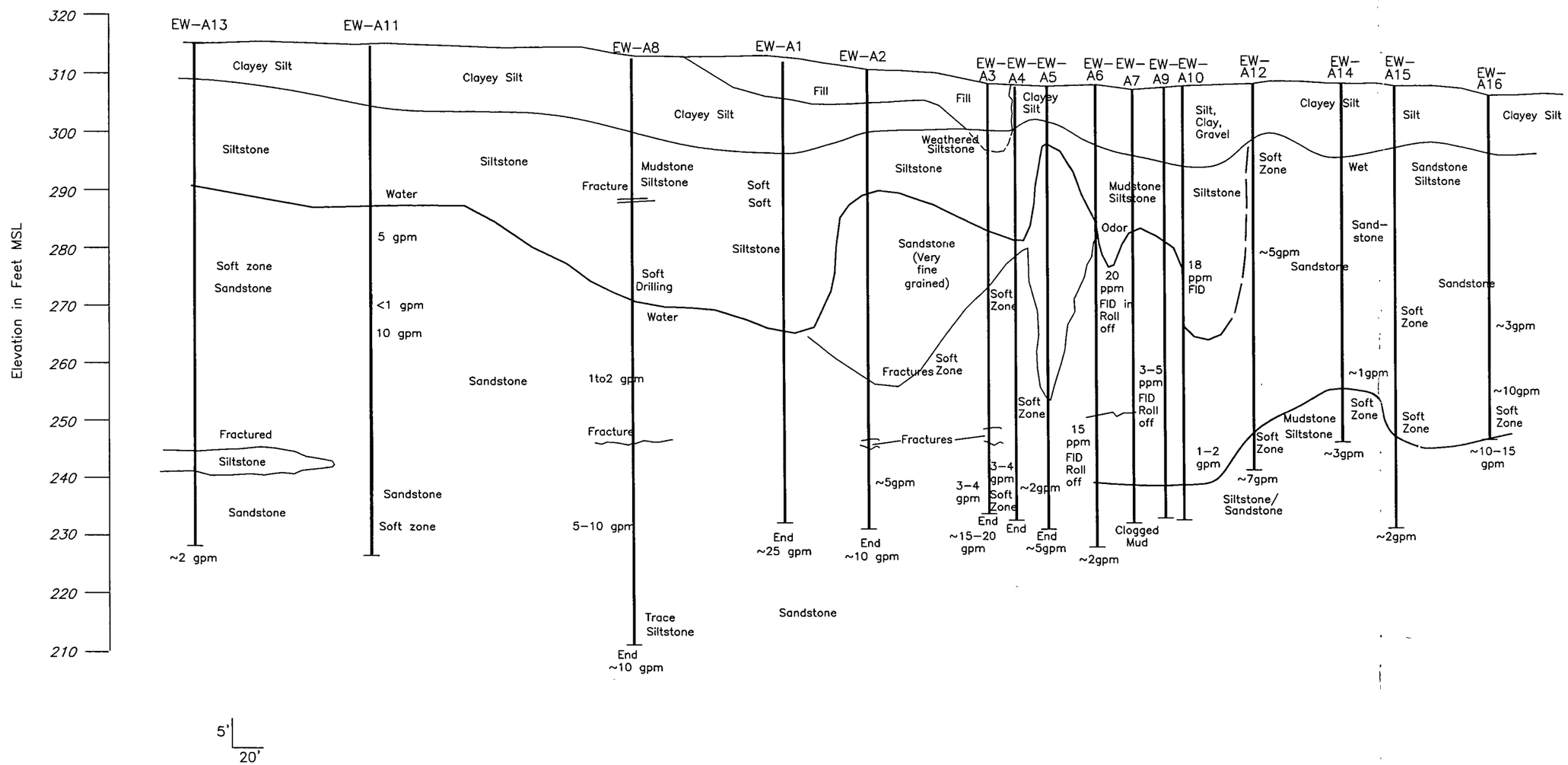
APPROVED NORTHDIV FOR COMMANDER, NAVFAC

SEAL AREA

SAT TO DATE

CODE I.D. NO.	80091
SCALE :	N.T.S.
SPEC. NO.	04–
CONSTRN. CONTR. NO.	
NAVFAC DRAWING NO.	
SHEET	OF
SIZE: B	DIS. SH. NO.

DATE CREATED
LATEST CHANGE
CHANGED BY:



Area "A" Extraction Wells

Figure 1–2

FOSTER WHEELER ENVIRONMENTAL

DSGN: DR: CHK:
SUPV: CH. ENG:
SUBMITTED BY: (TRIM MEMBER) (TITLE) (DATE)
NORTHDIV DIR. HD: HD: DIR:
FPC:
OFFICER IN CHARGE
APPROVED DATE

NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
DEPARTMENT OF THE NAVY
LESTER PENNSYLVANIA

Figure 1–2
NAWC – Warminster, PA
Cross Section – Area 'A'

APPROVED NORTHDIV FOR COMMANDER, NAVFAC
DATE

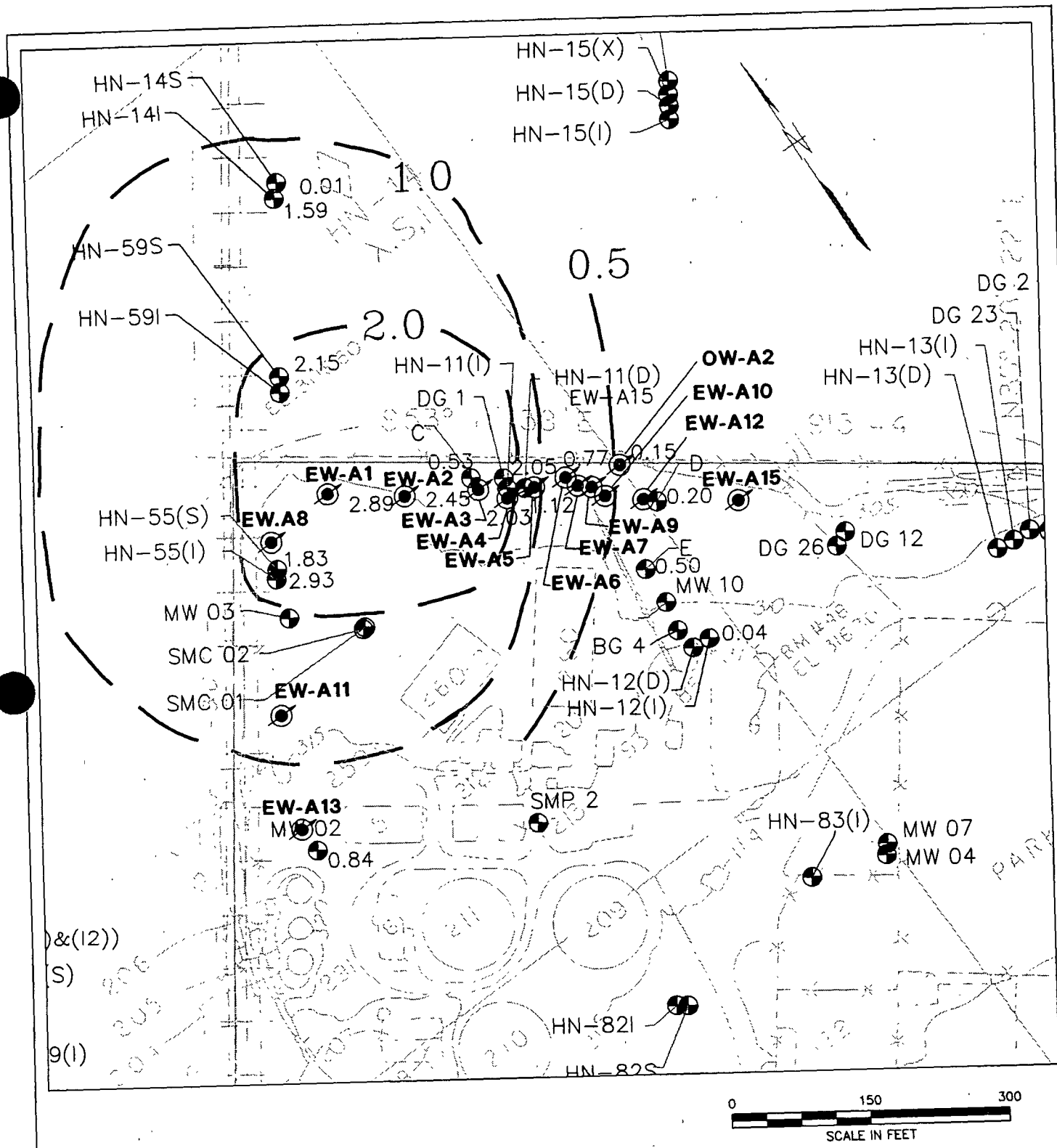
SEAL AREA

SAT TO DATE

CODE I.D. NO.	80091
SCALE :	N.T.S.
SPEC. NO.	04–
CONSTRN. CONTR. NO.	
NAVFAC DRAWING NO.	
SHEET	OF
SIZE: B	DIS. SH. NO.

DATE CREATED
LATEST CHANGE
CHANGED BY:

Warminster/Pipeline/Area-a/xsecs.dwg



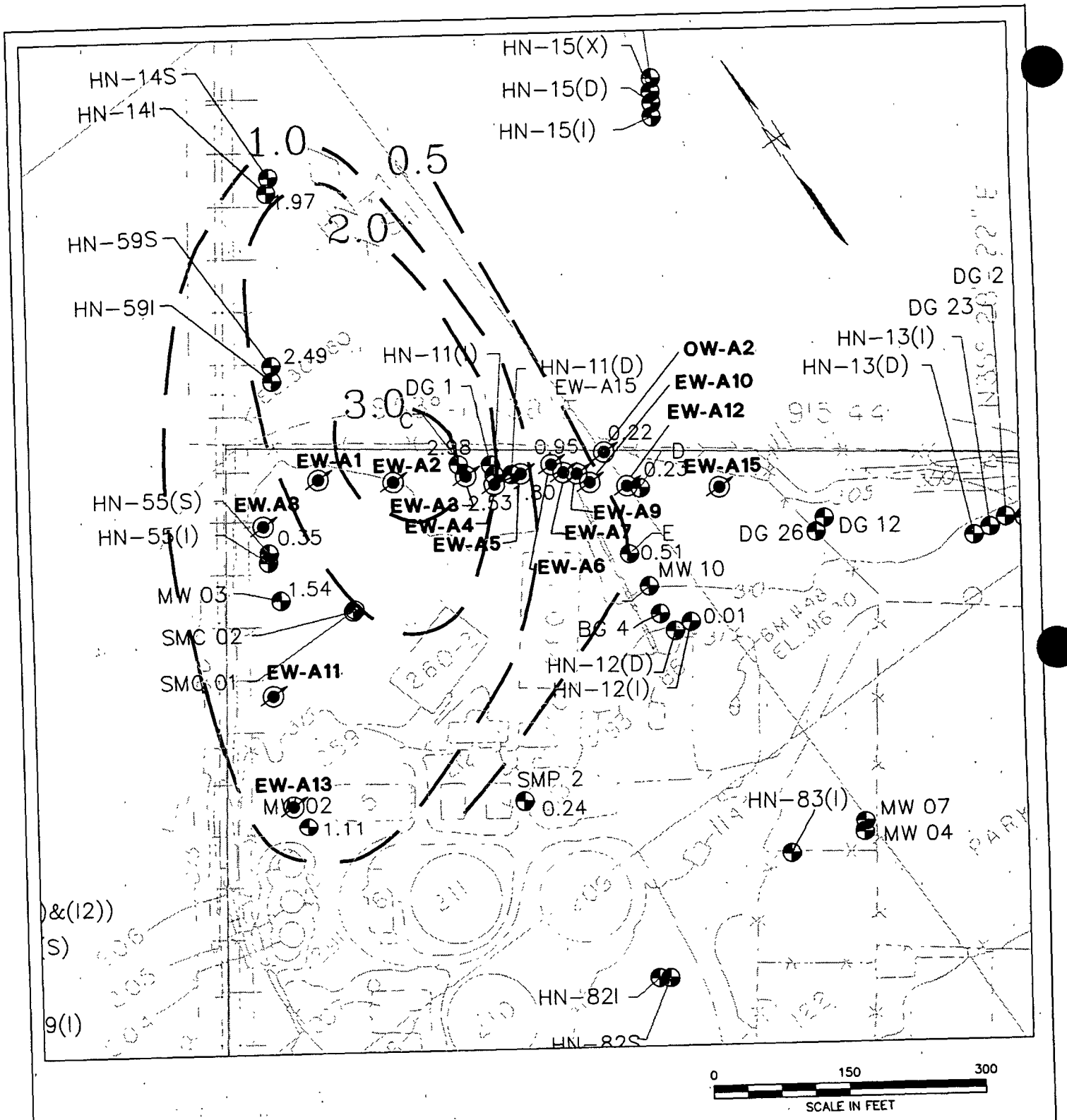
CADD FILE: warminster\pipeline\A3-1

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-1

Maximum Drawdown During Yield Test @EW-A1
15 gpm 1/22/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



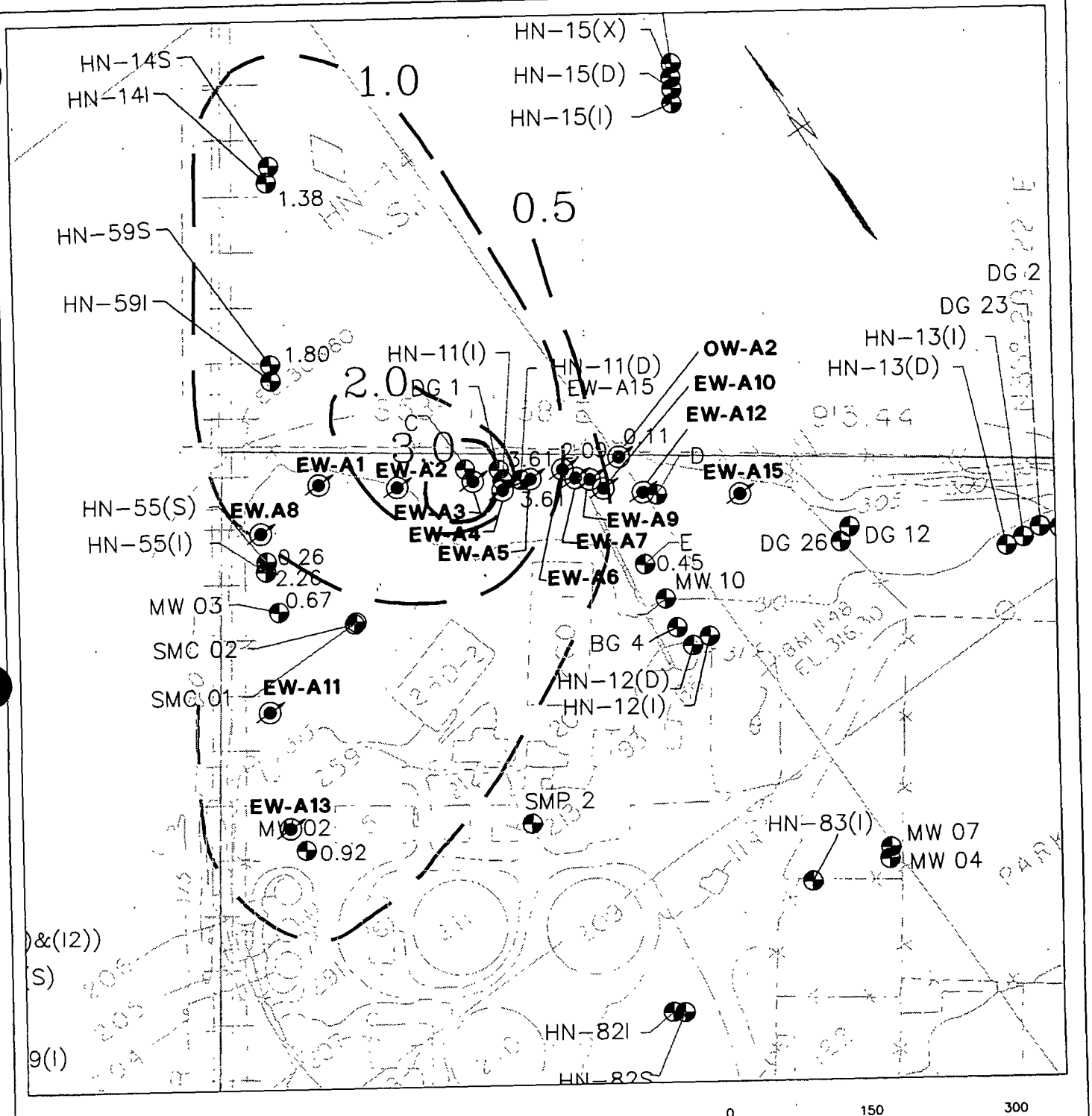
CADD FILE: warminster\pipeline\A3-2

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-2

Maximum Drawdown During Yield Test @EW-A2
12.5 gpm 1/14/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



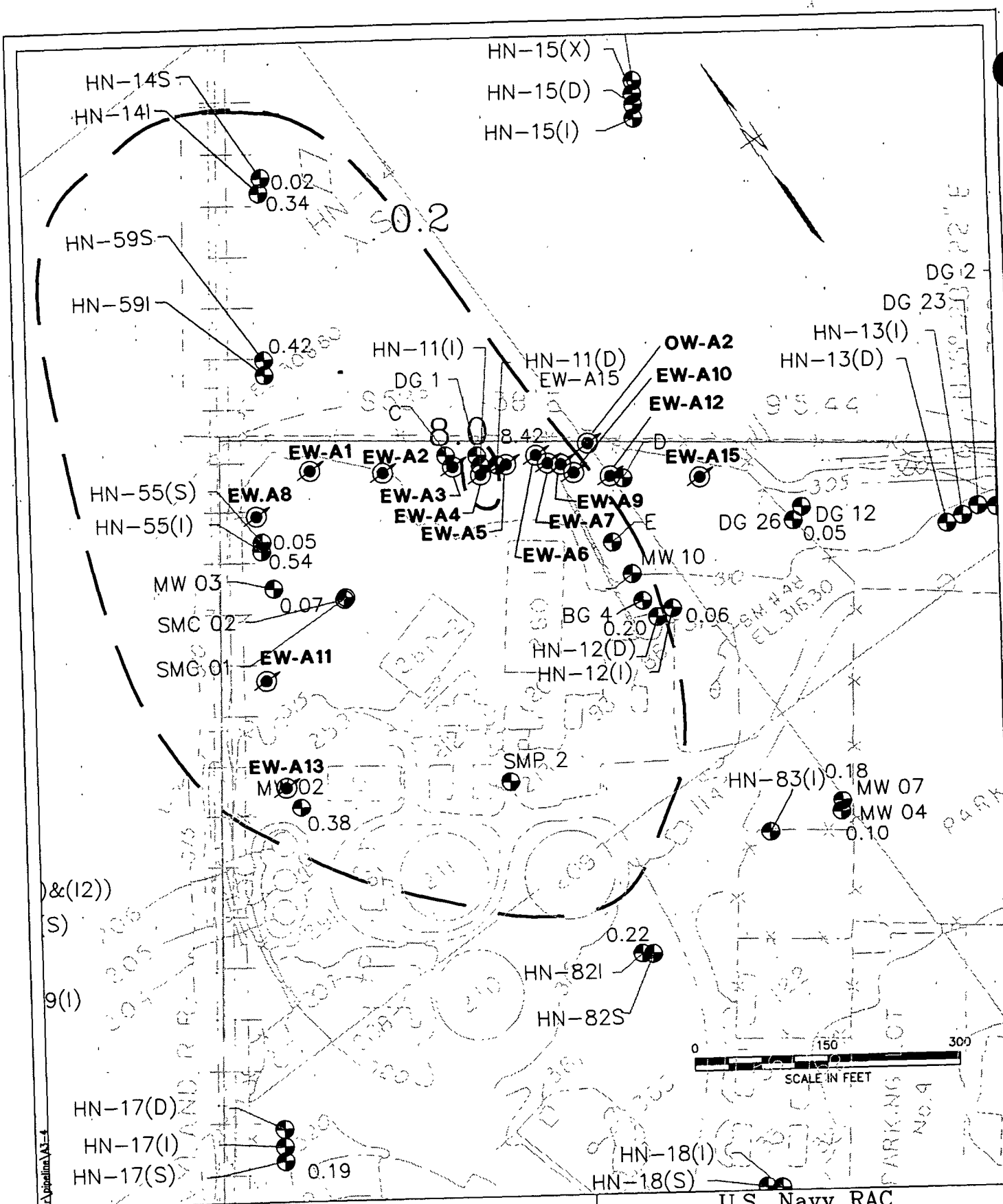
CADD FILE: warminster\pipeline\A3-3

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-3

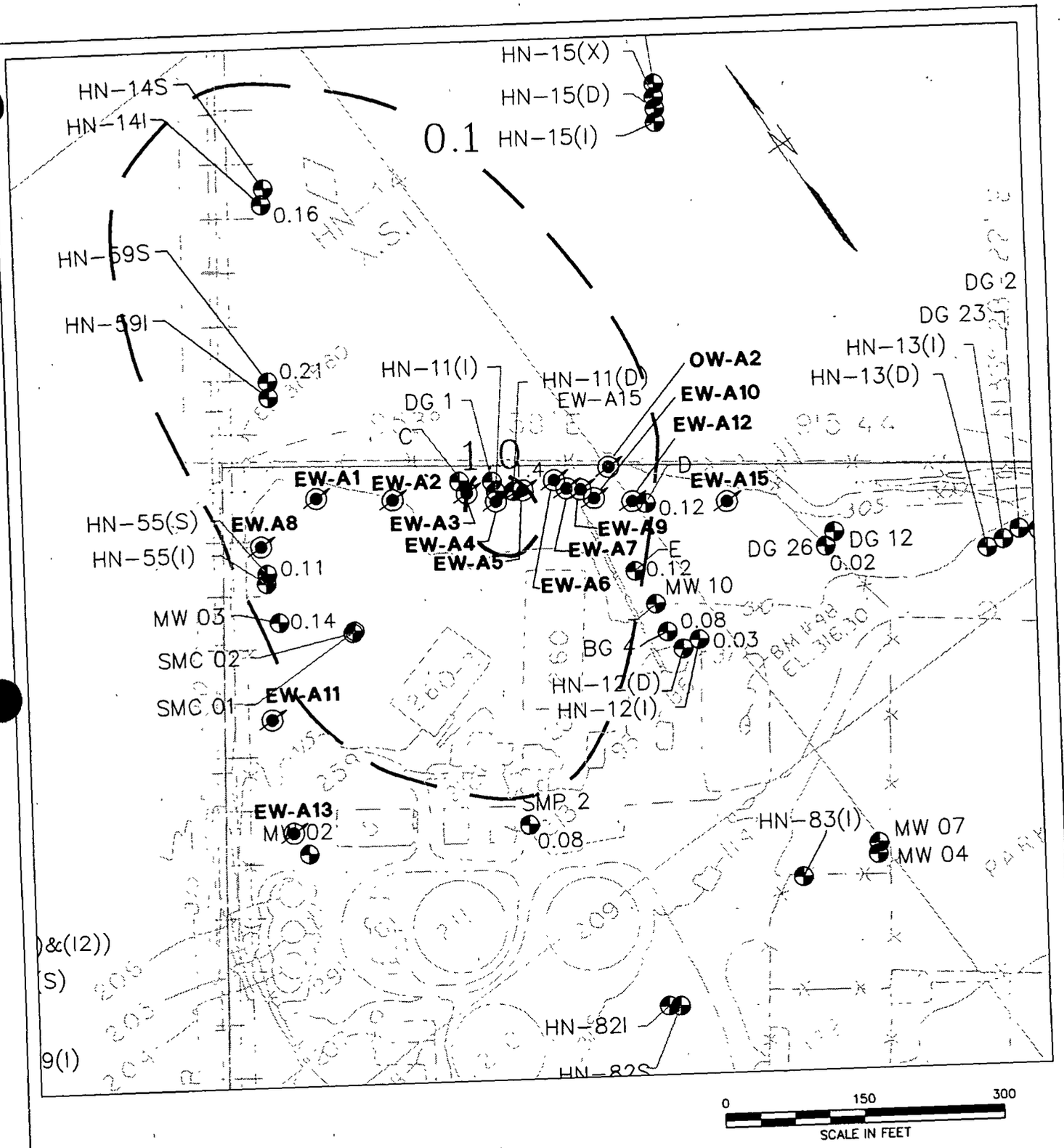
Maximum Drawdown During Yield Test @EW-A3
10 gpm 1/6/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



CADD FILE: warminster\pipeline\A3-4

U.S. Navy RAC
NAWC WARMINSTER - AREA A
Figure 3-4
Maximum Drawdown During Yield Test @EW-A4
3 gpm 12/22/98
FOSTER WHEELER ENVIR NMENTAL CORPORATION



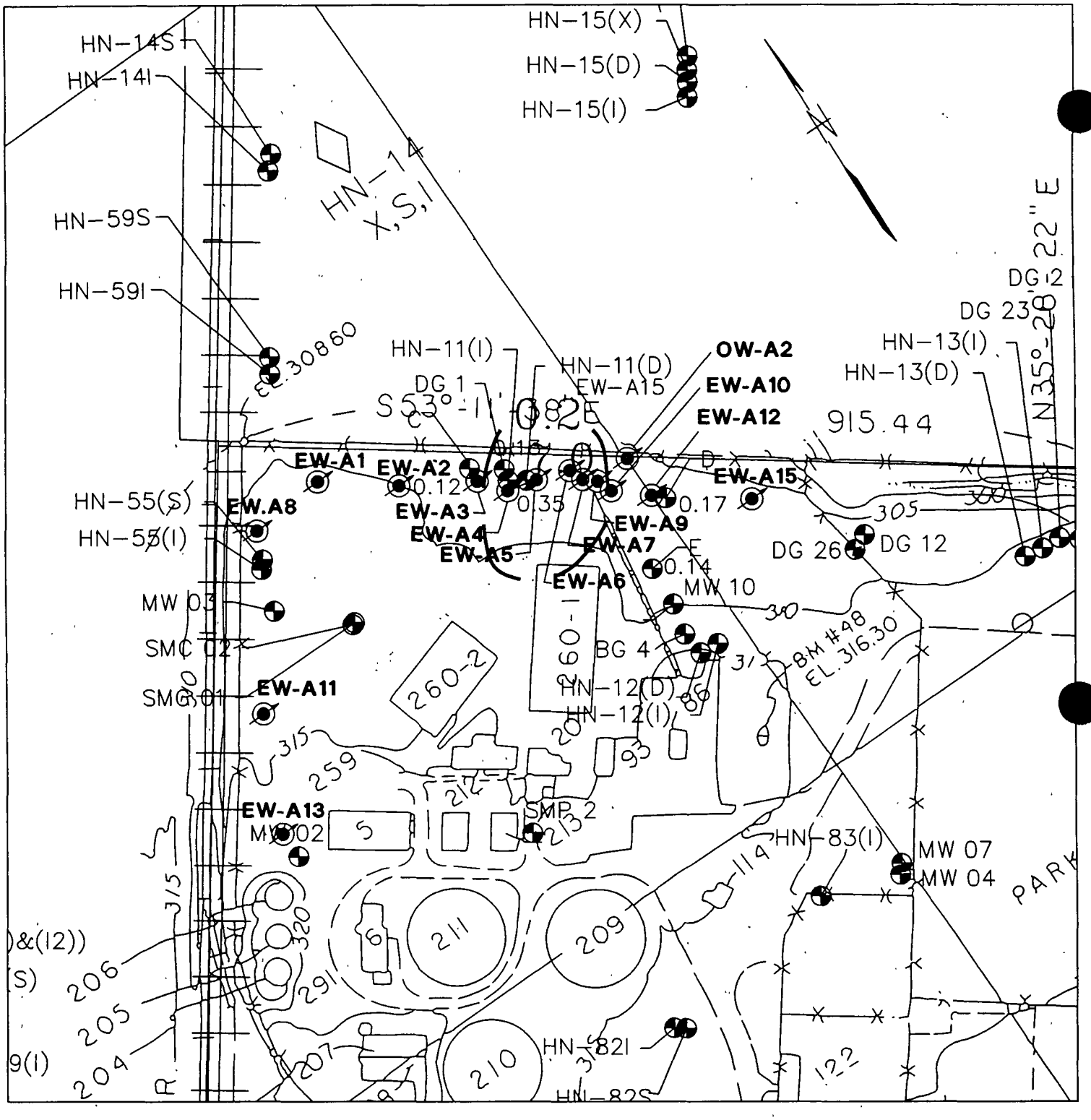
CADD FILE: warminster\pipeline\A3-5

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-5

Maximum Drawdown During Yield Test @EW-A5
2 gpm 1/7/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



0 150 300

SCALE IN FEET

CADD FILE: warminster\pipeline\A3-6

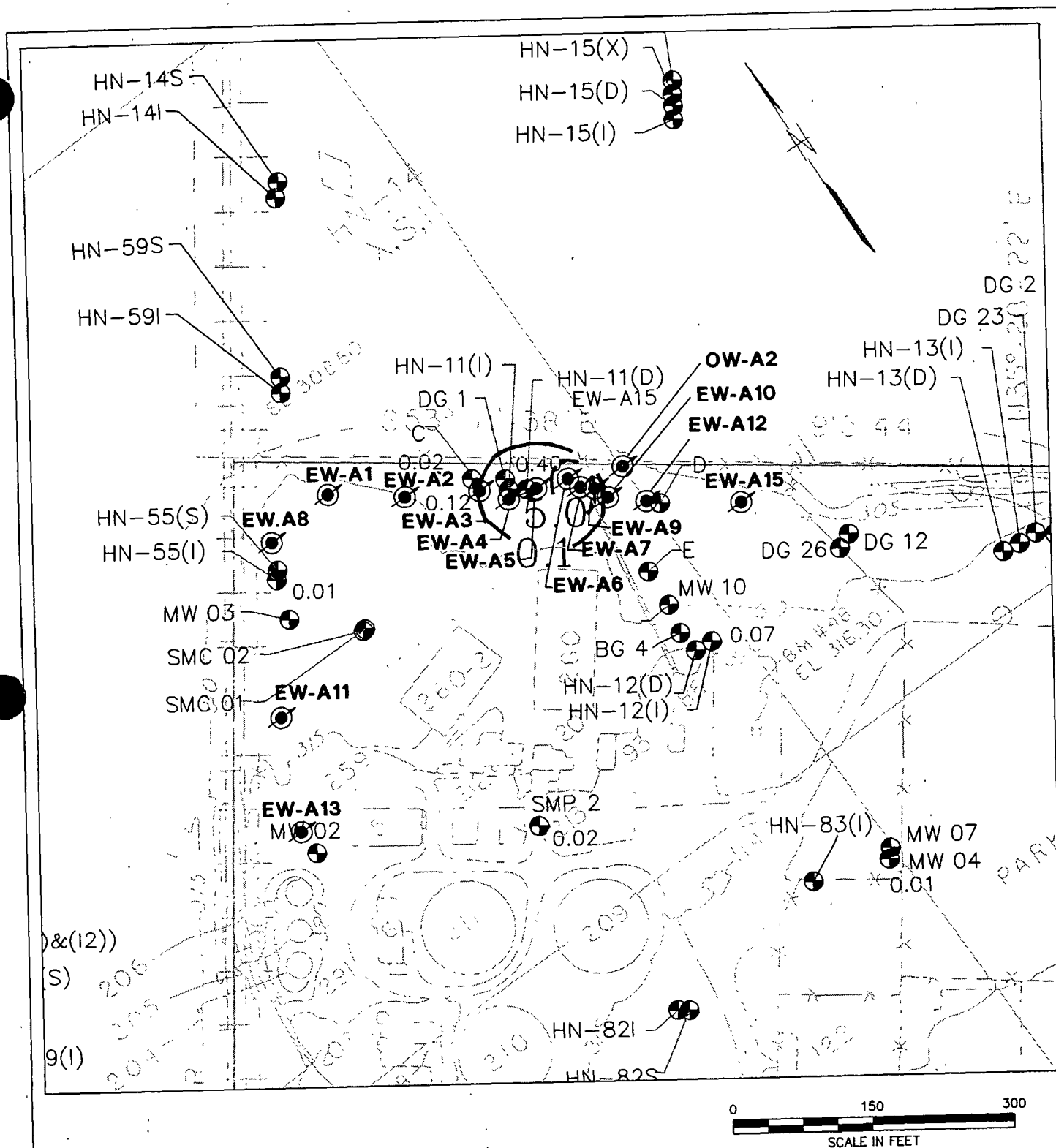
U.S. Navy RAC

NAWC WARMINSTER – AREA A

Figure 3-6

Maximum Drawdown During Yield Test @EW-A6
1.1 gpm 1/18/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION

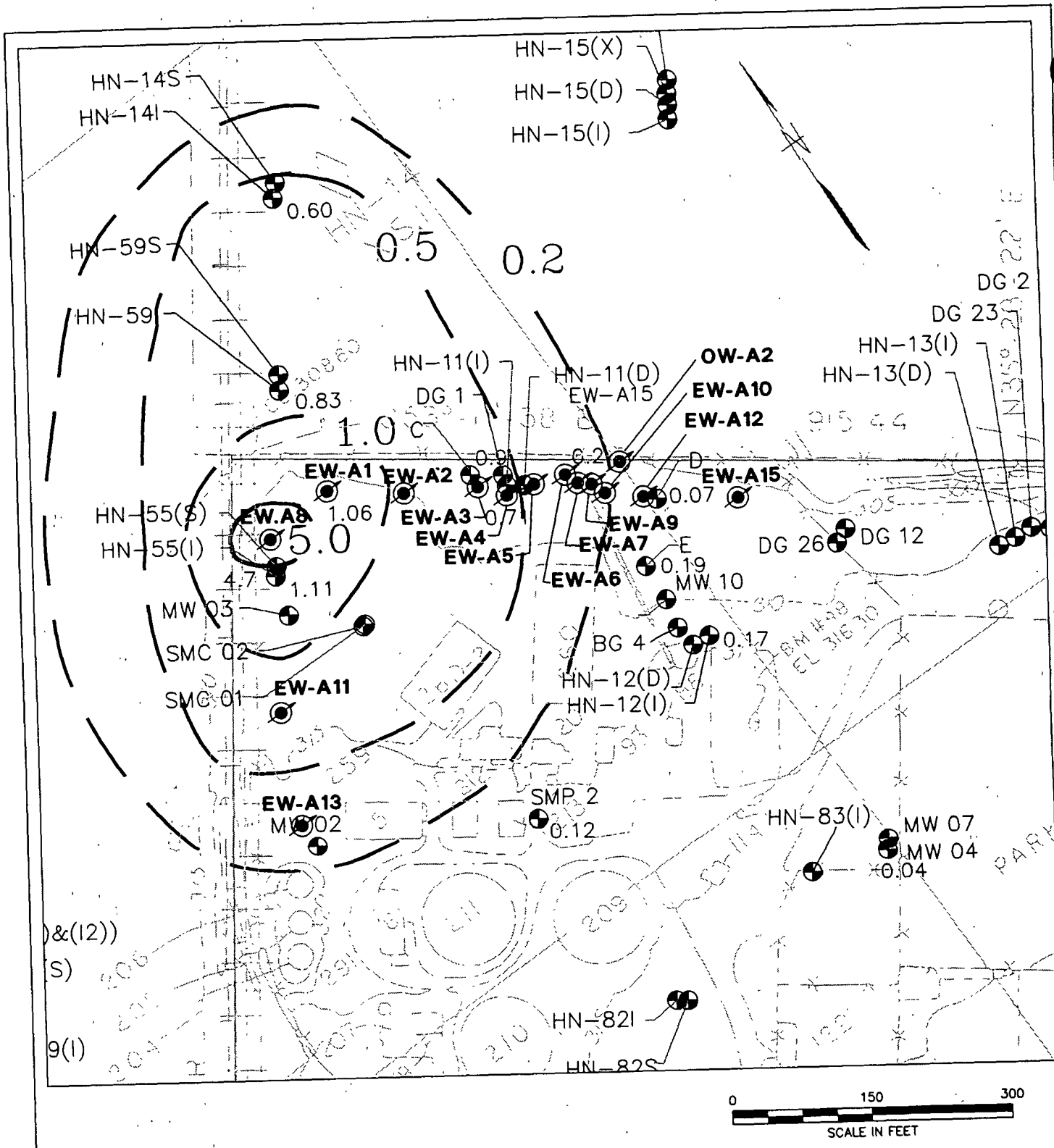


CADD FILE: warminster\pipeline\A3-7

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-7
Maximum Drawdown During Yield Test @EW-A7
1 gpm for 4.5 hr & 2.5 gpm for 1.5 hr
1/29/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



CADD FILE: warminster\pipeline\A3-8

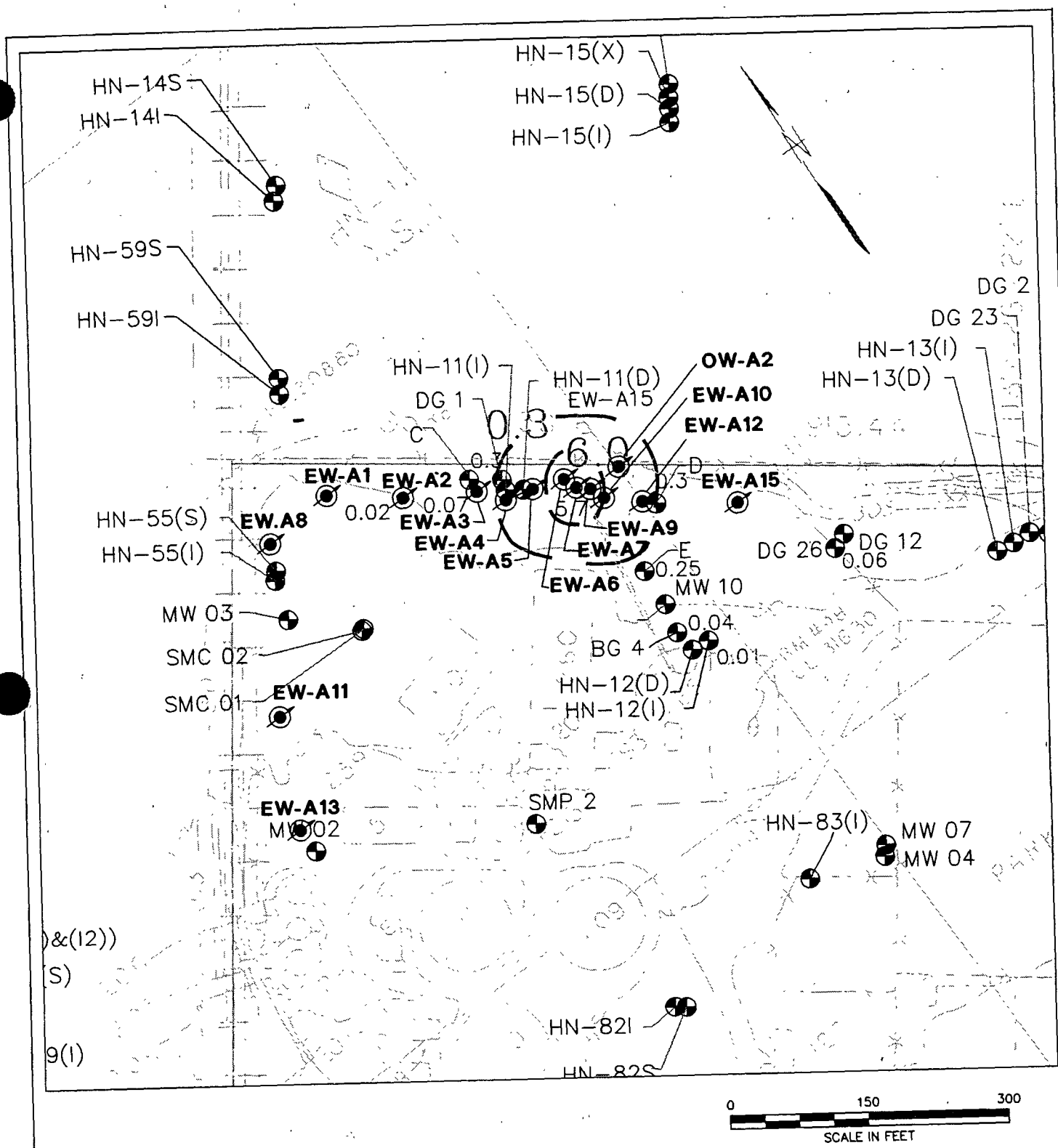
U.S. Navy RAC

NAWC WARMINSTER – AREA A

Figure 3-8

Maximum Drawdown During Yield Test @EW-A8
8 gpm 2/8/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



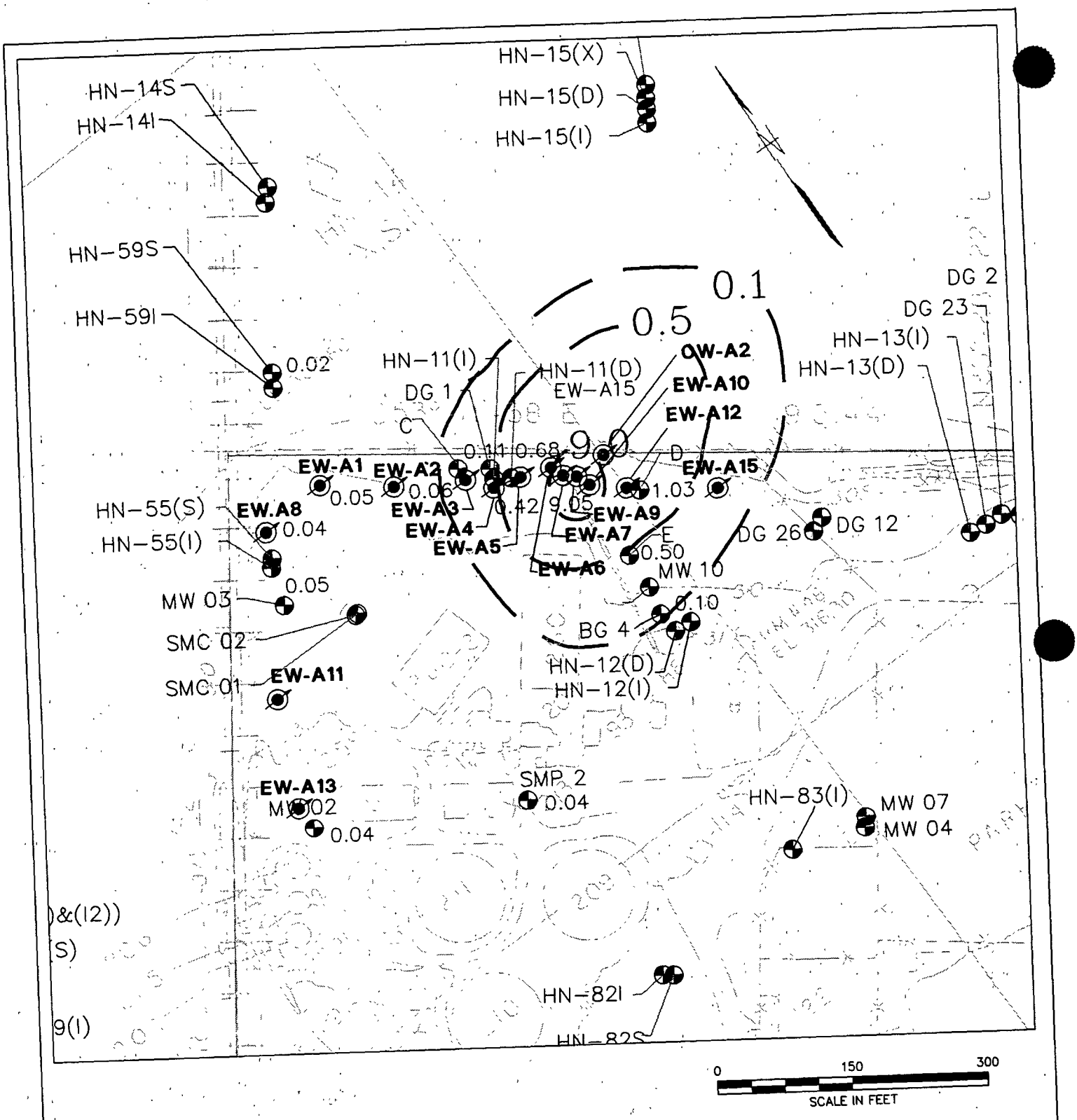
CADD FILE: warminster\pipeline\A3-9

U.S. Navy RAC
NAWC WARMINSTER - AREA A

Figure 3-9

Maximum Drawdown During Yield Test @EW-A9
1.4 gpm (average) 2/4/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



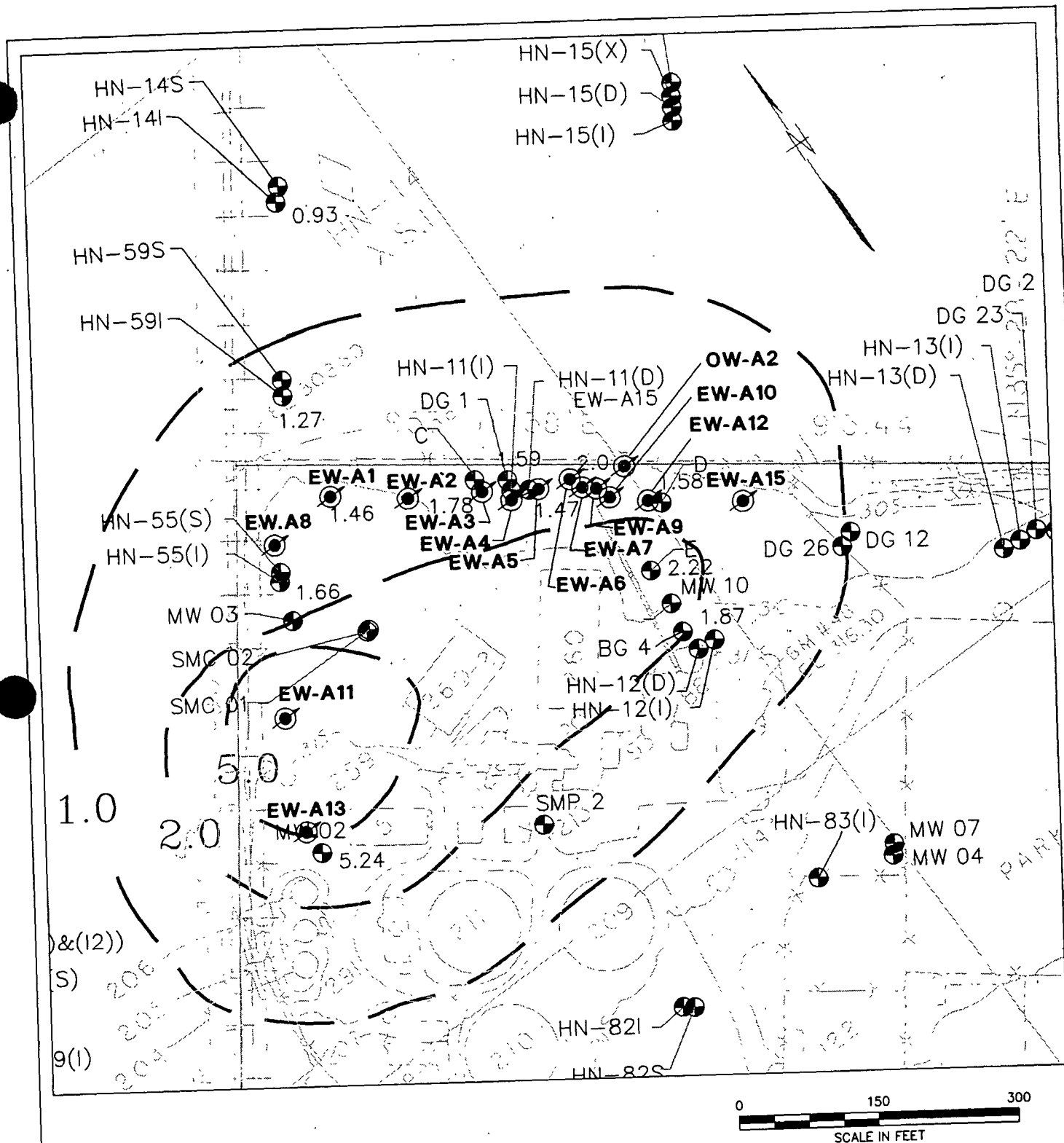
CADD FILE: warminster\pipeline\A3-10

U.S. Navy RAC
NAWC WARMINSTER - AREA A

Figure 3-10

Maximum Drawdown During Yield Test @EW-A10
5 gpm 2/11/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



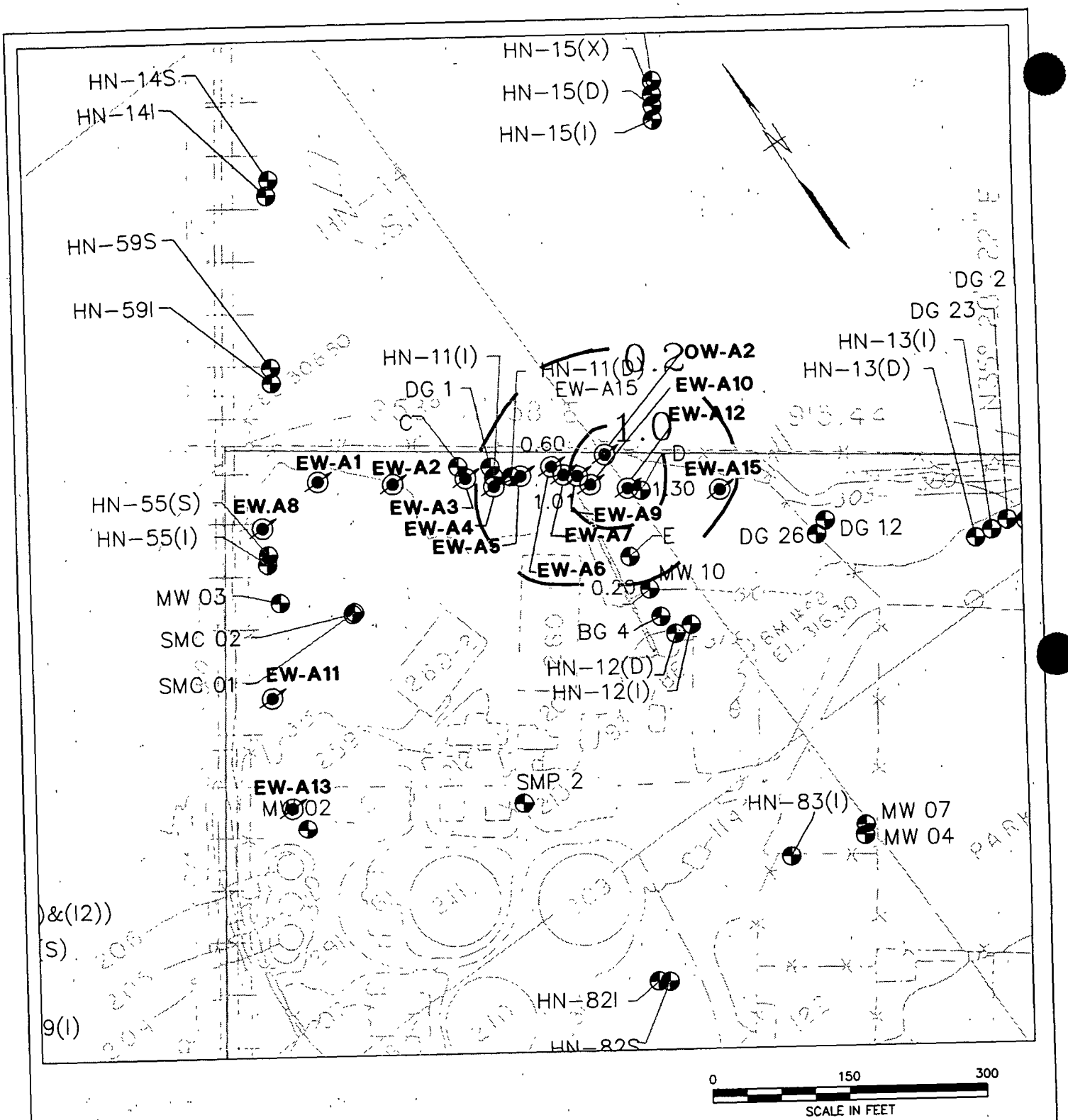
CADD FILE: warminster\pipeline\A3-11

U.S. Navy RAC
NAWC WARMINSTER - AREA A

Figure 3-11

Maximum Drawdown During Yield Test @EW-A11
15 gpm 2/16/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



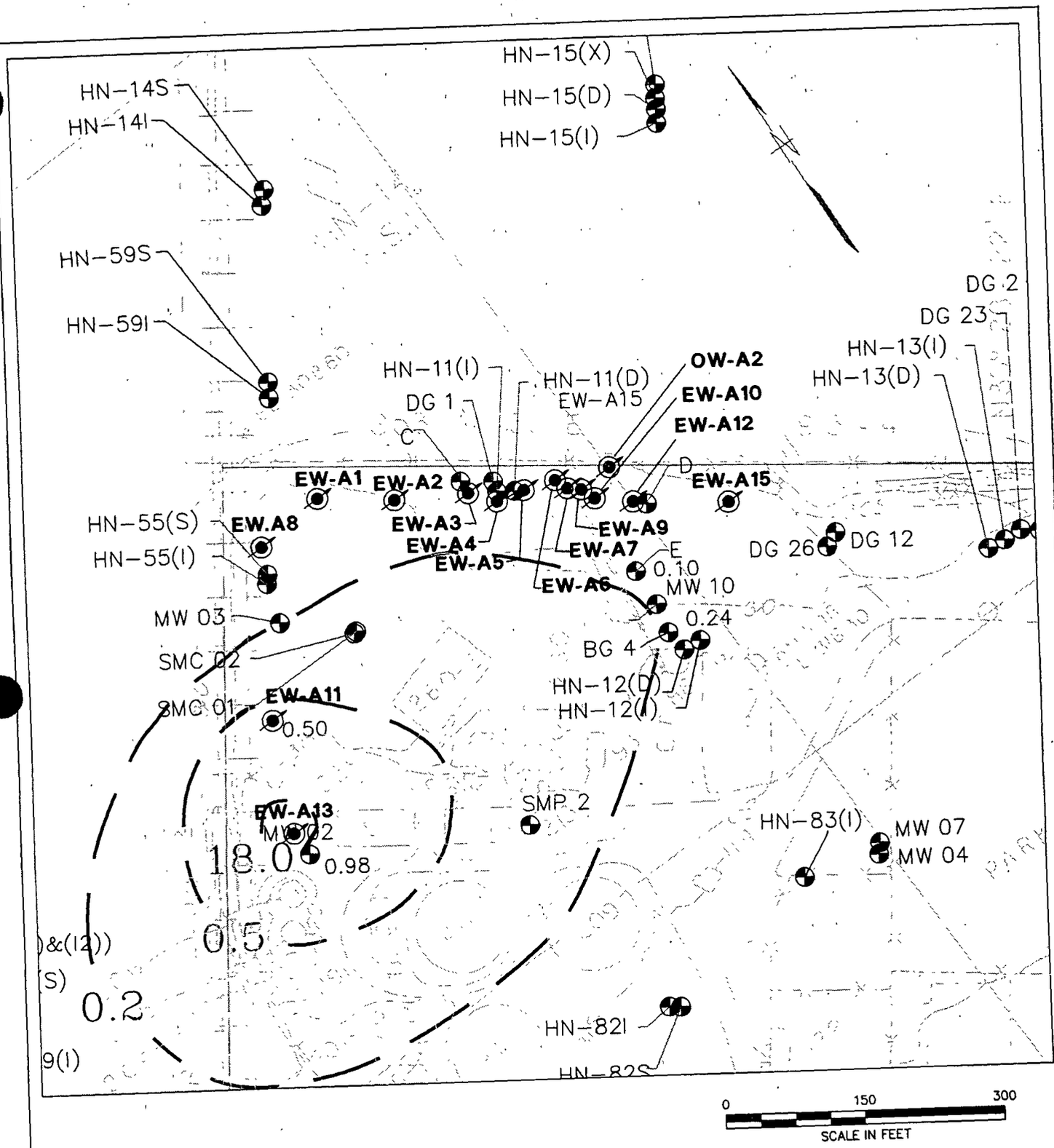
CADD FILE: warminster\pipeline\A3-12

U.S. Navy RAC
NAWC WARMINSTER - AREA A

Figure 3-12

Maximum Drawdown During Yield Test @EW-A12
11 gpm 2/18/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



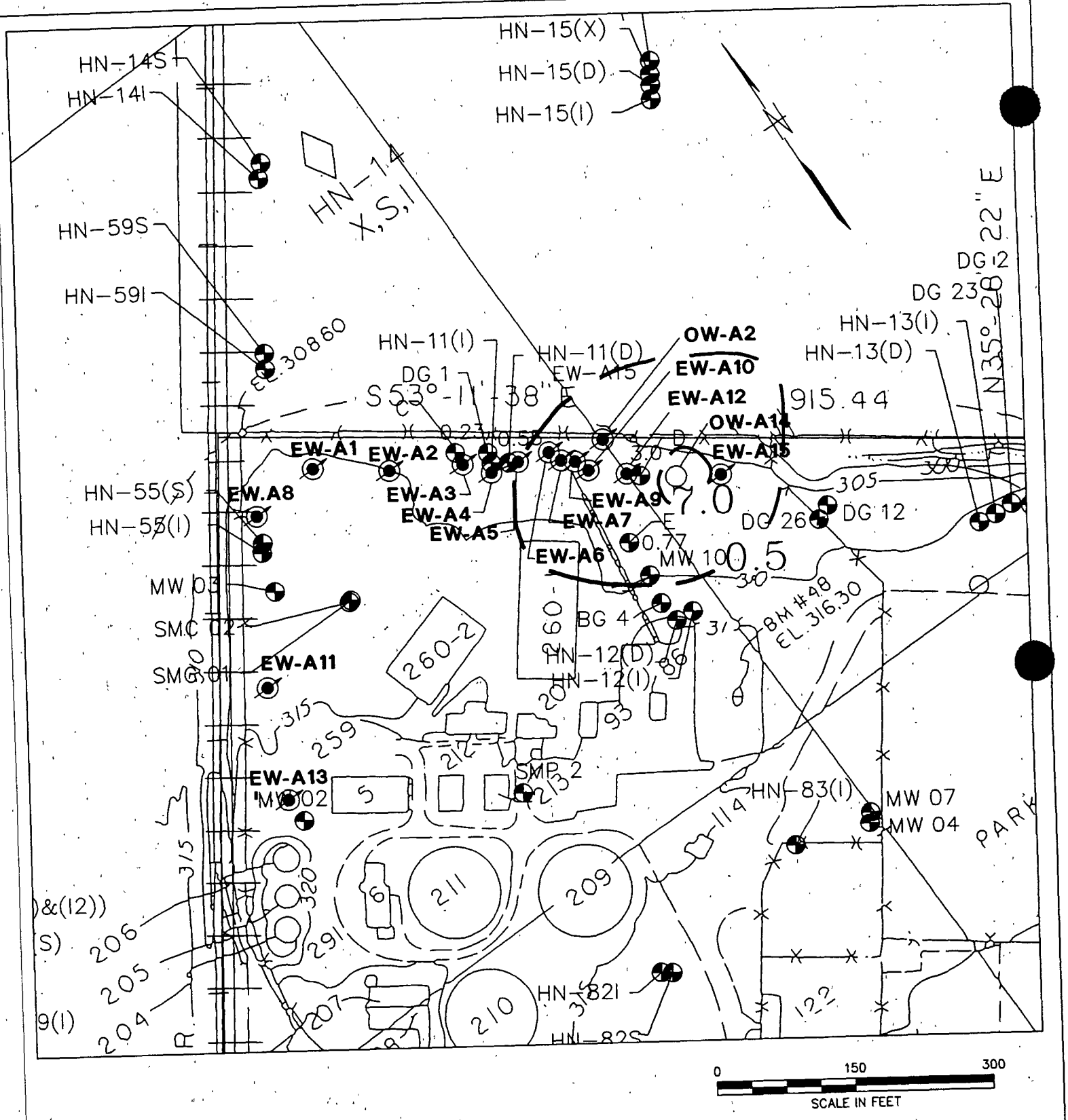
CADD FILE: warminster\pipeline\A3-13

U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-13

Maximum Drawdown During Yield Test @EW-A13
2 gpm 2/22/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION



0 150 300
SCALE IN FEET

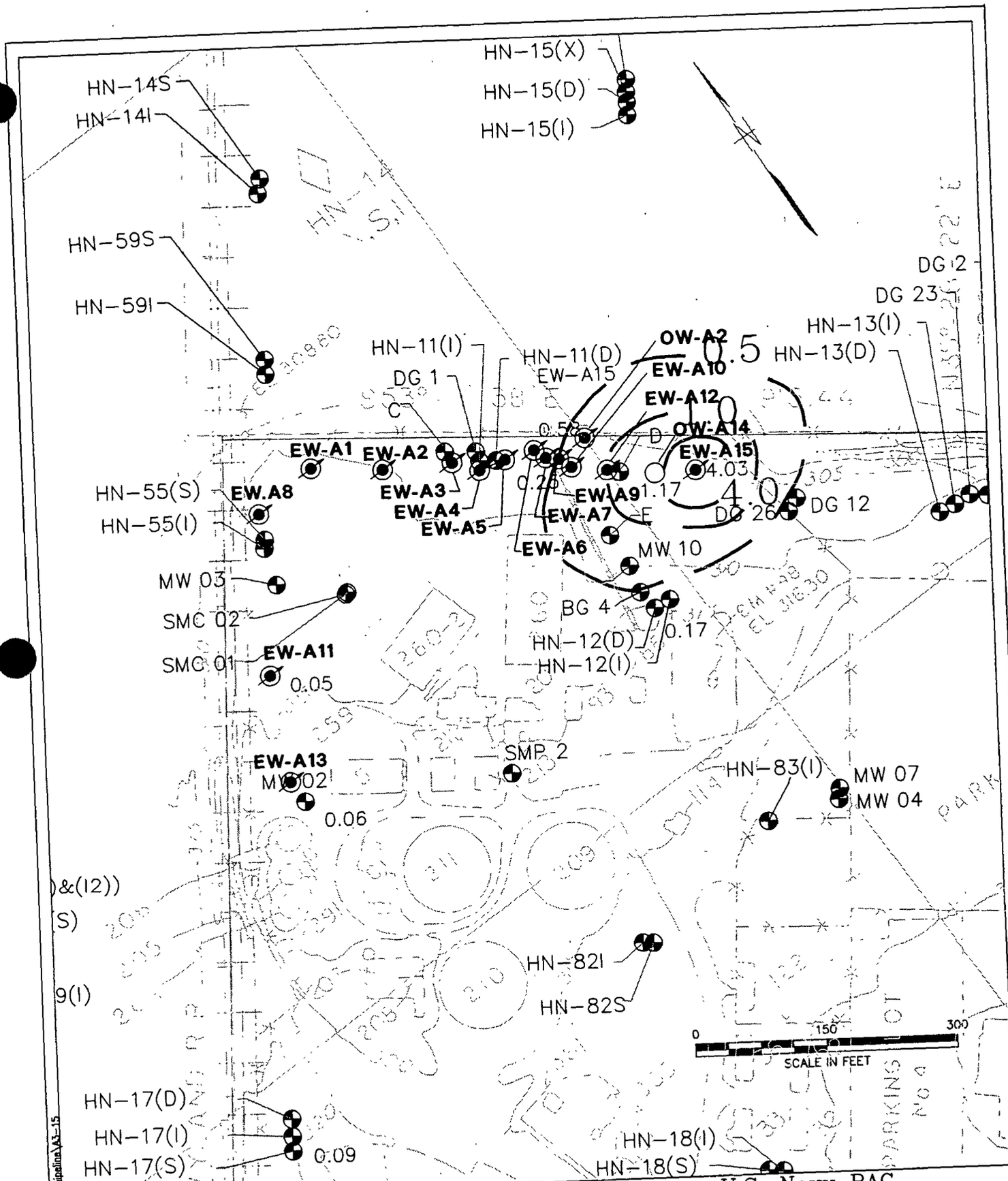
U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-14

Maximum Drawdown During Yield Test @OW-A14
1.5 gpm 2/24/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION

CADD FILE: warminster\pipeline\A3-14



U.S. Navy RAC
NAWC WARMINSTER – AREA A

Figure 3-15
Maximum Drawdown During Yield Test @EW-A15
3 gpm 3/3/99

FOSTER WHEELER ENVIRONMENTAL CORPORATION

CADD FILE: warminster\Dripeline\A3-15

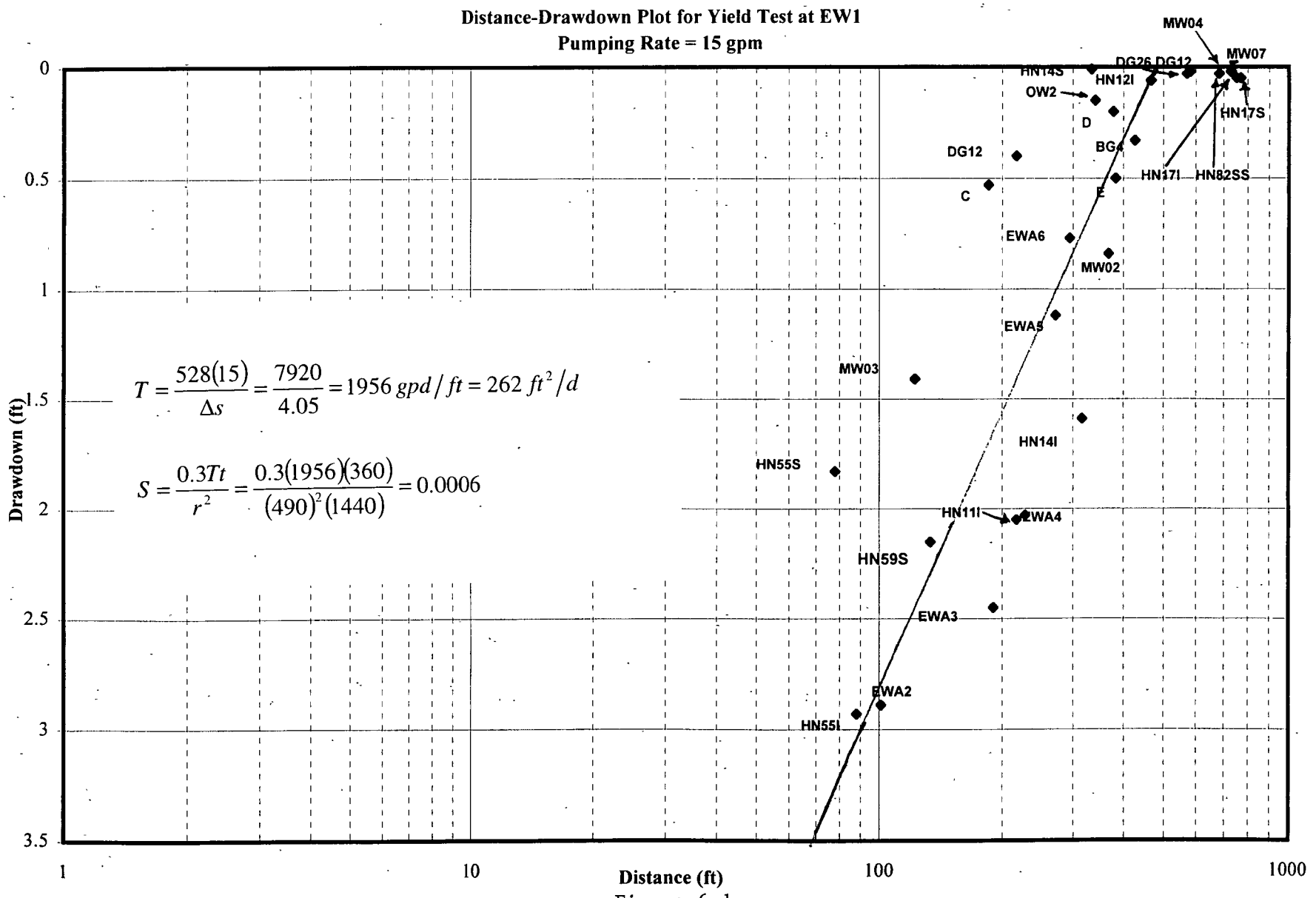

Distance-Drawdown Plot for Yield Test at EW1
Pumping Rate = 15 gpm
Drawdown (ft)
Distance (ft)
0
0.5
1
1.5
2
2.5
3
3.5
1
10
100
1000
$T = \frac{528(15)}{\Delta s} = \frac{7920}{4.05} = 1956\ gpd/ft = 262\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1956)(360)}{(490)^2(1440)} = 0.0006$
MW04
MW07
DG26
DG12
HN14S
HN12I
OW2
D
HN17S
BG4
DG12
HN17I
HN82SS
C
E
EWA6
MW02
EWA5
MW03
HN14I
HN55S
HN11I
EWA4
HN59S
EWA3
EWA2
HN55I

Figure 6-1

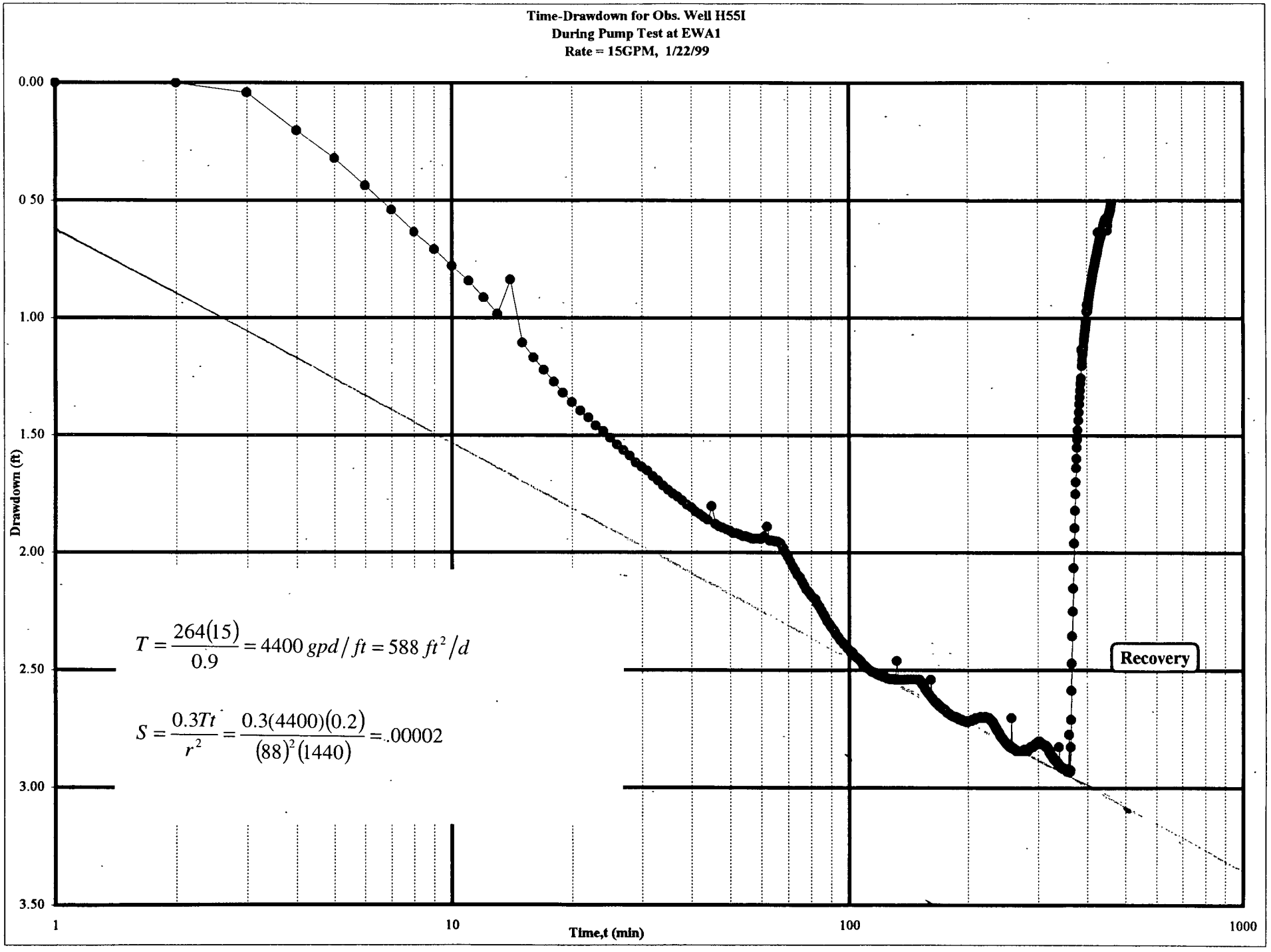
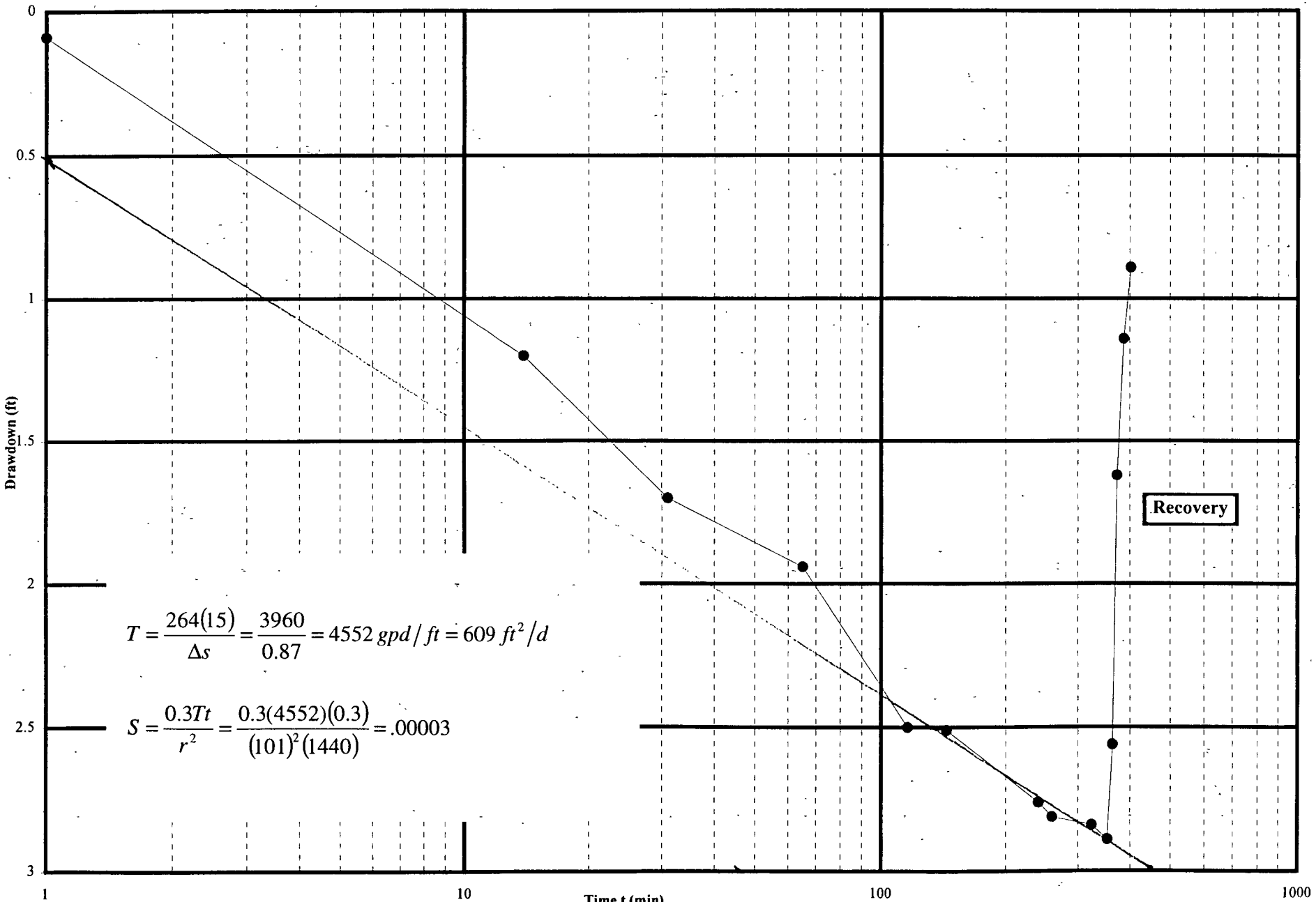

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
0 50
1.00
1.50
2.00
2.50
3.00
3.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{0.9} = 4400\ gpd/ft = 588\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4400)(0.2)}{(88)^2(1440)} = .00002$

Figure 6-2

Time-Drawdown for Obs. Well EWA2
During Pump Test at EWA1
Rate = 15GPM, 1/22/99



$$T = \frac{264(15)}{\Delta s} = \frac{3960}{0.87} = 4552\ gpd/ft = 609\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(4552)(0.3)}{(101)^2(1440)} = .00003$$

Figur[illegible]-3

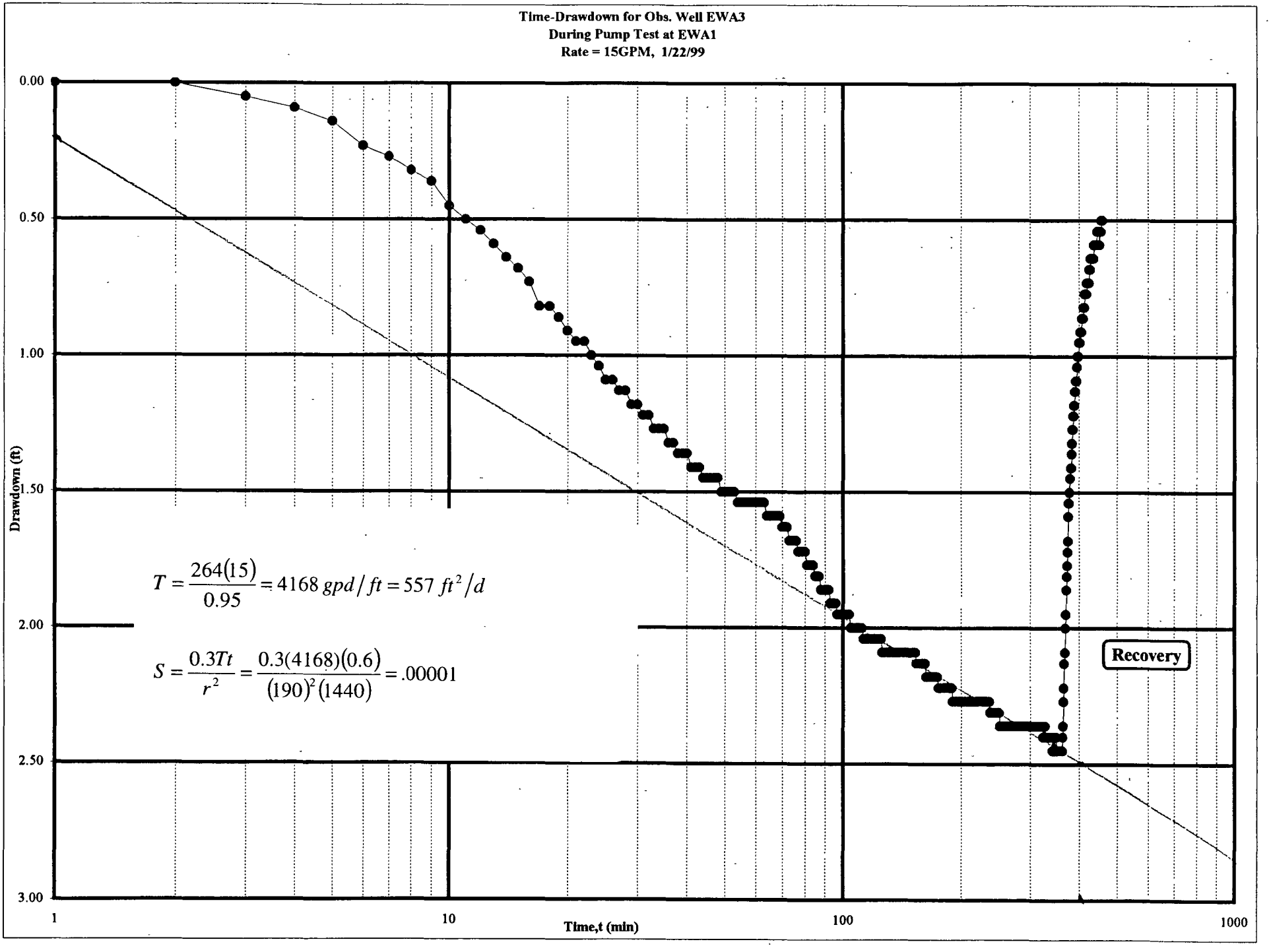

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
0.50
1.00
1.50
2.00
2.50
3.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{0.95} = 4168\ gpd/ft = 557\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4168)(0.6)}{(190)^2(1440)} = .00001$

Figure 6-4

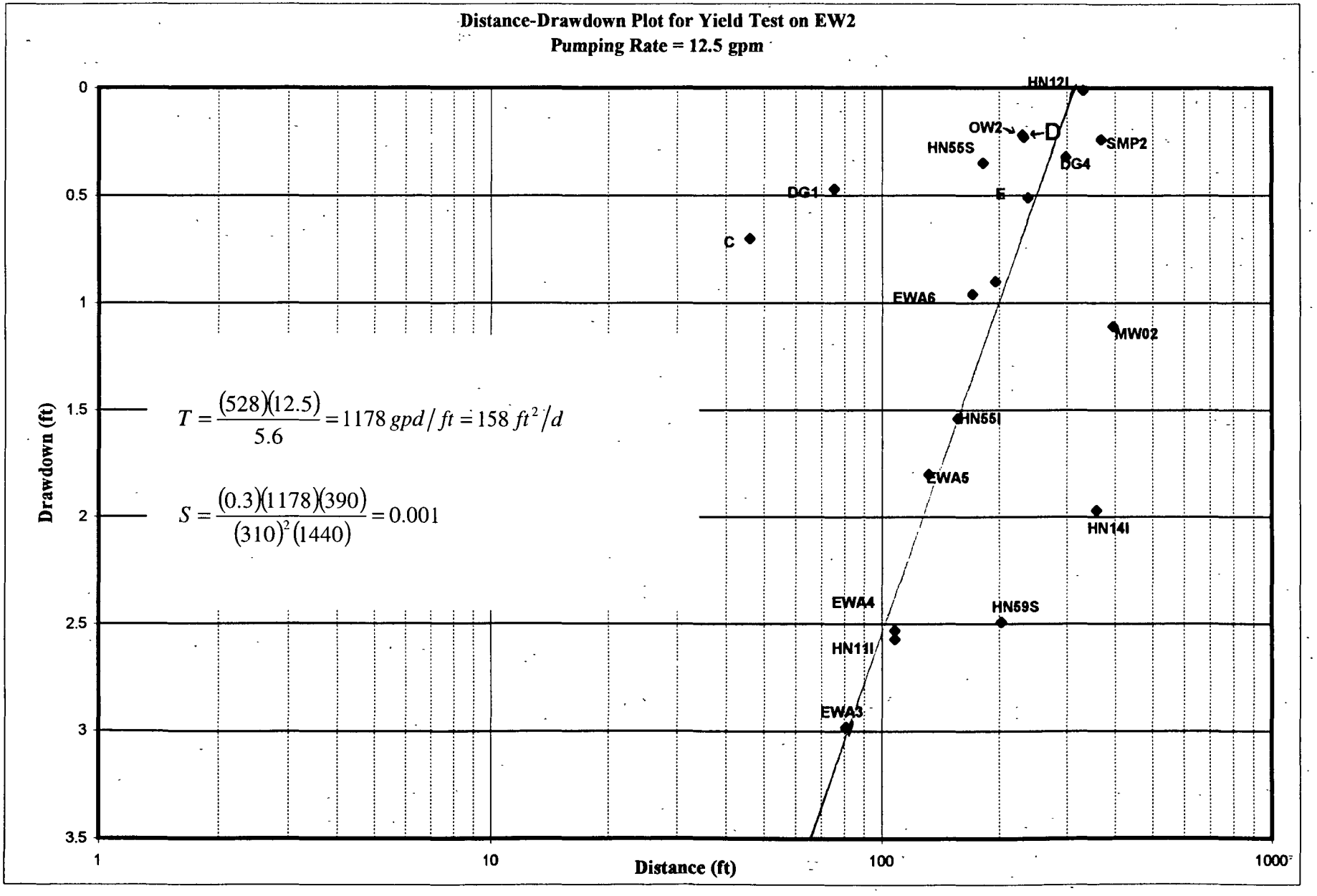

Distance-Drawdown Plot for Yield Test on EW2
Pumping Rate = 12.5 gpm
Drawdown (ft)
Distance (ft)
0
0.5
1
1.5
2
2.5
3
3.5
1
10
100
1000
HN12I
OW2
D
HN55S
SMP2
DG4
DG1
E
C
EWA6
MW02
HN55I
EWA5
HN14I
EWA4
HN59S
HN11I
EWA3
$T = \frac{(528)(12.5)}{5.6} = 1178\ gpd/ft = 158\ ft^2/d$
$S = \frac{(0.3)(1178)(390)}{(310)^2(1440)} = 0.001$

Figure 6-5

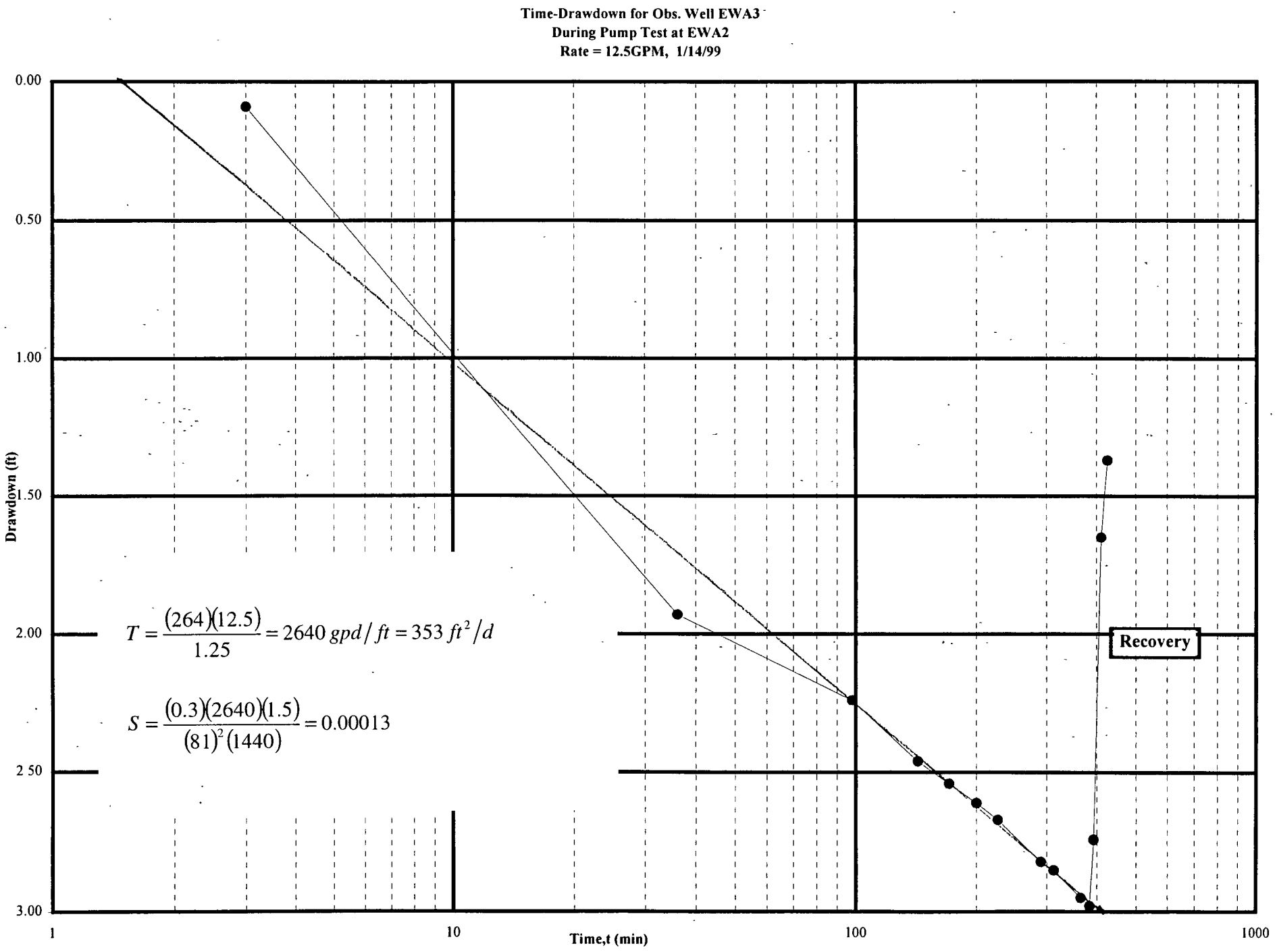
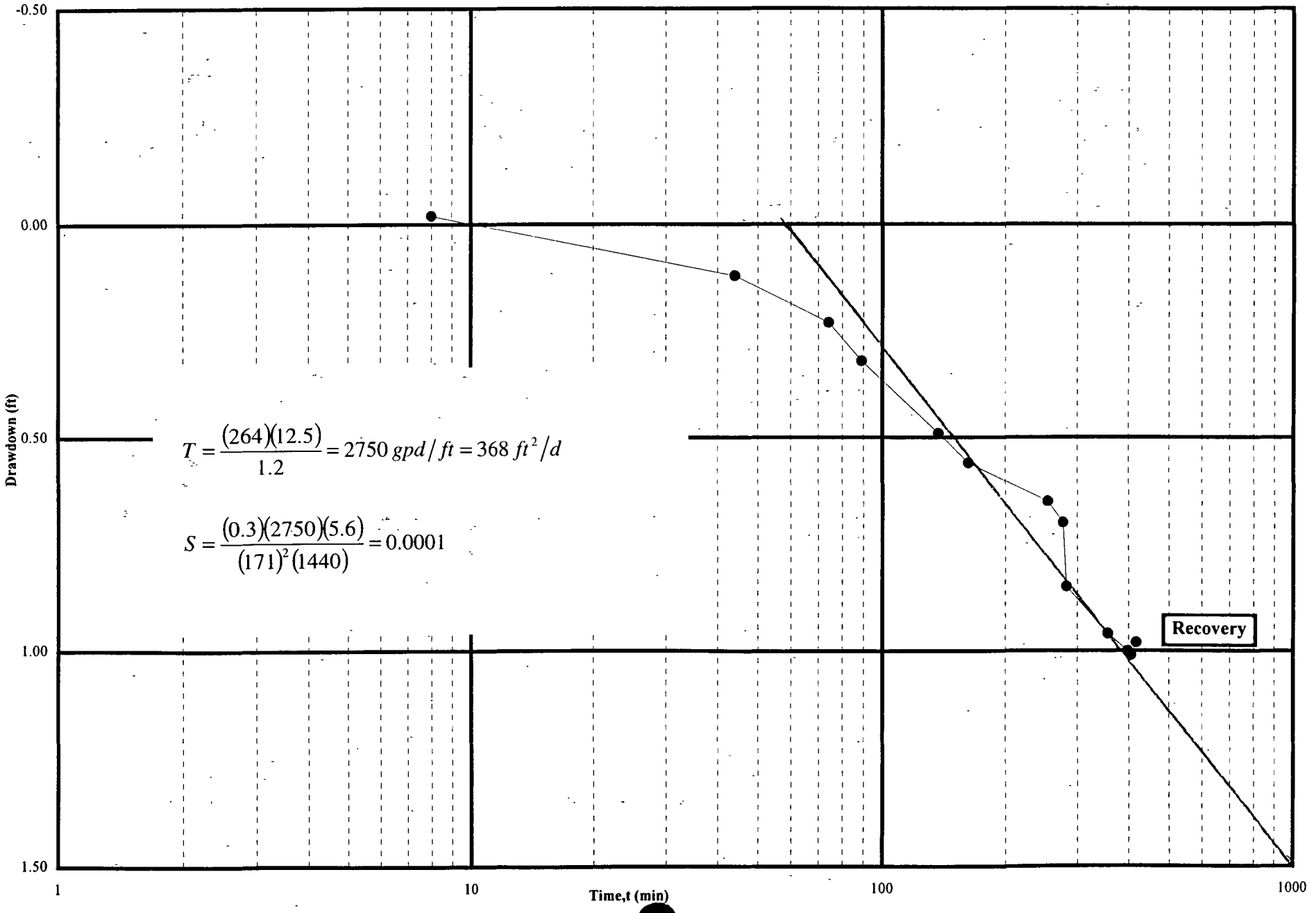

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
0.00
0.50
1.00
1.50
2.00
2.50
3.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{(264)(12.5)}{1.25} = 2640\ gpd/ft = 353\ ft^2/d$
$S = \frac{(0.3)(2640)(1.5)}{(81)^2(1440)} = 0.00013$

Figure 6-6

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99



Figu[illegible]-7

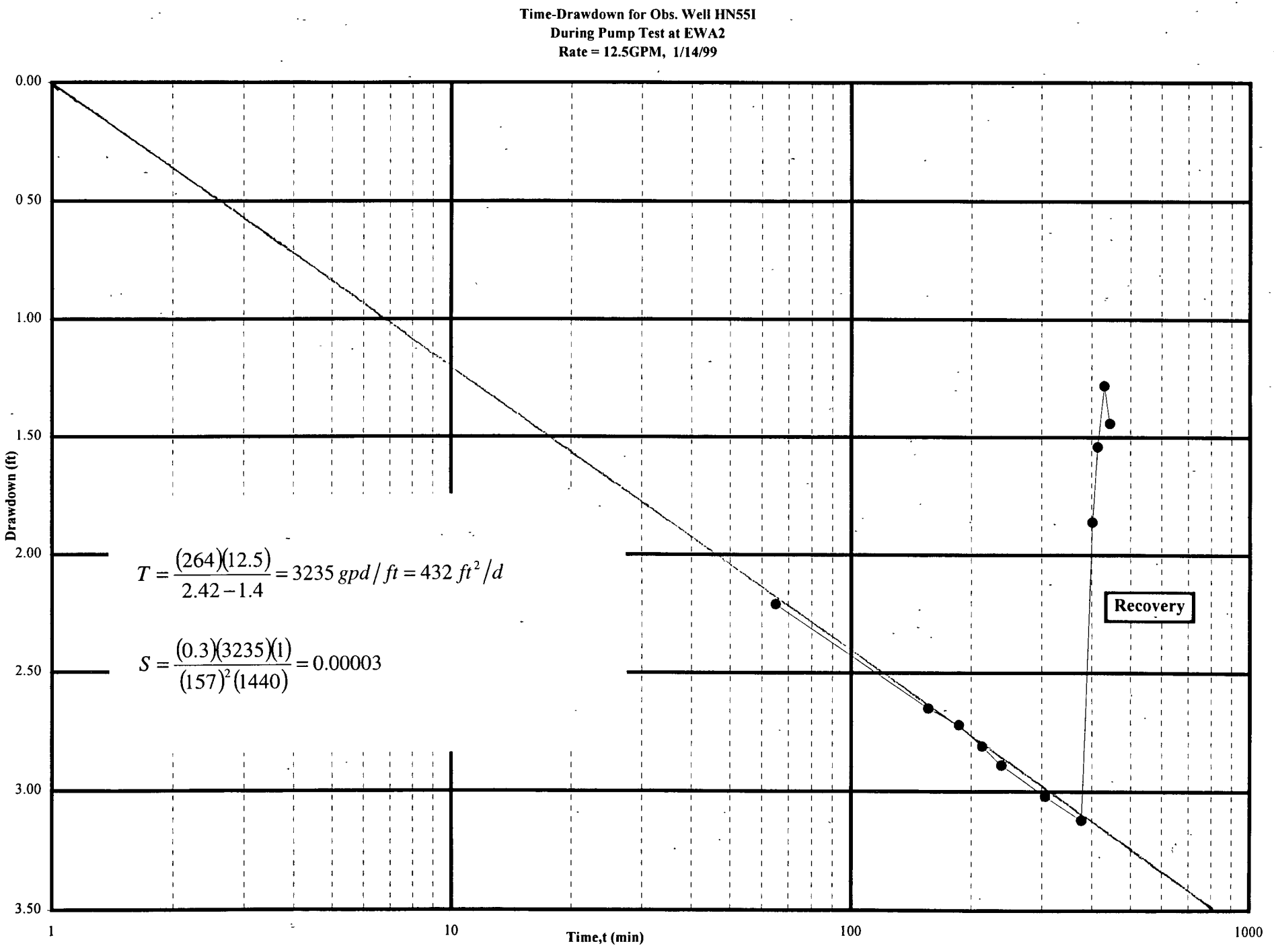
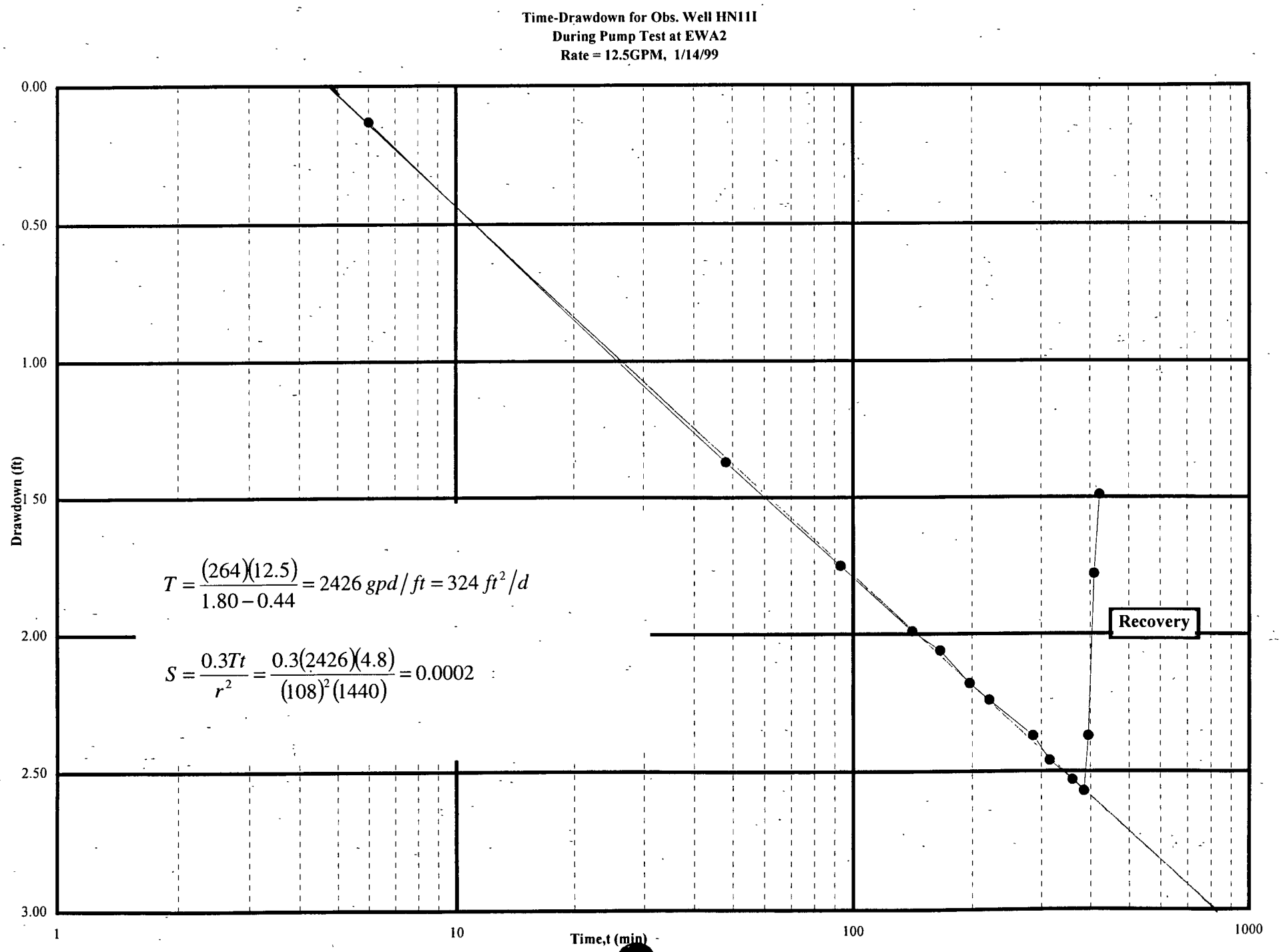

Time-Drawdown for Obs. Well HN55I
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
0.00
0 50
1.00
1.50
2.00
2.50
3.00
3.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{(264)(12.5)}{2.42-1.4} = 3235\ gpd/ft = 432\ ft^2/d$
$S = \frac{(0.3)(3235)(1)}{(157)^2(1440)} = 0.00003$

Figure 6-8


Time-Drawdown for Obs. Well HN11I
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{(264)(12.5)}{1.80-0.44} = 2426\ gpd/ft = 324\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(2426)(4.8)}{(108)^2(1440)} = 0.0002$

Figur[illegible]-9

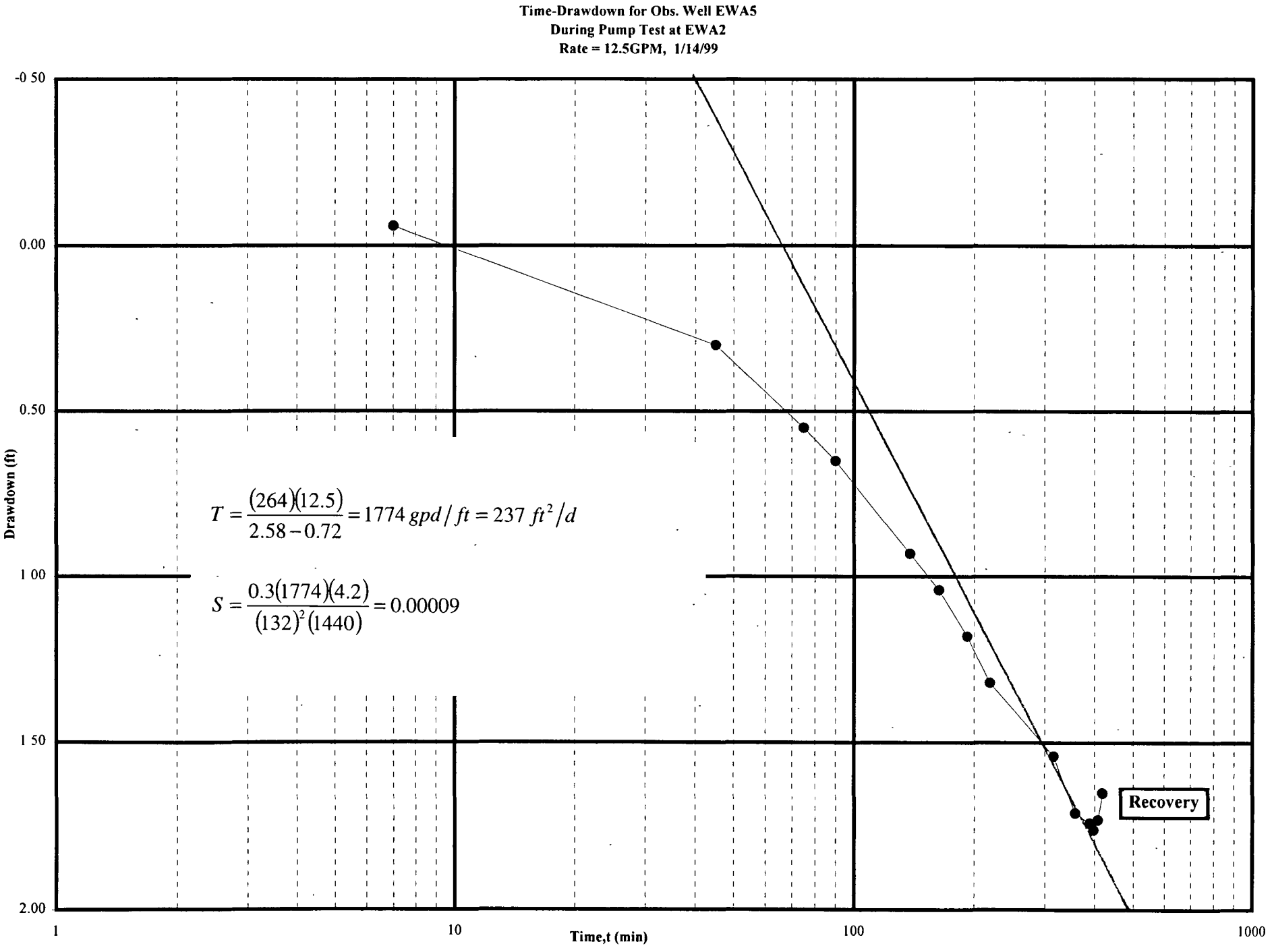
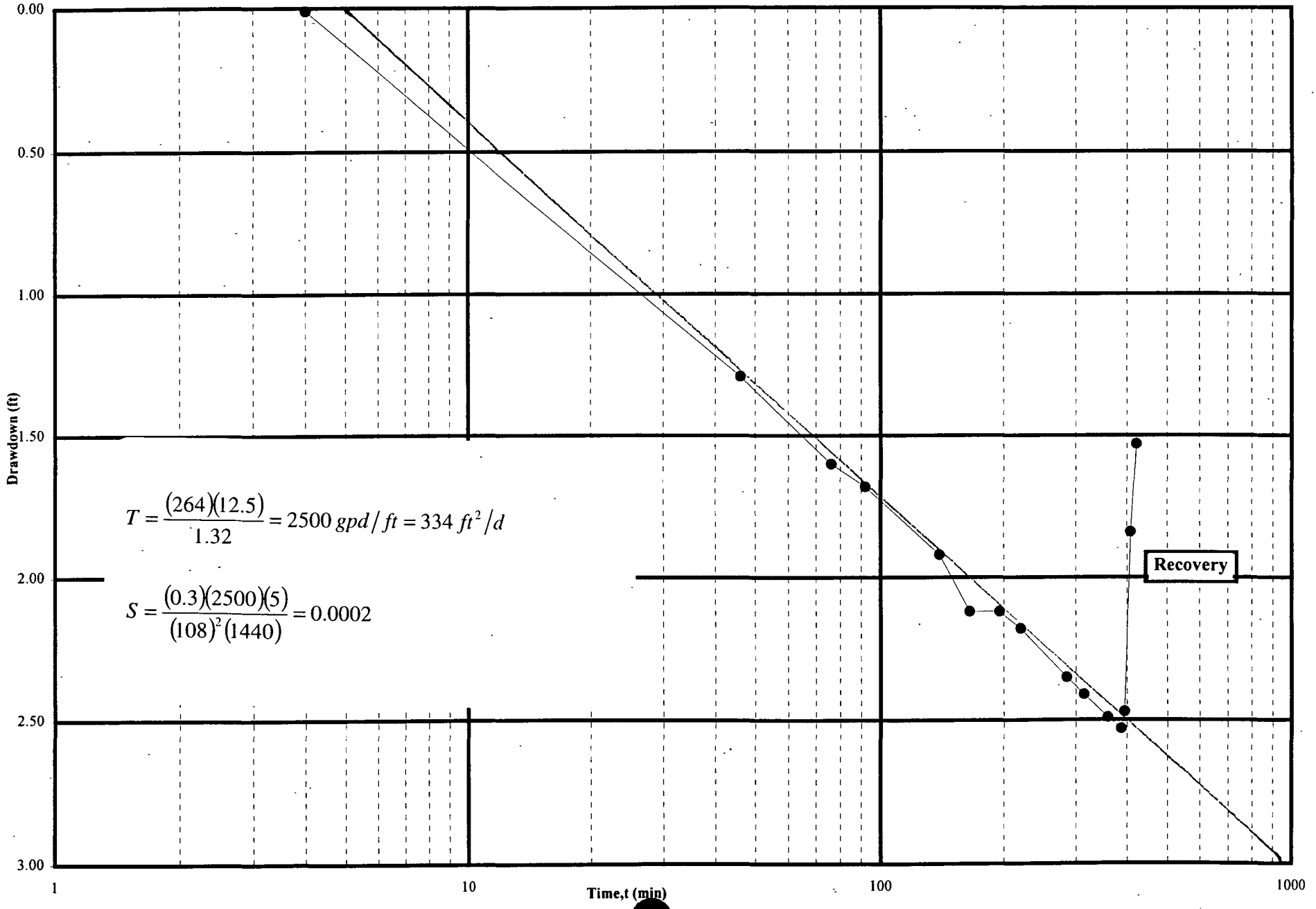

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
-0 50
0.00
0.50
1 00
1 50
2.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
$T = \frac{(264)(12.5)}{2.58-0.72} = 1774\ gpd/ft = 237\ ft^2/d$
$S = \frac{0.3(1774)(4.2)}{(132)^2(1440)} = 0.00009$
Recovery

Figure 6-10

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99



$$T = \frac{(264)(12.5)}{1.32} = 2500\ gpd/ft = 334\ ft^2/d$$

$$S = \frac{(0.3)(2500)(5)}{(108)^2(1440)} = 0.0002$$

Figu[illegible]-11

Distance-Drawdown Plot for Yield Test at EW-3
Pumping Rate = 10 gpm

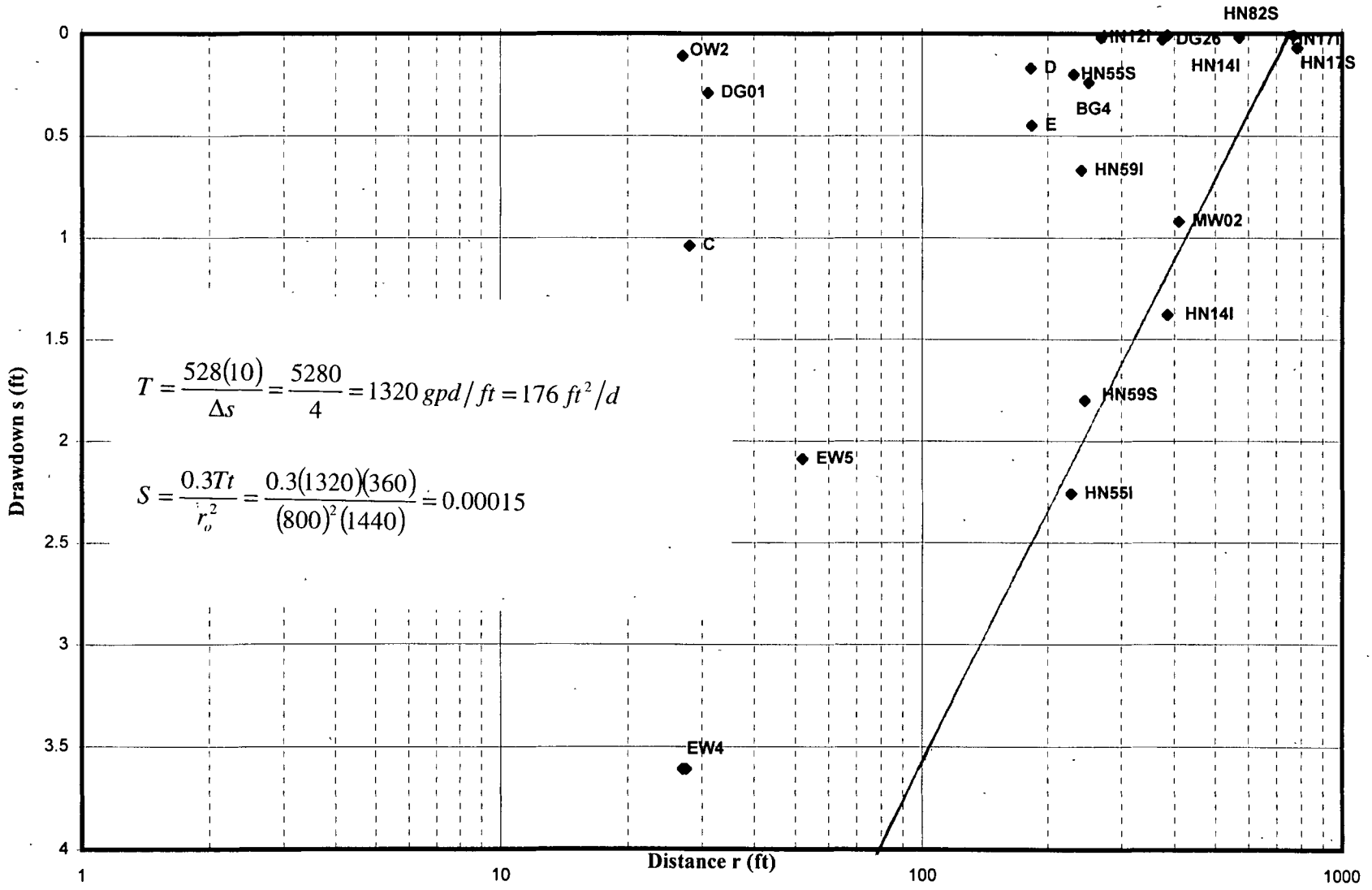
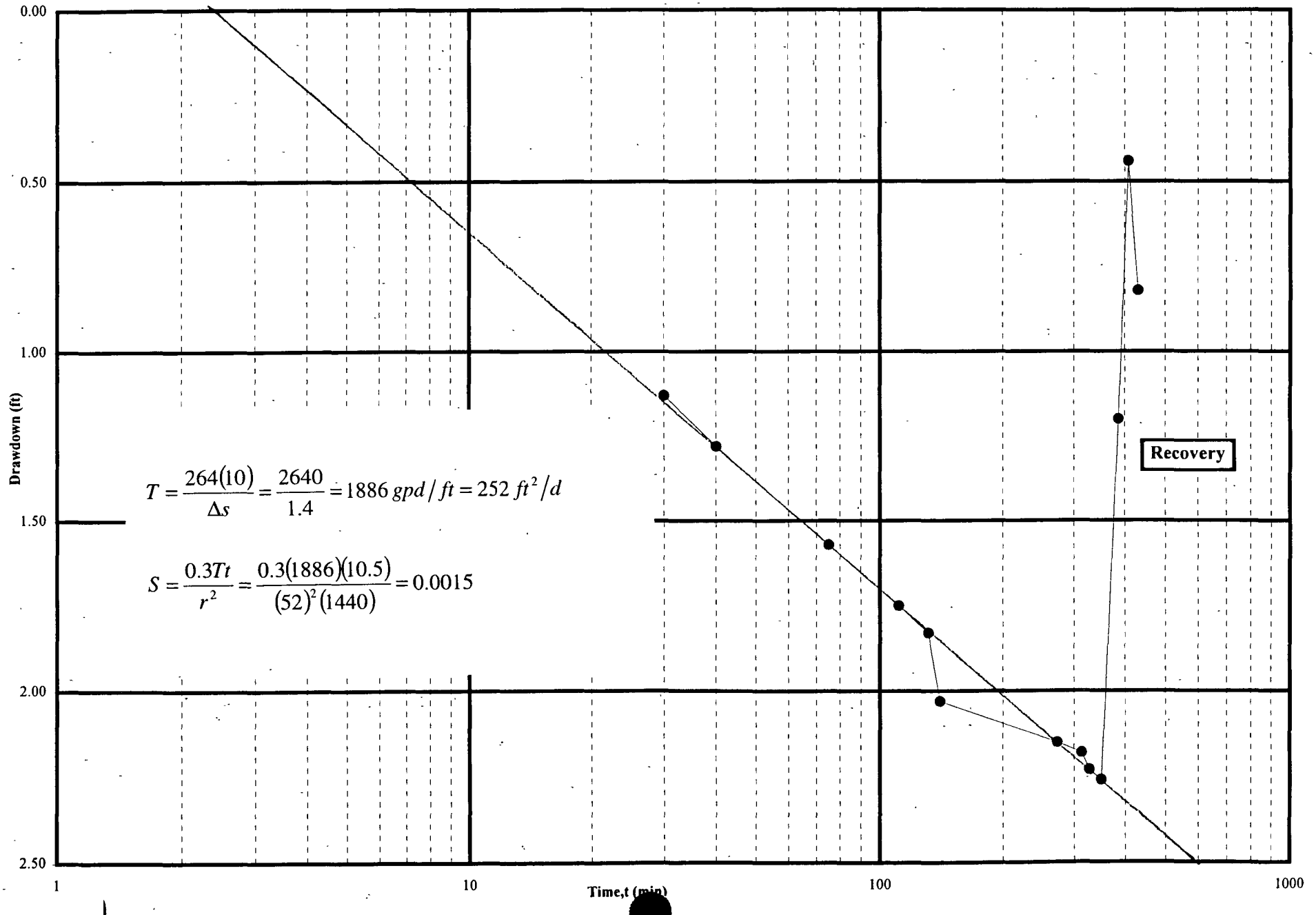


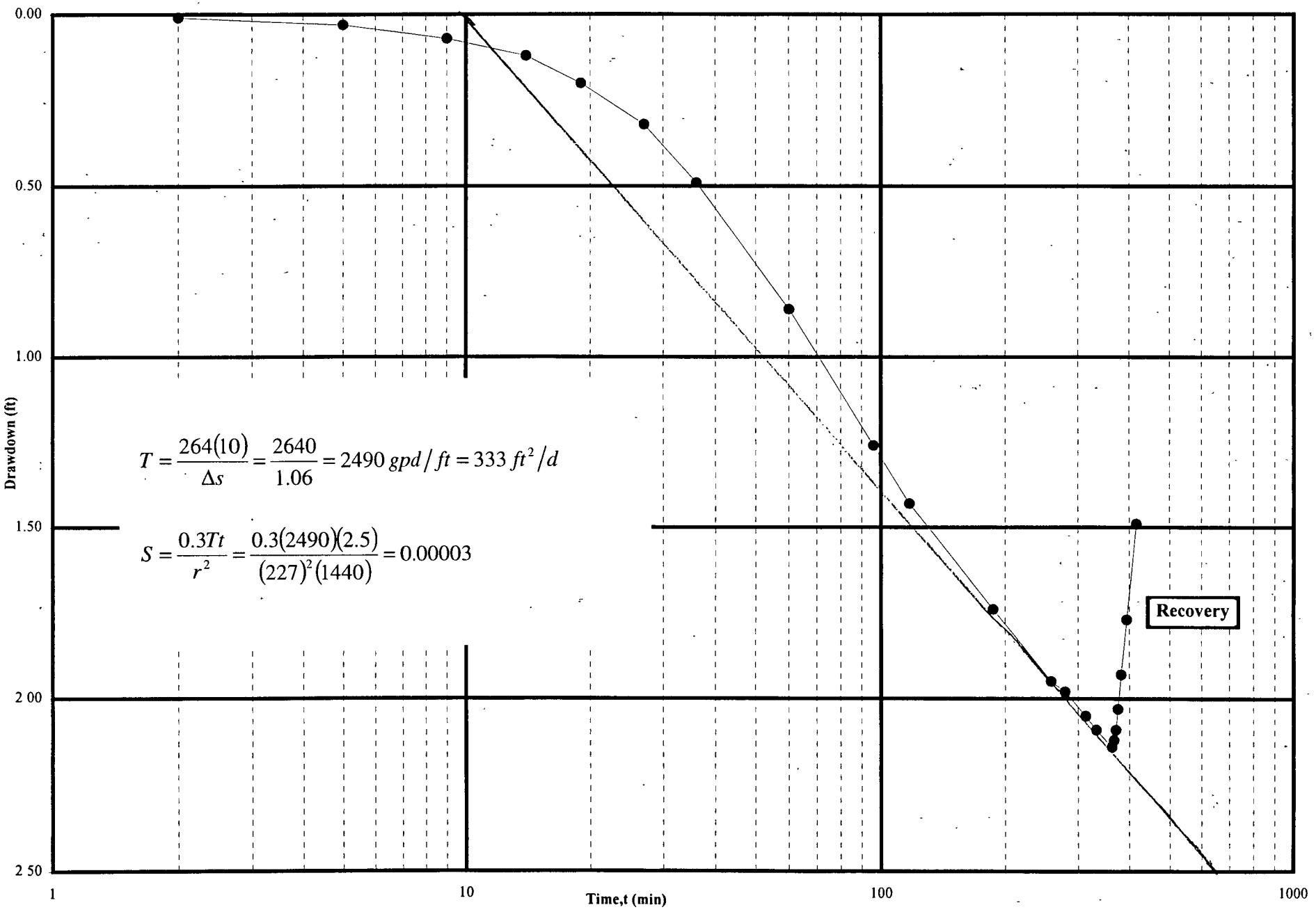
Figure 6-12

Time-Drawdown for Obs. Well HN55I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99



Figur[illegible]-13

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA3
Rate = 10GPM, 1/6/99



$$T = \frac{264(10)}{\Delta s} = \frac{2640}{1.06} = 2490\ gpd/ft = 333\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(2490)(2.5)}{(227)^2(1440)} = 0.00003$$

Figure 6-14

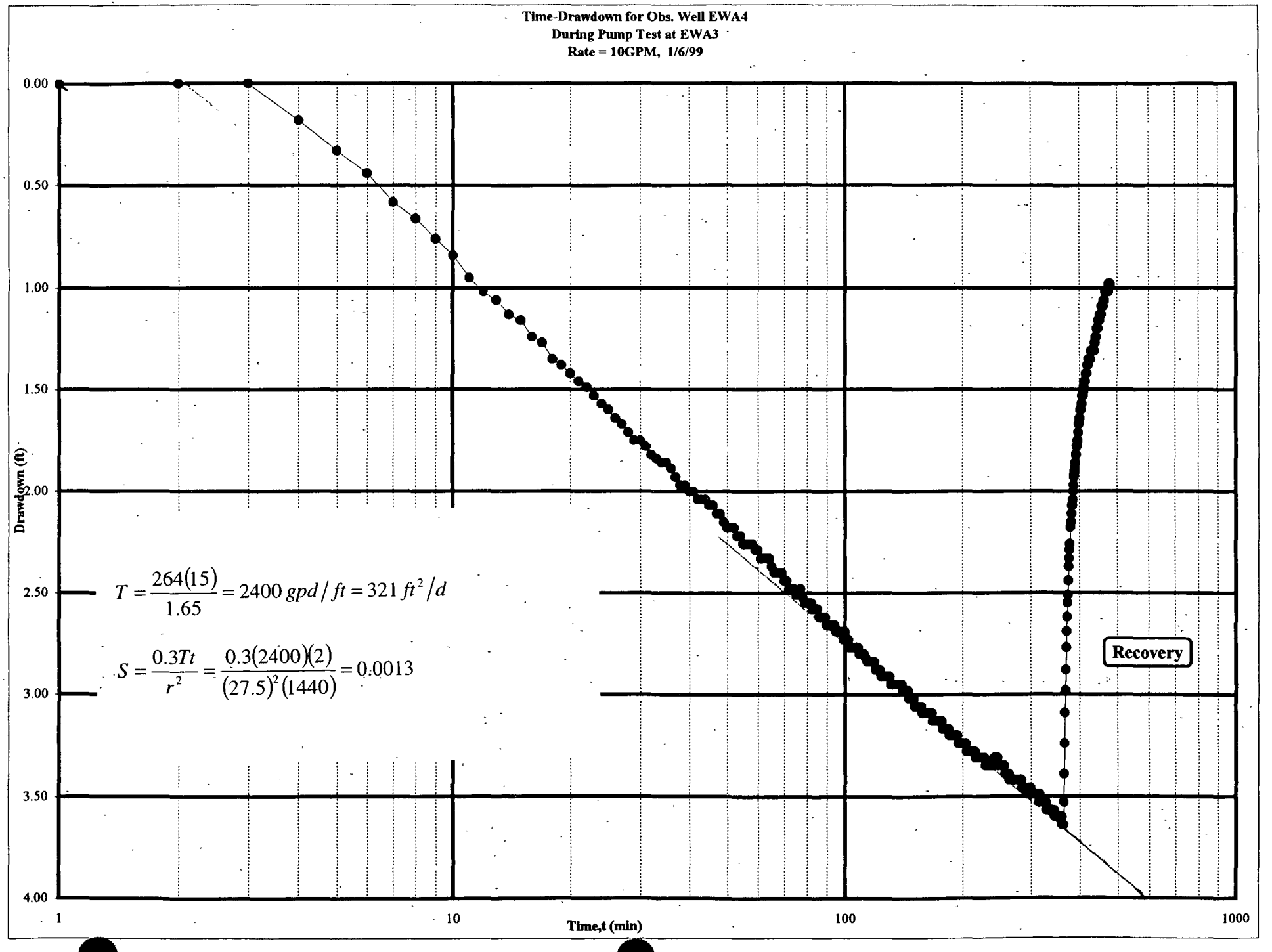

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{1.65} = 2400\ gpd/ft = 321\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(2400)(2)}{(27.5)^2(1440)} = 0.0013$

Figure 15

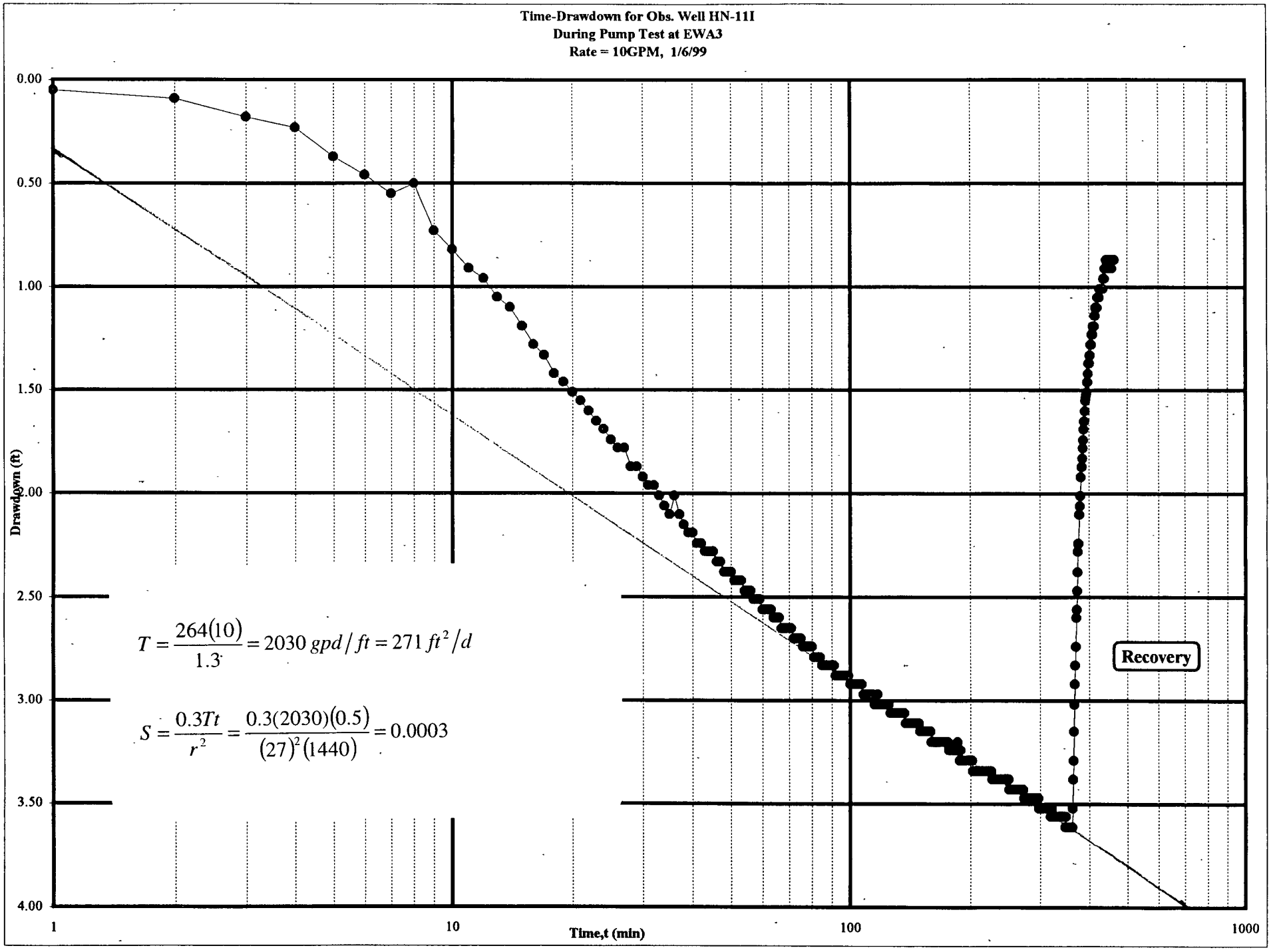

Time-Drawdown for Obs. Well HN-11I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(10)}{1.3} = 2030\ gpd/ft = 271\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(2030)(0.5)}{(27)^2(1440)} = 0.0003$

Figure 6-16

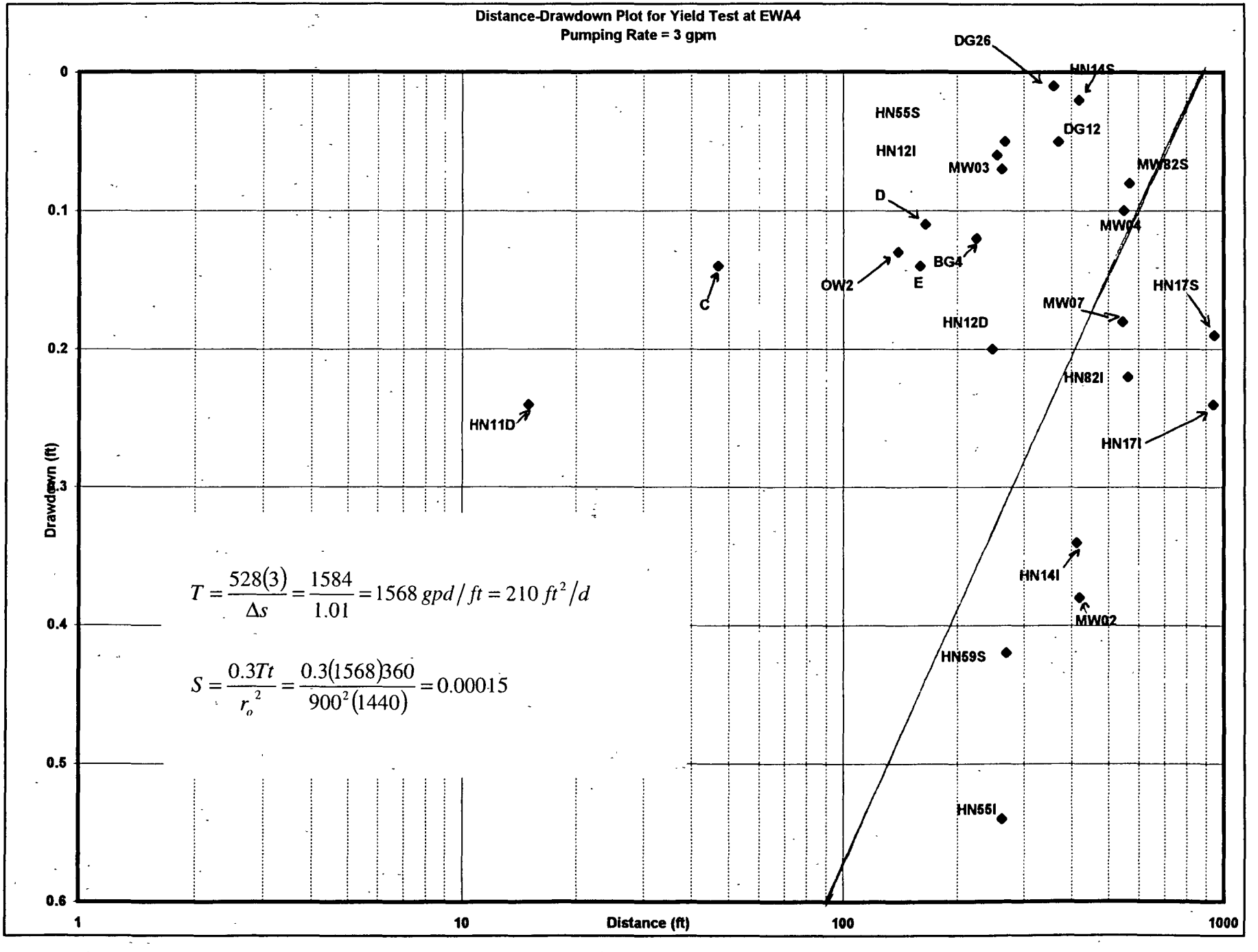

Distance-Drawdown Plot for Yield Test at EWA4
Pumping Rate = 3 gpm
Drawdown (ft)
Distance (ft)
0
0.1
0.2
0.3
0.4
0.5
0.6
1
10
100
1000
DG26
HN14S
HN55S
DG12
HN12I
MW03
MW32S
D
MW04
BG4
OW2
E
C
HN17S
MW07
HN12D
HN82I
HN11D
HN17I
HN14I
MW02
HN59S
HN55I
$T = \frac{528(3)}{\Delta s} = \frac{1584}{1.01} = 1568\ gpd/ft = 210\ ft^2/d$
$S = \frac{0.3Tt}{r_o^2} = \frac{0.3(1568)360}{900^2(1440)} = 0.00015$

Figure 6-17

Calculated Recovery Plot for Obs.Well HN-55I
EWA4 Yield Test - Dec.22, 1998

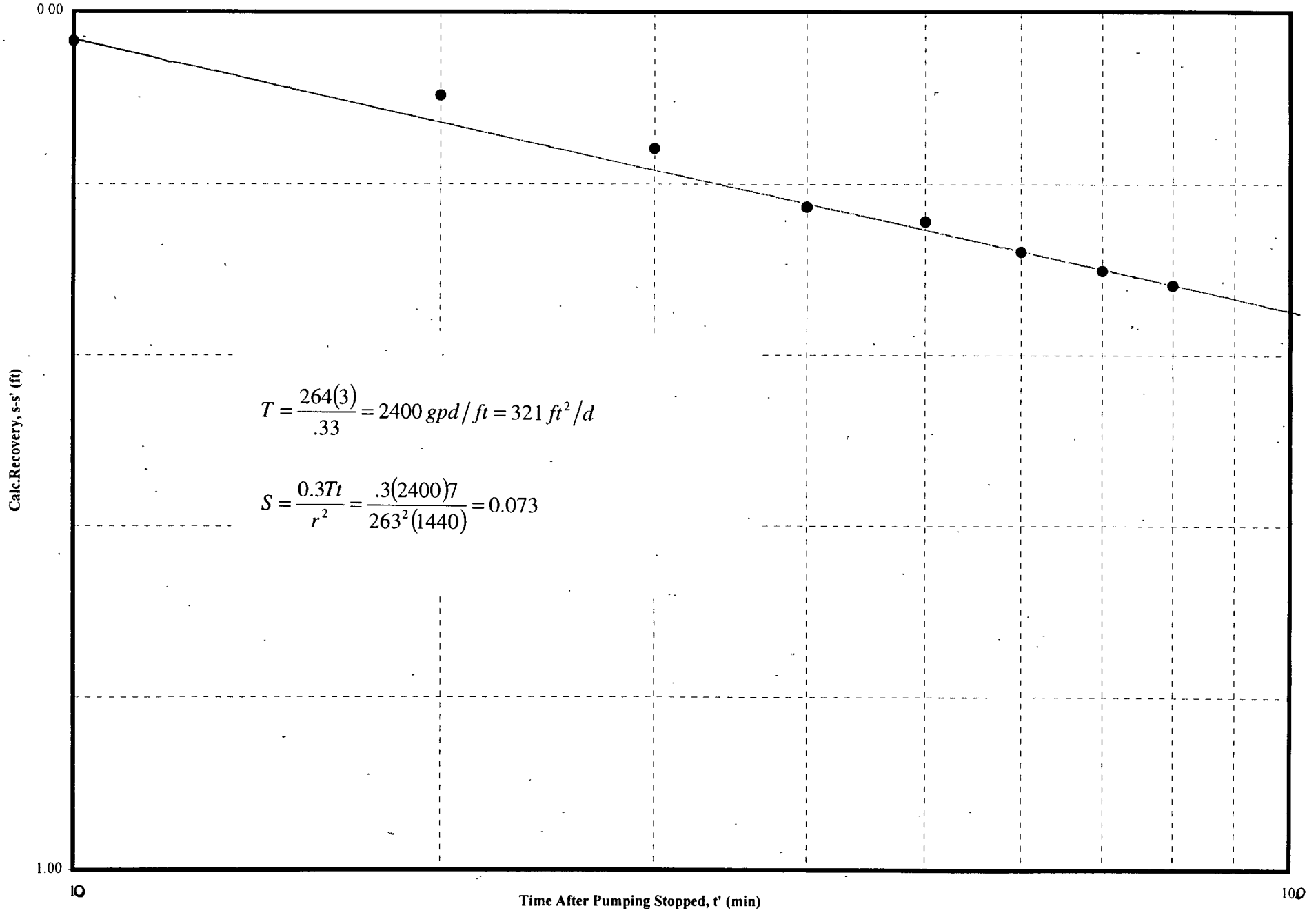


Figure 6-18

Residual Drawdown, Observation Well HN-55I
Yield Test at EWA4, Dec.22, 1998

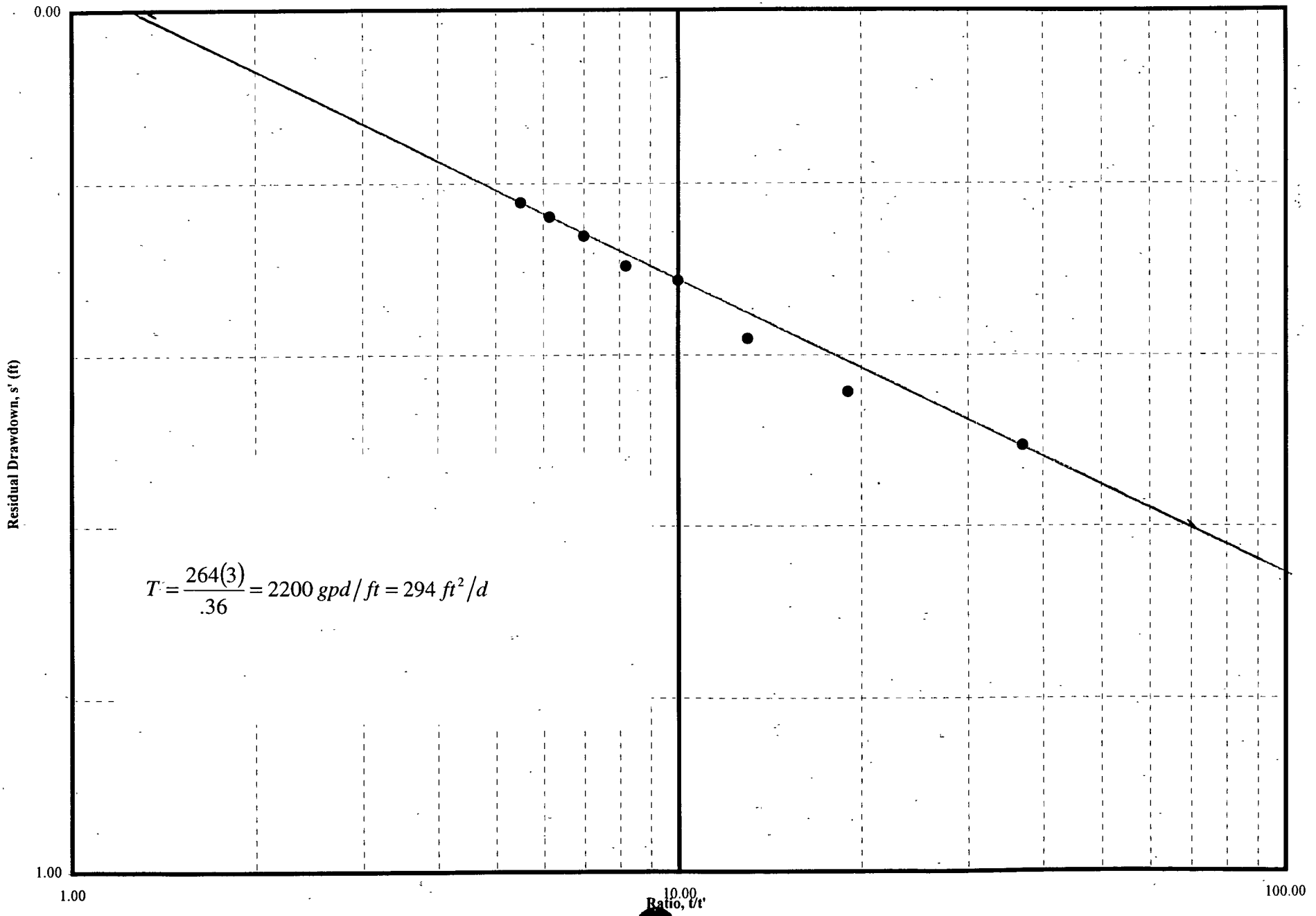


Figure 6-19

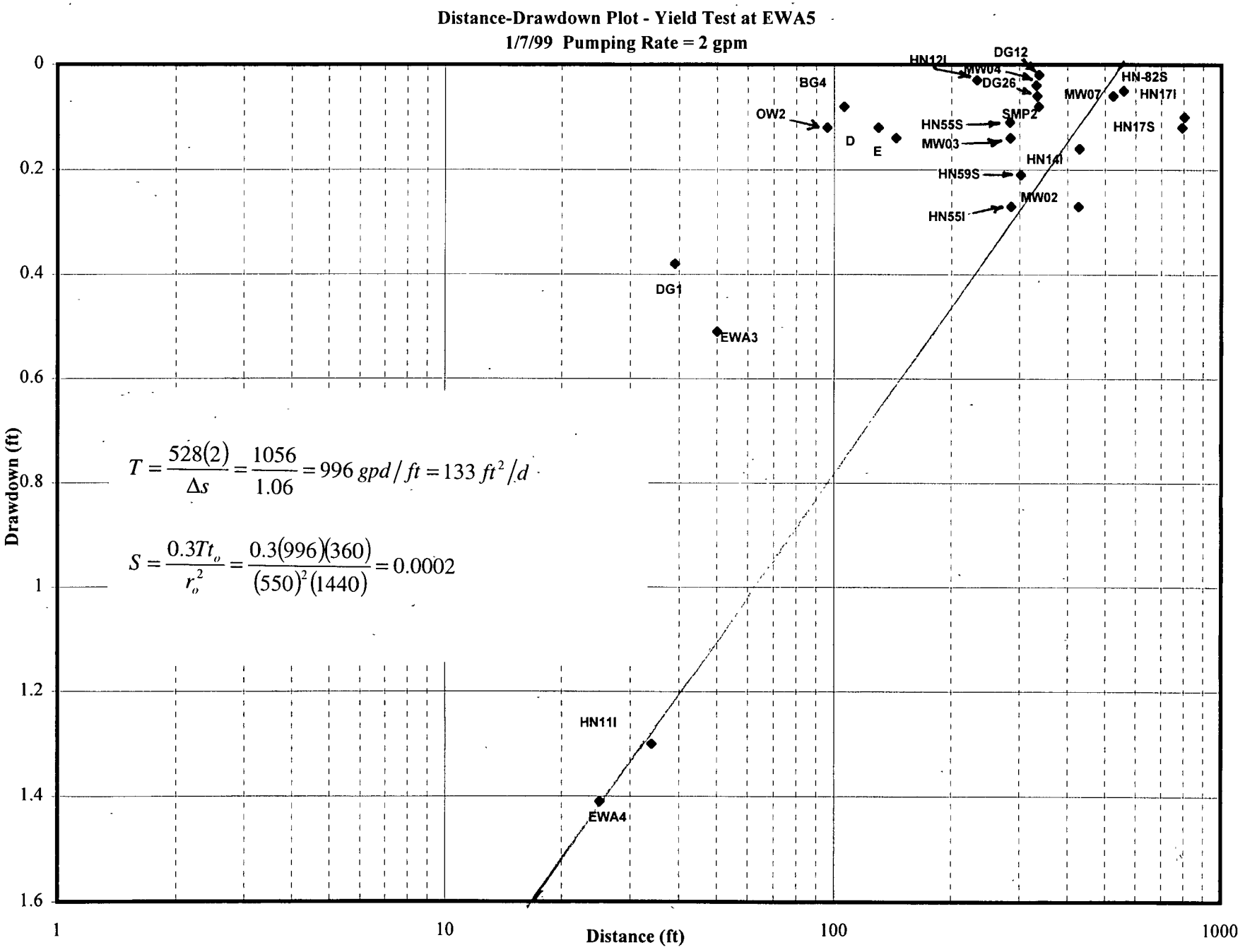
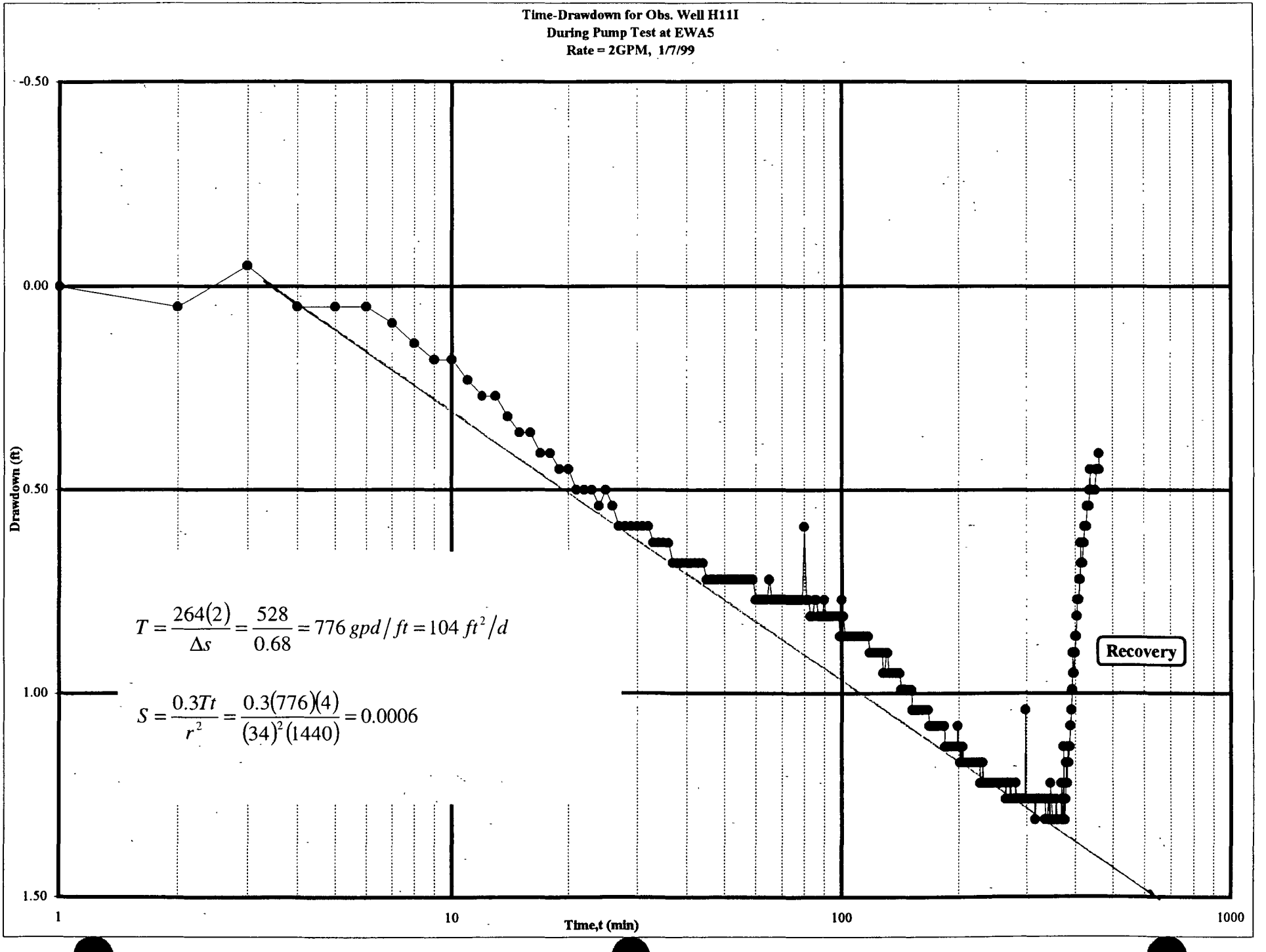

Distance-Drawdown Plot - Yield Test at EWA5
1/7/99 Pumping Rate = 2 gpm
Drawdown (ft)
Distance (ft)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1
10
100
1000
HN12I
DG12
MW04
DG26
BG4
HN-82S
MW07
HN17I
OW2
SMP2
HN55S
HN17S
D
E
MW03
HN14I
HN59S
MW02
HN55I
DG1
EWA3
HN11I
EWA4
$T = \frac{528(2)}{\Delta s} = \frac{1056}{1.06} = 996\ gpd/ft = 133\ ft^2/d$
$S = \frac{0.3Tt_o}{r_o^2} = \frac{0.3(996)(360)}{(550)^2(1440)} = 0.0002$

Figure 6-20


Time-Drawdown for Obs. Well H11I
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
-0.50
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.68} = 776\ gpd/ft = 104\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(776)(4)}{(34)^2(1440)} = 0.0006$

Figur 21

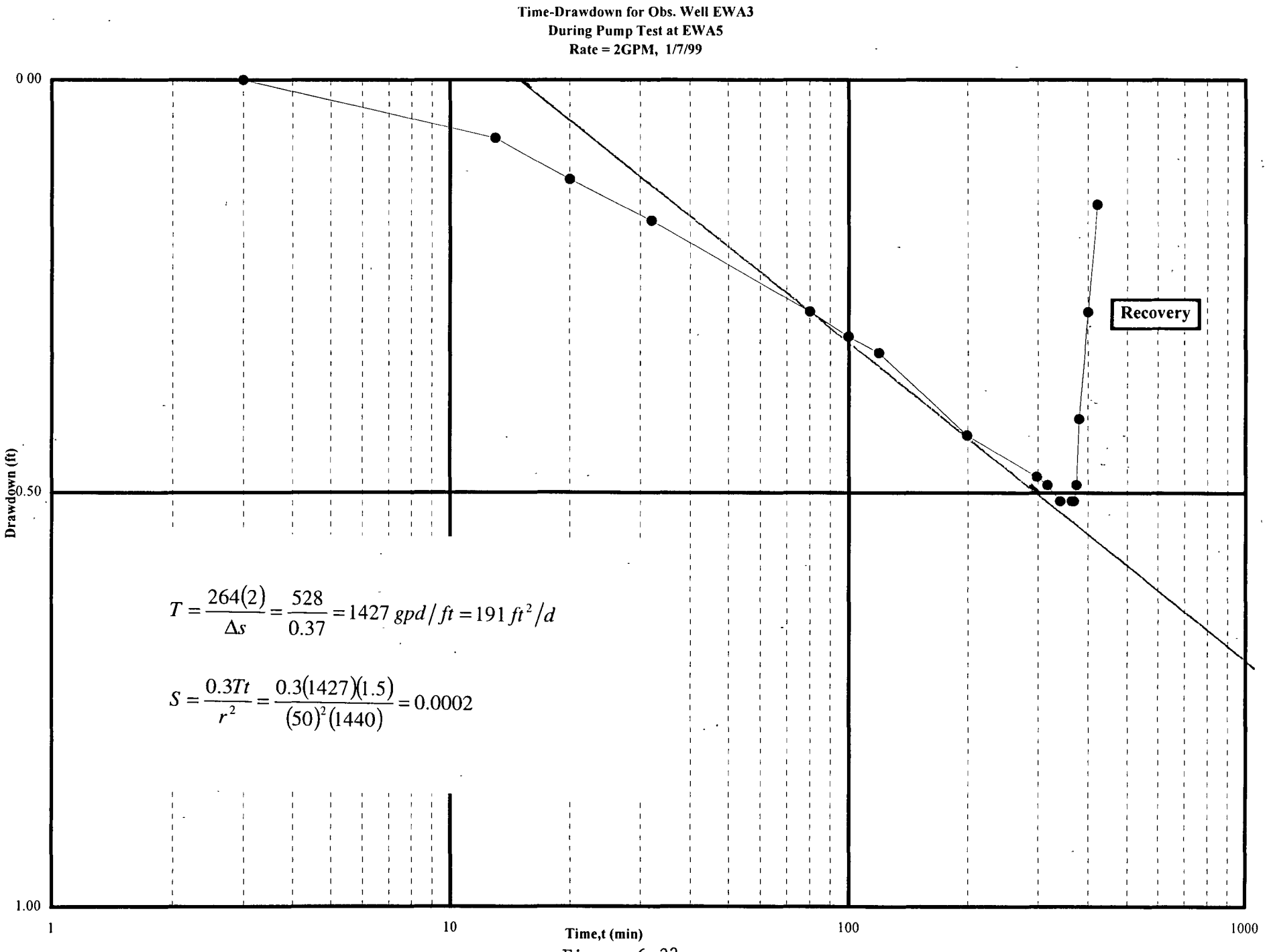
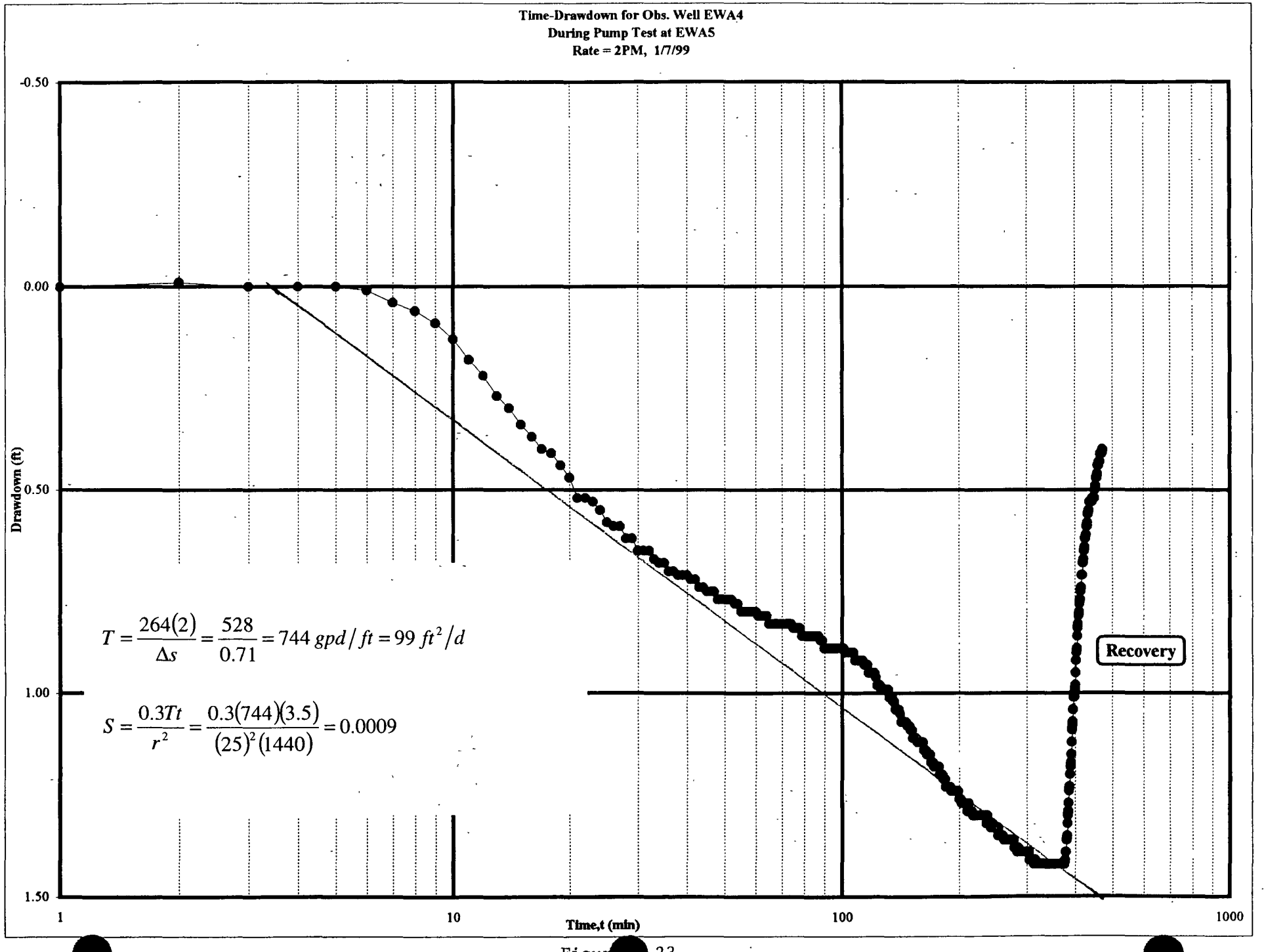

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.37} = 1427\ gpd/ft = 191\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1427)(1.5)}{(50)^2(1440)} = 0.0002$

Figure 6-22


Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA5
Rate = 2PM, 1/7/99
-0.50
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.71} = 744\ gpd/ft = 99\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(744)(3.5)}{(25)^2(1440)} = 0.0009$

Figur[illegible]-23

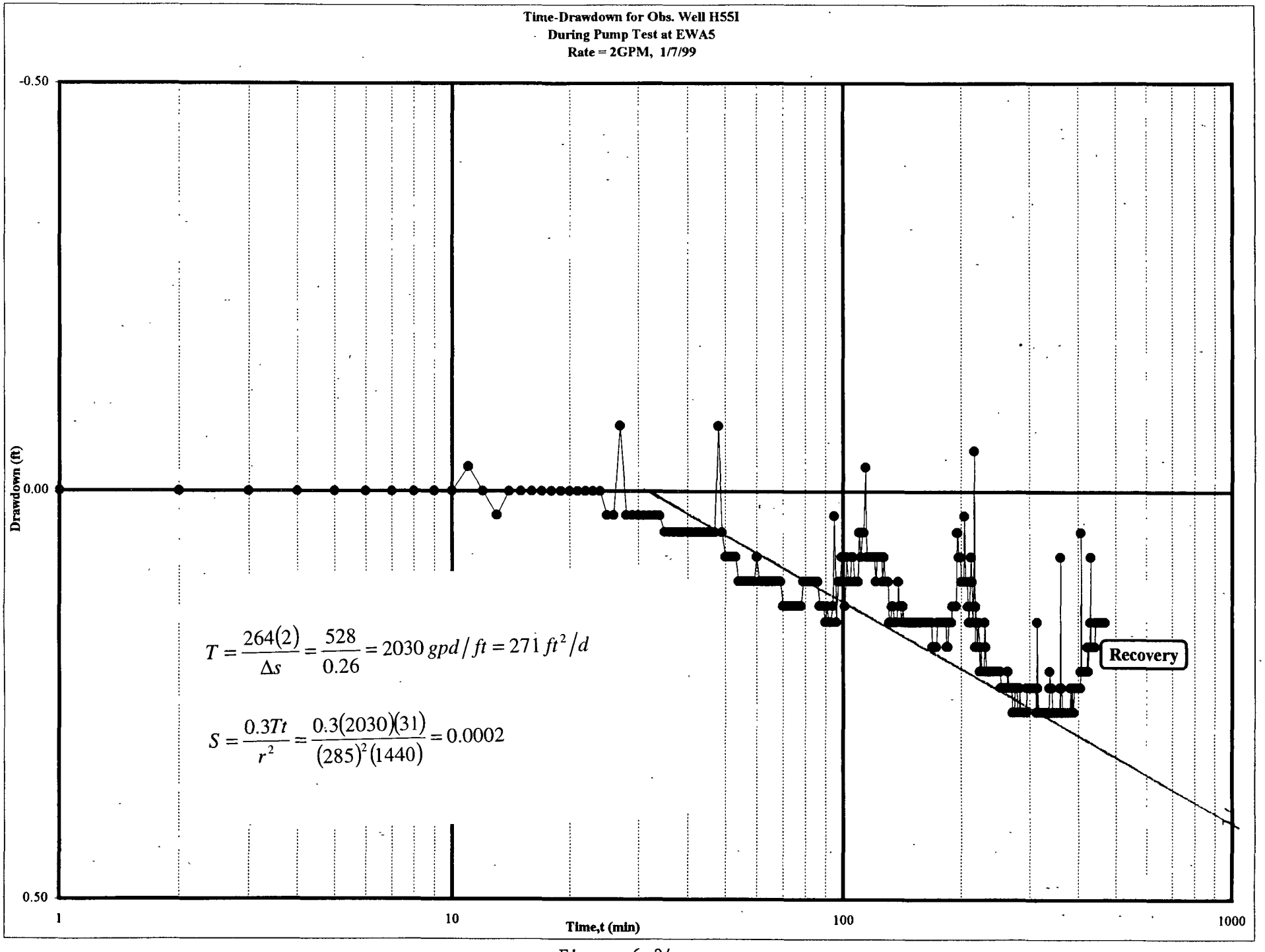

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
-0.50
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.26} = 2030\ gpd/ft = 271\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(2030)(31)}{(285)^2(1440)} = 0.0002$

Figure 6-24

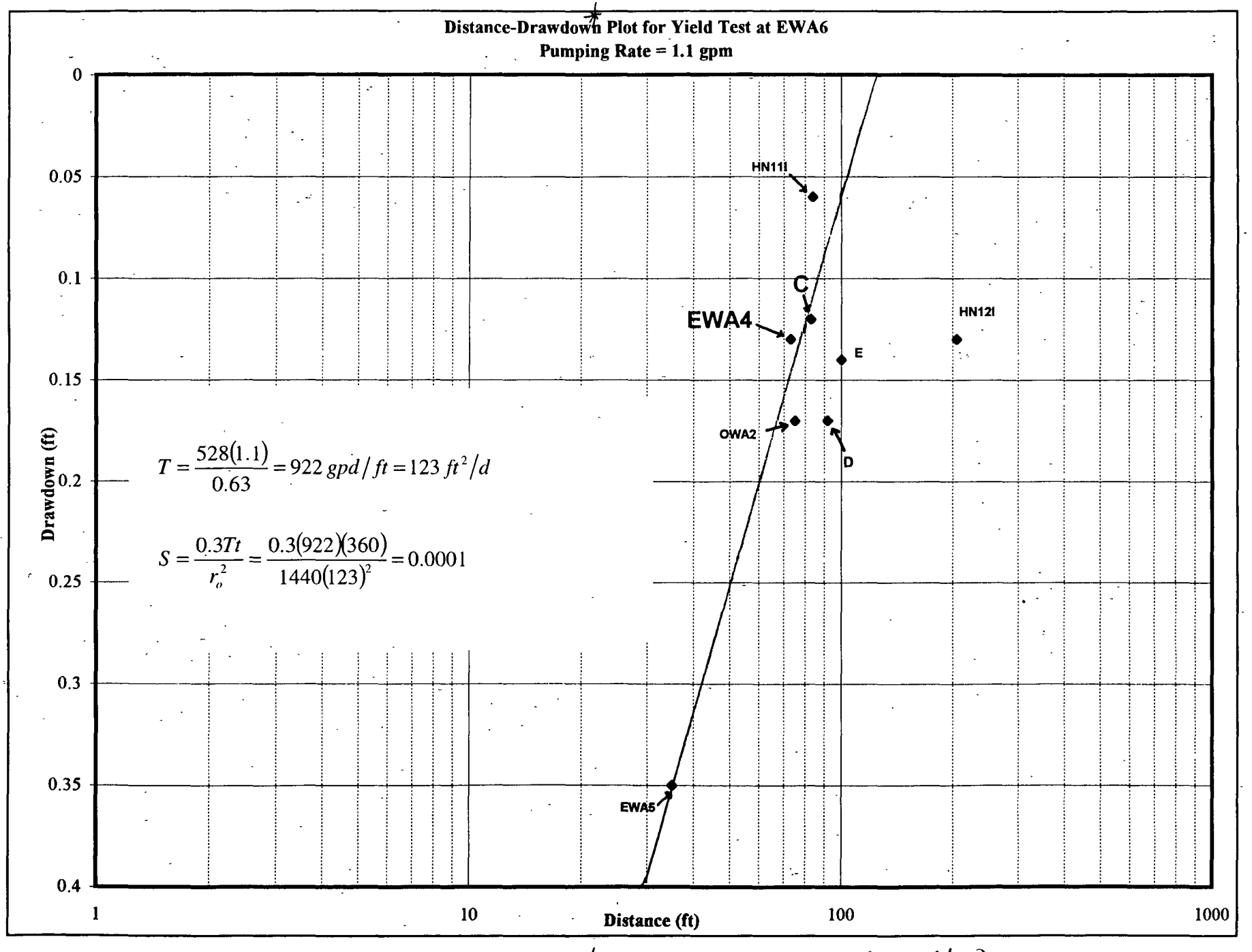
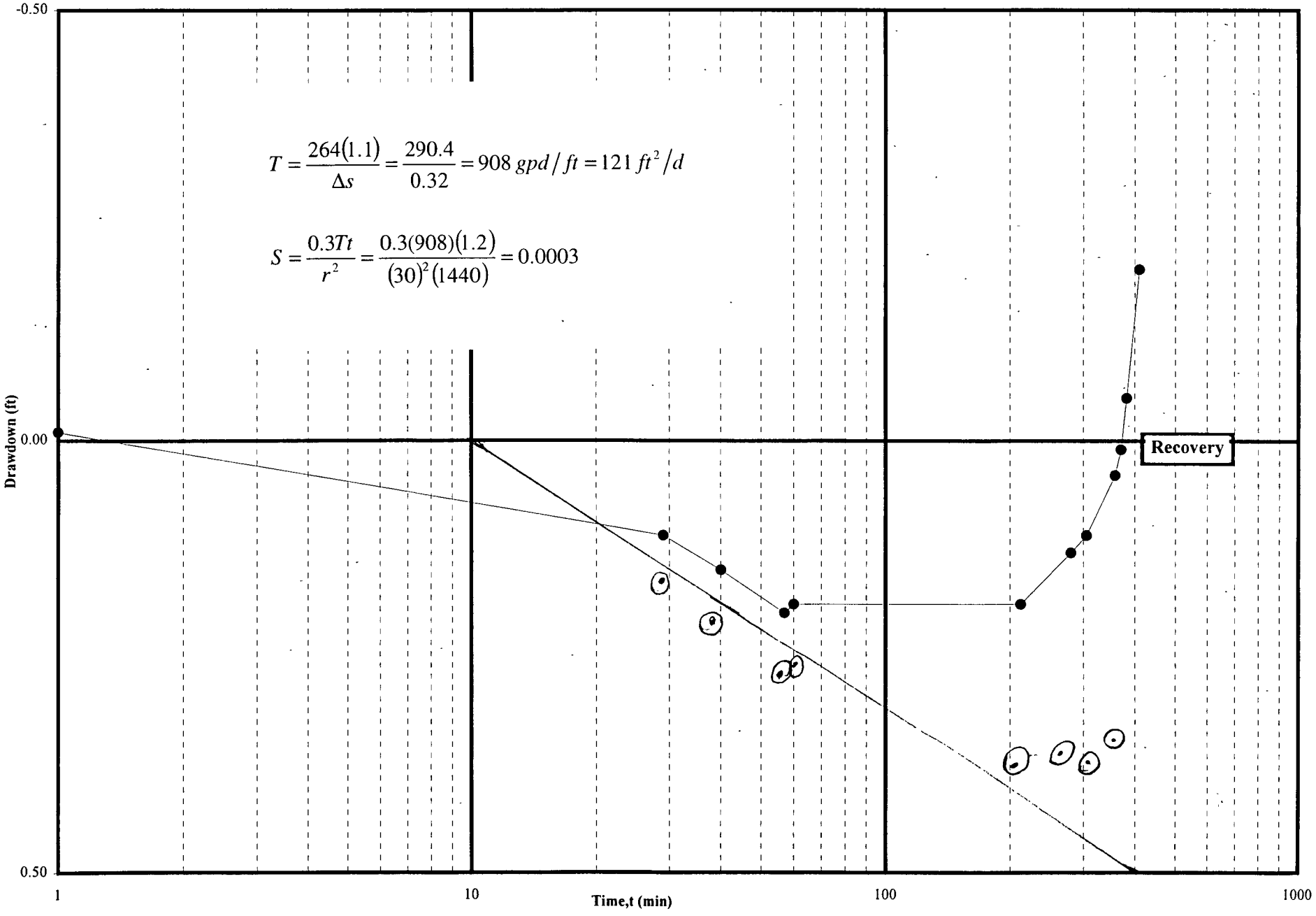


Figure 6-25 * Recharge Corrected (0.05ft/hr)

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA6
Rate = 1.1GPM, 1/18/99

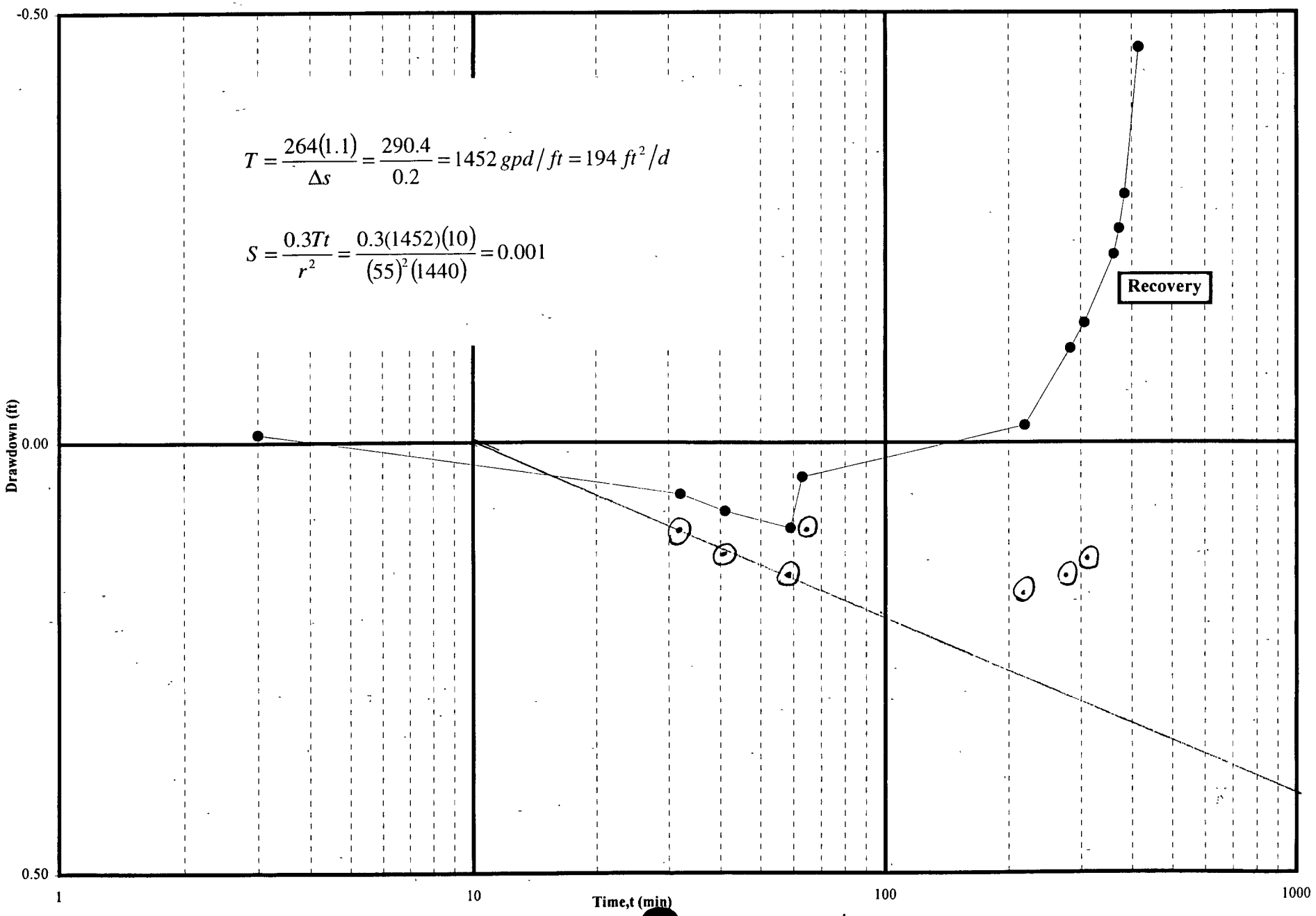


$$T = \frac{264(1.1)}{\Delta s} = \frac{290.4}{0.32} = 908\ gpd/ft = 121\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(908)(1.2)}{(30)^2(1440)} = 0.0003$$

Figure 6-26 ⊙ Recharge Corrected (0.05ft/hr)

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA6
Rate = 1.1GPM, 1/18/99



$$T = \frac{264(1.1)}{\Delta s} = \frac{290.4}{0.2} = 1452\, gpd/ft = 194\, ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(1452)(10)}{(55)^2(1440)} = 0.001$$

Figure 6-27 ⊙ Recharge corrected (0.05 ft/hr)

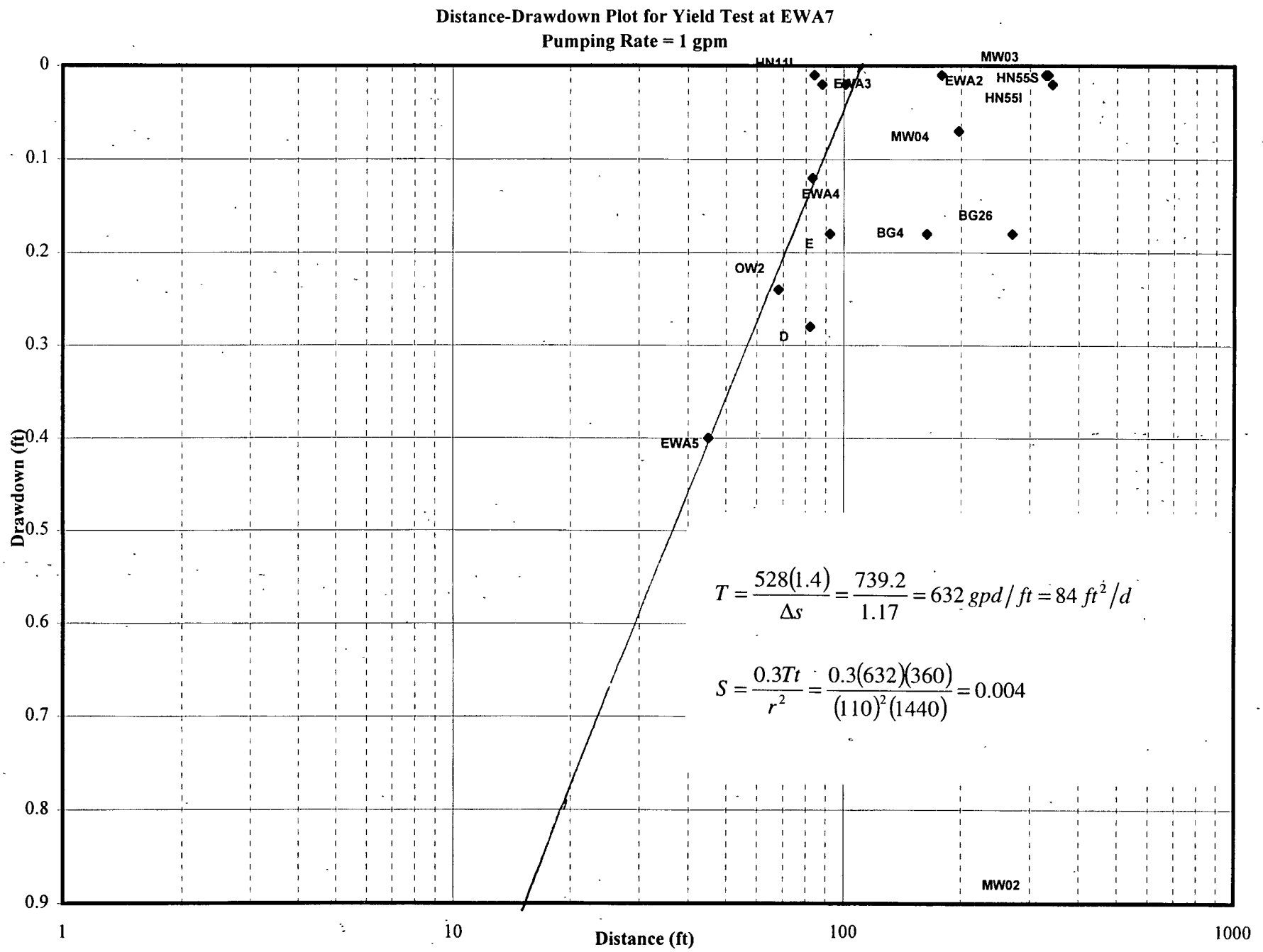
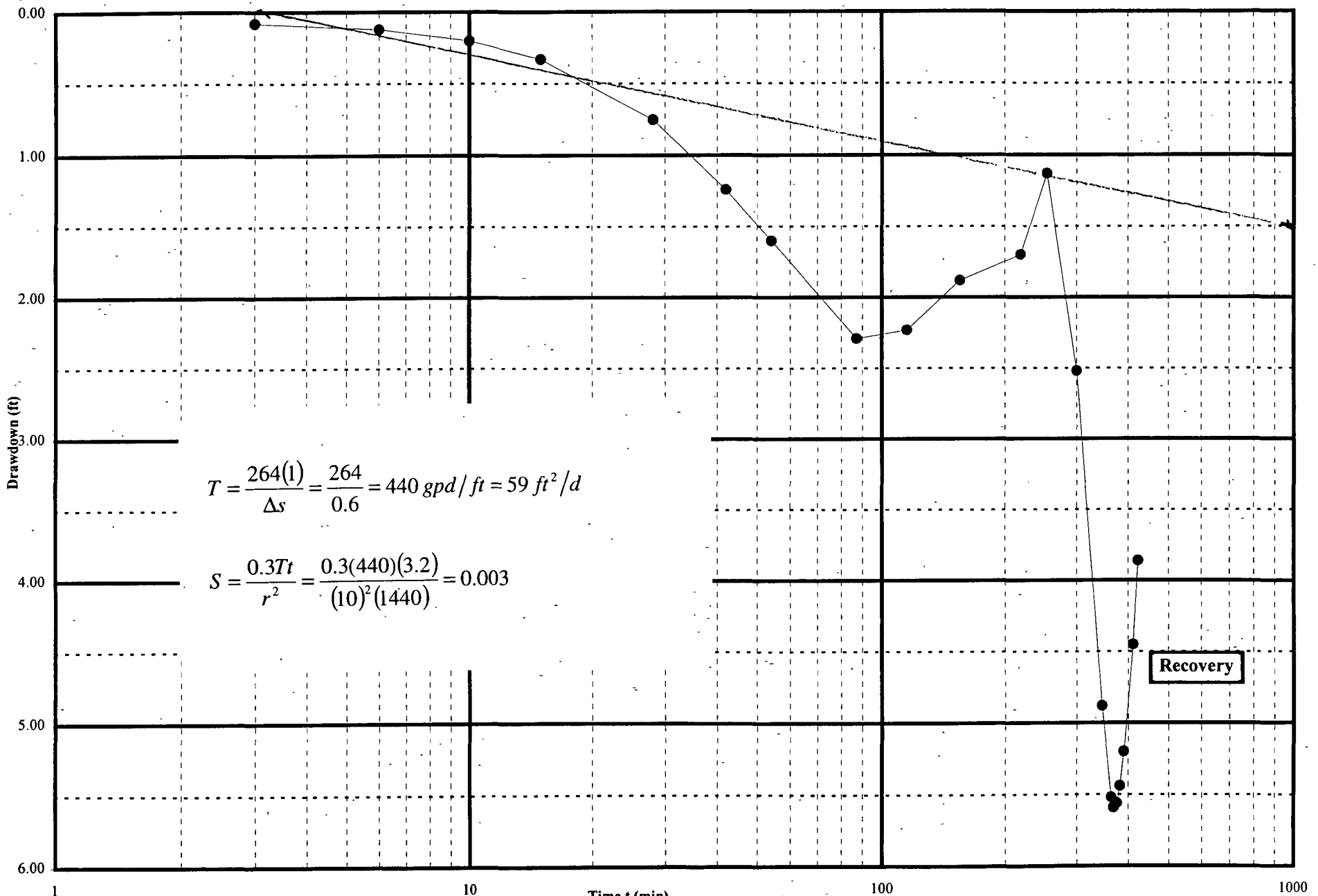

Distance-Drawdown Plot for Yield Test at EWA7
Pumping Rate = 1 gpm
Drawdown (ft)
Distance (ft)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
10
100
1000
HN14I
EWA3
MW03
EWA2
HN55S
HN55I
MW04
EWA4
BG26
BG4
E
OW2
D
EWA5
MW02
$T = \frac{528(1.4)}{\Delta s} = \frac{739.2}{1.17} = 632\ gpd/ft = 84\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(632)(360)}{(110)^2(1440)} = 0.004$

Figure 6-28

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA7
Rate = 1GPM for 4.5 hrs and 2.5GPM for 1.5 hrs, 1/27/99



$$T = \frac{264(1)}{\Delta s} = \frac{264}{0.6} = 440\ gpd/ft = 59\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(440)(3.2)}{(10)^2(1440)} = 0.003$$

Figu[illegible]-29

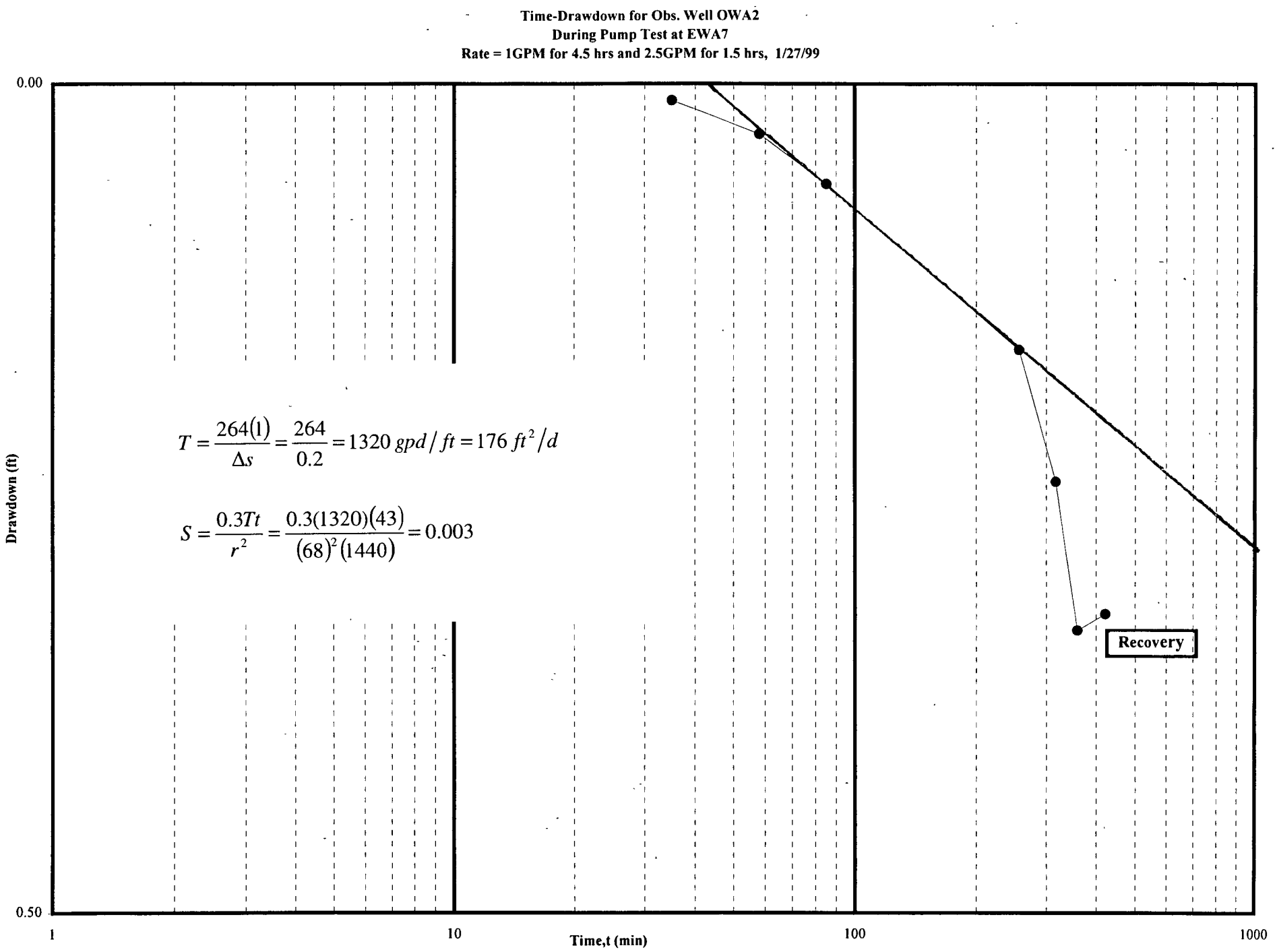
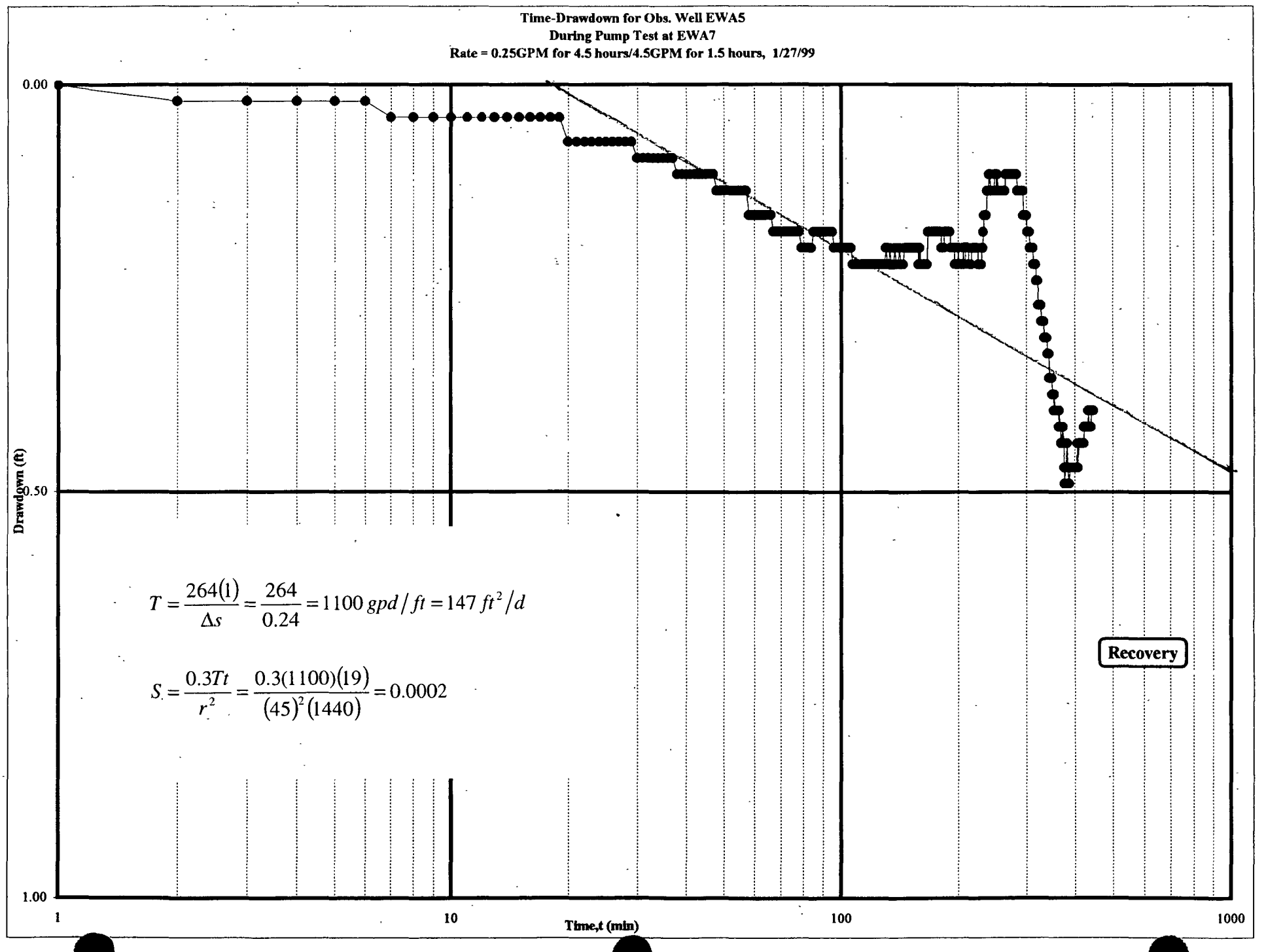

Time-Drawdown for Obs. Well OWA2
During Pump Test at EWA7
Rate = 1GPM for 4.5 hrs and 2.5GPM for 1.5 hrs, 1/27/99
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(1)}{\Delta s} = \frac{264}{0.2} = 1320\ gpd/ft = 176\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1320)(43)}{(68)^2(1440)} = 0.003$

Figure 6-30


Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA7
Rate = 0.25GPM for 4.5 hours/4.5GPM for 1.5 hours, 1/27/99
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(1)}{\Delta s} = \frac{264}{0.24} = 1100\ gpd/ft = 147\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1100)(19)}{(45)^2(1440)} = 0.0002$

Figur[illegible]-31

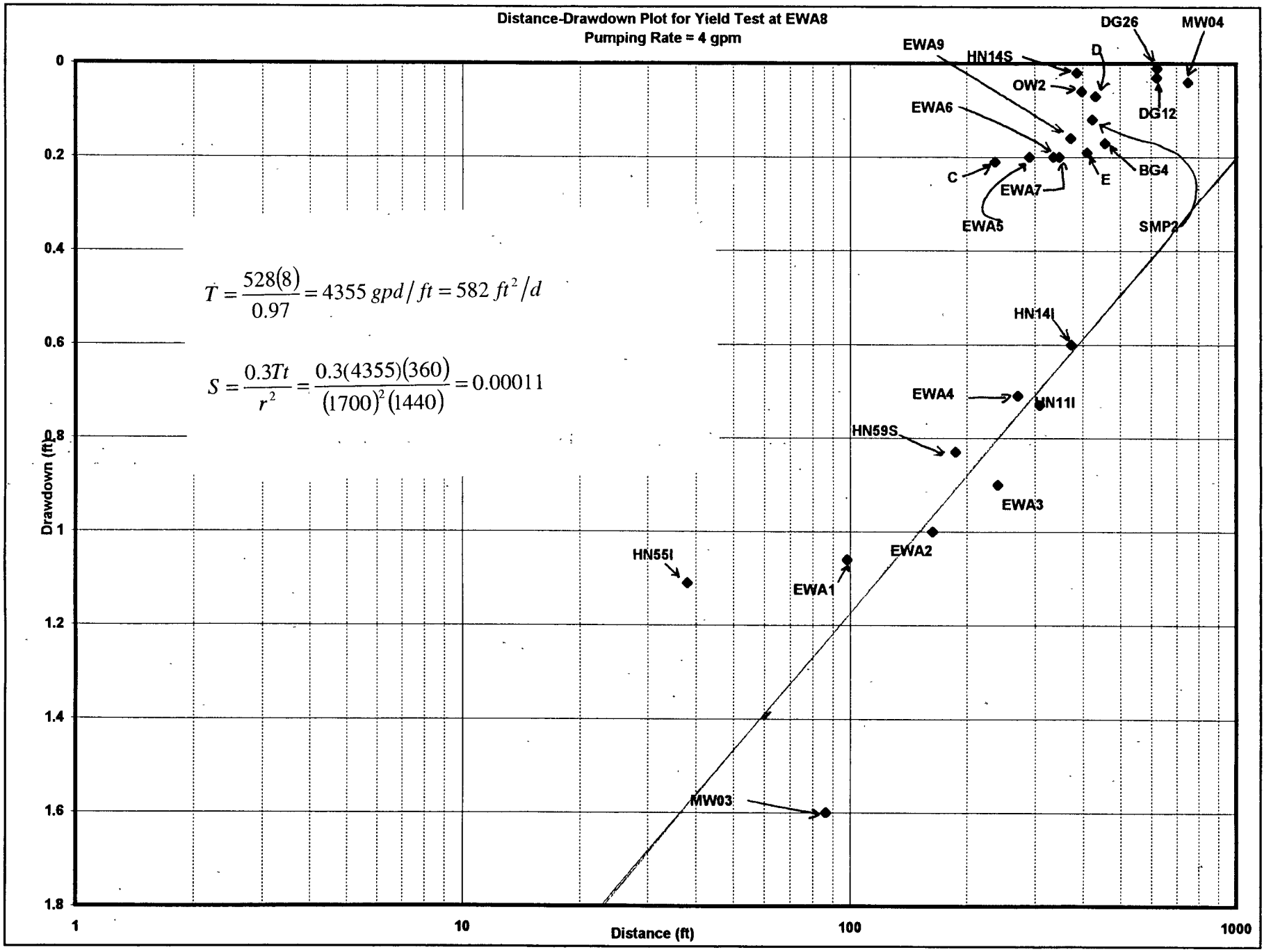

Distance-Drawdown Plot for Yield Test at EWA8
Pumping Rate = 4 gpm
$T = \frac{528(8)}{0.97} = 4355\ gpd/ft = 582\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4355)(360)}{(1700)^2(1440)} = 0.00011$
Drawdown (ft)
Distance (ft)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
1
10
100
1000
DG26
MW04
EWA9
HN14S
D
OW2
DG12
EWA6
C
EWA7
E
BG4
EWA5
SMP2
HN14I
EWA4
HN11I
HN59S
EWA3
EWA2
HN55I
EWA1
MW03

Figure 6-32

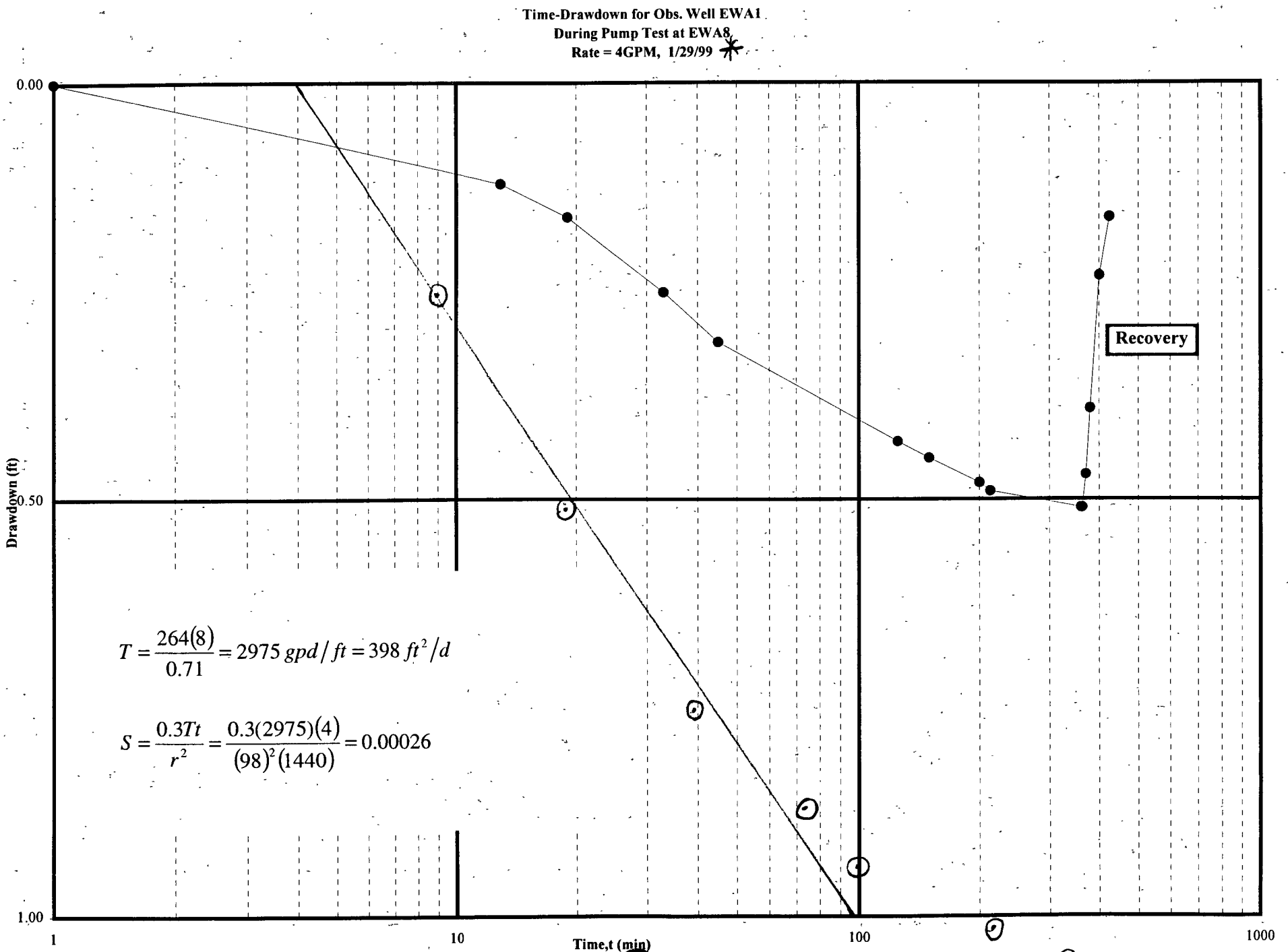


Figure 6-33 * ⊙ 8gpm on 2/8/99

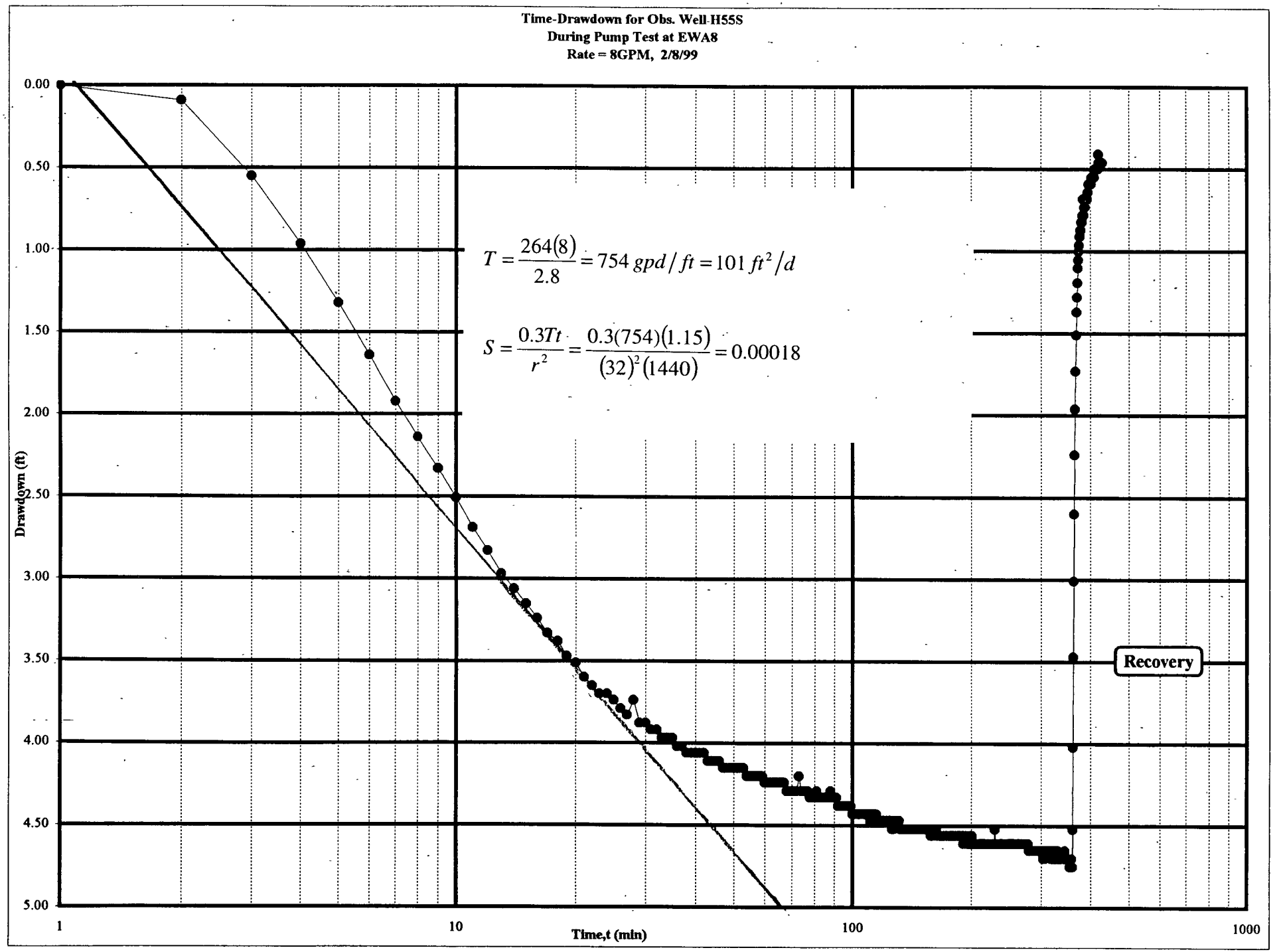
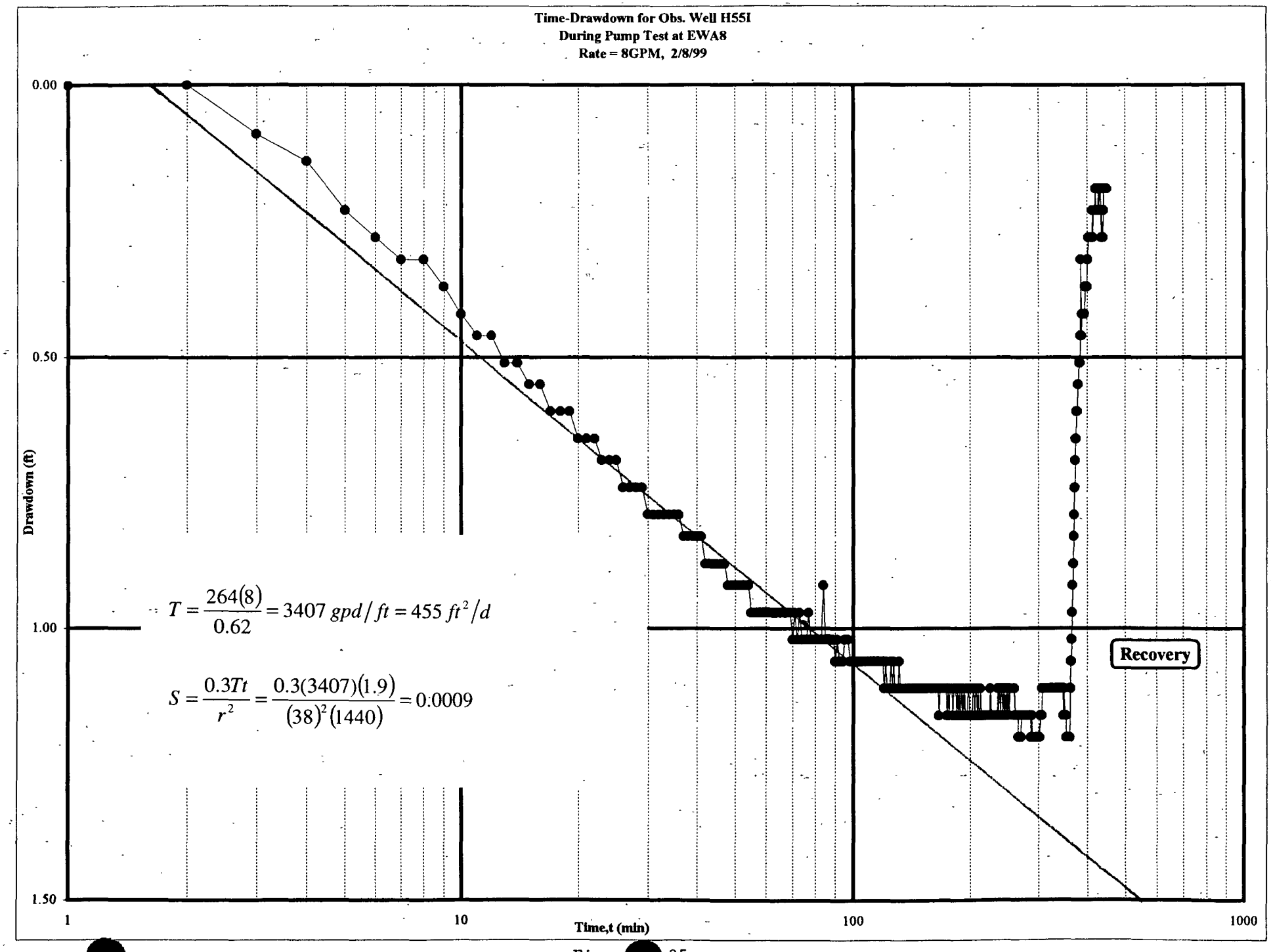

Time-Drawdown for Obs. Well H55S
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
$T = \frac{264(8)}{2.8} = 754\ gpd/ft = 101\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(754)(1.15)}{(32)^2(1440)} = 0.00018$
Recovery
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
1
10
100
1000
Time,t (min)

Figure 6-34


Time-Drawdown for Obs. Well H55I
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(8)}{0.62} = 3407\ gpd/ft = 455\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(3407)(1.9)}{(38)^2(1440)} = 0.0009$

Figur[illegible]-35

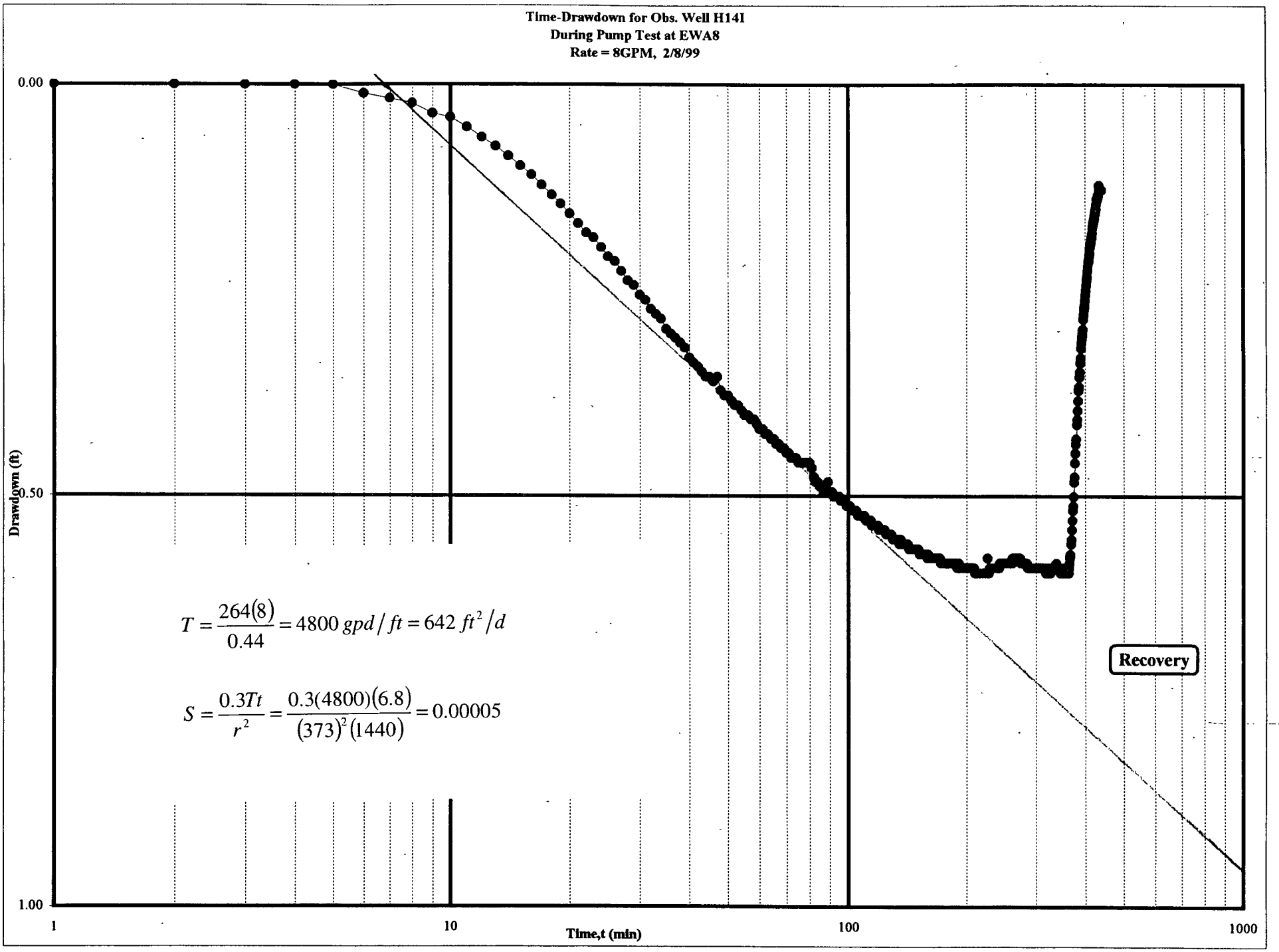
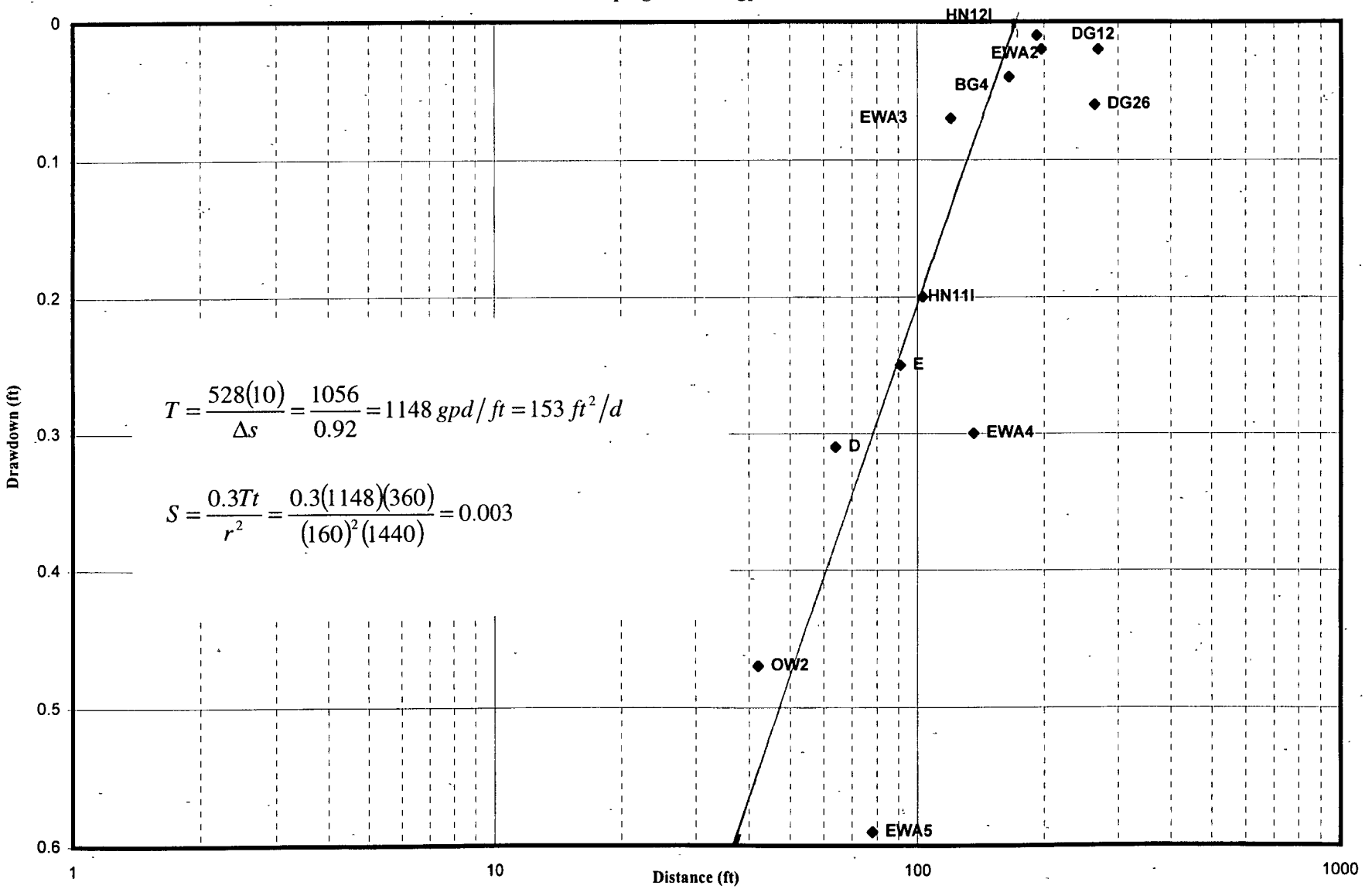

Time-Drawdown for Obs. Well H14I
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(8)}{0.44} = 4800\ gpd/ft = 642\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4800)(6.8)}{(373)^2(1440)} = 0.00005$

Figure 6-36

Distance-Drawdown Plot for Yield Test at EWA9
Pumping Rate = 1 gpm



$$T = \frac{528(10)}{\Delta s} = \frac{1056}{0.92} = 1148\ gpd/ft = 153\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(1148)(360)}{(160)^2(1440)} = 0.003$$

Figure 6-37

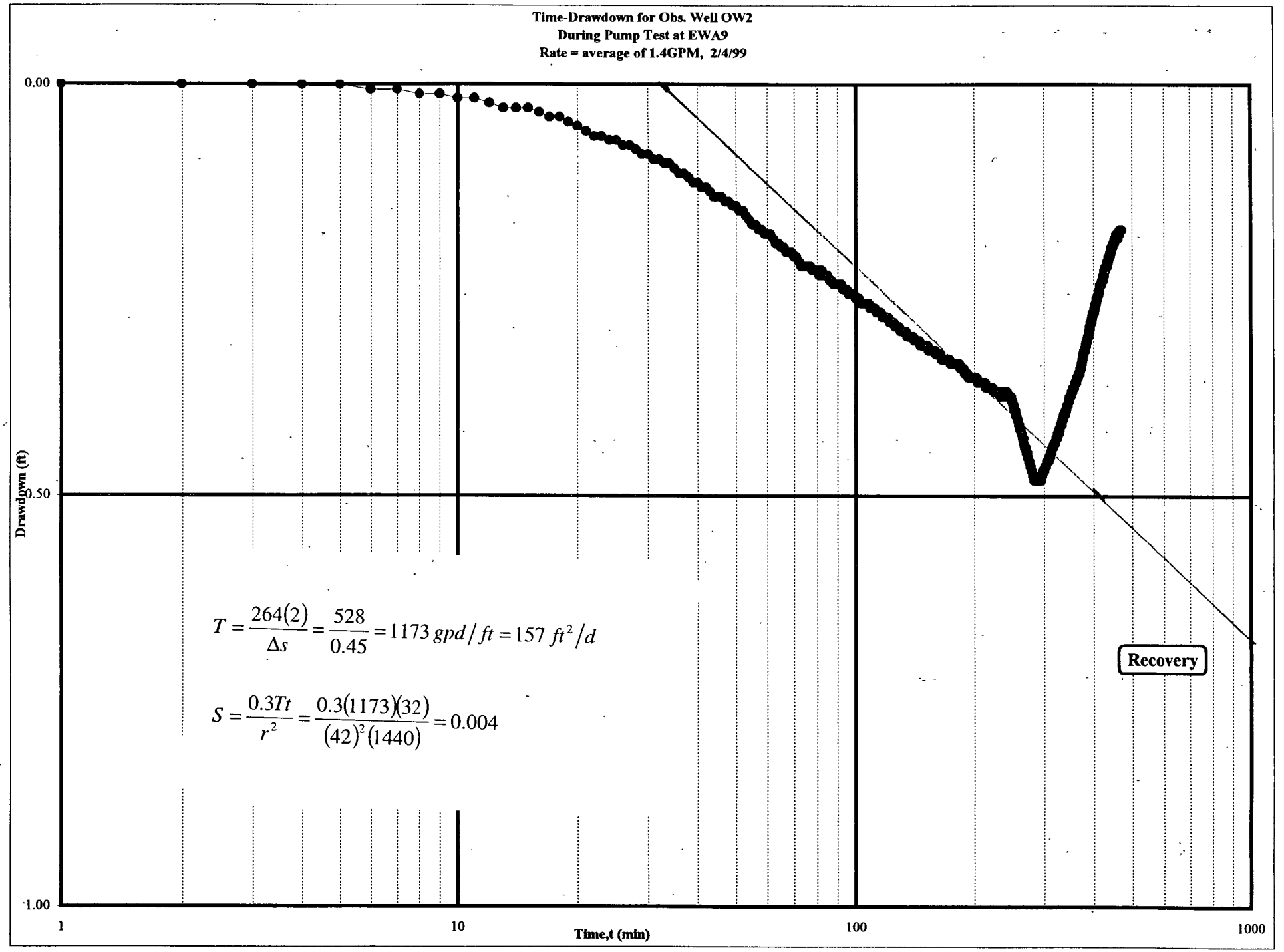
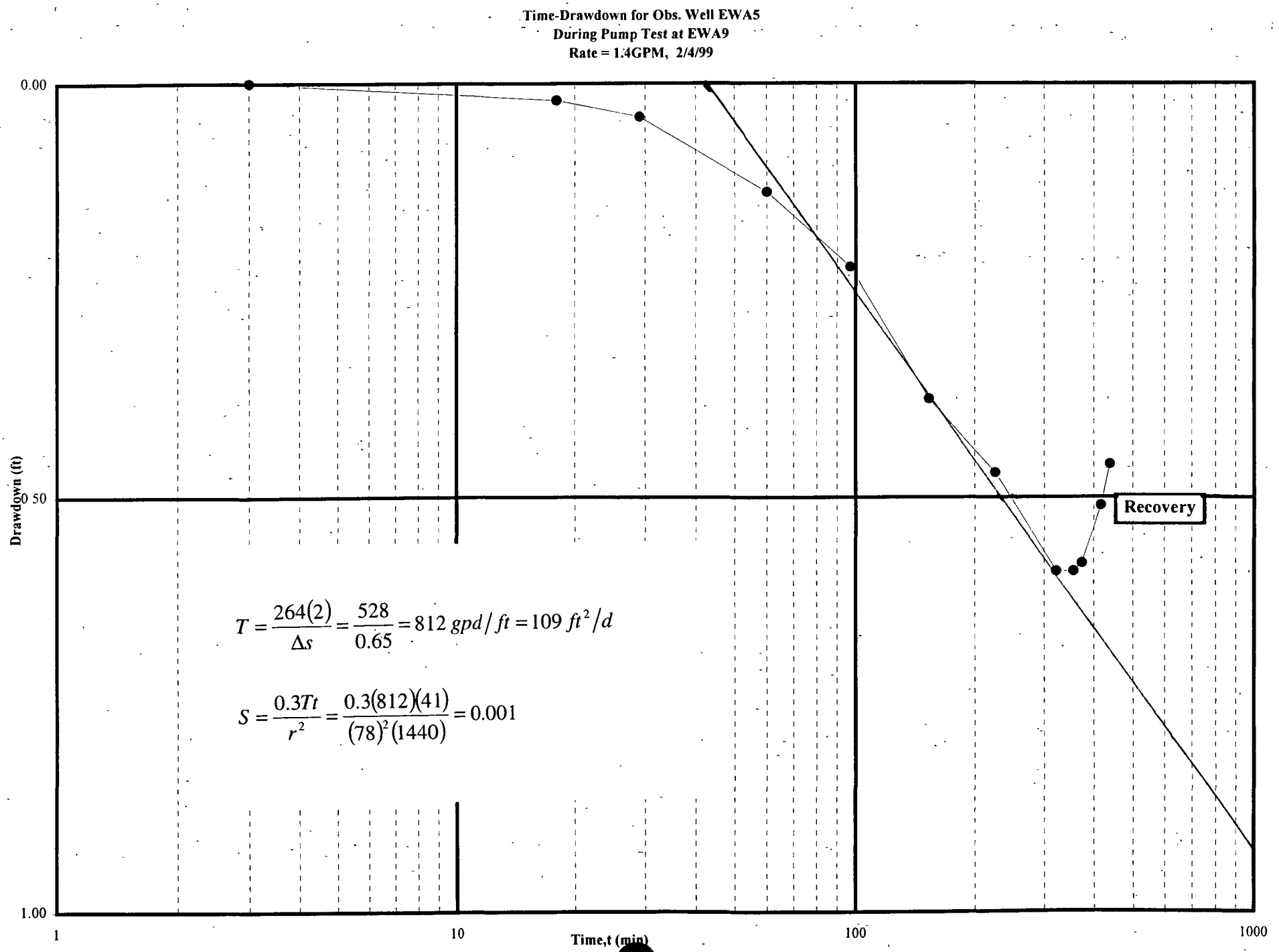

Time-Drawdown for Obs. Well OW2
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
0.00
-0.50
-1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.45} = 1173\ gpd/ft = 157\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1173)(32)}{(42)^2(1440)} = 0.004$

Figure 6-38


Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA9
Rate = 1.4GPM, 2/4/99
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{\Delta s} = \frac{528}{0.65} = 812\ gpd/ft = 109\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(812)(41)}{(78)^2(1440)} = 0.001$

Figur[illegible]-39

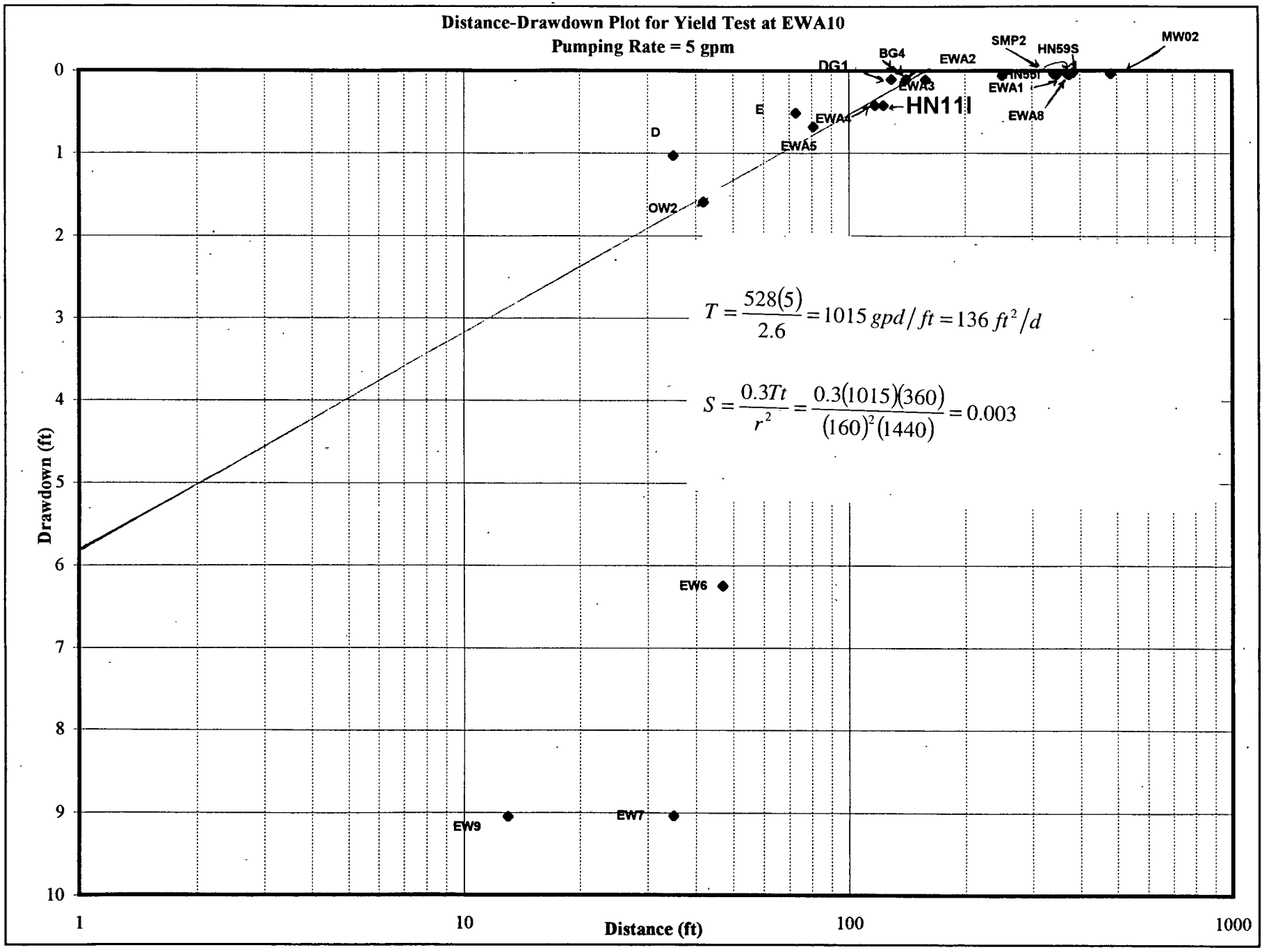

Distance-Drawdown Plot for Yield Test at EWA10
Pumping Rate = 5 gpm
Drawdown (ft)
Distance (ft)
0
1
2
3
4
5
6
7
8
9
10
1
10
100
1000
MW02
SMP2
HN59S
BG4
DG1
EWA2
HN55I
EWA1
EWA3
HN11I
EWA8
E
EWA4
D
EWA5
OW2
EW6
EW7
EW9
$T = \frac{528(5)}{2.6} = 1015\ gpd/ft = 136\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1015)(360)}{(160)^2(1440)} = 0.003$

Figure 6-40

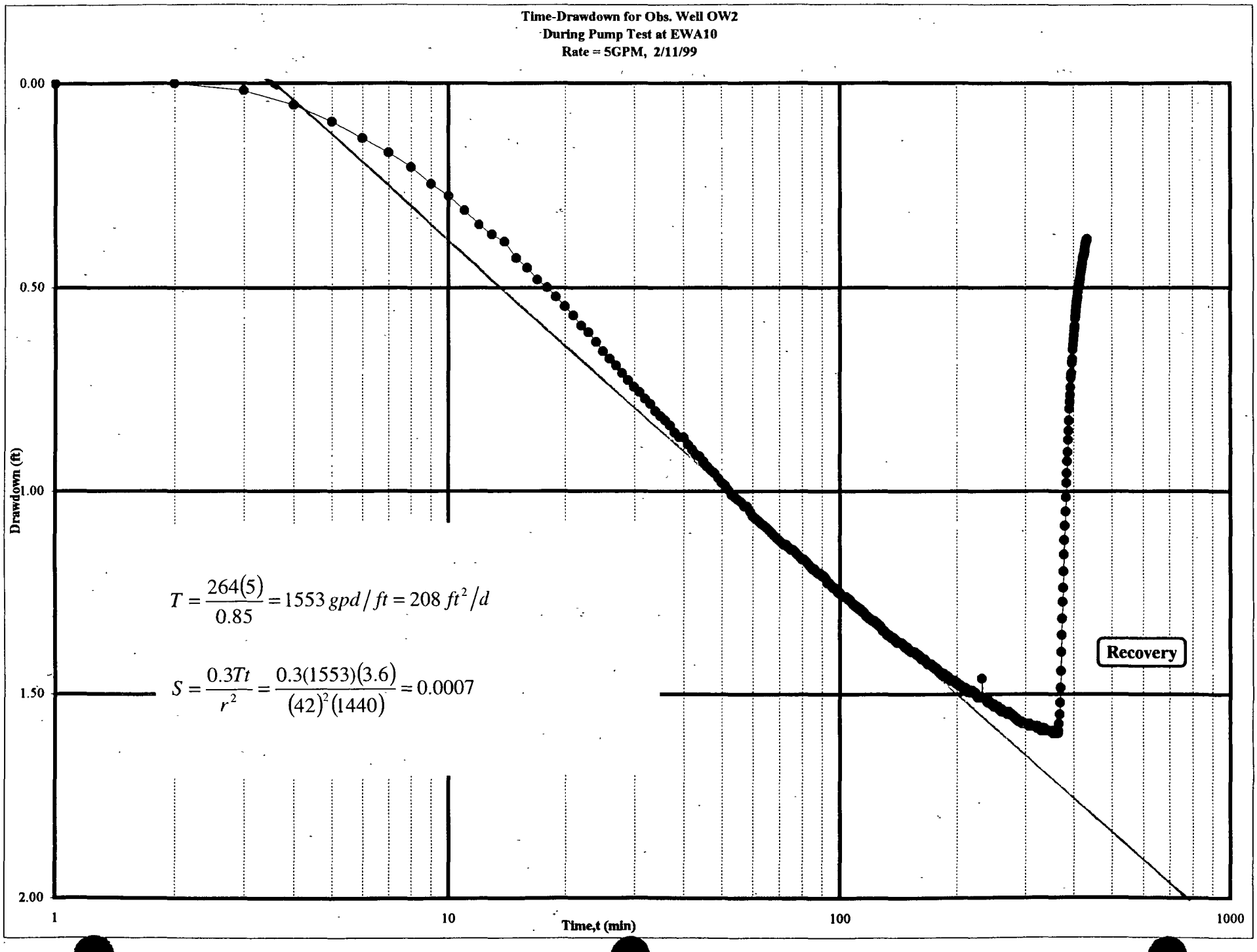

Time-Drawdown for Obs. Well OW2
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
0.00
0.50
1.00
1.50
2.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(5)}{0.85} = 1553\ gpd/ft = 208\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1553)(3.6)}{(42)^2(1440)} = 0.0007$

Figure 41

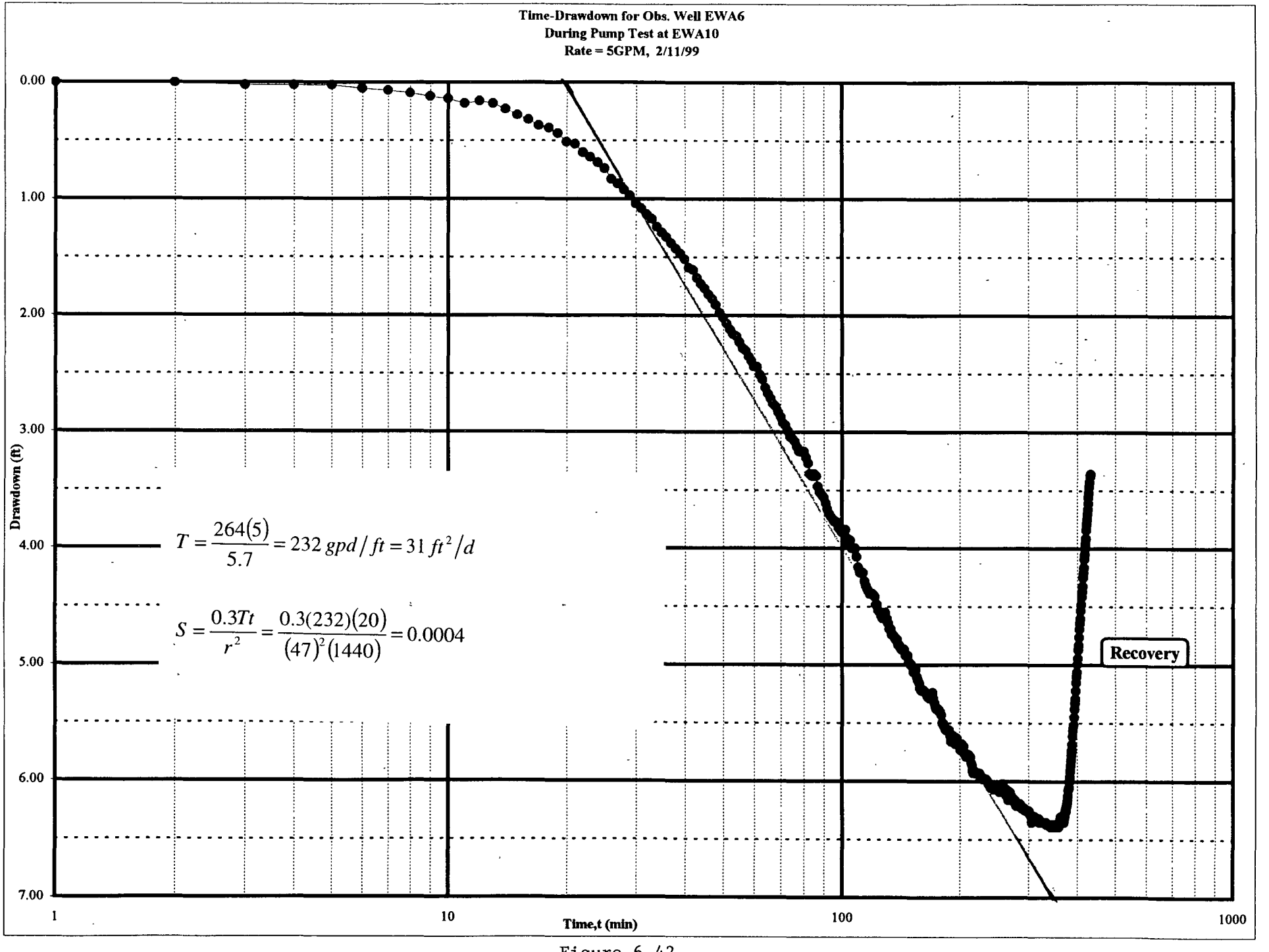
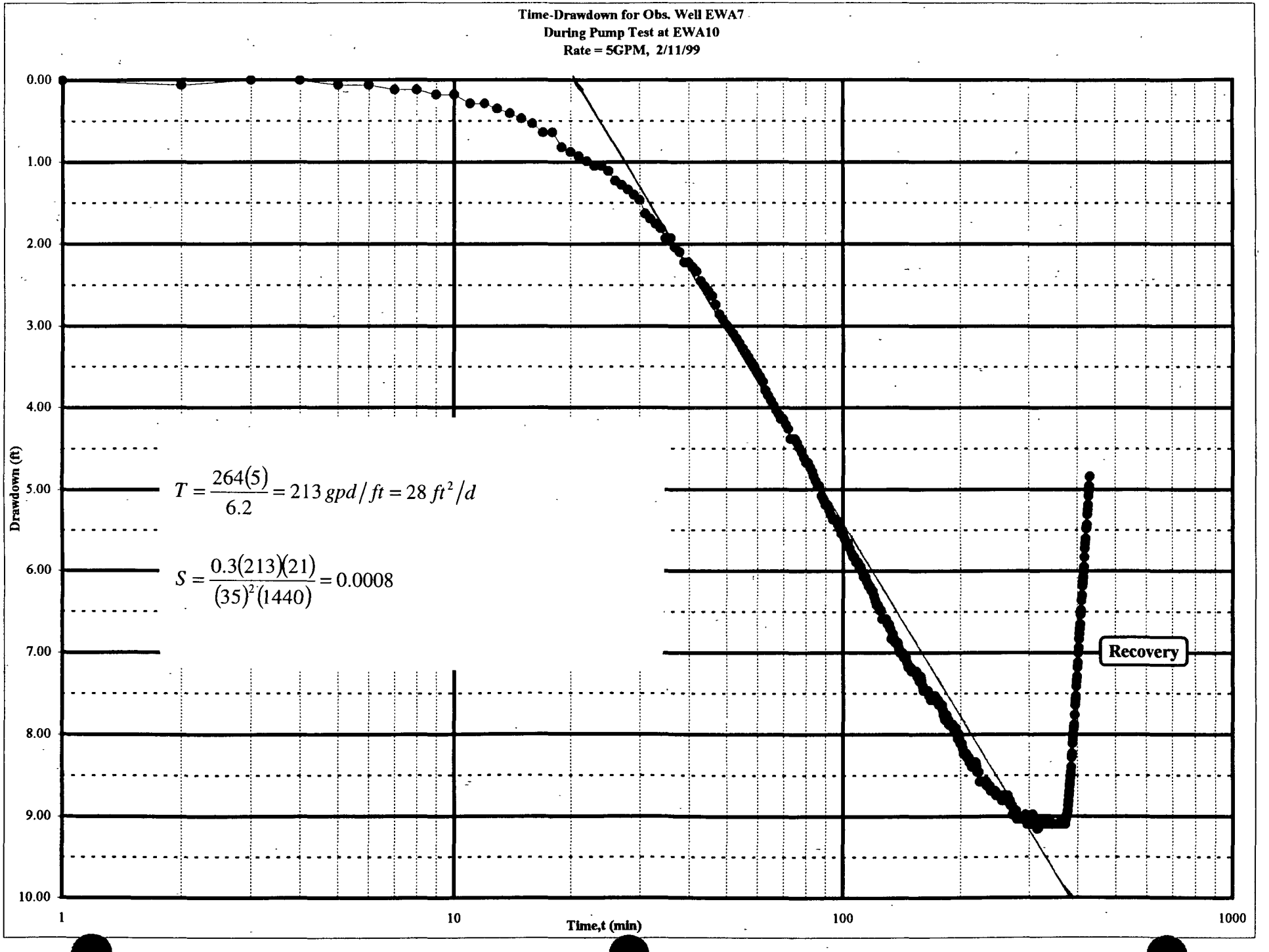

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
$T = \frac{264(5)}{5.7} = 232\ gpd/ft = 31\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(232)(20)}{(47)^2(1440)} = 0.0004$
Recovery

Figure 6-42


Time-Drawdown for Obs. Well EWA7
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
1
10
100
1000
Time,t (min)
$T = \frac{264(5)}{6.2} = 213\ gpd/ft = 28\ ft^2/d$
$S = \frac{0.3(213)(21)}{(35)^2(1440)} = 0.0008$
Recovery

Figu[illegible]-43

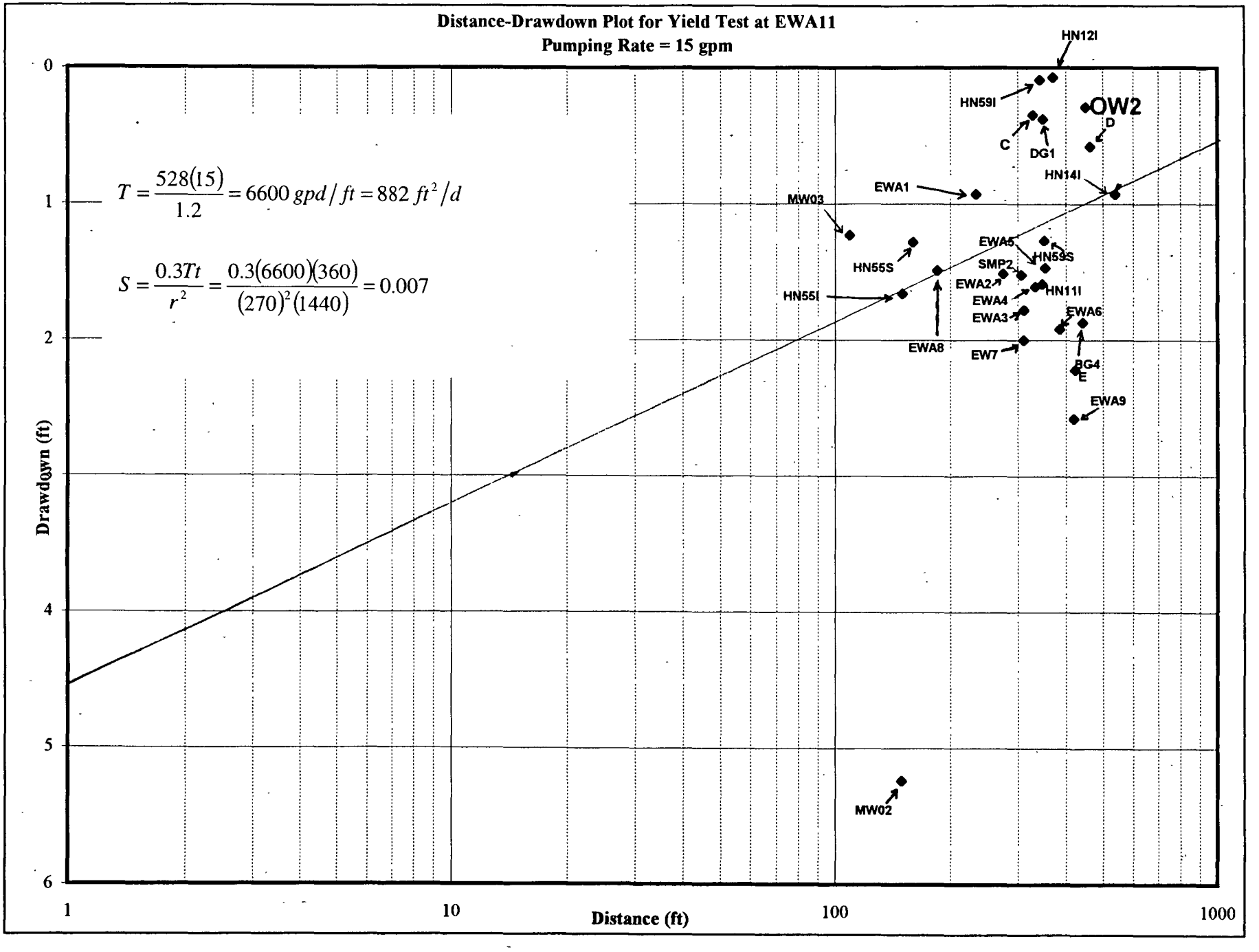
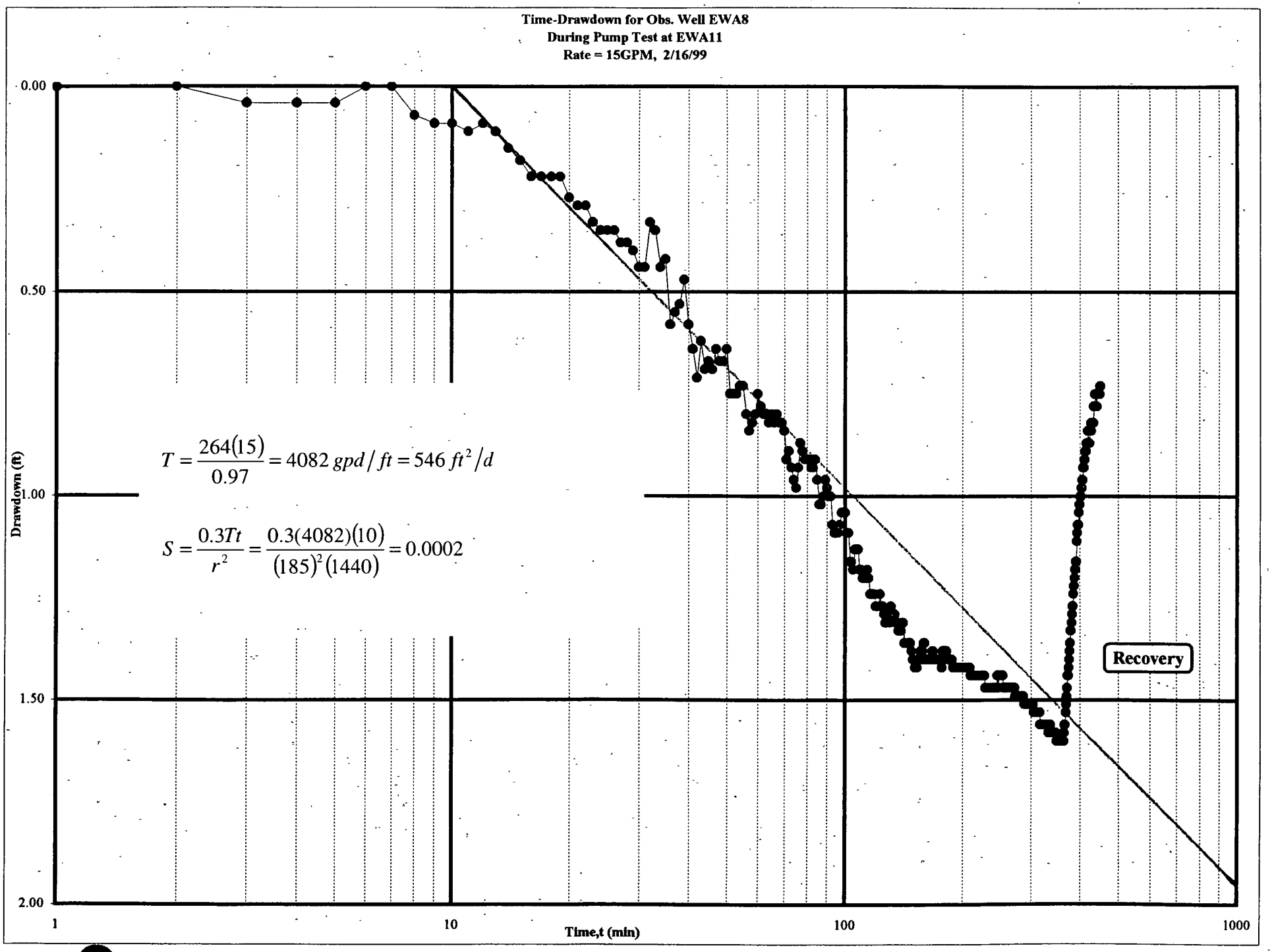

Distance-Drawdown Plot for Yield Test at EWA11
Pumping Rate = 15 gpm
$T = \frac{528(15)}{1.2} = 6600\ gpd/ft = 882\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(6600)(360)}{(270)^2(1440)} = 0.007$
Drawdown (ft)
Distance (ft)
0
1
2
4
5
6
1
10
100
1000
HN12I
HN59I
OW2
D
C
DG1
HN14I
EWA1
MW03
EWA5
HN59S
SMP2
HN55S
EWA2
HN11I
HN55I
EWA4
EWA3
EWA6
EWA8
EW7
BG4
E
EWA9
MW02

Figure 6-44


Time-Drawdown for Obs. Well EWA8
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
0.50
1.00
1.50
2.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{0.97} = 4082\ gpd/ft = 546\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4082)(10)}{(185)^2(1440)} = 0.0002$

Figur 45

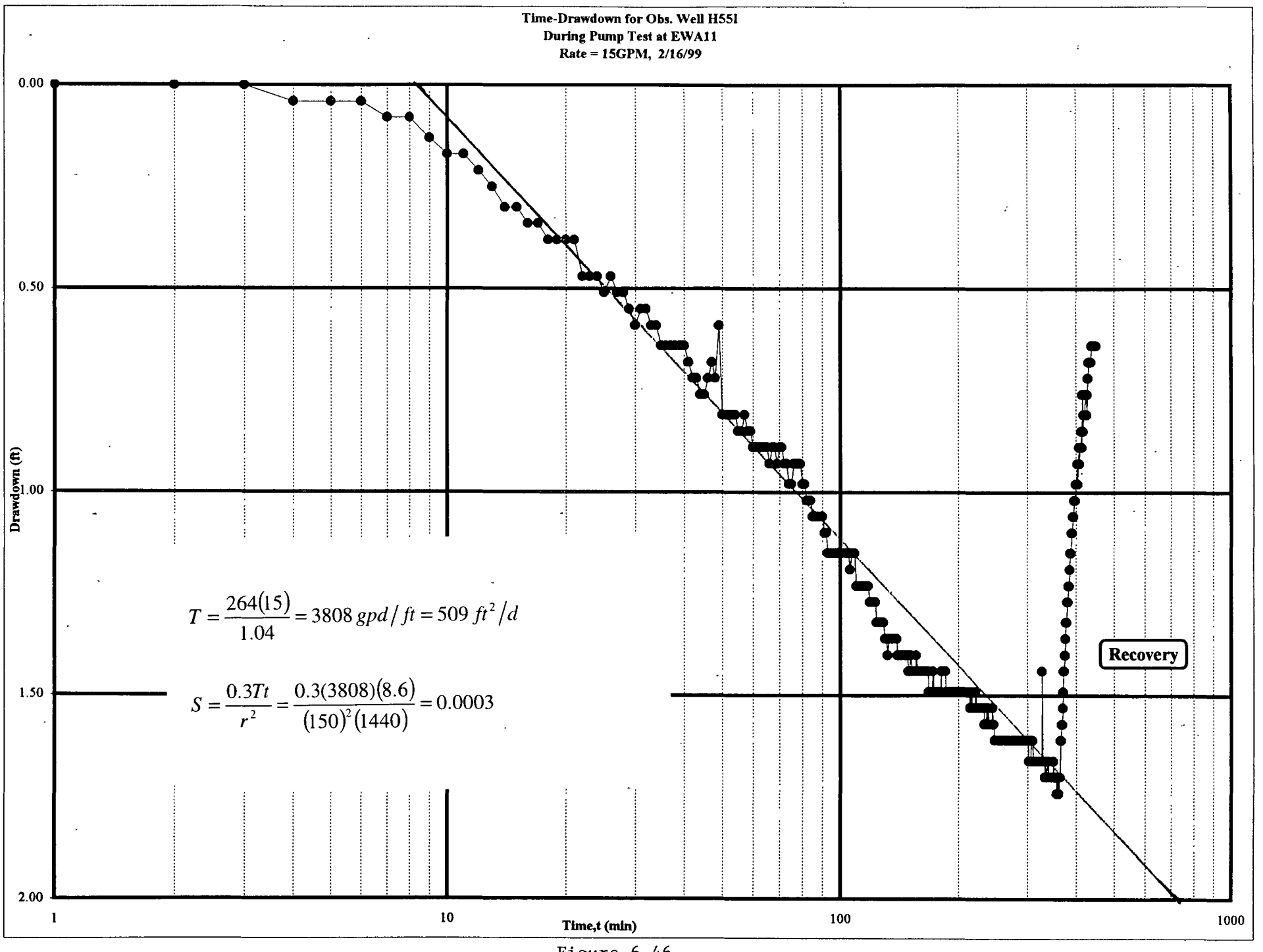
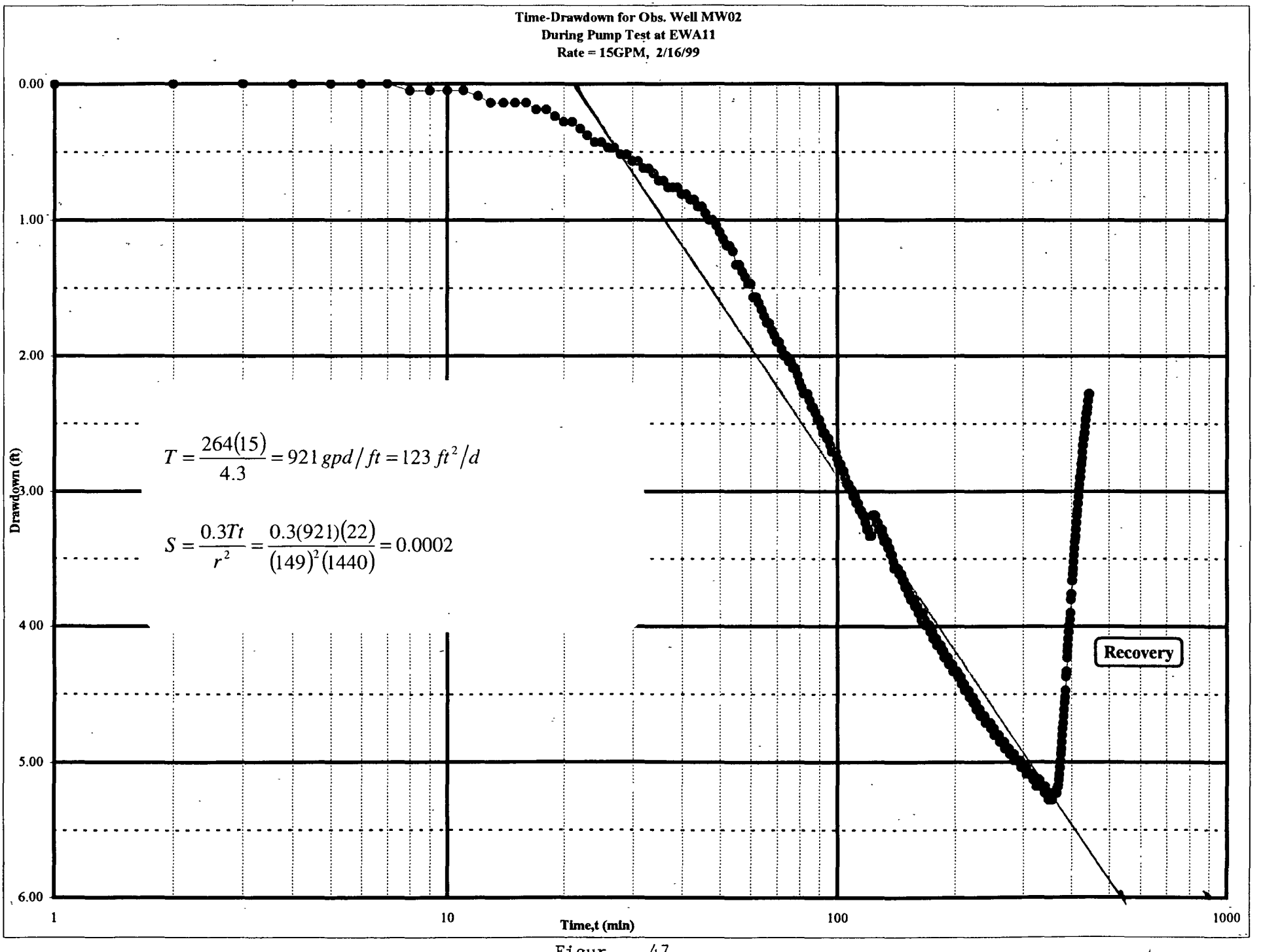

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
0.50
1.00
1.50
2.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{1.04} = 3808\ gpd/ft = 509\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(3808)(8.6)}{(150)^2(1440)} = 0.0003$

Figure 6-46


Time-Drawdown for Obs. Well MW02
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
$T = \frac{264(15)}{4.3} = 921\, gpd/ft = 123\, ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(921)(22)}{(149)^2(1440)} = 0.0002$
Recovery

Figur 47

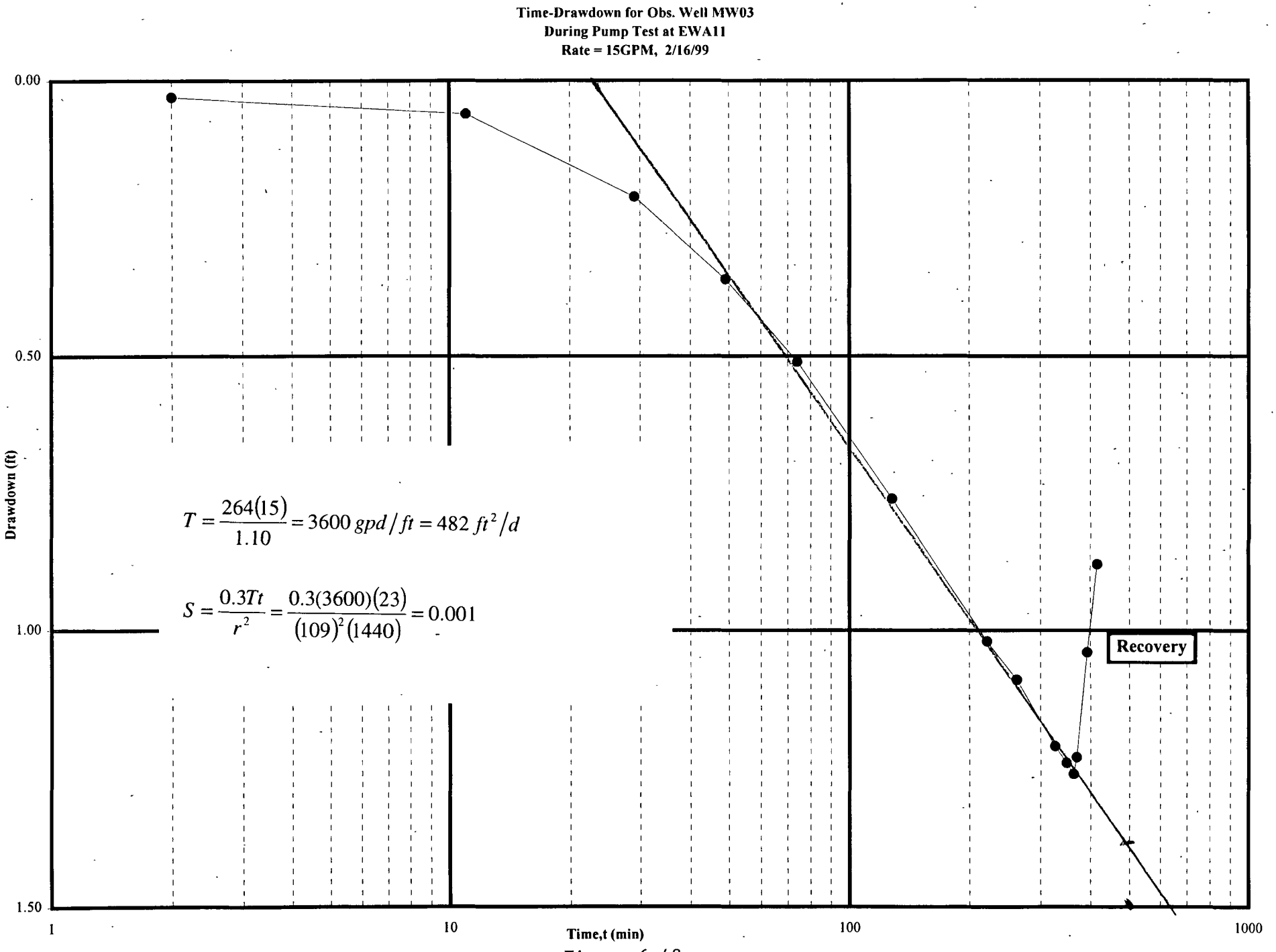

Time-Drawdown for Obs. Well MW03
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{1.10} = 3600\ gpd/ft = 482\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(3600)(23)}{(109)^2(1440)} = 0.001$

Figure 6-48

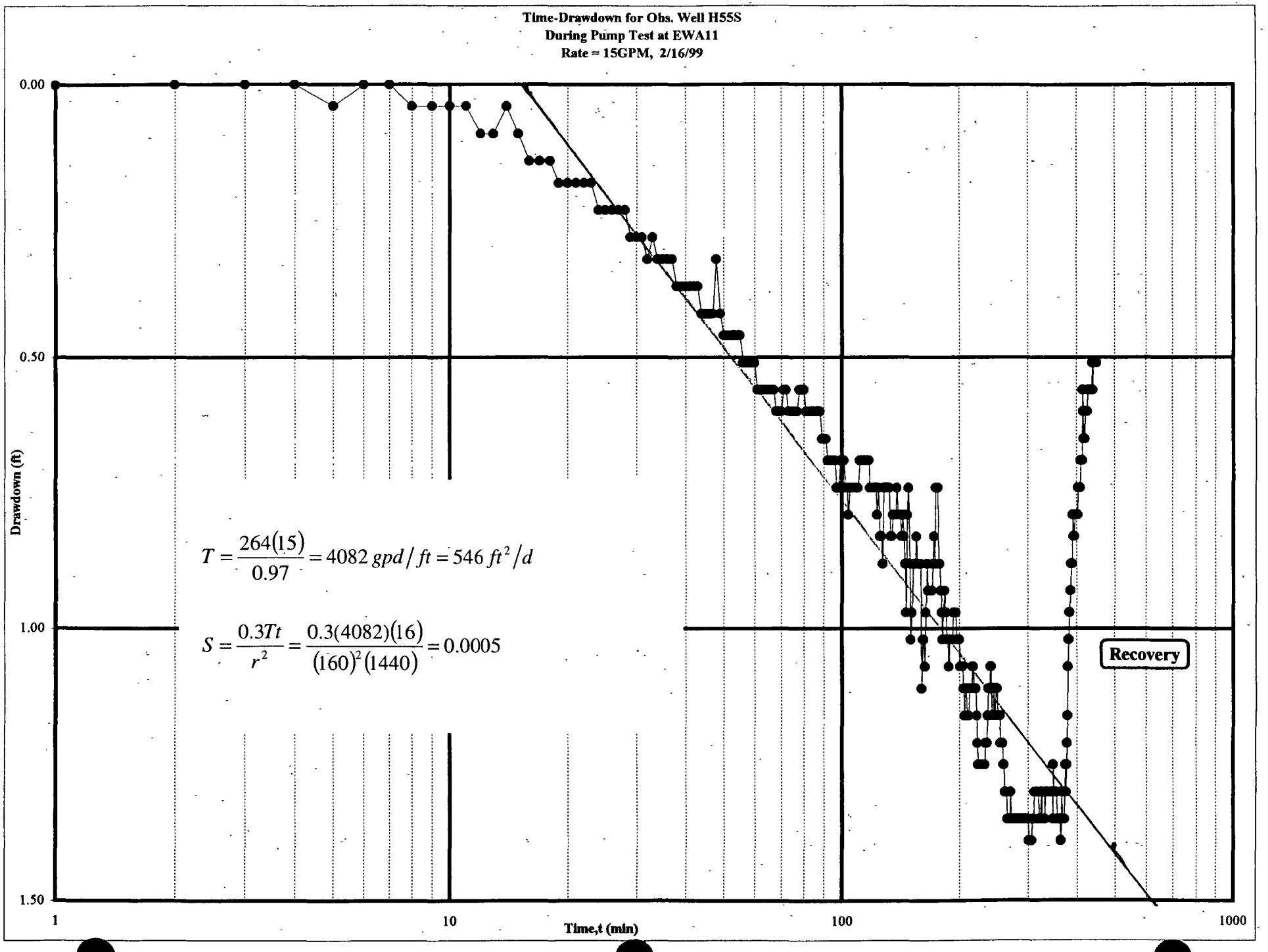

Time-Drawdown for Obs. Well H55S
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(15)}{0.97} = 4082\ gpd/ft = 546\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(4082)(16)}{(160)^2(1440)} = 0.0005$

Figure [illegible]-49

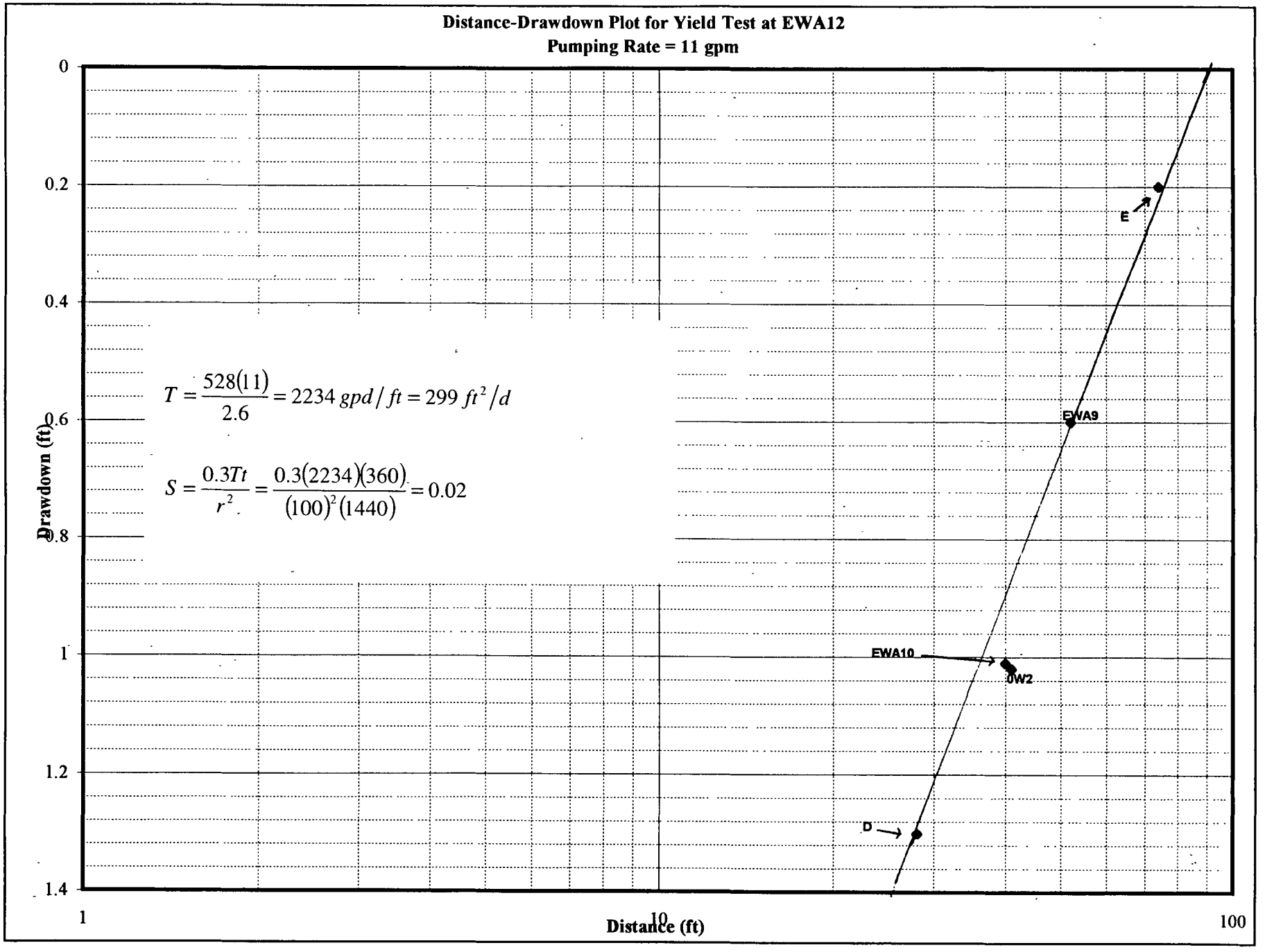

Distance-Drawdown Plot for Yield Test at EWA12
Pumping Rate = 11 gpm
Drawdown (ft)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
Distance (ft)
1
10
100
E
EWA9
EWA10
OW2
D
$T = \frac{528(11)}{2.6} = 2234\ gpd/ft = 299\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(2234)(360)}{(100)^2(1440)} = 0.02$

Figure 6-50

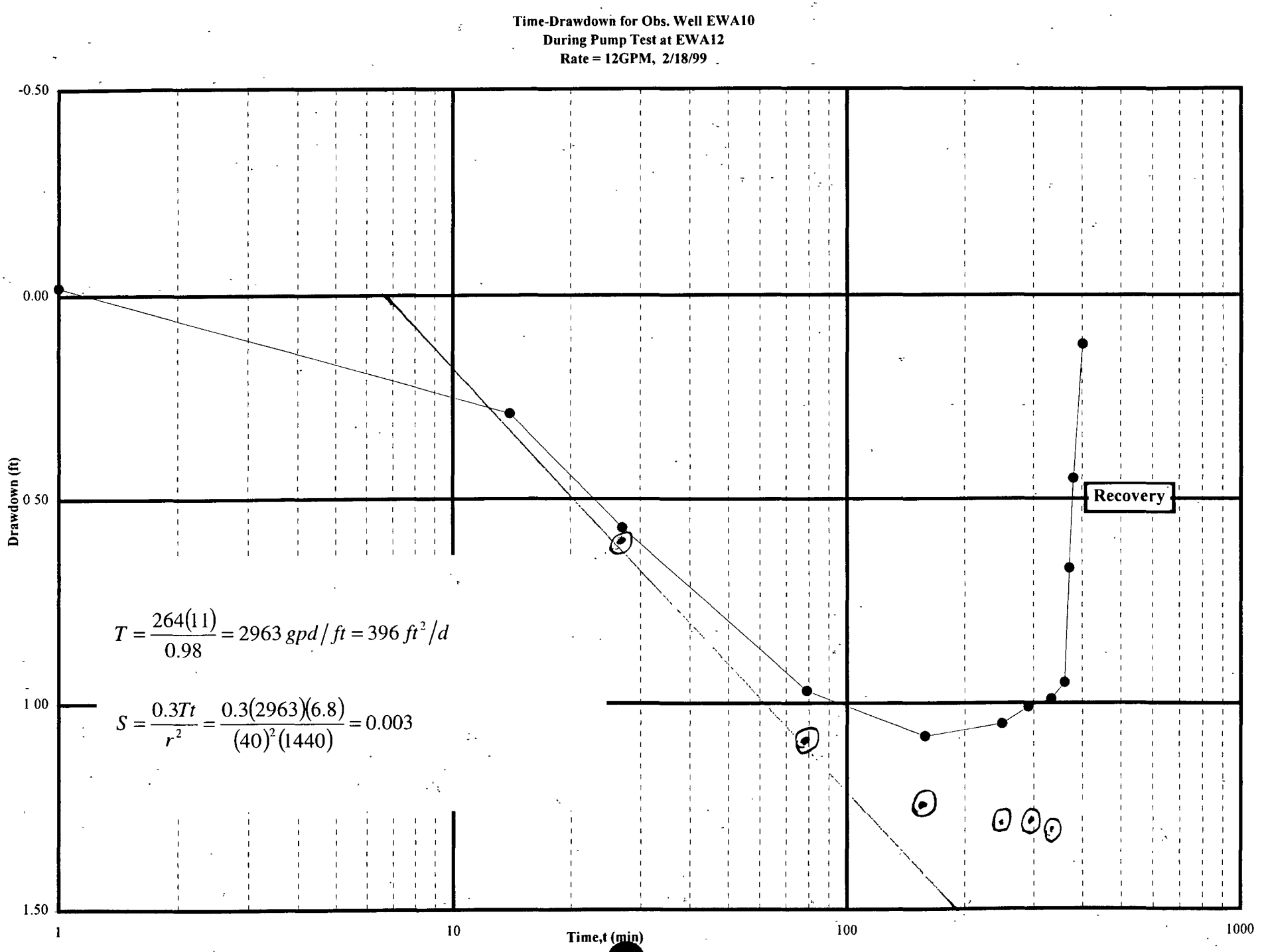


Figure 6-51 ⊙ Recharge corrected

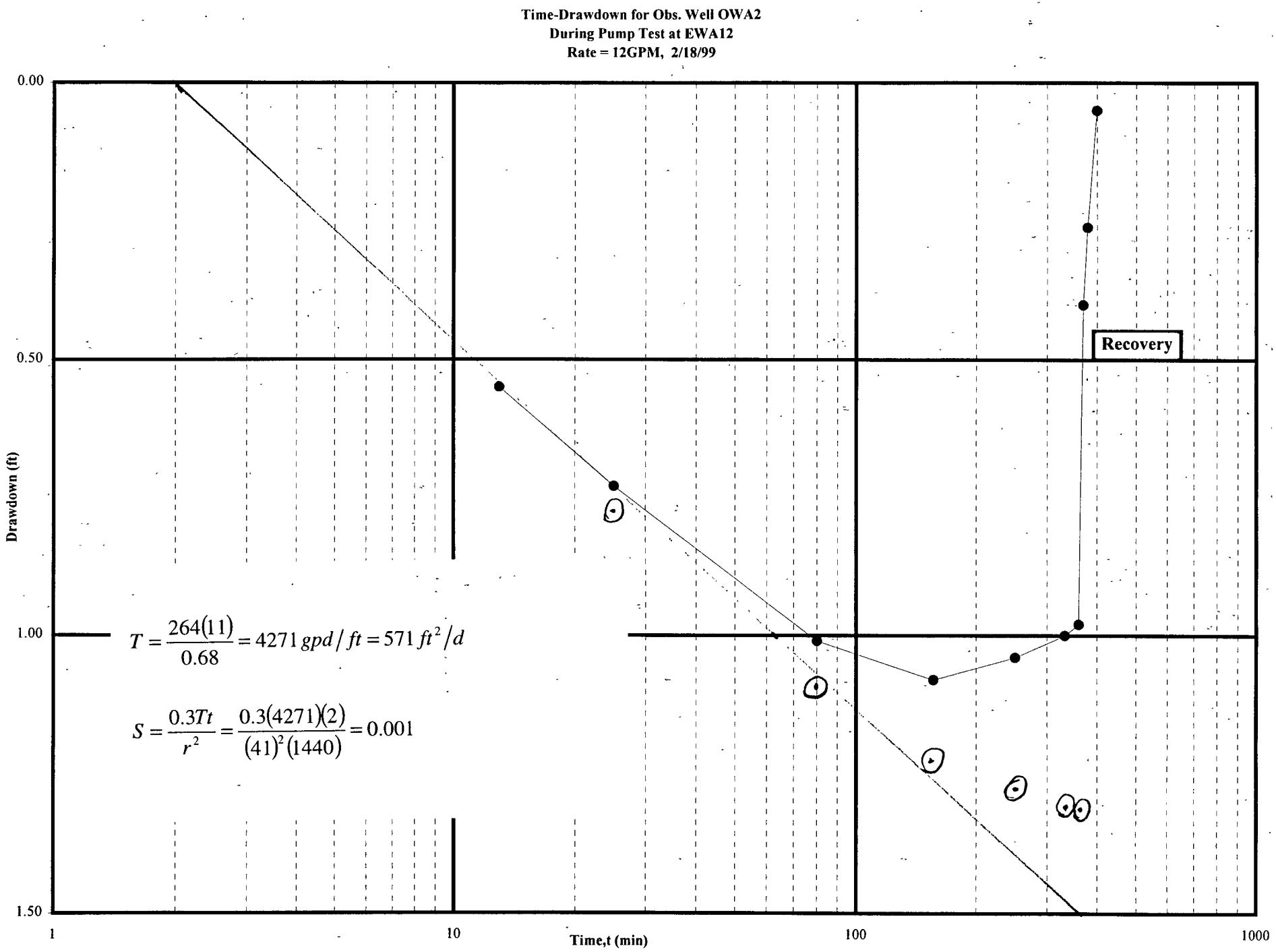


Figure 6-52 ⊙ Recharge corrected

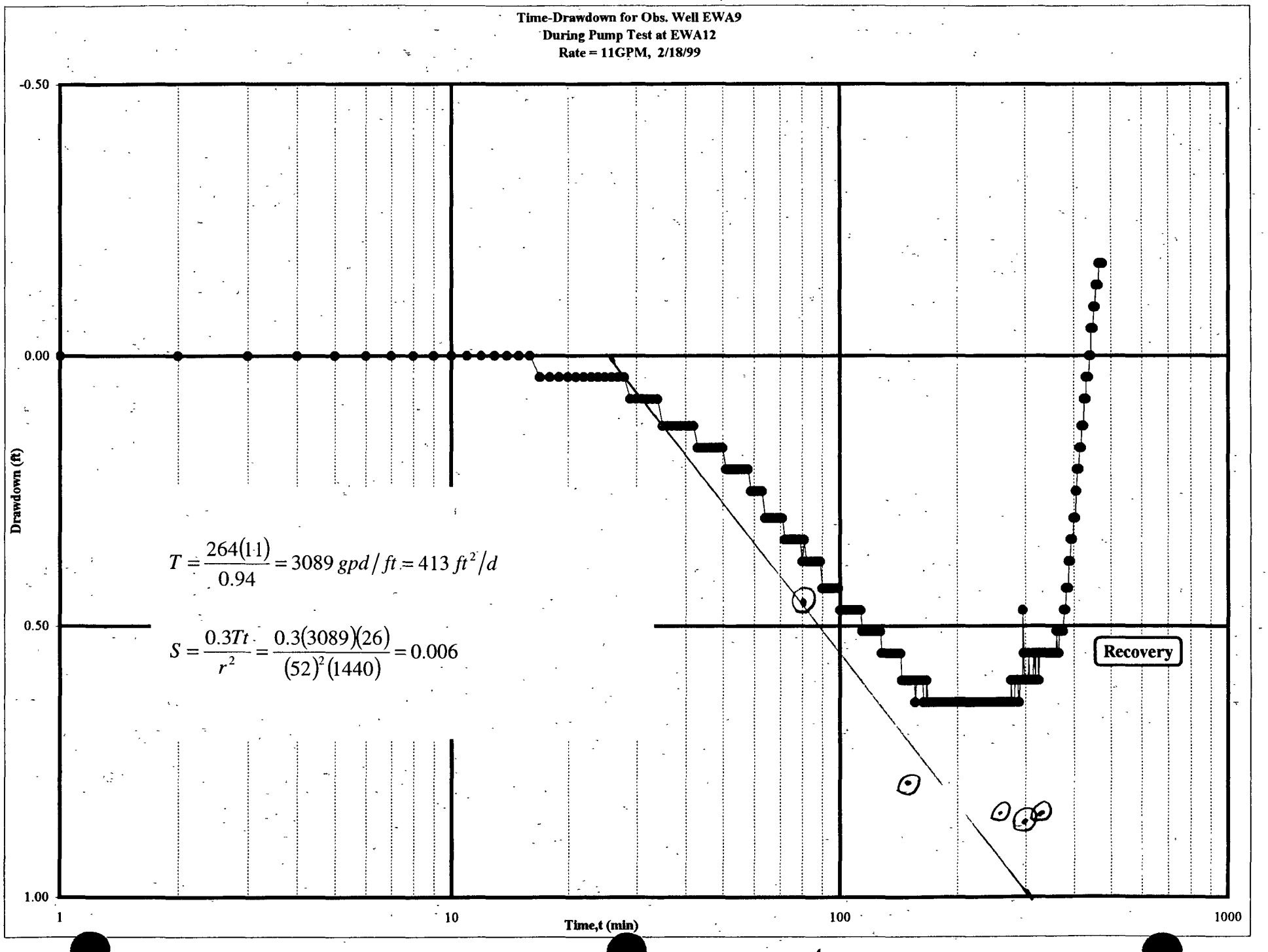


Figure 6-53 ⊙ recharge corrected

Distance-Drawdown Plot for Yield Test at EWA13
Pumping Rate = 2 gpm

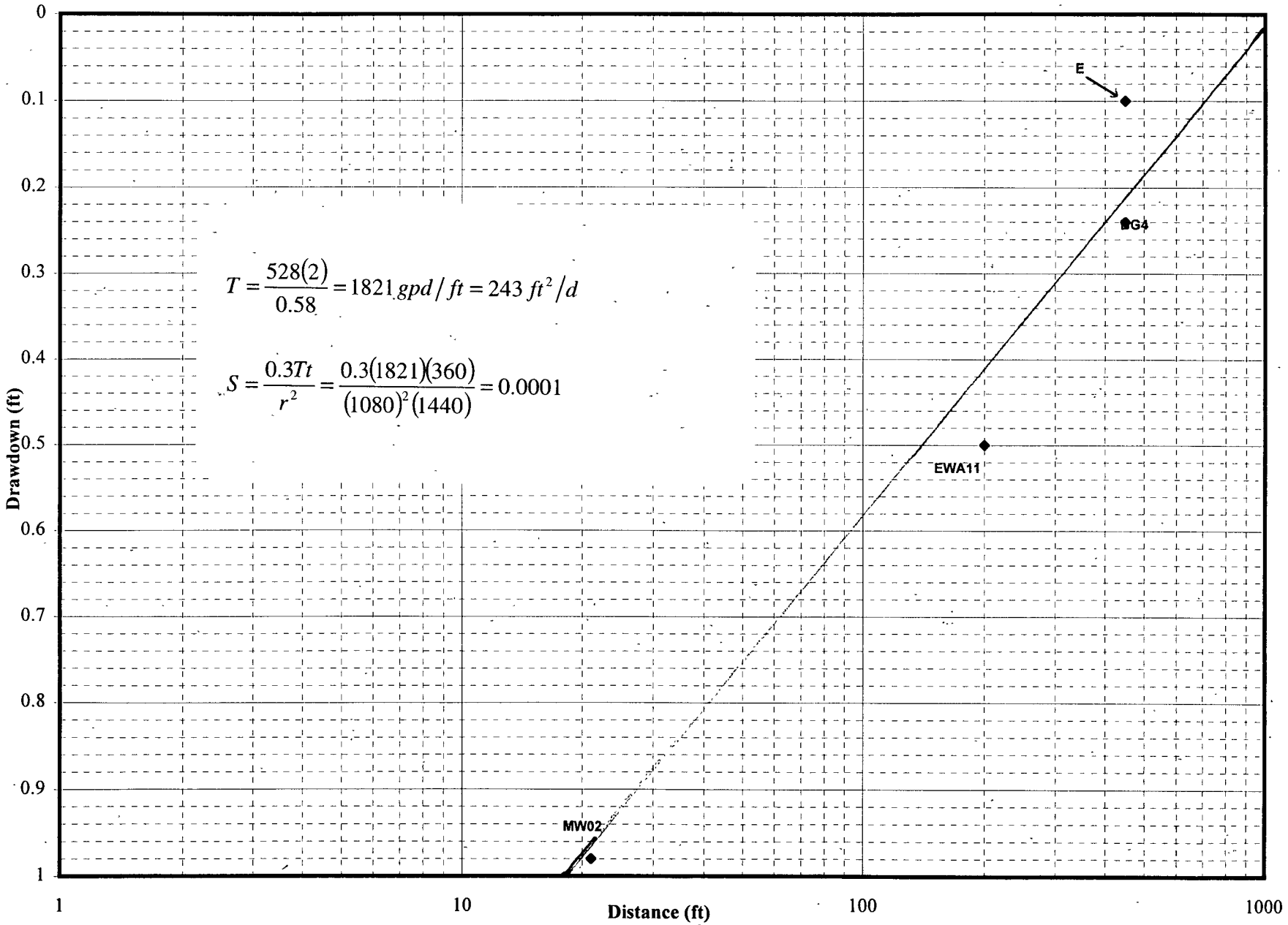
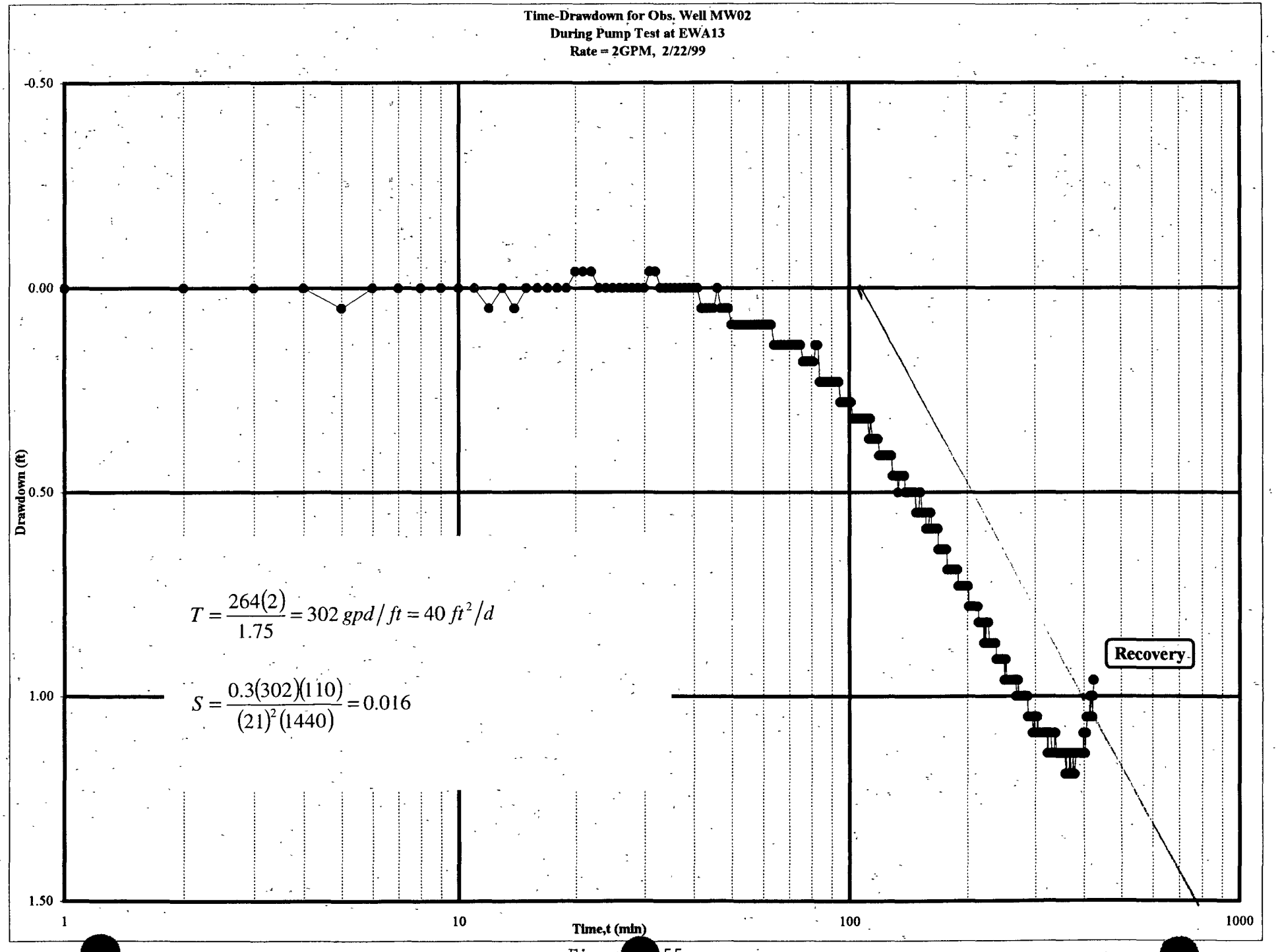


Figure 6-54


Time-Drawdown for Obs. Well MW02
During Pump Test at EWA13
Rate = 2GPM, 2/22/99
-0.50
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{1.75} = 302\ gpd/ft = 40\ ft^2/d$
$S = \frac{0.3(302)(110)}{(21)^2(1440)} = 0.016$

Figur[illegible]55

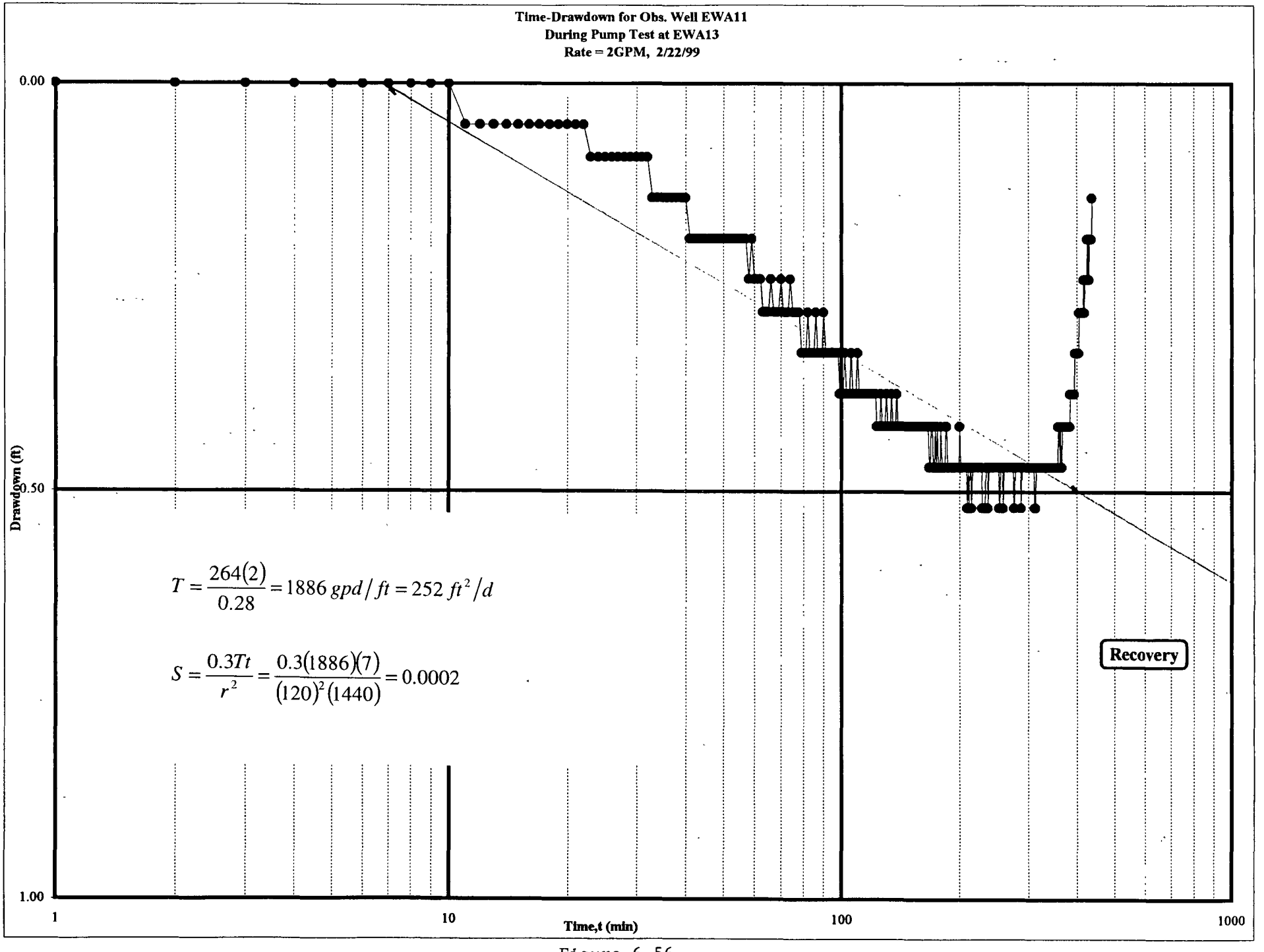

Time-Drawdown for Obs. Well EWA11
During Pump Test at EWA13
Rate = 2GPM, 2/22/99
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(2)}{0.28} = 1886\ gpd/ft = 252\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(1886)(7)}{(120)^2(1440)} = 0.0002$

Figure 6-56

Distance-Drawdown Plot for Yield Test at EWA14
Pumping Rate = 1.5 gpm

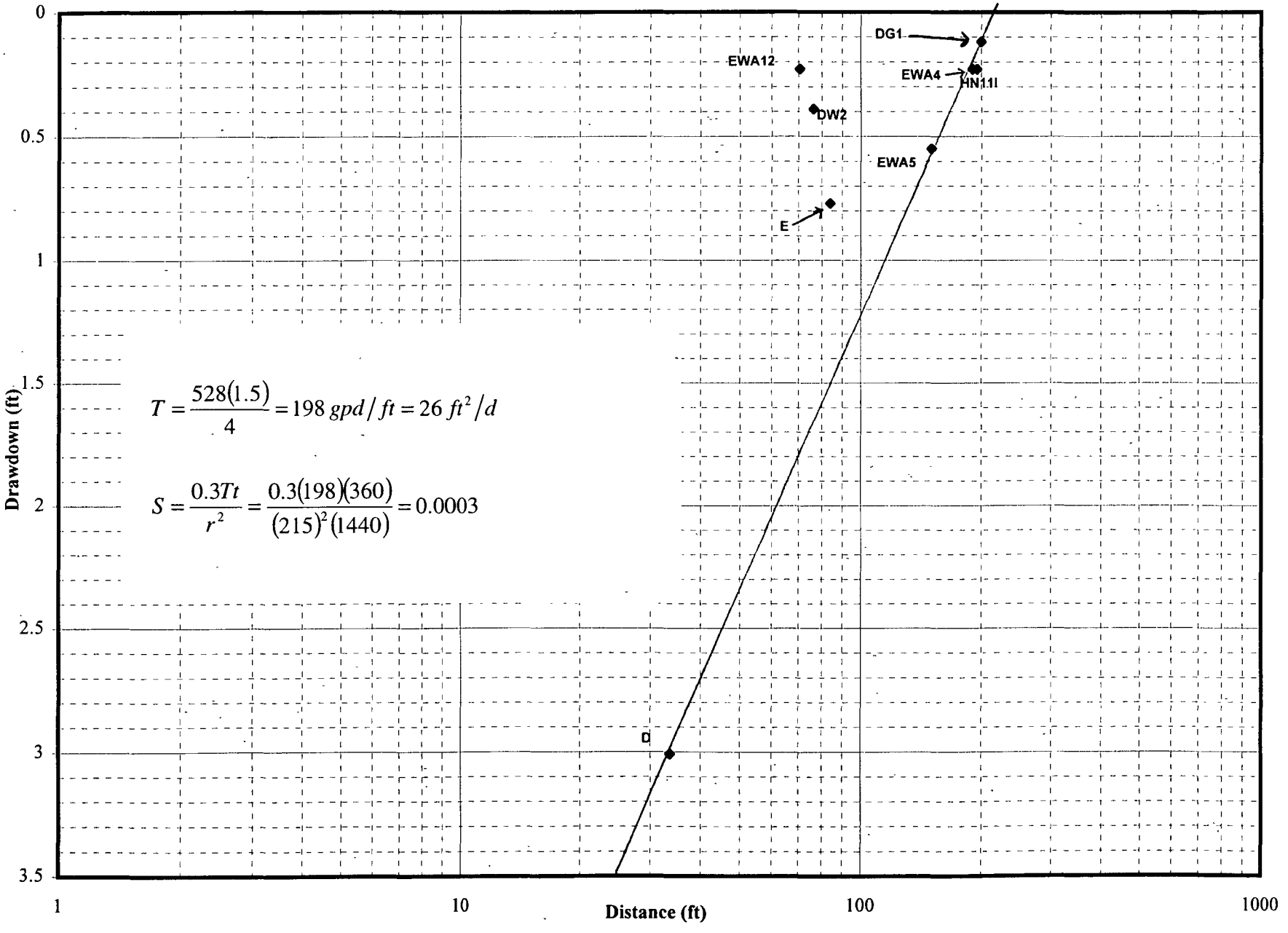


Figure 6-57

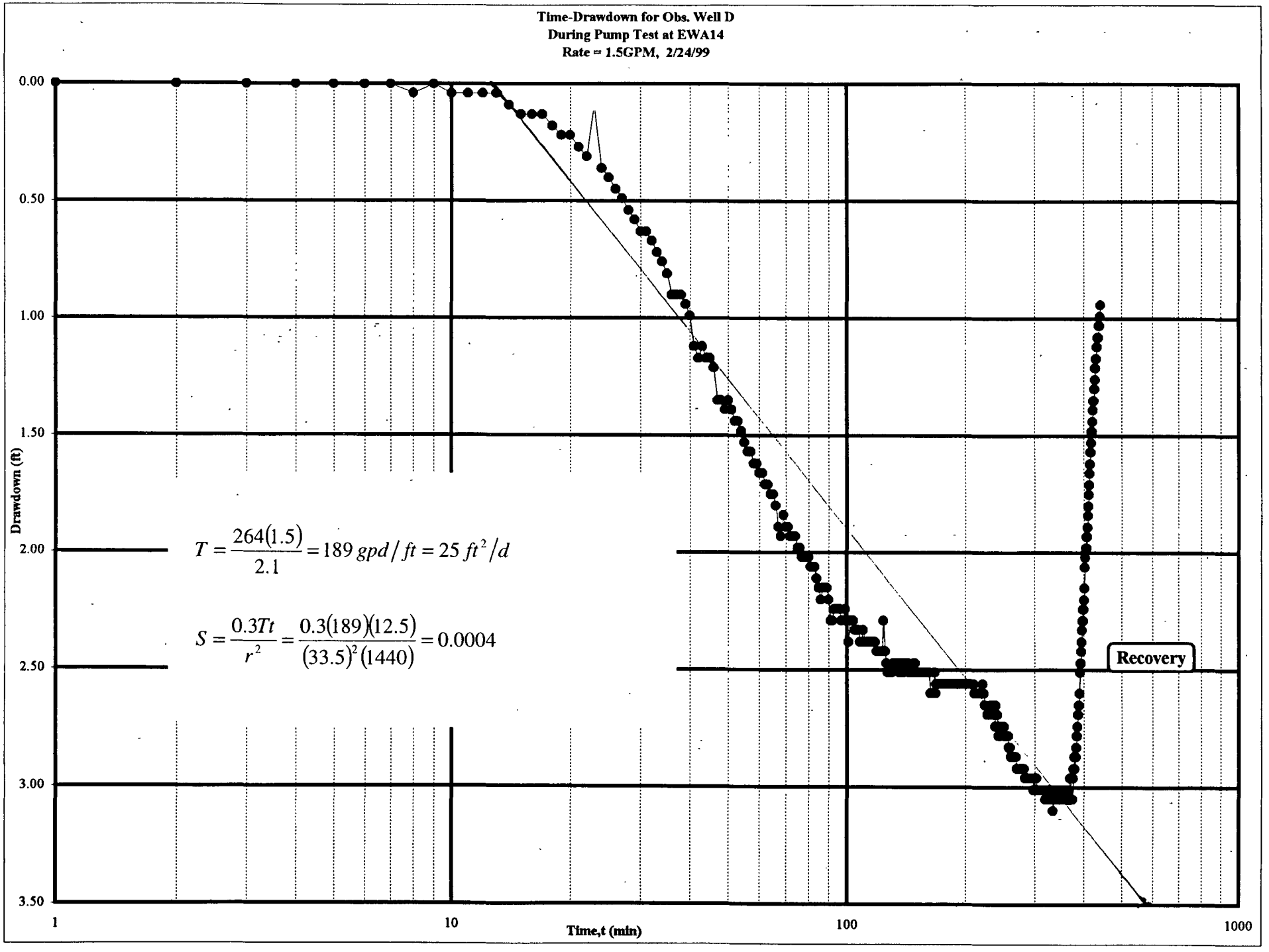
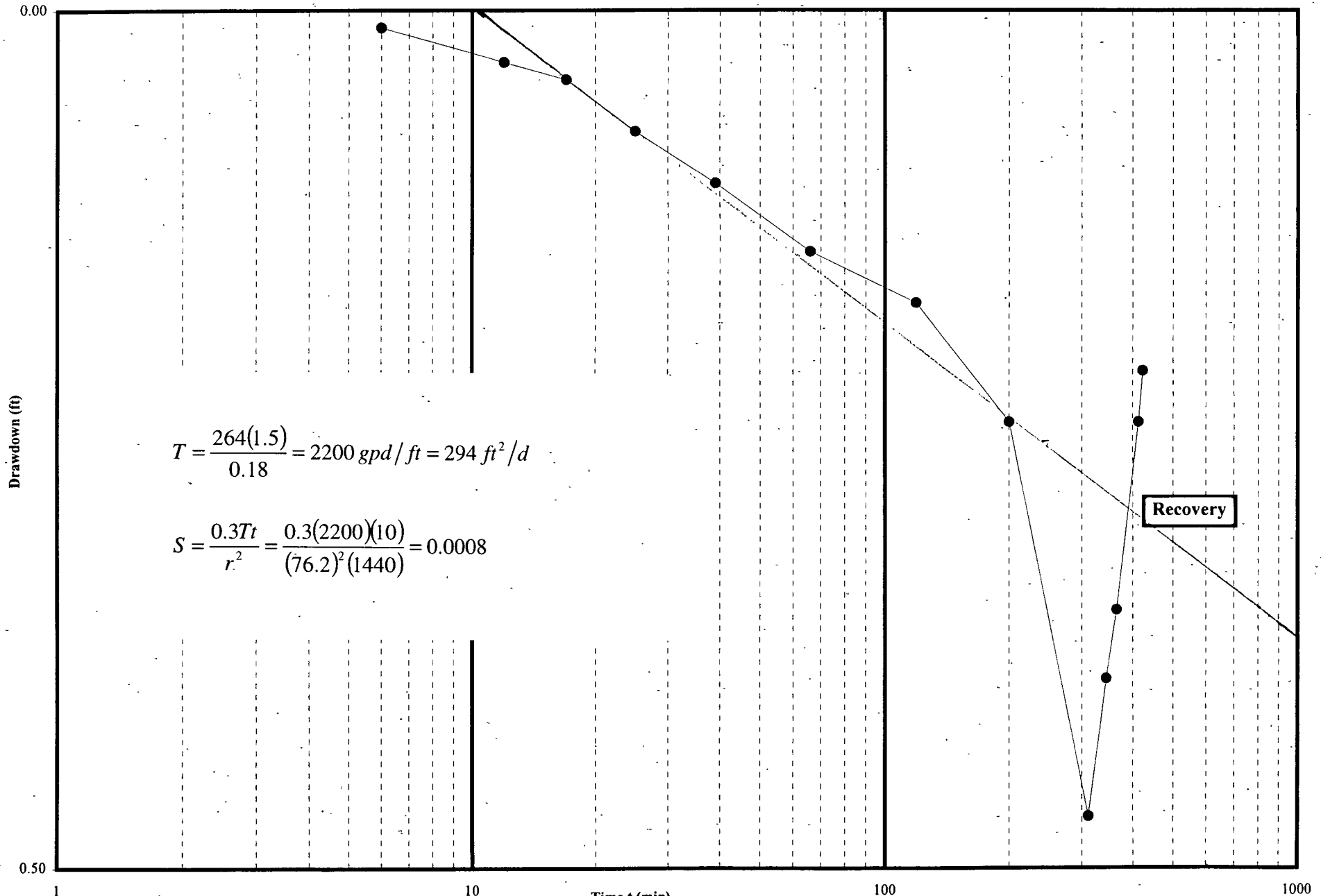

Time-Drawdown for Obs. Well D
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
Drawdown (ft)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
1
10
100
1000
Time,t (min)
$T = \frac{264(1.5)}{2.1} = 189\ gpd/ft = 25\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(189)(12.5)}{(33.5)^2(1440)} = 0.0004$
Recovery

Figure 6-58

Time-Drawdown for Obs. Well OWA2
During Pump Test at EWA14
Rate = 2GPM, 2/24/99



$$T = \frac{264(1.5)}{0.18} = 2200\ gpd/ft = 294\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(2200)(10)}{(76.2)^2(1440)} = 0.0008$$

Figur[illegible]59

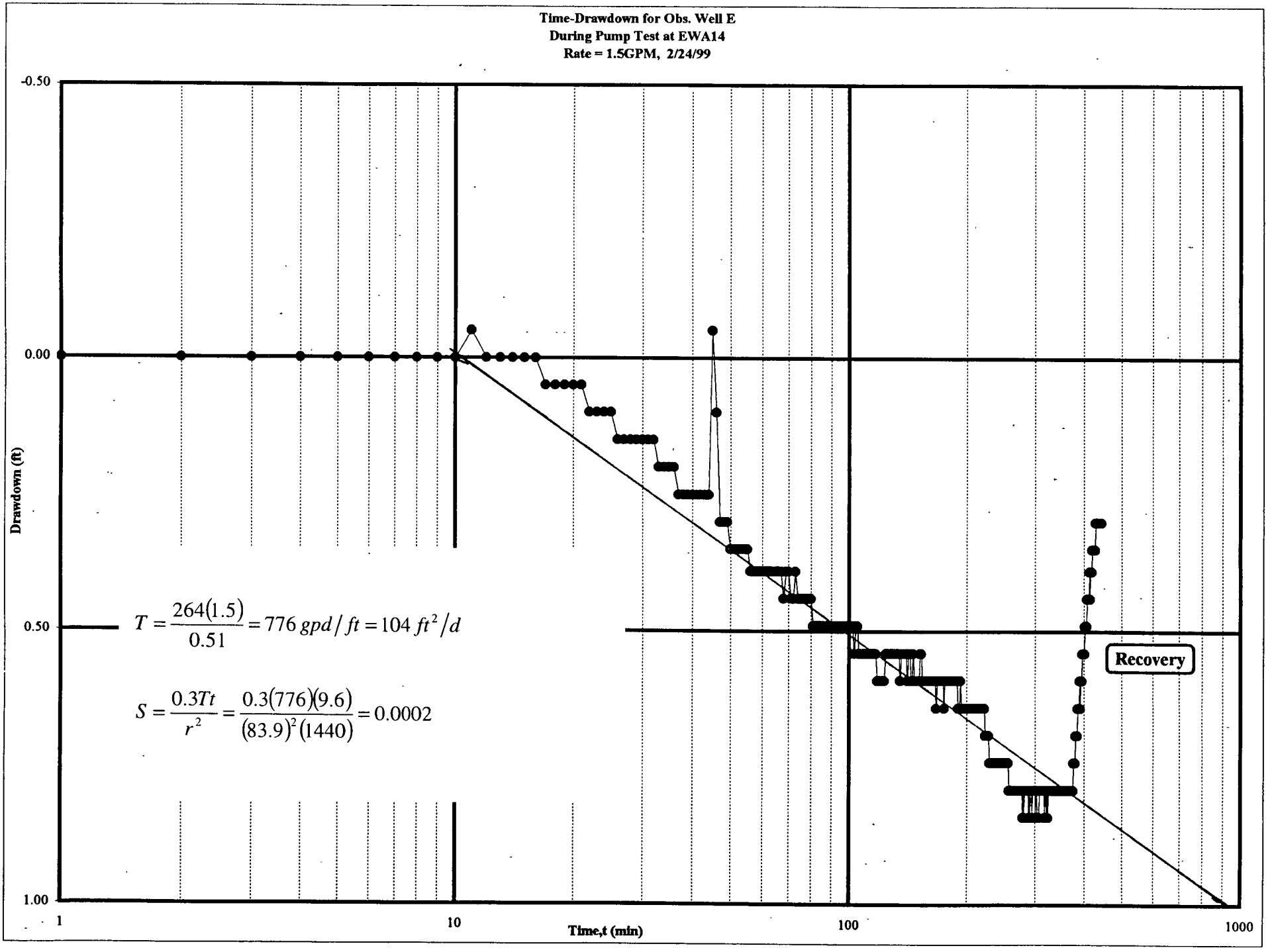

Time-Drawdown for Obs. Well E
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
-0.50
0.00
0.50
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(1.5)}{0.51} = 776\ gpd/ft = 104\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(776)(9.6)}{(83.9)^2(1440)} = 0.0002$

Figure 6-60

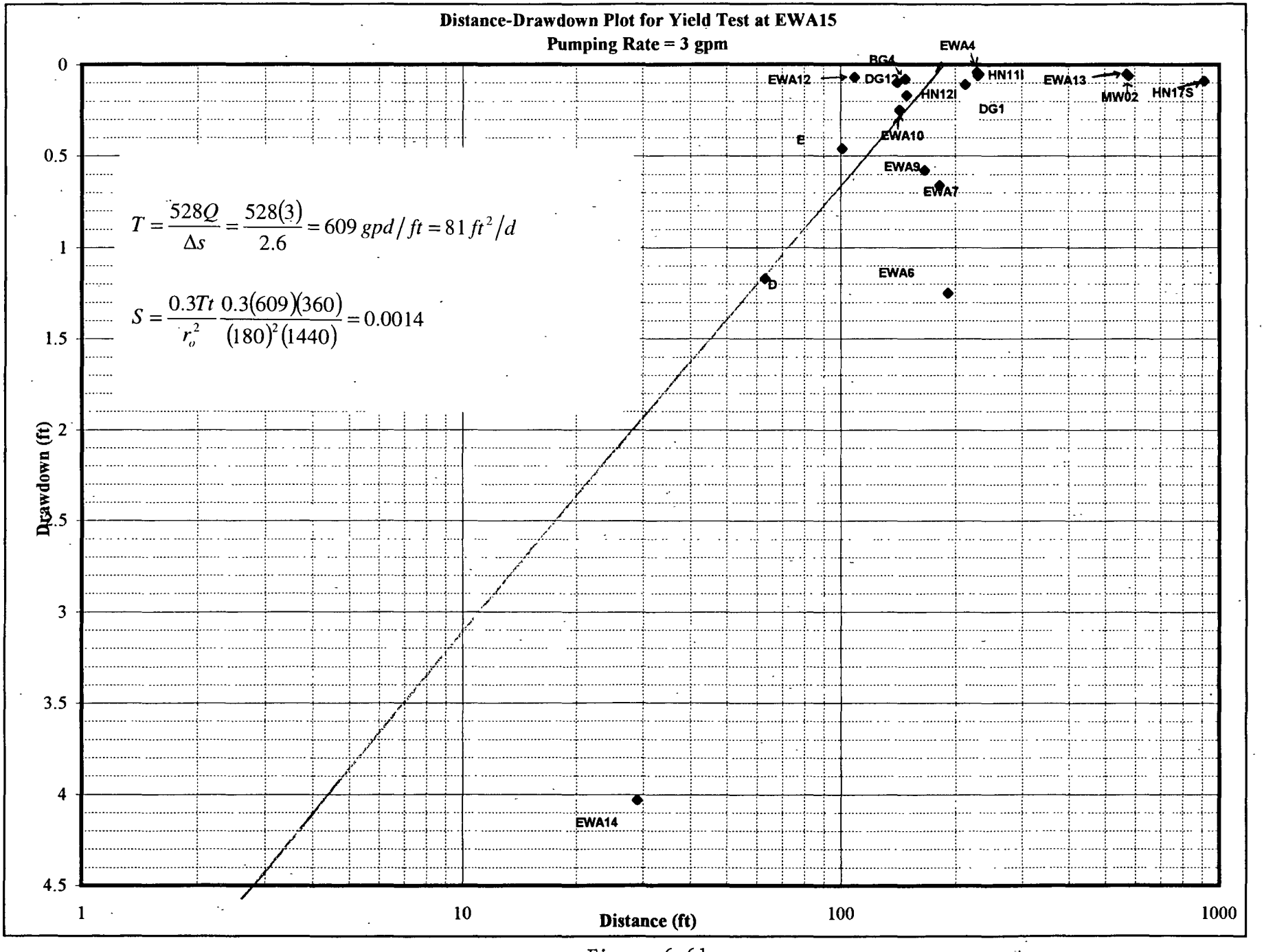
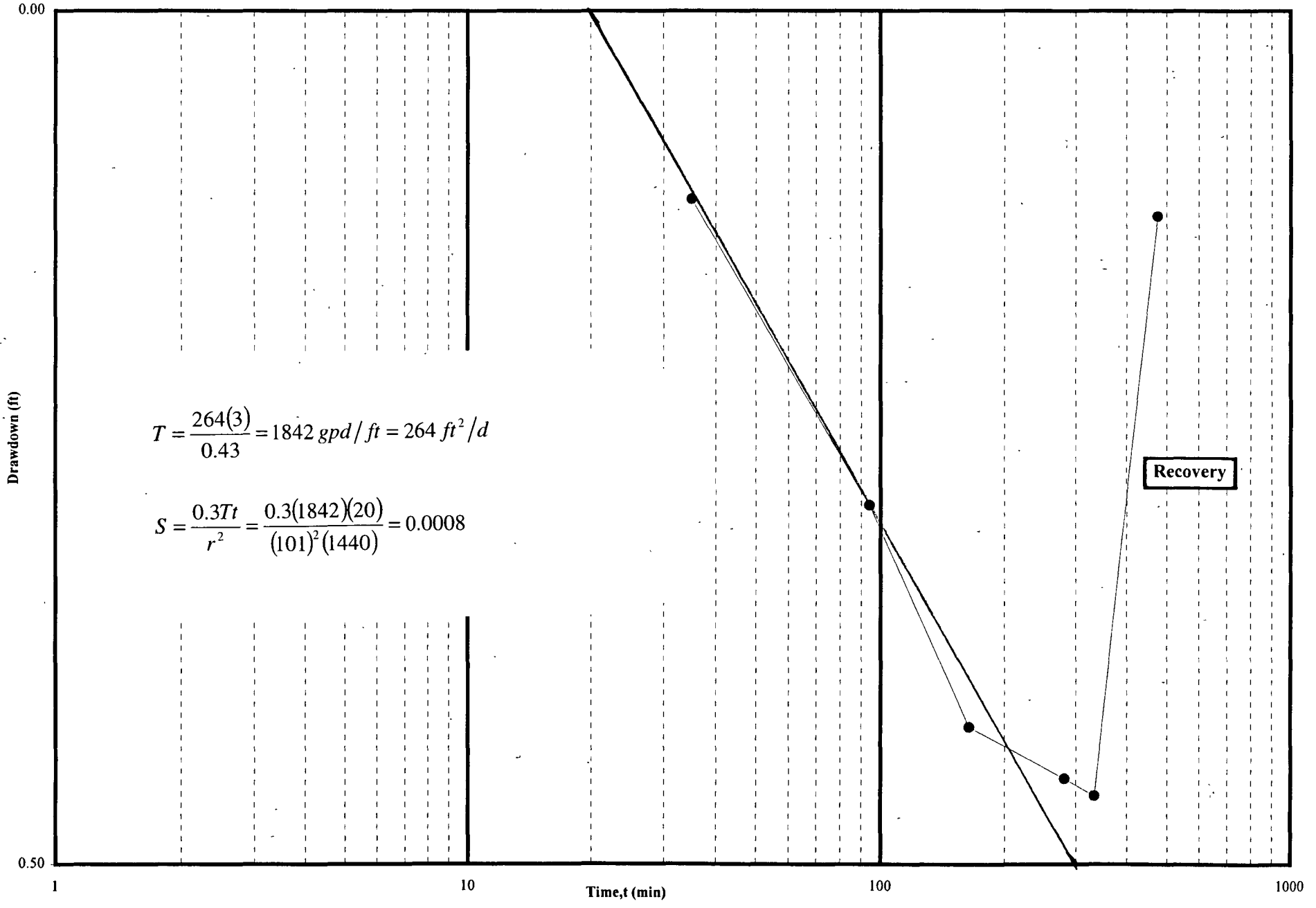

Distance-Drawdown Plot for Yield Test at EWA15
Pumping Rate = 3 gpm
$T = \frac{528Q}{\Delta s} = \frac{528(3)}{2.6} = 609\ gpd/ft = 81\ ft^2/d$
$S = \frac{0.3Tt}{r_o^2} \frac{0.3(609)(360)}{(180)^2(1440)} = 0.0014$
Drawdown (ft)
Distance (ft)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
1
10
100
1000
EWA4
BG4
EWA12
DG12
HN11I
EWA13
MW02
HN17S
HN12I
DG1
E
EWA10
EWA9
EWA7
EWA6
D
EWA14

Figure 6-61

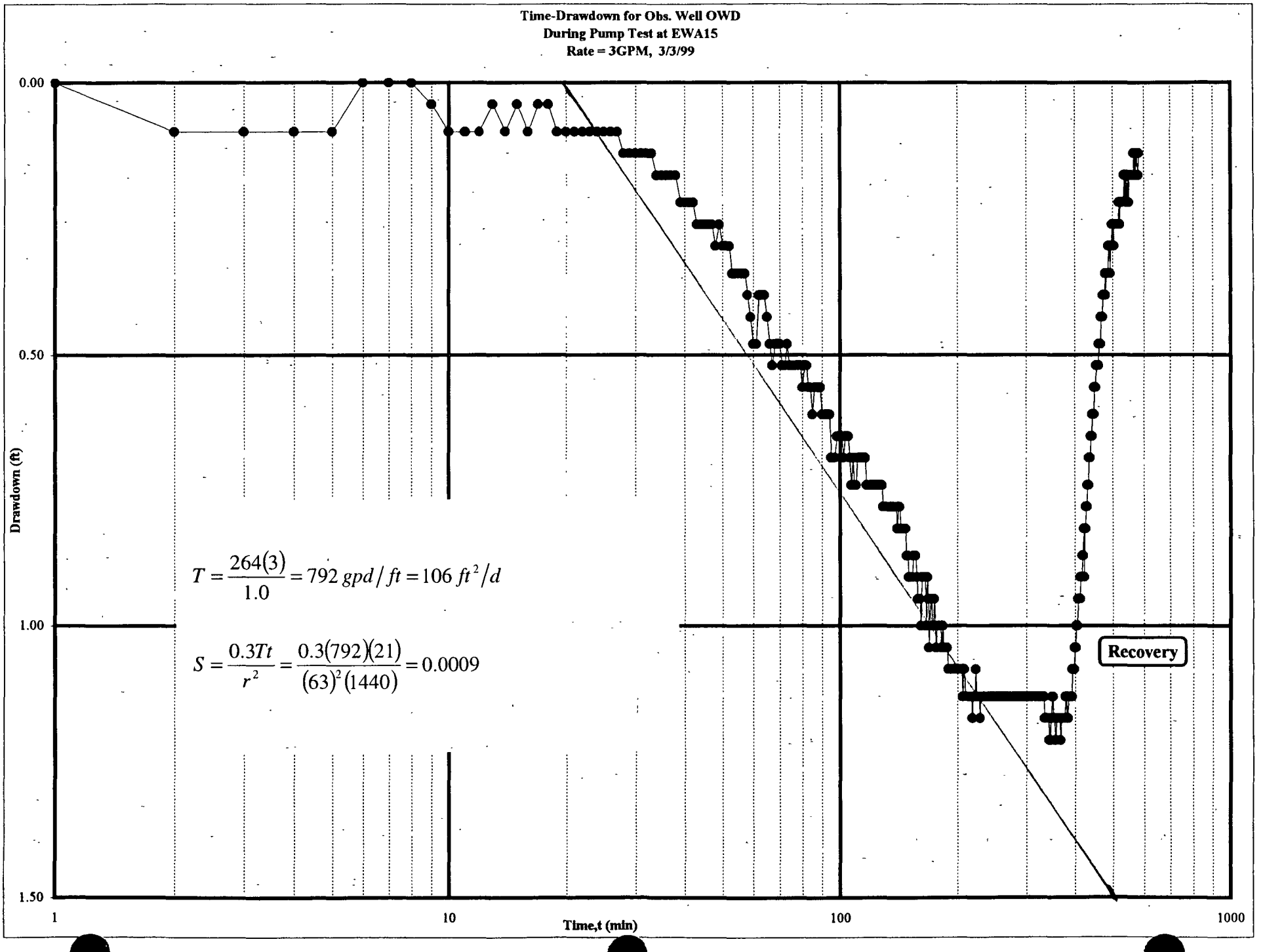
Time-Drawdown for Obs. Well MW-E
During Pump Test at EWA15
Rate = 3GPM, 3/3/99



$$T = \frac{264(3)}{0.43} = 1842\ gpd/ft = 264\ ft^2/d$$

$$S = \frac{0.3Tt}{r^2} = \frac{0.3(1842)(20)}{(101)^2(1440)} = 0.0008$$

Figure 6-62


Time-Drawdown for Obs. Well OWD
During Pump Test at EWA15
Rate = 3GPM, 3/3/99
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery
$T = \frac{264(3)}{1.0} = 792\ gpd/ft = 106\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(792)(21)}{(63)^2(1440)} = 0.0009$

Figu[illegible]-63

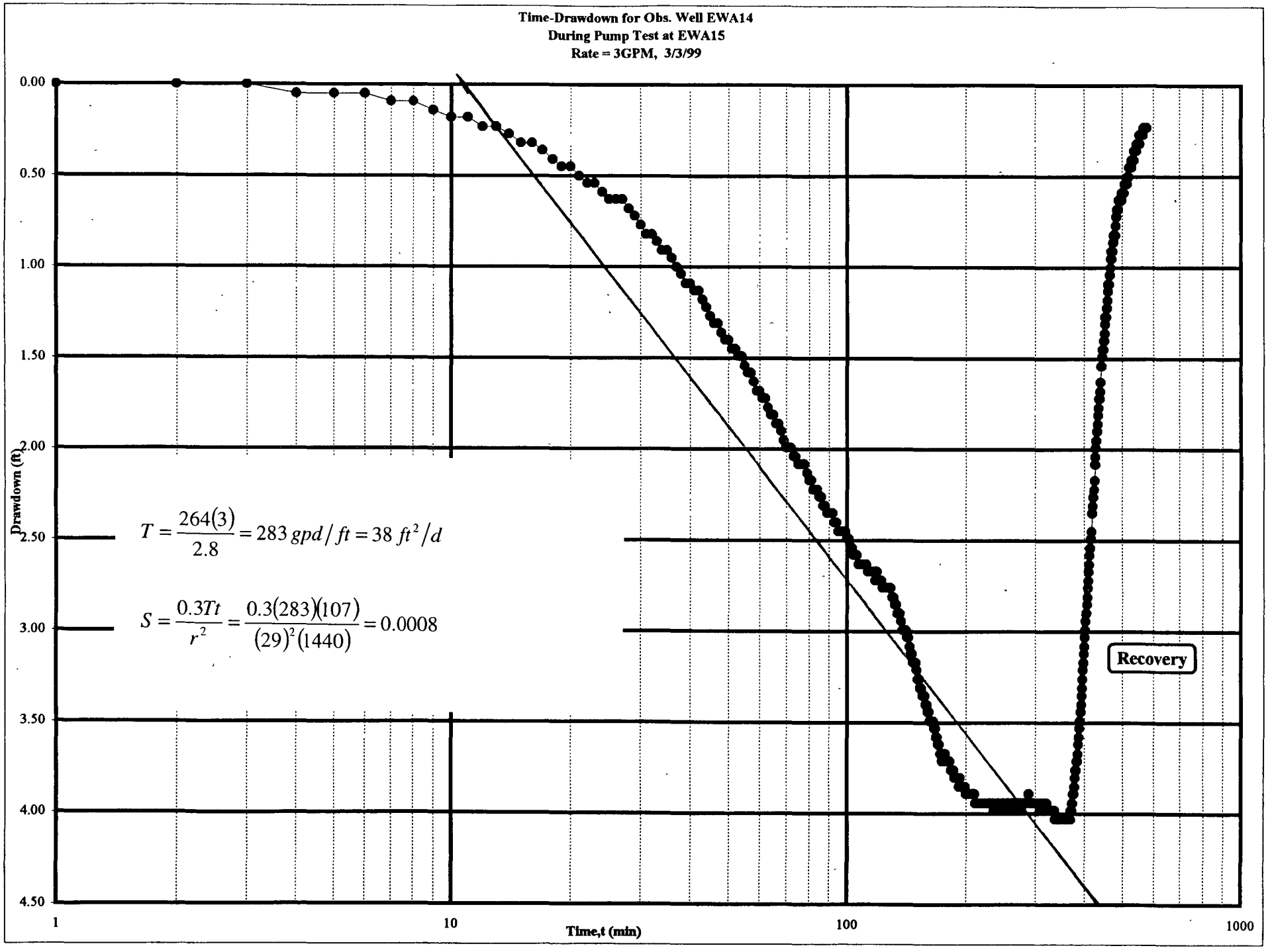
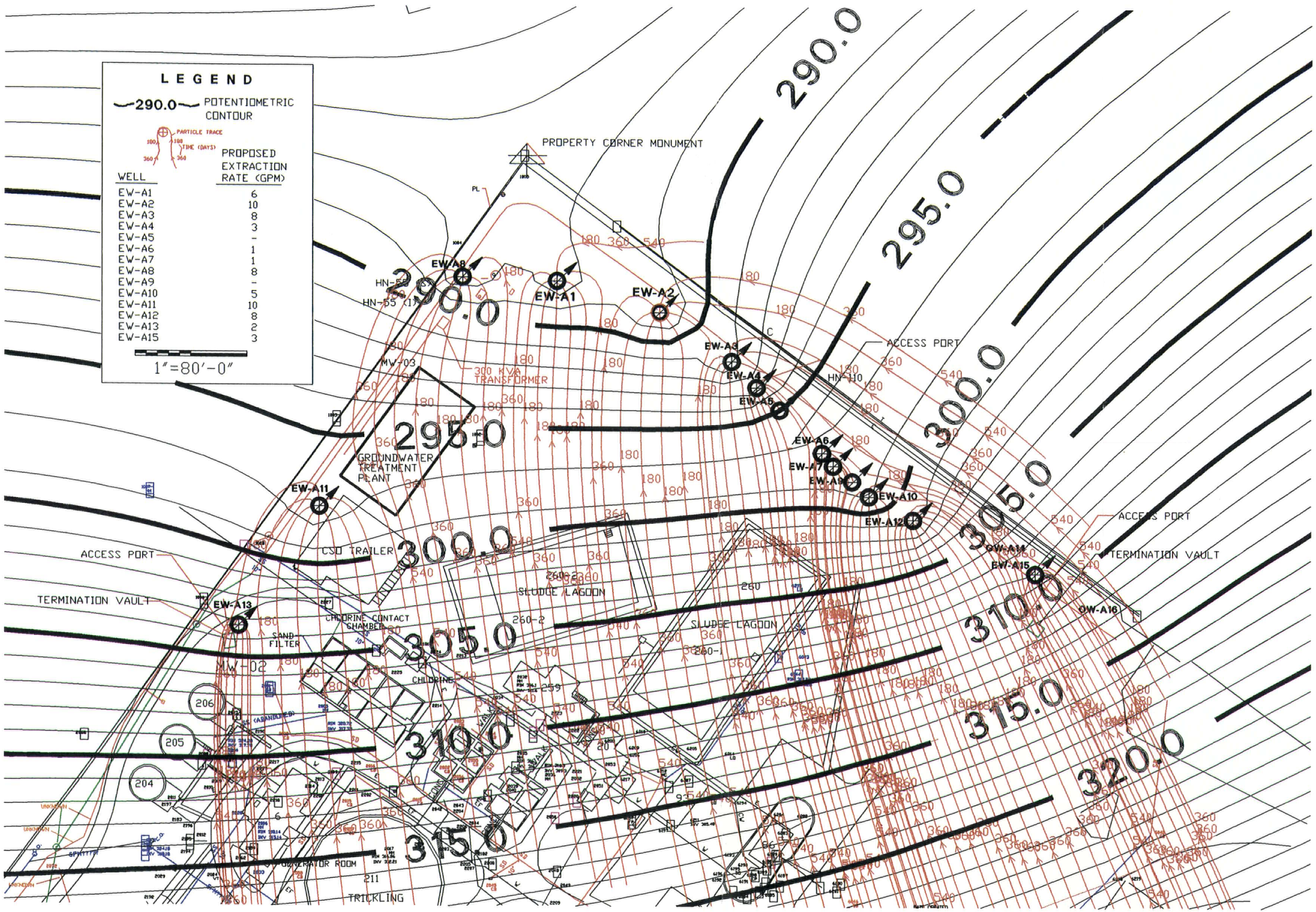

Time-Drawdown for Obs. Well EWA14
During Pump Test at EWA15
Rate = 3GPM, 3/3/99
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
$T = \frac{264(3)}{2.8} = 283\ gpd/ft = 38\ ft^2/d$
$S = \frac{0.3Tt}{r^2} = \frac{0.3(283)(107)}{(29)^2(1440)} = 0.0008$
Recovery

Figure 6-64



FOSTER WHEELER ENVIRONMENTAL

DSGN: DR: CHK:
SUP: CH ENG:
SUBMITTED BY: (TITLE)
(FWAI MEMBER) (DATE)
NORTHDIV DM: HQ: FPC: DR: OFFICER IN CHARGE

NAVAL FACILITIES ENGINEERING COMMAND
NORTHERN DIVISION
DEPARTMENT OF THE NAVY
LESTER PENNSYLVANIA

Figure 7-1
NAWC Warminster
Estimated Capture Zone for Area 'A'

QuickFlow v 1.9 Model

APPROVED DATE
NORTHDIV FOR COMMANDER, NAVFAC APPROVED DATE

SEAL AREA

SAT TO DATE

CODE I.D. NO. 80091
SCALE : N.T.S.
SPEC. NO. 04-
CONSTRN. CONTR. NO.
NAVFAC DRAWING NO.
SHEET OF
SIZE: B
DIS. SH. NO.

DATE CREATED
LATEST CHANGE

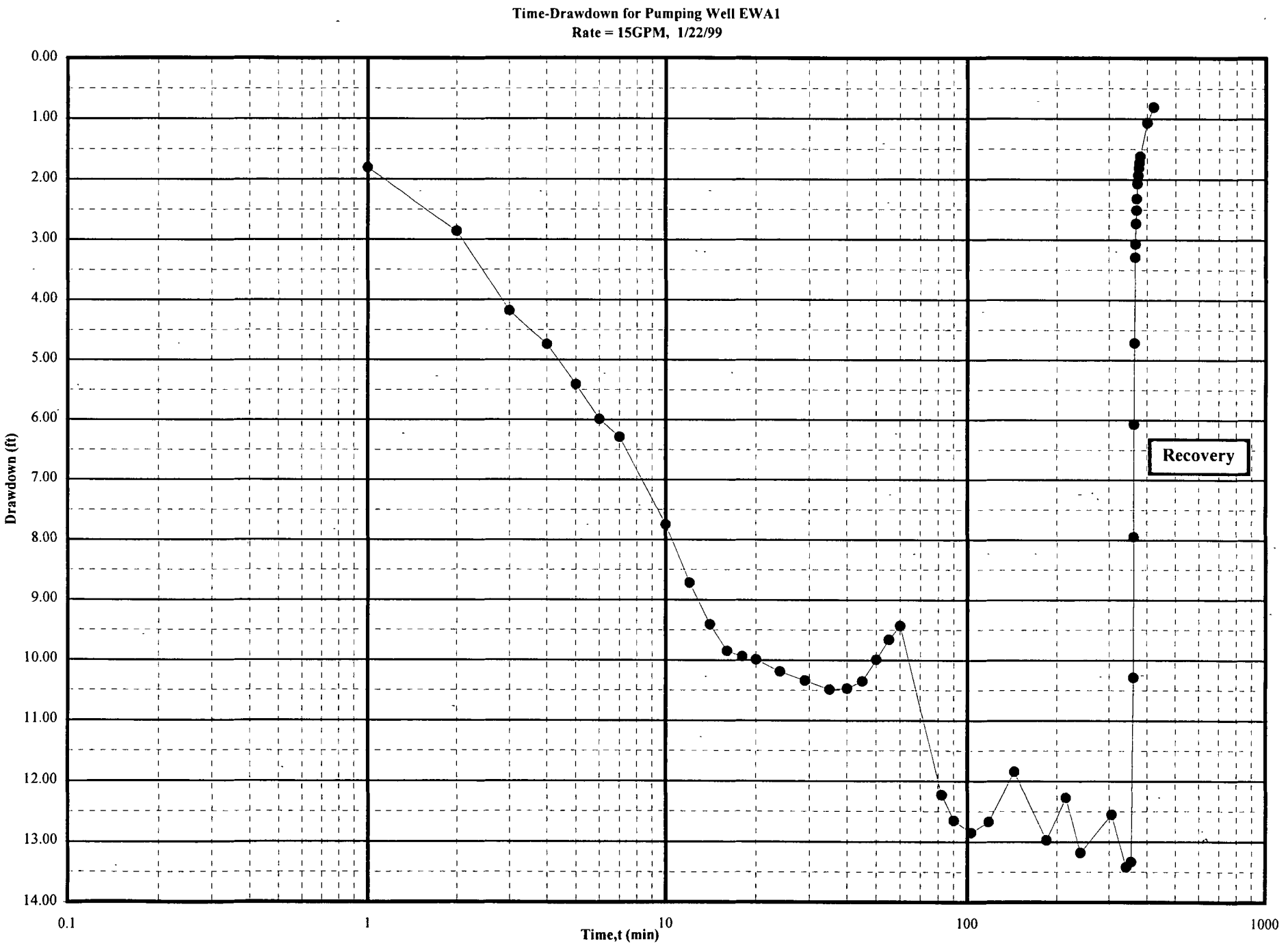
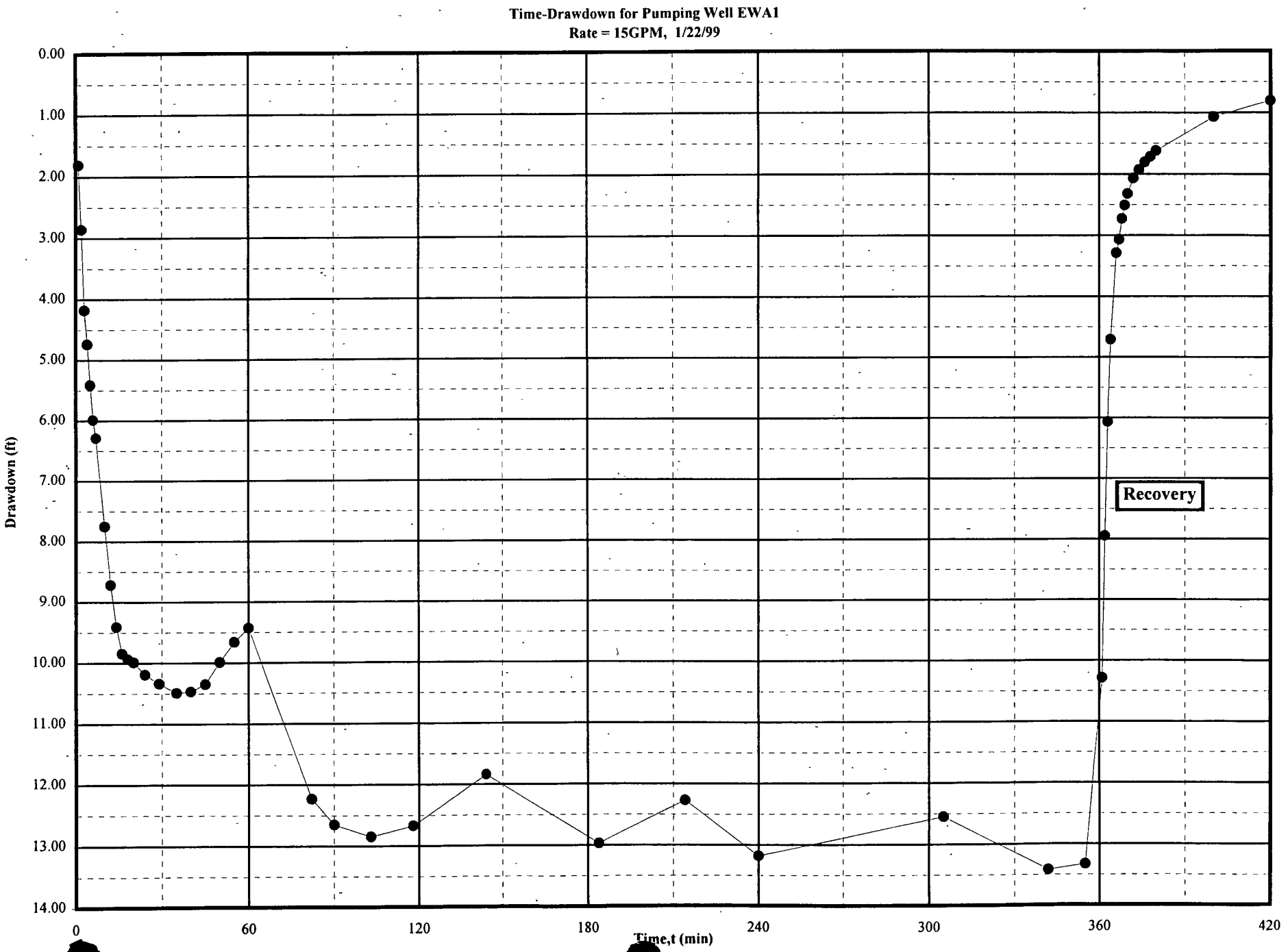

Time-Drawdown for Pumping Well EWA1
Rate = 15GPM, 1/22/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-1


Time-Drawdown for Pumping Well EWA1
Rate = 15GPM, 1/22/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

ure 8-2

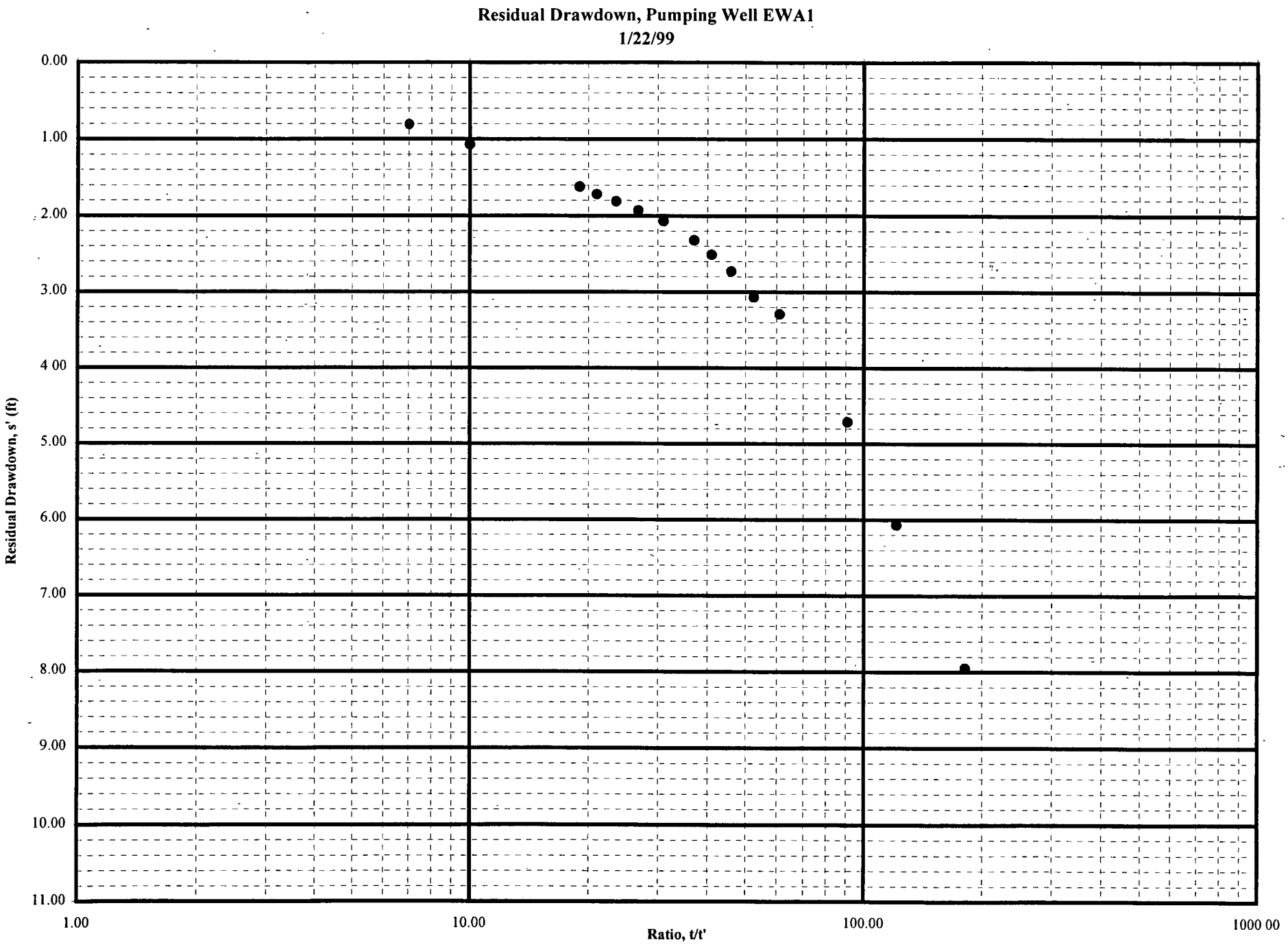

Residual Drawdown, Pumping Well EWA1
1/22/99
0.00
1.00
2.00
3.00
4 00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-3

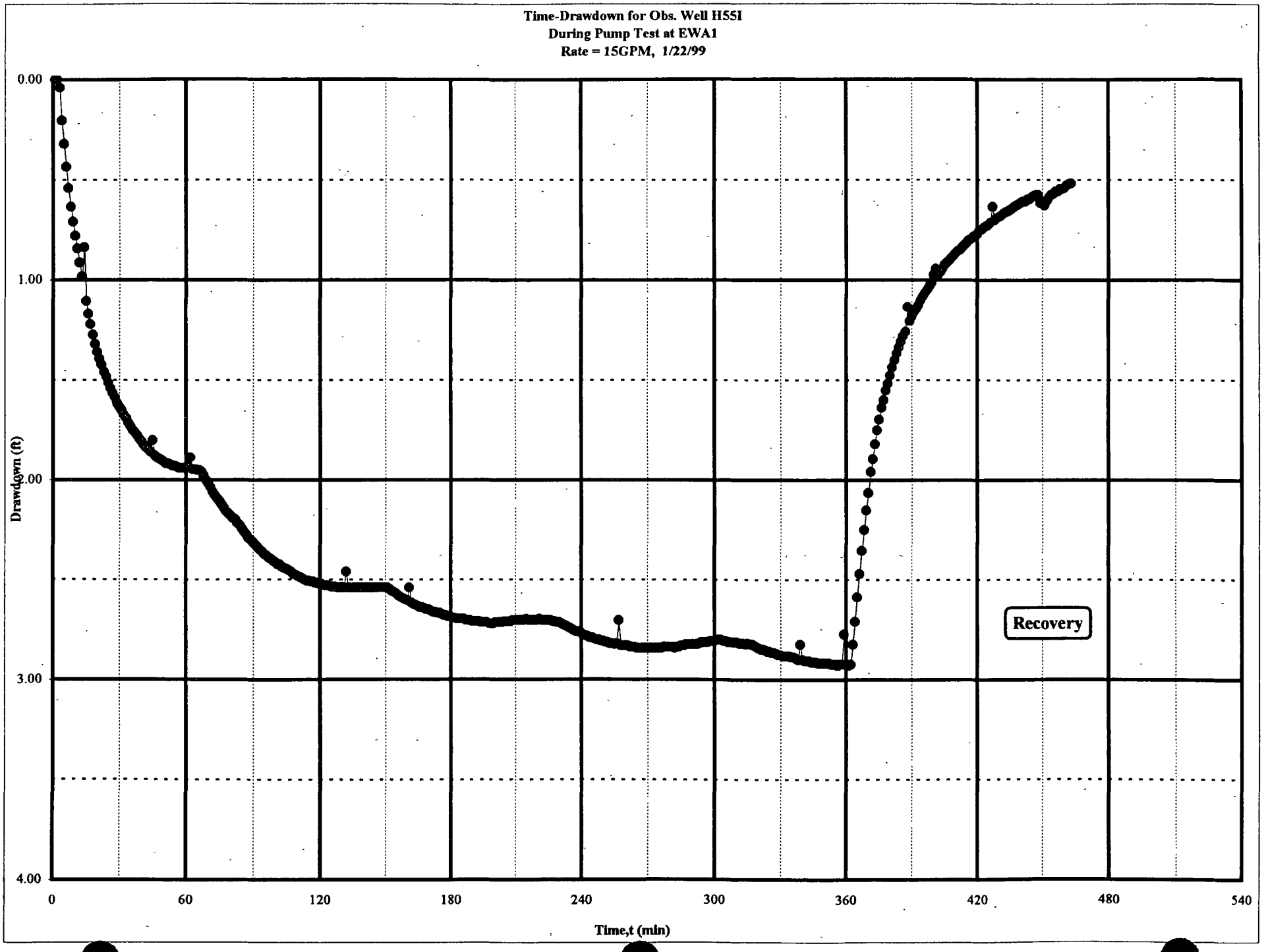

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Fig 8-4

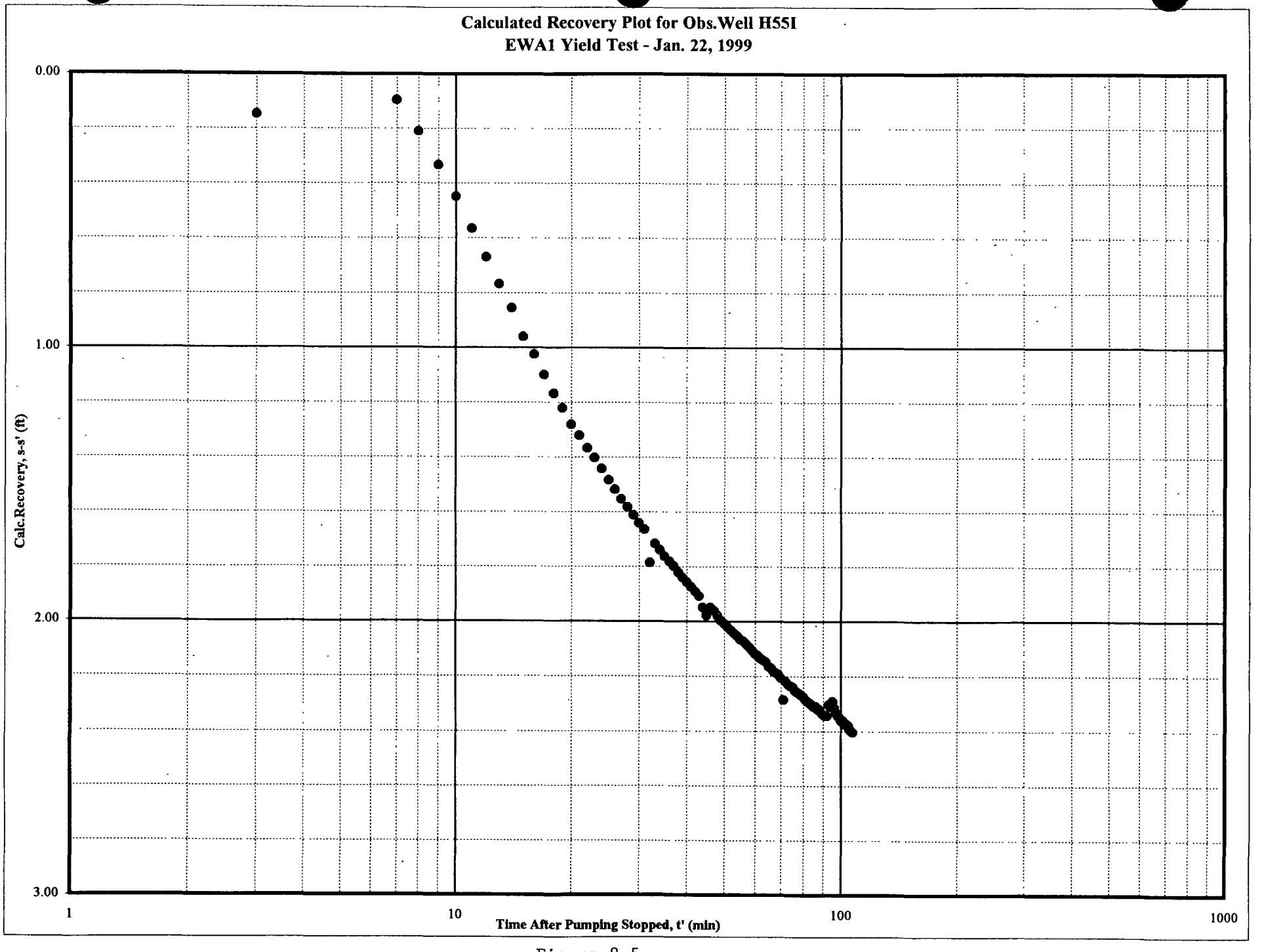
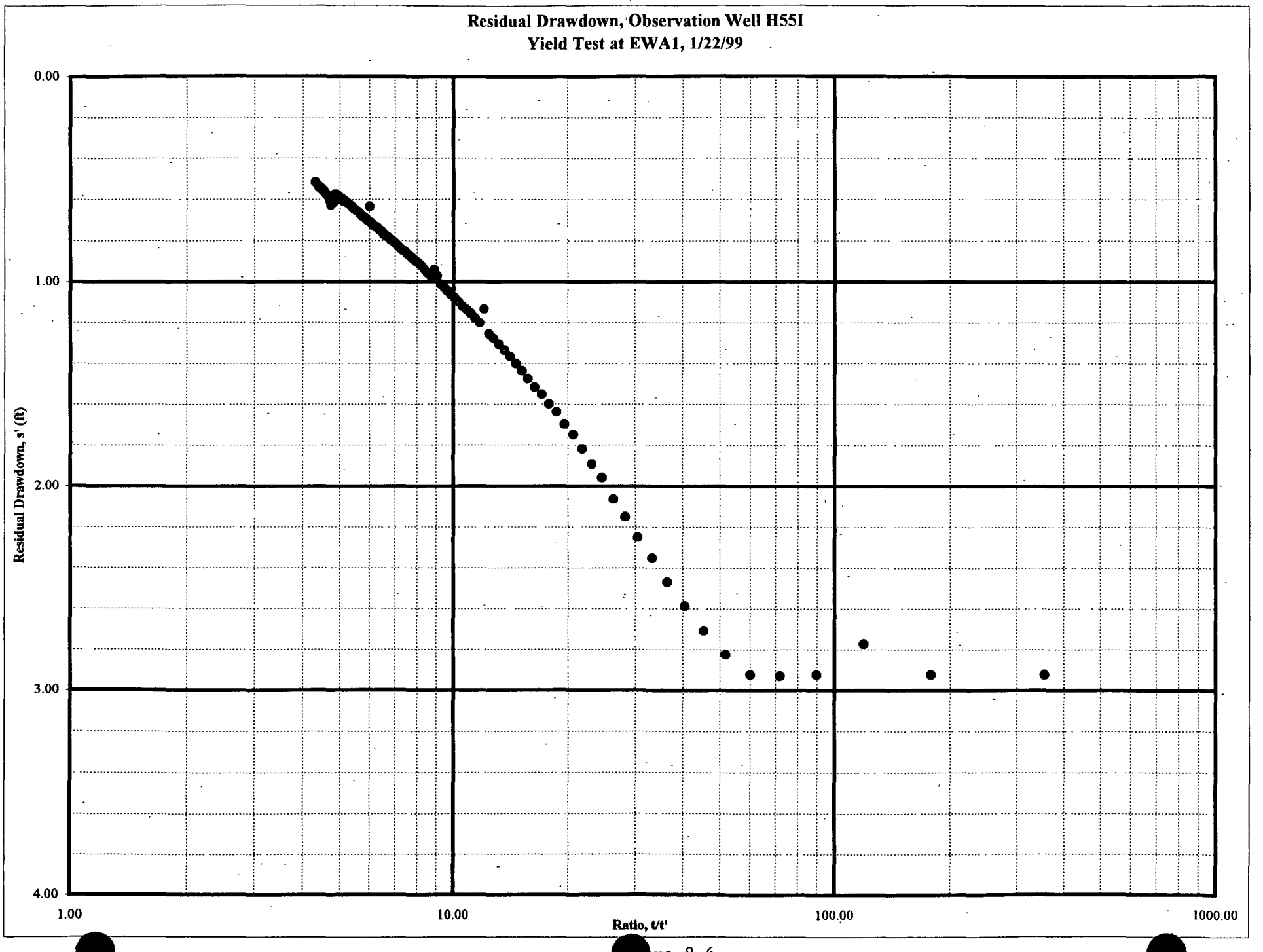

Calculated Recovery Plot for Obs.Well H55I
EWA1 Yield Test - Jan. 22, 1999
0.00
1.00
2.00
3.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-5


Residual Drawdown, Observation Well H55I
Yield Test at EWA1, 1/22/99
0.00
1.00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

re 8-6

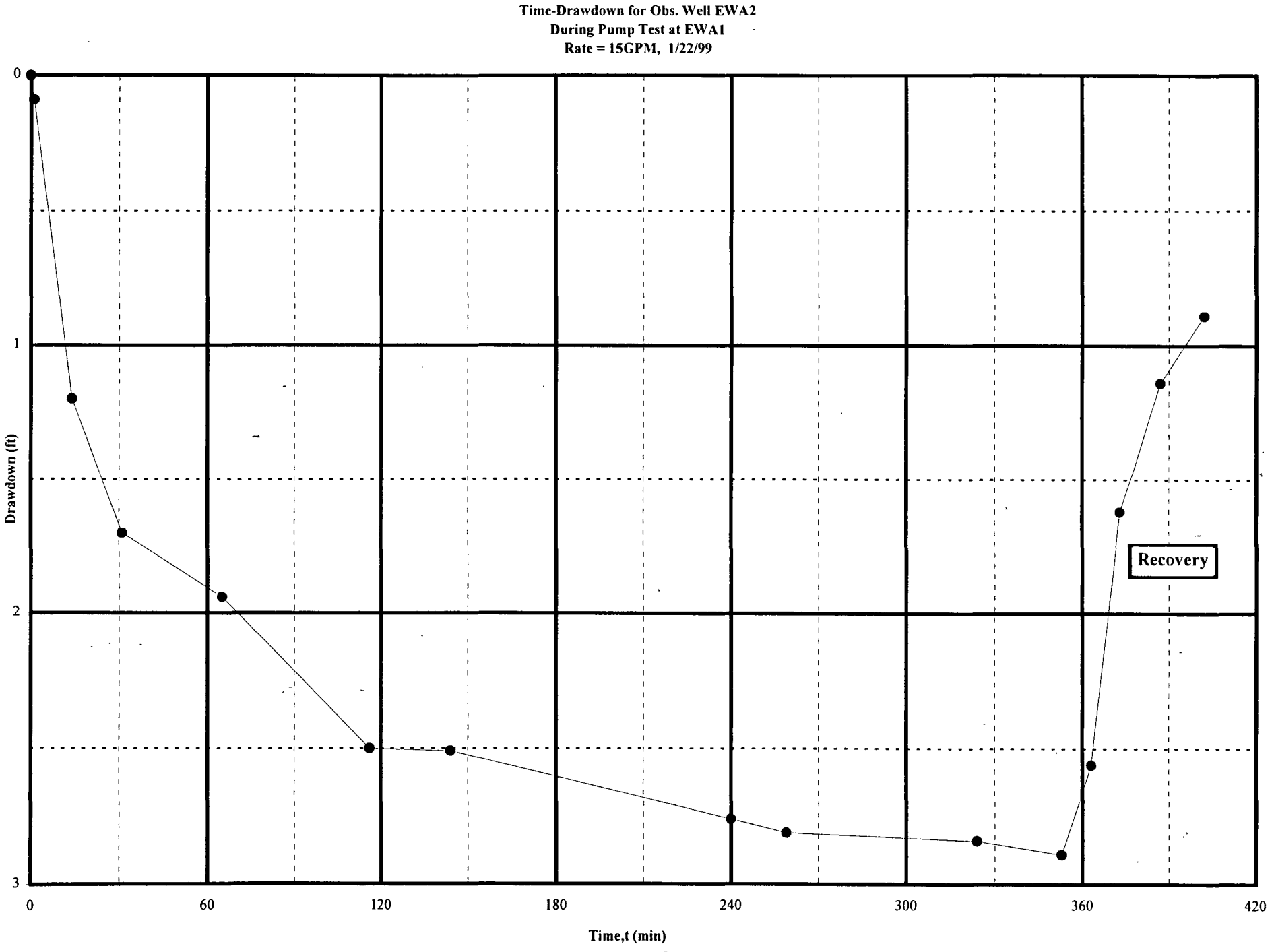

Time-Drawdown for Obs. Well EWA2
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
Drawdown (ft)
0
1
2
3
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-7

Calculated Recovery Plot for Obs.Well EWA2
EWA1 Yield Test - Jan. 22, 1999

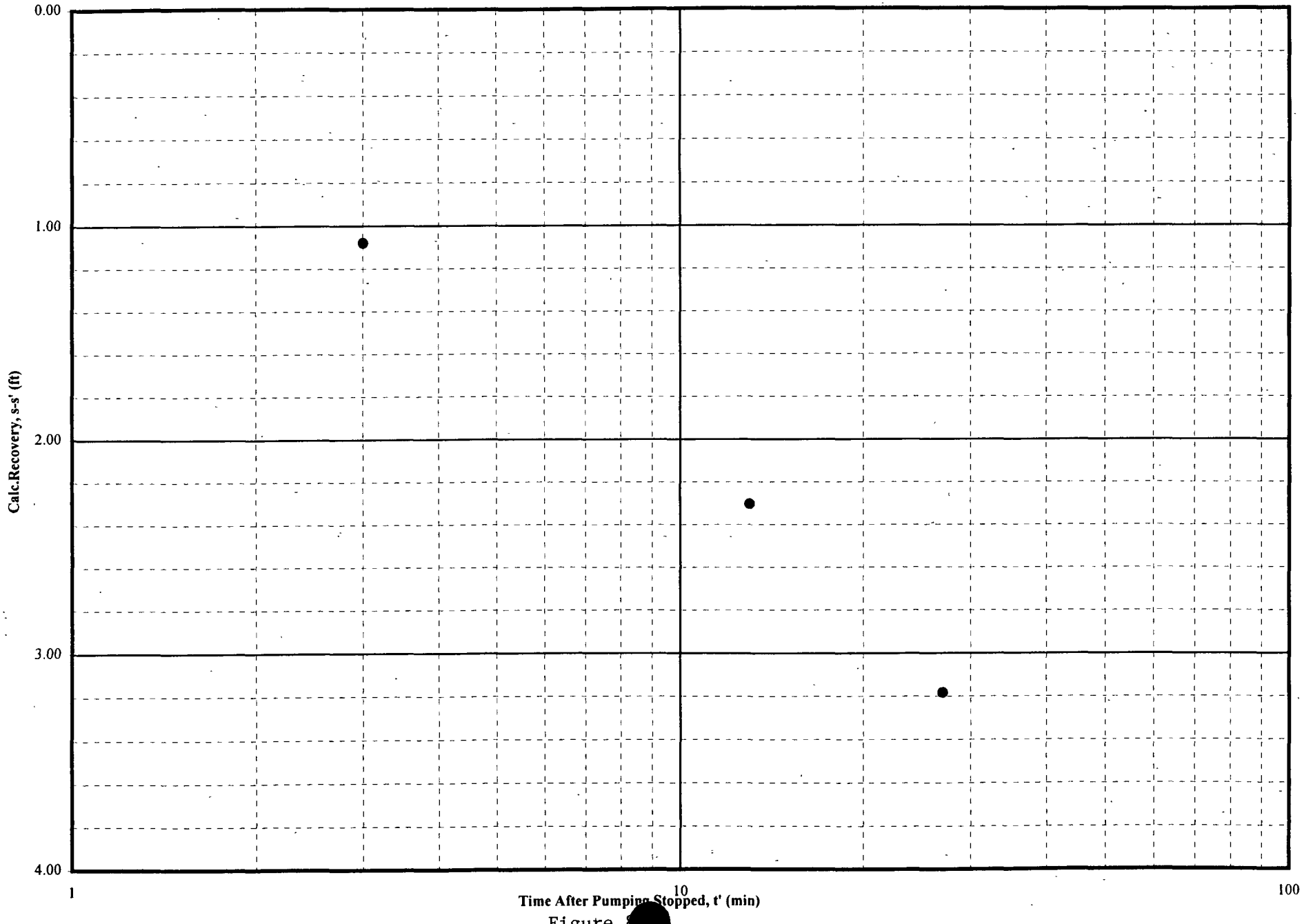


Figure 8

Residual Drawdown, Observation Well EWA2
Yield Test at EWA1, 1/22/99

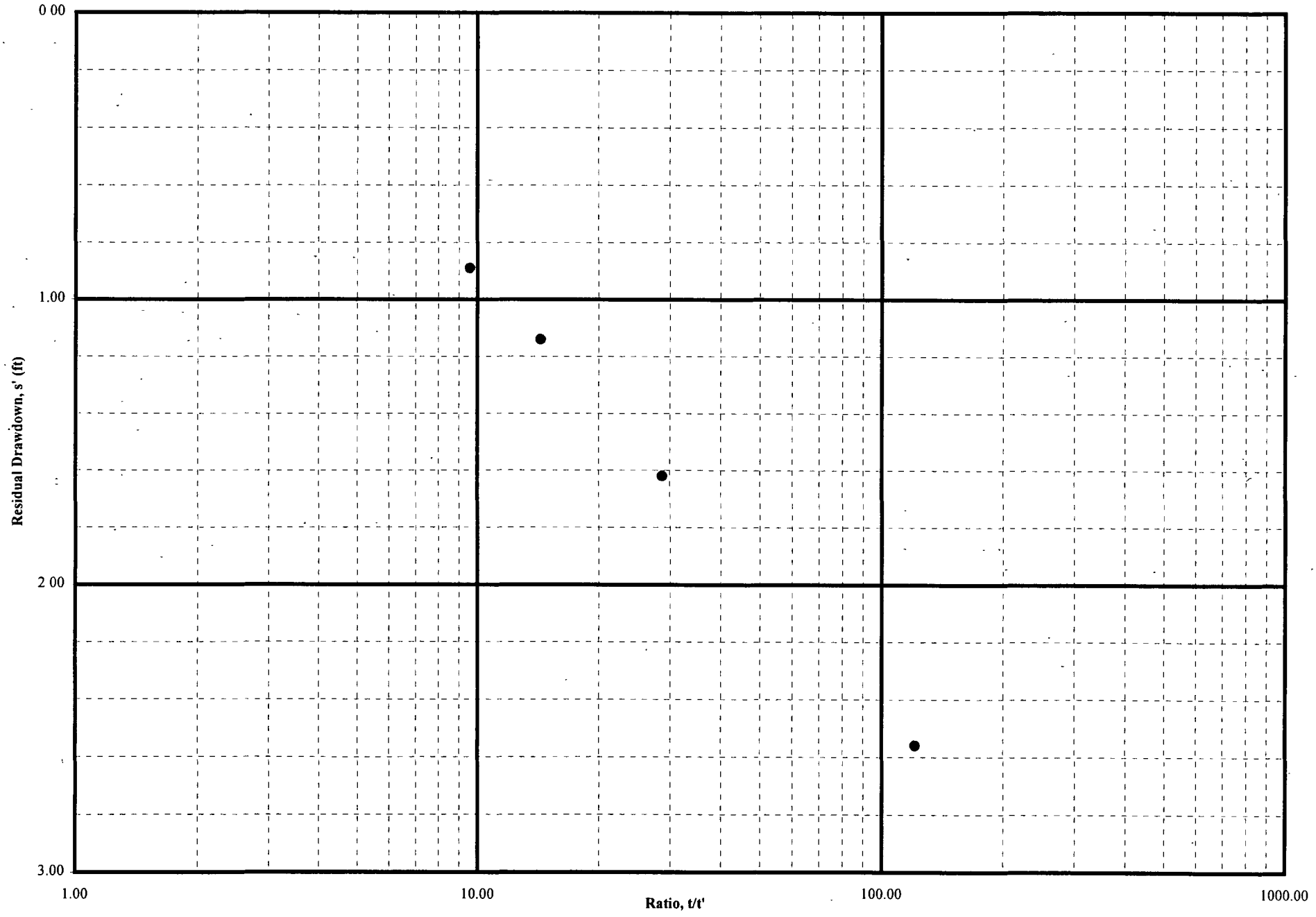


Figure 8-9

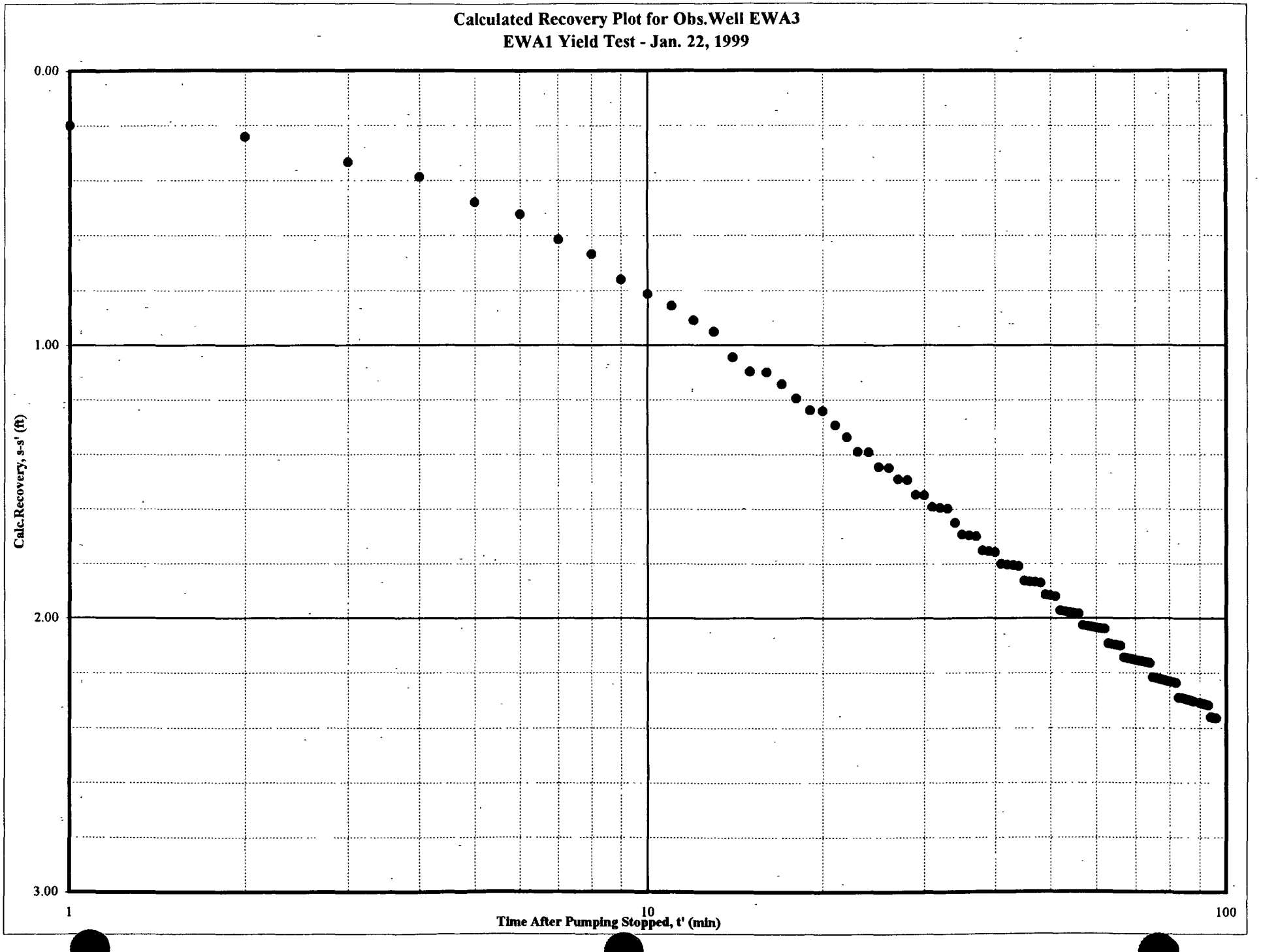

Calculated Recovery Plot for Obs.Well EWA3
EWA1 Yield Test - Jan. 22, 1999
0.00
1.00
2.00
3.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-

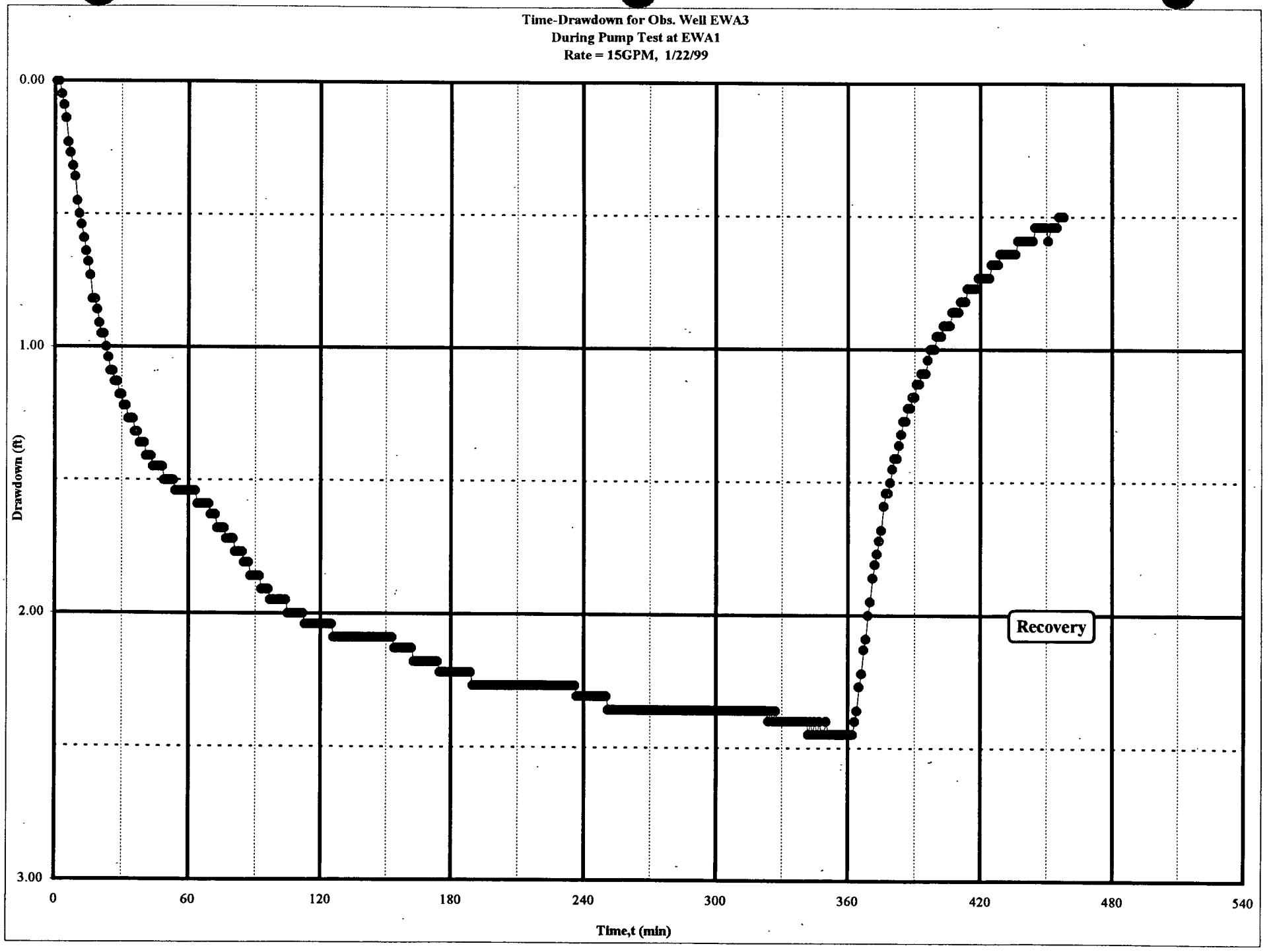

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-11

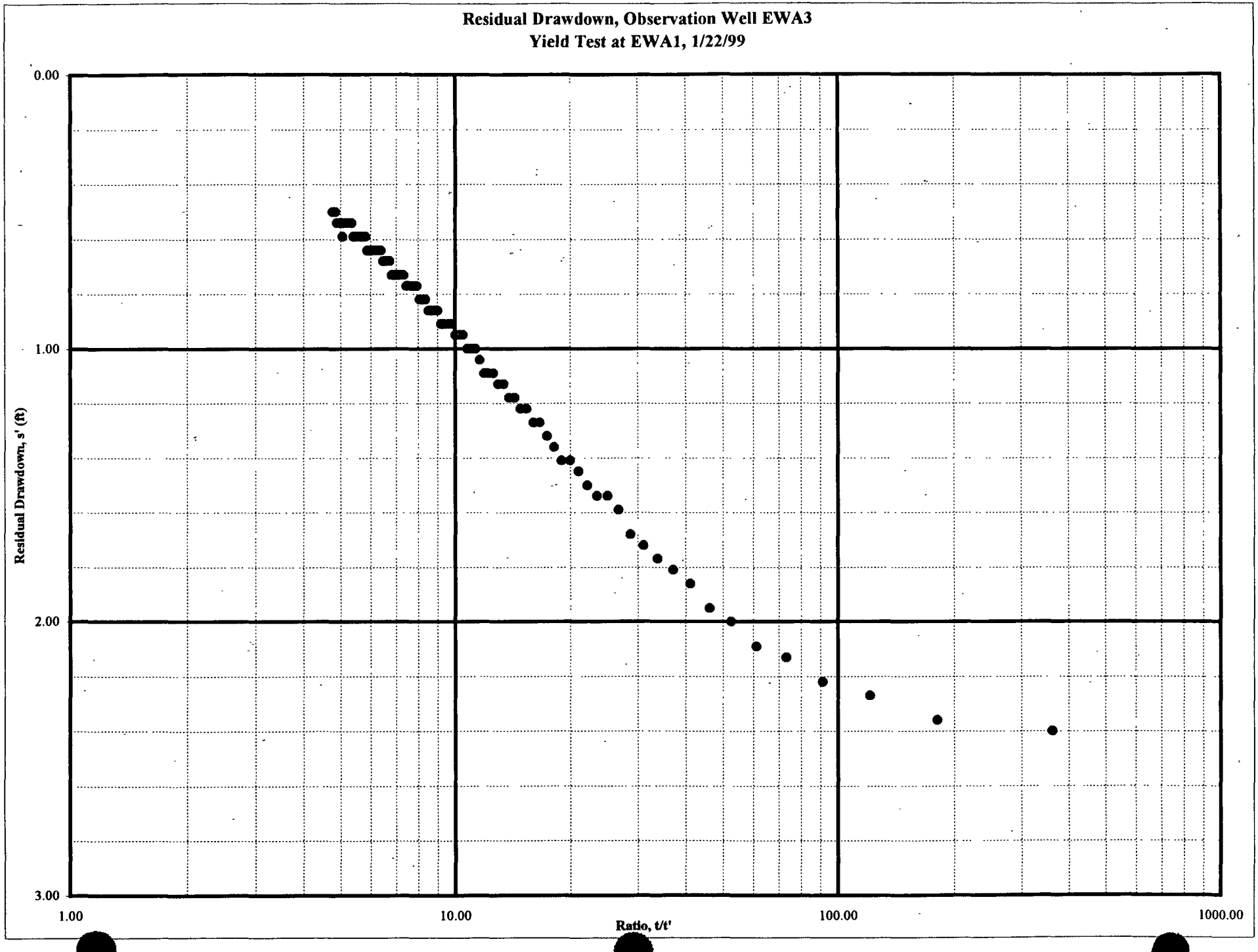

Residual Drawdown, Observation Well EWA3
Yield Test at EWA1, 1/22/99
0.00
1.00
2.00
3.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-12

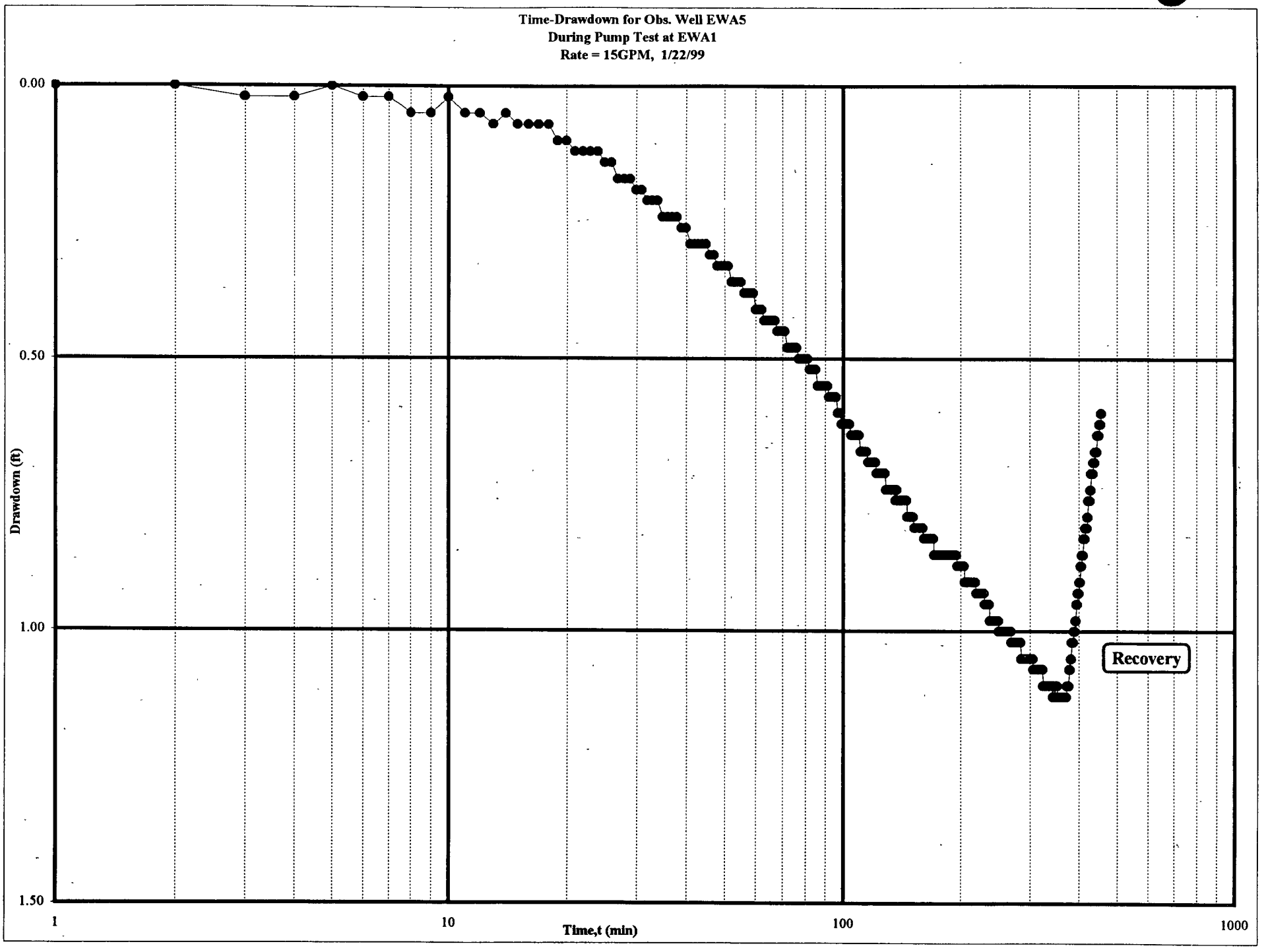

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
0.50
1.00
1.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figure 8-13

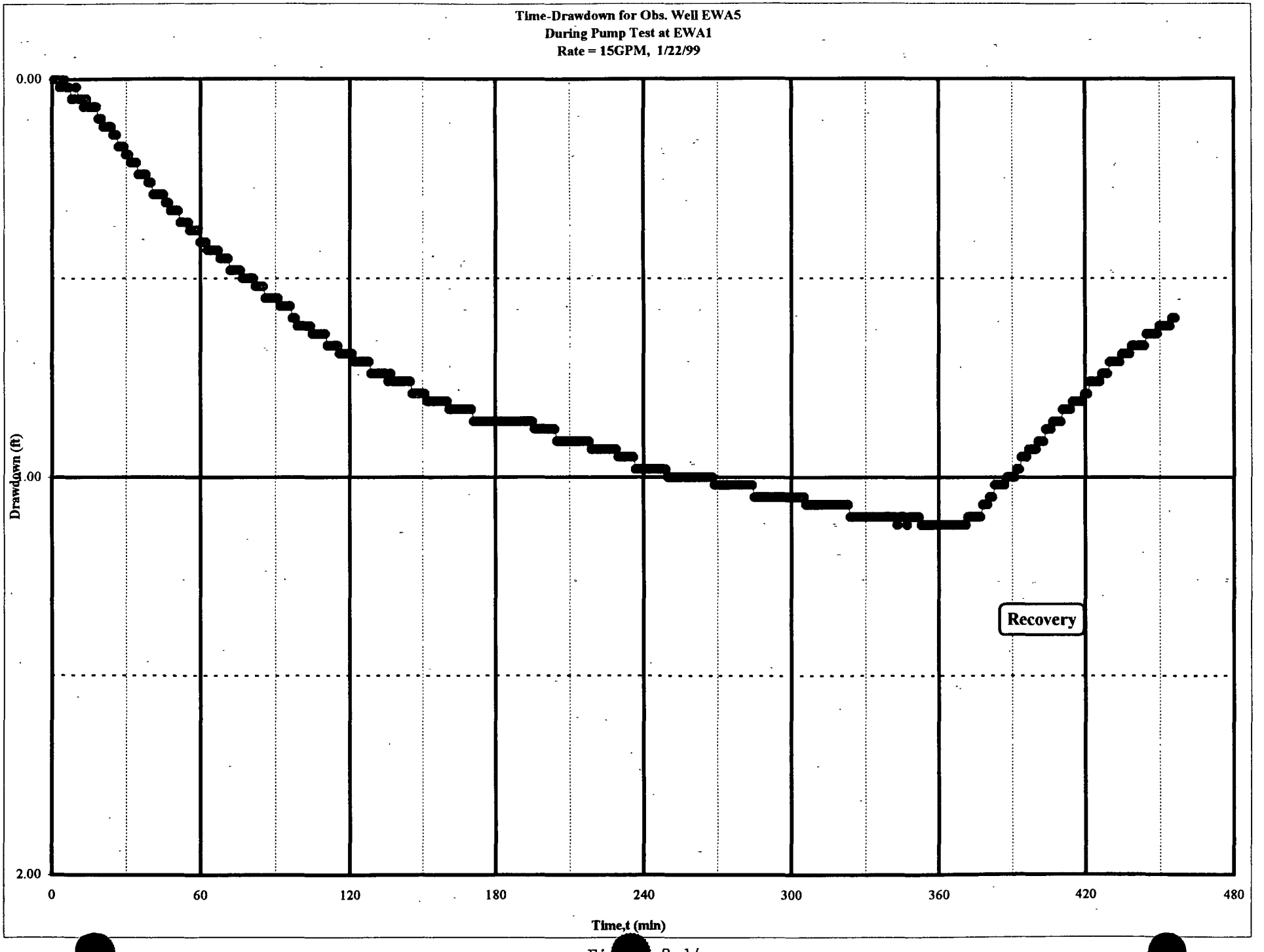

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Fig 8-14

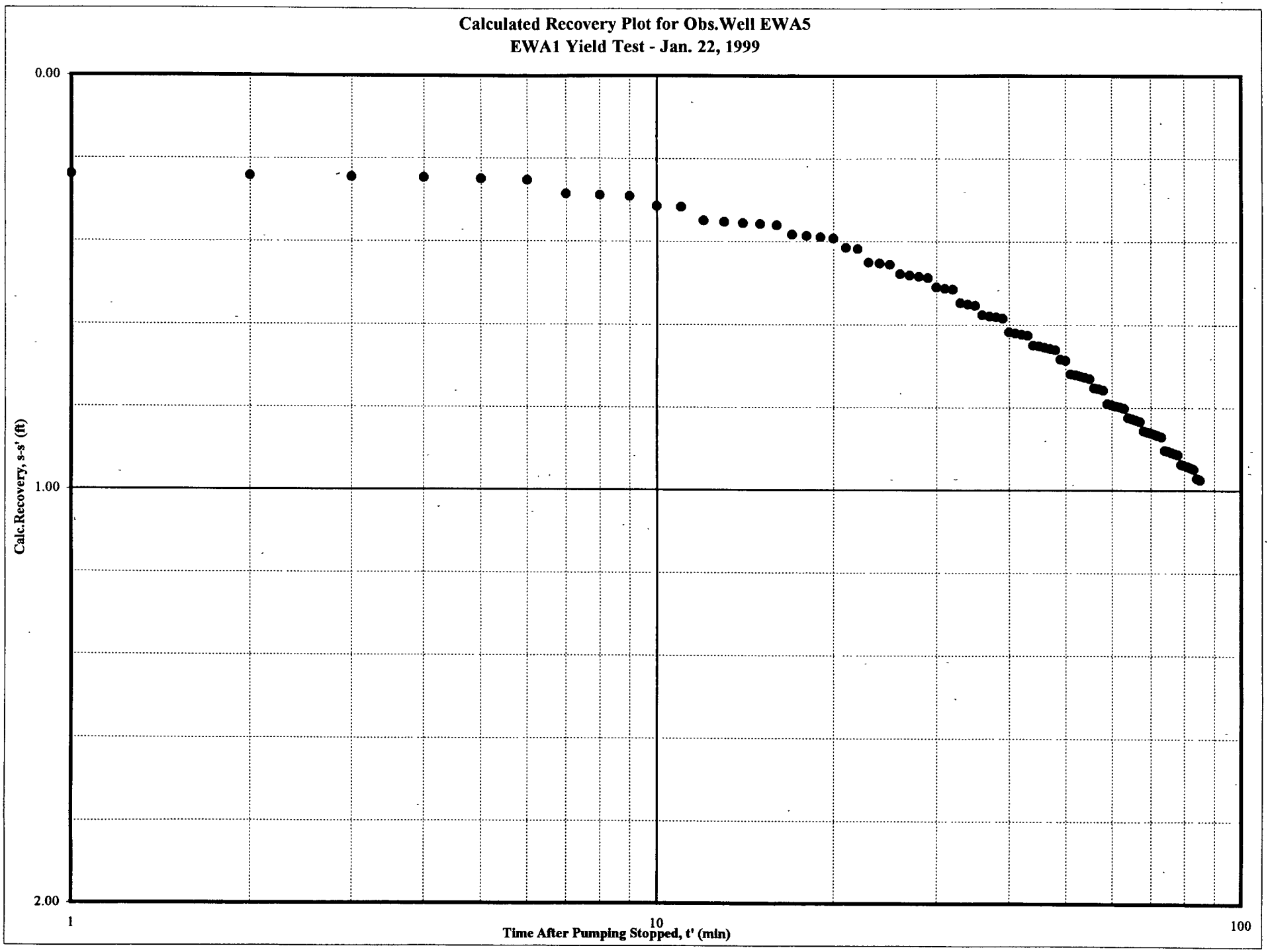

Calculated Recovery Plot for Obs.Well EWA5
EWA1 Yield Test - Jan. 22, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-15

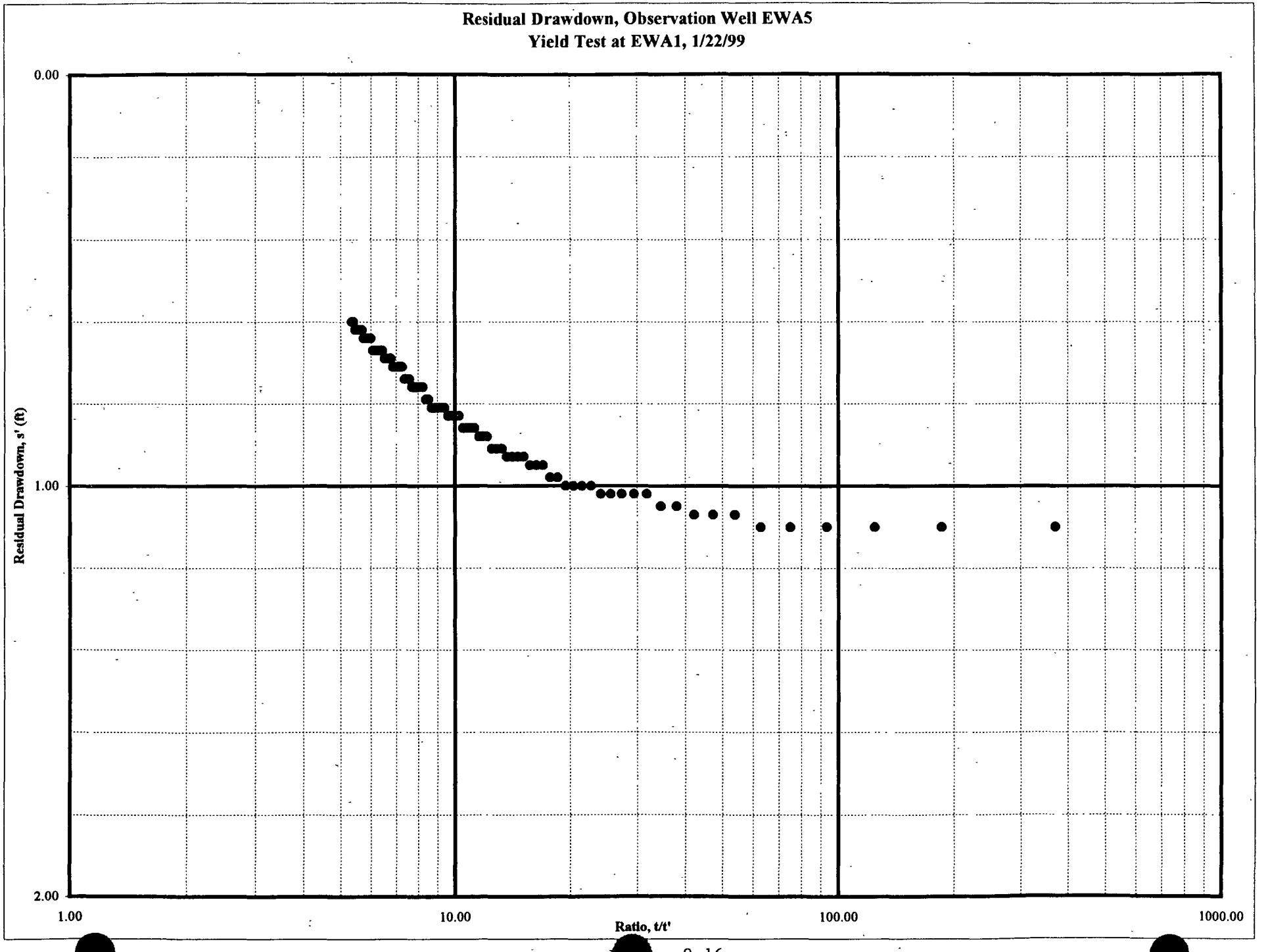

Residual Drawdown, Observation Well EWA5
Yield Test at EWA1, 1/22/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-16

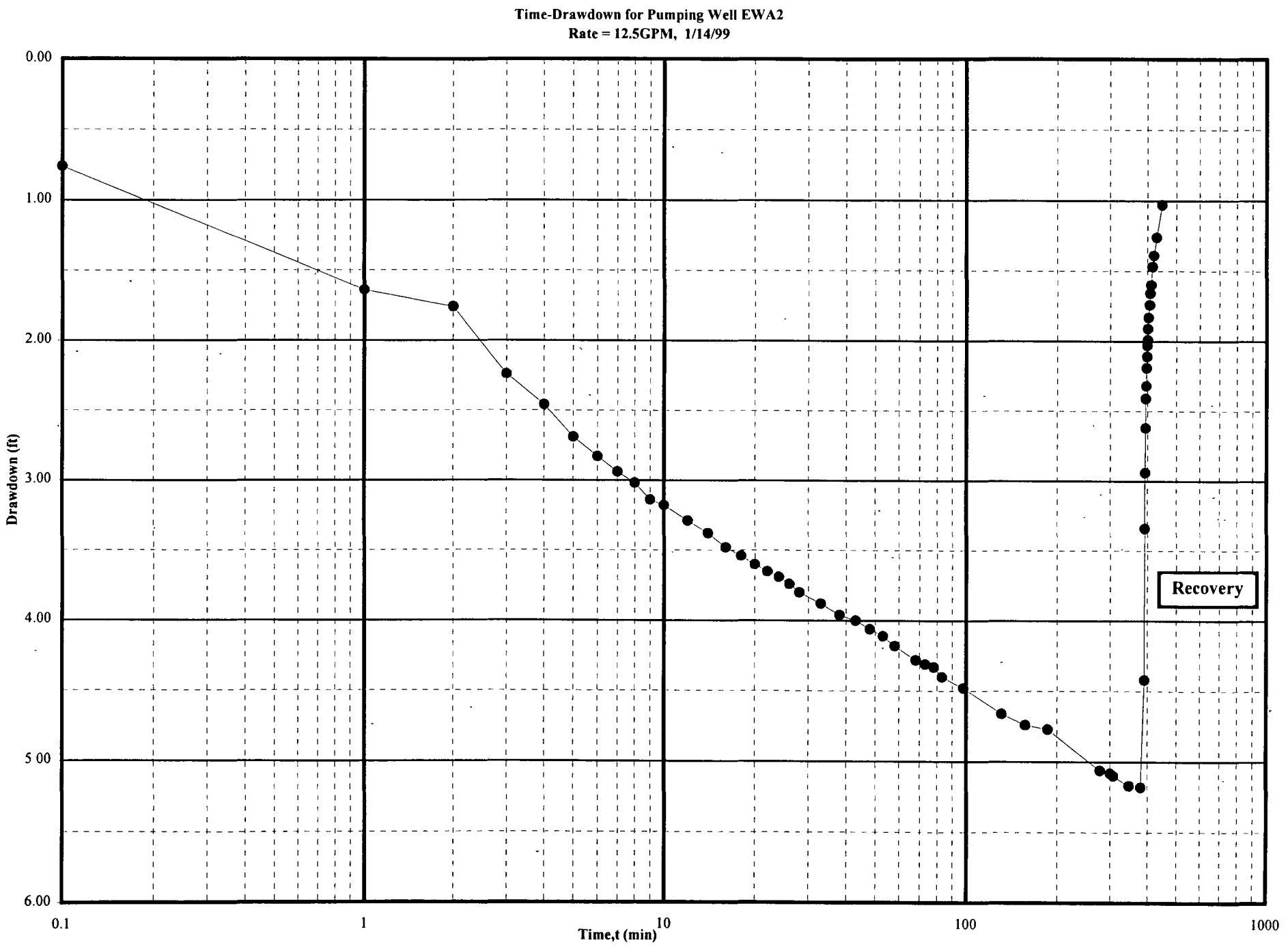

Time-Drawdown for Pumping Well EWA2
Rate = 12.5GPM, 1/14/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5 00
6.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-17

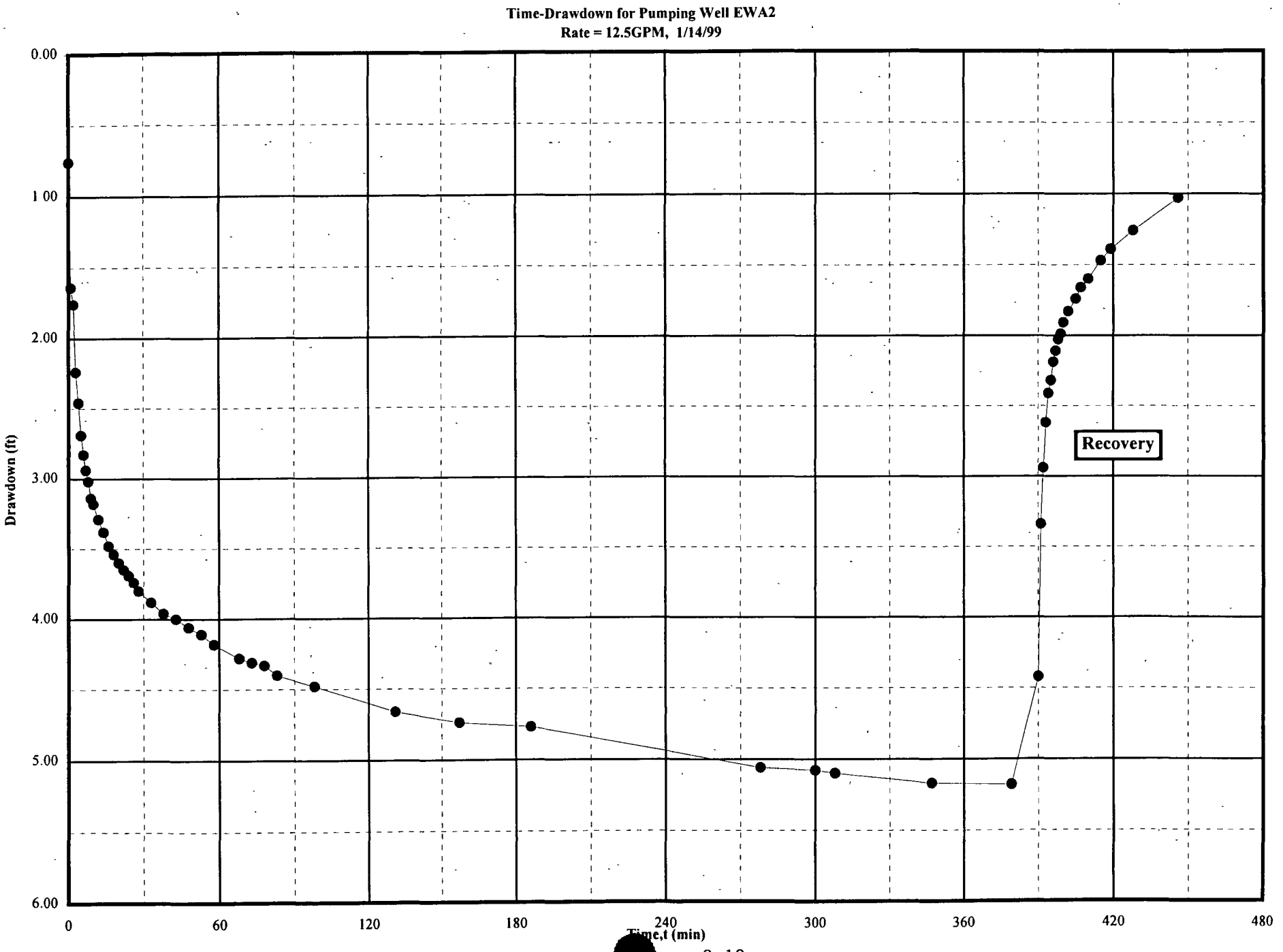

Time-Drawdown for Pumping Well EWA2
Rate = 12.5GPM, 1/14/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-18

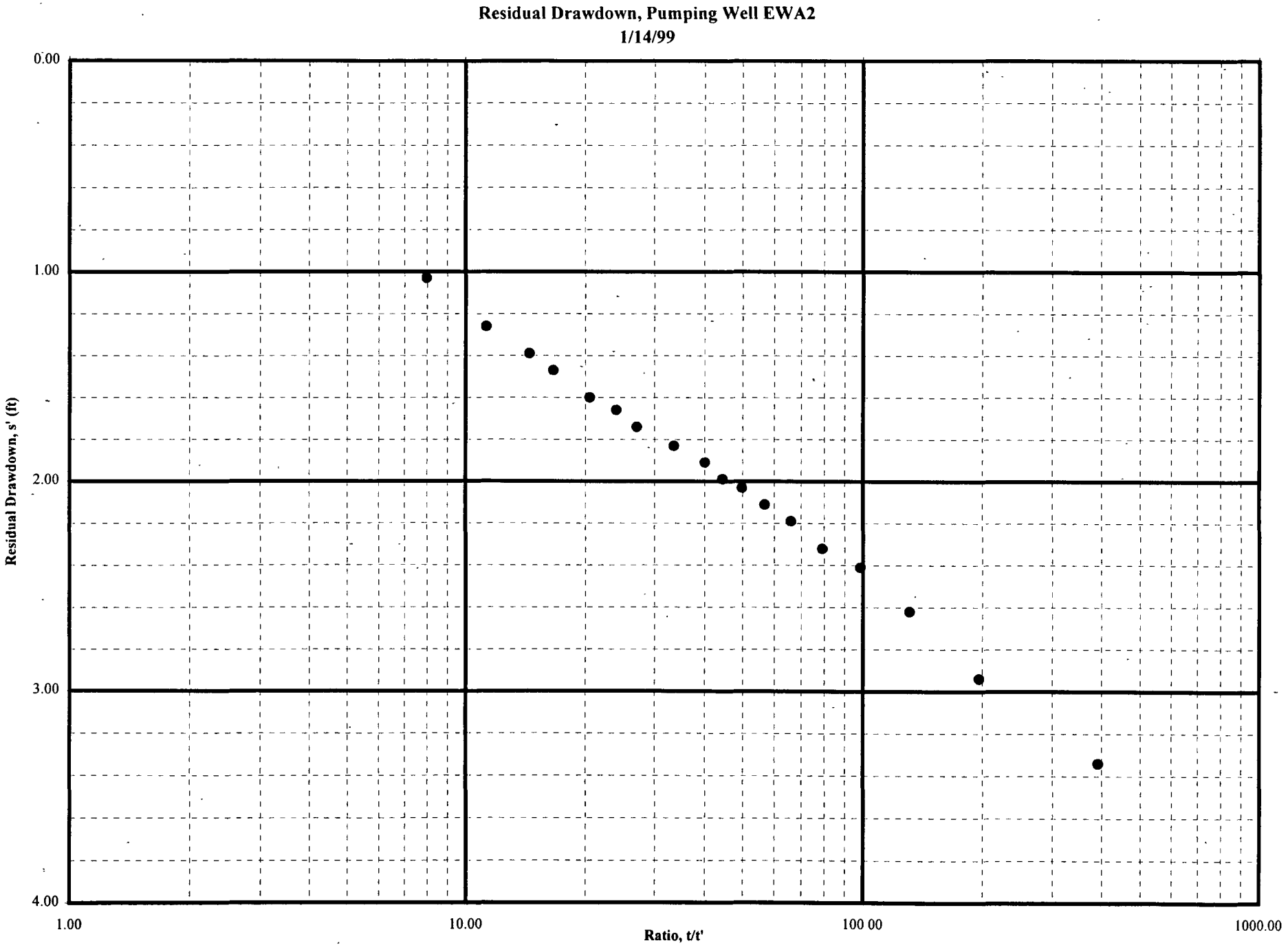

Residual Drawdown, Pumping Well EWA2
1/14/99
0.00
1.00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100 00
1000.00
Ratio, t/t'

Figure 8-19

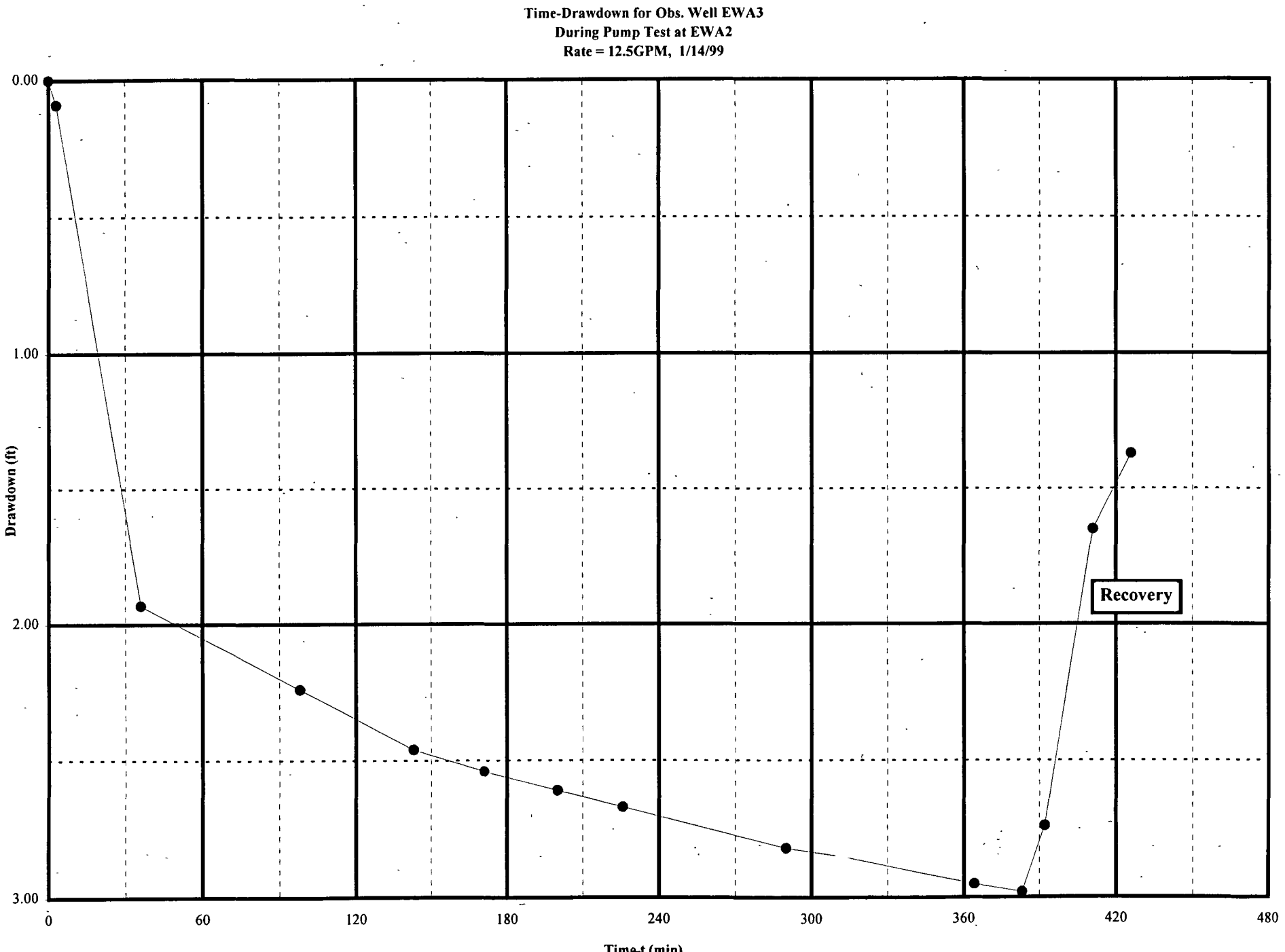

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time t (min)
Recovery

Figure 8-20

Calculated Recovery Plot for Obs.Well EWA3
EWA2 Yield Test - Jan. 14, 1999

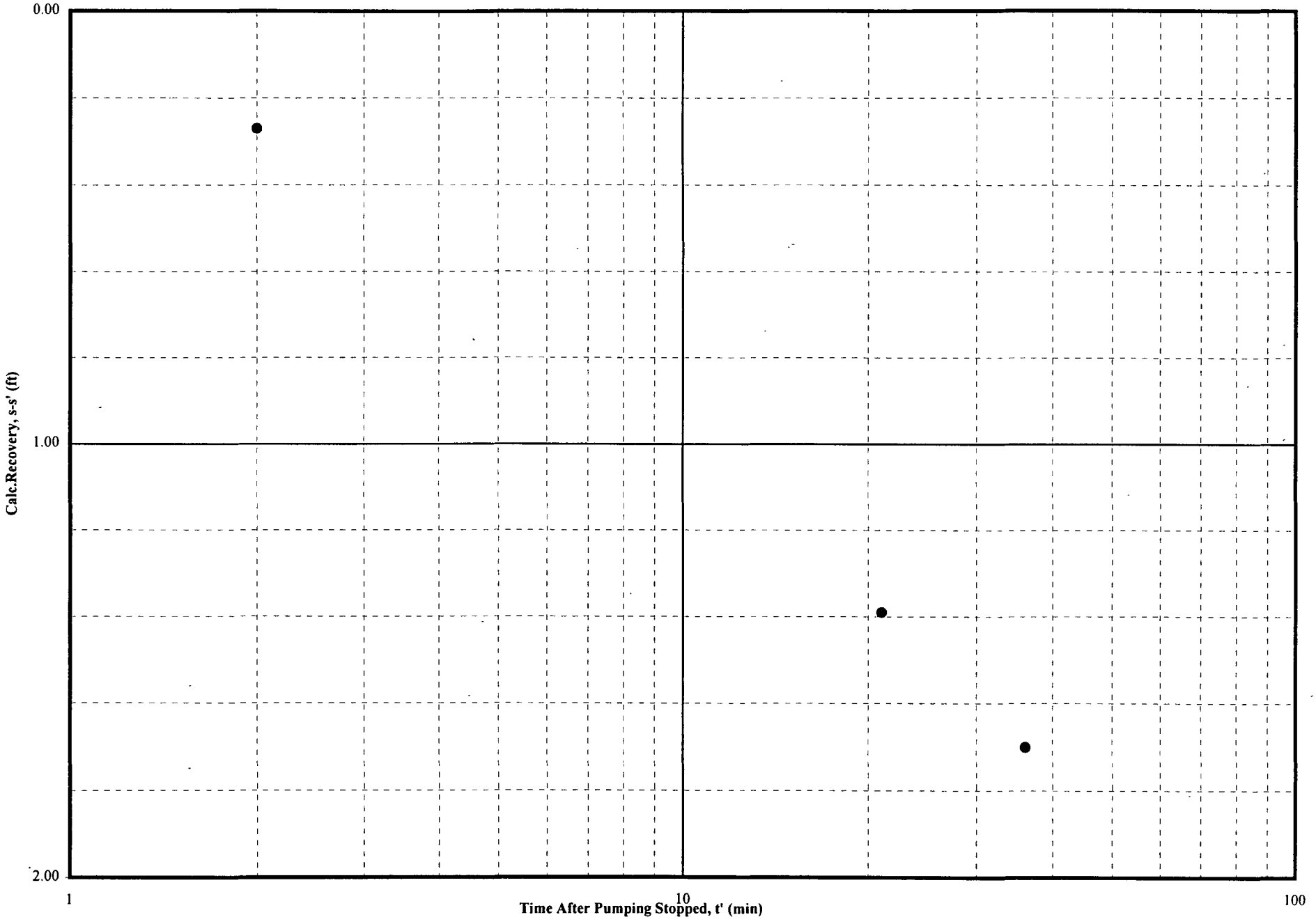
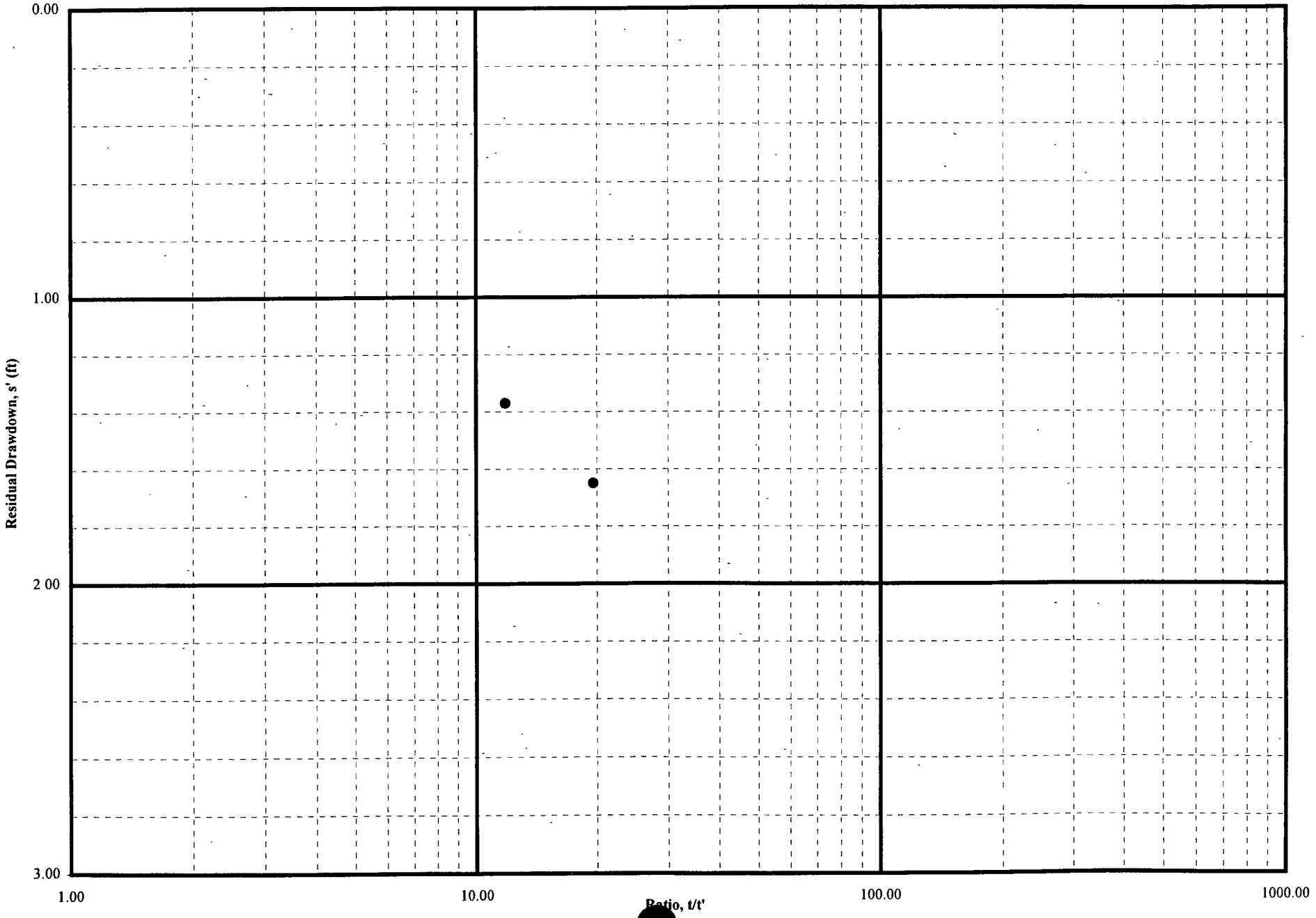


Figure 8-21

Residual Drawdown, Observation Well EWA3
Yield Test at EWA2, 1/14/99



ure 8-22

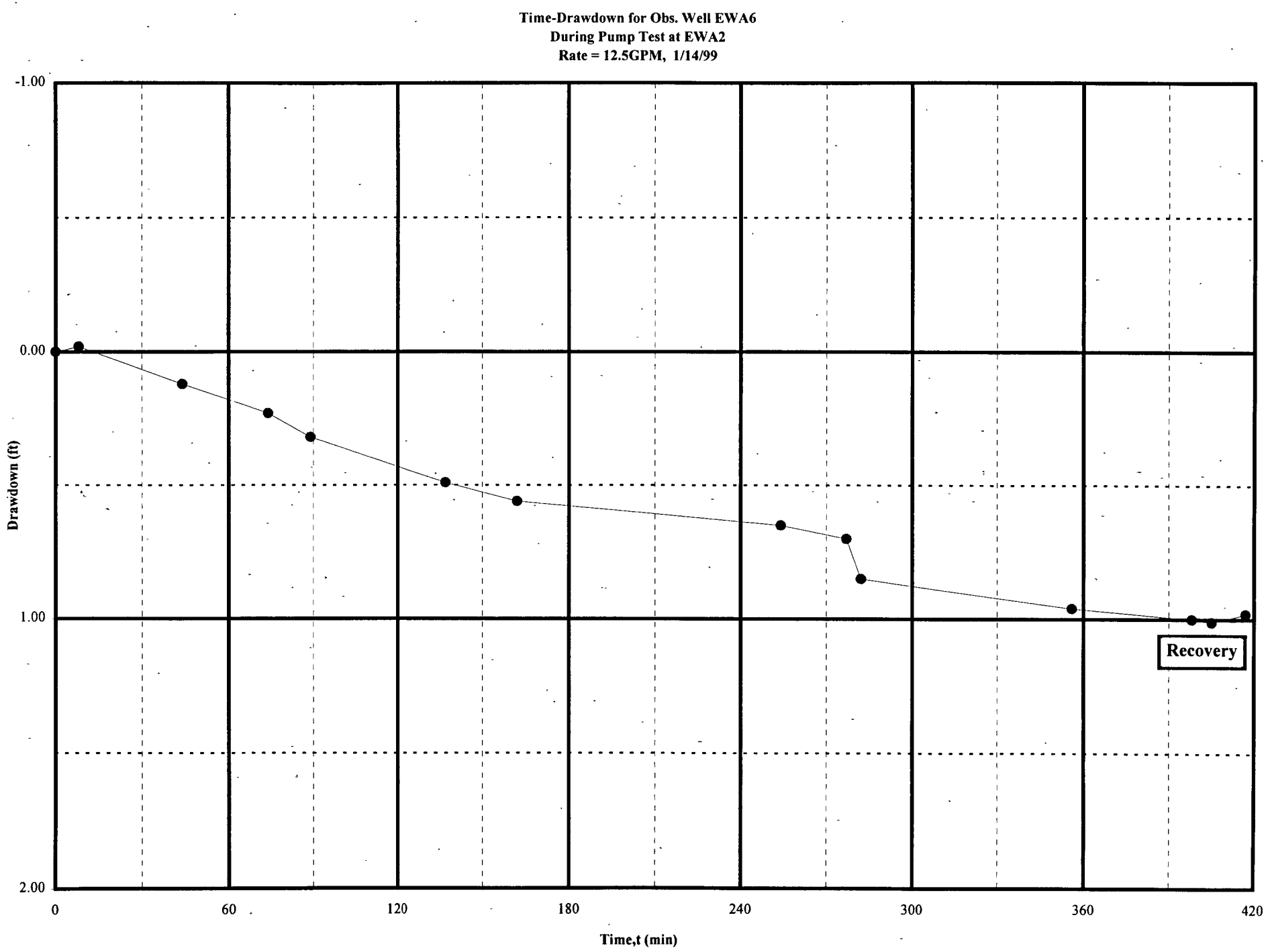
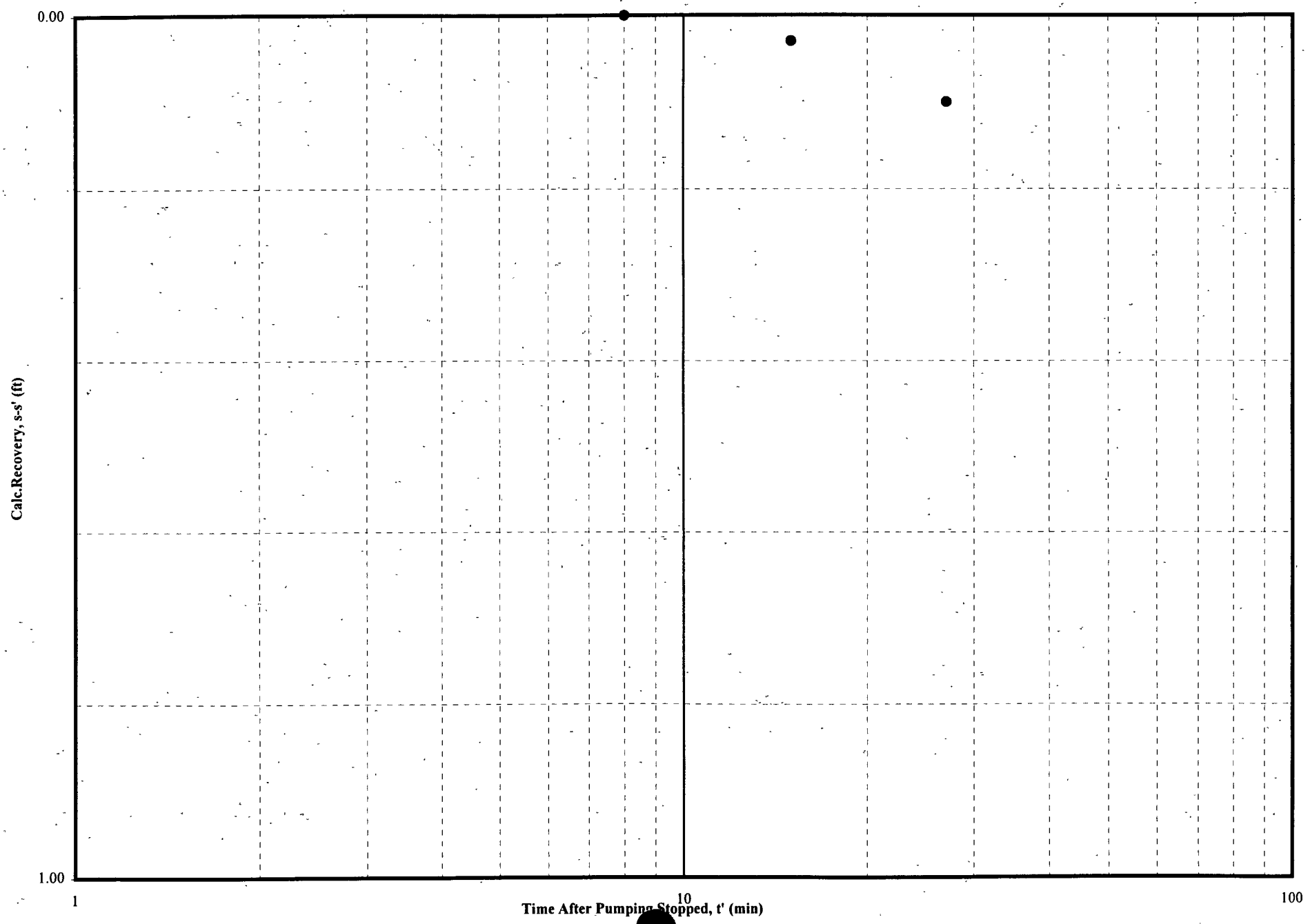

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
-1.00
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-23

Calculated Recovery Plot for Obs.Well EWA6
EWA2 Yield Test - Jan. 14, 1999



Figure

Residual Drawdown, Observation Well EWA6
Yield Test at EWA2, 1/14/99

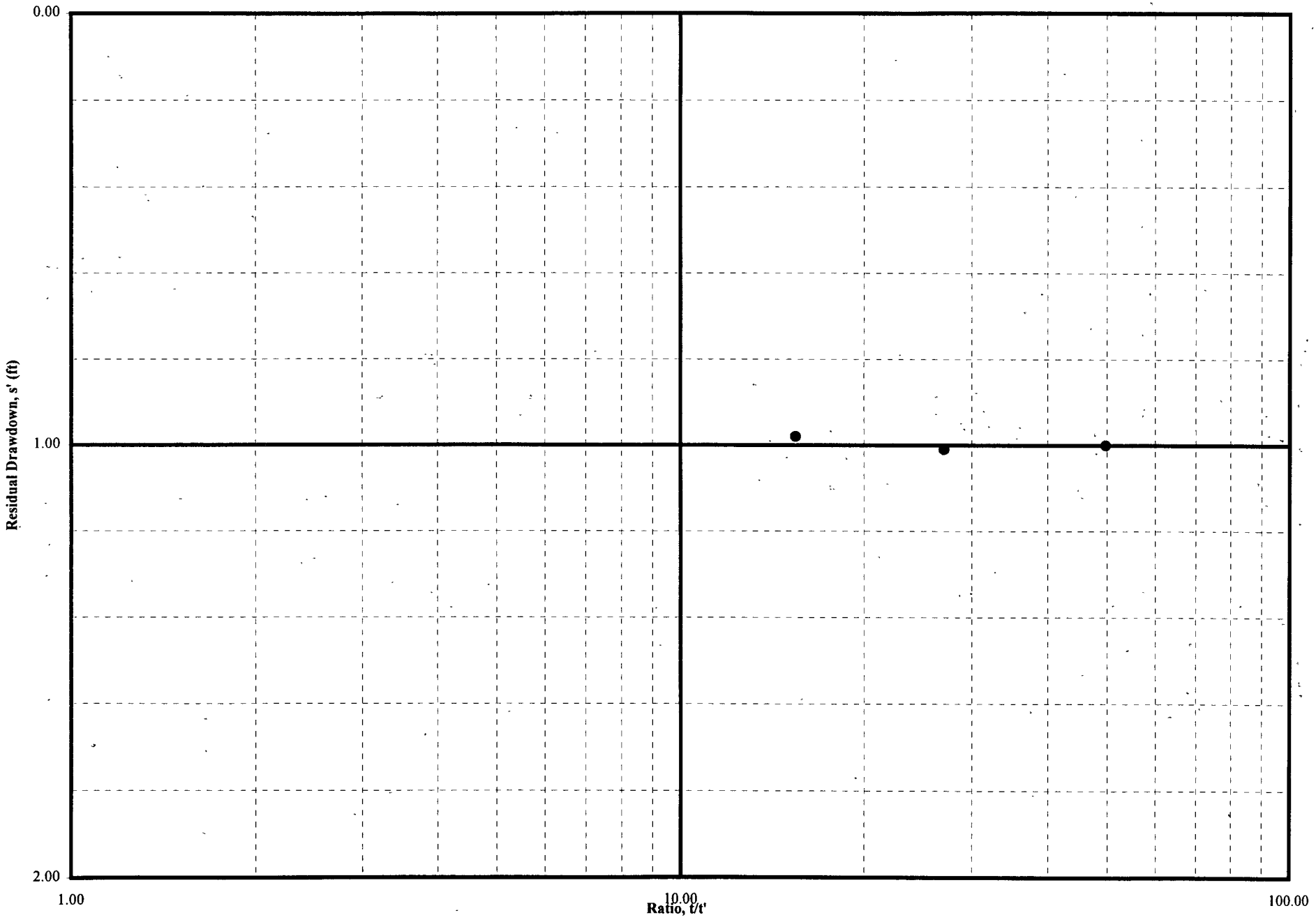
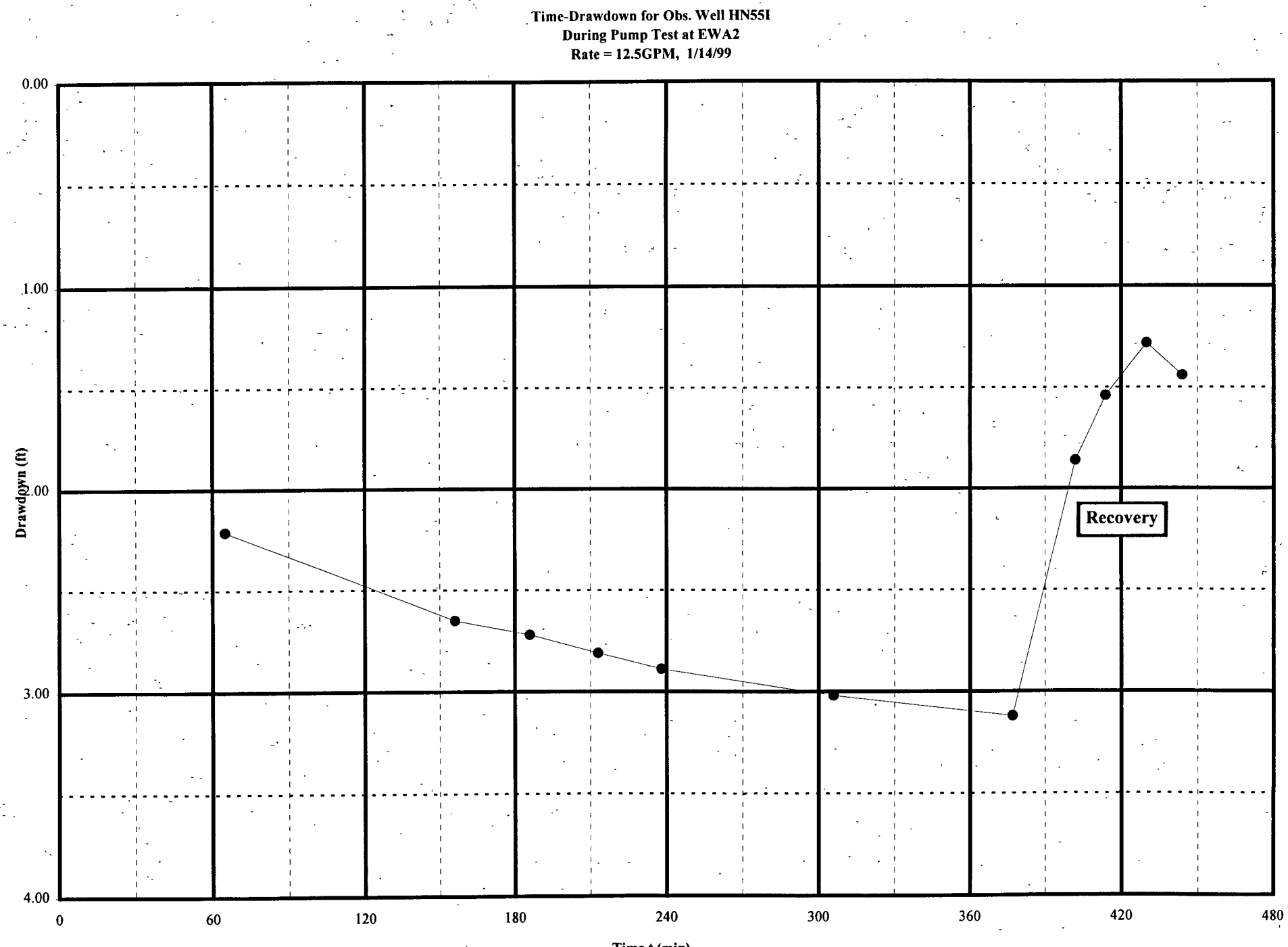


Figure 8-25


Time-Drawdown for Obs. Well HN55I
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time t (min)
Recovery

Fi[illegible]e 8-26

Calculated Recovery Plot for Obs.Well HN55I
EWA2 Yield Test - Jan. 14, 1999

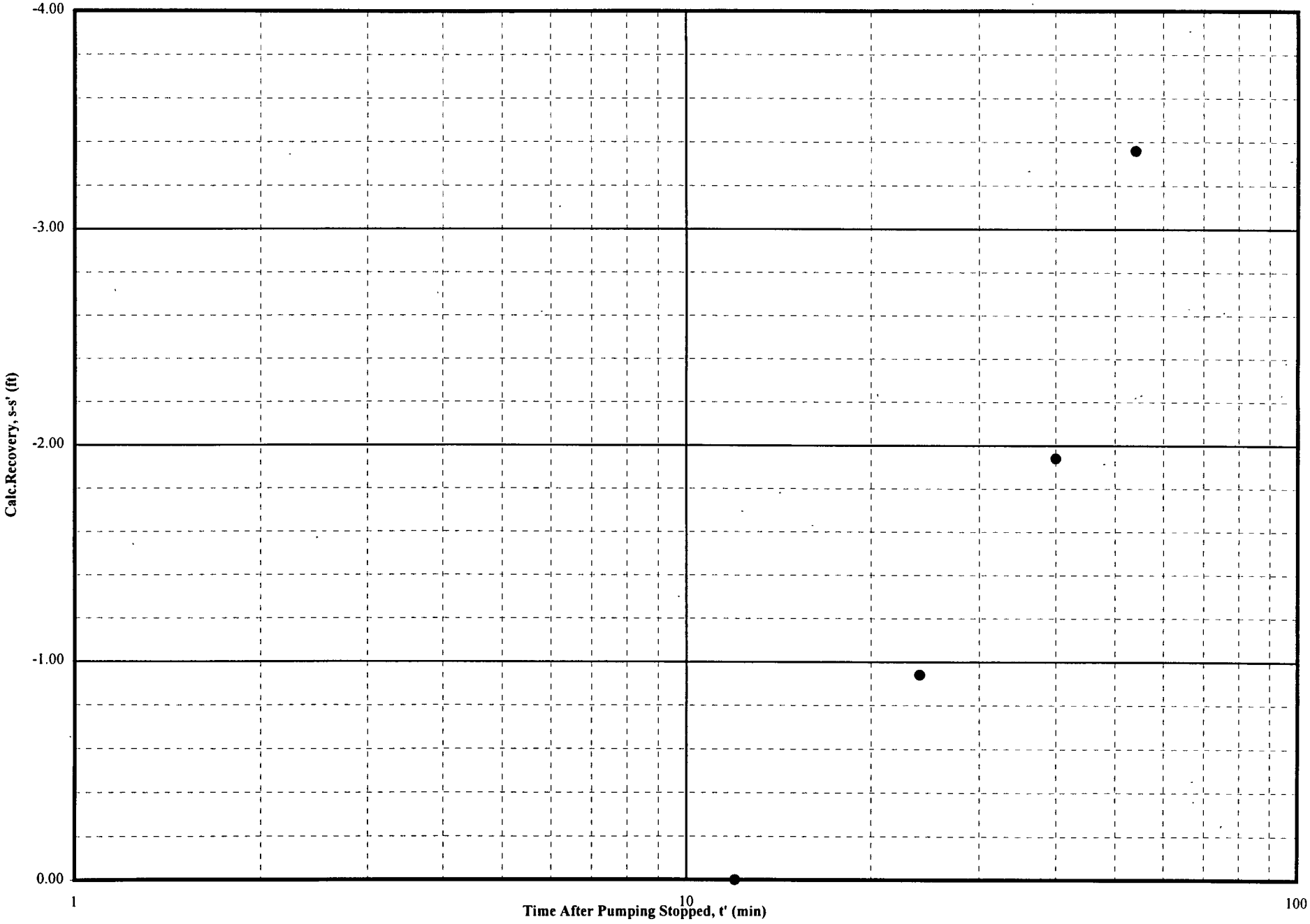
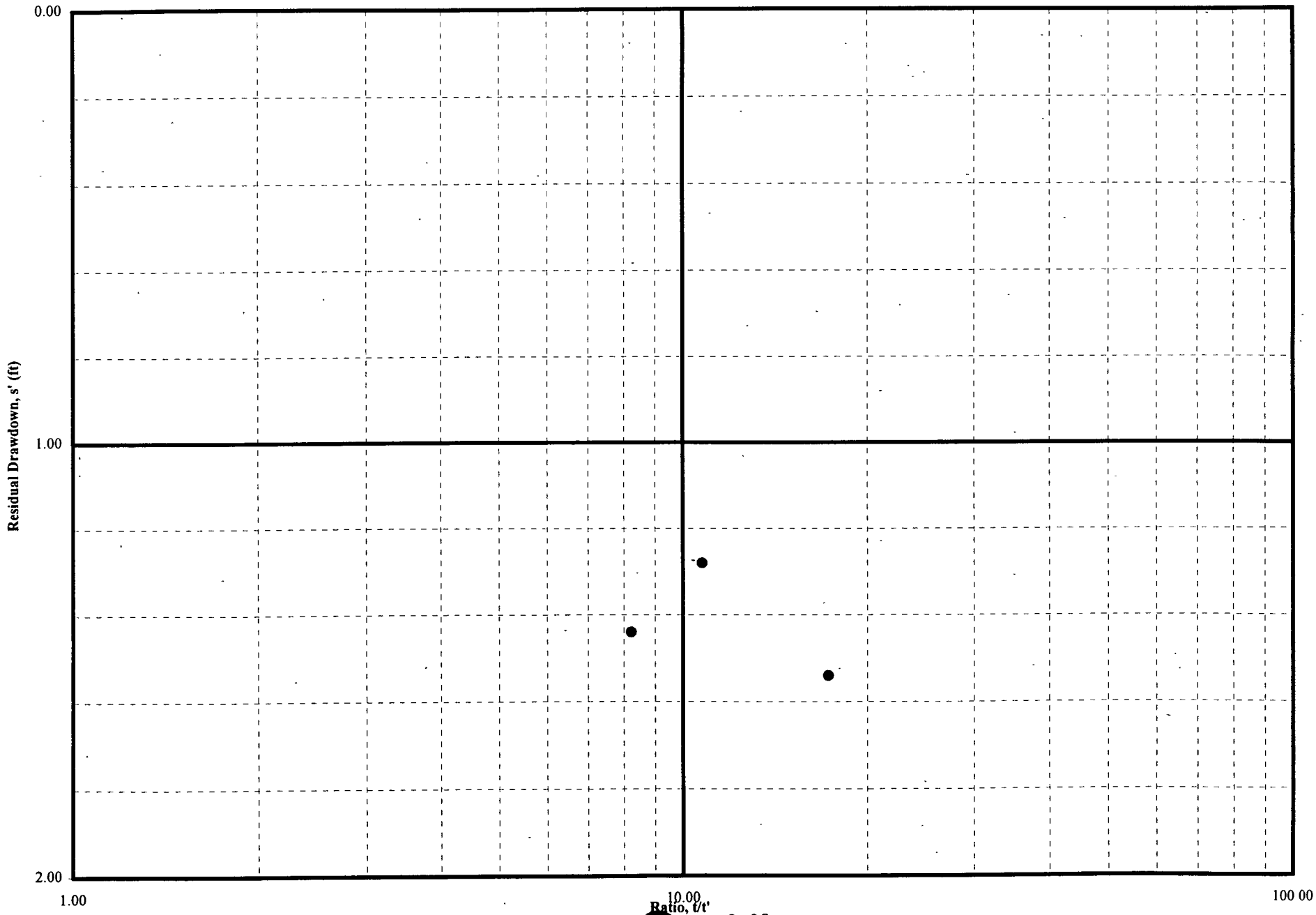


Figure 8-27

Residual Drawdown, Observation Well HN55I
Yield Test at EWA2, 1/14/99



ure 8-28

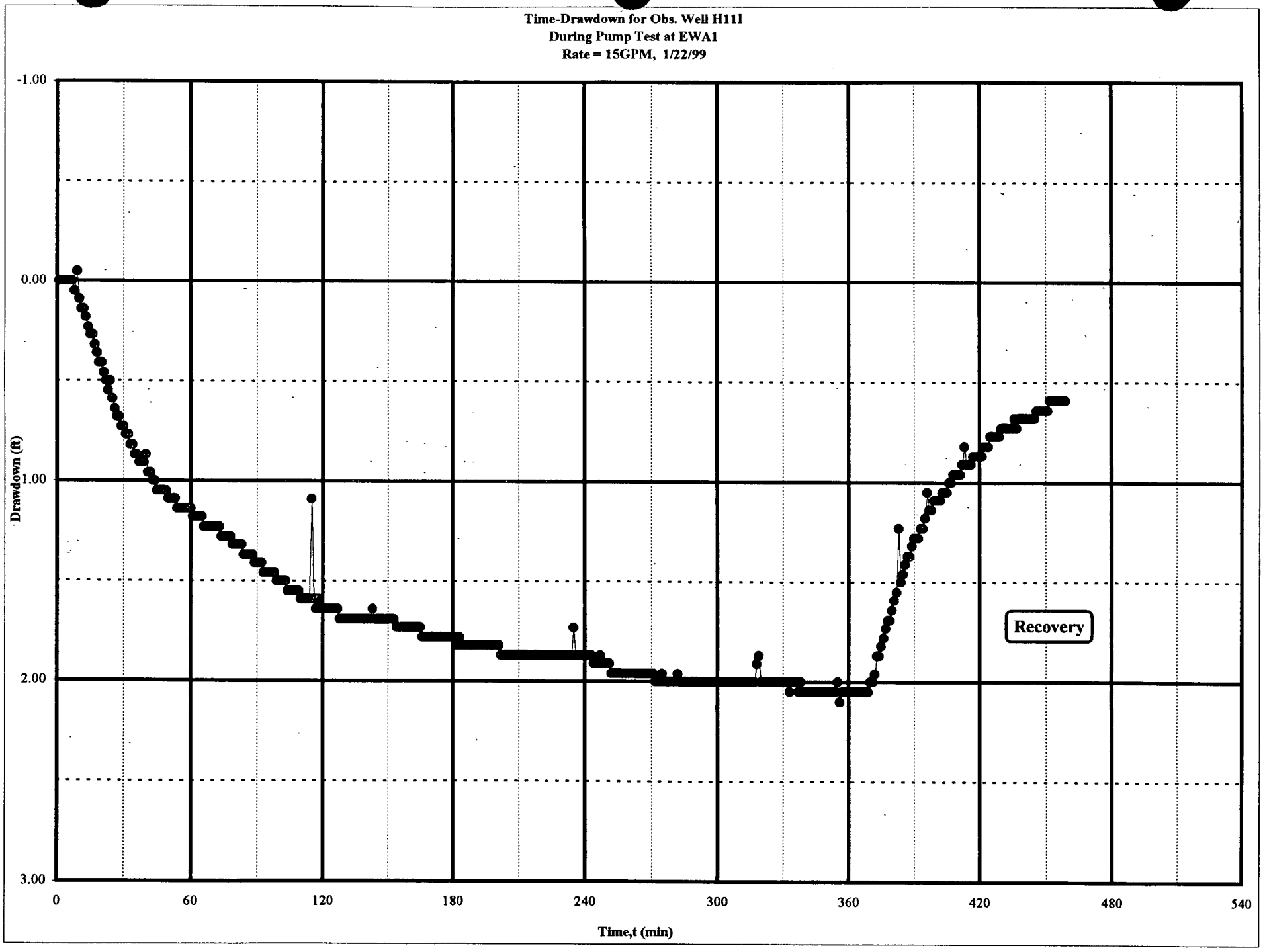
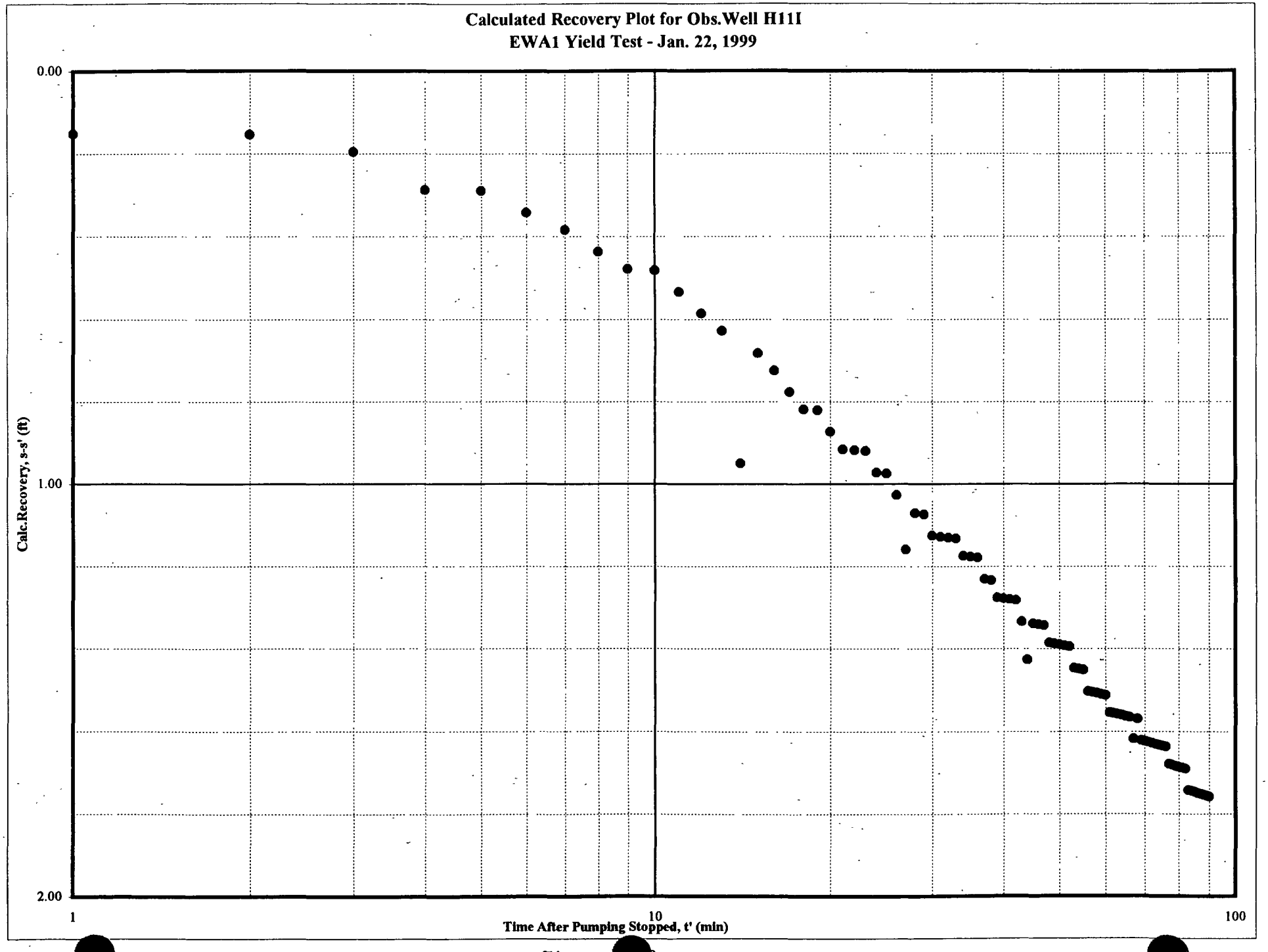

Time-Drawdown for Obs. Well H11I
During Pump Test at EWA1
Rate = 15GPM, 1/22/99
-1.00
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-29


Calculated Recovery Plot for Obs.Well H11I
EWA1 Yield Test - Jan. 22, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure

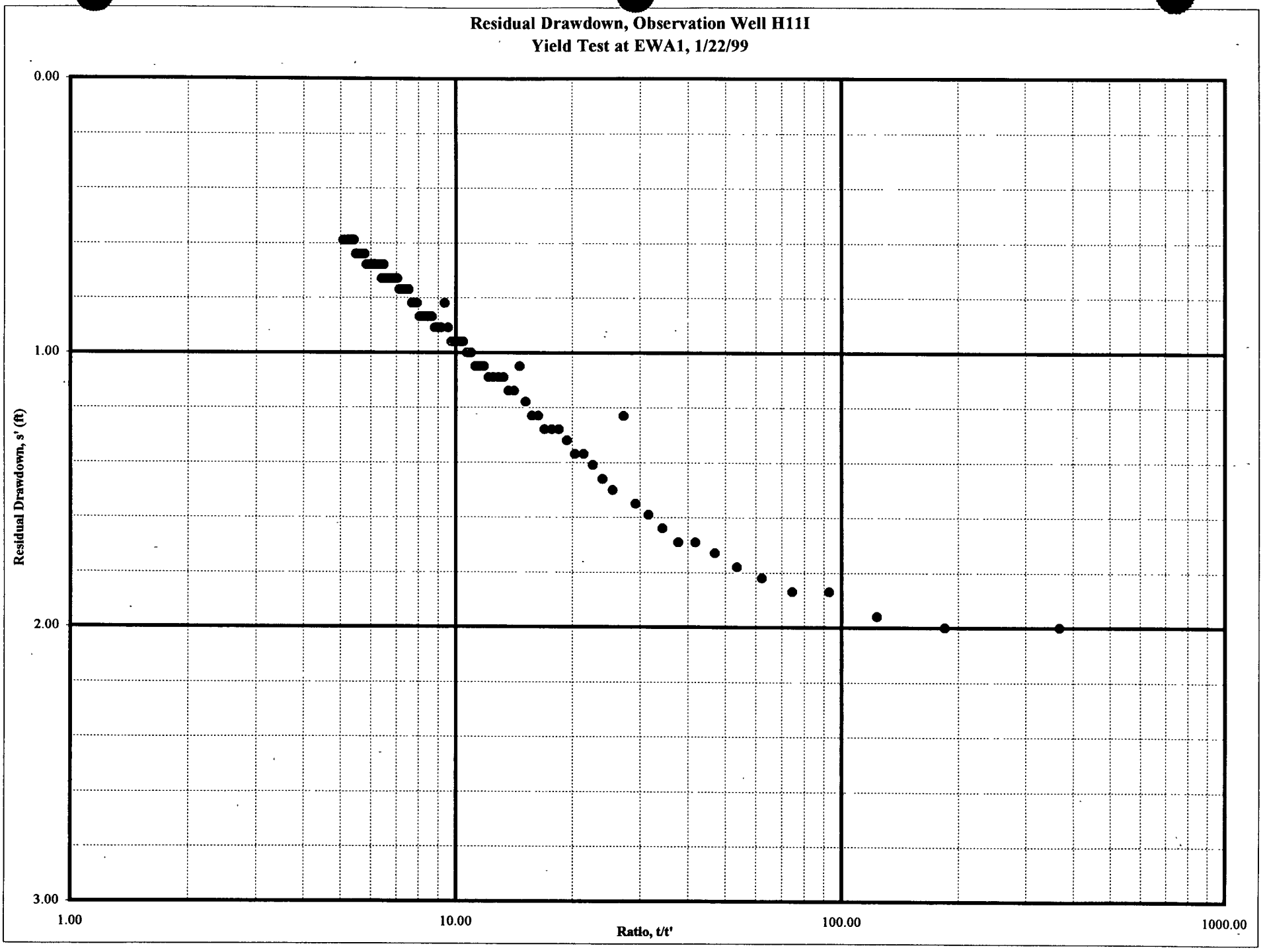

Residual Drawdown, Observation Well H11I
Yield Test at EWA1, 1/22/99
0.00
1.00
2.00
3.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-31

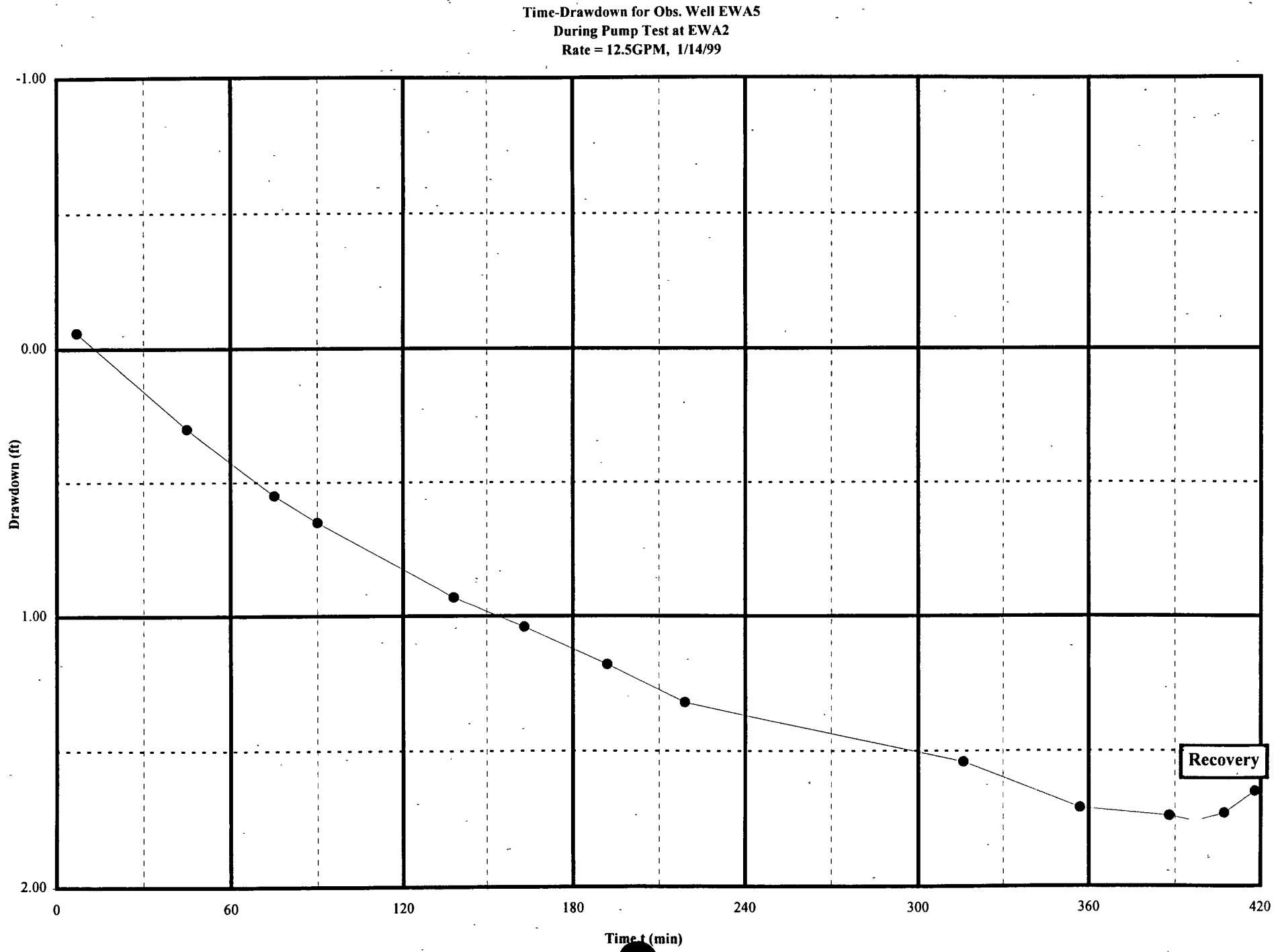

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
-1.00
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time t (min)
Recovery

Figure 8-32

Calculated Recovery Plot for Obs.Well EWA5
EWA2 Yield Test - Jan. 14, 1999

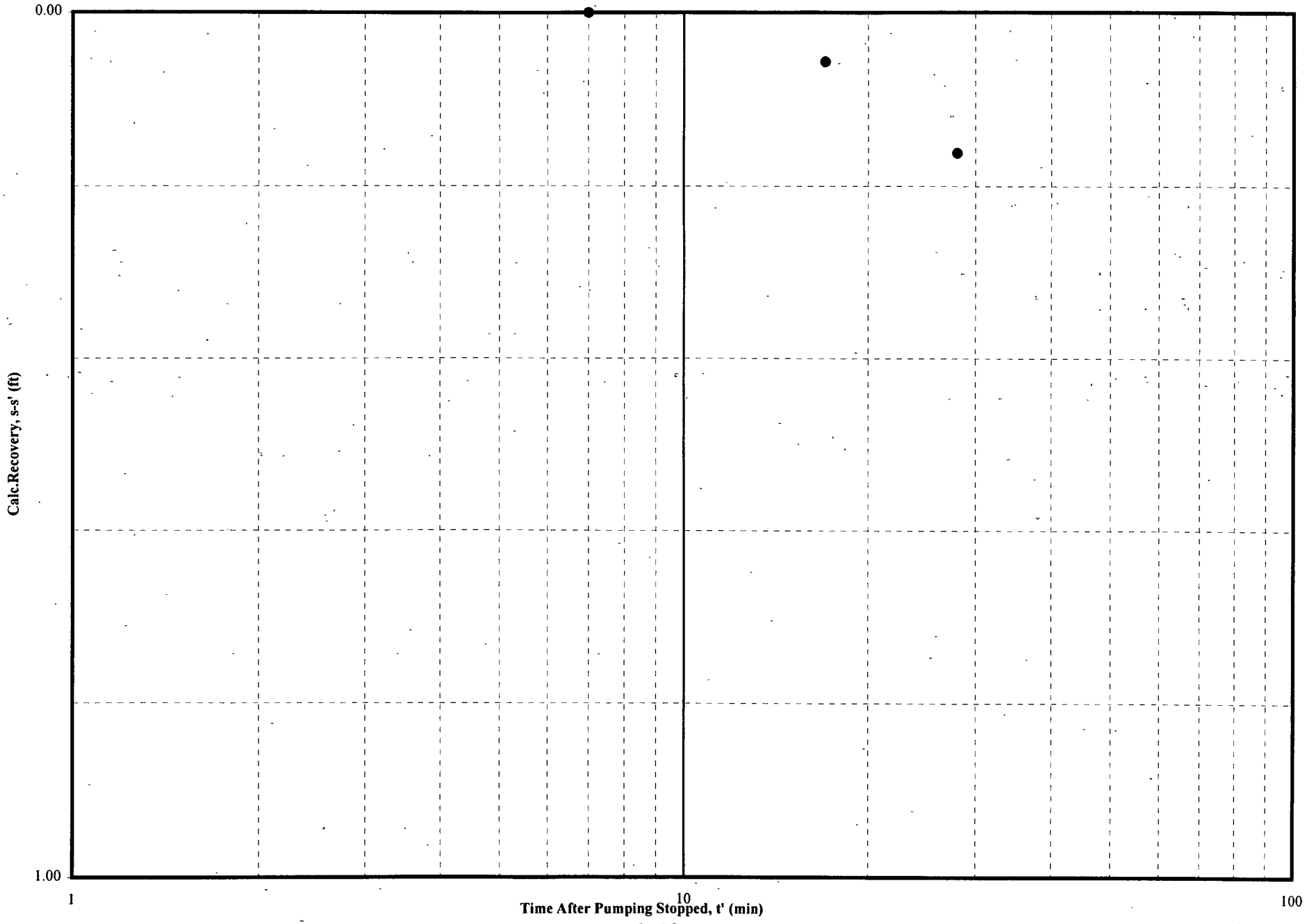
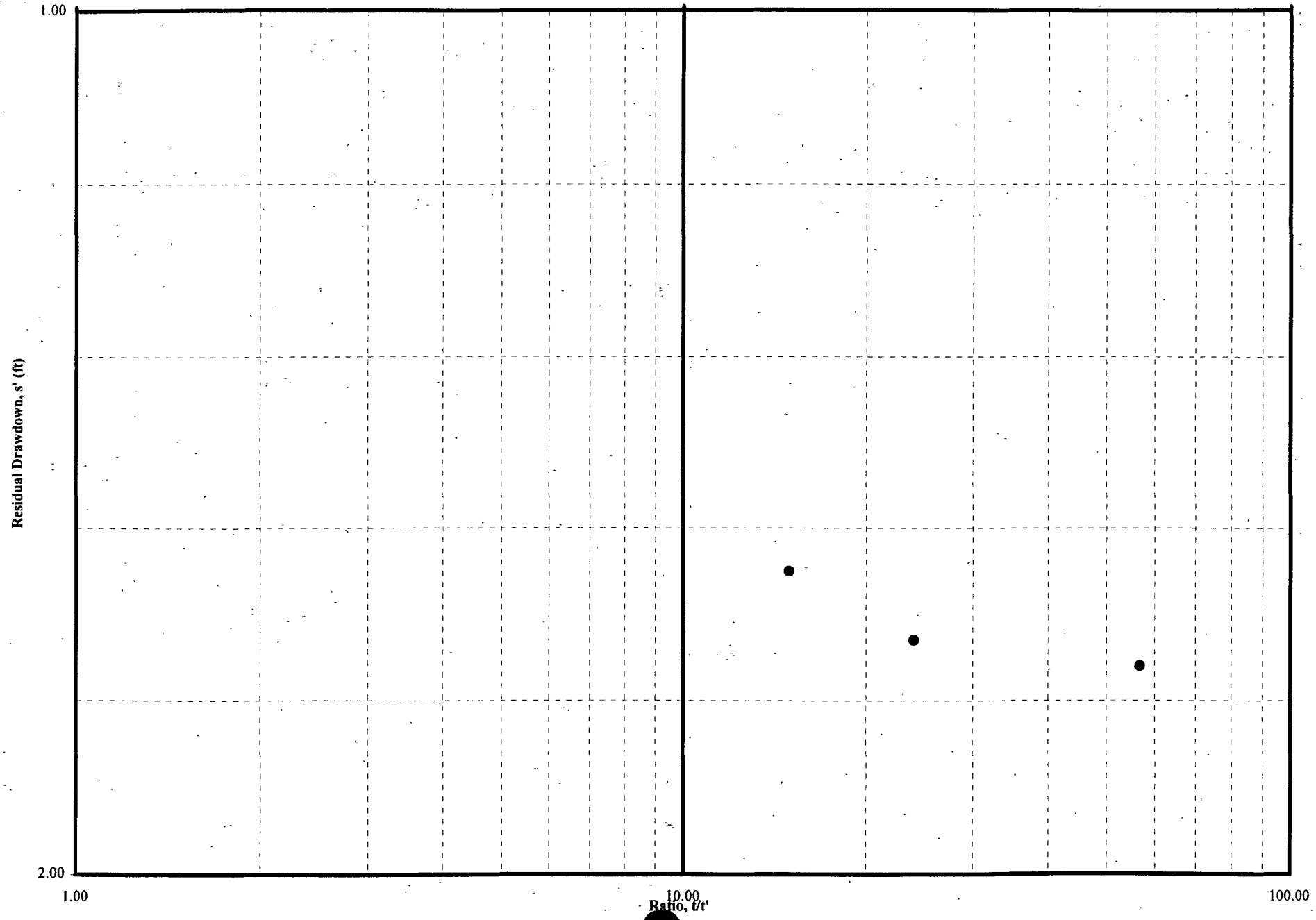


Figure 8-33

Residual Drawdown, Observation Well EWA5
Yield Test at EWA2, 1/14/99



ure 8-34

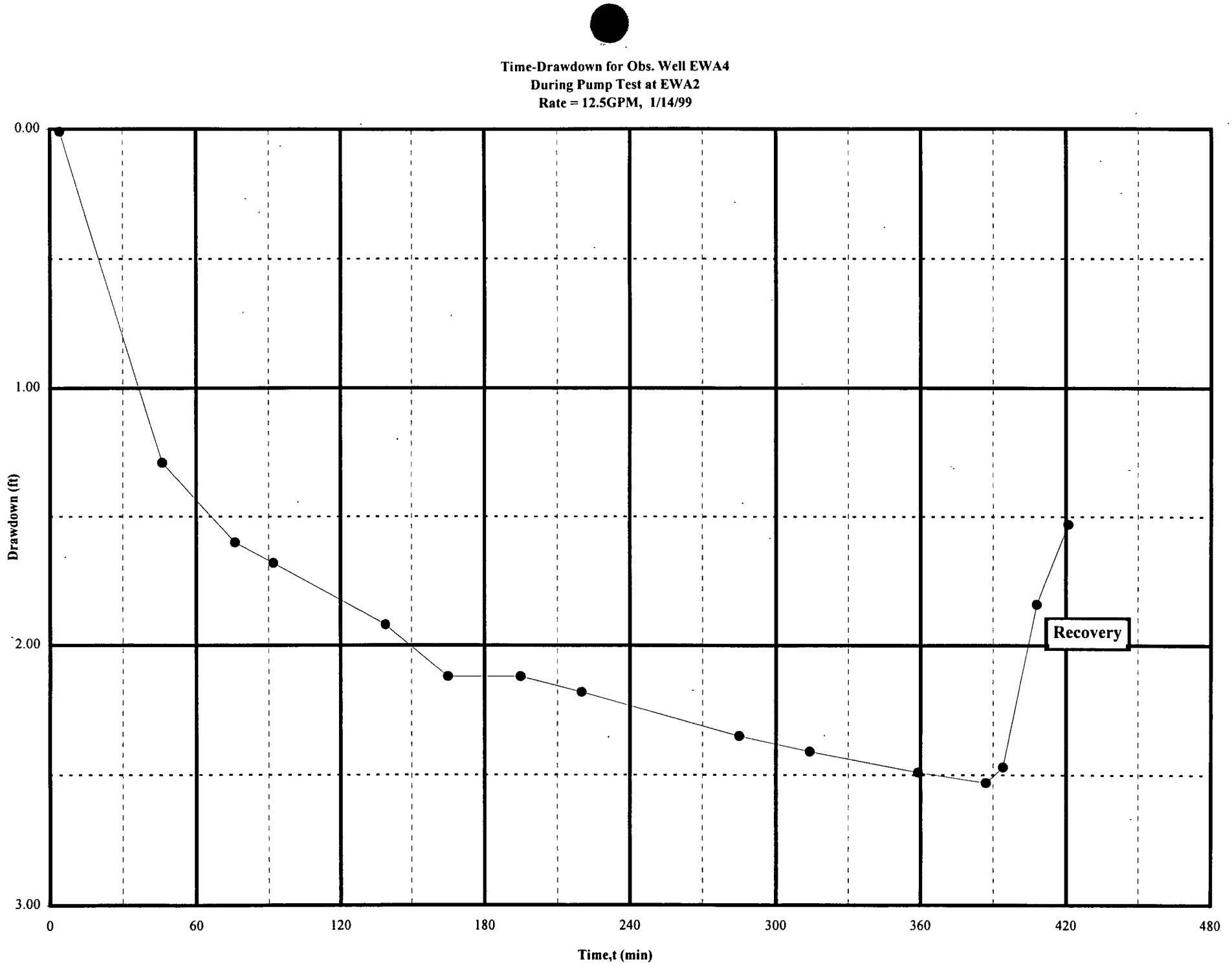
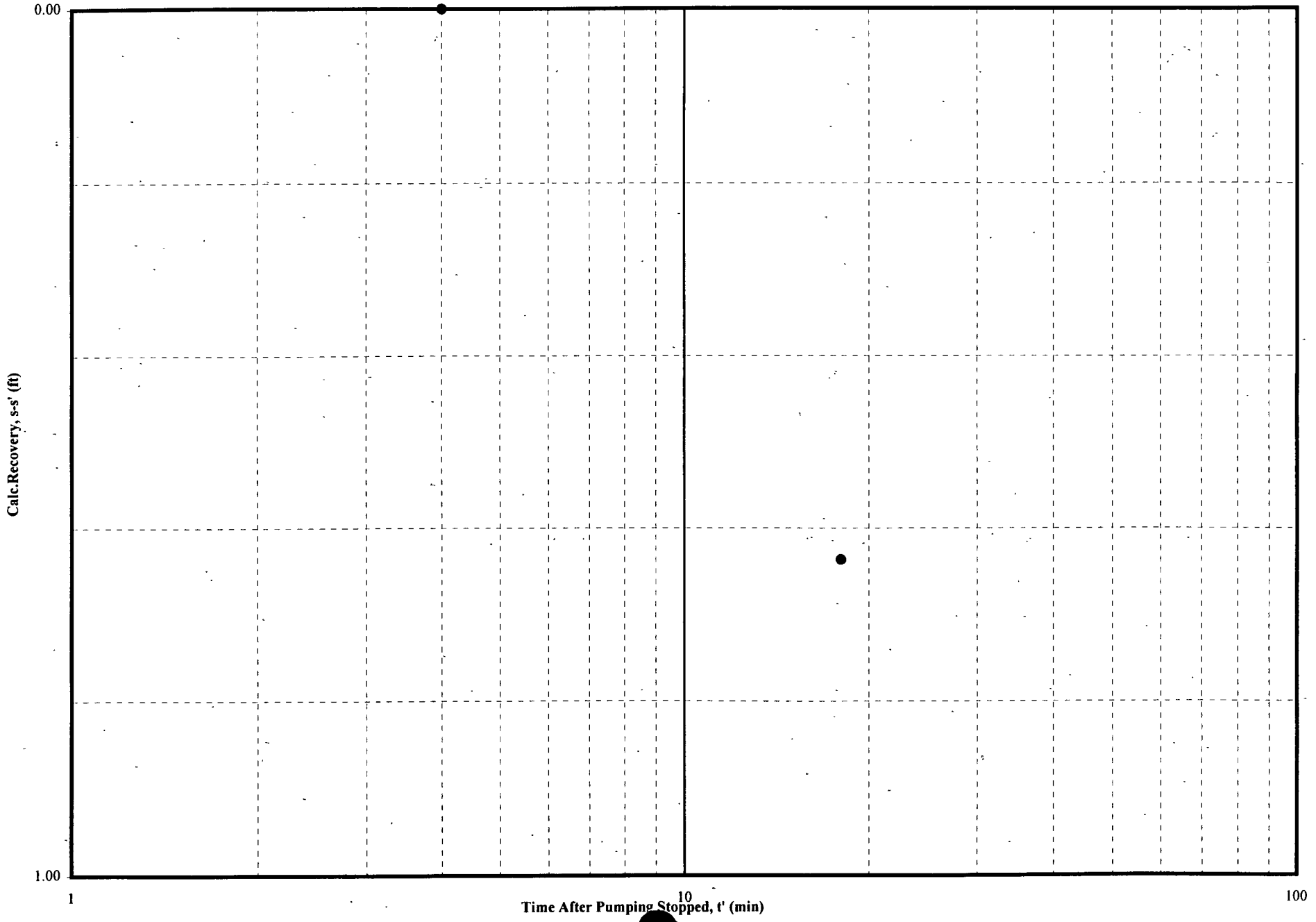

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA2
Rate = 12.5GPM, 1/14/99
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-35

Calculated Recovery Plot for Obs.Well EWA4
EWA2 Yield Test - Jan. 14, 1999



Figure

Residual Drawdown, Observation Well EWA4
Yield Test at EWA2, 1/14/99

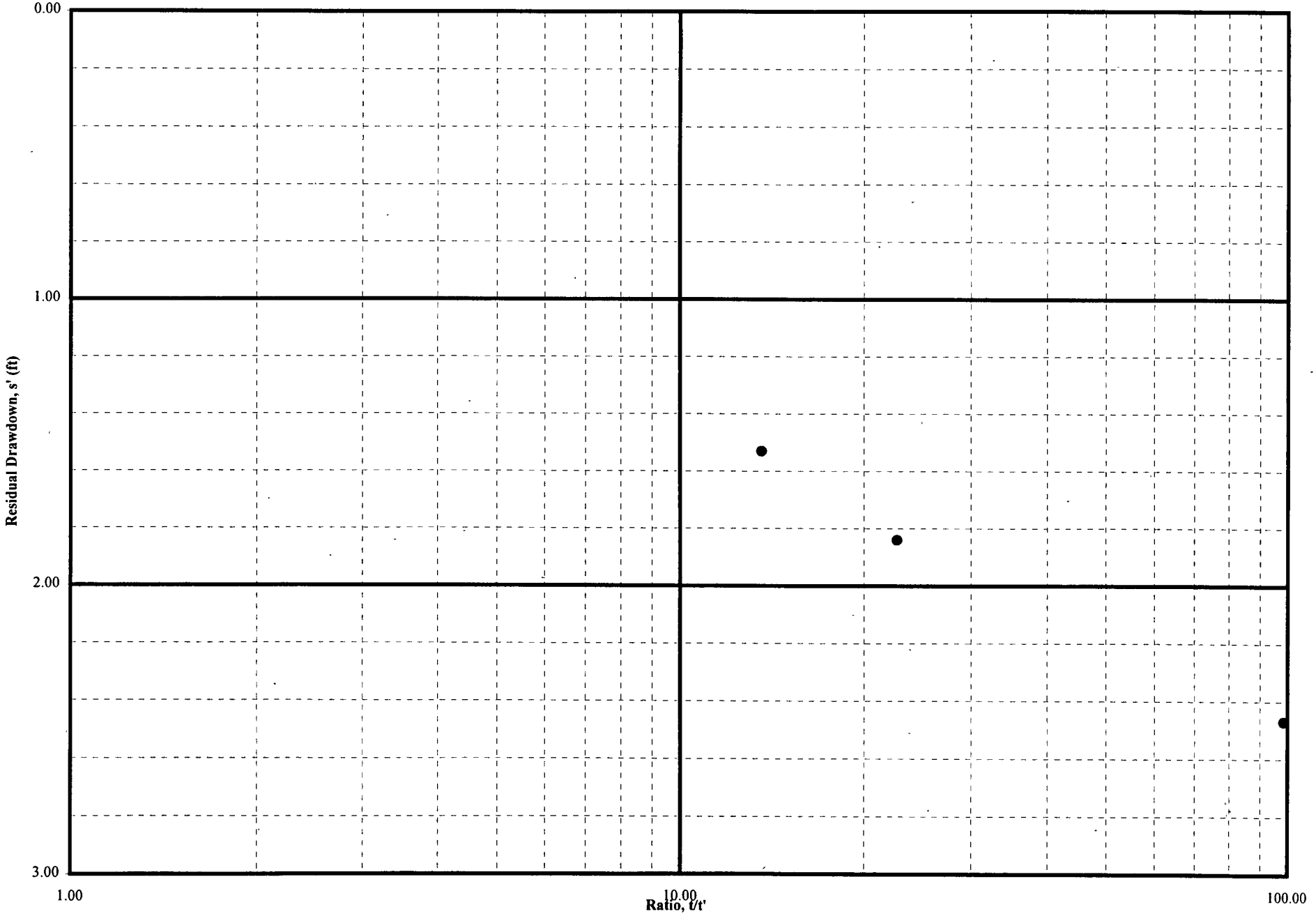
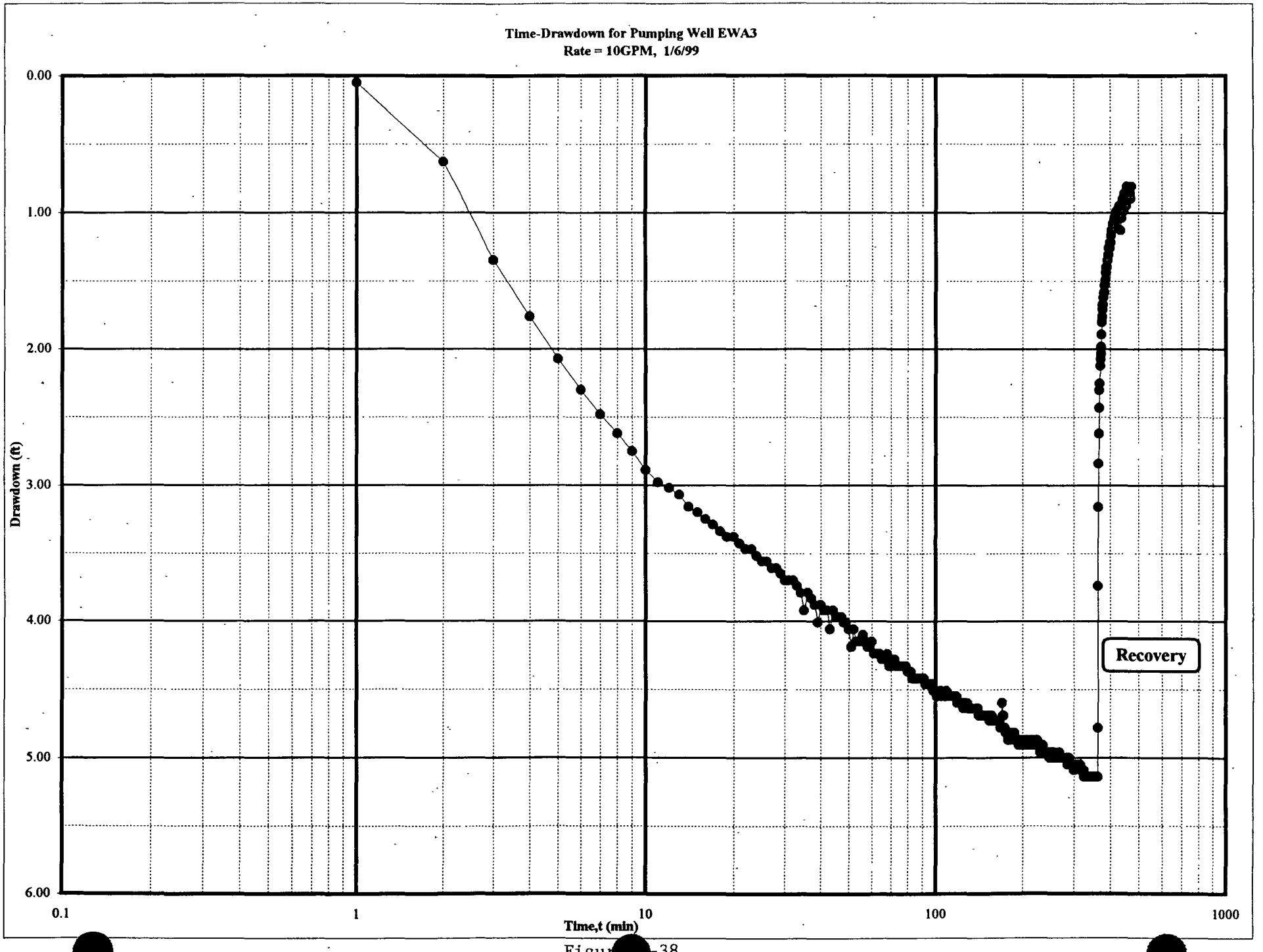


Figure 8-37


Time-Drawdown for Pumping Well EWA3
Rate = 10GPM, 1/6/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figu[illegible]-38

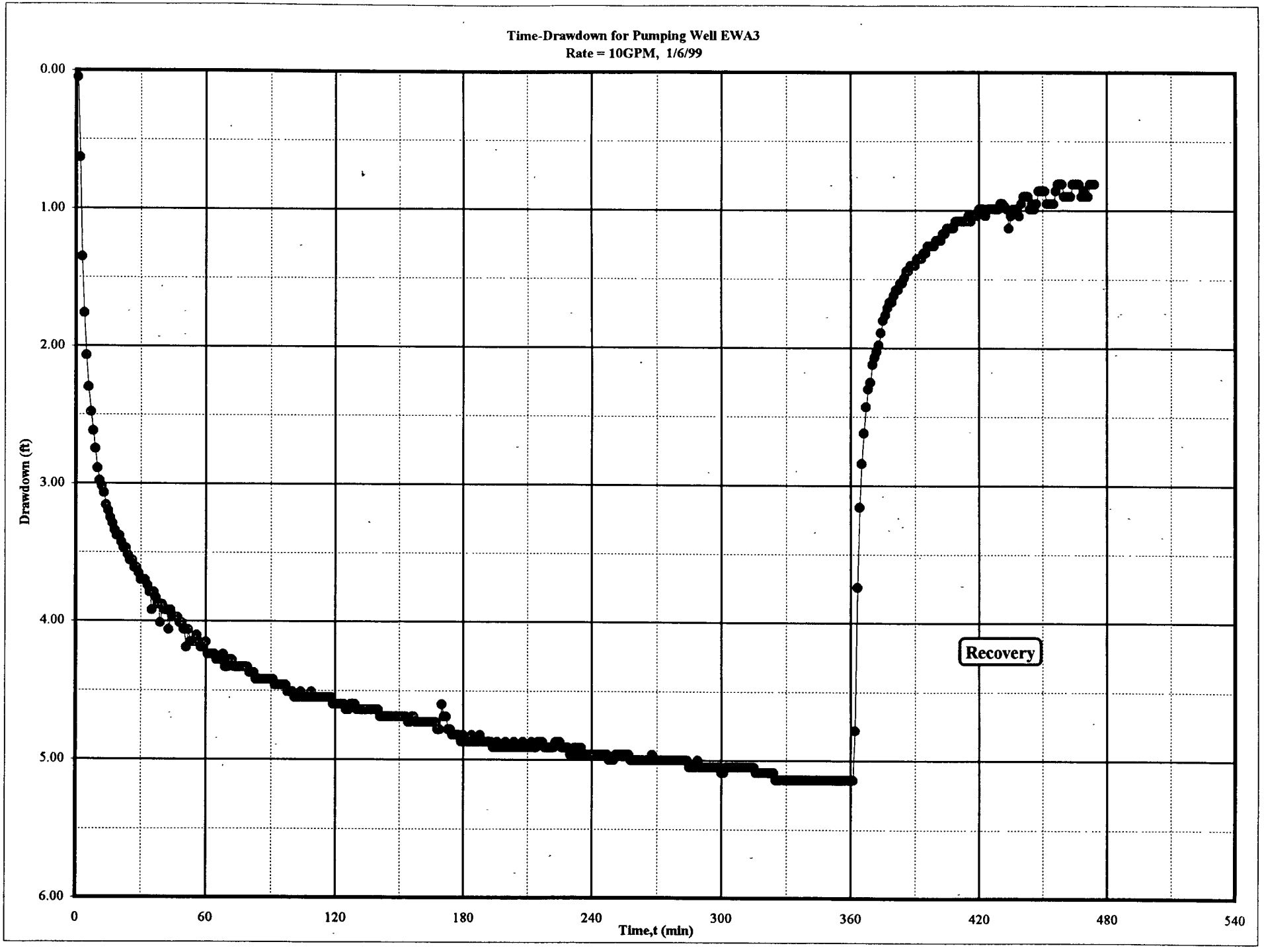
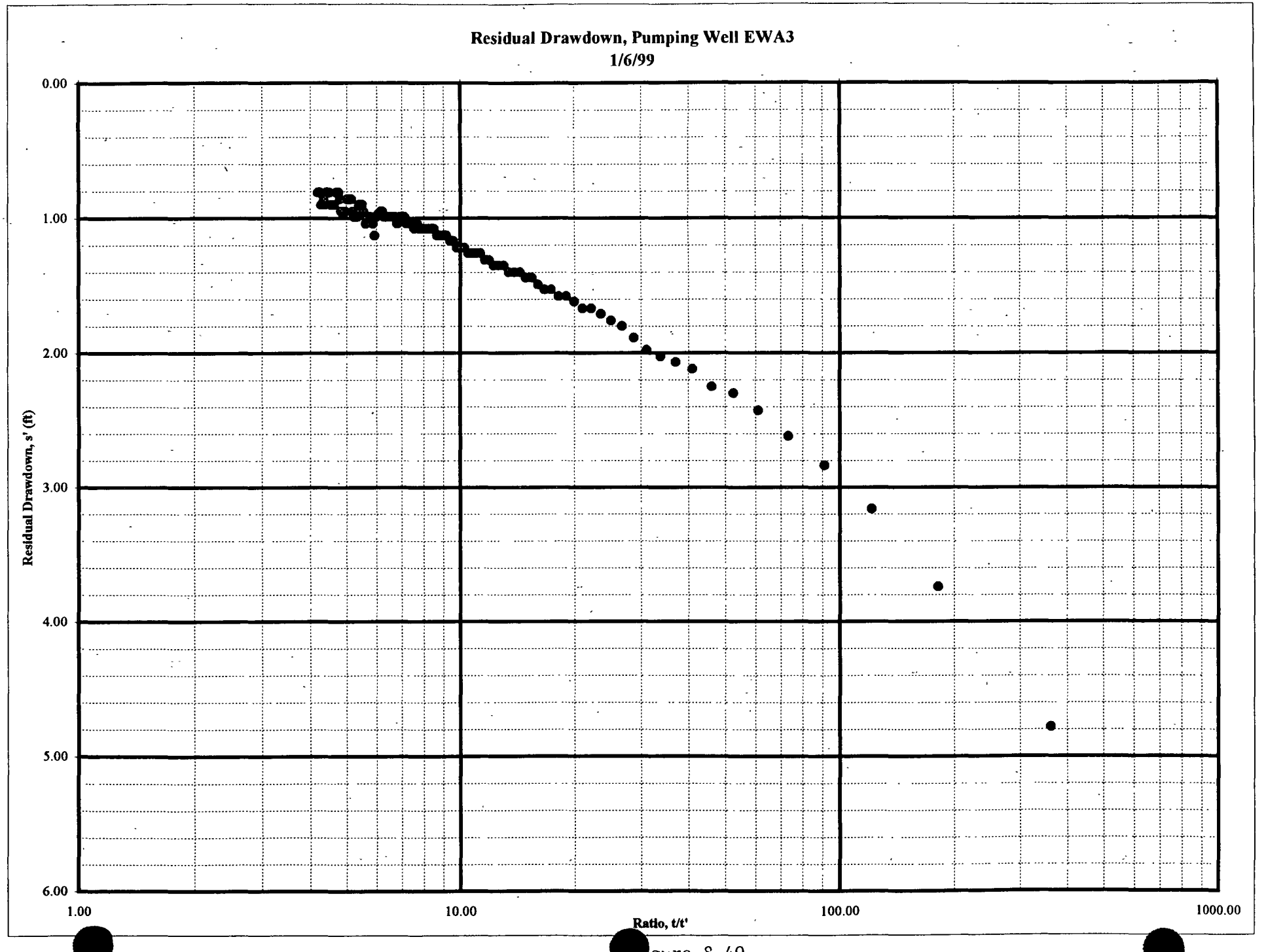

Time-Drawdown for Pumping Well EWA3
Rate = 10GPM, 1/6/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-39


Residual Drawdown, Pumping Well EWA3
1/6/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

gure 8-40

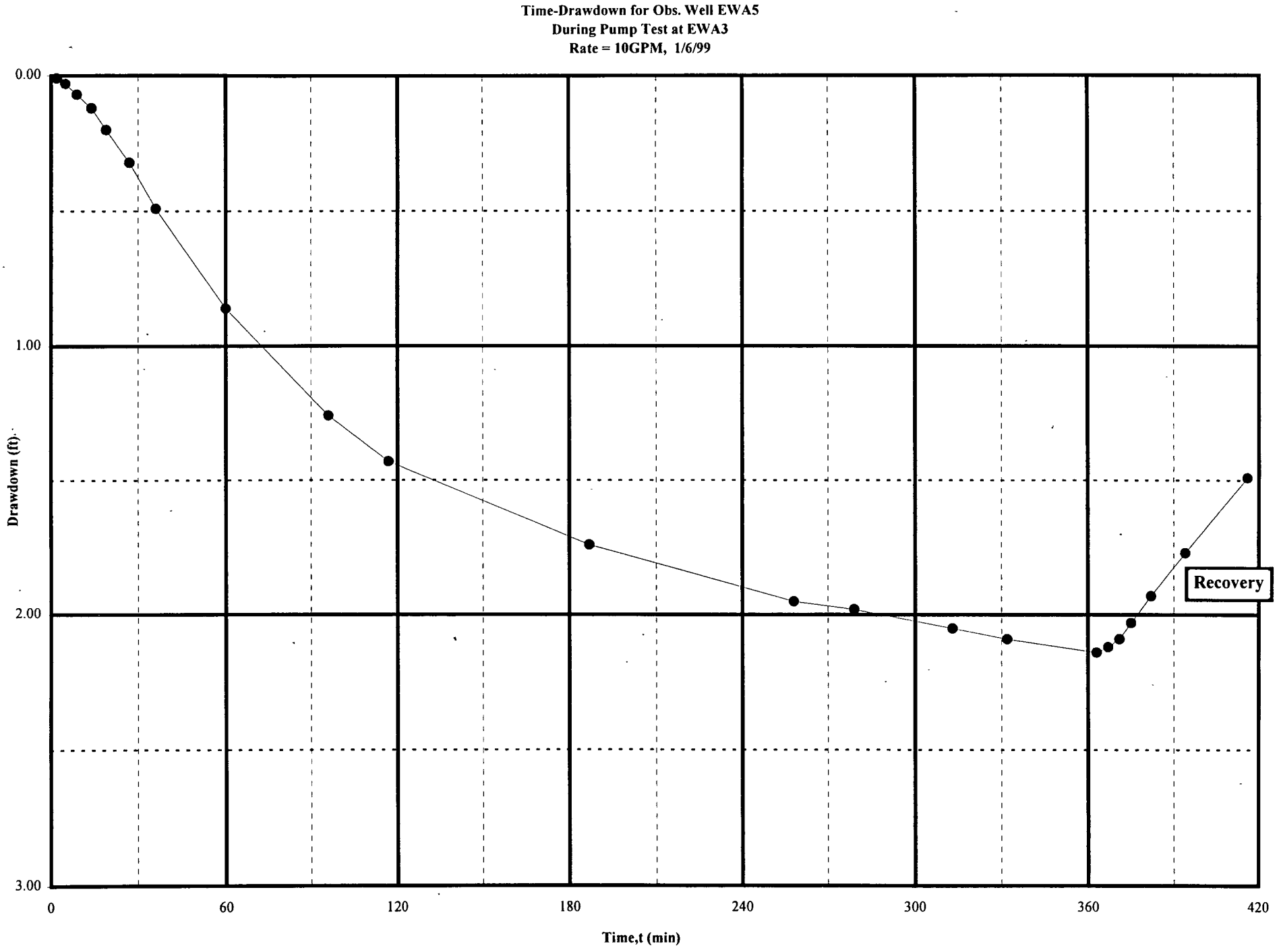

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-41

Calculated Recovery Plot for Obs.Well EWA5
EWA3 Yield Test - Jan. 6, 1999

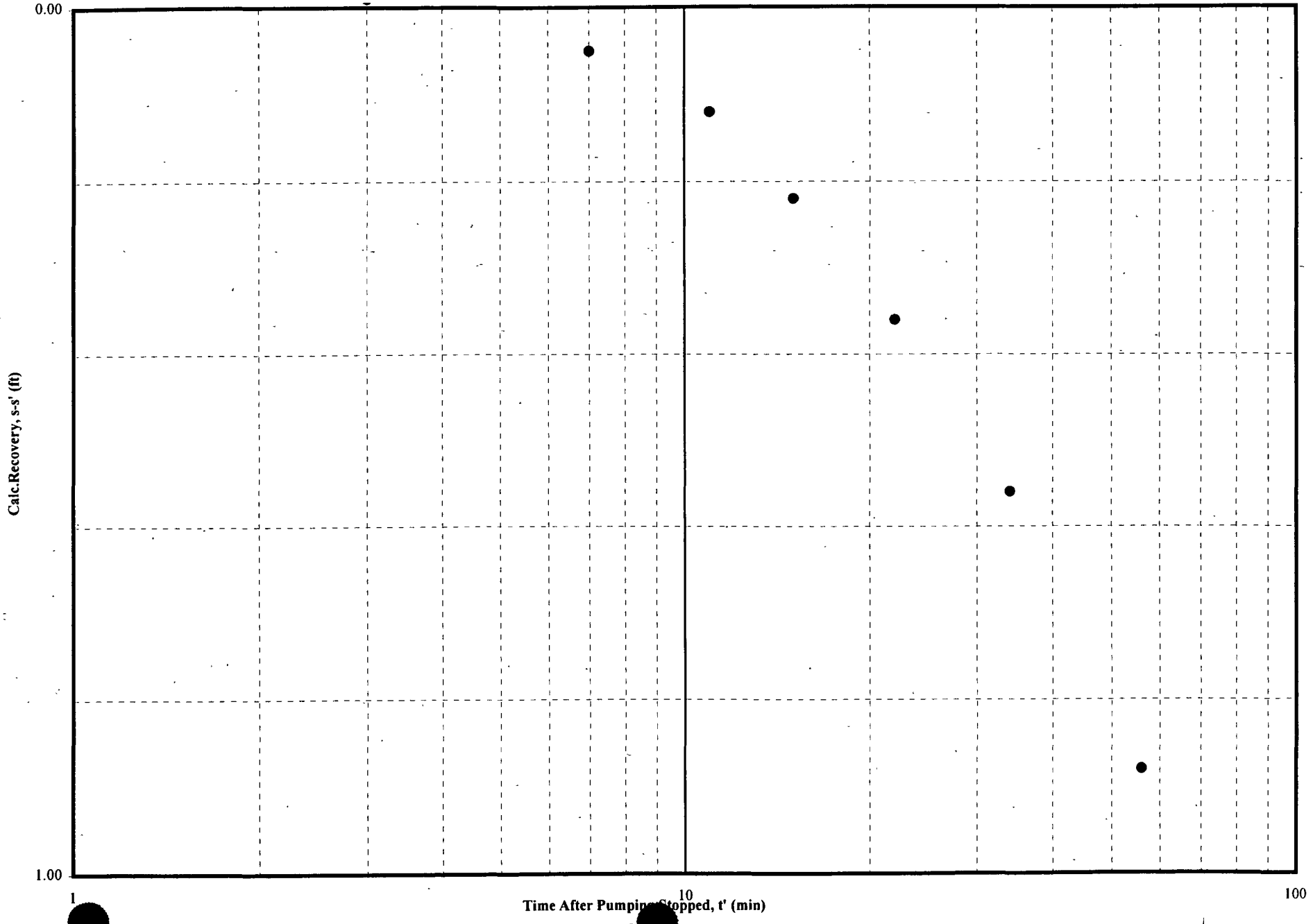


Figure 8

Residual Drawdown, Observation Well EWA5
Yield Test at EWA3, 1/6/99

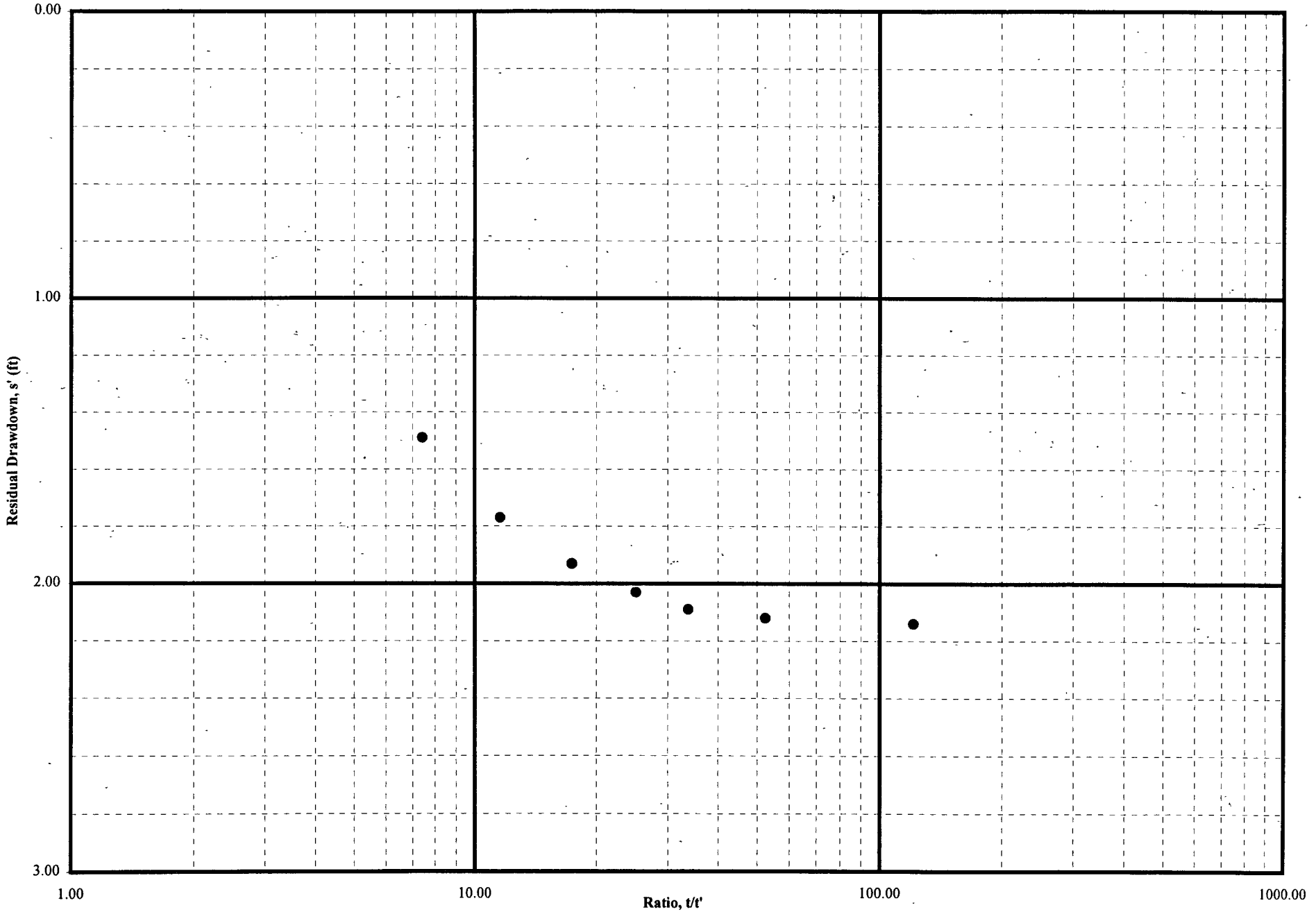


Figure 8-43

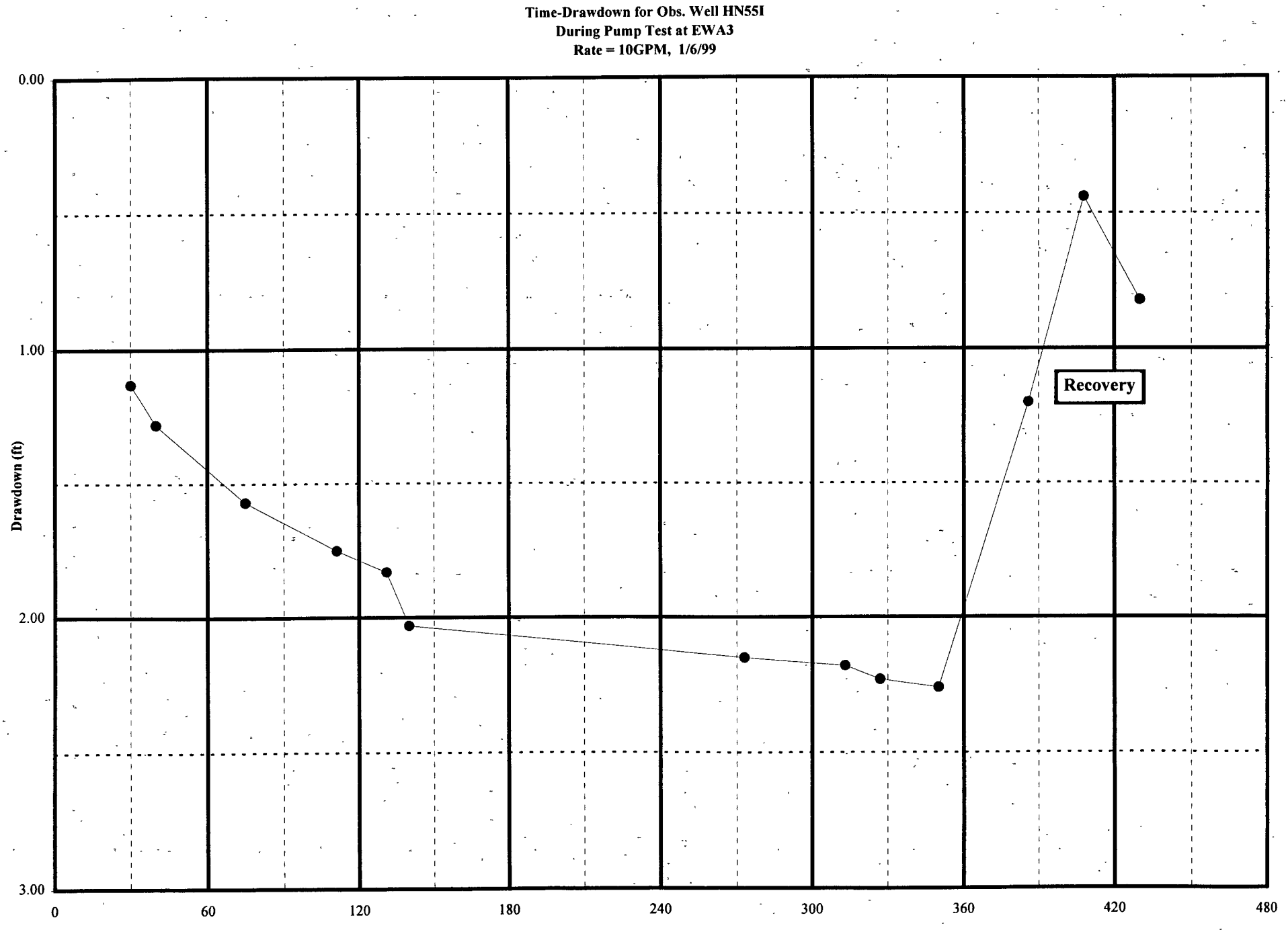

Time-Drawdown for Obs. Well HN55I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
1.00
2.00
3.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time (min)
Recovery

Fig 8-44

Residual Drawdown, Observation Well HN55I
Yield Test at EWA3, 1/6/99

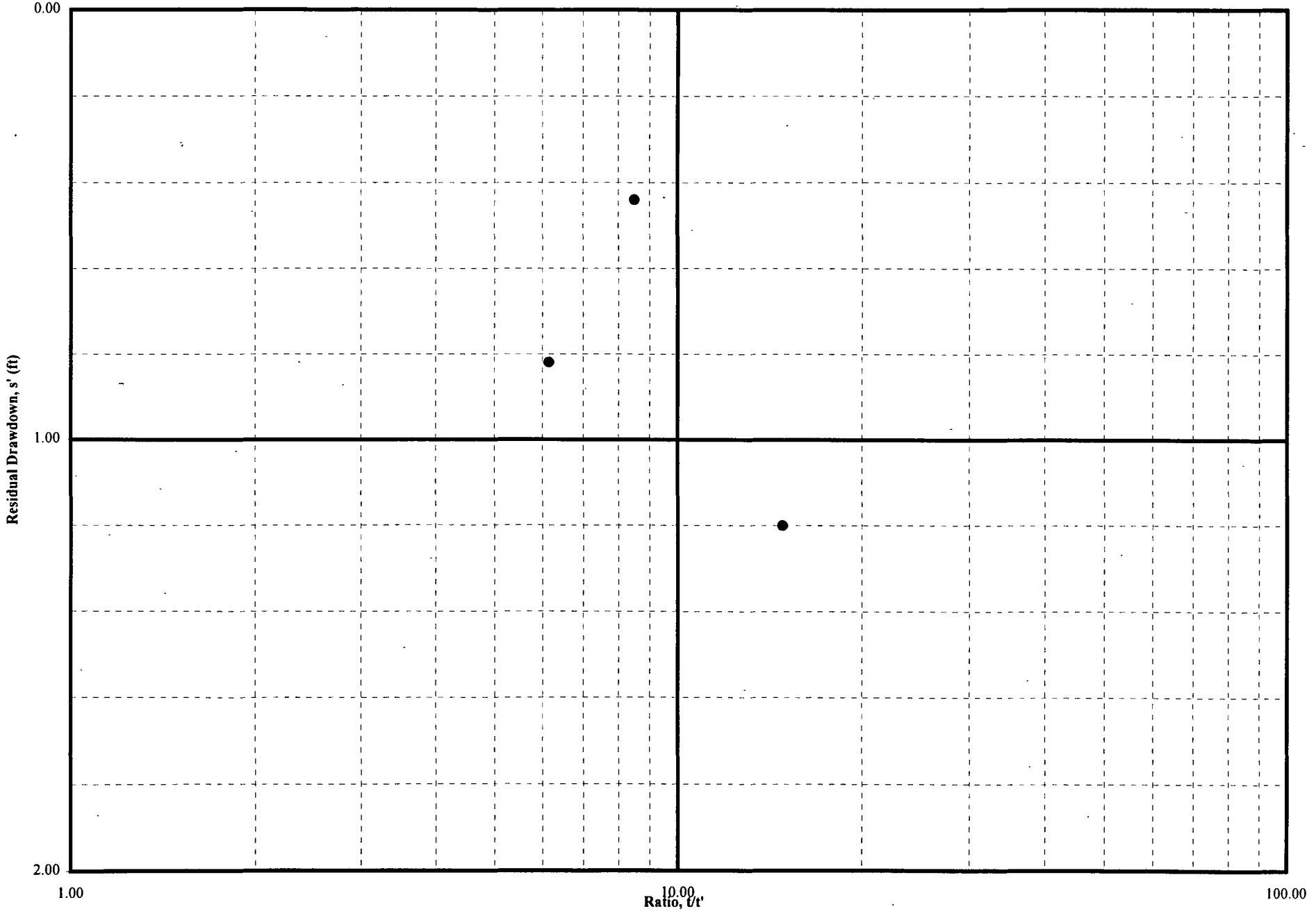
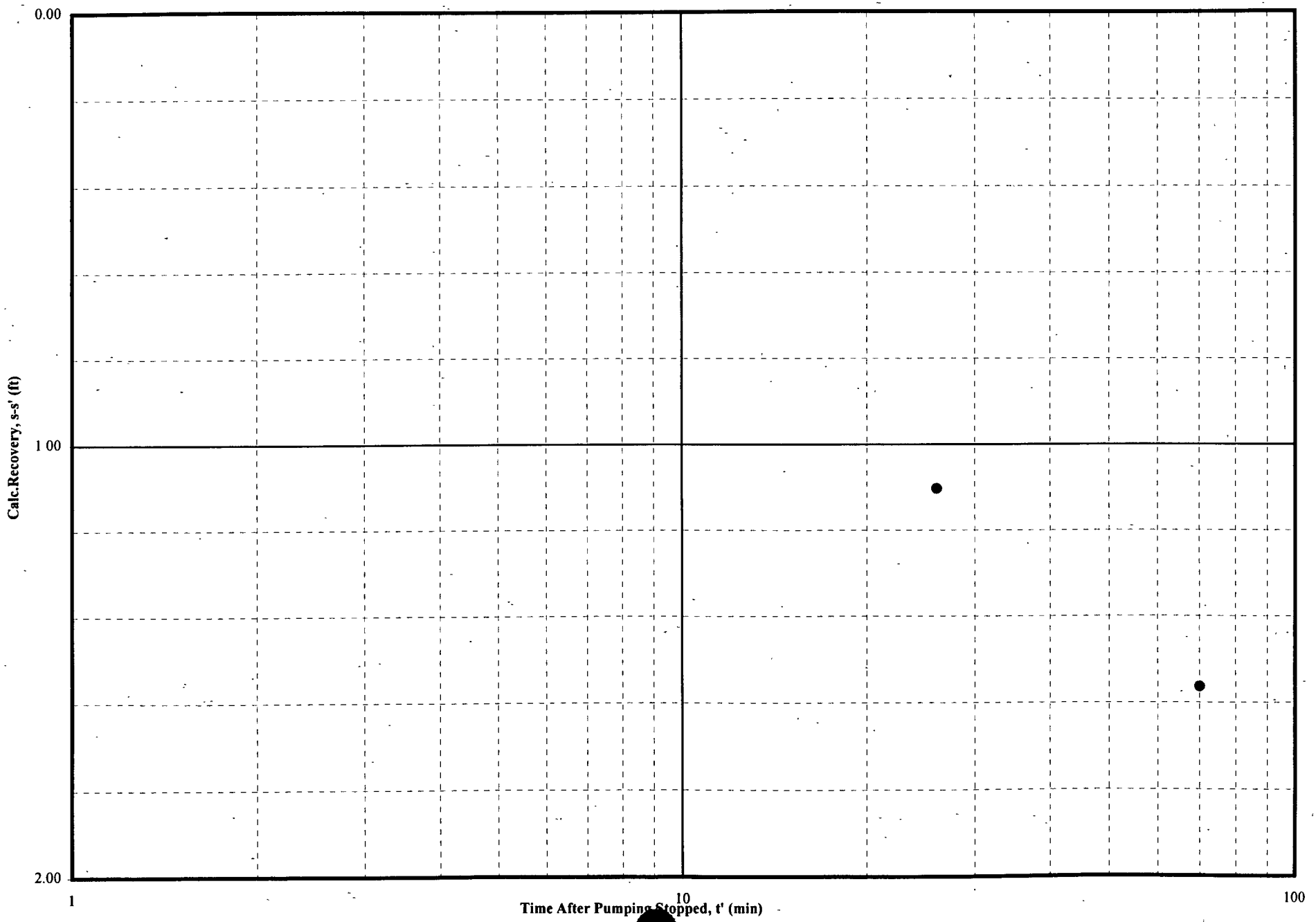


Figure 8-45

Calculated Recovery Plot for Obs.Well HN55I
EWA3 Yield Test - Jan. 6, 1999



Figure

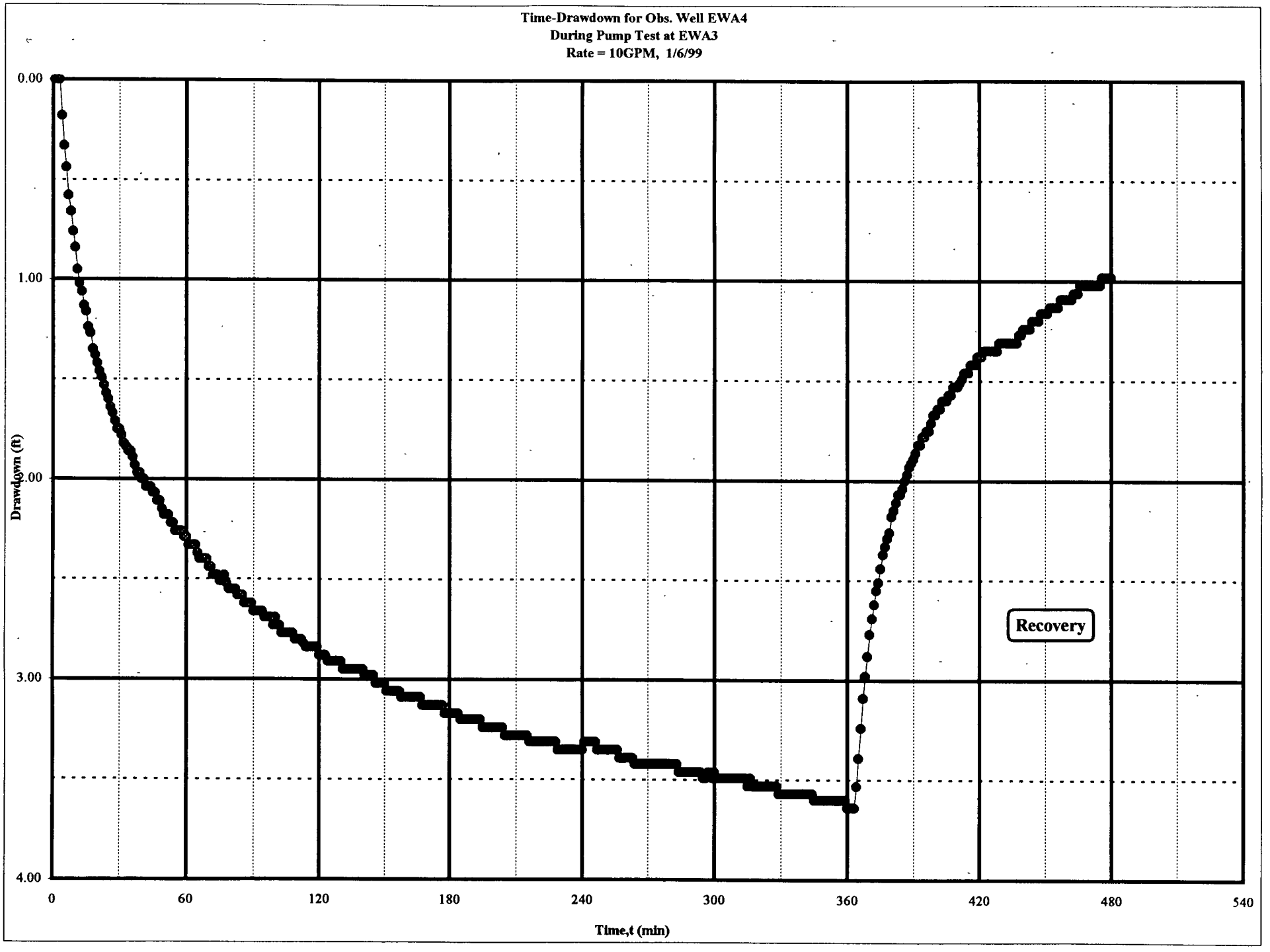

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-47

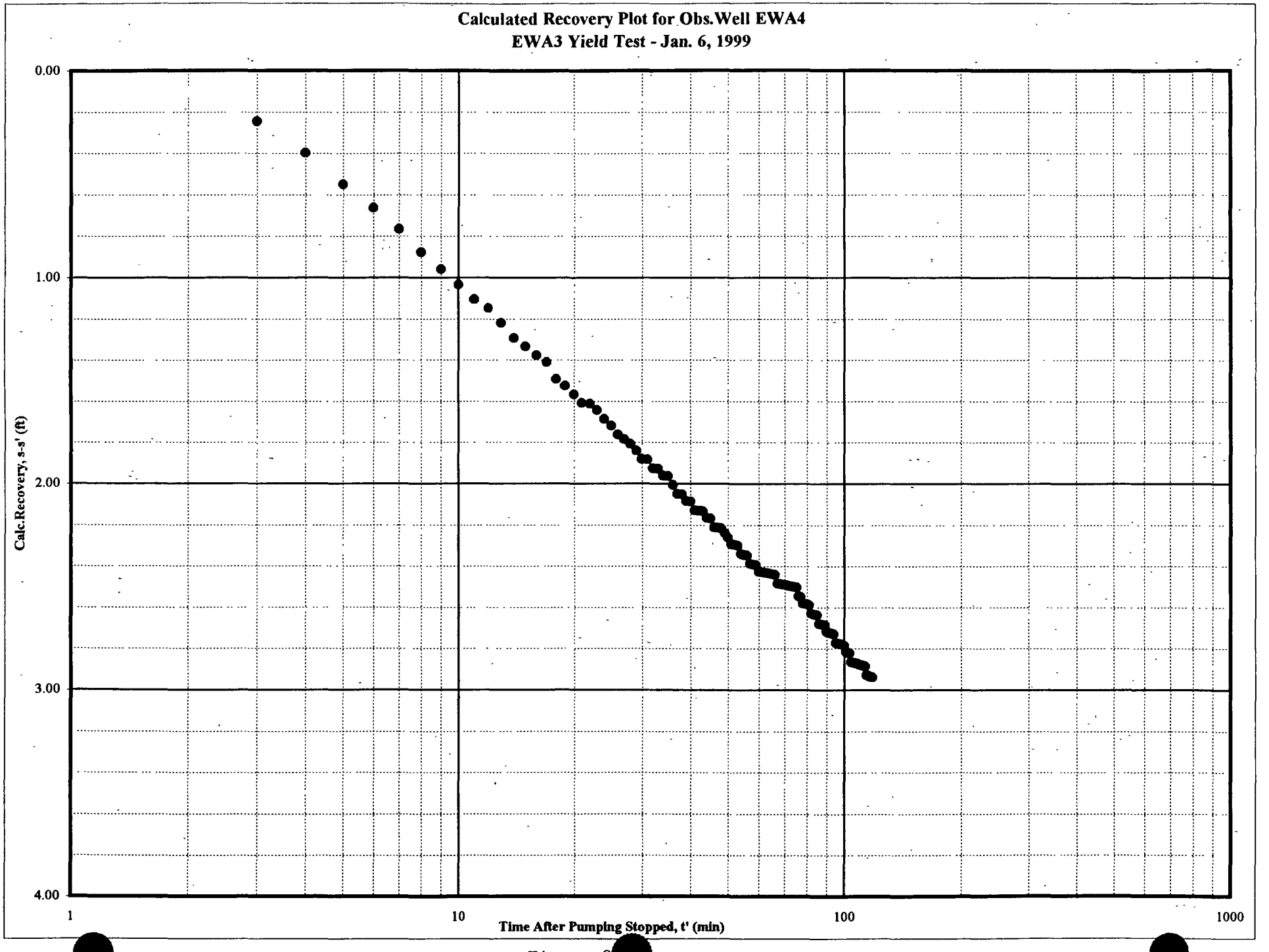

Calculated Recovery Plot for Obs.Well EWA4
EWA3 Yield Test - Jan. 6, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8

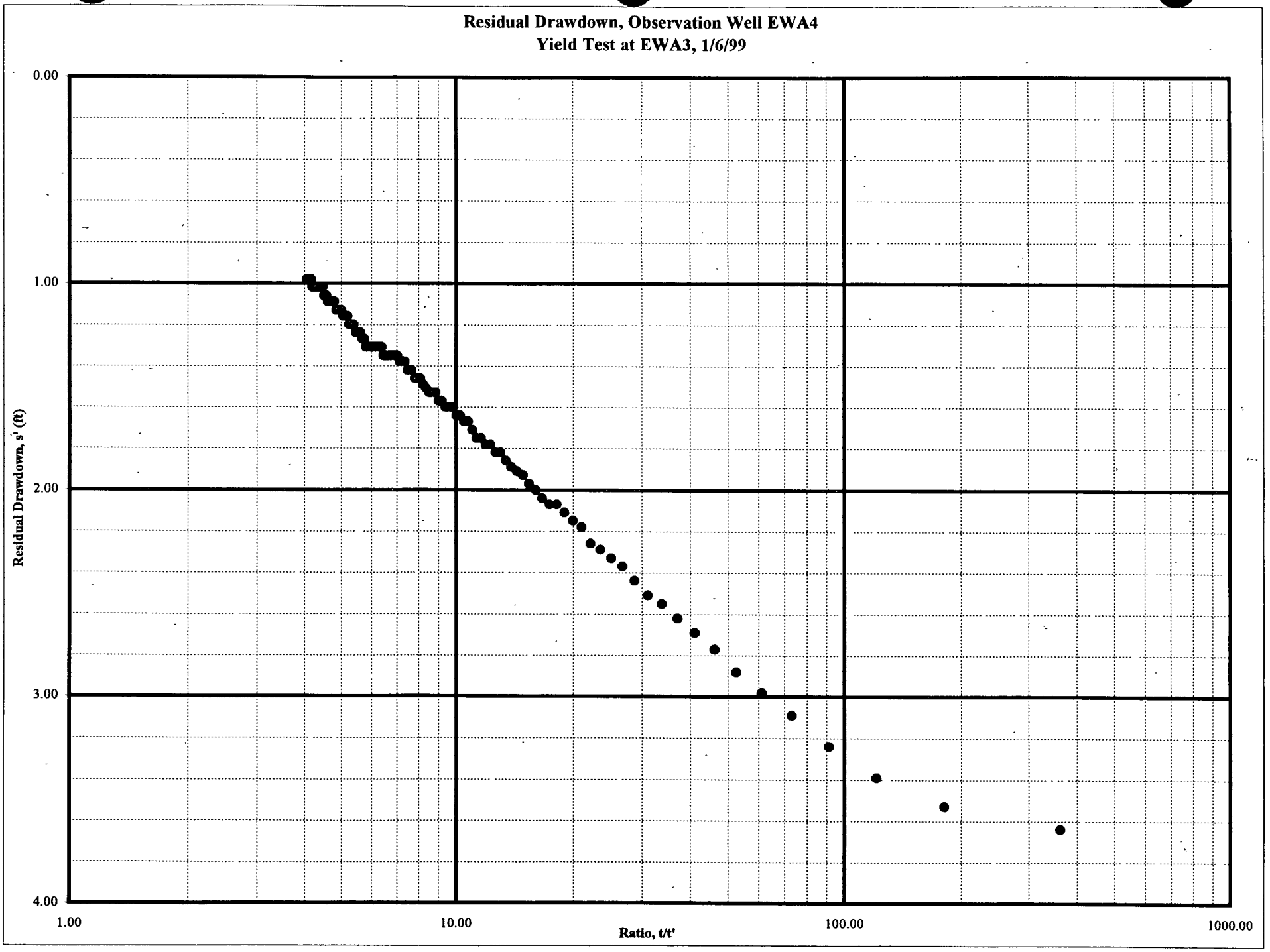

Residual Drawdown, Observation Well EWA4
Yield Test at EWA3, 1/6/99
0.00
1.00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-49

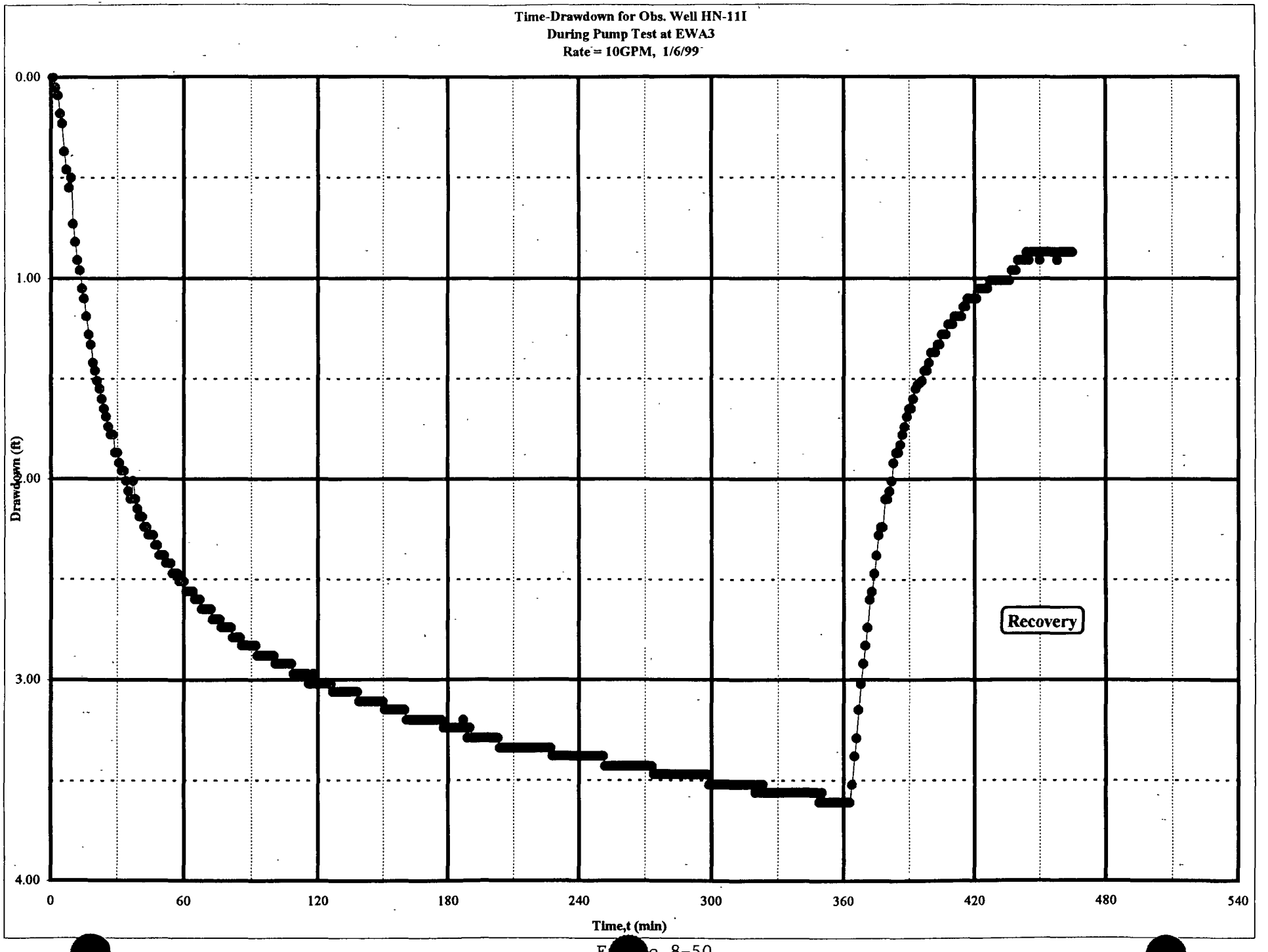

Time-Drawdown for Obs. Well HN-11I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-50

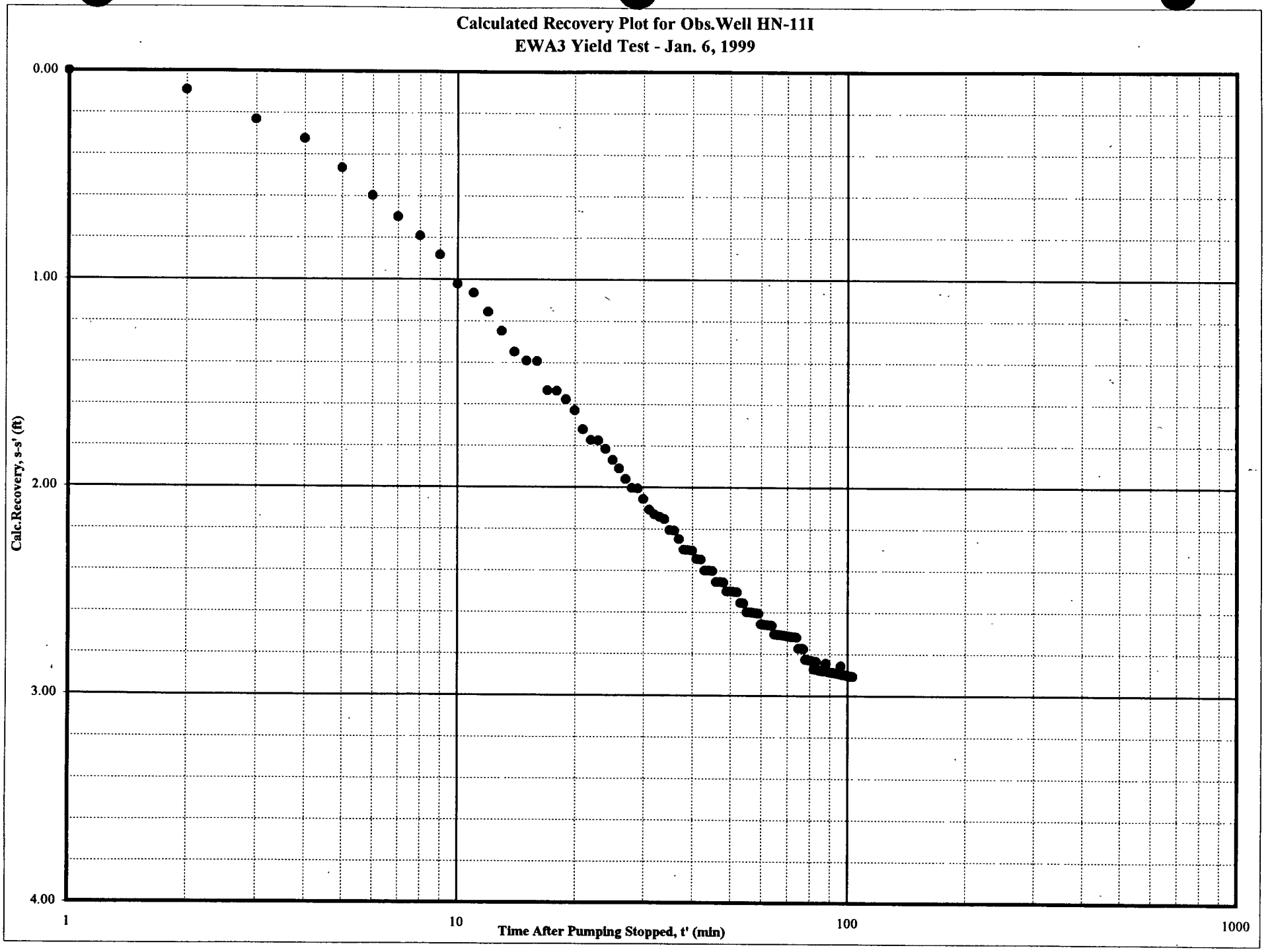
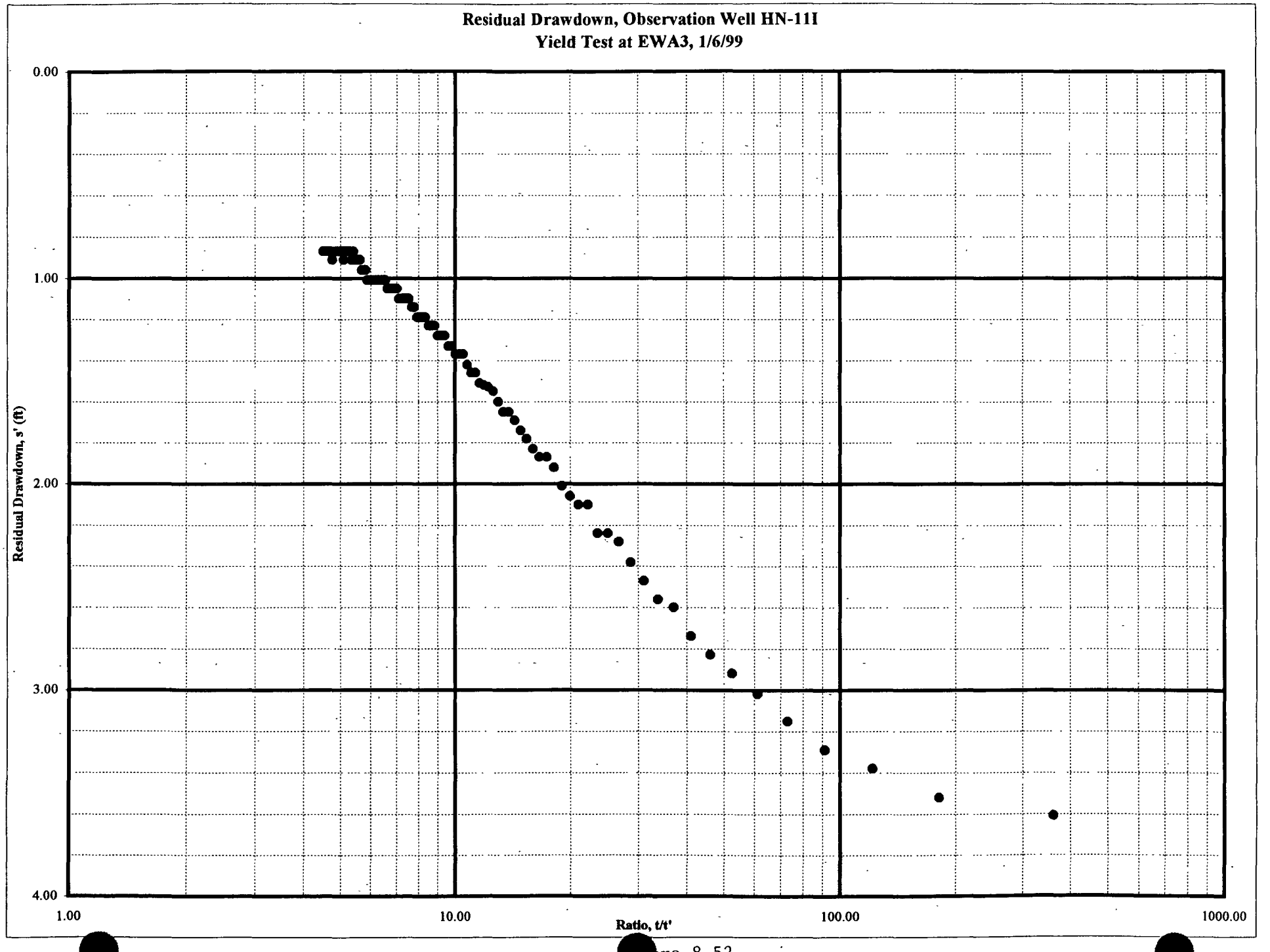

Calculated Recovery Plot for Obs.Well HN-11I
EWA3 Yield Test - Jan. 6, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-51


Residual Drawdown, Observation Well HN-11I
Yield Test at EWA3, 1/6/99
0.00
1.00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

ure 8-52

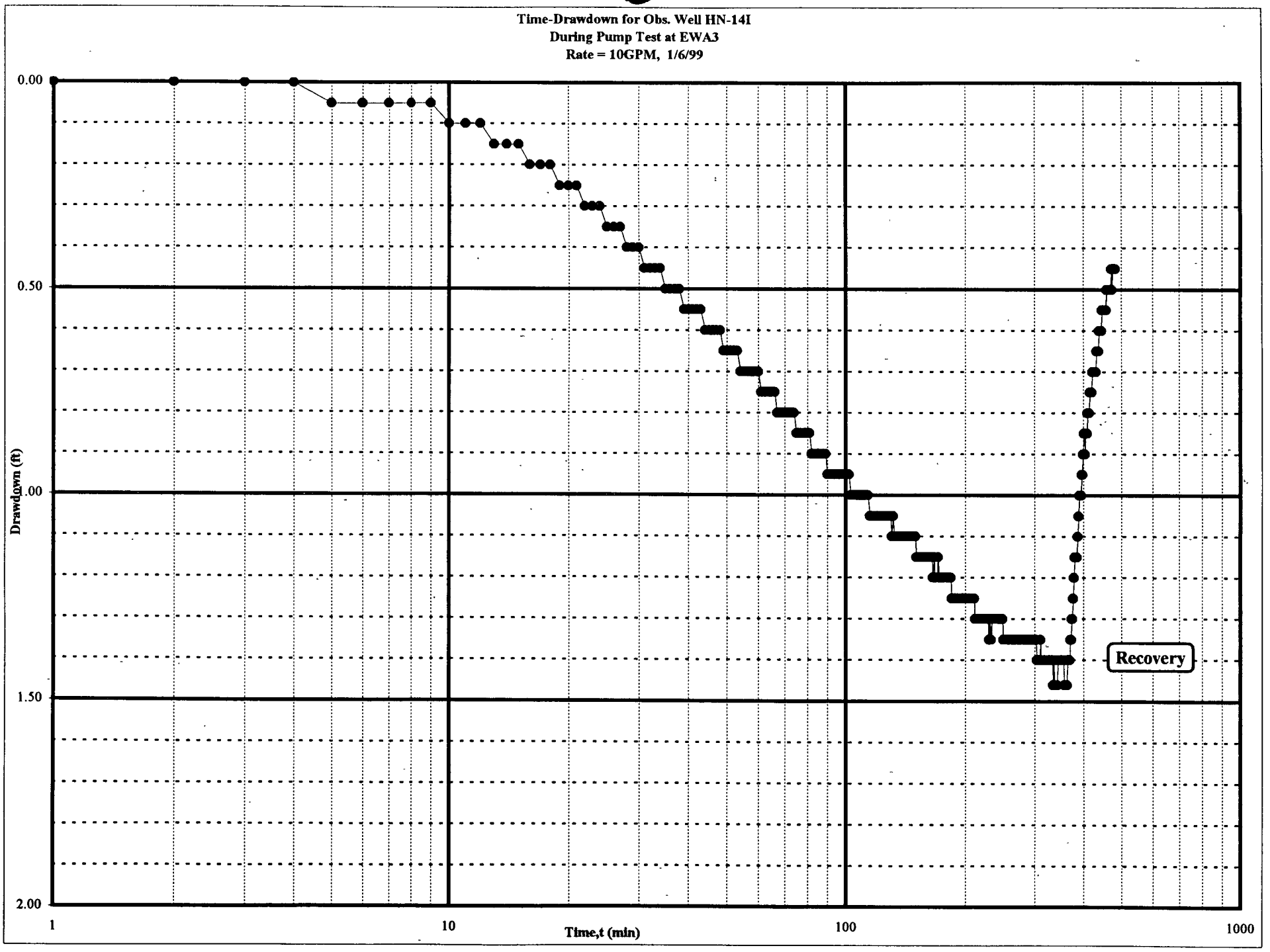
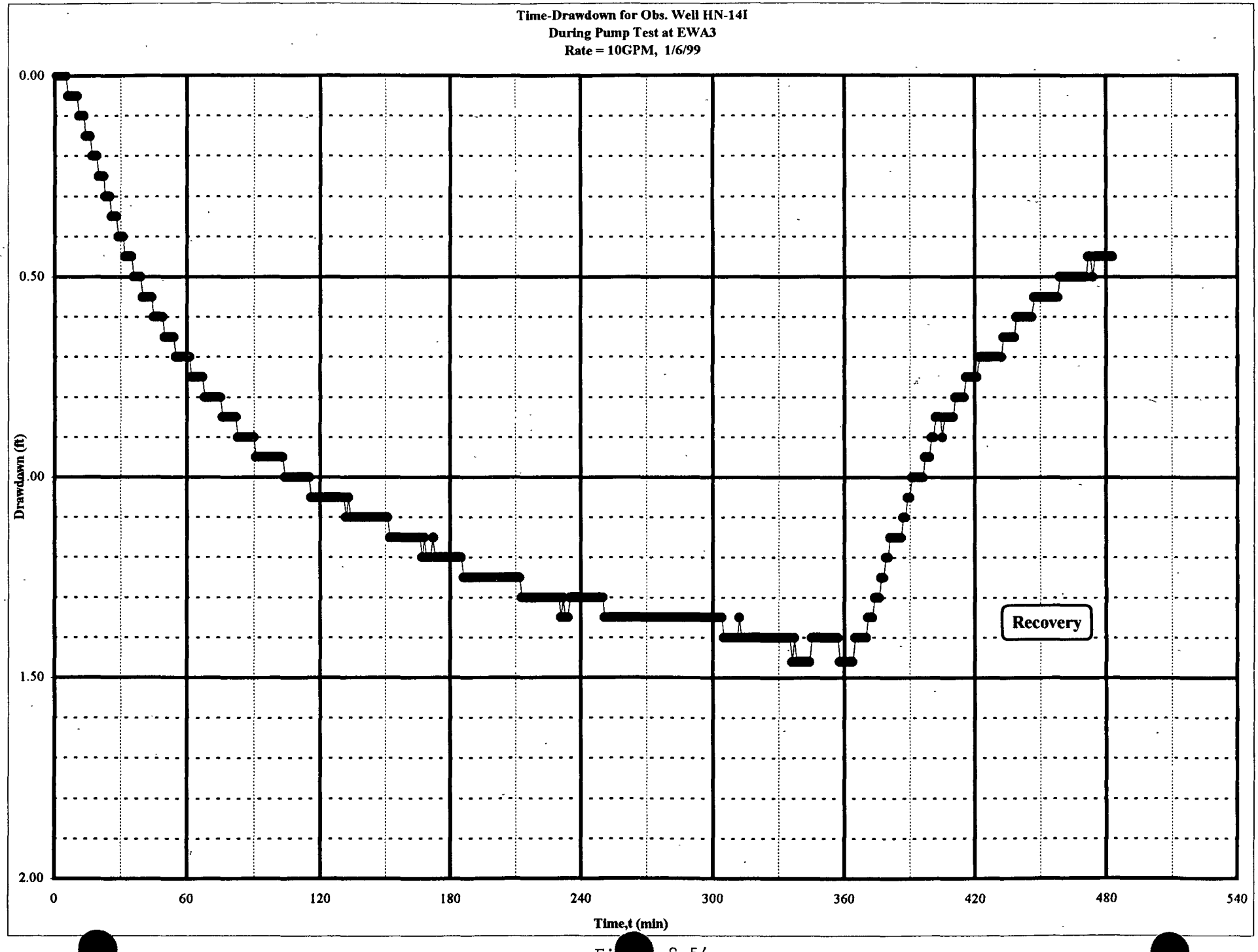

Time-Drawdown for Obs. Well HN-14I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
0.50
1.00
1.50
2.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figure 8-53


Time-Drawdown for Obs. Well HN-14I
During Pump Test at EWA3
Rate = 10GPM, 1/6/99
0.00
0.50
1.00
1.50
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Fi[illegible] 8-54

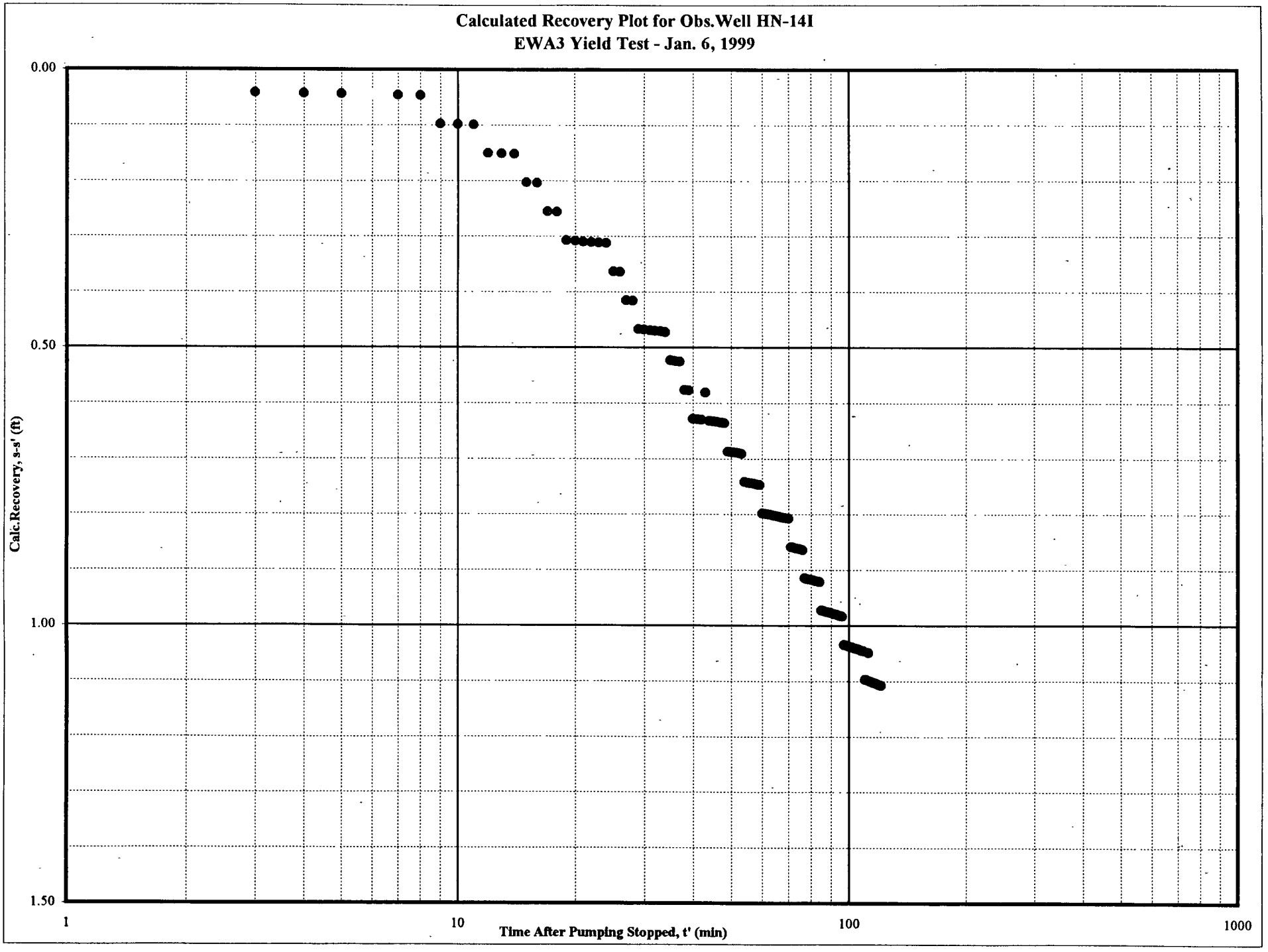

Calculated Recovery Plot for Obs.Well HN-14I
EWA3 Yield Test - Jan. 6, 1999
0.00
0.50
1.00
1.50
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-55

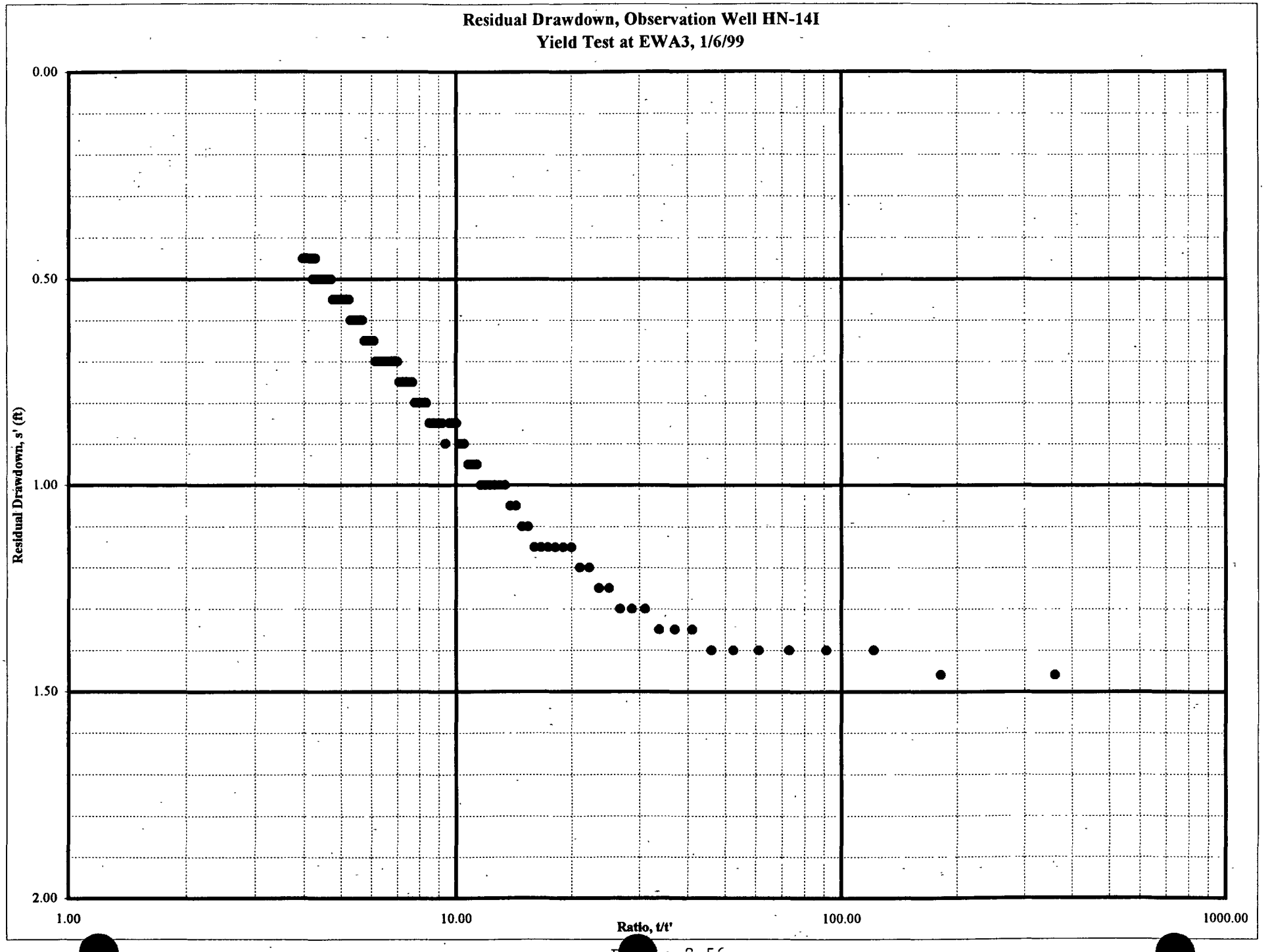

Residual Drawdown, Observation Well HN-14I
Yield Test at EWA3, 1/6/99
0.00
0.50
1.00
1.50
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-56

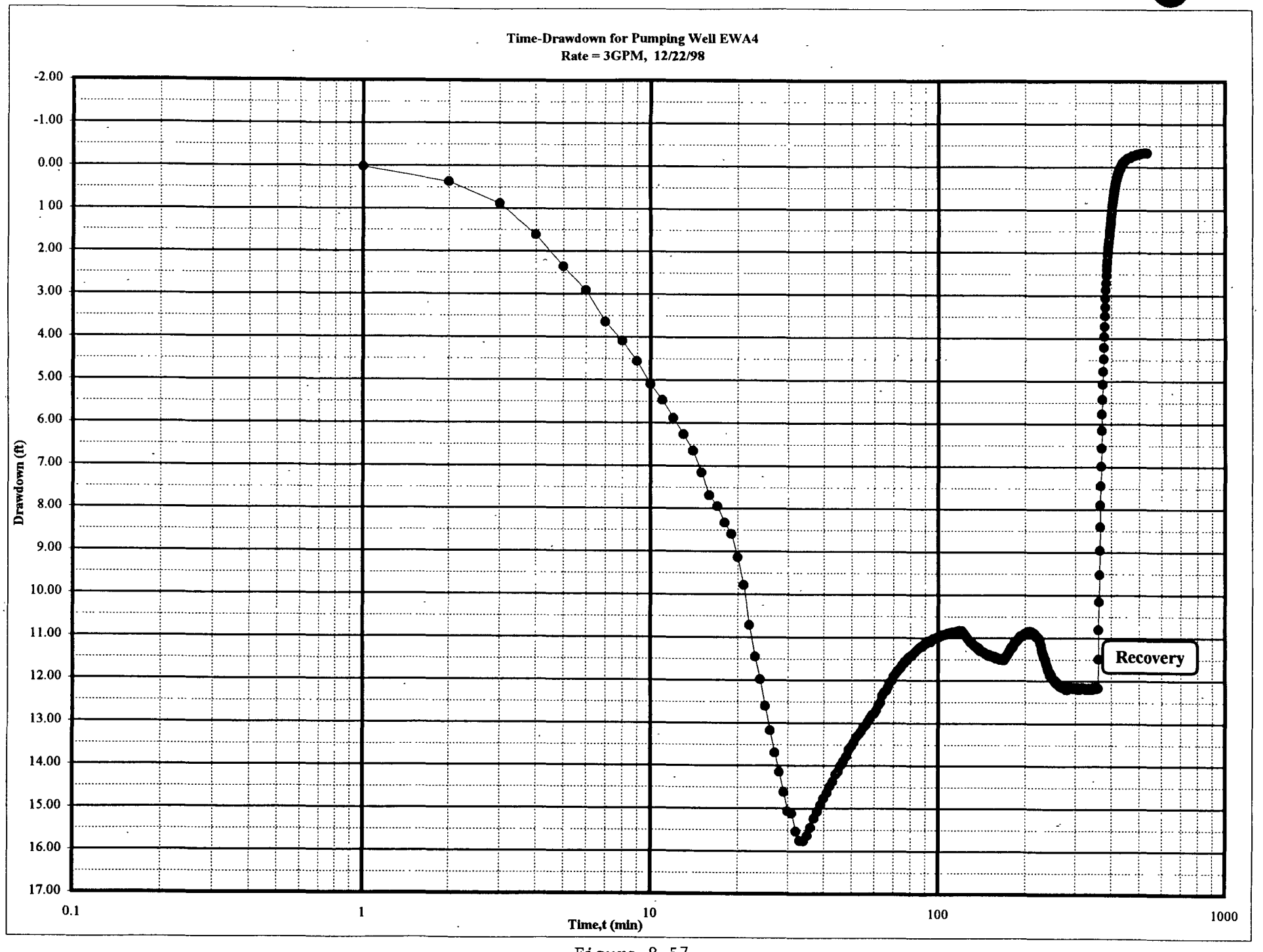
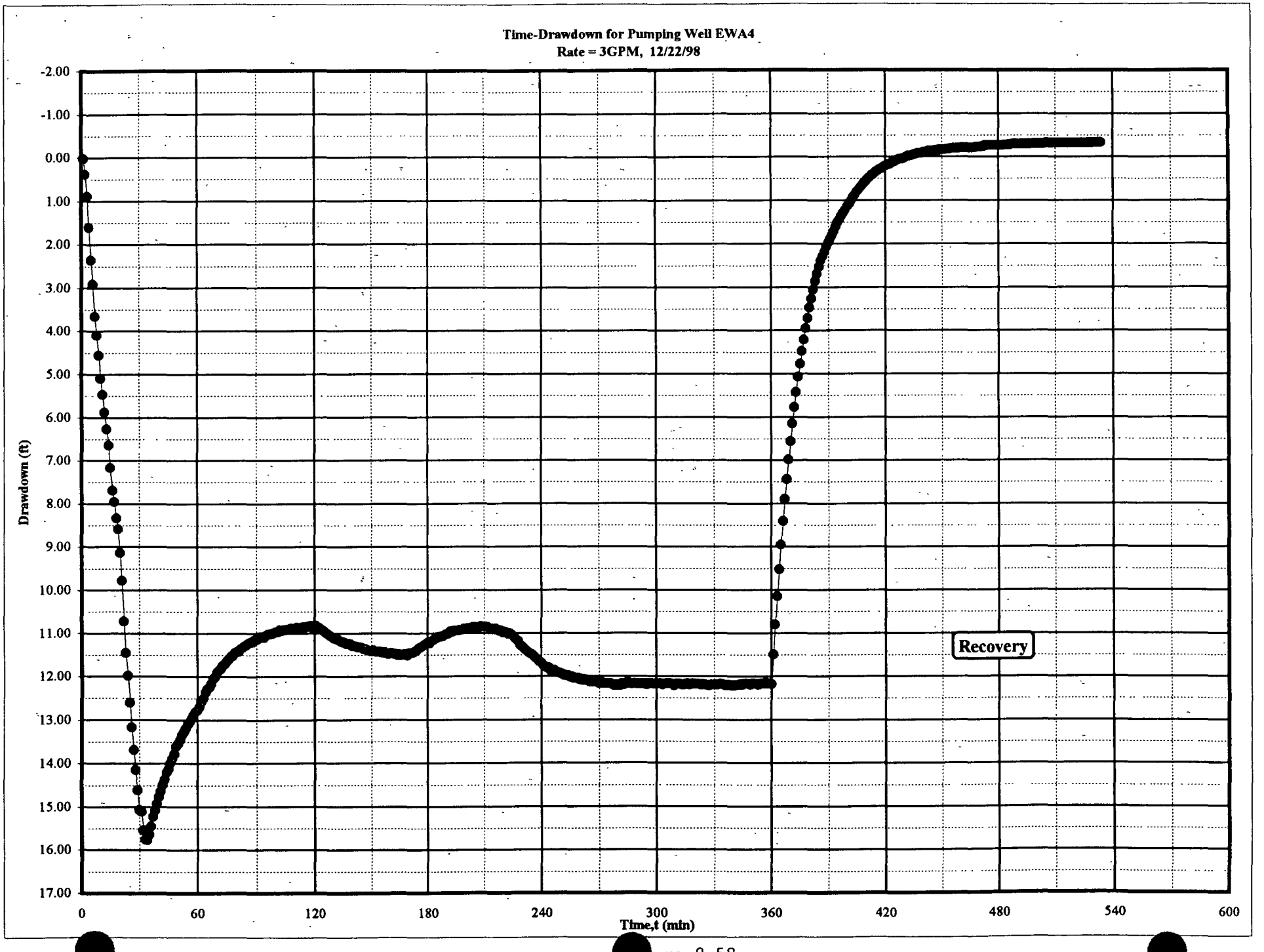

Time-Drawdown for Pumping Well EWA4
Rate = 3GPM, 12/22/98
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-57


Time-Drawdown for Pumping Well EWA4
Rate = 3GPM, 12/22/98
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
0
60
120
180
240
300
360
420
480
540
600
Time,t (min)
Recovery

ure 8-58

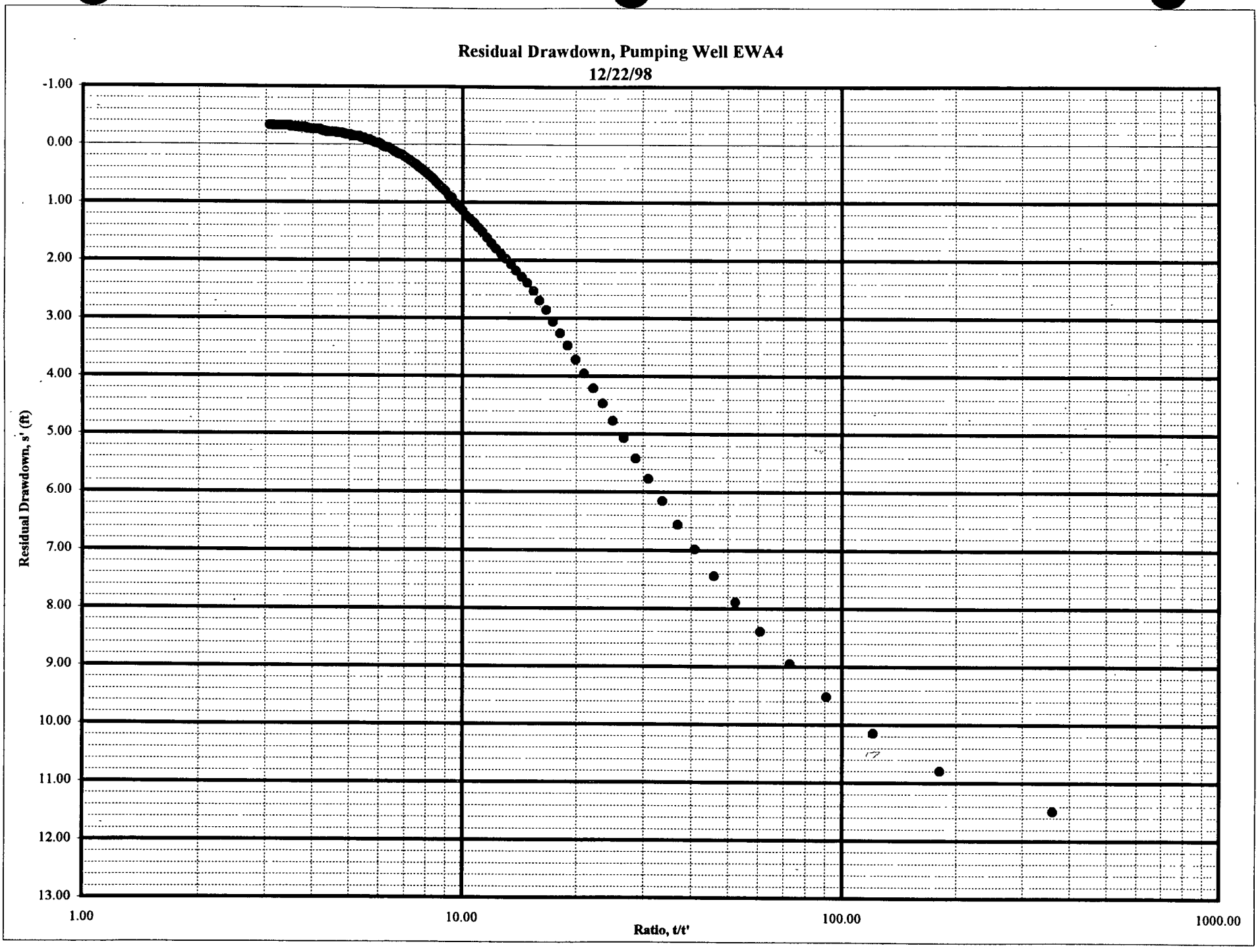
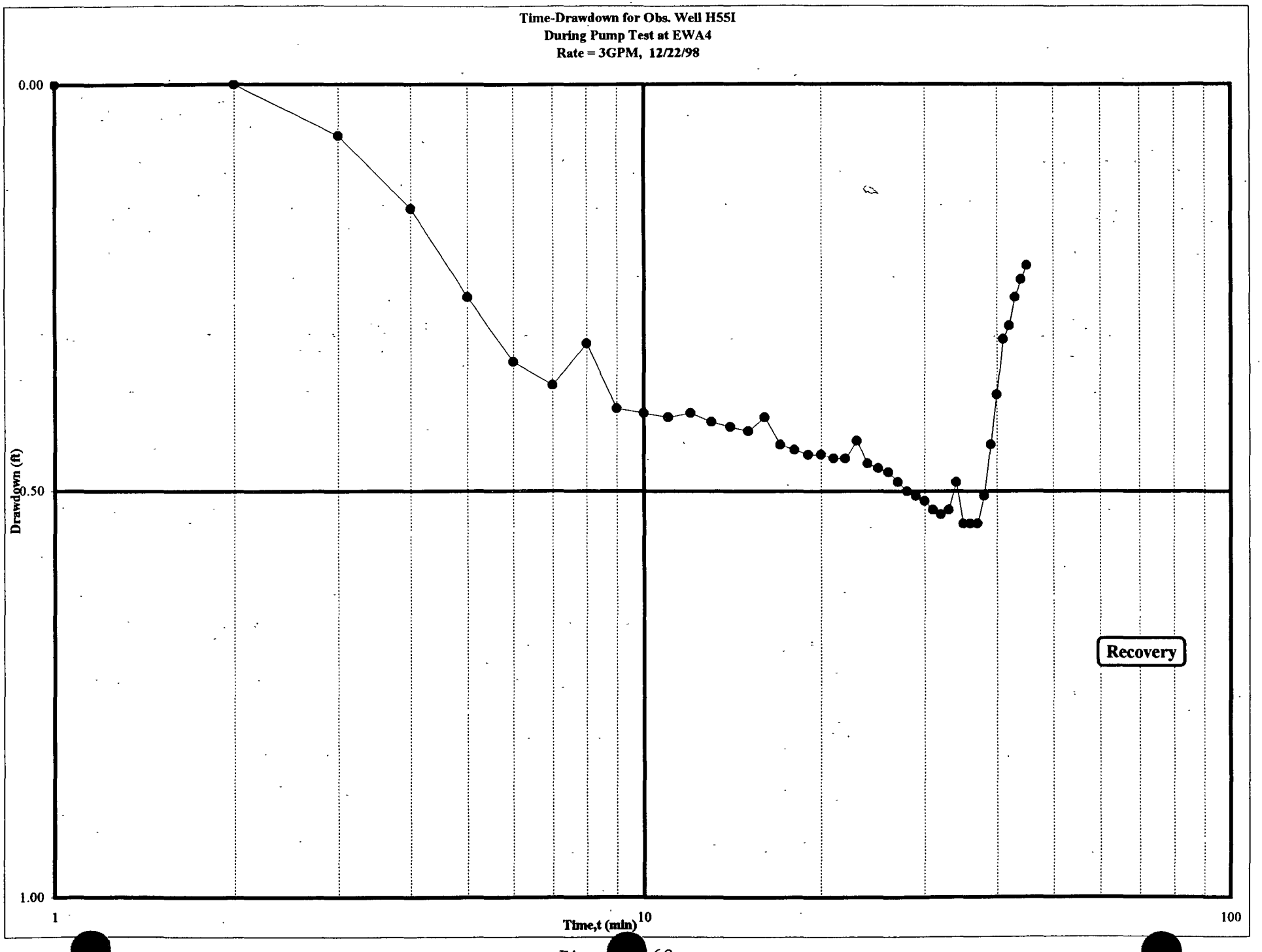

Residual Drawdown, Pumping Well EWA4
12/22/98
Residual Drawdown, s' (ft)
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-59


Time-Drawdown for Obs. Well H55I
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
0.00
0.50
1.00
Drawdown (ft)
1
10
100
Time,t (min)
Recovery

Figur -60

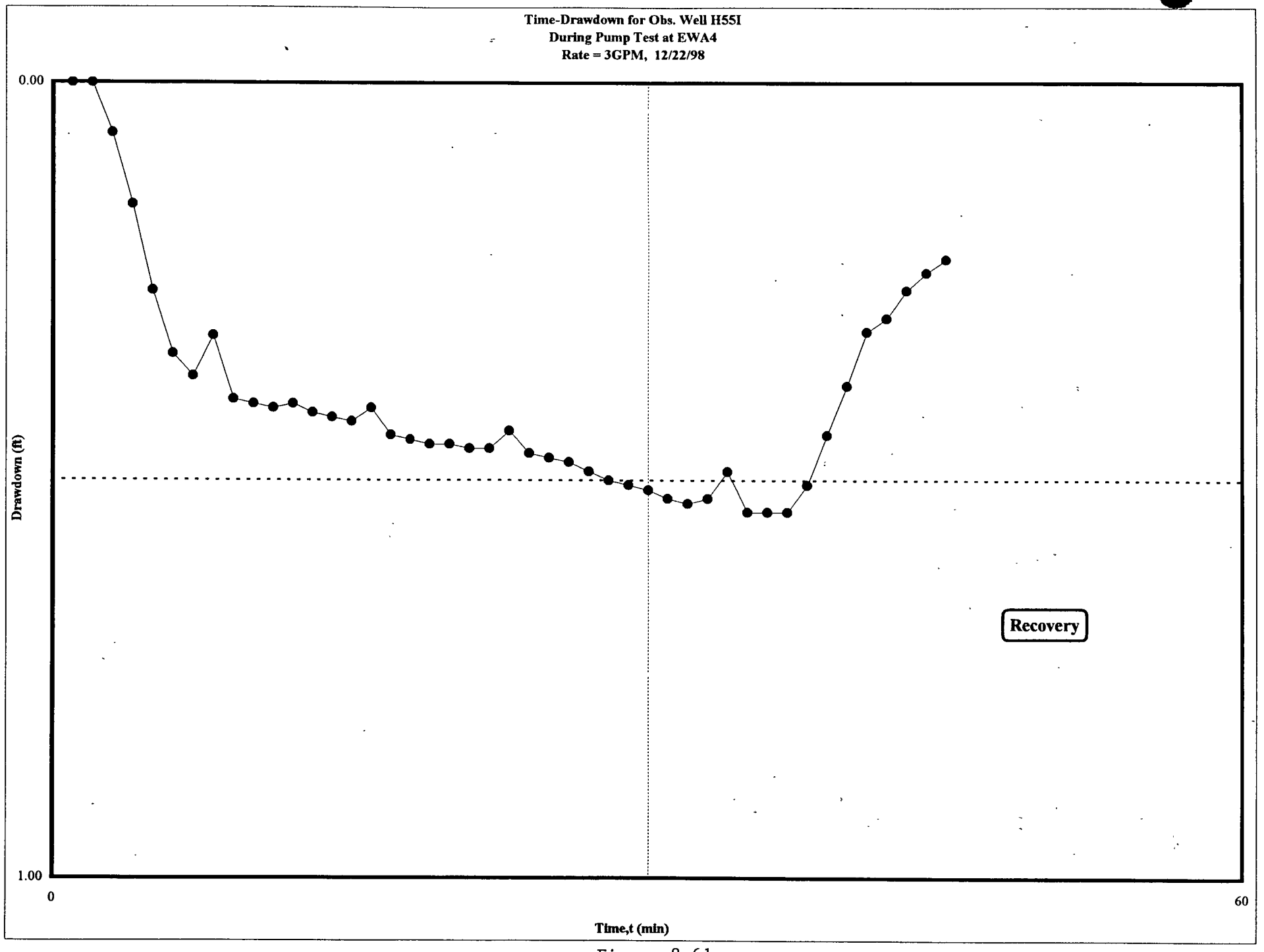

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
0.00
1.00
Drawdown (ft)
0
60
Time,t (min)
Recovery

Figure 8-61

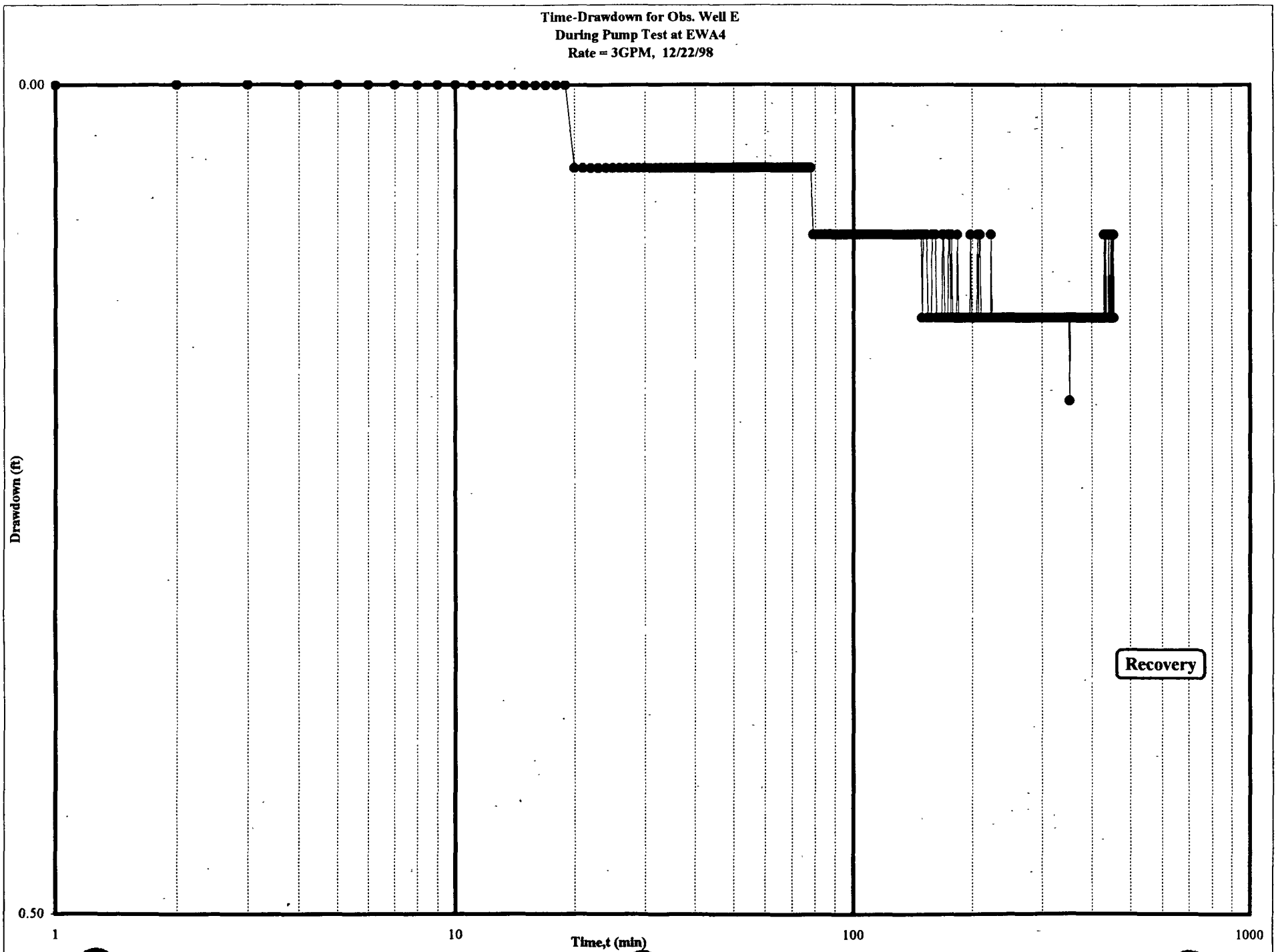

Time-Drawdown for Obs. Well E
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figure 62

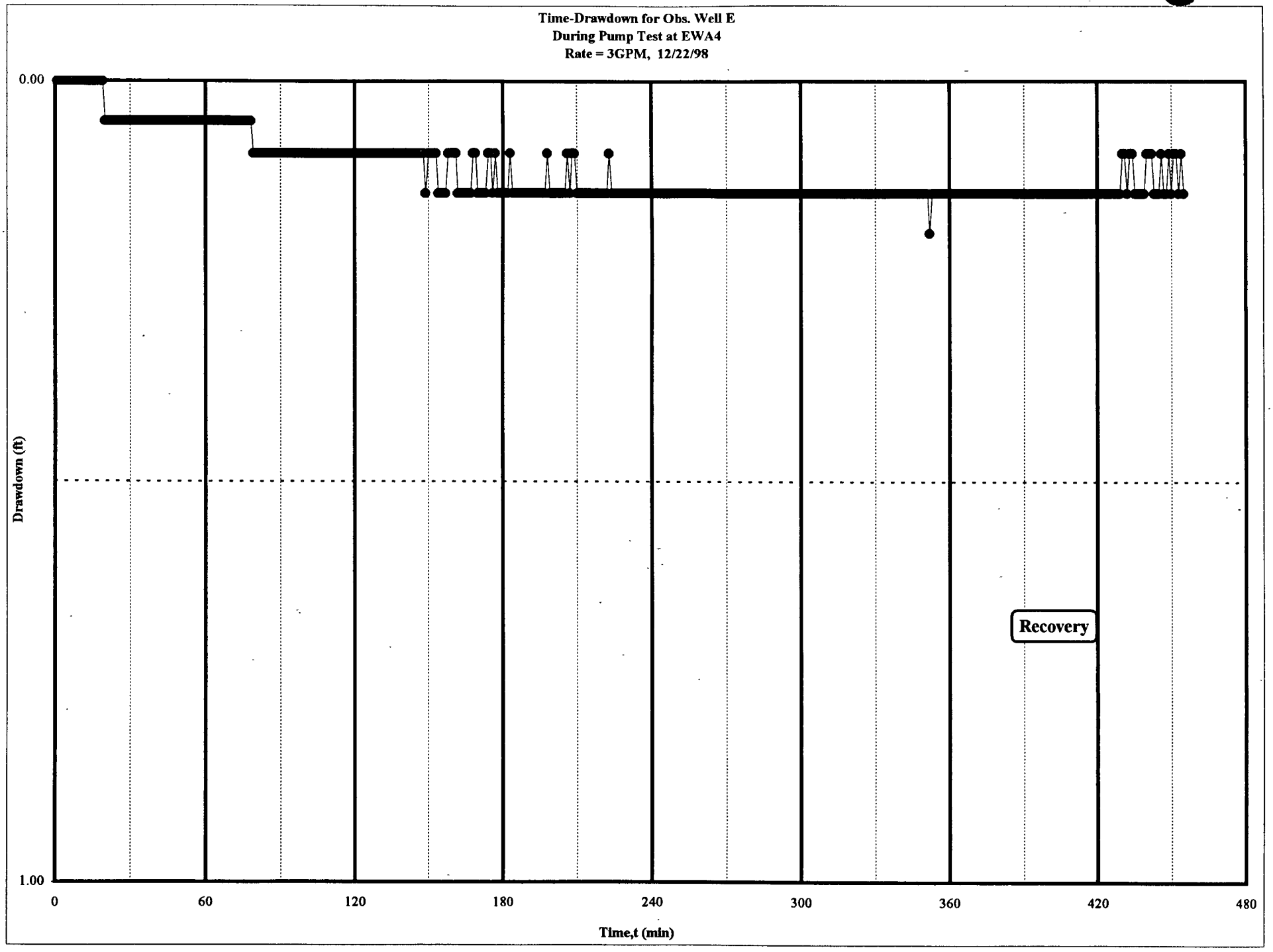

Time-Drawdown for Obs. Well E
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-63

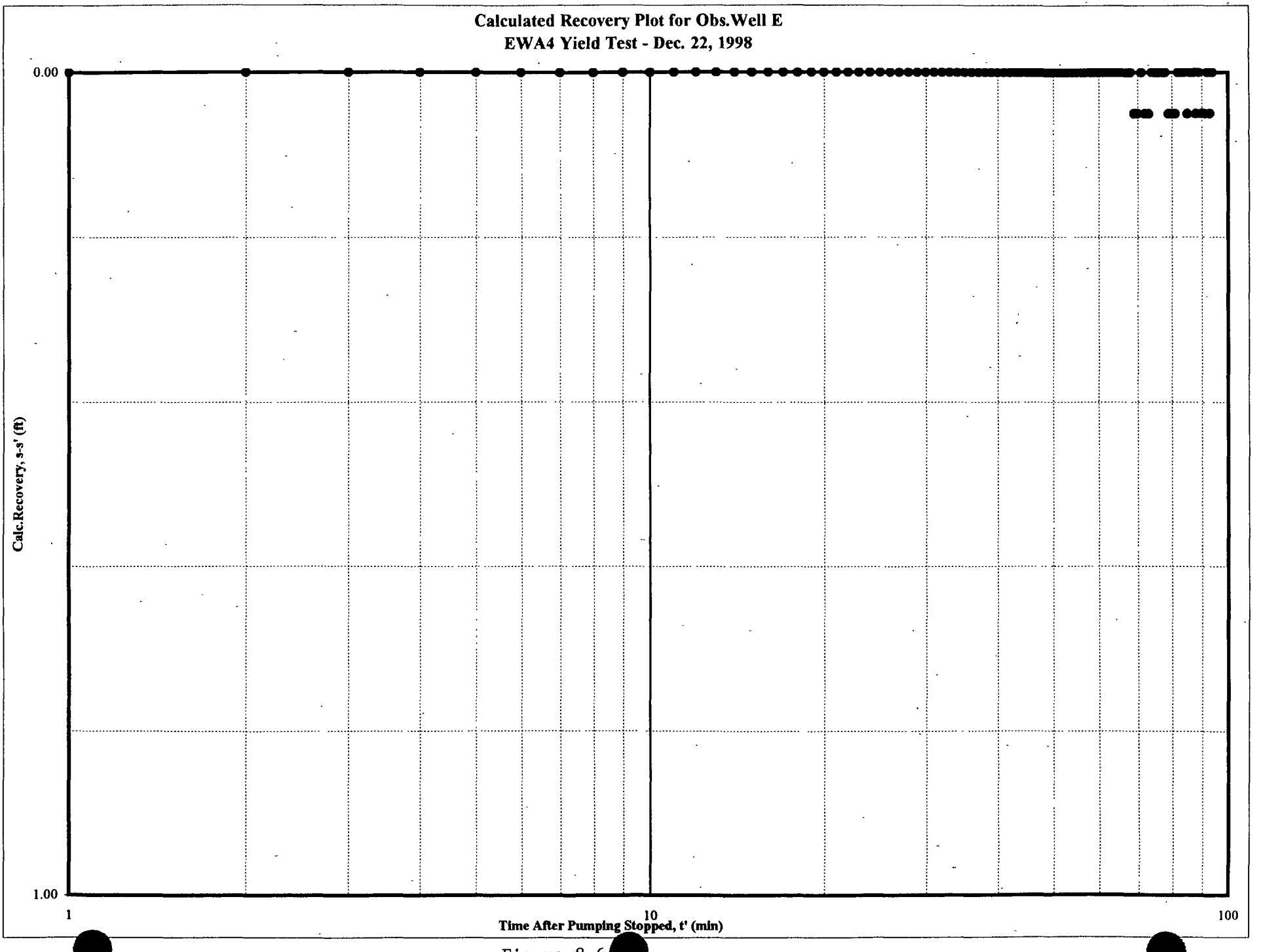

Calculated Recovery Plot for Obs.Well E
EWA4 Yield Test - Dec. 22, 1998
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-6

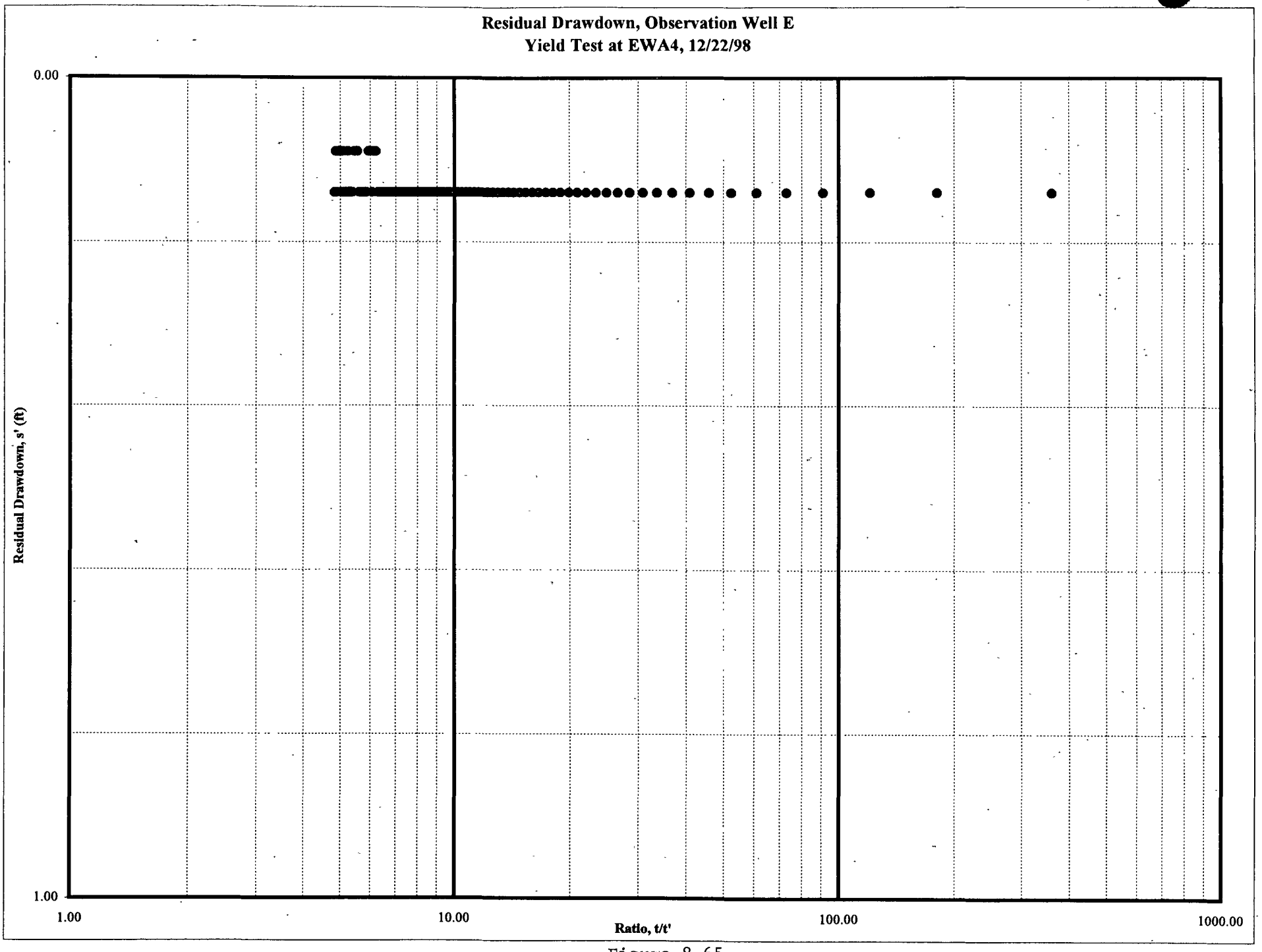

Residual Drawdown, Observation Well E
Yield Test at EWA4, 12/22/98
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-65

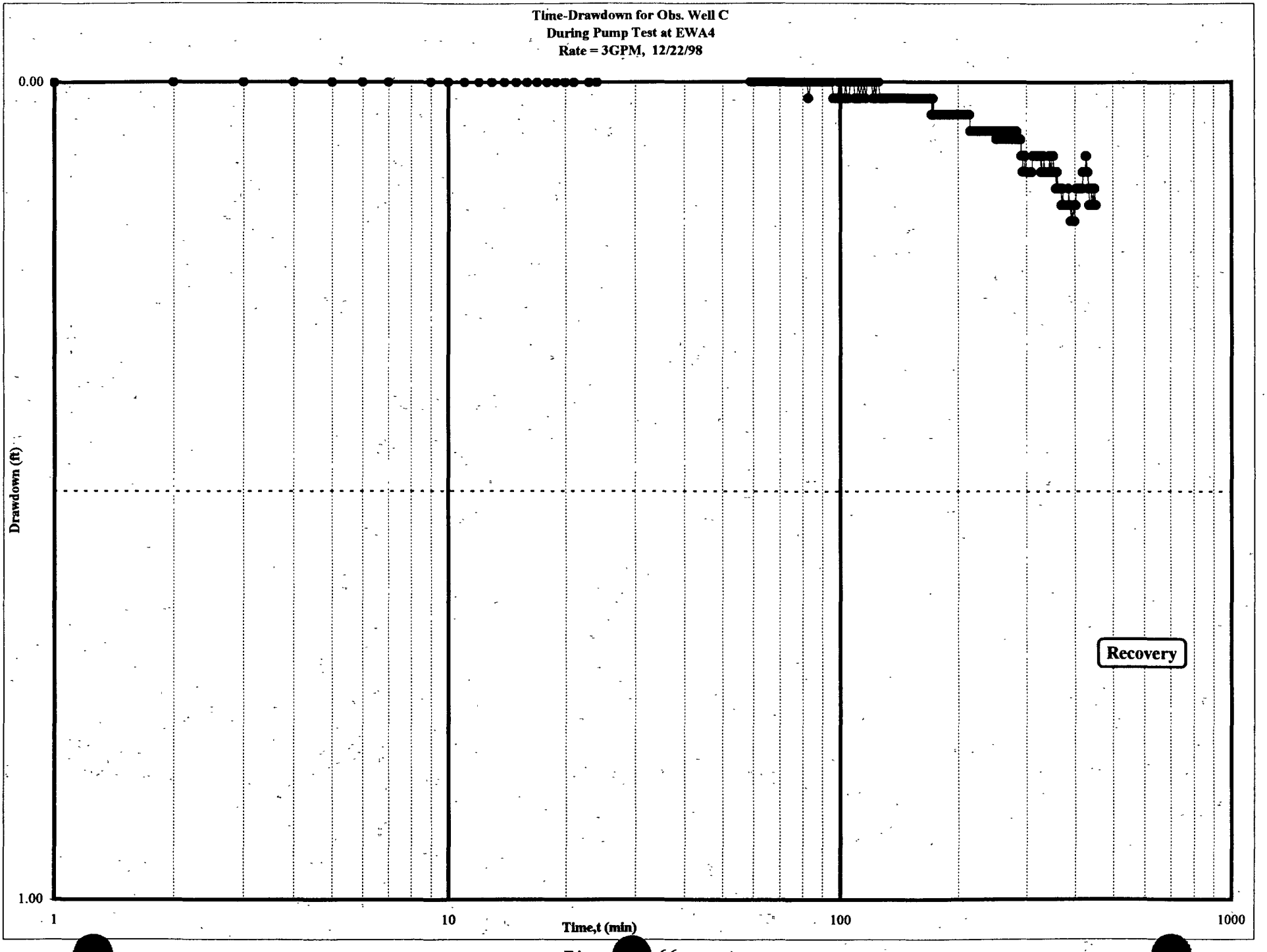

Time-Drawdown for Obs. Well C
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
0.00
1.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figure 66

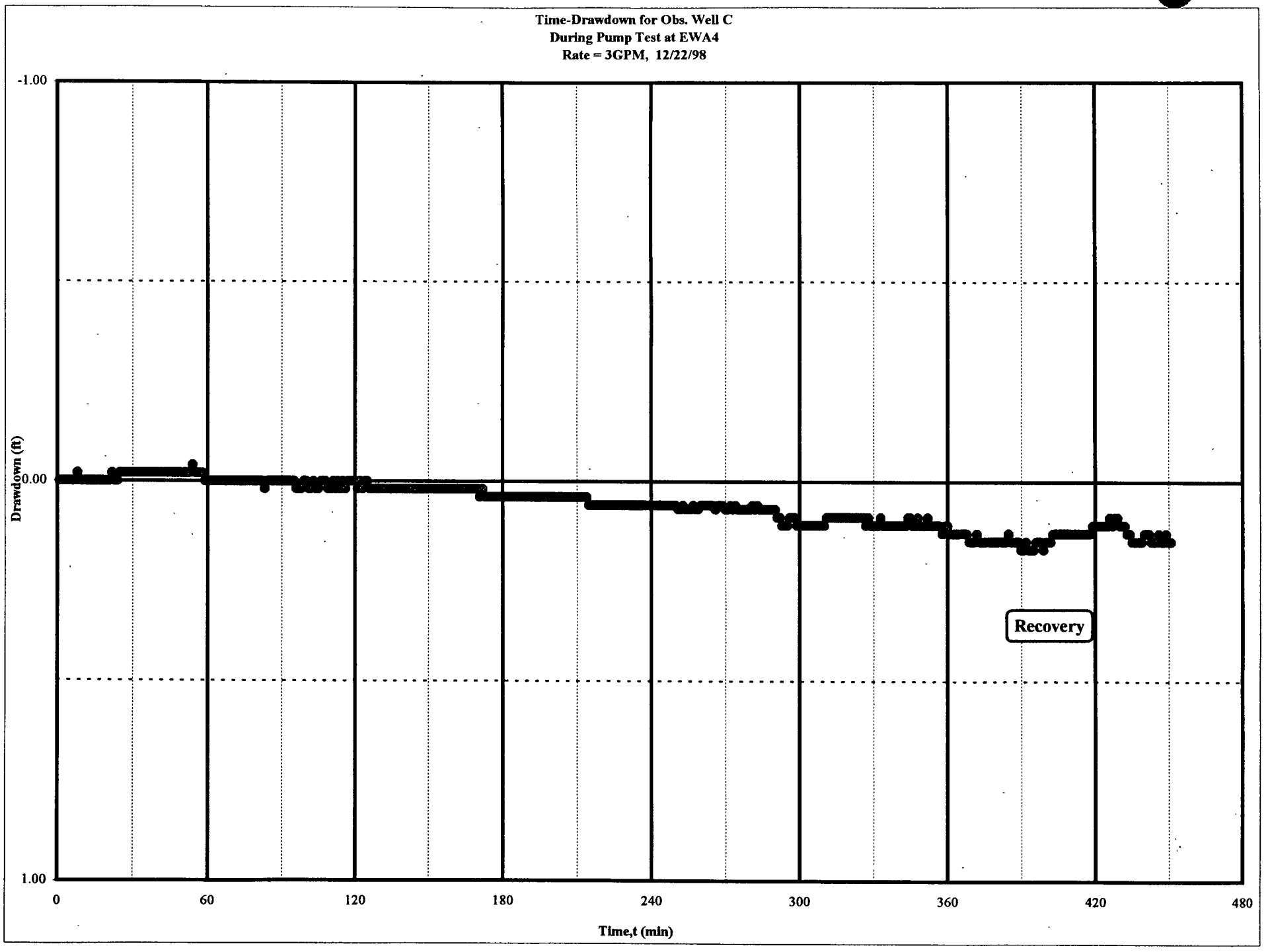

Time-Drawdown for Obs. Well C
During Pump Test at EWA4
Rate = 3GPM, 12/22/98
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-67

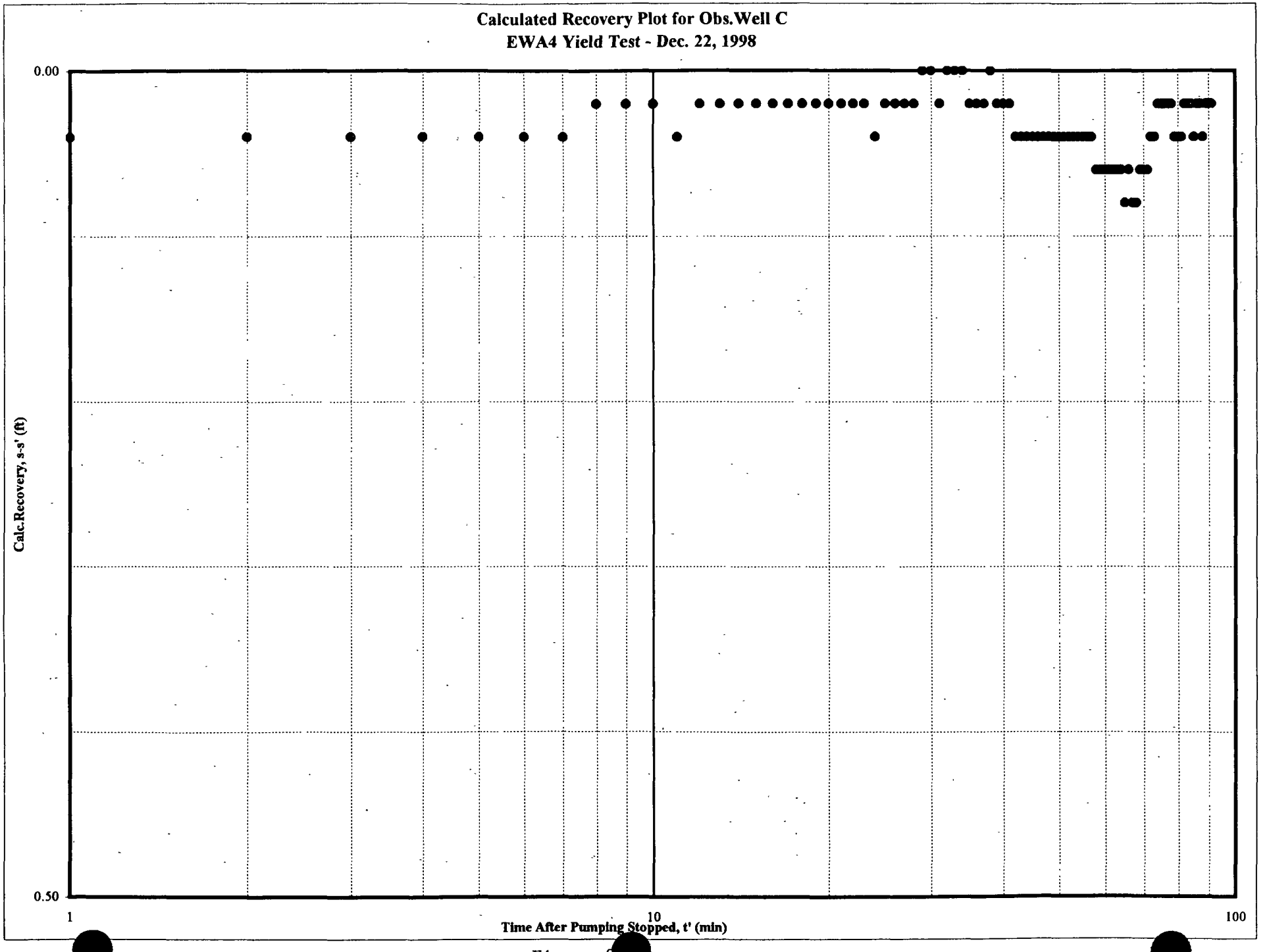

Calculated Recovery Plot for Obs.Well C
EWA4 Yield Test - Dec. 22, 1998
0.00
0.50
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8

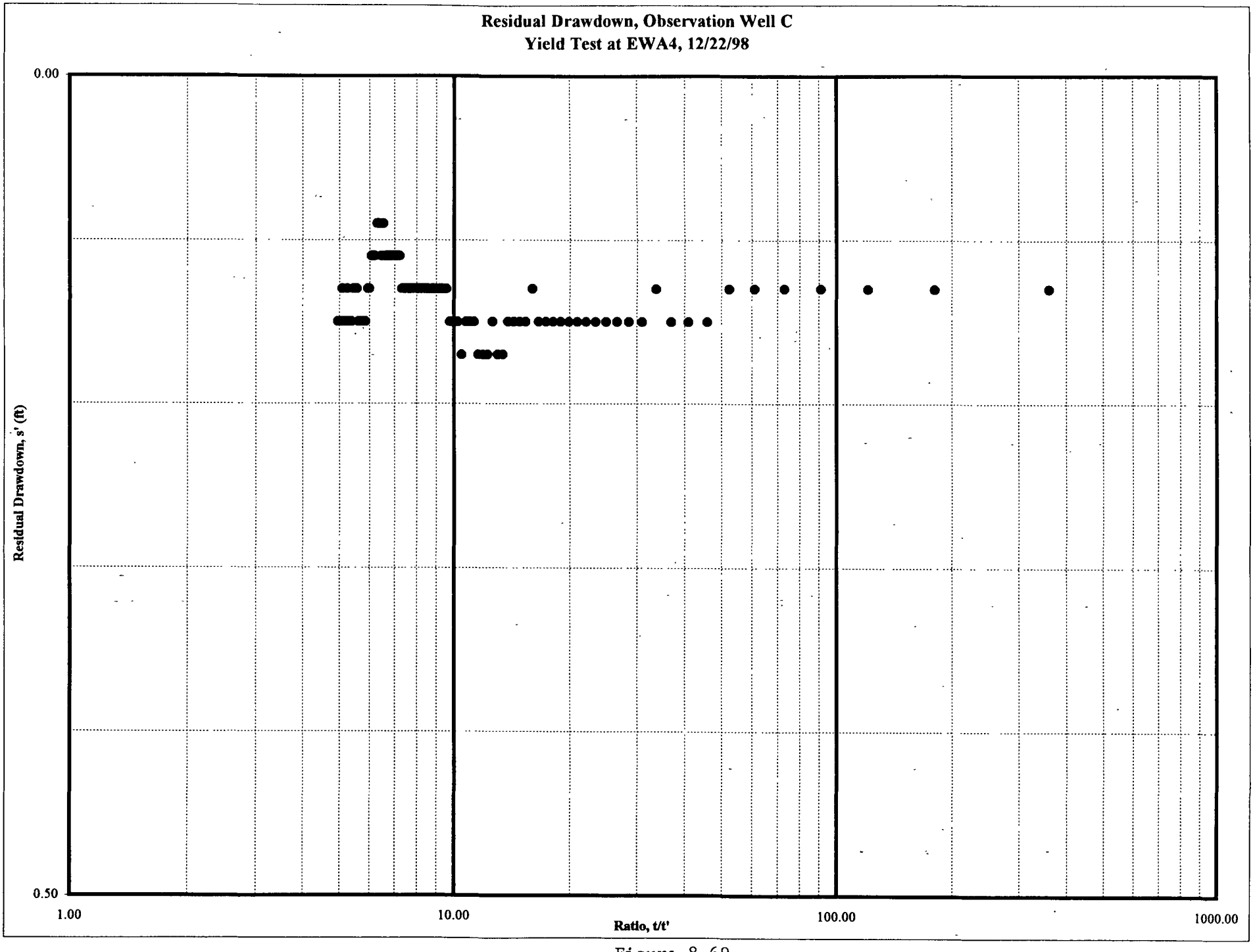
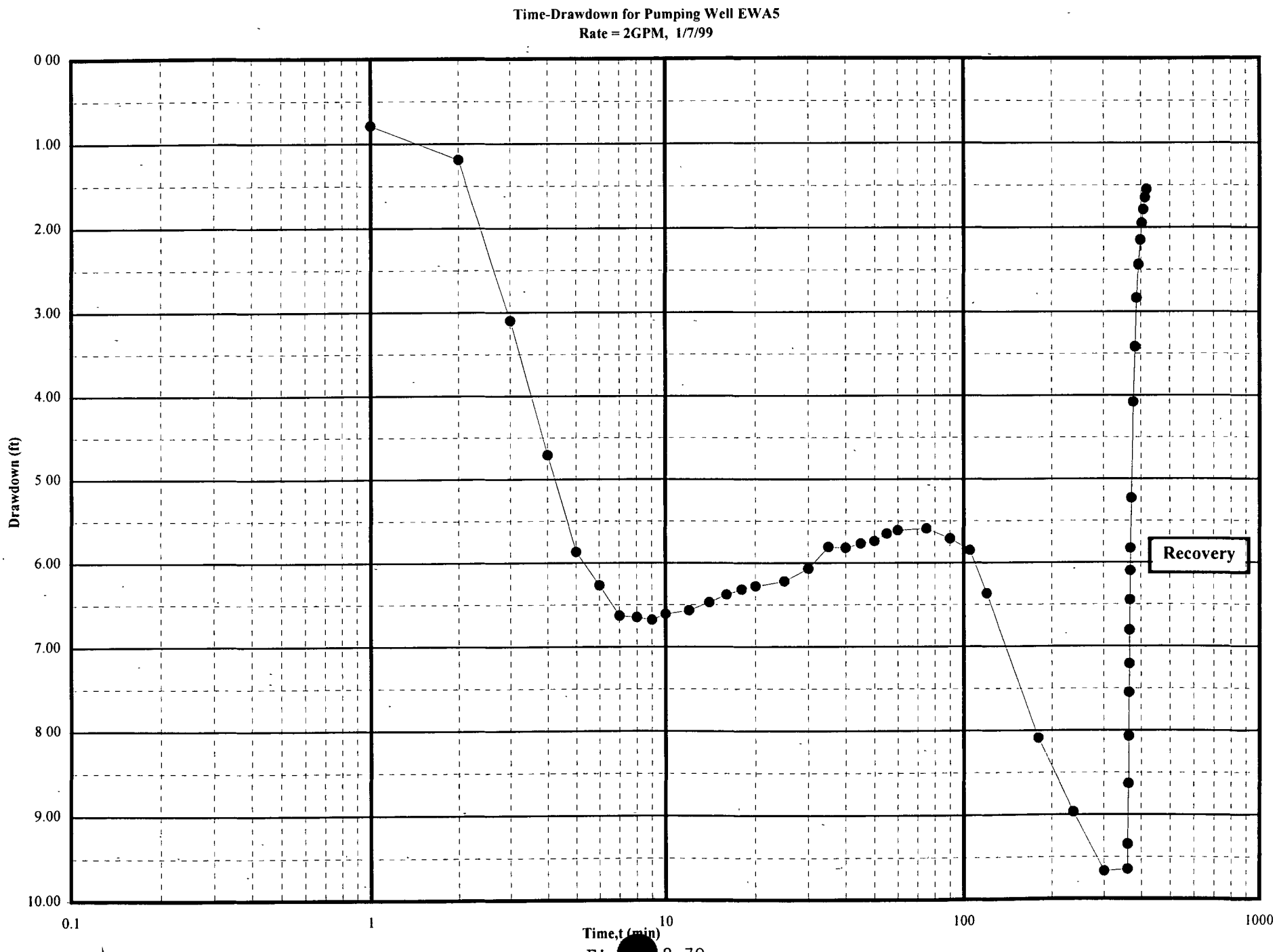

Residual Drawdown, Observation Well C
Yield Test at EWA4, 12/22/98
0.00
0.50
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-69


Time-Drawdown for Pumping Well EWA5
Rate = 2GPM, 1/7/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Fig[illegible]8-70

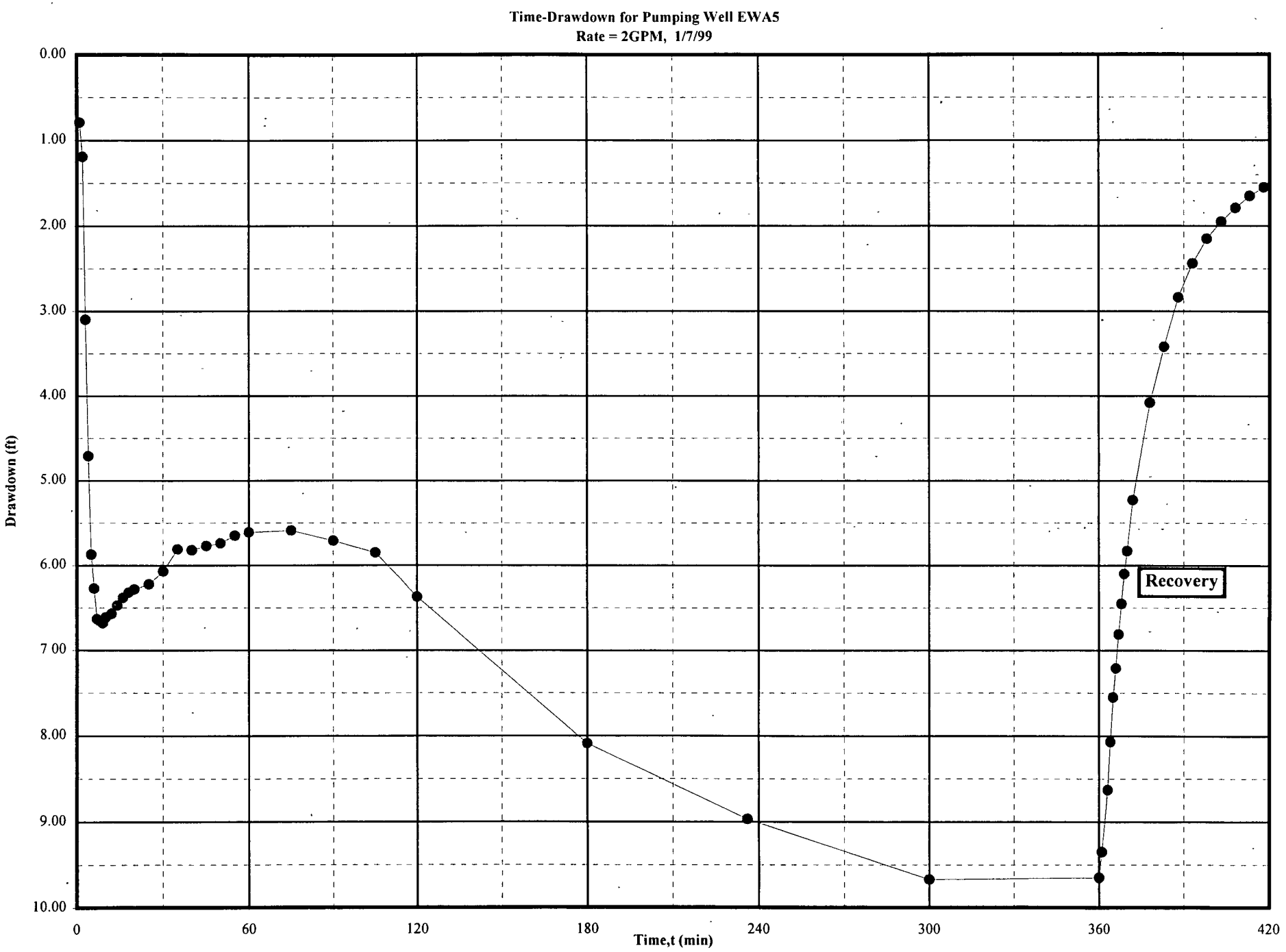

Time-Drawdown for Pumping Well EWA5
Rate = 2GPM, 1/7/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-71

Residual Drawdown, Pumping Well EWA5
1/7/99

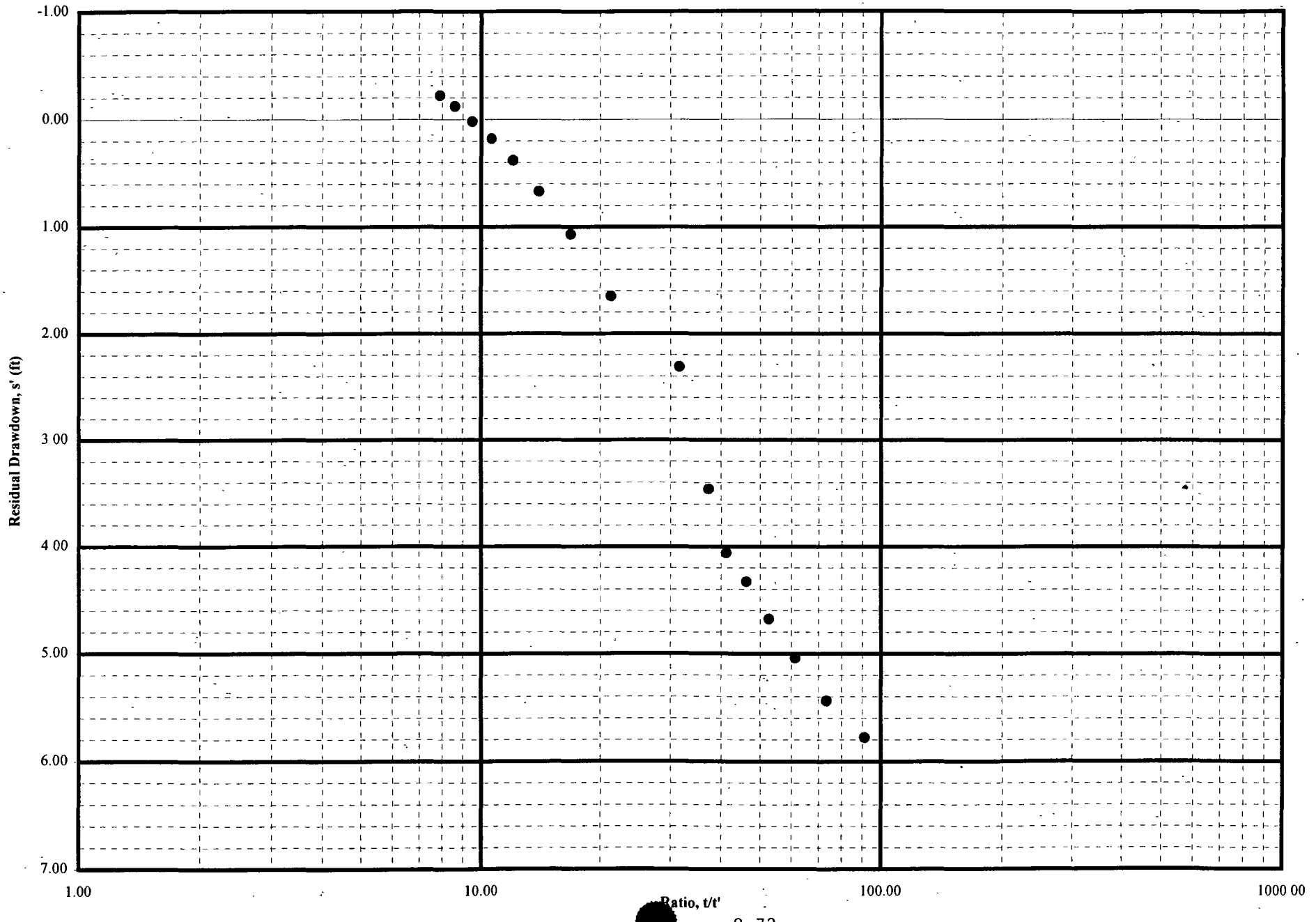


Figure 8-72

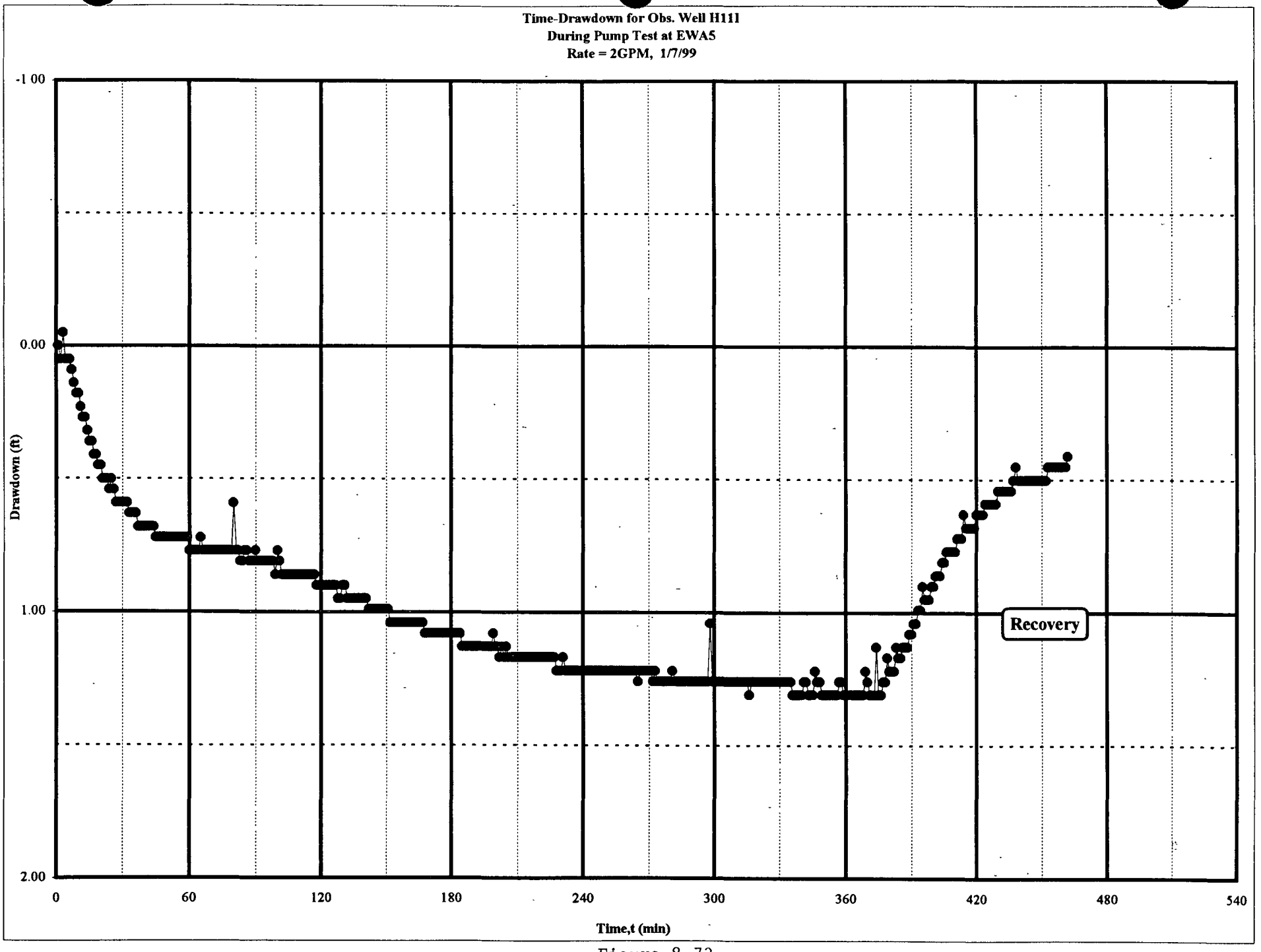

Time-Drawdown for Obs. Well H111
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
-1.00
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-73

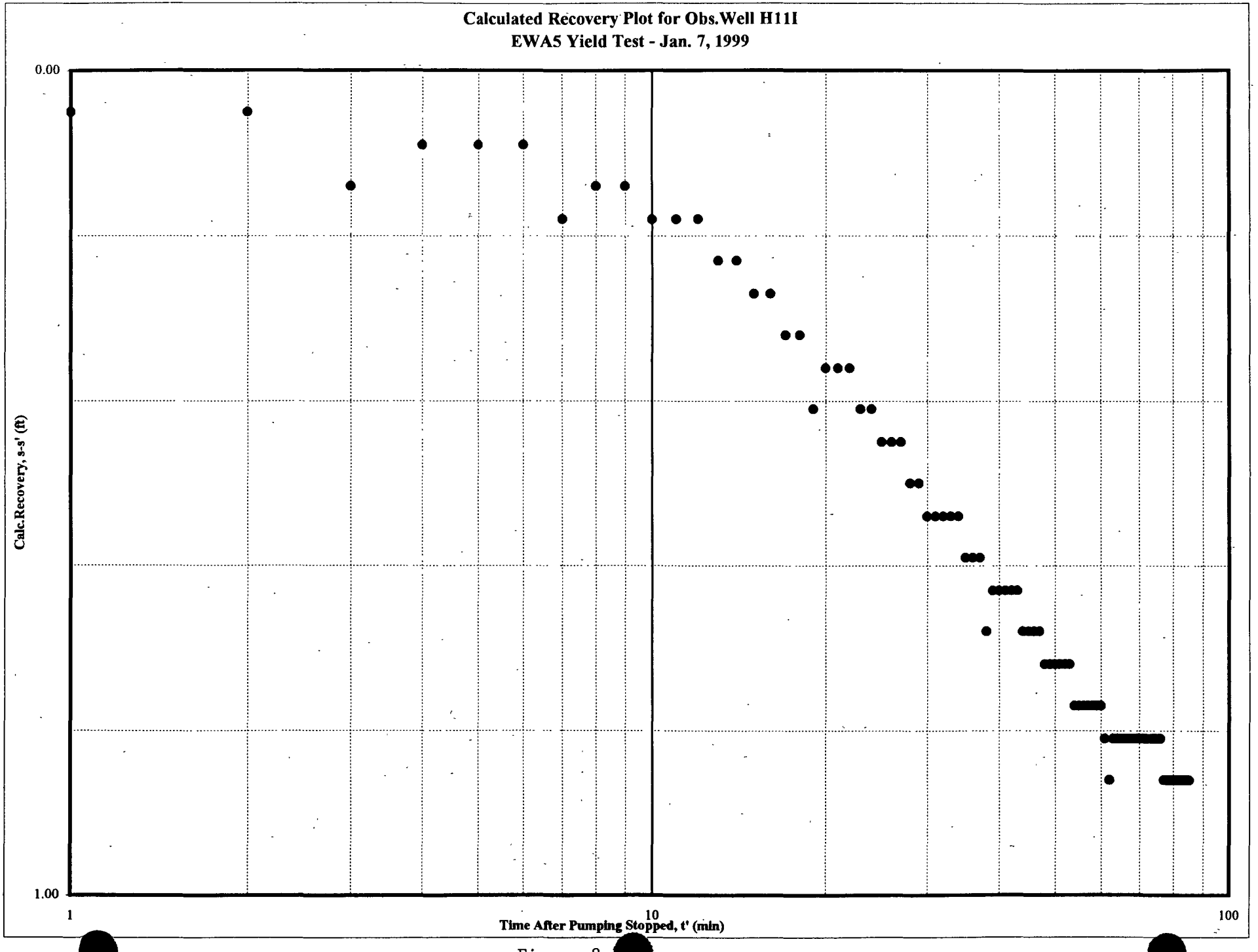

Calculated Recovery Plot for Obs.Well H11I
EWA5 Yield Test - Jan. 7, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-

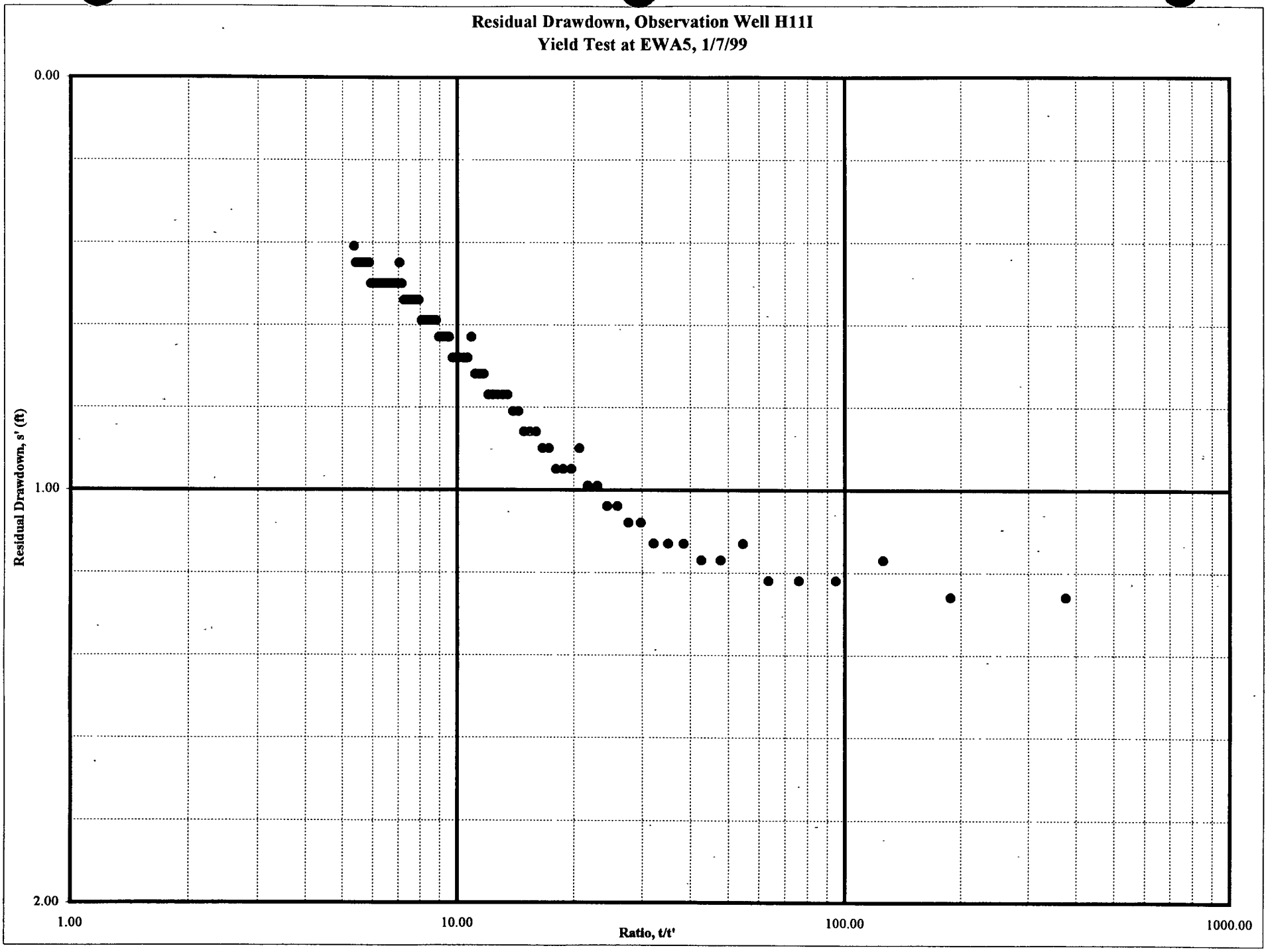

Residual Drawdown, Observation Well H11I
Yield Test at EWA5, 1/7/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-75

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA5
Rate = 2GPM, 1/7/99

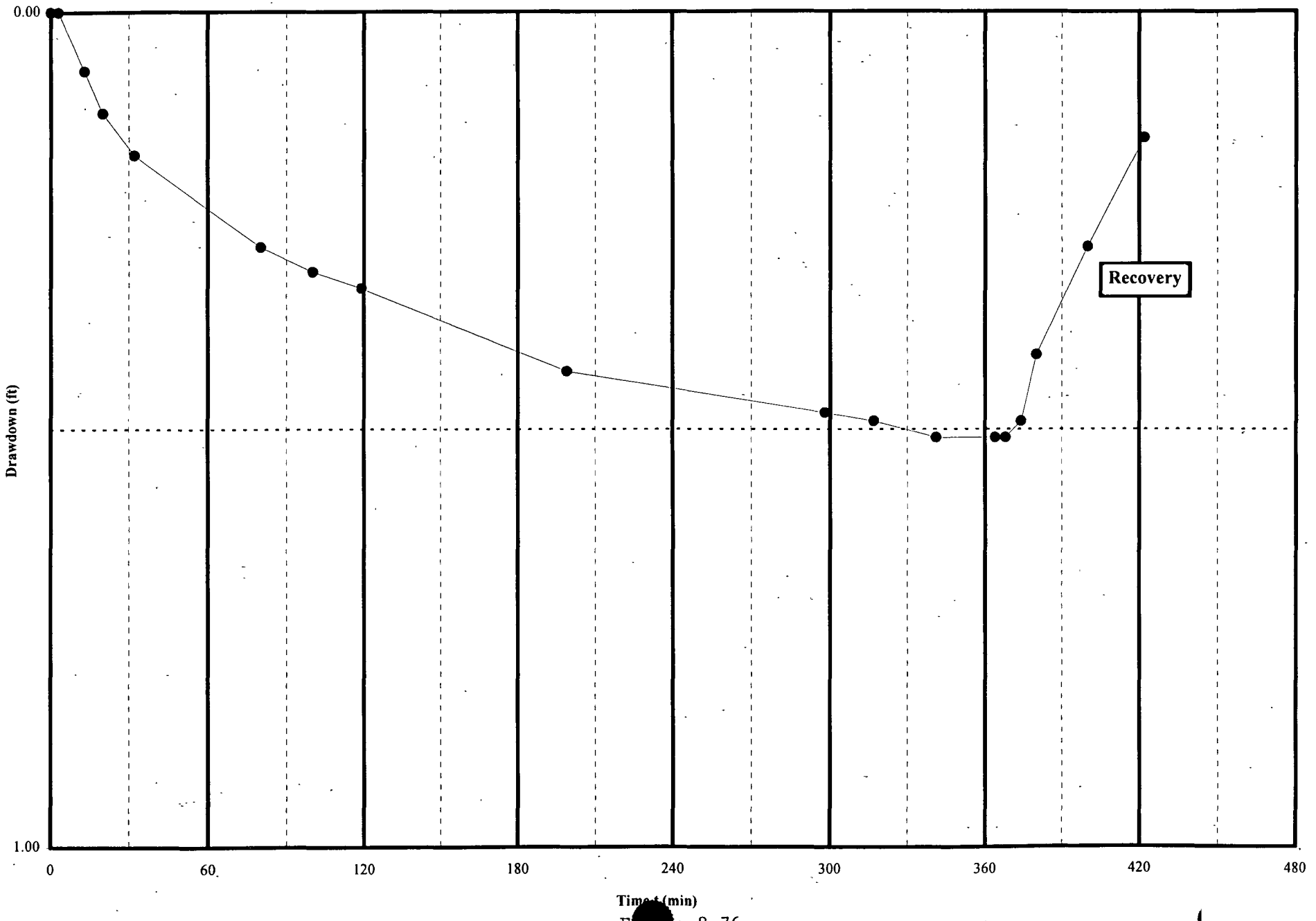


Figure 8-76

Calculated Recovery Plot for Obs.Well EWA3
EWA5 Yield Test - Jan. 7, 1999

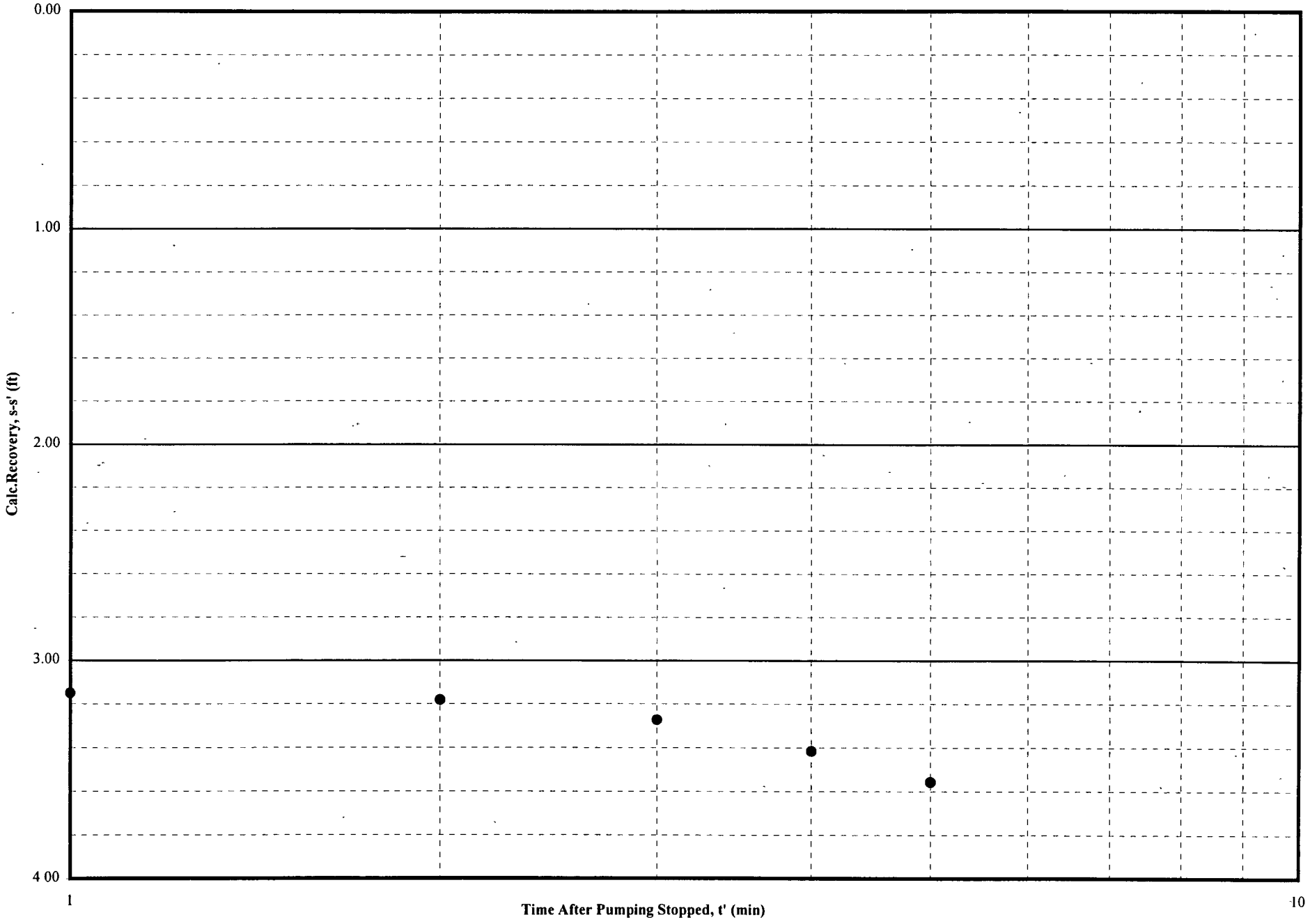


Figure 8-77

Residual Drawdown, Observation Well EWA3
Yield Test at EWA5, 1/7/99

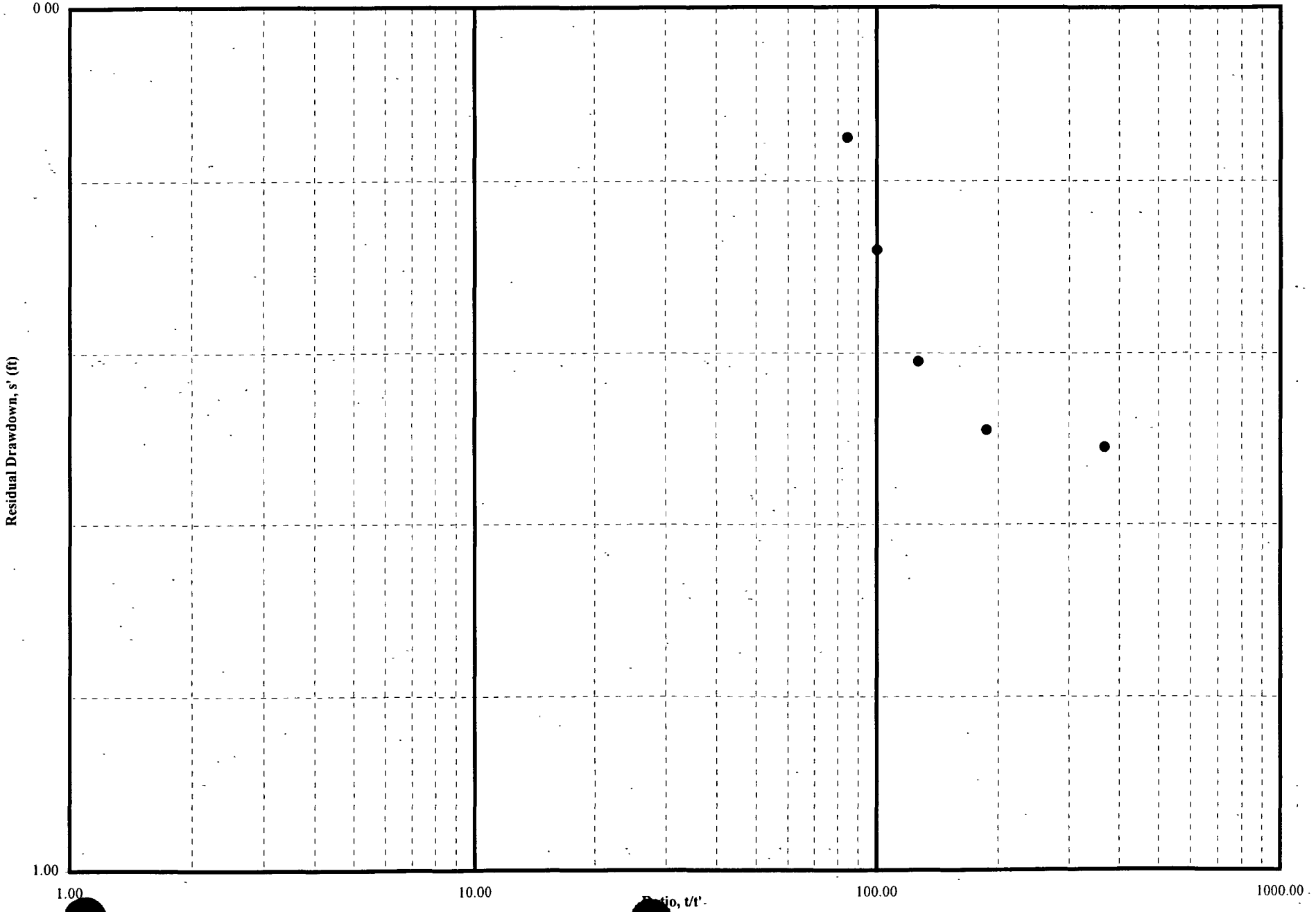


Figure 8-78

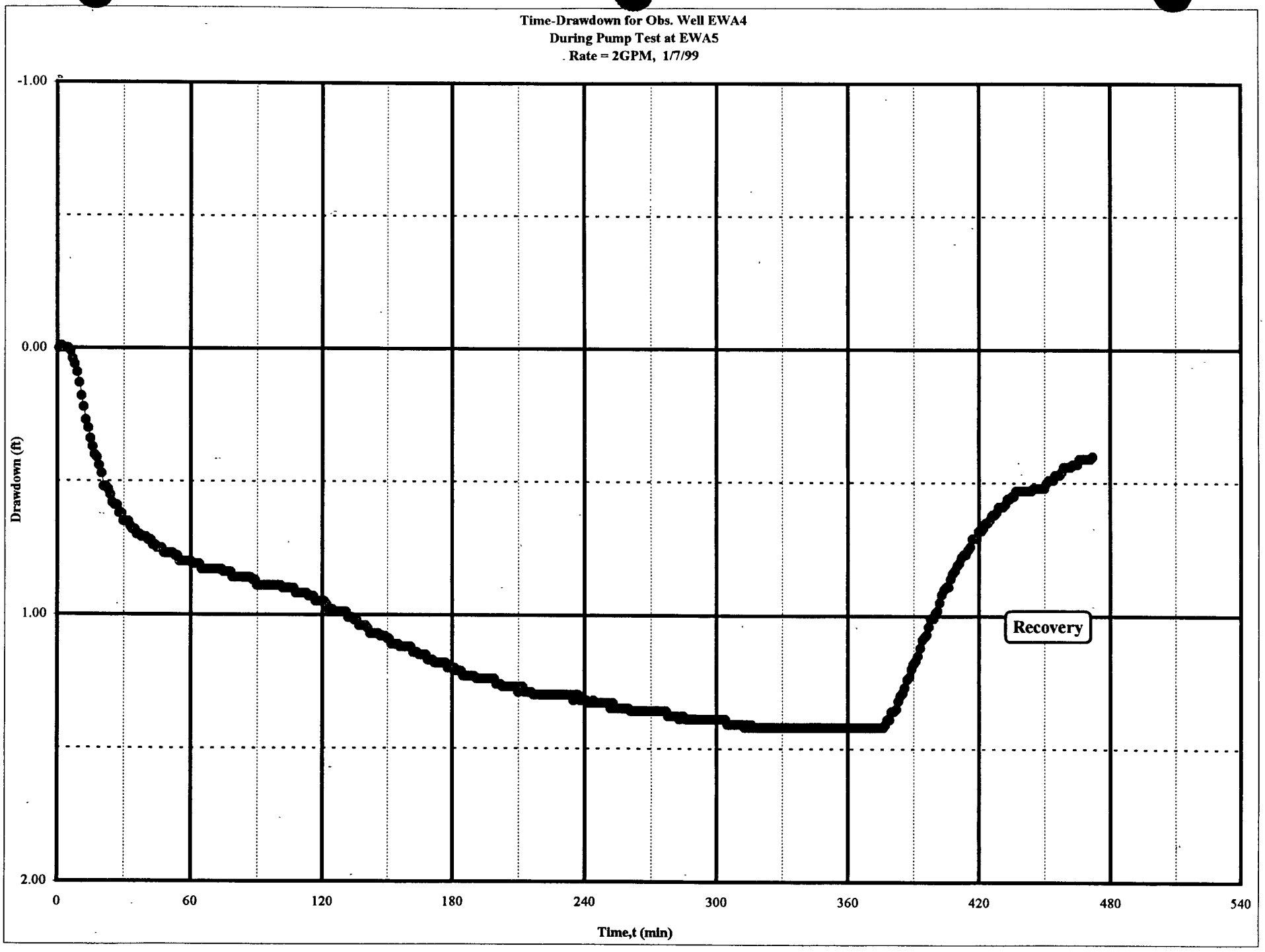

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
-1.00
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-79

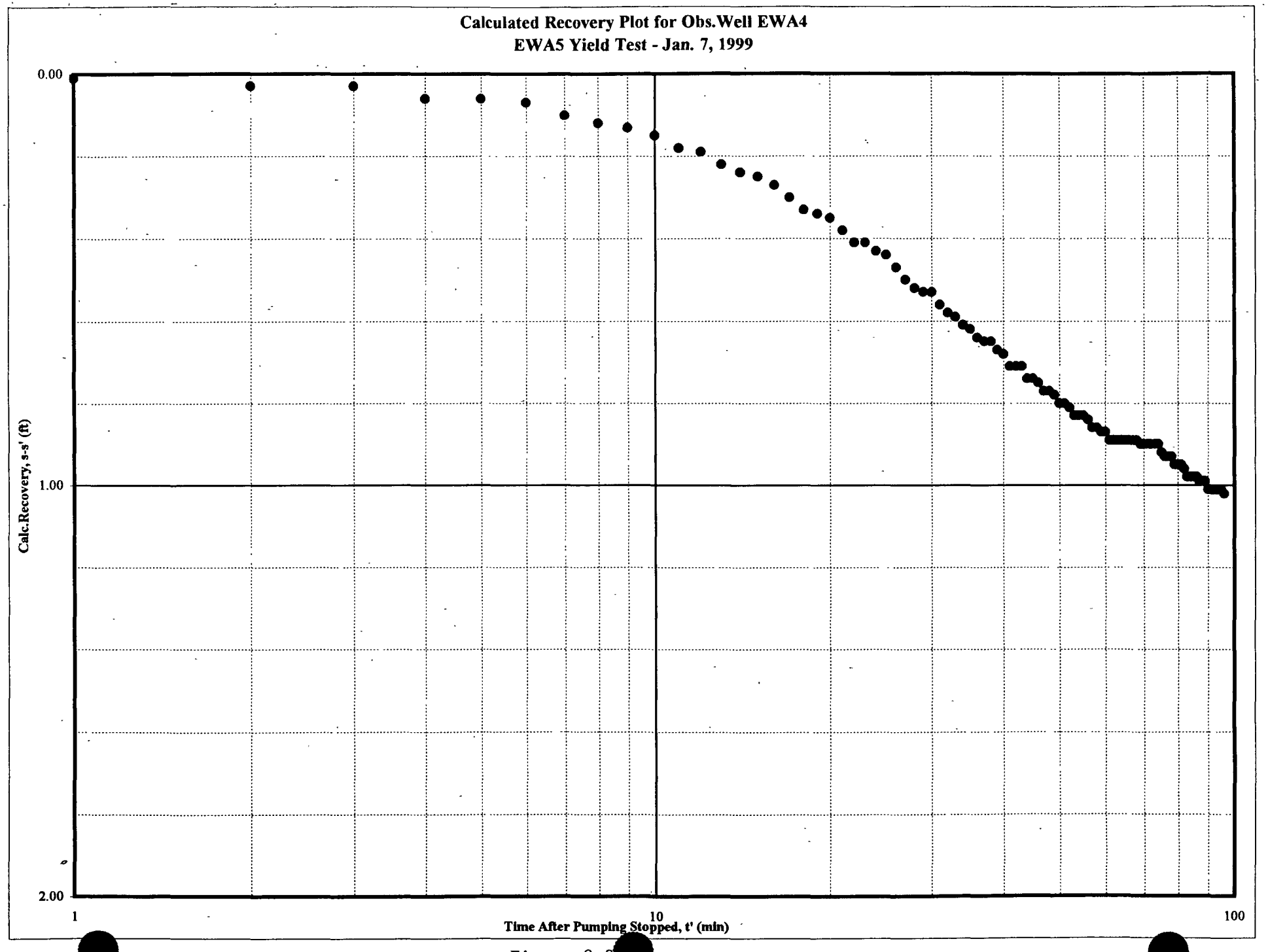

Calculated Recovery Plot for Obs.Well EWA4
EWA5 Yield Test - Jan. 7, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-8

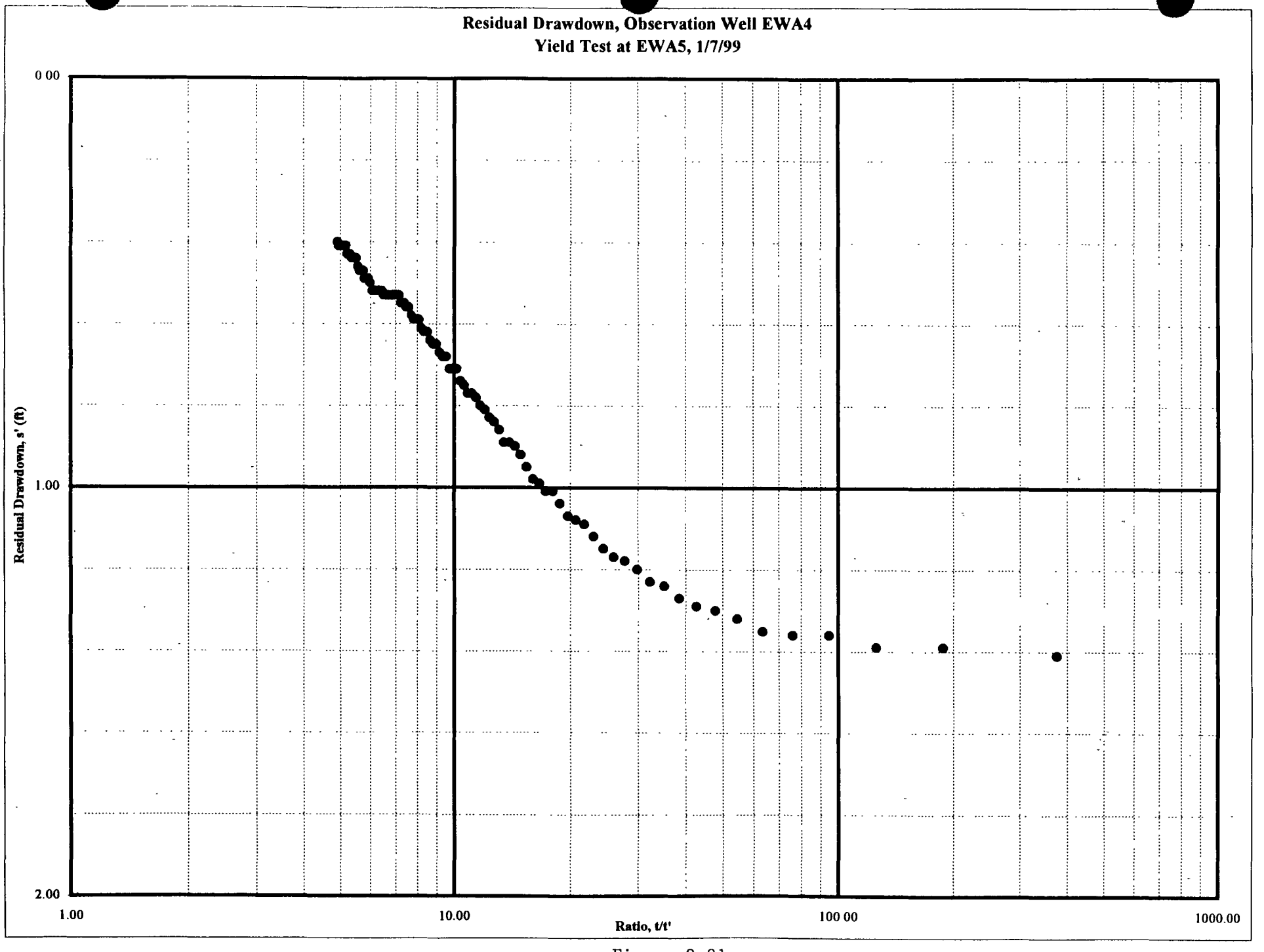
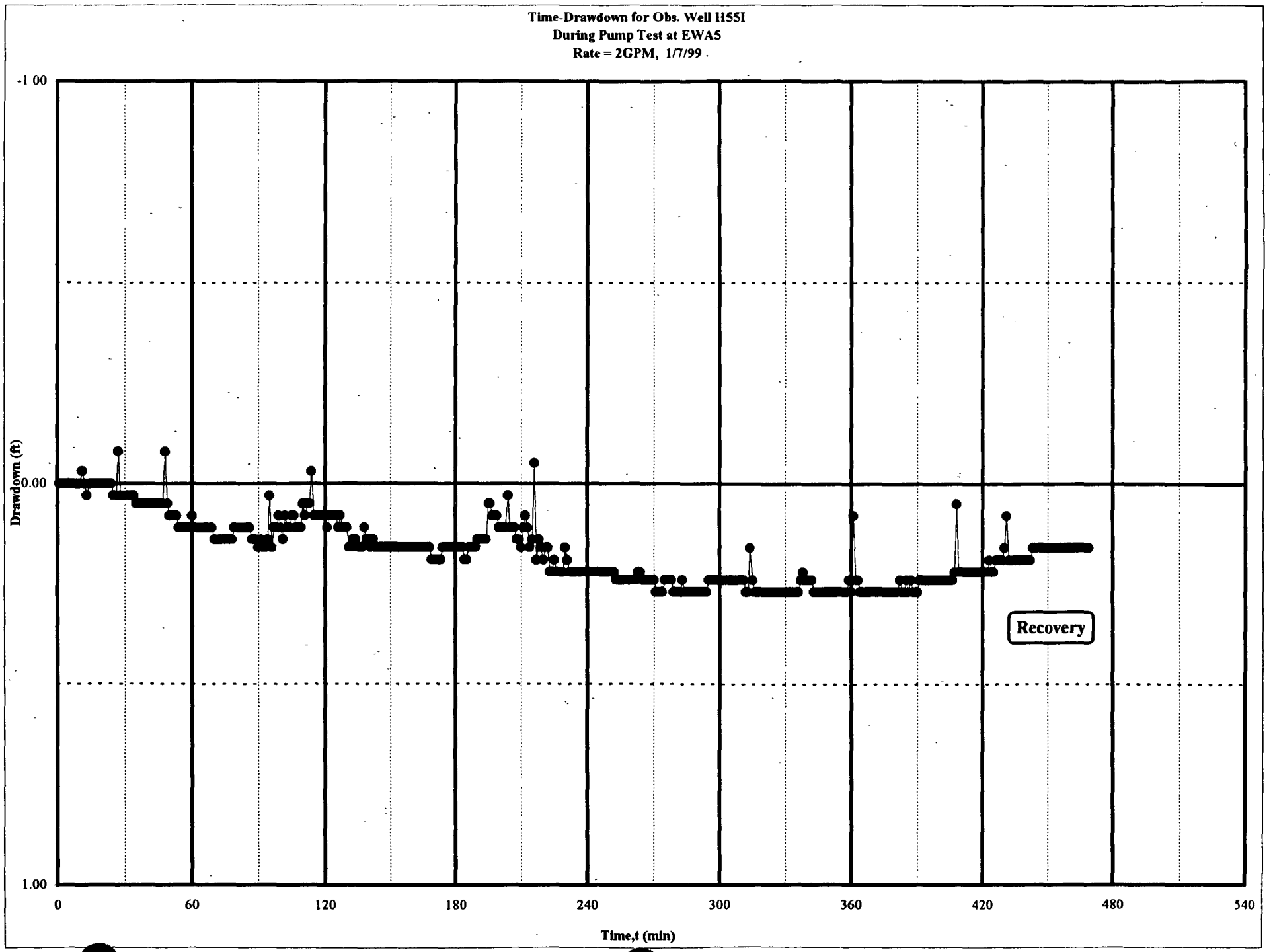

Residual Drawdown, Observation Well EWA4
Yield Test at EWA5, 1/7/99
0 00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100 00
1000.00
Ratio, t/t'

Figure 8-81


Time-Drawdown for Obs. Well H55I
During Pump Test at EWA5
Rate = 2GPM, 1/7/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Fi[illegible] 8-82

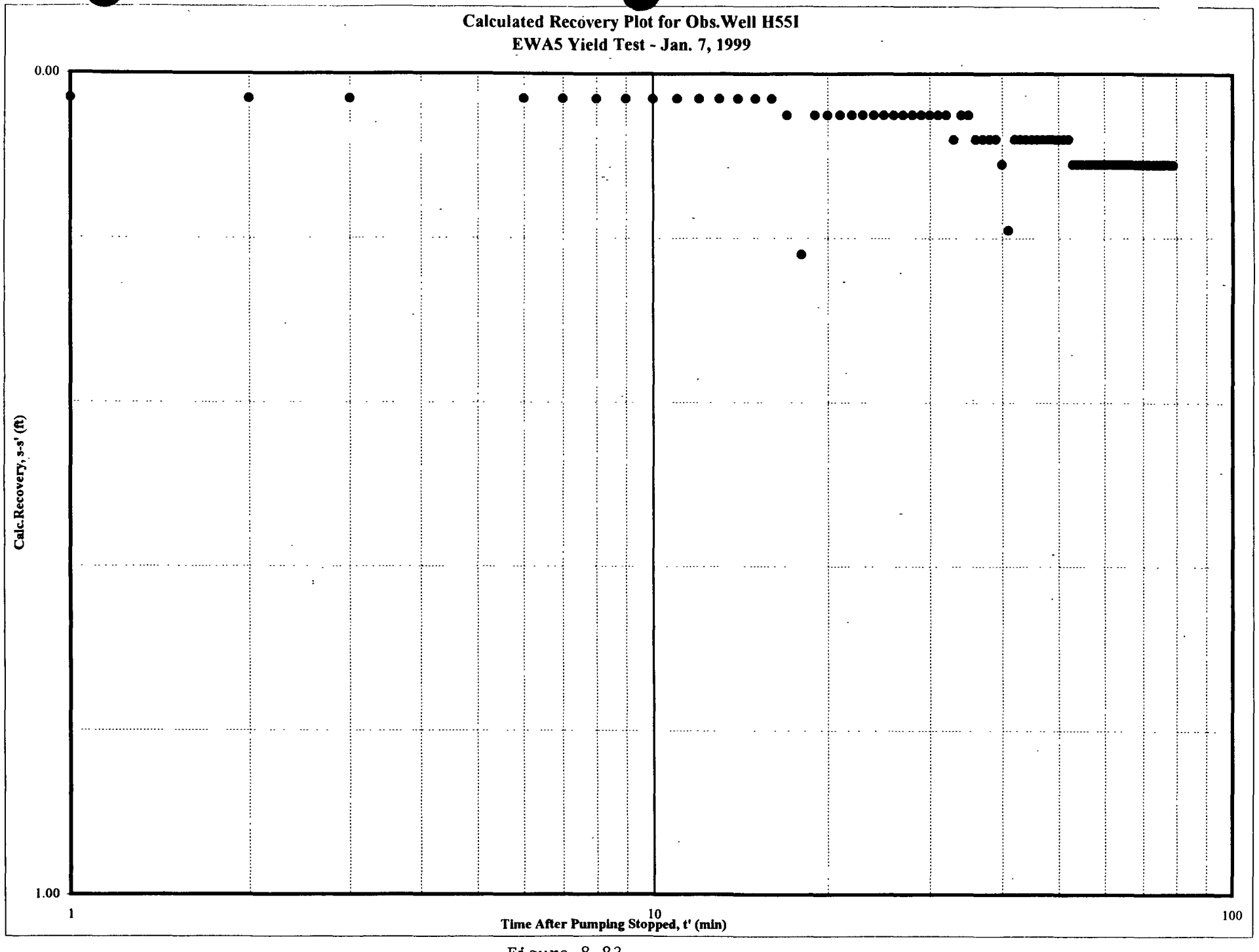

Calculated Recovery Plot for Obs.Well H551
EWA5 Yield Test - Jan. 7, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-83

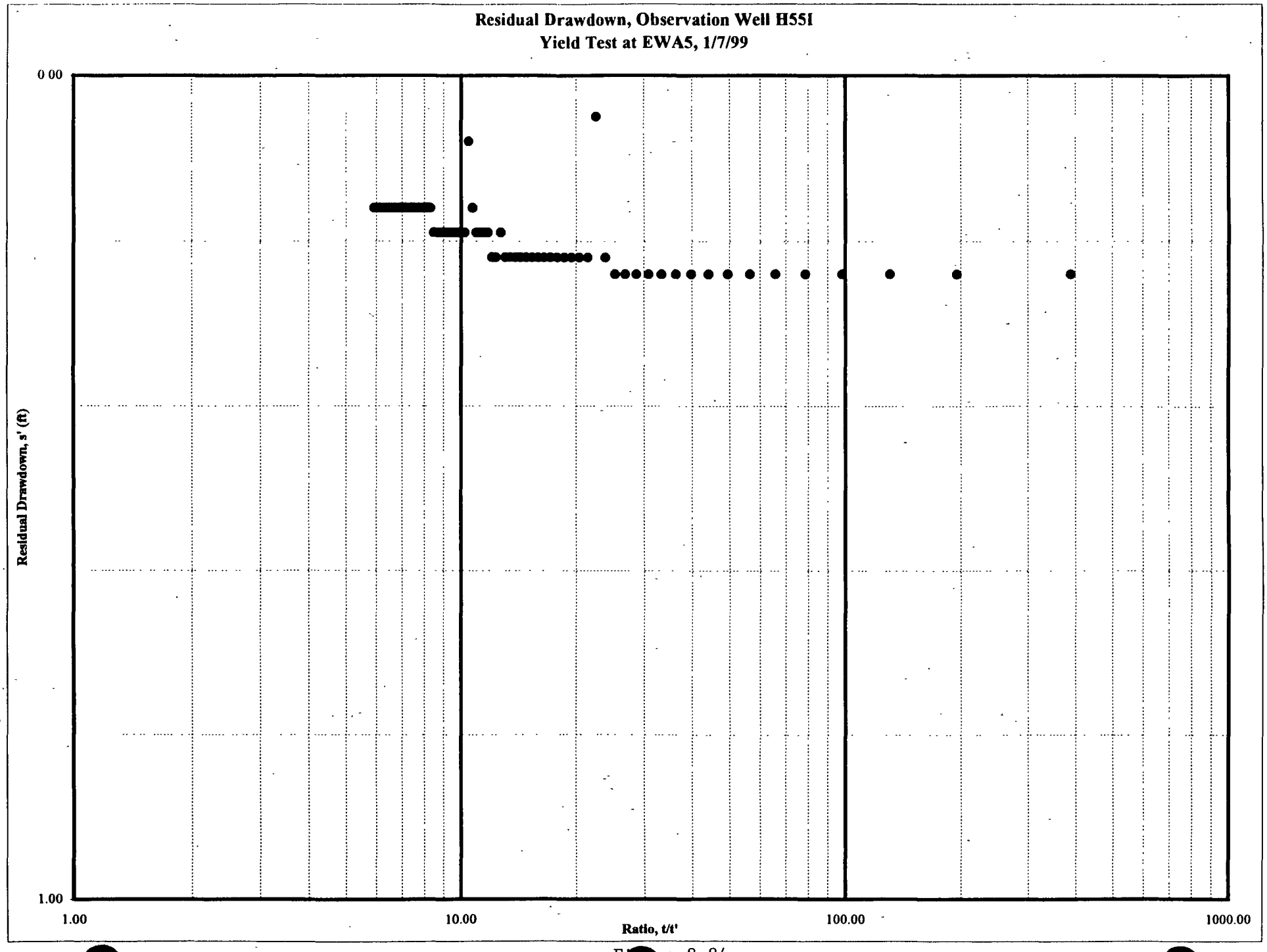

Residual Drawdown, Observation Well H55I
Yield Test at EWA5, 1/7/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-84

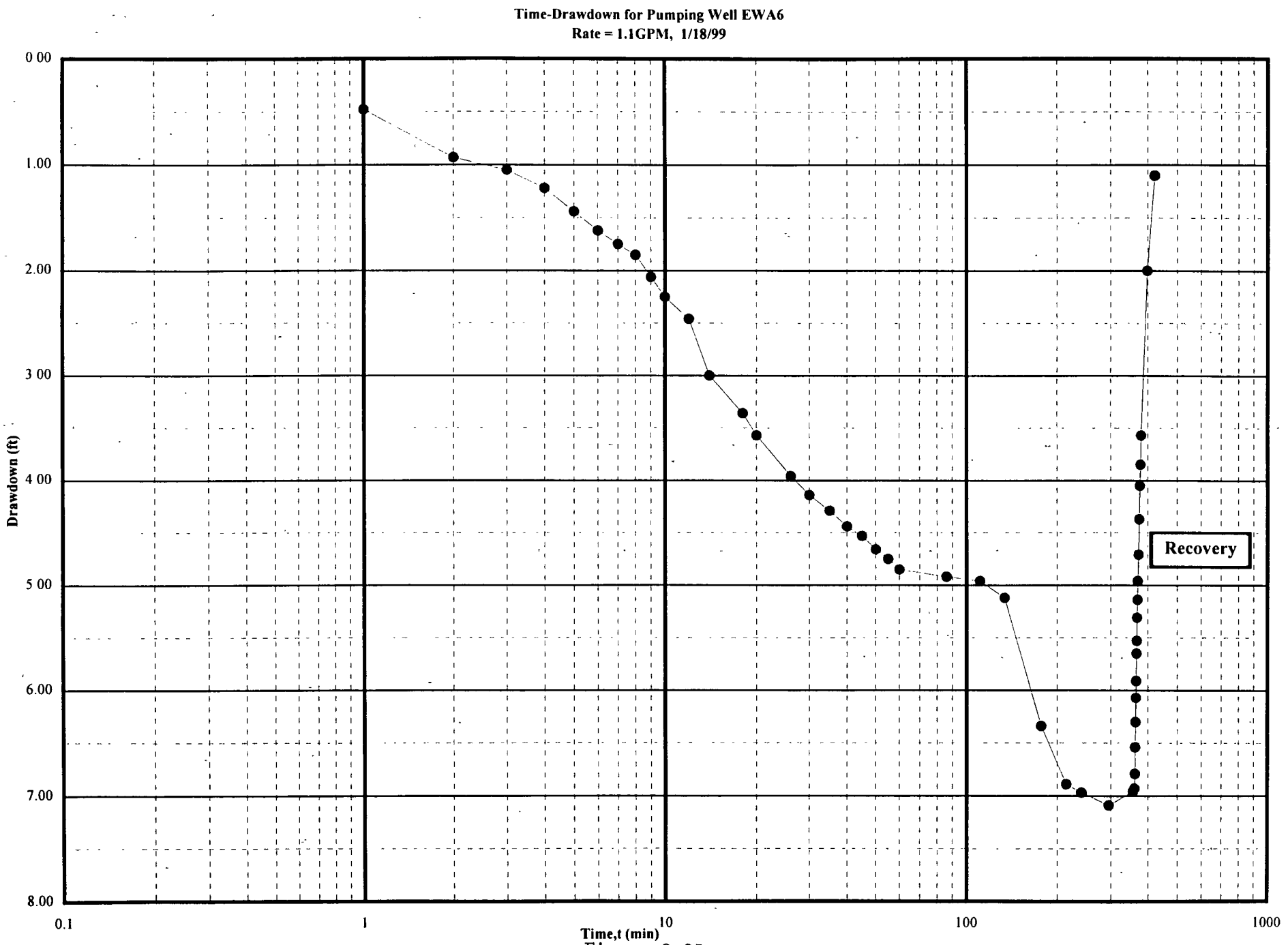
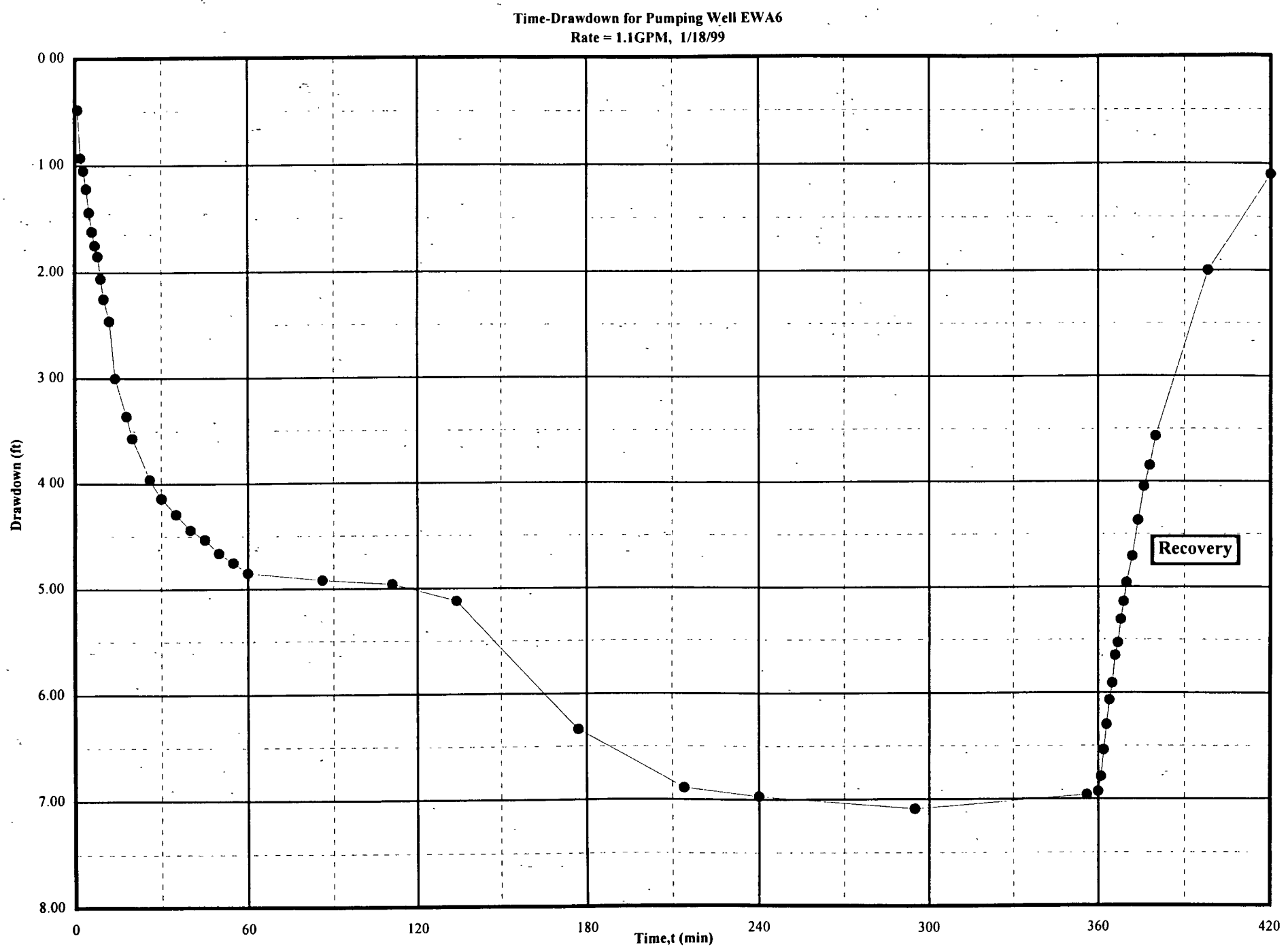

Time-Drawdown for Pumping Well EWA6
Rate = 1.1GPM, 1/18/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-85


Time-Drawdown for Pumping Well EWA6
Rate = 1.1GPM, 1/18/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

re 8-86

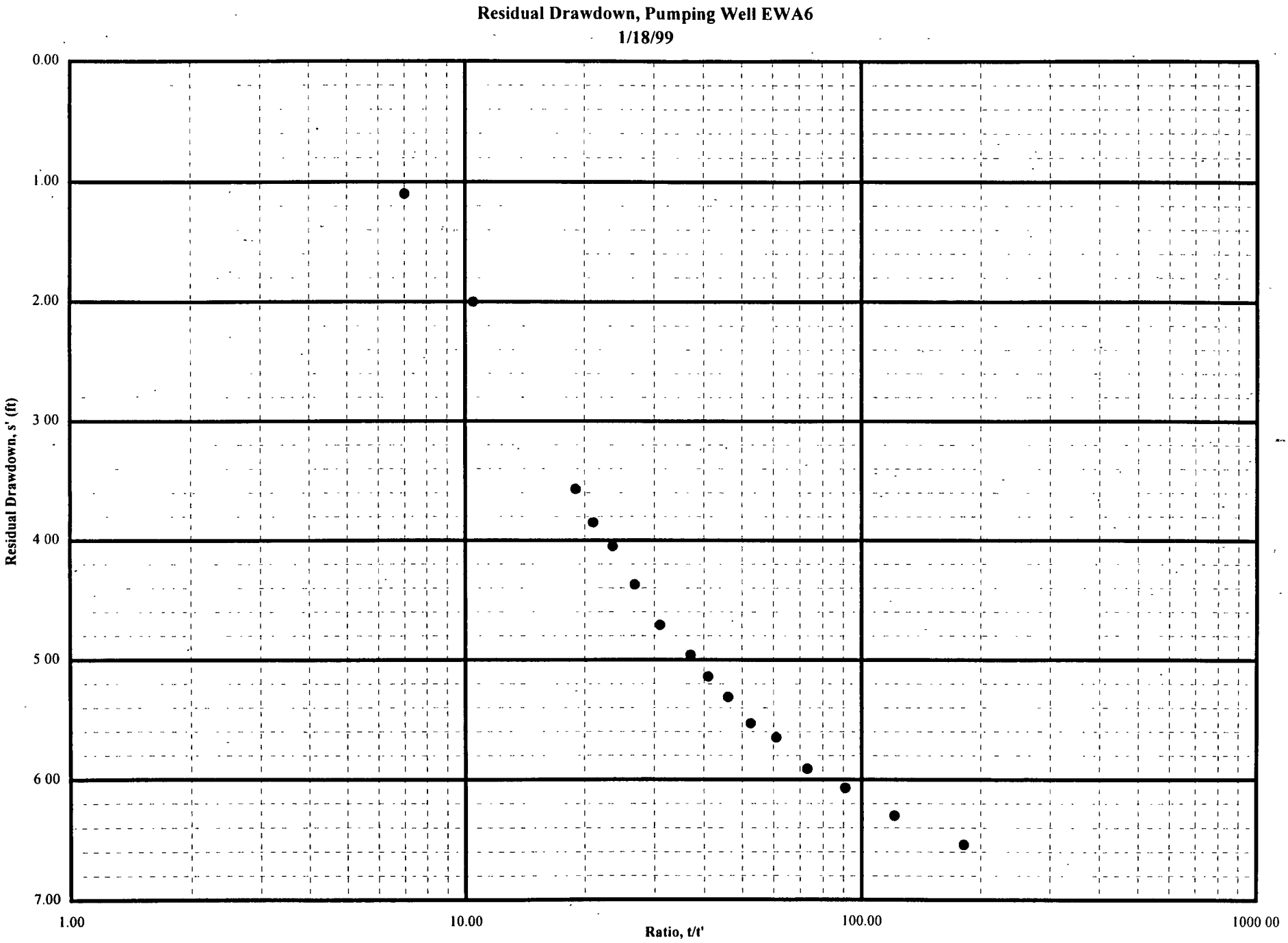
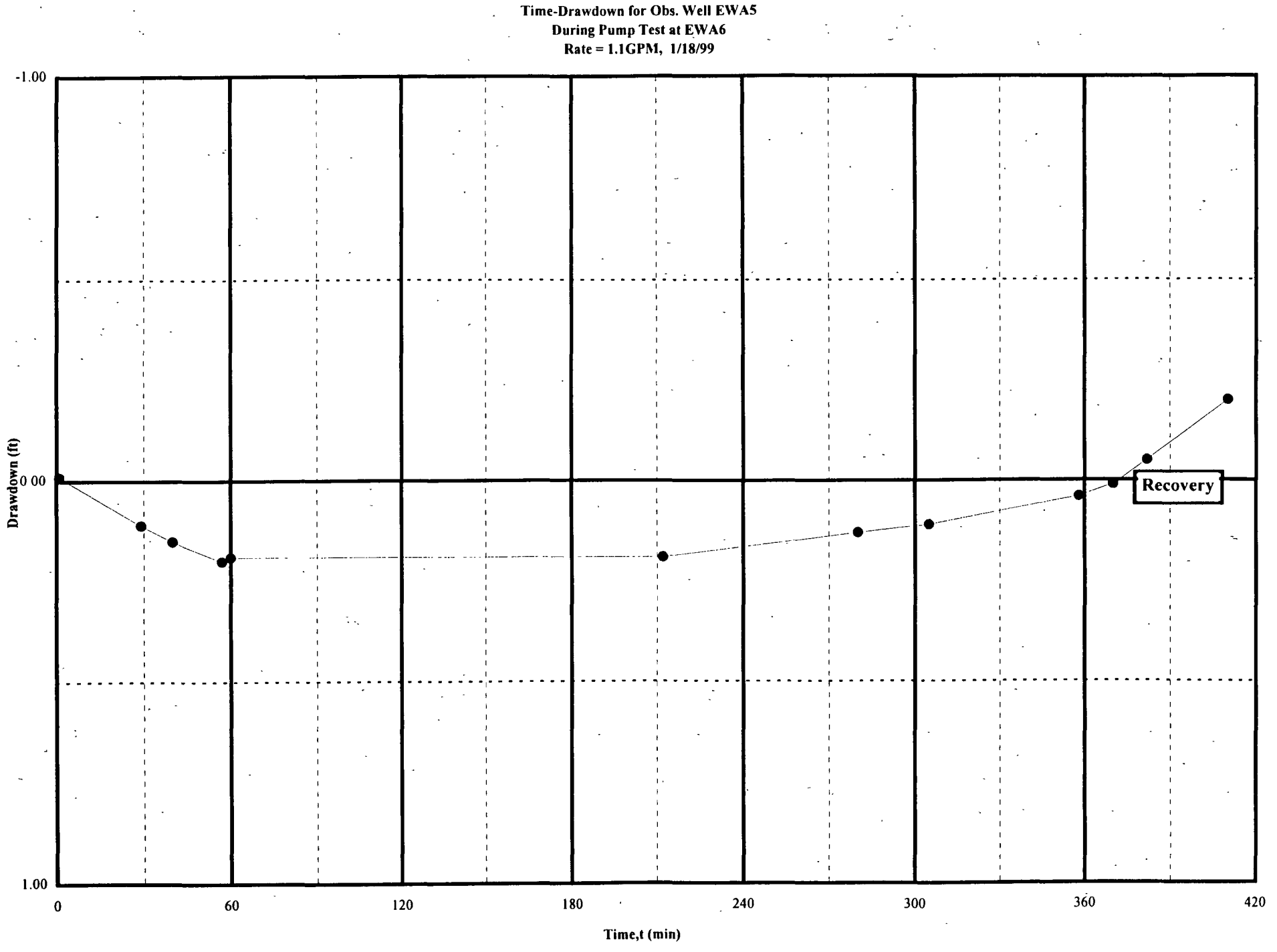

Residual Drawdown, Pumping Well EWA6
1/18/99
0.00
1.00
2.00
3 00
4 00
5 00
6 00
7.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-87


Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA6
Rate = 1.1GPM, 1/18/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Fi 8-88

Calculated Recovery Plot for Obs.Well EWA5
EWA6 Yield Test - Jan. 18, 1999

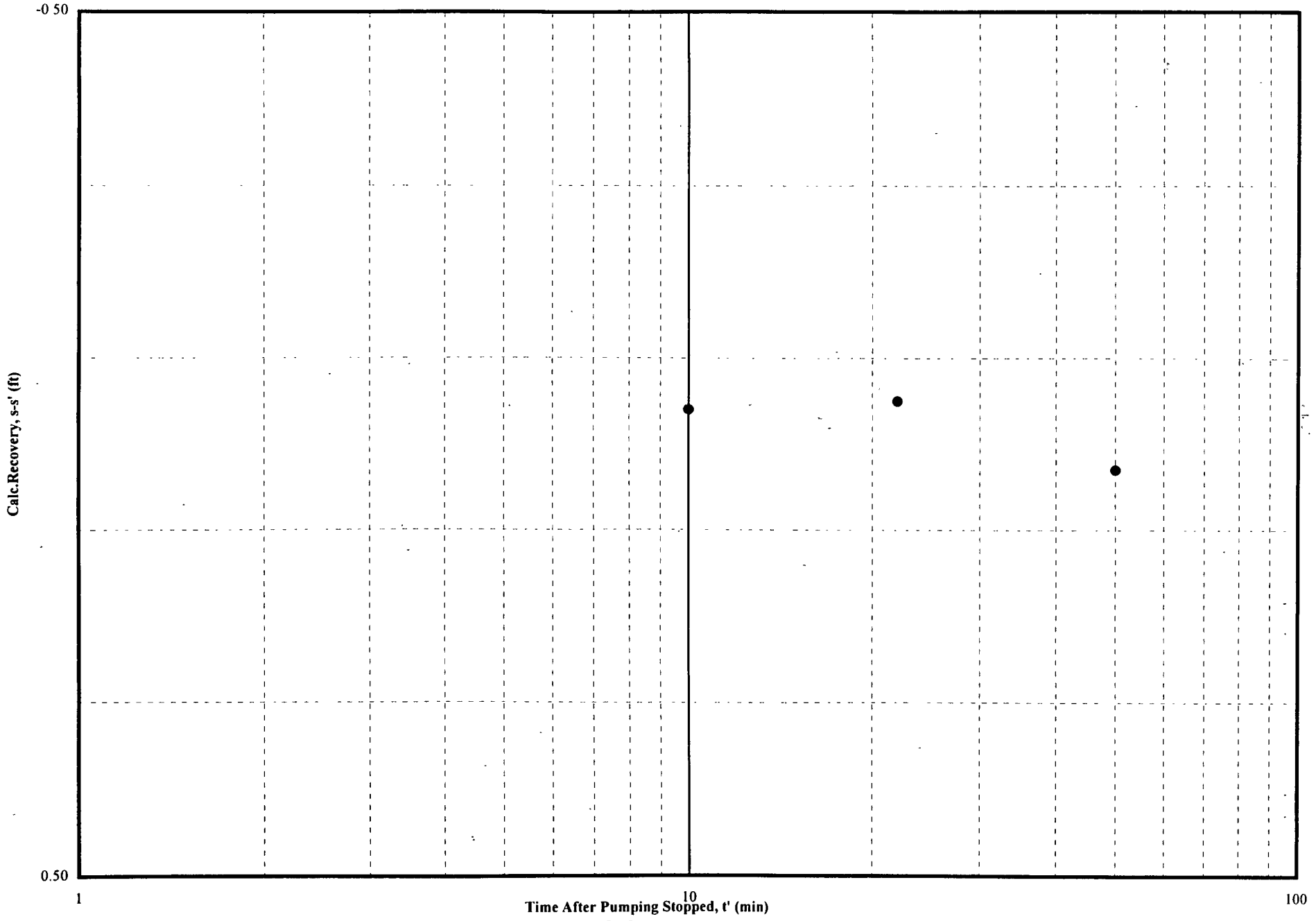


Figure 8-89

Residual Drawdown, Observation Well EWA5
Yield Test at EWA6, 1/18/99

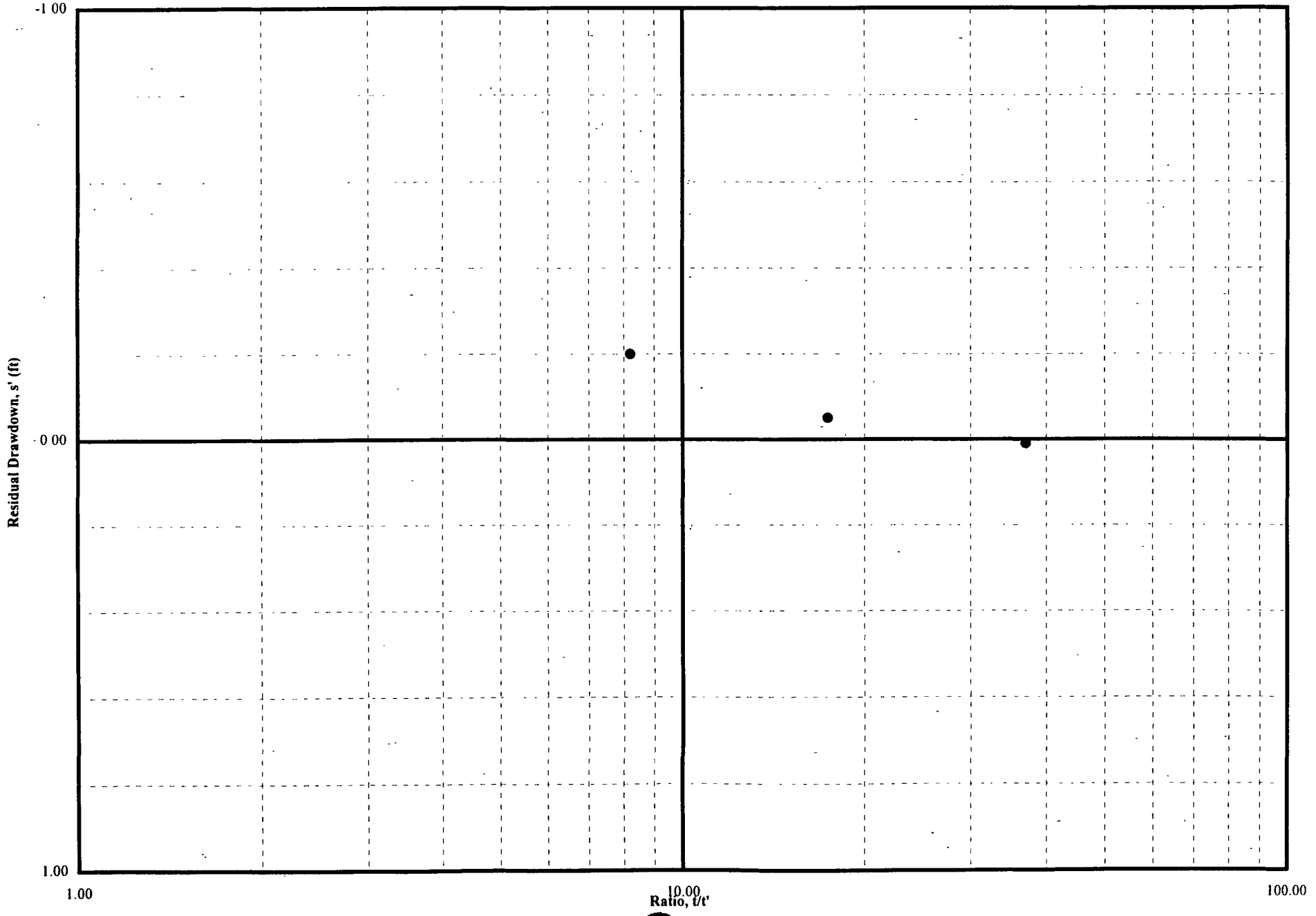


Figure 8-90

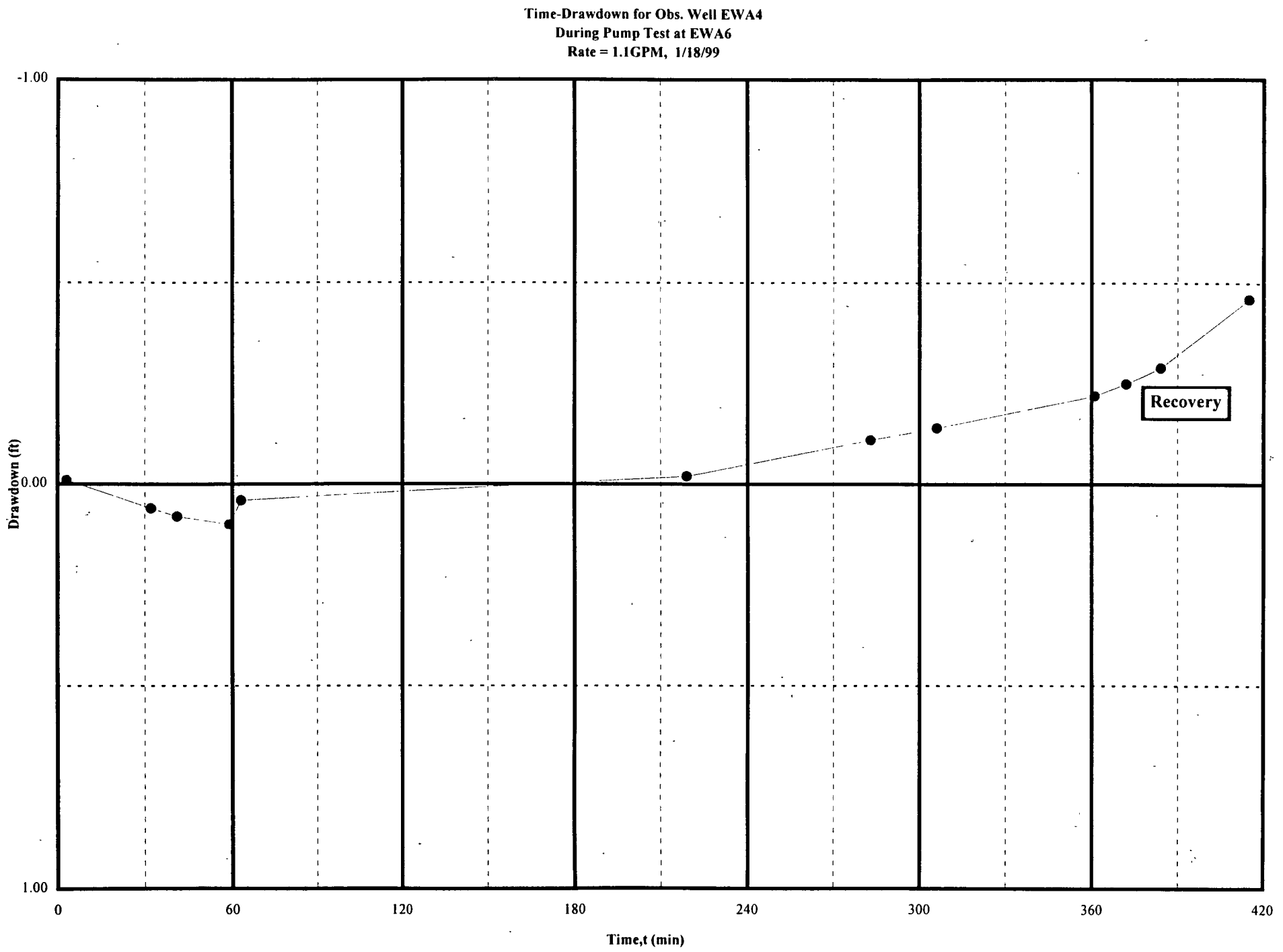
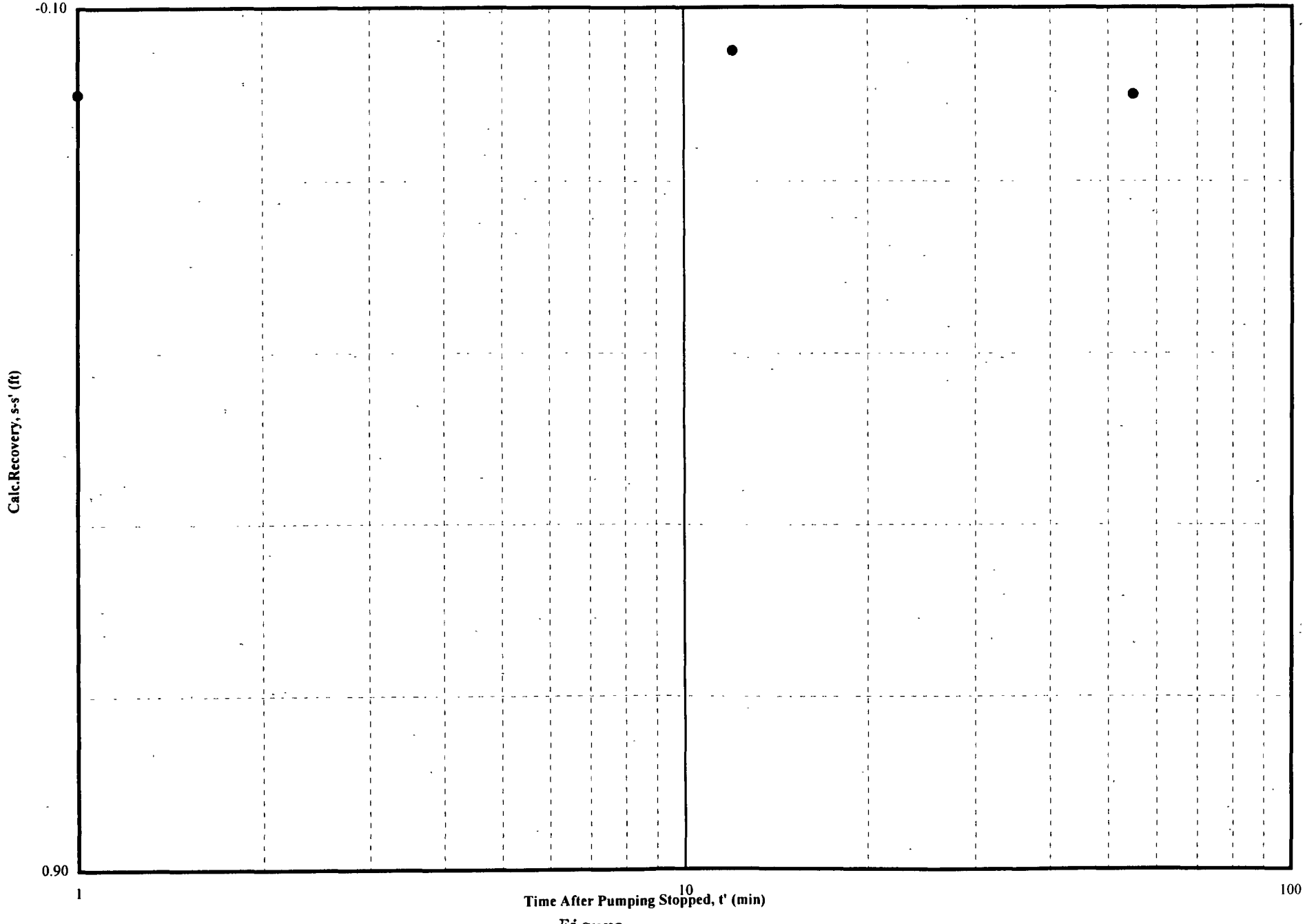

Time-Drawdown for Obs. Well EWA4
During Pump Test at EWA6
Rate = 1.1GPM, 1/18/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-91

Calculated Recovery Plot for Obs.Well EWA5
EWA6 Yield Test - Jan. 18, 1999



Figure

Residual Drawdown, Observation Well EWA5
Yield Test at EWA6, 1/18/99

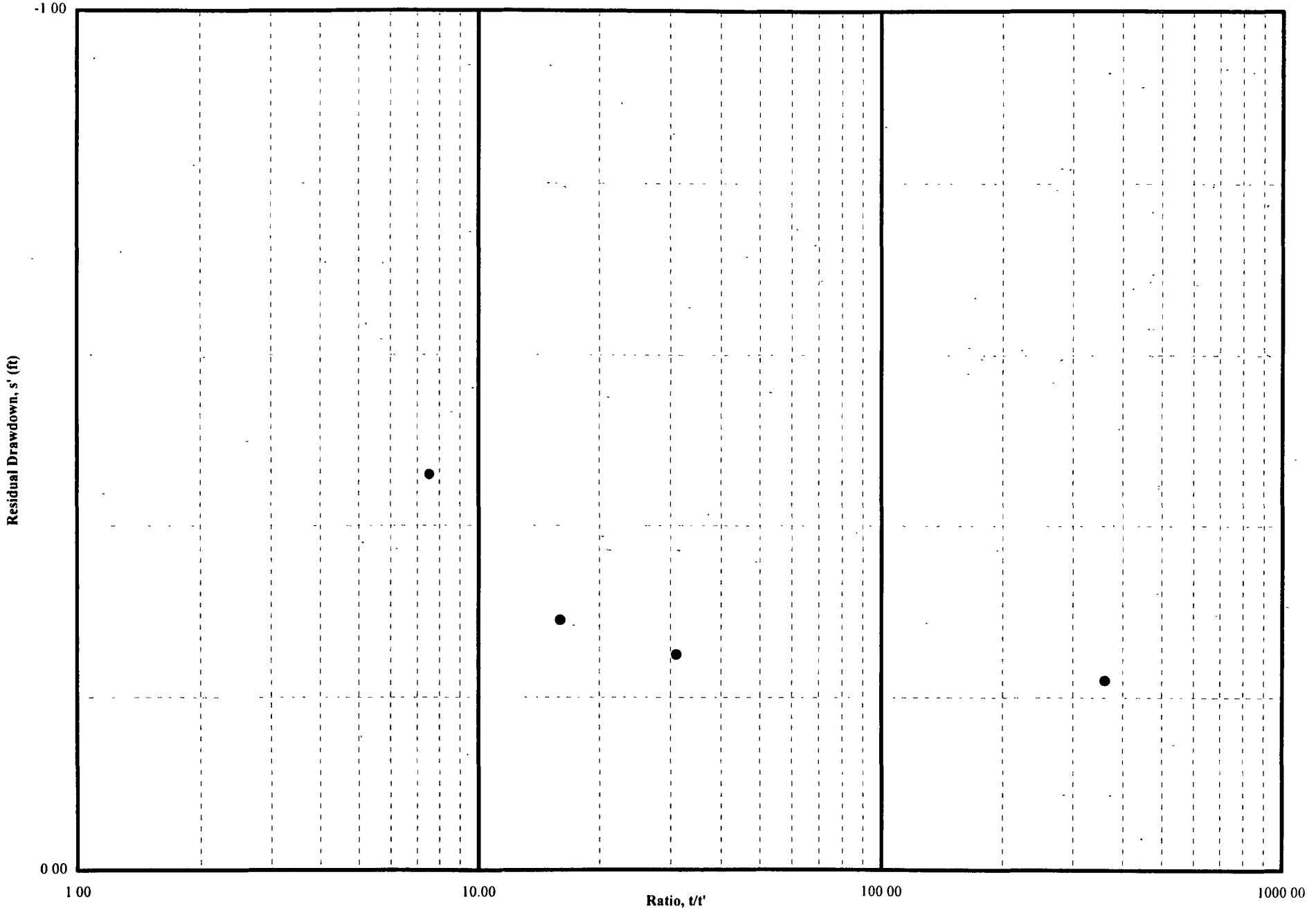


Figure 8-93

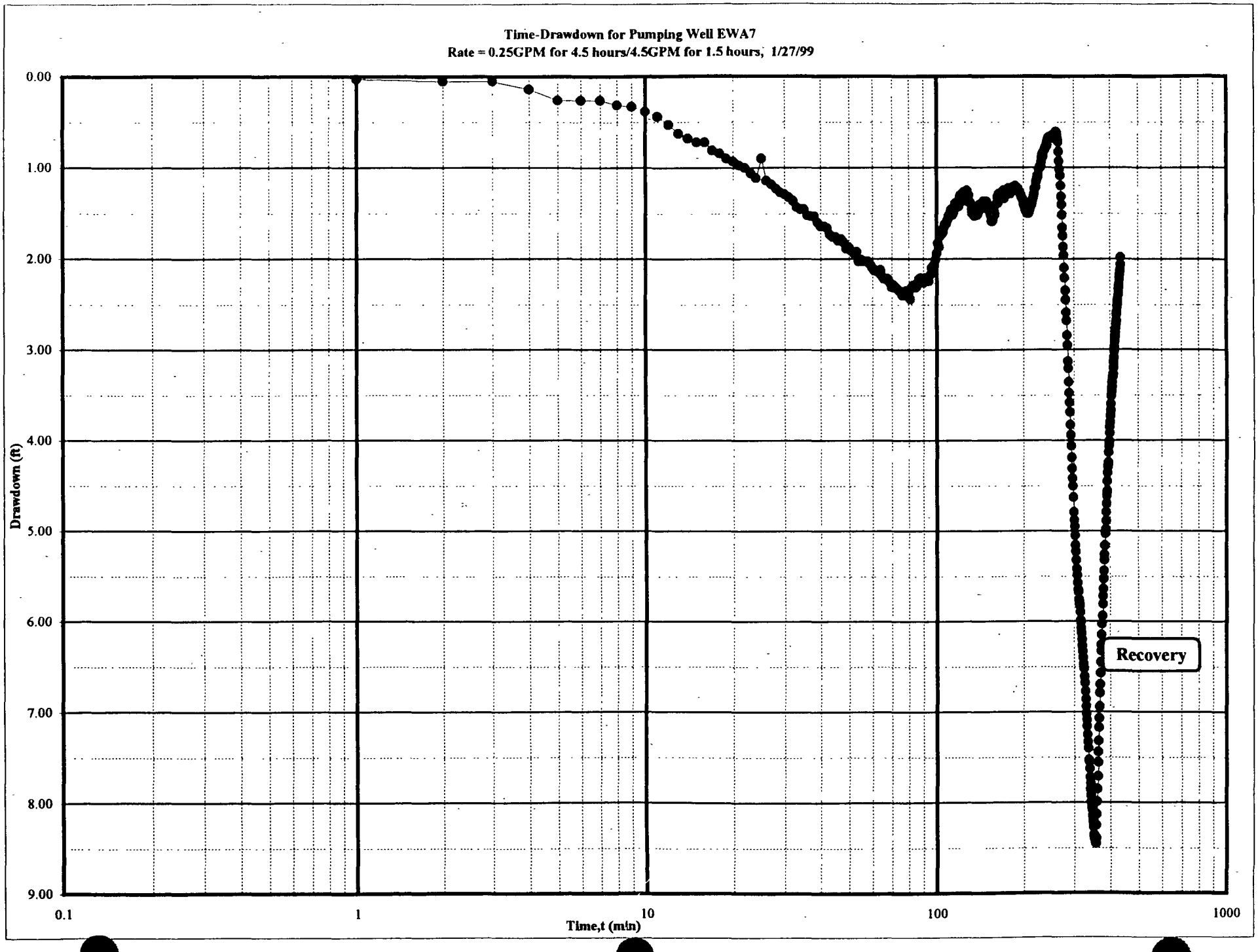

Time-Drawdown for Pumping Well EWA7
Rate = 0.25GPM for 4.5 hours/4.5GPM for 1.5 hours, 1/27/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 3-94

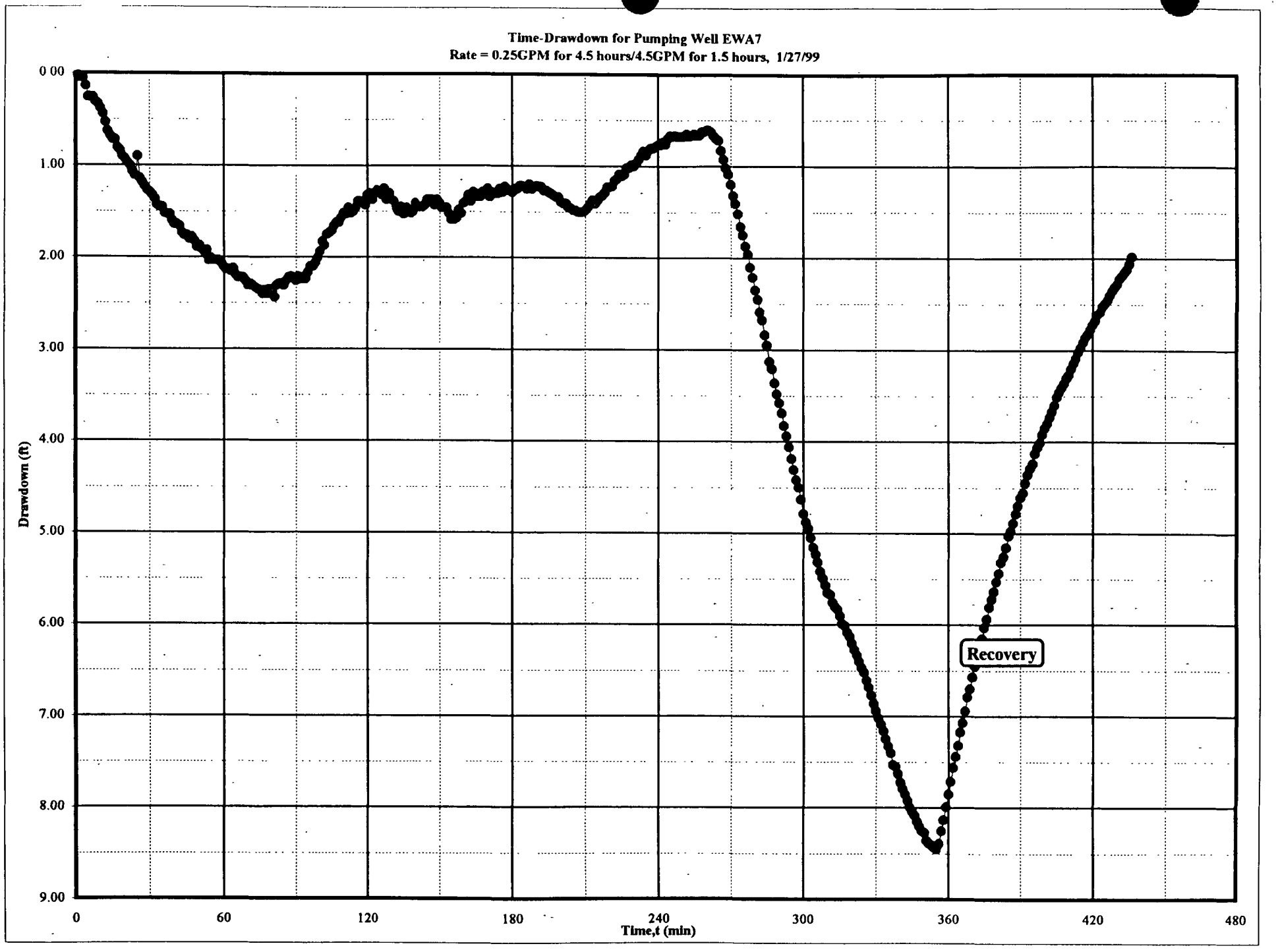
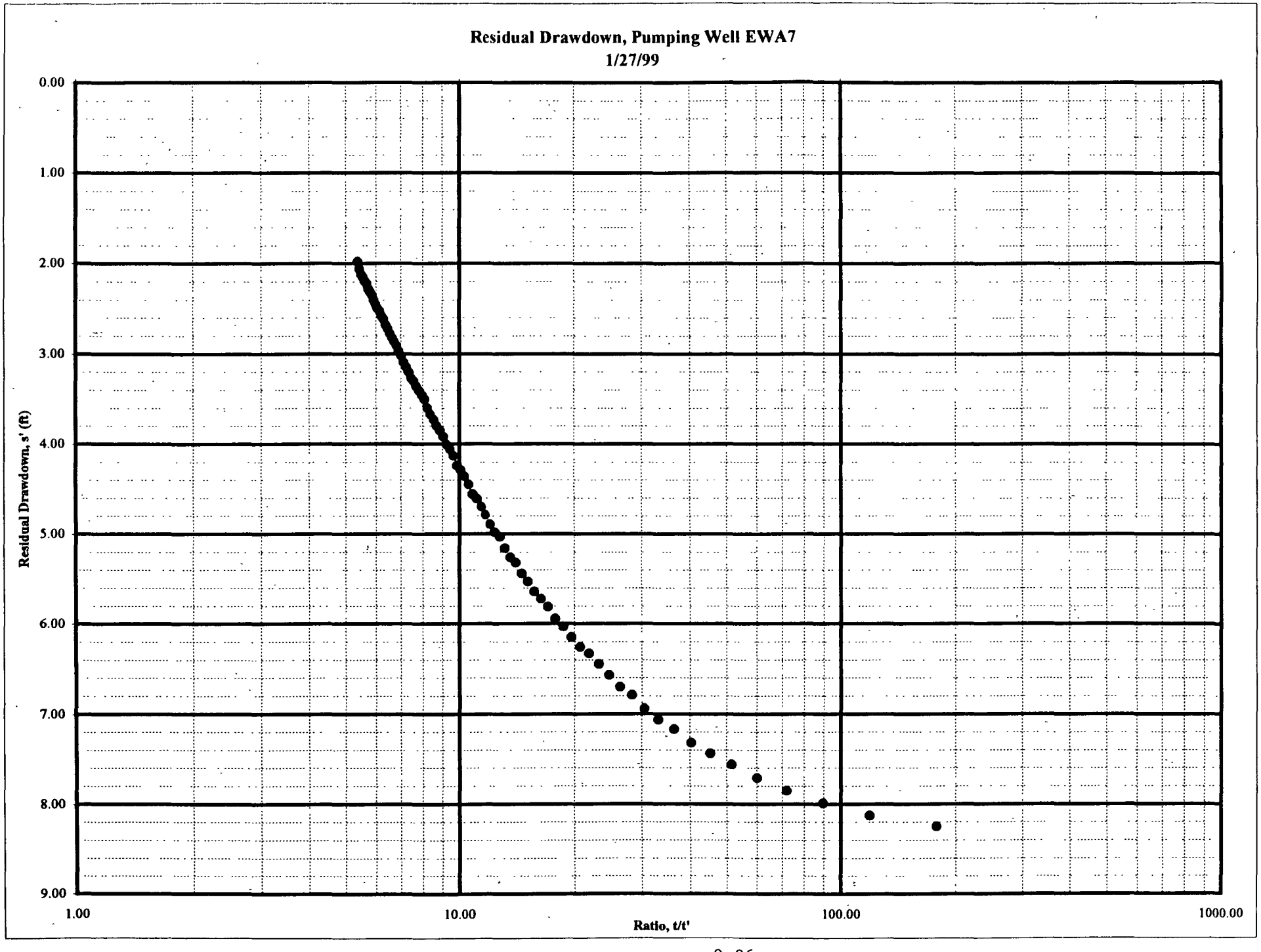

Time-Drawdown for Pumping Well EWA7
Rate = 0.25GPM for 4.5 hours/4.5GPM for 1.5 hours, 1/27/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-95


Residual Drawdown, Pumping Well EWA7
1/27/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

gure 8-96

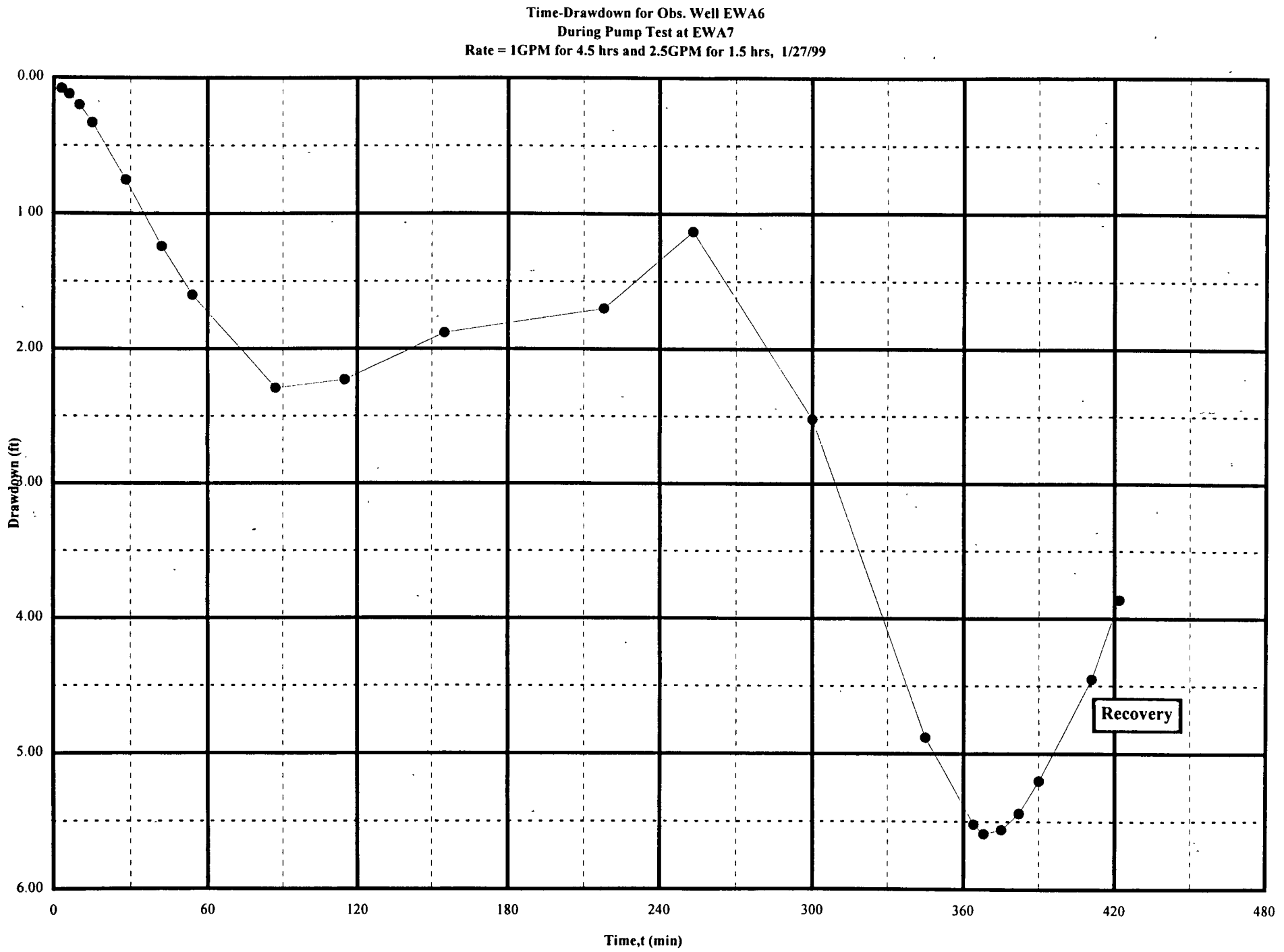

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA7
Rate = 1GPM for 4.5 hrs and 2.5GPM for 1.5 hrs, 1/27/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-97

Calculated Recovery Plot for Obs.Well EWA6
EWA7 Yield Test - Jan. 27, 1999

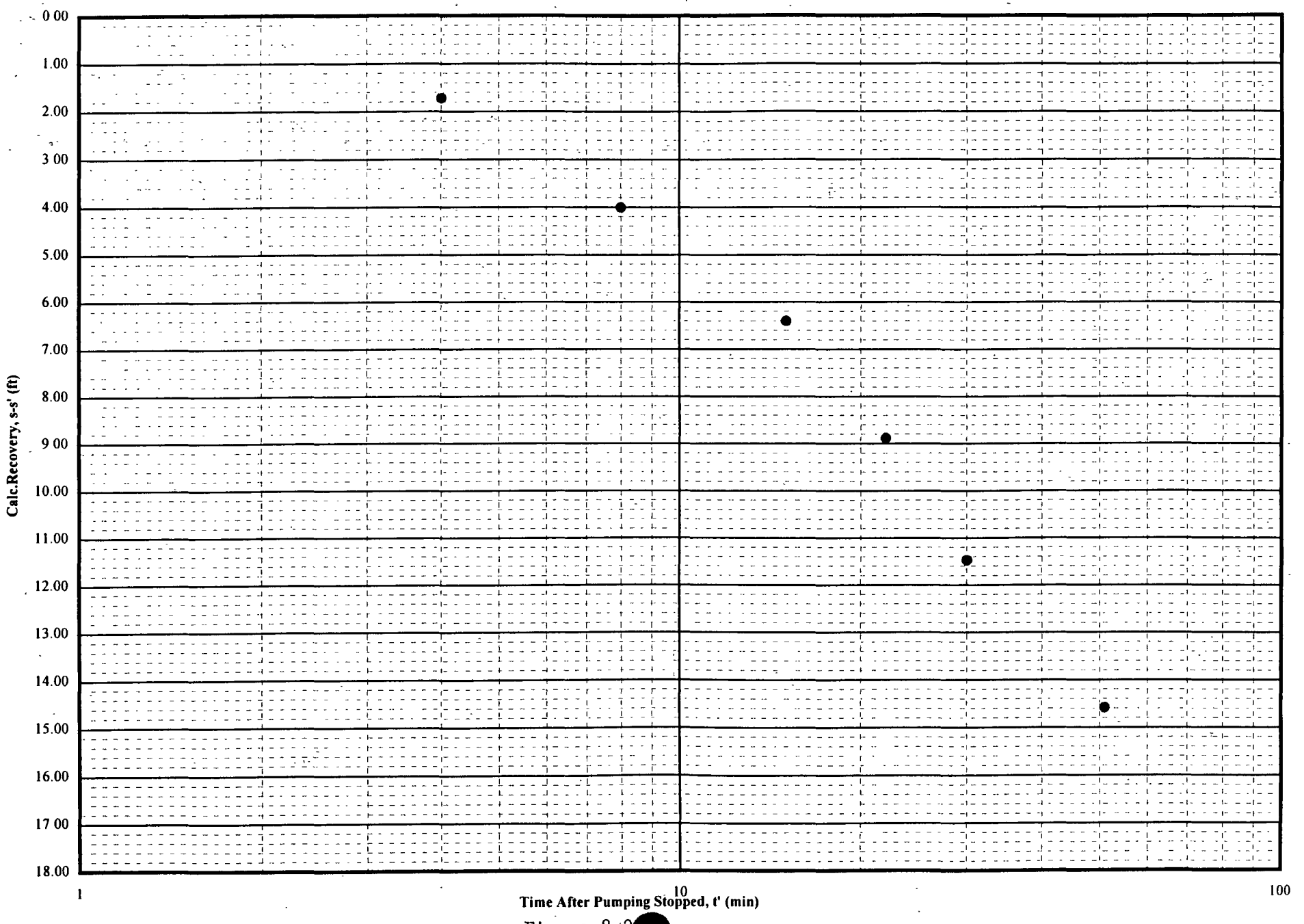


Figure 8-9

Residual Drawdown, Observation Well EWA6
Yield Test at EWA7, 1/27/99

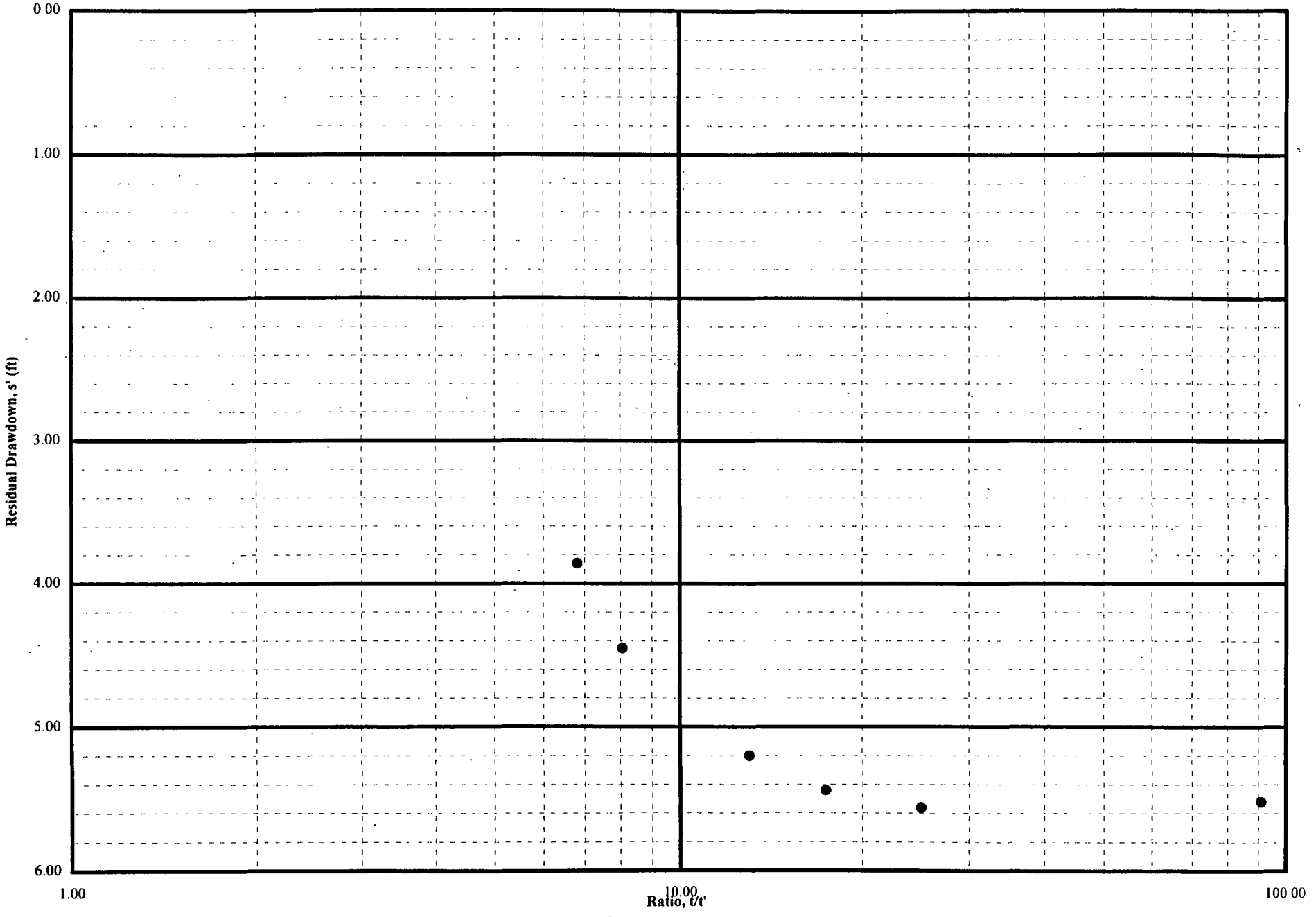


Figure 8-99

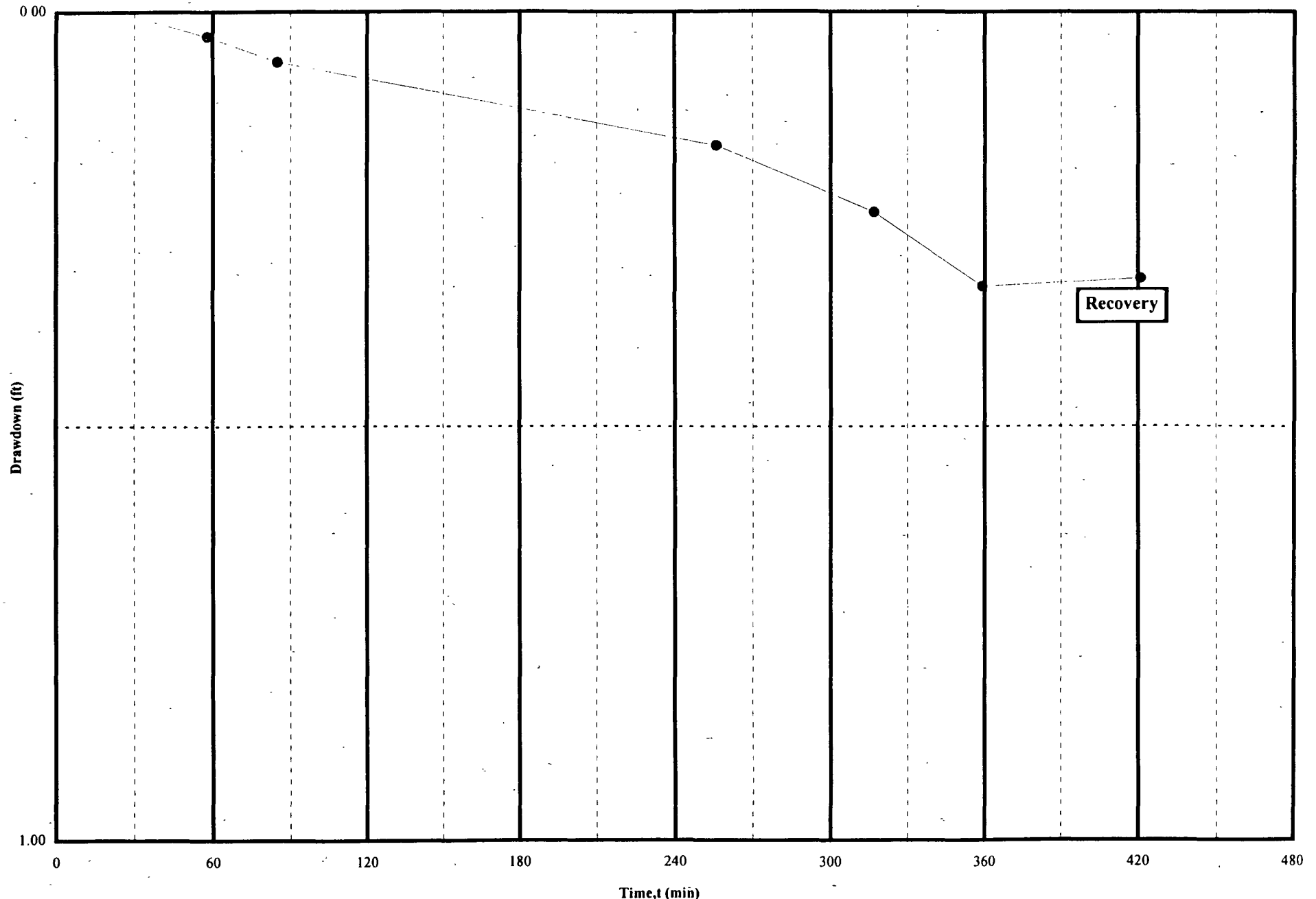

Time-Drawdown for Obs. Well OWA2
During Pump Test at EWA7
Rate = 1GPM for 4.5 hrs and 2.5GPM for 1.5 hrs, 1/27/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-100

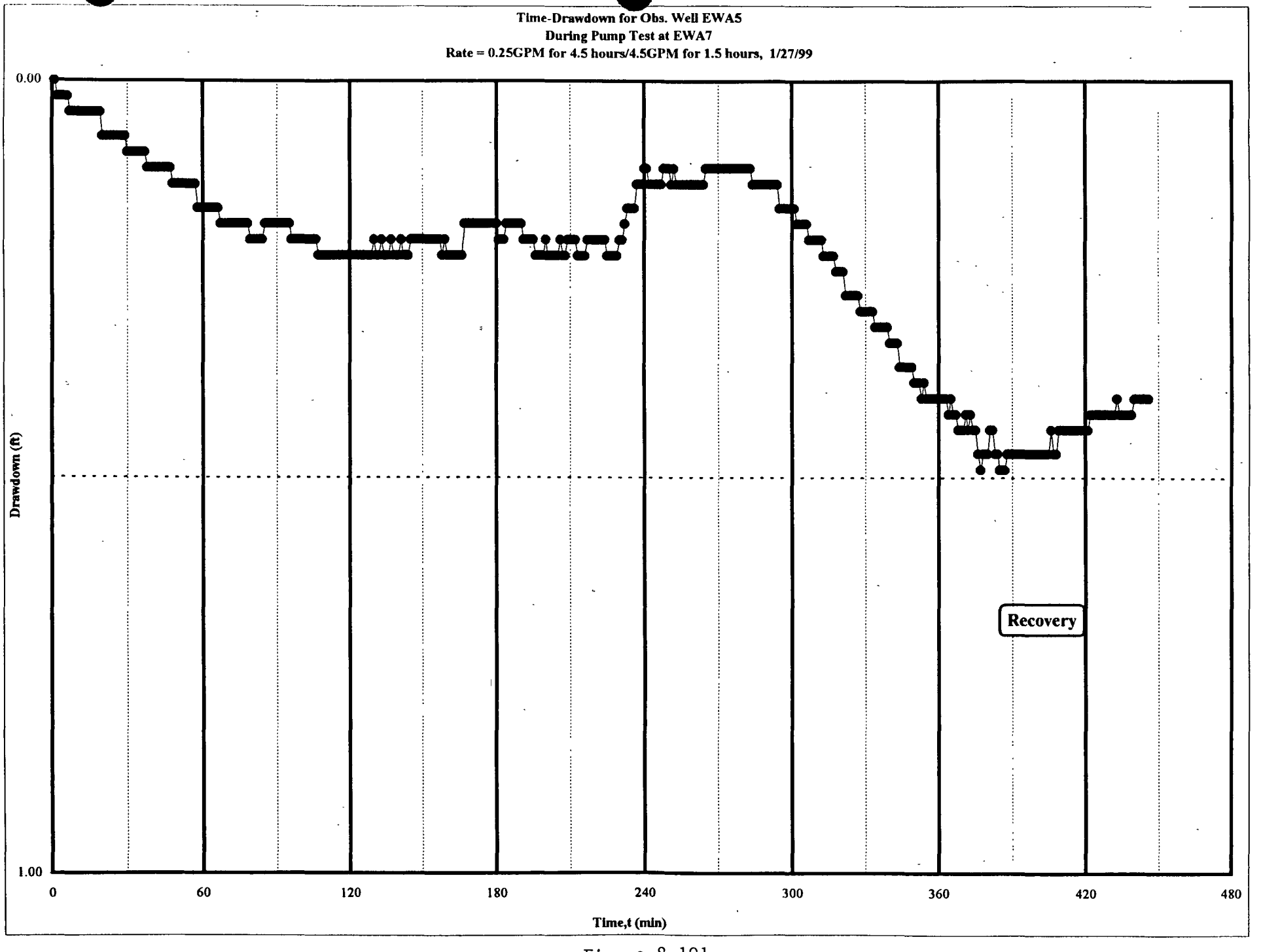

Time-Drawdown for Obs. Well EWA5
During Pump Test at EWA7
Rate = 0.25GPM for 4.5 hours/4.5GPM for 1.5 hours, 1/27/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-101

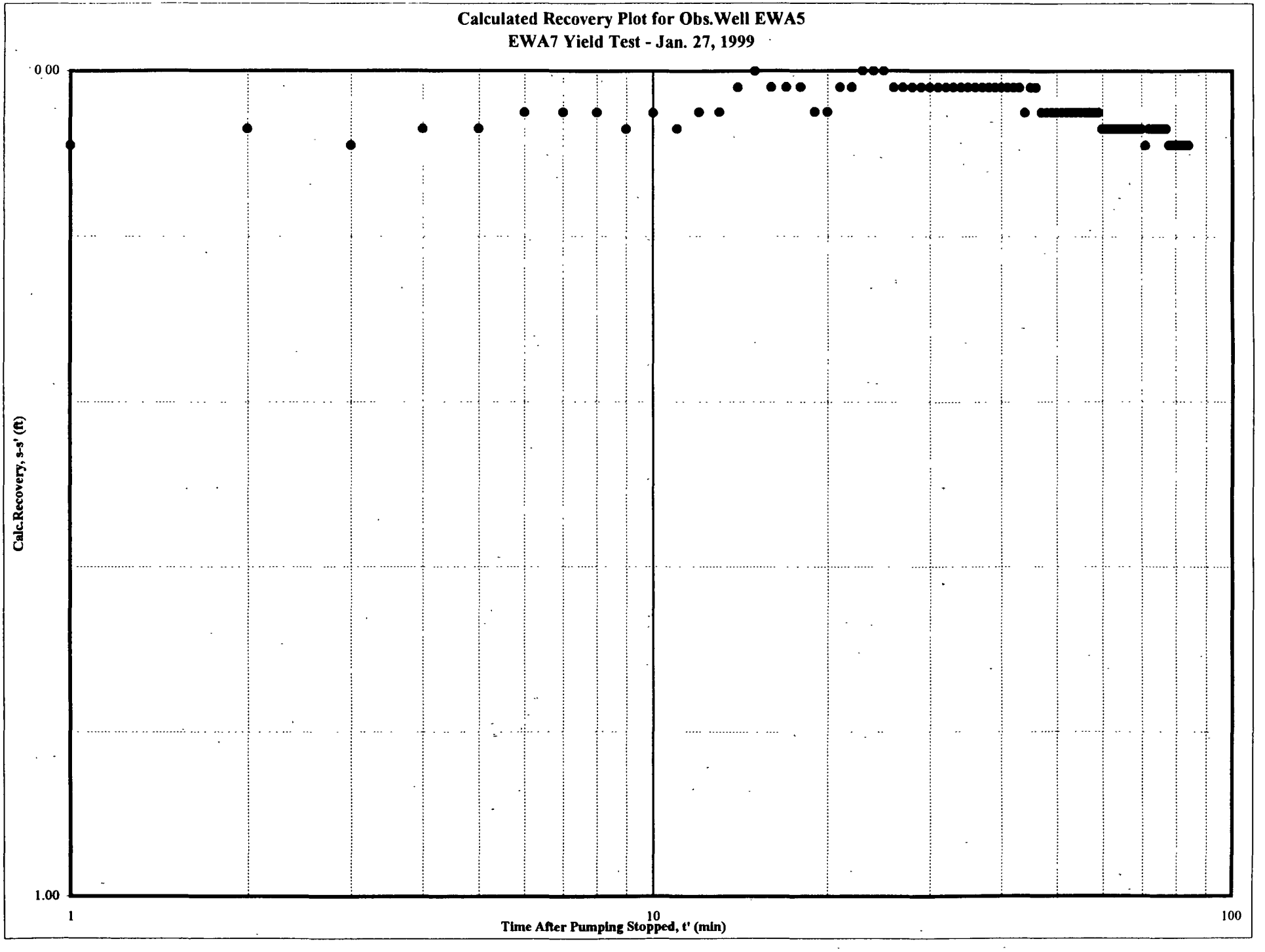

Calculated Recovery Plot for Obs.Well EWA5
EWA7 Yield Test - Jan. 27, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-1

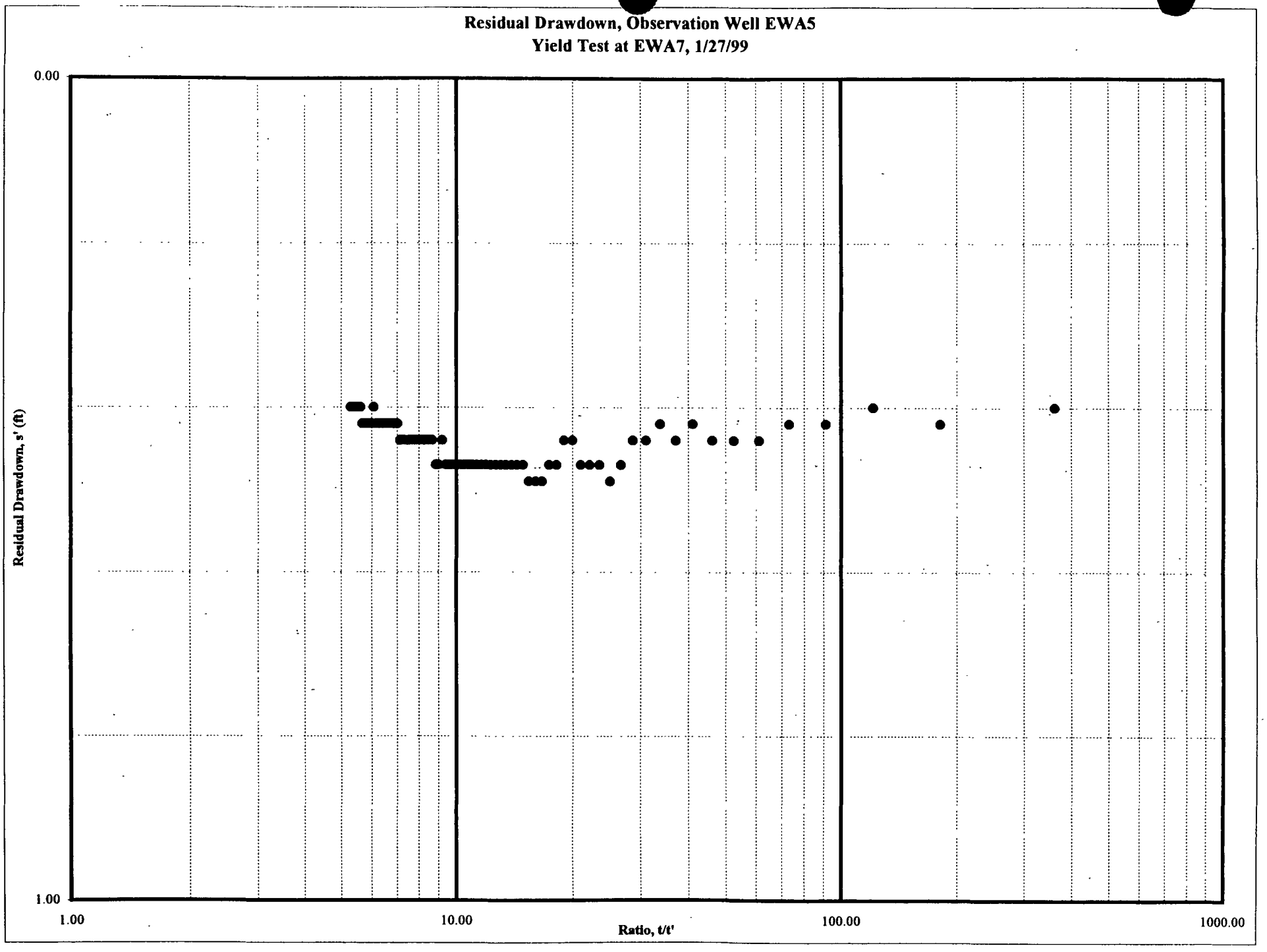
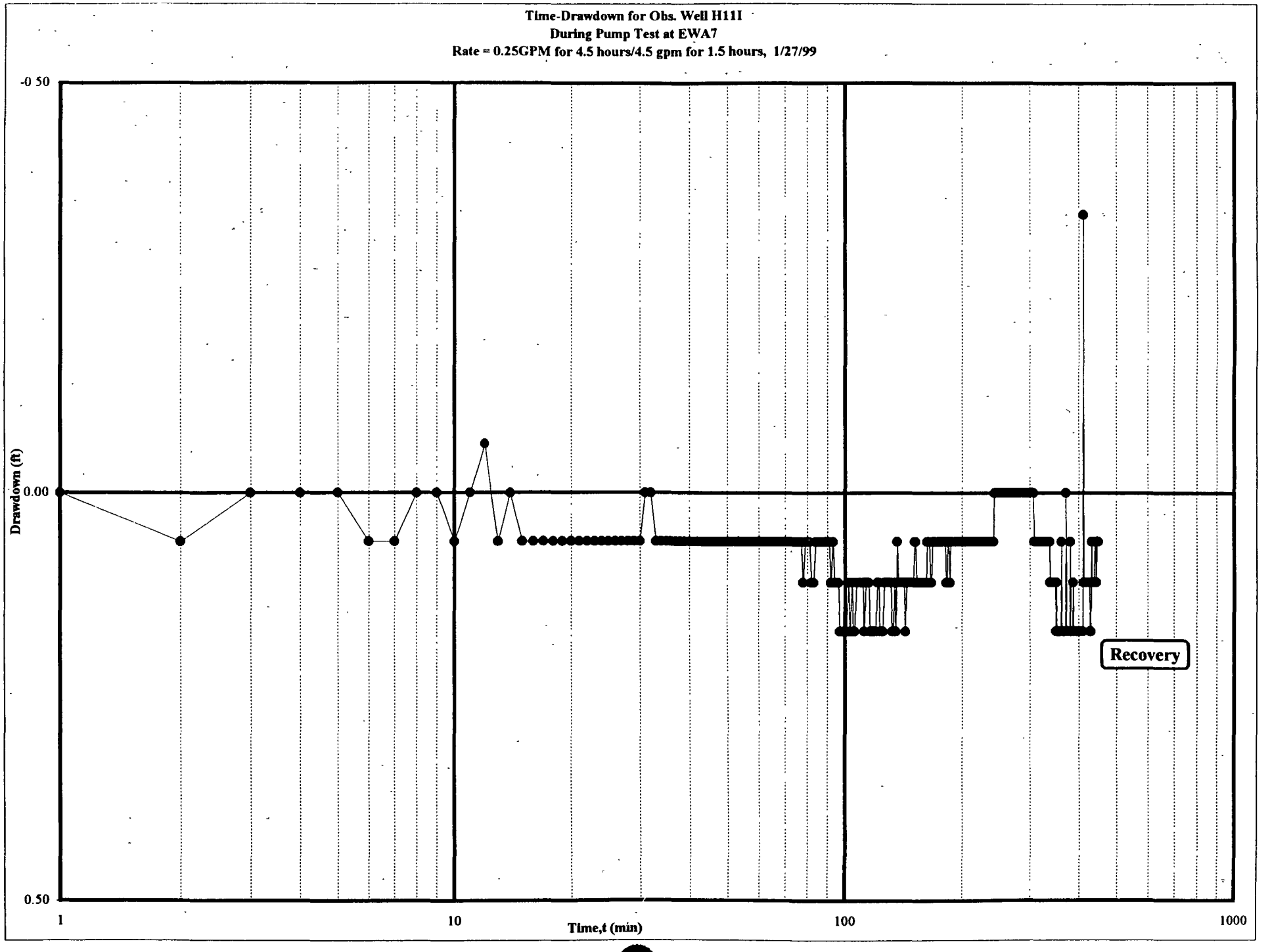

Residual Drawdown, Observation Well EWA5
Yield Test at EWA7, 1/27/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-103


Time-Drawdown for Obs. Well H11I
During Pump Test at EWA7
Rate = 0.25GPM for 4.5 hours/4.5 gpm for 1.5 hours, 1/27/99
-0 50
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figur[illegible]-104

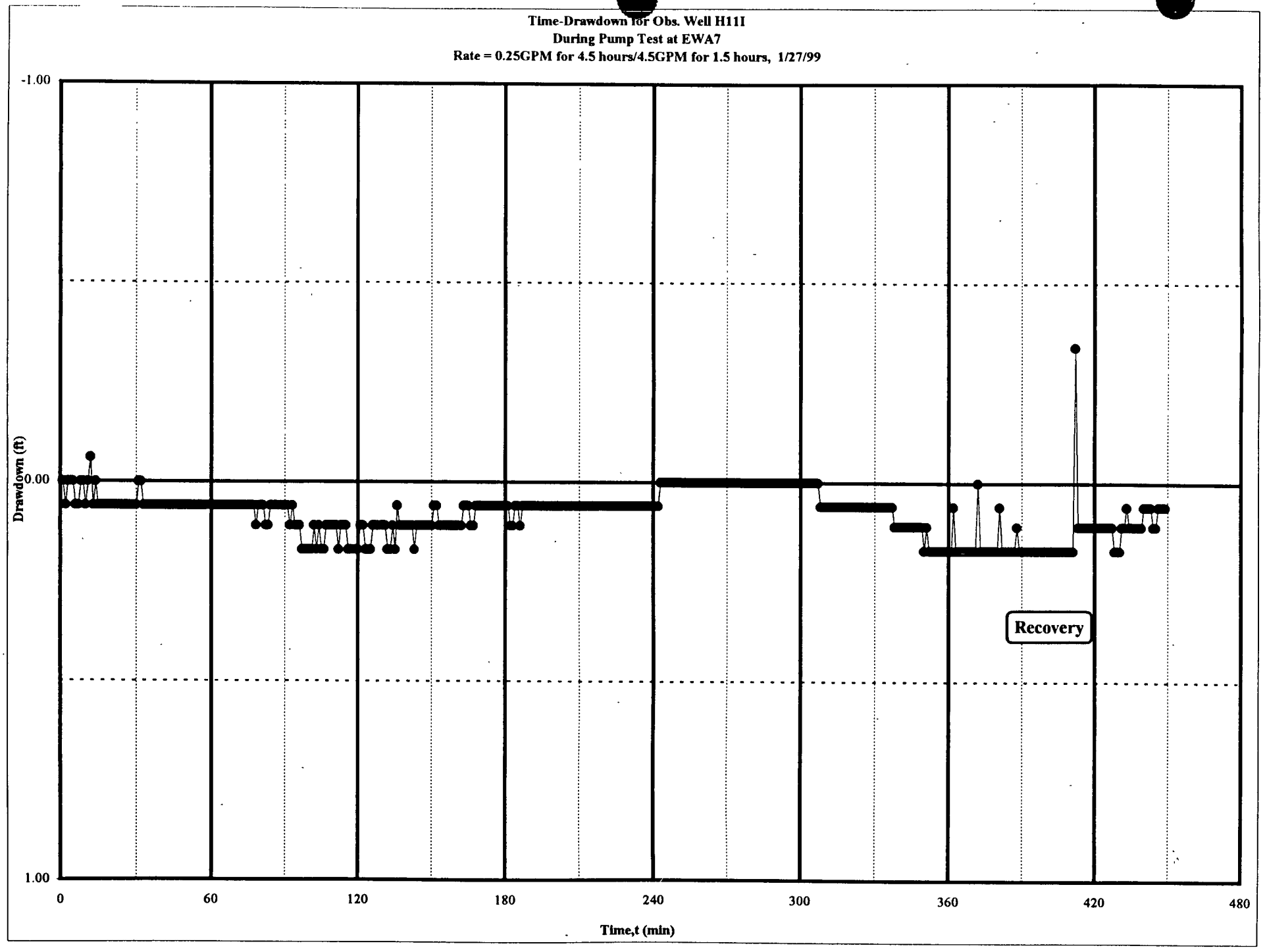

Time-Drawdown for Obs. Well H11I
During Pump Test at EWA7
Rate = 0.25GPM for 4.5 hours/4.5GPM for 1.5 hours, 1/27/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-105

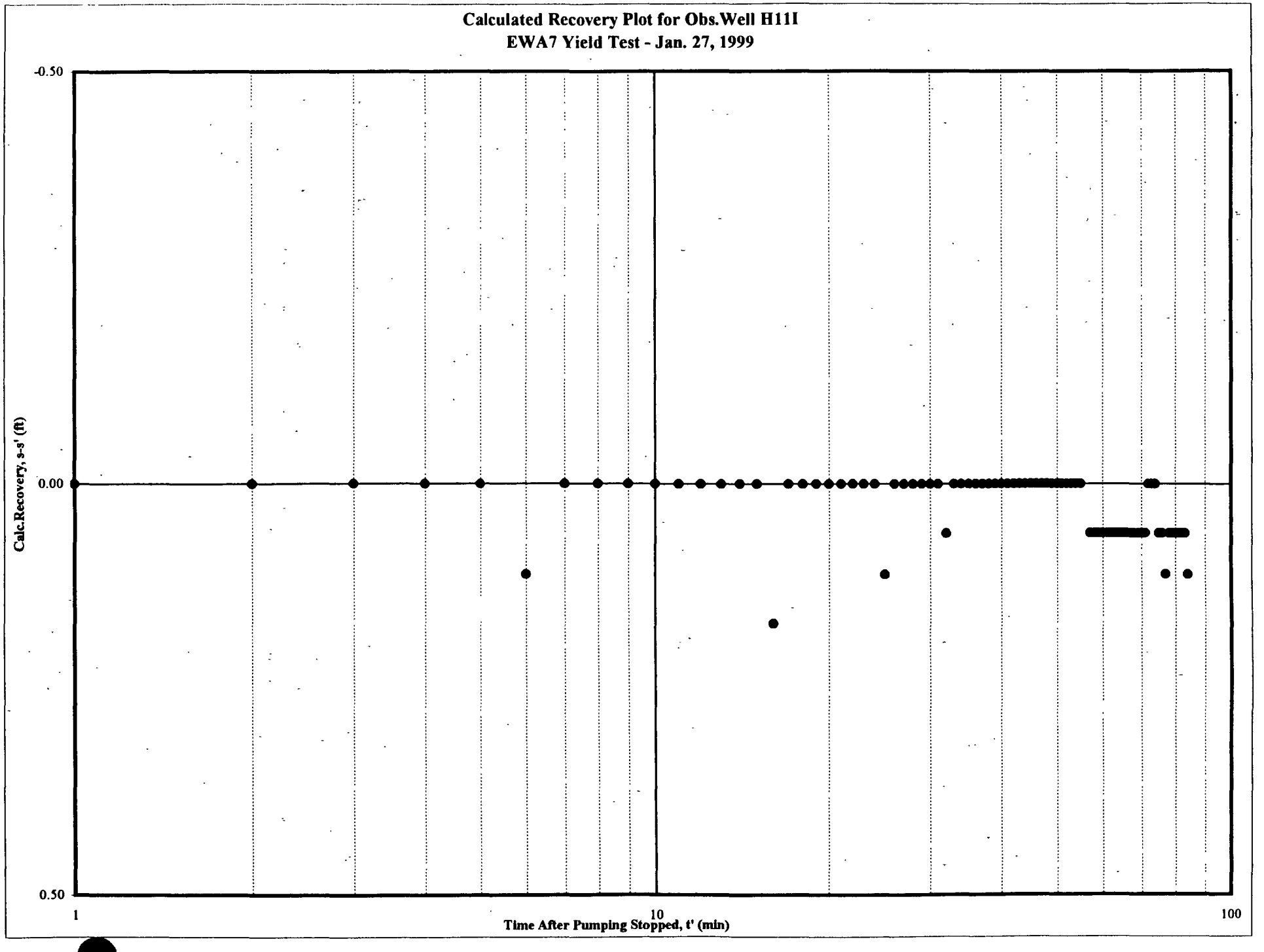

Calculated Recovery Plot for Obs.Well H11I
EWA7 Yield Test - Jan. 27, 1999
-0.50
0.00
0.50
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-

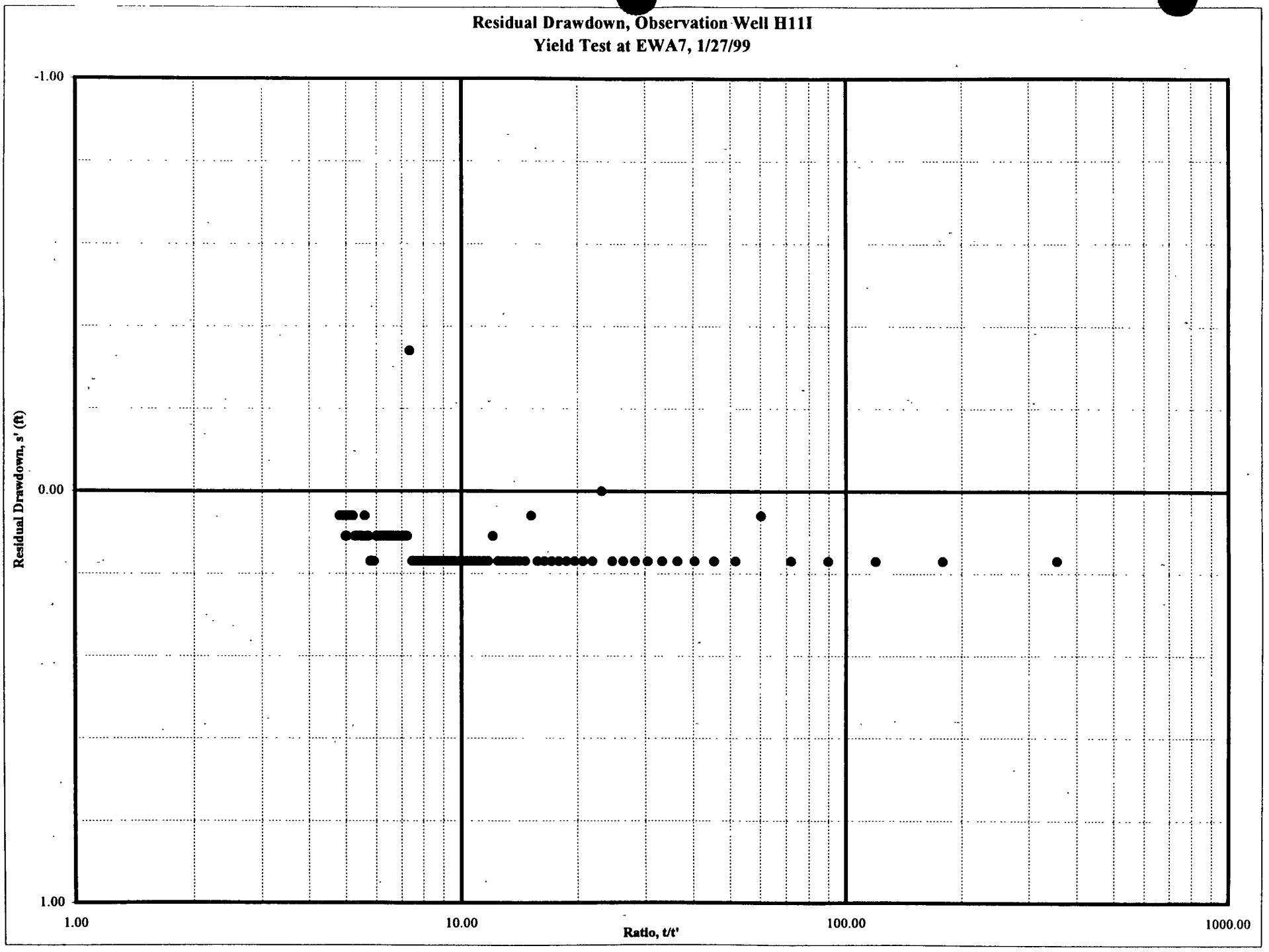

Residual Drawdown, Observation Well H11I
Yield Test at EWA7, 1/27/99
-1.00
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-107

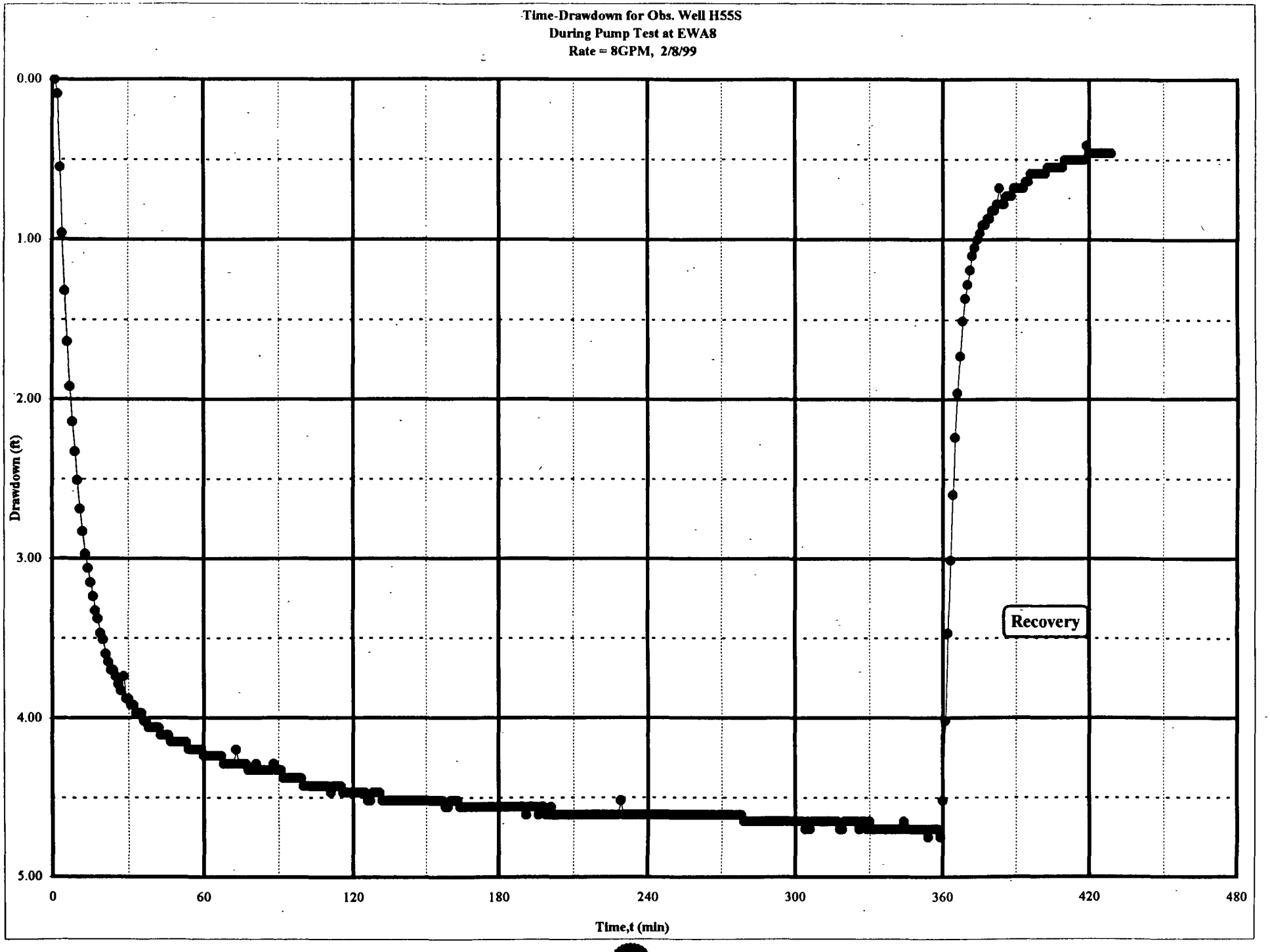

Time-Drawdown for Obs. Well H55S
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-108

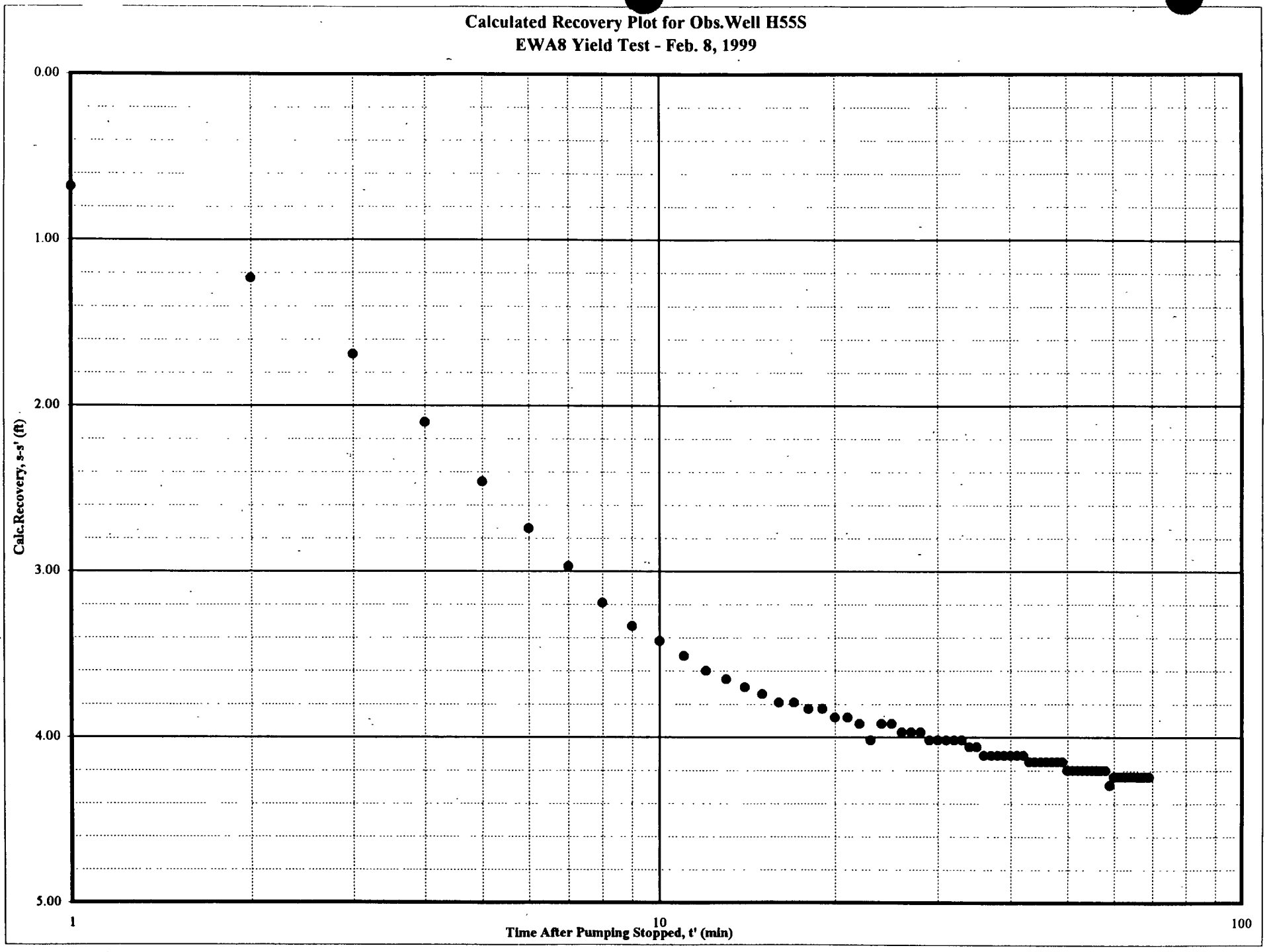

Calculated Recovery Plot for Obs.Well H55S
EWA8 Yield Test - Feb. 8, 1999
0.00
1.00
2.00
3.00
4.00
5.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-109

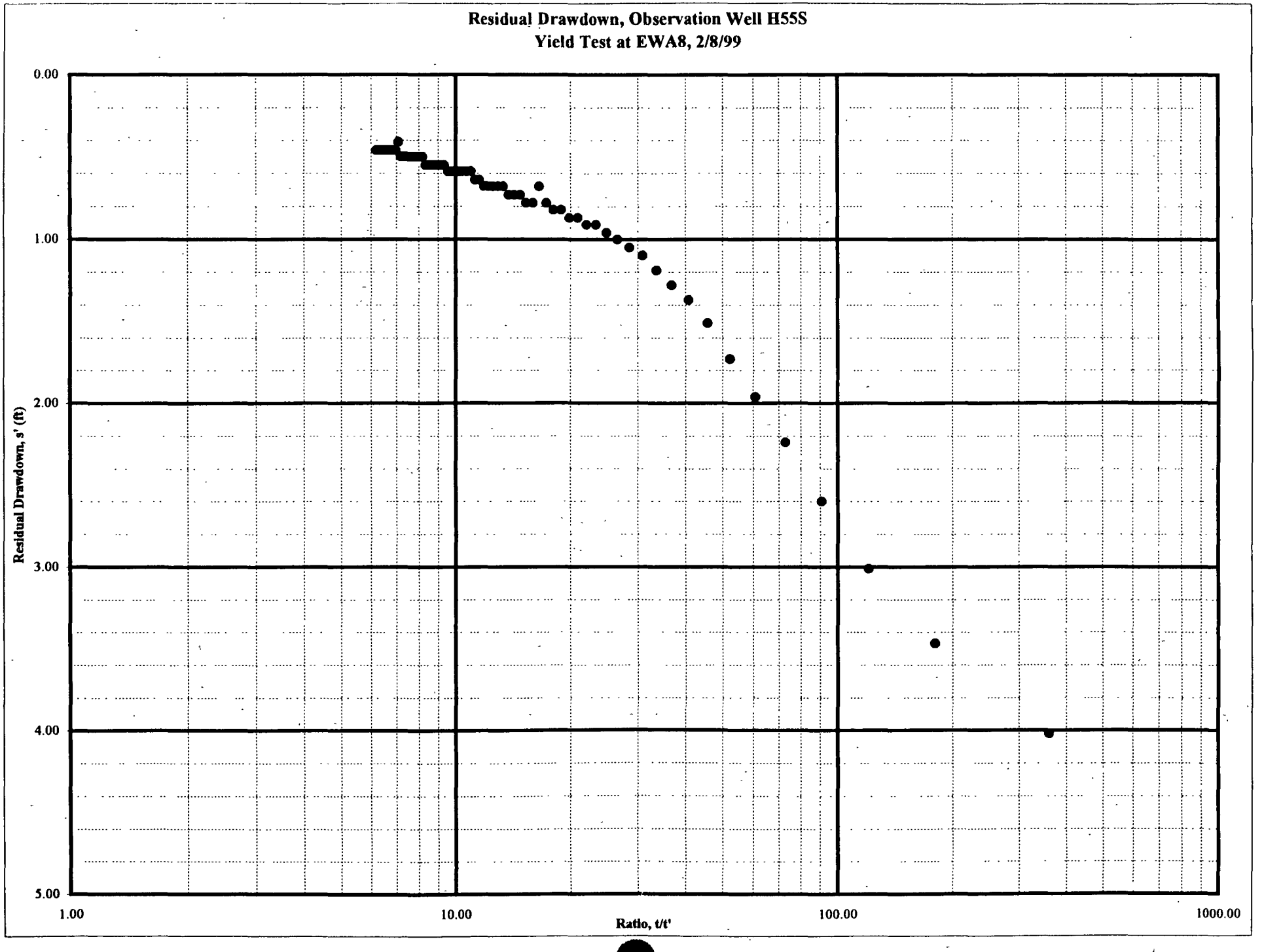

Residual Drawdown, Observation Well H55S
Yield Test at EWA8, 2/8/99
0.00
1.00
2.00
3.00
4.00
5.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-110

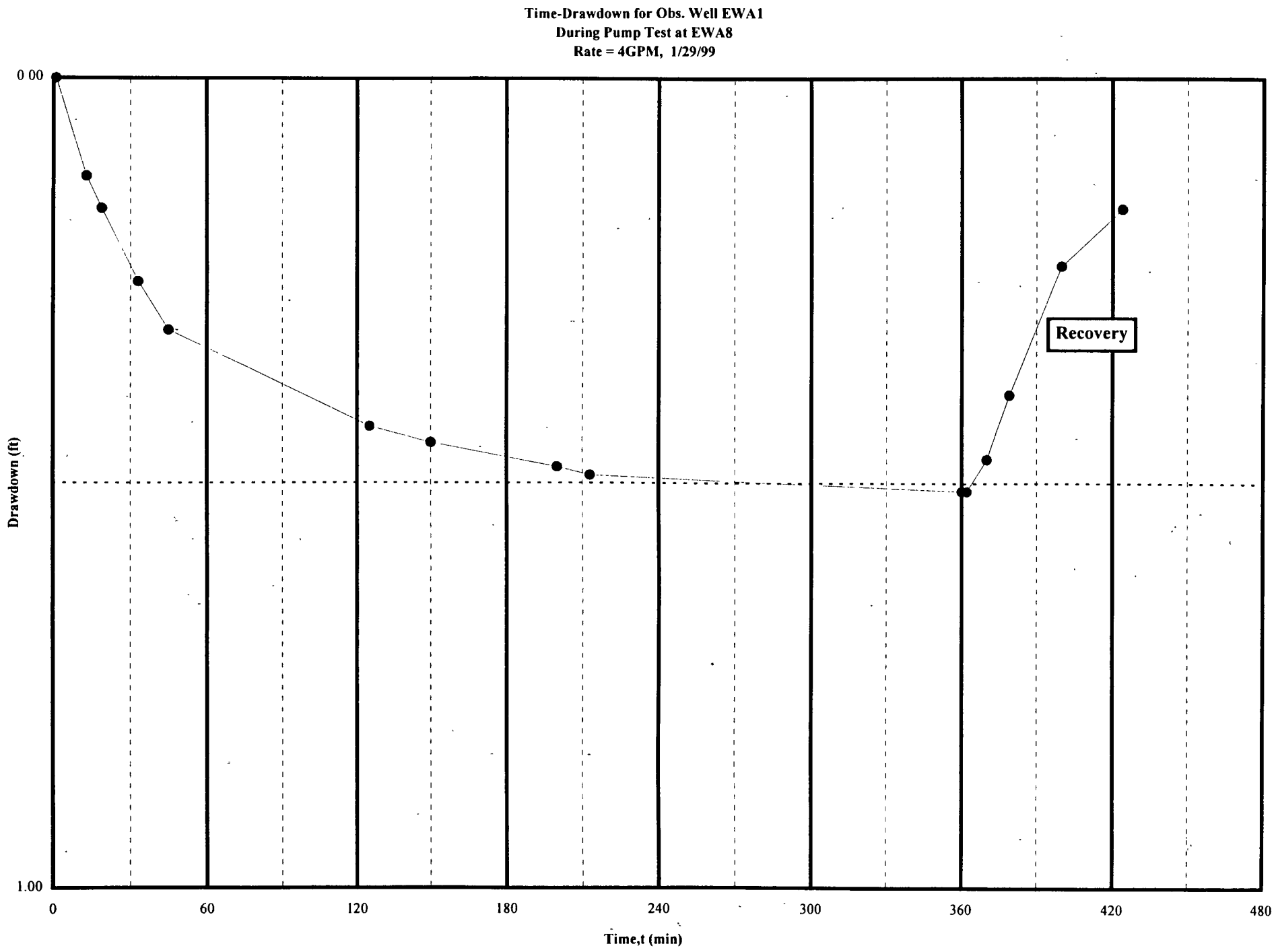

Time-Drawdown for Obs. Well EWA1
During Pump Test at EWA8
Rate = 4GPM, 1/29/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-111

Calculated Recovery Plot for Obs.Well EWA1
EWA8 Yield Test - Jan. 29, 1999

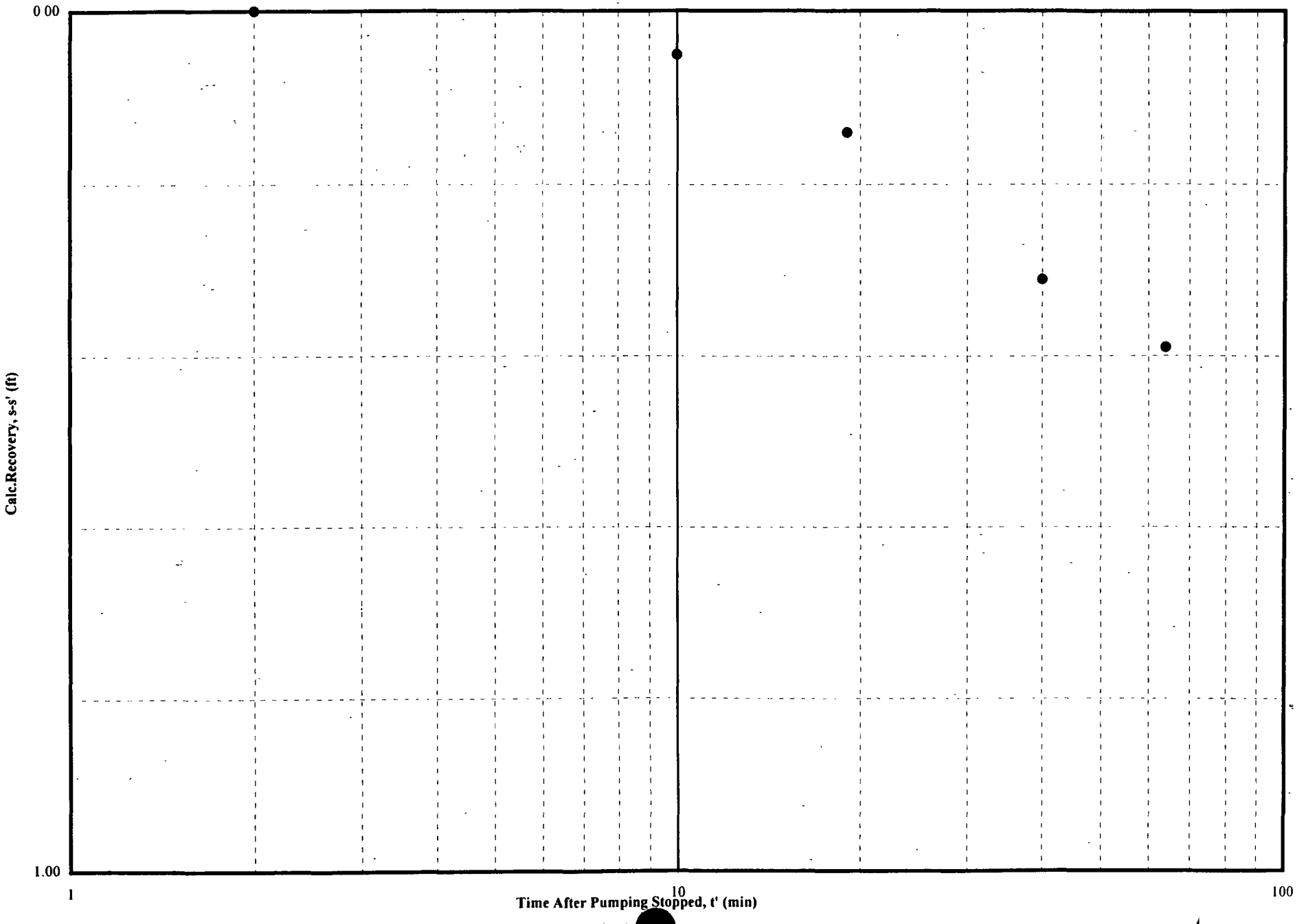


Figure 8-1

Residual Drawdown, Observation Well EWA1
Yield Test at EWA8, 1/29/99

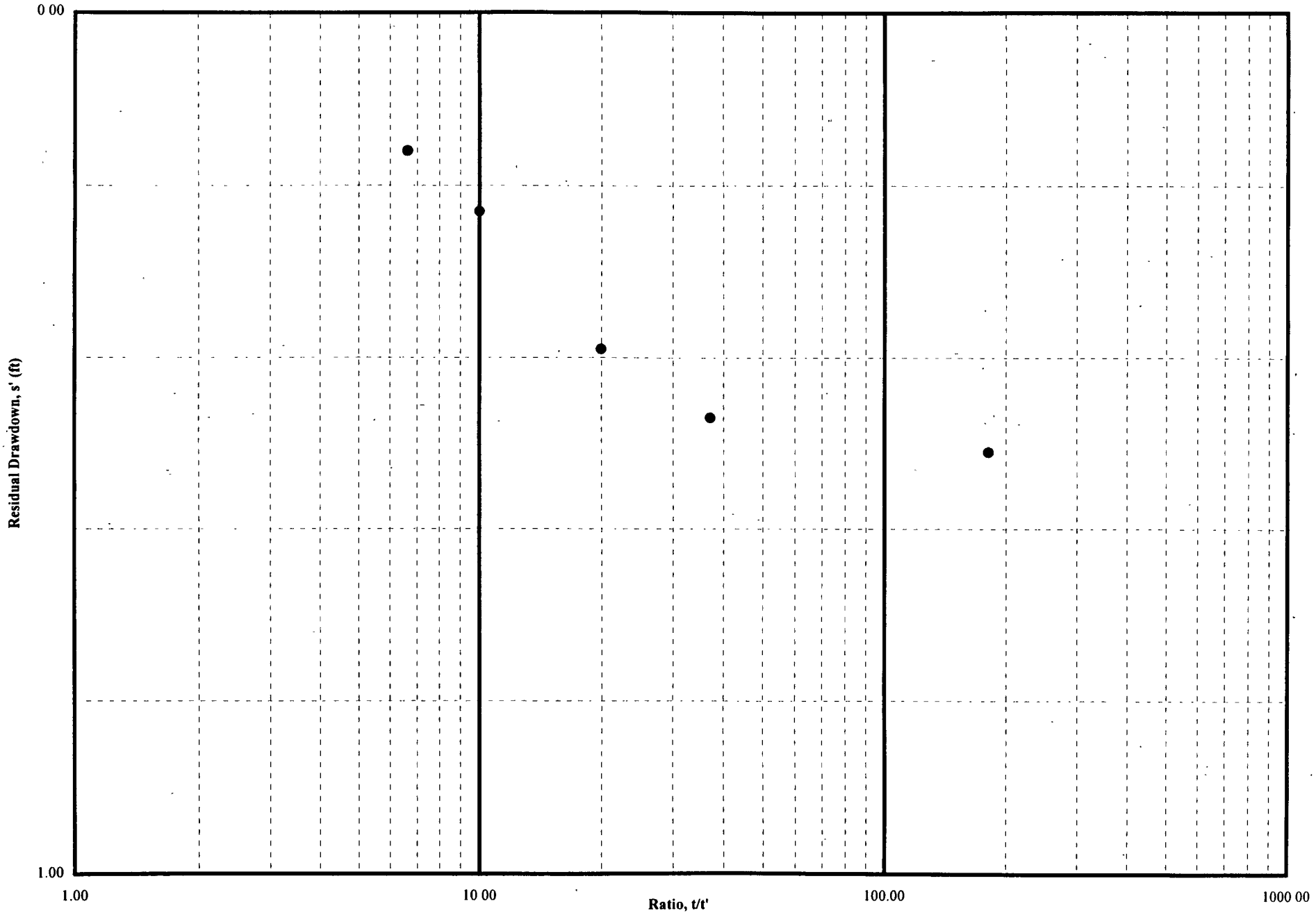
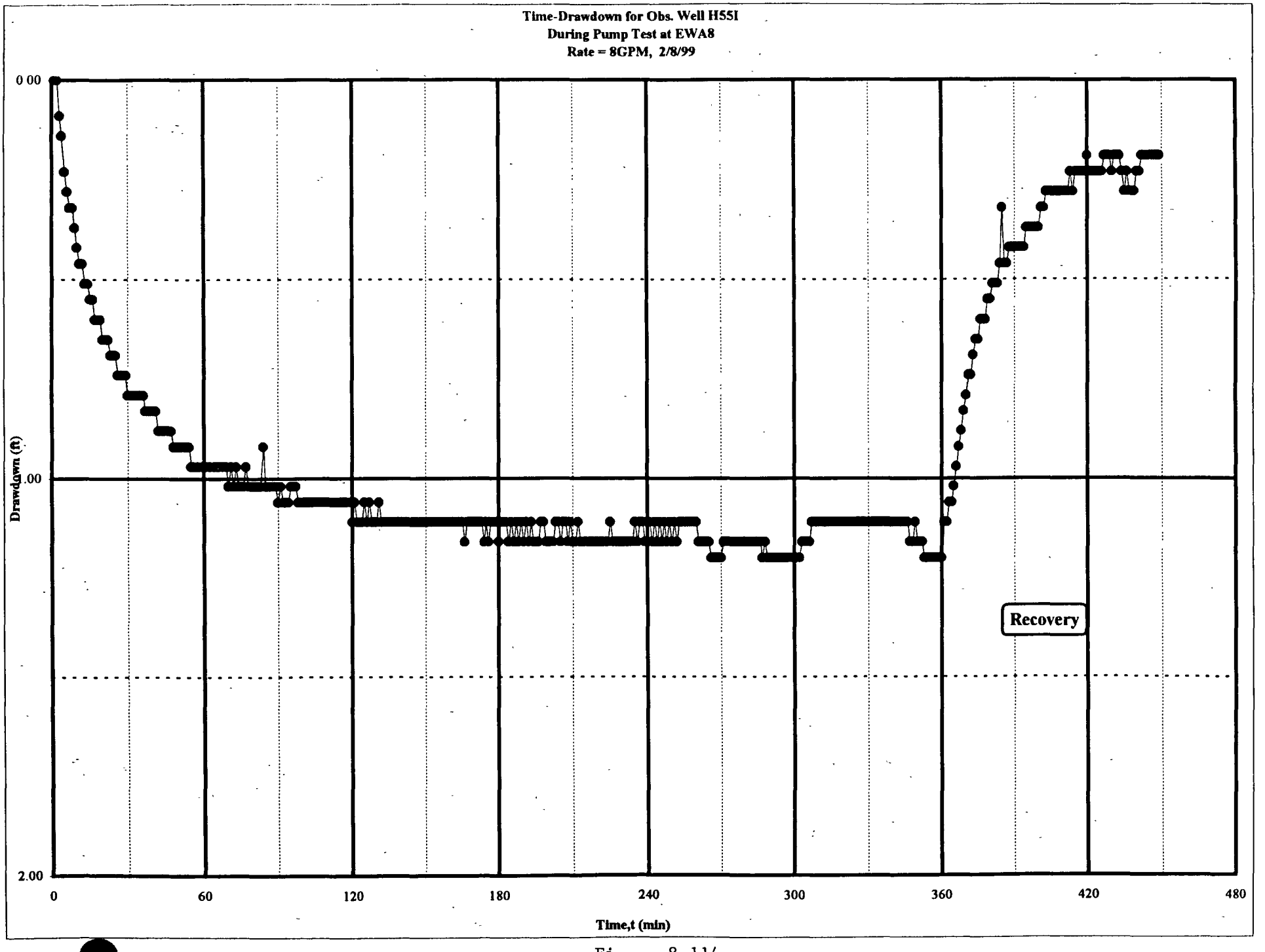


Figure 8-113


Time-Drawdown for Obs. Well H55I
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Fi 8-114

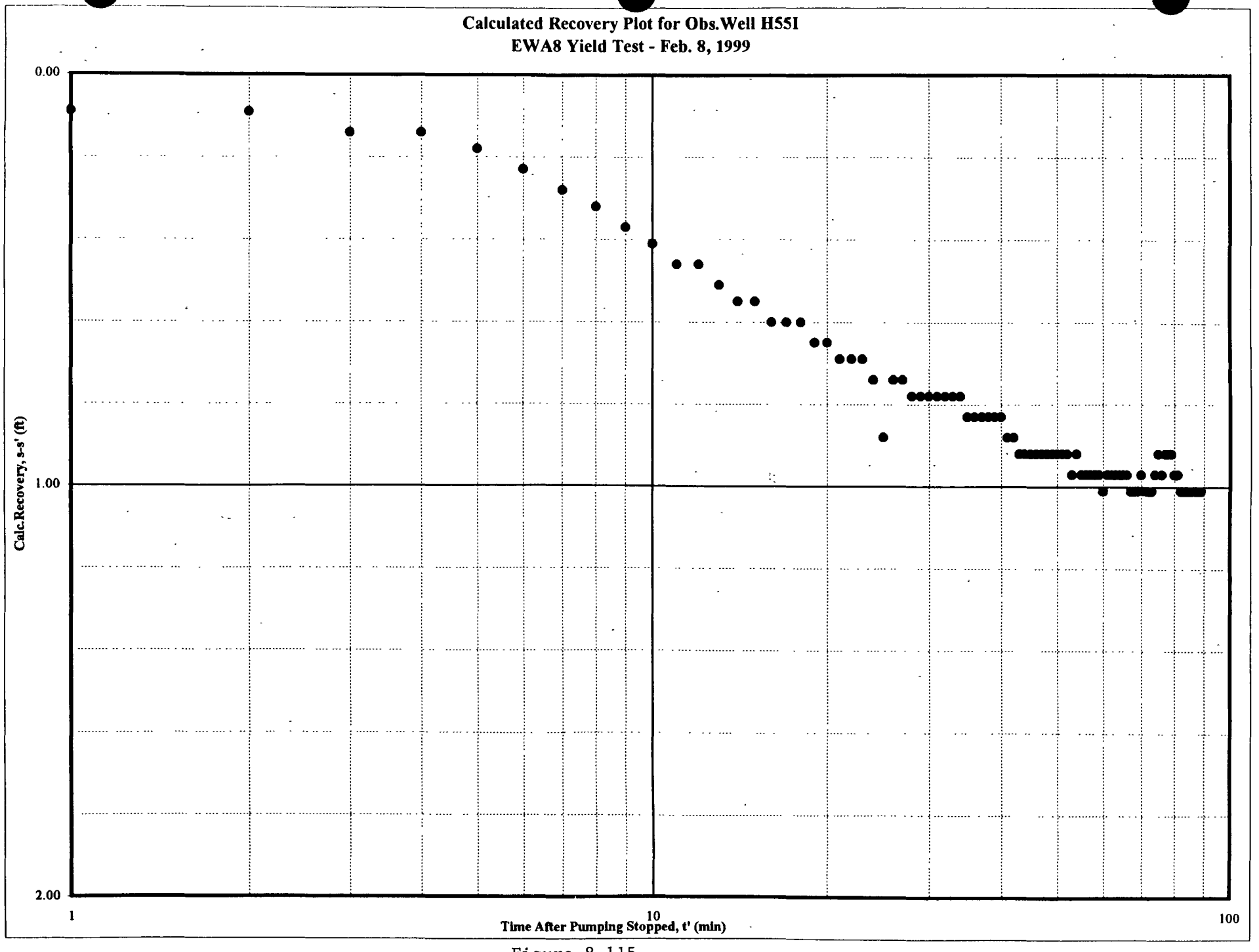
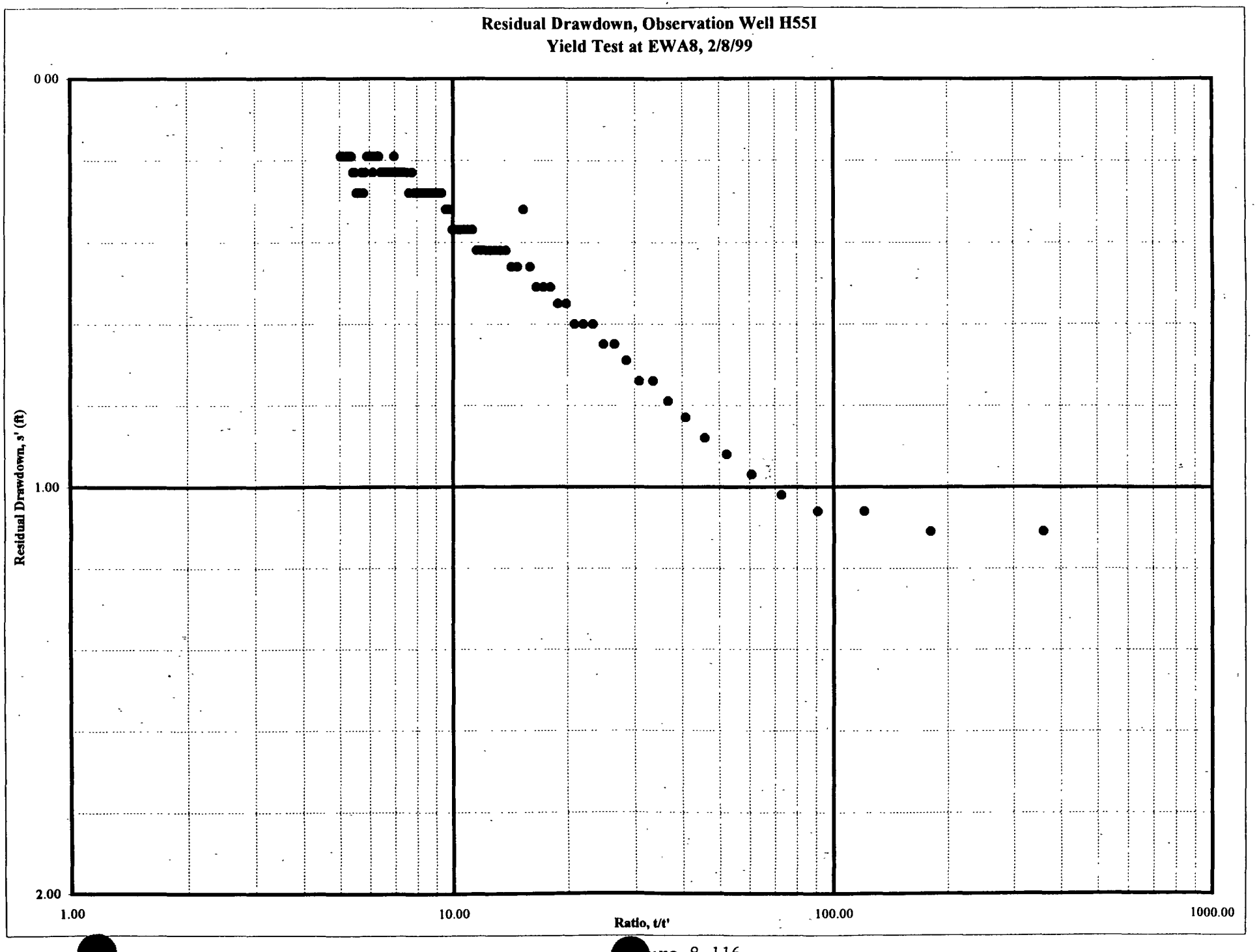

Calculated Recovery Plot for Obs.Well H55I
EWA8 Yield Test - Feb. 8, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-115


Residual Drawdown, Observation Well H55I
Yield Test at EWA8, 2/8/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

ure 8-116

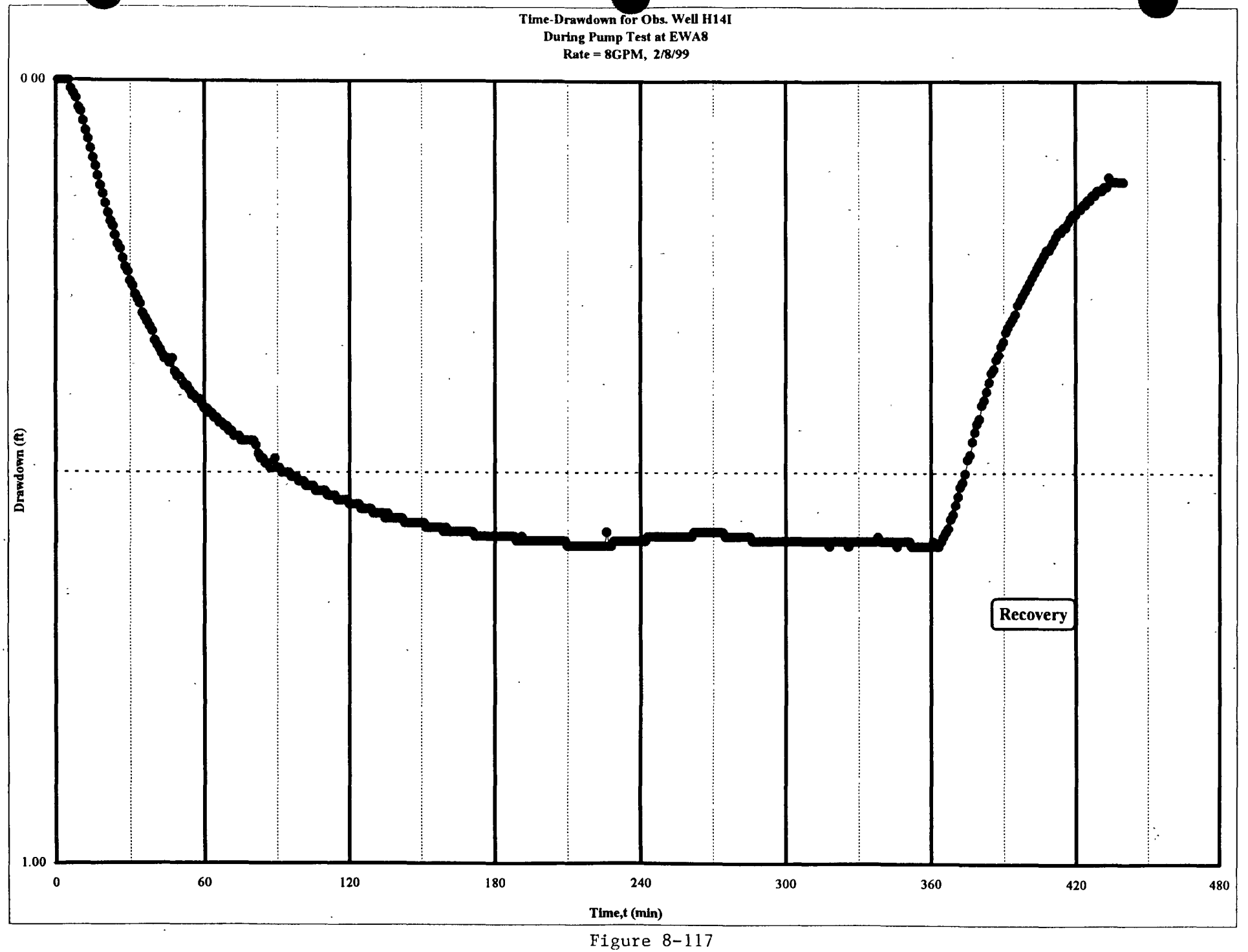

Time-Drawdown for Obs. Well H14I
During Pump Test at EWA8
Rate = 8GPM, 2/8/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-117

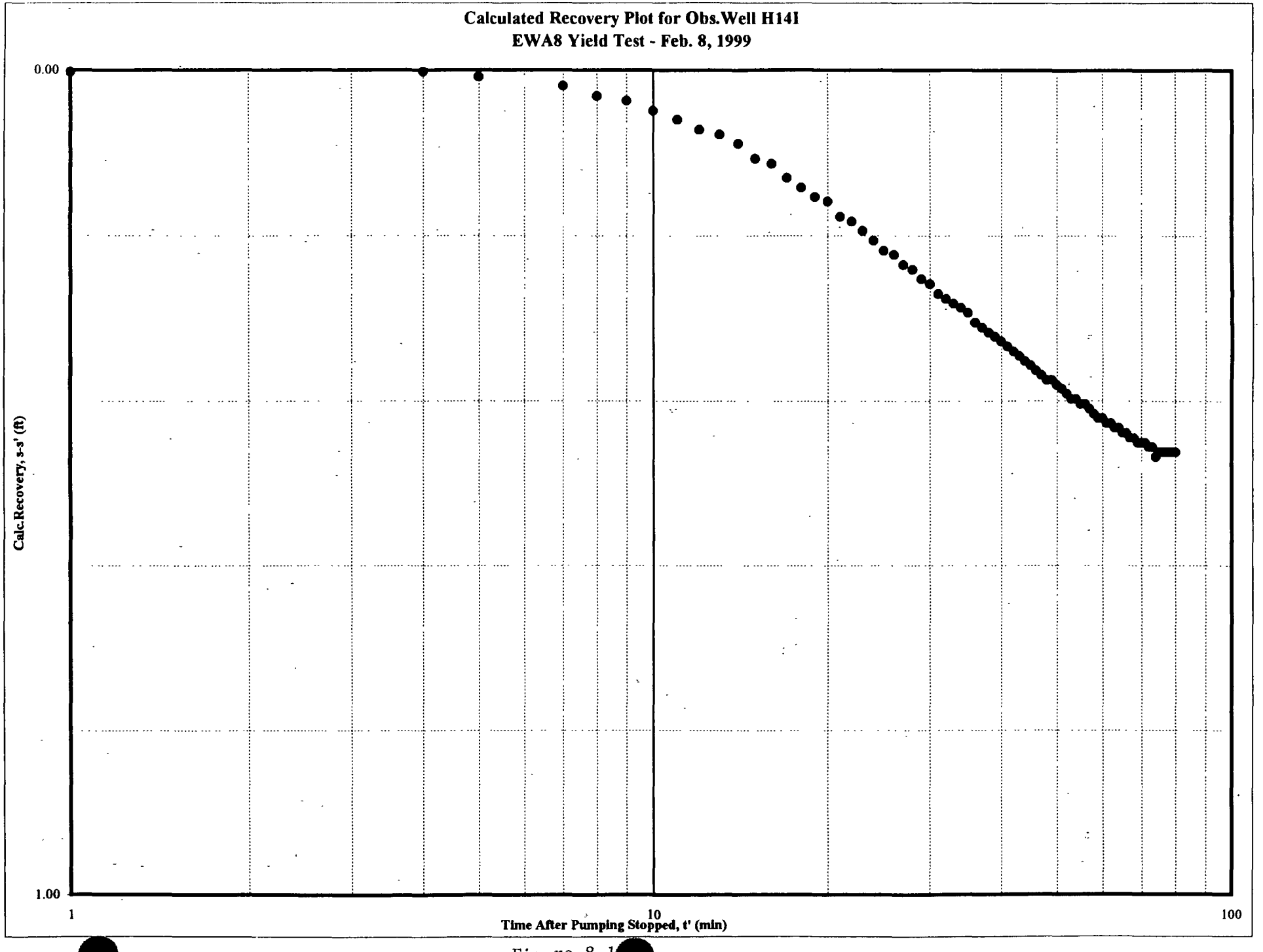

Calculated Recovery Plot for Obs.Well H14I
EWA8 Yield Test - Feb. 8, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-1

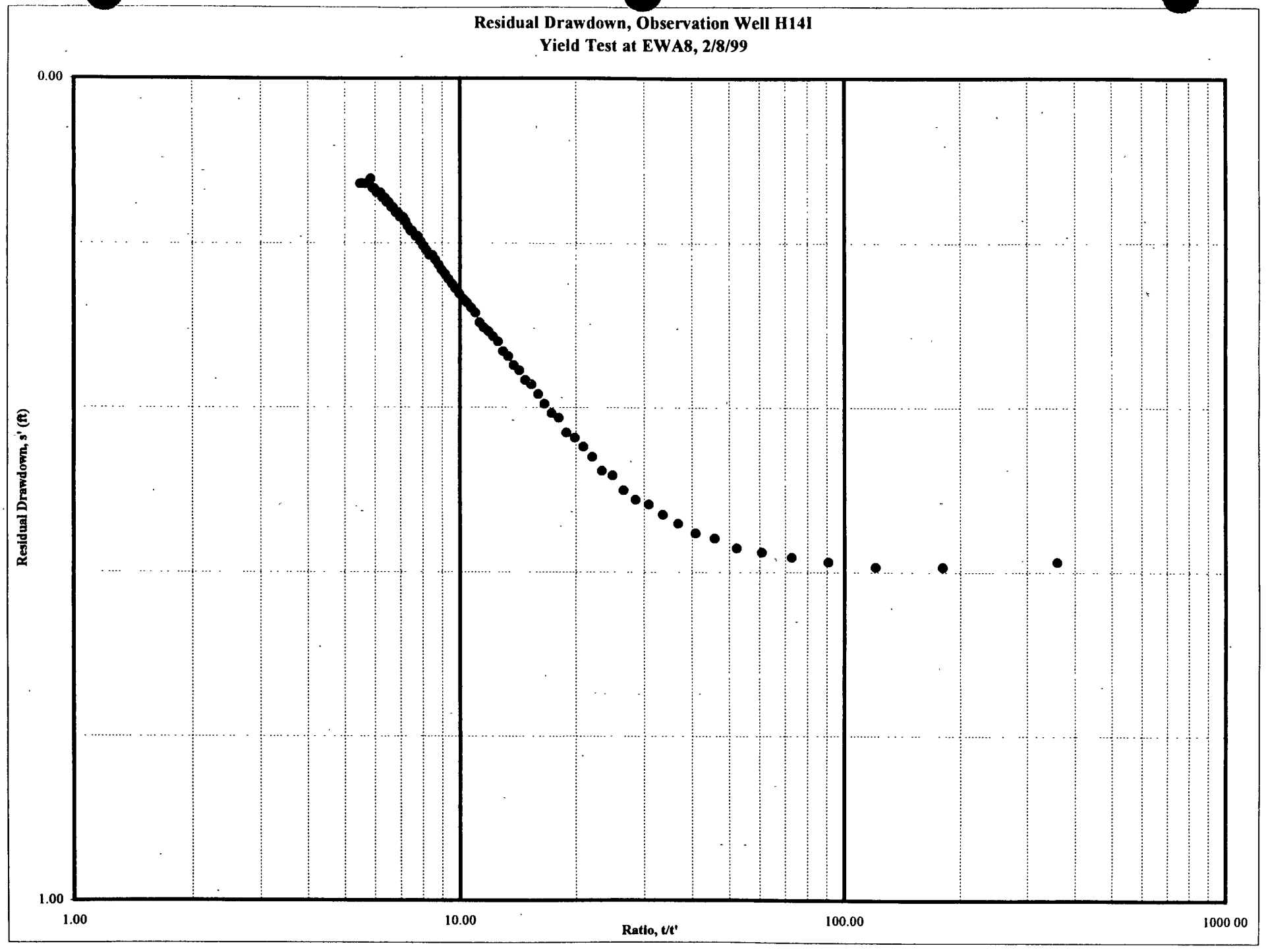
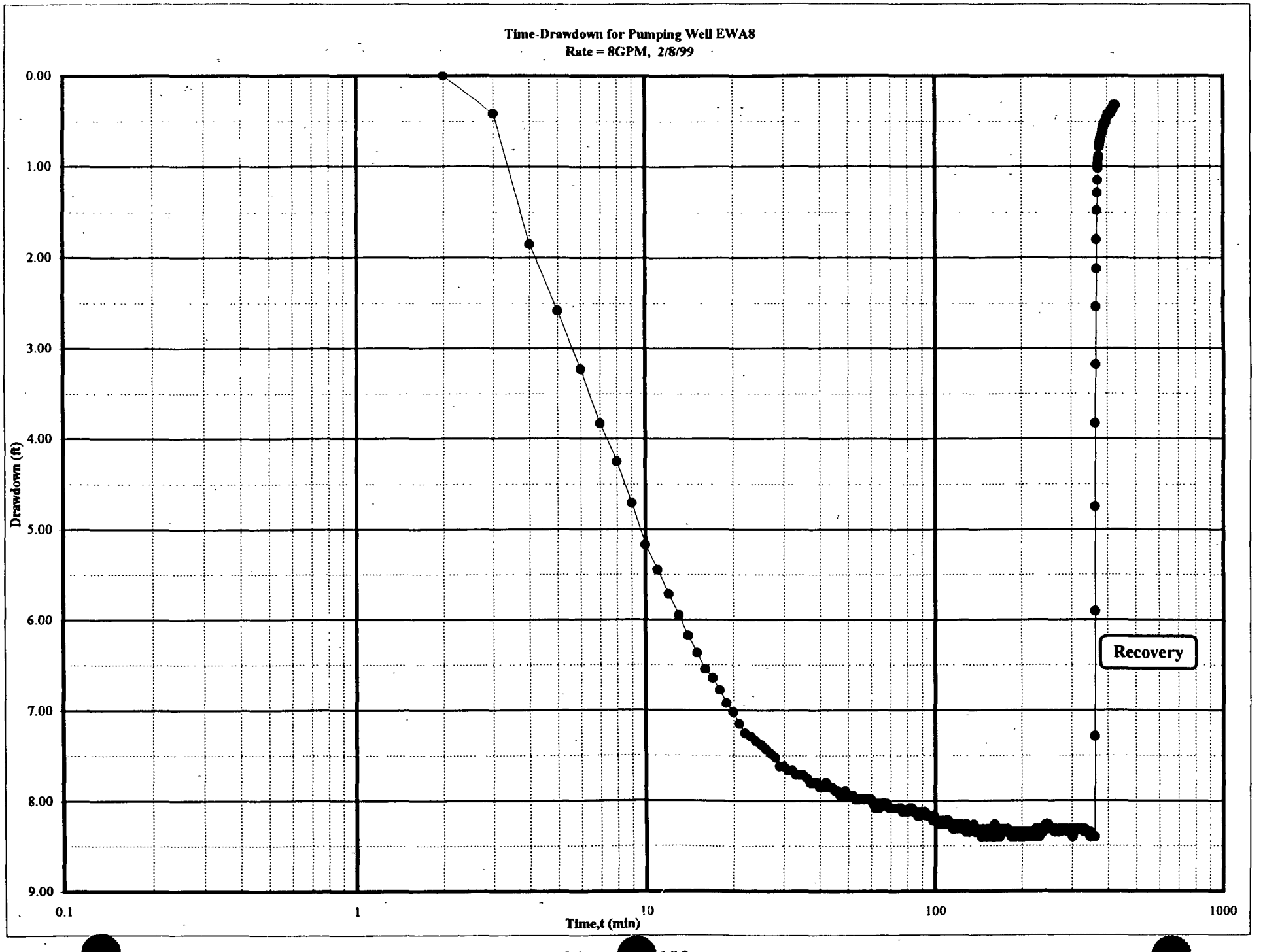

Residual Drawdown, Observation Well H14I
Yield Test at EWA8, 2/8/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-119


Time-Drawdown for Pumping Well EWA8
Rate = 8GPM, 2/8/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figur 120

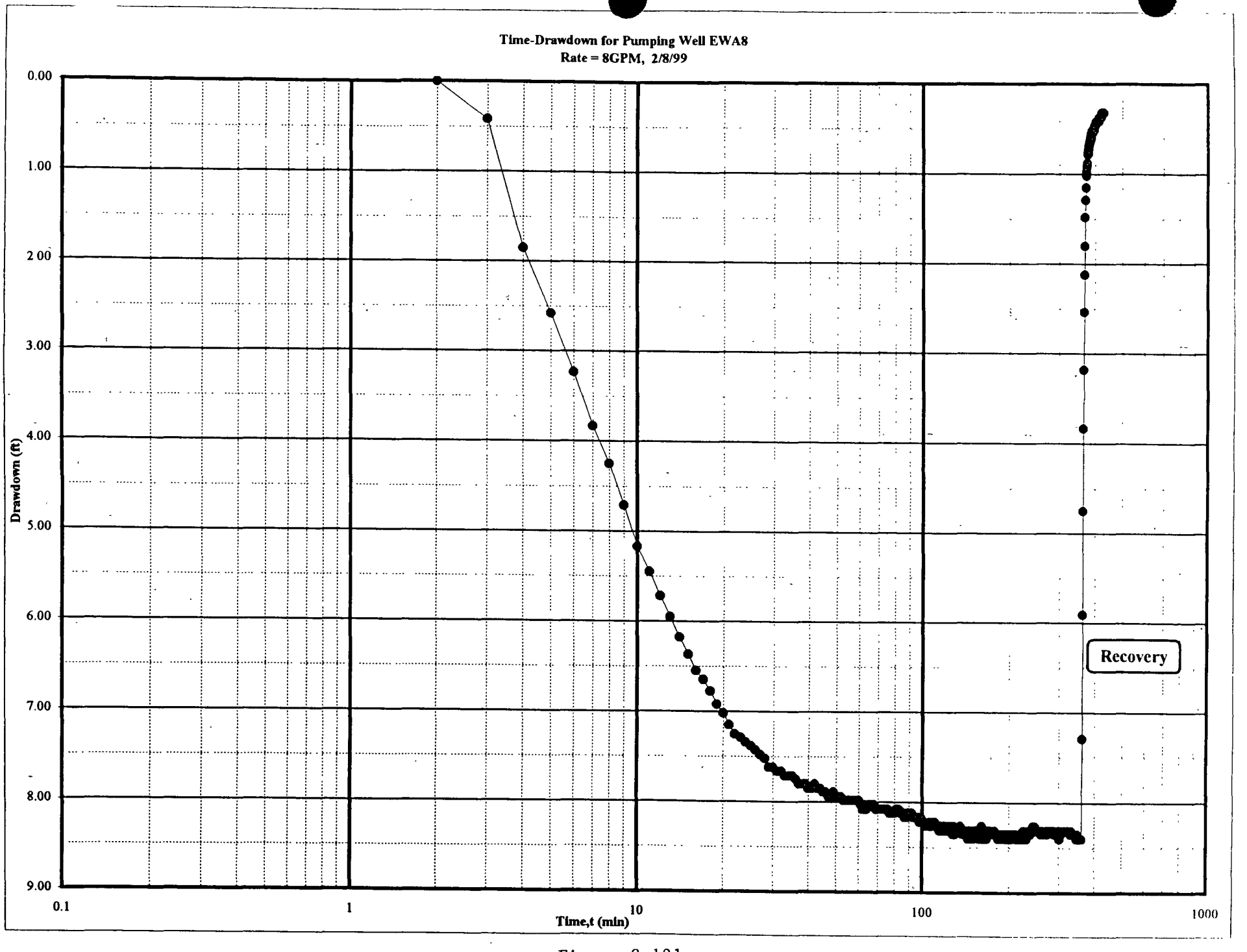
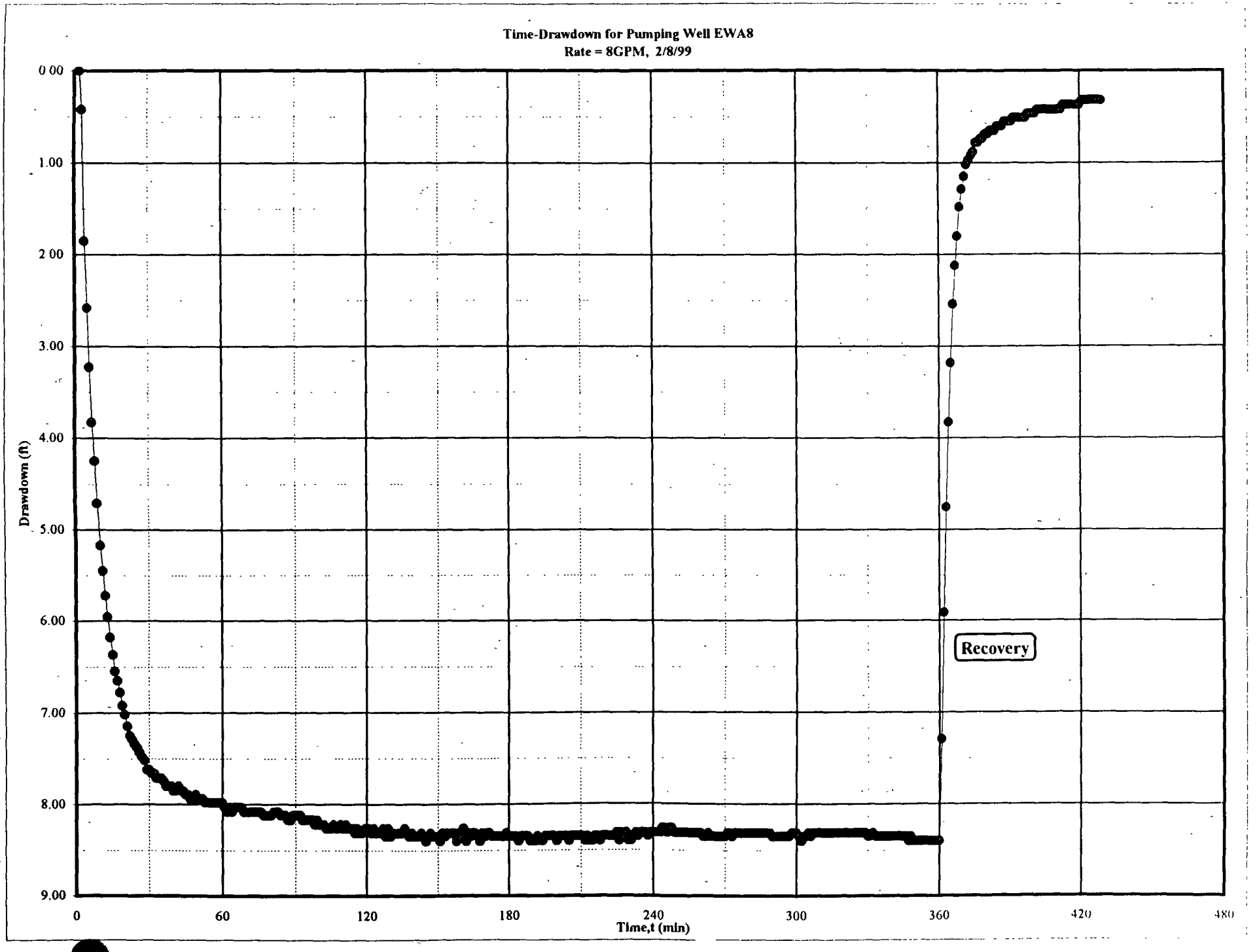

Time-Drawdown for Pumping Well EWA8
Rate = 8GPM, 2/8/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-121


Time-Drawdown for Pumping Well EWA8
Rate = 8GPM, 2/8/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

ure 8-122

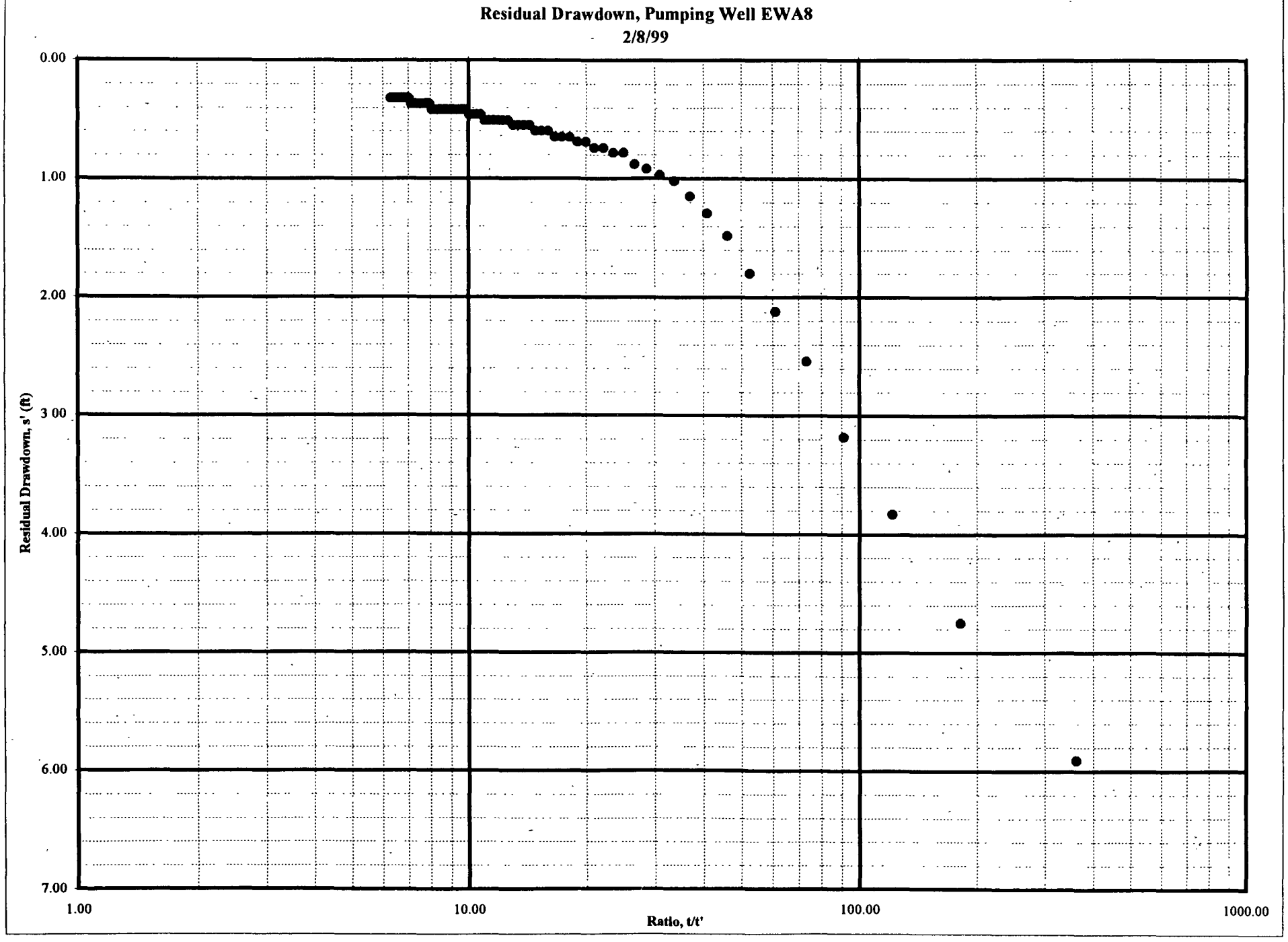
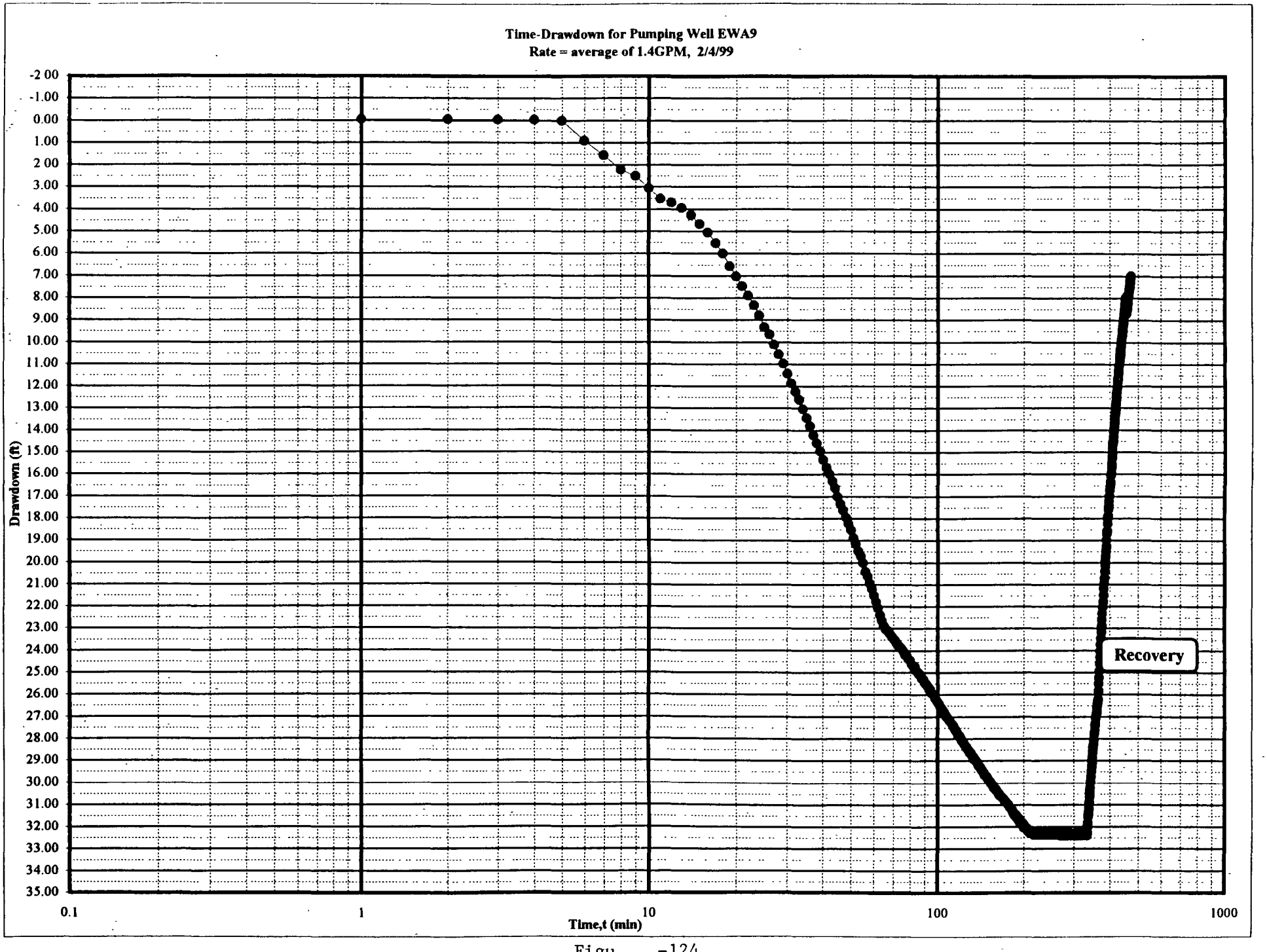

Residual Drawdown, Pumping Well EWA8
2/8/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-123


Time-Drawdown for Pumping Well EWA9
Rate = average of 1.4GPM, 2/4/99
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
30.00
31.00
32.00
33.00
34.00
35.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figu -124

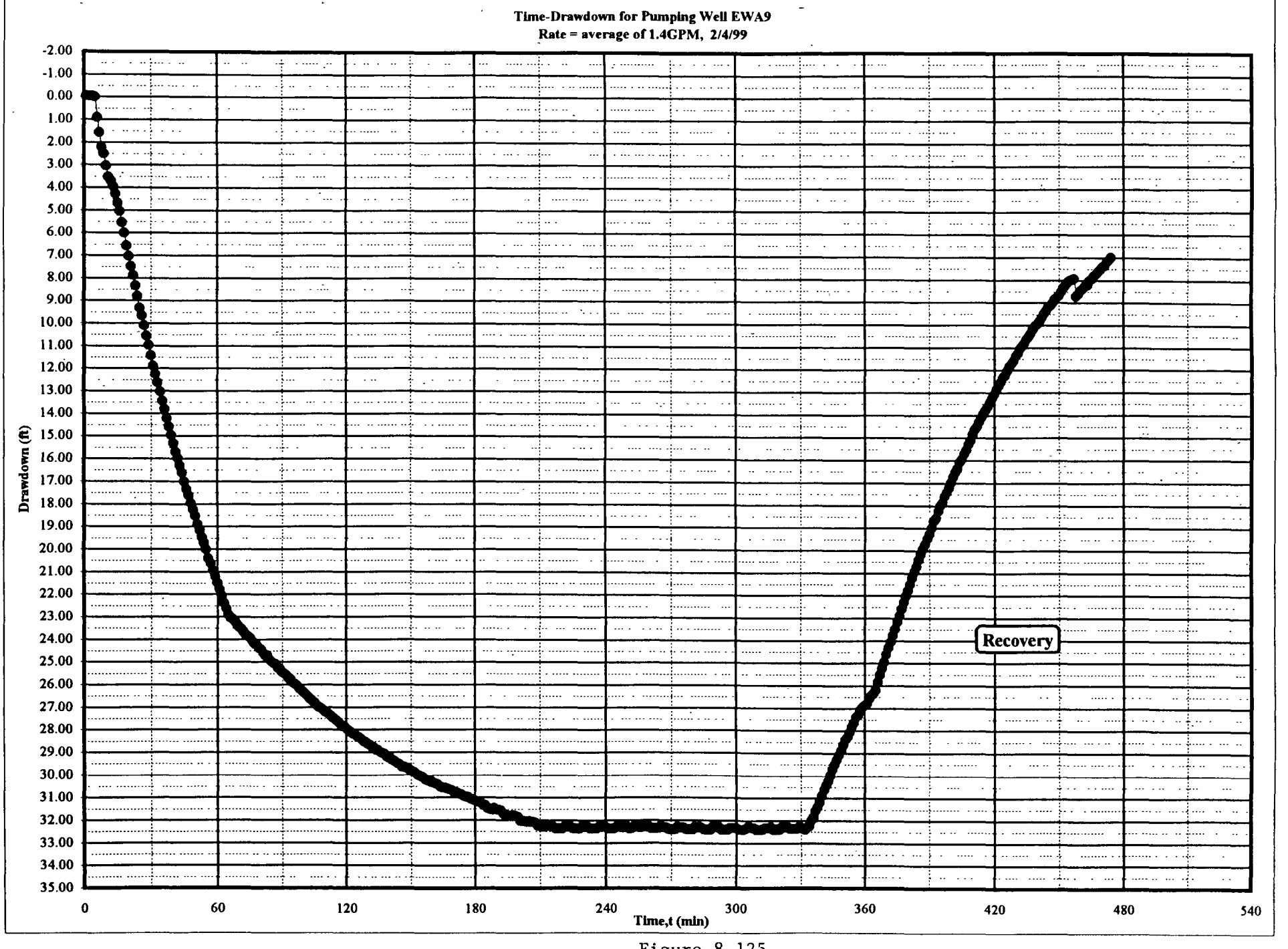
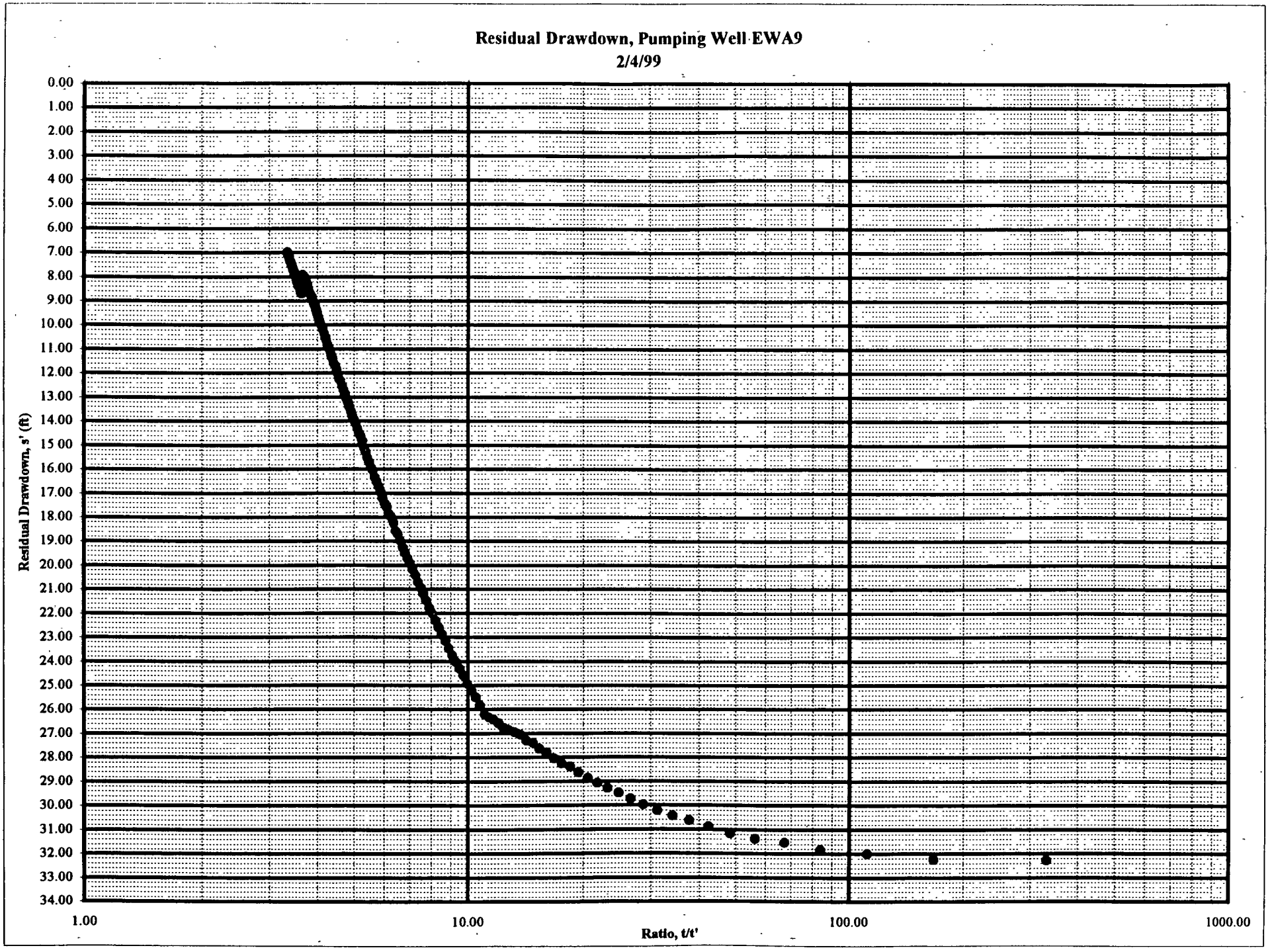

Time-Drawdown for Pumping Well EWA9
Rate = average of 1.4GPM, 2/4/99
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
30.00
31.00
32.00
33.00
34.00
35.00
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-125


Residual Drawdown, Pumping Well EWA9
2/4/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
30.00
31.00
32.00
33.00
34.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

gure 8-126

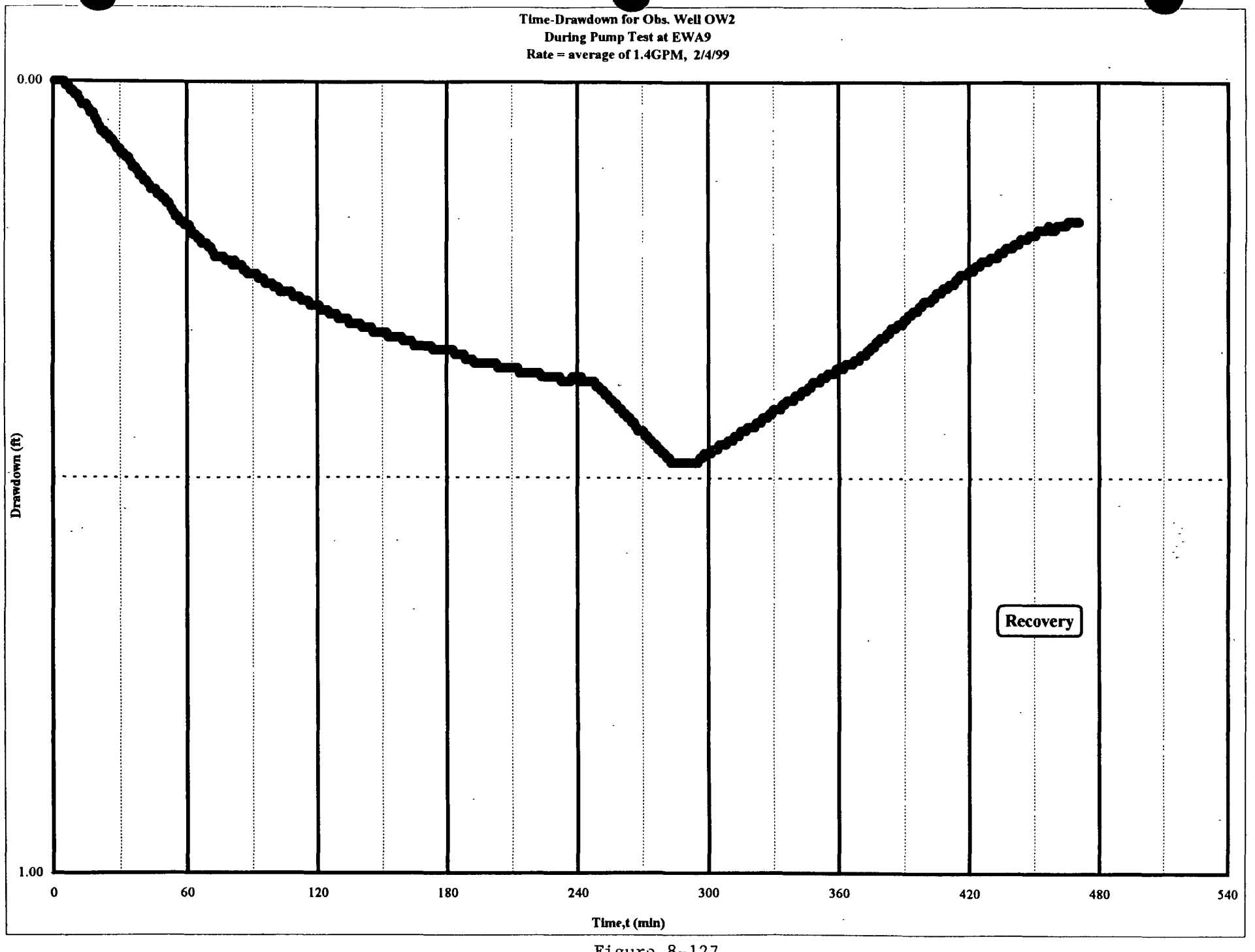

Time-Drawdown for Obs. Well OW2
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-127

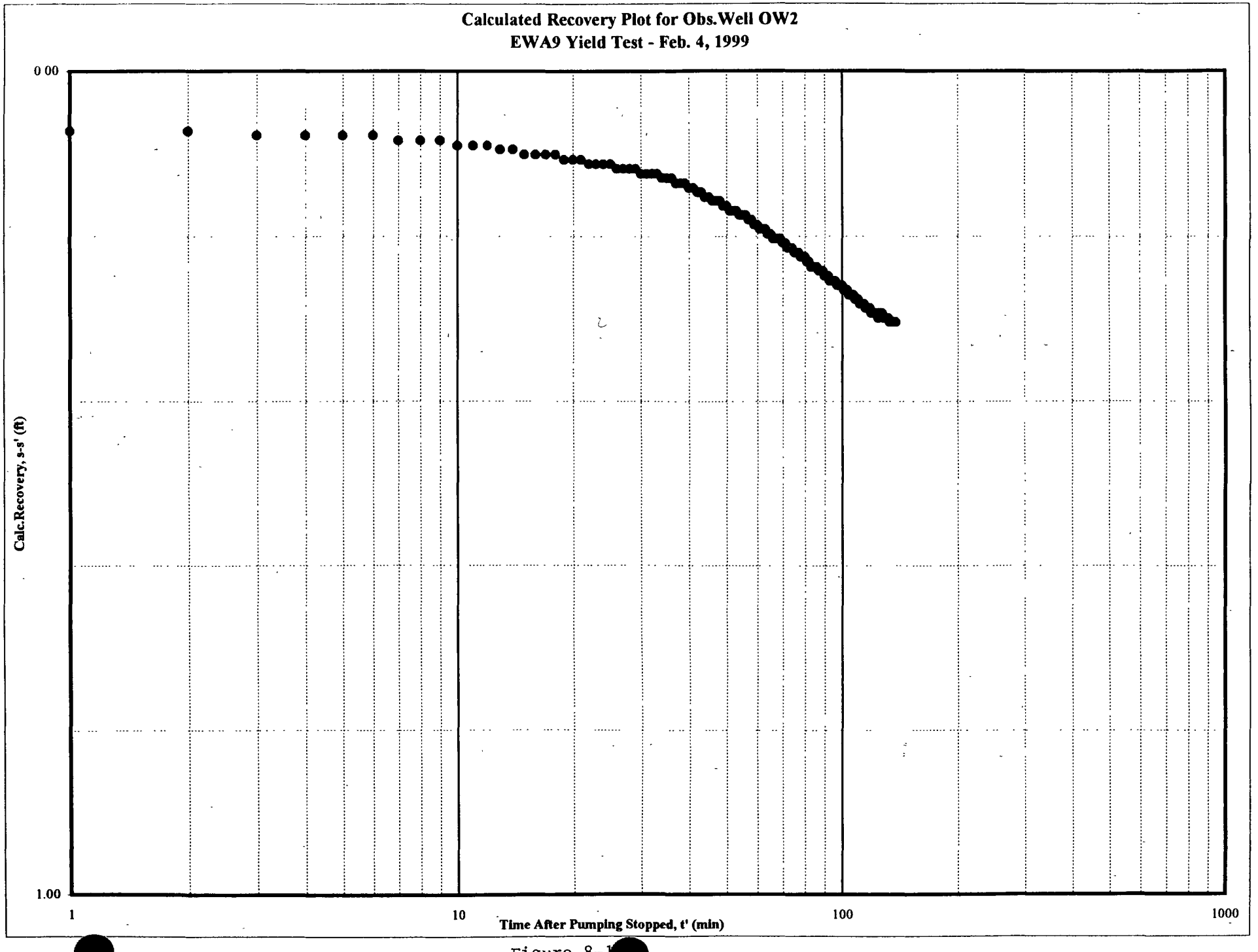

Calculated Recovery Plot for Obs.Well OW2
EWA9 Yield Test - Feb. 4, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-1

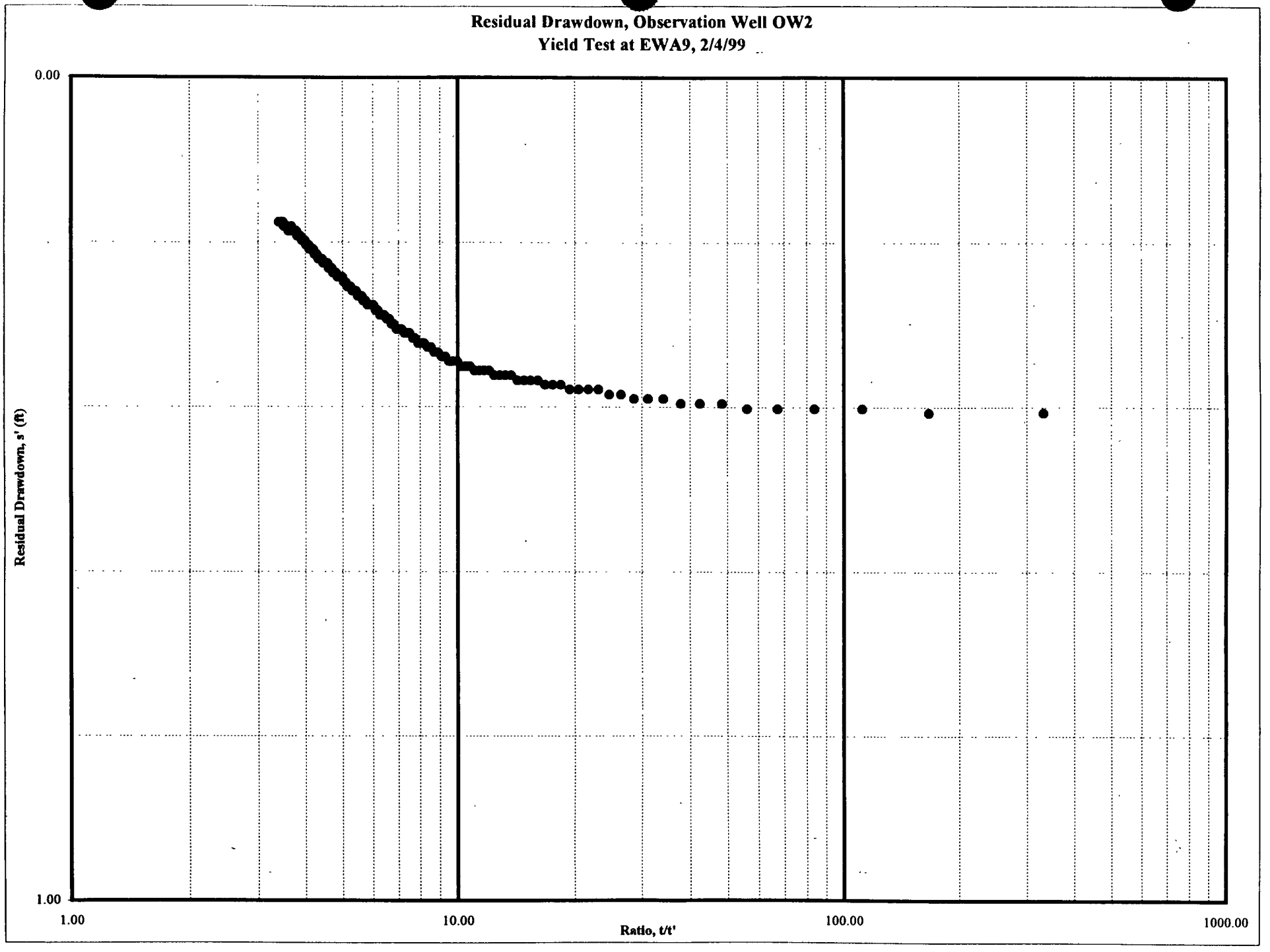
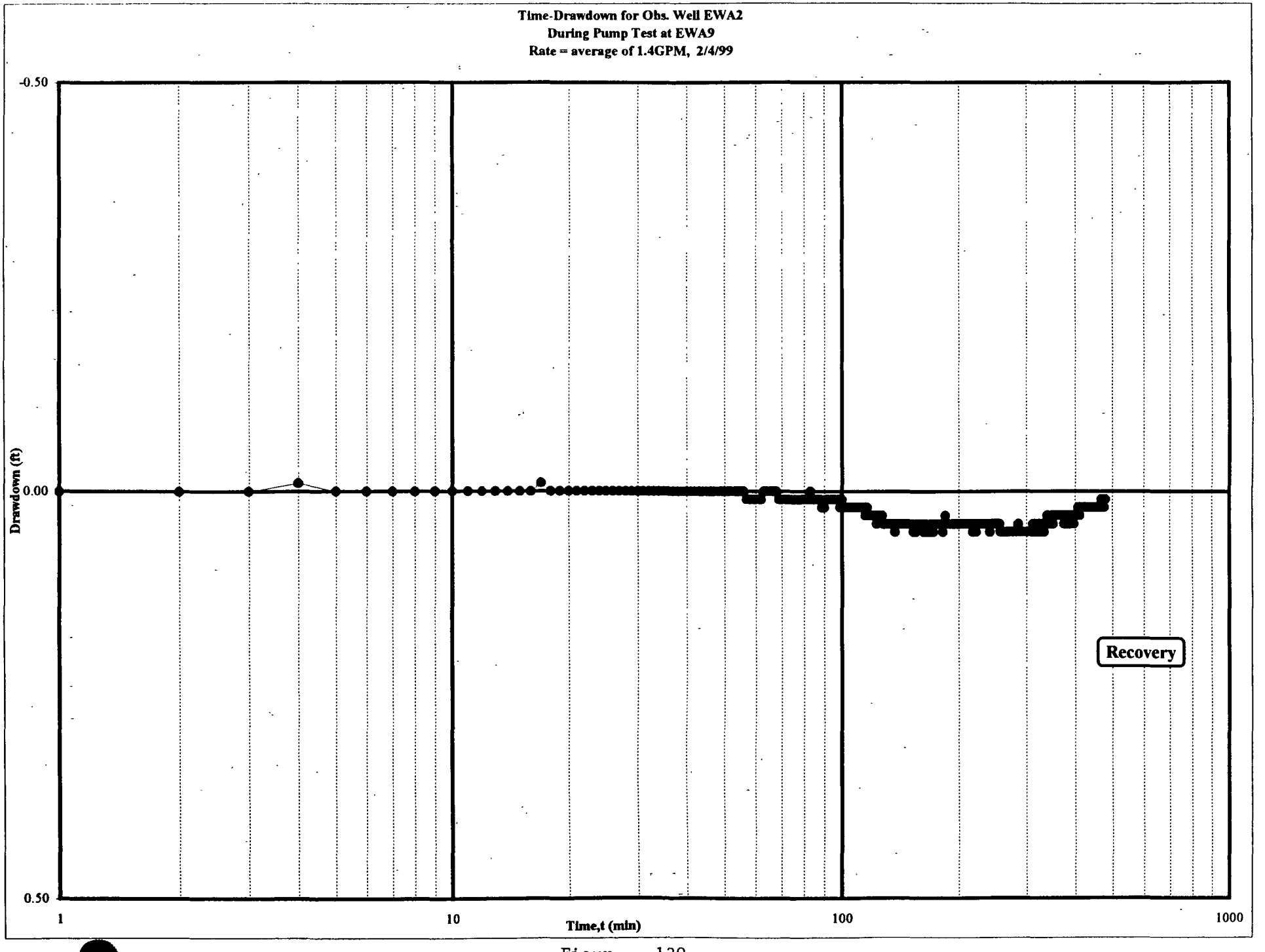

Residual Drawdown, Observation Well OW2
Yield Test at EWA9, 2/4/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-129


Time-Drawdown for Obs. Well EWA2
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
-0.50
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figur 130

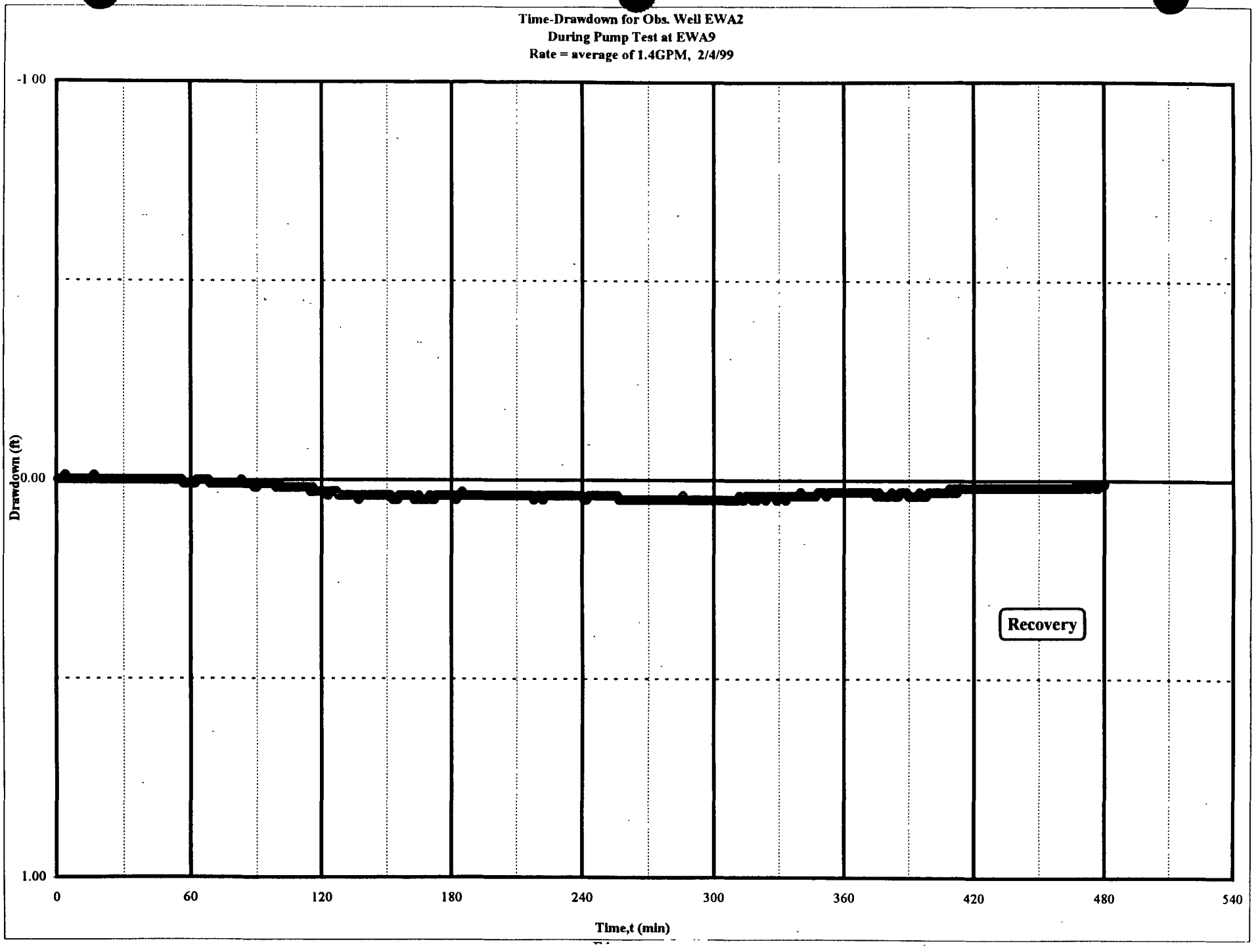

Time-Drawdown for Obs. Well EWA2
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-131

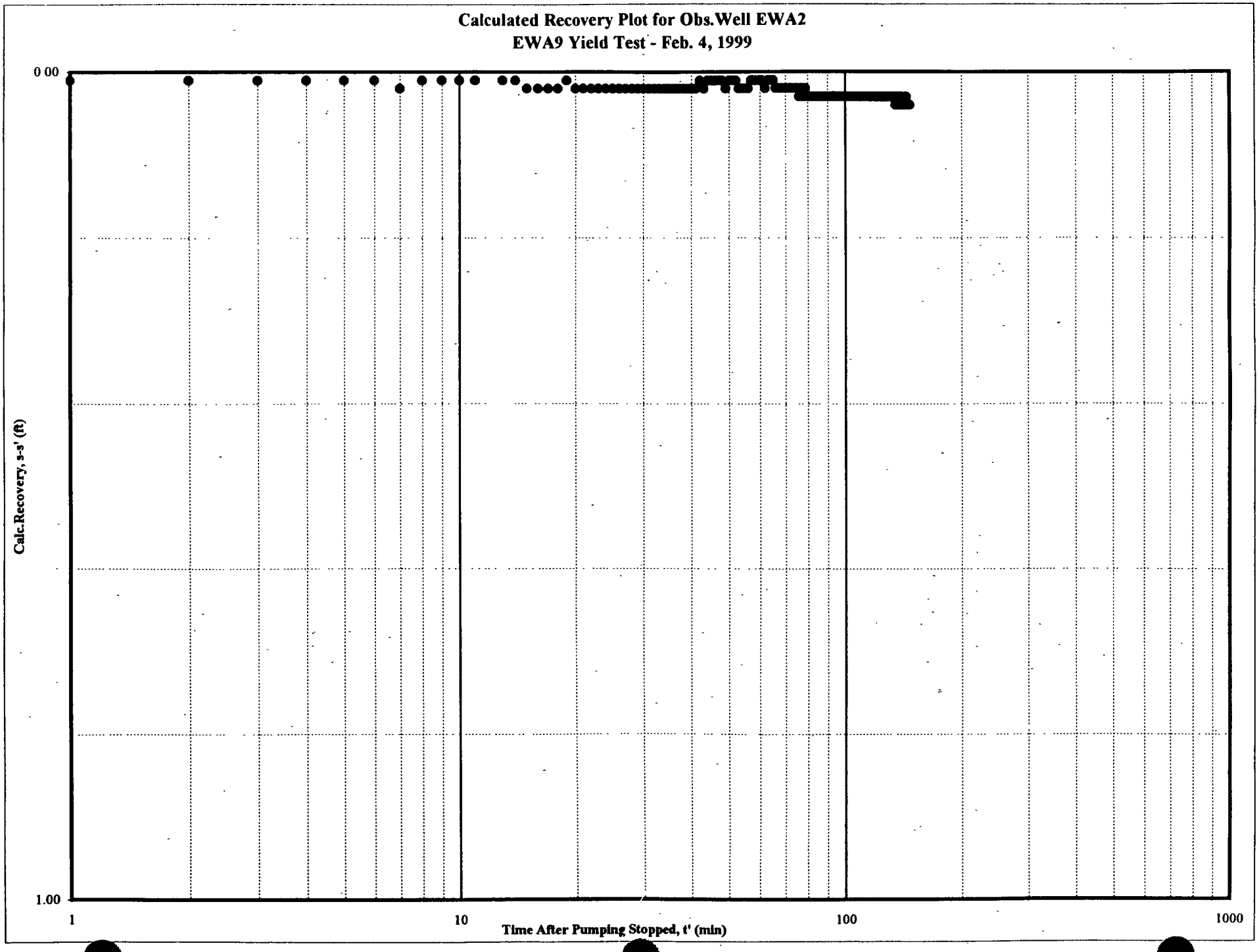

Calculated Recovery Plot for Obs.Well EWA2
EWA9 Yield Test - Feb. 4, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-1

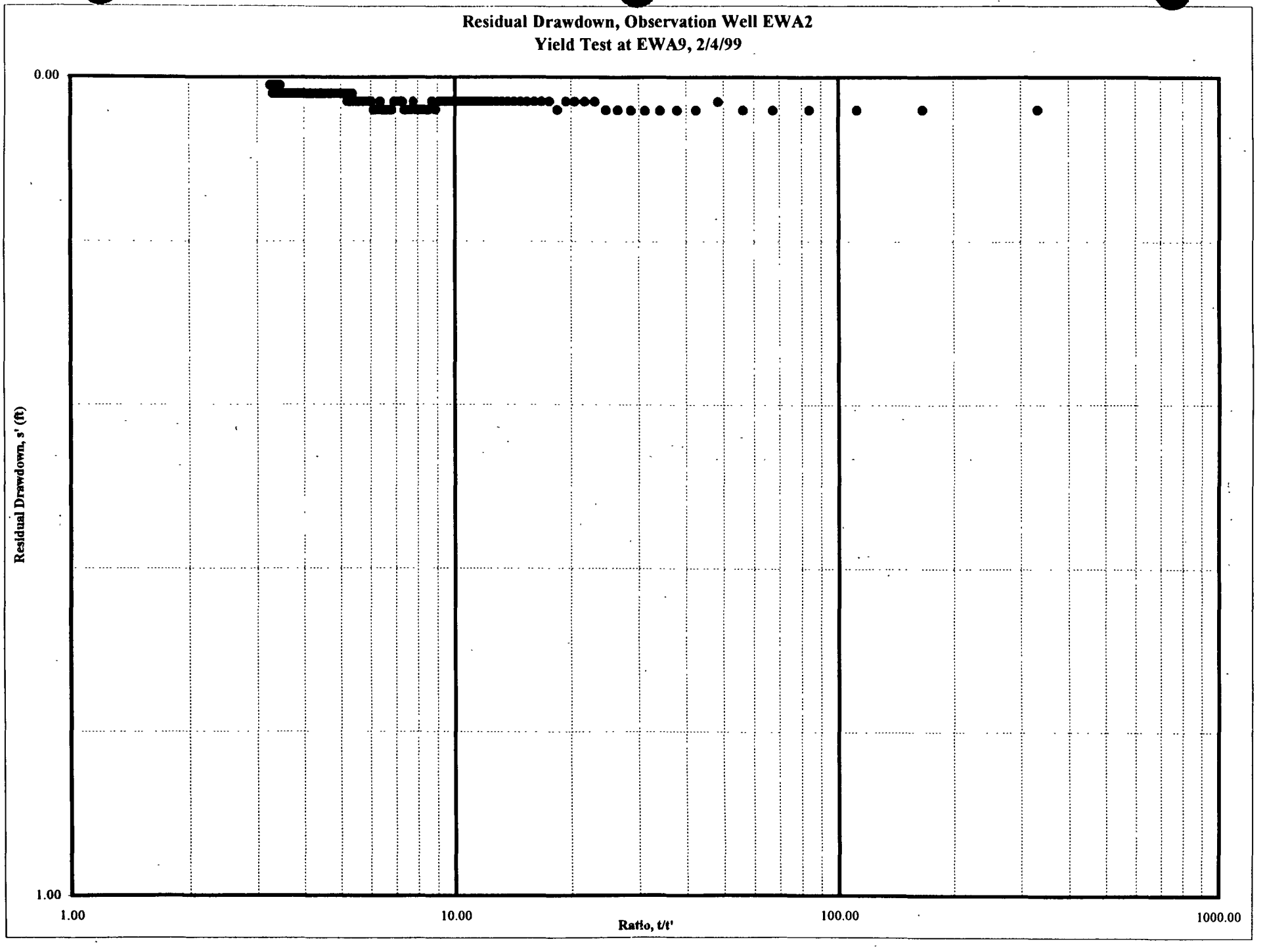
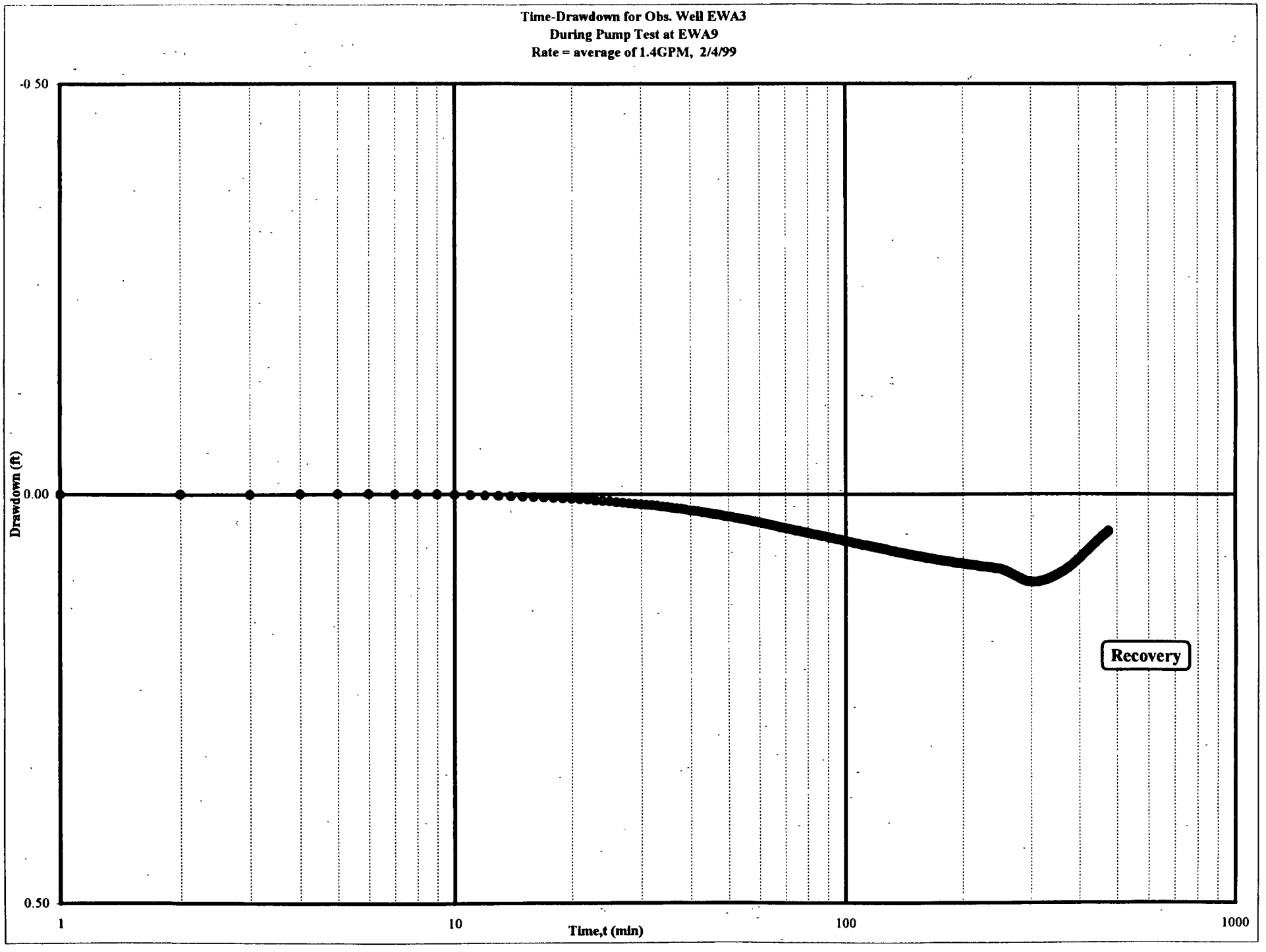

Residual Drawdown, Observation Well EWA2
Yield Test at EWA9, 2/4/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-133


Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
-0 50
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figur 134

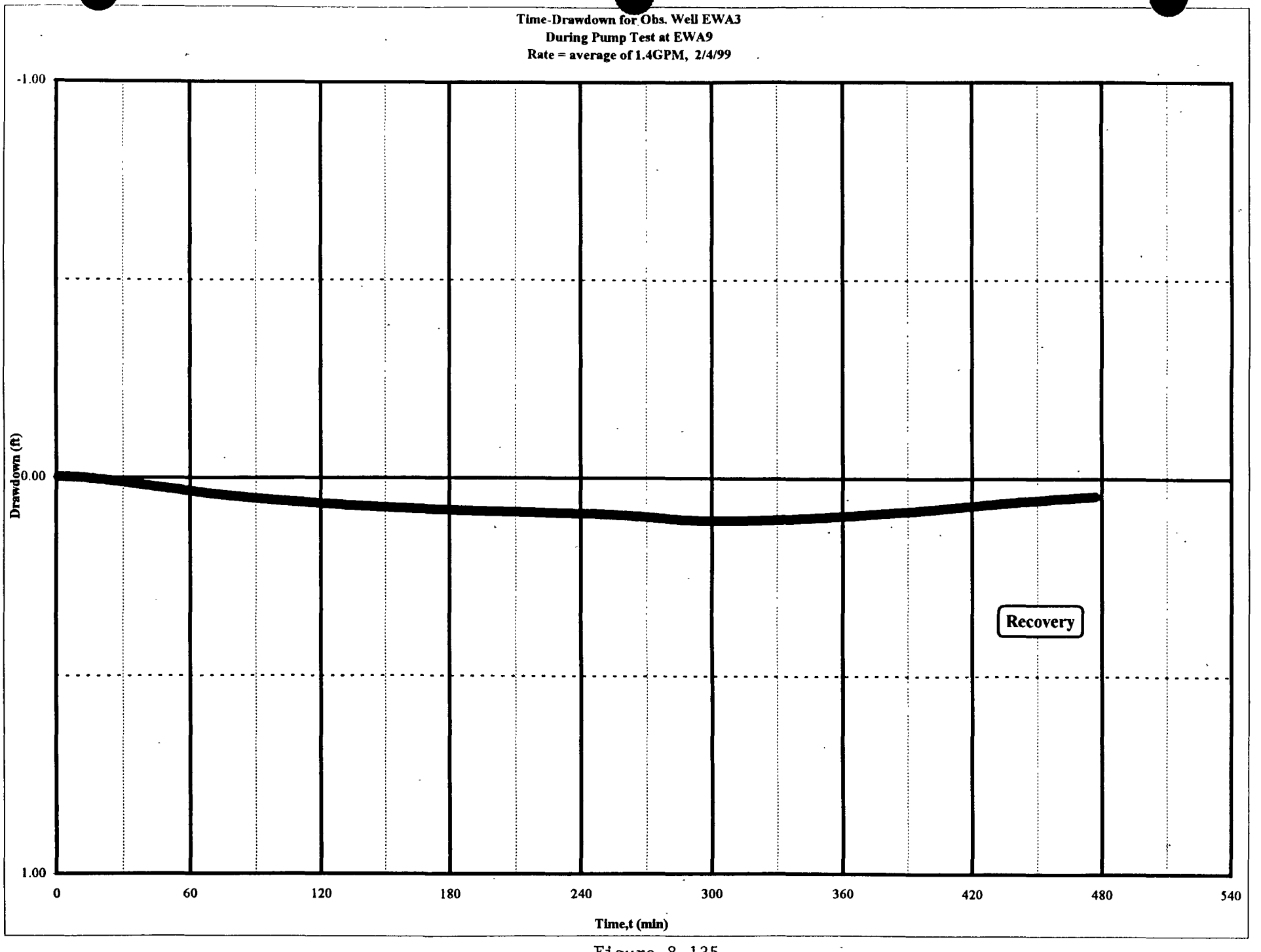

Time-Drawdown for Obs. Well EWA3
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-135

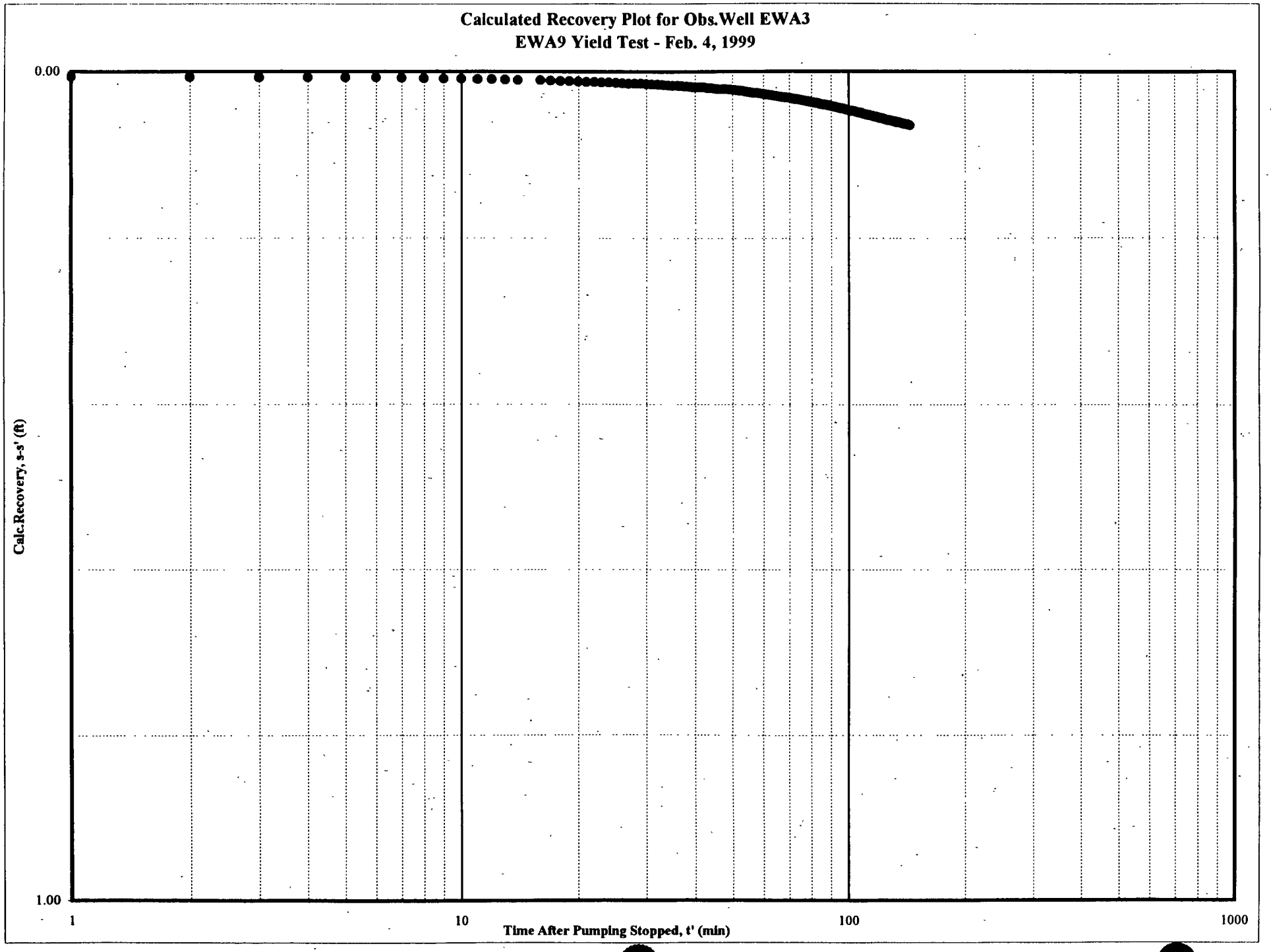

Calculated Recovery Plot for Obs.Well EWA3
EWA9 Yield Test - Feb. 4, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-1

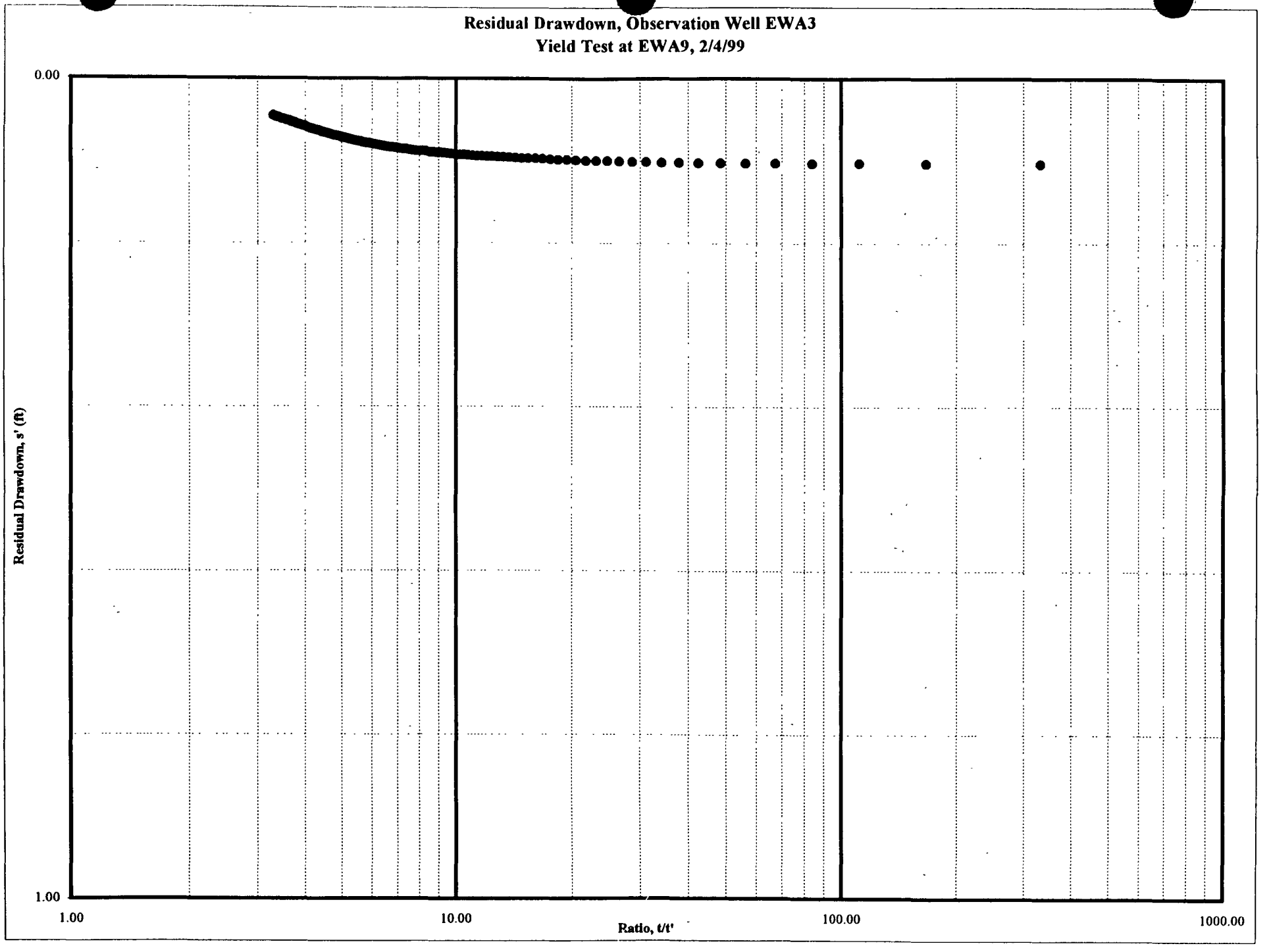
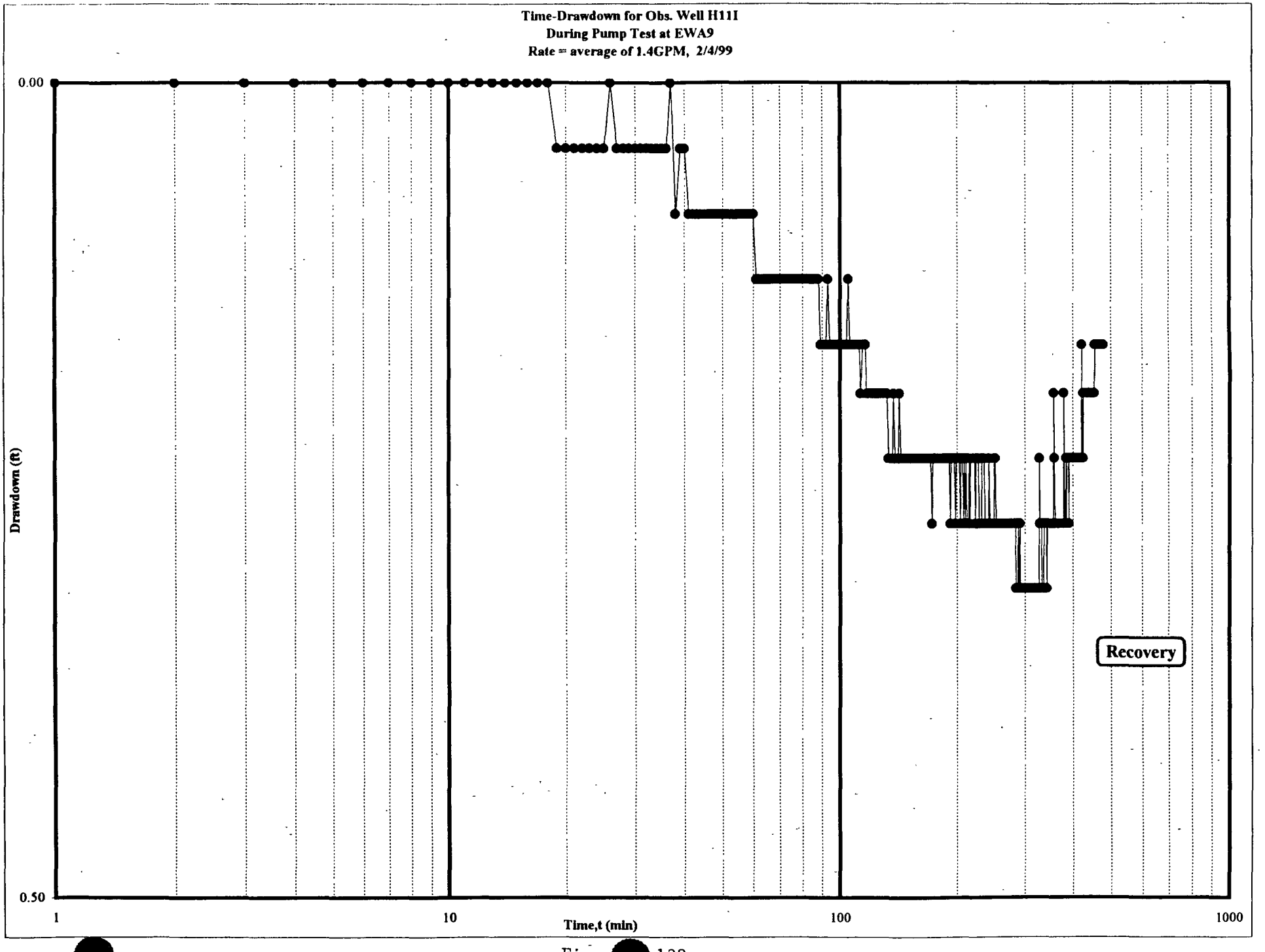

Residual Drawdown, Observation Well EWA3
Yield Test at EWA9, 2/4/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-137


Time-Drawdown for Obs. Well H11I
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
0.00
0.50
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figur[illegible]-138

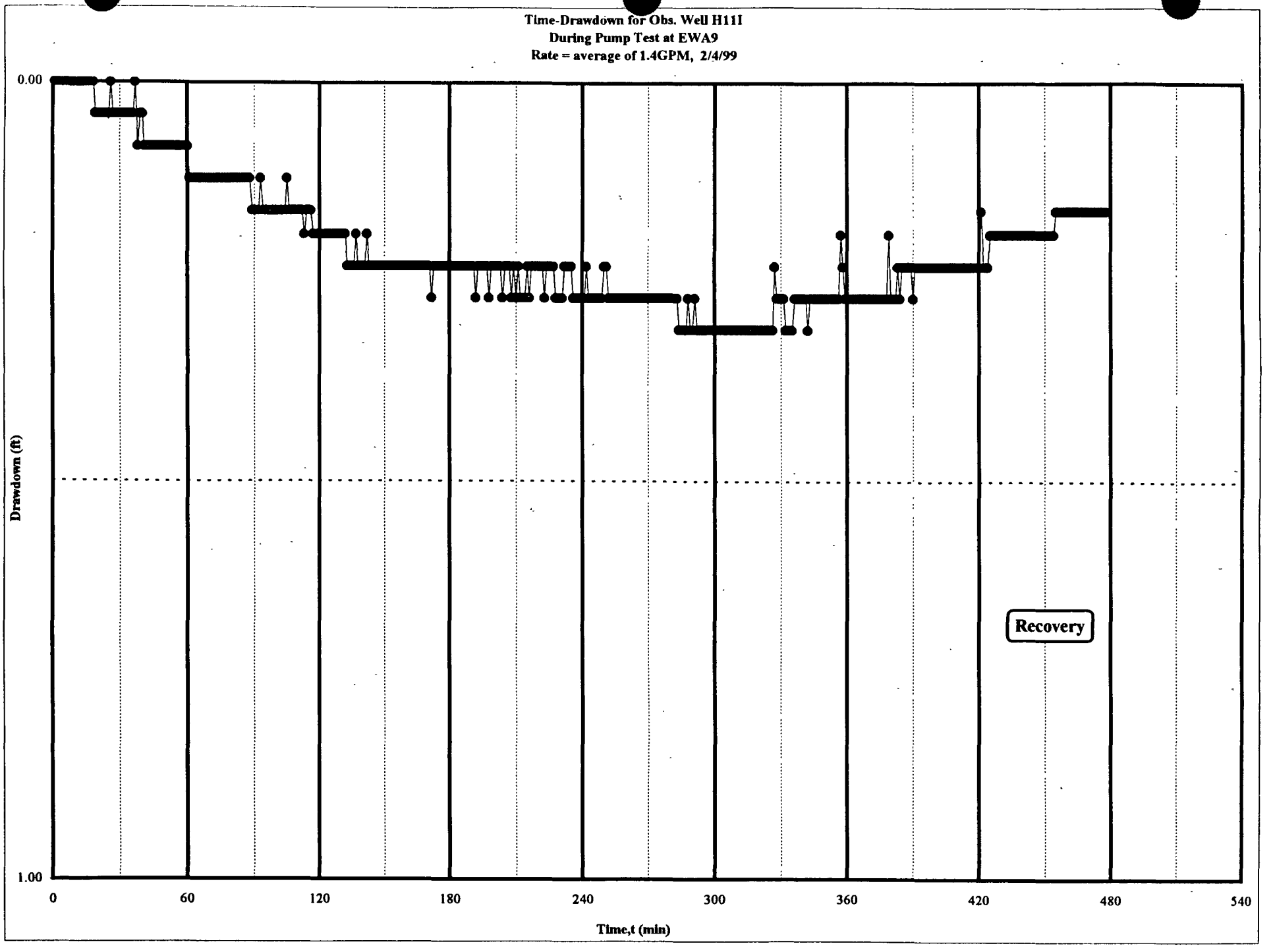

Time-Drawdown for Obs. Well H11I
During Pump Test at EWA9
Rate = average of 1.4GPM, 2/4/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Figure 8-139

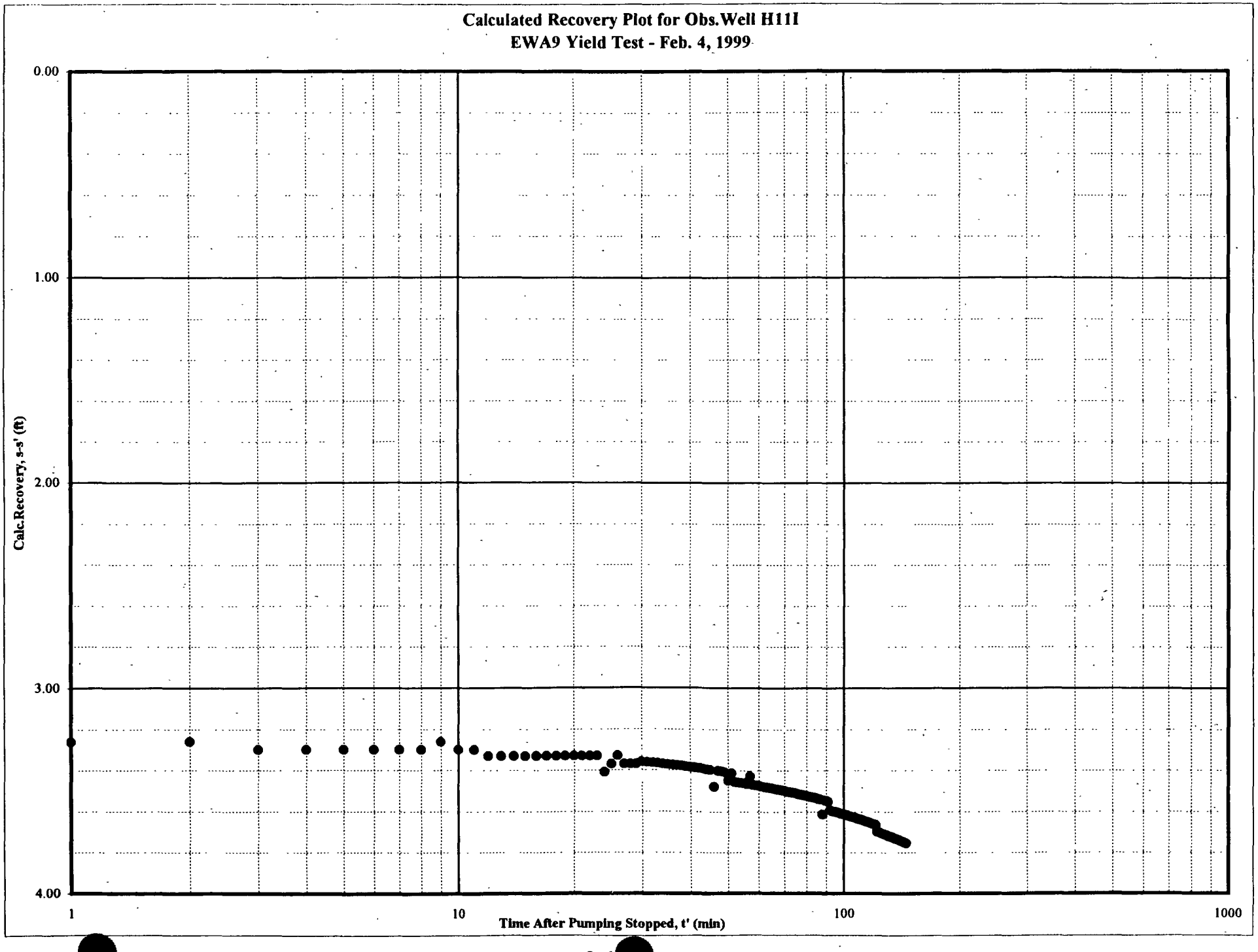

Calculated Recovery Plot for Obs.Well H11I
EWA9 Yield Test - Feb. 4, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-1

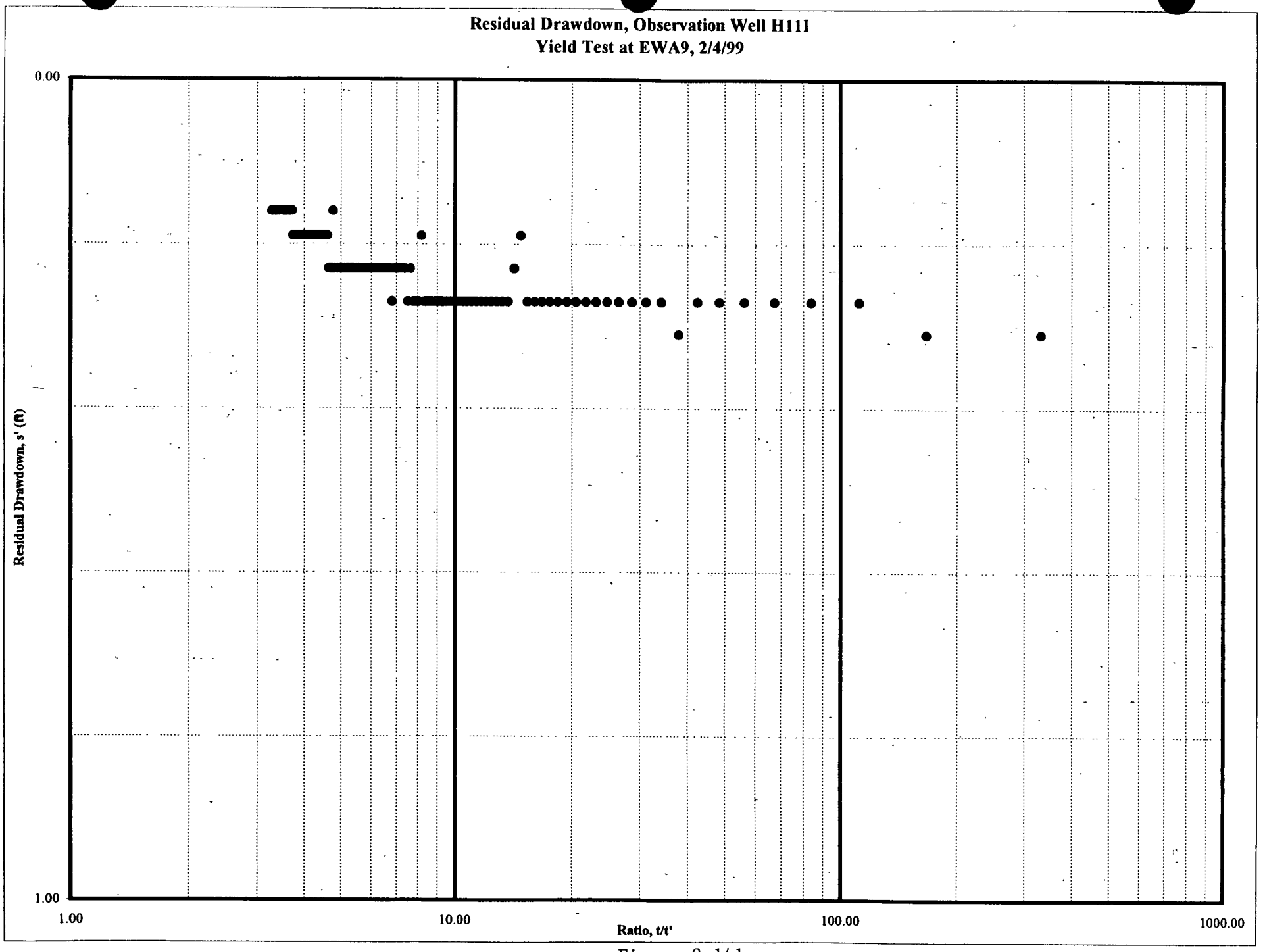
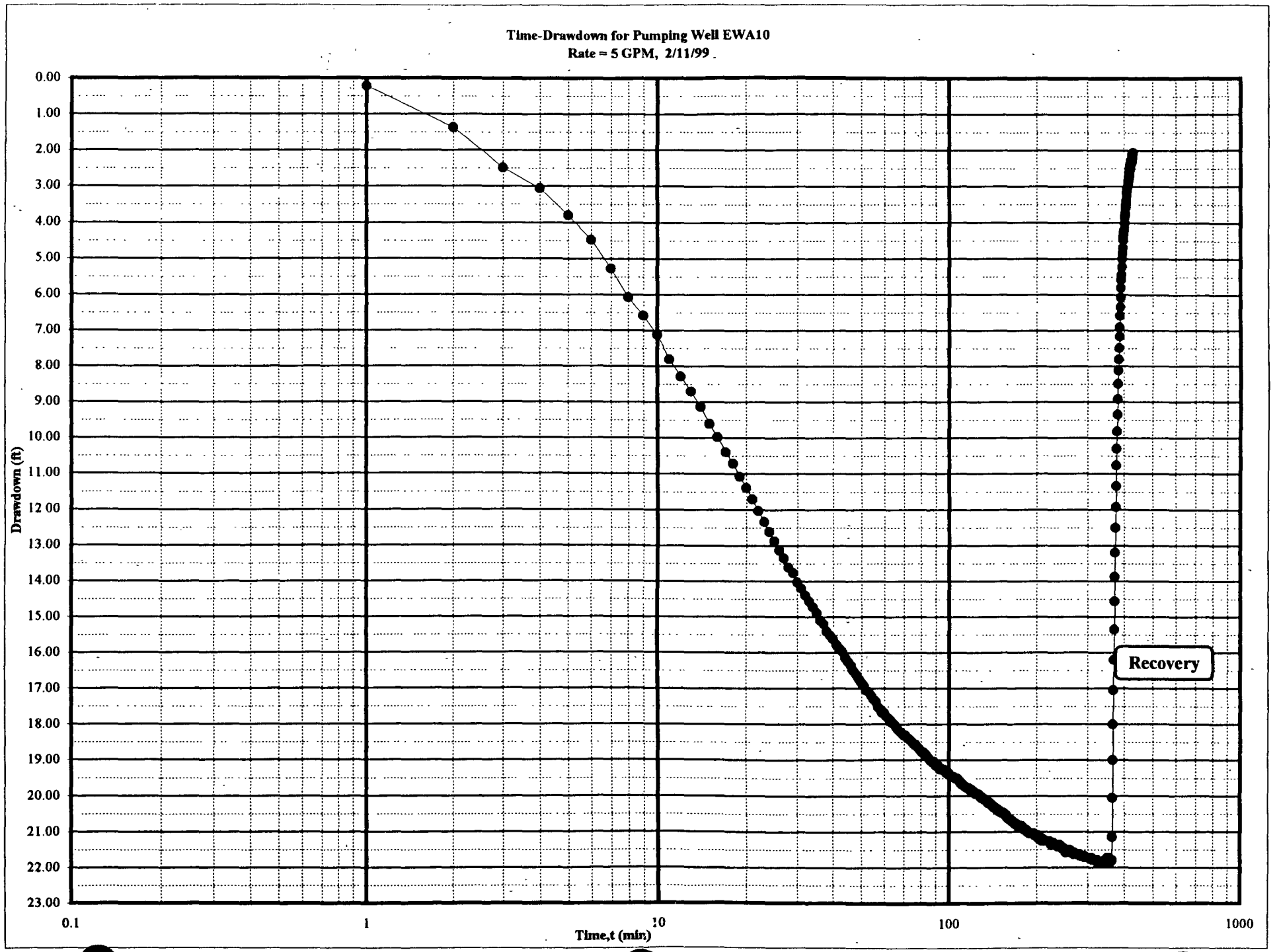

Residual Drawdown, Observation Well H11I
Yield Test at EWA9, 2/4/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-141


Time-Drawdown for Pumping Well EWA10
Rate = 5 GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figu 3-142

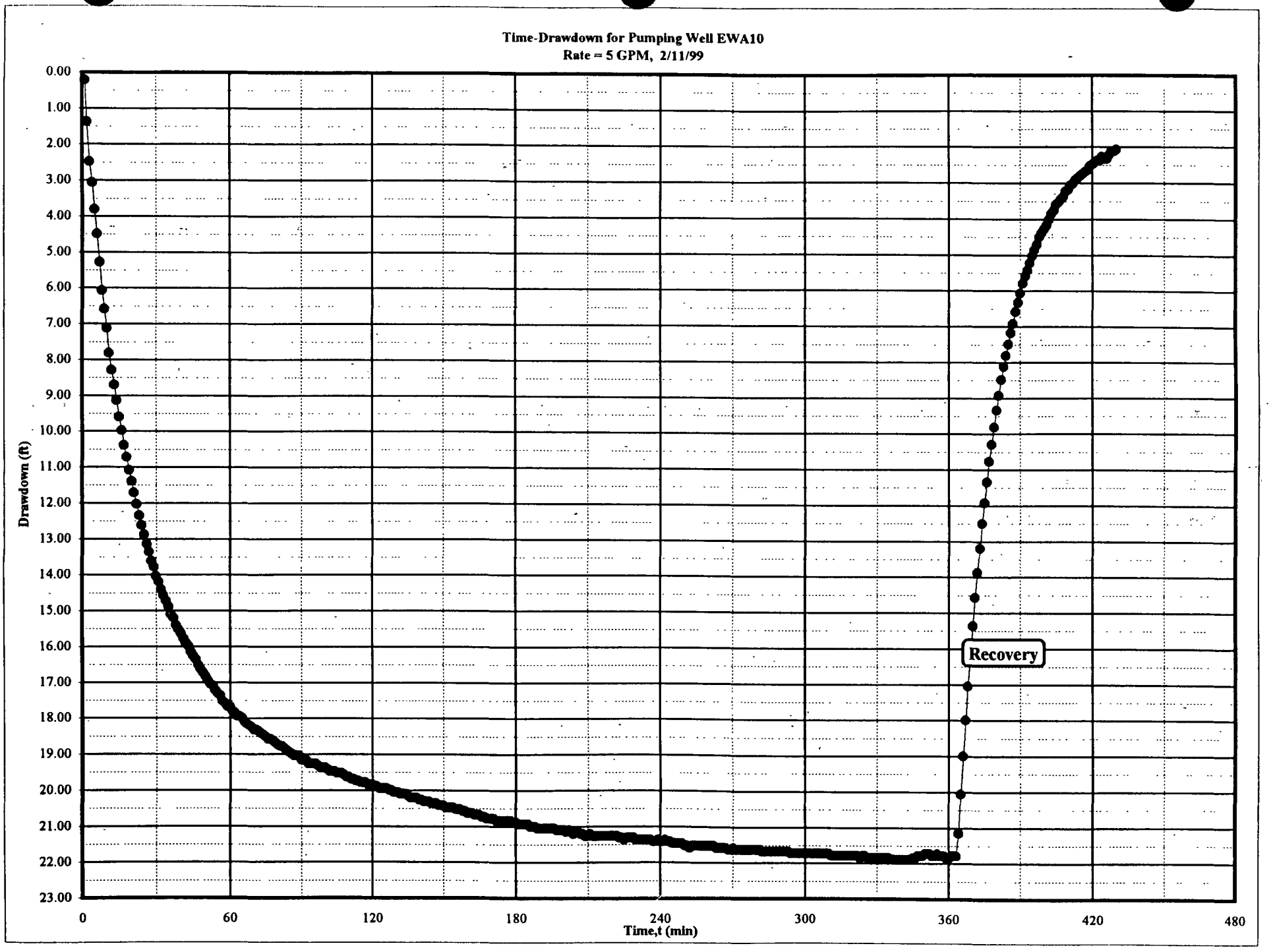
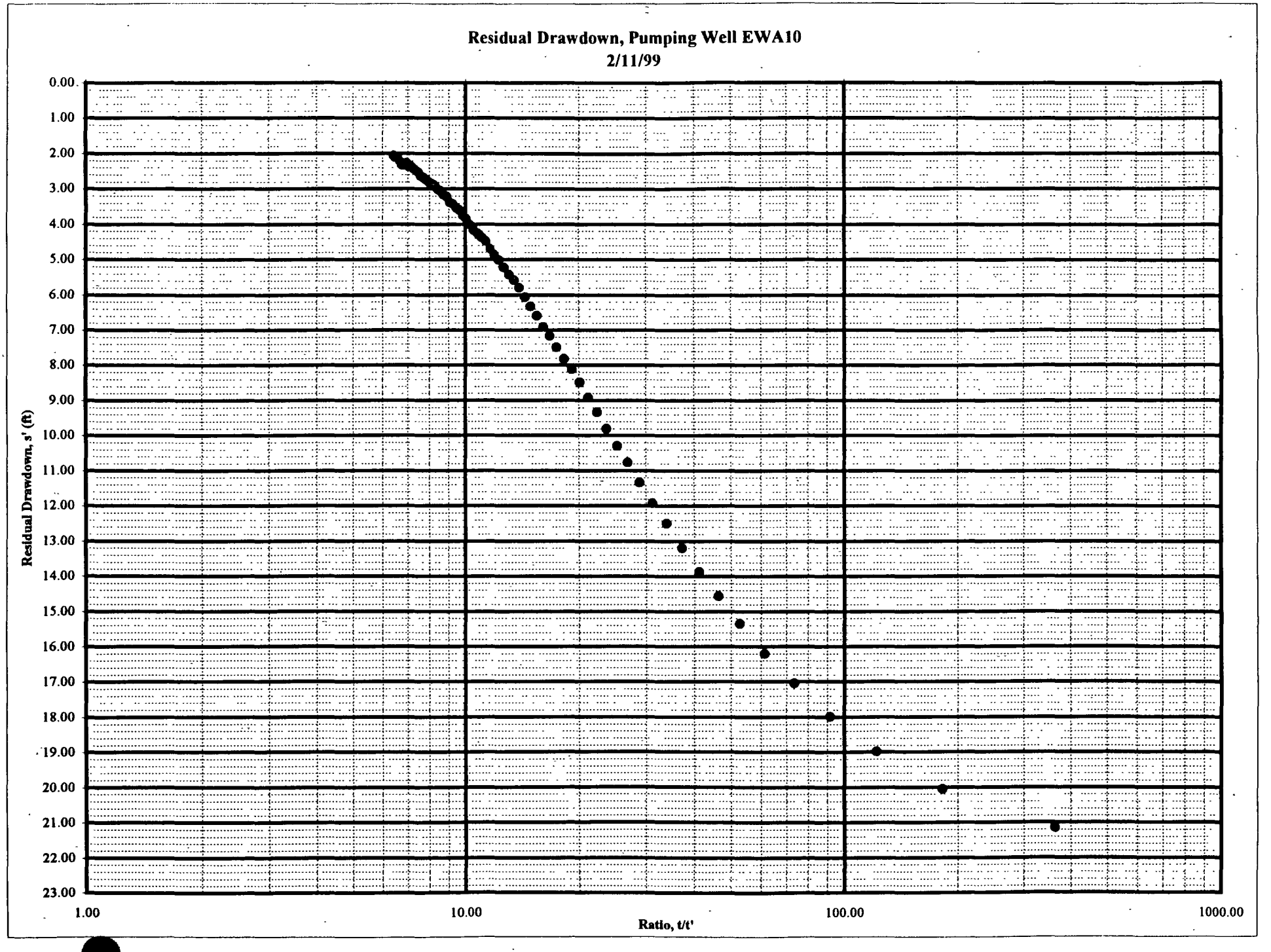

Time-Drawdown for Pumping Well EWA10
Rate = 5 GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-143


Residual Drawdown, Pumping Well EWA10
2/11/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

ure 8-144

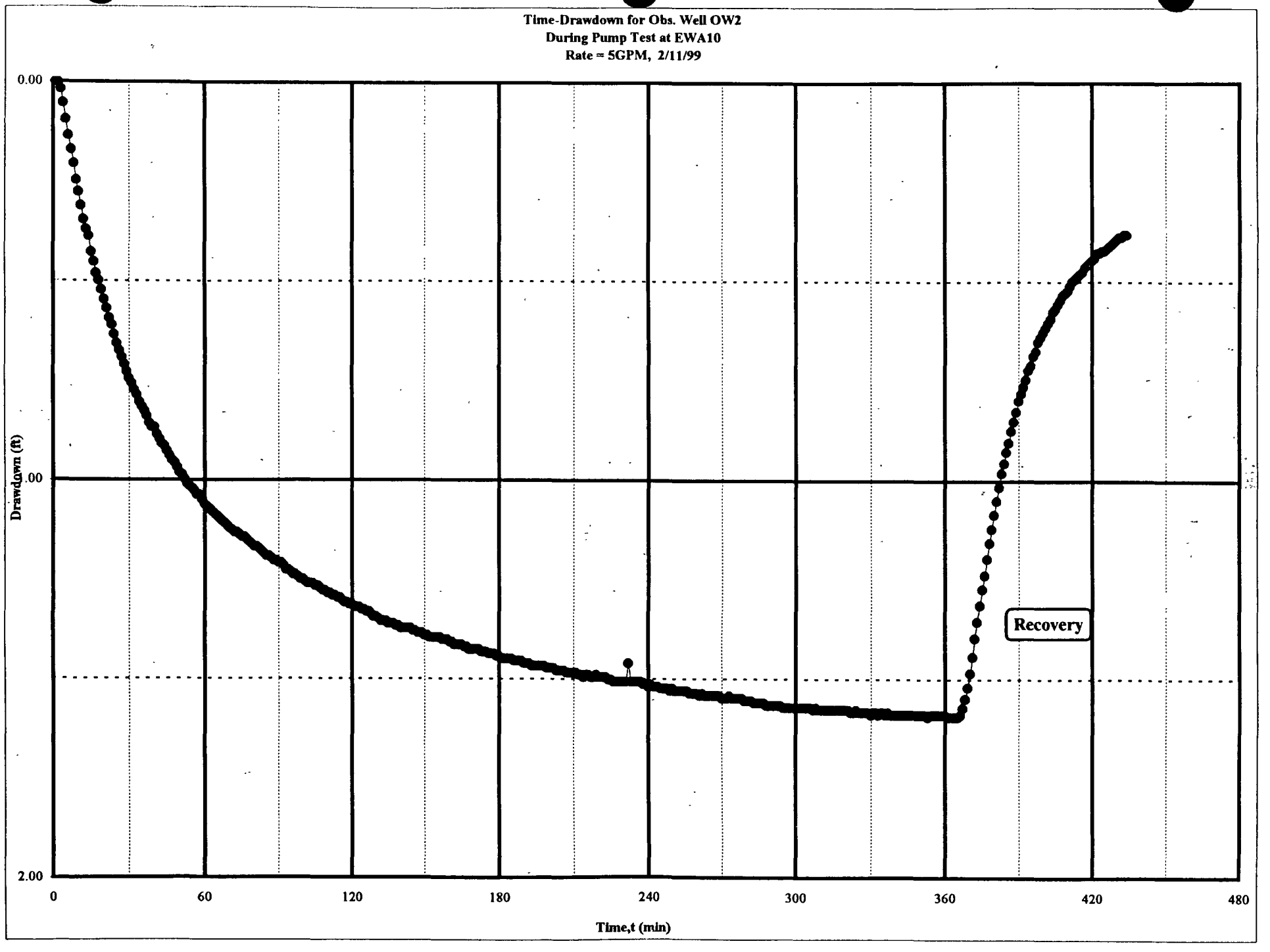

Time-Drawdown for Obs. Well OW2
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-145

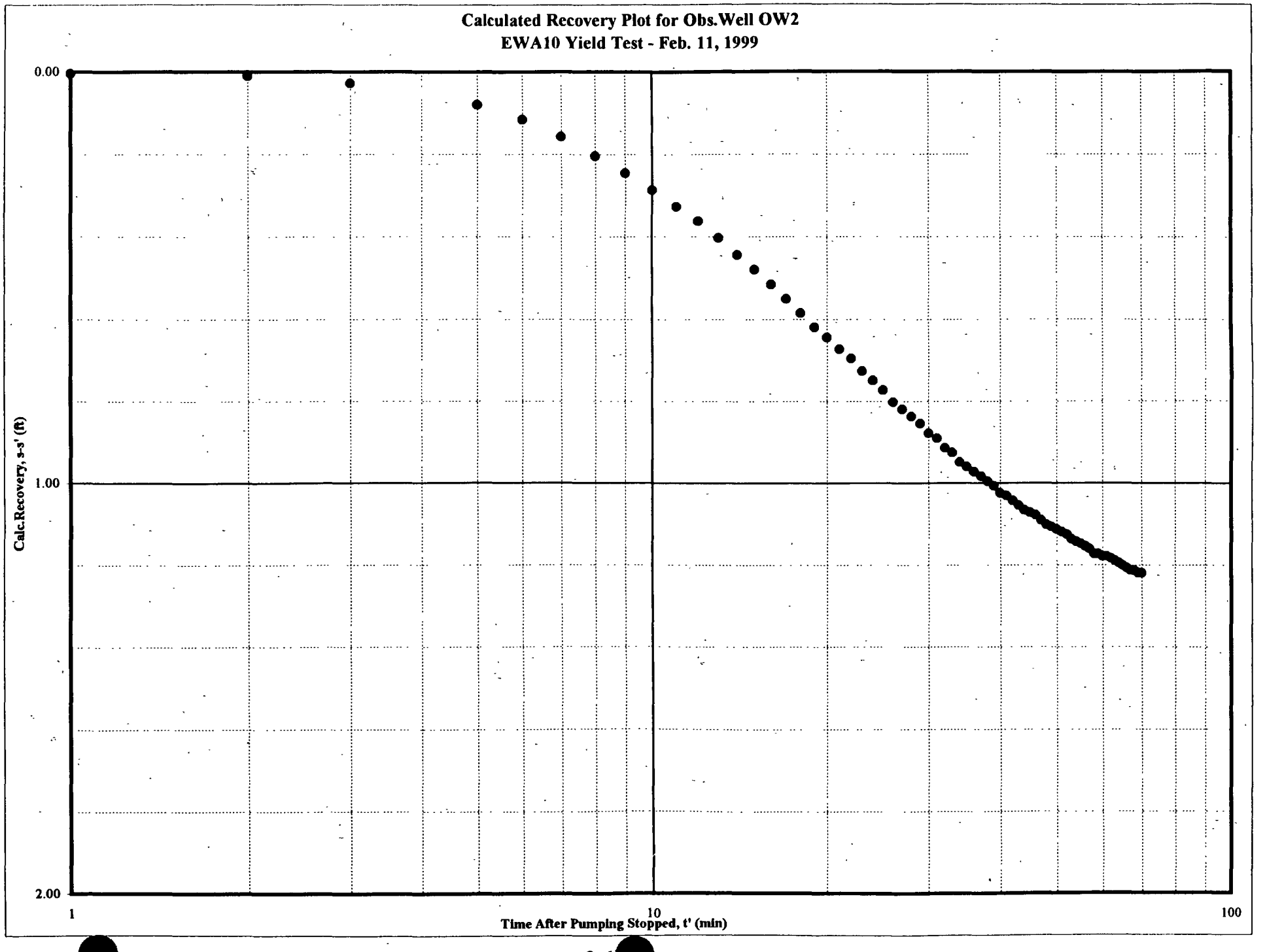

Calculated Recovery Plot for Obs.Well OW2
EWA10 Yield Test - Feb. 11, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-1

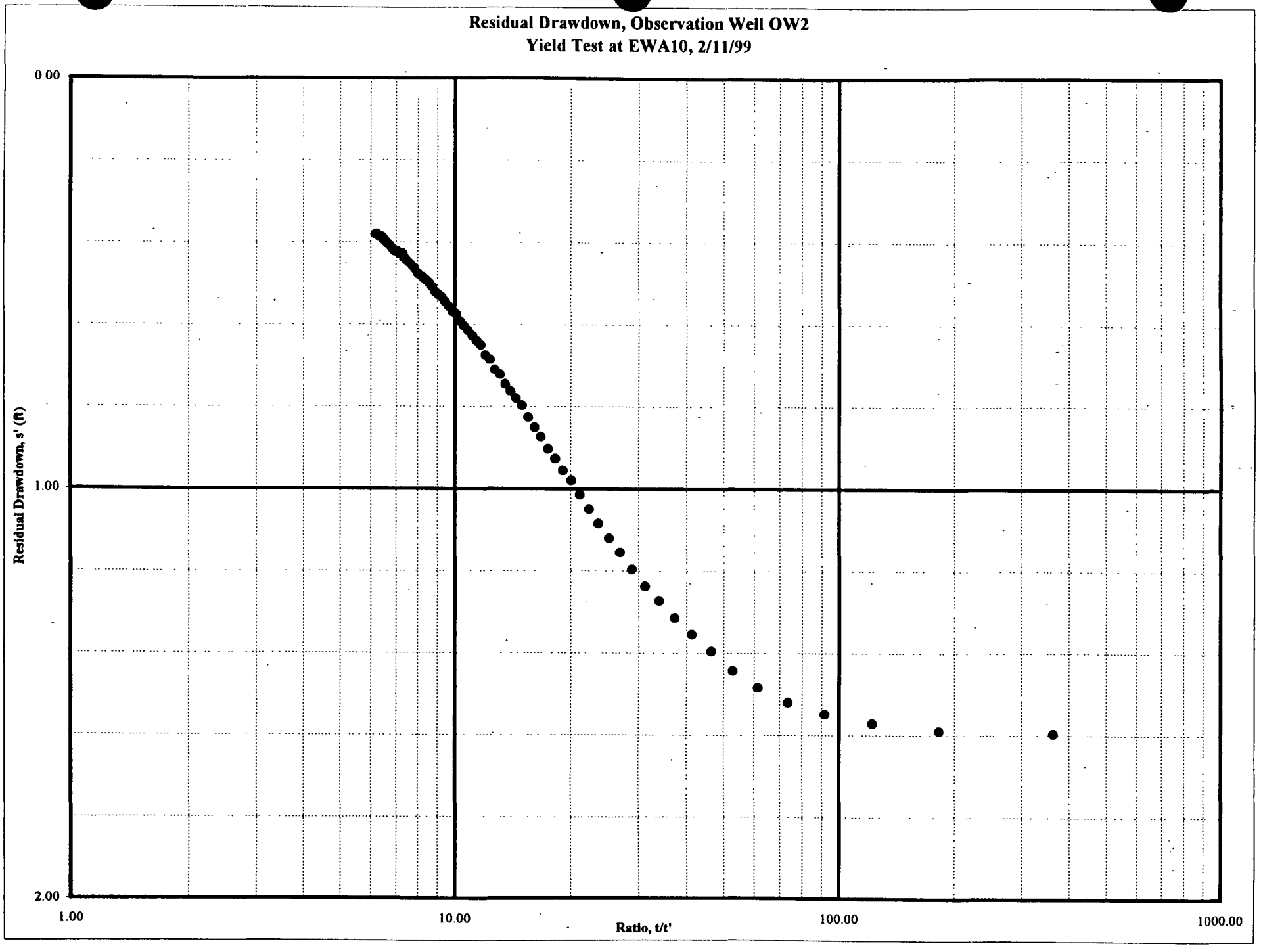

Residual Drawdown, Observation Well OW2
Yield Test at EWA10, 2/11/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-147

Time-Drawdown for Obs. Well EWA6
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recove
ry

Fig 8-148

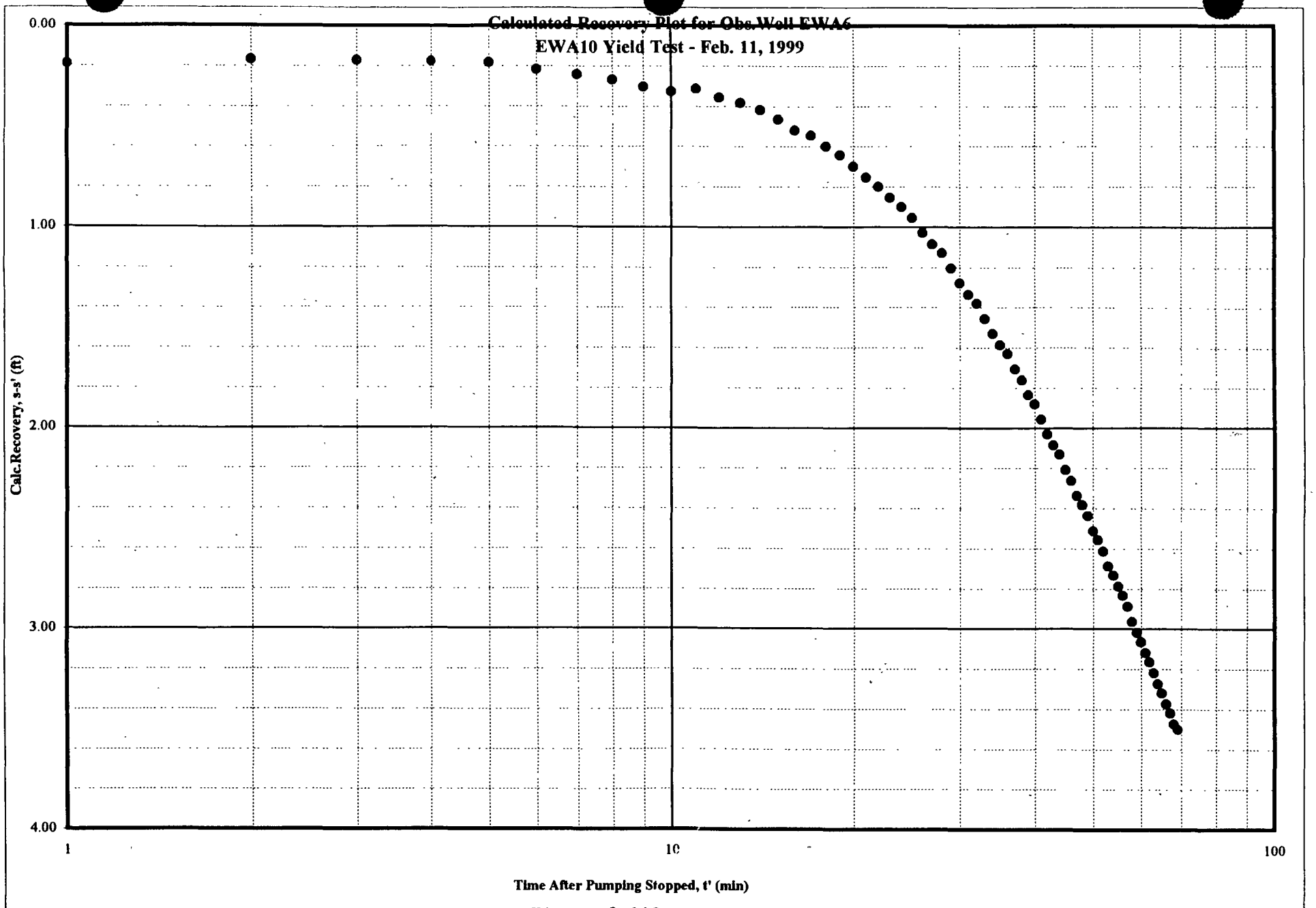
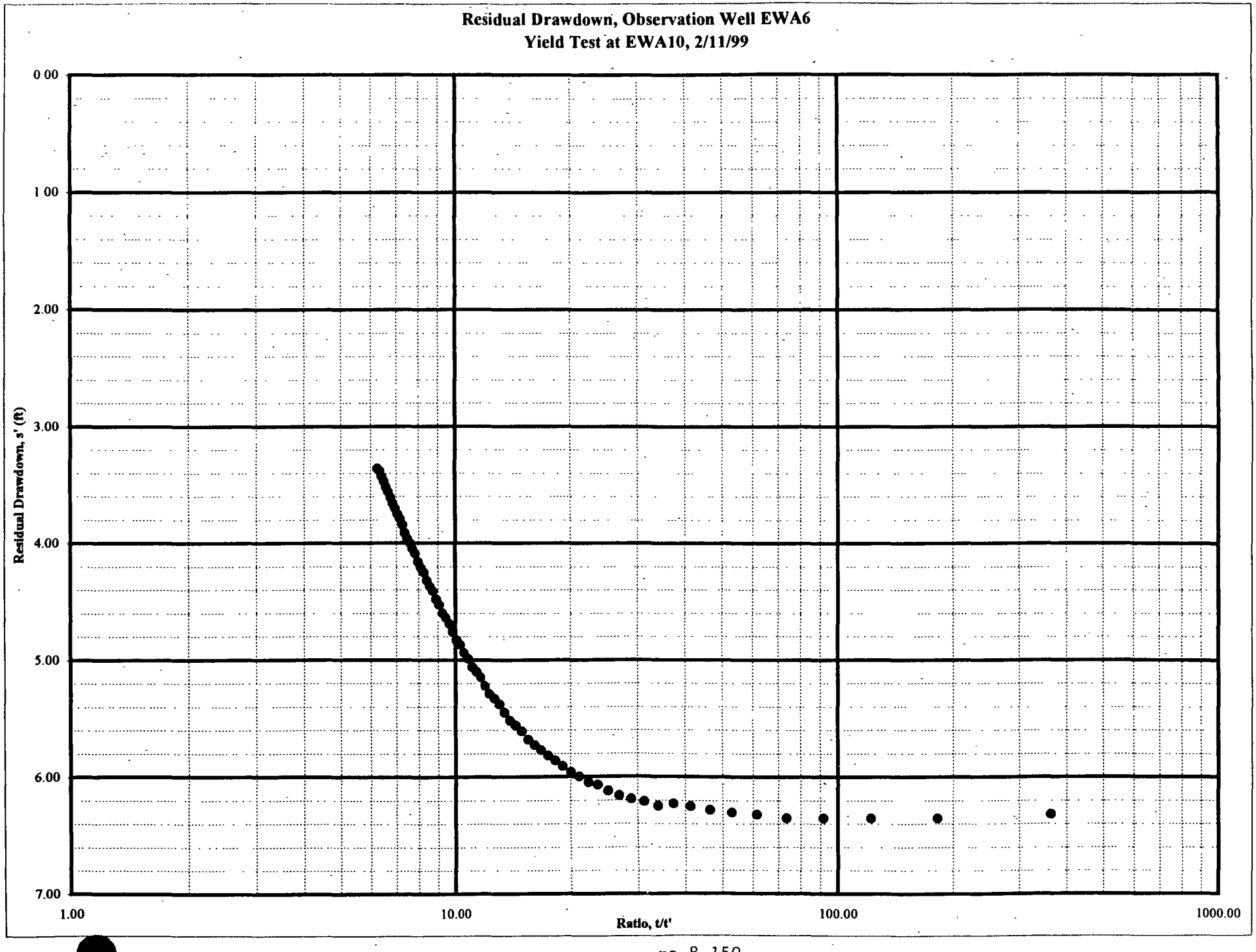

Calculated Recovery Plot for Obs.Well EWA6
EWA10 Yield Test - Feb. 11, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-149


Residual Drawdown, Observation Well EWA6
Yield Test at EWA10, 2/11/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Time-Drawdown for Obs. Well EWA7
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-151

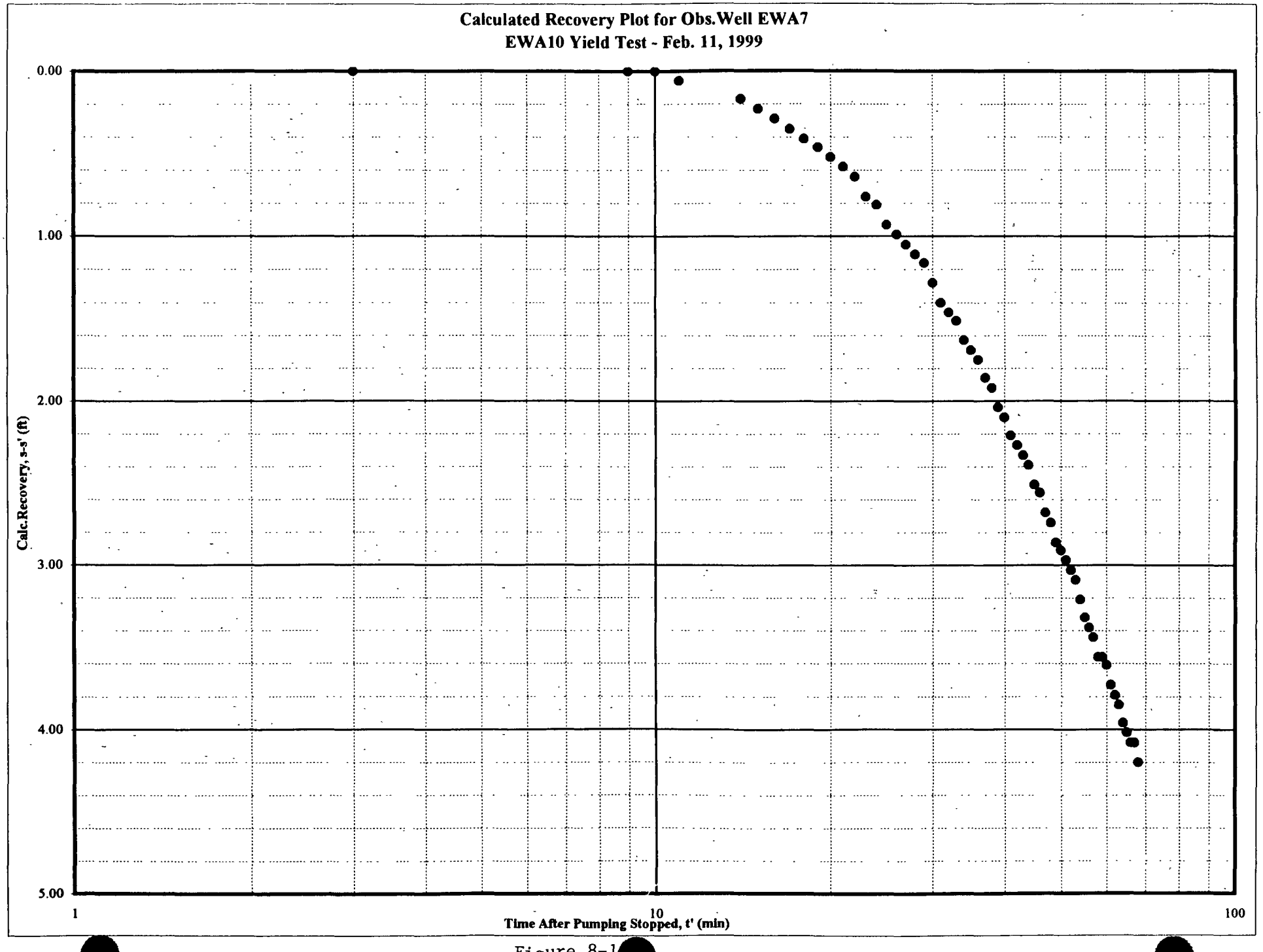

Calculated Recovery Plot for Obs.Well EWA7
EWA10 Yield Test - Feb. 11, 1999
0.00
1.00
2.00
3.00
4.00
5.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-1

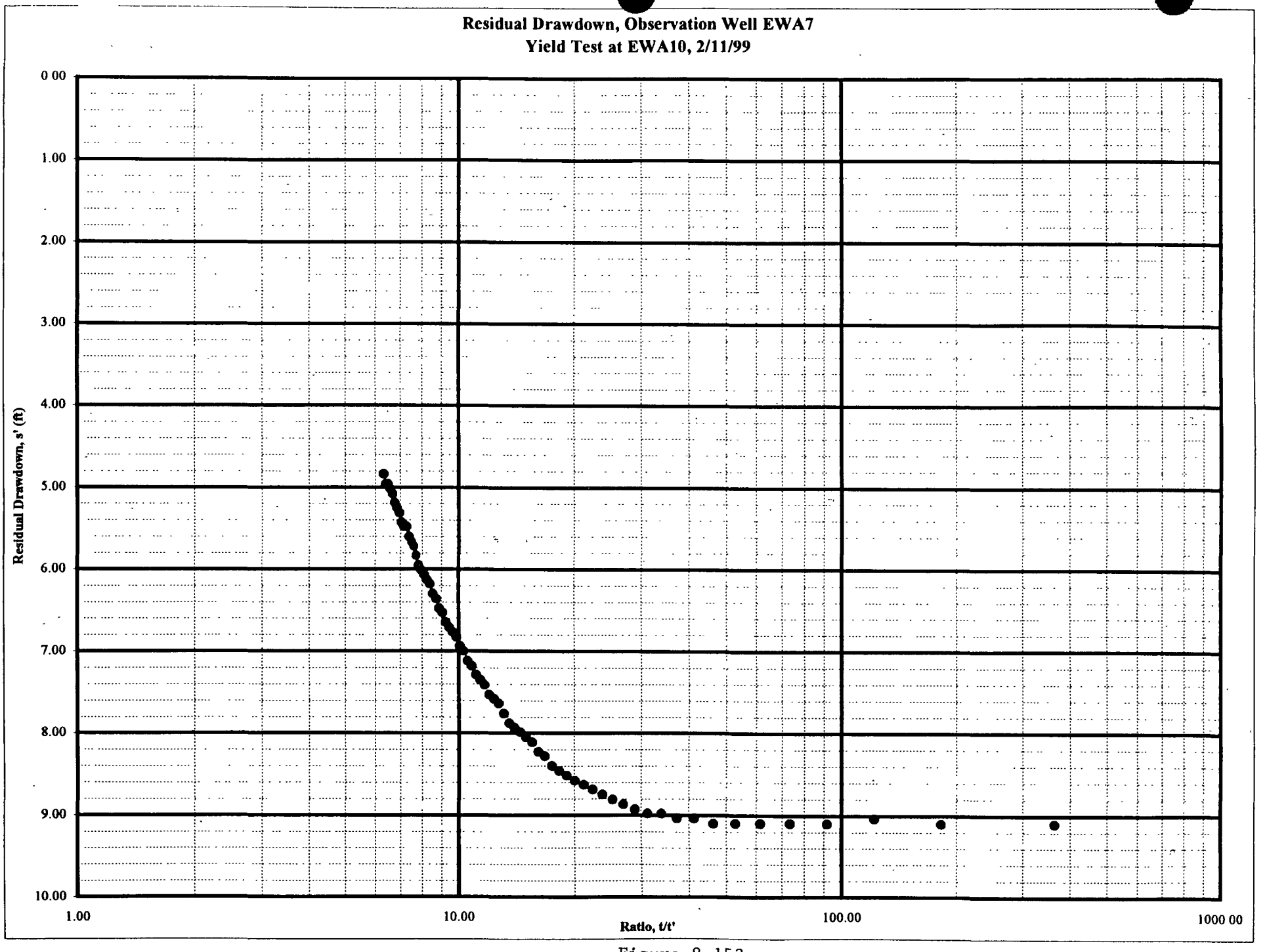

Residual Drawdown, Observation Well EWA7
Yield Test at EWA10, 2/11/99
Residual Drawdown, s' (ft)
0 00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-153

Time-Drawdown for Obs. Well EWA9
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
1
10
100
1000
Time,t (min)
Recovery

Figure 54

Time-Drawdown for Obs. Well EWA9
During Pump Test at EWA10
Rate = 5GPM, 2/11/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-155

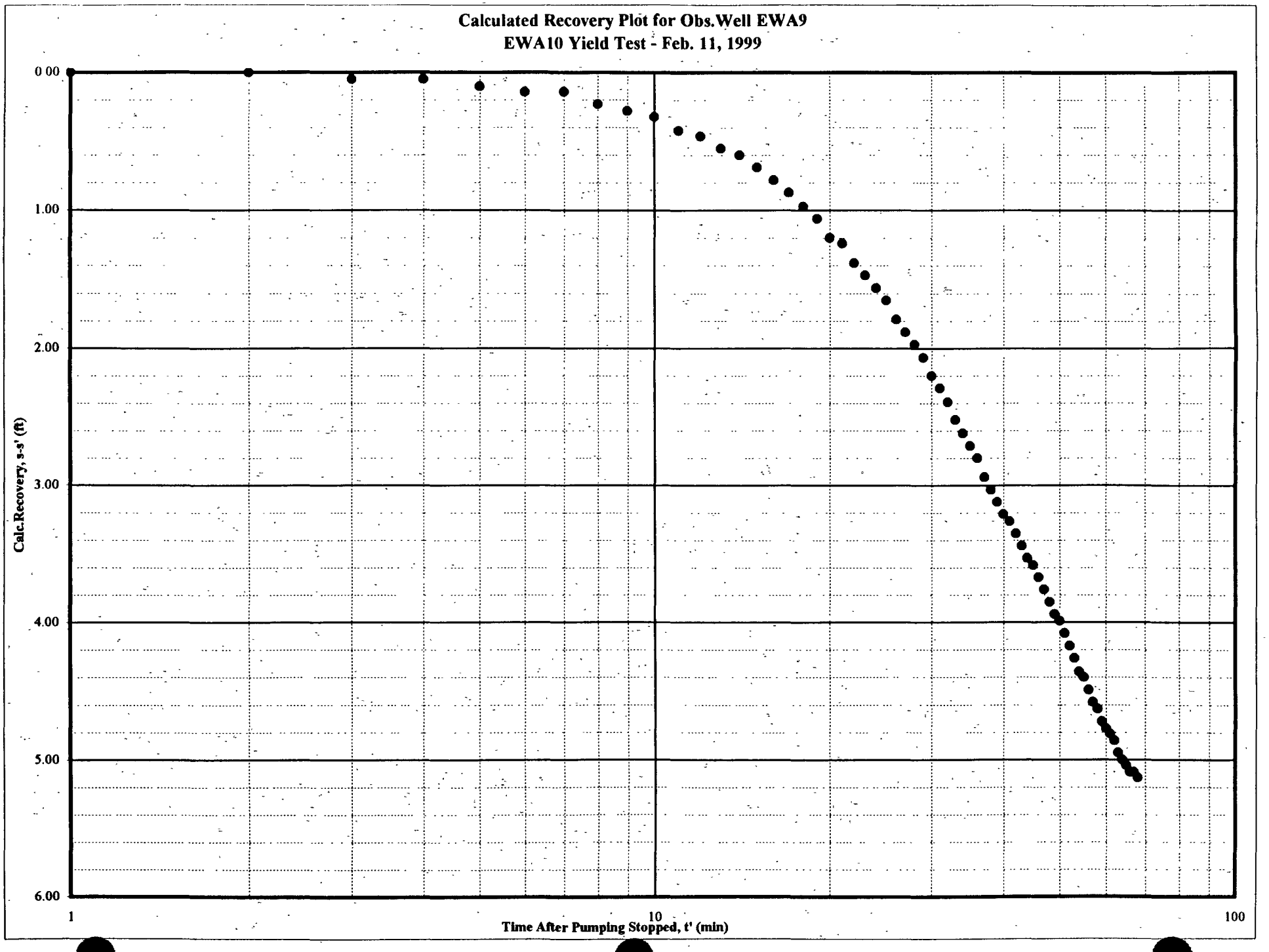

Calculated Recovery Plot for Obs.Well EWA9
EWA10 Yield Test - Feb. 11, 1999
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-15

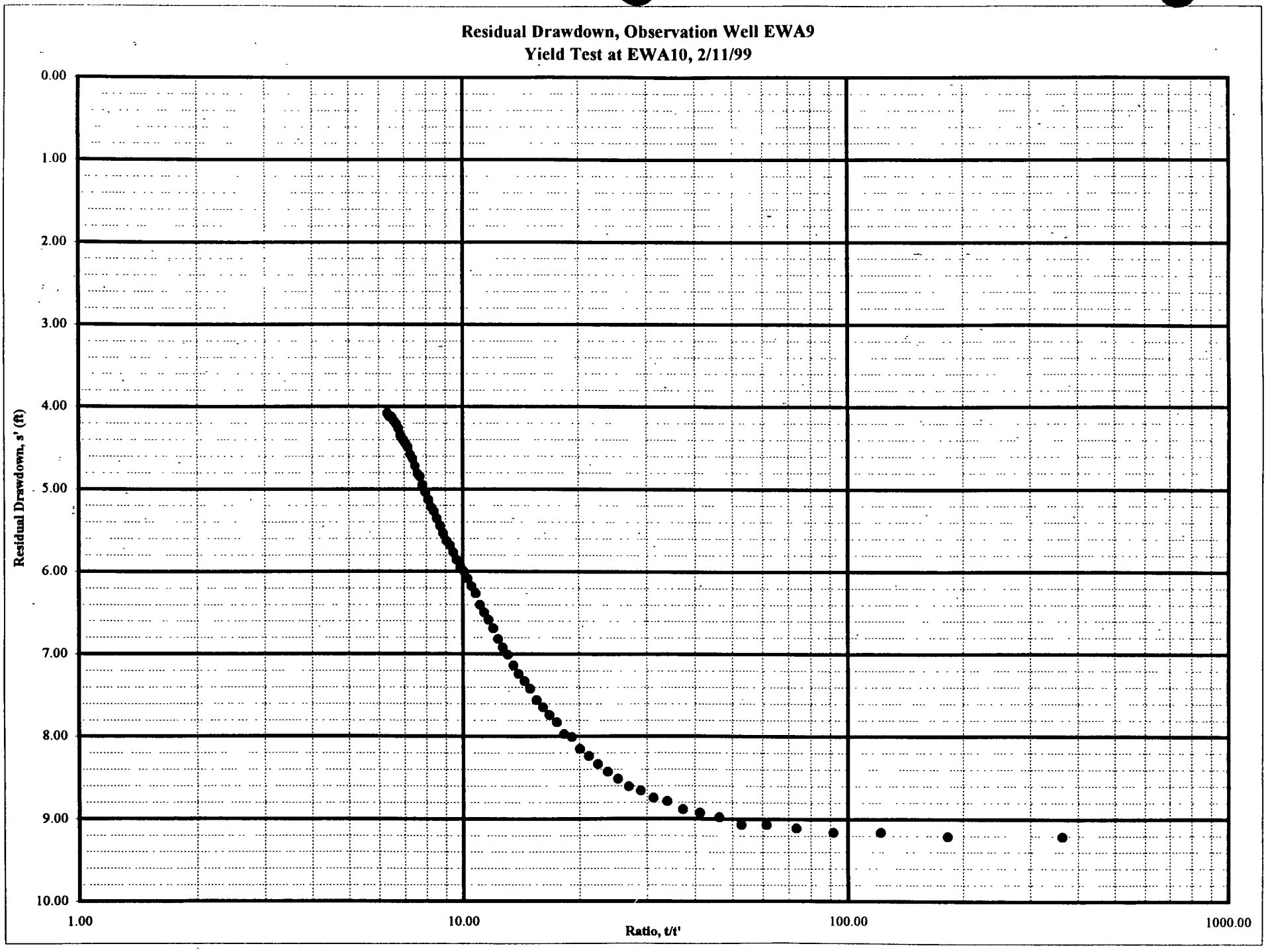
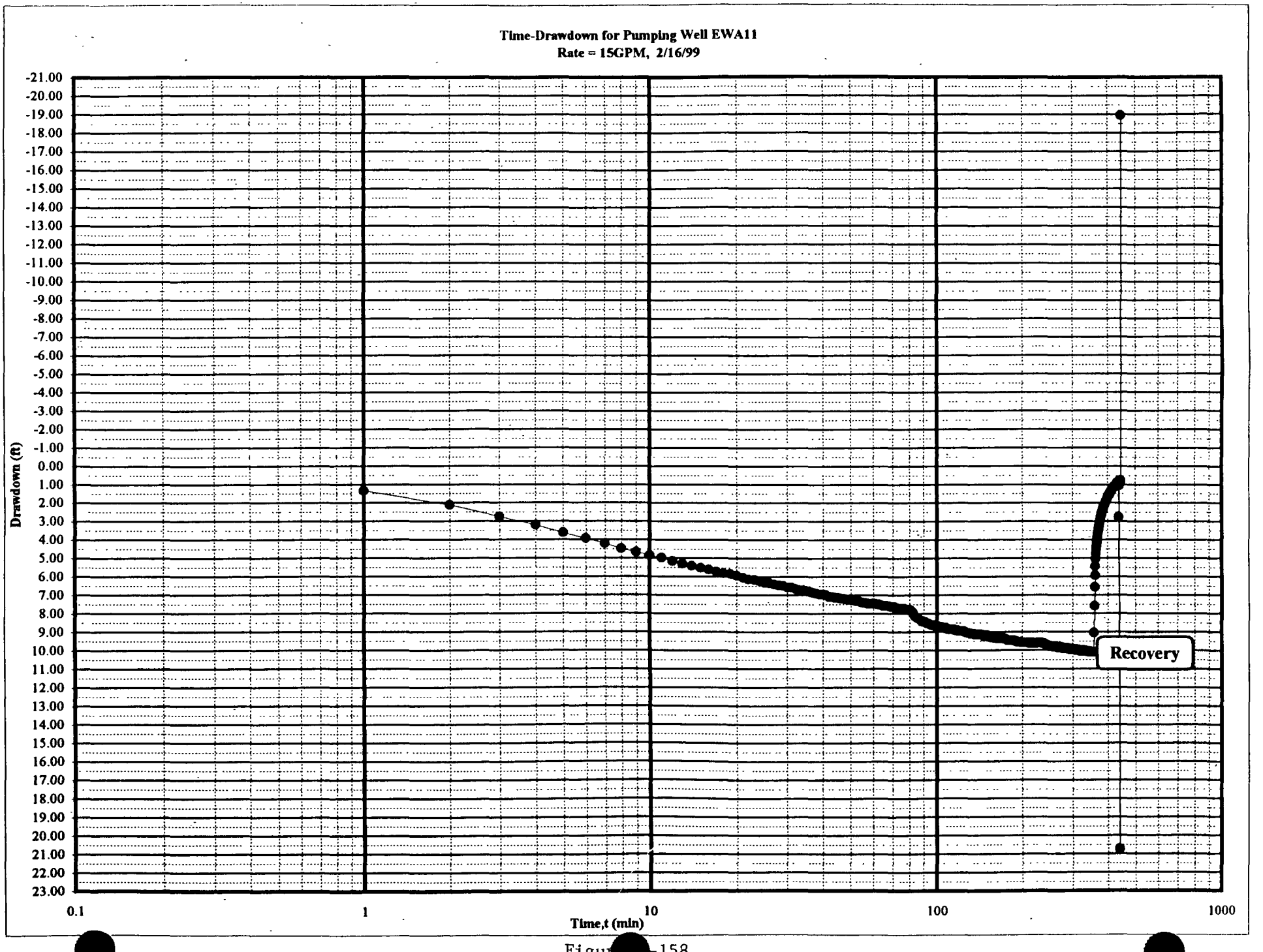

Residual Drawdown, Observation Well EWA9
Yield Test at EWA10, 2/11/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-157


Time-Drawdown for Pumping Well EWA11
Rate = 15GPM, 2/16/99
Drawdown (ft)
-21.00
-20.00
-19.00
-18.00
-17.00
-16.00
-15.00
-14.00
-13.00
-12.00
-11.00
-10.00
-9.00
-8.00
-7.00
-6.00
-5.00
-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figu[illegible]-158

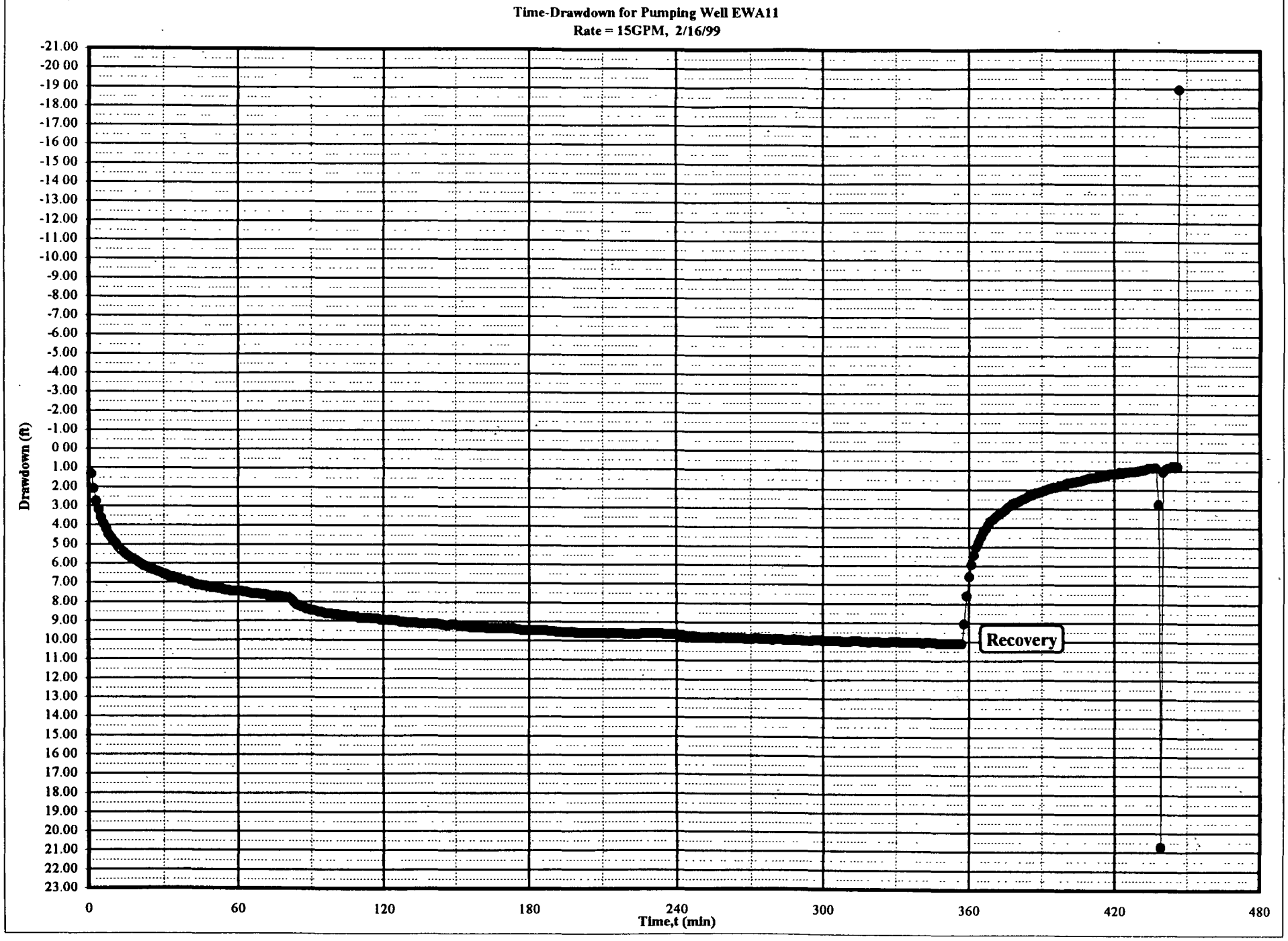

Time-Drawdown for Pumping Well EWA11
Rate = 15GPM, 2/16/99
Drawdown (ft)
-21.00
-20.00
-19.00
-18.00
-17.00
-16.00
-15.00
-14.00
-13.00
-12.00
-11.00
-10.00
-9.00
-8.00
-7.00
-6.00
-5.00
-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-159

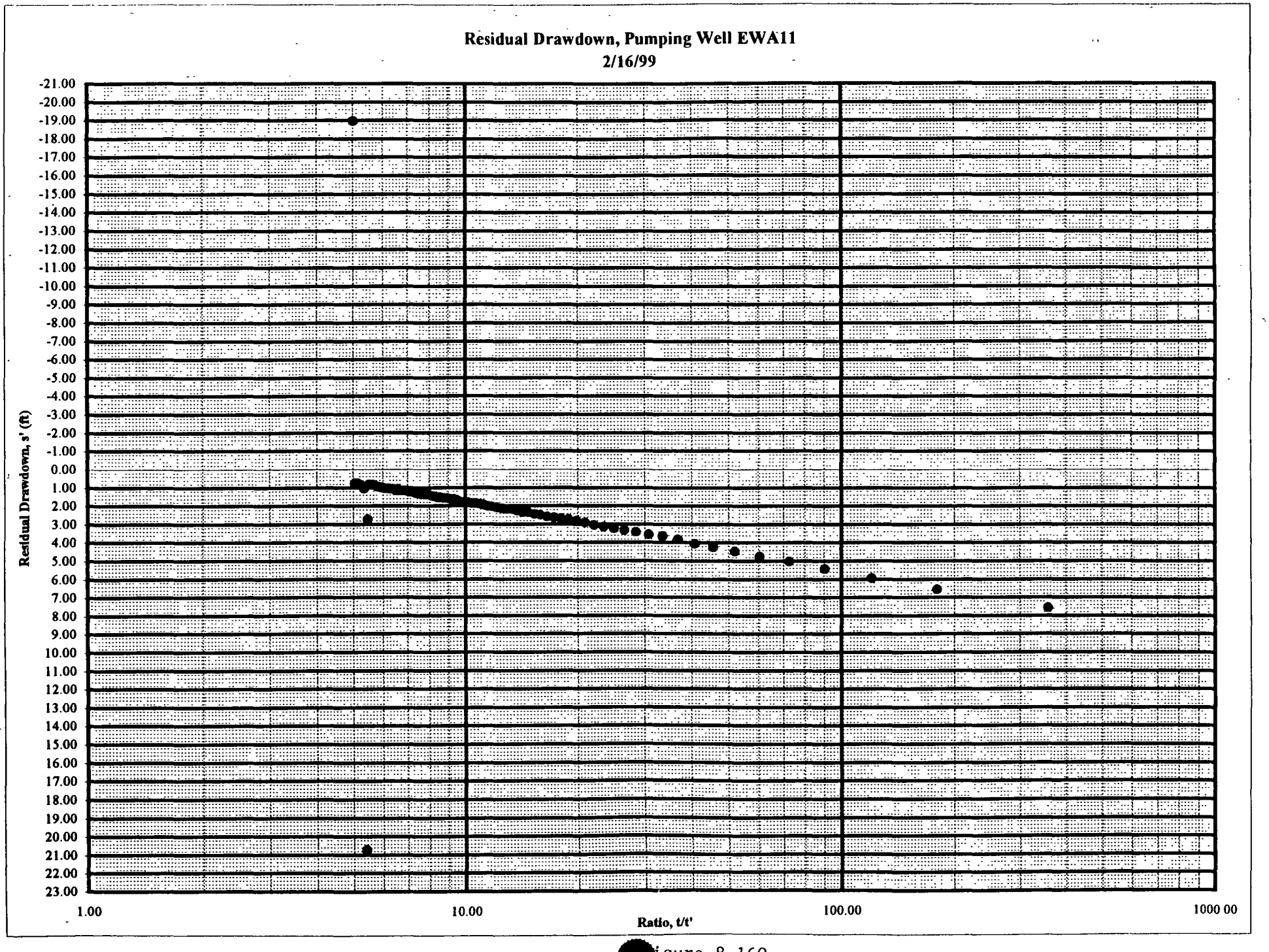

Residual Drawdown, Pumping Well EWA11
2/16/99
Residual Drawdown, s' (ft)
-21.00
-20.00
-19.00
-18.00
-17.00
-16.00
-15.00
-14.00
-13.00
-12.00
-11.00
-10.00
-9.00
-8.00
-7.00
-6.00
-5.00
-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-160

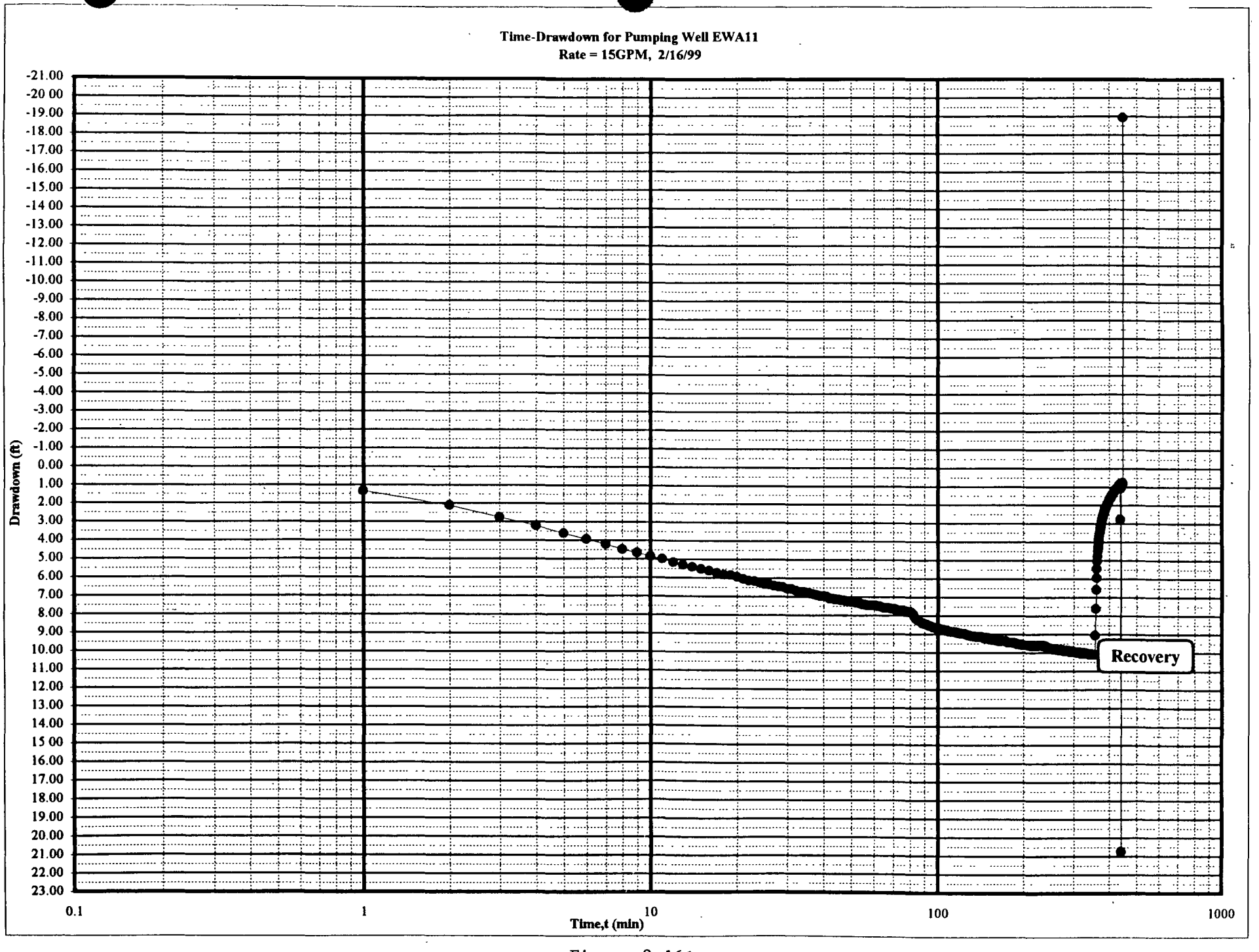
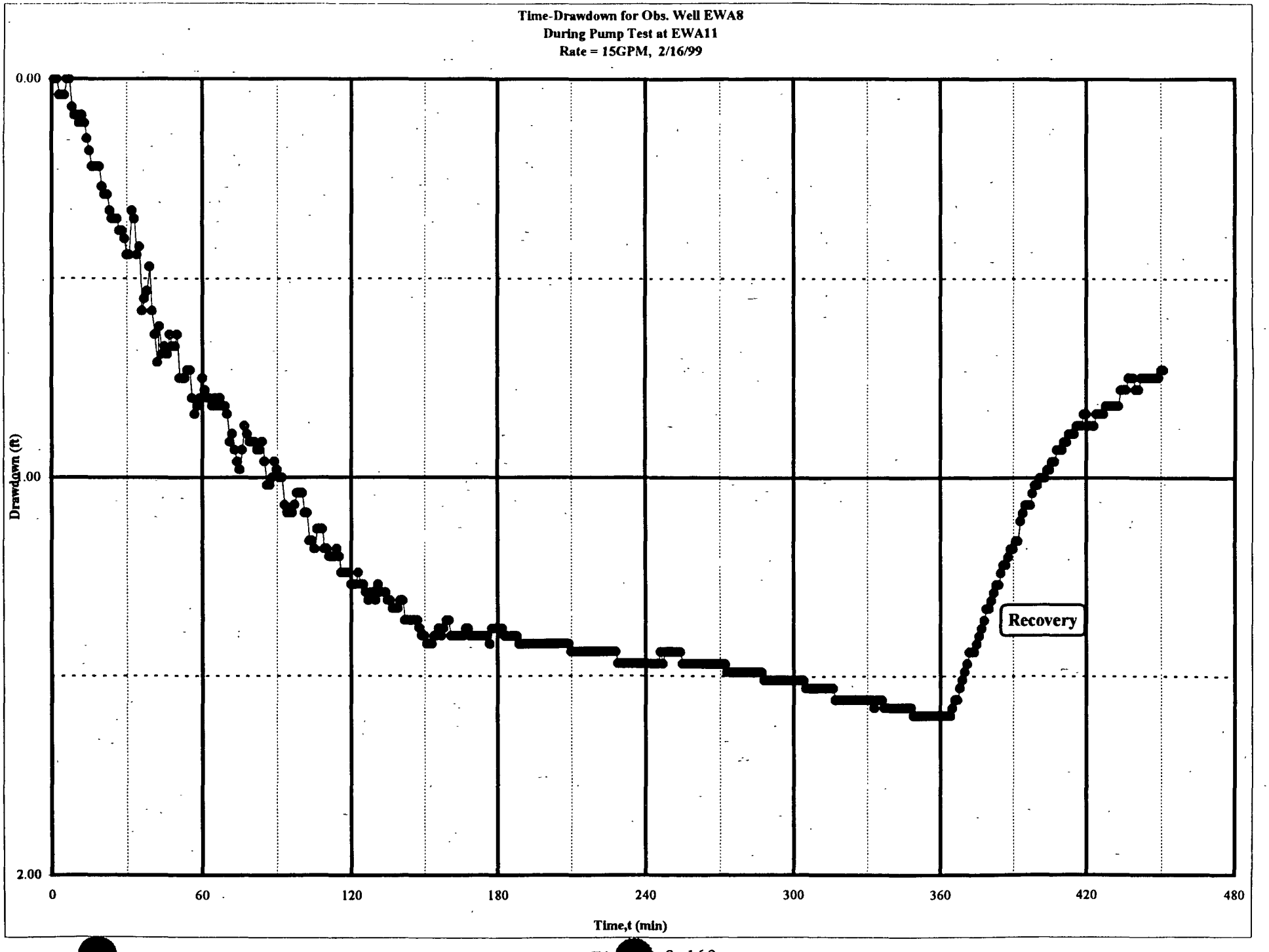

Time-Drawdown for Pumping Well EWA11
Rate = 15GPM, 2/16/99
Drawdown (ft)
-21.00
-20.00
-19.00
-18.00
-17.00
-16.00
-15.00
-14.00
-13.00
-12.00
-11.00
-10.00
-9.00
-8.00
-7.00
-6.00
-5.00
-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-161


Time-Drawdown for Obs. Well EWA8
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Fi[illegible] 8-162

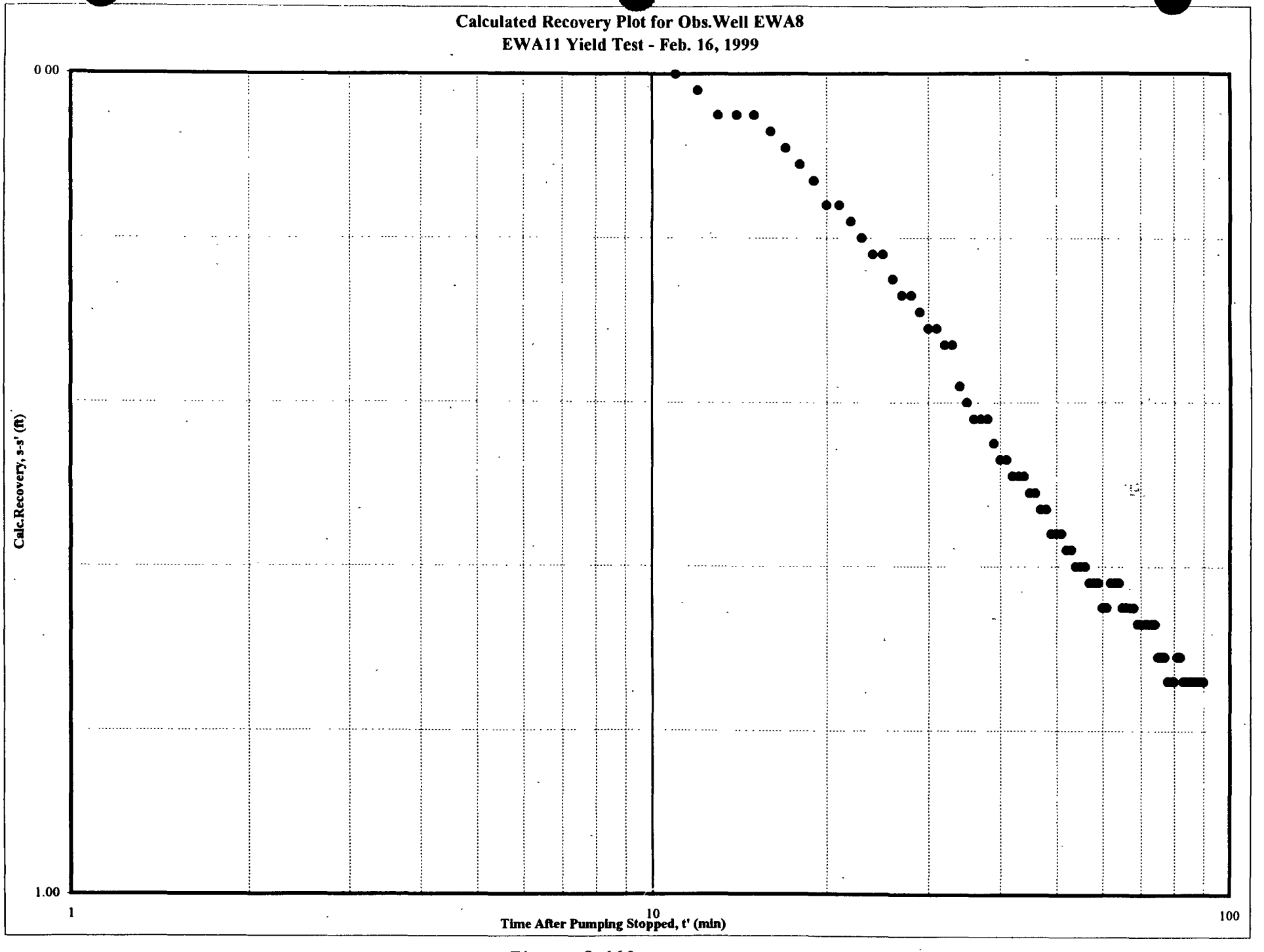
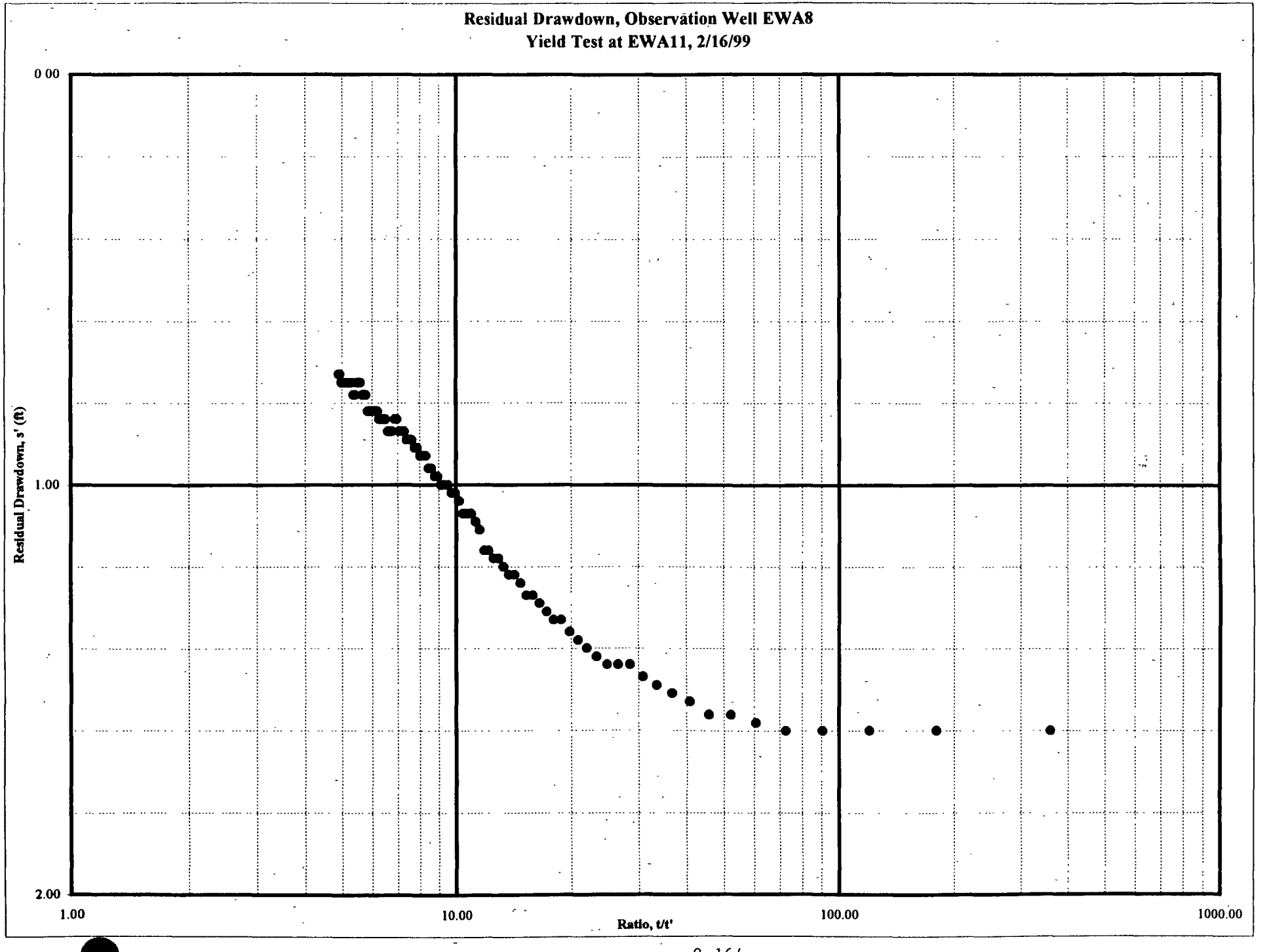

Calculated Recovery Plot for Obs.Well EWA8
EWA11 Yield Test - Feb. 16, 1999
0 00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-163


Residual Drawdown, Observation Well EWA8
Yield Test at EWA11, 2/16/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

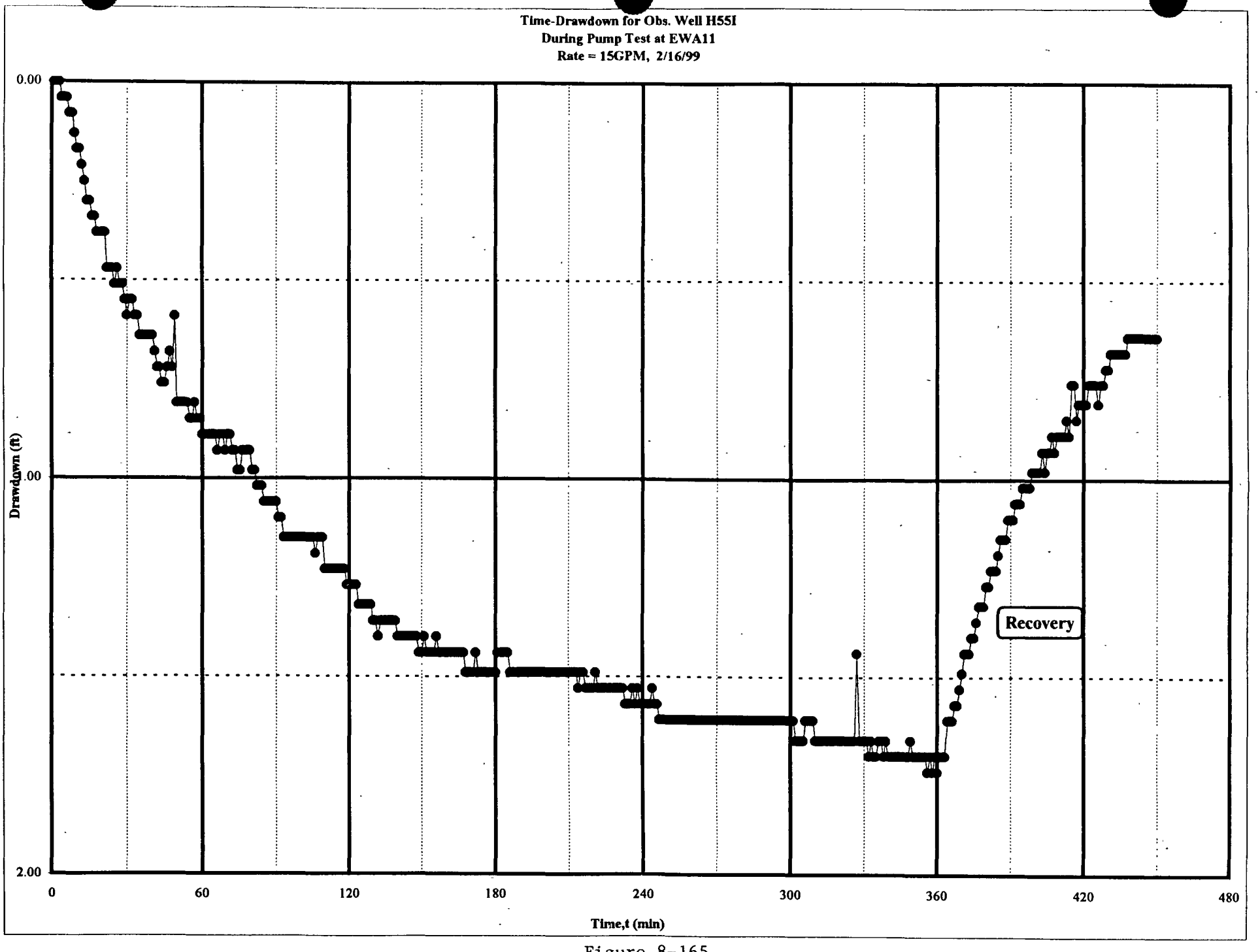

Time-Drawdown for Obs. Well H55I
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-165

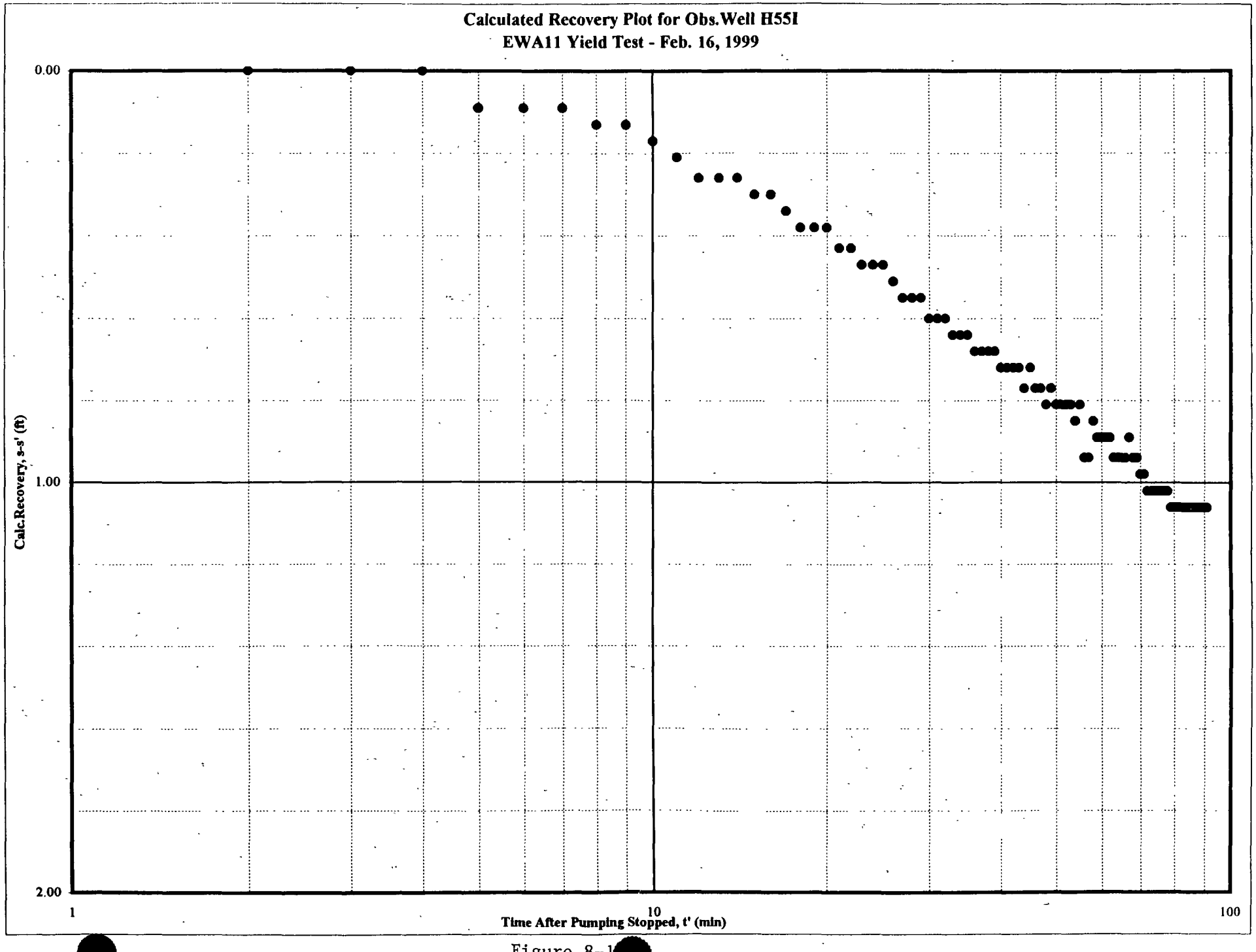

Calculated Recovery Plot for Obs.Well H55I
EWA11 Yield Test - Feb. 16, 1999
0.00
1.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-1

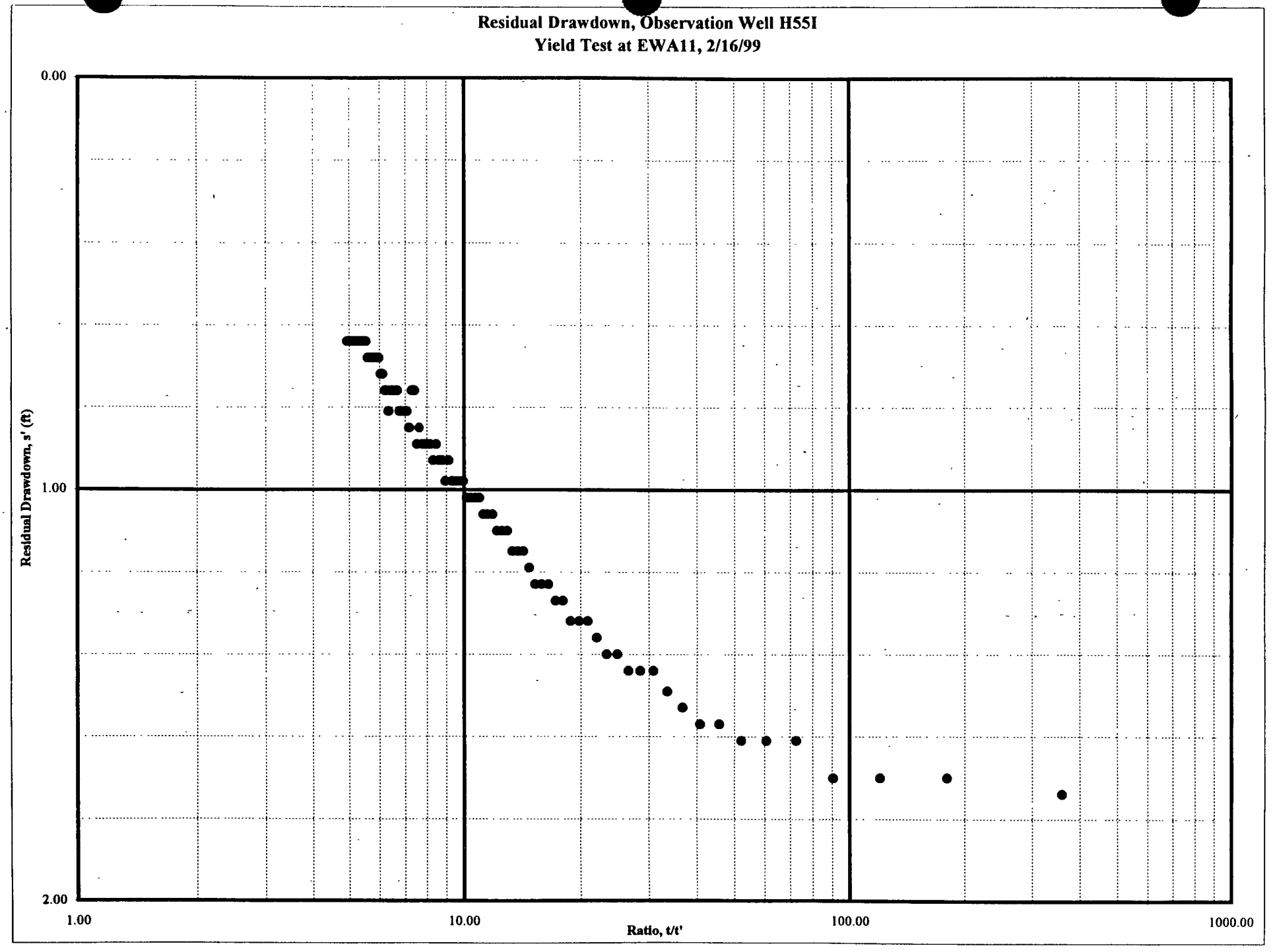
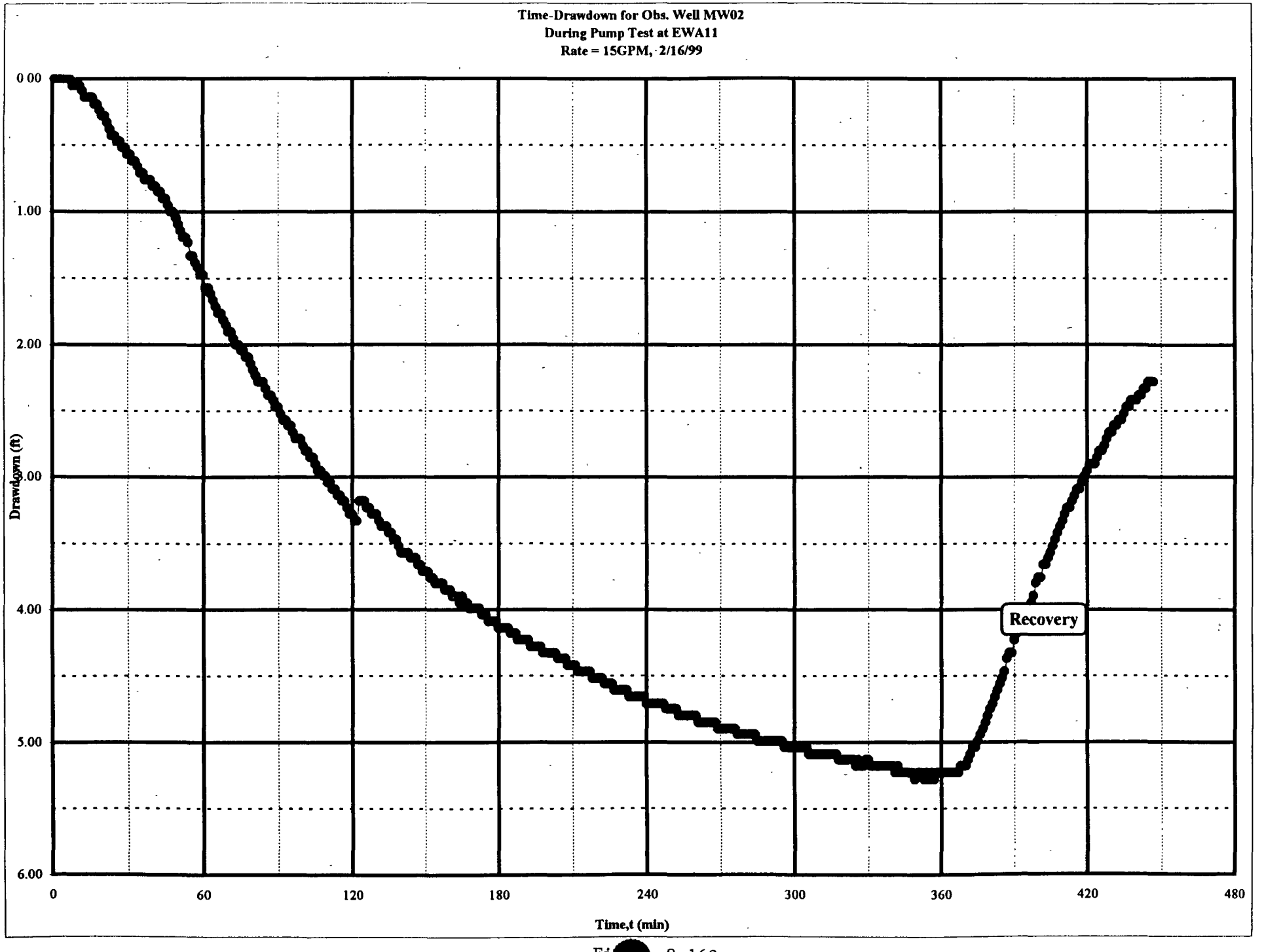

Residual Drawdown, Observation Well H55I
Yield Test at EWA11, 2/16/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-167


Time-Drawdown for Obs. Well MW02
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Fi[illegible] 8-168

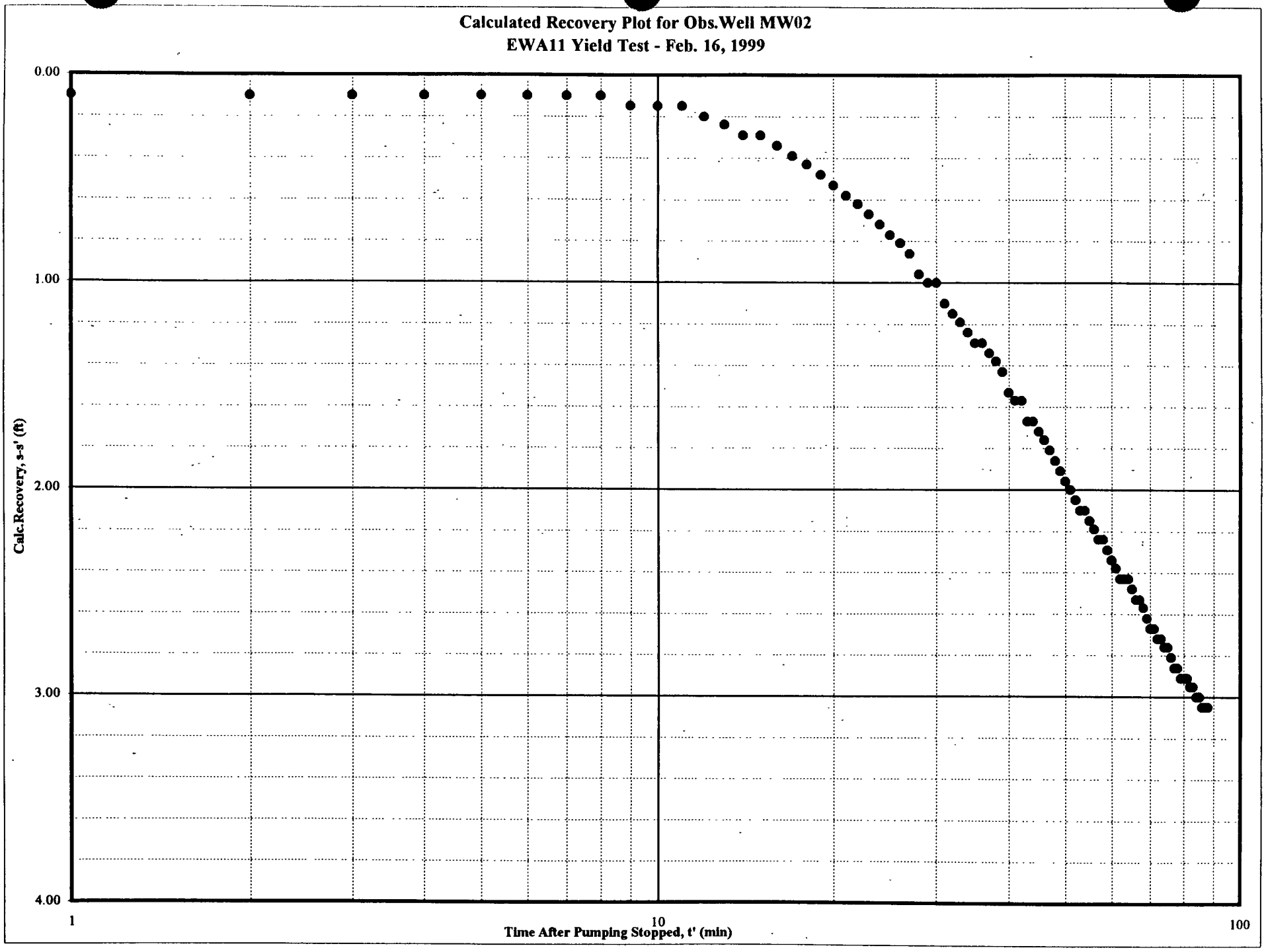
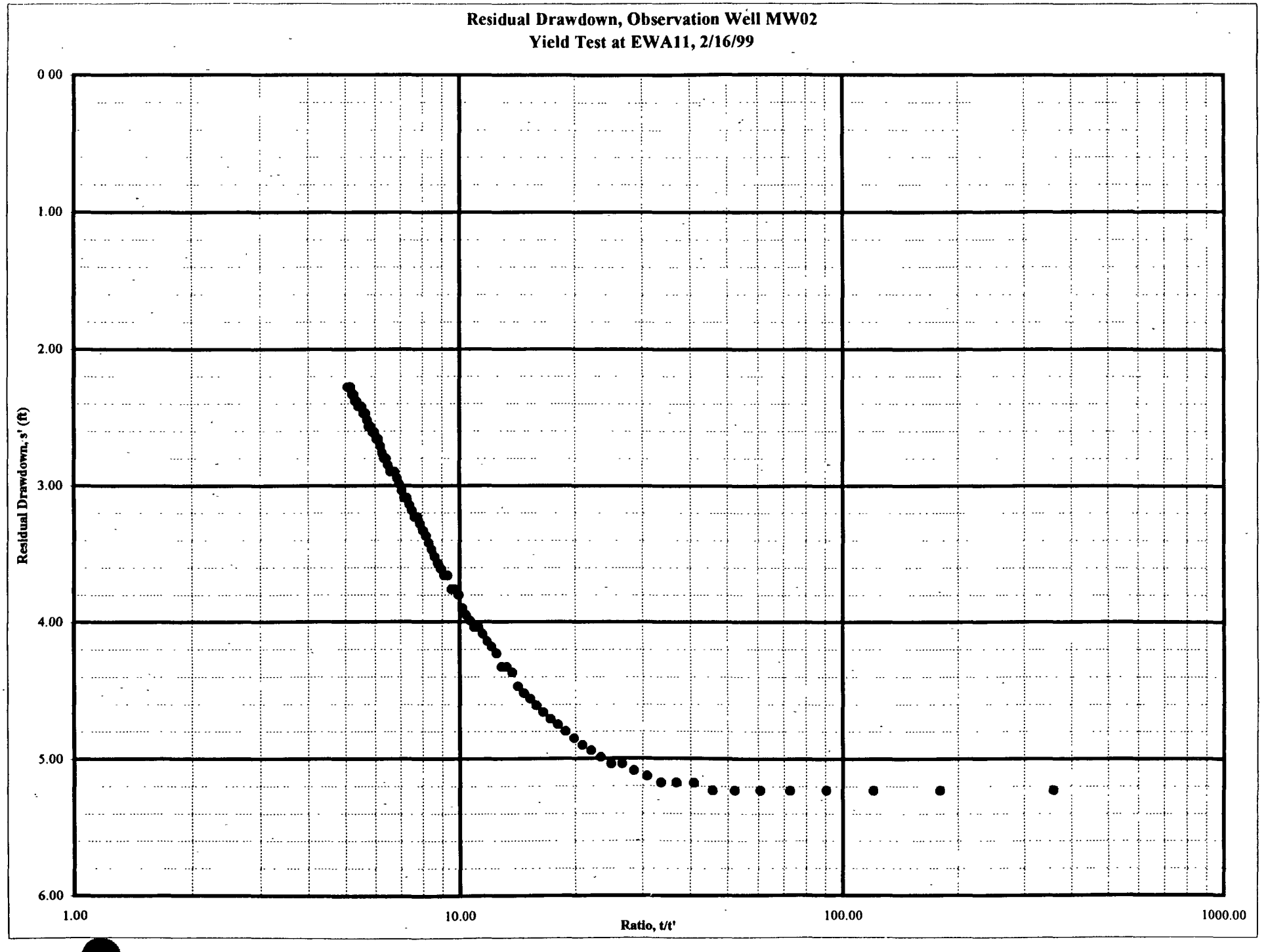

Calculated Recovery Plot for Obs.Well MW02
EWA11 Yield Test - Feb. 16, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-169


Residual Drawdown, Observation Well MW02
Yield Test at EWA11, 2/16/99
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

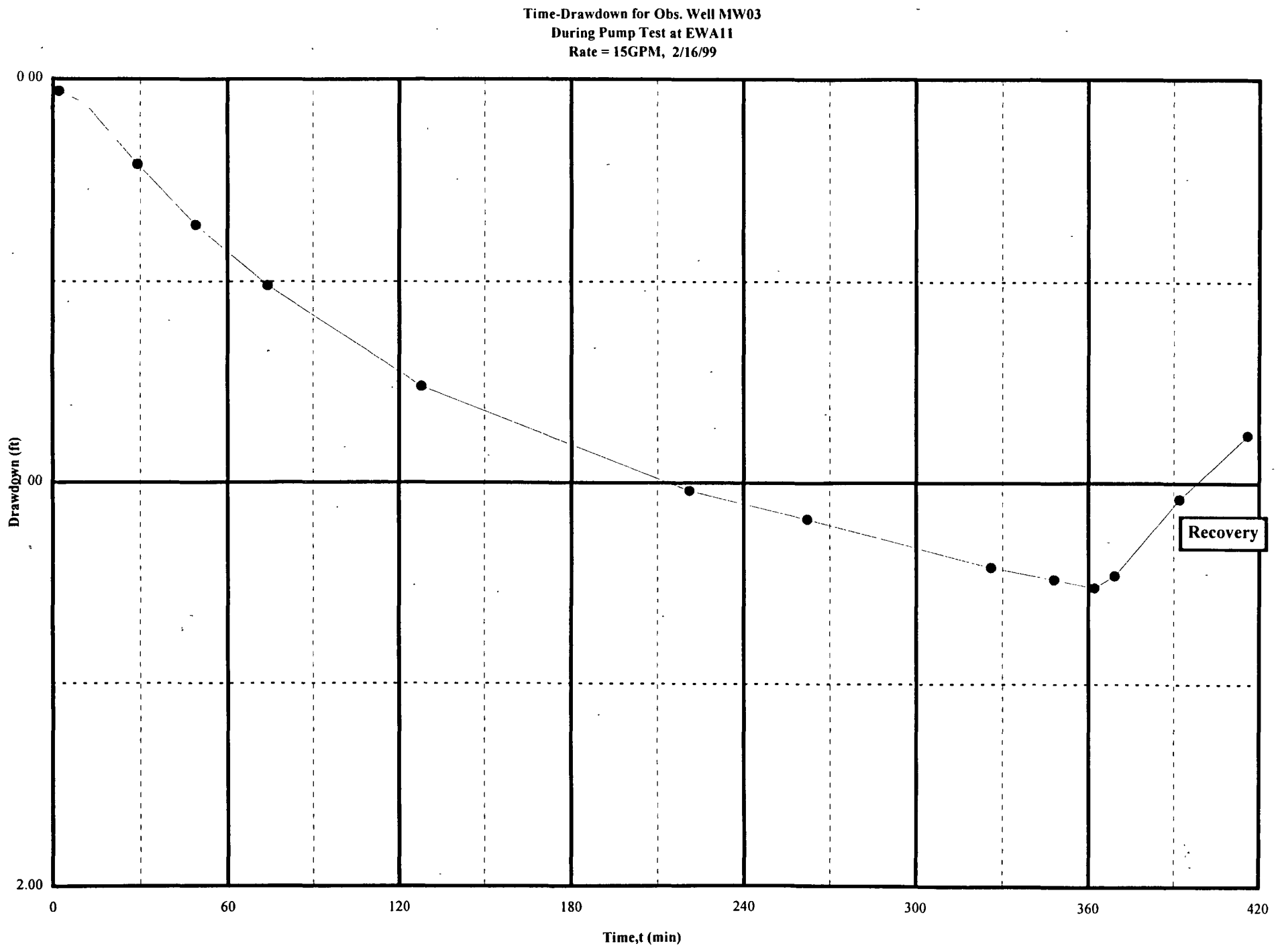

Time-Drawdown for Obs. Well MW03
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-171

Calculated Recovery Plot for Obs.Well MW03
EWA11 Yield Test - Feb. 16, 1999

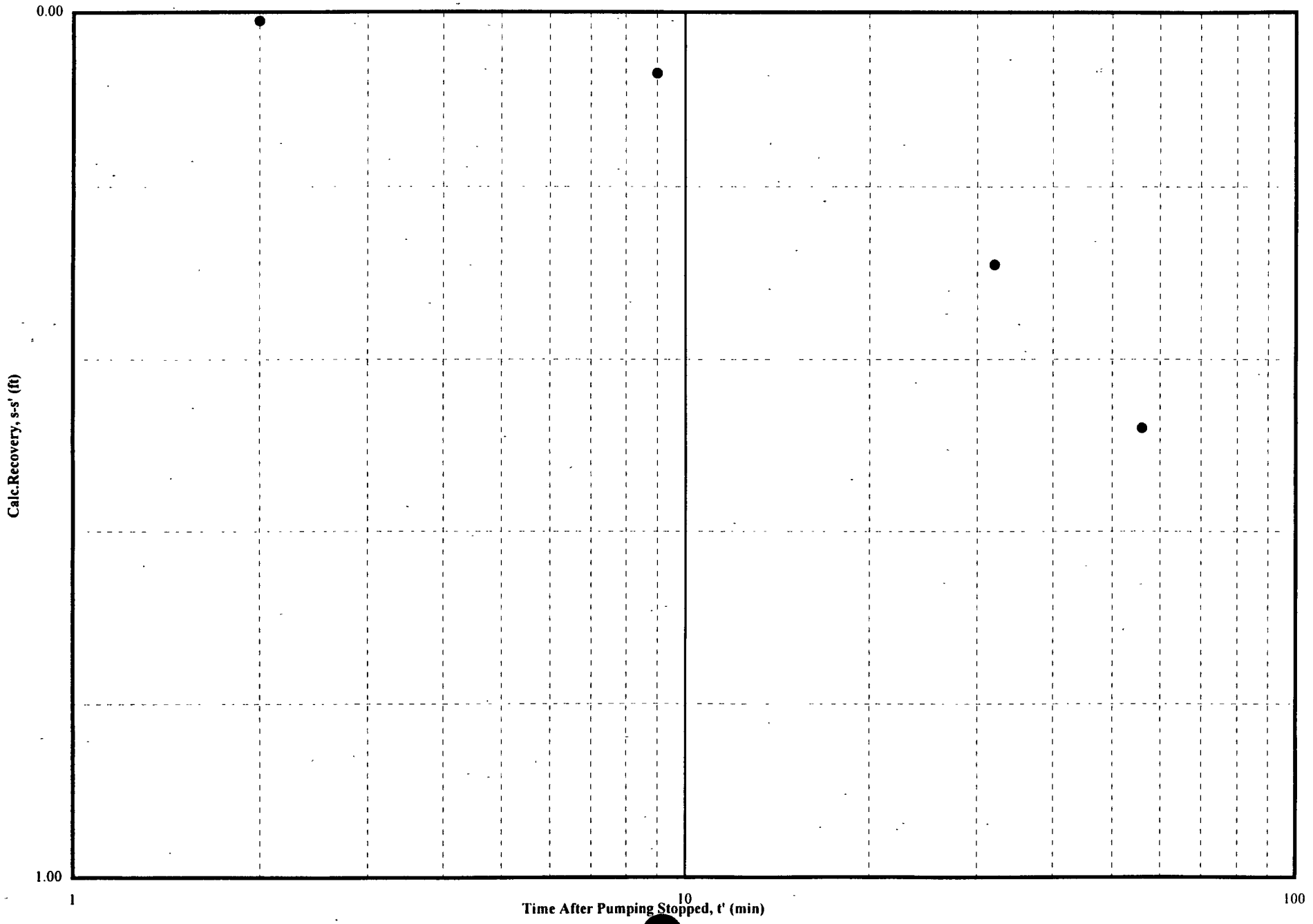


Figure 8-1

Residual Drawdown, Observation Well MW03
Yield Test at EWA11, 2/16/99

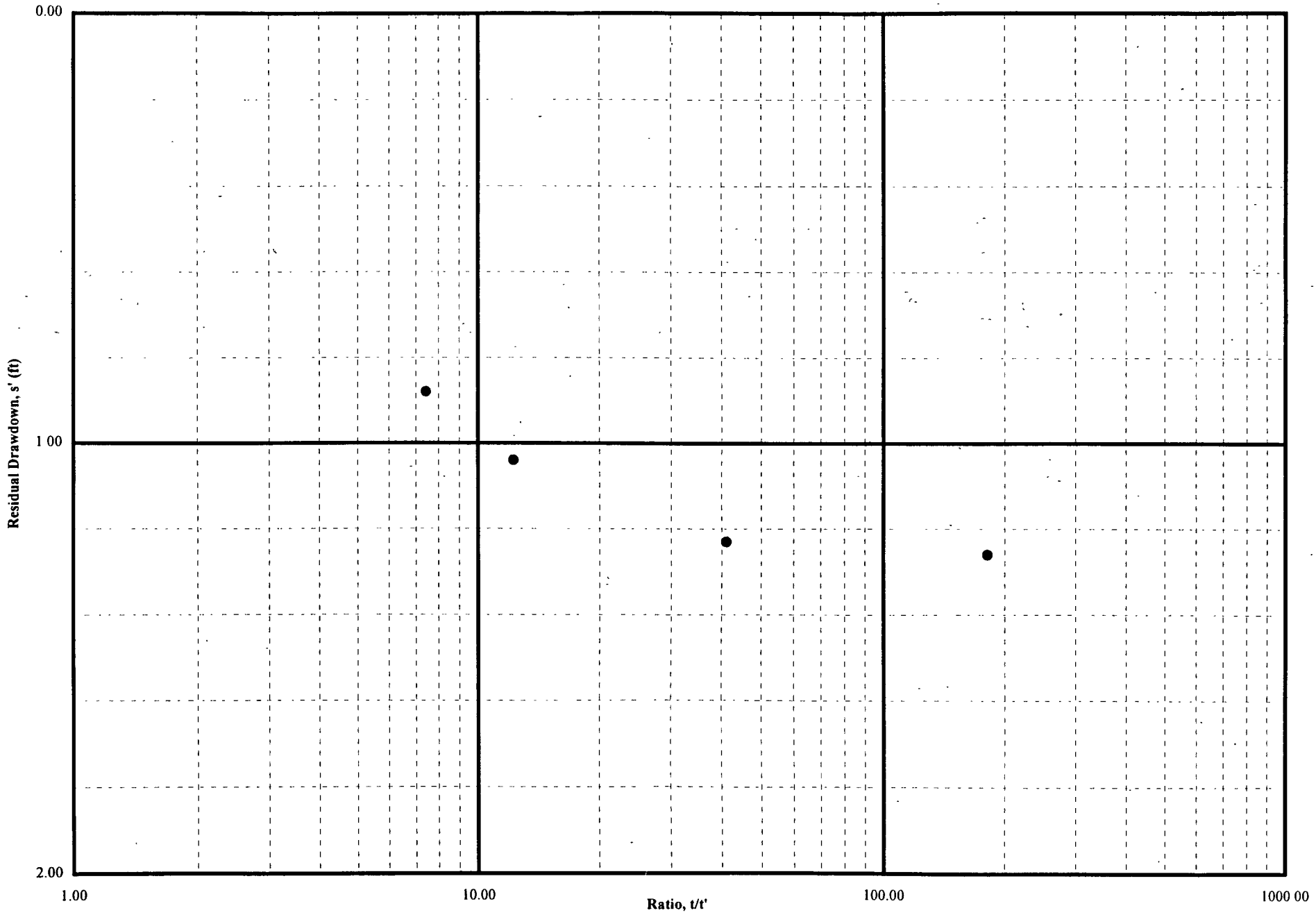
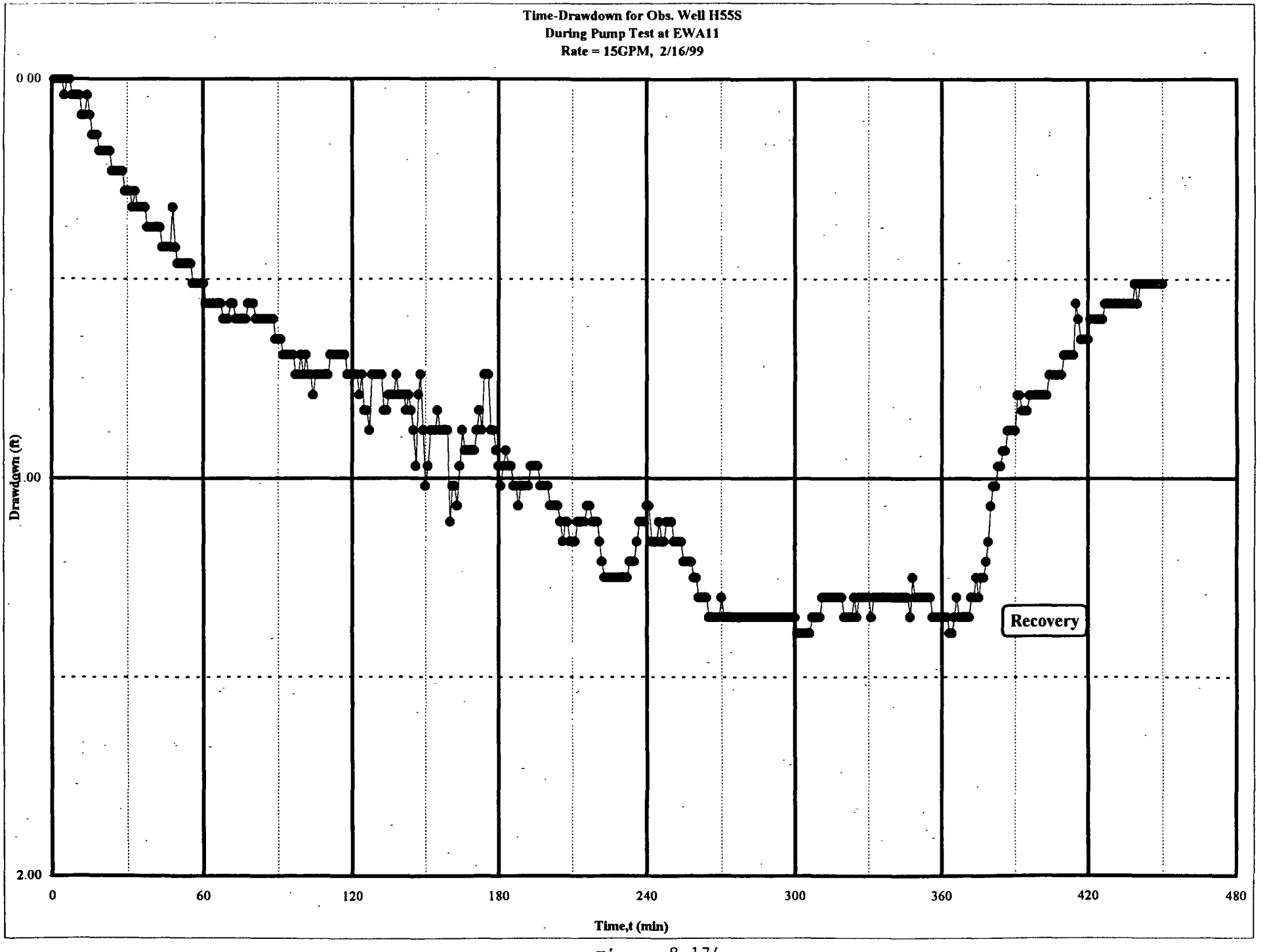


Figure 8-173


Time-Drawdown for Obs. Well H55S
During Pump Test at EWA11
Rate = 15GPM, 2/16/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Fi 8-174

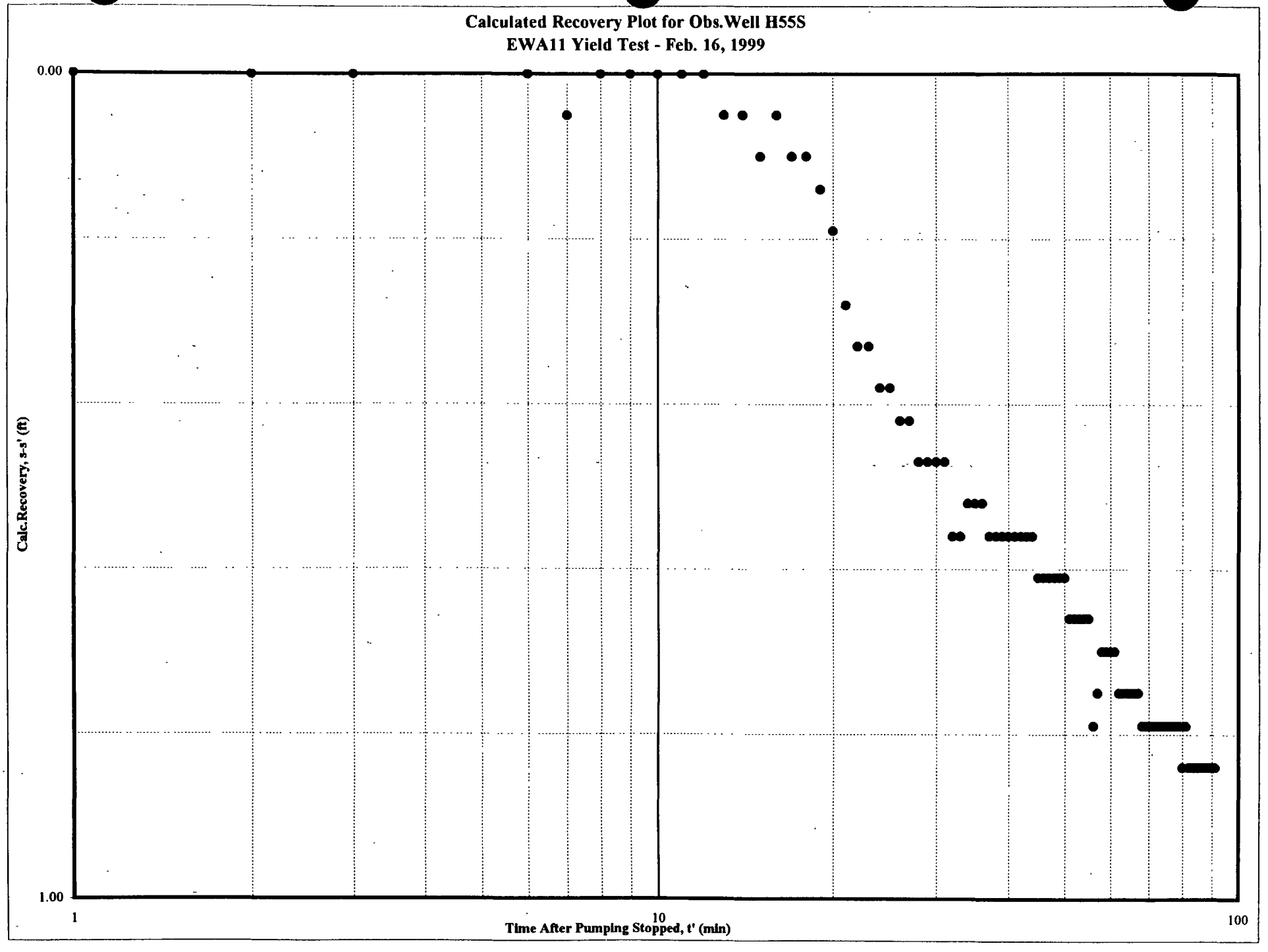

Calculated Recovery Plot for Obs.Well H55S
EWA11 Yield Test - Feb. 16, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-175

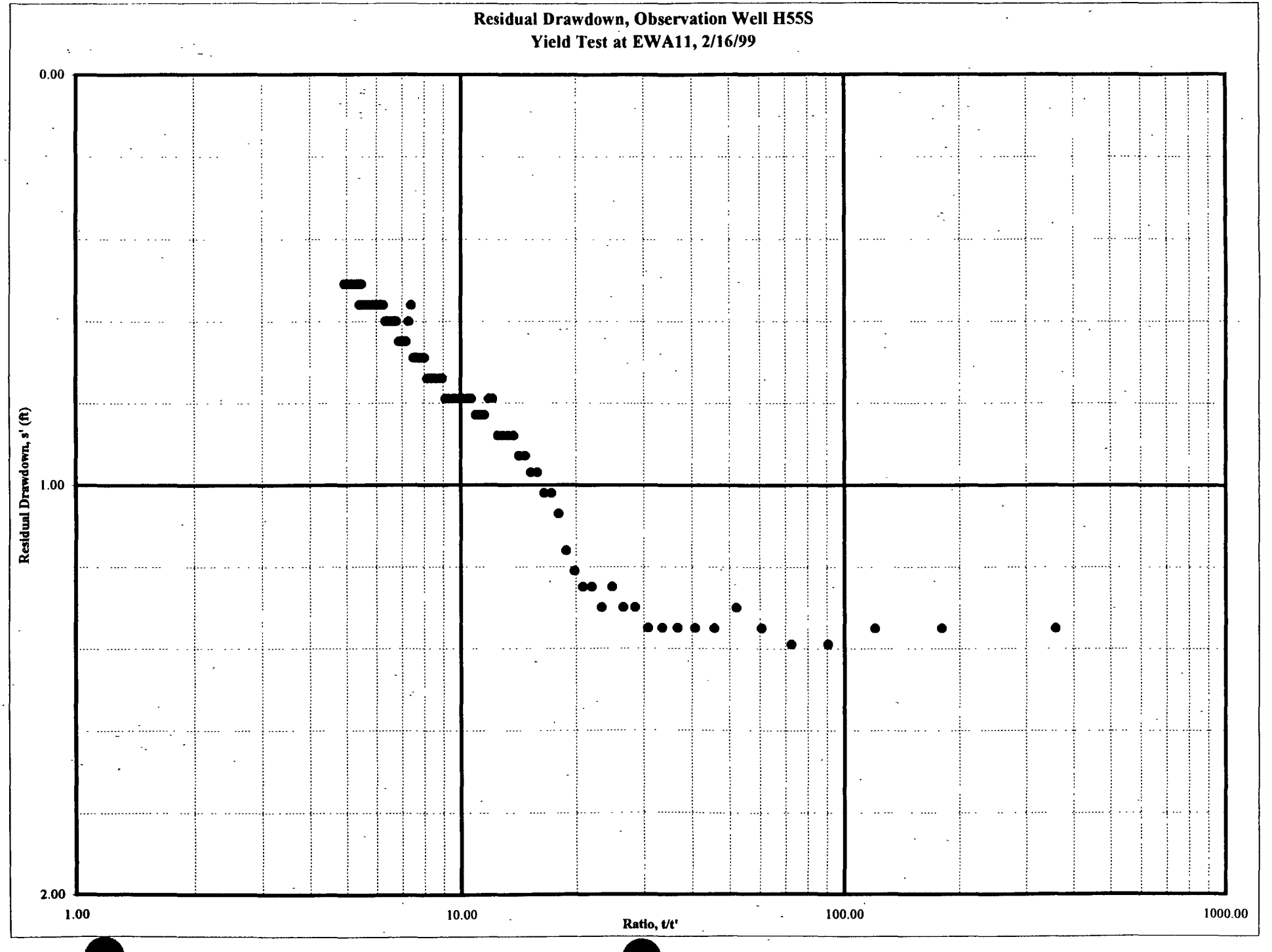

Residual Drawdown, Observation Well H55S
Yield Test at EWA11, 2/16/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-176

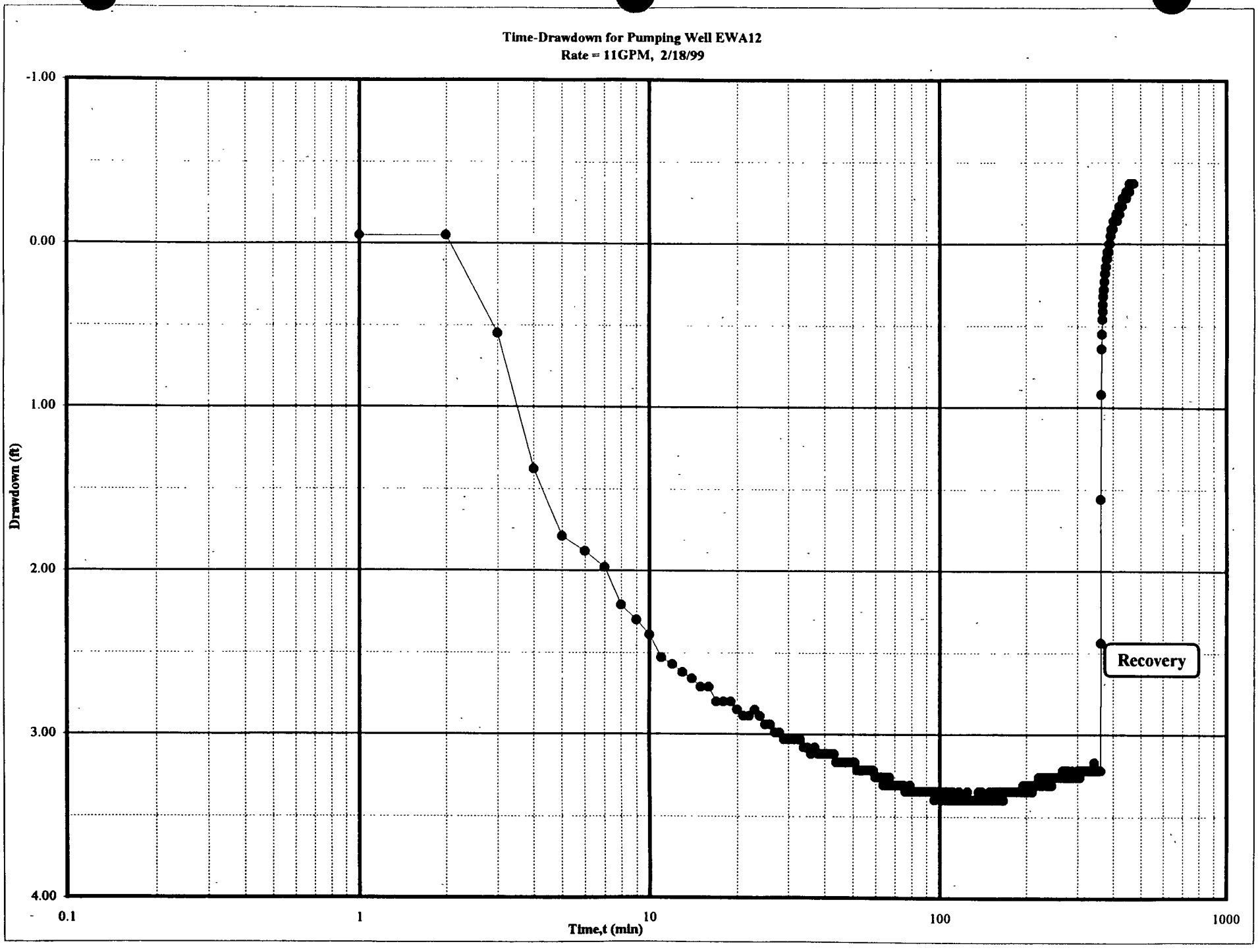
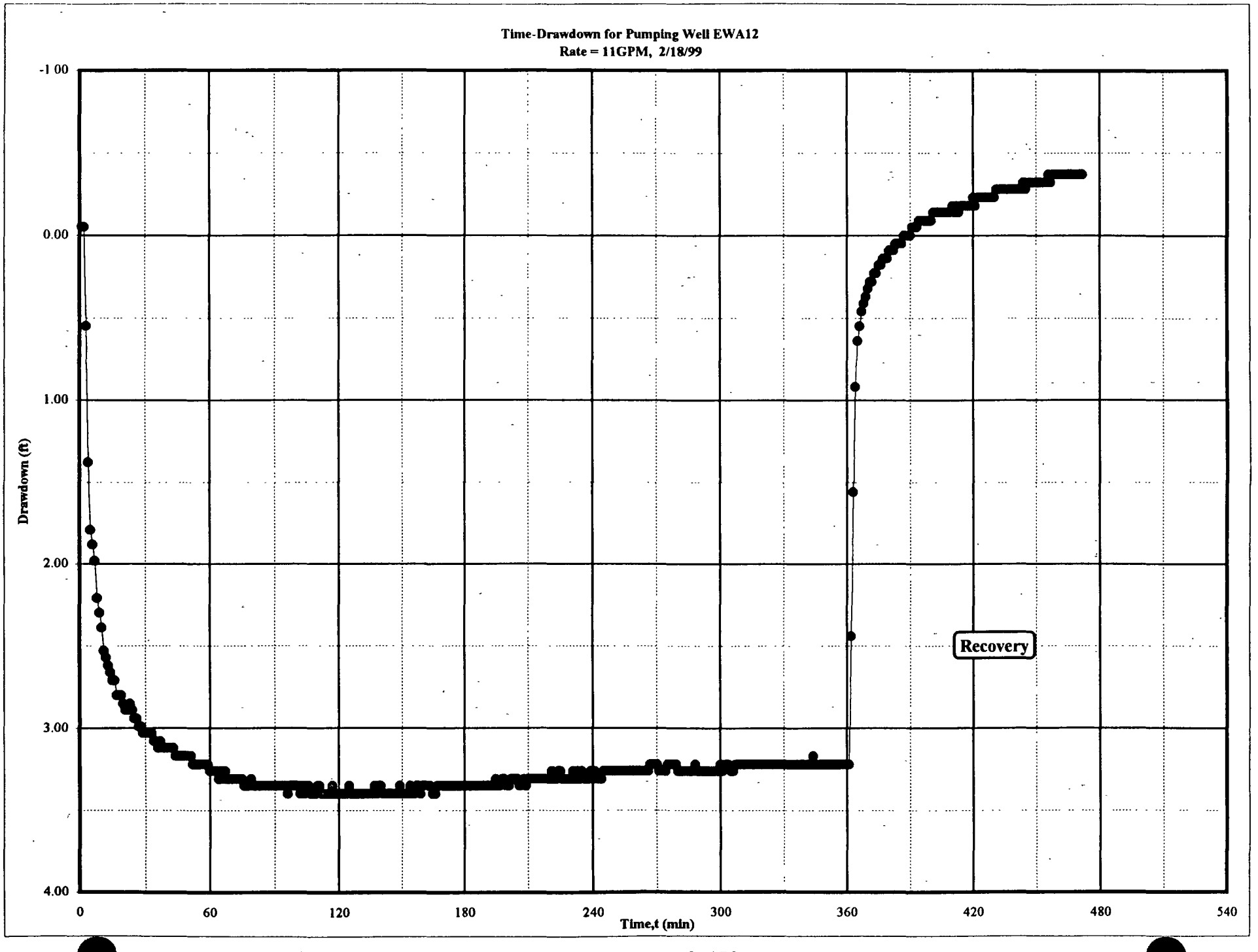

Time-Drawdown for Pumping Well EWA12
Rate = 11GPM, 2/18/99
-1.00
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-177


Time-Drawdown for Pumping Well EWA12
Rate = 11GPM, 2/18/99
-1.00
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

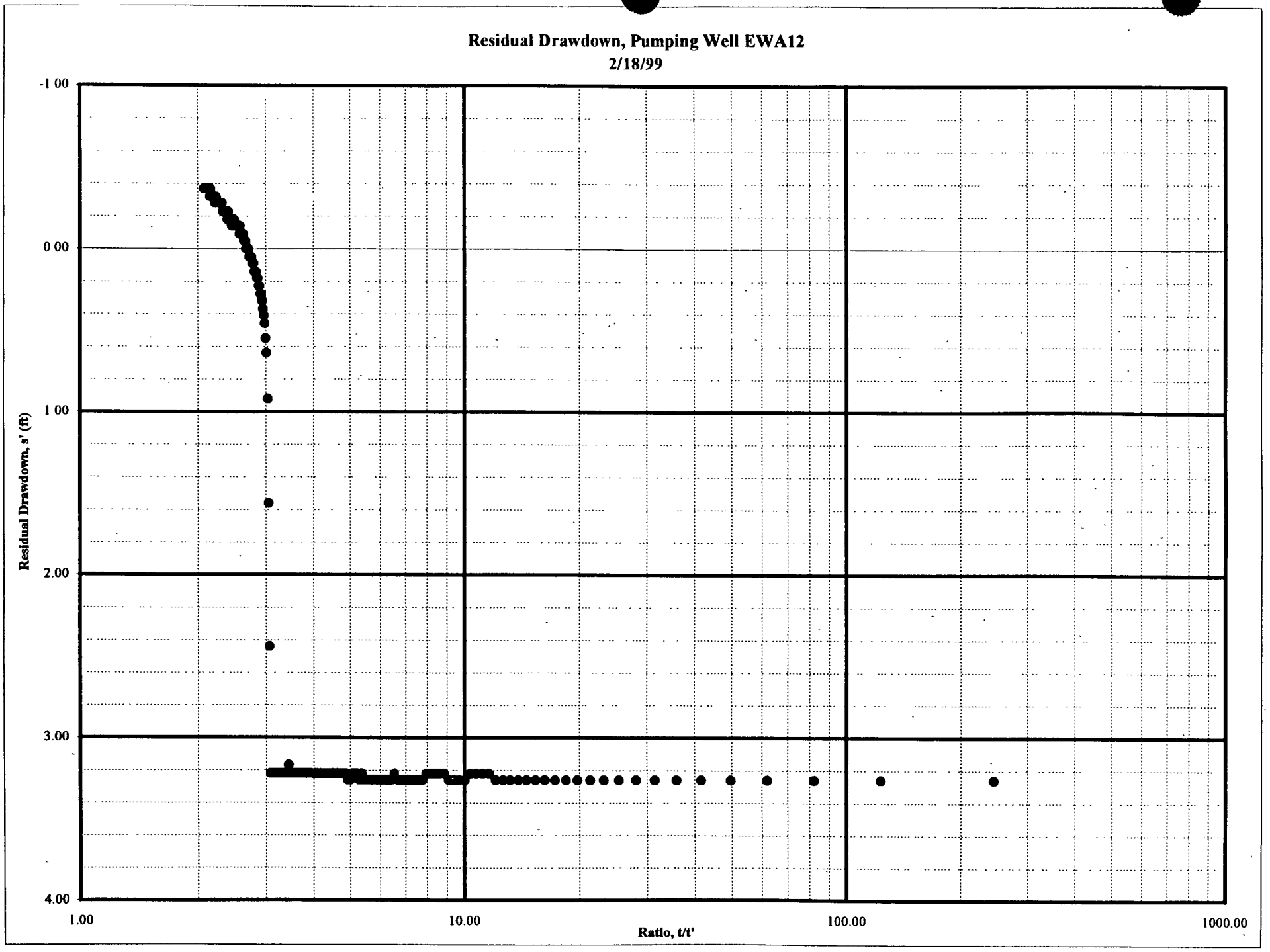
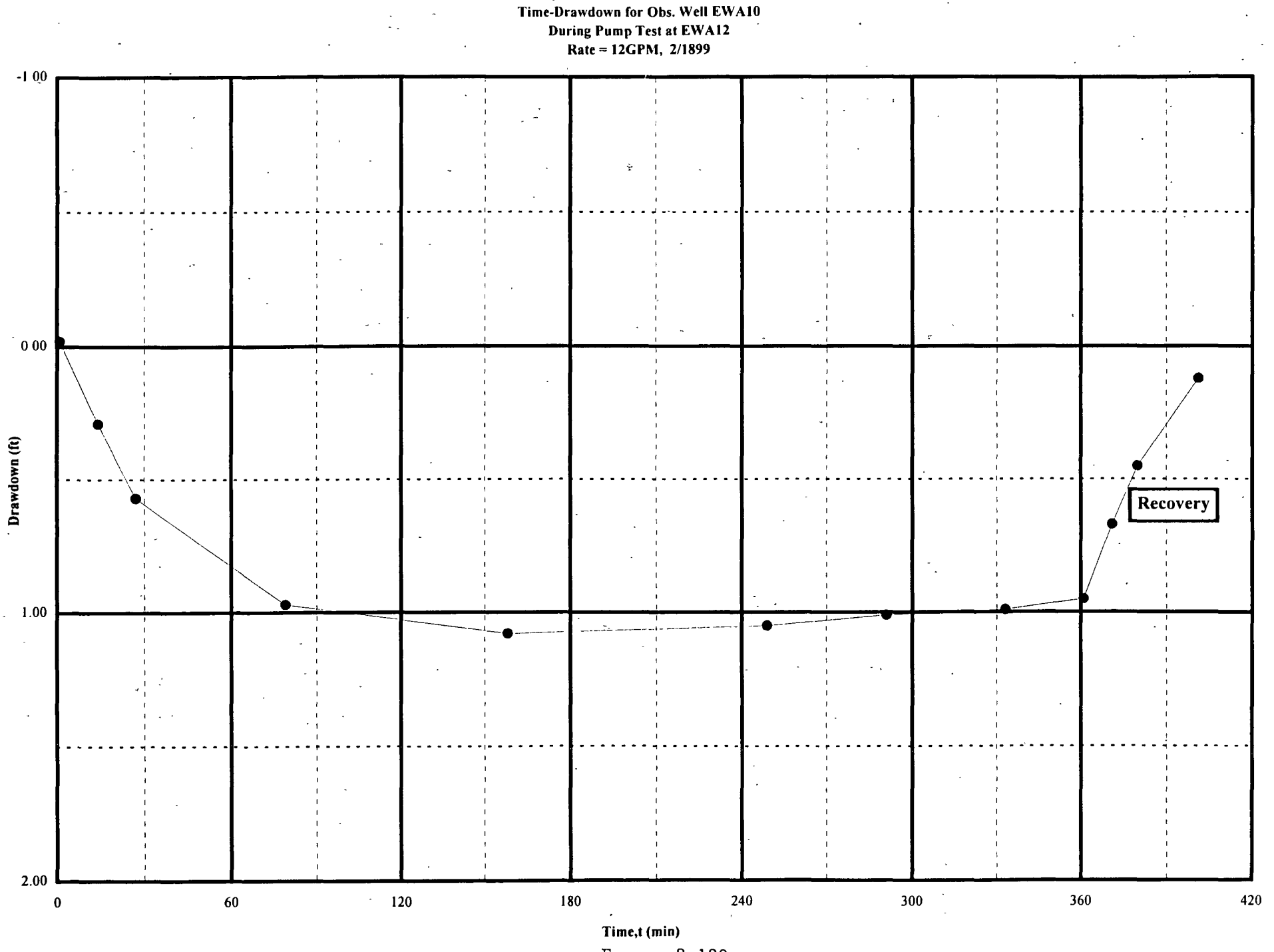

Residual Drawdown, Pumping Well EWA12
2/18/99
-1 00
0 00
1 00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-179


Time-Drawdown for Obs. Well EWA10
During Pump Test at EWA12
Rate = 12GPM, 2/1899
-1 00
0 00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

F e 8-180

Calculated Recovery Plot for Obs.Well EWA10
EWA12 Yield Test - Feb. 18, 1999

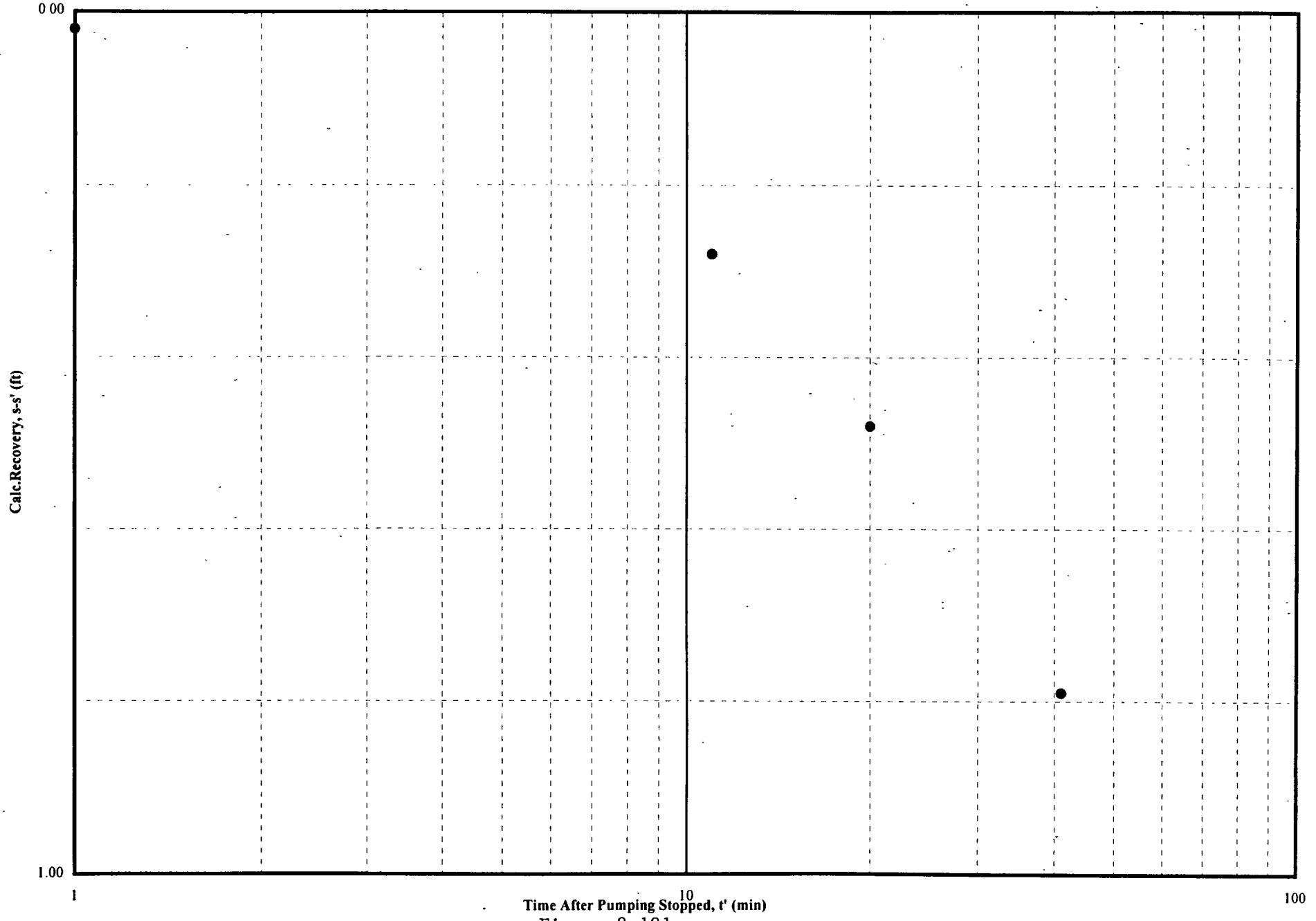
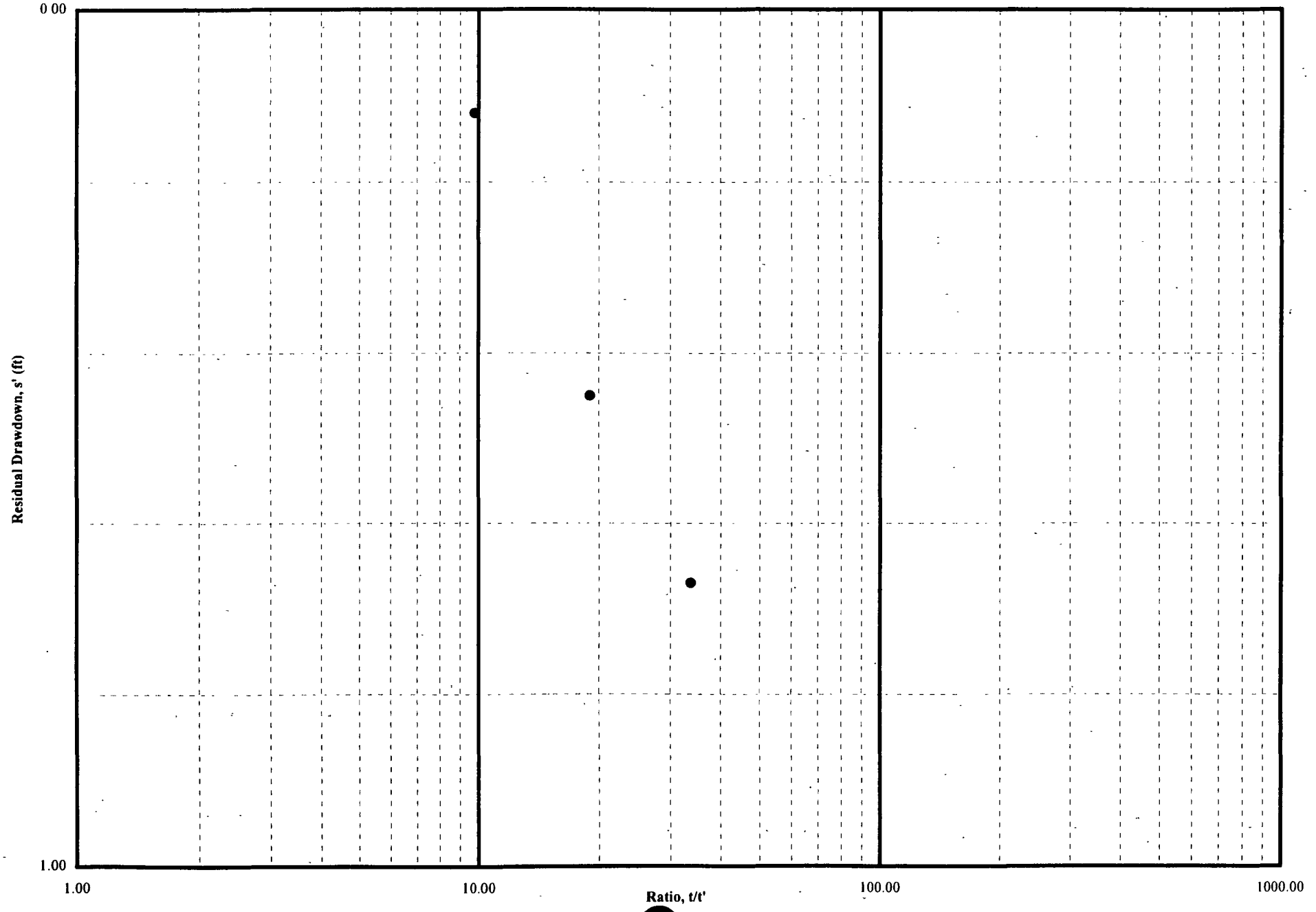


Figure 8-181

Residual Drawdown, Observation Well EWA10
Yield Test at EWA12, 2/18/99



ure 8-182

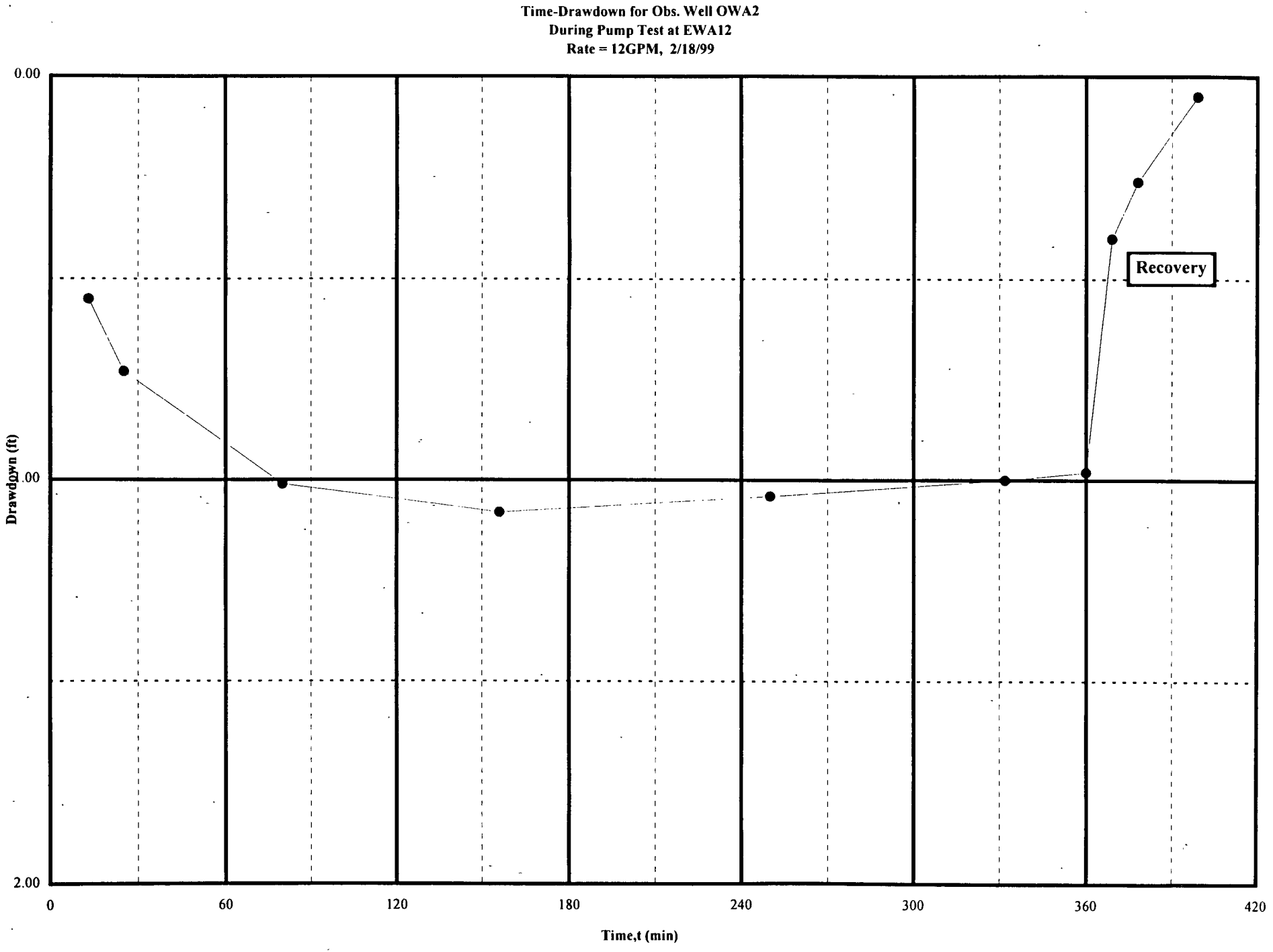

Time-Drawdown for Obs. Well OWA2
During Pump Test at EWA12
Rate = 12GPM, 2/18/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-183

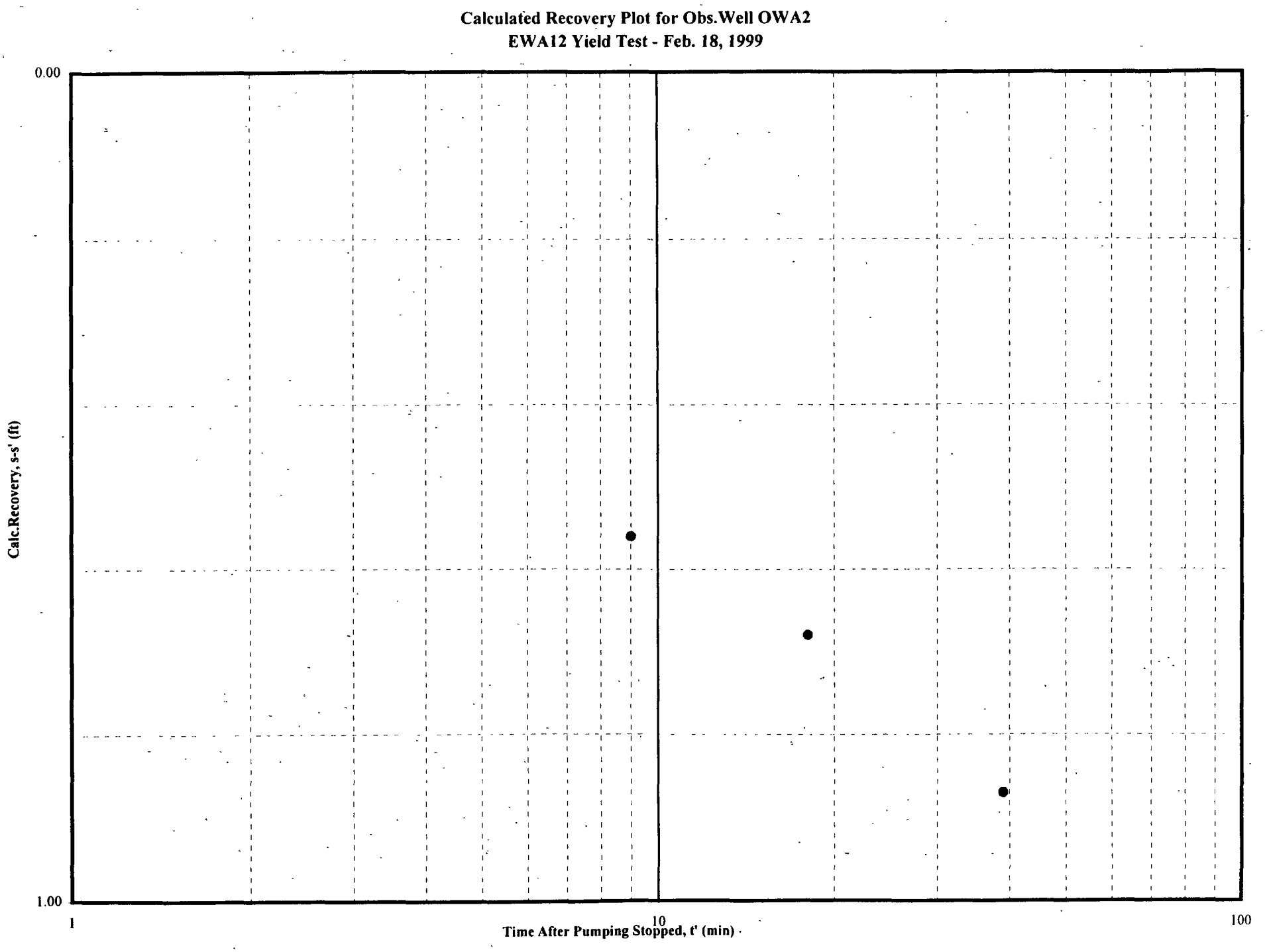

Calculated Recovery Plot for Obs.Well OWA2
EWA12 Yield Test - Feb. 18, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-18

Residual Drawdown, Observation Well OWA2
Yield Test at EWA12, 2/18/99

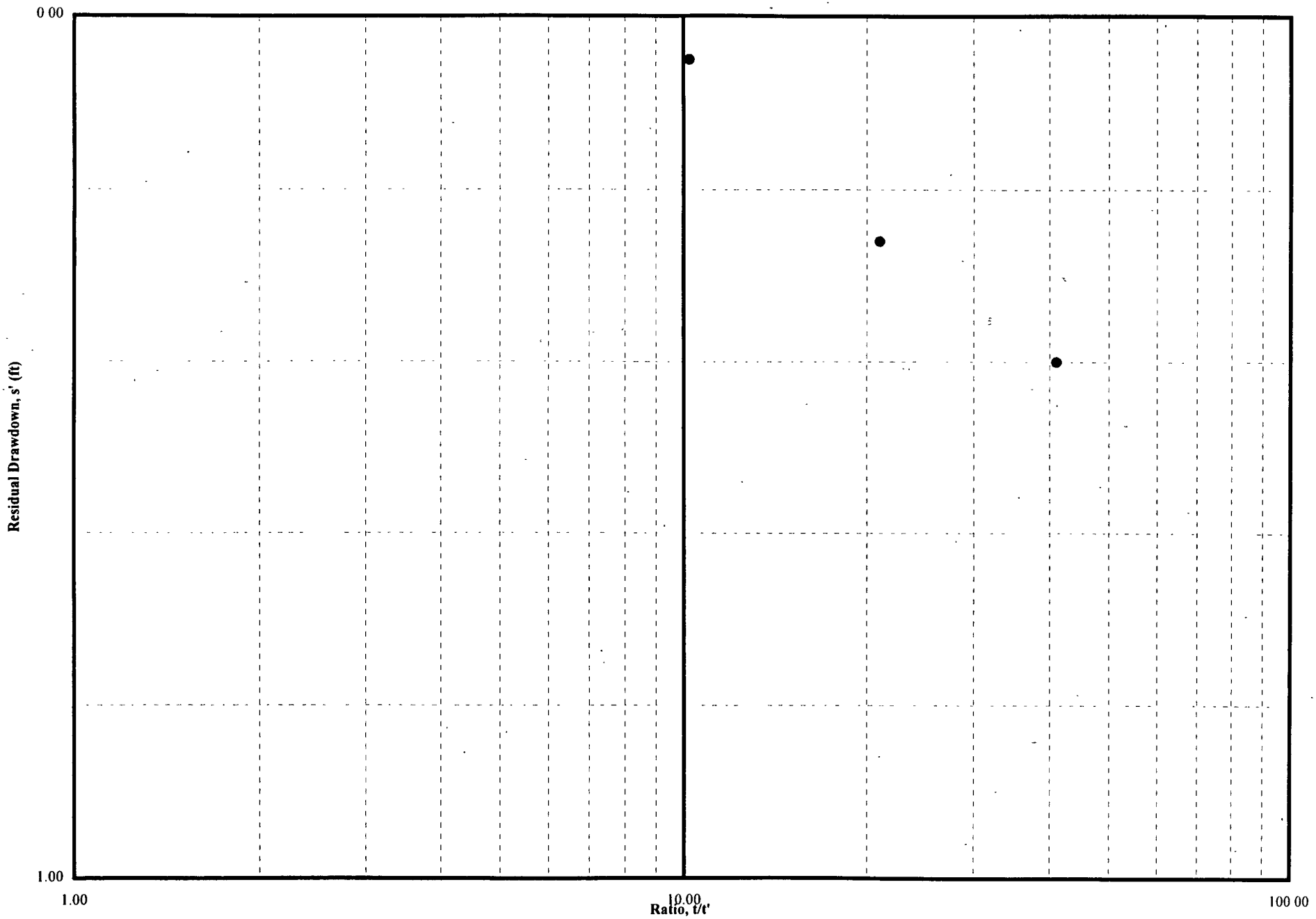
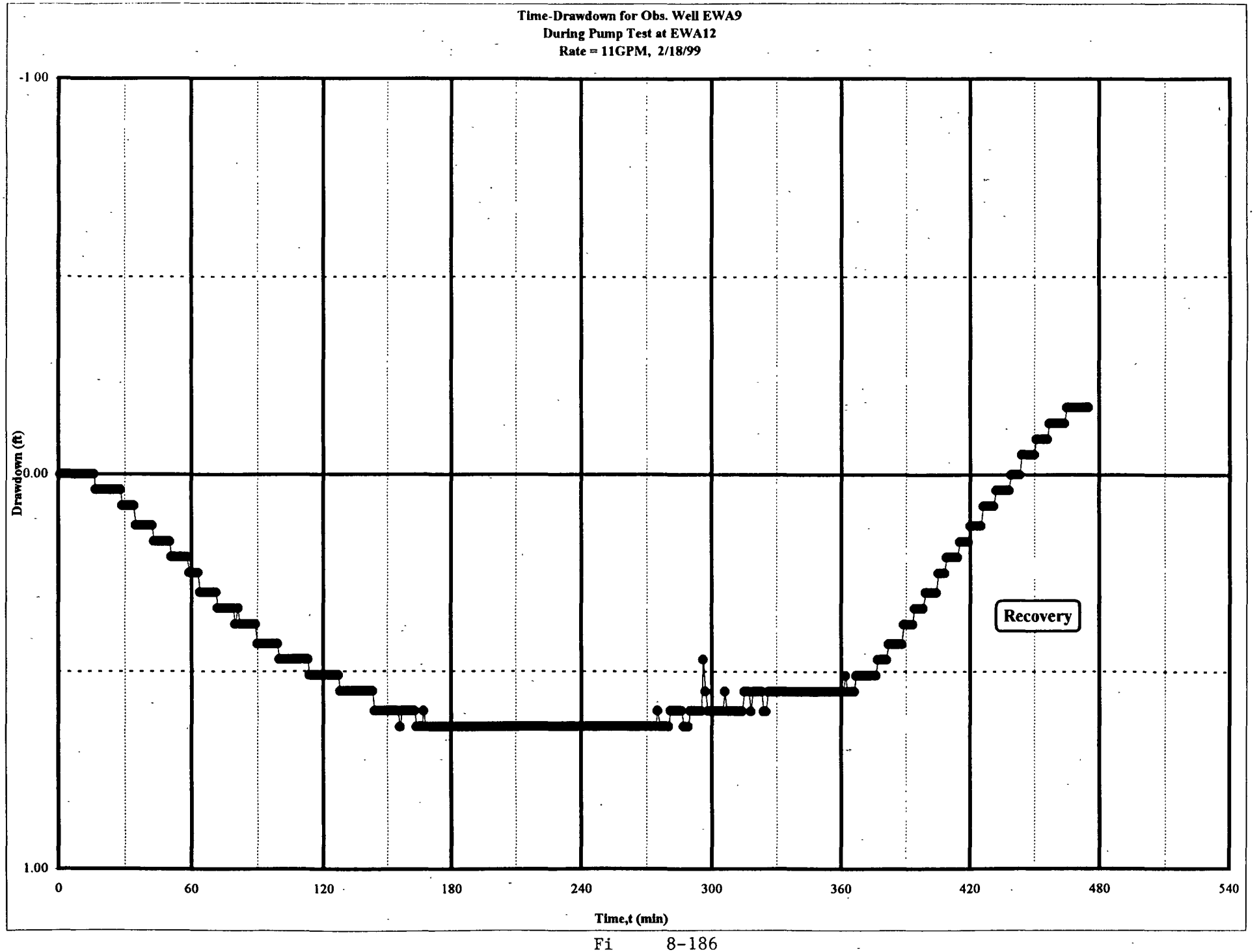


Figure 8-185


Time-Drawdown for Obs. Well EWA9
During Pump Test at EWA12
Rate = 11GPM, 2/18/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
Time,t (min)
Recovery

Fi 8-186

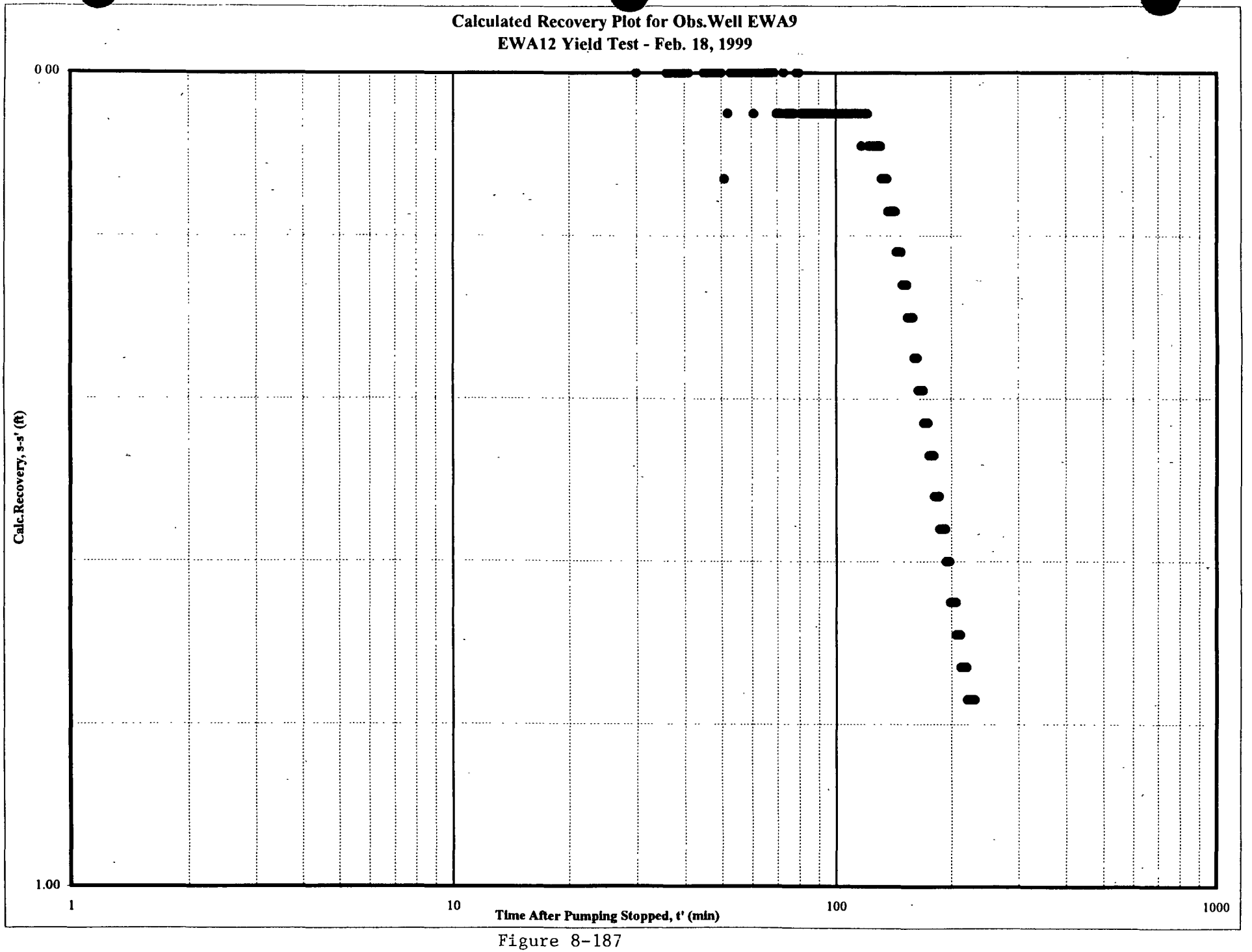
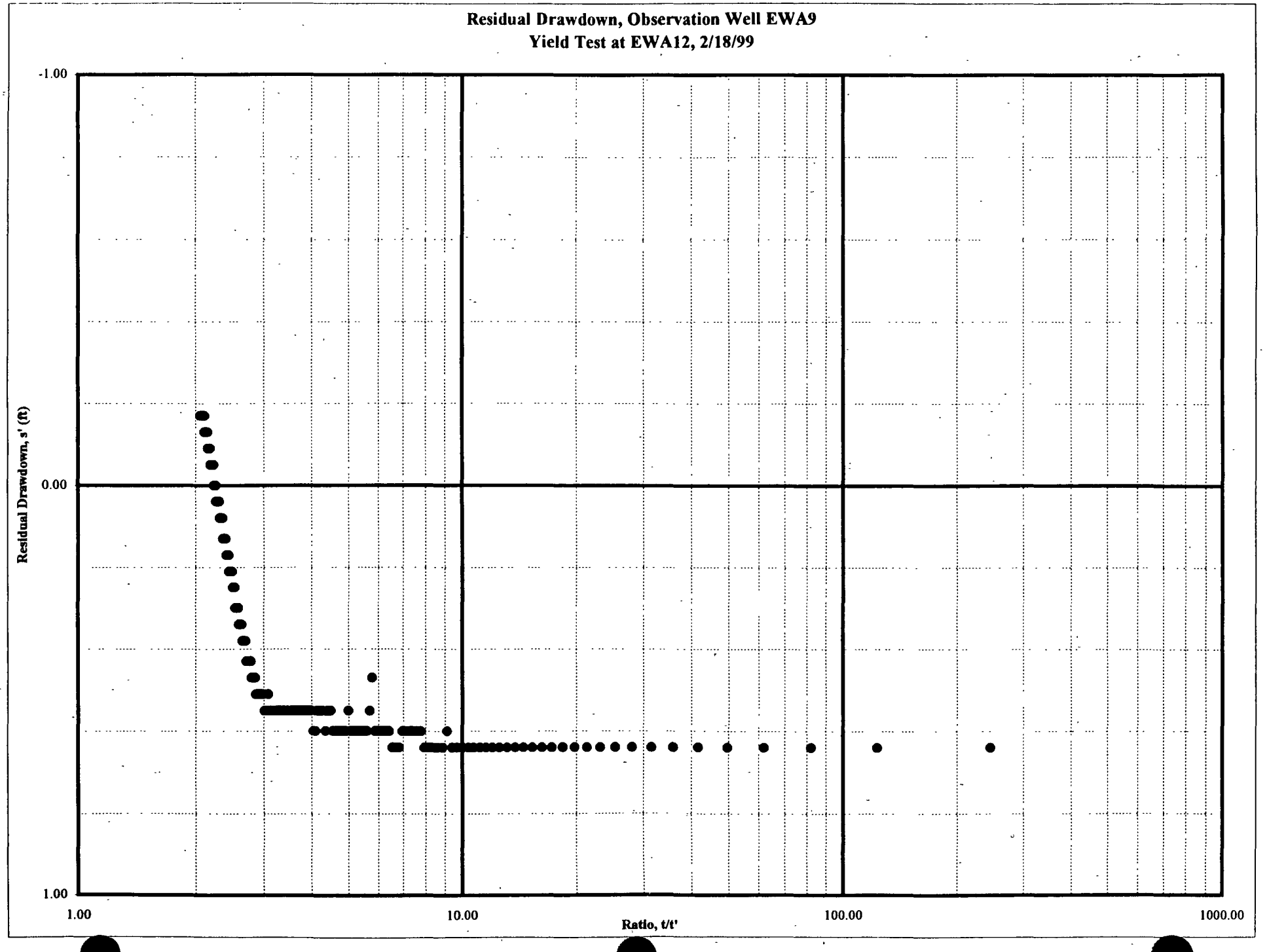

Calculated Recovery Plot for Obs.Well EWA9
EWA12 Yield Test - Feb. 18, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-187


Residual Drawdown, Observation Well EWA9
Yield Test at EWA12, 2/18/99
-1.00
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

ure 8-188

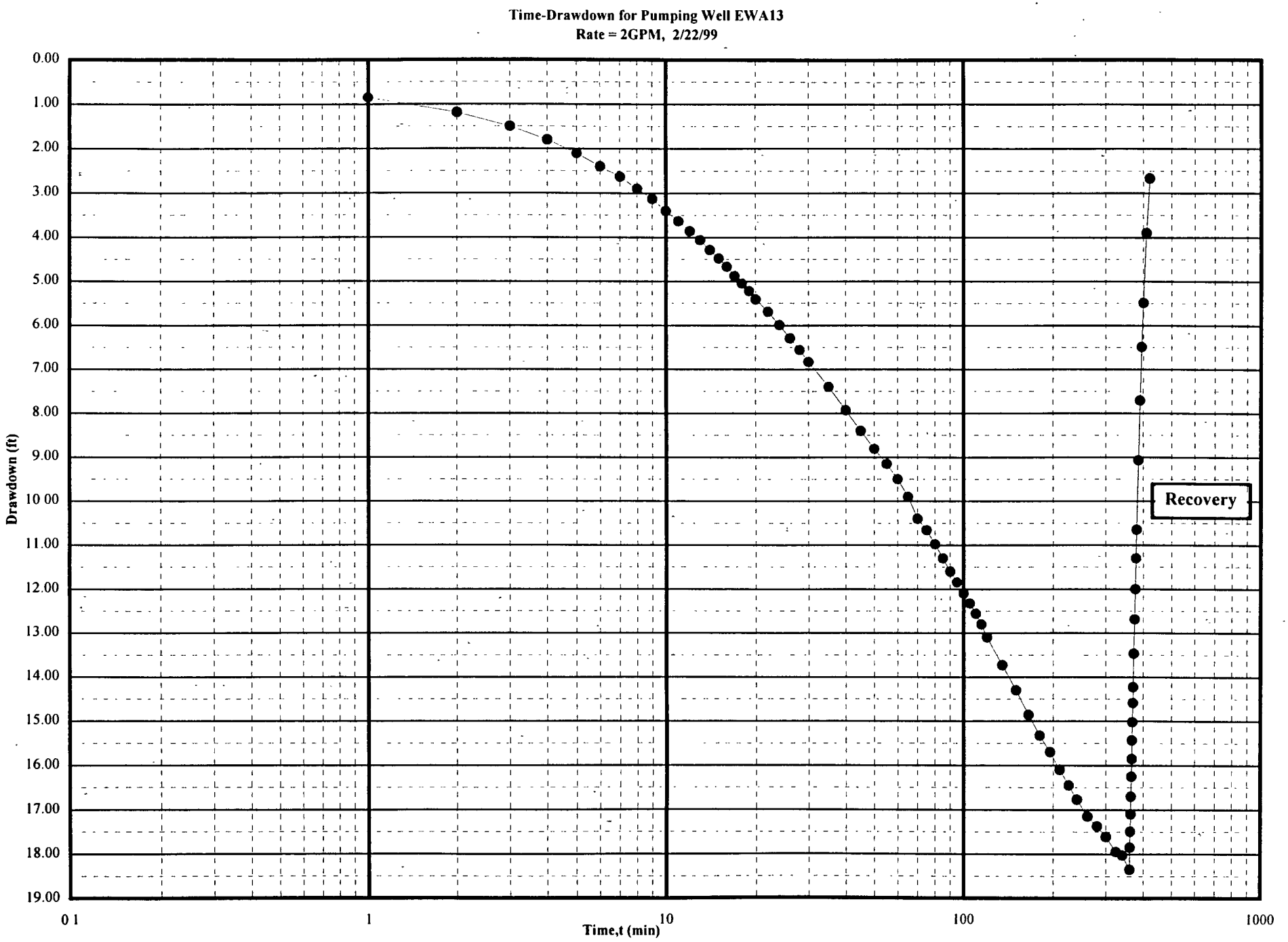
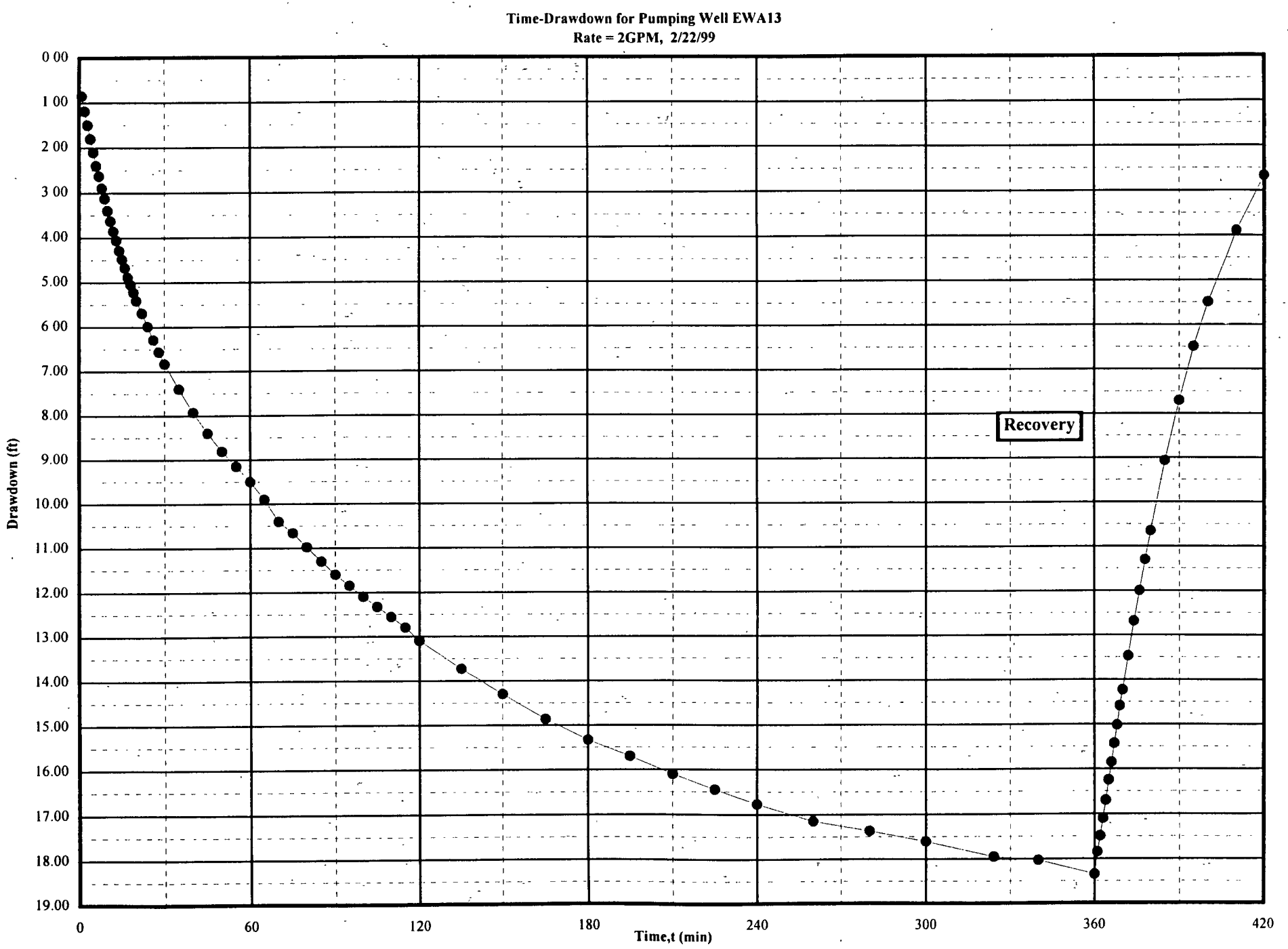

Time-Drawdown for Pumping Well EWA13
Rate = 2GPM, 2/22/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-189


Time-Drawdown for Pumping Well EWA13
Rate = 2GPM, 2/22/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

ure 8-190

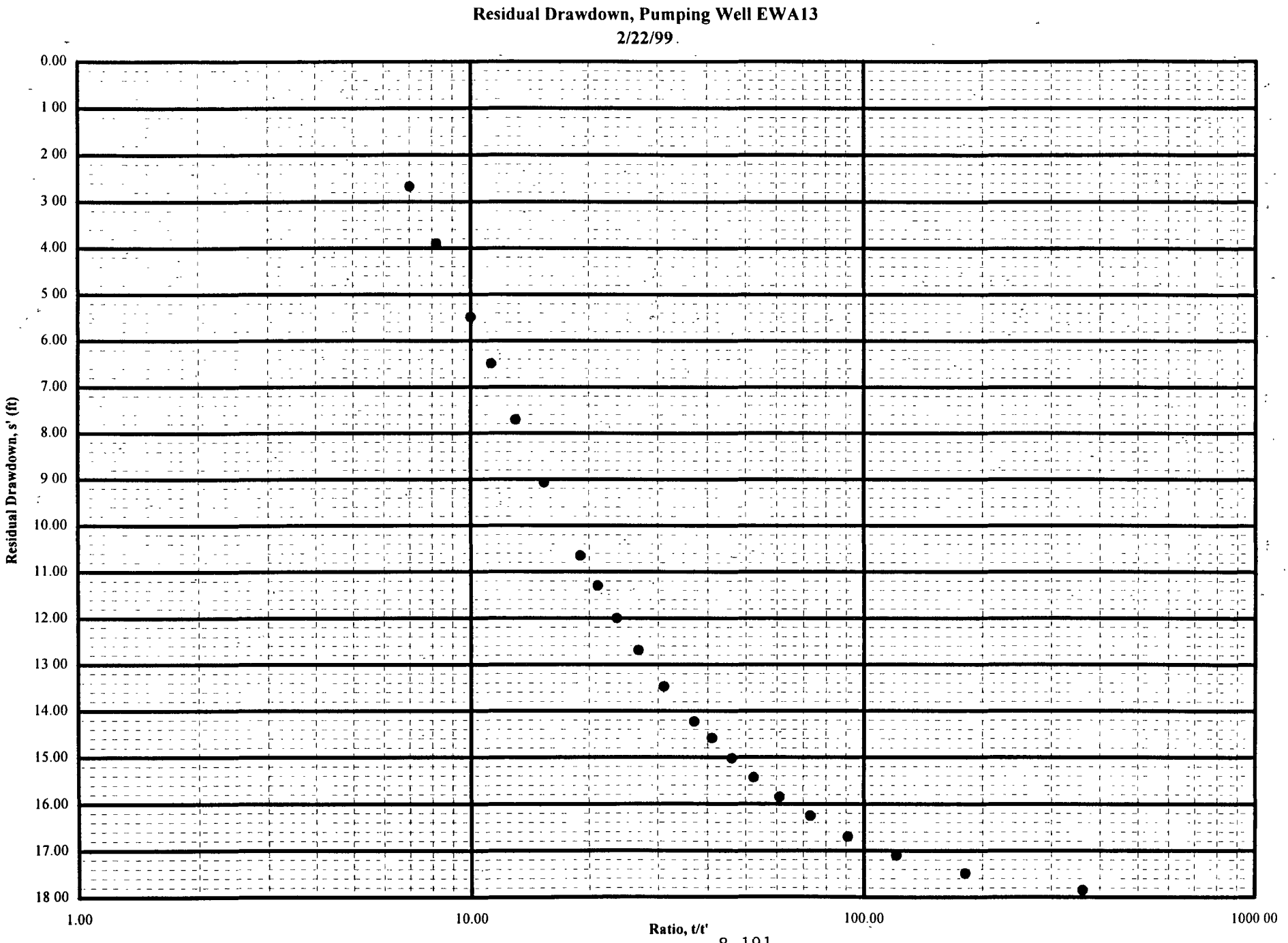

Residual Drawdown, Pumping Well EWA13
2/22/99
Residual Drawdown, s' (ft)
0.00
1 00
2 00
3 00
4.00
5 00
6.00
7.00
8.00
9 00
10.00
11.00
12.00
13 00
14.00
15.00
16.00
17.00
18 00
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-191

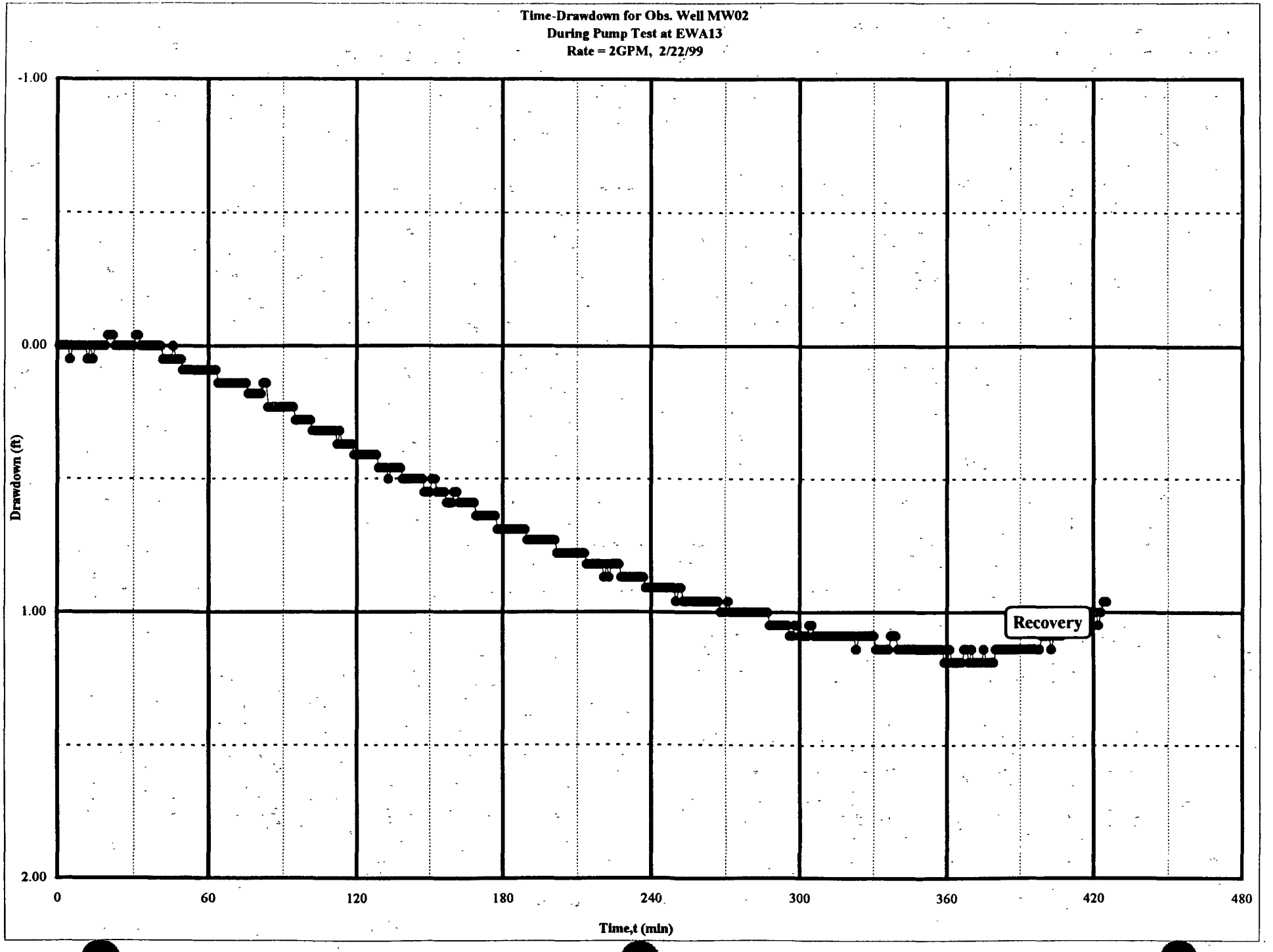

Time-Drawdown for Obs. Well MW02
During Pump Test at EWA13
Rate = 2GPM, 2/22/99
-1.00
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-192

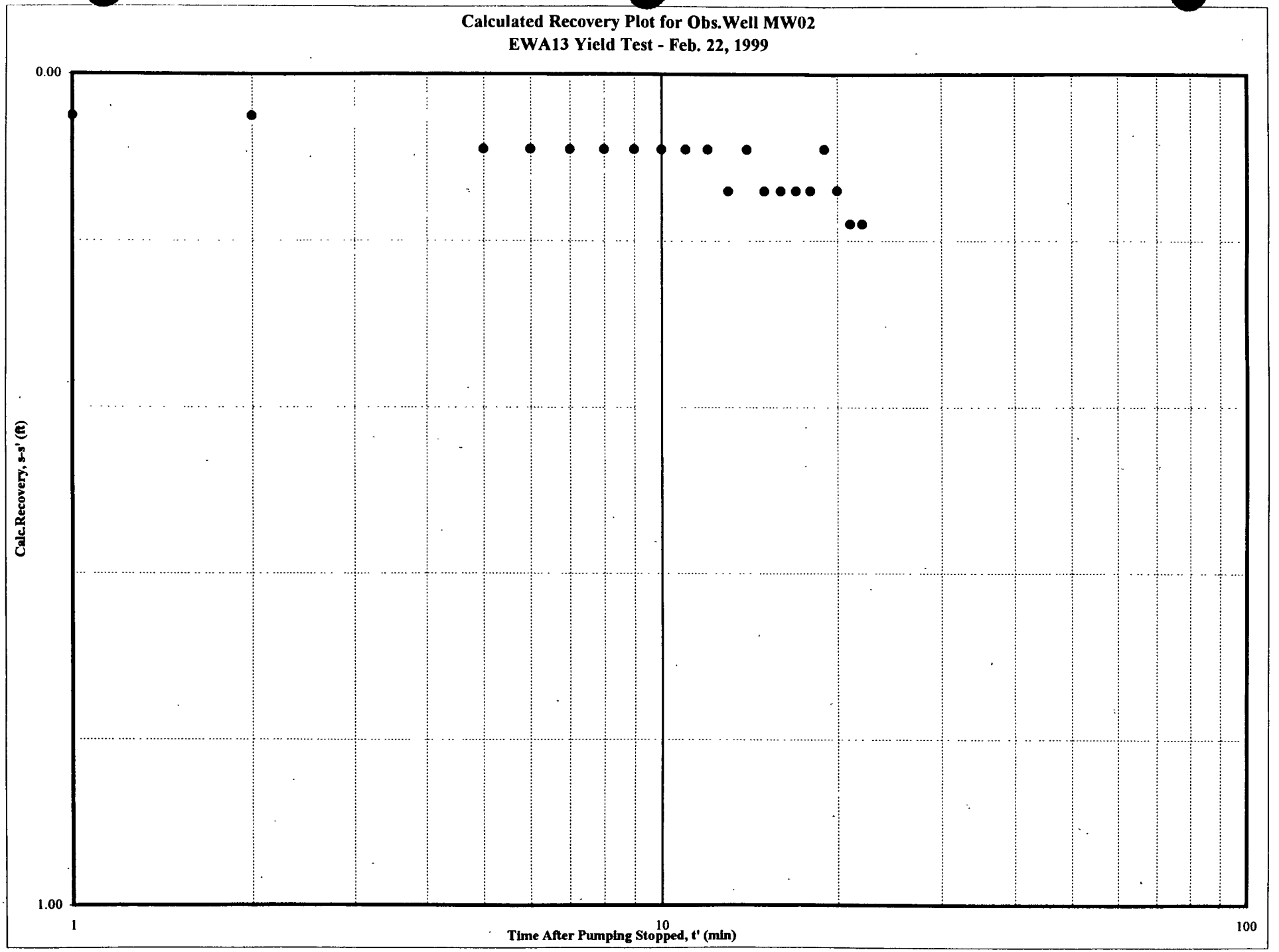
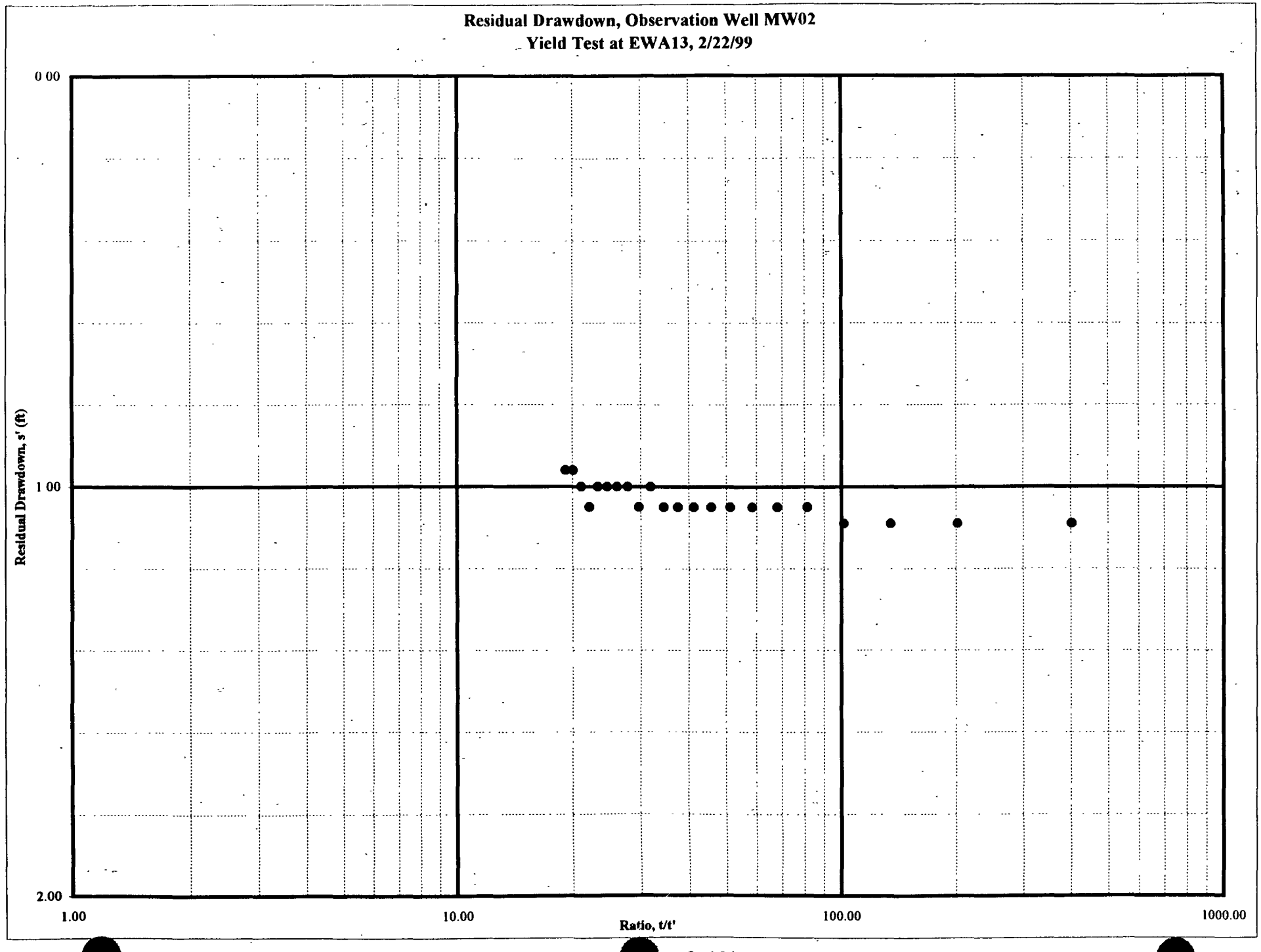

Calculated Recovery Plot for Obs.Well MW02
EWA13 Yield Test - Feb. 22, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-193


Residual Drawdown, Observation Well MW02
Yield Test at EWA13, 2/22/99
0.00
1.00
2.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

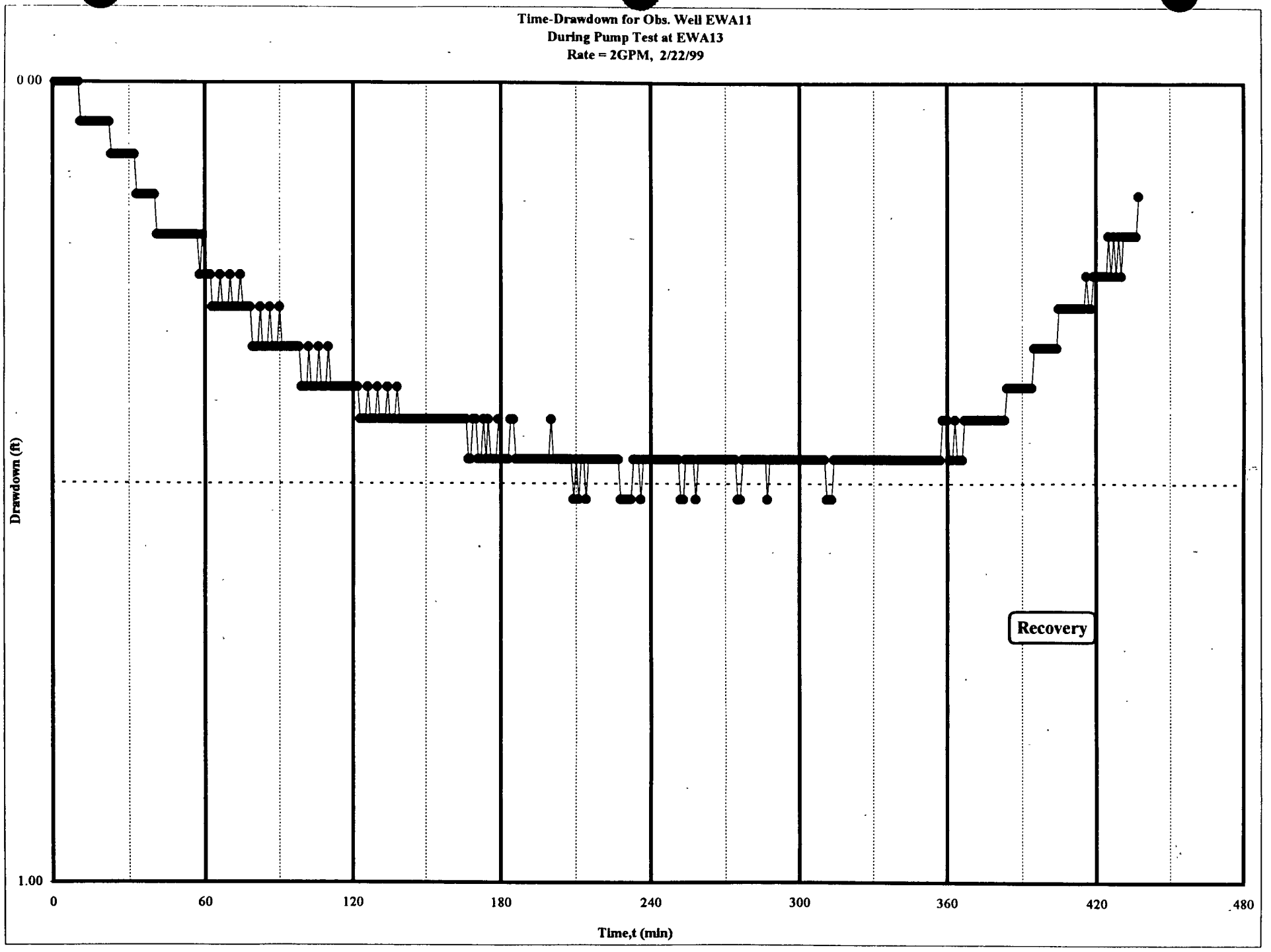

Time-Drawdown for Obs. Well EWA11
During Pump Test at EWA13
Rate = 2GPM, 2/22/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-195

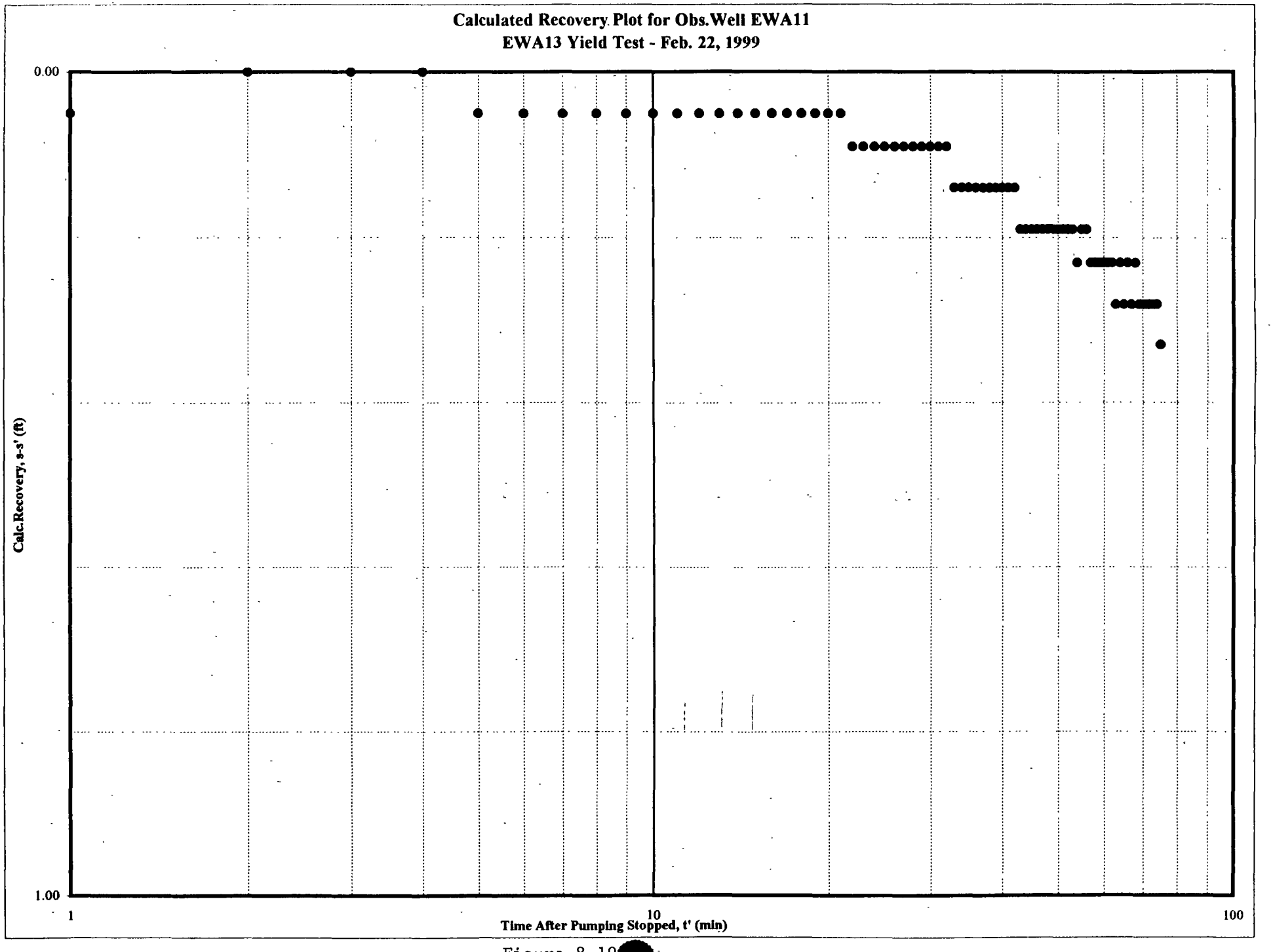

Calculated Recovery Plot for Obs.Well EWA11
EWA13 Yield Test - Feb. 22, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-19

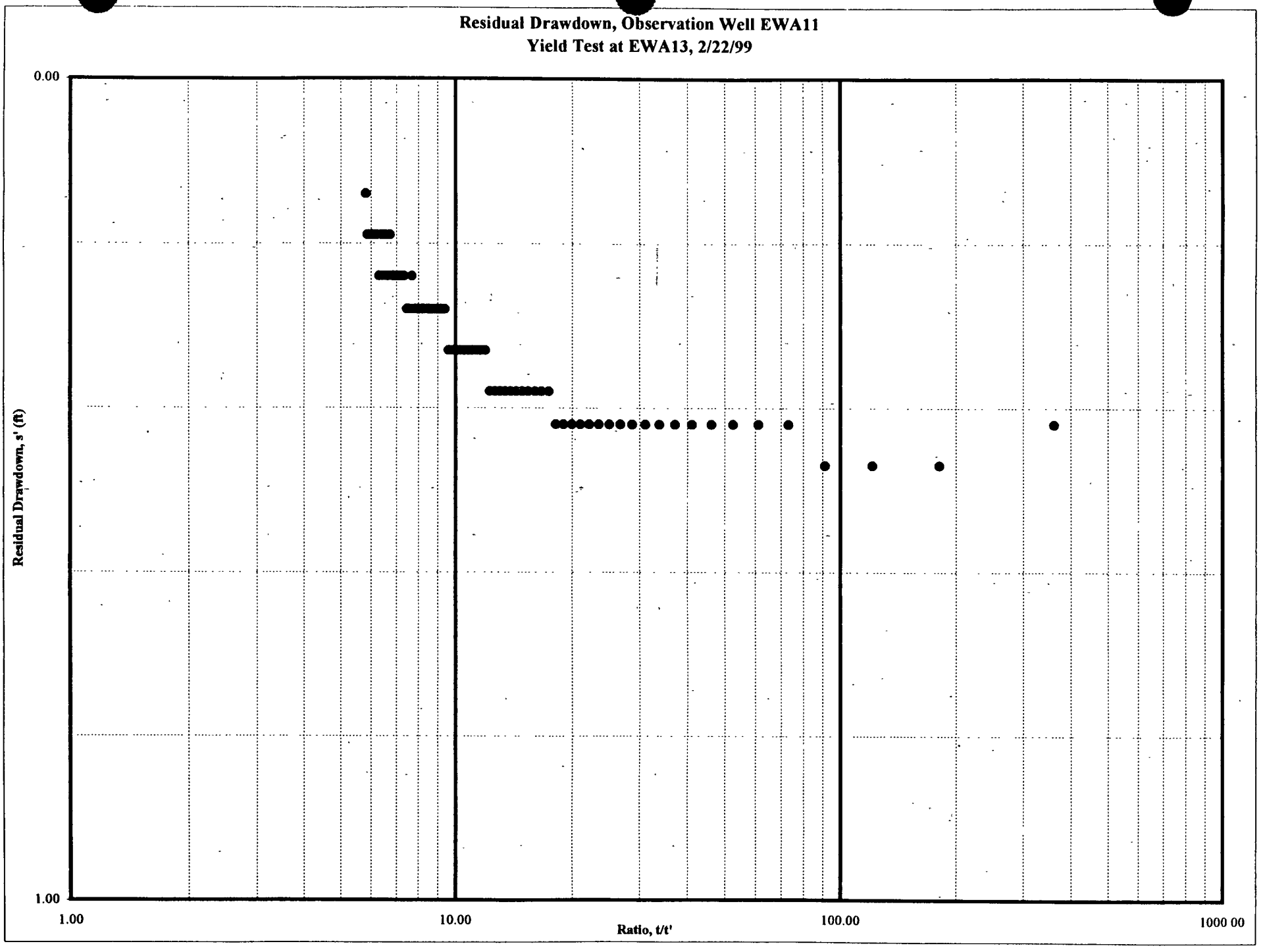
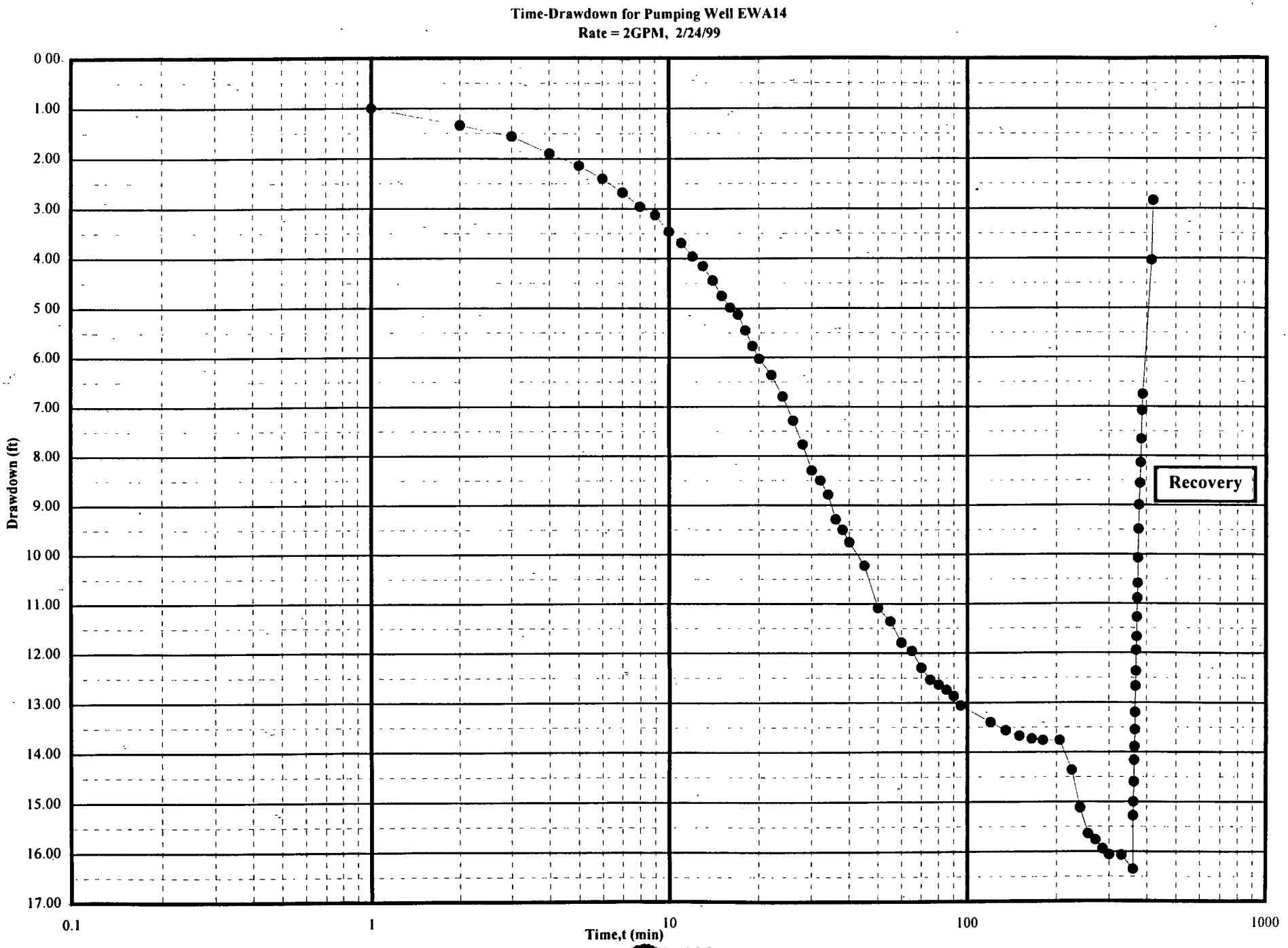

Residual Drawdown, Observation Well EWA11
Yield Test at EWA13, 2/22/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000 00
Ratio, t/t'

Figure 8-197


Time-Drawdown for Pumping Well EWA14
Rate = 2GPM, 2/24/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figu[illegible]8-198

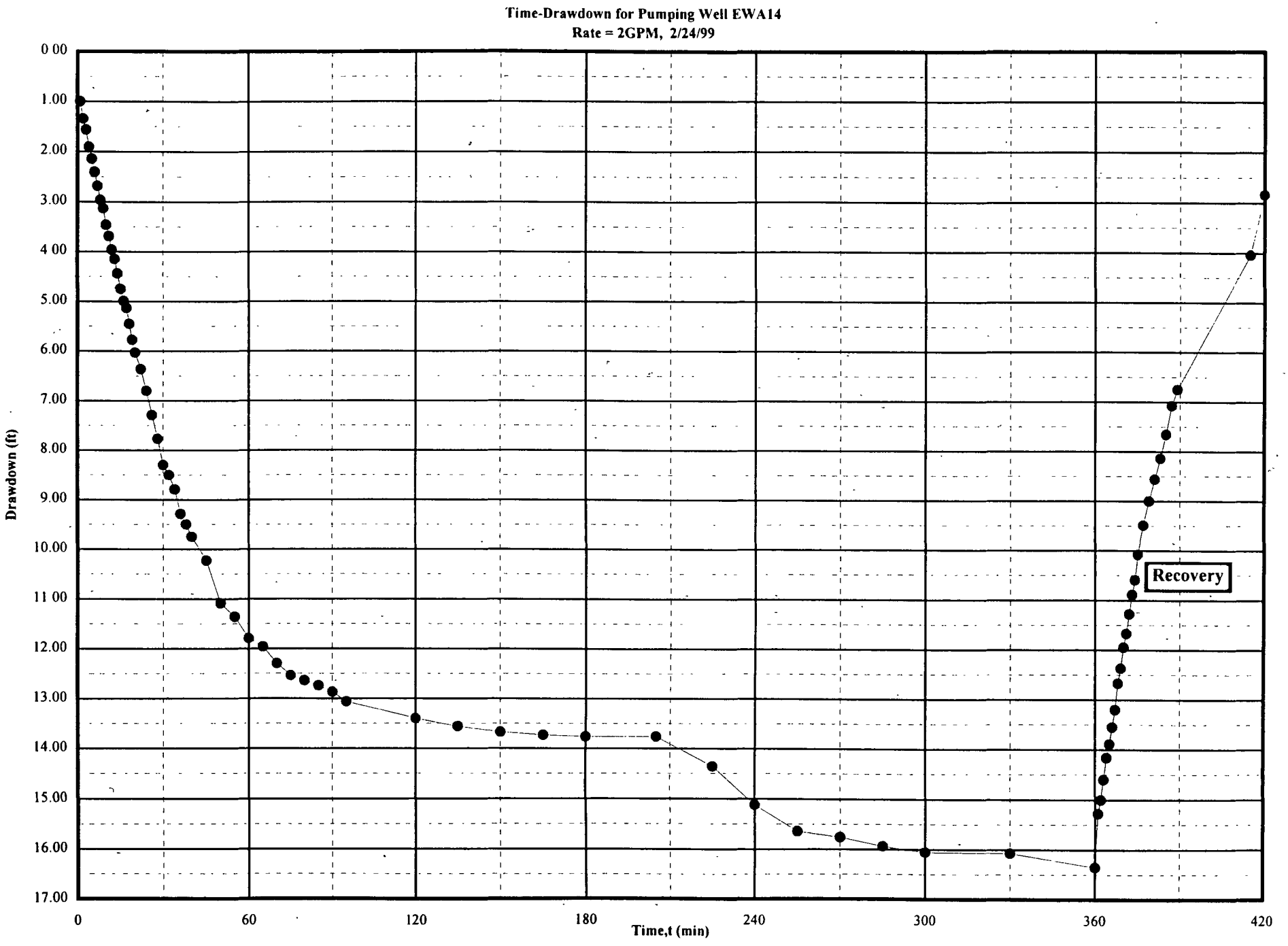
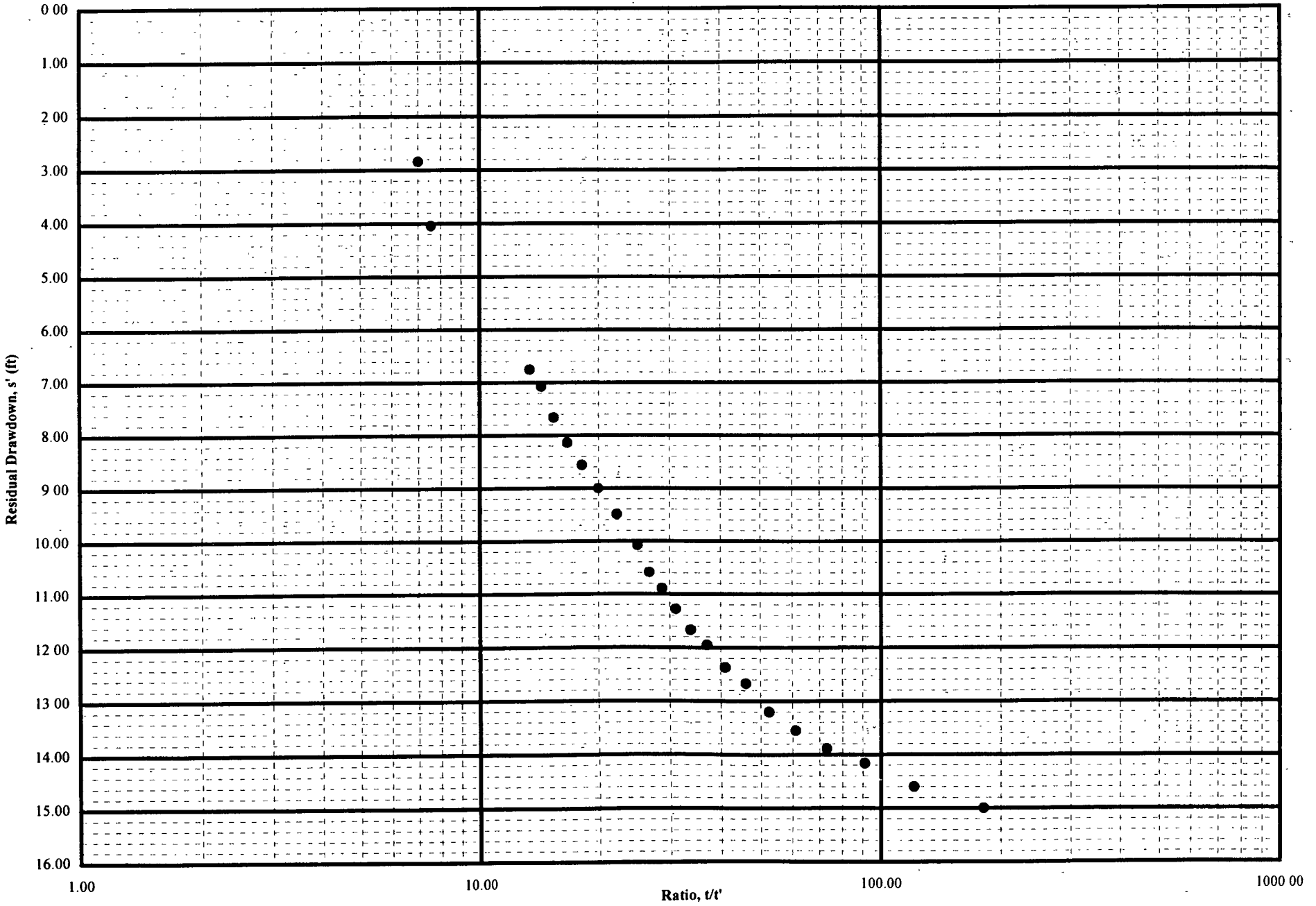

Time-Drawdown for Pumping Well EWA14
Rate = 2GPM, 2/24/99
Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
0
60
120
180
240
300
360
420
Time,t (min)
Recovery

Figure 8-199

Residual Drawdown, Pumping Well EWA14
2/24/99



gure 8-200

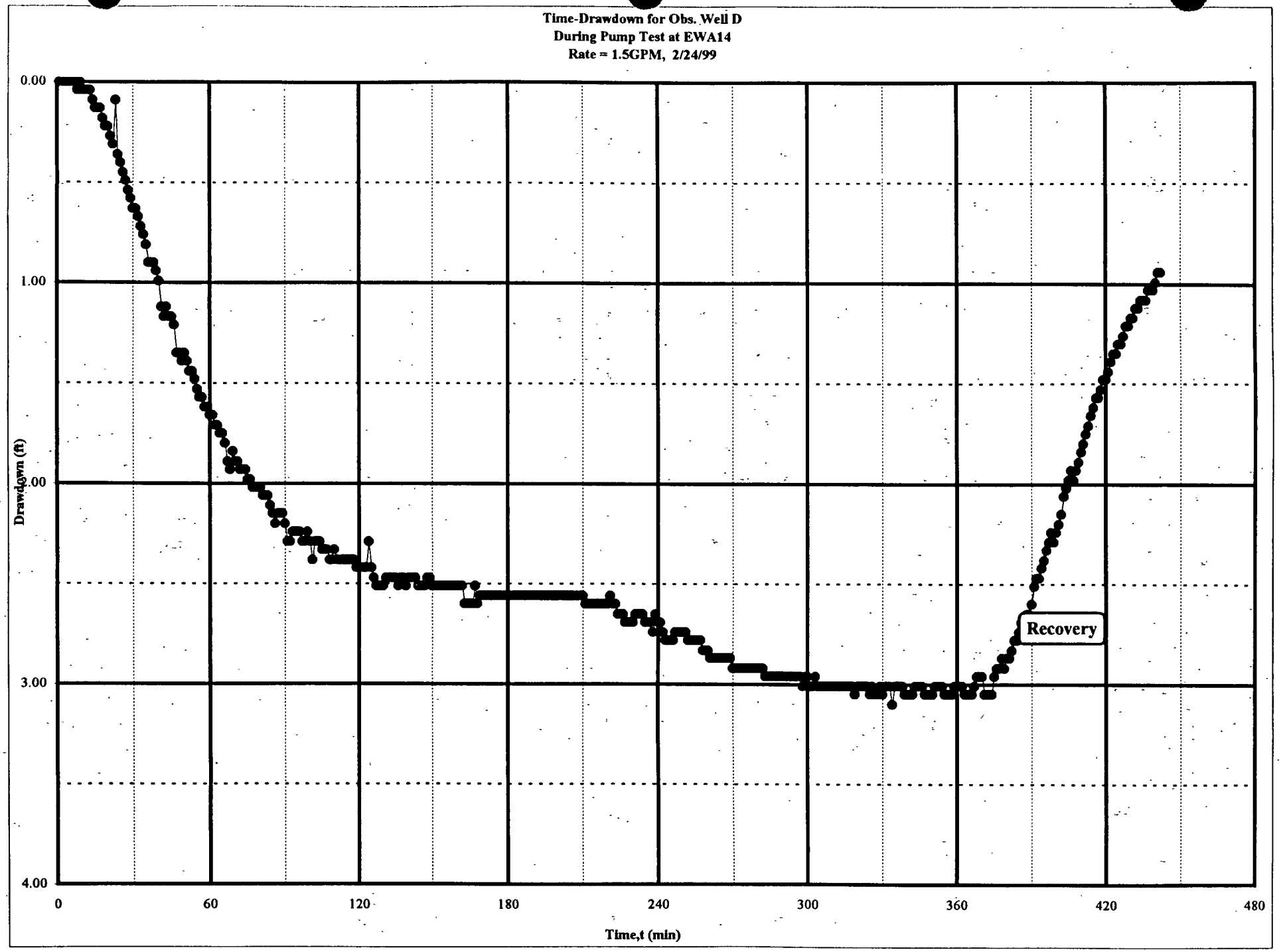

Time-Drawdown for Obs. Well D
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
0.00
1.00
2.00
3.00
4.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-201

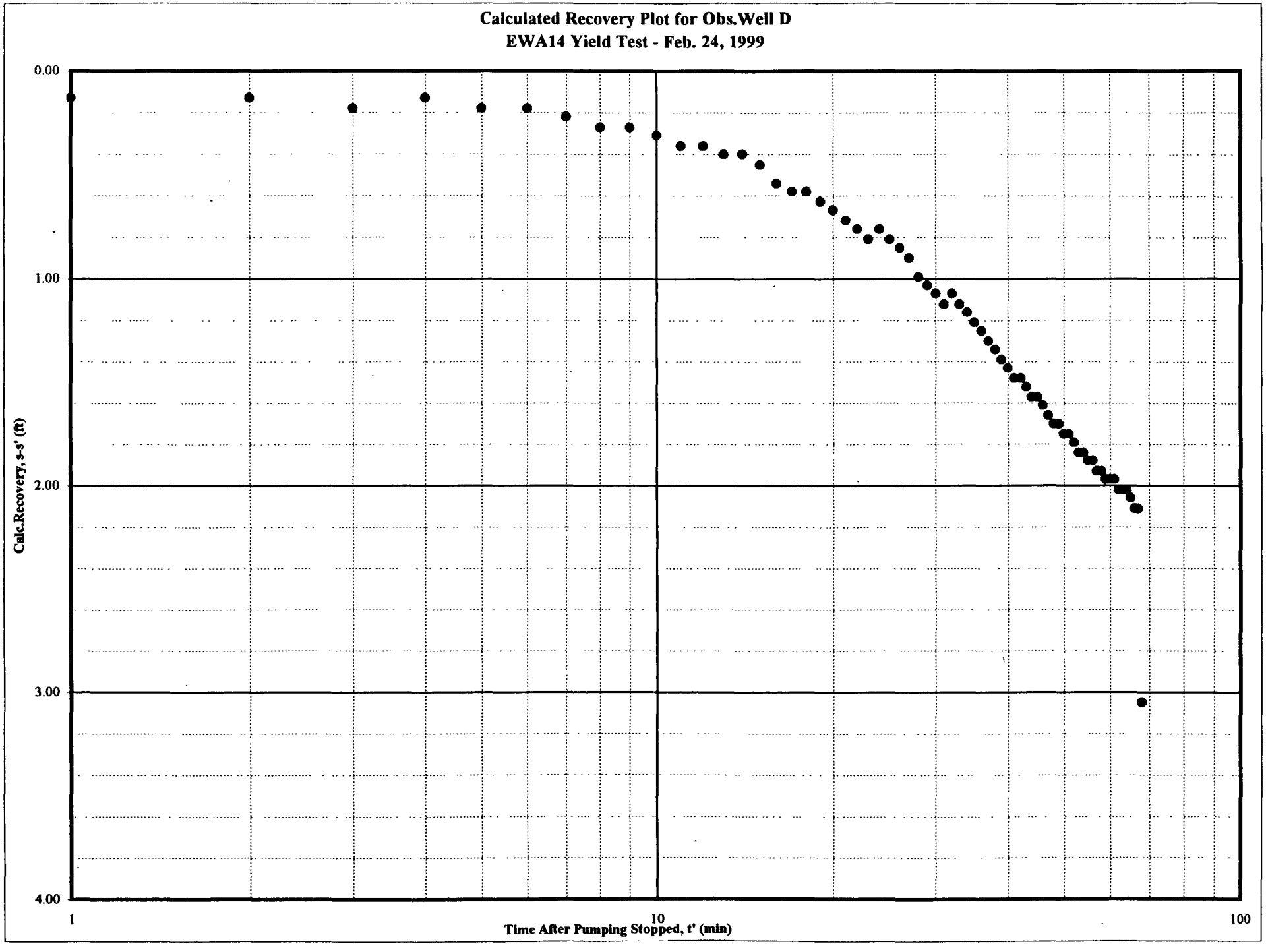

Calculated Recovery Plot for Obs.Well D
EWA14 Yield Test - Feb. 24, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-20

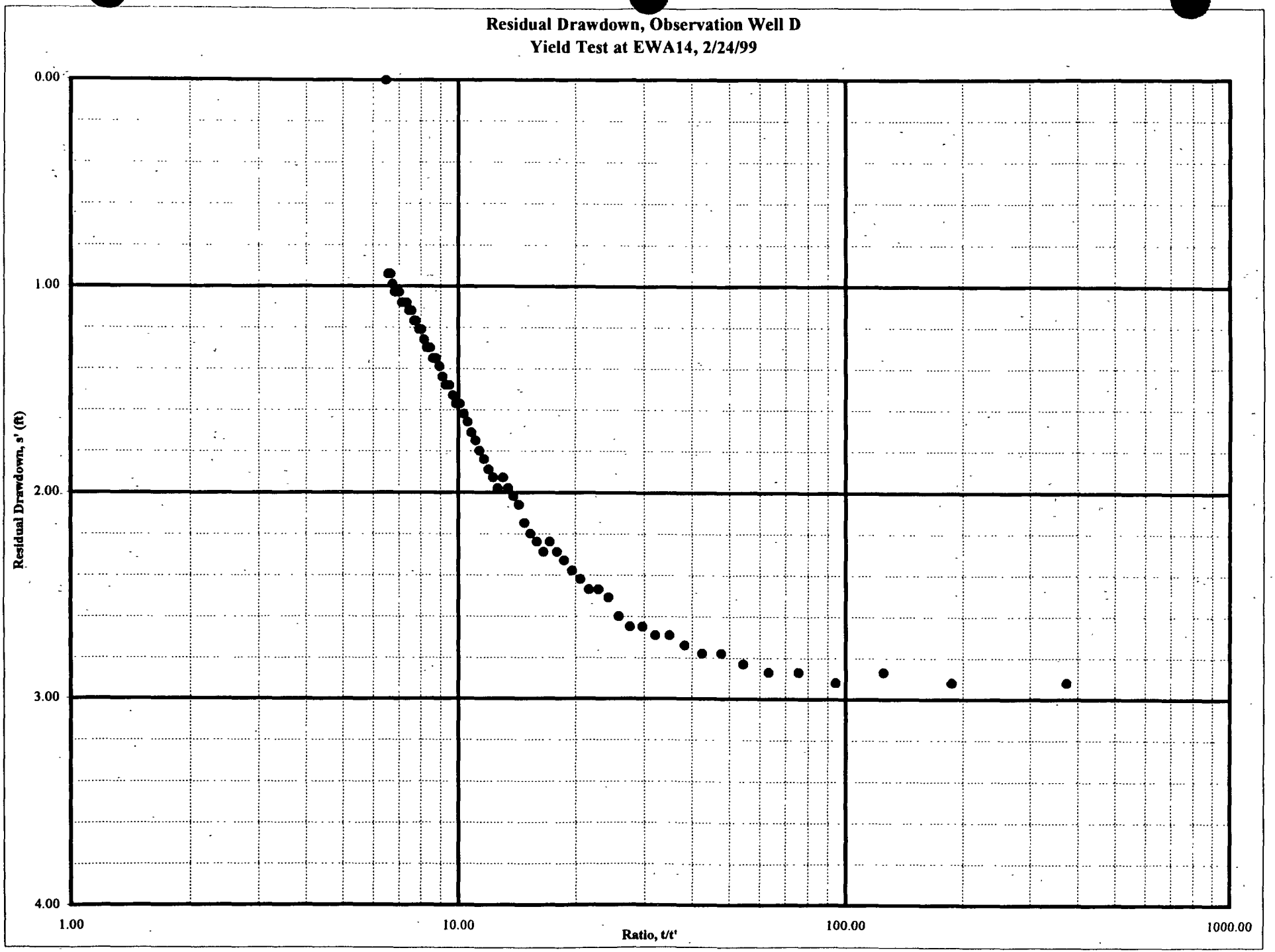
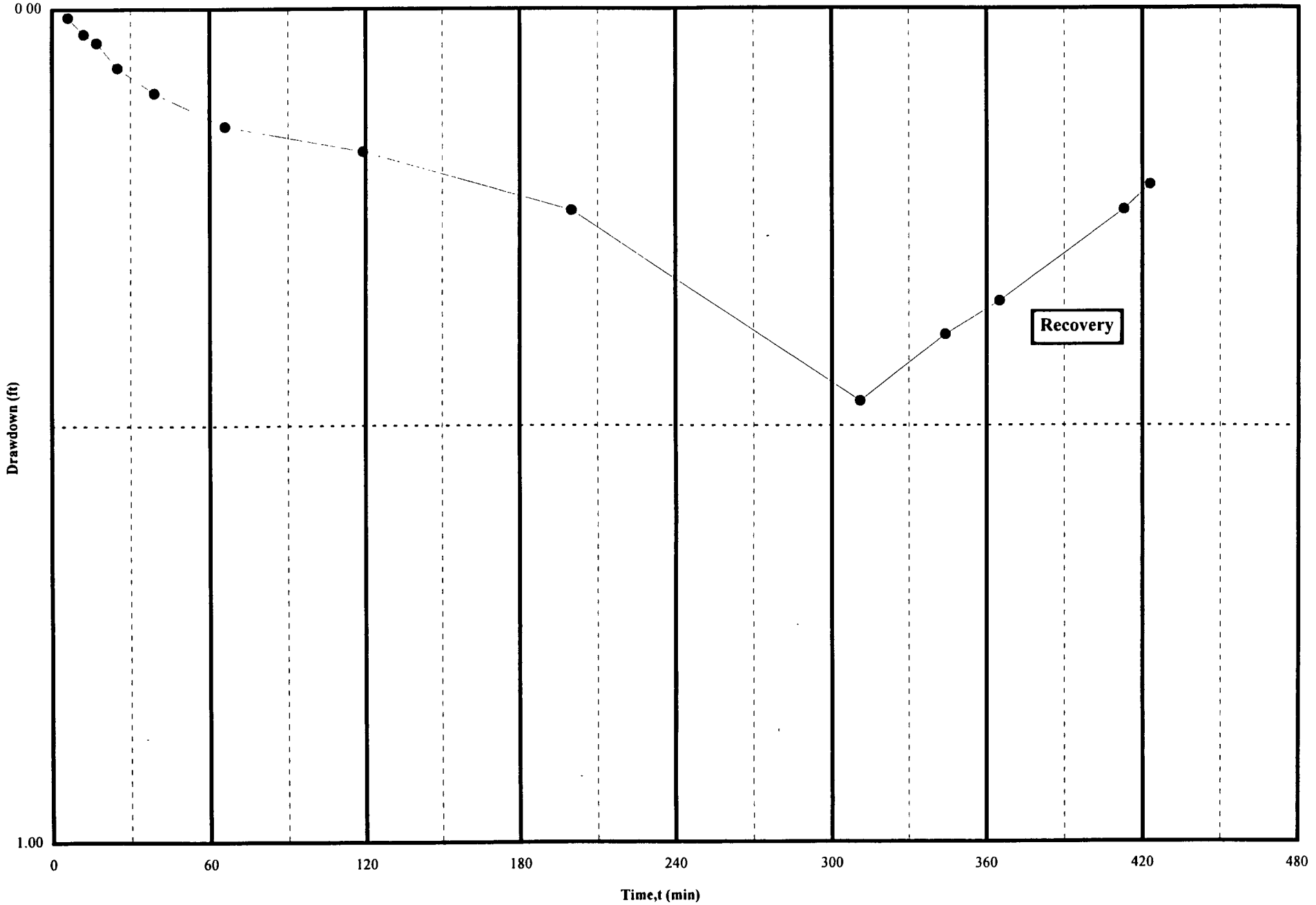

Residual Drawdown, Observation Well D
Yield Test at EWA14, 2/24/99
0.00
1.00
2.00
3.00
4.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-203

Time-Drawdown for Obs. Well OWA2
During Pump Test at EWA14
Rate = 2GPM, 2/24/99



Fi 8-204

Calculated Recovery Pl t for Obs.Well OWA2
EWA14 Yield Test - Feb. 24, 1999

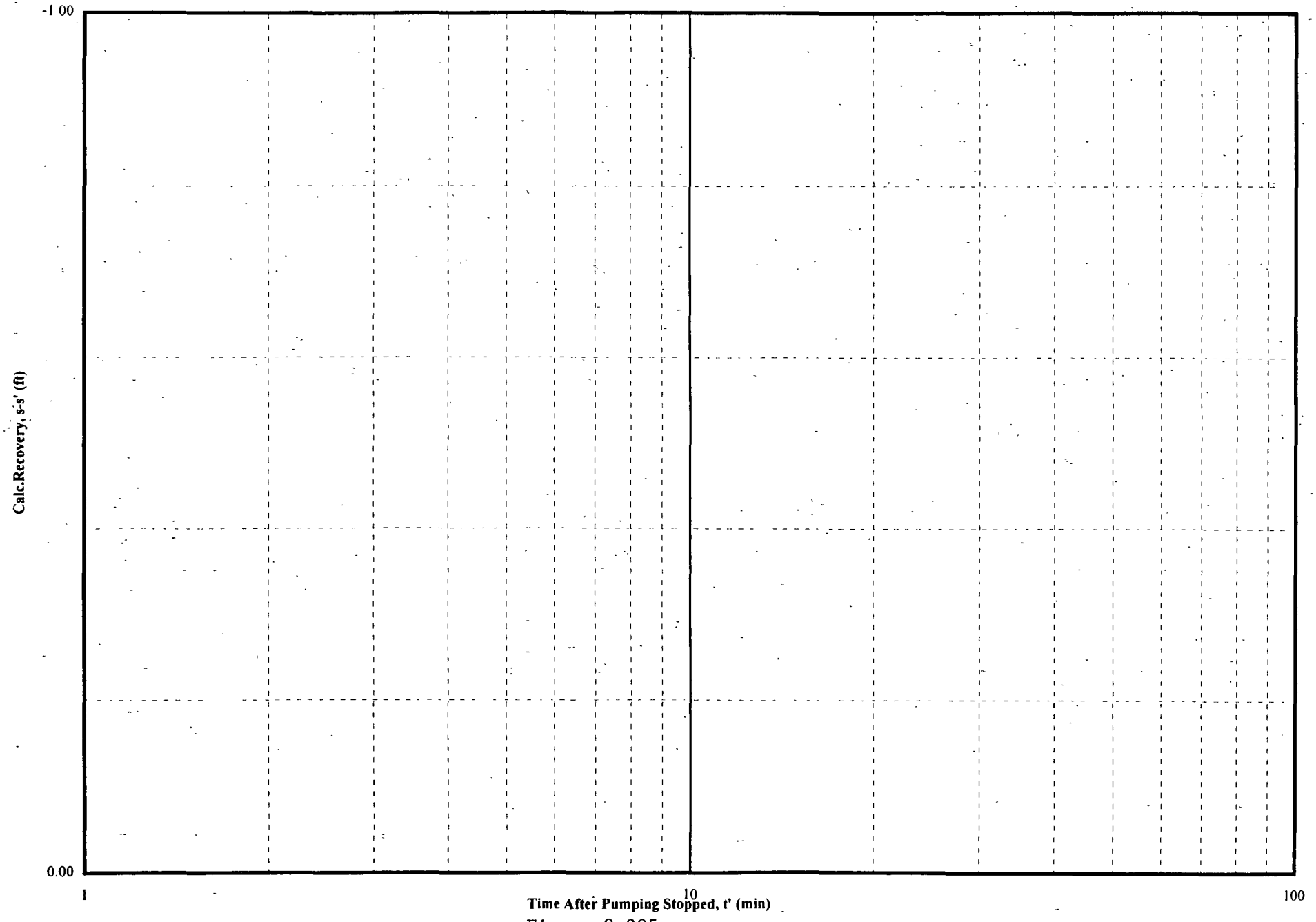


Figure 8-205

Residual Drawdown, Observation Well OWA2
Yield Test at EWA14, 2/24/99

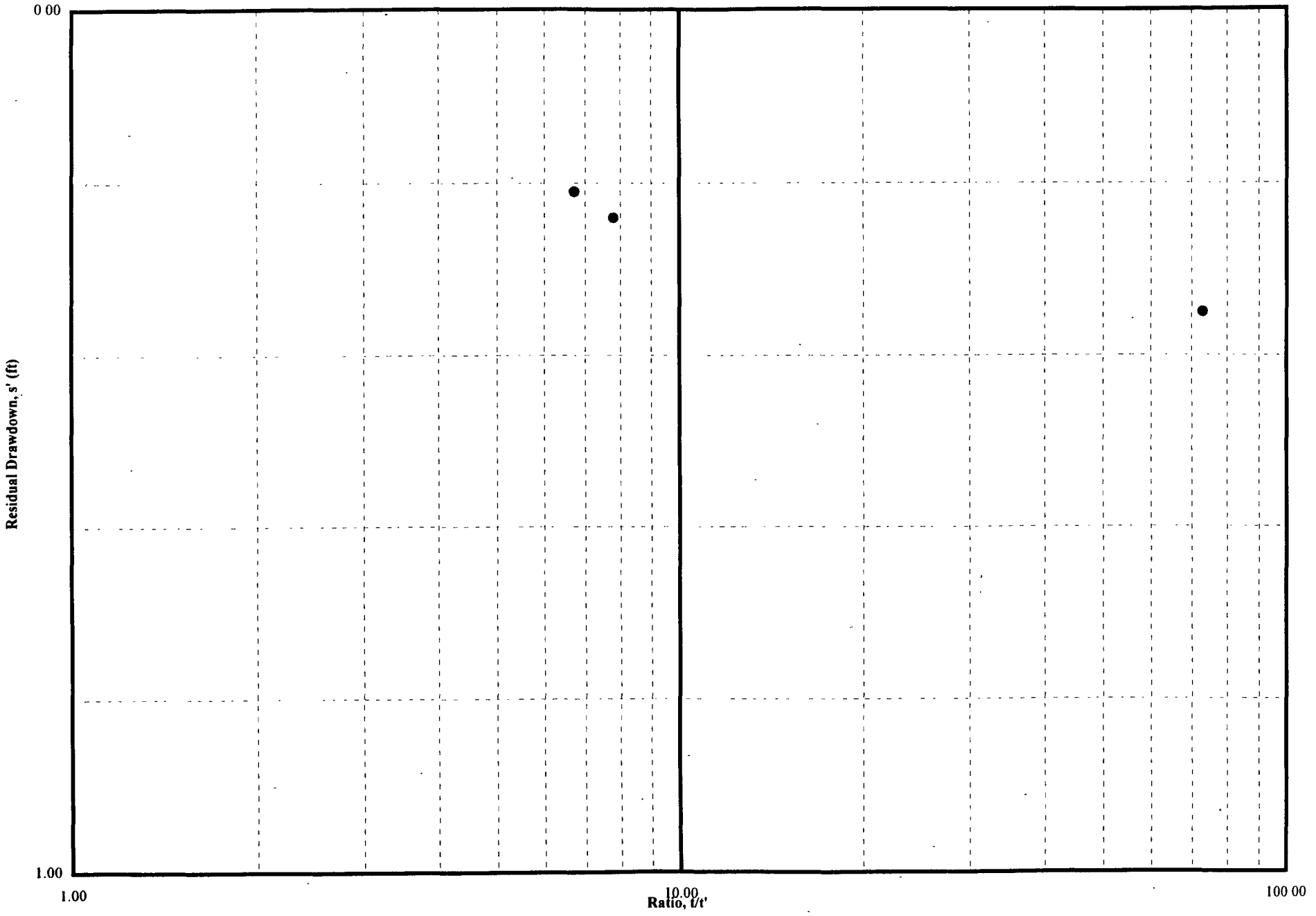


Figure 8-206

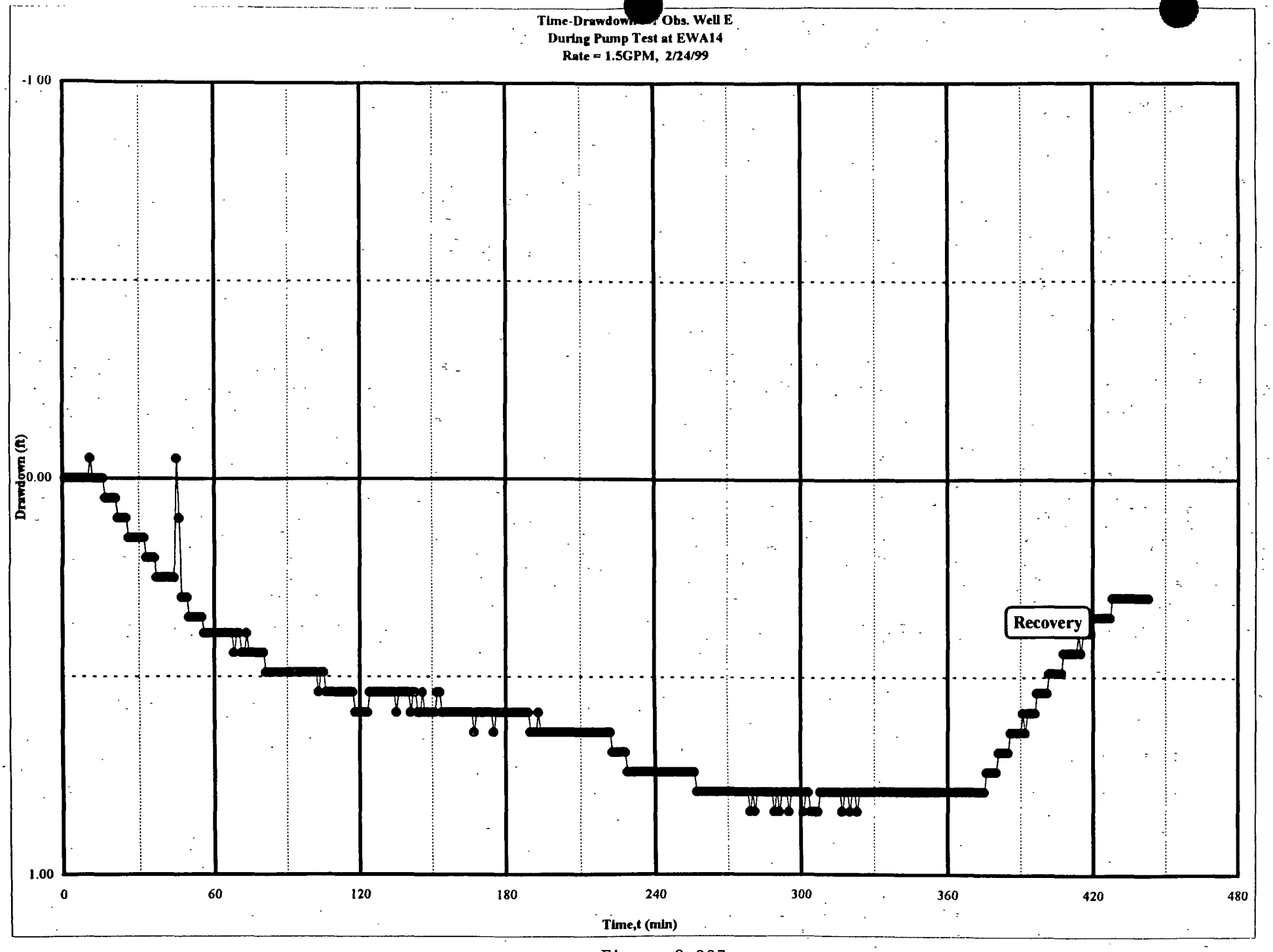

Time-Drawdown at Obs. Well E
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
-1.00
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-207

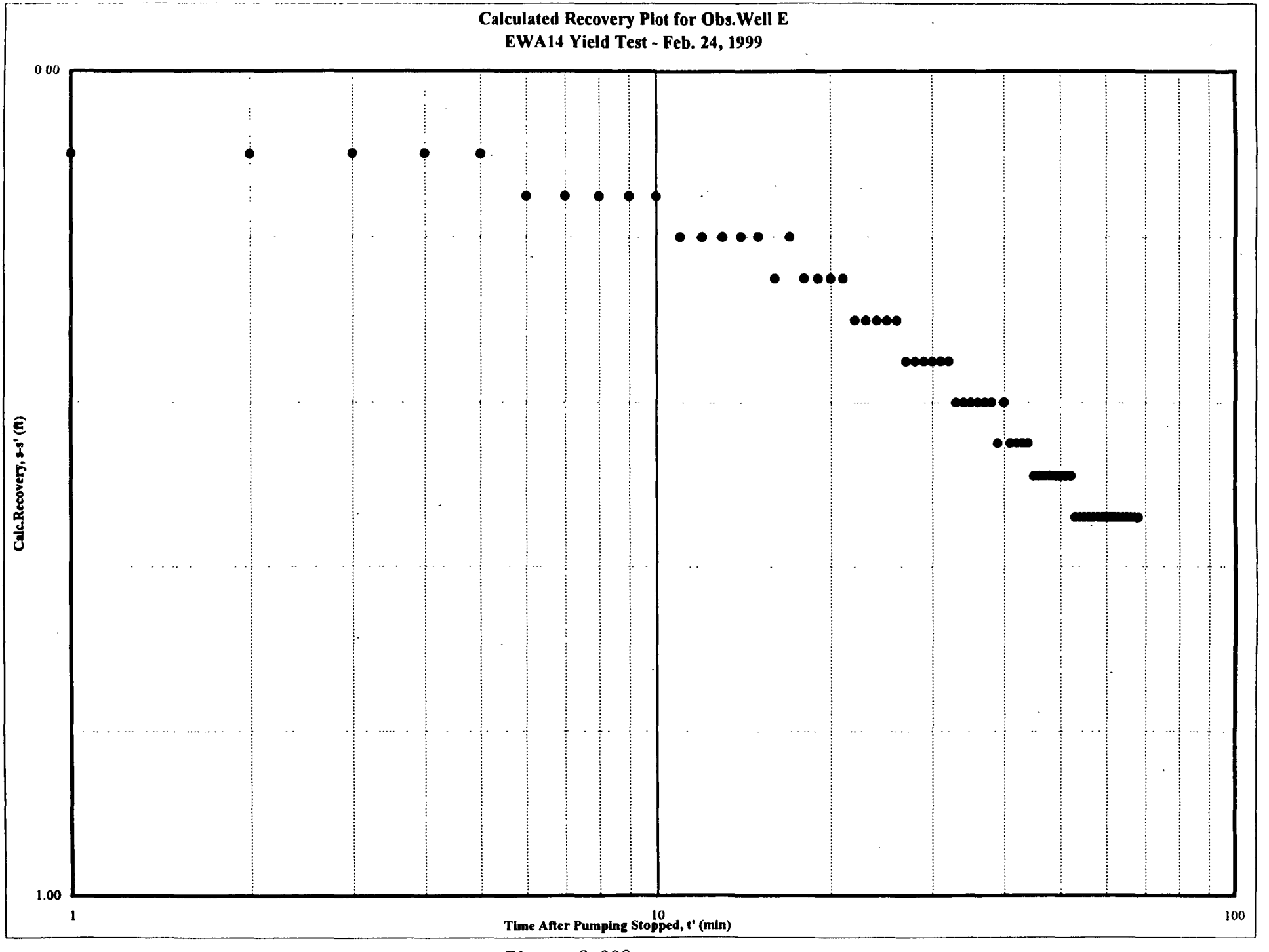

Calculated Recovery Plot for Obs.Well E
EWA14 Yield Test - Feb. 24, 1999
0.00
1.00
Calc.Recovery, s-s' (ft)
1
10
100
Time After Pumping Stopped, t' (min)

Figure 8-208

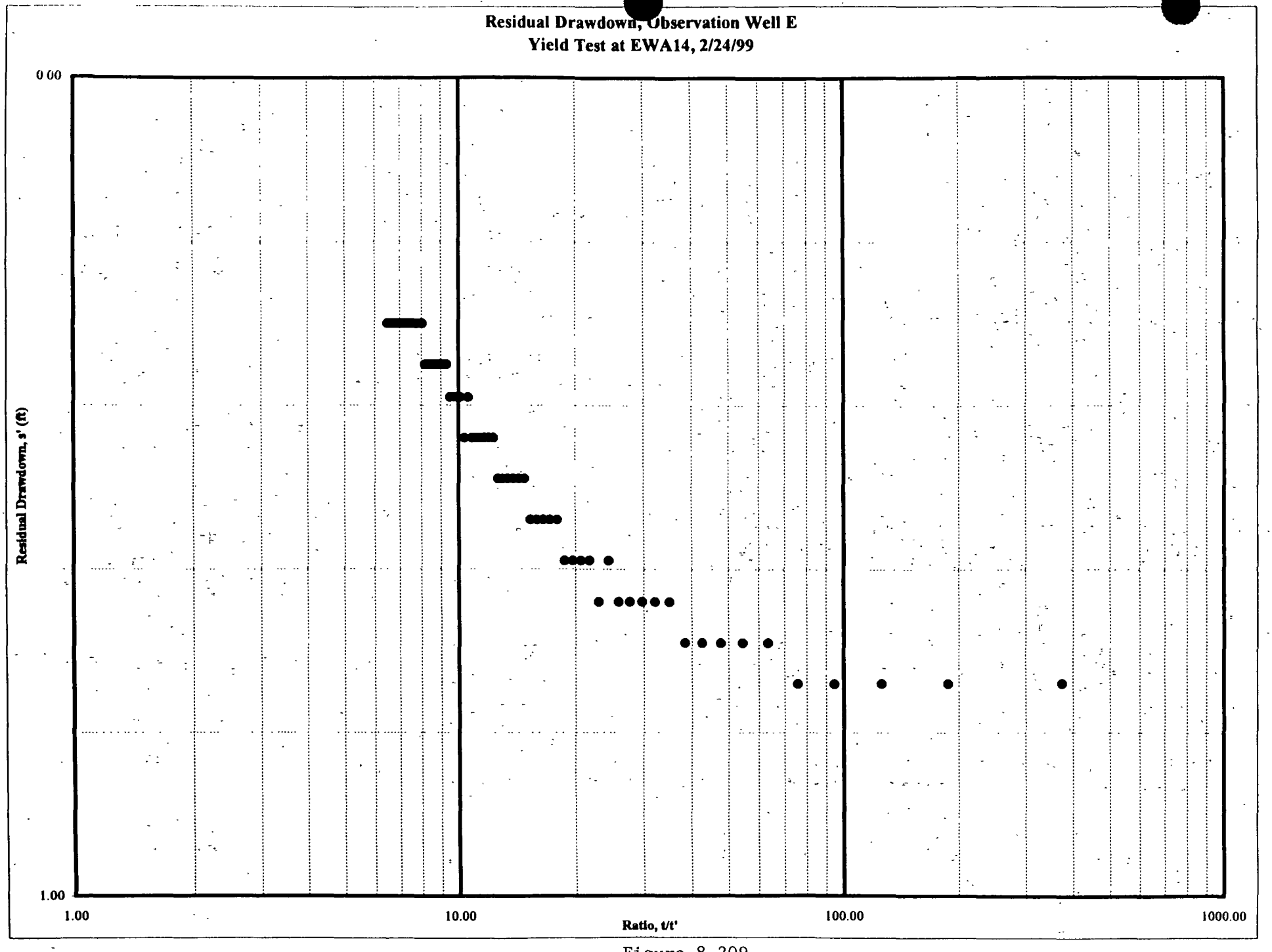

Residual Drawdown, Observation Well E
Yield Test at EWA14, 2/24/99
0.00
1.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-209

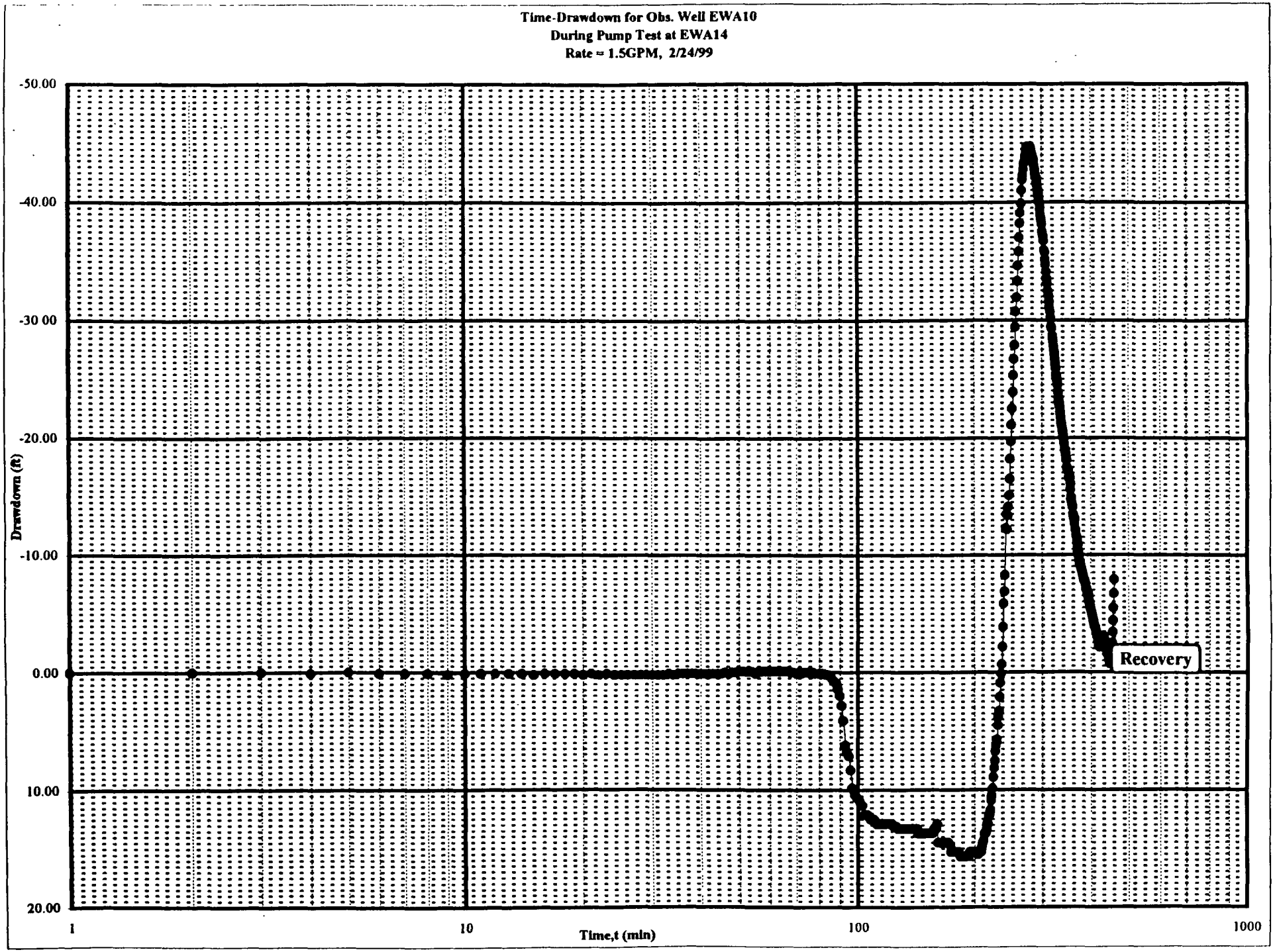

Time-Drawdown for Obs. Well EWA10
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
-50.00
-40.00
-30 00
-20.00
-10.00
0.00
10.00
20.00
Drawdown (ft)
1
10
100
1000
Time,t (min)
Recovery

Figure 8-210

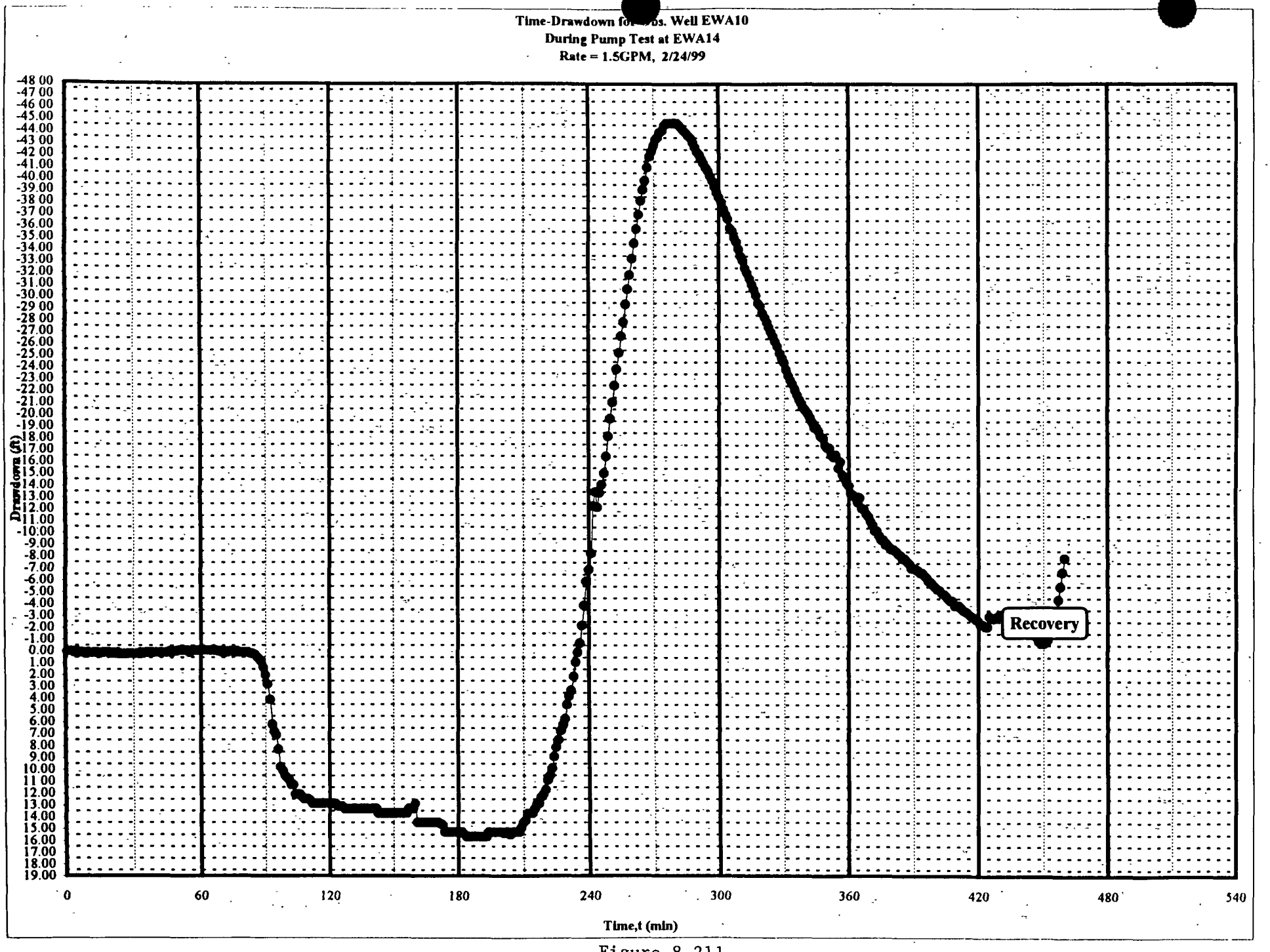

Time-Drawdown for Obs. Well EWA10
During Pump Test at EWA14
Rate = 1.5GPM, 2/24/99
Drawdown (ft)
Time,t (min)
Recovery

Figure 8-211

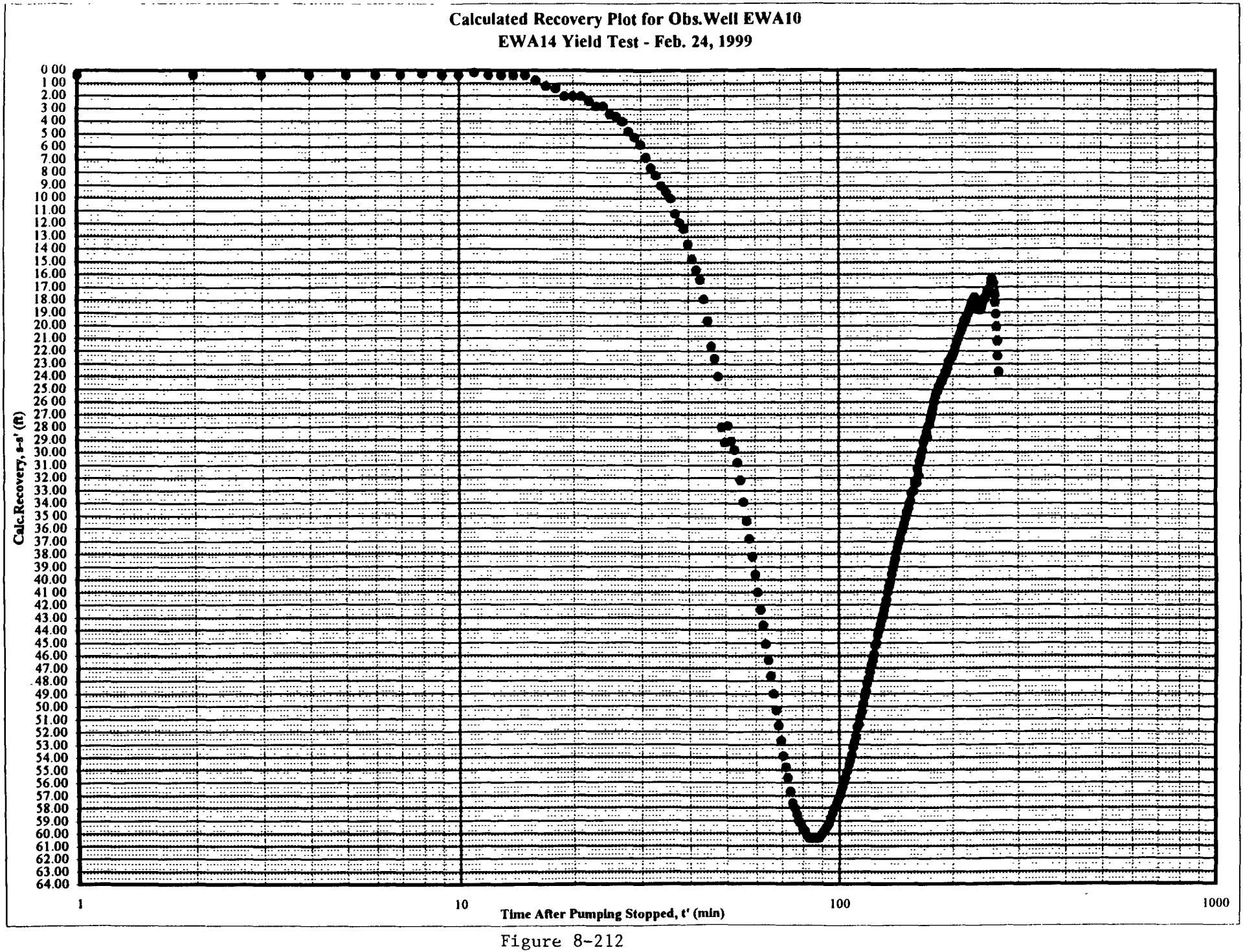

Calculated Recovery Plot for Obs.Well EWA10
EWA14 Yield Test - Feb. 24, 1999
Calc.Recovery, s-s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
30.00
31.00
32.00
33.00
34.00
35.00
36.00
37.00
38.00
39.00
40.00
41.00
42.00
43.00
44.00
45.00
46.00
47.00
48.00
49.00
50.00
51.00
52.00
53.00
54.00
55.00
56.00
57.00
58.00
59.00
60.00
61.00
62.00
63.00
64.00
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-212

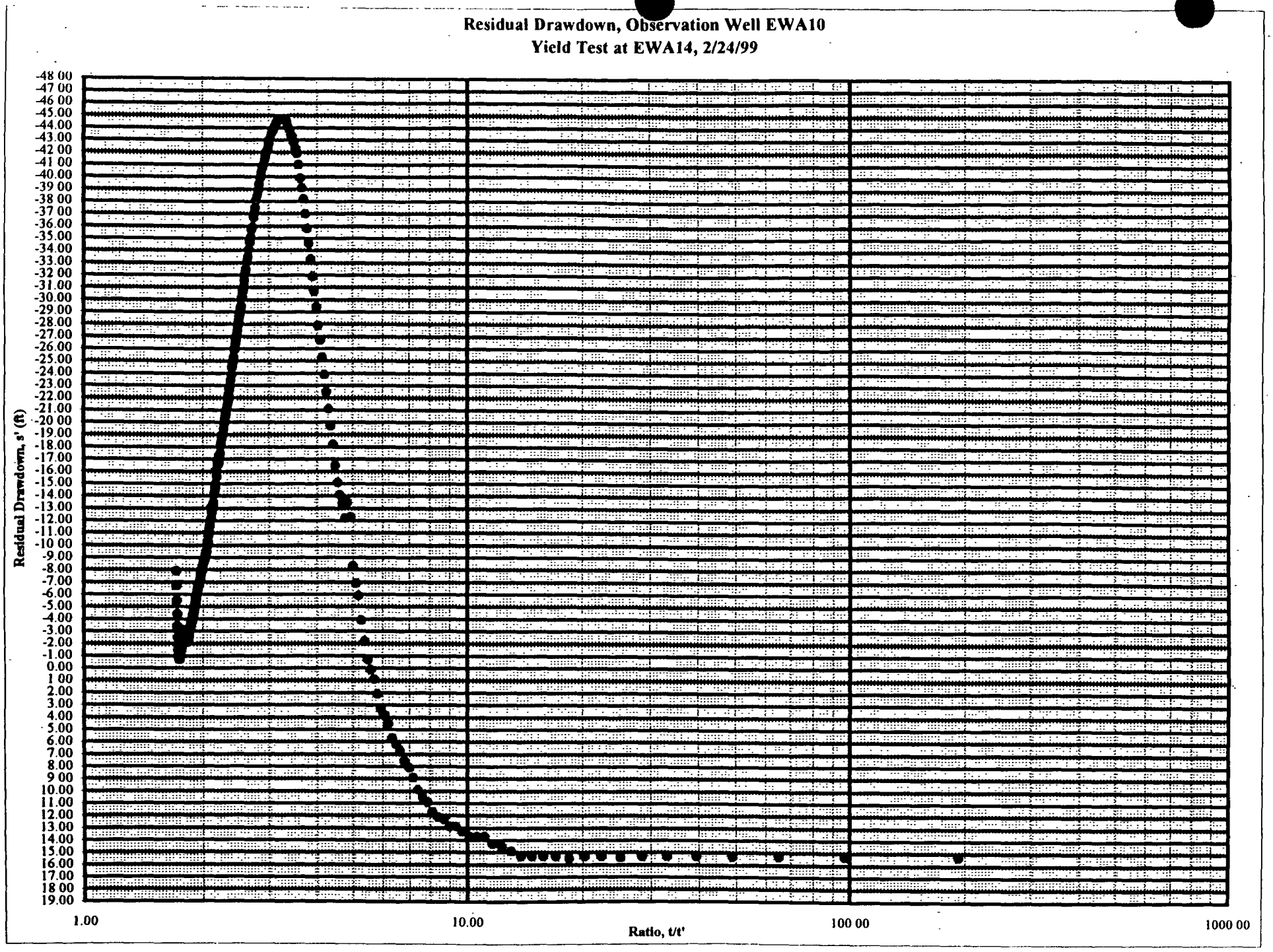

Residual Drawdown, Observation Well EWA10
Yield Test at EWA14, 2/24/99
Residual Drawdown, s' (ft)
-48.00
-47.00
-46.00
-45.00
-44.00
-43.00
-42.00
-41.00
-40.00
-39.00
-38.00
-37.00
-36.00
-35.00
-34.00
-33.00
-32.00
-31.00
-30.00
-29.00
-28.00
-27.00
-26.00
-25.00
-24.00
-23.00
-22.00
-21.00
-20.00
-19.00
-18.00
-17.00
-16.00
-15.00
-14.00
-13.00
-12.00
-11.00
-10.00
-9.00
-8.00
-7.00
-6.00
-5.00
-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-213

Time-Drawdown for Pumping Well EWA15
Rate = 3GPM, 3/3/99
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
0.1
1
10
100
1000
Time,t (min)
Recovery

Figure 8-214

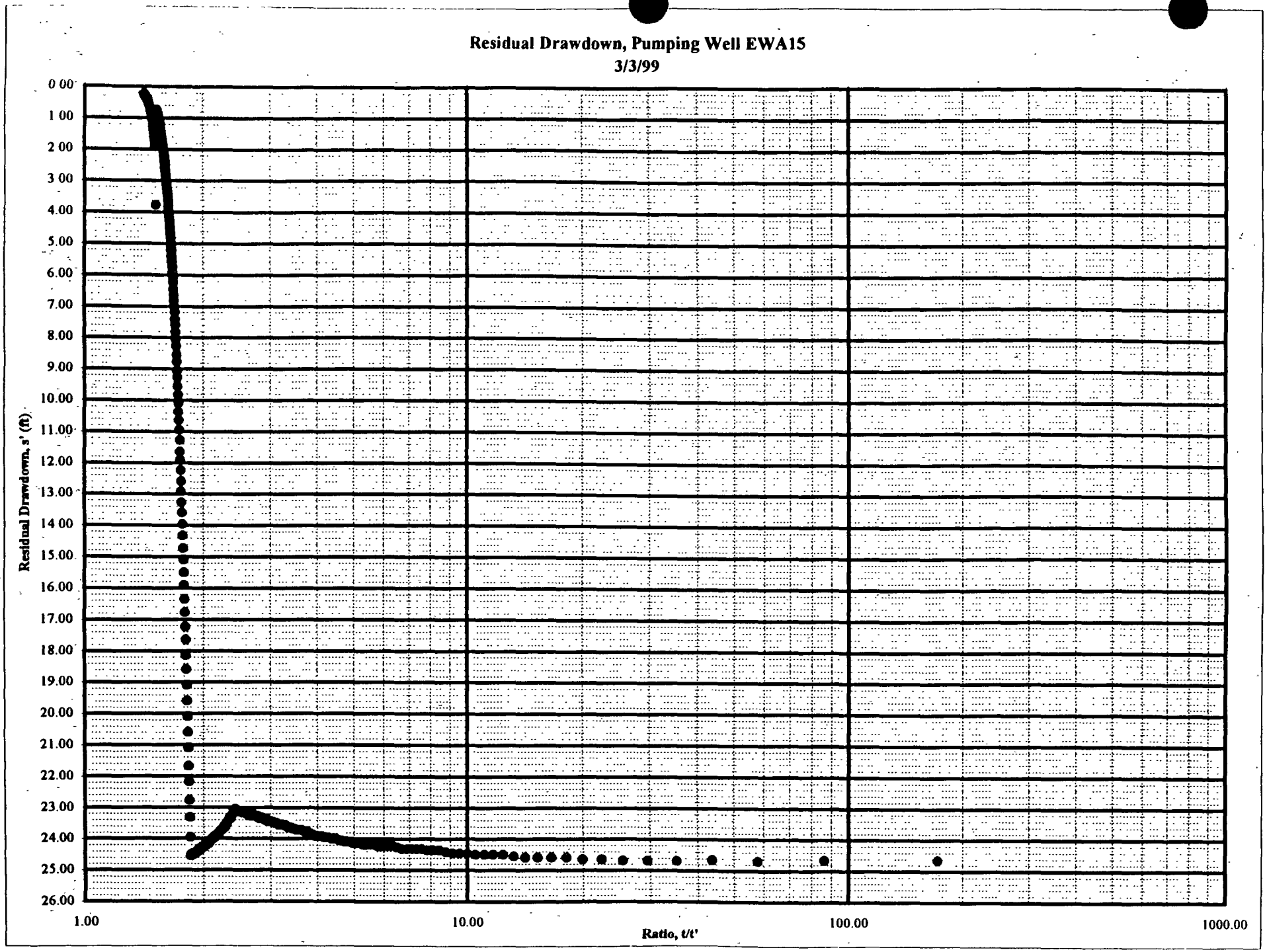

Residual Drawdown, Pumping Well EWA15
3/3/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-215

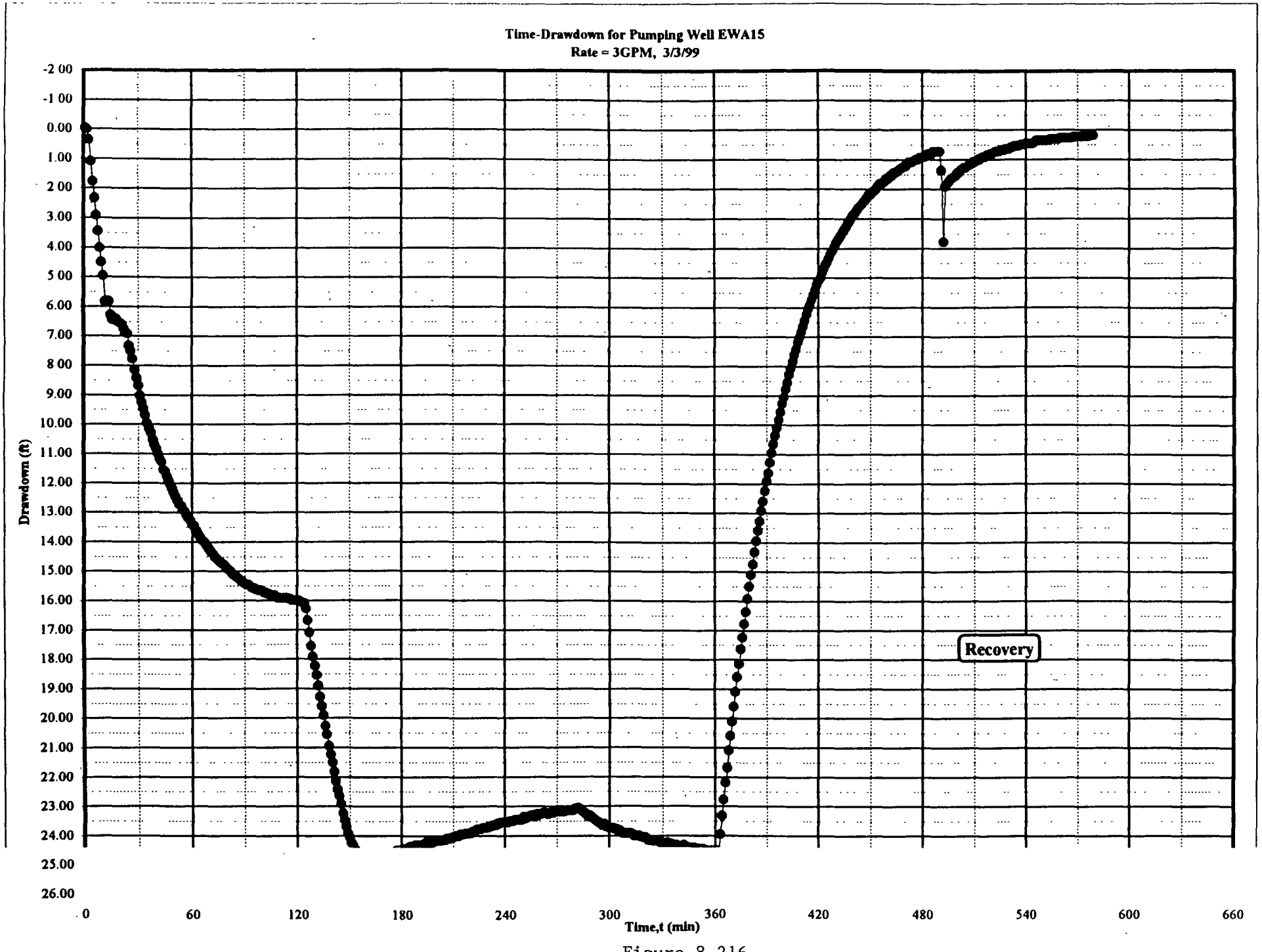

Time-Drawdown for Pumping Well EWA15
Rate = 3GPM, 3/3/99
Drawdown (ft)
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
0
60
120
180
240
300
360
420
480
540
600
660
Time,t (min)
Recovery

Figure 8-216

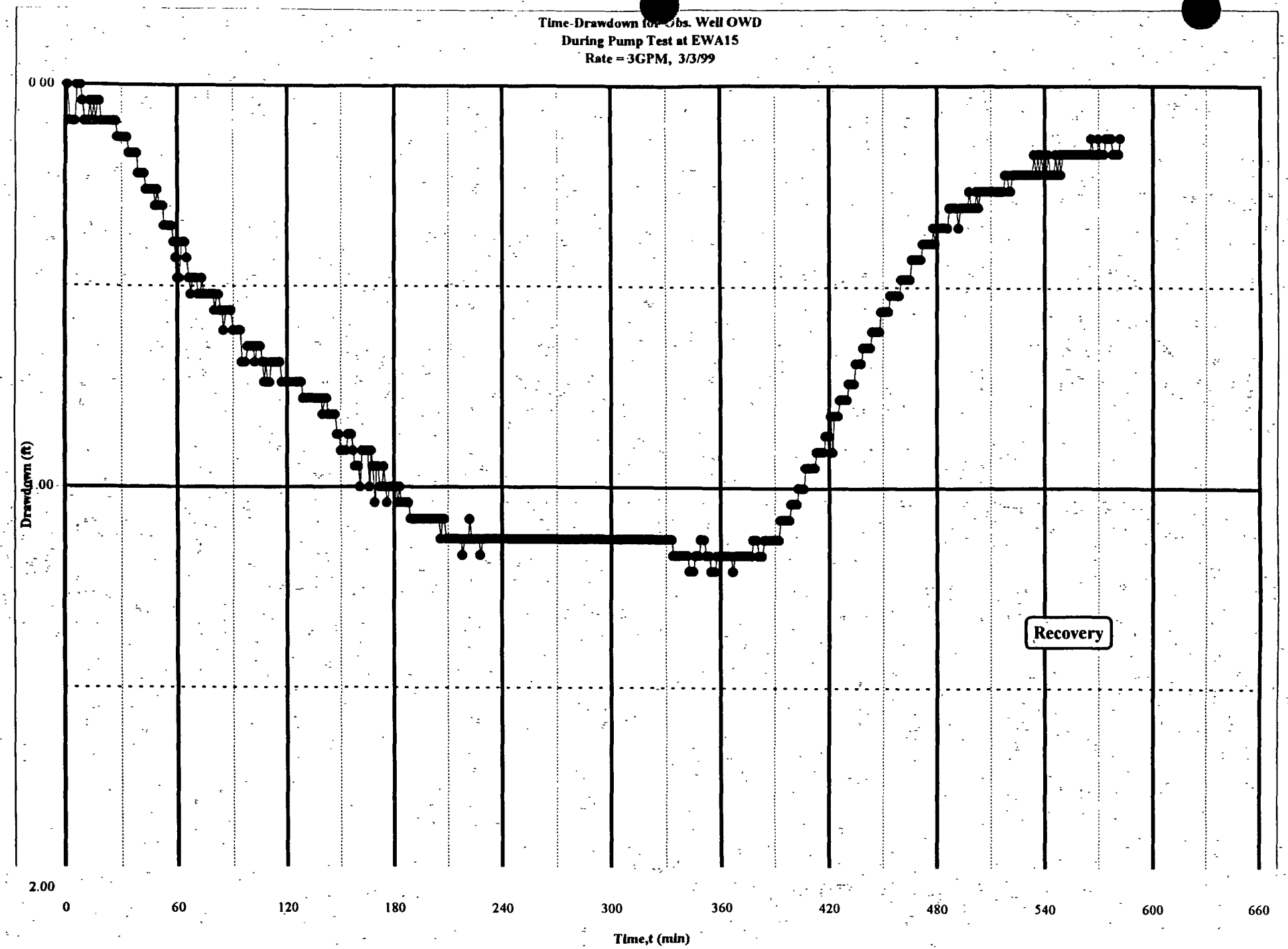

Time-Drawdown for Obs. Well OWD
During Pump Test at EWA15
Rate = 3GPM, 3/3/99
0.00
1.00
2.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
600
660
Time,t (min)
Recovery

Figure 8-217

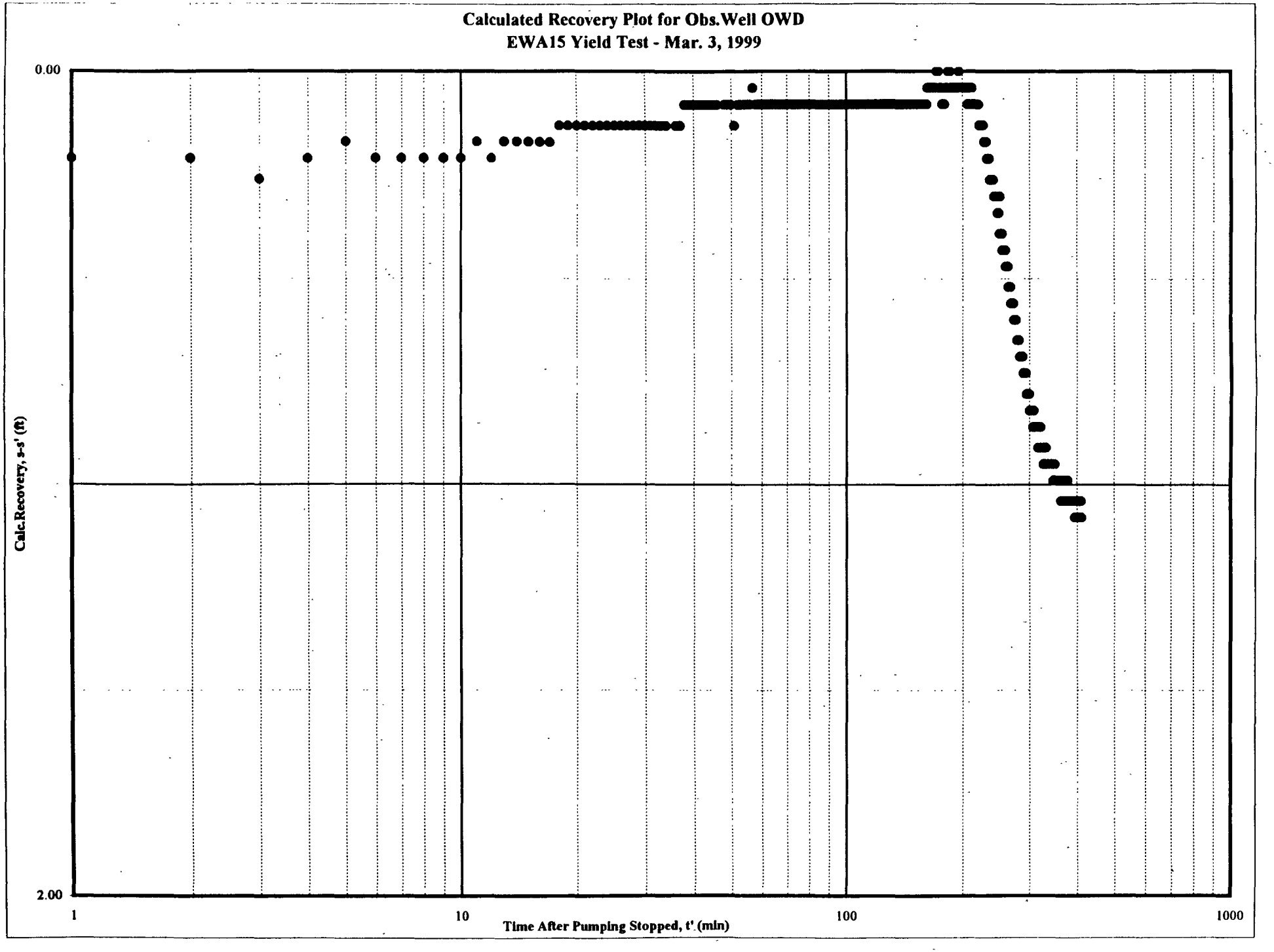

Calculated Recovery Plot for Obs.Well OWD
EWA15 Yield Test - Mar. 3, 1999
0.00
2.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-21

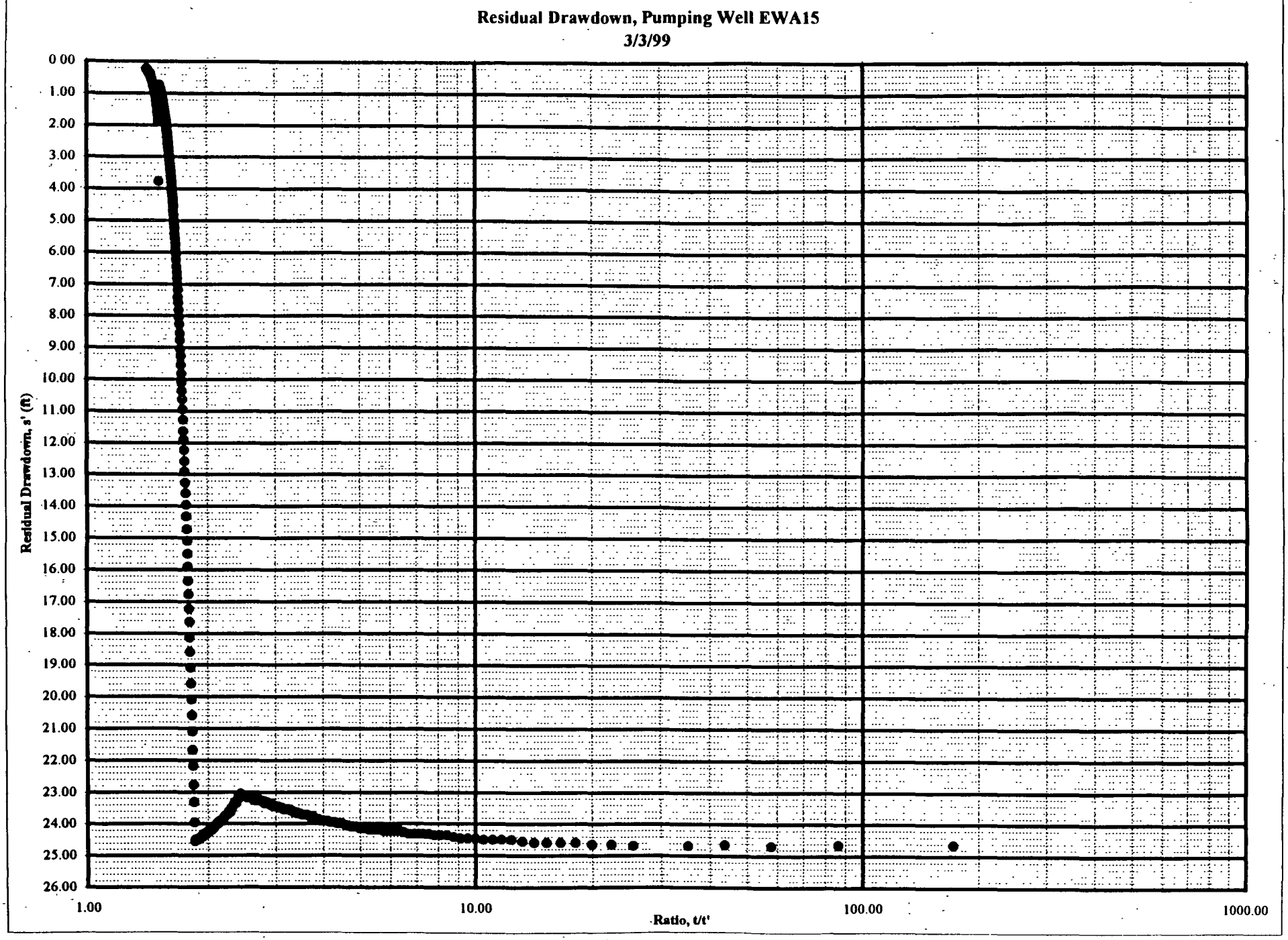

Residual Drawdown, Pumping Well EWA15
3/3/99
Residual Drawdown, s' (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-219

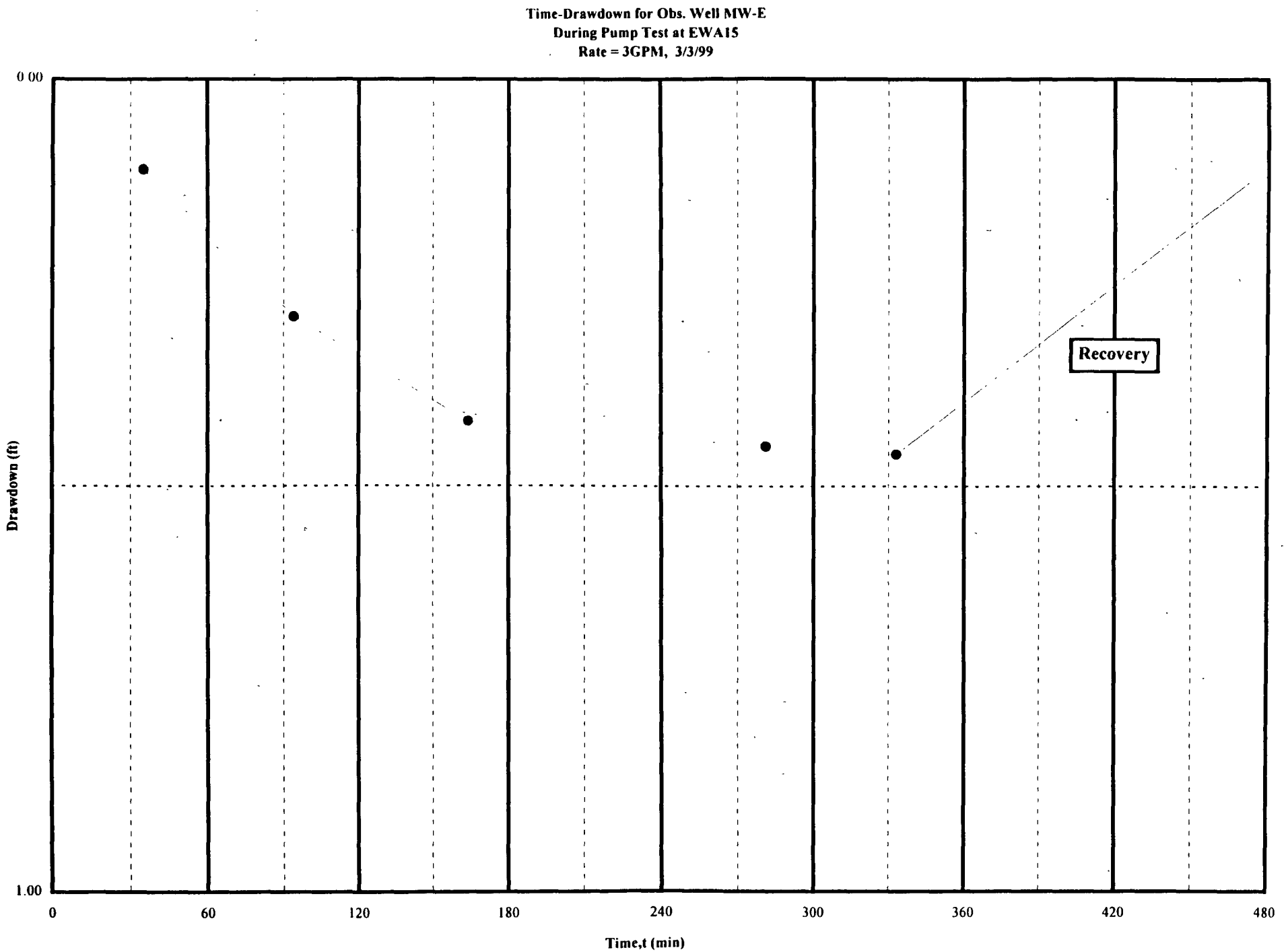

Time-Drawdown for Obs. Well MW-E
During Pump Test at EWA15
Rate = 3GPM, 3/3/99
0.00
1.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
Time,t (min)
Recovery

Figure 8-220

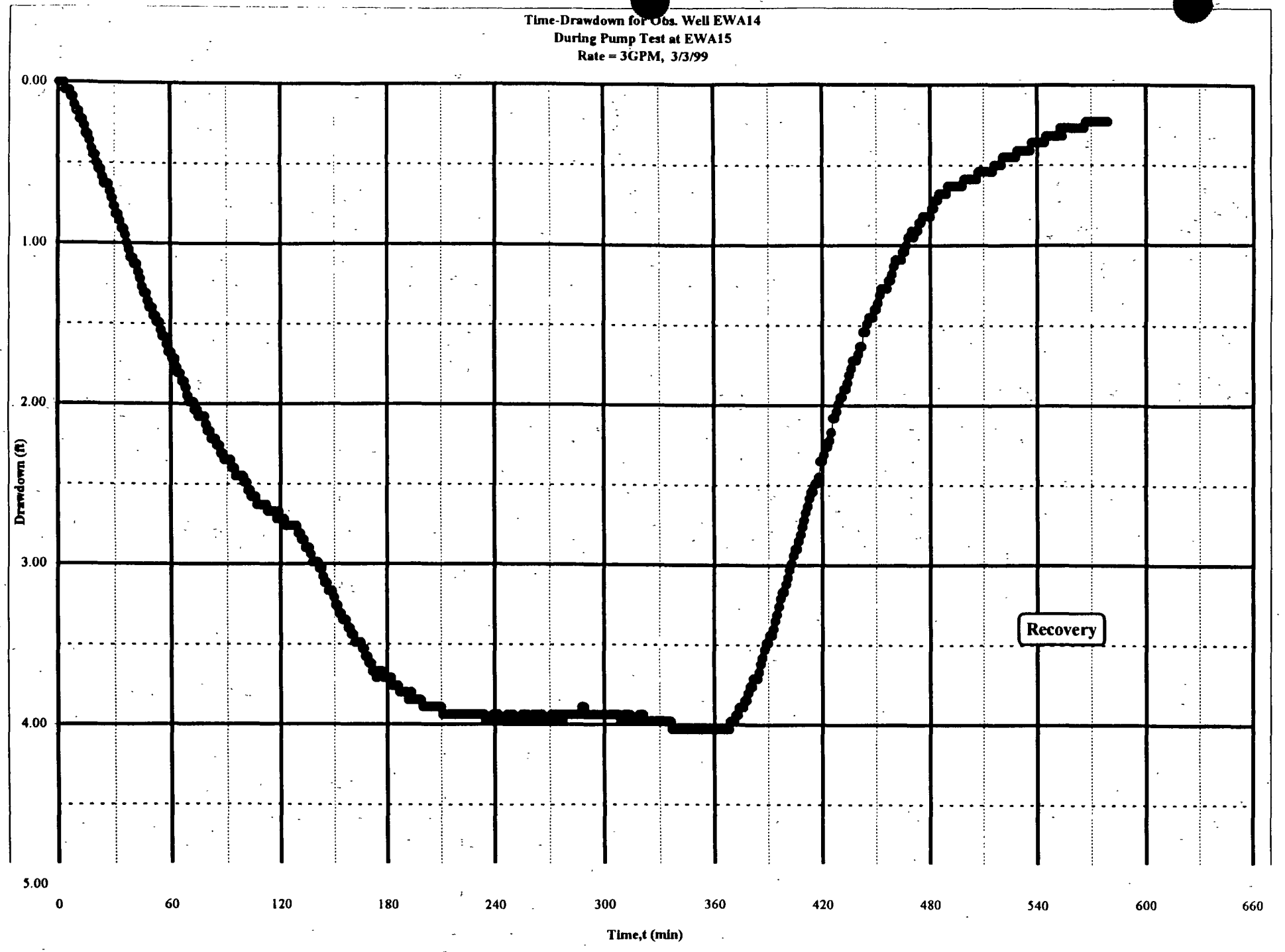

Time-Drawdown for Obs. Well EWA14
During Pump Test at EWA15
Rate = 3GPM, 3/3/99
0.00
1.00
2.00
3.00
4.00
5.00
Drawdown (ft)
0
60
120
180
240
300
360
420
480
540
600
660
Time,t (min)
Recovery

Figure 8-221

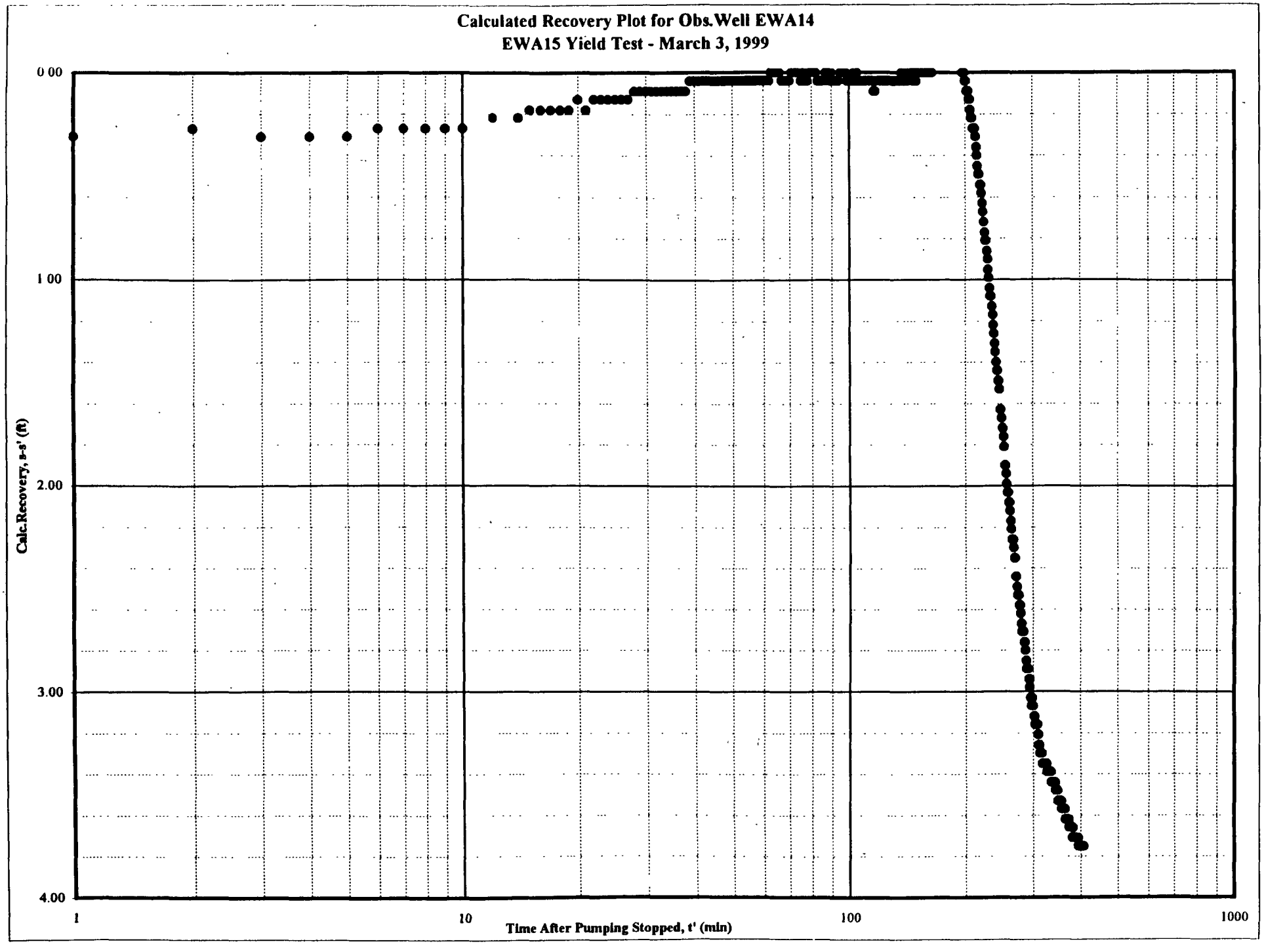

Calculated Recovery Plot for Obs.Well EWA14
EWA15 Yield Test - March 3, 1999
0.00
1.00
2.00
3.00
4.00
Calc.Recovery, s-s' (ft)
1
10
100
1000
Time After Pumping Stopped, t' (min)

Figure 8-22

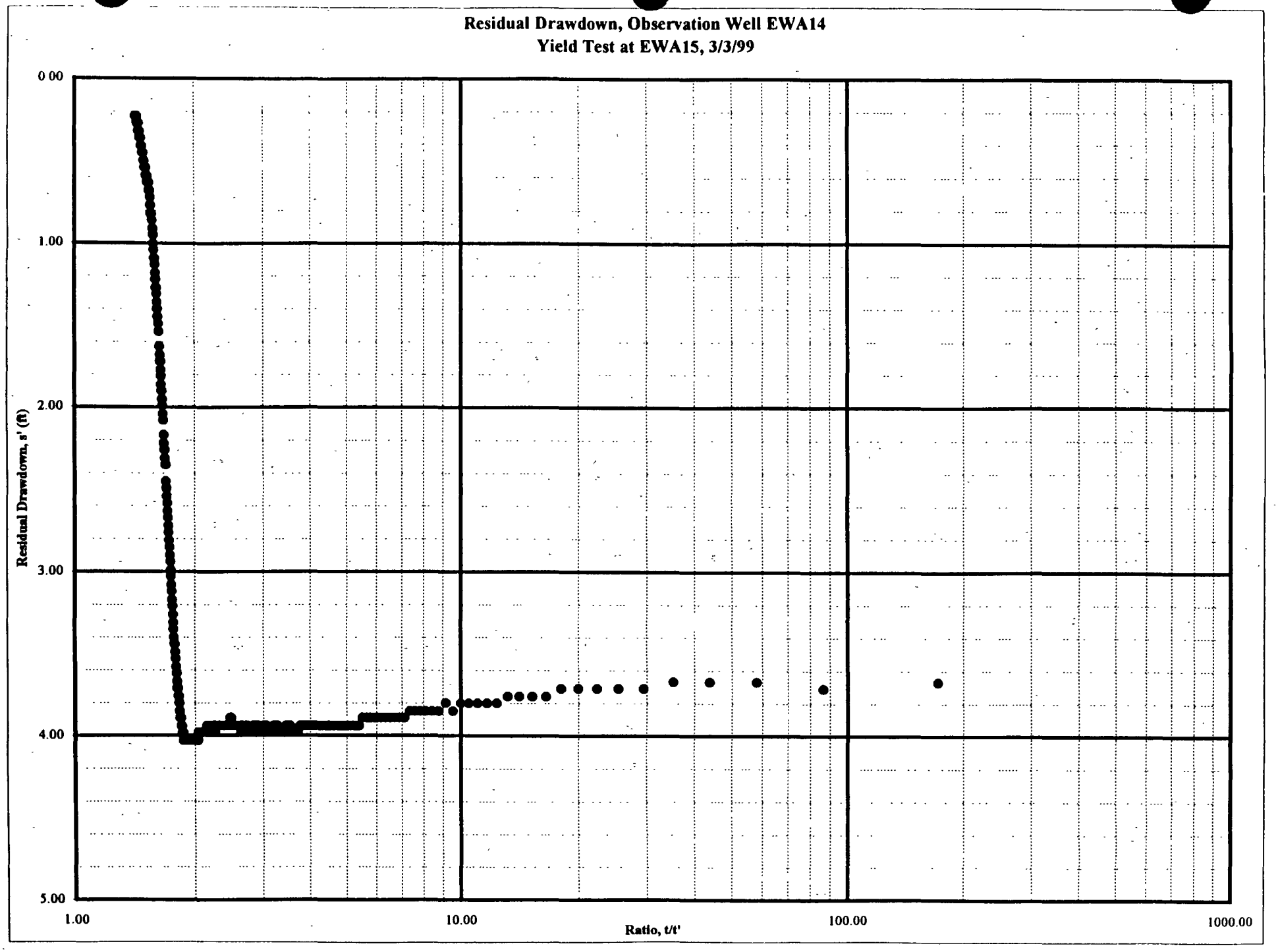

Residual Drawdown, Observation Well EWA14
Yield Test at EWA15, 3/3/99
0.00
1.00
2.00
3.00
4.00
5.00
Residual Drawdown, s' (ft)
1.00
10.00
100.00
1000.00
Ratio, t/t'

Figure 8-223

APPENDIX A

Borehole Logs and Construction Diagrams

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A1
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/19/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/20/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Gry	Shaley gravel, some silt (fill)			
5'			Rd brn	Clayey silt, dry		Bottom of excavation fill ~8'	
10'			Rd brn	Clayey silt, dry			
15'			Brn	Vf gr siltstone, slightly friable, dry		Bedrock at 15'	
20'			Brn	Siltstone, resistant		End of 14" borehole Install 10" casing at 20'	
						Soft drilling 22-24'	
25'						1/16-1/8" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A1
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/19/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/20/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn	Vf gr sandstone			
						Soft zone 28-28.5'	
30'			Brn	Siltstone, resistant, tr calcite, wet		1/16" chips	
35'			Brn	Siltstone, friable, wet		1/4" chips	
40'			Brn	Siltstone, resistant		1/4" chips	
45'			Brn	Siltstone, friable, wet		~2 gpm airlift yield	
						Significant fracture at 47'	
50'						1/2" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A1
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/19/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/20/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings were not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Gry brn	F gr sandstone, friable		1/2" chips	
55'			Brn	F gr sandstone, friable			
60'			Gry	F-med gr sandstone, friable		Slight increase in airlift yield	
65'			Brn	F gr sandstone, slightly friable		Fracture at 64' ~4 gpm airlift yield 1/8-1/4" chips	
						Soft zone 66-67'	
70'			Brn	F gr sandstone, friable		~12 -15 gpm airlift yield 1/8-1/4" chips	
75'			Brn	F-med gr sandstone		1" chips	
80'						End of 10" borehole Airlift yield ~25 gpm	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A2
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/8/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/11/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings approximate not above background except where noted.

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Gray	Shaley gravel, some silt (excavation fill)			
5'			Rd brn	Silt, dry			
10'			Rd brn	Siltstone resistant, dry		1/4 " chips	
15'			Rd brn	Siltstone, dry		1/4 " chips	
20'			Rd brn	Vf gr sandstone, dry		End of 14" borehole Install 10" casing Soft zone ~ 24'	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A2
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/8/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/11/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background level except where noted.

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Gry brn	Vf gr sandstone siltstone, dry		Soft zone 25-30'	
30'			Gry brn	Vf gr sandstone		1/4" chips	
35'			Brn	Vf gr sandstone, dry		1/8 - 1/2" chips	
40'			Gry brn to Red brn	F to vf gr sandstone		Very hard drilling starting 40'	
45'			Rd gry	F to vf gr sandstone, dry			
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A2
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/8/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/11/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings above background except where noted

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Rd Brn	F gr sandstone, dry		1/4" chips	
55'			Gry Brn	F gr sandstone, sl moist		Note: 0.5 ppm on OVA in sample bag	
60'			Rd Brn	F to med gr sandstone, wet		Fracture 62 to 63 ft	
65'			Rd Brn	F to med gr sandstone, wet			
70'			Rd Brn	F to med gr sandstone, some siltstone			
75'			Rd Brn	F to med gr sandstone and siltstone		Fracture 76' ~5 gpm air lift yield improving to 10 gpm after completion 1/8 to 1/4" chips	
80'						End of bore at 80' 1/8 to 1/4" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A3
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Gry	Shaley gravel (excavation fill), moist			
5'						Weathered bedrock at 7'	
10'				Siltstone/mudstone, friable		Competent bedrock at 13' 1/4-1/8" chips	
15'							
20'			Brn	Siltstone to mudstone, friable, dry		0 ppm FID	
				22-23' Soft zone			
25'			Brn	Siltstone, less friable, dry		0 ppm FID 1/4 inch chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A3
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings approximate

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn	Vf gr sandstone Micaceous, wet			
						Fracture at 27 ft	
30'			Brn	Vf gr sandstone Moist, less wet		Fracture at 30 ft 1/8 to 1/4" chips	
35'			Brn	Vf gr sandstone		1/8" chips	
40'			Brn	F gr sandstone			
						Soft zone at 43'	
45'			Brn	F gr sandstone		1/8" chips	
						Soft zone at 48-53'	
50'						1/8-1/4" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A3
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings above background except where noted

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
55'			Gr Brn	F to med gravel, sandstone		1/4" to 1/2" chips 10 gpm air lift yield	
60'			Gr Brn	F to med gr sandstone		Fracture at 61 ft Fracture at 63 ft	
65'			Gr Brn	F to med gr sandstone			
70'			Gr Brn	F gr sandstone			
75'			Gr Brn	F gr sandstone		Air lift yield ~15-20 gpm	
80'						75' End of 10" borehole	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A4
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 12/17/98
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 12/18/98
DRILLING METHOD: Air Hammer 14 inch dia. to 15 feet, 10 inch dia. to 76 feet

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn to Rd brn	Topsoil, silt, little sand, clay, dry			
5'			Rd brn	Bedrock at 5'		0 ppm FID	
				Vf gr sandstone to siltstone, dry			
			Rd brn	7–11' Mudstone, dry			
10'						0 ppm FID	
			Brn	Siltstone, dry		0 ppm FID	
15'						Set 10 inch casing at 15 feet	
20'			Brn	Siltstone to mudstone, friable, dry		0 ppm FID	
				22–23' Soft zone			
25'			Brn	Siltstone, less friable, dry		0 ppm FID 1/4 inch chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A4
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 12/17/98
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 12/18/98
DRILLING METHOD: Air Hammer 14 inch dia. to 15 feet, 10 inch dia. to 76 feet

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
30'			Gr brn	Vf gr sandstone, dry		0 ppm OVA 1/4 to 1/8 inch chips	
35'			Gr brn	F gr sandstone, dry, friable		0 ppm OVA	
40'			Brn	F-m gr sandstone 40.5-41.0' Soft zone		0 ppm in rolloff 0.8 ppm in sample	bag
45'			Brn	F-m gr sandstone 46.0-46.1' Soft zone		0 ppm OVA	
50'			Grn brn	F gr sandstone		0 ppm OVA	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A4
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 12/17/98
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 12/18/98
DRILLING METHOD: Air Hammer 14 inch dia. to 15 feet, 10 inch dia. to 76 feet

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
55'			Brn	F gr sandstone, slight moist		1-3/4 inch pieces	
60'			Grn brn	F-m gr sandstone, moist to wet		2 ppm OVA in rolloff 0.3 ppm in sample bag	
				63-64' Soft zone, 3-5 gpm yield			
65'			Grn brn	F-m gr sandstone, wet ~5 gpm yield		1-2 ppm OVA in rolloff 0 ppm in sample bag	
				69-70' Soft zone			
70'			Brn	Vf gr sandstone to siltstone		1/4 inch chips 1-2 ppm OVA in rolloff 0.3 ppm in sample bag	
75'			Brn	F-m gr sandstone			

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A5
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings approximate

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Clayey silt, dry		Bedrock at 5 ft.	
5'			Brn to Rd brn	Siltstone to vf gr sandstone, dry			
10'			Brn to Rd brn	Siltstone, dry			
15'			Rd brn to Brn	Vf gr siltstone, dry		End of 14" borehole	
20'			Brn to Rd brn	Vf gr sandstone, dry		1/8" to 1/4" Chips Soft zone at 20' Soft zone at 23'	
25'						1/8 " chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A5
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings approximate

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn to Rd brn	Siltstone, micaceous, dry			
30'			Brn to Rd brn	Vf gr sandstone, moist			
35'			Brn to Rd brn	Vf gr sandstone, dry			
40'			Gr brn	F gr sandstone, dry			
45'			Brn	Vf gr sandstone, dry			
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A5
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings approximate.

Depth	Blows /6"	% Recovery	Color	Material Description	USCS Classification	Remarks	Profile
			Brn	Vf gr sandstone, wet			
55'			Brn	Vf gr sandstone			
60'			Pinkish Brn	F gr sandstone		Soft zone at 62'	
65'			Brn	F gr sandstone			
70'			Brn	F gr sandstone		Soft zone at 72'	
75'				End of boring at 77'		~5 gpm air lift yield Air lift gradual increase to ~8 gpm	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A6
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/12/99
FIELD GEOLOGIST: T. Fowler/D. Walsh
DATE COMPLETED: 1/13/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Silt, little sand, dry		0 ppm on FID	
5'			Brn	Vf gr sandstone, dry		Bedrock at 10' 1/4" chips 0 ppm on FID	
10'			Rd brn	Mudstone, soft, friable, dry		Softer @ 13'	
15'			Rd brn	Mudstone, somewhat harder, dry		1/4" to 1/2" chips	
20'			Rd brn	Siltstone, dry		End of 14" borehole Set 10" casing	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A6
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/12/99
FIELD GEOLOGIST: T. Fowler/D. Walsh
DATE COMPLETED: 1/13/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Rd brn	Siltstone, dry		0.2 ppm on FID	
30'			Rd brn	Siltstone, dry			
35'			Rd brn	F-med gr sandstone, dry		~ 20 ppm on FID in rolloff	
40'			Red brn	F gr sandstone Moderately sorted, dry			
45'			Red brn	Siltstone		Minor water, soft drilling	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A6
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/12/99
FIELD GEOLOGIST: T. Fowler/D. Walsh
DATE COMPLETED: 1/13/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Rd brn	Vf-f gr sandstone, some f gr sandstone		No odor	
55'			Gry	Vf-f gr sandstone, wet		Up to 1/2" chips	
						Fracture at 57'	
60'			Gry	Vf-f gr sandstone, wet		0 ppm FID in sample ~15 ppm in rolloff	
65'			Gry	Vf-f gr sandstone			
70'			Gry Brn gry	Vf-f gr sandstone, Some siltstone		Little water	
75'			Rd brn	Siltstone, some shale			
80'				Same as above		2-3 gpm air lift yield End of 10" borehole	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A7
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/21/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/25/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Silt, some sand, dry		0 ppm FID	
5'			Rd brn	Silt, dry		0 ppm FID	
10'			Rd brn to brn	Siltstone, resistant		0 ppm FID Bdrock at 11.5'	
15'			Rd brn to brn	Siltstone, resistant, dry		1/4-1/2" chips Soft zone 15-17' Strong hydrocarbon odor near borehole. No visible staining. 0 ppm FID	
20'			Rd brn	Siltstone, resistant, dry		1/2" chips End of 14" borehole @ 20' Install 10" dia. casing Soft zones at 22' 23' and 25' 0 ppm FID 1/4" chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A7
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/21/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/25/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Rd brn	Siltstone to vf gr sandstone, slightly friable, dry		0 ppm FID Slight sweet odor	
30'			Rd brn	F gr sandstone, friable, dry		0 ppm FID	
35'			Brn	F gr sandstone, dry		0 ppm FID	
40'			Brn	F-med gr sandstone, slightly moist		0 ppm FID	
45'			Brn	F-med gr sandstone, slightly moist		0 ppm FID	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A7
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/21/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 1/25/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn	F gr sandstone, wet		0 ppm FID	
55'			Brn	F gr sandstone to siltstone		0.5 ppm FID in sample 3-4 ppm in rolloff Airlift yield ~0.5 gpm Fracture at 56'	
[illegible]'			Gry brn	F-med gr sandstone		1 ppm FID in sample 8 ppm FID in rolloff Airlift yield ~0.7 gpm	
65'			Brn	F gr sandstone		FID 0.7 ppm in sample, 2-2.5 ppm in rolloff	
70'			Rd brn	Mudstone, soft		Very soft at 74' Air lift yield declines	
75'						End of 10" borehole at 75'	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A8
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/26/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Silt and sand, dry			
5'			Rd brn	Clayey silt, some sand			
10'			Rd brn	Mudstone, dry, soft		1/16" chips Bedrock at 12.5'	
15'			Rd brn	Siltstone, dry, soft		1/16-1/8" chips	
20'			Brn	Siltstone, dry, slightly friable		1/16-1/8" chips End of 14" borehole Install 10" casing Fracture at 23' 1/16" chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A8
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/26/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Rd brn	Siltstone to vf gr sandstone, slightly friable, dry			
						28-30' Soft 1/16" chips	
30'			Brn	Siltstoe, resistant, dry		1/8" chips	
						Very soft drilling 34-40'	
35'			Brn	Siltstone, dry, slightly friable		1/8-1/4" chips	
40'			Brn	Siltstone to vf gr sandstone, wet		Water appears at 40'	
45'			Brn	Vf - f gr sandstone, wet		Fracture at 45' 1/4" chips	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A8
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/26/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn	Vf gr sandstone, slightly friable			
55'			Brn	Siltstone, resistant		~1-2 gpm air lift yield	
60'			Brn	F gr sandstone, friable		~5 gpm air lift yield	
65'			Brn	F-med gr sandstone		1/8-1/4" chips	
70'			Brn	F gr sandstone		Fracture at 70'	
75'			Brn	F gr sandstone		3/4-1/2" chips	
						1/4" chips ~5-10 gpm air lift yield	
80'			Brn	F gr sandstone.		End of 10" borehole	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A8
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 1/26/99
FIELD GEOLOGIST: T. Fowler/M. Greenberg
DATE COMPLETED: 2/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Dk rd-gry	F sandstone, saturated		1/4" chips	
85'			Lt gry-lt brn	F-m sandstone, saturated		1/4" chips	
90'			Lt gry-lt brn	M sandstone, saturated		~5 gpm air lift yield 1/4" chips	
95'			Dk brn-rd orng	M sandstone, saturated		~5 gpm air lift yield 1/4" chips	
100'							
102'			Dk brn-gry	Vf-f sandstone, tr siltstone, saturated		~10 gpm air lift yield 1/8-1/4" chips Borehole terminated at 102'	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A9
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/1/99
FIELD GEOLOGIST: M. Greenberg/ D. Walsh
DATE COMPLETED: 2/3/99
DRILLING METHOD: Air Hammer.

REMARKS: All FID readings 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Clayey silt, some gravel, little sand, slightly moist			
5'							
			Rd brn	Clayey silt, some gravel , little sand, dry		Install temporary casing	
10'			Rd brn to brn	Siltstone, dry		Bedrock at 10' Resistant bedrock, 1/4-1/2" chips	
						Soft zone	
15'			Rd-brn	Mudstone, soft, dry		Set 10" casing at 16'	
20'			Rd brn	Siltstone, dry			
25'						1/16-1/8" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A9
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/1/99
FIELD GEOLOGIST: M. Greenberg/D. Walsh
DATE COMPLETED: 2/3/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
26'			Gry-blk buff	Becoming vf-f sandstone			
31'			Gry	F sandstone, dry			
36'			Gry	F sandstone, becoming slightly coarser, dry			
41'				F arkosic sandstone, dry			
46'				F arkose sandstone, some m grains, dry			

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A9
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/1/99
FIELD GEOLOGIST: M. Greenberg/D. Walsh
DATE COMPLETED: 2/3/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
51'				F-med arkosic sandstone, dry			
56'				F-med arkosic sandstone, w/rd-brn siltstone, moderate limonite staining on sandstone, dry			
61'			M gry rd-brn	Sandstone Siltstone, occasional coarse sand grains, damp			
65'			Rd brn	Siltstone, damper			
71'			Dk rd brn – gry brn	Siltstone, tr vf gr sand, tr mica, saturated		Cuttings becoming saturated 1/2" chips	
75'						End of 10" borehole @75'	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A10
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/9/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/10/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			M brn to org brn	Silt, some gravel (fill material)		FID=0 ppm	
5'			Brnish red	Silt and clay, slightly damp		FID=0 ppm	
10'			M brn	Clayey silt, some m dk brn siltstone			
15'			M to dk brn	Silt, dry, soft, tr dk brn to redish brn siltstone.		Bedrock at 15'	
20'			M to dk brn	Silt, damp, friable; siltstone		Set 10" casing at 20' FID=18 ppm	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A10
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/9/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/10/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			M brn	Siltstone, v soft, dry		FID=3-5 ppm	
30'			M brn	Sandy silt, dry		FID=0 ppm	
35'				AA		FID=3.6 ppm	
40'			Pnk to Brn	VF sandstone, soft, moist		FID=0 ppm	
45'			Dk brn to gry	Vf gr sandstone, dry to damp			
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A10
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/9/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/10/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Tan to lt brn, Pnk	Vf f gr sandstone, sat'd		FID=0 ppm	
55'			Pinkish red	F-m sandstone, sat'd, some iron-oxide stain		1-2 gpm air lift yield FID=0 ppm	
60'			Pinkish Brn	F-m sandstone, sat'd,		FID=0 ppm 1/8" chips	
65'			M-dk red/brn	VF sandstone and siltstone, sat'd,		65-67' soft zone	
70'			M brn	Siltstone, soft, sat'd, some vf reddish-brn sandstone.		1 gpm air lift yield	
75'				Boring complete at 75'		<1/8-1/2" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A11
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/11/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/12/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings = 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Lt brn	Clayey silt, friable, soft, moist			
5'			Dk red brn	Micaceous siltstone		1/8-1/4" chips FID=0	
10'			Dk red brn	Siltstone, clayey, damp		Encounter bedrock surface 11 ft. 1/8-1/4" chips	
15'			Dk red brn	Siltstone, tr mixed content		1/4-1/2" chips Set 10" casing at 16'	
20'			Redish brn	Clayey silt, soft, damp		1/8" to 1/4" Chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EWA11
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
DATE STARTED: 2/11/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/12/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings = 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Dk gry	VF sandstone, sat'd			
						28–30' Encounter water 1/8" chips FID=0 ppm	
30'			Dk red brn	VF micaceous sandstone, semi–sat'd			
						1/8–1/4" chips	
35'			Dk red/ gry	Micaceous sandstone, vf, saturated		Water table encountered 5 gpm air lift yield	
40'				AA		FID=0 ppm 1/4" chips 4 gpm air lift yield	
45'			Dk red/ gry	F–m micaceous sandstone, saturated		FID=0 ppm 1/2–3/4" chips 10 gpm air lift yield	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A11
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/11/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 2/12/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings = 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Dk pnk to gry	F-m sandstone, tr micaceous content, saturated		FID=0 ppm 1/2" chips	
55'				AA		FID=0 ppm	
60'				AA		FID=0 ppm	
65'				AA		FID=0 ppm	
70'			Dk red-brn and tan-yel	F-m sandstone, saturated, some ??????? stain, trace micaceous content		FID=0 ppm 1/8-1/2" chips	
75'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A11
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/11/99
FIELD GEOLOGIST: T. Fowler/M. Greenberg
DATE COMPLETED: 2/12/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings = 0 ppm

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			M-dk pnk	Sandstone, saturated		1/2-1" chips	
						84' soft zone	
85'				AA, saturated, tr limonite			
88'				Sandstone, saturated, some limonite stain		Boring complete to 88'	
90'							
95'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A12
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/16/99
FIELD GEOLOGIST: M. Greenberg\T. Fowler
DATE COMPLETED: 2/17/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Dk brn/ rdish	Clayey silt, soft, damp			
5'			Dk brn	Vf gr sandstone, dry		Bedrock at 7'	
10'			Dk brn	Vf gr sandstone, dry		1/4-3/4" chips Soft zone ~13'	
15'			Dk brn	Vf gr sandstone, dry		End of 14" borehole Set 10" casing	
20'			Dk rdish brn	Vf -f gr sandstone, tr mica, wet		1/4" chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A12
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/16/99
FIELD GEOLOGIST: M. Greenberg\T. Fowler
DATE COMPLETED: 2/17/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn	F-med gr sandstone, tr mica, limonite, wet		1/4-1/2" chips	
30'			Dk pink /lt brn	F gr sandstone, tr limonite, wet		1/8-1/4" chips Airlift yield ~5 gpm	
35'			Dk rdish brn	F gr sandstone, tr mica			
40'			Dk rdish brn	F gr sandstone, sl friable, tr mica		1/4" chips	
45'			Dk rdish brn	F gr sandstone, sl friable		1/4" chips	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A12
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/16/99
FIELD GEOLOGIST: M. Greenberg\T. Fowler
DATE COMPLETED: 2/17/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Brn-dk brn	F-med gr sandstone, friable		1/8-1/4" chips	
55'			Brn-dk brn	F-med gr sandstone, some brn siltstone		1/8-1/2" chips	
60'			Dk brn	Siltstone, resistant, tr calcite		Airlift yield ~7 gpm Soft zone ~62' 1/4" chips	
65'						End of 10" borehole at 67'	
70'							
75'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A13
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/18/99
FIELD GEOLOGIST: T. Fowler\R. Funk
DATE COMPLETED: 2/19/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Brn	Clayey silt, slightly moist			
5'			Brn-rddsh brn	Siltstone, slightly friable, dry		5.8 Hit bedrock	
10'			Brn	Siltstone to mudstone, friable, dry			
						Bottom of 14" borehole	
15'			Rddsh brn	Siltstone, slightly friable, dry		Set 10" casing at 15' 1/8-1/16" chips	
20'			Rddsh brn	Siltstone to vf sandstone competent to sl friable, dry		1/8-1/16" chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A13
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/18/99
FIELD GEOLOGIST: T. Fowler / R. Funk
DATE COMPLETED: 2/19/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings = 0.0 ppm.

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Reddsh brn	Competent to slightly friable siltstone to v f sandstone		1/4-1/8" chips, dry	
30'			Dk gry brn	F gr sandstone		1/4-1/8" chips, moist.	
35'			Brn	Ex f gr sandstone to siltstone		Soft zone Moist	
40'			Reddsh brn	Sl friable siltstone		Moist	
45'			Dk brn	Friable siltstone		1"-7/16" chips, moist	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A13
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/18/99
FIELD GEOLOGIST: T. Fowler/R. Funk
DATE COMPLETED: 2/19/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Grysh brn	Friable sandstone, moist		1/4-1/16" chips	
55'			Grysh brn	F gr sandstone, moist		1/4-1/8" chips	
60'			Grysh brn	F gr sandstone, moist		Few 1/8" chips	
65'						Fractured zone encountered 65-69'	
			Gry-dk grysh brn	F-med gr sandstone, very moist		Few chips 1/4-1/8"	
70'							
			Dk brnsh-gry	Competent siltstone		1-1/8" chips Water gradually cleans caked mud from borehole	
75'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A13
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/18/99
FIELD GEOLOGIST: T. Fowler/R. Funk
DATE COMPLETED: 2/19/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Gry-dk brn gry	F-med gr sandstone, saturated		1/2-1/4" chips	
80'			Gry	F-med gr sandstone, saturated		1/2-1/4" chips Airlift yield ~1 gpm	
85'						Soft zone 86-87'	
						Bottom of 10" borehole at 87' Airlift yield cleaner ~2 gpm	
90'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A14
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/22/99
FIELD GEOLOGIST: R. Funk
DATE COMPLETED: 2/23/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Dk reddsh brn	Clayey silt, moist, slightly plastic			
5'			SAA	SAA			
10'			SAA	SAA			
						Bedrock encountered at 13'	
15'			Rosey brn	F gr sandstone, fissile, slightly moist		1/4" chips Some water encountered at 15'	
			Reddsh brn	Wet vf gr micaceous sandstone		1/4–1/8" chips Outer casing set to 19'	
20'			Dk. brn	Poorly graded mostly f sandstone fissile, wet		1/2–1/8" chips Water in hole at start of days drilling	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW –A14
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
DATE STARTED: 2/18/99
FIELD GEOLOGIST: T. Fowler/R. Funk
DATE COMPLETED: 2/19/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Dk brn	Med gr sandstone, very fissile, dry		1/4" chips	
30'			Med gry	Med gr sandstone w/limonite staining, fissile, dry		Few 1/4–1/8" chips	
35'			Rosey gry	Med gr sandstone, fissile, dry		Few very small 1/16" chips	
40'			Rosey gry	Med gr sandstone, fissile, dry		Few 1/4–1/16" chips	
45'			SAA	SAA		Plentiful 1/4–1/16" chips	
						Water encountered at 48'	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A14
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 2/22/99
FIELD GEOLOGIST: R. Funk
DATE COMPLETED: 2/23/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Dk gry	Med-f gr sandstone, competent		1-1/8" chips Well producing 1 gpm Very soft zone 51-55' easy drilling	
55'			Dk reddsh brn-gry	Very soft clayey mudstone		1/4-1/2" chips Well producing 2 gpm	
60'			Dk gry brn	Micaceous siltstone, competent		1-1/4" chips Well producing 3 gpm Stop drilling at 61' total depth	
65'							
70'							
75'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A15
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/1/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/2/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0							
5'			Lt brn	Silt, some sand, tr gravel, sl moist			
						Bedrock at 9'	
10'			Brn	F-med gr sandstone, dry, resistant			
15'			Brn	F gr sandstone, sl friable, dry			
						End of 14" borehole at 16' Set 10" casing	
20'			Gry brn	Siltstone, v friable, dry		1/8" chips	
25'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A15
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/1/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/2/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
			Whtsh gry	F gr sandstone, sl friable, dry		1/16" chips	
30'			Lt gry	F gr sandstone, dry			
35'			Lt brn	F-med gr sandstone, friable, dry		1/16-1/8" chips	
40'			Gry brn	F gr sandstone, friable, dry		1/16" chips Soft zone at 41' (0.3 ft.)	
45'			Brn	Vf gr sandstone, friable, sl moist		1/8" chips	
50'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: EW-A15
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/1/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/2/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recovery	Color	Material Description	USCS Classification	Remarks	Profile
			Brn	Vf–med gr sandstone, moist		1/4–1/2" chips	
55'			Varied brn	F–med gr sandstone, friable, moist		1/8" chips Soft zone at 56'	
60'			Brn	F gr sandstone, wet		1/16–1/4" chips Soft zone 60–67'	
65'			Brn–rd brn	Siltstone, some resistant chips			
70'			Brn–rd brn	Mudstone, v friable, wet		1/2" chips	
75'			Brn	Siltstone, resistant, wet		1/4" chips Airlift yield 2 gpm	
77'				End of 10" boring at 77'			

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A16
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/5/99
DRILLING METHOD: Air Hammer

REMARKS: All IFD readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0			Gry	Gravel, angular (excavation fill) to 2'			
5'			Brn	Clayey silt, sl moist			
10'			Brn	Sand, some silt, little gravel, dry		Bedrock at 10'	
15'			Purplsh brn	Vf-f gr sandstone, little moisture		End of 14" borehole Set 10" casing at 16'	
20'			Gry brn	F gr sandstone, v friable, dry		1/8" chips	
25'			Gry brn	F gr sandstone, v friable		1/4-1/8" chips	

Borehole Log

PROJECT: Naval Air Warfare Center - Area A
BORING NO.: OW-A16
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
30'			Brn	F-med gr sandstone, resistant-sl friable moist		1/16-1/8" chips	
35'			Brn	F-med gr sandstone, resistant, moist			
40'			Lt brn	F-med gr sandstone, some red brn silty sandstone, v friable		Airlift yield ~3 gpm 1/8" chips	
45'			Purplsh brn	F-med gr sandstone, sl friable		1/4" chips Harder at 48' Airlift yield ~10 gpm 1/8-1/2" chips	
50'			Gry brn	Siltstone, platey, resistant			

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A16
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/5/99
DRILLING METHOD: Air Hammer

REMARKS: All FID readings are not above background

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
55'			Gry brn	F gr sandstone, resistant		1/8-1/4" chips	
60'			Gry	F gr sandstone		1/8" chips Soft at 61' End of 10" borehole Airlift yield ~10-15 gpm	
65'							
70'							
75'							

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A17
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/9/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
0							
			Brn-rd brn	Clayey silt, little sand, little gravel, sl moist		0 ppm FID	
5'							
10'			Brn	Siltstone, dry, resistant		1/4" chips 0 ppm FID Bedrock at 10'	
15'			Brn	Siltstone, sl friable, dry		1/4" chips 0 ppm FID End of 14" borehole Set 10" casing at 16'	
20'			Brn-rd brn	Vf gr sandstone, dry, little mica		1/4" chips	
25'			Dk gry brn	Siltstone – vf gr sandstone, tr mica, dry		0 ppm FID	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A17
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/9/99
DRILLING METHOD: Air Hammer

REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
30'			Purpish brn	F gr sandstone, dry, friable		1/8" chips 0 ppm FID	
35'			Brn	Vf gr sandstone, micaceous, dry, friable		1/4" chips 0.4 ppm FID (0.2 ppm in rolloff)	
40'			Brn	Vf gr sandstone, dry, friable		1/16" chips 0 ppm FID Soft zone at 43'	
45'			Brn	Vf gr sandstone, tr mica, friable, sl moist			
50'			Brn	F gr sandstone, friable		Airlift yield ~1 gpm 1-2 ppm OVA 1/8" chips	

Borehole Log

PROJECT: Naval Air Warfare Center – Area A
BORING NO.: OW-A17
PROJECT LOCATION: Warminster, PA
SURFACE ELEVATION:
SUBCONTRACTOR/DRILLER: Hardin-Huber Inc.
DATE STARTED: 3/4/99
FIELD GEOLOGIST: T. Fowler
DATE COMPLETED: 3/9/99
DRILLING METHOD: Air Hammer

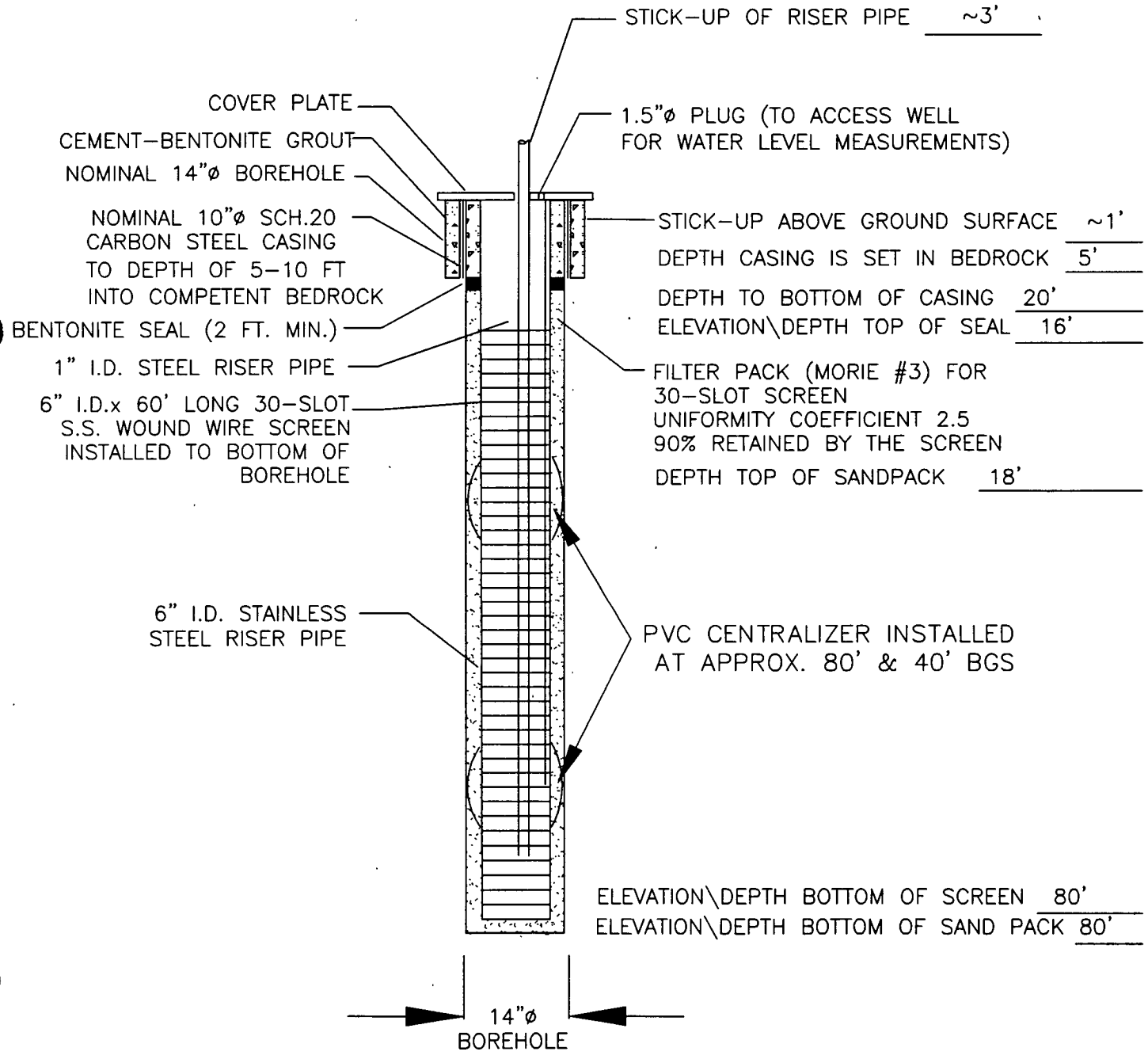
REMARKS:

Depth	Blows /6"	% Recov-ery	Color	Material Description	USCS Class-ification	Remarks	Profile
55'			Brn	F gr sandstone, friable		1/8" chips 2 ppm OVA	
						Soft zone at 58'	
						Fracture at 59'	
60'			Brn	Vf gr sandstone-siltstone		1/8-1/4" chips 3 ppm OVA 1-2 ppm in rolloff Airlift yield ~1-2 gpm	
65'			Gry	Siltstone/vf gr sandstone, platey, sl friable		0 ppm FID	
						68' softer	
						69' harder	
70'			Brn	Siltstone/vf gr sandstone, incr platey, sl friable		71.5' soft Airlift yield ~3-4 gpm	
72'			Brn-gry	Siltstone incr platey, grading to mudstone		End of 10" borehole at 72'	
75'							

Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

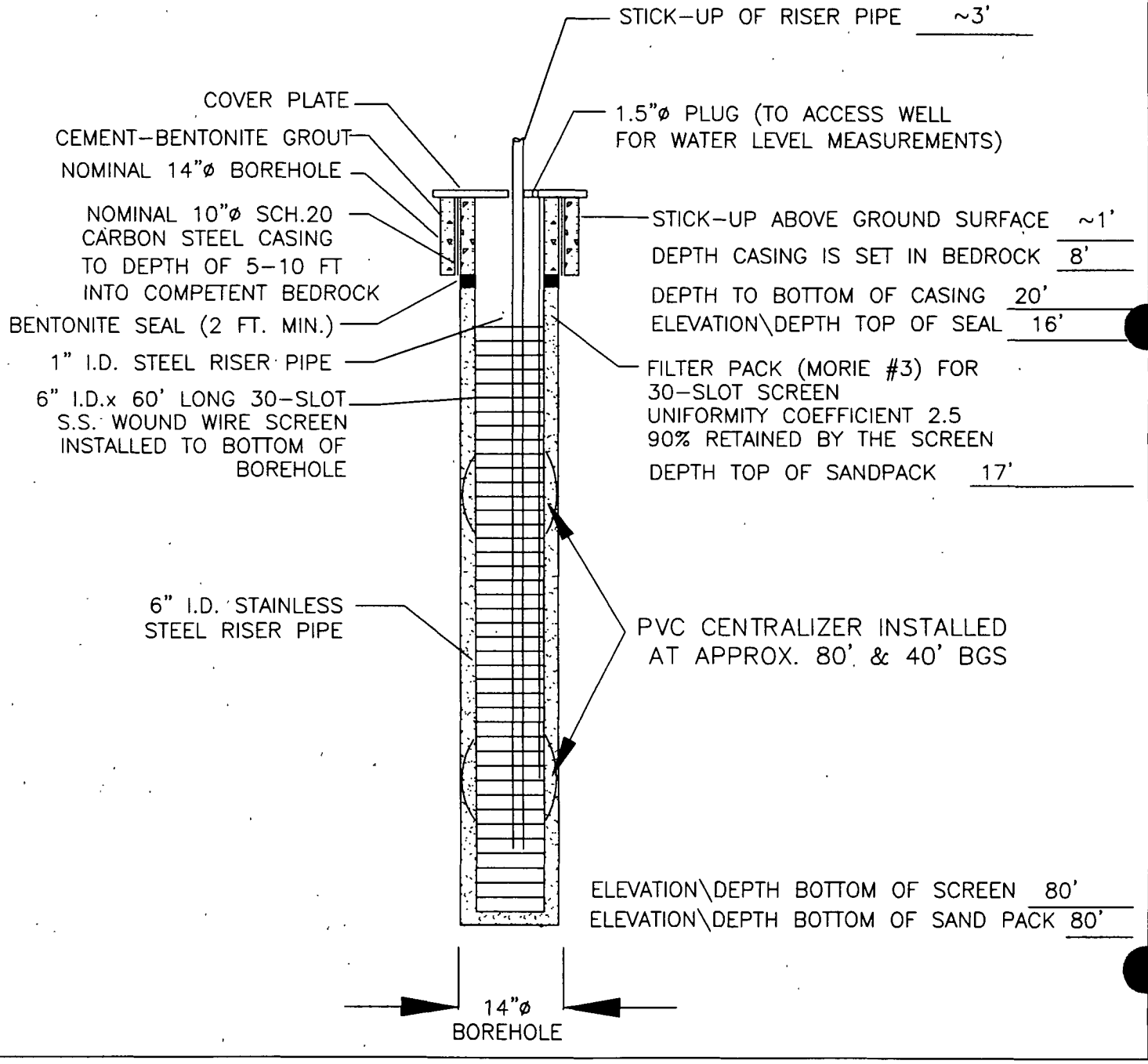
BORING NO.: EW–A1
SURFACE ELEVATION:
DATE STARTED: 2/25/99
DATE COMPLETED: 2/25/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

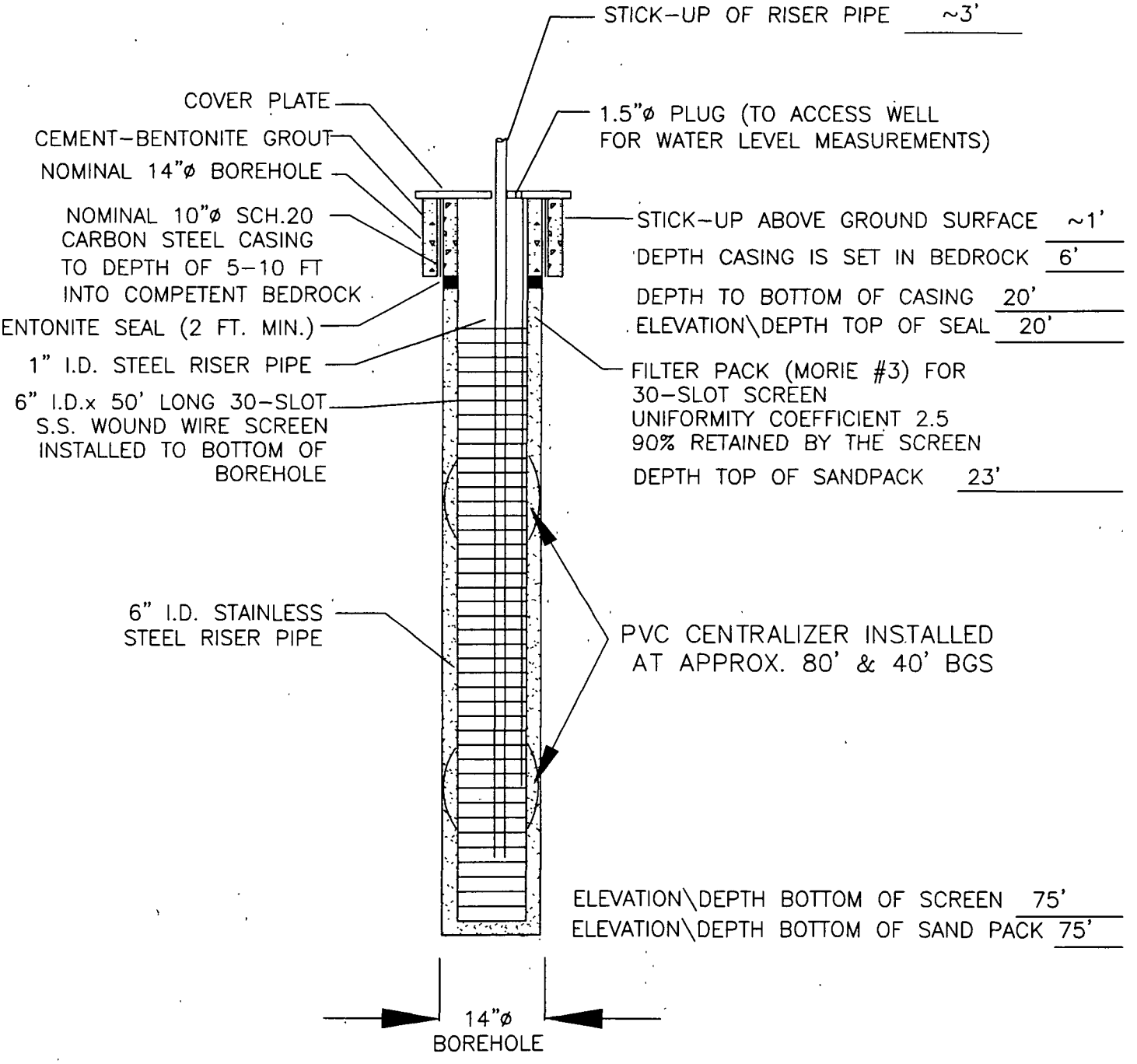
BORING NO.: EW–A2
SURFACE ELEVATION:
DATE STARTED: 2/25/99
DATE COMPLETED: 2/25/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

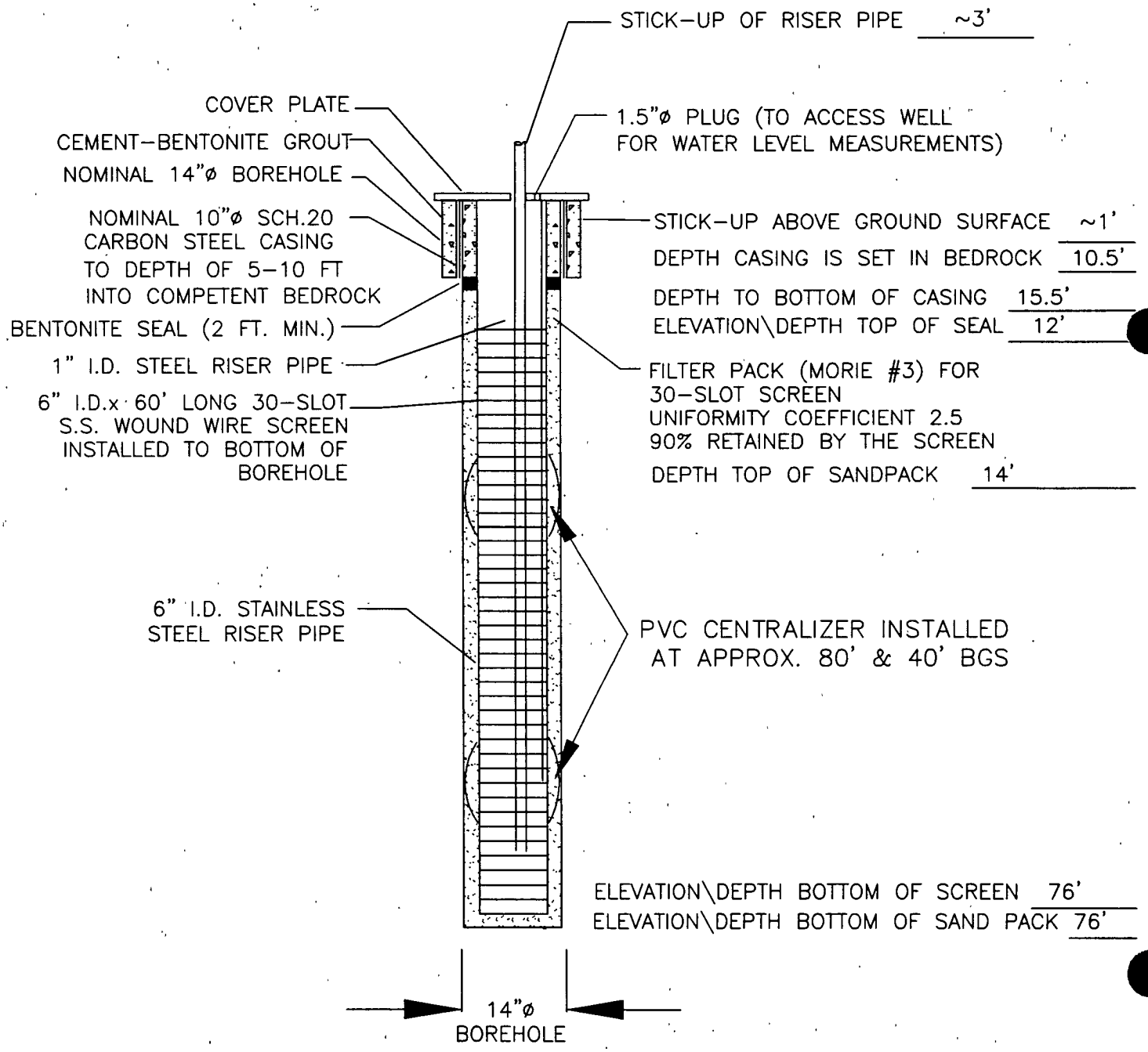
BORING NO.: EW–A3
SURFACE ELEVATION:
DATE STARTED: 1/12/99
DATE COMPLETED: 1/12/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

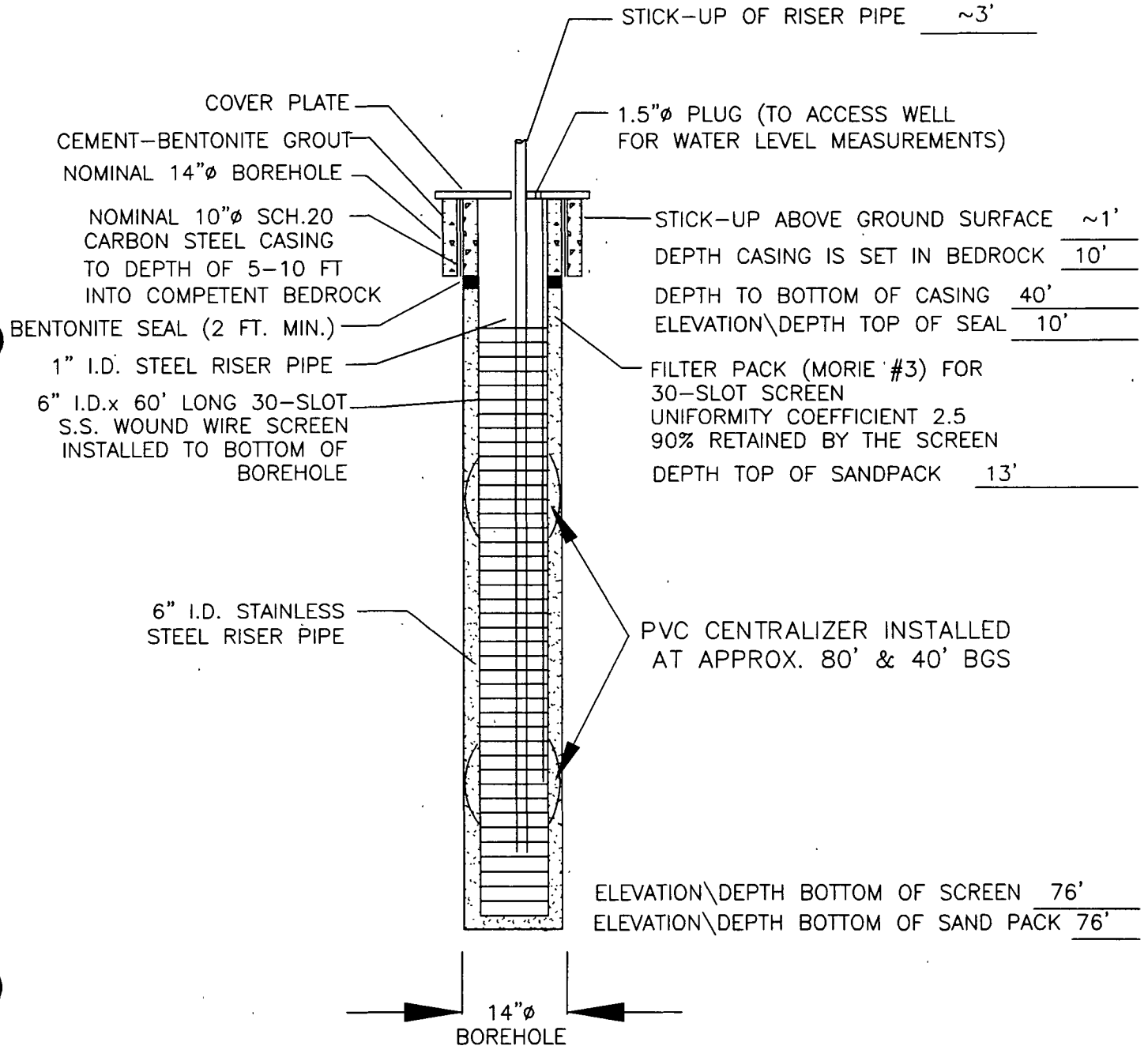
BORING NO.: EW–A4
SURFACE ELEVATION:
DATE STARTED: 1/8/99
DATE COMPLETED: 1/8/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

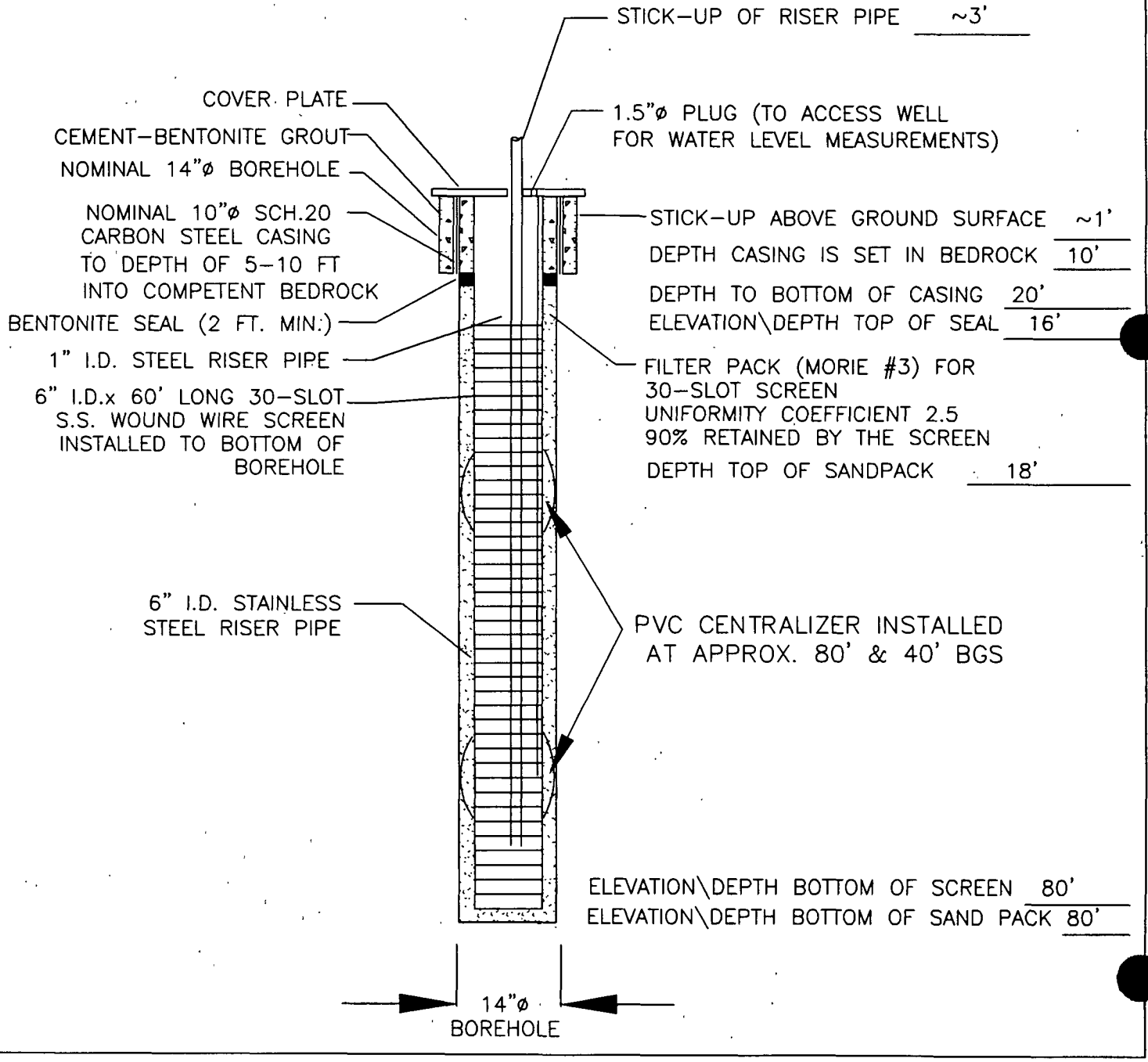
BORING NO.: EW–A5
SURFACE ELEVATION:
DATE STARTED: 1/13/99
DATE COMPLETED: 1/13/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

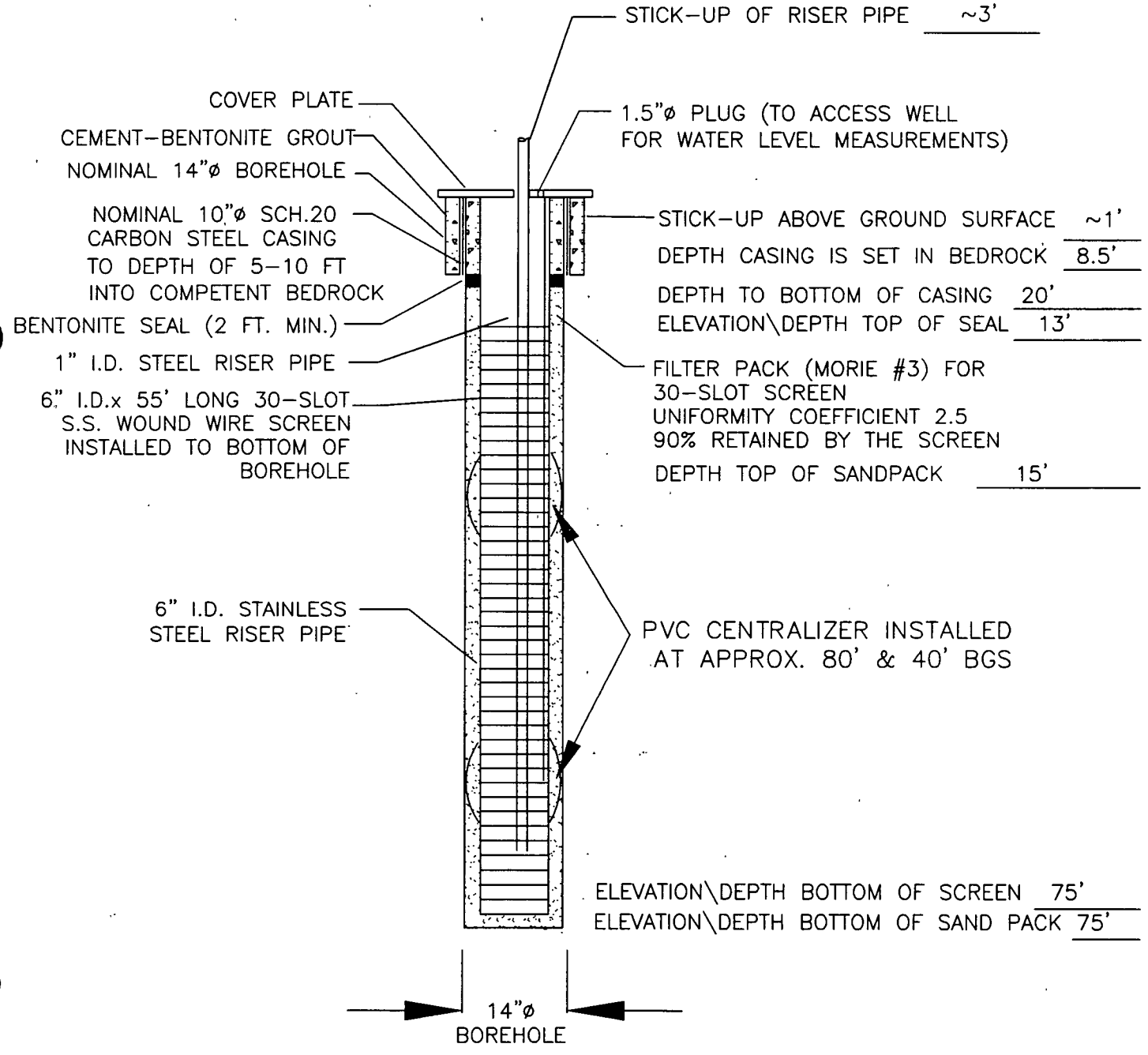
BORING NO.: EW–A6
SURFACE ELEVATION:
DATE STARTED: 2/26/99
DATE COMPLETED: 2/26/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

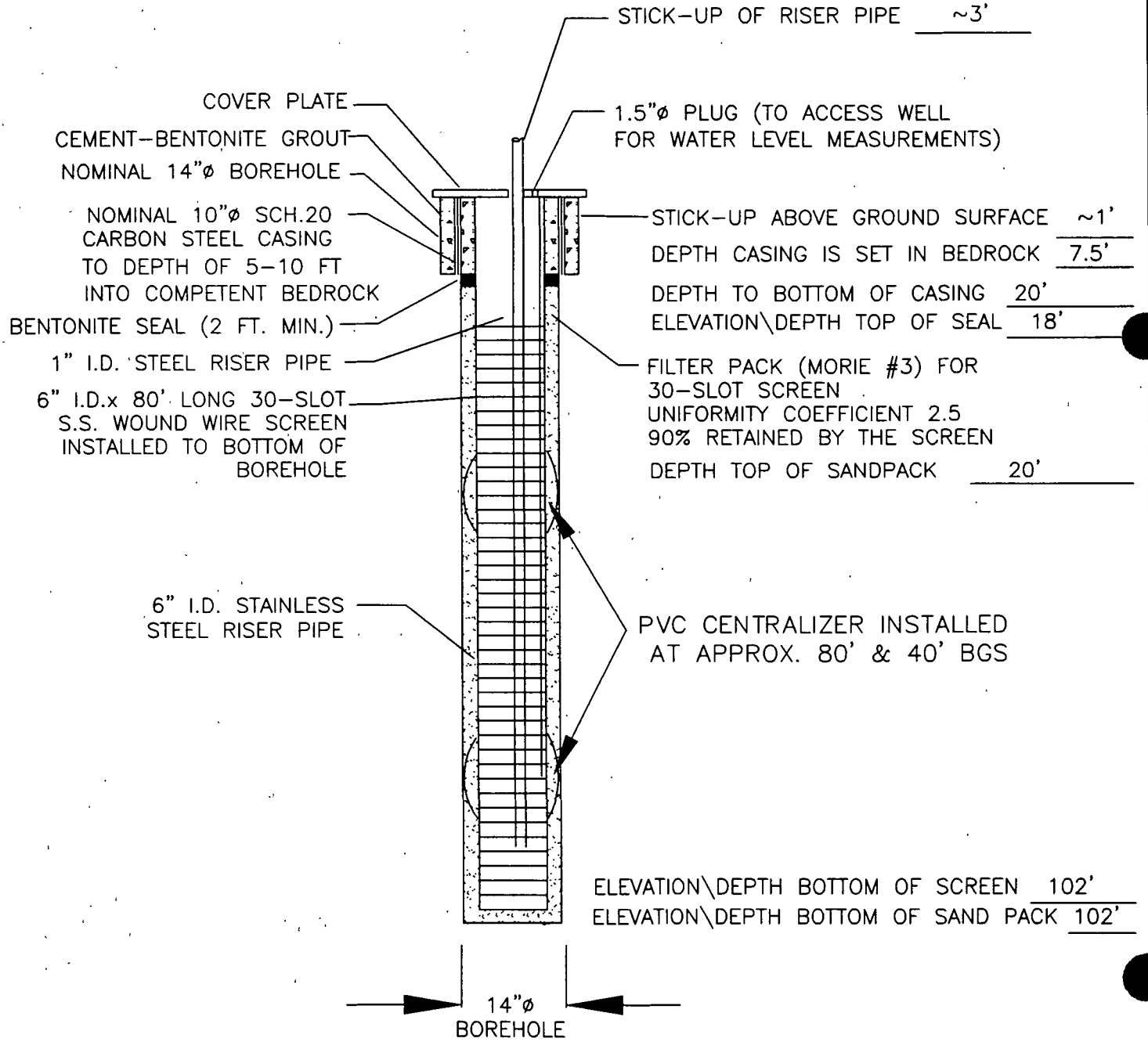
BORING NO.: EW–A7
SURFACE ELEVATION:
DATE STARTED: 2/26/99
DATE COMPLETED: 2/26/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

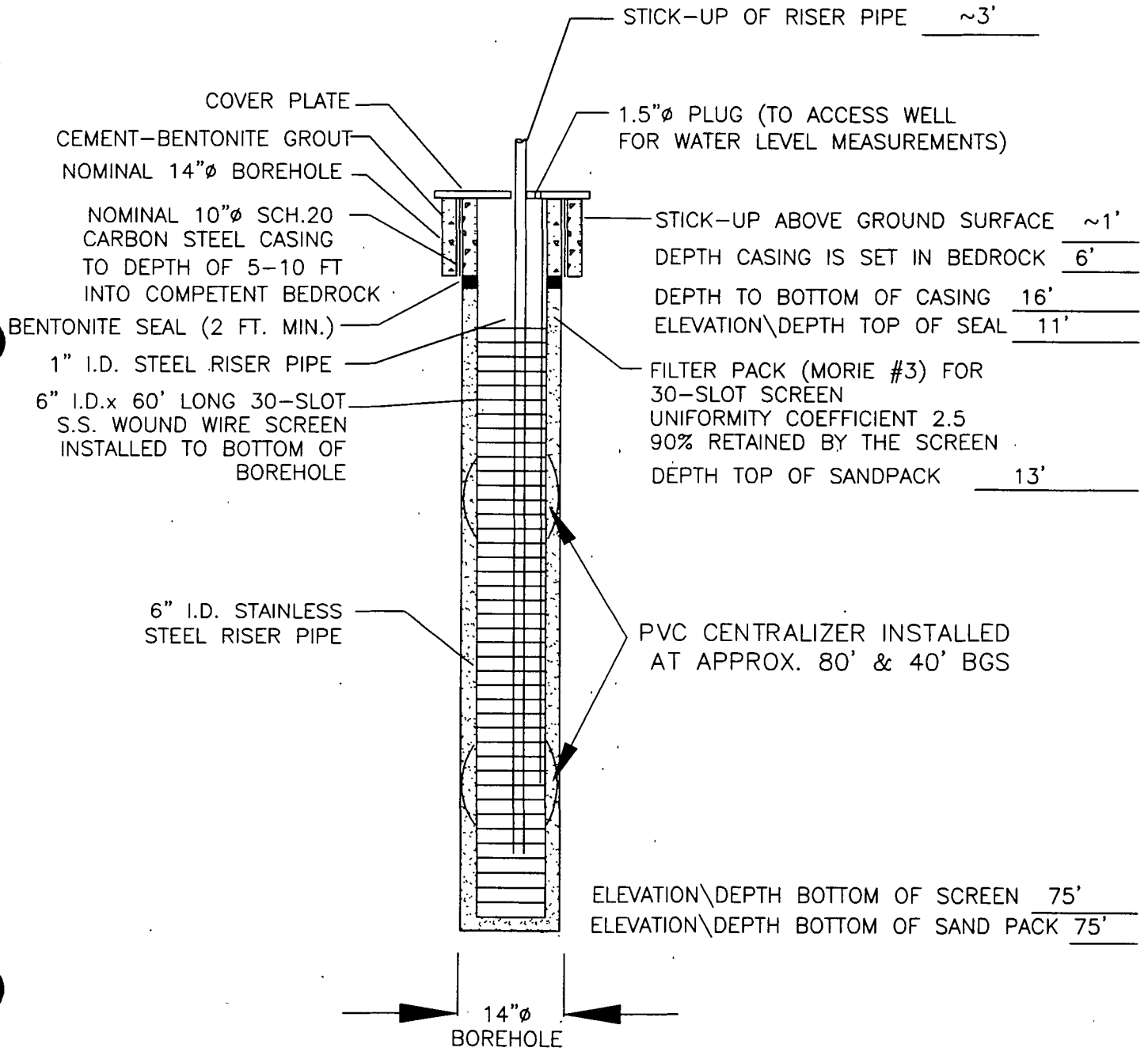
BORING NO.: EW–A8
SURFACE ELEVATION:
DATE STARTED: 2/24/99
DATE COMPLETED: 2/24/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

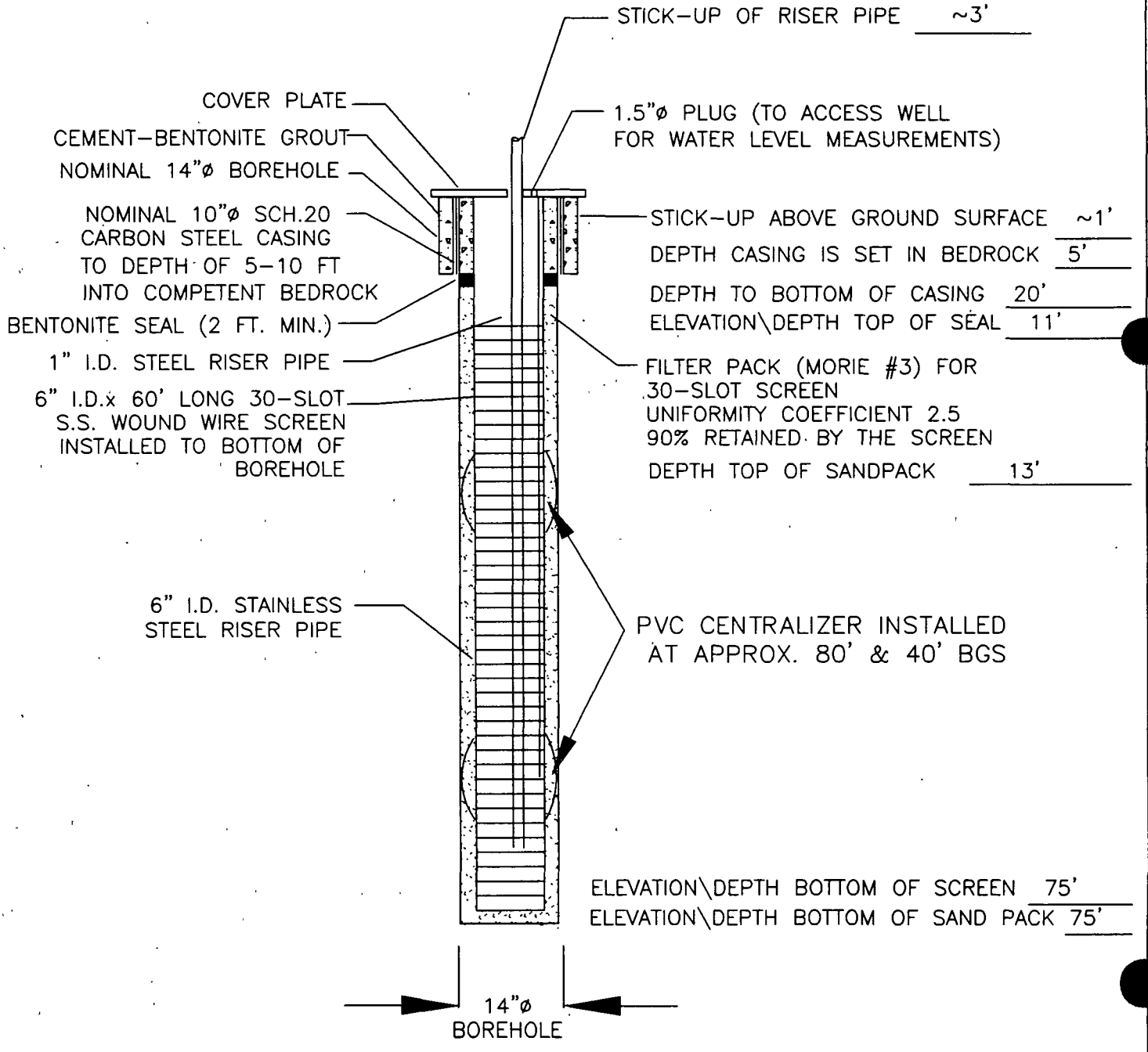
BORING NO.: EW–A9
SURFACE ELEVATION:
DATE STARTED: 2/26/99
DATE COMPLETED: 2/26/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

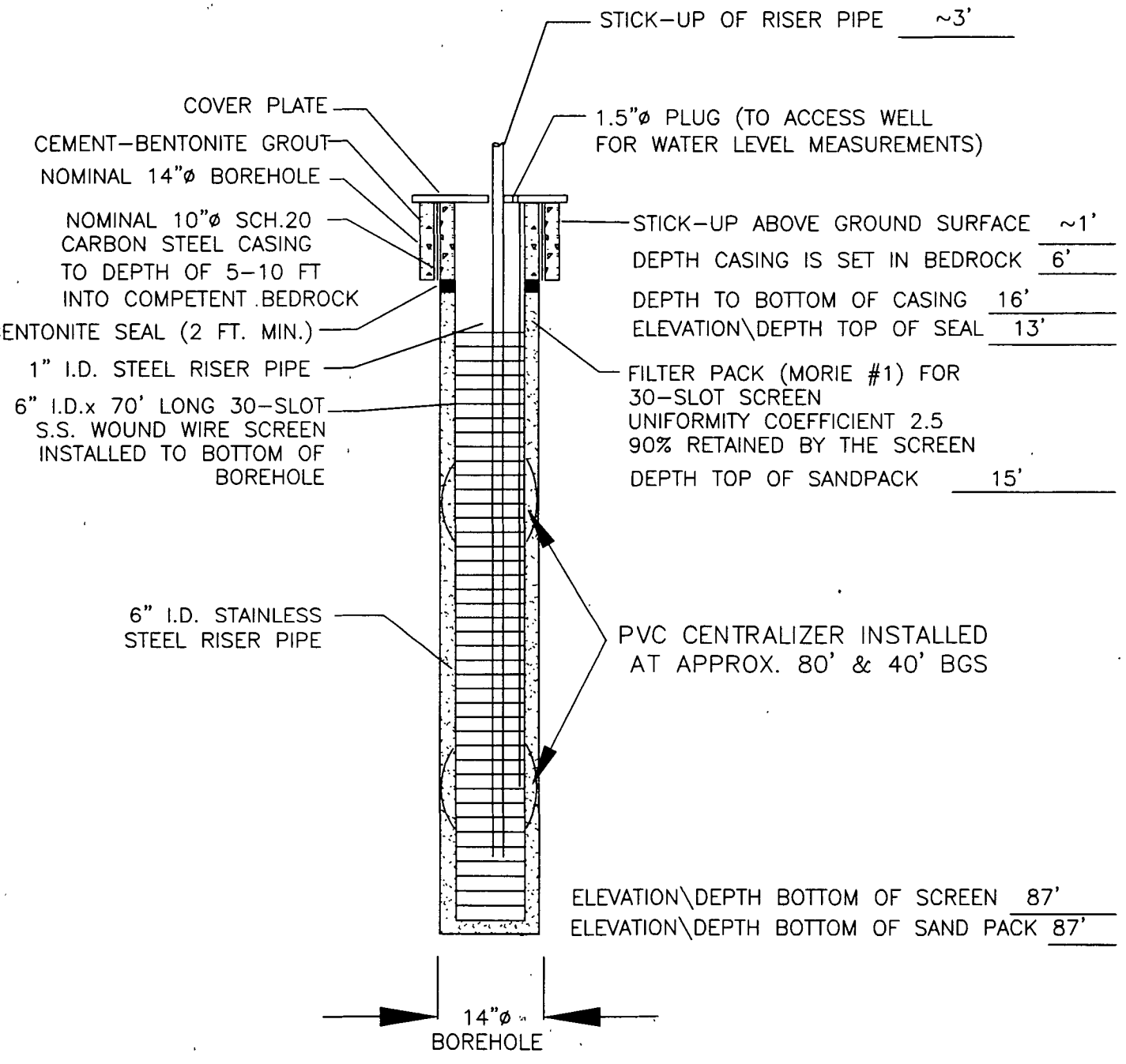
BORING NO.: EW–A10
SURFACE ELEVATION:
DATE STARTED: 3/10/99
DATE COMPLETED: 3/10/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

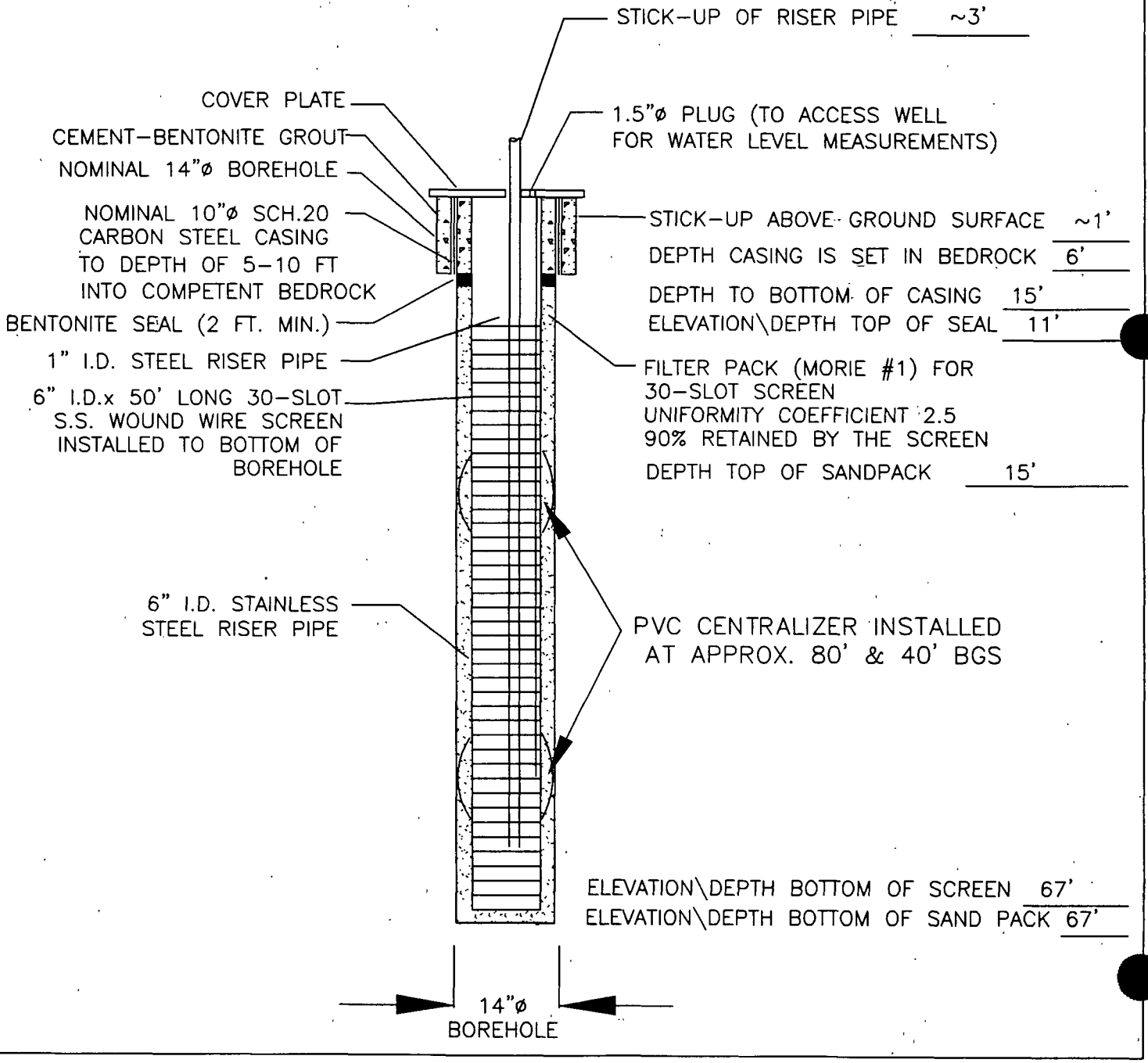
BORING NO.: EW–A11
SURFACE ELEVATION:
DATE STARTED: 3/9/99
DATE COMPLETED: 3/9/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

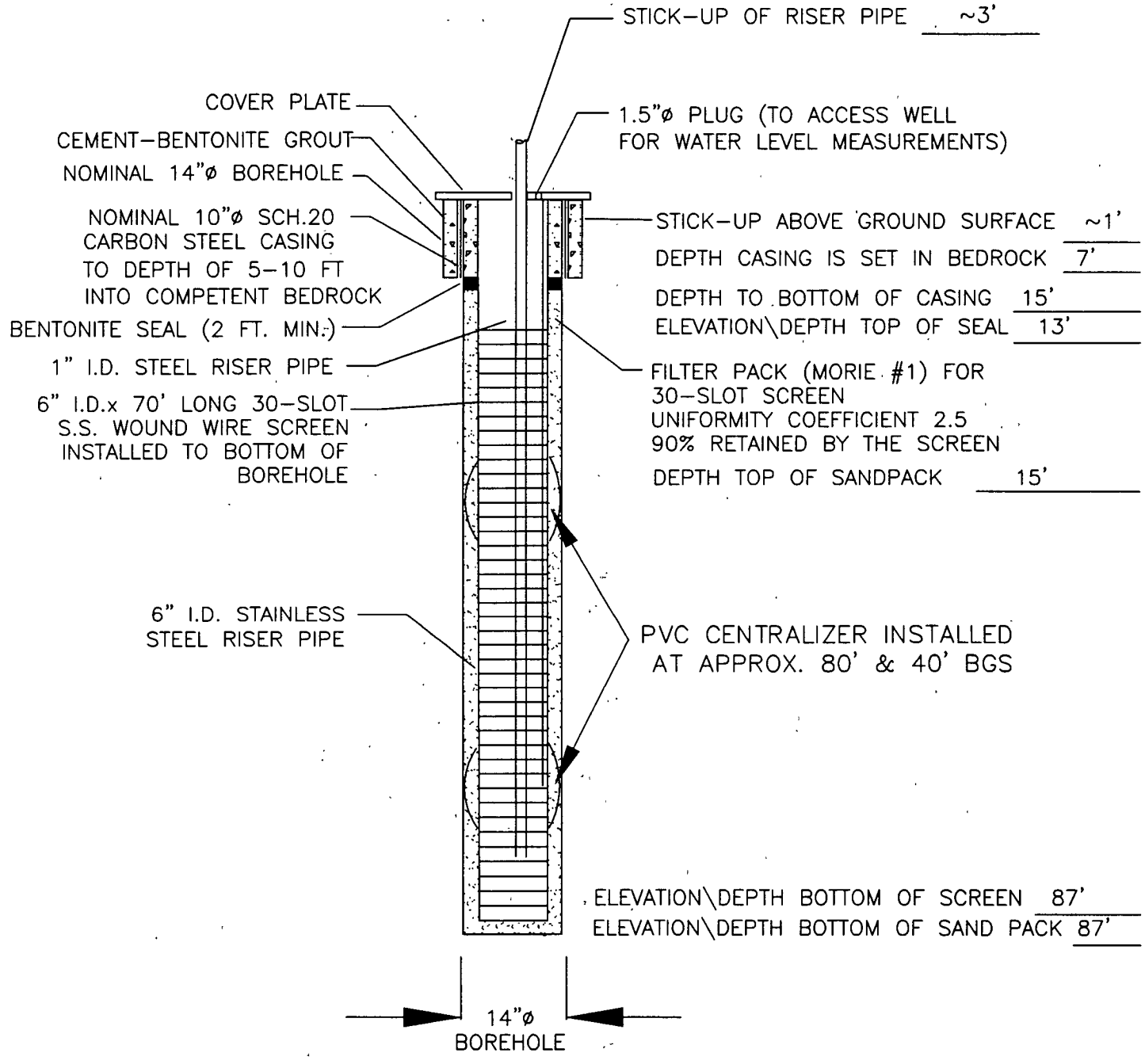
BORING NO.: EW–A12
SURFACE ELEVATION:
DATE STARTED: 3/10/99
DATE COMPLETED: 3/10/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

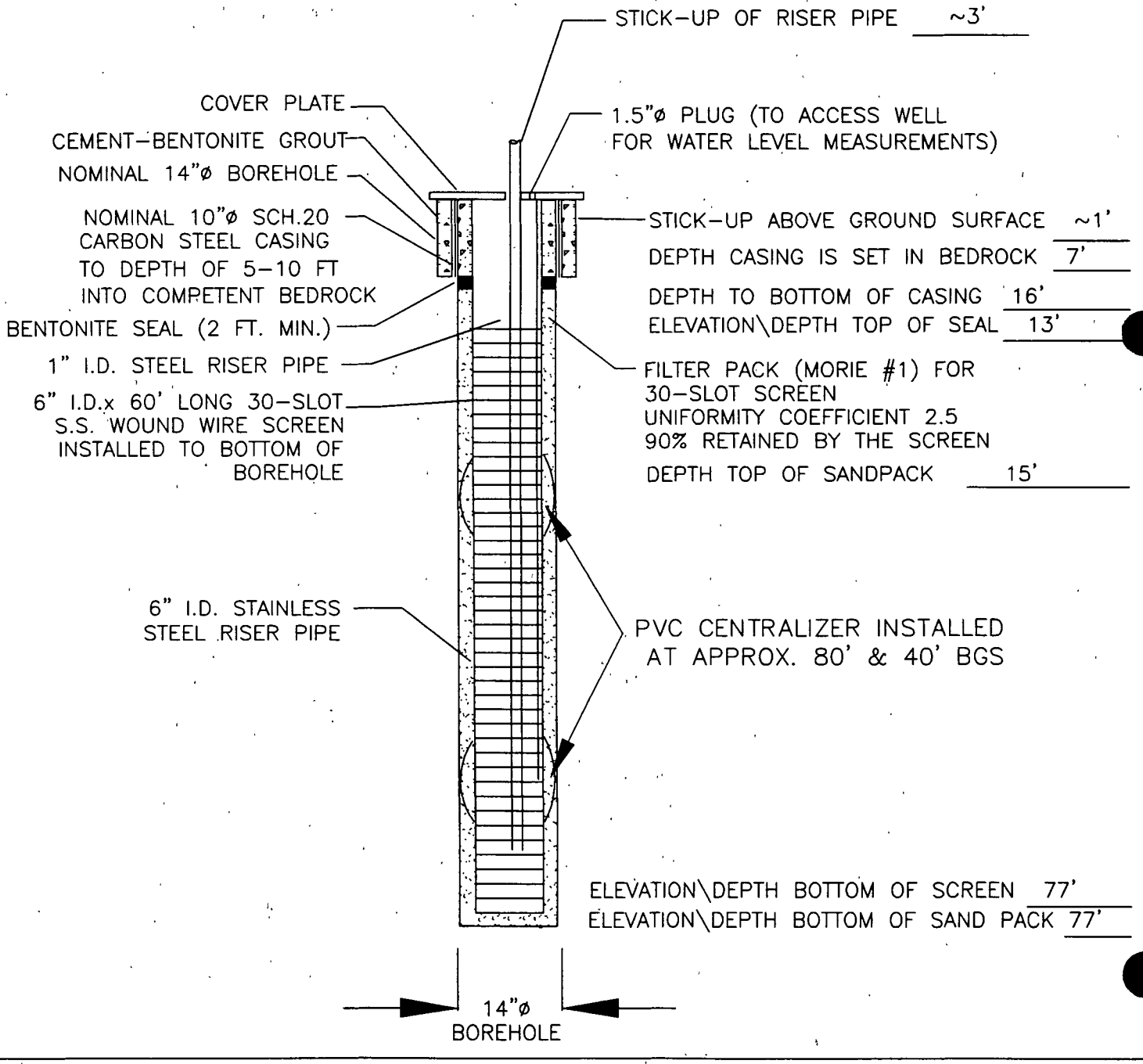
BORING NO.: EW–A13
SURFACE ELEVATION:
DATE STARTED: 3/10/99
DATE COMPLETED: 3/10/99



Double Cased
Extraction Well Construction

PROJECT: Naval Air Warfare Center – Area A
PROJECT LOCATION: Warminster, PA
SUBCONTRACTOR/DRILLER: Hardin–Huber Inc.
FIELD GEOLOGIST: R. Funk/T. Fowler
DRILLING METHOD: Air Hammer

BORING NO.: EW–A15
SURFACE ELEVATION:
DATE STARTED: 10/27/98
DATE COMPLETED: 10/27/98



APPENDIX B

Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
AREA A
INORGANIC ANALYSES OF GROUNDWATER SAMPLES

SAMPLE ID	EWA6		EWA7		EW-A15 (Unfiltered)		EW-A15D (dup) (Unfiltered)		EW-A15-F (Filtered)		EW-A15D-F (dup) (Filtered)		OW-2 (Unfiltered)		OW-2D (dup) (Unfiltered)		OW-2-F (Filtered)		OW-2D-F (dup) (Filtered)	
SAMPLE DATE	2/25/99		2/25/99		3/10/99		3/10/99		3/10/99		3/10/99		3/9/99		3/9/99		3/9/99		3/9/99	
UNITS	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Aluminum	NA		NA		38.8	B	34.5	B	24.6	B	21.0	B	42.4	B	54.7	B	22.7	B	24.0	B
Antimony	NA		NA		6.5	B	3.0	U	3.0	U	3.0	U	3.6	B	3.0	U	3.0	U	3.0	U
Arsenic	4.0	U	4.0	U	12.0		4.0	U	4.0	U	4.8	B	7.3	B	5.4	B	4.0	U	4.0	U
Barium	NA		NA		158	B	149	B	152	B	148	B	69.7	B	70.6	B	69.7	B	75.6	B
Beryllium	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	NA		NA		39700		37400		37200		37200		44600		45400		45300		47300	
Chromium	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	12.8		11.6		6.2	B	6.2	B
Cobalt	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	2.0	B	1.6	B	1.4	B	7.0	B
Copper	24.9	B	31.1		35.8		16.8	U	19.7	B	13.8	B	32.0		29.2		14.4	B	17.1	B
Iron	171		329		998		759		92.0	B	92.6	B	987		792		64.5	B	74.4	B
Lead	1.1	B	2.3	B	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	NA		NA		12500		11800		11900		11800		13600		13900		13800		14300	
Manganese	47.7		308		56.3		53.3		45.5		47.3		62.9		63.3		44.4		54.5	
Mercury	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.7	B	1.4	B	2.3	B	3.4	B
Potassium	NA		NA		997	B	902	B	984	B	911	B	1210	B	1180	B	1210	B	1340	B
Selenium	NA		NA		4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U
Silver	NA		NA		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Sodium	NA		NA		12000		11200		10300		10700		19000		19600		19900		20600	
Thallium	NA		NA		3.0	U	3.0	U	3.0	U	3.0	U	9.3	B	3.0	U	3.0	U	3.0	U
Vanadium	NA		NA		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Zinc	21.9		42.4		18.7	B	19.5	B	19.3	B	18.7	B	23.3		26.4		24.4		20.7	
Cyanide	4.0	U	4.0	U	4.0	U	4.0	U	NA		NA		4.0	U	4.0	U	NA		NA	
Hexavalent Cr	<.0250mg/l		<.0250mg/l		NA		NA		NA		NA		NA		NA		NA		NA	
TSS	3.00 mg/l		4.00mg/l		NA		NA		NA		NA		NA		NA		NA		NA	

Notes: ug/l - micrograms per liter, or parts per billion
mg/l - milligrams per liter, or parts per million
B - Concentration lies between sample detection limit and instrument detection limit.
U - Not detected. Associated value is the analyte detection limit.
TSS - Total Suspended Solids
NA - Not Analyzed
F - Filtered sample

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		EW-1			EW-1DL			EW-1			EW-1	
	Lab Sample ID		65257			65257DL			65445			66169	
	Sample Collection Date		1/22/99			1/22/99			1/26/99			2/1/99	
	Sample Receipt Date		1/23/99			1/23/99			1/27/99			2/2/99	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA												
75-71-8	Dichlorodifluoromethane	1.8	ND		920	ND		46	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		920	ND		46	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		650	ND		33	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		830	ND		42	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		1000	ND		51	ND		2	ND	
107-02-8	Acrolein	5	ND		2500	ND		130	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	700	E	630	ND		1	2200		1	850	E
75-35-4	1,1-Dichloroethene	1	3.6		290	ND		14	ND		0.6	ND	
67-64-1	Acetone	5	ND		2500	ND		130	ND		5	6.4	
75-15-0	Carbon Disulfide	5	ND		2500	ND		130	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		370	ND		18	ND		1	2.1	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		340	ND		17	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		2500	ND		130	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		190	ND		9.3	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		500	ND		25	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	10		420	ND		21	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		440	ND		22	ND		0.9	ND	
67-66-3	Chloroform	1	26		420	ND		21	ND		1	3.1	
71-55-6	1,1,1-Trichloroethane	0.9	ND		430	ND		22	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		2500	ND		130	ND		5	ND	
78-93-3	2-Butanone	5	ND		2500	ND		130	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	400	E	760	ND		38	ND		1.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		370	ND		18	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		430	ND		21	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		450	ND		23	ND		0.9	ND	
79-01-6	Trichloroethene	1	1900	E	1	11300	D	1	97		1	78	
78-87-5	1,2-Dichloropropane	1	ND		500	ND		25	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		440	ND		22	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		300	ND		15	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		2500	ND		130	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		65	ND		3.3	ND		0.1	ND	
108-88-3	Toluene	1	ND		500	ND		25	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		120	ND		5.8	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	1	21		450	ND		23	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		2500	ND		130	ND		5	ND	
127-18-4	Tetrachloroethene	1	60		450	ND		23	ND		0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		450	ND		23	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		500	ND		25	ND		1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		600	ND		30	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		2500	ND		130	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		450	ND		23	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	57		450	ND		23	ND		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		450	ND		23	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		650	ND		33	ND		1.3	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		EW-1			EW-1DL			EW-1			EW-1	
	Lab Sample ID		65257			65257DL			65445			66169	
	Sample Collection Date		1/22/99			1/22/99			1/26/99			2/1/99	
	Sample Receipt Date		1/23/99			1/23/99			1/27/99			2/2/99	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
95-47-6	o-xylene	0.9	ND		450	ND		23	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		230	ND		11	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		250	ND		13	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		500	ND		25	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		350	ND		18	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		550	ND		28	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		550	ND		28	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		450	ND		23	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		500	ND		25	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		450	ND		23	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		550	ND		28	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		350	ND		18	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		550	ND		28	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		300	ND		15	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		480	ND		24	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		250	ND		13	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		500	ND		25	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		400	ND		20	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		600	ND		30	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		700	ND		35	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		400	ND		20	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		500	ND		25	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		400	ND		20	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		350	ND		18	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		EW-1DL			EW-1			EW-1DL		
	Lab Sample ID		66169DL			66367			66367DL		
	Sample Collection Date		2/1/99			2/3/99			2/3/99		
	Sample Receipt Date		2/2/99			2/4/99			2/4/99		
	Sample Matrix		WATER			WATER			WATER		
	Units		ug/L			ug/L			ug/L		
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
	TCL VOA										
75-71-8	Dichlorodifluoromethane	92	ND		1.8	ND		180	ND		1.8
74-87-3	Chloromethane	92	ND		1.8	ND		180	ND		1.8
75-01-4	Vinyl Chloride	65	ND		1.3	ND		130	ND		1.3
74-83-9	Bromomethane	83	ND		1.7	ND		170	ND		1.7
75-00-3	Chloroethane	100	ND		2	ND		200	ND		2
107-02-8	Acrolein	250	ND		5	ND		500	ND		5
75-69-4	Trichlorofluoromethane	1	1500		1	1100	E	1	1300	D	1
75-35-4	1,1-Dichloroethene	29	ND		0.6	ND		57	ND		0.6
67-64-1	Acetone	250	ND		5	ND		500	ND		5
75-15-0	Carbon Disulfide	250	ND	D	5	ND		500	ND		5
75-09-2	Methylene Chloride	37	ND		0.7	ND		73	ND		0.7
156-60-5	trans-1,2-Dichloroethene	34	ND		0.7	ND		68	ND		0.7
107-13-1	Acrylonitrile	250	ND		5	ND		500	ND		5
75-34-4	1,1-Dichloroethane	19	ND		0.4	ND		37	ND		0.4
590-20-7	2,2-Dichloropropane	50	ND		1	ND		100	ND		1
156-59-2	cis-1,2-dichloroethene	42	ND		0.8	ND		84	ND		0.8
74-97-5	Bromochloromethane	44	ND		0.9	ND		87	ND		0.9
67-66-3	Chloroform	42	ND		1	3.4		84	ND		1
71-55-6	1,1,1-Trichloroethane	43	ND		0.9	ND		86	ND		0.9
108-05-4	Vinyl Acetate	250	ND		5	ND		500	ND		5
78-93-3	2-Butanone	250	ND		5	ND		500	ND		5
56-23-5	Carbon Tetrachloride	76	ND		1.5	ND		150	ND		1.5
563-58-6	1,1-Dichloropropene	37	ND		0.7	ND		73	ND		0.7
71-43-2	Benzene	43	ND		0.9	ND		85	ND		0.9
107-06-2	1,2-Dichloroethane	45	ND		0.9	ND		90	ND		0.9
79-01-6	Trichloroethene	1	130		1	43		1	220	D	1
78-87-5	1,2-Dichloropropane	50	ND		1	ND		100	ND		1
74-95-3	Dibromomethane	44	ND		0.9	ND		88	ND		0.9
75-27-4	Bromodichloromethane	30	ND	D	0.6	ND		60	ND		0.6
110-07-3	2-Chloroethyl Vinyl Ether	250	ND		5	ND		500	ND		5
10061-01-5	cis-1,3-Dichloropropene	6.5	ND		0.1	ND		13	ND		0.1
108-88-3	Toluene	50	ND		1	ND		100	ND		1
10061-02-6	trans-1,3-Dichloropropene	12	ND		0.2	ND		23	ND		0.2
79-00-5	1,1,2-Trichloroethane	45	ND		0.9	ND		90	ND		0.9
108-10-1	4-Methyl-2-Pentanone	250	ND		5	ND		500	ND		5
127-18-4	Tetrachloroethene	45	ND		0.9	ND		90	ND		0.9
142-28-9	1,3-Dichloropropane	45	ND		0.9	ND		90	ND		0.9
124-48-1	Dibromochloromethane	50	ND		1	ND		100	ND		1
106-93-4	1,2-Dibromoethane	60	ND		1.2	ND		120	ND		1.2
591-78-6	2-Hexanone	250	ND		5	ND		500	ND		5
108-90-7	Chlorobenzene	45	ND		0.9	ND		90	ND		0.9
630-20-6	1,1,1,2-Tetrachloroethane	45	ND		0.9	ND		90	ND		0.9
100-41-4	Ethylbenzene	45	ND		0.9	ND		90	ND		0.9
136777-61-2	m&p-xylenes	65	ND		1.3	ND		130	ND		1.3

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		EW-1DL			EW-1			EW-1DL		
	Lab Sample ID		66169DL			66367			66367DL		
	Sample Collection Date		2/1/99			2/3/99			2/3/99		
	Sample Receipt Date		2/2/99			2/4/99			2/4/99		
	Sample Matrix		WATER			WATER			WATER		
	Units		ug/L			ug/L			ug/L		
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
95-47-6	o-xylene	45	ND		0.9	ND		90	ND		0.9
100-42-5	Styrene	23	ND		0.5	ND		45	ND		0.5
75-25-2	Bromoform	25	ND		0.5	ND		50	ND		0.5
98-82-8	isopropylbenzene	50	ND		1	ND		100	ND		1
108-86-1	Bromobenzene	35	ND		0.7	ND		70	ND		0.7
79-34-5	1,1,2,2-Tetrachloroethane	55	ND		1.1	ND		110	ND		1.1
96-18-4	1,2,3-Trichloropropane	55	ND		1.1	ND		110	ND		1.1
103-65-1	n-Propylbenzene	45	ND		0.9	ND		90	ND		0.9
95-49-8	2-Chlorotoluene	50	ND		1	ND		100	ND		1
106-43-4	4-Chlorotoluene	45	ND		0.9	ND		90	ND		0.9
108-67-8	1,3,5-Trimethylbenzene	55	ND		1.1	ND		110	ND		1.1
98-06-6	tert-Butylbenzene	35	ND		0.7	ND		70	ND		0.7
95-63-6	1,2,4-Trimethylbenzene	55	ND		1	2.1		110	ND		1.1
135-98-8	sec-Butylbenzene	30	ND		0.6	ND		60	ND		0.6
541-73-1	1,3-Dichlorobenzene	48	ND		1	ND		95	ND		1
99-87-6	4-Isopropyltoluene	25	ND		0.5	ND		50	ND		0.5
106-46-7	1,4-Dichlorobenzene	50	ND		1	ND		100	ND		1
95-50-1	1,2-Dichlorobenzene	40	ND		0.8	ND		80	ND		0.8
104-51-8	n-Butylbenzene	60	ND		1.2	ND		120	ND		1.2
96-12-8	1,2-Dibromo-3-chloropropane	70	ND		1.4	ND		140	ND		1.4
120-82-1	1,2,4-Trichlorobenzene	40	ND		0.8	ND		80	ND		0.8
87-68-3	Hexachlorobutadiene	50	ND		1	ND		100	ND		1
91-20-3	Naphthalene	40	ND		0.8	ND		80	ND		0.8
87-61-6	1,2,3-Trichlorobenzene	35	ND		0.7	ND		70	ND		0.7

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID	EW-A1			EW-A1DL			EWA1			EWA1DL	
	Lab Sample ID	66757			66757DL			67427			67427DL	
	Sample Collection Date	2/10/99			2/10/99			2/19/99			2/19/99	
	Sample Receipt Date	2/11/99			2/11/99			2/20/99			2/20/99	
	Sample Matrix	WATER			WATER			WATER			WATER	
	Units	ug/L			ug/L			ug/L			ug/L	
		CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA											
75-71-8	Dichlorodifluoromethane	ND		180	ND		1.8	ND		180	ND	
74-87-3	Chloromethane	ND		180	ND		1.8	ND		180	ND	
75-01-4	Vinyl Chloride	ND		130	ND		1.3	ND		130	ND	
74-83-9	Bromomethane	ND		170	ND		1.7	ND		170	ND	
75-00-3	Chloroethane	ND		200	ND		2	ND		200	ND	
107-02-8	Acrolein	ND		500	ND		5	ND		500	ND	
75-69-4	Trichlorofluoromethane	990	E	1	1200	D	1	1200	E	1	1600	D
75-35-4	1,1-Dichloroethene	ND		57	ND		0.6	ND		57	ND	
67-64-1	Acetone	ND		500	ND		5	ND		500	ND	
75-15-0	Carbon Disulfide	ND		500	ND		5	ND		500	ND	
75-09-2	Methylene Chloride	ND		73	ND		0.7	ND		73	ND	
156-60-5	trans-1,2-Dichloroethene	ND		68	ND		0.7	ND		68	ND	
107-13-1	Acrylonitrile	ND		500	ND		5	ND		500	ND	
75-34-4	1,1-Dichloroethane	ND		37	ND		0.4	ND		37	ND	
590-20-7	2,2-Dichloropropane	ND		100	ND		1	ND		100	ND	
156-59-2	cis-1,2-dichloroethene	ND		84	ND		0.8	ND		84	ND	
74-97-5	Bromochloromethane	ND		87	ND		0.9	ND		87	ND	
67-66-3	Chloroform	2.7		84	ND		1	3		84	ND	
71-55-6	1,1,1-Trichloroethane	ND		86	ND		0.9	ND		86	ND	
108-05-4	Vinyl Acetate	ND		500	ND		5	ND		500	ND	
78-93-3	2-Butanone	ND		500	ND		5	ND		500	ND	
56-23-5	Carbon Tetrachloride	ND		150	ND		1.5	ND		150	ND	
563-58-6	1,1-Dichloropropene	ND		73	ND		0.7	ND		73	ND	
71-43-2	Benzene	ND		85	ND		0.9	ND		85	ND	
107-06-2	1,2-Dichloroethane	ND		90	ND		0.9	ND		90	ND	
79-01-6	Trichloroethene	44		100	ND		1	29		100	ND	
78-87-5	1,2-Dichloropropane	ND		100	ND		1	ND		100	ND	
74-95-3	Dibromomethane	ND		88	ND		0.9	ND		88	ND	
75-27-4	Bromodichloromethane	ND		60	ND		0.6	ND		60	ND	
110-07-3	2-Chloroethyl Vinyl Ether	ND		500	ND		5	ND		500	ND	
10061-01-5	cis-1,3-Dichloropropene	ND		13	ND		0.1	ND		13	ND	
108-88-3	Toluene	ND		100	ND		1	ND		100	ND	
10061-02-6	trans-1,3-Dichloropropene	ND		23	ND		0.2	ND		23	ND	
79-00-5	1,1,2-Trichloroethane	ND		90	ND		0.9	ND		90	ND	
108-10-1	4-Methyl-2-Pentanone	ND		500	ND		5	ND		500	ND	
127-18-4	Tetrachloroethene	ND		90	ND		0.9	ND		90	ND	
142-28-9	1,3-Dichloropropane	ND		90	ND		0.9	ND		90	ND	
124-48-1	Dibromochloromethane	ND		100	ND		1	ND		100	ND	
106-93-4	1,2-Dibromoethane	ND		120	ND		1.2	ND		120	ND	
591-78-6	2-Hexanone	ND		500	ND		5	ND		500	ND	
108-90-7	Chlorobenzene	ND		90	ND		0.9	ND		90	ND	
630-20-6	1,1,1,2-Tetrachloroethane	ND		90	ND		0.9	ND		90	ND	
100-41-4	Ethylbenzene	ND		90	ND		0.9	ND		90	ND	
136777-61-2	m&p-xylenes	ND		130	ND		1.3	ND		130	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID	EW-A1			EW-A1DL			EWA1			EWA1DL	
	Lab Sample ID	66757			66757DL			67427			67427DL	
	Sample Collection Date	2/10/99			2/10/99			2/19/99			2/19/99	
	Sample Receipt Date	2/11/99			2/11/99			2/20/99			2/20/99	
	Sample Matrix	WATER			WATER			WATER			WATER	
	Units	ug/L			ug/L			ug/L			ug/L	
		CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
95-47-6	o-xylene	ND		90	ND		0.9	ND		90	ND	
100-42-5	Styrene	ND		45	ND		0.5	ND		45	ND	
75-25-2	Bromoform	ND		50	ND		0.5	ND		50	ND	
98-82-8	isopropylbenzene	ND		100	ND		1	ND		100	ND	
108-86-1	Bromobenzene	ND		70	ND		0.7	ND		70	ND	
79-34-5	1,1,2,2-Tetrachloroethane	ND		110	ND		1.1	ND		110	ND	
96-18-4	1,2,3-Trichloropropane	ND		110	ND		1.1	ND		110	ND	
103-65-1	n-Propylbenzene	ND		90	ND		0.9	ND		90	ND	
95-49-8	2-Chlorotoluene	ND		100	ND		1	ND		100	ND	
106-43-4	4-Chlorotoluene	ND		90	ND		0.9	ND		90	ND	
108-67-8	1,3,5-Trimethylbenzene	ND		110	ND		1.1	ND		110	ND	
98-06-6	tert-Butylbenzene	ND		70	ND		0.7	ND		70	ND	
95-63-6	1,2,4-Trimethylbenzene	ND		110	ND		1.1	ND		110	ND	
135-98-8	sec-Butylbenzene	ND		60	ND		0.6	ND		60	ND	
541-73-1	1,3-Dichlorobenzene	ND		95	ND		1	ND		95	ND	
99-87-6	4-Isopropyltoluene	ND		50	ND		0.5	ND		50	ND	
106-46-7	1,4-Dichlorobenzene	ND		100	ND		1	ND		100	ND	
95-50-1	1,2-Dichlorobenzene	ND		80	ND		0.8	ND		80	ND	
104-51-8	n-Butylbenzene	ND		120	ND		1.2	ND		120	ND	
96-12-8	1,2-Dibromo-3-chloropropane	ND		140	ND		1.4	ND		140	ND	
120-82-1	1,2,4-Trichlorobenzene	ND		80	ND		0.8	ND		80	ND	
87-68-3	Hexachlorobutadiene	ND		100	ND		1	ND		100	ND	
91-20-3	Naphthalene	ND		80	ND		0.8	ND		80	ND	
87-61-6	1,2,3-Trichlorobenzene	ND		70	ND		0.7	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		**EW-A1**	
	Lab Sample ID		69215	
	Sample Collection Date		3/23/99	
	Sample Receipt Date		3/24/99	
	Sample Matrix		WATER	
	Units		ug/L	
		MDL	CONC	Q
	TCL VOA			
75-71-8	Dichlorodifluoromethane	1.8	ND	
74-87-3	Chloromethane	1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND	
74-83-9	Bromomethane	1.7	ND	
75-00-3	Chloroethane	2	ND	
107-02-8	Acrolein	5	ND	
75-69-4	Trichlorofluoromethane	1	980	E
75-35-4	1,1-Dichloroethene	0.6	ND	
67-64-1	Acetone	5	ND	
75-15-0	Carbon Disulfide	5	ND	
75-09-2	Methylene Chloride	0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND	
107-13-1	Acrylonitrile	5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND	
74-97-5	Bromochloromethane	0.9	ND	
67-66-3	Chloroform	1	1.3	
71-55-6	1,1,1-Trichloroethane	0.9	ND	
108-05-4	Vinyl Acetate	5	ND	
78-93-3	2-Butanone	5	ND	
56-23-5	Carbon Tetrachloride	2	1	J
563-58-6	1,1-Dichloropropene	0.7	ND	
71-43-2	Benzene	0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND	
79-01-6	Trichloroethene	1	84	
78-87-5	1,2-Dichloropropane	1	ND	
74-95-3	Dibromomethane	0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND	
108-88-3	Toluene	1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND	
127-18-4	Tetrachloroethene	0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND	
124-48-1	Dibromochloromethane	1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND	
591-78-6	2-Hexanone	5	ND	
108-90-7	Chlorobenzene	0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.9	ND	
100-41-4	Ethylbenzene	0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A1

	Client Sample ID		EW-A1	
	Lab Sample ID		69215	
	Sample Collection Date		3/23/99	
	Sample Receipt Date		3/24/99	
	Sample Matrix		WATER	
	Units		ug/L	
		MDL	CONC	Q
95-47-6	o-xylene	0.9	ND	
100-42-5	Styrene	0.5	ND	
75-25-2	Bromoform	0.5	ND	
98-82-8	isopropylbenzene	1	ND	
108-86-1	Bromobenzene	0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND	
95-49-8	2-Chlorotoluene	1	ND	
106-43-4	4-Chlorotoluene	0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND	
91-20-3	Naphthalene	0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A2

	Client Sample ID		EW-2DL			EW-2			EW-2		
	Lab Sample ID		64672DL			64888			65362		
	Sample Collection Date		1/14/99			1/19/99			1/25/99		
	Sample Receipt Date		1/15/99			1/20/99			1/26/99		
	Sample Matrix		WATER			WATER			WATER		
	Units		ug/L			ug/L			ug/L		
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
	TCL VOA										
75-71-8	Dichlorodifluoromethane	460	ND		920	ND		920	ND		1.8
74-87-3	Chloromethane	460	ND		920	ND		920	ND		1.8
75-01-4	Vinyl Chloride	330	ND		650	ND		650	ND		1.3
74-83-9	Bromomethane	420	ND		830	ND		830	ND		1.7
75-00-3	Chloroethane	510	ND		1000	ND		1000	ND		2
107-02-8	Acrolein	1300	ND		2500	ND		2500	ND		5
75-69-4	Trichlorofluoromethane	320	ND		630	ND		630	ND		1
75-35-4	1,1-Dichloroethene	140	ND		290	ND		290	ND		1
67-64-1	Acetone	0	1400	BD	2500	ND		2500	ND		5
75-15-0	Carbon Disulfide	1300	ND		2500	ND		2500	ND		5
75-09-2	Methylene Chloride	180	ND		370	ND		370	ND		0.7
156-60-5	trans-1,2-Dichloroethene	170	ND		340	ND		340	ND		0.7
107-13-1	Acrylonitrile	1300	ND		2500	ND		2500	ND		5
75-34-4	1,1-Dichloroethane	93	ND		190	ND		190	ND		0.4
590-20-7	2,2-Dichloropropane	250	ND		500	ND		500	ND		1
156-59-2	cis-1,2-dichloroethene	210	ND		420	ND		420	ND		1
74-97-5	Bromochloromethane	220	ND		440	ND		440	ND		0.9
67-66-3	Chloroform	210	ND		420	ND		420	ND		1
71-55-6	1,1,1-Trichloroethane	220	ND		430	ND		430	ND		0.9
108-05-4	Vinyl Acetate	1300	ND		2500	ND		2500	ND		5
78-93-3	2-Butanone	1300	ND		2500	ND		2500	ND		5
56-23-5	Carbon Tetrachloride	2	150	JD	760	ND	E	760	ND		2
563-58-6	1,1-Dichloropropene	180	ND		370	ND		370	ND		0.7
71-43-2	Benzene	210	ND		430	ND		430	ND		0.9
107-06-2	1,2-Dichloroethane	230	ND		450	ND		450	ND		0.9
79-01-6	Trichloroethene	1	26600	D	1	21300		1	19200		1
78-87-5	1,2-Dichloropropane	250	ND		500	ND		500	ND		1
74-95-3	Dibromomethane	220	ND		440	ND		440	ND		0.9
75-27-4	Bromodichloromethane	150	ND		300	ND		300	ND		0.6
110-07-3	2-Chloroethyl Vinyl Ether	1300	ND		2500	ND		2500	ND		5
10061-01-5	cis-1,3-Dichloropropene	33	ND		65	ND		65	ND		0.1
108-88-3	Toluene	250	ND		500	ND		500	ND		1
10061-02-6	trans-1,3-Dichloropropene	58	ND		120	ND		120	ND		0.2
79-00-5	1,1,2-Trichloroethane	230	ND		450	ND		450	ND		1
108-10-1	4-Methyl-2-Pentanone	1300	ND		2500	ND		2500	ND		5
127-18-4	Tetrachloroethene	230	ND		450	ND		450	ND		1
142-28-9	1,3-Dichloropropane	230	ND		450	ND		450	ND		0.9
124-48-1	Dibromochloromethane	250	ND		500	ND		500	ND		1
106-93-4	1,2-Dibromoethane	300	ND		600	ND		600	ND		1.2

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A2

591-78-6	2-Hexanone	1300	ND		2500	ND		2500	ND		5
108-90-7	Chlorobenzene	230	ND		450	ND		450	ND		0.9
630-20-6	1,1,1,2-Tetrachloroethane	230	ND		450	ND		450	ND		1
100-41-4	Ethylbenzene	230	ND		450	ND		450	ND		0.9
136777-61-2	m&p-xylenes	330	ND		650	ND		650	ND		1.3
95-47-6	o-xylene	230	ND		450	ND		450	ND		0.9
100-42-5	Styrene	110	ND		230	ND		230	ND		0.5
75-25-2	Bromoform	130	ND		250	ND		250	ND		0.5
98-82-8	isopropylbenzene	250	ND		500	ND		500	ND		1
108-86-1	Bromobenzene	180	ND		350	ND		350	ND		0.7
79-34-5	1,1,2,2-Tetrachloroethane	280	ND		550	ND		550	ND		1.1
96-18-4	1,2,3-Trichloropropane	280	ND		550	ND		550	ND		1.1
103-65-1	n-Propylbenzene	230	ND		450	ND		450	ND		0.9
95-49-8	2-Chlorotoluene	250	ND		500	ND		500	ND		1
106-43-4	4-Chlorotoluene	230	ND		450	ND		450	ND		0.9
108-67-8	1,3,5-Trimethylbenzene	280	ND		550	ND		550	ND		1.1
98-06-6	tert-Butylbenzene	180	ND		350	ND		350	ND		0.7
95-63-6	1,2,4-Trimethylbenzene	280	ND		550	ND		550	ND		1.1
135-98-8	sec-Butylbenzene	150	ND		300	ND		300	ND		0.6
541-73-1	1,3-Dichlorobenzene	240	ND		480	ND		480	ND		1
99-87-6	4-Isopropyltoluene	130	ND		250	ND		250	ND		0.5
106-46-7	1,4-Dichlorobenzene	250	ND		500	ND		500	ND		1
95-50-1	1,2-Dichlorobenzene	200	ND		400	ND		400	ND		0.8
104-51-8	n-Butylbenzene	300	ND		600	ND		600	ND		1.2
96-12-8	1,2-Dibromo-3-chloropropane	350	ND		700	ND		700	ND		1.4
120-82-1	1,2,4-Trichlorobenzene	200	ND		400	ND		400	ND		0.8
87-68-3	Hexachlorobutadiene	250	ND		500	ND		500	ND		1
91-20-3	Naphthalene	200	ND		400	ND		400	ND		0.8
87-61-6	1,2,3-Trichlorobenzene	180	ND		350	ND		350	ND		0.7

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A2

EW-2			EW-2DL			EW-A2			EW-A2	
66370			66370DL			66758			69220	
2/3/99			2/3/99			2/10/99			3/23/99	
2/4/99			2/4/99			2/11/99			3/24/99	
WATER			WATER			WATER			WATER	
ug/L			ug/L			ug/L			ug/L	
CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
ND		1800	ND		180	ND		180	ND	
ND		1800	ND		180	ND		180	ND	
ND		1300	ND		130	ND		130	ND	
ND		1700	ND		170	ND		170	ND	
ND		2000	ND		200	ND		200	ND	
ND		5000	ND		500	ND		500	ND	
27		1300	ND		130	ND		130	ND	
4.3		570	ND		57	ND		57	ND	
ND		5000	ND		500	ND		500	ND	
ND		5000	ND		500	ND		500	ND	
ND		730	ND		73	ND		73	ND	
ND		680	ND		68	ND		68	ND	
ND		5000	ND		500	ND		500	ND	
ND		370	ND		37	ND		37	ND	
ND		1000	ND		100	ND		100	ND	
13		840	ND		84	ND		84	ND	
ND		870	ND		87	ND		87	ND	
32		840	ND		84	ND		84	ND	
ND		860	ND		86	ND		86	ND	
ND		5000	ND		500	ND		500	ND	
ND		5000	ND		500	ND		500	ND	
290	E	1500	ND		150	ND		150	ND	
ND		730	ND		73	ND		73	ND	
ND		850	ND		85	ND		85	ND	
ND		900	ND		90	ND		90	ND	
2100	E	1	12000	D	1	9300		1	5100	
ND		1000	ND		100	ND		100	ND	
ND		880	ND		88	ND		88	ND	
ND		600	ND		60	ND		60	ND	
ND		5000	ND		500	ND		500	ND	
ND		130	ND		13	ND		13	ND	
ND		1000	ND		100	ND		100	ND	
ND		230	ND		23	ND		23	ND	
24		900	ND		90	ND		90	ND	
ND		5000	ND		500	ND		500	ND	
140		900	ND		90	ND		1	210	
ND		900	ND		90	ND		90	ND	
ND		1000	ND		100	ND		100	ND	
ND		1200	ND		120	ND		120	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A2

ND		5000	ND		500	ND		500	ND	
ND		900	ND		90	ND		90	ND	
140		900	ND		90	ND		90	ND	
ND		900	ND		90	ND		90	ND	
ND		1300	ND		130	ND		130	ND	
ND		900	ND		90	ND		90	ND	
ND		450	ND		45	ND		45	ND	
ND		500	ND		50	ND		50	ND	
ND		1000	ND		100	ND		100	ND	
ND		700	ND		70	ND		70	ND	
ND		1100	ND		110	ND		110	ND	
ND		1100	ND		110	ND		110	ND	
ND		900	ND		90	ND		90	ND	
ND		1000	ND		100	ND		100	ND	
ND		900	ND		90	ND		90	ND	
ND		1100	ND		110	ND		110	ND	
ND		700	ND		70	ND		70	ND	
ND		1100	ND		1	370		110	ND	
ND		600	ND		60	ND		60	ND	
ND		950	ND		95	ND		95	ND	
ND		500	ND		50	ND		50	ND	
ND		1000	ND		100	ND		100	ND	
ND		800	ND		80	ND		80	ND	
ND		1200	ND		120	ND		120	ND	
ND		1400	ND		140	ND		140	ND	
ND		800	ND		80	ND		80	ND	
ND		1000	ND		100	ND		100	ND	
ND		800	ND		80	ND		80	ND	
ND		700	ND		70	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

	Client Sample ID		EW-3			EW-3DL			EW-3	
	Lab Sample ID		64060			64060DL			64312	
	Sample Collection Date		1/6/99			1/6/99			1/8/99	
	Sample Receipt Date		1/7/99			1/7/99			1/9/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		460	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		460	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		330	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		420	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		510	ND		2	ND	
107-02-8	Acrolein	5	ND		1300	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	6.4		320	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	1	3.2		140	ND		0.6	ND	
67-64-1	Acetone	5	ND		1300	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		1300	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		180	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		170	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		1300	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		93	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		250	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	4.9		210	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		220	ND		0.9	ND	
67-66-3	Chloroform	1	23		210	ND		1	8.7	
71-55-6	1,1,1-Trichloroethane	0.9	ND		220	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		1300	ND		5	ND	
78-93-3	2-Butanone	5	ND		1300	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	370	E	380	ND		2	160	
563-58-6	1,1-Dichloropropene	0.7	ND		180	ND		0.7	ND	
71-43-2	Benzene	1	2.1		210	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		230	ND		0.9	ND	
79-01-6	Trichloroethene	1	1900	E	1	14800	D	1	1800	E
78-87-5	1,2-Dichloropropane	1	ND		250	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		220	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		150	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		1300	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		33	ND		0.1	ND	
108-88-3	Toluene	1	ND		250	ND		1	2.1	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		58	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	1	21		230	ND		1	4.6	
108-10-1	4-Methyl-2-Pentanone	5	ND		1300	ND		5	ND	
127-18-4	Tetrachloroethene	1	75		230	ND		1	5.4	
142-28-9	1,3-Dichloropropane	0.9	ND		230	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		250	ND		1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		300	ND		1.2	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

591-78-6	2-Hexanone	5	ND		1300	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		230	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	70		230	ND		1	3.5	
100-41-4	Ethylbenzene	0.9	ND		230	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		330	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		230	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		110	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		130	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		250	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		180	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		280	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		280	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		230	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		250	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		230	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		280	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		180	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		280	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		150	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		240	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		130	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		250	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		200	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		300	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		350	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		200	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		250	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		200	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		180	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

	EW-3DL			EW-3			EW-3DL			EW-3			EW-3DL		
	64312DL			64357			64357DL			64588			64588DL		
	1/8/99			1/11/99			1/11/99			1/13/99			1/13/99		
	1/9/99			1/12/99			1/12/99			1/14/99			1/14/99		
	WATER			WATER			WATER			WATER			WATER		
	ug/L			ug/L			ug/L			ug/L			ug/L		
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
460	ND		1.8	ND		920	ND		1.8	ND		460	ND		920
460	ND		1.8	ND		920	ND		1.8	ND		460	ND		920
330	ND		1.3	ND		650	ND		1.3	ND		330	ND		650
420	ND		1.7	ND		830	ND		1.7	ND		420	ND		830
510	ND		2	ND		1000	ND		2	ND		510	ND		1000
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
320	ND		1.3	ND		630	ND		1.3	ND		320	ND		630
140	ND		0.6	ND		290	ND		0.6	ND		140	ND		290
1300	ND		5	ND		2500	ND		5	ND		5	1300	BD	2500
1300	ND		5	4.1	J	2500	ND		5	ND	J	1300	ND		2500
180	ND		0.7	ND		370	ND		0.7	ND		180	ND		370
170	ND		0.7	ND		340	ND		0.7	ND		170	ND		340
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
93	ND		0.4	ND		190	ND		0.4	ND		93	ND		190
250	ND		1	ND		500	ND		1	ND		250	ND		500
210	ND		0.8	ND		420	ND		0.8	ND		210	ND		420
220	ND		0.9	ND		440	ND		0.9	ND		220	ND		440
210	ND		1	11		420	ND		1	13		210	ND		420
220	ND		0.9	ND		430	ND		0.9	ND		220	ND		430
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
380	ND		2	190		760	ND		2	230	E	380	ND		760
180	ND		0.7	ND		370	ND		0.7	ND		180	ND		370
210	ND		0.9	ND		430	ND		0.9	ND		210	ND		430
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
1	4200	D	1	1800	E	1	6200	D	1	450	E	1	5700	D	1
250	ND		1	ND		500	ND		1	ND		250	ND		500
220	ND		0.9	ND		440	ND		0.9	ND		220	ND		440
150	ND		0.6	ND		300	ND		0.6	ND		150	ND		300
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
33	ND		0.1	ND		65	ND		0.1	ND		33	ND		65
250	ND		1	ND		500	ND		1	ND		250	ND		500
58	ND		0.2	ND		120	ND		0.2	ND		58	ND		120
230	ND		1	5.3		450	ND		1	5		230	ND		450
1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
230	ND		1	5.7		450	ND		1	4.5		230	ND		450
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
250	ND		1	ND		500	ND		1	ND		250	ND		500
300	ND		1.2	ND		600	ND		1.2	ND		300	ND		600

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

1300	ND		5	ND		2500	ND		5	ND		1300	ND		2500
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
230	ND		1	3.8		450	ND		0.9	ND		230	ND		450
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
330	ND		1.3	ND		650	ND		1.3	ND		330	ND		650
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
110	ND		0.5	ND		230	ND		0.5	ND		110	ND		230
130	ND		0.5	ND		250	ND		0.5	ND		130	ND		250
250	ND		1	ND		500	ND		1	ND		250	ND		500
180	ND		0.7	ND		350	ND		0.7	ND		180	ND		350
280	ND		1.1	ND		550	ND		1.1	ND		280	ND		550
280	ND		1.1	ND		550	ND		1.1	ND		280	ND		550
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
250	ND		1	ND		500	ND		1	ND		250	ND		500
230	ND		0.9	ND		450	ND		0.9	ND		230	ND		450
280	ND		1.1	ND		550	ND		1.1	ND		280	ND		550
180	ND		0.7	ND		350	ND		0.7	ND		180	ND		350
280	ND		1.1	ND		550	ND		1.1	ND		280	ND		550
150	ND		0.6	ND		300	ND		0.6	ND		150	ND		300
240	ND		1	ND		480	ND		1	ND		240	ND		480
130	ND		0.5	ND		250	ND		0.5	ND		130	ND		250
250	ND		1	ND		500	ND		1	ND		250	ND		500
200	ND		0.8	ND		400	ND		0.8	ND		200	ND		400
300	ND		1.2	ND		600	ND		1.2	ND		300	ND		600
350	ND		1.4	ND		700	ND		1.4	ND		350	ND		700
200	ND		0.8	ND		400	ND		0.8	ND		200	ND		400
250	ND		1	ND		500	ND		1	ND		250	ND		500
200	ND		0.8	ND		400	ND		0.8	ND		200	ND		400
180	ND		0.7	ND		350	ND		0.7	ND		180	ND		350

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

EW-3			EW-3			EW-3			EW-A3			EW-A3	
64889			65360			66171			66692			69217	
1/19/99			1/25/99			2/1/99			2/9/99			3/23/99	
1/20/99			1/26/99			2/2/99			2/10/99			3/24/99	
WATER			WATER			WATER			WATER			WATER	
ug/L			ug/L			ug/L			ug/L			ug/L	
CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
ND		920	ND		180	ND		180	ND		18	ND	
ND		920	ND		180	ND		180	ND		18	ND	
ND		650	ND		130	ND		130	ND		13	ND	
ND		830	ND		170	ND		170	ND		17	ND	
ND		1000	ND		200	ND		200	ND		20	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		630	ND		130	ND		130	ND		13	ND	
ND		290	ND		57	ND		57	ND		5.7	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		370	ND		73	ND		73	ND		7.3	ND	
ND		340	ND		68	ND		68	ND		6.8	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		190	ND		37	ND		37	ND		3.7	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		420	ND		84	ND		84	ND		8.4	ND	
ND		440	ND		87	ND		87	ND		8.7	ND	
ND		420	ND		84	ND		84	ND		8.4	ND	
ND		430	ND		86	ND		86	ND		8.6	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		760	ND		150	ND		150	ND		2	46	
ND		370	ND		73	ND		73	ND		7.3	ND	
ND		430	ND		85	ND		85	ND		8.5	ND	
ND		450	ND		90	ND		90	ND		9	ND	
3100		1	8100		1	3100		1	2400		1	1800	
ND		500	ND		100	ND		100	ND		10	ND	
ND		440	ND		88	ND		88	ND		8.8	ND	
ND		300	ND		60	ND		60	ND		6	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		65	ND		13	ND		13	ND		1.3	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		120	ND		23	ND		23	ND		2.3	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		2500	ND		500	ND		500	ND		50	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		600	ND		120	ND		120	ND		12	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A3

ND		2500	ND		500	ND		500	ND		50	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		650	ND		130	ND		130	ND		13	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		230	ND		45	ND		45	ND		4.5	ND	
ND		250	ND		50	ND		50	ND		5	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		350	ND		70	ND		70	ND		7	ND	
ND		550	ND		110	ND		110	ND		11	ND	
ND		550	ND		110	ND		110	ND		11	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		450	ND		90	ND		90	ND		9	ND	
ND		550	ND		110	ND		110	ND		11	ND	
ND		350	ND		70	ND		70	ND		7	ND	
ND		550	ND		110	ND		110	ND		11	ND	
ND		300	ND		60	ND		60	ND		6	ND	
ND		480	ND		95	ND		95	ND		9.5	ND	
ND		250	ND		50	ND		50	ND		5	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		400	ND		80	ND		80	ND		8	ND	
ND		600	ND		120	ND		120	ND		12	ND	
ND		700	ND		140	ND		140	ND		14	ND	
ND		400	ND		80	ND		80	ND		8	ND	
ND		500	ND		100	ND		100	ND		10	ND	
ND		400	ND		80	ND		80	ND		8	ND	
ND		350	ND		70	ND		70	ND		7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

	Client Sample ID		EW-4			EW-4DL			EW-4	
	Lab Sample ID		63388			63388DL			63931	
	Sample Collection Date		12/22/98			12/22/98			1/5/99	
	Sample Receipt Date		12/23/98			12/23/98			1/6/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	9.2	ND		920	ND		1.8	ND	
74-87-3	Chloromethane	9.2	ND		920	ND		1.8	ND	
75-01-4	Vinyl Chloride	6.5	ND		650	ND		1.3	ND	
74-83-9	Bromomethane	8.3	ND		830	ND		1.7	ND	
75-00-3	Chloroethane	10	ND		1000	ND		2	ND	
107-02-8	Acrolein	25	ND		2500	ND		5	ND	
75-69-4	Trichlorofluoromethane	6.3	ND		630	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	1	15		290	ND		1	ND	
67-64-1	Acetone	5	18	J	2500	ND		5	ND	
75-15-0	Carbon Disulfide	25	ND		2500	ND		5	ND	
75-09-2	Methylene Chloride	3.7	ND		370	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	3.4	ND		340	ND		0.7	ND	
107-13-1	Acrylonitrile	25	ND		2500	ND		5	ND	
75-34-4	1,1-Dichloroethane	1.9	ND		190	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	5	ND		500	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	4.2	ND		420	ND		1	ND	
74-97-5	Bromochloromethane	4.4	ND		440	ND		0.9	ND	
67-66-3	Chloroform	1	87		420	ND		1	7.4	
71-55-6	1,1,1-Trichloroethane	4.3	ND		430	ND		0.9	ND	
108-05-4	Vinyl Acetate	25	ND		2500	ND		5	ND	
78-93-3	2-Butanone	25	ND		2500	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	1300	E	760	ND		2	150	
563-58-6	1,1-Dichloropropene	3.7	ND		370	ND		0.7	ND	
71-43-2	Benzene	4.3	ND		430	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	4.5	ND		450	ND		0.9	ND	
79-01-6	Trichloroethene	1	32400	E	1	49700	D	1	1400	E
78-87-5	1,2-Dichloropropane	5	ND		500	ND		1	ND	
74-95-3	Dibromomethane	4.4	ND		440	ND		0.9	ND	
75-27-4	Bromodichloromethane	3	ND		300	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	25	ND		2500	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.7	ND		65	ND		0.1	ND	
108-88-3	Toluene	1	13		500	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	1.2	ND		120	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	1	93		450	ND		1	6.1	
108-10-1	4-Methyl-2-Pentanone	25	ND		2500	ND		5	ND	
127-18-4	Tetrachloroethene	1	97		450	ND		1	5.5	
142-28-9	1,3-Dichloropropane	4.5	ND		450	ND		0.9	ND	
124-48-1	Dibromochloromethane	5	ND		500	ND		1	ND	
106-93-4	1,2-Dibromoethane	6	ND		600	ND		1.2	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

591-78-6	2-Hexanone	25	ND		2500	ND		5	ND	
108-90-7	Chlorobenzene	4.5	ND		450	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	4.5	ND		450	ND		1	5	
100-41-4	Ethylbenzene	4.5	ND		450	ND		0.9	ND	
136777-61-2	m&p-xylenes	1	13		650	ND		1.3	ND	
95-47-6	o-xylene	1	14		450	ND		0.9	ND	
100-42-5	Styrene	2.3	ND		230	ND		0.5	ND	
75-25-2	Bromoform	2.5	ND		250	ND		0.5	ND	
98-82-8	isopropylbenzene	5	ND		500	ND		1	ND	
108-86-1	Bromobenzene	3.5	ND		350	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	5.5	ND		550	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	5.5	ND		550	ND		1.1	ND	
103-65-1	n-Propylbenzene	4.5	ND		450	ND		0.9	ND	
95-49-8	2-Chlorotoluene	5	ND		500	ND		1	ND	
106-43-4	4-Chlorotoluene	4.5	ND		450	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	5.5	ND		550	ND		1.1	ND	
98-06-6	tert-Butylbenzene	3.5	ND		350	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	5.5	ND		550	ND		1.1	ND	
135-98-8	sec-Butylbenzene	3	ND		300	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	4.8	ND		480	ND		1	ND	
99-87-6	4-Isopropyltoluene	2.5	ND		250	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	5	ND		500	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	4	ND		400	ND		0.8	ND	
104-51-8	n-Butylbenzene	6	ND		600	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	7	ND		700	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	4	ND		400	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	5	ND		500	ND		1	ND	
91-20-3	Naphthalene	4	ND		400	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	3.5	ND		350	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

	EW-4DL			EW-4			EW-4DL			EW-4			EW-4BOT		
	63931DL			64313			64313DL			65023			65021		
	1/5/99			1/8/99			1/8/99			1/20/99			1/20/99		
	1/6/99			1/9/99			1/9/99			1/21/99			1/21/99		
	WATER			WATER			WATER			WATER			WATER		
	ug/L			ug/L			ug/L			ug/L			ug/L		
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
460	ND		1.8	ND		920	ND			ND		920	ND		920
460	ND		1.8	ND		920	ND			ND		920	ND		920
330	ND		1.3	ND		650	ND			ND		650	ND		650
420	ND		1.7	ND		830	ND			ND		830	ND		830
510	ND		2	ND		1000	ND			ND		1000	ND		1000
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
320	ND		1.3	ND		630	ND			ND		630	ND		630
140	ND		1	2.2		290	ND			ND		290	ND		290
1300	ND		5	4.2	J	2500	ND			ND		2500	ND		2500
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
180	ND		0.7	ND		370	ND			ND		370	ND		370
170	ND		0.7	ND		340	ND			ND		340	ND		340
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
93	ND		0.4	ND		190	ND			ND		190	ND		190
250	ND		1	ND		500	ND			ND		500	ND		500
210	ND		1	2		420	ND			ND		420	ND		420
220	ND		0.9	ND		440	ND			ND		440	ND		440
210	ND		1	13		420	ND			ND		420	ND		420
220	ND		0.9	ND		430	ND			ND		430	ND		430
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
380	ND		2	440	E	760	ND			ND		760	ND		760
180	ND		0.7	ND		370	ND			ND		370	ND		370
210	ND		0.9	ND		430	ND			ND		430	ND		430
230	ND		0.9	ND		450	ND			ND		450	ND		450
1	3900	D	1	2100	E	1	11400	D		10100		1	5800		1
250	ND		1	ND		500	ND			ND		500	ND		500
220	ND		0.9	ND		440	ND			ND		440	ND		440
150	ND		0.6	ND		300	ND			ND		300	ND		300
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
33	ND		0.1	ND		65	ND			ND		65	ND		65
250	ND		1	5.4		500	ND			ND		500	ND		500
58	ND		0.2	ND		120	ND			ND		120	ND		120
230	ND		1	15		450	ND			ND		450	ND		450
1300	ND		5	ND		2500	ND			ND		2500	ND		2500
230	ND		1	14		450	ND			ND		450	ND		450
230	ND		0.9	ND		450	ND			ND		450	ND		450
250	ND		1	ND		500	ND			ND		500	ND		500
300	ND		1.2	ND		600	ND			ND		600	ND		600

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

1300	ND		5	ND		2500	ND			ND		2500	ND		2500
230	ND		0.9	ND		450	ND			ND		450	ND		450
230	ND		1	5.4		450	ND			ND		450	ND		450
230	ND		0.9	ND		450	ND			ND		450	ND		450
330	ND		1.3	ND		650	ND			ND		650	ND		650
230	ND		0.9	ND		450	ND			ND		450	ND		450
110	ND		0.5	ND		230	ND			ND		230	ND		230
130	ND		0.5	ND		250	ND			ND		250	ND		250
250	ND		1	ND		500	ND			ND		500	ND		500
180	ND		0.7	ND		350	ND			ND		350	ND		350
280	ND		1.1	ND		550	ND			ND		550	ND		550
280	ND		1.1	ND		550	ND			ND		550	ND		550
230	ND		0.9	ND		450	ND			ND		450	ND		450
250	ND		1	ND		500	ND			ND		500	ND		500
230	ND		0.9	ND		450	ND			ND		450	ND		450
280	ND		1.1	ND		550	ND			ND		550	ND		550
180	ND		0.7	ND		350	ND			ND		350	ND		350
280	ND		1.1	ND		550	ND			ND		550	ND		550
150	ND		0.6	ND		300	ND			ND		300	ND		300
240	ND		1	ND		480	ND			ND		480	ND		480
130	ND		0.5	ND		250	ND			ND		250	ND		250
250	ND		1	ND		500	ND			ND		500	ND		500
200	ND		0.8	ND		400	ND			ND		400	ND		400
300	ND		1.2	ND		600	ND			ND		600	ND		600
350	ND		1.4	ND		700	ND			ND		700	ND		700
200	ND		0.8	ND		400	ND			ND		400	ND		400
250	ND		1	ND		500	ND			ND		500	ND		500
200	ND		0.8	ND		400	ND			ND		400	ND		400
180	ND		0.7	ND		350	ND			ND		350	ND		350

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

EW-4			EW-4			EWA4			EW-4DL			EWA4		
65359			66170			66540			63931DL			67514		
1/25/99			2/1/99			2/5/99			1/5/99			2/23/99		
1/26/99			2/2/99			2/6/99			1/6/98			2/24/99		
WATER			WATER			WATER			WATER			WATER		
ug/L			ug/L			ug/L			ug/L			ug/L		
CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
ND		180	ND		1.8	ND		460	ND		9.2	ND		180
ND		180	ND		1.8	ND		460	ND		9.2	ND		180
ND		130	ND		1.3	ND		330	ND		6.5	ND		130
ND		170	ND		1.7	ND		420	ND		8.3	ND		170
ND		200	ND		2	ND		510	ND		10	ND		200
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		130	ND		1.3	ND		320	ND		6.3	ND		130
ND		57	ND		0.6	ND		140	ND		2.9	ND		57
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		73	ND		0.7	ND		180	ND		3.7	ND		73
ND		68	ND		0.7	ND		170	ND		3.4	ND		68
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		37	ND		0.4	ND		93	ND		1.9	ND		37
ND		100	ND		1	ND		250	ND		5	ND		100
ND		84	ND		0.8	ND		210	ND		4.2	ND		84
ND		87	ND		0.9	ND		220	ND		4.4	ND		87
ND		84	ND		1	7.4		210	ND		4.2	ND		84
ND		86	ND		0.9	ND		220	ND		4.3	ND		86
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		150	ND		2	150		380	ND		2	28		150
ND		73	ND		0.7	ND		180	ND		3.7	ND		73
ND		85	ND		0.9	ND		210	ND		4.3	ND		85
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
42600		1	7300		1	1400	E	1	3900	D	1	2100	E	1
ND		100	ND		1	ND		250	ND		5	ND		100
ND		88	ND		0.9	ND		220	ND		4.4	ND		88
ND		60	ND		0.6	ND		150	ND		3	ND		60
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		13	ND		0.1	ND		33	ND		0.7	ND		13
ND		100	ND		1	ND		250	ND		5	ND		100
ND		23	ND		0.2	ND		58	ND		1.2	ND		23
ND		90	ND		1	6.1		230	ND		4.5	ND		90
ND		500	ND		5	ND		1300	ND		25	ND		500
ND		90	ND		1	5.5		230	ND		4.5	ND		90
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		100	ND		1	ND		250	ND		5	ND		100
ND		120	ND		1.2	ND		300	ND		6	ND		120

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

ND		500	ND		5	ND		1300	ND		25	ND		500
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		90	ND		1	5		230	ND		4.5	ND		90
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		130	ND		1.3	ND		330	ND		6.5	ND		130
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		45	ND		0.5	ND		110	ND		2.3	ND		45
ND		50	ND		0.5	ND		130	ND		2.5	ND		50
ND		100	ND		1	ND		250	ND		5	ND		100
ND		70	ND		0.7	ND		180	ND		3.5	ND		70
ND		110	ND		1.1	ND		280	ND		5.5	ND		110
ND		110	ND		1.1	ND		280	ND		5.5	ND		110
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		100	ND		1	ND		250	ND		5	ND		100
ND		90	ND		0.9	ND		230	ND		4.5	ND		90
ND		110	ND		1.1	ND		280	ND		5.5	ND		110
ND		70	ND		0.7	ND		180	ND		3.5	ND		70
ND		110	ND		1.1	ND		280	ND		5.5	ND		110
ND		60	ND		0.6	ND		150	ND		3	ND		60
ND		95	ND		1	ND		240	ND		4.8	ND		95
ND		50	ND		0.5	ND		130	ND		2.5	ND		50
ND		100	ND		1	ND		250	ND		5	ND		100
ND		80	ND		0.8	ND		200	ND		4	ND		80
ND		120	ND		1.2	ND		300	ND		6	ND		120
ND		140	ND		1.4	ND		350	ND		7	ND		140
ND		80	ND		0.8	ND		200	ND		4	ND		80
ND		100	ND		1	ND		250	ND		5	ND		100
ND		80	ND		0.8	ND		200	ND		4	ND		80
ND		70	ND		0.7	ND		180	ND		3.5	ND		70

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

EWA4DL			EWA4			EWA4	
67514DL			68746			68964	
2/23/99			3/12/99			3/18/99	
2/24/99			3/13/99			3/19/99	
WATER			WATER			WATER	
ug/L			ug/L			ug/L	
CONC	Q	MDL	CONC	Q	MDL	CONC	Q
ND		92	ND		1.8	ND	
ND		92	ND		1.8	ND	
ND		65	ND		1.3	ND	
ND		83	ND		1.7	ND	
ND		100	ND		2	ND	
ND		250	ND		5	ND	
ND		63	ND		1.3	ND	
ND		29	ND		0.6	ND	
ND		250	ND		5	ND	
ND		250	ND		5	ND	
ND		37	ND		0.7	ND	
ND		34	ND		0.7	ND	
ND		250	ND		5	ND	
ND		19	ND		0.4	ND	
ND		50	ND		1	ND	
ND		42	ND		0.8	ND	
ND		44	ND		0.9	ND	
ND		42	ND		1	5.7	
ND		43	ND		0.9	ND	
ND		250	ND		5	ND	
ND		250	ND		5	ND	
ND		76	ND		2	150	
ND		37	ND		0.7	ND	
ND		43	ND		0.9	ND	
ND		45	ND		0.9	ND	
2000	D	1	4300		1	1900	E
ND		50	ND		1	ND	
ND		44	ND		0.9	ND	
ND		30	ND		0.6	ND	
ND		250	ND		5	ND	
ND		6.5	ND		0.1	ND	
ND		50	ND		1	ND	
ND		12	ND		0.2	ND	
ND		45	ND		1	5.9	
ND		250	ND		5	ND	
ND		45	ND		1	8.3	
ND		45	ND		0.9	ND	
ND		50	ND		1	ND	
ND		60	ND		1.2	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A4

ND		250	ND		5	ND	
ND		45	ND		0.9	ND	
ND		45	ND		1	7.2	
ND		45	ND		0.9	ND	
ND		65	ND		1.3	ND	
ND		45	ND		0.9	ND	
ND		23	ND		0.5	ND	
ND		25	ND		0.5	ND	
ND		50	ND		1	ND	
ND		35	ND		0.7	ND	
ND		55	ND		1.1	ND	
ND		55	ND		1.1	ND	
ND		45	ND		0.9	ND	
ND		50	ND		1	ND	
ND		45	ND		0.9	ND	
ND		55	ND		1.1	ND	
ND		35	ND		0.7	ND	
ND		55	ND		1.1	ND	
ND		30	ND		0.6	ND	
ND		48	ND		1	ND	
ND		25	ND		0.5	ND	
ND		50	ND		1	ND	
ND		40	ND		0.8	ND	
ND		60	ND		1.2	ND	
ND		70	ND		1.4	ND	
ND		40	ND		0.8	ND	
ND		50	ND		1	ND	
ND		40	ND		0.8	ND	
ND		35	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

	Client Sample ID		EW-5A			EW-5ADL			EW-5A		
	Lab Sample ID		64177			64177DL			64314		
	Sample Collection Date		1/7/99			1/7/99			1/8/99		
	Sample Receipt Date		1/8/99			1/8/99			1/9/99		
	Sample Matrix		WATER			WATER			WATER		
	Units		ug/L			ug/L			ug/L		
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
	TCL VOA										
75-71-8	Dichlorodifluoromethane	1.8	ND		920	ND		1.8	ND		920
74-87-3	Chloromethane	2	2		920	ND		1.8	ND		920
75-01-4	Vinyl Chloride	1	2.1		650	ND		1.3	ND		650
74-83-9	Bromomethane	1.7	ND		830	ND		1.7	ND		830
75-00-3	Chloroethane	2	ND		1000	ND		2	ND		1000
107-02-8	Acrolein	5	ND		2500	ND		5	ND		2500
75-69-4	Trichlorofluoromethane	1.3	ND		630	ND		1.3	ND		630
75-35-4	1,1-Dichloroethene	1	10		290	ND		0.6	ND		290
67-64-1	Acetone	5	ND		2500	ND		5	6.2		2500
75-15-0	Carbon Disulfide	5	ND		2500	ND		5	ND		2500
75-09-2	Methylene Chloride	1	3.7		370	ND		0.7	ND		370
156-60-5	trans-1,2-Dichloroethene	0.7	ND		340	ND		0.7	ND		340
107-13-1	Acrylonitrile	5	ND		2500	ND		5	ND		2500
75-34-4	1,1-Dichloroethane	0.4	ND		190	ND		0.4	ND		190
590-20-7	2,2-Dichloropropane	1	ND		500	ND		1	ND		500
156-59-2	cis-1,2-dichloroethene	1	10		420	ND		0.8	ND		420
74-97-5	Bromochloromethane	0.9	ND		440	ND		0.9	ND		440
67-66-3	Chloroform	1	92		420	ND		1	28		420
71-55-6	1,1,1-Trichloroethane	0.9	ND		430	ND		0.9	ND		430
108-05-4	Vinyl Acetate	5	ND		2500	ND		5	ND		2500
78-93-3	2-Butanone	5	ND		2500	ND		5	ND		2500
56-23-5	Carbon Tetrachloride	2	2600	E	2	3500	D	2	640	E	760
563-58-6	1,1-Dichloropropene	0.7	ND		370	ND		0.7	ND		370
71-43-2	Benzene	1	12		430	ND		0.9	ND		430
107-06-2	1,2-Dichloroethane	1	2.5		450	ND		0.9	ND		450
79-01-6	Trichloroethene	1	3600	E	1	99100	D	1	2400	E	1
78-87-5	1,2-Dichloropropane	1	ND		500	ND		1	ND		500
74-95-3	Dibromomethane	0.9	ND		440	ND		0.9	ND		440
75-27-4	Bromodichloromethane	0.6	ND		300	ND		0.6	ND		300
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		2500	ND		5	ND		2500
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		65	ND		0.1	ND		65
108-88-3	Toluene	1	100		500	ND		1	18		500
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		120	ND		0.2	ND		120
79-00-5	1,1,2-Trichloroethane	1	96		450	ND		1	3.6		450
108-10-1	4-Methyl-2-Pentanone	5	ND		2500	ND		5	ND		2500
127-18-4	Tetrachloroethene	1	130		450	ND		1	10		450
142-28-9	1,3-Dichloropropane	0.9	ND		450	ND		0.9	ND		450
124-48-1	Dibromochloromethane	1	ND		500	ND		1	ND		500

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

106-93-4	1,2-Dibromoethane	1.2	ND		600	ND		1.2	ND		600
591-78-6	2-Hexanone	5	ND		2500	ND		5	ND		2500
108-90-7	Chlorobenzene	0.9	ND		450	ND		0.9	ND		450
630-20-6	1,1,1,2-Tetrachloroethane	1	110		450	ND		1	8.7		450
100-41-4	Ethylbenzene	1	21		450	ND		1	3		450
136777-61-2	m&p-xylenes	1	96		650	ND		1	14		650
95-47-6	o-xylene	1	43		450	ND		1	6.3		450
100-42-5	Styrene	0.5	ND		230	ND		0.5	ND		230
75-25-2	Bromoform	0.5	ND		250	ND		0.5	ND		250
98-82-8	isopropylbenzene	1	7.9		500	ND		1	ND		500
108-86-1	Bromobenzene	0.7	ND		350	ND		0.7	ND		350
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		550	ND		1.1	ND		550
96-18-4	1,2,3-Trichloropropane	1.1	ND		550	ND		1.1	ND		550
103-65-1	n-Propylbenzene	0.9	ND		450	ND		0.9	ND		450
95-49-8	2-Chlorotoluene	1	ND		500	ND		1	ND		500
106-43-4	4-Chlorotoluene	0.9	ND		450	ND		0.9	ND		450
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		550	ND		1.1	ND		550
98-06-6	tert-Butylbenzene	0.7	ND		350	ND		0.7	ND		350
95-63-6	1,2,4-Trimethylbenzene	1	4.1		550	ND		1.1	ND		550
135-98-8	sec-Butylbenzene	0.6	ND		300	ND		0.6	ND		300
541-73-1	1,3-Dichlorobenzene	1	ND		480	ND		1	ND		480
99-87-6	4-Isopropyltoluene	0.5	ND		250	ND		0.5	ND		250
106-46-7	1,4-Dichlorobenzene	1	ND		500	ND		1	ND		500
95-50-1	1,2-Dichlorobenzene	0.8	ND		400	ND		0.8	ND		400
104-51-8	n-Butylbenzene	1.2	ND		600	ND		1.2	ND		600
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		700	ND		1.4	ND		700
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		400	ND		0.8	ND		400
87-68-3	Hexachlorobutadiene	1	ND		500	ND		1	ND		500
91-20-3	Naphthalene	0.8	ND		400	ND		0.8	ND		400
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		350	ND		0.7	ND		350

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

EW-5DL			EW-5			EW-5DL			EW-5			EW-5BOT		
64314DL			64358			64358DL			65024			65022		
1/8/99			1/11/99			1/11/99			1/20/99			1/20/99		
1/9/99			1/12/99			1/12/99			1/21/99			1/21/99		
WATER			WATER			WATER			WATER			WATER		
ug/L			ug/L			ug/L			ug/L			ug/L		
CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
ND		1.8	ND		920	ND		920	ND		920	ND		920
ND		1.8	ND		920	ND		920	ND		920	ND		920
ND		1.3	ND		650	ND		650	ND		650	ND		650
ND		1.7	ND		830	ND		830	ND		830	ND		830
ND		2	ND		1000	ND		1000	ND		1000	ND		1000
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		1.3	ND		630	ND		630	ND		630	ND		630
ND		0.6	ND		290	ND		290	ND		290	ND		290
ND		5	2.8	J	2500	ND		2500	ND		2500	ND		2500
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		0.7	ND		370	ND		370	ND		370	ND		370
ND		0.7	ND		340	ND		340	ND		340	ND		340
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		0.4	ND		190	ND		190	ND		190	ND		190
ND		1	ND		500	ND		500	ND		500	ND		500
ND		1	2.6		420	ND		420	ND		420	ND		420
ND		0.9	ND		440	ND		440	ND		440	ND		440
ND		1	38		420	ND		420	ND		420	ND		420
ND		0.9	ND		430	ND		430	ND		430	ND		430
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		2	710	E	760	ND		760	ND		760	ND		760
ND		0.7	ND		370	ND		370	ND		370	ND		370
ND		0.9	ND		430	ND		430	ND		430	ND		430
ND		0.9	ND		450	ND		450	ND		450	ND		450
12500	D	1	2800	E	1	17200	D	1	8900		1	7100		1
ND		1	ND		500	ND		500	ND		500	ND		500
ND		0.9	ND		440	ND		440	ND		440	ND		440
ND		0.6	ND		300	ND		300	ND		300	ND		300
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		0.1	ND		65	ND		65	ND		65	ND		65
ND		1	19		500	ND		500	ND		500	ND		500
ND		0.2	ND		120	ND		120	ND		120	ND		120
ND		1	5.2		450	ND		450	ND		450	ND		450
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		1	12		450	ND		450	ND		450	ND		450
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		1	ND		500	ND		500	ND		500	ND		500

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

ND		1.2	ND		600	ND		600	ND		600	ND		600
ND		5	ND		2500	ND		2500	ND		2500	ND		2500
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		1	11		450	ND		450	ND		450	ND		450
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		1.3	ND		650	ND		650	ND		650	ND		650
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		0.5	ND		230	ND		230	ND		230	ND		230
ND		0.5	ND		250	ND		250	ND		250	ND		250
ND		1	ND		500	ND		500	ND		500	ND		500
ND		0.7	ND		350	ND		350	ND		350	ND		350
ND		1.1	ND		550	ND		550	ND		550	ND		550
ND		1.1	ND		550	ND		550	ND		550	ND		550
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		1	ND		500	ND		500	ND		500	ND		500
ND		0.9	ND		450	ND		450	ND		450	ND		450
ND		1.1	ND		550	ND		550	ND		550	ND		550
ND		0.7	ND		350	ND		350	ND		350	ND		350
ND		1.1	ND		550	ND		550	ND		550	ND		550
ND		0.6	ND		300	ND		300	ND		300	ND		300
ND		1	ND		480	ND		480	ND		480	ND		480
ND		0.5	ND		250	ND		250	ND		250	ND		250
ND		1	ND		500	ND		500	ND		500	ND		500
ND		0.8	ND		400	ND		400	ND		400	ND		400
ND		1.2	ND		600	ND		600	ND		600	ND		600
ND		1.4	ND		700	ND		700	ND		700	ND		700
ND		0.8	ND		400	ND		400	ND		400	ND		400
ND		1	ND		500	ND		500	ND		500	ND		500
ND		0.8	ND		400	ND		400	ND		400	ND		400
ND		0.7	ND		350	ND		350	ND		350	ND		350

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

EW-5			EW-5			EW-A5			EWA5			EWA5	
65361			66301			66691			68747			68965	
1/25/99			2/2/99			2/9/99			3/12/99			3/18/99	
1/26/99			2/3/99			2/10/99			3/13/99			3/19/99	
WATER			WATER			WATER			WATER			WATER	
ug/L			ug/L			ug/L			ug/L			ug/L	
CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
ND		180	ND		180	ND		92	ND		1.8	ND	
ND		180	ND		180	ND		92	ND		1.8	ND	
ND		130	ND		130	ND		65	ND		1.3	ND	
ND		170	ND		170	ND		83	ND		1.7	ND	
ND		200	ND		200	ND		100	ND		2	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		130	ND		130	ND		63	ND		1.3	ND	
ND		57	ND		57	ND		29	ND		0.6	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		73	ND		73	ND		37	ND		0.7	ND	
ND		68	ND		68	ND		34	ND		0.7	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		37	ND		37	ND		19	ND		0.4	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		84	ND		84	ND		42	ND		0.8	ND	
ND		87	ND		87	ND		44	ND		0.9	ND	
ND		84	ND		84	ND		42	ND		1	6.1	
ND		86	ND		86	ND		43	ND		0.9	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		150	ND		150	ND		2	110		2	120	
ND		73	ND		73	ND		37	ND		0.7	ND	
ND		85	ND		85	ND		43	ND		0.9	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
3900		1	2800		1	1800		1	6800		1	1900	E
ND		100	ND		100	ND		50	ND		1	ND	
ND		88	ND		88	ND		44	ND		0.9	ND	
ND		60	ND		60	ND		30	ND		0.6	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		13	ND		13	ND		6.5	ND		0.1	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		23	ND		23	ND		12	ND		0.2	ND	
ND		90	ND		90	ND		45	ND		1	2.1	
ND		500	ND		500	ND		250	ND		5	ND	
ND		90	ND		90	ND		45	ND		1	2.9	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		100	ND		100	ND		50	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A5

ND		120	ND		120	ND		60	ND		1.2	ND	
ND		500	ND		500	ND		250	ND		5	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		130	ND		130	ND		65	ND		1.3	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		45	ND		45	ND		23	ND		0.5	ND	
ND		50	ND		50	ND		25	ND		0.5	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		70	ND		70	ND		35	ND		0.7	ND	
ND		110	ND		110	ND		55	ND		1.1	ND	
ND		110	ND		110	ND		55	ND		1.1	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		90	ND		90	ND		45	ND		0.9	ND	
ND		110	ND		110	ND		55	ND		1.1	ND	
ND		70	ND		70	ND		35	ND		0.7	ND	
ND		110	ND		110	ND		55	ND		1.1	ND	
ND		60	ND		60	ND		30	ND		0.6	ND	
ND		95	ND		95	ND		48	ND		1	ND	
ND		50	ND		50	ND		25	ND		0.5	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		80	ND		80	ND		40	ND		0.8	ND	
ND		120	ND		120	ND		60	ND		1.2	ND	
ND		140	ND		140	ND		70	ND		1.4	ND	
ND		80	ND		80	ND		40	ND		0.8	ND	
ND		100	ND		100	ND		50	ND		1	ND	
ND		80	ND		80	ND		40	ND		0.8	ND	
ND		70	ND		70	ND		35	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

	Client Sample ID		EW-6-1			EW-6-1DL			EW-6-2	
	Lab Sample ID		64839			64839DL			64840	
	Sample Collection Date		1/18/99			1/18/99			1/18/99	
	Sample Receipt Date		1/19/99			1/19/99			1/19/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	180	ND		9200	ND		180	ND	
74-87-3	Chloromethane	180	ND		9200	ND		180	ND	
75-01-4	Vinyl Chloride	130	ND		6500	ND		130	ND	
74-83-9	Bromomethane	170	ND		8300	ND		170	ND	
75-00-3	Chloroethane	200	ND		10100	ND		200	ND	
107-02-8	Acrolein	500	ND		25000	ND		500	ND	
75-69-4	Trichlorofluoromethane	130	ND		6300	ND		130	ND	
75-35-4	1,1-Dichloroethene	57	ND		2900	ND		57	ND	
67-64-1	Acetone	0	210	J	25000	ND		500	ND	
75-15-0	Carbon Disulfide	500	ND		25000	ND		500	ND	
75-09-2	Methylene Chloride	73	ND		3700	ND		73	ND	
156-60-5	trans-1,2-Dichloroethene	68	ND		3400	ND		68	ND	
107-13-1	Acrylonitrile	500	ND		25000	ND		500	ND	
75-34-4	1,1-Dichloroethane	37	ND		1900	ND		37	ND	
590-20-7	2,2-Dichloropropane	100	ND		5000	ND		100	ND	
156-59-2	cis-1,2-dichloroethene	84	ND		4200	ND		84	ND	
74-97-5	Bromochloromethane	87	ND		4400	ND		87	ND	
67-66-3	Chloroform	1	530		4200	ND		1	680	
71-55-6	1,1,1-Trichloroethane	86	ND		4300	ND		86	ND	
108-05-4	Vinyl Acetate	500	ND		25000	ND		500	ND	
78-93-3	2-Butanone	500	ND		25000	ND		500	ND	
56-23-5	Carbon Tetrachloride	2	28800	E	2	20400	D	2	25200	E
563-58-6	1,1-Dichloropropene	73	ND		3700	ND		73	ND	
71-43-2	Benzene	85	ND		4300	ND		85	ND	
107-06-2	1,2-Dichloroethane	90	ND		4500	ND		90	ND	
79-01-6	Trichloroethene	1	154000	E	1	495500	D	1	154400	E
78-87-5	1,2-Dichloropropane	100	ND		5000	ND		100	ND	
74-95-3	Dibromomethane	88	ND		4400	ND		88	ND	
75-27-4	Bromodichloromethane	60	ND		3000	ND		60	ND	
110-07-3	2-Chloroethyl Vinyl Ether	500	ND		25000	ND		500	ND	
10061-01-5	cis-1,3-Dichloropropene	13	ND		650	ND		13	ND	
108-88-3	Toluene	1	2000		5000	ND		1	1700	
10061-02-6	trans-1,3-Dichloropropene	23	ND		1200	ND		23	ND	
79-00-5	1,1,2-Trichloroethane	1	380		4500	ND		1	470	
108-10-1	4-Methyl-2-Pentanone	500	ND		25000	ND		500	ND	
127-18-4	Tetrachloroethene	1	360		4500	ND		1	430	
142-28-9	1,3-Dichloropropane	90	ND		4500	ND		90	ND	
124-48-1	Dibromochloromethane	100	ND		5000	ND		100	ND	
106-93-4	1,2-Dibromoethane	120	ND		6000	ND		120	ND	
591-78-6	2-Hexanone	500	ND		25000	ND		500	ND	
108-90-7	Chlorobenzene	90	ND		4500	ND		90	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

630-20-6	1,1,1,2-Tetrachloroethane	1	300		4500	ND		1	390	
100-41-4	Ethylbenzene	1	320		4500	ND		1	250	
136777-61-2	m&p-xylenes	1	1300		6500	ND		1	1100	
95-47-6	o-xylene	1	410		4500	ND		1	330	
100-42-5	Styrene	45	ND		2300	ND		45	ND	
75-25-2	Bromoform	50	ND		2500	ND		50	ND	
98-82-8	isopropylbenzene	100	ND		5000	ND		100	ND	
108-86-1	Bromobenzene	70	ND		3500	ND		70	ND	
79-34-5	1,1,2,2-Tetrachloroethane	110	ND		5500	ND		110	ND	
96-18-4	1,2,3-Trichloropropane	110	ND		5500	ND		110	ND	
103-65-1	n-Propylbenzene	90	ND		4500	ND		90	ND	
95-49-8	2-Chlorotoluene	100	ND		5000	ND		100	ND	
106-43-4	4-Chlorotoluene	90	ND		4500	ND		90	ND	
108-67-8	1,3,5-Trimethylbenzene	110	ND		5500	ND		110	ND	
98-06-6	tert-Butylbenzene	70	ND		3500	ND		70	ND	
95-63-6	1,2,4-Trimethylbenzene	110	ND		5500	ND		110	ND	
135-98-8	sec-Butylbenzene	60	ND		3000	ND		60	ND	
541-73-1	1,3-Dichlorobenzene	95	ND		4800	ND		95	ND	
99-87-6	4-Isopropyltoluene	50	ND		2500	ND		50	ND	
106-46-7	1,4-Dichlorobenzene	100	ND		5000	ND		100	ND	
95-50-1	1,2-Dichlorobenzene	80	ND		4000	ND		80	ND	
104-51-8	n-Butylbenzene	120	ND		6000	ND		120	ND	
96-12-8	1,2-Dibromo-3-chloropropane	140	ND		7000	ND		140	ND	
120-82-1	1,2,4-Trichlorobenzene	80	ND		4000	ND		80	ND	
87-68-3	Hexachlorobutadiene	100	ND		5000	ND		100	ND	
91-20-3	Naphthalene	80	ND		4000	ND		80	ND	
87-61-6	1,2,3-Trichlorobenzene	70	ND		3500	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

	EW-6-2DL			EW-6BOT			EW-6BOTDL			EW-6			EW-6DL
	64840DL			65025			65025DL			65026			65026DL
	1/18/99			1/20/99			1/20/99			1/20/99			1/20/99
	1/19/99			1/21/99			1/21/99			1/21/99			1/21/99
	WATER			WATER			WATER			WATER			WATER
	ug/L			ug/L			ug/L			ug/L			ug/L
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
9200	ND		920	ND		18300	ND		920	ND		9200	ND
9200	ND		920	ND		18300	ND		920	ND		9200	ND
6500	ND		650	ND		13000	ND		650	ND		6500	ND
8300	ND		830	ND		16600	ND		830	ND		8300	ND
10100	ND		1000	ND		20200	ND		1000	ND		10100	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
6300	ND		630	ND		12600	ND		630	ND		6300	ND
2900	ND		290	ND		5700	ND		290	ND		2900	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
3700	ND		370	ND		7300	ND		370	ND		3700	ND
3400	ND		340	ND		6800	ND		340	ND		3400	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
1900	ND		190	ND		3700	ND		190	ND		1900	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
4200	ND		420	ND		8400	ND		420	ND		4200	ND
4400	ND		440	ND		8700	ND		440	ND		4400	ND
4200	ND		420	ND		8400	ND		420	ND		4200	ND
4300	ND		430	ND		8600	ND		430	ND		4300	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
2	14700	D	2	32600		15200	ND		2	24400		7600	ND
3700	ND		370	ND		7300	ND		370	ND		3700	ND
4300	ND		430	ND		8500	ND		430	ND		4300	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
1	423900	D	1	620200	E	1	1001900	D	1	554600	E	1	612900
5000	ND		500	ND		10000	ND		500	ND		5000	ND
4400	ND		440	ND		8800	ND		440	ND		4400	ND
3000	ND		300	ND		6000	ND		300	ND		3000	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
650	ND		65	ND		1300	ND		65	ND		650	ND
5000	ND		1	4000		10000	ND		1	2800		5000	ND
1200	ND		120	ND		2300	ND		120	ND		1200	ND
4500	ND		1	1200		9000	ND		450	ND		4500	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
6000	ND		600	ND		12000	ND		600	ND		6000	ND
25000	ND		2500	ND		50000	ND		2500	ND		25000	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

4500	ND		450	ND		9000	ND		450	ND		4500	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
6500	ND		1	1400		13000	ND		650	ND		6500	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
2300	ND		230	ND		4500	ND		230	ND		2300	ND
2500	ND		250	ND		5000	ND		250	ND		2500	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
3500	ND		350	ND		7000	ND		350	ND		3500	ND
5500	ND		550	ND		11000	ND		550	ND		5500	ND
5500	ND		550	ND		11000	ND		550	ND		5500	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
4500	ND		450	ND		9000	ND		450	ND		4500	ND
5500	ND		550	ND		11000	ND		550	ND		5500	ND
3500	ND		350	ND		7000	ND		350	ND		3500	ND
5500	ND		550	ND		11000	ND		550	ND		5500	ND
3000	ND		300	ND		6000	ND		300	ND		3000	ND
4800	ND		480	ND		9500	ND		480	ND		4800	ND
2500	ND		250	ND		5000	ND		250	ND		2500	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
4000	ND		400	ND		8000	ND		400	ND		4000	ND
6000	ND		600	ND		12000	ND		600	ND		6000	ND
7000	ND		700	ND		14000	ND		700	ND		7000	ND
4000	ND		400	ND		8000	ND		400	ND		4000	ND
5000	ND		500	ND		10000	ND		500	ND		5000	ND
4000	ND		400	ND		8000	ND		400	ND		4000	ND
3500	ND		350	ND		7000	ND		350	ND		3500	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

		EW-6			EW-6			EW-6DL			EW-6 BOT			EW-6 BOTDL
		65448			66168			66168DL			66166			66166DL
		1/26/99			2/1/99			2/1/99			2/1/99			2/1/99
		1/27/99			2/2/99			2/2/99			2/2/99			2/2/99
		WATER			WATER			WATER			WATER			WATER
		ug/L			ug/L			ug/L			ug/L			ug/L
Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
	1800	ND		180	ND		18300	ND		180	ND		18300	ND
	1800	ND		180	ND		18300	ND		180	ND		18300	ND
	1300	ND		130	ND		13000	ND		130	ND		13000	ND
	1700	ND		170	ND		16600	ND		170	ND		16600	ND
	2000	ND		200	ND		20200	ND		200	ND		20200	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	1300	ND		130	ND		12600	ND		130	ND		12600	ND
	570	ND		57	ND		5700	ND		57	ND		5700	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	730	ND		73	ND		1	22800	D	73	ND		1	20700
	680	ND		68	ND		6800	ND		68	ND		6800	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	370	ND		37	ND		3700	ND		37	ND		3700	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	840	ND		84	ND		8400	ND		84	ND		8400	ND
	870	ND		87	ND		8700	ND		87	ND		8700	ND
	840	ND		1	1200		8400	ND		1	1700		8400	ND
	860	ND		86	ND		8600	ND		86	ND		8600	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	2	17200		2	19800	E	15200	ND		2	25800	E	15200	ND
	730	ND		73	ND		7300	ND		73	ND		7300	ND
	850	ND		85	ND		8500	ND		85	ND		8500	ND
	900	ND		90	ND		9000	ND		90	ND		9000	ND
D	1	761000	E	1	155500	E	1	1219200	D	1	168700	E	1	906400
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	880	ND		88	ND		8800	ND		88	ND		8800	ND
	600	ND		60	ND		6000	ND		60	ND		6000	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	130	ND		13	ND		1300	ND		13	ND		1300	ND
	1	2600		1	2700		10000	ND		1	3600		10000	ND
	230	ND		23	ND		2300	ND		23	ND		2300	ND
	900	ND		1	630		9000	ND		1	440		9000	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	900	ND		1	350		9000	ND		1	350		9000	ND
	900	ND		90	ND		9000	ND		90	ND		9000	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	1200	ND		120	ND		12000	ND		120	ND		12000	ND
	5000	ND		500	ND		50000	ND		500	ND		50000	ND
	900	ND		90	ND		9000	ND		90	ND		9000	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

	900	ND		1	290		9000	ND		1	300		9000	ND
	900	ND		1	370		9000	ND		1	440		9000	ND
	1300	ND		1	1500		13000	ND		1	1800		13000	ND
	900	ND		1	470		9000	ND		1	540		9000	ND
	450	ND		45	ND		4500	ND		45	ND		4500	ND
	500	ND		50	ND		5000	ND		50	ND		5000	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	700	ND		70	ND		7000	ND		70	ND		7000	ND
	1100	ND		110	ND		11000	ND		110	ND		11000	ND
	1100	ND		110	ND		11000	ND		110	ND		11000	ND
	900	ND		90	ND		9000	ND		90	ND		9000	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	900	ND		90	ND		9000	ND		90	ND		9000	ND
	1100	ND		110	ND		11000	ND		110	ND		11000	ND
	700	ND		70	ND		7000	ND		70	ND		7000	ND
	1100	ND		110	ND		11000	ND		110	ND		11000	ND
	600	ND		60	ND		6000	ND		60	ND		6000	ND
	950	ND		95	ND		9500	ND		95	ND		9500	ND
	500	ND		50	ND		5000	ND		50	ND		5000	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	800	ND		80	ND		8000	ND		80	ND		8000	ND
	1200	ND		120	ND		12000	ND		120	ND		12000	ND
	1400	ND		140	ND		14000	ND		140	ND		14000	ND
	800	ND		80	ND		8000	ND		80	ND		8000	ND
	1000	ND		100	ND		10000	ND		100	ND		10000	ND
	800	ND		80	ND		8000	ND		80	ND		8000	ND
	700	ND		70	ND		7000	ND		70	ND		7000	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

		EW-A6			EW-A6DL			EWA6			EWA6DL			EWA6
		66693			66693DL			67690			67690DL			68967
		2/9/99			2/9/99			2/25/99			2/25/99			3/18/99
		2/10/99			2/10/99			2/26/99			2/26/99			3/19/99
		WATER			WATER			WATER			WATER			WATER
		ug/L			ug/L			ug/L			ug/L			ug/L
Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
	180	ND		9200	ND		180	ND		9200	ND		180	ND
	180	ND		9200	ND		180	ND		9200	ND		180	ND
	130	ND		6500	ND		130	ND		6500	ND		130	ND
	170	ND		8300	ND		170	ND		8300	ND		170	ND
	200	ND		10100	ND		200	ND		10100	ND		200	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	130	ND		6300	ND		130	ND		6300	ND		130	ND
	57	ND		2900	ND		57	ND		2900	ND		57	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
D	73	ND		3700	ND		73	ND		3700	ND		73	ND
	68	ND		3400	ND		68	ND		3400	ND		68	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	37	ND		1900	ND		37	ND		1900	ND		37	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	84	ND		4200	ND		84	ND		4200	ND		84	ND
	87	ND		4400	ND		87	ND		4400	ND		87	ND
	1	1500		4200	ND		1	290		4200	ND		1	270
	86	ND		4300	ND		86	ND		4300	ND		86	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	2	10500		7600	ND		2	5900		7600	ND		2	4100
	73	ND		3700	ND		73	ND		3700	ND		73	ND
	85	ND		4300	ND		85	ND		4300	ND		85	ND
	90	ND		4500	ND		90	ND		4500	ND		90	ND
D	1	168600	E	1	728500	D	1	184900	E	1	354900	D	1	129500
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	88	ND		4400	ND		88	ND		4400	ND		88	ND
	60	ND		3000	ND		60	ND		3000	ND		60	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	13	ND		650	ND		13	ND		650	ND		13	ND
	1	2600		5000	ND		1	460		5000	ND		1	480
	23	ND		1200	ND		23	ND		1200	ND		23	ND
	1	280		4500	ND		1	320		4500	ND		1	310
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	1	290		4500	ND		1	440		4500	ND		1	300
	90	ND		4500	ND		90	ND		4500	ND		90	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	120	ND		6000	ND		120	ND		6000	ND		120	ND
	500	ND		25000	ND		500	ND		25000	ND		500	ND
	90	ND		4500	ND		90	ND		4500	ND		90	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

	1	250		4500	ND		1	270		4500	ND		90	ND
	1	450		4500	ND		90	ND		4500	ND		90	ND
	1	1900		6500	ND		1	280		6500	ND		1	290
	1	590		4500	ND		90	ND		4500	ND		90	ND
	45	ND		2300	ND		45	ND		2300	ND		45	ND
	50	ND		2500	ND		50	ND		2500	ND		50	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	70	ND		3500	ND		70	ND		3500	ND		70	ND
	110	ND		5500	ND		110	ND		5500	ND		110	ND
	110	ND		5500	ND		110	ND		5500	ND		110	ND
	90	ND		4500	ND		90	ND		4500	ND		90	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	90	ND		4500	ND		90	ND		4500	ND		90	ND
	110	ND		5500	ND		110	ND		5500	ND		110	ND
	70	ND		3500	ND		70	ND		3500	ND		70	ND
	110	ND		5500	ND		110	ND		5500	ND		110	ND
	60	ND		3000	ND		60	ND		3000	ND		60	ND
	95	ND		4800	ND		95	ND		4800	ND		95	ND
	50	ND		2500	ND		50	ND		2500	ND		50	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	80	ND		4000	ND		80	ND		4000	ND		80	ND
	120	ND		6000	ND		120	ND		6000	ND		120	ND
	140	ND		7000	ND		140	ND		7000	ND		140	ND
	80	ND		4000	ND		80	ND		4000	ND		80	ND
	100	ND		5000	ND		100	ND		5000	ND		100	ND
	80	ND		4000	ND		80	ND		4000	ND		80	ND
	70	ND		3500	ND		70	ND		3500	ND		70	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

		EWA6D	
		68968	
		3/18/99	
		3/19/99	
		WATER	
		ug/L	
Q	MDL	CONC	Q
	180	ND	
	180	ND	
	130	ND	
	170	ND	
	200	ND	
	500	ND	
	130	ND	
	57	ND	
	500	ND	
	500	ND	
	73	ND	
	68	ND	
	500	ND	
	37	ND	
	100	ND	
	84	ND	
	87	ND	
	1	280	
	86	ND	
	500	ND	
	500	ND	
	2	4000	
	73	ND	
	85	ND	
	90	ND	
E	1	69000	E
	100	ND	
	88	ND	
	60	ND	
	500	ND	
	13	ND	
	1	490	
	23	ND	
	1	300	
	500	ND	
	1	300	
	90	ND	
	100	ND	
	120	ND	
	500	ND	
	90	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAWC, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A6

	1	260	
	90	ND	
	1	280	
	90	ND	
	45	ND	
	50	ND	
	100	ND	
	70	ND	
	110	ND	
	110	ND	
	90	ND	
	100	ND	
	90	ND	
	110	ND	
	70	ND	
	110	ND	
	60	ND	
	95	ND	
	50	ND	
	100	ND	
	80	ND	
	120	ND	
	140	ND	
	80	ND	
	100	ND	
	80	ND	
	70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

	Client Sample ID		EW-7			EW-7DL			EW-7 BOT	
	Lab Sample ID		65547			65547DL			66167	
	Sample Collection Date		1/27/99			1/27/99			2/1/99	
	Sample Receipt Date		1/28/99			1/28/99			2/2/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	920	ND		9200	ND		180	ND	
74-87-3	Chloromethane	920	ND		9200	ND		180	ND	
75-01-4	Vinyl Chloride	650	ND		6500	ND		130	ND	
74-83-9	Bromomethane	830	ND		8300	ND		170	ND	
75-00-3	Chloroethane	1000	ND		10100	ND		200	ND	
107-02-8	Acrolein	2500	ND		25000	ND		500	ND	
75-69-4	Trichlorofluoromethane	630	ND		6300	ND		130	ND	
75-35-4	1,1-Dichloroethene	290	ND		2900	ND		57	ND	
67-64-1	Acetone	2500	ND		25000	ND		500	ND	
75-15-0	Carbon Disulfide	2500	ND		25000	ND		500	ND	
75-09-2	Methylene Chloride	370	ND		3700	ND		73	ND	
156-60-5	trans-1,2-Dichloroethene	340	ND		3400	ND		68	ND	
107-13-1	Acrylonitrile	2500	ND		25000	ND		500	ND	
75-34-4	1,1-Dichloroethane	190	ND		1900	ND		37	ND	
590-20-7	2,2-Dichloropropane	500	ND		5000	ND		100	ND	
156-59-2	cis-1,2-dichloroethene	420	ND		4200	ND		84	ND	
74-97-5	Bromochloromethane	440	ND		4400	ND		87	ND	
67-66-3	Chloroform	420	ND		4200	ND		1	2400	
71-55-6	1,1,1-Trichloroethane	430	ND		4300	ND		86	ND	
108-05-4	Vinyl Acetate	2500	ND		25000	ND		500	ND	
78-93-3	2-Butanone	2500	ND		25000	ND		500	ND	
56-23-5	Carbon Tetrachloride	2	14100		7600	ND		2	14600	E
563-58-6	1,1-Dichloropropene	370	ND		3700	ND		73	ND	
71-43-2	Benzene	430	ND		4300	ND		85	ND	
107-06-2	1,2-Dichloroethane	450	ND		4500	ND		90	ND	
79-01-6	Trichloroethene	1	404700	E	1	490400	D	1	152100	E
78-87-5	1,2-Dichloropropane	500	ND		5000	ND		100	ND	
74-95-3	Dibromomethane	440	ND		4400	ND		88	ND	
75-27-4	Bromodichloromethane	300	ND		3000	ND		60	ND	
110-07-3	2-Chloroethyl Vinyl Ether	2500	ND		25000	ND		500	ND	
10061-01-5	cis-1,3-Dichloropropene	65	ND		650	ND		13	ND	
108-88-3	Toluene	1	1700		5000	ND		1	1800	
10061-02-6	trans-1,3-Dichloropropene	120	ND		1200	ND		23	ND	
79-00-5	1,1,2-Trichloroethane	450	ND		4500	ND		1	880	
108-10-1	4-Methyl-2-Pentanone	2500	ND		25000	ND		500	ND	
127-18-4	Tetrachloroethene	450	ND		4500	ND		1	430	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

142-28-9	1,3-Dichloropropane	450	ND		4500	ND		90	ND	
124-48-1	Dibromochloromethane	500	ND		5000	ND		100	ND	
106-93-4	1,2-Dibromoethane	600	ND		6000	ND		120	ND	
591-78-6	2-Hexanone	2500	ND		25000	ND		500	ND	
108-90-7	Chlorobenzene	450	ND		4500	ND		90	ND	
630-20-6	1,1,1,2-Tetrachloroethane	450	ND		4500	ND		90	ND	
100-41-4	Ethylbenzene	450	ND		4500	ND		1	250	
136777-61-2	m&p-xylenes	650	ND		6500	ND		1	1000	
95-47-6	o-xylene	450	ND		4500	ND		1	310	
100-42-5	Styrene	230	ND		2300	ND		45	ND	
75-25-2	Bromoform	250	ND		2500	ND		50	ND	
98-82-8	isopropylbenzene	500	ND		5000	ND		100	ND	
108-86-1	Bromobenzene	350	ND		3500	ND		70	ND	
79-34-5	1,1,2,2-Tetrachloroethane	550	ND		5500	ND		110	ND	
96-18-4	1,2,3-Trichloropropane	550	ND		5500	ND		110	ND	
103-65-1	n-Propylbenzene	450	ND		4500	ND		90	ND	
95-49-8	2-Chlorotoluene	500	ND		5000	ND		100	ND	
106-43-4	4-Chlorotoluene	450	ND		4500	ND		90	ND	
108-67-8	1,3,5-Trimethylbenzene	550	ND		5500	ND		110	ND	
98-06-6	tert-Butylbenzene	350	ND		3500	ND		70	ND	
95-63-6	1,2,4-Trimethylbenzene	550	ND		5500	ND		110	ND	
135-98-8	sec-Butylbenzene	300	ND		3000	ND		60	ND	
541-73-1	1,3-Dichlorobenzene	480	ND		4800	ND		95	ND	
99-87-6	4-Isopropyltoluene	250	ND		2500	ND		50	ND	
106-46-7	1,4-Dichlorobenzene	500	ND		5000	ND		100	ND	
95-50-1	1,2-Dichlorobenzene	400	ND		4000	ND		80	ND	
104-51-8	n-Butylbenzene	600	ND		6000	ND		120	ND	
96-12-8	1,2-Dibromo-3-chloropropane	700	ND		7000	ND		140	ND	
120-82-1	1,2,4-Trichlorobenzene	400	ND		4000	ND		80	ND	
87-68-3	Hexachlorobutadiene	500	ND		5000	ND		100	ND	
91-20-3	Naphthalene	400	ND		4000	ND		80	ND	
87-61-6	1,2,3-Trichlorobenzene	350	ND		3500	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

	Client Sample ID		EW-7 BOTDL			EW-7			EWA7
	Lab Sample ID		66167DL			66302			67691
	Sample Collection Date		2/1/99			2/2/99			2/25/99
	Sample Receipt Date		2/2/99			2/3/99			2/26/99
	Sample Matrix		WATER			WATER			WATER
	Units		ug/L			ug/L			ug/L
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
	TCL VOA								
75-71-8	Dichlorodifluoromethane	18300	ND		9200	ND		180	ND
74-87-3	Chloromethane	18300	ND		9200	ND		180	ND
75-01-4	Vinyl Chloride	13000	ND		6500	ND		130	ND
74-83-9	Bromomethane	16600	ND		8300	ND		170	ND
75-00-3	Chloroethane	20200	ND		10100	ND		200	ND
107-02-8	Acrolein	50000	ND		25000	ND		500	ND
75-69-4	Trichlorofluoromethane	12600	ND		6300	ND		130	ND
75-35-4	1,1-Dichloroethene	5700	ND		2900	ND		57	ND
67-64-1	Acetone	50000	ND		25000	ND		500	ND
75-15-0	Carbon Disulfide	50000	ND		25000	ND		500	ND
75-09-2	Methylene Chloride	7300	ND		1	10700		73	ND
156-60-5	trans-1,2-Dichloroethene	6800	ND		3400	ND		68	ND
107-13-1	Acrylonitrile	50000	ND		25000	ND		500	ND
75-34-4	1,1-Dichloroethane	3700	ND		1900	ND		37	ND
590-20-7	2,2-Dichloropropane	10000	ND		5000	ND		100	ND
156-59-2	cis-1,2-dichloroethene	8400	ND		4200	ND		84	ND
74-97-5	Bromochloromethane	8700	ND		4400	ND		87	ND
67-66-3	Chloroform	8400	ND		4200	ND		1	220
71-55-6	1,1,1-Trichloroethane	8600	ND		4300	ND		86	ND
108-05-4	Vinyl Acetate	50000	ND		25000	ND		500	ND
78-93-3	2-Butanone	50000	ND		25000	ND		500	ND
56-23-5	Carbon Tetrachloride	15200	ND		7600	ND		2	2100
563-58-6	1,1-Dichloropropene	7300	ND		3700	ND		73	ND
71-43-2	Benzene	8500	ND		4300	ND		85	ND
107-06-2	1,2-Dichloroethane	9000	ND		4500	ND		90	ND
79-01-6	Trichloroethene	1	739500	D	1	689200		1	91300
78-87-5	1,2-Dichloropropane	10000	ND		5000	ND		100	ND
74-95-3	Dibromomethane	8800	ND		4400	ND		88	ND
75-27-4	Bromodichloromethane	6000	ND		3000	ND		60	ND
110-07-3	2-Chloroethyl Vinyl Ether	50000	ND		25000	ND		500	ND
10061-01-5	cis-1,3-Dichloropropene	1300	ND		650	ND		13	ND
108-88-3	Toluene	10000	ND		5000	ND		1	250
10061-02-6	trans-1,3-Dichloropropene	2300	ND		1200	ND		23	ND
79-00-5	1,1,2-Trichloroethane	9000	ND		4500	ND		1	280
108-10-1	4-Methyl-2-Pentanone	50000	ND		25000	ND		500	ND
127-18-4	Tetrachloroethene	9000	ND		4500	ND		1	380

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

142-28-9	1,3-Dichloropropane	9000	ND		4500	ND		90	ND
124-48-1	Dibromochloromethane	10000	ND		5000	ND		100	ND
106-93-4	1,2-Dibromoethane	12000	ND		6000	ND		120	ND
591-78-6	2-Hexanone	50000	ND		25000	ND		500	ND
108-90-7	Chlorobenzene	9000	ND		4500	ND		90	ND
630-20-6	1,1,1,2-Tetrachloroethane	9000	ND		4500	ND		1	330
100-41-4	Ethylbenzene	9000	ND		4500	ND		90	ND
136777-61-2	m&p-xylenes	13000	ND		6500	ND		130	ND
95-47-6	o-xylene	9000	ND		4500	ND		90	ND
100-42-5	Styrene	4500	ND		2300	ND		45	ND
75-25-2	Bromoform	5000	ND		2500	ND		50	ND
98-82-8	isopropylbenzene	10000	ND		5000	ND		100	ND
108-86-1	Bromobenzene	7000	ND		3500	ND		70	ND
79-34-5	1,1,2,2-Tetrachloroethane	11000	ND		5500	ND		110	ND
96-18-4	1,2,3-Trichloropropane	11000	ND		5500	ND		110	ND
103-65-1	n-Propylbenzene	9000	ND		4500	ND		90	ND
95-49-8	2-Chlorotoluene	10000	ND		5000	ND		100	ND
106-43-4	4-Chlorotoluene	9000	ND		4500	ND		90	ND
108-67-8	1,3,5-Trimethylbenzene	11000	ND		5500	ND		110	ND
98-06-6	tert-Butylbenzene	7000	ND		3500	ND		70	ND
95-63-6	1,2,4-Trimethylbenzene	11000	ND		5500	ND		110	ND
135-98-8	sec-Butylbenzene	6000	ND		3000	ND		60	ND
541-73-1	1,3-Dichlorobenzene	9500	ND		4800	ND		95	ND
99-87-6	4-Isopropyltoluene	5000	ND		2500	ND		50	ND
106-46-7	1,4-Dichlorobenzene	10000	ND		5000	ND		100	ND
95-50-1	1,2-Dichlorobenzene	8000	ND		4000	ND		80	ND
104-51-8	n-Butylbenzene	12000	ND		6000	ND		120	ND
96-12-8	1,2-Dibromo-3-chloropropane	14000	ND		7000	ND		140	ND
120-82-1	1,2,4-Trichlorobenzene	8000	ND		4000	ND		80	ND
87-68-3	Hexachlorobutadiene	10000	ND		5000	ND		100	ND
91-20-3	Naphthalene	8000	ND		4000	ND		80	ND
87-61-6	1,2,3-Trichlorobenzene	7000	ND		3500	ND		70	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

	Client Sample ID			**EWA7DL**			**EWA7**	
	Lab Sample ID			67691DL				
	Sample Collection Date			2/25/99			3/18/99	
	Sample Receipt Date			2/26/99			3/19/09	
	Sample Matrix			WATER			WATER	
	Units			ug/L			ug/L	
		Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA							
75-71-8	Dichlorodifluoromethane		9200	ND		180	ND	
74-87-3	Chloromethane		9200	ND		180	ND	
75-01-4	Vinyl Chloride		6500	ND		130	ND	
74-83-9	Bromomethane		8300	ND		170	ND	
75-00-3	Chloroethane		10100	ND		200	ND	
107-02-8	Acrolein		25000	ND		500	ND	
75-69-4	Trichlorofluoromethane		6300	ND		130	ND	
75-35-4	1,1-Dichloroethene		2900	ND		57	ND	
67-64-1	Acetone		25000	ND		500	ND	
75-15-0	Carbon Disulfide		25000	ND		500	ND	
75-09-2	Methylene Chloride		3700	ND		73	ND	
156-60-5	trans-1,2-Dichloroethene		3400	ND		68	ND	
107-13-1	Acrylonitrile		25000	ND		500	ND	
75-34-4	1,1-Dichloroethane		1900	ND		37	ND	
590-20-7	2,2-Dichloropropane		5000	ND		100	ND	
156-59-2	cis-1,2-dichloroethene		4200	ND		84	ND	
74-97-5	Bromochloromethane		4400	ND		87	ND	
67-66-3	Chloroform		4200	ND		1	330	
71-55-6	1,1,1-Trichloroethane		4300	ND		86	ND	
108-05-4	Vinyl Acetate		25000	ND		500	ND	
78-93-3	2-Butanone		25000	ND		500	ND	
56-23-5	Carbon Tetrachloride		7600	ND		2	7600	
563-58-6	1,1-Dichloropropene		3700	ND		73	ND	
71-43-2	Benzene		4300	ND		85	ND	
107-06-2	1,2-Dichloroethane		4500	ND		90	ND	
79-01-6	Trichloroethene	E	1	156500	D	1	107300	E
78-87-5	1,2-Dichloropropane		5000	ND		100	ND	
74-95-3	Dibromomethane		4400	ND		88	ND	
75-27-4	Bromodichloromethane		3000	ND		60	ND	
110-07-3	2-Chloroethyl Vinyl Ether		25000	ND		500	ND	
10061-01-5	cis-1,3-Dichloropropene		650	ND		13	ND	
108-88-3	Toluene		5000	ND		1	730	
10061-02-6	trans-1,3-Dichloropropene		1200	ND		23	ND	
79-00-5	1,1,2-Trichloroethane		4500	ND		1	570	
108-10-1	4-Methyl-2-Pentanone		25000	ND		500	ND	
127-18-4	Tetrachloroethene		4500	ND		1	340	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A7

142-28-9	1,3-Dichloropropane		4500	ND		90	ND	
124-48-1	Dibromochloromethane		5000	ND		100	ND	
106-93-4	1,2-Dibromoethane		6000	ND		120	ND	
591-78-6	2-Hexanone		25000	ND		500	ND	
108-90-7	Chlorobenzene		4500	ND		90	ND	
630-20-6	1,1,1,2-Tetrachloroethane		4500	ND		1	250	
100-41-4	Ethylbenzene		4500	ND		90	ND	
136777-61-2	m&p-xylenes		6500	ND		1	360	
95-47-6	o-xylene		4500	ND		90	ND	
100-42-5	Styrene		2300	ND		45	ND	
75-25-2	Bromoform		2500	ND		50	ND	
98-82-8	isopropylbenzene		5000	ND		100	ND	
108-86-1	Bromobenzene		3500	ND		70	ND	
79-34-5	1,1,2,2-Tetrachloroethane		5500	ND		110	ND	
96-18-4	1,2,3-Trichloropropane		5500	ND		110	ND	
103-65-1	n-Propylbenzene		4500	ND		90	ND	
95-49-8	2-Chlorotoluene		5000	ND		100	ND	
106-43-4	4-Chlorotoluene		4500	ND		90	ND	
108-67-8	1,3,5-Trimethylbenzene		5500	ND		110	ND	
98-06-6	tert-Butylbenzene		3500	ND		70	ND	
95-63-6	1,2,4-Trimethylbenzene		5500	ND		110	ND	
135-98-8	sec-Butylbenzene		3000	ND		60	ND	
541-73-1	1,3-Dichlorobenzene		4800	ND		95	ND	
99-87-6	4-Isopropyltoluene		2500	ND		50	ND	
106-46-7	1,4-Dichlorobenzene		5000	ND		100	ND	
95-50-1	1,2-Dichlorobenzene		4000	ND		80	ND	
104-51-8	n-Butylbenzene		6000	ND		120	ND	
96-12-8	1,2-Dibromo-3-chloropropane		7000	ND		140	ND	
120-82-1	1,2,4-Trichlorobenzene		4000	ND		80	ND	
87-68-3	Hexachlorobutadiene		5000	ND		100	ND	
91-20-3	Naphthalene		4000	ND		80	ND	
87-61-6	1,2,3-Trichlorobenzene		3500	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A8

	Client Sample ID		EW-8			EW-8DL			EW-A8	
	Lab Sample ID		66088			66088DL			66654	
	Sample Collection Date		1/29/99			1/29/99			2/8/99	
	Sample Receipt Date		2/1/99			2/1/99			2/9/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		18	ND		18	ND	
74-87-3	Chloromethane	1.8	ND		18	ND		18	ND	
75-01-4	Vinyl Chloride	1.3	ND		13	ND		13	ND	
74-83-9	Bromomethane	1.7	ND		17	ND		17	ND	
75-00-3	Chloroethane	2	ND		20	ND		20	ND	
107-02-8	Acrolein	5	ND		50	ND		50	ND	
75-69-4	Trichlorofluoromethane	1	250	E	1	210	D	1	190	
75-35-4	1,1-Dichloroethene	0.6	ND		5.7	ND		5.7	ND	
67-64-1	Acetone	5	ND		50	ND		50	ND	
75-15-0	Carbon Disulfide	5	ND		50	ND		50	ND	
75-09-2	Methylene Chloride	0.7	ND		7.3	ND		7.3	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		6.8	ND		6.8	ND	
107-13-1	Acrylonitrile	5	ND		50	ND		50	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		3.7	ND		3.7	ND	
590-20-7	2,2-Dichloropropane	1	ND		10	ND		10	ND	
156-59-2	cis-1,2-dichloroethene	1	2.4		8.4	ND		8.4	ND	
74-97-5	Bromochloromethane	0.9	ND		8.7	ND		8.7	ND	
67-66-3	Chloroform	1	5.6		8.4	ND		8.4	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		8.6	ND		8.6	ND	
108-05-4	Vinyl Acetate	5	ND		50	ND		50	ND	
78-93-3	2-Butanone	5	ND		50	ND		50	ND	
56-23-5	Carbon Tetrachloride	2	46		2	41	D	15	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		7.3	ND		7.3	ND	
71-43-2	Benzene	0.9	ND		8.5	ND		8.5	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		9	ND		9	ND	
79-01-6	Trichloroethene	1	1000	E	1	1800	D	1	1300	
78-87-5	1,2-Dichloropropane	1	ND		10	ND		10	ND	
74-95-3	Dibromomethane	0.9	ND		8.8	ND		8.8	ND	
75-27-4	Bromodichloromethane	0.6	ND		6	ND		6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		50	ND		50	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		1.3	ND		1.3	ND	
108-88-3	Toluene	1	ND		10	ND		10	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		2.3	ND		2.3	ND	
79-00-5	1,1,2-Trichloroethane	1	2.4		9	ND		9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		50	ND		50	ND	
127-18-4	Tetrachloroethene	1	30		1	31	D	1	68	
142-28-9	1,3-Dichloropropane	0.9	ND		9	ND		9	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
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EXTRACTION WELL EW-A8

124-48-1	Dibromochloromethane	1	ND		10	ND		10	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		12	ND		12	ND	
591-78-6	2-Hexanone	5	ND		50	ND		50	ND	
108-90-7	Chlorobenzene	0.9	ND		9	ND		9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	31		1	23	D	1	61	
100-41-4	Ethylbenzene	0.9	ND		9	ND		9	ND	
136777-61-2	m&p-xylenes	1.3	ND		13	ND		13	ND	
95-47-6	o-xylene	0.9	ND		9	ND		9	ND	
100-42-5	Styrene	0.5	ND		4.5	ND		4.5	ND	
75-25-2	Bromoform	0.5	ND		5	ND		5	ND	
98-82-8	isopropylbenzene	1	ND		10	ND		10	ND	
108-86-1	Bromobenzene	0.7	ND		7	ND		7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		11	ND		11	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		11	ND		11	ND	
103-65-1	n-Propylbenzene	0.9	ND		9	ND		9	ND	
95-49-8	2-Chlorotoluene	1	ND		10	ND		10	ND	
106-43-4	4-Chlorotoluene	0.9	ND		9	ND		9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		11	ND		11	ND	
98-06-6	tert-Butylbenzene	0.7	ND		7	ND		7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		11	ND		11	ND	
135-98-8	sec-Butylbenzene	0.6	ND		6	ND		6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		9.5	ND		9.5	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		5	ND		5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		10	ND		10	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		8	ND		8	ND	
104-51-8	n-Butylbenzene	1.2	ND		12	ND		12	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		14	ND		14	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		8	ND		8	ND	
87-68-3	Hexachlorobutadiene	1	ND		10	ND		10	ND	
91-20-3	Naphthalene	0.8	ND		8	ND		8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		7	ND		7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A8

	EWA8			EW-A8	
	67512			69478	
	2/23/99			3/25/99	
	2/24/99			3/26/99	
	WATER			WATER	
	ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q
1.8	ND		1.8	ND	
1.8	ND		1.8	ND	
1.3	ND		1.3	ND	
1.7	ND		1.7	ND	
2	ND		2	ND	
5	ND		5	ND	
1	48		1	50	
0.6	ND		0.6	ND	
5	ND		5	ND	
5	ND		5	ND	
0.7	ND		0.7	ND	
0.7	ND		0.7	ND	
5	ND		5	ND	
0.4	ND		0.4	ND	
1	ND		1	ND	
0.8	ND		0.8	ND	
0.9	ND		0.9	ND	
1	2.1		1	2.1	
0.9	ND		0.9	ND	
5	ND		5	ND	
5	ND		5	ND	
1.5	ND		1.5	ND	
0.7	ND		0.7	ND	
0.9	ND		0.9	ND	
0.9	ND		0.9	ND	
1	35		1	37	
1	ND		1	ND	
0.9	ND		0.9	ND	
0.6	ND		0.6	ND	
5	ND		5	ND	
0.1	ND		0.1	ND	
1	ND		1	ND	
0.2	ND		0.2	ND	
0.9	ND		0.9	ND	
5	ND		5	ND	
0.9	ND		0.9	ND	
0.9	ND		0.9	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A8

1	ND		1	ND	
1.2	ND		1.2	ND	
5	ND		5	ND	
0.9	ND		0.9	ND	
0.9	ND		0.9	ND	
0.9	ND		0.9	ND	
1.3	ND		1.3	ND	
0.9	ND		0.9	ND	
0.5	ND		0.5	ND	
0.5	ND		0.5	ND	
1	ND		1	ND	
0.7	ND		0.7	ND	
1.1	ND		1.1	ND	
1.1	ND		1.1	ND	
0.9	ND		0.9	ND	
1	ND		1	ND	
0.9	ND		0.9	ND	
1.1	ND		1.1	ND	
0.7	ND		0.7	ND	
1.1	ND		1.1	ND	
0.6	ND		0.6	ND	
1	ND		1	ND	
0.5	ND		0.5	ND	
1	ND		1	ND	
0.8	ND		0.8	ND	
1.2	ND		1.2	ND	
1.4	ND		1.4	ND	
0.8	ND		0.8	ND	
1	ND		1	ND	
0.8	ND		0.8	ND	
0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A9

	Client Sample ID		EW-A9			EW-A9DL			EW-A9	
	Lab Sample ID		66690			66690DL			67187	
	Sample Collection Date		2/9/99			2/9/99			2/17/99	
	Sample Receipt Date		2/10/99			2/10/99			2/18/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	180	ND		1800	ND		1.8	ND	
74-87-3	Chloromethane	180	ND		1800	ND		2	5.4	
75-01-4	Vinyl Chloride	130	ND		1300	ND		1	6.9	
74-83-9	Bromomethane	170	ND		1700	ND		2	7.5	
75-00-3	Chloroethane	200	ND		2000	ND		2	ND	
107-02-8	Acrolein	500	ND		5000	ND		5	ND	
75-69-4	Trichlorofluoromethane	130	ND		1300	ND		1	15	
75-35-4	1,1-Dichloroethene	57	ND		570	ND		1	31	
67-64-1	Acetone	500	ND		5000	ND		5	ND	
75-15-0	Carbon Disulfide	500	ND		5000	ND		5	8.1	
75-09-2	Methylene Chloride	73	ND		730	ND		1	23	
156-60-5	trans-1,2-Dichloroethene	68	ND		680	ND		0.7	ND	
107-13-1	Acrylonitrile	500	ND		5000	ND		5	ND	
75-34-4	1,1-Dichloroethane	37	ND		370	ND		0	4.2	
590-20-7	2,2-Dichloropropane	100	ND		1000	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	84	ND		840	ND		1	55	
74-97-5	Bromochloromethane	87	ND		870	ND		0.9	ND	
67-66-3	Chloroform	84	ND		840	ND		1	530	E
71-55-6	1,1,1-Trichloroethane	86	ND		860	ND		0.9	ND	
108-05-4	Vinyl Acetate	500	ND		5000	ND		5	ND	
78-93-3	2-Butanone	500	ND		5000	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	460		1500	ND		2	4200	E
563-58-6	1,1-Dichloropropene	73	ND		730	ND		0.7	ND	
71-43-2	Benzene	85	ND		850	ND		1	28	
107-06-2	1,2-Dichloroethane	90	ND		900	ND		1	9	
79-01-6	Trichloroethene	1	38100	E	1	33600	D	1	4700	E
78-87-5	1,2-Dichloropropane	100	ND		1000	ND		1	ND	
74-95-3	Dibromomethane	88	ND		880	ND		0.9	ND	
75-27-4	Bromodichloromethane	60	ND		600	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	500	ND		5000	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	13	ND		130	ND		0.1	ND	
108-88-3	Toluene	100	ND		1000	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	23	ND		230	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	90	ND		900	ND		1	250	E
108-10-1	4-Methyl-2-Pentanone	500	ND		5000	ND		5	ND	
127-18-4	Tetrachloroethene	90	ND		900	ND		1	1100	E

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A9

142-28-9	1,3-Dichloropropane	90	ND		900	ND		0.9	ND	
124-48-1	Dibromochloromethane	100	ND		1000	ND		1	ND	
106-93-4	1,2-Dibromoethane	120	ND		1200	ND		1.2	ND	
591-78-6	2-Hexanone	500	ND		5000	ND		5	ND	
108-90-7	Chlorobenzene	90	ND		900	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	90	ND		900	ND		1	1100	E
100-41-4	Ethylbenzene	90	ND		900	ND		1	46	
136777-61-2	m&p-xylenes	130	ND		1300	ND		1	200	
95-47-6	o-xylene	90	ND		900	ND		1	78	
100-42-5	Styrene	45	ND		450	ND		0.5	ND	
75-25-2	Bromoform	50	ND		500	ND		0.5	ND	
98-82-8	isopropylbenzene	100	ND		1000	ND		1	12	
108-86-1	Bromobenzene	70	ND		700	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	110	ND		1100	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	110	ND		1100	ND		1.1	ND	
103-65-1	n-Propylbenzene	90	ND		900	ND		0.9	ND	
95-49-8	2-Chlorotoluene	100	ND		1000	ND		1	ND	
106-43-4	4-Chlorotoluene	90	ND		900	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	110	ND		1100	ND		1	4	
98-06-6	tert-Butylbenzene	70	ND		700	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	110	ND		1100	ND		1	9.9	
135-98-8	sec-Butylbenzene	60	ND		600	ND		1	1.6	
541-73-1	1,3-Dichlorobenzene	95	ND		950	ND		1	ND	
99-87-6	4-Isopropyltoluene	50	ND		500	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	100	ND		1000	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	80	ND		800	ND		1	1.9	
104-51-8	n-Butylbenzene	120	ND		1200	ND		1	1.6	
96-12-8	1,2-Dibromo-3-chloropropane	140	ND		1400	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	80	ND		800	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	100	ND		1000	ND		1	ND	
91-20-3	Naphthalene	80	ND		800	ND		1	7.4	
87-61-6	1,2,3-Trichlorobenzene	70	ND		700	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A9

	EW-A9DL			EW-A9			EW-A9DUP	
	67187DL			69218			69219	
	2/17/99			3/23/99			3/23/99	
	2/18/99			3/24/99			3/24/99	
	WATER			WATER			WATER	
	ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
9200	ND		180	ND		180	ND	
9200	ND		180	ND		180	ND	
6500	ND		130	ND		130	ND	
8300	ND		170	ND		170	ND	
10100	ND		200	ND		200	ND	
25000	ND		500	ND		500	ND	
6300	ND		130	ND		130	ND	
2900	ND		57	ND		57	ND	
25000	ND		500	ND		500	ND	
25000	ND		500	ND		500	ND	
3700	ND		73	ND		73	ND	
3400	ND		68	ND		68	ND	
25000	ND		500	ND		500	ND	
1900	ND		37	ND		37	ND	
5000	ND		100	ND		100	ND	
4200	ND		84	ND		84	ND	
4400	ND		87	ND		87	ND	
4200	ND		1	160		1	130	
4300	ND		86	ND		86	ND	
25000	ND		500	ND		500	ND	
25000	ND		500	ND		500	ND	
7600	ND		2	5000		2	3800	
3700	ND		73	ND		73	ND	
4300	ND		85	ND		85	ND	
4500	ND		90	ND		90	ND	
1	273300	D	1	113000	E	1	104900	E
5000	ND		100	ND		100	ND	
4400	ND		88	ND		88	ND	
3000	ND		60	ND		60	ND	
25000	ND		500	ND		500	ND	
650	ND		13	ND		13	ND	
5000	ND		1	180		100	ND	
1200	ND		23	ND		23	ND	
4500	ND		1	160		1	150	
25000	ND		500	ND		500	ND	
4500	ND		1	810		1	730	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A9

4500	ND		90	ND		90	ND	
5000	ND		100	ND		100	ND	
6000	ND		120	ND		120	ND	
25000	ND		500	ND		500	ND	
4500	ND		90	ND		90	ND	
4500	ND		90	ND		90	ND	
4500	ND		90	ND		90	ND	
6500	ND		130	ND		130	ND	
4500	ND		90	ND		90	ND	
2300	ND		45	ND		45	ND	
2500	ND		50	ND		50	ND	
5000	ND		100	ND		100	ND	
3500	ND		70	ND		70	ND	
5500	ND		110	ND		110	ND	
5500	ND		110	ND		110	ND	
4500	ND		90	ND		90	ND	
5000	ND		100	ND		100	ND	
4500	ND		90	ND		90	ND	
5500	ND		110	ND		110	ND	
3500	ND		70	ND		70	ND	
5500	ND		110	ND		110	ND	
3000	ND		60	ND		60	ND	
4800	ND		95	ND		95	ND	
2500	ND		50	ND		50	ND	
5000	ND		100	ND		100	ND	
4000	ND		80	ND		80	ND	
6000	ND		120	ND		120	ND	
7000	ND		140	ND		140	ND	
4000	ND		80	ND		80	ND	
5000	ND		100	ND		100	ND	
4000	ND		80	ND		80	ND	
3500	ND		70	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A10

	Client Sample ID		EW-A10			EW-A10			EW-A10DL			EW-A10	
	Lab Sample ID		66853			67188			67188DL			69216	
	Sample Collection Date		2/11/99			2/17/99			2/17/99			3/23/99	
	Sample Receipt Date		2/12/99			2/18/99			2/18/99			3/24/99	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA												
75-71-8	Dichlorodifluoromethane	9200	ND		1.8	ND		9200	ND		180	ND	
74-87-3	Chloromethane	9200	ND		2	6.6		9200	ND		180	ND	
75-01-4	Vinyl Chloride	6500	ND		1	5.4		6500	ND		130	ND	
74-83-9	Bromomethane	8300	ND		2	9.9		8300	ND		170	ND	
75-00-3	Chloroethane	10100	ND		2	ND		10100	ND		200	ND	
107-02-8	Acrolein	25000	ND		5	ND		25000	ND		500	ND	
75-69-4	Trichlorofluoromethane	6300	ND		1	9.5		6300	ND		130	ND	
75-35-4	1,1-Dichloroethene	2900	ND		1	26		2900	ND		57	ND	
67-64-1	Acetone	25000	ND		5	16		25000	ND		500	ND	
75-15-0	Carbon Disulfide	25000	ND		5	3.4	J	25000	ND		500	ND	
75-09-2	Methylene Chloride	3700	ND		1	13		3700	ND		73	ND	
156-60-5	trans-1,2-Dichloroethene	3400	ND		0.7	ND		3400	ND		68	ND	
107-13-1	Acrylonitrile	25000	ND		5	ND		25000	ND		500	ND	
75-34-4	1,1-Dichloroethane	1900	ND		0	3.7		1900	ND		37	ND	
590-20-7	2,2-Dichloropropane	5000	ND		1	ND		5000	ND		100	ND	
156-59-2	cis-1,2-dichloroethene	4200	ND		1	58		4200	ND		84	ND	
74-97-5	Bromochloromethane	4400	ND		0.9	ND		4400	ND		87	ND	
67-66-3	Chloroform	4200	ND		1	480	E	4200	ND		84	ND	
71-55-6	1,1,1-Trichloroethane	4300	ND		0.9	ND		4300	ND		86	ND	
108-05-4	Vinyl Acetate	25000	ND		5	ND		25000	ND		500	ND	
78-93-3	2-Butanone	25000	ND		5	ND		25000	ND		500	ND	
56-23-5	Carbon Tetrachloride	7600	ND		2	4100	E	7600	ND		2	6300	
563-58-6	1,1-Dichloropropene	3700	ND		0.7	ND		3700	ND		73	ND	
71-43-2	Benzene	4300	ND		1	29		4300	ND		85	ND	
107-06-2	1,2-Dichloroethane	4500	ND		1	12		4500	ND		90	ND	
79-01-6	Trichloroethene	1	113100		1	4200	E	1	288300	D	1	134500	E
78-87-5	1,2-Dichloropropane	5000	ND		1	ND		5000	ND		100	ND	
74-95-3	Dibromomethane	4400	ND		0.9	ND		4400	ND		88	ND	
75-27-4	Bromodichloromethane	3000	ND		1	1.6		3000	ND		60	ND	
110-07-3	2-Chloroethyl Vinyl Ether	25000	ND		5	ND		25000	ND		500	ND	
10061-01-5	cis-1,3-Dichloropropene	650	ND		0.1	ND		650	ND		13	ND	
108-88-3	Toluene	5000	ND		1	390	E	5000	ND		1	440	
10061-02-6	trans-1,3-Dichloropropene	1200	ND		0.2	ND		1200	ND		23	ND	
79-00-5	1,1,2-Trichloroethane	4500	ND		1	270	E	4500	ND		1	150	
108-10-1	4-Methyl-2-Pentanone	25000	ND		5	ND		25000	ND		500	ND	
127-18-4	Tetrachloroethene	4500	ND		1	860	E	4500	ND		1	590	
142-28-9	1,3-Dichloropropane	4500	ND		0.9	ND		4500	ND		90	ND	
124-48-1	Dibromochloromethane	5000	ND		1	ND		5000	ND		100	ND	
106-93-4	1,2-Dibromoethane	6000	ND		1.2	ND		6000	ND		120	ND	
591-78-6	2-Hexanone	25000	ND		5	ND		25000	ND		500	ND	
108-90-7	Chlorobenzene	4500	ND		0.9	ND		4500	ND		90	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A10

630-20-6	1,1,1,2-Tetrachloroethane	4500	ND		1	870	E	4500	ND		90	ND	
100-41-4	Ethylbenzene	4500	ND		1	60		4500	ND		90	ND	
136777-61-2	m&p-xylenes	6500	ND		1	280		6500	ND		1	180	
95-47-6	o-xylene	4500	ND		1	92		4500	ND		90	ND	
100-42-5	Styrene	2300	ND		0.5	ND		2300	ND		45	ND	
75-25-2	Bromoform	2500	ND		0.5	ND		2500	ND		50	ND	
98-82-8	isopropylbenzene	5000	ND		1	11		5000	ND		100	ND	
108-86-1	Bromobenzene	3500	ND		0.7	ND		3500	ND		70	ND	
79-34-5	1,1,2,2-Tetrachloroethane	5500	ND		1.1	ND		5500	ND		110	ND	
96-18-4	1,2,3-Trichloropropane	5500	ND		1.1	ND		5500	ND		110	ND	
103-65-1	n-Propylbenzene	4500	ND		1	2.3		4500	ND		90	ND	
95-49-8	2-Chlorotoluene	5000	ND		1	ND		5000	ND		100	ND	
106-43-4	4-Chlorotoluene	4500	ND		0.9	ND		4500	ND		90	ND	
108-67-8	1,3,5-Trimethylbenzene	5500	ND		1	10		5500	ND		110	ND	
98-06-6	tert-Butylbenzene	3500	ND		0.7	ND		3500	ND		70	ND	
95-63-6	1,2,4-Trimethylbenzene	5500	ND		1	25		5500	ND		110	ND	
135-98-8	sec-Butylbenzene	3000	ND		0.6	ND		3000	ND		60	ND	
541-73-1	1,3-Dichlorobenzene	4800	ND		1	ND		4800	ND		95	ND	
99-87-6	4-Isopropyltoluene	2500	ND		0	1.9		2500	ND		50	ND	
106-46-7	1,4-Dichlorobenzene	5000	ND		1	ND		5000	ND		100	ND	
95-50-1	1,2-Dichlorobenzene	4000	ND		1	2.8		4000	ND		80	ND	
104-51-8	n-Butylbenzene	6000	ND		1.2	ND		6000	ND		120	ND	
96-12-8	1,2-Dibromo-3-chloropropane	7000	ND		1.4	ND		7000	ND		140	ND	
120-82-1	1,2,4-Trichlorobenzene	4000	ND		0.8	ND		4000	ND		80	ND	
87-68-3	Hexachlorobutadiene	5000	ND		1	ND		5000	ND		100	ND	
91-20-3	Naphthalene	4000	ND		1	7.7		4000	ND		80	ND	
87-61-6	1,2,3-Trichlorobenzene	3500	ND		0.7	ND		3500	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A11

	Client Sample ID		EW-11			EW-11DL			EWA11			EW-A11	
	Lab Sample ID		67164			67164DL			67428			69480	
	Sample Collection Date		2/16/99			2/16/99			2/19/99			3/25/99	
	Sample Receipt Date		2/17/99			2/17/99			2/20/99			3/27/99	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA												
75-71-8	Dichlorodifluoromethane	1.8	ND		18	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		18	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		13	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		17	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		20	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		50	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		13	ND		1.3	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		5.7	ND		0.6	ND		0.6	ND	
67-64-1	Acetone	5	ND		50	ND		5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		50	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		7.3	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		6.8	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		50	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		3.7	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		10	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	4.6		8.4	ND		0.8	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		8.7	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	1	4.9		8.4	ND		0.8	ND		0.8	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		8.6	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		50	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		50	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	19		15	ND		1.5	ND		1.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		7.3	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		8.5	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	270	E	1	210	D	1	2.1		1	4.2	
78-87-5	1,2-Dichloropropane	1	ND		10	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		8.8	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		50	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		1.3	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	1.2		10	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		2.3	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		9	ND		0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		50	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	1	140		1	110	D	0.9	ND		0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		10	ND		1	ND		1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		12	ND		1.2	ND		1.2	ND	

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591-78-6	2-Hexanone	5	ND		50	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	150		1	120	D	0.9	ND		0.9	ND	
100-41-4	Ethylbenzene	1	1		9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1	1.2	J	13	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		4.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		10	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		11	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		11	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		10	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		11	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		11	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		9.5	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		10	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		12	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		14	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		8	ND		0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		10	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		7	ND		0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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EXTRACTION WELL EW-A12

	Client Sample ID		EWA12			EWA12DL			EWA12			EW-A12	
	Lab Sample ID		67303			67303DL			67826			69479	
	Sample Collection Date		2/18/99			2/18/99			2/26/99			3/25/99	
	Sample Receipt Date		2/19/99			2/19/99			2/27/99			3/27/99	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA												
75-71-8	Dichlorodifluoromethane	1.8	ND		9.2	ND		180	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		9.2	ND		180	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		6.5	ND		130	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		8.3	ND		170	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		10	ND		200	ND		2	ND	
107-02-8	Acrolein	5	ND		25	ND		500	ND		5	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		6.3	ND		130	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		2.9	ND		57	ND		0.6	ND	
67-64-1	Acetone	5	ND		25	ND		500	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		25	ND		500	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		3.7	ND		73	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		3.4	ND		68	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		25	ND		500	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		1.9	ND		37	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		5	ND		100	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	24		1	26	D	84	ND		1	17	
74-97-5	Bromochloromethane	0.9	ND		4.4	ND		87	ND		0.9	ND	
67-66-3	Chloroform	1	3.6		4.2	ND		84	ND		1	4.7	
71-55-6	1,1,1-Trichloroethane	0.9	ND		4.3	ND		86	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		25	ND		500	ND		5	ND	
78-93-3	2-Butanone	5	ND		25	ND		500	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	7.6		2	5	JD	150	ND		2	5.3	
563-58-6	1,1-Dichloropropene	0.7	ND		3.7	ND		73	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		4.3	ND		85	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		4.5	ND		90	ND		0.9	ND	
79-01-6	Trichloroethene	1	340	E	1	360	D	1	240		1	110	
78-87-5	1,2-Dichloropropane	1	ND		5	ND		100	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		4.4	ND		88	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		3	ND		60	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		25	ND		500	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.7	ND		13	ND		0.1	ND	
108-88-3	Toluene	1	ND		5	ND		100	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		1.2	ND		23	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		4.5	ND		90	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		25	ND		500	ND		5	ND	
127-18-4	Tetrachloroethene	1	56		1	56	D	1	200		1	75	
142-28-9	1,3-Dichloropropane	0.9	ND		4.5	ND		90	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		5	ND		100	ND		1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		6	ND		120	ND		1.2	ND	

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EXTRACTION WELL EW-A12

591-78-6	2-Hexanone	5	ND		25	ND		500	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		4.5	ND		90	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	57		1	58	D	90	ND		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		4.5	ND		90	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		6.5	ND		130	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		4.5	ND		90	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		2.3	ND		45	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		2.5	ND		50	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		5	ND		100	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		3.5	ND		70	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		5.5	ND		110	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		5.5	ND		110	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		4.5	ND		90	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		5	ND		100	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		4.5	ND		90	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		5.5	ND		110	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		3.5	ND		70	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		5.5	ND		110	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		3	ND		60	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		4.8	ND		95	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		2.5	ND		50	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		5	ND		100	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		4	ND		80	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		6	ND		120	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		7	ND		140	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		4	ND		80	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		5	ND		100	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		4	ND		80	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		3.5	ND		70	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A13

	Client Sample ID		**EW-A13**			**EW-A13**
	Lab Sample ID		67511			69470
	Sample Collection Date		2/22/99			3/26/99
	Sample Receipt Date		2/23/99			3/27/99
	Sample Matrix		WATER			WATER
	Units		ug/L			ug/L
		MDL	CONC	Q	MDL	CONC
	TCL VOA					
75-71-8	Dichlorodifluoromethane	9.2	ND		1.8	ND
74-87-3	Chloromethane	9.2	ND		1.8	ND
75-01-4	Vinyl Chloride	6.5	ND		1.3	ND
74-83-9	Bromomethane	8.3	ND		1.7	ND
75-00-3	Chloroethane	10	ND		2	ND
107-02-8	Acrolein	25	ND		5	ND
75-69-4	Trichlorofluoromethane	6.3	ND		1.3	ND
75-35-4	1,1-Dichloroethene	2.9	ND		0.6	ND
67-64-1	Acetone	25	ND		5	ND
75-15-0	Carbon Disulfide	25	ND		5	ND
75-09-2	Methylene Chloride	3.7	ND		0.7	ND
156-60-5	trans-1,2-Dichloroethene	3.4	ND		0.7	ND
107-13-1	Acrylonitrile	25	ND		5	ND
75-34-4	1,1-Dichloroethane	1.9	ND		0.4	ND
590-20-7	2,2-Dichloropropane	5	ND		1	ND
156-59-2	cis-1,2-dichloroethene	4.2	ND		0.8	ND
74-97-5	Bromochloromethane	4.4	ND		0.9	ND
67-66-3	Chloroform	4.2	ND		0.8	ND
71-55-6	1,1,1-Trichloroethane	4.3	ND		0.9	ND
108-05-4	Vinyl Acetate	25	ND		5	ND
78-93-3	2-Butanone	25	ND		5	ND
56-23-5	Carbon Tetrachloride	7.6	ND		1.5	ND
563-58-6	1,1-Dichloropropene	3.7	ND		0.7	ND
71-43-2	Benzene	4.3	ND		0.9	ND
107-06-2	1,2-Dichloroethane	4.5	ND		0.9	ND
79-01-6	Trichloroethene	1	380		1	8.9
78-87-5	1,2-Dichloropropane	5	ND		1	ND
74-95-3	Dibromomethane	4.4	ND		0.9	ND
75-27-4	Bromodichloromethane	3	ND		0.6	ND
110-07-3	2-Chloroethyl Vinyl Ether	25	ND		5	ND
10061-01-5	cis-1,3-Dichloropropene	0.7	ND		0.1	ND
108-88-3	Toluene	5	ND		1	ND
10061-02-6	trans-1,3-Dichloropropene	1.2	ND		0.2	ND
79-00-5	1,1,2-Trichloroethane	4.5	ND		0.9	ND
108-10-1	4-Methyl-2-Pentanone	25	ND		5	ND
127-18-4	Tetrachloroethene	4.5	ND		1	2.5
142-28-9	1,3-Dichloropropane	4.5	ND		0.9	ND
124-48-1	Dibromochloromethane	5	ND		1	ND
106-93-4	1,2-Dibromoethane	6	ND		1.2	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A13

591-78-6	2-Hexanone	25	ND		5	ND
108-90-7	Chlorobenzene	4.5	ND		0.9	ND
630-20-6	1,1,1,2-Tetrachloroethane	4.5	ND		0.9	ND
100-41-4	Ethylbenzene	4.5	ND		0.9	ND
136777-61-2	m&p-xylenes	6.5	ND		1.3	ND
95-47-6	o-xylene	4.5	ND		0.9	ND
100-42-5	Styrene	2.3	ND		0.5	ND
75-25-2	Bromoform	2.5	ND		0.5	ND
98-82-8	isopropylbenzene	5	ND		1	ND
108-86-1	Bromobenzene	3.5	ND		0.7	ND
79-34-5	1,1,2,2-Tetrachloroethane	5.5	ND		1.1	ND
96-18-4	1,2,3-Trichloropropane	5.5	ND		1.1	ND
103-65-1	n-Propylbenzene	4.5	ND		0.9	ND
95-49-8	2-Chlorotoluene	5	ND		1	ND
106-43-4	4-Chlorotoluene	4.5	ND		0.9	ND
108-67-8	1,3,5-Trimethylbenzene	5.5	ND		1.1	ND
98-06-6	tert-Butylbenzene	3.5	ND		0.7	ND
95-63-6	1,2,4-Trimethylbenzene	5.5	ND		1.1	ND
135-98-8	sec-Butylbenzene	3	ND		0.6	ND
541-73-1	1,3-Dichlorobenzene	4.8	ND		1	ND
99-87-6	4-Isopropyltoluene	2.5	ND		0.5	ND
106-46-7	1,4-Dichlorobenzene	5	ND		1	ND
95-50-1	1,2-Dichlorobenzene	4	ND		0.8	ND
104-51-8	n-Butylbenzene	6	ND		1.2	ND
96-12-8	1,2-Dibromo-3-chloropropane	7	ND		1.4	ND
120-82-1	1,2,4-Trichlorobenzene	4	ND		0.8	ND
87-68-3	Hexachlorobutadiene	5	ND		1	ND
91-20-3	Naphthalene	4	ND		0.8	ND
87-61-6	1,2,3-Trichlorobenzene	3.5	ND		0.7	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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VOLATILE ORGANIC ANALYSES
OBSERVATION WELL OW-A14

	Client Sample ID		EWA14			EWA14DL			EWA14			A14
	Lab Sample ID		67825			67595DL			67825			68961
	Sample Collection Date		2/24/99			2/24/99			2/26/99			3/18/99
	Sample Receipt Date		2/27/99			2/25/99			2/27/99			3/19/99
	Sample Matrix		WATER			WATER			WATER			WATER
	Units		ug/L			ug/L			ug/L			ug/L
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
	TCL VOA											
75-71-8	Dichlorodifluoromethane	180	ND		18	ND		180	ND		1.8	ND
74-87-3	Chloromethane	180	ND		18	ND		180	ND		1.8	ND
75-01-4	Vinyl Chloride	130	ND		13	ND		130	ND		1.3	ND
74-83-9	Bromomethane	170	ND		17	ND		170	ND		1.7	ND
75-00-3	Chloroethane	200	ND		20	ND		200	ND		2	ND
107-02-8	Acrolein	500	ND		50	ND		500	ND		5	ND
75-69-4	Trichlorofluoromethane	130	ND		13	ND		130	ND		1.3	ND
75-35-4	1,1-Dichloroethene	57	ND		5.7	ND		57	ND		0.6	ND
67-64-1	Acetone	500	ND		50	ND		500	ND		5	ND
75-15-0	Carbon Disulfide	500	ND		50	ND		500	ND		5	ND
75-09-2	Methylene Chloride	73	ND		7.3	ND		73	ND		0.7	ND
156-60-5	trans-1,2-Dichloroethene	68	ND		6.8	ND		68	ND		0.7	ND
107-13-1	Acrylonitrile	500	ND		50	ND		500	ND		5	ND
75-34-4	1,1-Dichloroethane	37	ND		3.7	ND		37	ND		0.4	ND
590-20-7	2,2-Dichloropropane	100	ND		10	ND		100	ND		1	ND
156-59-2	cis-1,2-dichloroethene	84	ND		1	24	D	84	ND		1	12
74-97-5	Bromochloromethane	87	ND		8.7	ND		87	ND		0.9	ND
67-66-3	Chloroform	84	ND		8.4	ND		84	ND		1	6.7
71-55-6	1,1,1-Trichloroethane	86	ND		8.6	ND		86	ND		0.9	ND
108-05-4	Vinyl Acetate	500	ND		50	ND		500	ND		5	ND
78-93-3	2-Butanone	500	ND		50	ND		500	ND		5	ND
56-23-5	Carbon Tetrachloride	150	ND		15	ND		150	ND		2	2.2
563-58-6	1,1-Dichloropropene	73	ND		7.3	ND		73	ND		0.7	ND
71-43-2	Benzene	85	ND		8.5	ND		85	ND		0.9	ND
107-06-2	1,2-Dichloroethane	90	ND		9	ND		90	ND		0.9	ND
79-01-6	Trichloroethene	1	350		1	840	D	1	350		1	150
78-87-5	1,2-Dichloropropane	100	ND		10	ND		100	ND		1	ND
74-95-3	Dibromomethane	88	ND		8.8	ND		88	ND		0.9	ND
75-27-4	Bromodichloromethane	60	ND		6	ND		60	ND		0.6	ND
110-07-3	2-Chloroethyl Vinyl Ether	500	ND		50	ND		500	ND		5	ND
10061-01-5	cis-1,3-Dichloropropene	13	ND		1.3	ND		13	ND		0.1	ND
108-88-3	Toluene	100	ND		10	ND		100	ND		1	ND
10061-02-6	trans-1,3-Dichloropropene	23	ND		2.3	ND		23	ND		0.2	ND
79-00-5	1,1,2-Trichloroethane	90	ND		9	ND		90	ND		0.9	ND
108-10-1	4-Methyl-2-Pentanone	500	ND		50	ND		500	ND		5	ND
127-18-4	Tetrachloroethene	90	ND		1	170	D	90	ND		1	71
142-28-9	1,3-Dichloropropane	90	ND		9	ND		90	ND		0.9	ND
124-48-1	Dibromochloromethane	100	ND		10	ND		100	ND		1	ND
106-93-4	1,2-Dibromoethane	120	ND		12	ND		120	ND		1.2	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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591-78-6	2-Hexanone	500	ND		50	ND		500	ND		5	ND
108-90-7	Chlorobenzene	90	ND		9	ND		90	ND		0.9	ND
630-20-6	1,1,1,2-Tetrachloroethane	90	ND		1	170	D	90	ND		1	72
100-41-4	Ethylbenzene	90	ND		9	ND		90	ND		0.9	ND
136777-61-2	m&p-xylenes	130	ND		13	ND		130	ND		1.3	ND
95-47-6	o-xylene	90	ND		9	ND		90	ND		0.9	ND
100-42-5	Styrene	45	ND		4.5	ND		45	ND		0.5	ND
75-25-2	Bromoform	50	ND		5	ND		50	ND		0.5	ND
98-82-8	isopropylbenzene	100	ND		10	ND		100	ND		1	ND
108-86-1	Bromobenzene	70	ND		7	ND		70	ND		0.7	ND
79-34-5	1,1,2,2-Tetrachloroethane	110	ND		11	ND		110	ND		1.1	ND
96-18-4	1,2,3-Trichloropropane	110	ND		11	ND		110	ND		1.1	ND
103-65-1	n-Propylbenzene	90	ND		9	ND		90	ND		0.9	ND
95-49-8	2-Chlorotoluene	100	ND		10	ND		100	ND		1	ND
106-43-4	4-Chlorotoluene	90	ND		9	ND		90	ND		0.9	ND
108-67-8	1,3,5-Trimethylbenzene	110	ND		11	ND		110	ND		1.1	ND
98-06-6	tert-Butylbenzene	70	ND		7	ND		70	ND		0.7	ND
95-63-6	1,2,4-Trimethylbenzene	110	ND		11	ND		110	ND		1.1	ND
135-98-8	sec-Butylbenzene	60	ND		6	ND		60	ND		0.6	ND
541-73-1	1,3-Dichlorobenzene	95	ND		9.5	ND		95	ND		1	ND
99-87-6	4-Isopropyltoluene	50	ND		5	ND		50	ND		0.5	ND
106-46-7	1,4-Dichlorobenzene	100	ND		10	ND		100	ND		1	ND
95-50-1	1,2-Dichlorobenzene	80	ND		8	ND		80	ND		0.8	ND
104-51-8	n-Butylbenzene	120	ND		12	ND		120	ND		1.2	ND
96-12-8	1,2-Dibromo-3-chloropropane	140	ND		14	ND		140	ND		1.4	ND
120-82-1	1,2,4-Trichlorobenzene	80	ND		8	ND		80	ND		0.8	ND
87-68-3	Hexachlorobutadiene	100	ND		10	ND		100	ND		1	ND
91-20-3	Naphthalene	80	ND		8	ND		80	ND		0.8	ND
87-61-6	1,2,3-Trichlorobenzene	70	ND		7	ND		70	ND		0.7	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A15

	Client Sample ID		EWA15			EWA15DL			EWA15			EWA15D
	Lab Sample ID		68094			68094DL						
	Sample Collection Date		3/3/99			3/3/99			3/10/99			3/10/99
	Sample Receipt Date		3/4/99			3/4/99			3/11/99			3/11/99
	Sample Matrix		WATER			WATER			WATER			WATER
	Units		ug/L			ug/L			ug/L			ug/L
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC
	TCL VOA											
75-71-8	Dichlorodifluoromethane	1.8	ND		180	ND						
74-87-3	Chloromethane	1.8	ND		180	ND						
75-01-4	Vinyl Chloride	1.3	ND		130	ND						
74-83-9	Bromomethane	1.7	ND		170	ND						
75-00-3	Chloroethane	2	ND		200	ND						
107-02-8	Acrolein	5	ND		500	ND						
75-69-4	Trichlorofluoromethane	1.3	ND		130	ND						
75-35-4	1,1-Dichloroethene	0.6	ND		57	ND						
67-64-1	Acetone	5	ND		500	ND						
75-15-0	Carbon Disulfide	5	ND		500	ND						
75-09-2	Methylene Chloride	0.7	ND		73	ND						
156-60-5	trans-1,2-Dichloroethene	0.7	ND		68	ND						
107-13-1	Acrylonitrile	5	ND		500	ND						
75-34-4	1,1-Dichloroethane	0.4	ND		37	ND						
590-20-7	2,2-Dichloropropane	1	ND		100	ND						
156-59-2	cis-1,2-dichloroethene	1	8.7		84	ND						
74-97-5	Bromochloromethane	0.9	ND		87	ND						
67-66-3	Chloroform	1	3.6		84	ND						
71-55-6	1,1,1-Trichloroethane	0.9	ND		86	ND						
108-05-4	Vinyl Acetate	5	ND		500	ND						
78-93-3	2-Butanone	5	ND		500	ND						
56-23-5	Carbon Tetrachloride	2	6		150	ND						
563-58-6	1,1-Dichloropropene	0.7	ND		73	ND						
71-43-2	Benzene	0.9	ND		85	ND						
107-06-2	1,2-Dichloroethane	0.9	ND		90	ND						
79-01-6	Trichloroethene	1	390	E	1	490	D					
78-87-5	1,2-Dichloropropane	1	ND		100	ND						
74-95-3	Dibromomethane	0.9	ND		88	ND						
75-27-4	Bromodichloromethane	0.6	ND		60	ND						
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		500	ND						
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		13	ND						
108-88-3	Toluene	1	ND		100	ND						
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		23	ND						
79-00-5	1,1,2-Trichloroethane	0.9	ND		90	ND						
108-10-1	4-Methyl-2-Pentanone	5	ND		500	ND						
127-18-4	Tetrachloroethene	1	44		90	ND						
142-28-9	1,3-Dichloropropane	0.9	ND		90	ND						
124-48-1	Dibromochloromethane	1	ND		100	ND						
106-93-4	1,2-Dibromoethane	1.2	ND		120	ND						

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NAVAL AIR WARFARE CENTER, WARMINSTER
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EXTRACTION WELL EW-A15

591-78-6	2-Hexanone	5	ND		500	ND						
108-90-7	Chlorobenzene	0.9	ND		90	ND						
630-20-6	1,1,1,2-Tetrachloroethane	1	44		90	ND						
100-41-4	Ethylbenzene	0.9	ND		90	ND						
136777-61-2	m&p-xylenes	1.3	ND		130	ND						
95-47-6	o-xylene	0.9	ND		90	ND						
100-42-5	Styrene	0.5	ND		45	ND						
75-25-2	Bromoform	0.5	ND		50	ND						
98-82-8	isopropylbenzene	1	ND		100	ND						
108-86-1	Bromobenzene	0.7	ND		70	ND						
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		110	ND						
96-18-4	1,2,3-Trichloropropane	1.1	ND		110	ND						
103-65-1	n-Propylbenzene	0.9	ND		90	ND						
95-49-8	2-Chlorotoluene	1	ND		100	ND						
106-43-4	4-Chlorotoluene	0.9	ND		90	ND						
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		110	ND						
98-06-6	tert-Butylbenzene	0.7	ND		70	ND						
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		110	ND						
135-98-8	sec-Butylbenzene	0.6	ND		60	ND						
541-73-1	1,3-Dichlorobenzene	1	ND		95	ND						
99-87-6	4-Isopropyltoluene	0.5	ND		50	ND						
106-46-7	1,4-Dichlorobenzene	1	ND		100	ND						
95-50-1	1,2-Dichlorobenzene	0.8	ND		80	ND						
104-51-8	n-Butylbenzene	1.2	ND		120	ND						
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		140	ND						
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		80	ND						
87-68-3	Hexachlorobutadiene	1	ND		100	ND						
91-20-3	Naphthalene	0.8	ND		80	ND						
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		70	ND						

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A15

	Client Sample ID		**EWA15**			**EWA15DL**		
	Lab Sample ID		68094			68094DL		
	Sample Collection Date		3/3/99			3/3/99		
	Sample Receipt Date		3/4/99			3/4/99		
	Sample Matrix		WATER			WATER		
	Units		ug/L			ug/L		
		MDL	CONC	Q	MDL	CONC	Q	MDL
	TCL VOA							
75-71-8	Dichlorodifluoromethane	1.8	ND		180	ND		
74-87-3	Chloromethane	1.8	ND		180	ND		
75-01-4	Vinyl Chloride	1.3	ND		130	ND		
74-83-9	Bromomethane	1.7	ND		170	ND		
75-00-3	Chloroethane	2	ND		200	ND		
107-02-8	Acrolein	5	ND		500	ND		
75-69-4	Trichlorofluoromethane	1.3	ND		130	ND		
75-35-4	1,1-Dichloroethene	0.6	ND		57	ND		
67-64-1	Acetone	5	ND		500	ND		
75-15-0	Carbon Disulfide	5	ND		500	ND		
75-09-2	Methylene Chloride	0.7	ND		73	ND		
156-60-5	trans-1,2-Dichloroethene	0.7	ND		68	ND		
107-13-1	Acrylonitrile	5	ND		500	ND		
75-34-4	1,1-Dichloroethane	0.4	ND		37	ND		
590-20-7	2,2-Dichloropropane	1	ND		100	ND		
156-59-2	cis-1,2-dichloroethene	1	8.7		84	ND		
74-97-5	Bromochloromethane	0.9	ND		87	ND		
67-66-3	Chloroform	1	3.6		84	ND		
71-55-6	1,1,1-Trichloroethane	0.9	ND		86	ND		
108-05-4	Vinyl Acetate	5	ND		500	ND		
78-93-3	2-Butanone	5	ND		500	ND		
56-23-5	Carbon Tetrachloride	2	6		150	ND		
563-58-6	1,1-Dichloropropene	0.7	ND		73	ND		
71-43-2	Benzene	0.9	ND		85	ND		
107-06-2	1,2-Dichloroethane	0.9	ND		90	ND		
79-01-6	Trichloroethene	1	390	E	1	490	D	
78-87-5	1,2-Dichloropropane	1	ND		100	ND		
74-95-3	Dibromomethane	0.9	ND		88	ND		
75-27-4	Bromodichloromethane	0.6	ND		60	ND		
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		500	ND		
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		13	ND		
108-88-3	Toluene	1	ND		100	ND		
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		23	ND		
79-00-5	1,1,2-Trichloroethane	0.9	ND		90	ND		
108-10-1	4-Methyl-2-Pentanone	5	ND		500	ND		
127-18-4	Tetrachloroethene	1	44		90	ND		
142-28-9	1,3-Dichloropropane	0.9	ND		90	ND		
124-48-1	Dibromochloromethane	1	ND		100	ND		
106-93-4	1,2-Dibromoethane	1.2	ND		120	ND		

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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EXTRACTION WELL EW-A15

591-78-6	2-Hexanone	5	ND		500	ND		
108-90-7	Chlorobenzene	0.9	ND		90	ND		
630-20-6	1,1,1,2-Tetrachloroethane	1	44		90	ND		
100-41-4	Ethylbenzene	0.9	ND		90	ND		
136777-61-2	m&p-xylenes	1.3	ND		130	ND		
95-47-6	o-xylene	0.9	ND		90	ND		
100-42-5	Styrene	0.5	ND		45	ND		
75-25-2	Bromoform	0.5	ND		50	ND		
98-82-8	isopropylbenzene	1	ND		100	ND		
108-86-1	Bromobenzene	0.7	ND		70	ND		
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		110	ND		
96-18-4	1,2,3-Trichloropropane	1.1	ND		110	ND		
103-65-1	n-Propylbenzene	0.9	ND		90	ND		
95-49-8	2-Chlorotoluene	1	ND		100	ND		
106-43-4	4-Chlorotoluene	0.9	ND		90	ND		
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		110	ND		
98-06-6	tert-Butylbenzene	0.7	ND		70	ND		
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		110	ND		
135-98-8	sec-Butylbenzene	0.6	ND		60	ND		
541-73-1	1,3-Dichlorobenzene	1	ND		95	ND		
99-87-6	4-Isopropyltoluene	0.5	ND		50	ND		
106-46-7	1,4-Dichlorobenzene	1	ND		100	ND		
95-50-1	1,2-Dichlorobenzene	0.8	ND		80	ND		
104-51-8	n-Butylbenzene	1.2	ND		120	ND		
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		140	ND		
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		80	ND		
87-68-3	Hexachlorobutadiene	1	ND		100	ND		
91-20-3	Naphthalene	0.8	ND		80	ND		
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		70	ND		

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
OBSERVATION WELL OW-A16

	Client Sample ID		**EWA16-BOT**			**A16**	
	Lab Sample ID		68295			68962	
	Sample Collection Date		3/5/99			3/18/99	
	Sample Receipt Date		3/6/99			3/18/99	
	Sample Matrix		WATER			WATER	
	Units		ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q
	TCL VOA						
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		0.6	ND	
67-64-1	Acetone	5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND	
67-66-3	Chloroform	0.8	ND		0.8	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND	
56-23-5	Carbon Tetrachloride	1.5	ND		1.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	6.5		1	9.5	
78-87-5	1,2-Dichloropropane	1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND	
127-18-4	Tetrachloroethene	1	2.9		0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND	
106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
OBSERVATION WELL OW-A16

591-78-6	2-Hexanone	5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.9	ND		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
EXTRACTION WELL EW-A17

	Client Sample ID		EWA17-BOT			EWA17-BOT			EWA17-BOTDL			EWA17-BOTDL1				A17	
	Lab Sample ID		68296			68352			68352DL			68352L1				68963	
	Sample Collection Date		3/5/99			3/8/99			3/8/99			3/9/99				3/18/99	
	Sample Receipt Date		3/6/99			3/9/99			3/9/99			3/9/99				3/19/99	
	Sample Matrix		WATER			WATER			WATER			WATER				WATER	
	Units		ug/L			ug/L			ug/L			ug/L				ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	MDL	CONC	Q
	TCL VOA																
75-71-8	Dichlorodifluoromethane	92	ND		1.8	ND		92	ND		920	ND		92	180	ND	
74-87-3	Chloromethane	92	ND		1.8	ND		92	ND		920	ND		92	180	ND	
75-01-4	Vinyl Chloride	65	ND		1.3	ND		65	ND		650	ND		65	130	ND	
74-83-9	Bromomethane	83	ND		2	2		83	ND		830	ND		83	170	ND	
75-00-3	Chloroethane	100	ND		2	ND		100	ND		1000	ND		100	200	ND	
107-02-8	Acrolein	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
75-69-4	Trichlorofluoromethane	63	ND		1	6.8		63	ND		630	ND		63	130	ND	
75-35-4	1,1-Dichloroethene	29	ND		1	2.7		29	ND		290	ND		29	57	ND	
67-64-1	Acetone	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
75-15-0	Carbon Disulfide	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
75-09-2	Methylene Chloride	37	ND		0.7	ND		37	ND		370	ND		37	73	ND	
156-60-5	trans-1,2-Dichloroethene	34	ND		0.7	ND		34	ND		340	ND		34	68	ND	
107-13-1	Acrylonitrile	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
75-34-4	1,1-Dichloroethane	19	ND		0	4.4		19	ND		190	ND		19	37	ND	
590-20-7	2,2-Dichloropropane	50	ND		1	ND		50	ND		500	ND		50	100	ND	
156-59-2	cis-1,2-dichloroethene	42	ND		1	32		42	ND		420	ND		42	84	ND	
74-97-5	Bromochloromethane	44	ND		0.9	ND		44	ND		440	ND		44	87	ND	
67-66-3	Chloroform	42	ND		1	76		42	ND		420	ND		42	84	ND	
71-55-6	1,1,1-Trichloroethane	43	ND		0.9	ND		43	ND		430	ND		43	86	ND	
108-05-4	Vinyl Acetate	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
78-93-3	2-Butanone	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
56-23-5	Carbon Tetrachloride	2	180		2	750	E	2	380	D	760	ND		76	2	410	
563-58-6	1,1-Dichloropropene	37	ND		0.7	ND		37	ND		370	ND		37	73	ND	
71-43-2	Benzene	43	ND		0.9	ND		43	ND		430	ND		43	85	ND	
107-06-2	1,2-Dichloroethane	45	ND		1	4.6		45	ND		450	ND		45	90	ND	
79-01-6	Trichloroethene	1	6800		1	580	E	1	12300	E	1	13700	D	1	1	11400	
78-87-5	1,2-Dichloropropane	50	ND		1	ND		50	ND		500	ND		50	100	ND	
74-95-3	Dibromomethane	44	ND		0.9	ND		44	ND		440	ND		44	88	ND	
75-27-4	Bromodichloromethane	30	ND		0.6	ND		30	ND		300	ND		30	60	ND	
110-07-3	2-Chloroethyl Vinyl Ether	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
10061-01-5	cis-1,3-Dichloropropene	6.5	ND		0.1	ND		6.5	ND		65	ND		6.5	13	ND	
108-88-3	Toluene	50	ND		1	5.9		50	ND		500	ND		50	100	ND	
10061-02-6	trans-1,3-Dichloropropene	12	ND		0.2	ND		12	ND		120	ND		12	23	ND	
79-00-5	1,1,2-Trichloroethane	45	ND		1	8.8		45	ND		450	ND		45	90	ND	
108-10-1	4-Methyl-2-Pentanone	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
127-18-4	Tetrachloroethene	1	530		1	820	E	1	580	D	450	ND		45	1	690	
142-28-9	1,3-Dichloropropane	45	ND		0.9	ND		45	ND		450	ND		45	90	ND	
124-48-1	Dibromochloromethane	50	ND		1	ND		50	ND		500	ND		50	100	ND	
106-93-4	1,2-Dibromoethane	60	ND		1.2	ND		60	ND		600	ND		60	120	ND	
591-78-6	2-Hexanone	250	ND		5	ND		250	ND		2500	ND		250	500	ND	
108-90-7	Chlorobenzene	45	ND		0.9	ND		45	ND		450	ND		45	90	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	500		1	860	E	1	590	D	450	ND		45	1	690	
100-41-4	Ethylbenzene	45	ND		0.9	ND		45	ND		450	ND		45	90	ND	
136777-61-2	m&p-xylenes	65	ND		1	6.3		65	ND		650	ND		65	130	ND	
95-47-6	o-xylene	45	ND		1	3.9		45	ND		450	ND		45	90	ND	
100-42-5	Styrene	23	ND		0.5	ND		23	ND		230	ND		23	45	ND	
75-25-2	Bromoform	25	ND		0.5	ND		25	ND		250	ND		25	50	ND	
98-82-8	Isopropylbenzene	50	ND		1	ND		50	ND		500	ND		50	100	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
OBSERVATION WELL OW-A17

	EWA17-BOT			EWA17-BOT			EWA17-BOTDL			EWA17-BOTDL1				A17
	68296			68352			68352DL			68352L1				68963
	3/5/99			3/8/99			3/8/99			3/9/99				3/18/99
	3/6/99			3/9/99			3/9/99			3/9/99				3/19/99
	WATER			WATER			WATER			WATER				WATER
	ug/L			ug/L			ug/L			ug/L				ug/L
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	MDL	CONC
92	ND		1.8	ND		92	ND		920	ND		92	180	ND
92	ND		1.8	ND		92	ND		920	ND		92	180	ND
65	ND		1.3	ND		65	ND		650	ND		65	130	ND
83	ND		2	2		83	ND		830	ND		83	170	ND
100	ND		2	ND		100	ND		1000	ND		100	200	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
63	ND		1	6.8		63	ND		630	ND		63	130	ND
29	ND		1	2.7		29	ND		290	ND		29	57	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
37	ND		0.7	ND		37	ND		370	ND		37	73	ND
34	ND		0.7	ND		34	ND		340	ND		34	68	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
19	ND		0	4.4		19	ND		190	ND		19	37	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND
42	ND		1	32		42	ND		420	ND		42	84	ND
44	ND		0.9	ND		44	ND		440	ND		44	87	ND
42	ND		1	76		42	ND		420	ND		42	84	ND
43	ND		0.9	ND		43	ND		430	ND		43	86	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
2	180		2	750	E	2	380	D	760	ND		76	2	410
37	ND		0.7	ND		37	ND		370	ND		37	73	ND
43	ND		0.9	ND		43	ND		430	ND		43	85	ND
45	ND		1	4.6		45	ND		450	ND		45	90	ND
1	6800		1	580	E	1	12300	E	1	13700	D	1	1	11400
50	ND		1	ND		50	ND		500	ND		50	100	ND
44	ND		0.9	ND		44	ND		440	ND		44	88	ND
30	ND		0.6	ND		30	ND		300	ND		30	60	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
6.5	ND		0.1	ND		6.5	ND		65	ND		6.5	13	ND
50	ND		1	5.9		50	ND		500	ND		50	100	ND
12	ND		0.2	ND		12	ND		120	ND		12	23	ND
45	ND		1	8.8		45	ND		450	ND		45	90	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
1	530		1	820	E	1	580	D	450	ND		45	1	690
45	ND		0.9	ND		45	ND		450	ND		45	90	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND
60	ND		1.2	ND		60	ND		600	ND		60	120	ND
250	ND		5	ND		250	ND		2500	ND		250	500	ND
45	ND		0.9	ND		45	ND		450	ND		45	90	ND
1	500		1	860	E	1	590	D	450	ND		45	1	690
45	ND		0.9	ND		45	ND		450	ND		45	90	ND
65	ND		1	6.3		65	ND		650	ND		65	130	ND
45	ND		1	3.9		45	ND		450	ND		45	90	ND
23	ND		0.5	ND		23	ND		230	ND		23	45	ND
25	ND		0.5	ND		25	ND		250	ND		25	50	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER
VOLATILE ORGANIC ANALYSES
OBSERVATION WELL OW-A17

35	ND		0.7	ND		35	ND		350	ND		35	70	ND
55	ND		1.1	ND		55	ND		550	ND		55	110	ND
55	ND		1.1	ND		55	ND		550	ND		55	110	ND
45	ND		0.9	ND		45	ND		450	ND		45	90	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND
45	ND		0.9	ND		45	ND		450	ND		45	90	ND
55	ND		1.1	ND		55	ND		550	ND		55	110	ND
35	ND		0.7	ND		35	ND		350	ND		35	70	ND
55	ND		1.1	ND		55	ND		550	ND		55	110	ND
30	ND		0.6	ND		30	ND		300	ND		30	60	ND
48	ND		1	ND		48	ND		480	ND		48	95	ND
25	ND		0.5	ND		25	ND		250	ND		25	50	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND
40	ND		1	2.3		40	ND		400	ND		40	80	ND
60	ND		1.2	ND		60	ND		600	ND		60	120	ND
70	ND		1.4	ND		70	ND		700	ND		70	140	ND
40	ND		0.8	ND		40	ND		400	ND		40	80	ND
50	ND		1	ND		50	ND		500	ND		50	100	ND
40	ND		0.8	ND		40	ND		400	ND		40	1	3400
35	ND		0.7	ND		35	ND		350	ND		35	70	ND

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

	Client Sample ID		HN-11I			HN-11I			HN-11I			HN-11I	
	Lab Sample ID		62734			62912			63072			63387	
	Sample Collection Date		12/16/98			12/17/98			12/18/98			12/21/98	
	Sample Receipt Date		12/17/98			12/18/98			12/19/98			12/23/98	
	Sample Matrix		WATER			WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA												
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND		9.2	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND		9.2	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND		6.5	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND		8.3	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND		10	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND		25	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		1.3	ND		1	2.2		6.3	ND	
75-35-4	1,1-Dichloroethene	1	22		0.6	ND		1	20		1	16	
67-64-1	Acetone	5	ND		5	ND		5	ND		5	17	J
75-15-0	Carbon Disulfide	5	4.5	J	5	ND		5	3.7	J	25	ND	
75-09-2	Methylene Chloride	1	5.2		0.7	ND		1	4.9		3.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND		3.4	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND		25	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND		1.9	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND		5	ND	
156-59-2	cis-1,2-dichloroethene	1	16		0.8	ND		1	15		4.2	ND	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		0.9	ND		4.4	ND	
67-66-3	Chloroform	1	110		1	22		1	93		1	91	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND		4.3	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND		25	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND		25	ND	
56-23-5	Carbon Tetrachloride	2	2000	E	2	380	E	2	1900	E	7.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND		3.7	ND	
71-43-2	Benzene	1	15		0.9	ND		1	13		1	11	
107-06-2	1,2-Dichloroethane	1	4.2		0.9	ND		1	4		4.5	ND	
79-01-6	Trichloroethene	1	690	E	1	2100	E	1	3000	E	1	34900	E
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND		5	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND		4.4	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND		3	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND		25	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND		0.7	ND	
108-88-3	Toluene	1	18		1	ND		1	15		1	10	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND		1.2	ND	
79-00-5	1,1,2-Trichloroethane	1	150		1	37		1	120		1	100	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND		25	ND	
127-18-4	Tetrachloroethene	1	110		1	11		1	110		1	74	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND		4.5	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND		5	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND		6	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND		25	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND		4.5	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	110		1	11		1	120		4.5	ND	
100-41-4	Ethylbenzene	1	5.2		0.9	ND		1	3.6		4.5	ND	
136777-61-2	m&p-xylenes	1	21		1.3	ND		1	18		1	15	
95-47-6	o-xylene	1	26		0.9	ND		1	23		1	17	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND		2.3	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND		2.5	ND	
98-82-8	isopropylbenzene	1	6.1		1	ND		1	5.4		5	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND		3.5	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND		5.5	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND		5.5	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND		4.5	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND		5	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND		4.5	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND		5.5	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND		3.5	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND		5.5	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND		3	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND		4.8	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND		2.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND		5	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND		4	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND		6	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND		7	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		0.8	ND		4	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND		5	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND		4	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND		3.5	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

	HN-11IDL			HN-11I			HN-11I			HN-11IDL			HN-11I			HN-11I	
	63387DL			63930			64311			64311DL			64890			65358	
	12/21/99			1/5/99			1/8/99			1/8/99			1/19/99			1/25/99	
	12/23/98			1/6/98			1/9/99			1/9/99			1/20/99			1/26/99	
	WATER			WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
920	ND		1.8	ND		1.8	ND		920	ND		920	ND		920	ND	
920	ND		1.8	ND		1.8	ND		920	ND		920	ND		920	ND	
650	ND		1.3	ND		1.3	ND		650	ND		650	ND		650	ND	
830	ND		1.7	ND		1.7	ND		830	ND		830	ND		830	ND	
1000	ND		2	ND		2	ND		1000	ND		1000	ND		1000	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
630	ND		1.3	ND		1.3	ND		630	ND		630	ND		630	ND	
290	ND		1	6.1		1	7.9		290	ND		290	ND		290	ND	
2500	ND		5	ND		5	3.8	J	5	1200	JD	2500	ND		2500	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
370	ND		0.7	ND		1	2.3		370	ND		370	ND		370	ND	
340	ND		0.7	ND		0.7	ND		340	ND		340	ND		340	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
190	ND		0.4	ND		0.4	ND		190	ND		190	ND		190	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
420	ND		1	4.3		1	6.9		420	ND		420	ND		420	ND	
440	ND		0.9	ND		0.9	ND		440	ND		440	ND		440	ND	
420	ND		1	29		1	45		420	ND		420	ND		420	ND	
430	ND		0.9	ND		0.9	ND		430	ND		430	ND		430	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
760	ND	D	2	720	E	2	1400	E	2	1100	D	760	ND		760	ND	
370	ND		0.7	ND		0.7	ND		370	ND		370	ND		370	ND	
430	ND		0 9	ND		1	6.2		430	ND		430	ND		430	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
1	51700	D	1	2300	E	1	3600	E	1	43900	D	1	25200		1	37400	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
440	ND		0.9	ND		0.9	ND		440	ND		440	ND		440	ND	
300	ND		0.6	ND		0.6	ND		300	ND		300	ND		300	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
65	ND		0.1	ND		0.1	ND		65	ND		65	ND		65	ND	
500	ND		1	4.7		1	11		500	ND		500	ND		500	ND	
120	ND		0.2	ND		0.2	ND		120	ND		120	ND		120	ND	
450	ND		1	36		1	65		450	ND		450	ND		450	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
450	ND		1	29		1	58		450	ND		450	ND		450	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

600	ND		1.2	ND		1.2	ND		600	ND		600	ND		600	ND	
2500	ND		5	ND		5	ND		2500	ND		2500	ND		2500	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
450	ND		1	27		1	51		450	ND		450	ND		450	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
650	ND		1	4.7		1	6.3		650	ND		650	ND		650	ND	
450	ND		1	5		1	6.8		450	ND		450	ND		450	ND	
230	ND		0.5	ND		0.5	ND		230	ND		230	ND		230	ND	
250	ND		0.5	ND		0.5	ND		250	ND		250	ND		250	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
350	ND		0.7	ND		0.7	ND		350	ND		350	ND		350	ND	
550	ND		1.1	ND		1.1	ND		550	ND		550	ND		550	ND	
550	ND		1.1	ND		1.1	ND		550	ND		550	ND		550	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
450	ND		0.9	ND		0.9	ND		450	ND		450	ND		450	ND	
550	ND		1.1	ND		1.1	ND		550	ND		550	ND		550	ND	
350	ND		0.7	ND		0.7	ND		350	ND		350	ND		350	ND	
550	ND		1.1	ND		1.1	ND		550	ND		550	ND		550	ND	
300	ND		0.6	ND		0.6	ND		300	ND		300	ND		300	ND	
480	ND		1	ND		1	ND		480	ND		480	ND		480	ND	
250	ND		0.5	ND		0.5	ND		250	ND		250	ND		250	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
400	ND		0.8	ND		0.8	ND		400	ND		400	ND		400	ND	
600	ND		1.2	ND		1.2	ND		600	ND		600	ND		600	ND	
700	ND		1.4	ND		1.4	ND		700	ND		700	ND		700	ND	
400	ND		0.8	ND		0.8	ND		400	ND		400	ND		400	ND	
500	ND		1	ND		1	ND		500	ND		500	ND		500	ND	
400	ND		0.8	ND		0.8	ND		400	ND		400	ND		400	ND	
350	ND		0.7	ND		0.7	ND		350	ND		350	ND		350	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

	HN-11I			HN-11IDL			HN11I			HN11I	
	66369			66369DL			67515			68828	
	2/3/99			2/3/99			2/23/99			3/16/99	
	2/4/99			2/4/99			2/24/99			3/17/99	
	WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		180	ND		180	ND		1.8	ND	
1.8	ND		180	ND		180	ND		1.8	ND	
1.3	ND		130	ND		130	ND		1.3	ND	
1.7	ND		170	ND		170	ND		1.7	ND	
2	ND		200	ND		200	ND		2	ND	
5	ND		500	ND		500	ND		5	ND	
1.3	ND		130	ND		130	ND		1.3	ND	
1	4.1		57	ND		57	ND		1	3.4	
5	ND		500	ND		500	ND		5	ND	
5	ND		500	ND		500	ND		5	ND	
0.7	ND		73	ND		73	ND		0.7	ND	
0.7	ND		68	ND		68	ND		0.7	ND	
5	ND		500	ND		500	ND		5	ND	
0.4	ND		37	ND		37	ND		0.4	ND	
1	ND		100	ND		100	ND		1	ND	
1	2.7		84	ND		84	ND		0.8	ND	
0.9	ND		87	ND		87	ND		0.9	ND	
1	13		84	ND		84	ND		1	8	
0.9	ND		86	ND		86	ND		0.9	ND	
5	ND		500	ND		500	ND		5	ND	
5	ND		500	ND		500	ND		5	ND	
2	260	E	150	ND		150	ND		2	260	E
0.7	ND		73	ND		73	ND		0.7	ND	
0 9	ND		85	ND		85	ND		0.9	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
1	1700	E	1	10900	D	1	2600		1	3700	E
1	ND		100	ND		100	ND		1	ND	
0.9	ND		88	ND		88	ND		0.9	ND	
0.6	ND		60	ND		60	ND		0.6	ND	
5	ND		500	ND		500	ND		5	ND	
0.1	ND		13	ND		13	ND		0.1	ND	
1	ND		100	ND		100	ND		1	ND	
0.2	ND		23	ND		23	ND		0.2	ND	
1	17		90	ND		90	ND		1	9.9	
5	ND		500	ND		500	ND		5	ND	
1	15		90	ND		90	ND		1	18	
0.9	ND		90	ND		90	ND		0.9	ND	
1	ND		100	ND		100	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11I

1.2	ND		120	ND		120	ND		1.2	ND	
5	ND		500	ND		500	ND		5	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
1	15		90	ND		90	ND		0.9	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
1.3	ND		130	ND		130	ND		1.3	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
0.5	ND		45	ND		45	ND		0.5	ND	
0.5	ND		50	ND		50	ND		0.5	ND	
1	ND		100	ND		100	ND		1	ND	
0.7	ND		70	ND		70	ND		0.7	ND	
1.1	ND		110	ND		110	ND		1.1	ND	
1.1	ND		110	ND		110	ND		1.1	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
1	ND		100	ND		100	ND		1	ND	
0.9	ND		90	ND		90	ND		0.9	ND	
1.1	ND		110	ND		110	ND		1.1	ND	
0.7	ND		70	ND		70	ND		0.7	ND	
1.1	ND		110	ND		110	ND		1.1	ND	
0.6	ND		60	ND		60	ND		0.6	ND	
1	ND		95	ND		95	ND		1	ND	
0.5	ND		50	ND		50	ND		0.5	ND	
1	ND		100	ND		100	ND		1	ND	
0.8	ND		80	ND		80	ND		0.8	ND	
1.2	ND		120	ND		120	ND		1.2	ND	
1.4	ND		140	ND		140	ND		1.4	ND	
0.8	ND		80	ND		80	ND		0.8	ND	
1	ND		100	ND		100	ND		1	ND	
0.8	ND		80	ND		80	ND		0.8	ND	
0.7	ND		70	ND		70	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11D

	Client Sample ID		HN-11D			HN-11D			HN-11D	
	Lab Sample ID		62909			63073			65800	
	Sample Collection Date		12/17/98			12/18/98			1/28/99	
	Sample Receipt Date		12/18/98			12/19/98			1/29/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		1.3	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		0.6	ND		0.6	ND	
67-64-1	Acetone	5	2.2	J	5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND		0.8	ND		0.8	ND	
74-97-5	Bromochloromethane	0 9	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	0.8	ND		0.8	ND		0.8	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	1.5	ND		1.5	ND		1.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	7		1	4.9		1	16	
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	0.9	ND		0.9	ND		0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-11D

106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.9	ND		0.9	ND		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-14I

	Client Sample ID		**HN-14I**			**HN14I**			**HN-14I**	
	Lab Sample ID		62910			63067			63799	
	Sample Collection Date		12/17/99			12/18/98			1/4/99	
	Sample Receipt Date		12/18/98			12/19/98			1/5/98	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	17		1	29		1	17	
75-35-4	1,1-Dichloroethene	0.6	ND		1	1.2		0.6	ND	
67-64-1	Acetone	5	ND		5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	15		1	16		1	21	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	1	7.3		1	8.2		1	11	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	110		2	140		2	96	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	1400	E	1	1400	E	1	1700	E
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	1	6.1		1	6.3		1	7.9	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	1	44		1	47		1	51	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND	

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106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	46		1	49		1	48	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0 8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND	

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	HN-14IDL			HN-14I			HN-14IDL			HN-14I			HN-14IDL	
	63799DL			64359			64359DL			64586			64586DL	
	1/4/99			1/11/99			1/11/99			1/13/99			1/13/99	
	1/5/98			1/12/99			1/12/99			1/14/99			1/14/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
180	ND		1.8	ND		920	ND		1.8	ND		460	ND	
180	ND		1.8	ND		920	ND		1.8	ND		460	ND	
130	ND		1.3	ND		650	ND		1.3	ND		330	ND	
170	ND		1.7	ND		830	ND		1.7	ND		420	ND	
200	ND		2	ND		1000	ND		2	ND		510	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
130	ND		1	20		630	ND		1	25		320	ND	
57	ND		0.6	ND		290	ND		0.6	ND		140	ND	
5	1200	BD	5	ND		2500	ND		5	ND		5	1600	BD
500	ND		5	ND		2500	ND		5	ND		1300	ND	
73	ND		0.7	ND		370	ND		0.7	ND		180	ND	
68	ND		0.7	ND		340	ND		0.7	ND		170	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
37	ND		0.4	ND		190	ND		0.4	ND		93	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
84	ND		1	21		420	ND		1	30		210	ND	
87	ND		0.9	ND		440	ND		0.9	ND		220	ND	
84	ND		1	9.7		420	ND		1	12		210	ND	
86	ND		0.9	ND		430	ND		0.9	ND		220	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
150	ND		2	150		760	ND		2	130		380	ND	
73	ND		0.7	ND		370	ND		0.7	ND		180	ND	
85	ND		0.9	ND		430	ND		0.9	ND		210	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
1	5900	D	1	1800	E	1	5200	D	1	500	E	1	4800	D
100	ND		1	ND		500	ND		1	ND		250	ND	
88	ND		0.9	ND		440	ND		0.9	ND		220	ND	
60	ND		0.6	ND		300	ND		0.6	ND		150	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
13	ND		0.1	ND		65	ND		0.1	ND		33	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
23	ND		0.2	ND		120	ND		0.2	ND		58	ND	
90	ND		1	8.5		450	ND		1	7.8		230	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
90	ND		1	59		450	ND		1	64		230	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	

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120	ND		1.2	ND		600	ND		1.2	ND		300	ND	
500	ND		5	ND		2500	ND		5	ND		1300	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
90	ND		1	54		450	ND		0.9	ND		230	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
130	ND		1.3	ND		650	ND		1.3	ND		330	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
45	ND		0.5	ND		230	ND		0.5	ND		110	ND	
50	ND		0.5	ND		250	ND		0.5	ND		130	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
70	ND		0.7	ND		350	ND		0.7	ND		180	ND	
110	ND		1.1	ND		550	ND		1.1	ND		280	ND	
110	ND		1.1	ND		550	ND		1.1	ND		280	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
90	ND		0.9	ND		450	ND		0.9	ND		230	ND	
110	ND		1.1	ND		550	ND		1.1	ND		280	ND	
70	ND		0.7	ND		350	ND		0.7	ND		180	ND	
110	ND		1.1	ND		550	ND		1.1	ND		280	ND	
60	ND		0.6	ND		300	ND		0.6	ND		150	ND	
95	ND		1	ND		480	ND		1	ND		240	ND	
50	ND		0.5	ND		250	ND		0.5	ND		130	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
80	ND		0.8	ND		400	ND		0.8	ND		200	ND	
120	ND		1.2	ND		600	ND		1.2	ND		300	ND	
140	ND		1.4	ND		700	ND		1.4	ND		350	ND	
80	ND		0.8	ND		400	ND		0.8	ND		200	ND	
100	ND		1	ND		500	ND		1	ND		250	ND	
80	ND		0.8	ND		400	ND		0.8	ND		200	ND	
70	ND		0.7	ND		350	ND		0.7	ND		180	ND	

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MONITORING WELL HN-14I

	HN-14I			HN-14I			HN-14IDL			HN-14I			HN-14I	
	65124			65447			65447DL			66536			67183	
	1/21/99			1/26/99			1/26/99			2/5/99			2/17/99	
	1/22/99			1/27/99			1/27/99			2/6/99			2/18/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
920	ND		1.8	ND		46	ND		180	ND		1.8	ND	
920	ND		1.8	ND		46	ND		180	ND		1.8	ND	
650	ND		1.3	ND		33	ND		130	ND		1.3	ND	
830	ND		1.7	ND		42	ND		170	ND		1.7	ND	
1000	ND		2	ND		51	ND		200	ND		2	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
630	ND		1	41		32	ND		130	ND		1	85	
290	ND		0.6	ND		14	ND		57	ND		1	3.7	
2500	ND		5	ND		130	ND		500	ND		5	ND	
2500	ND		5	ND		130	ND		500	ND		5	1.1	J
370	ND		0.7	ND		18	ND		73	ND		0.7	ND	
340	ND		0.7	ND		17	ND		68	ND		0.7	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
190	ND		0.4	ND		9.3	ND		37	ND		0.4	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
420	ND		1	45		21	ND		84	ND		1	36	
440	ND		0.9	ND		22	ND		87	ND		0.9	ND	
420	ND		1	14		21	ND		84	ND		1	27	
430	ND		0.9	ND		22	ND		86	ND		0.9	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
760	ND		2	150		2	73	D	150	ND		2	290	E
370	ND		0.7	ND		18	ND		73	ND		0.7	ND	
430	ND		0.9	ND		21	ND		85	ND		0.9	ND	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
1	4000		1	1100	E	1	5400	D	1	5400		1	2200	E
500	ND		1	ND		25	ND		100	ND		1	ND	
440	ND		0.9	ND		22	ND		88	ND		0.9	ND	
300	ND		0.6	ND		15	ND		60	ND		0.6	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
65	ND		0.1	ND		3.3	ND		13	ND		0.1	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
120	ND		0.2	ND		5.8	ND		23	ND		0.2	ND	
450	ND		1	8.3		23	ND		90	ND		1	23	
2500	ND		5	ND		130	ND		500	ND		5	ND	
450	ND		1	65		1	55	D	90	ND		1	85	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	

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600	ND		1.2	ND		30	ND		120	ND		1.2	ND	
2500	ND		5	ND		130	ND		500	ND		5	ND	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
450	ND		1	63		23	ND		90	ND		1	86	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
650	ND		1.3	ND		33	ND		130	ND		1.3	ND	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
230	ND		0.5	ND		11	ND		45	ND		0.5	ND	
250	ND		0.5	ND		13	ND		50	ND		0.5	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
350	ND		0.7	ND		18	ND		70	ND		0.7	ND	
550	ND		1.1	ND		28	ND		110	ND		1.1	ND	
550	ND		1.1	ND		28	ND		110	ND		1.1	ND	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
450	ND		0.9	ND		23	ND		90	ND		0.9	ND	
550	ND		1.1	ND		28	ND		110	ND		1.1	ND	
350	ND		0.7	ND		18	ND		70	ND		0.7	ND	
550	ND		1.1	ND		28	ND		110	ND		1.1	ND	
300	ND		0.6	ND		15	ND		60	ND		0.6	ND	
480	ND		1	ND		24	ND		95	ND		1	ND	
250	ND		0.5	ND		13	ND		50	ND		0.5	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
400	ND		0.8	ND		20	ND		80	ND		0.8	ND	
600	ND		1.2	ND		30	ND		120	ND		1.2	ND	
700	ND		1.4	ND		35	ND		140	ND		1.4	ND	
400	ND		0.8	ND		20	ND		80	ND		0.8	ND	
500	ND		1	ND		25	ND		100	ND		1	ND	
400	ND		0.8	ND		20	ND		80	ND		0.8	ND	
350	ND		0.7	ND		18	ND		70	ND		0.7	ND	

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	HN-14IDL			HN14I			HN-14I			HN14I			HN14IDL		
	67183DL			67828			68631			68830			68830DL		
	2/17/99			2/26/99			3/11/99			3/16/99			3/16/99		
	2/18/99			2/27/99			3/12/99			3/17/99			3/17/99		
	WATER			WATER			WATER			WATER			WATER		
	ug/L			ug/L			ug/L			ug/L			ug/L		
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL
180	ND		180	ND		1.8	ND		1.8	ND		180	ND		1.8
180	ND		180	ND		1.8	ND		1.8	ND		180	ND		1.8
130	ND		130	ND		1.3	ND		1.3	ND		130	ND		1.3
170	ND		170	ND		1.7	ND		1.7	ND		170	ND		1.7
200	ND		200	ND		2	ND		2	ND		200	ND		2
500	ND		500	ND		5	ND		5	ND		500	ND		5
130	ND		130	ND		1	170		1	180		1	260	D	1
57	ND		57	ND		1	3.2		1	3.1		57	ND		0.6
500	ND		500	ND		5	ND		5	ND		500	ND		5
500	ND		500	ND		5	3	J	5	ND		500	ND		5
73	ND		73	ND		0.7	ND		0.7	ND		73	ND		0.7
68	ND		68	ND		0.7	ND		0.7	ND		68	ND		0.7
500	ND		500	ND		5	ND		5	ND		500	ND		5
37	ND		37	ND		0.4	ND		0.4	ND		37	ND		0.4
100	ND		100	ND		1	ND		1	ND		100	ND		1
84	ND		84	ND		1	21		1	18		84	ND		0.8
87	ND		87	ND		0.9	ND		0.9	ND		87	ND		0.9
84	ND		84	ND		1	23		1	9.6		84	ND		0.8
86	ND		86	ND		0.9	ND		0.9	ND		86	ND		0.9
500	ND		500	ND		5	ND		5	ND		500	ND		5
500	ND		500	ND		5	ND		5	ND		500	ND		5
150	ND		150	ND		2	360	E	2	290	E	2	350	D	2
73	ND		73	ND		0.7	ND		0.7	ND		73	ND		0.7
85	ND		85	ND		0.9	ND		0.9	ND		85	ND		0.9
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
1	12200	D	1	16300		1	2300	E	1	4700	E	1	15700	D	1
100	ND		100	ND		1	ND		1	ND		100	ND		1
88	ND		88	ND		0.9	ND		0.9	ND		88	ND		0.9
60	ND		60	ND		0.6	ND		0.6	ND		60	ND		0.6
500	ND		500	ND		5	ND		5	ND		500	ND		5
13	ND		13	ND		0.1	ND		0.1	ND		13	ND		0.1
100	ND		100	ND		1	ND		1	ND		100	ND		1
23	ND		23	ND		0.2	ND		0.2	ND		23	ND		0.2
90	ND		90	ND		1	20		1	18		90	ND		0.9
500	ND		500	ND		5	ND		5	ND		500	ND		5
90	ND		90	ND		1	81		1	100		1	140	D	1
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
100	ND		100	ND		1	ND		1	ND		100	ND		1

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120	ND		120	ND		1.2	ND		1.2	ND		120	ND		1.2
500	ND		500	ND		5	ND		5	ND		500	ND		5
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
90	ND		90	ND		1	80		0.9	ND		90	ND		0.9
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
130	ND		130	ND		1.3	ND		1.3	ND		130	ND		1.3
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
45	ND		45	ND		0.5	ND		0.5	ND		45	ND		0.5
50	ND		50	ND		0.5	ND		0.5	ND		50	ND		0.5
100	ND		100	ND		1	ND		1	ND		100	ND		1
70	ND		70	ND		0.7	ND		0.7	ND		70	ND		0.7
110	ND		110	ND		1.1	ND		1.1	ND		110	ND		1.1
110	ND		110	ND		1.1	ND		1.1	ND		110	ND		1.1
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
100	ND		100	ND		1	ND		1	ND		100	ND		1
90	ND		90	ND		0.9	ND		0.9	ND		90	ND		0.9
110	ND		110	ND		1.1	ND		1.1	ND		110	ND		1.1
70	ND		70	ND		0.7	ND		0.7	ND		70	ND		0.7
110	ND		110	ND		1.1	ND		1.1	ND		110	ND		1.1
60	ND		60	ND		0.6	ND		0.6	ND		60	ND		0.6
95	ND		95	ND		1	ND		1	ND		95	ND		1
50	ND		50	ND		0.5	ND		0.5	ND		50	ND		0.5
100	ND		100	ND		1	ND		1	ND		100	ND		1
80	ND		80	ND		0.8	ND		0.8	ND		80	ND		0.8
120	ND		120	ND		1.2	ND		1.2	ND		120	ND		1.2
140	ND		140	ND		1.4	ND		1.4	ND		140	ND		1.4
80	ND		80	ND		0.8	ND		0.8	ND		80	ND		0.8
100	ND		100	ND		1	ND		1	ND		100	ND		1
80	ND		80	ND		0.8	ND		0.8	ND		80	ND		0.8
70	ND		70	ND		0.7	ND		0.7	ND		70	ND		0.7

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
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MONITORING WELL HN-14S

	Client Sample ID		HN-14S			HN-14S			HN14S	
	Lab Sample ID		62733			62908			63066	
	Sample Collection Date		12/16/98			12/17/98			12/18/98	
	Sample Receipt Date		12/17/98			12/18/98			12/19/98	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	580	E	1	390	E	1	440	E
75-35-4	1,1-Dichloroethene	0.6	ND		0.6	ND		0.6	ND	
67-64-1	Acetone	5	ND		5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND		0.8	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	1	3		1	2.7		0.8	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	7.7		2	8.9		1.5	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	330	E	1	380	E	1	300	E
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	1	3.5		1	4		0.9	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND	

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106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	2.2		1	3.8		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND	

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	HN-14S			HN-14S			HN-14S			HN-14SDL			HN-14-S	
	63798			64453			65123			65123DL			65446	
	1/4/99			1/12/99			1/21/99			1/21/99			1/26/99	
	1/5/98			1/13/99			1/22/99			1/22/99			1/27/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		1.8	ND		1.8	ND		92	ND		9.2	ND	
1.8	ND		1.8	ND		1.8	ND		92	ND		9.2	ND	
1.3	ND		1.3	ND		1.3	ND		65	ND		6.5	ND	
1.7	ND		1.7	ND		1.7	ND		83	ND		8.3	ND	
2	ND		2	ND		2	ND		100	ND		10	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
1	290	E	1	490	E	1	260	E	1	250	D	1	240	
0.6	ND		0.6	ND		0.6	ND		29	ND		2.9	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
0.7	ND		0.7	ND		0.7	ND		37	ND		3.7	ND	
0.7	ND		0.7	ND		0.7	ND		34	ND		3.4	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
0.4	ND		0.4	ND		0.4	ND		19	ND		1.9	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
1	2.9		0.8	ND		0.8	ND		42	ND		4.2	ND	
0.9	ND		0.9	ND		0.9	ND		44	ND		4.4	ND	
1	3.6		1	2.7		0.8	ND		42	ND		4.2	ND	
0.9	ND		0.9	ND		0.9	ND		43	ND		4.3	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
2	9		2	2.6		1.5	ND		76	ND		7.6	ND	
0.7	ND		0.7	ND		0.7	ND		37	ND		3.7	ND	
0.9	ND		0.9	ND		0.9	ND		43	ND		4.3	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1	730	E	1	220	E	1	65		50	ND		1	240	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.9	ND		0.9	ND		0.9	ND		44	ND		4.4	ND	
0.6	ND		0.6	ND		0.6	ND		30	ND		3	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
0.1	ND		0.1	ND		0.1	ND		6.5	ND		0.7	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.2	ND		0.2	ND		0.2	ND		12	ND		1.2	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
1	8.6		0.9	ND		0.9	ND		45	ND		4.5	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	

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1.2	ND		1.2	ND		1.2	ND		60	ND		6	ND	
5	ND		5	ND		5	ND		250	ND		25	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1	7.7		0.9	ND		0.9	ND		45	ND		4.5	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1.3	ND		1.3	ND		1.3	ND		65	ND		6.5	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
0.5	ND		0.5	ND		0.5	ND		23	ND		2.3	ND	
0.5	ND		0.5	ND		0.5	ND		25	ND		2.5	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.7	ND		0.7	ND		0.7	ND		35	ND		3.5	ND	
1.1	ND		1.1	ND		1.1	ND		55	ND		5.5	ND	
1.1	ND		1.1	ND		1.1	ND		55	ND		5.5	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.9	ND		0.9	ND		0.9	ND		45	ND		4.5	ND	
1.1	ND		1.1	ND		1.1	ND		55	ND		5.5	ND	
0.7	ND		0.7	ND		0.7	ND		35	ND		3.5	ND	
1.1	ND		1.1	ND		1.1	ND		55	ND		5.5	ND	
0.6	ND		0.6	ND		0.6	ND		30	ND		3	ND	
1	ND		1	ND		1	ND		48	ND		4.8	ND	
0.5	ND		0.5	ND		0.5	ND		25	ND		2.5	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.8	ND		0.8	ND		0.8	ND		40	ND		4	ND	
1.2	ND		1.2	ND		1.2	ND		60	ND		6	ND	
1.4	ND		1.4	ND		1.4	ND		70	ND		7	ND	
0.8	ND		0.8	ND		0.8	ND		40	ND		4	ND	
1	ND		1	ND		1	ND		50	ND		5	ND	
0.8	ND		0.8	ND		0.8	ND		40	ND		4	ND	
0.7	ND		0.7	ND		0.7	ND		35	ND		3.5	ND	

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	HN-14S			HN-14S			HN14S			HN-14S			HN14S			HN-14S	
	66537			67182			67827			68632			68829			69476	
	2/5/99			2/17/99			2/26/99			3/11/99			3/16/99			3/26/99	
	2/6/99			2/18/99			2/27/99			3/12/99			3/17/99			3/27/99	
	WATER			WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		1.8	ND		180	ND		1.8	ND		1.8	ND		1.8	ND	
1.8	ND		1.8	ND		180	ND		1.8	ND		1.8	ND		1.8	ND	
1.3	ND		1.3	ND		130	ND		1.3	ND		1.3	ND		1.3	ND	
1.7	ND		1.7	ND		170	ND		1.7	ND		1.7	ND		1.7	ND	
2	ND		2	ND		200	ND		2	ND		2	ND		2	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
1	130		1	160		130	ND		1	110		1	130		1	120	
0.6	ND		0.6	ND		57	ND		0.6	ND		0.6	ND		0.6	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
0.7	ND		0.7	ND		73	ND		0.7	ND		0.7	ND		0.7	ND	
0.7	ND		0.7	ND		68	ND		0.7	ND		0.7	ND		0.7	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
0.4	ND		0.4	ND		37	ND		0.4	ND		0.4	ND		0.4	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.8	ND		0.8	ND		84	ND		0.8	ND		0.8	ND		0.8	ND	
0.9	ND		0.9	ND		87	ND		0.9	ND		0.9	ND		0.9	ND	
0.8	ND		1	1.3		84	ND		0.8	ND		0.8	ND		0.8	ND	
0.9	ND		0.9	ND		86	ND		0.9	ND		0.9	ND		0.9	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
1.5	ND		1.5	ND		150	ND		2	7.7		2	10		2	15	
0.7	ND		0.7	ND		73	ND		0.7	ND		0.7	ND		0.7	ND	
0.9	ND		0.9	ND		85	ND		0.9	ND		0.9	ND		0.9	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
1	83		1	85		1	270		1	450	E	1	400	E	1	590	E
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.9	ND		0.9	ND		88	ND		0.9	ND		0.9	ND		0.9	ND	
0.6	ND		0.6	ND		60	ND		0.6	ND		0.6	ND		0.6	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
0.1	ND		0.1	ND		13	ND		0.1	ND		0.1	ND		0.1	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.2	ND		0.2	ND		23	ND		0.2	ND		0.2	ND		0.2	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		1	1.2	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		1	1.6		1	1.8	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	

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1.2	ND		1.2	ND		120	ND		1.2	ND		1.2	ND		1.2	ND	
5	ND		5	ND		500	ND		5	ND		5	ND		5	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
1.3	ND		1.3	ND		130	ND		1.3	ND		1.3	ND		1.3	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
0.5	ND		0.5	ND		45	ND		0.5	ND		0.5	ND		0.5	ND	
0.5	ND		0.5	ND		50	ND		0.5	ND		0.5	ND		0.5	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.7	ND		0.7	ND		70	ND		0.7	ND		0.7	ND		0.7	ND	
1.1	ND		1.1	ND		110	ND		1.1	ND		1.1	ND		1.1	ND	
1.1	ND		1.1	ND		110	ND		1.1	ND		1.1	ND		1.1	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.9	ND		0.9	ND		90	ND		0.9	ND		0.9	ND		0.9	ND	
1.1	ND		1.1	ND		110	ND		1.1	ND		1.1	ND		1.1	ND	
0.7	ND		0.7	ND		70	ND		0.7	ND		0.7	ND		0.7	ND	
1.1	ND		1.1	ND		110	ND		1.1	ND		1.1	ND		1.1	ND	
0.6	ND		0.6	ND		60	ND		0.6	ND		0.6	ND		0.6	ND	
1	ND		1	ND		95	ND		1	ND		1	ND		1	ND	
0.5	ND		0.5	ND		50	ND		0.5	ND		0.5	ND		0.5	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.8	ND		0.8	ND		80	ND		0.8	ND		0.8	ND		0.8	ND	
1.2	ND		1.2	ND		120	ND		1.2	ND		1.2	ND		1.2	ND	
1.4	ND		1.4	ND		140	ND		1.4	ND		1.4	ND		1.4	ND	
0.8	ND		0 8	ND		80	ND		0.8	ND		0.8	ND		0.8	ND	
1	ND		1	ND		100	ND		1	ND		1	ND		1	ND	
0.8	ND		0.8	ND		80	ND		0.8	ND		0.8	ND		0.8	ND	
0.7	ND		0.7	ND		70	ND		0.7	ND		0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

	Client Sample ID		HN-55I			HN-55I			HN-55IDL	
	Lab Sample ID		62913			64360			64360DL	
	Sample Collection Date		12/17/99			1/11/99			1/11/99	
	Sample Receipt Date		12/18/98			1/12/99			1/12/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		920	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		920	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		650	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		830	ND	
75-00-3	Chloroethane	2	ND		2	ND		1000	ND	
107-02-8	Acrolein	5	ND		5	ND		2500	ND	
75-69-4	Trichlorofluoromethane	1	110		1.3	ND		630	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		1	3		290	ND	
67-64-1	Acetone	5	ND		5	ND		2500	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		2500	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		370	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		340	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		2500	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		190	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		500	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND		1	10		420	ND	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		440	ND	
67-66-3	Chloroform	1	15		0.8	ND		420	ND	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		430	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		2500	ND	
78-93-3	2-Butanone	5	ND		5	ND		2500	ND	
56-23-5	Carbon Tetrachloride	2	190		2	360	E	760	ND	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		370	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		430	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		450	ND	
79-01-6	Trichloroethene	1	1400	E	1	2400	E	1	11200	D
78-87-5	1,2-Dichloropropane	1	ND		1	ND		500	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		440	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		300	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		2500	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		65	ND	
108-88-3	Toluene	1	ND		1	ND		500	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		120	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		1	21		450	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		2500	ND	
127-18-4	Tetrachloroethene	1	250	E	1	280	E	450	ND	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		450	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		500	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		600	ND	
591-78-6	2-Hexanone	5	ND		5	ND		2500	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		450	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	260	E	1	250	E	450	ND	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		450	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		650	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		450	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		230	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		250	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		500	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		350	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		550	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		550	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		450	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		500	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		450	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		550	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		350	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		550	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		300	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		480	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		250	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		500	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		400	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		600	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		700	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		400	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		500	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		400	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		350	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

	HN-55I			HN-55IDL			HN-55I			HN-55I			HN-55I	
	64587			64587DL			64891			66368			66852	
	1/13/99			1/13/99			1/19/99			2/3/99			2/10/99	
	1/14/99			1/14/99			1/20/99			2/4/99			2/12/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		460	ND		920	ND		1.8	ND		920	ND	
1.8	ND		460	ND		920	ND		1.8	ND		920	ND	
1.3	ND		330	ND		650	ND		1.3	ND		650	ND	
1.7	ND		420	ND		830	ND		1.7	ND		830	ND	
2	ND		510	ND		1000	ND		2	ND		1000	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
1	97		320	ND		630	ND		1	750	E	630	ND	
1	4.4		140	ND		290	ND		0.6	ND		290	ND	
5	ND		5	1400	BD	2500	ND		5	ND		2500	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
0.7	ND		180	ND		370	ND		0.7	ND		370	ND	
0.7	ND		170	ND		340	ND		0.7	ND		340	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
0.4	ND		93	ND		190	ND		0.4	ND		190	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
1	12		210	ND		420	ND		1	4.5		420	ND	
0.9	ND		220	ND		440	ND		0.9	ND		440	ND	
1	29		210	ND		420	ND		1	11		420	ND	
0.9	ND		220	ND		430	ND		0.9	ND		430	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
2	380	E	380	ND		760	ND		2	78		760	ND	
0.7	ND		180	ND		370	ND		0.7	ND		370	ND	
0.9	ND		210	ND		430	ND		0.9	ND		430	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
1	430	E	1	11900	D	1	11400		1	1200	E	1	4300	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.9	ND		220	ND		440	ND		0.9	ND		440	ND	
0.6	ND		150	ND		300	ND		0.6	ND		300	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
0.1	ND		33	ND		65	ND		0.1	ND		65	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.2	ND		58	ND		120	ND		0.2	ND		120	ND	
1	20		230	ND		450	ND		1	6.7		450	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
1	290	E	230	ND		450	ND		1	71		450	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

1.2	ND		300	ND		600	ND		1.2	ND		600	ND	
5	ND		1300	ND		2500	ND		5	ND		2500	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
0.9	ND		230	ND		450	ND		1	71		450	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
1.3	ND		330	ND		650	ND		1.3	ND		650	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
0.5	ND		110	ND		230	ND		0.5	ND		230	ND	
0.5	ND		130	ND		250	ND		0.5	ND		250	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.7	ND		180	ND		350	ND		0.7	ND		350	ND	
1.1	ND		280	ND		550	ND		1.1	ND		550	ND	
1.1	ND		280	ND		550	ND		1.1	ND		550	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.9	ND		230	ND		450	ND		0.9	ND		450	ND	
1.1	ND		280	ND		550	ND		1.1	ND		550	ND	
0.7	ND		180	ND		350	ND		0.7	ND		350	ND	
1.1	ND		280	ND		550	ND		1.1	ND		550	ND	
0.6	ND		150	ND		300	ND		0.6	ND		300	ND	
1	ND		240	ND		480	ND		1	ND		480	ND	
0.5	ND		130	ND		250	ND		0.5	ND		250	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.8	ND		200	ND		400	ND		0.8	ND		400	ND	
1.2	ND		300	ND		600	ND		1.2	ND		600	ND	
1.4	ND		350	ND		700	ND		1.4	ND		700	ND	
0.8	ND		200	ND		400	ND		0.8	ND		400	ND	
1	ND		250	ND		500	ND		1	ND		500	ND	
0.8	ND		200	ND		400	ND		0.8	ND		400	ND	
0.7	ND		180	ND		350	ND		0.7	ND		350	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

	HN-55I			HN55I			HN-55I	
	68635			68826			69471	
	3/11/99			3/16/99			3/26/99	
	3/12/99			3/17/99			3/27/99	
	WATER			WATER			WATER	
	ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		1.8	ND		18	ND	
1.8	ND		1.8	ND		18	ND	
1.3	ND		1 3	ND		13	ND	
1.7	ND		1.7	ND		17	ND	
2	ND		2	ND		20	ND	
5	ND		5	ND		50	ND	
1	61		1	45		1	46	
0.6	ND		0.6	ND		5.7	ND	
5	ND		5	ND		50	ND	
5	ND		5	ND		50	ND	
0.7	ND		0.7	ND		7.3	ND	
0.7	ND		0.7	ND		6.8	ND	
5	ND		5	ND		50	ND	
0.4	ND		0 4	ND		3.7	ND	
1	ND		1	ND		10	ND	
1	5.9		1	5.4		8.4	ND	
0.9	ND		0 9	ND		8.7	ND	
1	10		1	10		8.4	ND	
0.9	ND		0.9	ND		8.6	ND	
5	ND		5	ND		50	ND	
5	ND		5	ND		50	ND	
2	80		2	82		2	90	
0.7	ND		0.7	ND		7.3	ND	
0.9	ND		0.9	ND		8.5	ND	
0.9	ND		0 9	ND		9	ND	
1	1100	E	1	1400	E	1	1600	
1	ND		1	ND		10	ND	
0.9	ND		0.9	ND		8.8	ND	
0.6	ND		0.6	ND		6	ND	
5	ND		5	ND		50	ND	
0.1	ND		0.1	ND		1.3	ND	
1	ND		1	ND		10	ND	
0.2	ND		0.2	ND		2.3	ND	
1	2.4		0.9	ND		9	ND	
5	ND		5	ND		50	ND	
1	260	E	1	280	E	1	410	
0.9	ND		0.9	ND		9	ND	
1	ND		1	ND		10	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-55I

1.2	ND		1.2	ND		12	ND	
5	ND		5	ND		50	ND	
0.9	ND		0.9	ND		9	ND	
1	260	E	0.9	ND		9	ND	
0.9	ND		0.9	ND		9	ND	
1.3	ND		1.3	ND		13	ND	
0.9	ND		0.9	ND		9	ND	
0.5	ND		0.5	ND		4.5	ND	
0.5	ND		0.5	ND		5	ND	
1	ND		1	ND		10	ND	
0.7	ND		0.7	ND		7	ND	
1.1	ND		1.1	ND		11	ND	
1.1	ND		1.1	ND		11	ND	
0.9	ND		0.9	ND		9	ND	
1	ND		1	ND		10	ND	
0.9	ND		0.9	ND		9	ND	
1.1	ND		1.1	ND		11	ND	
0.7	ND		0.7	ND		7	ND	
1.1	ND		1.1	ND		11	ND	
0.6	ND		0.6	ND		6	ND	
1	ND		1	ND		9.5	ND	
0.5	ND		0.5	ND		5	ND	
1	ND		1	ND		10	ND	
0.8	ND		0.8	ND		8	ND	
1.2	ND		1.2	ND		12	ND	
1.4	ND		1.4	ND		14	ND	
0.8	ND		0.8	ND		8	ND	
1	ND		1	ND		10	ND	
0.8	ND		0.8	ND		8	ND	
0.7	ND		0.7	ND		7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

	Client Sample ID		HN-59I			HN-59IDL			HN-59I	
	Lab Sample ID		63929			63929DL			64455	
	Sample Collection Date		1/5/99			1/5/99			1/12/99	
	Sample Receipt Date		1/6/98			1/6/98			1/13/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		920	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		920	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		650	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		830	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		1000	ND		2	ND	
107-02-8	Acrolein	5	ND		2500	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	110		630	ND		1	120	
75-35-4	1,1-Dichloroethene	1	6		290	ND		1	6.4	
67-64-1	Acetone	5	ND		2500	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		2500	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		370	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		340	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		2500	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		190	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		500	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	17		420	ND		1	18	
74-97-5	Bromochloromethane	0.9	ND		440	ND		0.9	ND	
67-66-3	Chloroform	1	31		420	ND		1	34	
71-55-6	1,1,1-Trichloroethane	0.9	ND		430	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		2500	ND		5	ND	
78-93-3	2-Butanone	5	ND		2500	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	480	E	760	ND		2	520	E
563-58-6	1,1-Dichloropropene	0.7	ND		370	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		430	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		450	ND		0.9	ND	
79-01-6	Trichloroethene	1	2200	E	1	16500	D	1	640	E
78-87-5	1,2-Dichloropropane	1	ND		500	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		440	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		300	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		2500	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		65	ND		0.1	ND	
108-88-3	Toluene	1	ND		500	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		120	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	1	26		450	ND		1	29	
108-10-1	4-Methyl-2-Pentanone	5	ND		2500	ND		5	ND	
127-18-4	Tetrachloroethene	1	190		450	ND		1	210	E
142-28-9	1,3-Dichloropropane	0.9	ND		450	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		500	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

106-93-4	1,2-Dibromoethane	1.2	ND		600	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		2500	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		450	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	180		450	ND		1	200	
100-41-4	Ethylbenzene	0.9	ND		450	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		650	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		450	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		230	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		250	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		500	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		350	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		550	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		550	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		450	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		500	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		450	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		550	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		350	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		550	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		300	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		480	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		250	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		500	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		400	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		600	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		700	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		400	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		500	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		400	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		350	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

	HN-59IDL			HN-59I			HN-59I			HN-59I			HN-59I	
	64455DL			65126			65797			66371			67185	
	1/12/99			1/21/99			1/28/99			2/3/99			2/17/99	
	1/13/99			1/22/99			1/29/99			2/4/99			2/18/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
920	ND		920	ND		920	ND		1.8	ND		1.8	ND	
920	ND		920	ND		920	ND		1.8	ND		1.8	ND	
650	ND		650	ND		650	ND		1.3	ND		1.3	ND	
830	ND		830	ND		830	ND		1.7	ND		1.7	ND	
1000	ND		1000	ND		1000	ND		2	ND		2	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
630	ND		630	ND		630	ND		1	100		1	120	
290	ND		290	ND		290	ND		1	6.1		1	5.9	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
370	ND		370	ND		370	ND		0.7	ND		0.7	ND	
340	ND		340	ND		340	ND		0.7	ND		0.7	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
190	ND		190	ND		190	ND		0.4	ND		0.4	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
420	ND		420	ND		420	ND		1	17		1	15	
440	ND		440	ND		440	ND		0.9	ND		0.9	ND	
420	ND		420	ND		420	ND		1	32		1	32	
430	ND		430	ND		430	ND		0.9	ND		0.9	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
760	ND		760	ND		760	ND		2	340	E	2	330	E
370	ND		370	ND		370	ND		0.7	ND		0.7	ND	
430	ND		430	ND		430	ND		0.9	ND		1	1.1	
450	ND		450	ND		450	ND		0.9	ND		1	1.3	
1	17300	D	1	15700		1	16400		1	2000	E	1	2300	E
500	ND		500	ND		500	ND		1	ND		1	ND	
440	ND		440	ND		440	ND		0.9	ND		0.9	ND	
300	ND		300	ND		300	ND		0.6	ND		0.6	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
65	ND		65	ND		65	ND		0.1	ND		0.1	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
120	ND		120	ND		120	ND		0.2	ND		0.2	ND	
450	ND		450	ND		450	ND		1	29		1	27	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
450	ND		450	ND		450	ND		1	200		1	180	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

600	ND		600	ND		600	ND		1.2	ND		1.2	ND	
2500	ND		2500	ND		2500	ND		5	ND		5	ND	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
450	ND		450	ND		450	ND		1	200	E	1	180	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
650	ND		650	ND		650	ND		1.3	ND		1.3	ND	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
230	ND		230	ND		230	ND		0.5	ND		0.5	ND	
250	ND		250	ND		250	ND		0.5	ND		0.5	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
350	ND		350	ND		350	ND		0.7	ND		0.7	ND	
550	ND		550	ND		550	ND		1.1	ND		1.1	ND	
550	ND		550	ND		550	ND		1.1	ND		1.1	ND	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
450	ND		450	ND		450	ND		0.9	ND		0.9	ND	
550	ND		550	ND		550	ND		1.1	ND		1.1	ND	
350	ND		350	ND		350	ND		0.7	ND		0.7	ND	
550	ND		550	ND		550	ND		1.1	ND		1.1	ND	
300	ND		300	ND		300	ND		0.6	ND		0.6	ND	
480	ND		480	ND		480	ND		1	ND		1	ND	
250	ND		250	ND		250	ND		0.5	ND		0.5	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
400	ND		400	ND		400	ND		0.8	ND		0.8	ND	
600	ND		600	ND		600	ND		1.2	ND		1.2	ND	
700	ND		700	ND		700	ND		1.4	ND		1.4	ND	
400	ND		400	ND		400	ND		0.8	ND		0.8	ND	
500	ND		500	ND		500	ND		1	ND		1	ND	
400	ND		400	ND		400	ND		0.8	ND		0.8	ND	
350	ND		350	ND		350	ND		0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

	HN 59I			HN-59I			HN59I			HN-59I	
	67922			68633			68832			69475	
	3/1/99			3/11/99			3/16/99			3/26/99	
	3/2/99			3/12/99			3/17/99			3/27/99	
	WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
9.2	ND		1.8	ND		1.8	ND		180	ND	
9.2	ND		1.8	ND		1.8	ND		180	ND	
6.5	ND		1.3	ND		1.3	ND		130	ND	
8.3	ND		1.7	ND		1.7	ND		170	ND	
10	ND		2	ND		2	ND		200	ND	
25	ND		5	ND		5	ND		500	ND	
1	130		1	100		1	92		130	ND	
2.9	ND		1	4.4		1	4.2		57	ND	
25	ND		5	ND		5	ND		500	ND	
25	ND		5	3.1	J	5	ND		500	ND	
3.7	ND		0.7	ND		0.7	ND		73	ND	
3.4	ND		0.7	ND		0.7	ND		68	ND	
25	ND		5	ND		5	ND		500	ND	
1.9	ND		0.4	ND		0.4	ND		37	ND	
5	ND		1	ND		1	ND		100	ND	
1	13		1	12		1	11		84	ND	
4.4	ND		0.9	ND		0.9	ND		87	ND	
1	26		1	25		1	21		84	ND	
4.3	ND		0.9	ND		0 9	ND		86	ND	
25	ND		5	ND		5	ND		500	ND	
25	ND		5	ND		5	ND		500	ND	
2	360		2	330	E	2	280	E	150	ND	
3.7	ND		0.7	ND		0.7	ND		73	ND	
4.3	ND		0.9	ND		0.9	ND		85	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
1	9800	E	1	2300	E	1	4500	E	1	6900	
5	ND		1	ND		1	ND		100	ND	
4.4	ND		0.9	ND		0.9	ND		88	ND	
3	ND		0.6	ND		0.6	ND		60	ND	
25	ND		5	ND		5	ND		500	ND	
0.7	ND		0.1	ND		0.1	ND		13	ND	
5	ND		1	ND		1	ND		100	ND	
1.2	ND		0.2	ND		0.2	ND		23	ND	
1	25		1	21		1	18		90	ND	
25	ND		5	ND		5	ND		500	ND	
1	180		1	150		1	150		1	220	
4.5	ND		0.9	ND		0.9	ND		90	ND	
5	ND		1	ND		1	ND		100	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59I

6	ND		1.2	ND		1.2	ND		120	ND	
25	ND		5	ND		5	ND		500	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
4.5	ND		1	150		0.9	ND		90	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
6.5	ND		1.3	ND		1.3	ND		130	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
2.3	ND		0.5	ND		0.5	ND		45	ND	
2.5	ND		0.5	ND		0.5	ND		50	ND	
5	ND		1	ND		1	ND		100	ND	
3.5	ND		0.7	ND		0.7	ND		70	ND	
5.5	ND		1.1	ND		1.1	ND		110	ND	
5.5	ND		1.1	ND		1.1	ND		110	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
5	ND		1	ND		1	ND		100	ND	
4.5	ND		0.9	ND		0.9	ND		90	ND	
5.5	ND		1.1	ND		1.1	ND		110	ND	
3.5	ND		0.7	ND		0.7	ND		70	ND	
5.5	ND		1.1	ND		1.1	ND		110	ND	
3	ND		0.6	ND		0.6	ND		60	ND	
4.8	ND		1	ND		1	ND		95	ND	
2.5	ND		0.5	ND		0.5	ND		50	ND	
5	ND		1	ND		1	ND		100	ND	
4	ND		0.8	ND		0.8	ND		80	ND	
6	ND		1.2	ND		1.2	ND		120	ND	
7	ND		1.4	ND		1.4	ND		140	ND	
4	ND		0.8	ND		0.8	ND		80	ND	
5	ND		1	ND		1	ND		100	ND	
4	ND		0.8	ND		0.8	ND		80	ND	
3.5	ND		0.7	ND		0.7	ND		70	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

	Client Sample ID		HN-59S			HN59S			HN59T	
	Lab Sample ID		62911			63068			63069	
	Sample Collection Date		12/17/99			12/18/98			12/18/98	
	Sample Receipt Date		12/18/98			12/19/98			12/19/98	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1	1700	E	1	1600	E	1	1700	E
75-35-4	1,1-Dichloroethene	0.6	ND		0.6	ND		0.6	ND	
67-64-1	Acetone	5	ND		5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	0.8	ND		0.8	ND		0.8	ND	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	1	4.5		1	3.6		1	3.9	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	20		2	2.7		2	5.4	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	610	E	1	140		1	150	
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	1	11		1	1.6		1	1.6	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	11		0.9	ND		0.9	ND	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

	HN-59S			HN-59SDL			HN-59S			HN-59SDL			HN-59S	
	63928			63928DL			64454			64454DL			65125	
	1/5/99			1/5/99			1/12/99			1/12/99			1/21/99	
	1/6/98			1/6/98			1/13/99			1/13/99			1/22/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		180	ND		1.8	ND		920	ND		920	ND	
1.8	ND		180	ND		1.8	ND		920	ND		920	ND	
1.3	ND		130	ND		1.3	ND		650	ND		650	ND	
1.7	ND		170	ND		1.7	ND		830	ND		830	ND	
2	ND		200	ND		2	ND		1000	ND		1000	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
1	1400	E	1	2900	D	1	1800	E	1	2600	D	1	2500	
0.6	ND		57	ND		0.6	ND		290	ND		290	ND	
5	ND		5	360	JD	5	ND		2500	ND		2500	ND	
5	4 7	J	500	ND		5	ND		2500	ND		2500	ND	
0.7	ND		73	ND		0.7	ND		370	ND		370	ND	
0.7	ND		68	ND		0.7	ND		340	ND		340	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
0.4	ND		37	ND		0.4	ND		190	ND		190	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.8	ND		84	ND		0.8	ND		420	ND		420	ND	
0.9	ND		87	ND		0.9	ND		440	ND		440	ND	
1	4		84	ND		1	6.1		420	ND		420	ND	
0.9	ND		86	ND		0.9	ND		430	ND		430	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
1.5	ND		150	ND		2	29		760	ND		760	ND	
0.7	ND		73	ND		0.7	ND		370	ND		370	ND	
0.9	ND		85	ND		0.9	ND		430	ND		430	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
1	190		1	220	D	1	940	E	1	1900	D	1	1000	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.9	ND		88	ND		0.9	ND		440	ND		440	ND	
0.6	ND		60	ND		0.6	ND		300	ND		300	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
0.1	ND		13	ND		0.1	ND		65	ND		65	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.2	ND		23	ND		0.2	ND		120	ND		120	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
0.9	ND		90	ND		1	17		450	ND		450	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

1.2	ND		120	ND		1.2	ND		600	ND		600	ND	
5	ND		500	ND		5	ND		2500	ND		2500	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
0.9	ND		90	ND		1	15		450	ND		450	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
1.3	ND		130	ND		1.3	ND		650	ND		650	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
0.5	ND		45	ND		0.5	ND		230	ND		230	ND	
0.5	ND		50	ND		0.5	ND		250	ND		250	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.7	ND		70	ND		0.7	ND		350	ND		350	ND	
1.1	ND		110	ND		1.1	ND		550	ND		550	ND	
1.1	ND		110	ND		1.1	ND		550	ND		550	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.9	ND		90	ND		0.9	ND		450	ND		450	ND	
1.1	ND		110	ND		1.1	ND		550	ND		550	ND	
0.7	ND		70	ND		0.7	ND		350	ND		350	ND	
1.1	ND		110	ND		1.1	ND		550	ND		550	ND	
0.6	ND		60	ND		0.6	ND		300	ND		300	ND	
1	ND		95	ND		1	ND		480	ND		480	ND	
0.5	ND		50	ND		0.5	ND		250	ND		250	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.8	ND		80	ND		0.8	ND		400	ND		400	ND	
1.2	ND		120	ND		1.2	ND		600	ND		600	ND	
1.4	ND		140	ND		1.4	ND		700	ND		700	ND	
0.8	ND		80	ND		0.8	ND		400	ND		400	ND	
1	ND		100	ND		1	ND		500	ND		500	ND	
0.8	ND		80	ND		0.8	ND		400	ND		400	ND	
0.7	ND		70	ND		0.7	ND		350	ND		350	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

	HN-59S			HN-59S			HN-59S			HN 59S			HN-59S	
	65796			66538			67184			67923			68634	
	1/28/99			2/5/99			2/17/99			3/1/99			3/11/99	
	1/29/99			2/6/99			2/18/99			3/2/99			3/12/99	
	WATER			WATER			WATER			WATER			WATER	
	ug/L			ug/L			ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
180	ND		18	ND		1.8	ND		9.2	ND		1.8	ND	
180	ND		18	ND		1.8	ND		9.2	ND		1.8	ND	
130	ND		13	ND		1.3	ND		6.5	ND		1.3	ND	
170	ND		17	ND		1.7	ND		8.3	ND		1.7	ND	
200	ND		20	ND		2	ND		10	ND		2	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
1	2000		1	2000		1	1300	E	1	2000	E	1	1100	E
57	ND		5.7	ND		0.6	ND		2.9	ND		0.6	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
73	ND		7.3	ND		0.7	ND		3.7	ND		0.7	ND	
68	ND		6.8	ND		0.7	ND		3.4	ND		0.7	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
37	ND		3.7	ND		0.4	ND		1.9	ND		0.4	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
84	ND		8.4	ND		1	1.2		4.2	ND		0.8	ND	
87	ND		8.7	ND		0.9	ND		4.4	ND		0.9	ND	
84	ND		8.4	ND		1	4.6		4.2	ND		1	3.5	
86	ND		8.6	ND		0.9	ND		4.3	ND		0.9	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
150	ND		15	ND		2	7.2		7.6	ND		2	2.7	
73	ND		7.3	ND		0.7	ND		3.7	ND		0.7	ND	
85	ND		8.5	ND		0.9	ND		4.3	ND		0.9	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
1	1500		1	750		1	340	E	1	140		1	140	
100	ND		10	ND		1	ND		5	ND		1	ND	
88	ND		8.8	ND		0.9	ND		4.4	ND		0.9	ND	
60	ND		6	ND		0.6	ND		3	ND		0.6	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
13	ND		1.3	ND		0.1	ND		0.7	ND		0.1	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
23	ND		2.3	ND		0.2	ND		1.2	ND		0.2	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
90	ND		1	21		1	14		4.5	ND		1	2.1	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	

120	ND		12	ND		1.2	ND		6	ND		1.2	ND	
500	ND		50	ND		5	ND		25	ND		5	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
90	ND		9	ND		1	13		4.5	ND		0.9	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
130	ND		13	ND		1.3	ND		6.5	ND		1.3	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0 9	ND	
45	ND		4.5	ND		0.5	ND		2.3	ND		0.5	ND	
50	ND		5	ND		0.5	ND		2.5	ND		0.5	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
70	ND		7	ND		0.7	ND		3.5	ND		0.7	ND	
110	ND		11	ND		1.1	ND		5.5	ND		1.1	ND	
110	ND		11	ND		1.1	ND		5.5	ND		1.1	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
90	ND		9	ND		0.9	ND		4.5	ND		0.9	ND	
110	ND		11	ND		1.1	ND		5.5	ND		1.1	ND	
70	ND		7	ND		0.7	ND		3.5	ND		0.7	ND	
110	ND		11	ND		1.1	ND		5.5	ND		1.1	ND	
60	ND		6	ND		0.6	ND		3	ND		0.6	ND	
95	ND		9.5	ND		1	ND		4.8	ND		1	ND	
50	ND		5	ND		0.5	ND		2.5	ND		0.5	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
80	ND		8	ND		0.8	ND		4	ND		0.8	ND	
120	ND		12	ND		1.2	ND		6	ND		1.2	ND	
140	ND		14	ND		1.4	ND		7	ND		1.4	ND	
80	ND		8	ND		0.8	ND		4	ND		0.8	ND	
100	ND		10	ND		1	ND		5	ND		1	ND	
80	ND		8	ND		0.8	ND		4	ND		0.8	ND	
70	ND		7	ND		0.7	ND		3.5	ND		0.7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

	HN59S			HN-59S	
	68831			69473	
	3/16/99			3/26/99	
	3/17/99			3/27/99	
	WATER			WATER	
	ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q
1.8	ND		18	ND	
1.8	ND		18	ND	
1.3	ND		13	ND	
1.7	ND		17	ND	
2	ND		20	ND	
5	ND		50	ND	
1	1500	E	1	2800	E
0.6	ND		5.7	ND	
5	ND		50	ND	
5	ND		50	ND	
0.7	ND		7.3	ND	
0.7	ND		6.8	ND	
5	ND		50	ND	
0.4	ND		3.7	ND	
1	ND		10	ND	
0.8	ND		8 4	ND	
0.9	ND		8.7	ND	
1	3.8		8.4	ND	
0.9	ND		8.6	ND	
5	ND		50	ND	
5	ND		50	ND	
2	7.6		15	ND	
0.7	ND		7.3	ND	
0.9	ND		8.5	ND	
0.9	ND		9	ND	
1	270	E	1	180	
1	ND		10	ND	
0.9	ND		8.8	ND	
0.6	ND		6	ND	
5	ND		50	ND	
0.1	ND		1.3	ND	
1	ND		10	ND	
0.2	ND		2.3	ND	
0.9	ND		9	ND	
5	ND		50	ND	
1	14		9	ND	
0.9	ND		9	ND	
1	ND		10	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL HN-59S

1.2	ND		12	ND	
5	ND		50	ND	
0.9	ND		9	ND	
0.9	ND		9	ND	
0.9	ND		9	ND	
1.3	ND		13	ND	
0.9	ND		9	ND	
0.5	ND		4.5	ND	
0.5	ND		5	ND	
1	ND		10	ND	
0.7	ND		7	ND	
1.1	ND		11	ND	
1.1	ND		11	ND	
0.9	ND		9	ND	
1	ND		10	ND	
0.9	ND		9	ND	
1.1	ND		11	ND	
0.7	ND		7	ND	
1.1	ND		11	ND	
0.6	ND		6	ND	
1	ND		9.5	ND	
0.5	ND		5	ND	
1	ND		10	ND	
0.8	ND		8	ND	
1.2	ND		12	ND	
1.4	ND		14	ND	
0.8	ND		8	ND	
1	ND		10	ND	
0.8	ND		8	ND	
0.7	ND		7	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL OW-A2

	Client Sample ID		OW-A2			OW-A2			OW-A2	
	Lab Sample ID		63797			64590			65444	
	Sample Collection Date		1/4/99			1/13/99			1/26/99	
	Sample Receipt Date		1/5/98			1/14/99			1/27/99	
	Sample Matrix		WATER			WATER			WATER	
	Units		ug/L			ug/L			ug/L	
		MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
	TCL VOA									
75-71-8	Dichlorodifluoromethane	1.8	ND		1.8	ND		1.8	ND	
74-87-3	Chloromethane	1.8	ND		1.8	ND		1.8	ND	
75-01-4	Vinyl Chloride	1.3	ND		1.3	ND		1.3	ND	
74-83-9	Bromomethane	1.7	ND		1.7	ND		1.7	ND	
75-00-3	Chloroethane	2	ND		2	ND		2	ND	
107-02-8	Acrolein	5	ND		5	ND		5	ND	
75-69-4	Trichlorofluoromethane	1.3	ND		1.3	ND		1.3	ND	
75-35-4	1,1-Dichloroethene	0.6	ND		0.6	ND		0.6	ND	
67-64-1	Acetone	5	3.7	J	5	ND		5	ND	
75-15-0	Carbon Disulfide	5	ND		5	ND		5	ND	
75-09-2	Methylene Chloride	0.7	ND		0.7	ND		0.7	ND	
156-60-5	trans-1,2-Dichloroethene	0.7	ND		0.7	ND		0.7	ND	
107-13-1	Acrylonitrile	5	ND		5	ND		5	ND	
75-34-4	1,1-Dichloroethane	0.4	ND		0.4	ND		0.4	ND	
590-20-7	2,2-Dichloropropane	1	ND		1	ND		1	ND	
156-59-2	cis-1,2-dichloroethene	1	29		1	85		1	39	
74-97-5	Bromochloromethane	0.9	ND		0.9	ND		0.9	ND	
67-66-3	Chloroform	1	5.9		1	7.4		1	8.4	
71-55-6	1,1,1-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-05-4	Vinyl Acetate	5	ND		5	ND		5	ND	
78-93-3	2-Butanone	5	ND		5	ND		5	ND	
56-23-5	Carbon Tetrachloride	2	16		2	7.7		2	37	
563-58-6	1,1-Dichloropropene	0.7	ND		0.7	ND		0.7	ND	
71-43-2	Benzene	0.9	ND		0.9	ND		0.9	ND	
107-06-2	1,2-Dichloroethane	0.9	ND		0.9	ND		0.9	ND	
79-01-6	Trichloroethene	1	430	E	1	190		1	790	E
78-87-5	1,2-Dichloropropane	1	ND		1	ND		1	ND	
74-95-3	Dibromomethane	0.9	ND		0.9	ND		0.9	ND	
75-27-4	Bromodichloromethane	0.6	ND		0.6	ND		0.6	ND	
110-07-3	2-Chloroethyl Vinyl Ether	5	ND		5	ND		5	ND	
10061-01-5	cis-1,3-Dichloropropene	0.1	ND		0.1	ND		0.1	ND	
108-88-3	Toluene	1	ND		1	ND		1	ND	
10061-02-6	trans-1,3-Dichloropropene	0.2	ND		0.2	ND		0.2	ND	
79-00-5	1,1,2-Trichloroethane	0.9	ND		0.9	ND		0.9	ND	
108-10-1	4-Methyl-2-Pentanone	5	ND		5	ND		5	ND	
127-18-4	Tetrachloroethene	1	89		1	120		1	100	
142-28-9	1,3-Dichloropropane	0.9	ND		0.9	ND		0.9	ND	
124-48-1	Dibromochloromethane	1	ND		1	ND		1	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
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VOLATILE ORGANIC ANALYSES
MONITORING WELL OW-A2

106-93-4	1,2-Dibromoethane	1.2	ND		1.2	ND		1.2	ND	
591-78-6	2-Hexanone	5	ND		5	ND		5	ND	
108-90-7	Chlorobenzene	0.9	ND		0.9	ND		0.9	ND	
630-20-6	1,1,1,2-Tetrachloroethane	1	83		0.9	ND		1	99	
100-41-4	Ethylbenzene	0.9	ND		0.9	ND		0.9	ND	
136777-61-2	m&p-xylenes	1.3	ND		1.3	ND		1.3	ND	
95-47-6	o-xylene	0.9	ND		0.9	ND		0.9	ND	
100-42-5	Styrene	0.5	ND		0.5	ND		0.5	ND	
75-25-2	Bromoform	0.5	ND		0.5	ND		0.5	ND	
98-82-8	isopropylbenzene	1	ND		1	ND		1	ND	
108-86-1	Bromobenzene	0.7	ND		0.7	ND		0.7	ND	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	ND		1.1	ND		1.1	ND	
96-18-4	1,2,3-Trichloropropane	1.1	ND		1.1	ND		1.1	ND	
103-65-1	n-Propylbenzene	0.9	ND		0.9	ND		0.9	ND	
95-49-8	2-Chlorotoluene	1	ND		1	ND		1	ND	
106-43-4	4-Chlorotoluene	0.9	ND		0.9	ND		0.9	ND	
108-67-8	1,3,5-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
98-06-6	tert-Butylbenzene	0.7	ND		0.7	ND		0.7	ND	
95-63-6	1,2,4-Trimethylbenzene	1.1	ND		1.1	ND		1.1	ND	
135-98-8	sec-Butylbenzene	0.6	ND		0.6	ND		0.6	ND	
541-73-1	1,3-Dichlorobenzene	1	ND		1	ND		1	ND	
99-87-6	4-Isopropyltoluene	0.5	ND		0.5	ND		0.5	ND	
106-46-7	1,4-Dichlorobenzene	1	ND		1	ND		1	ND	
95-50-1	1,2-Dichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
104-51-8	n-Butylbenzene	1.2	ND		1.2	ND		1.2	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.4	ND		1.4	ND		1.4	ND	
120-82-1	1,2,4-Trichlorobenzene	0.8	ND		0.8	ND		0.8	ND	
87-68-3	Hexachlorobutadiene	1	ND		1	ND		1	ND	
91-20-3	Naphthalene	0.8	ND		0.8	ND		0.8	ND	
87-61-6	1,2,3-Trichlorobenzene	0.7	ND		0.7	ND		0.7	ND	

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NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL OW-A2

	OW-A2			OW-A2			OW-A2	
	66539			67516			69474	
	2/5/99			2/23/99			3/26/99	
	2/6/99			2/24/99			3/27/99	
	WATER			WATER			WATER	
	ug/L			ug/L			ug/L	
MDL	CONC	Q	MDL	CONC	Q	MDL	CONC	Q
1.8	ND		9.2	ND		18	ND	
1.8	ND		9.2	ND		18	ND	
1.3	ND		6.5	ND		13	ND	
1.7	ND		8.3	ND		17	ND	
2	ND		10	ND		20	ND	
5	ND		25	ND		50	ND	
1.3	ND		6.3	ND		13	ND	
0.6	ND		2.9	ND		5.7	ND	
5	24		25	ND		50	ND	
5	ND		25	ND		50	ND	
0.7	ND		3.7	ND		7.3	ND	
0.7	ND		3.4	ND		6.8	ND	
5	ND		25	ND		50	ND	
0.4	ND		1.9	ND		3.7	ND	
1	ND		5	ND		10	ND	
1	32		1	34		1	25	
0.9	ND		4.4	ND		8.7	ND	
1	6		4.2	ND		1	24	
0.9	ND		4.3	ND		8.6	ND	
5	ND		25	ND		50	ND	
5	ND		25	ND		50	ND	
2	14		7.6	ND		2	210	
0.7	ND		3.7	ND		7.3	ND	
0.9	ND		4.3	ND		8.5	ND	
0.9	ND		4.5	ND		9	ND	
1	320	E	1	250		1	4200	E
1	ND		5	ND		10	ND	
0.9	ND		4.4	ND		8.8	ND	
0.6	ND		3	ND		6	ND	
5	ND		25	ND		50	ND	
0.1	ND		0.7	ND		1.3	ND	
1	ND		5	ND		10	ND	
0.2	ND		1.2	ND		2.3	ND	
0.9	ND		4.5	ND		9	ND	
5	ND		25	ND		50	ND	
1	100		1	71		1	340	
0.9	ND		4.5	ND		9	ND	
1	ND		5	ND		10	ND	

FOSTER WHEELER ENVIRONMENTAL CORPORATION
NAVAL AIR WARFARE CENTER, WARMINSTER, AREA A
VOLATILE ORGANIC ANALYSES
MONITORING WELL OW-A2

1.2	ND		6	ND		12	ND	
5	ND		25	ND		50	ND	
0.9	ND		4.5	ND		9	ND	
1	100		1	74		9	ND	
0.9	ND		4.5	ND		9	ND	
1.3	ND		6.5	ND		13	ND	
0.9	ND		4.5	ND		9	ND	
0.5	ND		2.3	ND		4.5	ND	
0.5	ND		2.5	ND		5	ND	
1	ND		5	ND		10	ND	
0.7	ND		3.5	ND		7	ND	
1.1	ND		5.5	ND		11	ND	
1.1	ND		5.5	ND		11	ND	
0.9	ND		4.5	ND		9	ND	
1	ND		5	ND		10	ND	
0.9	ND		4.5	ND		9	ND	
1.1	ND		5.5	ND		11	ND	
0.7	ND		3.5	ND		7	ND	
1.1	ND		5.5	ND		11	ND	
0.6	ND		3	ND		6	ND	
1	ND		4.8	ND		9.5	ND	
0.5	ND		2.5	ND		5	ND	
1	ND		5	ND		10	ND	
0.8	ND		4	ND		8	ND	
1.2	ND		6	ND		12	ND	
1.4	ND		7	ND		14	ND	
0.8	ND		4	ND		8	ND	
1	ND		5	ND		10	ND	
0.8	ND		4	ND		8	ND	
0.7	ND		3.5	ND		7	ND	