Aquifer Land Acquisition Study

Town of Easthampton, Massachusetts
September 1987

Volume II
Appendices

Prepared For:

Town of Easthampton
Board of Public Works
Town Hall
Easthampton, Massachusetts

Prepared By:

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iEP inc.

Appendix A

Nonotuck Park 18" Well Data

2 copies * Taylor & Brown JUL 1 0 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER

TOWN OF EASTHAMPTON

STREET LIVELY PROPERTY STATE MASS.

OWNER OF PROPERTY TOWN OF EASTHAMPTON

OPERATORS FRED FINLAY - BOB FATELGER

SIZE & TYPE OF PUMP: 8" TURBINE

DISCHARGE LINE Size 6" in.; Length 100' feet

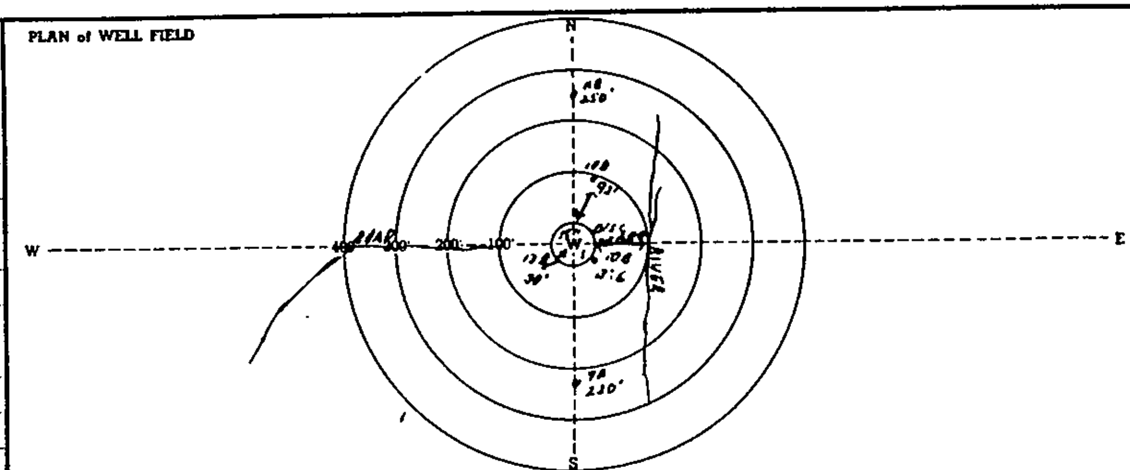
ORFICE PIPE 10" in.; SIZE ORFICE PLATE 8" in.

DESCRIPTION OF WELL BEING PUMPED: 18" GRAVEL WELL

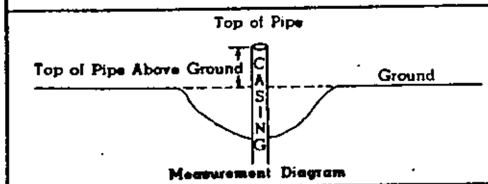
LENGTH OF DUNKER ON TAPE 3" in ADD TO READINGS (When you make read)

LENGTH OF ALTITUDE LINE FROM CENTER OF GAUGE 60' ft in.

PLAN of WELL FIELD



ALL MEASUREMENTS TO BE MADE FROM TOP OF CASINGS



STATIC TAKEN 11:00AM 6/27/62

FINISHED WELL NO. 18" WELL # 1

DEPTH OF WELL 165'

TOP OF PIPE ABOVE GROUND 6"

STATIC READING 8':6"

Observation Wells Information

No. 9B	No. 10B	No. 13:B	No. 14B	No. 11B	No.
Depth	Depth	Depth	Depth	Depth	Depth
Pipe AG 2"	Pipe AG 9"	Pipe AG 9"	Pipe AG 8"	Pipe AG 9"	Pipe AG
Static 1"	Static 8':7½"	Static 9':11"	Static 8':4"	Static 2':10"	Static

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt Gauge Reading	Tape Meas'nt in Well	Orfice Head in Inches	GPM	Water Level	Water Level	Water Level	Water Level	Water Level	Water Level
6/27/62 CLEAR	11:30AM	STARTED TEST										
STATE SAMPLE	12:00 NOON		26':0"		12"	1080	1':0¼"	12':5½"	10':11"	10':0½"	3':10½"	
TAKEN AT 12:00 NOON	1:00 PM		27':0"		12"	1080	1':9½"	13':3"	11':8½"	10':9¾"	4':8¼"	
	2:00 PM		27':6"		12"	1080	2':2"	13':8"	12':1¾"	11':3"	5':1¼"	
	3:00 PM		27':6"		12"	1080	2':4½"	13':11"	12':4¼"	11':6"	5':3¾"	
	4:00 PM		27':6"		12"	1080	2':6¾"	14':1¼"	12':6¼"	11':8"	5':6¼"	
	5:00 PM		27':6"		12"	1080	2':8½"	14':3¾"	12':9"	11':10¼"	5':8½"	
	6:00 PM		27':6"		12"	1080	2':10¼"	14':5"	13':0¼"	12':0"	5':10¼"	
	7:00 PM		27':6"		12"	1080	2':11¼"	14':6"	13':0¼"	12':1½"	5':11¾"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 2

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8:6"				1"	8:7 1/2"	9:11"	8:4"	2:10"	
6/27/62	8:00PM		27:6"		12"	1080	3:0 1/4"	14:6 1/2"	13:0 1/4"	12:1 1/2"	6:0"	
	9:00PM		27:6"		12"	1080	3:1"	14:7 3/4"	13:0 3/4"	12:2 1/4"	6:0 3/4"	
	10:00PM		27:6"		12"	1080	3:2"	14:8 3/4"	13:1 3/4"	12:3 1/4"	6:1 3/4"	
	11:00PM		27:6"		12"	1080	3:2 1/2"	14:9 1/4"	13:2 1/2"	12:3 3/4"	6:2 1/4"	
MIDNIGHT	12:00		27:6"		12"	1080	3:3"	14:9 3/4"	13:3"	12:4 1/4"	6:2 3/4"	
6/28/62	1:00AM		28:0"		12"	1080	3:3 1/4"	14:10 1/4"	13:3 1/2"	12:4 1/2"	6:3 1/4"	
	2:00AM		28:0"		12"	1080	3:3 1/2"	14:10 1/2"	13:4"	12:5"	6:3 1/2"	
	3:00AM		28:0"		12"	1080	3:3 3/4"	14:10 3/4"	13:4 1/2"	12:5 1/4"	6:3 3/4"	
	4:00AM		28:0"		12"	1080	3:4"	14:11 1/4"	13:4 3/4"	12:5 1/2"	6:4 1/4"	
	5:00AM		28:6"		12"	1080	3:4 1/4"	14:11 1/2"	13:5"	12:6"	6:4 1/2"	
	6:00AM		28:6"		12"	1080	3:4 1/2"	14:11 3/4"	13:5 1/4"	12:6 1/4"	6:4 3/4"	
	7:00AM		28:6"		12"	1080	3:4 3/4"	15:0"	13:5 1/2"	12:6 1/2"	6:5"	
	8:00AM		28:6"		12"	1080	3:5"	15:0 1/4"	13:5 1/2"	12:6 3/4"	6:5 1/4"	
	9:00AM		28:6"		12"	1080	3:5 1/4"	15:0 1/4"	13:5 3/4"	12:6 3/4"	6:5 1/2"	
	10:00AM		28:6"		12"	1080	3:5 1/2"	15:0 1/2"	13:6"	12:7"	6:5 1/2"	
	11:00AM		28:6"		12"	1080	3:5 3/4"	15:0 3/4"	13:6 1/4"	12:7 1/4"	6:5 3/4"	
NOON	12:00		28:6"		12"	1080	3:6"	15:1"	13:6 1/2"	12:7 1/2"	6:6"	
	1:00PM		29:0"		12"	1080	3:6"	15:0 1/2"	13:6"	12:7"	6:5 3/4"	
	2:00PM		29:0"		12"	1080	3:6 1/4"	15:1"	13:6"	12:7 1/2"	6:6"	
	3:00PM	50°	29:0"		12"	1080	3:6 1/4"	15:1"	13:6"	12:7 3/4"	6:6 1/4"	
	4:00PM		29:0"		12"	1080	3:6 1/4"	15:1 1/2"	13:6 1/4"	12:7 3/4"	6:6 1/4"	
	5:00PM		29:0"		12"	1080	3:6 1/4"	15:1 1/2"	13:6 1/4"	12:7 3/4"	6:6 1/4"	
	6:00PM		29:0"		12"	1080	3:6 3/4"	15:1 3/4"	13:6 1/2"	12:8"	6:6 3/4"	
	7:00PM		29:0"		12"	1080	3:7"	15:1 3/4"	13:6 3/4"	12:8 1/4"	6:7"	
	8:00PM		29:0"		12"	1080	3:7 1/4"	15:1 3/4"	13:6 3/4"	12:8 1/2"	6:7 1/4"	
	9:00PM		29:0"		12"	1080	3:7 1/4"	15:1 3/4"	13:7"	12:8 1/2"	6:7 1/4"	
	10:00PM		27:0"		12"	1080	3:7 1/2"	15:1 3/4"	13:7 1/4"	12:8 3/4"	6:7 1/2"	
	11:00PM		29:0"		12"	1080	3:7 1/2"	15:2"	13:7 1/4"	12:8 3/4"	6:7 1/2"	
MIDNIGHT	12:00		29:0"		12"	1080	3:7 3/4"	15:2"	13:7 1/2"	12:9"	6:7 1/2"	
6/29/62	1:00AM		29:0"		12"	1080	3:7 3/4"	15:2 1/4"	13:7 3/4"	12:9"	6:7 3/4"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 3

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orfice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#11B Water Level	#11B Water Level	Water Level
STATIC			8:6"				1"	8:7½"	9:11"	8:4"	2:10"	
6/29/62	2:00AM		29:0"		12"	1080	3:8"	15:2¾"	13:8"	12:9¼"	6:7¾"	
	3:00AM		29:0"		12"	1080	3:8"	15:2¾"	13:8"	12:9½"	6:8"	
	4:00AM		29:0"		12"	1080	3:8"	15:3"	13:8"	12:9½"	6:8"	
	5:00AM		29:0"		12"	1080	3:8¼"	15:3"	13:8¼"	12:9½"	6:8¼"	
	6:00AM		29:0"		12"	1080	3:8¼"	15:3¼"	13:8¼"	12:9½"	6:8¼"	
	7:00AM		29:0"		12"	1080	3:8½"	15:3"	13:8¼"	12:9¾"	6:8½"	
	8:00AM		29:0"		12"	1080	3:8½"	15:3"	13:8¼"	12:9¾"	6:8½"	
	9:00AM		29:0"		12"	1080	3:8½"	15:3¼"	13:8½"	12:10"	6:8½"	
	10:00AM		29:0"		12"	1080	3:8½"	15:3¼"	13:8½"	12:10"	6:8½"	
	11:00AM		29:0"		12"	1080	3:8½"	15:3¼"	13:8½"	12:10"	6:8½"	
NOON	12:00		29:0"		12"	1080	3:8½"	15:3¼"	13:8½"	12:10¼"	6:8½"	
SHUT DOWN 12:12-	1:00PM		29:0"		12"	1080	3:8½"	15:3½"	13:8½"	12:10"	6:8½"	
12:15PM GREASE	2:00PM		29:0"		12"	1080	3:8½"	15:3¾"	13:8¾"	12:10"	6:8¾"	
AND CHECK OIL	3:00PM		29:0"		12"	1080	3:8½"	15:3¾"	13:8¾"	12:10"	6:8¾"	
	4:00PM		29:0"		12"	1080	3:8½"	15:3¾"	13:8¾"	12:10½"	6:8¾"	
	5:00PM		29:0"		12"	1080	3:9"	15:3¾"	13:9"	12:10½"	6:9"	
	6:00PM		29:0"		12"	1080	3:9½"	15:4"	13:9¼"	12:11"	6:9½"	
	7:00PM		29:0"		12"	1080	3:9½"	15:4"	13:9¼"	12:11"	6:9½"	
	8:00PM		29:0"		12"	1080	3:9¾"	15:4¼"	13:9½"	12:11¼"	6:9¾"	
	9:00PM		29:0"		12"	1080	3:9¾"	15:4½"	13:9½"	12:11¼"	6:9¾"	
	10:00PM		29:0"		12"	1080	3:9¾"	15:4½"	13:9½"	12:11¼"	6:9¾"	
	11:00PM		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11¼"	6:9¾"	
MIDNIGHT	12:00		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11¼"	6:9¾"	
6/30/62	1:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	2:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	3:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	4:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	5:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	6:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	
	7:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:10"	12:11¼"	6:9¾"	

JUL 1 0 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 4

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8:6"				1"	8:7½"	9:11"	8:4"	2:10"	
CLEAR 6/30/62	8:00AM		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11¼"	6:10"	
	9:00AM		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11¼"	6:10"	
	10:00AM		29:0"		12"	1080	3:10"	15:4½"	13:9½"	12:11¼"	6:10"	
	11:00AM		29:0"		12"	1080	3:10"	15:4½"	13:9½"	12:11¼"	6:10"	
NOON	12:00		29:0"		12"	1080	3:10"	15:4½"	13:9½"	12:11¼"	6:10"	
	1:00PM		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11½"	6:10"	
	2:00PM		29:0"		12"	1080	3:10"	15:4½"	13:10"	12:11½"	6:10"	
	3:00PM		29:0"		12"	1080	3:10¼"	15:4¾"	13:10"	12:11½"	6:10¼"	
	4:00PM		29:0"		12"	1080	3:10¼"	15:5"	13:10¼"	12:11½"	6:10¼"	
	5:00PM		29:0"		12"	1080	3:10¼"	15:5"	13:10¼"	12:11½"	6:10¼"	
	6:00PM		29:0"		12"	1080	3:10½"	15:5"	13:10¼"	12:11¾"	6:10½"	
	7:00PM		29:0"		12"	1080	3:10½"	15:5"	13:10¼"	12:11¾"	6:10½"	
	8:00PM		29:0"		12"	1080	3:10¾"	15:5½"	13:10½"	13:0"	6:10¾"	
	9:00PM		29:0"		12"	1080	3:10¾"	15:5½"	13:11"	13:0"	6:10¾"	
	10:00PM		29:0"		12"	1080	3:10¾"	15:5½"	13:11"	13:0"	6:10¾"	
	11:00PM		29:0"		12"	1080	3:10½"	15:5½"	13:10½"	13:0"	6:10¼"	
MIDNIGHT	12:00		29:0"		12"	1080	3:10½"	15:5½"	13:10¼"	13:0"	6:10¼"	
7/1/62	1:00AM		29:0"		12"	1080	3:10¼"	15:5½"	13:10"	13:0"	6:10¼"	
	2:00AM		29:0"		12"	1080	3:10¼"	15:5½"	13:10"	13:0"	6:10¼"	
RAIN	3:00AM		29:0"		12"	1080	3:10¼"	15:5½"	13:10"	13:0"	6:10"	
	4:00AM		29:0"		12"	1080	3:10¼"	15:5½"	13:10"	13:0"	6:10"	
	5:00AM		29:0"		12"	1080	3:9¾"	15:5"	13:9¾"	12:11½"	6:9¾"	
CLEAR	6:00AM		29:0"		12"	1080	3:9¾"	15:4¾"	13:9¾"	12:11¼"	6:9¾"	
	7:00AM		29:0"		12"	1080	3:9¾"	15:4½"	13:9¾"	12:11¼"	6:9¾"	
	8:00AM		29:0"		12"	1080	3:10"	15:4¾"	13:10"	12:11½"	6:10"	
	9:00AM		29:0"		12"	1080	3:10"	15:4¾"	13:10"	12:11½"	6:10"	
	10:00AM		29:0"		12"	1080	3:10"	15:4¾"	13:10"	12:11½"	6:10"	
	11:00AM		29:0"		12"	1080	3:10"	15:4¾"	13:10"	12:11½"	6:10"	
NOON	12:00		29:0"		12"	1080	3:10"	15:4¾"	13:10"	12:11½"	6:10"	
	1:00PM		29:0"		12"	1080	3:10¼"	15:5"	13:10"	12:11¾"	6:10¼"	

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST JUL 10 1962

NO. 5

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'mt in Well	Orifice Head in Inches	GPM	# 98 Water Level	# 108 Water Level	# 138 Water Level	# 148 Water Level	# 118 Water Level	Water Level
STATIC			8:6"				1"	8:7½"	9:11"	8:4"	2:10"	
CLEAR 7/1/62	2:00 PM		29:0"		12"	1080	3:10½"	15:5"	13:10"	12:11¾"	6:10¼"	
	3:00 PM		29:0"		12"	1080	3:10¾"	15:5½"	13:10½"	13:0"	6:10¾"	
	4:00 PM		29:0"		12"	1080	3:11"	15:5½"	13:11"	13:0¼"	6:11"	
	5:00 PM		29:0"		12"	1080	3:11"	15:5½"	13:11"	13:0¼"	6:11"	
	6:00 PM		29:0"		12"	1080	3:11"	15:5½"	13:11"	13:0¼"	6:11"	
	7:00 PM		29:0"		12"	1080	3:11"	15:6"	13:11"	13:0½"	6:11"	
	8:00 PM		29:0"		12"	1080	3:11¼"	15:6¼"	13:11¼"	13:0½"	6:11¼"	
	9:00 PM		30:0"		12"	1080	3:11½"	15:6½"	13:11½"	13:1"	6:11½"	
	10:00 PM		29:6"		12"	1080	3:11½"	15:6½"	13:11½"	13:1"	6:11½"	
	11:00 PM		29:6"		12"	1080	3:11½"	15:6¾"	13:11¾"	13:1"	6:11½"	
MIDNIGHT	12:00		29:6"		12"	1080	3:11¼"	15:6"	13:11"	13:0½"	6:11¼"	
7/2/62	1:00 AM		29:6"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	2:00 AM		29:6"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	3:00 AM		29:6"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	4:00 AM		29:6"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	5:00 AM		29:0"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	6:00 AM		29:0"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	7:00 AM		29:0"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	8:00 AM		29:0"		12"	1080	3:11¼"	15:6½"	13:11"	13:0½"	6:11¼"	
	9:00 AM		29:0"	STICK IN	12"	1080	3:11½"	15:6½"	13:11¼"	13:0¾"	6:11½"	
	10:00 AM		29:0"	RIVER	12"	1080	4:0"	15:7"	13:11½"	13:1½"	7:0"	
	11:00 AM		29:0"	SET AT	12"	1080	4:0"	15:7¼"	13:11¾"	13:1½"	7:0"	
NOON	12:00		29:0"	20"	12"	1080	4:0"	15:7½"	14:0"	13:1½"	7:0"	
	1:00 PM		29:0"	20"	12"	1080	4:0½"	15:8"	14:0½"	13:2"	7:0½"	
	2:00 PM		29:0"	20"	12"	1080	4:0½"	15:8"	14:0½"	13:2"	7:0½"	
	3:00 PM		29:0"	20"	12"	1080	4:0¼"	15:8"	14:0¾"	13:2¼"	7:0¾"	
	4:00 PM		29:0"	20"	12"	1080	4:0½"	15:8"	14:0¾"	13:2¼"	7:0½"	
SHUT DOWN 7:25 -	5:00 PM		29:0"	20"	12"	1080	4:1"	15:8"	14:0¾"	13:2½"	7:0"	
7:40 CHANGE	6:00 PM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
FUEL FILTERS	7:00 PM		29:6"	20"	12"	1080	4:1"	15:8½"	14:1"	13:2½"	7:1"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 6

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

RIVER → START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	[illegible]	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8:6"	20"			1"	8:7 1/2"	9:11"	8:4"	2:10"	
CLEAR 7/2/62	8:00 PM		29:6"	20"	12"	1080	3:11"	15:6"	13:7"	13:0"	6:10 1/2"	
	9:00 PM		29:6"	20"	12"	1080	4:0 1/4"	15:8"	14:0 1/4"	13:1 3/4"	7:0 1/4"	
	10:00 PM		29:6"	up 20 1/4"	12"	1080	4:0 1/2"	15:8"	14:0 3/4"	13:2 1/4"	7:0 1/2"	
	11:00 PM		29:6"	20 1/4	12"	1080	4:1"	15:8 1/2"	14:1"	13:2 3/4"	7:1"	
MIDNIGHT	12:00		29:6"	20 1/4"	12"	1080	4:1 1/4"	15:8 1/2"	14:1 1/4"	13:2 3/4"	7:1 1/4"	
7/3/62	1:00 AM		29:6"	20 1/4"	12"	1080	4:1 1/4"	15:8 1/2"	14:1 1/4"	13:2 3/4"	7:1 1/4"	
	2:00 AM		29:6"	20 1/4"	12"	1080	4:1 1/4"	15:8 1/2"	14:1 1/4"	13:2 3/4"	7:1 1/4"	
	3:00 AM		29:6"	20 1/4"	12"	1080	4:1 1/4"	15:8 1/2"	14:1 1/4"	13:2 3/4"	7:1 1/4"	
	4:00 AM		29:6"	20 1/4"	12"	1080	4:1 1/4"	15:8 1/2"	14:1 1/4"	13:2 3/4"	7:1 1/4"	
	5:00 AM		29:6"	20 1/4"	12"	1080	4:1"	15:8 1/2"	14:1"	13:2 1/2"	7:1"	
	6:00 AM		29:6"	20 1/4"	12"	1080	4:1"	15:8 1/2"	14:1"	13:2 1/2"	7:1"	
	7:00 AM		29:6"	20 1/4"	12"	1080	4:0 3/4"	15:8 1/4"	14:1"	13:2 1/2"	7:0 3/4"	
	8:00 AM		29:6"	20 1/4"	12"	1080	4:0 3/4"	15:8 1/4"	14:1"	13:2 1/2"	7:0 3/4"	
	9:00 AM		29:6"	20 1/4"	12"	1080	4:0 3/4"	15:8 1/4"	14:1"	13:2 1/2"	7:0 3/4"	
	10:00 AM		29:6"	20 1/4"	12"	1080	4:1"	15:8 1/4"	14:1"	13:2 1/2"	7:1"	
	11:00 AM		29:6"	20 1/4"	12"	1080	4:1"	15:8 1/4"	14:1"	13:2 1/2"	7:1"	
NOON	12:00		29:6"	20"	12"	1080	4:1 1/4"	15:8 1/4"	14:1"	13:2 3/4"	7:1 1/4"	
	1:00 PM		29:6"	20"	12"	1080	4:1 1/2"	15:8 1/2"	14:1 1/4"	13:3"	7:1 1/2"	
	2:00 PM		29:6"	20"	12"	1080	4:1 1/2"	15:8 1/2"	14:1 1/2"	13:3"	7:1 1/2"	
	3:00 PM	SHUT DOWN 2:45 CHANG FUEL PUMP STARTED AGAIN 3:05PM PUMPING 1170GPM CUT TO 1080GPM AT 3:55 PM										
	4:00 PM		29:6"	20"	12"	1080	3:11 3/4"	15:7"	14:0"	13:1 1/2"	6:11 1/2"	
	5:00 PM		29:6"	20"	12"	1080	4:0 1/2"	15:7 3/4"	14:0 1/2"	13:2"	7:0 1/2"	
	6:00 PM		29:6"	20"	12"	1080	4:0 3/4"	15:8"	14:0 3/4"	13:2 1/2"	7:0 3/4"	
	7:00 PM		29:6"	20"	12"	1080	4:1 1/4"	15:8 1/2"	14:1"	13:3"	7:1 1/4"	
	8:00 PM		29:6"	19 3/4"	12"	1080	4:1 1/2"	15:8 3/4"	14:1 1/2"	13:3 1/2"	7:1 1/2"	
	9:00 PM		29:6"	19 3/4"	12"	1080	4:1 3/4"	15:9"	14:1 3/4"	13:3 1/2"	7:1 3/4"	
	10:00 PM		29:6"	20"	12"	1080	4:2"	15:9"	14:2"	13:3 3/4"	7:2"	
	11:00 PM		29:6"	20"	12"	1080	4:2 1/4"	15:9 1/4"	14:2 1/4"	13:3 3/4"	7:2 1/4"	
MIDNIGHT	12:00		29:6"	20"	12"	1080	4:2 1/4"	15:9 1/2"	14:2 1/4"	13:3 3/4"	7:2 1/4"	
7/4/62	1:00 AM		29:6"	20"	12"	1080	4:2 1/4"	15:9 1/2"	14:2 1/4"	13:3 3/4"	7:2 1/4"	

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 7

LOG OF PUMP TEST

JUL 10 1962

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading (RIVER)	Tape-Measure In-Well	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8:6"	20"			1"	8:7½"	9:11"	8:4"	2:10"	
7/4/62	2:00 AM		29:6"	20"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
	3:00 AM		29:6"	20"	12"	1080	4:1¾"	15:8½"	14:1¾"	13:3¼"	7:1¾"	
	4:00 AM		29:6"	20"	12"	1080	4:1¼"	15:8¼"	14:1½"	13:2¾"	7:1¼"	
	5:00 AM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	6:00 AM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	7:00 AM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	8:00 AM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	9:00 AM		29:6"	20"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	10:00 AM		29:6"	20"	12"	1080	4:1¼"	15:8¼"	14:1¼"	13:2¾"	7:1¼"	
	11:00 AM		29:6"	20"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1½"	
NOON	12:00		29:6"	20"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1¾"	
	1:00 PM		29:6"	20"	12"	1080	4:2"	15:8¾"	14:1¾"	13:3¼"	7:2"	
	2:00 PM		29:6"	20"	12"	1080	4:2"	15:9"	14:1¾"	13:3¼"	7:2"	
	3:00 PM		29:6"	20¼"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1½"	
	4:00 PM		29:6"	20¼"	12"	1080	4:1¼"	15:8½"	14:1¼"	13:3"	7:1¼"	
	5:00 PM		29:6"	20¼"	12"	1080	4:1¼"	15:8¼"	14:1¼"	13:2¾"	7:1¼"	
	6:00 PM		29:6"	20¼"	12"	1080	4:1½"	15:8½"	14:1¼"	13:3"	7:1½"	
	7:00 PM		29:6"	20¼"	12"	1080	4:1½"	15:8½"	14:1¼"	13:3"	7:1½"	
	8:00 PM		29:6"	20¼"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1½"	
	9:00 PM		29:6"	20¼"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
	10:00 PM		29:6"	20¼"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
	11:00 PM		29:6"	20¼"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
MIDNIGHT	12:00		29:6"	20¼"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
7/5/62	1:00 AM		29:6"	20¼"	12"	1080	4:1¾"	15:8½"	14:1¾"	13:3½"	7:2"	
	2:00 AM		29:6"	20¼"	12"	1080	4:1¼"	15:8¼"	14:1½"	13:3"	7:1½"	
	3:00 AM		29:6"	20¼"	12"	1080	4:1¼"	15:8¼"	14:1½"	13:3"	7:1½"	
	4:00 AM		29:6"	20¼"	12"	1080	4:1"	15:8"	14:1¼"	13:2¾"	7:1¼"	
	5:00 AM		29:6"	20¼"	12"	1080	4:1"	15:8"	14:1"	13:2½"	7:1"	
	6:00 AM		29:6"	20¼"	12"	1080	4:1"	15:8"	14:1"	13:2½"	7:1"	
	7:00 AM		29:6"	20¼"	12"	1080	4:1"	15:8"	14:1"	13:2½"	7:1"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 8

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	RIVER → Alt. Gauge Reading	Supp. Mean's in Wall	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8:6"	20"		.	1"	8:7½"	9:11"	8:4"	2:10"	
CLEAR 7/5/62	8:00 AM		29:6"	20¼"	12"	1080	4:1"	15:8¼"	14:1"	13:2½"	7:1"	
	9:00 AM		29:6"	20¼"	12"	1080	4:1¼"	15:8¼"	14:1¼"	13:2¾"	7:1¼"	
	10:00 AM		29:6"	20"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1½"	
	11:00 AM		29:6"	20"	12"	1080	4:1¾"	15:8¾"	14:1¾"	13:3¼"	7:1¾"	
NOON	12:00		29:6"	20"	12"	1080	4:2"	15:9"	14:2"	13:3½"	7:2"	
	1:00 PM		29:6"	20"	12"	1080	4:2¼"	15:9"	14:2¼"	13:3¾"	7:2¼"	
SHUT DOWN 3:15 -	2:00 PM		29:6"	20"	12"	1080	4:2½"	15:9¼"	14:2½"	13:3¾"	7:2½"	
3:20PM TO GREASE	3:00 PM		29:6"	20"	12"	1080	4:2½"	15:9½"	14:2½"	13:4"	7:2½"	
AND CHECK OIL	4:00 PM		29:6"	20"	12"	1080	4:2"	15:8¾"	14:2"	13:3½"	7:2"	
	5:00 PM		29:6"	20"	12"	1080	4:2¼"	15:8¾"	14:2"	13:3¾"	7:2¼"	
	6:00 PM		29:6"	20"	12"	1080	4:2½"	15:9"	14:2¼"	13:4"	7:2½"	
	7:00 PM		29:6"	20"	12"	1080	4:2½"	15:9"	14:2½"	13:4"	7:2½"	
	8:00 PM		29:6"	20¼"	12"	1080	4:2½"	15:9¼"	14:2¼"	13:4"	7:2½"	
	9:00 PM		29:6"	20¼"	12"	1080	4:2½"	15:9½"	14:2½"	13:4"	7:2½"	
	10:00 PM		29:6"	20¼"	12"	1080	4:2¾"	15:9½"	14:2¾"	13:4¼"	7:2¾"	
	11:00 PM		29:6"	20¼"	12"	1080	4:2¾"	15:9½"	14:2¾"	13:4¼"	7:2¾"	
MIDNIGHT	12:00		29:6"	20¼"	12"	1080	4:2¾"	15:9½"	14:2¾"	13:4¼"	7:2¾"	
7/6/62	1:00 AM		29:6"	20¼"	12"	1080	4:2½"	15:9¼"	14:2½"	13:4"	7:2½"	
	2:00 AM		29:6"	20¼"	12"	1080	4:2¼"	15:9"	14:2¼"	13:3¾"	7:2¼"	
	3:00 AM		29:6"	20¼"	12"	1080	4:2"	15:8¾"	14:2"	13:3½"	7:2"	
	4:00 AM		29:6"	20¼"	12"	1080	4:1¾"	15:8½"	14:1½"	13:3¼"	7:1¾"	
	5:00 AM		29:6"	20¼"	12"	1080	4:1½"	15:8¼"	14:1¼"	13:3"	7:1½"	
	6:00 AM		29:6"	20¼"	12"	1080	4:1½"	15:8¼"	14:1¼"	13:3"	7:1½"	
	7:00 AM		29:6"	20¼"	12"	1080	4:1½"	15:8¼"	14:1¼"	13:3"	7:1½"	
	8:00 AM		29:6"	20¼"	12"	1080	4:1½"	15:8¼"	14:1¼"	13:3"	7:1½"	
	9:00 AM		29:6"	20"	12"	1080	4:1½"	15:8¼"	14:1¼"	13:3"	7:1½"	
	10:00 AM		29:6"	20"	12"	1080	4:1½"	15:8½"	14:1½"	13:3"	7:1½"	
	11:00 AM		29:6"	20"	12"	1080	4:1¾"	15:8½"	14:1¾"	13:3¼"	7:1¾"	
NOON	12:00		29:6"	20"	12"	1080	4:2"	15:8¾"	14:2"	13:3½"	7:2"	
	1:00 PM	STOPPED	AT 1:00	STARTED	AGAIN	AT 1:05 PM.		STATE	SAMPLE	TAKEN	AT 1:15 PM.	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 9

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

RIVER → START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	~~Pump Mounted in Well~~	Orifice Head in Inches	GPM	#9B Water Level	#10B Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC		·	8:6"	20"			1"	8:7½"	9:11"	8:4"	2:10"	
CLEAR 7/6/62	2:00 PM		29:6"	19¾"	12"	1080	4:1½"	15:8"	14:1½"	13:3"	7:1¼"	
SHUT DOWN 3:10-	3:00 PM		29:6"	19¾"	12"	1080	4:2¼"	15:8¾"	14:2½"	13:2¾"	7:2¼"	
3:20 PM FOR	4:00 PM		29:6"	20"	12"	1080	4:1"	15:8"	14:1"	13:2¼"	7:1"	
REPAIRS	5:00 PM		29:6"	20"	12"	1080	4:2"	15:9"	14:2"	13:3"	7:2"	
	6:00 PM		29:6"	20"	12"	1080	4:2½"	15:9¾"	14:2½"	13:4"	7:2½"	
	7:00 PM		29:6"	20"	12"	1080	4:2¾"	15:10"	14:2¾"	13:4½"	7:2¾"	
	8:00 PM		29:6"	20"	12"	1080	4:3"	15:10¼"	14:3"	13:4½"	7:3"	
	9:00 PM		29:6"	20"	12"	1080	4:2¾"	15:10¼"	14:3"	13:4½"	7:3"	
	10:00 PM		29:6"	20¼"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
	11:00 PM		29:6"	20¼"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
MIDNIGHT	12:00		29:6"	20¼"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
7/7/62	1:00 AM		29:6"	20¼"	12"	1080	4:2¾"	15:10"	14:3"	13:4¼"	7:2¾"	
	2:00 AM		29:6"	20¼"	12"	1080	4:2¾"	15:10"	14:3"	13:4¼"	7:2¾"	
	3:00 AM		29:6"	20¼"	12"	1080	4:2¾"	15:10	14:3"	13:4¼"	7:2¾"	
	4:00 AM		29:6"	20¼"	12"	1080	4:2¾"	15:10"	14:3"	13:4¼"	7:2¾"	
	5:00 AM		29:6"	20¼"	12"	1080	4:2¾"	15:10"	14:3"	13:4¼"	7:2¾"	
	6:00 AM		29:6"	20¼"	12"	1080	4:2½"	15:9¾"	14:2¾"	13:4"	7:2½"	
	7:00 AM		29:6"	20¼"	12"	1080	4:2½"	15:9¾"	14:2¾"	13:4"	7:2½"	
	8:00 AM		29:6"	20"	12"	1080	4:2½"	15:9¾"	14:2¾"	13:4"	7:2½"	
	9:00 AM		29:6"	20"	12"	1080	4:2½"	15:9¾"	14:2¾"	13:4"	7:2½"	
	10:00 AM		29:6"	20"	12"	1080	4:2½"	15:9¾"	14:2¾"	13:4"	7:2½"	
	11:00 AM		29:6"	20"	12"	1080	4:3"	15:10"	14:3"	13:4½"	7:3"	
NOON	12:00		29:6"	20"	12"	1080	4:3"	15:10"	14:3"	13:4½"	7:3"	
	1:00 PM	·	29:6"	20"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
	2:00 PM		29:6"	20"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
	3:00 PM		29:6"	20"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
	4:00 PM		29:6"	20"	12"	1080	4:3"	15:10¼"	14:3¼"	13:4½"	7:3"	
	5:00 PM		29:6"	20"	12"	1080	4:3"	15:10"	14:3"	13:4½"	7:3"	
	6:00 PM		29:6"	20"	12"	1080	4:3"	15:10"	14:3"	13:4½"	7:3"	
	7:00 PM		29:6"	20"	12"	1080	4:3"	15:10"	14:3"	13:4½"	7:3"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS. NO. 10"

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	RIVER → Alt. Gauge Reading	In Well	Orifice Head in Inches	GPM	#98 Water Level	#100 Water Level	#130 Water Level	#140 Water Level	#115 Water Level	Water Level
STATIC			8'6"	10"			1"	8'7½"	9'11"	8'4"	2'10"	
CLEAR 7/7/62	8:00PM		29'6"	20¼"	12"	1080	4'3"	15'10"	14'3¼"	13'4½"	7'3"	
	9:00PM		29'6"	20¼"	12"	1080	4'3"	15'10"	14'3¼"	13'4½"	7'3"	
	10:00PM		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	11:00PM		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
MIDNIGHT	12:00		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
7/8/62	1:00AM		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	2:00AM		29'6"	20¼"	12"	1080	4'3"	15'10¼"	14'3¼"	13'4½"	7'3"	
	3:00AM		29'6"	20¼"	12"	1080	4'3"	15'10¼"	14'3¼"	13'4½"	7'3"	
	4:00AM		29'6"	20¼"	12"	1080	4'2¾"	15'10"	14'3"	13'4¼"	7'3"	
	5:00AM		29'6"	20¼"	12"	1080	4'2¾"	15'9¾"	14'2¾"	13'4¼"	7'3"	
	6:00AM		29'6"	20¼"	12"	1080	4'2¾"	15'9¾"	14'2¾"	13'4"	7'2¾"	
	7:00AM		29'6"	20¼"	12"	1080	4'2¾"	15'9¾"	14'2¾"	13'4"	7'2¾"	
	8:00AM		29'6"	20"	12"	1080	4'2½"	15'9½"	14'2½"	13'3¾"	7'2½"	
	9:00AM		29'6"	20"	12"	1080	4'2½"	15'9½"	14'2½"	13'3¾"	7'2½"	
	10:00AM		29'6"	20"	12"	1080	4'2½"	15'9½"	14'2½"	13'4"	7'2½"	
	11:00AM		29'6"	20"	12"	1080	4'2½"	15'9½"	14'2½"	13'4"	7'2½"	
NOON	12:00		29'6"	20"	12"	1080	4'2¾"	15'9¾"	14'2¾"	13'4"	7'2¾"	
	1:00PM		29'6"	20"	12"	1080	4'3"	15'10"	14'3"	13'4¼"	7'3"	
	2:00PM		29'6"	20"	12"	1080	4'3"	15'10"	14'3"	13'4¼"	7'3"	
	3:00PM		29'6"	20"	12"	1080	4'3"	15'10"	14'3"	13'4¼"	7'3"	
	4:00PM		29'6"	20"	12"	1080	4'3"	15'10"	14'2¾"	13'4¼"	7'3"	
	5:00PM		29'6"	20"	12"	1080	4'3"	15'10"	14'3"	13'4½"	7'3¼"	
	6:00PM		29'6"	20"	12"	1080	4'3¼"	15'10"	14'3"	13'4½"	7'3¼"	
	7:00PM		29'6"	20"	12"	1080	4'3¼"	15'10"	14'3"	13'4½"	7'3¼"	
	8:00PM		29'6"	20"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	9:00PM		29'6"	20"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	10:00PM		29'6"	20"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	11:00PM		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	12:00		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	
	1:00AM		29'6"	20¼"	12"	1080	4'3¼"	15'10¼"	14'3¼"	13'4½"	7'3¼"	

JUL 10 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 11

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	RIVER → Alt. Gauge Reading	Pump-Mounted in Well	Orifice Head in Inches	GPM	# 9B Water Level	# 10B Water Level	# 13B Water Level	# 14B Water Level	# 11B Water Level	Water Level
STATIC			8:6"	20"			1"	8:7½	9:11"	8:4"	2:11"	
CLEAR 7/9/62	2:00 AM		29:6"	20¼"	12"	1080	4:3"	15:10	14:3"	13:4"	7:3"	
	3:00 AM		29:6"	20¼"	12"	1080	4:3"	15:9¾"	14:3"	13:4"	7:3"	
	4:00 AM		29:6"	20¼"	12"	1080	4:2¾	15:9½	14:2¾"	13:3¾	7:2¾	
	5:00 AM		29:6"	20¼"	12"	1080	4:2¾	15:9½"	14:2¾"	13:3¾	7:2¾"	
	6:00 AM		29:6"	20¼"	12"	1080	4:2¾	15:9½	14:2¾"	13:3¾	7:2¾"	
	7:00 AM		29:6"	20¼"	12"	1080	4:2¾	15:9½	14:2¾	13:3¾	7:2¾	
	8:00 AM		29:6"	20"	12"	1080	4:2¾	15:9½	14:2¾	13:3¾	7:2¾"	
	9:00 AM		29:6"	20"	12"	1080	4:2¾	15:9½"	14:2¾"	13:3¾	7:2¾	
	10:00 AM		29:6"	20"	12"	1080	4:2¾	15:9½"	14:2¾	13:3¾"	7:2¾"	
	10:10AM	SHUT	PUMP TEST OFF			RECOVERY TAKEN FOR 24 HRS.						
	10:11AM		13:0"					12:9½"	13:10¼"	12:5"		
	10:12AM		12:6"					12:7"	13:9"	12:3¼"		
	10:15AM		12:6"				3:9"	12:5¼	13:7½"	12:2¾	6:6¼"	
	10:30AM		12:0"				3:4¼"	11:11¼"	13:2"	11:8¼"	6:2½"	
RAIN	11:00AM		11:0"				3:0"	11:6½"	12:9"	11:3"	5:9¼"	
NOON	12:00		10:6"	20¼"			2:6"	11:0"	12:3"	10:8½	5:3"	
	1:00PM		10:0"	19¾"			2:2"	10:8"	11:8"	10:4¾"	4:10¾"	
	2:00PM		10:0"	19¾"			1:11¼"	10:5"	11:8"	10:2"	4:8"	
	3:00 PM		10:0"	20"			1:9½"	10:3"	11:6"	10:0"	4:6"	
CLEAR	4:00PM		10:0"	20"			1:8"	10:1½"	11:4½"	9:10½"	4:4½"	
	5:00PM		10:0"	20"			1:7"	10:0¼"	11:3¼"	9:9½"	4:3½"	
	6:00PM		9:6"	19¾"			1:6"	9:11¼"	11:2½"	9:8¼"	4:2¼"	
	7:00PM		9:6"	19¾"			1:5"	9:10¾"	11:2"	9:7½"	4:1½"	
	8:00PM		9:6"	19¾"			1:4½"	9:10"	11:1¼"	9:7"	4:1"	
	9:00 PM		9:6"	19¾"			1:4¼"	9:9½"	11:0½"	9:6½"	4:0½"	
	10:00PM		9:6"	20"			1:3½"	9:9"	11:0¾"	9:6"	4:0¾"	
	11:00PM		9:6"	20"			1:3¼"	9:8½"	11:0"	9:5½"	4:0"	
MIDNIGHT	12:00		9:6"	20"			1:3"	9:8"	10:11¼"	9:5"	3:11¼"	
7/10/62	1:00AM		9:0"	20"			1:2¾"	9:7½"	10:10½"	9:4¼"	3:11"	
	2:00 AM		9:0"	20"			1:2½"	9:7"	10:10"	9:3¾"	3:10¾"	

JUL 1 0 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 12

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER TOWN OF EASTHAMPTON MASS.

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	RIVER → Alt. Gauge Reading	~~Tape Measure~~ ~~In Well~~	Orifice Head In Inches	GPM	#9R Water Level	#10R Water Level	#13B Water Level	#14B Water Level	#11B Water Level	Water Level
STATIC			8':6"	20"			1"	8':7½"	9':11"	8':4"	2':10"	
RECOVERY	3:00 AM		9':0"	20"			1':1½"	9':6½"	10':9½"	9':3¼"	3':10½"	
7/10/62	4:00 AM		9':0"	20"			1':1"	9':6¼"	10':9"	9':3"	3':10"	
	5:00 AM		9':0"	20"			1':0¾"	9':6"	10':8¾"	9':2¾"	3':9½"	
	6:00 AM		9':0"	19¾"			1':0½"	9':5¾"	10':8½"	9':2½"	3':9"	
	7:00 AM		9':0"	19¾"			1':0¼"	9':5½"	10':8¼"	9':2¼"	3':8½"	
	8:00 AM		9':0"	19¾"			1':0"	9':5¼"	10':8"	9':2"	3':8¼"	
	9:00 AM		9':0"	19¾"			11¾"	9':5"	10':7¾"	9':1¾"	3':8"	
	10:00 AM		9':0"	19¾"			11½"	9':4¾"	10':7½"	9':1½"	3':7¾"	
THE END												

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 1080 USGPM

STATIC WATER LEVEL: 1 INCH

AQUIFER THICKNESS: 59

R = 220 FT FROM 18" GRAVEL WELL

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
27	11	30	0.00	0.083	0.000	1080.0000
27	12	0	30.00	1.021	0.938	1080.0000
27	13	0	90.00	1.792	1.709	1080.0000
27	14	0	150.00	2.167	2.084	1080.0000
27	15	0	210.00	2.375	2.292	1080.0000
27	16	0	270.00	2.562	2.479	1080.0000
27	17	0	330.00	2.708	2.625	1080.0000
27	18	0	390.00	2.854	2.771	1080.0000
27	19	0	450.00	2.937	2.854	1080.0000
27	20	0	510.00	3.021	2.938	1080.0000
27	21	0	570.00	3.083	3.000	1080.0000
27	22	0	630.00	3.167	3.084	1080.0000
27	23	0	690.00	3.208	3.125	1080.0000
28	0	0	750.00	3.250	3.167	1080.0000
28	1	0	810.00	3.271	3.188	1080.0000
28	2	0	870.00	3.292	3.209	1080.0000
28	3	0	930.00	3.312	3.229	1080.0000
28	4	0	990.00	3.333	3.250	1080.0000
28	5	0	1050.00	3.354	3.271	1080.0000
28	6	0	1110.00	3.375	3.292	1080.0000
28	7	0	1170.00	3.396	3.313	1080.0000
28	8	0	1230.00	3.417	3.334	1080.0000
28	9	0	1290.00	3.437	3.354	1080.0000
28	10	0	1350.00	3.458	3.375	1080.0000
28	11	0	1410.00	3.479	3.396	1080.0000
28	12	0	1470.00	3.500	3.417	1080.0000
28	13	0	1530.00	3.500	3.417	1080.0000
28	14	0	1590.00	3.521	3.438	1080.0000
28	15	0	1650.00	3.521	3.438	1080.0000
28	17	0	1770.00	3.521	3.438	1080.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 INCH
R = 220 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
28	18	0	1830.00	3.562	3.479	1080.0000
28	19	0	1890.00	3.583	3.500	1080.0000
28	20	0	1950.00	3.604	3.521	1080.0000
28	21	0	2010.00	3.604	3.521	1080.0000
28	22	0	2070.00	3.625	3.542	1080.0000
28	23	0	2130.00	3.625	3.542	1080.0000
29	0	0	2190.00	3.646	3.563	1080.0000
29	1	0	2250.00	3.646	3.563	1080.0000
29	2	0	2310.00	3.667	3.584	1080.0000
29	3	0	2370.00	3.667	3.584	1080.0000
29	5	0	2490.00	3.687	3.604	1080.0000
29	7	0	2610.00	3.708	3.625	1080.0000
29	9	0	2730.00	3.708	3.625	1080.0000
29	11	0	2850.00	3.708	3.625	1080.0000
29	13	0	2970.00	3.708	3.625	1080.0000
29	15	0	3090.00	3.708	3.625	1080.0000
29	17	0	3210.00	3.750	3.667	1080.0000
29	18	0	3270.00	3.792	3.709	1080.0000
29	19	0	3330.00	3.792	3.709	1080.0000
29	20	0	3390.00	3.812	3.729	1080.0000
29	22	0	3510.00	3.812	3.729	1080.0000
29	23	0	3570.00	3.833	3.750	1080.0000
30	0	0	3630.00	3.833	3.750	1080.0000
30	1	0	3690.00	3.812	3.729	1080.0000
30	2	0	3750.00	3.812	3.729	1080.0000
30	6	0	3990.00	3.812	3.729	1080.0000
30	8	0	4110.00	3.833	3.750	1080.0000
30	12	0	4350.00	3.833	3.750	1080.0000
30	14	0	4470.00	3.833	3.750	1080.0000
30	15	0	4530.00	3.854	3.771	1080.0000

I.E.P. INC.

FUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 INCH
R = 220 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
30	17	0	4650.00	3.854	3.771	1080.0000
30	18	0	4710.00	3.875	3.792	1080.0000
30	19	0	4770.00	3.873	3.792	1080.0000
30	20	0	4830.00	3.896	3.813	1080.0000
30	22	0	4950.00	3.896	3.813	1080.0000
30	23	0	5010.00	3.875	3.792	1080.0000
1	1	0	5130.00	3.854	3.771	1080.0000
1	4	0	5310.00	3.854	3.771	1080.0000
1	5	0	5370.00	3.812	3.729	1080.0000
1	7	0	5490.00	3.812	3.729	1080.0000
1	8	0	5550.00	3.833	3.750	1080.0000
1	12	0	5790.00	3.833	3.750	1080.0000
1	13	0	5850.00	3.854	3.771	1080.0000
1	14	0	5910.00	3.875	3.792	1080.0000
1	15	0	5970.00	3.896	3.813	1080.0000
1	16	0	6030.00	3.917	3.834	1080.0000
1	19	0	6210.00	3.917	3.834	1080.0000
1	20	0	6270.00	3.937	3.854	1080.0000
1	21	0	6330.00	3.958	3.875	1080.0000
1	22	0	6390.00	3.958	3.875	1080.0000
2	0	0	6510.00	3.937	3.854	1080.0000
2	8	0	6990.00	3.937	3.854	1080.0000
2	9	0	7050.00	3.958	3.875	1080.0000
2	10	0	7110.00	4.000	3.917	1080.0000
2	13	0	7290.00	4.042	3.959	1080.0000
2	16	0	7470.00	4.042	3.959	1080.0000
2	17	0	7530.00	4.083	4.000	1080.0000
2	23	0	7890.00	4.083	4.000	1080.0000
3	0	0	7950.00	4.104	4.021	1080.0000
3	4	0	8190.00	4.104	4.021	1080.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 INCH
R = 220 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
3	5	0	8250.00	4.083	4.000	1080.0000
3	6	0	8310.00	4.083	4.000	1080.0000
3	7	0	8370.00	4.062	3.979	1080.0000
3	9	0	8490.00	4.062	3.979	1080.0000
3	10	0	8550.00	4.083	4.000	1080.0000
3	11	0	8610.00	4.083	4.000	1080.0000
3	12	0	8670.00	4.104	4.021	1080.0000
3	13	0	8730.00	4.125	4.042	1080.0000
3	14	0	8790.00	4.125	4.042	1080.0000
3	16	0	8910.00	3.979	3.896	1080.0000
3	17	0	8970.00	4.042	3.959	1080.0000
3	18	0	9030.00	4.062	3.979	1080.0000
3	19	0	9090.00	4.104	4.021	1080.0000
3	20	0	9150.00	4.125	4.042	1080.0000
3	21	0	9210.00	4.146	4.063	1080.0000
3	22	0	9270.00	4.167	4.084	1080.0000
3	23	0	9330.00	4.187	4.104	1080.0000
4	0	0	9390.00	4.187	4.104	1080.0000
4	2	0	9510.00	4.167	4.084	1080.0000
4	7	0	9810.00	4.083	4.000	1080.0000
4	12	0	10110.00	4.125	4.042	1080.0000
4	17	0	10410.00	4.104	4.021	1080.0000
4	23	0	10770.00	4.167	4.084	1080.0000
5	3	0	11010.00	4.104	4.021	1080.0000
5	7	0	11250.00	4.083	4.000	1080.0000
5	13	0	11610.00	4.187	4.104	1080.0000
6	0	0	12270.00	4.229	4.146	1080.0000
6	8	0	12750.00	4.125	4.042	1080.0000
6	12	0	12990.00	4.167	4.084	1080.0000
6	22	0	13590.00	4.250	4.167	1080.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 9B

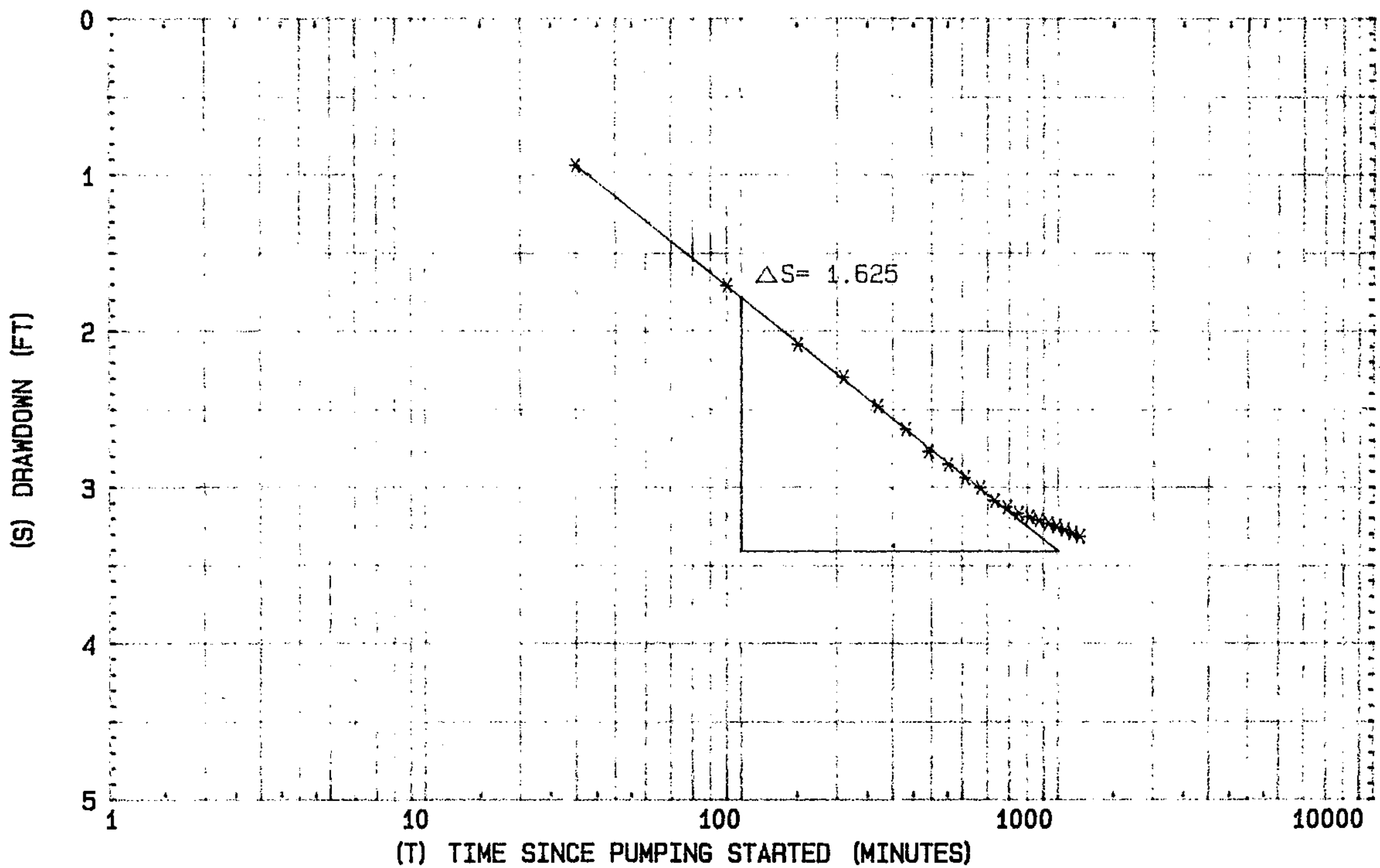
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 INCH
R = 220 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
7	7	0	14130.00	4.208	4.125	1080.0000
7	15	0	14610.00	4.250	4.167	1080.0000
8	0	0	15150.00	4.271	4.188	1080.0000
8	8	0	15630.00	4.208	4.125	1080.0000
8	15	0	16050.00	4.250	4.167	1080.0000
8	23	0	16530.00	4.271	4.188	1080.0000
9	4	0	16830.00	4.229	4.146	1080.0000
9	10	0	17190.00	4.229	4.146	1080.0000
						VALUE USED
						1080.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	9B	ΔS=	1.625 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	175509 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	1 IN	S=	.00602

I.E.P. INC.

FIGURE 40

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 98

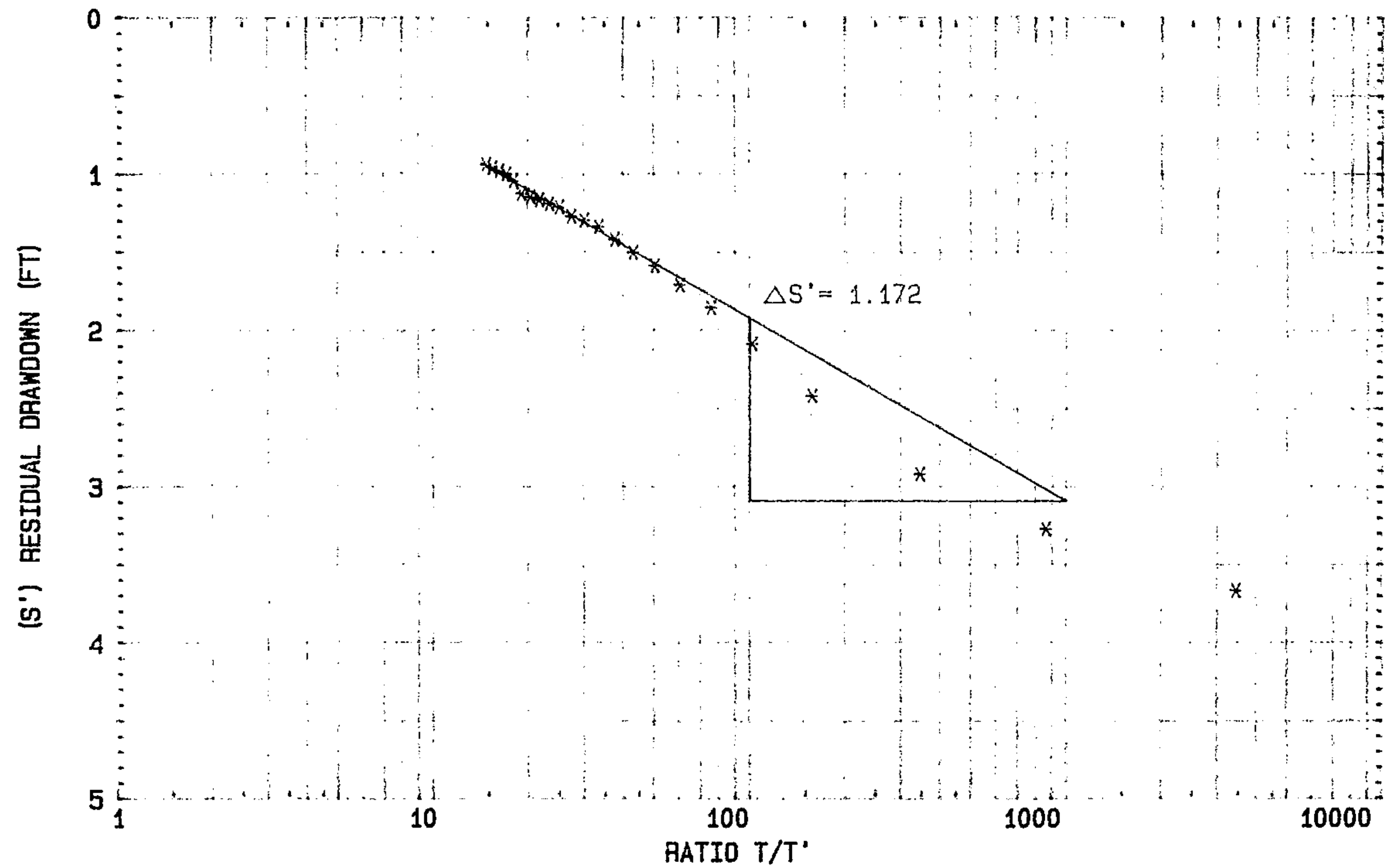
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 INCH
R = 220 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
9	10	10	17200.00	0.00	0.00	4.229	4.146
9	10	15	17205.00	5.00	3441.00	3.750	3.667
9	10	30	17220.00	20.00	861.00	3.334	3.271
9	11	0	17250.00	50.00	345.00	3.000	2.917
9	12	0	17310.00	110.00	157.36	2.500	2.417
9	13	0	17370.00	170.00	102.18	2.167	2.084
9	14	0	17430.00	230.00	75.78	1.937	1.854
9	15	0	17490.00	290.00	60.31	1.792	1.709
9	16	0	17550.00	350.00	50.14	1.667	1.584
9	17	0	17610.00	410.00	42.95	1.583	1.500
9	18	0	17670.00	470.00	37.60	1.500	1.417
9	19	0	17730.00	530.00	33.45	1.417	1.334
9	20	0	17790.00	590.00	30.15	1.375	1.292
9	21	0	17850.00	650.00	27.46	1.354	1.271
9	22	0	17910.00	710.00	25.23	1.292	1.209
9	23	0	17970.00	770.00	23.34	1.271	1.188
10	0	0	18030.00	830.00	21.72	1.250	1.167
10	1	0	18090.00	890.00	20.33	1.229	1.146
10	2	0	18150.00	950.00	19.11	1.208	1.125
10	3	0	18210.00	1010.00	18.03	1.125	1.042
10	4	0	18270.00	1070.00	17.07	1.083	1.000
10	5	0	18330.00	1130.00	16.22	1.062	0.979
10	6	0	18390.00	1190.00	15.45	1.042	0.959
10	7	0	18450.00	1250.00	14.76	1.021	0.938
10	8	0	18510.00	1310.00	14.13	1.000	0.917
10	9	0	18570.00	1370.00	13.55	0.979	0.896
10	10	0	18630.00	1430.00	13.03	0.958	0.875

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	9B	ΔS'= 1.172 FT	
FILE:	EHO-1	Q=	1080 USGPM	T= 243181 USGPD/FT	
LOCATION:	NONOTUCK PARK	S.W.L.=	1 IN		

I. E. P. INC.

FIGURE 42

PUMPING TEST COEFFICIENTS

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:
EHO-1
LOCATION: NONOTUCK PARK

WELL # 9B

DRAWDOWN:

delta s = 1.611584 FT T = 176919.1 USGPD/FT S = 5.937183E-03

RECOVERY:

delta s = 1.398023 FT T = 203946.1 USGPD/FT S = 1.357555E-02

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 7.5 IN
R = 2 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
27	11	30	0.00	8.625	0.000	1080.0000
27	12	0	30.00	12.458	3.833	1080.0000
27	13	0	90.00	13.250	4.625	1080.0000
27	14	0	150.00	13.667	5.042	1080.0000
27	15	0	210.00	13.917	5.292	1080.0000
27	16	0	270.00	14.104	5.479	1080.0000
27	17	0	330.00	14.312	5.687	1080.0000
27	18	0	390.00	14.417	5.792	1080.0000
27	19	0	450.00	14.500	5.875	1080.0000
27	20	0	510.00	14.542	5.917	1080.0000
27	21	0	570.00	14.646	6.021	1080.0000
27	22	0	630.00	14.729	6.104	1080.0000
27	23	0	690.00	14.771	6.146	1080.0000
28	0	0	750.00	14.812	6.187	1080.0000
28	1	0	810.00	14.854	6.229	1080.0000
28	2	0	870.00	14.875	6.250	1080.0000
28	3	0	930.00	14.896	6.271	1080.0000
28	4	0	990.00	14.937	6.312	1080.0000
28	5	0	1050.00	14.958	6.333	1080.0000
28	6	0	1110.00	14.979	6.354	1080.0000
28	7	0	1170.00	15.000	6.375	1080.0000
28	8	0	1230.00	15.021	6.396	1080.0000
28	9	0	1290.00	15.021	6.396	1080.0000
28	10	0	1350.00	15.042	6.417	1080.0000
28	11	0	1410.00	15.062	6.437	1080.0000
28	12	0	1470.00	15.083	6.458	1080.0000
28	13	0	1530.00	15.042	6.417	1080.0000
28	14	0	1590.00	15.083	6.458	1080.0000
28	15	0	1650.00	15.083	6.458	1080.0000
28	16	0	1710.00	15.125	6.500	1080.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 7.5 IN
R = 2 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
28	17	0	1770.00	15.125	6.500	1080.0000
28	18	0	1830.00	15.146	6.521	1080.0000
28	19	0	1890.00	15.146	6.521	1080.0000
28	20	0	1950.00	15.146	6.521	1080.0000
28	21	0	2010.00	15.146	6.521	1080.0000
28	22	0	2070.00	15.146	6.521	1080.0000
28	23	0	2130.00	15.167	6.542	1080.0000
29	0	0	2190.00	15.167	6.542	1080.0000
29	1	0	2250.00	15.187	6.562	1080.0000
29	3	0	2370.00	15.229	6.604	1080.0000
29	5	0	2490.00	15.250	6.625	1080.0000
29	7	0	2610.00	15.250	6.625	1080.0000
29	9	0	2730.00	15.271	6.646	1080.0000
29	12	0	2910.00	15.271	6.646	1080.0000
29	16	0	3150.00	15.312	6.687	1080.0000
29	20	0	3390.00	15.354	6.729	1080.0000
30	0	0	3630.00	15.375	6.750	1080.0000
30	4	0	3870.00	15.375	6.750	1080.0000
30	8	0	4110.00	15.375	6.750	1080.0000
30	12	0	4350.00	15.375	6.750	1080.0000
30	18	0	4710.00	15.417	6.792	1080.0000
1	0	0	5070.00	15.458	6.833	1080.0000
1	6	0	5430.00	15.396	6.771	1080.0000
1	12	0	5790.00	15.396	6.771	1080.0000
1	18	0	6150.00	15.479	6.854	1080.0000
2	0	0	6510.00	15.500	6.875	1080.0000
2	6	0	6870.00	15.542	6.917	1080.0000
2	12	0	7230.00	15.625	7.000	1080.0000
2	18	0	7590.00	15.687	7.062	1080.0000
3	0	0	7950.00	15.708	7.083	1080.0000

I.E.P. INC.

EHO-1

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 10B

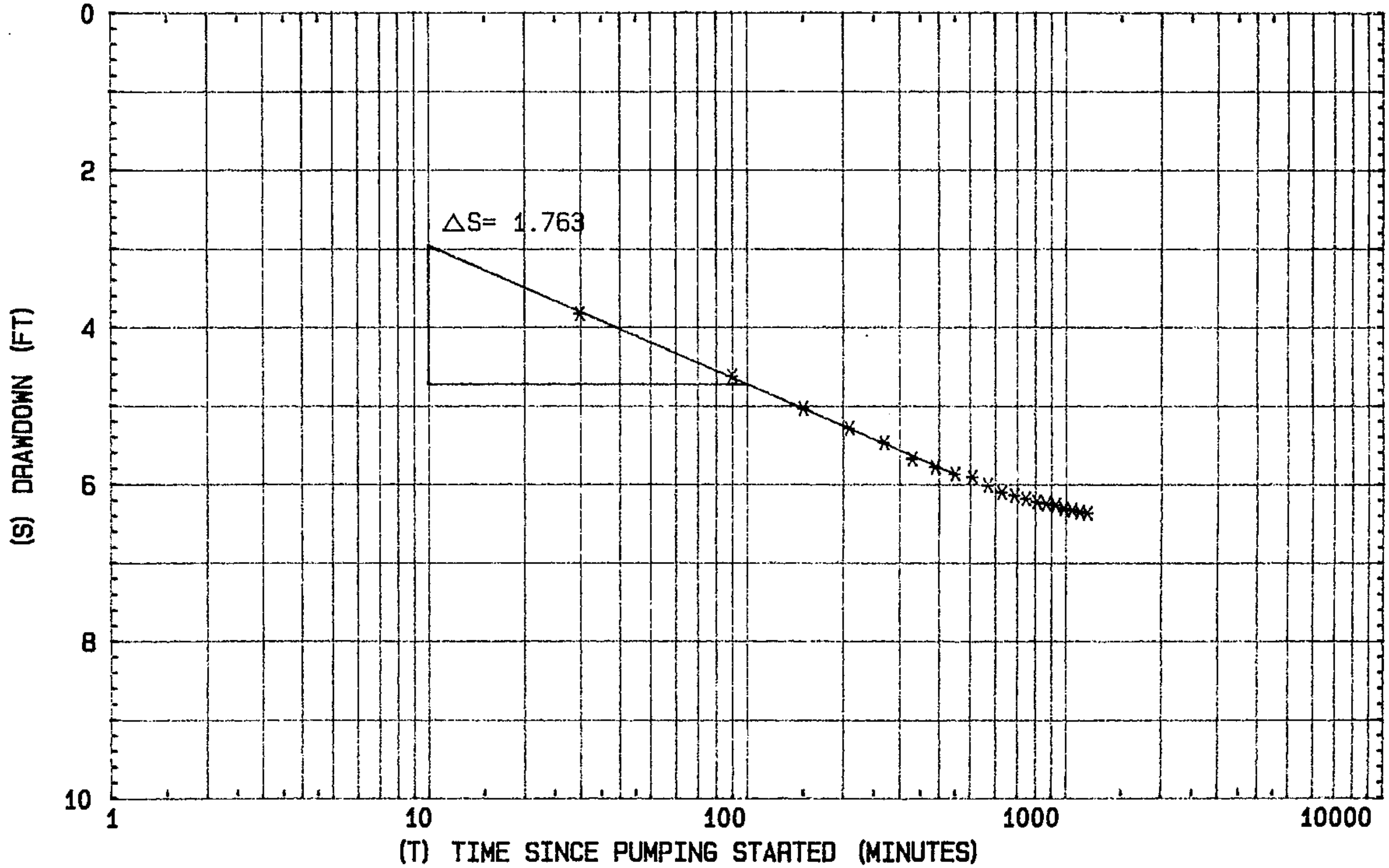
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 7.5 IN
R = 2 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
3	6	0	8310.00	15.708	7.083	1080.0000
3	12	0	8670.00	15.687	7.062	1080.0000
3	18	0	9030.00	15.667	7.042	1080.0000
4	0	0	9390.00	15.771	7.146	1080.0000
4	12	0	10110.00	15.708	7.083	1080.0000
5	0	0	10830.00	15.750	7.125	1080.0000
5	12	0	11550.00	15.750	7.125	1080.0000
6	0	0	12270.00	15.792	7.167	1080.0000
6	12	0	12990.00	15.729	7.104	1080.0000
7	0	0	13710.00	15.854	7.229	1080.0000
7	12	0	14430.00	15.833	7.208	1080.0000
8	0	0	15150.00	15.854	7.229	1080.0000
8	12	0	15870.00	15.812	7.187	1080.0000
9	0	0	16590.00	15.854	7.229	1080.0000
9	10	0	17190.00	15.792	7.167	1080.0000
						VALUE USED
						1080.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	10B	ΔS=	1.763 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	161709 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	8 FT 7.5 IN	S=	%1.74107

I.E.P. INC.

FIGURE 31

PUMPING TEST - RECOVERY DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 10B

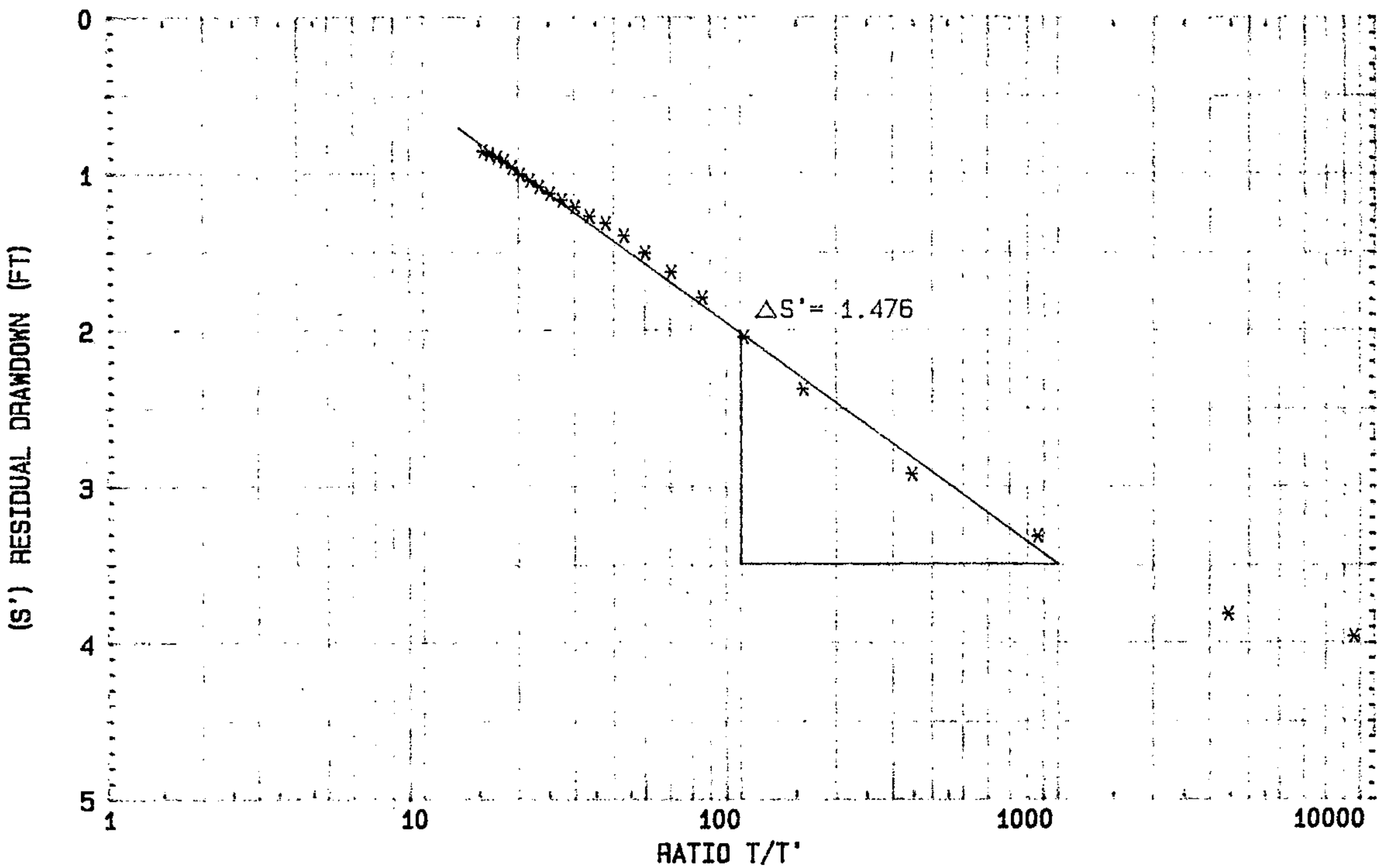
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 7.5 IN
R = 2 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
9	10	1	17191.00	1.00	17191.00	12.792	4.167
9	10	2	17192.00	2.00	8596.00	12.583	3.958
9	10	5	17195.00	5.00	3439.00	12.437	3.812
9	10	20	17210.00	20.00	860.50	11.937	3.312
9	10	50	17240.00	50.00	344.80	11.542	2.917
9	11	50	17300.00	110.00	157.27	11.000	2.375
9	12	50	17360.00	170.00	102.12	10.667	2.042
9	13	50	17420.00	230.00	75.74	10.417	1.792
9	14	50	17480.00	290.00	60.28	10.250	1.625
9	15	50	17540.00	350.00	50.11	10.125	1.500
9	16	50	17600.00	410.00	42.93	10.021	1.396
9	17	50	17660.00	470.00	37.57	9.937	1.312
9	18	50	17720.00	530.00	33.43	9.896	1.271
9	19	50	17780.00	590.00	30.14	9.833	1.208
9	20	50	17840.00	650.00	27.45	9.792	1.167
9	21	50	17900.00	710.00	25.21	9.750	1.125
9	22	50	17960.00	770.00	23.32	9.708	1.083
9	23	50	18020.00	830.00	21.71	9.667	1.042
10	0	50	18080.00	890.00	20.31	9.625	1.000
10	1	50	18140.00	950.00	19.09	9.583	0.958
10	2	50	18200.00	1010.00	18.02	9.542	0.917
10	3	50	18260.00	1070.00	17.07	9.521	0.896
10	4	50	18320.00	1130.00	16.21	9.500	0.875
10	5	50	18380.00	1190.00	15.45	9.479	0.854
10	6	50	18440.00	1250.00	14.75	9.458	0.833
10	7	50	18500.00	1310.00	14.12	9.437	0.812
10	8	50	18560.00	1370.00	13.55	9.417	0.792
10	9	50	18620.00	1430.00	13.02	9.396	0.771

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	10B	ΔS' =	1.476 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	193194 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	8 FT 7.5 IN		

I.E.P. INC.

FIGURE 33

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 2 FT 10 INCHES
R = 250 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
27	11	30	0.00	2.833	0.000	1080.0000
27	12	0	30.00	3.875	1.042	1080.0000
27	13	0	90.00	4.687	1.854	1080.0000
27	14	0	150.00	5.104	2.271	1080.0000
27	15	0	210.00	5.312	2.479	1080.0000
27	16	0	270.00	5.521	2.688	1080.0000
27	17	0	330.00	5.708	2.875	1080.0000
27	18	0	390.00	5.854	3.021	1080.0000
27	19	0	450.00	5.979	3.146	1080.0000
27	20	0	510.00	6.000	3.167	1080.0000
27	21	0	570.00	6.062	3.229	1080.0000
27	22	0	630.00	6.146	3.313	1080.0000
27	23	0	690.00	6.187	3.354	1080.0000
28	0	0	750.00	6.229	3.396	1080.0000
28	2	0	870.00	6.292	3.459	1080.0000
28	4	0	990.00	6.354	3.521	1080.0000
28	6	0	1110.00	6.396	3.563	1080.0000
28	8	0	1230.00	6.437	3.604	1080.0000
28	10	0	1350.00	6.458	3.625	1080.0000
28	12	0	1470.00	6.500	3.667	1080.0000
28	16	0	1710.00	6.521	3.688	1080.0000
28	20	0	1950.00	6.604	3.771	1080.0000
29	0	0	2190.00	6.792	3.959	1080.0000
29	4	0	2430.00	6.667	3.834	1080.0000
29	8	0	2670.00	6.708	3.875	1080.0000
29	18	0	3270.00	6.792	3.959	1080.0000
30	0	0	3630.00	6.812	3.979	1080.0000
30	6	0	3990.00	6.812	3.979	1080.0000
30	12	0	4350.00	6.833	4.000	1080.0000
30	18	0	4710.00	6.875	4.042	1080.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 11B

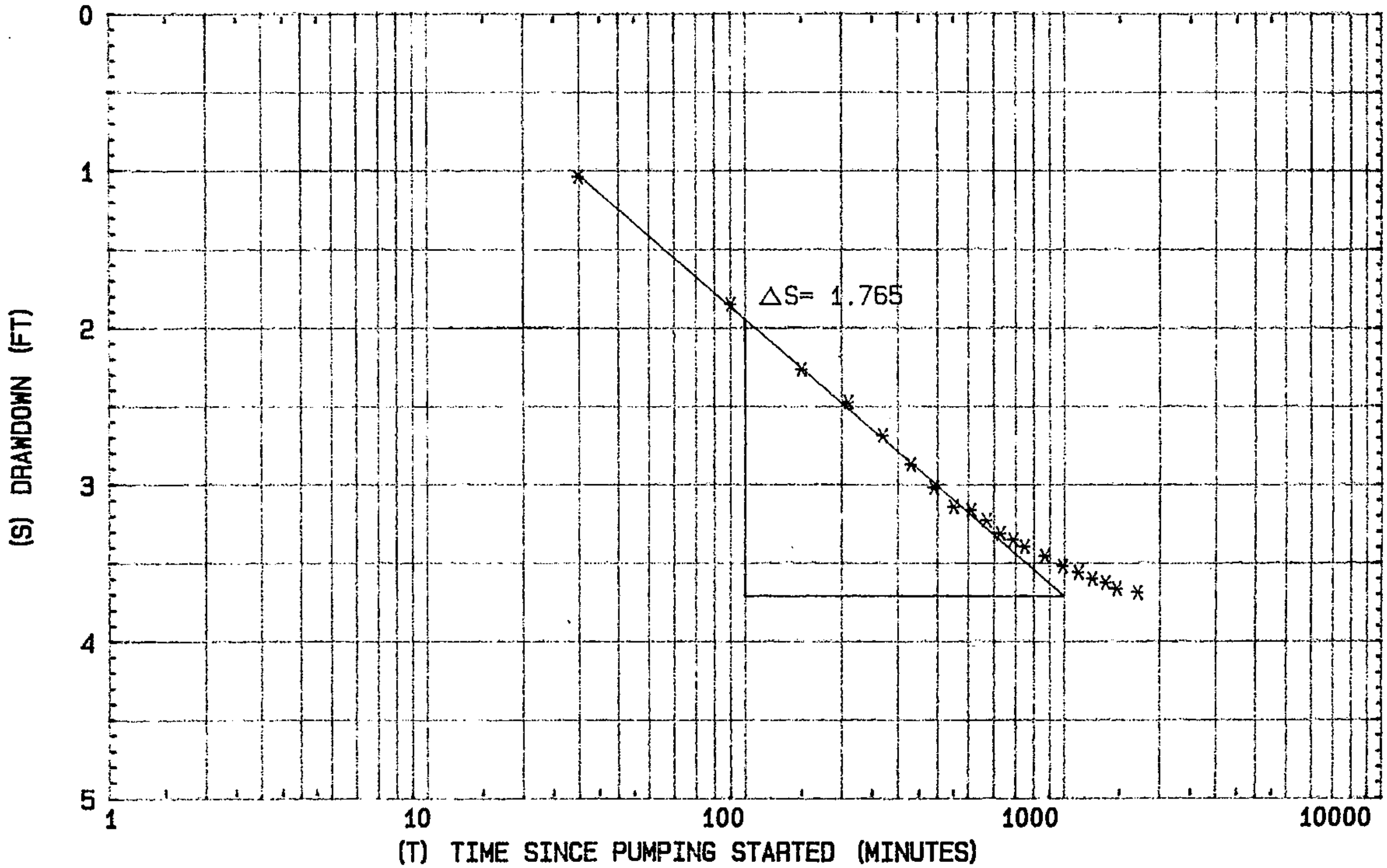
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 2 FT 10 INCHES
R = 250 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
1	0	0	5070.00	6.854	4.021	1080.0000
1	12	0	5790.00	6.833	4.000	1080.0000
2	0	0	6510.00	6.937	4.104	1080.0000
2	12	0	7230.00	7.000	4.167	1080.0000
3	0	0	7950.00	7.104	4.271	1080.0000
3	12	0	8670.00	7.104	4.271	1080.0000
4	0	0	9390.00	7.187	4.354	1080.0000
4	12	0	10110.00	7.146	4.313	1080.0000
5	0	0	10830.00	7.167	4.333	1080.0000
5	12	0	11550.00	7.167	4.333	1080.0000
6	0	0	12270.00	7.229	4.396	1080.0000
6	12	0	12990.00	7.167	4.333	1080.0000
7	0	0	13710.00	7.250	4.417	1080.0000
7	12	0	14430.00	7.250	4.417	1080.0000
8	0	0	15150.00	7.271	4.438	1080.0000
8	12	0	15870.00	7.229	4.396	1080.0000
9	0	0	16590.00	7.271	4.438	1080.0000
9	10	0	17190.00	7.229	4.396	1080.0000
						VALUE USED
						1080.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	11B	ΔS=	1.765 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	161517 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	2 FT 10 IN	S=	.00424

I.E.P. INC.

FIGURE 34

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 1080 USGPM

STATIC WATER LEVEL: 2 FT 10 INCHES

AQUIFER THICKNESS: 59 FT

R = 250 FT FROM 18" GRAVEL WELL

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
9	10	0	17190.00	0.00	0.00	7.271	4.438
9	10	5	17195.00	5.00	3439.00	6.521	3.688
9	10	20	17210.00	20.00	860.50	6.208	3.375
9	10	50	17240.00	50.00	344.80	5.771	2.938
9	11	50	17300.00	110.00	157.27	5.250	2.417
9	12	50	17360.00	170.00	102.12	4.896	2.063
9	13	50	17420.00	230.00	75.74	4.667	1.834
9	14	50	17480.00	290.00	60.28	4.500	1.667
9	15	50	17540.00	350.00	50.11	4.375	1.542
9	16	50	17600.00	410.00	42.93	4.292	1.459
9	17	50	17660.00	470.00	37.57	4.187	1.354
9	18	50	17720.00	530.00	33.43	4.125	1.292
9	19	50	17780.00	590.00	30.14	4.083	1.250
9	20	50	17840.00	650.00	27.45	4.042	1.209
9	21	50	17900.00	710.00	25.21	4.062	1.229
9	22	50	17960.00	770.00	23.32	4.000	1.167
9	23	50	18020.00	830.00	21.71	3.937	1.104
10	0	50	18080.00	890.00	20.31	3.917	1.084
10	1	50	18140.00	950.00	19.09	3.896	1.063
10	2	50	18200.00	1010.00	18.02	3.875	1.042
10	3	50	18260.00	1070.00	17.07	3.833	1.000
10	4	50	18320.00	1130.00	16.21	3.792	0.959
10	5	50	18380.00	1190.00	15.45	3.750	0.917
10	6	50	18440.00	1250.00	14.75	3.708	0.875
10	7	50	18500.00	1310.00	14.12	3.687	0.854
10	8	50	18560.00	1370.00	13.55	3.667	0.834

I.E.P. INC.

PUMPING TEST COEFFICIENTS

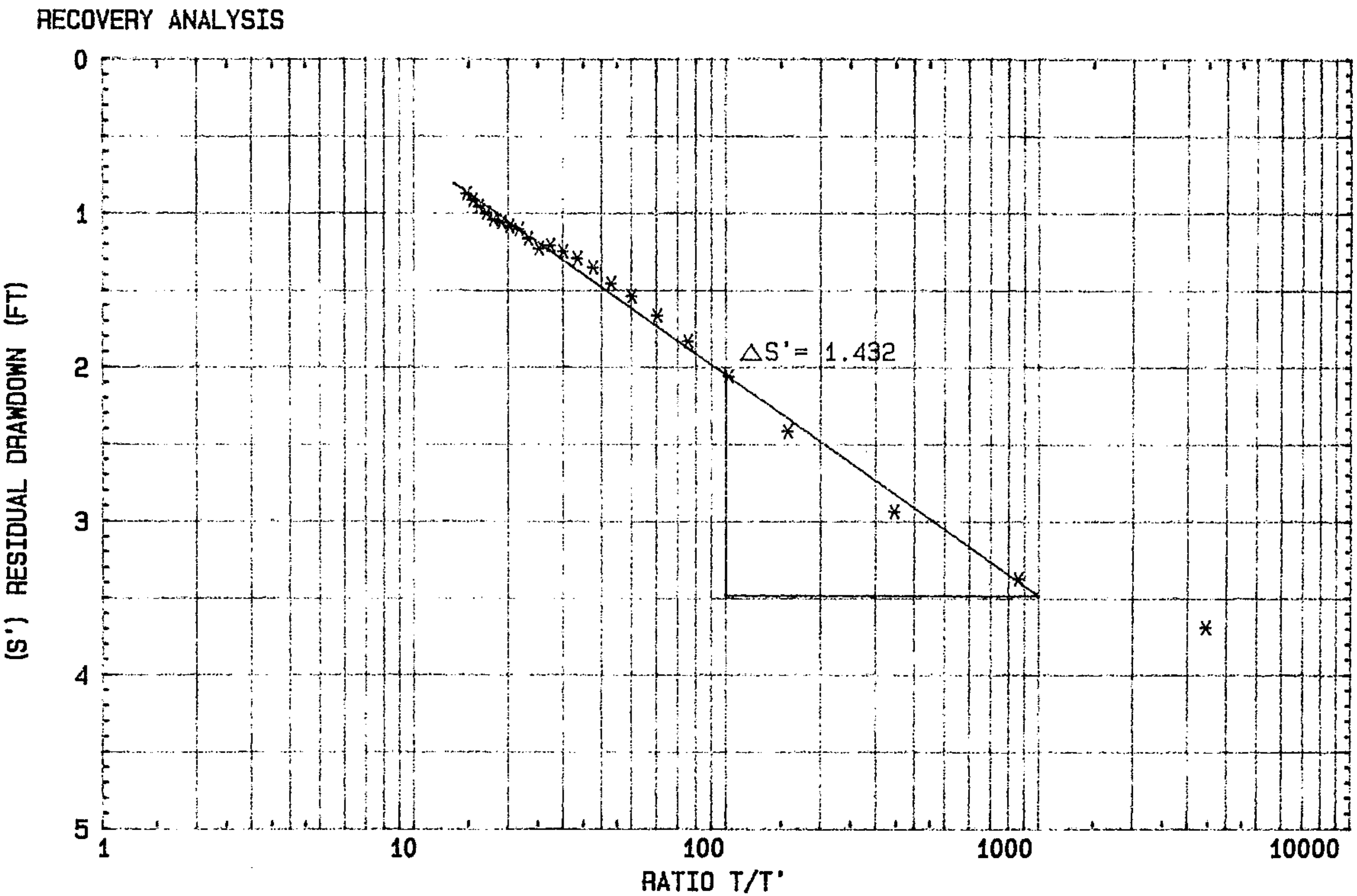
PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:
EHO-1
LOCATION: NONOTUCK PARK

WELL # 11B

RECOVERY:

delta s = 1.432489 FT   T = 199038.3 USGPD/FT   S = 2.454849E-03

I.E.P. INC.



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	11B	ΔS'=	1.432 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	199038 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	2 FT 10 IN		

I.E.P. INC.

FIGURE 36

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 13B

DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 9 FT 11 IN
R = 30 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
27	11	30	0.00	9.917	0.000	1080.0000
27	12	0	30.00	10.917	1.000	1080.0000
27	13	0	90.00	11.708	1.791	1080.0000
27	14	0	150.00	12.146	2.229	1080.0000
27	15	0	210.00	12.354	2.437	1080.0000
27	16	0	270.00	12.521	2.604	1080.0000
27	17	0	330.00	12.750	2.833	1080.0000
27	18	0	390.00	13.021	3.104	1080.0000
27	19	0	450.00	13.021	3.104	1080.0000
27	20	0	510.00	13.021	3.104	1080.0000
27	21	0	570.00	13.062	3.145	1080.0000
27	22	0	630.00	13.146	3.229	1080.0000
27	23	0	690.00	13.208	3.291	1080.0000
28	0	0	750.00	13.250	3.333	1080.0000
28	2	0	870.00	13.333	3.416	1080.0000
28	4	0	990.00	13.396	3.479	1080.0000
28	6	0	1110.00	13.437	3.520	1080.0000
28	8	0	1230.00	13.458	3.541	1080.0000
28	10	0	1350.00	13.500	3.583	1080.0000
28	12	0	1470.00	13.542	3.625	1080.0000
28	16	0	1710.00	13.521	3.604	1080.0000
28	20	0	1950.00	13.562	3.645	1080.0000
29	0	0	2190.00	13.625	3.708	1080.0000
29	4	0	2430.00	13.667	3.750	1080.0000
29	8	0	2670.00	13.687	3.770	1080.0000
29	12	0	2910.00	13.708	3.791	1080.0000
29	18	0	3270.00	13.792	3.875	1080.0000
30	0	0	3630.00	13.833	3.916	1080.0000
30	6	0	3990.00	13.833	3.916	1080.0000
30	12	0	4350.00	13.792	3.875	1080.0000

I.E.P. INC.

EHO-1

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 13B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 1080 USGPM

STATIC WATER LEVEL: 9 FT 11 IN

AQUIFER THICKNESS: 59 FT

R = 30 FT FROM 18" GRAVEL WELL

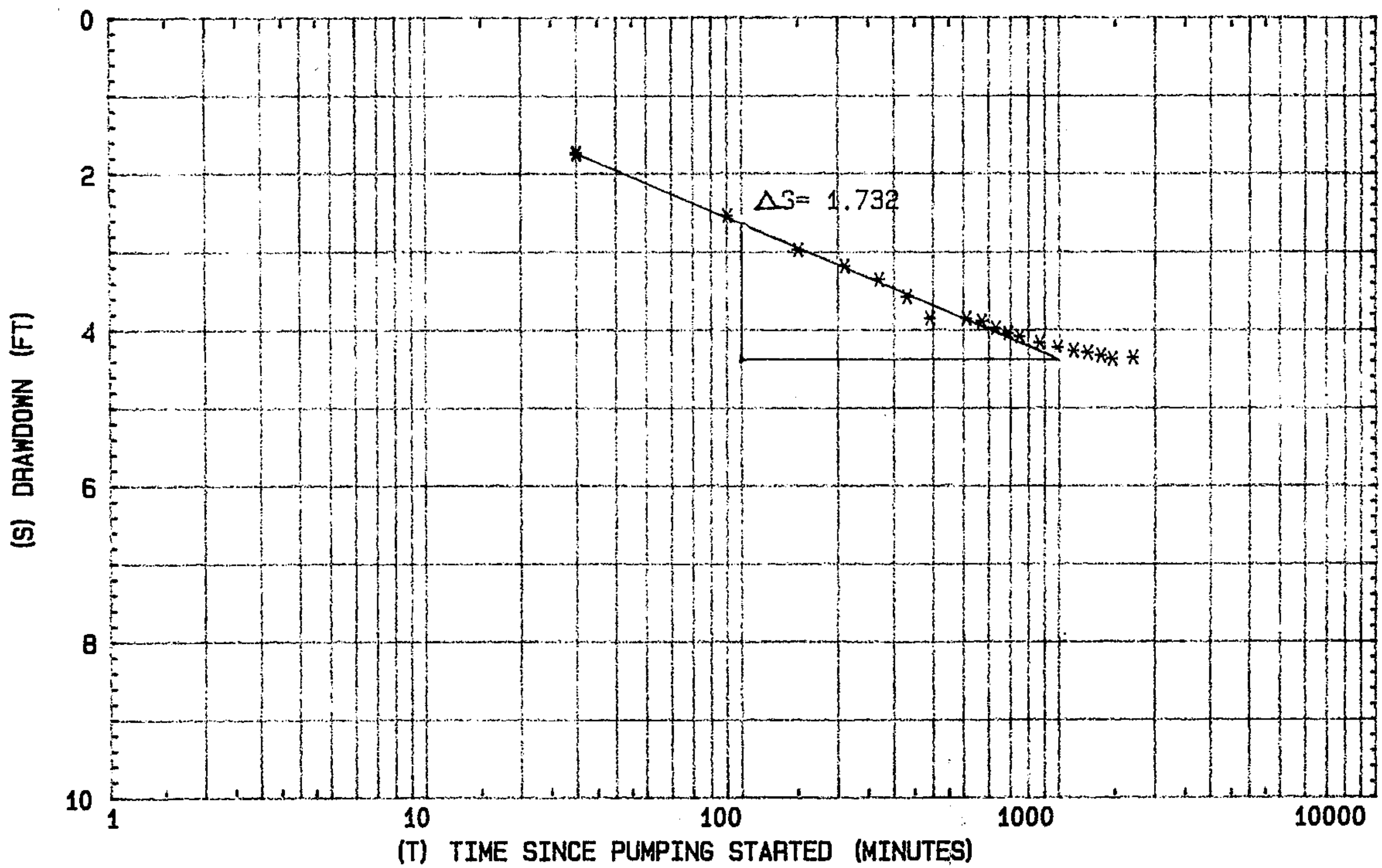
CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
30	18	0	4710.00	13.854	3.937	1080.0000
1	12	0	5790.00	13.833	3.916	1080.0000
2	12	0	7230.00	14.000	4.083	1080.0000
3	6	0	8310.00	14.083	4.166	1080.0000
4	0	0	9390.00	14.187	4.270	1080.0000
4	18	0	10470.00	14.104	4.187	1080.0000
5	16	0	11790.00	14.167	4.250	1080.0000
6	16	0	13230.00	14.083	4.166	1080.0000
7	16	0	14670.00	14.271	4.354	1080.0000
8	16	0	16110.00	14.229	4.312	1080.0000
9	4	0	16830.00	14.229	4.312	1080.0000
9	10	0	17190.00	14.229	4.312	1080.0000
						VALUE USED
						1080.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	13B	ΔS=	1.732 FT
FILE:	EHO-1	Q=	1080 USGPM	T=	164636 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	9 FT 11 IN	S=	.11334

I.E.P. INC.

FIGURE 37

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 13B

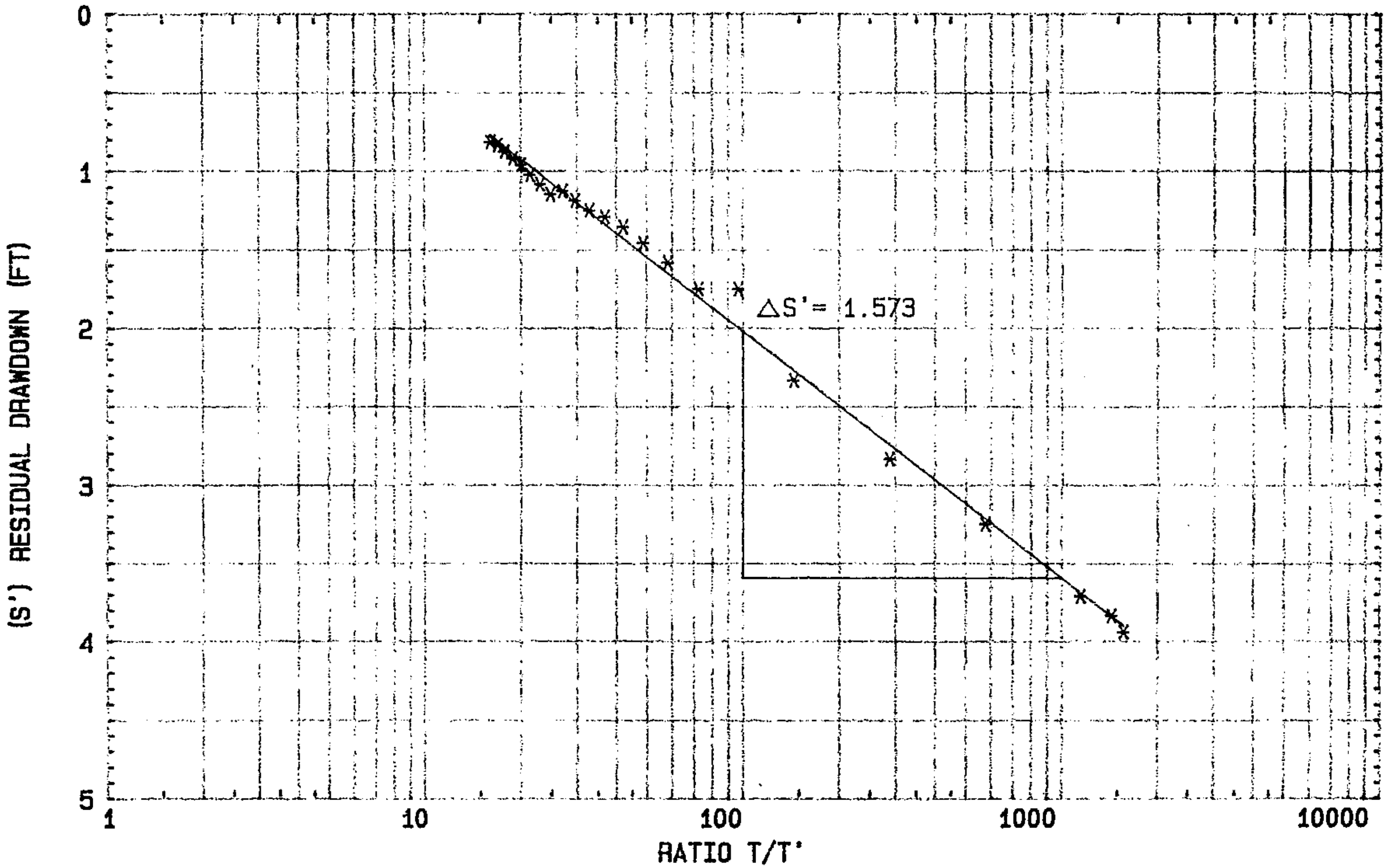
DATUM POINT: TOP OF CASING
PUMPING RATE: 1080 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 9 FT 11 IN
R = 30 FT FROM 18" GRAVEL WELL
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
9	10	11	17201.00	11.00	1563.73	13.854	3.937
9	10	12	17202.00	12.00	1433.50	13.750	3.833
9	10	15	17205.00	15.00	1147.00	13.625	3.708
9	10	30	17220.00	30.00	574.00	13.167	3.250
9	11	0	17250.00	60.00	287.50	12.750	2.833
9	12	0	17310.00	120.00	144.25	12.250	2.333
9	13	0	17370.00	180.00	96.50	11.667	1.750
9	14	0	17430.00	240.00	72.63	11.667	1.750
9	15	0	17490.00	300.00	58.30	11.500	1.583
9	16	0	17550.00	360.00	48.75	11.375	1.458
9	17	0	17610.00	420.00	41.93	11.271	1.354
9	18	0	17670.00	480.00	36.81	11.208	1.291
9	19	0	17730.00	540.00	32.83	11.167	1.250
9	20	0	17790.00	600.00	29.65	11.104	1.187
9	21	0	17850.00	660.00	27.05	11.042	1.125
9	22	0	17910.00	720.00	24.88	11.062	1.145
9	23	0	17970.00	780.00	23.04	11.000	1.083
10	0	0	18030.00	840.00	21.46	10.937	1.020
10	1	0	18090.00	900.00	20.10	10.875	0.958
10	2	0	18150.00	960.00	18.91	10.833	0.916
10	3	0	18210.00	1020.00	17.85	10.792	0.875
10	4	0	18270.00	1080.00	16.92	10.750	0.833
10	5	0	18330.00	1140.00	16.08	10.729	0.812
10	6	0	18390.00	1200.00	15.33	10.708	0.791
10	7	0	18450.00	1260.00	14.64	10.687	0.770
10	8	0	18510.00	1320.00	14.02	10.667	0.750
10	9	0	18570.00	1380.00	13.46	10.646	0.729
9	10	13	17202.94	12.94	1329.50	10.625	0.708

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	13B	ΔS'= 1.573 FT	
FILE:	EHO-1	Q=	1080 USGPM	T= 181215 USGPD/FT	
LOCATION:	NONOTUCK PARK	S.W.L.=	9 FT 11 IN		

I.E.P. INC.

FIGURE 39

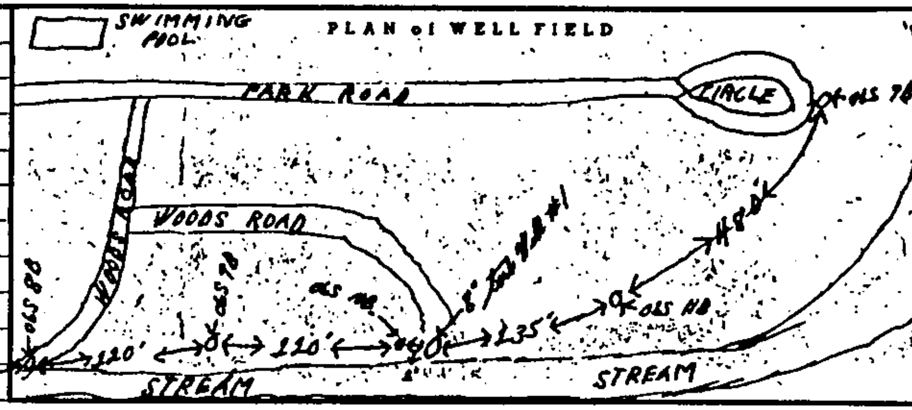
R. E. CHAPMAN CO. - LOG OF PUMP TEST

Co.

DEC 23 1959

Customer Town of Easthampton
Location: Back of Nonotuck Park
Town Easthampton State Mass Street
Owner of Property Lively Property
Date 12/14/59
Operator Fred S. Finlay
Pump Data
Size & Type of Pump 5" Turbine
Size & Length—Discharge Line 6" X 105'
Size Orifice Pipe 6" in.
Size Orifice 5" in.
Description of Well being pumped 8" Test Well
Length Dunker 3" in. (Do Not) Add To Readings
Length of Alt. Line from center of gauge 80 ft. in.

PLAN of WELL FIELD



READINGS—Measurements From Top of Casing:

WELL		LARGE WELL No. 1		DIAM. 8" Test		LARGE WELL No.		DIAM.		Obs. Well No. 10B	Obs. Well No. 11B	Obs. Well No. 9B	Obs. Well No. 8B	Obs. Well No. 7B
Elevation—Top of Pipe Above Ground		7"	7"							7"	10"	5"	11"	5'-10"
Date, Weather and Samples Taken	Time	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.					
		Static 8'-2"	Static 8'-2"	From top of pipe		Static	Static			8'-2"	1'-6 3/4"	2'-7 1/4"	0'-8"	1'-7 1/4"
12/14/59	7:00 PM	Started test								11				
	7:30 PM	41'-0"	41'-0"	30"	670					11'-9"	1'-7 1/4"	3'-5"	1'-8 1/4"	2'-6 1/4"
	8:00 PM	41'-0"	41'-0"	30"	670					12'-2"	1'-7 1/2"	3'-8"	1'-10 3/4"	2'-8 1/2"
	9:00 PM	41'-6"	41'-6"	30"	670					12'-7"	1'-7 3/4"	3'-11 1/4"	2'-1 1/4"	2'-10 3/4"
	10:00 PM	41'-6"	41'-6"	31"	681					12'-8 3/4"	1'-8"	4'-2 1/4"	2'-3 3/4"	3'-1"
	11:00 PM	42'-0"	42'-0"	31"	681					12'-10 1/4"	1'-8 1/4"	4'-4 1/2"	2'-6"	3'-3 1/4"
MIDNITE	12:00	42'-0"	42'-0"	31"	681					12'-11 3/4"	1'-11"	4'-5 1/4"	2'-7"	3'-3 1/2"
12/15/59	1:00 AM	42'-0"	42'-0"	31"	681					13'-1 1/4"	2'-1"	4'-6 1/2"	2'-8"	3'-3 3/4"
	2:00 AM	42'-6"	42'-6"	31"	681					13'-2"	2'-3 1/4"	4'-7 3/4"	2'-8 3/4"	3'-4 1/4"
	3:00 AM	42'-6"	42'-6"	31"	681					13'-2 1/4"	2'-5"	4'-8 1/4"	2'-9 1/2"	3'-4 1/2"
	4:00 AM	42'-6"	42'-6"	31"	681					13'-3 1/2"	2'-6 1/2"	4'-9"	2'-10 1/2"	3'-4 3/4"

#2 Co.

DEC 23 1959

READINGS—Measurements From Top of Casing

Top of pipe above ground 7"

WELL		LARGE WELL No. 1 (7")		DIAM. 8" Test		LARGE WELL No. Smith cks +		DIAM.		Obs. Well No. 10B (7")	Obs. Well No. 11B (10")	Obs. Well No. 7A (5")	Obs. Well No. 7B (11")	Obs. Well No. 8B (5'10")
Elevation—Top of Pipe Above Ground		Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.					
Date, Weather and Samples Taken	Time	Static 8'2"	Static 8'2"	From top of pipe		Static	Static 1'8"			8'2"	1'6¾"	1'7¼"	0'8"	1'7¼"
12/15/59	5:00 AM	42'6"	42'6"	31"	681					13'4¼"	2'7¼"	4'9½"	2'11"	3'5¼"
	6:00 AM	42'6"	42'6"	31"	681					13'5"	2'8"	4'10½"	2'11½"	3'5¾"
	7:00 AM	42'6"	42'6"	31"	681		2'8"			13'6"	2'11½"	4'11"	3'0½"	3'6"
	8:00 AM	42'6"	42'6"	31"	681					13'6½"	3'1¼"	4'11½"	3'1"	3'6"
	9:00 AM	42'6"	42'6"	31"	681					13'6¾"	3'2¾"	5'0"	3'1½"	3'6½"
	10:00 AM	42'6"	42'6"	31"	681					13'7"	3'4½"	5'0"	3'1½"	3'6½"
	11:00 AM	42'6"	42'6"	31"	681					13'7½"	3'6¼"	5'0½"	3'2"	3'6½"
NOON	12:00	43'0"	43'0"	31"	681					13'7½"	3'8"	5'0½"	3'2"	3'6½"
	1:00 PM	43'0"	43'0"	31"	681					13'7½"	3'9½"	5'1"	3'2"	3'9½"
	2:00 PM	43'0"	43'0"	31"	681					13'7¾"	3'10¾"	5'1"	3'2¼"	3'10"
	3:00 PM	43'0"	43'0"	31"	681		2'10½"			13'8"	4'0"	5'1¼"	3'2½"	3'11"
	4:00 PM	43'0"	43'0"	31"	681					13'8¼"	4'1"	5'1¼"	3'2¾"	3'11½"
	5:00 PM	43'0"	43'0"	31"	681					13'8½"	4'1¾"	5'1½"	3'3"	4'0"
	6:00 PM	43'0"	43'0"	31"	681					13'8½"	4'2½"	5'1¾"	3'3"	4'0"
	7:00 PM	43'0"	43'0"	31"	681					13'8¾"	4'3½"	5'2"	3'3"	4'0"
	8:00 PM	43'0"	43'0"	31"	681					13'8¾"	4'4½"	5'2¼"	3'3"	4'0"
	9:00 PM	43'0"	43'0"	31"	681					13'8¾"	4'5¼"	5'2¼"	3'3¼"	4'0¼"
	10:00 PM	43'0"	43'0"	31"	681					13'8¾"	4'5¾"	5'2¼"	3'3¼"	4'0¼"
	11:00 PM	43'0"	43'0"	31"	681					13'8¾"	4'6"	5'2¼"	3'3½"	4'0¼"
MIDNITE	12:00	43'0"	43'0"	31"	681					13'9"	4'6¼"	5'2¼"	3'3½"	4'0¼"
12/16/59	1:00 AM	43'0"	43'0"	31"	681					13'9"	4'7"	5'2½"	3'3½"	4'0½"
	2:00 AM	43'0"	43'0"	31"	681					13'9"	4'7½"	5'2½"	3'3½"	4'0½"
	3:00 AM	43'0"	43'0"	31"	681					13'9"	4'8½"	5'2½"	3'3¾"	4'0½"
	4:00 AM	43'0"	43'0"	31"	681					13'9¼"	4'9¼"	5'2½"	3'3¾"	4'0½"
	5:00 AM	43'0"	43'0"	31"	681					13'9¼"	4'9¾"	5'2½"	3'3¾"	4'0¾"
	6:00 AM	43'0"	43'0"	31"	681					13'9½"	4'10¼"	5'2¾"	3'4"	4'0¾"
	7:00 AM	43'0"	43'0"	31"	681					13'9½"	4'10¾"	5'2¾"	3'4"	4'1"

#3 Co.

DEC 23 1959

Top of pipe above ground 7" 7"

READINGS—Measurements From Top of Casing

WELL		LARGE WELL No.		DIAM.		LARGE WELL No. South obs ↓		DIAM.		7"	10"	5"	11"	5'-10"
Elevation—Top of Pipe Above Ground		Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Obs. Well No. 10B	Obs. Well No. 11B	Obs. Well No. 7B	Obs. Well No. 9B	Obs. Well No. 8B
Date, Weather and Samples Taken	Time	Static 8'-2"	Static 8'-2"			Static	Static 1'-8"			8'-2"	1'-6¾"	1'-7¼"	0'-8"	1'-7¼"
12/16/59 7:30	7:30 AM	Shut down to grease												
	8:00 AM	43'-0"	43'-0"	31"	681					13'-8¾"	4'-11"	5'-2"	3'-3¼"	4'-0½"
	9:00 AM	43'-0"	43'-0"	31"	681					13'-10"	4'-11½"	5'-3"	3'-4¼"	4'-1¼"
	10:00 AM	43'-6"	43'-6"	31"	681					13'-10"	4'-11½"	5'-3"	3'-4½"	4'-1¼"
	11:00 AM	43'-6"	43'-6"	31"	681					13'-10¼"	4'-11¾"	5'-3½"	3'-4¾"	4'-1½"
NOON	12:00	43'-6"	43'-6"	31"	681					13'-10½"	5'-0"	5'-4"	3'-5¼"	4'-2"
	1:00 PM	43'-6"	43'-6"	31"	681					13'-10½"	5'-0"	5'-4"	3'-5¼"	4'-2"
	2:00 PM	43'-6"	43'-6"	31"	681					13'-10¾"	5'-0¼"	5'-4¼"	3'-5¼"	4'-2¼"
	3:00 PM	43'-6"	43'-6"	31"	681		3'-1½"			13'-11½"	5'-0½"	5'-4½"	3'-5¾"	4'-2¾"
	4:00 PM	43'-6"	43'-6"	31"	681					14'-0½"	5'-1"	5'-4¾"	3'-6"	4'-2¾"
4:30	4:50 PM	Shut down to repair air line												
	5:00 PM	No reading												
	6:00 PM	43'-6"	43'-6"	31"	681					13'-9½"	5'-1"	5'-1¾"	3'-3"	4'-0¼"
	7:00 PM	43'-6"	43'-6"	31"	681					13'-10½"	5'-1¼"	5'-3"	3'-4¼"	4'-1¼"
	8:00 PM	43'-6"	43'-6"	31"	681					13'-11"	5'-1½"	5'-3¾"	3'-5"	4'-2"
	9:00 PM	43'-6"	43'-6"	31"	681					13'-11½"	5'-1¾"	5'-4¼"	3'-5½"	4'-2½"
	10:00 PM	43'-6"	43'-6"	31"	681					13'-11½"	5'-1¾"	5'-4½"	3'-5¾"	4'-2¾"
	11:00 PM	43'-6"	43'-6	31"	681					13'-11¾"	5'-2"	5'-4¾"	3'-5¾"	4'-2¾"
MIDNITE	12:00	43'-6"	43'-6"	31"	681					14'-0"	5'-2"	5'-4¾"	3'-5¾"	4'-3"
12/17/59	1:00 AM	43'-6"	43'-6"	31"	681					14'-0"	5'-2¼"	5'-5"	3'-6"	4'-3"
	2:00 AM	43'-6"	43'-6"	31"	681					14'-0¼"	5'-2¼"	5'-5"	3'-6"	4'-3¼"
	3:00 AM	43'-6"	43'-6"	31"	681					14'-0¼"	5'-2½"	5'-5"	3'-6"	4'-3¼"
	4:00 AM	43'-6"	43'-6"	31"	681					14'-0¼"	5'-2½"	5'-5"	3'-6"	4'-3¼"
	5:00 AM	43'-6"	43'-6"	31"	681					14'-0¼"	5'-2¾"	5'-5"	3'-6"	4'-3¼"
	6:00 AM	43'-6"	43'-6"	31"	681					14'-0¼"	5'-2¾"	5'-5"	3'-6"	4'-3¼"
	7:00 AM	43'-6"	43'-6"	31"	681		3'-1"			14'-0¼"	5'-2¾"	5'-5"	3'-6"	4'-3¼"
	8:00 AM	43'-6"	43'-6"	31"	681					14'-0½"	5'-3¼"	5'-5"	3'-6¼"	4'-3¼"

#4 Co

DEC 2 3 1959

READINGS—Measurements From Top of Casing

Top of Pipe above ground 7"

Date, Weather and Samples Taken	Time	LARGE WELL No. 7" Alt. Guage Reading	Corresponding Water Level	DIAM Head-In Inches	G. P. M.	LARGE WELL No. South obs. Alt. Guage Reading	Corresponding Water Level	DIAM. Head-In Inches	G. P. M.	Obs. Well No. 7"	Obs. Well No. 10"	Obs. Well No. 5"	Obs. Well No. 11"	Obs. Well No. 5'-10"
		Static 8'-2"	Static 8'-2"	From top of pipe		Static	Static 1'-8"			8'-2"	1'-6¾"	2'-7¼"	0'-8"	1'-7¼"
12/17/59	9:00 AM	43'-6"	43'-6"	31"	681					14'-0½"	5'-3¼"	5'-5"	3'-6¼"	4'-3¼"
	10:00 AM	43'-6"	43'-6"	31"	657					14'-0½"	5'-3½"	5'-5½"	3'-6½"	4'-3½"
	11:00 AM	43'-6"	43'-6"	31"	681					14'-0½"	5'-3½"	5'-5½"	3'-6½"	4'-3½"
NOON	12:00	43'-6"	43'-6"	31"	681					14'-0¾"	5'-3¾"	5'-5½"	3'-6¾"	4'-3½"
	1:00 PM	43'-6"	43'-6"	31"	681					14'-0¾"	5'-4"	5'-5¾"	3'-6¾"	4'-3¾"
	2:00 PM	43'-6"	43'-6"	31"	681					14'-0¾"	5'-4"	5'-5¾"	3'-6¾"	4'-3¾"
	3:00 PM	43'-6"	43'-6"	31"	681		3'-2½"			14'-0¾"	5'-4"	5'-5¾"	3'-6¾"	4'-3¾"
	4:00 PM	43'-6"	43'-6"	31"	681					14'-1"	5'-4¼"	5'-5¾"	3'-7"	4'-4"
	6:00 PM	43'-6"	43'-6"	31"	651					14'-1¼"	5'-4½"	5'-6"	3'-7"	4'-4"
	8:00 PM	43'-6"	43'-6"	31"	681					14'-1½"	5'-4¾"	5'-6¼"	3'-7¼"	4'-4¼"
	10:00 PM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-5"	5'-6½"	3'-7½"	4'-4½"
MIDNITE	12:00	43'-6"	43'-6"	31"	681					14'-1¾"	5'-5¼"	5'-6½"	3'-7½"	4'-4½"
12/18/59	2:00 AM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-5½"	5'-6½"	3'-7½"	4'-4½"
	4:00 AM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-5¾"	5'-6½"	3'-7¾"	4'-4¾"
	6:00 AM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-6"	5'-6½"	3'-7¾"	4'-4¾"
	8:00 AM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-6¼"	5'-6½"	3'-7¾"	4'-4¾"
	10:00 AM	43'-6"	43'-6"	31"	681					14'-1¾"	5'-6½"	5'-6½"	3'-7¾"	4'-4¾"
NOON	12:00	43'-6"	43'-6"	31"	681					14'-1¾"	5'-6¾"	5'-6½"	3'-7¾"	4'-4½"
	2:00 PM	43'-6"	43'-6"	31"	681	3:00 PM	3'-3½"			14'-2"	5'-7"	5'-6½"	3'-7¾"	4'-4¾"
	4:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-7"	5'-6¾"	3'-7¾"	4'-4¾"
	6:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-7¼"	5'-6¾"	3'-7¾"	4'-4¾"
	8:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-7¼"	5'-6¾"	3'-7¾"	4'-4¾"
	10:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-7¼"	5'-6¾"	3'-7¾"	4'-4¾"
MIDNITE	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-7½"	5'-6¾"	3'-7¾"	4'-4¾"
12/19/59	2:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-7½"	5'-6¾"	3'-7¾"	4'-4¾"
	4:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-7½"	5'-6¾"	3'-7¾"	4'-4¾"
	6:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-7¾"	5'-6¾"	3'-7¾"	4'-4¾"

5 Co.

DEC 2 3 1959

READINGS—Measurements From Top of Casing

Top of pipe above ground 7" 7"

WELL LARGE WELL No. 1			DIAM. 8" Test			LARGE WELL No. South abs		DIAM.		7"	10"	5"	11"	5'-10"
Date, Weather and Samples Taken	Time	Alt. Guage Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Guage Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Obs. Well No. 10B	Obs. Well No. 11B	Obs. Well No. 7B	Obs. Well No. 9B	Obs. Well No. 8B
		Static 8'-2	Static 8'-2"	From top of pipe		Static	Static 1'-8"			8'-2"	1'-6¾"	2'-7¼"	0'-8"	1'-7¼"
12/19/59	8:00 AM	43'-6"	43'-6"	31"	681		3'-3½"			14'-2"	5'-8"	5'-6¾"	3'-7¾"	4'-4¾"
	10:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-8¼"	5'-6¾"	3'-7¾"	4'-4¾"
NOON	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-8¼"	5'-6¾"	3'-7¾"	4'-4¾"
	2:00 PM	43'-6"	43'-6"	31"	681	3:00 PM	3'-3¼"			14'-2"	5'-8½"	5'-6¾"	3'-7¾"	4'-4¾"
	4:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-8½"	5'-7"	3'-8"	4'-5"
	6:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-8½"	5'-7"	3'-8"	4'-5"
	8:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-8½"	5'-7"	3'-8"	4'-5"
	10:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-8½"	5'-7"	3'-8"	4'-5"
MIDNITE	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-8¾"	5'-7"	3'-8"	4'-5"
12/20/59	2:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9"	5'-7"	3'-8"	4'-5"
	4:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9"	5'-7"	3'-8"	4'-5"
	6:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¼"	5'-7"	3'-8"	4'-5"
	8:00 AM	43'-6"	43'-6"	31"	681		3'-3"			14'-2"	5'-9½"	5'-7"	3'-8"	4'-5"
	10:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9½"	5'-7"	3'-8"	4'-5"
NOON	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	2:00 PM	43'-6"	43'-6"	31"	681	3:00 PM	3'-3"			14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	4:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	6:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	8:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	10:00 PM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
MIDNITE	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
12/21/59	2:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	4:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	6:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	8:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	10:00 AM	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
NOON	12:00	43'-6"	43'-6"	31"	681					14'-2"	5'-9¾"	5'-7"	3'-8"	4'-5"
	2:00 PM	43'-6"	43'-6"	31"	681									

6 Co.

DEC 23 1959

READINGS—Measurements From Top of Casing

Top of pipe above ground 7" 7"

WELL		LARGE WELL No. 1	DIAM. 8" Test			LARGE WELL No.	DIAM.			Obs. Well No. 10B (7")	Obs. Well No. 11B (10")	Obs. Well No. 7B (5")	Obs. Well No. 9B (11")	Obs. Well No. 8B (5'-11")
Date, Weather and Samples Taken	Time	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.					
		Static 8'-2"	Static 8'-2"	From top of pipe		Static	Static			8'-2"	1'-6 3/4"	2'-7 1/4"	0'-8"	1'-7 1/4"
12/21/59	2:15PM	Pump test shut off												
	2:16PM									11'-4 1/2"				
	2:17PM									11'-3"				
	2:18PM									11'-2"				
	2:19PM									11'-1 1/2"				
	2:20PM	10'-0"	10'-0"							11'-0 3/4"				
	2:25PM									10'-11"				
	2:30PM									10'-10"	5'-10"	5'-2"	3'-2"	4'-0 1/2"
	3:00PM	9'-11"	9'-11"							11'-5 3/4"	5'-10"	4'-10 1/2"	2'-10"	3'-9
	4:00PM									10'-1"	5'-9 3/4"	4'-4 1/2"	2'-4 1/2"	3'-4"
	5:00PM									9'-9 1/2"	5'-9 1/2"	4'-1 1/4"	2'-1 1/2"	3'-1"
	6:00PM									9'-7"	5'-9"	3'-10 3/4"	1'-11 3/4"	2'-10 1/2"
	7:00PM									9'-5 1/2"	5'-8 1/2"	3'-9 1/4"	1'-10	2'-9"
12/22/59	10:00AM									8'-10"	5'-3 1/4"	3'-2"	1'-2"	1'-10 1/4"

R. E. CHAPMAN CO.

OAKDALE, MASS.

DEC 6 3 1959

Name of Driller Wm Cummings Names of Helpers Fred Finlay

Job Name & Location East Hampton Mass 8" Test Well

Date Started 12/8/59 Date Finished 12/11/59 | Date Started Date Finished

Hole No. 1-8" 10-B 2½" Test Wells | Hole No.

Depth From	Depth To	Classification of Material	
0'	6'	Gravel Fill	**Feet of Screen Exposed** 16'-0"
6'	106	Blue Clay	**Size of Screen & Slot** 10'-0" 20 slot, 10'-0" 30 slot
106	118	Coarse dirty Gravel	
118	135	Med. Gravel	**Screen Left in**
135	140	Small Gravel	
140	145	" "	**Screen Pulled Out**
145	150	" "	
150	155	" "	**Pipe Left in** 149'-0"
155	160	" "	
160	165	" "	**Pipe Pulled Out**
165	168	Fine Sand & clay.	
		Set 20' 8" test screen at 168'-0"	**Remarks** Pipe all welded joints Pump test on regular chart.

Depth From	Depth To	Classification of Material	
			Feet of Screen Exposed
		Pump test starting 12/14/59	**Size of Screen & Slot**
			Screen Left in
		20 slot screen on bottom 30 slot on top. Lead packer on flush tube etc.	**Screen Pulled Out**
			Pipe Left in
			Pipe Pulled Out
			Remarks

Pump Test on Hole No.

Date	Time	Dr. Down	G. P. M.	Static and Other Info.

Pump Test on Hole No.

Date	Time	Dr. Down	G. P. M.	Static and Other Info

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 7B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 2 FT 7.25 INCHE

AQUIFER THICKNESS: 59

R = 715 FT FT FROM 8" TEST WELL

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	2.604	0.000	681.0000
14	19	30	30.00	3.417	0.813	681.0000
14	20	0	60.00	3.667	1.063	681.0000
14	21	0	120.00	3.937	1.333	681.0000
14	22	0	180.00	4.187	1.583	681.0000
14	23	0	240.00	4.375	1.771	681.0000
15	0	0	300.00	4.437	1.833	681.0000
15	1	0	360.00	4.542	1.938	681.0000
15	2	0	420.00	4.646	2.042	681.0000
15	3	0	480.00	4.687	2.083	681.0000
15	4	0	540.00	4.750	2.146	681.0000
15	5	0	600.00	4.792	2.188	681.0000
15	6	0	660.00	4.875	2.271	681.0000
15	7	0	720.00	4.917	2.313	681.0000
15	8	0	780.00	4.958	2.354	681.0000
15	9	0	840.00	5.000	2.396	681.0000
15	10	0	900.00	5.000	2.396	681.0000
15	11	0	960.00	5.042	2.438	681.0000
15	12	0	1020.00	5.042	2.438	681.0000
15	13	0	1080.00	5.083	2.479	681.0000
15	14	0	1140.00	5.083	2.479	681.0000
15	15	0	1200.00	5.104	2.500	681.0000
15	16	0	1260.00	5.104	2.500	681.0000
15	17	0	1320.00	5.125	2.521	681.0000
15	18	0	1380.00	5.146	2.542	681.0000
15	19	0	1440.00	5.167	2.563	681.0000
15	20	0	1500.00	5.187	2.583	681.0000
15	21	0	1560.00	5.187	2.583	681.0000
15	22	0	1620.00	5.187	2.583	681.0000
15	23	0	1680.00	5.187	2.583	681.0000

I.E.P. INC.

EHO-1

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 7B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 2 FT 7.25 INCHE

AQUIFER THICKNESS: 59

R = 715 FT FT FROM 8" TEST WELL

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
16	0	0	1740.00	5.187	2.583	681.0000
16	1	0	1800.00	5.208	2.604	681.0000
16	2	0	1860.00	5.208	2.604	681.0000
16	3	0	1920.00	5.208	2.604	681.0000
16	6	0	2100.00	5.229	2.625	681.0000
16	7	0	2160.00	5.229	2.625	681.0000
16	8	0	2220.00	5.167	2.563	681.0000
16	9	0	2280.00	5.250	2.646	681.0000
16	10	0	2340.00	5.250	2.646	681.0000
16	11	0	2400.00	5.292	2.688	681.0000
16	12	0	2460.00	5.333	2.729	681.0000
16	13	0	2520.00	5.333	2.729	681.0000
16	14	0	2580.00	5.354	2.750	681.0000
16	15	0	2640.00	5.375	2.771	681.0000
16	16	0	2700.00	5.396	2.792	681.0000
16	18	0	2820.00	5.146	2.542	681.0000
16	19	0	2880.00	5.250	2.646	681.0000
16	20	0	2940.00	5.312	2.708	681.0000
16	21	0	3000.00	5.354	2.750	681.0000
16	22	0	3060.00	5.375	2.771	681.0000
16	23	0	3120.00	5.396	2.792	681.0000
17	0	0	3180.00	5.396	2.792	681.0000
17	1	0	3240.00	5.417	2.813	681.0000
17	7	0	3600.00	5.417	2.813	681.0000
17	10	0	3780.00	5.458	2.854	681.0000
17	12	0	3900.00	5.458	2.854	681.0000
17	13	0	3960.00	5.479	2.875	681.0000
17	17	0	4200.00	5.500	2.896	681.0000
17	20	0	4380.00	5.521	2.917	681.0000
17	22	0	4500.00	5.542	2.938	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 7B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 2 FT 7.25 INCHE

AQUIFER THICKNESS: 59

CONDITIONS: CONFINED

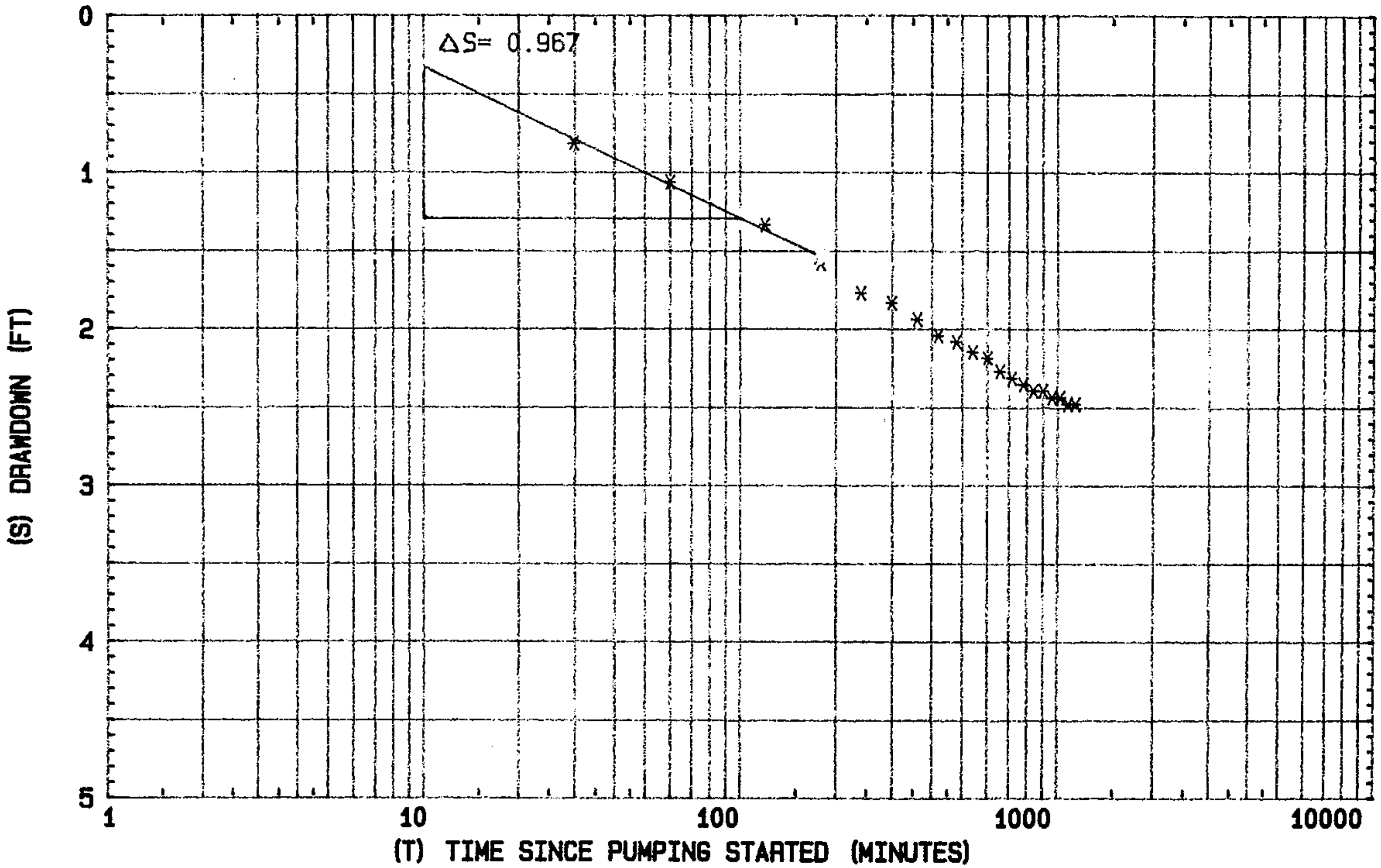
R = 715 FT FT FROM 8" TEST WELL

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
18	0	0	4620.00	5.542	2.938	681.0000
18	2	0	4740.00	5.542	2.938	681.0000
18	14	0	5460.00	5.542	2.938	681.0000
18	16	0	5580.00	5.562	2.958	681.0000
19	6	0	6420.00	5.562	2.958	681.0000
19	8	0	6540.00	5.562	2.958	681.0000
19	14	0	6900.00	5.562	2.958	681.0000
19	16	0	7020.00	5.583	2.979	681.0000
20	16	0	8460.00	5.583	2.979	681.0000
						VALUE USED 681.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	7B	ΔS=	0.967 FT
FILE:	EHO-1	Q=	681 USGPM	T=	185991 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	2 FT 7.25 INCHES	S=	.00035

I . E . P . INC .

FIGURE 16

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 7B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 2 FT 7.25 INCHE

AQUIFER THICKNESS: 59

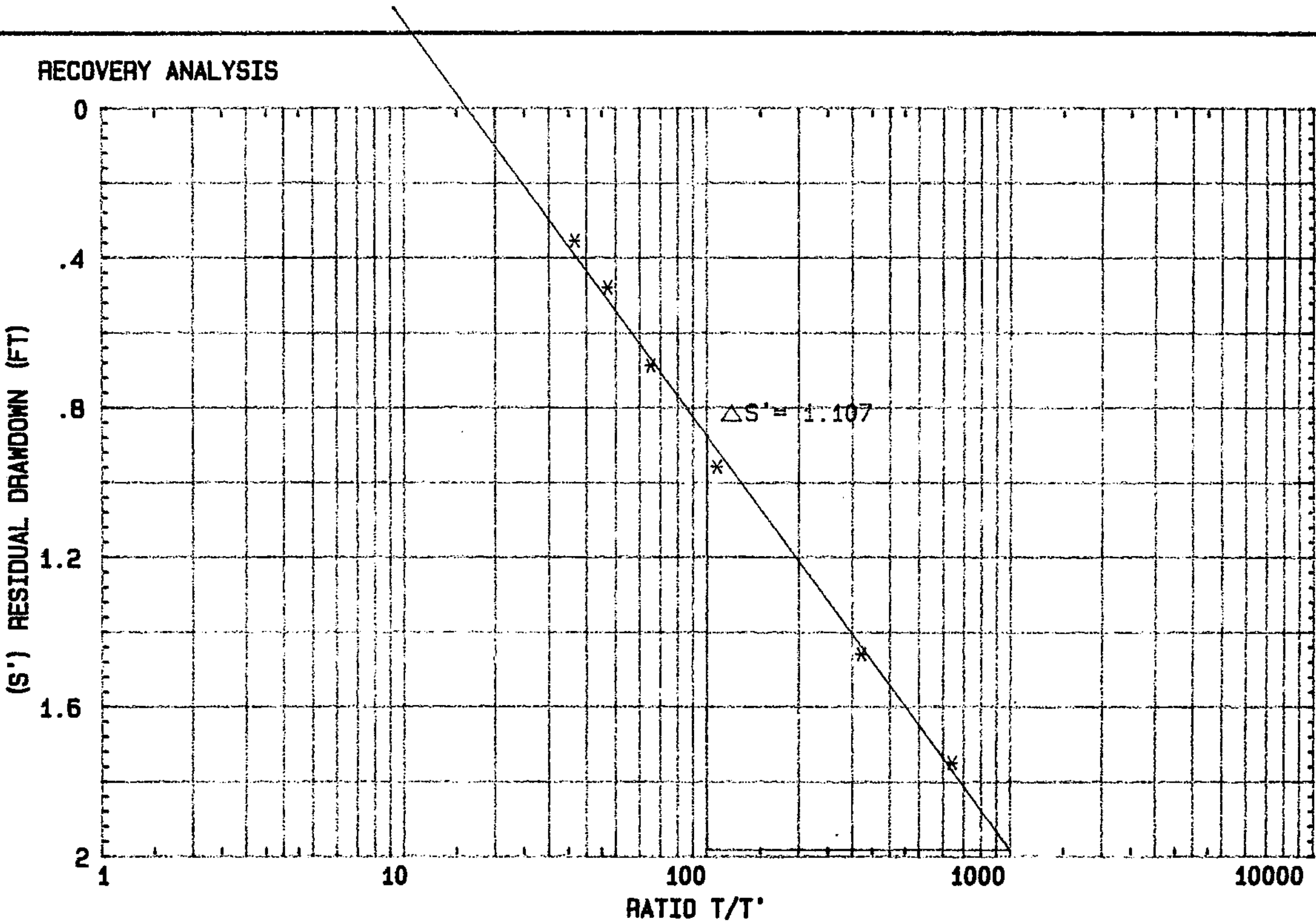
R = 715 FT FT FROM 8" TEST WELL

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
21	12	15	9675.00	15.00	645.00	5.167	1.750
21	12	30	9690.00	30.00	323.00	4.875	1.458
21	13	30	9750.00	90.00	108.33	4.375	0.958
21	14	30	9810.00	150.00	65.40	4.104	0.688
21	15	30	9870.00	210.00	47.00	3.896	0.479
21	16	30	9930.00	270.00	36.78	3.771	0.354
22	7	30	10830.00	1170.00	9.26	3.167	-0.250

I.E.P. INC.



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	7B	ΔS'= 1.107 FT
FILE:	EHO-1	Q=	681 USGPM	T= 162391 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	2 FT 7.25 INCHES	

I.E.P. INC.

FIGURE 18

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:
EHO-1
LOCATION: NONOTUCK PARK
WELL NO.: 8B
DATUM POINT: TOP OF CASING
ELEV. OF DATUM POINT:
5 FT 10 INCHES ABOVE GROUND
PUMPING RATE: 681 USGPM
STATIC WATER LEVEL: 1 FT 7.25 INCHE

AQUIFER THICKNESS: 59 FT
R = 440 FT FT FROM 8" TEST WELL # 1
CONDITIONS: CONFINED
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	1.604	0.000	681.0000
14	19	30	30.00	2.521	0.917	681.0000
14	20	0	60.00	2.708	1.104	681.0000
14	21	0	120.00	2.896	1.292	681.0000
14	22	0	180.00	3.083	1.479	681.0000
14	23	0	240.00	3.271	1.667	681.0000
15	0	0	300.00	3.292	1.688	681.0000
15	1	0	360.00	3.312	1.708	681.0000
15	2	0	420.00	3.354	1.750	681.0000
15	3	0	480.00	3.375	1.771	681.0000
15	4	0	540.00	3.396	1.792	681.0000
15	5	0	600.00	3.437	1.833	681.0000
15	6	0	660.00	3.479	1.875	681.0000
15	7	0	720.00	3.500	1.896	681.0000
15	8	0	780.00	3.500	1.896	681.0000
15	9	0	840.00	3.542	1.938	681.0000
15	12	0	1020.00	3.542	1.938	681.0000
15	13	0	1080.00	3.792	2.187	681.0000
15	14	0	1140.00	3.833	2.229	681.0000
15	15	0	1200.00	3.917	2.312	681.0000
15	16	0	1260.00	3.958	2.354	681.0000
15	17	0	1320.00	4.000	2.396	681.0000
15	20	0	1500.00	4.000	2.396	681.0000
15	21	0	1560.00	4.021	2.417	681.0000
16	0	0	1740.00	4.021	2.417	681.0000
16	1	0	1800.00	4.042	2.438	681.0000
16	5	0	2040.00	4.062	2.458	681.0000
16	7	0	2160.00	4.083	2.479	681.0000
16	8	0	2220.00	4.042	2.438	681.0000
16	9	0	2280.00	4.104	2.500	681.0000

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 8B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

5 FT 10 INCHES ABOVE GROUND

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 7.25 INCHE

AQUIFER THICKNESS: 59 FT

CONDITIONS: CONFINED

R = 440 FT FT FROM 8" TEST WELL # 1

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
16	11	0	2400.00	4.125	2.521	681.0000
16	12	0	2460.00	4.167	2.563	681.0000
16	14	0	2580.00	4.187	2.583	681.0000
16	15	0	2640.00	4.229	2.625	681.0000
16	16	0	2700.00	4.229	2.625	681.0000
16	18	0	2820.00	4.021	2.417	681.0000
16	19	0	2880.00	4.104	2.500	681.0000
16	20	0	2940.00	4.167	2.563	681.0000
16	21	0	3000.00	4.187	2.583	681.0000
16	22	0	3060.00	4.229	2.625	681.0000
16	23	0	3120.00	4.229	2.625	681.0000
17	0	0	3180.00	4.250	2.646	681.0000
17	1	0	3240.00	4.250	2.646	681.0000
17	2	0	3300.00	4.271	2.667	681.0000
17	8	0	3660.00	4.271	2.667	681.0000
17	10	0	3780.00	4.292	2.688	681.0000
17	13	0	3960.00	4.312	2.708	681.0000
17	16	0	4140.00	4.333	2.729	681.0000
17	20	0	4380.00	4.354	2.750	681.0000
17	22	0	4500.00	4.375	2.771	681.0000
18	4	0	4860.00	4.396	2.792	681.0000
18	10	0	5220.00	4.396	2.792	681.0000
18	12	0	5340.00	4.375	2.771	681.0000
18	14	0	5460.00	4.396	2.792	681.0000
19	6	0	6420.00	4.396	2.792	681.0000
19	14	0	6900.00	4.396	2.792	681.0000
19	16	0	7020.00	4.417	2.813	681.0000
20	12	0	8220.00	4.417	2.813	681.0000
21	12	0	9660.00	4.417	2.813	681.0000
21	14	0	9780.00	4.417	2.813	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.: EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 8B

DATUM POINT: TOP OF CASING 5 FT 10 INCHES ABOVE GROUND

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 7.25 INCHE

AQUIFER THICKNESS: 59 FT

R = 440 FT FT FROM 8" TEST WELL # 1

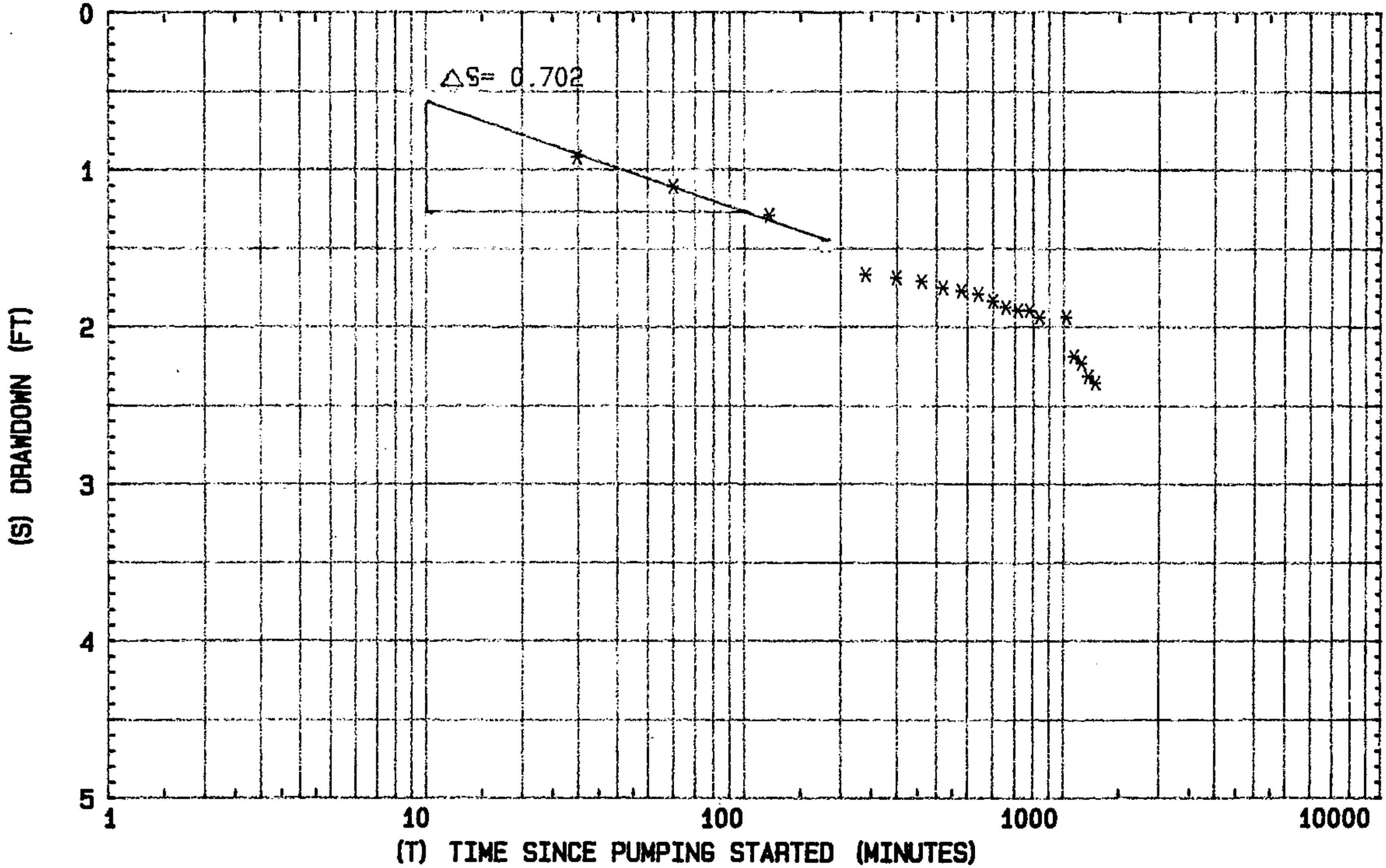
CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
						VALUE USED 681.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	8B	ΔS=	0.702 FT
FILE:	EHO-1	Q=	681 USGPM	T=	256106 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	1 FT 7.25 INCHES	S=	.00043

I.E.P. INC.

FIGURE 19

PUMPING TEST – RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 8B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 7.25 INCHE

AQUIFER THICKNESS: 59 FT

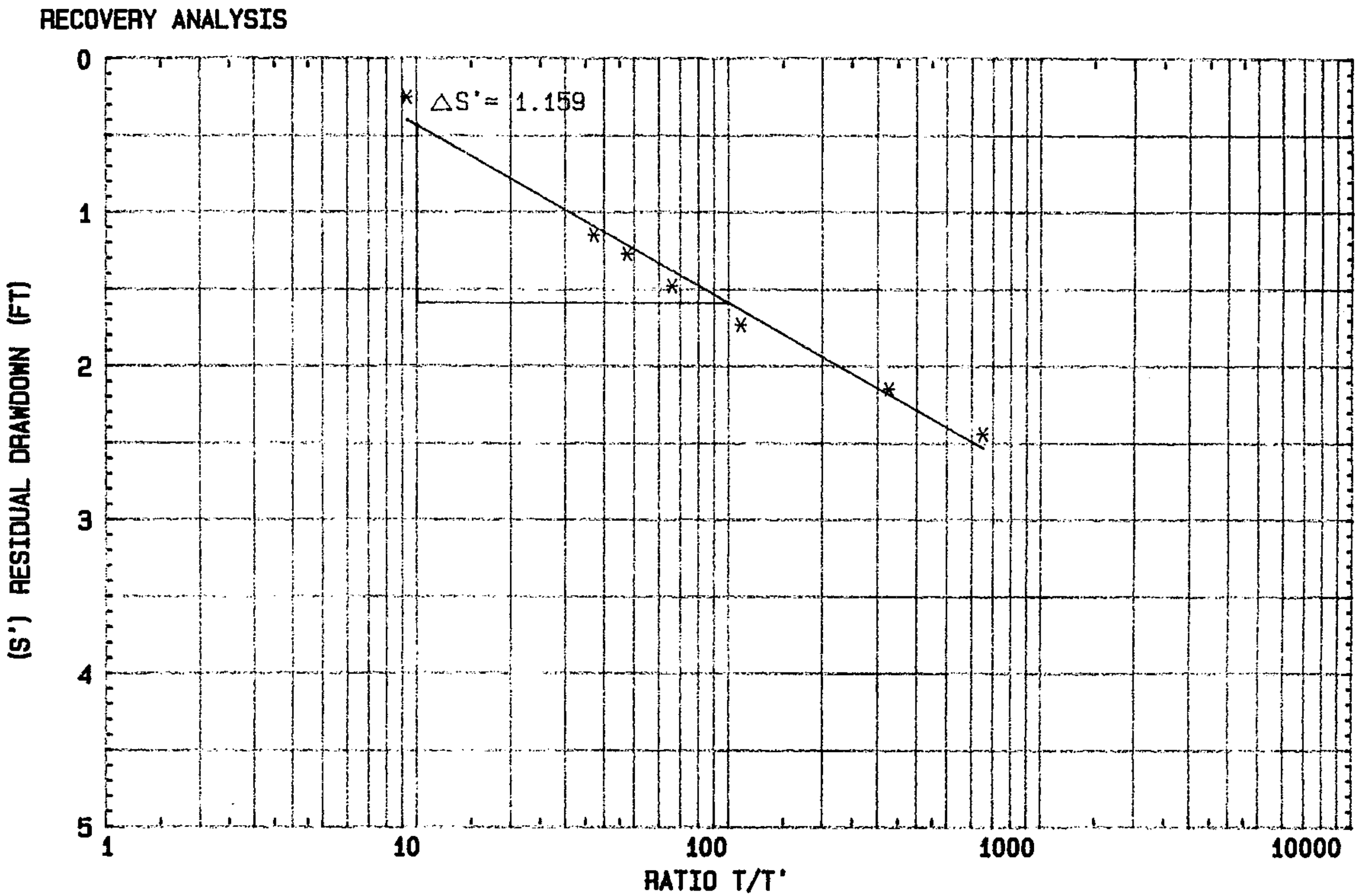
R = 440 FT FROM 8" TEST WELL # 1

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
21	14	15	9795.00	15.00	653.00	4.042	2.438
21	14	30	9810.00	30.00	327.00	3.750	2.146
21	15	30	9870.00	90.00	109.67	3.333	1.729
21	16	30	9930.00	150.00	66.20	3.083	1.479
21	17	30	9990.00	210.00	47.57	2.875	1.271
21	18	30	10050.00	270.00	37.22	2.750	1.146
22	9	30	10950.00	1170.00	9.36	1.854	0.250

I.E.P. INC.



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	8B	ΔS'=	1.159 FT
FILE:	EHO-1	Q=	681 USGPM	T=	155184 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	1 FT 7.25 INCHES		

I.E.P. INC.

FIGURE 21

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 INCHES
R = 220 FT FROM 8" TEST WELL # 1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	0.667	0.000	681.0000
14	19	30	30.00	1.687	1.020	681.0000
14	20	0	60.00	1.896	1.229	681.0000
14	21	0	120.00	2.104	1.437	681.0000
14	22	0	180.00	2.312	1.645	681.0000
14	23	0	240.00	2.500	1.833	681.0000
15	0	0	300.00	2.583	1.916	681.0000
15	1	0	360.00	2.667	2.000	681.0000
15	2	0	420.00	2.729	2.062	681.0000
15	3	0	480.00	2.792	2.125	681.0000
15	4	0	540.00	2.875	2.208	681.0000
15	5	0	600.00	2.917	2.250	681.0000
15	6	0	660.00	2.958	2.291	681.0000
15	7	0	720.00	3.042	2.375	681.0000
15	8	0	780.00	3.083	2.416	681.0000
15	9	0	840.00	3.125	2.458	681.0000
15	10	0	900.00	3.125	2.458	681.0000
15	11	0	960.00	3.125	2.458	681.0000
15	12	0	1020.00	3.167	2.500	681.0000
15	13	0	1080.00	3.167	2.500	681.0000
15	14	0	1140.00	3.187	2.520	681.0000
15	15	0	1200.00	3.208	2.541	681.0000
15	16	0	1260.00	3.229	2.562	681.0000
15	17	0	1320.00	3.250	2.583	681.0000
15	20	0	1500.00	3.250	2.583	681.0000
15	21	0	1560.00	3.271	2.604	681.0000
15	23	0	1680.00	3.292	2.625	681.0000
16	2	0	1860.00	3.292	2.625	681.0000
16	3	0	1920.00	3.312	2.645	681.0000
16	5	0	2040.00	3.312	2.645	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 9B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 INCHES
R = 220 FT FROM 8" TEST WELL # 1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
16	6	0	2100.00	3.333	2.666	681.0000
16	8	0	2220.00	3.354	2.687	681.0000
16	10	0	2340.00	3.375	2.708	681.0000
16	11	0	2400.00	3.396	2.729	681.0000
16	12	0	2460.00	3.437	2.770	681.0000
16	14	0	2580.00	3.437	2.770	681.0000
16	15	0	2640.00	3.479	2.812	681.0000
16	16	0	2700.00	3.500	2.833	681.0000
16	18	0	2820.00	3.125	2.458	681.0000
16	19	0	2880.00	3.354	2.687	681.0000
16	20	0	2940.00	3.417	2.750	681.0000
16	21	0	3000.00	3.437	2.770	681.0000
16	22	0	3060.00	3.479	2.812	681.0000
17	0	0	3180.00	3.479	2.812	681.0000
17	1	0	3240.00	3.500	2.833	681.0000
17	7	0	3600.00	3.500	2.833	681.0000
17	8	0	3660.00	3.521	2.854	681.0000
17	10	0	3780.00	3.542	2.875	681.0000
17	12	0	3900.00	3.562	2.895	681.0000
17	14	0	4020.00	3.562	2.895	681.0000
17	20	0	4380.00	3.604	2.937	681.0000
17	22	0	4500.00	3.625	2.958	681.0000
18	2	0	4740.00	3.625	2.958	681.0000
18	4	0	4860.00	3.646	2.979	681.0000
18	16	0	5580.00	3.646	2.979	681.0000
19	4	0	6300.00	3.646	2.979	681.0000
19	14	0	6900.00	3.646	2.979	681.0000
19	16	0	7020.00	3.667	3.000	681.0000
20	16	0	8460.00	3.667	3.000	681.0000
21	12	0	9660.00	3.667	3.000	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 9B

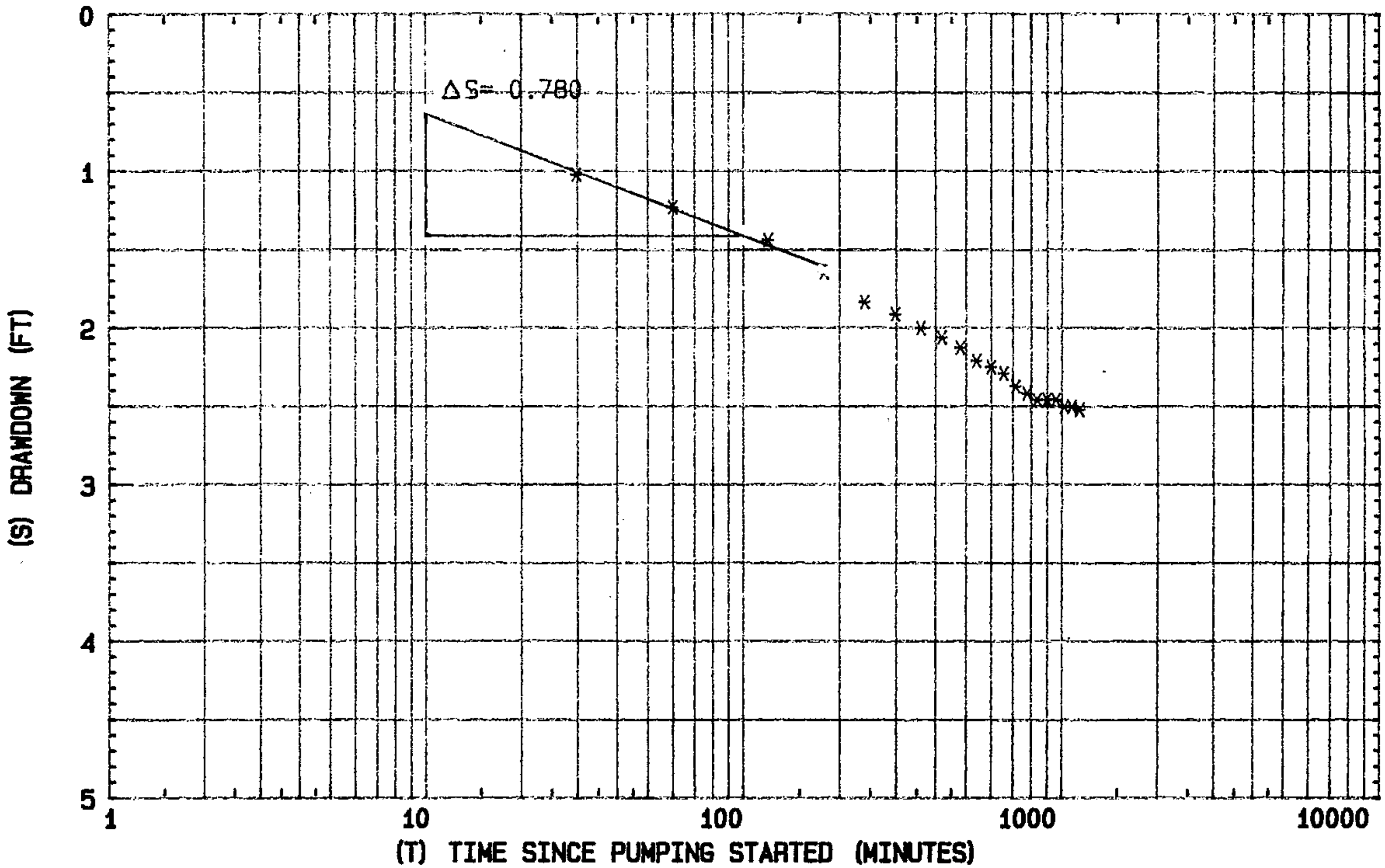
DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 INCHES
R = 220 FT FROM 8" TEST WELL # 1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
						VALUE USED
						681.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	9B	ΔS=	0.780 FT
FILE:	EHO-1	Q=	681 USGPM	T=	230515 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	8 INCHES	S=	.00154

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FIGURE 22

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 9B

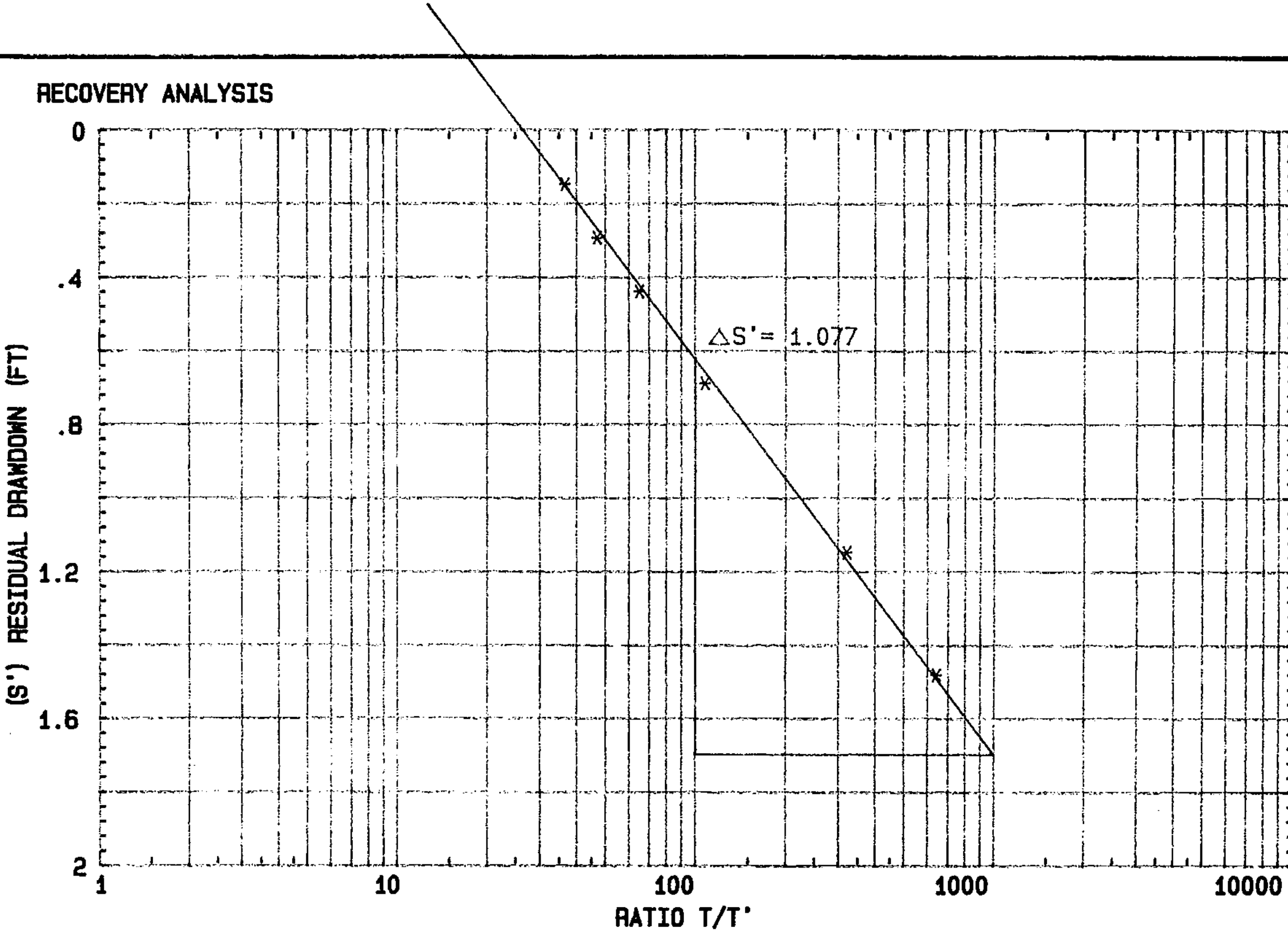
DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 INCHES
R = 220 FT FROM 8" TEST WELL # 1
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
21	12	15	9675.00	15.00	645.00	3.167	1.479
21	12	30	9690.00	30.00	323.00	2.833	1.146
21	13	30	9750.00	90.00	108.33	2.375	0.688
21	14	30	9810.00	150.00	65.40	2.125	0.438
21	15	30	9870.00	210.00	47.00	1.979	0.292
21	16	30	9930.00	270.00	36.78	1.833	0.146
22	7	30	10830.00	1170.00	9.26	1.167	-0.521

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	9B	△S'= 1.077 FT	
FILE:	EHO-1	Q=	681 USGPM	T= 166955 USGPD/FT	
LOCATION:	NONOTUCK PARK	S.W.L.=	8 INCHES		

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FIGURE 24

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 2 INCHES
R = 2 FT FROM 8" TEST WELL #1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	8.167	0.000	681.0000
14	19	30	30.00	11.750	3.583	681.0000
14	20	0	60.00	12.167	4.000	681.0000
14	21	0	120.00	12.583	4.417	681.0000
14	22	0	180.00	12.729	4.562	681.0000
14	23	0	240.00	12.854	4.687	681.0000
15	0	0	300.00	12.979	4.812	681.0000
15	1	0	360.00	13.104	4.938	681.0000
15	2	0	420.00	13.167	5.000	681.0000
15	3	0	480.00	13.229	5.062	681.0000
15	4	0	540.00	13.292	5.125	681.0000
15	5	0	600.00	13.354	5.187	681.0000
15	6	0	660.00	13.417	5.250	681.0000
15	7	0	720.00	13.500	5.333	681.0000
15	8	0	780.00	13.542	5.375	681.0000
15	9	0	840.00	13.562	5.396	681.0000
15	10	0	900.00	13.583	5.417	681.0000
15	11	0	960.00	13.625	5.458	681.0000
15	12	0	1020.00	13.625	5.458	681.0000
15	13	0	1080.00	13.625	5.458	681.0000
15	14	0	1140.00	13.646	5.479	681.0000
15	15	0	1200.00	13.667	5.500	681.0000
15	16	0	1260.00	13.687	5.521	681.0000
15	17	0	1320.00	13.708	5.542	681.0000
15	18	0	1380.00	13.708	5.542	681.0000
15	19	0	1440.00	13.729	5.562	681.0000
15	20	0	1500.00	13.729	5.562	681.0000
15	21	0	1560.00	13.729	5.562	681.0000
15	22	0	1620.00	13.729	5.562	681.0000
15	23	0	1680.00	13.729	5.562	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 2 INCHES
R = 2 FT FROM 8" TEST WELL #1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
16	0	0	1740.00	13.750	5.583	681.0000
16	1	0	1800.00	13.750	5.583	681.0000
16	2	0	1860.00	13.750	5.583	681.0000
16	3	0	1920.00	13.750	5.583	681.0000
16	4	0	1980.00	13.771	5.604	681.0000
16	5	0	2040.00	13.771	5.604	681.0000
16	6	0	2100.00	13.792	5.625	681.0000
16	7	0	2160.00	13.792	5.625	681.0000
16	8	0	2220.00	13.729	5.562	681.0000
16	9	0	2280.00	13.833	5.667	681.0000
16	10	0	2340.00	13.833	5.667	681.0000
16	11	0	2400.00	13.854	5.687	681.0000
16	12	0	2460.00	13.875	5.708	681.0000
16	13	0	2520.00	13.875	5.708	681.0000
16	14	0	2580.00	13.896	5.729	681.0000
16	15	0	2640.00	13.958	5.792	681.0000
16	16	0	2700.00	14.042	5.875	681.0000
16	18	0	2820.00	13.792	5.625	681.0000
16	19	0	2880.00	13.875	5.708	681.0000
16	20	0	2940.00	13.917	5.750	681.0000
16	21	0	3000.00	13.958	5.792	681.0000
16	22	0	3060.00	13.958	5.792	681.0000
16	23	0	3120.00	13.979	5.812	681.0000
17	0	0	3180.00	14.000	5.833	681.0000
17	1	0	3240.00	14.000	5.833	681.0000
17	2	0	3300.00	14.021	5.854	681.0000
17	3	0	3360.00	14.021	5.854	681.0000
17	4	0	3420.00	14.021	5.854	681.0000
17	5	0	3480.00	14.021	5.854	681.0000
17	6	0	3540.00	14.021	5.854	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 2 INCHES
R = 2 FT FROM 8" TEST WELL #1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
17	7	0	3600.00	14.021	5.854	681.0000
17	8	0	3660.00	14.042	5.875	681.0000
17	9	0	3720.00	14.042	5.875	681.0000
17	10	0	3780.00	14.042	5.875	681.0000
17	11	0	3840.00	14.042	5.875	681.0000
17	12	0	3900.00	14.062	5.896	681.0000
17	13	0	3960.00	14.062	5.896	681.0000
17	14	0	4020.00	14.062	5.896	681.0000
17	15	0	4080.00	14.062	5.896	681.0000
17	16	0	4140.00	14.083	5.917	681.0000
17	18	0	4260.00	14.104	5.938	681.0000
17	20	0	4380.00	14.125	5.958	681.0000
17	22	0	4500.00	14.146	5.979	681.0000
18	0	0	4620.00	14.146	5.979	681.0000
18	2	0	4740.00	14.146	5.979	681.0000
18	4	0	4860.00	14.146	5.979	681.0000
18	6	0	4980.00	14.146	5.979	681.0000
18	8	0	5100.00	14.146	5.979	681.0000
18	10	0	5220.00	14.146	5.979	681.0000
18	12	0	5340.00	14.146	5.979	681.0000
18	14	0	5460.00	14.167	6.000	681.0000
18	16	0	5580.00	14.167	6.000	681.0000
18	18	0	5700.00	14.167	6.000	681.0000
18	20	0	5820.00	14.167	6.000	681.0000
18	22	0	5940.00	14.167	6.000	681.0000
19	0	0	6060.00	14.167	6.000	681.0000
19	2	0	6180.00	14.167	6.000	681.0000
19	4	0	6300.00	14.167	6.000	681.0000
19	6	0	6420.00	14.167	6.000	681.0000
19	8	0	6540.00	14.167	6.000	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK
WELL NO.: 10B

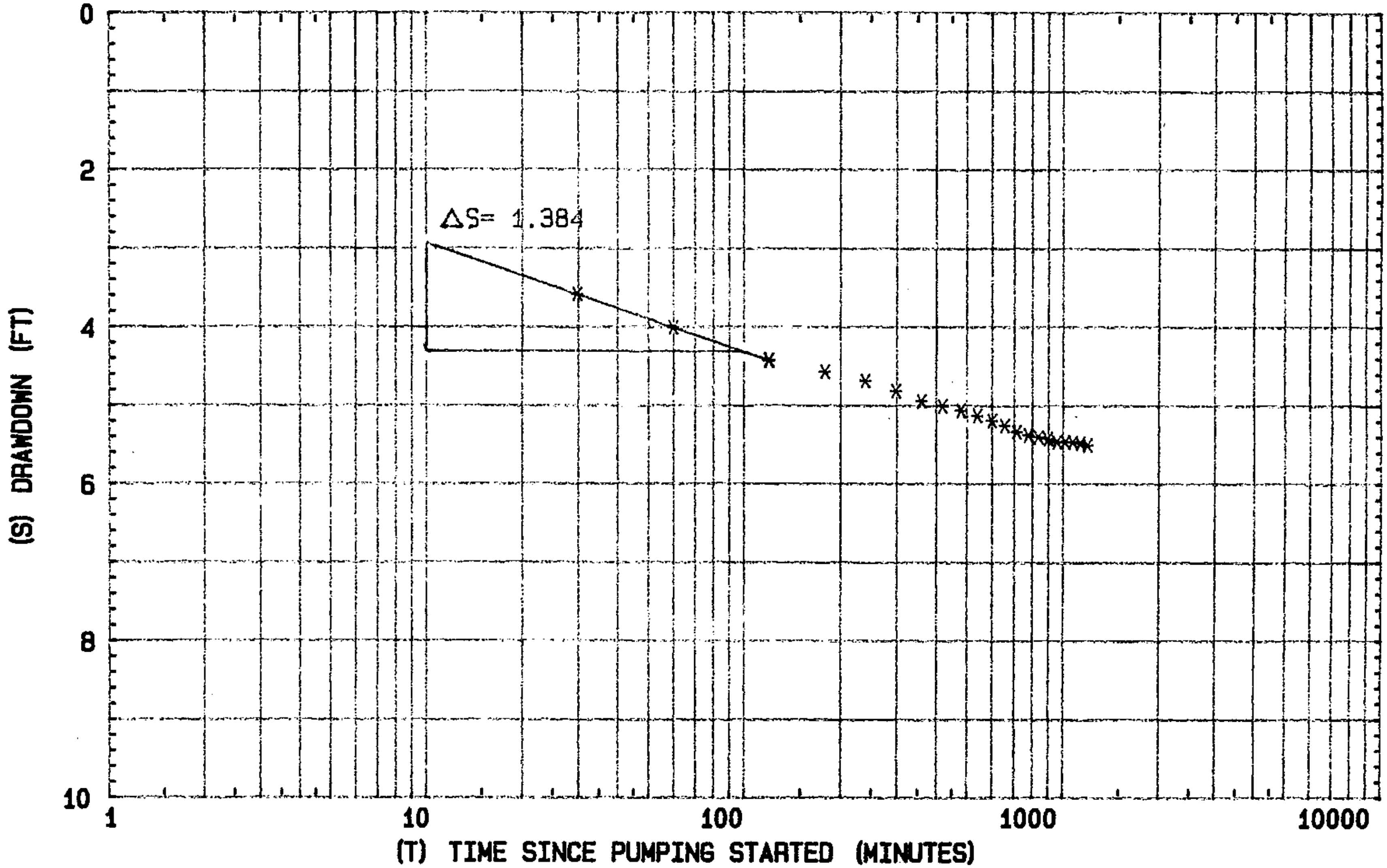
DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 2 INCHES
R = 2 FT FROM 8" TEST WELL #1
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
19	12	0	6780.00	14.167	6.000	681.0000
19	20	0	7260.00	14.167	6.000	681.0000
20	0	0	7500.00	14.167	6.000	681.0000
20	6	0	7860.00	14.167	6.000	681.0000
20	12	0	8220.00	14.167	6.000	681.0000
20	18	0	8580.00	14.167	6.000	681.0000
21	0	0	8940.00	14.167	6.000	681.0000
21	4	0	9180.00	14.167	6.000	681.0000
21	10	0	9540.00	14.167	6.000	681.0000
21	14	0	9780.00	14.167	6.000	681.0000
21	14	15	9795.00	14.167	6.000	681.0000
						VALUE USED
						681.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	10B	ΔS=	1.384 FT
FILE:	EHO-1	Q=	681 USGPM	T=	129888 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	8 FT 2 INCHES	S=	.52417

I.E.P. INC.

FIGURE 25

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 10B

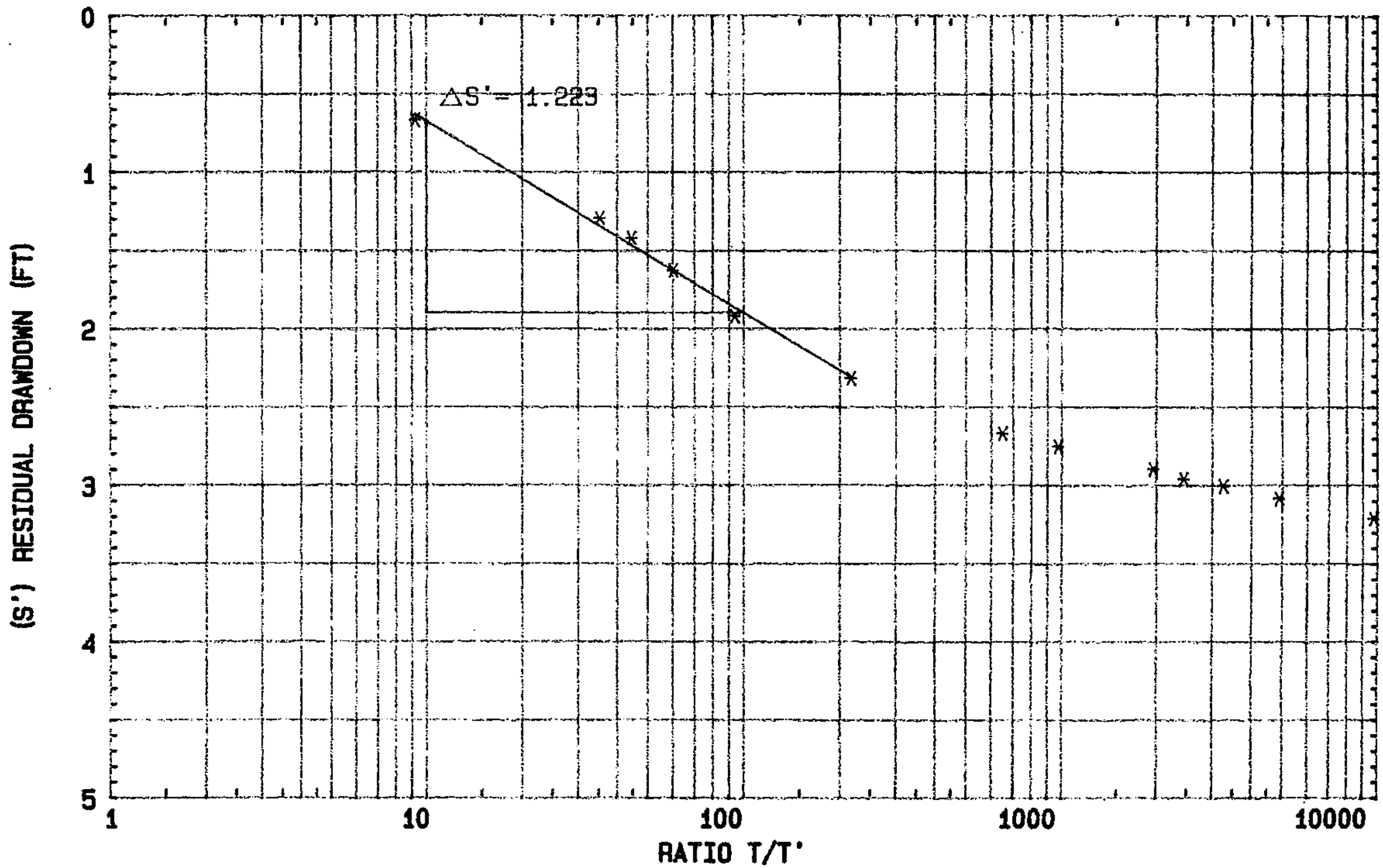
DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 2 INCHES
R = 2 FT FROM 8" TEST WELL #1
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
21	14	16	9796.00	1.00	9796.00	11.375	3.208
21	14	17	9797.00	2.00	4898.50	11.250	3.083
21	14	18	9798.00	3.00	3266.00	11.167	3.000
21	14	19	9799.00	4.00	2449.75	11.125	2.958
21	14	20	9800.00	5.00	1960.00	11.062	2.896
21	14	25	9805.00	10.00	980.50	10.917	2.750
21	14	30	9810.00	15.00	654.00	10.833	2.667
21	15	0	9840.00	45.00	218.67	10.479	2.312
21	16	0	9900.00	105.00	94.29	10.083	1.917
21	17	0	9960.00	165.00	60.36	9.792	1.625
21	18	0	10020.00	225.00	44.53	9.583	1.417
21	19	0	10080.00	285.00	35.37	9.458	1.292
22	10	0	10980.00	1185.00	9.27	8.833	0.667

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	10B
FILE:	EHO-1	Q=	681 USGPM
LOCATION:	NONOTUCK PARK	S.W.L.=	8 FT 2 INCHES

ΔS'= 1.223 FT
T= 146977 USGPD/FT

I.E.P. INC.

FIGURE 27

PUMPING TEST - DRAWDOWN DATA

EHO-1

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 6.75 INCHE

AQUIFER THICKNESS: 59 FT

R = 235 FT FROM 8" TEST WELL # 1

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	1.562	0.000	681.0000
14	19	30	30.00	1.604	0.042	681.0000
14	20	0	60.00	1.625	0.062	681.0000
14	21	0	120.00	1.646	0.083	681.0000
14	22	0	180.00	1.667	0.104	681.0000
14	23	0	240.00	1.687	0.125	681.0000
15	0	0	300.00	1.917	0.354	681.0000
15	1	0	360.00	2.083	0.521	681.0000
15	2	0	420.00	2.271	0.708	681.0000
15	3	0	480.00	2.417	0.854	681.0000
15	4	0	540.00	2.542	0.979	681.0000
15	5	0	600.00	2.604	1.042	681.0000
15	6	0	660.00	2.667	1.104	681.0000
15	7	0	720.00	2.958	1.396	681.0000
15	8	0	780.00	3.104	1.542	681.0000
15	9	0	840.00	3.229	1.667	681.0000
15	10	0	900.00	3.375	1.813	681.0000
15	11	0	960.00	3.521	1.958	681.0000
15	12	0	1020.00	3.667	2.104	681.0000
15	13	0	1080.00	3.792	2.229	681.0000
15	14	0	1140.00	3.896	2.333	681.0000
15	15	0	1200.00	4.000	2.438	681.0000
15	16	0	1260.00	4.083	2.521	681.0000
15	17	0	1320.00	4.146	2.583	681.0000
15	18	0	1380.00	4.208	2.646	681.0000
15	19	0	1440.00	4.292	2.729	681.0000
15	20	0	1500.00	4.375	2.813	681.0000
15	21	0	1560.00	4.437	2.875	681.0000
15	22	0	1620.00	4.479	2.917	681.0000
15	23	0	1680.00	4.500	2.938	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 6.75 INCHE

AQUIFER THICKNESS: 59 FT

R = 235 FT FROM 8" TEST WELL # 1

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
16	0	0	1740.00	4.521	2.958	681.0000
16	1	0	1800.00	4.583	3.021	681.0000
16	2	0	1860.00	4.625	3.062	681.0000
16	3	0	1920.00	4.708	3.146	681.0000
16	4	0	1980.00	4.771	3.208	681.0000
16	5	0	2040.00	4.812	3.250	681.0000
16	6	0	2100.00	4.854	3.292	681.0000
16	7	0	2160.00	4.896	3.333	681.0000
16	8	0	2220.00	4.917	3.354	681.0000
16	9	0	2280.00	4.958	3.396	681.0000
16	10	0	2340.00	4.958	3.396	681.0000
16	11	0	2400.00	4.979	3.417	681.0000
16	12	0	2460.00	5.000	3.438	681.0000
16	13	0	2520.00	5.000	3.438	681.0000
16	14	0	2580.00	5.021	3.458	681.0000
16	15	0	2640.00	5.042	3.479	681.0000
16	16	0	2700.00	5.083	3.521	681.0000
16	18	0	2820.00	5.083	3.521	681.0000
16	19	0	2880.00	5.104	3.542	681.0000
16	20	0	2940.00	5.125	3.563	681.0000
16	21	0	3000.00	5.146	3.583	681.0000
16	22	0	3060.00	5.146	3.583	681.0000
16	23	0	3120.00	5.167	3.604	681.0000
17	0	0	3180.00	5.167	3.604	681.0000
17	1	0	3240.00	5.187	3.625	681.0000
17	2	0	3300.00	5.187	3.625	681.0000
17	3	0	3360.00	5.208	3.646	681.0000
17	4	0	3420.00	5.208	3.646	681.0000
17	5	0	3480.00	5.229	3.667	681.0000
17	6	0	3540.00	5.229	3.667	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 6.75 INCHE

AQUIFER THICKNESS: 59 FT

CONDITIONS: CONFINED

R = 235 FT FROM 8" TEST WELL # 1

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
17	7	0	3600.00	5.229	3.667	681.0000
17	8	0	3660.00	5.271	3.708	681.0000
17	9	0	3720.00	5.271	3.708	681.0000
17	10	0	3780.00	5.292	3.729	681.0000
17	11	0	3840.00	5.292	3.729	681.0000
17	12	0	3900.00	5.312	3.750	681.0000
17	13	0	3960.00	5.333	3.771	681.0000
17	14	0	4020.00	5.333	3.771	681.0000
17	15	0	4080.00	5.333	3.771	681.0000
17	16	0	4140.00	5.354	3.792	681.0000
17	18	0	4260.00	5.375	3.813	681.0000
17	20	0	4380.00	5.396	3.833	681.0000
17	22	0	4500.00	5.417	3.854	681.0000
18	0	0	4620.00	5.438	3.875	681.0000
18	2	0	4740.00	5.458	3.896	681.0000
18	4	0	4860.00	5.479	3.917	681.0000
18	6	0	4980.00	5.500	3.938	681.0000
18	8	0	5100.00	5.521	3.958	681.0000
18	10	0	5220.00	5.542	3.979	681.0000
18	12	0	5340.00	5.563	4.000	681.0000
18	14	0	5460.00	5.583	4.021	681.0000
18	16	0	5580.00	5.583	4.021	681.0000
18	18	0	5700.00	5.604	4.042	681.0000
18	20	0	5820.00	5.604	4.042	681.0000
18	22	0	5940.00	5.604	4.042	681.0000
19	0	0	6060.00	5.625	4.062	681.0000
19	2	0	6180.00	5.625	4.062	681.0000
19	4	0	6300.00	5.625	4.062	681.0000
19	6	0	6420.00	5.646	4.083	681.0000
19	8	0	6540.00	5.667	4.104	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING

ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM

STATIC WATER LEVEL: 1 FT 6.75 INCHE

AQUIFER THICKNESS: 59 FT

R = 235 FT FROM 8" TEST WELL # 1

CONDITIONS: CONFINED

SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
19	10	0	6660.00	5.687	4.125	681.0000
19	12	0	6780.00	5.687	4.125	681.0000
19	14	0	6900.00	5.708	4.146	681.0000
19	16	0	7020.00	5.708	4.146	681.0000
19	18	0	7140.00	5.708	4.146	681.0000
19	20	0	7260.00	5.708	4.146	681.0000
19	22	0	7380.00	5.708	4.146	681.0000
20	0	0	7500.00	5.729	4.167	681.0000
20	2	0	7620.00	5.750	4.187	681.0000
20	4	0	7740.00	5.750	4.187	681.0000
20	6	0	7860.00	5.771	4.208	681.0000
20	8	0	7980.00	5.792	4.229	681.0000
20	10	0	8100.00	5.792	4.229	681.0000
20	12	0	8220.00	5.812	4.250	681.0000
20	14	0	8340.00	5.812	4.250	681.0000
20	16	0	8460.00	5.812	4.250	681.0000
20	18	0	8580.00	5.812	4.250	681.0000
20	20	0	8700.00	5.812	4.250	681.0000
20	22	0	8820.00	5.812	4.250	681.0000
21	0	0	8940.00	5.812	4.250	681.0000
21	2	0	9060.00	5.812	4.250	681.0000
21	4	0	9180.00	5.812	4.250	681.0000
21	6	0	9300.00	5.812	4.250	681.0000
21	8	0	9420.00	5.812	4.250	681.0000
21	10	0	9540.00	5.812	4.250	681.0000
21	12	0	9660.00	5.812	4.250	681.0000
21	14	0	9780.00	5.812	4.250	681.0000
14	19	0	0.00	0.000	-1.562	681.0000
14	19	0	0.00	0.000	-1.562	681.0000
14	19	0	0.00	0.000	-1.562	681.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING
ELEV. OF DATUM POINT:

PUMPING RATE: 681 USGPM
STATIC WATER LEVEL: 1 FT 6.75 INCHE

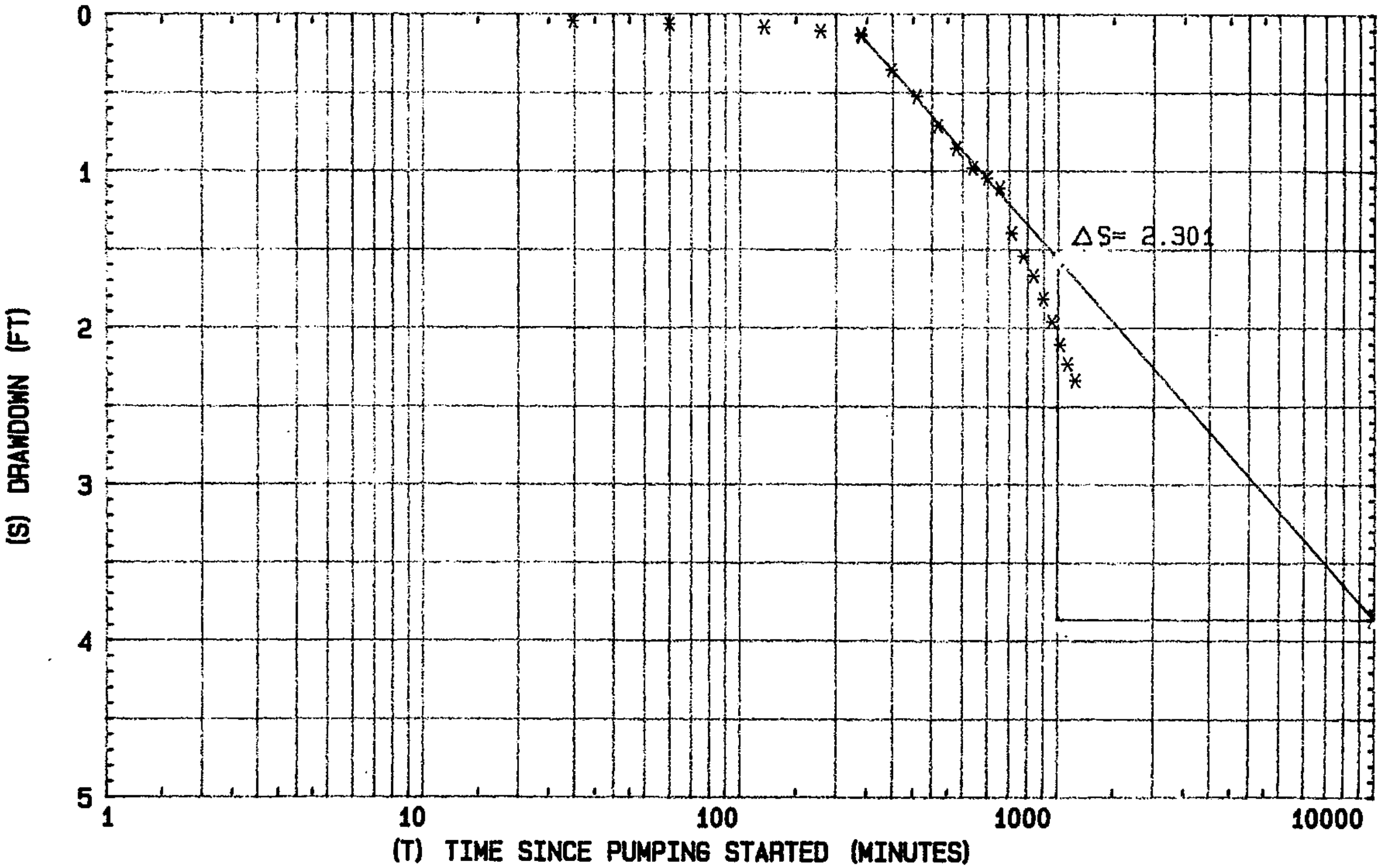
AQUIFER THICKNESS: 59 FT
R = 235 FT FROM 8" TEST WELL # 1

CONDITIONS: CONFINED
SCREEN INTERVAL: 149 TO 165 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
14	19	0	0.00	0.000	-1.562	681.0000
14	19	0	0.00	0.000	-1.562	681.0000
14	19	0	0.00	0.000	-1.562	681.0000
14	19	0	0.00	0.000	-1.562	681.0000
						VALUE USED
						681.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	11B	ΔS=	2.301 FT
FILE:	EHO-1	Q=	681 USGPM	T=	78138 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	1 FT 6.75 INCHES	S=	.06201

I.E.P. INC.

FIGURE 28

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: NONOTUCK PARK

WELL NO.: 11B

DATUM POINT: TOP OF CASING
PUMPING RATE: 681 USGPM

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 6.75 INCHE

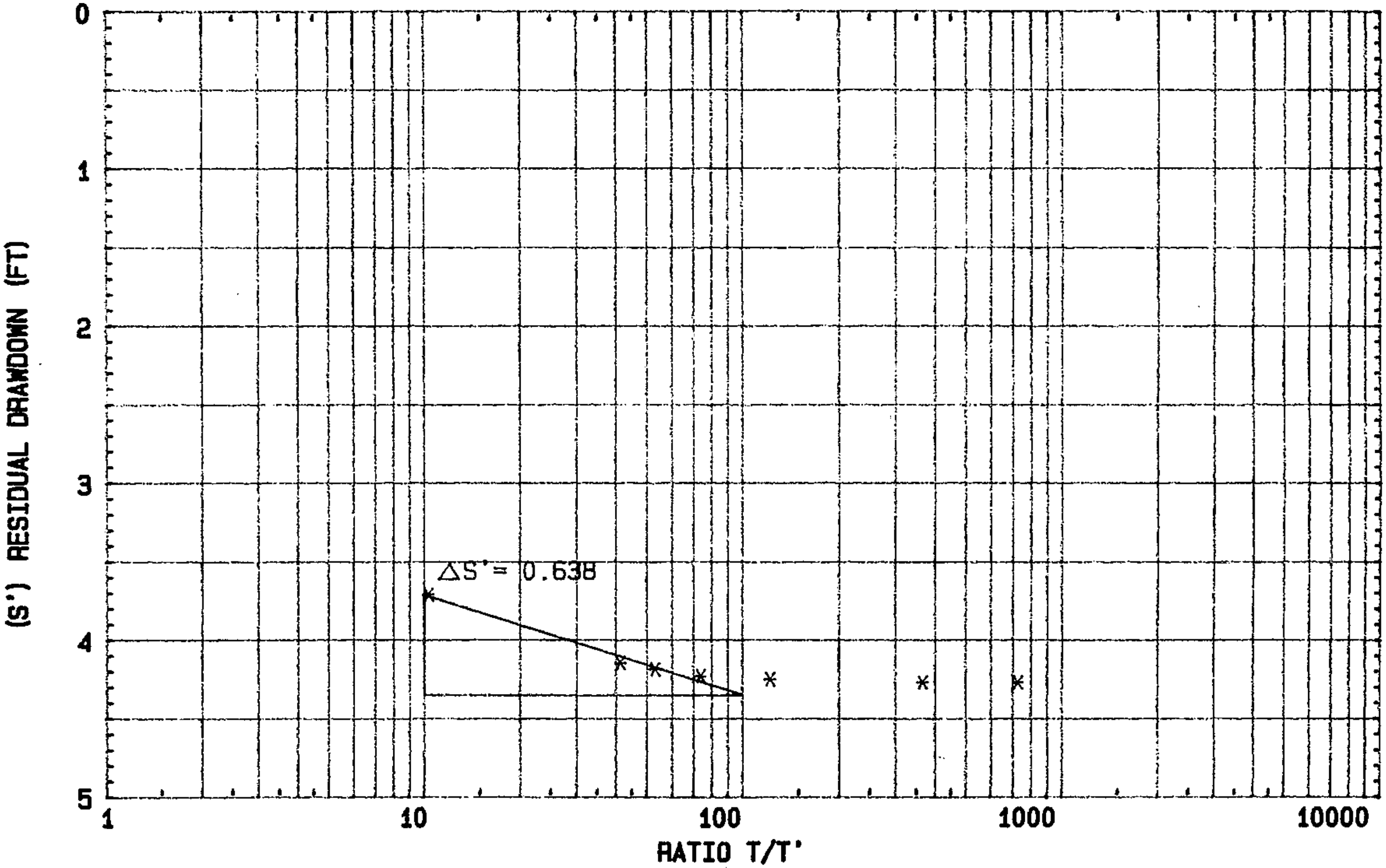
AQUIFER THICKNESS: 59 FT
CONDITIONS: CONFINED

R = FT FROM 8" TEST WELL # 1
SCREEN INTERVAL: 149 TO 165 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
22	10	15	10995.00	15.00	733.00	5.833	4.271
22	10	30	11010.00	30.00	367.00	5.833	4.271
22	11	30	11070.00	90.00	123.00	5.812	4.250
22	12	30	11130.00	150.00	74.20	5.792	4.229
22	13	30	11190.00	210.00	53.29	5.750	4.187
22	14	30	11250.00	270.00	41.67	5.708	4.146
23	5	30	12150.00	1170.00	10.38	5.271	3.709

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	11B	ΔS'=	0.638 FT
FILE:	EHO-1	Q=	681 USGPM	T=	281804 USGPD/FT
LOCATION:	NONOTUCK PARK	S.W.L.=	1 FT 6.75 INCHES		

I.E.P. INC.

FIGURE 30

DISTANCE - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.: EHO-1
LOCATION: NONOTUCK PK 8" WELL START TIME OF TEST: 14/19/30
DURATION:(minutes) 9660 Q OF PROD. WELL:(USGPM) 681

WELL NO.	DISTANCE	DRAWDOWN
	(ft)	s (ft)
7B	715.0000	2.97900
8B	440.0000	2.81300
9B	220.0000	3.00000
10B	2.0000	6.00000
11B	235.0000	4.25000

I.E.P. INC.

PUMPING TEST COEFFICIENTS

PROJECT: EASTHAMPTON AQUIFER STUDY FILE NO.: EHO-1
LOCATION: NONOTUCK PK 8" WELL DURATION (min): 9660

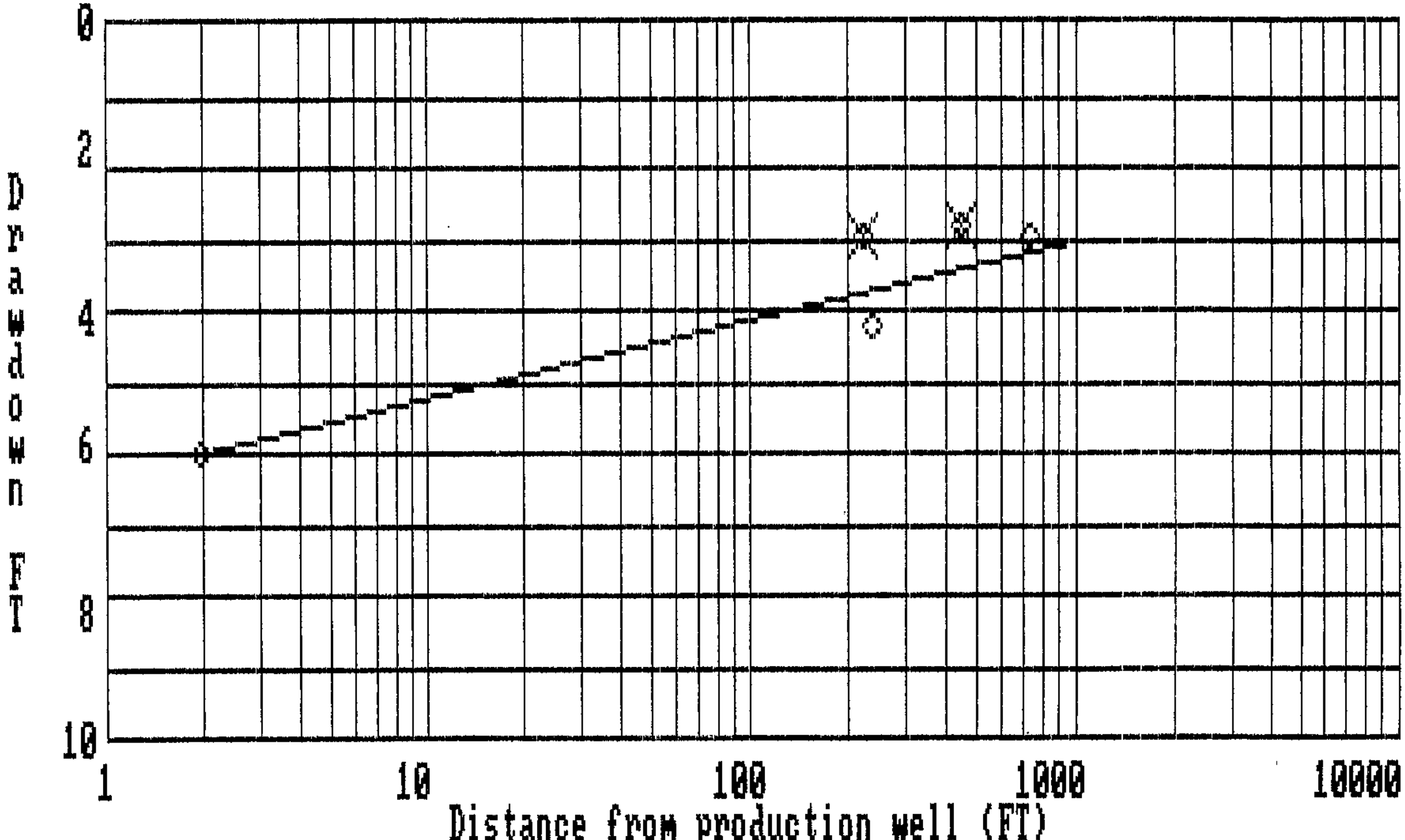
DISTANCE / DRAWDOWN GRAPH:

LINE SEGMENT # 1 :

delta s = 1.082662 FT T = 332114.8 USGPD/FT S = 9.880597E-07

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:EASTHAMPTON AQUIFER FILE:EHO-1 LOCATION:NONOTUCK PK 8" WELL

delta s = 1.082662 FT T = 332114.8 USGPD/FT S = 9.880597E-07

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

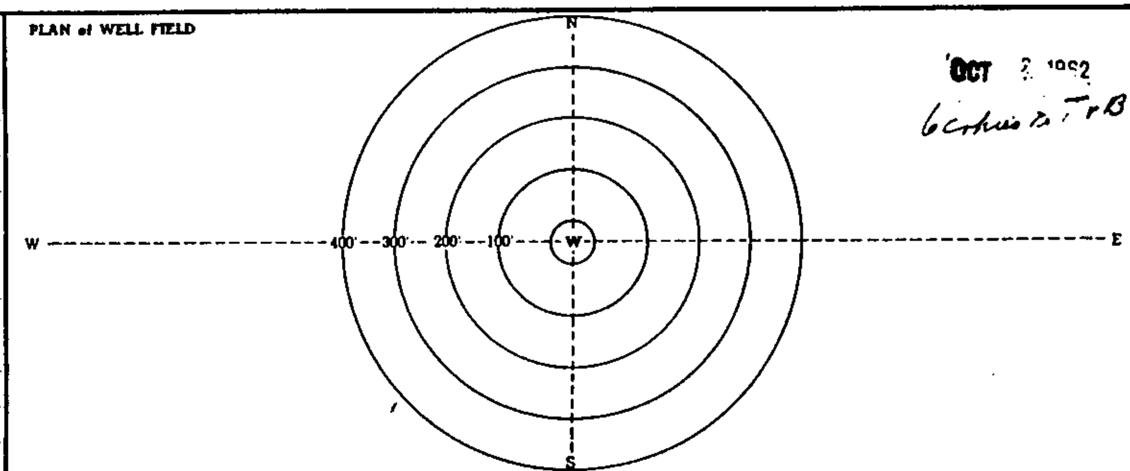
OCT 2 1962
6 copies to TB

CUSTOMER

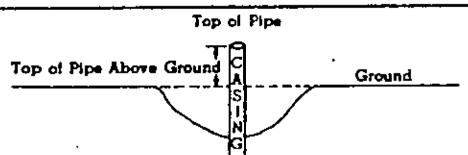
TOWN EASTHAMPTON
STREET STATE MASS
OWNER OF PROPERTY: TOWN
OPERATORS. JAMES SULLIVAN, BOB FATEIBER

SIZE & TYPE OF PUMP 8" DEEP WELL TURBINE
DISCHARGE LINE Size 6 in. Length 106 feet.
ORFICE PIPE 10 in; SIZE ORFICE PLATE 6 in.
DESCRIPTION OF WELL BEING PUMPED: 18" GRAVEL DEVELOPED
LENGTH OF DUNKER ON TAPE 3 in ADD TO READINGS (When you make read)
LENGTH OF ALTITUDE LINE FROM CENTER OF GAUGE 43 ft 0 in.

PLAN of WELL FIELD



ALL MEASUREMENTS TO BE MADE FROM TOP OF CASINGS



Measurement Diagram

FINISHED WELL NO 1 - 18"
DEPTH OF WELL 165'
TOP OF PIPE ABOVE GROUND 3"
STATIC READING

Observation Wells Information

No. 10B	No. 11B	No. 9B	No.	No.	No.
Depth	Depth	Depth	Depth	Depth	Depth
Pipe AG	Pipe AG	Pipe AG	Pipe AG	Pipe AG	Pipe AG
Static 9'-1"	Static 3'3"	Static 6"	Static	Static	Static

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	Water Level	Water Level	Water Level	Water Level	Water Level	Water Level
8/27/62	1:30 P.M.			11'			9'-1"	3'3"	6"			
CLEAR	2:00 P.M.			22'	26"	704	11'-10"	4'-1¾"	1'-5"			
	3:00 P.M.			23'	26"	704	12'-2¾"	4'-7½"	1'-9¼"			
	4:00 P.M.			23'	26"	704	12'-7"	4'-10½"	2'-1"			
	5:00 P.M.			23'	26"	704	12'-8¾"	5'-0¾"	2'-2½"			
	6:00 P.M.			23'-6"	26"	704	12'-10¾"	5'-2½"	2'-4"			
	7:00 P.M.			23'-6"	26"	704	13'-0"	5'-4"	2'-5½"			
	8:00 P.M.			23'-6"	26"	704	13'-1"	5'-5"	2'-6½"			
	9:00 P.M.			23'-6"	26"	704	13'-1¼"	5'-6"	2'-7¼"			

OCT 3 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 1

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	10B Water Level	11B Water Level	9B Water Level	Water Level	Water Level	Water Level
8/27/62												
	10:00 P.M.			23'-6"	26"	704	13'-2¼"	5'-2¾"	2'-8"			
	11:00 P.M.			23'-6"	26"	704	13'-2¾"	5'-7½"	2'-8½"			
MIDNIGHT	12:00			23'-6"	26"	704	13'-4½"	5'-9½"	2'-11¾"			
8/28/62	1:00 A.M.			23'-6"	26"	704	13'-4¾"	5'-9¾"	2'-11¾"			
	2:00 A.M.			23'-6"	26"	704	13'-4½"	5'-9½"	2'-11¼"			
	3:00 A.M.			23'-6"	26"	704	13'-4¾"	5'-9½"	2'-11"			
	4:00 A.M.			23'-6"	26"	704	13'-5"	5'-9½"	2'-10½"			
	5:00 A.M.			23'-6"	26"	704	13'-5"	6'-9¾"	2'-11"			
WATER SAMPLE TAKEN	6:00 A.M.			23'-6"	26"	704	13'-5½"	5'-9¾"	2'-11"			
RAIN AND CLOUDY	7:00 A.M.			23'-6"	26"	704	13'-5½"	5'-9¾"	2'-11"			
	8:10 A.M.			23'-6"	26"	704	13'-5½"	5'-9½"	2'-11"			
	9:00 A.M.			23'-6"	26"	704	13'-5½"	5'-9½"	2'-11½"			
	10:00 A.M.			23'-6"	26"	704	13'-5¾"	5'-10"	2'-11½"			
RAIN	11:00 A.M.			23'-6"	26"	704	13'-5¾"	5'-10"	2'-11½"			
NOON	12:00			23'-6"	26"	704	13'-6"	5'-10¼"	2'-11¾"			
WATER SAMPLE TAKEN	1:00 P.M.			23'-6"	26"	704	13'-6½"	5'-10½"	3'-0"			
	2:00 P.M.			23'-6"	26"	704	13'-6¾"	5'-10¾"	3'-0¼"			
CLOUDY	3:00 P.M.			23'-6"	26"	704	13'-7"	5'-11"	3'-0½"			
	4:00 P.M.			23'-6"	26"	704	13'-7¼"	5'-11¼"	3'-0¾"			
	5:00 P.M.			23'-6"	26"	704	13'-7¼"	5'-11¼"	3'-0¾"			
	6:00 P.M.			23'-6"	26"	704	13'-7¼"	5'-11¼"	3'-0¾"			
LIGHT RAIN	7:00 P.M.			23'-6"	26"	704	13'-7¼"	5'-11¼"	3'-1"			
CLOUDY	8:00 P.M.			23'-6"	26"	704	13'-7½"	5'-11¼"	3'-1"			
	9:00 P.M.			23'-6"	26"	704	13'-7½"	5'-11½"	3'-1"			
	10:00 P.M.			23'-6"	26"	704	13'-7¾"	5'-11½"	3'-1"			
RAIN	11:00 P.M.			23'-6"	26"	704	13'-7¾"	5'-11¾"	3'-1¼"			
MIDNIGHT	12:00			23'-6"	26"	704	13'-8"	5'-11¾"	3'-1¼"			
8/29/62	1:00 A.M.			23'-6"	26"	704	13'-8"	5'-11¾"	3'-1¼"			
	2:00 A.M.			23'-6"	26"	704	13'-8"	5'-11¾"	3'-1½"			
	3:00 A.M.			23'-6"	26"	704	13'-8"	5'-11½"	3'-1½"			

OCT 3 1962

R. E. CHAPMAN CO., OAKDALE, MASS. NO. 2

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

. CUSTOMER

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	10B Water Level	11B Water Level	9-B Water Level	Water Level	Water Level	Water Level
8/29/62												
	4:00 A.M.			23'-6"	26"	704	13'-7½"	5'-11"	3'-1"			
	5:00 A.M.			23'-6"	26"	704	13'-7½"	5'-10¾"	3'-1"			
LIGHT RAIN	6:00 A.M.			23'-6"	26"	704	13'-7¼"	5'-10½"	3'-0½"			
WATER SAMPLE TAKEN	7:00 A.M.			23'-6"	26"	704	13'-6½"	5'-11"	3'-1"			
CLOUDY	8:00 A.M.			23'-6"	26"	704	13'-6½"	5'-11½"	3'-1"			
	9:00 A.M.			23'-6"	26"	704	13'-6½"	5'-11½"	3'-1½"			
SHUT DOWN GREASE	10:00 A.M.			23'-6"	26"	704	13'-6¾"	5'-11½"	3'-1½"			
AND OIL 11:20-11:23	11:00 A.M.			23'-6"	26"	704	13'-7¼"	5'-11½"	3'-1½"			
NOON	12:00			23'-6"	26"	704	13'-7½"	5'-11¾"	3'-1¼"			
SHUT DOWN 1:00 P.M.	1:00 P.M.	CHANGED ORIFICE PLATE TO 8". INCREASED PUMPING RATE FROM 704 G.P.M TO 1080 G.P.M										
TO 1:05 P.M.	2:00 P.M.			29'-6"	12"	1080	15'-1½"	6'-6½"	3'-7"			
WATER SAMPLE	3:00 P.M.			29'-6"	12"	1080	15'-3¾"	6'-8½"	3'-9"			
TAKEN 2:00 P.M.	4:00 P.M.			29'-6"	12"	1080	15'-5¼"	6'-10"	3'-10½"			
	5:00 P.M.			29'-6"	12"	1080	15'-6¼"	6'-11¼"	3'-11½"			
	6:00 P.M.			29'-6"	12"	1080	15'-6¾"	7'-0"	4'-0¼"			
CLOUDY	7:00 P.M.			29'-6"	12"	1080	15'-7¼"	7'-0½"	4'-0¾"			
	8:00 P.M.			29'-6"	12"	1080	15'-7¾"	7'-1"	4'-1½"			
CLEAR	9:00 P.M.			29'-6"	12"	1080	15'-8"	7'-1¼"	4'-2"			
	10:00 P.M.			29'-6"	12"	1080	15'-8¼"	7'-1½"	4'-2¼"			
	11:00 P.M.			29'-6"	12"	1080	15'-8½"	7'-1¾"	4'-2½"			
MIDNIGHT	12:00			29'-6"	12"	1080	15'-9"	7'-2¼"	4'-3"			
8/30/62	1:00 A.M.			29'-6"	12"	1080	15'-9"	7'-2¼"	4'-3"			
CLEAR	2:00 A.M.			29'-6"	12"	1080	15'-9"	7'-2¼"	4'-3"			
	3:00 A.M.			29'-6"	12"	1080	15'-9¼"	7'-2½"	4'-3¼"			
	4:00 A.M.			29'-6"	12"	1080	15'-9¼"	7'-3"	4'-3¼"			
	5:00 A.M.			29'-6"	12"	1080	15'-9½"	7'-3½"	4'-3½"			
WATER SAMPLE TAKEN	6:00 A.M.			29'-6"	12"	1080	15'-9½"	7'-3½"	4'-3½"			
	7:00 A.M.			29'-6"	12"	1080	15'-9½"	7'-3½"	4'-3½"			
	8:00 A.M.			29'-6"	12"	1080	15'-9½"	7'-3¼"	4'-3½"			
CLEAR AND WARM	9:00 A.M.			29'-6"	12"	1080	15'-10½"	7'-3"	4'-3¾"			

OCT 3 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

LOG OF PUMP TEST

NO. 3

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	10-B Water Level	11-B Water Level	9-B Water Level	Water Level	Water Level	Water Level
8/30/62												
	10:00 A.M.			29'-6"	12"	1080	15'-11"	7'-4"	4'-4"			
	11:00 A.M.			29'-6"	12"	1080	16'-0"	7'-4"	4'-4¼"			
NOON	12:00			29'-6"	12"	1080	16'-0"	7'-4"	4'-4½"			
CLEAR AND WARM	1:00 P.M.			29'-6"	12"	1080	16'-0"	7'-4¼"	4'-4½"			
WATER SAMPLE TAKEN	2:00 P.M.			29'-6"	12"	1080	16'-0"	7'-4¼"	4'-4½"			
	3:00 P.M.			29'-6"	12"	1080	16'-0"	7'-4¼"	4'-4½"			
	4:00 P.M.			29'-6"	12"	1080	16'-0¼"	7'-4¼"	4'-4½"			
	6:00 P.M.			29'-6"	12"	1080	16'-0¼"	7'-4¼"	4'-4½"			
	6:00 P.M.			29'-6"	12"	1080	16'-0½"	7'-4¼"	4'-4½"			
	7:00 P.M.			29'-6"	12"	1080	16'-0½"	7'-4¼"	4'-4½"			
CLEAR	8:00 P.M.			29'-6"	12"	1080	16'-0½"	7'-4½"	4'-4¾"			
	9:00 P.M.			29'-6"	12"	1080	16'-0½"	7'-4½"	4'-4¾"			
	10:00 P.M.			29'-6"	12"	1080	16'-0½"	7'-4¾"	4'-5"			
	11:00 P.M.			29'-6"	12"	1080	16'-0¾"	7'-5"	4'-5¼"			
MIDNIGHT	12:00			29'-6"	12"	1080	16'-0¾"	7'-5¼"	4'-5¼"			
8/31/62	1:00 A.M.			29'-6"	12"	1080	16'-0½"	7'-5¼"	4'-5"			
	2:00 A.M.			29'-6"	12"	1080	16'-0½"	7'-5¼"	4'-5"			
	3:00 A.M.			29'-6"	12"	1080	16'-0½"	7'-5¼"	4'-5¼"			
	4:00 A.M.			29'-6"	12"	1080	16'-0¼"	7'-5¼"	4'-5¼"			
	5:00 A.M.			29'-6"	12"	1080	16'-0¼"	7'-5½"	4'-5½"			
WATER SAMPLE TAKEN	6:00 A.M.			29'-6"	12"	1080	16'-0½"	7'-5½"	4'-5½"			
	7:00 A.M.			29'-6"	12"	1080	16'-1"	7'-5"	4'-5½"			
	8:00 A.M.			29'-6"	12"	1080	16'-1¼"	7'-5"	4'-5½"			
	9:00 A.M.			29'-6"	12"	1080	16'-1"	7'-5½"	4'-6"			
	10:00 A.M.			29'-6"	12"	1480	16'-1"	7'-6"	4'-6"			
	11:00 A.M.			29'-6"	12"	1080	16'-1"	7'-6"	4'-6"			
NOON	12:00			29'-6"	12"	1080	16'-1½"	7'-6"	4'-6¼"			
CLEAR AND WARM	1:00 P.M.			29'-6"	12"	1080	16'-1½"	7'-6"	4'-6½"			
WATOR SAMPLE TAKEN	2:00 P.M.			29'-6"	12"	1080	16'-1½"	7'-6"	4'-6½"			
	2:35 P.M.	SHUT OFF PUMP TEST				START OF RECOVERY READING AT 235 P.M.						

OCT 3 1962

R. E. CHAPMAN CO., OAKDALE, MASS.

NO. 4

LOG OF PUMP TEST

TEL. WEST BOYLSTON TEmple 5-3727

CUSTOMER

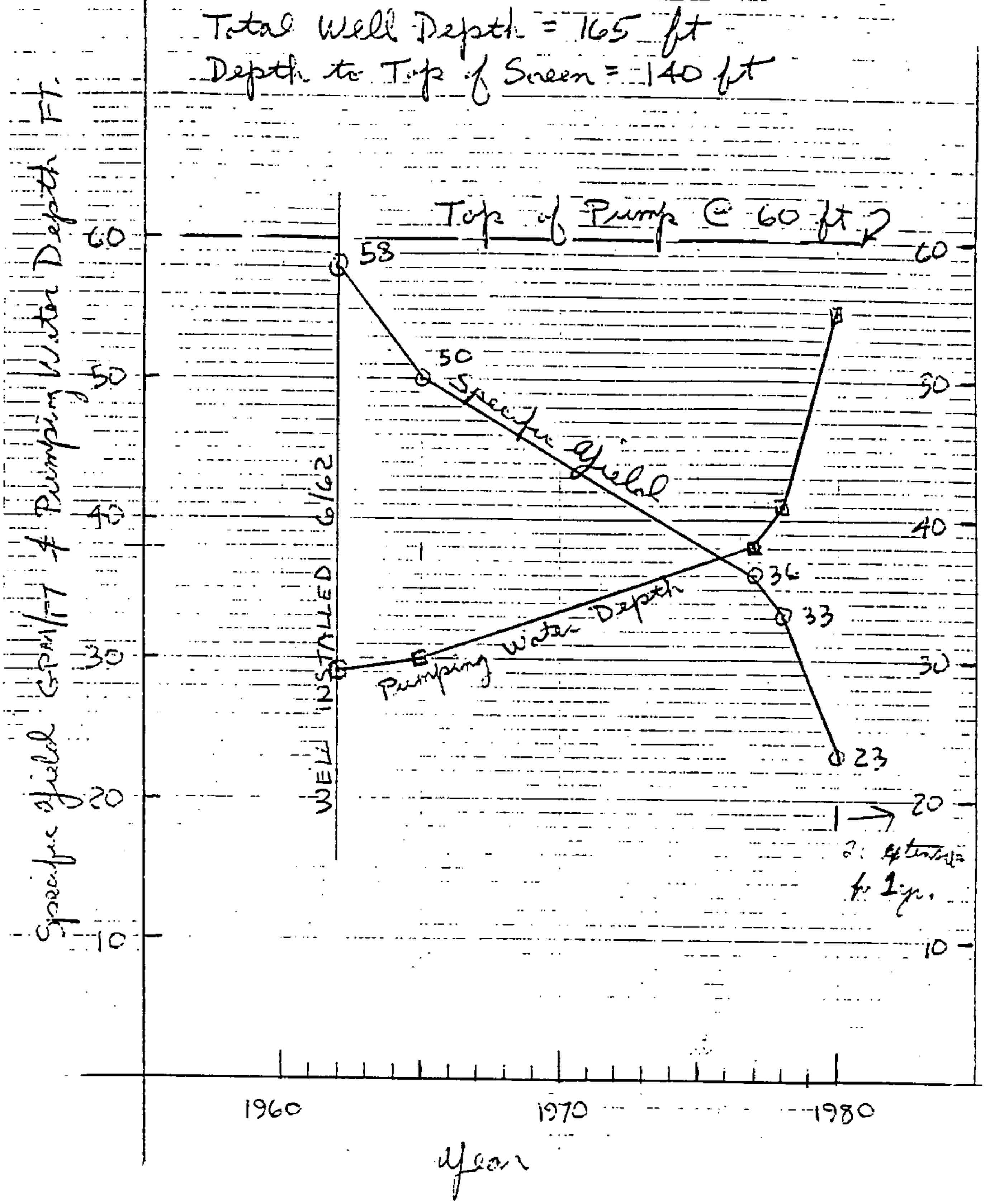
START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	10-B Water Level	11-B Water Level	9-B Water Level	Water Level	Water Level	Water Level
8/31/62	RECOVERY		READINGS									
CLEAR												
	2:35 P.M.			15'-0"			13'-0½"					
	2:40 P.M.			14'-0"			12'-7¼"	6'-10½"	4'-0½"			
	3:00 P.M.			13'-6"			12'-2¾"	6'-5"	3'-7¾"			
	4:00 P.M.			12'-6"			11'-6"	5'-9"	2'-11¾"			
	5:00 P.M.			12'-0"			10'-11¾"	5'-2"	2'-6"			
	6:00 P.M.			11'-6"			10'-6"	4'-9"	2'-0"			
	7:00 P.M.			11'-0"			10'-0¾"	4'-3¼"	1'-7"			

L-14

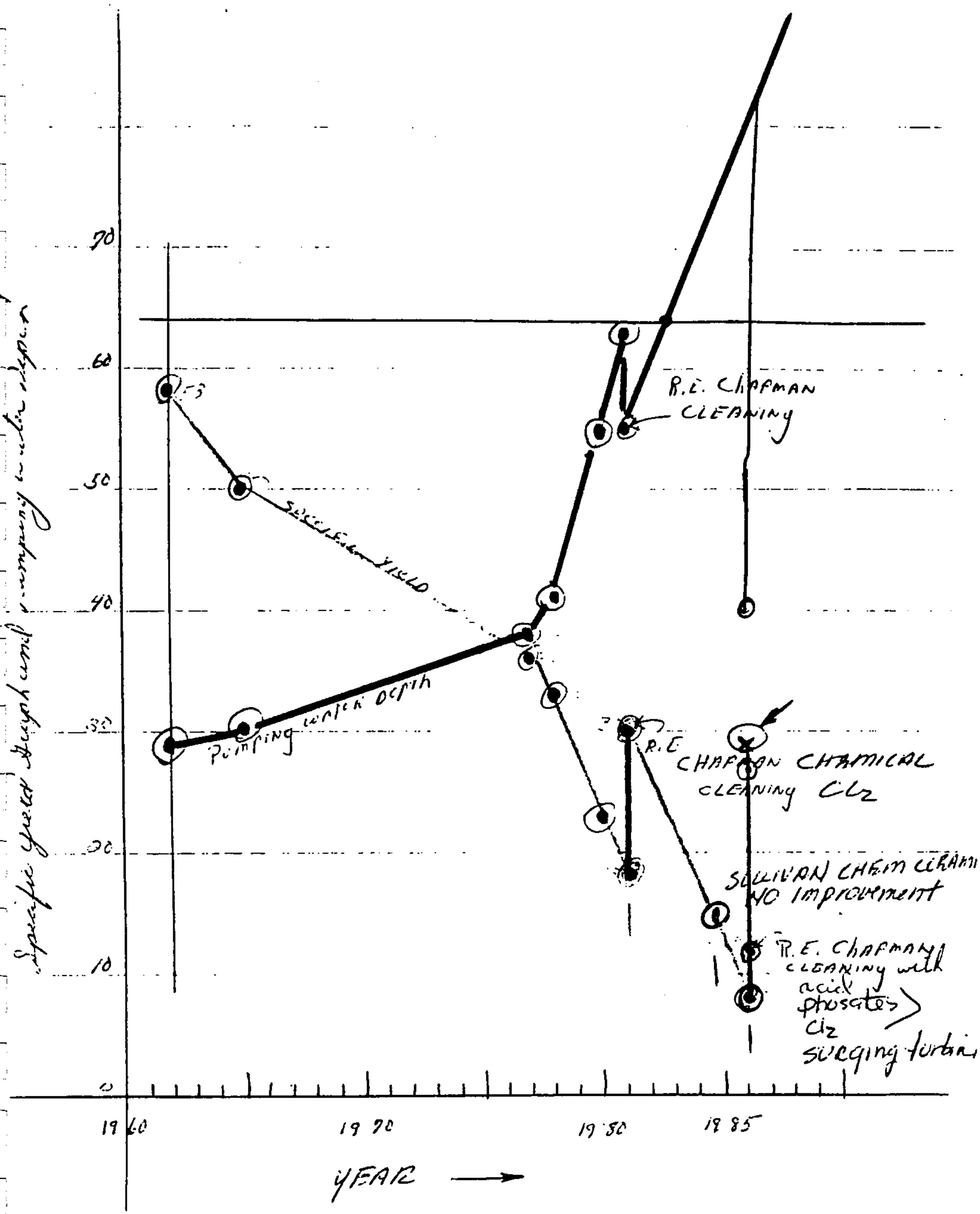
3 Northeast Park 10/4/80

OHO

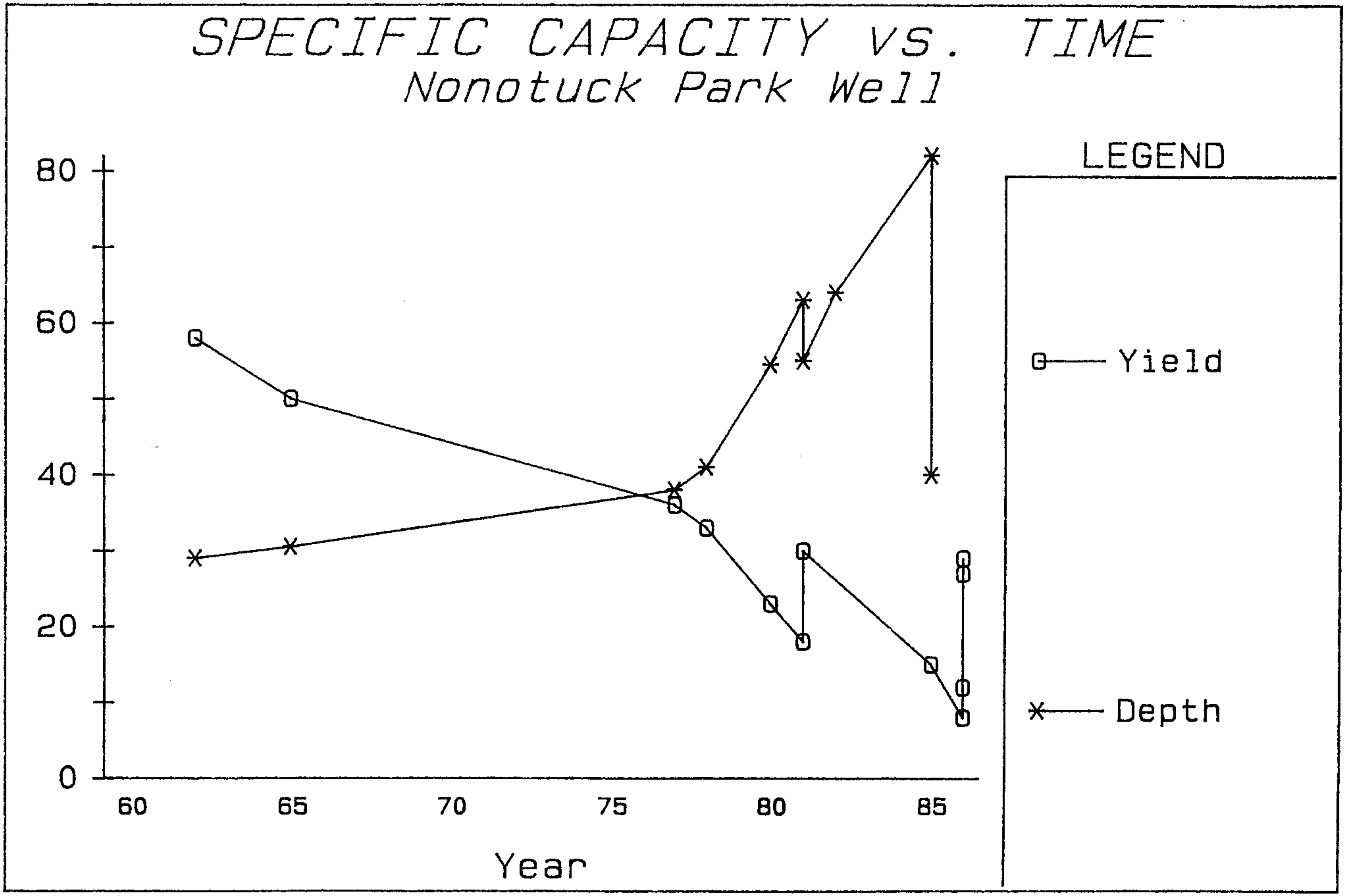


(1) Specific Yield Based on Static Water Level of 9 FT. & Original Test Pumping Data

(2) Pumping Rate Assume at 1042 GPM



Specific yield depth and pumping water depth
70
60
50
40
30
20
10
0
R.E. CHAPMAN CLEANING
SPECIFIC YIELD
Pumping water depth
R.E. CHAPMAN CHEMICAL CLEANING Cl_2
SULLIVAN CHEM CLEANI
NO improvement
R.E. CHAPMAN CLEANING with acid phosates Cl_2 surging turbin
1960
1970
1980
1985
YEAR


SPECIFIC CAPACITY vs. TIME
Nonotuck Park Well
80
60
40
20
0
60
65
70
75
80
85
Year
LEGEND
Yield
Depth

Appendix B

Hendrick Street 8" Well Data

Spec. for INSTALL. of Grav. Packe H2O Supply Well

Hendrick St.
8" Well

LOG OF 8" WELL

3/57

Depth From	Depth To	Material
0'	9'	Loam and clay
9'	20'	Fine sand
20'	26'	Coarse sand and gravel
26'	35'	Fine sand
35'	40'	Coarse gravel
40'	55'	Very fine sand
55'	62'	Coarse sand and gravel
62'	73'	Coarse sand
73'	88'	Fine sand
88'	93'	Coarse sand
93'	106'	Coarse sand and gravel
106'	110'	Fine sand
110'	118'	Clay and sand
118'	121'	Ledge

DESCRIPTION OF SCREEN

15' of Everdur

10' of 155 slot
5' of 30 slot

Bottom of screen set at 101'-6"

PUMP TEST OF 8" WELL

Time	Flow 8" Well	Draw-Down 3" Well	#W2 Well	#W4 Well	#W2A Well	Remarks
12:30 PM	0	Overflowing	1'-11"	2'-4"	1'-7"	Main Pumping Station Operating @ 2½ MGD
12:45 "	800	14'-6"	2'-7"	3'-2"	1'-9½"	
1:30 "	800	15'	2'-10"	3'-7 3/4"	1'-11½"	
2:30 "	800	15'	2'-10"	3'-7 3/4"	2'	
3:30 "	800	15'	2'-10"	3'-8¼"	2'-½"	
4:30 "	800	15'	2'-10½"	3'-8 3/4"	2'-3/4"	
5:30 "	800	15'	2'-11"	3'-9¼"	2'-1"	
6:30 "	800	15'	2'-11"	3'-9¼"	2'-1"	
7:30 "	800	15'	2'-11"	3'-9¼"	2'-1"	
8:30 "	800	15'	2'-11 3/4"	3'-9½"	2'-1½"	
9:30 "	800	15'	2'-11 3/4"	3'-9½"	2'-1½"	
10:30 "	800	15'	2'-11 3/4"	3'-9½"	2'-1½"	
10:45 "	800	15'	2'-11 3/4"	3'-9½"	2'-1½"	
11:15 "	800	14'-3"	1'-9½"	+1"	1'-9¼"	
12:00	800	14'	1'-6"	+2½"	1'-6½"	
1:00 AM	800	13'	1'-4½"	+2½"	1'-5½"	
2:00 "	800	13'	1'-3 3/4"	+2 3/4"	1'-5"	
3:00 "	800	13'	1'-3½"	+2 3/4"	1'-5"	
4:00 "	800	13'	1'-3½"	+3"	1'-5"	
5:00 "	800	13'	1'-3½"	+3 3/4"	1'-5"	
6:00 "	800	13'	1'-3½"	+3 3/4"	1'-5"	
6:15 "	800	13'	1'-3½"	+3 3/4"	1'-5"	Main Pumping Station Operating @ 2½ MGD
6:45 "	800	14'	2'-3"	-3'	1'-8"	
7:00 "	800	15'	2'-9"	3'-7½"	2'	
8:00 "	800	15'	2'-10 3/4"	3'-8½"	2'-1"	
9:00 "	800	15'	2'-11"	3'-9"	2'-1½"	
10:00 "	800	15'	2'-11½"	3'-9½"	2'-1½"	
11:00 "	800	15'	2'-11 3/4"	3'-9 3/4"	2'-1 3/4"	
12:00	800	15'	2'-11 3/4"	3'-9 3/4"	2'-1 3/4"	
1:00 PM	800	15'	2'-11 3/4"	3'-9 3/4"	2'-1 3/4"	
2:00 "	800	15'	2'-11 3/4"	3'-9 3/4"	2'-1 3/4"	

RECOVERY READING

Time	Flow 8" Well	3" Well	#W2 Well	#W4 Well	#W2A Well
2:01		1'-0"	2'-10"	3'-1"	1'-0"
2:02		0'-3"	-	-	1'-2"
2:03		overflow	2'-9"	3'-1"	1'-3"
4:00 PM		overflow	2'-3"	2'-7"	1'-3"

R. E. CHAPMAN CO.

OAKDALE, MASS.

Name of Driller F. A. SULLIVAN　　Names of Helpers O. M. PATTERSON　J. HOLLICK

Job Name & Location TOWN OF EAST HAMPTON MASS　OLD WELL FIELD

Date Started 12/17/53　Date Finished 12/22/53　|　Date Started　Date Finished

Hole No 8" #1 Permanent Well　|　Hole No

Depth From	Depth To	Classification of Material
0'	9'	LOAM + CLAY
[illegible]'	20'	FINE SAND
[illegible]0'	26'	COURSE SAND + GRAVEL
[illegible]'	35'	FINE SAND
[illegible]5'	40'	COURSE GRAVEL
40'	55'	VERY FINE SAND
[illegible]5'	62'	COURSE SAND + GRAVEL
62'	73'	COURSE SAND
[illegible]3'	86'	FINE SAND
88'	93	COURSE SAND
[illegible]'	106'	COURSE SAND + GRAVEL
106'	115'	FINE SAND
[illegible]'	118'	CLAY + SAND
[illegible]'	121'	LEDGE

Feet of Screen Exposed: 15'

Size of Screen & Slot: 10' - 125 SLOT
5' - 30 SLOT

Screen Left in: 15' EVEDUR

Screen Pulled Out: —

Pipe Left in: 88'-6"

Pipe Pulled Out: 31'

Remarks

SET BOTTOM OF SCREEN AT 101'-6"

LEFT PIPE ABOVE GROUND 2'-6"

SCREEN HAD LEAD PACKER + BOTTOM

Depth From	Depth To	Classification of Material

Feet of Screen Exposed

Size of Screen & Slot

Screen Left in

Screen Pulled Out

Pipe Left in

Pipe Pulled Out

Remarks

Pump Test on Hole No.

Date	Time	Dr. Down	G. P. M.	Static and Other Info.

Pump Test on Hole No.

Date	Time	Dr. Down	G. P. M.	Static and Other Info

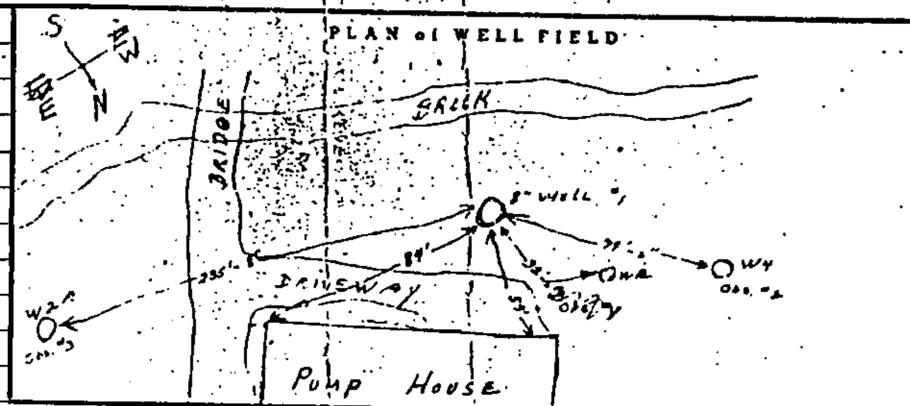
R. E. CHAPMAN CO. — LOG OF PUMP TEST

Customer: *Town of East Hampton, Mass.*
Location: *Old Well Field*
Town: State: Street:

Owner of Property: *Town of East Hampton Mass.*
Date: *12/22/53*
Operator: *F.A. Sullivan – O.M. Patterson – J. Hellick*

Pump Data

Size & Type of Pump: *6" Suction Pump*
Size & Length—Discharge Line:
Size Orifice Pipe* *8* In.
Size Orifice *6* In.
Description of Well being pumped: *8" [illegible] Well*
Length Dunker In. (Do Not) Add To Readings *[illegible]*
Length of Alt Line from center of gauge *21* Ft. In.



READINGS—Measurements From Top of Casing *YES*

WELL		LARGE WELL No. *1*	DIAM. *8"*			LARGE WELL No.		DIAM.		Obs. Well No. 1 *W4*	Obs. Well No. 2 *W1*	Obs. Well No. 3 *W2*	Obs. Well No.	Obs. Well No.
Elevation—Top of Pipe Above Ground		*2'-6" A.G.*								*2' 6" A.G.*	*3'-11" A.G.*	*5'-1" A.G.*		
Date, Weather and Samples Taken	Time	Alt. Gauge Reading	Corresponding Water Level	Head-In Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-In Inches	G. P. M.					
Pumping Station Running OK	*12:30*	Static *Flowing*	Static *Flowing*	*0*	*0*	Static	Static			*1' 11"*	*2'-6"*	*1'-7"*		
Started Pump at 12:30 P.M.	*12:45*	*6'-6"*	*14'-6"*	*27*	*800*					*2' 7"*	*3'-2"*	*1'-9½"*		
	1:30	*6'*	*15'*	*27*	*800*					*2' 10"*	*3'-7½"*	*1'-11½"*		
12/22/53	*2:30*	*6'*	*15'*	*27*	*800*					*2' 10"*	*3'-7¾"*	*2'*		
	3:30	*6'*	*15'*	*27*	*800*					*2' 10"*	*3'-8½"*	*2'-½"*		
	4:30	*6'*	*15'*	*27*	*800*					*2' 10½"*	*3'-8½"*	*2'-¾"*		
	5:30	*6'*	*15'*	*27*	*800*					*2' 11"*	*3'-9¼"*	*2'-1"*		
	6:30	*6'*	*15'*	*27*	[illegible]					*2' 11"*	*3'-9¼"*	*2'-1"*		
	7:30	*6'*	*15'*	*27*	*800*					*2' 11"*	*3'-10¼"*	*2'-1"*		
	8:30	*6'*	*15'*	*27*	*800*					*2' 11½"*	*3'-9½"*	*2'-1½"*		
	9:30	*6'*	*15'*	*27*	*800*					*2' 11¾"*	*3'-9¾"*	*2'-1½"*		
	10:30	*6'*	*15'*	*27*	*800*					*2' 11¾"*	*3'-9½"*	*2'-1¾"*		

READINGS—Measurements From Top of Casing YES

WELL		LARGE WELL No. 1		DIAM. 8"		LARGE WELL No.		DIAM.		Obs. Well No. 1 W2	Obs. Well No. 2 W4	Obs. Well No. 3 W2A	Obs. Well No.	Obs. Well No.
Date, Weather and Samples Taken	Time	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.					
		Static	Static			Static	Static							
12/22/53 P.M.	10:45	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
Pumping Station Stopped at 11:00 P.M.	11:15	6'-9"	14'-3"	27	800					1'-9½"	+½"	1'-9½"		
Midnight	12:00	7'	14'	27	800					1'-6"	+3½"	1'-6½"		
12/23/53 A.M.	1:00	8'	13'	27	800					1'-4½"	+2½"	1'-5½"		
	2:00	8'	13'	27	800					1'-3½"	+2½"	1'-9"		
Adding 1½ ft of pipe to Obs. (W4)	3:00	8'	13'	27	800					1'-3½"	+2½"	1'-5"		
as it was starting to	4:00	8'	13'	27	800					1'-3½"	+3"	1'-5"		
flow over previous pipe	5:00	8'	13'	27	800					1'-3½"	+3½"	1'-5"		
	6:00	8'	13'	27	800					1'-3½"	+3½"	1'-5"		
Pumping Stations Started at 6:30 A.M.	6:15	8'	13'	27	800					1'-3½"	+3½"	1'-5"		
	6:45	7'	14'	27	800					2'-3"	-3'	1'-8"		
	7:30	6'	15'	27	800					2'-9"	3'-7½"	2'		
	8:00	6'	15'	27	800					2'-11½"	3'-11½"	2'-1"		
	9:00	6'	15'	27	800					2'-11"	3'-9"	2'-1½"		
	10:00	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
	11:00	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
Noon	12:00	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
P.M.	1:00	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
	2:00	6'	15'	27	800					2'-11½"	3'-9½"	2'-1½"		
	RETURN READINGS													
	1 Min	21'								2'-10"	3'-1"	1'		
	2 Min	21'-9"										1'-2"		
	3 Min	Flowing	Flowing							2'-9"	3'-1"	1'-3"		
	4 P.M.									[illegible]	3'-7"	[illegible]		

EHO-1

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

LOCATION: EASTHAMPTON, MA

WELL NO.: W2

DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 11 INCHES
R = 32 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
22	12	30	0.00	1.917	0.000	800.0000
22	12	45	15.00	2.583	0.667	800.0000
22	13	30	60.00	2.833	0.917	800.0000
22	14	30	120.00	2.833	0.917	800.0000
22	15	30	180.00	2.833	0.917	800.0000
22	16	30	240.00	2.875	0.958	800.0000
22	17	30	300.00	2.917	1.000	800.0000
22	18	30	360.00	2.917	1.000	800.0000
22	19	30	420.00	2.917	1.000	800.0000
22	20	30	480.00	2.979	1.062	800.0000
22	21	30	540.00	2.979	1.062	800.0000
22	22	30	600.00	2.979	1.062	800.0000
22	22	45	615.00	2.979	1.062	800.0000
22	23	15	645.00	1.792	-0.125	800.0000
23	0	0	690.00	1.042	-0.875	800.0000
23	1	0	750.00	1.375	-0.542	800.0000
23	2	0	810.00	1.312	-0.604	800.0000
23	3	0	870.00	1.292	-0.625	800.0000
23	4	0	930.00	1.292	-0.625	800.0000
23	5	0	990.00	1.292	-0.625	800.0000
23	6	0	1050.00	1.292	-0.625	800.0000
23	6	15	1065.00	1.292	-0.625	800.0000
23	6	45	1095.00	2.250	0.333	800.0000
23	7	0	1110.00	2.750	0.833	800.0000
23	8	0	1170.00	2.896	0.979	800.0000
23	9	0	1230.00	2.917	1.000	800.0000
23	10	0	1290.00	2.958	1.042	800.0000
23	11	0	1350.00	2.979	1.062	800.0000
23	12	0	1410.00	2.979	1.062	800.0000
23	13	0	1470.00	2.979	1.062	800.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: EASTHAMPTON, MA

WELL NO.: W2

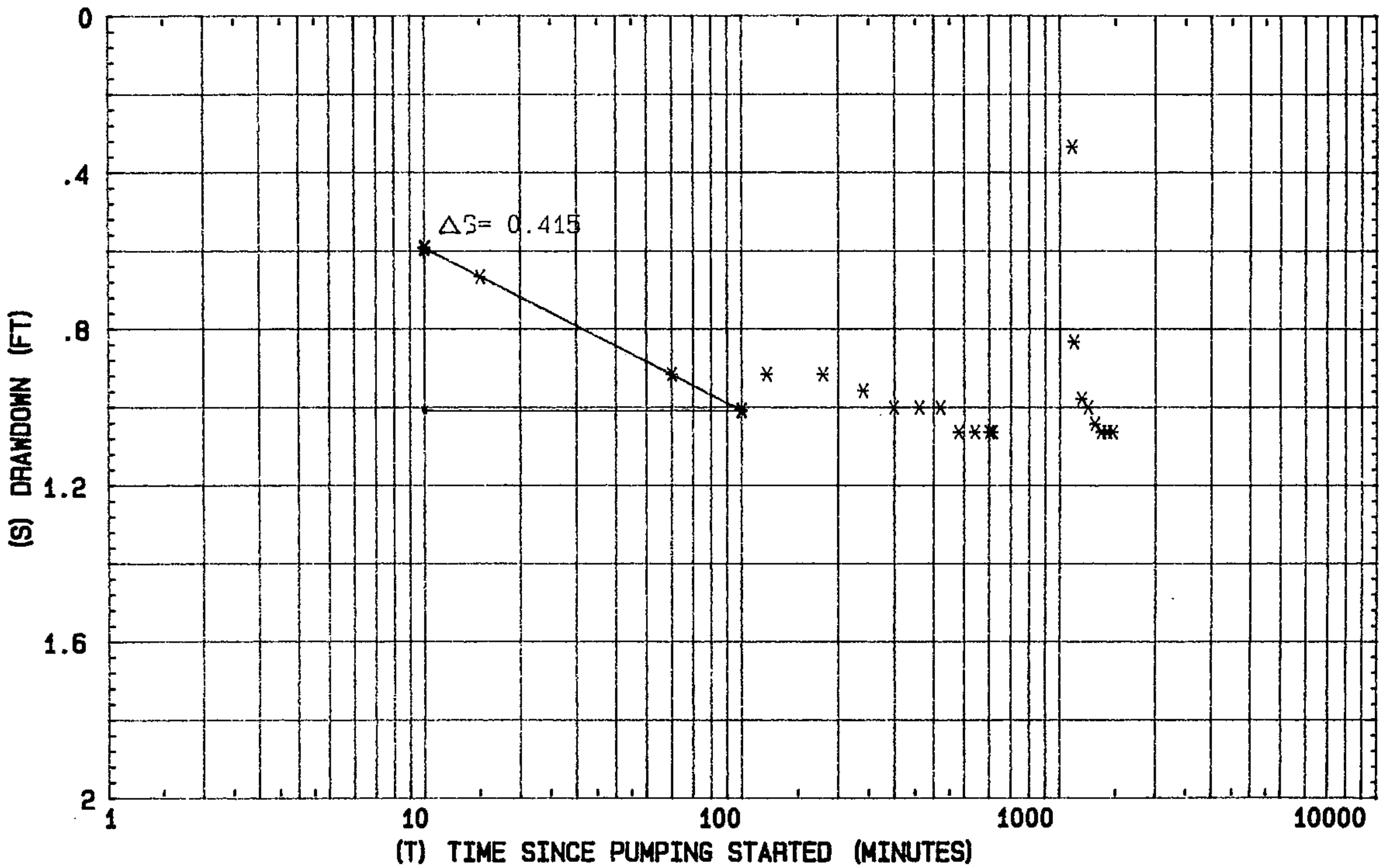
DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 11 INCHES
R = 32 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
23	14	0	1530.00	2.979	1.062	800.0000
						VALUE USED 800.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	W2	ΔS=	0.415 FT
FILE:	EHO-1	Q=	800 USGPM	T=	508641 USGPD/FT
LOCATION:	HENDRICK ST. 8" WELL	S.W.L.=	1 FT 11 INCHES	S=	03857

I.E.P. INC.

FIGURE 4

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: EASTHAMPTON, MA

WELL NO.: W2

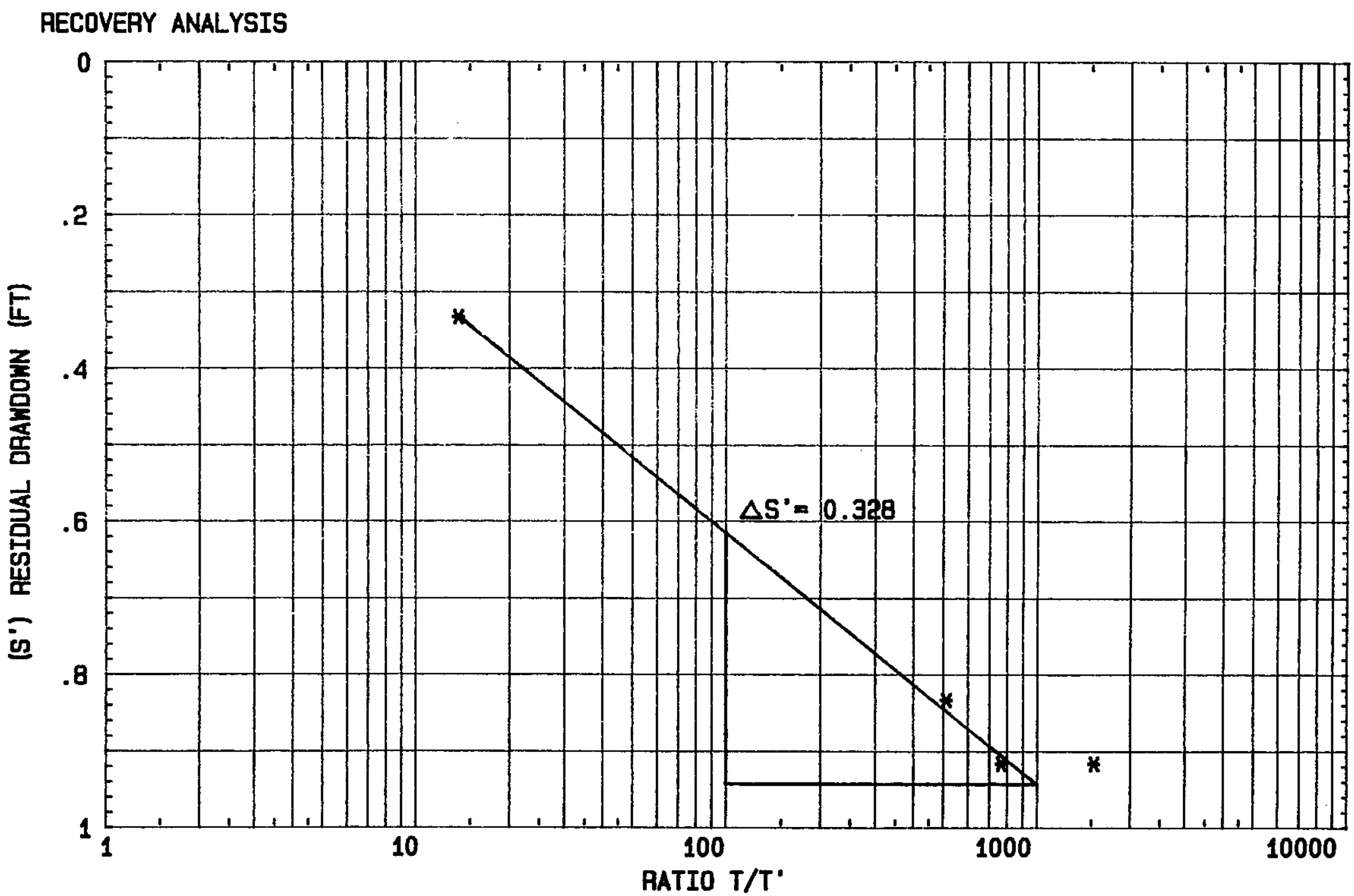
DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 11 INCHES
R = 32 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
23	14	1	1531.00	1.00	1531.00	2.833	0.917
23	14	2	1532.00	2.00	766.00	2.833	0.917
23	14	3	1533.00	3.00	511.00	2.750	0.833
23	16	0	1650.00	120.00	13.75	2.250	0.333

I.E.P. INC.

HENDRICK ST. 8" WELL



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	W2	ΔS'= 0.328 FT
FILE:	EHO-1	Q=	800 USGPM	T= 644073 USGPD/FT
LOCATION:	HENDRICK ST. 8" WELL	S.W.L.=	1 FT 11 INCHES	

I.E.P. INC.

FIGURE 6

PUMPING TEST – DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL
WELL NO.: W2A

DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 7 INCHES
R = 235 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
22	12	30	0.00	1.583	0.000	800.0000
22	12	45	15.00	1.792	0.208	800.0000
22	13	30	60.00	1.958	0.375	800.0000
22	14	30	120.00	2.000	0.417	800.0000
22	15	30	180.00	2.042	0.458	800.0000
22	16	30	240.00	2.062	0.479	800.0000
22	17	30	300.00	2.083	0.500	800.0000
22	18	30	360.00	2.083	0.500	800.0000
22	19	30	420.00	2.083	0.500	800.0000
22	20	30	480.00	2.125	0.542	800.0000
22	21	30	540.00	2.125	0.542	800.0000
22	22	30	600.00	2.125	0.542	800.0000
22	22	45	615.00	2.125	0.542	800.0000
22	23	15	645.00	1.771	0.187	800.0000
23	0	0	690.00	1.542	-0.042	800.0000
23	1	0	750.00	1.458	-0.125	800.0000
23	2	0	810.00	1.417	-0.167	800.0000
23	3	0	870.00	1.417	-0.167	800.0000
23	4	0	930.00	1.417	-0.167	800.0000
23	5	0	990.00	1.417	-0.167	800.0000
23	6	0	1050.00	1.417	-0.167	800.0000
23	6	15	1065.00	1.417	-0.167	800.0000
23	6	45	1095.00	1.667	0.083	800.0000
23	7	0	1110.00	2.000	0.417	800.0000
23	8	0	1170.00	2.083	0.500	800.0000
23	9	0	1230.00	2.104	0.521	800.0000
23	10	0	1290.00	2.125	0.542	800.0000
23	11	0	1350.00	2.146	0.563	800.0000
23	12	0	1410.00	2.146	0.563	800.0000
23	13	0	1470.00	2.146	0.563	800.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL
WELL NO.: W2A

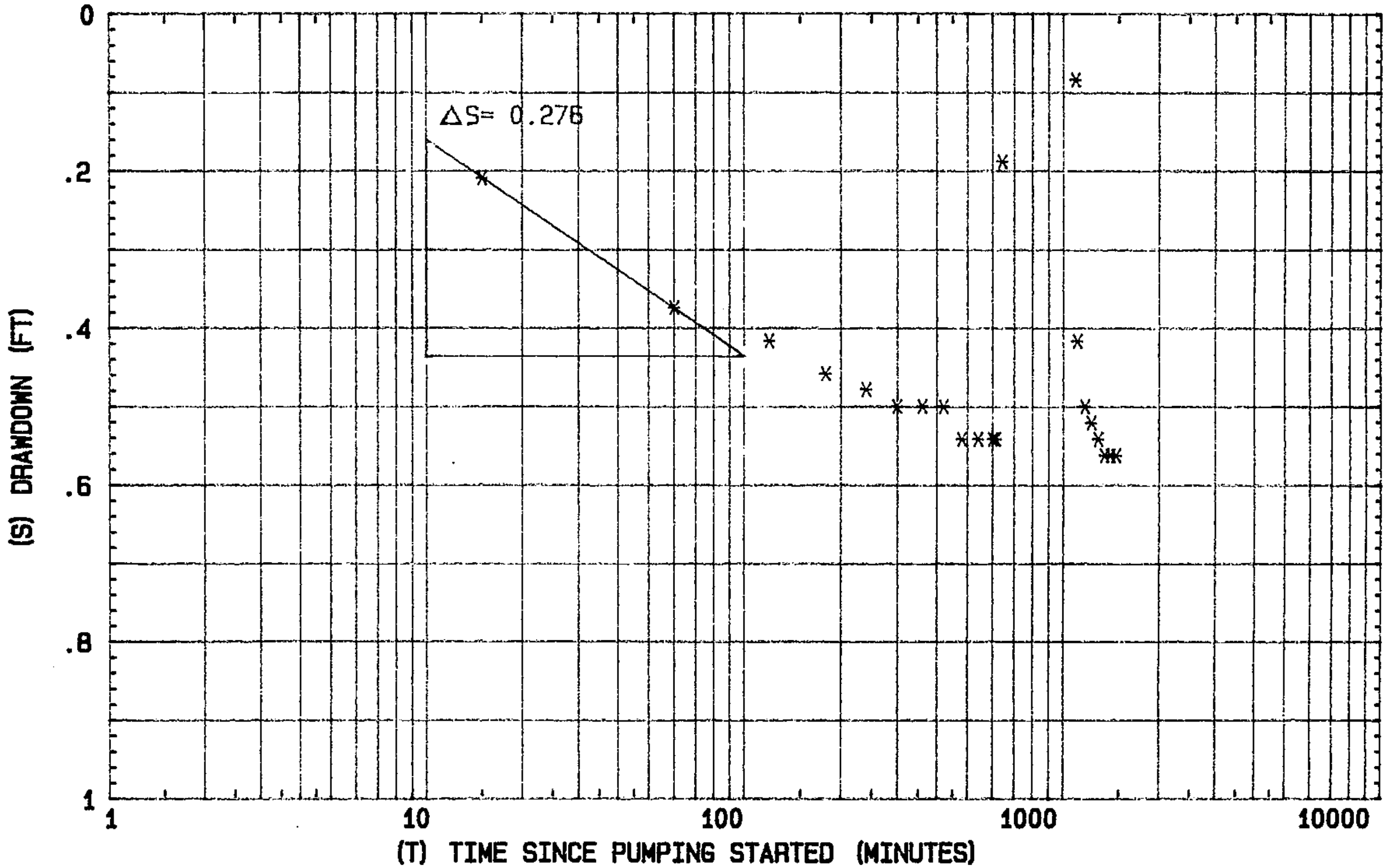
DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 7 INCHES
R = 235 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
23	14	0	1530.00	2.146	0.563	800.0000
						VALUE USED 800.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	W2A	ΔS=	0.276 FT
FILE:	EHO-1	Q=	800 USGPM	T=	765995 USGPD/FT
LOCATION:	HENDRICK ST. 8" WELL	S.W.L.=	1 FT 7 INCHES	S=	.00758

I.E.P. INC.

FIGURE 7

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL

WELL NO.: W2A

DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 1 FT 7 INCHES
R = 235 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
23	14	1	1531.00	1.00	1531.00	1.000	-0.583
23	14	2	1532.00	2.00	766.00	1.167	-0.417
23	14	3	1533.00	3.00	511.00	1.250	-0.333
23	16	0	1650.00	120.00	13.75	1.250	-0.333

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL

WELL NO.: W4

DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 2 FT 4 INCHES
R = 79.5 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
22	12	30	0.00	2.333	0.000	800.0000
22	12	45	15.00	3.167	0.833	800.0000
22	13	30	60.00	3.646	1.312	800.0000
22	14	30	120.00	3.646	1.312	800.0000
22	15	30	180.00	3.687	1.354	800.0000
22	16	30	240.00	3.729	1.396	800.0000
22	17	30	300.00	3.771	1.437	800.0000
22	18	30	360.00	3.771	1.437	800.0000
22	19	30	420.00	3.771	1.437	800.0000
22	20	30	480.00	3.792	1.458	800.0000
22	21	30	540.00	3.792	1.458	800.0000
22	22	30	600.00	3.792	1.458	800.0000
22	22	45	615.00	3.792	1.458	800.0000
22	23	15	645.00	2.250	-0.083	800.0000
23	0	0	690.00	2.125	-0.208	800.0000
23	1	0	750.00	2.125	-0.208	800.0000
23	2	0	810.00	2.104	-0.229	800.0000
23	3	0	870.00	2.104	-0.229	800.0000
23	4	0	930.00	2.083	-0.250	800.0000
23	5	0	990.00	2.021	-0.312	800.0000
23	6	0	1050.00	2.021	-0.312	800.0000
23	6	15	1065.00	2.021	-0.312	800.0000
23	6	45	1095.00	3.000	0.667	800.0000
23	7	0	1110.00	3.625	1.292	800.0000
23	8	0	1170.00	3.708	1.375	800.0000
23	9	0	1230.00	3.750	1.417	800.0000
23	10	0	1290.00	3.792	1.458	800.0000
23	11	0	1350.00	3.812	1.479	800.0000
23	12	0	1410.00	3.812	1.479	800.0000
23	13	0	1470.00	3.812	1.479	800.0000

I.E.P. INC.

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL

WELL NO.: W4

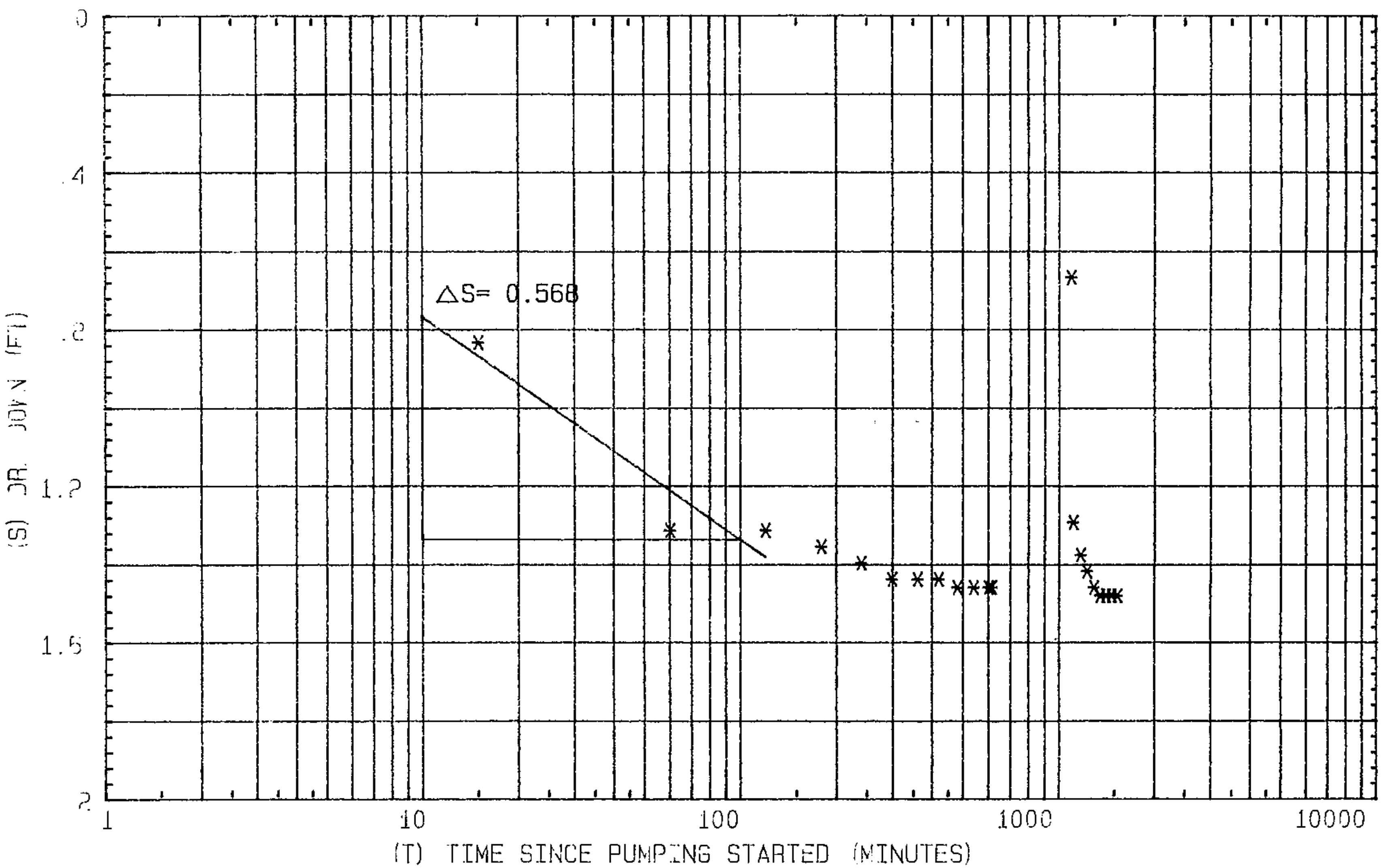
DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 2 FT 4 INCHES
R = 79.5 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
23	14	0	1530.00	3.812	1.479	800.0000
						VALUE USED
						800.0000

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT.	EASTHAMPTON AQUIFER	WELL NO.	W4	ΔS=	0.568 FT
FILE:	FHO-1	Q=	800 USGPM	T=	371529 USGPD/FT
LOCATION:	HENDRICK ST. 8" WELL	S.W.L.=	2 FT 4 INCHES	S=	.00548

I.E.P. INC.   FIG.

Line drawn - least squares fit.

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 8" WELL

WELL NO.: W4

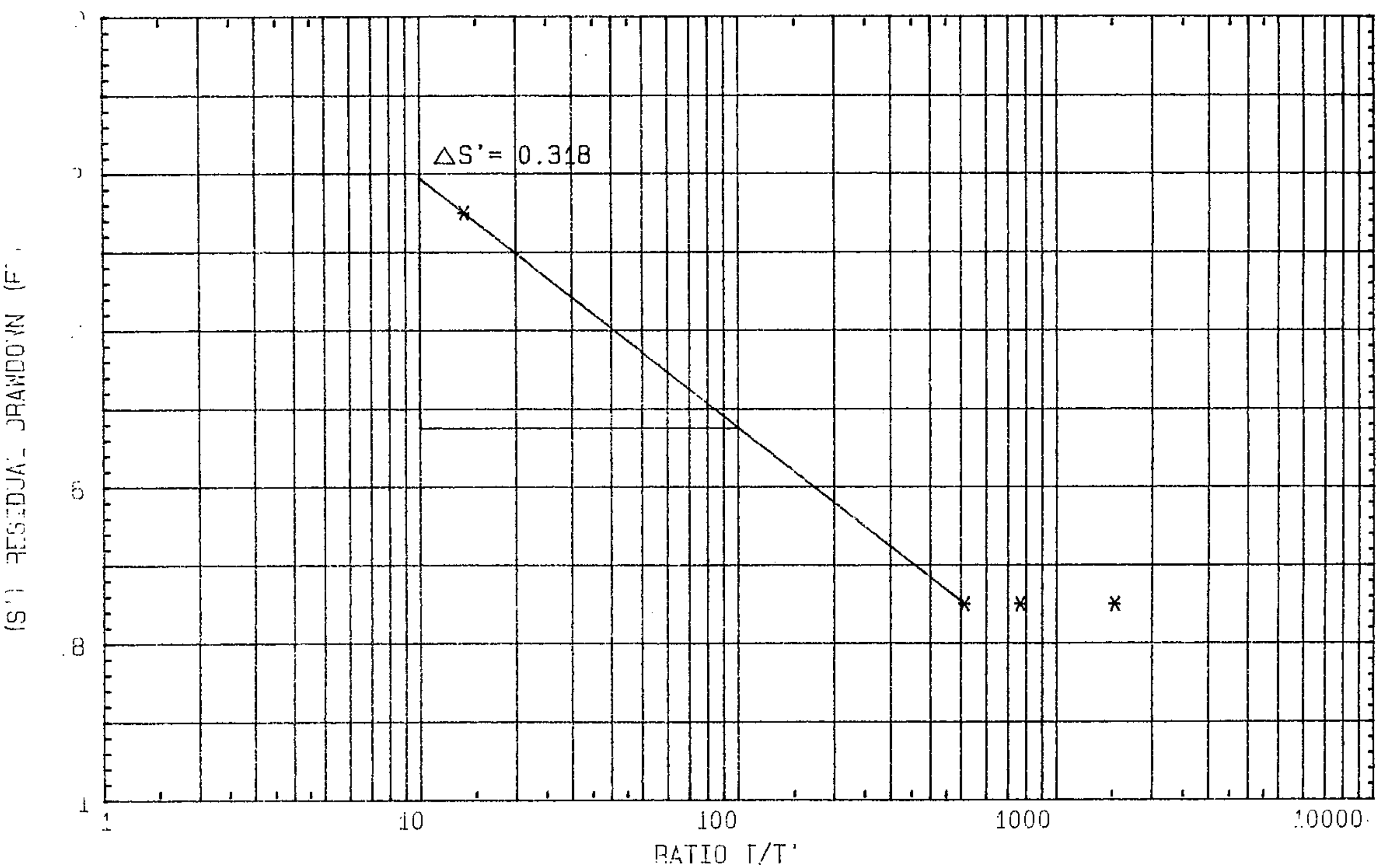
DATUM POINT: TOP OF CASING
PUMPING RATE: 800 USGPM
AQUIFER THICKNESS: 101 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 2 FT 4 INCHES
R = 79.5 FT FROM 8" WELL #1
SCREEN INTERVAL: 86.5 TO 101.5 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
23	14	1	1531.00	1.00	1531.00	3.083	0.750
23	14	2	1532.00	2.00	766.00	3.083	0.750
23	14	3	1533.00	3.00	511.00	3.083	0.750
23	16	0	1650.00	120.00	13.75	2.583	0.250

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.	W1	ΔS' = 0.318 FT
FILE:	EHO-1	Q=	800 USGPM	T= 663191 USGPD/FT
LOCATION:	HENDRICK ST. 8" WELL	S.W.L.=	2 FT 4 INCHES	

I.E.P. INC.

FIG.

PUMPING TEST COEFFICIENTS

PROJECT: EASTHAMPTON AQUIFER STUDY FILE NO.: EHO-1
LOCATION: HENDRICK ST. 8" WELL DURATION (min): 615

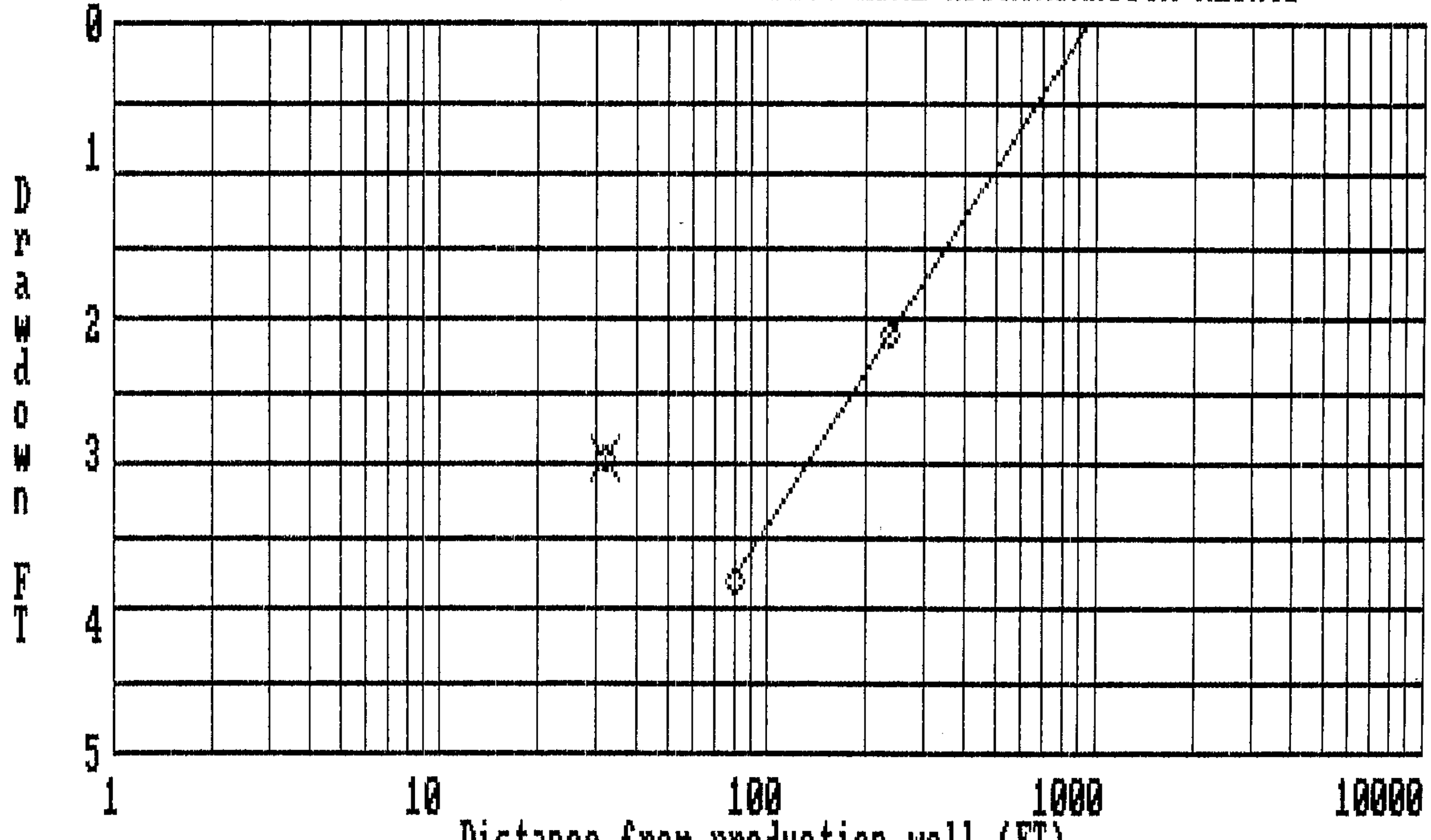
DISTANCE / DRAWDOWN GRAPH:

LINE SEGMENT # 1 :

delta s = 3.541529 FT T = 119270.5 USGPD/FT , S = 1.745761E-02

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:EASTHAMPTON AQUIFER FILE:EHO-1 LOCATION:HENDRICK ST. 8" WELL

delta s = 3.541529 FT T = 119270.5 USGPD/FT S = 1.745761E-02

PUMPING TEST COEFFICIENTS

PROJECT: EASTHAMPTON AQUIFER STUDY FILE NO.: EHO-1
LOCATION: HENDRICK ST. 8" WELL DURATION (min): 615

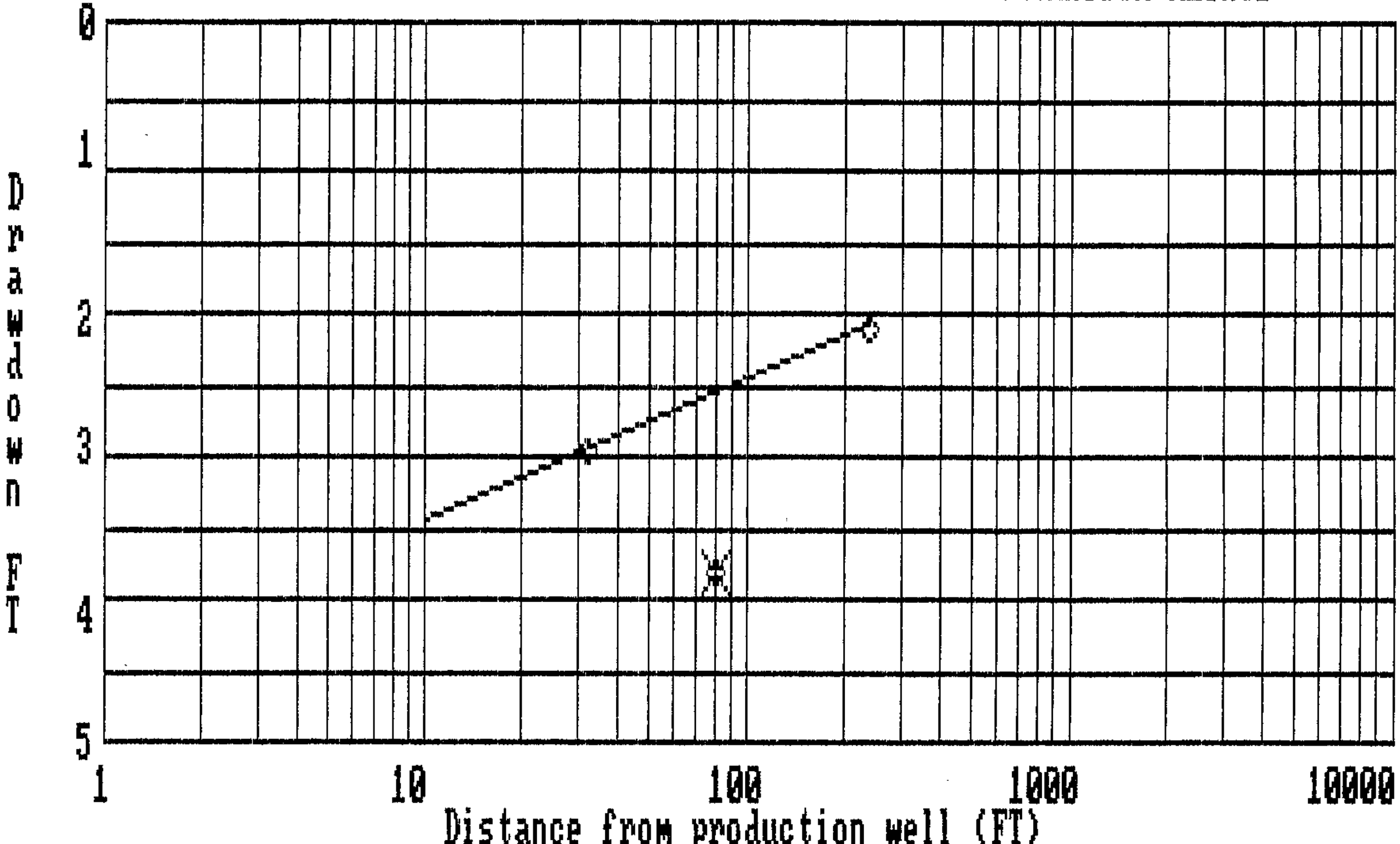
DISTANCE / DRAWDOWN GRAPH:

LINE SEGMENT # 1 :

delta s = .9862368 FT   T = 428294.7 USGPD/FT   S = 4.874519E-05

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:EASTHAMPTON AQUIFER FILE:EHO-1 LOCATION:HENDRICK ST. 8" WELL

delta s = .9862368 FT T = 428294.7 USGPD/FT S = 4.874519E-05

Appendix C

Hendrick Street 10" Well (Pines) Data

iEP inc.

Town of Easthampton

Hendrick Street 10" Well (Pines)

boring log, pump test log and pumping test analysis plots

R. E. CHAPMAN CO.

OAKDALE, MASS.

JUN 6 1957

Name of Driller F.A. Sullivan Names of Helpers F.G. Sullivan - Hollick

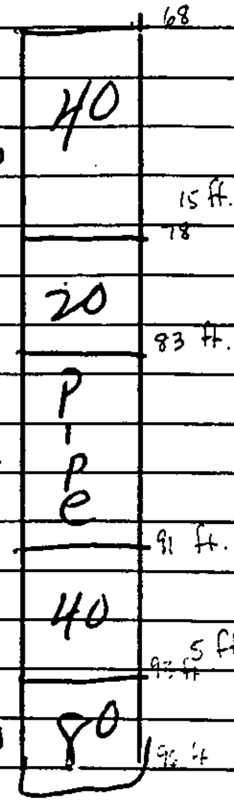
Job: Name & Location Easthampton, MASS - old well Field at Pumping Station

Date Started 5-6-57 Date Finished 5-25-57 | Date Started Date Finished

Hole No. 1. 10" Gravel Well | Hole No.

Depth From	Depth To	Classification of Material	
0	5	FILL	Feet of Screen Exposed 20' EVERDUR
5	25	SILTY-SAND AND CLAY	Size of Screen & Slot 10" 40 20 40 80
25	50	VERY FINE SAND	Screen Left in 20'
50	60	FINE DIRTY SAND	
60	70	FINE SAND	Screen Pulled Out
70	75	COARSE SAND	
75	89	VERY FINE SILTY SAND	Pipe Left in 69'6" of 10"
89	94	COARSE GRAVEL	
94	96	FINE DIRTY SAND	Pipe Pulled Out
96	98	HARDPAN	
	98	Ledge	Remarks: Temp 48°

Depth From	Depth To	Classification of Material	Feet of Screen Exposed
		10" SCREEN	Size of Screen & Slot
		10' of #40	Screen Left in
		5' of #20	Screen Pulled Out
		8' of Pipe	Pipe Left in
		2' of #40	Pipe Pulled Out
		3' of #80	Remarks



Pump Test on Hole No. | Pump Test on Hole No.

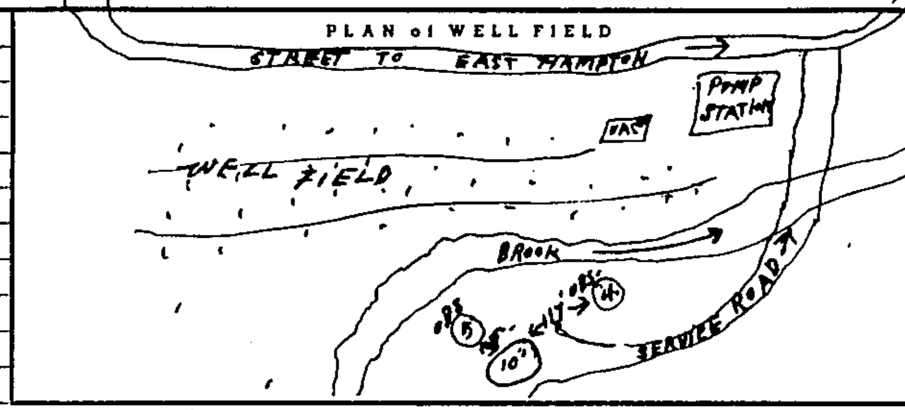
Date	Time	Dr. Down	G. P. M.	Static and Other Info.
5/24/57	9 AM			STATIC 7'6" FROM TOP of 10" Pipe Above Gd. 1'
				Bottom of Screen Set 96' Below Ground
				69' FROM top of 10" Pipe TO TOP of SCREEN
				D.D. 18'6" pumping 225 GPM FROM TOP of Pip-

R. E. CHAPMAN CO. - LOG OF PUMP TEST

JUN 6 1957

Customer: TOWN OF EAST HAMPTON MASS.
Location: SOUTH OF OLD WELL FIELD
Town EAST HAMPTON State MASS Street
Owner of Property TOWN
Date 5-31-57
Operator F. A. Sullivan F. E. - J. K. Sullivan

Pump Data
Size & Type of Pump 30'
Size & Length—Discharge Line 8" TURBIN SET BOTTOM AT 65'
Orifice Pipe 8" in.
Size Orifice 6" in. WATER TENP 48°
Description of Well being pumped 10" GRAVEL WELL
Length Dunker in. (Do Not) Add To Readings END OF TAPE
Length of Alt. Line from center of gauge 65 Ft. in.



READINGS—Measurements From Top of Casing YES.

WELL		LARGE WELL No. 1.		DIAM. 10"		LARGE WELL No.		DIAM.		Obs. Well No. 5	Obs. Well No. 4	Obs. Well No.	Obs. Well No.	Obs. Well No.
Elevation—Top of Pipe Above Ground		Alt. Gauge Reading 1.	Corresponding Water Level	Head-in Inches	G. P. M.	Alt. Gauge Reading	Corresponding Water Level	Head-in Inches	G. P. M.	1'	1'	VAC. AT PUMP STATION		
Date, Weather and Samples Taken	Time	Static 7'	Static	00	00	Static	Static							
5-30-57	8-00 P.M.	MEASURMENT TAKEN AFTER PUMP STATION STOPED FOR 11 HRS.								5'-2"	6'-5"			
5-31-57	6-40 A.M.		BEFORE STARTING STARTING PUMP TEST							7'-1"	8'-7"	3½"		
			NOW PUMP STATION IS RUNING.							7'-1"	8'-7"			
PUMP TEST STARTED	6-45 A.M.	39'		22"	725					13'-8"	10'-3"			
	7-00 AM	40'		22"	725					13'-11"	10'-5"	4½"		
WATER SAMPEL TAKEN	7-15 AM	40'		22"	725					14'-2"	10'-7½"	4¾		
	7-30 AM.	40'		22"	725					14'-2½"	10'-8½"	4¾		
	8-00 AM.	40'		22"	725					14'-3"	10'-9¾	5"		
	8-30 AM	40'		22"	725	PUMP STATION CAPACITY				14'-3¼	10'-9"			
	9-00 A.M.	40'		22"	725	1				14'-3½"	10'-9½	5"		
	9-30 AM	40'		22"	725					14'-3¾"	10'-9½	5"		
	10-00 AM	40		22"	725					14'-4"	10'-10"			

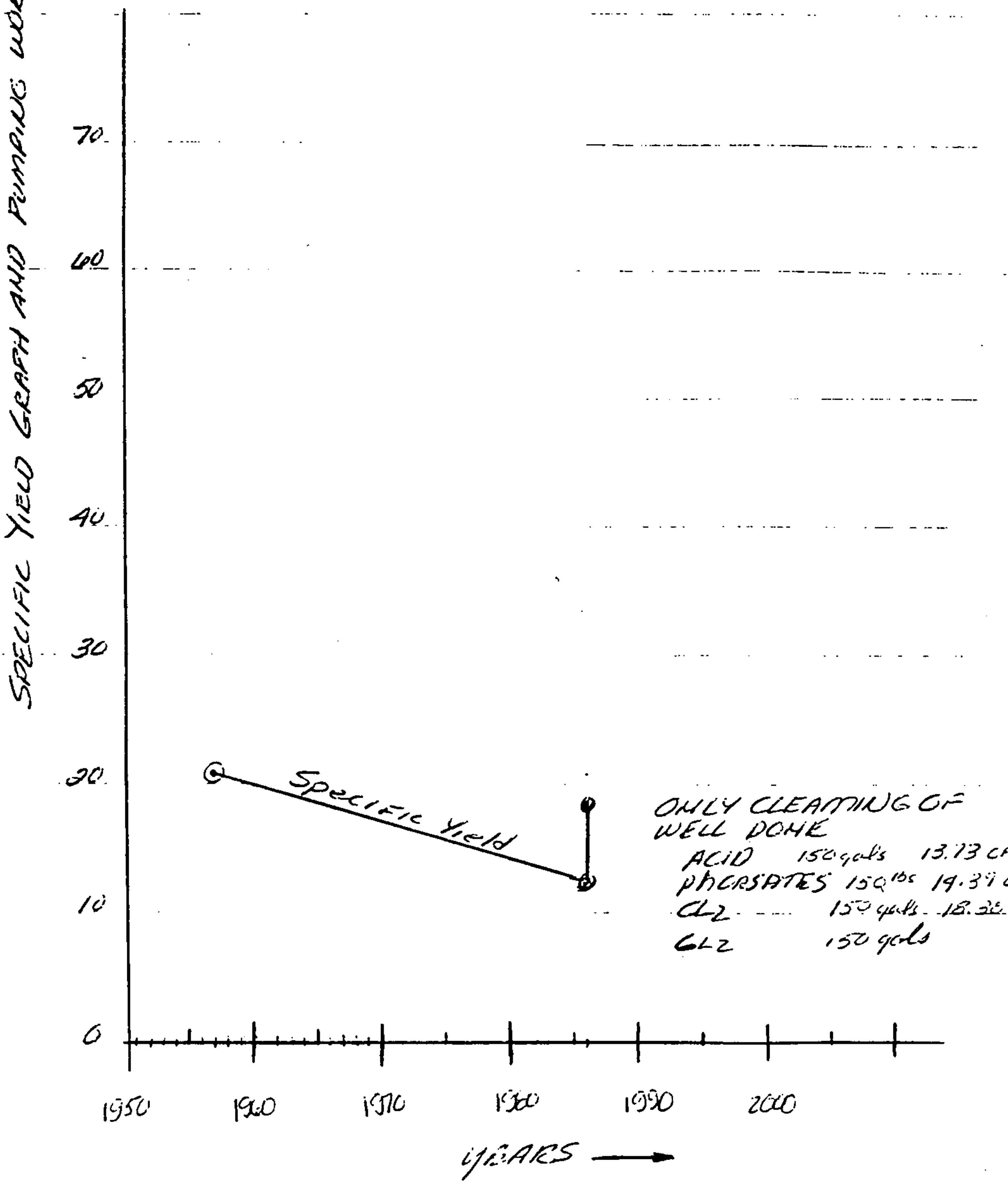
PAGE No. 2. EAST HAMPTON

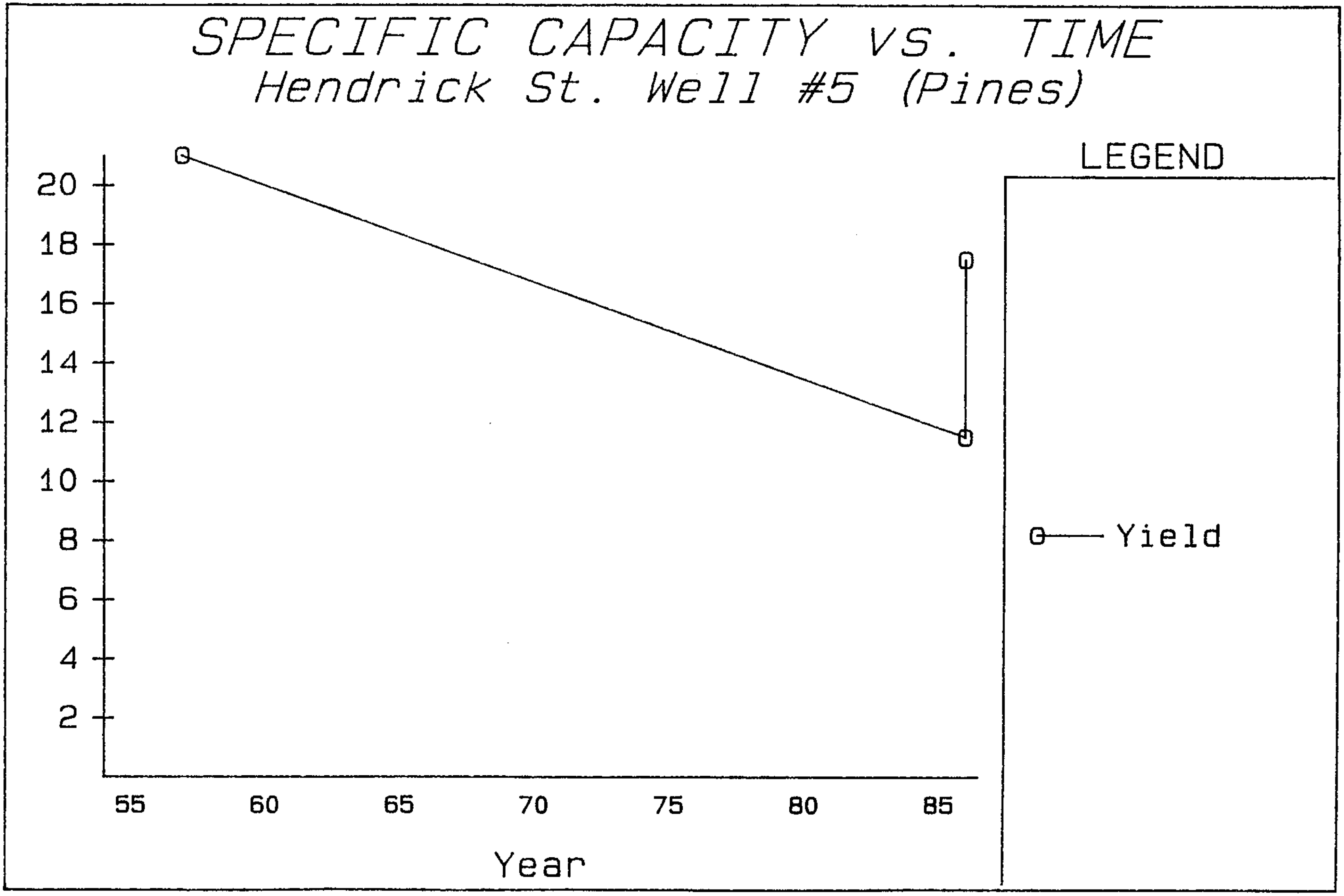
READINGS—Measurements From Top of Casing YES.

JUN 6 1957

WELL		LARGE WELL No. 1.		DIAM 10"		LARGE WELL No.		DIAM.		Obs. Well No. 5	Obs. Well No. 4	Obs. Well No.	Obs. Well No.	Obs. Well No.
Date Weather and Samples Taken	Time	Alt. Gauge Reading	Corresponding Water Level	Head-In Inches	G.P.M	Alt. Gauge Reading	Corresponding Water Level	Head-In Inches	G.P.M.			VAC. AT		
		Static 7'	Static	0 0	0 0	Static	Static			7'-1"	8'-7	PUMP STATION		
5-31-57	10.30 AM	40'		22"	725					14'-4 1/4"	10'-10 1/4	5"		
	11-00 AM	40'		22"	725					14'-4 1/4	10'-10 1/4"	+2 1/4"		
	11-30 AM	40'		22"	725					14'-4 1/4"	10'-10 1/4"	4 1/2"		
	12 NOON	40'		22"	725					14'-4 1/4	10'-10 1/2	4 1/2"		
	12-45 P.M	40		22"	725					14'-4 1/4"	10'-10 1/2"			
	1-00 P.M.	40		22"	725					14'-4 1/4	10'-10 1/2"			
	1-00 P.M.	PUMP	TEST	STOPED		RETURN	READINGS					—		
	1-01 PM	8'		0	0					8'-9"	9-8"	—		
	1-05 PM	7'-6"		0	0					7'-10 1/2"	9'-2 1/2	—		
	1-10 P.M.	—		0	0					7'-8"	9'			
	1-30 P.M	—		0	0					7'-6"	8'-11 1/2"			
	2-00 PM	—		0	0					7'-6"	8'-11"			

#5 Pine
Kendrick St.




SPECIFIC CAPACITY vs. TIME
Hendrick St. Well #5 (Pines)
LEGEND
Yield
20
18
16
14
12
10
8
6
4
2
55
60
65
70
75
80
85
Year

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 10" WELL

WELL NO.: OB4

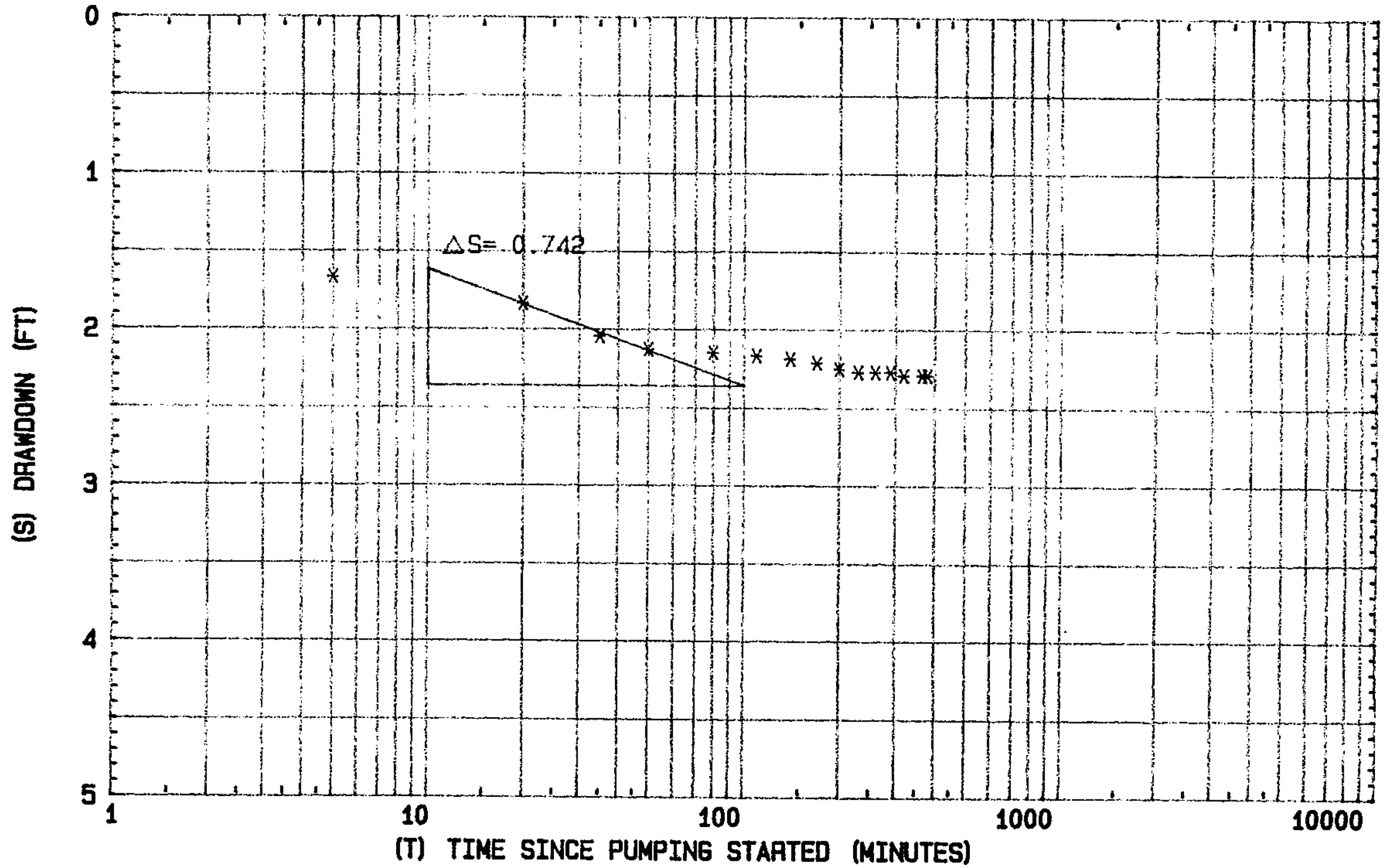
DATUM POINT: TOP OF CASING
PUMPING RATE: 725 USGPM
AQUIFER THICKNESS: 88.5 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: H104
R = 117 FT FROM 10" GRAVEL WELL
SCREEN INTERVAL: 68 TO 96 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
31	6	45	0.00	8.583	0.000	725.0000
31	6	50	5.00	10.250	1.667	725.0000
31	7	5	20.00	10.417	1.834	725.0000
31	7	20	35.00	10.625	2.042	725.0000
31	7	35	50.00	10.708	2.125	725.0000
31	8	5	80.00	10.729	2.146	725.0000
31	8	35	110.00	10.750	2.167	725.0000
31	9	5	140.00	10.771	2.188	725.0000
31	9	35	170.00	10.792	2.209	725.0000
31	10	5	200.00	10.833	2.250	725.0000
31	10	35	230.00	10.854	2.271	725.0000
31	11	5	260.00	10.854	2.271	725.0000
31	11	35	290.00	10.854	2.271	725.0000
31	12	5	320.00	10.875	2.292	725.0000
31	12	50	365.00	10.875	2.292	725.0000
31	13	5	380.00	10.875	2.292	725.0000
						VALUE USED
						725.0000

I.E.P. INC.

PUMPING TEST ANALYSIS STRAIGHT LINE APPROXIMATION METHOD



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	OB4	ΔS=	0.742 FT
FILE:	EHO-1	Q=	725 USGPM	T=	257840 USGPD/FT
LOCATION:	HENDRICK ST. 10" WEL	S.W.L.=	H104	S=	.00026

I. E. P. INC.

FIGURE 10

PUMPING TEST - RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST 10" WELL

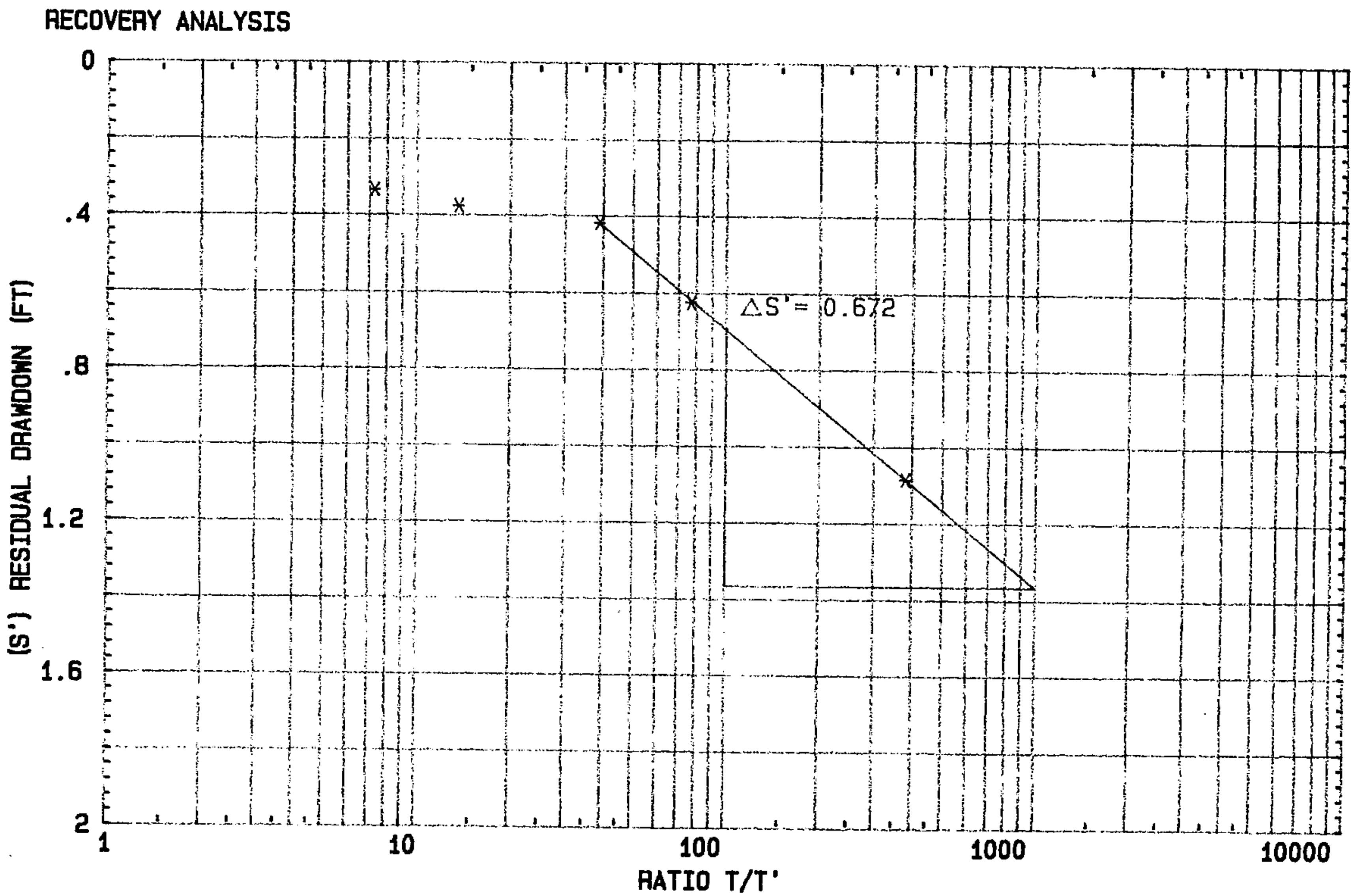
WELL NO.: OB4

DATUM POINT: TOP OF CASING
PUMPING RATE: 750 USGPM
AQUIFER THICKNESS: 88.5 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 8 FT 7 INCHES
R = 117 FT FROM 10" GRAVEL WELL
SCREEN INTERVAL: 68 TO 96 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
31	13	1	381.00	1.00	381.00	9.667	1.083
31	13	5	385.00	5.00	77.00	9.208	0.625
31	13	10	390.00	10.00	39.00	9.000	0.417
31	13	30	410.00	30.00	13.67	8.958	0.375
31	14	0	440.00	60.00	7.33	8.917	0.333

I.E.P. INC.



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	OB4	ΔS' =	0.672 FT
FILE:	EHO-1	Q=	725 USGPM	T=	285019 USGPD/FT
LOCATION:	HENDRICK ST. 10" WEL	S.W.L.=	H104		

I.E.P. INC.

FIGURE 12

PUMPING TEST - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY

FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 10" WELL

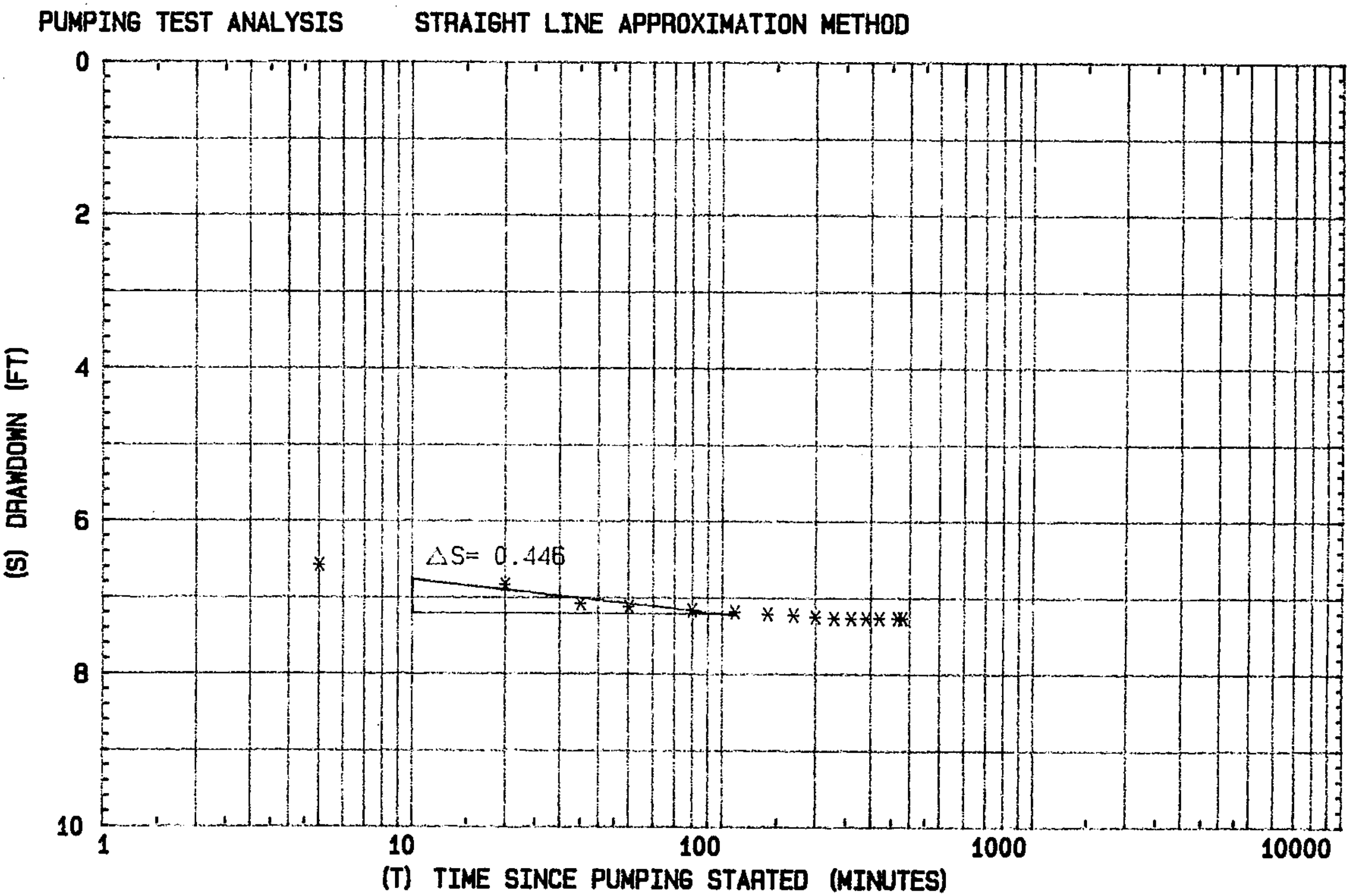
WELL NO.: OB5

DATUM POINT: TOP OF CASING
PUMPING RATE: 725 USGPM
AQUIFER THICKNESS: 88.5 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 7 FT 1 INCH
R = 5 FT FROM 10" GRAVEL WELL
SCREEN INTERVAL: 68 TO 96 FT

TIME			ELAPSED TIME	WATER LEVEL	DRAWDOWN	(Q)
DY	HR	MN	t (MIN)	(ft)	s (ft)	(USGPM)
31	6	45	0.00	7.083	0.000	725.0000
31	6	50	5.00	13.667	6.584	725.0000
31	7	5	20.00	13.917	6.834	725.0000
31	7	20	35.00	14.167	7.084	725.0000
31	7	35	50.00	14.208	7.125	725.0000
31	8	5	80.00	14.250	7.167	725.0000
31	8	35	110.00	14.271	7.188	725.0000
31	9	5	140.00	14.292	7.209	725.0000
31	9	35	170.00	14.312	7.229	725.0000
31	10	5	200.00	14.333	7.250	725.0000
31	10	35	230.00	14.354	7.271	725.0000
31	11	5	260.00	14.354	7.271	725.0000
31	11	35	290.00	14.354	7.271	725.0000
31	12	5	320.00	14.354	7.271	725.0000
31	12	50	365.00	14.354	7.271	725.0000
31	13	5	380.00	14.354	7.271	725.0000
						VALUE USED
						725.0000

I.E.P. INC.



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	OB5	ΔS=	0.446 FT
FILE:	EHO-1	Q=	725 USGPM	T=	429286 USGPD/FT
LOCATION:	HENDRICK ST 10" WELL	S.W.L.=	7 FT 1 INCH	S=	.00000

I.E.P. INC.

FIGURE 13

PUMPING TEST – RECOVERY DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.:

EHO-1

LOCATION: HENDRICK ST. 10" WELL
WELL NO.: OB5

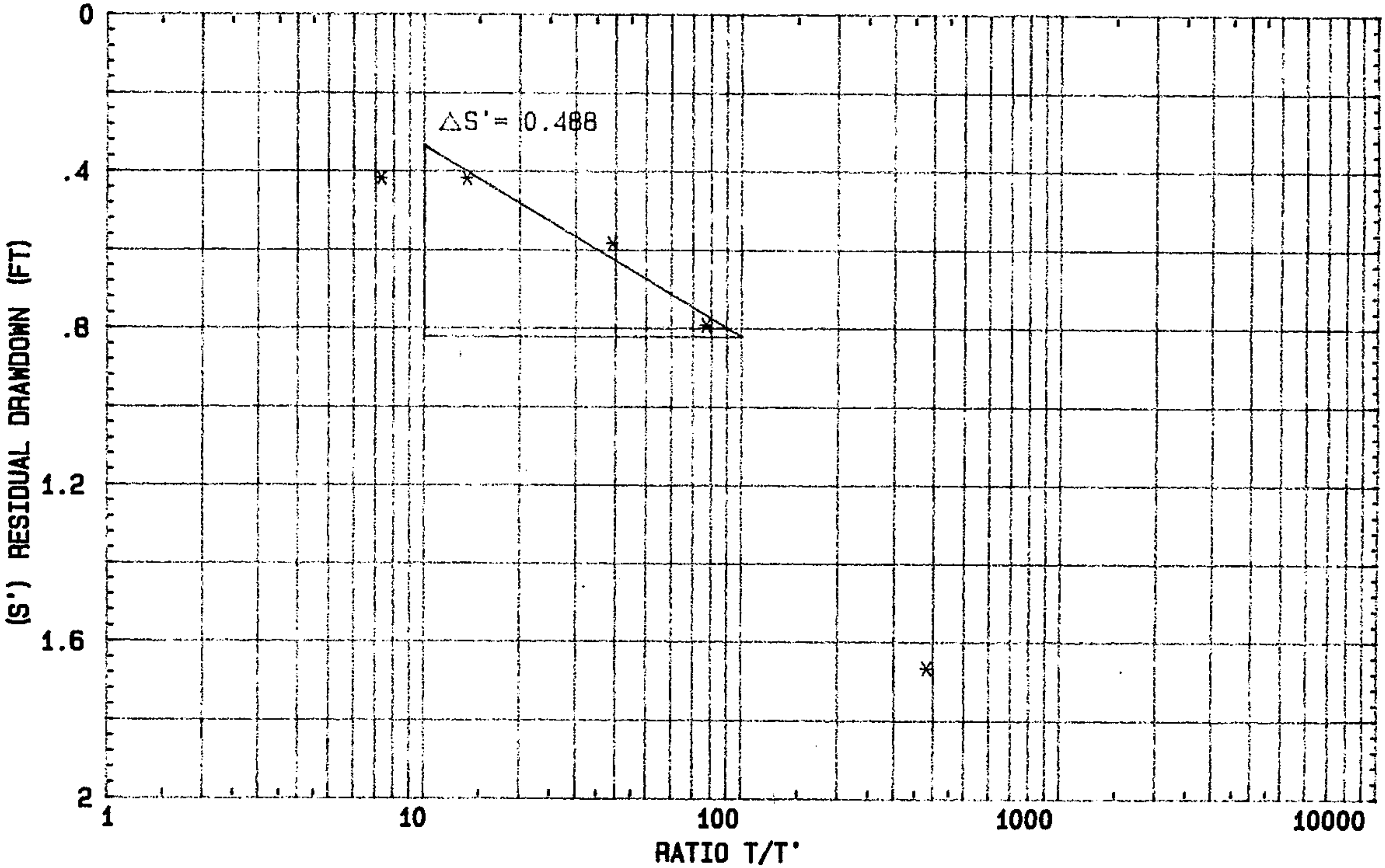
DATUM POINT: TOP OF CASING
PUMPING RATE: 725 USGPM
AQUIFER THICKNESS: 88.5 FT
CONDITIONS: CONFINED

ELEV. OF DATUM POINT:
STATIC WATER LEVEL: 7 FT 1 INCH
R = 5 FT FROM 10" GRAVEL WELL
SCREEN INTERVAL: 68 TO 96 FT

TIME			PUMPING STARTED	PUMPING ENDED	RATIO	WATER LEVEL	RESIDUAL DRAWDOWN
DY	HR	MN	t (MIN)	t' (MIN)	t/t'	(ft)	(ft)
31	13	1	381.00	1.00	381.00	8.750	1.667
31	13	5	385.00	5.00	77.00	7.875	0.792
31	13	10	390.00	10.00	39.00	7.667	0.583
31	13	30	410.00	30.00	13.67	7.500	0.417
31	14	0	440.00	60.00	7.33	7.500	0.417

I.E.P. INC.

RECOVERY ANALYSIS



PROJECT:	EASTHAMPTON AQUIFER	WELL NO.:	OB5	ΔS'= 0.488 FT	
FILE:	EHO-1	Q=	725 USGPM	T= 392132 USGPD/FT	
LOCATION:	HENDRICK ST 10" WELL	S.W.L.=	7 FT 1 INCH		

I.E.P. INC.

FIGURE 15

DISTANCE - DRAWDOWN DATA

PROJECT: EASTHAMPTON AQUIFER STUDY
FILE NO.: EHO-1
LOCATION: HENDRICK ST. 10" WELL
START TIME OF TEST: 31/06/40
DURATION:(minutes) 380
Q OF PROD. WELL:(USGPM) 725

WELL NO.	DISTANCE (ft)	DRAWDOWN s (ft)
OB4	117.0000	2.29200
OB5	5.0000	7.27100

I.E.P. INC.

PUMPING TEST COEFFICIENTS

PROJECT: EASTHAMPTON AQUIFER STUDY FILE NO.: EHO-1
LOCATION: HENDRICK ST. 10" WELL DURATION (min): 380

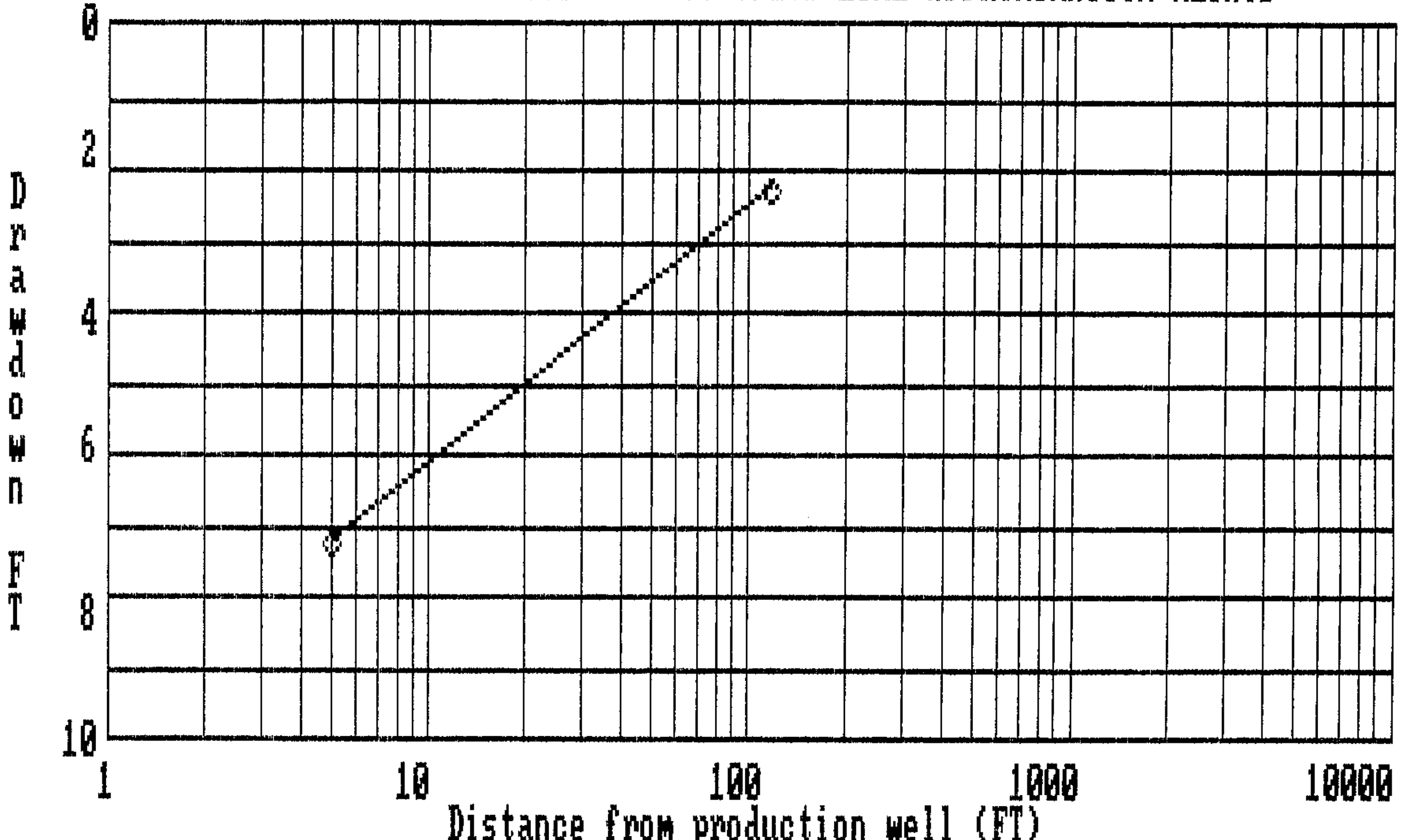
DISTANCE / DRAWDOWN GRAPH:

LINE SEGMENT # 1 :

delta s = 3.636388 FT T = 105269.3 USGPD/FT S = 3.341039E-02

I.E.P. INC.

PUMPING TEST ANALYSIS   STRAIGHT LINE APPROXIMATION METHOD



PROJECT:EASTHAMPTON AQUIFER FILE:EHO-1   LOCATION:HENDRICK ST. 10" WEL

delta s = 3.636388 FT   T = 105269.3 USGPD/FT   S = 3.341039E-02

Appendix D

2-1/2" Test Well Logs by R. E. Chapman, 1986

12/31

R. E. Chapman Co.

ARTESIAN and GRAVEL PACKED WELLS

33 NORTH MAIN ST., OAKDALE, MASS. 01539 AC 617 835-3727 Notify us at Oakdale, Mass. 01539

SITE PLAN FOR TEST HOLES By.........................

DRILLER George Irvine DATE Dec. 29, 1986 MACHINE NO. 20w-1

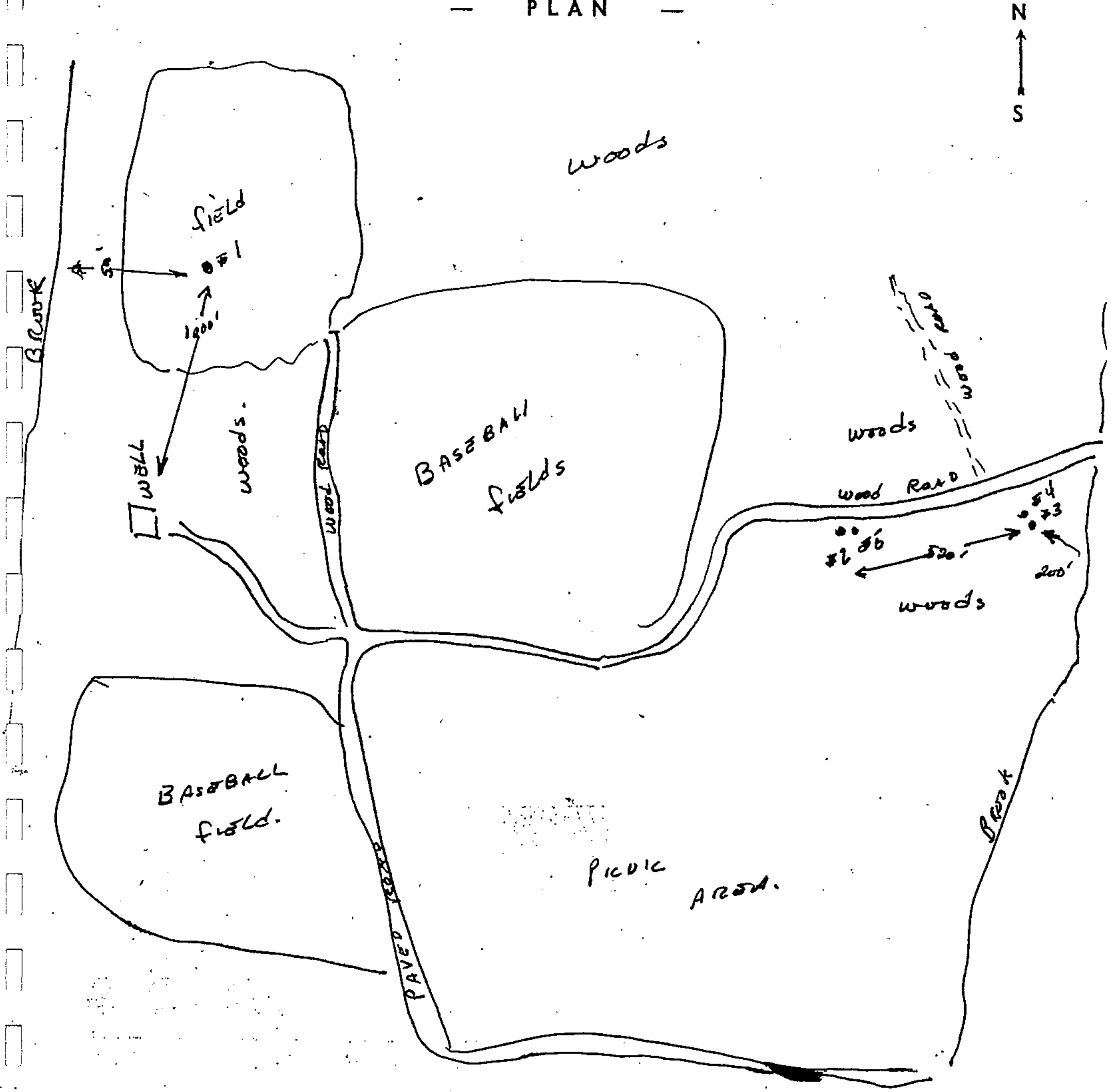
CUSTOMER Town of Easthampton Mass ADDRESS

Hole Nos. on This Site Plan #1 #2 #3 #4 #5

Hole Nos. Driven and Removed

Hole Nos. Driven and Left in Place #1 #2 #3 #4 #5

— PLAN —



R. E. CHAPMAN CO. 12/31
OAKDALE, MASSACHUSETTS
DIAL 835-3727 — 835-3221

Job Location: Town of Easthampton Mass.
Date: Dec. 29 1986 Hole No. 1
Started: Finished:

LOG OF HOLE

Depth From Ground Surface	Depth To	Classification of Materials	No. of 30" blows on spoon	Penetration of Spoon in Inches
		Set deep well cylinder		
		in well #1 to 41'		
		3' below 38' stated		
		at 10 gpm The pump		
		would not run steady		
		with dirty water being		
		pumped - Pumped 1 hour.		

Used ... ft. ... inches of casing
Well rated at ... G.P.M. ... " Vacuum
Water level is ... ft. below ground level
Remarks

Foreman: George Irwine

R. E. CHAPMAN CO. 12/31
OAKDALE, MASSACHUSETTS
DIAL 835-3727 — 835-3221

Job Location: Town of Easthampton Mass.
Date: Dec. 19-21-22-86 Hole No. 5-86
Started: Finished:

2" off #2-86 LOG OF HOLE

Depth From Ground Surface	Depth To	Classification of Materials	No. of 30" blows on spoon	Penetration of Spoon in Inches
0"	13'	Brown sand, gravel		
13'	39'	Soft gray clay		
39'	66'	Firm red & gray clay		
66'	86'	Reddish soft clay, reddish sand to		
		fine angular gravel very tight packed.		
86'	105'	Reddish sand, gravel & clay		
105'	125'	Reddish sand to red sand & fine gravel.		
125'	155'	Reddish sand & fine gravel		
		Stopped at	155'	

Used 147 ft. ... inches of casing
Well rated at 10 G.P.M. — " Vacuum
Water level is 31.47 ft. below ground level
Remarks: set 10' of 30 slot screen from 155' to 146' - Pumped with cylinder pump.
Left in

Foreman: George Irwine

R. E. CHAPMAN CO. 12/31
OAKDALE, MASSACHUSETTS
DIAL 835-3727 — 835-3221

Job Location: Town of Easthampton Mass.
Date: Dec. 17-18-86 Hole No. 4-86
Started: Finished:

2' off 3-86 LOG OF HOLE

Depth From Ground Surface	Depth To	Classification of Materials	No. of 30" blows on spoon	Penetration of Spoon in Inches
0"	6'	Brown sand & gravel.		
6'	28'	Gray soft clay.		
28'	60'	Red & gray soft clay		
60'	78'	Red soft clay		
78'	94'	Red silty sand & clay		
94'	112'	Reddish brown sand & fine gravel		
		Stopped at	112'	

Used 105 ft. ... inches of casing
Well rated at — G.P.M. ... " Vacuum
Water level is 25.51 ft. below ground level
Remarks: set 10' of 30 slot screen from 112'-103'. 3 riser. water 3.5' lower in obs. well than original test well?
Left in

Foreman: George Irwine

R. E. CHAPMAN CO. 13/31

OAKDALE, MASSACHUSETTS

DIAL 835-3727 — 835-3221

Job Location Town of Easthampton Mass

Date Dec 16, 1986 Hole No. 3-86

Started .... Finished ....

520' off #2-86 LOG OF HOLE toward School

Depth From Ground Surface	To	CLASSIFICATION of MATERIALS	No. of 30" blows on spoon	Penetration of Spoon in inches
0"	6'	Brown sand & gravel		
6'	28'	Soft gray clay		
28'	60'	Red & gray soft clay		
60'	78'	Red soft clay some silt		
78'	94'	Red silty sand & clay		
94'	110'	Reddish brown sand & fine gravel		
110'	114'	Reddish brown sand trace of silt,		
		to fine angular gravel		
		Refusal at	114'	

Used 98 ft. .... inches of casing

Well rated at 30 G.P.M. 27 " Vacuum

Water level is 22.20 ft. below ground level

Remarks set 10' of 30 slot screen from 110-100' 3' riser. Pumped 1 hour for State water sample - Left in

Foreman George Irwine

R. E. CHAPMAN CO. 13/31

OAKDALE, MASSACHUSETTS

DIAL 835-3727 — 835-3221

Job Location Town of Easthampton Mass.

Date Dec. 13-15-86 Hole No. 2-86

Started .... Finished ....

300' off ballfield LOG OF HOLE town property

Depth From Ground Surface	To	CLASSIFICATION of MATERIALS	No. of 30" blows on spoon	Penetration of Spoon in inches
0"	13'	Brown sand & gravel		
13'	39'	Soft gray clay		
39'	66'	Firm red & gray clay		
66'	86'	Red firm clay, reddish brown		
		sand to fine angular gravel		
86'	105'	Reddish brown silty sand		
105	155'	Reddish brown fine to coarse		
		sand to fine angular gravel		
155'	166'	Reddish brown silty sand		
		to fine angular gravel		
		Refusal at	166'	

Used 147 ft. .... inches of casing

Well rated at 10 G.P.M. .... " Vacuum

Water level is 31.72 ft. below ground level

Remarks set 10' of 30 slot screen from 155'-146' no riser. Pumped 2 hours with cylinder pump for State water sample. Left in

Foreman George Irwine

R. E. CHAPMAN CO. 13/31

OAKDALE, MASSACHUSETTS

DIAL 835-3727 — 835-3221

Job Location Easthampton Mass.

Date Dec. 5-9-86 Hole No. 1-86

Started .... Finished ....

in field 1000' LOG OF HOLE off production w

Depth From Ground Surface	To	CLASSIFICATION of MATERIALS	No. of 30" blows on spoon	Penetration of Spoon
0"	9'	Brown sand to fine gravel		
9'	30'	Gray silt & clay		
30'	60'	Reddish brown silty sand & clay		
60'	95	Reddish brown fine sand		
		trace of silt & clay		
95'	145'	Reddish brown fine to coarse		
		sand to fine angular gravel		
145'	154'	Reddish brown fine to coarse sand		
154'	170'	Reddish brown very fine to		
		medium sand trace of silt		
170'	191'	Reddish brown very fine to		
		medium sand mixed with silt.		
		Refusal at	191'	

Used .... ft. .... inches of casing

Well rated at .... G.P.M. .... " Vacuu

Water level is 36.4 ft. below ground le

Remarks set 10' of 30 slot screen from 15- to 152' - casing broke on top - to be pulled back to 146' - and pumped later.

Foreman George Irwine

Tel.: Boston 542-8348 12/31

R. E. CHAPMAN CO., OAKDALE, MASS. 01539

LOG OF PUMP TEST

Tel.: West Boylston 835-6231

CUSTOMER EAstHAmpton

TOWN EAstHAmpton

STREET — STATE MASS.

OWNER OF PROPERTY: Town

OPERATORS: George Irvine

Mike Ordung

SIZE & TYPE OF PUMP: 1¼" Cylinder Pump

DISCHARGE LINE: Size in.; Length feet.

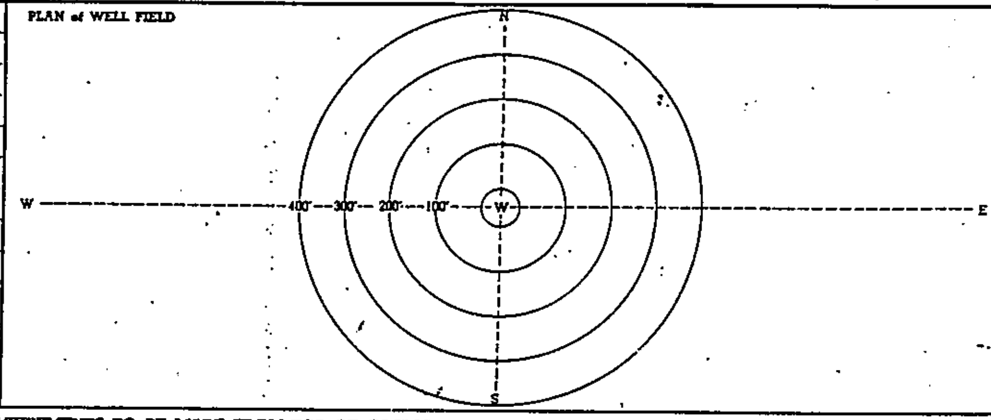
ORFICE PIPE in.; SIZE ORFICE PLATE in.

DESCRIPTION OF WELL BEING PUMPED: 2½" Test Well

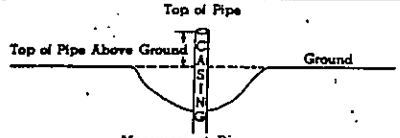
LENGTH OF DUNKER ON TAPE in. ADD TO READINGS (When you make read.)

LENGTH OF ALTITUDE LINE FROM CENTER OF GAUGE ft. in.

PLAN of WELL FIELD



ALL MEASUREMENTS TO BE MADE FROM TOP OF CASINGS



Measurement Diagram

FINISHED WELL NO.	2
DEPTH OF WELL	155
TOP OF PIPE ABOVE GROUND	2.08
STATIC READING	31.34

Observation Wells Information

No. 5	No.	No.	No.	No.	No.
Depth 155	Depth	Depth	Depth	Depth	Depth
Pipe AG 2.10	Pipe AG	Pipe AG	Pipe AG	Pipe AG	Pipe AG
Static 31.36	Static	Static	Static	Static	Static

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas't in Well	Orifice Head in Inches	GPM	Water Level	Water Level	Water Level	Water Level	Water Level	Water Level
Dec. 29, 1986	8:00 AM					10	31.57					
	8:15 AM					10	31.72					
	8:30 AM					10	31.84		Recouvery in 30 seconds.			
	9:00 AM					10	31.88					
	10:00 AM					10	31.93					
	11:00 AM					10	31.96					

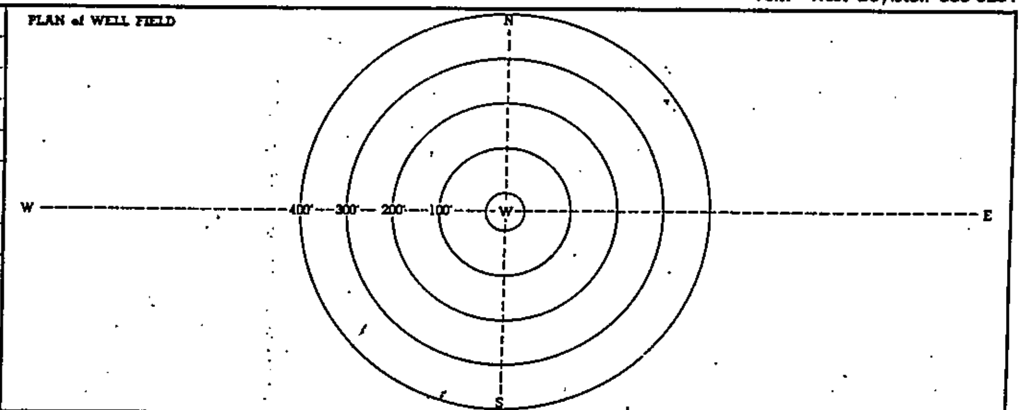
Tel.: Boston 542-8348 12/31
LOG OF PUMP TEST
Tel.: West Boylston 835-6231

R. E. CHAPMAN CO., OAKDALE, MASS. 01539

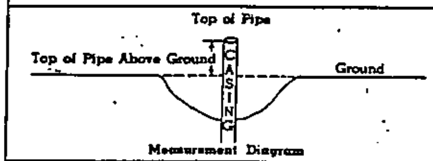
CUSTOMER East Hampton

TOWN EastHampton
STREET STATE Mass.
OWNER OF PROPERTY: Town
OPERATORS: George Irwine
Mike Ordway
SIZE & TYPE OF PUMP: 1½ Honda
DISCHARGE LINE: Size 1½ in.; Length 50 feet
ORFICE PIPE in.; SIZE ORFICE PLATE in.
DESCRIPTION OF WELL BEING PUMPED: 2½" Test Well
LENGTH OF DUNKER ON TAPE 3 in. ADD TO READINGS (When you make read.)
LENGTH OF ALTITUDE LINE FROM CENTER OF GAUGE ft. in.

PLAN of WELL FIELD



ALL MEASUREMENTS TO BE MADE FROM TOP OF CASINGS



FINISHED WELL NO. 3
DEPTH OF WELL 110'
TOP OF PIPE ABOVE GROUND 4"
STATIC READING 22.01

Observation Wells Information

No. 4	No.	No.	No.	No.	No.
Depth 112	Depth	Depth	Depth	Depth	Depth
Pipe AG 2.05	Pipe AG	Pipe AG	Pipe AG	Pipe AG	Pipe AG
Static 28.07	Static	Static	Static	Static	Static

START PUMP TEST READINGS BELOW THIS LINE

Date, Weather and Sample Taken	Time	Water Temperature	Alt. Gauge Reading	Tape Meas'nt in Well	Orifice Head in Inches	GPM	Water Level	Water Level	Water Level	Water Level	Water Level	Water Level
Dec. 12 1986	2:00PM				27	30	28.35					
	2:15PM				27	30	28.69		Recouvery in 90 seconds —			
sunny & mild.	2:30PM				27	30	28.79		to 28.07			
	3:00PM				27	30	28.85					
	4:00PM				27	30	28.87					

Appendix E

Hendrick Street Tubular Well field Data

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well

Note: Wellfield Pumping At 3.5 - 3.7 MGD During Maintenance Tests Unless Otherwise Noted

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-1	6/09/59	96'6"	5	-	65	20	-	-	0- 5 FILL
	9/13/71				35	20	6'3"	sand	5-30 fine-med. SAND
	9/25/72				42	20	4'7"	rust	30-37 coarse GRAVEL
	9/12/74				37	20	6'6"	clean	37-50 coarse SAND
	9/05/75				20	20	6'0"	clean	50-85 coarse SAND, fine GRAVEL
									85-95 fine to med. GRAVEL
B-2	6/17/59	98'7"	5	20	62.5	20	-	-	0-30 fine dirty SAND
	9/13/71				37.5	20	8'4"	clean	30-55 fine-med. GRAVEL
	9/22/72				47	20	6'8"	clean	55-65 med. GRAVEL
	9/10/74				42.8	20	7'1"	clean	65-85 coarse SAND & fine GRAVEL
	9/03/75				44.1	20	6'6"	clean	85-96 fine GRAVEL & SAND
B-3	6/16/59	97'2"	5	20	65	20	-	-	0-25 fine SAND
	9/13/71				32.6	20	6'9"	clean	25-35 fine GRAVEL
	9/22/72				39.4	20	5'2"	clean	35-45 coarse SAND
	9/10/74				36.6	20	5'5"	clean	45-60 med. GRAVEL
	9/03/75				33.3	20	4'10"	clean	60-80 fine-coarse SAND
									80-93 fine-med. GRAVEL
B-4	6/15/59	98'	5	20	79	20	-	-	0- 3 FILL
	9/13/71				48.4	20	6'9"	clean	4-27 fine SAND
	9/25/72				55.5	20	5'2"	rust	27-67 coarse SAND
	9/09/74				51.7	20	5'2"	clean	67-80 fine GRAVEL
	9/02/75				55.5	20	5'0"	clean	80-94 med. GRAVEL
B-4A	6/01/59	108'	5	20	55	20	-	-	0- 5 FILL
	9/13/71				21.4	20	6'9"	clean	5- 32 fine SAND
	9/26/72				27.2	20	4'10"	silt	32- 45 coarse SAND
	9/11/74				23.0	20	5'3"	clean	45- 67 med. GRAVEL
	9/04/75				25	20	4'4"	clean	80-106 fine-med. GRAVEL
									106-108 fine SAND
									108 refusal
B-5	6/10/59	98'5"	5	20	79	20	-	-	0- 6 FILL
	9/13/71				44.1	20	7'6"	clean	6-35 fine-med. SAND
	9/25/72				55.6	20	5'10"	rust	35-65 coarse SAND
	9/09/74				46.9	20	6'0"	clean	65-80 coarse SAND & fine GRAVEL
	9/02/75				46.9	20	5'10"	clean	80-98 fine-med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-6	6/12/59	98'2"	5	20	77	20	-	-	0- 4 FILL
	9/13/71				50	20	6'7"	clean	4-30 fine SAND
	9/25/72				60	20	5'0"	rust	30-65 med.-coarse SAND
	9/09/74				57.7	20	5'2"	clean	65-80 coarse SAND, fine GRAVEL
	9/02/75				51.7	20	5'1"	clean	80-96 med. GRAVEL
B-7	6/10/59	98'1"	5	20	77	20	-	-	0- 3 FILL
	9/13/71				42.9	20	6'8"	clean	3-29 fine SAND
	9/25/72				46.9	20	4'10"	rust	29-45 med.-coarse SAND
	9/09/74				45.5	20	5'3"	clean	45-60 fine-med. GRAVEL
	9/02/75				46.9	20	4'11"	clean	60-70 fine-med. SAND
									70-80 coarse SAND & fine GRAVEL
									80-95 fine-med. GRAVEL
B-8	6/09/59	99'10"	5	20	77	20	-	-	0- 5 FILL
	9/13/71				37.5	20	7'3"	clean	5-27 fine-med. SAND
	9/25/72				41.6	20	5'2"	rust	27-60 fine GRAVEL
	9/12/74				36.6	18	5'10"	clean	60-73 fine-med. GRAVEL
	9/04/75				40.5	20	5'4"	clean	73-92 med.-coarse GRAVEL
B-9	6/26/59	98'9"	5	20	77	20	-	-	0-30 fine SAND & CLAY
	9/13/71				46.9	20	8'2"	clean	30-45 med.-coarse SAND
	9/25/72				68.1	20	6'1"	rust	45-58 med. GRAVEL
	9/09/74				68.1	20	6'10"	clean	58-80 coarse SAND
	9/02/75				53.6	20	6'9"	clean	80-97 med. GRAVEL
B-10	6/11/59	97'4"	5	20	71	20	-	-	0- 3 LOAM
	9/13/71				46.9	20	6'10"	clean	3-22 fine SAND
	9/25/72				51.7	20	4'10"	rust	22-38 med.-coarse SAND
	9/09/74				51.7	20	5'5"	clean	38-63 coarse SAND
	9/02/75				46.9	20	5'2"	clean	63-80 fine GRAVEL
									80-93 med. GRAVEL
B-11	6/25/59	96'9"	5	20	75	20	-	-	0-27 fine dirty SAND
	9/13/71				41.6	20	6'8"	clean	27-38 coarse SAND
	9/25/72				48.4	20	4'8"	rust	38-55 med. GRAVEL
	9/09/74				45.4	20	5'3"	clean	55-78 fine GRAVEL
	9/02/75				46.9	20	5'5"	clean	78-93 med. GRAVEL

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Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-12	6/11/59	98'3"	5	20	65	20	–	–	0- 3 LOAM
	9/13/71				50	20	6'11"	clean	4-25 fine SAND & CLAY
	9/25/72				51.7	20	4'10"	rust	25-65 med.-coarse SAND
	9/09/74				51.7	20	5'6"	clean	65-80 coarse SAND
	9/02/75				46.9	20	5'3"	clean	80-90 med. GRAVEL
B-13	6/05/59	100'5"	5	20	70	20	–	–	0- 3 FILL
	9/13/71				36.6	20	7'2"	clean	3-27 fine SAND
	9/25/72				41.6	20	5'4"	rust	27-40 med.-coarse SAND
	9/12/74				40.5	20	5'4"	clean	40-60 coarse SAND
	9/04/75				39.5	20	5'5"	clean	60-70 fine GRAVEL
									70-80 med. GRAVEL
									80-98 med.-coarse GRAVEL
B-14	6/04/59	98'8"	5	20	69	20	–	–	0- 3 FILL
	9/13/71				40.5	20	6'10"	clean	3-27 fine SAND
	9/25/72				40.5	20	5'1"	rust	27-60 med.-coarse SAND
	9/11/74				37.5	18	5'7"	clean	60-70 fine GRAVEL
	9/04/75				41.6	20	5'1"	clean	70-96 fine-med. GRAVEL
B-15	6/24/59	97'10"	5	20	71	20	–	–	0-27 fine SAND & CLAY
	9/13/71				48.4	20	6'10"	clean	27-35 med.-coarse SAND
	9/22/72				51.7	20	5'5"	rust	35-55 med. GRAVEL
	9/09/74				55.5	20	5'6"	clean	55-78 coarse SAND
	9/02/75				46.9	20	5'2"	clean	78-93 fine GRAVEL
B-16	6/08/59	98'8"	5	20	79	20	–	–	0- 4 FILL
	9/13/71				40.5	20	7'4"	clean	4-27 fine SAND
	9/25/72				44.1	20	5'3"	rust	27-60 med.-coarse SAND
	9/12/74				40.5	20	5'11"	clean	60-70 fine GRAVEL
	9/04/75				39.5	20	5'5"	clean	70-80 med. SAND
									80-85 coarse SAND, fine GRAVEL
									85-95 fine-med. GRAVEL
B-17	6/24/59	98'6"	5	20	67	20	–	–	0-30 fine SAND & CLAY
	9/13/71				46.9	20	6'10"	clean	30-45 med. GRAVEL
	9/22/72				55.5	20	5'5"	rust	45-70 med.-coarse SAND
	9/10/74				48.4	20	5'0"	clean	70-94 fine-med. GRAVEL
	9/02/75				50	20	5'4"	clean	

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-18	7/02/59	98'6"	5	15	60	22	-	-	0-60 fine SAND
	9/13/71				31.9	20	6'10"	clean	60-75 fine SAND, small GRAVEL
	9/22/72				34.1	20	5'4"	sand	75-85 med. SAND, small GRAVEL
	9/10/74				31.9	20	5'0"	clean	85-95 fine SAND, small GRAVEL
	9/02/75				33.3	20	5'4"	clean	95-98'6" med. SAND, GRAVEL
B-19	6/23/59	98'	5	20	65	20	-	-	0-39 fine SAND
	9/13/71				37.5	20	6'10"	clean	39-50 med. GRAVEL
	9/22/72				44.1	20	5'7"	clean	50-80 med. SAND, trace CLAY
	9/10/74				44.1	20	5'3"	clean	80-93 med.-coarse GRAVEL
	9/02/75				41.6	20	5'4"	clean	
B-20	6/18/59	97'9"	5	20	71	20	-	-	0-27 fine dirty SAND
	9/13/71				45.5	20	8'9"	clean	27-45 med.-coarse SAND
	9/22/72				57.7	20	7'2"	rust	45-68 med. GRAVEL
	9/10/74				48.4	20	7'2"	clean	68-82 fine SAND
	9/02/75				50	20	7'0"	clean	82-95 med. GRAVEL
B-21	6/17/59	97'11"	5	20	65	20	-	-	0-25 fine dirty SAND
	9/13/71				40.5	20	6'10"	clean	25-50 med.-coarse SAND
	9/22/72				46.9	20	5'2"	sand	50-65 fine GRAVEL
	9/10/74				42.8	20	5'3"	clean	65-85 fine-med. SAND
	9/02/75				40.5	20	5'1"	clean	85-94 med.-coarse GRAVEL
B-22	6/03/59	98'4"	-	-	72	20	-	-	0-30 fine-med. SAND
	9/13/71				42.8	20	7'0"	clean	30-60 med.-coarse SAND
	9/26/72				45.4	20	5'2"	rust	60-80 fine GRAVEL
	9/11/74				41.6	20	5'9"	clean	80-98 med.-coarse GRAVEL
	9/04/75				44.1	20	5'1"	clean	
B-23	6/03/59	98'11"	-	-	75	20	-	-	0- 2 FILL
	9/13/71				27.7	20	6'10"	clean	2-25 fine SAND
	9/26/72				32.6	20	5'1"	rust	25-35 med. GRAVEL
	9/11/74				28.3	20	5'8"	clean	35-60 fine GRAVEL
	9/04/75				28.3	20	4'10"	clean	60-97 fine-med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-24	6/23/59	98'1"	5	20	65	20	-	-	0- 2 LOAM
	9/13/71				50	20	7'0"	clean	2-15 fine SAND
	9/22/72				53.6	20	5'4"	sand,rust	15-41 SAND & GRAVEL
	9/16/74				50	20	5'6"	clean	41-47 soft CLAY
	9/03/75				53.5	20	4'1"	clean	47-63 fine-med. SAND & GRAVEL
									63-74 med. GRAVEL
									74-82 fine SAND, trace CLAY
									82-96 med. GRAVEL

note: station not pumping during 9/03/75 test
static level flowing prior to test and 4'1" after test

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-25	6/12/59	93'9"	-	-	-	-	-	-	-
	9/13/73				35.7	20	7'3"	clean	
	9/22/72				42.8	20	5'6"	rust	
	9/10/74				38.4	20	5'9"	clean	
	9/03/75				45.5	20	flowing	clean	

note: staion not pumping during 9/03/75 test
well flowing before and after test

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-26	7/02/59	96'	-	-	77	20	-	-	0- 2 LOAM
	9/13/71				45.5	20	6'8"	clean	2- 7 SAND & CLAY
	9/26/72				50	20	5'0"	rust	7-30 fine-med. SAND
	9/11/74				45.5	20	5'4"	clean	30-37 fine SAND & CLAY
	9/04/75				50	20	4'7"	clean	37-70 med.-coarse SAND
									70-80 fine GRAVEL
									80-90 med. GRAVEL
									95-98 fine dirty SAND
B-27	6/17/59	98'2"	5	20	73	20	-	-	0-27 fine dirty SAND
	9/13/71				35.7	20	7'2"	clean	27-35 med.-coarse SAND
	9/22/72				44.1	20	5'8"	rust	35-50 fine-med. GRAVEL
	9/10/74				37.5	20	6'0"	clean	50-70 coarse SAND
	9/03/75				37.5	20	5'3"	clean	70-80 fine-coarse SAND
									80-93 fine-med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
B-28	6/16/59	95'11"	5	20	75	20	-	-	0-25 fine dirty SAND
	9/13/71				41.6	20	6'9"	clean	25-35 coarse SAND
	9/22/72				50	20	5'2"	rust	35-50 med. GRAVEL
	9/10/74				41.6	20	5'6"	clean	50-85 med.-coarse SAND
	9/03/75				44.1	20	4'9"	clean	85-91 fine-med. GRAVEL
B-29	6/30/59	91'10"	4'6"	15	60	20	-	-	0-60 fine SAND, small GRAVEL
	9/13/71				34	20	6'9"	clean	60-85 med. SAND, GRAVEL
	9/22/72				38.5	20	5'5"	rust	85-92 SAND, GRAVEL
	9/10/74				33.3	20	5'8"	clean	
	9/03/75				34	20	4'10"	clean	
C-1	1956	-	-	-	-	-	-	-	-
	9/13/71				34	20	3'4"	sand	
	9/21/72	61'7"			35.7	20	3'3"	sand	
	9/16/74				30	20	3'5"	clean	
	9/09/75				25.5	20	3'4"	sand	
C-2	1956	-	-	-	-	-	-	-	-
	9/13/71				41.6	20	3'6"	sand	
	9/21/72	72'9"			36.7	20	3'5"	sand	
	9/16/74				30.6	20	3'6"	clean	
	9/09/75				31	20	3'4"	clean	
C-3	1956	-	-	-	-	-	-	-	-
	9/13/71				65.2	20	3'10"	sand	
	9/21/72	62'5"			55.5	20	3'4"	rust	
	9/16/74				60	20	4'7"	clean	
	9/09/75				60	18	4'10"	clean	
C-4	1956	-	-	-	-	-	-	-	-
	9/13/71				53.5	20	4'6"	clean	
	9/21/72	79'11"			62.5	20	4'5"	rust	
	9/16/74				50	20	4'5"	clean	
	9/09/75				50	20	4'0"	clean	
C-5	1956	-	-	-	-	-	-	-	-
	9/13/71				46.9	20	3'10"	sand	
	9/21/72	68'5"			55.5	20	3'6"	sand	
	9/16/74				48.3	20	3'8"	clean	
	9/09/75				47	20	3'5"	clean	

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
C-6	1956	–	–	–	–	–	–	–	–
	9/13/71				75	20	4'2"	clean	
	9/21/72	77'6"			78.9	20	3'7"	rust	
	9/16/74				75	20	3'10"	clean	
	9/09/75				65.2	20	3'8"	clean	
D-1	8/18/61	100	5	–	–	–	–	–	0- 4 FILL
	9/13/71				50	20	6'10"	sand	4-32 fine SAND & CLAY
	9/25/72				55.5	20	5'4"	rust	32-60 med.-coarse SAND
	9/09/74				53.5	20	4'2"	clean	60-66 med. GRAVEL
	9/02/75				50	20	4'2"	clean	66-89 med.-coarse SAND
									89-100 med.-coarse GRAVEL
D-2	8/16/61	102'7"	5	20	–	–	–	–	0- 3 FILL
	9/13/71				36.5	20	8'1"	clean	3-27 fine SAND & CLAY
	9/25/72				39.4	20	6'5"	rust	27-55 med.-coarse SAND
	9/09/74				33.3	18	6'8"	clean	55-65 fine-med. GRAVEL
	9/02/75				37.5	20	6'6"	clean	65-90 med.-coarse SAND
									90-102 med. GRAVEL
D-3	8/16/61	98'6"	5	–	–	–	–	–	0- 3 FILL
	9/13/71				34.1	20	8'3"	clean	3-30 fine SAND & CLAY
	9/25/72				39.5	20	5'11"	rust	30-60 med. SAND
	9/09/74				31.9	20	6'10"	clean	60-68 fine-med. GRAVEL
	9/02/75				34.1	20	6'7"	clean	68-88 med.-coarse SAND
									88-98'8" fine-med. GRAVEL
D-4	8/18/61	104'	5	–	–	–	–	–	0- 6 FILL
	9/13/71				38.4	20	8'11"	clean	6-30 fine SAND & CLAY
	9/22/72				50	20	7'7"	rust	30-60 med.-coarse SAND
	9/10/74				42.8	20	7'6"	clean	60-71 fine-med. GRAVEL
	9/02/75				45.4	20	7'3"	clean	71-90 med.-coarse SAND
									90-104 fine-med. GRAVEL
D-5	8/23/61	102	5	–	–	–	–	–	0- 4 FILL
	9/13/71				40.5	20	7'10"	clean	4-30 fine SAND & CLAY
	9/22/72				45.4	20	6'8"	rust	30-60 med. SAND
	9/10/74				40.5	20	6'3"	clean	60-70 coarse SAND & fine GRAVEL
	9/03/75				38.4	20	5'9"	clean	70-90 med.-coarse SAND
									90-99'8" med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
D-6	8/21/64	98'6"	5	-	-	-	-	-	0- 4 FILL
	9/13/71				34	20	8'5"	sand	4-26 fine SAND & CLAY
	9/22/72				38.4	20	6'5"	sand	26-63 med.-coarse SAND
	9/11/74				34.8	20	6'8"	clean	63-70 med.-coarse GRAVEL
	9/03/75				34.8	20	6'5"	clean	70-90 med.-coarse SAND
									90-98 med. GRAVEL
D-7	8/22/61	105'	5	-	-	-	-	-	0- 5 FILL
	9/13/71				39.4	20	7'7"	clean	5-33 fine SAND & CLAY
	9/21/72				41.6	20	5'8"	rust	33-65 med.-coarse SAND
	9/11/74				38.5	20	5'10"	clean	65-70 med. GRAVEL
	9/03/75				42.8	20	5'4"	clean	70-95 med.-coarse SAND
									95-105 fine-med. GRAVEL
D-8	8/17/61	98'3"	5	-	-	-	-	-	0- 4 FILL
	9/13/71				37	20	6'1"	clean	4-26 fine SAND & CLAY
	9/21/72				38	20	4'8"	rust,sand	26-58 med.-coarse SAND
	9/10/74				33	20	4'11"	clean	58-65 fine-med. GRAVEL
	9/03/75				34	20	4'3"	clean	65-85 med.-coarse SAND
									85-98'3" med.-coarse GRAVEL
D-9	8/23/61	99'8"	5	-	-	-	-	-	0- 4 FILL
	9/13/71				41	20	6'0"	clean	4-30 fine SAND & CLAY
	9/22/72				45	20	4'5"	rust	30-60 med. SAND
	9/10/74				41	20	4'4"	clean	60-70 coarse SAND, fine GRAVEL
	9/03/75				47	20	flowing	clean	70-90 med.-coarse SAND
									90-99'8" med. GRAVEL

note: station not pumping during 9/03/75 test
well flowing before and after test

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
D-10	8/17/61	98'6"	5	-	-	-	-	-	0- 4 FILL
	9/13/71				41	20	5'9"	clean	4-31 fine SAND & CLAY
	9/22/72				45	20	4'5"	rust	31-60 med.-coarse SAND
	9/09/74				41	20	4'4"	clean	60-70 fine GRAVEL
	9/02/75				39	20	4'3"	clean	70-80 med.-coarse SAND
									80-98'6" fine-med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
E-1	5/21/62	91'5"	5	-	85	25	-	-	0-20 fine SAND & CLAY
	9/13/71				48	19	7"	sand	20-61 fine-med. SAND
	9/21/72				44	20	1'3"	silt	61-70 med. GRAVEL
	9/16/74				41	20	1"0"	clean	70-91'5" med.-coarse GRAVEL
	9/05/75				44	20	1'2"	clean	91'5" Refusal
E-2	5/22/62	92'2"	5	-	79	25	-	-	0-21 fine SAND & CLAY
	9/13/71				47	20	5'3"	clean	21-64 med. SAND
	9/21/72				54	20	5'11"	sand	64-70 med.-coarse GRAVEL
	9/16/74				48	20	5'8"	clean	70-80 coarse SAND, fine GRAVEL
	9/05/75				45	20	5'7"	clean	80-92'2" med.-coarse GRAVEL
									92'2" Refusal
E-3	5/21/62	88'3"	5	20	77	25	-	-	0-21 fine SAND & CLAY
	9/13/71				43	20	5'1"	clean	21-62 med. SAND
	9/21/72				44	20	5'6"	rust	62-85 coarse SAND, fine GRAVEL
	9/18/74				42	21	5'9"	clean	85 Refusal
	9/05/75				43	20	5'6"	clean	
E-4	5/22/62	94'9"	5	-	71	25	-	-	0-23 fine SAND & CLAY
	9/21/72				42	20	5'4"	silt	23-64 fine-med. SAND
	9/18/74				33	20	5'6"	clean	64-72 fine-med. GRAVEL
	9/05/75				35	20	4'11"	clean	72-84 coarse SAND, fine GRAVEL
									84-94'9" med. GRAVEL
									94'9" Refusal
E-5	5/15/62	91'	5	20	67	25	-	-	0-21 fine SAND & CLAY
	9/13/71				32	18	4'8"	clean	21-63 fine-med. SAND
	9/21/72				39	20	4'11"	rust	64-70 med. GRAVEL
	9/18/74				38	20	5'1"	clean	70-80 coarse SAND
	9/05/75				34	20	4'7"	clean	80-91 coarse SAND, fine GRAVEL
									91 Refusal
E-6	5/17/62	91'3"	5	20	85	25	-	-	0-22 fine SAND & CLAY
	9/13/71				52	20	4'9"	clean	22-62 med. SAND
	9/20/72				54	20	4'8"	sand	62-69 fine-med. GRAVEL
	9/18/74				48	20	5'0"	clean	69-80 med.-coarse SAND
	9/05/75				45	20	4'5"	clean	80-91'3" med.-coarse GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
E-7	5/17/62	89'7"	5'7"	20	62	25	–	–	0-24 fine SAND & CLAY
	9/13/71				45	19	4'3"	clean	24-60 fine-med. SAND
	9/20/72				43	20	4'2"	silt	60-67 med. GRAVEL
	9/18/74				41	20	4'6"	clean	67-89 coarse SAND, fine GRAVEL
	9/05/75				38	20	3'8"	clean	
E-8	5/17/62	90'10"	5	20	65	25	–	–	0-20 fine SAND & CLAY
	9/13/71				31	20	4'0"	clean	20-63 med. SAND
	9/20/72				34	20	3'11"	silt	63-72 fine-med. GRAVEL
	9/18/74				28	20	4'2"	clean	72-89'10" coarse SAND,
	9/05/75				28	20	3'3"	clean	fine GRAVEL
E-9	5/16/62	84'	5	20	55	25	–	–	0-24 fine SAND & CLAY
	9/13/71				36	18	3'9"	clean	24-60 fine-med. SAND
	9/20/72				34	20	3'7"	silt	60-67 med.-coarse GRAVEL
	9/18/74				30	20	3'9"	clean	67-70 coarse SAND
	9/08/75				29	20	3'7"	clean	70-84 coarse SAND, fine GRAVEL
									84 Refusal
E-10	5/16/62	90'4"	5'4"	20	62	25	–	–	0-18 fine SAND & CLAY
	9/13/71				45	20	4'2"	sand	18-55 fine-med. SAND
	9/20/72				43	20	4'0"	sand,silt	55-90 coarse SAND, fine GRAVEL
	9/18/74				36	20	4'1"	clean	
	9/08/75				41	20	3'10"	clean	
F-1	6/10/63	97'5"	6	30	80	20	–	–	0- 4 FILL
	9/13/71				38	20	6'8"	clean	4-16 fine Silty SAND
	9/25/72				44	20	4'6"	rust	16-30 med. SAND
	9/12/74				42	20	5'3"	clean	30-80 med.-coarse SAND
	9/05/75				41	20	4'9"	clean	80-97 coarse SAND, fine GRAVEL
F-2	6/03/63	99'5"	5	20	69	20	flowing	–	0-30 fine SAND, some CLAY
	9/13/71				43	20	6'0"	clean	30-75 med.-coarse SAND
	9/21/72				52	20	4'3"	rust	75-87 coarse SAND
	9/11/74				45	20	4'4"	clean	87-90 fine-med. SAND
	9/03/75				47	20	4'1"	clean	90-99 coarse SAND, fine GRAVEL

note: static 2'8" above ground on 6/3/62

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
F-3	6/04/63	102'2"	5	20	65	20	-	-	0-30 fine Silty SAND
	9/13/71				38	20	3'2"	clean	30-50 fine-med. SAND
	9/21/72				39	20	3'9"	rust	50-60 med. GRAVEL & SAND
	9/16/74				35	20	3'8"	clean	60-102 coarse SAND, fine GRAVEL
	9/05/75				37	20	3'7"	clean	
F-4	6/04/63	100'10"	5	20	70	20	-	-	0-35 fine Silty SAND
	9/13/71				33	20	3'4"	clean	35-50 med. SAND
	9/21/72				33	20	3'8"	silt	50-60 coarse SAND, fine GRAVEL
	9/16/74				30	20	3'8"	clean	60-85 coarse SAND
	9/05/75				28	20	3'4"	cloudy	85-100 coarse SAND, fine GRAVEL
F-5	6/05/63	102'5"	5	20	69	20	-	-	0- 6 fine Silty SAND
	9/13/71				50	20	2'8"	clean	6-30 fine-med. SAND
	9/21/72				47	20	2'10"	rust	30-50 med.-coarse SAND
	9/16/74				43	20	2'11"	clean	50-60 coarse SAND, fine GRAVEL
	9/05/75				43	20	2'7"	clean	60-85 med.-coarse SAND
									85-102 coarse SAND, fine GRAVEL
F-6	6/05/63	103'1"	5	20	69	20	-	-	0- 7 fine Silty SAND
	9/13/71				38	20	3'3"	clean	7-30 fine-med. SAND
	9/21/72				45	20	3'6"	clean	30-80 med.-coarse SAND
	9/16/74				37	20	3'7"	clean	80-103 coarse SAND, fine GRAVEL
	9/05/75				41	20	3'2"	clean	
F-7	6/05/86	102'6"	5	20	80	20	-	-	0- 4 FILL
	9/13/71				41	20	3'7"	clean	4-10 fine Silty SAND
	9/20/72				42	20	3'6"	rust	10-30 med. SAND
	9/16/74				38	20	3'11"	clean	30-50 med.-coarse SAND
	9/05/75				36	20	3'3"	clean	85-102 coarse SAND, fine GRAVEL
F-8	6/06/63	102'2"	5	20	50	20	-	-	0- 4 FILL
	9/13/71				23	20	4'0"	sand	4-30 fine Silty SAND
	9/20/72				19.5	20	3'6"	silt	30-70 med.-coarse SAND
	9/16/74				15.6	22	3'10"	clean	70-90 coarse SAND
	9/05/75				16.1	20	3'3"	cloudy	90-102 coarse SAND, fine GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
F-9	6/06/63	97'11"	5	20	70	20	–	–	0- 4 FILL
	9/13/71				44	20	3'8"	clean	4-20 Silty SAND
	9/20/72				50	20	3'8"	sand	20-60 med.-coarse SAND
	9/16/74				50	20	3'10"	clean	60-80 coarse SAND
	9/05/75				47	20	3'3"	clean	80-97 coarse SAND, fine GRAVEL
F-10	6/06/63	97'2"	5	–	57	20	–	–	0- 3 FILL
	9/13/71				28	20	3'4"	clean	3-10 fine Silty SAND
	9/20/72				33	20	3'3"	silt	10-35 fine-med. SAND
	9/09/75				25.5	20	3'0"	clean	35-70 med.-coarse SAND
									70-97 coarse SAND, fine GRAVEL
G-1	8/18/64	92'11"	5	20	55	20	–	–	0- 3 FILL
	9/13/71				36	20	5'7"	clean	3- 7 SAND & CLAY
	9/20/72				41	20	5'9"	sand	7-24 fine SAND & CLAY
	9/18/74				35	20	6'0"	clean	24-80 med.-coarse SAND
	9/08/75				31	20	6'0"	clean	80-93 coarse SAND & fine GRAVEL
									93-99 fine SAND
G-2	8/25/64	92'	5	20	60	20	–	–	0- 4 FILL
	9/13/71				45	20	5'3"	clean	4- 8 SAND & CLAY
	9/20/72				47	20	4'11"	sand	8-27 fine-med. SAND
	9/18/74				33	20	5'0"	clean	27-60 med.-coarse SAND
	9/08/75				37	20	4'10"	clean	60-78 fine SAND, med. GRAVEL
									78-92 med.-coarse GRAVEL
G-3	8/25/64	92'3"	5	20	70	20	–	–	0- 4 FILL
	9/13/71				47	20	5'2"	clean	4- 8 SAND & CLAY
	9/20/72				54	20	4'10"	sand	8-27 fine SAND
	9/18/74				48	20	4'10"	clean	27-50 med.-coarse SAND
	9/08/75				45	20	4'9"	clean	50-70 coarse SAND, fine GRAVEL
									70-93 med.-coarse GRAVEL
G-4	8/25/64	91'11"	5	20	69	–	–	–	0- 3 FILL
	9/13/71				50	20	5'6"		3- 7 SAND & CLAY
	9/20/72				50	20	5'0"	rust	7-21 fine SAND
	9/18/74				43	20	5'1"	clean	21-50 fine-med. SAND
	9/08/75				43	20	4'10"	clean	50-80 med.-coarse SAND
									80-91'11" coarse SAND, med. GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
G-5	8/19/64	93'5"	5	20	70	-	-	-	0- 4 FILL
	9/13/71				52	20	5'2"	clean	4- 8 SAND & CLAY
	9/20/72				52	20	4'8"	silt	8-30 fine SAND
	9/18/74				45	20	4'8"	clean	30-81 med.-coarse SAND
	9/08/75				42	20	4'7"	clean	81-93'5" coarse SAND & GRAVEL
G-6	8/24/64	93'7"	10	20	67	20	-	-	0- 3 FILL
	9/13/71				57.6	20	5'5"	clean	3- 7 SAND & CLAY
	9/20/72				54	20	4'8"	rust	7-27 fine-med. SAND
	9/18/74				52	20	4'7"	clean	27-50 med.-coarse SAND
	9/08/75				52	20	4'8"	clean	50-65 coarse SAND, fine GRAVEL
									65-85 med.-coarse SAND
									85-93'7" coarse SAND, fine GRAVEL
G-7	8/20/64	92'11"	5	20	65	20	-	-	0- 5 SAND & CLAY
	9/13/71				48	20	5'11"	clean	5-28 fine-med. SAND
	9/18/72				60	20	4'11"	rust	28-54 med.-coarse SAND
	9/13/74				45	20	5'3"	clean	54-69 coarse SAND, fine GRAVEL
	9/08/75				39	15	4'9"	clean	69-92'11" ?
G-8	8/20/64	94'8"	5	20	50	20	-	-	0- 5 SAND & CLAY
	9/18/72				27	20	2'11"	sand,rust	5-29 fine-med. SAND
	9/13/74				-	0	3'9"		29-62 med.-coarse SAND
	9/08/75				-	0	3'0"		62-80 coarse SAND
									80-94'7" coarse SAND, fine GRAVEL
G-9	8/21/64	85'7"	5	20	50	20	-	-	0- 5 SAND & CLAY
	9/13/71				38	20	3'9"	clean	5-30 fine SAND
	9/18/72				44	20	2'7"	sand	30-67 med.-coarse SAND
	9/13/74				35	20	3'0"	clean	67-71 fine-med. SAND
	9/08/75				43	20	2'5"	clean	71-86 coarse SAND, fine GRAVEL
									86 fine Silty SAND
G-10	8/21/64	85'	5	-	65	20	-	-	0- 5 SAND & CLAY
	9/18/72				59	20	2'7"	sand,rust	5-29 fine SAND
	9/13/74				28	15	2'11"	clean	29-66 med.-coarse SAND
	9/08/75					0	2'5"		66-72 med. SAND
									72-85 coarse SAND, fine GRAVEL

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Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
H-1	7/20/65	93'5"	5	–	55	20	–	–	0-27 fine Silty SAND
	9/13/71				41	20	5'11"	sand	27-65 med.-coarse SAND
	9/18/72				55.5	22	5'3"	sand	65-80 coarse SAND
	9/18/74				45	20	4'8"	clean	80-93'5" coarse SAND & GRAVEL
	9/08/75				42	20	5'0"	clean	
H-2	7/19/65	86'3"	5	–	50	20	–	–	0-26 fine SAND & CLAY
	9/13/71				47	18	6'0"	clean	26-60 med.-coarse SAND
	9/18/72				50	20	5'2"	rust,sand	60-67 fine SAND & CLAY
	9/18/73				48	20	4'5"	clean	67-87'3" coarse SAND,
	9/08/75				50	20	5'0"	clean	fine GRAVEL
H-3	7/22/65	86'6"	5	20	50	20	–	–	0- 3 SAND & CLAY
	9/13/71				44	20	3'10"	clean	3-24 fine-med. SAND
	9/20/72				47	18	3'7"	sand	24-65 med.-coarse SAND
	9/16/74				47	20	3'9"	clean	65-74 coarse SAND
	9/08/75				47	18	3'7"	clean	74-86'8" coarse SAND,
									med. GRAVEL
H-4	7/23/65	85'3"	5	20	60	20	–	–	0- 5 SAND & CLAY FILL
	9/13/71				33	20	3'1"	clean	5-22 fine Silty SAND & CLAY
	9/18/72				36	20	2'9"	sand	22-63 med.-coarse SAND
	9/13/74				38	20	2"	clean	63-70 med. GRAVEL
	9/09/75				32	20	2'7"	clean	70-85'3" med.-coarse GRAVEL
	note: station not pumping on 9/13/74								
H-5	7/22/65	87'2"	5	20	57.5	20	–	–	0- 5 SAND & CLAY FILL
	9/13/71				44	20	3'10"	sand	5-21 fine Silty SAND
	9/18/72				43	20	3'6"	sand	21-72 med.-coarse SAND
	9/13/74				41	20	11"	clean	72-87'2" coarse SAND & GRAVEL
	9/09/75				36	20	3'0"	clean	
H-6	7/22/65	88'4"	5	20	57	20	–	–	0- 4 SAND & CLAY FILL
	9/13/71				52	20	3'6"	sand	4-27 fine-med. SAND
	9/18/72				55.5	20	3'2"	sand	27-63 med.-coarse SAND
	9/13/74				50	20	9"	clean	63-68 CLAY
	9/09/75				36	18	2'9"	clean	68-70 med.-coarse SAND
									70-88'4" coarse SAND & GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
H-7	7/20/65	92'1"	5	20	50	20	-	-	0-27 fine SAND
	9/13/71				26.7	20	3'5"	clean	27-67 med.-coarse SAND
	9/18/72				32.6	20	3'0"	dirty	67-84 coarse SAND
	9/13/74				21.7	20	1'1"	clean	84-92'1" coarse SAND & GRAVEL
	9/09/75				20	20	2'6"	cloudy	
H-8	7/21/65	85'10"	5	20	55	20	-	-	0- 7 SAND & CLAY
	9/13/71				50	20	3'6"	clean	7-31 fine-med. SAND
	9/18/72				50	20	2'10"	sand	31-64 med.-coarse SAND
	9/13/74				45	20	3'3"	clean	64-72 fine-med. SAND
	9/08/75				47	20	2'8"	clean	72-85'10" coarse SAND, fine GRAVEL
H-9	7/21/65	87'4"	5	20	50	20	-	-	0- 4 FILL
	9/13/71				41	20	4'3"	clean	4-27 fine SAND & CLAY
	9/18/72				50	20	3'6"	rust,sand	27-63 med.-coarse SAND
	9/13/74				38	20	3'10"	clean	63-68 SAND & CLAY
	9/08/75				36	20	3'3"	clean	68-75 coarse SAND
									75-87'4" coarse SAND & GRAVEL
H-10	7/23/65	88'8"	5	20	55	20	-	-	0- 5 SAND & CLAY FILL
	9/18/72				27	10	3'4"	sand	5-27 fine SAND & CLAY
	9/13/74				30	14	3'9"	clean	27-63 med.-coarse SAND
	9/08/75				26	12	2'11"	clean	63-72 coarse SAND
									72-88'8" fine-med. GRAVEL
H-11	7/24/65	89'1"	5	20	55	20	-	-	0- 3 SAND & CLAY FILL
	9/13/71				47	20	4'2"	sand	3-27 fine Silty SAND
	9/18/72				50	20	3'8"	sand	27-60 med.-coarse SAND
	9/13/74				38	20	3'10"	clean	60-64 CLAY
	9/08/75				39	20	3'4"	clean	64-74 med.-coarse SAND
									74-89'1" coarse SAND & GRAVEL
I-1	6/09/66	89'11"	5	20	73	25	-	-	0- 4 FILL
	9/13/71				38	20	7'4"	clean	4-25 fine-med. SAND
	9/25/72				39	20	5'4"	rust	25-50 med.-coarse SAND
	9/04/75				36	20	5'1"	clean	50-60 fine-med. SAND
									60-89'11" coarse SAND, fine GRAVEL

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
I-2	6/09/66	88'1"	5	20	71	25	-	-	0- 5 FILL
	9/13/71				44	20	7'0"	clean	5-24 fine-med. SAND
	9/25/72				48	20	5'1"	rust	24-65 med.-coarse SAND
	9/12/74				41	18	5'2"	clean	65-88'1" coarse SAND,
	9/04/75				44	20	5'3"	clean	fine GRAVEL
I-3	6/08/66	87'11"	5	20	-	-	-	-	0- 4 FILL
	9/13/71				45	20	7'7"	clean	4-27 fine-med. SAND
	9/25/72				50	20	5'10"	rust	27-37 fine SAND, trace CLAY
	9/12/74				47	20	6'0"	clean	37-61 med.-coarse SAND
	9/04/75				44	20	5'10"	clean	61-87'11" med.-coarse SAND, fine GRAVEL
I-4	6/08/66	92'4"	5	20	77	25	-	-	0- 4 FILL
	9/13/71				41	20	7'6"	clean	4-29 fine-med. SAND
	9/25/72				47	20	5'7"	rust	29-35 CLAY
	9/11/74				38	20	6'4"	clean	35-72 med.-coarse SAND
	9/04/75				39	20	5'8"	clean	72-92'4" coarse SAND, fine GRAVEL
I-5	6/07/66	87'7"	5	20	-	-	-	-	0- 4 FILL
	9/13/71				55.5	20	6'2"	clean	4-28 fine-med. SAND
	9/26/72				55.5	20	5'5"	rust	28-35 SILT & CLAY
	9/11/74				43	20	5'10"	clean	35-70 med.-coarse SAND
	9/04/75				45	20	5'1"	clean	70-87'7" med.-coarse SAND, fine GRAVEL
I-6	6/07/66	87'7"	5	20	73	20	-	-	0- 4 FILL
	9/13/71				44	20	6'10"	clean	4-23 fine-med. SAND
	9/26/72				54	20	5'2"	rust	23-28 SILT & CLAY
	9/11/74				43	20	5'7"	clean	28-70 med.-coarse SAND
	9/04/75				45	20	4'10"	clean	70-87'7" coarse SAND, fine GRAVEL
I-7	6/01/66	99'11"	5	20	55	25	-	-	0- 3 SAND & CLAY
	9/13/71				20	20	3'10"	clean	3-55 med.-coarse SAND
	9/18/72				22.5	20	3'3"	rust	55-60 coarse SAND & GRAVEL
	9/13/74				20	20	3'8"	sand,silt	60-80 med.-coarse SAND
	9/08/75				20.5	25	3'0"	cloudy	80-99'11" coarse SAND & GRAVEL

note: 'poor condition' noted after 9/08/75 test

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
I-8	6/01/66	94'7"	5	20	50	20	-	-	0- 3 SAND & CLAY
	9/13/71				29	29	4'4"	clean	3-50 med.-coarse SAND
									55-57 coarse SAND & GRAVEL
									57-67 fine SAND & CLAY
									67-94'7" med.-coarse SAND
I-9	6/03/66	88'11"	5	20	90	25	-	-	0- 5 FILL
	9/13/71				52	20	5'7"	clean	5-25 fine-med. SAND
	9/18/72				62.5	20	4'10"	sand	25-77 med.-coarse SAND
	9/13/74				55.5	20	5'0"	clean	77-88'11" coarse SAND,
	9/08/75				60	20	4'8"	clean	fine GRAVEL
I-10	6/06/66	88'	5	20	80	25	-	-	0- 6 FILL
	9/13/71				43	20	5'1"	clean	6-62 fine-med.-coarse SAND
	9/13/74				38	20	4'8"	clean	62-68 coarse SAND & GRAVEL
	9/08/75				38	20	4'1"	clean	68-88 med.-coarse SAND
J-1	11/28/67	95'	5	20	65	20	2'5"	-	0-63 med. SAND
	9/13/71				31	20	7'8"	clean	63-95 coarse SAND
	9/25/72				34	20	5'7"	silt,sand	
	9/12/74				39	20	6'5"	clean	

note: static water at ground surface on 11/28/67 (riser pipe 2'5" a.g.)

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
J-2	11/28/67	93'	5	20	67	21	6"	-	0-63 med. SAND
	9/13/71				38	20	7'5"	clean	63-93 coarse SAND
	9/25/72				42	20	5'9"	rust	
	9/12/74				38	20	6'1"	-	
	9/04/75				36	20	5'8"	clean	
J-3	11/28/67	95'	5	20	80	20	7'0"	-	0-63 med. SAND
	9/13/71				50	20	7'2"	sand	63-95 coarse SAND
	9/26/72				50	20	5'7"	sand	
	9/11/74				38	20	6'2"	clean	
	9/04/75				42	20	5'6"	clean	

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
J-4	11/16/67	93'	5	20	80	20	1'8"	-	0-52 med. SAND
	9/13/71				48	20	6'9"	clean	52-89 coarse SAND
	9/26/72				57.6	20	4'11"	rust	89-93 coarse GRAVEL
	9/11/74				52	20	5'4"	clean	
	9/04/75				52	20	4'7"	clean	
J-5	11/16/67	94'	5	20	65	20	2'1"	-	0-52 med. SAND
	9/13/71				44	20	7'3"	clean	52-89 coarse SAND
	9/26/72				50	20	5'7"	rust	89-94 coarse GRAVEL
	9/11/74				35	15	5'11"	clean	
	9/04/75				47	20	5'1"	clean	
J-6	11/17/67	91'	5	20	60	20	2'5"	-	0-63 med. SAND
	9/13/71				45	20	7'6"	clean	63-89 coarse SAND
	9/26/72				47	20	5'10"	rust	89-91 coarse GRAVEL
	9/11/74				38	20	6'0"	clean	
	9/04/75				41	20	5'2"	clean	
	note: top of pipe 3'5" a.g.								
J-7	11/20/67	94'	5	20	75	20	2'1"	-	0-63 med. SAND
	9/13/71				47	20	6'10"	clean	63-90 coarse SAND
	9/26/72				54	20	5'0"	rust	90-94 coarse GRAVEL
	9/11/74				44	20	5'4"	clean	
	9/04/75				45	20	4'1"	clean	
	note: top of pipe 3' a.g.								
J-8	11/21/67	93'	5	20	60	20	1'10"	-	0-42 med. SAND
	9/13/71				43	20	6'4"	clean	42-84 coarse SAND
	9/26/72				50	20	4'8"	silt	84-93 coarse GRAVEL
	9/11/74				38	20	4'7"	clean	
	9/03/75				39	20	4'8"	clean	
	note: top of pipe 3' a.g.								

Well #	Date Installed or Tested	Depth (ft.)	Exposed Screen Length (ft.)	Screen Slot Size #	Yield Rating (gpm)	Vacuum (in. hg)	Static Water Level (ft.)	Well Cond. Before Test	Log of Well
J-9	11/121/67	93'	5	20	40	20	2'4"	-	0 -42 med. SAND
	9/13/71				27	20	6'9"	sand	42-80 coarse SAND
	9/26/72				31	20	5'2"	silt,sand	70-93 coarse GRAVEL
	9/11/74				24	20	5'4"	clean	
	9/03/75				23	20	5'0"	sand	

note: top of pipe 4' a.g.

EASTHAMPTON, MASS WELL FIELD

WELL	DEPTH	ORIG RATE	VALVE	RATE AT START	RATE AFTER TREATMENT
B-1 (W29)	96'-6"	65-20	OK	45-21	45-21
B-2	98'-7"	62.5-20	OK	28-26	33.6 24
B-3	97'-2"	65-20	OK	33.6-24	36.8 24
B-4	92'-9"	79-20	OK	73-4	72-5
B 4-A	108'	55-20	OK	55-20	67.2-16
B-5	94'-7"	79-20	OK	42 21	49.6 16
B-6	98'-2"	77-20	OK	60 15	54.4 16
B-7	98'-1"	77-20	OK	50-19	51.2 19
B-8	99'-10"	77-20	OK	43 24	48-20
B-9	98'-9"	77-20	OK	65-6	68.8 6
B-10	97'-4"	71 20	OK	33-15	51.2-16
B-11	96'-9"	75-20	OK	45-22	47.2 17
B-12	98'-3"	65-20	OK	60-16	51.2 15
B-13	100'-5"	70-20	OK	43 20	47.2 19
B-14	98'-8"	69-20	OK	46-24	49.7 21
B-15	97'-10"	71-20	OK	68-6	73.6 4
B-16	98'-8"	79-20	OK	52-19	48.2 18
B-17	98'-6"	67-20	OK	50-20	56 15
B-18	98'-6"	60-22	OK	30-25	40 24
B-19	98'	65-20	OK	48-23	51.2 20
B-20	97'-9"	71-20		51-20	55.4 20
B-21	97'-11"	65-20	OK	43-24	49.6 19
B-22	98'-4"	72-20	OK	48-22	52.8 21
B-23	98'-11"	75-20	OK	38-25	32.8 25
B-24	98'-1"	65-20	OK	47-21	52.8 21
B-25	93'-9"	45.5-20	BAD	DRAW PIPE	42.4 21
B-26	96'	77-20	OK	48-20	50.4 18
B-27	98'-2"	73-20	OK	34-25	41.6 24
B-28	95'-11"	75-20	OK	41-24	51.2 24
B-29	91'-10"	60-20	OK	45-23	45-22

EASTHAMPTON Well field.

Well No.	Depth	Orig Rate	Value	Rate at start	Ending Rate
C-1	61'-7"	35.7 20	BAD	DRAW PIPE	23.6 20
C-2	72'-9"	41.6 20	missing	DRAW PIPE	36.8 20
C-3	62'-5"	65.2 - 20	OK	52.8 - 22	54.4 20
C-4	79'-11"	62.5 - 20	BAD	DRAW PIPE	35.6 21
C-5	68'-5"	55.5 - 20	BAD	DRAW PIPE	40 22
C-6	77'-6"	78.9 - 20	BAD	DRAW PIPE	47.2 21
D-1	100'	55.5 - 20	OK	73 - 4	73 - 4
D-2	102'-7"	39.4 - 20	OK	45 - 10	70.4 - 6
D-3	98'-6"	39.5 - 20	PIPE BROKE below ground.		
D-4	104'	50 - 20	OK	42 - 20	46 - 20
D-5	102'	45.4 - 20	OK	40 - 23	43.4 - 23
D-6	98'-6"	38.4 20	BAD	DRAW PIPE	44.8 22
D-7	105'	42.8 - 20	OK	17.6 - 15	27.2 - 22
D-8	98'-3"	38 - 20	BAD	DRAW PIPE	24.8 24
D-9	99'-8"	47 - 20	OK	45 - 23	45 - 22
D-10	98'-6"	45 - 20	OK	27 - 24	40 - 20
E-1	91'-5"	85 - 20	OK	26.4 - 27	28.8 24
E-2	92'-2"	79 - 25	OK	1 - 25	VALVE OR PIPE LEAKS. 14.4 12
E-3	88'-3"	77 - 25	OK	1 - 26	44.8 - 25
E-4	94'-9"	71 - 25	OK	7 - 25	33.6 - 26
E-5	91'	67 25	OK	10.4 - 26	35.2 - 24
E-6	91'-3"	85 - 25	BAD	DRAW PIPE	42.2 - 23
E-7	89'-7"	62 - 25	BAD	DRAW PIPE	37.2 - 22
E-8	90'-10"	65 - 25	OK	12.8 - 27	31.4 - 25
E-9	84'	55 - 25	OK	14.4 - 26	17.6 - 24
E-10	90'4"	62 - 25	OK	27.2 26	28.8 - 24
F-1	97'-5"	80 - 20	OK	45 - 20	49.6 20
F 2	99'-5"	69'-20	OK	46 20	48 20
F 3	102'-2"	65 - 20	OK	16 - 27	34.4 22
F4	100'-10"	70 - 20	OK	9.6 25	38.8 25

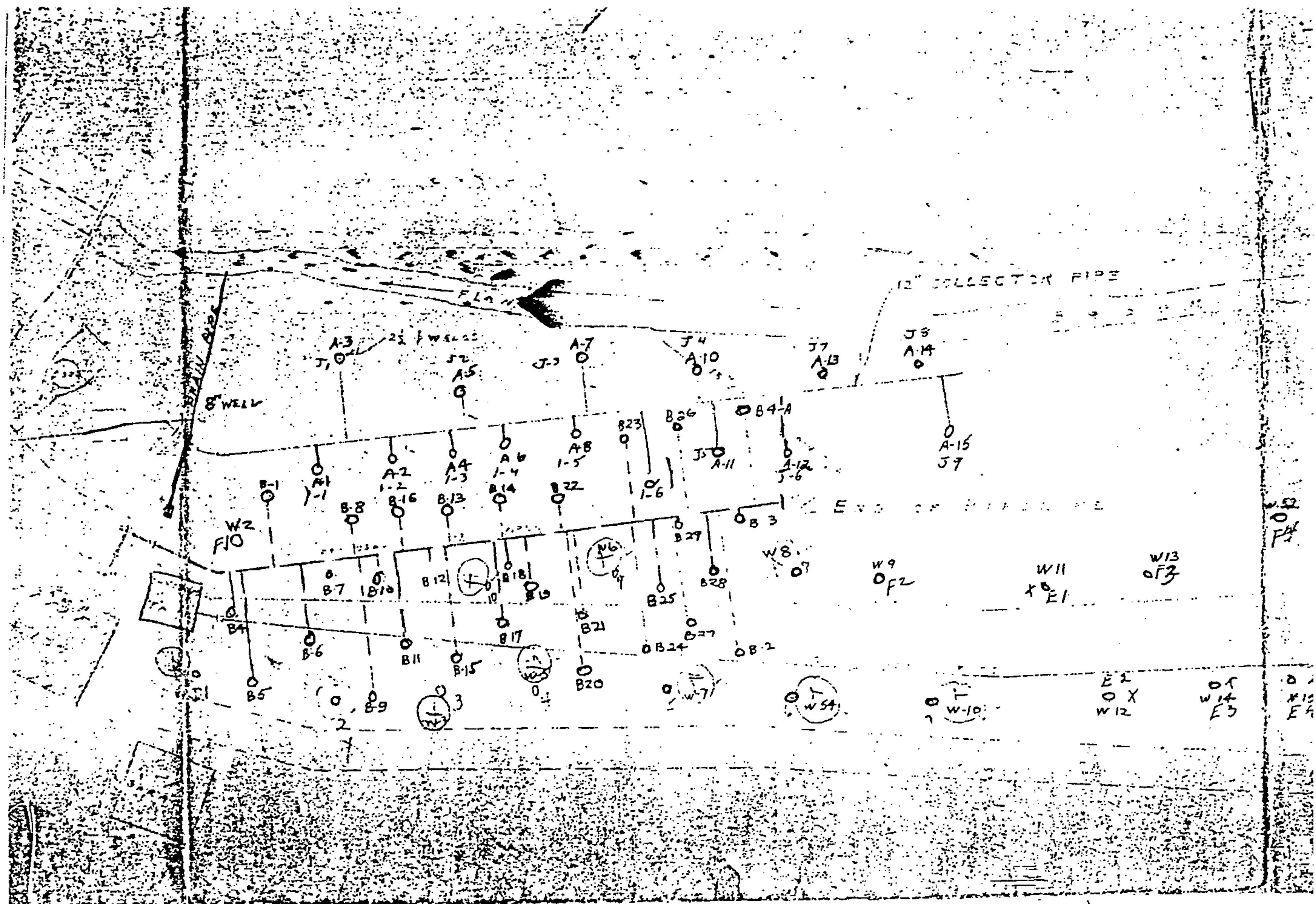
.ON Well field.

		ORIG. RATE	VALVE	RATE AT START	ENDING RATE
	102'-5"	69-20	OK	22.4 - 23	33.6 25
F-6	103'-1"	69-20	OK	27.2 - 28	35.2 24
F-7	102'-6"	80-20	OK	19.2 - 27	42.2 20
F 8	102'-2"	50-20	OK	1 22	27.2 - 20
F-9	97'-11"	70-20	BAD	DRAW PIPE	47.2 21
F-10	97'-2"	57'-20	OK	14.4 27	28.2 27
G-1	92'-11"	55-20	OK	28.8 27	32 - 27
G-2	92'	60-20	OK	36.8 27	40 - 26
G-3	92'-3"	70-20	OK	42.4 25	43.2 . 25
G-4	91'-11"	69 - -	OK	31.2 27	40 - 26
G-5	93'-5"	70 —	BAD	DRAW PIPE	42.2 19
G-6	93'-7"	67-20	BAD	DRAW PIPE	38.2 20
G-7	92'-11"	65-20	LEAKS	28.8 - 18	33.6 24
G-8	94'-8"	50'-20	BAD	DRAW PIPE	34.2 21
G-9	85'-7"	50-20	BAD	DRAW PIPE	33.6 23
G-10	85'	65'-20	BAD	DRAW PIPE	32.8 21
H-1	93'-5"	55-20	LEAKS?	36.8 - 25 MAY BE BROKEN AT TOP JOINT.	35.2 20
H-2	86'-3"	50-20	BAD	DRAW PIPE	33.6 - 20
H-3	86'-6"	50-20	OK	44 - 25	44.8 24
H-4	85'-3"	60-20	OK	16 - 26	20.8 24
H-5	87'-2"	57.5-20	OK	25.6 - 28	27.2 25
H-6	88'-4"	57-20	OK	27.2 27	31.2 26
H-7	92'-1"	50-20	OK	8 - 27	16.2 27
H-8	85'-10"	55-20	OK	37.6 26	16. 25
H-9	87'-4"	50-20	OK	21.6 25	40. 25
H-10	88'-8"	55-20	OK	37.6 27	39.2 26
H-11	89'-1"	55-20	OK	27.2 27	30.4 27
I-1	89'-11"	73-25	OPEN	no well found	
I-2	88'-1"	71-25	OPEN	no well found.	
I-3	87'-11"	50-20	OPEN	no well found.	

casthampton Well field.

No	Depth	orig Rate	Valve	Rate at start	Ending Rate
I-4	92'-4"	77-25	open -	no well found.	
I-5	87'-7"	55.5-20	open.	no well found	
I-6	87'-7"	73-20	open -	No well found	
I-7	99'-11"	55-25	OK	6.4 - 25	28.8 20
I-8	94-7	50-20	missing	Draw pipe	40 - 25
I-9	88-11	90-25	BAD	Draw pipe	38.2-19
I-10	88'	80-25	missing	Draw pipe	44.6 21
J-1	95'	65-20	OK	73 - 6	70.4 - 6
J-2	93'	67-21	OK	43 24	42.4 23
J-3	95'	80-20	OK	45- 24	46.4 21
J-4	93'	80-20	OK	52.8 - 22	54.4 22
J-5	94'	65-20	OK	48-25	48.8 24
J-6	91'	60-20	OK	44.8-24	41.6 25
J-7	94'	75-20	open	Draw pipe	43.2 6
J-8	93'	60-20	open	Draw pipe	30.4 25
J-9	93'	40-20	open	Draw pipe	28.8 25

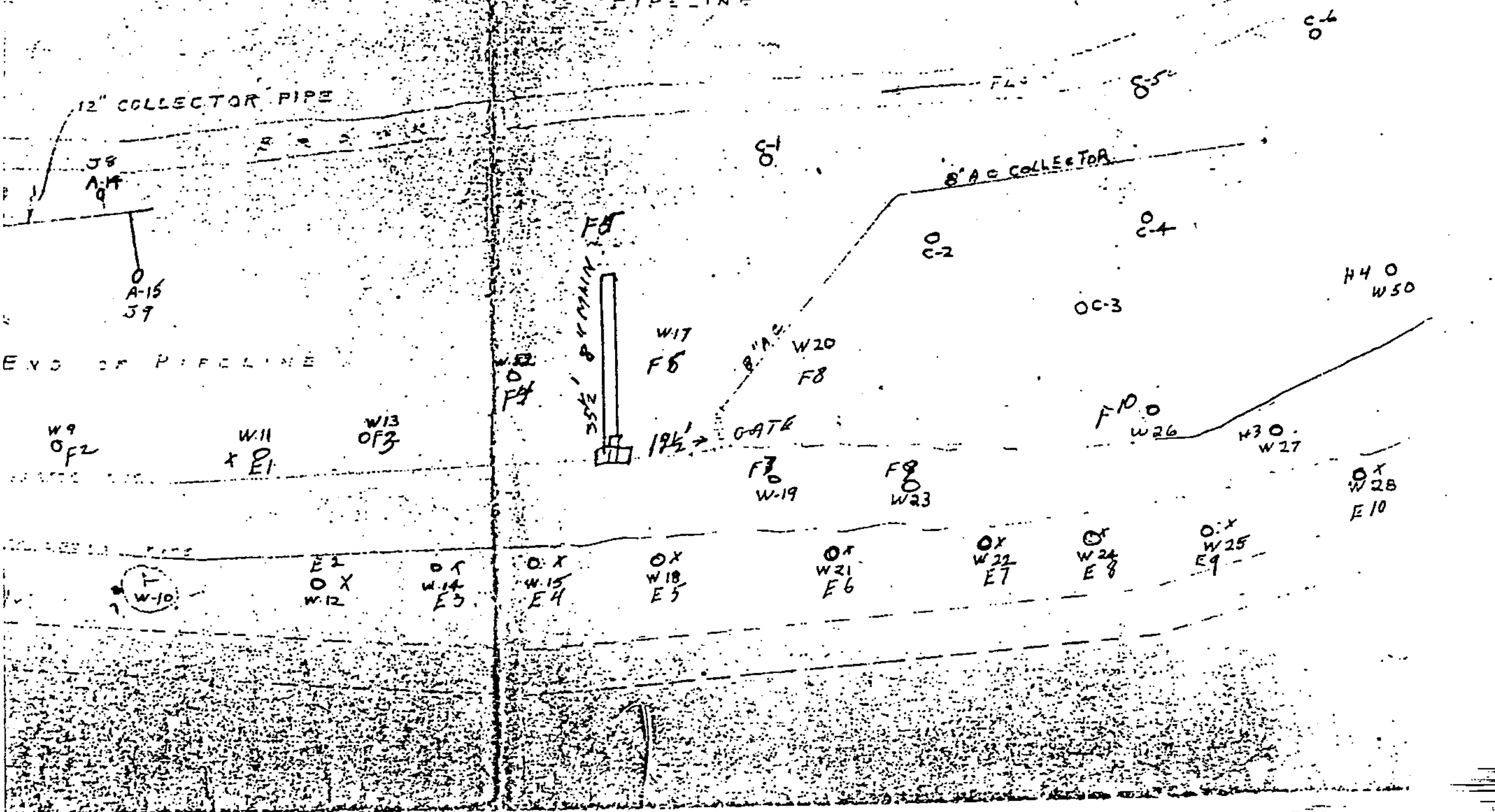
W-29 = B-1



12" COLLECTOR PIPE
8" WELL
FLA
W2
F10
A-3
J1
A-5
A-7
J4
A-10
J7
A-13
J8
A-14
A-15
J9
B-1
B-8
B-16
B-13
B14
B22
A-2
A4
A8
B23
B26
B4-A
A-11
A-12
B4
B5
B-6
B-7
B11
B12
B-15
B17
B20
B21
B24
B25
B27
B28
B29
B 3
B-2
W8
W9
F2
W11
E1
W13
F3
W12
E2
W14
E3
W-10
W54
W-7
B-9

NOTE

- ALL REQUIRED NIPPLE PIECES TO BE CUT FROM FULL LENGTHS OF PIPE.
- ALL VALVES & FITTINGS TO BE MADE UP WITH HOT POURED LEAD JOINTS PROPERLY CAUL
- PIPE TO BE LAID ACCURATELY TO LINE & GRADE.
- PIPE LAYING TO BEGIN AT TAPPING SLEEVE & VALVE & TO PROCEED TO END OF PIPELINE



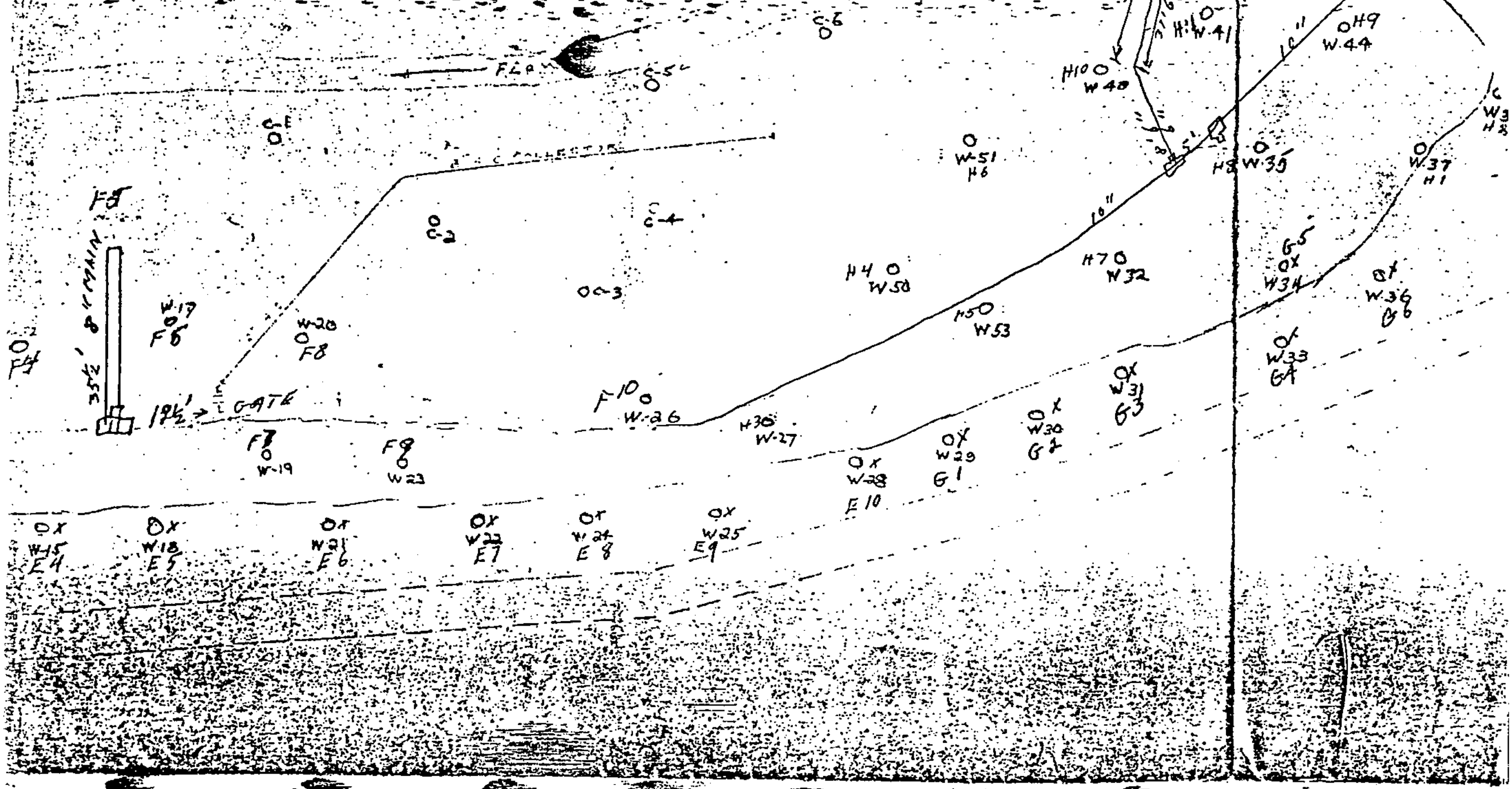
NOTE

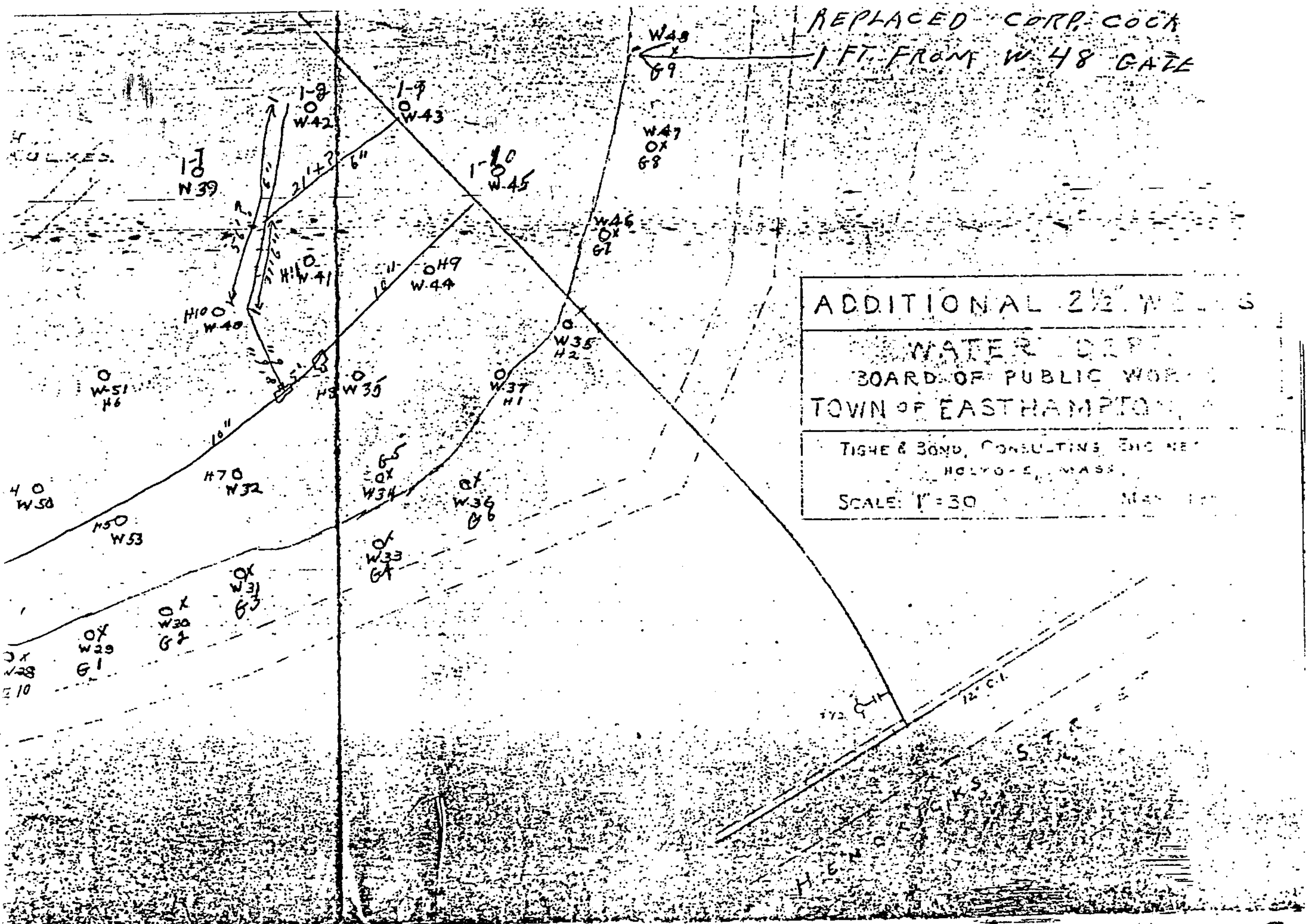
ALL REQUIRED NIPPLE PIECES TO BE CUT FROM FULL LENGTHS OF PIPE.

ALL VALVES & FITTINGS TO BE MADE UP WITH HOT POURED LEAD JOINTS PROPERLY CAULKED.

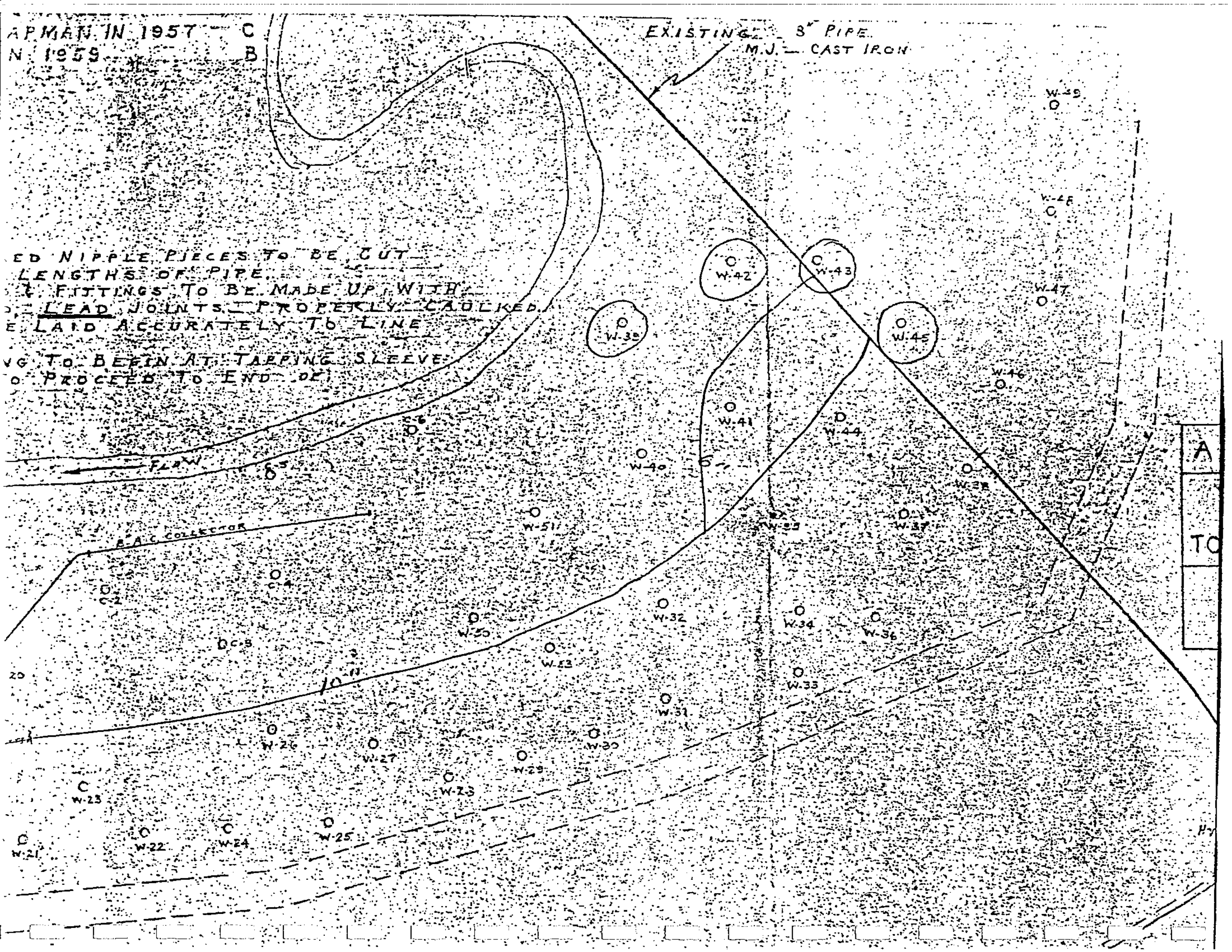
PIPE TO BE LAID ACCURATELY TO LINE & GRADE.

PIPE LAYING TO BEGIN AT [illegible] VALVE & PROCEED TO END OF PIPELINE





REPLACED CORP. COCK
1 FT. FROM W 48 GATE
ADDITIONAL 2½" WELLS
WATER DEPT.
BOARD OF PUBLIC WOR
TOWN OF EASTHAMPTON
TIGHE & BOND, CONSULTING ENGINEERS
HOLYOKE, MASS.
SCALE: 1" = 30
W 48
G 9
W 47
G 8
W 46
G 7
1-9
W 43
1-8
W 42
W 39
1-10
W 45
H 10
W 41
H 9
W 44
H 100
W 40
W 35
H 2
W 37
H 1
W 36
W 51
H 6
H 5
W 33
G 4
W 34
G 5
W 36
G 6
H 7
W 32
W 50
H 5
W 53
W 31
G 3
W 30
G 2
W 29
G 1
W 28
10"
6"
12" C.I.



APMAN IN 1957 — C
N 1959 — B
EXISTING 3" PIPE
M.J. — CAST IRON
ED NIPPLE PIECES TO BE CUT
LENGTHS OF PIPE.
FITTINGS TO BE MADE UP WITH
LEAD JOINTS — PROPERLY CAULKED.
E LAID ACCURATELY TO LINE
NG TO BEGIN AT TAPPING SLEEVE
O PROCEED TO END OF
FLOW
C-6
C-5
C-4
C-2
DC-5
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W-53
A
TO

Appendix F

IEP, Inc. 2" Monitoring Well Borings, 1987

GUILD DRILLING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 2
DATE
HOLE NO. PS-1
LINE & STA.
OFFSET
SURF. ELEV.

TO I.E.P.
PROJECT NAME Monitor Wells@NonotuckPark
REPORT SENT TO above
SAMPLES SENT TO taken at site

ADDRESS Northboro, Mass.
LOCATION EASTHAMPTON, MASS.
PROJ. NO.
OUR JOB NO. 87-676

GROUND WATER OBSERVATIONS			CASING	SAMPLER	CORE BAR.
At 26'8" in well	after comp. Hours	Type	PW- HW	S/S	
At 27'	after 17 Hours	Size I.D.	5" 4"	1-3/8"	
		Hammer Wt.	300#	140#	BIT
		Hammer Fall	24"	30"	

	Date	Time
START	1/28/87	
COMPLETE	2/3/87	
TOTAL HRS.		
BORING FOREMAN	A. Mason	
INSPECTOR		
SOILS ENGR.		

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From- To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
		0'-1'-6"	D	27	19	8		1'-0"	Dark brown silty fine SAND	1	18"	16"
								5'+-	Brown fine to coarse SAND, Little fine gravel			
								9'+-	Brown fine tomedium SAND			
									Brown fine SAND & silt			
		19'-20'6"	D	7	13	15				2	18"	16"
		39'-40'6"	D	7	14	26		47'-0"	@39' becomes red-brown	3	18"	18"
		49'-50'-6"	D	2	3	5		69'-0"	Red-brown fine SAND & silt, trace clay	4	18"	18"
		69'-70'6"	D	16	23	34			Red-brown fine to medium SAND, trace silt	5	18"	16"
		89'-90'6"	D	21	17	14				6	18"	15"
		109'-110'6"	D	17	24	20		117'-0"		7	18"	18"
		119'-120'6"	D	67	80	72			Red-brown fine to coarse SAND, some silt, trace cobbles	8	18"	8"

GROUND SURFACE TO 19' USED PW- 5 "CASING: THEN HW-4" to 180' then r/bit & inst.we

Sample Type	Proportions Used		140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density		Cohesive Consistency			SUMMARY:	
D=Dry C=Cored W=Washed	trace	0 to 10%	0-10	Loose	0-4	Soft	30 + Hard	Earth Boring	182'
UP=Undisturbed Piston	little	10 to 20%	10-30	Med. Dense	4-8	M/Stiff		Rock Coring	
TP=Test Pit A=Auger V=Vane Test	some	20 to 35%	30-50	Dense	8-15	Stiff		Samples	11
UT=Undisturbed Thinwall	and	35 to 50%	50 +	Very Dense	15-30	V-Stiff			

HOLE NO. PS-1

GUILD DRILLING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 2 OF 2
DATE
HOLE NO. PS-1
LINE & STA.
OFFSET
SURF. ELEV.

TO same as 1 | ADDRESS same as 1
PROJECT NAME | LOCATION
REPORT SENT TO | PROJ. NO.
SAMPLES SENT TO | OUR JOB NO.

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.
At ____ after ____ Hours	Type	same as 1		
	Size I.D.			
At ____ after ____ Hours	Hammer Wt.			BIT
	Hammer Fall			

	Date	Time
START		a.m. p.m.
COMPLETE		a.m. p.m.
TOTAL HRS.		
BORING FOREMAN		
INSPECTOR		
SOILS ENGR.		

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
		129'-130'6"	D	47	65	84			Red-brown fine to coarse SAND, some silt, trace cobbles	9	18"	6"
		149'-150'6"	D	28	48	39				10	18"	16"
								169'-6"	Red-brown fine to coarse SAND, trace silt & fine gravel			
		169'-170'6"	D	15	27	32			Red-brown SILT, trace very fine sand	11	18"	12"
								182'-0"	Refusal on Roller bit			
									Bottom of Boring 182'-0"			
									Installed 2" PVC Monitor well & set well @ 182' Used: 10' slotted, 172' of solid, 1 gate box, 1 bag of cement, and 200 lbs of Ottawa sand. Flushed well w/ 2 tanks of water.			

GROUND SURFACE TO ____ USED ____ "CASING: THEN ____

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used	
trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency		
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M/Stiff	
30-50	Dense	8-15	Stiff	
50 +	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring
Rock Coring
Samples

HOLE NO. PS-1

GUILD DRILLING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1
DATE
HOLE NO. PS 2-D
LINE & STA.
OFFSET
SURF. ELEV.

TO I.E.P.
PROJECT NAME Monitor Wells@NonotuckPark
REPORT SENT TO above
SAMPLES SENT TO taken at site

ADDRESS Northboro, Mass.
LOCATION EASTHAMPTON, MASS.
PROJ. NO.
OUR JOB NO. 87-676

GROUND WATER OBSERVATIONS
2/4/87 - 6' end of shift
At ______ after ______ Hours
At 5' start of shift, 2/5/87
At 3.8' @ after ______ Hours
start of shift, 2/6/87

	CASING	SAMPLER	CORE BAR.
Type	HW	S/S	
Size I.D.	4"	1-3/8"	
Hammer Wt.	300#	140#	BIT
Hammer Fall	24"	30"	

	Date	Time
START	2/4/87	a.m. p.m.
COMPLETE	2/5/87	a.m. p.m.
TOTAL HRS.		

BORING FOREMAN A. Mason
INSPECTOR Walen
SOILS ENGR.

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
								6'-0"	Brown fine SAND & silt, (layered)			
		9'-10'6"	D	5	8	12			Brown SILT, trace very fine sand, trace clay (layered)	1	18"	16"
		19'-20'6"	D	9	8	8				2	18"	16"
		29'-30'6"	D	2	2	5				3	18"	18"
		39'-40'6"	D	2	2	3		49'-6"		4	18"	18"
		49'-50'6"	D	2	6	9		54'-6"	Red-brown fine to coarse SAND & silt, trace fine gravel	5	18"	18"
		@55'	D	100/0"					Possible bedrock or boulder			
		54'6"-59'	ran roller bit									
		@59'	D	100/0"				59'-0"				
									Bottom of Boring 59'-0" Installed 2" PVC Monitor well @ 59' Used: 10' of slotted, 49' of solid, 1 bag of Ottawa sand, 1 gate box, and 1/2 bag of cement.			

Note: After pumping & developing well, water started to flow over the top of well.

GROUND SURFACE TO 9' USED mud "CASING: THEN S/S & r/bit to ref.-then inst.we

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used	
trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency			
0-10	Loose	0-4	Soft	30 +	Hard
10-30	Med. Dense	4-8	M/Stiff		
30-50	Dense	8-15	Stiff		
50 +	Very Dense	15-30	V-Stiff		

SUMMARY:
Earth Boring 59'
Rock Coring
Samples 5

HOLE NO. PS2-D

TOWN PRESS — EAST PROV.

GUILD DRILLING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1
DATE
HOLE NO. PS-2S
LINE & STA.
OFFSET
SURF. ELEV.

TO I.E.P.
PROJECT NAME Monitor Wells@NonotuckPark
REPORT SENT TO above
SAMPLES SENT TO taken at site

ADDRESS Northboro, Mass.
LOCATION EASTHAMPTON, MASS.
PROJ. NO.
OUR JOB NO. 87-676

GROUND WATER OBSERVATIONS
At 10'7" 2/6/87 start of shift after ____ Hours
At ____ after ____ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW	S/S	
Size I.D.	4"	1-3/8"	
Hammer Wt.	300#	140#	BIT
Hammer Fall	24"	30"	

	Date	Time
START	2/5/87	a.m. p.m.
COMPLETE	2/5/87	a.m. p.m.

TOTAL HRS.
BORING FOREMAN A. Mason
INSPECTOR
SOILS ENGR.

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
									Drove HW casing to 9' Open hole to 15'			
								15'-0"	Bottom of Boring 15'-0" Set 2" PVC Monitor well @ 15' Used: 10' of slotted, 5' of solid, 1 bag of Ottawa sand, 1/2 bag of cement, and 1 gate box.			

GROUND SURFACE TO 9' USED HW-4 "CASING: THEN open hole to 15' then inst. well

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used
trace 0 to 10%
little 10 to 20%
some 20 to 35%
and 35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density		Cohesive Consistency		
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M/Stiff	
30-50	Dense	8-15	Stiff	
50 +	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring 15'
Rock Coring
Samples

HOLE NO. PS-2S

TOWN PRESS - EAST PROV.

GUILD DRILLING CO., INC.

100 WATER STREET EAST PROVIDENCE, R. I.

SHEET 1 OF 1
DATE
HOLE NO. PS-1S
LINE & STA. (S-4)
OFFSET
SURF. ELEV.

TO I.E.P.
ADDRESS Northboro, Mass.
PROJECT NAME Monitor Wells@NonotuckPark
LOCATION EASTHAMPTON, MASS.
REPORT SENT TO above
PROJ. NO.
SAMPLES SENT TO taken at site
OUR JOB NO. 87-676

GROUND WATER OBSERVATIONS
At 19.6' after comp Hours
At after Hours

	CASING	SAMPLER	CORE BAR.
Type	HW	S/S	
Size I.D.	4"	1-3/8"	
Hammer Wt.	300#	140#	BIT
Hammer Fall	24"	30"	

	Date	Time
START	2/4/87	a.m. p.m.
COMPLETE	2/4/87	a.m. p.m.

TOTAL HRS.
BORING FOREMAN A. Mason
INSPECTOR
SOILS ENGR.

LOCATION OF BORING:

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE No.	Pen	Rec.
									Drove HW Casing to 14' Ran roller bit to 50' Open hole - no mud used No samples taken			
								50'				
									Bottom of Boring 50.0' Installed 2" PVC Monitor well @ 50' Used: 10' slotted, 40' of solid, 100 lbs. of Ottawa sand, and 1 gate box.			

GROUND SURFACE TO 14' USED HW-4 "CASING: THEN open hole to 50' then inst.well

Sample Type
D=Dry C=Cored W=Washed
UP=Undisturbed Piston
TP=Test Pit A=Auger V=Vane Test
UT=Undisturbed Thinwall

Proportions Used
trace 0 to 10%
little 10 to 20%
some 20 to 35%
and 35 to 50%

140 lb Wt. x 30" fall on 2" O.D. Sampler

Cohesionless Density
0-10 Loose
10-30 Med. Dense
30-50 Dense
50 + Very Dense

Cohesive Consistency
0-4 Soft
4-8 M/Stiff
8-15 Stiff
15-30 V-Stiff
30 + Hard

SUMMARY:
Earth Boring 50'
Rock Coring
Samples

HOLE NO. PS-1S

Appendix G

Electrical Resistivity Survey Report

DR. JOHN F. KICK

Geophysical & Geological Consulting

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(617) 649-6650

ELECTRICAL RESISTIVITY SURVEY
EASTHAMPTON, MASSACHUSETTS

prepared for

IEP, Inc.
6 Maple Street
Northborough, MA

ELECTRICAL RESISTIVITY SURVEY
EASTHAMPTON, MASSACHUSETTS

Introduction

An electrical resistivity survey was completed at various locations in the town of Easthampton, Massachusetts by John Kick, consulting geophysicist. The purpose of the survey was to provide information on the nature and extent of subsurface strata especially impervious clay layers. The information is needed to support a groundwater investigation being conducted by IEP, Inc.

Electrical Resistivity Method

Electrical resistivity values measured from the surface of the ground depend on the thickness and composition of subsurface layers. Electrically speaking, composition is a combination of soil or rock characteristics (mineralogy, texture, porosity, permeability, etc.) and the compostion of interstitial water. Soils such as clay and silt for example generally have lower resistivity than sands and gravels. In Easthampton electrical resistivity was used to determine the presence and depth of layers of sand, clay, and bedrock that could be controlling factors in the siting of wells.

Electrical resistivity systems are made up of two pairs of electrodes, a power source, and a measuring apparatus. One pair of electrodes introduces current into the ground and therefore functions as a transmitter. The second pair samples the resulting potemtial pattern and therefore acts as a receiver. Knowledge of the current, potential, and the particular electrode configuration used allows one to compute the "average" resistivity of the volume of ground sampled. The resulting average resistivity is known as "apparent resistivity".

Apparent resistivity readings can be made for a series of electrode spacings varying from closely to widely spaced. With each increase in electrode spacing an increasingly larger and deeper volume of ground is sampled; thus the method is also referred to as electrical sounding. The results of a sounding are plotted as curves of apparent resistivity versus electrode spacing termed a sounding curve. The shape of the curve reflects the change of resistivity with depth, and therefore changes in the nature and thickness of materials. The shape of the curve can be analyzed and interpreted by use of a variety of methods to yield thickness and "true" resistivities of subsurface layers.

Field Work

On January 27, 28, 29 and February 5, 1987, soundings were made at 7 locations as shown on the map of Figure 1. An ABEM Terrameter 300B earth resistivity system was used in the Schlumberger electrode configuration which involves two outer, current electrodes (transmitter) and two inner, potential electrodes (receivers). In the Schlumberger configuration the inner electrodes are spaced at less than one fifth the distance between the outer electrodes. The distance between the center of the configuration and either outer electrode is referred to as the "L-spacing."

Analysis

Data from the field was plotted as curves of apparent resistivity versus electrode spacing (L-spacing) on logarithmic graph paper. The curves were analyzed by modeling making use of a computer program that calculates Schlumberger electrical soundings for up to ten horizontal layers of earth material.

The procedure for interpretation can be briefly explained as follows. An initial theoretical sounding curve is calculated by assuming a model made up of a sequence of layers and corresponding resistivities. The assumptions are constrained by values from field curves and well logs. The calculated curve is compared to the observed curve and differences are noted. A second theoretical curve is then calculated using model parameters that are likely to minimize the differences between the observed and calculated curves. The process is repeated until the calculated curve is sufficiently close to the observed sounding curve. The resulting model is interpreted in terms of geological structure and materials.

Results

The results of the 7 resistivity sounding curves are presented below, listing the results of modeling.

Models - Each model listed below provides a section of layers that is consistent with the observed field values. It should be kept in mind that the layers listed in the models are electrical in nature and do not necessarily correspond exactly with geologically observed strata. The resolution of the resistivity method decreases with depth because the volume sampled increases, and because of a general decrease in signal-to-noise ratio with depth.

For the models listed below, thickness is given in feet and resistivity is given in units of ohm-feet. "K" denotes basal substratum, thickness not recorded. Location of each sounding is shown on the map of Figure 1.

Model for So #1

Thickness	Resistivity
3	11500
5	16000
8	900
8	10000
130	500
K	11500

Model for So #2

Thickness	Resistivity
2	32000
40	90000
130	6500
K	580

Model for So #3

Thickness	Resistivity
1	1000
5	1400
7	600
70	300
100	800
K	300

Model for So #4

Thickness	Resistivity
3	2000
5	1000
15	350
130	900
K	300

Model for So #5

Thickness	Resistivity
5	4800
10	2600
20	900
110	350
K	2500

Model for So #6

Thickness	Resistivity
2	10000
7	28000
53	9900
50	1000
K	330

Model for So #7

Thickness	Resistivity
4	28000
9	100000
25	40000
50	1000
K	500

Resistivity Values

The resistivity units derived from modeling are interpreted to be associated with earth stratigraphic units listed below. The stratigraphic units listed are somewhat general and arbitrary. There are sure to be vertical and horizontal gradations, changes, and other complexities common to sediments underlying this site. There should be some overlapping of the resistivity value ranges.

Resistivity Range (ohm ft.)	Stratigraphic Unit
50 - 600	Clay and silty clay - ionized pore water.
600 - 1000	Clayey silt - silt and fine sand.
1000 - 2000	Silt - saturated sand and gravel.
2000 - 16000 and higher	Unsaturated sand and gravel - fill to bedrock.

Discussion of Soundings

Following is a brief discussion of the results of the soundings; (spread length is greatest separation of current electrodes).

Sounding #1 (spread length: 1600 ft.) - 24 feet of sandy-gravelly material over 130 feet of fine grained (silt - clay). 154 feet to bedrock. This interpretation does not agree well with the results of boring PS-1 located about 1000 feet to the southeast which shows a preponderance of sand. The sediments may become sandier towards PS-1 or contain mineralized water that gives a lower than normal reading for sand.

Sounding #2 (spread length: 1600 ft.) - Sounding #2 shows mostly high resistivities indicating coarse sand and gravel over bedrock.

Sounding #3 (spread length: 900 ft.) - This model shows a 6 foot layer of fine sand over 7 feet of silty and clayey sediment. Layers 83 feet and lower have values of resistivity normal for fine sand, silt, clay. If bedrock is shallow as possibly indicated by boring PS-2 and a nearby ridge, the lower layer would likely be interpreted as bedrock. Such low values for bedrock would indicate weathering and/or fracturing and consequent mineralized pore water.

Sounding #4 (spread length: 1600 ft.) - This sounding is similar in many respects to sounding #3. Either bedrock was beneath the range of the sounding, or it has an unusually low resistivity.

Sounding #5 (spread length: 2000 ft.) - Similar in many respects to soundings 3 and 4, but showing higher values in the substratum. The higher values are consistent with an interpretation as bedrock.

Sounding #6 (spread length: 900 ft.) - Very high values of resistivity indicate coarse, unsaturated material near the surface with bedrock likely at shallow depth. Values consistent with fine grained sand, silt, or clay were not observed.

Sounding #7 (spread length: 1000 ft.) - Very similar to #6 but with higher values; a similar interpretation follows.

Summary

Soundings 2, 6, and 7 show predominance of coarse grained sediment and bedrock. Soundings 1, 3, 4, and 5 show substantial volumes of fine grained sediment.

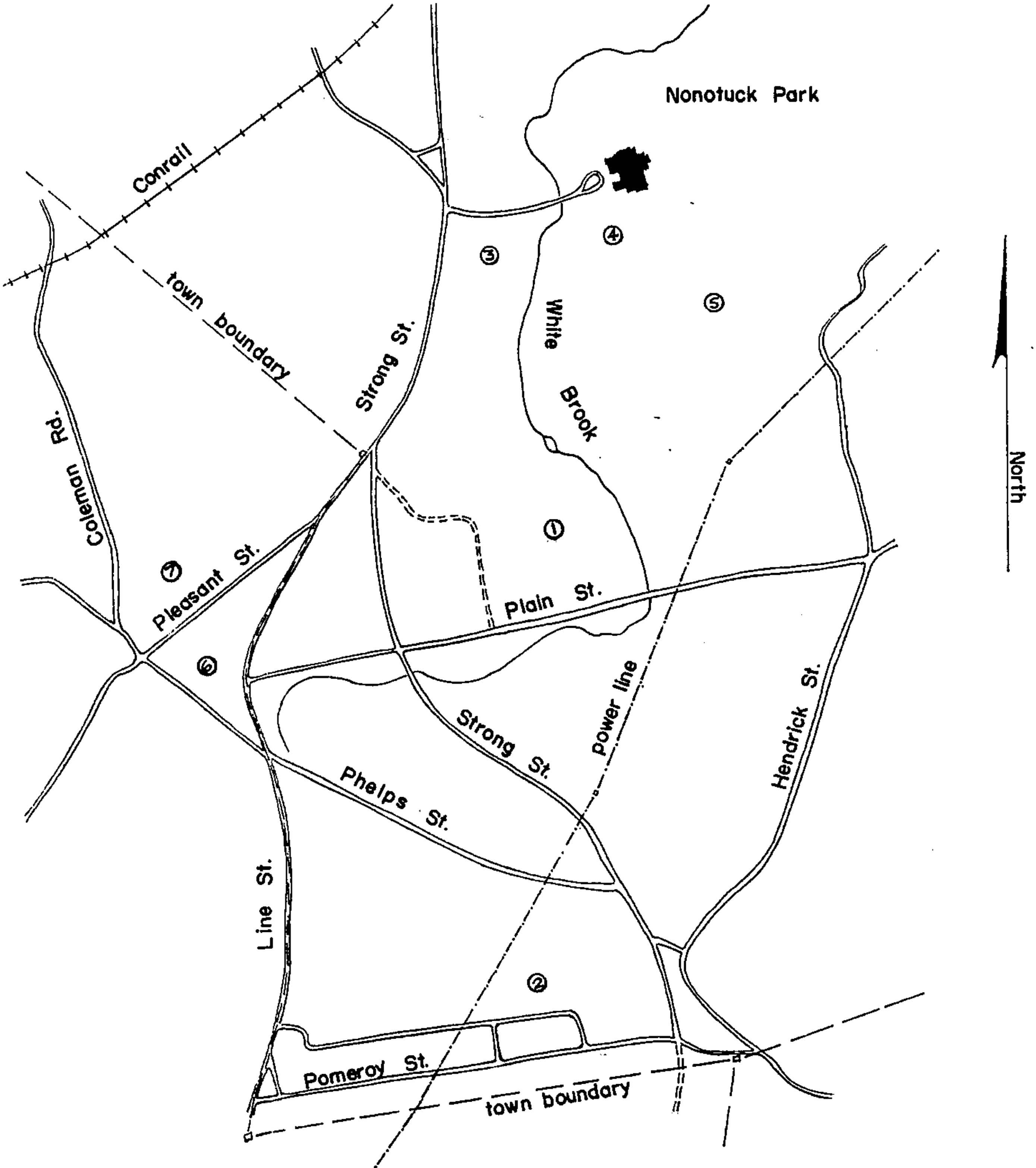

FIGURE 1

LOCATIONS OF

ELECTRICAL RESISTIVITY SOUNDINGS EASTHAMPTON, MASSACHUSETTS

⑥ resistivity sounding center

1 inch = approx. 1640 feet

by: J. F. Kick PhD
Geophysicist

Appendix H

Ground-Water Modeling Input Data Files

DATA SET: U1SS

Easthampton ALA

```
       2         39         23          1          1
 3  0  0  8  0 00  0 11 12 00  0  0
       0          1
       1          1               (23I3)          -1
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 0  0  0  1  1  1  1  1  1  1  1  1  1  1 -1 -1 -1 -1 -1 -1  1  0  0
 0  0  0  1  1 -1 -1 -1 -1 -1 -1 -1 -1 -1  1  1  1  1  1  1  0  0  0
 0  0  0  1 -1  1 -1  1  1  1  1  1  1  1  1  1  1  1  0  0  0  0  0
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 0  0  0  1  1  1  1  1  1  1  1  1  1  1  1 -1  1  0  0  0  0  0  0
```

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1 1 (23I3) −1

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     0         0 0118.800003      160.      127.      160.      155.      145.      145.      140.      135.      140.      145.      140.      155.
     0         0         0      165.      145.      130.      165.      165.      165.      160.      160.      140.      145.      170.      160.      170.
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DATA SET U1TR

Easthampton ALA

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1	1.		(23F10.0)	-1											
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1000.	1000.	1000.	217.	218.	219.	220.	220.	221.	220.	220.	220.	219.	219.	219.	1000.
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1000.	1000.	1000.	1000.	238.	238.	239.	239.	240.	240.	241.	242.	244.	245.	1000.	1000.
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0	0	0	0	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	0	0
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3	1.	(23F10.0)		-1											
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0	0	0	5.80e-010	5.80e-010	5.80e-010	5.80e-010	5.80e-010	5.80e-010	5.80e-010	4.64e-009	4.64e-009	5.80e-010	5.80e-010	5.80e-010	5.80e-010
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0	0	0	0	5.80e-010	5.80e-010	5.80e-010	5.80e-010	4.64e-009	4.64e-009	4.64e-009	4.64e-009	4.64e-009	5.80e-010	5.80e-010	5.80e-010
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3	1.		(23F10.0)	-1											
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0	0	0	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	3.51e-002	3.51e-002
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0	0	0	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	3.51e-002	3.51e-002
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0	0	0	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	3.51e-002
0	0	0	4.01e-001	4.01e-001	1.88e-003	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	9.82e-002	4.01e-001	4.01e-001	4.01e-001	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	9.82e-002	4.01e-001	4.01e-001	4.01e-001	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	3.51e-002

0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	1.052352
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	1.052352
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0	0	0	0	4.01e-001	1.88e-003	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	7.02e-001
0	0	0	0	4.01e-001	1.88e-003	4.51e-001	4.51e-001	4.51e-001	4.51e-001	4.51e-001	1.052352	1.052352	1.052352	1.052352	7.02e-001
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         3       1.0          (23F10.0)        -1
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        0         0         0 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003
        0         0         0 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003
        0         0         0 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003 3.75e-003
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 1.88e-003 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002
        0         0         0 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002
        0         0         0 4.01e-001 4.01e-001 1.88e-003 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 4.01e-001 3.51e-002
        0         0         0         0 4.01e-001 1.88e-003 4.01e-001 7.44e-002 1.12e-001 4.01e-001 9.82e-002 9.82e-002 4.01e-001 4.01e-001 4.01e-001 3.51e-002
```

0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	9.82e-002	4.01e-001	4.01e-001	4.01e-001	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	9.82e-002	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	3.51e-002
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	1.052352
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	7.44e-002	1.12e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	1.052352
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	1.052352
0	0	0	0	4.01e-001	1.88e-003	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	1.052352	7.02e-001
0	0	0	0	4.01e-001	1.88e-003	4.51e-001	4.51e-001	4.51e-001	4.51e-001	4.51e-001	1.052352	1.052352	1.052352	1.052352	7.02e-001
0	0	0	4.01e-001	4.01e-001	4.51e-001	0	0	4.51e-001	4.51e-001	4.51e-001	4.51e-001	1.052352	1.052352	1.052352	7.02e-001
0	0	0	4.01e-001	4.01e-001	4.01e-001	4.51e-001	4.51e-001	4.51e-001	4.51e-001	4.51e-001	4.51e-001	1.052352	1.052352	1.052352	7.02e-001
0	0	0	4.01e-001	4.01e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	1.052352	1.052352	1.052352	7.02e-001
0	0	0	4.01e-001	4.01e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	1.052352	1.052352	1.052352	7.02e-001
0	0	0	4.01e-001	4.01e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	1.052352	1.052352	1.052352	0
0	0	0	4.01e-001	4.01e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	1.052352	1.052352	0	0
0	0	0	4.01e-001	4.01e-001	7.02e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	1.052352	1.052352	1.052352	0
0	0	0	0	4.01e-001	7.02e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	4.01e-001	1.052352	1.052352	0	0
0	0	0	0	4.01e-001	7.02e-001	4.01e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	7.02e-001	1.052352	1.052352	0	0
0	0	0	0	4.01e-001	7.02e-001	3.93e-001	3.93e-001	3.93e-001	3.93e-001	3.93e-001	3.93e-001	1.052352	1.052352	0	0
0	0	0	0	4.01e-001	7.02e-001	1.052352	1.052352	1.052352	1.052352	1.052352	1.052352	1.052352	1.052352	0	0

DATA SET U4DRT

2	0		
2			
2	25	16	-6.03
2	14	10	-1.39

DATA SET U4NP

2	0		
2			
2	14	10	-1.52
2	25	16	-1.39

DATA SET: U4HS

2	0		
2			
2	25	16	-1.78
2	14	10	-1.39

DATA SET: U8TR

59	06				
59					
1	39	16	255.	5.32E-3	250.
1	39	15	253.	5.32E-3	248.
1	38	14	251.	5.32E-3	246.
1	38	13	250.	5.32E-3	245.
1	38	12	248.	5.32E-3	243.
1	38	11	245.	5.32E-3	240.
1	38	10	240.	5.32E-3	235.
1	37	10	230.	5.32E-3	225.
1	36	10	225.	5.32E-3	220.
1	36	9	223.	5.32E-3	218.
1	36	8	220.	5.32E-3	215.
1	35	8	215.	5.32E-3	210.
1	34	9	210.	5.32E-3	205.
1	34	10	210.	5.32E-3	205.
1	34	11	210.	5.32E-3	205.
1	34	12	205.	5.32E-3	200.
1	33	13	200.	5.32E-3	195.
1	32	14	190.	5.32E-3	185.
1	32	15	190.	5.32E-3	185.
1	31	15	185.	5.32E-3	180.
1	30	16	180.	5.32E-3	175.
1	29	16	180.	5.32E-3	175.
1	28	16	175.	5.32E-3	170.
1	27	16	170.	5.79E-4	165.
1	26	16	170.	5.79E-4	165.
1	26	17	170.	5.79E-4	165.
1	25	17	170.	5.79E-4	165.
1	24	17	165.	5.79E-4	160.
1	23	17	160.	5.79E-4	155.
1	22	16	160.	5.79E-4	155.
1	21	15	160.	5.79E-4	155.
1	21	14	160.	5.79E-4	155.
1	20	14	160.	5.79E-4	155.
1	19	14	158.	5.79E-4	153.

1	18	13	158.	5.79E-4	153.
1	17	13	156.	5.79E-4	151.
1	16	13	156.	5.79E-4	151.
1	16	12	154.	5.79E-4	149.
1	15	11	152.	5.79E-4	147.
1	14	11	152.	5.79E-4	147.
1	13	10	150.	5.79E-4	145.
1	12	10	150.	5.79E-4	145.
1	11	10	150.	5.793-4	145.
1	11	9	150.	5.79E-4	145.
1	11	8	150.	5.79E-4	145.
1	11	7	150.	5.79E-4	145.
1	10	7	150.	5.793-4	145.
1	9	6	150.	5.79E-4	145.
1	8	5	140.	5.793-4	135.
1	7	5	130.	5.79E-4	125.
1	6	6	130.	5.79E-4	125.
1	5	6	130.	5.79E-4	125.
1	5	4	120.	5.79E-4	115.
1	4	5	120.	5.79E-4	115.
1	4	7	130.	5.79E-4	125.
1	3	6	120.	5.79E-4	115.
1	3	7	115.	5.79E-4	110.
1	3	8	110.	5.79E-4	105.
1	3	9	110.	5.79E-4	105.
1	3	10	110.	5.79E-4	105.
1	3	11	110.	5.79E-4	105.
1	3	12	110.	5.79E-4	105.
1	3	13	110.	5.79E-4	105.
1	3	14	105.	5.79E-4	100.
1	2	15	105.	5.79E-4	100.
1	2	16	105.	5.79E-4	100.
1	2	17	105.	5.79E-4	100.
1	2	18	100.	5.79E-4	95.
1	2	19	100.	5.79E-4	95.
1	2	20	100.	5.79E-4	95.

DATA SET: U8SS

27	-1				
27					
1	30	16	180.	5.8E-5	175.
1	29	16	178.	5.8E-6	173.
1	28	16	176.	5.8E-6	171.
1	27	16	172.	5.8E-6	167.
1	26	16	170.	5.8E-6	165.
1	26	17	169.	5.8E-6	164.
1	25	17	168.	5.8E-6	163.
1	24	17	167.	5.8E-6	162.
1	23	17	166.	5.8E-6	161.
1	22	16	164.	5.8E-6	159.
1	21	15	161.	5.8E-6	156.
1	21	14	160.	5.8E-6	155.
1	19	14	158.	5.8E-6	153.
1	18	13	157.	5.8E-6	152.
1	17	13	156.	5.8E-6	151.
1	16	13	155.	5.8E-6	150.
1	16	12	154.	5.8E-5	149.
1	15	11	153.	5.8E-6	148.
1	14	11	152.	5.8E-4	147.
1	13	10	151.	5.8E-4	146.
1	12	10	150.	5.8E-4	145.
1	11	10	148.2	5.8E-6	143.2
1	11	9	147.9	5.8E-5	142.9
1	11	8	147.3	5.8E-5	142.3
1	11	7	147.	5.8E-5	142.
1	10	7	147.	5.8E-6	142.
1	9	6	145.	5.8E-6	140.

DATA SET: U11TR

1	0														
1															
11	1.		(23F10.0)	-1											
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010	5.71e-010
0	0	0	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009	3.17e-009
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0

0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008

DATA SET: U11SS

```
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   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010 5.71e-010
   0      0         0 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009 3.17e-009
   0      0         0 6.66e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008
   0      0         0 6.66e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008
   0      0         0 6.66e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 6.66e-008
   0      0         0 6.66e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 3.17e-008 6.66e-008         0
```

0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008	0	0
0	0	0	0	6.66e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	3.17e-008	6.66e-008
0	1														

DATA SET: U12

```
200        5
 1. 1.00e-003       1        0        0
```

Appendix I

Ground-Water Modeling Output Data Files

10 year steady state run (10YSS.DAT)

```
1                     U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  0  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 STEADY-STATE SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1          1
         2          0
   1796 ELEMENTS IN X ARRAY ARE USED BY BCF
  18909 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 2 -- RECHARGE TO ONE SPECIFIED NODE IN EACH VERTICAL COLUMN
   1794 ELEMENTS OF X ARRAY USED FOR RECHARGE
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF    27 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE PRINTED
    162 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  20865 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  28846 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
```

```
0
                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                ----------------------------------------------------------------------------------
0
                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                ----------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99    AT ALL NO-FLOW NODES (IBOUND=0).
0
                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                ----------------------------------------------------------------------------------
0
                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                ----------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
           HEAD
           DRAWDOWN
0                                        COLUMN TO ROW ANISOTROPY =   1.000000
0
                              DELR WILL BE READ ON UNIT  3 USING FORMAT:         (23F10.0)
                ---------------------------------------------------------------------
0
                              DELC WILL BE READ ON UNIT  3 USING FORMAT:         (39F10.0)
                ---------------------------------------------------------------------
```

```
0
                 HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
               ----------------------------------------------------------------------------------------
0
                              BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
               ----------------------------------------------------------------------------------------
0
               VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
               ----------------------------------------------------------------------------------------
0
                  TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
               ----------------------------------------------------------------------------------------
0
                                      SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
                                      -------------------------------------------
0                          MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      200
                                          ACCELERATION PARAMETER =     1.0000
                               HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
                               SIP HEAD CHANGE PRINTOUT INTERVAL =      999
0                              CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
1                             STRESS PERIOD NO.   1, LENGTH =   .3155760E+09
                              ----------------------------------------------

                              NUMBER OF TIME STEPS =     1

                               MULTIPLIER FOR DELT =     1.000

                            INITIAL TIME STEP SIZE =   .3155760E+09
```

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0 RECHARGE LAYER INDEX = 1

0

27 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	30	16	180.0	.5800E-04	175.0	1
1	29	16	178.0	.5800E-05	173.0	2
1	28	16	176.0	.5800E-05	171.0	3
1	27	16	172.0	.5800E-05	167.0	4
1	26	16	170.0	.5800E-05	165.0	5
1	26	17	169.0	.5800E-05	164.0	6
1	25	17	168.0	.5800E-05	163.0	7
1	24	17	167.0	.5800E-05	162.0	8
1	23	17	166.0	.5800E-05	161.0	9
1	22	16	164.0	.5800E-05	159.0	10
1	21	15	161.0	.5800E-05	156.0	11
1	21	14	160.0	.5800E-05	155.0	12
1	19	14	158.0	.5800E-05	153.0	13
1	18	13	157.0	.5800E-05	152.0	14
1	17	13	156.0	.5800E-05	151.0	15
1	16	13	155.0	.5800E-05	150.0	16
1	16	12	154.0	.5800E-04	149.0	17
1	15	11	153.0	.5800E-05	148.0	18
1	14	11	152.0	.5800E-03	147.0	19
1	13	10	151.0	.5800E-03	146.0	20
1	12	10	150.0	.5800E-03	145.0	21
1	11	10	148.2	.5800E-05	143.2	22
1	11	9	147.9	.5800E-04	142.9	23
1	11	8	147.3	.5800E-04	142.3	24
1	11	7	147.0	.5800E-04	142.0	25
1	10	7	147.0	.5800E-05	142.0	26
1	9	6	145.0	.5800E-05	140.0	27

```
0AVERAGE SEED =  .00228822
 MINIMUM SEED =  .00000026
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

              .0000000E+00   .7812870E+00   .9521646E+00   .9895378E+00   .9977118E+00
0
    57 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------------
    98.92     (  1,  4, 14) -22.98      (  1, 35, 15) -15.30      (  1,  2, 21) -11.08      (  1, 33,  7) -20.81      (  1, 21, 13)
   -13.78     (  2,  4, 18) -4.880      (  1,  3, 17) -2.057      (  2, 28,  7) -2.765      (  2, 29,  4) -8.255      (  1,  4, 18)
   -5.339     (  2,  8, 18) -1.430      (  1, 12, 18) -1.479      (  1, 17,  4) -1.339      (  2,  8,  4) -3.713      (  1,  9,  4)
   -2.270     (  2,  4, 18) -.7787      (  1,  3, 18) -.2820      (  1,  4, 17) -.6964      (  1,  9,  4) -2.108      (  1,  4, 18)
   -1.369     (  2,  8, 18) -.3686      (  1, 12, 18) -.3307      (  1,  1,  4) -.2984      (  2,  8,  4) -.7589      (  1,  9,  4)
   -.4472     (  2,  4, 18) -.1539      (  1,  3, 18) -.5127E-01 (  1, 14, 17) -.1274      (  1,  9,  4) -.3898      (  1,  4, 18)
   -.2538     (  2,  8, 18) -.6828E-01 (  1, 12, 18) -.6138E-01 (  1,  1,  4) -.5227E-01 (  2,  7,  4) -.1316      (  1,  9,  4)
   -.7677E-01 (  2,  4, 18) -.2648E-01 (  1,  3, 18) -.8883E-02 (  1, 14, 17) -.2159E-01 (  1,  9,  4) -.6658E-01 (  1,  4, 18)
   -.4335E-01 (  2,  8, 18) -.1167E-01 (  1, 12, 18) -.1049E-01 (  1,  1,  4) -.8771E-02 (  2,  7,  4) -.2210E-01 (  1,  9,  4)
   -.1286E-01 (  2,  4, 18) -.4440E-02 (  1,  3, 18) -.1492E-02 (  1, 13, 17) -.3606E-02 (  1,  9,  4) -.1115E-01 (  1,  4, 18)
   -.7256E-02 (  2,  8, 18) -.1953E-02 (  1, 12, 18) -.1755E-02 (  1,  1,  4) -.1462E-02 (  2,  7,  4) -.3685E-02 (  1,  9,  4)
   -.2144E-02 (  2,  4, 18) -.7405E-03 (  1,  3, 18)
0
1                    HEAD IN LAYER  1 AT END OF TIME STEP  1 IN STRESS PERIOD  1
                ---------------------------------------------------------------------

               1          2          3          4          5          6          7          8          9         10
              11         12         13         14         15         16         17         18         19         20
              21         22         23
 ...................................................................................................................
0  1     1000.      1000.      1000.      151.7      150.0      140.0      130.0      120.0      110.0      108.0
         106.0      104.0      103.0      102.0      102.0      102.0      102.0      102.0      102.0      101.0
         98.00      1000.      1000.
0  2     1000.      1000.      1000.      159.3      157.5      153.4      150.3      148.1      146.3      145.1
         143.8      142.4      139.8      132.6      108.0      107.0      106.0      105.0      102.0      100.0
         123.8      1000.      1000.
0  3     1000.      1000.      1000.      172.6      167.2      116.0      115.0      114.3      113.6      112.9
```

	112.2	111.5	111.0	110.0	144.0	149.7	151.2	150.9	149.5	148.6
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	178.6	117.0	173.1	125.0	173.1	179.7	181.7
	182.7	183.1	183.3	183.2	182.5	181.9	181.4	181.1	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	118.8	175.1	127.0	176.3	182.6	184.0	184.5
	184.8	184.9	184.9	184.9	184.6	184.4	184.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	180.7	177.7	130.0	178.4	183.7	184.7	185.1
	185.2	185.3	185.3	185.3	185.2	185.1	185.1	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	181.6	130.0	178.7	184.0	185.2	185.4	185.5
	185.6	185.6	185.6	185.6	185.6	185.5	185.5	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	182.7	140.0	179.1	184.4	185.5	185.7	185.8
	185.8	185.8	185.8	185.8	185.8	185.8	185.8	185.9	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	185.5	178.5	146.4	181.2	184.7	185.3	185.6
	185.7	185.8	185.9	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	186.5	184.5	178.6	182.5	183.8	184.0	184.6
	185.1	185.5	185.8	186.0	186.0	186.0	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.0	186.4	184.5	179.5	178.4	176.3	179.8
	183.8	184.6	185.5	186.0	186.0	186.1	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	187.4	187.1	185.9	183.7	181.7	174.4	158.8
	180.9	183.3	185.1	185.9	186.0	186.1	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	187.6	187.4	186.5	185.1	183.0	175.5	159.3
	178.7	182.4	184.8	185.8	186.0	186.1	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	187.7	187.7	186.8	185.8	184.2	180.0	174.7
	171.8	181.1	184.7	185.8	186.0	186.1	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	187.9	188.0	187.1	186.2	185.1	183.0	181.3
	181.0	183.1	184.9	185.7	186.0	186.0	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							

0 16	1000.	1000.	1000.	188.2	188.5	187.4	186.6	186.0	185.2	184.7
	184.3	183.8	184.9	185.7	185.9	186.0	186.1	186.1	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	188.4	189.4	187.9	186.7	186.3	185.9	185.6
	185.2	185.1	185.1	185.6	185.8	185.9	185.9	186.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	190.6	188.6	186.9	186.4	186.0	185.7
	185.3	185.2	185.0	184.9	185.3	185.5	185.7	185.8	185.8	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	191.8	189.3	187.0	186.3	185.9	185.7
	185.3	185.0	184.7	181.3	183.5	184.6	185.2	185.5	185.7	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.0	190.0	187.1	186.2	185.3	185.2
	185.0	184.7	183.7	158.5	178.1	182.6	184.4	185.1	185.5	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.3	190.7	187.2	186.2	185.3	185.1
	185.0	184.9	184.5	181.1	182.9	184.1	184.8	185.1	185.3	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.2	191.4	187.4	186.2	185.3	185.2
	185.0	184.9	184.8	184.0	184.3	184.2	184.6	185.0	185.1	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	195.9	191.8	187.6	186.3	185.4	185.2
	185.1	185.0	184.8	184.7	184.7	184.5	184.3	184.8	185.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.5	192.4	187.8	186.5	185.5	185.3
	185.1	185.0	184.9	185.0	184.8	184.6	184.2	184.6	184.8	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	197.2	193.1	188.1	186.7	185.6	185.4
	185.2	185.1	184.9	185.0	184.7	184.4	184.1	184.5	184.7	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	197.9	194.0	188.5	187.0	185.9	185.6
	185.4	185.2	184.9	184.9	184.5	184.0	183.9	184.4	184.5	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.7	195.2	189.3	187.6	186.2	185.9
	185.6	185.3	185.0	184.8	184.2	183.7	183.9	184.2	184.4	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	202.5	199.9	197.5	191.4	189.1	187.0	186.6
	186.1	185.6	185.1	184.5	183.5	182.6	183.1	183.8	184.2	1000.

```
        1000.     1000.     1000.
 0 29   1000.     1000.     1000.     201.9     200.5     199.9     196.4     193.0     188.8     187.9
        187.1     186.2     185.1     183.8     182.2     178.0     181.1     1000.     1000.     1000.
        1000.     1000.     1000.
 0 30   1000.     1000.     1000.     202.4     201.6     200.0     197.2     194.8     192.5     191.0
        189.5     187.9     186.1     183.7     181.4     180.0     180.4     1000.     1000.     1000.
        1000.     1000.     1000.
 0 31   1000.     1000.     1000.     203.9     202.8     201.3     199.1     197.3     195.5     194.3
        192.9     191.4     189.2     186.1     183.0     183.2     183.1     1000.     1000.     1000.
        1000.     1000.     1000.
 0 32   1000.     1000.     1000.     206.0     204.9     203.5     201.7     200.2     198.8     197.7
        196.5     195.2     193.2     190.0     187.0     187.0     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 33   1000.     1000.     1000.     208.2     207.6     206.6     205.6     204.7     203.8     203.1
        202.2     201.3     200.0     198.5     197.6     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 34   1000.     1000.     1000.     212.1     212.1     212.0     212.5     213.1     214.0     215.0
        211.0     210.0     210.0     209.7     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 35   1000.     1000.     1000.     217.0     218.2     219.0     219.6     220.1     221.0     220.0
        219.7     219.5     219.4     219.4     219.4     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 36   1000.     1000.     1000.     1000.     226.4     226.7     226.5     225.0     230.0     229.0
        228.6     228.4     228.2     228.1     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 37   1000.     1000.     1000.     1000.     233.1     233.4     233.9     234.5     234.8     235.0
        235.2     235.4     235.5     235.7     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 38   1000.     1000.     1000.     1000.     237.9     238.3     238.8     239.3     239.7     240.0
        241.0     242.0     244.0     245.0     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 39   1000.     1000.     1000.     1000.     240.8     241.4     242.4     243.1     243.7     244.2
        244.8     245.3     246.3     247.7     250.0     255.0     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
1                 HEAD IN LAYER  2 AT END OF TIME STEP  1 IN STRESS PERIOD  1
            ------------------------------------------------------------------

          1         2         3         4         5         6         7         8         9        10
```

	11	12	13	14	15	16	17	18	19	20
	21	22	23							
0 1	1000.	1000.	1000.	150.7	148.7	144.4	140.0	136.9	134.5	133.1
	131.6	130.3	128.4	126.2	124.8	123.9	123.0	122.3	121.3	120.2
	119.0	1000.	1000.							
0 2	1000.	1000.	1000.	158.4	156.6	153.3	150.3	148.1	146.4	145.2
	143.9	142.7	140.7	137.7	135.4	134.0	132.7	131.5	129.9	128.3
	126.5	1000.	1000.							
0 3	1000.	1000.	1000.	172.4	170.2	165.2	162.9	161.5	160.6	160.0
	159.4	158.7	157.7	156.1	154.6	153.8	152.5	151.3	149.5	148.2
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	183.8	183.8	183.7	183.7	183.7	183.7	183.7
	183.7	183.7	183.7	183.7	182.4	181.4	180.8	180.3	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	184.1	184.1	184.1	184.1	184.1	184.1	184.1
	184.1	184.1	184.1	184.1	183.7	183.4	183.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	184.5	184.4	184.4	184.4	184.4	184.4	184.4
	184.4	184.4	184.4	184.4	184.2	184.1	184.1	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	184.8	184.8	184.7	184.7	184.7	184.7	184.7
	184.7	184.7	184.6	184.6	184.6	184.5	184.5	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	185.3	185.2	185.1	185.0	185.0	184.9	184.9
	184.9	184.9	184.9	184.9	184.9	184.8	184.9	184.9	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	185.6	185.5	185.4	185.3	185.2	185.1	185.1
	185.1	185.1	185.0	185.0	185.0	185.0	185.0	185.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	185.9	185.8	185.6	185.4	185.3	185.2	185.2
	185.2	185.1	185.1	185.1	185.1	185.1	185.1	185.1	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	186.2	186.1	185.8	185.5	185.4	185.3	185.3
	185.2	185.2	185.2	185.1	185.1	185.1	185.2	185.2	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	186.4	186.4	185.9	185.6	185.5	185.4	185.3
	185.3	185.2	185.2	185.2	185.2	185.2	185.2	185.2	1000.	1000.

	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	186.6	186.5	186.0	185.7	185.5	185.4	185.3
	185.3	185.3	185.2	185.2	185.2	185.2	185.2	185.2	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	186.8	186.8	186.1	185.7	185.5	185.4	185.4
	185.3	185.3	185.2	185.2	185.2	185.2	185.2	185.2	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	187.0	187.0	186.2	185.8	185.5	185.4	185.4
	185.3	185.3	185.2	185.2	185.1	185.1	185.2	185.2	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	187.2	187.5	186.3	185.8	185.5	185.4	185.4
	185.3	185.3	185.2	185.1	185.1	185.1	185.1	185.2	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	187.5	188.5	186.8	185.6	185.5	185.4	185.3
	185.3	185.2	185.1	185.1	185.1	185.1	185.1	185.1	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	189.8	187.7	185.6	185.4	185.3	185.2
	185.2	185.1	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	191.1	188.4	185.5	185.4	185.2	185.1
	185.1	185.0	184.9	184.9	184.9	184.9	184.9	184.9	184.9	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	192.4	189.1	185.5	185.4	185.1	185.1
	184.9	184.8	184.8	184.8	184.8	184.8	184.8	184.8	184.8	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	193.7	189.8	185.6	185.4	185.1	185.0
	184.9	184.8	184.8	184.7	184.7	184.7	184.6	184.6	184.6	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	194.7	190.4	185.6	185.4	185.1	185.0
	184.9	184.8	184.7	184.6	184.6	184.5	184.5	184.4	184.4	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	195.3	190.9	185.7	185.5	185.1	185.0
	184.9	184.8	184.7	184.6	184.5	184.4	184.3	184.2	184.2	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.0	191.4	185.7	185.6	185.2	185.1
	184.9	184.8	184.7	184.5	184.3	184.2	184.1	184.1	184.0	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	196.7	192.0	185.8	185.7	185.4	185.2

	185.0	184.9	184.7	184.4	184.2	184.1	184.0	184.0	183.9	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	197.3	192.9	185.9	185.8	185.6	185.4
	185.2	184.9	184.7	184.4	184.1	184.0	183.9	183.8	183.8	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.0	194.0	185.9	185.9	185.8	185.6
	185.3	185.0	184.7	184.3	184.0	183.8	183.7	183.6	183.6	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	199.0	196.4	186.0	186.1	186.3	186.1
	185.7	185.3	184.8	184.1	183.6	183.3	183.1	183.0	183.2	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	201.9	200.3	199.9	196.4	193.0	188.2	187.7
	186.9	186.0	185.1	183.8	182.7	181.8	181.8	181.8	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	202.4	201.6	199.9	197.2	194.8	192.5	191.0
	189.4	187.8	186.0	183.7	181.6	180.4	180.4	180.5	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.8	202.8	201.3	199.1	197.3	195.5	194.3
	192.9	191.3	189.2	186.1	183.5	183.2	183.1	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.0	204.9	203.5	201.7	200.2	198.8	197.7
	196.5	195.2	193.2	190.1	187.5	187.1	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.6	206.6	205.6	204.7	203.8	203.1
	202.2	201.2	200.0	198.5	197.6	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	212.1	212.1	212.0	212.5	213.1	213.9	214.3
	211.3	210.2	210.0	209.7	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	217.0	218.2	219.1	219.5	220.1	220.5	220.1
	219.7	219.5	219.4	219.4	219.4	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.4	226.7	226.4	225.8	228.7	228.8
	228.6	228.4	228.2	228.1	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	233.1	233.4	233.9	234.5	234.8	235.0
	235.2	235.4	235.5	235.7	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

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0 38   1000.     1000.     1000.     1000.     237.9     238.3     238.8     239.3     239.7     240.1
       241.0     242.1     243.9     244.9     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 39   1000.     1000.     1000.     1000.     240.8     241.4     242.4     243.1     243.7     244.2
       244.8     245.3     246.3     247.6     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP  1 IN STRESS PERIOD  1
                 ---------------------------------------------------------------

           1         2         3         4         5         6         7         8         9        10
          11        12        13        14        15        16        17        18        19        20
          21        22        23
.....................................................................................................
0 1    1000.     1000.     1000.     8.264     .0000     .0000     .0000     .0000     .0000     .0000
       .0000     .0000     .0000     .0000     .0000     .0000     .0000     .0000     .0000     .0000
       .0000     1000.     1000.
0 2    1000.     1000.     1000.    -24.34    -12.47    -8.422    -15.30    -23.07    -31.30    -30.09
      -29.80    -29.37    -28.27    -23.56     .0000     .0000     .0000     .0000     .0000     .0000
      -24.84     1000.     1000.
0 3    1000.     1000.     1000.    -55.64    -50.65     .0000     .0000     .0000     .0000     .0000
       .0000     .0000     .0000     .0000    -18.97    -29.67    -31.19    -30.91    -14.52    -18.59
       1000.     1000.     1000.
0 4    1000.     1000.     1000.    -61.01     .0000    -28.12     .0000    -43.12    -34.75    -36.74
      -37.66    -58.08    -53.31    -63.16    -52.46    -41.91    -41.45    -41.11     1000.     1000.
       1000.     1000.     1000.
0 5    1000.     1000.     1000.     .0000    -15.13     .0000    -16.26    -27.61    -39.03    -39.51
      -44.75    -49.87    -44.93    -39.87    -44.61    -29.43    -24.35     1000.     1000.     1000.
       1000.     1000.     1000.
0 6    1000.     1000.     1000.    -15.71    -32.73     .0000    -13.45    -18.70    -19.73    -25.05
      -25.21    -45.27    -40.31    -15.29    -25.19    -15.11    -10.08     1000.     1000.     1000.
       1000.     1000.     1000.
0 7    1000.     1000.     1000.    -11.60     .0000    -13.65    -14.04    -15.18    -15.45    -15.54
      -20.58    -20.60    -30.61    -20.59    -15.55    -10.53    -5.517     1000.     1000.     1000.
       1000.     1000.     1000.
0 8    1000.     1000.     1000.    -32.71     .0000    -34.10    -38.70    -20.47    -20.70    -20.78
      -15.82    -15.83    -10.84    -10.84    -5.834    -.8307     4.159     9.140     1000.     1000.
       1000.     1000.     1000.
0 9    1000.     1000.     1000.    -20.46    -8.517     .0000    -31.21    -29.74    -15.33    -20.56
```

	-15.71	-15.82	-10.91	-5.961	-.9737	4.023	4.014	9.007	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-11.47	-14.53	-31.87	-35.03	-23.83	-19.05	-19.56
	-15.11	-15.46	-10.83	-.9922	-1.033	3.952	3.940	8.932	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-12.04	-16.43	-36.48	-32.47	-31.13	-28.39	-31.61
	-35.33	-19.56	-5.499	-.9525	3.950	3.917	8.897	13.89	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-7.364	-17.06	-35.93	-28.73	-26.66	-19.41	-8.767
	-32.06	-13.34	-5.099	-.8787	3.966	3.915	8.887	8.873	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-7.561	-17.38	-26.49	-10.05	2.046	4.478	-8.327
	-29.63	-17.37	-4.830	-.8250	3.982	3.920	8.887	8.872	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-7.750	-27.67	-16.83	-2.767	.8164	3.001	5.276
	-19.77	-31.39	-4.664	-.7750	4.004	8.933	8.895	13.88	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-2.931	-32.97	-7.066	-1.188	-.1139	-4.2999E-02	.6993
	-29.01	-33.13	-4.856	-.7213	4.030	6.951	9.910	11.89	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-8.189	-23.46	-12.36	-1.561	1.024	-.2458	.3184
	-14.32	-31.83	-32.43	.3117	4.070	6.990	9.946	11.93	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-8.448	-24.37	-5.900	-1.734	1.686	7.0190E-02	.4206
	-2.236	-3.134	-32.11	-31.59	-2.798	4.111	9.052	14.02	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-20.57	-4.600	-1.854	1.623	-1.7944E-02	-1.685
	-3.315	-5.184	-29.51	7.5073E-02	2.687	5.454	9.291	14.20	24.18	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-19.79	-5.289	-.9545	2.668	1.098	-.6590
	-2.344	-3.997	-24.68	-24.28	1.483	5.421	9.806	11.48	24.32	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-19.72	-4.979	-5.1651E-02	3.843	2.667	.8154
	-1.003	-2.716	-13.73	.0000	5.889	5.397	10.60	9.855	24.52	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-19.66	-8.715	-3.213	-.1617	4.711	7.852
	9.987	11.14	5.450	-21.11	-21.87	-22.08	10.23	9.864	24.69	1000.
	1000.	1000.	1000.							

0 22	1000.	1000.	1000.	1000.	-19.32	-16.36	-7.399	-1.238	3.689	11.84
	12.96	14.07	20.23	-4.038	-4.252	-20.17	10.35	10.04	24.88	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-18.66	-16.84	-9.557	-1.326	4.640	7.802
	10.93	17.04	21.16	5.267	-4.681	-18.54	-17.29	10.23	25.02	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-18.02	-14.41	-7.769	-.4640	4.542	4.723
	9.872	19.00	21.13	9.040	-.7908	-8.563	-16.16	10.38	25.16	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-17.20	-13.12	-4.069	3.323	7.378	8.590
	12.78	16.93	21.10	7.003	-.7281	-7.428	-14.06	10.50	25.31	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-7.910	-9.024	1.474	2.998	9.142	11.39
	12.63	16.84	22.07	9.059	-6.521	-6.993	-12.91	10.65	25.45	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-4.657	-7.207	.7049	7.449	9.812	16.10
	24.41	29.70	25.03	5.183	-14.24	-11.70	-10.90	10.81	25.61	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	12.50	10.15	-4.516	-1.411	5.880	16.98	23.41
	23.89	29.37	11.94	-9.475	-4.496	-6.645	-8.118	11.23	25.84	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	10.10	9.531	6.119	-.3902	1.983	16.23	27.13
	27.95	28.85	4.889	3.230	-2.687	.0000	18.85	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	12.59	8.380	5.035	22.81	15.18	27.49	23.99
	25.52	27.08	6.928	-.7045	-1.446	.0000	19.62	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	11.15	7.232	33.72	20.88	22.74	24.47	20.74
	22.12	23.62	15.79	-1.080	.0000	26.82	31.94	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	8.980	5.061	36.54	18.27	19.77	21.20	17.28
	18.48	19.81	11.80	.0000	.0000	37.96	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	6.841	2.423	63.37	14.39	15.28	16.19	11.92
	12.82	13.75	.0000	6.451	17.40	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	2.909	-2.090	57.98	7.523	6.872	6.003	.0000
	.0000	.0000	.0000	.3056	1000.	1000.	1000.	1000.	1000.	1000.

```
         1000.     1000.     1000.
0 35     1000.     1000.     1000.    -2.018     6.826     5.951     5.438    -3.083     .0000     .0000
         .3044     .5355     10.58     20.62     20.61     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 36     1000.     1000.     1000.     1000.    -1.443    -1.722    -1.452     .0000     .0000     9.025
         9.363     1.630     6.810     21.86     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 37     1000.     1000.     1000.     1000.    -3.052    -3.381    -3.946    -4.472    -4.808     .0000
         9.793     9.623     14.45     19.32     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 38     1000.     1000.     1000.     1000.     2.121     1.745     1.153     .6652    -4.739     .0000
         .0000     .0000     .0000     .0000     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 39     1000.     1000.     1000.     1000.    -.8077    -1.432     7.630     6.920     6.260     .7750
         .2413    -.3353    -1.258     7.328     .0000     .0000     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
1                 DRAWDOWN IN LAYER  2 AT END OF TIME STEP  1 IN STRESS PERIOD  1
           ----------------------------------------------------------------------

             1         2         3         4         5         6         7         8         9        10
            11        12        13        14        15        16        17        18        19        20
            21        22        23
 .............................................................................................................
0  1     1000.     1000.     1000.    -40.73    -38.65    -34.36    -30.01    -26.88    -24.55    -23.06
        -21.64    -20.30    -18.42    -16.20    -14.76    -13.87    -13.05    -12.30    -11.28    -10.18
        -8.967     1000.     1000.
0  2     1000.     1000.     1000.     61.63     63.39     66.69     69.73     71.90     73.63     74.82
         76.05     77.33     79.33     82.26     84.61     86.03     87.32     88.48     90.07     91.69
         93.45     1000.     1000.
0  3     1000.     1000.     1000.     47.62     49.82     54.85     57.13     58.45     59.39     60.01
         60.65     61.30     62.33     63.91     65.35     66.19     67.46     68.69     70.53     71.76
         1000.     1000.     1000.
0  4     1000.     1000.     1000.     36.19     36.24     36.26     36.28     36.28     36.29     36.29
         36.30     36.30     36.31     36.33     37.57     38.57     39.16     39.74     1000.     1000.
         1000.     1000.     1000.
0  5     1000.     1000.     1000.     35.85     35.86     35.89     35.88     35.88     35.89     35.89
         35.89     35.89     35.90     35.91     36.26     36.63     36.65     1000.     1000.     1000.
         1000.     1000.     1000.
```

0 6	1000.	1000.	1000.	35.53	35.55	35.60	35.60	35.60	35.61	35.61
	35.62	35.62	35.62	35.63	35.77	35.92	35.92	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	35.16	35.22	35.26	35.29	35.31	35.32	35.33
	35.34	35.35	35.36	35.37	35.42	35.48	35.47	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	34.74	34.82	34.90	34.98	35.02	35.05	35.07
	35.09	35.10	35.12	35.13	35.14	35.17	35.14	35.11	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	34.37	34.46	34.63	34.75	34.82	34.87	34.90
	34.92	34.94	34.97	34.99	34.99	35.00	34.99	34.97	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	34.10	34.20	34.43	34.60	34.70	34.76	34.80
	34.83	34.86	34.89	34.91	34.91	34.91	34.90	34.89	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	33.80	33.91	34.23	34.46	34.59	34.67	34.72
	34.76	34.79	34.83	34.85	34.86	34.86	34.85	34.84	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	33.55	33.65	34.08	34.37	34.53	34.62	34.68
	34.72	34.76	34.80	34.83	34.84	34.84	34.83	34.82	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	33.39	33.45	33.98	34.32	34.49	34.59	34.65
	34.71	34.75	34.79	34.82	34.83	34.84	34.83	34.81	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	33.21	33.23	33.89	34.27	34.47	34.58	34.64
	34.70	34.74	34.79	34.83	34.84	34.84	34.83	34.82	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	33.04	32.97	33.81	34.25	34.45	34.57	34.63
	34.69	34.74	34.79	34.83	34.85	34.85	34.84	34.83	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	32.79	32.49	33.71	34.25	34.45	34.57	34.63
	34.69	34.74	34.81	34.86	34.87	34.87	34.86	34.85	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	32.52	31.47	33.15	34.40	34.50	34.60	34.67
	34.73	34.78	34.86	34.92	34.93	34.93	34.92	34.91	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	30.19	32.34	34.45	34.56	34.70	34.76
	34.81	34.90	34.97	35.01	35.02	35.02	35.01	35.01	35.02	1000.

	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	28.90	31.63	34.48	34.62	34.79	34.85
	34.92	35.04	35.10	35.13	35.14	35.14	35.13	35.11	45.10	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	27.61	30.93	34.48	34.65	34.87	34.94
	35.06	35.17	35.19	35.23	35.24	35.24	35.24	35.24	45.24	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	26.30	30.20	34.44	34.64	34.90	34.99
	35.10	35.20	35.24	35.30	35.32	35.33	35.36	35.40	45.43	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	25.32	29.59	34.38	34.59	34.90	35.02
	35.11	35.19	35.27	35.37	35.42	35.46	35.54	35.61	45.64	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	24.66	29.13	34.33	34.53	34.86	34.99
	35.10	35.19	35.28	35.43	35.52	35.63	35.73	35.81	45.82	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	24.00	28.60	34.27	34.44	34.77	34.93
	35.05	35.17	35.29	35.50	35.66	35.81	35.90	35.94	45.96	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	23.34	27.95	34.20	34.30	34.59	34.80
	34.97	35.13	35.29	35.57	35.77	35.88	35.96	36.01	56.08	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	22.67	27.12	34.13	34.17	34.36	34.59
	34.85	35.06	35.28	35.65	35.88	36.00	36.07	36.15	56.23	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	22.00	26.00	34.06	34.08	34.17	34.36
	34.67	34.95	35.25	35.74	36.04	36.19	36.31	36.42	56.43	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	21.00	23.59	33.98	33.91	33.70	33.88
	34.30	34.73	35.17	35.91	36.40	36.69	36.88	36.99	56.75	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	38.12	19.65	20.07	23.61	26.98	31.82	32.32
	33.07	33.99	34.93	36.20	37.30	38.15	38.24	38.16	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	47.59	38.39	20.06	22.82	25.19	47.54	34.03
	40.56	37.20	33.99	36.27	38.38	39.64	39.58	39.48	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	36.16	27.23	33.73	45.89	49.75	52.48	50.75

	50.14	49.66	30.82	33.92	36.51	36.77	46.94	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	43.99	45.06	36.54	41.27	54.78	56.21	52.28
	48.49	34.85	26.81	29.94	32.49	37.91	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	46.84	57.42	63.38	59.39	58.28	58.19	56.92
	37.82	18.77	20.01	21.46	22.40	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	67.91	62.91	57.98	52.52	6.870	26.06	5.685
	8.665	9.823	10.02	50.31	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	57.98	31.82	20.95	5.452	1.937	-.5048	9.925
	.2653	10.52	50.58	60.62	80.61	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	48.56	43.29	13.56	-2.821	-5.723	3.208
	6.395	7.621	9.808	31.86	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	46.95	41.62	51.05	25.53	-9.800	-.9981
	4.800	29.63	34.45	49.33	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	46.12	46.75	26.15	.6650	-11.74	-4.067
	-3.012	-2.102	3.071	9.101	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	74.19	48.57	46.62	43.92	41.26	35.77
	30.24	24.66	18.75	12.44	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

0

VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 1 IN STRESS PERIOD 1

0

CUMULATIVE VOLUMES	L**3	RATES FOR THIS TIME STEP	L**3/T
IN:		IN:	
STORAGE =	.00000	STORAGE =	.00000
CONSTANT HEAD =	.25793E+11	CONSTANT HEAD =	81.734

```
                     RECHARGE =    .11313E+10                                  RECHARGE =    3.5849
                RIVER LEAKAGE =    .00000                                 RIVER LEAKAGE =    .00000
0                    TOTAL IN =    .26925E+11                                  TOTAL IN =    85.319
0                  OUT:                                                      OUT:
                   ----                                                      ----
                      STORAGE =    .00000                                       STORAGE =    .00000
                CONSTANT HEAD =    .26916E+11                             CONSTANT HEAD =    85.291
                     RECHARGE =    .00000                                      RECHARGE =    .00000
                RIVER LEAKAGE =    .96488E+07                             RIVER LEAKAGE =    .30575E-01
0                   TOTAL OUT =    .26925E+11                                 TOTAL OUT =    85.321
0                    IN - OUT =   -.79872E+06                                  IN - OUT =   -.25330E-02
0         PERCENT DISCREPANCY =                  .00                PERCENT DISCREPANCY =                  .00

0

        TIME SUMMARY AT END OF TIME STEP  1 IN STRESS PERIOD  1
                            SECONDS      MINUTES      HOURS       DAYS        YEARS
                           -----------------------------------------------------------
    TIME STEP LENGTH       .315576E+09  .525960E+07  87660.0     3652.50     10.0000
  STRESS PERIOD TIME       .315576E+09  .525960E+07  87660.0     3652.50     10.0000
TOTAL SIMULATION TIME      .315576E+09  .525960E+07  87660.0     3652.50     10.0000
1
```

10 year steady state pumping conditions (10yssp.dat)

```
1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  4  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 STEADY-STATE SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1         1
         2         0
   1796 ELEMENTS IN X ARRAY ARE USED BY BCF
  18909 ELEMENTS OF X ARRAY USED OUT OF  32125
0WEL1 -- WELL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM  4
 MAXIMUM OF    2 WELLS
      8 ELEMENTS IN X ARRAY ARE USED FOR WELLS
  18917 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 2 -- RECHARGE TO ONE SPECIFIED NODE IN EACH VERTICAL COLUMN
   1794 ELEMENTS OF X ARRAY USED FOR RECHARGE
  20711 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   27 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE PRINTED
    162 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  20873 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
```

```
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  28854 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
0

                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                ----------------------------------------------------------------------------------
0

                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                ----------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99    AT ALL NO-FLOW NODES (IBOUND=0).
0

                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                ----------------------------------------------------------------------------------
0

                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                ----------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
          HEAD
          DRAWDOWN
0                                  COLUMN TO ROW ANISOTROPY =   1.000000
0

                              DELR WILL BE READ ON UNIT  3 USING FORMAT:           (23F10.0)
                ------------------------------------------------------------------
0
```

```
                 DELC WILL BE READ ON UNIT  3 USING FORMAT:          (39F10.0)
          ----------------------------------------------------------------
0
   HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
  ------------------------------------------------------------------------------------------
0
                 BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
  ------------------------------------------------------------------------------------------
0
VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
  ------------------------------------------------------------------------------------------
0
    TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
  ------------------------------------------------------------------------------------------
0
                    SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
                    -------------------------------------------
0            MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      200
                             ACCELERATION PARAMETER =     1.0000
                  HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
                  SIP HEAD CHANGE PRINTOUT INTERVAL =      999
                  CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
0
1                STRESS PERIOD NO.   1, LENGTH =   .3155760E+09
                 ----------------------------------------------

                 NUMBER OF TIME STEPS =     1
```

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = .3155760E+09

0 2 WELLS

LAYER	ROW	COL	STRESS RATE	WELL NO.
2	25	16	-6.0300	1
2	14	10	-1.3900	2

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0 RECHARGE LAYER INDEX = 1

0

27 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	30	16	180.0	.5800E-04	175.0	1
1	29	16	178.0	.5800E-05	173.0	2
1	28	16	176.0	.5800E-05	171.0	3
1	27	16	172.0	.5800E-05	167.0	4
1	26	16	170.0	.5800E-05	165.0	5
1	26	17	169.0	.5800E-05	164.0	6
1	25	17	168.0	.5800E-05	163.0	7
1	24	17	167.0	.5800E-05	162.0	8
1	23	17	166.0	.5800E-05	161.0	9
1	22	16	164.0	.5800E-05	159.0	10
1	21	15	161.0	.5800E-05	156.0	11
1	21	14	160.0	.5800E-05	155.0	12
1	19	14	158.0	.5800E-05	153.0	13
1	18	13	157.0	.5800E-05	152.0	14
1	17	13	156.0	.5800E-05	151.0	15
1	16	13	155.0	.5800E-05	150.0	16
1	16	12	154.0	.5800E-04	149.0	17
1	15	11	153.0	.5800E-05	148.0	18

```
                 1      14      11    152.0        .5800E-03        147.0          19
                 1      13      10    151.0        .5800E-03        146.0          20
                 1      12      10    150.0        .5800E-03        145.0          21
                 1      11      10    148.2        .5800E-05        143.2          22
                 1      11       9    147.9        .5800E-04        142.9          23
                 1      11       8    147.3        .5800E-04        142.3          24
                 1      11       7    147.0        .5800E-04        142.0          25
                 1      10       7    147.0        .5800E-05        142.0          26
                 1       9       6    145.0        .5800E-05        140.0          27
0AVERAGE SEED =  .00228822
 MINIMUM SEED =  .00000026
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7812870E+00   .9521646E+00   .9895378E+00   .9977118E+00
0
    57 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------------
     98.92     (  1,  4, 14)  -22.98     (  1, 35, 15)  -15.30     (  1,  2, 21)  -12.93     (  1, 28, 19)  -23.49     (  1, 20, 12)
    -16.67     (  2,  4, 18)  -5.848     (  1,  3, 17)  -2.233     (  2, 27,  7)  -3.234     (  1,  6,  4)  -10.51     (  1,  4, 18)
    -6.813     (  2,  8, 18)  -1.826     (  1, 12, 18)  -1.799     (  1, 17,  4)  -1.665     (  2,  8,  4)  -4.531     (  1,  9,  4)
    -2.755     (  2,  4, 18)  -.9489     (  1,  3, 18)  -.3345     (  1,  4, 17)  -.8266     (  1,  9,  4)  -2.500     (  1,  4, 18)
    -1.630     (  2,  8, 18)  -.4384     (  1, 12, 18)  -.3931     (  1,  1,  4)  -.3540     (  2,  7,  4)  -.8950     (  1,  9,  4)
    -.5248     (  2,  4, 18)  -.1815     (  1,  3, 18)  -.5995E-01 (  1, 13, 18)  -.1491     (  1,  9,  4)  -.4555     (  1,  4, 18)
    -.2976     (  2,  8, 18)  -.7999E-01 (  1, 12, 18)  -.7185E-01 (  1,  1,  4)  -.6167E-01 (  2,  7,  4)  -.1546     (  1,  9,  4)
    -.8987E-01 (  2,  4, 18)  -.3114E-01 (  1,  3, 18)  -.1035E-01 (  1, 13, 18)  -.2524E-01 (  1,  9,  4)  -.7761E-01 (  1,  4, 18)
    -.5071E-01 (  2,  8, 18)  -.1363E-01 (  1, 12, 18)  -.1224E-01 (  1,  1,  4)  -.1036E-01 (  2,  7,  4)  -.2598E-01 (  1,  9,  4)
    -.1507E-01 (  2,  4, 18)  -.5227E-02 (  1,  3, 18)  -.1740E-02 (  1, 13, 18)  -.4222E-02 (  1,  9,  4)  -.1301E-01 (  1,  4, 18)
    -.8499E-02 (  2,  8, 18)  -.2285E-02 (  1, 12, 18)  -.2052E-02 (  1,  1,  4)  -.1731E-02 (  2,  7,  4)  -.4342E-02 (  1,  9,  4)
    -.2519E-02 (  2,  4, 18)  -.8736E-03 (  1,  3, 18)
0
1                     HEAD IN LAYER  1 AT END OF TIME STEP  1 IN STRESS PERIOD  1
              ---------------------------------------------------------------------

             1          2          3          4          5          6          7          8          9          10
            11         12         13         14         15         16         17         18         19          20
```

	21	22	23							
0 1	1000.	1000.	1000.	148.9	150.0	140.0	130.0	120.0	110.0	108.0
	106.0	104.0	103.0	102.0	102.0	102.0	102.0	102.0	102.0	101.0
	98.00	1000.	1000.							
0 2	1000.	1000.	1000.	154.9	153.2	149.5	146.6	144.5	142.8	141.7
	140.5	139.2	136.8	130.2	108.0	107.0	106.0	105.0	102.0	100.0
	122.1	1000.	1000.							
0 3	1000.	1000.	1000.	166.3	161.4	116.0	115.0	114.3	113.6	112.9
	112.2	111.5	111.0	110.0	140.3	145.5	146.8	146.6	145.3	144.4
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	171.5	117.0	166.8	125.0	166.7	172.5	174.2
	174.9	175.3	175.4	175.3	174.7	174.2	173.8	173.5	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	118.8	168.5	127.0	169.4	174.9	176.1	176.5
	176.7	176.8	176.8	176.8	176.5	176.4	176.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	173.4	170.9	130.0	171.3	175.8	176.7	176.9
	177.1	177.1	177.1	177.1	177.0	176.9	176.9	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	174.3	130.0	171.7	176.2	177.1	177.3	177.3
	177.3	177.3	177.3	177.3	177.3	177.2	177.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	175.4	140.0	172.4	176.5	177.3	177.4	177.5
	177.5	177.5	177.5	177.4	177.4	177.4	177.4	177.4	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	177.8	172.0	146.4	173.9	176.7	177.1	177.2
	177.3	177.4	177.4	177.5	177.5	177.5	177.5	177.5	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	178.7	177.1	172.1	175.0	175.9	176.0	176.4
	176.7	177.0	177.3	177.4	177.5	177.5	177.5	177.5	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	179.3	178.7	176.9	172.5	171.6	169.8	172.5
	175.5	176.1	176.9	177.4	177.5	177.5	177.6	177.6	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	179.7	179.4	178.1	176.0	174.2	168.4	156.5
	173.1	175.1	176.6	177.3	177.5	177.6	177.6	177.6	1000.	1000.
	1000.	1000.	1000.							

0 13	1000.	1000.	1000.	179.9	179.7	178.6	177.1	175.2	169.3	157.0
	171.5	174.3	176.4	177.3	177.5	177.6	177.7	177.7	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	180.2	180.1	178.9	177.6	176.1	172.7	168.4
	166.2	173.3	176.3	177.3	177.6	177.7	177.7	177.7	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	180.4	180.5	179.1	178.0	176.9	175.1	173.6
	173.3	175.0	176.4	177.3	177.6	177.7	177.8	177.8	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	180.8	181.2	179.5	178.4	177.7	177.0	176.4
	176.0	175.7	176.6	177.5	177.7	177.8	177.9	177.9	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	181.2	182.5	180.4	178.8	178.2	177.8	177.4
	177.1	177.0	177.1	177.7	177.9	178.0	178.1	178.1	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	184.3	181.6	179.3	178.7	178.3	177.9
	177.5	177.5	177.4	177.5	177.8	178.0	178.2	178.3	178.3	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	186.1	182.8	179.8	179.1	178.6	178.4
	178.1	177.8	177.5	175.1	176.8	177.6	178.0	178.2	178.3	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	187.9	184.1	180.4	179.3	178.5	178.3
	178.1	177.9	177.1	158.5	172.9	176.3	177.5	178.0	178.2	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	189.8	185.3	181.0	179.8	178.8	178.6
	178.4	178.3	177.9	175.4	176.6	177.4	177.8	177.9	177.9	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	191.2	186.4	181.6	180.2	179.1	178.9
	178.7	178.6	178.3	177.6	177.5	177.3	177.4	177.5	177.6	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	192.1	187.2	182.0	180.5	179.4	179.2
	179.0	178.8	178.5	178.2	177.7	177.3	177.0	177.2	177.5	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	193.1	188.1	182.5	181.0	179.8	179.5
	179.3	179.1	178.8	178.5	177.7	177.1	176.8	177.1	177.4	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	194.1	189.2	183.1	181.5	180.3	180.0
	179.7	179.4	179.1	178.8	177.8	177.1	176.8	177.2	177.5	1000.

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	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	195.1	190.5	183.9	182.2	180.9	180.6
	180.2	179.9	179.5	179.2	178.2	177.5	177.3	177.5	177.7	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	196.3	192.2	185.1	183.1	181.6	181.3
	180.9	180.5	180.1	179.7	178.8	178.2	178.0	178.0	178.0	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	201.4	198.0	195.5	188.2	185.6	183.2	182.7
	182.2	181.7	181.1	180.6	179.7	179.1	179.0	178.7	178.5	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	200.9	199.1	198.9	195.2	191.3	186.1	185.0
	184.2	183.2	182.3	181.1	180.0	178.0	179.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	201.6	200.7	199.1	196.3	193.7	191.2	189.6
	188.1	186.5	184.8	182.7	181.0	180.0	180.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.2	202.1	200.7	198.5	196.7	195.0	193.7
	192.4	190.9	188.8	185.9	183.0	183.2	183.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	205.6	204.5	203.0	201.3	199.9	198.5	197.4
	196.3	195.0	193.1	190.0	187.0	187.0	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	207.8	207.2	206.3	205.4	204.5	203.6	202.9
	202.1	201.2	200.0	198.5	197.6	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	211.9	211.9	211.8	212.4	213.1	214.0	215.0
	211.0	210.0	210.0	209.7	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	216.9	218.1	219.0	219.5	220.1	221.0	220.0
	219.7	219.5	219.4	219.4	219.4	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.4	226.7	226.4	225.0	230.0	229.0
	228.6	228.4	228.2	228.1	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	233.0	233.4	233.9	234.5	234.8	235.0
	235.2	235.4	235.5	235.7	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	237.9	238.2	238.8	239.3	239.7	240.0

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```
        241.0     242.0     244.0     245.0     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 39   1000.     1000.     1000.     1000.     240.8     241.4     242.4     243.1     243.7     244.2
        244.8     245.3     246.3     247.7     250.0     255.0     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 1                HEAD IN LAYER  2 AT END OF TIME STEP  1 IN STRESS PERIOD  1
             ---------------------------------------------------------------

            1         2         3         4         5         6         7         8         9        10
           11        12        13        14        15        16        17        18        19        20
           21        22        23
.....................................................................................................
 0  1   1000.     1000.     1000.     147.7     145.9     141.9     137.7     134.6     132.4     130.9
        129.6     128.3     126.5     124.4     123.0     122.2     121.4     120.7     119.7     118.7
        117.5     1000.     1000.
 0  2   1000.     1000.     1000.     153.9     152.3     149.3     146.4     144.4     142.8     141.7
        140.5     139.3     137.5     134.7     132.6     131.3     130.1     129.0     127.5     126.0
        124.4     1000.     1000.
 0  3   1000.     1000.     1000.     165.9     163.9     159.4     157.3     156.1     155.3     154.7
        154.1     153.5     152.5     151.1     149.8     149.0     147.9     146.8     145.1     144.0
        1000.     1000.     1000.
 0  4   1000.     1000.     1000.     175.8     175.7     175.7     175.7     175.7     175.7     175.7
        175.6     175.6     175.6     175.6     174.5     173.6     173.1     172.6     1000.     1000.
        1000.     1000.     1000.
 0  5   1000.     1000.     1000.     176.1     176.1     176.0     176.0     176.0     176.0     176.0
        176.0     176.0     176.0     176.0     175.6     175.3     175.3     1000.     1000.     1000.
        1000.     1000.     1000.
 0  6   1000.     1000.     1000.     176.4     176.4     176.3     176.3     176.2     176.2     176.2
        176.2     176.2     176.2     176.2     176.0     175.9     175.9     1000.     1000.     1000.
        1000.     1000.     1000.
 0  7   1000.     1000.     1000.     176.8     176.7     176.6     176.5     176.5     176.4     176.4
        176.4     176.4     176.4     176.3     176.3     176.2     176.2     1000.     1000.     1000.
        1000.     1000.     1000.
 0  8   1000.     1000.     1000.     177.3     177.1     176.9     176.8     176.7     176.6     176.6
        176.6     176.5     176.5     176.5     176.5     176.4     176.4     176.5     1000.     1000.
        1000.     1000.     1000.
 0  9   1000.     1000.     1000.     177.7     177.5     177.2     177.0     176.8     176.7     176.6
        176.6     176.6     176.5     176.5     176.5     176.5     176.5     176.5     1000.     1000.
```

	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	178.0	177.9	177.4	177.1	176.8	176.7	176.6
	176.6	176.5	176.5	176.5	176.5	176.5	176.5	176.6	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	178.4	178.2	177.6	177.1	176.8	176.6	176.5
	176.5	176.5	176.5	176.5	176.5	176.6	176.6	176.6	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	178.8	178.6	177.8	177.2	176.8	176.4	176.3
	176.3	176.4	176.5	176.5	176.6	176.6	176.6	176.7	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	179.0	178.8	177.9	177.3	176.7	176.3	175.9
	176.1	176.3	176.5	176.6	176.6	176.6	176.7	176.7	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	179.2	179.1	178.1	177.3	176.8	176.1	175.1
	175.9	176.3	176.5	176.6	176.7	176.7	176.7	176.8	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	179.5	179.5	178.2	177.4	176.9	176.4	176.0
	176.2	176.4	176.6	176.7	176.8	176.8	176.8	176.9	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	179.8	180.2	178.3	177.5	177.1	176.8	176.7
	176.6	176.7	176.8	176.9	176.9	176.9	176.9	177.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	180.2	181.7	179.3	177.6	177.3	177.1	177.0
	177.0	177.0	177.0	177.1	177.1	177.1	177.1	177.2	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	183.6	180.7	177.9	177.6	177.4	177.4
	177.4	177.3	177.4	177.4	177.4	177.4	177.4	177.4	177.5	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	185.5	181.9	178.3	178.1	177.9	177.8
	177.8	177.7	177.7	177.6	177.6	177.6	177.6	177.5	177.5	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	187.4	183.2	178.7	178.5	178.2	178.1
	178.0	178.0	177.9	177.8	177.7	177.7	177.6	177.5	177.4	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	189.3	184.4	179.2	178.9	178.6	178.5
	178.3	178.1	178.0	177.8	177.7	177.7	177.5	177.3	177.1	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	190.7	185.5	179.6	179.3	178.9	178.7

	178.6	178.4	178.2	177.8	177.5	177.3	176.9	176.7	176.7	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	191.7	186.2	179.9	179.6	179.2	179.0
	178.8	178.6	178.3	177.8	177.2	176.6	176.2	176.1	176.3	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	192.6	187.1	180.2	180.0	179.6	179.3
	179.1	178.9	178.5	177.7	176.7	175.6	175.5	175.6	176.1	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	193.6	188.1	180.5	180.5	180.1	179.8
	179.5	179.2	178.8	177.9	176.4	174.5	175.4	175.7	176.2	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	194.6	189.3	180.8	180.9	180.7	180.3
	180.0	179.6	179.2	178.3	177.1	176.2	176.1	176.3	176.6	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	195.6	190.9	181.0	181.2	181.2	180.9
	180.6	180.2	179.8	178.8	178.0	177.4	177.1	177.1	177.1	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	197.0	194.2	181.3	181.5	182.1	182.0
	181.6	181.1	180.6	179.8	179.1	178.7	178.4	178.3	177.8	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	200.9	199.0	198.9	195.2	191.3	185.3	184.7
	184.0	183.0	182.1	181.0	180.1	179.6	179.4	179.3	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	201.6	200.7	199.1	196.3	193.7	191.2	189.6
	188.0	186.4	184.7	182.7	181.1	180.2	180.2	180.1	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.2	202.1	200.7	198.5	196.7	195.0	193.7
	192.3	190.9	188.8	185.9	183.4	183.2	183.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	205.6	204.5	203.0	201.3	199.9	198.5	197.4
	196.3	195.0	193.1	190.1	187.5	187.1	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	207.8	207.2	206.3	205.4	204.5	203.6	202.9
	202.1	201.2	200.0	198.5	197.6	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	211.9	211.9	211.9	212.4	213.1	213.9	214.3
	211.3	210.2	210.0	209.7	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

```
0 35   1000.    1000.    1000.    216.9    218.1    219.0    219.5    220.0    220.5    220.1
       219.7    219.5    219.4    219.4    219.4    1000.    1000.    1000.    1000.    1000.
       1000.    1000.    1000.
0 36   1000.    1000.    1000.    1000.    226.4    226.7    226.4    225.8    228.7    228.8
       228.6    228.4    228.2    228.1    1000.    1000.    1000.    1000.    1000.    1000.
       1000.    1000.    1000.
0 37   1000.    1000.    1000.    1000.    233.0    233.4    233.9    234.5    234.8    235.0
       235.2    235.4    235.5    235.7    1000.    1000.    1000.    1000.    1000.    1000.
       1000.    1000.    1000.
0 38   1000.    1000.    1000.    1000.    237.9    238.2    238.8    239.3    239.7    240.1
       241.0    242.1    243.9    244.9    1000.    1000.    1000.    1000.    1000.    1000.
       1000.    1000.    1000.
0 39   1000.    1000.    1000.    1000.    240.8    241.4    242.4    243.1    243.7    244.2
       244.8    245.3    246.3    247.6    1000.    1000.    1000.    1000.    1000.    1000.
       1000.    1000.    1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP  1 IN STRESS PERIOD  1
           ------------------------------------------------------------------

           1        2        3        4        5        6        7        8        9       10
          11       12       13       14       15       16       17       18       19       20
          21       22       23
 ...........................................................................................
0  1   1000.    1000.    1000.    11.12    .0000    .0000    .0000    .0000    .0000    .0000
       .0000    .0000    .0000    .0000    .0000    .0000    .0000    .0000    .0000    .0000
       .0000    1000.    1000.
0  2   1000.    1000.    1000.   -19.89   -8.244   -4.522   -11.60   -19.49   -27.83   -26.69
      -26.49   -26.17   -25.28   -21.23    .0000    .0000    .0000    .0000    .0000    .0000
      -23.05    1000.    1000.
0  3   1000.    1000.    1000.   -49.28   -44.91    .0000    .0000    .0000    .0000    .0000
       .0000    .0000    .0000    .0000   -15.32   -25.50   -26.84   -26.55   -10.27   -14.43
       1000.    1000.    1000.
0  4   1000.    1000.    1000.   -53.86    .0000   -21.79    .0000   -36.69   -27.46   -29.16
      -29.93   -50.26   -45.44   -55.30   -44.67   -34.17   -33.75   -33.45    1000.    1000.
       1000.    1000.    1000.
0  5   1000.    1000.    1000.    .0000   -8.497    .0000   -9.399   -19.93   -31.12   -31.51
      -36.70   -41.79   -36.83   -31.76   -36.52   -21.35   -16.28    1000.    1000.    1000.
       1000.    1000.    1000.
0  6   1000.    1000.    1000.   -8.355   -25.90    .0000   -6.328   -10.85   -11.69   -16.95
```

	-17.06	-37.11	-32.13	-7.096	-16.99	-6.923	-1.895	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	-4.261	.0000	-6.673	-6.177	-7.076	-7.263	-7.319
	-12.34	-12.34	-22.33	-12.31	-7.264	-2.233	2.777	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	-25.38	.0000	-27.37	-30.83	-12.30	-12.44	-12.47
	-7.478	-7.474	-2.462	-2.446	2.570	7.579	12.57	17.56	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	-12.79	-2.000	.0000	-23.94	-21.69	-7.092	-12.23
	-7.319	-7.377	-2.438	2.530	7.521	12.52	12.51	17.50	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-3.710	-7.066	-25.39	-27.54	-15.95	-11.03	-11.37
	-6.743	-6.991	-2.300	7.553	7.512	12.49	12.48	17.46	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-4.310	-8.720	-28.88	-25.52	-24.25	-21.87	-24.30
	-27.01	-11.07	3.051	7.617	12.51	12.47	17.44	22.42	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	.3068	-9.353	-28.08	-20.99	-19.17	-13.45	-6.470
	-24.32	-5.064	3.388	7.661	12.50	12.43	17.39	17.37	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	5.6610E-02	-9.717	-18.56	-2.055	9.824	10.71	-6.025
	-22.37	-9.297	3.595	7.676	12.47	12.39	17.35	17.32	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-.1930	-20.08	-8.886	5.355	8.873	10.35	11.56
	-14.22	-23.64	3.708	7.669	12.43	17.34	17.29	22.27	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	4.559	-25.48	.8565	6.976	8.106	7.940	8.424
	-21.29	-24.97	3.560	7.653	12.37	15.28	18.22	20.20	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-.8018	-16.17	-4.519	6.574	9.302	8.043	8.591
	-6.043	-23.70	-24.14	8.541	12.26	15.17	18.11	20.08	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-1.173	-17.52	1.594	6.196	9.782	8.207	8.570
	5.931	4.988	-24.08	-23.66	5.105	12.01	16.94	21.91	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-14.30	2.379	5.705	9.348	7.744	6.090
	4.483	2.549	-21.88	7.503	10.16	12.97	16.83	21.73	31.65	1000.
	1000.	1000.	1000.							

0 19	1000.	1000.	1000.	1000.	-14.11	1.158	6.170	9.932	8.366	6.610
	4.924	3.235	-17.53	-18.10	8.196	12.41	16.99	18.78	31.69	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-14.63	.9336	6.620	10.67	9.537	7.688
	5.854	4.103	-7.112	.0000	11.07	11.73	17.47	17.00	31.84	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-15.17	-3.349	2.995	6.237	11.22	14.39
	16.56	17.75	12.05	-15.36	-15.57	-15.37	17.25	17.11	32.08	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-15.28	-11.43	-1.560	4.808	9.878	18.08
	19.26	20.44	26.69	2.385	2.498	-13.25	17.57	17.46	32.36	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-14.93	-12.22	-3.976	4.463	10.59	13.81
	17.02	23.21	27.47	11.81	2.288	-11.31	-9.979	17.76	32.54	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-14.60	-10.12	-2.462	5.035	10.20	10.46
	15.70	24.92	27.22	15.52	6.289	-1.133	-8.757	17.93	32.61	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-14.10	-9.199	.9398	8.498	12.70	14.00
	18.29	22.55	26.89	13.23	6.187	-8.2169E-02	-6.820	17.84	32.52	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-5.145	-5.534	6.142	7.829	14.10	16.43
	17.76	22.07	27.45	14.82	-.2367	-.4923	-6.266	17.49	32.29	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-2.251	-4.241	4.938	11.88	14.40	20.73
	29.11	34.48	29.91	10.30	-8.835	-6.179	-5.032	16.98	31.97	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	13.56	11.96	-2.515	1.843	9.432	20.84	27.29
	27.80	33.32	15.90	-5.566	-.7175	-3.054	-3.952	16.25	31.51	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	11.08	10.85	7.114	.8213	3.702	18.95	29.96
	30.83	31.76	7.748	5.941	-.5487	.0000	20.77	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	13.43	9.263	5.877	23.73	16.25	28.77	25.35
	26.91	28.46	8.243	.2691	-1.027	.0000	19.79	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	11.79	7.877	34.31	21.46	23.31	25.03	21.28
	22.64	24.09	16.20	-.8574	.0000	26.84	31.98	1000.	1000.	1000.

```
         1000.      1000.      1000.
0 32     1000.      1000.      1000.      9.441      5.532      36.97      18.67      20.13      21.52      17.57
         18.73      20.01      11.93      .0000      .0000      37.96      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 33     1000.      1000.      1000.      7.200      2.769      63.68      14.65      15.49      16.36      12.05
         12.92      13.81      .0000      6.455      17.40      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 34     1000.      1000.      1000.      3.138     -1.882      58.15      7.639      6.944      6.034      .0000
         .0000      .0000      .0000      .3060      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 35     1000.      1000.      1000.     -1.874      6.949      6.041      5.496     -3.054      .0000      .0000
         .3056      .5367      10.58      20.62      20.61      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 36     1000.      1000.      1000.      1000.     -1.400     -1.691     -1.432      .0000      .0000      9.026
         9.364      1.631      6.810      21.86      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 37     1000.      1000.      1000.      1000.     -3.035     -3.369     -3.938     -4.468     -4.806      .0000
         9.793      9.623      14.45      19.32      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 38     1000.      1000.      1000.      1000.      2.128      1.751      1.157      .6674     -4.738      .0000
         .0000      .0000      .0000      .0000      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 39     1000.      1000.      1000.      1000.     -.8035     -1.428      7.633      6.922      6.262      .7766
         .2427     -.3341     -1.257      7.329      .0000      .0000      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
1                 DRAWDOWN IN LAYER  2 AT END OF TIME STEP  1 IN STRESS PERIOD  1
             ____________________________________________________________________

             1          2          3          4          5          6          7          8          9         10
            11         12         13         14         15         16         17         18         19         20
            21         22         23
 ..........................................................................................................
0  1     1000.      1000.      1000.     -37.67     -35.91     -31.86     -27.67     -24.65     -22.38     -20.95
        -19.58     -18.29     -16.49     -14.37     -13.00     -12.15     -11.37     -10.66     -9.695     -8.654
        -7.507      1000.      1000.
0  2     1000.      1000.      1000.      66.09      67.68      70.74      73.58      75.61      77.23      78.34
         79.49      80.69      82.54      85.25      87.42      88.73      89.92      91.00      92.46      93.96
         95.56      1000.      1000.
```

0 3	1000.	1000.	1000.	54.10	56.08	60.58	62.67	63.88	64.75	65.33
	65.91	66.52	67.47	68.91	70.21	70.97	72.11	73.22	74.87	75.98
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	44.20	44.26	44.28	44.32	44.33	44.34	44.34
	44.35	44.36	44.37	44.39	45.50	46.39	46.91	47.43	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	43.88	43.90	43.95	43.97	43.99	44.00	44.01
	44.01	44.02	44.03	44.04	44.37	44.70	44.72	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	43.56	43.61	43.69	43.73	43.75	43.77	43.79
	43.80	43.81	43.82	43.83	43.96	44.11	44.11	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	43.19	43.28	43.38	43.47	43.52	43.56	43.58
	43.60	43.62	43.64	43.65	43.71	43.77	43.77	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	42.74	42.86	43.05	43.21	43.32	43.38	43.42
	43.45	43.48	43.51	43.52	43.55	43.58	43.56	43.53	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	42.29	42.46	42.78	43.05	43.21	43.31	43.37
	43.41	43.44	43.47	43.49	43.49	43.50	43.49	43.47	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	41.96	42.15	42.58	42.94	43.17	43.31	43.38
	43.43	43.46	43.48	43.48	43.48	43.47	43.45	43.43	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	41.57	41.78	42.36	42.86	43.18	43.39	43.48
	43.53	43.53	43.51	43.48	43.46	43.45	43.42	43.39	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	41.25	41.43	42.18	42.79	43.23	43.56	43.73
	43.71	43.64	43.53	43.45	43.43	43.40	43.37	43.33	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	41.02	41.16	42.06	42.74	43.25	43.74	44.06
	43.89	43.72	43.53	43.42	43.38	43.35	43.32	43.28	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	40.78	40.85	41.93	42.68	43.24	43.93	44.87
	44.08	43.74	43.49	43.36	43.30	43.28	43.25	43.22	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	40.53	40.47	41.81	42.61	43.14	43.64	43.96
	43.79	43.60	43.41	43.28	43.20	43.20	43.18	43.15	1000.	1000.

	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	40.18	39.78	41.66	42.49	42.94	43.22	43.34
	43.36	43.32	43.23	43.14	43.10	43.09	43.06	43.03	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	39.80	38.28	40.73	42.45	42.74	42.89	42.95
	43.01	43.01	42.95	42.90	42.89	42.88	42.86	42.83	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	36.40	39.33	42.12	42.38	42.55	42.59
	42.64	42.66	42.65	42.65	42.65	42.65	42.63	42.59	42.53	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	34.52	38.07	41.73	41.93	42.15	42.21
	42.25	42.29	42.34	42.38	42.40	42.42	42.45	42.48	52.51	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	32.62	36.84	41.29	41.51	41.78	41.87
	41.96	42.04	42.11	42.22	42.26	42.29	42.38	42.50	52.61	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	30.72	35.57	40.80	41.07	41.42	41.54
	41.69	41.86	41.97	42.18	42.28	42.34	42.53	42.75	52.90	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	29.28	34.53	40.40	40.67	41.09	41.27
	41.41	41.61	41.81	42.21	42.47	42.72	43.05	43.30	53.34	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	28.32	33.77	40.11	40.35	40.81	41.03
	41.22	41.41	41.67	42.25	42.76	43.42	43.79	43.91	53.66	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	27.35	32.93	39.82	39.97	40.43	40.69
	40.92	41.15	41.46	42.26	43.35	44.42	44.47	44.38	53.86	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	26.39	31.94	39.52	39.47	39.88	40.24
	40.53	40.80	41.17	42.11	43.58	45.52	44.56	44.26	63.75	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	25.42	30.71	39.23	39.07	39.30	39.66
	40.03	40.36	40.76	41.71	42.87	43.77	43.87	43.70	63.40	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	24.44	29.12	38.99	38.83	38.83	39.05
	39.45	39.83	40.25	41.15	42.01	42.61	42.94	42.92	62.91	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	22.98	25.79	38.73	38.45	37.88	37.98

	38.42	38.92	39.36	40.23	40.87	41.26	41.56	41.72	62.19	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	39.10	21.02	21.07	24.82	28.70	34.72	35.25
	36.04	36.99	37.87	39.00	39.85	40.42	40.63	40.73	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	48.44	39.27	20.90	23.74	26.26	48.82	35.41
	41.97	38.60	35.32	37.26	38.86	39.77	39.79	39.86	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	36.80	27.88	34.32	46.47	50.32	53.04	51.29
	50.65	50.14	31.23	34.14	36.56	36.80	46.98	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	44.45	45.53	36.98	41.67	55.14	56.53	52.57
	48.74	35.05	26.94	29.95	32.49	37.91	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	47.20	57.77	63.68	59.65	58.49	58.36	57.06
	37.93	18.83	20.01	21.46	22.40	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	68.14	63.12	58.14	52.63	6.942	26.09	5.690
	8.666	9.824	10.02	50.31	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	58.13	31.95	21.04	5.510	1.966	-.4977	9.927
	.2669	10.52	50.58	60.62	80.61	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	48.60	43.32	13.58	-2.819	-5.722	3.209
	6.396	7.622	9.809	31.87	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	46.97	41.63	51.06	25.54	-9.799	-.9978
	4.801	29.63	34.46	49.33	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	46.13	46.75	26.16	.6673	-11.74	-4.067
	-3.012	-2.102	3.071	9.101	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	74.20	48.57	46.62	43.92	41.26	35.77
	30.24	24.66	18.75	12.44	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0										

```
                       VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP  1 IN STRESS PERIOD  1
                       ------------------------------------------------------------------------------
0               CUMULATIVE VOLUMES      L**3                                   RATES FOR THIS TIME STEP      L**3/T
                ------------------                                             ------------------------

                    IN:                                                            IN:
                    ---                                                            ---
                      STORAGE =          .00000                                      STORAGE =          .00000
                CONSTANT HEAD =          .26072E+11                            CONSTANT HEAD =         82.616
                        WELLS =          .00000                                        WELLS =          .00000
                     RECHARGE =          .11313E+10                                 RECHARGE =          3.5849
                RIVER LEAKAGE =          .00000                                RIVER LEAKAGE =          .00000
0                    TOTAL IN =          .27203E+11                                 TOTAL IN =         86.201
0                   OUT:                                                           OUT:
                    ----                                                           ----
                      STORAGE =          .00000                                      STORAGE =          .00000
                CONSTANT HEAD =          .24855E+11                            CONSTANT HEAD =         78.762
                        WELLS =          .23416E+10                                    WELLS =          7.4200
                     RECHARGE =          .00000                                     RECHARGE =          .00000
                RIVER LEAKAGE =          .70581E+07                            RIVER LEAKAGE =          .22366E-01
0                   TOTAL OUT =          .27204E+11                                TOTAL OUT =         86.204
0                    IN - OUT =         -.95027E+06                                 IN - OUT =         -.30060E-02
0         PERCENT DISCREPANCY =                    .00                   PERCENT DISCREPANCY =                    .00



0
        TIME SUMMARY AT END OF TIME STEP  1 IN STRESS PERIOD  1
                                SECONDS        MINUTES       HOURS        DAYS         YEARS
                             -----------------------------------------------------------------
     TIME STEP LENGTH          .315576E+09    .525960E+07    87660.0      3652.50      10.0000
   STRESS PERIOD TIME          .315576E+09    .525960E+07    87660.0      3652.50      10.0000
 TOTAL SIMULATION TIME         .315576E+09    .525960E+07    87660.0      3652.50      10.0000
1
```

DROUGHT PUMPING CONDITIONS (DRTN.DAT)

```
1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  4  0  8  0  0  0  0 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1         1
         2         0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0WEL1 -- WELL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM  4
 MAXIMUM OF    2 WELLS
      8 ELEMENTS IN X ARRAY ARE USED FOR WELLS
  20711 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21065 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29046 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
```

```
0

                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
                ------------------------------------------------------------------------------
0

                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
                ------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99     AT ALL NO-FLOW NODES (IBOUND=0).
0

                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
{ESC}}          ------------------------------------------------------------------------------
0

                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
                ------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL — THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
           HEAD
           DRAWDOWN
0                                  COLUMN TO ROW ANISOTROPY =   1.000000
0

                              DELR WILL BE READ ON UNIT  3 USING FORMAT:       (23F10.0)
                ----------------------------------------------------------------
0

                              DELC WILL BE READ ON UNIT  3 USING FORMAT:       (39F10.0)
                ----------------------------------------------------------------
```

```
0
        PRIMARY STORAGE COEF FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
          HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
                       BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
      VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
          PRIMARY STORAGE COEF FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
          TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
      ---------------------------------------------------------------------------------------------
0
                        SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
                        -------------------------------------------
0
               MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      200
                              ACCELERATION PARAMETER =     1.0000
                    HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
```

SIP HEAD CHANGE PRINTOUT INTERVAL = 999

0 CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED

1 STRESS PERIOD NO. 1, LENGTH = .1555200E+08

NUMBER OF TIME STEPS = 10

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = 1555200.

0 2 WELLS

LAYER	ROW	COL	STRESS RATE	WELL NO.
2	25	16	-6.0300	1
2	14	10	-1.3900	2

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9
1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17
1	32	14	190.0	.5320E-02	185.0	18

1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27
1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47
1	9	6	150.0	.5790E-03	145.0	48
1	8	5	140.0	.5793E-03	135.0	49
1	7	5	130.0	.5790E-03	125.0	50
1	6	6	130.0	.5790E-03	125.0	51
1	5	6	130.0	.5790E-03	125.0	52
1	5	4	120.0	.5790E-03	115.0	53
1	4	5	120.0	.5790E-03	115.0	54
1	4	7	130.0	.5790E-03	125.0	55
1	3	6	120.0	.5790E-03	115.0	56

```
                1        3        7    115.0         .5790E-03          110.0              57
                1        3        8    110.0         .5790E-03          105.0              58
                1        3        9    110.0         .5790E-03          105.0              59
0AVERAGE SEED =  .00218448
 MINIMUM SEED =  .00000029
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7838094E+00   .9532616E+00   .9898956E+00   .9978155E+00
0
    47 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
    47 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
    47 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
    41 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
    43 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
    43 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
    42 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
    42 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
    42 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
    42 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ------------------------------------------------------------------------------------------------------------------------------------
    1.610     (  1,  4,  5)   .1299     (  2,  2, 15)  -.1303     (  2, 36,  8)  -.1873     (  1, 38,  7)  -.2883     (  2, 37, 10)
   -.2609     (  1, 39, 15)  -.5091E-01 (  1, 36, 13)  -.1032     (  1, 39, 15)  -.9553E-01 (  2, 39, 10)  -.2055     (  1, 39, 15)
   -.6479E-01 (  2, 30, 18)  -.4179E-01 (  1, 39, 15)  -.3234E-01 (  2, 29, 18)  -.7094E-01 (  1, 39, 15)  -.9369E-01 (  2, 24, 17)
   -.7500E-01 (  1, 39, 15)  -.1328E-01 (  1, 39, 13)  -.2863E-01 (  1, 39, 15)  -.2879E-01 (  2, 29, 18)  -.5458E-01 (  1, 39, 15)
   -.2627E-01 (  2, 30, 18)  -.1064E-01 (  1, 39, 15)  -.1227E-01 (  2, 29, 18)  -.1825E-01 (  1, 39, 15)  -.3464E-01 (  2, 24, 17)
   -.1941E-01 (  1, 39, 15)  -.3533E-02 (  2, 30, 18)  -.7412E-02 (  1, 39, 15)  -.9793E-02 (  2, 29, 18)  -.1417E-01 (  1, 39, 15)
   -.8726E-02 (  2, 30, 18)  -.2791E-02 (  1, 39, 15)  -.4037E-02 (  2, 29, 18)  -.4784E-02 (  1, 39, 15)  -.1138E-01 (  2, 24, 17)
   -.5931E-02 (  2,  4, 18)  -.1134E-02 (  2, 30, 18)  -.1954E-02 (  1, 39, 15)  -.3129E-02 (  2, 29, 18)  -.3949E-02 (  1, 33, 15)
   -.2760E-02 (  2, 30, 18)  -.7490E-03 (  1, 39, 15)
0
1                      HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ----------------------------------------------------------------------

            1          2          3          4          5          6          7          8          9         10
           11         12         13         14         15         16         17         18         19         20
```

	21	22	23							
0 1	1000.	1000.	1000.	152.0	149.9	141.6	133.0	124.9	117.8	115.3
	113.4	111.7	110.3	109.0	108.6	108.3	108.1	107.9	107.6	106.6
	104.3	1000.	1000.							
0 2	1000.	1000.	1000.	159.3	158.0	153.4	150.4	148.3	146.5	145.4
	144.2	142.6	140.3	133.7	118.4	115.1	113.7	112.4	110.3	109.7
	124.5	1000.	1000.							
0 3	1000.	1000.	1000.	173.4	167.7	130.2	126.8	125.0	123.2	126.0
	125.6	125.3	124.4	125.2	145.3	150.4	151.7	151.5	150.3	149.3
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	179.9	136.6	174.3	145.0	174.5	180.8	182.8
	183.6	183.9	184.0	183.9	183.4	182.7	182.0	181.7	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	137.1	176.2	143.6	177.3	183.7	185.0	185.6
	185.8	185.8	185.8	185.8	185.5	185.1	184.9	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	181.9	179.0	145.6	179.3	184.7	185.7	185.9
	185.9	186.0	186.0	185.9	185.9	185.8	185.8	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	182.9	145.8	180.0	184.9	185.9	186.2	186.5
	186.7	186.7	186.7	186.7	186.7	186.6	186.6	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	183.9	153.2	180.2	185.1	186.6	186.8	186.8
	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.7	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	186.7	180.1	160.3	181.2	185.6	186.1	186.5
	186.7	186.8	186.9	186.9	186.9	186.8	186.8	186.8	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	187.7	185.7	179.9	167.0	182.9	183.7	184.5
	186.0	186.7	186.9	186.9	186.9	186.9	186.9	186.9	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.9	187.1	185.4	166.2	165.4	159.7	162.9
	185.2	187.5	186.9	186.9	187.0	187.0	186.9	186.9	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	188.2	187.8	186.9	182.8	180.6	172.8	158.3
	183.8	186.7	186.4	186.9	187.0	187.0	187.0	187.0	1000.	1000.
	1000.	1000.	1000.							

0 13	1000.	1000.	1000.	188.5	188.2	187.6	185.7	183.5	175.8	159.1
	181.3	185.5	186.1	186.9	187.0	187.1	187.0	187.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	188.8	188.6	187.8	186.7	184.9	180.5	174.7
	172.0	183.1	186.0	187.0	187.1	187.1	187.1	187.1	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	188.8	189.0	187.9	187.1	185.9	183.3	179.1
	172.1	182.5	186.5	186.9	187.1	187.2	187.1	187.1	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	188.9	189.6	188.1	187.7	187.0	186.0	185.1
	184.1	178.6	181.4	186.4	187.1	187.2	187.2	187.2	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	189.0	190.1	188.9	188.0	187.3	187.2	187.6
	188.9	187.7	182.3	186.5	187.2	187.3	187.3	187.3	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.7	189.7	188.2	187.5	187.6	188.2
	190.2	189.5	183.9	185.5	186.7	187.2	187.3	187.3	187.2	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.8	190.1	188.4	187.8	188.1	188.3
	189.1	191.3	190.5	172.5	184.0	186.2	186.8	187.1	187.1	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.9	190.9	188.7	188.4	192.3	192.6
	192.7	192.6	191.7	169.3	180.2	184.3	185.9	186.5	186.8	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	195.0	191.6	189.0	188.7	193.0	193.4
	193.4	193.2	192.4	172.9	169.5	181.4	185.2	186.1	186.1	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	196.0	192.0	189.3	189.0	193.5	193.8
	193.9	193.7	193.2	185.1	180.7	167.5	179.4	184.7	186.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.8	192.6	189.7	189.3	193.9	194.2
	194.2	194.0	193.6	187.3	184.8	179.4	167.0	182.4	185.9	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	197.5	193.1	190.1	189.7	194.3	194.5
	194.5	194.4	193.9	187.9	185.9	181.9	169.9	182.8	186.1	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	198.1	193.9	190.4	190.1	194.8	195.0
	195.0	194.8	194.4	188.1	185.7	181.2	173.3	183.4	186.2	1000.

	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.9	194.9	191.0	190.5	195.3	195.6
	195.5	195.4	194.9	188.2	184.3	173.7	173.7	183.8	186.3	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	199.8	196.3	191.8	191.3	196.1	196.3
	196.3	196.1	195.6	188.7	184.3	173.9	181.9	185.5	186.4	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	203.7	201.7	199.8	195.0	194.1	197.8	198.0
	198.0	197.8	197.3	191.0	186.8	176.1	185.8	186.6	186.6	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	205.3	204.6	205.0	204.1	202.8	200.6	200.2
	200.0	199.7	199.5	199.2	199.1	198.9	199.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	205.6	205.4	205.2	204.5	203.8	203.1	202.7
	202.3	201.9	201.6	201.3	201.2	201.2	201.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	206.2	205.9	205.7	205.3	204.9	204.6	204.4
	204.2	204.0	203.7	203.4	203.2	203.1	203.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.8	206.5	206.2	205.9	205.7	205.5	205.3
	205.2	205.1	204.9	204.7	204.5	204.5	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	207.3	207.1	206.9	206.6	206.5	206.4	206.3
	206.2	206.1	206.0	205.8	205.7	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	208.2	208.1	207.9	207.7	207.7	207.6	207.6
	207.6	207.6	207.6	207.6	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	209.4	209.7	209.8	209.8	209.7	209.7	209.7
	209.7	209.7	209.7	209.7	209.7	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	211.7	211.8	211.8	211.8	211.8	211.8
	211.7	211.6	211.6	211.6	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	213.0	213.0	213.0	213.0	213.0	213.0
	213.0	213.0	212.9	212.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	213.7	213.7	213.8	213.8	213.8	213.8

```
         213.8      213.8      213.7      213.7      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
0 39     1000.      1000.      1000.      1000.      214.1      214.1      214.1      214.1      214.1      214.1
         214.1      214.1      214.1      214.1      214.2      214.2      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
1                 HEAD IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ---------------------------------------------------------------------------

             1          2          3          4          5          6          7          8          9         10
            11         12         13         14         15         16         17         18         19         20
            21         22         23
 ..........................................................................................................
0  1     1000.      1000.      1000.      152.8      151.0      147.2      143.4      140.7      138.6      137.3
         136.0      134.8      133.0      130.9      129.6      128.7      127.9      127.1      126.1      125.0
         123.8      1000.      1000.
0  2     1000.      1000.      1000.      161.0      159.4      156.4      153.7      151.7      150.1      149.0
         147.8      146.7      144.8      142.1      140.0      138.7      137.4      136.3      134.7      133.0
         130.8      1000.      1000.
0  3     1000.      1000.      1000.      176.5      174.6      170.6      168.5      167.3      166.4      165.8
         165.2      164.5      163.4      161.5      159.7      158.6      157.1      155.7      153.7      152.4
         1000.      1000.      1000.
0  4     1000.      1000.      1000.      189.1      189.0      189.0      189.0      189.0      189.0      188.9
         188.9      188.9      188.9      188.9      187.5      186.4      185.7      185.0      1000.      1000.
         1000.      1000.      1000.
0  5     1000.      1000.      1000.      189.4      189.4      189.4      189.4      189.4      189.4      189.3
         189.3      189.3      189.3      189.3      188.8      188.4      188.3      1000.      1000.      1000.
         1000.      1000.      1000.
0  6     1000.      1000.      1000.      189.7      189.7      189.7      189.7      189.6      189.6      189.6
         189.6      189.6      189.6      189.6      189.3      189.1      189.1      1000.      1000.      1000.
         1000.      1000.      1000.
0  7     1000.      1000.      1000.      190.1      190.0      190.0      190.0      189.9      189.9      189.9
         189.9      189.9      189.9      189.9      189.7      189.6      189.6      1000.      1000.      1000.
         1000.      1000.      1000.
0  8     1000.      1000.      1000.      190.5      190.4      190.3      190.3      190.2      190.2      190.2
         190.2      190.2      190.2      190.1      190.0      190.0      189.9      189.9      1000.      1000.
         1000.      1000.      1000.
0  9     1000.      1000.      1000.      190.9      190.8      190.6      190.5      190.4      190.4      190.4
         190.3      190.3      190.3      190.3      190.3      190.3      190.2      190.1      1000.      1000.
```

	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	191.1	191.1	190.8	190.6	190.5	190.5	190.4
	190.4	190.4	190.4	190.5	190.5	190.5	190.4	190.3	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	191.4	191.3	191.1	190.8	190.6	190.5	190.4
	190.4	190.5	190.6	190.6	190.7	190.7	190.6	190.6	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	191.7	191.6	191.2	190.9	190.6	190.4	190.3
	190.4	190.5	190.7	190.8	190.9	190.9	190.8	190.8	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	191.8	191.8	191.3	191.0	190.7	190.3	190.1
	190.3	190.5	190.8	191.0	191.0	191.1	191.0	191.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	192.0	192.0	191.5	191.1	190.8	190.2	189.3
	190.2	190.6	190.9	191.1	191.3	191.3	191.2	191.2	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	192.2	192.3	191.6	191.3	191.0	190.6	190.3
	190.6	190.8	191.1	191.4	191.5	191.5	191.4	191.4	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	192.4	192.7	191.7	191.5	191.3	191.2	191.1
	191.2	191.3	191.5	191.7	191.8	191.8	191.8	191.7	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	192.7	193.7	192.4	192.0	191.7	191.7	191.8
	191.8	191.9	192.1	192.3	192.3	192.3	192.3	192.2	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	194.9	193.4	192.7	192.5	192.5	192.5
	192.6	192.7	192.9	193.0	193.0	193.0	192.8	192.6	192.3	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	196.1	194.4	193.4	193.3	193.4	193.4
	193.5	193.6	193.7	193.7	193.7	193.6	193.3	192.9	192.4	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	197.3	195.2	194.1	194.1	194.1	194.1
	194.2	194.4	194.3	194.2	194.2	194.1	193.7	193.0	192.3	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	198.5	195.9	194.9	194.8	194.8	194.8
	194.8	194.7	194.6	194.5	194.4	194.3	193.8	192.9	191.9	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	199.4	196.5	195.4	195.4	195.3	195.2

	195.2	195.1	194.9	194.6	194.4	194.2	193.7	193.0	192.3	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	200.0	197.0	195.8	195.8	195.6	195.6
	195.5	195.4	195.2	194.7	194.3	193.7	193.4	193.1	192.8	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	200.6	197.6	196.1	196.2	196.1	195.9
	195.8	195.7	195.5	194.8	193.9	193.0	193.0	193.2	193.3	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	201.2	198.4	196.5	196.7	196.6	196.4
	196.2	196.1	195.8	195.1	193.8	192.0	193.0	193.3	193.7	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	201.8	199.3	196.8	197.1	197.1	196.9
	196.7	196.5	196.3	195.6	194.7	193.8	193.8	194.0	194.3	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	202.4	200.4	197.1	197.3	197.5	197.4
	197.3	197.1	196.9	196.3	195.7	195.2	194.9	195.0	195.1	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	203.3	202.6	197.3	197.6	198.2	198.2
	198.1	197.9	197.8	197.5	197.2	197.0	196.8	196.7	196.1	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	205.3	204.5	205.0	204.1	202.8	200.2	200.0
	199.8	199.5	199.3	199.1	198.9	198.8	198.8	198.7	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	205.6	205.4	205.1	204.5	203.8	203.1	202.6
	202.3	201.9	201.5	201.3	201.2	201.2	201.2	201.0	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	206.2	205.9	205.7	205.3	204.9	204.6	204.4
	204.2	204.0	203.7	203.4	203.2	203.1	203.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.8	206.5	206.2	205.9	205.7	205.5	205.3
	205.2	205.1	204.9	204.7	204.5	204.5	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	207.3	207.1	206.9	206.6	206.5	206.4	206.3
	206.2	206.1	206.0	205.8	205.7	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	208.2	208.1	207.9	207.7	207.7	207.6	207.6
	207.6	207.6	207.6	207.6	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

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0 35    1000.      1000.      1000.      209.4      209.7      209.8      209.8      209.7      209.7      209.7
        209.7      209.7      209.7      209.7      209.7      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 36    1000.      1000.      1000.      1000.      211.7      211.8      211.8      211.8      211.8      211.7
        211.7      211.6      211.6      211.6      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 37    1000.      1000.      1000.      1000.      213.0      213.0      213.0      213.0      213.0      213.0
        213.0      213.0      212.9      212.9      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 38    1000.      1000.      1000.      1000.      213.7      213.7      213.8      213.8      213.8      213.8
        213.8      213.8      213.7      213.7      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 39    1000.      1000.      1000.      1000.      214.1      214.1      214.1      214.1      214.1      214.1
        214.1      214.1      214.1      214.1      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
1                 DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                ---------------------------------------------------------------

             1          2          3          4          5          6          7          8          9         10
            11         12         13         14         15         16         17         18         19         20
            21         22         23
 ....................................................................................................................
0  1    1000.      1000.      1000.    1.2558E-02 9.3475E-02 -1.558     -3.035     -4.933     -7.778     -7.270
       -7.375     -7.703     -7.324     -7.017     -6.559     -6.320     -6.106     -5.896     -5.576     -5.564
       -6.270      1000.      1000.
0  2    1000.      1000.      1000.     -.2767    -2.7222E-02 -.3997    -.3918     -.3190     -.4998     -.3878
       -.1922     -.6499     -.3325     -.6674     -10.41     -8.053     -7.699     -7.430     -8.300     -9.655
       -.4814      1000.      1000.
0  3    1000.      1000.      1000.     -.4037     -.7186     -14.17     -11.77     -11.03     -9.213     -13.03
       -13.65     -13.28     -13.41     -15.19     -1.318     -.4172     -.7119     -.4917     -.2683     -.3200
        1000.      1000.      1000.
0  4    1000.      1000.      1000.     -.8614     -19.58     -1.300     -19.96     -1.497     -.7694     -.7516
       -.6369     -.8991     -.9606     -.9134     -.4012     -.6830     -1.011     -.6708      1000.      1000.
        1000.      1000.      1000.
0  5    1000.      1000.      1000.     -18.14     -1.162     -16.55     -1.290     -.6621     -.9946     -.5549
       -.7583     -.8070     -.8146     -.7824     -.4754     -1.051     -.8750      1000.      1000.      1000.
        1000.      1000.      1000.
0  6    1000.      1000.      1000.     -.8556     -1.005     -15.59     -1.300     -.6981     -.6797     -.8912
```

	-.9419	-.9508	-.9506	-.9426	-.8698	-.8097	-.7878	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	-.8529	-15.75	-.9691	-.8579	-.9163	-1.208	-.5388
	-.6810	-.7163	-.7222	-.7177	-.6776	-.6484	-.6367	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	-.9065	-13.17	-1.249	-1.050	-.5896	-.7594	-.8030
	-.8166	-.8192	-.8183	-.8149	-.7883	-.7694	-.7551	-.7469	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	-.7042	-1.137	-14.28	-.2481	-.5802	-1.129	-.5114
	-.7315	-.8270	-.8639	-.8689	-.8569	-.8458	-.8304	-.8174	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-.6685	-.6868	-.9292	16.05	1.124	.3014	.5401
	-.9549	-.6627	-.8668	-.9047	-.9078	-.9023	-.8863	-.8720	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-.8981	-1.100	-.3558	13.76	12.56	16.26	17.06
	-1.194	-2.542	-.8551	-.9362	-.9539	-.9557	-.9432	-.9306	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-1.174	-.8124	-.9264	1.213	1.397	1.188	.6934
	-2.769	-3.711	-1.359	-.9239	-.9980	-1.010	-1.000	-.9875	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-.5497	-1.171	-.5666	-.6674	-.4787	.1679	-9.3277E-02
	-2.309	-3.478	-1.116	-.9363	-1.040	-1.056	-1.045	-1.031	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-.7536	-.6218	-.8338	-.6755	-.9362	-.5159	.3258
	1.9730E-02	-2.082	-1.029	-.9596	-1.094	-1.111	-1.096	-1.078	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-.8469	-.9611	-.9461	-1.131	-.9222	-.2882	1.897
	8.912	.5008	-1.523	-.9467	-1.142	-1.166	-1.147	-1.126	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-.9387	-.5909	-1.110	-.7468	-.9531	-1.048	-.1310
	-.1339	5.425	3.647	-.4475	-1.142	-1.231	-1.218	-1.193	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-1.013	-1.105	-.8696	-1.012	-1.309	-1.219	-1.603
	-3.926	-2.728	2.737	-.5361	-1.214	-1.334	-1.324	-1.285	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-.6734	-.7451	-1.243	-1.521	-1.573	-2.240
	-5.155	-4.456	1.123	-.4880	-1.708	-1.211	-1.321	-1.266	-1.150	1000.
	1000.	1000.	1000.							

0 19	1000.	1000.	1000.	1000.	-.7921	-1.114	-1.446	-1.778	-2.110	-2.270
	-4.110	-6.315	-5.512	8.538	-2.3193E-03	-1.242	-1.827	-1.067	-1.058	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-.8646	-.9050	-1.707	-2.434	-7.343	-7.641
	-7.743	-7.623	-7.652	-10.33	-2.194	-1.345	-1.931	-1.515	-.7558	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-.9666	-.6082	-1.965	-2.713	-8.046	-8.350
	-8.395	-8.230	-7.388	8.130	13.53	2.556	-.2074	-1.082	-1.135	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-.9939	-1.036	-2.298	-2.969	-8.517	-8.819
	-8.856	-8.717	-8.193	-1.116	3.317	16.51	5.557	.3350	-.9766	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-.7773	-.5554	-1.723	-3.261	-8.863	-9.151
	-9.166	-9.036	-8.593	-2.340	.1873	5.636	16.98	2.558	-.9128	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-.5096	-1.076	-2.051	-2.707	-8.271	-9.536
	-9.528	-9.387	-8.948	-2.916	-.9010	3.075	14.15	2.248	-1.061	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-1.100	-.8522	-2.401	-3.071	-8.753	-9.999
	-9.969	-9.812	-9.352	-3.094	-.6696	2.755	10.66	1.557	-1.212	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-.8722	-.8736	-1.975	-3.503	-9.319	-9.574
	-10.53	-10.36	-9.884	-3.227	.7418	10.27	10.31	.1901	-1.296	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-.8034	-1.284	-2.817	-3.334	-10.07	-10.34
	-10.30	-11.13	-10.64	-3.699	-.3373	10.07	2.132	-1.481	-2.415	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	-.6868	-1.666	-1.756	-3.978	-5.119	-10.83	-11.02
	-11.95	-11.76	-12.34	-5.988	-2.805	6.884	-2.820	-2.633	-2.582	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-3.349	-3.580	-4.959	-8.101	-9.762	-11.58	-12.21
	-12.96	-13.70	-14.48	-15.22	-17.12	-20.88	-17.96	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-3.644	-3.416	-5.154	-7.498	-8.825	-10.09	-11.66
	-12.28	-13.94	-15.57	-17.32	-20.24	-21.21	-21.18	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-2.166	-2.915	-4.668	-6.259	-7.913	-8.609	-10.40
	-11.19	-12.97	-14.68	-17.37	-20.16	-20.06	-19.96	1000.	1000.	1000.

```
          1000.      1000.      1000.
 0 32     1000.      1000.      1000.     -.7552     -1.503     -2.209     -3.904     -5.666     -6.469     -7.333
         -8.195     -10.06     -11.87     -14.66     -17.53     -17.45      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 33     1000.      1000.      1000.      .7398      .8960      .1413     -.6380     -1.478     -2.352     -3.267
         -4.181     -5.095     -5.977     -6.840     -7.731      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 34     1000.      1000.      1000.      3.836      3.917      4.120      5.257      5.331      6.369      7.388
          3.399      2.400      2.401      2.406      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 35     1000.      1000.      1000.      7.559      8.311      9.194      10.22      10.26      11.29      10.31
          10.33      10.34      9.334      9.327      9.323      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 36     1000.      1000.      1000.      1000.      14.29      15.19      15.16      13.17      18.21      17.25
          17.30      16.37      16.42      16.44      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 37     1000.      1000.      1000.      1000.      20.05      20.03      21.00      21.98      21.98      21.98
          22.00      22.02      23.05      23.07      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 38     1000.      1000.      1000.      1000.      24.26      24.26      25.25      25.24      26.24      26.24
          27.24      28.25      30.26      31.26      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 39     1000.      1000.      1000.      1000.      26.88      26.88      27.88      28.88      29.88      29.87
          30.87      30.87      31.87      33.86      35.83      40.82      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
1                   DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                ______________________________________________________________

              1          2          3          4          5          6          7          8          9         10
             11         12         13         14         15         16         17         18         19         20
             21         22         23
..........................................................................................................
 0  1     1000.      1000.      1000.     -1.849     -1.986     -3.224     -3.414     -3.680     -3.619     -4.288
         -4.008     -4.784     -5.038     -4.944     -4.551     -4.684     -4.879     -5.137     -5.119     -5.021
         -4.818      1000.      1000.
 0  2     1000.      1000.      1000.     -2.973     -2.425     -3.438     -3.667     -3.677     -4.082     -3.982
         -3.843     -3.659     -3.811     -4.121     -4.994     -4.660     -4.423     -4.278     -4.700     -4.981
         -3.820      1000.      1000.
```

0 3	1000.	1000.	1000.	-4.484	-4.636	-5.620	-5.523	-5.272	-5.379	-5.792
	-6.168	-5.494	-5.384	-5.539	-4.672	-4.597	-4.136	-4.745	-3.726	-4.376
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	-5.066	-5.023	-5.001	-4.974	-4.963	-4.954	-4.947
	-4.939	-4.929	-4.914	-4.890	-5.489	-5.360	-4.682	-5.007	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	-5.412	-5.404	-5.370	-5.364	-5.359	-5.352	-5.348
	-5.343	-5.337	-5.329	-5.318	-4.828	-5.363	-5.296	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	-4.731	-5.705	-5.662	-5.650	-5.641	-5.633	-5.627
	-5.622	-5.617	-5.610	-5.602	-5.340	-5.107	-5.064	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	-5.088	-5.038	-4.994	-4.958	-4.935	-4.920	-4.911
	-4.903	-4.896	-4.888	-4.881	-4.724	-4.592	-4.559	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	-5.505	-5.436	-5.346	-5.270	-5.224	-5.197	-5.182
	-5.171	-5.162	-5.152	-5.147	-5.043	-4.967	-4.916	-4.878	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	-4.877	-4.793	-5.629	-5.496	-5.416	-5.372	-5.351
	-5.339	-5.333	-5.333	-5.340	-5.295	-5.257	-5.196	-5.140	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-5.148	-5.054	-4.834	-5.641	-5.523	-5.459	-5.432
	-5.422	-5.428	-5.449	-5.477	-5.488	-5.473	-5.405	-5.344	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-5.443	-5.349	-5.051	-4.786	-5.601	-5.485	-5.442
	-5.448	-5.488	-5.567	-5.639	-5.658	-5.670	-5.616	-5.565	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-5.684	-5.610	-5.226	-4.908	-4.643	-5.411	-5.311
	-5.380	-5.502	-5.680	-5.813	-5.853	-5.881	-5.834	-5.786	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-4.849	-4.804	-5.346	-5.002	-4.683	-5.307	-5.059
	-5.287	-5.518	-5.783	-5.959	-6.025	-6.060	-6.010	-5.958	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-5.017	-5.023	-5.466	-5.120	-4.770	-5.202	-4.334
	-5.197	-5.591	-5.930	-6.144	-6.281	-6.283	-6.216	-6.154	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-5.185	-5.278	-5.580	-5.269	-4.958	-5.589	-5.344
	-5.589	-5.840	-6.136	-6.373	-6.549	-6.519	-6.436	-6.366	1000.	1000.

	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-5.429	-4.736	-5.725	-5.531	-5.309	-6.168	-6.128
	-6.189	-6.305	-6.511	-6.718	-6.797	-6.811	-6.759	-6.702	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-4.678	-4.676	-5.390	-5.975	-5.743	-6.727	-6.773
	-6.787	-6.877	-7.109	-7.282	-7.328	-7.337	-7.259	-7.168	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-4.869	-5.448	-6.650	-7.464	-7.486	-7.545
	-7.567	-7.698	-7.874	-7.959	-7.979	-7.972	-7.800	-7.551	-7.325	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-5.067	-6.397	-7.380	-8.337	-8.359	-8.384
	-8.468	-8.636	-8.697	-8.697	-8.689	-8.645	-8.344	-7.892	-7.421	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-5.268	-6.220	-8.120	-9.106	-9.117	-9.137
	-9.234	-9.353	-9.297	-9.218	-9.187	-9.125	-8.696	-8.042	-7.342	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-4.473	-5.856	-8.859	-9.838	-9.791	-9.775
	-9.760	-9.706	-9.636	-9.473	-9.393	-9.323	-8.824	-7.933	-6.922	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-4.376	-6.488	-9.411	-10.39	-10.29	-10.25
	-10.22	-10.08	-9.941	-9.622	-9.403	-9.187	-8.693	-9.040	-8.318	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-4.978	-5.997	-9.778	-9.782	-10.65	-10.57
	-10.48	-10.36	-10.18	-9.714	-9.276	-9.736	-9.354	-9.125	-8.811	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-4.580	-6.611	-10.14	-10.22	-11.06	-10.94
	-10.82	-10.68	-10.47	-9.835	-9.893	-8.976	-9.020	-9.151	-9.308	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-4.182	-6.358	-10.50	-10.73	-11.59	-11.39
	-11.23	-11.08	-10.84	-11.11	-9.798	-7.966	-8.990	-9.338	-9.737	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-4.783	-6.280	-10.83	-11.12	-11.08	-11.90
	-11.71	-11.55	-11.32	-11.64	-10.66	-9.831	-9.791	-10.02	-10.34	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-4.384	-6.433	-11.08	-11.33	-11.46	-11.40
	-12.25	-12.08	-11.89	-12.34	-11.68	-11.18	-10.94	-11.04	-11.07	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-4.283	-6.625	-11.34	-11.64	-12.17	-12.24

	-12.12	-12.94	-12.84	-13.49	-13.17	-13.97	-13.80	-13.72	-13.12	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-3.341	-4.473	-4.956	-8.107	-9.768	-12.18	-12.03
	-12.80	-13.53	-14.34	-15.11	-15.95	-16.84	-16.77	-16.66	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-3.641	-3.411	-5.146	-7.493	-8.823	-10.06	-11.63
	-13.25	-13.89	-15.53	-17.29	-19.23	-21.19	-21.15	-19.96	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-2.161	-2.915	-4.666	-6.256	-7.909	-8.604	-10.39
	-11.18	-12.96	-14.66	-17.36	-19.16	-20.06	-19.96	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-.7532	-1.503	-2.209	-3.903	-5.666	-6.469	-7.333
	-8.194	-10.05	-11.87	-14.66	-16.53	-17.45	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	.7399	.8964	.1419	-.6377	-1.478	-2.352	-3.266
	-4.180	-5.092	-5.977	-6.839	-7.730	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	3.836	3.917	4.118	5.255	5.330	6.368	6.387
	3.398	2.401	2.401	2.407	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	7.559	8.310	9.197	10.22	10.26	11.29	10.31
	10.33	10.34	9.334	9.328	9.323	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	14.29	15.19	14.16	14.18	17.22	17.26
	17.31	16.37	16.42	16.44	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	20.05	20.03	21.00	21.98	21.98	21.99
	22.00	22.02	23.05	23.07	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	24.26	24.26	25.25	25.24	26.24	26.24
	27.24	28.25	30.26	31.26	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	26.88	26.88	27.88	28.88	29.88	29.87
	30.87	30.87	31.87	33.86	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0										

```
                  VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD  1
                  ------------------------------------------------------------------------------

0              CUMULATIVE VOLUMES      L**3                         RATES FOR THIS TIME STEP      L**3/T
               ------------------                                   ------------------------

                     IN:                                                  IN:
                     ---                                                  ---
                      STORAGE =     .19201E+09                             STORAGE =    8.7300
                CONSTANT HEAD =     .00000                           CONSTANT HEAD =    .00000
                        WELLS =     .00000                                   WELLS =    .00000
                RIVER LEAKAGE =     .44129E+07                       RIVER LEAKAGE =    .35727
0                    TOTAL IN =     .19643E+09                            TOTAL IN =    9.0872
0                   OUT:                                                 OUT:
                    ----                                                 ----
                      STORAGE =     .69104E+08                             STORAGE =    .92787
                CONSTANT HEAD =     .00000                           CONSTANT HEAD =    .00000
                        WELLS =     .11540E+09                               WELLS =    7.4200
                RIVER LEAKAGE =     .12623E+08                       RIVER LEAKAGE =    .79361
0                   TOTAL OUT =     .19712E+09                           TOTAL OUT =    9.1415
0                    IN - OUT =    -.69726E+06                            IN - OUT =   -.54236E-01
0         PERCENT DISCREPANCY =               -.35             PERCENT DISCREPANCY =               -.60



0


       TIME SUMMARY AT END OF TIME STEP 10 IN STRESS PERIOD  1
                           SECONDS       MINUTES       HOURS       DAYS        YEARS
                        -----------------------------------------------------------
    TIME STEP LENGTH      .155520E+07   25920.0      432.000     18.0000     .492813E-01
  STRESS PERIOD TIME      .155520E+08   259200.      4320.00     180.000     .492813
TOTAL SIMULATION TIME     .155520E+08   259200.      4320.00     180.000     .492813
1
```

DROUGHT NONPUMPING CONDITIONS (DRTN.DAT)

```
1                     U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  0  0  8  0  0  0  0 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1          1
         2          0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21057 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29038 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
0

                                        BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:            (23I3)
```

```
0

                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:       (23I3)
                    ------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99    AT ALL NO-FLOW NODES (IBOUND=0).
0

                    INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
                    ------------------------------------------------------------------------------
0

                    INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
                    ------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
            HEAD
            DRAWDOWN
0                              COLUMN TO ROW ANISOTROPY =   1.000000
0

                               DELR WILL BE READ ON UNIT  3 USING FORMAT:        (23F10.0)
                    -----------------------------------------------------------------
0

                               DELC WILL BE READ ON UNIT  3 USING FORMAT:        (39F10.0)
                    -----------------------------------------------------------------
0

                    PRIMARY STORAGE COEF FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:      (23F10.0)
```

```
0
     HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
                    BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
 VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
      PRIMARY STORAGE COEF FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
      TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
                           SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
0                  MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =       200
                                  ACCELERATION PARAMETER =     1.0000
                        HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
                        SIP HEAD CHANGE PRINTOUT INTERVAL =      999
0                       CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
1                      STRESS PERIOD NO.    1, LENGTH =    .1555200E+08
```

NUMBER OF TIME STEPS = 10

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = 1555200.

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9
1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17
1	32	14	190.0	.5320E-02	185.0	18
1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27

1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47
1	9	6	150.0	.5790E-03	145.0	48
1	8	5	140.0	.5793E-03	135.0	49
1	7	5	130.0	.5790E-03	125.0	50
1	6	6	130.0	.5790E-03	125.0	51
1	5	6	130.0	.5790E-03	125.0	52
1	5	4	120.0	.5790E-03	115.0	53
1	4	5	120.0	.5790E-03	115.0	54
1	4	7	130.0	.5790E-03	125.0	55
1	3	6	120.0	.5790E-03	115.0	56
1	3	7	115.0	.5790E-03	110.0	57
1	3	8	110.0	.5790E-03	105.0	58
1	3	9	110.0	.5790E-03	105.0	59

0AVERAGE SEED = .00218448
MINIMUM SEED = .00000029
0
5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

.0000000E+00 .7838094E+00 .9532616E+00 .9898956E+00 .9978155E+00

```
0
    47 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
    47 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
    47 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
    42 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
    37 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
    37 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
    37 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
    37 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
    37 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
    33 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ------------------------------------------------------------------------------------------------------------------------------------
    1.897     (  1,  4,  5)   .1778     (  2,  2, 15)  -.6221E-01 (  2, 39,  7)  -.1114     (  1, 39,  7)  -.1579     (  2, 38,  9)
   -.1553     (  1, 39, 15)  -.2783E-01 (  1, 39, 13)  -.6097E-01 (  1, 39, 15)  -.5483E-01 (  2, 39, 10)  -.1177     (  1, 39, 15)
   -.1572E-01 (  1, 39, 15)  -.2273E-01 (  1, 39, 15)  -.1633E-01 (  2, 38, 14)  -.3878E-01 (  1, 39, 15)  -.3872E-01 (  2, 38, 14)
   -.4025E-01 (  1, 39, 15)  -.7082E-02 (  1, 39, 13)  -.1534E-01 (  1, 39, 15)  -.1339E-01 (  2, 39, 10)  -.2861E-01 (  1, 39, 15)
   -.3719E-02 (  1, 39, 15)  -.5337E-02 (  1, 39, 15)  -.3879E-02 (  2, 38, 14)  -.9194E-02 (  1, 39, 15)  -.9257E-02 (  2, 38, 14)
   -.9603E-02 (  1, 39, 15)  -.1690E-02 (  1, 39, 13)  -.3662E-02 (  1, 39, 15)  -.3205E-02 (  2, 39, 10)  -.6852E-02 (  1, 39, 15)
   -.1126E-02 (  2, 30, 18)  -.1292E-02 (  1, 39, 15)  -.9400E-03 (  2, 38, 14)
0
1                      HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
            -----------------------------------------------------------------------

              1           2           3           4           5           6           7           8           9          10
             11          12          13          14          15          16          17          18          19          20
             21          22          23
 ..........................................................................................................................
0  1.    1000.       1000.       1000.       152.4       150.3       142.0       133.5       125.3       118.2       115.7
         113.8       112.1       110.7       109.4       108.9       108.6       108.4       108.2       107.9       106.8
         104.5       1000.       1000.
0  2     1000.       1000.       1000.       160.1       158.8       154.2       151.1       149.0       147.2       146.1
         144.9       143.3       141.0       134.3       119.0       115.6       114.2       112.9       110.8       110.1
         124.8       1000.       1000.
0  3     1000.       1000.       1000.       175.1       169.4       131.7       128.2       126.5       124.5       127.6
         127.2       126.8       125.9       126.6       146.6       151.6       152.8       152.5       151.2       150.2
         1000.       1000.       1000.
```

0 4	1000.	1000.	1000.	182.5	139.1	176.9	147.4	177.1	183.4	185.4
	186.3	186.6	186.6	186.6	185.9	185.1	184.4	184.0	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	139.6	178.8	146.0	180.0	186.4	187.7	188.3
	188.5	188.5	188.5	188.5	188.1	187.6	187.4	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	184.6	181.7	148.1	182.0	187.4	188.4	188.7
	188.7	188.7	188.7	188.7	188.6	188.4	188.4	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	185.6	148.2	182.7	187.6	188.7	189.0	189.3
	189.5	189.5	189.5	189.5	189.4	189.3	189.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	186.6	155.7	183.0	187.9	189.4	189.6	189.7
	189.7	189.7	189.7	189.7	189.6	189.5	189.5	189.4	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	189.4	182.9	162.6	184.0	188.5	189.0	189.4
	189.7	189.8	189.8	189.8	189.7	189.7	189.6	189.6	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	190.4	188.4	182.7	168.9	185.7	186.6	187.5
	189.6	190.3	189.9	189.9	189.9	189.8	189.8	189.7	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	190.6	189.8	188.2	168.2	167.4	161.4	165.8
	194.9	197.5	190.7	190.0	190.0	189.9	189.9	189.8	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	190.9	190.5	189.8	185.6	183.5	175.6	160.4
	193.7	196.9	190.4	190.0	190.0	190.0	189.9	189.9	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	191.2	190.9	190.4	188.6	186.5	178.8	161.3
	190.7	195.6	190.4	190.1	190.1	190.1	190.0	189.9	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	191.4	191.3	190.7	189.6	188.0	183.9	178.9
	178.8	192.7	191.7	190.2	190.2	190.1	190.1	190.0	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	191.5	191.6	190.8	190.1	189.0	186.7	183.5
	178.7	191.9	196.1	190.7	190.3	190.2	190.1	190.0	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	191.6	192.2	190.9	190.7	190.0	189.5	190.3
	193.4	186.9	190.1	190.2	190.3	190.3	190.2	190.1	1000.	1000.

	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	191.6	192.6	191.5	190.9	190.3	190.7	193.0
	199.1	198.1	191.1	190.2	190.3	190.3	190.2	190.1	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	194.0	192.1	191.1	190.5	191.0	193.5
	200.2	199.9	192.9	189.1	189.8	190.2	190.1	189.8	189.4	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	195.0	192.2	191.3	190.8	191.9	192.6
	195.4	201.7	201.1	175.2	187.0	189.2	189.5	189.5	189.2	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	195.9	192.7	191.5	192.1	202.4	203.2
	203.6	203.7	202.6	172.0	183.1	187.2	188.6	188.8	188.7	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	196.8	193.0	191.7	192.4	203.3	204.1
	204.4	204.3	203.3	175.5	171.2	184.1	187.7	188.2	187.8	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	197.7	193.3	191.9	192.6	203.7	204.5
	204.8	204.7	204.1	188.9	183.5	168.8	181.8	187.0	188.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	198.5	193.8	192.3	192.8	203.9	204.7
	205.0	205.0	204.4	191.3	188.0	182.1	168.3	185.0	188.2	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	199.1	194.3	192.6	193.2	204.1	205.0
	205.2	205.2	204.6	191.9	189.2	185.0	171.2	185.7	188.7	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	199.7	195.0	192.9	193.5	204.4	205.2
	205.5	205.4	204.9	192.0	189.0	184.3	174.7	186.4	189.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	200.4	196.0	193.5	193.9	204.8	205.6
	205.8	205.8	205.2	192.1	187.3	175.0	174.9	186.7	189.1	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	201.3	197.5	194.4	194.8	205.5	206.2
	206.5	206.4	205.8	192.5	187.3	175.1	184.5	188.4	189.1	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	204.9	203.9	201.8	198.3	198.4	207.4	208.0
	208.2	208.1	207.7	195.9	190.5	176.6	189.3	189.5	189.2	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	212.7	212.3	212.6	212.4	212.1	211.6	211.5

```
          211.4    211.4    211.4    211.3    211.3    211.0    211.3    1000.    1000.    1000.
          1000.    1000.    1000.
 0 30     1000.    1000.    1000.    212.9    212.8    212.8    212.7    212.5    212.3    212.2
          212.1    212.0    211.9    211.8    211.8    211.8    211.8    1000.    1000.    1000.
          1000.    1000.    1000.
 0 31     1000.    1000.    1000.    213.1    213.1    213.1    213.0    212.9    212.8    212.7
          212.7    212.6    212.5    212.4    212.3    212.3    212.3    1000.    1000.    1000.
          1000.    1000.    1000.
 0 32     1000.    1000.    1000.    213.5    213.4    213.3    213.2    213.1    213.1    213.0
          213.0    212.9    212.9    212.8    212.7    212.7    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 33     1000.    1000.    1000.    213.7    213.7    213.6    213.5    213.5    213.4    213.4
          213.4    213.3    213.3    213.2    213.2    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 34     1000.    1000.    1000.    214.1    214.1    214.0    214.0    214.0    213.9    213.9
          213.9    214.0    214.0    214.0    1000.    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 35     1000.    1000.    1000.    214.8    214.9    215.0    215.0    215.0    215.0    215.0
          215.0    215.0    215.0    215.0    215.0    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 36     1000.    1000.    1000.    1000.    216.0    216.1    216.1    216.1    216.1    216.1
          216.1    216.0    216.0    216.0    1000.    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 37     1000.    1000.    1000.    1000.    216.7    216.8    216.8    216.8    216.8    216.8
          216.8    216.8    216.8    216.8    1000.    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 38     1000.    1000.    1000.    1000.    217.2    217.2    217.2    217.2    217.2    217.2
          217.2    217.2    217.2    217.2    1000.    1000.    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
 0 39     1000.    1000.    1000.    1000.    217.4    217.4    217.4    217.4    217.4    217.4
          217.4    217.5    217.5    217.5    217.5    217.5    1000.    1000.    1000.    1000.
          1000.    1000.    1000.
1                   HEAD IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
             ----------------------------------------------------------------

              1        2        3        4        5        6        7        8        9       10
             11       12       13       14       15       16       17       18       19       20
             21       22       23
```

0	1	1000.	1000.	1000.	155.5	153.6	149.8	145.9	143.1	141.0	139.6
		138.3	137.0	135.2	133.0	131.6	130.7	129.8	129.0	127.9	126.8
		125.5	1000.	1000.							
0	2	1000.	1000.	1000.	165.3	163.7	160.7	157.8	155.7	154.1	152.9
		151.7	150.4	148.5	145.6	143.3	141.8	140.5	139.2	137.4	135.5
		133.0	1000.	1000.							
0	3	1000.	1000.	1000.	185.2	183.4	179.3	177.1	175.8	174.8	174.1
		173.4	172.6	171.2	168.9	166.4	165.0	163.1	161.4	158.9	157.2
		1000.	1000.	1000.							
0	4	1000.	1000.	1000.	202.7	202.6	202.6	202.6	202.6	202.6	202.6
		202.5	202.5	202.5	202.5	200.4	198.8	197.7	196.7	1000.	1000.
		1000.	1000.	1000.							
0	5	1000.	1000.	1000.	203.1	203.1	203.1	203.1	203.1	203.1	203.1
		203.1	203.1	203.1	203.1	202.2	201.4	201.2	1000.	1000.	1000.
		1000.	1000.	1000.							
0	6	1000.	1000.	1000.	203.5	203.5	203.5	203.5	203.5	203.5	203.5
		203.5	203.5	203.5	203.5	202.9	202.4	202.2	1000.	1000.	1000.
		1000.	1000.	1000.							
0	7	1000.	1000.	1000.	203.9	203.9	203.9	204.0	204.0	204.0	204.0
		204.0	204.0	204.0	204.0	203.5	203.2	203.0	1000.	1000.	1000.
		1000.	1000.	1000.							
0	8	1000.	1000.	1000.	204.4	204.4	204.4	204.5	204.5	204.5	204.5
		204.5	204.5	204.5	204.5	204.1	203.9	203.6	203.3	1000.	1000.
		1000.	1000.	1000.							
0	9	1000.	1000.	1000.	204.7	204.8	204.8	204.9	204.9	204.9	204.9
		205.0	205.0	205.0	205.0	204.7	204.6	204.3	204.0	1000.	1000.
		1000.	1000.	1000.							
0	10	1000.	1000.	1000.	205.0	205.0	205.1	205.1	205.2	205.2	205.2
		205.2	205.3	205.3	205.3	205.3	205.2	204.8	204.5	1000.	1000.
		1000.	1000.	1000.							
0	11	1000.	1000.	1000.	205.2	205.3	205.3	205.4	205.5	205.5	205.5
		205.6	205.6	205.6	205.7	205.6	205.6	205.2	204.9	1000.	1000.
		1000.	1000.	1000.							
0	12	1000.	1000.	1000.	205.4	205.5	205.5	205.6	205.7	205.7	205.8
		205.8	205.8	205.9	205.9	205.9	205.9	205.6	205.3	1000.	1000.
		1000.	1000.	1000.							
0	13	1000.	1000.	1000.	205.5	205.6	205.6	205.8	205.8	205.9	205.9

	206.0	206.0	206.1	206.2	206.2	206.1	205.8	205.5	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	205.6	205.7	205.7	205.9	206.0	206.1	206.1
	206.2	206.2	206.3	206.4	206.5	206.4	206.1	205.7	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	205.7	205.9	205.8	206.1	206.2	206.2	206.3
	206.3	206.4	206.5	206.6	206.8	206.7	206.3	205.9	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	205.9	206.1	205.9	206.3	206.4	206.5	206.6
	206.6	206.7	206.8	207.0	207.0	207.0	206.6	206.2	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	206.0	206.5	205.8	206.8	206.8	206.9	207.0
	207.0	207.1	207.3	207.5	207.5	207.5	207.0	206.4	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	207.1	205.9	207.3	207.3	207.5	207.6
	207.6	207.8	208.0	208.1	208.1	208.1	207.2	206.0	204.7	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	207.7	206.0	207.8	208.0	208.2	208.3
	208.4	208.6	208.8	208.8	208.8	208.7	207.6	206.0	204.4	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	208.3	205.9	208.4	208.5	208.8	208.9
	209.1	209.3	209.3	209.3	209.3	209.2	207.9	205.9	203.8	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	208.9	204.9	208.9	209.0	209.3	209.4
	209.5	209.6	209.6	209.7	209.7	209.6	207.8	205.2	202.5	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	209.4	204.9	209.2	209.4	209.6	209.7
	209.8	209.9	209.9	209.9	209.9	209.9	208.6	206.6	204.2	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	209.7	205.1	209.4	209.6	209.8	209.9
	210.0	210.0	210.0	210.1	210.1	210.2	209.5	208.6	206.2	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	210.0	205.4	209.7	209.9	210.0	210.1
	210.2	210.2	210.2	210.3	210.3	210.4	210.5	210.5	208.2	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	210.4	206.0	209.9	210.1	210.3	210.3
	210.3	210.4	210.4	210.4	210.5	210.5	210.5	210.5	208.9	1000.
	1000.	1000.	1000.							

0 26	1000.	1000.	1000.	1000.	210.7	206.8	210.1	210.3	210.4	210.5
	210.5	210.5	210.5	210.6	210.6	210.6	210.6	210.6	209.3	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	211.0	207.9	210.2	210.4	210.6	210.6
	210.7	210.7	210.7	210.7	210.7	210.7	210.7	210.7	209.6	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	211.5	210.1	210.3	210.5	210.8	210.9
	210.9	210.9	211.0	211.0	211.0	211.0	211.0	210.9	209.9	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	212.7	212.2	212.6	212.4	212.1	211.5	211.4
	211.4	211.4	211.3	211.3	211.3	211.3	211.3	211.3	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	212.9	212.8	212.8	212.7	212.5	212.3	212.2
	212.1	212.0	211.9	211.8	211.8	211.8	211.8	211.7	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	213.1	213.1	213.1	213.0	212.9	212.8	212.7
	212.7	212.6	212.5	212.4	212.3	212.3	212.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	213.5	213.4	213.3	213.2	213.1	213.1	213.0
	213.0	212.9	212.9	212.8	212.7	212.7	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	213.7	213.7	213.6	213.5	213.5	213.4	213.4
	213.4	213.3	213.3	213.2	213.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	214.1	214.1	214.0	214.0	214.0	213.9	213.9
	213.9	214.0	214.0	214.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	214.8	214.9	215.0	215.0	215.0	215.0	215.0
	215.0	215.0	215.0	215.0	215.0	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	216.0	216.1	216.1	216.1	216.1	216.1
	216.1	216.0	216.0	216.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	216.7	216.8	216.8	216.8	216.8	216.8
	216.8	216.8	216.8	216.8	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	217.2	217.2	217.2	217.2	217.2	217.2
	217.2	217.2	217.2	217.2	1000.	1000.	1000.	1000.	1000.	1000.

```
          1000.     1000.     1000.
 0 39     1000.     1000.     1000.     1000.     217.4     217.4     217.4     217.4     217.4     217.4
          217.4     217.5     217.5     217.5     1000.     1000.     1000.     1000.     1000.     1000.
          1000.     1000.     1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
            ----------------------------------------------------------------------------

              1         2         3         4         5         6         7         8         9        10
             11        12        13        14        15        16        17        18        19        20
             21        22        23
.....................................................................................................
 0  1     1000.     1000.     1000.    -.4332    -.3474    -1.989    -3.453    -5.341    -8.180    -7.663
         -7.761    -8.082    -7.691    -7.367    -6.895    -6.646    -6.423    -6.205    -5.871    -5.846
         -6.535     1000.     1000.
 0  2     1000.     1000.     1000.    -1.054    -.7982    -1.156    -1.130    -1.042    -1.207    -1.084
         -.8753    -1.319    -.9768    -1.271    -10.99    -8.608    -8.229    -7.935    -8.773    -10.09
         -.8405     1000.     1000.
 0  3     1000.     1000.     1000.    -2.065    -2.366    -15.73    -13.23    -12.46    -10.52    -14.58
         -15.20    -14.81    -14.89    -16.58    -2.554    -1.595    -1.818    -1.522    -1.201    -1.191
          1000.     1000.     1000.
 0  4     1000.     1000.     1000.    -3.519    -22.14    -3.947    -22.43    -4.147    -3.442    -3.431
         -3.319    -3.583    -3.644    -3.583    -2.932    -3.113    -3.363    -2.961     1000.     1000.
          1000.     1000.     1000.
 0  5     1000.     1000.     1000.    -20.59    -3.834    -19.00    -3.978    -3.378    -3.719    -3.280
         -3.486    -3.536    -3.543    -3.503    -3.104    -3.619    -3.412     1000.     1000.     1000.
          1000.     1000.     1000.
 0  6     1000.     1000.     1000.    -3.559    -3.705    -18.07    -4.021    -3.446    -3.435    -3.651
         -3.704    -3.714    -3.715    -3.701    -3.550    -3.438    -3.388     1000.     1000.     1000.
          1000.     1000.     1000.
 0  7     1000.     1000.     1000.    -3.573    -18.24    -3.708    -3.634    -3.707    -4.008    -3.340
         -3.486    -3.524    -3.532    -3.523    -3.412    -3.336    -3.297     1000.     1000.     1000.
          1000.     1000.     1000.
 0  8     1000.     1000.     1000.    -3.636    -15.66    -4.016    -3.868    -3.427    -3.610    -3.661
         -3.680    -3.687    -3.690    -3.682    -3.590    -3.525    -3.462    -3.415     1000.     1000.
          1000.     1000.     1000.
 0  9     1000.     1000.     1000.    -3.436    -3.866    -16.60    -3.036    -3.457    -4.033    -3.433
         -3.686    -3.789    -3.801    -3.798    -3.742    -3.697    -3.630    -3.574     1000.     1000.
          1000.     1000.     1000.
```

0 10	1000.	1000.	1000.	-3.394	-3.436	-3.700	14.07	-1.699	-2.596	-2.510
	-4.583	-4.342	-3.933	-3.884	-3.867	-3.835	-3.762	-3.697	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-3.609	-3.845	-3.162	11.79	10.56	14.59	14.16
	-10.92	-12.51	-4.729	-3.997	-3.961	-3.937	-3.868	-3.805	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-3.868	-3.540	-3.754	-1.612	-1.494	-1.635	-1.447
	-12.68	-13.95	-5.370	-4.020	-4.031	-4.016	-3.948	-3.884	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-3.229	-3.884	-3.397	-3.596	-3.497	-2.847	-2.328
	-11.73	-13.57	-5.388	-4.076	-4.090	-4.075	-4.004	-3.937	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-3.417	-3.312	-3.662	-3.628	-4.004	-3.860	-3.943
	-6.797	-11.66	-6.714	-4.245	-4.171	-4.141	-4.061	-3.986	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-3.494	-3.624	-3.770	-4.088	-3.994	-3.674	-2.528
	2.275	-8.948	-11.12	-4.662	-4.267	-4.205	-4.111	-4.026	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-3.560	-3.197	-3.913	-3.697	-4.008	-4.512	-5.261
	-9.404	-2.891	-5.095	-4.159	-4.268	-4.264	-4.162	-4.061	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-3.605	-3.586	-3.457	-3.949	-4.338	-4.691	-6.986
	-14.07	-13.09	-6.133	-4.240	-4.324	-4.346	-4.223	-4.078	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-2.995	-3.081	-4.125	-4.499	-5.006	-7.523
	-15.20	-14.90	-7.890	-4.138	-4.789	-4.184	-4.112	-3.796	-3.375	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-2.958	-3.214	-4.266	-4.758	-5.875	-6.588
	-10.42	-16.70	-16.14	5.850	-2.954	-4.170	-4.544	-3.469	-3.152	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-2.877	-2.747	-4.493	-6.118	-17.40	-18.23
	-18.62	-18.67	-18.56	-13.00	-5.100	-4.243	-4.582	-3.791	-2.668	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-2.825	-2.047	-4.671	-6.388	-18.29	-19.13
	-19.42	-19.34	-18.30	5.465	11.82	-7.1075E-02	-2.701	-3.164	-2.826	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-2.745	-2.331	-4.947	-6.587	-18.66	-19.51
	-19.79	-19.74	-19.05	-4.893	.5029	15.17	3.236	-1.985	-2.964	1000.

	1000.	1000.	1000.								
0 23	1000.	1000.	1000.	1000.	-2.459	-1.784	-4.334	-6.830	-18.90	-19.73	
	-20.00	-19.97	-19.39	-6.260	-2.981	2.862	15.70	-7.6752E-03	-3.226	1000.	
	1000.	1000.	1000.								
0 24	1000.	1000.	1000.	1000.	-2.124	-2.259	-4.625	-6.213	-18.14	-19.96	
	-20.21	-20.18	-19.63	-6.865	-4.243	-2.5375E-02	12.83	-.6690	-3.699	1000.	
	1000.	1000.	1000.								
0 25	1000.	1000.	1000.	1000.	-2.652	-2.005	-4.942	-6.508	-18.42	-20.22	
	-20.47	-20.43	-19.88	-7.005	-4.011	-.2826	9.342	-1.418	-3.987	1000.	
	1000.	1000.	1000.								
0 26	1000.	1000.	1000.	1000.	-2.377	-2.021	-4.500	-6.897	-18.80	-19.60	
	-20.83	-20.79	-20.22	-7.051	-2.257	9.003	9.056	-2.725	-4.073	1000.	
	1000.	1000.	1000.								
0 27	1000.	1000.	1000.	1000.	-2.347	-2.527	-5.416	-6.797	-19.46	-20.23	
	-20.46	-21.41	-20.84	-7.548	-3.256	8.915	-.5494	-4.446	-5.127	1000.	
	1000.	1000.	1000.								
0 28	1000.	1000.	1000.	-1.897	-3.918	-3.819	-7.312	-9.357	-20.40	-21.02	
	-22.18	-22.13	-22.66	-10.85	-6.525	6.375	-6.314	-5.529	-5.155	1000.	
	1000.	1000.	1000.								
0 29	1000.	1000.	1000.	-10.70	-11.30	-12.60	-16.40	-19.08	-22.56	-23.48	
	-24.44	-25.40	-26.38	-27.34	-29.29	-33.01	-30.25	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 30	1000.	1000.	1000.	-10.86	-10.80	-12.78	-15.66	-17.49	-19.30	-21.19	
	-22.10	-24.01	-25.92	-27.85	-30.81	-31.79	-31.79	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 31	1000.	1000.	1000.	-9.147	-10.08	-12.05	-13.96	-15.86	-16.78	-18.72	
	-19.66	-21.60	-23.51	-26.41	-29.33	-29.30	-29.27	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 32	1000.	1000.	1000.	-7.457	-8.370	-9.293	-11.21	-13.14	-14.08	-15.04	
	-15.99	-17.95	-19.88	-22.79	-25.74	-25.72	1000.	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 33	1000.	1000.	1000.	-5.703	-5.652	-6.578	-7.510	-8.460	-9.419	-10.39	
	-11.36	-12.33	-13.29	-14.24	-15.20	1000.	1000.	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 34	1000.	1000.	1000.	-2.140	-2.115	-2.038	-.9875	-.9611	5.2261E-02	1.057	
	-2.944	-3.950	-3.962	-3.967	1000.	1000.	1000.	1000.	1000.	1000.	
	1000.	1000.	1000.								
0 35	1000.	1000.	1000.	2.217	3.075	4.000	5.005	5.020	6.026	5.029	

```
        5.031     5.031     4.022     4.016     4.015     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 36   1000.     1000.     1000.     1000.     9.958     10.90     10.88     8.875     13.89     12.91
        12.94     11.97     12.00     12.01     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 37   1000.     1000.     1000.     1000.     16.25     16.24     17.22     18.20     18.20     18.20
        18.21     18.22     19.23     19.24     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 38   1000.     1000.     1000.     1000.     20.79     20.79     21.78     21.77     22.77     22.76
        23.76     24.76     26.77     27.77     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 39   1000.     1000.     1000.     1000.     23.57     23.57     24.56     25.56     26.55     26.55
        27.55     27.55     28.54     30.54     32.51     37.51     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
1                DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                 ---------------------------------------------------------------

            1         2         3         4         5         6         7         8         9        10
           11        12        13        14        15        16        17        18        19        20
           21        22        23
 ..................................................................................................
 0  1   1000.     1000.     1000.    -4.491    -4.601    -5.781    -5.901    -6.110    -5.999    -6.631
       -6.313    -7.048    -7.238    -7.050    -6.584    -6.667    -6.814    -7.024    -6.937    -6.760
       -6.464     1000.     1000.
 0  2   1000.     1000.     1000.    -7.323    -6.744    -7.684    -7.816    -7.742    -8.066    -7.906
       -7.699    -7.440    -7.466    -7.575    -8.276    -7.825    -7.466    -7.200    -7.442    -7.494
       -5.989     1000.     1000.
 0  3   1000.     1000.     1000.    -13.24    -13.37    -14.29    -14.10    -13.76    -13.76    -14.09
       -14.36    -13.55    -13.20    -12.85    -11.40    -10.99    -10.13    -10.38    -8.865    -9.195
        1000.     1000.     1000.
 0  4   1000.     1000.     1000.    -18.65    -18.62    -18.60    -18.58    -18.57    -18.56    -18.56
       -18.55    -18.53    -18.52    -18.48    -18.41    -17.76    -16.74    -16.73     1000.     1000.
        1000.     1000.     1000.
 0  5   1000.     1000.     1000.    -19.10    -19.11    -19.10    -19.11    -19.12    -19.12    -19.12
       -19.12    -19.11    -19.11    -19.09    -18.17    -18.38    -18.18     1000.     1000.     1000.
        1000.     1000.     1000.
 0  6   1000.     1000.     1000.    -18.49    -19.49    -19.49    -19.52    -19.53    -19.54    -19.54
       -19.54    -19.54    -19.54    -19.53    -18.90    -18.41    -18.24     1000.     1000.     1000.
```

	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	-18.92	-18.91	-18.94	-18.97	-18.99	-19.00	-19.01
	-19.01	-19.01	-19.02	-19.01	-18.52	-18.17	-18.00	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	-19.37	-19.38	-19.42	-19.46	-19.49	-19.51	-19.52
	-19.53	-19.53	-19.54	-19.54	-19.13	-18.86	-18.58	-18.34	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	-18.73	-18.75	-19.80	-19.85	-19.89	-19.92	-19.94
	-19.95	-19.96	-19.98	-19.99	-19.74	-19.57	-19.27	-18.98	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-18.97	-19.00	-19.05	-20.12	-20.17	-20.20	-20.23
	-20.25	-20.27	-20.29	-20.31	-20.28	-20.18	-19.82	-19.48	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-19.21	-19.26	-19.31	-19.40	-20.46	-20.50	-20.53
	-20.56	-20.58	-20.62	-20.65	-20.63	-20.58	-20.24	-19.92	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-19.39	-19.46	-19.50	-19.61	-19.69	-20.74	-20.77
	-20.81	-20.84	-20.90	-20.95	-20.94	-20.91	-20.57	-20.25	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-18.50	-18.59	-19.62	-19.76	-19.85	-20.91	-20.94
	-20.98	-21.02	-21.09	-21.15	-21.17	-21.15	-20.81	-20.48	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-18.61	-18.73	-19.73	-19.91	-20.01	-21.08	-21.12
	-21.16	-21.21	-21.29	-21.38	-21.48	-21.42	-21.05	-20.71	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-18.71	-18.87	-19.83	-20.06	-20.17	-21.25	-21.30
	-21.34	-21.40	-21.50	-21.62	-21.77	-21.70	-21.29	-20.92	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-18.86	-18.11	-19.95	-20.32	-20.43	-21.52	-21.58
	-21.63	-21.70	-21.82	-21.96	-22.01	-21.99	-21.58	-21.19	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-17.99	-17.55	-18.78	-20.79	-20.76	-21.87	-21.97
	-22.02	-22.12	-22.32	-22.47	-22.51	-22.48	-21.98	-21.43	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-17.13	-17.89	-21.31	-22.30	-22.48	-22.57
	-22.63	-22.81	-23.00	-23.10	-23.12	-23.07	-22.24	-21.03	-19.66	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-16.71	-17.99	-21.85	-22.96	-23.17	-23.26

	-23.40	-23.64	-23.76	-23.81	-23.81	-23.72	-22.62	-21.02	-19.36	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-16.31	-16.86	-22.37	-23.53	-23.78	-23.88
	-24.10	-24.33	-24.33	-24.34	-24.34	-24.23	-22.87	-20.86	-18.78	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-14.92	-14.88	-22.85	-24.03	-24.28	-24.38
	-24.51	-24.62	-24.64	-24.66	-24.66	-24.55	-22.80	-20.23	-17.51	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-14.39	-14.87	-23.20	-24.38	-24.63	-24.74
	-24.84	-24.86	-24.88	-24.91	-24.92	-24.87	-23.55	-22.65	-20.21	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-14.71	-14.06	-23.43	-23.61	-24.84	-24.94
	-24.99	-25.02	-25.05	-25.08	-25.11	-26.16	-25.52	-24.61	-22.21	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-14.04	-14.44	-23.65	-23.85	-25.05	-25.12
	-25.16	-25.19	-25.21	-25.25	-26.32	-26.43	-26.47	-26.48	-24.17	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-13.36	-14.00	-23.86	-24.12	-25.26	-25.30
	-25.33	-25.35	-25.38	-26.41	-26.46	-26.50	-26.53	-26.53	-24.90	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-13.70	-13.80	-24.06	-24.32	-24.43	-25.46
	-25.49	-25.52	-25.54	-26.57	-26.59	-26.60	-26.60	-26.61	-25.32	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-13.04	-13.89	-24.21	-24.40	-24.56	-24.62
	-25.67	-25.69	-25.71	-26.73	-26.74	-26.73	-26.72	-26.73	-25.59	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-12.55	-14.09	-24.34	-24.53	-24.79	-24.89
	-24.93	-25.93	-25.97	-26.98	-26.97	-27.96	-27.95	-27.94	-26.85	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-10.70	-12.24	-12.60	-16.40	-19.08	-23.45	-23.43
	-24.40	-25.36	-26.35	-27.32	-28.29	-29.25	-29.26	-29.26	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-10.86	-10.79	-12.78	-15.66	-17.49	-19.30	-21.19
	-23.09	-24.00	-25.91	-27.84	-29.81	-31.79	-31.78	-30.74	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-9.146	-10.08	-12.05	-13.95	-15.86	-16.78	-18.72
	-19.66	-21.59	-23.50	-26.40	-28.33	-29.30	-29.27	1000.	1000.	1000.
	1000.	1000.	1000.							

```
0 32   1000.     1000.     1000.     -7.456    -8.370    -9.293    -11.21    -13.14    -14.08    -15.04
      -15.99    -17.95    -19.88    -22.79    -24.74    -25.72     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 33   1000.     1000.     1000.     -5.703    -5.652    -6.578    -7.510    -8.460    -9.419    -10.39
      -11.36    -12.33    -13.29    -14.24    -15.20     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 34   1000.     1000.     1000.     -2.140    -2.115    -2.039    -.9883    -.9618   5.1224E-02 5.5542E-02
      -2.945    -3.951    -3.962    -3.967     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 35   1000.     1000.     1000.      2.217     3.074     4.001     5.007     5.020     6.026     5.029
       5.031     5.030     4.022     4.016     4.015     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 36   1000.     1000.     1000.      1000.     9.958     10.90     9.879     9.880     12.89     12.91
       12.94     11.97     12.00     12.01     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 37   1000.     1000.     1000.      1000.     16.25     16.24     17.22     18.20     18.20     18.20
       18.21     18.22     19.23     19.24     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 38   1000.     1000.     1000.      1000.     20.79     20.79     21.78     21.77     22.77     22.76
       23.76     24.76     26.77     27.77     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0 39   1000.     1000.     1000.      1000.     23.57     23.57     24.56     25.56     26.55     26.55
       27.55     27.55     28.55     30.54     1000.     1000.     1000.     1000.     1000.     1000.
       1000.     1000.     1000.
0

                 VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD  1

0           CUMULATIVE VOLUMES      L**3                      RATES FOR THIS TIME STEP      L**3/T

              IN:                                                  IN:

                  STORAGE =    .14008E+09                           STORAGE =    2.9743
            CONSTANT HEAD =    .00000                         CONSTANT HEAD =    .00000
            RIVER LEAKAGE =    .39774E+07                     RIVER LEAKAGE =    .28672
0                TOTAL IN =    .14405E+09                          TOTAL IN =    3.2610
```

```
0              OUT:                                                  OUT:
               ----                                                  ----
                 STORAGE =    .12703E+09                               STORAGE =    2.0614
           CONSTANT HEAD =    .00000                             CONSTANT HEAD =    .00000
           RIVER LEAKAGE =    .17303E+08                         RIVER LEAKAGE =    1.2507
0              TOTAL OUT =    .14433E+09                             TOTAL OUT =    3.3121
0               IN - OUT =   -.27901E+06                              IN - OUT =   -.51126E-01
0    PERCENT DISCREPANCY =               -.19              PERCENT DISCREPANCY =              -1.56


0
```

TIME SUMMARY AT END OF TIME STEP 10 IN STRESS PERIOD 1

	SECONDS	MINUTES	HOURS	DAYS	YEARS
TIME STEP LENGTH	.155520E+07	25920.0	432.000	18.0000	.492813E-01
STRESS PERIOD TIME	.155520E+08	259200.	4320.00	180.000	.492813
TOTAL SIMULATION TIME	.155520E+08	259200.	4320.00	180.000	.492813

1

```
CALIBRATION RUN, NONTUCK PARK, PUMPING CONDITIONS

1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  4  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1         1
         2         0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0WEL1 -- WELL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM  4
 MAXIMUM OF    2 WELLS
      8 ELEMENTS IN X ARRAY ARE USED FOR WELLS
  20711 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 1 -- RECHARGE TO TOP LAYER
    897 ELEMENTS OF X ARRAY USED FOR RECHARGE
  21608 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21962 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
```

```
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29943 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
0

                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
               ------------------------------------------------------------------------------------
0

                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
               ------------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99     AT ALL NO-FLOW NODES (IBOUND=0).
0

                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
               ------------------------------------------------------------------------------------
0

                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
               ------------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
           HEAD
           DRAWDOWN
0                                  COLUMN TO ROW ANISOTROPY =   1.000000
0

                             DELR WILL BE READ ON UNIT  3 USING FORMAT:         (23F10.0)
               ------------------------------------------------------------------------
0
```

```
                 DELC WILL BE READ ON UNIT  3 USING FORMAT:          (39F10.0)
0
   PRIMARY STORAGE COEF FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
  HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
               BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
   PRIMARY STORAGE COEF FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0
   TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
0

                  SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
```

0 MAXIMUM ITERATIONS ALLOWED FOR CLOSURE = 200
ACCELERATION PARAMETER = 1.0000
HEAD CHANGE CRITERION FOR CLOSURE = .10000E-02
SIP HEAD CHANGE PRINTOUT INTERVAL = 999
0 CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
1 STRESS PERIOD NO. 1, LENGTH = 1036800.

NUMBER OF TIME STEPS = 10

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = 103680.0

0 2 WELLS

LAYER	ROW	COL	STRESS RATE	WELL NO.
2	14	10	-1.5200	1
2	25	16	-1.3900	2

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9

1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17
1	32	14	190.0	.5320E-02	185.0	18
1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27
1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47

```
           1       9       6    150.0         .5790E-03         145.0           48
           1       8       5    140.0         .5793E-03         135.0           49
           1       7       5    130.0         .5790E-03         125.0           50
           1       6       6    130.0         .5790E-03         125.0           51
           1       5       6    130.0         .5790E-03         125.0           52
           1       5       4    120.0         .5790E-03         115.0           53
           1       4       5    120.0         .5790E-03         115.0           54
           1       4       7    130.0         .5790E-03         125.0           55
           1       3       6    120.0         .5790E-03         115.0           56
           1       3       7    115.0         .5790E-03         110.0           57
           1       3       8    110.0         .5790E-03         105.0           58
           1       3       9    110.0         .5790E-03         105.0           59
0AVERAGE SEED =  .00218448
 MINIMUM SEED =  .00000029
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7838094E+00   .9532616E+00   .9898956E+00   .9978155E+00
0
    15 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
    12 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 -----------------------------------------------------------------------------------------------------------------------------------
   -.4536     (  1, 23, 17)  .2081     (  2, 26,  9)  .3321     (  2, 30, 18)  .1724     (  1, 31, 17)  .1858     (  2, 30, 18)
   -.4860E-01 (  1, 39, 15)  .1279E-01 (  2, 16,  4)  .8946E-02 (  1, 31, 17) -.1170E-01 (  2, 10,  7) -.9161E-02 (  2, 17,  4)
   -.2426E-02 (  2, 19,  5) -.9130E-03 (  2,  9, 17)
0
1                     HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ---------------------------------------------------------------------
```

	1 11 21	2 12 22	3 13 23	4 14	5 15	6 16	7 17	8 18	9 19	10 20
0 1	1000.	1000.	1000.	152.0	150.0	140.1	130.2	120.4	110.6	108.5
	106.5	104.6	103.5	102.5	102.5	102.5	102.4	102.4	102.4	101.4
	98.45	1000.	1000.							
0 2	1000.	1000.	1000.	159.0	158.0	153.0	150.0	148.0	146.0	145.0
	144.0	142.0	140.0	133.0	108.9	107.6	106.6	105.5	102.6	100.7
	124.0	1000.	1000.							
0 3	1000.	1000.	1000.	173.0	167.0	117.1	116.0	114.9	114.8	114.0
	113.0	113.0	112.0	111.2	144.0	150.0	151.0	151.0	150.0	149.0
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	179.0	118.5	173.0	126.7	173.0	180.0	182.0
	183.0	183.0	183.0	183.0	182.9	182.0	181.0	181.0	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	120.5	175.0	128.4	176.0	183.0	184.0	184.9
	185.0	185.0	185.0	185.0	184.9	184.0	184.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	181.0	178.0	131.3	178.0	184.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	182.0	131.3	179.0	184.0	185.0	185.0	185.9
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	183.0	141.1	179.0	184.0	185.9	186.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	186.0	179.0	147.4	181.0	185.0	185.0	185.9
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	187.0	185.0	179.0	180.7	183.9	184.0	184.9
	185.0	185.9	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.0	186.0	185.0	178.1	176.3	172.9	176.1
	183.7	184.6	185.9	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							

0 12	1000.	1000.	1000.	187.0	187.0	186.0	183.9	181.9	174.0	158.8
	180.7	182.9	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	187.9	187.0	186.9	185.0	183.0	175.9	158.9
	178.6	181.9	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	188.0	187.9	187.0	185.9	184.0	180.0	174.9
	171.3	180.7	184.9	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	188.0	188.0	187.0	186.0	185.0	182.9	180.8
	175.2	182.3	184.7	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	188.0	188.9	187.0	186.9	186.0	185.0	184.9
	183.6	180.8	183.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	188.0	189.0	188.0	187.0	186.0	186.0	185.9
	185.0	184.8	183.2	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.0	189.0	187.0	186.0	186.0	185.9
	185.1	185.0	183.4	185.0	185.1	186.0	186.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.0	189.0	187.0	186.0	186.0	186.0
	185.1	185.2	185.1	179.5	184.0	185.0	185.1	186.0	186.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.0	190.0	187.0	186.0	185.2	185.2
	185.2	185.2	184.2	160.4	178.1	183.0	184.1	185.0	186.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.0	191.0	187.0	186.0	185.3	185.3
	185.3	185.3	185.2	179.6	180.1	184.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.0	191.0	187.1	186.0	185.3	185.3
	185.4	185.4	185.3	184.0	183.9	178.5	184.7	185.0	185.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.0	192.0	188.0	186.1	185.5	185.4
	185.4	185.4	185.4	185.0	185.0	184.8	178.4	184.9	185.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.9	192.0	188.0	187.0	186.1	185.5
	185.4	185.4	185.4	185.1	185.1	184.9	179.5	184.9	185.0	1000.

	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	197.0	193.0	188.1	187.0	186.2	185.7
	185.5	185.5	185.5	185.1	185.0	184.0	180.7	184.9	185.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.0	194.0	189.0	187.1	186.4	186.2
	185.7	185.6	185.5	185.1	184.9	180.7	180.7	184.1	184.9	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	199.0	195.0	189.1	188.0	186.6	186.5
	186.3	185.8	185.6	185.1	184.1	180.7	183.9	184.1	184.1	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	203.0	200.0	198.0	191.1	189.1	187.7	187.6
	187.0	186.8	186.1	185.2	184.1	177.7	183.2	184.1	184.0	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	202.7	201.3	201.4	198.2	196.2	195.0	194.8
	194.7	194.6	194.5	194.5	194.4	194.3	194.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	203.2	202.8	202.0	200.9	199.8	198.8	198.3
	197.8	197.5	197.1	196.8	196.8	196.8	196.7	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	204.6	204.1	203.6	202.9	202.3	201.8	201.5
	201.2	200.8	200.4	199.9	199.6	199.4	199.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.5	205.8	205.2	204.6	204.2	203.8	203.6
	203.4	203.1	202.8	202.5	202.2	202.0	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.8	207.3	206.8	206.5	206.3	206.1
	205.9	205.8	205.6	205.3	205.0	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	211.5	211.3	210.7	210.4	210.2	210.2	210.2
	210.2	210.3	210.4	210.4	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	216.4	217.5	218.1	218.0	217.9	217.9	217.9
	217.9	217.9	218.0	218.1	218.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.7	226.8	226.7	226.6	226.5
	226.3	226.1	226.0	225.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	232.0	232.1	232.3	232.4	232.4	232.4

```
         232.4     232.3     232.2     232.1     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
 0 38    1000.     1000.     1000.     1000.     235.9     235.9     235.9     236.0     236.0     236.0
         236.0     236.0     235.9     235.9     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
 0 39    1000.     1000.     1000.     1000.     237.9     237.9     237.9     237.9     238.0     238.0
         238.0     238.0     238.0     238.1     238.2     238.2     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
1                   HEAD IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
              ------------------------------------------------------------

             1         2         3         4         5         6         7         8         9        10
            11        12        13        14        15        16        17        18        19        20
            21        22        23
 ..........................................................................................................
 0  1    1000.     1000.     1000.     150.7     148.6     144.3     140.0     136.9     134.6     133.1
         131.7     130.4     128.5     126.3     124.8     124.0     123.1     122.4     121.4     120.3
         119.1     1000.     1000.
 0  2    1000.     1000.     1000.     158.1     156.4     153.1     150.1     147.9     146.2     145.0
         143.8     142.6     140.6     137.7     135.4     134.0     132.7     131.6     130.0     128.4
         126.7     1000.     1000.
 0  3    1000.     1000.     1000.     171.7     169.5     164.6     162.3     161.0     160.1     159.5
         158.9     158.2     157.2     155.7     154.3     153.5     152.3     151.1     149.3     148.1
         1000.     1000.     1000.
 0  4    1000.     1000.     1000.     183.0     182.9     182.9     182.9     182.9     182.9     182.9
         182.9     182.9     182.9     182.8     181.5     180.5     179.9     179.3     1000.     1000.
         1000.     1000.     1000.
 0  5    1000.     1000.     1000.     183.3     183.3     183.3     183.3     183.3     183.3     183.3
         183.3     183.3     183.3     183.3     182.8     182.4     182.4     1000.     1000.     1000.
         1000.     1000.     1000.
 0  6    1000.     1000.     1000.     183.7     183.7     183.6     183.6     183.6     183.6     183.6
         183.6     183.6     183.6     183.6     183.4     183.1     183.1     1000.     1000.     1000.
         1000.     1000.     1000.
 0  7    1000.     1000.     1000.     184.1     184.0     184.0     183.9     183.9     183.9     183.9
         183.9     183.9     183.9     183.9     183.7     183.6     183.6     1000.     1000.     1000.
         1000.     1000.     1000.
 0  8    1000.     1000.     1000.     184.5     184.4     184.3     184.3     184.2     184.2     184.2
         184.2     184.2     184.2     184.2     184.1     184.0     184.0     183.9     1000.     1000.
```

	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	184.9	184.8	184.6	184.5	184.4	184.4	184.4
	184.4	184.4	184.4	184.4	184.3	184.3	184.2	184.2	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	185.2	185.1	184.9	184.7	184.5	184.5	184.5
	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.4	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	185.5	185.4	185.1	184.8	184.6	184.5	184.5
	184.5	184.5	184.6	184.7	184.7	184.7	184.7	184.6	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	185.8	185.7	185.3	184.9	184.7	184.4	184.3
	184.4	184.6	184.8	184.9	185.0	185.0	184.9	184.8	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	186.0	185.9	185.4	185.0	184.7	184.3	184.0
	184.3	184.6	184.9	185.1	185.2	185.2	185.1	185.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	186.1	186.2	185.5	185.1	184.8	184.2	183.2
	184.2	184.7	185.1	185.3	185.5	185.4	185.3	185.1	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	186.3	186.4	185.6	185.3	185.0	184.6	184.3
	184.6	184.9	185.3	185.6	185.8	185.7	185.5	185.2	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	186.6	186.9	185.8	185.5	185.3	185.2	185.2
	185.3	185.5	185.7	186.0	186.1	186.0	185.5	185.1	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	186.9	188.0	186.1	185.9	185.7	185.8	185.9
	185.9	186.1	186.4	186.7	186.7	186.7	186.0	185.5	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	189.3	187.2	186.5	186.4	186.6	186.7
	186.8	187.1	187.4	187.5	187.5	187.5	186.6	185.8	185.2	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	190.7	188.1	187.0	187.1	187.5	187.6
	187.8	188.2	188.4	188.5	188.5	188.3	186.9	185.8	185.2	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	192.1	189.0	187.6	187.8	188.2	188.4
	188.8	189.2	189.2	189.2	189.2	189.0	187.3	185.8	185.2	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	193.5	189.9	188.1	188.2	188.8	189.1

	189.4	189.6	189.7	189.7	189.7	189.3	186.2	185.1	184.9	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	194.5	190.3	188.7	188.8	189.4	189.8
	190.0	190.1	190.1	190.1	190.1	189.7	186.3	184.9	184.3	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	195.3	190.9	189.0	189.2	189.8	190.1
	190.3	190.4	190.5	190.4	190.4	190.2	187.5	186.4	184.5	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.0	191.3	189.4	189.7	190.3	190.6
	190.7	190.8	190.8	190.8	190.7	190.7	190.8	190.8	185.4	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	196.8	192.1	189.9	190.4	190.9	191.0
	191.1	191.2	191.3	191.2	191.0	190.6	190.9	190.9	185.6	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	197.5	193.0	190.3	190.9	191.3	191.5
	191.6	191.7	191.7	191.7	191.5	191.3	191.2	191.3	185.7	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.3	194.1	190.6	191.2	191.7	192.0
	192.1	192.2	192.3	192.2	192.1	191.9	191.8	191.8	185.8	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	199.5	196.5	191.0	191.6	192.5	192.8
	193.0	193.0	193.2	193.1	193.1	193.0	192.9	192.8	185.8	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	202.7	201.2	201.5	198.2	196.2	194.9	194.8
	194.7	194.6	194.6	194.5	194.5	194.4	194.4	194.3	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	203.2	202.8	202.0	200.9	199.9	198.8	198.3
	197.8	197.4	197.1	196.9	196.8	196.8	196.7	196.5	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	204.6	204.1	203.6	202.9	202.3	201.8	201.5
	201.2	200.8	200.4	199.9	199.6	199.4	199.2	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.5	205.8	205.2	204.6	204.2	203.8	203.6
	203.4	203.1	202.8	202.5	202.2	202.0	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.8	207.3	206.8	206.5	206.3	206.1
	205.9	205.8	205.6	205.3	205.0	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

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0 34    1000.      1000.      1000.      211.5      211.3      210.7      210.4      210.2      210.2      210.2
        210.2      210.3      210.4      210.4      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 35    1000.      1000.      1000.      216.4      217.5      218.1      218.0      217.9      217.9      217.9
        217.9      217.9      218.0      218.1      218.1      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 36    1000.      1000.      1000.      1000.      226.3      226.7      226.8      226.7      226.6      226.5
        226.3      226.1      226.0      225.9      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 37    1000.      1000.      1000.      1000.      232.0      232.1      232.3      232.4      232.4      232.4
        232.3      232.3      232.2      232.1      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 38    1000.      1000.      1000.      1000.      235.9      235.9      235.9      236.0      236.0      236.0
        236.0      236.0      235.9      235.9      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 39    1000.      1000.      1000.      1000.      237.9      237.9      237.9      237.9      238.0      238.0
        238.0      238.0      238.0      238.1      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ___________________________________________________________________________

            1          2          3          4          5          6          7          8          9         10
           11         12         13         14         15         16         17         18         19         20
           21         22         23
.....................................................................................................................
0  1    1000.      1000.      1000.      4.1351E-03 1.4740E-02 -.1073     -.2149     -.3561     -.5964     -.5287
       -.5397     -.5686     -.5340     -.5100     -.4723     -.4544     -.4379     -.4226     -.3958     -.3945
       -.4531      1000.      1000.
0  2    1000.      1000.      1000.     -5.2338E-03 1.5884E-02 -7.2174E-03 -4.0588E-03 4.5013E-03 -1.3306E-02 -1.5411E-03
       2.5299E-02 -2.9343E-02 8.2703E-03 1.0239E-02 -.8551     -.5688     -.5617     -.5344     -.6074     -.7429
       2.2888E-05  1000.      1000.
0  3    1000.      1000.      1000.      1.9913E-02 5.9357E-03 -1.113     -.9623     -.9053     -.7917     -.9749
       -.9988     -.9608     -.9717     -1.151    -5.7373E-03 3.0563E-02 -2.1484E-02 1.1139E-03 1.6312E-02 7.4615E-03
        1000.      1000.      1000.
0  4    1000.      1000.      1000.      3.3142E-02 -1.543     2.0111E-02 -1.750     1.4465E-02 3.8071E-02 2.8778E-02
       4.9042E-02 1.5060E-02 1.4587E-02 1.5305E-02 6.5552E-02 2.6230E-02 -1.8326E-02 2.7222E-02  1000.      1000.
        1000.      1000.      1000.
0  5    1000.      1000.      1000.     -1.522      2.0309E-02 -1.388     1.2680E-02 4.5074E-02 -2.3499E-03 6.3065E-02
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	2.8061E-02	2.7390E-02	2.7481E-02	2.7893E-02	6.7078E-02	-1.7120E-02	1.7532E-02	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	3.1555E-02	3.1693E-02	-1.304	6.6986E-03	4.0131E-02	4.5059E-02	1.7715E-02
	1.7242E-02	1.7288E-02	1.7471E-02	1.7563E-02	1.8768E-02	2.2507E-02	2.2064E-02	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	3.4454E-02	-1.319	3.5629E-02	2.7191E-02	2.2934E-02	-2.1957E-02	7.0877E-02
	3.7689E-02	3.7201E-02	3.7399E-02	3.7506E-02	3.6545E-02	3.6469E-02	3.5477E-02	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	3.0670E-02	-1.092	2.3163E-02	8.7433E-03	5.2582E-02	3.5400E-02	3.0685E-02
	3.0869E-02	3.1067E-02	3.1418E-02	3.1540E-02	2.9938E-02	2.9053E-02	2.7435E-02	2.5726E-02	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	3.8254E-02	3.6575E-02	-1.432	2.5009E-02	4.5395E-02	-2.2385E-02	7.1899E-02
	3.8452E-02	2.9770E-02	2.9480E-02	2.9404E-02	2.8076E-02	2.7344E-02	2.5894E-02	2.4506E-02	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	4.1504E-02	4.3808E-02	3.9963E-02	2.311	5.8228E-02	2.8534E-02	9.5764E-02
	-1.5106E-02	7.9865E-02	2.8946E-02	2.8030E-02	2.7405E-02	2.6749E-02	2.5223E-02	2.3727E-02	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	2.3453E-02	1.8921E-03	4.9896E-02	1.915	1.741	3.112	3.902
	.3494	.3563	5.8762E-02	2.6535E-02	2.5665E-02	2.4979E-02	2.3453E-02	2.2003E-02	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-1.8814E-02	4.3518E-02	3.0518E-03	6.5994E-02	9.7717E-02	6.8970E-03	.1736
	.3270	9.6252E-02	8.3008E-03	3.3081E-02	2.3361E-02	2.2369E-02	2.0935E-02	1.9638E-02	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	6.9061E-02	-2.1988E-02	6.8069E-02	5.8136E-03	3.1662E-02	.1272	.1349
	.4447	.1038	4.5700E-02	3.1464E-02	2.0981E-02	1.9928E-02	1.8753E-02	1.7624E-02	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	2.9099E-02	6.5552E-02	2.6672E-02	6.1890E-02	1.5533E-02	3.0731E-02	.1351
	.7256	.2709	6.9000E-02	2.9007E-02	1.7334E-02	1.6754E-02	1.5991E-02	1.5289E-02	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	2.4414E-02	2.4719E-03	2.3361E-02	-5.4169E-03	2.9053E-02	5.2429E-02	.1726
	5.777	.6710	.2917	3.2959E-02	1.3412E-02	1.3336E-02	1.3153E-02	1.2756E-02	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	1.6525E-02	5.1056E-02	6.3324E-03	5.1117E-02	3.1540E-02	-5.7678E-03	.1055
	.4005	3.242	1.973	4.1779E-02	9.6283E-03	8.9111E-03	9.3231E-03	9.2010E-03	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	1.0544E-02	-4.3945E-03	2.0020E-02	2.9175E-02	1.6022E-03	2.1118E-02	7.8018E-02
	4.4815E-02	.2080	1.826	4.0573E-02	9.5367E-03	8.8501E-04	2.7008E-03	3.9520E-03	1000.	1000.
	1000.	1000.	1000.							

0 18	1000.	1000.	1000.	1000.	3.4271E-02	2.5574E-02	1.5060E-02	-8.0261E-03	1.2817E-03	5.4291E-02
	-8.1970E-02	1.6525E-02	1.592	1.7975E-02	-6.3171E-02	3.3081E-02	4.4556E-03	-8.0872E-04	-2.1362E-04	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	1.8753E-02	-1.0574E-02	6.4087E-03	-1.8692E-02	1.8768E-03	3.4302E-02
	-7.0694E-02	-.1665	-6.6483E-02	1.504	3.4653E-02	3.9368E-03	-6.2958E-02	3.9398E-02	3.2043E-04	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	9.8114E-03	3.1586E-03	-8.0566E-03	-1.3046E-02	-.2322	-.2212
	-.2319	-.1896	-.2496	-1.394	-7.1442E-02	2.0142E-02	-6.9412E-02	-3.2486E-02	3.4607E-02	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-2.2888E-03	1.6174E-02	-2.2659E-02	-1.9974E-02	-.2784	-.2731
	-.2910	-.3064	-.2226	1.379	2.949	3.5416E-02	1.8997E-02	-1.8768E-02	-3.5080E-02	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-1.1185E-02	-3.6880E-02	-6.4224E-02	-2.8763E-02	-.3440	-.3382
	-.3536	-.3581	-.3426	-4.4388E-02	5.8640E-02	5.510	.2644	-1.8311E-03	-4.0436E-03	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	7.7515E-03	4.1183E-02	2.8152E-02	-7.7301E-02	-.4659	-.3907
	-.3892	-.3941	-.3916	-3.3615E-02	-2.4643E-02	.2307	5.552	.1266	-1.9836E-03	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	5.2124E-02	-3.9169E-02	-2.0370E-02	1.5564E-02	-9.4131E-02	-.5168
	-.4382	-.4359	-.4326	-7.2754E-02	-6.3965E-02	9.5779E-02	4.454	6.2119E-02	-9.4299E-03	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-3.8818E-02	4.6692E-03	-6.7154E-02	-2.9175E-02	-.2464	-.6514
	-.5045	-.4861	-.4793	-7.8934E-02	-3.4668E-02	-1.3641E-02	3.296	6.7154E-02	-7.7667E-03	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	3.0670E-03	6.0577E-03	2.3193E-02	-8.1421E-02	-.3938	-.2287
	-.7019	-.5618	-.5345	-8.5571E-02	5.5450E-02	3.270	3.298	-8.9066E-02	6.7261E-02	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	2.1561E-02	-2.9907E-02	-7.8461E-02	1.0986E-03	-.5632	-.5022
	-.3066	-.7593	-.6133	-8.4702E-02	-9.3246E-02	3.339	5.5176E-02	-9.9869E-02	-9.5840E-02	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	5.6763E-03	-8.3008E-03	2.2415E-02	-8.1848E-02	-9.0973E-02	-.7101	-.5815
	-.9681	-.7739	-1.081	-.1968	-9.5779E-02	5.333	-.1764	-8.1985E-02	-2.6062E-02	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-.6658	-.2811	-1.369	-2.239	-3.243	-6.040	-6.833
	-7.693	-8.564	-9.529	-10.53	-12.44	-16.26	-13.33	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-1.159	-.7611	-2.019	-3.851	-4.826	-5.833	-7.287
	-7.834	-9.453	-11.09	-12.85	-15.83	-16.79	-16.74	1000.	1000.	1000.

```
          1000.      1000.      1000.
 0 31     1000.      1000.      1000.     -.5661     -1.067     -2.606     -3.875     -5.293     -5.812     -7.487
         -8.161     -9.838     -11.40     -13.95     -16.61     -16.43     -16.25      1000.      1000.      1000.
          1000.      1000.      1000.
 0 32     1000.      1000.      1000.     -.4988     -.8474     -1.213     -2.621     -4.184     -4.838     -5.604
         -6.368     -8.136     -9.827     -12.45     -15.19     -15.02      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 33     1000.      1000.      1000.     -.2442      .1599     -.2672     -.8038     -1.489     -2.256     -3.102
         -3.950     -4.798     -5.588     -6.290     -7.003      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 34     1000.      1000.      1000.      .4976      .7059      1.289      2.631      2.782      3.824      4.824
          .7926     -.2776     -.3618     -.4027      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 35     1000.      1000.      1000.      .5532      .4569      .9268      1.968      2.073      3.098      2.100
          2.083      2.057      .9678      .9186      .9108      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 36     1000.      1000.      1000.      1000.     -.2590      .3029      .1963     -1.719      3.414      2.523
          2.664      1.856      2.015      2.064      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 37     1000.      1000.      1000.      1000.      1.020      .9196      1.746      2.606      2.592      2.608
          2.648      2.714      3.839      3.910      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 38     1000.      1000.      1000.      1000.      2.142      2.132      3.056      3.023      4.011      4.009
          5.014      6.027      8.053      9.065      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
 0 39     1000.      1000.      1000.      1000.      3.113      3.130      4.087      5.060      6.040      6.027
          7.016      7.005      7.989      9.937      11.81      16.77      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
1                   DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                    ---------------------------------------------------------------

             1          2          3          4          5          6          7          8          9         10
            11         12         13         14         15         16         17         18         19         20
            21         22         23
 ..............................................................................................................
 0  1     1000.      1000.      1000.      .2686      .3652     -.3414 -7.7515E-03 9.8846E-02    .4233 -9.7443E-02
          .3098     -.3583     -.4821     -.2762      .1614 4.8126E-02     -.1357     -.3888     -.3705     -.2776
    -7.7286E-02      1000.      1000.
```

0 2	1000.	1000.	1000.	-.1346	.5830	-8.3664E-02	-6.6879E-02	8.0841E-02	-.2074	-3.2501E-02
	.1818	.4436	.4100	.2905	-.3899	9.4452E-03	.2800	.4324	-5.6763E-03	-.4038
	.3486	1000.	1000.							
0 3	1000.	1000.	1000.	.2523	.4543	.4069	.6713	.9743	.8855	.4951
	.1147	.7504	.7527	.2851	.6869	.4967	.7230	-8.3435E-02	.6884	-.1237
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	1.006	1.057	1.071	1.096	1.099	1.103	1.108
	1.114	1.121	1.133	1.154	.4517	.4944	1.109	.7142	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	.6550	.6576	.6913	.6875	.6873	.6898	.6923
	.6954	.6991	.7051	.7139	1.152	.5733	.6260	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	1.313	.3396	.3837	.3864	.3908	.3958	.3994
	.4031	.4069	.4122	.4183	.6475	.8516	.8830	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	.9323	.9878	1.027	1.058	1.078	1.091	1.099
	1.106	1.111	1.118	1.124	1.259	1.370	1.395	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	.4852	.5622	.6518	.7258	.7701	.7954	.8091
	.8196	.8270	.8344	.8381	.9298	.9916	1.031	1.055	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	1.084	1.177	.3512	.4855	.5658	.6076	.6268
	.6370	.6395	.6354	.6254	.6670	.6972	.7579	.8113	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	.7926	.8950	1.133	.3308	.4523	.5149	.5394
	.5446	.5343	.5055	.4712	.4576	.4721	.5499	.6179	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	.4739	.5772	.9040	1.183	.3741	.4888	.5272
	.5121	.4625	.3699	.2851	.2656	.2534	.3290	.3990	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	.2145	.2956	.7221	1.064	1.340	.5779	.6745
	.5870	.4438	.2379	8.4778E-02	4.1855E-02	1.2985E-02	9.8740E-02	.1837	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	1.036	1.086	.5985	.9723	1.306	.6975	.9538
	.6890	.4236	.1190	-8.4366E-02	-.1574	-.1909	-8.2581E-02	2.8458E-02	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	.8544	.8469	.4754	.8587	1.225	.8201	1.751
	.7866	.3383	-5.1239E-02	-.2995	-.4540	-.4458	-.2823	-.1186	1000.	1000.

	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	.6728	.5678	.3593	.7169	1.035	.4077	.6513
	.3573	6.0577E-02	-.2899	-.5656	-.7665	-.7162	-.4557	-.2089	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	.4097	1.065	.2139	.4734	.6837	-.2051	-.1934
	-.2946	-.4545	-.7214	-.9688	-1.056	-1.034	-.5326	-.1330	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	1.137	1.012	.8539	9.9686E-02	.2641	-.7858	-.8816
	-.9480	-1.098	-1.428	-1.652	-1.703	-1.666	-1.027	-.4857	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	.6664	.7949	-.4503	-1.381	-1.575	-1.702
	-1.802	-2.074	-2.374	-2.506	-2.529	-2.462	-1.599	-.7509	-.2305	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	.3093	-.1151	-1.032	-2.143	-2.461	-2.600
	-2.818	-3.213	-3.416	-3.480	-3.475	-3.317	-1.924	-.7720	-.1751	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-6.5445E-02	-4.8492E-02	-1.606	-2.785	-3.234	-3.433
	-3.798	-4.204	-4.216	-4.228	-4.216	-4.007	-2.260	-.8469	-.1577	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	.5428	8.7463E-02	-2.150	-3.242	-3.821	-4.085
	-4.359	-4.638	-4.681	-4.689	-4.664	-4.252	-1.221	-.1164	.1130	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	.4604	-.3346	-2.661	-3.780	-4.429	-4.751
	-4.996	-5.082	-5.128	-5.125	-5.089	-4.696	-1.341	-.9274	-.3331	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-.2737	.1454	-3.035	-3.198	-4.843	-5.145
	-5.311	-5.416	-5.464	-5.446	-5.393	-6.178	-3.492	-2.426	-.4646	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-2.0096E-02	-.3388	-3.442	-3.704	-5.302	-5.560
	-5.696	-5.796	-5.842	-5.801	-6.696	-6.672	-6.760	-6.771	-1.415	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	.2212	-9.0591E-02	-3.873	-4.365	-5.850	-6.007
	-6.127	-6.223	-6.267	-7.201	-6.974	-6.614	-6.874	-6.934	-1.609	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-.5499	-1.2604E-02	-4.313	-4.936	-5.327	-6.459
	-6.598	-6.696	-6.745	-7.680	-7.482	-7.277	-7.236	-7.288	-1.711	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-.3338	-.1097	-4.644	-5.192	-5.721	-5.959

	-7.126	-7.214	-7.277	-8.231	-8.084	-7.925	-7.808	-7.823	-1.773	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-.5290	-.4917	-4.978	-5.566	-6.505	-6.833
	-6.993	-8.032	-8.159	-9.145	-9.061	-9.982	-9.888	-9.817	-2.793	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-.6516	-1.176	-1.464	-2.184	-3.163	-6.902	-6.830
	-7.726	-8.599	-9.608	-10.55	-11.48	-12.42	-12.36	-12.35	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-1.163	-.7517	-2.021	-3.885	-4.871	-5.837	-7.292
	-8.840	-9.446	-11.09	-12.87	-14.82	-16.78	-16.72	-15.54	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-.5600	-1.068	-2.601	-3.870	-5.287	-5.804	-7.478
	-8.152	-9.822	-11.39	-13.94	-15.62	-16.44	-16.25	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-.4920	-.8463	-1.213	-2.622	-4.185	-4.838	-5.604
	-6.369	-8.132	-9.827	-12.46	-14.20	-15.03	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	-.2435	.1611	-.2663	-.8039	-1.489	-2.256	-3.102
	-3.950	-4.795	-5.588	-6.291	-7.004	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	.4982	.7069	1.282	2.626	2.777	3.819	3.819
	.7876	-.2769	-.3623	-.4024	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	.5537	.4551	.9320	1.982	2.071	3.097	2.099
	2.084	2.052	.9679	.9200	.9118	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	-.2588	.3138	-.7939	-.6981	2.433	2.544
	2.684	1.856	2.015	2.066	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	1.020	.9209	1.747	2.612	2.599	2.615
	2.656	2.723	3.842	3.912	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	2.143	2.134	3.055	3.023	4.011	4.009
	5.014	6.028	8.056	9.068	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	3.113	3.131	4.087	5.060	6.041	6.028
	7.017	7.006	7.992	9.946	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

```
0

              VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD  1
              ---------------------------------------------------------------------------
0      CUMULATIVE VOLUMES      L**3                        RATES FOR THIS TIME STEP      L**3/T
       ------------------                                  ------------------------

            IN:                                                   IN:
            ---                                                   ---
              STORAGE =    .29153E+08                               STORAGE =    21.588
        CONSTANT HEAD =    .00000                             CONSTANT HEAD =    .00000
                WELLS =    .00000                                     WELLS =    .00000
             RECHARGE =    .42172E+07                              RECHARGE =    4.0675
        RIVER LEAKAGE =    .18726E+06                         RIVER LEAKAGE =    .18774
0            TOTAL IN =    .33558E+08                              TOTAL IN =    25.843
0          OUT:                                                 OUT:
           ----                                                 ----
              STORAGE =    .29775E+08                               STORAGE =    22.119
        CONSTANT HEAD =    .00000                             CONSTANT HEAD =    .00000
                WELLS =    .30171E+07                                 WELLS =    2.9100
             RECHARGE =    .00000                                  RECHARGE =    .00000
        RIVER LEAKAGE =    .76498E+06                         RIVER LEAKAGE =    .81288
0           TOTAL OUT =    .33558E+08                             TOTAL OUT =    25.842
0            IN - OUT =    16.000                                  IN - OUT =    .10777E-02
0 PERCENT DISCREPANCY =               .00               PERCENT DISCREPANCY =               .00

0

        TIME SUMMARY AT END OF TIME STEP 10 IN STRESS PERIOD  1
                              SECONDS       MINUTES      HOURS       DAYS        YEARS
                           -----------------------------------------------------------
     TIME STEP LENGTH         103680.       1728.00      28.8000     1.20000     .328542E-02
   STRESS PERIOD TIME         .103680E+07   17280.0      288.000     12.0000     .328542E-01
TOTAL SIMULATION TIME         .103680E+07   17280.0      288.000     12.0000     .328542E-01
```

```
CALIBRATION RUN, NONOTUCK PARK, NONPUMPING CONDITIONS (NPN.DAT)


1                     U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS         39 ROWS         23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  0  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1         1
         2         0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 1 -- RECHARGE TO TOP LAYER
    897 ELEMENTS OF X ARRAY USED FOR RECHARGE
  21600 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21954 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29935 ELEMENTS OF X ARRAY USED OUT OF  32125
```

```
1Easthampton ALA
0

                              BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                        ----------------------------------------------------------------------------------------

0

                              BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                        ----------------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99     AT ALL NO-FLOW NODES (IBOUND=0).
0

                                INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:       (23F10.0)
                        ----------------------------------------------------------------------------------------

0

                                INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:       (23F10.0)
                        ----------------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL — THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
           HEAD
           DRAWDOWN
0                                        COLUMN TO ROW ANISOTROPY =   1.000000
0

                                          DELR WILL BE READ ON UNIT  3 USING FORMAT:       (23F10.0)
                        ---------------------------------------------------------------------------

0

                                          DELC WILL BE READ ON UNIT  3 USING FORMAT:       (39F10.0)
                        ---------------------------------------------------------------------------
```

```
0

                PRIMARY STORAGE COEF FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
              ___________________________________________________________________________________________
0

               HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
              ___________________________________________________________________________________________
0

                              BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
              ___________________________________________________________________________________________
0

              VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:        (23F10.0)
              ___________________________________________________________________________________________
0

                PRIMARY STORAGE COEF FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
              ___________________________________________________________________________________________
0

                TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
              ___________________________________________________________________________________________
0

                                   SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
                                   ___________________________________________
0                         MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      200
                                         ACCELERATION PARAMETER =     1.0000
```

HEAD CHANGE CRITERION FOR CLOSURE = .10000E-02
SIP HEAD CHANGE PRINTOUT INTERVAL = 999
0 CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
1 STRESS PERIOD NO. 1, LENGTH = 1036800.

NUMBER OF TIME STEPS = 10

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = 103680.0

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9
1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17

1	32	14	190.0	.5320E-02	185.0	18
1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27
1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47
1	9	6	150.0	.5790E-03	145.0	48
1	8	5	140.0	.5793E-03	135.0	49
1	7	5	130.0	.5790E-03	125.0	50
1	6	6	130.0	.5790E-03	125.0	51
1	5	6	130.0	.5790E-03	125.0	52
1	5	4	120.0	.5790E-03	115.0	53
1	4	5	120.0	.5790E-03	115.0	54
1	4	7	130.0	.5790E-03	125.0	55

```
              1        3       6    120.0         .5790E-03          115.0            56
              1        3       7    115.0         .5790E-03          110.0            57
              1        3       8    110.0         .5790E-03          105.0            58
              1        3       9    110.0         .5790E-03          105.0            59
0AVERAGE SEED =  .00218448
 MINIMUM SEED =  .00000029
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7838094E+00   .9532616E+00   .9898956E+00   .9978155E+00
0
    14 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
    13 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ------------------------------------------------------------------------------------------------------------------------------------
    .5474     (  2, 23, 17)  .2466      (  2, 26,  9)  .3673      (  2, 29, 18)  .2032      (  2, 12, 11)  .2131      (  2, 11,  9)
    .6296E-01 (  2, 18,  5)  .1775E-01 (  2, 16,  4)  .9816E-02 (  1, 31, 17) -.1417E-01 (  2,  9,  7) -.1115E-01 (  2, 17,  4)
   -.2920E-02 (  2, 19,  5) -.1138E-02 (  2,  9, 17)  .6795E-03 (  2, 10,  4)
0
1                         HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                ---------------------------------------------------------------------

            1          2          3          4          5          6          7          8          9         10
           11         12         13         14         15         16         17         18         19         20
           21         22         23
 ..........................................................................................................................
0  1    1000.      1000.      1000.      152.0      150.0      140.1      130.2      120.4      110.6      108.5
        106.5      104.6      103.5      102.5      102.5      102.5      102.4      102.4      102.4      101.4
        98.45      1000.      1000.
```

0 2	1000.	1000.	1000.	159.0	158.0	153.0	150.0	148.0	146.0	145.0
	144.0	142.0	140.0	133.0	108.9	107.6	106.6	105.5	102.6	100.7
	124.0	1000.	1000.							
0 3	1000.	1000.	1000.	173.0	167.0	117.1	116.0	114.9	114.8	114.0
	113.0	113.0	112.0	111.2	144.0	150.0	151.0	151.0	150.0	149.0
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	179.0	118.6	173.0	126.8	173.0	180.0	182.0
	183.0	183.0	183.0	183.0	183.0	182.0	181.1	181.0	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	120.6	175.0	128.4	176.0	183.0	184.1	185.0
	185.0	185.0	185.0	185.0	185.0	184.1	184.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	181.0	178.0	131.4	178.0	184.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	182.0	131.4	179.0	184.0	185.0	185.1	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	183.0	141.1	179.0	184.0	186.0	186.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	186.0	179.0	147.5	181.0	185.0	185.1	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	187.0	185.0	179.0	180.7	184.0	184.0	185.0
	185.1	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.0	186.0	185.0	178.1	176.3	172.9	176.2
	184.1	185.1	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	187.1	187.0	186.1	184.0	182.0	174.1	158.9
	181.2	183.4	185.1	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	188.0	187.1	187.0	185.1	183.0	175.9	158.9
	179.1	182.4	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	188.0	188.0	187.0	186.0	184.1	180.0	175.0
	171.8	181.2	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.

	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	188.0	188.0	187.0	186.1	185.0	183.0	180.9
	175.7	182.8	185.2	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	188.0	189.0	187.0	187.0	186.0	185.1	185.0
	184.1	181.2	183.4	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	188.0	189.0	188.0	187.0	186.1	186.0	186.0
	185.4	185.2	183.5	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.0	189.0	187.0	186.1	186.0	186.0
	185.4	185.3	183.7	185.0	185.1	186.0	186.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.0	189.0	187.0	186.1	186.0	186.0
	185.1	185.4	185.3	179.5	184.0	185.0	185.1	186.0	186.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.0	190.0	187.0	186.0	185.5	185.4
	185.5	185.4	184.5	160.4	178.1	183.0	184.1	185.0	186.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.0	191.0	187.0	186.0	185.5	185.5
	185.5	185.5	185.4	179.6	180.1	184.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.0	191.0	187.1	186.0	185.5	185.5
	185.5	185.5	185.5	184.1	184.0	178.5	184.7	185.0	185.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.0	192.0	188.0	186.1	185.6	185.6
	185.6	185.6	185.6	185.1	185.1	184.8	178.5	184.9	185.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	197.0	192.0	188.0	187.0	186.2	185.7
	185.6	185.6	185.6	185.1	185.1	184.9	179.6	185.0	185.0	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	197.0	193.0	188.1	187.0	186.4	185.8
	185.7	185.6	185.6	185.1	185.1	184.1	180.7	185.0	185.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.0	194.0	189.0	187.1	186.5	186.4
	185.8	185.7	185.7	185.1	185.0	180.8	180.7	184.1	184.9	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	199.0	195.0	189.1	188.0	186.7	186.6

	186.4	185.9	185.8	185.1	184.1	180.7	184.0	184.1	184.1	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	203.0	200.0	198.0	191.1	189.1	187.8	187.7
	187.1	186.9	186.2	185.2	184.1	177.7	183.2	184.1	184.0	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	202.8	201.5	201.5	198.4	196.5	195.8	195.6
	195.6	195.5	195.5	195.6	195.5	195.3	195.4	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	203.2	202.9	202.1	201.0	200.1	199.2	198.7
	198.3	198.0	197.7	197.5	197.5	197.5	197.4	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	204.6	204.2	203.7	203.0	202.5	202.0	201.7
	201.4	201.1	200.8	200.3	200.0	199.8	199.7	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.5	205.9	205.3	204.7	204.3	204.0	203.8
	203.6	203.3	203.0	202.7	202.4	202.3	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.3	207.9	207.3	206.9	206.6	206.4	206.2
	206.1	205.9	205.7	205.4	205.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	211.5	211.3	210.7	210.4	210.3	210.2	210.2
	210.3	210.3	210.4	210.5	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	216.5	217.6	218.1	218.0	217.9	217.9	217.9
	217.9	218.0	218.1	218.1	218.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.7	226.8	226.7	226.6	226.5
	226.3	226.1	226.0	225.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	232.0	232.1	232.3	232.4	232.4	232.4
	232.4	232.3	232.2	232.1	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	235.9	235.9	235.9	236.0	236.0	236.0
	236.0	236.0	235.9	235.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	237.9	237.9	237.9	237.9	238.0	238.0
	238.0	238.0	238.0	238.1	238.2	238.2	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

1 HEAD IN LAYER 2 AT END OF TIME STEP 10 IN STRESS PERIOD 1

	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23							
0 1	1000.	1000.	1000.	150.8	148.7	144.4	140.1	137.0	134.7	133.2
	131.8	130.4	128.6	126.3	124.9	124.0	123.2	122.4	121.4	120.3
	119.1	1000.	1000.							
0 2	1000.	1000.	1000.	158.5	156.8	153.5	150.4	148.3	146.6	145.4
	144.2	142.9	140.9	138.0	135.6	134.2	132.9	131.7	130.2	128.5
	126.7	1000.	1000.							
0 3	1000.	1000.	1000.	173.3	171.1	166.2	163.9	162.6	161.6	161.0
	160.3	159.7	158.6	156.9	155.4	154.4	153.1	151.8	149.9	148.6
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	186.4	186.4	186.4	186.4	186.4	186.4	186.4
	186.4	186.3	186.3	186.3	184.7	183.4	182.7	181.9	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	186.8	186.8	186.8	186.8	186.8	186.9	186.9
	186.9	186.8	186.8	186.8	186.2	185.6	185.5	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	187.2	187.2	187.2	187.2	187.2	187.2	187.2
	187.2	187.2	187.2	187.2	186.8	186.4	186.4	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	187.6	187.6	187.6	187.6	187.6	187.6	187.6
	187.6	187.6	187.6	187.6	187.3	187.1	187.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	188.1	188.0	188.0	188.0	188.0	188.0	188.0
	188.0	188.0	188.0	188.0	187.8	187.6	187.4	187.3	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	188.4	188.4	188.4	188.3	188.3	188.3	188.3
	188.3	188.3	188.3	188.3	188.2	188.1	187.9	187.7	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	188.7	188.7	188.6	188.6	188.6	188.6	188.6
	188.6	188.6	188.6	188.6	188.6	188.5	188.2	188.0	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	189.0	188.9	188.8	188.8	188.8	188.8	188.8

	188.8	188.8	188.8	188.8	188.8	188.8	188.5	188.3	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	189.2	189.2	189.0	188.9	188.9	188.9	188.9
	188.9	189.0	189.0	189.0	189.0	189.0	188.7	188.5	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	189.3	189.3	189.1	189.1	189.0	189.0	189.0
	189.1	189.1	189.1	189.1	189.1	189.1	188.8	188.5	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	189.5	189.5	189.2	189.1	189.1	189.1	189.2
	189.2	189.2	189.2	189.3	189.3	189.3	188.9	188.6	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	189.6	189.7	189.3	189.2	189.2	189.2	189.3
	189.3	189.3	189.4	189.5	189.5	189.5	189.0	188.5	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	189.8	190.1	189.4	189.4	189.4	189.4	189.4
	189.5	189.5	189.6	189.7	189.7	189.6	188.8	188.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	190.0	190.8	188.8	189.5	189.5	189.6	189.6
	189.7	189.8	189.9	190.0	190.0	190.0	188.9	187.9	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.8	188.9	189.7	189.7	189.9	190.0
	190.1	190.2	190.4	190.5	190.5	190.4	189.0	187.3	186.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.8	189.1	189.8	190.0	190.3	190.4
	190.6	190.8	191.0	191.0	191.0	190.8	188.8	186.8	185.6	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.8	189.7	190.0	190.2	190.6	190.8
	191.1	191.5	191.5	191.5	191.5	191.3	188.8	186.6	185.4	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.9	190.1	190.2	190.2	190.9	191.1
	191.4	191.7	191.8	191.8	191.8	191.3	187.1	185.3	184.9	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.8	190.5	190.5	190.5	191.3	191.6
	191.9	192.0	192.1	192.2	192.2	191.8	187.3	185.3	184.4	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.4	191.0	190.7	190.8	191.6	191.9
	192.1	192.3	192.4	192.5	192.5	192.4	188.9	187.5	184.7	1000.
	1000.	1000.	1000.							

0 24	1000.	1000.	1000.	1000.	197.0	191.4	191.0	191.2	191.9	192.2
	192.4	192.6	192.7	192.8	192.9	193.1	193.1	193.1	186.0	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	197.6	192.2	191.3	191.8	192.3	192.6
	192.8	192.9	193.0	193.1	193.2	193.2	193.2	193.2	186.3	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.3	193.1	191.7	192.3	192.7	192.9
	193.1	193.3	193.4	193.5	193.5	193.5	193.4	193.4	186.4	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.9	194.2	192.0	192.5	193.0	193.3
	193.5	193.7	193.8	193.9	193.9	193.8	193.7	193.7	186.4	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	200.0	196.6	192.2	192.8	193.7	194.0
	194.2	194.3	194.5	194.5	194.5	194.5	194.4	194.4	186.3	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	202.8	201.4	201.6	198.3	196.4	195.7	195.7
	195.6	195.6	195.6	195.6	195.6	195.5	195.5	195.5	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	203.3	202.9	202.1	201.1	200.2	199.2	198.8
	198.4	198.0	197.7	197.6	197.5	197.5	197.4	197.3	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	204.6	204.2	203.7	203.0	202.5	202.0	201.7
	201.4	201.1	200.7	200.3	200.0	199.9	199.7	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.5	205.9	205.3	204.7	204.3	204.0	203.8
	203.6	203.3	203.0	202.7	202.5	202.3	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.3	207.9	207.3	206.9	206.6	206.4	206.2
	206.1	205.9	205.7	205.4	205.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	211.5	211.3	210.8	210.4	210.3	210.2	210.2
	210.3	210.3	210.4	210.5	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	216.5	217.6	218.1	218.0	217.9	217.9	217.9
	217.9	218.0	218.1	218.1	218.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.7	226.8	226.7	226.6	226.5
	226.3	226.1	226.0	225.9	1000.	1000.	1000.	1000.	1000.	1000.

```
         1000.      1000.      1000.
 0 37    1000.      1000.      1000.      1000.      232.0      232.1      232.3      232.4      232.4      232.4
         232.3      232.3      232.2      232.1      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
 0 38    1000.      1000.      1000.      1000.      235.9      235.9      235.9      236.0      236.0      236.0
         236.0      236.0      235.9      235.9      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
 0 39    1000.      1000.      1000.      1000.      237.9      237.9      237.9      237.9      238.0      238.0
         238.0      238.0      238.0      238.1      1000.      1000.      1000.      1000.      1000.      1000.
         1000.      1000.      1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ------------------------------------------------------------------

            1          2          3          4          5          6          7          8          9         10
           11         12         13         14         15         16         17         18         19         20
           21         22         23
 ..........................................................................................................
 0  1    1000.      1000.      1000.     3.4637E-03 1.4053E-02 -.1079     -.2155     -.3568     -.5970     -.5293
        -.5403     -.5692     -.5345     -.5104     -.4727     -.4548     -.4382     -.4230     -.3961     -.3947
        -.4533      1000.      1000.
 0  2    1000.      1000.      1000.    -8.6060E-03 1.2634E-02 -1.0544E-02 -7.3090E-03 1.4038E-03 -1.6388E-02 -4.4861E-03
        2.2339E-02 -3.2181E-02 5.6152E-03 7.8888E-03 -.8571     -.5706     -.5633     -.5358     -.6085     -.7438
       -4.1199E-04  1000.      1000.
 0  3    1000.      1000.      1000.     3.1433E-03 -1.0757E-02 -1.130     -.9789     -.9217     -.8077     -.9910
        -1.015     -.9762     -.9864     -1.164     -1.6388E-02 2.1179E-02 -2.9434E-02 -5.5847E-03 1.1383E-02 3.5248E-03
         1000.      1000.      1000.
 0  4    1000.      1000.      1000.    -1.3443E-02 -1.590    -2.6672E-02 -1.796    -3.2394E-02 -8.8654E-03 -1.8234E-02
        2.1057E-03 -3.1937E-02 -3.2318E-02 -3.1509E-02 2.4811E-02 -9.9182E-03 -5.1437E-02 -2.9755E-03 1000.      1000.
         1000.      1000.      1000.
 0  5    1000.      1000.      1000.     -1.569     -2.7328E-02 -1.436    -3.5477E-02 -3.2959E-03 -5.0797E-02 1.4572E-02
       -2.0523E-02 -2.1179E-02 -2.1118E-02 -2.0645E-02 2.3422E-02 -5.7343E-02 -2.1072E-02 1000.      1000.      1000.
         1000.      1000.      1000.
 0  6    1000.      1000.      1000.    -1.6586E-02 -1.6754E-02 -1.353    -4.2755E-02 -9.6741E-03 -4.8218E-03 -3.2242E-02
       -3.2822E-02 -3.2806E-02 -3.2730E-02 -3.2547E-02 -2.6749E-02 -1.9882E-02 -1.8707E-02 1000.      1000.      1000.
         1000.      1000.      1000.
 0  7    1000.      1000.      1000.    -1.4389E-02 -1.368     -1.4664E-02 -2.3926E-02 -2.8671E-02 -7.3761E-02 1.8921E-02
       -1.4450E-02 -1.5060E-02 -1.4938E-02 -1.4801E-02 -1.1246E-02 -8.3618E-03 -7.5836E-03 1000.      1000.      1000.
         1000.      1000.      1000.
```

0 8	1000.	1000.	1000.	-1.8494E-02	-1.142	-2.8503E-02	-4.4342E-02	-1.4648E-03	-1.9058E-02	-2.4017E-02	
	-2.4048E-02	-2.3941E-02	-2.3819E-02	-2.3636E-02	-2.0782E-02	-1.8799E-02	-1.7410E-02	-1.6312E-02	1000.	1000.	
	1000.	1000.	1000.								
0 9	1000.	1000.	1000.	-1.0788E-02	-1.3626E-02	-1.484	-3.0182E-02	-1.1276E-02	-7.9880E-02	1.4084E-02	
	-1.9608E-02	-2.8351E-02	-2.8595E-02	-2.8412E-02	-2.6581E-02	-2.5314E-02	-2.3331E-02	-2.1545E-02	1000.	1000.	
	1000.	1000.	1000.								
0 10	1000.	1000.	1000.	-7.1411E-03	-6.2866E-03	-1.3290E-02	2.256	-7.0190E-04	-3.1555E-02	3.5095E-02	
	-7.8781E-02	1.6342E-02	-3.1204E-02	-3.1525E-02	-3.1250E-02	-3.0365E-02	-2.7695E-02	-2.5360E-02	1000.	1000.	
	1000.	1000.	1000.								
0 11	1000.	1000.	1000.	-2.4506E-02	-4.7684E-02	-3.8300E-03	1.858	1.681	3.052	3.831	
	-.1229	-.1142	-6.8665E-03	-3.4332E-02	-3.4180E-02	-3.3661E-02	-3.0960E-02	-2.8366E-02	1000.	1000.	
	1000.	1000.	1000.								
0 12	1000.	1000.	1000.	-6.6040E-02	-5.3101E-03	-5.0613E-02	6.7139E-03	3.3295E-02	-6.2256E-02	.1011	
	-.1841	-.4009	-5.8762E-02	-2.7939E-02	-3.6407E-02	-3.6102E-02	-3.3081E-02	-3.0197E-02	1000.	1000.	
	1000.	1000.	1000.								
0 13	1000.	1000.	1000.	2.2461E-02	-7.0084E-02	1.4603E-02	-5.3726E-02	-3.4317E-02	5.3345E-02	5.4962E-02	
	-9.2911E-02	-.4084	-2.1973E-02	-2.9129E-02	-3.8147E-02	-3.7827E-02	-3.4393E-02	-3.1067E-02	1000.	1000.	
	1000.	1000.	1000.								
0 14	1000.	1000.	1000.	-1.6739E-02	1.8402E-02	-2.6443E-02	2.5635E-03	-5.0858E-02	-4.7806E-02	2.8122E-02	
	.2190	-.2444	-8.5144E-03	-3.0533E-02	-4.0253E-02	-3.9673E-02	-3.5446E-02	-3.1281E-02	1000.	1000.	
	1000.	1000.	1000.								
0 15	1000.	1000.	1000.	-2.0706E-02	-4.3472E-02	-2.9282E-02	-6.3843E-02	-3.5583E-02	-2.0126E-02	8.3984E-02	
	5.309	.1743	-.1556	-2.7374E-02	-4.2130E-02	-4.1397E-02	-3.5583E-02	-3.0045E-02	1000.	1000.	
	1000.	1000.	1000.								
0 16	1000.	1000.	1000.	-2.7420E-02	7.5226E-03	-4.5395E-02	-5.0049E-03	-2.8839E-02	-6.9336E-02	3.0060E-02	
	-5.8685E-02	2.812	1.559	-1.5015E-02	-4.3488E-02	-4.2801E-02	-3.2318E-02	-2.3819E-02	1000.	1000.	
	1000.	1000.	1000.								
0 17	1000.	1000.	1000.	-3.2181E-02	-4.2938E-02	-1.1841E-02	-2.2705E-02	-5.3558E-02	-3.4897E-02	1.2848E-02	
	-.3595	-.1942	1.459	-1.0147E-02	-3.8208E-02	-4.5517E-02	-3.3188E-02	-2.2644E-02	1000.	1000.	
	1000.	1000.	1000.								
0 18	1000.	1000.	1000.	1000.	1.7090E-03	7.3853E-03	-2.9648E-02	-5.4901E-02	-4.5914E-02	-1.9836E-04	
	-.4205	-.3183	1.282	-2.5467E-02	-.1044	-7.0038E-03	-2.4704E-02	-1.7883E-02	-6.6833E-03	1000.	
	1000.	1000.	1000.								
0 19	1000.	1000.	1000.	1000.	-8.2397E-03	-1.9882E-02	-3.0792E-02	-5.6198E-02	-3.7155E-02	-4.8523E-03	
	-.1165	-.4273	-.3274	1.469	2.5940E-04	-2.9373E-02	-8.4244E-02	2.9175E-02	-2.8992E-03	1000.	
	1000.	1000.	1000.								
0 20	1000.	1000.	1000.	1000.	-1.1719E-02	-2.8076E-03	-3.8254E-02	-4.4327E-02	-.4569	-.4492	
	-.4556	-.4100	-.4719	-1.424	-.1014	-8.7433E-03	-8.6777E-02	-3.9932E-02	3.2684E-02	1000.	

	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-1.8829E-02	1.4771E-02	-4.6432E-02	-4.3869E-02	-.4606	-.4630
	-.4843	-.5064	-.4255	1.351	2.922	9.9792E-03	1.0727E-02	-2.0477E-02	-3.5263E-02	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-2.4643E-02	-3.7872E-02	-8.4427E-02	-4.9194E-02	-.5063	-.5103
	-.5311	-.5433	-.5336	-7.2403E-02	3.0914E-02	5.487	.2551	-4.8370E-03	-4.5471E-03	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-3.8605E-03	4.0359E-02	9.9335E-03	-9.5856E-02	-.6167	-.5526
	-.5582	-.5704	-.5750	-6.1249E-02	-5.3131E-02	.2016	5.537	.1155	-4.0131E-03	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	4.2236E-02	-3.9825E-02	-3.6972E-02	-1.4191E-03	-.2337	-.6681
	-.5977	-.6031	-.6080	-.1001	-9.4498E-02	6.1325E-02	4.424	2.9633E-02	-1.5915E-02	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-4.7256E-02	4.0283E-03	-8.2489E-02	-4.4754E-02	-.3736	-.7912
	-.6533	-.6431	-.6451	-.1054	-6.6040E-02	-5.2567E-02	3.265	3.4821E-02	-1.4877E-02	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-4.0283E-03	5.5084E-03	8.9111E-03	-9.6191E-02	-.5099	-.3558
	-.8391	-.7074	-.6889	-.1102	2.7481E-02	3.243	3.270	-.1188	6.0593E-02	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	1.5732E-02	-3.0441E-02	-9.2087E-02	-1.3123E-02	-.6724	-.6192
	-.4327	-.8938	-.7556	-.1070	-.1174	3.316	2.8275E-02	-.1257	-.1017	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	4.6692E-03	-1.4206E-02	2.0966E-02	-9.5566E-02	-.1067	-.8289	-.7079
	-1.104	-.9194	-1.234	-.2261	-.1252	5.314	-.2071	-.1021	-3.0594E-02	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-.7906	-.4985	-1.497	-2.364	-3.529	-6.780	-7.646
	-8.559	-9.487	-10.50	-11.57	-13.48	-17.31	-14.39	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-1.244	-.8762	-2.145	-4.050	-5.111	-6.226	-7.743
	-8.347	-10.02	-11.72	-13.52	-16.51	-17.47	-17.44	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-.6237	-1.150	-2.714	-4.028	-5.486	-6.041	-7.742
	-8.443	-10.15	-11.75	-14.33	-17.02	-16.85	-16.68	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-.5417	-.9067	-1.298	-2.734	-4.322	-4.996	-5.776
	-6.556	-8.338	-10.05	-12.70	-15.45	-15.28	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	-.2766	.1174	-.3277	-.8826	-1.582	-2.361	-3.215

```
        -4.071    -4.927    -5.728    -6.441    -7.161    1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 34     1000.     1000.     1000.     .4792     .6826     1.256     2.590     2.735     3.774     4.771
         .7367    -.3358    -.4227    -.4656     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 35     1000.     1000.     1000.     .5456     .4490     .9174     1.956     2.060     3.083     2.084
         2.065     2.037     .9476     .8982     .8907     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 36     1000.     1000.     1000.     1000.    -.2614     .3004     .1936    -1.722     3.410     2.519
         2.659     1.851     2.009     2.058     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 37     1000.     1000.     1000.     1000.     1.019     .9188     1.745     2.605     2.590     2.607
         2.647     2.712     3.837     3.908     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 38     1000.     1000.     1000.     1000.     2.142     2.132     3.056     3.023     4.011     4.009
         5.014     6.027     8.052     9.064     1000.     1000.     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
0 39     1000.     1000.     1000.     1000.     3.113     3.129     4.087     5.059     6.040     6.027
         7.016     7.005     7.988     9.937     11.81     16.77     1000.     1000.     1000.     1000.
         1000.     1000.     1000.
1                 DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                  ------------------------------------------------------------

             1         2         3         4         5         6         7         8         9        10
            11        12        13        14        15        16        17        18        19        20
            21        22        23
.......................................................................................................
0  1     1000.     1000.     1000.     .1713     .2686    -.4361  -9.9335E-02 1.0208E-02 .3377    -.1807
         .2291    -.4360    -.5549    -.3411     .1028  -5.9967E-03 -.1854    -.4342    -.4097    -.3096
        -.1012     1000.     1000.
0  2     1000.     1000.     1000.    -.5230     .1960    -.4664    -.4411    -.2845    -.5628    -.3800
        -.1561     .1170     .1030  1.7792E-02 -.6319    -.2116  8.0292E-02  .2536    -.1546    -.5183
         .2817     1000.     1000.
0  3     1000.     1000.     1000.    -1.316    -1.114    -1.156    -.8780    -.5578    -.6237    -.9941
        -1.348    -.6783    -.6096    -.9315    -.3503    -.4395  -9.3201E-02 -.7930     .1235    -.5978
         1000.     1000.     1000.
0  4     1000.     1000.     1000.    -2.444    -2.397    -2.390    -2.370    -2.369    -2.366    -2.362
        -2.356    -2.348    -2.335    -2.310    -2.711    -2.438    -1.665    -1.906     1000.     1000.
```

	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	-2.836	-2.843	-2.825	-2.842	-2.849	-2.851	-2.851
	-2.850	-2.848	-2.843	-2.833	-2.181	-2.603	-2.483	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	-2.206	-3.195	-3.179	-3.198	-3.207	-3.211	-3.212
	-3.212	-3.211	-3.209	-3.203	-2.784	-2.448	-2.351	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	-2.608	-2.579	-2.588	-2.597	-2.601	-2.603	-2.603
	-2.603	-2.603	-2.601	-2.597	-2.284	-2.052	-1.959	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	-3.058	-3.026	-3.020	-3.019	-3.018	-3.018	-3.018
	-3.018	-3.017	-3.016	-3.014	-2.750	-2.575	-2.414	-2.277	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	-2.434	-2.406	-3.360	-3.348	-3.343	-3.342	-3.341
	-3.342	-3.343	-3.344	-3.344	-3.183	-3.072	-2.879	-2.699	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	-2.696	-2.670	-2.598	-3.570	-3.560	-3.559	-3.559
	-3.561	-3.564	-3.569	-3.571	-3.552	-3.481	-3.241	-3.022	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-2.969	-2.949	-2.835	-2.790	-3.776	-3.774	-3.776
	-3.780	-3.787	-3.801	-3.811	-3.789	-3.755	-3.514	-3.287	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-3.179	-3.179	-3.006	-2.949	-2.934	-3.935	-3.939
	-3.947	-3.960	-3.985	-4.007	-3.994	-3.968	-3.709	-3.459	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	-2.321	-2.344	-3.114	-3.051	-3.036	-4.041	-4.049
	-4.059	-4.078	-4.112	-4.145	-4.149	-4.124	-3.835	-3.549	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	-2.461	-2.526	-3.215	-3.147	-3.135	-4.146	-4.158
	-4.172	-4.198	-4.243	-4.293	-4.347	-4.297	-3.942	-3.584	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-2.599	-2.733	-3.303	-3.235	-3.228	-4.248	-4.267
	-4.289	-4.322	-4.378	-4.450	-4.541	-4.470	-3.980	-3.495	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-2.794	-2.097	-3.404	-3.355	-3.358	-4.395	-4.428
	-4.464	-4.509	-4.588	-4.669	-4.697	-4.631	-3.750	-2.982	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-1.993	-1.845	-1.827	-3.498	-3.502	-4.580	-4.650

	-4.695	-4.771	-4.928	-5.028	-5.041	-4.960	-3.879	-2.877	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	-1.824	-.9455	-3.660	-4.705	-4.894	-4.986
	-5.059	-5.234	-5.419	-5.491	-5.491	-5.382	-3.954	-2.335	-.9707	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-1.821	-1.115	-3.831	-4.952	-5.262	-5.389
	-5.550	-5.837	-6.001	-6.050	-6.036	-5.843	-3.779	-1.825	-.5800	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-1.847	-.7054	-4.009	-5.167	-5.612	-5.806
	-6.113	-6.453	-6.486	-6.516	-6.507	-6.258	-3.810	-1.628	-.4034	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-.9018	-7.7789E-02	-4.182	-5.226	-5.851	-6.142
	-6.418	-6.729	-6.793	-6.839	-6.825	-6.313	-2.079	-.3290	8.5083E-02	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-.7602	-.4529	-4.469	-5.546	-6.273	-6.640
	-6.903	-7.040	-7.129	-7.199	-7.207	-6.758	-2.287	-1.273	-.3926	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-1.354	4.2679E-02	-4.711	-4.835	-6.576	-6.935
	-7.140	-7.290	-7.389	-7.479	-7.519	-8.357	-4.946	-3.453	-.6865	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-.9679	-.4300	-5.002	-5.222	-6.921	-7.247
	-7.432	-7.581	-7.686	-7.791	-8.891	-9.060	-9.124	-9.086	-2.045	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-.6018	-.1722	-5.333	-5.767	-7.343	-7.582
	-7.761	-7.909	-8.018	-9.120	-9.185	-9.236	-9.249	-9.212	-2.298	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-1.255	-8.6121E-02	-5.690	-6.266	-6.708	-7.912
	-8.120	-8.274	-8.386	-9.478	-9.497	-9.472	-9.431	-9.415	-2.369	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-.9275	-.1771	-5.961	-6.481	-7.026	-7.304
	-8.531	-8.675	-8.794	-9.876	-9.871	-9.819	-9.746	-9.724	-2.362	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-.9637	-.5576	-6.239	-6.794	-7.676	-8.015
	-8.221	-9.315	-9.474	-10.54	-10.53	-11.49	-11.42	-11.35	-3.269	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	-.7776	-1.416	-1.599	-2.304	-3.442	-7.734	-7.695
	-8.640	-9.575	-10.63	-11.62	-12.58	-13.53	-13.49	-13.50	1000.	1000.
	1000.	1000.	1000.							

0 30	1000.	1000.	1000.	-1.250	-.8674	-2.148	-4.087	-5.160	-6.236	-7.755
	-9.361	-10.03	-11.74	-13.55	-15.50	-17.46	-17.42	-16.27	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	-.6185	-1.151	-2.710	-4.022	-5.480	-6.034	-7.734
	-8.435	-10.13	-11.74	-14.32	-16.03	-16.86	-16.68	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-.5349	-.9056	-1.297	-2.735	-4.322	-4.997	-5.777
	-6.556	-8.335	-10.05	-12.70	-14.45	-15.29	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	-.2760	.1185	-.3269	-.8829	-1.582	-2.361	-3.215
	-4.071	-4.924	-5.728	-6.443	-7.163	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	.4797	.6836	1.249	2.585	2.730	3.768	3.765
	.7317	-.3351	-.4232	-.4654	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	.5461	.4472	.9224	1.970	2.058	3.082	2.082
	2.065	2.032	.9476	.8996	.8918	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	-.2612	.3113	-.7966	-.7012	2.429	2.540
	2.679	1.850	2.009	2.060	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	1.019	.9201	1.746	2.611	2.598	2.614
	2.655	2.722	3.841	3.911	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	2.142	2.133	3.055	3.023	4.011	4.009
	5.014	6.028	8.056	9.067	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	3.113	3.131	4.087	5.060	6.041	6.028
	7.016	7.006	7.991	9.945	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

0

VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD 1

0 CUMULATIVE VOLUMES L**3 RATES FOR THIS TIME STEP L**3/T

```
                      IN:                                                      IN:
                      ---                                                      ---
                        STORAGE =    .28722E+08                                  STORAGE =    21.433
                  CONSTANT HEAD =    .00000                                CONSTANT HEAD =    .00000
                       RECHARGE =    .42172E+07                                 RECHARGE =    4.0675
                  RIVER LEAKAGE =    .18705E+06                            RIVER LEAKAGE =    .18762
0                      TOTAL IN =    .33126E+08                                 TOTAL IN =    25.688
0                     OUT:                                                     OUT:
                      ----                                                     ----
                        STORAGE =    .32351E+08                                  STORAGE =    24.855
                  CONSTANT HEAD =    .00000                                CONSTANT HEAD =    .00000
                       RECHARGE =    .00000                                     RECHARGE =    .00000
                  RIVER LEAKAGE =    .77439E+06                            RIVER LEAKAGE =    .83105
0                     TOTAL OUT =    .33126E+08                                TOTAL OUT =    25.686
0                      IN - OUT =    600.00                                     IN - OUT =    .11883E-02
```

```
CALIBRATION RUN, HENDRICK STREET, PUMPING CONDITIONS (HSP.DAT)

1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  4  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1         1
         2         0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0WEL1 -- WELL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM  4
 MAXIMUM OF    2 WELLS
      8 ELEMENTS IN X ARRAY ARE USED FOR WELLS
  20711 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 1 -- RECHARGE TO TOP LAYER
    897 ELEMENTS OF X ARRAY USED FOR RECHARGE
  21608 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21962 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
```

```
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29943 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
0
                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
                    ------------------------------------------------------------------------------
0
                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23I3)
                    ------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99     AT ALL NO-FLOW NODES (IBOUND=0).
0
                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
                    ------------------------------------------------------------------------------
0
                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:      (23F10.0)
                    ------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
          HEAD
          DRAWDOWN
0                              COLUMN TO ROW ANISOTROPY =   1.000000
0
                              DELR WILL BE READ ON UNIT  3 USING FORMAT:      (23F10.0)
                    ---------------------------------------------------------------
0
```

DELC WILL BE READ ON UNIT 3 USING FORMAT: (39F10.0)

0

PRIMARY STORAGE COEF FOR LAYER 1 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

HYD. COND. ALONG ROWS FOR LAYER 1 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

BOTTOM FOR LAYER 1 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

VERT HYD COND /THICKNESS FOR LAYER 1 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

PRIMARY STORAGE COEF FOR LAYER 2 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

TRANSMIS. ALONG ROWS FOR LAYER 2 WILL BE READ ON UNIT 3 USING FORMAT: (23F10.0)

0

SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE

```
0                        MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =      200
                                         ACCELERATION PARAMETER =     1.0000
                              HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
                              SIP HEAD CHANGE PRINTOUT INTERVAL =      999
0                             CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED
1                            STRESS PERIOD NO.   1, LENGTH =   86400.00

                             NUMBER OF TIME STEPS =    10

                              MULTIPLIER FOR DELT =     1.000

                            INITIAL TIME STEP SIZE =   8640.000
0           2 WELLS
```

LAYER	ROW	COL	STRESS RATE	WELL NO.
2	25	16	-1.7800	1
2	14	10	-1.3900	2

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9

1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17
1	32	14	190.0	.5320E-02	185.0	18
1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27
1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47

```
                1        9       6    150.0          .5790E-03          145.0             48
                1        8       5    140.0          .5793E-03          135.0             49
                1        7       5    130.0          .5790E-03          125.0             50
                1        6       6    130.0          .5790E-03          125.0             51
                1        5       6    130.0          .5790E-03          125.0             52
                1        5       4    120.0          .5790E-03          115.0             53
                1        4       5    120.0          .5790E-03          115.0             54
                1        4       7    130.0          .5790E-03          125.0             55
                1        3       6    120.0          .5790E-03          115.0             56
                1        3       7    115.0          .5790E-03          110.0             57
                1        3       8    110.0          .5790E-03          105.0             58
                1        3       9    110.0          .5790E-03          105.0             59
0AVERAGE SEED =  .00218448
 MINIMUM SEED =  .00000029
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7838094E+00   .9532616E+00   .9898956E+00   .9978155E+00
0
     8 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
     7 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ------------------------------------------------------------------------------------------------------------------------------------
    .2693     (  2, 31, 17)   .1193     (  2, 31, 16)   .8148E-01 (  2, 30, 18)  -.1628E-01 (  2, 12, 10)  -.4113E-02 (  2, 10, 15)
   -.1649E-02 (  2, 10, 15)   .3442E-03 (  2, 12, 10)
0
1                     HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
          ----------------------------------------------------------------
```

	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23							
0 1	1000.	1000.	1000.	152.0	150.0	140.0	130.0	120.0	110.1	108.0
	106.0	104.0	103.0	102.0	102.0	102.0	102.0	102.0	102.0	101.0
	98.04	1000.	1000.							
0 2	1000.	1000.	1000.	159.0	158.0	153.0	150.0	148.0	146.0	145.0
	144.0	142.0	140.0	133.0	108.1	107.0	106.0	105.0	102.1	100.1
	124.0	1000.	1000.							
0 3	1000.	1000.	1000.	173.0	167.0	116.1	115.1	114.1	114.1	113.1
	112.1	112.1	111.1	110.1	144.0	150.0	151.0	151.0	150.0	149.0
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	179.0	117.1	173.0	125.2	173.0	180.0	182.0
	183.0	183.0	183.0	183.0	183.0	182.0	181.0	181.0	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	119.1	175.0	127.1	176.0	183.0	184.0	185.0
	185.0	185.0	185.0	185.0	185.0	184.0	184.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	181.0	178.0	130.1	178.0	184.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	182.0	130.1	179.0	184.0	185.0	185.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	183.0	140.1	179.0	184.0	186.0	186.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	186.0	179.0	146.1	181.0	185.0	185.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	187.0	185.0	179.0	182.8	184.0	184.0	185.0
	185.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.0	186.0	185.0	179.8	177.8	175.7	179.6
	184.0	185.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	187.0	187.0	186.0	184.0	182.0	174.0	159.0

	181.0	183.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	188.0	187.0	187.0	185.0	183.0	176.0	159.0
	179.0	182.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	188.0	188.0	187.0	186.0	184.0	180.0	175.0
	172.0	181.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	188.0	188.0	187.0	186.0	185.0	183.0	181.0
	180.3	183.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	188.0	189.0	187.0	187.0	186.0	185.0	185.0
	184.0	183.7	184.8	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	188.0	189.0	188.0	187.0	186.0	186.0	186.0
	185.0	185.0	184.8	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.0	189.0	187.0	186.0	186.0	186.0
	185.0	185.0	184.8	185.0	185.0	186.0	186.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.0	189.0	187.0	186.0	186.0	186.0
	185.0	185.0	185.0	180.9	184.0	185.0	185.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.0	190.0	187.0	186.0	185.0	185.0
	185.0	185.0	184.0	159.1	178.0	183.0	184.0	185.0	186.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.0	191.0	187.0	186.0	185.0	185.0
	185.0	185.0	185.0	180.9	182.7	184.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.0	191.0	187.0	186.0	185.0	185.0
	185.0	185.0	185.0	184.0	184.0	183.4	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.0	192.0	188.0	186.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	183.4	185.0	185.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	197.0	192.0	188.0	187.0	186.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	183.5	185.0	185.0	1000.
	1000.	1000.	1000.							

0 25	1000.	1000.	1000.	1000.	197.0	193.0	188.0	187.0	186.0	185.0
	185.0	185.0	185.0	185.0	185.0	184.0	183.7	185.0	185.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.0	194.0	189.0	187.0	186.0	186.0
	185.0	185.0	185.0	185.0	185.0	183.7	183.7	184.0	185.0	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	199.0	195.0	189.0	188.0	186.0	186.0
	186.0	185.0	185.0	185.0	184.0	183.7	184.0	184.0	184.0	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	203.0	200.0	198.0	191.0	189.0	187.0	187.0
	186.0	186.0	185.0	185.0	184.0	182.2	183.0	184.0	184.0	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	201.8	200.6	200.0	196.1	193.0	188.9	188.0
	187.2	186.4	185.5	184.7	183.8	183.2	183.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	202.3	201.7	200.0	197.2	194.9	192.7	191.3
	189.9	188.5	187.1	185.7	185.2	184.9	184.7	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.9	202.9	201.3	199.2	197.4	195.9	194.8
	193.6	192.5	191.0	189.4	188.4	187.8	187.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.1	205.1	203.6	201.9	200.4	199.1	198.2
	197.3	196.4	195.1	193.8	192.9	192.4	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.7	206.7	205.6	204.6	203.7	203.0
	202.4	201.7	200.8	199.8	199.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	212.0	212.0	211.8	211.5	211.2	210.9	210.7
	210.5	210.3	210.1	209.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	217.0	218.1	219.0	219.5	219.7	219.7	219.6
	219.4	219.3	219.3	219.2	219.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.9	227.2	227.3	227.8	228.0
	228.1	228.1	228.0	228.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	233.0	233.3	234.0	234.6	234.9	235.1
	235.3	235.4	235.4	235.5	1000.	1000.	1000.	1000.	1000.	1000.

```
        1000.     1000.     1000.
 0 38   1000.     1000.     1000.     1000.     237.9     238.2     239.0     239.6     240.2     240.6
        241.0     241.4     241.8     242.0     1000.     1000.     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
 0 39   1000.     1000.     1000.     1000.     240.8     241.3     242.2     242.9     243.5     243.9
        244.3     244.8     245.3     246.0     246.7     247.0     1000.     1000.     1000.     1000.
        1000.     1000.     1000.
1                  HEAD IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
          ----------------------------------------------------------------------

            1         2         3         4         5         6         7         8         9        10
           11        12        13        14        15        16        17        18        19        20
           21        22        23
 ..........................................................................................................
 0  1   1000.     1000.     1000.     151.0     148.8     144.2     140.0     136.9     134.6     133.1
        131.6     130.2     128.3     126.1     124.7     123.8     123.0     122.2     121.2     120.1
        119.0     1000.     1000.
 0  2   1000.     1000.     1000.     158.2     156.7     153.1     150.1     148.0     146.3     145.2
        144.0     142.7     140.8     137.9     135.5     134.1     132.8     131.6     130.0     128.4
        126.8     1000.     1000.
 0  3   1000.     1000.     1000.     172.1     170.0     165.1     162.9     161.7     160.7     160.1
        159.5     158.8     157.8     156.2     154.8     153.9     152.7     151.5     149.6     148.3
        1000.     1000.     1000.
 0  4   1000.     1000.     1000.     183.4     183.4     183.3     183.3     183.3     183.3     183.3
        183.3     183.3     183.3     183.2     182.2     181.2     180.7     180.1     1000.     1000.
        1000.     1000.     1000.
 0  5   1000.     1000.     1000.     183.7     183.7     183.6     183.6     183.6     183.6     183.6
        183.6     183.6     183.6     183.6     183.4     183.2     183.2     1000.     1000.     1000.
        1000.     1000.     1000.
 0  6   1000.     1000.     1000.     184.0     183.9     183.9     183.8     183.8     183.8     183.8
        183.8     183.8     183.8     183.8     183.9     183.9     183.9     1000.     1000.     1000.
        1000.     1000.     1000.
 0  7   1000.     1000.     1000.     184.3     184.2     184.1     184.1     184.0     184.0     184.0
        184.0     183.9     183.9     183.9     184.2     184.3     184.4     1000.     1000.     1000.
        1000.     1000.     1000.
 0  8   1000.     1000.     1000.     184.7     184.5     184.4     184.2     184.2     184.1     184.1
        184.0     184.0     184.0     184.0     184.3     184.4     184.6     184.8     1000.     1000.
        1000.     1000.     1000.
```

0 9	1000.	1000.	1000.	185.0	184.9	184.6	184.3	184.2	184.1	184.1
	184.0	184.0	184.0	184.0	184.2	184.3	184.5	184.7	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	185.3	185.1	184.7	184.4	184.2	184.1	184.0
	184.0	184.0	183.9	184.0	184.0	184.1	184.4	184.7	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	185.6	185.4	184.9	184.4	184.1	184.0	183.9
	183.8	183.8	183.9	183.9	184.0	184.0	184.3	184.6	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	185.8	185.7	185.0	184.5	184.1	183.7	183.6
	183.6	183.7	183.8	183.9	184.0	184.0	184.3	184.6	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	186.0	185.9	185.1	184.5	184.0	183.5	183.2
	183.4	183.6	183.8	183.9	184.0	184.0	184.4	184.6	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	186.2	186.1	185.2	184.5	184.0	183.3	182.4
	183.2	183.5	183.8	183.9	184.0	184.1	184.4	184.7	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	186.4	186.4	185.3	184.6	184.1	183.6	183.3
	183.5	183.7	183.9	184.0	184.1	184.1	184.5	184.7	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	186.7	187.0	185.4	184.7	184.3	184.0	183.9
	183.9	183.9	184.0	184.1	184.1	184.2	184.7	184.9	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	187.0	188.1	186.8	184.7	184.4	184.3	184.2
	184.2	184.2	184.2	184.2	184.3	184.3	184.8	185.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	189.6	187.9	184.9	184.7	184.5	184.5
	184.4	184.4	184.4	184.4	184.4	184.5	184.8	185.0	185.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	191.0	188.1	185.1	185.0	184.8	184.7
	184.7	184.6	184.5	184.5	184.5	184.6	184.9	185.0	185.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	192.3	189.0	185.3	185.2	184.9	184.8
	184.7	184.6	184.6	184.5	184.5	184.6	184.9	185.0	185.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	193.7	190.0	185.6	185.3	185.0	184.9
	184.8	184.7	184.6	184.5	184.5	184.7	185.0	185.0	185.0	1000.

	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	194.7	190.0	185.7	185.4	185.1	184.9
	184.8	184.7	184.6	184.4	184.3	184.4	184.9	184.1	184.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	195.4	191.0	185.8	185.6	185.2	185.0
	184.9	184.7	184.6	184.4	184.2	184.0	184.0	184.0	184.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.0	191.0	185.8	185.7	185.3	185.1
	184.9	184.8	184.6	184.3	183.9	183.5	183.4	183.4	184.0	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	196.7	192.0	185.9	185.8	185.5	185.2
	185.0	184.9	184.7	184.3	183.7	183.1	183.3	183.4	184.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	197.4	193.0	186.0	185.9	185.7	185.5
	185.2	185.0	184.8	184.3	183.9	183.5	183.5	183.5	184.0	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.1	194.0	186.0	186.0	185.9	185.7
	185.4	185.2	184.9	184.4	184.0	183.8	183.6	183.6	183.9	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	199.1	196.0	186.1	186.2	186.4	186.2
	185.9	185.5	185.2	184.6	184.2	184.0	183.8	183.7	183.0	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	201.8	200.5	200.0	196.1	193.0	188.3	187.9
	187.2	186.4	185.7	184.9	184.4	184.0	183.8	183.9	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	202.3	201.7	200.0	197.2	194.9	192.7	191.2
	189.9	188.5	187.2	185.9	185.2	184.9	184.7	184.6	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.9	202.9	201.3	199.2	197.4	195.9	194.8
	193.6	192.5	191.0	189.4	188.4	187.9	187.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.1	205.1	203.6	201.9	200.4	199.1	198.2
	197.3	196.4	195.2	193.8	193.0	192.5	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.7	206.7	205.5	204.6	203.7	203.0
	202.4	201.7	200.8	199.8	199.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	212.0	212.0	211.8	211.5	211.2	210.9	210.7

```
          210.5        210.3       210.1       209.9       1000.       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
 0 35     1000.        1000.       1000.       216.9       218.1       219.0       219.5       219.7       219.6       219.6
          219.4        219.3       219.3       219.2       219.2       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
 0 36     1000.        1000.       1000.       1000.       226.3       226.9       227.1       227.4       227.7       227.9
          228.0        228.0       228.0       228.0       1000.       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
 0 37     1000.        1000.       1000.       1000.       233.0       233.3       234.0       234.6       234.9       235.1
          235.3        235.4       235.4       235.5       1000.       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
 0 38     1000.        1000.       1000.       1000.       237.9       238.2       239.0       239.6       240.2       240.6
          241.0        241.4       241.8       242.0       1000.       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
 0 39     1000.        1000.       1000.       1000.       240.8       241.3       242.2       242.9       243.5       243.9
          244.3        244.8       245.3       246.0       1000.       1000.       1000.       1000.       1000.       1000.
          1000.        1000.       1000.
1                 DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ----------------------------------------------------------------------------

            1            2           3           4           5           6           7           8           9          10
           11           12          13          14          15          16          17          18          19          20
           21           22          23
 ..................................................................................................................................
 0  1     1000.        1000.       1000.     1.2207E-04  9.1553E-04 -8.6823E-03 -1.8005E-02 -3.0067E-02 -5.0491E-02 -4.4540E-02
       -4.5441E-02 -4.7707E-02 -4.4579E-02 -4.2694E-02 -3.9650E-02 -3.8170E-02 -3.6674E-02 -3.5339E-02 -3.2967E-02 -3.2913E-02
       -3.8086E-02  1000.       1000.
 0  2     1000.        1000.       1000.    -2.5940E-04  8.5449E-04 -5.1880E-04 -2.4414E-04  4.1199E-04 -1.0834E-03 -1.6785E-04
        2.0599E-03 -2.8076E-03  4.1199E-04  8.6975E-04 -7.2525E-02 -4.7775E-02 -4.7401E-02 -4.5052E-02 -5.1071E-02 -6.2492E-02
       -2.2888E-04  1000.       1000.
 0  3     1000.        1000.       1000.     1.2817E-03 -7.6294E-05 -9.4856E-02 -8.2634E-02 -7.7988E-02 -6.8687E-02 -8.3008E-02
       -8.4854E-02 -8.1657E-02 -8.2596E-02 -9.7687E-02 -8.3923E-04  2.1057E-03 -2.4109E-03 -2.4414E-04  1.0071E-03  7.0190E-04
          1000.        1000.       1000.
 0  4     1000.        1000.       1000.     9.9182E-04  -.1325      4.5776E-05  -.1510     -3.9673E-04  1.3580E-03  4.8828E-04
        2.2888E-03 -6.4087E-04 -6.2561E-04 -5.6458E-04  4.0436E-03  7.1716E-04 -3.0975E-03  1.0681E-03  1000.       1000.
          1000.        1000.       1000.
 0  5     1000.        1000.       1000.     -.1313      1.5259E-05  -.1198     -6.1035E-04  2.0142E-03 -2.2125E-03  3.6316E-03
        4.5776E-04  4.7302E-04  4.8828E-04  5.3406E-04  4.0283E-03 -3.2806E-03 -3.0518E-05  1000.       1000.       1000.
```

	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	8.6975E-04	1.0223E-03	-.1126	-1.1139E-03	1.6632E-03	2.1210E-03	-2.8992E-04
	-2.7466E-04	-2.8992E-04	-2.8992E-04	-2.4414E-04	-1.8311E-04	3.0518E-05	.0000	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	1.2207E-03	-.1139	1.3733E-03	5.9509E-04	2.5940E-04	-3.7537E-03	4.4708E-03
	1.4496E-03	1.4648E-03	1.4343E-03	1.4648E-03	1.0986E-03	1.0071E-03	7.7820E-04	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	9.6130E-04	-9.4650E-02	5.3406E-04	-8.8501E-04	2.8992E-03	1.4343E-03	1.0376E-03
	1.0529E-03	1.1139E-03	1.1444E-03	1.0986E-03	6.7139E-04	5.1880E-04	2.8992E-04	1.0681E-04	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	1.6327E-03	1.7242E-03	-.1252	-1.5259E-04	2.3956E-03	-3.5858E-03	4.7760E-03
	1.8158E-03	1.0834E-03	1.1749E-03	1.1749E-03	8.3923E-04	6.5613E-04	4.1199E-04	1.6785E-04	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	1.8921E-03	2.1667E-03	1.9989E-03	.2029	2.0599E-03	-1.3733E-04	5.6000E-03
	-3.0975E-03	5.5084E-03	1.2207E-03	1.1444E-03	1.0834E-03	1.0071E-03	5.6458E-04	2.5940E-04	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	3.8147E-04	-1.4038E-03	2.5635E-03	.1672	.1515	.2831	.3654
	1.4343E-02	2.5177E-02	3.7384E-03	1.2207E-03	1.1597E-03	1.0681E-03	6.1035E-04	2.8992E-04	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-3.3417E-03	2.2888E-03	-1.2970E-03	2.5940E-03	5.6305E-03	-4.0436E-03	1.1551E-02
	2.2903E-02	-1.0834E-03	-3.3569E-04	2.0599E-03	1.1444E-03	1.0376E-03	6.1035E-04	2.7466E-04	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	4.4708E-03	-3.6011E-03	4.5624E-03	-8.8501E-04	1.4801E-03	1.0117E-02	1.1261E-02
	3.5309E-02	-4.5776E-05	3.0670E-03	2.0599E-03	1.1597E-03	1.0376E-03	5.6458E-04	3.0518E-04	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	8.0872E-04	4.3182E-03	8.5449E-04	4.3335E-03	2.4414E-04	1.2512E-03	9.0790E-03
	4.0070E-02	1.5778E-02	4.4708E-03	1.9531E-03	1.0681E-03	9.7656E-04	5.9509E-04	2.1362E-04	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	4.7302E-04	-1.4038E-03	6.7139E-04	-1.7090E-03	1.5259E-03	3.5248E-03	-8.5449E-04
	.7020	1.4420E-02	1.6342E-02	2.3346E-03	1.0071E-03	9.1553E-04	5.4932E-04	2.2888E-04	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-1.6785E-04	2.8687E-03	-7.7820E-04	3.4790E-03	1.9531E-03	-1.3885E-03	7.8278E-03
	3.3112E-03	.3482	.1866	2.3193E-03	9.6130E-04	7.9346E-04	1.6785E-04	.0000	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-6.8665E-04	-1.8311E-03	1.6785E-04	1.8921E-03	-3.6621E-04	1.4038E-03	6.5155E-03
	3.1433E-03	9.4299E-03	.1800	2.8992E-03	1.5411E-03	6.2561E-04	1.6785E-04	-1.5259E-05	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	1.7242E-03	1.0986E-03	1.0681E-03	-6.8665E-04	3.8147E-04	5.3864E-03

	-2.6245E-03	3.4637E-03	.1670	1.3123E-03	-4.1656E-03	4.3945E-03	9.3079E-04	-1.5259E-05	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	5.0354E-04	-9.0027E-04	7.7820E-04	-1.0223E-03	1.3428E-03	4.5624E-03
	-4.4708E-03	1.1444E-03	9.8877E-03	.1370	3.9673E-03	2.5787E-03	-4.6844E-03	3.8910E-03	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-6.1035E-05	2.1362E-04	3.0518E-05	2.4414E-04	-5.7526E-03	-2.1515E-03
	3.0518E-05	9.0332E-03	3.2349E-03	-.1214	-3.1586E-03	4.9133E-03	-4.8065E-03	-2.4719E-03	3.1433E-03	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-9.6130E-04	1.3275E-03	-8.6975E-04	2.5940E-04	-4.9438E-03	-1.4191E-03
	-4.7302E-04	7.7820E-04	9.2163E-03	.1260	.2798	-1.5106E-03	2.2125E-03	-1.6174E-03	-3.1433E-03	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-1.5106E-03	-2.9755E-03	-4.1351E-03	-4.5776E-05	-5.5847E-03	-1.4496E-03
	-4.2725E-04	6.5613E-04	2.9297E-03	-7.4768E-04	-2.2125E-03	.5713	6.5308E-03	-3.0518E-05	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	2.1362E-04	3.5706E-03	4.5166E-03	-4.3640E-03	-1.8143E-02	-2.0447E-03
	-6.2561E-04	5.6458E-04	2.0142E-03	2.3041E-03	2.5787E-03	7.9498E-03	.5698	4.1351E-03	.0000	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	4.3640E-03	-3.2196E-03	4.8828E-04	4.1809E-03	2.9495E-02	-1.4709E-02
	-1.2665E-03	3.3569E-04	2.2583E-03	-6.1035E-04	1.5259E-04	7.6141E-03	.4536	4.6539E-03	-1.5259E-05	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-3.6926E-03	5.3406E-04	-3.2806E-03	9.1553E-04	1.5366E-02	-2.8061E-02
	-2.5482E-03	-2.7466E-04	2.2278E-03	-4.1199E-04	3.4790E-03	-5.1727E-03	.3358	7.5226E-03	3.0518E-05	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	2.8992E-04	5.4932E-04	5.4321E-03	-3.1586E-03	-4.5776E-05	2.9327E-02
	-2.7496E-02	-1.6327E-03	1.7395E-03	-3.8147E-04	7.0038E-03	.3354	.3384	-6.3171E-03	7.6294E-03	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	1.9684E-03	-2.5787E-03	-3.3875E-03	4.7455E-03	-1.3809E-02	-5.2338E-03
	3.0106E-02	-2.2751E-02	7.4768E-04	6.1035E-04	-5.9204E-03	.3407	2.3499E-03	-7.6294E-04	-7.5836E-03	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1.2360E-03	-3.5095E-04	3.2196E-03	-1.6937E-03	-9.0027E-04	-5.8441E-03	1.9272E-02
	-1.7242E-02	1.7349E-02	-6.6681E-03	1.7700E-03	2.6093E-03	.8439	-3.3722E-03	2.6093E-03	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	.1749	.3674	4.3396E-02	-8.6700E-02	-1.0681E-04	.1151	-1.2512E-03
	-.2036	-.3688	-.4861	-.6610	-1.790	-5.177	-2.028	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-.2644	.2522	-2.0126E-02	-.2140	8.5190E-02	.3173	-.2548
	.1429	-.5080	-1.063	-1.707	-4.183	-4.902	-4.681	1000.	1000.	1000.
	1000.	1000.	1000.							

```
0 31   1000.      1000.      1000.     8.7265E-02  .1110      -.3500     -.2081     -.4276      .1374     -.7650
       -.6348     -1.503     -2.010    -3.400     -5.404      -4.821     -4.314     1000.       1000.     1000.
       1000.      1000.      1000.
0 32   1000.      1000.      1000.    -6.4194E-02 -6.6757E-02  .3904      .1445     -.4029     -.1263     -.2273
       -.2987     -1.369     -2.144    -3.768     -5.941      -5.439     1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 33   1000.      1000.      1000.     -.1725      .3067       .2773      .4496      .4441      .3387     -2.7145E-02
       -.3683     -.7041     -.8169    -.7885     -1.084      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 34   1000.      1000.      1000.    -2.5681E-02 -2.0157E-02  .2417      1.506      1.781       3.076     4.286
        .4907     -.3371     -.1031    9.3521E-02  1000.      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 35   1000.      1000.      1000.     4.9973E-02 -8.1955E-02 -3.3401E-02 .4839      .3118       1.321      .4075
        .5701      .7240     -.2622    -.2320     -.2289      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 36   1000.      1000.      1000.      1000.     -.3414      6.5933E-02 -.1553     -2.333       2.236     1.015
        .9145   -5.1559E-02 1.8600E-02 4.0024E-02  1000.      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 37   1000.      1000.      1000.      1000.     3.9856E-02  -.3353   -1.5747E-02   .4001    7.4234E-02 -.1119
       -.2633     -.3697      .5592      .4984     1000.      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 38   1000.      1000.      1000.      1000.      .1266      -.2284    3.6591E-02  -.6295     -.2138     -.6136
     -7.8583E-03   .6296      2.234      2.976     1000.      1000.      1000.      1000.       1000.     1000.
       1000.      1000.      1000.
0 39   1000.      1000.      1000.      1000.      .2181      -.2897     -.2193    9.0469E-02   .4917    7.7454E-02
        .6579      .2451      .6550      1.970     3.286       8.049     1000.      1000.       1000.     1000.
       1000.      1000.      1000.
1               DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
                ________________________________________________________________

          1          2          3          4          5          6          7          8          9         10
         11         12         13         14         15         16         17         18         19         20
         21         22         23
..........................................................................................................................
0  1   1000.      1000.      1000.     3.7598E-02  .1558      -.2252    2.9312E-02 8.5861E-02   .4225   -7.2128E-02
        .3761     -.2453     -.3083    -.1004      .3252       .2131    4.1573E-02  -.1932     -.1505   -7.6729E-02
     3.3379E-02   1000.      1000.
0  2   1000.      1000.      1000.     -.1717      .2808      -.1348     -.1047    1.5152E-02  -.3086     -.1631
```

	1.9745E-02	.2553	.1999	.1238	-.5067	-8.2031E-02	.2109	.3870	-1.3062E-02	-.3999
	.1766	1000.	1000.							
0 3	1000.	1000.	1000.	-.1069	-1.0468E-02	-6.0806E-02	7.9056E-02	.3341	.2664	-.1013
	-.4598	.1936	.2205	-.1949	.2247	5.2979E-02	.3120	-.4527	.3961	-.3015
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	.5917	.6472	.6670	.6963	.7013	.7071	.7119
	.7179	.7248	.7365	.7547	-.1712	-.2460	.3117	-.1155	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	.3056	.3163	.3647	.3719	.3786	.3853	.3900
	.3949	.3997	.4065	.4133	.5776	-.1532	-.1655	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	1.023	6.4026E-02	.1331	.1561	.1733	.1864	.1947
	.2024	.2090	.2173	.2224	.1274	.1429	7.6279E-02	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	.7143	.7945	.8757	.9437	.9871	1.015	1.032
	1.047	1.059	1.073	1.080	.8356	.7276	.5977	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	.3419	.4595	.6208	.7591	.8450	.8986	.9295
	.9552	.9754	.9980	1.009	.7217	.5725	.3661	.1891	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	.9876	1.138	.4213	.6541	.7991	.8856	.9327
	.9682	.9929	1.016	1.023	.8048	.7028	.4625	.2548	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	.7191	.8934	1.271	.5980	.8036	.9248	.9865
	1.026	1.047	1.058	1.048	.9929	.9094	.6048	.3414	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	.4126	.6026	1.110	1.558	.8571	1.046	1.133
	1.166	1.162	1.129	1.087	1.035	.9720	.6590	.3811	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	.1511	.3289	.9756	1.531	1.934	1.254	1.406
	1.385	1.307	1.187	1.099	1.041	.9756	.6615	.3820	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	.9669	1.118	.8815	1.505	1.981	1.455	1.762
	1.587	1.406	1.209	1.091	1.027	.9613	.6484	.3703	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	.7747	.8710	.7845	1.466	1.991	1.664	2.597
	1.792	1.454	1.197	1.060	.9849	.9297	.6157	.3395	1000.	1000.
	1000.	1000.	1000.							

0 15	1000.	1000.	1000.	.5779	.5739	.6892	1.410	1.908	1.391	1.705
	1.523	1.336	1.134	1.001	.9317	.8907	.5477	.2718	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	.2849	1.025	.5627	1.322	1.730	.9947	1.113
	1.124	1.081	.9910	.9005	.8614	.7951	.2734	5.3345E-02	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	.9828	.8670	.1706	1.328	1.573	.7200	.7813
	.8292	.8356	.7962	.7518	.7296	.6694	.2081	2.8351E-02	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	.4467	.1491	1.123	.3069	.4793	.5254
	.5669	.6055	.6173	.6106	.5998	.5478	.1610	1.6418E-02	-8.3923E-03	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	3.9078E-02	-6.6269E-02	.8947	2.6016E-02	.2349	.3056
	.3483	.4162	.4737	.4966	.4943	.4325	7.8629E-02	2.1667E-03	-4.9744E-03	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-.3495	-4.5776E-03	.6747	-.1593	8.7738E-02	.1756
	.2700	.3676	.4080	.4569	.4671	.4024	7.7133E-02	6.3934E-03	-3.9978E-03	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	.2724	1.3245E-02	.4479	-.3158	-3.3142E-02	7.4677E-02
	.1873	.3281	.3854	.4765	.5049	.3286	1.5396E-02	1.5015E-02	1.5427E-02	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	.2737	-4.8355E-02	.3151	-.4485	-9.1003E-02	5.9021E-02
	.1734	.2847	.3874	.5616	.6555	.5728	.1134	-7.1091E-02	-3.1677E-02	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-.3879	4.6265E-02	.2340	.4428	-.1584	1.2161E-02
	.1384	.2551	.3862	.6373	.8308	1.6571E-02	-2.2430E-03	3.7933E-02	-9.4604E-04	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-4.8950E-02	-4.4556E-02	.1604	.3277	-.2688	-7.7499E-02
	7.0770E-02	.2064	.3701	.7152	.1266	.5430	.6147	.6178	2.0554E-02	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	.2866	5.9662E-03	9.3536E-02	.1970	-.4595	-.2276
	-4.0787E-02	.1247	.3232	-.2579	.2791	.9187	.6832	.6265	2.2751E-02	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-.3836	1.4587E-02	3.4866E-02	8.7463E-02	.2960	-.4647
	-.2081	-1.5259E-05	.2346	-.3101	.1442	.4719	.5414	.5450	2.4826E-02	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-6.0989E-02	6.3934E-03	-2.4658E-02	-4.5166E-03	8.3939E-02	.2744
	-.4313	-.1721	.1030	-.4103	-2.6871E-02	.2225	.3878	.4463	7.8934E-02	1000.

	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-8.7616E-02	-2.3697E-02	-.1013	-.1718	-.4053	-.2500
	.1206	-.5053	-.1584	-.5957	-.2285	-1.002	-.7911	-.6850	-4.4037E-02	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	.1883	-.4740	-2.7924E-03	-7.0831E-02	-2.4414E-04	-.3235	.1476
	-.1742	-.3933	-.6921	-.8874	-1.383	-2.046	-1.784	-1.865	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-.2739	.2631	-7.1716E-04	-.2121	8.3527E-02	.3464	-.2430
	-.8654	-.4929	-1.165	-1.932	-3.248	-4.929	-4.683	-3.620	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	.1047	.1101	-.3435	-.2018	-.4208	.1456	-.7573
	-.6262	-1.473	-1.999	-3.408	-4.444	-4.863	-4.330	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-5.6564E-02	-6.4468E-02	.3942	.1457	-.4027	-.1269	-.2292
	-.3006	-1.354	-2.151	-3.789	-4.976	-5.466	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	-.1717	.3085	.2813	.4527	.4471	.3412	-2.5223E-02
	-.3660	-.6893	-.8153	-.7946	-1.094	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	-2.5131E-02	-1.9470E-02	.2365	1.506	1.781	3.075	3.285
	.4901	-.3266	-9.7397E-02	9.6619E-02	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	5.0461E-02	-8.5724E-02	-3.2974E-02	.5260	.3451	1.362	.4415
	.5764	.7143	-.2604	-.2309	-.2287	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	-.3412	7.4768E-02	-1.150	-1.367	1.255	1.055
	.9561	-3.6774E-02	2.0432E-02	4.2389E-02	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	4.0039E-02	-.3346	-1.4648E-02	.4044	8.2947E-02	-.1030
	-.2539	-.3615	.5623	.5025	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	.1266	-.2276	3.9230E-02	-.6291	-.2137	-.6139
	-9.0027E-03	.6166	2.237	2.988	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	.2177	-.2919	-.2271	8.8531E-02	.4912	7.8018E-02
	.6598	.2486	.6648	2.014	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

0

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                         VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD  1
                         ----------------------------------------------------------------------------
0                  CUMULATIVE VOLUMES      L**3                          RATES FOR THIS TIME STEP      L**3/T
                   ------------------                                    ------------------------

                       IN:                                                   IN:
                       ---                                                   ---
                         STORAGE =    .55890E+07                               STORAGE =    44.752
                   CONSTANT HEAD =    .00000                             CONSTANT HEAD =    .00000
                           WELLS =    .00000                                     WELLS =    .00000
                        RECHARGE =    .35143E+06                              RECHARGE =    4.0675
                   RIVER LEAKAGE =    13949.                             RIVER LEAKAGE =    .16589
0                       TOTAL IN =    .59544E+07                              TOTAL IN =    48.986
0                      OUT:                                                 OUT:
                       ----                                                 ----
                         STORAGE =    .56288E+07                               STORAGE =    45.192
                   CONSTANT HEAD =    .00000                             CONSTANT HEAD =    .00000
                           WELLS =    .27389E+06                                 WELLS =    3.1700
                        RECHARGE =    .00000                                  RECHARGE =    .00000
                   RIVER LEAKAGE =    50968.                             RIVER LEAKAGE =    .61647
0                      TOTAL OUT =    .59536E+07                             TOTAL OUT =    48.978
0                       IN - OUT =    770.00                                  IN - OUT =    .75455E-02
0           PERCENT DISCREPANCY =               .01                PERCENT DISCREPANCY =               .02


0



          TIME SUMMARY AT END OF TIME STEP 10 IN STRESS PERIOD  1
                                 SECONDS      MINUTES       HOURS         DAYS         YEARS
                              -----------------------------------------------------------------
     TIME STEP LENGTH            8640.00      144.000       2.40000       .100000      .273785E-03
   STRESS PERIOD TIME            86400.0      1440.00       24.0000       1.00000      .273785E-02
 TOTAL SIMULATION TIME           86400.0      1440.00       24.0000       1.00000      .273785E-02
1
```

```
CALIBRATION RUN, HENDRICK STREET, NONPUMPING CONDITIONS (HSN.DAT)

1                    U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER MODEL
0Easthampton ALA
    2 LAYERS        39 ROWS        23 COLUMNS
   1 STRESS PERIOD(S) IN SIMULATION
 MODEL TIME UNIT IS SECONDS
0I/O UNITS:
 ELEMENT OF IUNIT:  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
         I/O UNIT:  3  0  0  8  0  0  0 11 12  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
0BAS1 -- BASIC MODEL PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  1
 ARRAYS RHS AND BUFF WILL SHARE MEMORY.
 START HEAD WILL BE SAVED
  17113 ELEMENTS IN X ARRAY ARE USED BY BAS
  17113 ELEMENTS OF X ARRAY USED OUT OF  32125
0BCF1 -- BLOCK-CENTERED FLOW PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT  3
 TRANSIENT SIMULATION
      LAYER  AQUIFER TYPE
      -------------------
         1          1
         2          0
   3590 ELEMENTS IN X ARRAY ARE USED BY BCF
  20703 ELEMENTS OF X ARRAY USED OUT OF  32125
0RCH1 -- RECHARGE PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 11
 OPTION 1 -- RECHARGE TO TOP LAYER
    897 ELEMENTS OF X ARRAY USED FOR RECHARGE
  21600 ELEMENTS OF X ARRAY USED OUT OF  32125
0RIV1 -- RIVER PACKAGE, VERSION 1,  12/08/83 INPUT READ FROM UNIT  8
 MAXIMUM OF   59 RIVER NODES
 CELL-BY-CELL FLOWS WILL BE RECORDED ON UNIT  6
    354 ELEMENTS IN X ARRAY ARE USED FOR RIVERS
  21954 ELEMENTS OF X ARRAY USED OUT OF  32125
0SIP1 -- STRONGLY IMPLICIT PROCEDURE SOLUTION PACKAGE, VERSION 1, 12/08/83 INPUT READ FROM UNIT 12
 MAXIMUM OF 200 ITERATIONS ALLOWED FOR CLOSURE
  5 ITERATION PARAMETERS
   7981 ELEMENTS IN X ARRAY ARE USED BY SIP
  29935 ELEMENTS OF X ARRAY USED OUT OF  32125
1Easthampton ALA
```

```
0

                    BOUNDARY ARRAY FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                 ------------------------------------------------------------------------------
0

                    BOUNDARY ARRAY FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:          (23I3)
                 ------------------------------------------------------------------------------
0AQUIFER HEAD WILL BE SET TO  999.99     AT ALL NO-FLOW NODES (IBOUND=0).
0

                     INITIAL HEAD FOR LAYER  1 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                 ------------------------------------------------------------------------------
0

                     INITIAL HEAD FOR LAYER  2 WILL BE READ ON UNIT  1 USING FORMAT:        (23F10.0)
                 ------------------------------------------------------------------------------
0DEFAULT OUTPUT CONTROL -- THE FOLLOWING OUTPUT COMES AT THE END OF EACH STRESS PERIOD:
 TOTAL VOLUMETRIC BUDGET
           HEAD
           DRAWDOWN
0                                                 COLUMN TO ROW ANISOTROPY =   1.000000
0

                            DELR WILL BE READ ON UNIT  3 USING FORMAT:         (23F10.0)
                 ----------------------------------------------------------------
0

                            DELC WILL BE READ ON UNIT  3 USING FORMAT:         (39F10.0)
                 ----------------------------------------------------------------
```

```
0
                PRIMARY STORAGE COEF FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
                ____________________________________________________________________________________________
0
                HYD. COND. ALONG ROWS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:         (23F10.0)
                ____________________________________________________________________________________________
0
                              BOTTOM FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
                ____________________________________________________________________________________________
0
                VERT HYD COND /THICKNESS FOR LAYER  1 WILL BE READ ON UNIT  3 USING FORMAT:      (23F10.0)
                ____________________________________________________________________________________________
0
                PRIMARY STORAGE COEF FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
                ____________________________________________________________________________________________
0
                TRANSMIS. ALONG ROWS FOR LAYER  2 WILL BE READ ON UNIT  3 USING FORMAT:          (23F10.0)
                ____________________________________________________________________________________________
0
                                SOLUTION BY THE STRONGLY IMPLICIT PROCEDURE
                                ___________________________________________
0
                        MAXIMUM ITERATIONS ALLOWED FOR CLOSURE =       200
                                       ACCELERATION PARAMETER =     1.0000
                            HEAD CHANGE CRITERION FOR CLOSURE =     .10000E-02
```

SIP HEAD CHANGE PRINTOUT INTERVAL = 999

0 CALCULATE ITERATION PARAMETERS FROM MODEL CALCULATED WSEED

1 STRESS PERIOD NO. 1, LENGTH = 86400.00

NUMBER OF TIME STEPS = 10

MULTIPLIER FOR DELT = 1.000

INITIAL TIME STEP SIZE = 8640.000

0

RECHARGE WILL BE READ ON UNIT 11 USING FORMAT: (23F10.0)

0

59 RIVER REACHES

0

LAYER	ROW	COL	STAGE	CONDUCTANCE	BOTTOM ELEVATION	RIVER REACH
1	39	16	255.0	.5320E-02	250.0	1
1	39	15	253.0	.5320E-02	248.0	2
1	38	14	251.0	.5320E-02	246.0	3
1	38	13	250.0	.5320E-02	245.0	4
1	38	12	248.0	.5320E-02	243.0	5
1	38	11	245.0	.5320E-02	240.0	6
1	38	10	240.0	.5320E-02	235.0	7
1	37	10	230.0	.5320E-02	225.0	8
1	36	10	225.0	.5320E-02	220.0	9
1	36	9	223.0	.5320E-02	218.0	10
1	36	8	220.0	.5320E-02	215.0	11
1	35	8	215.0	.5320E-02	210.0	12
1	34	9	210.0	.5320E-02	205.0	13
1	34	10	210.0	.5320E-02	205.0	14
1	34	11	210.0	.5320E-02	205.0	15
1	34	12	205.0	.5320E-02	200.0	16
1	33	13	200.0	.5320E-02	195.0	17
1	32	14	190.0	.5320E-02	185.0	18

1	32	15	190.0	.5320E-02	185.0	19
1	31	15	185.0	.5320E-02	180.0	20
1	30	16	180.0	.5320E-02	175.0	21
1	29	16	180.0	.5320E-02	175.0	22
1	28	16	175.0	.5320E-02	170.0	23
1	27	16	170.0	.5790E-03	165.0	24
1	26	16	170.0	.5790E-03	165.0	25
1	26	17	170.0	.5790E-03	165.0	26
1	25	17	170.0	.5790E-03	165.0	27
1	24	17	165.0	.5790E-03	160.0	28
1	23	17	160.0	.5790E-03	155.0	29
1	22	16	160.0	.5790E-03	155.0	30
1	21	15	160.0	.5790E-03	155.0	31
1	21	14	160.0	.5790E-03	155.0	32
1	20	14	160.0	.5790E-03	155.0	33
1	19	14	158.0	.5790E-03	153.0	34
1	18	13	158.0	.5790E-03	153.0	35
1	17	13	156.0	.5790E-03	151.0	36
1	16	13	156.0	.5790E-03	151.0	37
1	16	12	154.0	.5790E-03	149.0	38
1	15	11	152.0	.5790E-03	147.0	39
1	14	11	152.0	.5790E-03	147.0	40
1	13	10	150.0	.5790E-03	145.0	41
1	12	10	150.0	.5790E-03	145.0	42
1	11	10	150.0	.5793E-03	145.0	43
1	11	9	150.0	.5790E-03	145.0	44
1	11	8	150.0	.5790E-03	145.0	45
1	11	7	150.0	.5790E-03	145.0	46
1	10	7	150.0	.5793E-03	145.0	47
1	9	6	150.0	.5790E-03	145.0	48
1	8	5	140.0	.5793E-03	135.0	49
1	7	5	130.0	.5790E-03	125.0	50
1	6	6	130.0	.5790E-03	125.0	51
1	5	6	130.0	.5790E-03	125.0	52
1	5	4	120.0	.5790E-03	115.0	53
1	4	5	120.0	.5790E-03	115.0	54
1	4	7	130.0	.5790E-03	125.0	55
1	3	6	120.0	.5790E-03	115.0	56

```
                   1       3       7    115.0         .5790E-03         110.0            57
                   1       3       8    110.0         .5790E-03         105.0            58
                   1       3       9    110.0         .5790E-03         105.0            59
0AVERAGE SEED =  .00218448
 MINIMUM SEED =  .00000029
0
    5 ITERATION PARAMETERS CALCULATED FROM AVERAGE SEED:

             .0000000E+00   .7838094E+00   .9532616E+00   .9898956E+00   .9978155E+00
0
     7 ITERATIONS FOR TIME STEP   1 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   2 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   3 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   4 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   5 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   6 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   7 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   8 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP   9 IN STRESS PERIOD  1
     6 ITERATIONS FOR TIME STEP  10 IN STRESS PERIOD  1
0MAXIMUM HEAD CHANGE FOR EACH ITERATION:
0 HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL HEAD CHANGE LAYER,ROW,COL
 ----------------------------------------------------------------------------------------------------------------------------------
    .2702     (  2, 31, 17)   .1198     (  2, 31, 16)   .8315E-01 (  2, 30, 18)   .2820E-02 (  1, 31, 17)  -.2180E-02 (  2, 29, 18)
   -.1705E-03 (  2, 29, 18)
0
1                       HEAD IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
             -----------------------------------------------------------------------

              1           2           3           4           5           6           7           8           9          10
             11          12          13          14          15          16          17          18          19          20
             21          22          23
 ..........................................................................................................................
0  1      1000.       1000.       1000.       152.0       150.0       140.0       130.0       120.0       110.1       108.0
          106.0       104.0       103.0       102.0       102.0       102.0       102.0       102.0       102.0       101.0
          98.04       1000.       1000.
0  2      1000.       1000.       1000.       159.0       158.0       153.0       150.0       148.0       146.0       145.0
          144.0       142.0       140.0       133.0       108.1       107.0       106.0       105.0       102.1       100.1
```

	124.0	1000.	1000.							
0 3	1000.	1000.	1000.	173.0	167.0	116.1	115.1	114.1	114.1	113.1
	112.1	112.1	111.1	110.1	144.0	150.0	151.0	151.0	150.0	149.0
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	179.0	117.1	173.0	125.2	173.0	180.0	182.0
	183.0	183.0	183.0	183.0	183.0	182.0	181.0	181.0	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	119.1	175.0	127.1	176.0	183.0	184.0	185.0
	185.0	185.0	185.0	185.0	185.0	184.0	184.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	181.0	178.0	130.1	178.0	184.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	182.0	130.1	179.0	184.0	185.0	185.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	183.0	140.1	179.0	184.0	186.0	186.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	186.0	179.0	146.1	181.0	185.0	185.0	186.0
	186.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	187.0	185.0	179.0	182.8	184.0	184.0	185.0
	185.0	186.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	187.0	186.0	185.0	179.8	177.9	175.7	179.6
	184.0	185.0	186.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	187.0	187.0	186.0	184.0	182.0	174.0	159.0
	181.0	183.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	188.0	187.0	187.0	185.0	183.0	176.0	159.0
	179.0	182.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	188.0	188.0	187.0	186.0	184.0	180.0	175.0
	172.0	181.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	188.0	188.0	187.0	186.0	185.0	183.0	181.0

	180.3	183.0	185.0	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	188.0	189.0	187.0	187.0	186.0	185.0	185.0
	184.0	183.7	184.8	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	188.0	189.0	188.0	187.0	186.0	186.0	186.0
	185.0	185.0	184.8	186.0	186.0	186.0	186.0	186.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	191.0	189.0	187.0	186.0	186.0	186.0
	185.0	185.0	184.8	185.0	185.0	186.0	186.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	192.0	189.0	187.0	186.0	186.0	186.0
	185.0	185.0	185.0	180.9	184.0	185.0	185.0	186.0	186.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	193.0	190.0	187.0	186.0	185.0	185.0
	185.0	185.0	184.0	159.1	178.0	183.0	184.0	185.0	186.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	194.0	191.0	187.0	186.0	185.0	185.0
	185.0	185.0	185.0	180.9	182.7	184.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	195.0	191.0	187.0	186.0	185.0	185.0
	185.0	185.0	185.0	184.0	184.0	183.4	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	196.0	192.0	188.0	186.0	185.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	183.4	185.0	185.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	197.0	192.0	188.0	187.0	186.0	185.0
	185.0	185.0	185.0	185.0	185.0	185.0	183.5	185.0	185.0	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	197.0	193.0	188.0	187.0	186.0	185.0
	185.0	185.0	185.0	185.0	185.0	184.0	183.7	185.0	185.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	198.0	194.0	189.0	187.0	186.0	186.0
	185.0	185.0	185.0	185.0	185.0	183.7	183.7	184.0	185.0	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	199.0	195.0	189.0	188.0	186.0	186.0
	186.0	185.0	185.0	185.0	184.0	183.7	184.0	184.0	184.0	1000.
	1000.	1000.	1000.							

0 28	1000.	1000.	1000.	203.0	200.0	198.0	191.0	189.0	187.0	187.0
	186.0	186.0	185.0	185.0	184.0	182.2	183.0	184.0	184.0	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	201.8	200.6	200.0	196.1	193.0	188.9	188.0
	187.2	186.4	185.5	184.8	183.9	183.3	183.1	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	202.3	201.7	200.0	197.2	194.9	192.7	191.3
	189.9	188.5	187.1	185.7	185.2	184.9	184.7	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.9	202.9	201.3	199.2	197.4	195.9	194.8
	193.6	192.5	191.0	189.4	188.4	187.8	187.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.1	205.1	203.6	201.9	200.4	199.1	198.2
	197.3	196.4	195.1	193.8	192.9	192.4	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.7	206.7	205.6	204.6	203.7	203.0
	202.4	201.7	200.8	199.8	199.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	212.0	212.0	211.8	211.5	211.2	210.9	210.7
	210.5	210.3	210.1	209.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	217.0	218.1	219.0	219.5	219.7	219.7	219.6
	219.4	219.3	219.3	219.2	219.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.9	227.2	227.3	227.8	228.0
	228.1	228.1	228.0	228.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	233.0	233.3	234.0	234.6	234.9	235.1
	235.3	235.4	235.4	235.5	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 38	1000.	1000.	1000.	1000.	237.9	238.2	239.0	239.6	240.2	240.6
	241.0	241.4	241.8	242.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 39	1000.	1000.	1000.	1000.	240.8	241.3	242.2	242.9	243.5	243.9
	244.3	244.8	245.3	246.0	246.7	247.0	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

1 HEAD IN LAYER 2 AT END OF TIME STEP 10 IN STRESS PERIOD 1

	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23							
0 1	1000.	1000.	1000.	151.0	148.8	144.2	140.0	136.9	134.6	133.1
	131.6	130.2	128.3	126.1	124.7	123.8	123.0	122.2	121.2	120.1
	119.0	1000.	1000.							
0 2	1000.	1000.	1000.	158.2	156.7	153.1	150.1	148.0	146.3	145.2
	144.0	142.7	140.8	137.9	135.5	134.1	132.8	131.6	130.0	128.4
	126.8	1000.	1000.							
0 3	1000.	1000.	1000.	172.1	170.0	165.1	162.9	161.7	160.8	160.1
	159.5	158.8	157.8	156.2	154.8	154.0	152.7	151.5	149.6	148.3
	1000.	1000.	1000.							
0 4	1000.	1000.	1000.	183.9	183.8	183.8	183.8	183.8	183.8	183.8
	183.8	183.8	183.7	183.7	182.4	181.4	180.8	180.2	1000.	1000.
	1000.	1000.	1000.							
0 5	1000.	1000.	1000.	184.2	184.2	184.2	184.2	184.2	184.2	184.2
	184.2	184.2	184.2	184.1	183.8	183.3	183.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 6	1000.	1000.	1000.	184.5	184.5	184.5	184.5	184.5	184.4	184.4
	184.4	184.4	184.4	184.4	184.3	184.1	184.1	1000.	1000.	1000.
	1000.	1000.	1000.							
0 7	1000.	1000.	1000.	184.9	184.8	184.8	184.8	184.8	184.7	184.7
	184.7	184.7	184.7	184.7	184.7	184.6	184.6	1000.	1000.	1000.
	1000.	1000.	1000.							
0 8	1000.	1000.	1000.	185.3	185.2	185.2	185.1	185.0	185.0	185.0
	185.0	185.0	184.9	184.9	184.9	184.9	184.9	185.0	1000.	1000.
	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	185.7	185.6	185.4	185.3	185.2	185.2	185.2
	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	186.0	185.9	185.6	185.5	185.4	185.3	185.3
	185.2	185.2	185.2	185.2	185.2	185.1	185.1	185.1	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	186.3	186.2	185.8	185.6	185.5	185.4	185.4
	185.3	185.3	185.2	185.2	185.2	185.2	185.2	185.1	1000.	1000.
	1000.	1000.	1000.							

0 12	1000.	1000.	1000.	186.5	186.4	186.0	185.7	185.5	185.4	185.4
	185.3	185.3	185.3	185.2	185.2	185.2	185.2	185.1	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	186.7	186.6	186.1	185.8	185.6	185.5	185.4
	185.4	185.3	185.3	185.2	185.2	185.2	185.2	185.1	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	186.9	186.8	186.2	185.8	185.6	185.5	185.4
	185.4	185.3	185.3	185.2	185.2	185.2	185.2	185.1	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	187.0	187.1	186.3	185.8	185.6	185.5	185.4
	185.4	185.3	185.3	185.2	185.2	185.2	185.2	185.1	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	187.3	187.6	186.4	185.8	185.6	185.5	185.4
	185.4	185.3	185.3	185.2	185.2	185.2	185.1	185.0	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	187.6	188.6	187.0	185.7	185.6	185.5	185.4
	185.4	185.3	185.2	185.2	185.2	185.1	185.1	185.0	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	189.9	187.9	185.6	185.5	185.4	185.3
	185.3	185.2	185.1	185.1	185.1	185.1	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	191.2	188.1	185.6	185.5	185.3	185.2
	185.2	185.1	185.0	185.0	185.0	185.0	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	192.5	189.0	185.6	185.4	185.2	185.1
	185.1	185.0	184.9	184.9	184.9	184.9	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	193.8	190.0	185.7	185.4	185.2	185.1
	185.0	184.9	184.9	184.9	184.9	184.9	185.0	185.0	185.0	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	194.8	190.0	185.8	185.5	185.2	185.1
	185.0	185.0	184.9	184.8	184.8	184.7	184.9	184.1	184.0	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	195.4	191.0	185.8	185.6	185.2	185.1
	185.0	185.0	184.9	184.8	184.7	184.6	184.1	184.0	184.0	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	196.1	191.0	185.9	185.7	185.3	185.2
	185.1	185.0	184.9	184.8	184.6	184.5	184.5	184.4	184.0	1000.

	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	196.7	192.0	185.9	185.8	185.5	185.3
	185.2	185.1	185.0	184.8	184.6	184.5	184.4	184.4	184.0	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	197.4	193.0	186.0	185.9	185.8	185.6
	185.4	185.2	185.0	184.8	184.6	184.5	184.4	184.3	184.0	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	198.1	194.0	186.0	186.0	186.0	185.8
	185.6	185.4	185.1	184.8	184.6	184.5	184.3	184.2	183.9	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	199.1	196.0	186.1	186.2	186.5	186.3
	186.0	185.6	185.3	184.9	184.6	184.4	184.2	184.1	183.1	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	201.8	200.5	200.0	196.1	193.0	188.3	187.9
	187.2	186.5	185.8	185.0	184.5	184.2	183.9	184.1	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	202.3	201.7	200.0	197.2	194.9	192.7	191.2
	189.9	188.5	187.2	186.0	185.3	185.0	184.7	184.7	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	203.9	202.9	201.3	199.2	197.4	195.9	194.8
	193.6	192.5	191.0	189.4	188.4	187.9	187.3	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	206.1	205.1	203.6	201.9	200.4	199.1	198.2
	197.3	196.4	195.2	193.8	193.0	192.5	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	208.2	207.7	206.7	205.5	204.6	203.7	203.0
	202.4	201.7	200.8	199.8	199.1	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 34	1000.	1000.	1000.	212.0	212.0	211.8	211.5	211.2	210.9	210.7
	210.5	210.3	210.1	209.9	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 35	1000.	1000.	1000.	216.9	218.1	219.0	219.5	219.7	219.6	219.6
	219.4	219.3	219.3	219.2	219.2	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 36	1000.	1000.	1000.	1000.	226.3	226.9	227.1	227.4	227.7	227.9
	228.0	228.0	228.0	228.0	1000.	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 37	1000.	1000.	1000.	1000.	233.0	233.3	234.0	234.6	234.9	235.1

```
        235.3      235.4      235.4      235.5      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 38    1000.      1000.      1000.      1000.      237.9      238.2      239.0      239.6      240.2      240.6
        241.0      241.4      241.8      242.0      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
0 39    1000.      1000.      1000.      1000.      240.8      241.3      242.2      242.9      243.5      243.9
        244.3      244.8      245.3      246.0      1000.      1000.      1000.      1000.      1000.      1000.
        1000.      1000.      1000.
1                DRAWDOWN IN LAYER  1 AT END OF TIME STEP 10 IN STRESS PERIOD  1
           ------------------------------------------------------------------------

           1          2          3          4          5          6          7          8          9         10
          11         12         13         14         15         16         17         18         19         20
          21         22         23
.........................................................................................................................
0  1    1000.      1000.      1000.      7.6294E-05  9.4604E-04 -8.6823E-03 -1.8051E-02 -3.0045E-02 -5.0507E-02 -4.4518E-02
     -4.5433E-02 -4.7707E-02 -4.4601E-02 -4.2702E-02 -3.9665E-02 -3.8147E-02 -3.6690E-02 -3.5339E-02 -3.2990E-02 -3.2921E-02
     -3.8063E-02  1000.      1000.
0  2    1000.      1000.      1000.     -2.4414E-04  8.8501E-04 -5.0354E-04 -2.2888E-04  4.4250E-04 -1.0529E-03 -1.8311E-04
      2.0447E-03 -2.8534E-03  3.5095E-04  8.3923E-04 -7.2517E-02 -4.7760E-02 -4.7409E-02 -4.5074E-02 -5.1086E-02 -6.2485E-02
     -2.2125E-04  1000.      1000.
0  3    1000.      1000.      1000.      1.2512E-03 -1.3733E-04 -9.4856E-02 -8.2657E-02 -7.7972E-02 -6.8733E-02 -8.3031E-02
     -8.4892E-02 -8.1696E-02 -8.2611E-02 -9.7687E-02 -8.6975E-04  2.1210E-03 -2.3499E-03 -2.8992E-04  1.0071E-03  6.7139E-04
        1000.      1000.      1000.
0  4    1000.      1000.      1000.      5.9509E-04 -.1328     -3.5095E-04 -.1513     -7.3242E-04  1.0223E-03  1.0681E-04
      2.0142E-03 -1.0223E-03 -9.9182E-04 -9.9182E-04  3.8452E-03  6.4087E-04 -3.1586E-03  1.0681E-03  1000.       1000.
        1000.      1000.      1000.
0  5    1000.      1000.      1000.     -.1317      -3.9673E-04 -.1203     -1.0376E-03  1.6174E-03 -2.5940E-03  3.1891E-03
     -3.0518E-05  .0000     -1.5259E-05  .0000       3.7994E-03 -3.3875E-03 -1.0681E-04  1000.       1000.       1000.
        1000.      1000.      1000.
0  6    1000.      1000.      1000.      4.2725E-04  5.3406E-04 -.1132     -1.6022E-03  1.0681E-03  1.5259E-03 -8.0872E-04
     -8.8501E-04 -8.6975E-04 -8.2397E-04 -7.9346E-04 -5.0354E-04 -4.5776E-05 -3.0518E-05  1000.       1000.       1000.
        1000.      1000.      1000.
0  7    1000.      1000.      1000.      6.7139E-04 -.1144      8.0872E-04 -3.0518E-05 -4.2725E-04 -4.4250E-03  3.7689E-03
      7.4768E-04  7.3242E-04  7.3242E-04  7.0190E-04  7.1716E-04  7.6294E-04  6.5613E-04  1000.       1000.       1000.
        1000.      1000.      1000.
0  8    1000.      1000.      1000.      3.6621E-04 -9.5322E-02 -1.5259E-04 -1.7090E-03  2.0142E-03  5.0354E-04  .0000
      1.0681E-04  1.3733E-04  1.5259E-04  1.8311E-04  1.5259E-04  1.5259E-04  1.5259E-05  .0000       1000.       1000.
```

	1000.	1000.	1000.							
0 9	1000.	1000.	1000.	9.3079E-04	1.0223E-03	-.1261	-1.0986E-03	1.2970E-03	-4.7607E-03	3.6774E-03
	6.4087E-04	-1.0681E-04	-4.5776E-05	-4.5776E-05	-4.5776E-05	-4.5776E-05	-4.5776E-05	-4.5776E-05	1000.	1000.
	1000.	1000.	1000.							
0 10	1000.	1000.	1000.	1.2970E-03	1.4038E-03	1.0376E-03	.2017	7.1716E-04	-1.5869E-03	4.1504E-03
	-4.5624E-03	4.0741E-03	-1.8311E-04	-1.3733E-04	-1.5259E-04	-1.0681E-04	-9.1553E-05	-7.6294E-05	1000.	1000.
	1000.	1000.	1000.							
0 11	1000.	1000.	1000.	-2.1362E-04	-2.1820E-03	1.5411E-03	.1659	.1499	.2814	.3635
	1.5259E-05	1.1353E-02	2.1362E-03	-2.2888E-04	-2.2888E-04	-2.1362E-04	-1.2207E-04	-6.1035E-05	1000.	1000.
	1000.	1000.	1000.							
0 12	1000.	1000.	1000.	-3.9520E-03	1.5869E-03	-2.3499E-03	1.1292E-03	3.7994E-03	-6.2408E-03	9.2163E-03
	5.2490E-03	-1.7242E-02	-2.0599E-03	4.5776E-04	-2.7466E-04	-2.7466E-04	-1.5259E-04	-6.1035E-05	1000.	1000.
	1000.	1000.	1000.							
0 13	1000.	1000.	1000.	3.8757E-03	-4.2725E-03	3.5248E-03	-2.4414E-03	-5.0354E-04	7.4921E-03	8.2703E-03
	1.4816E-02	-1.7639E-02	1.3123E-03	4.8828E-04	-2.4414E-04	-2.4414E-04	-1.8311E-04	-9.1553E-05	1000.	1000.
	1000.	1000.	1000.							
0 14	1000.	1000.	1000.	2.7466E-04	3.6469E-03	-1.2207E-04	2.7924E-03	-1.8005E-03	-1.6632E-03	4.6539E-03
	1.6998E-02	-2.5482E-03	2.6398E-03	4.8828E-04	-2.8992E-04	-2.4414E-04	-1.0681E-04	-6.1035E-05	1000.	1000.
	1000.	1000.	1000.							
0 15	1000.	1000.	1000.	-4.5776E-05	-2.1057E-03	-3.2043E-04	-3.1128E-03	-3.5095E-04	1.0681E-03	-3.7994E-03
	.6824	-2.4872E-03	2.8839E-03	9.7656E-04	-2.5940E-04	-2.2888E-04	-1.3733E-04	-6.1035E-05	1000.	1000.
	1000.	1000.	1000.							
0 16	1000.	1000.	1000.	-6.2561E-04	2.3956E-03	-1.7090E-03	2.1667E-03	3.0518E-04	-3.1586E-03	5.8899E-03
	-1.1261E-02	.3349	.1751	1.0986E-03	-1.9836E-04	-1.9836E-04	-4.5776E-05	-4.5776E-05	1000.	1000.
	1000.	1000.	1000.							
0 17	1000.	1000.	1000.	-1.1444E-03	-2.2125E-03	9.1553E-05	8.0872E-04	-1.6632E-03	4.5776E-05	5.1270E-03
	-7.4768E-03	-6.1035E-04	.1712	1.9226E-03	6.1035E-04	-1.2207E-04	-4.5776E-05	-3.0518E-05	1000.	1000.
	1000.	1000.	1000.							
0 18	1000.	1000.	1000.	1000.	1.4038E-03	1.0681E-03	2.8992E-04	-1.4954E-03	-5.3406E-04	4.5013E-03
	-9.4757E-03	-2.9602E-03	.1612	6.7139E-04	-4.8218E-03	3.8300E-03	7.7820E-04	.0000	.0000	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	3.2043E-04	-9.3079E-04	3.5095E-04	-1.4343E-03	9.0027E-04	4.0436E-03
	-4.9438E-03	-2.2736E-03	6.4240E-03	.1366	3.5400E-03	2.2430E-03	-4.7150E-03	3.9063E-03	.0000	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-1.3733E-04	2.1362E-04	-2.1362E-04	-4.5776E-05	-7.5989E-03	-4.1656E-03
	-1.9531E-03	6.9580E-03	9.3079E-04	-.1217	-3.4637E-03	4.6234E-03	-4.8676E-03	-2.4719E-03	3.0975E-03	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	-1.0071E-03	1.3275E-03	-9.0027E-04	2.1362E-04	-5.5389E-03	-2.2736E-03

	-1.4801E-03	-7.9346E-04	7.4005E-03	.1257	.2795	-1.6022E-03	2.1973E-03	-1.6022E-03	-3.1433E-03	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	-1.5564E-03	-2.9907E-03	-4.1504E-03	-6.1035E-05	-6.0120E-03	-2.1973E-03
	-1.4648E-03	-7.9346E-04	1.0681E-03	-1.1139E-03	-2.6855E-03	.5710	6.4850E-03	-3.0518E-05	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	2.2888E-04	3.5248E-03	4.4250E-03	-4.3335E-03	-1.8616E-02	-2.7924E-03
	-1.6937E-03	-8.6975E-04	9.1553E-05	1.8921E-03	2.0142E-03	7.3395E-03	.5697	4.0588E-03	.0000	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	4.3488E-03	-3.2043E-03	4.4250E-04	4.1656E-03	2.9114E-02	-1.5366E-02
	-2.3346E-03	-1.1292E-03	1.8311E-04	-1.0681E-03	-7.1716E-04	6.3629E-03	.4523	3.5706E-03	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	-3.6926E-03	5.3406E-04	-3.3112E-03	8.8501E-04	1.5015E-02	-2.8717E-02
	-3.5248E-03	-1.6785E-03	1.3733E-04	-9.6130E-04	2.4109E-03	-7.0648E-03	.3344	6.4240E-03	-1.5259E-05	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	3.0518E-04	5.3406E-04	5.3711E-03	-3.1281E-03	-3.3569E-04	2.8778E-02
	-2.8366E-02	-2.9755E-03	-2.1362E-04	-8.5449E-04	6.1493E-03	.3342	.3373	-7.2327E-03	7.5836E-03	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	1.9989E-03	-2.5787E-03	-3.4027E-03	4.7455E-03	-1.4008E-02	-5.6763E-03
	2.9343E-02	-2.3865E-02	-9.0027E-04	1.9836E-04	-6.5918E-03	.3400	1.5717E-03	-1.4801E-03	-7.5989E-03	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1.2054E-03	-3.6621E-04	3.2654E-03	-1.6937E-03	-9.0027E-04	-6.0883E-03	1.8890E-02
	-1.7960E-02	1.6418E-02	-7.9498E-03	1.4801E-03	2.2278E-03	.8435	-3.7994E-03	2.2125E-03	-3.0518E-05	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	.1748	.3673	4.3396E-02	-8.6731E-02	-5.6458E-04	.1037	-1.7349E-02
	-.2279	-.4055	-.5396	-.7544	-1.879	-5.269	-2.124	1000.	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-.2644	.2523	-2.0157E-02	-.2141	8.4366E-02	.3145	-.2593
	.1356	-.5195	-1.081	-1.732	-4.214	-4.933	-4.712	1000.	1000.	1000.
	1000.	1000.	1000.							
0 31	1000.	1000.	1000.	8.7265E-02	.1110	-.3500	-.2082	-.4279	.1367	-.7661
	-.6364	-1.505	-2.014	-3.405	-5.410	-4.827	-4.320	1000.	1000.	1000.
	1000.	1000.	1000.							
0 32	1000.	1000.	1000.	-6.4194E-02	-6.6757E-02	.3904	.1445	-.4030	-.1264	-.2275
	-.2990	-1.369	-2.144	-3.769	-5.942	-5.440	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							
0 33	1000.	1000.	1000.	-.1724	.3067	.2773	.4496	.4441	.3387	-2.7176E-02
	-.3683	-.7042	-.8170	-.7886	-1.084	1000.	1000.	1000.	1000.	1000.
	1000.	1000.	1000.							

```
0 34    1000.       1000.       1000.     -2.5696E-02 -2.0157E-02   .2417       1.506       1.781       3.076       4.286
         .4907      -.3371      -.1031     9.3506E-02  1000.       1000.       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
0 35    1000.       1000.       1000.      4.9973E-02 -8.1940E-02 -3.3401E-02   .4839       .3118       1.321       .4075
         .5701       .7240      -.2622     -.2320      -.2290      1000.       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
0 36    1000.       1000.       1000.      1000.       -.3414      6.5948E-02  -.1553      -2.333      2.236       1.015
         .9145     -5.1559E-02  1.8616E-02  4.0039E-02  1000.       1000.       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
0 37    1000.       1000.       1000.      1000.       3.9856E-02  -.3353     -1.5762E-02   .4001      7.4234E-02  -.1119
        -.2633      -.3697       .5592      .4984      1000.       1000.       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
0 38    1000.       1000.       1000.      1000.        .1266      -.2284      3.6606E-02  -.6295      -.2138      -.6136
      -7.8583E-03    .6296      2.234      2.976       1000.       1000.       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
0 39    1000.       1000.       1000.      1000.        .2182      -.2897      -.2193      9.0469E-02   .4917      7.7454E-02
         .6579       .2451       .6550     1.970       3.286       8.049       1000.       1000.       1000.       1000.
        1000.       1000.       1000.
1                DRAWDOWN IN LAYER  2 AT END OF TIME STEP 10 IN STRESS PERIOD  1
             ------------------------------------------------------------------

           1           2           3           4           5           6           7           8           9          10
          11          12          13          14          15          16          17          18          19          20
          21          22          23
 ..........................................................................................................................
0  1    1000.       1000.       1000.      3.7552E-02   .1558      -.2252      2.9312E-02  8.5846E-02   .4225     -7.2144E-02
         .3761      -.2453      -.3083     -.1005       .3252       .2131      4.1580E-02  -.1932      -.1505     -7.6714E-02
       3.3386E-02   1000.       1000.
0  2    1000.       1000.       1000.      -.1723       .2801      -.1355      -.1054      1.4420E-02  -.3094      -.1638
       1.9012E-02    .2546       .1993      .1232      -.5070     -8.2260E-02   .2108       .3869     -1.3077E-02  -.3998
         .1766      1000.       1000.
0  3    1000.       1000.       1000.      -.1340     -3.7979E-02 -8.8974E-02  5.0415E-02   .3052       .2373      -.1304
        -.4890       .1647       .1924     -.2189       .2126      4.5166E-02   .3079      -.4548       .3956      -.3017
        1000.       1000.       1000.
0  4    1000.       1000.       1000.       .1381       .1895       .2024       .2266       .2288       .2330       .2372
         .2427       .2496       .2617      .2822      -.4342      -.3890       .2324      -.1518      1000.       1000.
        1000.       1000.       1000.
0  5    1000.       1000.       1000.      -.2021      -.2002      -.1666      -.1711      -.1714      -.1689      -.1664
```

```
      -.1633     -.1596     -.1536     -.1453      .2493     -.3488     -.2980      1000.      1000.      1000.
       1000.      1000.      1000.
0  6   1000.      1000.      1000.      .4671     -.5064     -.4624     -.4599     -.4551     -.4495     -.4454
      -.4411     -.4370     -.4311     -.4252     -.2670     -.1042   -9.5474E-02  1000.      1000.      1000.
       1000.      1000.      1000.
0  7   1000.      1000.      1000.      .1042      .1595      .1969      .2283      .2495      .2646      .2740
       .2825      .2901      .2998      .3069      .3414      .3960      .3604      1000.      1000.      1000.
       1000.      1000.      1000.
0  8   1000.      1000.      1000.     -.3188     -.2427     -.1575   -8.6548E-02 -4.1275E-02 -1.1017E-02  7.3700E-03
    2.3682E-02  3.7689E-02  5.4886E-02  6.6772E-02  7.3349E-02  8.9966E-02  5.4779E-02  1.4252E-02  1000.      1000.
       1000.      1000.      1000.
0  9   1000.      1000.      1000.      .3040      .3956     -.4378     -.3183     -.2438     -.1957     -.1670
      -.1419     -.1206   -9.4849E-02 -7.7332E-02 -7.2708E-02 -5.6213E-02 -5.7190E-02 -5.6152E-02  1000.      1000.
       1000.      1000.      1000.
0 10   1000.      1000.      1000.   2.9663E-02  .1330      .3616     -.4695     -.3687     -.3057     -.2686
      -.2365     -.2098     -.1777     -.1558     -.1553     -.1441     -.1232   -9.9716E-02  1000.      1000.
       1000.      1000.      1000.
0 11   1000.      1000.      1000.     -.2701     -.1613      .1591      .3900     -.4774     -.3969     -.3501
      -.3103     -.2779     -.2393     -.2125     -.2043     -.1952     -.1639     -.1281      1000.      1000.
       1000.      1000.      1000.
0 12   1000.      1000.      1000.     -.5152     -.4218   9.3689E-03   .2986      .4578     -.4476     -.3925
      -.3462     -.3097     -.2672     -.2366     -.2263     -.2158     -.1794     -.1381      1000.      1000.
       1000.      1000.      1000.
0 13   1000.      1000.      1000.      .3156      .3834   -8.7646E-02   .2459      .4224     -.4746     -.4146
      -.3638     -.3247     -.2793     -.2458     -.2341     -.2229     -.1837     -.1394      1000.      1000.
       1000.      1000.      1000.
0 14   1000.      1000.      1000.      .1423      .1599     -.1794      .2045      .3966     -.4939     -.4303
      -.3748     -.3335     -.2847     -.2475     -.2332     -.2231     -.1800     -.1324      1000.      1000.
       1000.      1000.      1000.
0 15   1000.      1000.      1000.   -3.1921E-02 -.1038     -.2617      .1790      .3821     -.5045     -.4388
      -.3820     -.3371     -.2833     -.2410     -.2251     -.2176     -.1633     -.1101      1000.      1000.
       1000.      1000.      1000.
0 16   1000.      1000.      1000.     -.2864      .4152     -.3613      .1748      .3796     -.5058     -.4390
      -.3811     -.3318     -.2705     -.2232     -.2091     -.1975   -9.0256E-02 -3.1982E-02  1000.      1000.
       1000.      1000.      1000.
0 17   1000.      1000.      1000.      .4493      .3942   1.2024E-02   .3214      .4272     -.4710     -.4050
      -.3511     -.2980     -.2221     -.1726     -.1592     -.1486   -6.4438E-02 -2.1210E-02  1000.      1000.
       1000.      1000.      1000.
```

0 18	1000.	1000.	1000.	1000.	.1062	.1091	.3681	-.5196	-.3773	-.3240
	-.2741	-.1928	-.1253	-9.1980E-02	-8.2199E-02	-7.5104E-02	-3.4317E-02	-1.4206E-02	-9.9030E-03	1000.
	1000.	1000.	1000.							
0 19	1000.	1000.	1000.	1000.	-.1852	-7.7881E-02	.3902	-.4597	-.2856	-.2299
	-.1668	-7.2495E-02	-2.0355E-02	6.6223E-03	1.4114E-02	1.5991E-02	4.1656E-03	-4.0588E-03	-5.0812E-03	1000.
	1000.	1000.	1000.							
0 20	1000.	1000.	1000.	1000.	-.4813	-1.0544E-02	.3778	-.4222	-.2097	-.1425
	-5.1453E-02	3.4317E-02	5.3192E-02	8.1406E-02	8.9584E-02	8.8882E-02	2.5925E-02	2.5330E-03	-4.1199E-03	1000.
	1000.	1000.	1000.							
0 21	1000.	1000.	1000.	1000.	.2174	1.2772E-02	.3216	-.3877	-.1526	-8.7753E-02
	-5.1575E-03	5.8014E-02	8.6685E-02	.1332	.1494	.1355	8.4229E-03	1.4923E-02	1.5457E-02	1000.
	1000.	1000.	1000.							
0 22	1000.	1000.	1000.	1000.	.2448	-4.8538E-02	.2477	-.4853	-.1840	-8.8104E-02
	-1.8845E-02	3.8254E-02	9.2163E-02	.1758	.2149	.2689	9.9731E-02	-7.2479E-02	-3.1799E-02	1000.
	1000.	1000.	1000.							
0 23	1000.	1000.	1000.	1000.	-.4055	4.6158E-02	.1914	.4168	-.2431	-.1280
	-4.9347E-02	1.4542E-02	8.6105E-02	.2041	.2730	-.5723	-9.4101E-02	-2.1957E-02	-2.1667E-03	1000.
	1000.	1000.	1000.							
0 24	1000.	1000.	1000.	1000.	-5.9479E-02	-4.4617E-02	.1325	.3064	-.3478	-.2105
	-.1109	-2.9358E-02	6.5552E-02	.2282	-.6446	-.5302	-.4547	-.3948	-9.7809E-03	1000.
	1000.	1000.	1000.							
0 25	1000.	1000.	1000.	1000.	.2804	5.8594E-03	7.3700E-02	.1754	-.5316	-.3500
	-.2124	-.1014	2.4460E-02	-.7637	-.6084	-.5082	-.4348	-.3706	-7.8888E-03	1000.
	1000.	1000.	1000.							
0 26	1000.	1000.	1000.	1000.	-.3872	1.4542E-02	1.8219E-02	5.9311E-02	.2316	-.5685
	-.3637	-.2085	-4.2267E-02	-.7726	-.5896	-.4820	-.4003	-.3183	-9.6130E-04	1000.
	1000.	1000.	1000.							
0 27	1000.	1000.	1000.	1000.	-6.3095E-02	6.4087E-03	-3.9536E-02	-3.1754E-02	2.6642E-02	.1851
	-.5672	-.3559	-.1392	-.7980	-.5822	-.4501	-.3204	-.2231	6.0043E-02	1000.
	1000.	1000.	1000.							
0 28	1000.	1000.	1000.	1000.	-8.8440E-02	-2.3743E-02	-.1149	-.1965	-.4506	-.3181
	1.7258E-02	-.6459	-.3376	-.8593	-.5621	-1.372	-1.179	-1.078	-5.3955E-02	1000.
	1000.	1000.	1000.							
0 29	1000.	1000.	1000.	.1883	-.4742	-2.8076E-03	-7.0862E-02	-5.0354E-04	-.3473	.1163
	-.2197	-.4608	-.7852	-1.013	-1.532	-2.203	-1.948	-2.055	1000.	1000.
	1000.	1000.	1000.							
0 30	1000.	1000.	1000.	-.2739	.2631	-7.3242E-04	-.2123	8.2458E-02	.3427	-.2489
	-.8747	-.5078	-1.188	-1.962	-3.280	-4.961	-4.716	-3.666	1000.	1000.

```
          1000.      1000.      1000.
0 31      1000.      1000.      1000.       .1047      .1101     -.3435     -.2019     -.4211      .1449     -.7584
         -.6278     -1.476     -2.003      -3.413     -4.450     -4.869     -4.336      1000.      1000.      1000.
          1000.      1000.      1000.
0 32      1000.      1000.      1000.   -5.6564E-02 -6.4468E-02  .3942      .1457     -.4028     -.1271     -.2294
         -.3009     -1.355     -2.152      -3.790     -4.977     -5.467      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 33      1000.      1000.      1000.      -.1717      .3085      .2813      .4527      .4471      .3412   -2.5269E-02
         -.3661     -.6894     -.8154      -.7948     -1.094      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 34      1000.      1000.      1000.   -2.5131E-02 -1.9470E-02  .2365      1.506      1.781      3.075      3.285
          .4901     -.3266   -9.7412E-02 9.6603E-02  1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 35      1000.      1000.      1000.    5.0461E-02 -8.5724E-02 -3.2974E-02 .5260     .3451      1.362      .4415
          .5764      .7143     -.2604      -.2309     -.2287      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 36      1000.      1000.      1000.       1000.     -.3412   7.4783E-02  -1.150     -1.367      1.255      1.055
          .9561   -3.6774E-02 2.0447E-02 4.2404E-02  1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 37      1000.      1000.      1000.       1000.   4.0024E-02  -.3346  -1.4664E-02   .4044   8.2947E-02  -.1030
         -.2539     -.3615      .5623       .5025      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 38      1000.      1000.      1000.       1000.      .1266     -.2276   3.9246E-02  -.6292     -.2137     -.6139
      -9.0027E-03    .6166      2.237       2.988      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0 39      1000.      1000.      1000.       1000.      .2178     -.2918     -.2271   8.8531E-02   .4912   7.8018E-02
          .6598      .2486      .6648       2.014      1000.      1000.      1000.      1000.      1000.      1000.
          1000.      1000.      1000.
0
```

VOLUMETRIC BUDGET FOR ENTIRE MODEL AT END OF TIME STEP 10 IN STRESS PERIOD 1

```
0        CUMULATIVE VOLUMES      L**3                     RATES FOR THIS TIME STEP      L**3/T

             IN:                                                IN:
```

```
                  STORAGE =   .54280E+07                               STORAGE =   43.315
            CONSTANT HEAD =   .00000                             CONSTANT HEAD =   .00000
                 RECHARGE =   .35143E+06                              RECHARGE =   4.0675
            RIVER LEAKAGE =   13949.                             RIVER LEAKAGE =   .16589
0                TOTAL IN =   .57933E+07                              TOTAL IN =   47.549
0               OUT:                                                 OUT:
                ----                                                 ----
                  STORAGE =   .57416E+07                               STORAGE =   46.924
            CONSTANT HEAD =   .00000                             CONSTANT HEAD =   .00000
                 RECHARGE =   .00000                                  RECHARGE =   .00000
            RIVER LEAKAGE =   50994.                             RIVER LEAKAGE =   .61723
0               TOTAL OUT =   .57926E+07                             TOTAL OUT =   47.541
0                IN - OUT =   783.00                                  IN - OUT =   .75760E-02
0    PERCENT DISCREPANCY =              .01               PERCENT DISCREPANCY =              .02



0
```

TIME SUMMARY AT END OF TIME STEP 10 IN STRESS PERIOD 1

	SECONDS	MINUTES	HOURS	DAYS	YEARS
TIME STEP LENGTH	8640.00	144.000	2.40000	.100000	.273785E-03
STRESS PERIOD TIME	86400.0	1440.00	24.0000	1.00000	.273785E-02
TOTAL SIMULATION TIME	86400.0	1440.00	24.0000	1.00000	.273785E-02

1