

11.01.1.2

PHASE I REMEDIAL INVESTIGATION REPORT

**LOCKHEED MARTIN TACTICAL DEFENSE SYSTEMS DIVISION
(Former Unisys Corp. Site)**

Great Neck, New York
NYSDEC Site No.130045

APPENDICES F - 6

Prepared for:
**New York State
Department of Environmental Conservation**

On behalf of:
**Lockheed Martin Tactical Defense Systems Division of
Lockheed Martin Tactical Systems, Inc.**

DECEMBER 1996

APPENDIX F

NONVALIDATED GROUND-WATER QUALITY DATA

APPENDIX G

PUMP TEST HYDROGRAPHS

~~APPENDIX H~~

~~GROUND-WATER MODEL DATA AND EXPANDED DESCRIPTION~~

APPENDIX F

NONVALIDATED GROUND-WATER QUALITY DATA



Inchcape Testing Services

Aquatec Laboratories

Laboratory Locations

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

150 Herman Melville Boulevard
New Bedford, MA 02740

Analytical Report

Unisys Corporation
365 Lakeville Road
M.S. 1P10
Great Neck, NY 11020

Attention : Brian Macrae

Date : 10/28/94
ETR Number : 47218
Project No.: 94200
No. Samples: 13
Arrived : 10/08/94
P.O. Number: CE94181

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Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Sample Description	Method No.	Parameter	Result
	601	Purgeable Halocarbons	
237285	MW-24GL:10/07/94	@1420 (Water)	C
237286	MW-25GL:10/07/94	@1745 (Water)	C
237287	MW-26GL:10/07/94	(Water)	C
237288	MW-27GL:10/07/94	@1615 (Water)	C
237289	MW-28GL:10/07/94	@1120 (Water)	C
237290	MW-29GL:10/07/94	@1030 (Water)	C
237291	MW-23MI:10/07/94	(Water)	C
237292	MW-24MI:10/07/94	@1415 (Water)	C
237293	MW-25MI:10/07/94	@1745 (Water)	C
237294	MW-26MI:10/07/94	@1215 (Water)	C
237295	MW-27MI:10/07/94	@1600 (Water)	C
237296	MW-28MI:10/07/94	@1110 (Water)	C
237297	MW-29MI:10/07/94	@1040 (Water)	C

Comments/Notes

C = Procedure/analysis completed

< Last Page >

Submitted By :

Aquatec Inc.

R. Marion McNeer



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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237285
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 15 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-24GL,
10/07/94 at 1420 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	50 U	cis-1,2-dichloroethene	2400
bromoform	50 U	trans-1,2-dichloroethene	50 U
bromomethane	50 U	1,2-dichloropropane	50 U
carbon tetrachloride	50 U	cis-1,3-dichloropropene	50 U
chlorobenzene	50 U	trans-1,3-dichloropropene	50 U
chloroethane	50 U	Freon 113	50 U
chloroform	50 U	methylene chloride	50 U
chloromethane	50 U	1,1,2,2-tetrachloroethane	50 U
dibromochloromethane	50 U	tetrachloroethene	350
1,2-dichlorobenzene	50 U	1,1,1-trichloroethane	50 U
1,3-dichlorobenzene	50 U	1,1,2-trichloroethane	50 U
1,4-dichlorobenzene	50 U	trichloroethene	320
dichlorodifluoromethane	50 U	trichlorofluoromethane	50 U
1,1-dichloroethane	50 U	vinyl chloride	50 U
1,2-dichloroethane	50 U		
1,1-dichloroethene	50 U		

The sample was diluted 100 fold for analysis.

Key to the letter used to qualify the results of the analysis:

- U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



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Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237286

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 15 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-25GL,
10/07/94 at 1745 hours.

Volatile Organic Compounds in ug/l EPA Method 601

<u>bromodichloromethane</u>	5.0 U	<u>cis-1,2-dichloroethene</u>	39
<u>bromoform</u>	5.0 U	<u>trans-1,2-dichloroethene</u>	5.0 U
<u>bromomethane</u>	5.0 U	<u>1,2-dichloropropane</u>	5.0 U
<u>carbon tetrachloride</u>	5.0 U	<u>cis-1,3-dichloropropene</u>	5.0 U
<u>chlorobenzene</u>	5.0 U	<u>trans-1,3-dichloropropene</u>	5.0 U
<u>chloroethane</u>	5.0 U	<u>Freon 113</u>	23
<u>chloroform</u>	5.0 U	<u>methylene chloride</u>	5.0 U
<u>chloromethane</u>	5.0 U	<u>1,1,2,2-tetrachloroethane</u>	5.0 U
<u>dibromochloromethane</u>	5.0 U	<u>tetrachloroethene</u>	5.0 U
<u>1,2-dichlorobenzene</u>	5.0 U	<u>1,1,1-trichloroethane</u>	120
<u>1,3-dichlorobenzene</u>	5.0 U	<u>1,1,2-trichloroethane</u>	5.0 U
<u>1,4-dichlorobenzene</u>	5.0 U	<u>trichloroethene</u>	300
<u>dichlorodifluoromethane</u>	5.0 U	<u>trichlorofluoromethane</u>	5.0 U
<u>1,1-dichloroethane</u>	5.0 U	<u>vinyl chloride</u>	5.0 U
<u>1,2-dichloroethane</u>	5.0 U		
<u>1,1-dichloroethene</u>	5.0 U		

The sample was diluted 10 fold for analysis.

Key to the letter used to qualify the results of the analysis:

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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237287
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 15 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-26GL,
10/07/94.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	1.5 U	cis-1,2-dichloroethene	55
bromoform	1.5 U	trans-1,2-dichloroethene	1.5 U
bromomethane	1.5 U	1,2-dichloropropane	1.5 U
carbon tetrachloride	1.5 U	cis-1,3-dichloropropene	1.5 U
chlorobenzene	1.5 U	trans-1,3-dichloropropene	1.5 U
chloroethane	1.5 U	Freon 113	1.5 U
chloroform	1.5 U	methylene chloride	1.5 U
chloromethane	1.5 U	1,1,2,2-tetrachloroethane	1.5 U
dibromochloromethane	1.5 U	tetrachloroethene	15
1,2-dichlorobenzene	1.5 U	1,1,1-trichloroethane	1.5 U
1,3-dichlorobenzene	1.5 U	1,1,2-trichloroethane	1.5 U
1,4-dichlorobenzene	1.5 U	trichloroethene	25
dichlorodifluoromethane	1.5 U	trichlorofluoromethane	1.5 U
1,1-dichloroethane	1.5 U	vinyl chloride	1.5 U
1,2-dichloroethane	1.5 U		
1,1-dichloroethene	1.5 U		

The sample was diluted 3 fold for analysis.

Key to the letter used to qualify the results of the analysis:

U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237288
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 15 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-27GL,
10/07/94 at 1615 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	0.5 U	cis-1,2-dichloroethene	39
bromoform	0.5 U	trans-1,2-dichloroethene	0.5 U
bromomethane	0.5 U	1,2-dichloropropane	0.5 U
carbon tetrachloride	0.5 U	cis-1,3-dichloropropene	0.5 U
chlorobenzene	0.5 U	trans-1,3-dichloropropene	0.5 U
chloroethane	0.5 U	Freon 113	7.5
chloroform	0.5 U	methylene chloride	0.5 U
chloromethane	0.5 U	1,1,2,2-tetrachloroethane	0.5 U
dibromochloromethane	0.5 U	tetrachloroethene	17
1,2-dichlorobenzene	0.5 U	1,1,1-trichloroethane	0.8
1,3-dichlorobenzene	0.5 U	1,1,2-trichloroethane	0.5 U
1,4-dichlorobenzene	0.5 U	trichloroethene	23
dichlorodifluoromethane	0.5 U	trichlorofluoromethane	0.5 U
1,1-dichloroethane	0.5 U	vinyl chloride	0.5 U
1,2-dichloroethane	0.5 U		
1,1-dichloroethene	0.5 U		

Key to the letter used to qualify the results of the analysis:

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Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237289

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 15 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-28GL,
10/07/94 at 1120 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	250 U	cis-1,2-dichloroethene	11000
bromoform	250 U	trans-1,2-dichloroethene	250 U
bromomethane	250 U	1,2-dichloropropane	250 U
carbon tetrachloride	250 U	cis-1,3-dichloropropene	250 U
chlorobenzene	250 U	trans-1,3-dichloropropene	250 U
chloroethane	250 U	Freon 113	250 U
chloroform	250 U	methylene chloride	250 U
chloromethane	250 U	1,1,2,2-tetrachloroethane	250 U
dibromochloromethane	250 U	tetrachloroethene	250 U
1,2-dichlorobenzene	250 U	1,1,1-trichloroethane	250 U
1,3-dichlorobenzene	250 U	1,1,2-trichloroethane	250 U
1,4-dichlorobenzene	250 U	trichloroethene	250 U
dichlorodifluoromethane	250 U	trichlorofluoromethane	250 U
1,1-dichloroethane	250 U	vinyl chloride	250 U
1,2-dichloroethane	250 U		
1,1-dichloroethene	250 U		

The sample was diluted 500 fold for analysis.

Key to the letter used to qualify the results of the analysis:

- U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



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Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237290

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 15 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-29GL,
10/07/94 at 1030 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	125 U	cis-1,2-dichloroethene	4700
bromoform	125 U	trans-1,2-dichloroethene	125 U
bromomethane	125 U	1,2-dichloropropane	125 U
carbon tetrachloride	125 U	cis-1,3-dichloropropene	125 U
chlorobenzene	125 U	trans-1,3-dichloropropene	125 U
chloroethane	125 U	Freon 113	125 U
chloroform	125 U	methylene chloride	125 U
chloromethane	125 U	1,1,2,2-tetrachloroethane	125 U
dibromochloromethane	125 U	tetrachloroethene	240
1,2-dichlorobenzene	125 U	1,1,1-trichloroethane	125 U
1,3-dichlorobenzene	125 U	1,1,2-trichloroethane	125 U
1,4-dichlorobenzene	125 U	trichloroethene	125 U
dichlorodifluoromethane	125 U	trichlorofluoromethane	125 U
1,1-dichloroethane	125 U	vinyl chloride	125 U
1,2-dichloroethane	125 U		
1,1-dichloroethene	125 U		

The sample was diluted 250 fold for analysis.

Key to the letter used to qualify the results of the analysis:

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Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237291

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 15 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-23MI,
10/07/94.

Volatile Organic Compounds in ug/l EPA Method 601

<u>bromodichloromethane</u>	<u>0.5 U</u>	<u>cis-1,2-dichloroethene</u>	<u>15</u>
<u>bromoform</u>	<u>0.5 U</u>	<u>trans-1,2-dichloroethene</u>	<u>0.5 U</u>
<u>bromomethane</u>	<u>0.5 U</u>	<u>1,2-dichloropropane</u>	<u>0.5 U</u>
<u>carbon tetrachloride</u>	<u>0.5 U</u>	<u>cis-1,3-dichloropropene</u>	<u>0.5 U</u>
<u>chlorobenzene</u>	<u>0.5 U</u>	<u>trans-1,3-dichloropropene</u>	<u>0.5 U</u>
<u>chloroethane</u>	<u>0.5 U</u>	<u>Freon 113</u>	<u>0.5 U</u>
<u>chloroform</u>	<u>0.5 U</u>	<u>methylene chloride</u>	<u>0.5 U</u>
<u>chloromethane</u>	<u>0.5 U</u>	<u>1,1,2,2-tetrachloroethane</u>	<u>0.5 U</u>
<u>dibromochloromethane</u>	<u>0.5 U</u>	<u>tetrachloroethene</u>	<u>0.8</u>
<u>1,2-dichlorobenzene</u>	<u>0.5 U</u>	<u>1,1,1-trichloroethane</u>	<u>0.5 U</u>
<u>1,3-dichlorobenzene</u>	<u>0.5 U</u>	<u>1,1,2-trichloroethane</u>	<u>0.5 U</u>
<u>1,4-dichlorobenzene</u>	<u>0.5 U</u>	<u>trichloroethene</u>	<u>1.1</u>
<u>dichlorodifluoromethane</u>	<u>0.5 U</u>	<u>trichlorofluoromethane</u>	<u>0.5 U</u>
<u>1,1-dichloroethane</u>	<u>0.5 U</u>	<u>vinyl chloride</u>	<u>0.5 U</u>
<u>1,2-dichloroethane</u>	<u>0.5 U</u>		
<u>1,1-dichloroethene</u>	<u>0.5 U</u>		

Key to the letter used to qualify the results of the analysis:

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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237292
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 15 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-24MI,
10/07/94 at 1415 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	5.0 U	cis-1,2-dichloroethene	140
bromoform	5.0 U	trans-1,2-dichloroethene	5.0 U
bromomethane	5.0 U	1,2-dichloropropane	5.0 U
carbon tetrachloride	5.0 U	cis-1,3-dichloropropene	5.0 U
chlorobenzene	5.0 U	trans-1,3-dichloropropene	5.0 U
chloroethane	5.0 U	Freon 113	5.0 U
chloroform	5.0 U	methylene chloride	5.0 U
chloromethane	5.0 U	1,1,2,2-tetrachloroethane	5.0 U
dibromochloromethane	5.0 U	tetrachloroethene	18
1,2-dichlorobenzene	5.0 U	1,1,1-trichloroethane	5.0 U
1,3-dichlorobenzene	5.0 U	1,1,2-trichloroethane	5.0 U
1,4-dichlorobenzene	5.0 U	trichloroethene	34
dichlorodifluoromethane	5.0 U	trichlorofluoromethane	5.0 U
1,1-dichloroethane	5.0 U	vinyl chloride	5.0 U
1,2-dichloroethane	5.0 U		
1,1-dichloroethene	5.0 U		

The sample was diluted 10 fold for analysis.

Key to the letter used to qualify the results of the analysis:

U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237293
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 15 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-25MI,
10/07/94 at 1745 hours.

Volatile Organic Compounds in ug/l EPA Method 601

<u>bromodichloromethane</u>	75 U	<u>cis-1,2-dichloroethene</u>	3300
<u>bromoform</u>	75 U	<u>trans-1,2-dichloroethene</u>	75 U
<u>bromomethane</u>	75 U	<u>1,2-dichloropropane</u>	75 U
<u>carbon tetrachloride</u>	75 U	<u>cis-1,3-dichloropropene</u>	75 U
<u>chlorobenzene</u>	75 U	<u>trans-1,3-dichloropropene</u>	75 U
<u>chloroethane</u>	75 U	<u>Freon 113</u>	75 U
<u>chloroform</u>	75 U	<u>methylene chloride</u>	75 U
<u>chloromethane</u>	75 U	<u>1,1,2,2-tetrachloroethane</u>	75 U
<u>dibromochloromethane</u>	75 U	<u>tetrachloroethene</u>	320
<u>1,2-dichlorobenzene</u>	75 U	<u>1,1,1-trichloroethane</u>	75 U
<u>1,3-dichlorobenzene</u>	75 U	<u>1,1,2-trichloroethane</u>	75 U
<u>1,4-dichlorobenzene</u>	75 U	<u>trichloroethene</u>	75 U
<u>dichlorodifluoromethane</u>	75 U	<u>trichlorofluoromethane</u>	75 U
<u>1,1-dichloroethane</u>	75 U	<u>vinyl chloride</u>	75 U
<u>1,2-dichloroethane</u>	75 U		
<u>1,1-dichloroethene</u>	75 U		

The sample was diluted 150 fold for analysis.

Key to the letter used to qualify the results of the analysis:

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Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237294
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 17 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-26MI,
10/07/94 at 1215 hours.

Volatile Organic Compounds in ug/l EPA Method 601

<u>bromodichloromethane</u>	<u>2.5 U</u>	<u>cis-1,2-dichloroethene</u>	<u>134</u>
<u>bromoform</u>	<u>2.5 U</u>	<u>trans-1,2-dichloroethene</u>	<u>2.5 U</u>
<u>bromomethane</u>	<u>2.5 U</u>	<u>1,2-dichloropropane</u>	<u>2.5 U</u>
<u>carbon tetrachloride</u>	<u>2.5 U</u>	<u>cis-1,3-dichloropropene</u>	<u>2.5 U</u>
<u>chlorobenzene</u>	<u>2.5 U</u>	<u>trans-1,3-dichloropropene</u>	<u>2.5 U</u>
<u>chloroethane</u>	<u>2.5 U</u>	<u>Freon 113</u>	<u>8.7</u>
<u>chloroform</u>	<u>2.5 U</u>	<u>methylene chloride</u>	<u>2.5 U</u>
<u>chloromethane</u>	<u>2.5 U</u>	<u>1,1,2,2-tetrachloroethane</u>	<u>2.5 U</u>
<u>dibromochloromethane</u>	<u>2.5 U</u>	<u>tetrachloroethene</u>	<u>24</u>
<u>1,2-dichlorobenzene</u>	<u>2.5 U</u>	<u>1,1,1-trichloroethane</u>	<u>2.5 U</u>
<u>1,3-dichlorobenzene</u>	<u>2.5 U</u>	<u>1,1,2-trichloroethane</u>	<u>2.5 U</u>
<u>1,4-dichlorobenzene</u>	<u>2.5 U</u>	<u>trichloroethene</u>	<u>16</u>
<u>dichlorodifluoromethane</u>	<u>2.5 U</u>	<u>trichlorofluoromethane</u>	<u>2.5 U</u>
<u>1,1-dichloroethane</u>	<u>2.5 U</u>	<u>vinyl chloride</u>	<u>2.5 U</u>
<u>1,2-dichloroethane</u>	<u>2.5 U</u>		
<u>1,1-dichloroethene</u>	<u>2.5 U</u>		

The sample was diluted 5 fold for analysis.

Key to the letter used to qualify the results of the analysis:

U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



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Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237297

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 17 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-29MI,
10/07/94 at 1040 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	5.0 U	cis-1,2-dichloroethene	260
bromoform	5.0 U	trans-1,2-dichloroethene	5.0 U
bromomethane	5.0 U	1,2-dichloropropane	5.0 U
carbon tetrachloride	5.0 U	cis-1,3-dichloropropene	5.0 U
chlorobenzene	5.0 U	trans-1,3-dichloropropene	5.0 U
chloroethane	5.0 U	Freon 113	17
chloroform	5.0 U	methylene chloride	5.0 U
chloromethane	5.0 U	1,1,2,2-tetrachloroethane	5.0 U
dibromochloromethane	5.0 U	tetrachloroethene	25
1,2-dichlorobenzene	5.0 U	1,1,1-trichloroethane	5.0 U
1,3-dichlorobenzene	5.0 U	1,1,2-trichloroethane	5.0 U
1,4-dichlorobenzene	5.0 U	trichloroethene	42
dichlorodifluoromethane	5.0 U	trichlorofluoromethane	5.0 U
1,1-dichloroethane	5.0 U	vinyl chloride	5.0 U
1,2-dichloroethane	5.0 U		
1,1-dichloroethene	5.0 U		

The sample was diluted 10 fold for analysis.

Key to the letter used to qualify the results of the analysis:

- U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.

IEA
An Aquatic Company
168 Rangeway Road
N. Billerica, Massachusetts 01862
817/272-5212
Fax 508/567-7871
1-800-450-5212

CHAIN OF CUSTODY RECORD

REGULATOR ☐ EDUCATION ☐ RELEASE ☐ FISH

☐ INDICES ☐ DRINKING WATER ☐ RCRA ☐ OTHER

REQUIRED

TURN/ROUND

☐ 15 BUSINESS DAY
☐ 10 BUSINESS DAY
☐ RUSH
☐ OTHER

UNIVERS CORP.		CONTACT PERSON: F. Tardos		PROJECT ID: 60618-280		PHONE: 60618-280		FAX: 60618-280	
70 E. Swedesford Rd.		ADDRESS		CITY: PA		STATE: PA		ZIP: 19301	
DATE	TIME	SAMPLE ID	MATRIX	CONTAINER TYPE	# OF CONTAINERS	COMMENTS			
10/1/94		MW-23MT	Water	40L	3	VOCs			
		MW-23GL							
		14115 MW-24MT							
		14120 MW-24GL							
		17145 MW-25MT							
		17145 MW-25GL							
		12145 MW-26MT							
		11147 MW-26GL							
		16100 MW-27MT							
		16145 MW-27GL							
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY		DATE/TIME		IEA USE ONLY	
[Signature]		10/7/94 1930							
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED FOR LAB BY		DATE/TIME		FIELD REMARKS	
[Signature]				[Signature]		10/8/94 1100			

for MW-26GL Cochran's time listed as 1147 1 vial has 1147 two have 1145.

1642

per Brian McGraw - 5/94 upon didn't think he sent it 5/23/94



Inchcape Testing Services

Aquatec Laboratories

Laboratory Locations

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

150 Herman Melville Boulevard
New Bedford, MA 02740

Analytical Report

Date: 28 October 1994

Aquatec Lab No.: 237295

ETR No.: 47218; Project No.: 94200

Sample Received On: 08 October 1994; Analyzed On: 17 October 1994

Sample Identification: Unisys Corporation, water sample labeled MW-27MI,
10/07/94 at 1600 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	1.5 U	cis-1,2-dichloroethene	54
bromoform	1.5 U	trans-1,2-dichloroethene	1.5 U
bromomethane	1.5 U	1,2-dichloropropane	1.5 U
carbon tetrachloride	1.5 U	cis-1,3-dichloropropene	1.5 U
chlorobenzene	1.5 U	trans-1,3-dichloropropene	1.5 U
chloroethane	1.5 U	Freon 113	4.1
chloroform	1.5 U	methylene chloride	1.5 U
chloromethane	1.5 U	1,1,2,2-tetrachloroethane	1.5 U
dibromochloromethane	1.5 U	tetrachloroethene	22
1,2-dichlorobenzene	1.5 U	1,1,1-trichloroethane	1.5 U
1,3-dichlorobenzene	1.5 U	1,1,2-trichloroethane	1.5 U
1,4-dichlorobenzene	1.5 U	trichloroethene	16
dichlorodifluoromethane	1.5 U	trichlorofluoromethane	1.5 U
1,1-dichloroethane	1.5 U	vinyl chloride	1.5 U
1,2-dichloroethane	1.5 U		
1,1-dichloroethene	1.5 U		

The sample was diluted 3 fold for analysis.

Key to the letter used to qualify the results of the analysis:

U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.



Inchcape Testing Services

Aquatec Laboratories

Laboratory Locations
55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

150 Herman Melville Boulevard
New Bedford, MA 02740

Analytical Report

Date: 28 October 1994
Aquatec Lab No.: 237296
ETR No.: 47218; Project No.: 94200
Sample Received On: 08 October 1994; Analyzed On: 17 October 1994
Sample Identification: Unisys Corporation, water sample labeled MW-28MI,
10/07/94 at 1110 hours.

Volatile Organic Compounds in ug/l EPA Method 601

bromodichloromethane	50 U	cis-1,2-dichloroethene	3100
bromoform	50 U	trans-1,2-dichloroethene	50 U
bromomethane	50 U	1,2-dichloropropane	50 U
carbon tetrachloride	50 U	cis-1,3-dichloropropene	50 U
chlorobenzene	50 U	trans-1,3-dichloropropene	50 U
chloroethane	50 U	Freon 113	77
chloroform	50 U	methylene chloride	50 U
chloromethane	50 U	1,1,2,2-tetrachloroethane	50 U
dibromochloromethane	50 U	tetrachloroethene	68
1,2-dichlorobenzene	50 U	1,1,1-trichloroethane	50 U
1,3-dichlorobenzene	50 U	1,1,2-trichloroethane	50 U
1,4-dichlorobenzene	50 U	trichloroethene	50 U
dichlorodifluoromethane	50 U	trichlorofluoromethane	50 U
1,1-dichloroethane	50 U	vinyl chloride	50 U
1,2-dichloroethane	50 U		
1,1-dichloroethene	50 U		

The sample was diluted 100 fold for analysis.

Key to the letter used to qualify the results of the analysis:

U - The compound was analyzed for but not detected at or above the reporting limit. The number is the method specified reporting limit for the compound.

CHAIN OF CUSTODY RECORD

REGULATOR CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☐ OTHER

REQUIRED

GUST
B.O.

TURN-ROUND

☐ 15 BUSINESS DAY
☐ 10 BUSINESS DAY
☐ RUSH
☐ OTHER

COMPANY: **Unisys Corp.** CONTACT PERSON: **F. Fiedler**

ADDRESS: **20 E. Sweden Rd. Del.** PROJECT ID: **6068-200** REQUESTED: **6068-200**

CITY: **Del.** STATE: **DE** ZIP: **19301**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

DATE: **10/10/94** TIME: **11:10** SAMPLE ID: **MW-23 MLE**

DATE: **11/20** TIME: **11:20** SAMPLE ID: **MW-23 GIL**

DATE: **10/140** TIME: **10:40** SAMPLE ID: **MW-29 MLE**

DATE: **10:30** TIME: **10:30** SAMPLE ID: **MW-29 GIL**

IEA USE ONLY

FIELD MARKS

RELINQUISHED BY (SIGNATURE): **Paul Macdon** DATE/TIME: **10/17/94 18:30**

RECEIVED FOR LAB BY: **aspin** DATE/TIME: **10/19/94 1100**

RELINQUISHED BY (SIGNATURE): **aspin** DATE/TIME: **10/19/94 1100**

RECEIVED FOR LAB BY: **aspin** DATE/TIME: **10/19/94 1100**

RELINQUISHED BY (SIGNATURE): **aspin** DATE/TIME: **10/19/94 1100**

RECEIVED FOR LAB BY: **aspin** DATE/TIME: **10/19/94 1100**

APPENDIX G

PUMP TEST HYDROGRAPHS

Pump Test Log

<u>Date</u>	<u>Time</u>	<u>Comment</u>
9/12 & 9/13	Setup	
9/14	7:30	Well EW3 was shut off
	8:30	All Wells were checked & are recording fine.
	3:45	Start EW2 @ 500 gpm
	5:30	Holding @ 475 10 gpm
9/15	10:05	Boost Well EW2 to 1,000 gpm. Note: opened valves @diffusion shock
	10:20	Change bag filters
	12:30	Done w/ change of filters on GAC system to
	12:45	Steady @ 985 10 gpm
9/16	10:05	Well EW2 was shut off
	11:20	All wells were checked & running fine
	13:25	EW3 on line
	14:30	60-64 lbs @ tank; 500 gpm @ diffusion
	14:45	Change bag filter
	16:00	Finish change & holding @ 500 gpm
9/19	8:00	Change bag filters
	10:31	Boost to 1,000 gpm EW3
9/20	10:30	Shutoff EW3 @ 975 gpm
	02:30	Start RWI @ 450 gpm
9/21	9:00	RWI @ 460 gpm
	14:30	Shutoff RWI @ 460 gpm
9/22	7:30	Move SE-2000 (23 & 24); Move Aquistar #1 (7) Start EW1 - 8GU bad transducer

Pump Test Log (continued)

9/22

8:22 disconnected & pull 8GL, 8GU, 8MU (Aquistar #1)

8:40 disconnected & pull 27MI, 27GL, 26MI, 26GL
(SE2000)

Ch1 26GL

2 26MI (missing tip to transducer)

3 27GL

4 27MI

SE2000 23GL,MI & 24GL,MI

Aquistar 1 7ML, 7GL

12:31 Done moving loggers

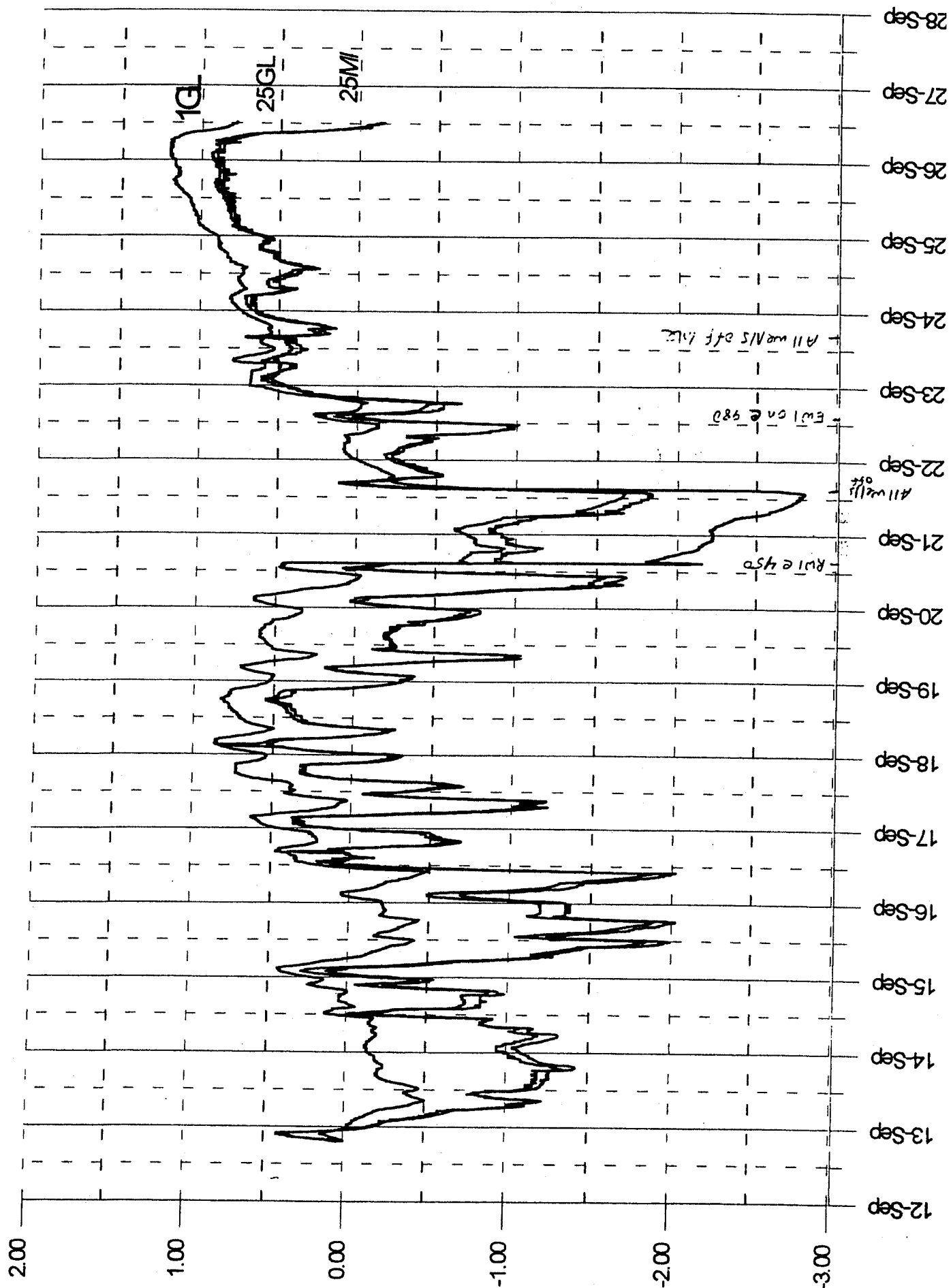
EW1 start @ 2:53 @ 980

9/23

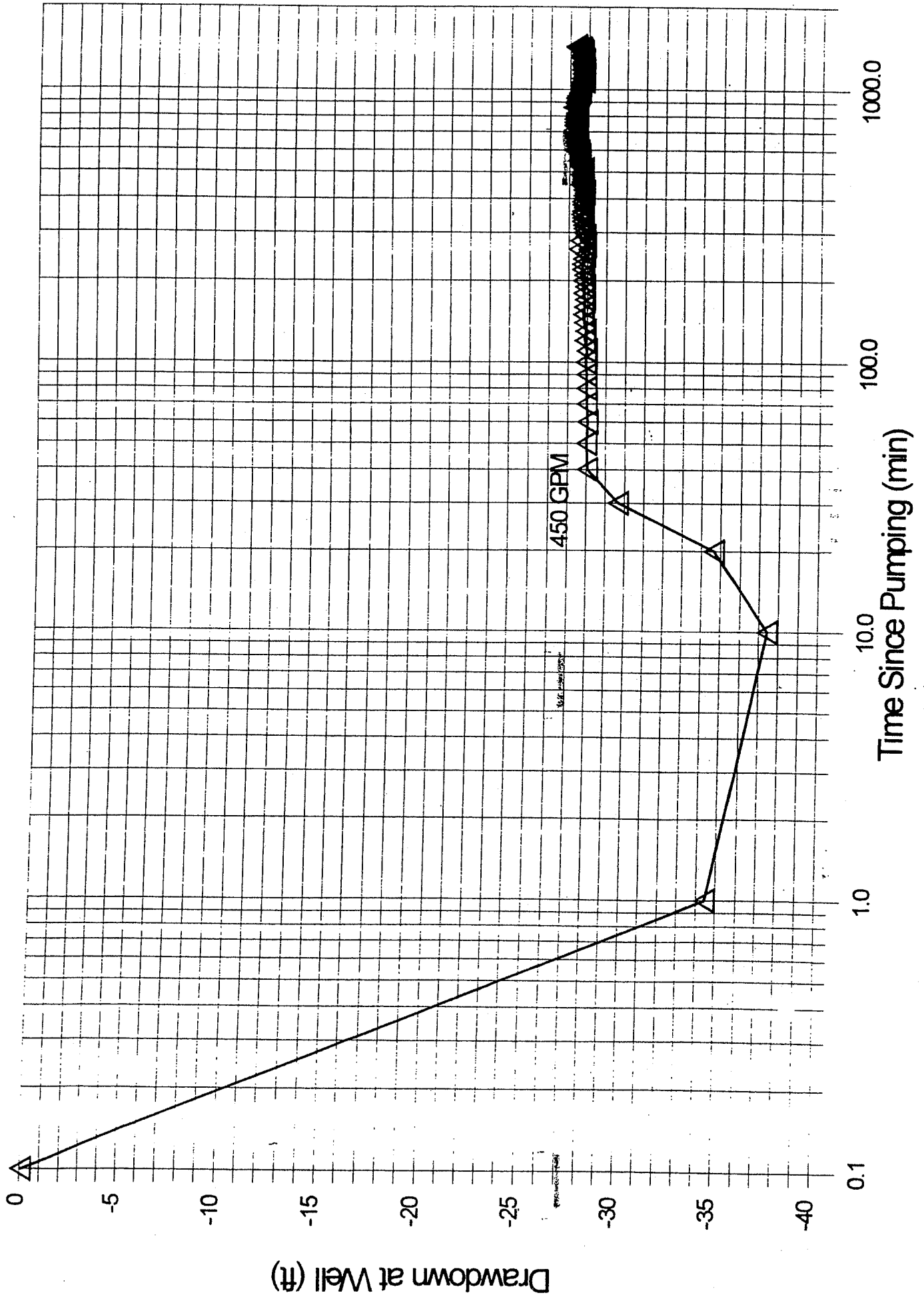
EW1 Shut Down @ 2:55 @ 960

15:00 EW3

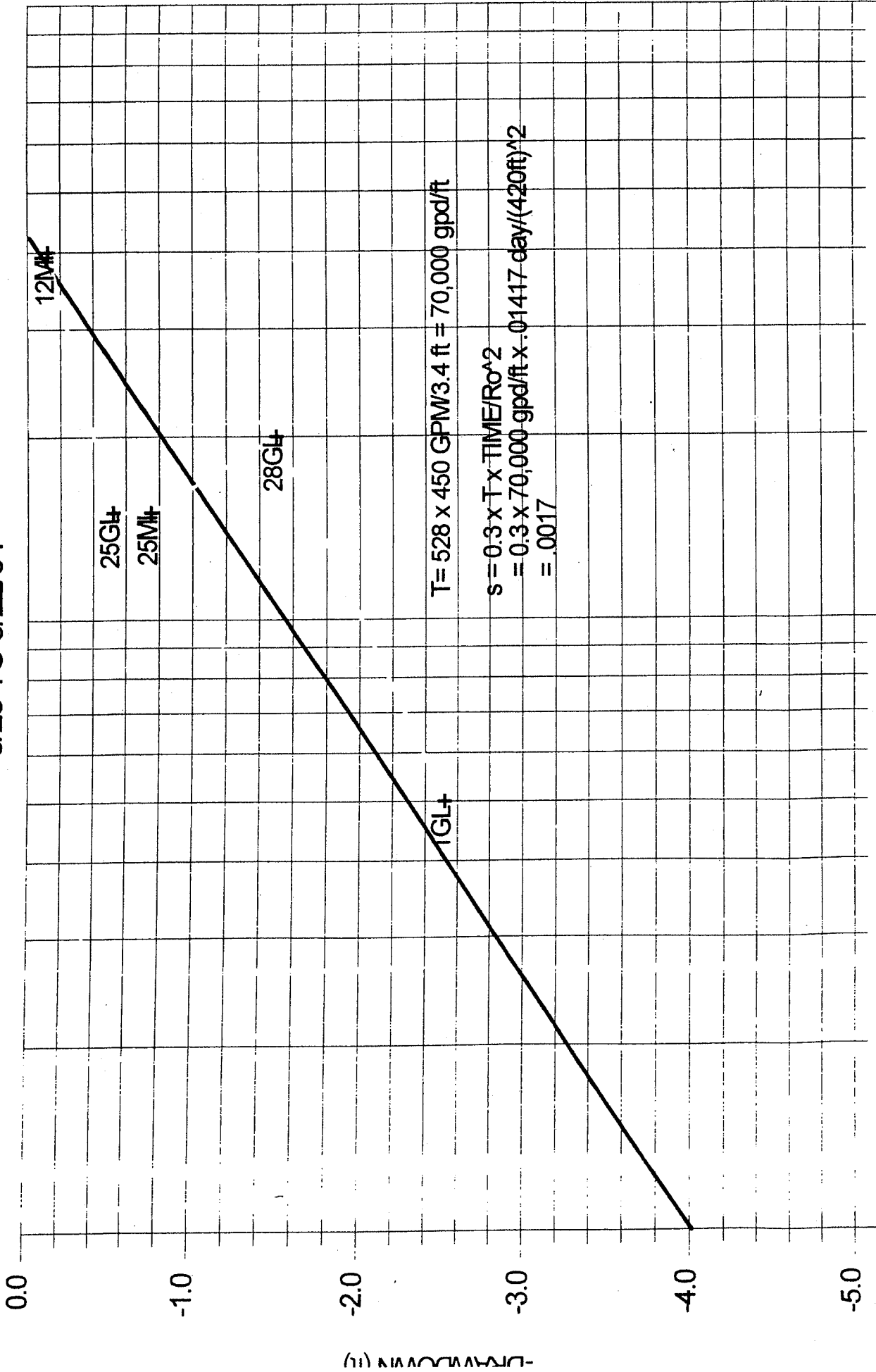
RW1 PUMP TEST DATA



DRAWDOWN AT RW1
450 GPM
9/20/94 to 9/22/94



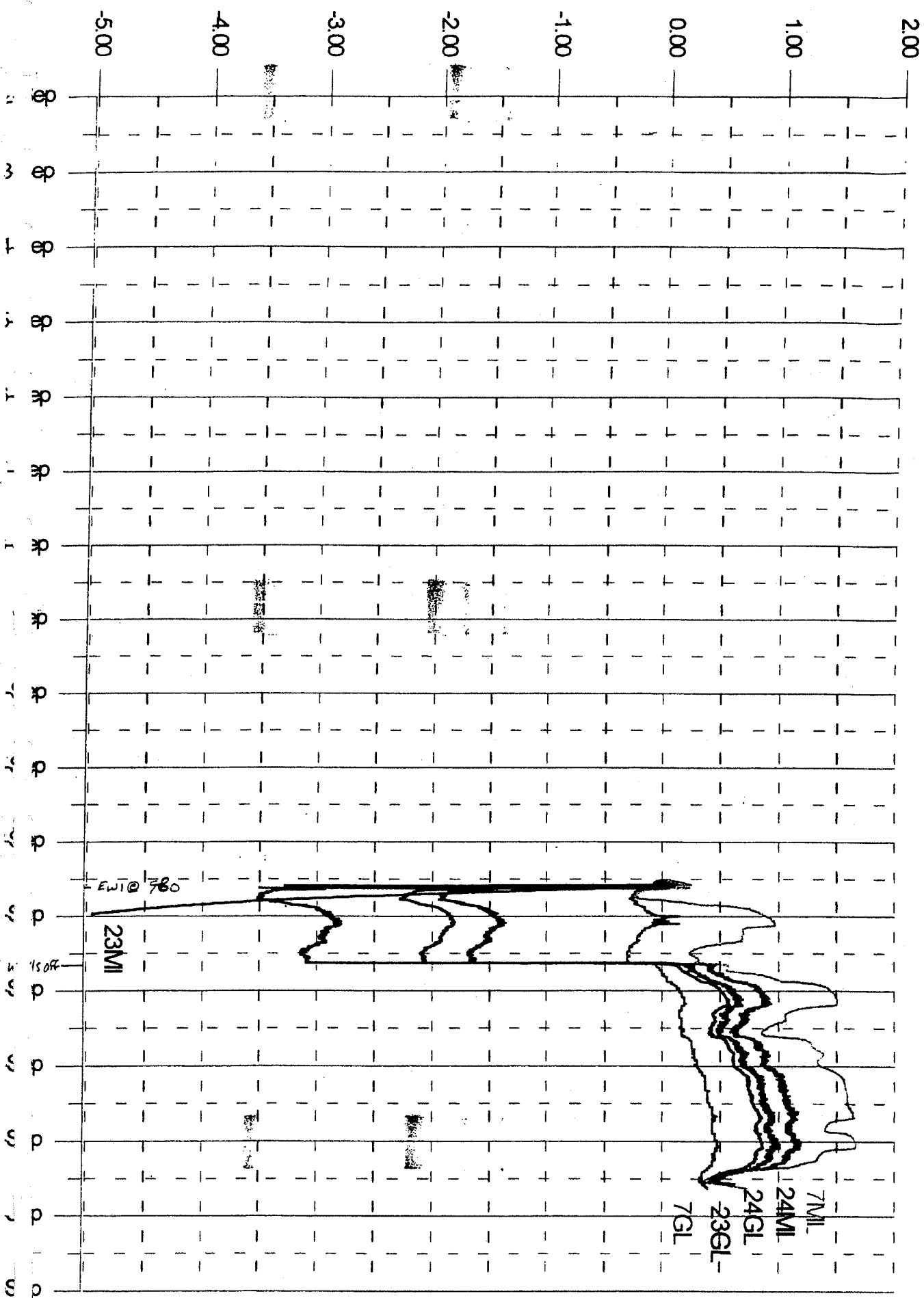
RW1 DISTANCE DRAWDOWN PLOT 450 GPM 9/20 TO 9/22/94



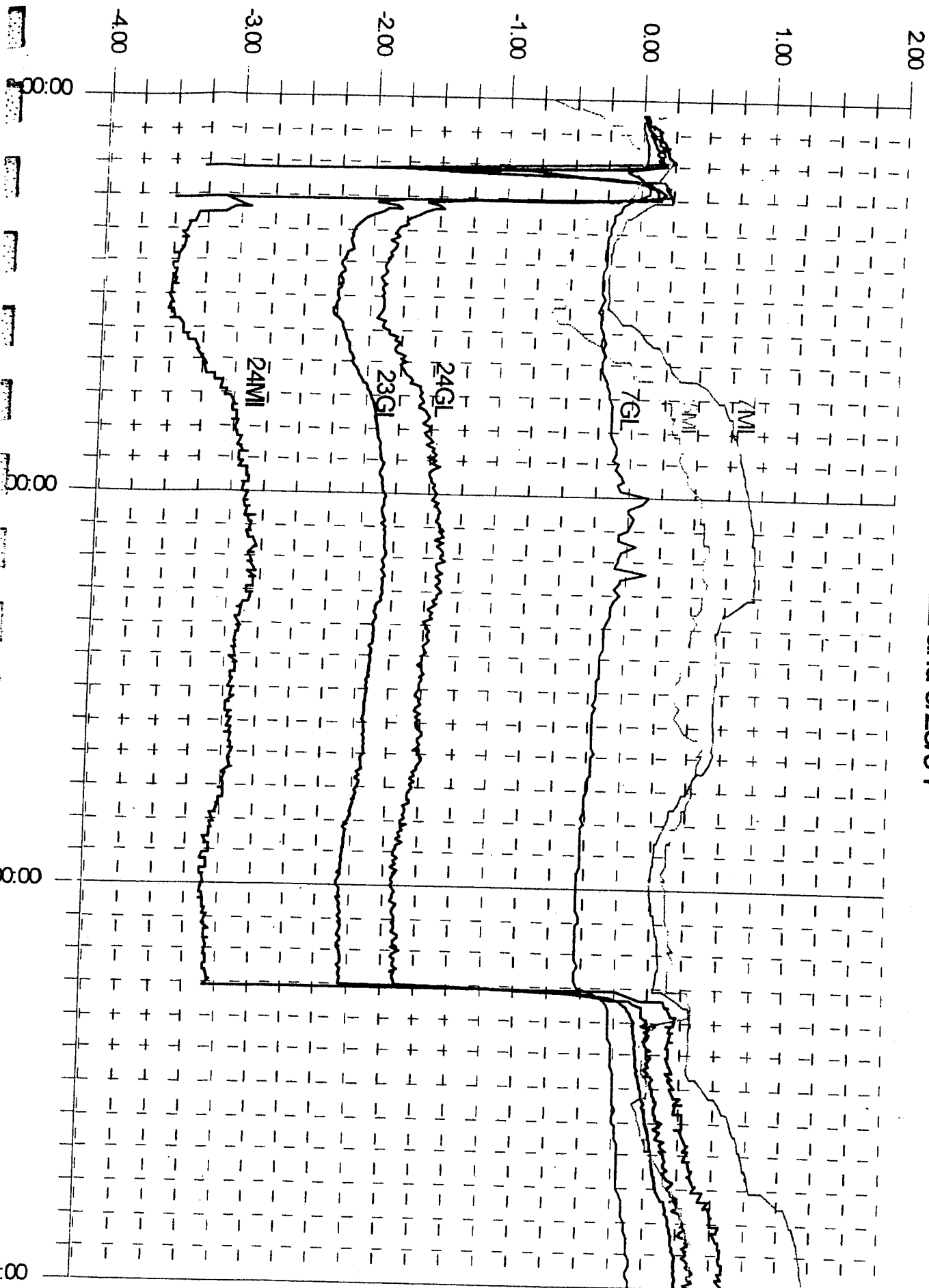
10 100 1000

DISTANCE (ft) PUMPING WELL (ft)

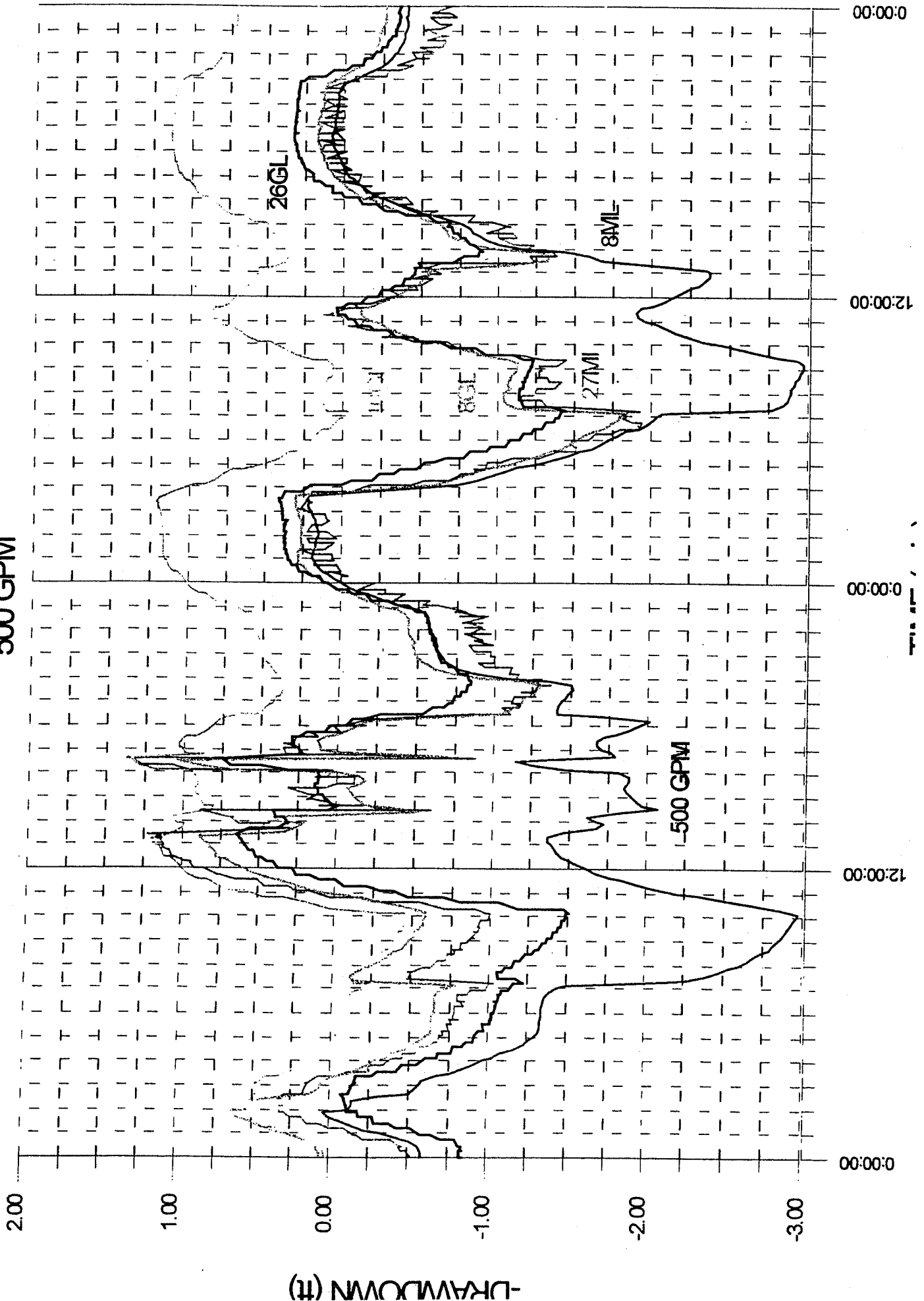
EW1 PUMP TEST DATA



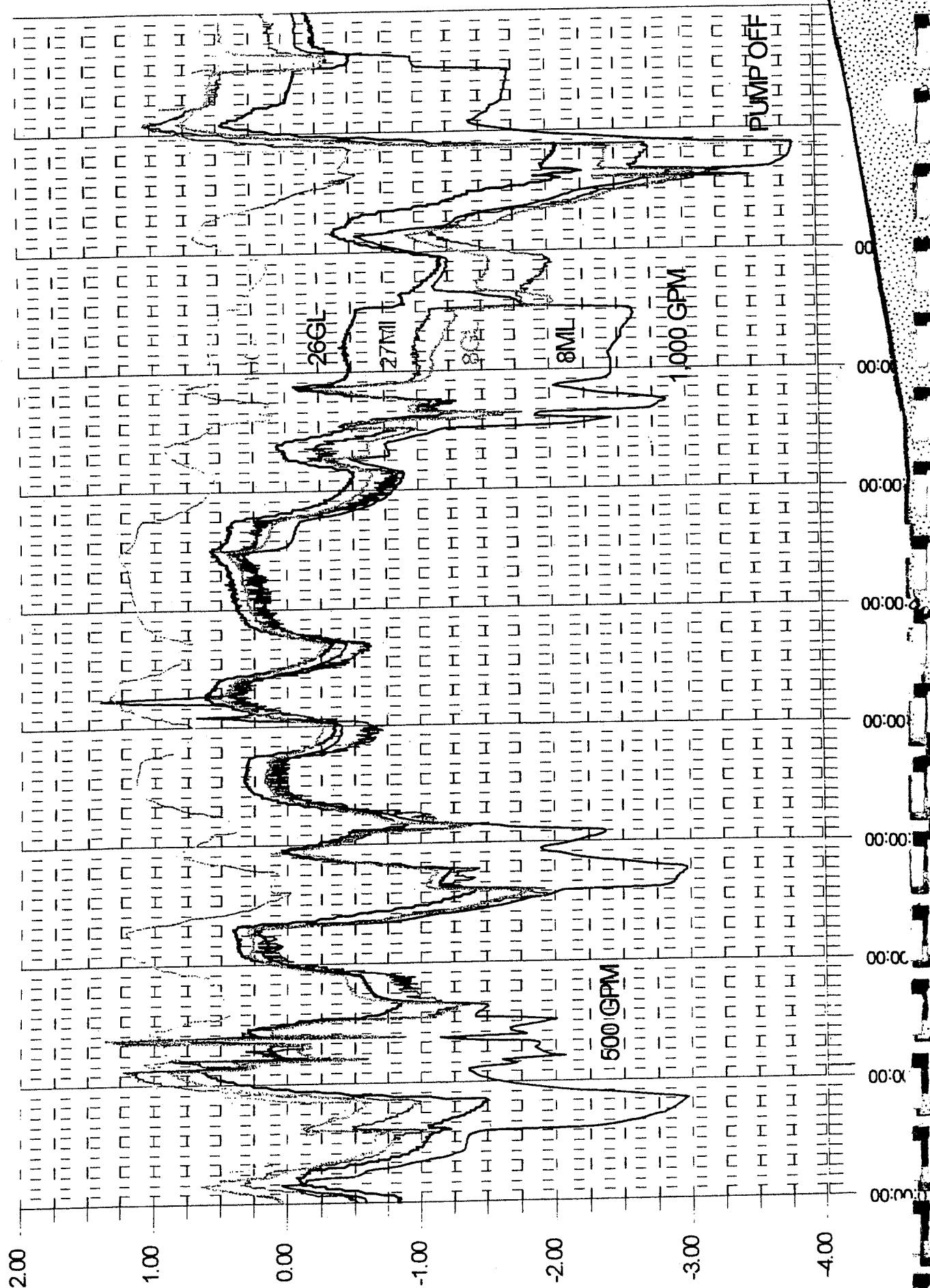
EW1 PUMP TEST DATA
980 GPM
9/22 and 9/23/94



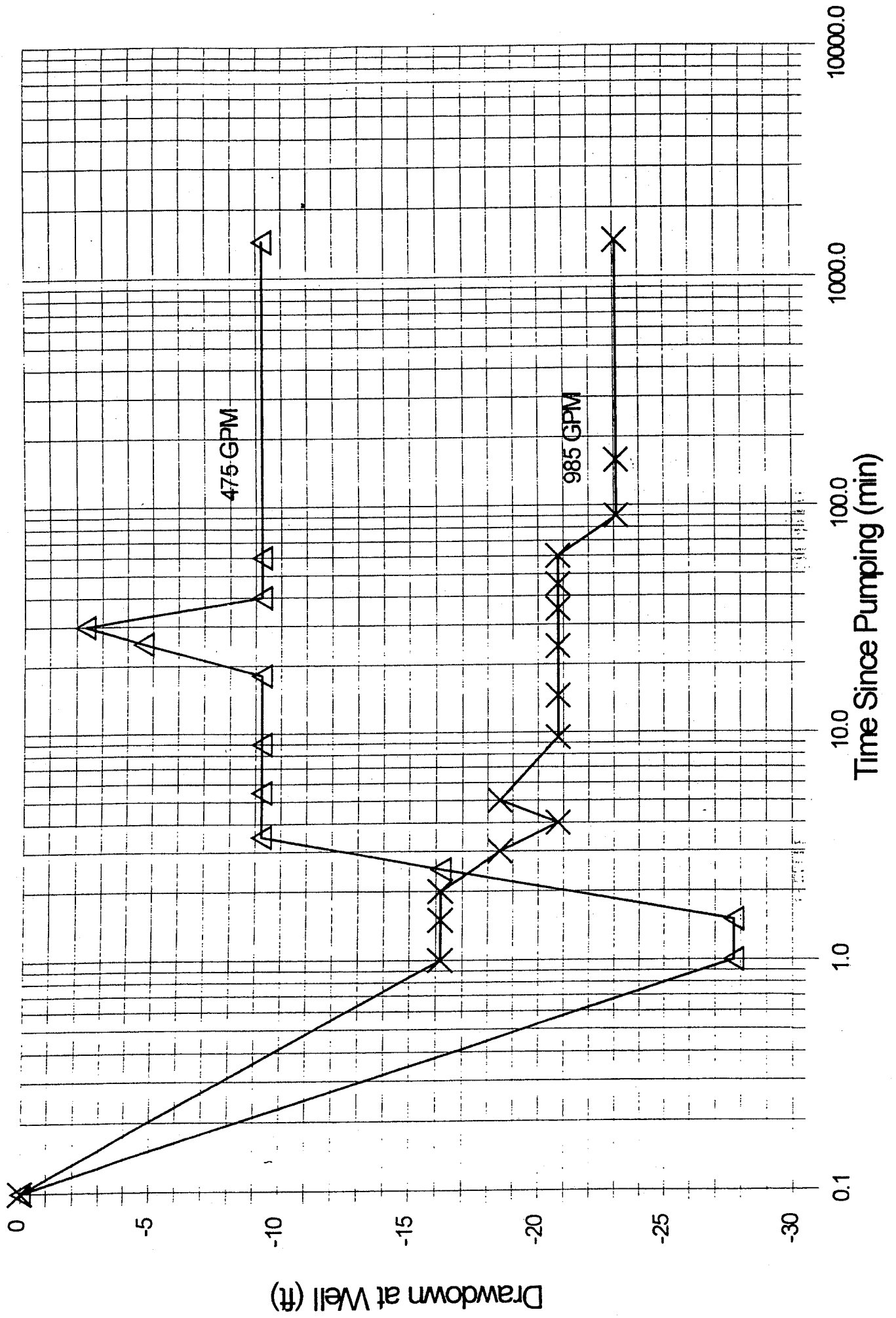
EV3 PUMP TEST DATA
9/16 to 9/18/94
500 GPM



9/16 to 9/21/94



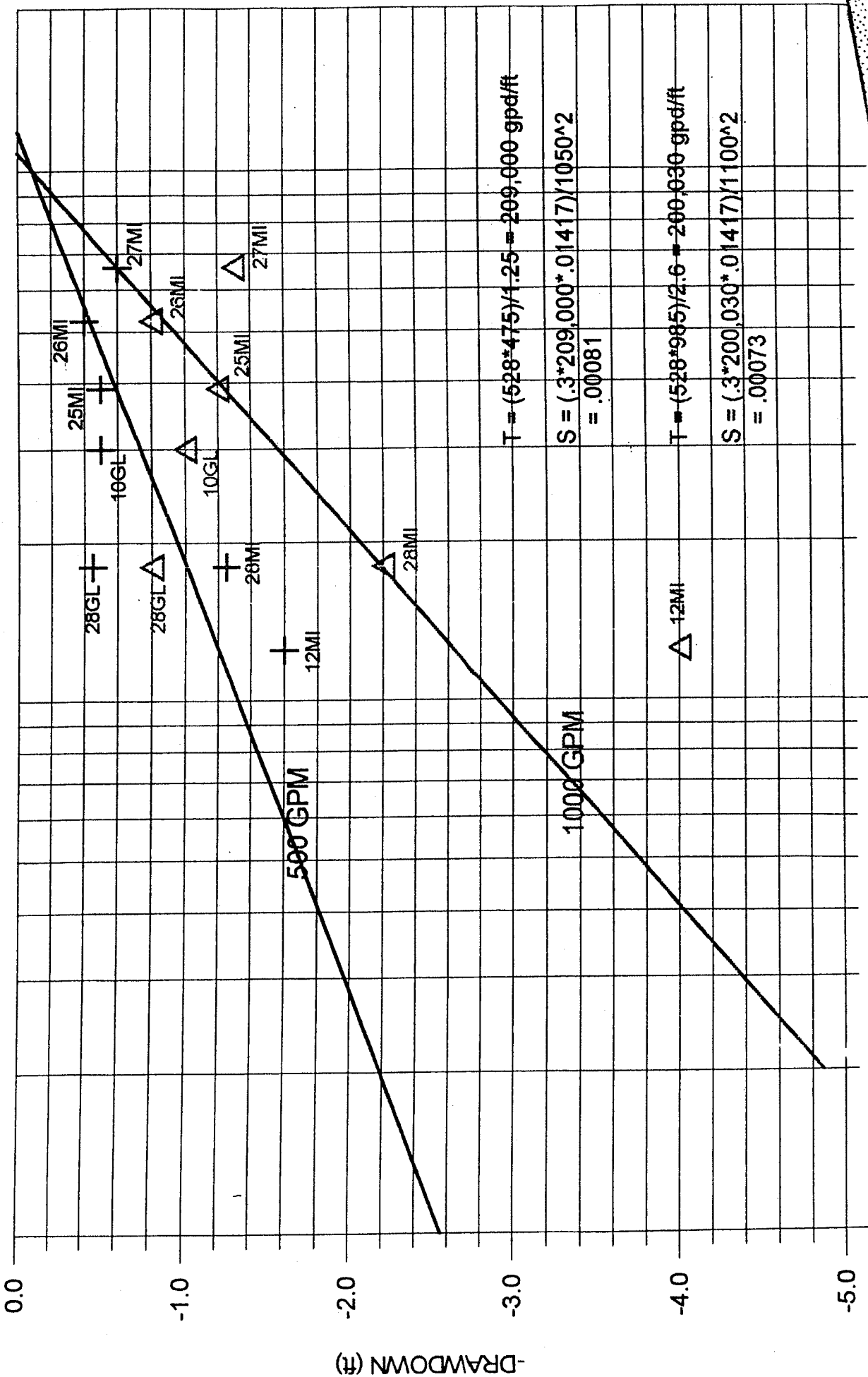
DRAWDOWN AT EW2
475 & 985 GPM
9/14/94 to 9/16/94



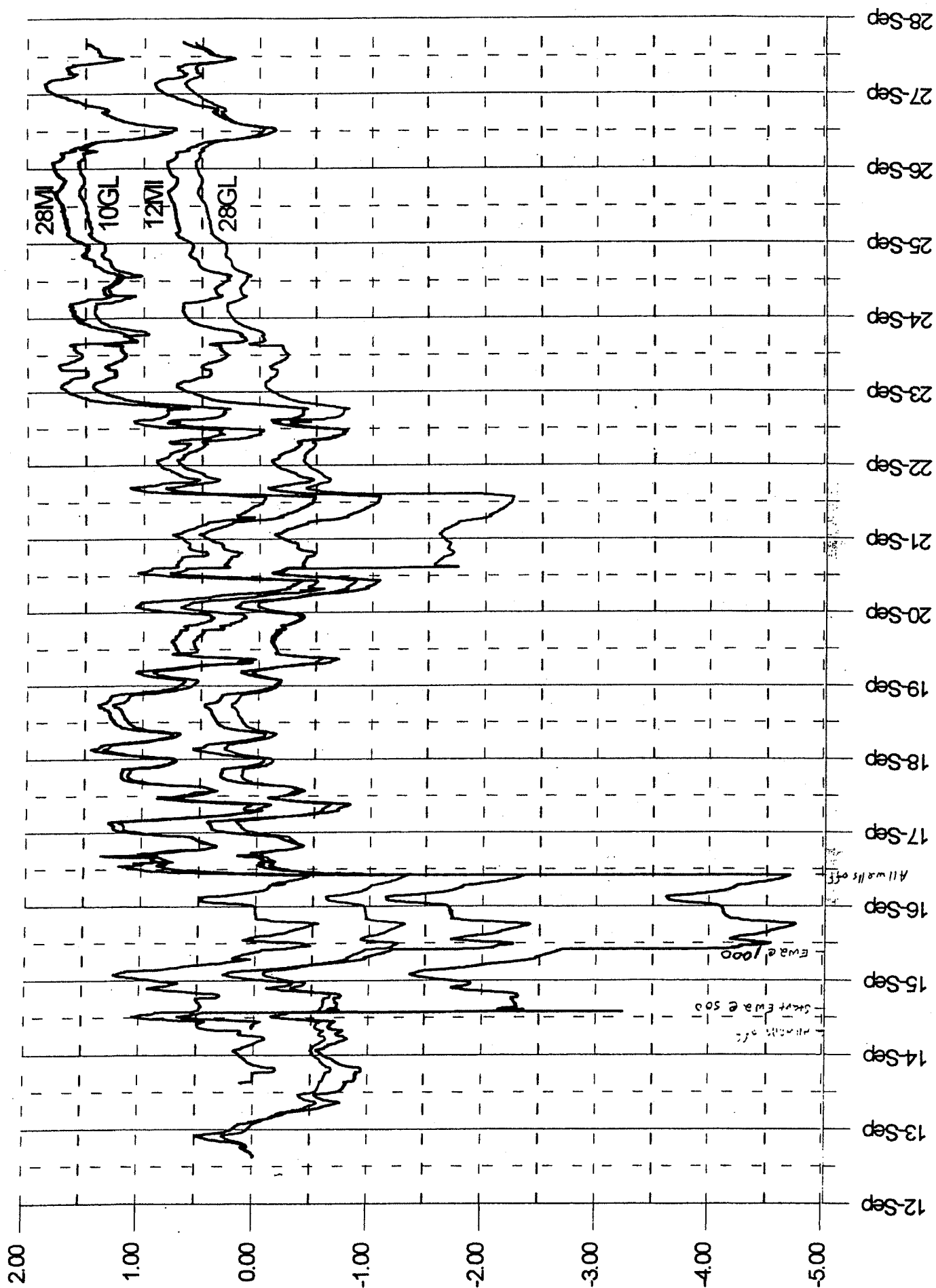
EW2 DISTANCE DRAWDOWN PLOT

475 & 985 GPM

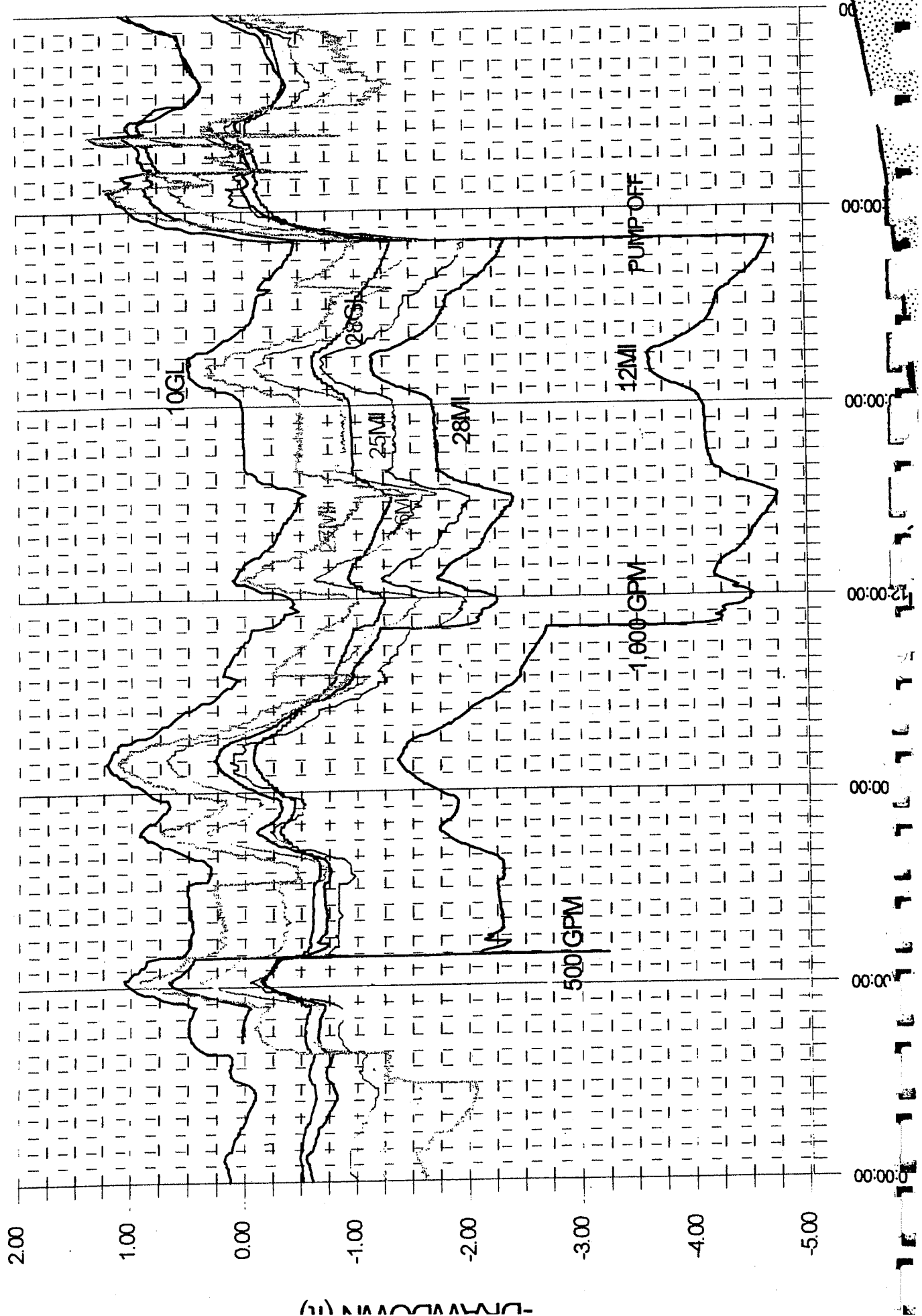
9/14 TO 9/16/94



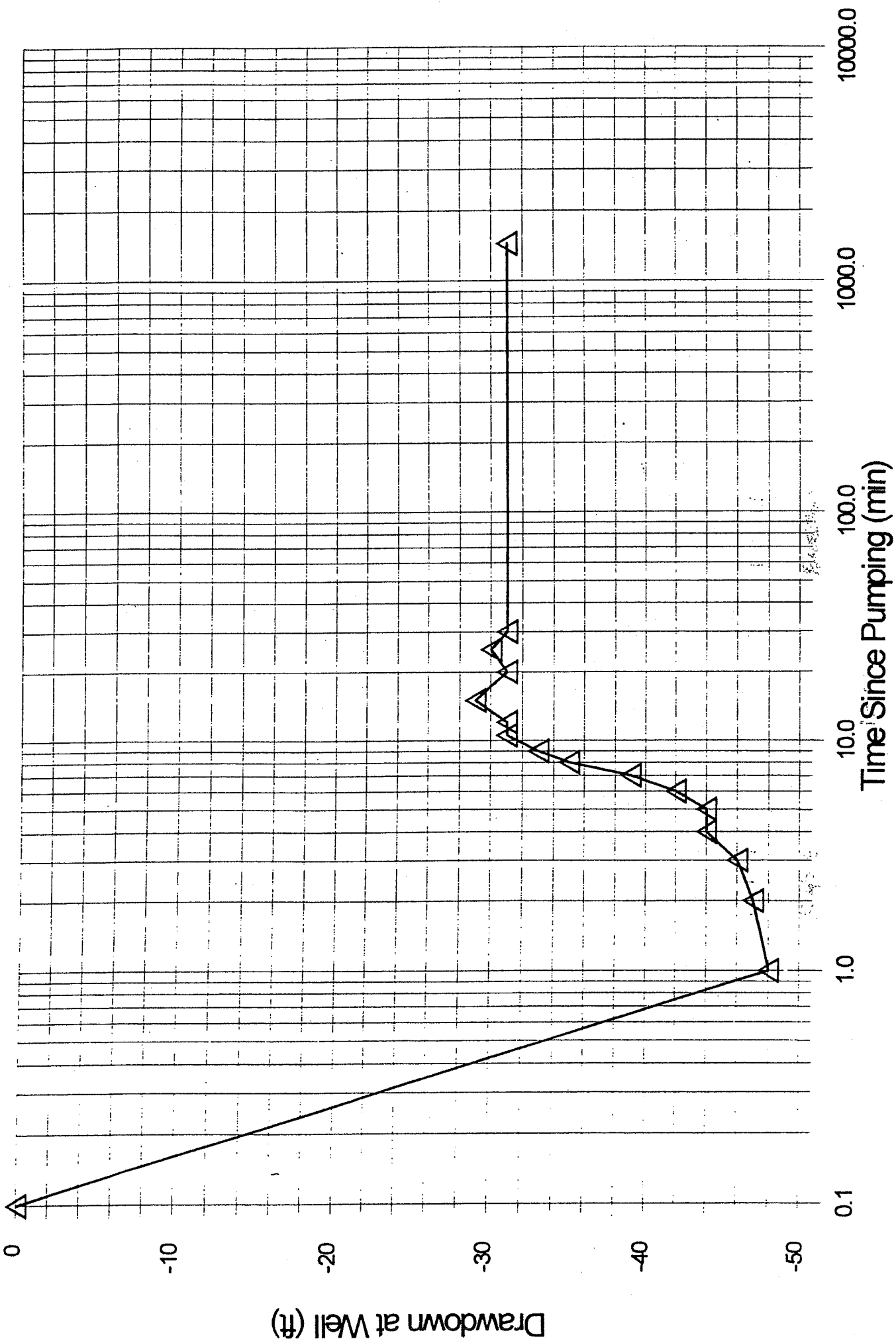
EW2 PUMP TEST DATA



EW2 PUMP TEST DATA 9/14 to 9/16/94



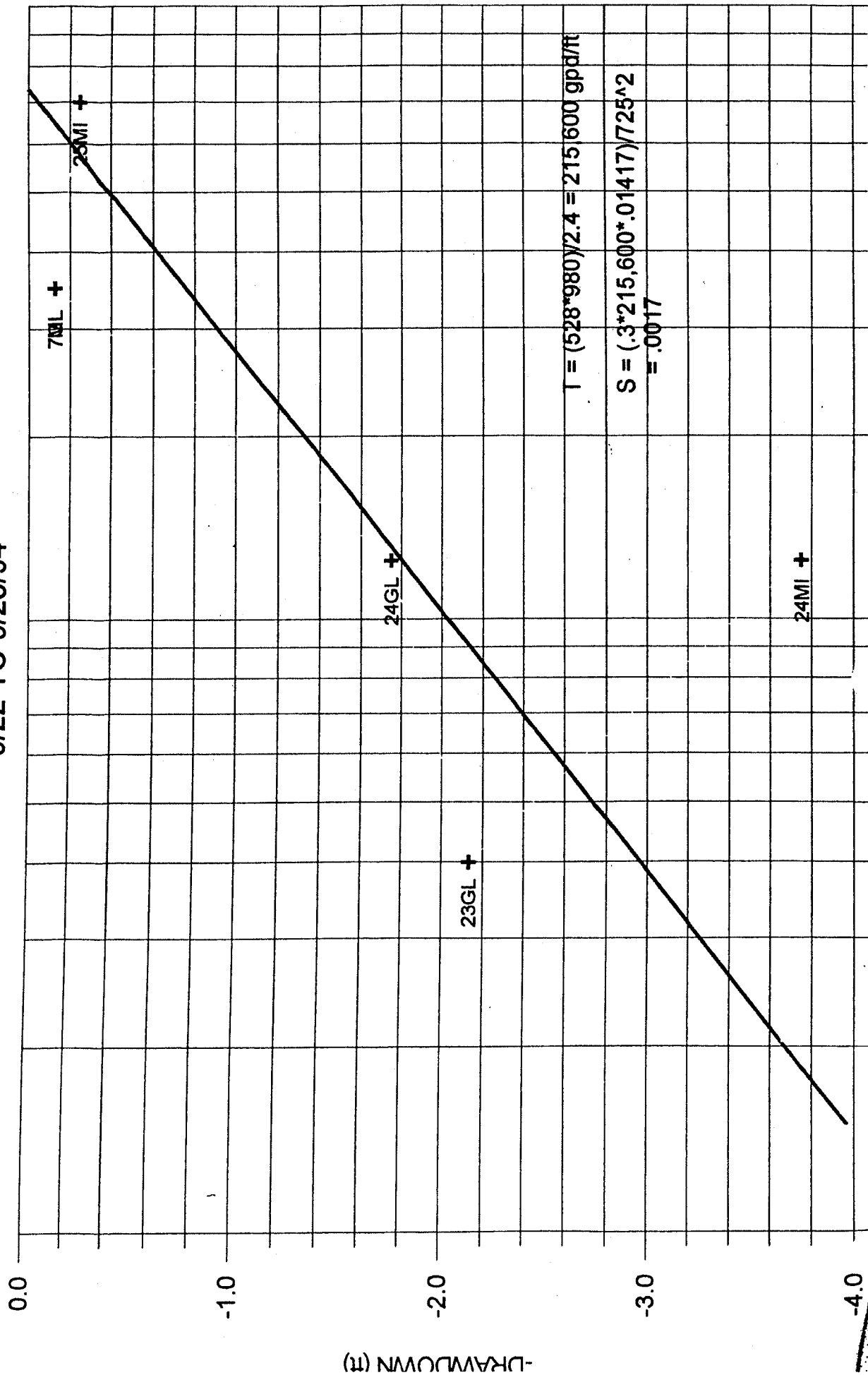
Drawdown at EW1
980 GPM
9/22/94



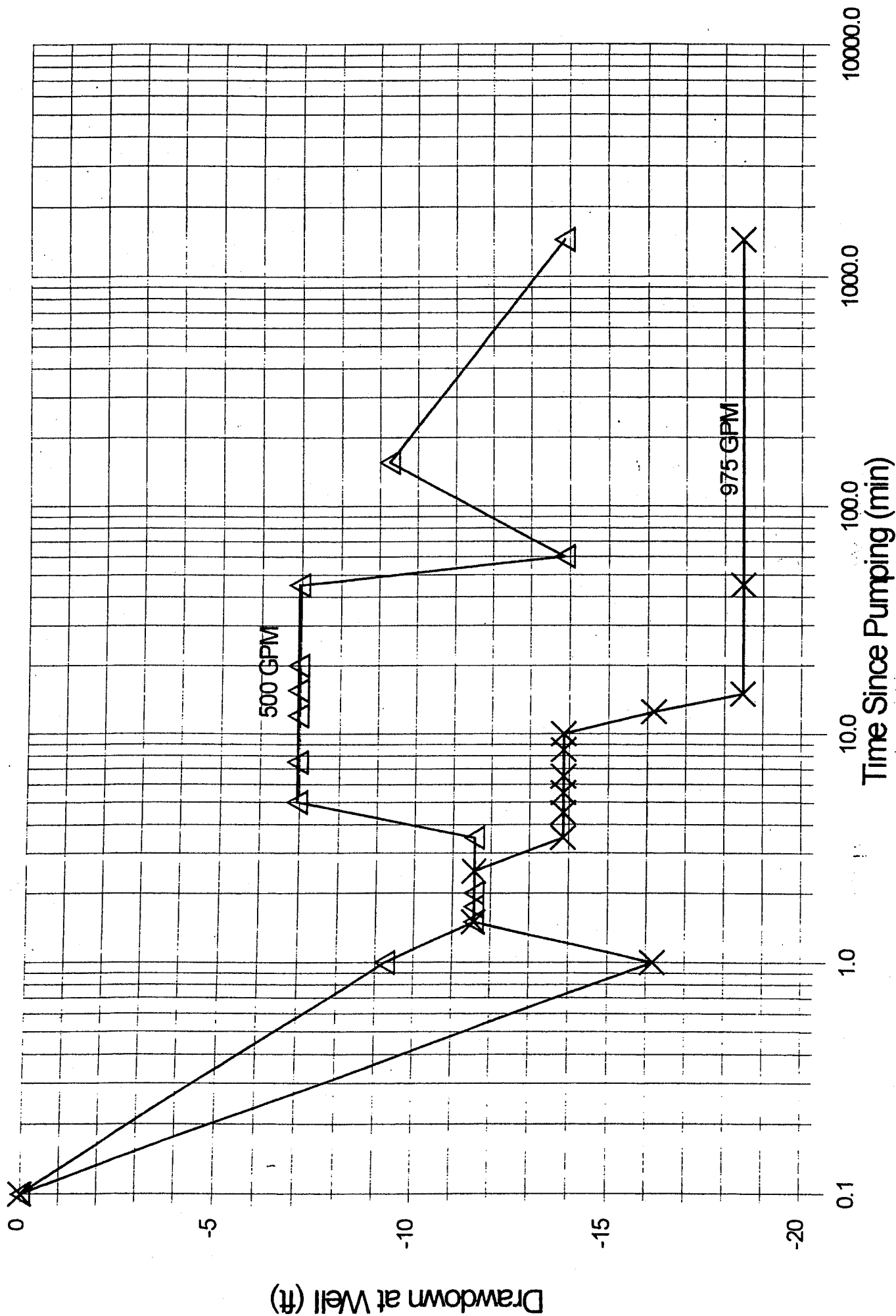
EW1 DISTANCE DRAWDOWN PLOT

980 GPM

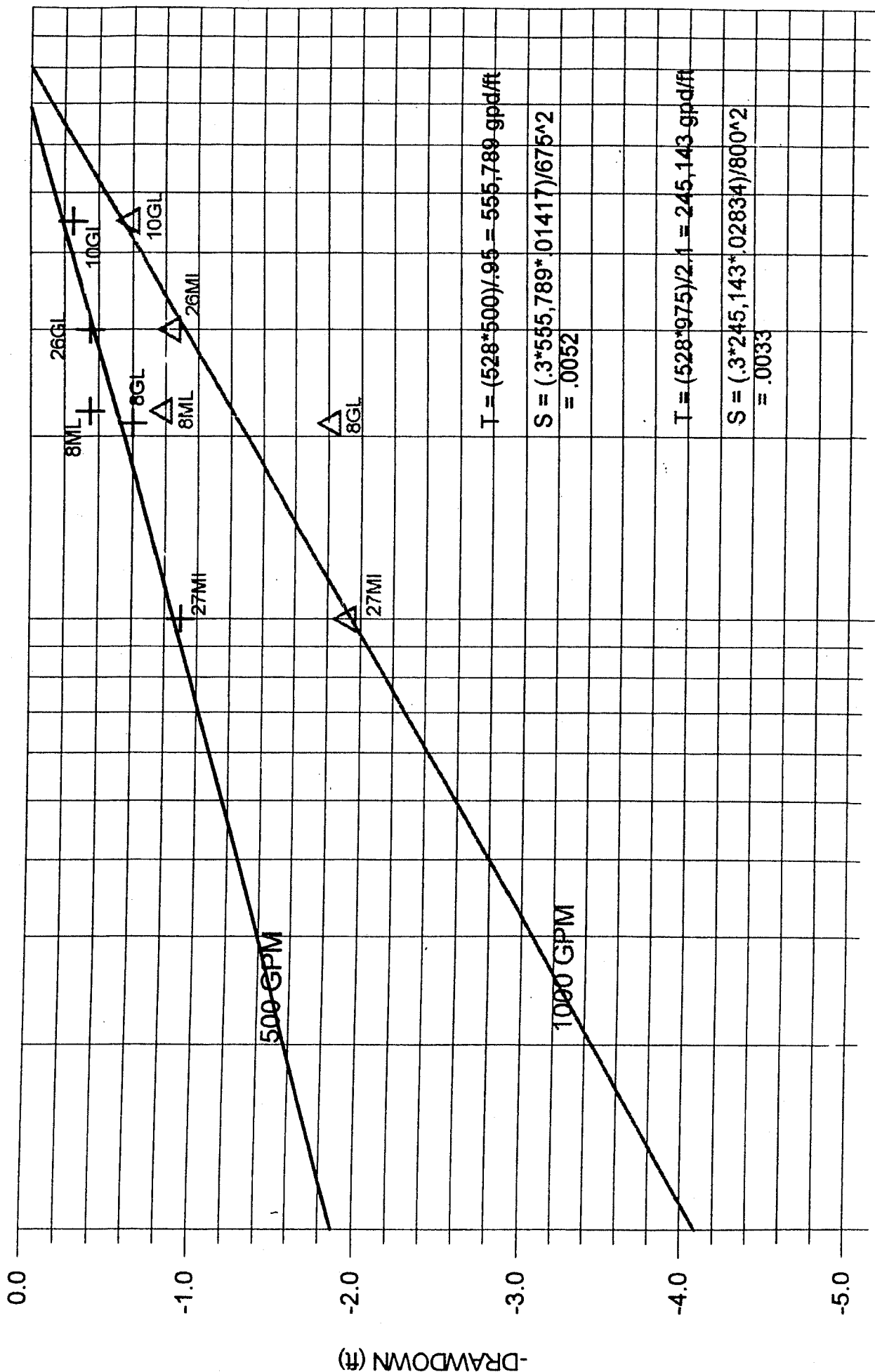
9/22 TO 9/23/94



DRAWDOWN AT EW3
500 & 975 GPM
9/16/94 to 9/20/94



EW3 DISTANCE DRAWDOWN PLOT 500 & 975 GPM 9/16 TO 9/20/94



$$T = (528 \times 500) / .95 = 555,789 \text{ gpd/ft}$$

$$S = (.3 \times 555,789 \times .01417) / 675^2 = .0052$$

$$T = (528 \times 975) / 2.1 = 245,143 \text{ gpd/ft}$$

$$S = (.3 \times 245,143 \times .02834) / 800^2 = .0033$$

10

100

1000

DISTANCE FROM PUMPING WELL (ft)

Gagliostro, Anthony

To: Borst, Robert; Benz, Rob; Camali, Gene; Camali, Nada; Amico, Paul
Cc: George, John; Tyndell, Angela; Pennington, Robert; Eugene, Vince; Christie, Simone
Subject: Contract 12R-WS2000 Affirmative Action Status

Please note that we have been advised by the Newark Office of Affirmative Action that En-Tech has not submitted the required paperwork for Scafar as a sub-contractor and the payrolls. The Newark OAA has also noted that Scafar has not been included on the submitted daily reports.

Please note that payment applications will not be approved for work that has not be properly filed and is up-to-date with the Office of Affirmative Action. Please provide the required information immediately to Newark OAA. Please contact Ms. Angela Tyndell of Newark OAA at (973) 733-8529 or myself if you have any questions regarding this matter.

Thank you. Tony.

From: Gagliostro, Anthony
Sent: Wednesday, July 06, 2005 1:23 PM
To: 'Paul Amico'; 'Nada Camali'; 'Rob Benz'; 'Tony Lopez'
Cc: Pennington, Robert; Eugene, Vince; Christie, Simone; 'George, John'; 'tyndella@ci.newark.nj.us'
Subject: RE: OVERDUE Contract 12R-WS2000 Affirmative Action Reminder

We understand that the Newark Office of Affirmative Action has not yet received En-Tech's updated Appendix G and quarterly report. This information is required immediately in order to complete the City's affirmative action reports to the State and the Mayor's office. Please fax the required information to Ms. Angela Tyndell, with a copy to CDM, this afternoon. Thank you.