

Faint, illegible text, possibly a stamp or header information.

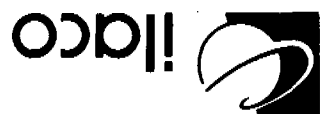


Rada' Integrated Rural Development Project

Yemen Arab Republic / Kingdom of the Netherlands

YE.AL 90

823



Republic of Yemen
Ministry of Agriculture
and Water Resources

Kingdom of the Netherlands
Ministry of Foreign Affairs
Development Cooperation
(Asia) Department

RADA INTEGRATED RURAL DEVELOPMENT PROJECT

SURFACE WATER MONITORING
IN AL BAYDA PROVINCE

First phase
April 1987-May 1990

Volume II

Technical note 39

G.J.M. Leereveld

May 1990

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AL BAYDA
1990
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ILACO
Arnhem, The Netherlands

This report is presented in two volumes:

Volume I - Main report

Volume II - Graphs and Annexes

Volume II - Graphs and Annexes

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Introduction

Every Preslog cycle will be presented in the following pages on a chronological basis.

The first page of a Preslog presentation consists always of the administration sheet, which is a standard filled up data sheet.

The pages presented afterwards are the graphs of the worked up Preslog data. The first page is always the pressure plot of the whole measuring period.

The two tables on page 2 show again the chronological and number sequences of all 43 Preslog cycles.

The last pages of this Volume II are the detailed calculations of the discharges of wadi Amad in 1989 as annex of chapter 4.

chronological sequence of Preslogs

no	place	preslog-ext.	page
1	amad 1	4318 -1	3
2	amad 1	4310 -1	6
3	amad 1	4351 -?	8
4	amad 1	4370 -1	9
5	amad 1	4421 -1	31
6	amad 1	4424 -2	33
7	amad 1a	4424 -3	39
8	amad 1a bar	4436 -1	41
9	amad 1b	4433 -1	43
10	amad 1c	4370 -2	45
11	amad 1	4438 -1	47
12	amad 2	4421 -0	58
13	amad 2	4427 -1	65
14	amad 2	4433 -0	67
15	amad 2a	4428 -1	83
16	amad 2b	4427 -3	85
17	amad 2	4433 -3	87
18	amad w1	4331 -1	97
19	amad ww	4333 -1	103
20	bayda al	4429 -3	110
21	hajalah	4370 -3	112
22	hawat	4436 -0	118
23	hawat	4429 -1	120
24	hawat	4430 -2	129
25	madan	4428 -0	130
26	mahajaba 1	4421 -0	133
27	mahajaba 1	4430 -1	136
28	mahajaba 1	4429 -2	147
29	mahajaba 1	4436 -2	151
30	mahajaba 1	4424 -4	153
31	mahajaba 2	4433 -2	161
32	mahajaba 2	4428 -2	175
33	mahajaba 2	4427 -4	178
34	mahajaba 3	4312 -1	185
35	mawir 1	4424 -0	192
36	mawir 1	4424 -1	196
37	mawir 1	4430 -0	198
38	mawir 1	4421 -2	200
39	mawir 1	4421 -3	203
40	mawir 2	4429 -0	207
41	mawir 2	4427 -2	209
42	mawir w1	4328 -1	214
43	shamiah	4427 -0	216
44	yaklah	4438 -0	229

43 cycles

number sequence of Preslogs

no	place	preslog-ext.	page
2	amad 1	4310 -1	6
34	mahajaba 3	4312 -1	185
1	amad 1	4318 -1	3
42	mawir w1	4328 -1	214
18	amad w1	4331 -1	97
19	amad ww	4333 -1	103
3	amad 1	4351 -?	8
4	amad 1	4370 -1	9
10	amad 1c	4370 -2	45
21	hajalah	4370 -3	112
12	amad 2	4421 -0	58
26	mahajaba 1	4421 -0	133
5	amad 1	4421 -1	31
38	mawir 1	4421 -2	200
39	mawir 1	4421 -3	203
35	mawir 1	4424 -0	192
36	mawir 1	4424 -1	196
6	amad 1	4424 -2	33
7	amad 1a	4424 -3	39
30	mahajaba 1	4424 -4	153
43	shamiah	4427 -0	216
13	amad 2	4427 -1	65
41	mawir 2	4427 -2	209
16	amad 2b	4427 -3	85
33	mahajaba 2	4427 -4	178
25	madan	4428 -0	130
15	amad 2a	4428 -1	83
32	mahajaba 2	4428 -2	175
40	mawir 2	4429 -0	207
23	hawat	4429 -1	120
28	mahajaba 1	4429 -2	147
20	bayda al	4429 -3	110
37	mawir 1	4430 -0	198
27	mahajaba 1	4430 -1	136
24	hawat	4430 -2	129
14	amad 2	4433 -0	67
9	amad 1b	4433 -1	43
31	mahajaba 2	4433 -2	161
17	amad 2	4433 -3	87
22	hawat	4436 -0	118
8	amad 1a bar	4436 -1	41
29	mahajaba 1	4436 -2	151
44	yaklah	4438 -0	229
11	amad 1	4438 -1	47

43 cycles

PLACE :Amad 1

PRESLOG:4318-1

Service given before initiation:not known (nk)
-interval :00:15

Initiation date:nk
Initiation time:nk

Try-out results:nk
Markers given :6

Installation date:06/04/87
Installation time:08:45

Installation description :in pipe without drum
-installation place:middle of wadi
-waterlevel :nk

Check up visit date :nk
Check up visit results:nk

Calculated removal/stop date:nk
Calculated removal/stop time:nk

Removal date:05/06/87
Removal time:nk
Remarks :removed by H.Nieuwenhuis
-waterlevel:nk
-sediment :nk

Stop date :nk
Stop time :nk

Service given :nk
Eprom reading date:nk
Number of eprom :4318-1
Number of eprom file :EP4318P_1
Number of administration file:AD4318P_1
Floppy number of eprom file :nk
Floppy number of administration file:Jos
Reference where results were listed :2

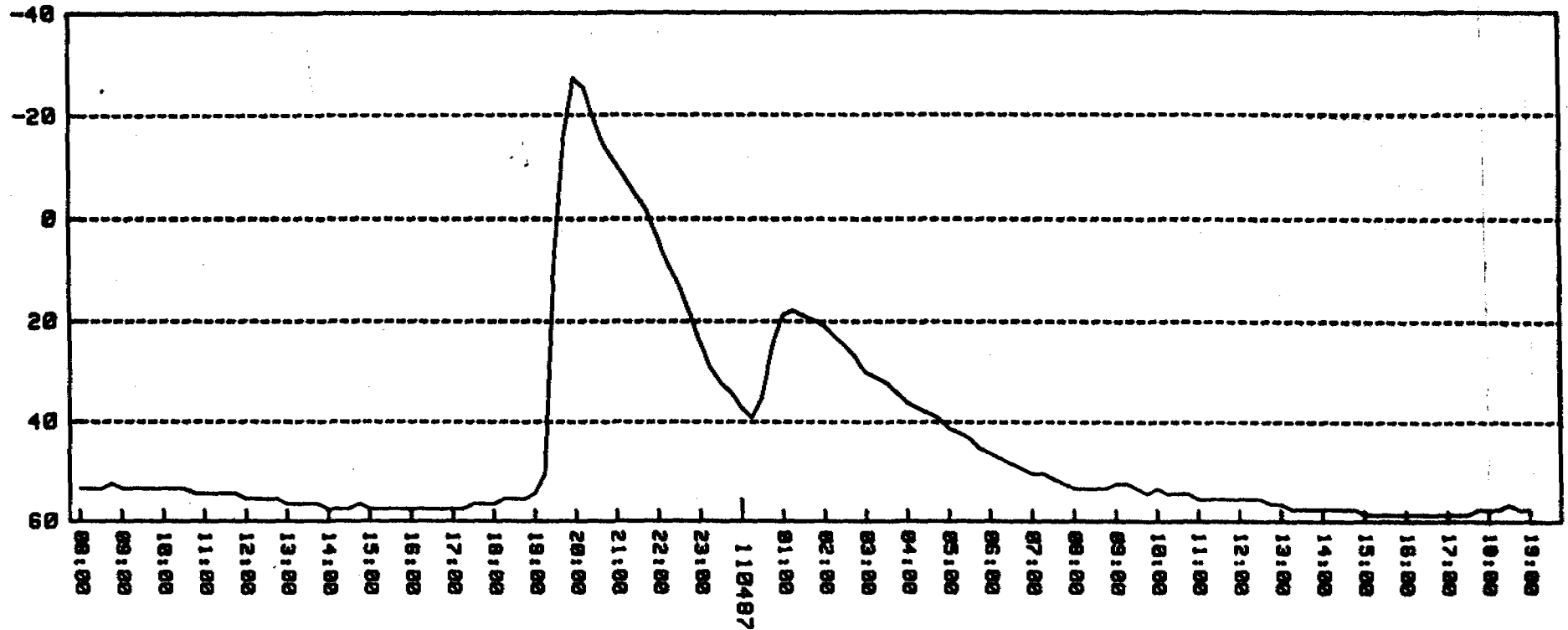
General remarks:
1.The preslog was the first in this wadi.
2.All data was taken to Holland and answered back 7 April 1990
(see telefax).

date:6 May 1990 (Sunday) 17:10

COUNTRY : YEMEN
STATION : WADI 'AMAD
PROJECT : RIRDP
BEGIN DATE : 100487
START TIME : 00:00

PLOT OF WATER LEVEL DEPTH
WATER LEVEL DEPTH (START) : 0 cm.
BAROMETER READING (START) : 798 mB.
END DATE : 110487
INTERVAL : 00:15

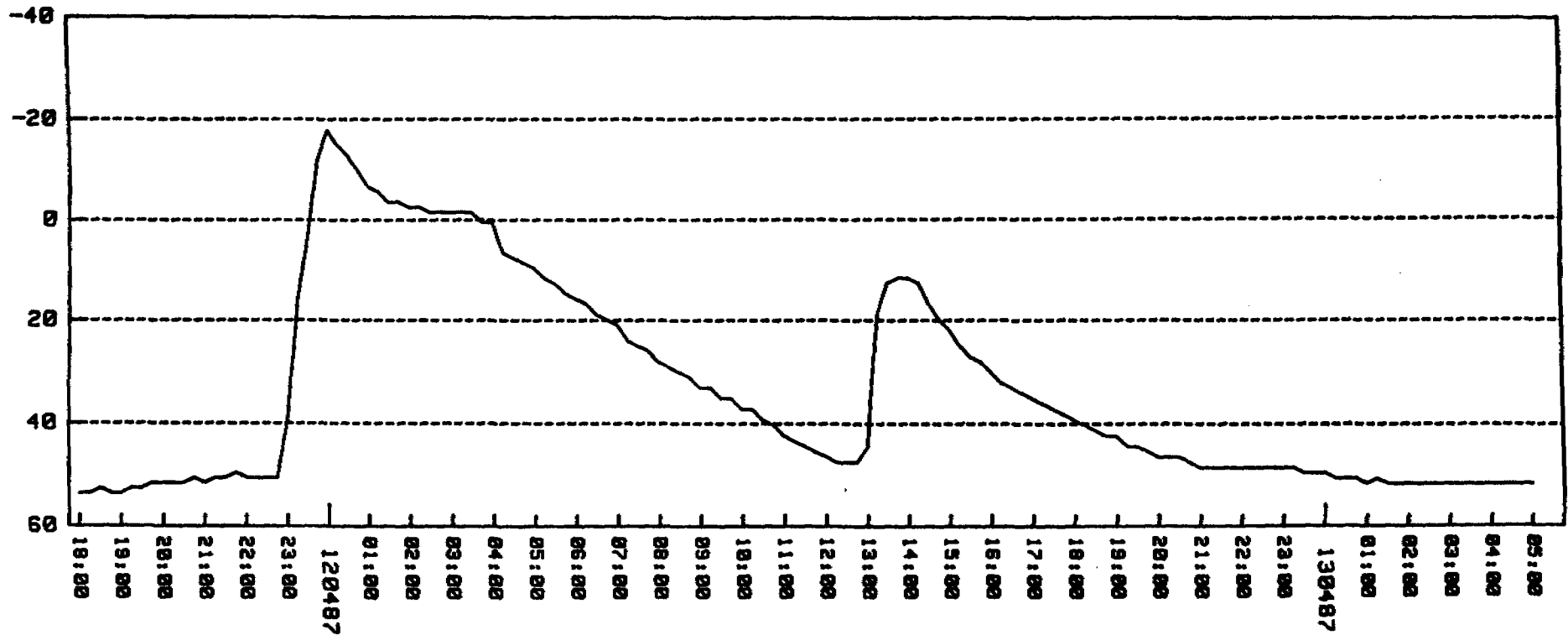
FILE: EP4310P_1
9 Feb 1987 11:48:38



COUNTRY : YEMEN
STATION : WADI 'AMAD
PROJECT : RIRD
BEGIN DATE : 110487
START TIME : 18:00

PLOT OF WATER LEVEL DEPTH
WATER LEVEL DEPTH (START) : 0 cm.
BAROMETER READING (START) : 798 mb.
END DATE : 130487
INTERVAL : 00:15

FILE: EP4310P_1
9 Feb 1987 11:56:10



PLACE :Amad-1

PRESLOG:4310-1

Service given before initiation:nk
-interval :00:075 (7½ min)

Initiation date:19/07/87
Initiation time:11:00

Try-out results:nk
Markers given :8

Installation date:nk
Installation time:nk

Installation description :in container without drum
-installation place:middle of wadi
-waterlevel :nk

Check up visit date :nk
Check up visit results:nk

Calculated removal/stop date:nk
Calculated removal/stop time:nk

Removal date:20/11/87
Removal time:nk
Remarks :nk
-waterlevel:nk
-sediment :nk

Stop date :nk
Stop time :nk

Service given :nk
Eprom reading date:nk
Number of eprom :EP4310-1
Number of eprom file :EP4310P_1
Number of administration file:AD4310P_1
Floppy number of eprom file :Jos
Floppy number of administration file:Jos
Reference where results were listed :2

General remarks:
1.strange interval

date:16 May 1990 (Sunday) 17:14

COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046
BEGIN DATE : 190787
START TIME : 11:00

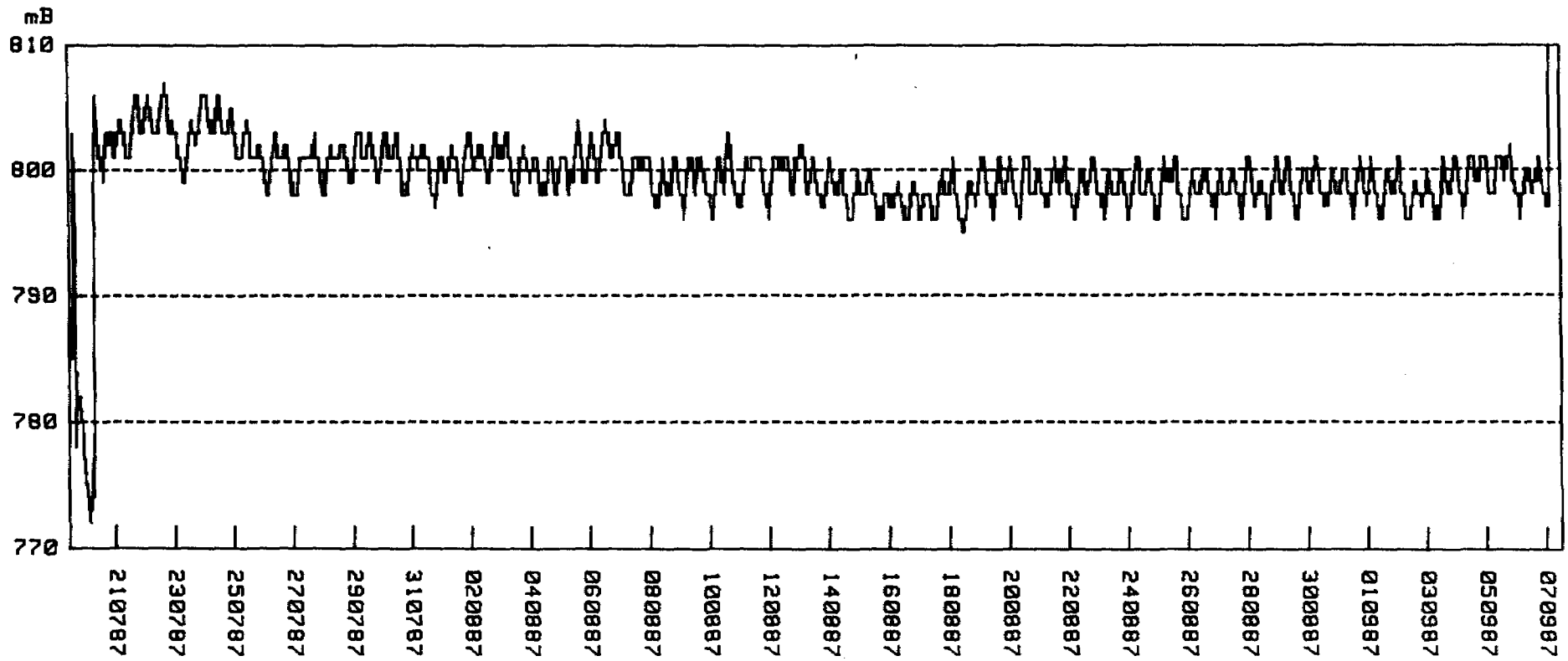
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 010188
INTERVAL : 00:07

PAGE 1

FILE: EP4310P_1

9 Apr 1990 13:08:23

7



PLACE :Amad I

PRESLOG:4351-? / 4371-?

Service given before initiation:nk
-interval :nk

Initiation date:13/12/87
Initiation time:11:00

Try-out results:nk
Markers given :nk

Installation date:13/12/87
Installation time:14:00

Installation description : in drum, filled with water (40 cm)
about 20 cm sand above drum
-installation place:in middle wadi
-waterlevel :40 cm above sensor =water in drum

Check up visit date :nk
Check up visit results:nk

Calculated removal/stop date:nk
Calculated removal/stop time:nk

Removal date:17/03/88
Removal time:+/- 11:30
Remarks :
-waterlevel:nk
-sediment :nk

Stop date :19/03/88
Stop time :10:58

Service given :nk
Eprom reading date:nk
Number of eprom :nk
Number of eprom file :nk
Number of administration file:nk
Floppy number of eprom file :Arnhem
Floppy number of administration file:Arnhem
Reference where results were listed :2

General remarks:
1.file nor information is found back. No floods occurred according to "monitoring with electronic recorders in Al Bayda Province", second phase, February 1988, Ilaco.

date:6 May 1990 (Sunday) 17:23

PLACE :Amad 1

PRESLOG:4370-1

Service given before initiation:nk
-interval :00:15

Initiation date:17/03/88
Initiation time:09:20

Try-out results:nk
Markers given :3

Installation date:17/03/88
Installation time:12:00

Installation description : in drum, filled with stones and
closed with cloth
-installation place:in middle wadi
-waterlevel :0.35 m in drum

Check up visit date :06/04/88,11:45
Check up visit results:drum refilled with +/- 10 cm water

Calculated removal/stop date:01/07/88
Calculated removal/stop time:nk

Removal date:15/08/88
Removal time:nk
Remarks :
-waterlevel:nk
-sediment :nk

Stop date :nk
Stop time :nk

Service given :sent to Holland
Eprom reading date:nk
Number of eprom :EP4370-0
Number of eprom file :EP4370P_0
Number of administration file:AD4370P_0
Floppy number of eprom file :1/2
Floppy number of administration file:?
Reference where results were listed :1,2

General remarks:
1.

date:6 May 1990 (Sunday) 17:26

COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 170388
START TIME : 09:15

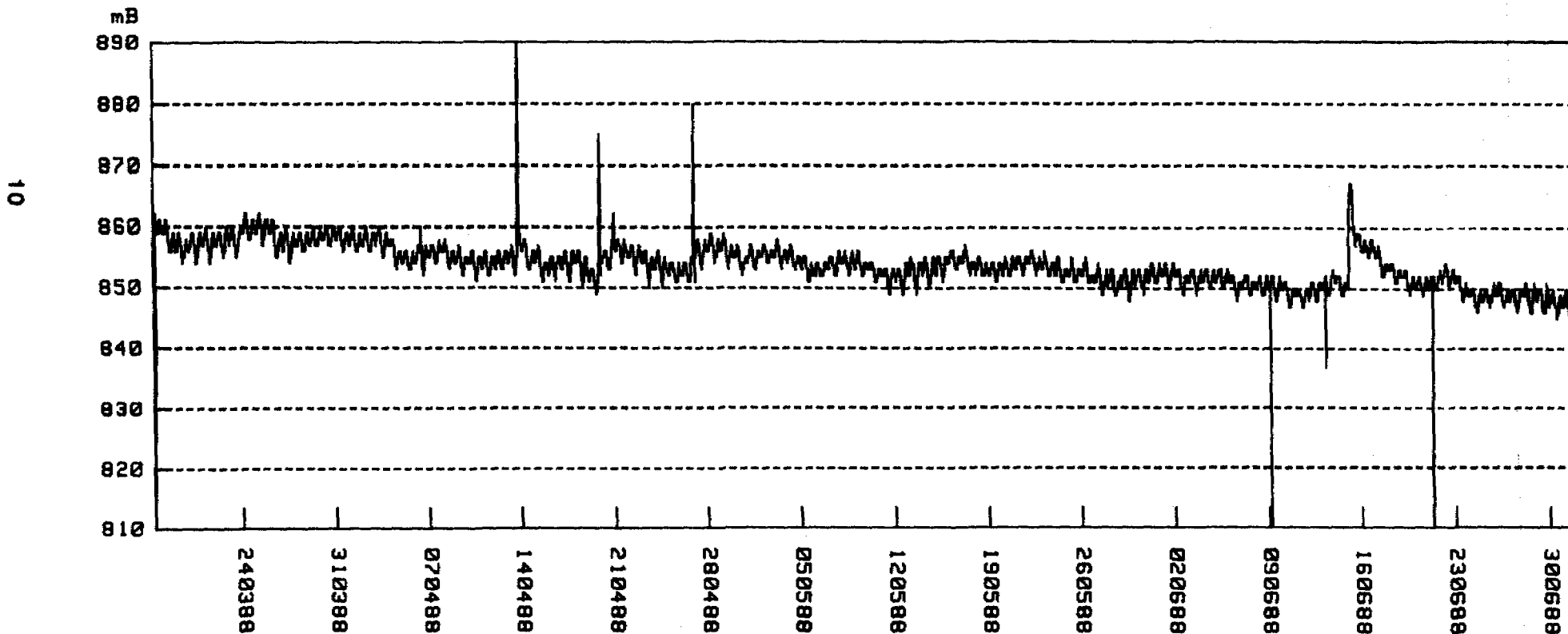
PLOT OF PRESSURE DATA

ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 150888
INTERVAL : 00:15

PAGE 1

FILE: EP4370P_0

10 Apr 1990 11:45:51



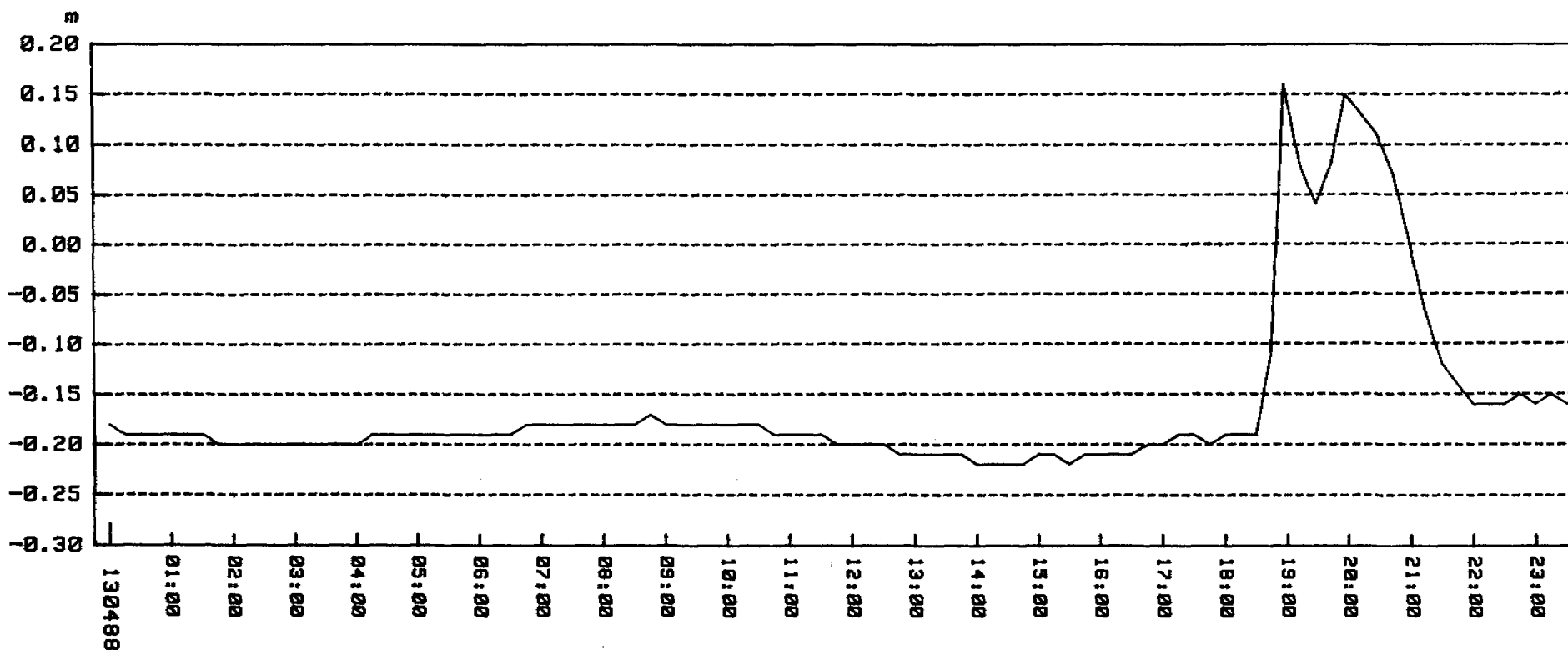
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 130400
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 809 mB.
END DATE : 270400
INTERVAL : 00:15

PAGE 1

FILE: EP4370P_0

10 Apr 1990 12:32:05

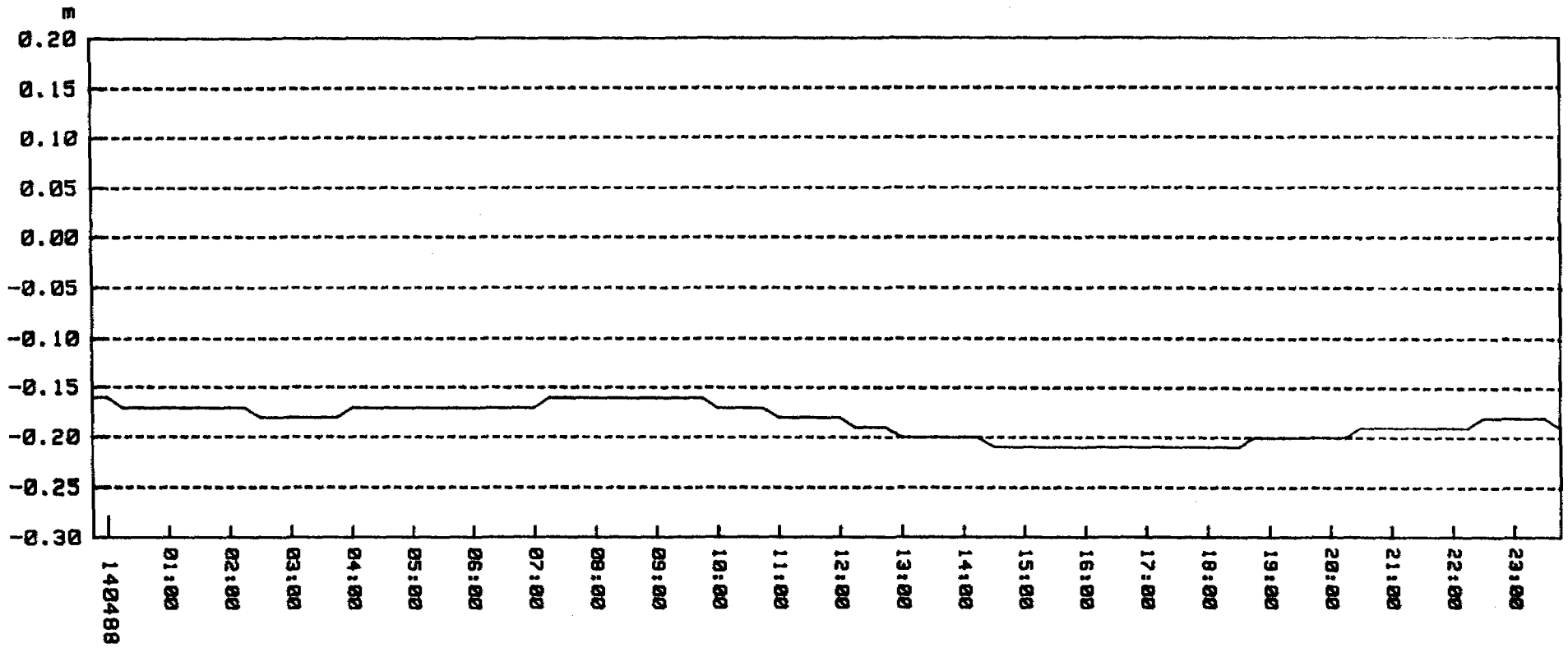


COUNTRY : YEMEN
STATION : AMRD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 12:34:47

12



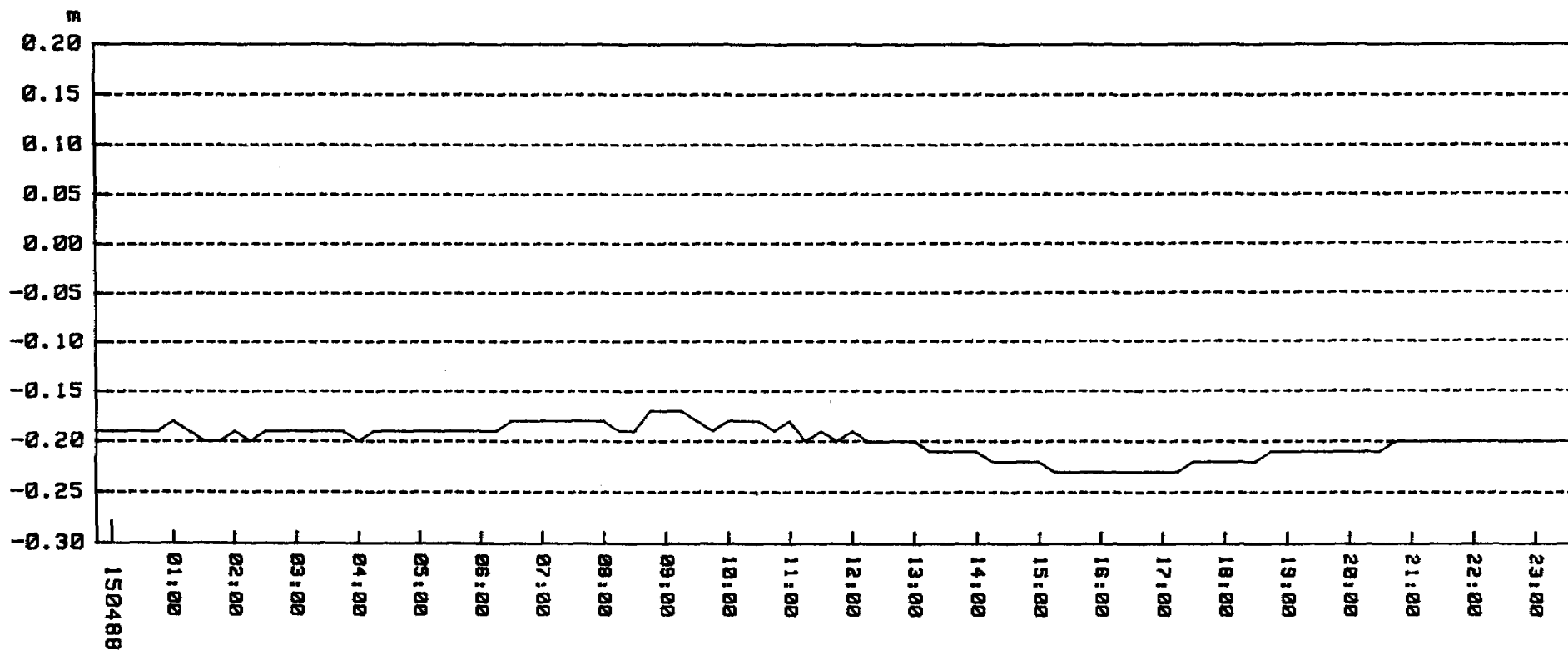
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 3

FILE: EP4370P_0
10 Apr 1990 12:37:27

13



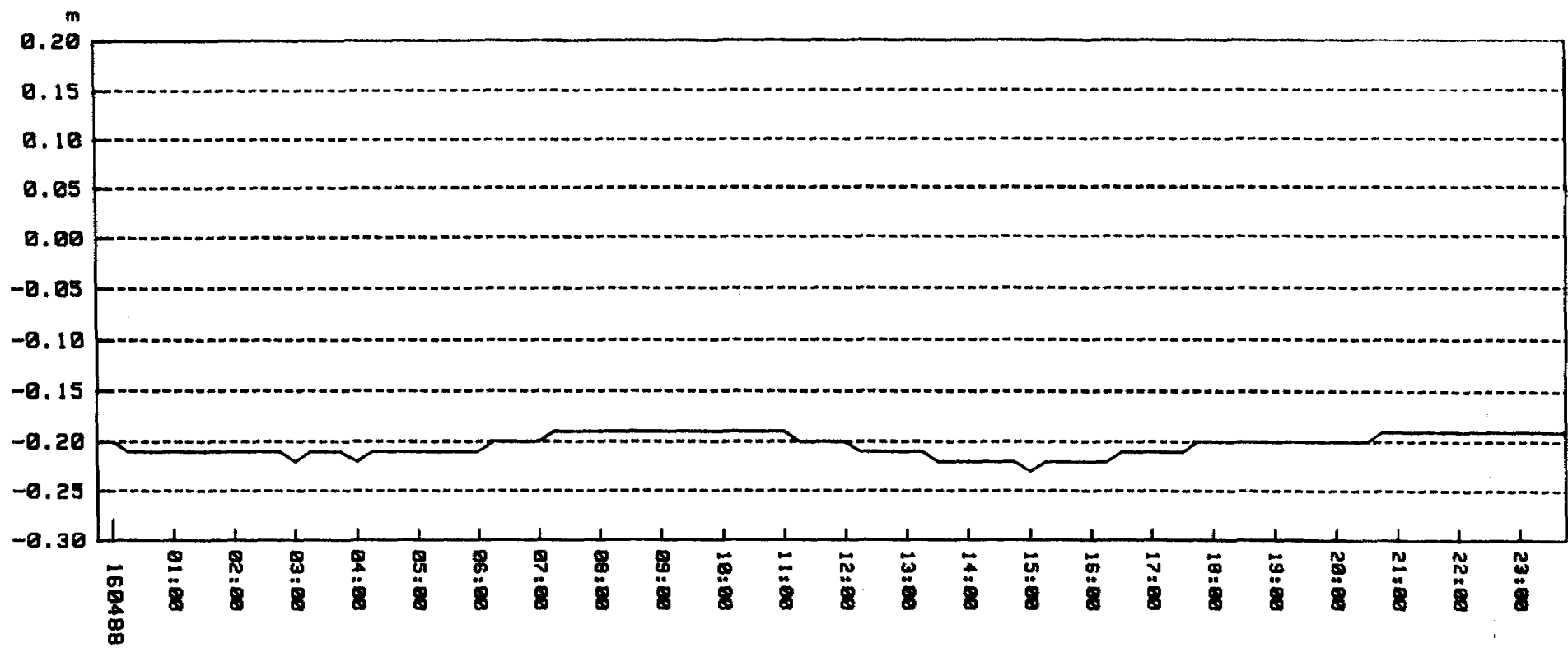
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 4

FILE: EP4370P_0
10 Apr 1988 12:40:00

14

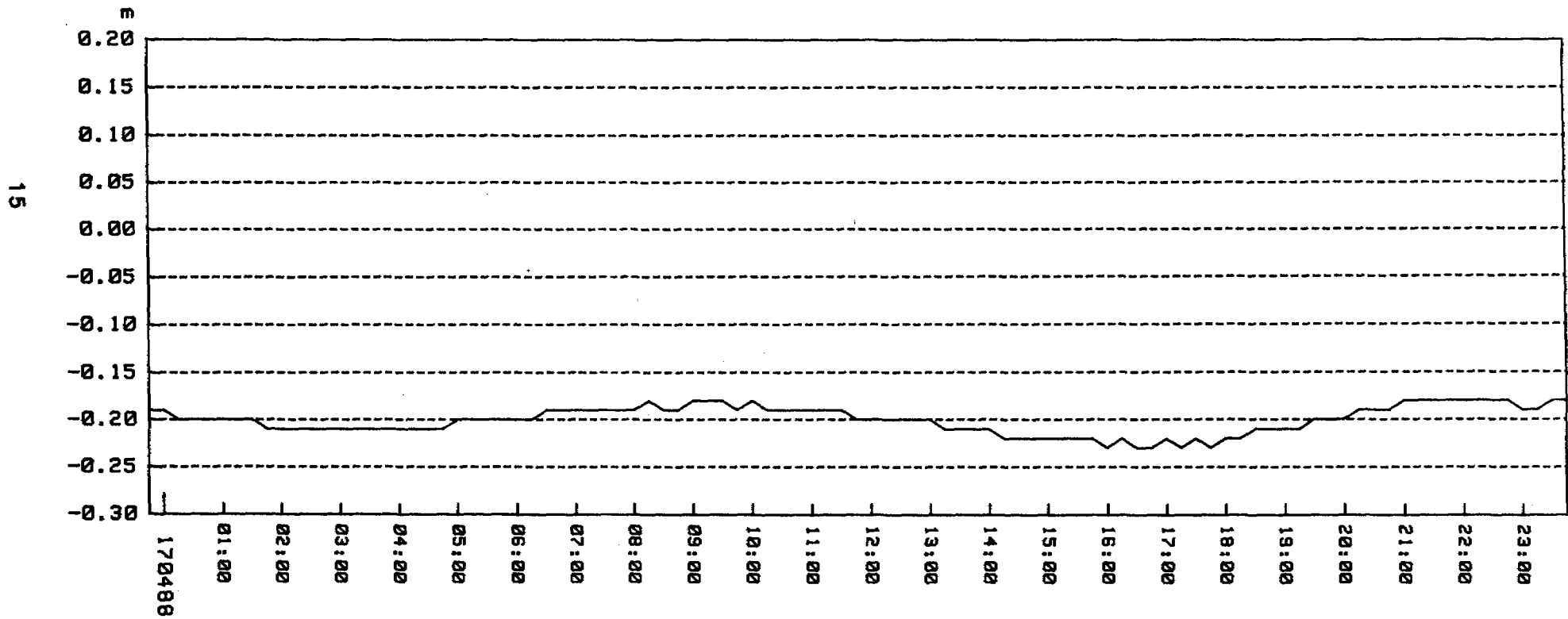


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 5

FILE: EP4370P_0
10 Apr 1990 12:42:49

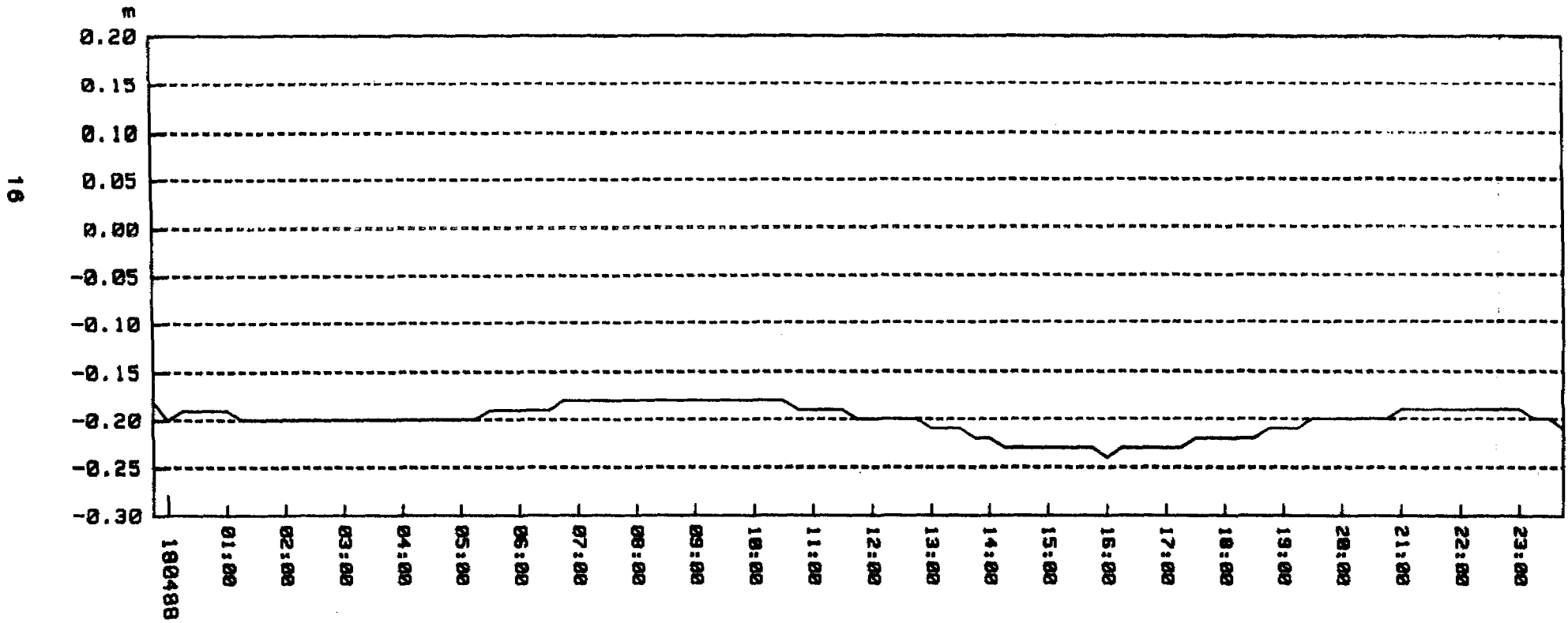


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 488048

PLOT OF WATER LEVEL ELEVATION

PAGE 6

FILE: EP4370P_0
10 Apr 1980 12:45:29

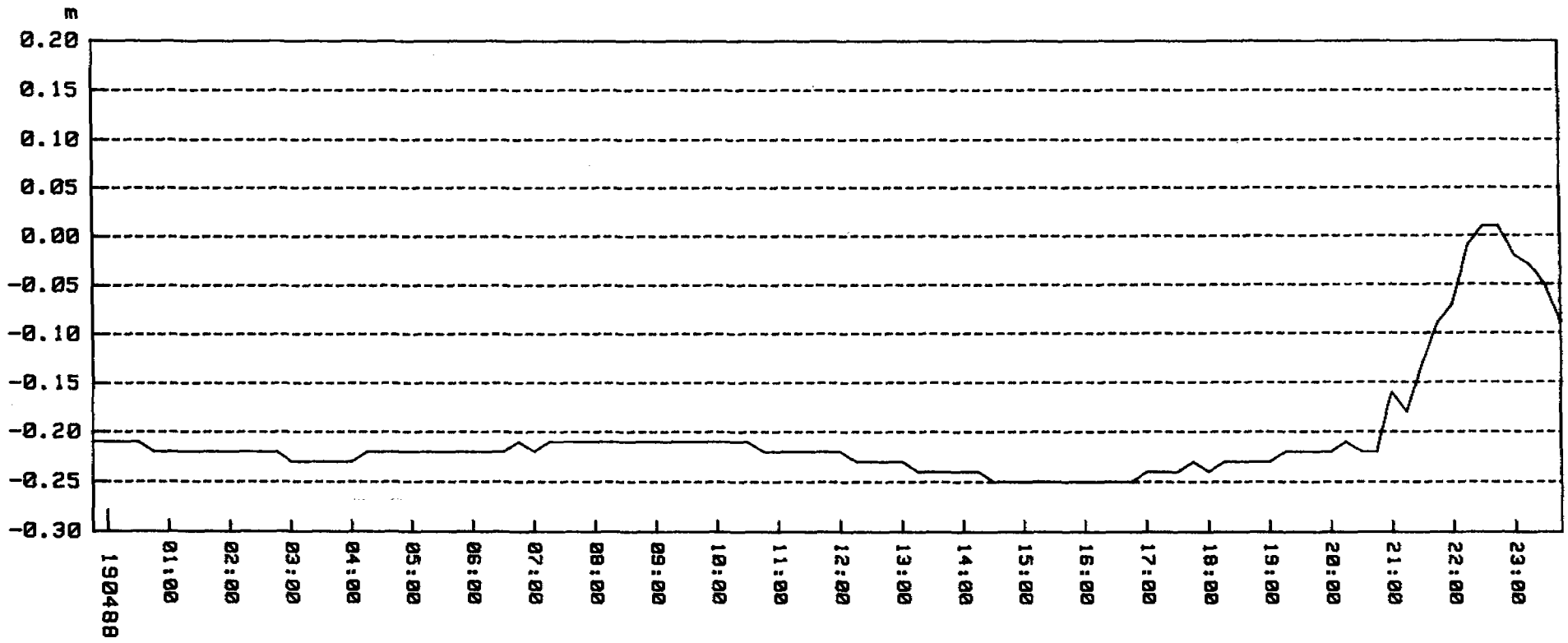


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 12:48:10

17

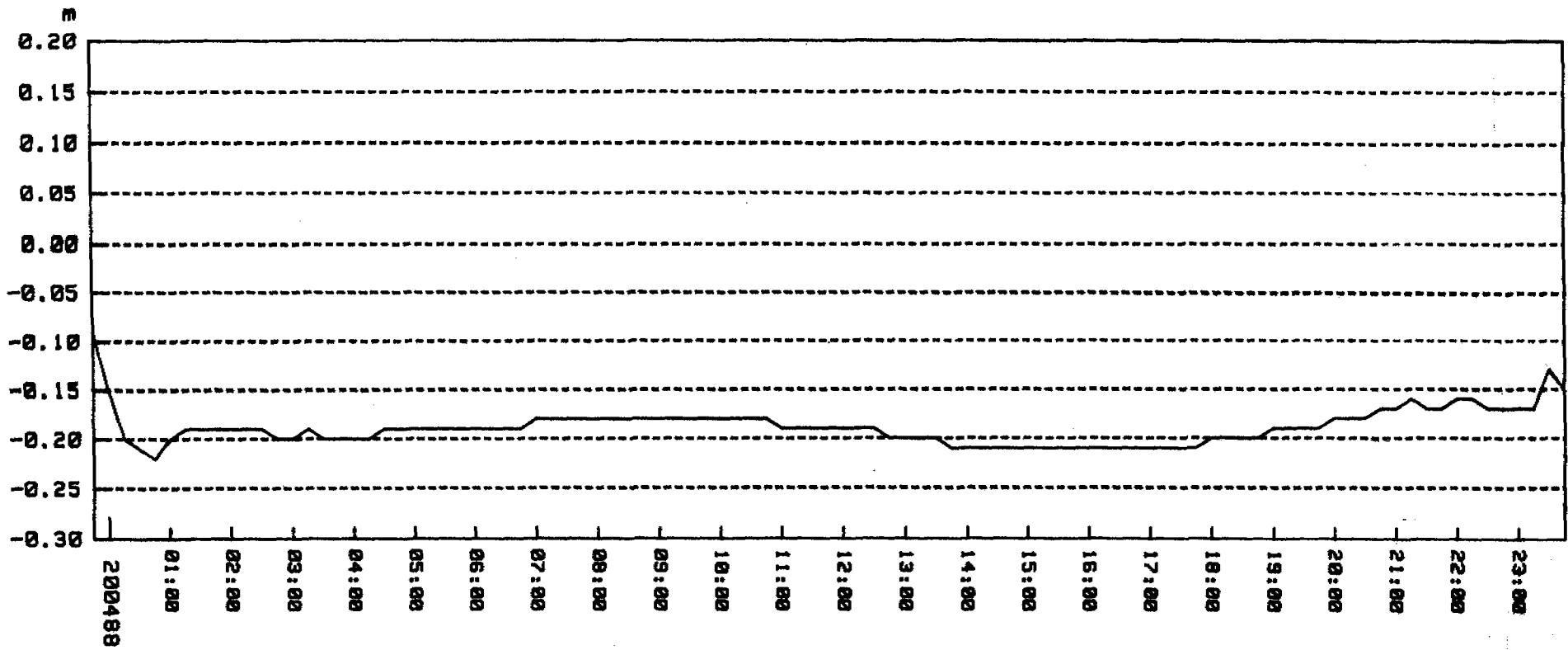


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 12:50:51

18



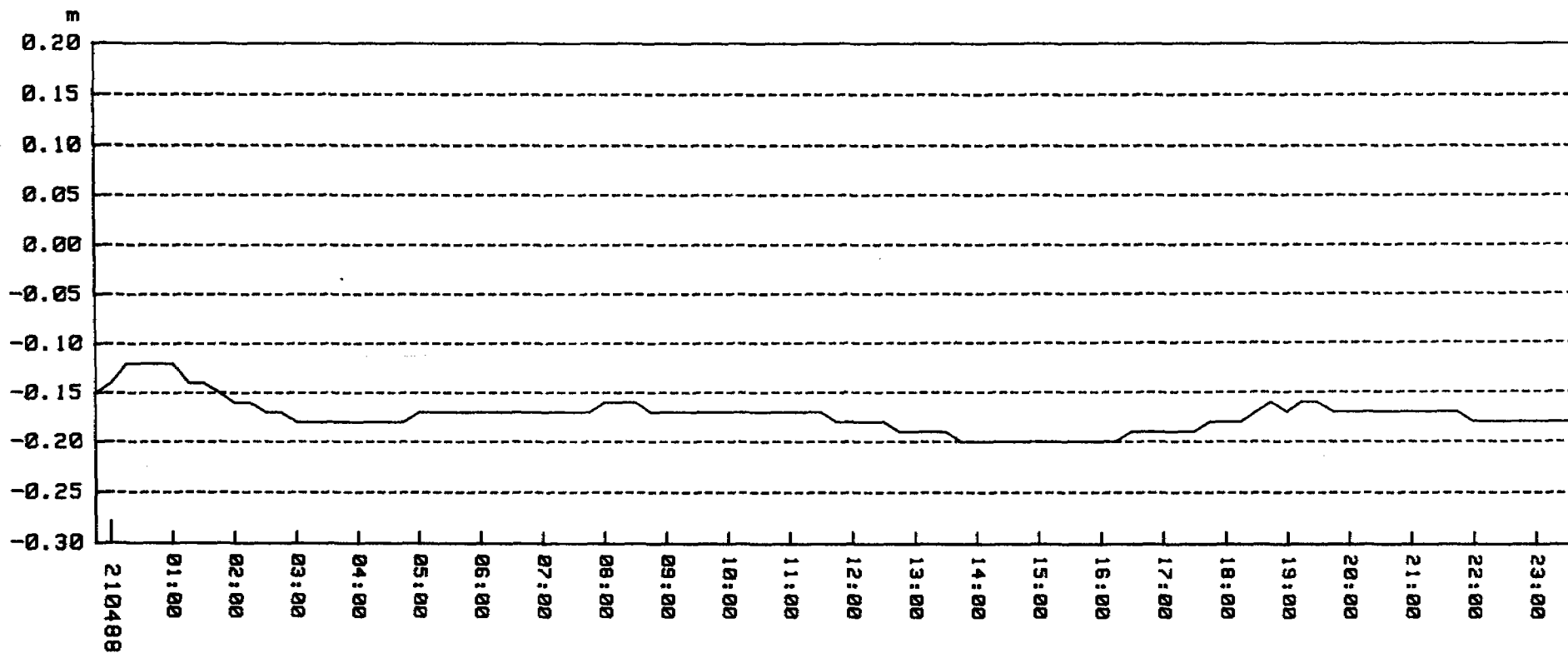
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4370P_0
10 Apr 1990 12:53:32

19

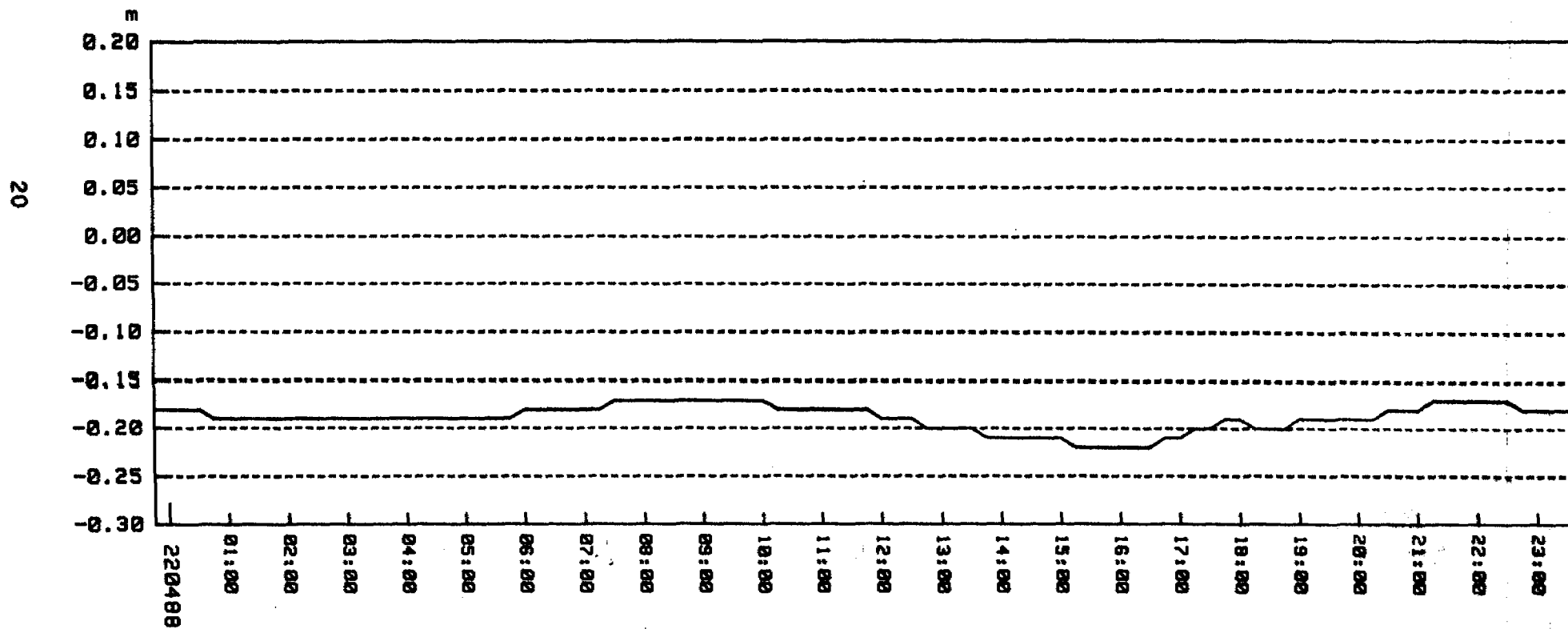


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4370P_0
10 Apr 1990 12:56:13



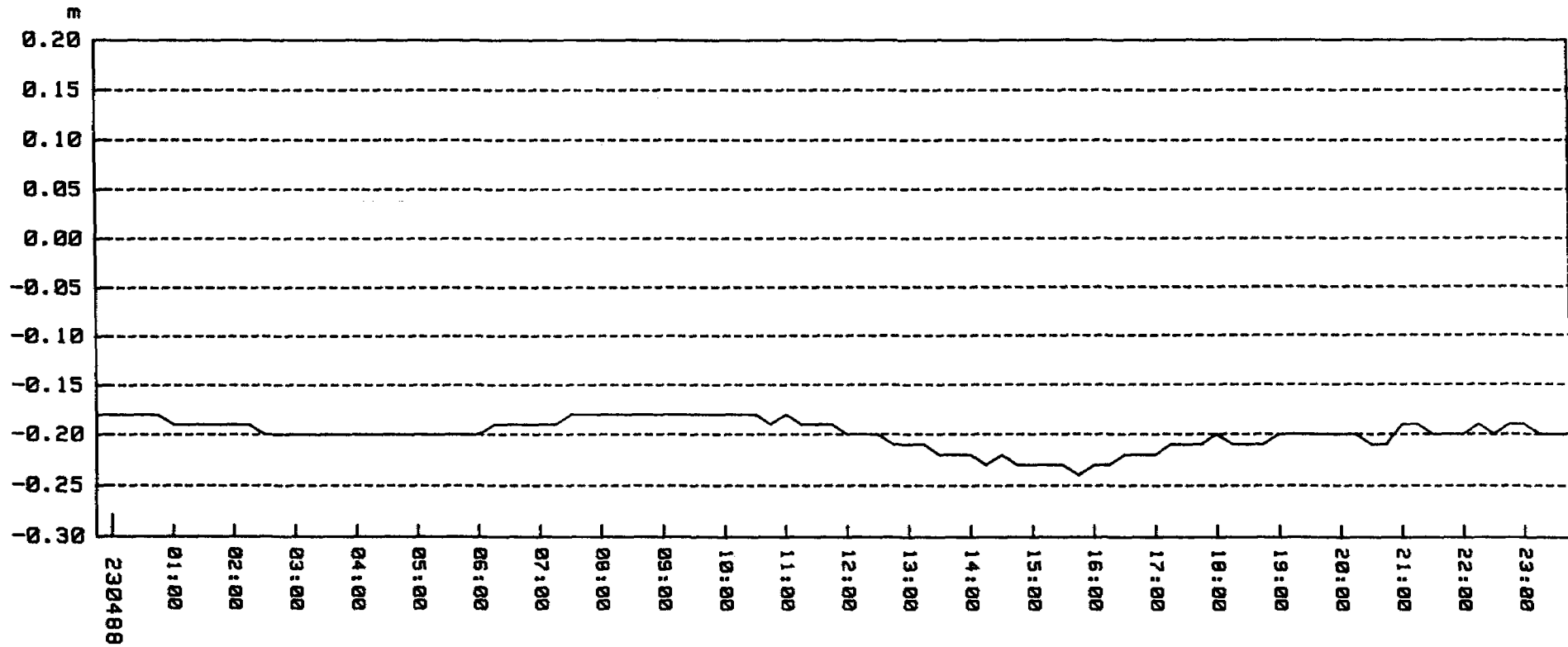
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4370P_0
10 Apr 1990 12:58:55

21

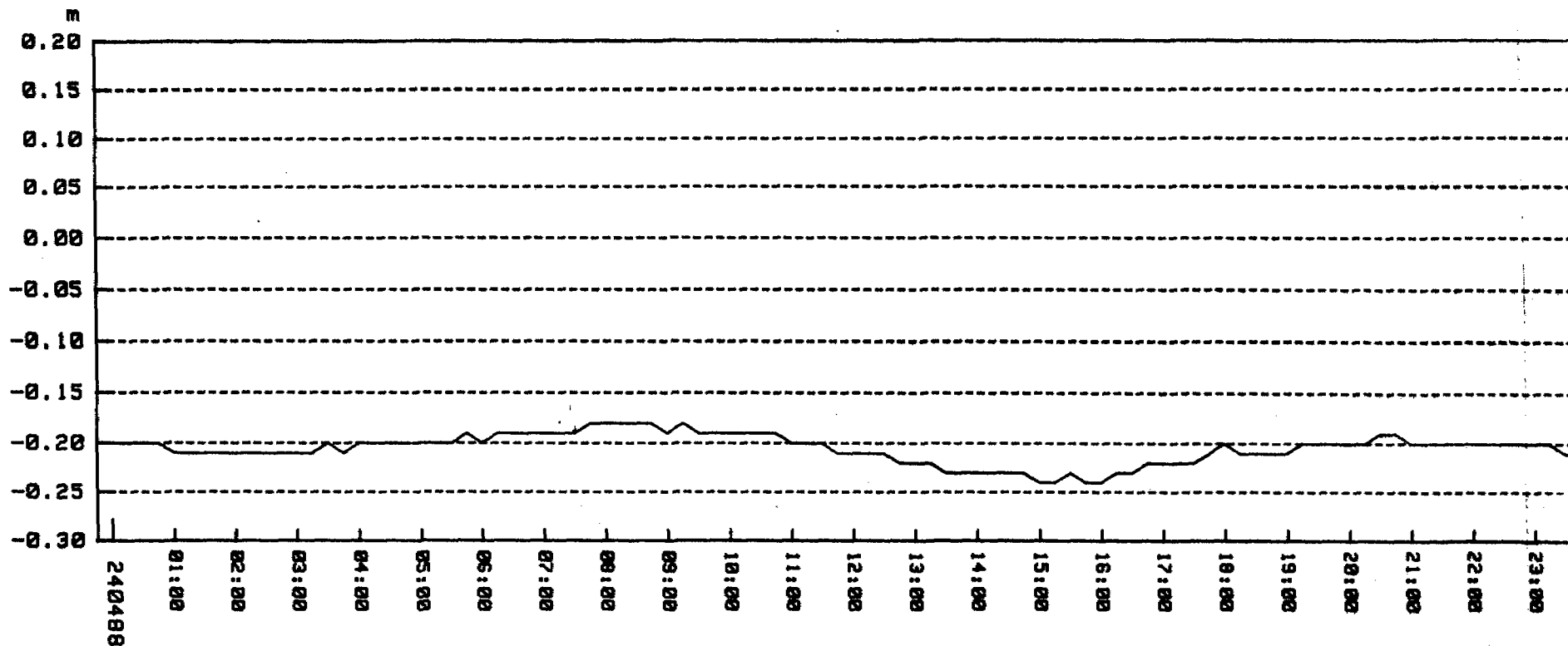


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 13:01:36

22



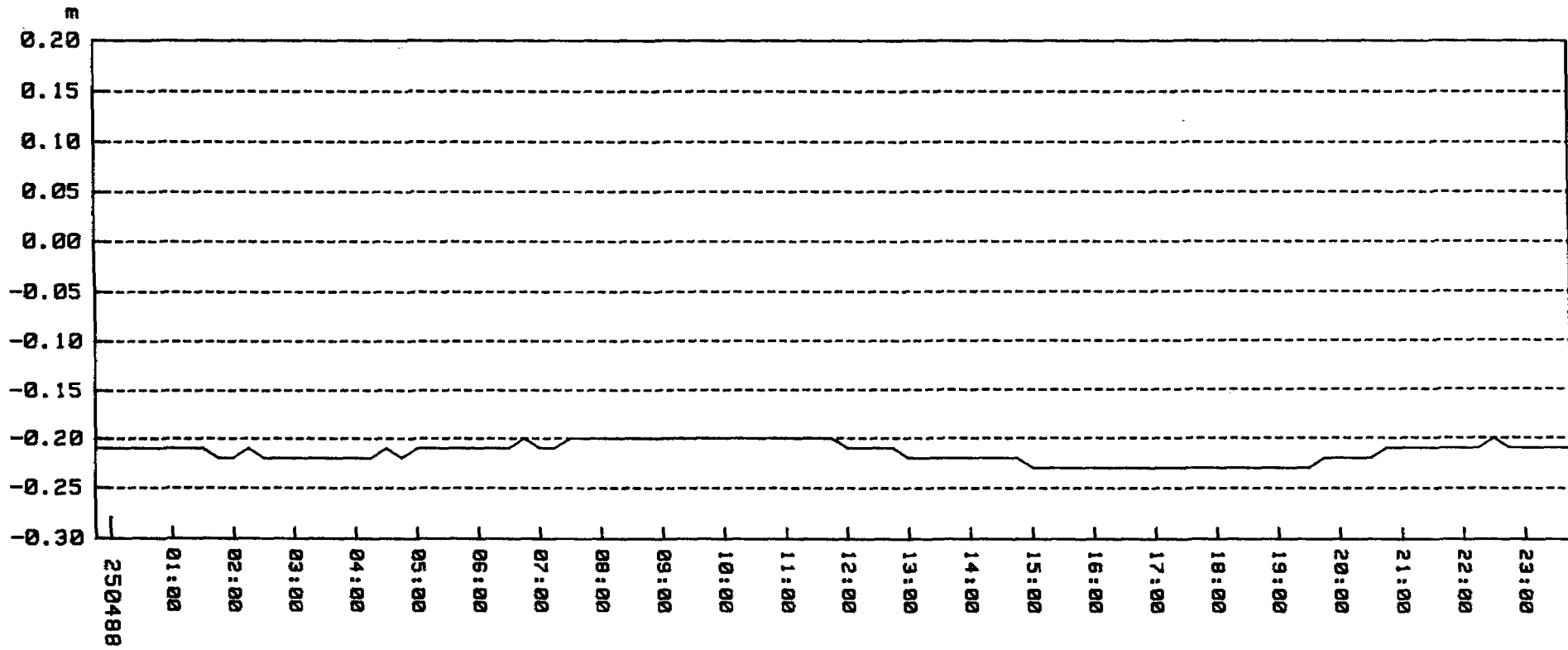
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4370P_0
10 Apr 1990 13:04:17

23

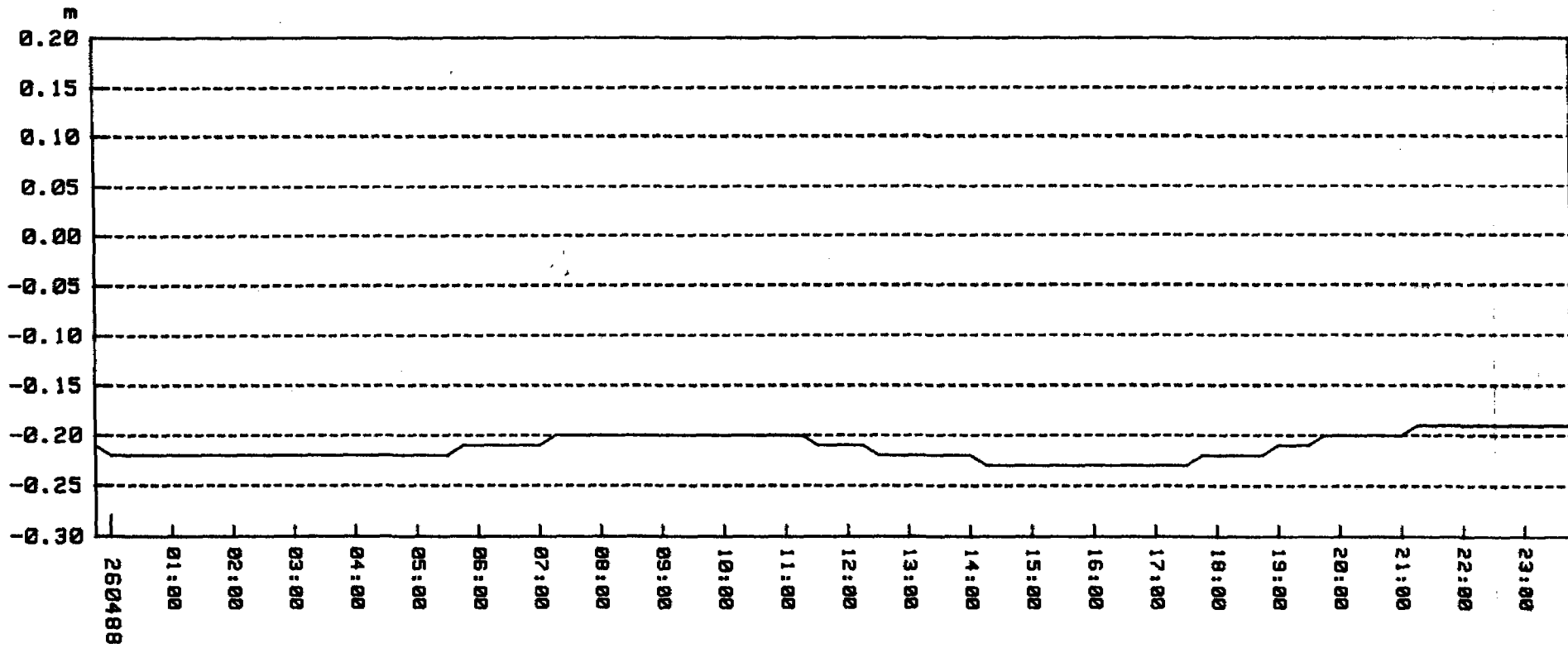


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 13:06:50

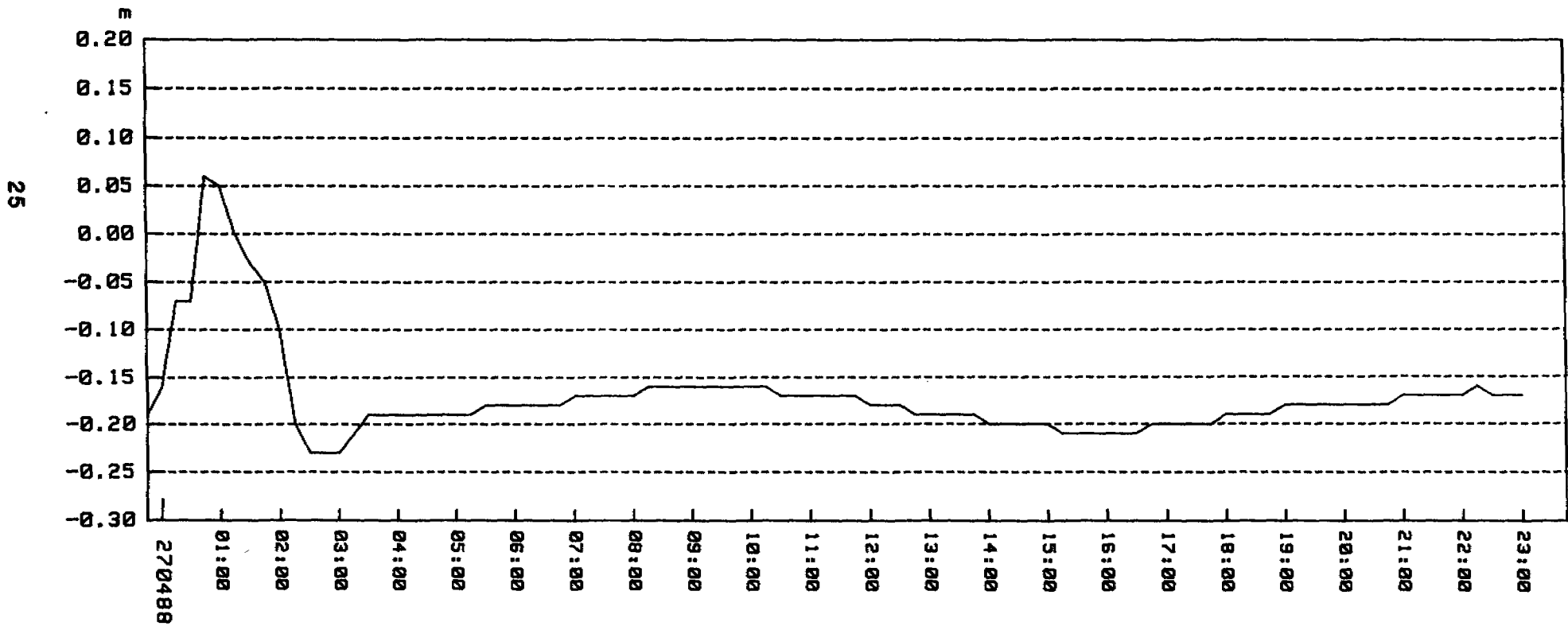
24



COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_0
10 Apr 1990 13:09:40



COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046
BEGIN DATE : 140688
START TIME : 00:00

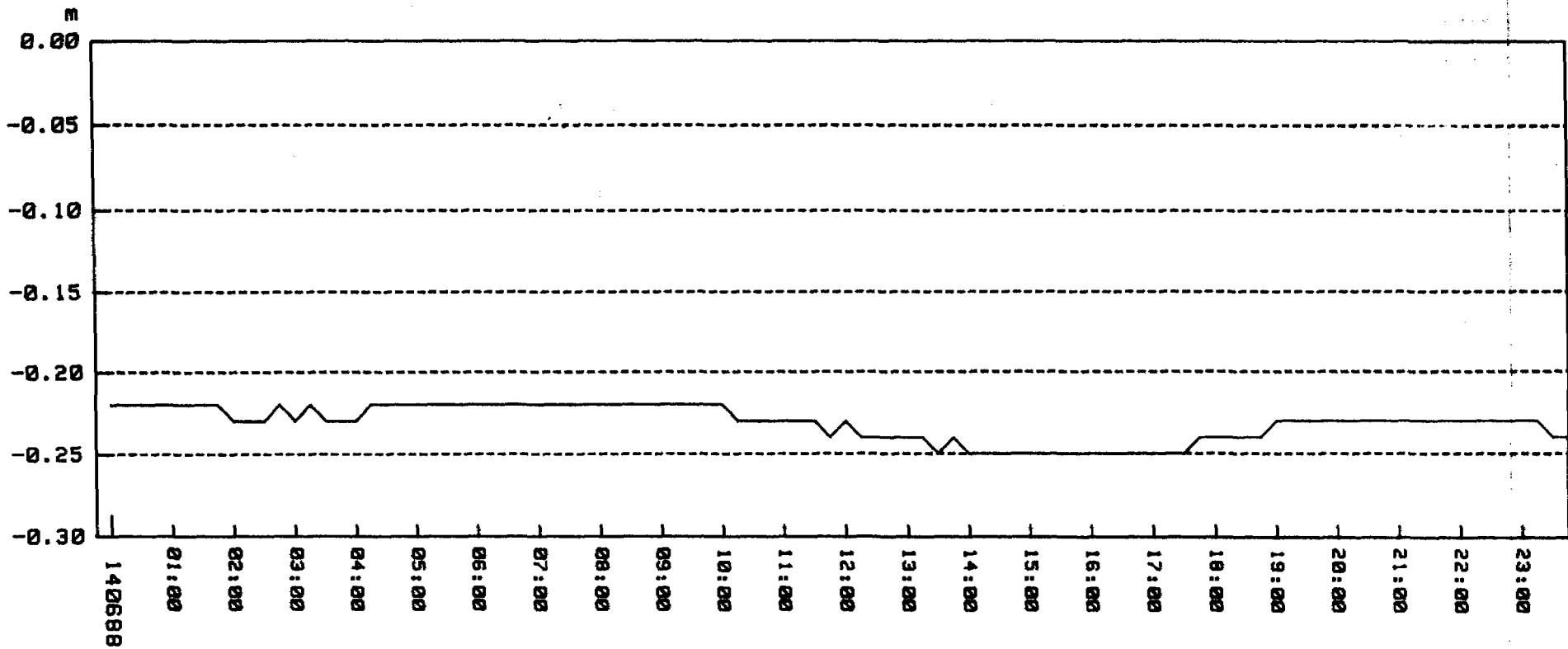
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 809 mB.
END DATE : 180688
INTERVAL : 00:15

PAGE 1

FILE: EP4370P_0

10 Apr 1980 13:35:58

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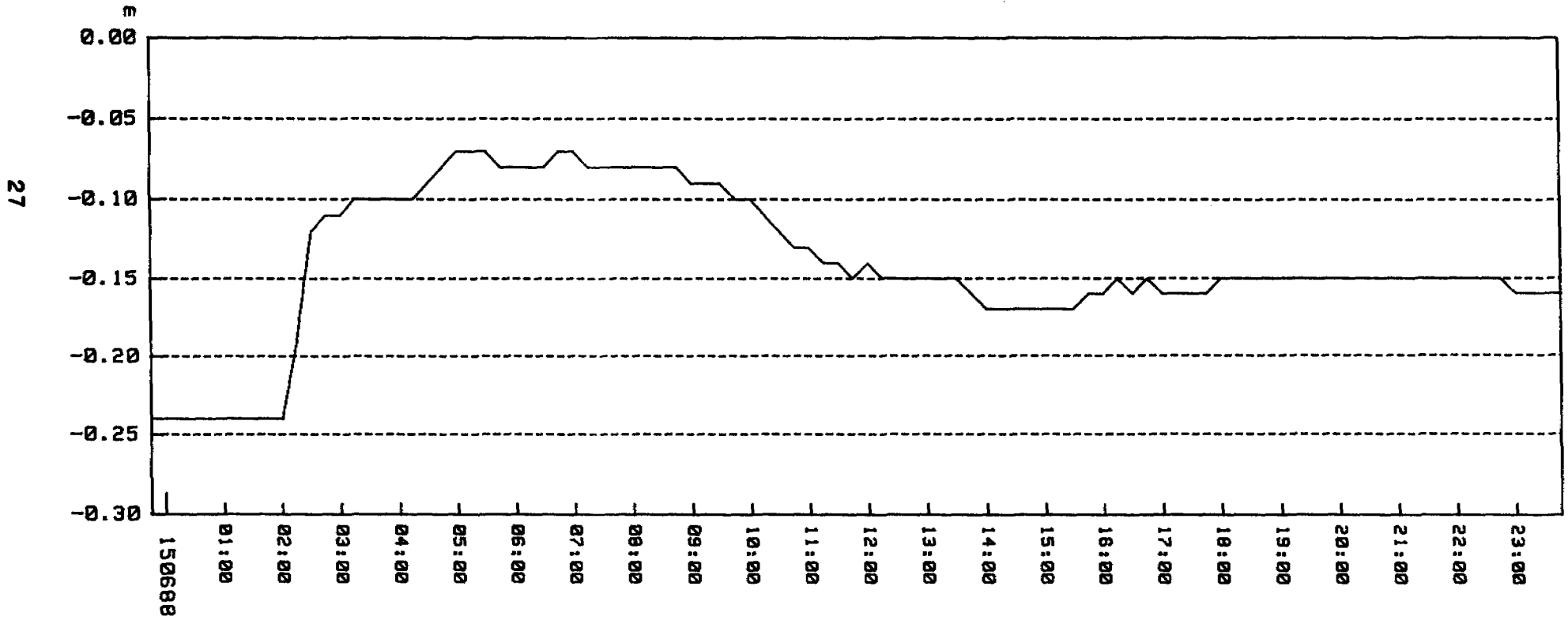
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4370P_0

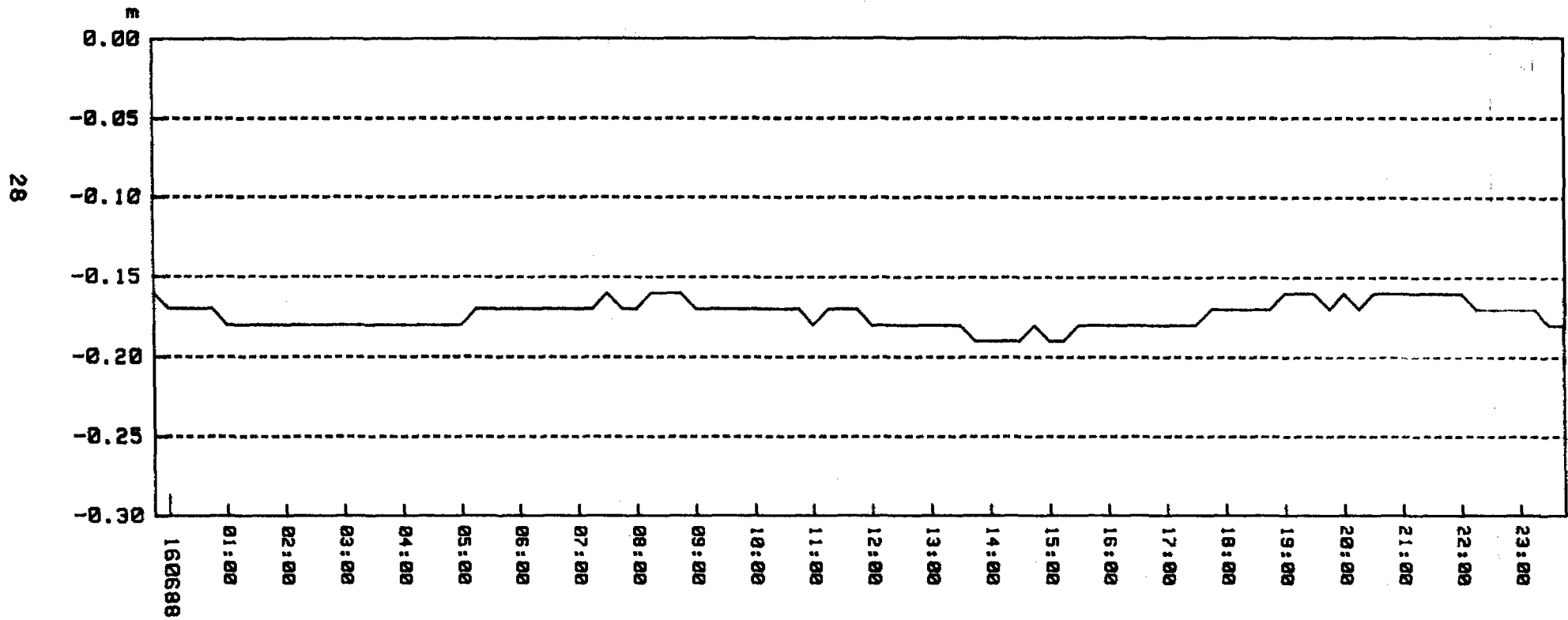
10 Apr 1990 13:37:59



COUNTRY : YEMEN
STATION : AMRD
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4378P_0
10 Apr 1998 13:48:04

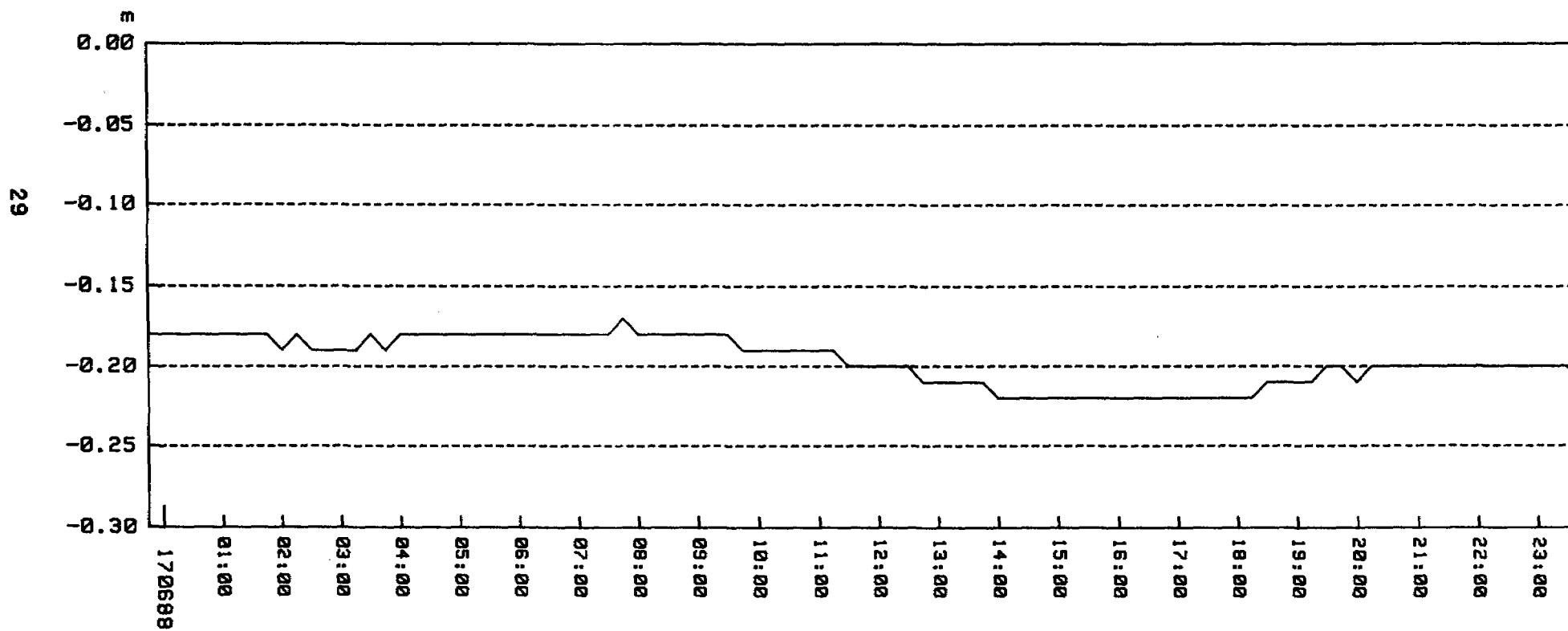


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4370P_0
10 Apr 1990 13:42:00

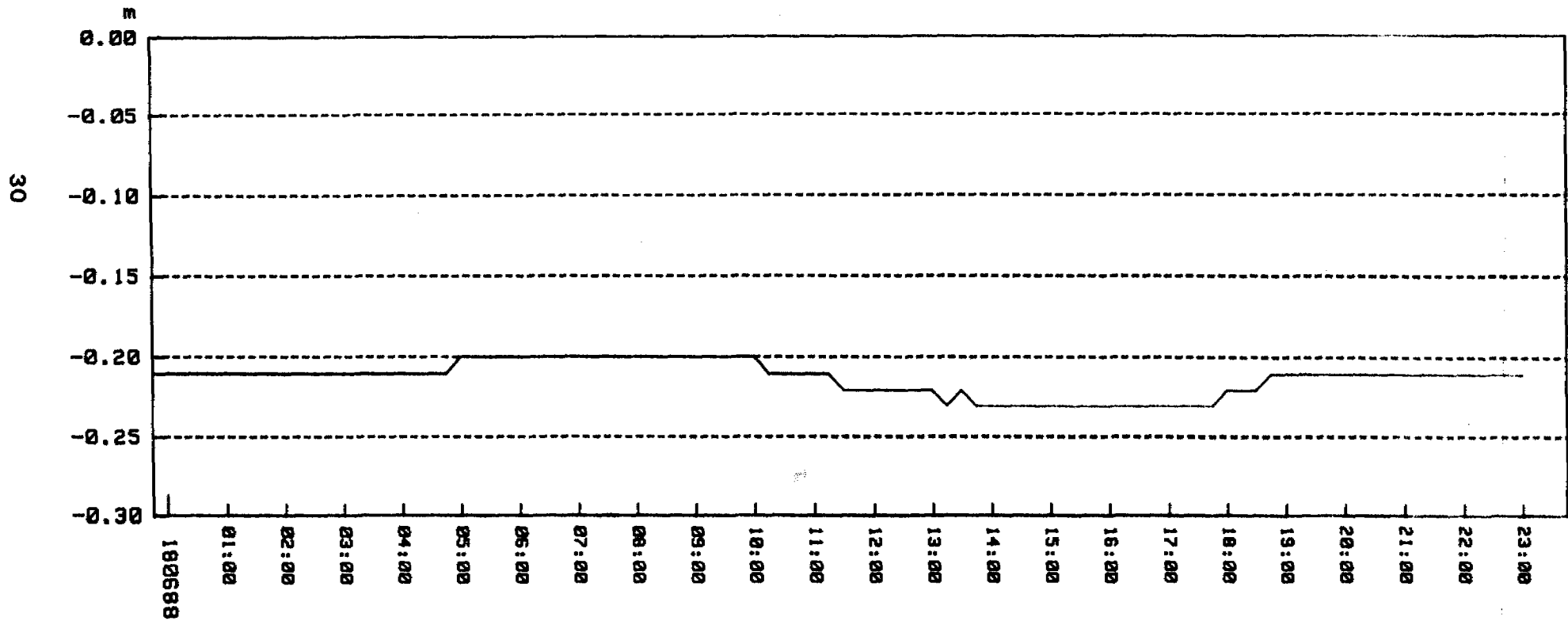


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 409046

PLOT OF WATER LEVEL ELEVATION

PAGE 5

FILE: EP4378P_0
10 Apr 1990 13:44:13



PLACE :Amad 1

PRESLOG:4421-1

Service given before initiation:batteries changed
-interval :00:15

Initiation date:19/09/88
Initiation time:07:15

Try-out results:OK
Markers given :2 markers

Installation date:19/09/88
Installation time:09:30

Installation description :clotch sheet
-installation place:middle wadi
-waterlevel :0.40 m.(drum)

Check up visit date :none
Check up visit results:none

Calculated removal/stop date:03/01/89
Calculated removal/stop time:-

Removal date:02/01/89
Removal time:10:20
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/01/89
Stop time :08:52

Service given :none
Eprom reading date:nk
Number of eprom :4421-1
Number of eprom file :EP4421P_10
Number of administration file:AD4421P_10
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

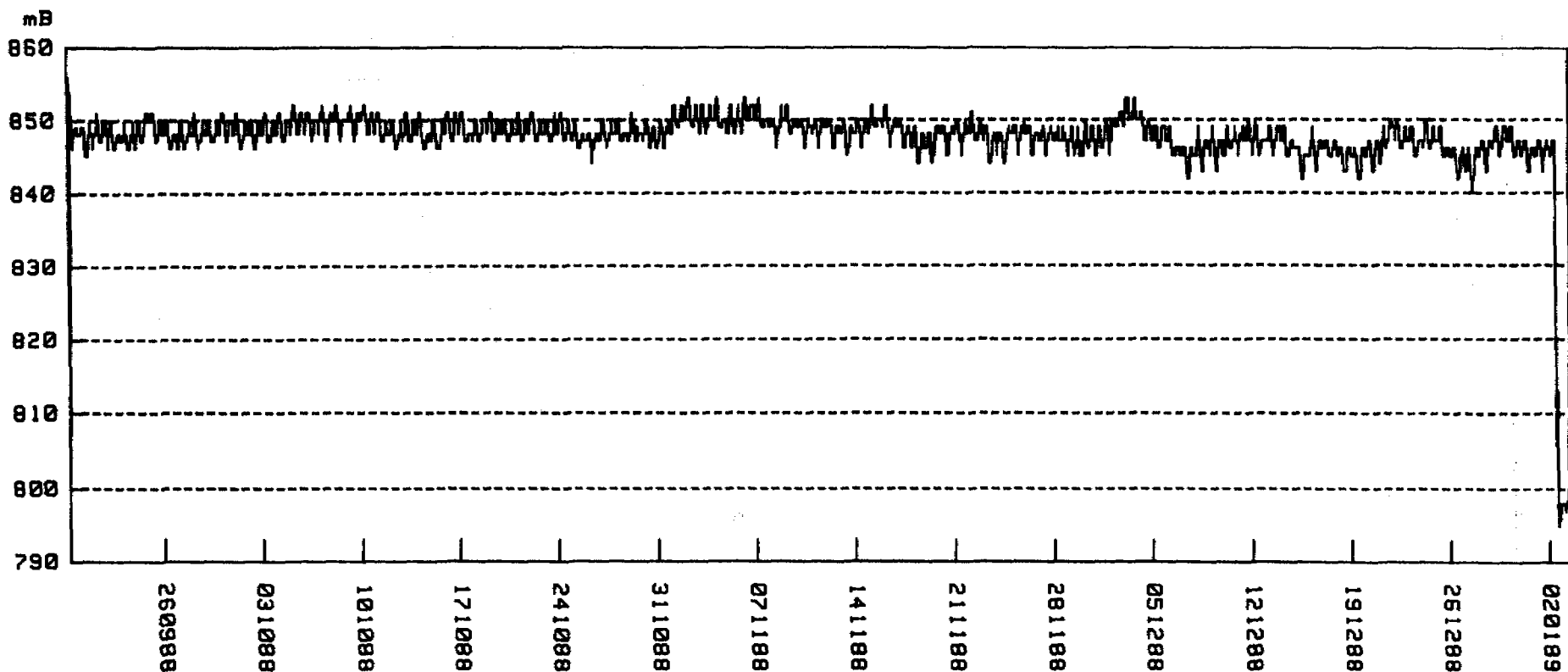
date:6 May 1990 (Sunday) 17:28

COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 190900
START TIME : 07:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030189
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_10
10 Apr 1990 15:56:38



PLACE :Amad 1

PRESLOG:4424-2

Service given before initiation:none
-interval :00:15

Initiation date:02/01/89
Initiation time:08:15

Try-out results:-
Markers given :2

Installation date:02/01/89
Installation time:10:20

Installation description :in drum with water
-installation place:middle wadi
-waterlevel :40 cm above sensor

Check up visit date :none
Check up visit results:none

Calculated removal/stop date:18/04/89
Calculated removal/stop time:-

Removal date:02/04/89
Removal time:11:20
Remarks :top drum= -0.27 m wadi.
-waterlevel:water stood at -0.12 m top drum
-sediment :-

Stop date :03/04/89
Stop time :08:25

Service given :none
Eprom reading date:nk
Number of eprom :EP4424-2
Number of eprom file :EP4424P_20
Number of administration file:AD4424P_20
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:6 May 1990 (Sunday) 17:29

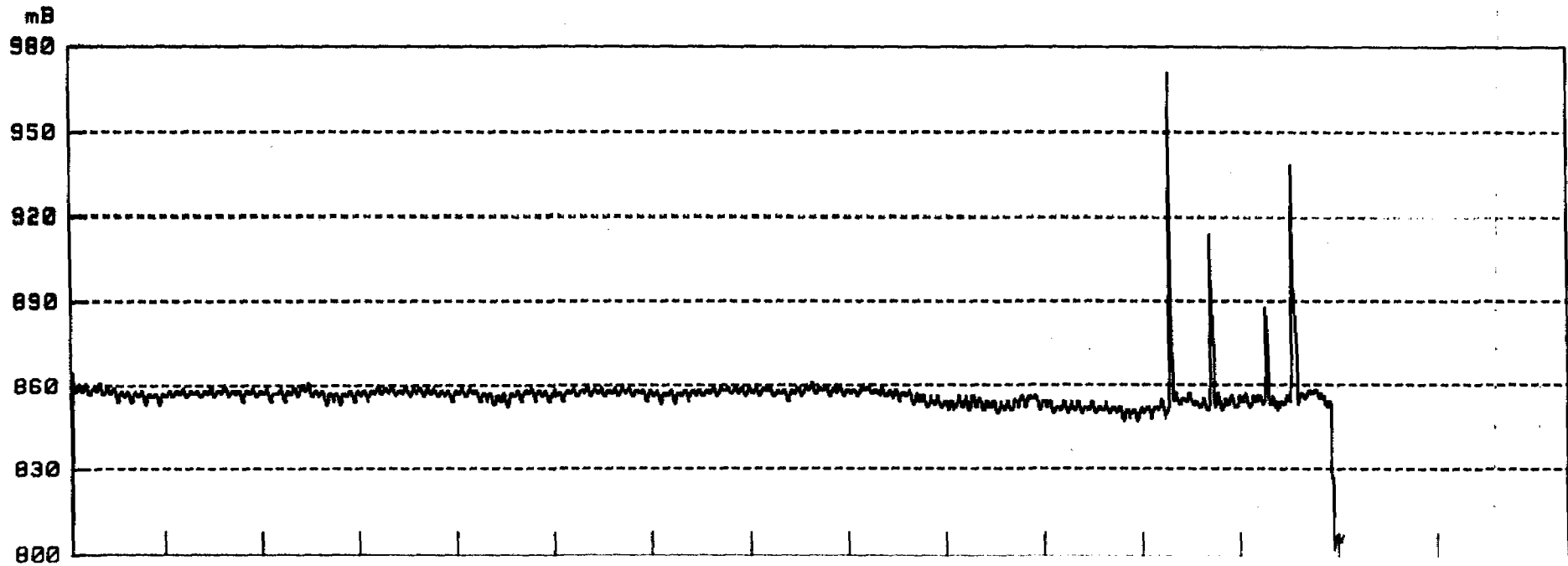
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 488046
BEGIN DATE : 020189
START TIME : 08:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030489
INTERVAL : 00:15

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FILE: EP4424P_20
18 Apr 1990 16:38:34

34



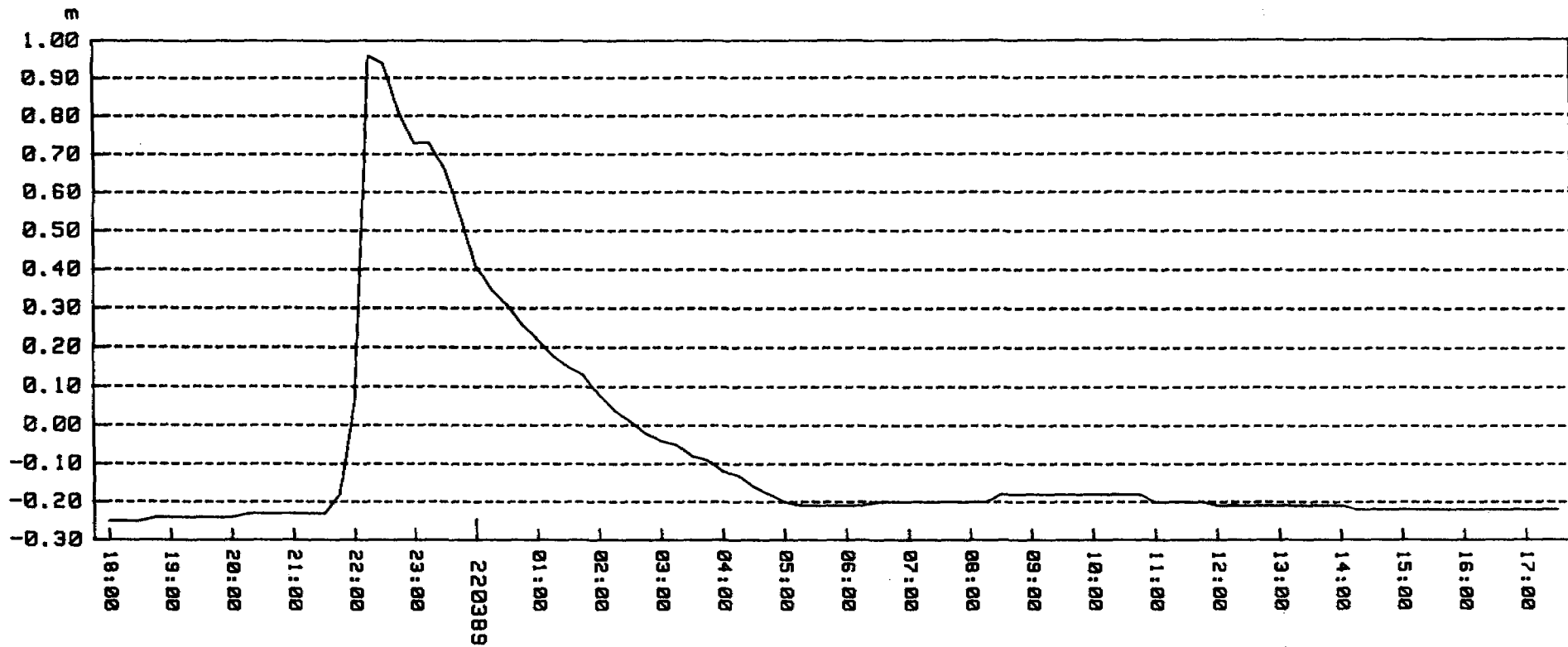
COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 210389
START TIME : 18:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 833 mB.
END DATE : 220389
INTERVAL : 00:15

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FILE: EP4424P_20
10 Apr 1990 17:02:39

35

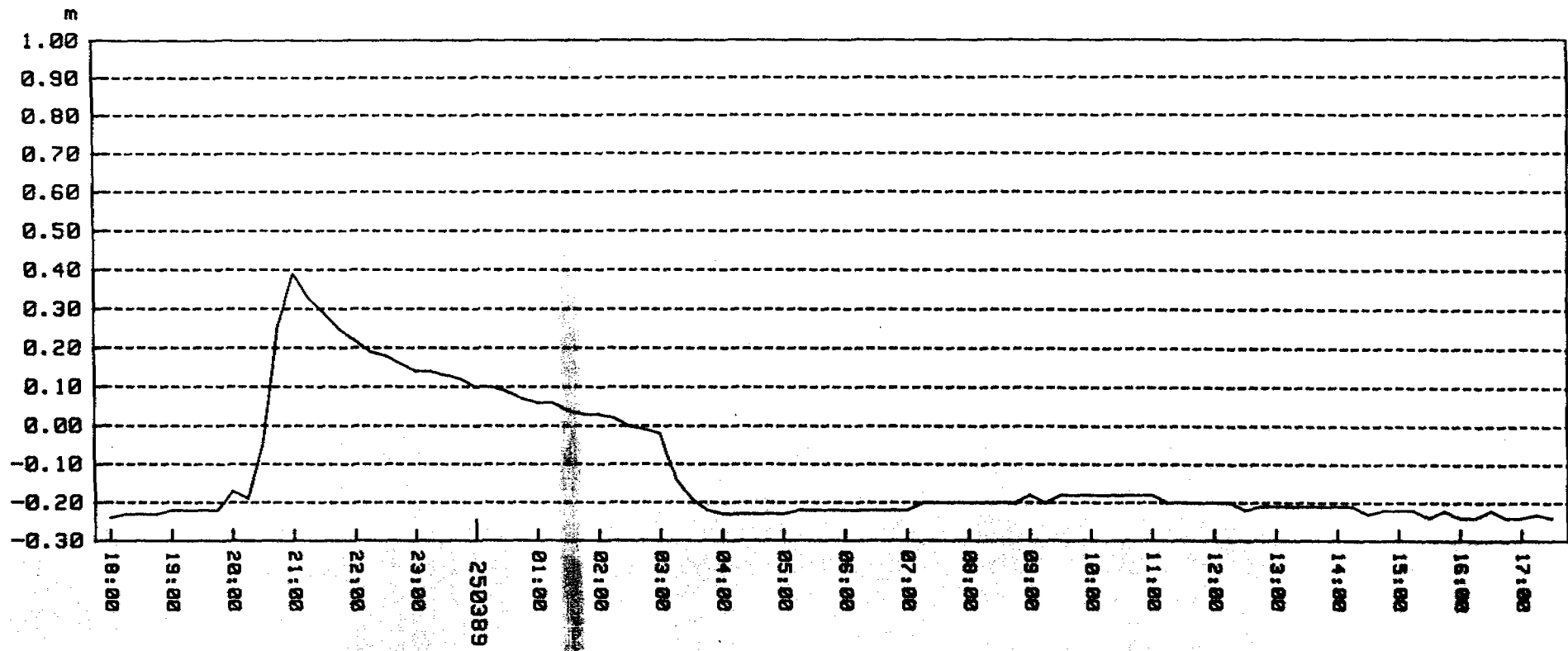


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 240389
START TIME : 18:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 933 mB.
END DATE : 250389
INTERVAL : 00:15

FILE: EP4424P_20
10 Apr 1990 17:00:42

36

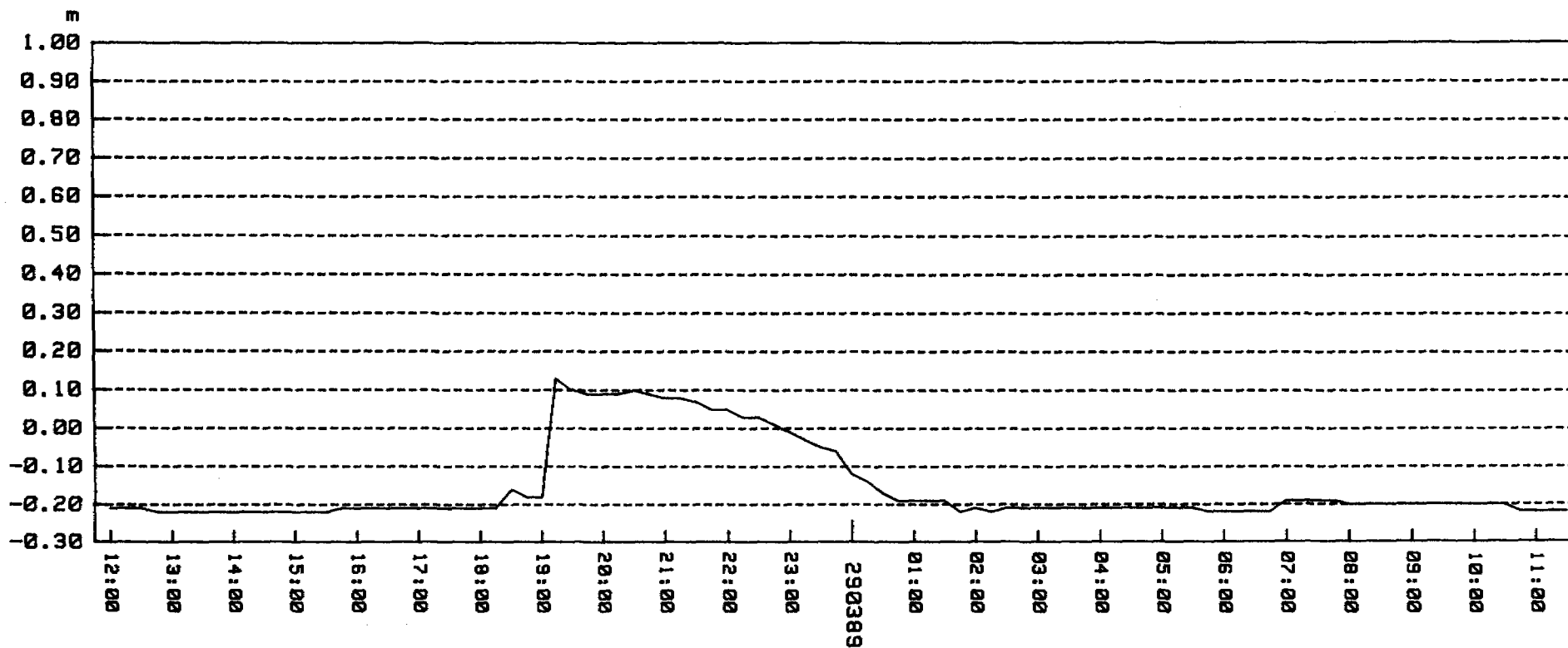


COUNTRY : YEMEN
STATION : AMAD
PROJECT : 408046
BEGIN DATE : 280389
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 833 mB.
END DATE : 290389
INTERVAL : 00:15

PAGE 1

FILE: EP4424P_20
10 Apr 1990 17:17:12



COUNTRY : YEMEN
STATION : AMAD
PROJECT : 400046
BEGIN DATE : 300389
START TIME : 12:00

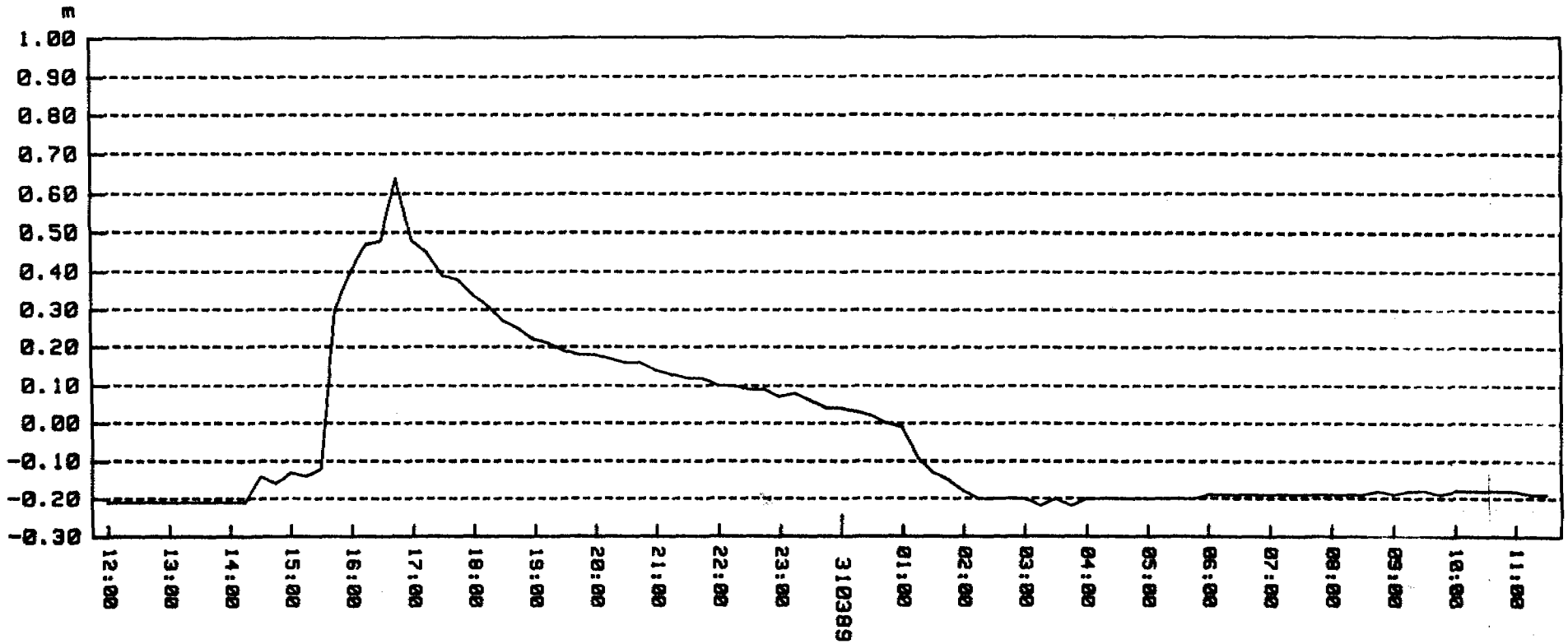
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 833 mB.
END DATE : 310389
INTERVAL : 00:15

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FILE: EP4424P_20

10 Apr 1980 17:23:24

38



PLACE :Amad 1a

PRESLOG:4424-3

Service given before initiation:none
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:Ok
Markers given :3

Installation date:03/04/89
Installation time:14:30

Installation description :try-out set-up
-installation place:sensor =+20.5 cm wadi level
-waterlevel :none, bottom hole is +5.0 cm wl.

Check up visit date :none
Check up visit results:none

Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:nk
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :08:30

Service given :Holland,rings+batteries.
Eprom reading date:nk
Number of eprom :ep4424-3
Number of eprom file :EP4424P_3
Number of administration file:AD4424P_3
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

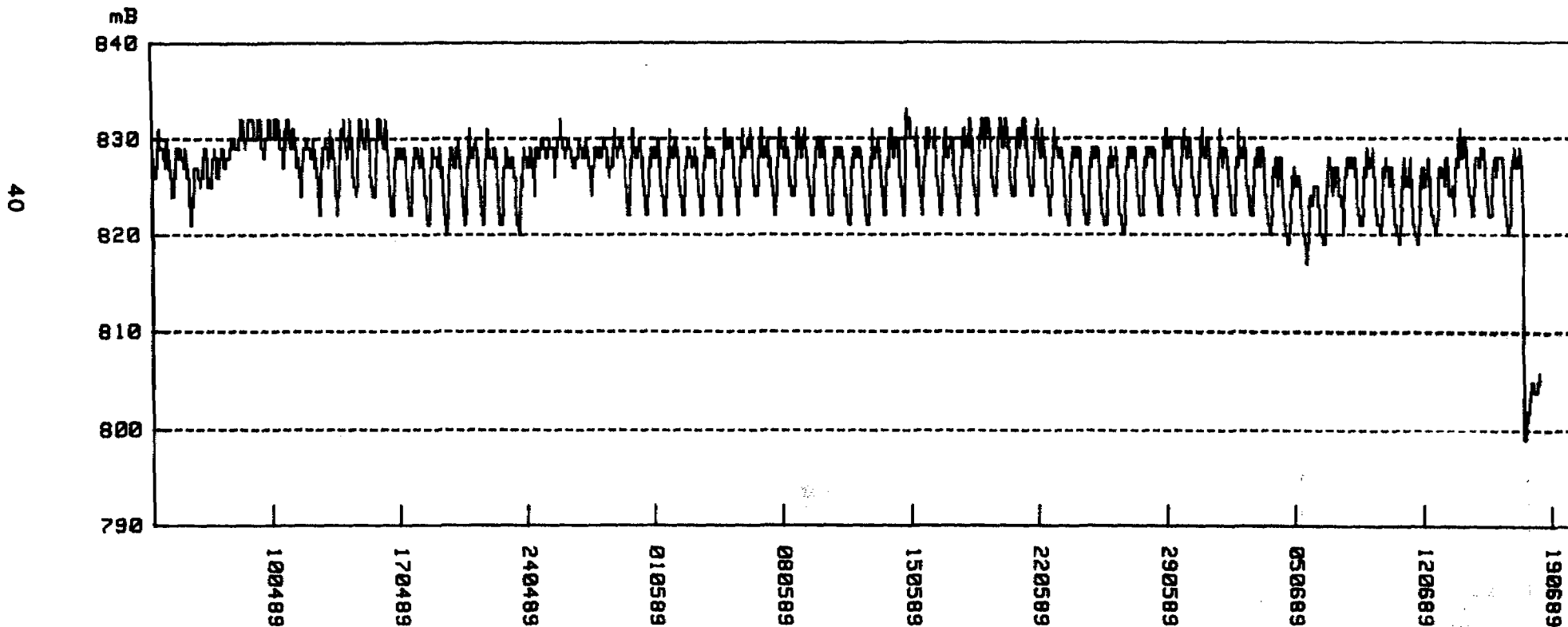
date:16 April 1990 (Monday) 15:59

COUNTRY : YEMEN
STATION : AMAD 1a
PROJECT : 400046
BEGIN DATE : 030489
START TIME : 12:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 100689
INTERVAL : 00:15

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FILE: EP4424P_3
10 Apr 1990 17:46:44



PLACE :Amad 1a bar

PRESLOG:4436-1

Service given before initiation:none
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:OK
Markers given :4

Installation date:03/04/89
Installation time:14:30

Installation description :try-out set-up
-installation place:in GS-pipe in top
-waterlevel :none

Check up visit date :none
Check up visit results:none
Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:nk
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :14:00

Service given :batteries changed
Eprom reading date:nk
Number of eprom :EP4436-1
Number of eprom file :EP4436P_1
Number of administration file:AD4436P_1
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 16:08

COUNTRY : YEMEN
STATION : AMAD 1a BAR
PROJECT : 408046
BEGIN DATE : 030489
START TIME : 12:00

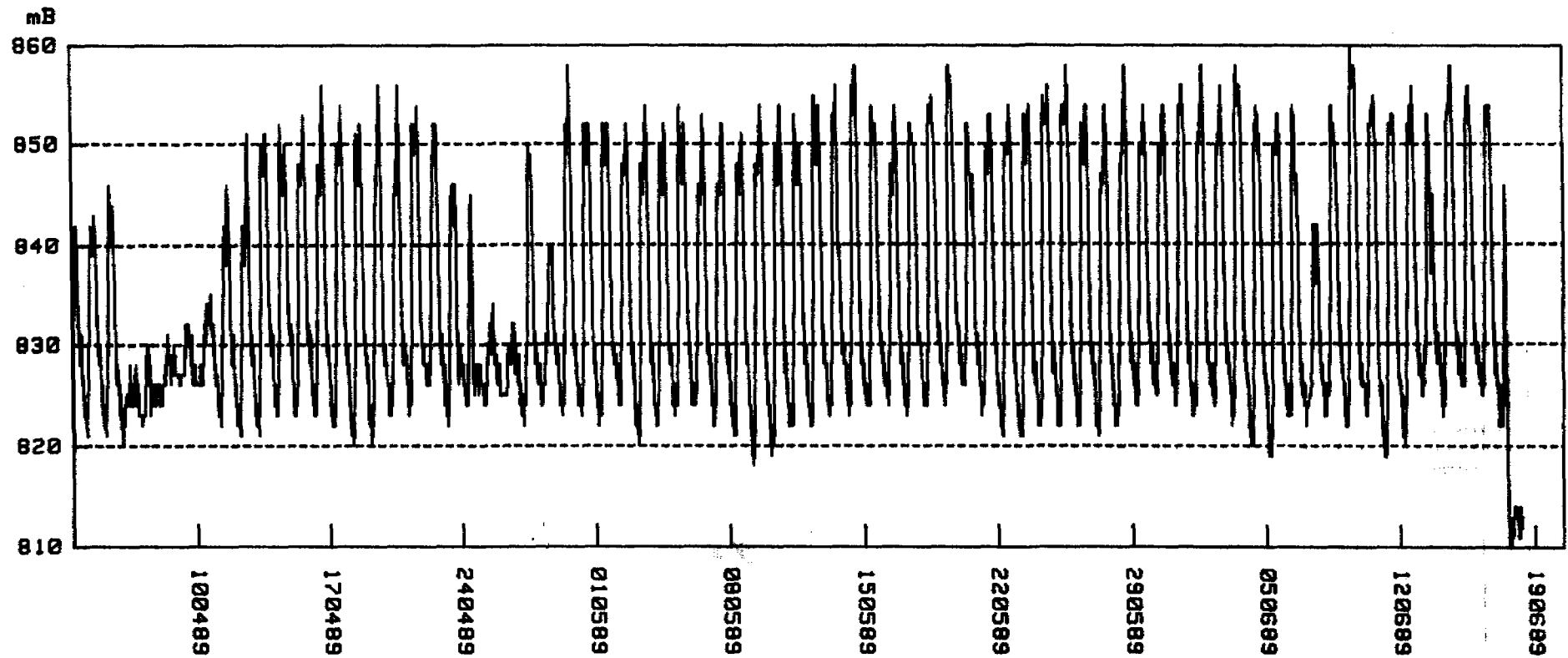
PLOT OF PRESSURE DATA

ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 180689
INTERVAL : 00:15

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FILE: EP4436P_1
10 Apr 1990 18:01:47

42



PLACE :Amad 1b

PRESLOG:4433-1

Service given before initiation:none
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:OK
Markers given :3

Installation date:03/04/89
Installation time:14:30

Installation description :try-out set-up
-installation place:sensor =-52 cm wadi level
-waterlevel :drum full,top drum=-33.5 cm wadi wl

Check up visit date :none
Check up visit results:none

Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:nk
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :08:30

Service given :batteries changed
Eprom reading date:nk
Number of eprom :ep4433-1
Number of eprom file :EP4433P_1
Number of administration file:AD4433P_1
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 16:20

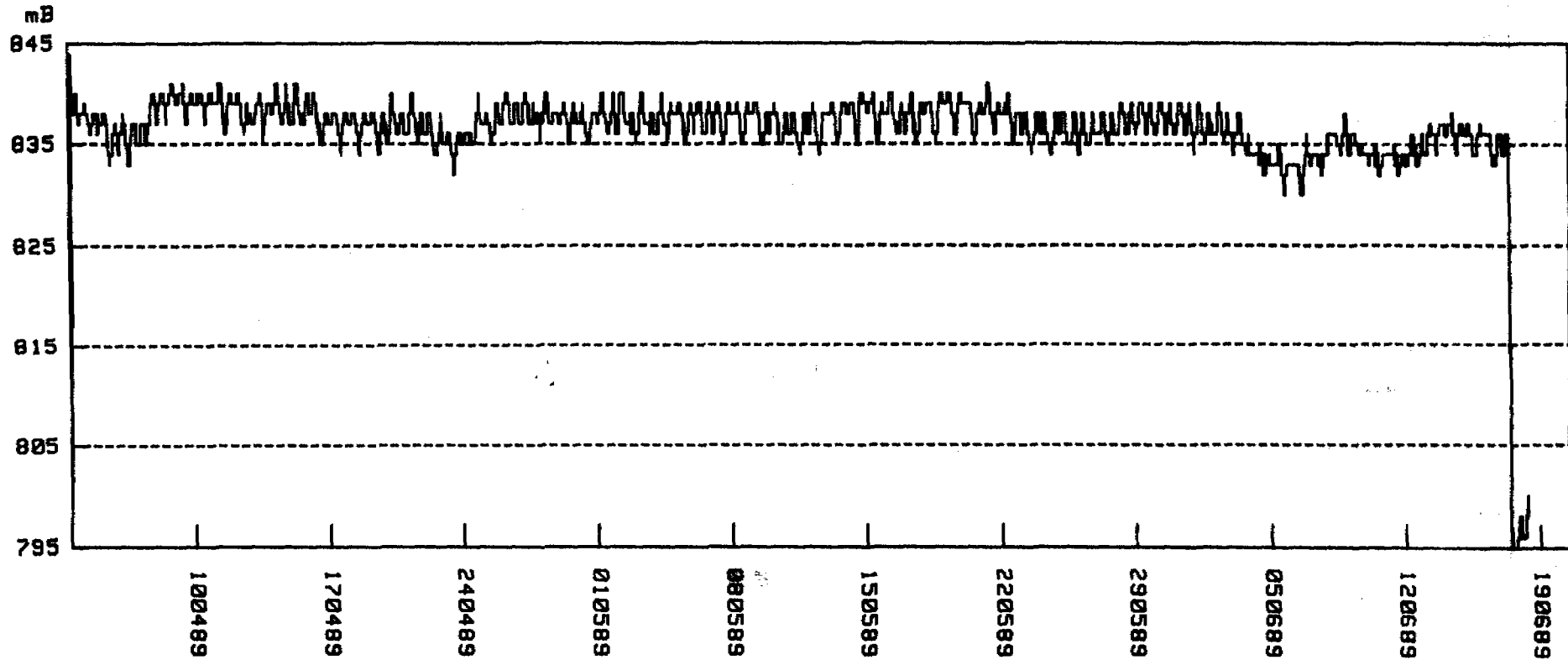
COUNTRY : YEMEN
STATION : AMAD 1b
PROJECT : 400046
BEGIN DATE : 030489
START TIME : 12:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 100689
INTERVAL : 00:15

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FILE: EP4433P_1
10 Apr 1990 10:19:47

44



PLACE :Amad lc

PRESLOG:4370-2

Service given before initiation:changed batteries
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:OK
Markers given :3

Installation date:03/04/89
Installation time:14:45

Installation description :try-out set-up
-installation place:sensor=-98.5 cm wadi level
-waterlevel :drum full,top drum=-72.5 cm w1

Check up visit date :none
Check up visit results:none

Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:nk
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :08:30

Service given :changed batteries and rings.
Eprom reading date:nk
Number of eprom :EP4370-2
Number of eprom file :EP4370P_2
Number of administration file:AD4370P_2
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 16:33

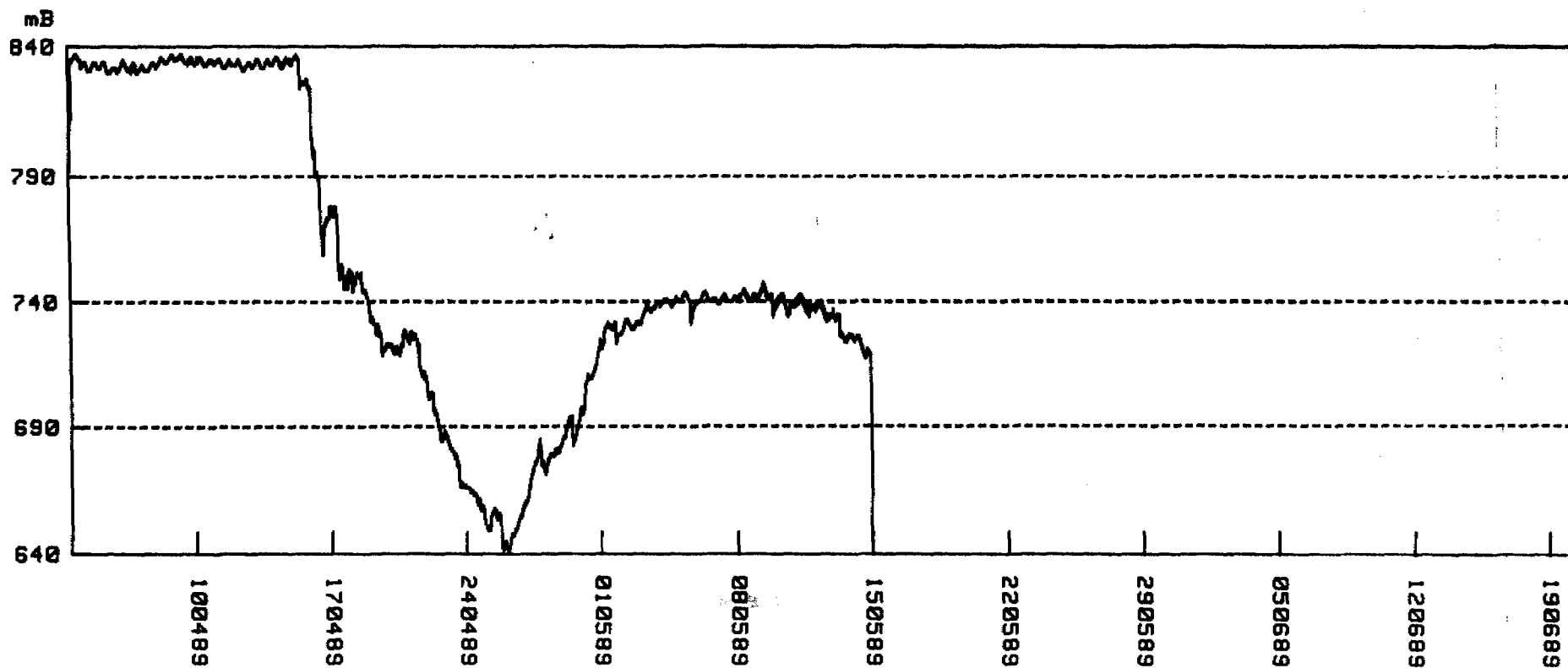
COUNTRY : YEMEN
STATION : AMAD 1c
PROJECT : 488046
BEGIN DATE : 030489
START TIME : 12:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 190689
INTERVAL : 00:15

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FILE: EP4370P_2
10 Apr 1990 10:41:22

46



PLACE :Amad 1

PRESLOG:4438-1

Service given before initiation?:
-interval :00:15

Initiation date:23/01/90
Initiation time:13:00

Try-out results: following data was obtained in field at
installation 23/01/90, 13:00 h :
23/01/90 13:00 last marker
,, 13:00 air
,, 13:15 water of 143 cm on sensor
,, 13:30 water of 143 cm on sensor
,, 13:45 water of 143 cm on sensor
14:00 air

the results, when reading out, were the same.

Markers given : one at beginning and one at end

Installation date:23/01/90
Installation time:13:00
Installation description :in pipe
-installation place:middle wadi
-waterlevel :-

Check up visit date :3/90
Check up visit results: the pipe was moved; was under strong
slope and there was no sand around
concrete fouting anymore, pipe was
replaced and sand restored.

Calculated removal/stop date:09/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:14:05
Remarks : pipe was still vertical whereas there have been a
flood after reconstruction.
-waterlevel:-
-sediment :normal

Stop date :03/05/90
Stop time :08:23

Service given :batteries and rings
Eprom reading date:03/05/90
Number of eprom :EP4438_1
Number of eprom file :EP4438P_1
Number of administration file:-
Floppy number of eprom file :C: / floppy 7
Floppy number of administration file:-
Reference where results were listed :2
General remarks: date:12 May 1990 (Saturday) 11:21

COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 406048
BEGIN DATE : 290190
START TIME : 13:00

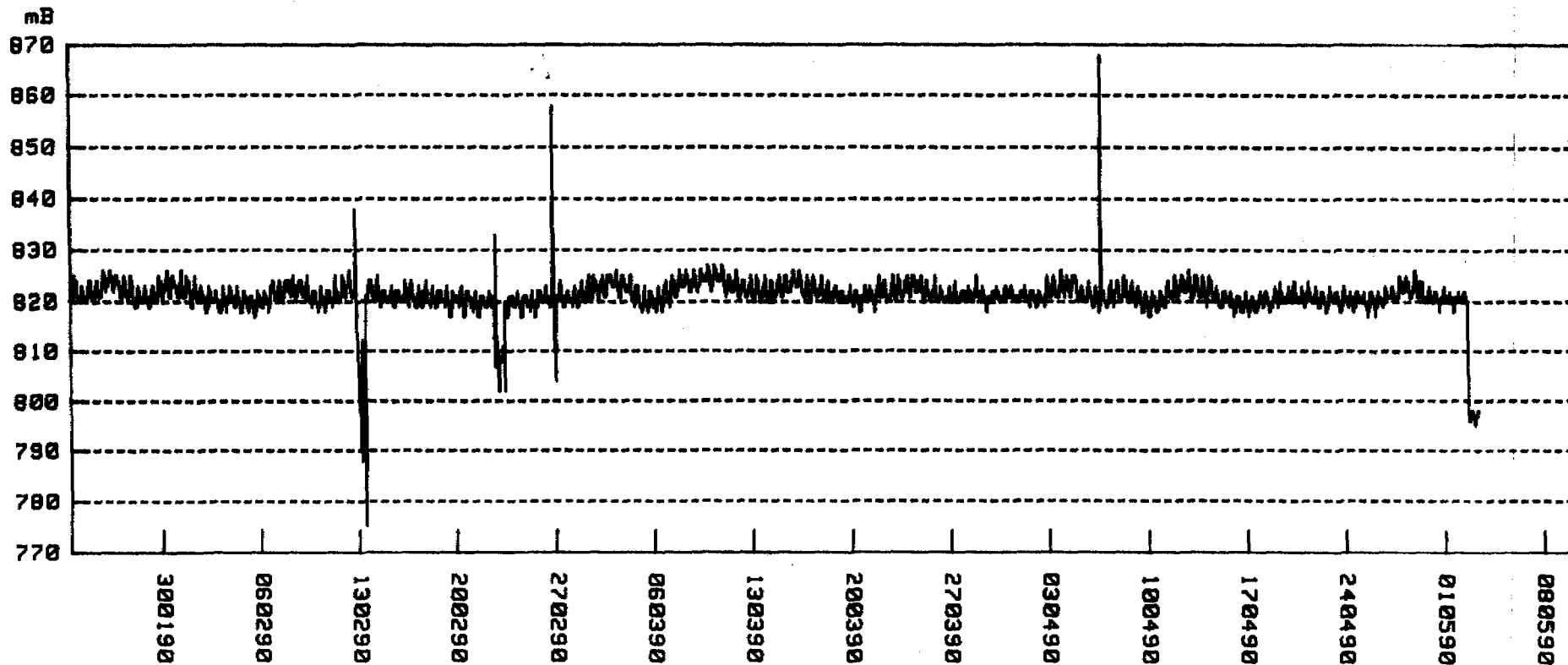
PLOT OF PRESSURE DATA

ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040590
INTERVAL : 00:15

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FILE: EP4438P_1
5 May 1990 21:15:48

48



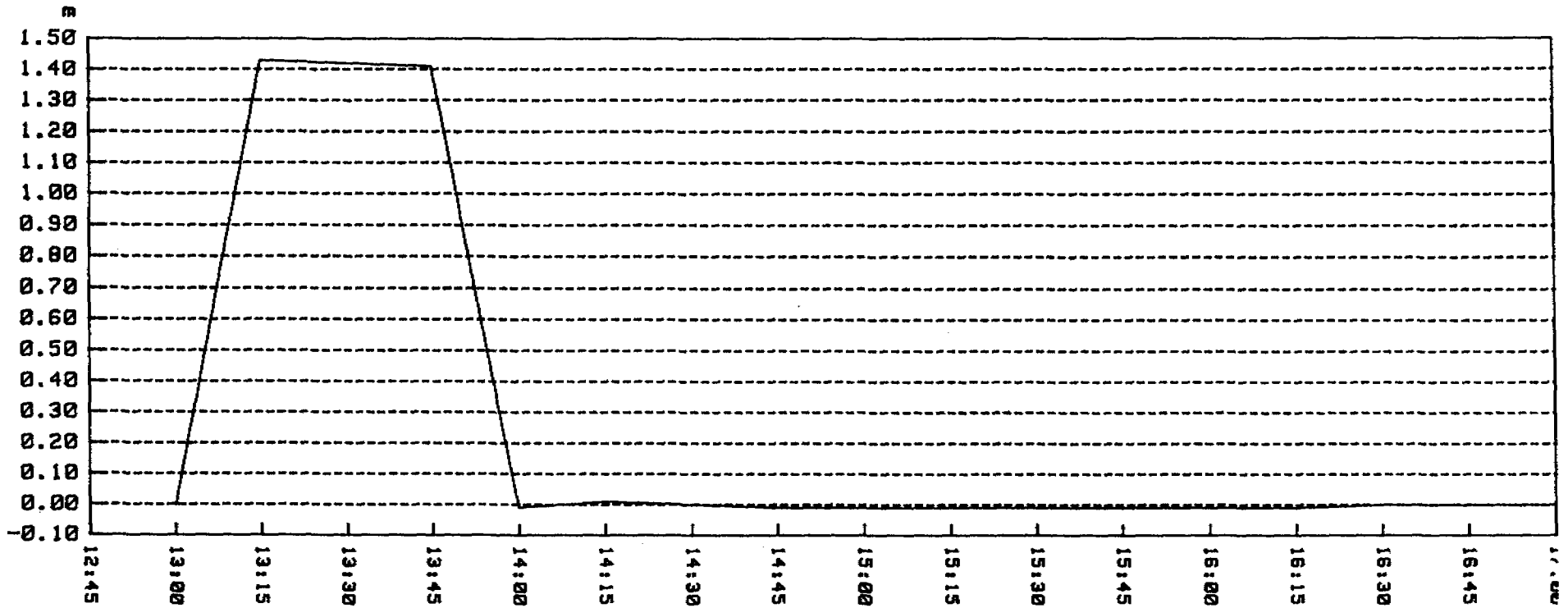
COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 408048
BEGIN DATE : 230190
START TIME : 13:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 821 mB.
END DATE : 230190
INTERVAL : 00:15

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FILE: EP4438P
3 May 1990 20:07:40

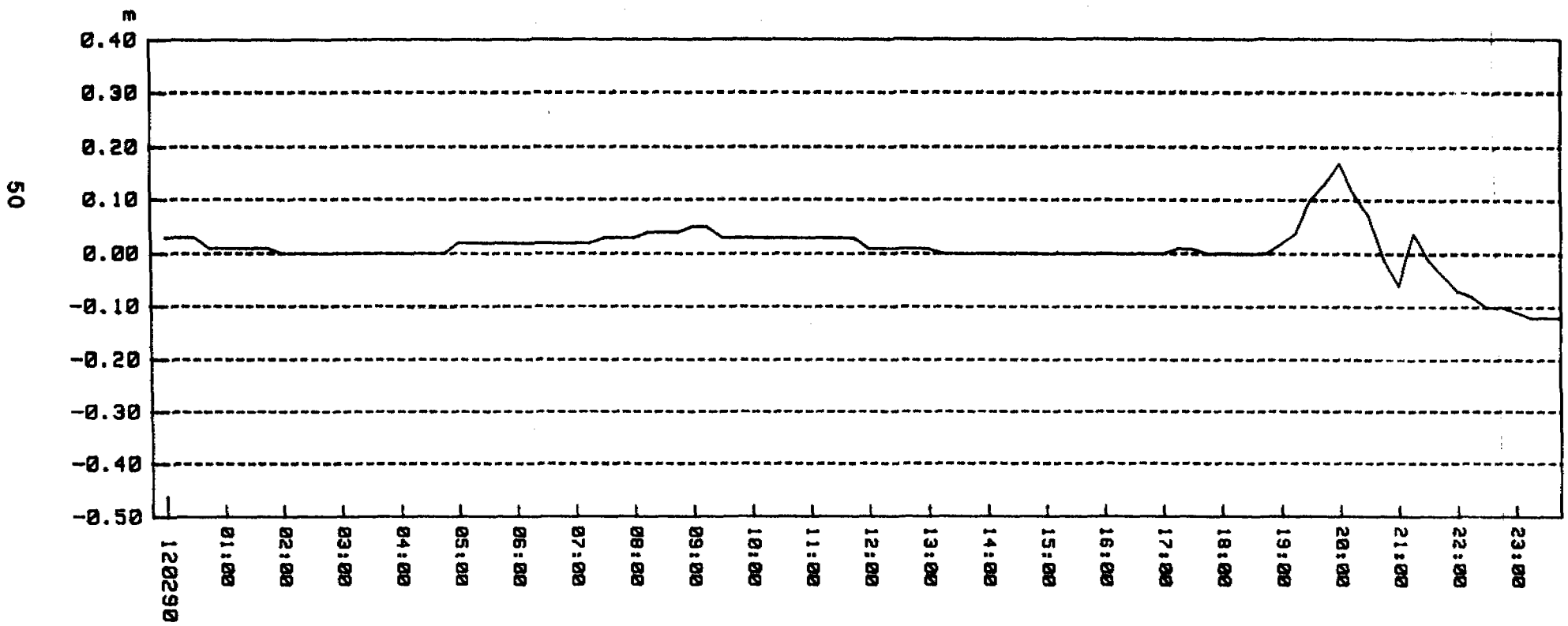
49



COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 408048
BEGIN DATE : 120290
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 821 mB.
END DATE : 140290
INTERVAL : 00:15

FILE: EP4438P_9
3 May 1990 20:23:32

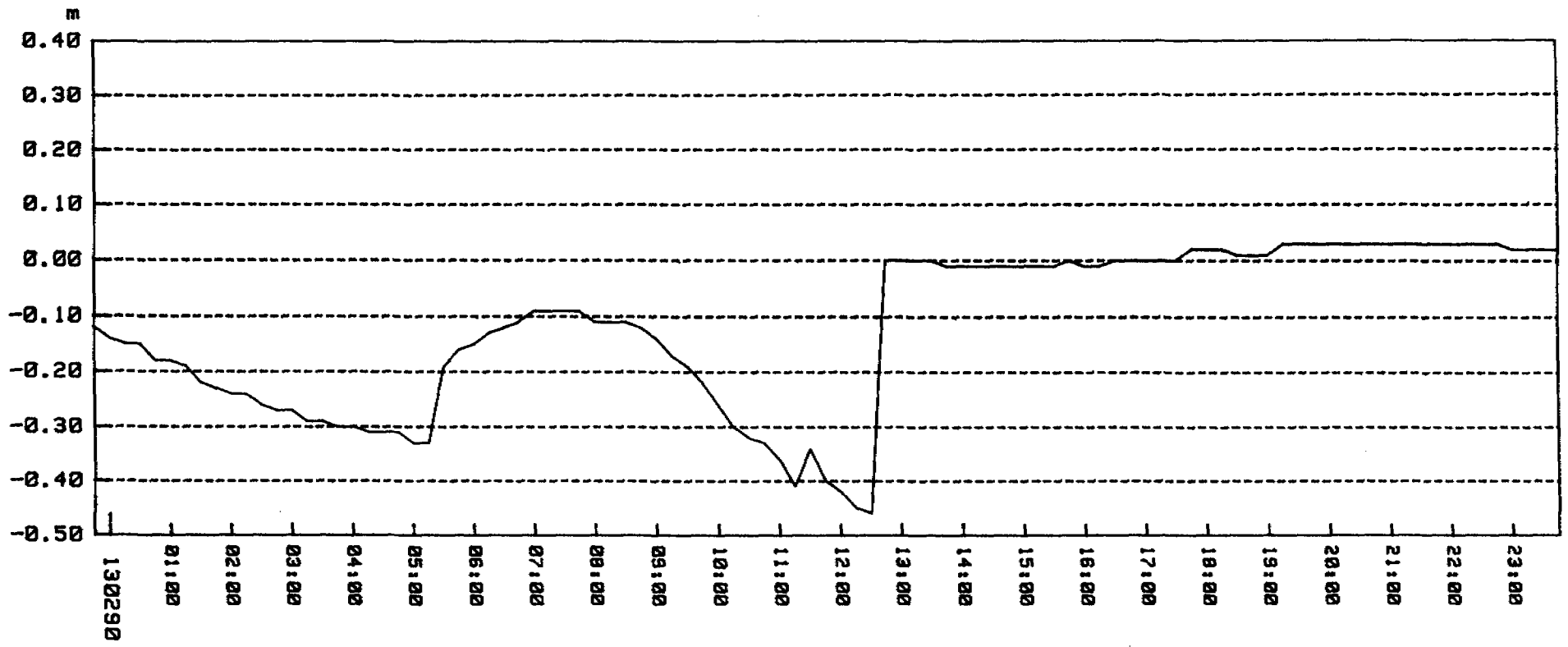


COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4438P_1
3 May 1990 20:26:04

51

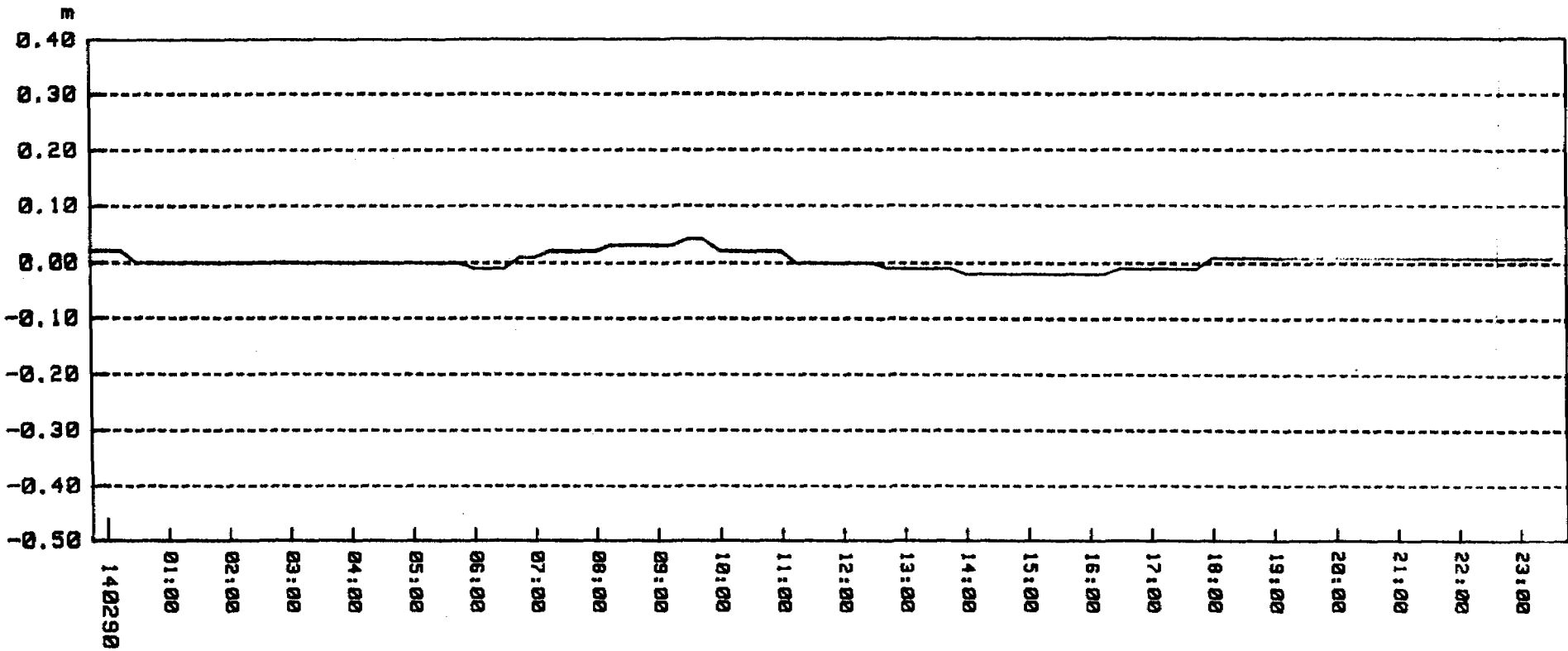


COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4439P_1
3 May 1998 20:20:36

52



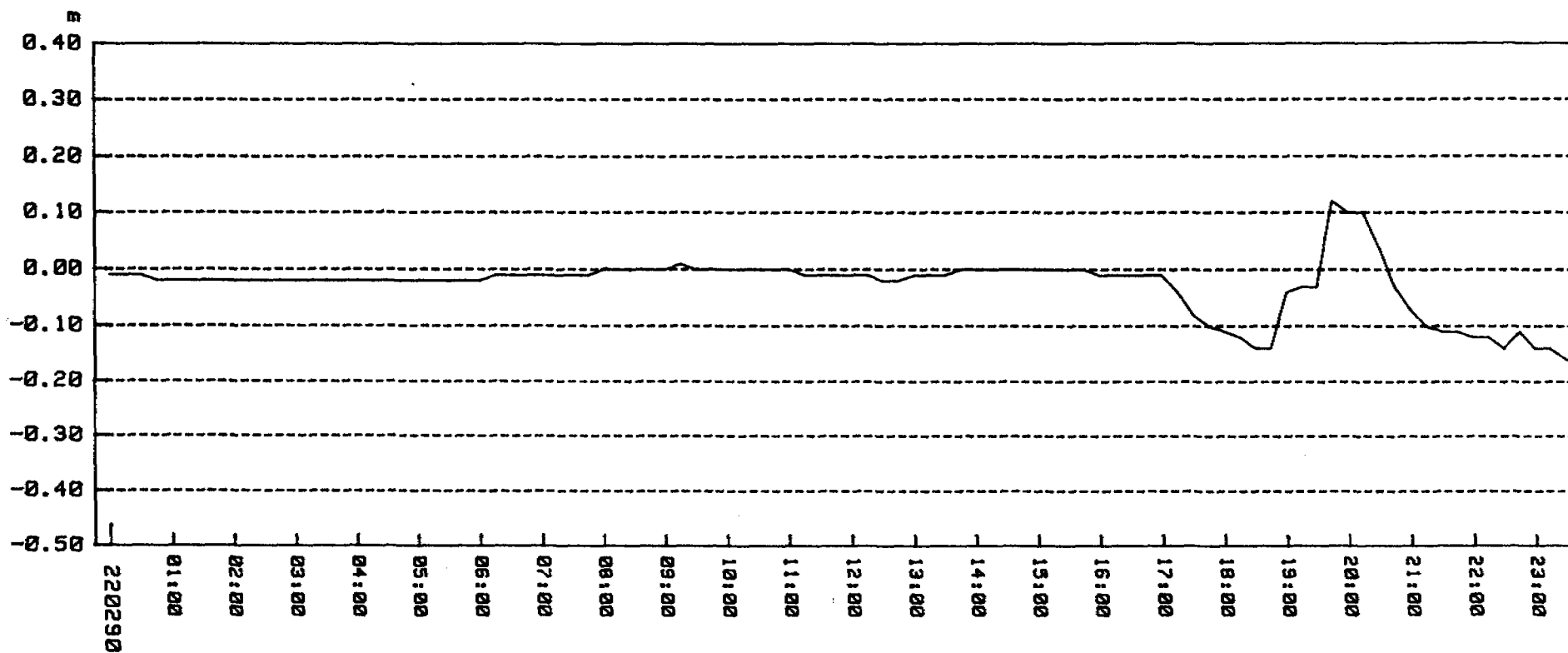
COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 400046
BEGIN DATE : 220290
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 821 mB.
END DATE : 230290
INTERVAL : 00:15

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FILE: EP4438P_0
3 May 1990 20:34:10

53



COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 408046

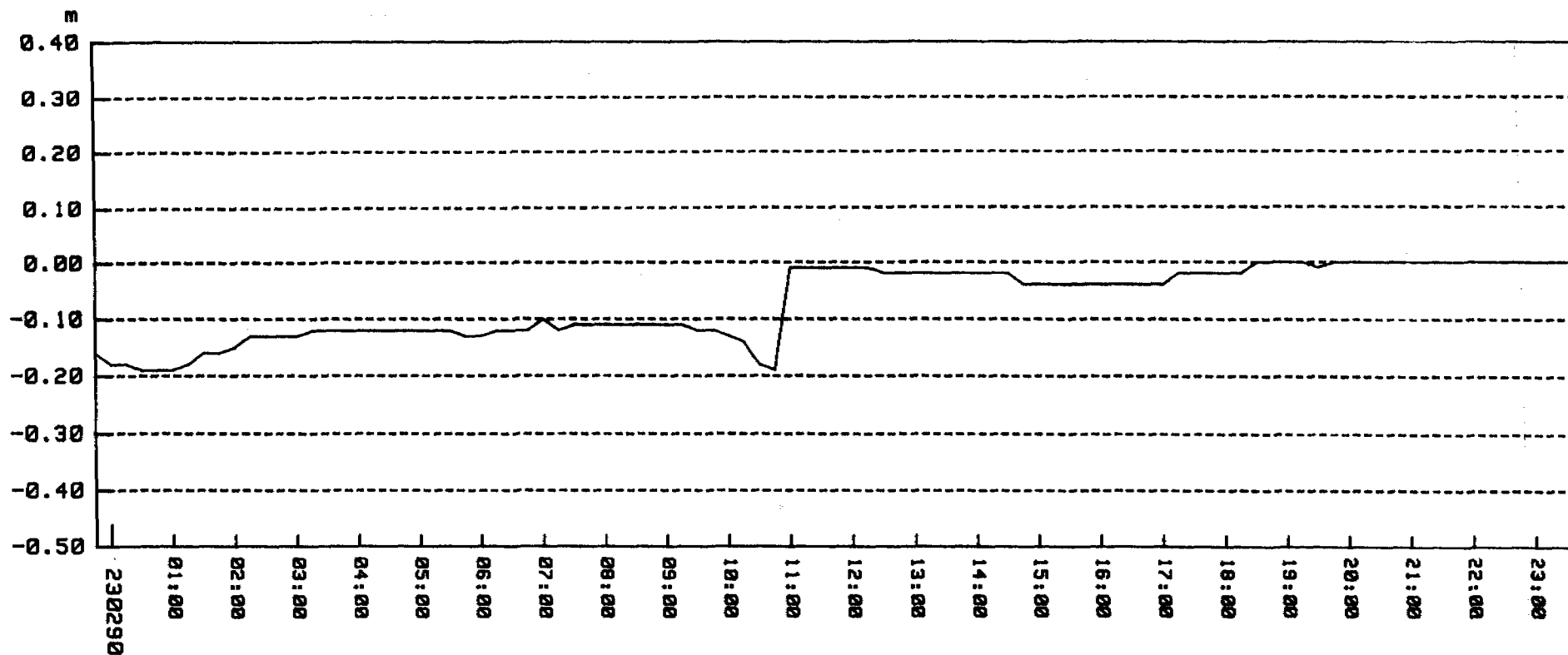
PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4438P_1

3 May 1990 20:36:42

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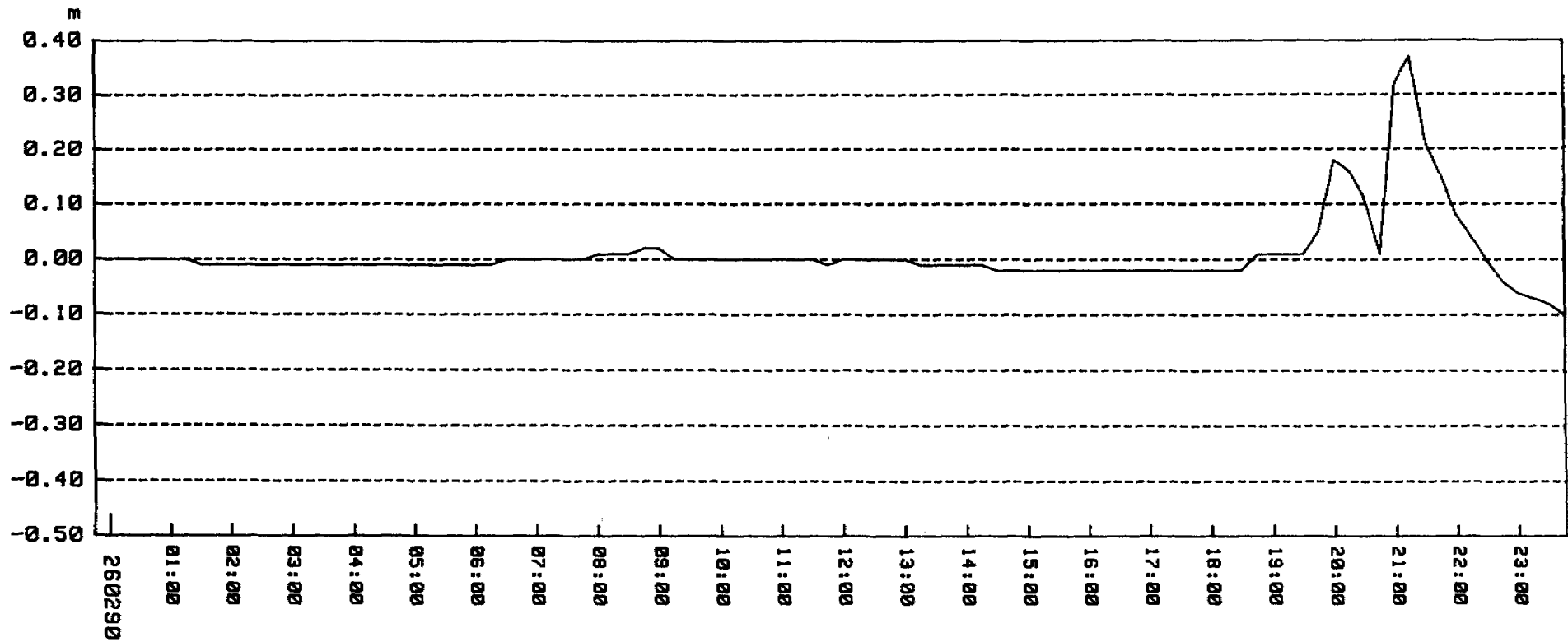
COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 400046
BEGIN DATE : 260290
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 821 mB.
END DATE : 270290
INTERVAL : 00:15

PAGE 1

FILE: EP4430P_1
3 May 1990 20:41:03

55



COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 408046

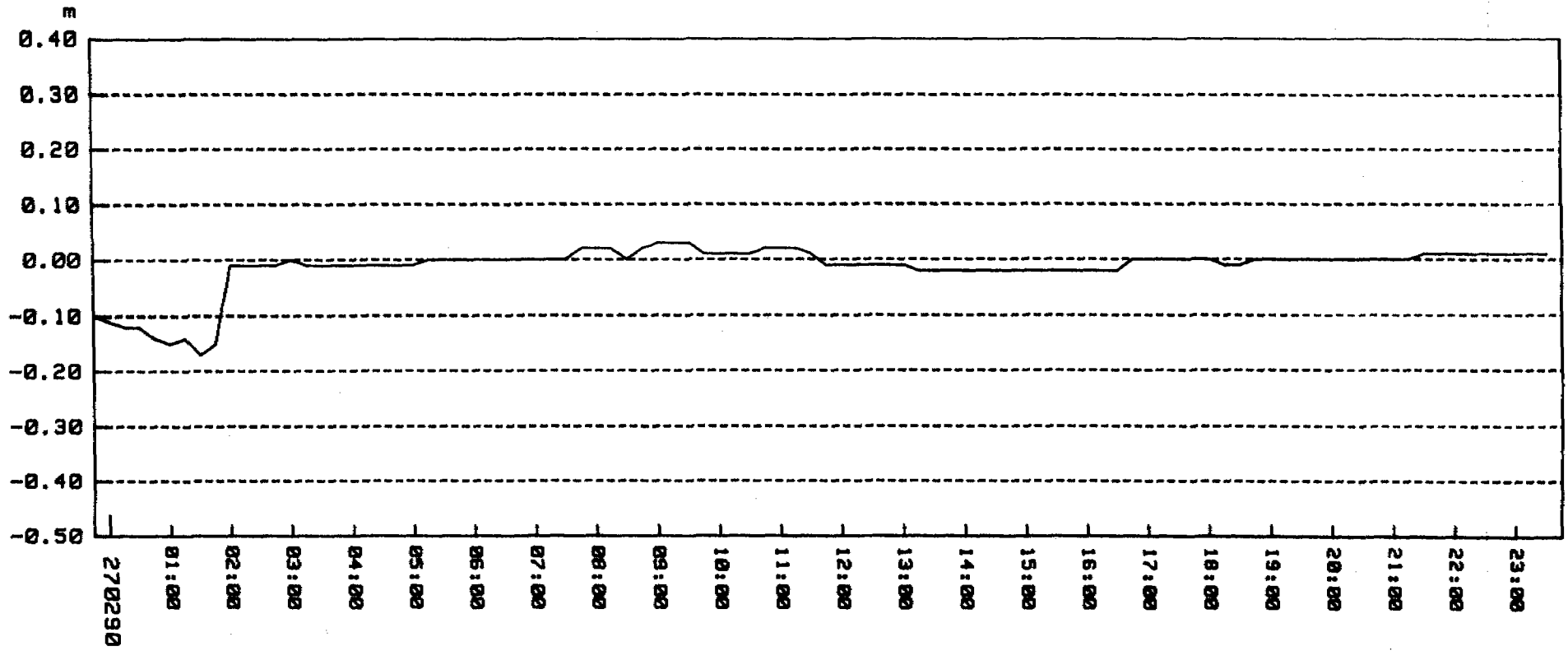
PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4438P_1

3 May 1990 20:43:34

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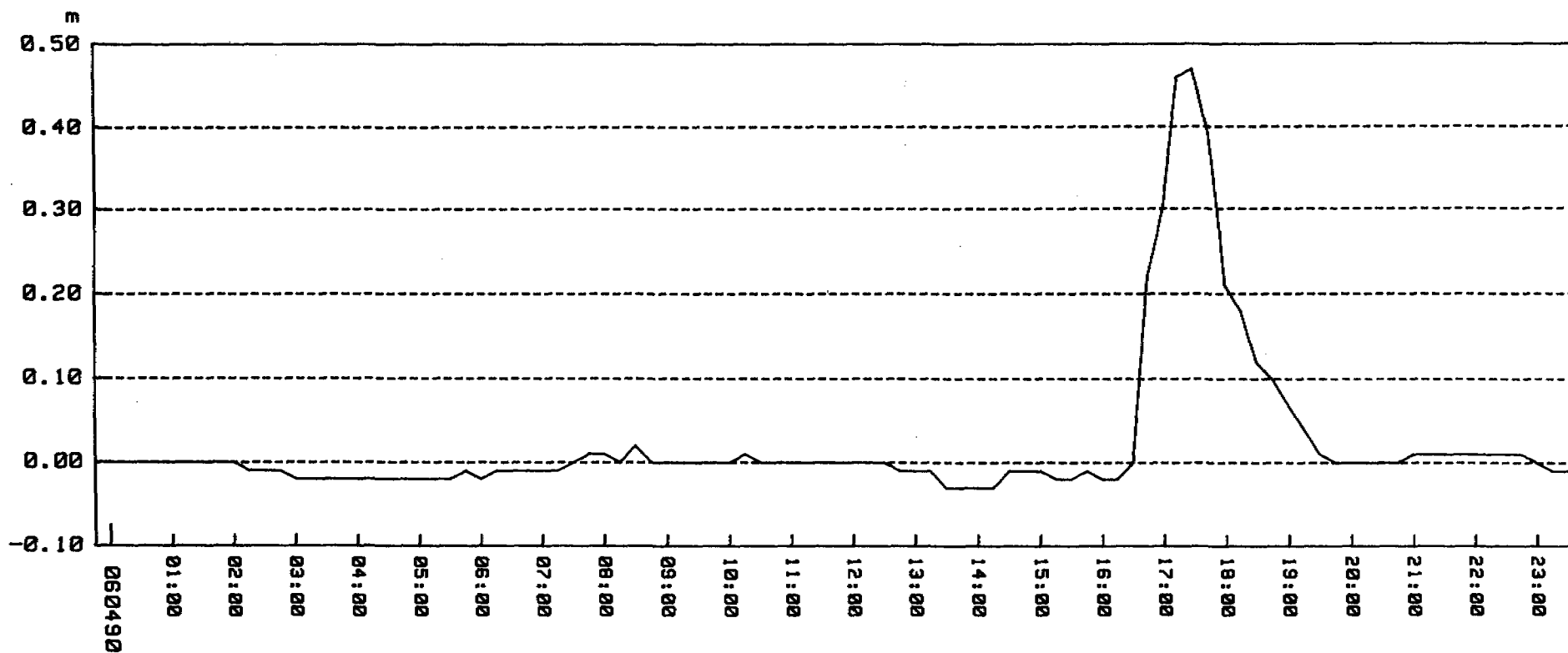
COUNTRY : YEMEN
STATION : AMAD 1
PROJECT : 400046
BEGIN DATE : 060490
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 921 mB.
END DATE : 070490
INTERVAL : 00:15

PAGE 1

FILE: EP4438P_1
3 May 1990 20:53:11

57



PLACE :Mahajaba 1 / Amad 2

PRESLOG:4421-0

Service given before initiation:none
-interval :00:15

Initiation date:15/01/88
Initiation time:19:45

Try-out results:OK
Markers given :1

Installation date:18/01/88
Installation time:10:00 Mahajaba a
Installation date:09/03/88
Installation time:13:00 Mahajaba b
Installation date:06/04/88
Installation time:13:45 Amad 2

Installation description Mahajaba a:in drum with 30 cm sand above
-installation place:in reservoir front old dam
-waterlevel :drum full with water

Installation description Mahajaba b:in drum with 20 cm sand above
-installation place: in narrow gorge ;future
dam place
-waterlevel :drum full with water

Installation description Amad 2 :in drum with 55 cm sand above
-installation place:middle of wadi at 250.3 m. of
Amad 1 with netting
-waterlevel :drum full with water and
boulders,sensor=-1.40 m
wadi level

Check up visit date :2 times:when moving
Check up visit results:OK

Calculated removal/stop date:30/04/88
Calculated removal/stop time:-

Removal date Mahajaba a :09/03/88
Removal time :10:00
Remarks :-

-waterlevel :-
-sediment :-

Removal date Mahajaba b :03/04/88
Removal time :nk
Remarks :-

-waterlevel :-
-sediment :-

Removal date Amad 2 :18/08/88

Removal time :13:00
Remarks :-
-waterlevel :-
-sediment :-

Stop date :nk
Stop time :nk

Service given :changed batteries
Eprom reading date:nk
Number of eprom :ep4421-0
Number of eprom file :EP4421P_0
Number of administration file:AD4421P_0
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed :1+2

General remarks:

1.

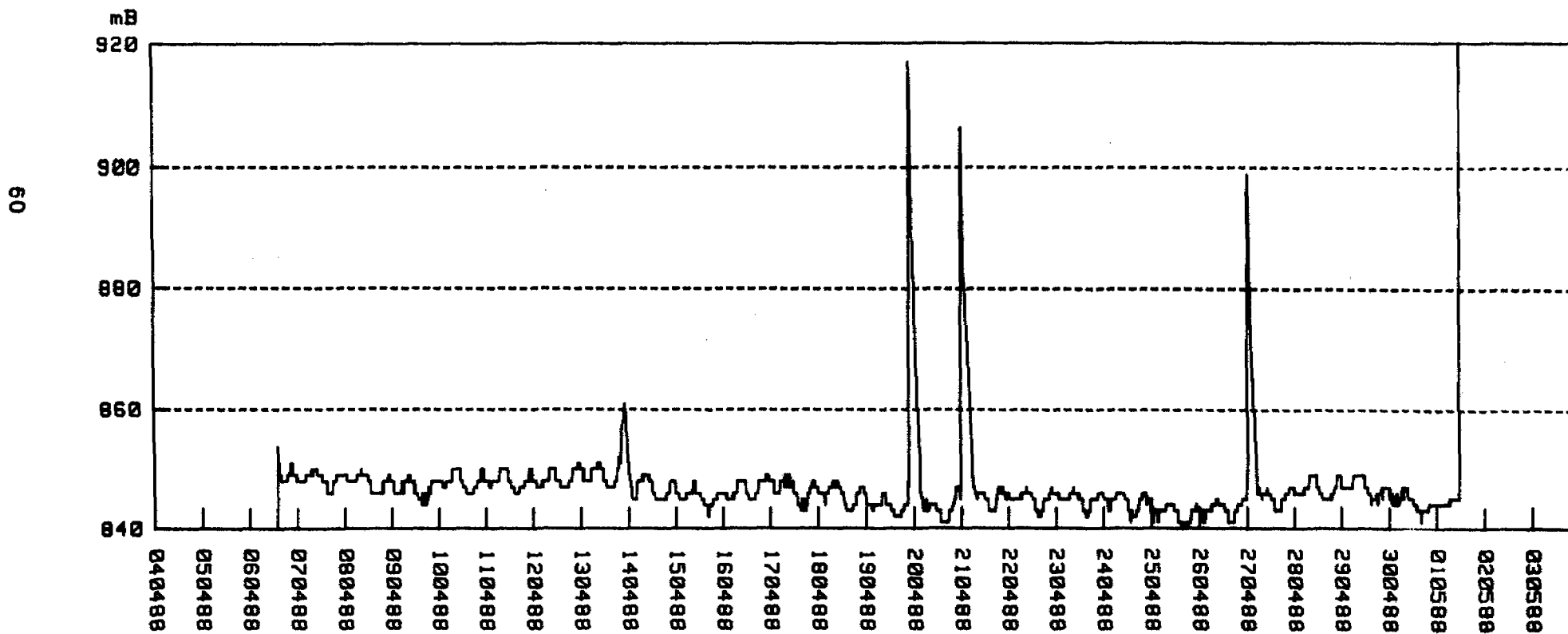
date:16 April 1990 (Monday) 17:18

COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 040488
START TIME : 00:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 020588
INTERVAL : 00:15

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FILE: EP4421P_0
11 Apr 1990 00:33:31

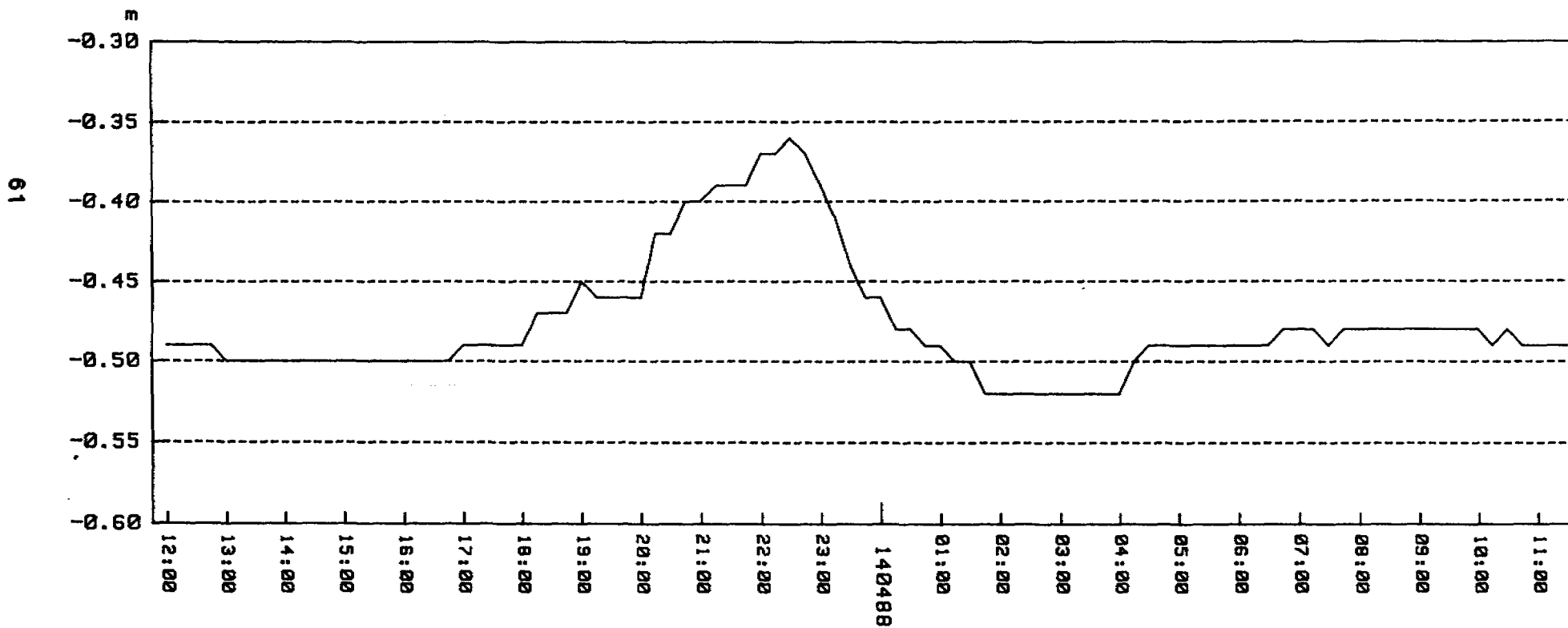


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 130488
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 805 mB.
END DATE : 140488
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_0
11 Apr 1990 08:52:25



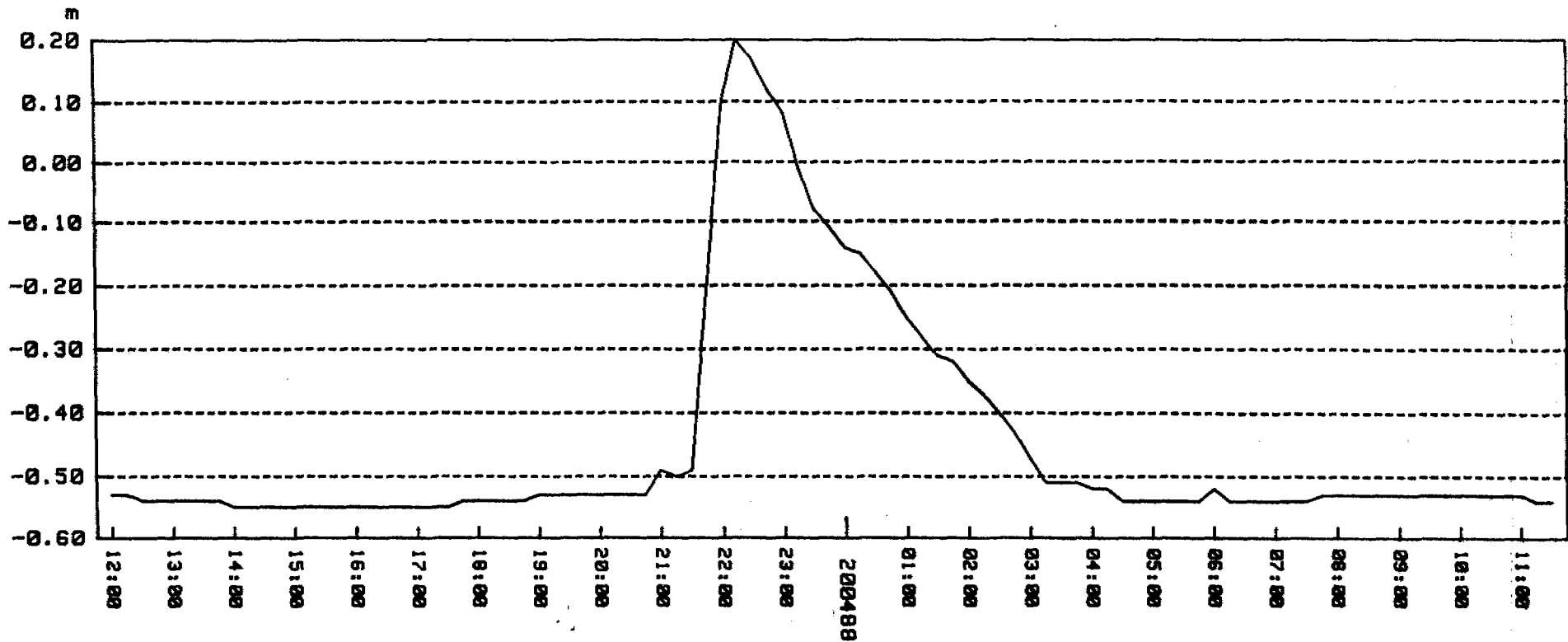
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 190488
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 005 mB.
END DATE : 200488
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_0
11 Apr 1990 00:58:14

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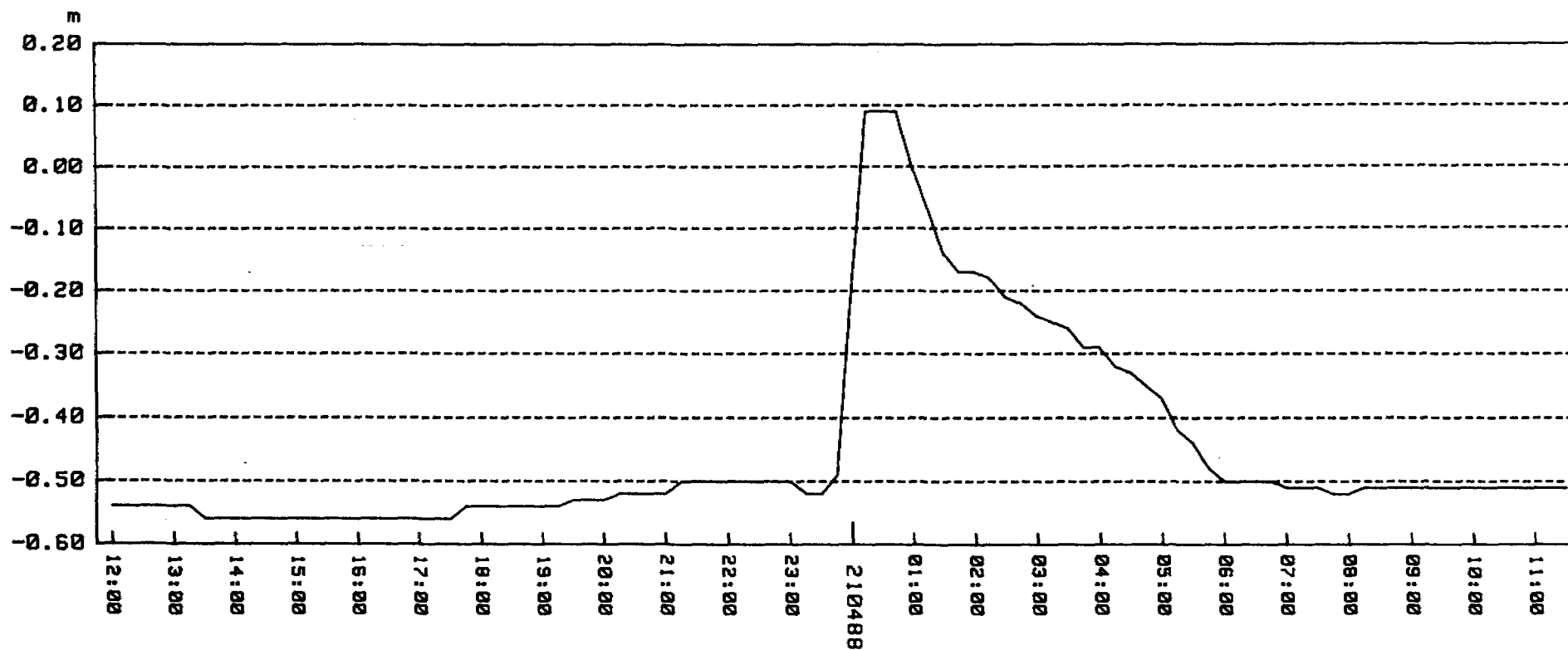
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 200400
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 805 mB.
END DATE : 210400
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_0
11 Apr 1990 09:33:27

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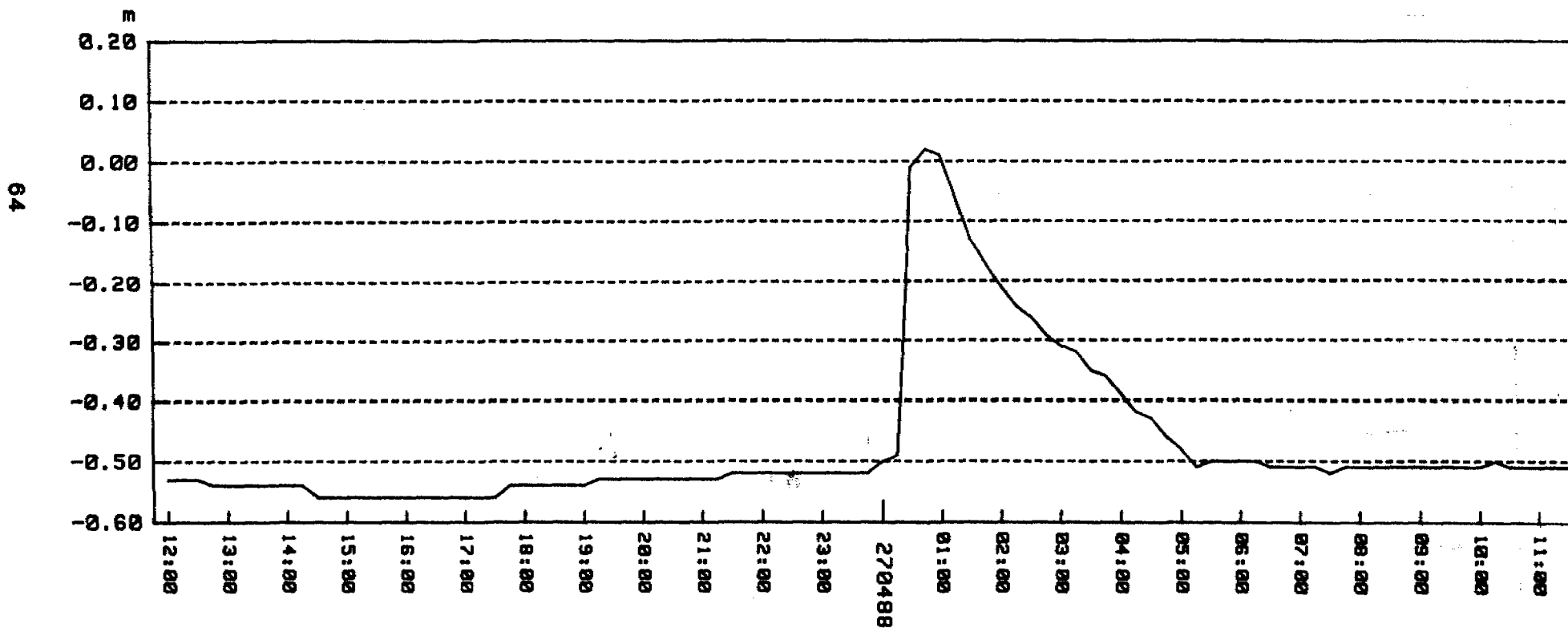


COUNTRY : YEMEN
STATION : AMRD 2
PROJECT : 400048
BEGIN DATE : 260488
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 805 mB.
END DATE : 270488
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_0
11 Apr 1990 09:47:58



PLACE :Amad 2

PRESLOG:4427-1

Service given before initiation:changed batteries
-interval :00:15

Initiation date:19/09/88
Initiation time:07:15

Try-out results:OK
Markers given :2

Installation date:19/09/88
Installation time:10:00

Installation description :in drum with 55 cm sand above
-installation place:middle wadi
-waterlevel :drum full with water and boulders
sensor=-1.40 m wadi level

Check up visit date :none
Check up visit results:-

Calculated removal/stop date:03/01/89
Calculated removal/stop time:-

Removal date:02/01/89
Removal time:10:55
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/01/89
Stop time :08:52

Service given :none
Eprom reading date:nk
Number of eprom :EP4427-1
Number of eprom file :EP4421P_10
Number of administration file:AD4421P_10
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

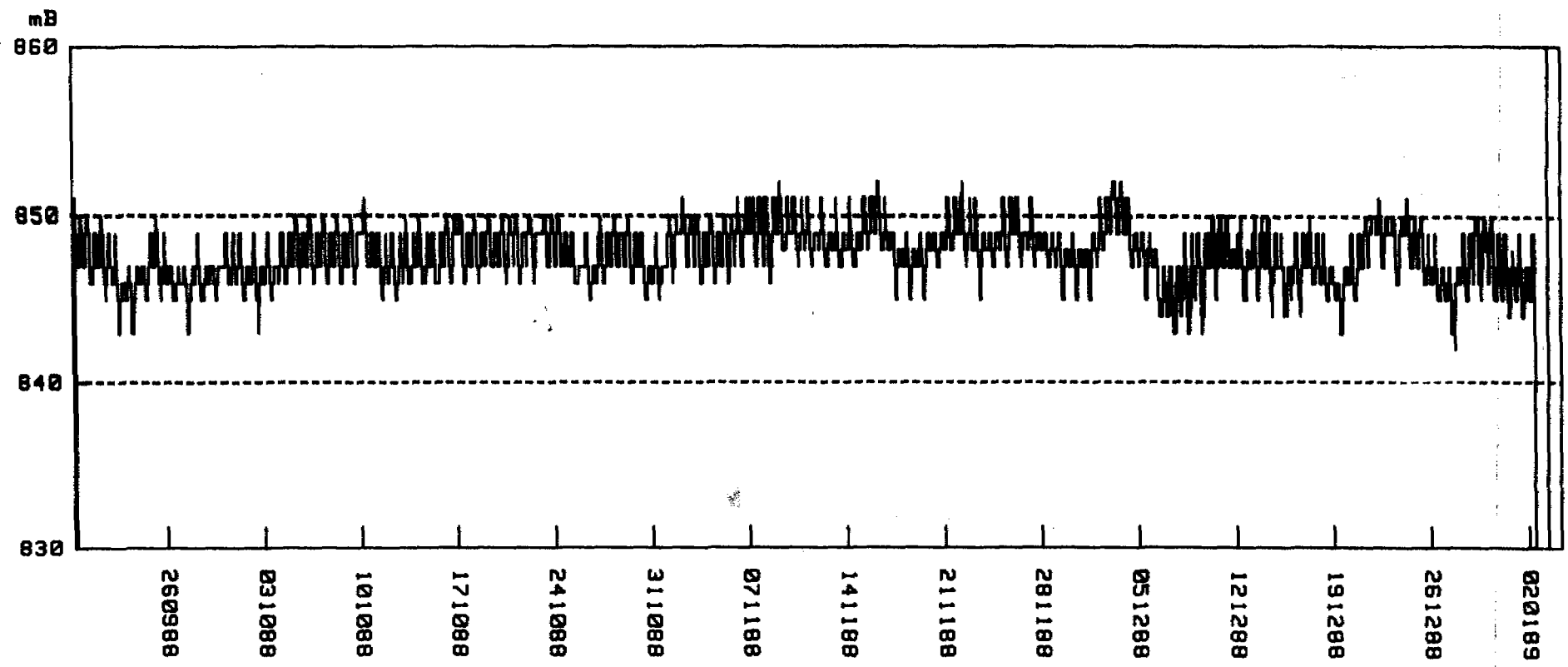
date:16 April 1990 (Monday) 17:28

COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 190900
START TIME : 07:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030100
INTERVAL : 00:15

FILE: EP4427P_10
11 Apr 1998 10:06:23

66



PLACE :Amad 2

PRESLOG:4433-0

Service given before initiation:none
-interval :00:15

Initiation date:02/01/89
Initiation time:08:15

Try-out results:OK
Markers given :2

Installation date:02/01/89
Installation time:10:55

Installation description :in drum with 55 cm sand above
-installation place:middle wadi
-waterlevel :drum full with water and boulders
sensor =-1.40 m wadi level

Check up visit date :none
Check up visit results:-

Calculated removal/stop date:18/04/89
Calculated removal/stop time:-

Removal date:02/04/89
Removal time:14:50
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/04/89
Stop time :08:25

Service given :none
Eprom reading date:nk
Number of eprom :EP4433-0
Number of eprom file :EP4433P_0
Number of administration file:AD4433P_0
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

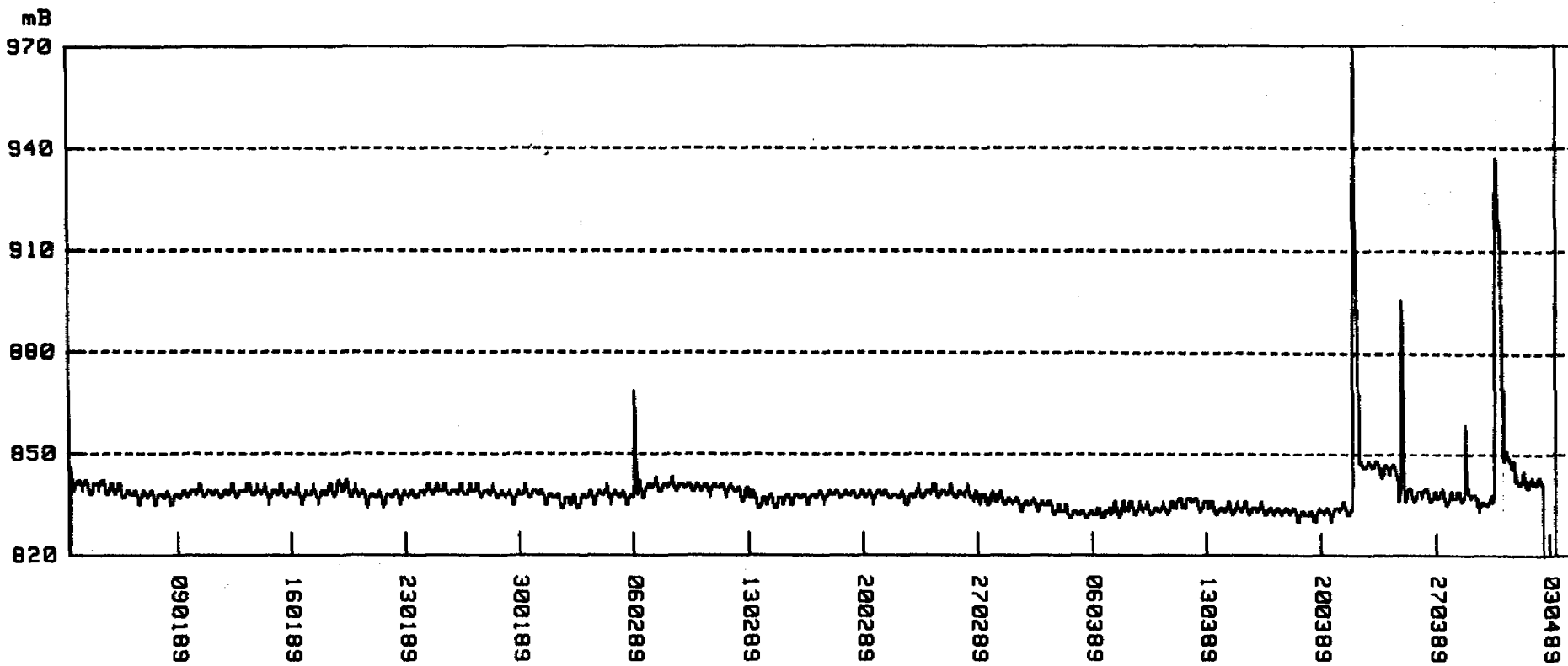
date:16 April 1990 (Monday) 17:38

COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 020189
START TIME : 08:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030489
INTERVAL : 00:15

FILE: EP4433P_0
11 Apr 1990 10:29:43

88

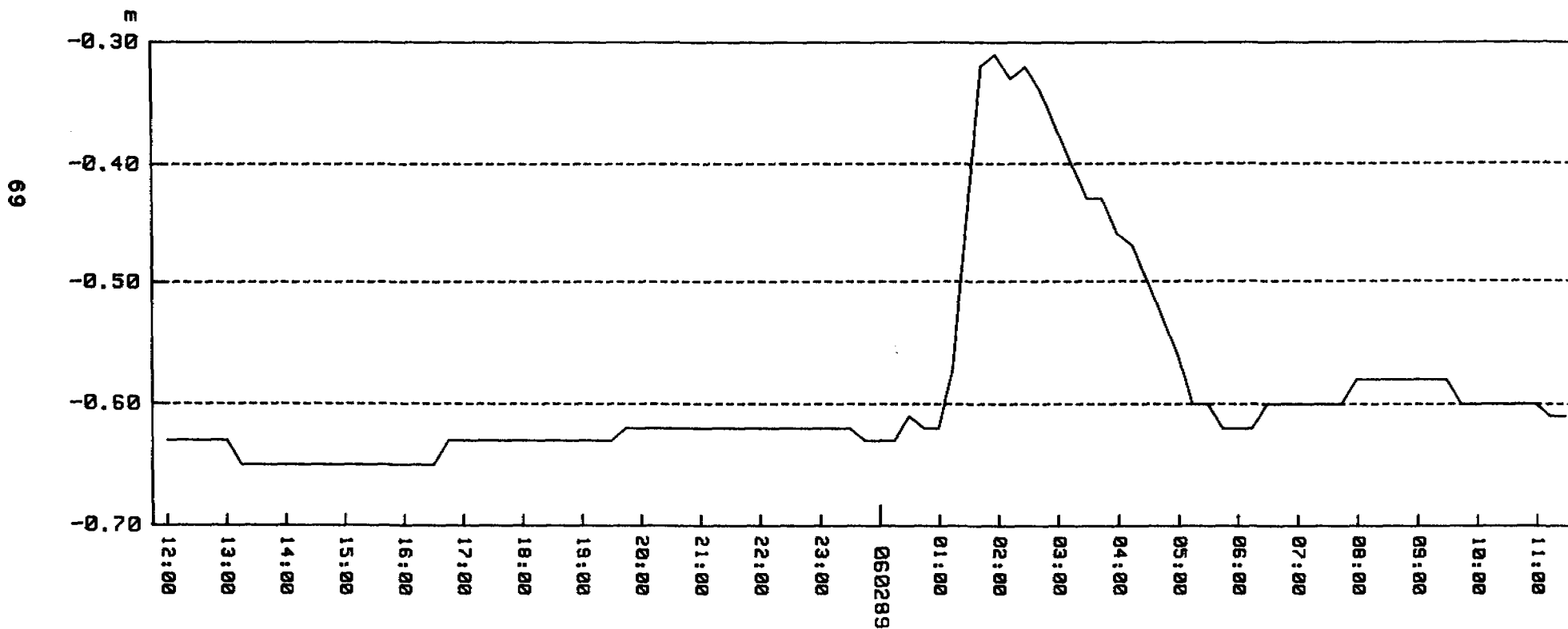


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046
BEGIN DATE : 050289
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 023 mB.
END DATE : 060289
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_0
11 Apr 1990 10:42:35



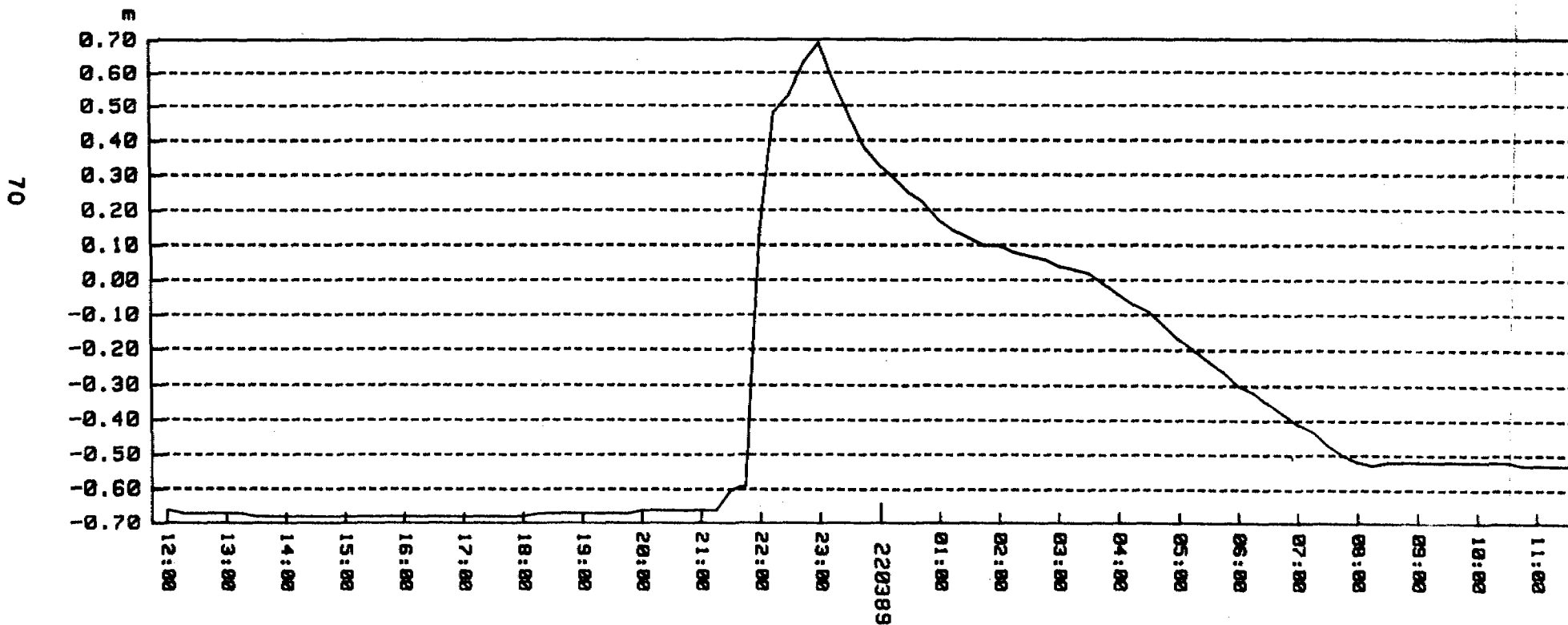
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 48846
BEGIN DATE : 210389
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 823 mB.
END DATE : 030489
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_0

11 Apr 1990 10:56:48



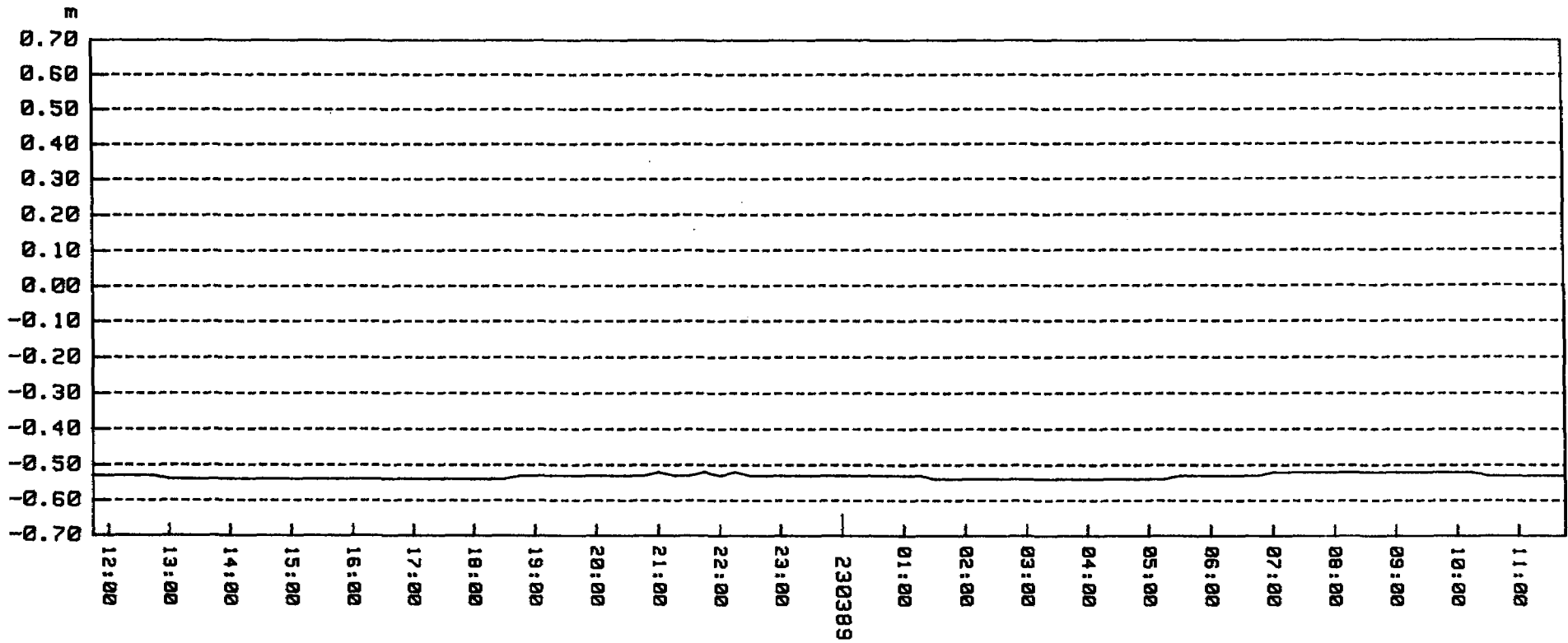
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4433P_0

11 Apr 1990 10:59:58



71

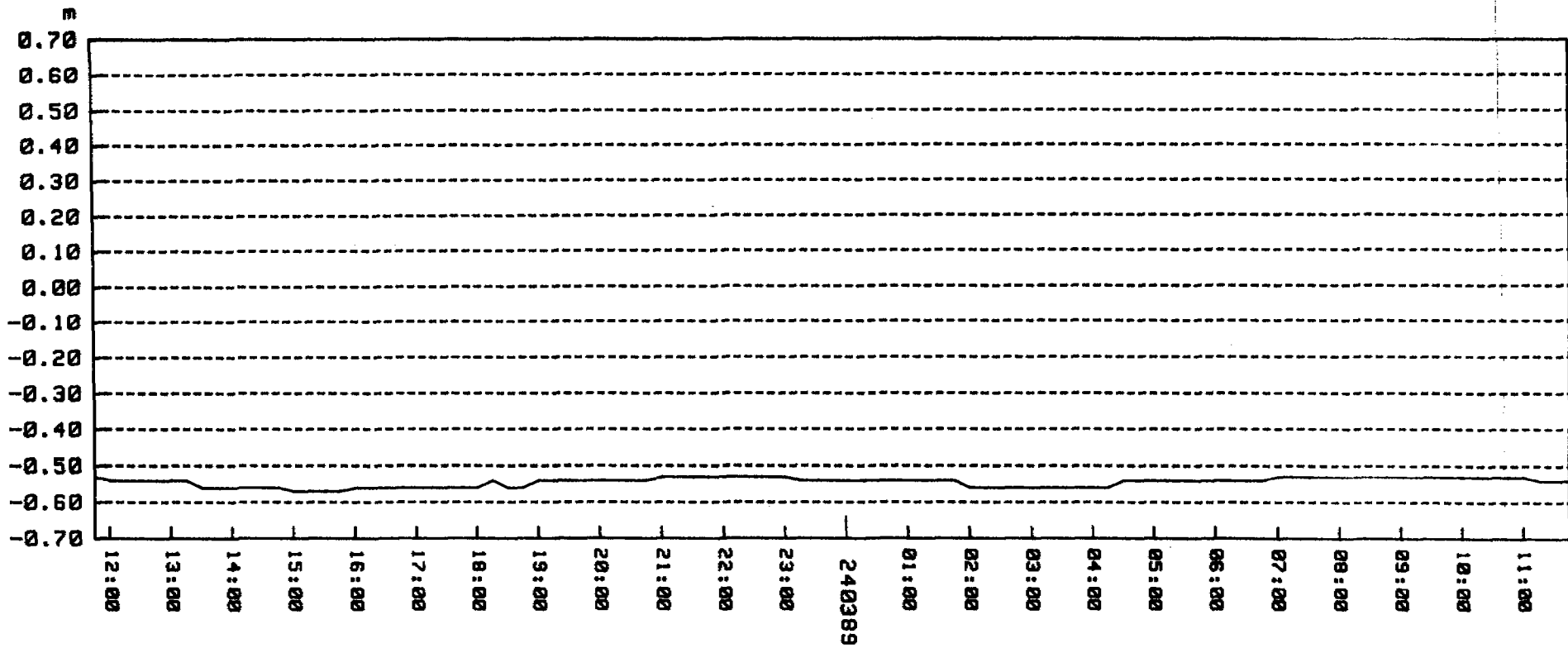
COUNTRY : YEMEN
STATION : AMRD 2
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

PAGE 3

FILE: EP4433P_0
11 Apr 1990 11:03:16

72



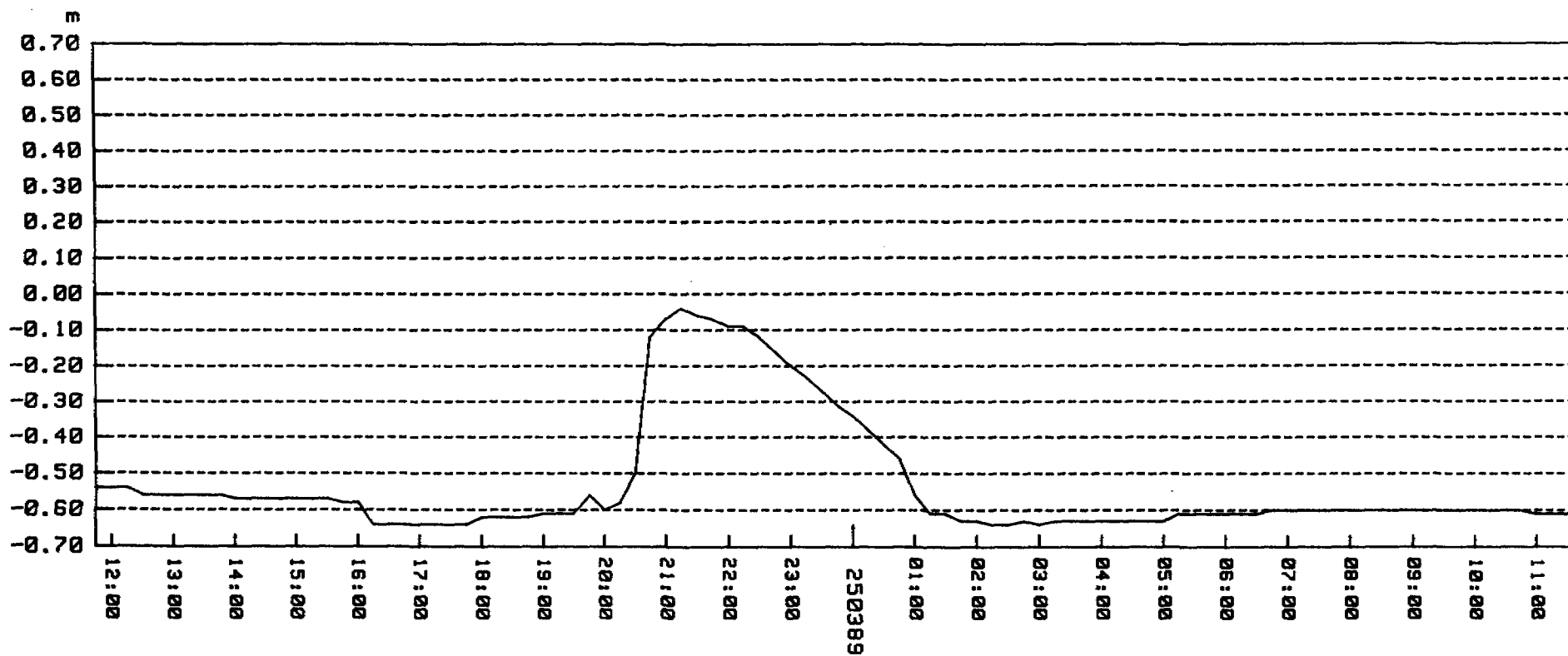
COUNTRY : YEMEN
STATION : AMRD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 4

FILE: EP4433P_0
11 Apr 1990 11:06:34

73



COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 409046

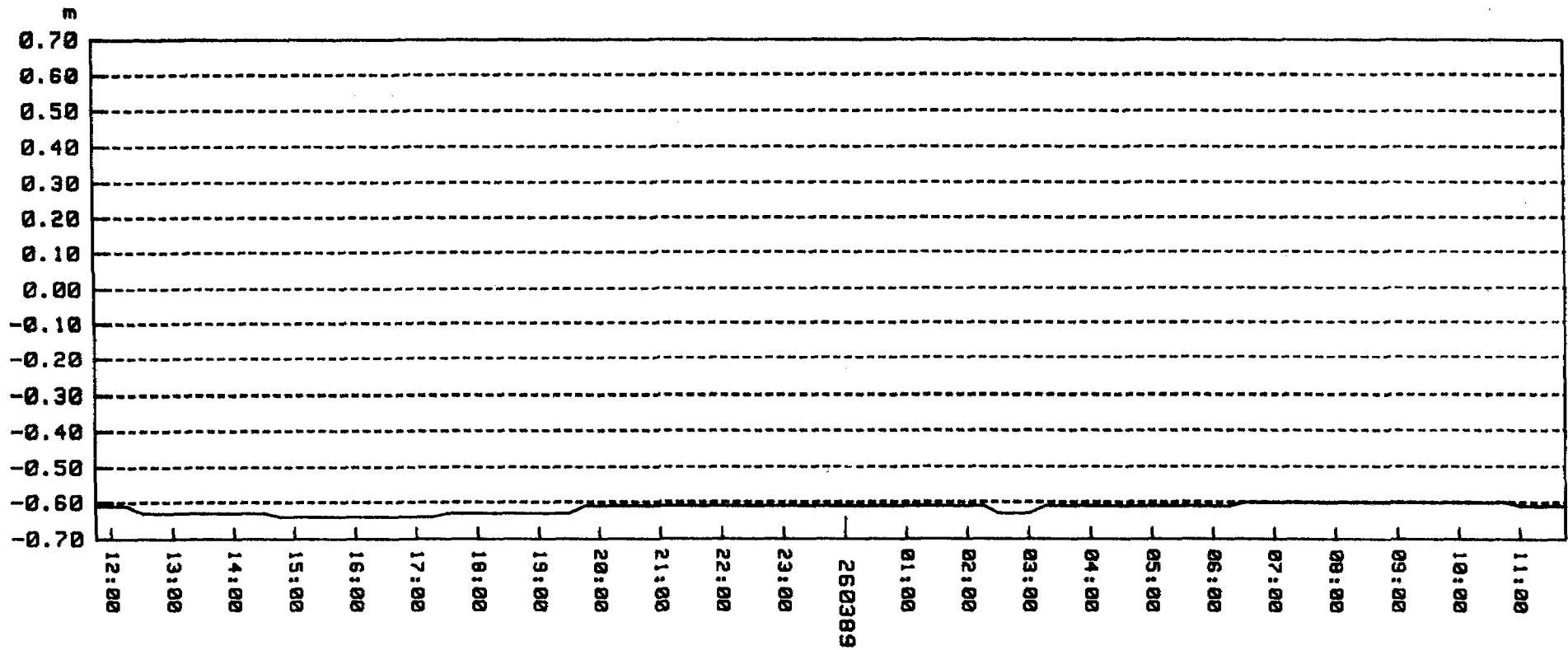
PLOT OF WATER LEVEL ELEVATION

PAGE 5

FILE: EP4433P_0

11 Apr 1990 11:09:52

74



COUNTRY : YEMEN
STATION : AMRD 2
PROJECT : 408046

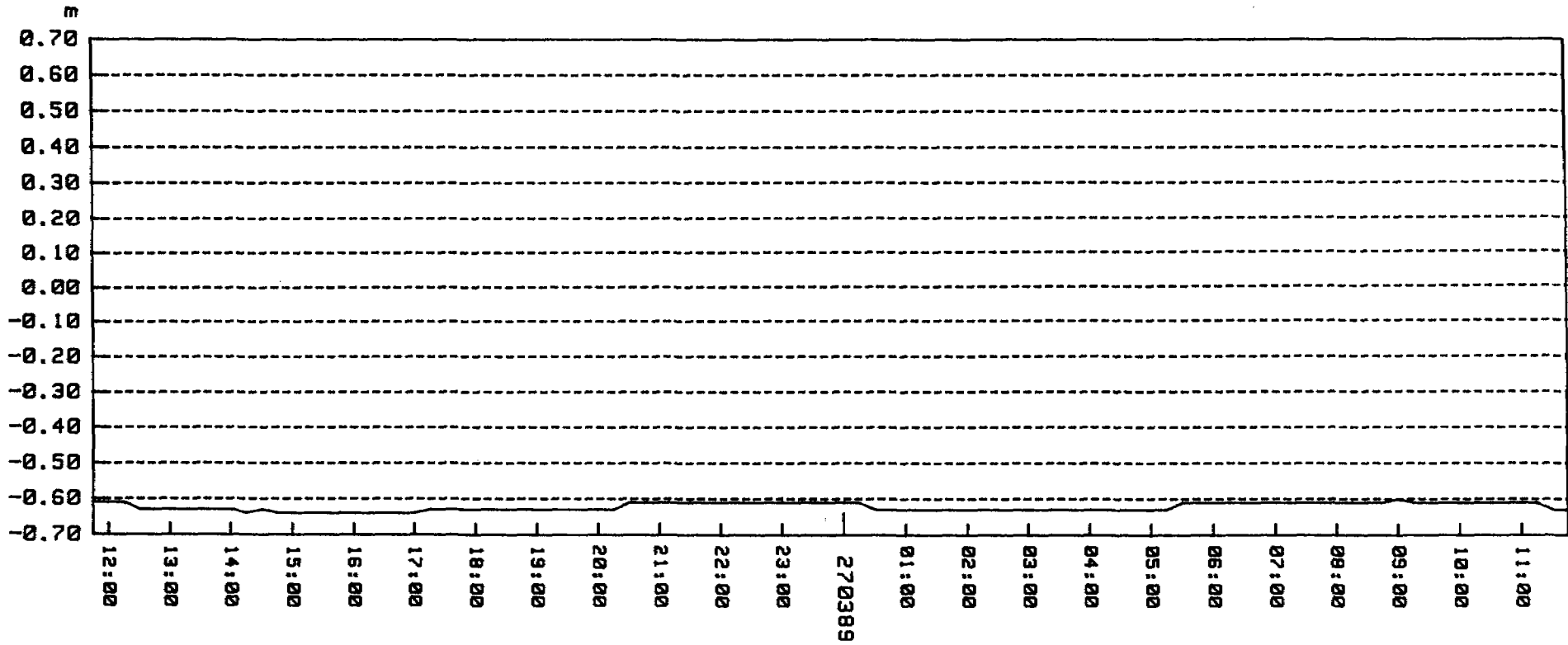
PLOT OF WATER LEVEL ELEVATION

PAGE 6

FILE: EP4433P_0

11 Apr 1990 11:13:10

75



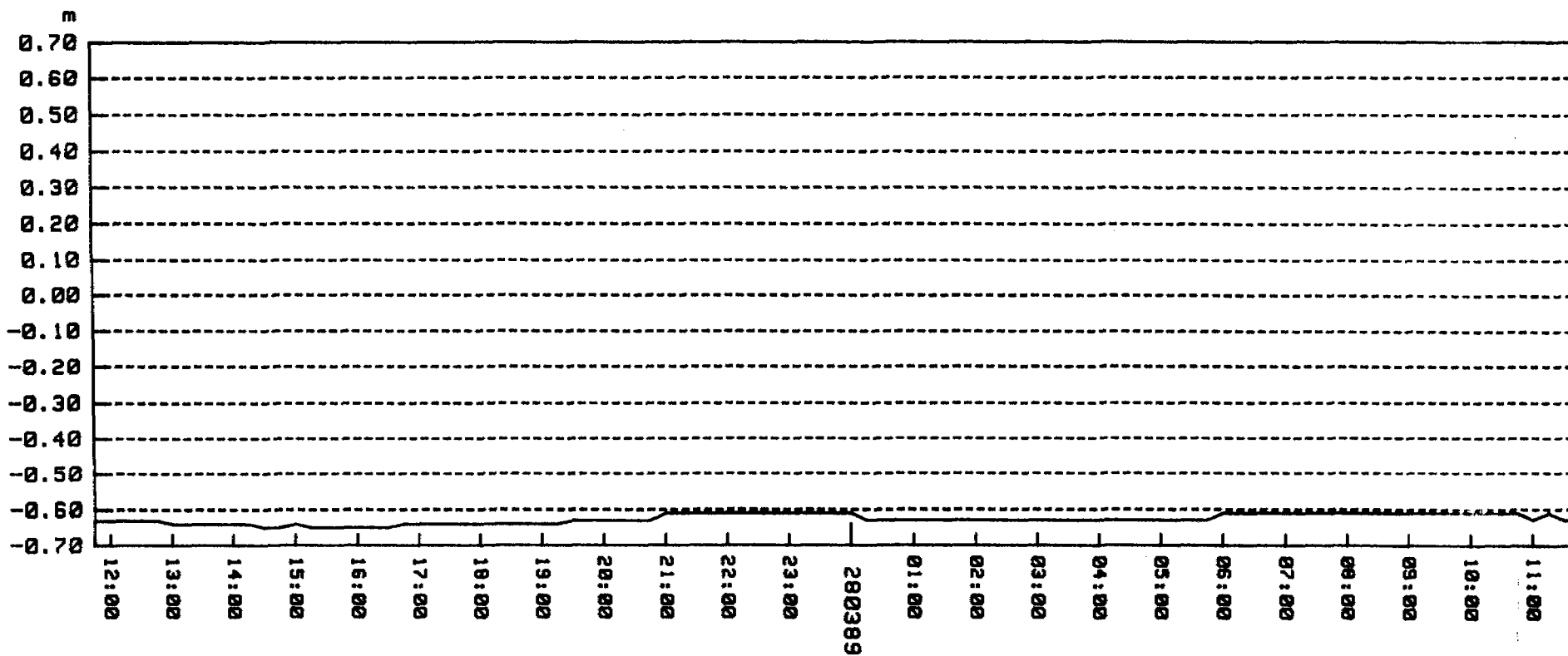
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 7

FILE: EP4433P_0
11 Apr 1990 11:16:28

76



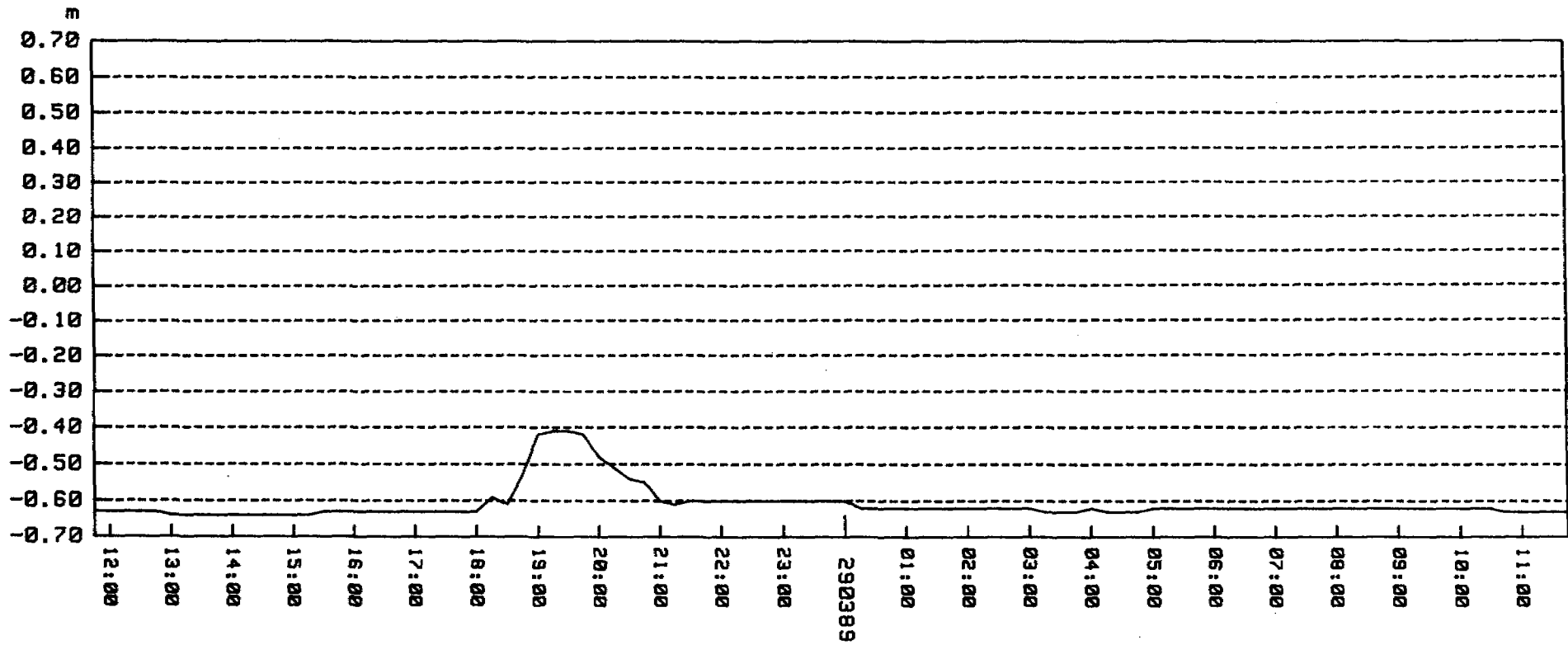
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4433P_0

11 Apr 1990 11:19:46



77

COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 488046

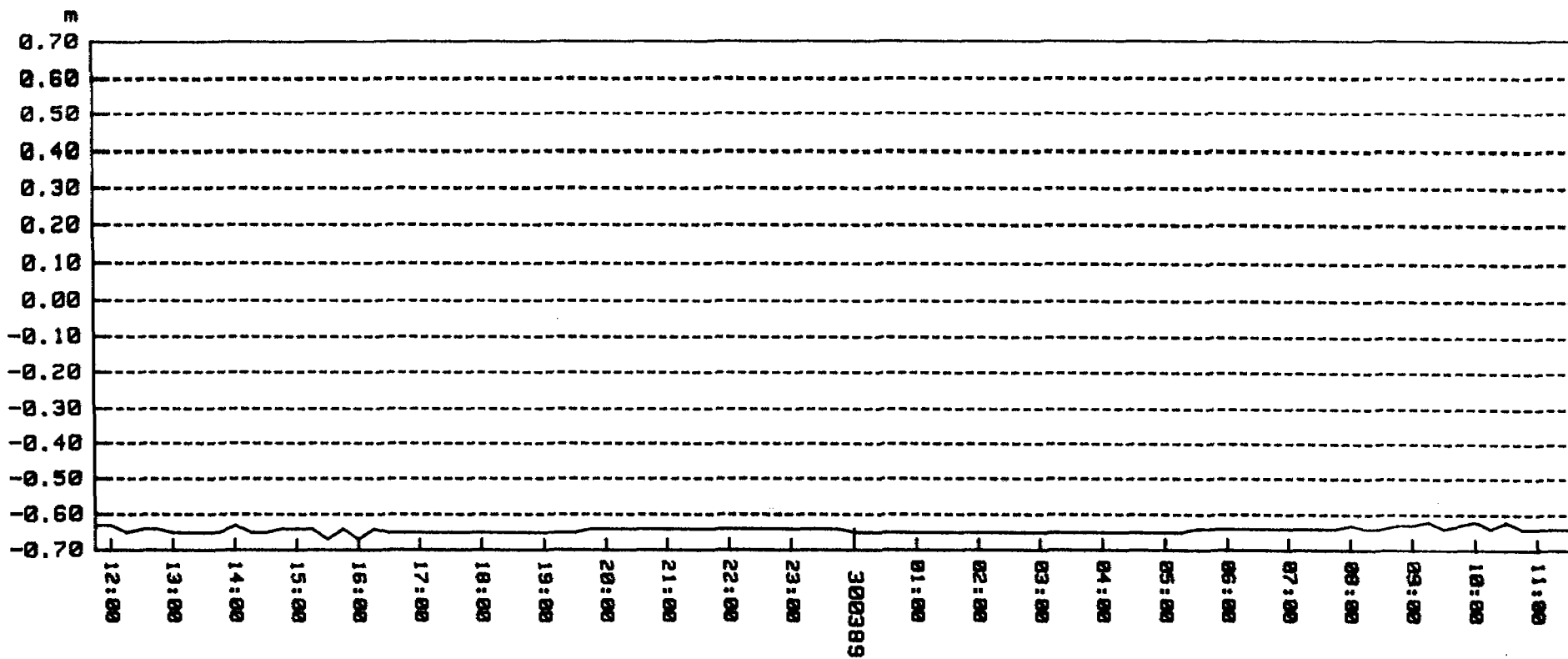
PLOT OF WATER LEVEL ELEVATION

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FILE: EP4433P_8

11 Apr 1998 11:23:04

78



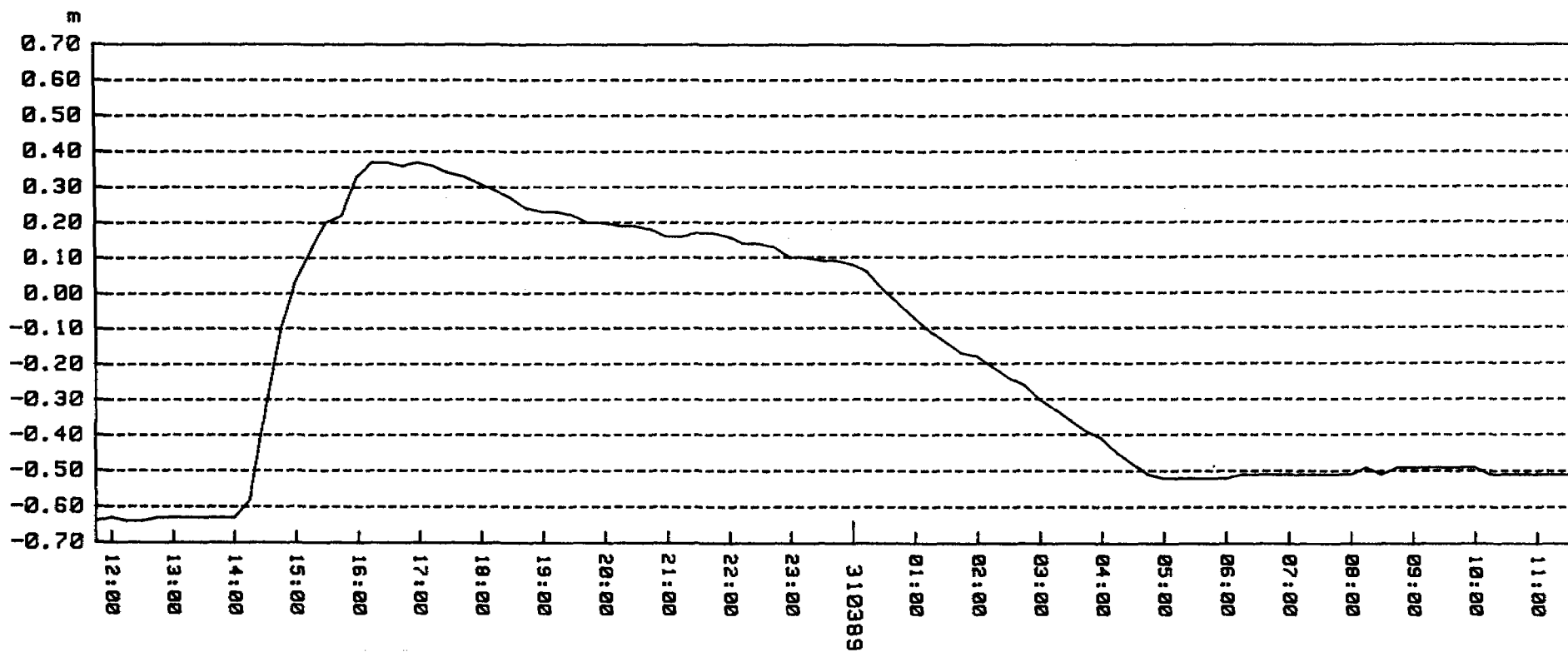
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 10

FILE: EP4493P_0
11 Apr 1990 11:26:22

79

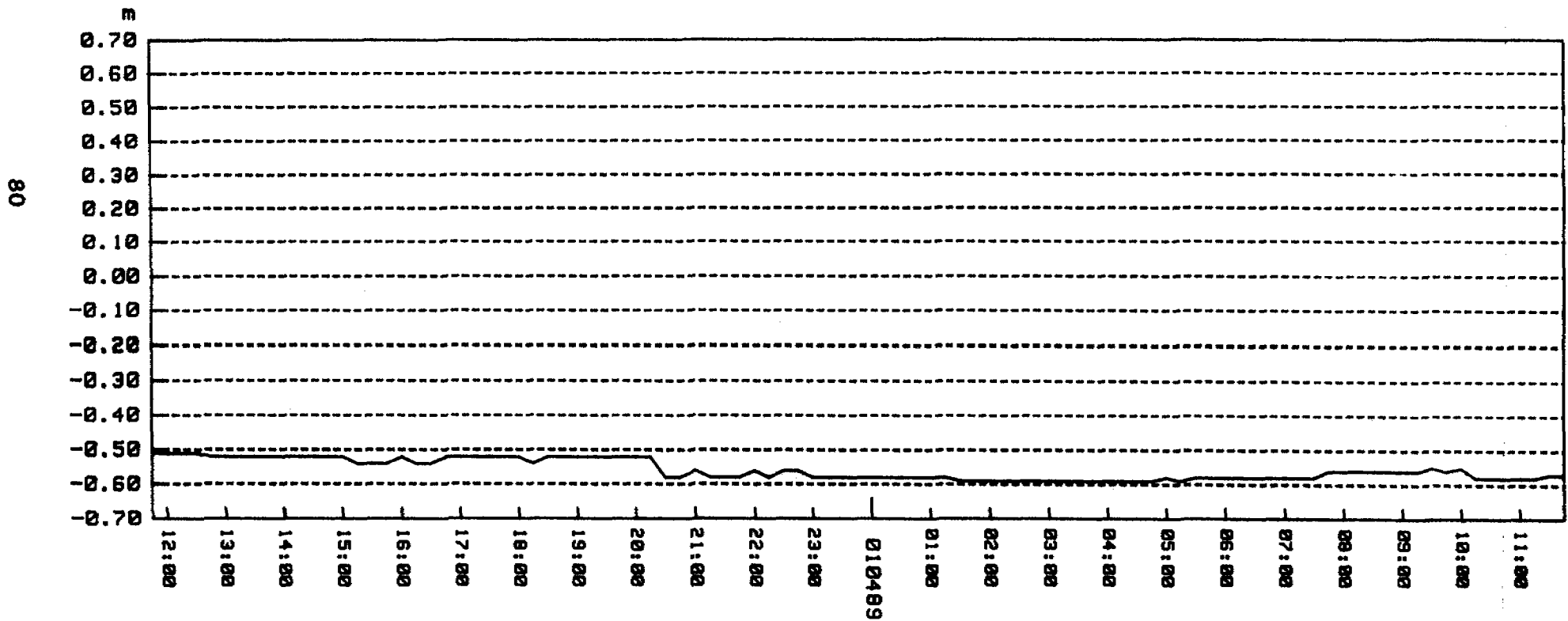


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_0

11 Apr 1990 11:29:41

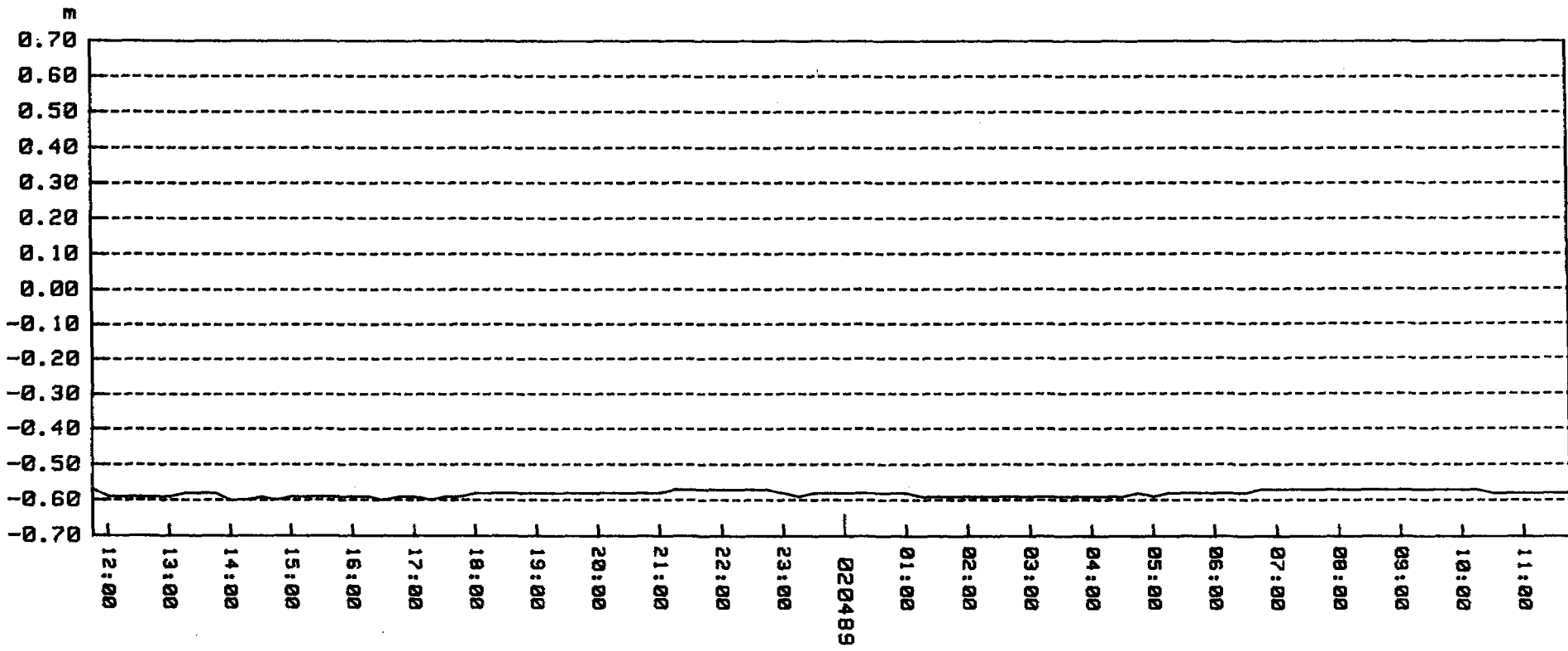


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_0
11 Apr 1990 11:32:59

81

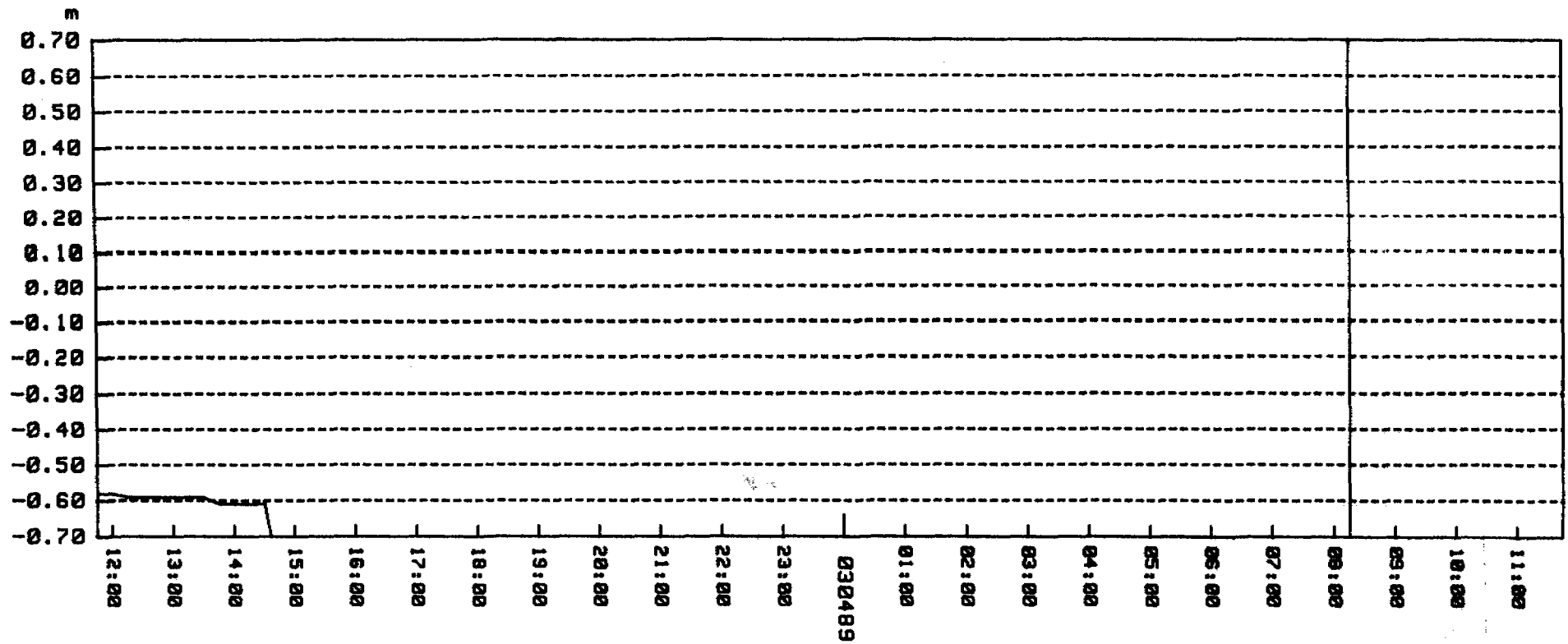


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_0
11 Apr 1990 11:36:18

02



PLACE :Amad 2a

PRESLOG:4428-1

Service given before initiation:changed batteries
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:OK
Markers given :4

Installation date:03/04/89
Installation time:13:55

Installation description :try-out set-up
-installation place:sensor =+22.5 cm wadi level
-waterlevel :none, bottom hole is +7.0 cm wl.

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:-
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :08:30

Service given :none
Eprom reading date:nk
Number of eprom :EP4428-1
Number of eprom file :EP4428P_1
Number of administration file:AD4428P_1
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 17:56

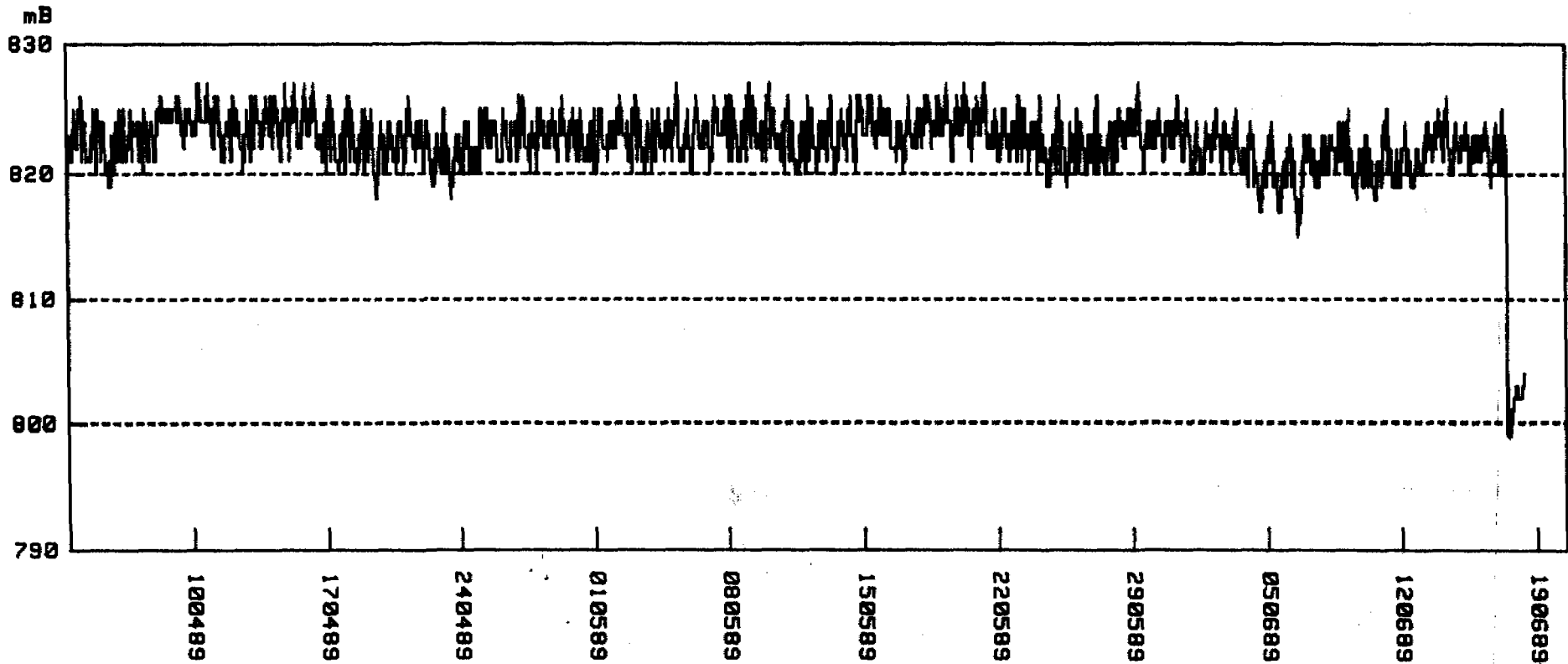
COUNTRY : YEMEN
STATION : AMAD 2a
PROJECT : 488046
BEGIN DATE : 030489
START TIME : 12:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 190689
INTERVAL : 00:15

PAGE 1

FILE: EP4428P_1
11 Apr 1990 11:57:11

84



PLACE :Amad 2b

PRESLOG:4427-3

Service given before initiation:none
-interval :00:15

Initiation date:03/04/89
Initiation time:12:00

Try-out results:ok
Markers given :3

Installation date:03/04/89
Installation time:13:55

Installation description :try-out set-up
-installation place:sensor= -67 cm wadi level
-waterlevel :drum full,top drum=-44 cm w

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:18/07/89
Calculated removal/stop time:-

Removal date:17/06/89
Removal time:-
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/06/89
Stop time :08:30

Service given :batteries and rings changed
Eprom reading date:nk
Number of eprom :EP4427-3
Number of eprom file :EP4427P_3
Number of administration file:AD4427P_3
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 18:16

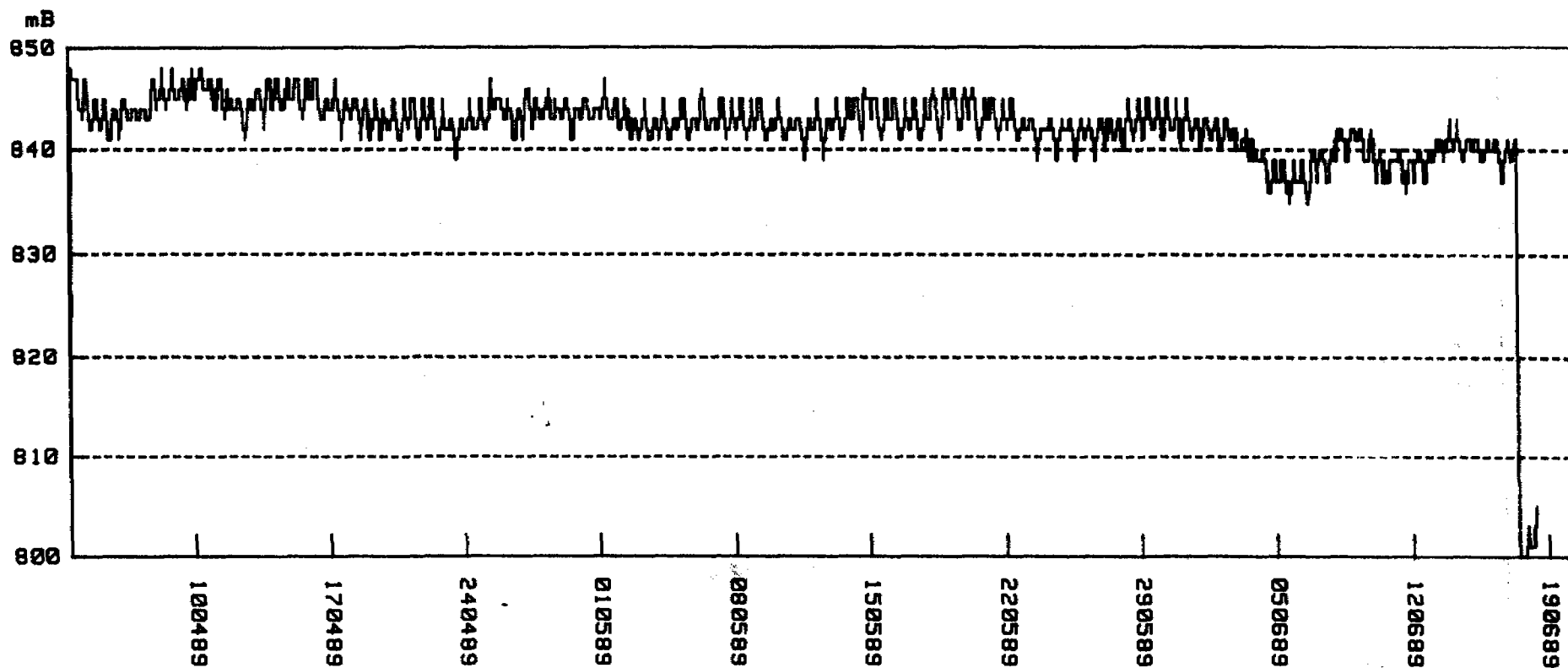
COUNTRY : YEMEN
STATION : AMAD 2b
PROJECT : 400046
BEGIN DATE : 030489
START TIME : 12:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 180689
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_3
11 Apr 1990 12:36:12

86



PLACE :Amad 2

PRESLOG:4433-3

Service given before initiation:?

-interval :00:15

Initiation date:23/01/90

Initiation time:13:00

Try-out results: following data was obtained in field at installation 23/01/90, 13:00 h :

23/01/90 13:00 last marker
,, 13:00 air
,, 13:15 air
,, 13:30 air
,, 13:45 air
,, 14:00 water of 143 cm on sensor
,, 14:15 water of 143 cm on sensor
,, 14:30 water of 143 cm on sensor
,, 14:45 water of 143 cm on sensor
,, 15:00 water of 143 cm on sensor
15:15 air

the results, when reading out, were different:

-not any increase in pressure can be observed as can be noticed on the listing of the file.

Markers given :one at beginning, none at end

Installation date:23/01/90

Installation time:13:00

Installation description :in pipe

-installation place:middle wadi

-waterlevel :-

Check up visit date :3/90

Check up visit results:OK, vertical

Calculated removal/stop date:09/05/90

Calculated removal/stop time:-

Removal date:03/05/90

Removal time:? (Mohammed S)

Remarks : the pipe was under strong slope, large amount of sediment in pipe, the logger could not be removed 02/05/90 but only 03/05/90 when the pipe was taken out and a new one was installed.

-waterlevel:-

-sediment :as described

Service given :new batteries (plate) and rings
Eprom reading date:05/05/90 Eissa
Number of eprom :EP4433-3
Number of eprom file :EP4433P_3
Number of administration file:-
Floppy number of eprom file :c: / floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:

1.Longer record than Amad 1 because logger staid one day longer in field.

date:5 May 1990 (Saturday) 18:00

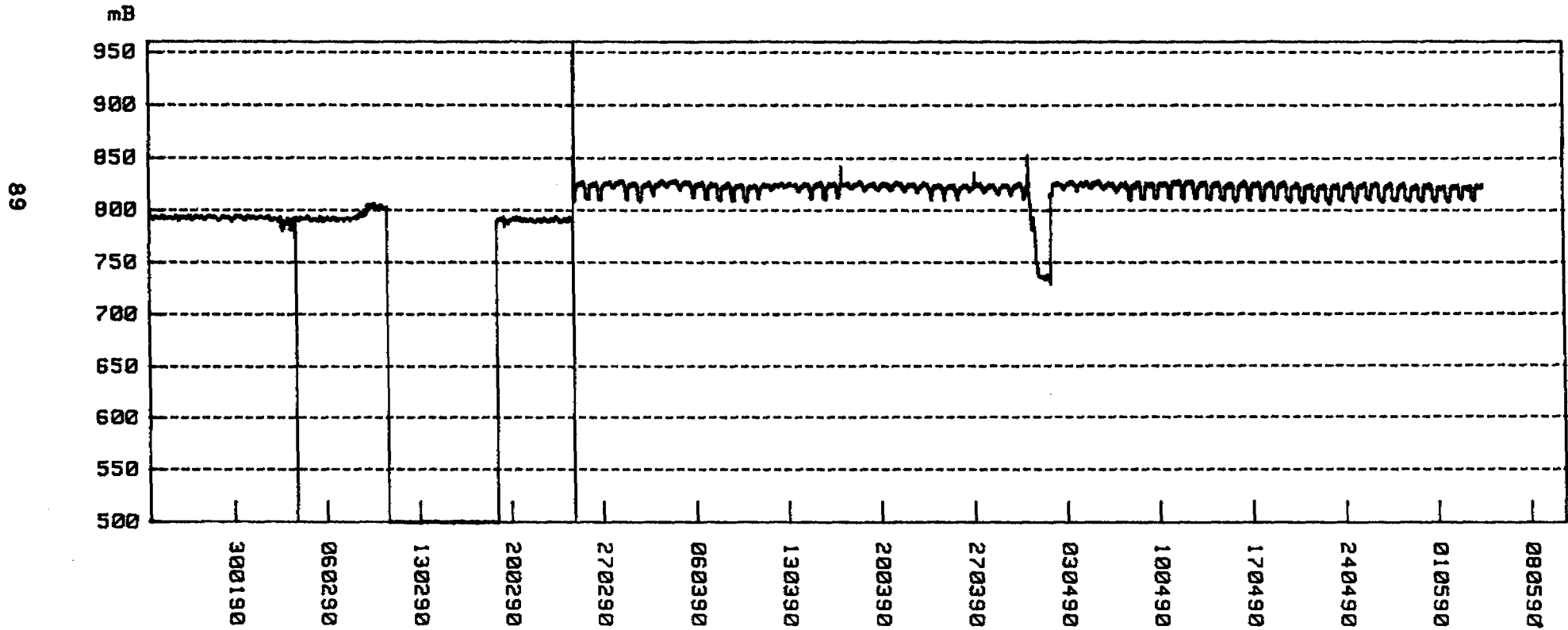
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 400046
BEGIN DATE : 230190
START TIME : 13:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040590
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

5 May 1990 13:04:53



COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 488046
BEGIN DATE : 030290
START TIME : 00:00

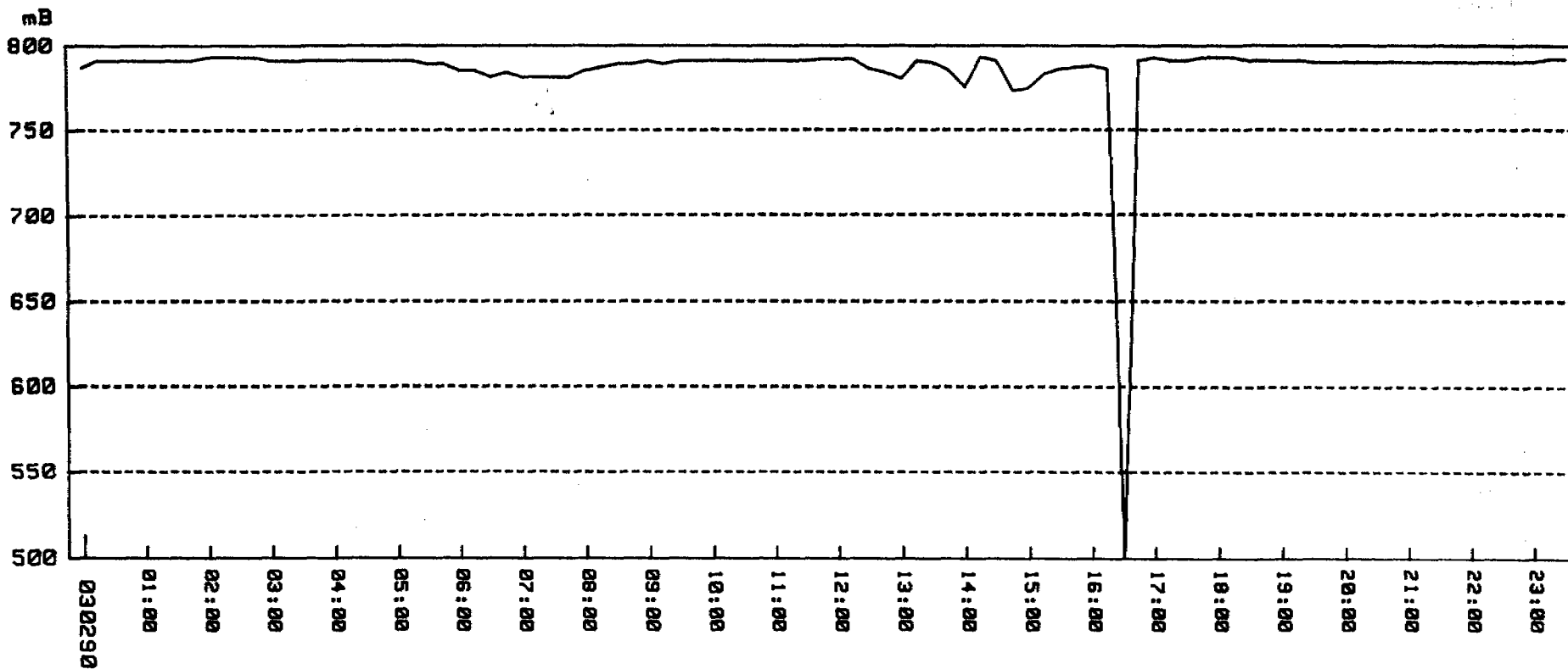
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030290
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

5 May 1990 13:43:28

90



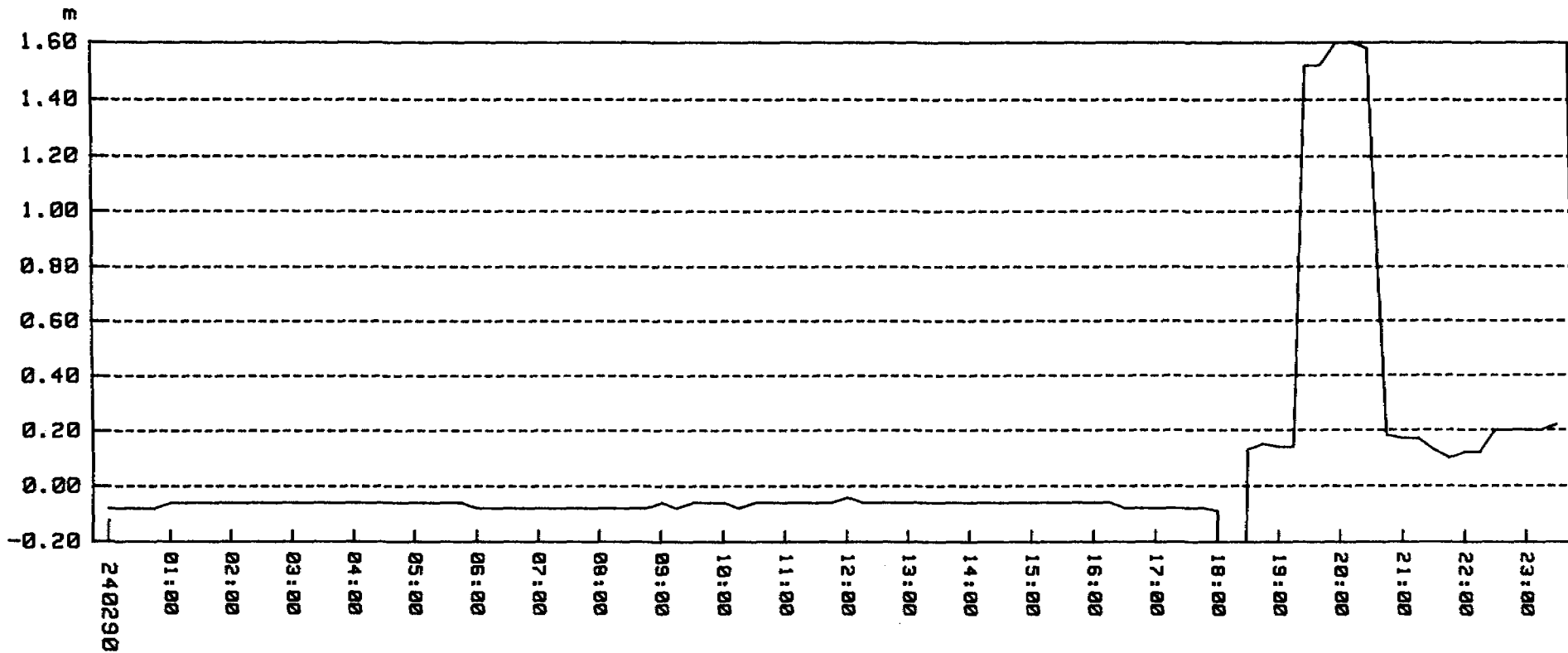
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 406048
BEGIN DATE : 240290
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 021 mB.
END DATE : 240290
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

5 May 1990 16:35:45

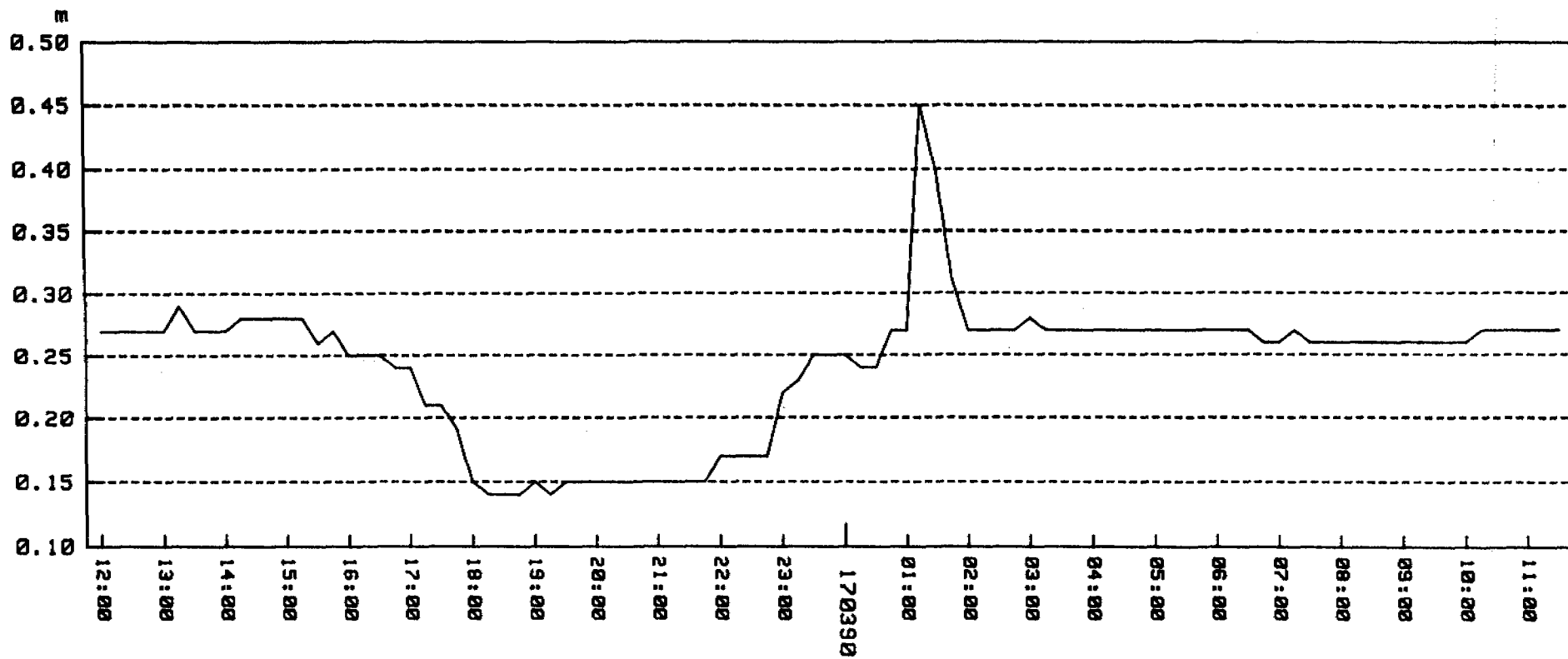


COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 406048
BEGIN DATE : 160390
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 021 mB.
END DATE : 170390
INTERVAL : 00:15

FILE: EP4433P_3
5 May 1990 16:27:09

92



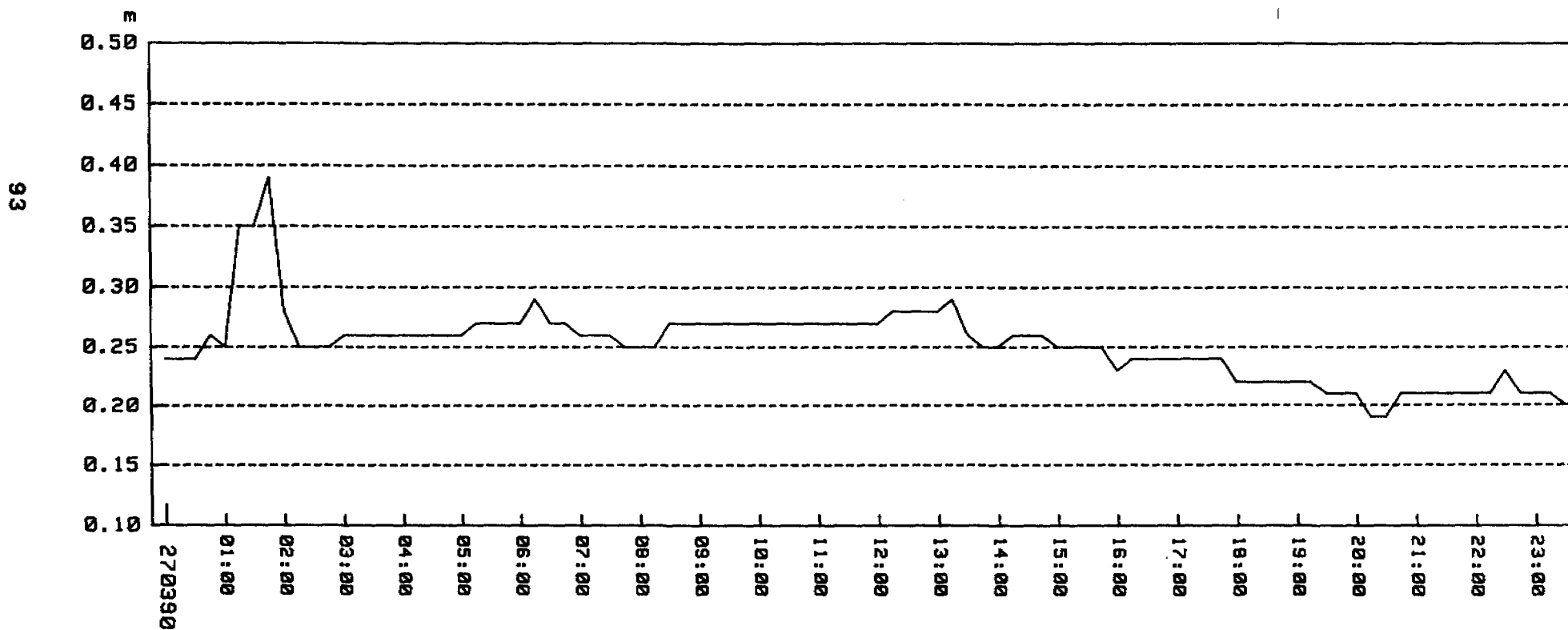
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 406040
BEGIN DATE : 270390
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 021 mB.
END DATE : 270390
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

5 May 1990 16:44:42



COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 408046
BEGIN DATE : 300390
START TIME : 00:00

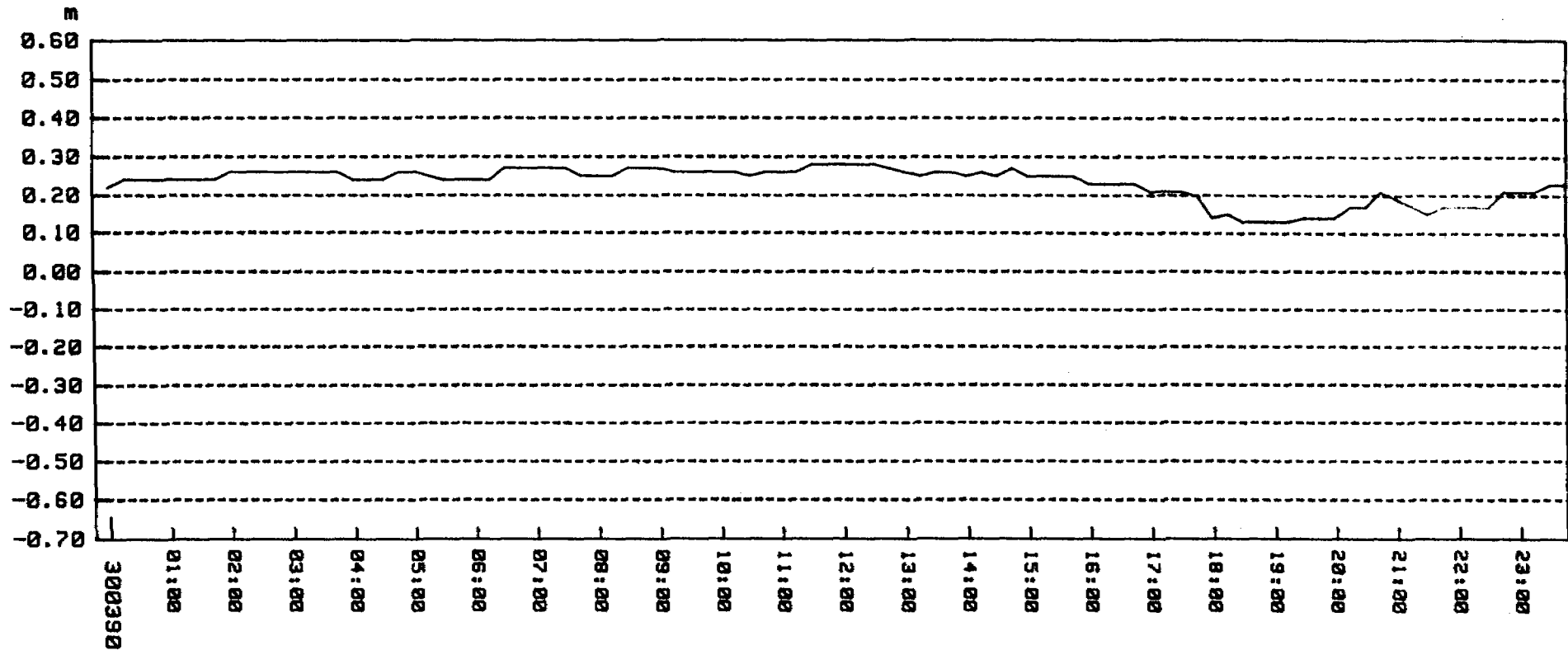
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 821 mB.
END DATE : 300390
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

9 May 1990 18:51:58

94



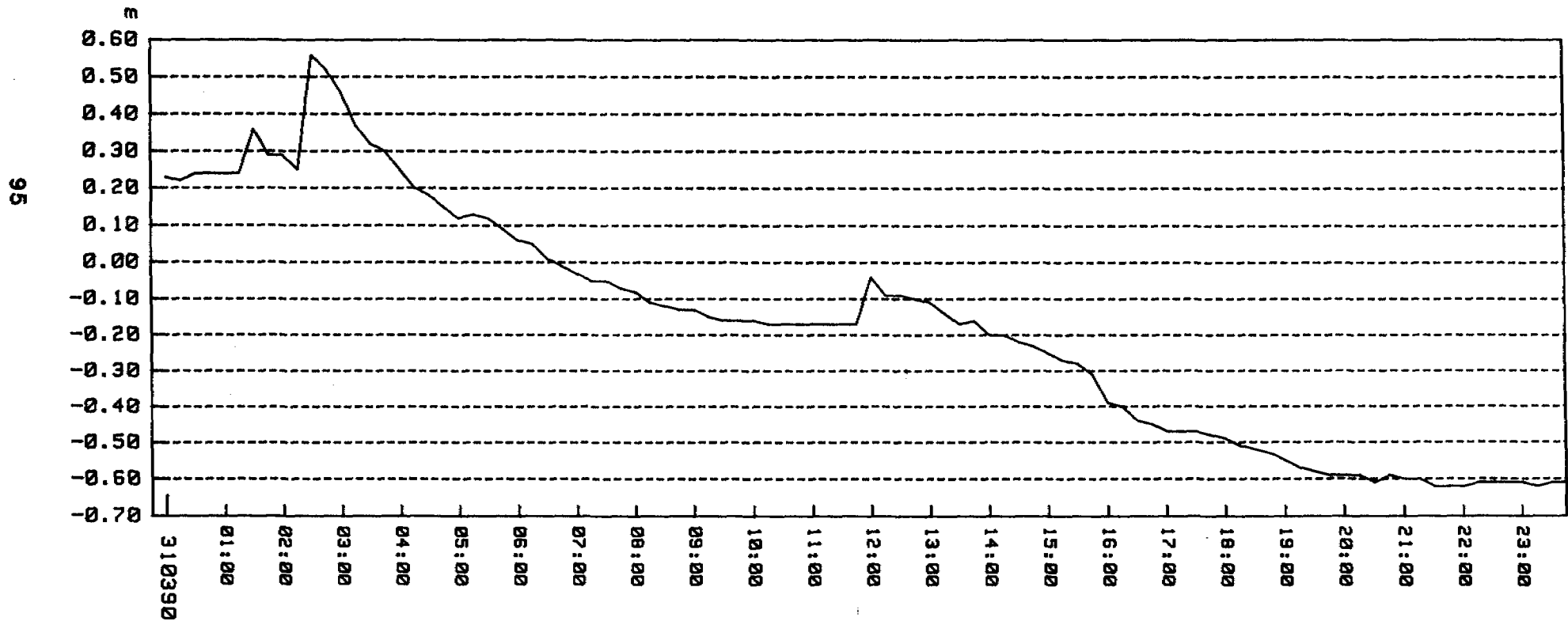
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 406048
BEGIN DATE : 310390
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 021 mB.
END DATE : 010490
INTERVAL : 00:15

PAGE 1

FILE: EP4433P_3

5 May 1990 16:50:00



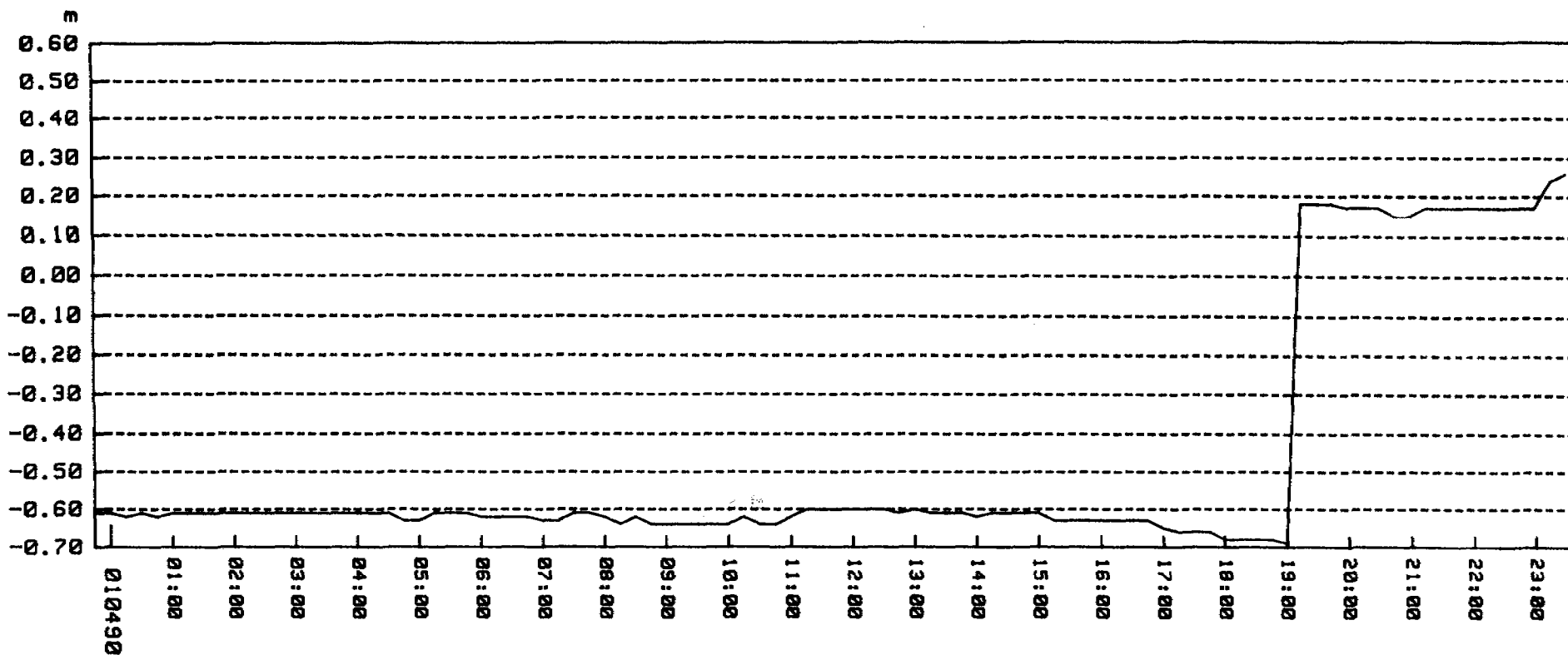
COUNTRY : YEMEN
STATION : AMAD 2
PROJECT : 406048

PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4433P_3
5 May 1990 18:53:09

96



PLACE :Amad well land

PRESLOG:4331-1

Service given before initiation:none
-interval :00:15

Initiation date:23/01/90
Initiation time:13:00

Try-out results:not tried in stand pipe
Markers given : one at start 23/01/90 13:00 h. and one at
end: 03/05/90 07:20 h.

Installation date:23/01/90
Installation time:13:00 last marker, in well at +/- 14:30 h.

Installation description : in container
-installation place: in non pumped shallow well
north of Amad 1, in
agricultural lands, sensor at
-14.60 m top flat stone at old
pump place.
-waterlevel : -12.60 m. to reference

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:09/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:14:10
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :new batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4331-10
Number of eprom file :EP4331P_1
Number of administration file:-
Floppy number of eprom file :C: /floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:-

date:5 May 1990 (Saturday) 18:49

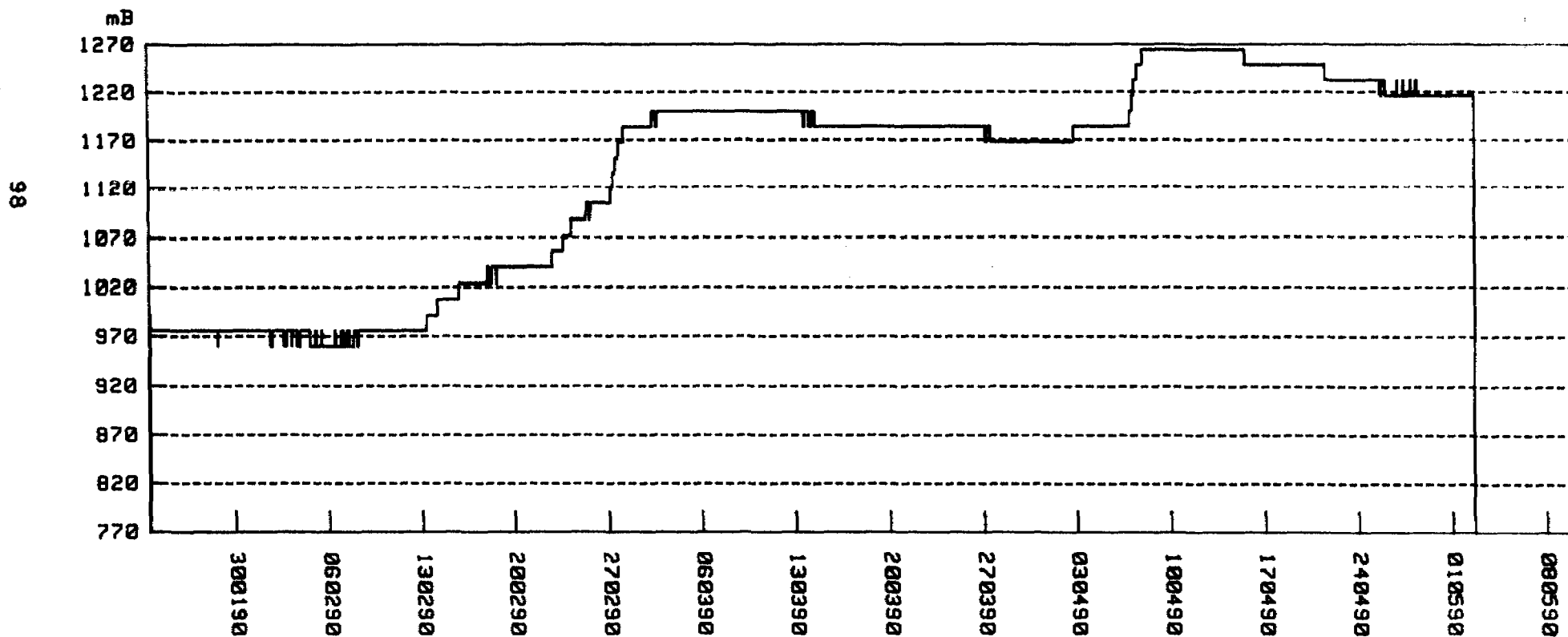
COUNTRY : YEMEN
STATION : AMAD WELL LAND
PROJECT : 406048
BEGIN DATE : 230190
START TIME : 13:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 020590
INTERVAL : 00:15

PAGE 1

FILE: EP4331P_1

5 May 1990 17:00:27



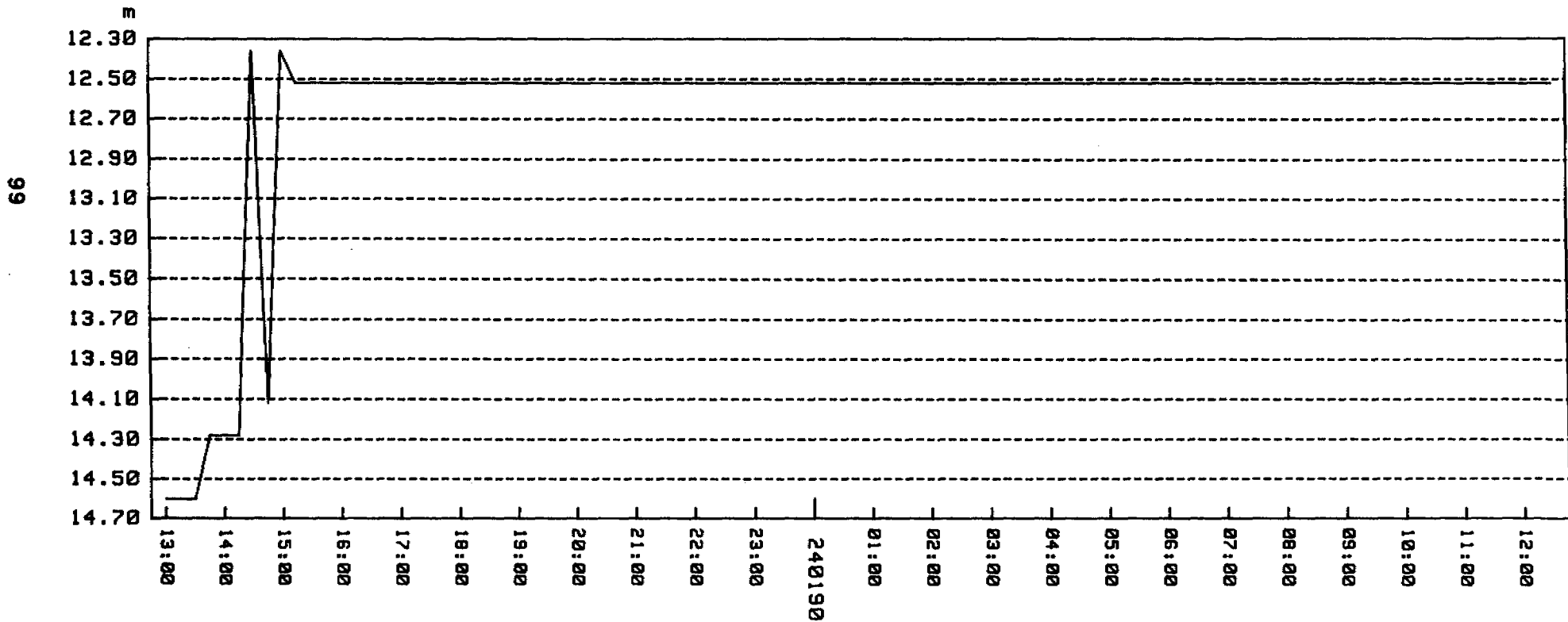
COUNTRY : YEMEN
STATION : AMAD WELL LAND
PROJECT : 406048
BEGIN DATE : 230190
START TIME : 13:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 800 mB.
END DATE : 240190
INTERVAL : 00:15

PAGE 1

FILE: EP4331P_1

5 May 1990 17:59:45



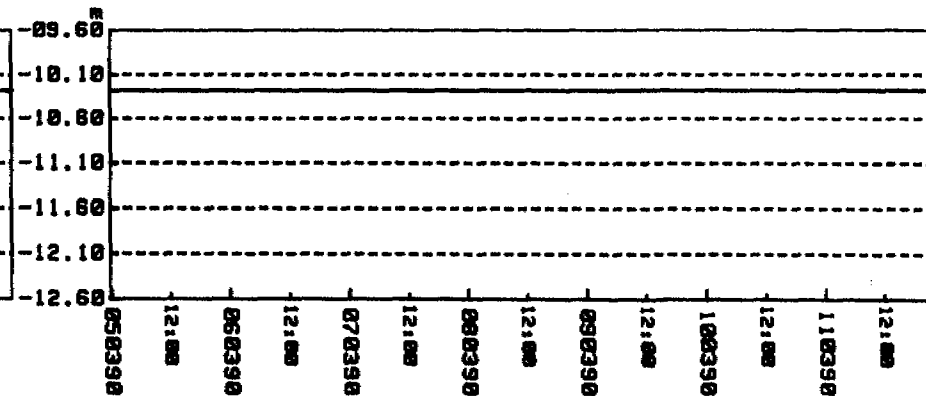
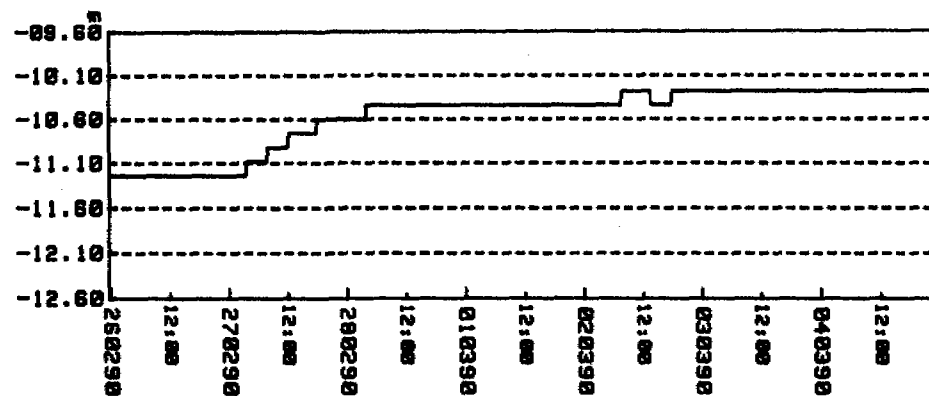
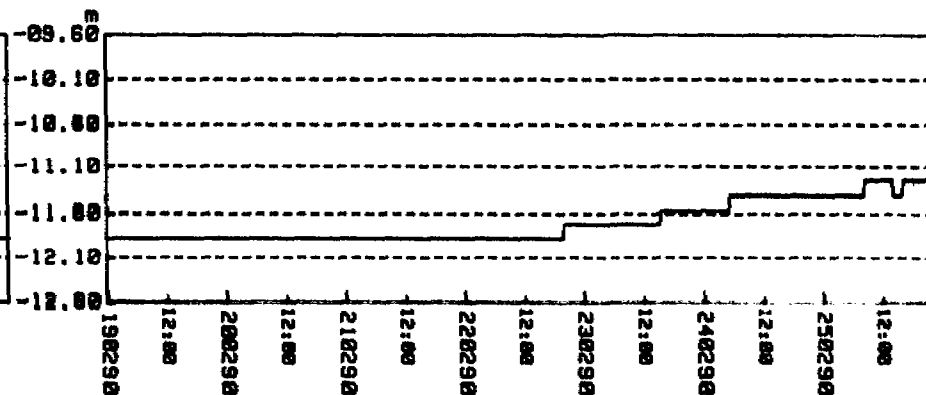
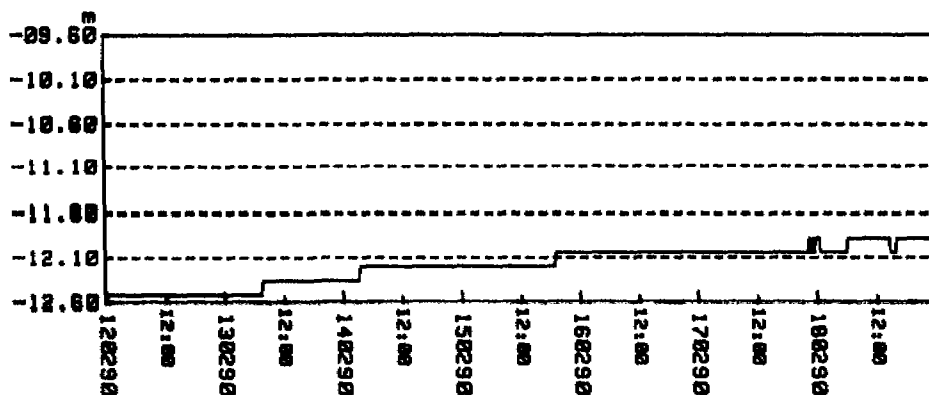
COUNTRY : YEMEN
 STATION : AMAD WELL LAND
 PROJECT : 406048
 BEGIN DATE : 120290
 START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 000 mB.
 END DATE : 030590
 INTERVAL : 00:15

PAGE 1

FILE: EP4331P_1
 5 May 1990 10:24:05

100

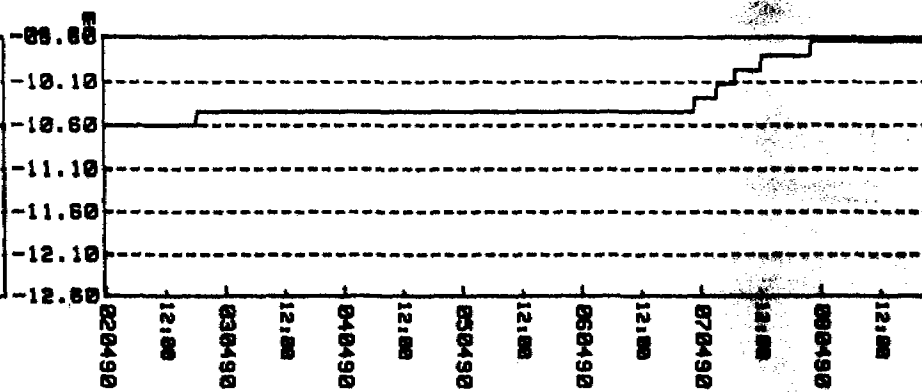
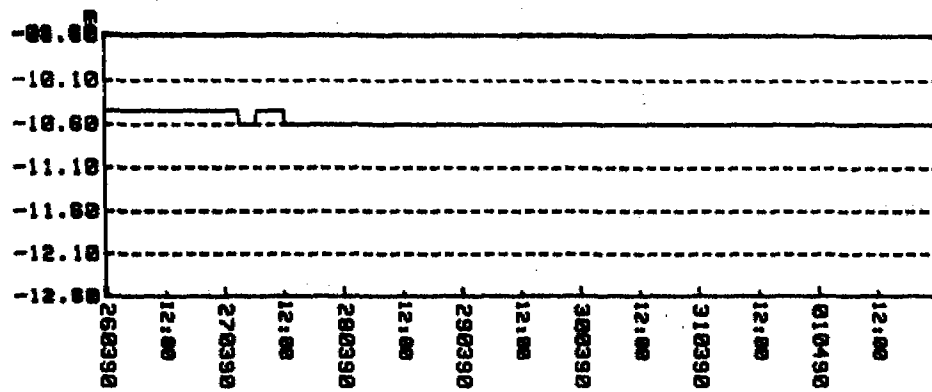
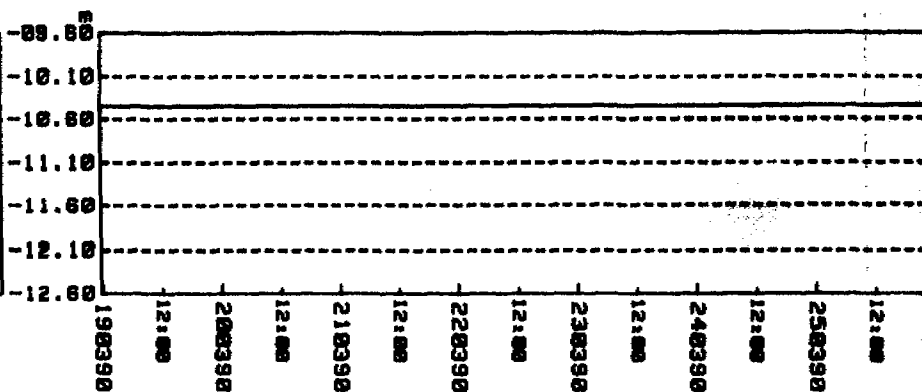
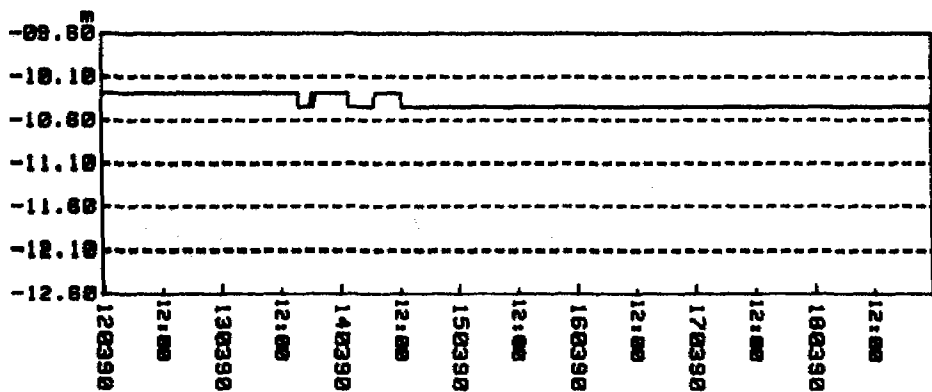


COUNTRY : YEMEN
STATION : AMRD WELL LAND
PROJECT : 406046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4331P_1
5 May 1998 10:29:31

101

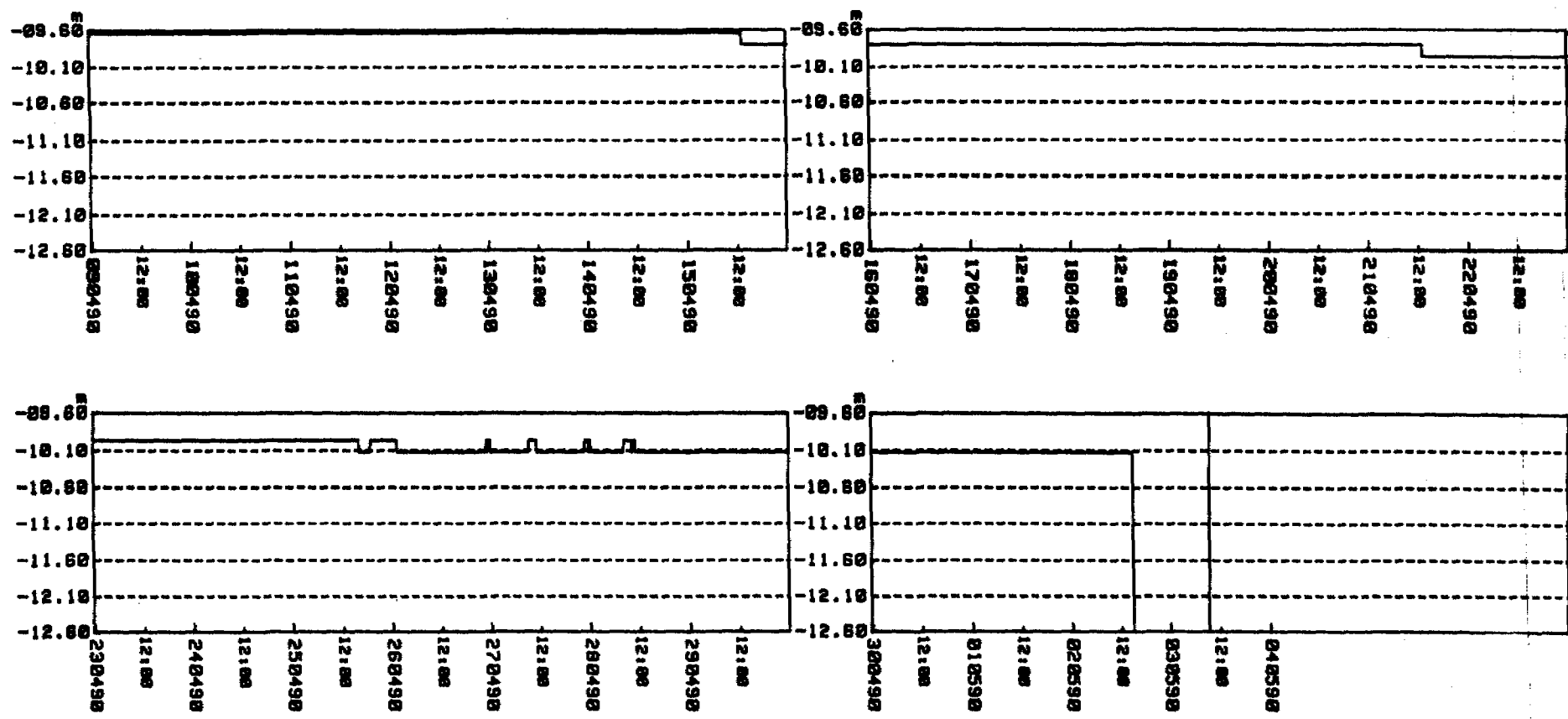


COUNTRY : YEMEN
 STATION : AMAD WELL LAND
 PROJECT : 406040

PLOT OF WATER LEVEL ELEVATION

FILE: EP4931P_1
 5 May 1990 18:34:58

102



PLACE :Amad well wadi

PRESLOG:4333-1

Service given before initiation:none
-interval :00:15

Initiation date:23/01/90
Initiation time:13:00

Try-out results: not tried out in stand pipe
Markers given : one at start 23/01/90 13:00 h. and one at
end: 03/05/90 07:20 h.

Installation date:23/01/90
Installation time:13:00 last marker, in well at +/- 15:00 h.

Installation description : in container
-installation place: in well at border of wadi,
about 180 m downstream of
Amad-1, sensor at -11.50 m top
stone at wadi side.
-waterlevel : -8.80 m to reference.

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:09/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:14:23
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :new batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4333-10
Number of eprom file :EP4333P_1
Number of administration file:-
Floppy number of eprom file :C: / floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.

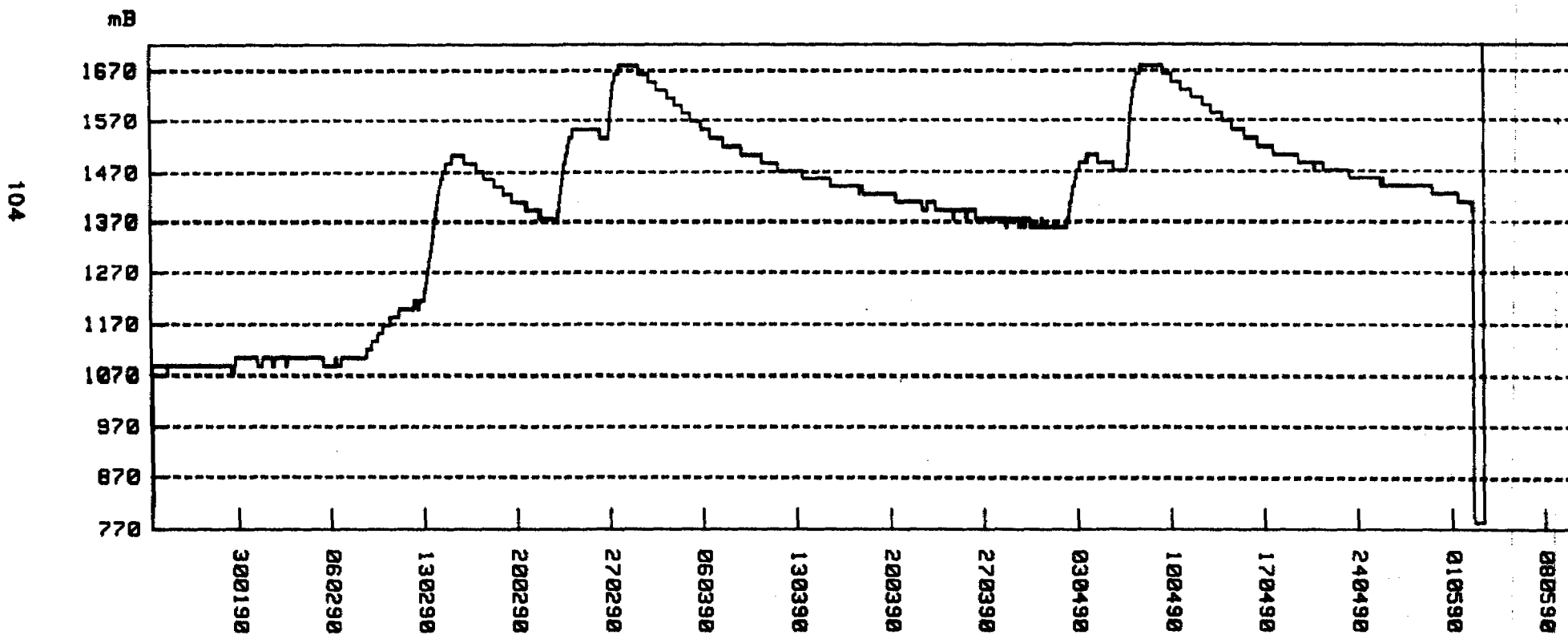
date:5 May 1990 (Saturday) 18:47

COUNTRY : YEMEN
STATION : AMAD WELL WADI
PROJECT : 406048
BEGIN DATE : 230190
START TIME : 13:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030590
INTERVAL : 00:15

PAGE 1

FILE: EP4333P_1
5 May 1980 19:06:35



COUNTRY : YEMEN
STATION : AMAD WELL WADI
PROJECT : 406848
BEGIN DATE : 230190
START TIME : 13:00

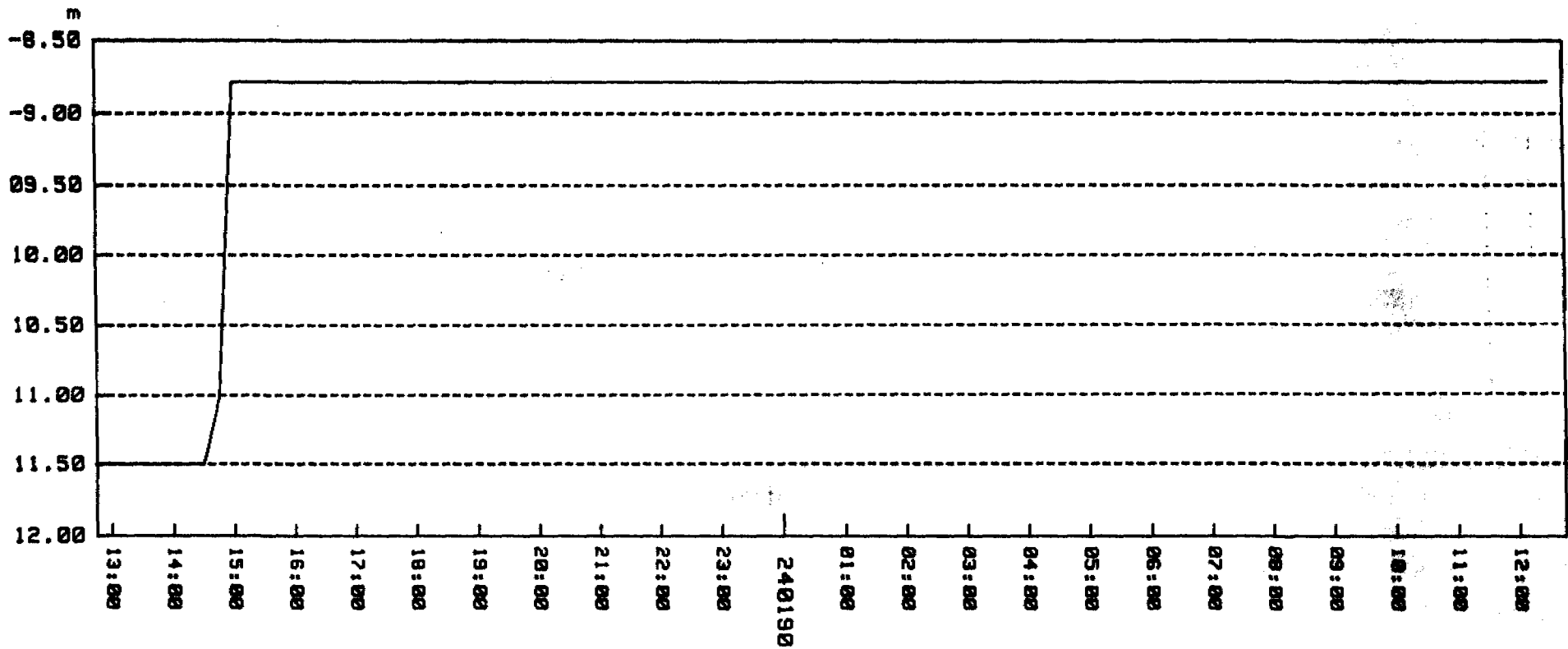
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 816 mB.
END DATE : 240190
INTERVAL : 00:15

PAGE 1

FILE: EP4333P_1

5 May 1990 19:26:55

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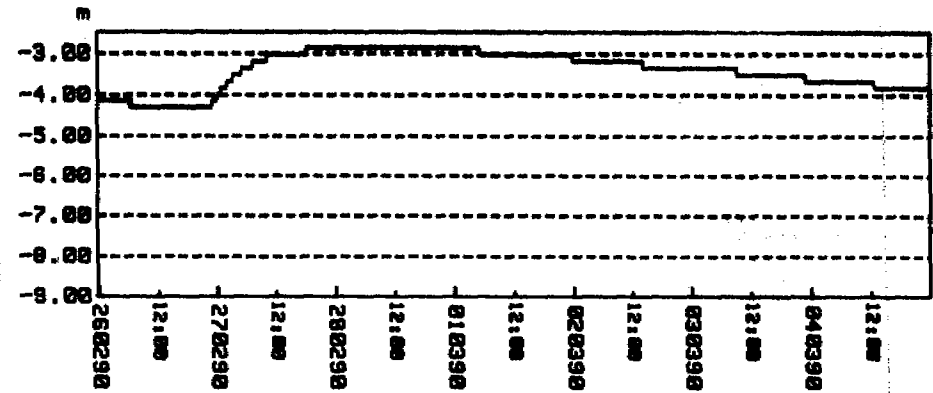
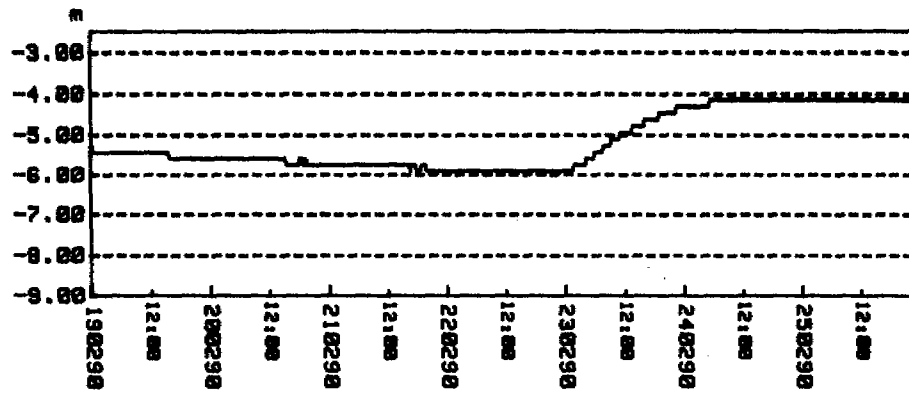
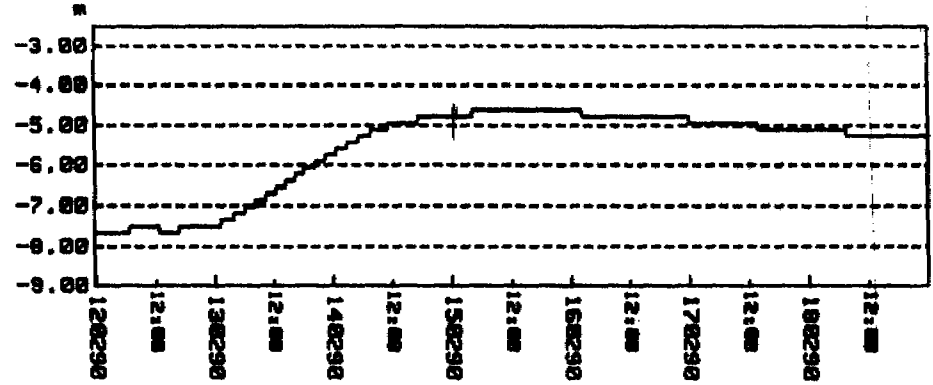
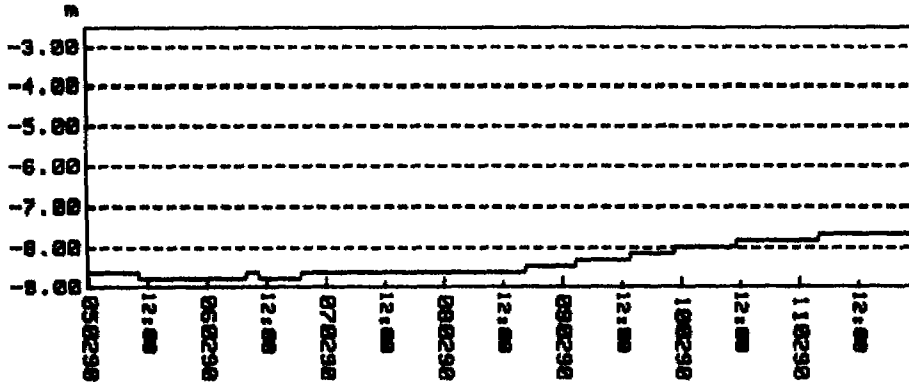
COUNTRY : YEMEN
 STATION : AMAD WELL WADI
 PROJECT : 406040
 BEGIN DATE : 050290
 START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 016 mB.
 END DATE : 040590
 INTERVAL : 00:15

PAGE 1

FILE: EP4933P_1
 5 May 1990 19:58:06

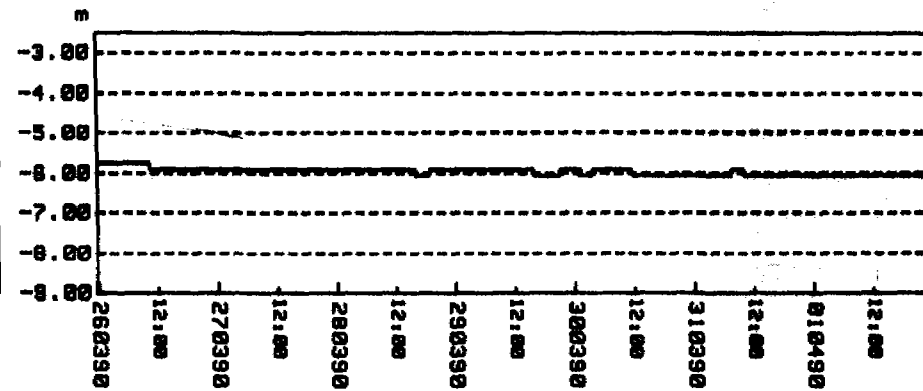
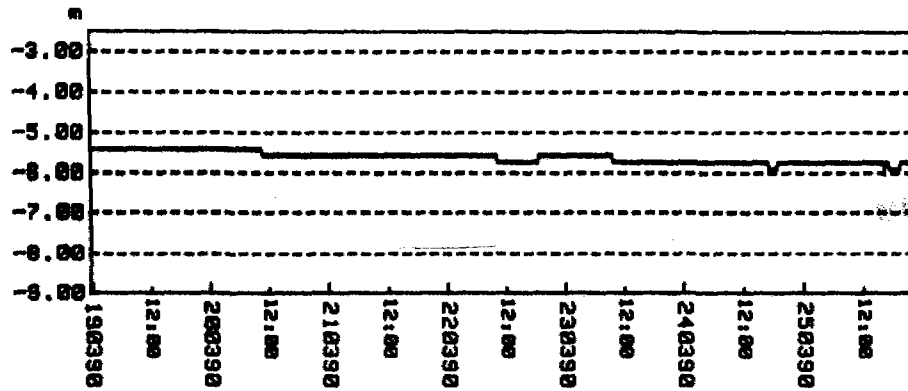
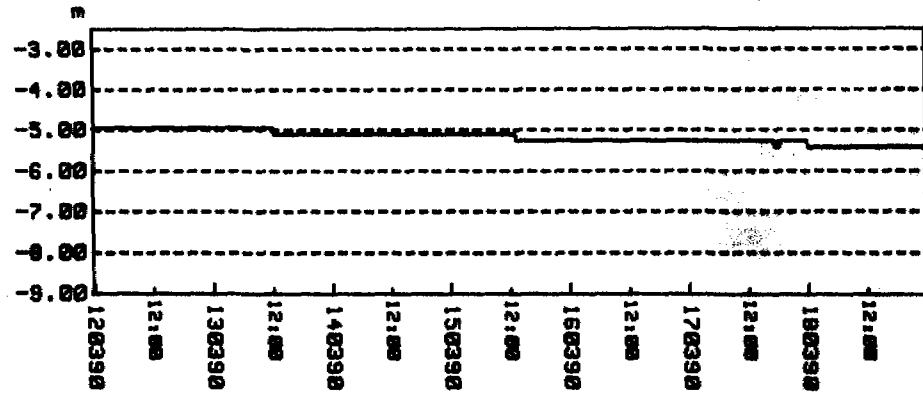
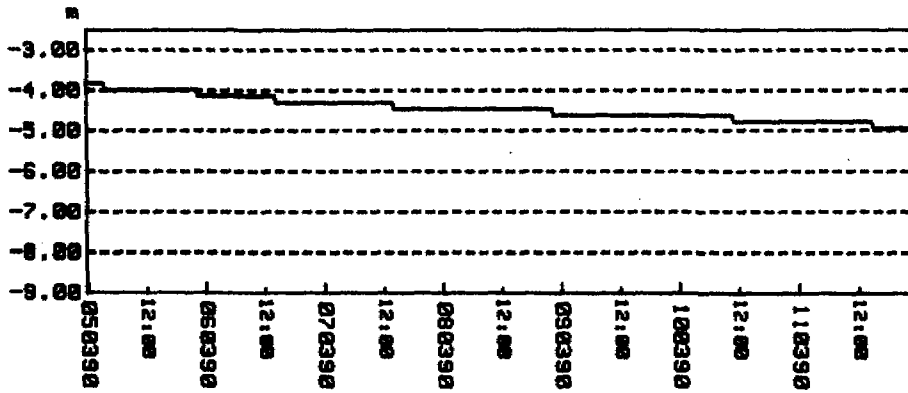
106



COUNTRY : YEMEN
STATION : AMAD WELL WADI
PROJECT : 406048

PLOT OF WATER LEVEL ELEVATION

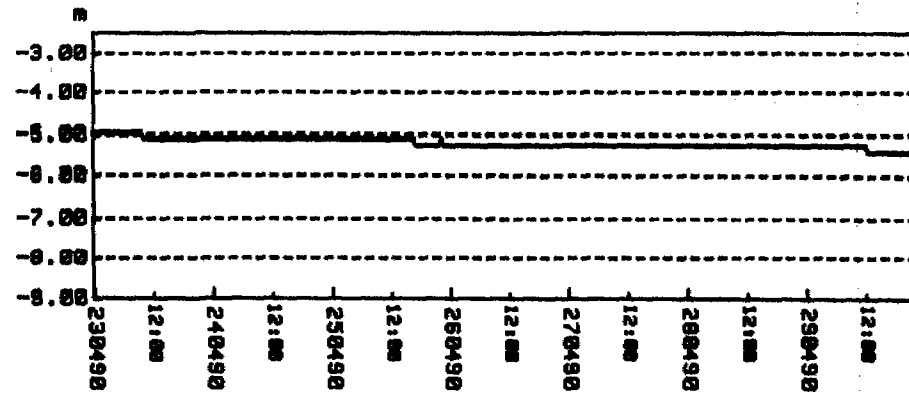
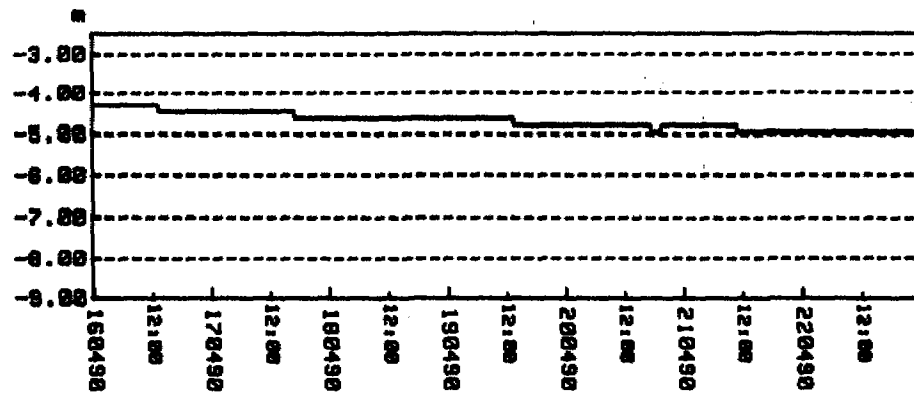
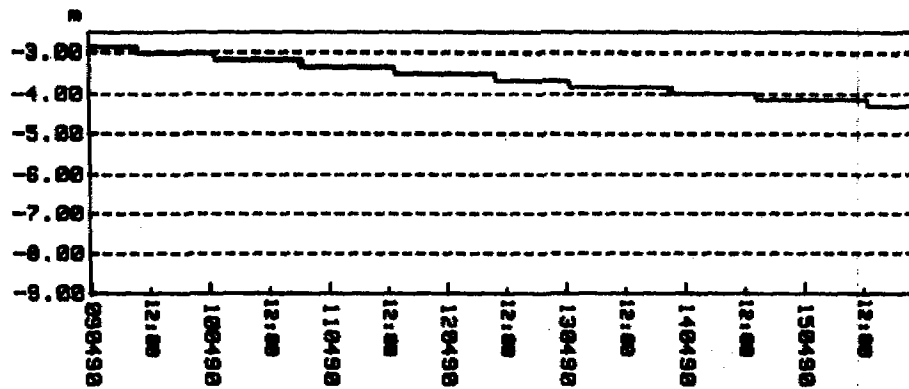
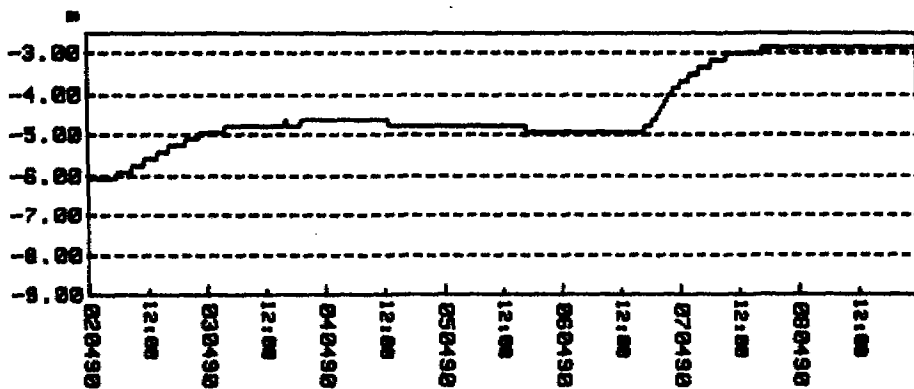
FILE: EP4939P_1
5 May 1990 20:03:44



COUNTRY : YEMEN
STATION : AMAD WELL WADI
PROJECT : 486848

PLOT OF WATER LEVEL ELEVATION

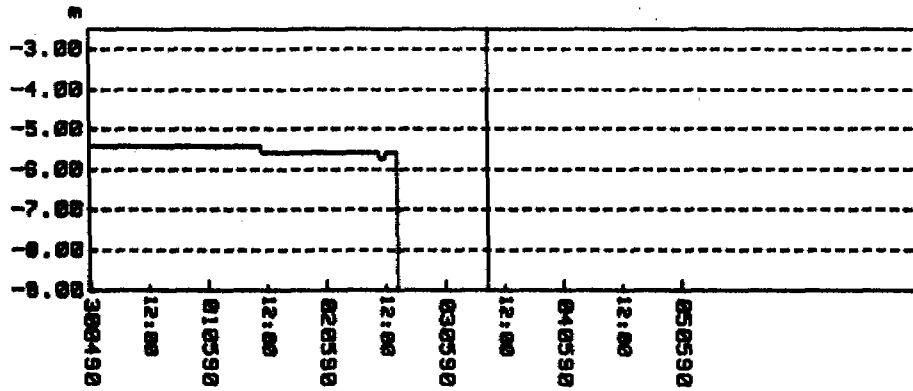
FILE: EP4333P_1
5 May 1990 20:09:23



COUNTRY : YEMEN
STATION : AMAD WELL WADI
PROJECT : 406049

PLOT OF WATER LEVEL ELEVATION

FILE: EP4333P_1
5 May 1988 20:14:58



PLACE :Al Bayda

PRESLOG:4429-3

Service given before initiation:none
-interval :00:15

Initiation date:18/01/90
Initiation time:15:15

Try-out results: last marker at 18/01/90 15:15
air pressure at 18/01/90 15:15
143 cm of water 18/01/90 15:30
143 cm of water 18/01/90 15:45
air pressure at 18/01/90 16:00
At processing these values were found as well

Markers given : one at start 18/01/90 15:15 and one at end at 03/05/90 07:20 h.

Installation date:18/01/90
Installation time:last marker at 15:15, in pipe at 16:00

Installation description :in GS pipe in middle of wadi +/-
500 m us of Al Bayda dam
-installation place:top-bottom at bottom pipe
-waterlevel :none

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:04/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:09:35
Remarks :no traces of floods
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4429_3
Number of eprom file :EP4429P_3
Number of administration file:-
Floppy number of eprom file :C: /floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:-

date:18 May 1990 (Friday) 19:09

COUNTRY : YEMEN
STATION : AL BAYDA
PROJECT : 406048
BEGIN DATE : 180190
START TIME : 15:15

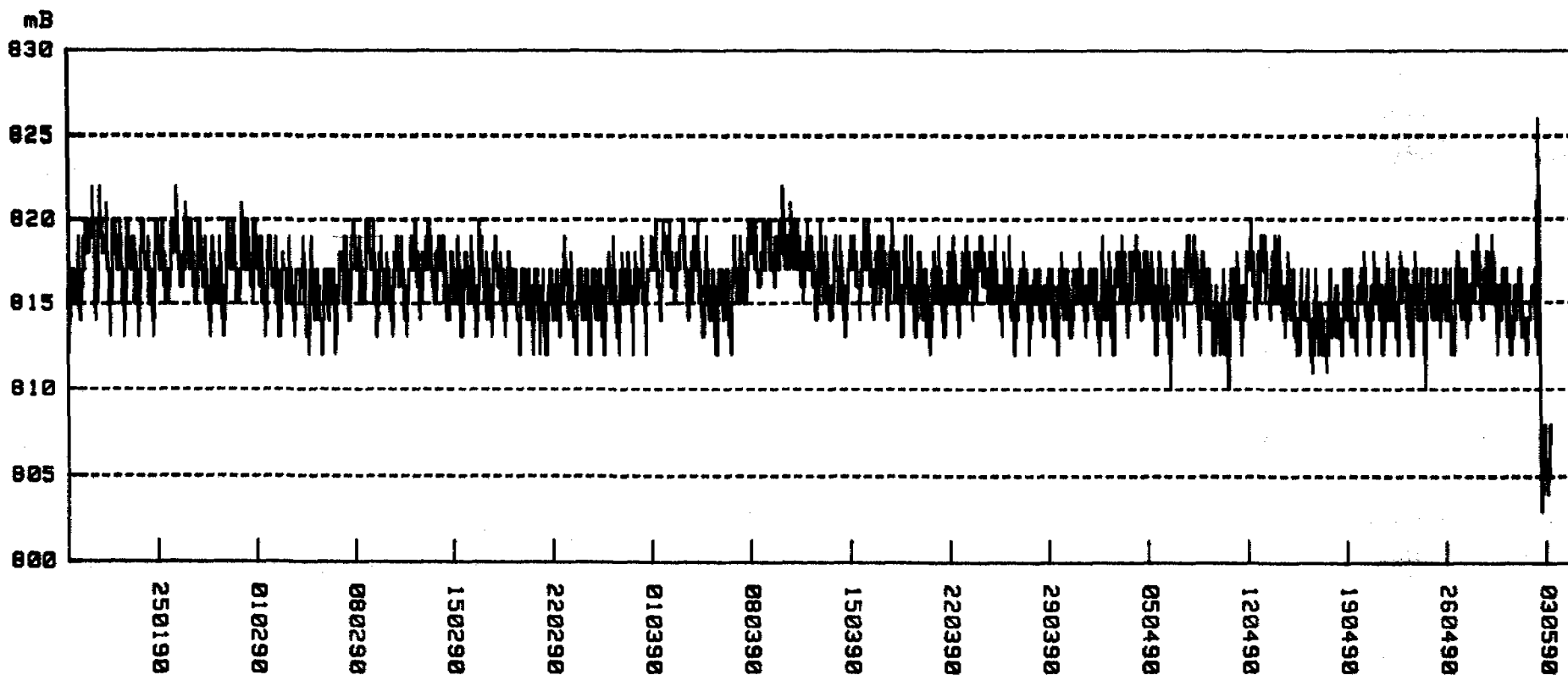
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040590
INTERVAL : 00:15

PAGE 1

FILE: EP4428P_3

5 May 1988 21:01:23

111



PLACE :Hajalah

PRESLOG:4370-3

Service given before initiation?:
-interval :00:15

Initiation date:23/01/90
Initiation time:10:30

Try-out results: last marker at 23/01/90 10:30
air pressure at 23/01/90 10:30
143 cm of water 23/01/90 10:45
143 cm of water 23/01/90 11:00
143 cm of water 23/01/90 11:15
air pressure at 23/01/90 11:30
when reading out, the values were found.

Markers given : one at start 23/01/90 10:30 and one at end at
03/05/90 07:20 h.

Installation date:23/01/90
Installation time:10:30

Installation description :in pipe, at bottom
-installation place:in middle of reservoir
-waterlevel :0

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:09/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:10:30
Remarks :-

-waterlevel:0, under reservoir floor
-sediment :about 5 cm in pipe, not around

Stop date :03/05/90
Stop time :08:23

Service given :new batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4370-3
Number of eprom file :EP4370P_3
Number of administration file:-
Floppy number of eprom file :c: /floppy 7
Floppy number of administration file:-
Reference where results were listed :2

Remarks:-

date:18 May 1990 (Friday) 19:11

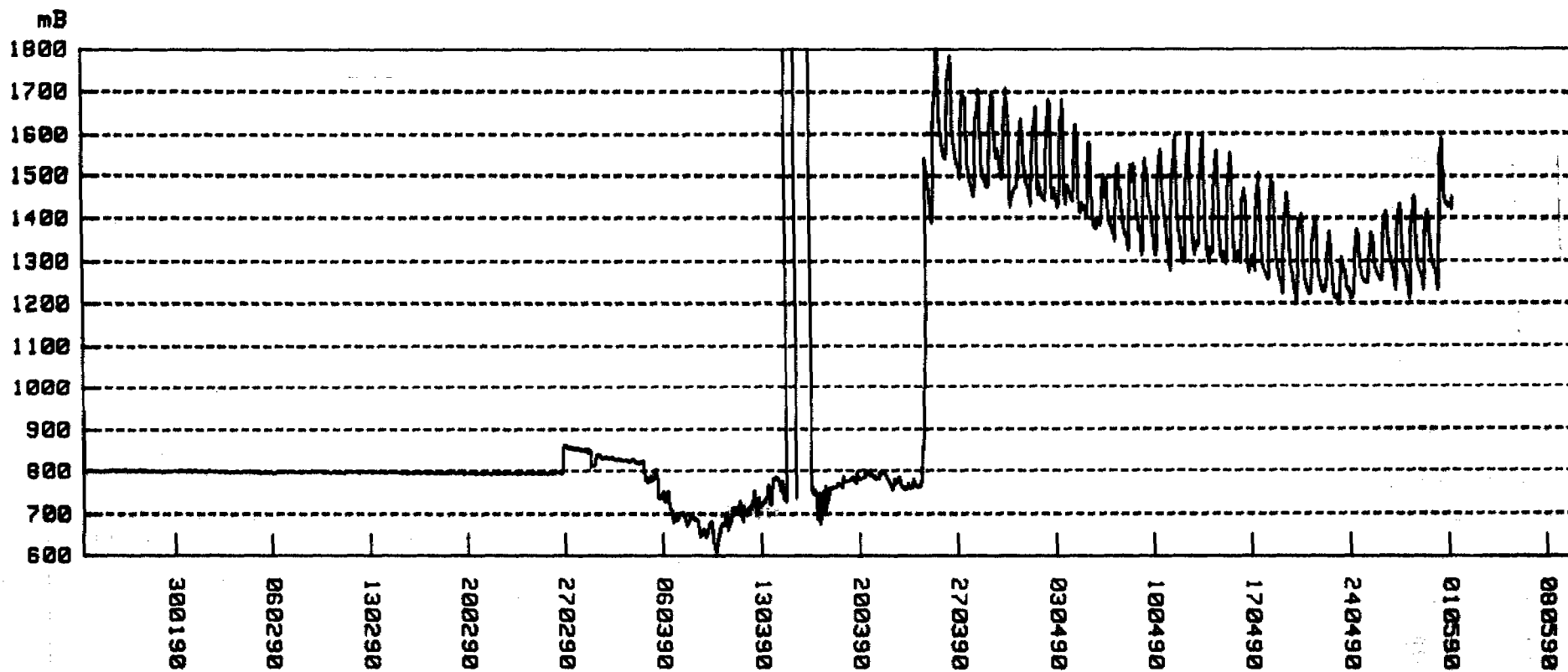
COUNTRY : YEMEN
STATION : HAJALAH
PROJECT : 400046
BEGIN DATE : 230190
START TIME : 10:30

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030590
INTERVAL : 00:15

PAGE 1

FILE: EP4370P_3
6 May 1990 00:42:55

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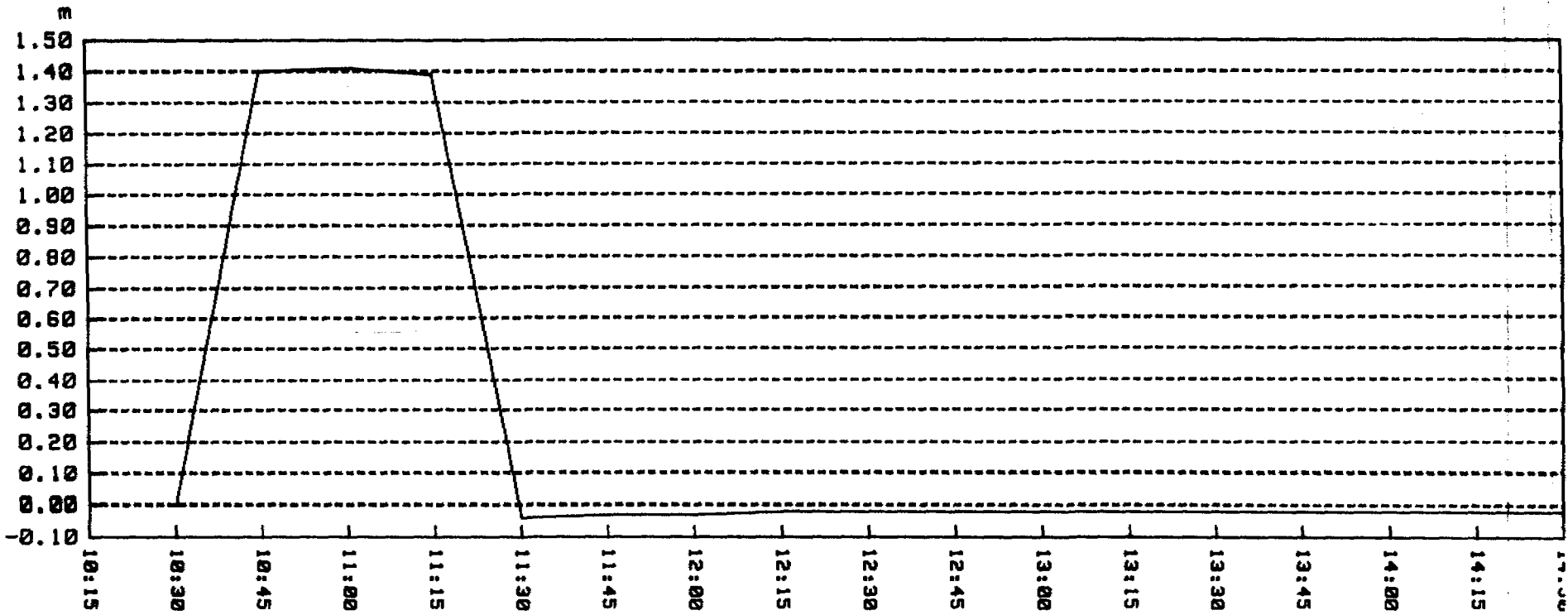
COUNTRY : YEMEN
STATION : HAJALAH
PROJECT : 408046
BEGIN DATE : 230190
START TIME : 10:30

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 881 mB.
END DATE : 230190
INTERVAL : 00:15

PAGE 1

FILE: EP4370P_3

6 May 1990 00:53:40



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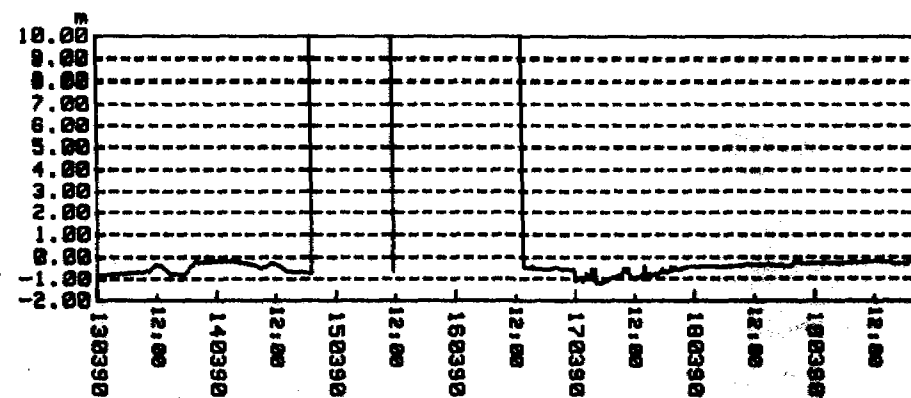
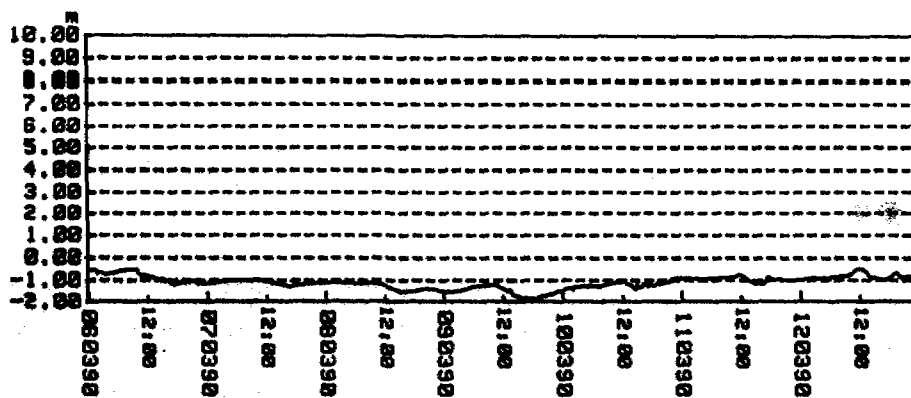
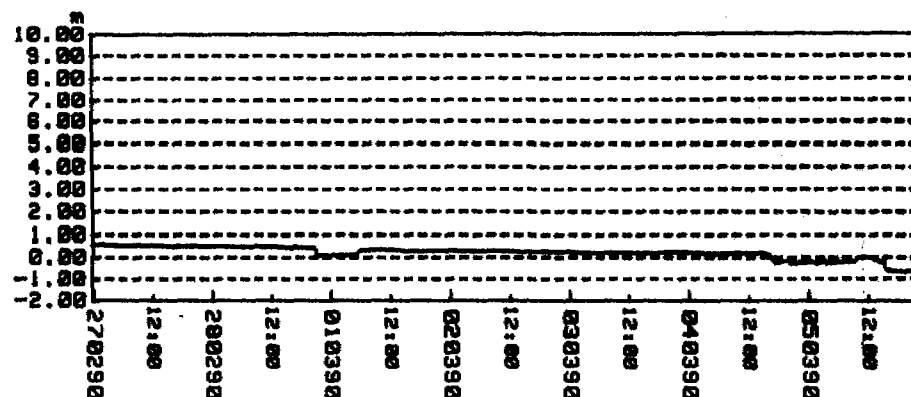
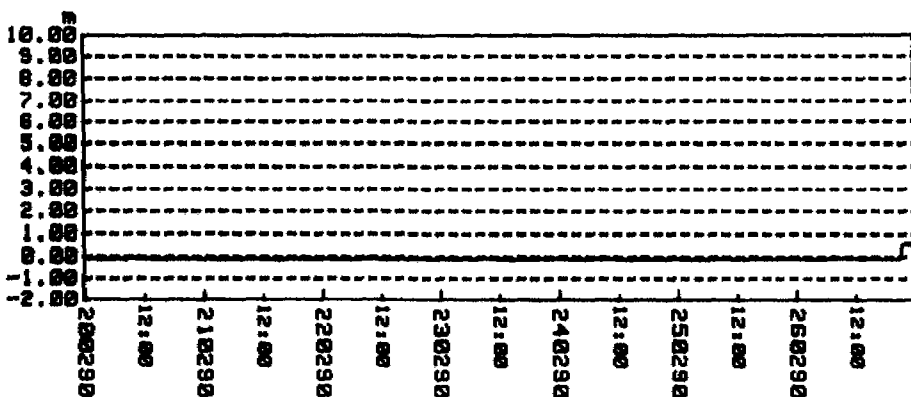
COUNTRY : YEMEN
 STATION : HAJALAH
 PROJECT : 400046
 BEGIN DATE : 200290
 START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 801 mB.
 END DATE : 040590
 INTERVAL : 00:15

PAGE 1

FILE: EP4370P_3

6 May 1990 09:00:21

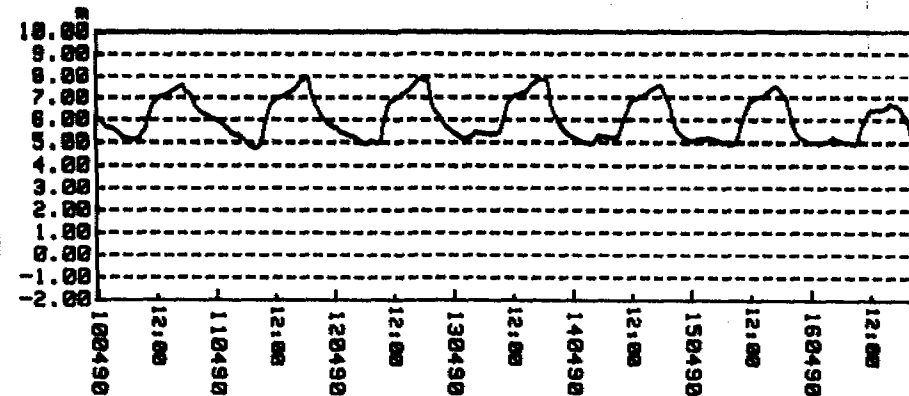
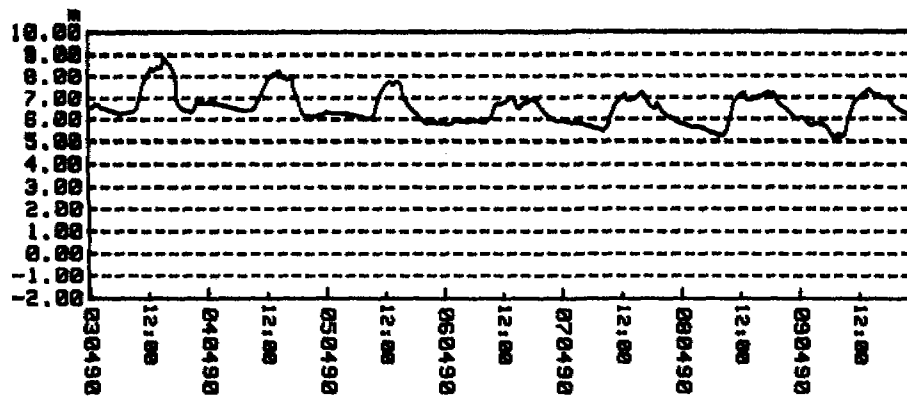
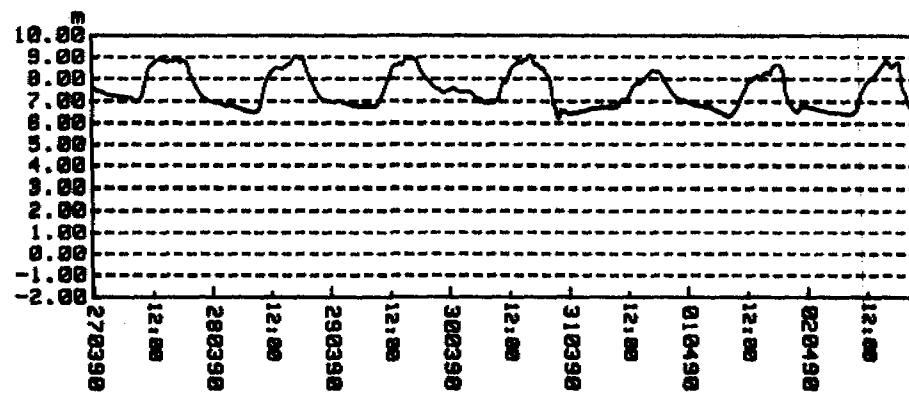
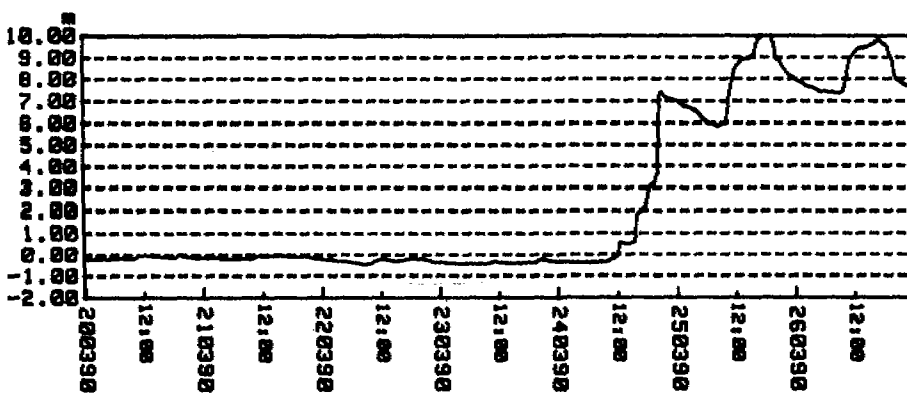


COUNTRY : YEMEN
STATION : HAJALAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_3

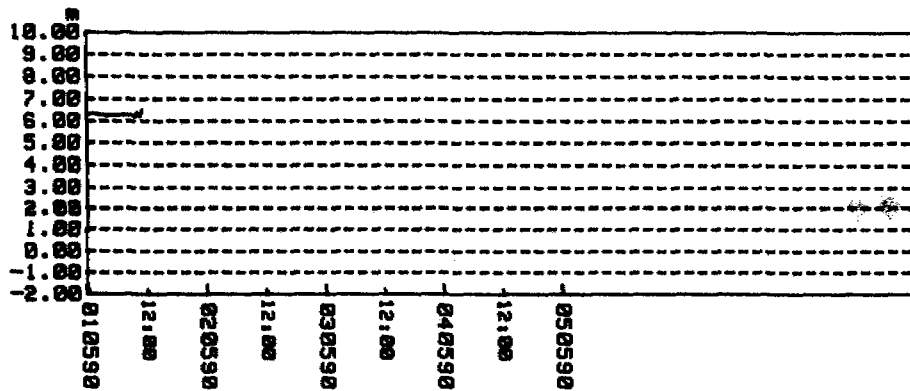
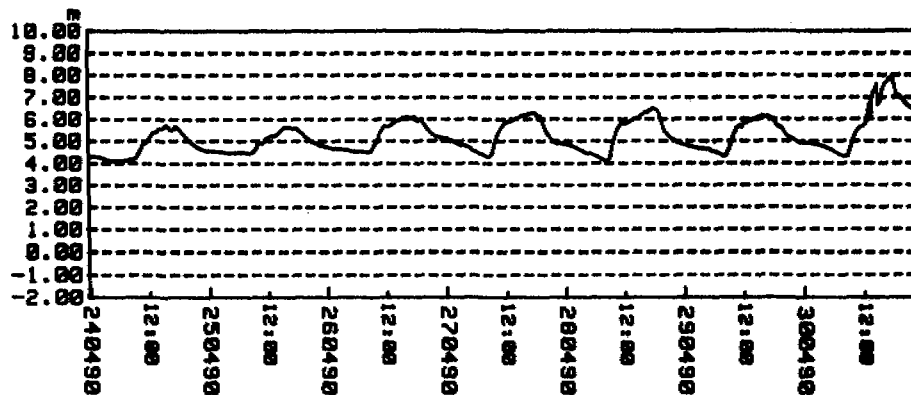
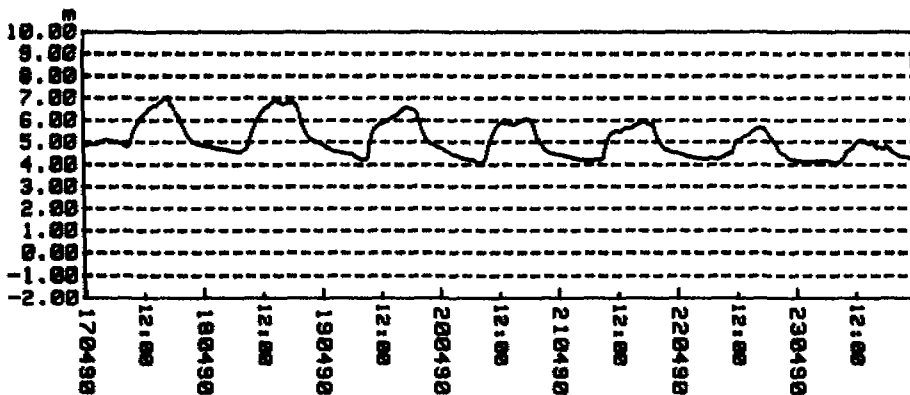
6 May 1990 09:13:30



COUNTRY : YEMEN
STATION : HAJALAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4370P_3
6 May 1990 09:20:57



PLACE :Hawat

PRESLOG:4436-0

Service given before initiation:none
-interval :00:15

Initiation date:09/11/88
Initiation time:10:00

Try-out results:OK
Markers given :2

Installation date:14/11/88
Installation time:13:00 (measurement +/- 492)

Installation description :in drum
-installation place:middle wadi
-waterlevel :drum full of water=wl
sensor at -40 cm wl

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:23/02/89
Calculated removal/stop time:-

Removal date:21/02/89
Removal time:10:45
Remarks :-
-waterlevel:-
-sediment :-

Stop date :21/02/89
Stop time :12:30

Service given :none
Eprom reading date:nk
Number of eprom :EP4436-0
Number of eprom file :EP4436P_0
Number of administration file:AD4436P_0
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 18:29

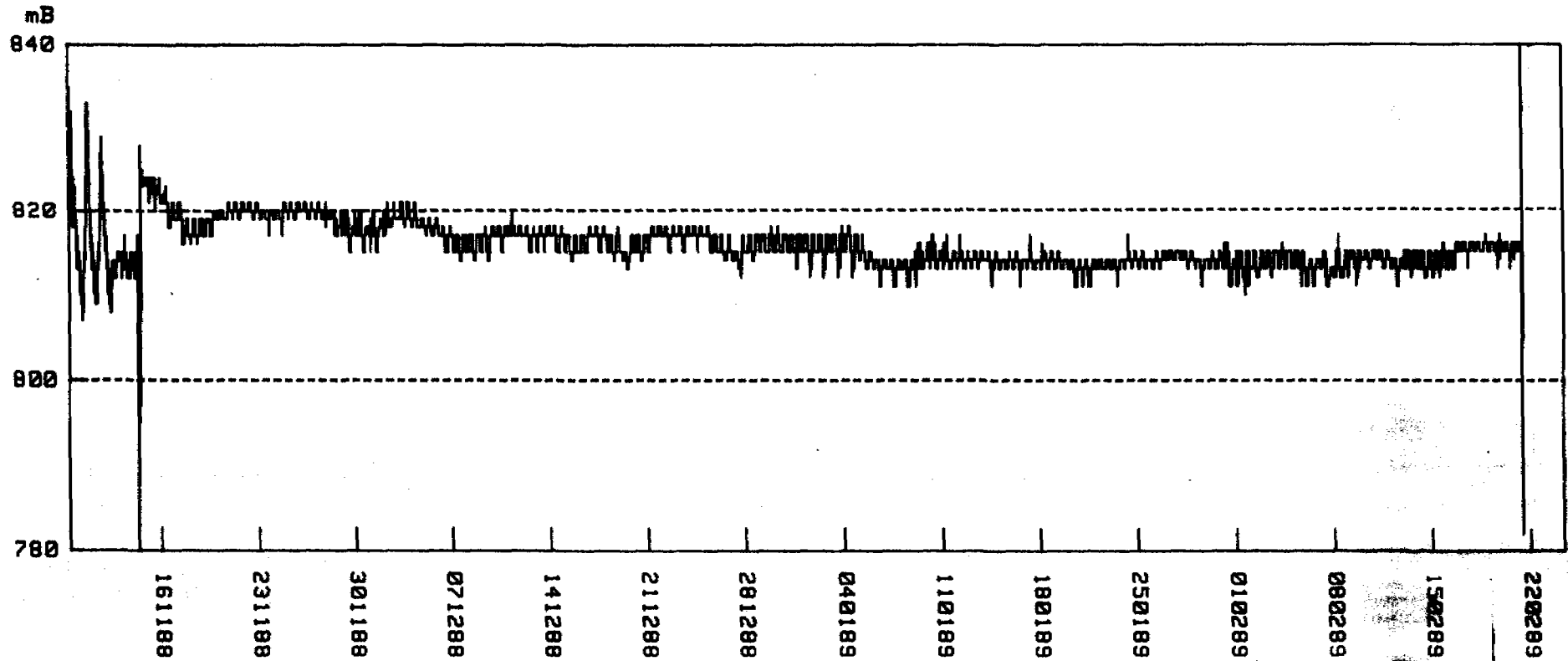
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 408046
BEGIN DATE : 091188
START TIME : 10:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 CM.
BAROMETER READING (START) : 0 MB.
END DATE : 010389
INTERVAL : 00:15

PAGE 1

FILE: EP4436P_0
9 Apr 1990 09:37:39

119



PLACE :Hawat

PRESLOG:4429-1

Service given before initiation:none
-interval :00:15

Initiation date:< 21/02/89 at 21/02/89
Initiation time:nk | 08:15 marker at record 43

Try-out results:OK
Markers given :3

Installation date:21/02/89
Installation time:10:55

Installation description :in drum
-installation place:middle wadi
-waterlevel :drum full of water= wl
sensor at -40 cm wl

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:07/06/89
Calculated removal/stop time:-

Removal date:07/06/89
Removal time:+/- 09:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :07/06/89
Stop time :nk

Service given :batteries and rings changed
Eprom reading date:nk
Number of eprom :EP4429-1
Number of eprom file :EP4429P_1
Number of administration file:AD4429P_1
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 18:40

COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 400046
BEGIN DATE : 210289
START TIME : 08:15

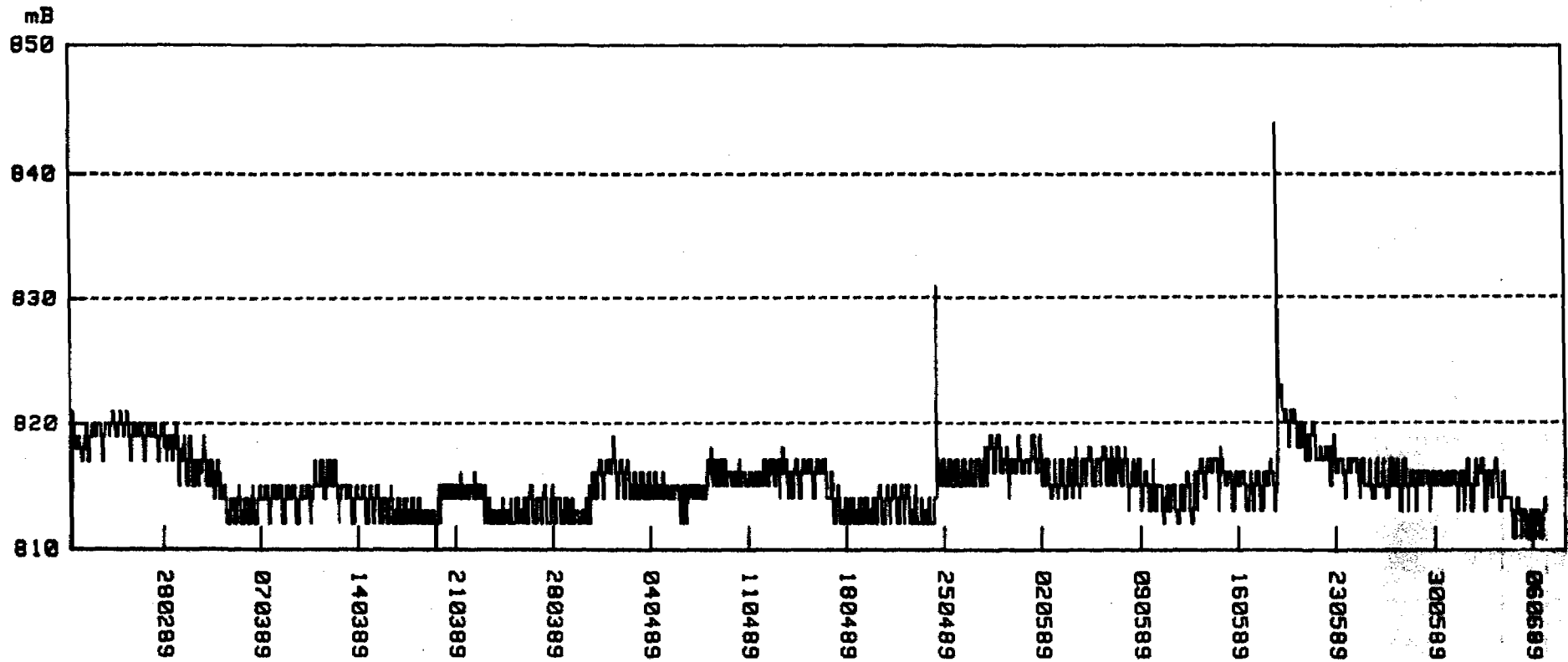
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 070689
INTERVAL : 00:15

PAGE 1

FILE: EP4429P_1

9 Apr 1990 10:03:08

121



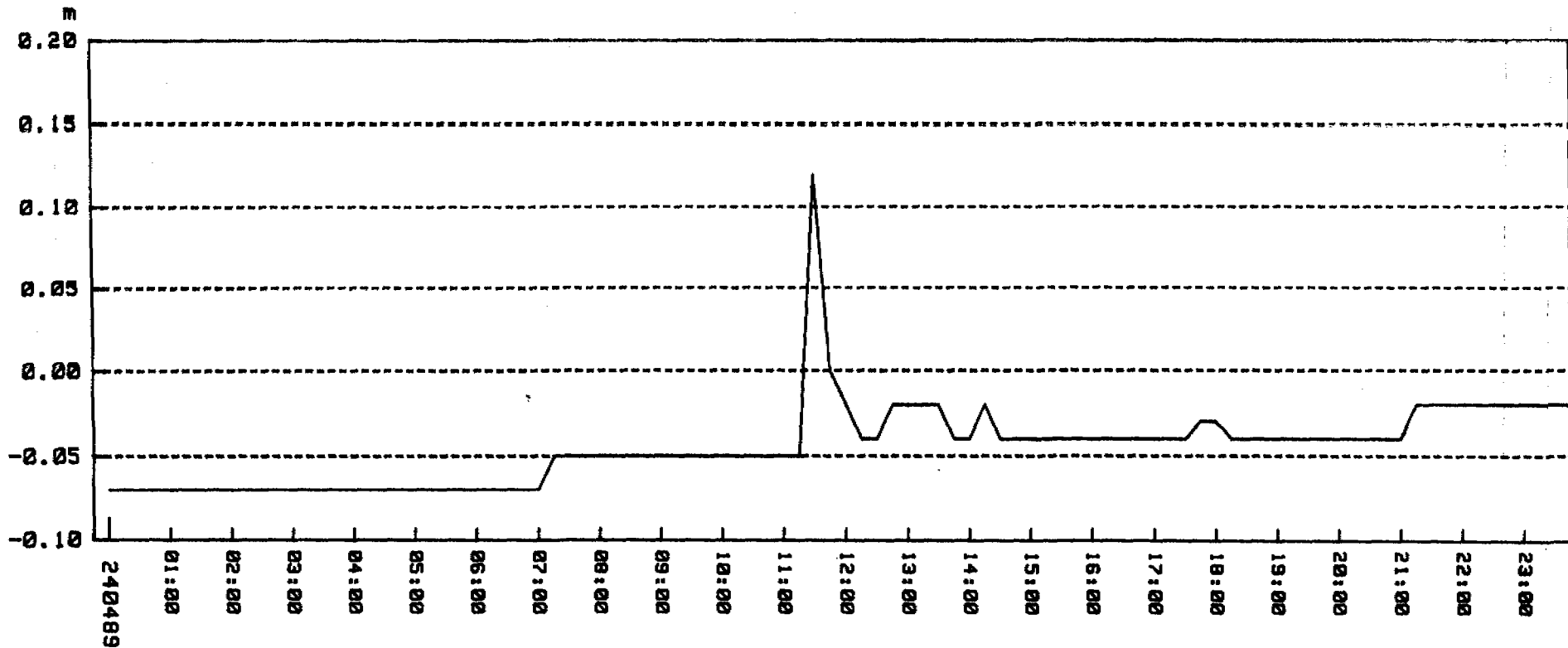
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 408046
BEGIN DATE : 240489
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 793 mB.
END DATE : 250489
INTERVAL : 00:15

PAGE 1

FILE: EP4429P_1

9 Apr 1990 10:57:17



122

COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 400046
BEGIN DATE : 100509
START TIME : 12:00

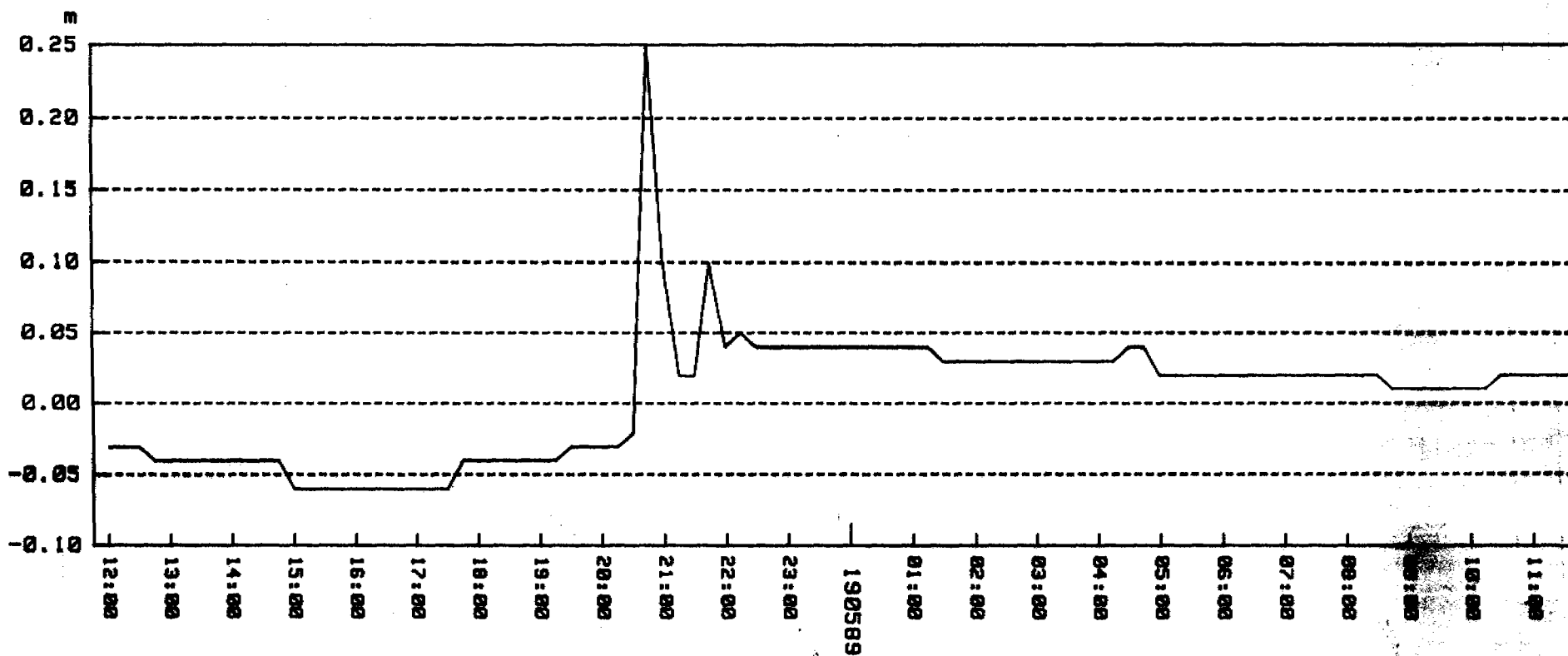
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 793 mB.
END DATE : 240509
INTERVAL : 00:15

PAGE 1

FILE: EP4429P_1

9 Apr 1990 11:00:47

123



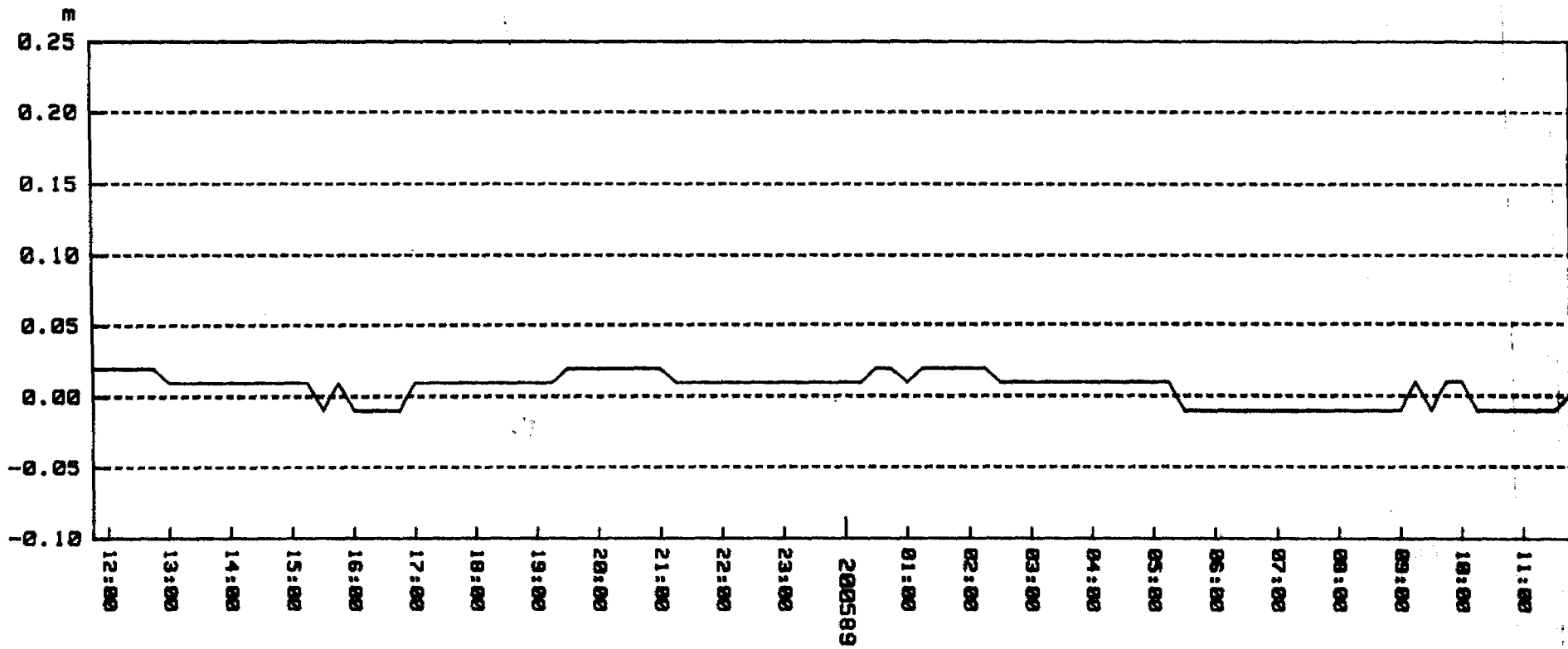
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 409048

PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4429P_1
9 Apr 1990 11:12:00

124



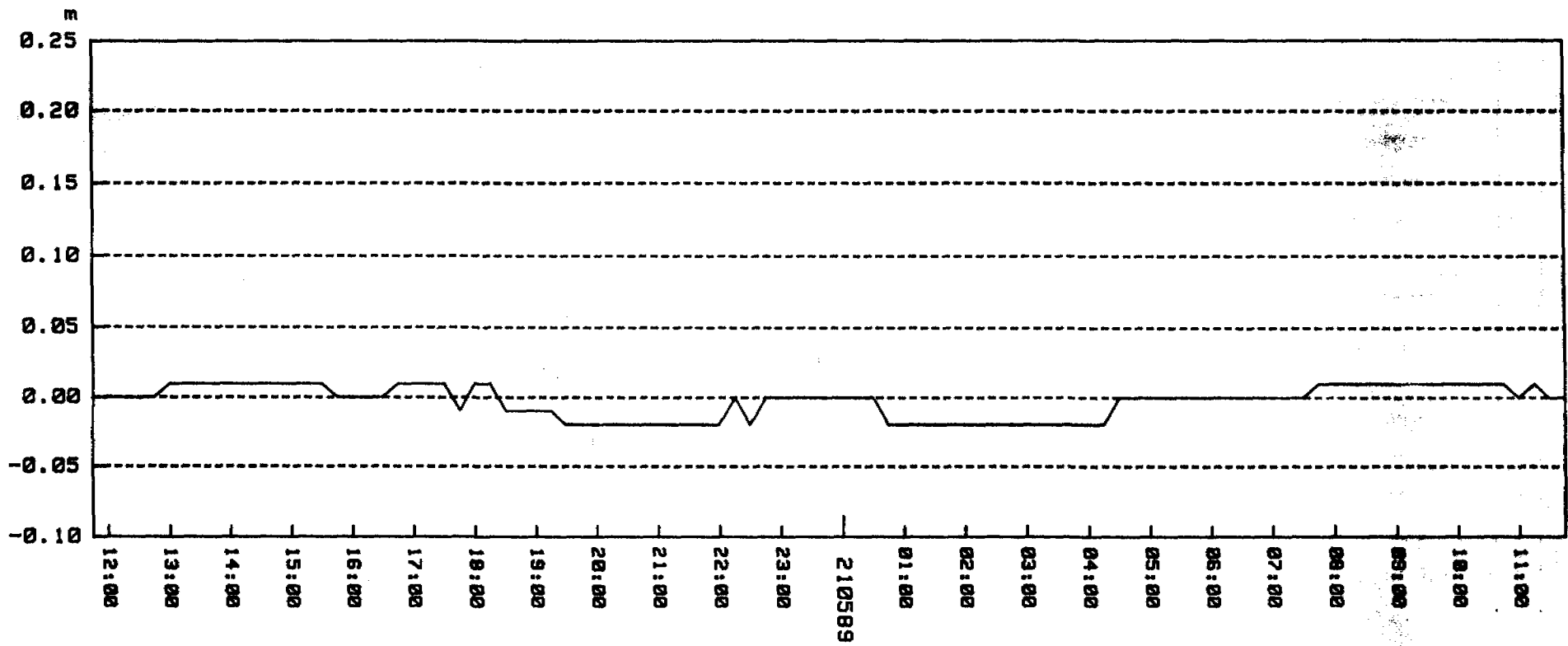
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

PAGE 3

FILE: EP442SP_1
9 Apr 1990 11:14:13

125



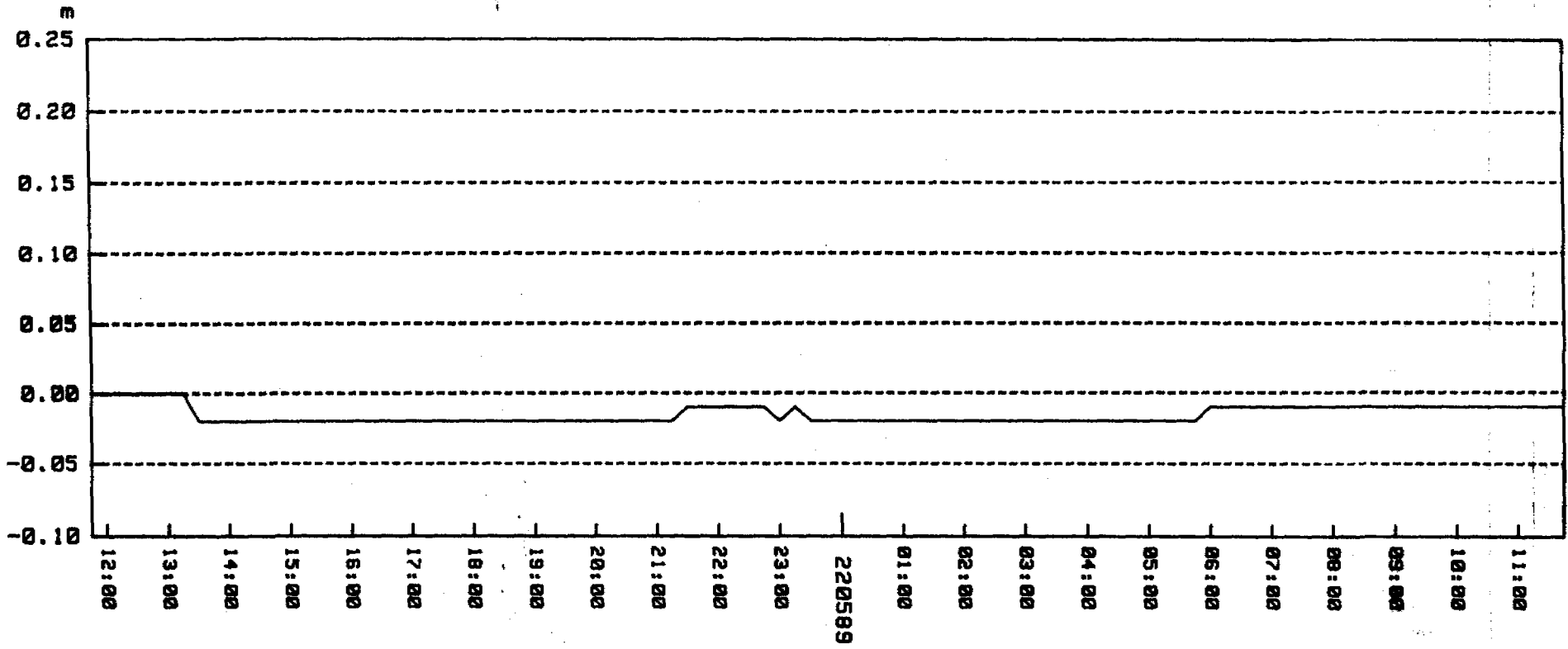
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 4

FILE: EP4428P_1
9 Apr 1998 11:18:25

126



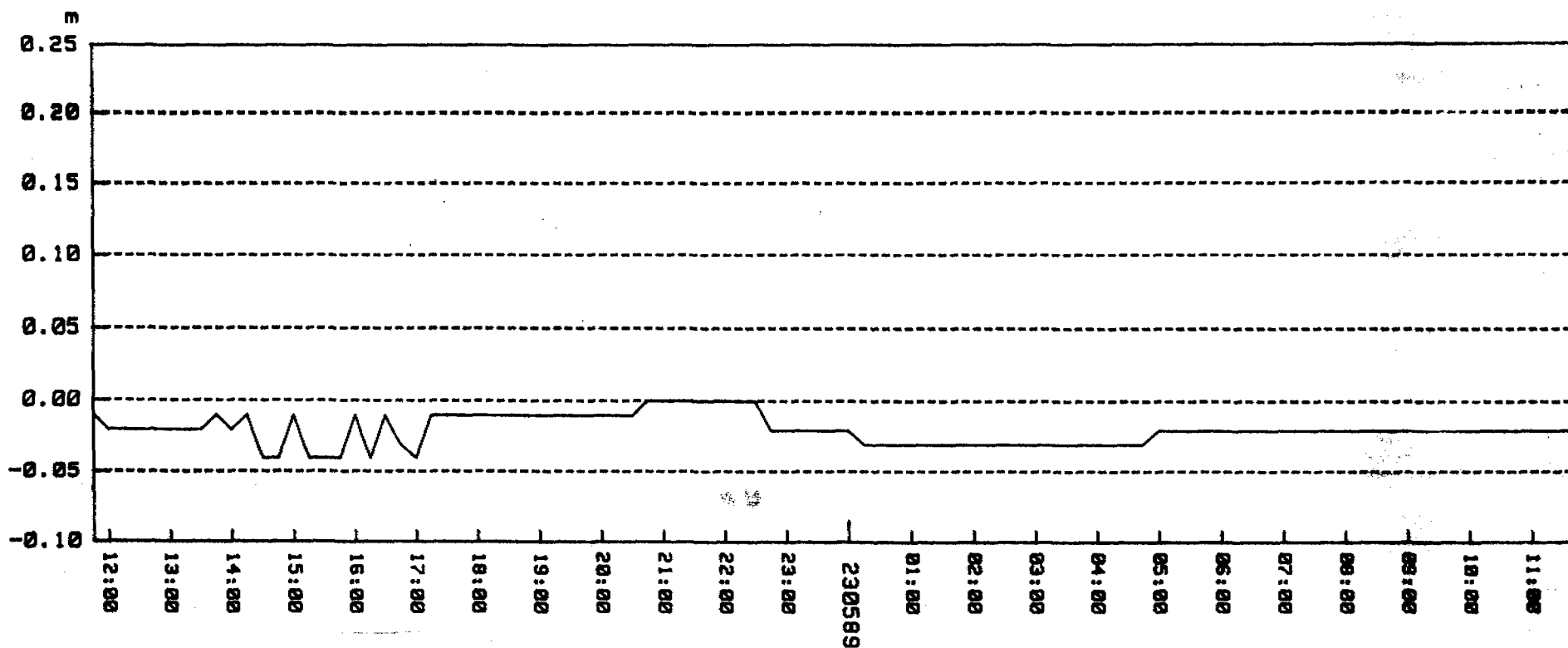
COUNTRY : YEMEN
STATION : HRWAT
PROJECT : 488048

PLOT OF WATER LEVEL ELEVATION

PAGE 5

FILE: EP4429P_1

9 Apr 1990 11:18:37



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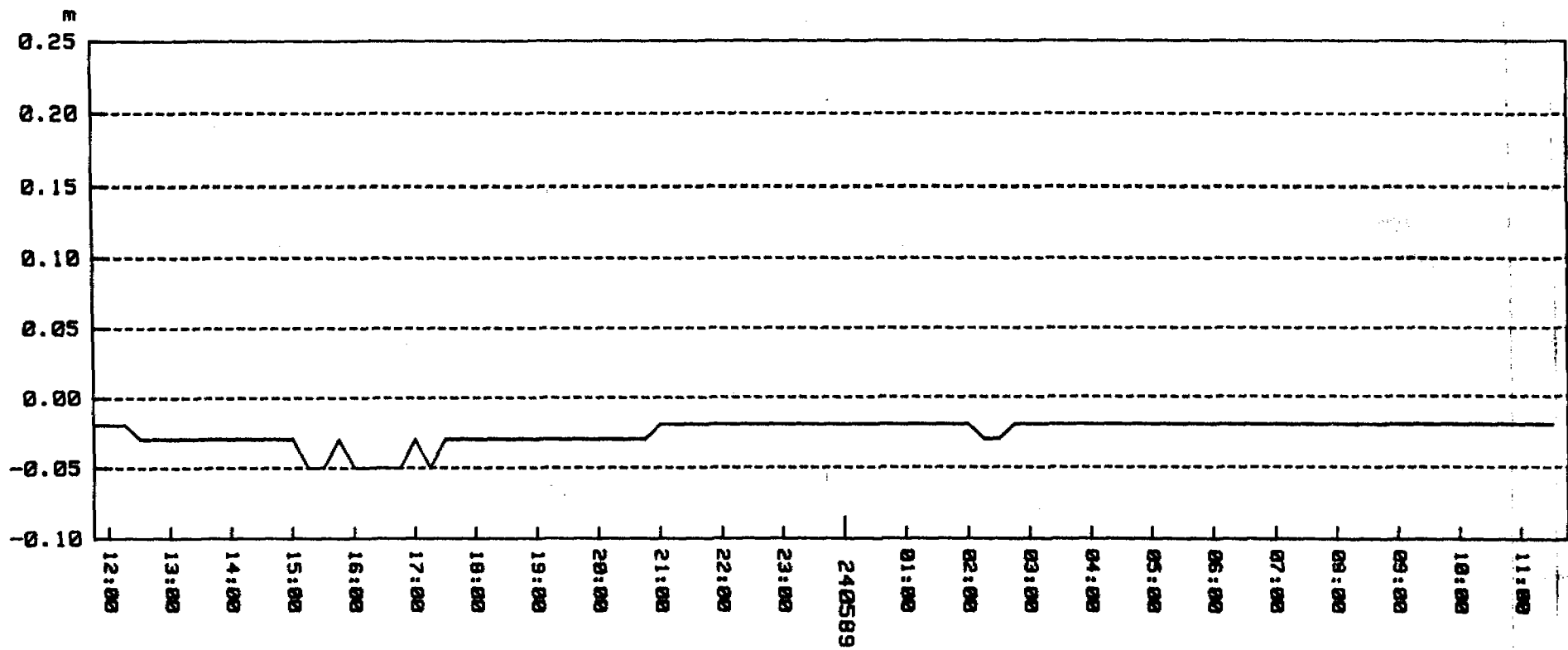
COUNTRY : YEMEN
STATION : HAWAT
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 8

FILE: EP4429P_1
9 Apr 1980 11:20:50

128



PLACE :Hawat

PRESLOG:4430-2

Service given before initiation:batteries changed
-interval :00:15

Initiation date:07/06/89
Initiation time:07:00

Try-out results:OK
Markers given :?

Installation date:07/06/89
Installation time:nk

Installation description :in drum
-installation place:middle wadi
-waterlevel :drum full of water=wl
sensor at -40 cm wl

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:21/09/89
Calculated removal/stop time:-

Removal date:21/09/89
Removal time:-
Remarks :stolen
-waterlevel:-
-sediment :-

Stop date :-
Stop time :-

Service given :-
Eprom reading date:-
Number of eprom :-
Number of eprom file :-
Number of administration file:-
Floppy number of eprom file :-
Floppy number of administration file:-
Reference where results were listed :-

General remarks:
1.

date:16 April 1990 (Monday) 18:45

PLACE :Madan

PRESLOG:4428-0

Service given before initiation:none
-interval :00:15

Initiation date:15/01/88
Initiation time:19:45

Try-out results:OK
Markers given :1

Installation date:27/01/88
Installation time:11:00

Installation description :in drum
-installation place:in narrow gorge / wadi
-waterlevel :drum full with water and sand,
25 cm sand above drum, sensor at
-40 cm top drum= -65 cm wadi level

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:12/05/88
Calculated removal/stop time:-

Removal date:15/08/88
Removal time:11:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :-
Stop time :-

Service given :batteries changed
Eprom reading date:nk
Number of eprom :EP4428-0
Number of eprom file :EP4428P_0
Number of administration file:AD4428P_0
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 18:59

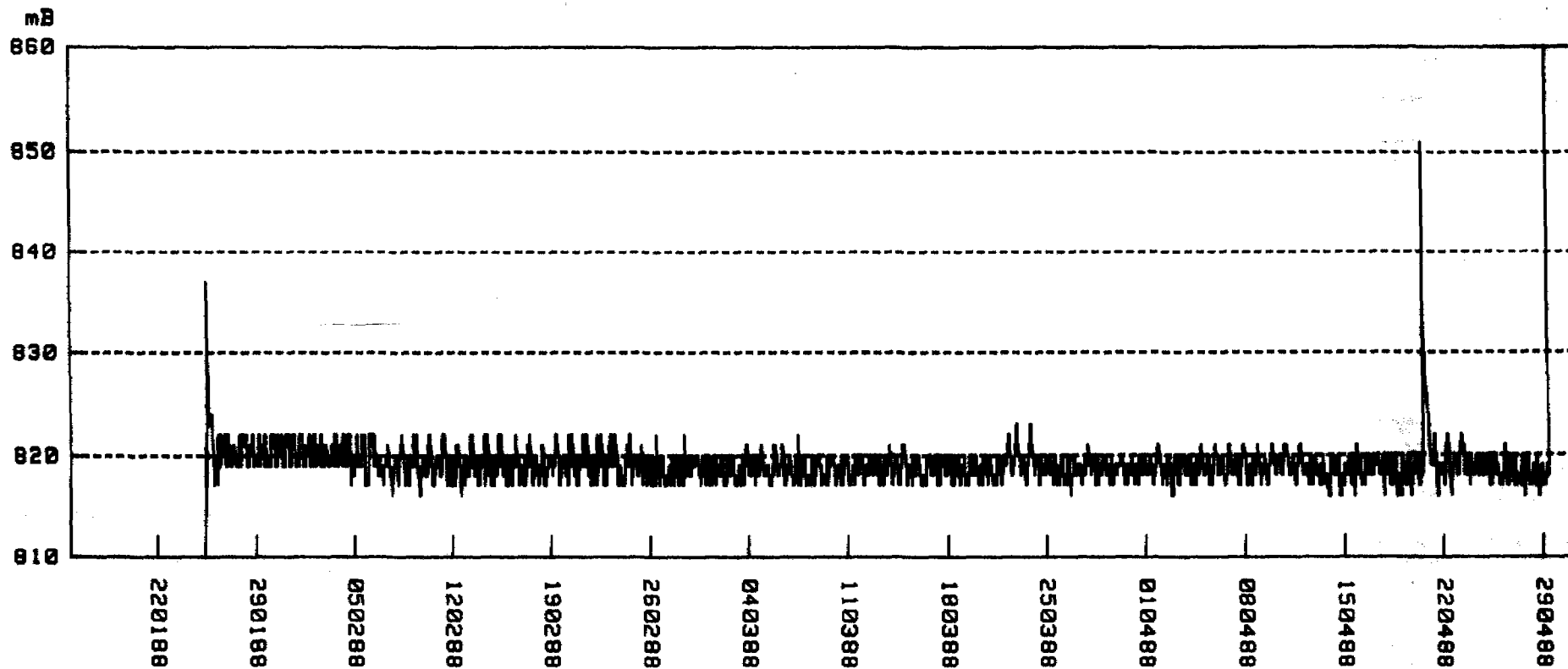
COUNTRY : YEMEN
STATION : MADAN
PROJECT : 400048
BEGIN DATE : 150100
START TIME : 19:45

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 150000
INTERVAL : 00:15

PAGE 1

FILE: EP4420P_0

0 Apr 1990 10:40:00



131

COUNTRY : YEMEN
STATION : MADAN
PROJECT : 40046
BEGIN DATE : 220488
START TIME : 12:00

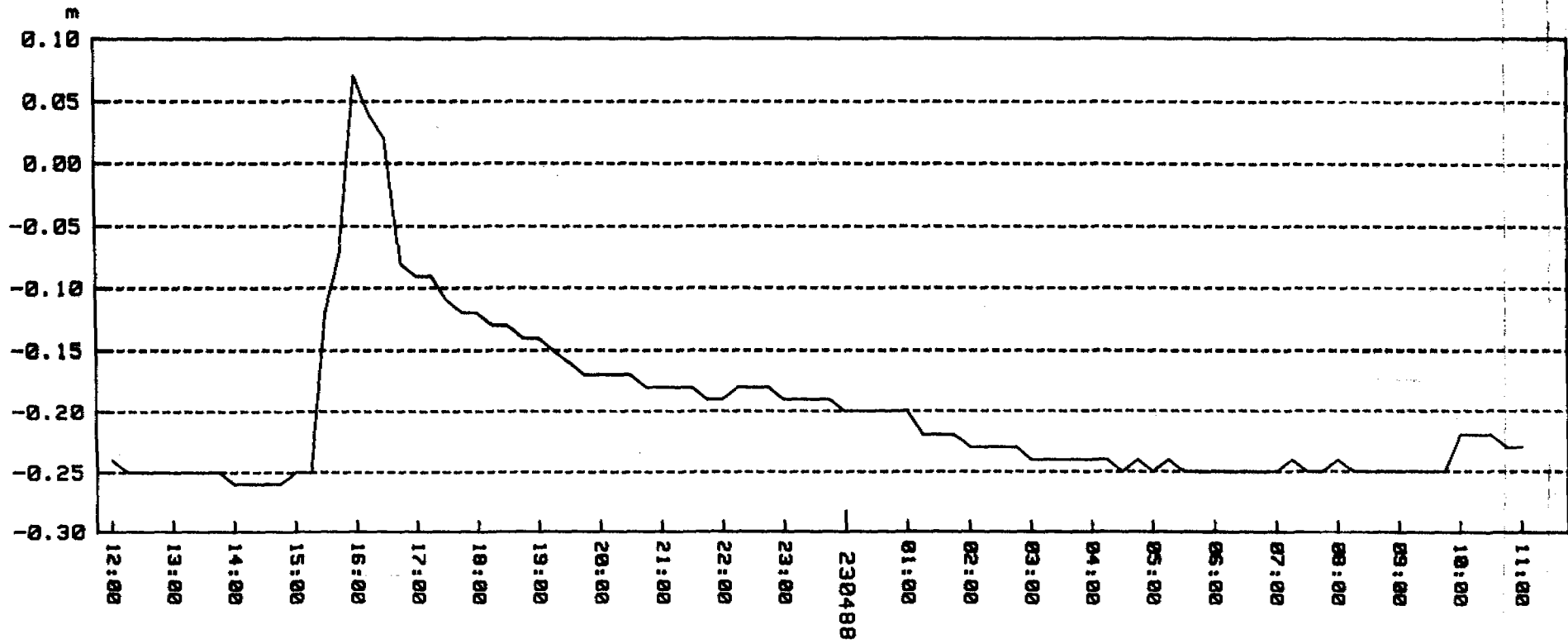
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 802 mB.
END DATE : 230488
INTERVAL : 00:15

PAGE 1

FILE: EP4428P_0

8 Apr 1990 12:07:29

132



PLACE :Mahajaba 1 / Amad 2

PRESLOG:4421-0

Service given before initiation:none
-interval :00:15

Initiation date:15/01/88
Initiation time:19:45

Try-out results:OK
Markers given :1

Installation date:18/01/88
Installation time:10:00 Mahajaba a
Installation date:09/03/88
Installation time:13:00 Mahajaba b
Installation date:06/04/88
Installation time:13:45 Amad 2

Installation description Mahajaba a:in drum with 30 cm sand above
-installation place:in reservoir front old dam
-waterlevel :drum full with water

Installation description Mahajaba b:in drum with 20 cm sand above
-installation place: in narrow gorge ;future
dam place

-waterlevel :drum full with water

Installation description Amad 2 :in drum with 55 cm sand above
-installation place:middle of wadi at 250.3 m. of
Amad 1 with netting

-waterlevel :drum full with water and
boulders,sensor=-1.40 m
wadi level

Check up visit date :2 times:when moving
Check up visit results:OK

Calculated removal/stop date:30/04/88
Calculated removal/stop time:-

Removal date Mahajaba a :09/03/88
Removal time :10:00
Remarks :-

-waterlevel :-

-sediment :-

Removal date Mahajaba b :03/04/88

Removal time :nk

Remarks :-

-waterlevel :-

-sediment :-

Removal date Amad 2 :18/08/88

Removal time :13:00
Remarks :-
-waterlevel :-
-sediment :-

Stop date :nk
Stop time :nk

Service given :changed batteries
Eprom reading date:nk
Number of eprom :ep4421-0
Number of eprom file :EP4421P_0
Number of administration file:AD4421P_0
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 17:18

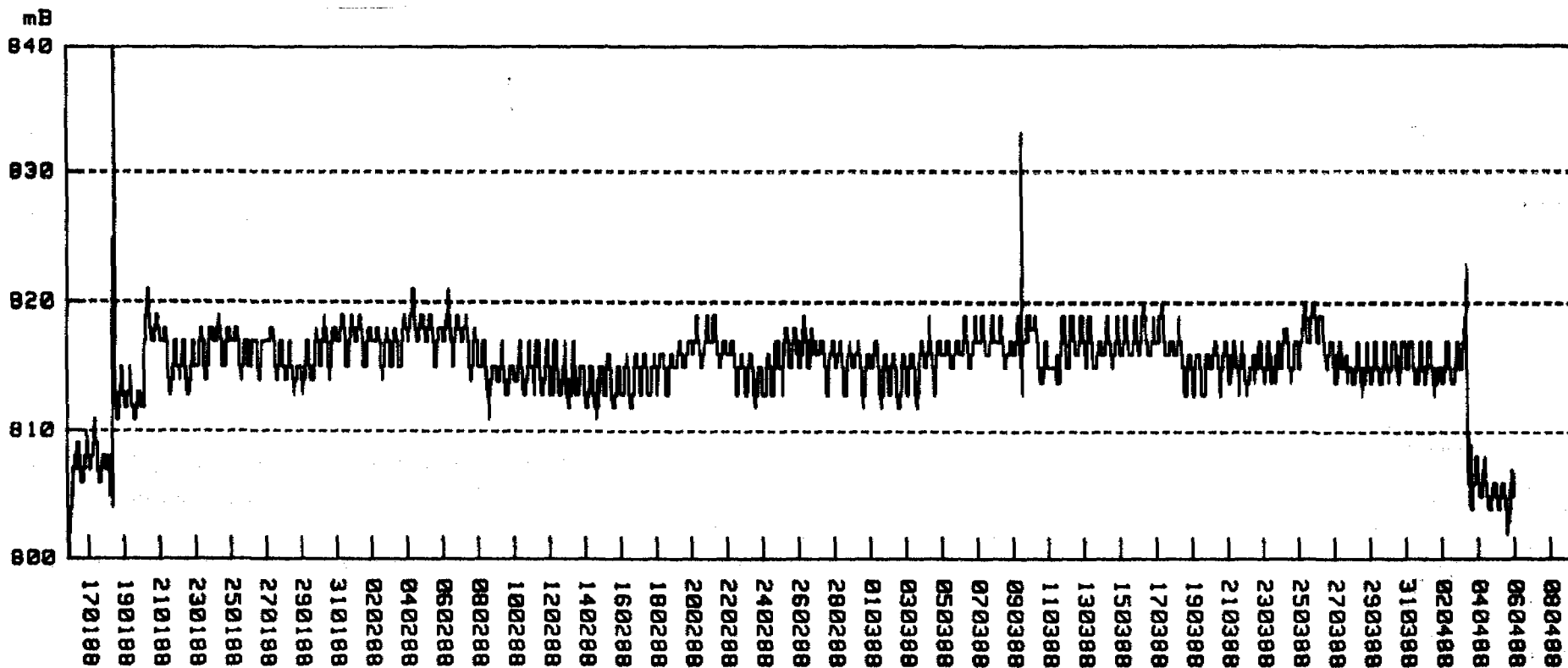
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 488046
BEGIN DATE : 150188
START TIME : 19:45

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 060488
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_0
11 Apr 1990 00:21:34

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PLACE :Mahajaba 1

PRESLOG:4430-1

Service given before initiation:none
-interval :00:15

Initiation date:18/02/89
Initiation time:08:30

Try-out results:OK
Markers given :4

Installation date:18/02/89
Installation time:10:45

Installation description :in PVC-pipe us of new dam
-installation place:sensor= -9.70 m crest dam
-waterlevel :none

Check up visit date :two times
Check up visit results:water levels measured by hand
see reference 2 for details.

Calculated removal/stop date:04/06/89
Calculated removal/stop time:-

Removal date:25/05/89
Removal time:17:00

Remarks :pipe had collapsed, logger was removed after a few
days of digging
-waterlevel:above the sensor
-sediment :little or none

Stop date :26/06/89
Stop time :-

Service given :batteries changed
Eprom reading date:nk
Number of eprom :EP4430-1
Number of eprom file :EP4430P_1
Number of administration file:AD4430P_1
Floppy number of eprom file :3
Floppy number of administration file:3
Reference where results were listed :1+2

General remarks:
1.

date:16 April 1990 (Monday) 19:16

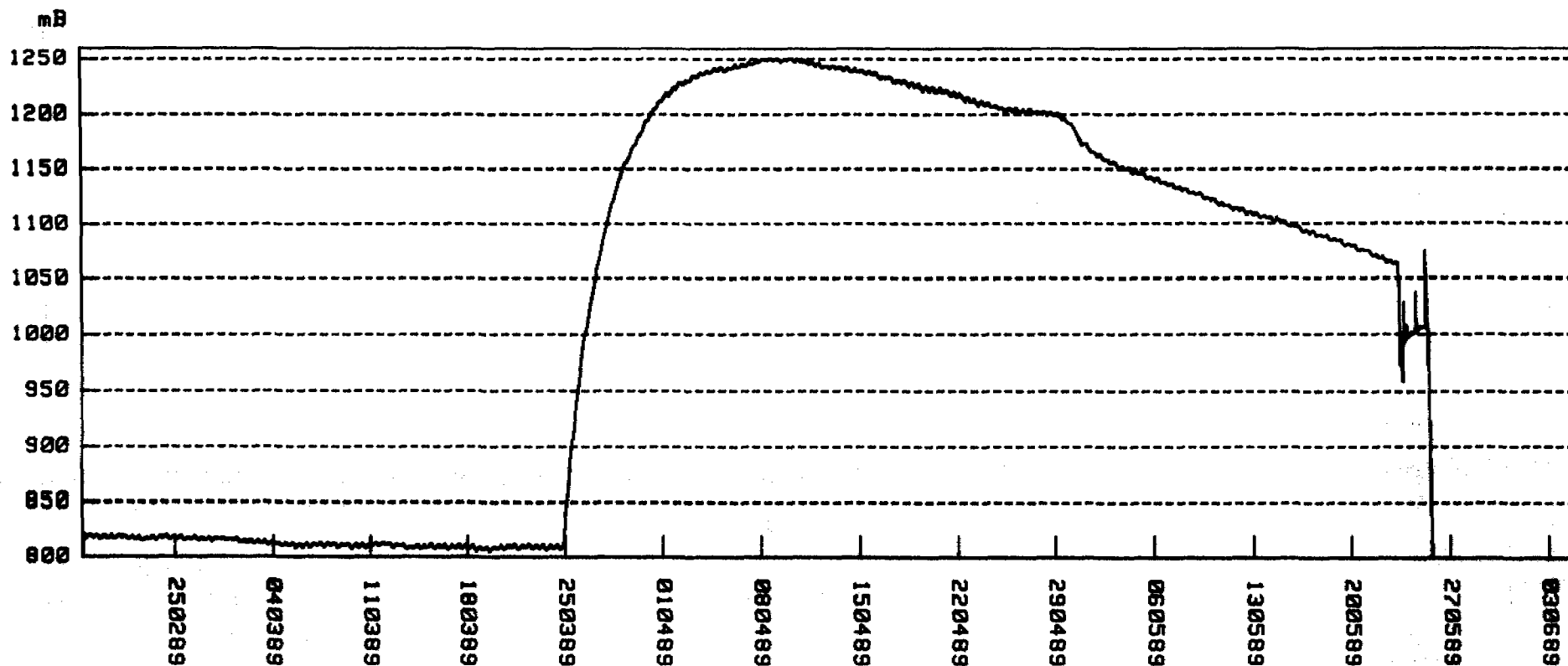
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046
BEGIN DATE : 100209
START TIME : 00:30

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 270509
INTERVAL : 00:15

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FILE: EP4430P_1
11 Apr 1990 13:51:57

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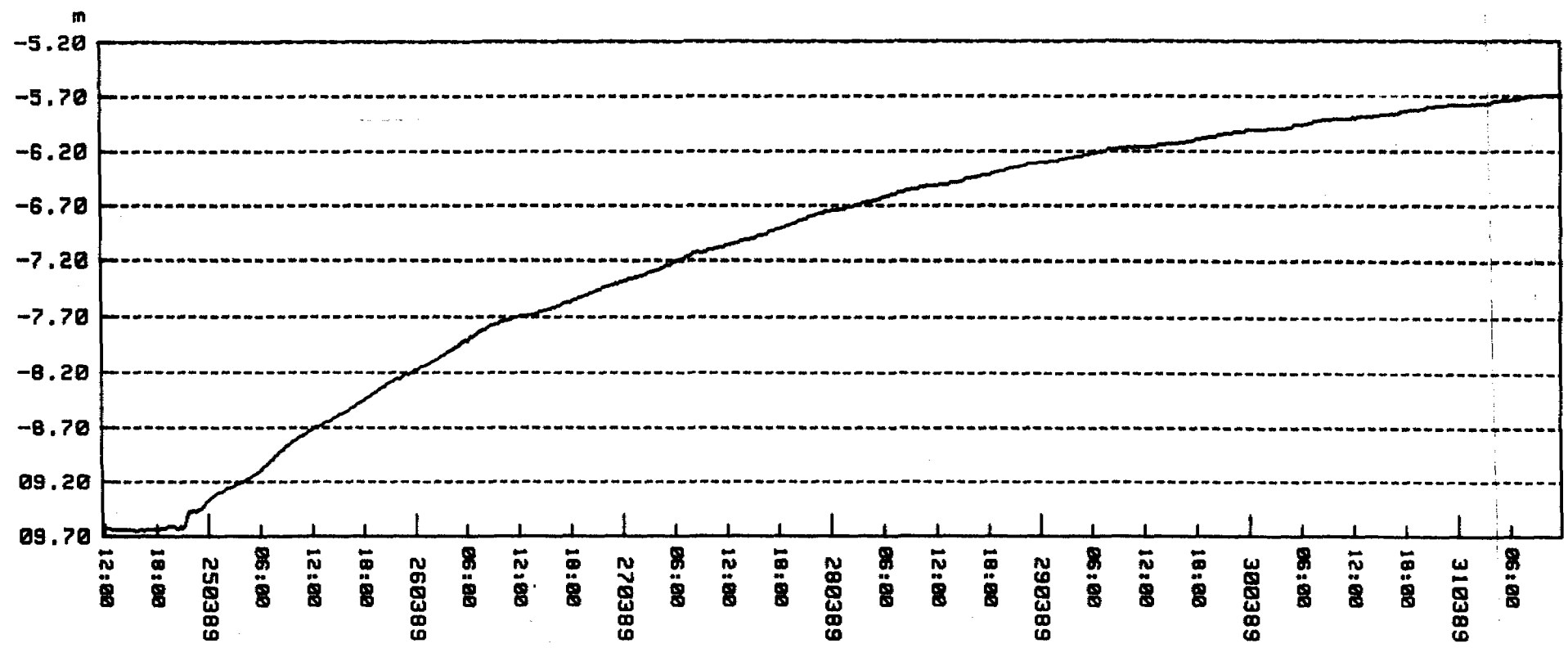


COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 408046
BEGIN DATE : 240389
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 815 mB.
END DATE : 260589
INTERVAL : 00:15

FILE: EP4430P_1
11 Apr 1980 18:03:36

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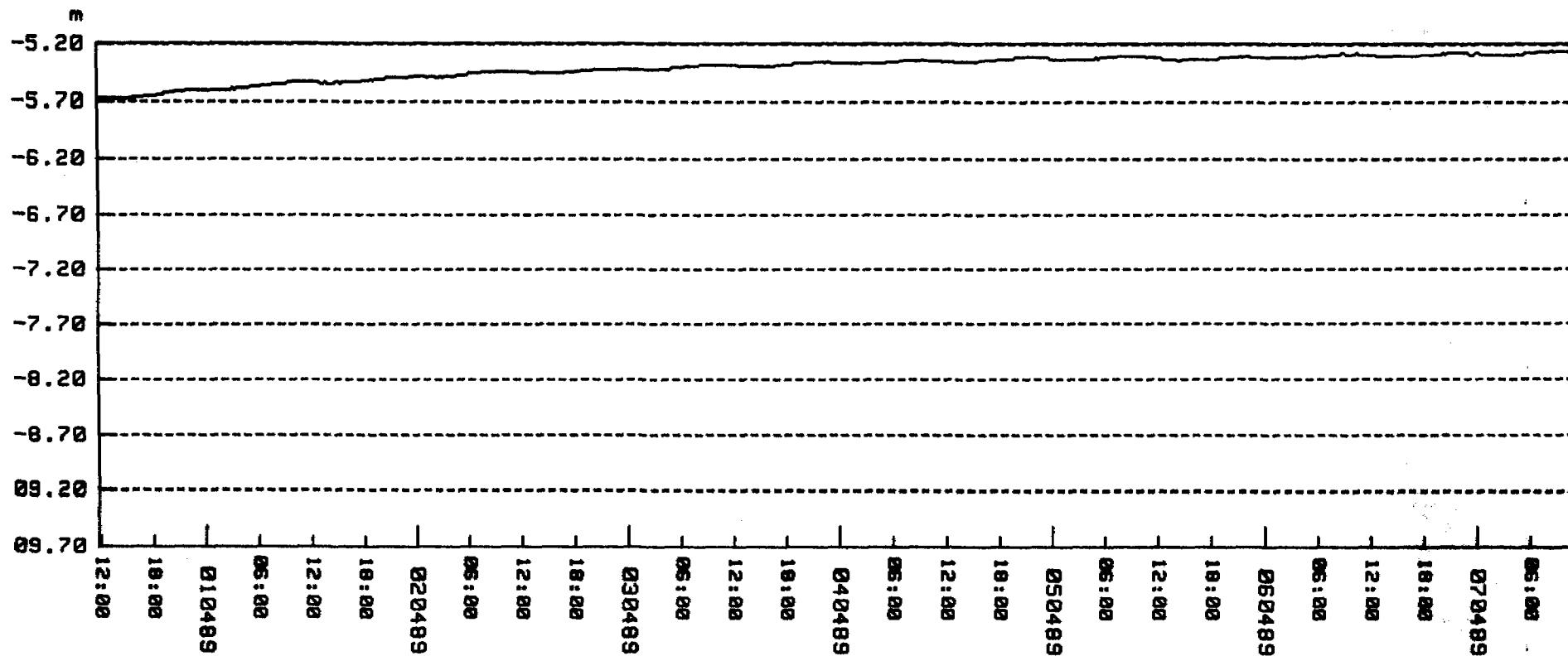
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4438P_1
11 Apr 1990 16:06:39

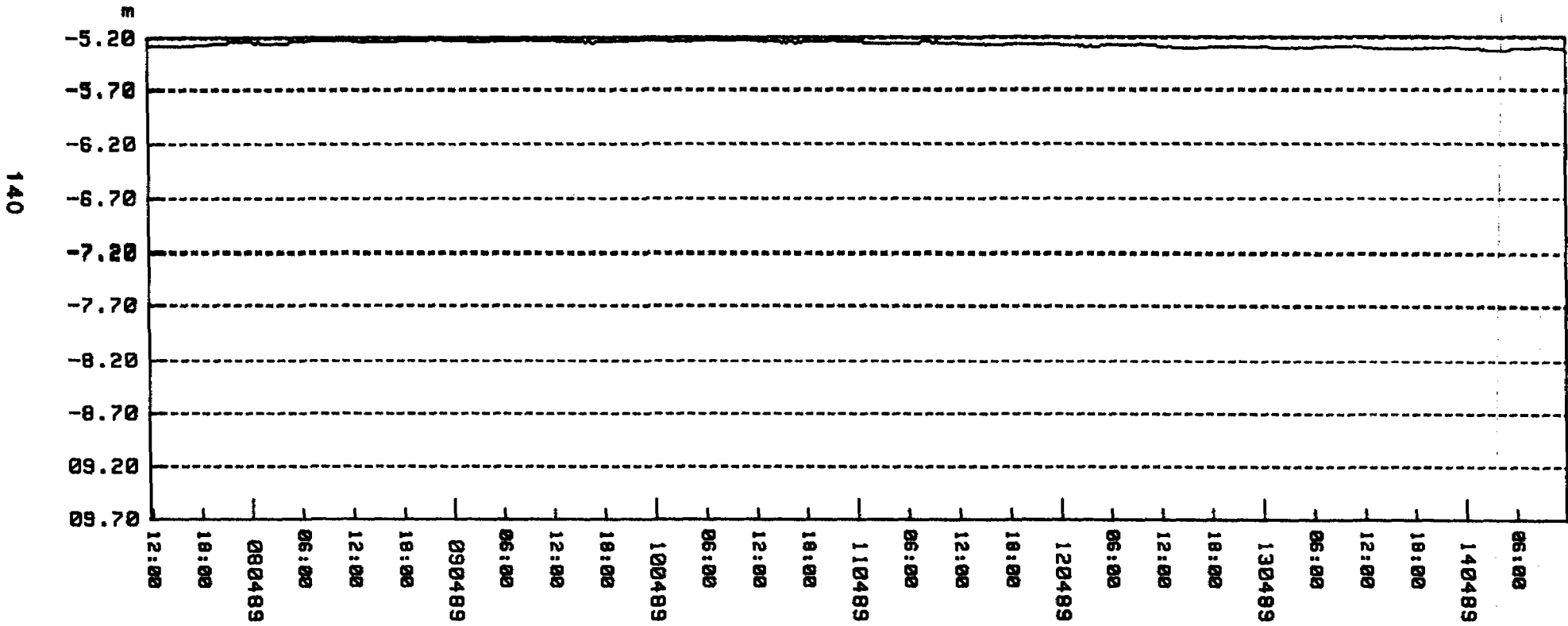
139



COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 488848

PLOT OF WATER LEVEL ELEVATION

FILE: EP4438P_1
11 Apr 1980 16:09:41

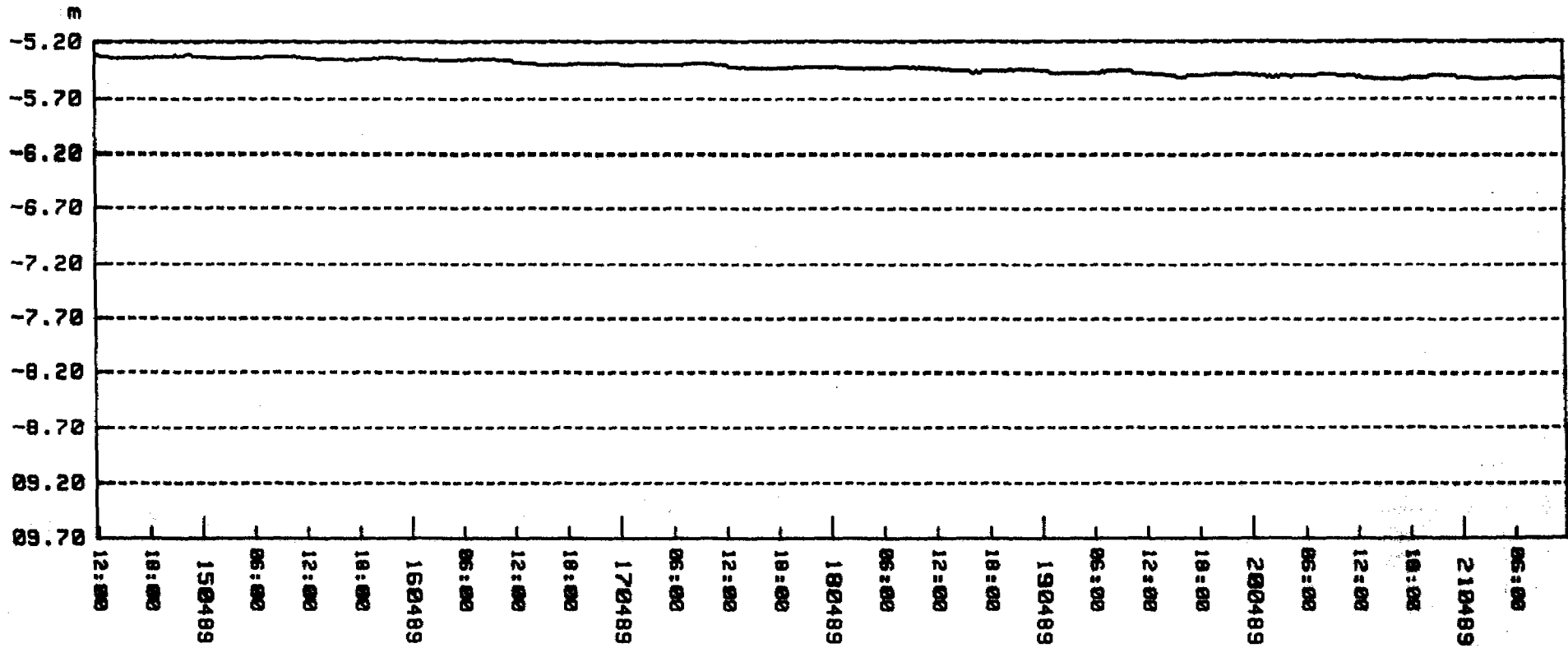


COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4430P_1
11 Apr 1990 16:12:42



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COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

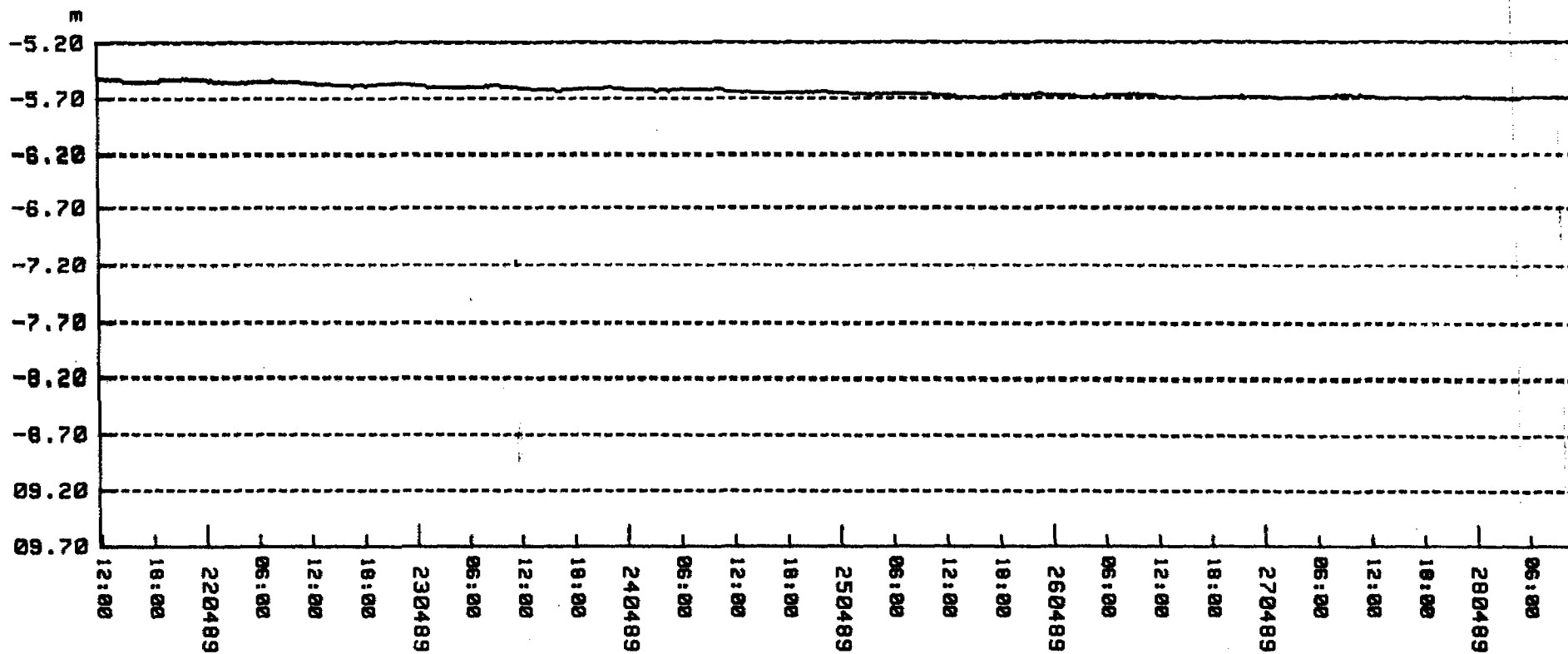
PLOT OF WATER LEVEL ELEVATION

PAGE 5

FILE: EP4430P_1

11 Apr 1998 16:15:44

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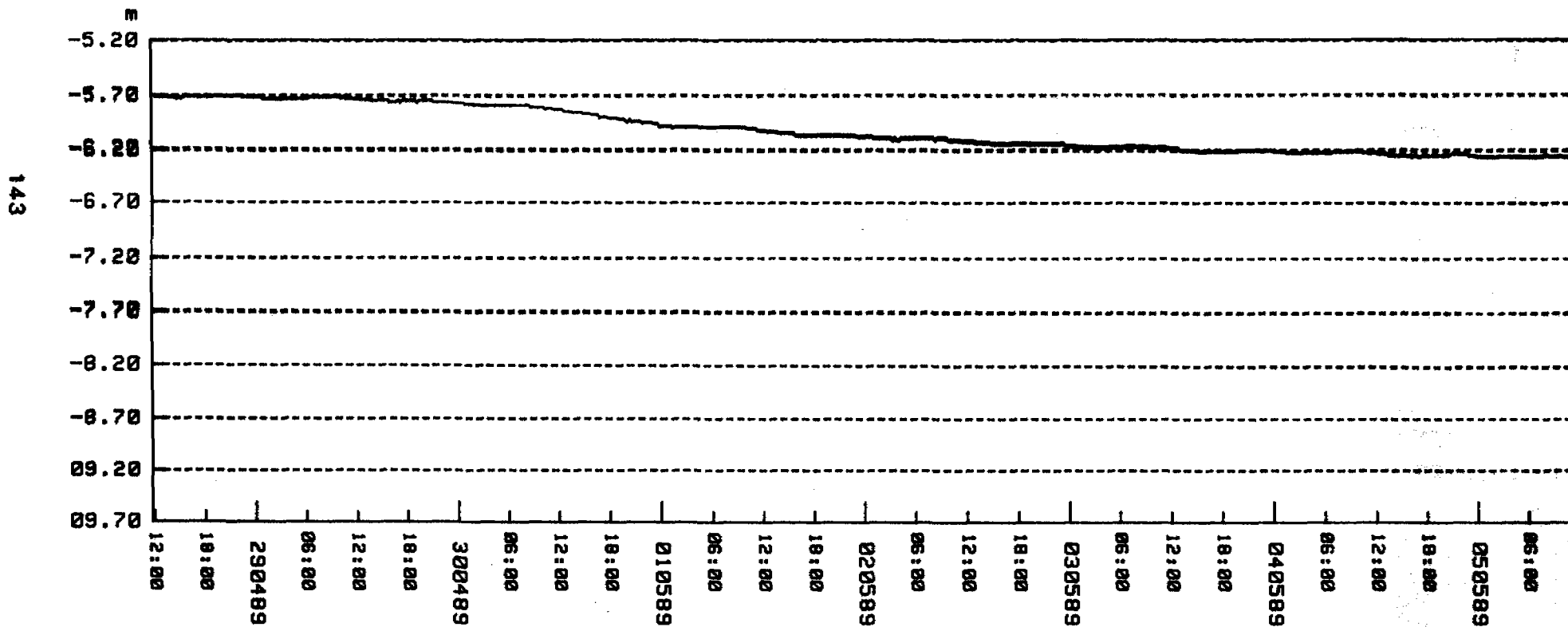


COUNTRY : YEMEN
STATION : MAHAJRA 1
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4430P_1
11 Apr 1998 18:18:46

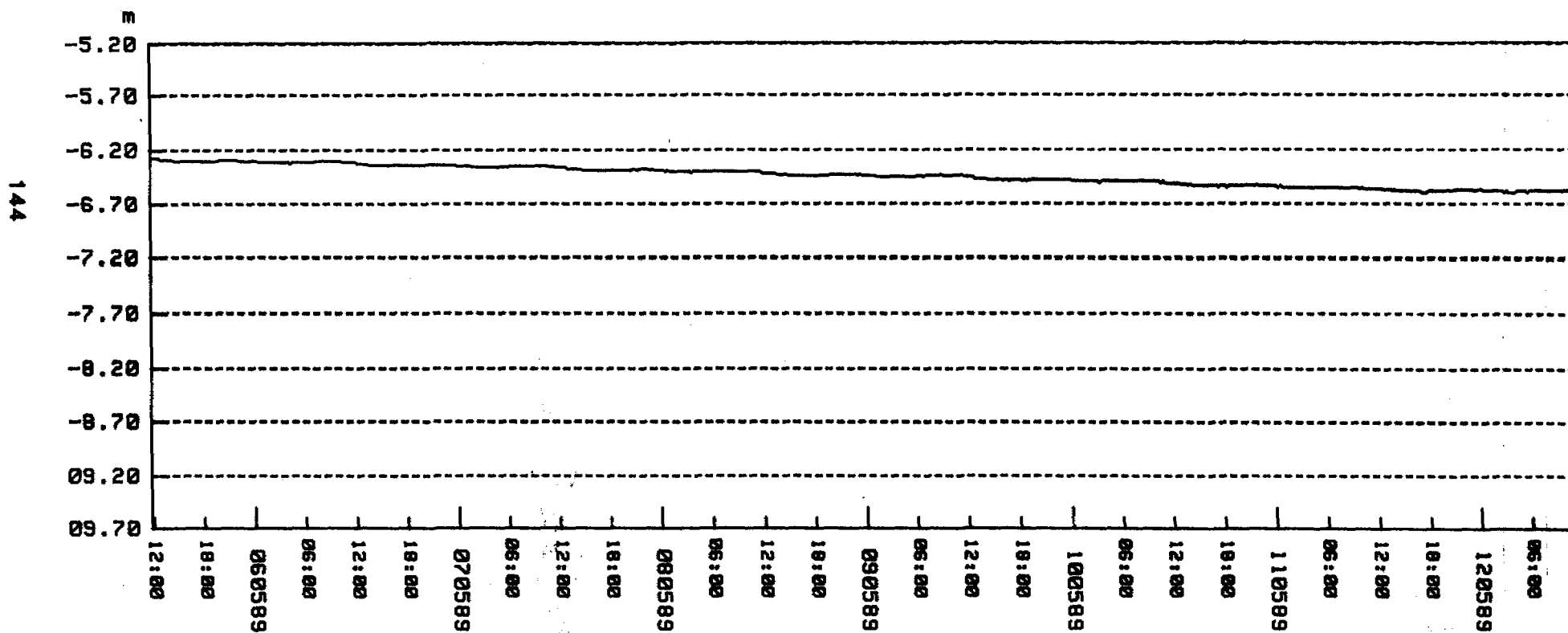


COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4430P_1

11 Apr 1998 16:21:49



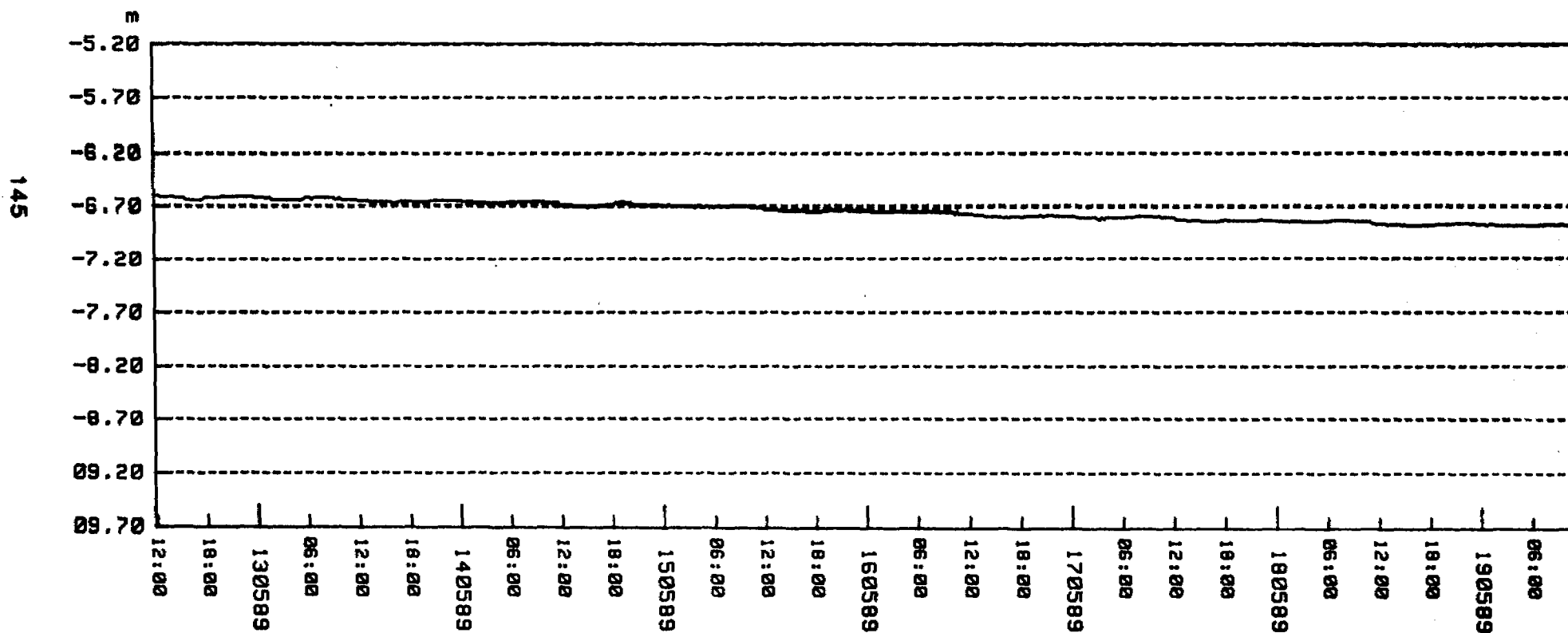
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 8

FILE: EP4438P_1

11 Apr 1990 18:24:52



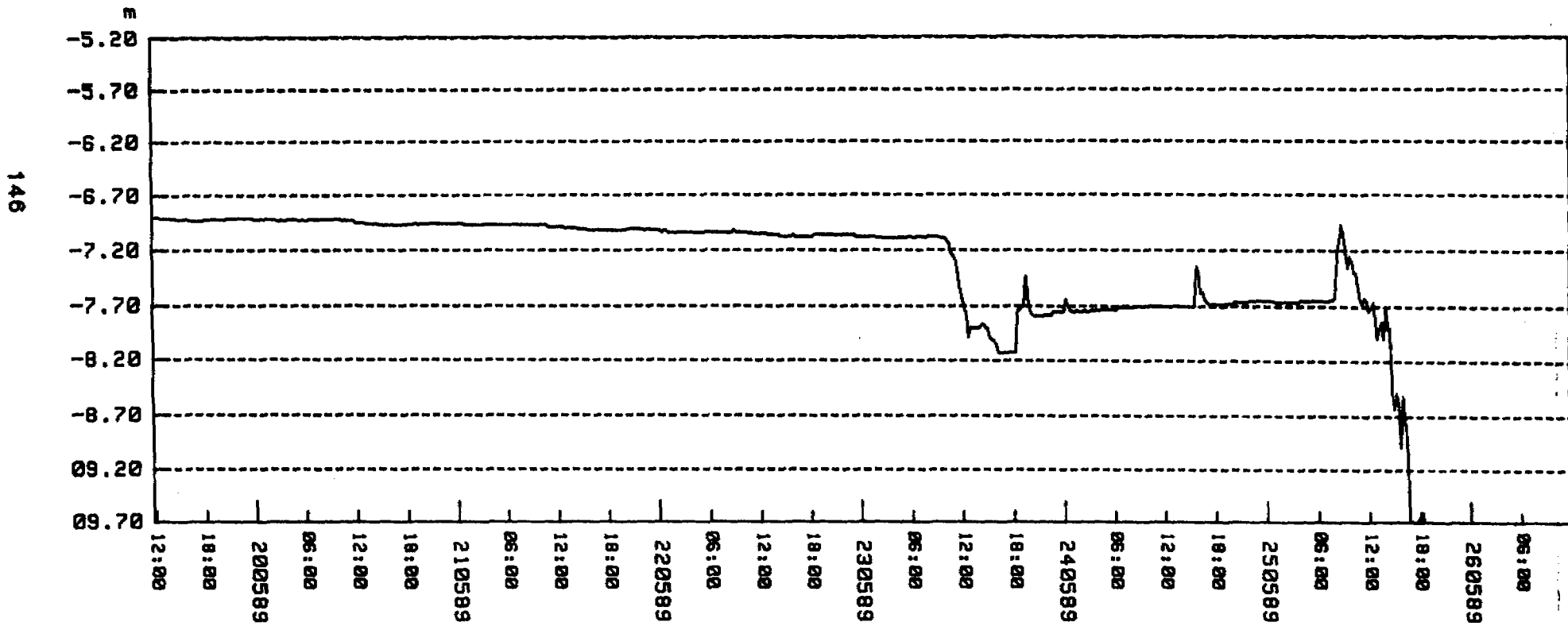
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4430P_1

11 Apr 1980 16:27:55



PLACE :Mahajaba 1

PRESLOG:4429-2

Service given before initiation:batteries and rings changed
-interval :00:15

Initiation date:24/06/89
Initiation time:11:00 marker at record 8

Try-out results:OK
Markers given :?

Installation date:25/06/89
Installation time:11:00

Installation description :in GS-pipe us of new dam
-installation place:sensor = -8.95 m crest dam
-waterlevel :little

Check up visit date :10/07/89
Check up visit results:removed 09:07, reinstalled 10:00,
water level measured = -8.15 m crest

Calculated removal/stop date:08/10/89
Calculated removal/stop time:-

Removal date:28/10/89
Removal time:11:00
Remarks :-
-waterlevel:little
-sediment :-

Stop date :-
Stop time :-

Service given :none
Eprom reading date:00/03/90
Number of eprom :EP4429-2
Number of eprom file :EP4429P_2
Number of administration file:-
Floppy number of eprom file :HP c-drive
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.

date:16 April 1990 (Monday) 19:30

Listing of file: EP4429P_2 START at registration 1

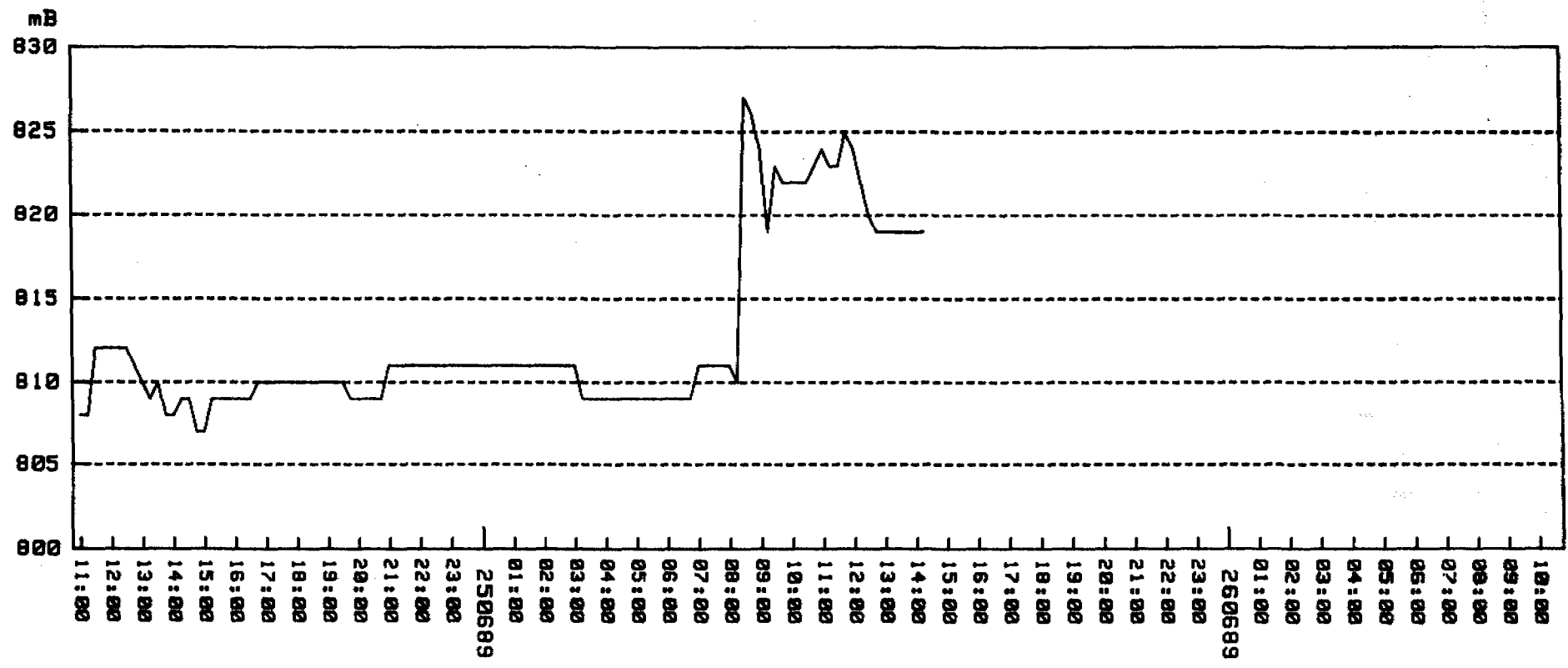
1	4429	2	8888	3	8888	4	808	5	808
6	812	7	812	8	812	9	812	10	812
11	811	12	810	13	809	14	810	15	808
16	808	17	809	18	809	19	807	20	807
21	809	22	809	23	809	24	809	25	809
26	809	27	810	28	810	29	810	30	810
31	810	32	810	33	810	34	810	35	810
36	810	37	810	38	810	39	809	40	809
41	809	42	809	43	809	44	811	45	811
46	811	47	811	48	811	49	811	50	811
51	811	52	811	53	811	54	811	55	811
56	811	57	811	58	811	59	811	60	811
61	811	62	811	63	811	64	811	65	811
66	811	67	811	68	811	69	809	70	809
71	809	72	809	73	809	74	809	75	809
76	809	77	809	78	809	79	809	80	809
81	809	82	809	83	809	84	811	85	811
86	811	87	811	88	811	89	810	90	827
91	826	92	824	93	819	94	823	95	822
96	822	97	822	98	822	99	823	100	824
101	823	102	823	103	825	104	824	105	822
106	820	107	819	108	819	109	819	110	819
111	819	112	819	113	819	114	-9999		

COUNTRY : YEMEN
STATION : MAHAJABA I
PROJECT : 400040
BEGIN DATE : 240689
START TIME : 11:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 260689
INTERVAL : 00:15

FILE: EP4429P_2
11 Apr 1990 18:43:39

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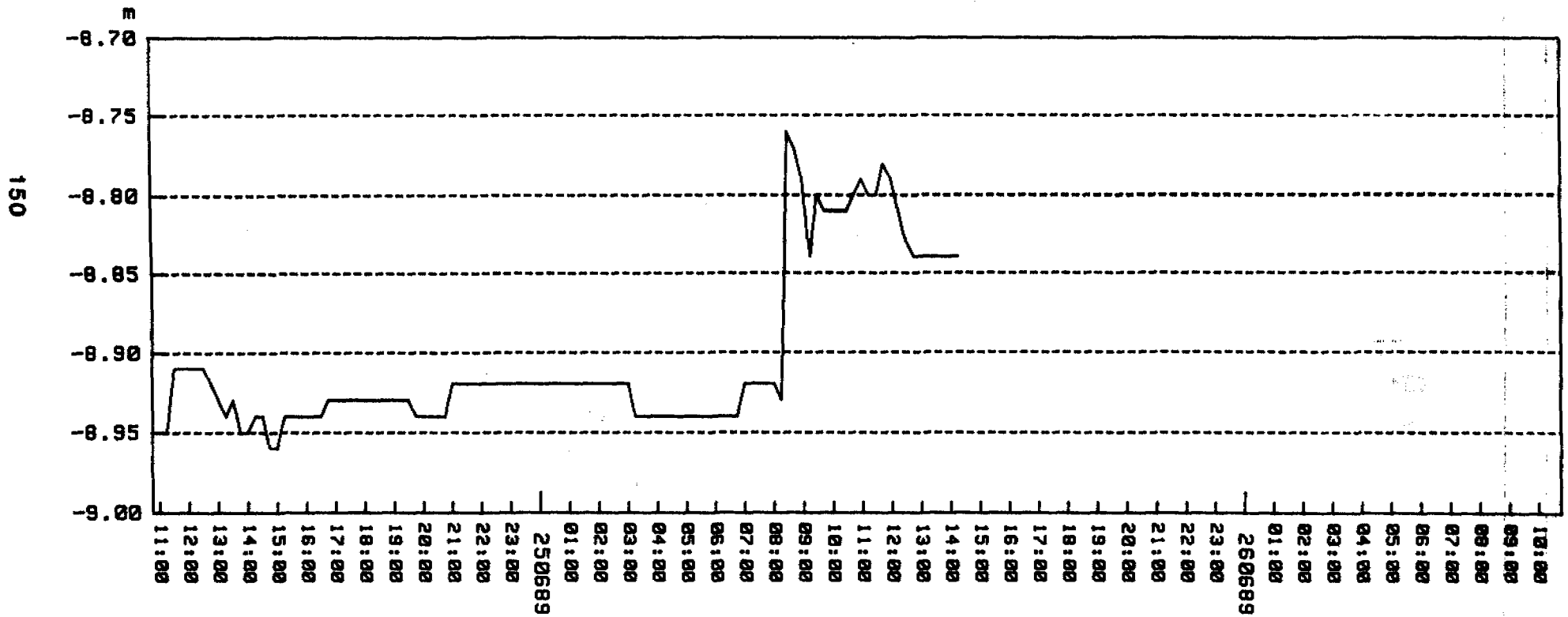
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 408048
BEGIN DATE : 240689
START TIME : 11:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 000 mB.
END DATE : 260689
INTERVAL : 00:15

PAGE 1

FILE: EP4429P_2

11 Apr 1980 16:50:27



PLACE :Mahajaba I

PRESLOG:4436-2

Service given before initiation:new batteries
-interval :00:15

Initiation date:28/10/89
Initiation time:08:00 ?

Try-out results:OK
Markers given :2

Installation date:28/10/89
Installation time:12:30

Installation description :in GS-pipe us of new dam
-installation place:sensor = -8.95 m crest dam
-waterlevel :-

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:11/02/90
Calculated removal/stop time:-

Removal date:18/01/90
Removal time:12:25
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/01/90
Stop time :-

Service given :new batteries
Eprom reading date:00/03/90
Number of eprom :EP4436-2
Number of eprom file :EP4436P_2
Number of administration file:-
Floppy number of eprom file :HP c-drive
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.

date:16 April 1990 (Monday) 19:47

Listing of file: EP4436P_2 START at registration 1

1	4436
2	8888
3	8888
4	817
5	815
6	807
7	811
8	811
9	-9999

PLACE :Mahajaba I

PRESLOG:4424-4

Service given before initiation:?

-interval :00:15

Initiation date:18/01/90

Initiation time:11:15

Try-out results:OK

Markers given : one at beginning 18/01/90 11;15 h and one at
end 03/05/90 07:20 h.

Installation date:18/01/90

Installation time:11:15 last marker, in pipe 12:30

Installation description :in GS-pipe us of new dam
-installation place:sensor =-8.95 m crest dam
-waterlevel :little

Check up visit date :3/90

Check up visit results:OK

Calculated removal/stop date:04/05/90

Calculated removal/stop time:-

Removal date:02/05/90

Removal time:11:46

Remarks :little water

-waterlevel:-

-sediment :-

Stop date :03/05/90

Stop time :08:23

Service given :new batteries and rings

Eprom reading date:03/05/90 Eissa

Number of eprom :EP4424-4

Number of eprom file :EP4424A_4

Number of administration file:-

Floppy number of eprom file :c: / floppy 7

Floppy number of administration file:-

Reference where results were listed :2

General remarks:

1.

date:16 May 1990 (Sunday) 10:21

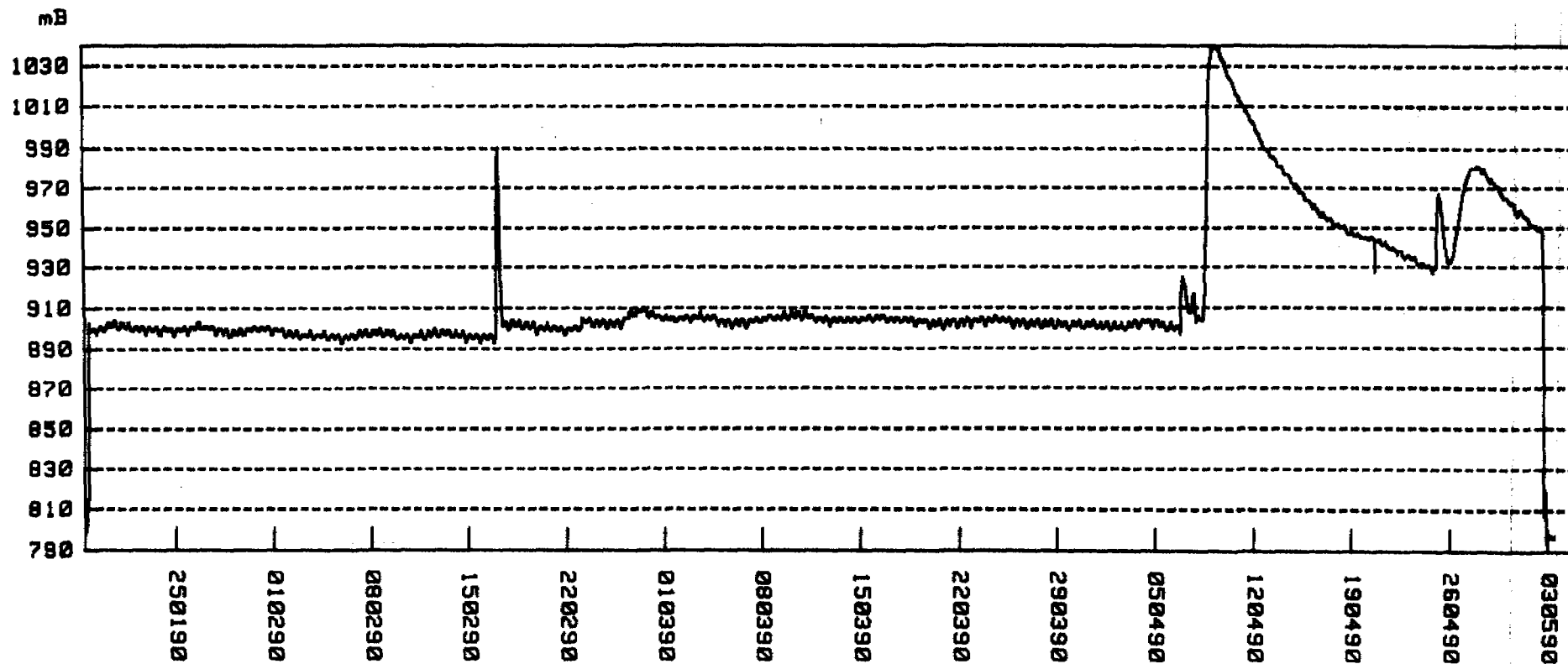
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 408046
BEGIN DATE : 180190
START TIME : 11:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030590
INTERVAL : 00:15

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FILE: EP4424P_4
8 May 1990 00:46:47

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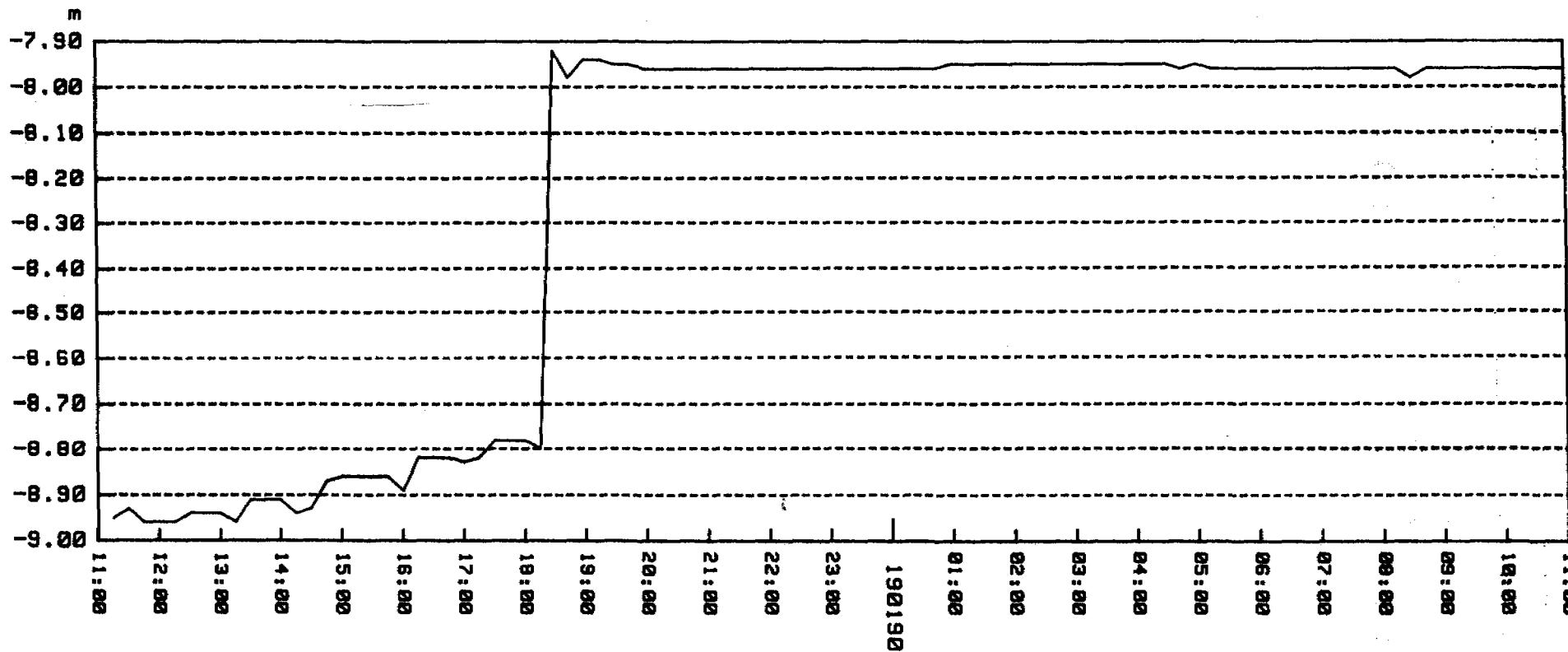
COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046
BEGIN DATE : 198180
START TIME : 11:15

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 900 mB.
END DATE : 198190
INTERVAL : 00:15

PAGE 1

FILE: EP4424P_4
6 May 1990 10:01:00

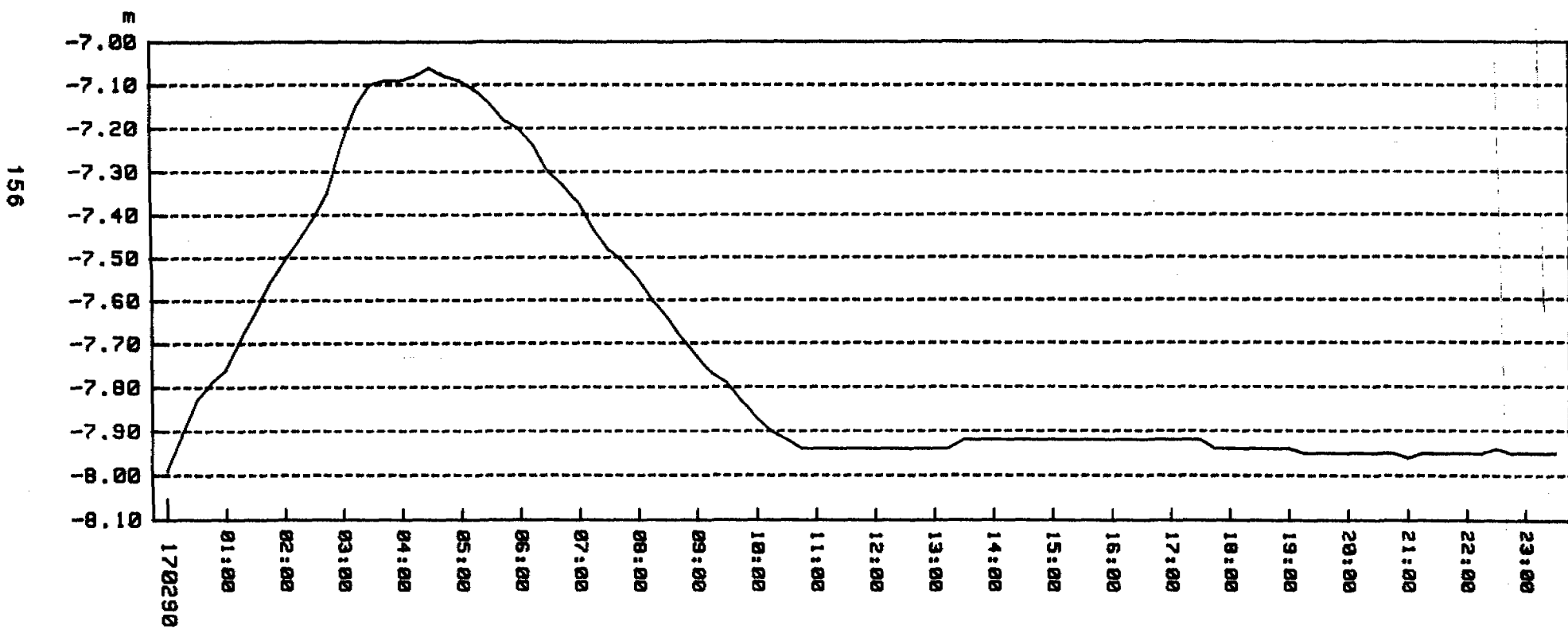
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COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 488046
BEGIN DATE : 170290
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 800 mB.
END DATE : 170290
INTERVAL : 00:15

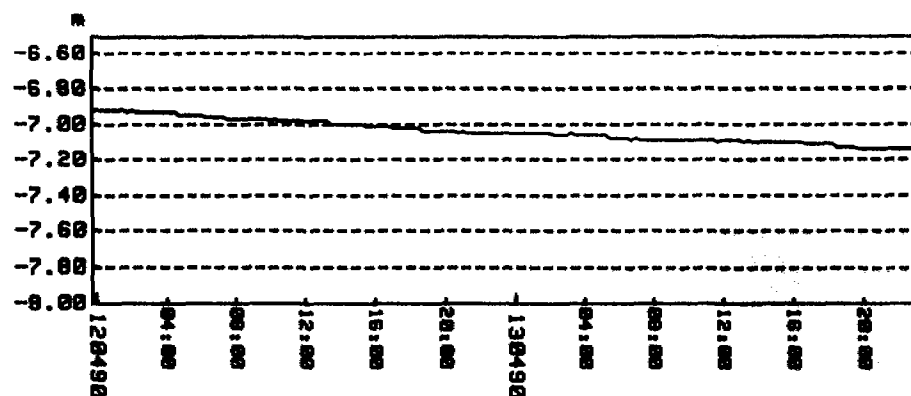
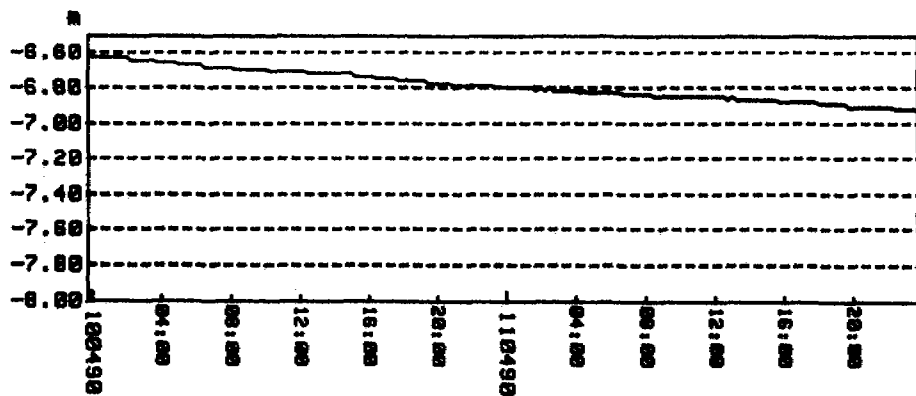
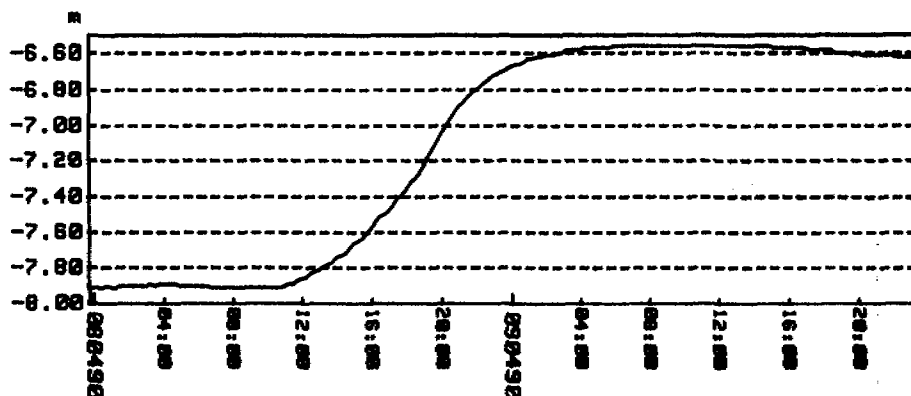
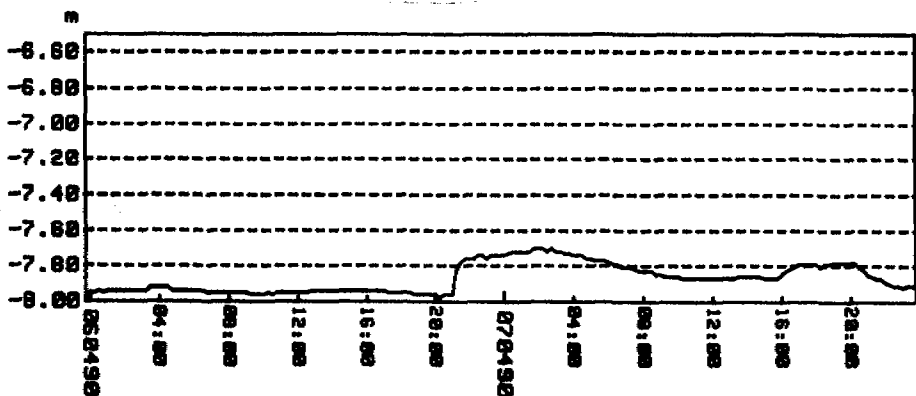
FILE: EP4424P_4
6 May 1998 16:20:25



COUNTRY : YEMEN
 STATION : MAHAJABA I
 PROJECT : 400046
 BEGIN DATE : 060490
 START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 800 mB.
 END DATE : 030590
 INTERVAL : 00:15

FILE: EP4424P_4
 6 May 1990 10:41:22

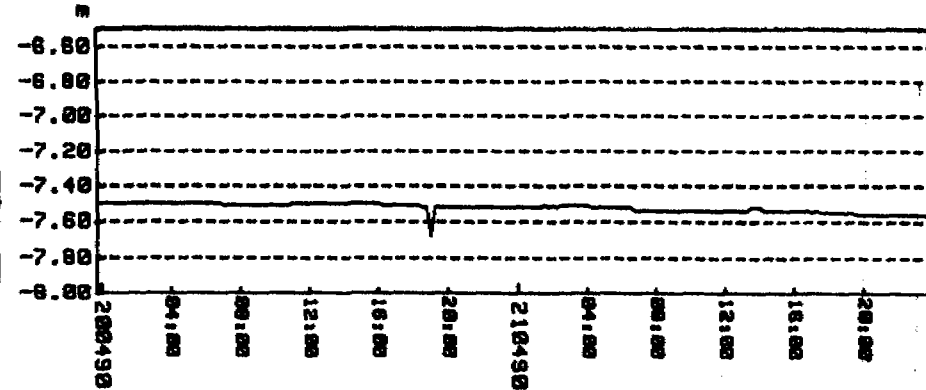
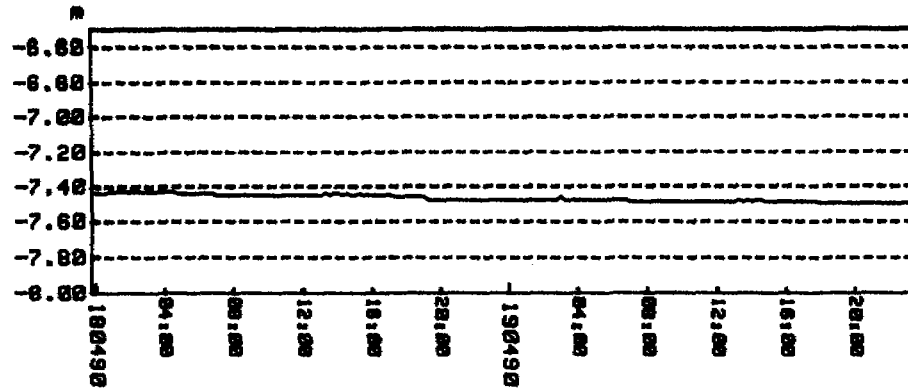
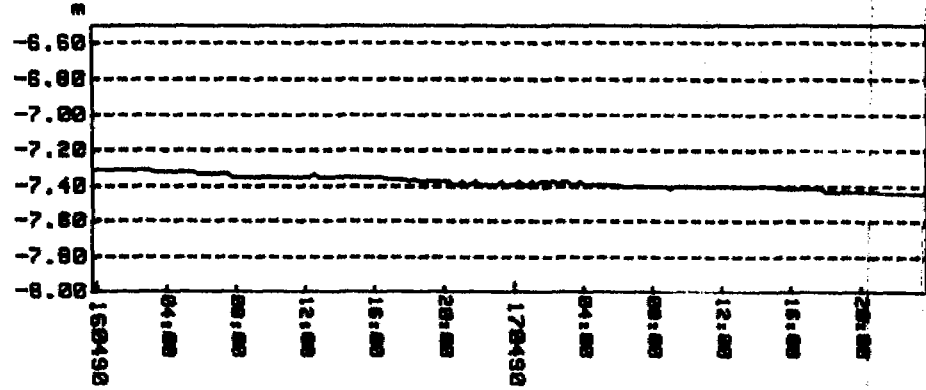
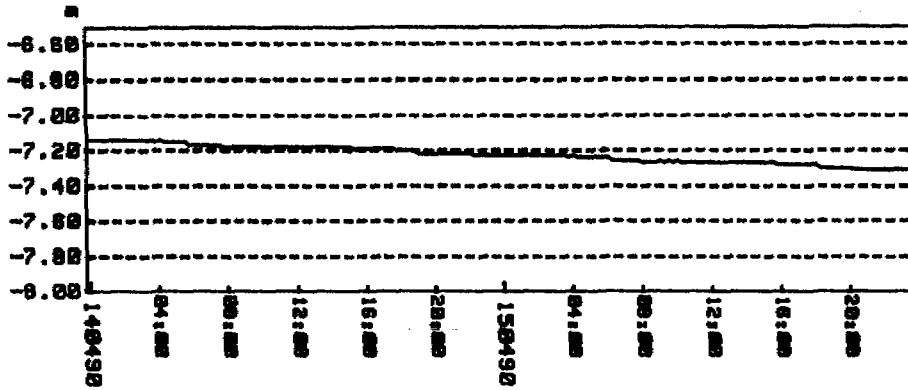


COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4424P_4
6 May 1990 10:48:03

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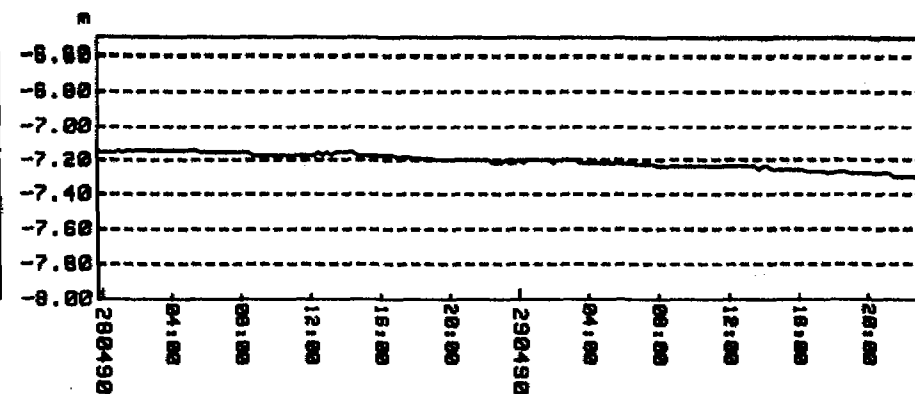
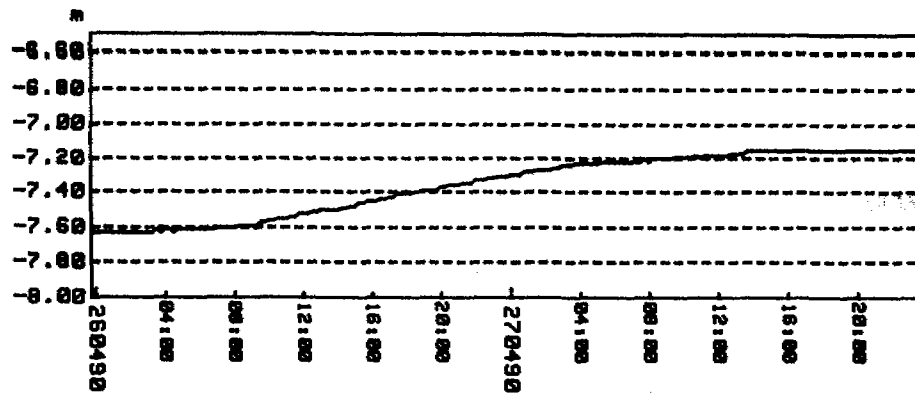
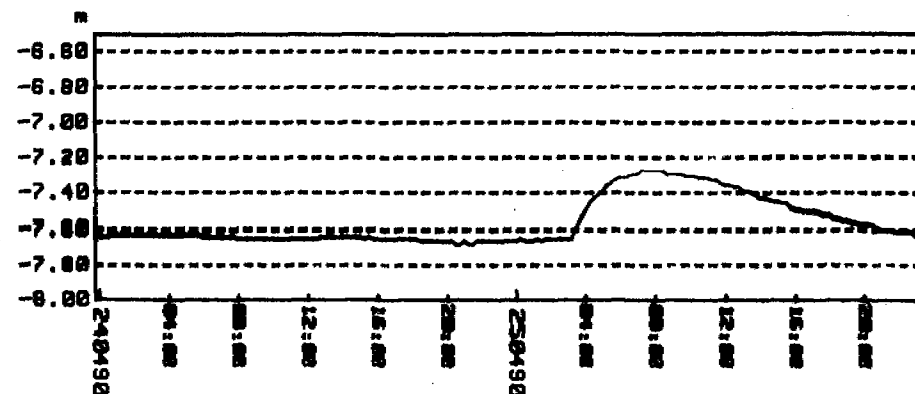
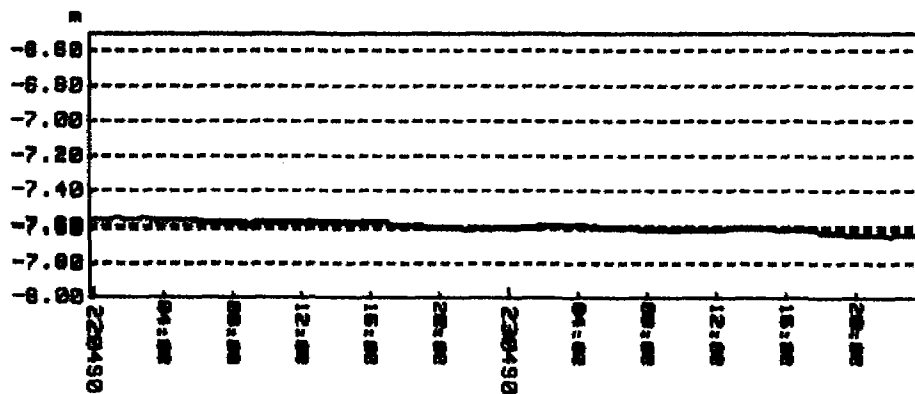


COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4424P_4
6 May 1990 10:50:45

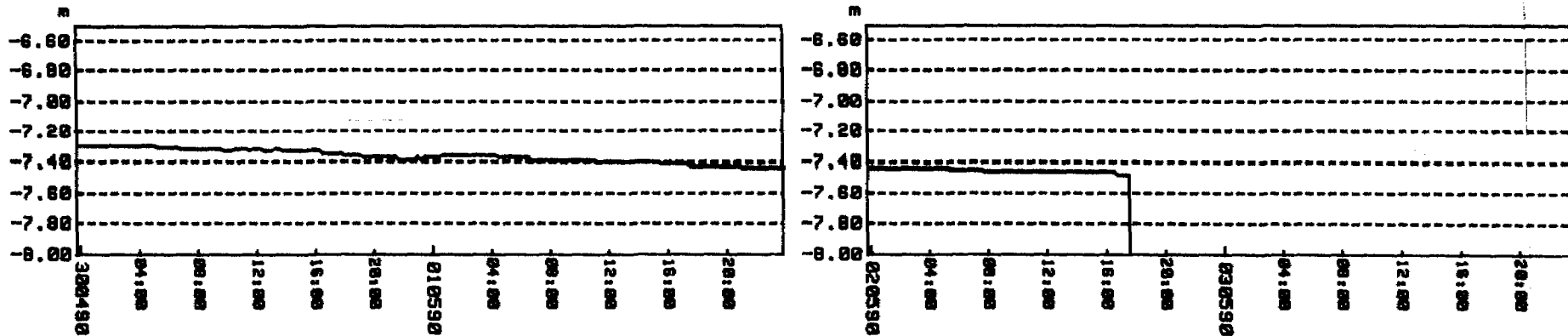
159



COUNTRY : YEMEN
STATION : MAHAJABA 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4424P_4
6 May 1990 10:55:27



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PLACE :Mahajaba 2

PRESLOG:4433-2

Service given before initiation:new batteries
-interval :00:15

Initiation date:10/07/89
Initiation time:07:15

Try-out results:OK
Markers given :2

Installation date:10/07/89
Installation time:09:37

Installation description :in pumped shallow well us of dam
-installation place:sensor = -20.00 m top wood beam
-waterlevel : -10.40 m top beam

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:24/10/89
Calculated removal/stop time:-

Removal date:24/10/89
Removal time:11:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :24/10/89
Stop time :-

Service given :none
Eprom reading date:28/10/89
Number of eprom :EP4433-2
Number of eprom file :EP4433P_2
Number of administration file:-
Floppy number of eprom file :5 and HP c-drive
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.

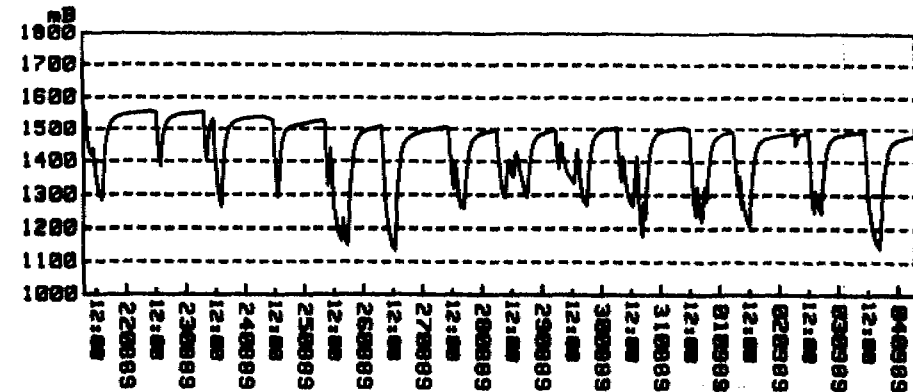
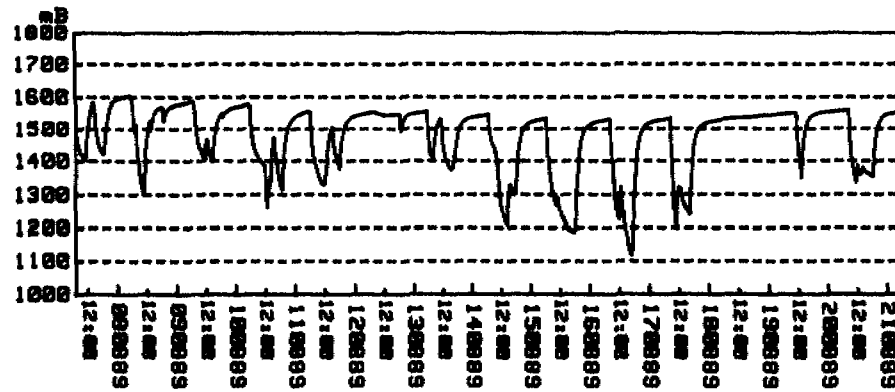
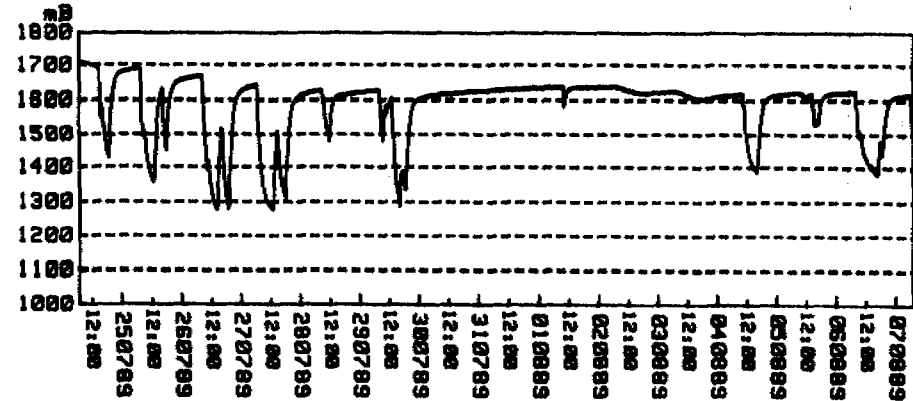
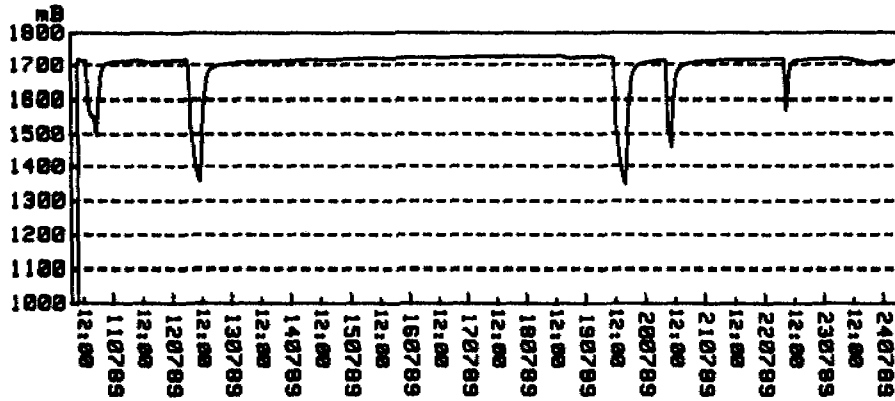
date:16 April 1990 (Monday) 20:00

COUNTRY : YEMEN
 STATION : MAHAJABA 2
 PROJECT : 408046
 BEGIN DATE : 100789
 START TIME : 07:15

PLOT OF PRESSURE DATA
 ELEVATION BAROMETER - DATALOGGER : 0 cm.
 BAROMETER READING (START) : 0 mB.
 END DATE : 251089
 INTERVAL : 00:15

PAGE 1

FILE: EP4433P_2
 12 Apr 1990 08:56:15

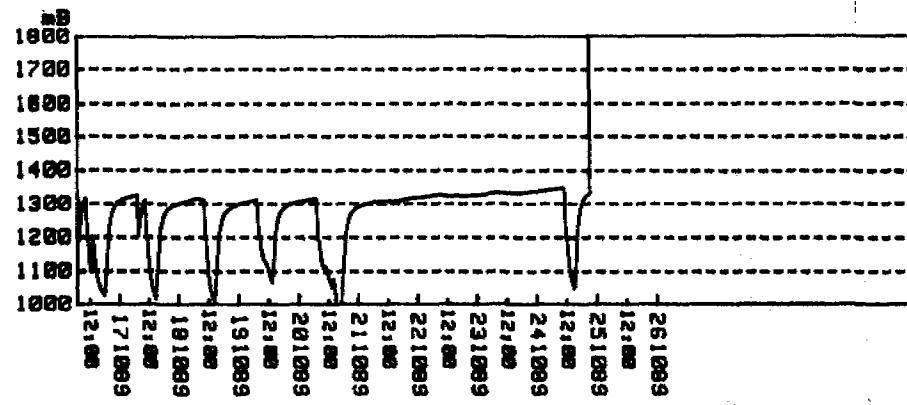
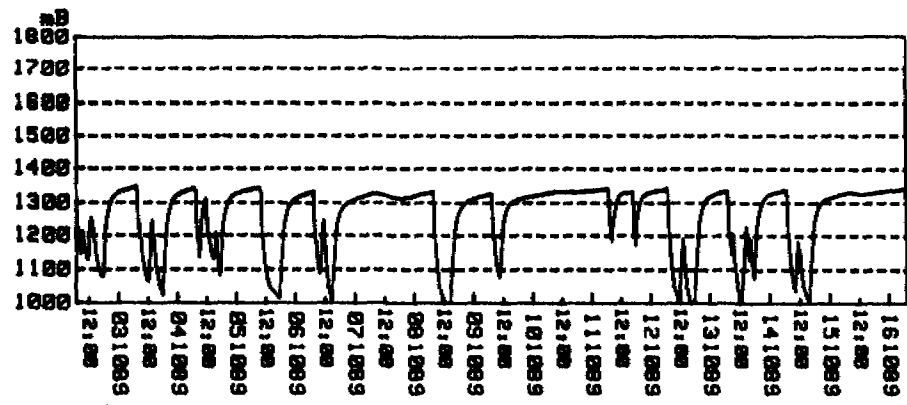
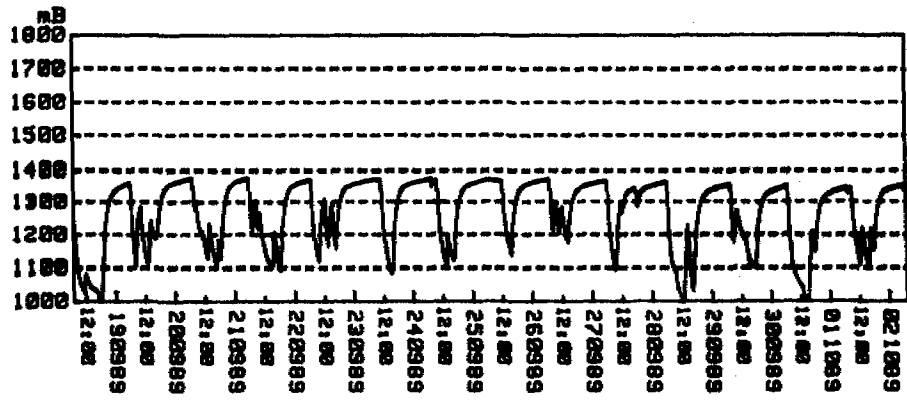
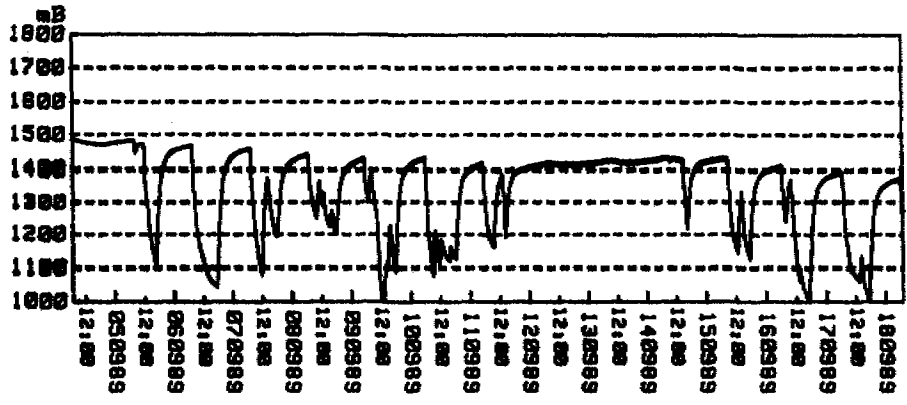


COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046

PLOT OF PRESSURE DATA

FILE: EP4433P_2
12 Apr 1990 09:07:07

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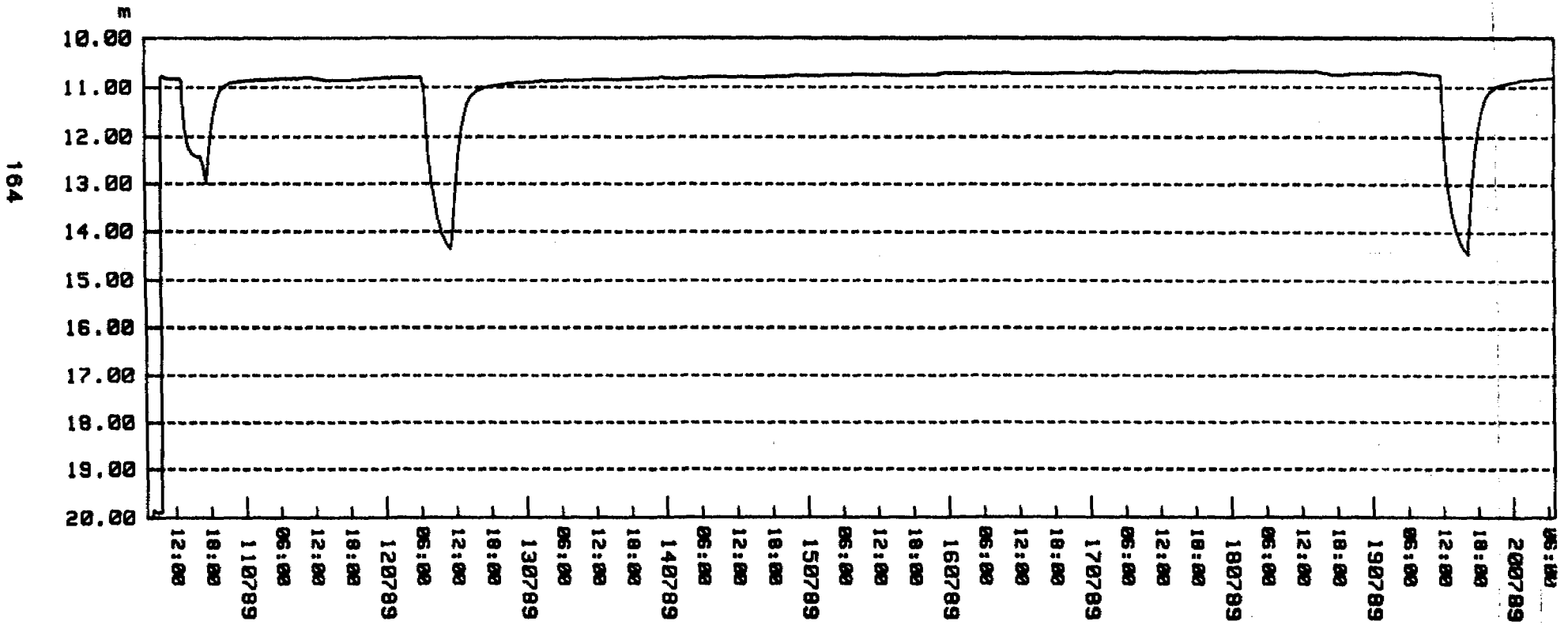


COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046
BEGIN DATE : 100789
START TIME : 07:15

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 006 mB.
END DATE : 251009
INTERVAL : 00:15

PAGE 1

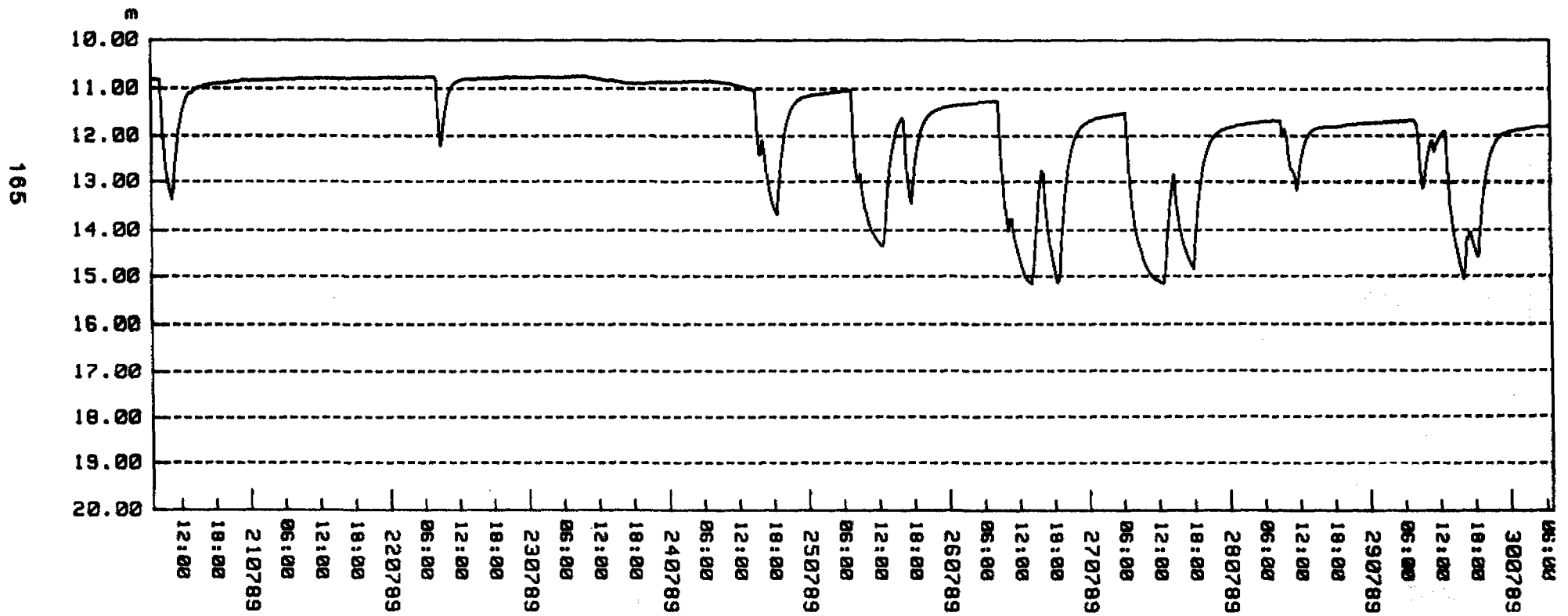
FILE: EP4433P_2
12 Apr 1980 09:47:30



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

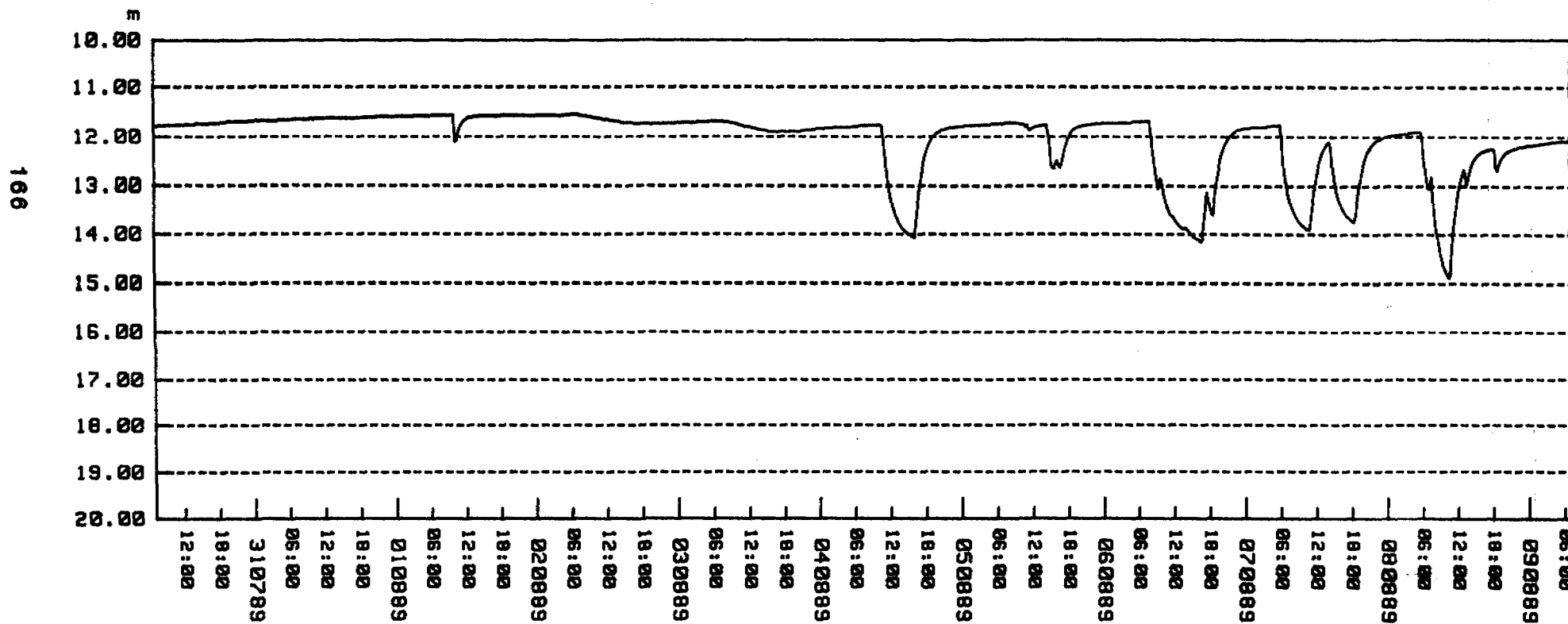
FILE: EP4433P_2
12 Apr 1990 09:51:07



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 488048

PLOT OF WATER LEVEL ELEVATION

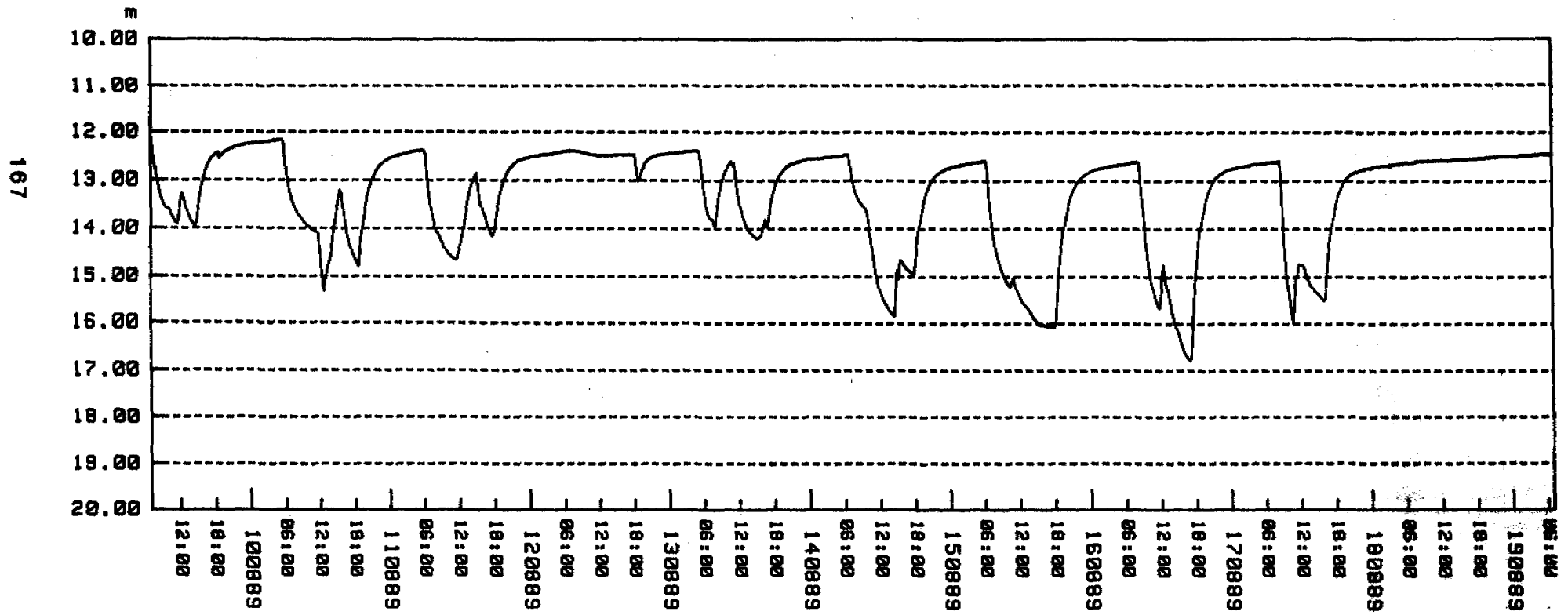
FILE: EP4433P_2
12 Apr 1998 09:54:37



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

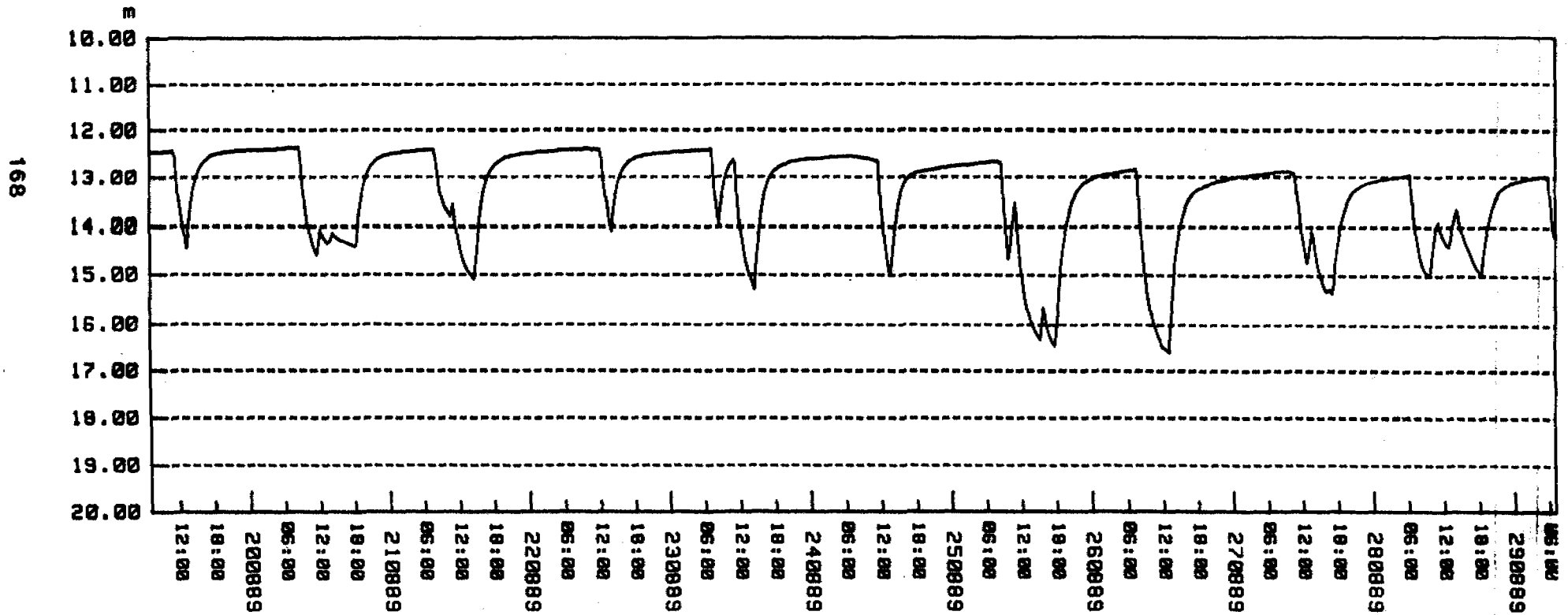
FILE: EP4433P_2
12 Apr 1990 09:58:00



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

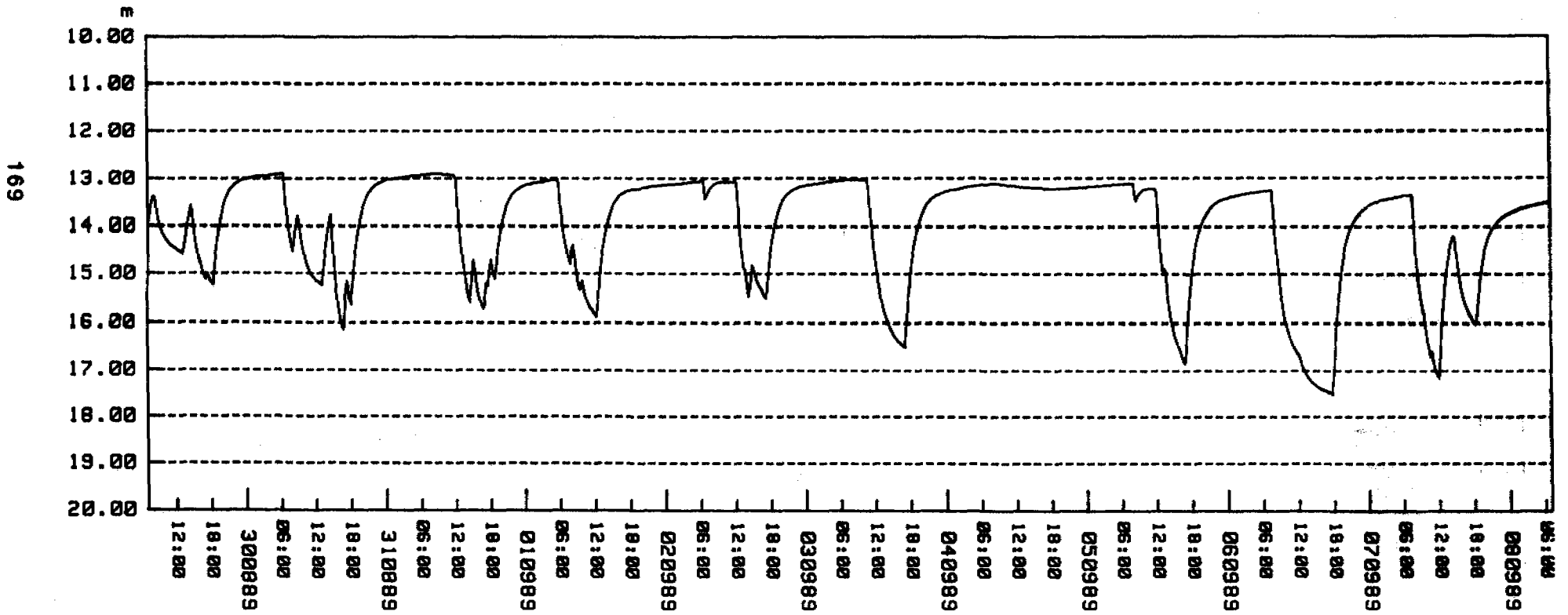
FILE: EP4433P_2
12 Apr 1990 10:01:39



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_2
12 Apr 1990 10:05:11



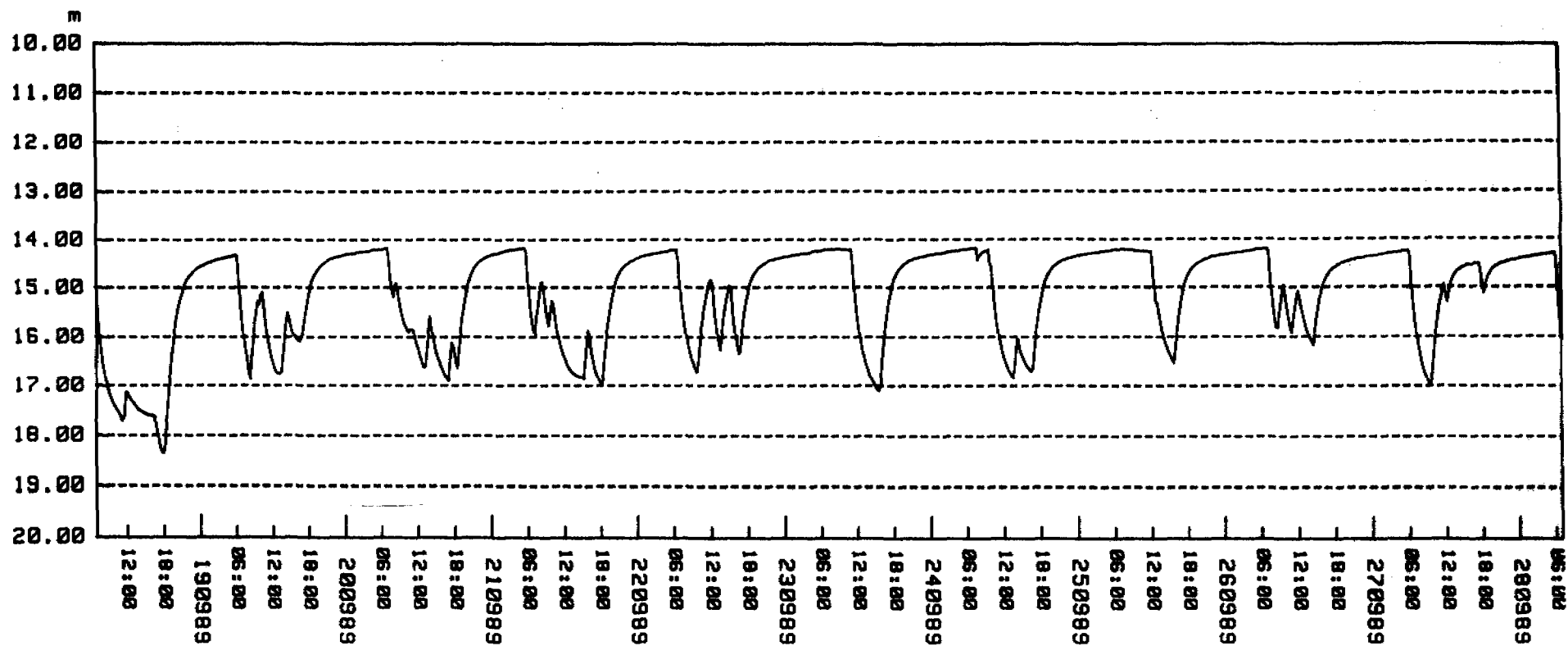
COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 0

FILE: EP4433P_2
12 Apr 1990 10:12:13

171

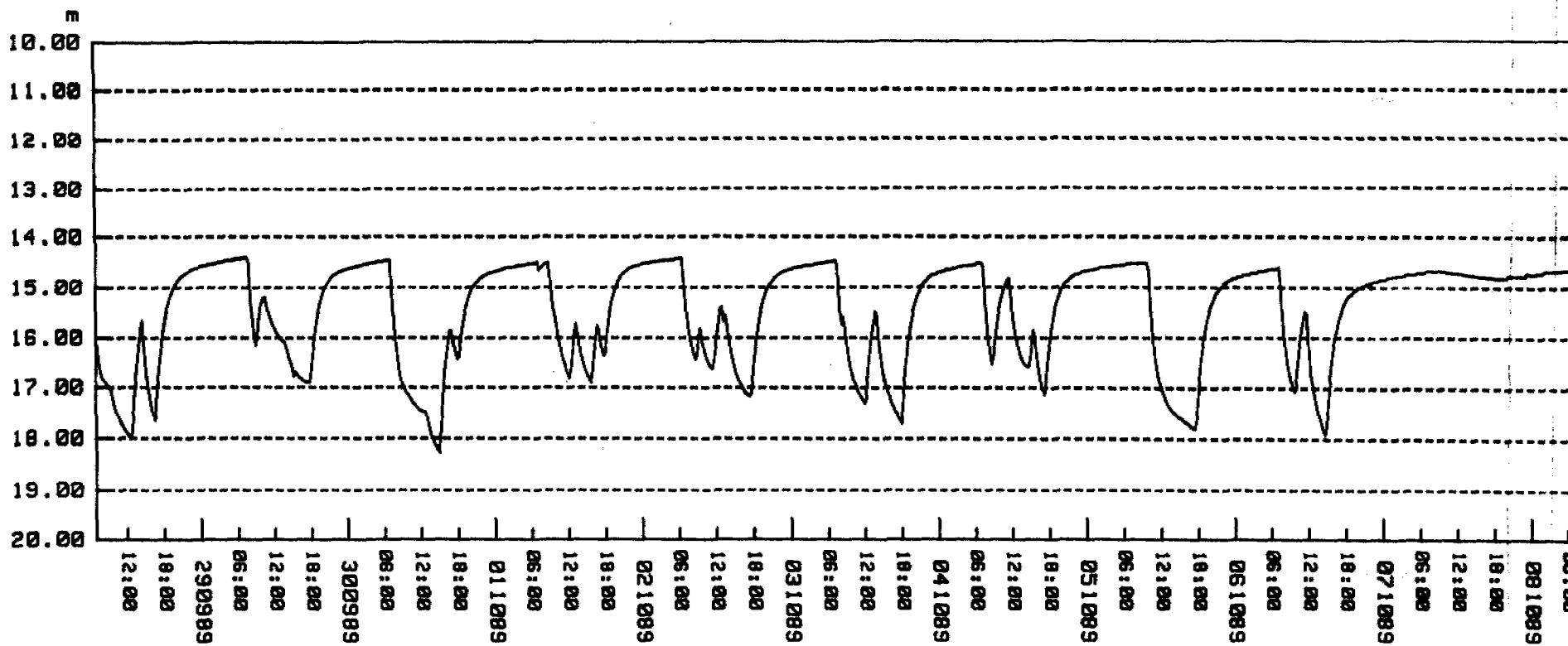


COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_2
12 Apr 1980 10:15:44

172



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046

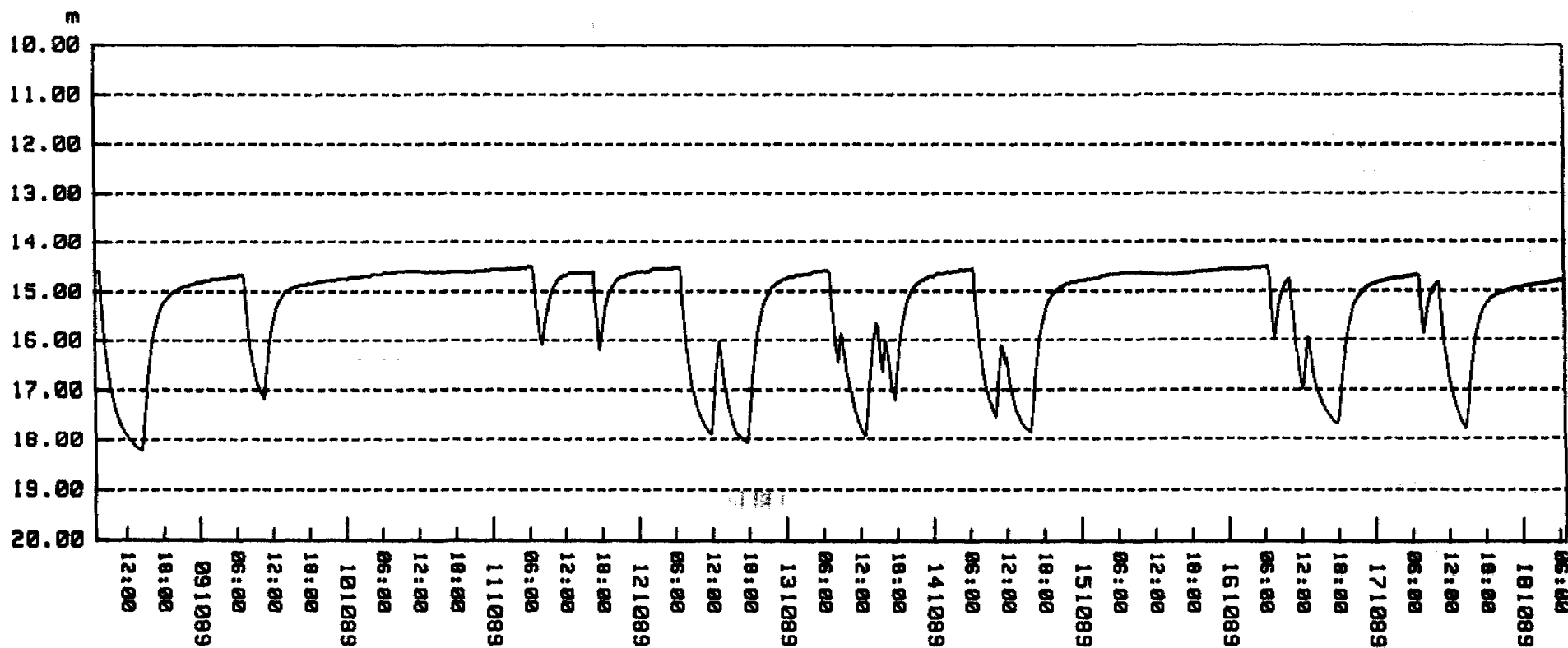
PLOT OF WATER LEVEL ELEVATION

PAGE 10

FILE: EP4493P_2

12 Apr 1990 10:19:13

173

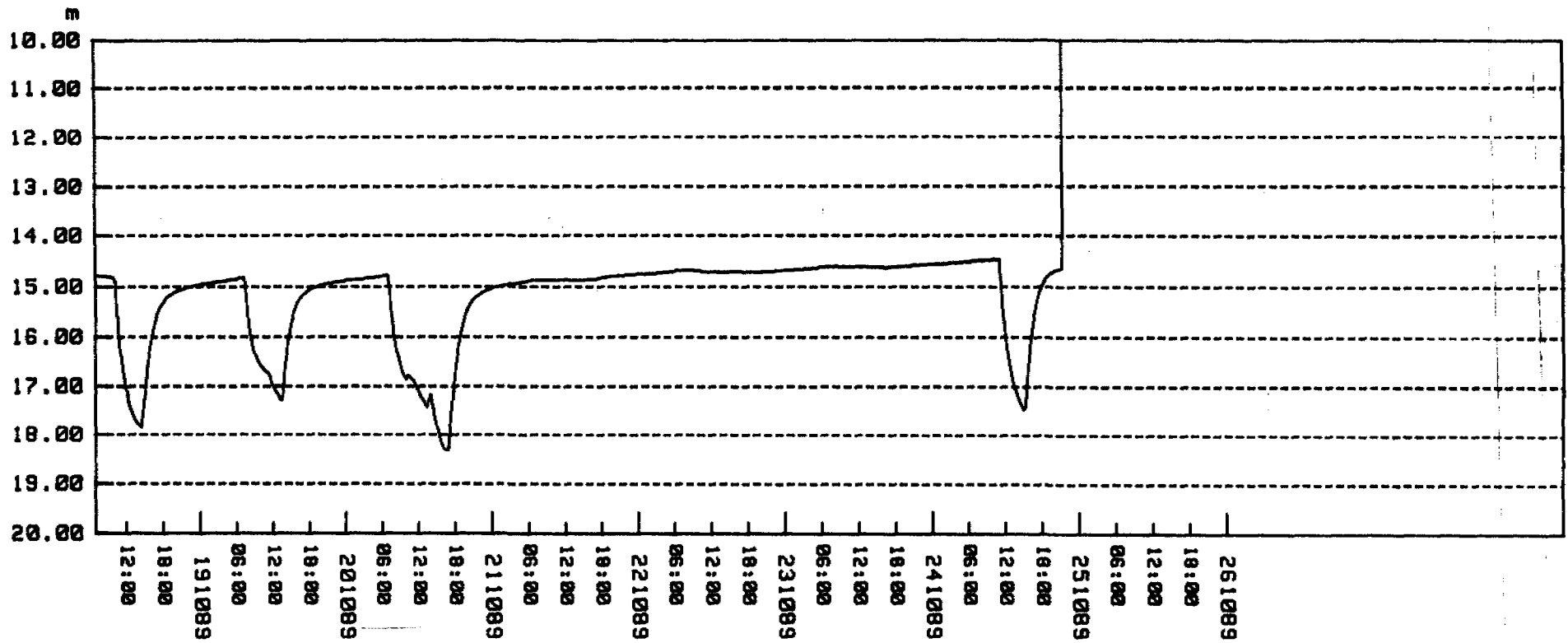


COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400846

PLOT OF WATER LEVEL ELEVATION

FILE: EP4433P_2
12 Apr 1990 10:22:42

174



PLACE :Mahajaba 2

PRESLOG:4428-2

Service given before initiation:none
-interval :00:15

Initiation date:28/10/89
Initiation time:08:00 ?

Try-out results:OK
Markers given :2

Installation date:28/10/89
Installation time:12:30

Installation description :in pumped shallow
-installation place:sensor = -20.00 m
-waterlevel :

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:11/02/90
Calculated removal/stop time:-

Removal date:18/01/90
Removal time:11:15
Remarks :-
-waterlevel:-
-sediment :-

Stop date :18/01/90
Stop time :12:36

Service given : totaly damaged,see fax from 23/01/90,
24/01/90,10/02/90

Eprom reading date: 00/03/90
Number of eprom : EP4429-2
Number of eprom file :EP4429P_2
Number of administration file:-
Floppy number of eprom file :HP c:
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.

date:17 April 1990 (Tuesday) 15:05

ating of file: EP4428P_2 START at registration :

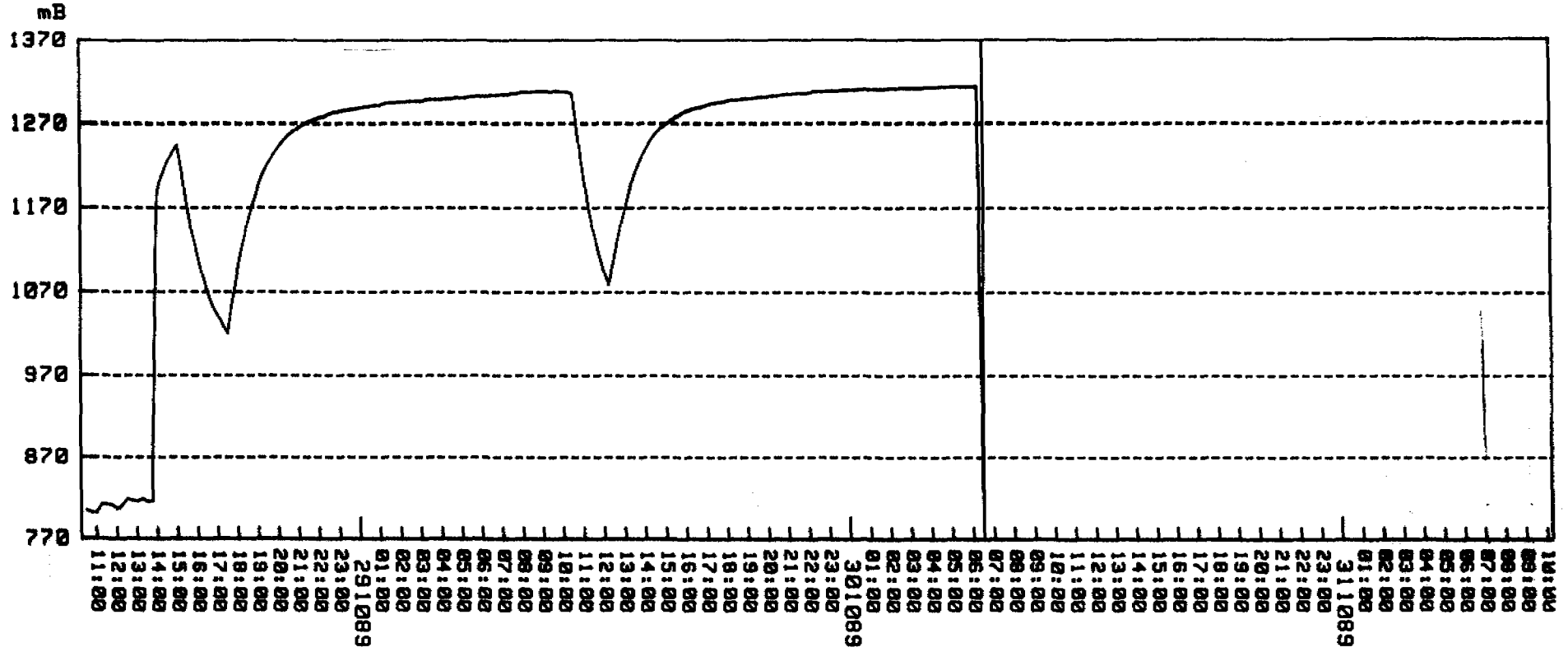
1	4428	2	8888	3	8888	4	505	5	802	6	802	7	813
8	812	9	812	10	807	11	311	12	819	13	817	14	816
15	819	16	816	17	816	18	1188	19	1206	20	1233	21	1234
22	1245	23	1211	24	1171	25	1141	26	1114	27	1091	28	1072
29	1054	30	1043	31	1030	32	1020	33	1058	34	1093	35	1125
36	1153	37	1174	38	1193	39	1209	40	1222	41	1233	42	1242
43	1249	44	1256	45	1261	46	1264	47	1269	48	1272	49	1274
50	1277	51	1278	52	1281	53	1283	54	1264	55	1285	56	1286
57	1287	58	1288	59	1289	60	1290	61	1291	62	1291	63	1293
64	1294	65	1294	66	1295	67	1295	68	1296	69	1296	70	1296
71	1297	72	1298	73	1298	74	1298	75	1299	76	1299	77	1300
78	1300	79	1300	80	1301	81	1302	82	1302	83	1302	84	1303
85	1303	86	1304	87	1304	88	1305	89	1305	90	1307	91	1307
92	1307	93	1308	94	1308	95	1308	96	1307	97	1308	98	1307
99	1307	100	1305	101	1258	102	1211	103	1172	104	1144	105	1118
106	1097	107	1079	108	1104	109	1139	110	1165	111	1190	112	1208
113	1224	114	1237	115	1248	116	1257	117	1264	118	1268	119	1273
120	1277	121	1281	122	1284	123	1286	124	1288	125	1289	126	1291
127	1293	128	1294	129	1295	130	1296	131	1297	132	1297	133	1298
134	1299	135	1299	136	1300	137	1301	138	1301	139	1302	140	1302
141	1303	142	1304	143	1304	144	1305	145	1305	146	1305	147	1307
148	1307	149	1307	150	1308	151	1308	152	1308	153	1309	154	1309
155	1309	156	1309	157	1310	158	1310	159	1310	160	1310	161	1310
162	1311	163	1311	164	1311	165	1311	166	1311	167	1311	168	1311
169	1312	170	1312	171	1312	172	1313	173	1312	174	1313	175	1313
176	1313	177	1313	178	1313	179	1314	180	770	181	3999	182	3999
183	3999	184	3999	185	3999	186	3999	187	3999	188	3999	189	3999
190	3999	191	3999	192	3999	193	3999	194	3999	195	3999	196	3999
197	3999	198	3999	199	3999	200	3999	201	3999	202	3999	203	3999
204	3999	205	3999	206	3999	207	3999	208	-9999				

COUNTRY : YEMEN
STATION : MAHRJABA 2
PROJECT : 408046
BEGIN DATE : 281089
START TIME : 10:30

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 011189
INTERVAL : 00:15

FILE: EP4428P_2
11 Apr 1990 10:14:30

177



PLACE :Mahajaba 2

PRESLOG:4427-4

Service given before initiation?:
-interval :00:15

Initiation date:18/01/90
Initiation time:11:15

Try-out results: last marker at 18/01/90 11:15
air pressure at 18/01/90 11:15
143 cm of water 18/01/90 11:30
143 cm of water 18/01/90 11:45
143 cm of water 18/01/90 12:00
in well at 18/01/90 12:15
when reading out, they were found

Markers given : one at start 18/01/90 11:15 and one at end at
03/05/90 07:20 h.

Installation date:18/01/90
Installation time:11:15 marker, in well 12:15

Installation description :in pumped shallow well
-installation place:sensor at -20.00 m top beam
-waterlevel :-14.52 m at 13:27 h

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:04/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:12:04
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :new batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4427-4
Number of eprom file :EP4427P_4
Number of administration file:-
Floppy number of eprom file :C: /floppy 7
Floppy number of administration file:-
Reference where results were listed :2
General remarks:-

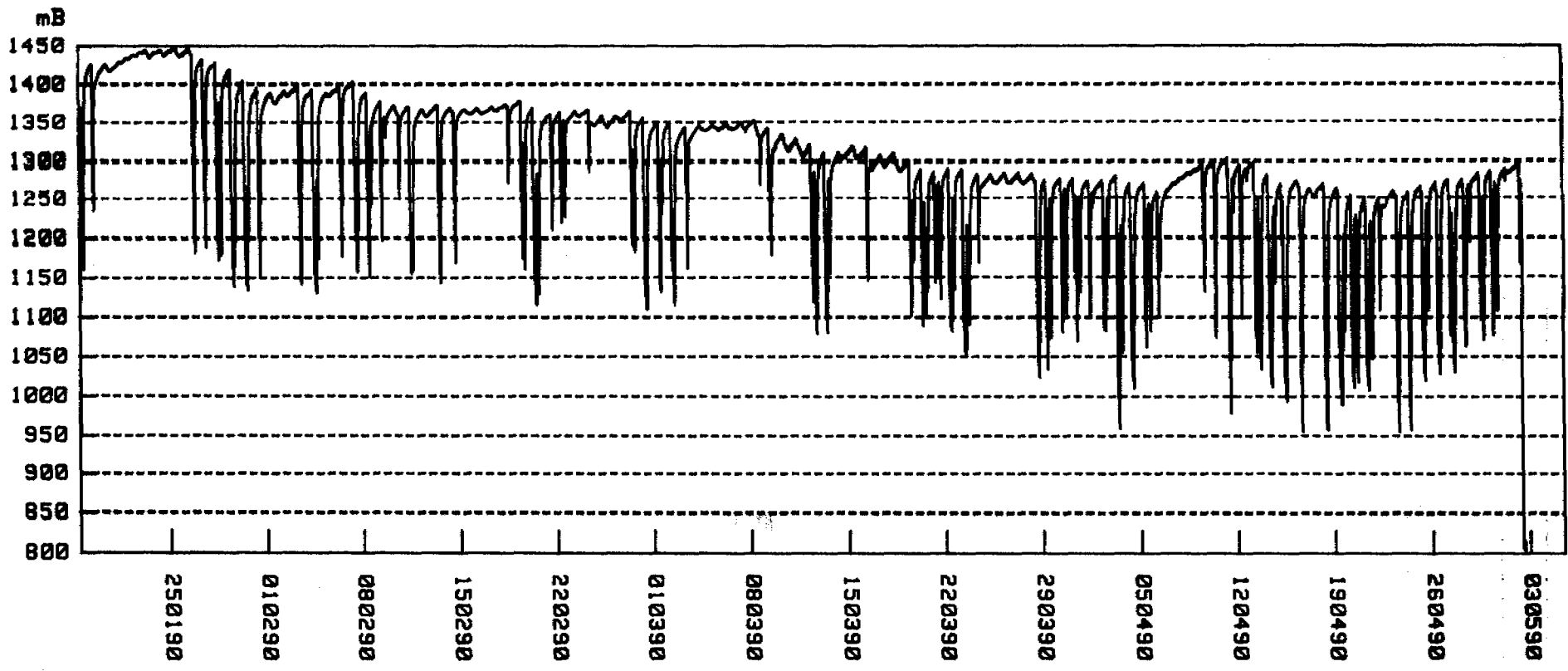
date:18 May 1990 (Friday) 19:17

COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046
BEGIN DATE : 180190
START TIME : 11:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030590
INTERVAL : 00:15

FILE: EP4427P_4
6 May 1990 11:23:40

179



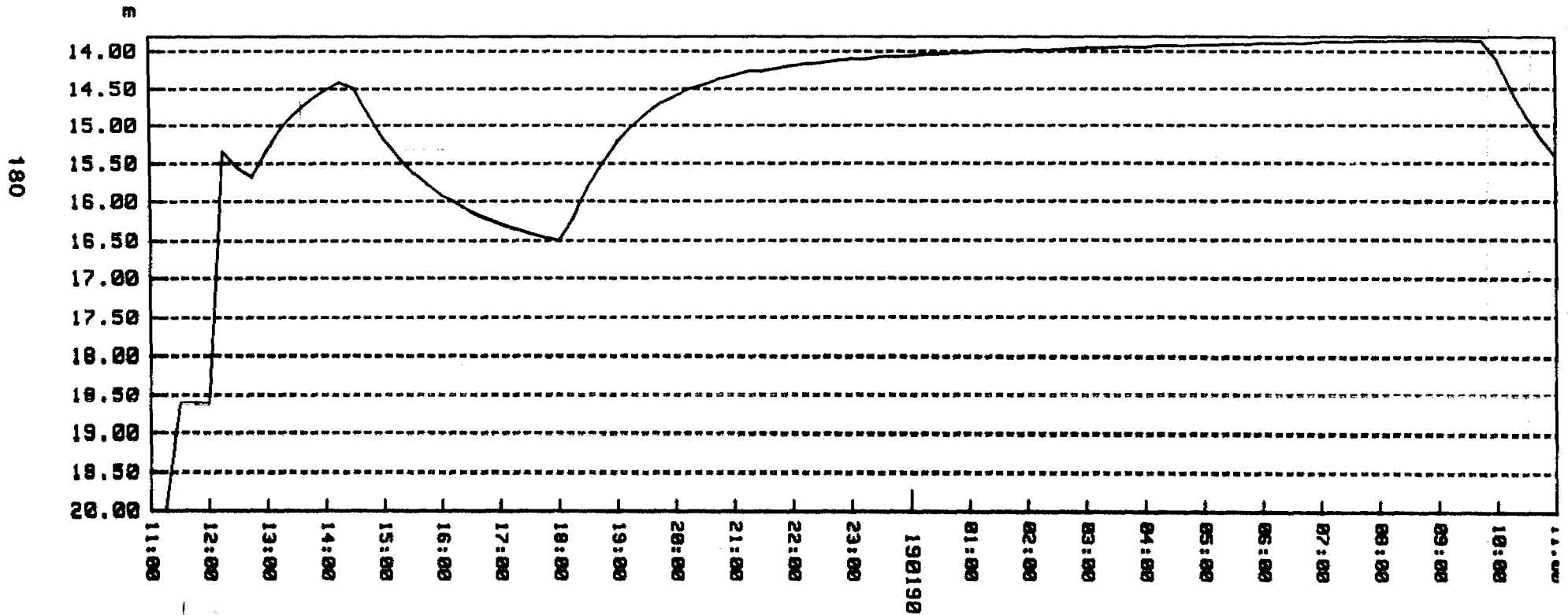
COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 408046
BEGIN DATE : 190190
START TIME : 11:15

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 001 mB.
END DATE : 190190
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_4

8 May 1990 11:42:55



143.10

pumping.

COUNTRY : YEMEN
 STATION : MAHAJABA 2
 PROJECT : 400046
 BEGIN DATE : 060490
 START TIME : 00:00

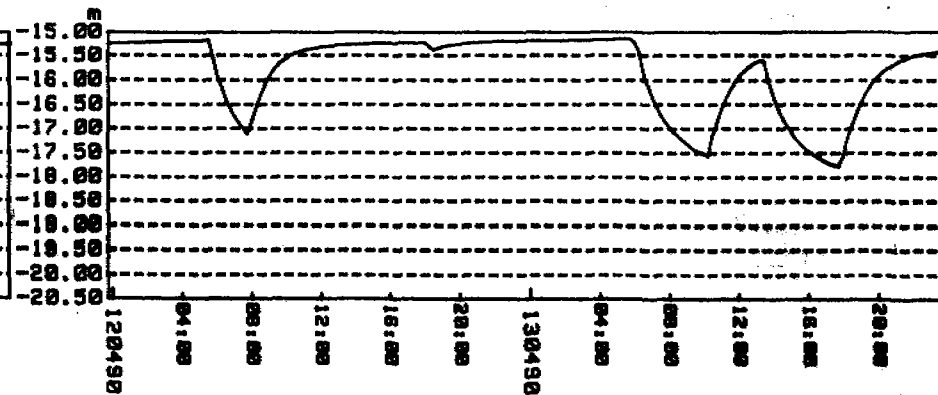
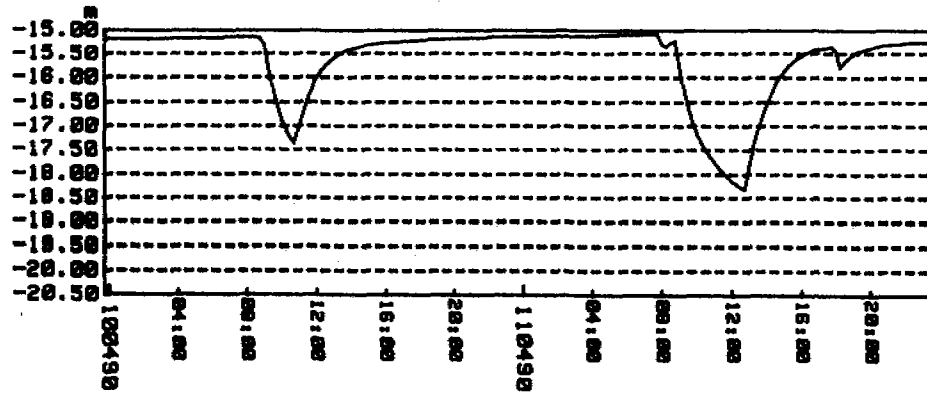
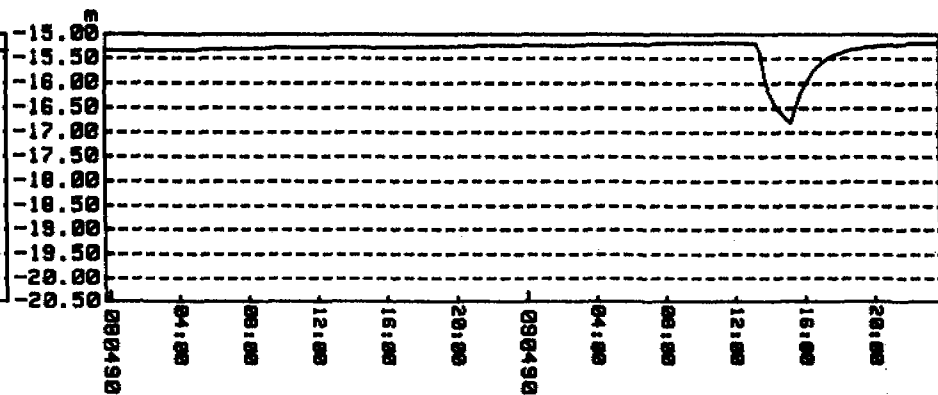
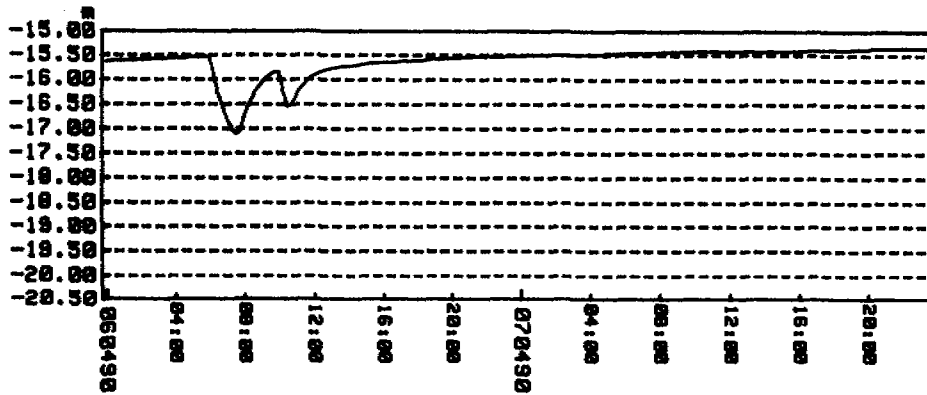
PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 001 mB.
 END DATE : 030590
 INTERVAL : 00:15

PAGE 1

FILE: EP4427P_4

6 May 1990 12:02:05

181

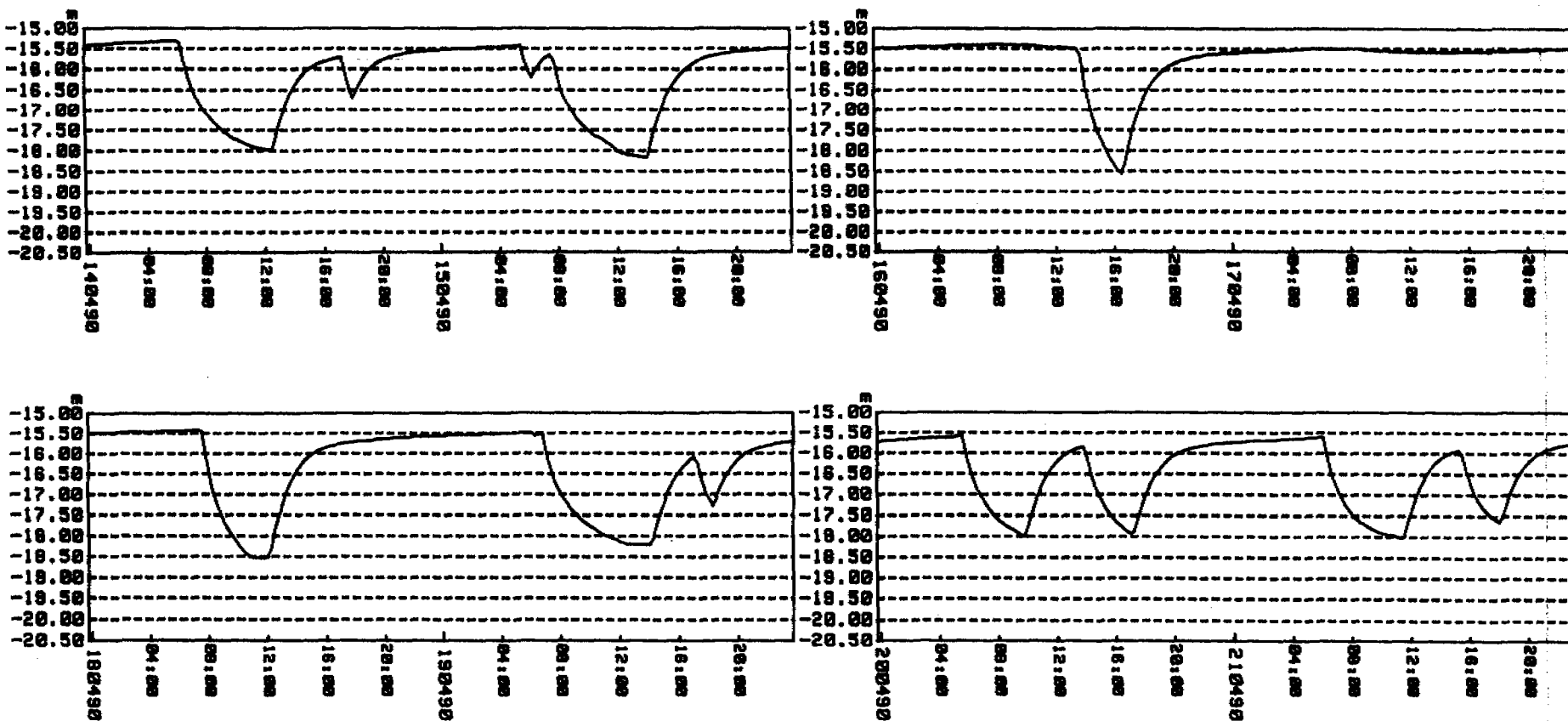


COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_4
6 May 1990 12:00:00

182



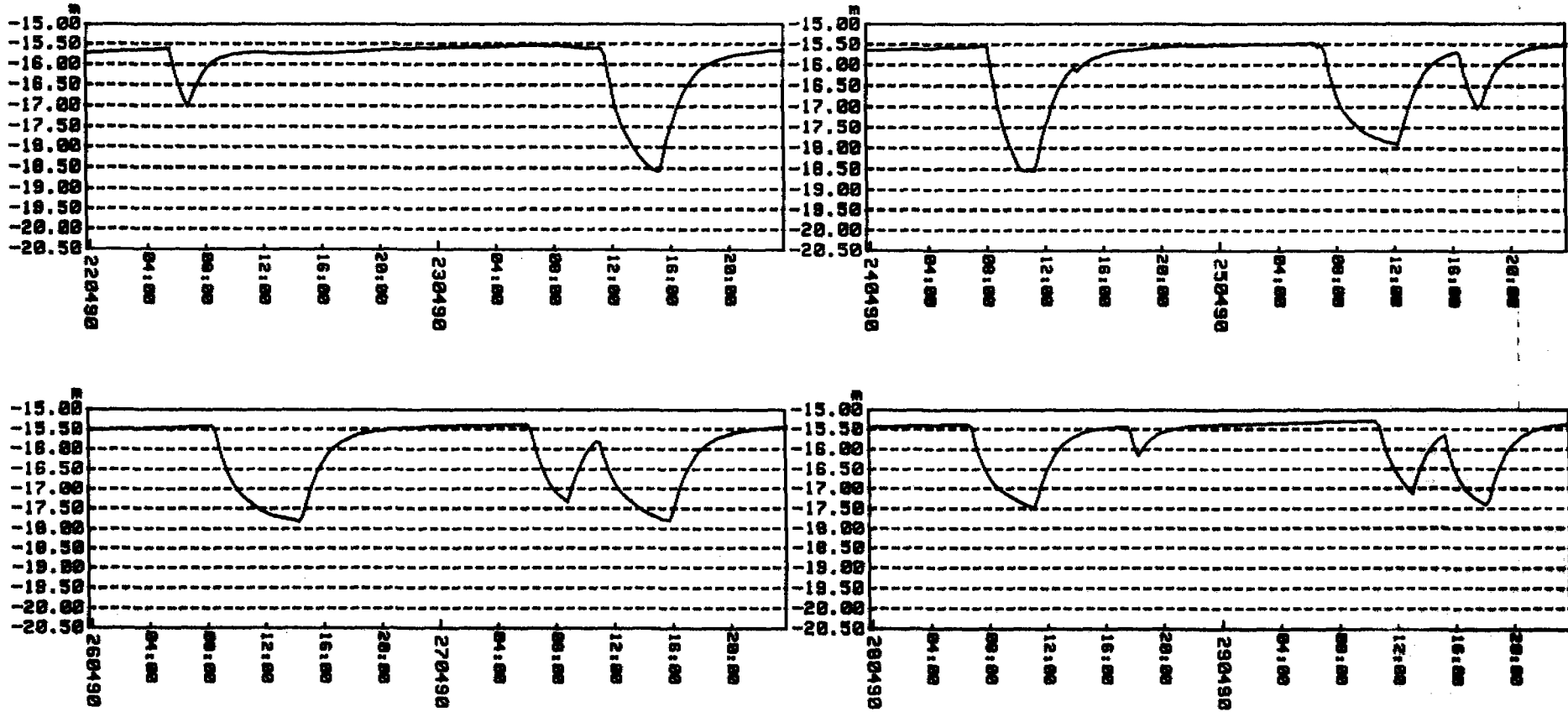
COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_4

6 May 1990 12:13:56

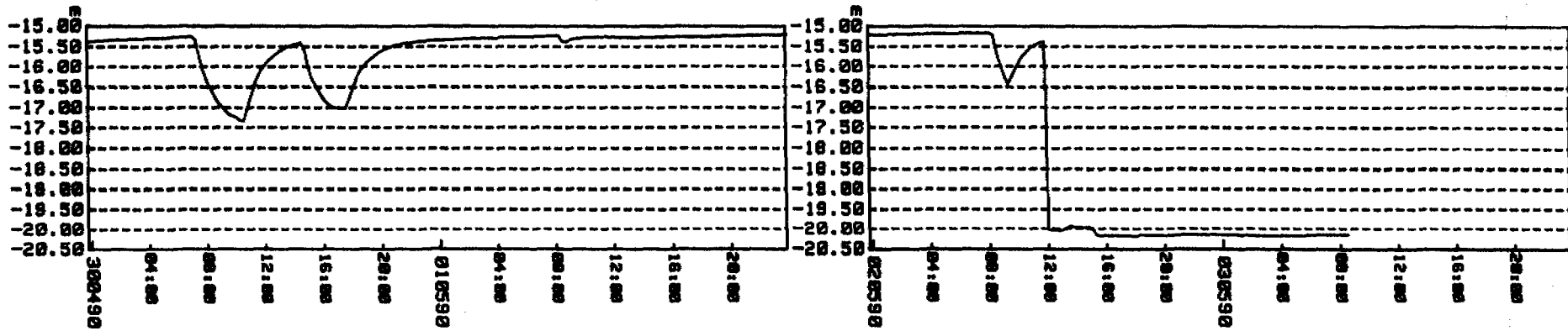
183



COUNTRY : YEMEN
STATION : MAHAJABA 2
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_4
6 May 1990 12:19:52



PLACE :Mahajaba 3 /non pumped well

PRESLOG:4321-1

Service given before initiation:none
-interval :00:15

Initiation date:18/01/90
Initiation time:11:15

Try-out results: - in the field the following action were done:
last marker at 18/01/90 11:15
air pressure at 18/01/90 11:15
air pressure at 18/01/90 11:30
air/well 18/01/90 11:45
air pressure at 18/01/90 12:00
143 cm of water 18/01/90 12:15
143 cm of water 18/01/90 12:30
143 cm of water 18/01/90 12:45
air/well 18/01/90 13:00
in well 18/01/90 13:15
- when reading out these were found
Markers given : one at start 18/01/90 11:15 and one at end at
03/05/90 07:20 h.

Installation date:18/01/90
Installation time:11:15 marker, 13:15 in well

Installation description :in non pumped shallow well
-installation place:sensor at -16.45 m top white stone
-waterlevel :-12.85 m to reference at 13:15

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:04/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:12:14
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :new batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4312-1
Number of eprom file :EP4312P_1
Number of administration file:-
Floppy number of eprom file :C: /floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:

1.

date: 18 May 1990 (Friday) 19:20

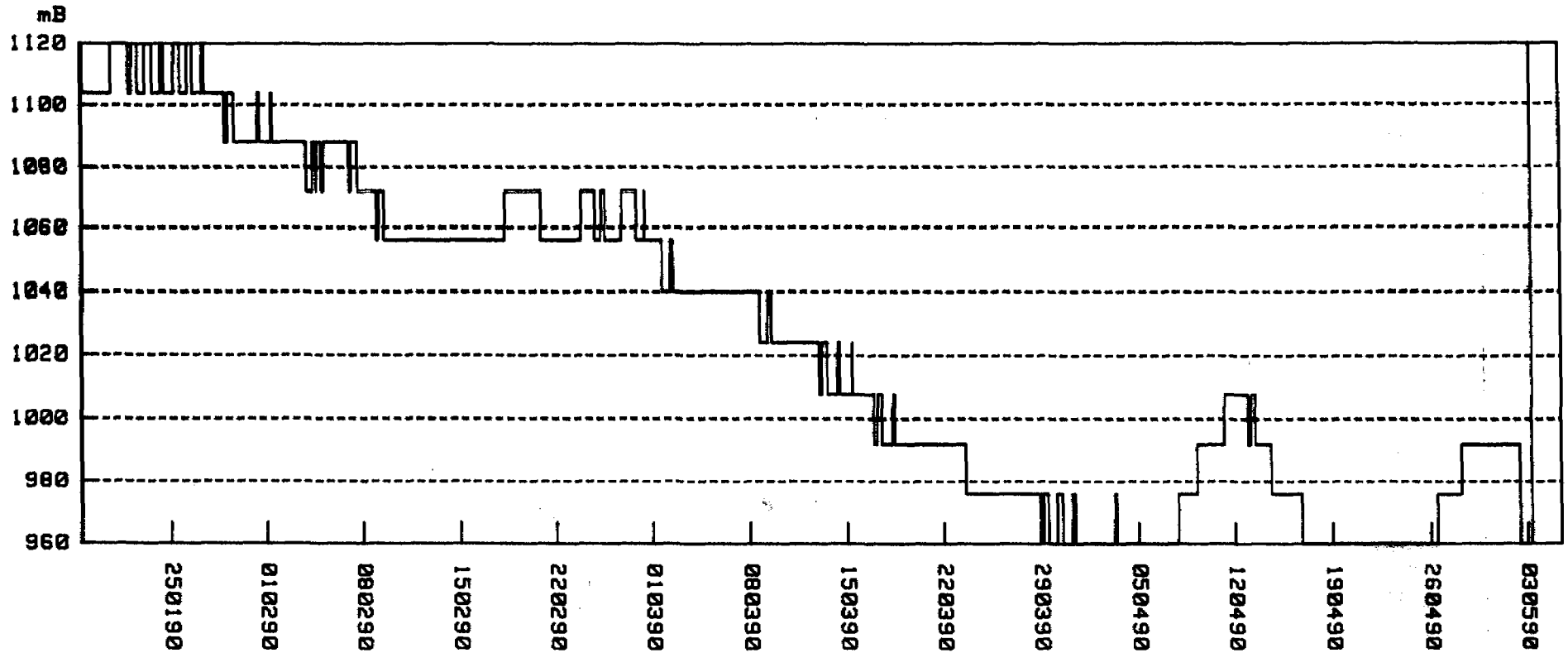
COUNTRY : YEMEN
STATION : MAHAJABA 3
PROJECT : 400046
BEGIN DATE : 100190
START TIME : 11:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040590
INTERVAL : 00:15

PAGE 1

FILE: EP4312P_1
6 May 1990 15:12:29

107

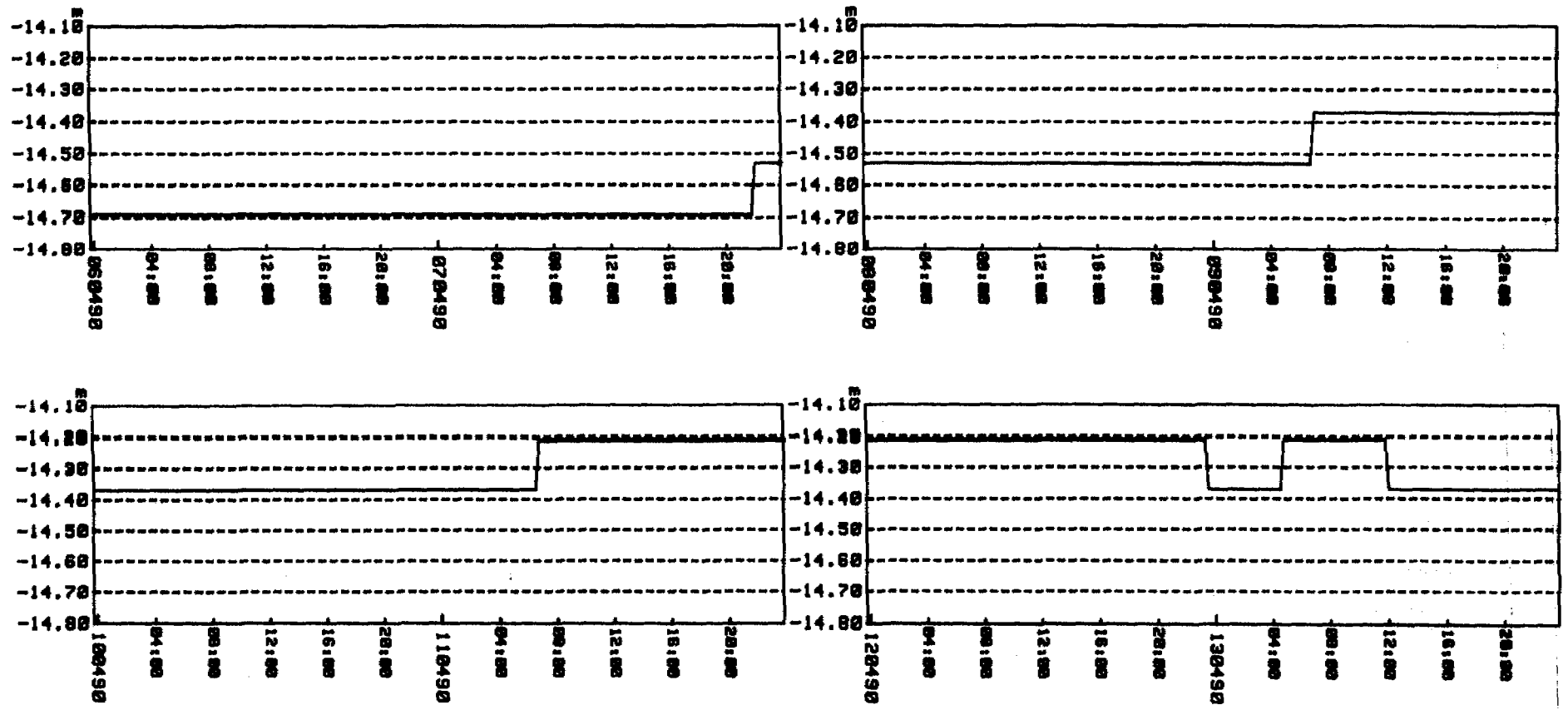


COUNTRY : YEMEN
 STATION : MAHAJABA 3
 PROJECT : 400046
 BEGIN DATE : 060490
 START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
 WATER LEVEL ELEVATION (START) : 0 m.
 BAROMETER READING (START) : 764 mB.
 END DATE : 030590
 INTERVAL : 00:15

FILE: EP4312P_1
 6 May 1990 15:49:27

188



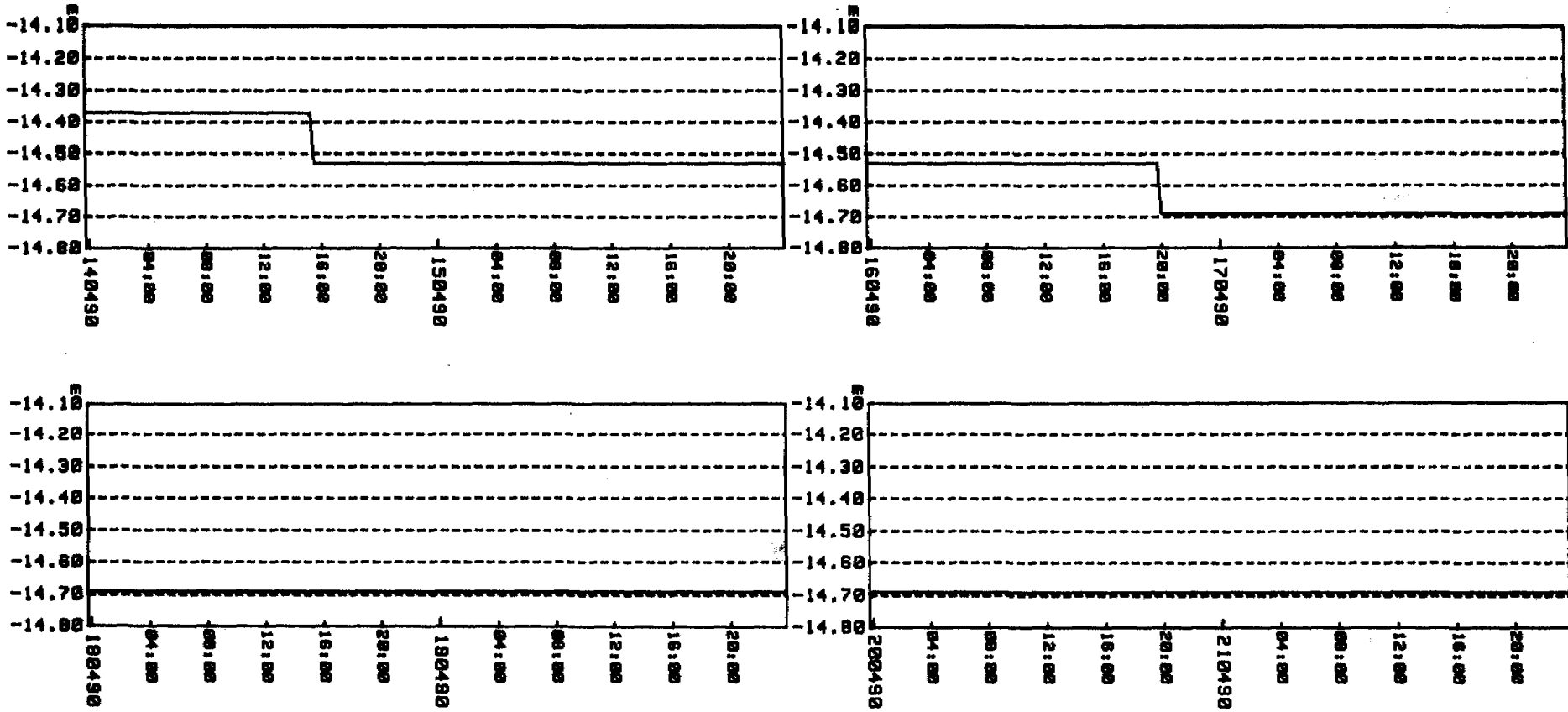
COUNTRY : YEMEN
STATION : MAHAJABA 3
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4312P_1

8 May 1990 15:53:57

189

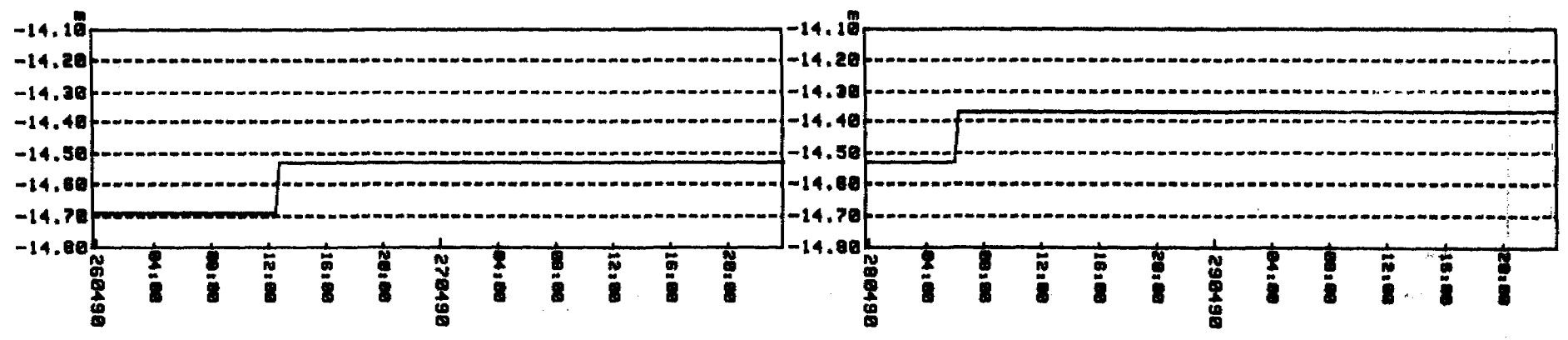
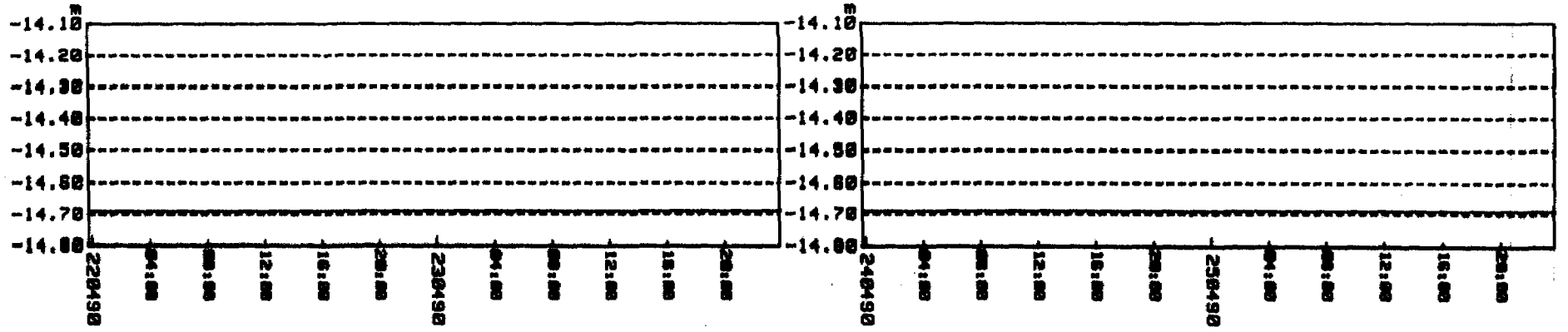


COUNTRY : YEMEN
STATION : MAHAJABA 3
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4312P_1
8 May 1990 15:58:28

190



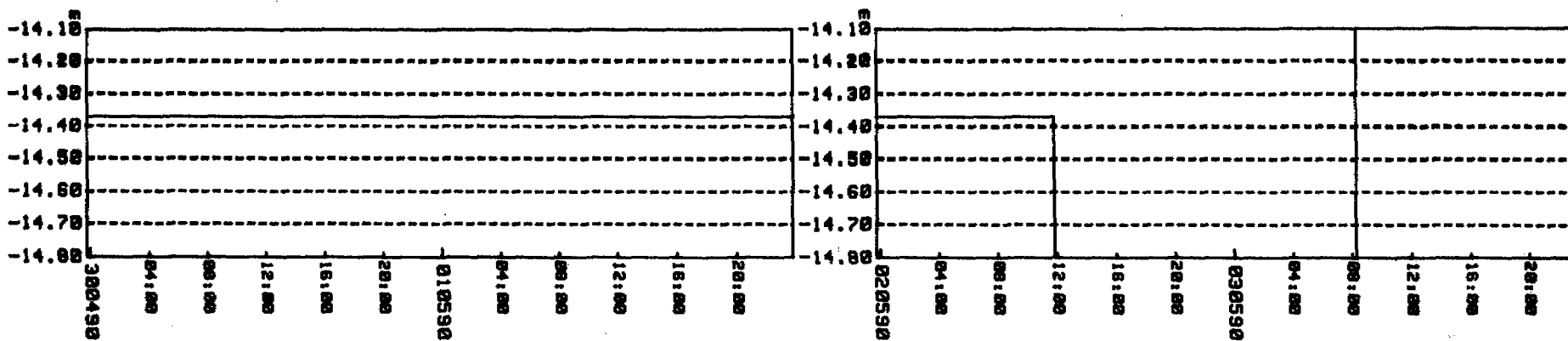
COUNTRY : YEMEN
STATION : MAHAJABA 3
PROJECT : 400248

PLOT OF WATER LEVEL ELEVATION

PAGE 4

FILE: EP4312P_1

8 May 1998 16:02:50



PLACE :Mawir 1

PRESLOG:4424-0

Service given before initiation:none
-interval :00:15

Initiation date:15/01/88
Initiation time:19:45

Try-out results:-
Markers given :-

Installation date:16/01/88
Installation time:14:00

Installation description :drum in wadi,30 cm sand above drum
-installation place:sand and boulders in drum
-waterlevel :drum full= 40 cm water

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:30/04/88
Calculated removal/stop time:-

Removal date:05/06/88
Removal time:09:00
Remarks :-
-waterlevel:-
-sediment :42 cm of sediment above drum

Stop date :-
Stop time :-

Service given :new batteries
Eprom reading date:nk
Number of eprom :EP4424-0
Number of eprom file :EP4424P_0
Number of administration file:AD4424P_0
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed :1+2

General remarks:
1.

date:17 April 1990 (Tuesday) 16:06

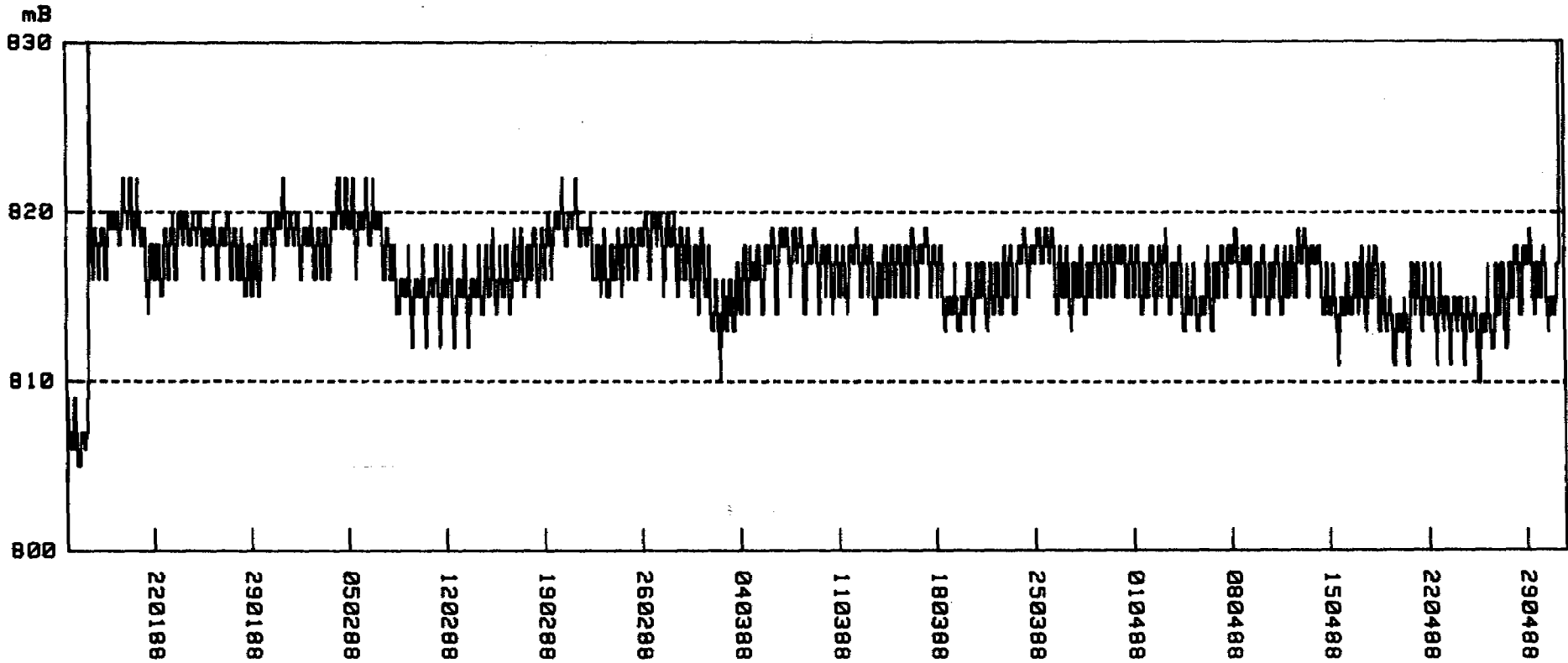
COUNTRY : YEMEN
STATION : MAHIR 1
PROJECT : 400046
BEGIN DATE : 150188
START TIME : 19:45

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040588
INTERVAL : 00:15

PAGE 1

FILE: EP4424P_0
17 Apr 1990 15:49:43

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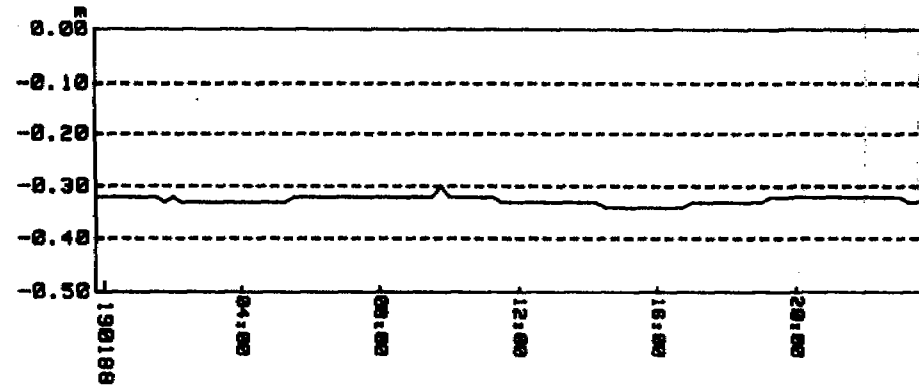
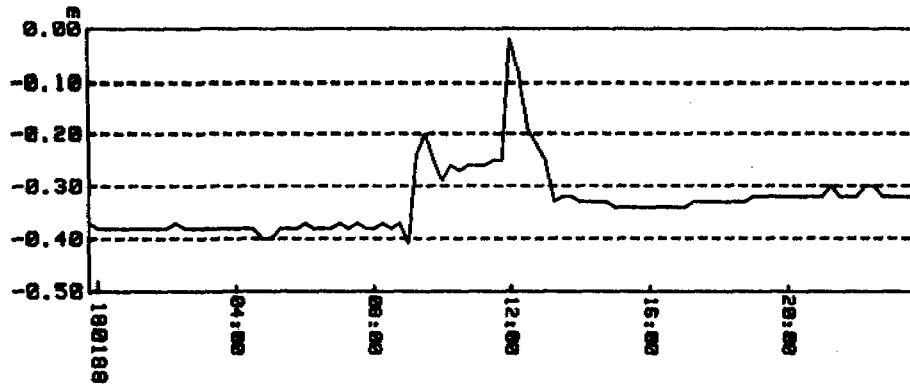
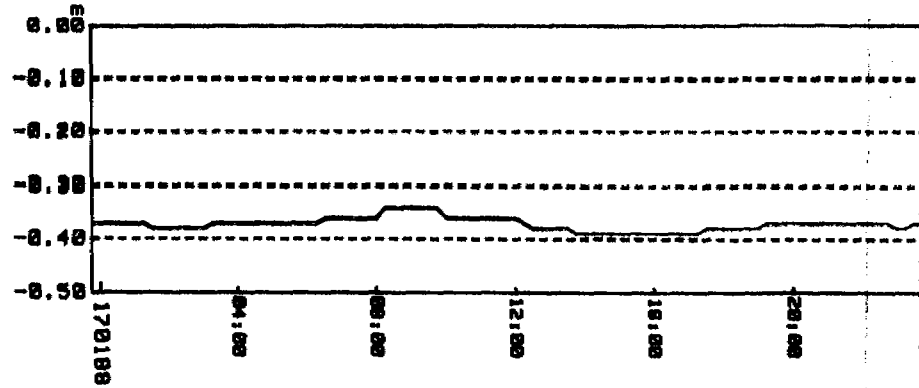
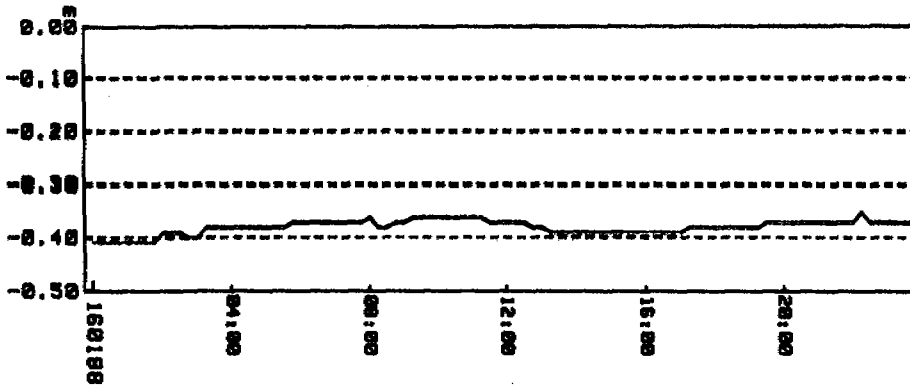
COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400046
BEGIN DATE : 160188
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 605 mB.
END DATE : 220188
INTERVAL : 00:15

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FILE: EP4421P_0
25 Apr 1990 16:44:09

194

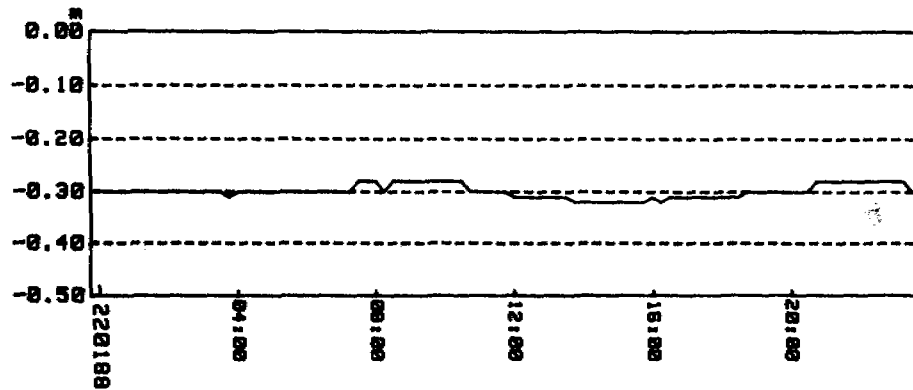
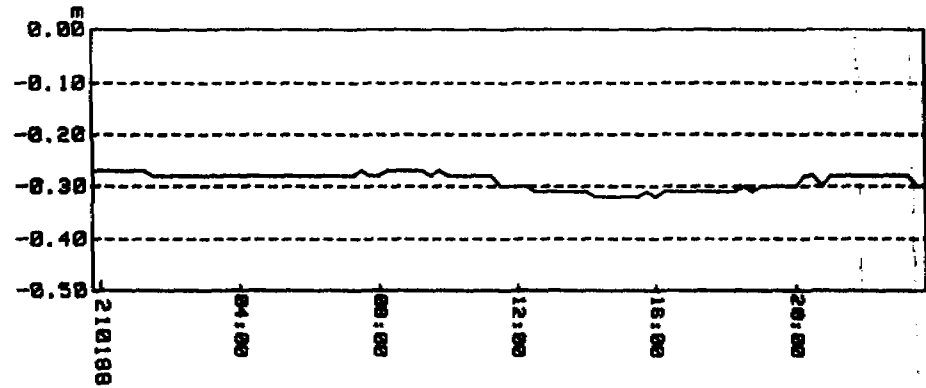
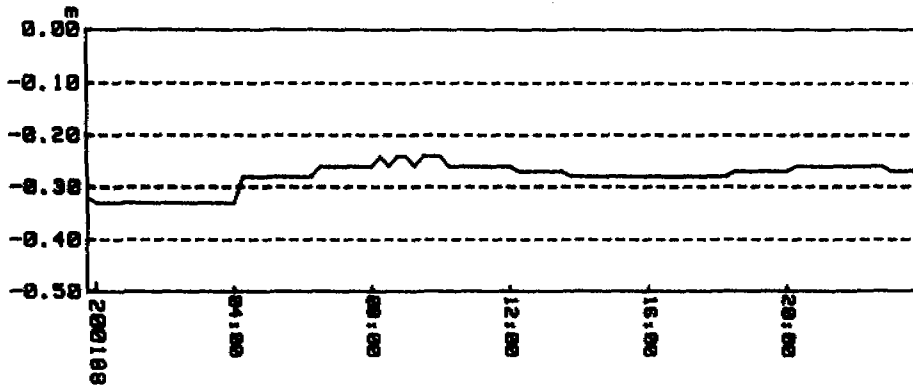


COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4421P_0
25 Apr 1990 16:47:14

195



PLACE :Mawir 1

PRESLOG:4424-1

Service given before initiation:batteries changed
-interval :00:15

Initiation date:140688
Initiation time:10:47

Try-out results:OK
Markers given :5,last marker at record 100 is 14/06/88 10:47

Installation date:14/06/88
Installation time:12:00

Installation description :drum in wadi,30 cm sand above drum
-installation place:sand and boulders in drum
-waterlevel :drum full= 40 cm water

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:28/09/88
Calculated removal/stop time:-

Removal date:09/10/88
Removal time:09:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :-
Stop time :-

Service given :none
Eprom reading date:nk
Number of eprom :EP4424-1
Number of eprom file :EP4424P_1
Number of administration file:EP4424P_1
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed :1+2

General remarks:

1. only 112 records: 1- 99 were before 14/06/88 10:47
100 was at 14/06/88 10:47
111 was at 14/06/88 13:15 when the Preslog
was already installed in the wadi; did not give any increase in
pressure due to water of drum. Why did he stop at 112 ?

date:18 May 1990 (Friday) 19:21

Listing of file: EP4424P_1 START at registration 1

1	4424	2	4051	3	798	4	4051	5	800	6	4051	7	800
8	801	9	802	10	4051	11	800	12	802	13	802	14	802
15	802	16	802	17	802	18	802	19	802	20	804	21	804
22	804	23	804	24	804	25	802	26	802	27	802	28	802
29	802	30	802	31	802	32	802	33	802	34	802	35	802
36	802	37	802	38	802	39	802	40	802	41	802	42	802
43	802	44	802	45	802	46	802	47	802	48	802	49	802
50	802	51	802	52	802	53	802	54	804	55	804	56	804
57	804	58	804	59	804	60	804	61	804	62	804	63	804
64	804	65	804	66	805	67	804	68	805	69	804	70	804
71	804	72	804	73	804	74	805	75	805	76	805	77	804
78	804	79	804	80	804	81	804	82	802	83	802	84	802
85	802	86	802	87	801	88	801	89	801	90	801	91	801
92	801	93	801	94	801	95	801	96	801	97	801	98	801
99	801	100	4051	101	801	102	793	103	784	104	784	105	783
106	783	107	783	108	783	109	782	110	806	111	4095	112	-9999

PLACE :Mawir 1

PRESLOG:4430-0

Service given before initiation:none
-interval :00:15

Initiation date:09/10/88
Initiation time:07:15

Try-out results:OK
Markers given :1

Installation date:09/10/88
Installation time:09:15

Installation description :drum in wadi,30 cm sand above drum
-installation place:boulders in drum covered with cloth
sheet
-waterlevel :drum full= 40 cm water

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:23/01/89
Calculated removal/stop time:-

Removal date:21/01/89
Removal time:09:45
Remarks :-
-waterlevel:-
-sediment :-

Stop date :21/01/89
Stop time :11:00

Service given :none
Eprom reading date:nk
Number of eprom :EP4430-0
Number of eprom file :EP4430P_0
Number of administration file:AD4430P_0
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:17 April 1990 (Tuesday) 17:07

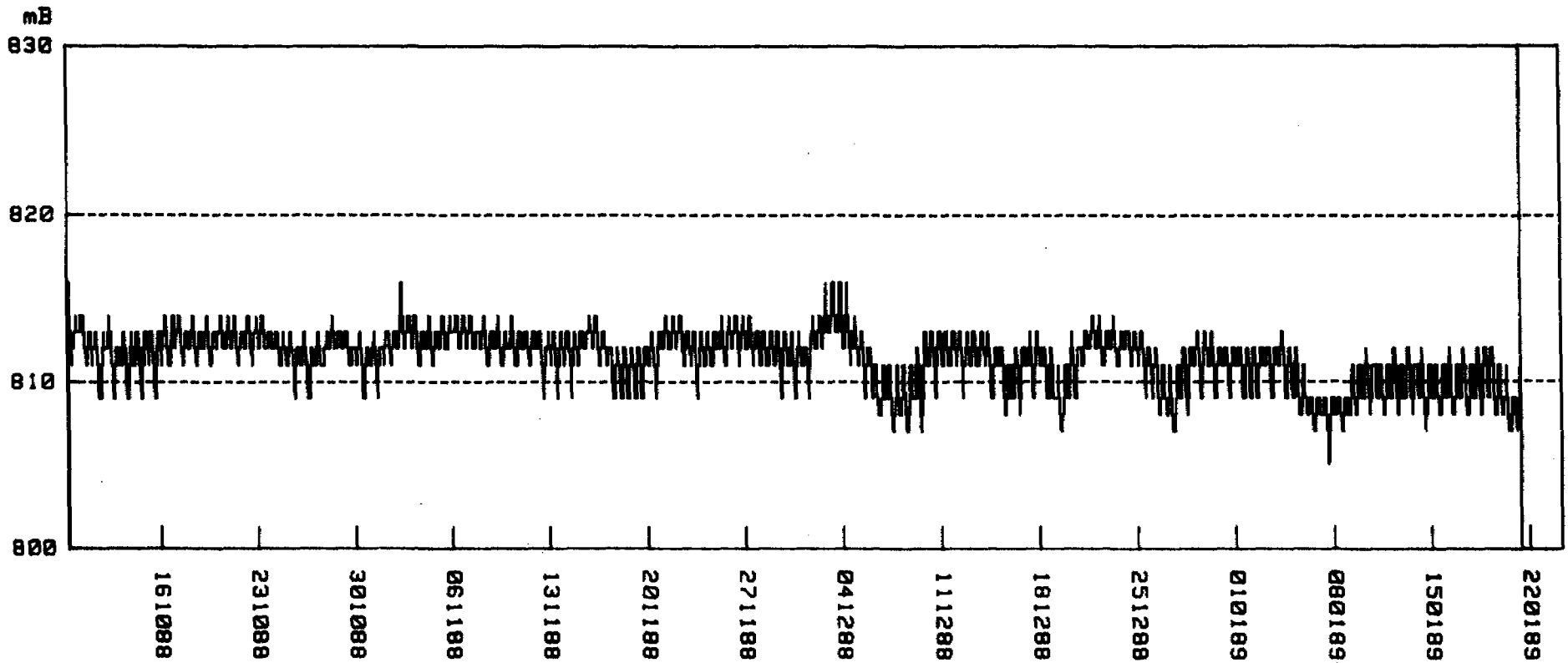
COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400046
BEGIN DATE : 091000
START TIME : 07:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 220100
INTERVAL : 00:15

PAGE 1

FILE: EP4430P_0
17 Apr 1990 16:14:00

199



PLACE :Mawir 1

PRESLOG:4421-2

Service given before initiation:none
-interval :00:15

Initiation date:21/01/89
Initiation time:08:45

Try-out results:OK
Markers given :1

Installation date:21/01/89
Installation time:09:45

Installation description :drum in wadi,30 cm sand above drum
-installation place:boulders in drum covered with cloth
-waterlevel :drum full= 40 cm water

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:07/05/89
Calculated removal/stop time:-

Removal date:03/04/89
Removal time:-
Remarks :-
-waterlevel:-
-sediment :-

Stop date :05/04/89
Stop time :08:08

Service given :batteries changed
Eprom reading date:nk
Number of eprom :EP4421-2
Number of eprom file :EP4421P_20
Number of administration file:AD4420P_20
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:17 April 1990 (Tuesday) 17:08

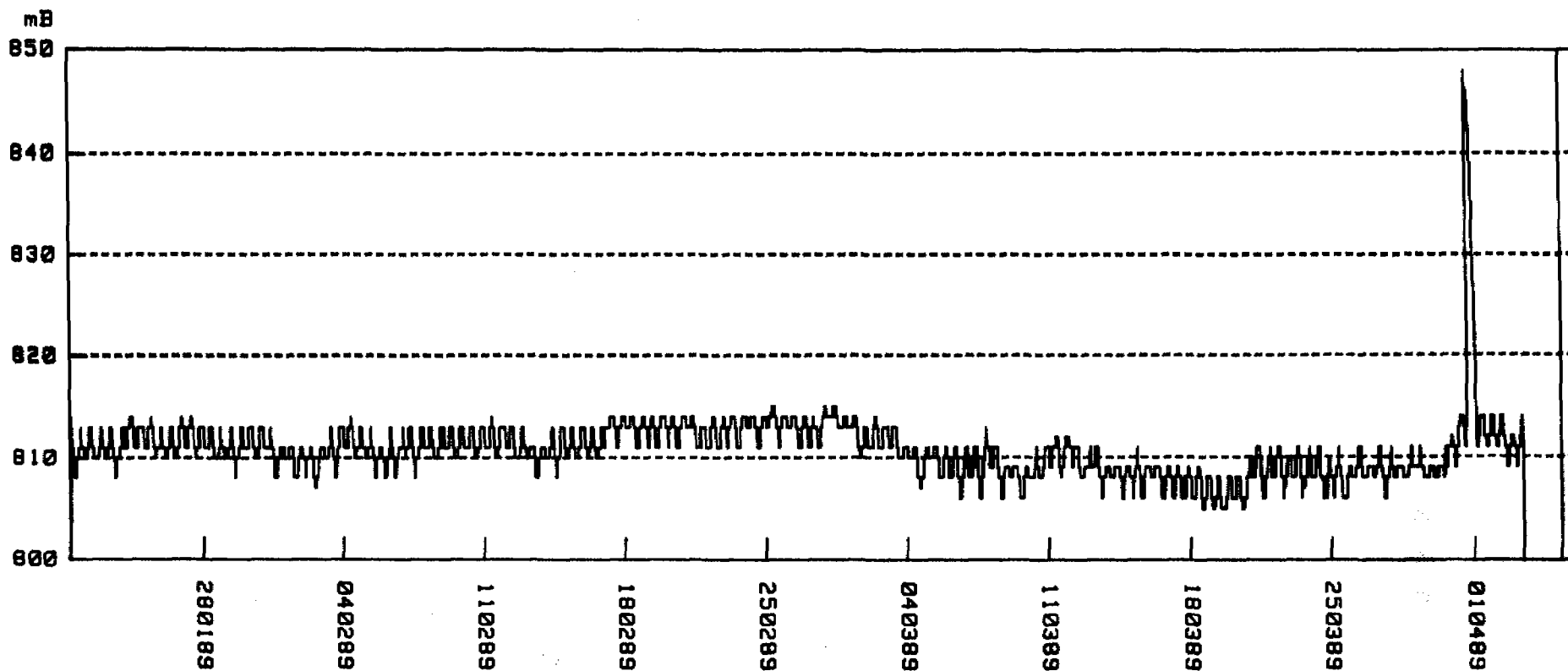
COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400048
BEGIN DATE : 210189
START TIME : 00:45

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 060489
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_20
17 Apr 1990 17:13:29

201



COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400048
BEGIN DATE : 310389
START TIME : 12:00

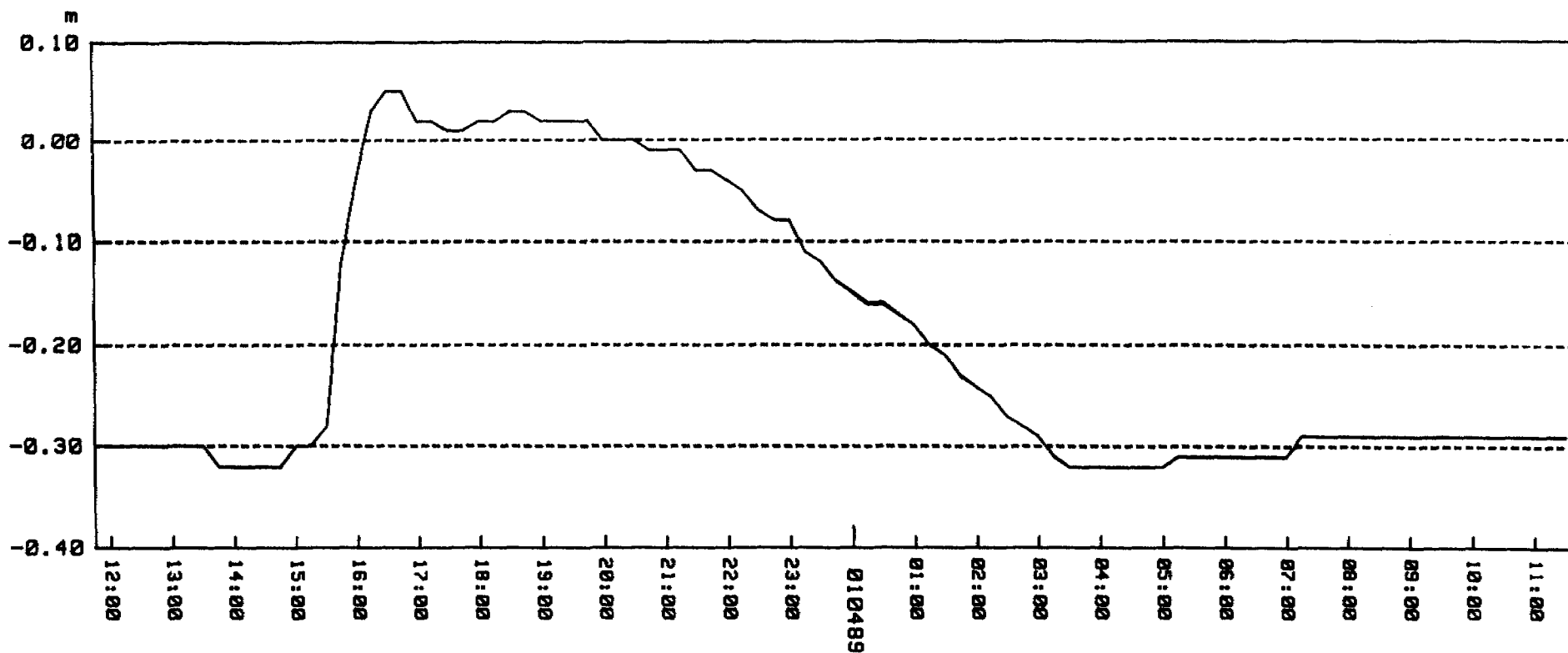
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 010 mB.
END DATE : 010489
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_20

17 Apr 1990 17:01:36

202



PLACE :Mawir 1

PRESLOG:4421-3

Service given before initiation:

-interval :00:15

Initiation date:17/01/90

Initiation time:09:00

Try-out results: following data was obtained in field at installation 17/01/90, 09:00 h :

17/01/90 09:00 last marker

„ 09:00 air

„ 09:15 water of 143 cm on sensor

„ 09:30 water of 143 cm on sensor

„ 09:45 water of 143 cm on sensor

10:00 air

the results, when reading out, were the same. The Preslog was started at the same date and time as the Preslog at Mawir 1.

Markers given :1 at start and 1 just before end

Installation date:17/01/90

Installation time:09:00

Installation description :in pipe with the holes just to high

-installation place:middle wadi

-waterlevel :

Check up visit date :3/90

Check up visit results:OK

Calculated removal/stop date:03/05/90

Calculated removal/stop time:-

Removal date:02/05/90

Removal time:16:25

Remarks :

-waterlevel:

-sediment :none, no traces of floods.

Stop date :03/05/90

Stop time :08:23

Service given :batteries + rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4421-3
Number of eprom file :EP4421P-3
Number of administration file:-
Floppy number of eprom file :floppy 7
Floppy number of administration file:-
Reference where results were listed :2
General remarks:-

1. In the middle, no flood has occurred
date:18 May 1990 (Friday) 19:26

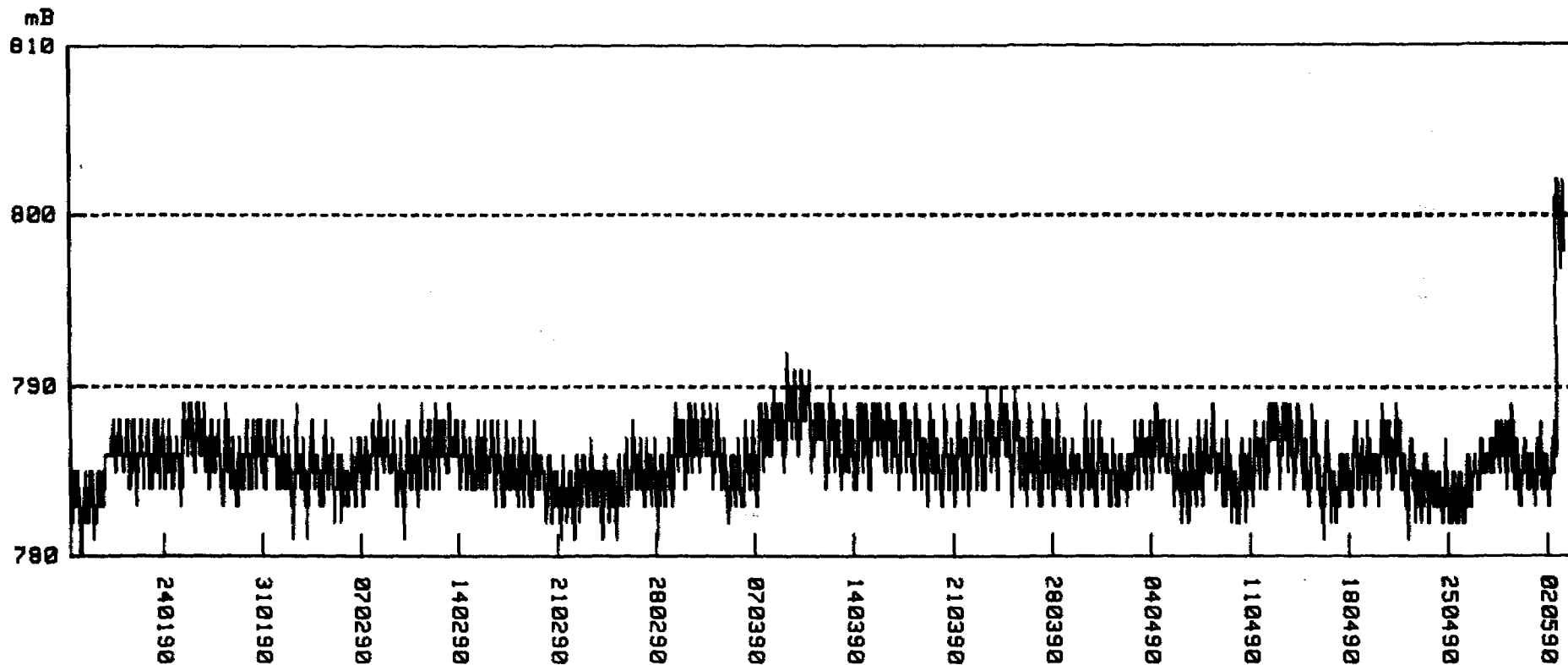
COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 488048
BEGIN DATE : 170190
START TIME : 09:00

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030590
INTERVAL : 00:15

PAGE 1

FILE: EP4421P_03
3 May 1990 18:51:42

205

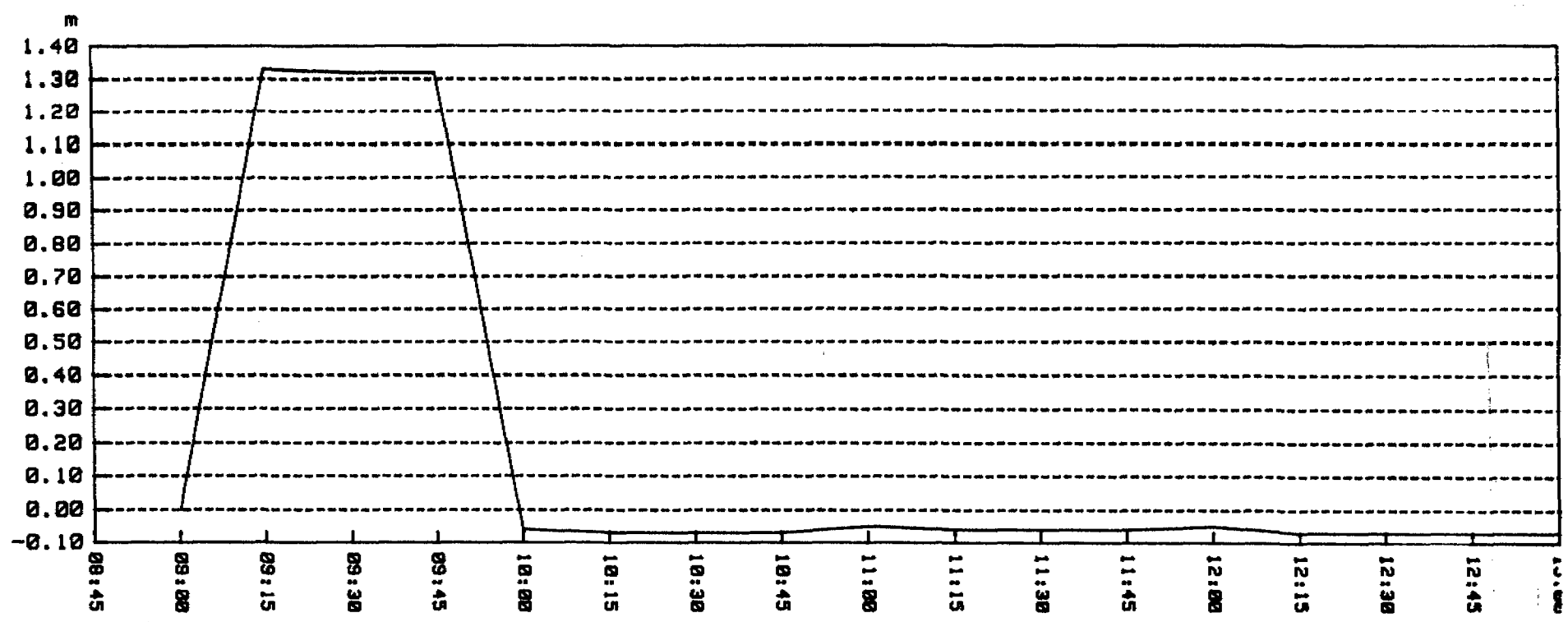


COUNTRY : YEMEN
STATION : MAWIR 1
PROJECT : 400048
BEGIN DATE : 170190
START TIME : 09:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 789 mB.
END DATE : 170190
INTERVAL : 00:15

FILE: EP4421P_03
3 May 1990 18:16:25

206



PLACE :Mawir 2

PRESLOG:4429-0

Service given before initiation:none
-interval :00:15

Initiation date:09/10/88
Initiation time:07:15

Try-out results:OK
Markers given :1

Installation date:09/10/88
Installation time:13:40

Installation description :in drum, middle wadi
-installation place:top drum= wadi level
-waterlevel :drum full= 40 cm.

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:23/01/89
Calculated removal/stop time:-

Removal date:21/01/89
Removal time:10:15
Remarks :-
-waterlevel:-
-sediment :-

Stop date :21/01/89
Stop time :11:00

Service given :none
Eprom reading date:nk
Number of eprom :EP4429-0
Number of eprom file :EP4429P_0
Number of administration file:AD4429P_0
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:17 April 1990 (Tuesday) 17:23

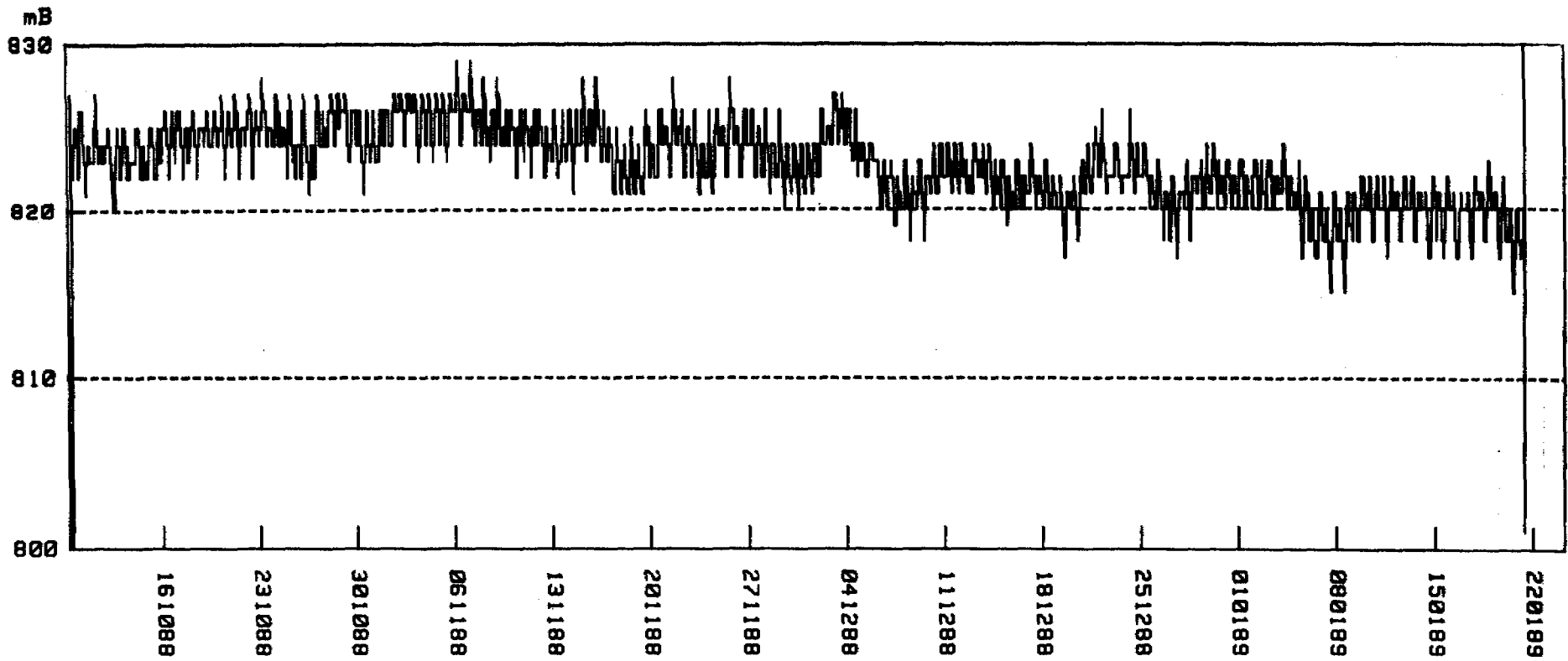
COUNTRY : YEMEN
STATION : MAWIR 2
PROJECT : 408046
BEGIN DATE : 091088
START TIME : 07:15

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 220189
INTERVAL : 00:15

PAGE 1

FILE: EP4429P_0
17 Apr 1990 17:34:10

208



PLACE :Mawir 2

PRESLOG:4427-2

Service given before initiation:none
-interval :00:15

Initiation date:21/01/89
Initiation time:08:45

Try-out results:OK
Markers given :4

Installation date:21/01/89
Installation time:10:15

Installation description :in drum,middle wadi
-installation place:top drum= wadi level
-waterlevel :drum full= 40 cm

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:07/05/89
Calculated removal/stop time:-

Removal date:02/04/89
Removal time:-
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/04/89
Stop time :09:09 (marker)

Service given :none
Eprom reading date:nk
Number of eprom :EP4427-2
Number of eprom file :EP4427P_20
Number of administration file:AD4427P_20
Floppy number of eprom file :1/2
Floppy number of administration file:2/4
Reference where results were listed :1+2

General remarks:
1.

date:17 April 1990 (Tuesday) 17:30

COUNTRY : YEMEN
STATION : MAWIR 2
PROJECT : 408046
BEGIN DATE : 210189
START TIME : 00:45

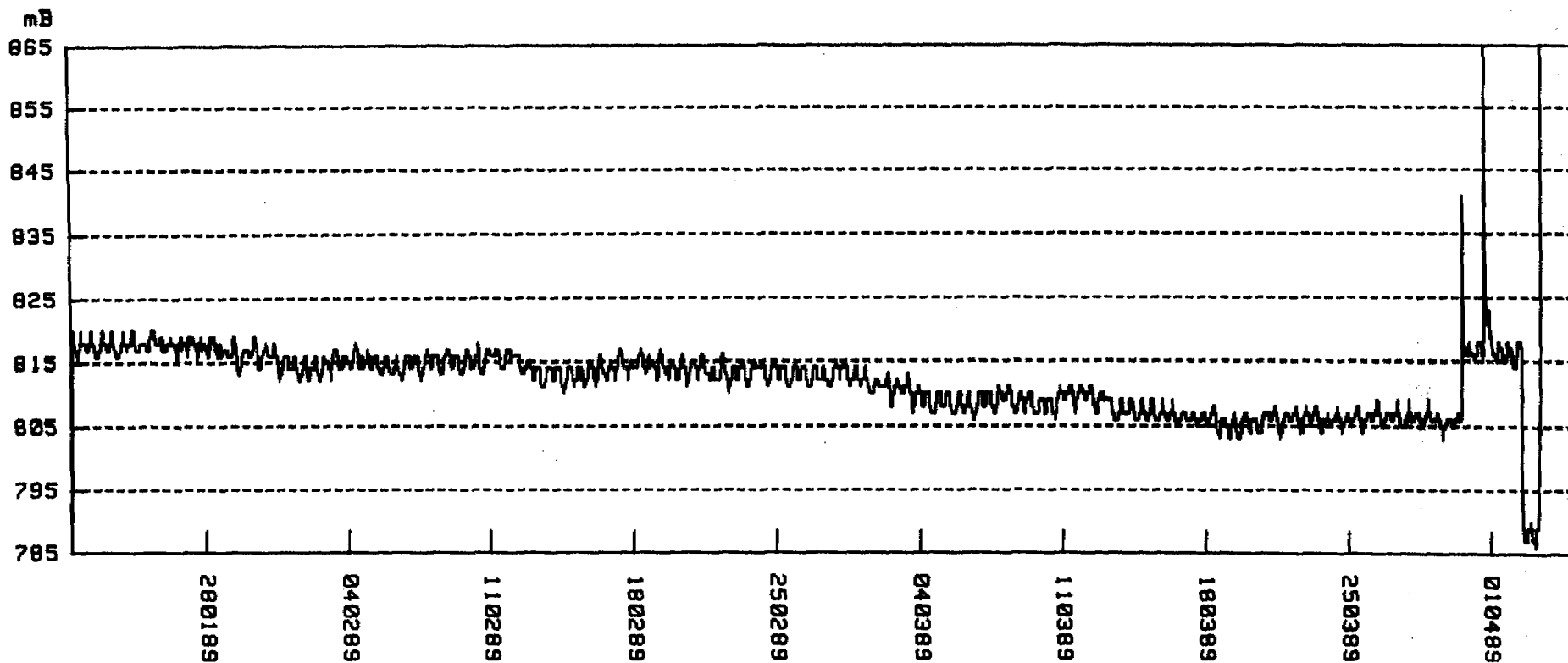
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 040489
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_20

17 Apr 1990 10:05:47

210



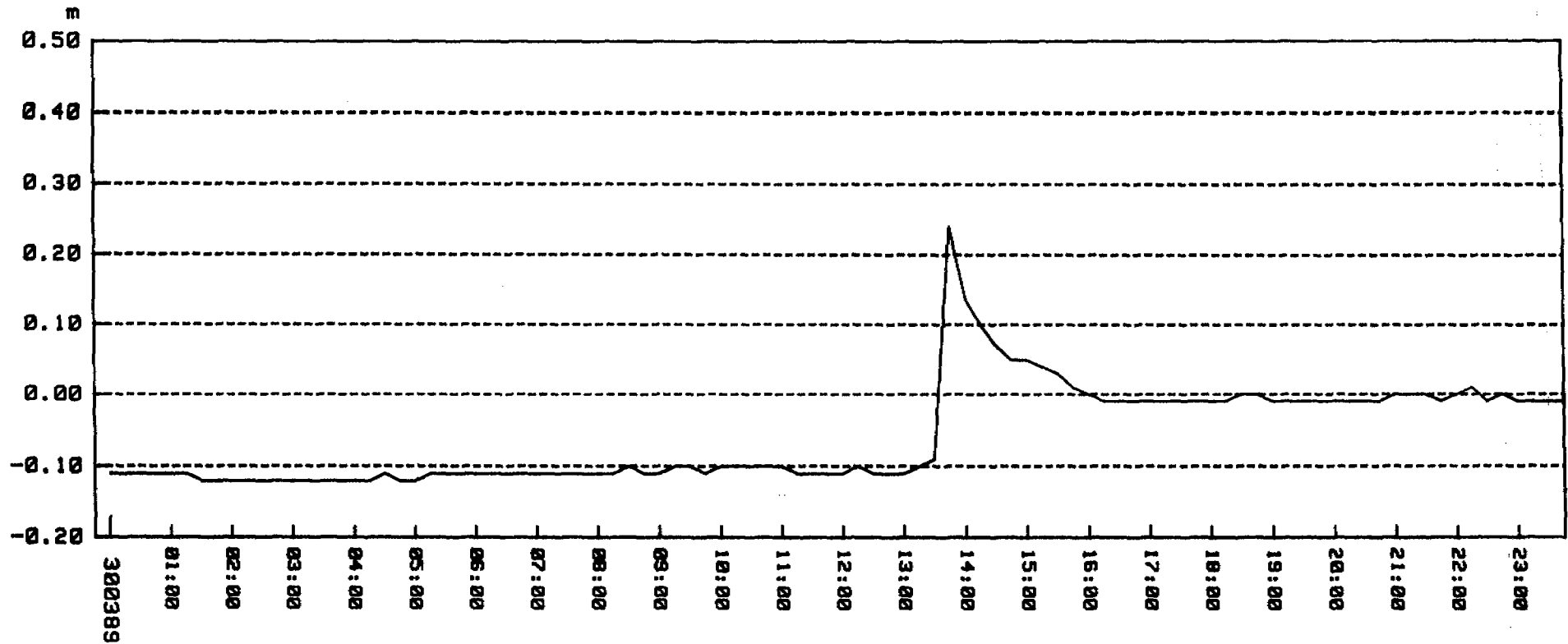
COUNTRY : YEMEN
STATION : MAWIR 2
PROJECT : 400046
BEGIN DATE : 300389
START TIME : 00:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 010 mB.
END DATE : 010489
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_20
17 Apr 1990 10:22:10

211



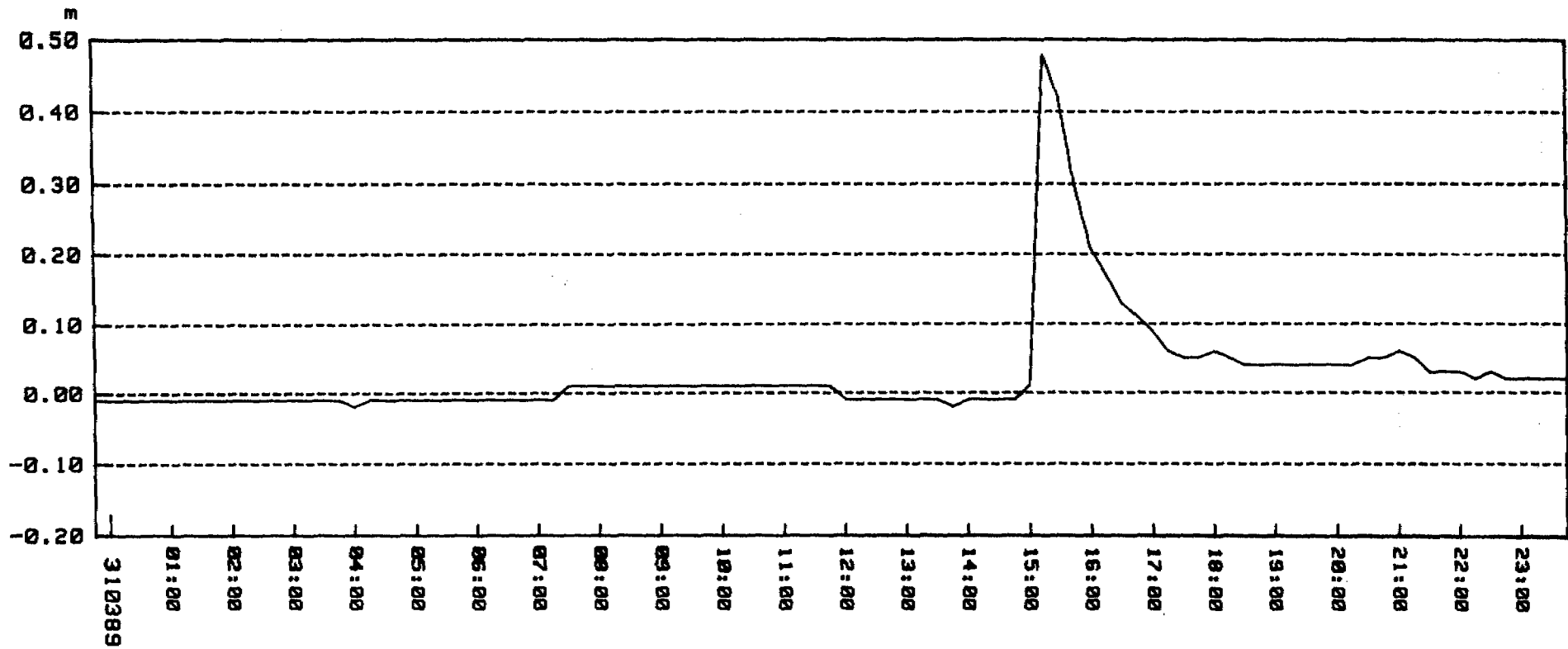
COUNTRY : YEMEN
STATION : MAWIR 2
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

PAGE 2

FILE: EP4427P_20
17 Apr 1980 18:24:33

212



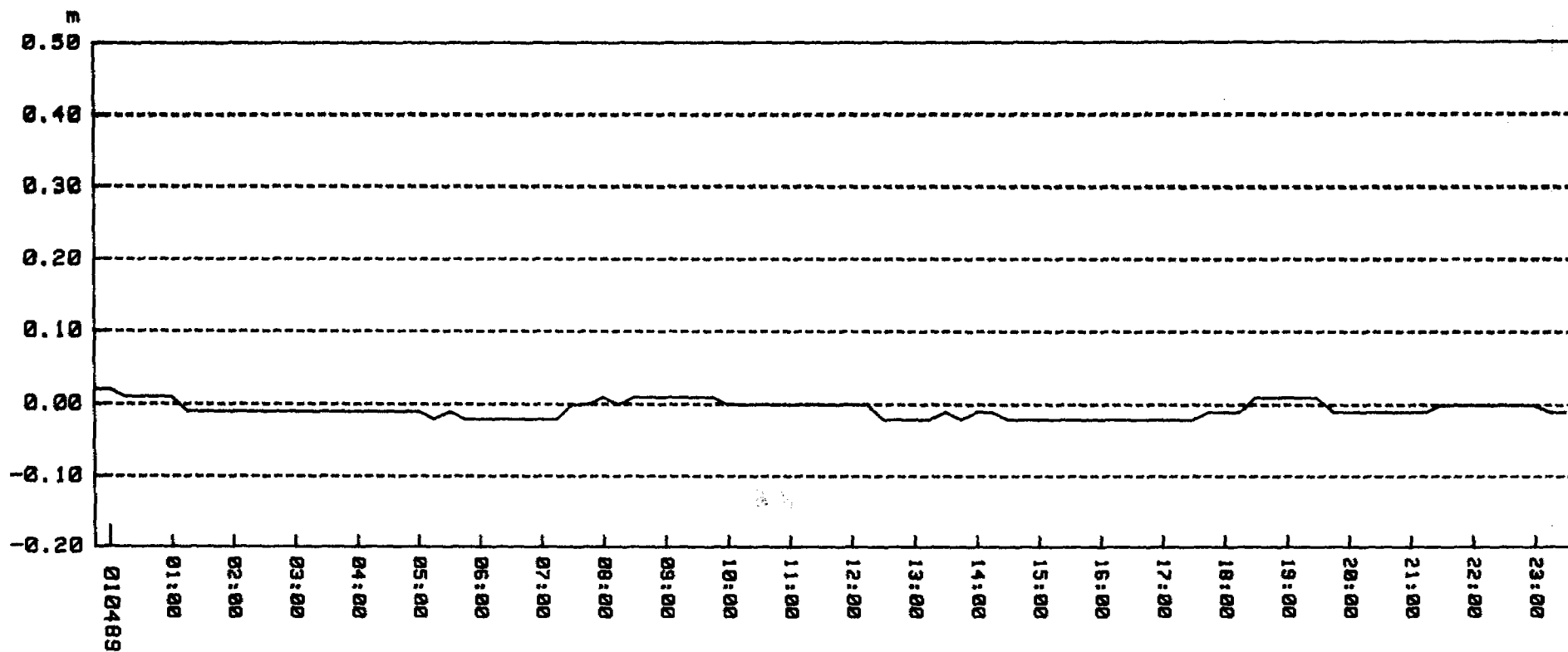
COUNTRY : YEMEN
STATION : MAWIR 2
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

PAGE 3

FILE: EP4427P_20
17 Apr 1980 10:20:47

213



PLACE :Mawir well

PRESLOG:4328-1

Service given before initiation:none (first time used)
-interval :00:15

Initiation date:17/01/90
Initiation time:09:00

Try-out results:OK
Markers given :1 at beginning and 1 at end

Installation date:17/01/90
Installation time:?

Installation description :in non pumped well near Mawir
-installation place:under water
-waterlevel :?

Check up visit date :3/90
Check up visit results:OK

Calculated removal/stop date:03/05/90
Calculated removal/stop time:-

Removal date:02/05/90
Removal time:16:50
Remarks :-
-waterlevel:-
-sediment :-

Stop date :03/05/90
Stop time :08:23

Service given :batteries and rings
Eprom reading date:03/05/90 Eissa
Number of eprom :EP4328-10
Number of eprom file :EP4328P_1
Number of administration file:-
Floppy number of eprom file :C: / floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:

- 1.Not the same amount of records between Mawir 1 (4421-3) and this one.
- 2.It was not possible to give a marker at 03/05/90 at 07:20.

date:5 May 1990 (Saturday) 16:19

COUNTRY : YEMEN
STATION : MAWIR WELL
PROJECT : 408046
BEGIN DATE : 170100
START TIME : 09:00

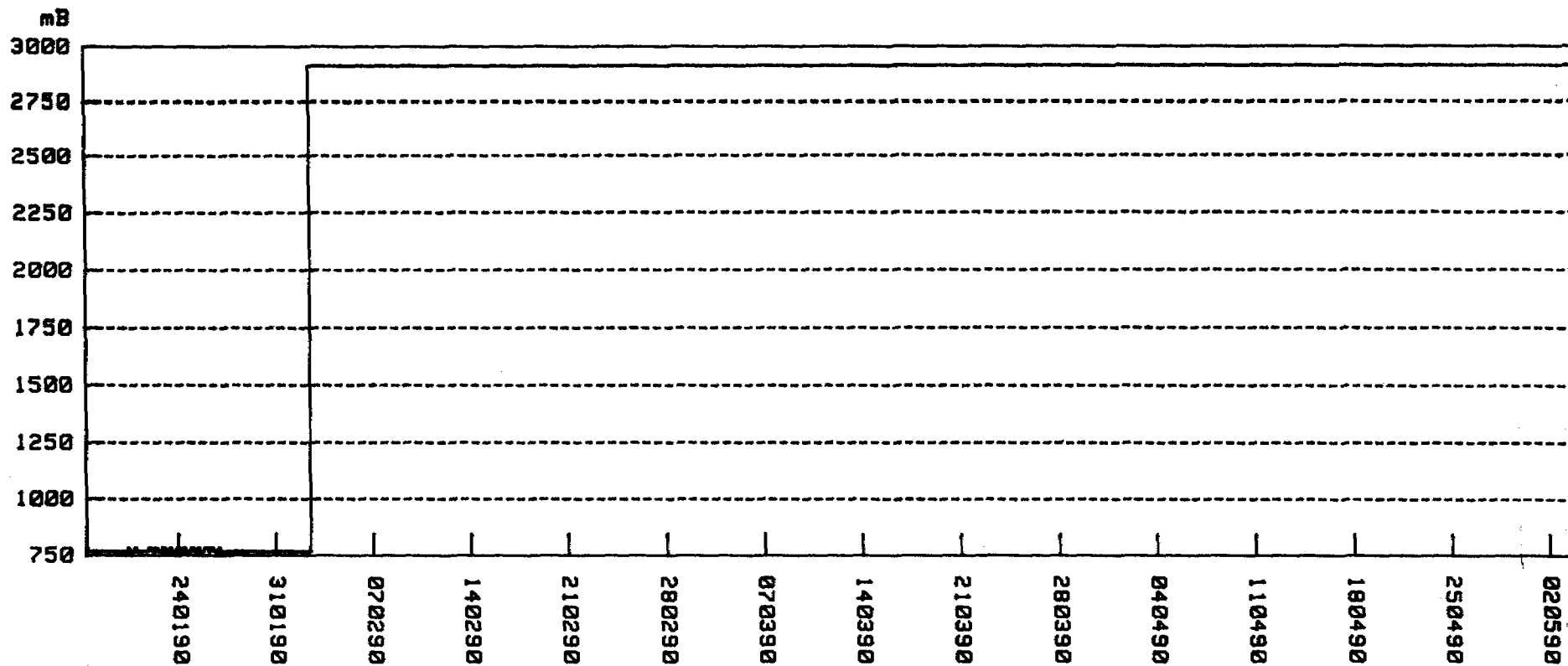
PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 030500
INTERVAL : 00:15

PAGE 1

FILE: EP4320P_0

3 May 1998 19:38:03

215



PLACE :Shamlah

PRESLOG:4427-0

Service given before initiation:none
-interval :00:15

Initiation date:15/01/88
Initiation time:19:45

Try-out results:OK
Markers given :1

Installation date:17/01/88
Installation time:10:00

Installation description :in drum
-installation place:just outside reservoir
-waterlevel :drum full= 40 cm

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:30/04/88
Calculated removal/stop time:-

Removal date:09/06/88
Removal time:10:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :-
Stop time :-

Service given :changed batteries
Eprom reading date:nk
Number of eprom :EP4427-0
Number of eprom file :EP4427P_0
Number of administration file:AD4427P_0
Floppy number of eprom file :1/2
Floppy number of administration file:4
Reference where results were listed1+2+Draft Project document for
the Shamlah dam.

General remarks:
1.

date:17 April 1990 (Tuesday) 17:40

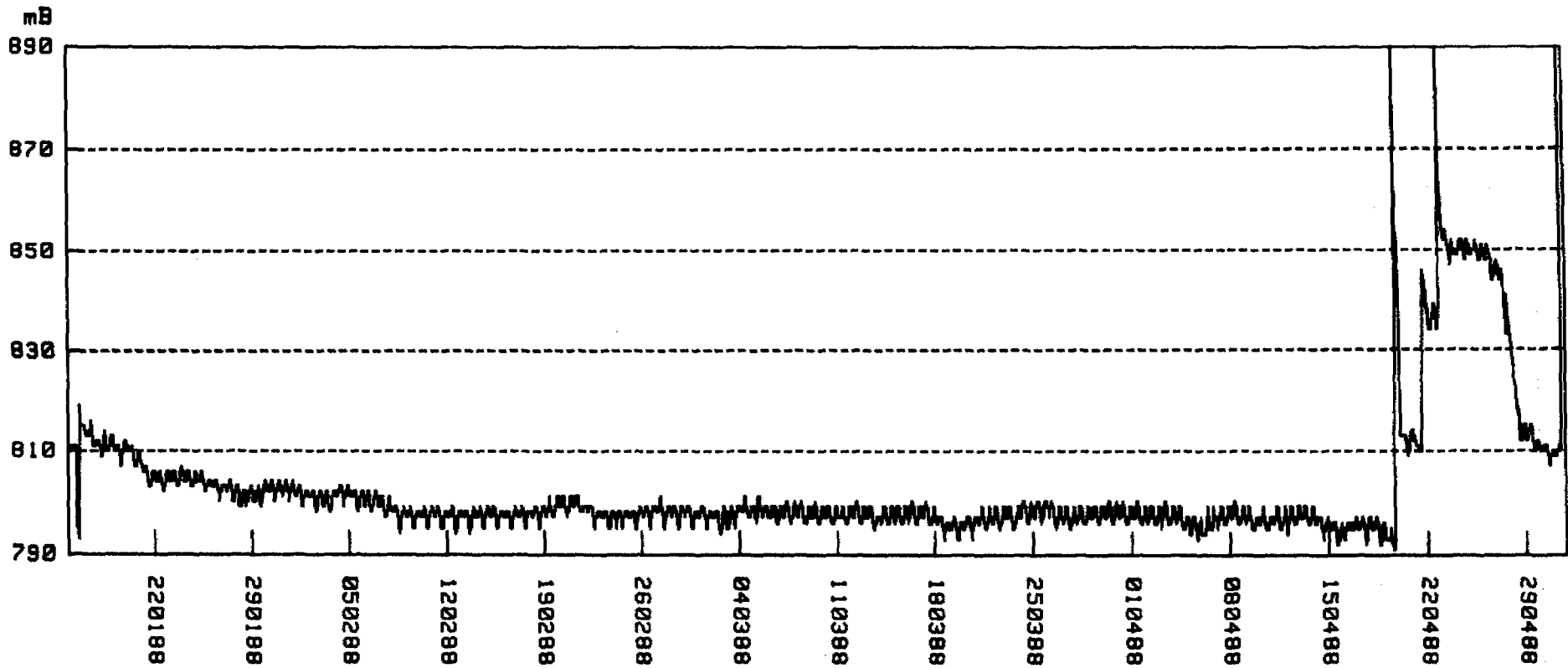
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 400046
BEGIN DATE : 150100
START TIME : 18:45

PLOT OF PRESSURE DATA
ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 090600
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_0
8 Apr 1998 12:20:40

217



COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 400046
BEGIN DATE : 190488
START TIME : 12:00

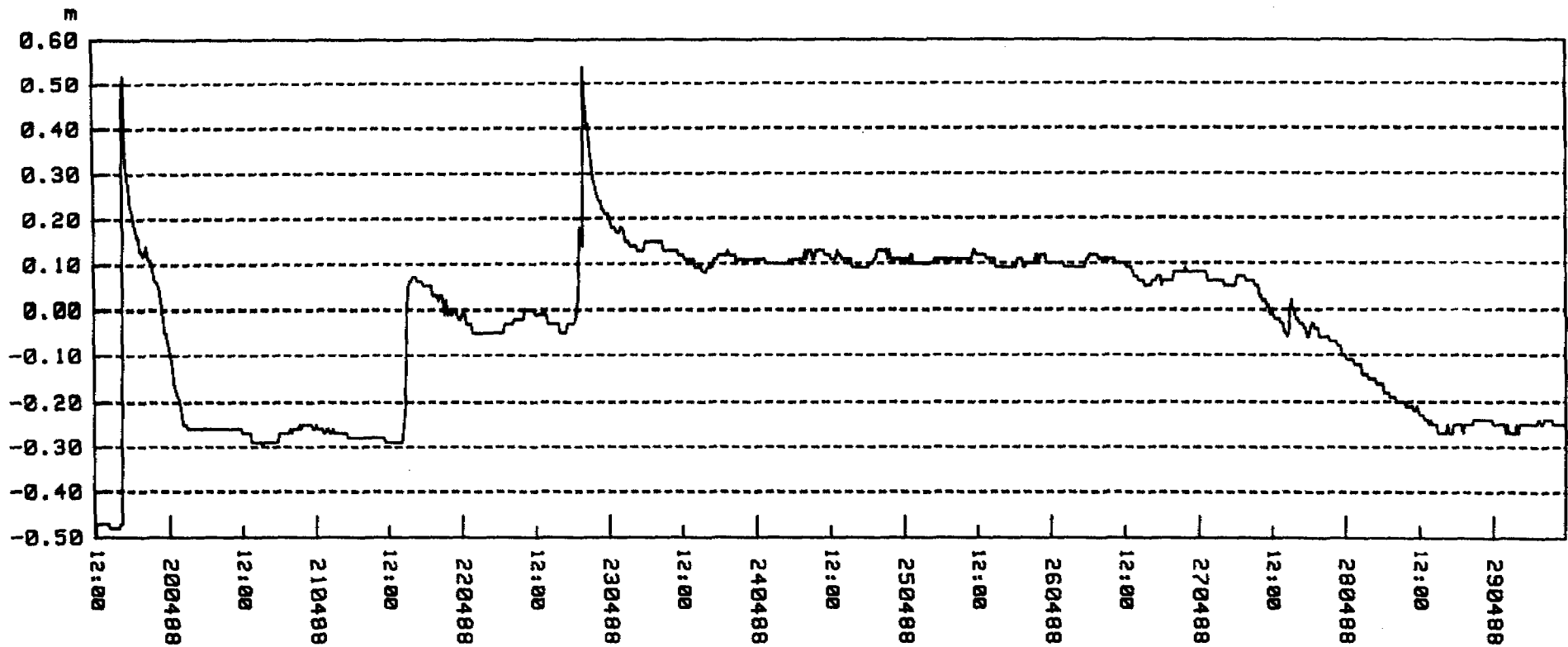
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 809 mB.
END DATE : 290488
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_0

8 Apr 1990 12:45:21

218



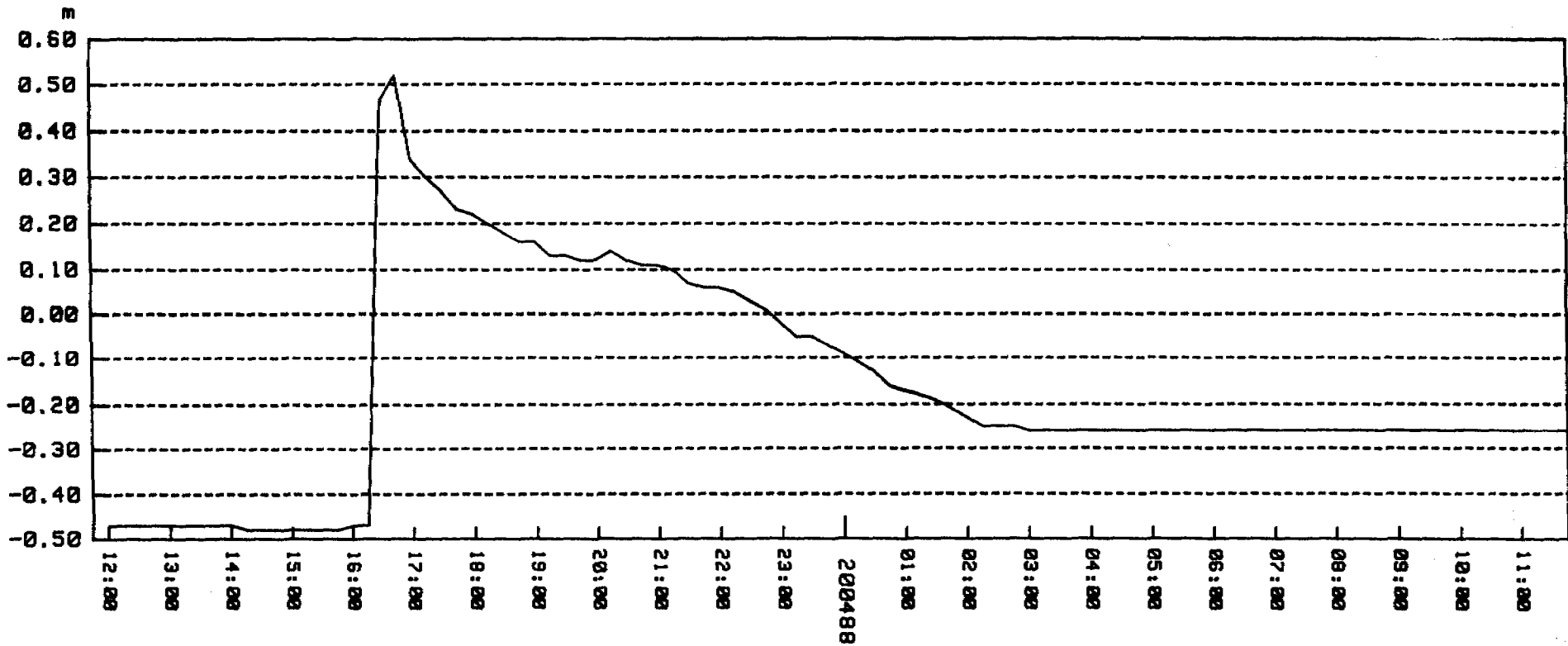
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 400046
BEGIN DATE : 198408
START TIME : 12:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 889 mB.
END DATE : 290488
INTERVAL : 00:15

PAGE 1

FILE: EP4427P_0

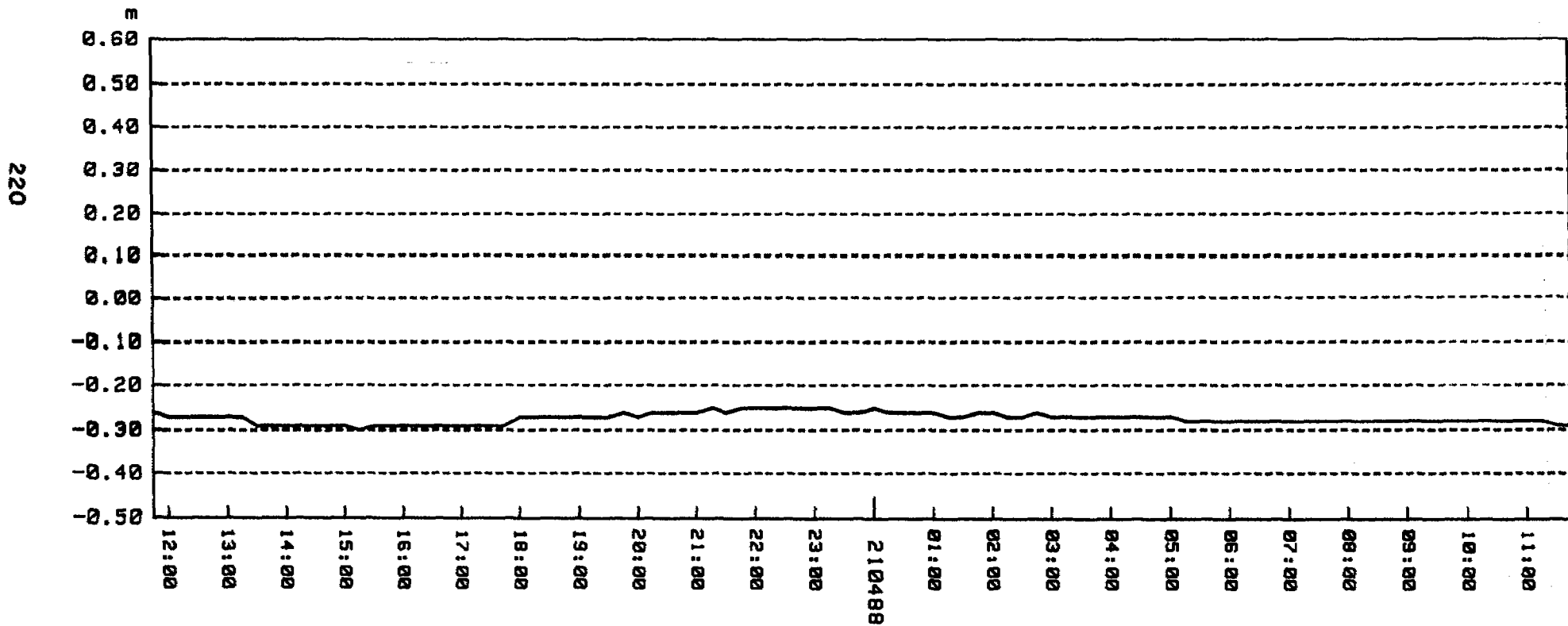
8 Apr 1990 12:54:00



COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_0
8 Apr 1998 12:56:50



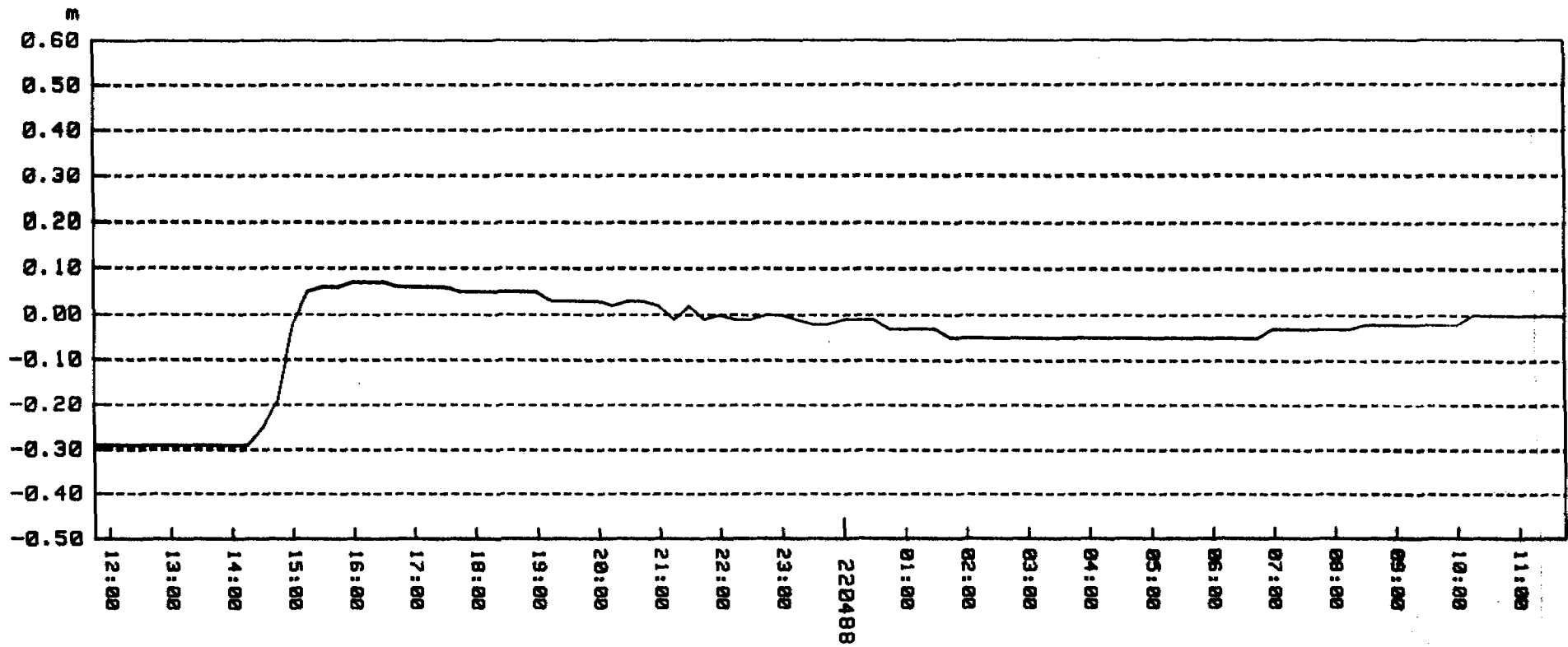
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4427P_0
8 Apr 1998 12:59:48

221

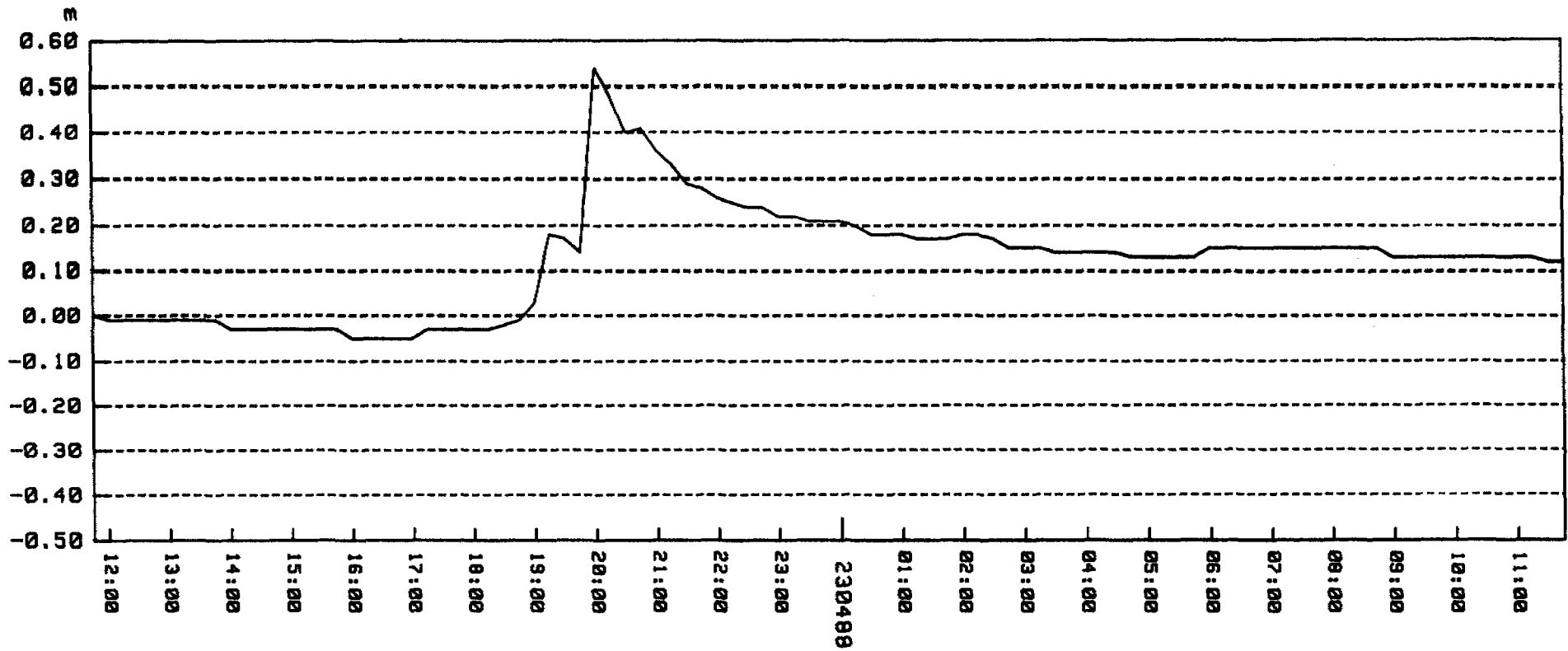


COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 409046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_0
8 Apr 1990 13:02:30

222



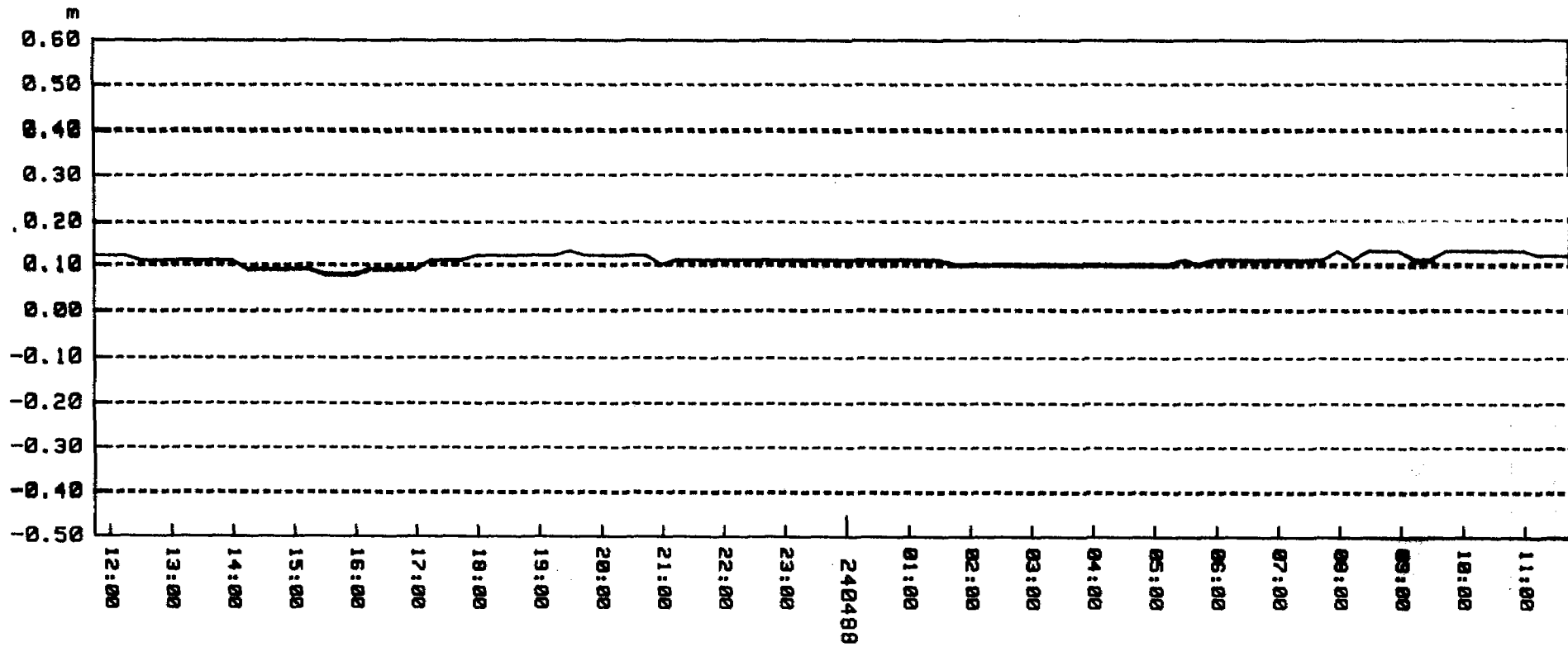
COUNTRY : YEMEN
STATION : SHANLAH
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4427P_0
8 Apr 1990 13:05:21

223



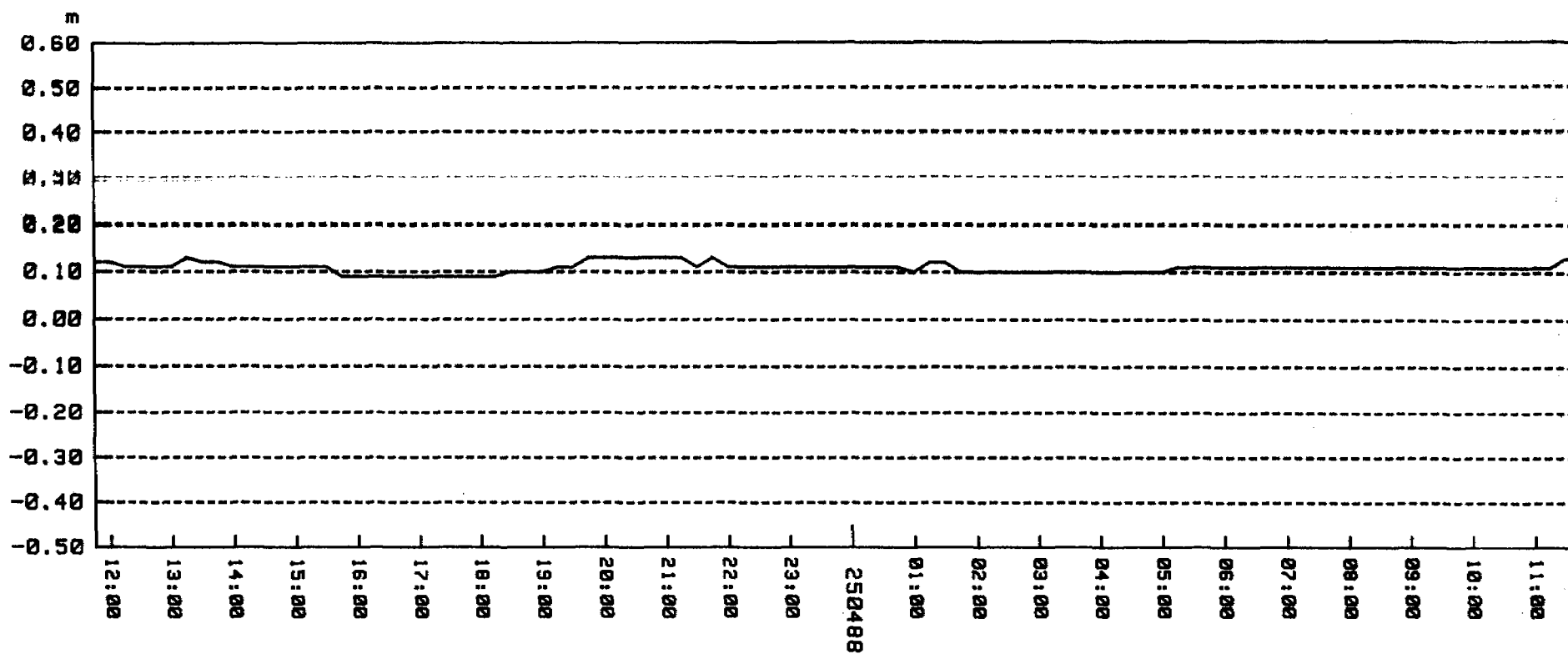
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_0

8 Apr 1990 13:00:12

224



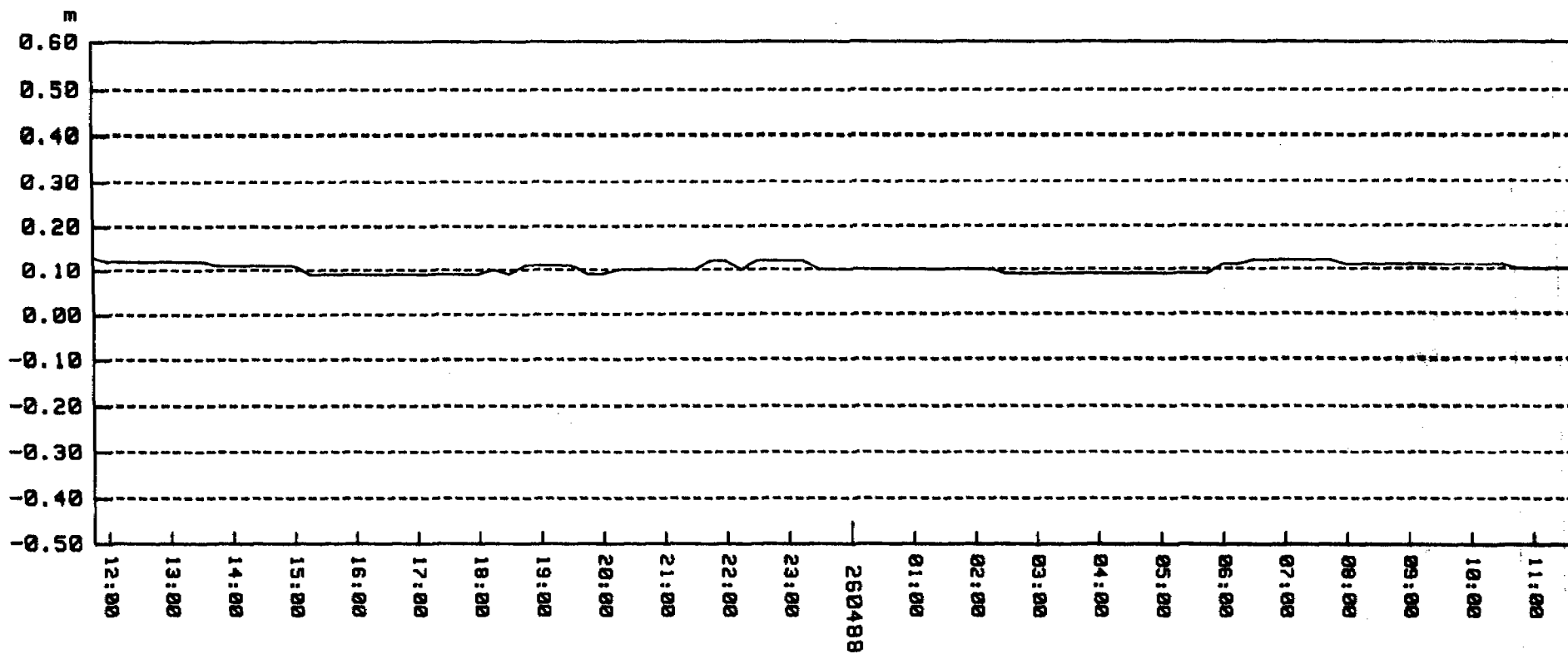
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 488046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4427P_0
8 Apr 1990 19:11:02

225



COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 408046

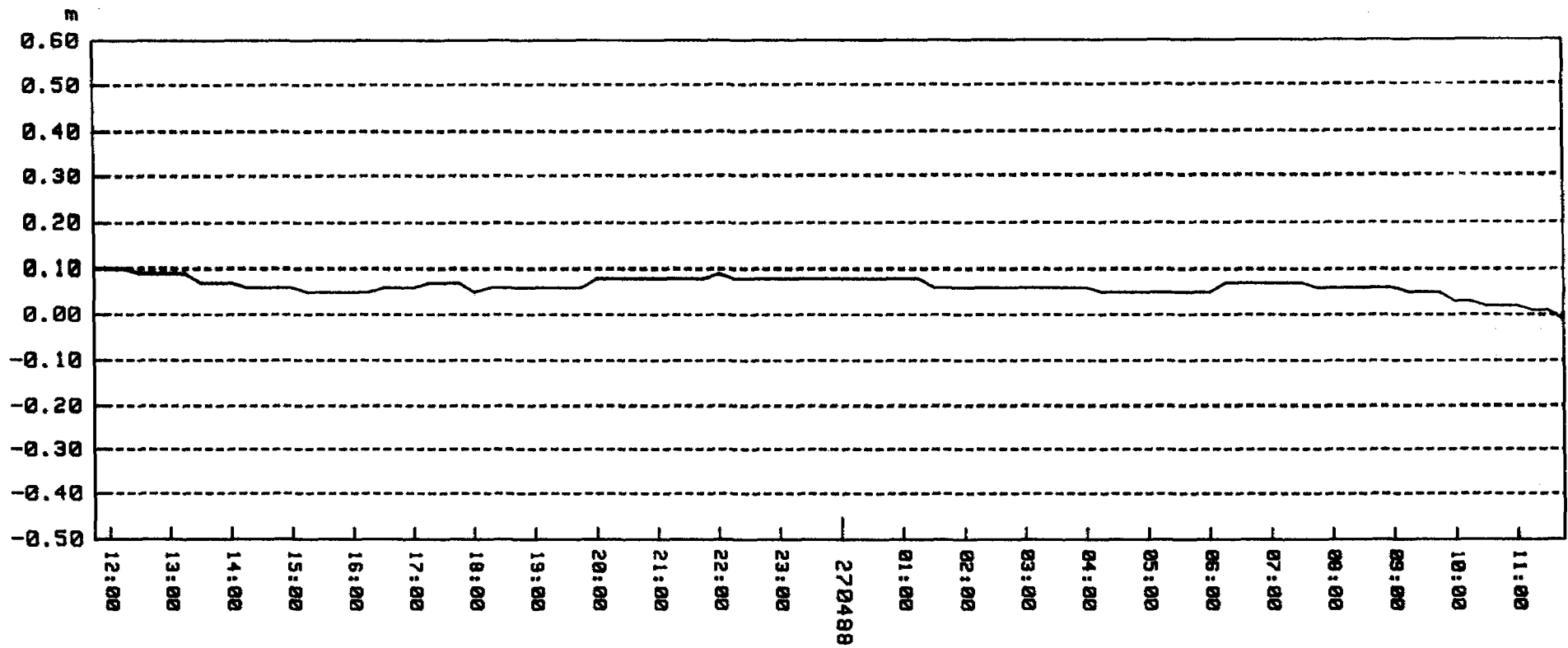
PLOT OF WATER LEVEL ELEVATION

PAGE 0

FILE: EP4427P_0

0 Apr 1990 13:14:14

226



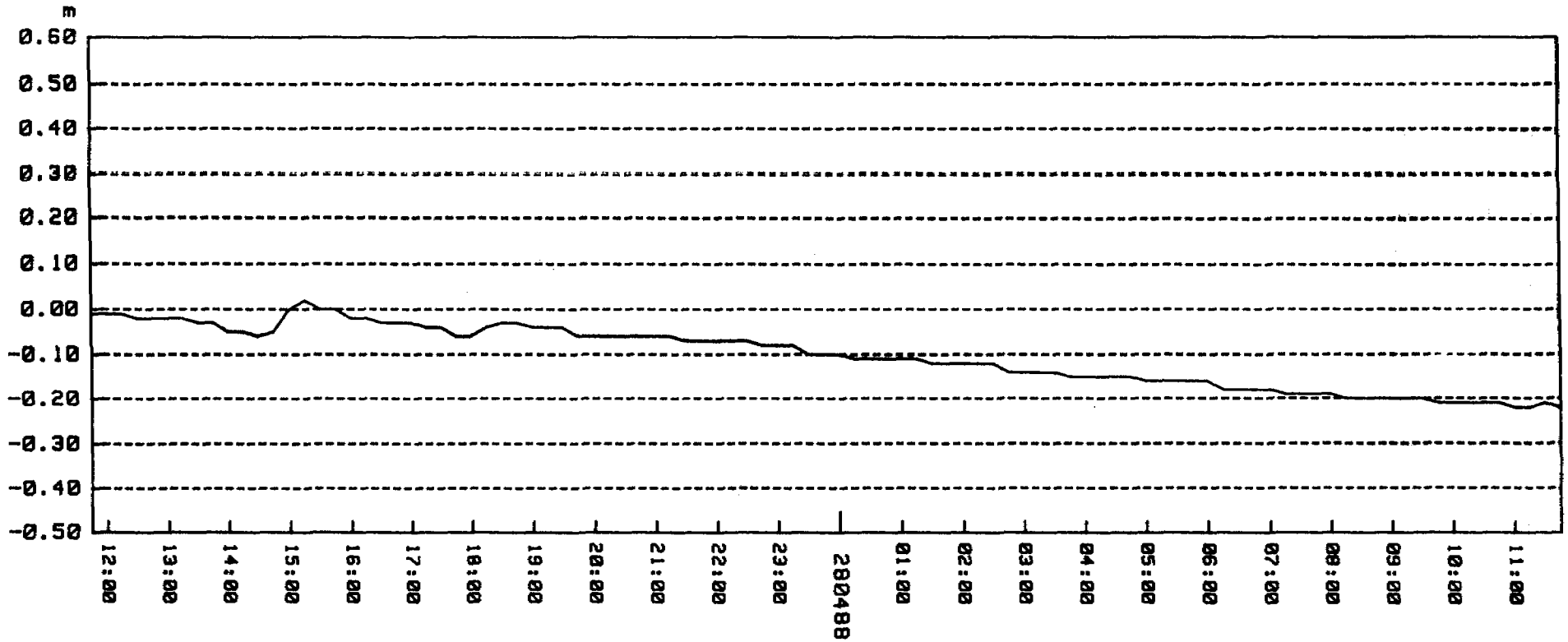
COUNTRY : YEMEN
STATION : SHANLAH
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

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FILE: EP4427P_0
8 Apr 1990 13:17:04

227



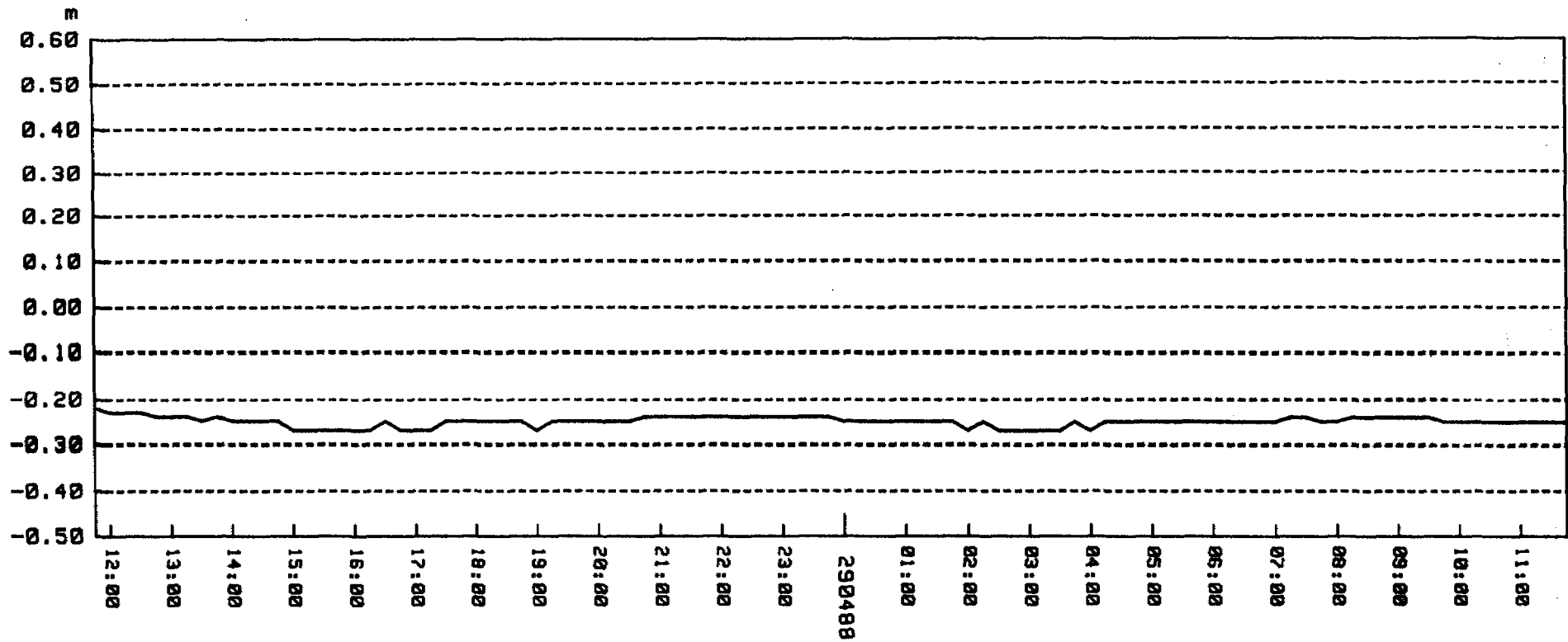
COUNTRY : YEMEN
STATION : SHAMLAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP4427P_0

8 Apr 1990 13:19:55

228



PLACE :Yaklah

PRESLOG:4438-0

Service given before initiation:none
-interval :00:15

Initiation date:31/10/88
Initiation time:08:15

Try-out results:OK
Markers given :1 ?

Installation date:31/10/88
Installation time:12:00

Installation description : without drum
-installation place: middle wadi, water level -40
cm wadi level
-waterlevel : - 65 cm wadi level

Check up visit date :-
Check up visit results:-

Calculated removal/stop date:14/02/89
Calculated removal/stop time:-

Removal date:01/11/89
Removal time:11:00
Remarks :-
-waterlevel:-
-sediment :-

Stop date :-
Stop time :-

Service given :batteries changed
Eprom reading date:nk
Number of eprom :EP4438-0
Number of eprom file :EP4438P_0
Number of administration file:-
Floppy number of eprom file :HP c: / floppy 7
Floppy number of administration file:-
Reference where results were listed :2

General remarks:
1.due to internal disputes the Preslog could not be removed earlier.

COUNTRY : YEMEN
STATION : YAKLAH
PROJECT : 400046
BEGIN DATE : 311000
START TIME : 00:15

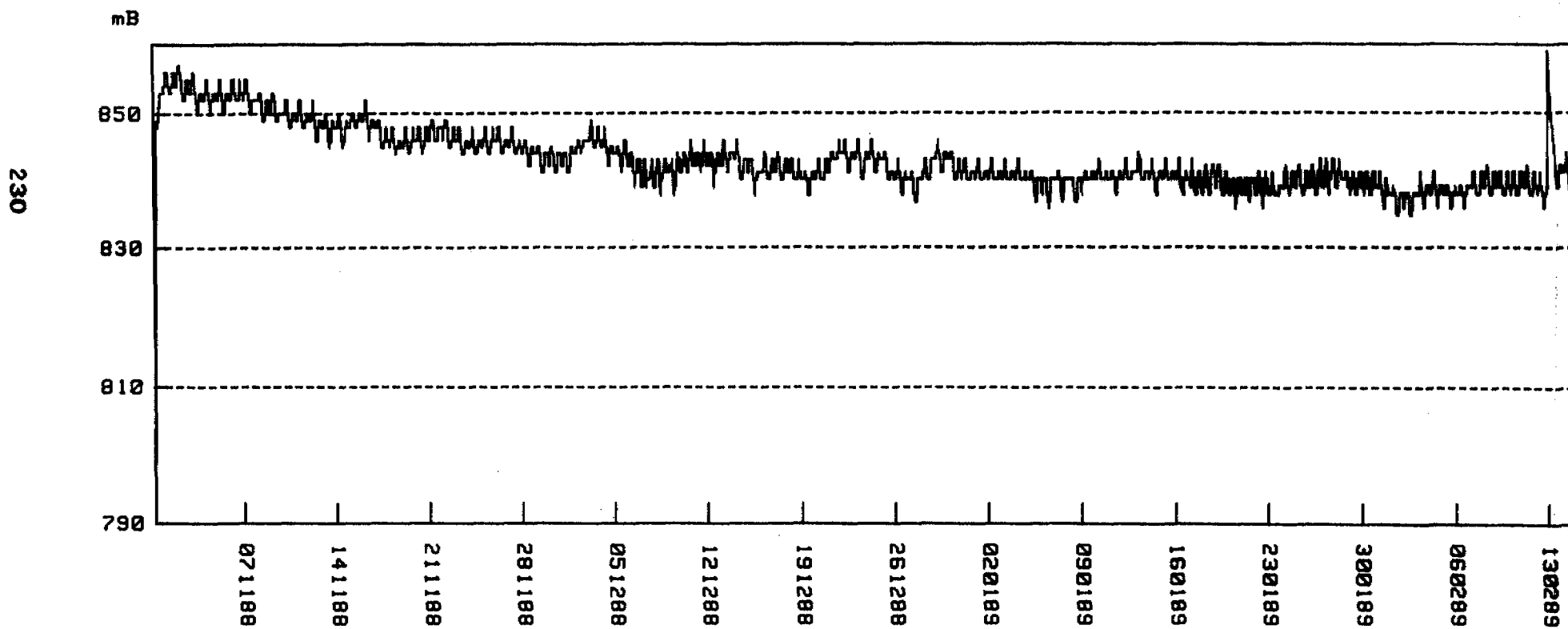
PLOT OF PRESSURE DATA

ELEVATION BAROMETER - DATALOGGER : 0 cm.
BAROMETER READING (START) : 0 mB.
END DATE : 010409
INTERVAL : 00:15

PAGE 1

FILE: EP535P_0

9 Apr 1990 00:48:13



COUNTRY : YEMEN
STATION : YAKLAH
PROJECT : 400048
BEGIN DATE : 311000
START TIME : 00:15

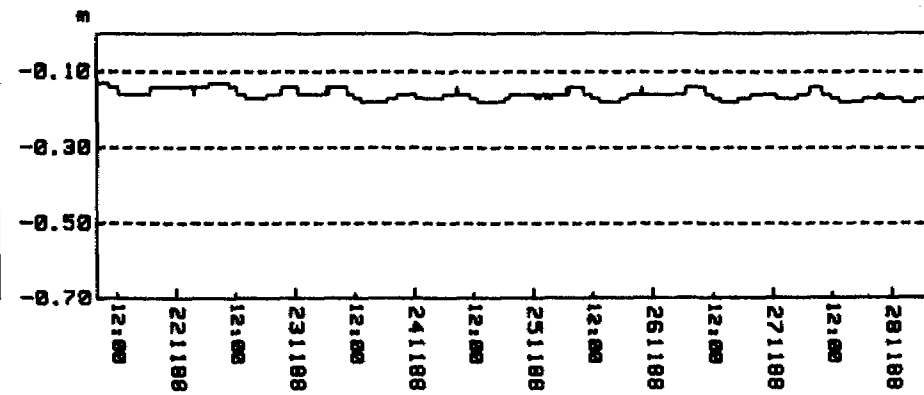
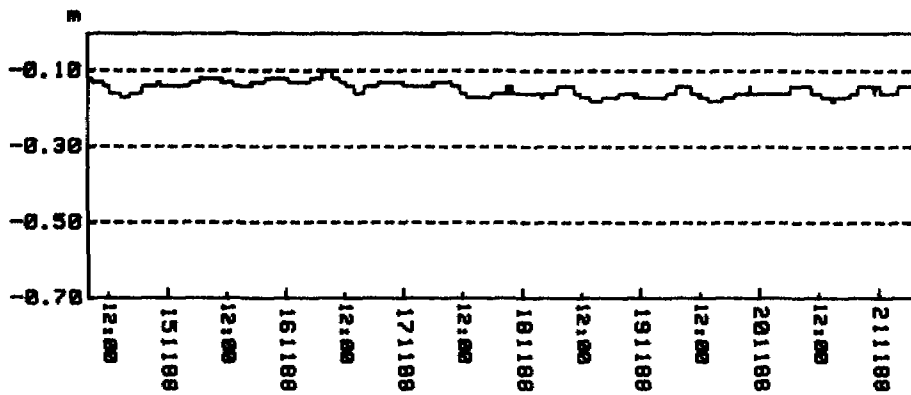
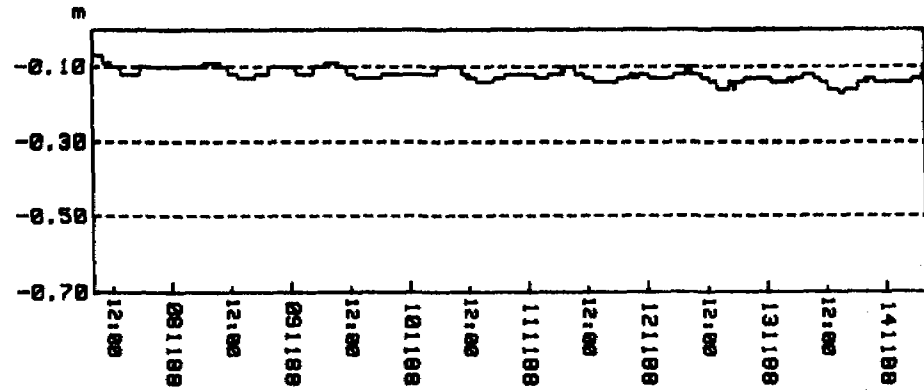
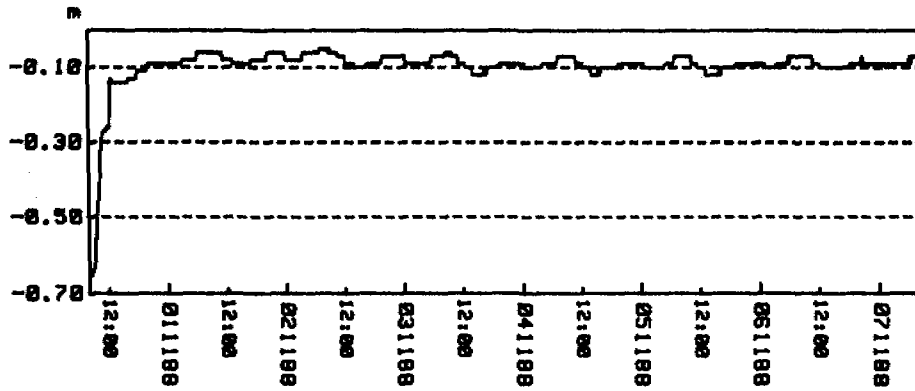
PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 787 mB.
END DATE : 010409
INTERVAL : 00:15

PAGE 1

FILE: EP535P_0

9 Apr 1990 00:02:20

231

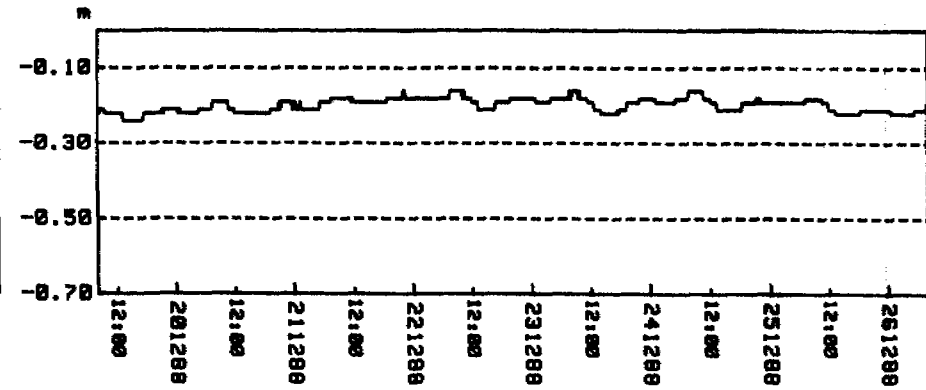
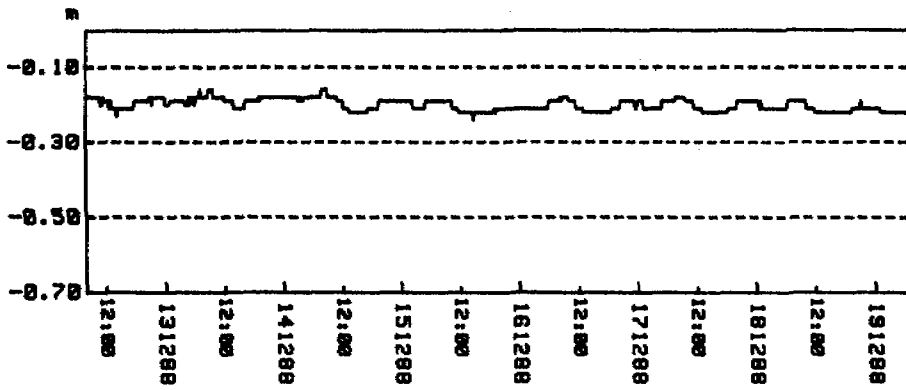
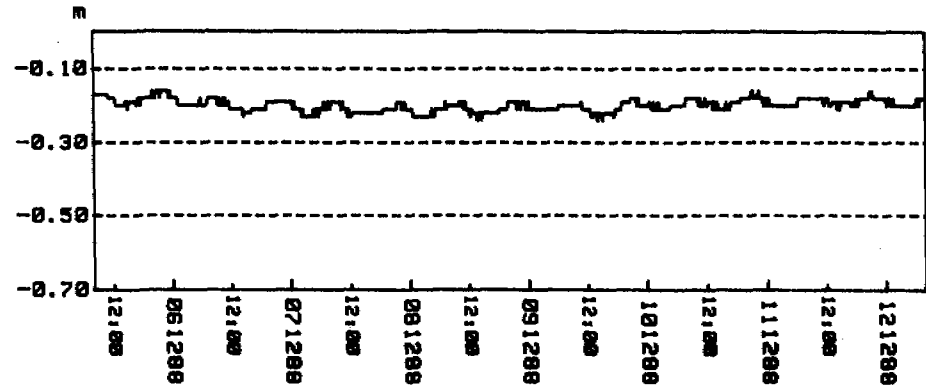
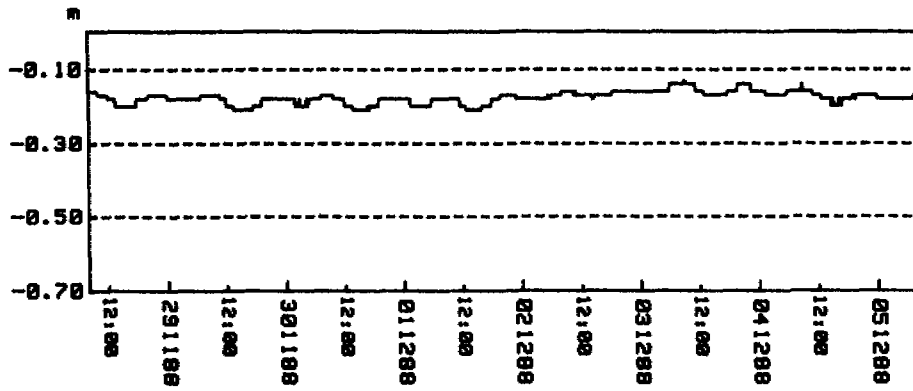


COUNTRY : YEMEN
STATION : YAKLAH
PROJECT : 408048

PLOT OF WATER LEVEL ELEVATION

FILE: EP535P_0
9 Apr 1990 09:07:00

232



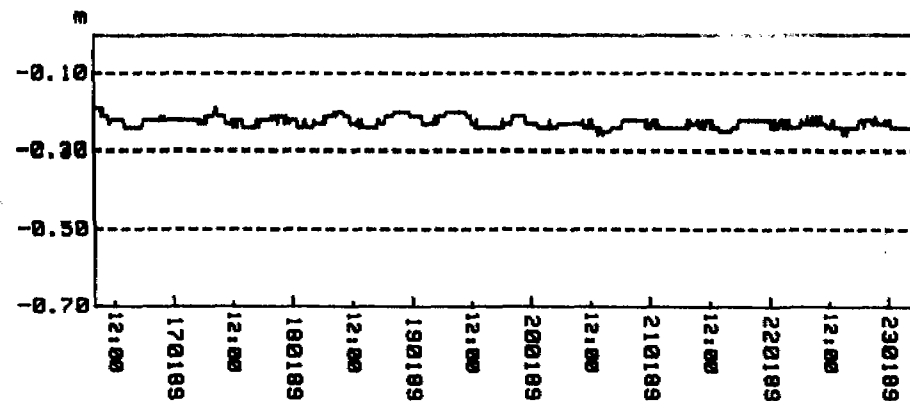
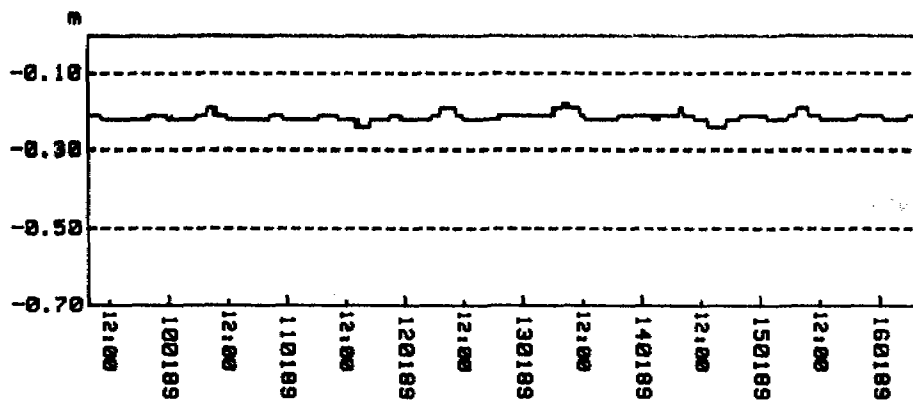
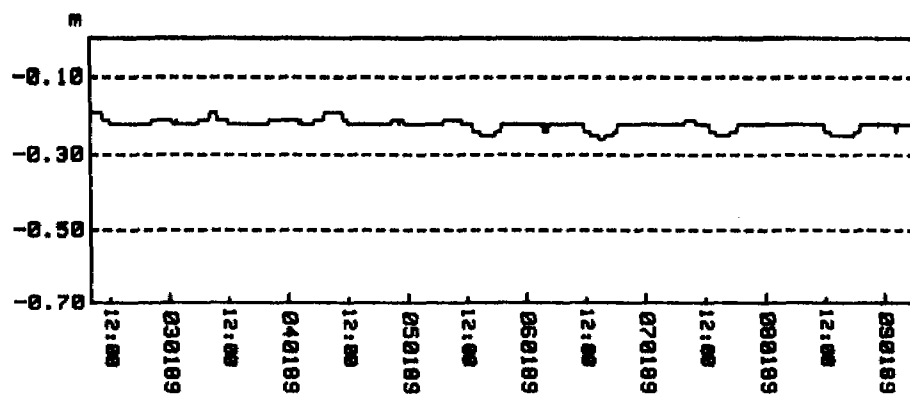
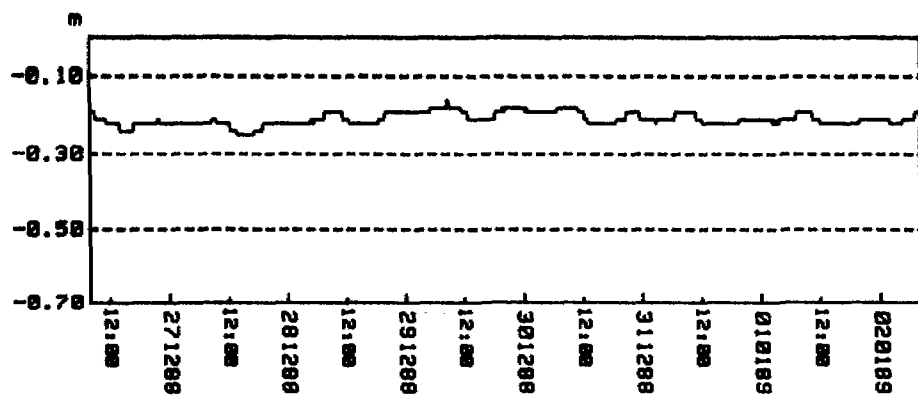
COUNTRY : YEMEN
STATION : YAKLAM
PROJECT : 400046

PLOT OF WATER LEVEL ELEVATION

FILE: EP535P_0

9 Apr 1990 09:11:50

233



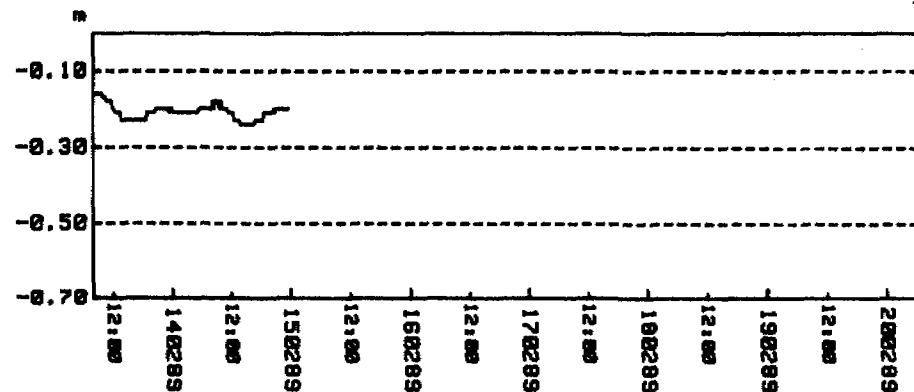
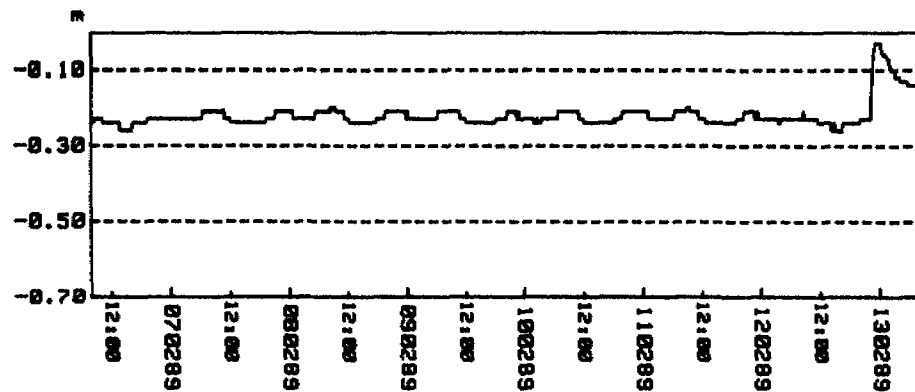
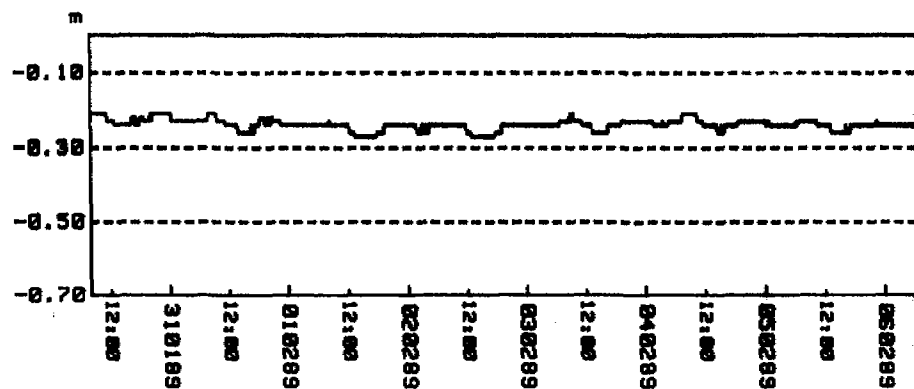
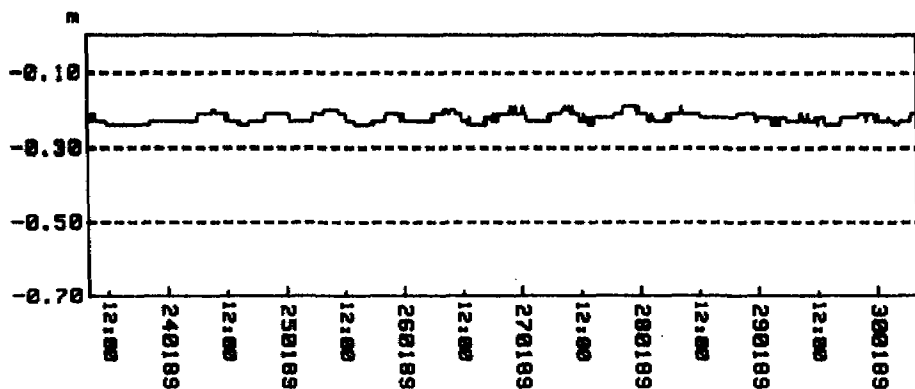
COUNTRY : YEMEN
STATION : YAKLAH
PROJECT : 408046

PLOT OF WATER LEVEL ELEVATION

FILE: EP535P_0

9 Apr 1990 09:16:28

234



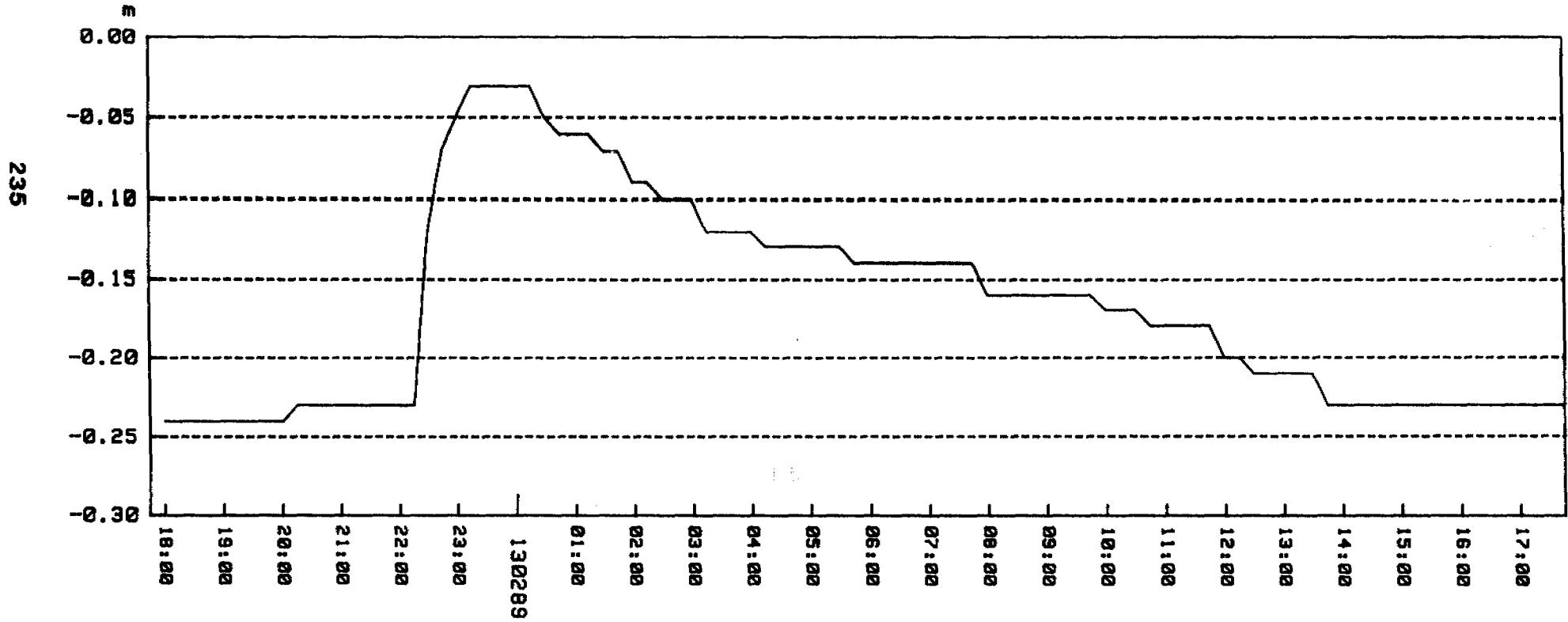
COUNTRY : YEMEN
STATION : YAKLAH
PROJECT : 408046
BEGIN DATE : 120289
START TIME : 18:00

PLOT OF WATER LEVEL ELEVATION
WATER LEVEL ELEVATION (START) : 0 m.
BAROMETER READING (START) : 797 mB.
END DATE : 140289
INTERVAL : 00:15

PAGE 1

FILE: EP535P_0

12 Apr 1990 10:32:56



PLACE : AMAD 1
 PRESLOG : 4224-20
 DATE : 21/03/89

file : amadi241

1. slope area method

input				calculations		results			input				results		
width	height	slope	roughness	A	R	V	Q	Q	starting	ending	duration	duration	maximum	volume	average
m	m	m/m		m ²	m	m/s	m ³ /s	m ³ /s	time	time	minutes	s	m ³	m ³	
							(1)	(2)	hh:mm	hh:mm					
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	21:30	21:45	15	900	0	0	
40.00	0.07	0.004	0.03	2.80	0.07	0.36	1.00	1.00	21:45	22:00	15	900	903	452	
40.00	0.96	0.004	0.03	38.40	0.92	1.99	76.36	80.02	22:00	22:15	15	900	72,020	36,461	
40.00	0.94	0.004	0.03	37.60	0.90	1.96	73.77	77.24	22:15	22:30	15	900	69,514	70,767	
40.00	0.81	0.004	0.03	32.40	0.78	1.78	57.80	60.14	22:30	22:45	15	900	54,129	61,822	
40.00	0.73	0.004	0.03	29.20	0.70	1.67	48.73	50.51	22:45	23:00	15	900	45,458	49,793	
40.00	0.73	0.004	0.03	29.20	0.70	1.67	48.73	50.51	23:00	23:15	15	900	45,458	45,458	
40.00	0.66	0.004	0.03	26.40	0.64	1.56	41.29	42.65	23:15	23:30	15	900	38,384	41,921	
40.00	0.55	0.004	0.03	22.00	0.54	1.39	30.58	31.42	23:30	23:45	15	900	28,275	33,330	
40.00	0.41	0.004	0.03	16.40	0.40	1.15	18.82	19.21	23:45	24:00	15	900	17,290	22,783	
40.00	0.37	0.004	0.03	14.80	0.36	1.07	15.89	16.18	24:00	00:15	15	900	14,561	15,926	
40.00	0.31	0.004	0.03	12.40	0.31	0.96	11.85	12.04	00:15	00:30	15	900	10,832	12,697	
40.00	0.26	0.004	0.03	10.40	0.26	0.85	8.85	8.97	00:30	00:45	15	900	8,073	9,452	
40.00	0.23	0.004	0.03	9.20	0.23	0.79	7.29	7.31	00:45	01:00	15	900	6,378	7,325	
40.00	0.18	0.004	0.03	7.20	0.18	0.67	4.81	4.85	01:00	01:15	15	900	4,368	5,473	
40.00	0.15	0.004	0.03	6.00	0.15	0.59	3.55	3.58	01:15	01:30	15	900	3,222	3,795	
40.00	0.13	0.004	0.03	5.20	0.13	0.54	2.80	2.82	01:30	01:45	15	900	2,537	2,880	
40.00	0.08	0.004	0.03	3.20	0.08	0.39	1.25	1.25	01:45	02:00	15	900	1,129	1,833	
40.00	0.05	0.004	0.03	2.00	0.05	0.29	0.57	0.57	02:00	02:15	15	900	515	822	
40.00	0.01	0.004	0.03	0.40	0.01	0.10	0.04	0.04	02:15	02:30	15	900	35	275	
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	02:30	02:45	15	900	0	18	
													Total		423,282

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2. ALAM & KENNEDY

input				calculations				input				calculations				input				results	
Speed	width	height	diameter	slope	rb	Froude	rb/d50	Reynolds	ff	fb	rb	q	Q	starting	ending	duration	duration	total volume	average volume		
m/s	m	m	m	m/m	m						m	m ³ /m	m ³ /s	time	time	minutes	s	m ³	m ³		
														hh:mm	hh:mm						
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.000	0.000	0.000	0.000	0.000	21:30	21:45	15	900	0	0		
0.65	40.00	0.07	1.00	0.004	0.070	7	70	46086	0.040	0.012	0.070	0.045	1.814	21:45	22:00	15	900	1,632	816		
2.55	40.00	0.96	1.00	0.004	0.916	26	916	2374238	0.040	0.003	0.892	2.336	93.435	22:00	22:15	15	900	84,092	42,862		
2.45	40.00	0.94	1.00	0.004	0.898	25	898	2235740	0.040	0.004	0.842	2.200	87.985	22:15	22:30	15	900	79,186	81,639		
2.30	40.00	0.81	1.00	0.004	0.778	23	778	1819889	0.040	0.005	0.759	1.790	71.619	22:30	22:45	15	900	64,457	71,822		
2.20	40.00	0.73	1.00	0.004	0.704	22	704	1574890	0.040	0.004	0.679	1.549	61.978	22:45	23:00	15	900	55,780	60,119		
2.20	40.00	0.73	1.00	0.004	0.704	22	704	1574890	0.040	0.004	0.679	1.549	61.978	23:00	23:15	15	900	55,780	55,780		
2.10	40.00	0.66	1.00	0.004	0.639	21	639	1363757	0.040	0.004	0.619	1.342	53.649	23:15	23:30	15	900	48,302	32,041		
1.95	40.00	0.55	1.00	0.004	0.535	20	535	1060937	0.040	0.003	0.521	1.044	41.752	23:30	23:45	15	900	37,577	42,939		
1.70	40.00	0.41	1.00	0.004	0.402	17	402	694215	0.040	0.003	0.396	0.683	27.320	23:45	24:00	15	900	24,588	31,082		
1.58	40.00	0.37	1.00	0.004	0.363	16	363	583407	0.040	0.005	0.358	0.574	22.959	24:00	00:15	15	900	20,663	22,684		
1.46	40.00	0.31	1.00	0.004	0.305	15	305	453011	0.040	0.005	0.306	0.446	17.828	00:15	00:30	15	900	16,045	18,354		
1.31	40.00	0.26	1.00	0.004	0.257	13	257	341751	0.040	0.007	0.257	0.336	13.449	00:30	00:45	15	900	12,104	14,075		
1.22	40.00	0.23	1.00	0.004	0.227	12	227	281965	0.040	0.007	0.223	0.277	11.096	00:45	01:00	15	900	9,987	11,045		
1.07	40.00	0.18	1.00	0.004	0.178	11	178	194017	0.040	0.007	0.172	0.191	7.635	01:00	01:15	15	900	6,872	8,429		
0.98	40.00	0.15	1.00	0.004	0.149	10	149	148302	0.040	0.008	0.147	0.146	5.836	01:15	01:30	15	900	5,253	6,062		
0.90	40.00	0.13	1.00	0.004	0.129	9	129	118153	0.040	0.009	0.127	0.116	4.650	01:30	01:45	15	900	4,185	4,719		
0.70	40.00	0.08	1.00	0.004	0.080	7	80	56693	0.040	0.010	0.078	0.056	2.231	01:45	02:00	15	900	2,008	3,096		
0.50	40.00	0.05	1.00	0.004	0.050	5	50	25347	0.040	0.020	0.048	0.025	0.998	02:00	02:15	15	900	898	1,453		
0.20	40.00	0.01	1.00	0.004	0.010	2	10	2032	0.040	0.030	0.009	0.002	0.080	02:15	02:30	15	900	72	485		
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.100	0.000	0.000	0.000	02:30	02:45	15	900	0	36		
																		Total		439,100	

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3. Chezy equation

input				results	input				results		
width	height	slope	f	V	Q	starting	ending	duration	duration	total volume	average volume
mi	mi	mi/mi	(from Alan & Kennedy)	m/s	m ³ /s	time	time	minutes	s	m ³	m ³
						hh:mm	hh:mm				
40.00	0.00	0.004	0.000	0.000	0.000	21:30	21:45	15	900	0	0
40.00	0.07	0.004	0.052	0.649	1.817	21:45	22:00	15	900	1,635	818
40.00	0.96	0.004	0.043	2.586	99.303	22:00	22:15	15	900	89,373	45,504
40.00	0.94	0.004	0.044	2.531	95.162	22:15	22:30	15	900	85,645	87,509
40.00	0.81	0.004	0.045	2.330	75.504	22:30	22:45	15	900	67,954	76,799
40.00	0.73	0.004	0.044	2.242	65.455	22:45	23:00	15	900	58,909	63,432
40.00	0.73	0.004	0.044	2.242	65.455	23:00	23:15	15	900	58,909	58,909
40.00	0.66	0.004	0.044	2.135	56.365	23:15	23:30	15	900	50,728	54,819
40.00	0.55	0.004	0.043	1.977	43.490	23:30	23:45	15	900	39,141	44,935
40.00	0.41	0.004	0.043	1.713	28.087	23:45	24:00	15	900	25,278	32,210
40.00	0.37	0.004	0.045	1.592	23.561	24:00	00:15	15	900	21,204	23,241
40.00	0.31	0.004	0.045	1.459	18.095	00:15	00:30	15	900	16,286	18,745
40.00	0.26	0.004	0.047	1.309	13.617	00:30	00:45	15	900	12,255	14,270
40.00	0.23	0.004	0.047	1.232	11.338	00:45	01:00	15	900	10,204	11,230
40.00	0.18	0.004	0.047	1.092	7.859	01:00	01:15	15	900	7,073	8,639
40.00	0.15	0.004	0.048	0.987	5.921	01:15	01:30	15	900	5,329	6,201
40.00	0.13	0.004	0.049	0.910	4.730	01:30	01:45	15	900	4,257	4,793
40.00	0.08	0.004	0.050	0.707	2.263	01:45	02:00	15	900	2,037	3,147
40.00	0.05	0.004	0.060	0.511	1.022	02:00	02:15	15	900	919	1,478
40.00	0.01	0.004	0.070	0.212	0.085	02:15	02:30	15	900	76	498
40.00	0.00	0.004	0.140	0.000	0.000	02:30	02:45	15	900	0	38
										Total	557,215

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PLACE : AMAD 1
 PRESLOG : 4224-20
 DATE : 24/03/89

file : amadi242

1. slope area method

input				calculations		results			input				results	
width	height	slope	roughness	A	R	V	Q	Q	starting	ending	duration	duration	maximum	average
m	m	m/m	m	m ²	m	m/s	m ³ /s	m ³ /s	time	time	minutes	s	m ³	m ³
							(1)	(2)	hh:mm	hh:mm				
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	20:00	20:15	15	900	0	0
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	20:15	20:30	15	900	0	0
40.00	0.27	0.004	0.03	10.80	0.27	0.87	9.43	9.55	20:30	20:45	15	900	8,599	4,299
40.00	0.39	0.004	0.03	15.60	0.38	1.11	17.33	17.67	20:45	21:00	15	900	15,902	12,250
40.00	0.33	0.004	0.03	13.20	0.32	1.00	13.14	13.36	21:00	21:15	15	900	12,026	13,964
40.00	0.28	0.004	0.03	11.20	0.28	0.89	10.01	10.15	21:15	21:30	15	900	9,137	10,581
40.00	0.25	0.004	0.03	10.00	0.25	0.83	8.30	8.40	21:30	21:45	15	900	7,561	8,349
40.00	0.21	0.004	0.03	8.40	0.21	0.74	6.21	6.28	21:45	22:00	15	900	5,651	6,606
40.00	0.20	0.004	0.03	8.00	0.20	0.72	5.73	5.79	22:00	22:15	15	900	5,208	5,429
40.00	0.17	0.004	0.03	6.80	0.17	0.64	4.37	4.41	22:15	22:30	15	900	3,971	4,589
40.00	0.15	0.004	0.03	6.00	0.15	0.59	3.55	3.58	22:30	22:45	15	900	3,222	3,596
40.00	0.14	0.004	0.03	5.60	0.14	0.57	3.17	3.19	22:45	23:00	15	900	2,871	3,047
40.00	0.14	0.004	0.03	5.60	0.14	0.57	3.17	3.19	23:00	23:15	15	900	2,871	2,871
40.00	0.13	0.004	0.03	5.20	0.13	0.54	2.80	2.82	23:15	23:30	15	900	2,537	2,704
40.00	0.12	0.004	0.03	4.80	0.12	0.51	2.45	2.47	23:30	23:45	15	900	2,220	2,379
40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	23:45	24:00	15	900	1,638	1,929
40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	24:00	00:15	15	900	1,638	1,638
40.00	0.08	0.004	0.03	3.20	0.08	0.39	1.25	1.25	00:15	00:30	15	900	1,129	1,383
40.00	0.07	0.004	0.03	2.80	0.07	0.36	1.00	1.00	00:30	00:45	15	900	903	1,016
40.00	0.06	0.004	0.03	2.40	0.06	0.32	0.77	0.78	00:45	01:00	15	900	699	801
40.00	0.06	0.004	0.03	2.40	0.06	0.32	0.77	0.78	01:00	01:15	15	900	699	699
40.00	0.04	0.004	0.03	1.60	0.04	0.25	0.39	0.39	01:15	01:30	15	900	355	527
40.00	0.03	0.004	0.03	1.20	0.03	0.20	0.24	0.24	01:30	01:45	15	900	220	288
40.00	0.03	0.004	0.03	1.20	0.03	0.20	0.24	0.24	01:45	02:00	15	900	220	220
40.00	0.02	0.004	0.03	0.80	0.02	0.16	0.12	0.12	02:00	02:15	15	900	112	166
40.00	0.01	0.004	0.03	0.40	0.01	0.10	0.04	0.04	02:15	02:30	15	900	35	74
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	02:30	02:45	15	900	0	18

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Total 48,329

2. ALAM & KENNEDY

input					calculations				input		calculations			input		results			
Speed	width	height	diameter	slope	rb	Froude	rb/d50	Reynolds	ff	fb	rb	q	Q	starting	ending	duration	duration	total volume	average volume
m/s	ml	ml	mm	ml/ml	ml						ml	m3/s/ml	m3/s	time	time	minutes	s	m3	m3
														hh:mm	hh:mm				
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.000	0.000	0.000	0.000	20:00	20:15	15	900	0	0
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.000	0.000	0.000	0.000	20:15	20:30	15	900	0	0
1.31	40.00	0.27	1.00	0.004	0.266	13	266	354720	0.033	0.010	0.235	0.349	13.960	20:30	20:45	15	900	12,564	6,282
1.47	40.00	0.39	1.00	0.004	0.383	15	383	571569	0.040	0.015	0.379	0.562	22.493	20:45	21:00	15	900	20,244	16,404
1.45	40.00	0.33	1.00	0.004	0.325	15	325	478463	0.040	0.007	0.315	0.471	18.829	21:00	21:15	15	900	16,946	18,595
1.34	40.00	0.28	1.00	0.004	0.276	14	276	376096	0.040	0.007	0.269	0.370	14.801	21:15	21:30	15	900	13,321	15,134
1.23	40.00	0.25	1.00	0.004	0.247	12	247	308691	0.040	0.009	0.236	0.304	12.148	21:30	21:45	15	900	10,933	12,127
1.15	40.00	0.21	1.00	0.004	0.208	12	208	242915	0.040	0.009	0.207	0.239	9.560	21:45	22:00	15	900	8,604	9,768
1.10	40.00	0.20	1.00	0.004	0.198	11	198	221399	0.040	0.009	0.189	0.218	8.713	22:00	22:15	15	900	7,842	8,223
1.00	40.00	0.17	1.00	0.004	0.169	10	169	171335	0.040	0.009	0.156	0.169	6.743	22:15	22:30	15	900	6,068	6,935
0.96	40.00	0.15	1.00	0.004	0.149	10	149	145275	0.040	0.009	0.144	0.143	5.717	22:30	22:45	15	900	5,145	5,607
0.93	40.00	0.14	1.00	0.004	0.139	9	139	131418	0.040	0.009	0.135	0.129	5.172	22:45	23:00	15	900	4,655	4,900
0.93	40.00	0.14	1.00	0.004	0.139	9	139	131418	0.040	0.009	0.135	0.129	5.172	23:00	23:15	15	900	4,655	4,655
0.90	40.00	0.13	1.00	0.004	0.129	9	129	118153	0.040	0.009	0.127	0.116	4.650	23:15	23:30	15	900	4,185	4,420
0.87	40.00	0.12	1.00	0.004	0.119	9	119	105482	0.040	0.009	0.118	0.104	4.151	23:30	23:45	15	900	3,736	3,960
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	23:45	24:00	15	900	2,830	3,283
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	24:00	00:15	15	900	2,830	2,830
0.70	40.00	0.08	1.00	0.004	0.080	7	80	56693	0.040	0.010	0.078	0.056	2.231	00:15	00:30	15	900	2,008	2,419
0.65	40.00	0.07	1.00	0.004	0.070	7	70	46086	0.040	0.010	0.067	0.045	1.814	00:30	00:45	15	900	1,632	1,820
0.58	40.00	0.06	1.00	0.004	0.060	6	60	35266	0.040	0.015	0.059	0.035	1.388	00:45	01:00	15	900	1,249	1,441
0.58	40.00	0.06	1.00	0.004	0.060	6	60	35266	0.040	0.015	0.059	0.035	1.388	01:00	01:15	15	900	1,249	1,249
0.45	40.00	0.04	1.00	0.004	0.040	5	40	18259	0.040	0.020	0.039	0.018	0.719	01:15	01:30	15	900	647	948
0.30	40.00	0.03	1.00	0.004	0.030	3	30	9134	0.040	0.020	0.017	0.009	0.359	01:30	01:45	15	900	324	485
0.30	40.00	0.03	1.00	0.004	0.030	3	30	9134	0.040	0.020	0.017	0.009	0.359	01:45	02:00	15	900	324	324
0.30	40.00	0.02	1.00	0.004	0.020	3	20	6092	0.040	0.020	0.017	0.006	0.240	02:00	02:15	15	900	216	270
0.20	40.00	0.01	1.00	0.004	0.010	2	10	2032	0.040	0.030	0.009	0.002	0.080	02:15	02:30	15	900	72	144
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.030	0.000	0.000	0.000	02:30	02:45	15	900	0	36

Total 63,898

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3. Chezy equation

input				results	input				results		
width	height	slope	f	V	Q	starting	ending	duration	duration	total volume	average volume
mi	mi	mi/mi	(from Alam & Kennedy)	m/s	m ³ /s	time	time	minutes	s	m ³	m ³
						hh:mm	hh:mm				
40.00	0.00	0.004	0.040	0.000	0.000	20:00	20:15	15	900	0	0
40.00	0.00	0.004	0.040	0.000	0.000	20:15	20:30	15	900	0	0
40.00	0.27	0.004	0.043	1.395	15.062	20:30	20:45	15	900	13,555	6,778
40.00	0.39	0.004	0.055	1.478	23.051	20:45	21:00	15	900	20,746	17,151
40.00	0.33	0.004	0.047	1.473	19.437	21:00	21:15	15	900	17,494	19,120
40.00	0.28	0.004	0.047	1.358	15.210	21:15	21:30	15	900	13,689	15,591
40.00	0.25	0.004	0.049	1.258	12.577	21:30	21:45	15	900	11,319	12,504
40.00	0.21	0.004	0.049	1.154	9.692	21:45	22:00	15	900	8,723	10,021
40.00	0.20	0.004	0.049	1.126	9.011	22:00	22:15	15	900	8,110	8,416
40.00	0.17	0.004	0.049	1.039	7.067	22:15	22:30	15	900	6,360	7,235
40.00	0.15	0.004	0.049	0.977	5.860	22:30	22:45	15	900	5,274	5,817
40.00	0.14	0.004	0.049	0.944	5.285	22:45	23:00	15	900	4,757	5,015
40.00	0.14	0.004	0.049	0.944	5.285	23:00	23:15	15	900	4,757	4,757
40.00	0.13	0.004	0.049	0.910	4.730	23:15	23:30	15	900	4,257	4,507
40.00	0.12	0.004	0.049	0.874	4.196	23:30	23:45	15	900	3,776	4,017
40.00	0.10	0.004	0.050	0.790	3.162	23:45	24:00	15	900	2,845	3,311
40.00	0.10	0.004	0.050	0.790	3.162	24:00	00:15	15	900	2,845	2,845
40.00	0.08	0.004	0.050	0.707	2.263	00:15	00:30	15	900	2,037	2,441
40.00	0.07	0.004	0.050	0.662	1.853	00:30	00:45	15	900	1,668	1,852
40.00	0.06	0.004	0.055	0.584	1.402	00:45	01:00	15	900	1,262	1,465
40.00	0.06	0.004	0.055	0.584	1.402	01:00	01:15	15	900	1,262	1,262
40.00	0.04	0.004	0.060	0.457	0.731	01:15	01:30	15	900	658	960
40.00	0.03	0.004	0.060	0.396	0.475	01:30	01:45	15	900	428	543
40.00	0.03	0.004	0.060	0.396	0.475	01:45	02:00	15	900	428	428
40.00	0.02	0.004	0.060	0.323	0.259	02:00	02:15	15	900	233	330
40.00	0.01	0.004	0.070	0.212	0.085	02:15	02:30	15	900	76	155
40.00	0.00	0.004	0.070	0.000	0.000	02:30	02:45	15	900	0	38
										Total	77,919

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PLACE : AMAD 1
 PRESLOG : 4224-20
 DATE : 28/03/89

file : amad1243

1. slope area method

input				calculations		results			input				results	
width	height	slope	roughness	A	R	V	Q	Q	starting	ending	duration	duration	maximum	average
mi	mi	mi/mi	m	m ²	m	m/s	m ³ /s	m ³ /s	time	time	minutes	s	m ³	m ³
									hh:mm	hh:mm				
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	18:45	19:00	15	900	0	0
40.00	0.13	0.004	0.03	5.20	0.13	0.54	2.80	2.82	19:00	19:15	15	900	2,537	1,269
40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	19:15	19:30	15	900	1,638	2,088
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	19:30	19:45	15	900	1,374	1,506
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	19:45	20:00	15	900	1,374	1,374
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	20:00	20:15	15	900	1,374	1,374
40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	20:15	20:30	15	900	1,638	1,506
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	20:30	20:45	15	900	1,374	1,506
40.00	0.08	0.004	0.03	3.20	0.08	0.39	1.25	1.25	20:45	21:00	15	900	1,129	1,251
40.00	0.08	0.004	0.03	3.20	0.08	0.39	1.25	1.25	21:00	21:15	15	900	1,129	1,129
40.00	0.06	0.004	0.03	2.40	0.06	0.32	0.77	0.78	21:15	21:30	15	900	699	914
40.00	0.05	0.004	0.03	2.00	0.05	0.29	0.57	0.57	21:30	21:45	15	900	515	607
40.00	0.05	0.004	0.03	2.00	0.05	0.29	0.57	0.57	21:45	22:00	15	900	515	515
40.00	0.03	0.004	0.03	1.20	0.03	0.20	0.24	0.24	22:00	22:15	15	900	220	368
40.00	0.03	0.004	0.03	1.20	0.03	0.20	0.24	0.24	22:15	22:30	15	900	220	220
40.00	0.01	0.004	0.03	0.40	0.01	0.10	0.04	0.04	22:30	22:45	15	900	35	128
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	22:45	23:00	15	900	0	18
													Total	15,771

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2. ALAM & KENNEDY

input					calculations				input				calculations				input			results			
Speed	width	height	diameter	slope	rb	Froude	rb/d50	Reynolds	ff	fb	rb	q	Q	starting	ending	duration	duration	total volume	average volume				
m/s	m	m	mm	m/m	m						m	m ³ /s/m	m ³ /s	time	time	minutes	s	m ³	m ³				

														hh:mm	hh:mm								
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.000	0.000	0.000	0.000	0.000	18:45	19:00	15	900	0	0				
0.90	40.00	0.13	1.00	0.004	0.129	9	129	118153	0.040	0.009	0.127	0.116	4.650	19:00	19:15	15	900	4,185	2,092				
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	19:15	19:30	15	900	2,830	3,507				
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	19:30	19:45	15	900	2,387	2,608				
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	19:45	20:00	15	900	2,387	2,387				
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	20:00	20:15	15	900	2,387	2,387				
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	20:15	20:30	15	900	2,830	2,608				
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	20:30	20:45	15	900	2,387	2,608				
0.70	40.00	0.08	1.00	0.004	0.080	7	80	56693	0.040	0.010	0.078	0.056	2.231	20:45	21:00	15	900	2,008	2,197				
0.70	40.00	0.08	1.00	0.004	0.080	7	80	56693	0.040	0.010	0.078	0.056	2.231	21:00	21:15	15	900	2,008	2,008				
0.58	40.00	0.06	1.00	0.004	0.060	6	60	35266	0.040	0.015	0.059	0.035	1.388	21:15	21:30	15	900	1,249	1,629				
0.51	40.00	0.05	1.00	0.004	0.050	5	50	25854	0.040	0.017	0.047	0.025	1.017	21:30	21:45	15	900	916	1,082				
0.51	40.00	0.05	1.00	0.004	0.050	5	50	25854	0.040	0.017	0.047	0.025	1.017	21:45	22:00	15	900	916	916				
0.30	40.00	0.03	1.00	0.004	0.030	3	30	9134	0.040	0.020	0.017	0.009	0.359	22:00	22:15	15	900	324	620				
0.30	40.00	0.03	1.00	0.004	0.030	3	30	9134	0.040	0.020	0.017	0.009	0.359	22:15	22:30	15	900	324	324				
0.20	40.00	0.01	1.00	0.004	0.010	2	10	2032	0.040	0.030	0.009	0.002	0.080	22:30	22:45	15	900	72	198				
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.000	0.000	0.000	0.000	22:45	23:00	15	900	0	36				
																		Total		27,207			

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3. Chezy equation

input				results	input				results		
width	height	slope	f	V	Q	starting	ending	duration	duration	total volume	average volume
m	m	m/m	(from Alam & Kennedy)	m/s	m ³ /s	time	time	minutes	s	m ³	m ³
						hh:mm	hh:mm				
40.00	0.00	0.004	0.000	0.000	0.000	18:45	19:00	15	900	0	0
40.00	0.13	0.004	0.049	0.910	4.730	19:00	19:15	15	900	4,257	2,129
40.00	0.10	0.004	0.050	0.790	3.162	19:15	19:30	15	900	2,845	3,351
40.00	0.09	0.004	0.050	0.750	2.700	19:30	19:45	15	900	2,430	2,638
40.00	0.09	0.004	0.050	0.750	2.700	19:45	20:00	15	900	2,430	2,430
40.00	0.09	0.004	0.050	0.750	2.700	20:00	20:15	15	900	2,430	2,430
40.00	0.10	0.004	0.050	0.790	3.162	20:15	20:30	15	900	2,845	2,638
40.00	0.09	0.004	0.050	0.750	2.700	20:30	20:45	15	900	2,430	2,638
40.00	0.08	0.004	0.050	0.707	2.263	20:45	21:00	15	900	2,037	2,234
40.00	0.08	0.004	0.050	0.707	2.263	21:00	21:15	15	900	2,037	2,037
40.00	0.06	0.004	0.055	0.584	1.402	21:15	21:30	15	900	1,262	1,650
40.00	0.05	0.004	0.057	0.524	1.048	21:30	21:45	15	900	943	1,103
40.00	0.05	0.004	0.057	0.524	1.048	21:45	22:00	15	900	943	943
40.00	0.03	0.004	0.060	0.396	0.475	22:00	22:15	15	900	428	685
40.00	0.03	0.004	0.060	0.396	0.475	22:15	22:30	15	900	428	428
40.00	0.01	0.004	0.070	0.212	0.085	22:30	22:45	15	900	76	252
40.00	0.00	0.004	0.040	0.000	0.000	22:45	23:00	15	900	0	38
										=====	
										Total	27,822

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PLACE : AMAD 1
 PRESLOG : 4224-20
 DATE : 30/03/89

file : amad1244

1. slope area method

input				calculations		results			input				results	
width	height	slope	roughness	A	R	V	Q	Q	starting	ending	duration	duration	maximum	volume
m	m	m/m	m	m ²	m	m/s	m ³ /s	m ³ /s	time	time	minutes	s	m ³	m ³
							(1)	(2)	hh:mm	hh:mm				
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	15:15	15:30	15	900	0	0
40.00	0.30	0.004	0.03	12.00	0.30	0.94	11.23	11.39	15:30	15:45	15	900	10,254	5,127
40.00	0.40	0.004	0.03	16.00	0.39	1.13	18.07	18.43	15:45	16:00	15	900	16,590	13,422
40.00	0.47	0.004	0.03	18.00	0.46	1.25	23.39	24.15	16:00	16:15	15	900	21,731	19,160
40.00	0.48	0.004	0.03	19.20	0.47	1.27	24.43	25.01	16:15	16:30	15	900	22,510	22,120
40.00	0.64	0.004	0.03	25.60	0.62	1.53	39.25	40.50	16:30	16:45	15	900	36,453	29,482
40.00	0.48	0.004	0.03	19.20	0.47	1.27	24.43	25.01	16:45	17:00	15	900	22,510	29,482
40.00	0.45	0.004	0.03	18.00	0.44	1.22	21.96	22.45	17:00	17:15	15	900	20,205	21,357
40.00	0.39	0.004	0.03	15.60	0.38	1.11	17.33	17.67	17:15	17:30	15	900	15,902	18,053
40.00	0.38	0.004	0.03	15.20	0.37	1.09	16.60	16.92	17:30	17:45	15	900	15,226	15,564
40.00	0.35	0.004	0.03	14.00	0.34	1.03	14.49	14.74	17:45	18:00	15	900	13,269	14,247
40.00	0.31	0.004	0.03	12.40	0.31	0.96	11.85	12.04	18:00	18:15	15	900	10,832	12,050
40.00	0.27	0.004	0.03	10.80	0.27	0.87	9.43	9.55	18:15	18:30	15	900	8,599	9,715
40.00	0.25	0.004	0.03	10.00	0.25	0.83	8.30	8.40	18:30	18:45	15	900	7,561	8,080
40.00	0.22	0.004	0.03	8.80	0.22	0.76	6.71	6.79	18:45	19:00	15	900	6,107	6,834
40.00	0.21	0.004	0.03	8.40	0.21	0.74	6.21	6.28	19:00	19:15	15	900	5,631	5,879
40.00	0.19	0.004	0.03	7.60	0.19	0.69	5.26	5.31	19:15	19:30	15	900	4,781	5,216
40.00	0.18	0.004	0.03	7.20	0.18	0.67	4.81	4.85	19:30	19:45	15	900	4,368	4,374
40.00	0.18	0.004	0.03	7.20	0.18	0.67	4.81	4.85	19:45	20:00	15	900	4,368	4,368
40.00	0.17	0.004	0.03	6.80	0.17	0.64	4.37	4.41	20:00	20:15	15	900	3,971	4,169
40.00	0.16	0.004	0.03	6.40	0.16	0.62	3.96	3.99	20:15	20:30	15	900	3,588	3,779
40.00	0.16	0.004	0.03	6.40	0.16	0.62	3.96	3.99	20:30	20:45	15	900	3,588	3,588
40.00	0.14	0.004	0.03	5.60	0.14	0.57	3.17	3.19	20:45	21:00	15	900	2,871	3,230
40.00	0.13	0.004	0.03	5.20	0.13	0.54	2.80	2.82	21:00	21:15	15	900	2,537	2,704
40.00	0.12	0.004	0.03	4.80	0.12	0.51	2.45	2.47	21:15	21:30	15	900	2,220	2,379
40.00	0.12	0.004	0.03	4.80	0.12	0.51	2.45	2.47	21:30	21:45	15	900	2,220	2,220
40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	21:45	22:00	15	900	1,638	1,929

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40.00	0.10	0.004	0.03	4.00	0.10	0.45	1.81	1.82	22:00	22:15	15	900	1,638	1,638
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	22:15	22:30	15	900	1,374	1,506
40.00	0.09	0.004	0.03	3.60	0.09	0.42	1.52	1.53	22:30	22:45	15	900	1,374	1,374
40.00	0.07	0.004	0.03	2.80	0.07	0.36	1.00	1.00	22:45	23:00	15	900	903	1,139
40.00	0.08	0.004	0.03	3.20	0.08	0.39	1.25	1.25	23:00	23:15	15	900	1,129	1,016
40.00	0.06	0.004	0.03	2.40	0.06	0.32	0.77	0.78	23:15	23:30	15	900	699	914
40.00	0.04	0.004	0.03	1.60	0.04	0.25	0.39	0.39	23:30	23:45	15	900	355	527
40.00	0.04	0.004	0.03	1.60	0.04	0.25	0.39	0.39	23:45	24:00	15	900	355	355
40.00	0.03	0.004	0.03	1.20	0.03	0.20	0.24	0.24	24:00	00:15	15	900	220	288
40.00	0.02	0.004	0.03	0.80	0.02	0.16	0.12	0.12	00:15	00:30	15	900	112	166
40.00	0.00	0.004	0.03	0.00	0.00	0.00	0.00	0.00	00:30	00:45	15	900	0	56

Total 56,527

2. ALAM & KENNEDY

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input		calculations							input		calculations			input		results			
Speed	width	height	diameter	slope	rb	Froude	rb/d50	Reynolds	ff	fb	rb	q	Q	starting	ending	duration	duration	total volume	average volume
m/s	ml	ml	mm	ml/ml	ml						ml	m3/s/ml	m3/s	time	time	minutes	s	m3	m3

0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.000	0.000	0.000	0.000	15:15	15:30	15	900	0	0
1.44	40.00	0.30	1.00	0.004	0.296	15	296	432605	0.040	0.005	0.298	0.426	17.025	15:30	15:45	15	900	15,322	7,661
1.65	40.00	0.40	1.00	0.004	0.392	17	392	657685	0.040	0.005	0.391	0.647	25.882	15:45	16:00	15	900	23,294	19,308
1.76	40.00	0.47	1.00	0.004	0.459	18	459	821480	0.040	0.004	0.435	0.808	32.328	16:00	16:15	15	900	29,095	26,195
1.79	40.00	0.48	1.00	0.004	0.469	18	469	852842	0.040	0.004	0.450	0.839	33.563	16:15	16:30	15	900	30,206	29,651
2.10	40.00	0.64	1.00	0.004	0.620	21	620	1323719	0.040	0.003	0.605	1.302	52.093	16:30	16:45	15	900	46,884	38,545
1.79	40.00	0.48	1.00	0.004	0.469	18	469	852842	0.040	0.004	0.450	0.839	33.563	16:45	17:00	15	900	30,206	38,545
1.74	40.00	0.45	1.00	0.004	0.440	18	440	778346	0.040	0.004	0.425	0.766	30.631	17:00	17:15	15	900	27,568	28,887
1.63	40.00	0.39	1.00	0.004	0.383	16	383	633781	0.040	0.005	0.381	0.624	24.942	17:15	17:30	15	900	22,447	25,008
1.61	40.00	0.38	1.00	0.004	0.373	16	373	610252	0.040	0.005	0.372	0.600	24.016	17:30	17:45	15	900	21,614	22,031
1.55	40.00	0.35	1.00	0.004	0.344	16	344	541925	0.040	0.005	0.345	0.533	21.327	17:45	18:00	15	900	19,194	20,404
1.46	40.00	0.31	1.00	0.004	0.305	15	305	453011	0.040	0.005	0.306	0.446	17.828	18:00	18:15	15	900	16,045	17,620
1.35	40.00	0.27	1.00	0.004	0.266	14	266	365551	0.040	0.006	0.267	0.360	14.386	18:15	18:30	15	900	12,947	14,496
1.30	40.00	0.25	1.00	0.004	0.247	13	247	326259	0.040	0.006	0.248	0.321	12.840	18:30	18:45	15	900	11,556	12,251
1.20	40.00	0.22	1.00	0.004	0.218	12	218	265416	0.040	0.007	0.216	0.261	10.445	18:45	19:00	15	900	9,401	10,478
1.15	40.00	0.21	1.00	0.004	0.208	12	208	242915	0.040	0.007	0.198	0.239	9.560	19:00	19:15	15	900	8,604	9,002
1.13	40.00	0.19	1.00	0.004	0.188	11	188	216172	0.040	0.007	0.191	0.213	8.507	19:15	19:30	15	900	7,656	8,130

1.07	40.00	0.18	1.00	0.004	0.178	11	178	194017	0.040	0.008	0.175	0.191	7.635	19:30	19:45	15	900	6,872	7,264
1.07	40.00	0.18	1.00	0.004	0.178	11	178	194017	0.040	0.008	0.175	0.191	7.635	19:45	20:00	15	900	6,872	6,872
1.00	40.00	0.17	1.00	0.004	0.169	10	169	171335	0.040	0.009	0.156	0.169	6.743	20:00	20:15	15	900	6,068	6,470
1.00	40.00	0.16	1.00	0.004	0.159	10	159	161337	0.040	0.009	0.156	0.159	6.349	20:15	20:30	15	900	5,714	5,891
1.00	40.00	0.16	1.00	0.004	0.159	10	159	161337	0.040	0.009	0.156	0.159	6.349	20:30	20:45	15	900	5,714	5,714
0.94	40.00	0.14	1.00	0.004	0.139	9	139	132831	0.040	0.009	0.138	0.131	5.227	20:45	21:00	15	900	4,705	5,209
0.90	40.00	0.13	1.00	0.004	0.129	9	129	118133	0.040	0.009	0.127	0.116	4.630	21:00	21:15	15	900	4,185	4,445
0.87	40.00	0.12	1.00	0.004	0.119	9	119	105482	0.040	0.009	0.118	0.104	4.151	21:15	21:30	15	900	3,736	3,960
0.87	40.00	0.12	1.00	0.004	0.119	9	119	105482	0.040	0.009	0.118	0.104	4.151	21:30	21:45	15	900	3,736	3,736
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	21:45	22:00	15	900	2,830	3,283
0.79	40.00	0.10	1.00	0.004	0.100	8	100	79898	0.040	0.010	0.100	0.079	3.144	22:00	22:15	15	900	2,830	2,830
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	22:15	22:30	15	900	2,387	2,608
0.74	40.00	0.09	1.00	0.004	0.090	7	90	67390	0.040	0.010	0.087	0.066	2.652	22:30	22:45	15	900	2,387	2,387
0.65	40.00	0.07	1.00	0.004	0.070	7	70	46086	0.040	0.010	0.067	0.045	1.814	22:45	23:00	15	900	1,632	2,010
0.70	40.00	0.08	1.00	0.004	0.080	7	80	56693	0.040	0.010	0.078	0.056	2.231	23:00	23:15	15	900	2,008	1,820
0.58	40.00	0.06	1.00	0.004	0.060	6	60	35266	0.040	0.015	0.059	0.035	1.388	23:15	23:30	15	900	1,249	1,629
0.45	40.00	0.04	1.00	0.004	0.040	5	40	18259	0.040	0.020	0.039	0.018	0.719	23:30	23:45	15	900	647	948
0.45	40.00	0.04	1.00	0.004	0.040	5	40	18259	0.040	0.020	0.039	0.018	0.719	23:45	24:00	15	900	647	647
0.30	40.00	0.03	1.00	0.004	0.030	3	30	9134	0.040	0.020	0.017	0.009	0.359	24:00	00:15	15	900	324	485
0.30	40.00	0.02	1.00	0.004	0.020	3	20	6092	0.040	0.020	0.017	0.006	0.240	00:15	00:30	15	900	216	270
0.00	40.00	0.00	1.00	0.004	0.000	0	0	0	0.040	0.000	0.000	0.000	0.000	00:30	00:45	15	900	0	108

Total 90,290

3. Chezy equation

input				!results		!input				!results	
width	height	slope	f	V	Q	!starting	!ending	!duration	!duration	!total volume	!average volume
ml	ml	m/ml	(from Alan & Kennedy)	m/s	m ³ /s	!time	!time	!minutes	!s	!m ³	!m ³
						!hh:mm	!hh:mm				
40.00	0.00	0.004	0.040	0.000	0.000	15:15	15:30	15	900	0	0
40.00	0.30	0.004	0.045	1.436	17.231	15:30	15:45	15	900	15,508	7,754
40.00	0.40	0.004	0.045	1.654	26.464	15:45	16:00	15	900	23,817	19,663
40.00	0.47	0.004	0.044	1.810	34.029	16:00	16:15	15	900	30,626	27,222
40.00	0.48	0.004	0.044	1.829	35.112	16:15	16:30	15	900	31,601	31,113
40.00	0.64	0.004	0.043	2.128	54.471	16:30	16:45	15	900	49,024	40,312
40.00	0.48	0.004	0.044	1.829	35.112	16:45	17:00	15	900	31,601	40,312
40.00	0.45	0.004	0.044	1.772	31.896	17:00	17:15	15	900	28,706	30,153

40.00	0.39	0.004	0.045	1.634	25.484	17:15	17:30	15	900	22,936	25,821
40.00	0.38	0.004	0.045	1.613	24.516	17:30	17:45	15	900	22,064	22,500
40.00	0.35	0.004	0.045	1.549	21.687	17:45	18:00	15	900	19,518	20,791
40.00	0.31	0.004	0.045	1.459	18.095	18:00	18:15	15	900	16,286	17,902
40.00	0.27	0.004	0.046	1.348	14.562	18:15	18:30	15	900	13,106	14,696
40.00	0.25	0.004	0.046	1.298	12.981	18:30	18:45	15	900	11,683	12,394
40.00	0.22	0.004	0.047	1.206	10.609	18:45	19:00	15	900	9,548	10,615
40.00	0.21	0.004	0.047	1.178	9.896	19:00	19:15	15	900	8,907	9,228
40.00	0.19	0.004	0.047	1.121	8.521	19:15	19:30	15	900	7,669	8,288
40.00	0.18	0.004	0.048	1.080	7.777	19:30	19:45	15	900	6,999	7,334
40.00	0.18	0.004	0.048	1.080	7.777	19:45	20:00	15	900	6,999	6,999
40.00	0.17	0.004	0.049	1.039	7.067	20:00	20:15	15	900	6,360	6,680
40.00	0.16	0.004	0.049	1.008	6.454	20:15	20:30	15	900	5,808	6,084
40.00	0.16	0.004	0.049	1.008	6.454	20:30	20:45	15	900	5,808	5,808
40.00	0.14	0.004	0.049	0.944	5.285	20:45	21:00	15	900	4,757	5,283
40.00	0.13	0.004	0.049	0.910	4.730	21:00	21:15	15	900	4,257	4,507
40.00	0.12	0.004	0.049	0.874	4.196	21:15	21:30	15	900	3,776	4,017
40.00	0.12	0.004	0.049	0.874	4.196	21:30	21:45	15	900	3,776	3,776
40.00	0.10	0.004	0.050	0.790	3.162	21:45	22:00	15	900	2,845	3,311
40.00	0.10	0.004	0.050	0.790	3.162	22:00	22:15	15	900	2,845	2,845
40.00	0.09	0.004	0.050	0.750	2.700	22:15	22:30	15	900	2,430	2,638
40.00	0.09	0.004	0.050	0.750	2.700	22:30	22:45	15	900	2,430	2,430
40.00	0.07	0.004	0.050	0.662	1.853	22:45	23:00	15	900	1,668	2,049
40.00	0.08	0.004	0.050	0.707	2.243	23:00	23:15	15	900	2,037	1,852
40.00	0.06	0.004	0.055	0.584	1.402	23:15	23:30	15	900	1,262	1,450
40.00	0.04	0.004	0.060	0.457	0.731	23:30	23:45	15	900	658	960
40.00	0.04	0.004	0.060	0.457	0.731	23:45	24:00	15	900	658	658
40.00	0.03	0.004	0.060	0.396	0.475	24:00	00:15	15	900	428	543
40.00	0.02	0.004	0.060	0.323	0.259	00:15	00:30	15	900	233	330
40.00	0.00	0.004	0.040	0.000	0.000	00:30	00:45	15	900	0	116

Total 91,892