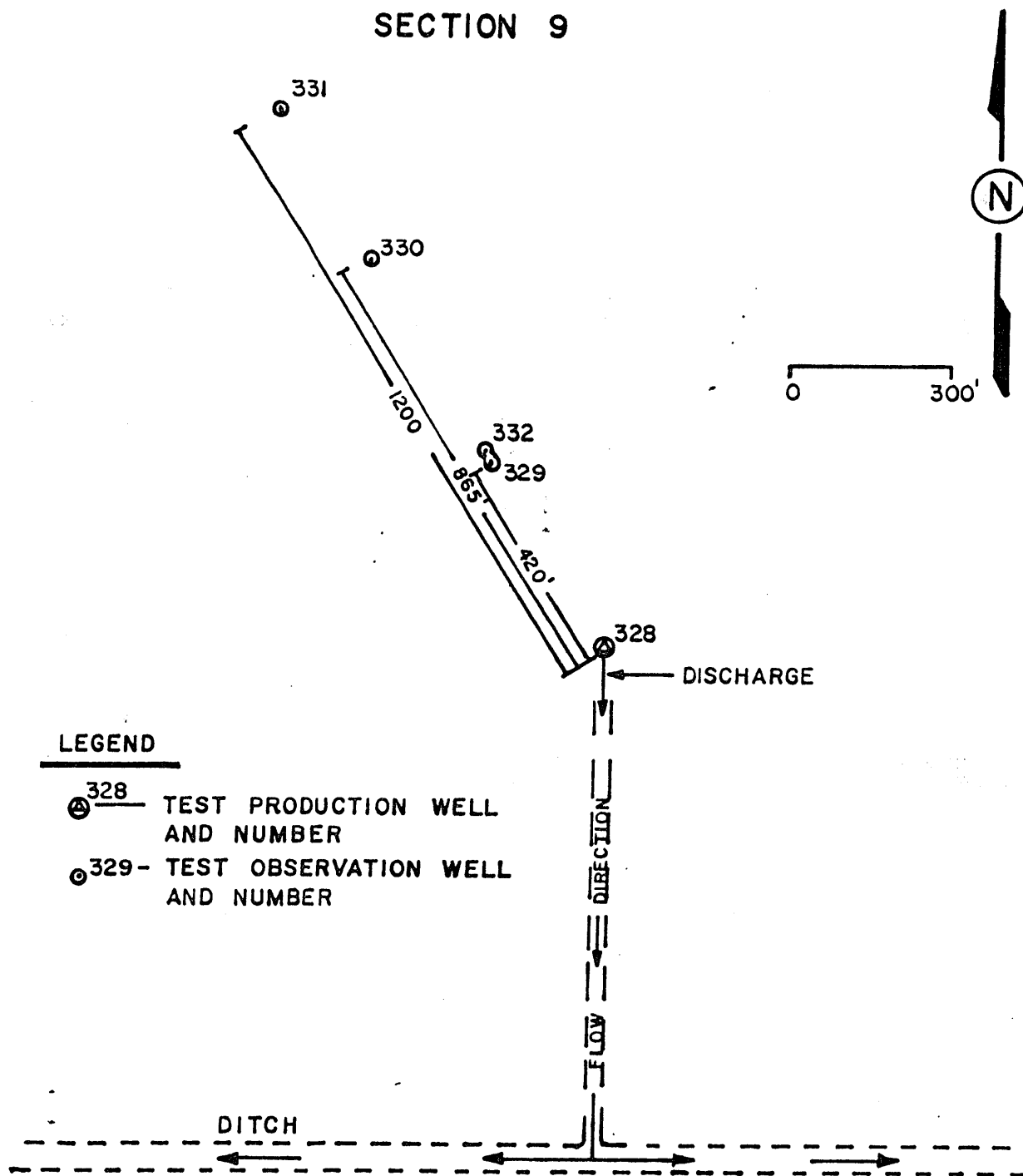


LOCATION OF USSC, SOUTHERN DIVISION RANCH AQUIFER TEST
SITES, 4-87

PHASE III AQUIFER TEST SITE

SECTION 9



MISSIMER & ASSOC., INC.

A-0428569-1

1987

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FIGURE SCHEMATIC DIAGRAM SHOWING PHASE III AQUIFER TEST SET-UP.

AQUIFER TEST RESULTS AND INTERPRETATIONS
SUMMARY OF COMPUTED AQUIFER HYDRAULIC COEFFICIENTS
PHASE III TEST

<u>Well No.</u>	<u>Method</u>	<u>Transmissivity (gpd/ft)</u>	<u>Storage Coefficient</u>	<u>Leakance (gpd/ft³)</u>
H-M-329	Straight Line	510,000	.00024	--
	Curve Matching	490,000	.00026	.0025
H-M-330	Straight Line	510,000	.00027	--
	Curve Matching	520,000	.00024	.0034
H-M-331	Straight Line	500,000	.00025	--
	Curve Matching	430,000	.00033	.0043
	Distance Drawdown	510,000	.00032	--

CONSTRUCTION DETAILS OF TEST PRODUCTION AND MONITORING WELLS
PHASE III TEST

<u>Well Number</u>	<u>Total Depth(feet)</u>	<u>Casing Diameter(inches)</u>	<u>Casing Depth (feet)</u>	<u>Casing Type</u>	<u>Finish</u>
PW H-M-328	133	10	75	PVC	Open
1 H-M-329	95	4	75	PVC	Open
2 H-M-330	126	6	--	Steel	Open
3 H-M-331	95	4	75	PVC	Open
H-M-332	16.5	4	12	PVC	PVC Slot Screen

WATER QUALITY DATA TAKEN DURING AQUIFER TEST
H-M-328 (TEST/PRODUCTION, PHASE III)

<u>Volume of Water Discharge (gallons)</u>	<u>Chloride (mg/l)</u>	<u>Conductivity (umhos/cm)</u>
57,225	68	935
850,200	68	935
1,657,345	68	935
2,321,700	68	935

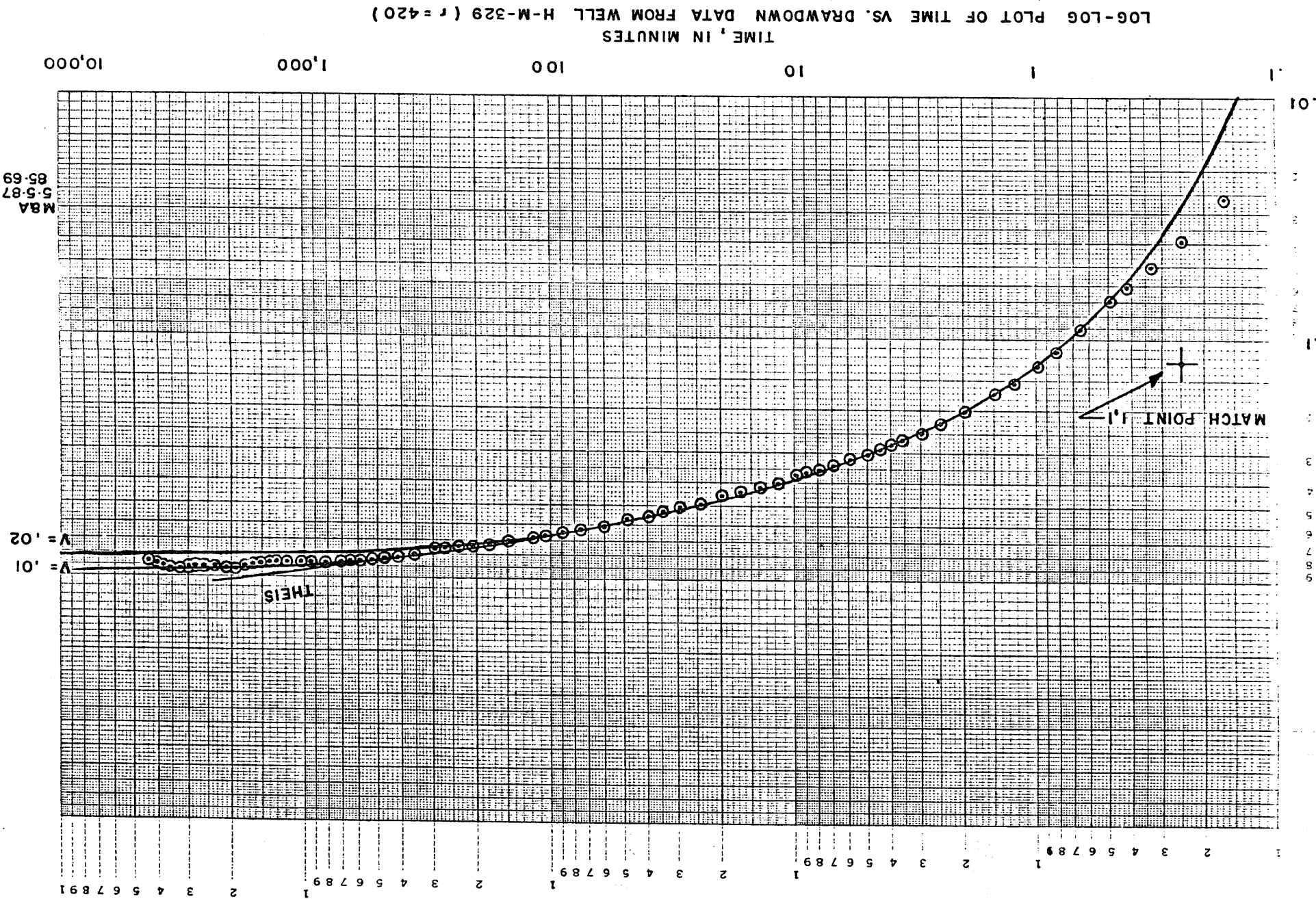
GEOLOGIST LOG OF WELL H-M-328
(USSC #84-D4-9)

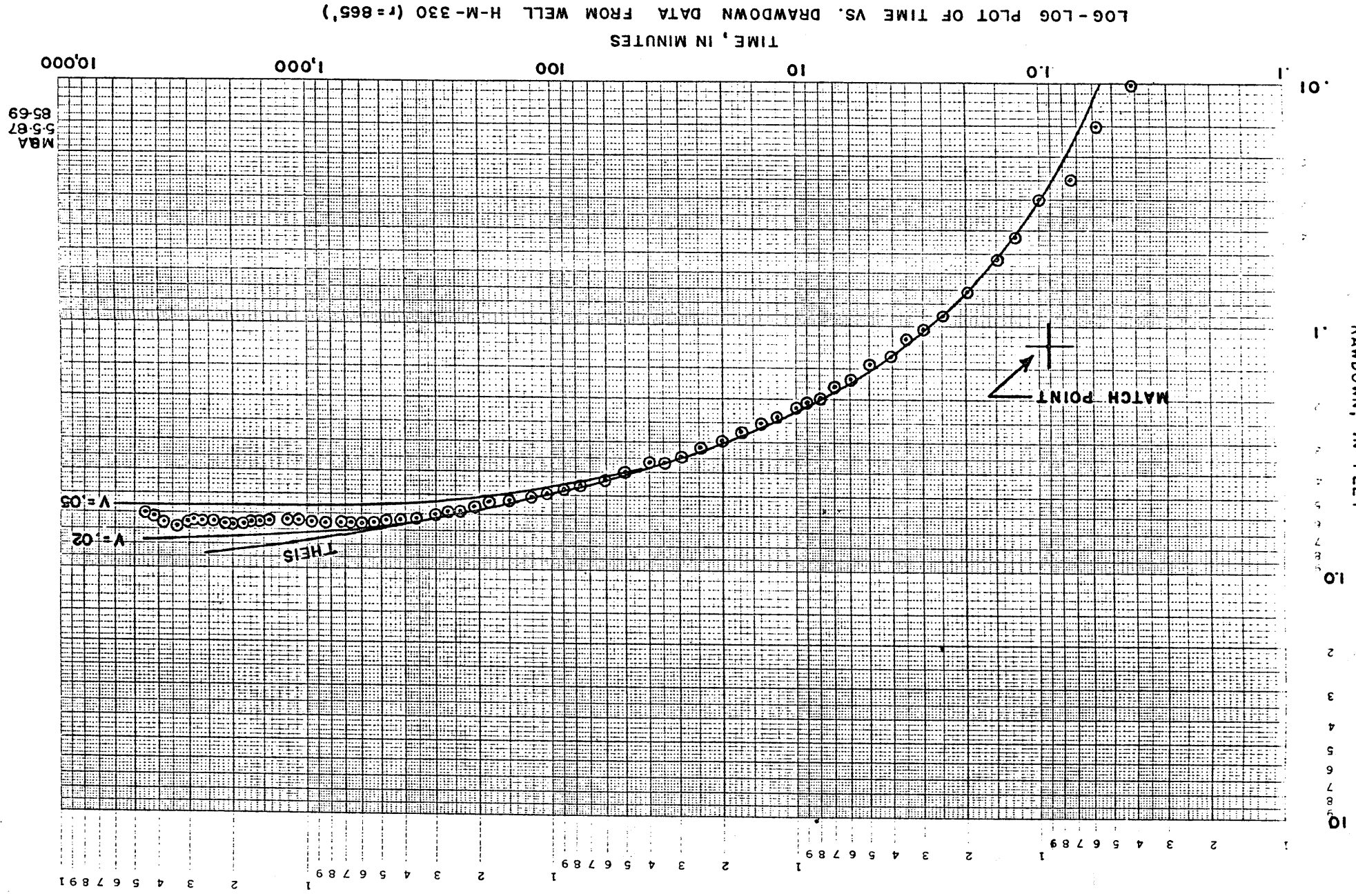
<u>Depth(feet)</u>	<u>Lithology</u>
0-7	Sand, light olive gray, unconsolidated fine to coarse quartz grains, sandy clay lenses, light olive gray with depth.
7-18	Shell marl, white, unconsolidated sandy and light olive gray sandy clay, bivalves, gastropods, barnacles, corals.
18-35	Clay, light olive gray, unconsolidated, sandy, abundant shell as above and oyster fragments.
35-42	Limestone, light olive gray, medium to soft, and shell white and gray, sandy good moldic porosity.
42-55	Limestone marl, light olive gray, similar to above but commonly unlithified.
55-62	Limestone, light olive gray, medium hard, fine quartz and phosphate sand abundant, shell common.
62-130	Limestone, light olive gray to yellowish gray and gray, medium to hard, fine quartz and phosphate sand, fine shell fragments, all common, excellent moldic porosity.
130-138	Limestone, yellowish gray, medium, and soft from 135 feet, common quartz sand minor phosphate, finer moldic porosity than that of above.
138-142	Limestone, yellowish gray, soft to medium, sandy granular texture, commonly friable and loose.

Elevation 17
Top - 18
Th

DRAWN, IN FEET

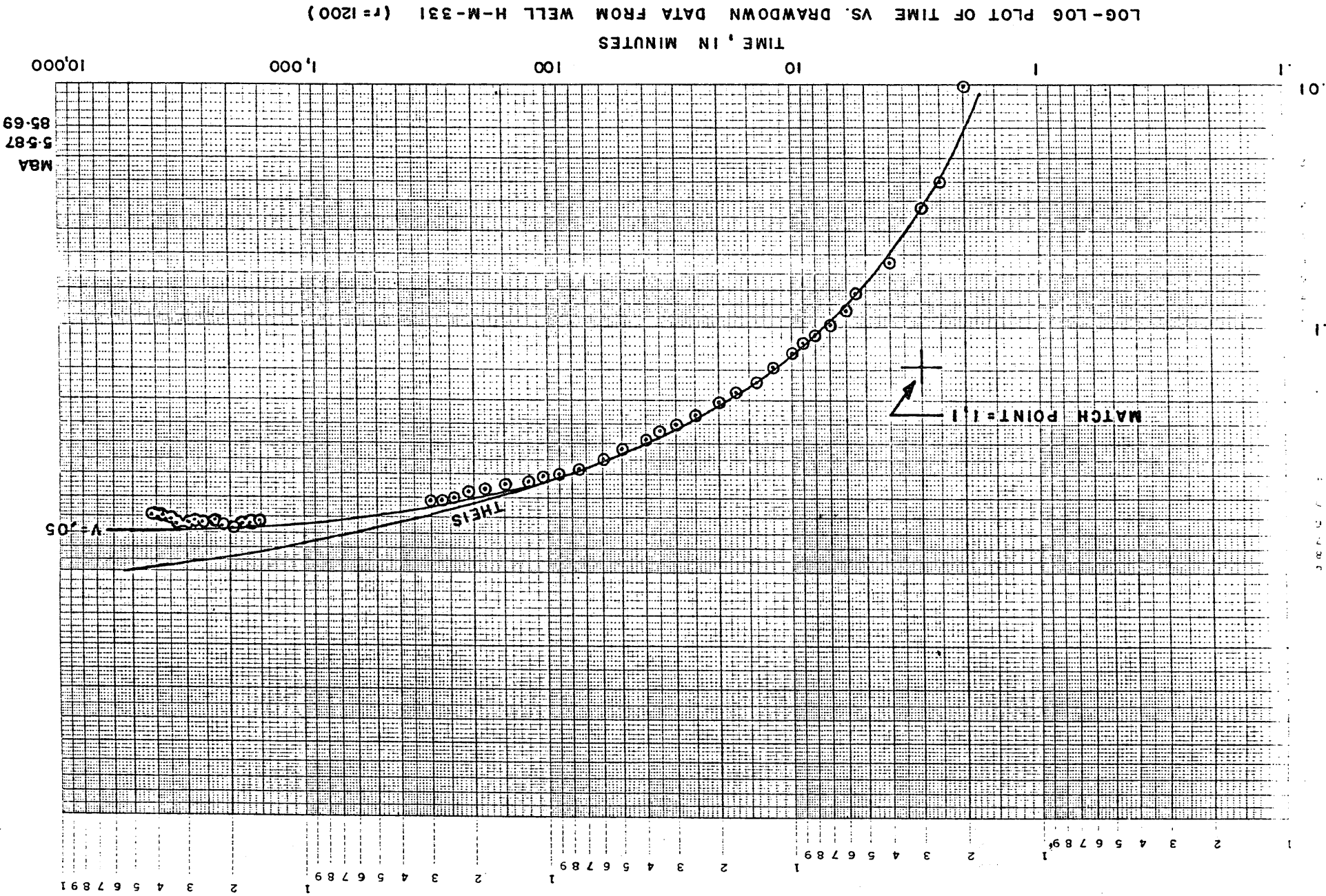
10
9
8
7
6
5
4
3
2
1



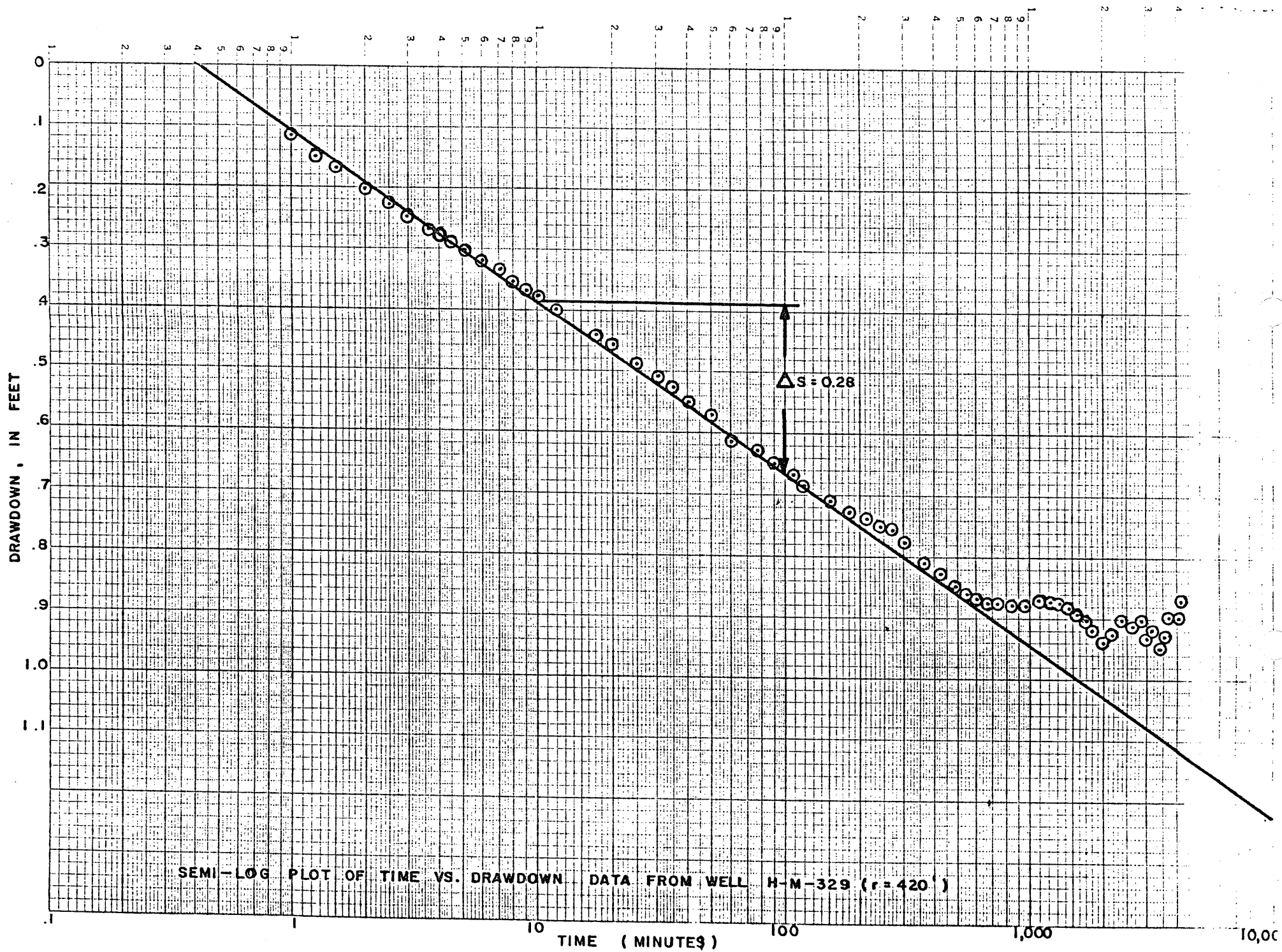


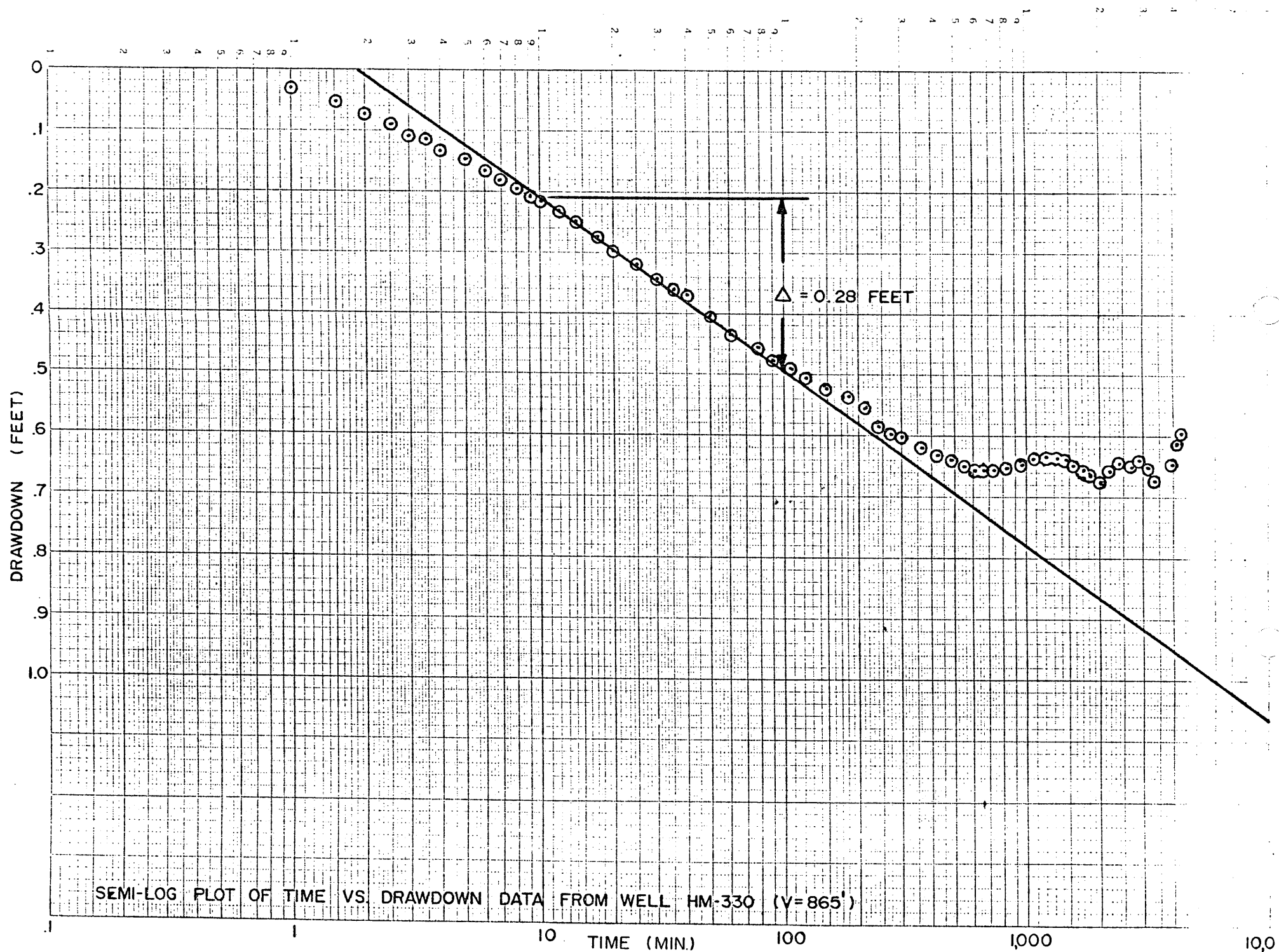
DRAWDOWN, IN FEET

1 2 3 4 5 6 7 8 9 10

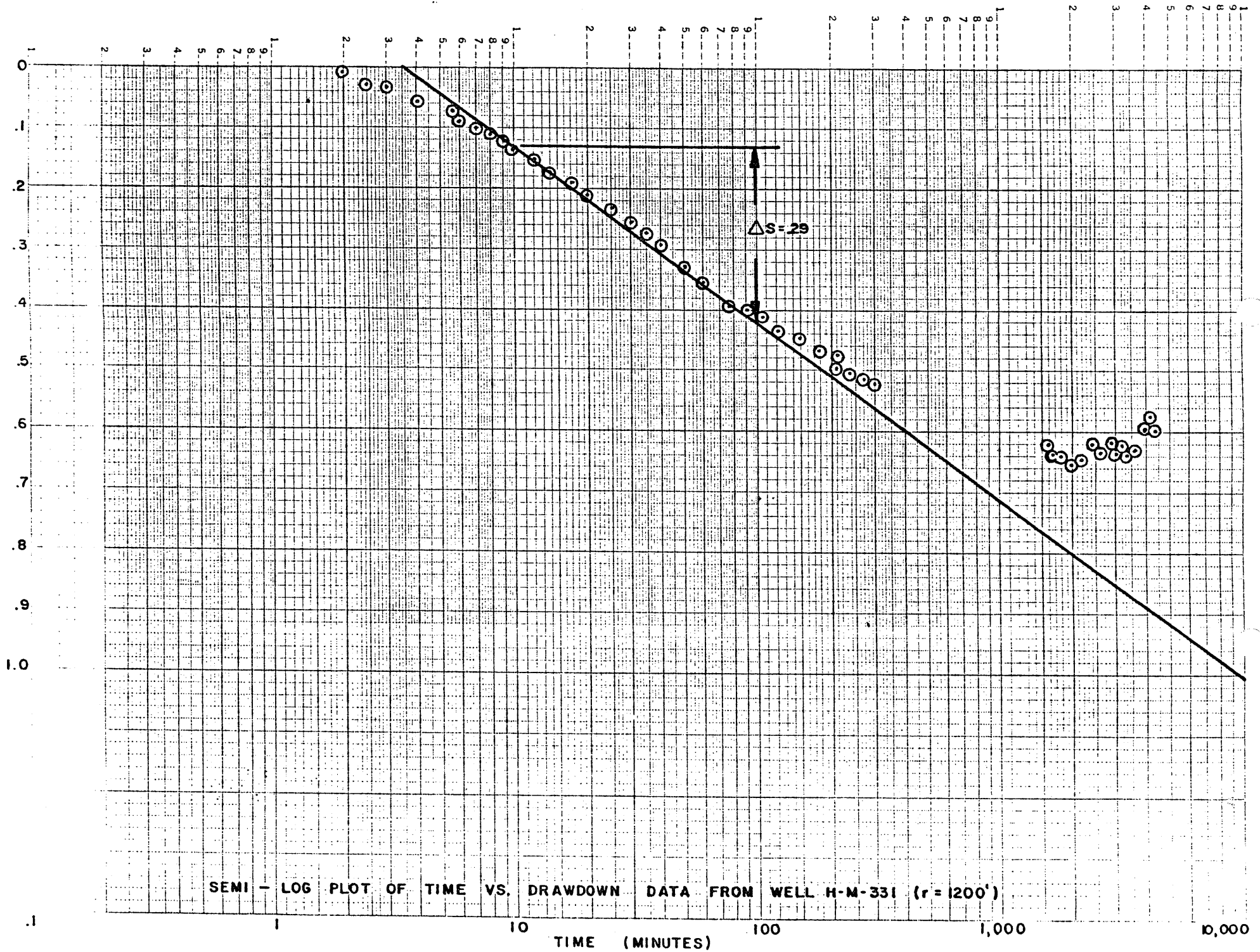


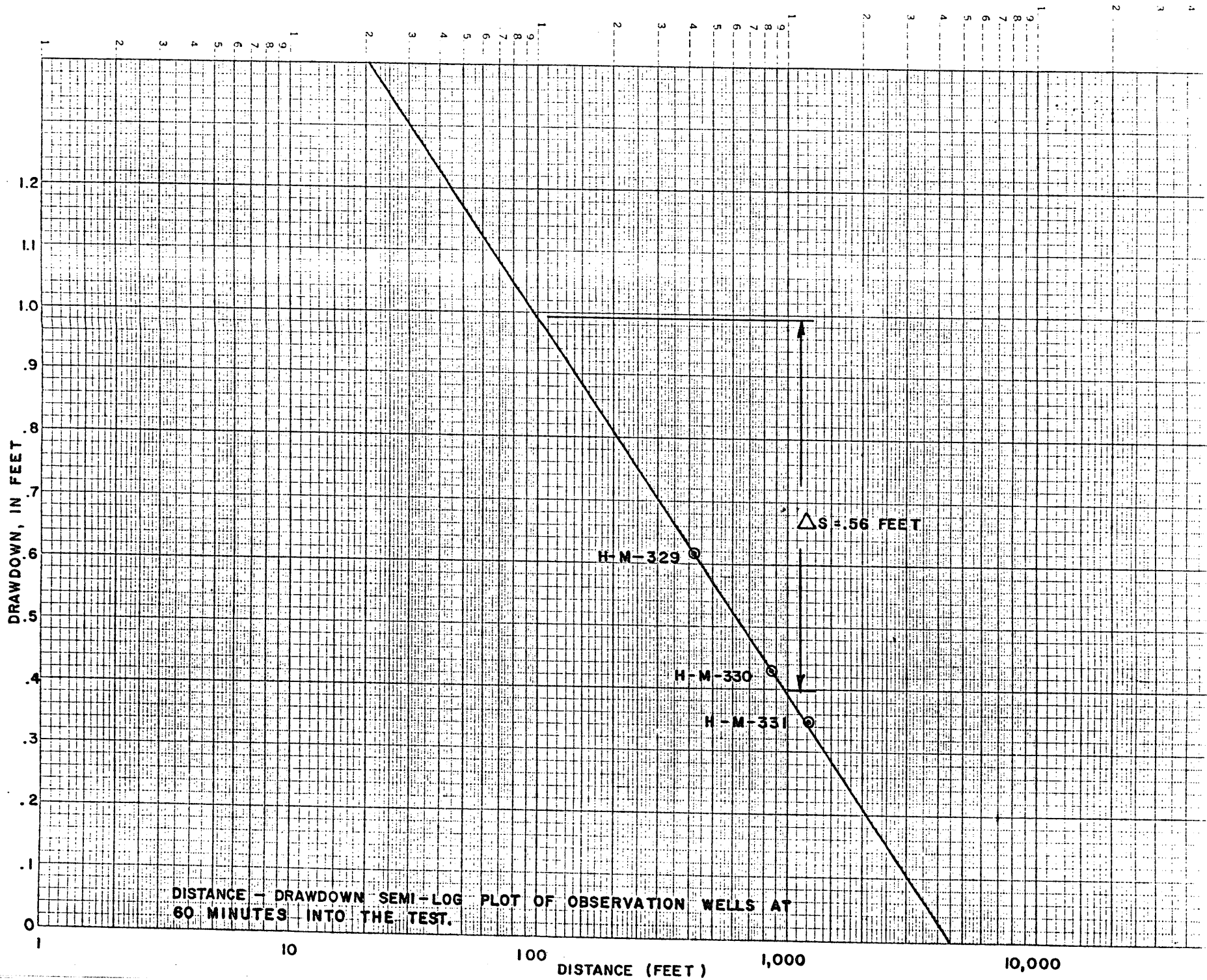
LOG-LOG PLOT OF TIME VS. DRAWDOWN DATA FROM WELL H-M-331 ($r=1200$)





DRAWDOWN , IN FEET





TIME VERSUS DRAWDOWN DATA FOR USSC TEST
PRODUCTION WELL H-M-328

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
2.5	2.15
5	2.15
8	2.33
10	2.33
13	2.40
15	2.41
18	2.48
20	2.51
25	2.53
30	2.53
35	2.52
40	2.54
50	2.59
60	3.03
75	2.57
90	2.58
105	2.53
120	2.56
1560	2.99
3041	3.22
4260	3.18

TIME VERSUS DRAWDOWN DATA FOR USSC
OBSERVATION WELL H-M-329

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
.083	.001
.167	.026
.25	.039
.33	.050
.5	.061
.667	.069
.833	.091
1	.113
1.25	.152
1.5	.170
2	.201
2.5	.225
3	.248
3.67	.267
4	.277
4.5	.291
5	.300
6	.320
7	.338
8	.354
9	.367
10	.378
12	.400
14	.417
17	.441
20	.459
25	.490
30	.510
35	.532
40	.551
50	.573
61	.614
76	.631
90	.648
106.5	.668
120	.685
150	.710
180	.727
210	.739
240	.751
270	.758
300	.77
360	.809
420	.828
480	.847
540	.861
600	.87
660	.874

TIME VERSUS DRAWDOWN DATA FOR USSC
OBSERVATION WELL H-M-329 - continued:

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
720	.878
840	.878
960	.88
1080	.872
1200	.877
1320	.878
1440	.881
1552	.892
1690	.905
1800	.92
1980	.939
2160	.924
2400	.902
2640	.911
2880	.904
3038	.931
3120	.918
3360	.944
3600	.93
3840	.899
4080	.892
4228	.867

TIME VERSUS DRAWDOWN DATA FOR USSC
OBSERVATION WELL H-M-330

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
.25	.005
.42	.01
.58	.015
.75	.025
1	.03
1.25	.043
1.5	.053
2	.072
2.5	.090
3	.102
3.5	.115
4	.135
5	.145
6	.165
7	.180
8	.195
9	.205
10	.215
12	.235
14	.250
17	.274
20	.295
25	.319
30	.343
35	.360
40	.369
50	.4
60	.431
76.5	.455
90	.471
105	.4875
120	.504
150	.525
180	.537
210	.559
240	.585
270	.592
300	.6
360	.619
420	.628
480	.637
540	.646
600	.655
660	.654
720	.653
840	.651
960	.642
1080	.637

TIME VERSUS DRAWDOWN DATA FOR USSC
OBSERVATION WELL H-M-330 - continued:

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
1200	.635
1320	.633
1440	.639
1565	.645
1692	.655
1800	.662
1980	.675
2160	.659
2400	.641
2640	.646
2880	.637
3034	.652
3360	.672
3840	.643
4080	.613
4257	.598

TIME VERSUS DRAWDOWN DATA FOR USSC
OBSERVATION WELL H-M-331

<u>Time (minutes)</u>	<u>Drawdown (feet)</u>
2	.01
2.5	.025
3	.034
4	.055
5.5	.072
6	.085
7	.098
8	.108
9	.118
10	.13
12	.149
14	.17
17	.186
20	.206
25	.231
30	.255
35	.27
40	.29
50	.317
60	.345
76.5	.381
90	.397
105	.312
120	.433
150	.440
180	.462
210	.475
240	.501
270	.513
300	.519
1575	.619
1697	.634
1800	.638
1980	.651
2160	.642
2400	.619
2640	.624
2880	.617
3030	.627
3120	.620
3360	.629
3600	.615
3840	.591
4080	.577
4260	.594