P-W

G.S., LCRP, #17, No Permit
NW Sec-35-T10S-R25W, Yuma County 14-18

32 x

14-18

County Yuma

Area San Luis

Lease No.

United States Geol. Survey

Well Name ~~Lower Colorado R. Project #17~~ 14-18

Location ~~NW NW~~ Sec ~~35~~ Twp ~~10S~~ Range ~~25W~~ Footage est. 800 fnl 200 fwl

Elev ~~90~~ Gr ____ KB ____ Spud Date ~~Jan. 20, '64~~ Completed Abandon ~~2-24-64~~ Total Depth ~~2946~~ driller

Contractor: ____ Approx. Cost $ ____

Drilled by Rotary X
Cable Tool ____

Casing Size	Depth	Cement
~~8"~~	~~1948~~	

Production Horizon ____

Initial Production ____

REMARKS ~~Perf. 520-1398~~

~~" 1438-1998~~

~~Reported oil show 1795-1818~~ — Personnel of USGS Yuma to John Bannister, 1964(?)

Elec. Logs Elec Log

Applic to Plug ____ Plugging Record ____ Completion Report ____

Sample Log ____
Sample Descrip. ____
Sample Set ____
Cores ____

Water well - accepted by ____

Bond Co. & No. ____

Bond Am't $ ____ Cancelled ____ Date Organization Report ____

Filing Receipt ____ Dated ____ Well Book ____ Plat Book ____

Loc. Plat ____ Dedication ____

API # 02-027-05023

PERMIT NUMBER none Date Issued ____ 14-18

32 × 1

14-18

Table 1-Logs of selected U. S. Geological Survey test wells in the [redacted]. started drilling: Jan. 20, 1964
Completed: Feb 24, 1964

LCRP 17. In Yuma Valley, near east bank of Colorado River, about 2-1/2 miles north of San Luis, Arizona, in NW 1/4 NW 1/4 sec. 35, T. 10S., R. 25W., Gila and Salt River base line and meridian. Altitude, about 90 feet. Drilled in January and February 1964 with rotary equipment by Roscoe Moss Co. Pilot hole, 15 inches; reamed to 16 inches, gravel-packed, and completed with 8-inch casing to 1,948 feet; perforated from 520 to 1,398 feet and 1,438 to 1,998 feet. Log from drill cuttings and interpretation of electric and caliper logs by F. H. Olmsted, F. J. Frank, J. H. Robison, and G. R. Vaughan.

Material	Thickness (feet)	Depth (feet)
Sand and silt, some clay, gastropods, and carbonized wood	71	71
Sand and gravel, some silt and clay	103	174
Gravel, coarse, probably somewhat cemented	32	206
Sand, some gravel	25	231
Gravel, coarse, probably cemented at least in part	45	276
Sand and gravel	30	306
Gravel, coarse, probably cemented in part	44	350
Sand, some coarse gravel beds	58	408
Gravel, coarse, probably cemented in part	64	472
Sand, some gravel	122	594
Gravel, fine-to medium grained, cemented in part	50	644

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32 ×

Material	Thickness (feet)	Depth (feet)
Clay	15	410
Sand, with clay streaks	15	425
Clay	5	430
Sand	35	465
Clay	9	474
Sand	26	500
Clay and sand	15	515
Sand	5	520
Clay	5	525
Sand, packed	42	567
Clay, hard	8	575
Sand	10	585
Sand and gravel	15	600
Sandstone	5	605
Clay and gravel	20	625
Sand	10	635
Clay	58	693
Sandstone	57	750
Clay, hard	7	757
Sand and sandstone	11	768
Sand and gravel	12	780
Clay	45	825
Casing reduced to 8" at 825'		
Clay, gray sandy streaks of brown fine sand	30	855
Sand, fine on sandstone	2	857
Sand, gray and clay	39	896
Clay on shale	3	899
Sand and silt	6	905
Clay, and streaks of sand	5	910
Sand, clay, and silt (thin layer,) cemented sand and gravel at 917'	10	920
Sand, with cemented streaks, and streaks of clay	30	950
Clay, brown	3	953
Clay, gray and sand	12	965
Clay and sandstone	5	970
Sand, loose	3	973
Clay and sandstone	12	985
Sandstone	3	988
Clay, silt, sand, and sandstone	37	1025
Sandy clay	43	1068
Sand, loose	3	1071
Clay, sandy and sandstone	14	1085
Granite	5	1090

Note: This is not part of the log of LCRP #17

Material	Thickness (feet)	Depth (feet)
Sand, some gravel; a few thin beds of silt and cemented gravel	203	847
Silt, clayey, in two thin beds with sand between them	12	859
Sand, some gravel; a few thin beds of silt and cemented gravel	171	1030
Silt	8	1038
Sand, some silt and fine gravel	394	1432
Clay	2	1434
Sand, compact, silty and pebbly; thin clay beds at depths of 1520, 1688, 1692, 1750, 1778, 1920, 1934 feet	556	1990
Clay	10	2000
Sand, compact; and cemented gravel	30	2030
Sand, silty; a few thin beds of cemented gravel	27	2057
Clay, silty	3	2060
Sand, and thin beds of grayish white compact silt	30	2090
Sand, silty and thin beds of cemented gravels	57	2147
Silt, clayey	3	2150
Sand, silt, and thin beds of clay and cemented gravel	50	2200
Sand, compact; and cemented gravel	12	2212
Clay	8	2220
Silt and sand	13	2233
Clay	5	2238
Sand, compact, silty; thin beds of clay	62	2300
Sand, silty	42	2342
Clay, silty	6	2348
Sand, compact; thin beds of cemented sand and gravel	67	2415
Clay, silty	2	2417
Sand, thin beds of silt and silty clay	97	2514
Clay	6	2520
Sand, some cenentation; some silt	154	2674
Clay	2	2676
Sand, silty; and thin cemented beds	52	2728
Clay	2	2730
Sand, silty; and thin cemented streaks	74	2804
Clay	2	2806

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(over)

Material	Thickness (feet)	Depth (feet)
Sand, silty; and a few thin lenses of cemented gravel	12	2818
Clay	4	2822
Sand, silt, thin beds of clayey silt	30	2852
Sand, some silt and cementation	40	2892
Clay	8	2900
Sand, silt, thin lenses of silty clay	46	2946

14-18

Table 1-Logs of selected U. S. Geological Survey test wells in the [redacted]. started drilling: Jan. 20, 1964
Completed: Feb 24, 1964

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Gravel, coarse, probably cemented in part	64	472
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Clay	5	2238
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Clay, silty	6	2348
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Clay	6	2520
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Clay	2	2676
Sand, silty; and thin cemented beds	52	2728
Clay	2	2730
Sand, silty; and thin cemented streaks	74	2804
Clay	2	2806

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(over)

32 ×

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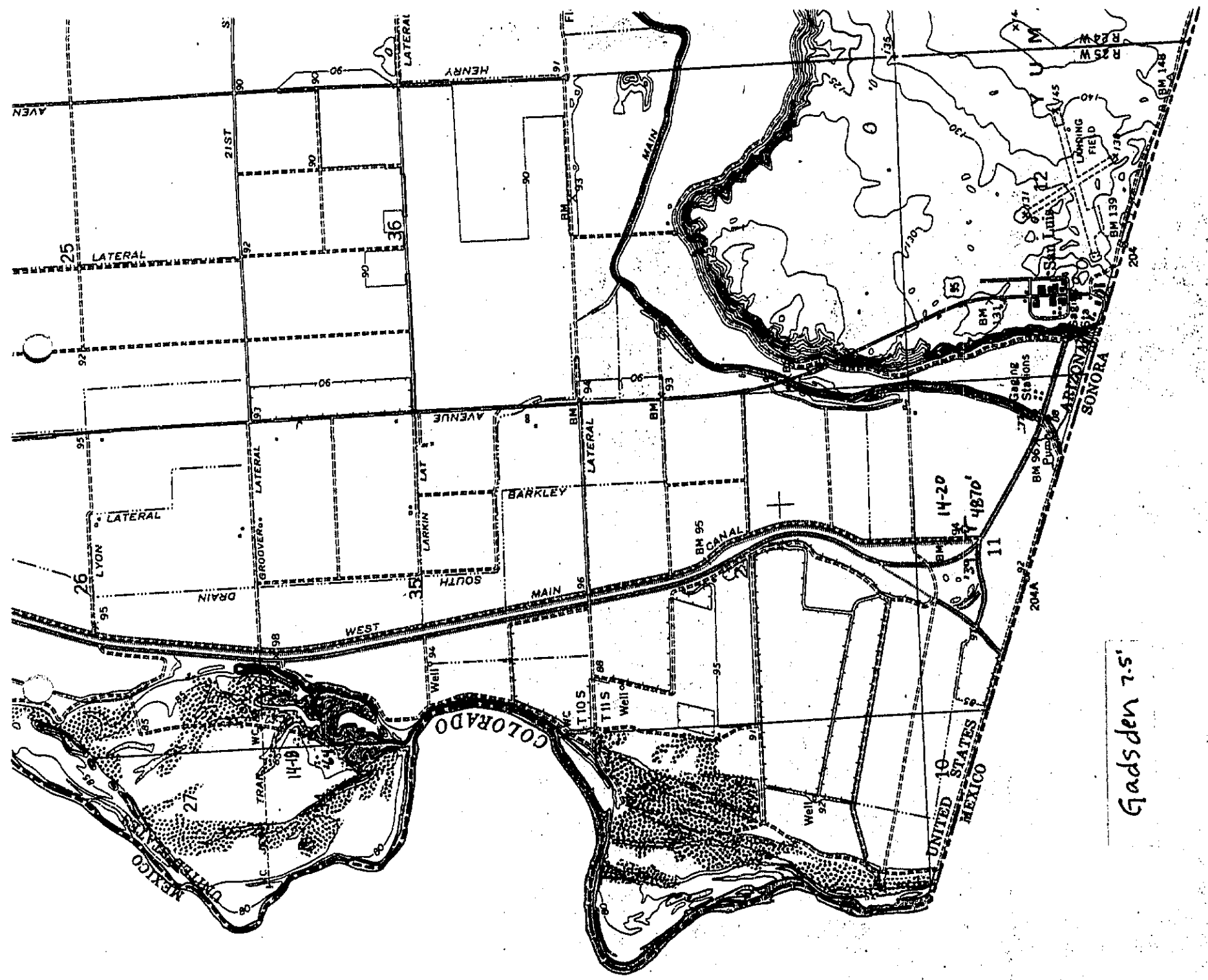
AVEN
21ST
LATERAL
HENRY
LATERAL
MAIN
25
36
LATERAL
AVENUE
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LATERAL
LATERAL
BARKLEY
LATERAL
LATERAL
LYON
GROVER
LARKIN
SOUTH
DRAIN
MAIN
WEST
CANAL
COLORADO
T10S
T11S
TRAP
14-19
27
26
35
11
10
14-20
4870'
R25W
R24W
San Luis
LANDING FIELD
ARIZONA
SONORA
UNITED STATES
MEXICO
UNITED STATES
MEXICO
Gaging Stations
Well
Well
Well
Well
BM 95
BM 96
BM 139
BM 148
BM 131
BM 93
BM 94
204
204A
95
135
130
125
140
145

Gadsden 7.5'

7/60 x 2"

SCHLUMBERGER WELL SURVEYING CORPORATION
HOUSTON, TEXAS

Electrical Log

COUNTY YUMA
FIELD or LOCATION YUMA ARIZONA
WELL TEST HOLE LCRP 17
COMPANY U.S. GEOL. SURVEY

COMPANY U. S. GEOLOGICAL SURVEY
WELL TEST HOLE LCRP NO. 17 14-18
FIELD YUMA ARIZONA
COUNTY YUMA STATE ARIZONA

LOCATION 4
Sec. 35 Twp. 10S Rge. 25W

Other Services: (CAL) 2"

Permanent Datum: ____, Elev. ____
Log Measured From GL, ____ Ft. Above Perm. Datum
Drilling Measured From GL

Elev.: K.B. ____ D.F. ____ G.L. 94'

Date	2/7/64
Run No.	1
Depth—Driller	2948.6
Depth—Logger	2939
Btm. Log Interval	2938
Top Log Interval	24
Casing—Driller	24" @ 24" @ @ @
Casing—Logger	24'
Bit Size	15"
Type Fluid in Hole	FRESH MUD GEL
Dens. | Visc.	64 50
pH | Fluid Loss	7 - ml ml ml ml
Source of Sample	CIRCULATED
R_m @ Meas. Temp.	5.2 @ 78 °F @ °F @ °F @ °F
R_{mf} @ Meas. Temp.	3.8 @ 100 °F @ °F @ °F @ °F
R_{mc} @ Meas. Temp.	3.6 @ 100 °F @ °F @ °F @ °F
Source: R_{mf} R_{mc}	C C
R_m @ BHT	4.4 @ 100 °F @ °F @ °F @ °F
Time Since Circ.	2 HRS.
Max. Rec. Temp.	100 °F °F °F °F
Equip. | Location	2533 LB
Recorded By	PENDLETON
Witnessed By	OLMSTED

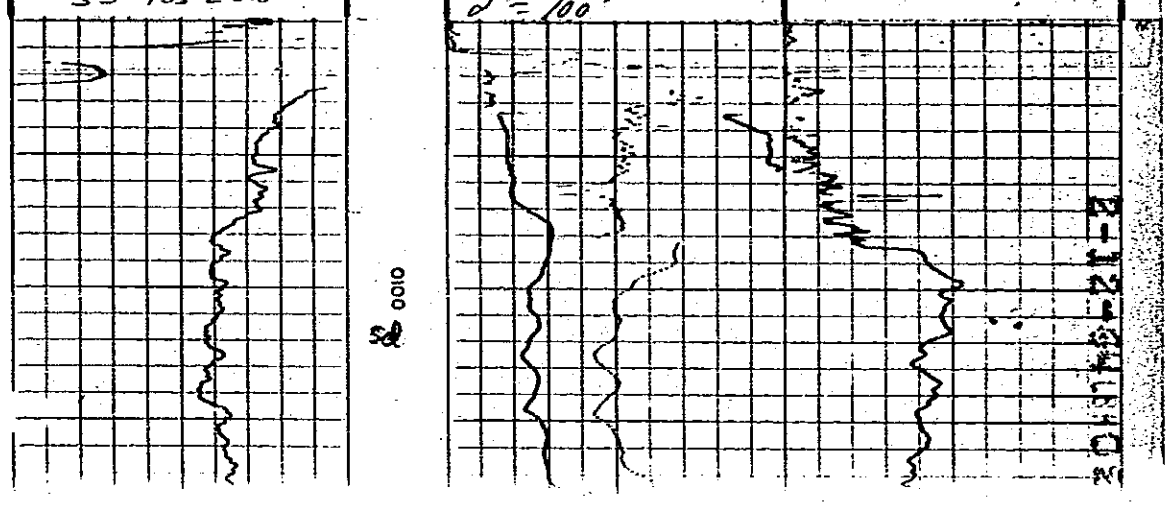
FOLD HERE — THIS HEADING AND LOG CONFORMS TO API RP 31

REMARKS 1

Changes in Mud Type or Additional Samples			Scale Changes			
Date | Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller						
Type Fluid in Hole						
Dens. | Visc.						
ph | Fluid Loss	ml					
Source of Sample			Equipment Data			
R_m @ Meas. Temp.	@ °F	@ °F	Run No.	Tool Type	Pad Type	Tool Pos.	Other
R_{mf} @ Meas. Temp.	@ °F	@ °F	1	554		FREE	
R_{mc} @ Meas. Temp.	@ °F	@ °F					
Source: R_{mf} | R_{mc}							
R_m @ BHT	@ °F	@ °F					
R_{mf} @ BHT	@ °F	@ °F					
R_{mc} @ BHT	@ °F	@ °F					

2-12-64 BH029901

SPONTANEOUS POTENTIAL millivolts	Depths	RESISTIVITY ohms. m²/m	RESISTIVITY ohms. m²/m
− |10| +		SHORT NORMAL 0 60	18'8" LATERAL 0 60
		0 600	0 600
		LONG NORMAL 0 60	
		0 600	
		0 AMP SHORT NORMAL 12	
35-10s-25w		2" = 100'	

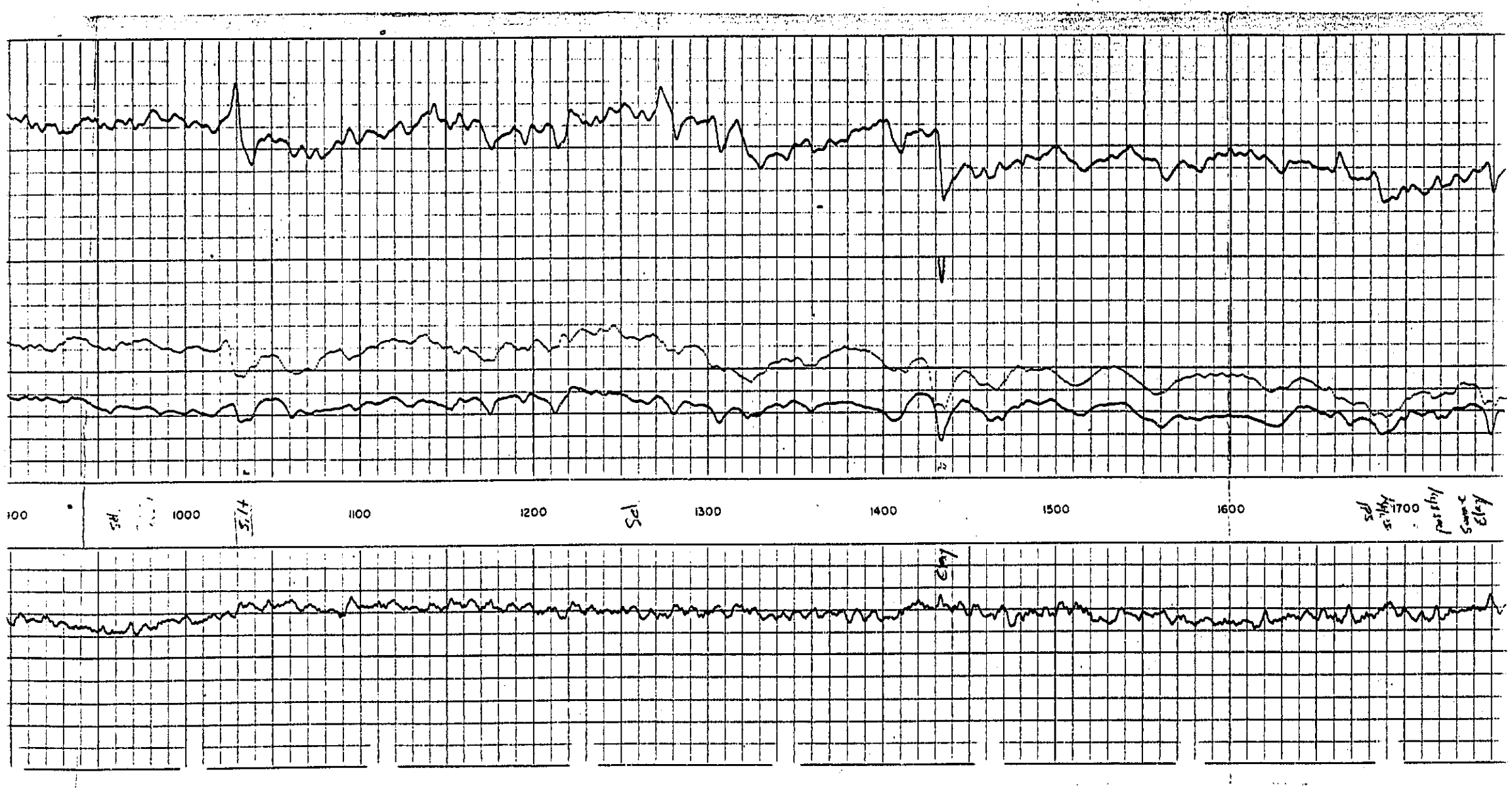


2-12-64 BH029901

32 x

Most of water
0900
0800
0700
0600
0500
0400
0300
0200
Pit 520-1398' and
1438-1998'

32 X 1L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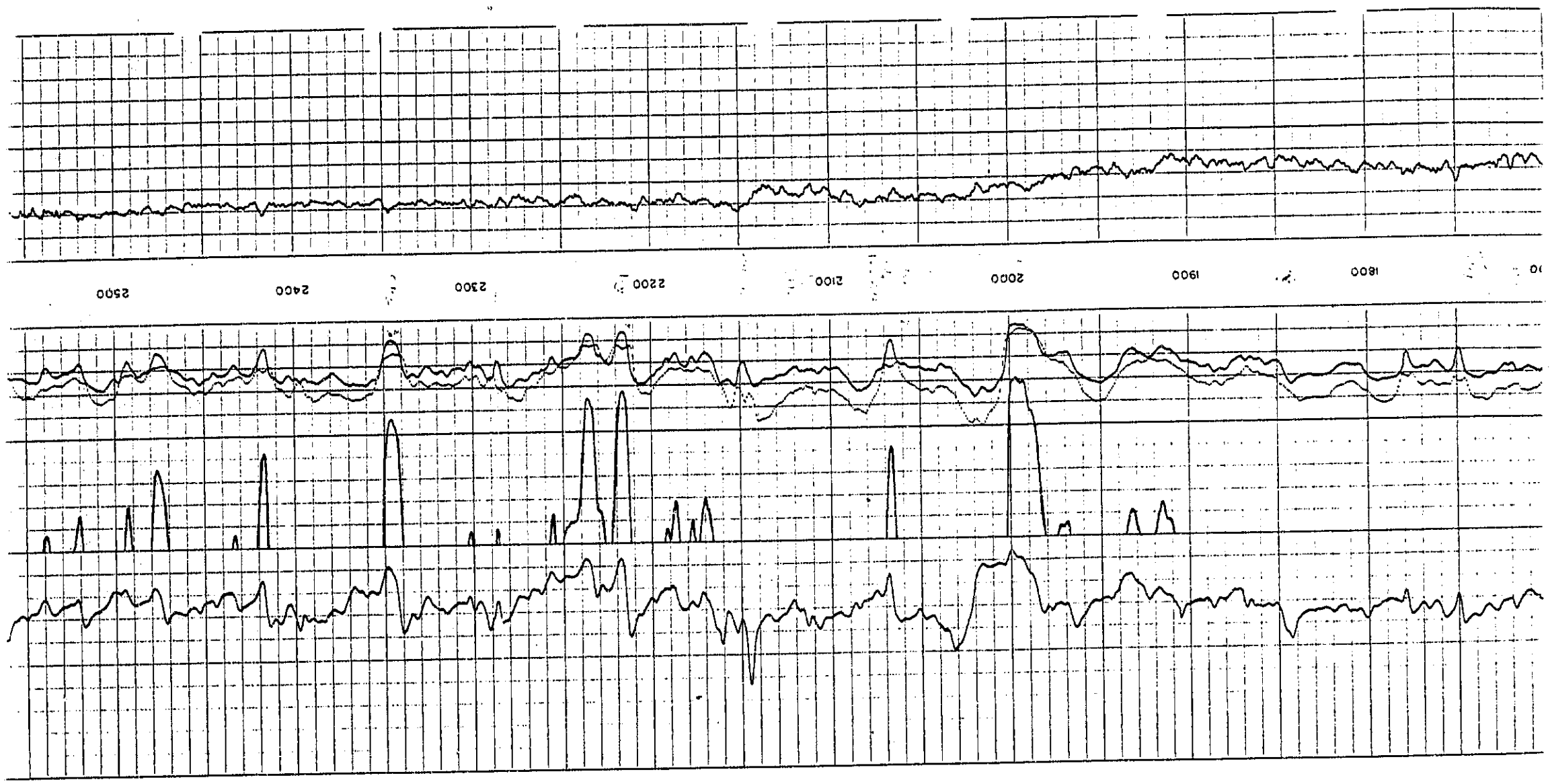
1100
1200
1300
1400
1500
1600
1700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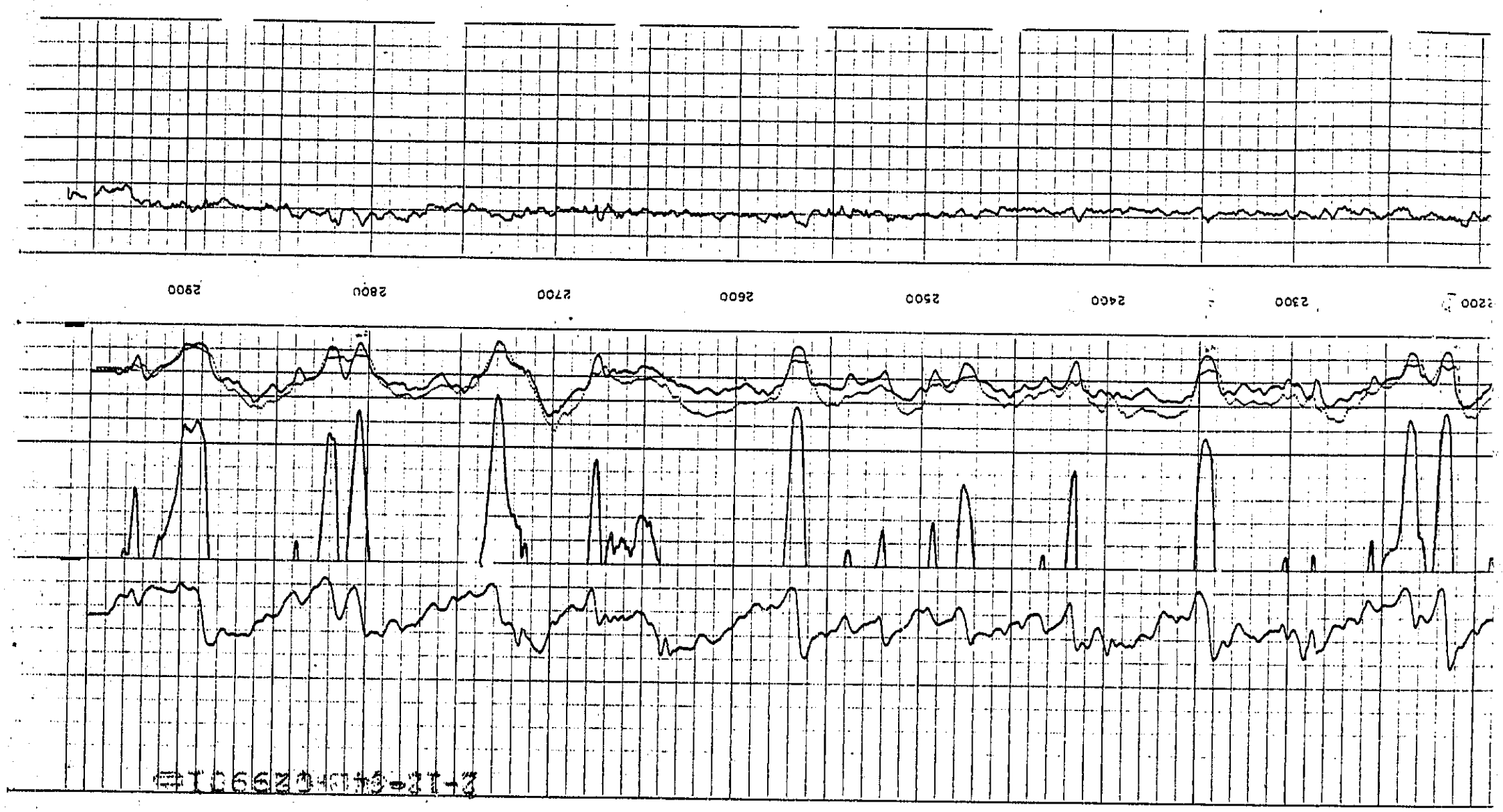
1900
2000
2100
2200
2300
2400
2500


2200
2300
2400
2500
2600
2700
2800
2900

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O. Box 1488
Yuma, Arizona

September 3, 1964

State of Arizona
Oil & Gas Conservation Commission
1624 West Adams
Phoenix, Arizona

Attention: John Bannister Executive Secretary

Gentlemen:

The enclosed formation log and electric logs of well LCRP #17 contain most of the information relevant to the drilling, etc. of this well.

The temperature of the formation water is about 78° F. A pump test pumping 390 gpm with a drawdown of 4.9 feet showed a specific capacity of about 80 gpm per foot of drawdown. This test and subsequent tests indicate that most of the water came from the 520-700Ft. interval and that the bottom part of this well would have a low permeability.

Sincerely,

C. C. McDonald
Project Hydrologist

fjf:arg

Encs. Formation Log
Electric Logs

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4 1964

32 ×

September 1, 1964

The Lower Colorado River Basin
Yuma Project Office GW
P.O. Box 1488
Yuma, Arizona 85364

Attention: Mr. Charles C. McDonald

Re: LCRP #17
NW/4NW/4, Section 35, T10S, R25W
Yuma County, Arizona

Gentlemen:

Inasmuch as the captioned well had an oil show from 1795 feet to 1818 feet, we would appreciate as much information as you are able to give us. — Yuma office of U.S.G.S. J.B. 1-7-73

If possible, we would appreciate the exact footage log as well as the commencement and completion dates, the total depth reached by this well, such casing information that you may be able to furnish, ground elevation, temperature, amount of water produce, formations encountered, etc.

Your help will be greatly appreciated.

Yours very truly,

John Bannister
Executive Secretary

mr

32 × 1