

OIL AND GAS PRODUCTION AND DISPOSITION
SUNRAY MID-CONTINENT LEASES SE BISTI AND CALLEGOS-GALLUP OIL POOLS
SAN JUAN COUNTY, NEW MEXICO

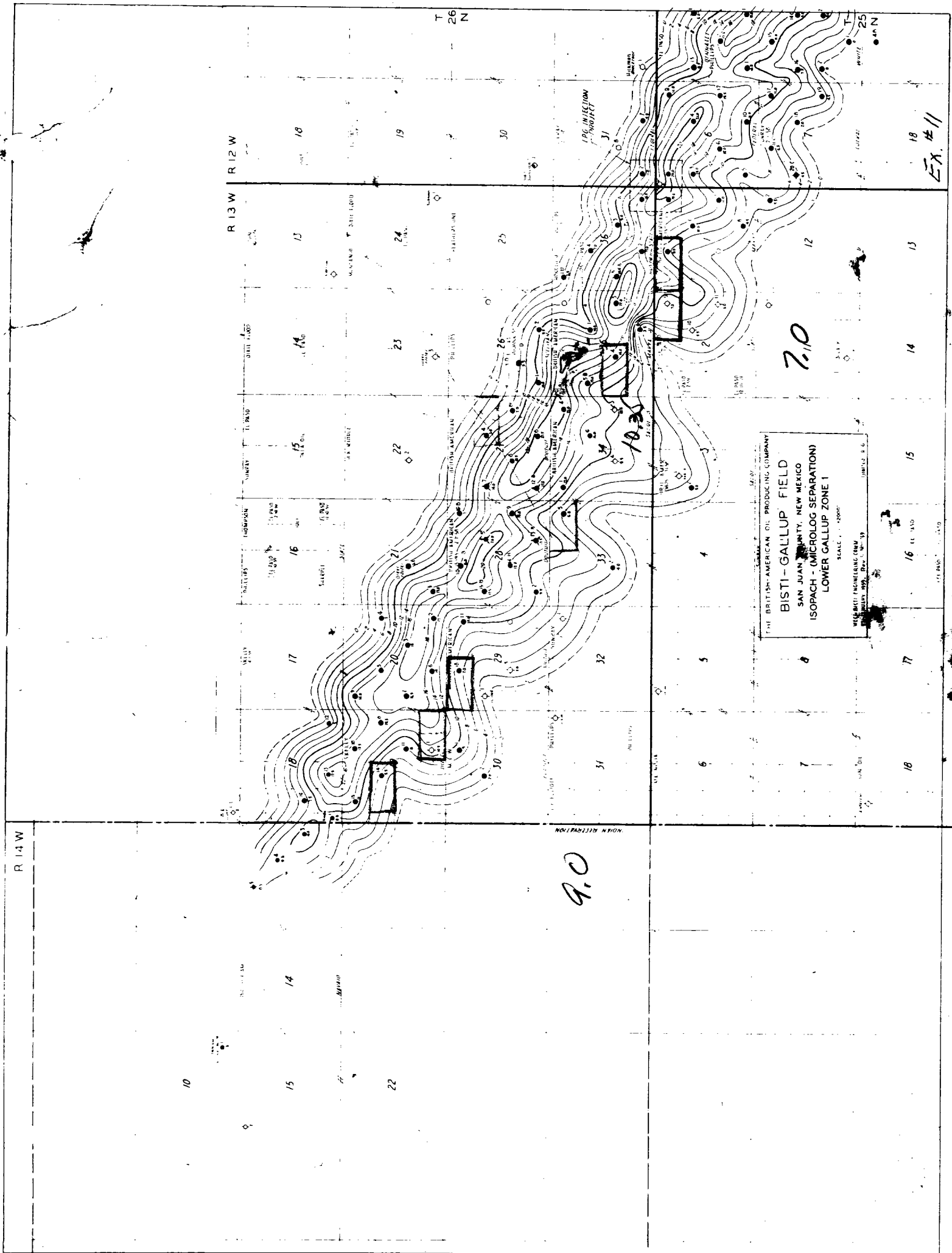
<u>Lease</u>	<u>Well No.</u>	<u>Oil Prod. Bbls/day November</u>	<u>Gas Prod. MCF/day November</u>	<u>Lease Use CF/day</u>	<u>Gas * Sales MCF/day</u>	<u>Gas * Flared MCF/day</u>
Bittoney-Nez 23-25-11	1	69	99	0	99	0
Es-Kee-Ba-Ey 25-25-11	1	98	39	0		2.8
	2	49	72	0	83	
Es-Ka-Nel-E-Wood 22-25-11	1	112	214	224	106.8	107
	2	S.I.	S.I.	-		
H. Platero 15-25-11	1	56	224	0	47 ** 177	0
Ka-Des-Pah 25-25-11	1	112	27			
	2	112	120	0	108	39
Ki-Yah-De-Tah 24-25-11	1	2	5	200	4.8	0
Mar-Ga-Le-Tah 23-25-11	1	75	114	0		
	2	37	83	0	197	0
N. Eaton 30-25-10	1	57	23	180		
	2	100	141	206	81.6	82
Federal J 35-27-13	1	3	44	300	0	43.7
TOTALS		<u>882</u>	<u>1,205</u>	<u>1,100</u>	<u>904.2</u>	<u>299.7</u>

* Estimates based on January 12, 1960 takes by El Paso.

** Sale for pipeline pump use.

BEFORE THE
OIL CONSERVATION COMMISSION
SUNRAY, N.M.

WAS



THE BRITISH-AMERICAN OIL PRODUCING COMPANY
BISTI-GALLUP FIELD
SAN JUAN COUNTY, NEW MEXICO
ISOPACH - (MICROLOG SEPARATION)
LOWER GALLUP ZONE I
SCALE: 1" = 2000'
WILLIAMS ENGINEERING CO.
SANTA FE, N.M.
JULY 1950

9.0

7.0

EX #11

R 14 W

R 12 W

R 13 W

R 14 W

R 15 W

R 16 W

R 17 W

R 18 W

R 19 W

R 20 W

R 21 W

R 22 W

R 23 W

R 24 W

R 25 W

R 26 W

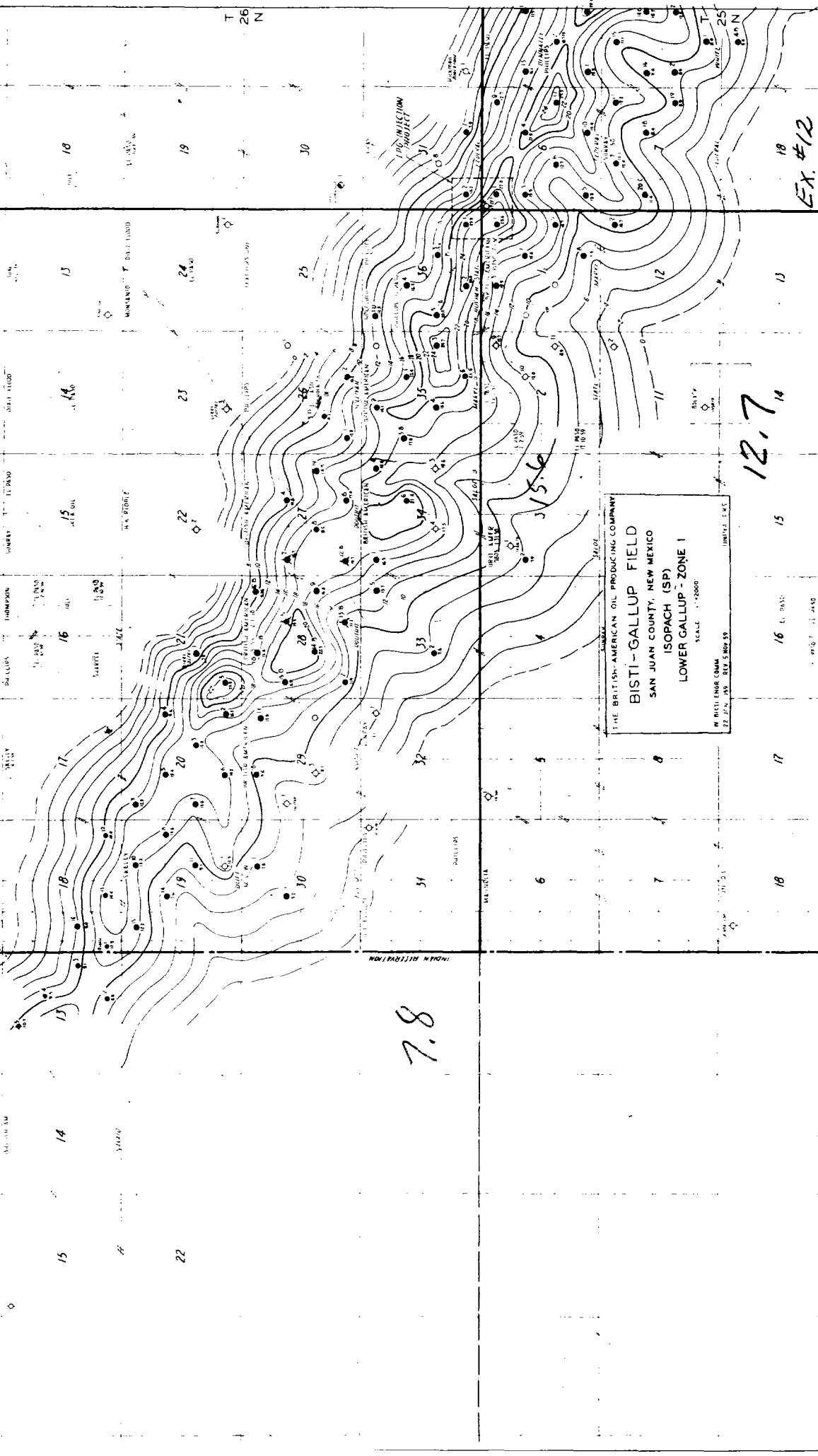
R 27 W

R 28 W

R 29 W

R 30 W

R 31 W

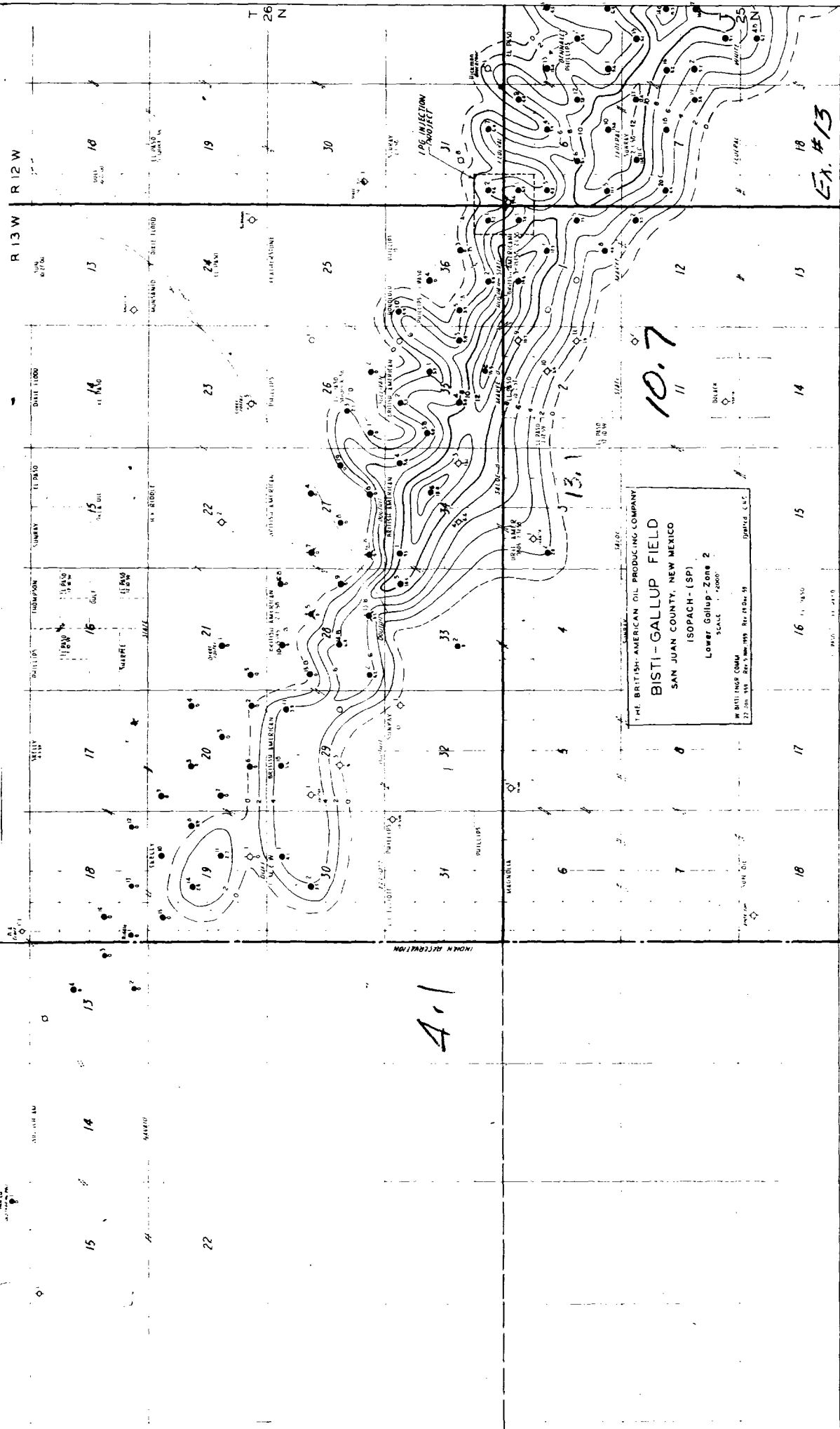


EX. #12

12.7

7.8

R 14 W

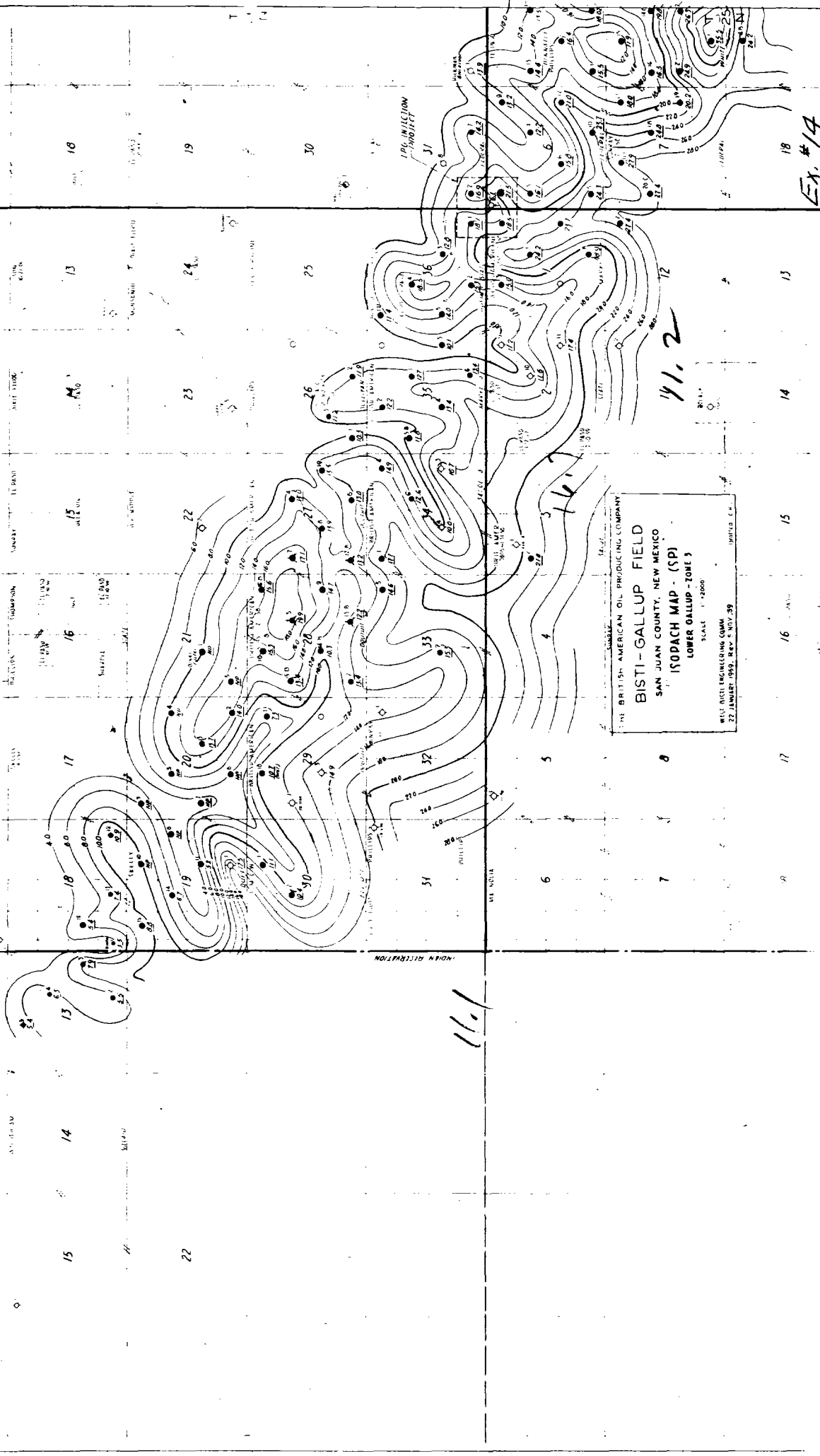


R 14 W

R 12 W

R 13 W

Ex. #14



10

15

22

11.1

11.2

17

16

15

14

13

18

BRITISH-AMERICAN
MARYE No 2

El. 6256' GL
 NE NE Sec. 12-25N-13W
 SAN JUAN CO., N.M.



GOR 3-1-59 TEST
 22-B0 0-BW 1710/1

9 5/8" CSG @ 230' KB
 cont to surf.

TOC @ 4375'

T. GALLUP SD. @ 4858'

Perf. 4858'-4876'
 5 1/2" M-L ZONE #1.
 FRAC'D w/30,000# & 30,000 GAL.
 12-5-58

Perf. 4880'-4898'

Perf. 4902'-4916'
 FRAC'D w/30,000# & 30,000 GAL.
 5-15-56

Perf. 4922'-4964'.
 4-80 g./ft. 4-30-56.
 FRAC'D. w/20,000# & 20,000 GAL.

PBD. @ 4970'

5 1/2" CSG, 800' 15.5#, 4183' 14# J-55 w/100 SK.
 T.D. @ 4982'

BRITISH-AMERICAN

SALGE N°B-5

EL. 6288' GL

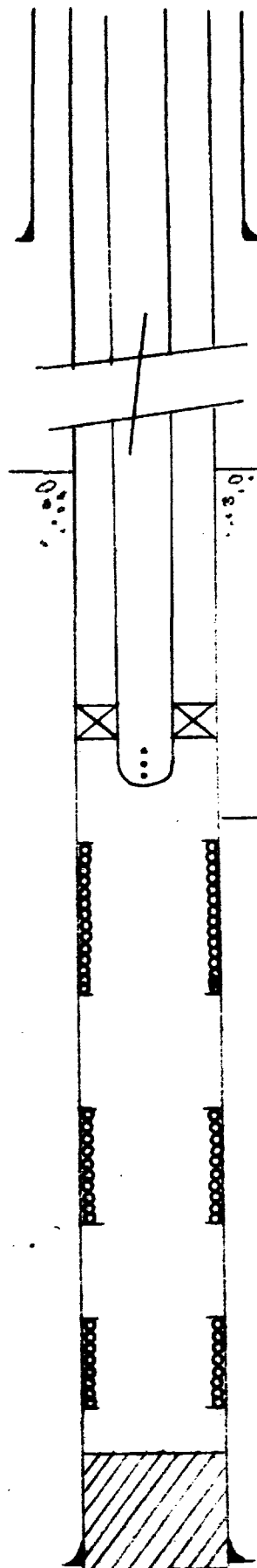
NE NE SEC. 33-26N-13W

SAN JUAN CO., N.M.



GOR 3-5-59:

880, GBW, 819/1



9 5/8" CSB. @ 214' KB
W/ 200 SAX.

TOC. @ 4200'

T. GALLUP SAND @ 4900'

PERF. 4994-5016'
FRAC'D W/30,000 # 4
30,000 GAL. 10-20-58.

PERF. 5028-5040'

PERF. 5054-5068'

PBD @ 5100'

5 1/2" CSB, 14" J-55 @ 5132' W/100 SX, 3% GEL.
TD @ 5133'

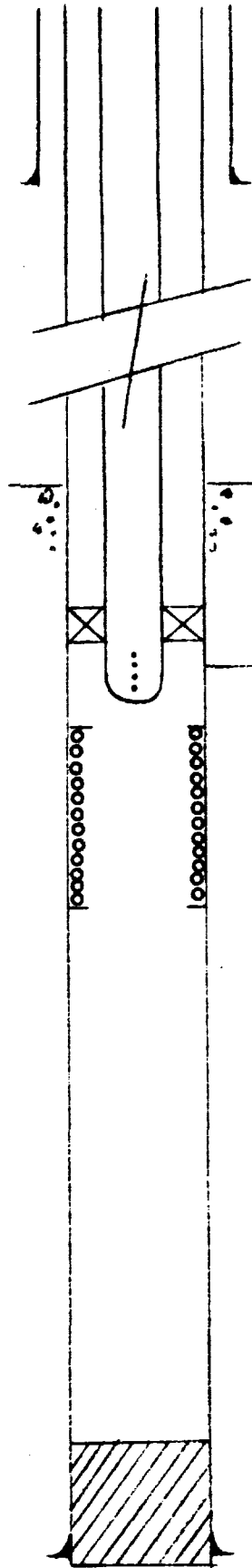
FRAC'D W/30,000 # 4
30,000 GAL. FIVE
STAGES W/32 NYLON
BALLS INJ. AFTER
EACH STAGE

EX. #16

BRITISH AMERICAN
NAVAJO No 3
 EL. 6420' KB
 NE SE SEC. 13- 26N-14W
 SAN JUAN CO., N.M.



GOR 3-7-59 TEST
 57 BO, C.B.W, 196/1



9 5/8" CSG @ 212' KB
 W/175 SAX.

T.O.C. @ 4650'

T. GALLUP SAND @ 5230'

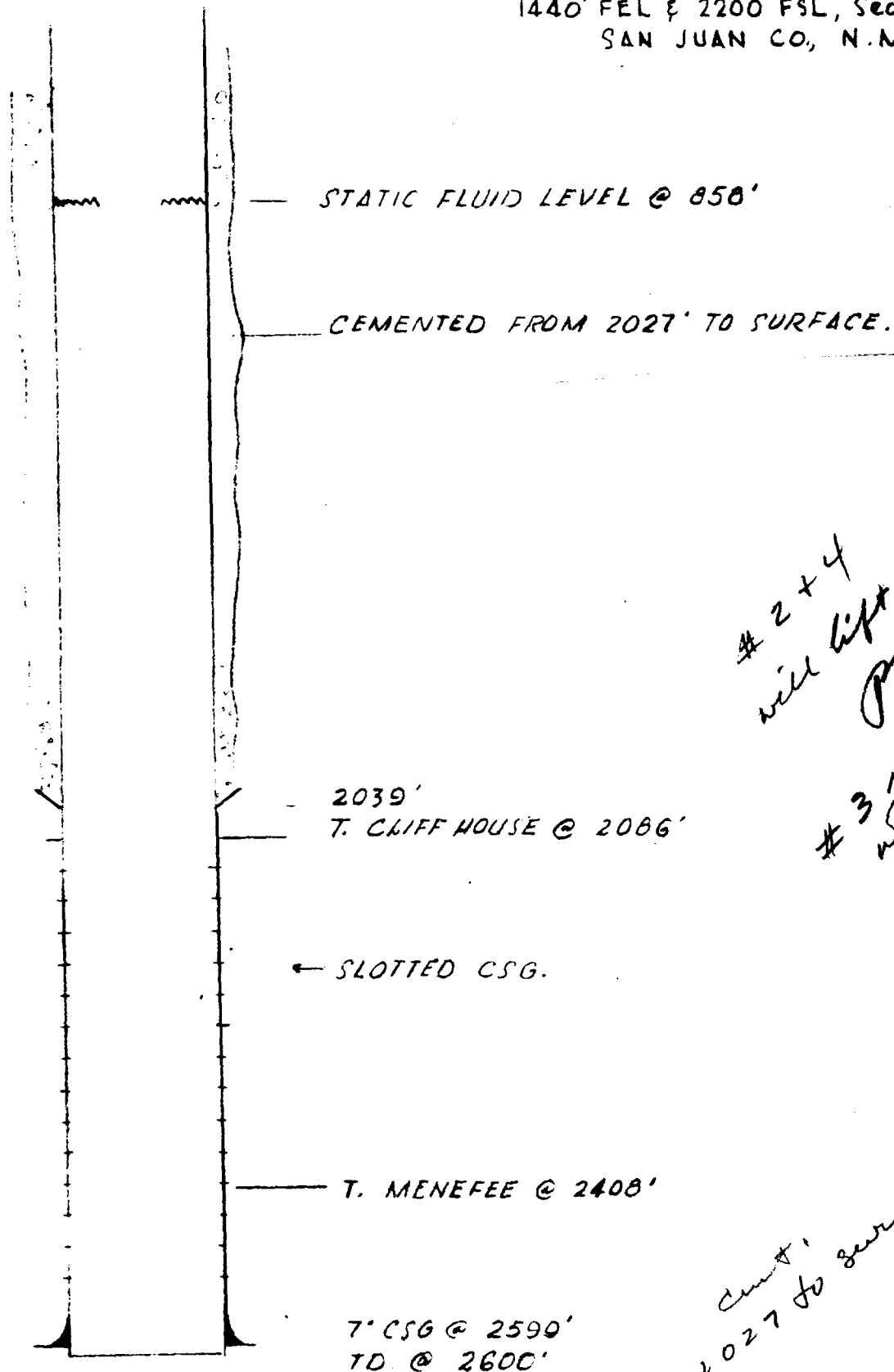
PERF 5238'-5250'
 FRAC'D W/30,000 # & 30,000 GAL. 1-10-59

PBD. @ 5312'

5 1/2" CSG, 14 #1-55 @ 5363' W/100 SX. 50-50 POZMIX "S"
 TD. 5365' KB

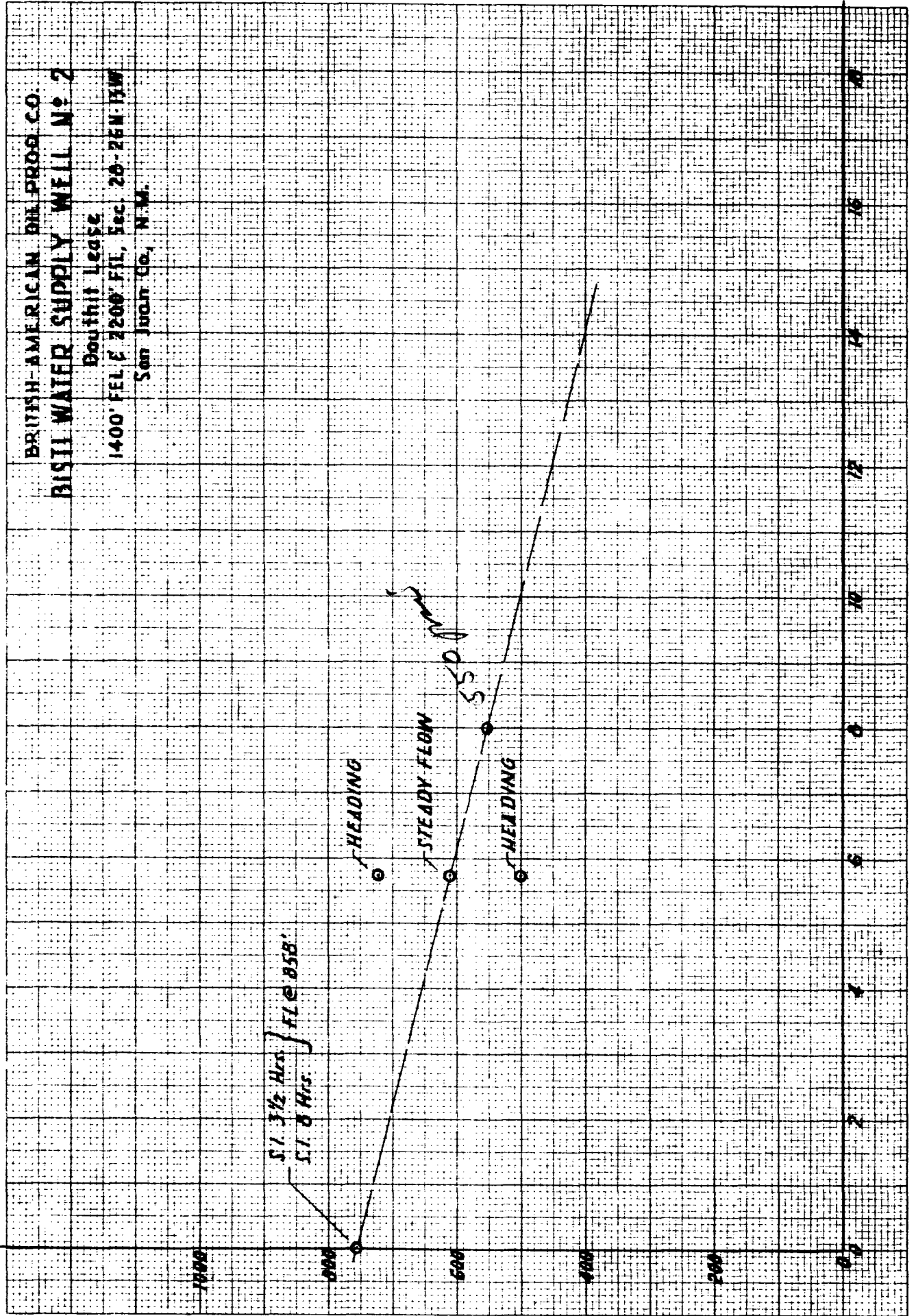
BRITISH-AMERICAN
DOUTHIT WATER SUPPLY WELL
NO. 2

1440' FEL & 2200' FSL, Sec. 28-26N-15W
SAN JUAN CO., N.M.



#2 + 4
will lift w/ Peda
pumps.
#3 will be lifted
w/ Fairbanks more

cont.
2027 to surf.



BRITISH-AMERICAN OIL PROD. CO.
BISTI WATER SUPPLY WELL No 2
Doughit Lease
1400' FEL E 2200' FIL, Sec. 20-26N-13W
San Juan Co., N.M.

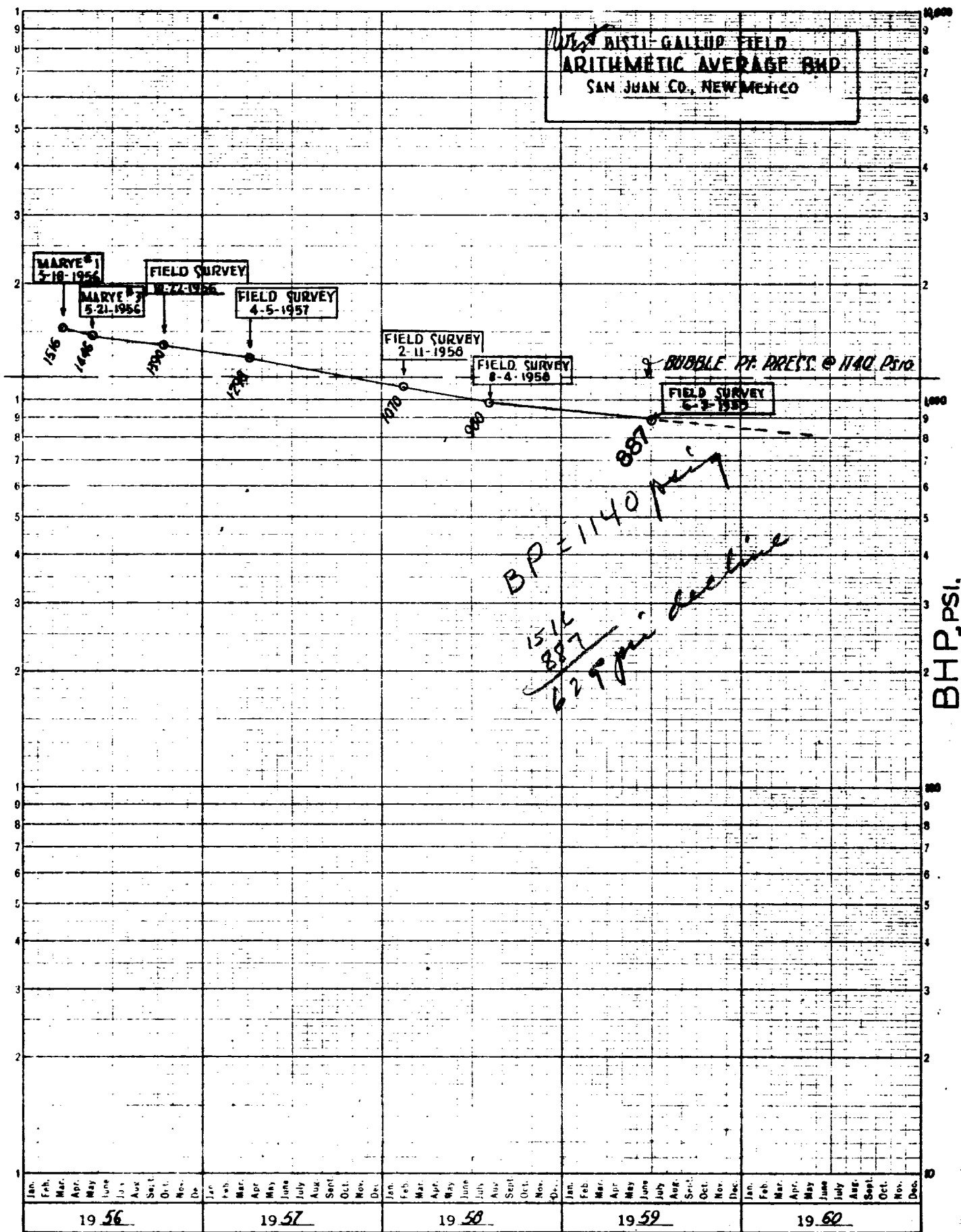
BW X 10³

Ex. #20

CHEMICAL ANALYSIS OF
 BRITISH-AMERICAN'S DOUTHIT WATER SUPPLY WELL #2
 1440' FEL, 2200' FSL, Section 28-26N-13W
 San Juan County, New Mexico

Total dissolved solids	3240 ppm
Sodium	937
Iron	11
Barium	0
Calcium	31
Magnesium	6
Chlorides	150
Bicarbonates	1165
Sulphates	940
Hydrogen Sulphides	13.6
Carbon Dioxide	12
Oxygen	0
Precipitated solids	217
Ferrous Sulphides	24.7
Calcium Carbonate	12.4
Silica	163.5
Organic	16.5
SG	1.004
pH	8.1

In a closed system this supply water from the Cliff House-Monofee sands would be compatible with Gallup sand produced water and would have no detrimental effect upon the formation.



PERTINENT DATA

WEST BISTI-LOWER GALLUP SAND

I. General Information

Date of Discovery	October, 1955
Structure	stratigraphic trap (sand bar deposits)
Participating Acreage	5,142 ✓
Total Wells Drilled	63
Depth to Top of Pay, Ft.	4,900' Approx.
Producing Zones	1st, 2nd, and 3rd Benches of Lower Gallup Sd.

II. Reservoir Information

Producing Mechanism	Solution Gas Drive
Arithmetic Avg. BHP, psi, (March, 1956)	1,516
Arithmetic Avg. BHP, psi, (June, 1959)	887
Bubble Point Pressure, psi.	1,140
Original Solution GOR, CF/S.T.B.O.	379
Original RVF, RBO/S.T.B.O.	1.249
Bottom Hole Temperature, °F.	145
Gravity of Oil, °API	38

	<u>ZONES</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
Average Porosity, %	14.9	9.3	9.6
Permeability, md.	31	2	2
Avg. Water Sat., %	28.1	31.7	35.8

III. Production and Reserves

Original Oil in Place, BSTO	43,750,000 (#1)
Based On M-L Pay	900,000 (#2)
	1,100,000 (#3)
	TOTAL 45,750,000
Original Recoverable Primary Reserves, Bbls.	6,320,000 ✓ R.G.
Est. Recovery Factor, % of Zone #1 Original Oil in Place by M-L	14.45
Cumulative Production to 10-1-59, Bbls.	2,723,111 ✓
Est. Cumulative Production to 2-1-60, Bbls.	3,250,000
Est. Remaining Primary Reserves on 2-1-60, Bbls.	3,070,000
% Primary Depletion on 2-1-60	51.4
Est. Remaining Primary Life Without Pressure Maintenance, Years	7

IV. Secondary Recovery by Pressure Maintenance

Estimated Commencement Date of Water Injection	6-1-60
Estimated Secondary Recovery, Bbls.	6,800,000
Estimated Total Primary & Secondary Recovery to Depletion, Bbls.	13,120,000
% Recovery of Original Oil In Place	30
Estimated Total Water Requirements, Bbls.	87,500,000
Estimated Daily Avg. Injection, BWPD	12,000 - 16,000
Estimated Duration of Program, Years	20 - 15
Initial Number of Injection Wells	17
Possible Additional Injection Wells	15
Initial Number of Recovery Wells	46
Estimated Number of Water Supply Wells	3
Flood Pattern	Line Drive
Maximum Injection Pressure, psig. (at surf)	1,200

Est.
Critical press
would be
2800# at surf

17
46
63
32
31

17
15
32

PROPOSED FIELD RULES AND REGULATIONS FOR
THE BRITISH-AMERICAN OIL PRODUCING COMPANY
WEST BISTI WATER INJECTION PRESSURE MAINTENANCE PROJECT

RULE 1: The project area (initial participation area) of the British-American Oil Producing Company, West Bisti Water Injection Pressure Maintenance Project shall comprise that area described as follows:

TOWNSHIP 25 NORTH, RANGE 13 WEST, NMPM

Section 1 E/2, N/2 NW/4

Section 12 E/2 NE/4

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM

Section 18 SW/4, S/2 SE/4

Section 19 N/2, N/2 SE/4, SE SE/4

Section 20 W/2, S/2 NE/4, SE/4

Section 21 SW/4

Section 26 SW/4, S/2 SE/4

Section 27 S/2, S/2 N/2

Section 28 All

Section 29 N/2 N/2

Section 30 N/2 NE/4

Section 33 N/2 NE/4

Section 34 N/2 NW/4, NE/4

Section 35 N/2, N/2 SW/4, SE/4

Section 36 W/2, SE/4

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. <u>24</u>
CASE NO. <u>1867</u>

RULE 2: The allowable for the West Bisti Gallup Sand Project shall be equal to the then current normal unit allowable for an 80 acre proration unit of comparable depth in Northwest New Mexico times the number of 80 acre proration units in the project area of the West Bisti Unit including those units having wells which are shut in or are used as injection wells, and those units or portions thereof having no wells.

RULE 3: The project allowable may be produced from any well or wells in the project area in any proportion.

RULE 4: Conversion of producing wells to injection, or the drilling of additional wells for injection, shall be done only after approval of same by the Secretary Director of the Commission. To obtain such approval, the project operator shall file proper application with the Commission, which application shall include the following:

- (1) A plat showing location of proposed injection well, all wells within the project area and offset operators, locating their offsetting wells to the project area.
- (2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depths and showing that injection of water will be confined into the West Bisti-Lower Gallup formation.
- (3) A letter stating that all offset operators to the project area have been furnished a complete copy of the application and the date of the notification.

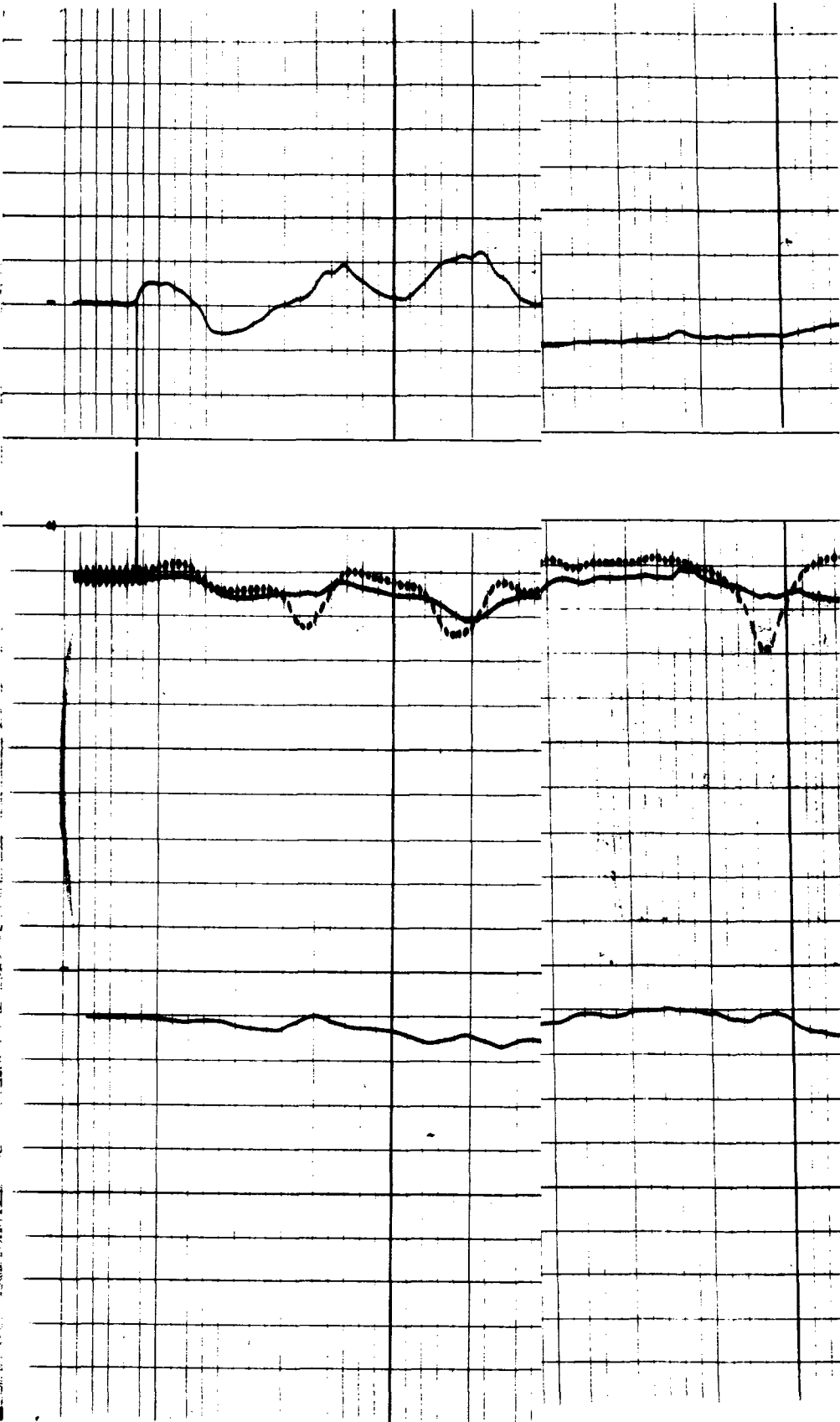
The Secretary-Director may approve the proposed injection well if, within

20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval provided waivers of objection are received from all offset operators.

RULE 5: Each month the project operator shall submit to the Commission a Water Injection Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required.

RULE 6: The commission shall, upon review of the report assign a project allowable for the next succeeding month in accordance with these rules.

RULE 7: The Special Rules and Regulations for the operation of the subject project shall prevail against the Statewide Rules and also against the Special Rules and Regulations for the Bisti-Lower Gallup Oil Pool, if in conflict therewith.

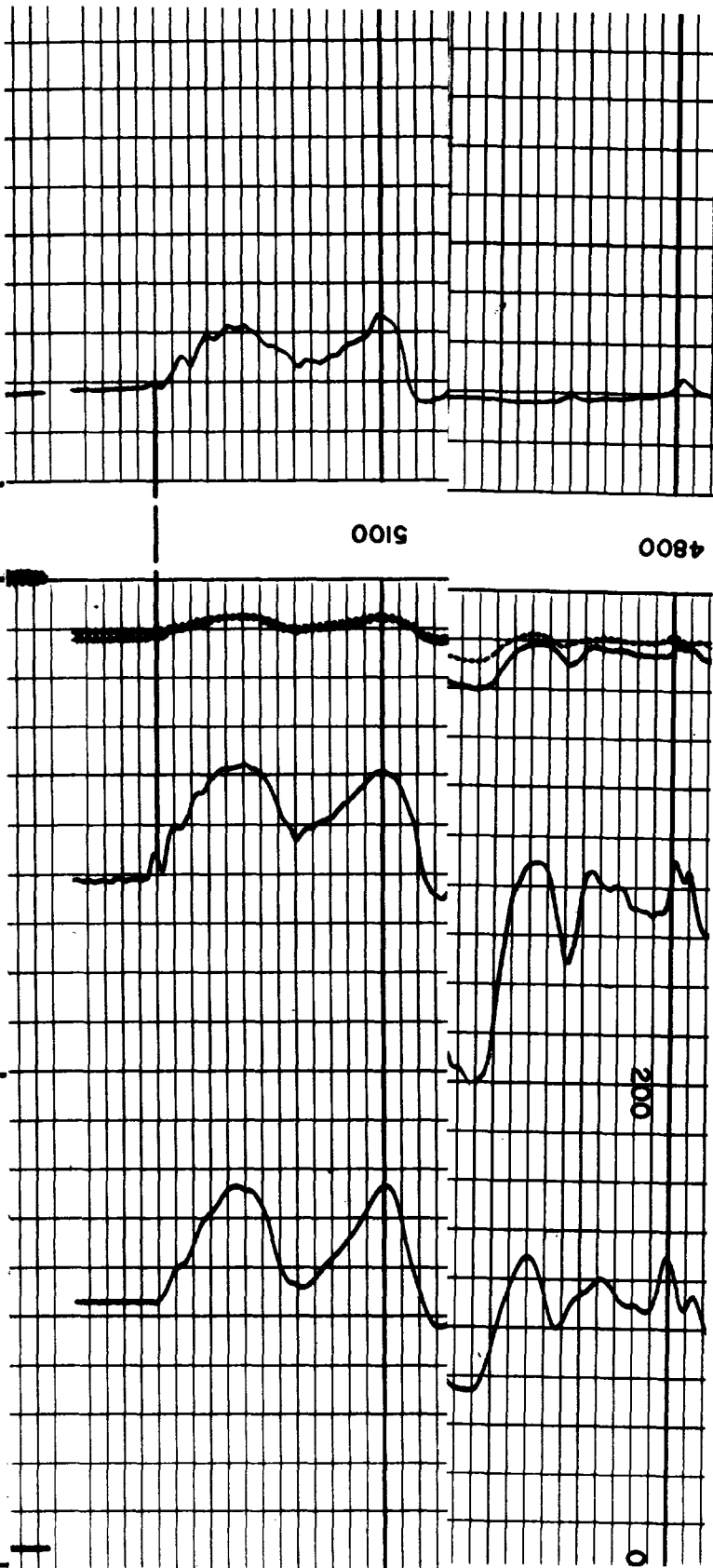


$\frac{1}{2}$ 0
 $\frac{1}{2}$ 0
 MV F.R. 4983'

0	NORMAL	100	0	LONG NORMAL	100
0		1000	0		1000
0	LATERAL	100			
0		1000			

Ex. B-1

BRITISH AMERICAN OIL PRODUCING COMPANY
 MARYE #2
 SAN JUAN, NEW MEXICO
 SEC. 12-25N-13W
 ELEV. 6256' G.L.



10
mV

RESISTIVITY		CONDUCTIVITY	
16" NORMAL		INDUCTION	
0	100	500	0
0	1000	1000	500
0	100	IND-ES F. R.	5126'
0	1000	DEPTH REACHED	5132'
0	AMP. NORMAL	20	

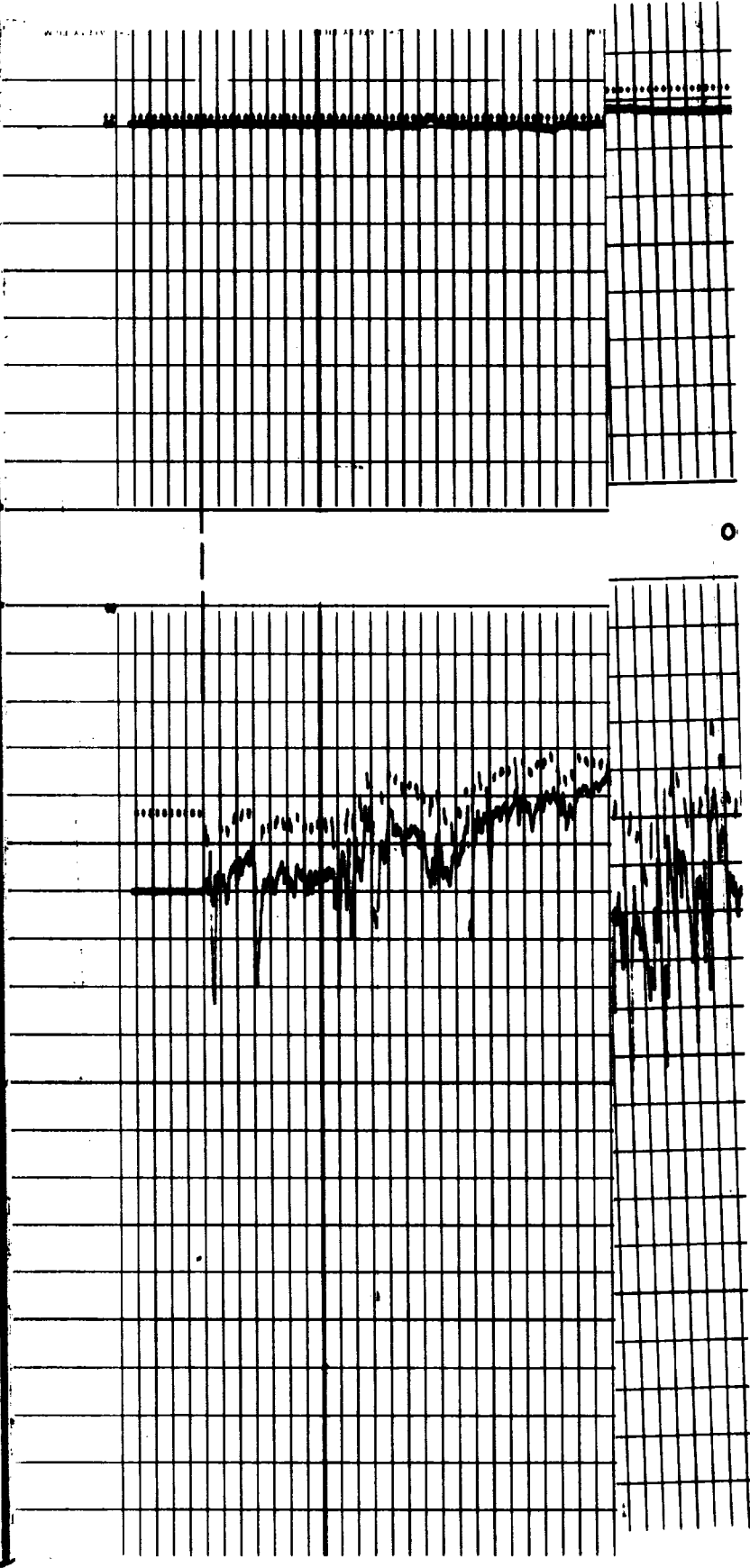
COMPANY
BRITISH AMERICAN
OIL PRODUCING COMPANY
WELL
SALGE B #5

COUNTY
SAN JUAN, NEW MEXICO

LOCATION
SEC. 33-26N-13W

ELEVATION
6288' G.L.

EX B-2



6 7 8 9 10 11 12 13 14 15 16

Hole Diameter in Inches

0 Micro Inverse 1" x 1"

20

40

0 Micro Normal 2"

20

40

MICROCALIPER

RESISTIVITY
ohms. m²/m

COMPANY BRITISH AMERICAN OIL PRODUCING COMPANY

WELL NAVAJO #3

FIELD BISTI

COUNTY SAN JUAN STATE NEW MEXICO

Rm 1.6 @ 128 °F
Rmf 1.1 @ 128 °F
Rmc 1.7 @ 128 °F
BHT 128 °F

SWSC FR 5364'
SWSC TD 5365'
DRLR TD 5365'
Elev:

EX. B-3

KB 6420'
DF
GI

EXHIBIT "C-1"
 BRITISH-AMERICAN
MARYE No 2
 El. 6256' GL
 NE NE Sec. 12-25N-13W
 SAN JUAN CO., N.M.



GOR 3-1-59 TEST
 22-B0 O-BW 1718/1

9 5/8" CSG @ 230' KB

TOC @ 4375'

T. GALLUP SD. @ 4855'

Perf. 4858'-4876'
 5 1/2" M-L ZONE #1.
 FRAC'D w/30,000# & 30,000 GAL.
 12-5-58

Perf. 4880'-4898'

Perf. 4902'-4916'
 FRAC'D w/30,000# & 30,000 GAL.
 5-15-58

Perf. 4922'-4964'.
 4.80 g./ft. 4-30-58.
 FRAC'D. w/20,000# & 20,000 GAL.

PBD. @ 4970'

5 1/2" CSG, 800' 15.5#, 4183' 14# J-55 w/100 SK.
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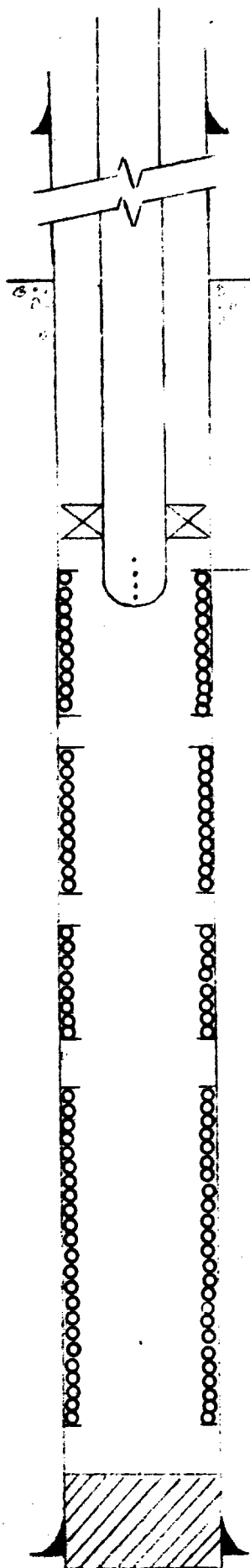


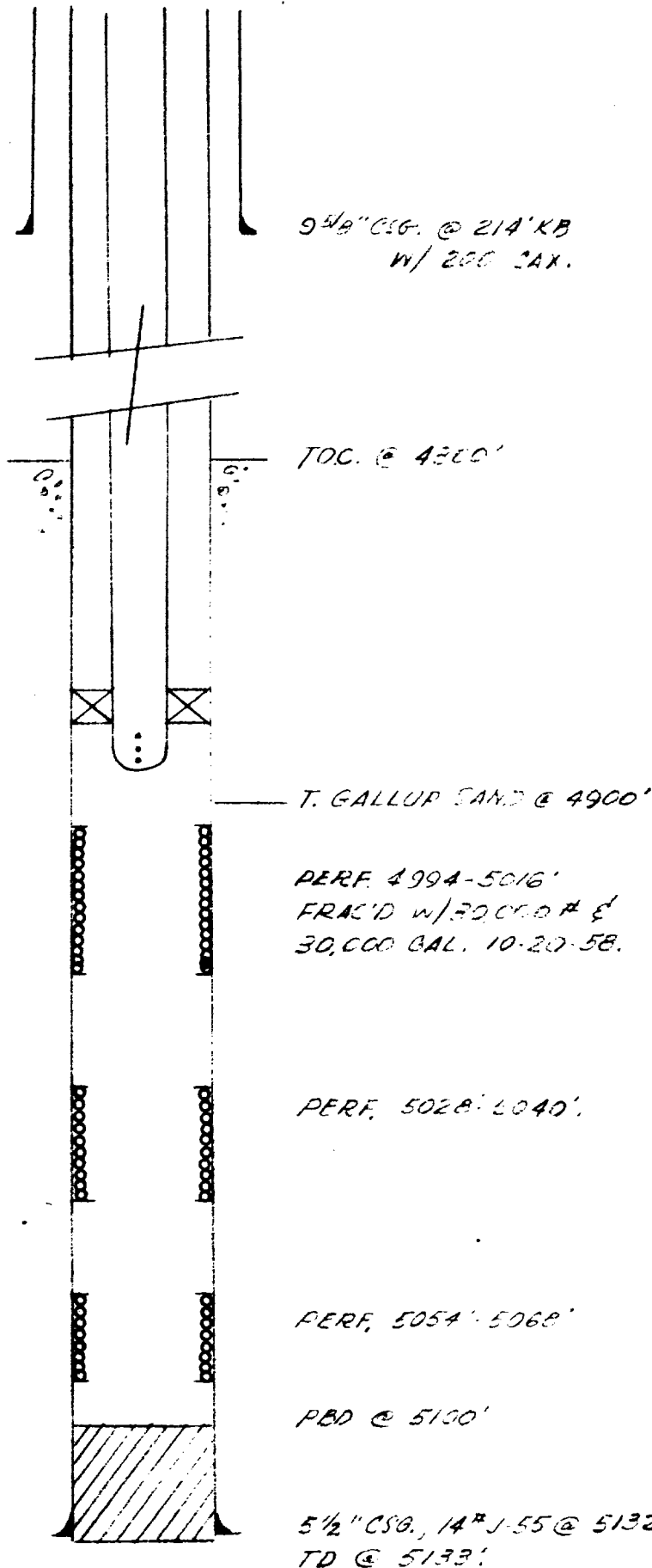
EXHIBIT "C-2"
BRITISH-AMERICAN

SALGE N^oB-5

EL. 6288' GL
NE NE SEC. 33-26N-13W
SAN JUAN CO., N.M.



GOR 3-5-59:
880, GBW, 819/1



FRAC'D W/ 30,000 # 4'
30,000 GAL. FIVE
STAGES W/ 32 NYLON
BALLS INJ. AFTER
EACH STAGE

EXHIBIT "C-3"

BRITISH-AMERICAN

NAVAJO No 3

EL. 6420' KB

NE SE SEC. 13- 26N-14W

SAN JUAN CO., N.M.



GOR 3-7-59 TEST

57 BO, C.B.W. 196/1

9 5/8" CSG @ 2 1/2' KB
W/175 SAX.

T.O.C. @ 4650'

T. GALLUP SAND @ 5250'

PERF 5238'-5250'

FRAC'D W/30,000 # 6' 30,000 GAL. 1-10-59

PBD. @ 5312'

5 1/2" CSG, 14 # J-55 @ 5363' W/100 SX. 50-50 POZMIX "S"
TD. 5365' KB

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
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EXHIBIT

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
CASE NO. 1867
EXHIBIT NO. 5

BRITISH AMERICAN OIL PROD. CO.

BISTI GALLUP FIELD
San Juan Co., New Mex.

SOUTH-NORTH CROSS SECTION C-C'
LOWER GALLUP SAND
ZONE I

Vert. Scale 1" = 40'

By: N.H. Williamson

1-22-60

SCHLUMBERGER WELL SURVEYING CORPORATION
INDUCTION ELECTRICAL

CO	British-American Oil Producing Co.
WELL	#11-B Douthitt
FIELD	Bisti
LOC	29-26N-13W C NE NE
CO	San Juan New Mexico
STATE	
PLANT No.	
Location of Well	
IND. 14545	
EX. 5534	
GL. 5534	

SCHLUMBERGER WELL SURVEYING CORPORATION
INDUCTION ELECTRICAL

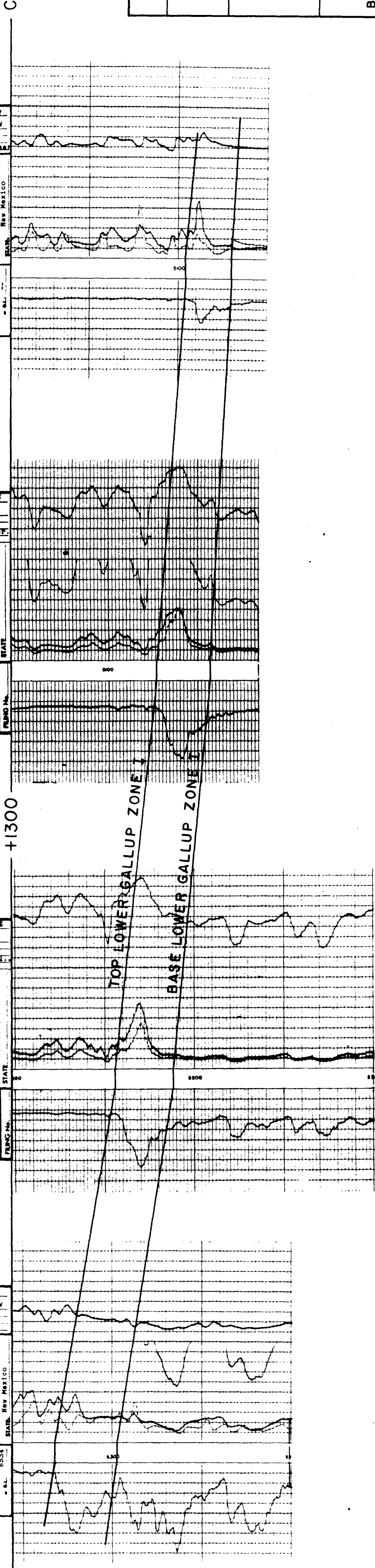
CO	Benson-Montin & Greer
WELL	#5 Foster
FIELD	Bisti
LOC	21-26N-13W C SW SW
CO	San Juan New Mexico
STATE	
PLANT No.	
Location of Well	
IND. 14703	
EX. 5534	
GL. 5534	

CO	Benson-Montin & Greer
WELL	#1 Foster
FIELD	Wildcat
LOC	21-26N-13W C NE SW
CO	San Juan New Mexico
STATE	
PLANT No.	
Location of Well	
IND. 14757	
EX. 5506	
GL. 5506	

+1300

TOP LOWER GALLUP ZONE I

BASE LOWER GALLUP ZONE I



EXHIBIT

BEFORE EXAMINED UTZ
OIL CONSERVATION CORPORATION
EXHIBIT NO. 4
CASE NO. 1867

PI
PENNY - CARP
SALINAS DISTRICT
LOS ANGELES

LOG NO. 16703 IE
COMPANY British-American Oil Producing Co.
WELL #2 Nava Jo
FIELD Vildora
LOC (P. 1) C SW SE 13 26N 14W
San Juan, N. Mex.

LOG NO. 16703 IE
13 26N 14W

PI
PENNY - CARP
SALINAS DISTRICT
LOS ANGELES

LOG NO. 22579 IE
COMPANY British-American Oil
Producing Company
WELL #3 Nava Jo
FIELD Bisti
LOC (P. 1) 1988 N/S 660 W/E
San Juan, New Mexico

LOG NO. 22579 IE
13 26N 14W

PETROLEUM INFORMATION
Location of well
A9240
(BL, IND)
T. 6334
CO British-American
WELL #1 Govt-Scott
FIELD Vildora
LOC 7-26N-13W
SE SW SW
San Juan
New Mexico
CO British-American
WELL #1 Govt-Scott
FIELD Vildora
LOC 7-26N-13W
SE SW SW
San Juan
New Mexico



BRITISH AMERICAN OIL PROD. CO.
BISTI GALLUP FIELD
San Juan Co., New Mex.
SOUTH-NORTH CROSS SECTION B-B'
LOWER GALLUP SAND
ZONE I
Vert. Scale 1" = 40'
By: N. H. Williamson
1-22-60

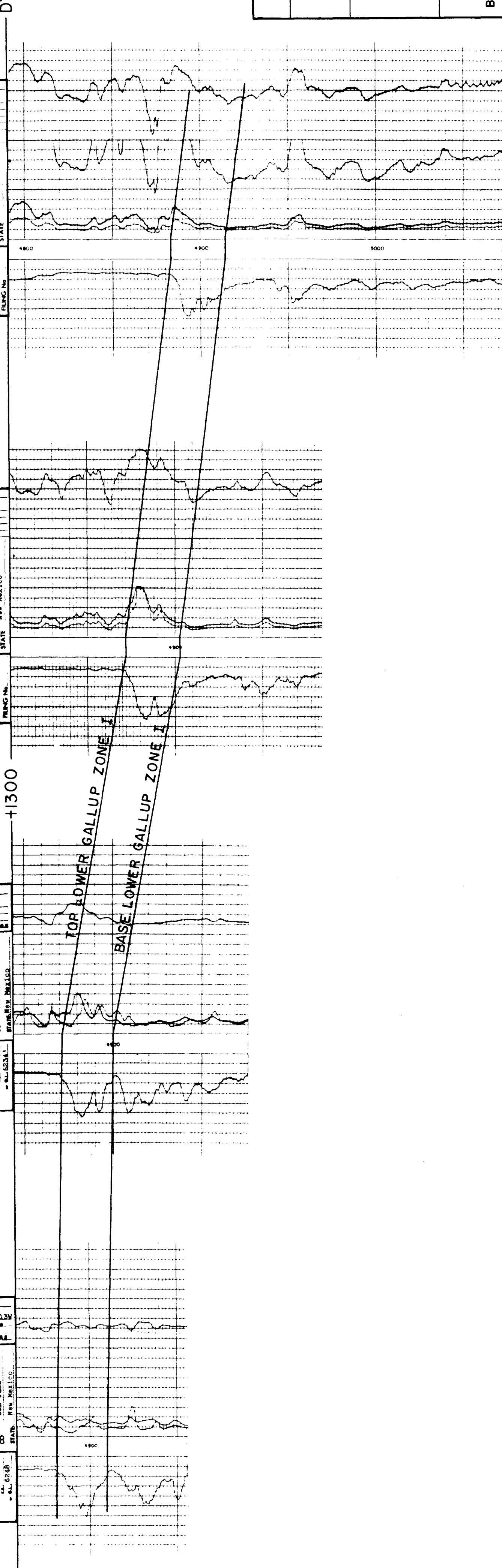
EXHIBIT

SCHEIDT & BOND WELL SURVIVING CORPORATION HITTING THE MARK	
INDUCTION - ELECTRICAL	
CO	San Juan A6398
LOC	C SW NE 2-25N-13W
WELL	#10 Kelly-State
FIELD	Bisti
LOC	C SW NE
CO	San Juan
STATE	New Mexico
ELECTRICAL	
CO	San Juan A6398
LOC	C SW NE 2-25N-13W
WELL	#10 Kelly-State
FIELD	Bisti
LOC	C SW NE
CO	San Juan
STATE	New Mexico

SCHEIDT & BOND WELL SURVIVING CORPORATION HITTING THE MARK	
ELECTRICAL	
CO	San Juan A6873
LOC	C NE NE 2-25N-13W
WELL	#9 Kelly-State
FIELD	Bisti
LOC	C NE NE
CO	San Juan
STATE	New Mexico
ELECTRICAL	
CO	San Juan A6873
LOC	C NE NE 2-25N-13W
WELL	#9 Kelly-State
FIELD	Bisti
LOC	C NE NE
CO	San Juan
STATE	New Mexico

SCHEIDT & BOND WELL SURVIVING CORPORATION HITTING THE MARK	
INDUCTION - ELECTRICAL	
CO	Phillips Petroleum
WELL	#3-A Hospah
FIELD	Bisti
LOC	C NW SW
CO	San Juan
STATE	New Mexico
ELECTRICAL	
CO	Phillips Petroleum
WELL	#3-A Hospah
FIELD	Bisti
LOC	C NW SW
CO	San Juan
STATE	New Mexico

SCHEIDT & BOND WELL SURVIVING CORPORATION HITTING THE MARK	
INDUCTION ELECTRICAL	
CO	Phillips Petroleum
WELL	#1-C Hospah
FIELD	Bisti
LOC	C SE NW
CO	San Juan
STATE	New Mexico
ELECTRICAL	
CO	Phillips Petroleum
WELL	#1-C Hospah
FIELD	Bisti
LOC	C SE NW
CO	San Juan
STATE	New Mexico



BRITISH AMERICAN OIL PROD. CO.

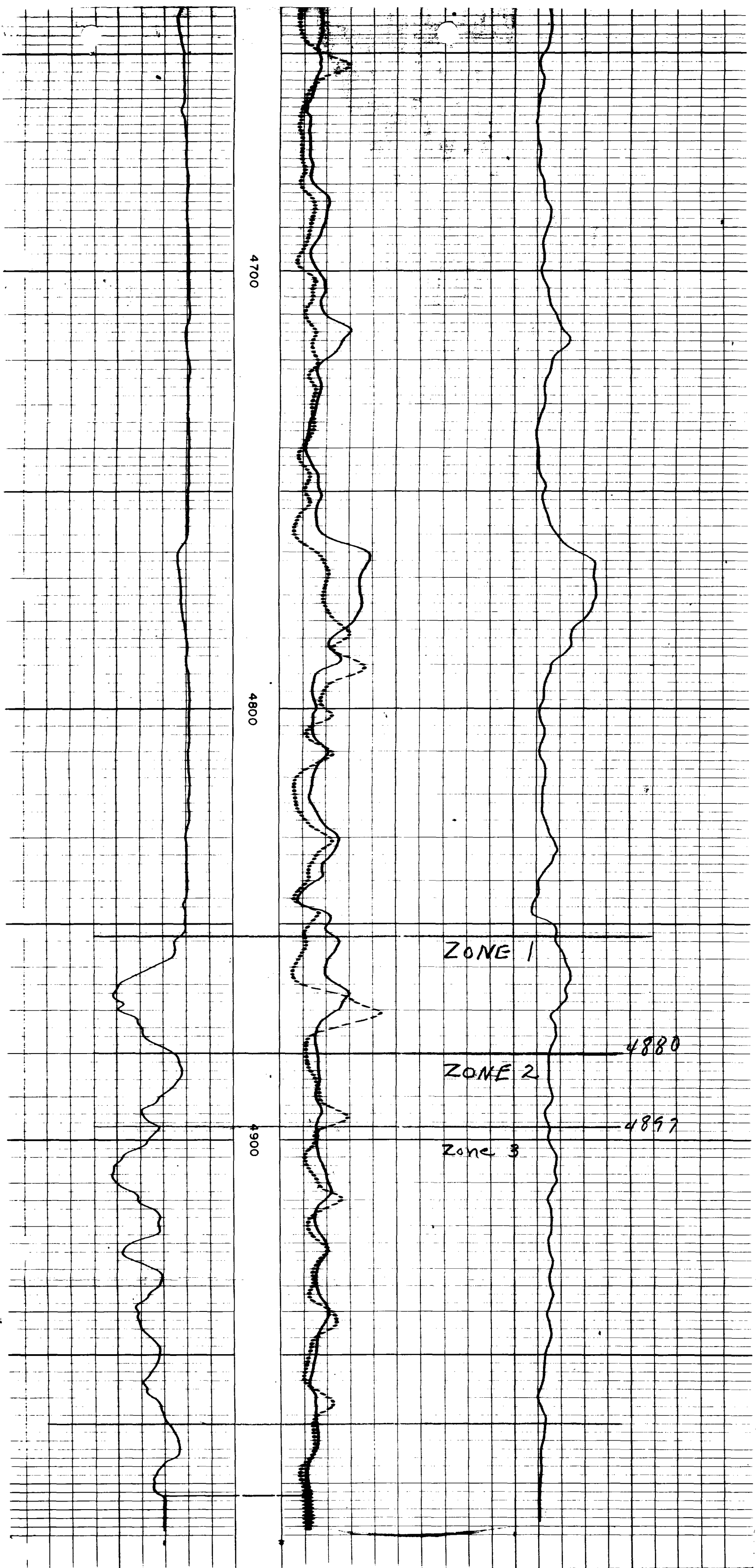
BISTI GALLUP FIELD
San Juan Co., New Mex.

SOUTH-NORTH CROSS SECTION D-D'
LOWER GALLUP SAND
ZONE I

Vert. Scale 1" = 40'

By: N. H. Williamson

I-22-60

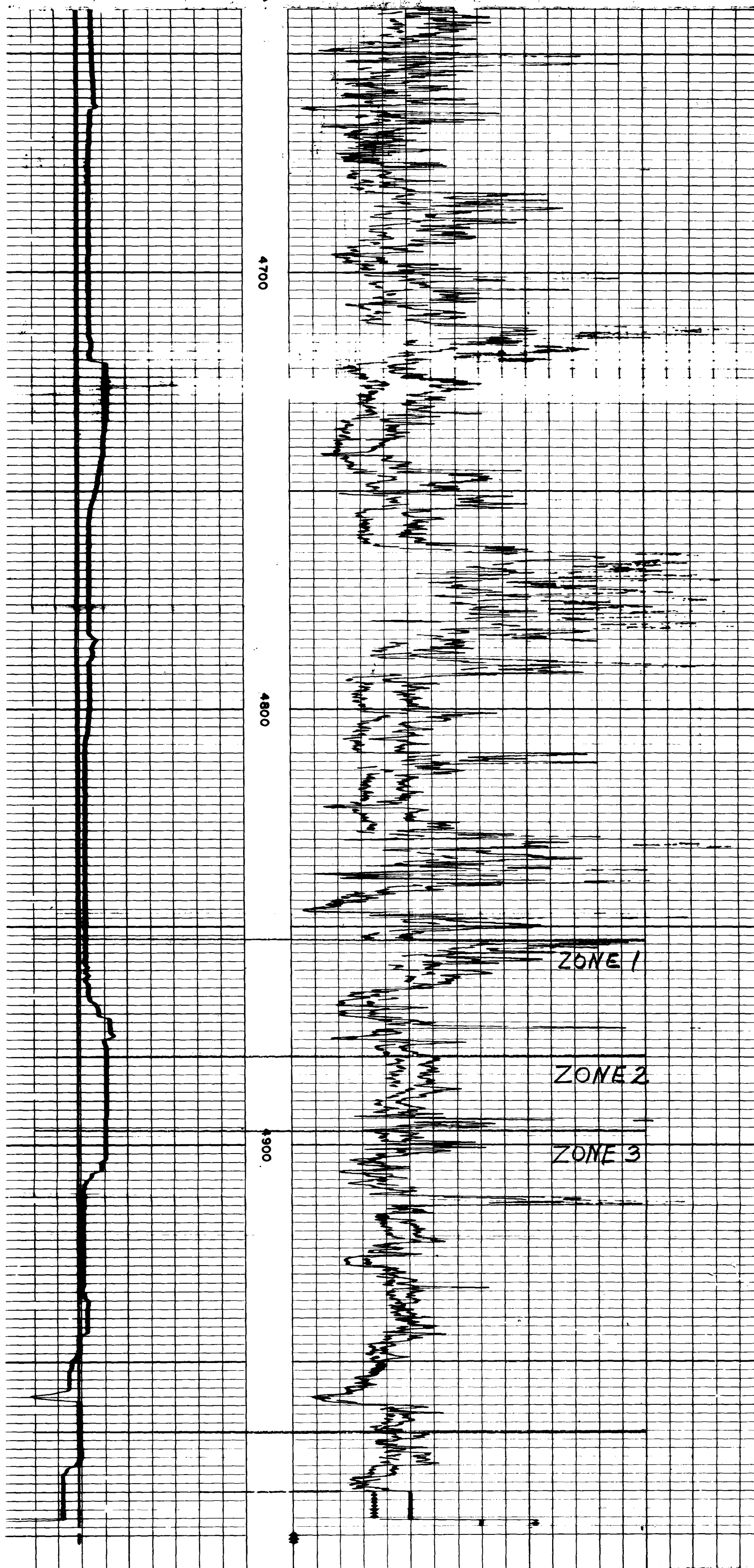


$\frac{10}{MV}$ + F.R.
 4983'

0	NORMAL	100	0	LONG NORMAL	100
0		1000	0		1000
0	LATERAL	100			
0		1000			

BRITISH AMERICAN OIL PRODUCING COMPANY
 MARYE #2
 SAN JUAN, NEW MEXICO
 SEC. 12-25N-13W
 ELEV. 6256' G.L.

EX #8



BIT SIZE

0 MICRO INVERSE "X" 20

40

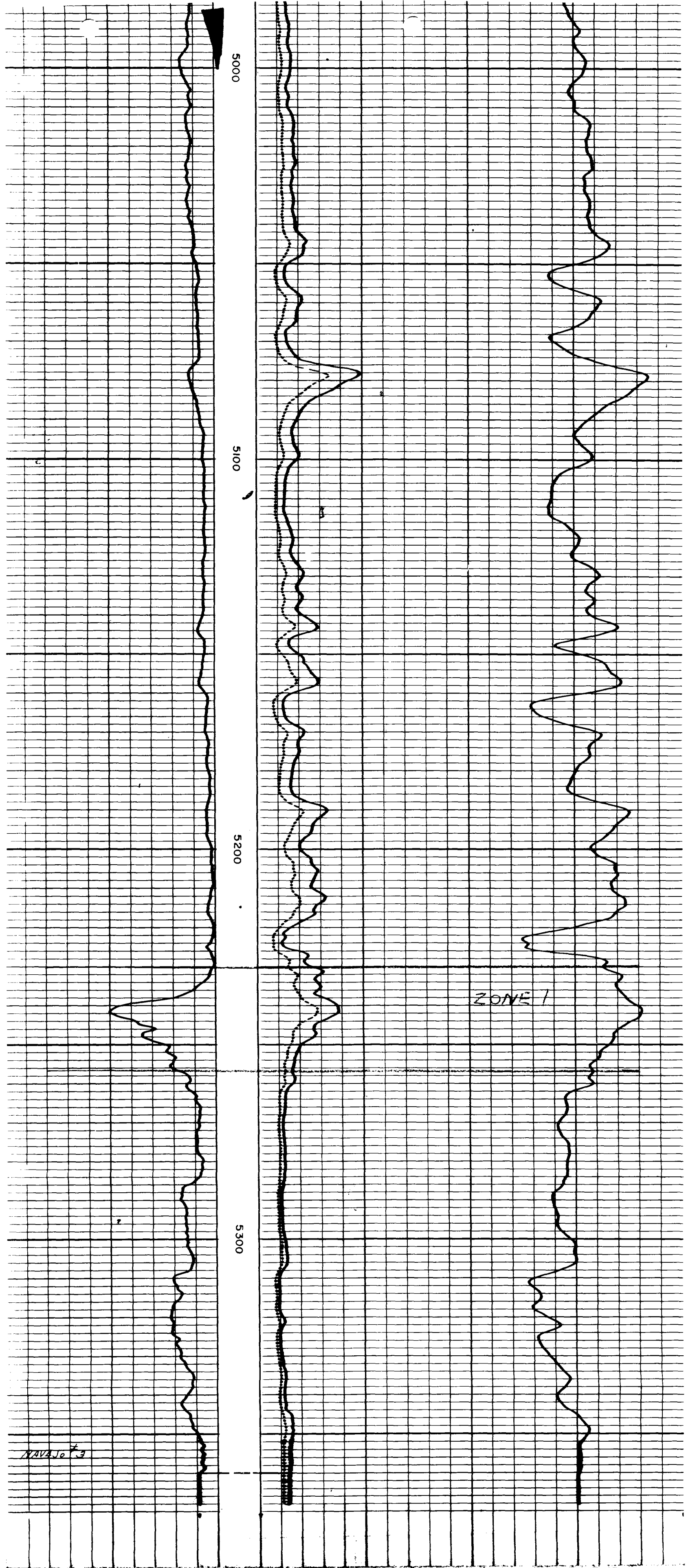
2.8 9.10 10.4 5
D AMERICAN NO. 1

1.0 4.0 10.0 20.0

1.1

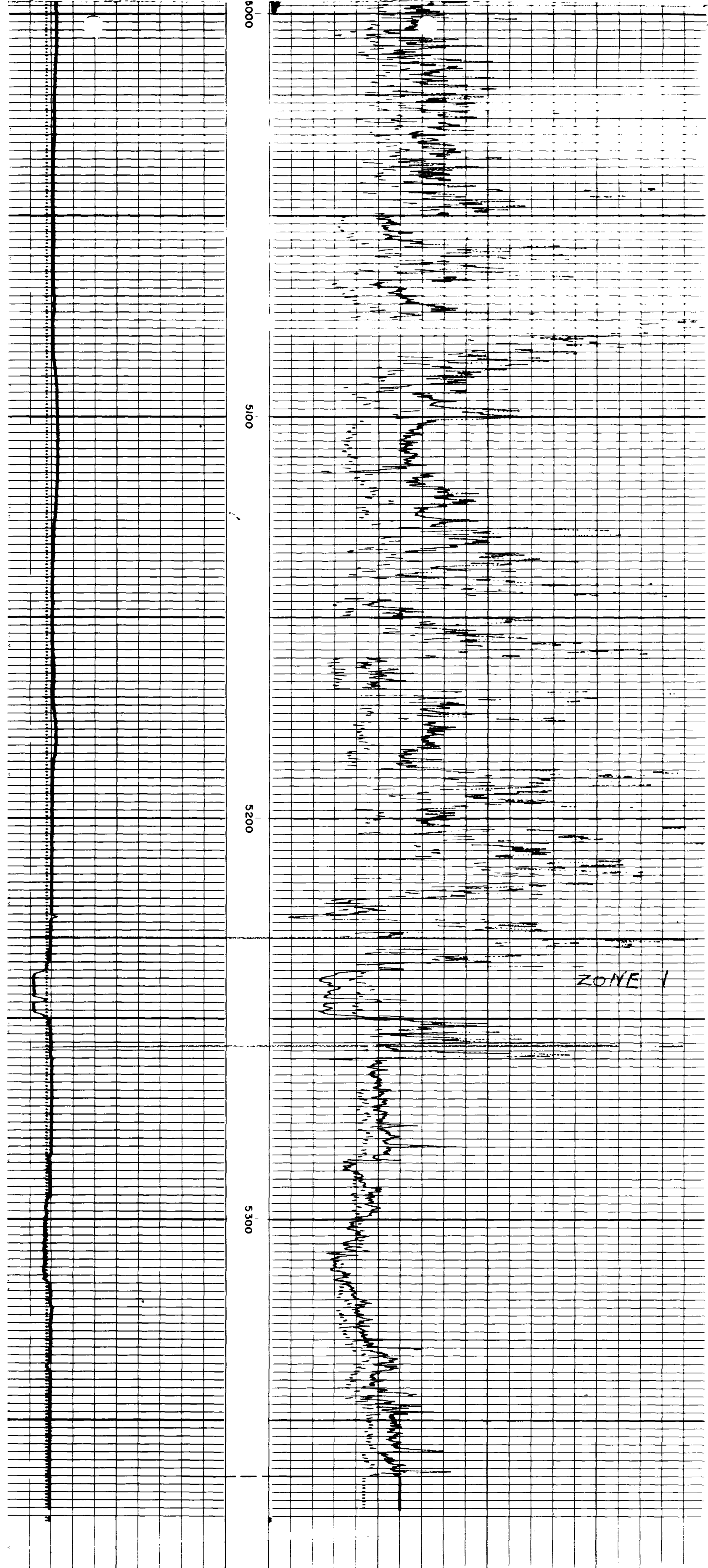
ALPHA M. 4980'
D REACHED 4983'

BRITISH AMERICAN OIL PRODUCING COMPANY
MARYE #2
SAN JUAN, NEW MEXICO
SEC. 12-25N-13W



10 — ↔ + MV	16" NORMAL	0 100
		0 1000
	INDUCTION	0 100
		0 1000
	RESISTIVITY ohms. m ² /m	
SPONTANEOUS-POTENTIAL millivolts	INDUCTION	
	400 200	600 400
CONDUCTIVITY millimhos/m = $\frac{1000}{\text{ohms. m}^2/\text{m}}$		
COMPANY <u>BRITISH AMERICAN OIL PRODUCING COMPANY</u>		
WELL <u>NAVAJO #3</u>		
FIELD <u>BISTI</u>		
COUNTY <u>SAN JUAN</u> STATE <u>NEW MEXICO</u>		
SWSC FR <u>5360'</u> SWSC TD <u>5366'</u> DRLR TD <u>5365'</u> Elev: KB <u>6420'</u> DF _____ GL _____		

Ex. #10



6 7 8 9 10 11 12 13 14 15 16		0 Micro Inverse 1' x 1'	20	40
Hole Diameter in Inches		0 Micro Normal 2'	20	40
MICROCALIPER		RESISTIVITY ohms. m ² /m		
COMPANY	BRITISH AMERICAN OIL PRODUCING COMPANY	Rm 1.6 @ 128 F	SWSC FR 5364'	
WELL	NAVAJO #3	Rmf 1.1 @ 128 F	SWSC TD 5365'	
FIELD	B'ST1	Rmc 1.7 @ 128 F	DRLR TD 5365'	
COUNTY	SAN JUAN	BHT 128 F	Elev: KB 6420'	
STATE	NEW MEXICO		DF	
			GL	

Ex. #10-A

1825

1. 2" DIA. VALVE, 200" DIA.
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96. 2" DIA. VALVE, 200" DIA.
97. 2" DIA. VALVE, 200" DIA.
98. 2" DIA. VALVE, 200" DIA.
99. 2" DIA. VALVE, 200" DIA.
100. 2" DIA. VALVE, 200" DIA.

THE EXHAUSTION APPARATUS OF THE BURNING CO.

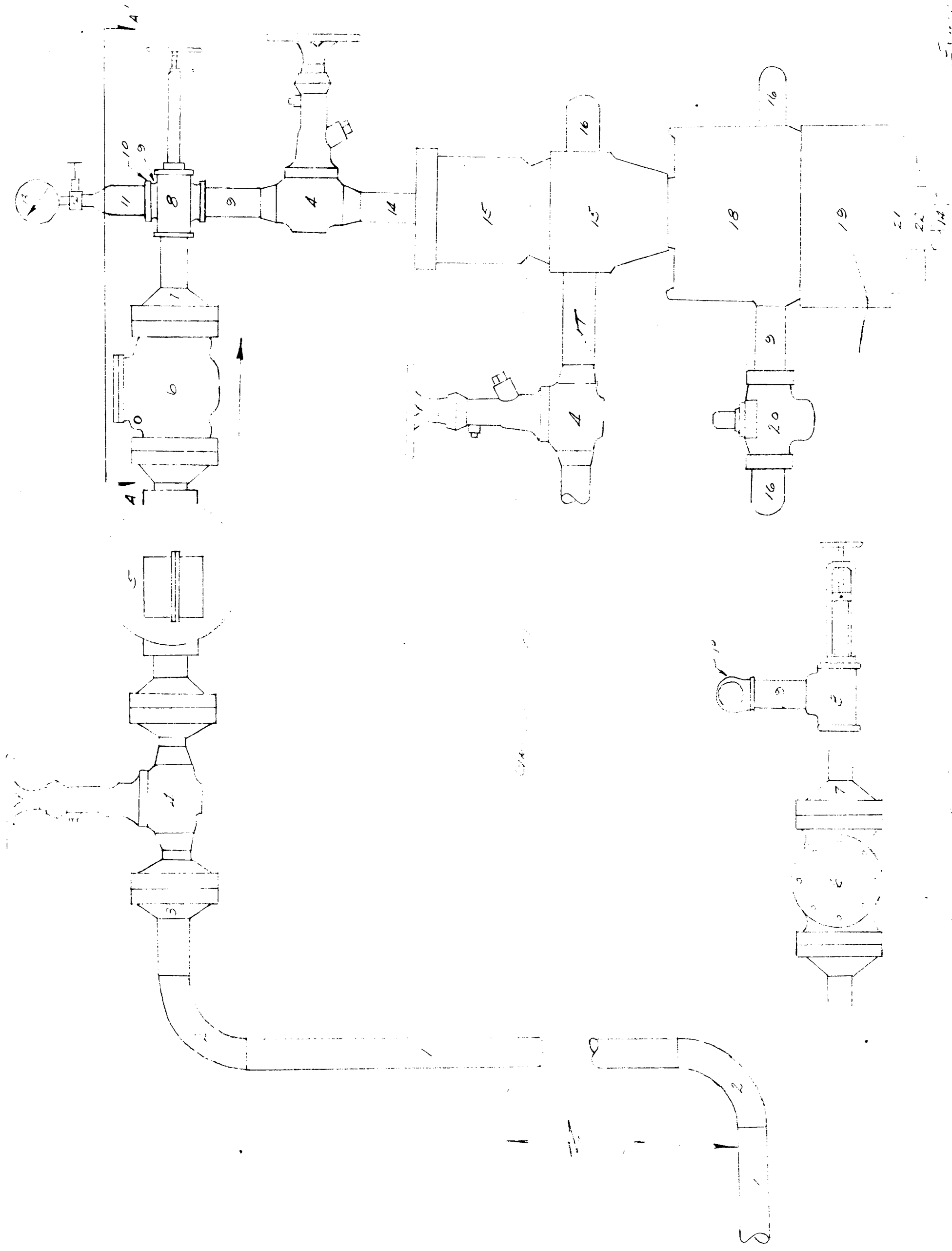
SECTION VIEW

WEST ELEVATION

SEE FIG. 1

FIG. 1

FIG. 2



SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

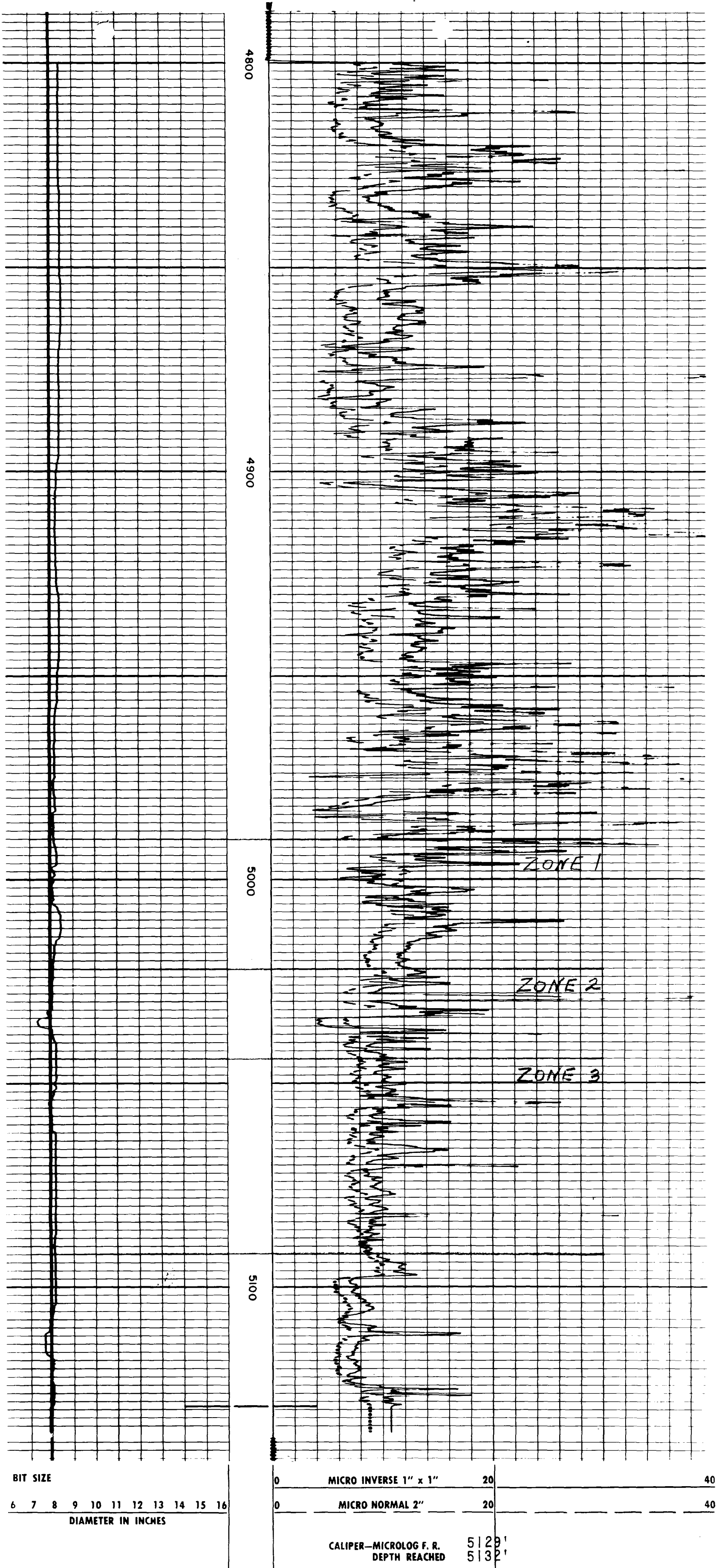


Electrical Log

COUNTY <u>SAN JUAN, N.M.</u> FIELD or <u>WILDCAT</u> LOCATION <u>MARYE #1</u> WELL	COMPANY <u>BRITISH AMERICAN</u> OIL PRODUCING CO.	COMPANY <u>BRITISH AMERICAN</u>	Location of Well
		<u>OIL PRODUCING CO.</u>	<u>500' FR N/L</u> <u>500' FR E/L</u> <u>SEC. 1-25N-13W</u>
		WELL <u>MARYE #1</u>	
		FIELD <u>WILDCAT</u>	<u>ES</u> <u>(ML-LL)</u>
		LOCATION <u>SEC. 1-25N-13W</u>	
		COUNTY <u>SAN JUAN,</u>	Elevation: <u>D.F. 6167</u> <u>K.B. 6189</u> or <u>G.L. 6179</u>
		STATE <u>NEW MEXICO</u>	FILING No. _____

RUN No.	ONE	TWO			
Date	3/7/56	3/12/56			
First Reading	4751	5004			
Last Reading	232	4751			
Feet Measured	4513	253			
Csg. Schlum.	232	---			
Csg. Driller	229	229			
Depth Reached	4752	5005			
Bottom Driller	4746	5000			
Depth Datum	K.B.	K.B.			
Mud Nat.	GEL-CHEM	GEL-			
" Density	9.9	9.6			
" Viscosity	73	78			
" Resist.	2.3 @ 45 F	2.8 @ 42 F	@ F	@ F	@ F
" Res. BHT	1.0 @ 115 F	1.1 @ 120 F	@ F	@ F	@ F
" pH	8.5 @ F	8.5 @ F	@ F	@ F	@ F
" Wtr. Loss	9.0 CC 30 min.	7.0 CC 30 min.	CC 30 min.	CC 30 min.	CC 30 min.
Max. Temp. °F	115	120			
Bit Size	8 3/4"	8 3/4"			
Spcgs.—AM	16"	16"			
A.M.	64"	64"			
AO	18 1/8"	18 1/8"			
Opr. Rig Time	---	1 HR.			
Truck No.	1773 FARM	1786 FARM			
Recorded By	JOY	MONTGOMERY			
Witnessed By	CALAHAN	JOY			

FOLD HERE



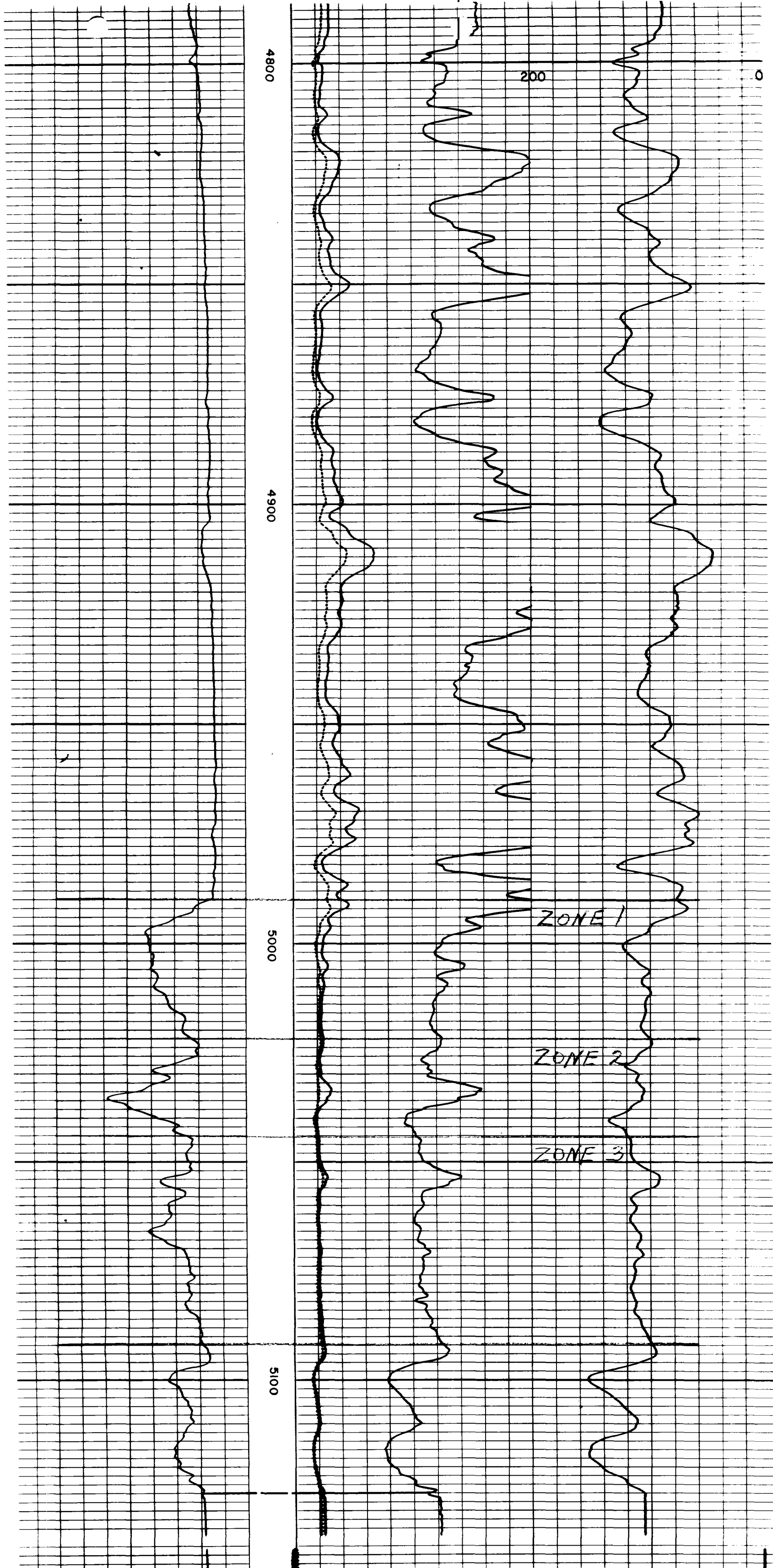
BIT SIZE
6 7 8 9 10 11 12 13 14 15 16
DIAMETER IN INCHES

0	MICRO INVERSE 1" x 1"	20	40
0	MICRO NORMAL 2"	20	40

CALIPER-MICROLOG F. R. 5129'
DEPTH REACHED 5132'

COMPANY BRITISH AMERICAN OIL PRODUCING COMPANY
WELL SALGE B #5
COUNTY SAN JUAN, NEW MEXICO
STATE
LOCATION SEC. 33-20N-13W
ELEVATION 6288' G.L.

EX. #9-A



SPONTANEOUS - POTENTIAL millivolts		DEPTHS	RESISTIVITY ohms. m ² /m		CONDUCTIVITY 1000 millimhos/m ohms. m ² /m	
10 mV			16" NORMAL		INDUCTION	
			0	100	500	0
			0	1000	1000	500
			INDUCTION			
			0	100	IND-ES F. R.	5126'
			0	1000	DEPTH REACHED	5132'
			0	AMP. NORMAL 20		
COMPANY	BRITISH AMERICAN OIL PRODUCING COMPANY					
WELL	SALGE B #5					
COUNTY	SAN JUAN, NEW MEXICO					
STATE						
LOCATION	SEC. 33-26N-13W					
ELEVATION	6288' G.L.					

Ex. #9

Ex. #9