

BASIN DAKOTA
T26N R4W

File 10

Consolidated Oil & Gas Co.

Sec. 13 (B) Jenney #1

Sec. 13 (P) Jenney #1M

Southern Union Exploration Co.

Sec. 13 (E) Jicarilla A #13

Sec. 24 (D) Jicarilla A #12

Southland Royalty Company

Sec. 12 (M) Jicarilla 101 #2

Sec. 12 (P) Jicarilla 101 #7

T26N R3W

Jerome P. McHugh

Sec. 17 (E) Apache #5

Sec. 17 (M) Apache #6

Sec. 18 (D) Apache #1

Sec. 18 (L) Apache #2

Sec. 19 (D) Apache #3

Sec. 19 (L) Apache #4

Sec. 20 (B) Apache #8

Sec. 20 (D) Apache #7

Consolidated Oil & Gas Co.

Sec. 7 (J) Tribal C #10

Sec. 7 (B) Tribal C #10-E

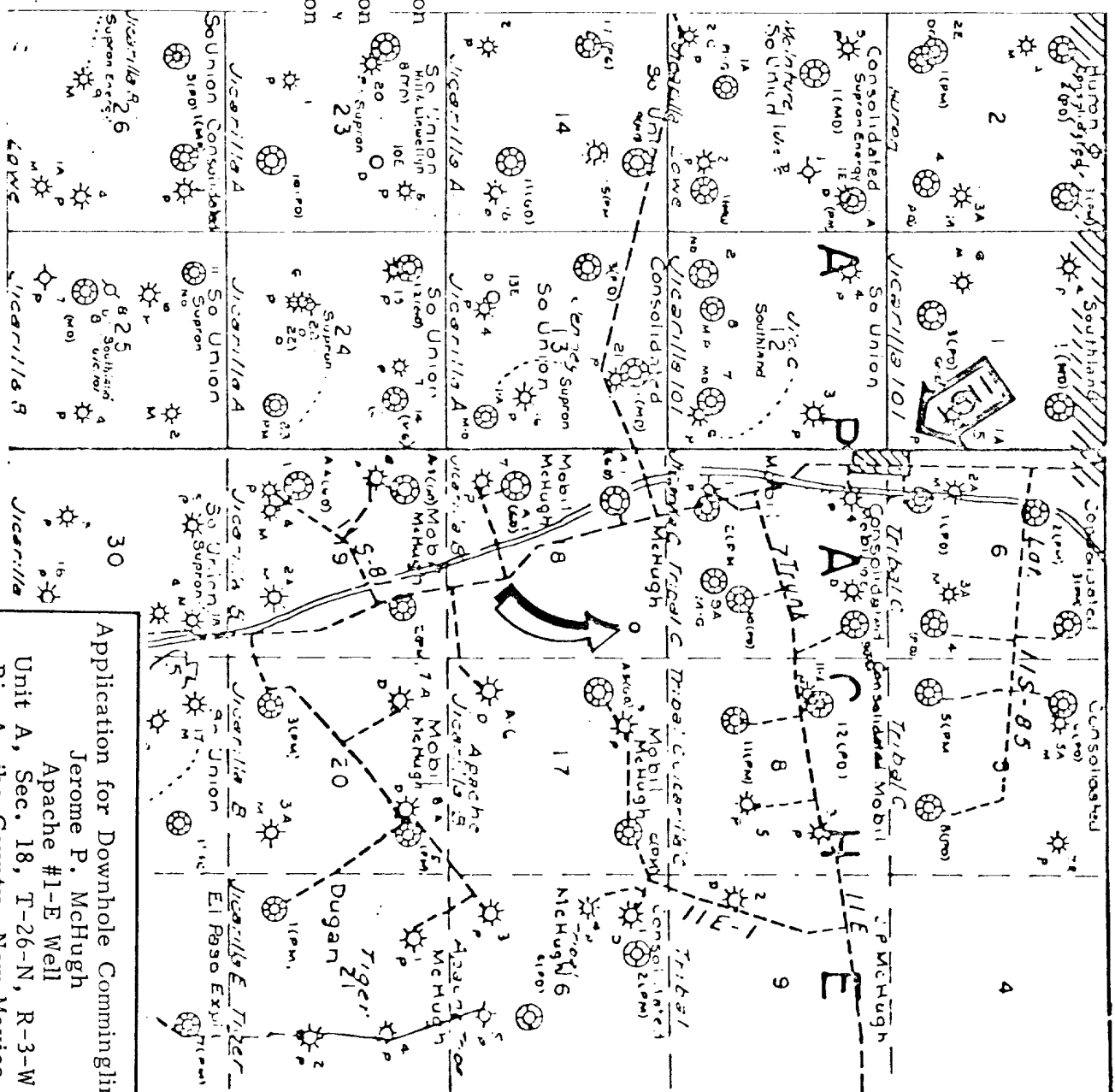
Sec. 8 (E) Tribal C #12

(CONTINUED ON REVERSE)

Cumulative 1980

26-4

26-3



Application for Downhole Commingling

Jerome P. McHugh

Apache #1-E Well

Unit A, Sec. 18, T-26-N, R-3-W

Rio Arriba County, New Mexico

Case No. 7378

Exhibit No. 1

WILD HORSE GALLUP

T26N R4W

Southern Union Exploration Co.	
Sec. 24 (A) Jicarilla A #14	
	gas 512997 16634
	oil 2891 --
Sec. 24 (D) Jicarilla A #12	
	gas 1880638 55841
	oil 7842 232
Southland Royalty Company	
Sec. 12 (M) Jicarilla 101 #2	
	gas 187189 8355
	oil 494 139
T26N R3W	
Jerome P. McHugh	
Sec. 18 (D) Apache #1	
	gas 135197 5467
	oil 7187 365
Sec. 18 (L) Apache #2	
	gas 51966 S
	oil 937 S
Sec. 19 (D) Apache #3	
	gas 1463891 41854
	oil 16081 275
Sec. 19 (L) Apache #4	
	gas 264242 S
	oil 5166 S
Consolidated Oil & Gas Co.	
Sec. 7 (O) Tribal C #9-A	
	gas 10747 4723

OFFSET OPERATORS AND LEASES

T-26-N, R-4-W

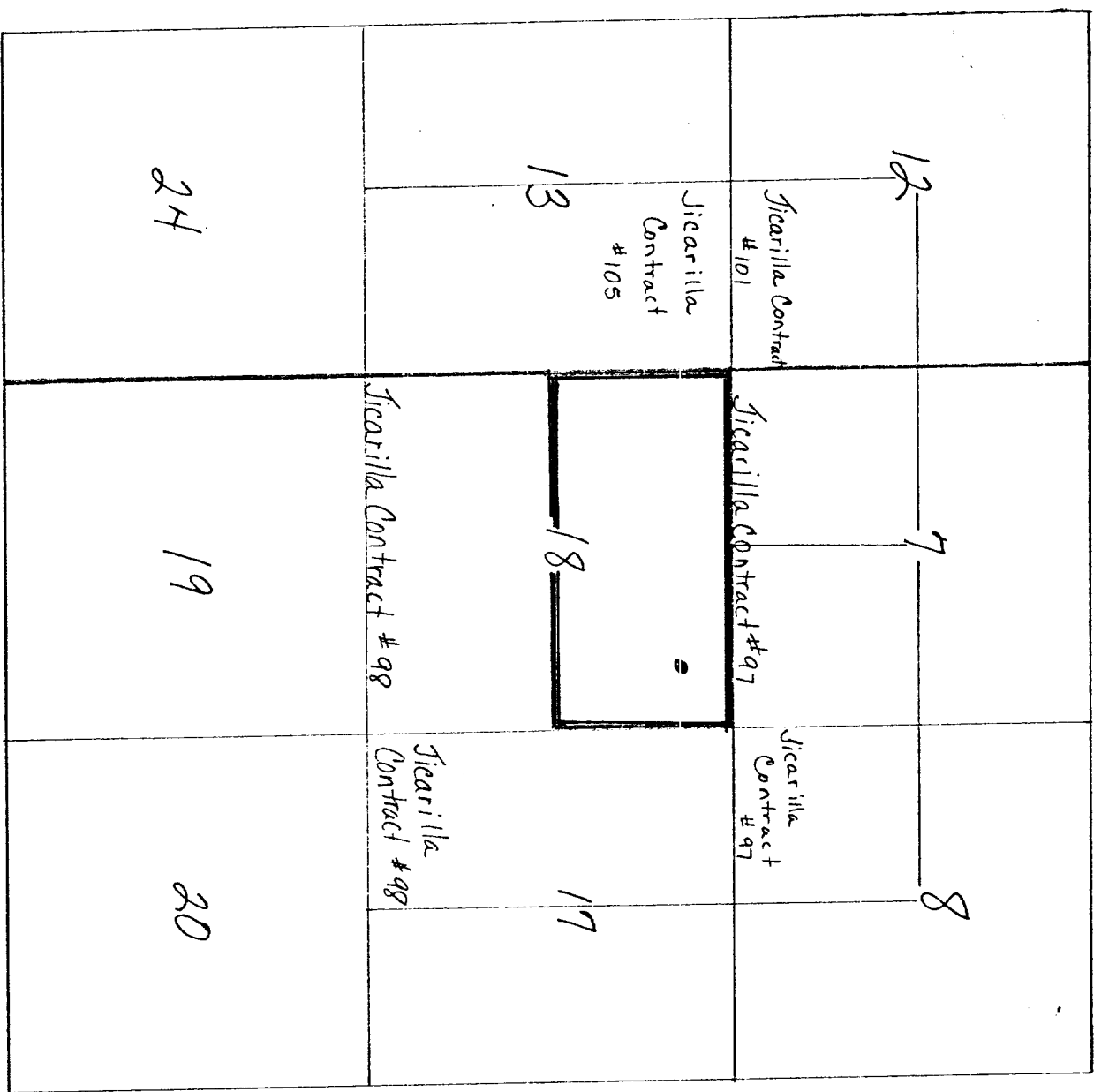
Sec. 12: SE/4
Southland Royalty
Jic. Tribal Contract #101

Sec. 13: E/2
Consolidated Oil and Gas, Inc.
Jic. Tribal Contract #105

T-26-N, R-3-W

Sec. 7: SE/4, SW/4
Sec. 8: SW/4
Consolidated Oil and Gas, Inc.
Jic. Tribal Contract #97

Sec. 17: W/2
Sec. 18: S/2
Jerome P. McHugh
Jic. Tribal Contract #98



JEROME P. MCHUGH
Apache #1-E Well
Sec. 18, T-26-N, R-3-W
Jic. Tribal Contract #98

Application for Downhole Commingling

Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 2



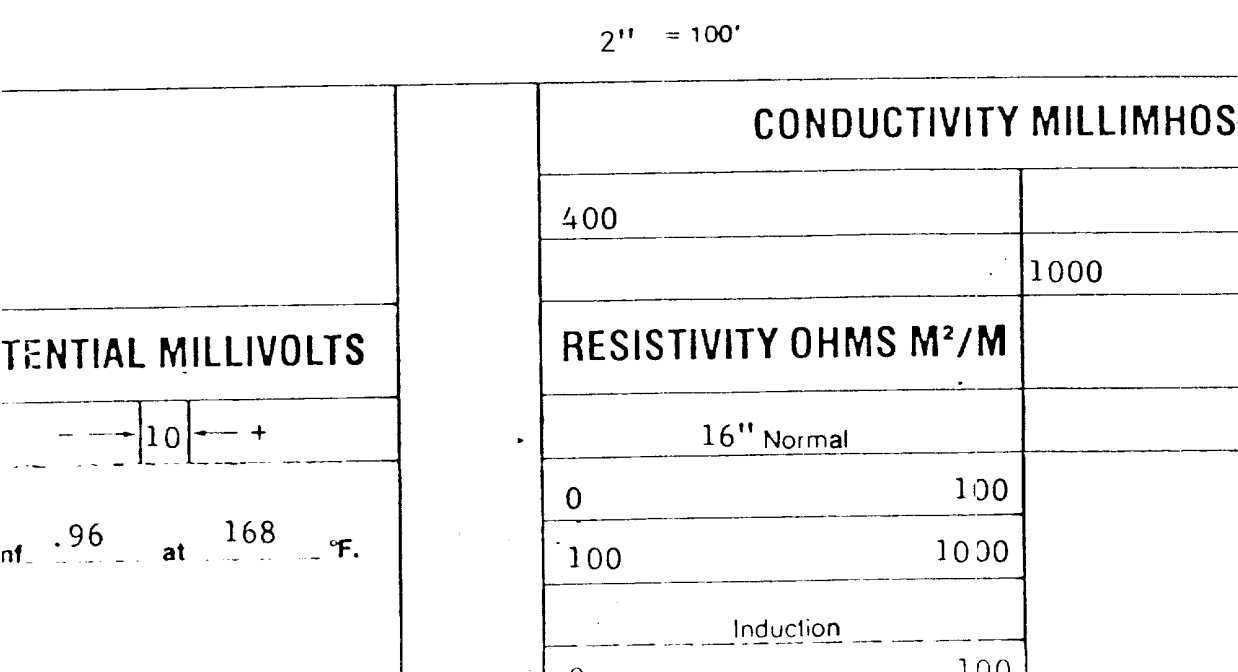
INDUCTION
ELECTRIFICATION

LC 11 7-7/1c

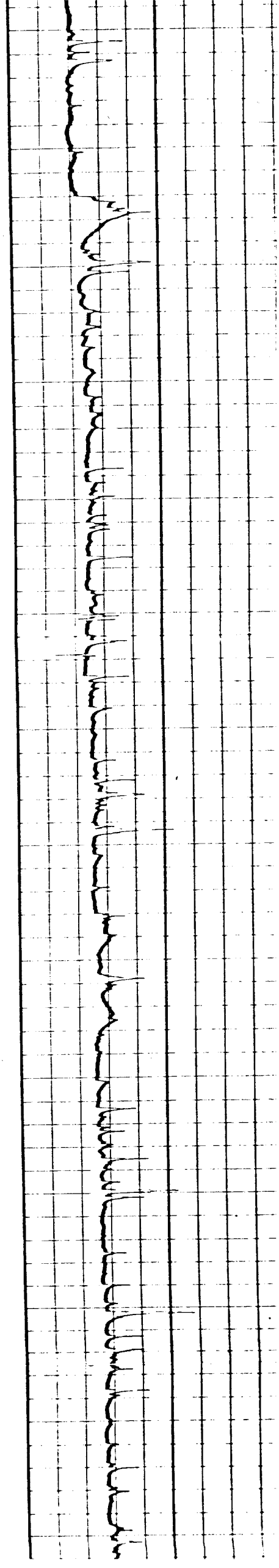
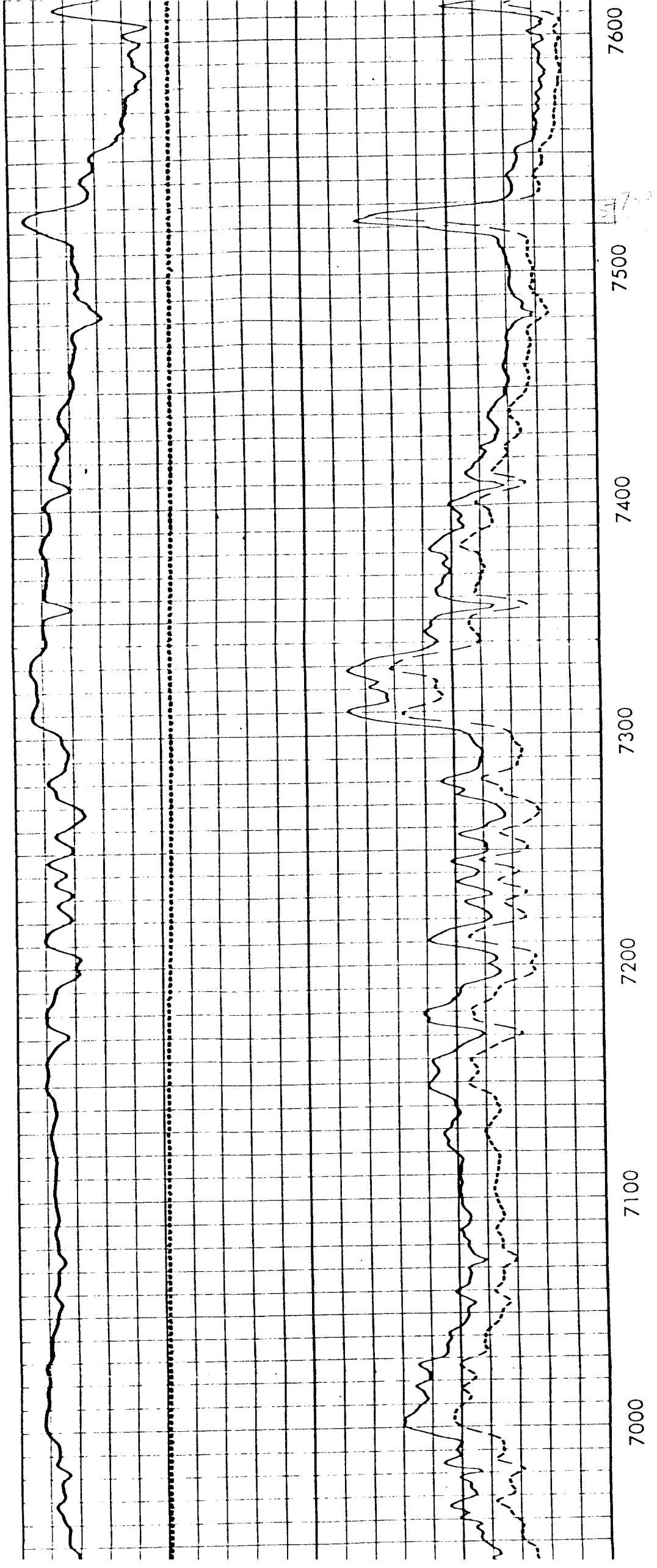
COMPANY JEROME P. McHUGH	
WELL APACHE #1E	
FIELD BASIN DAKOTA	
County RIO ARRIBA State N.M.	
Sec. 18 Twp. 26N Rge. 3W	
CDL-G	
Other Services:	
COUNTY RIO ARRIBA STATE NEW MEXICO	
FIELD BASIN DAKOTA	
WELL APACHE #1E	
Location 810 FNL 820 FEL	
Permanent Datum GROUND LEVEL Elev. 7140	
Log Measured From KELLY BUSHING Elev. 7152	
Drilling Measured From KELLY BUSHING D.F. 7150	
Date 6-18-81 GL 7140	
Run No. ONE	
Depth—Driller 8250	
Depth—Welex 8222	
Btm. Log Inter. 8221	
Top Log Inter. 255	
Casing—Driller 8 5/8@260	
Casing—Welex 255	
Bit Size 7 7/8	
Type Fluid in Hole 1.0N SOLID	
Dens. Visc. 8.9 1.56	
pH Fluid Loss 8.0 1.8.0ml	
Source of Sample MUD P.P.T.	
R _a (w Meas. Temp. 1.95 @ 68 °F	
R _m (w Meas. Temp. 2.2 @ 73 °F	
R _a (w Meas. Temp. 1.8 @ 76 °F	
Source R _a R _m MEASURED	
R _a (w BHT .79 @ 168°F	
Time Since Circ 4 HOURS	
Max Rec Temp. 68°F @ 711	

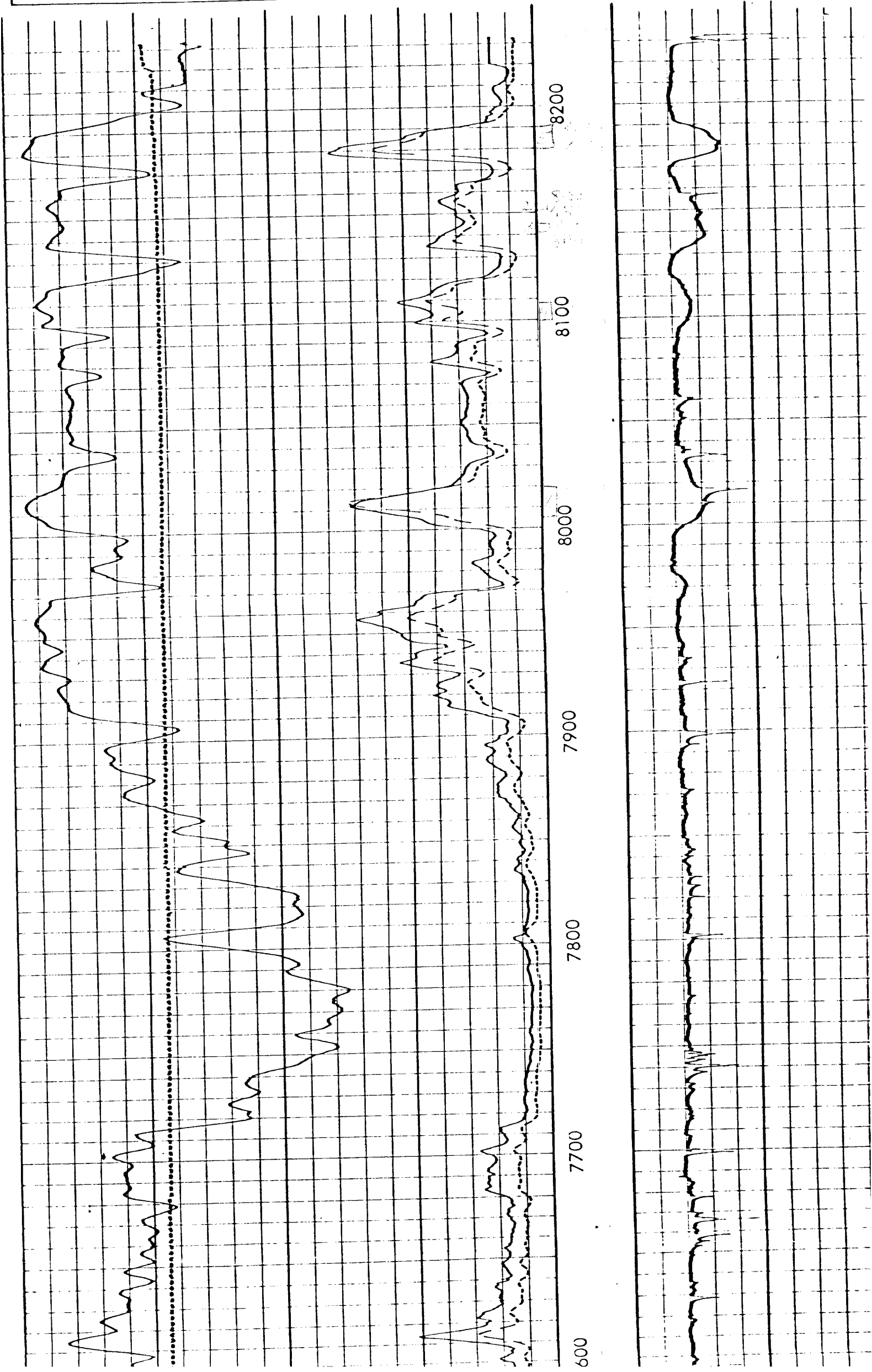
SCALE CHANGES			
Sample No.	Type Log	Depth	Scale Up Hole
—Driller			
Fluid in Hole			
Visc.			
Fluid Loss			
Tool Sample			
EQUIPMENT DATA			
Meas. Temp.	Run No.	Tool Type and No.	Pad Type
Meas. Temp.	ONE	M196-24403	1 1/2" S.O.
Meas. Temp.			
R _m R _{mc}			
BHT			
BHT			
BHT			
Ticket No. 98031			
Remarks: COULD NOT REMOVE NOISE FROM S.P. CURVE.			

Welex does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters, or recommendations which may be given by Welex personnel or which may appear on the log or in any other form. Any user of such data interpretations, conversions, or recommendations agrees that Welex is not responsible for any loss, damages, or expenses resulting from the use thereof.



Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 737E
Exhibit No. 3

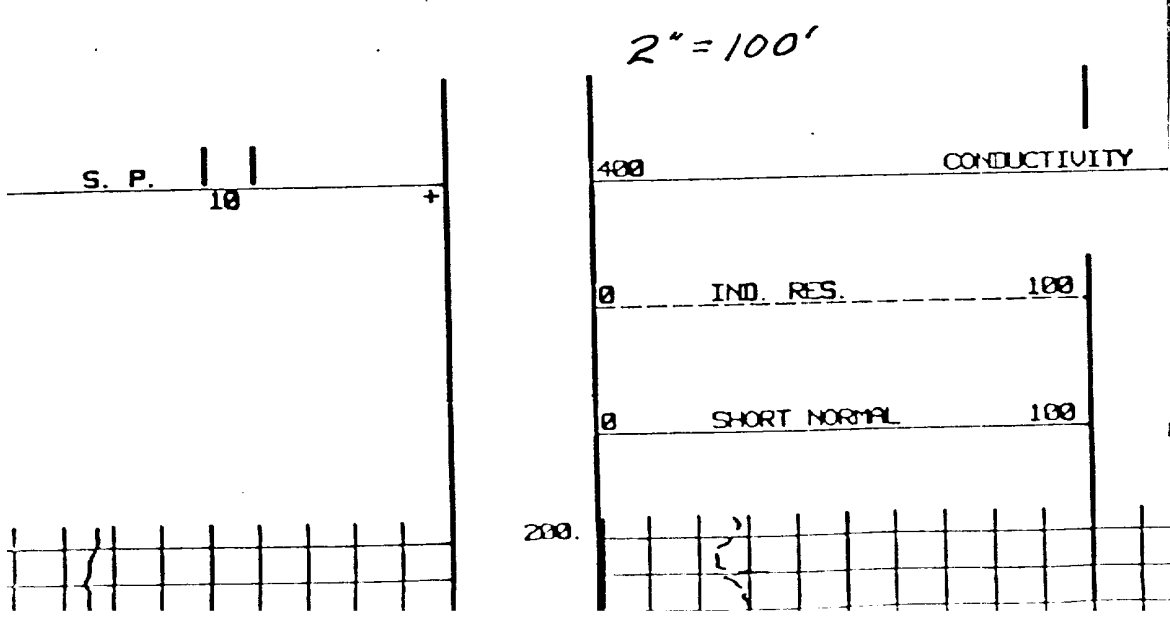






Core Ticket No		Remarks		SCALE CHANGES			
Change in Mud Type or Additional Samples		Type Log	Depth	Scale Up Hole	Scale Down Hole		
Sample No							
Driller							
Fluid in Hole							
Visc	9.2	63					
Fluid Loss	8.5	5.4 ml					
				EQUIPMENT DATA			
Core Sample	M40 PIT	@	°F	Run No.	Tool Type and No.	Pad Type	Tool Position
Meas Temp	2.87 @ 70 °F	@	°F	ONE	280 # 28609		FREE
Meas Temp	2.5 @ 67 °F	@	°F				
Meas Temp	4.0 @ 63 °F	@	°F				
Core R	MEAS. MEAS.	@	°F				
BHT	1.18 @ 170 °F	@	°F				
BHT	0.98 @ 170 °F	@	°F				
BHT	1.48 @ 170 °F	@	°F				

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 4



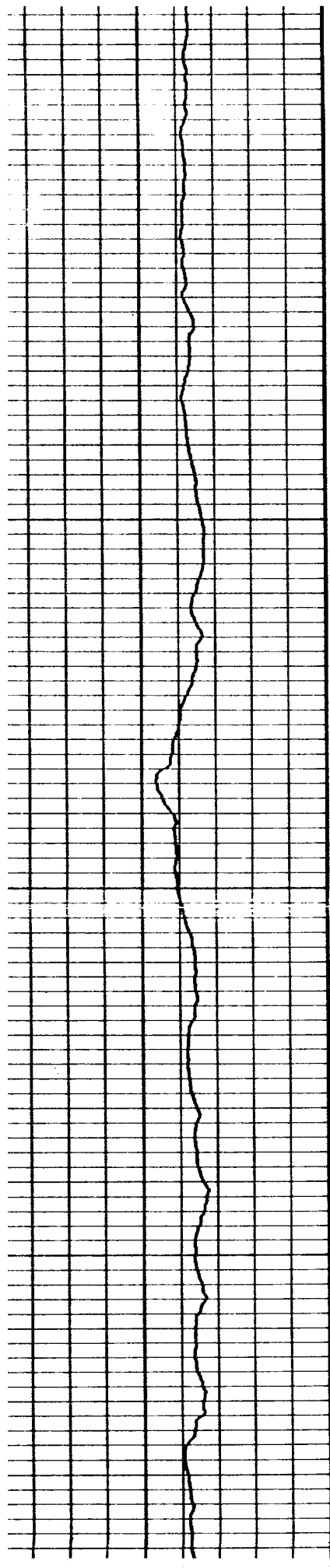
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7400.

7500.

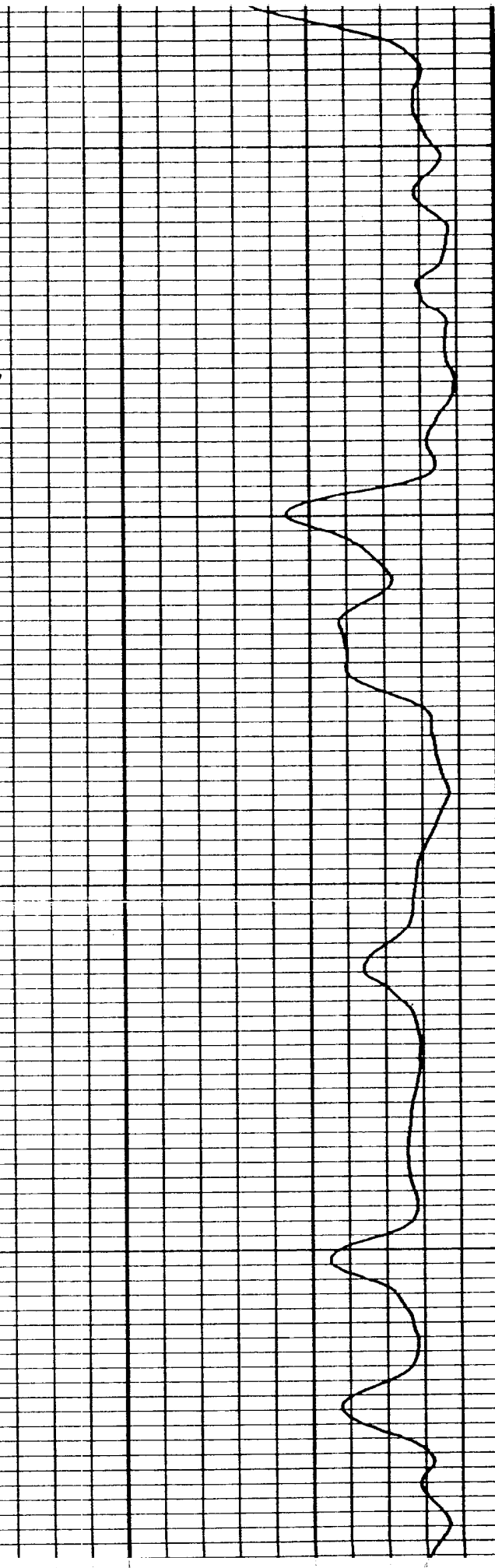
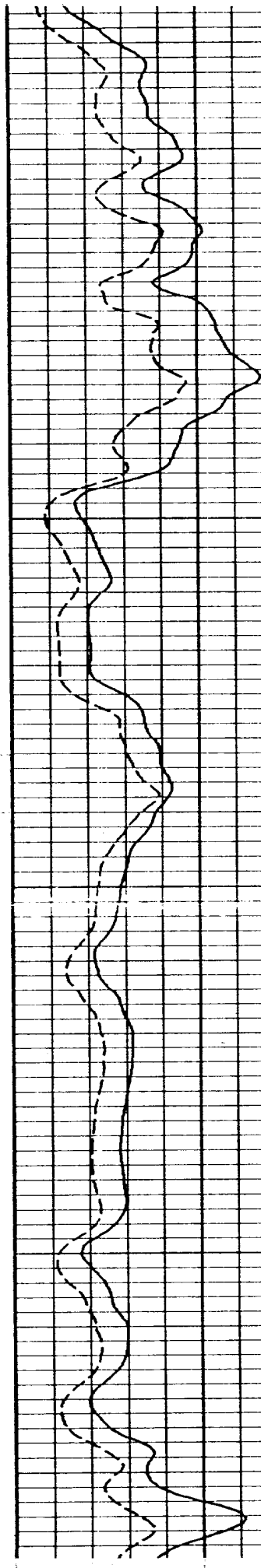
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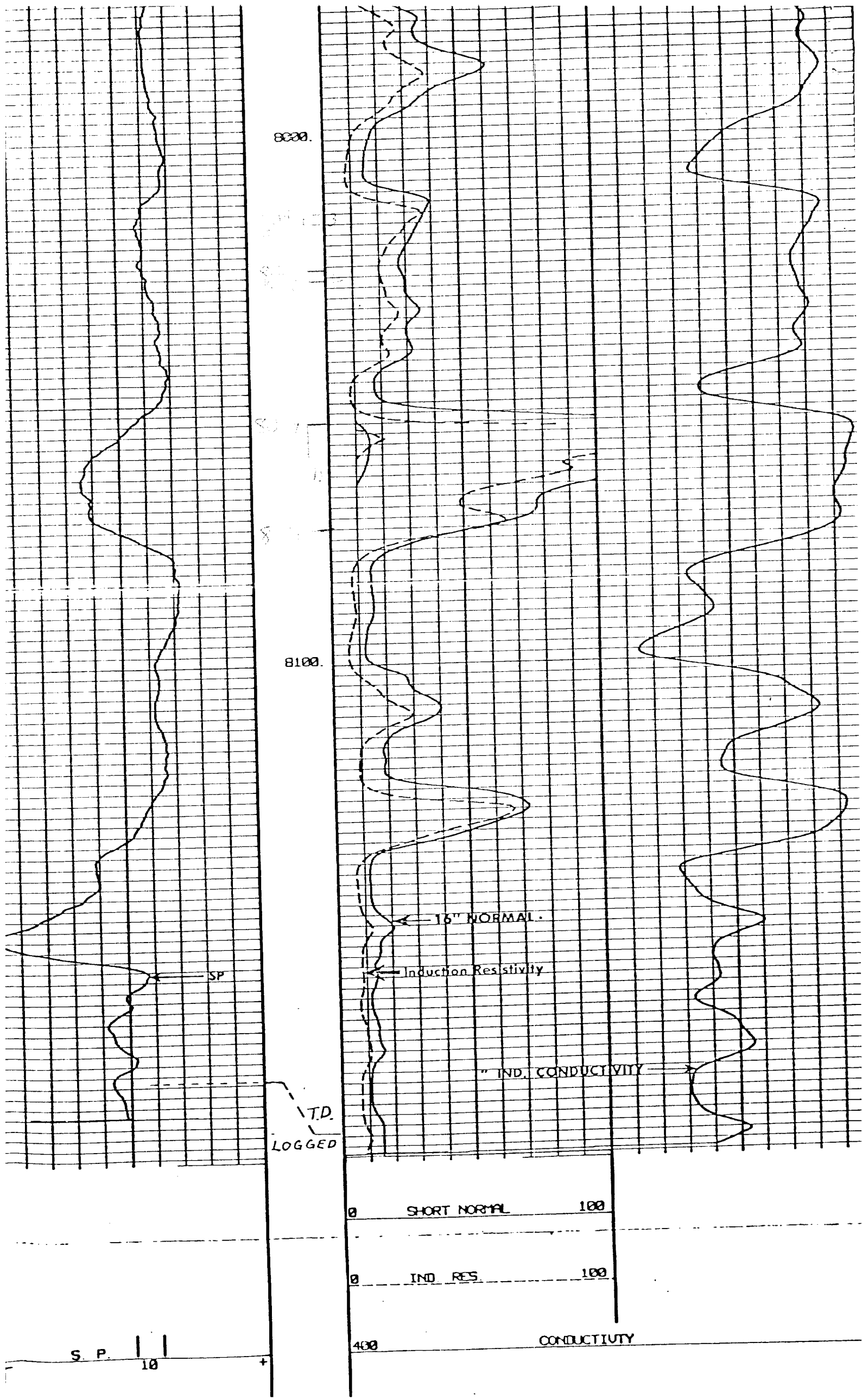
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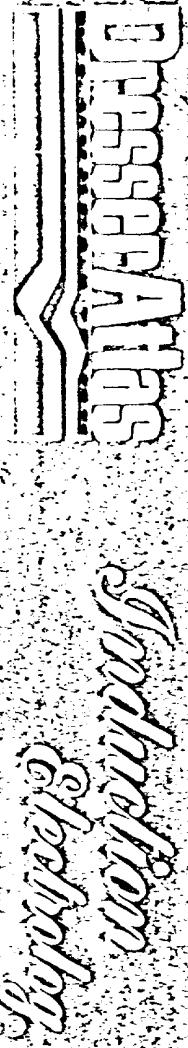


7800.

7900.

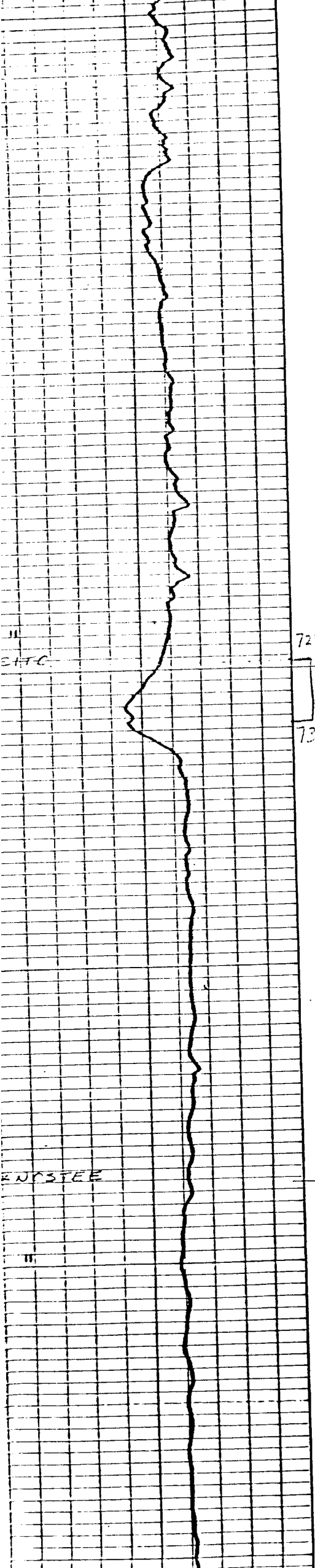






Boarded Ru

SPONTANEOUS POTENTIAL Millivolts	DEPTH	CONDUCTIVITY Millimhos/m
- ↔ + 10		INDUCTION CONDUCTIVITY 40" SPACING 400 200
		800 600
		RESISTIVITY Ohms m²/m
		16" NORMAL
		0 100

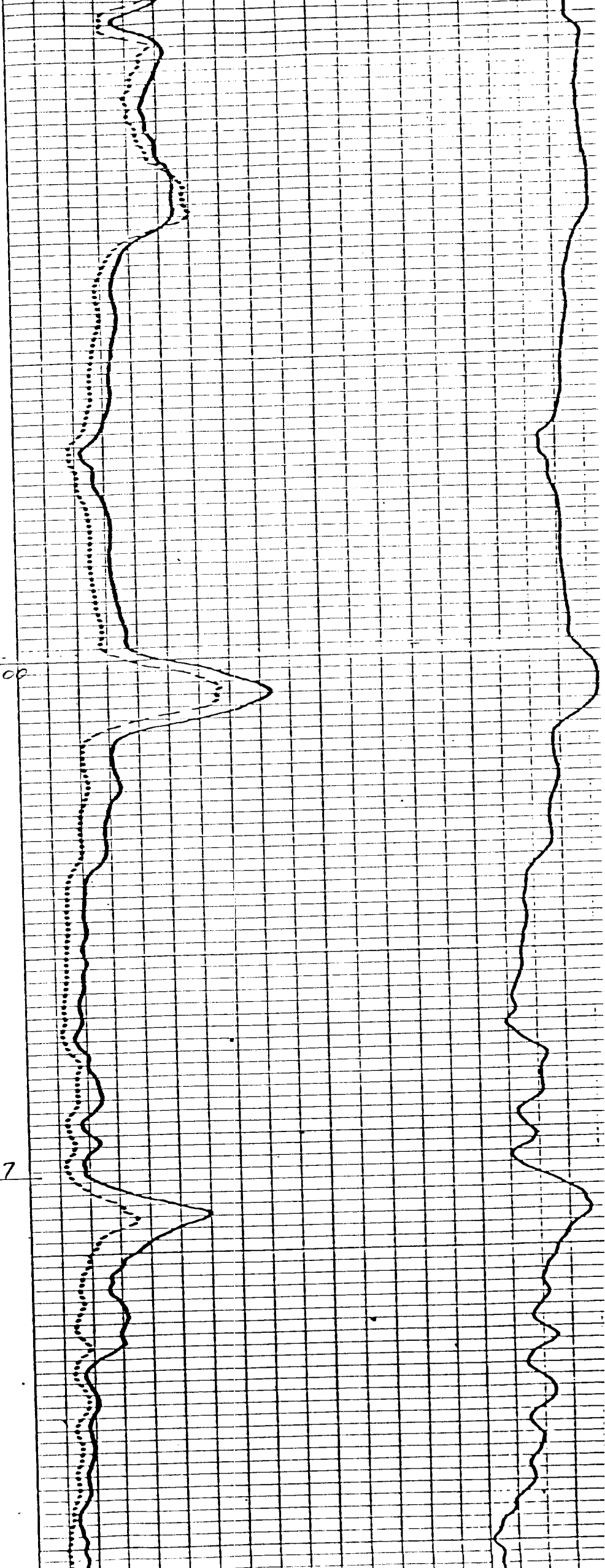


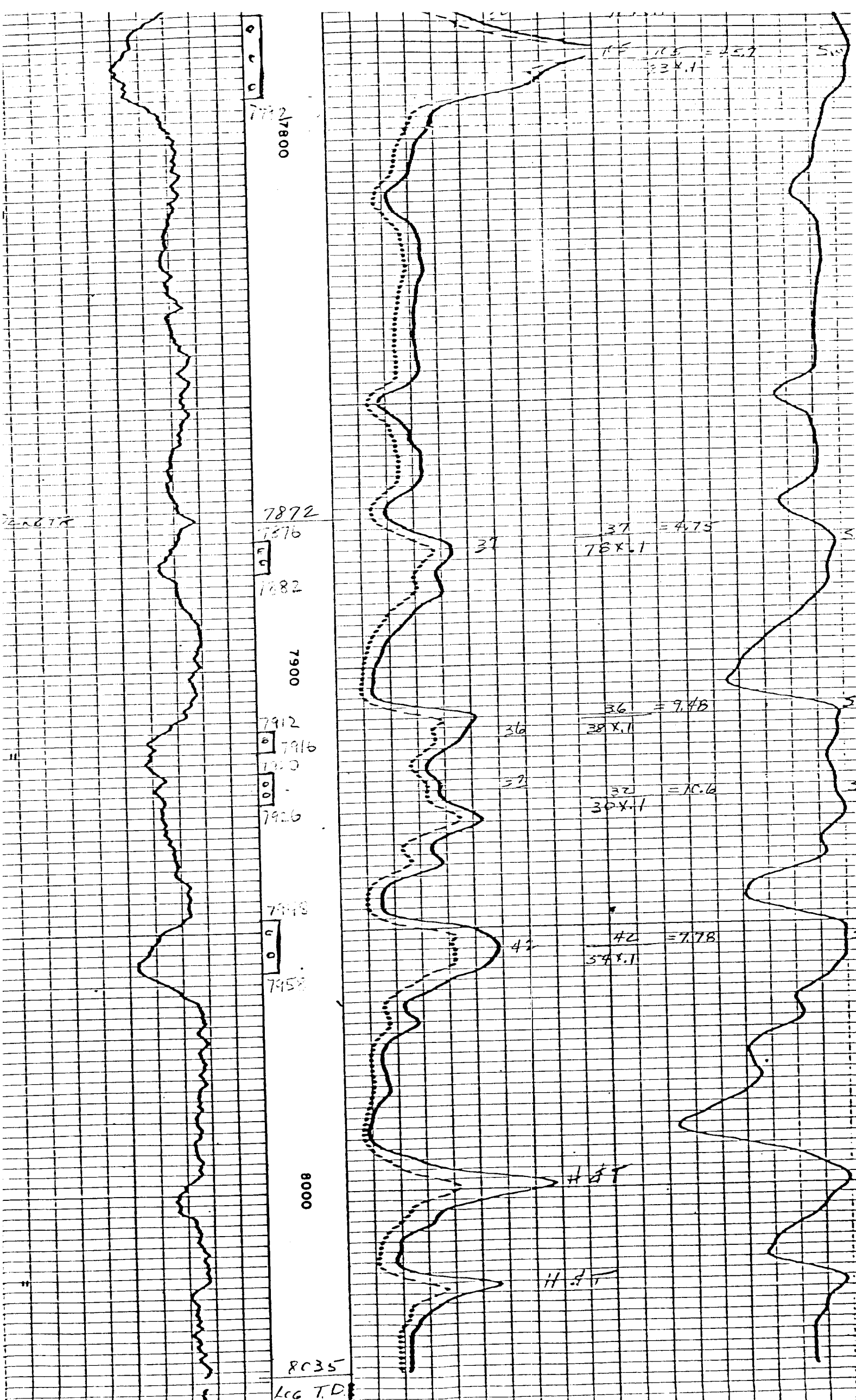
7200

7299
7300
7309

7387

7400







LE NO. COMPANY Jerome P. McHugh

WELL CLARILLA A 2 Pit

FIELD BASIN DAKOTA

COUNTY RIO ARriba STATE

LOCATION:

1650' ASL 790' EUL

Other Services

GDC

SEC 18 TWP 26N RGE 3W

Permanent Datum G.L. Elev. 6939

Log Measured from K.B. 13 Ft. Above Permanent Datum

Drilling Measured from K.B.

Elevations:

KB 6952

DF

GL 6939

Core 5-1-69

Run No. ONE

Depth-Driller 8127

Depth-Logger 8118

Bottom Logged Interval 8112

Top Logged Interval 210

Casing-Driller 858 @ 211'

Casing-Logger 210

Bit Size 7 7/8"

Type Fluid in Hole Chem Gel

Density and Viscosity 9.2 78

pH and Fluid Loss 9.0 3.3 cc

Source of Sample D.T.

Rm @ Meas. Temp. 2.2 @ 70 °F

Rmf @ Meas. Temp. 2.0 @ 70 °F

Rmc @ Meas. Temp. 2.6 @ 70 °F

Source of Rmf and Rmc Measured

Rm @ BHT 0.9 @ 147 F

Time Since Circ. 4 hrs.

Max. Rec. Temp. Deg. F. 147 °F

Equip. No. and location W-240 FARM

Recorded by DICKENS

FIELD PRINT

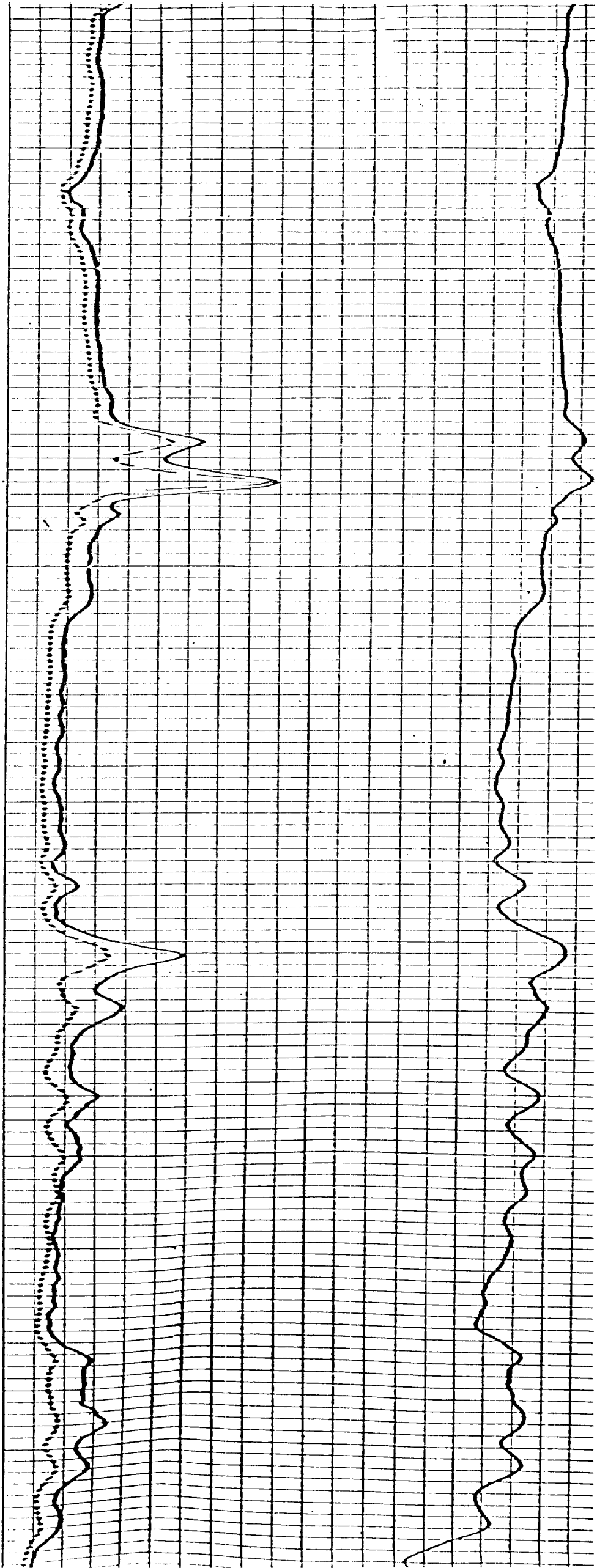
REMARKS

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	cc	cc				
Source of Sample				Equipment Data			
Rm @ Meas. Temp.	@	°F	@	°F	Run No.	Tool Type	Pad Type Tool Position Other
Rmf @ Meas. Temp.	@	°F	@	°F	1	805	Face
Rmc @ Meas. Temp.	@	°F	@	°F		S.N. 23	
Source Rmf Rmc							
Rm @ BHT	@	°F	@	°F			
Rmf @ BHT	@	°F	@	°F			
Rmc @ BHT	@	°F	@	°F			

SPONTANEOUS POTENTIAL Millivolts		DEPTH	CONDUCTIVITY Millimhos/m	
- $\frac{10}{\text{---}}$ +			INDUCTION CONDUCTIVITY 40" SPACING	
			400	
			RESISTIVITY Ohms m ² /m	
			16" NORMAL	
			0	100
			0	100

ation for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
t A, Sec. 18, T-26-N, R-3-W
Arriba County, New Mexico
Case No. 7378
Exhibit No. 6

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 6



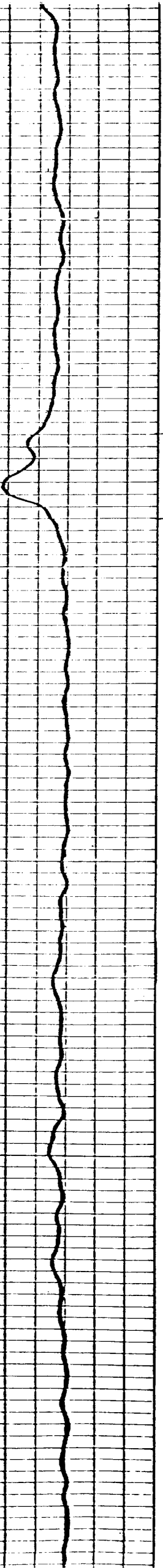
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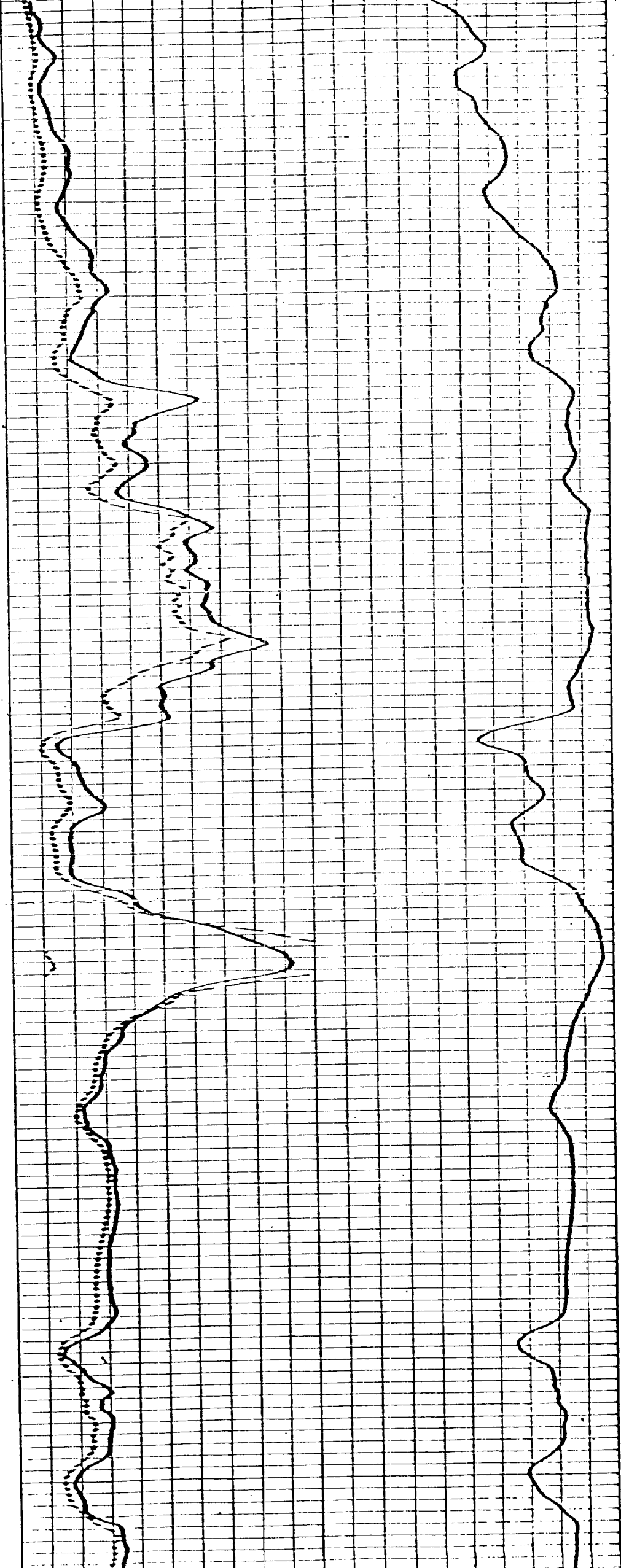
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7342

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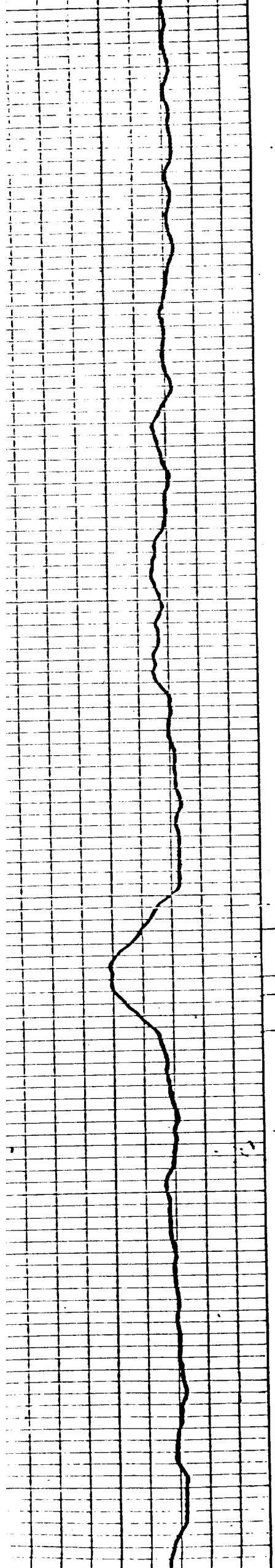


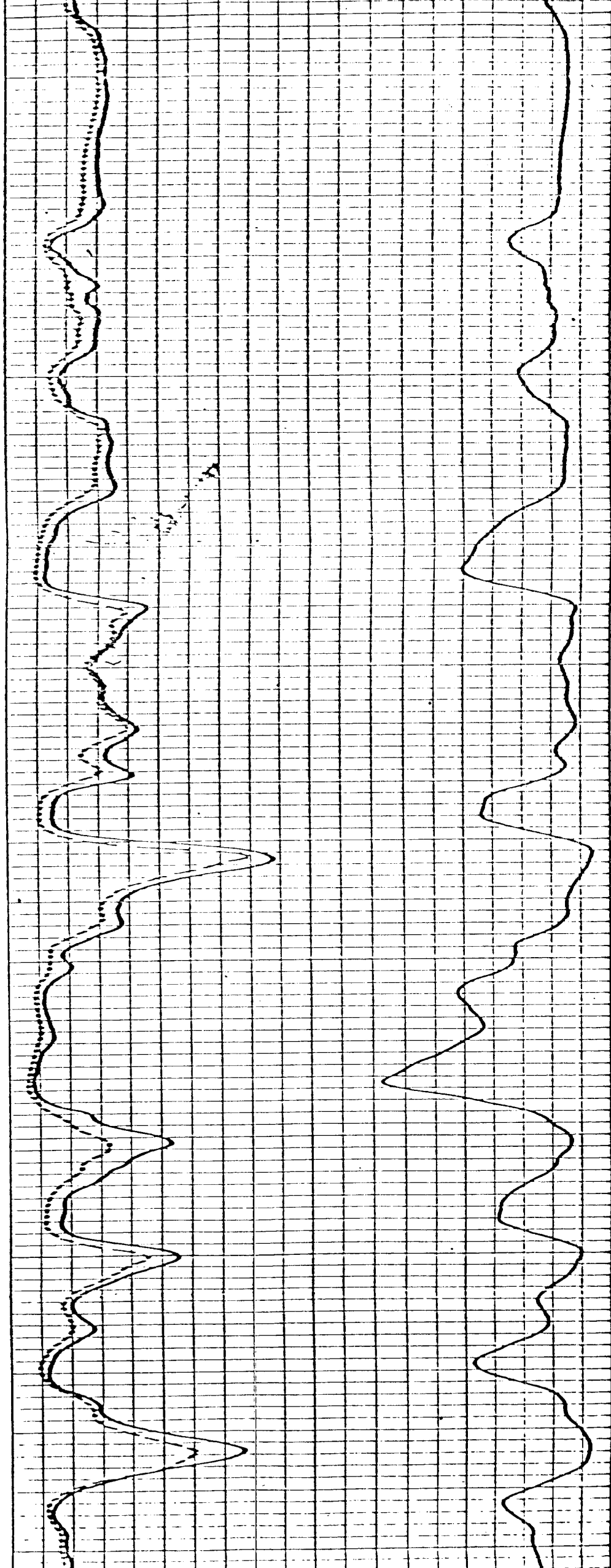
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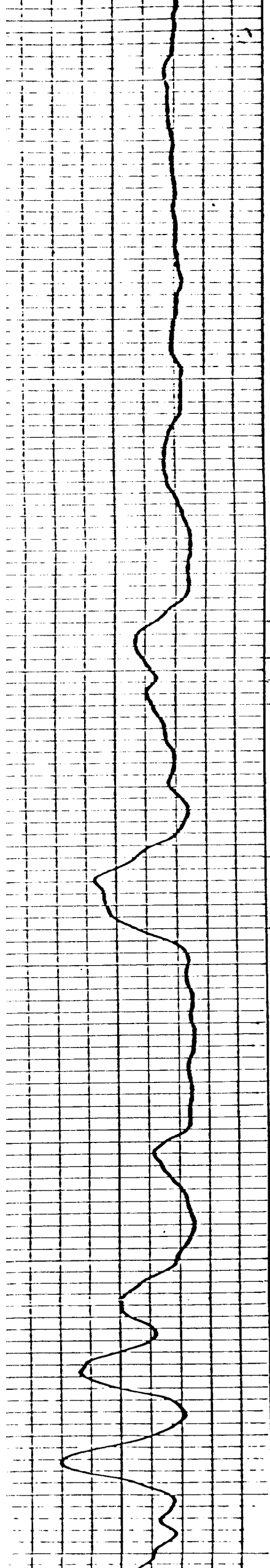
7900

7942
7942
7952
7956

7972

7984
8000

8100



dugan production corp.

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 7

JEROME P. McHUGH
Apache #1E
810' FNL - 820' FEL
Sec 18 T26N R3W
Rio Arriba County, NM

MORNING REPORT

5-31-81 Move in Four Corners Rig #10

6-1-81 Spud 12-1/4" hole at 1:30 p.m. 5-31-81. Drilling to 268'.
1/2° at 268'. Ran 8 jts. 8-5/8" OD, 24#, J-55, 8R, ST&C
csg. set at 260' RKB. Cemented w/ 150 sx class "B" 2% CaCl.
P.O.B. at 5:30 p.m. 5-31-81. Circulated 2 bbls good cement.
W.O.C. and nipple up.

6-2-81 2498' - Drilling Wt. 8.9 Vis 29 W.L. 10
1/2° at 781', 1/2° at 1276', 3/4° at 1615', 1° at 1797', 1° at 2402'

1-1/2 hrs - trip
18-1/4 hrs - drlg.
3/4 hr - rig service
1-1/4 hrs - survey
1/4 hr - wash
2 hrs - W.O.C.

6-3-81 3553' - Drilling Wt. 8.9 Vis 29 W.L. 9.4
3/4° at 2652', 1° at 3148'

2 hrs - trip
20-1/2 hrs - drilling
3/4 hr - rig service
1/2 hr - survey
1/4 hr - wash to bottom

6-4-81 4260' - Drilling Wt. 8.9 Vis 29 W.L. 8.5
1 1/4° at 3625', 1 1/4° at 4120'

2-3/4 hrs - trip
20 hrs - drilling
1/4 hr - rig service
1/2 hr - survey
1/2 hr - wash to bottom

6-5-81 4760' - Drlg. W.t 8.9 Vis 29 W.L. 8.4 1½° at 4615'
3-1/2 hrs - trip
19-1/2 hrs - drlg.
1/2 hr - rig service
1/4 hr - survey
1/4 hr - wash to bottom

6-6-81 5270' - Drlg. W.t 8.9 Vis 29 W.L. 8.4 1° at 5179'
23 hrs - drilling
3/4 hr - rig service
1/4 hr - survey

6-7-81 5575' - drlg. Wt. 8.9 Vis 34 W.L. 8.0
1° at 5179' 3/4° at 5544'
4-3/4 hrs - trip
17 hrs - drilling
3/4 hr - rig service
1 hr - cut drilling line
1/2 hr - wash to bottom

6-8-81 5998 - Drlg. Wt. 8.9 Vis 45 W.L. 8.6 30% LCM
1° at 5959'
20-3/4 hrs - drlg.
3/4 hr - rig service
1/4 hr - survey
1-1/2 hrs - lost circulation at 5990' - lost 175 bbls.
1/2 hr - wash to bottom

6-9-81 6222' - Drlg. Wt. 8.6 Vis 43 W.L. 8 32% LCM
Lost circ. at 6020 & 6052, total of 920 bbls.
1/4 hr - trip
13 hrs - trip
1/4 hr - rig service
10-1/2 hrs - lost circ. and mix mud

6-10-81 6507' - Drilling Wt. 8.5 Vis 45 W.L. 8.8 35% LCM
Lost circ. at 6426' - 500 bbl. 1¼° at 6482
17-1/4 hrs - drilling
3/4 hr - rig service
1/4 hr - survey
5-3/4 hr - lost circulation

6-11-81 6972' - Drlg. Wt. 8.8 Vis 44 W.L. 9.2
34% LCM
23-1/4 hrs - drlg.
3/4 hr - rig service

6-12-81 7221 - Drlg. Wt. 8.7 Vis 50 W.L. 9.0 30% LCM
1° at 6982', 1° at 7206'
5-1/2 hrs - trip
17 hrs - drilling
1/4 hr - rig service
1/4 hr - survey
1/2 hr - clean junk basket
1/4 hr - rig repair
1/4 hr - circ.

6-13-81 7570' - Drlg. Wt. 8.8 Vis 40 W.L. 10.0
28% LCM
23-1/4 hrs - drilling
3/4 hr - rig service

6-14-81 7875' - Trip. Wt. 8.8 Vis 40 W.L. 10.0 20% LCM
3/4° @ 7705'
1 hr - Trip
21-1/2 hrs - drilling
3/4 hr - rig service
1/4 hr - survey
1/2 hr - mix mud

6-15-81 8090' - Drlg. Wt. 8.9 Vis 44 W.L. 10.0 20% LCM
1° @ 7825'
6-3/4 hrs - Trip
16-3/4 hrs - drilling
1/2 hr - rig service

6-16-81 8250' - Trip for logs. Wt. 8.9 Vis 60 W.L. 10.0 20% LCM
1-1/2 hrs - trip
19-1/4 hrs - drilling
1/2 hr - rig service
1/2 hr - survey
2-1/4 hrs - circ. for logs

6-17-81 8250' - Logging. 1° @ 8250'
11-3/4 hrs - trip
6-1/2 hrs - logging
3-3/4 hrs - attempt to log
3 hrs - circ. & condition

6-18-81 8250' Circulate between.

2-1/4 hrs - logging
1 hr - cut drilling line
2-1/2 hrs - trip in hole
1/2 hr - wash to bottom
2-1/2 hrs - drilling
3/4 hr - circ.
5-1/2 hrs - lay down drilling pipe
5 hrs - run 4 1/2" csg.
1-1/4 hrs - circ & cement 1st stage
1-1/2 hrs - circ. between stages

6-19-81 Ran 30 jts 4 1/2" OD, 11.6#, K-55, 8Rd, ST&C csg. and 171 jts 4 1/2" OD, 10.5#, K-55, 8Rd, ST&C csg. (total of 201 jts.) T.E. 8271.42' set @ 8259' RKB. Cemented 1st stage w/ 10 bbls mud flush, 200 sks class "B" plus 8% gel and 1/4# flocele per sk. followed by 150 sks class "B" w/ 7-1/2# salt per sk. (total slurry first stage 555 Cu Ft.) Had good circ. and recipricated pipe OK while cementing. Float held OK. Opened bottom stage tool @ 6447'. Circ. 3 hrs w/ rig pump. Cemented 2nd stage w/ 10 bbls mud flush followed by 250 sks 65-35 plus 12% gel and 1/4# flocele per sk. Followed by 50 sks class "B" w/ 1/4# flocele per sk. (total slurry 2nd stage 714 Cu Ft) Good returns throughout job. Opened stage tool @ 6447'. Circulated w/ rig pump for 2 hrs. Cemented 3rd stage w/ 10 bbls mud flush followed by 400 sks 65-35 plus 12% gel and 1/4# flocele per sk followed by 50 sks class "B" w/ 1/4# flocele per sk. (total slurry 3rd stage 1107 Cu Ft) Good circulation throughout job. Closed stage tool w/ 2500 psi - held OK. Job complete @ 11:15 6-18-81. Set 4 1/2" csg. slips and cut off csg. Released rig @ 1:00 PM 6-18-81.

DAILY REPORT

9-21-81 Move in and rig up MTK Rig #2. Go in hole w/ bit and tbg. Tagged up at 3934'. Drlg. 11' cement and D.V. tool at 3945'.

9-22-81 Went in hole w/ tbg. to 6445'. Drlg. cement and D.V. tool at 6447'. Went in hole w/ tbg. and clean out to PBTD 8226'. Circulated hole clean.

9-23-81 Rig up Western Co. Pressure test to 4000 psi. OK.
Spot 250 gals 7 1/2% HCL. POH. Rig up Jetronics.
Ran GR-CCL from PBTD 8226' to 7350'.

Perforate Dakota 8006, 08, 10, 12, 14, 16, 18, 20
8100, 02, 06, 08, 41, 43, 45, 51, 53, 80, 82,
84, 86, 88, 90
Total 23 holes, all 1 SPF

9-24-81 Rig up Western Co. Broke formation down w/ 2100 psi.
Pumped 250 gal 15% HCL. Dropped 40 ball sealers.
Ball off w/ 4000 spi. Rig up Jetronics. Ran 4½" junk
basket. Unable to get thru D.V. tool at 6447. Surged well
back.

Fraced well as follows:

15,000 gal Mini Max III-30 w/ 2% oil - pad
20,000 gal Mini Max III-30 w/ 2% oil w/ 1# 20-40 sand
20,000 gal Mini Max III-30 w/ 2% oil w/ 1.5# 20-40 sand
15,000 gal Mini Max III-30 w/ 2% oil w/ 2# 20-40 sand
10,000 gal Mini Max III-30 w/ 2% oil w/ 2# 10-20 sand
5,292 gal fresh water - flush

ISDP - 1650 psi 15 min - 1500 psi
Max treating press 2900 psi, Min treating press 2700 psi,
Ave treating press 2800 psi at 36 BPM

Totals: 80,000 gal Mini Max III-30
80,000# 20-40 sand
20,000# 10-20 sand
1,600 gal condensate
60# breaker B-5
80 gal Aquaflow
80 gal Fracide

Shut in for 4 hours.

Perforate Gallup 7520-7530', 1 SPF. Spot 250 gal 15% HCL across
Gallup perms. Wait 30 min.

Fraced Gallup as follows:

6,000 gal Mini Max III-30 w/ 2% oil - pad
12,000 gal Mini Max III-30 w/ 2% oil w/ 1# 20-40 sand
16,000 gal Mini Max III-30 w/ 2% oil w/ 2# 20-40 sand
6,000 gal Mini Max III-30 w/ 2% oil w/ 2½# 20-40 sand
5,040 gal fresh water - flush

ISDP 1200 psi 15 min - 1100 psi
Max treating press 3000 psi, Min treating press 2600 psi
Ave treating press 2800 psi at 39 BPM

Totals: 40,000 gal Mini Max III-30
69,000# 20-40 sand
800 gal condensate
55# B-5 breaker
40 gal Aquaflow
40 gal Fracide

Shut well in over night.

JEROME P. McHUGH
Apache #1E
Page 6

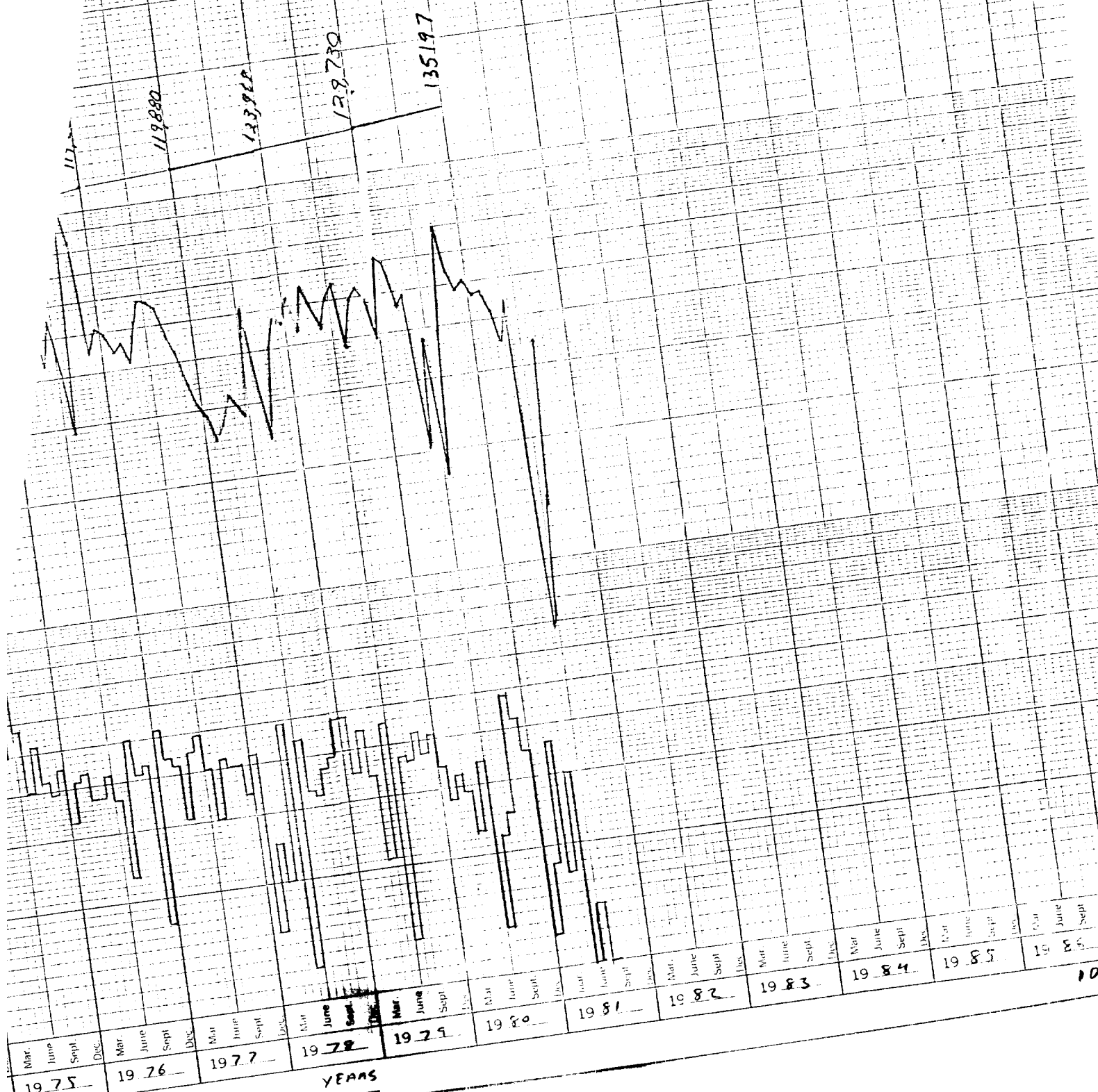
- 9-25-81 Opened well up. Flowing by heads. Went in hole w/ tbg. Tagged sand at 8184' RKB. Leaving 3 perforations covered. Landed tbg. as follows: 252 jts. 1½" OD, 2.9#, V-55 10 Rd, EUE tbg., w/ 31' cross pin sub on bottom. T.E. 8145.11' set at 8154' RKB.
- Nipple down BOP. Nipple up well head. Rig down pump and pit and MTK.
- 9-26-81 Blowing well to pit. Well making 1600 MCK with light spray of oil and water.

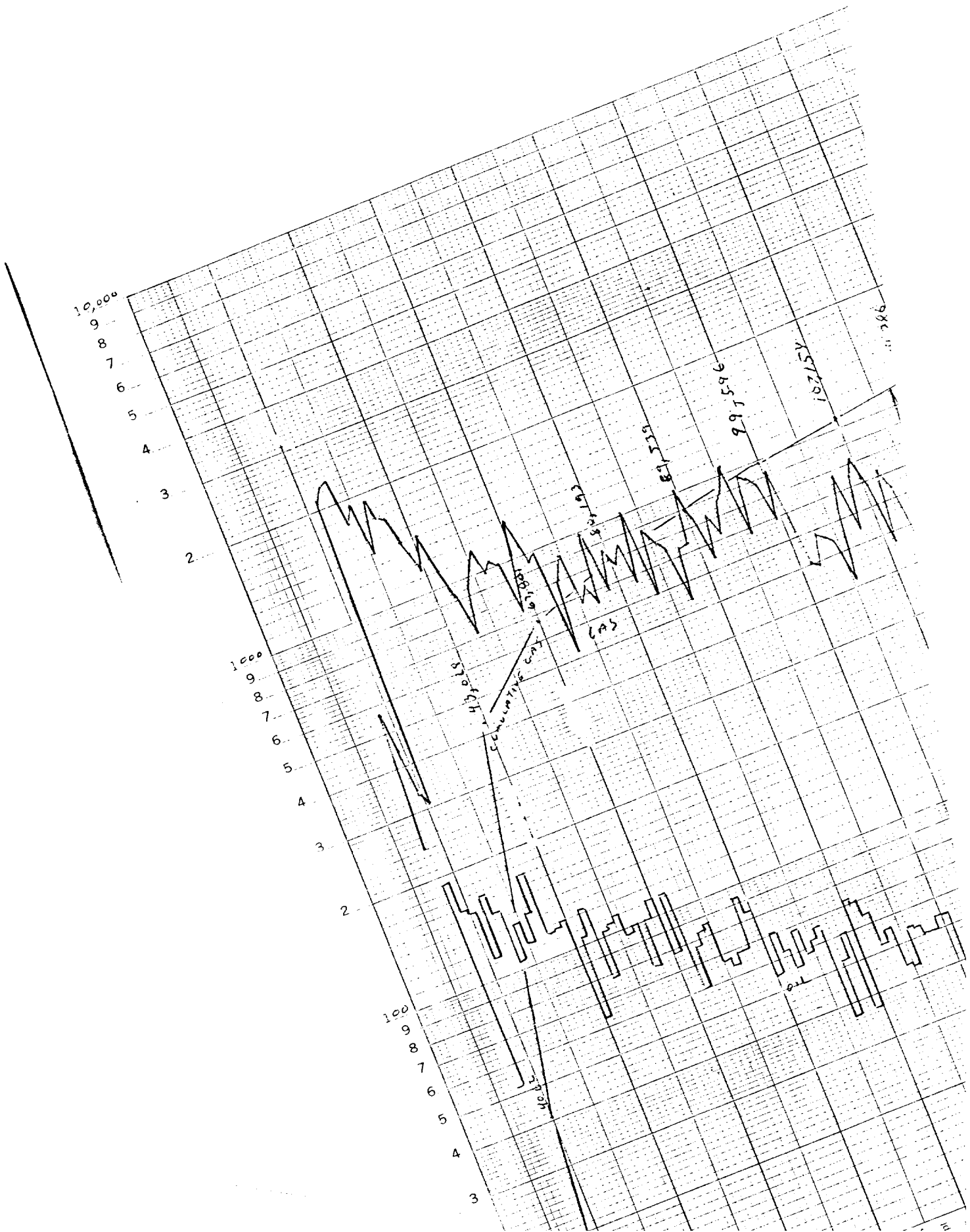
SHUT-IN PRESSURES

WELL	ZONE	INITIAL TEST	DATE	CURRENT TEST	DATE
Apache #1	Upper completion	1669 psig	9-2-69	300 psig	7-20-80
	Lower completion	2309 psig	9-2-69	510 psig	7-20-80
Apache #2	Upper completion	1514 psig	1-25-71	0	7-20-80
	Lower completion	1835 psig	1-25-71	510 psig	7-20-80
Apache #3	Upper completion	1357 psig	9-13-70	300 psig	7-2-80
	Lower completion	1496 psig	9-13-70	0	7-2-80
Apache #4	Upper completion	1330 psig	10-8-69	605 psig	5-27-78
	Lower completion	1345 psig	10-8-69	605 psig	2-20-78

Application for Downhole Commingling
 Jerome P. McHugh
 Apache #1-E Well
 Unit A, Sec. 18, T-26-N, R-3-W
 Rio Arriba County, New Mexico
 Case No. 1378
 Exhibit No. 8

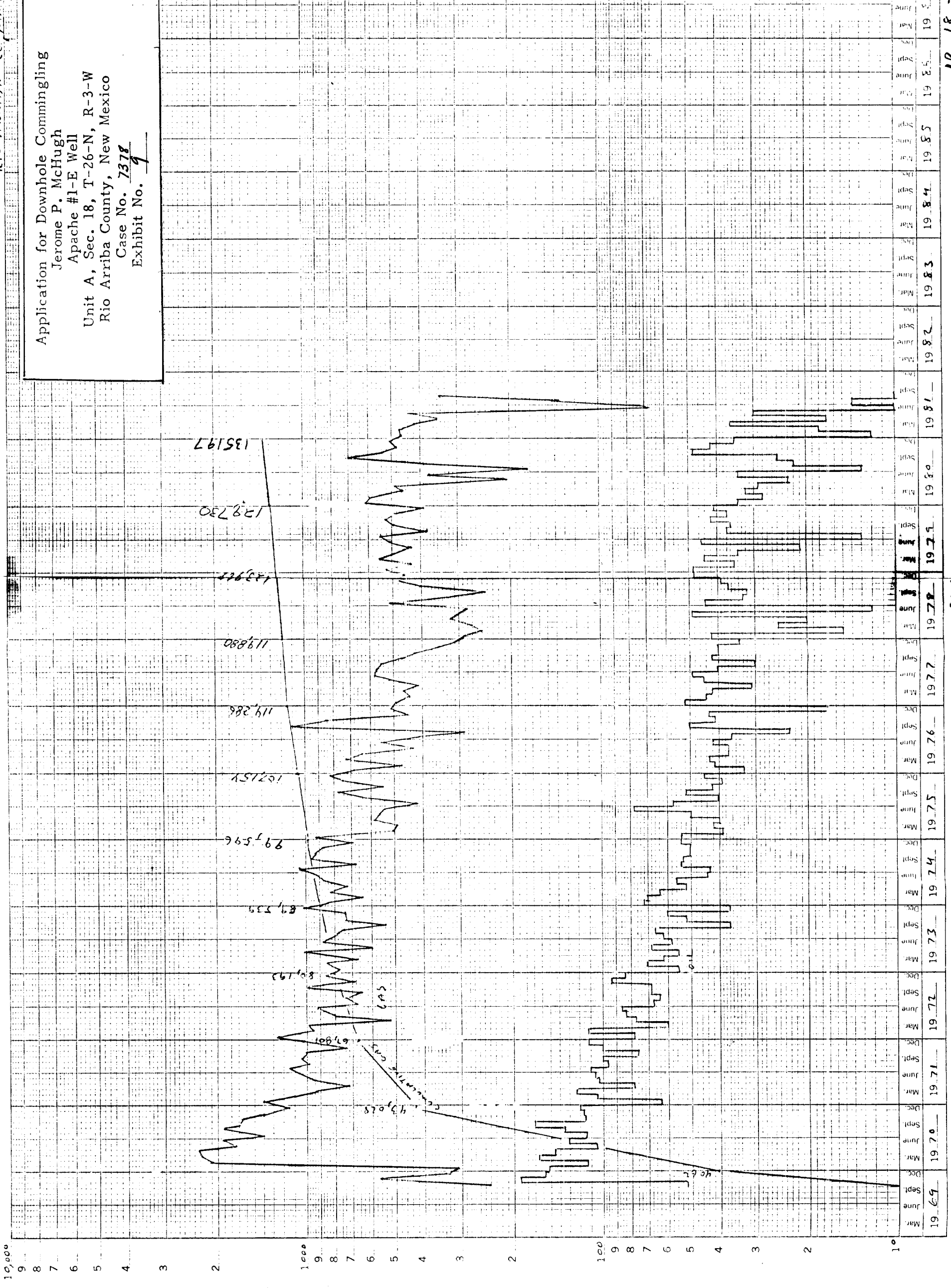
Application for Downhole Commingling
 Jerome P. McHugh
 Apache #1-E Well
 Unit A, Sec. 18, T-26-N, R-3-W
 Rio Arriba County, New Mexico
 Case No. 7378
 Exhibit No. 9





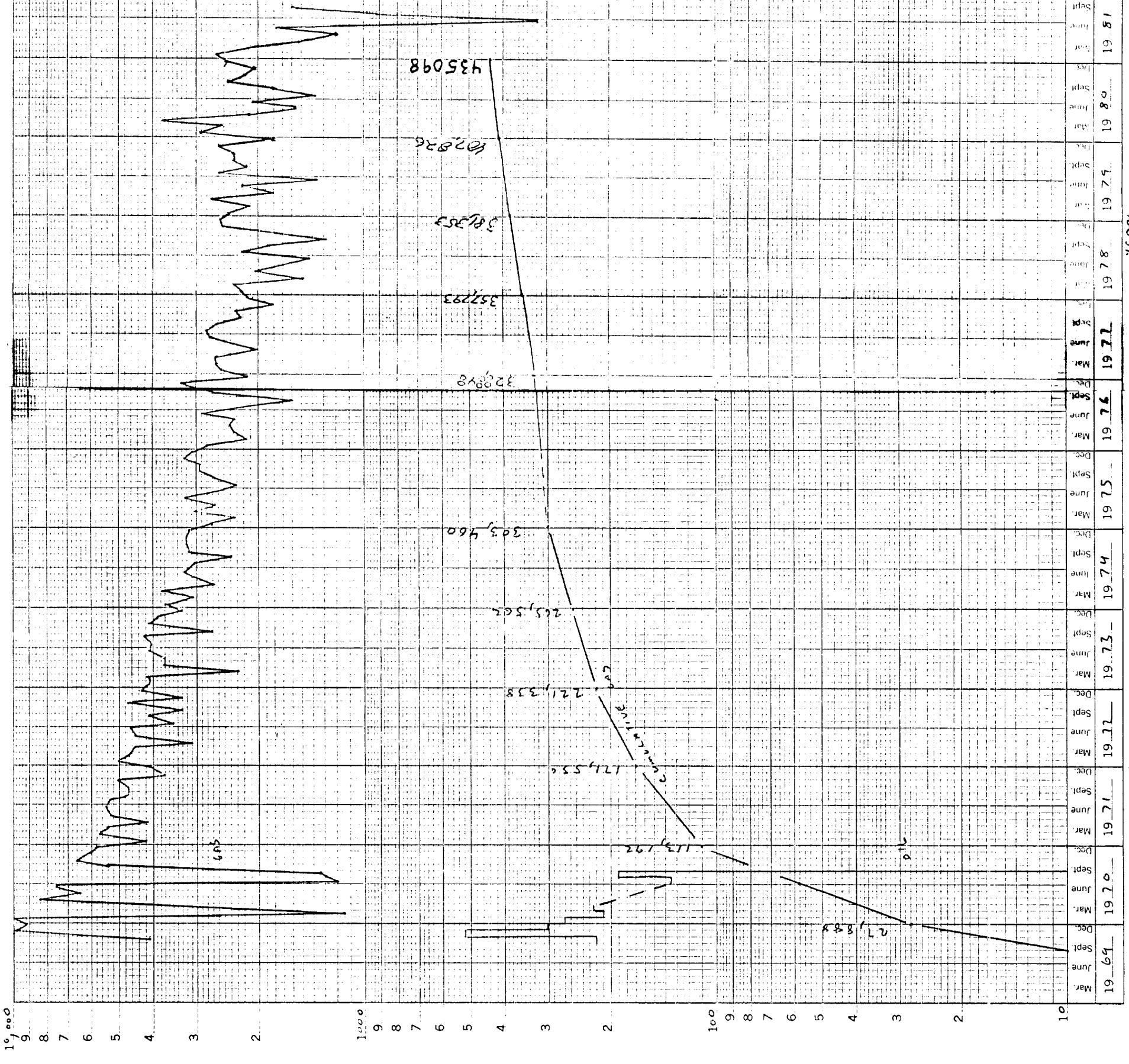
APACHE WELL NO. 1
WILD HOLE FALLUP
RIO ARriba CO, NM

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 9



APACHE WELLS
BASIN DATA
RIO ARriba CO., N.M. D-1

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 1371
Exhibit No. 10

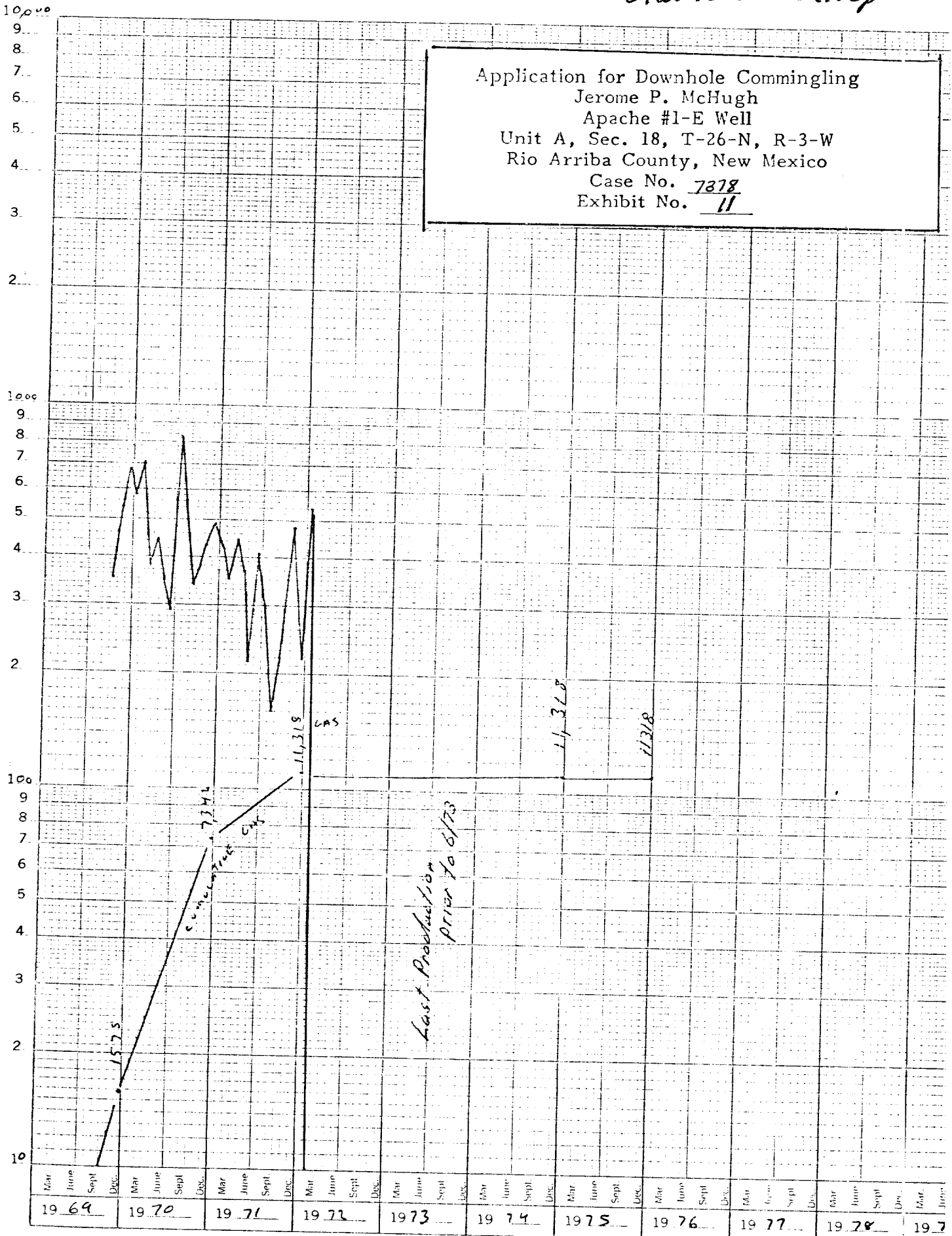


YEARS

10 15-262-

Apache #2 Wildhorse Gallup

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. II



37322 DISHOTA

Apache #2

Rio Arriba Co., N.M. L-18-

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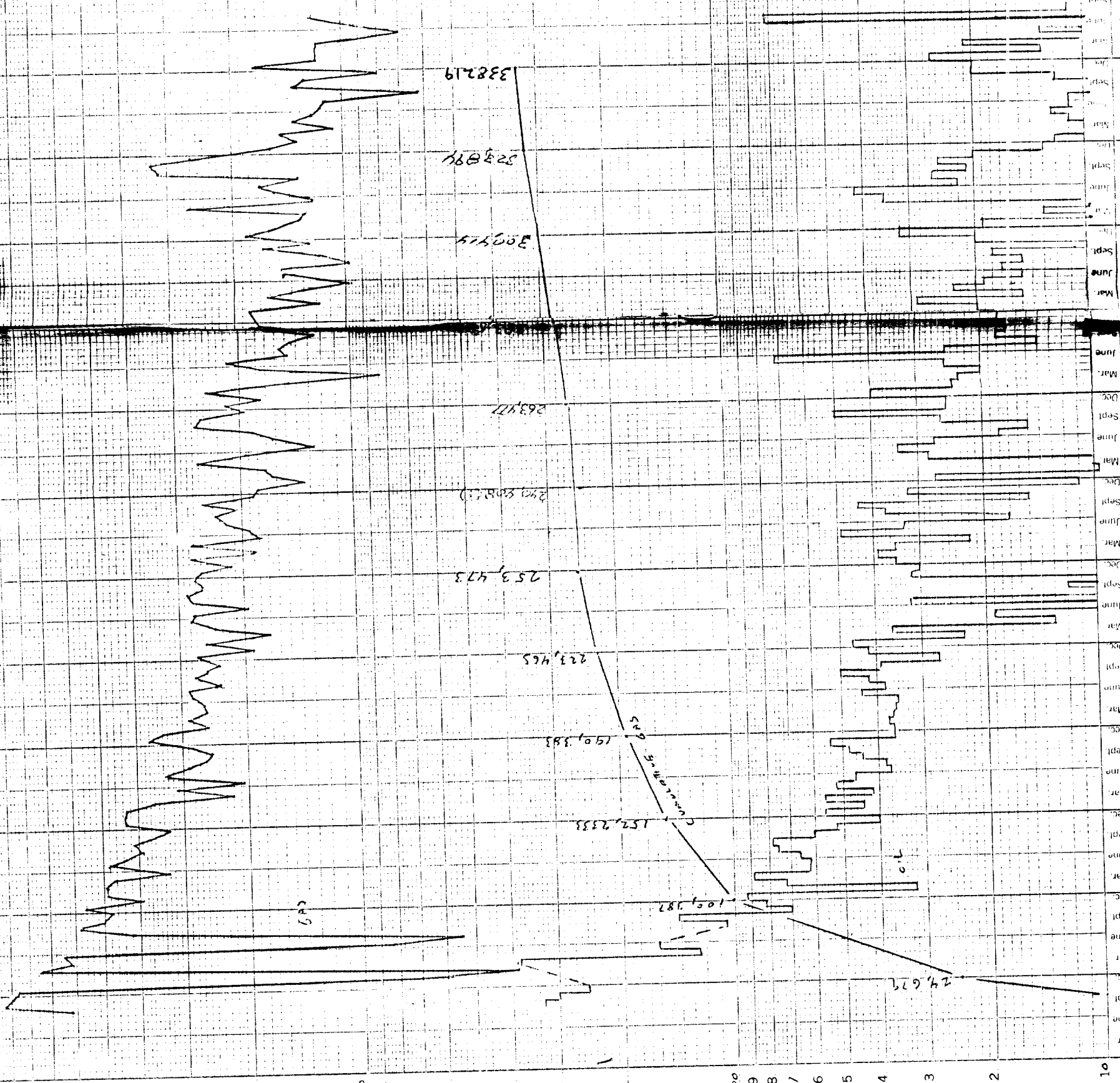
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YEARS

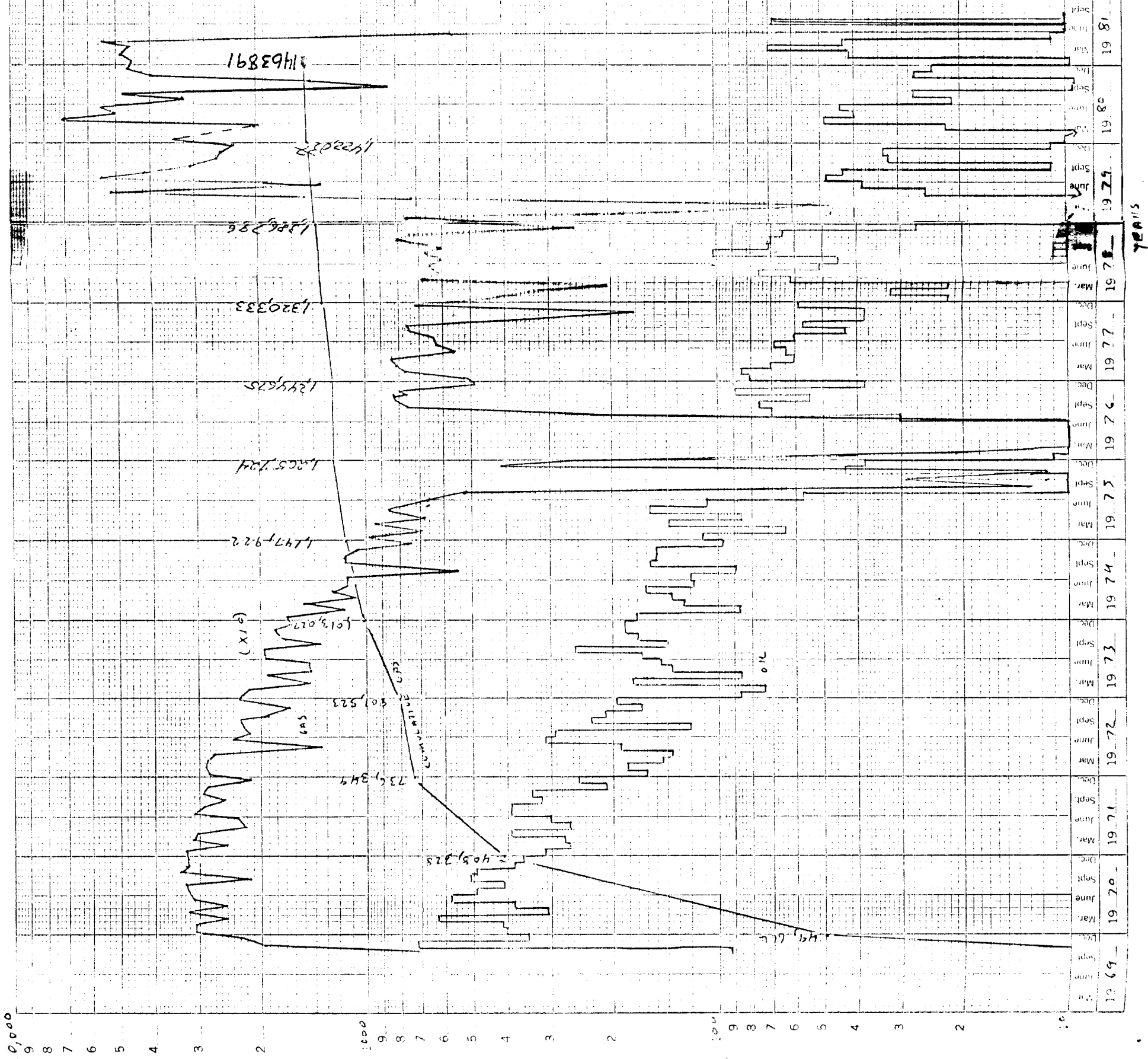
20 18 26 2-30

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 12

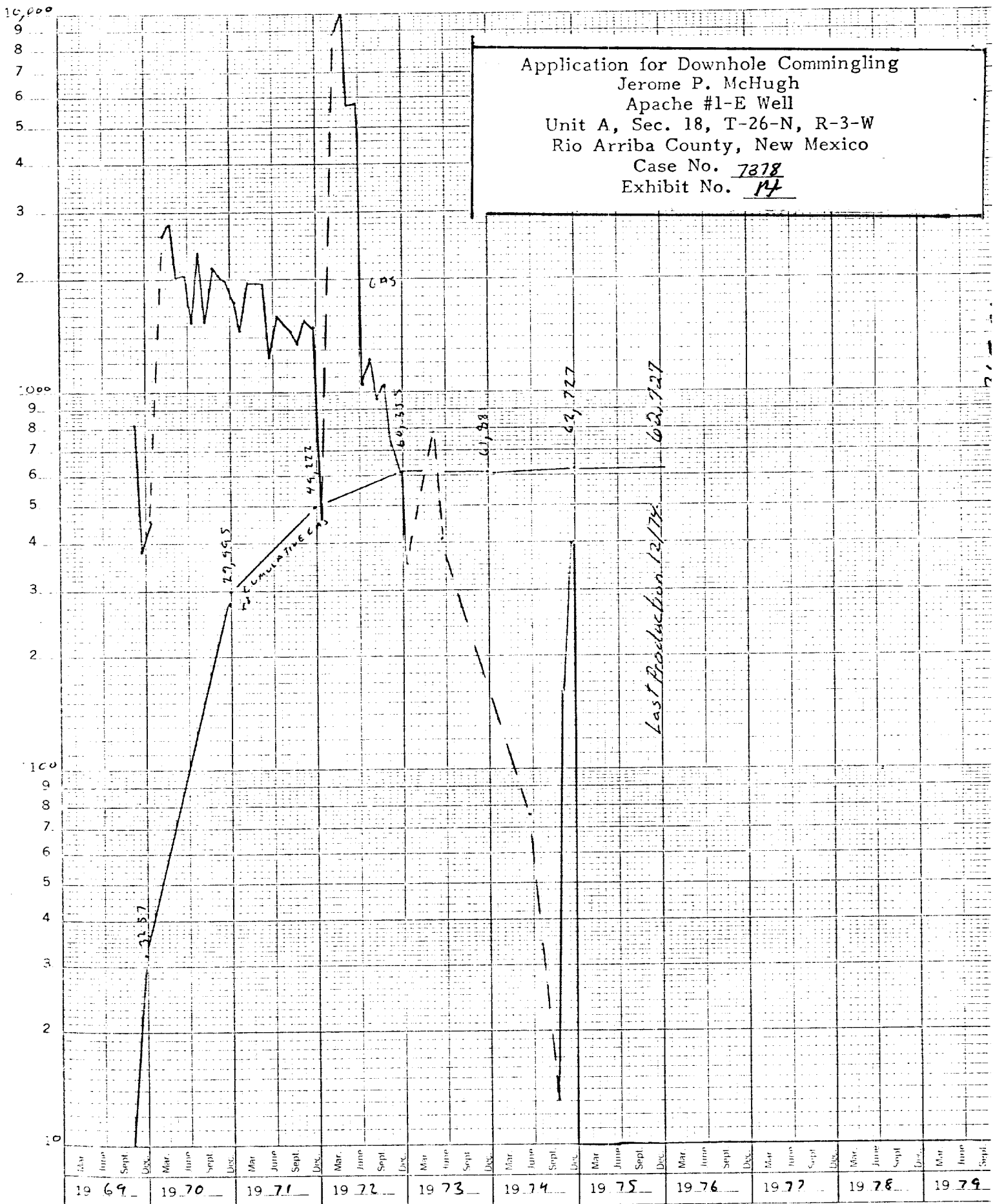


APACHE WELL No. 3
WILD HORSE CREEK
RIO ARriba CO., N.M. D-19-261

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7372
Exhibit No. 13

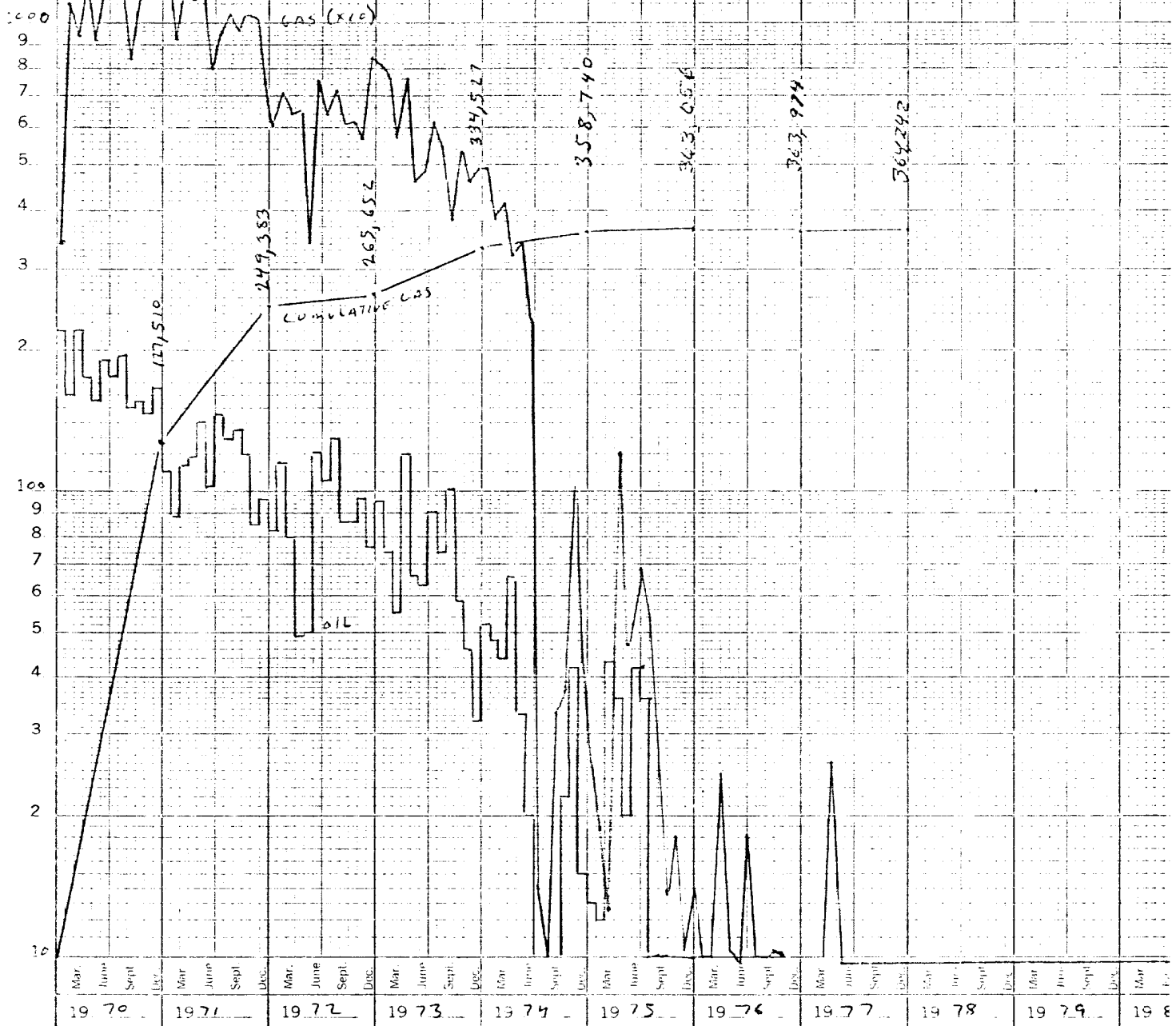


TPACHE #3
Basin Dakota



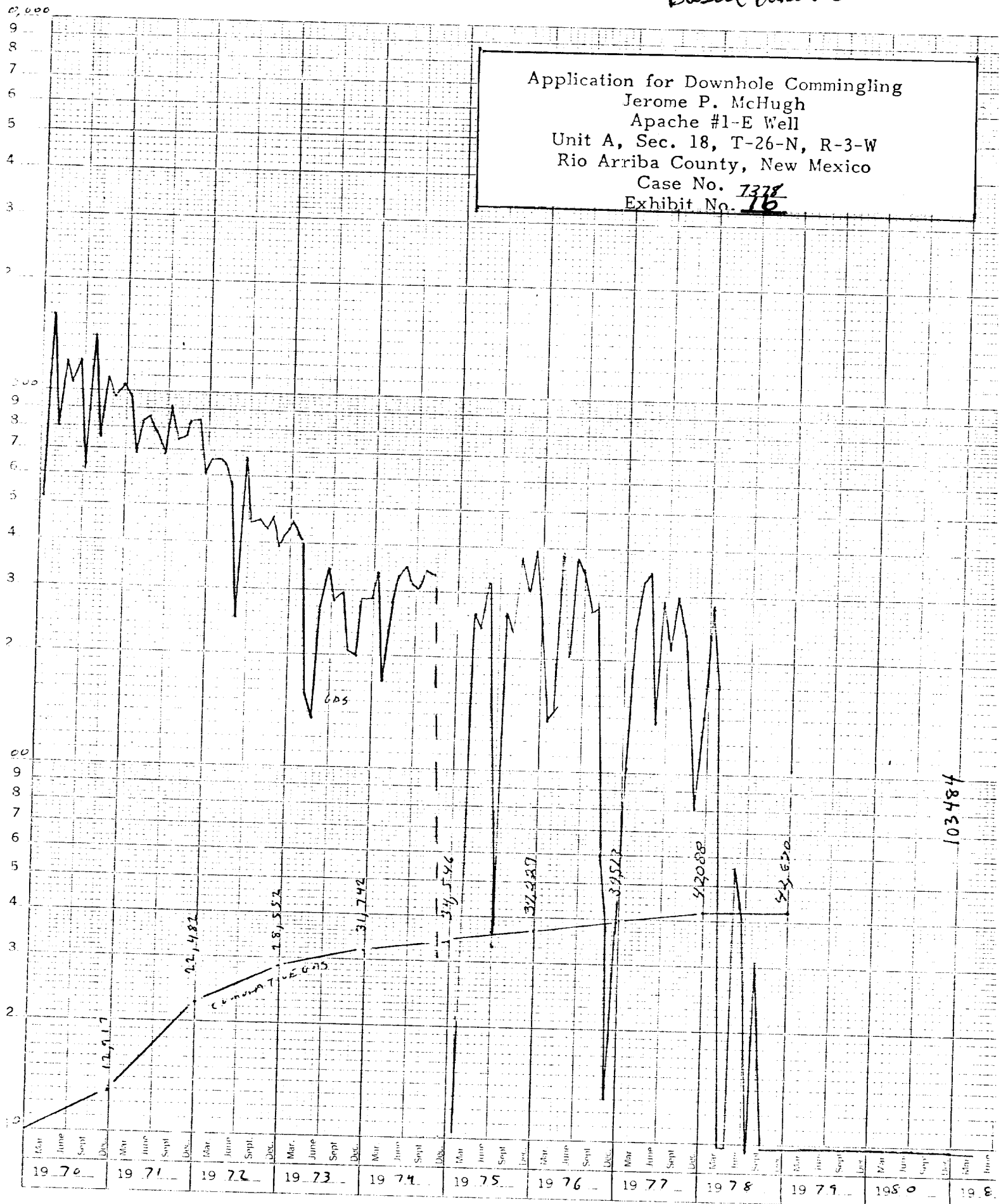
Apache well #4
Wild Horse Gallup

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 15



Apache Well # 4
Basin Dakota

Application for Downhole Commingling
Jerome P. McHugh
Apache #1-E Well
Unit A, Sec. 18, T-26-N, R-3-W
Rio Arriba County, New Mexico
Case No. 7378
Exhibit No. 16



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