

B+

Mueller
OIL AND GAS LEASE

Recorder No.
(58-134)

KANSAS BLUE PRINT CO. INC.
316-264-9344 • P.O. Box 793 • Wichita, KS 67201-0793

AGREEMENT, Made and entered into this Twenty-sixth day of April, 2005
by and between Eileen B. Mueller

Party of the first part, hereinafter called lessor (whether one or more) and
Edward E. Birk and Brian L. Birk Part of the second part, hereinafter called lessee.

WITNESSETH, That the said lessor, for and in consideration of one dollar and other valuable consideration, cash in hand paid, receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter contained on the part of lessee to be paid, kept and performed, has granted, demised, leased and let and by these presents does grant, demise, lease and let unto said lessee, for the sole and only purpose of mining and operating for oil and gas, and laying pipe lines, and building tanks, power stations and structures thereon to produce, save and take care of said products, all that certain tract of land situated in the County of Allen State of Kansas, described as follows, to wit:
The North Half (N2) of the Northeast Quarter (NE4)

of Section 13 Township 26 Range 19E and containing 80 acres more or less.

It is agreed that this lease shall remain in full force for a term of one years from this date, and as long thereafter as oil or gas, or either of them, is produced from said land by the lessee.

In consideration of the premises the said lessee covenants and agrees:

1st. To deliver to the credit of lessor, free of cost, in the pipe line to which lessee may connect his wells, the equal one-eighth ($\frac{1}{8}$) part of all oil produced and saved from the leased premises.

2nd. To pay lessor for gas from each well where gas only is found the equal one-eighth ($\frac{1}{8}$) of the gross proceeds at the prevailing market rate, (but, as to gas sold by lessee, in no event more than one-eighth ($\frac{1}{8}$) of the proceeds received by lessee from such sales), for all gas used off the premises, said payments to be made per division order

and lessor to have gas free of cost from any such well for all stoves and all inside lights in the principal dwelling house on said land during the same time by making his own connections with the well at his own risk and expense.

3rd. To pay lessor for gas produced from any oil well and used off the premises or in the manufacture of gasoline or any other product a royalty of one-eighth ($\frac{1}{8}$) of the market value, at the mouth of the well, (but, as to gas sold by lessee, in no event more than one-eighth ($\frac{1}{8}$) of the proceeds received by lessee from such sales), payable monthly at the prevailing market price.

If no well be commenced on said land on or before the N/A day of N/A, 19 , this lease shall terminate as to both parties, unless the lessee on or before that date shall pay or tender to the lessor, or to the lessor's credit in the N/A Bank at N/A

or its successors, which shall continue as the depository regardless of changes in the ownership of said land, the sum of Two Hundred (\$200.00) DOLLARS, which shall operate as a rental and cover the privilege of deferring

the commencement of a well for twelve months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods of the same number of months successively. All such payments or tenders of rentals may be made by check or draft of lessee or any assignee thereof, mailed or delivered on or before the rental paying date, either direct to lessor or assigns or to said depository bank. And it is understood and agreed that the consideration first recited herein, the down payment, covers not only the privileges granted to the date when said first rental is payable as aforesaid, but also the lessee's option of extending that period as aforesaid, and any and all other rights conferred.

Should the first well drilled on the above described land be a dry hole, then, and in that event, if a second well is not commenced on said land within twelve months from the expiration of the last rental period for which rental has been paid, this lease shall terminate as to both parties, unless the lessee on or before the expiration of said twelve months shall resume the payment of rentals in the same amount and in the same manner as hereinbefore provided. And it is agreed that upon the resumption of the payment of rentals, as above provided, that the last preceding paragraph hereof, governing the payment of rentals and the effect thereof, shall continue in force just as though there had been no interruption in the rental payments.

If said lessor owns a less interest in the above described land than the entire and undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the lessor only in the proportion which his interest bears to the whole and undivided fee.

Lessee shall have the right to use, free of cost, gas, oil, and water produced on said land for its operation thereon, except water from wells of lessor.

When requested by lessor, lessee shall bury his pipe lines below plow depth.

No well shall be drilled nearer than 200 feet to the house or barn now on said premises, without the written consent of the lessor.

Lessee shall pay for damages caused by its operations to growing crops on said land.

Lessee shall have the right at any time to remove all machinery and fixtures placed on said premises, including the right to draw and remove casing.

If the lessee shall commence to drill a well within the term of this lease or any extension thereof, the lessee shall have the right to drill such well to completion with reasonable diligence and dispatch, and if oil or gas, or either of them, be found in paying quantities, this lease shall continue and be in force with the like effect as if such well had been completed within the term of years herein first mentioned.

If the estate of either party hereto is assigned, and the privilege of assigning in whole or in part is expressly allowed, the covenants hereof shall extend to their heirs, executors, administrators, successors or assigns, but no change in the ownership of the land or assignment of rentals or royalties shall be binding on the lessee until after the lessee has been furnished with a written transfer or assignment or a true copy thereof; and it is hereby agreed in the event this lease shall be assigned as to a part or as to parts of the above described lands and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them on an acreage basis, such default shall not operate to defeat or affect this lease in so far as it covers a part or parts of said lands upon which the said lessee or any assignee thereof shall make due payments of said rentals. If the leased premises are now or hereafter owned in severalty or in separate tracts, the premises, nevertheless, may be developed and operated as an entirety, and the royalties shall be paid to each separate owner in the proportion that the acreage owned by him bears to the entire leased area. There shall be no obligation on the part of the lessee to offset wells on separate tracts into which the land covered by this lease may hereafter be divided by sale, devise, or otherwise, or to furnish separate measuring or receiving tanks for the oil produced from such separate tracts.

Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the lessee shall have the right at any time to redeem for lessor by payment, any mortgages, taxes or other liens on the above described lands, in the event of default of payment by lessor, and be subrogated to the rights of the holder thereof.

*or as long as the minimum royalty of \$200.00 per year is paid.

Whereof witness our hands as of the day and year first
above written,

Witness to the mark:

Eileen B. Mueller (SEAL)

SEAL (SEAL)

Eileen B. Mueller (SEAL)

SEAL (SEAL)

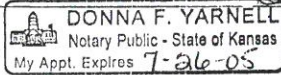
540

(SEAL)

STATE OF Kansas
COUNTY OF Allen
The foregoing instrument was acknowledged before me this 30th day of April, 2005
by Eileen R. Mueller and _____

ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)

My commission expires 7-26-05



Notary Public

STATE OF _____
COUNTY OF _____
The foregoing instrument was acknowledged before me this _____ day of _____, 19____
by _____ and _____

ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)

My commission expires _____

Notary Public

STATE OF _____
COUNTY OF _____
The foregoing instrument was acknowledged before me this _____ day of _____, 19____
by _____ and _____

ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)

My commission expires _____

Notary Public

STATE OF _____
COUNTY OF _____
The foregoing instrument was acknowledged before me this _____ day of _____, 19____
by _____ and _____

ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)

My commission expires _____

Notary Public

No. _____
OIL AND GAS LEASE

FROM

TO

Date _____, 19____

Section _____ Twp. _____ Rge. _____

No. of Acres _____ Term _____

County _____

STATE OF KANSAS

County ALLEN

11-5

This instrument was filed for record on the 2nd

day of JUNE, 2005

at 9:20 o'clock A. M., and duly recorded

in Book A61 Page 540 of _____

the records of this office.

CARA BARKDOLL

Register of Deeds.

By Michelle M. Smith

Fee: \$12.00

When recorded, return to _____

Deputy

ORIGINAL COMPARED WITH RECORD

STATE OF _____
COUNTY OF _____
The foregoing instrument was acknowledged before me this _____ day of _____, 19____
by _____
of _____ a _____
corporation, on behalf of the corporation.
My commission expires _____

ACKNOWLEDGMENT FOR CORPORATION (KsOkCoNe)

Notary Public

Coffeyville Resources
Division of Interest - Statement of Lease Ownership (RV3210)

Page 7

Property #	Property name	Operator
41656	S Mueller	Birk Petroleum

County	State	Product
Allen	Kansas	All

Division order #	Effective date
1079	01/01/09

=====

Coffeyville Resources ASSUMES NO RESPONSIBILITY FOR ACCURACY OR CORRECTNESS
OF THE INFORMATION HEREIN SET OUT.

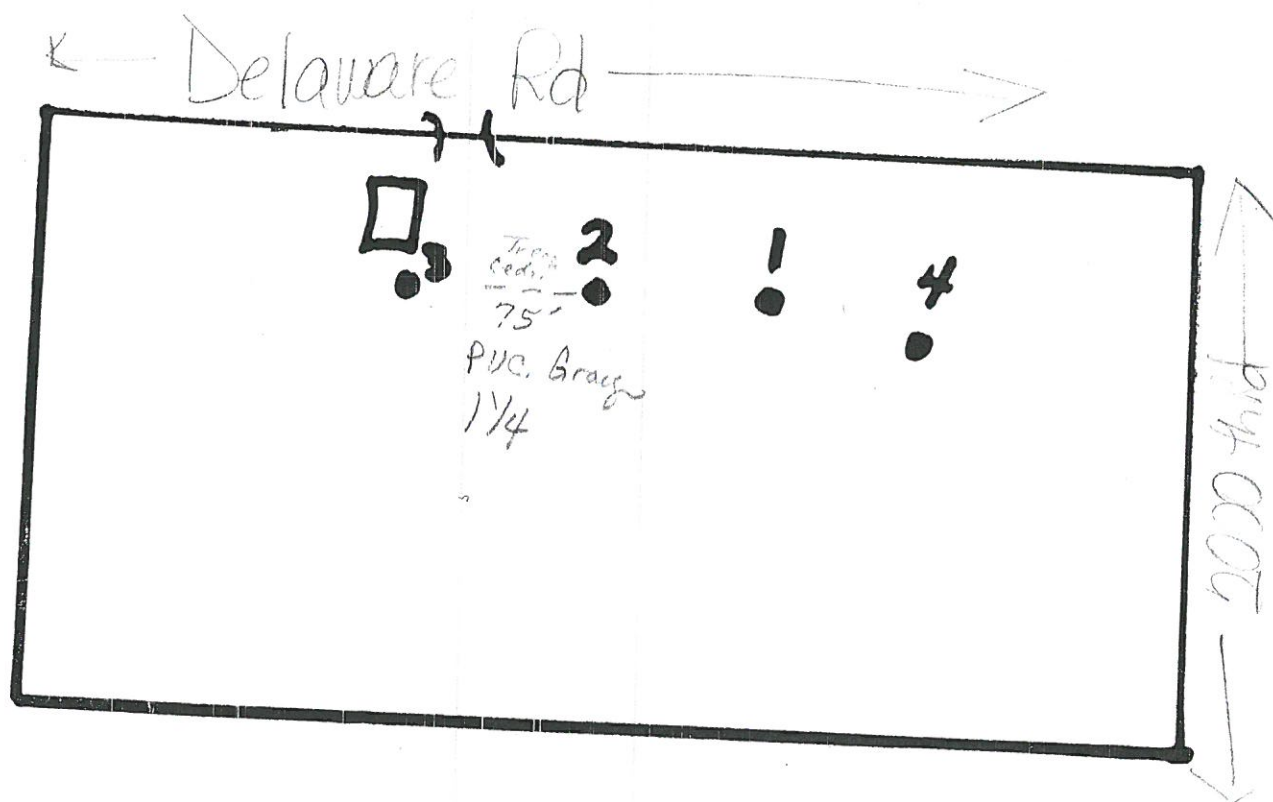
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Owner number	Owner name and address	Int Pay typ code	Decimal interest	Inflated interest
21559	Curtis Mark Mueller 2040 Delaware Rd Humboldt, KS 66748-2179	RI M	0.12500000	
10006	Edward E Birk and Brian L Birk, TC 900 S 4th St Burlington, KS 66839-1942	WI M	0.87500000	

1.00000000

SOUTH Mueller 80(A)

Sec. 18 26-19 ALLEN Co

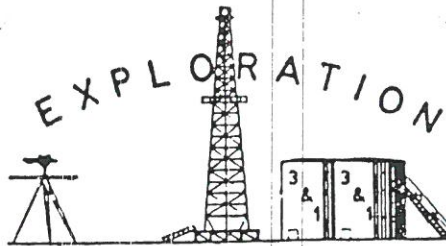


WORLDWIDE

EXPLORATION

CONSULTANTS

Suite 1244 Penthouse
225 East 16th Avenue
Denver, Colorado 80203



Phone: 303-830-0333
Telex: 4322090 WWCI UI

April 24, 1984

Participants
Mueller Lease
Allen County, KANSAS

Witnessed by Selmer L. Pederson

Re: Completion of Mueller No. 1 and No. 2 Wells

Tuesday April 17, 1984

7:00 A.M. Cornish Wireline on location Mueller No. 1
Perforated Bartlesville Sandstone Interval (Log attached)
Ran in hole with 1" pipe and spotted one Bbl of 15%
HCl acid; Pulled 1" out of hole -- ready for frac job.

9:00 A.M. Cornish Wireline on location Mueller No. 2
Perforated Bartlesville sandstone interval (Log attached)
Ran in hole with 1" pipe and spotted one bbl of 15%
HCl acid; Pulled 1" out of hole -- ready for frac job.

3:30 P.M. Consolidated Equipment moving onto location. Mueller No.
4:15 P.M. Sand Truck arrived on location:

Frac Job: Bartlesville INTERVAL
4,000 lbs of 16-30 Sand
2,000 lbs of 10-20 Sand
1,000 lbs of 8-12 Sand
Used 135 Bbls of geled water
10 Bbls to establish flow rate
105 Bbls for frac treatment
20 Bbls for flush after treatment
200 lbs or rock salt used

4:25 P.M. Frac Treatment completed
4:30 P.M. opened well with strong flow back
4:40 P.M. Still flowing back at good stream.
5:05 P.M. No flowing back - fish-eyes and oil droplets visible.

4:45 P.M. Consolidated Equipment on location Mueller No. 2

Frac Job: Bartlesville Interval
4,000 lbs of 16-30 Sand
2,000 lbs of 10-20 Sand
1,000 lbs of 8-12 Sand
Used 135 Bbls of geled water
10 Bbls to establish flow rate
105 Bbls for frac treatment
20 Bbls for flush after treatment

MUELLER No. 1 and No. 2 Wells

Page -2-

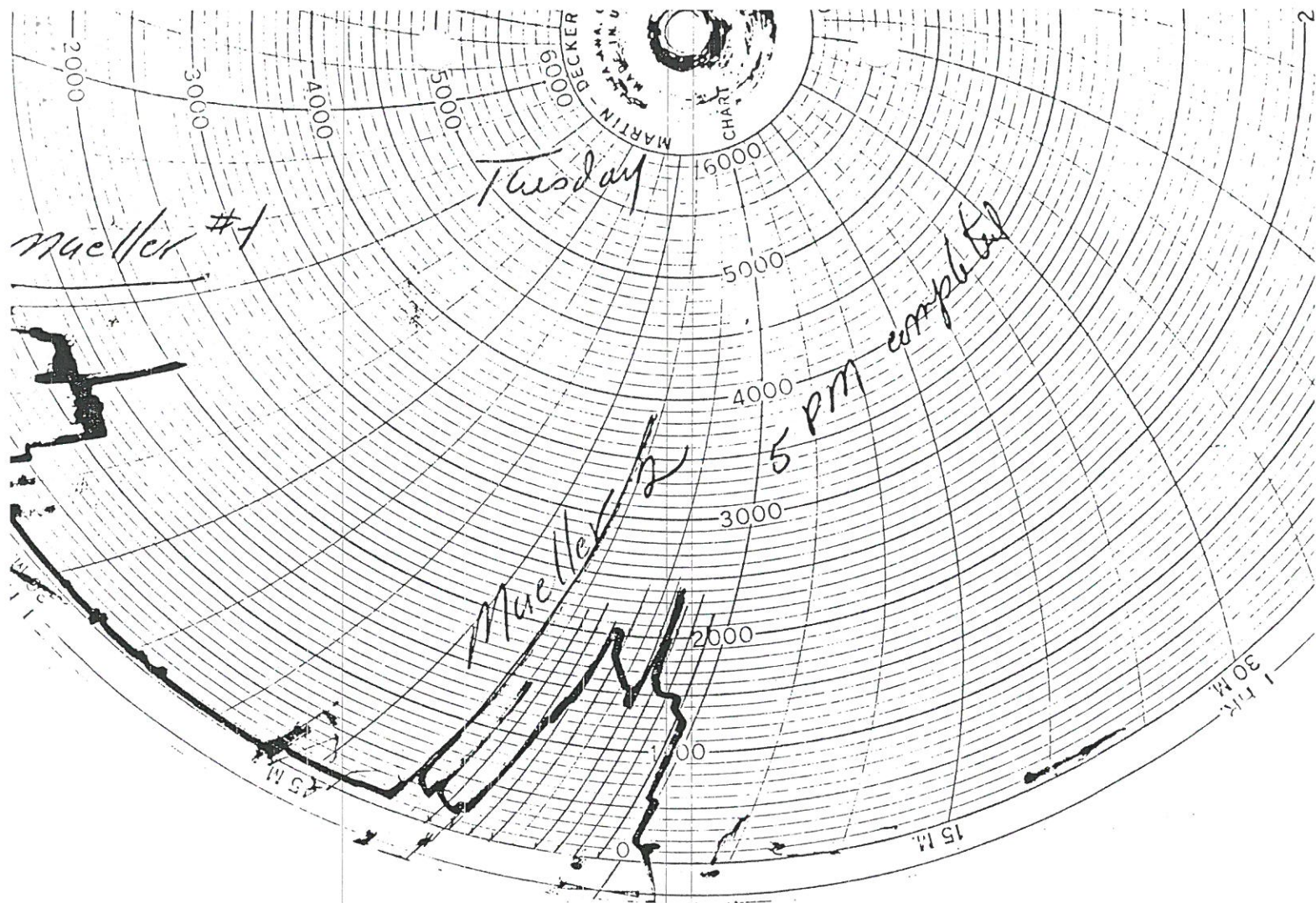
Wednesday -- April 18, 1984

10:10 A.M. Cornish wireline on location -- Mueller No. 2
Perforated Upper Zone (Cattleman Sandstone Interval)
Log attached.
Ran in hole with 1" pipe and spotted one Bbl of 15%
HCl acid; Pulled 1" out of hole -- ready for frac job.

11:30 A.M. Cornish wireline on location -- Mueller No. 1
Perforated Upper Zone (Cattleman Sandstone Interval)
log attached.
Ran in hole with 1" pipe and spotted one Bbl of 15%
HCl acid; Pulled 1" out of hole -- ready for frac job.

4:00 P.M. Consolidated Equipment on location -- Mueller No. 1
Frac Job: Cattleman Sandstone Interval
3,000 lbs 16-30 Sand
1,500 lbs 10-20 Sand
500 lbs 8-12 Sand
Used 120 Bbls of gelled water
10 Bbls to establish flow rate
90 Bbls for frac treatment
20 Bbls for flush after treatment
No salt used on this frac job
Shut-in pressure at 200 p.s.i. after treatment

4:45 P.M. Consolidated Equipment on location -- Mueller No. 2
Frac job: Cattleman Sandstone Interval
3,000 lbs of 16-30 Sand
1,500 lbs of 10-20 Sand
500 lbs of 8-12 Sand
Used 120 Bbls of gelled water
10 Bbls to establish flow rate
90 Bbls for frac treatment
20 Bbls for flush after treatment
No salt used on this frac job.
Shut-in pressure 200 p.s.i. after treatment.



MUELLER No. 2 WELL

BARTLESVILLE SANDSTONE INTERVAL

Perforations broke at 3,800 p.s.i.

Pumped 2,000 lbs 16-30 Sand at 2,000 p.s.i.

Pumped 1,000 lbs 10-20 Sand at 1,700-1,600 p.s.i.

Pumped 500 lbs 8-12 Sand at 1,500 p.s.i.

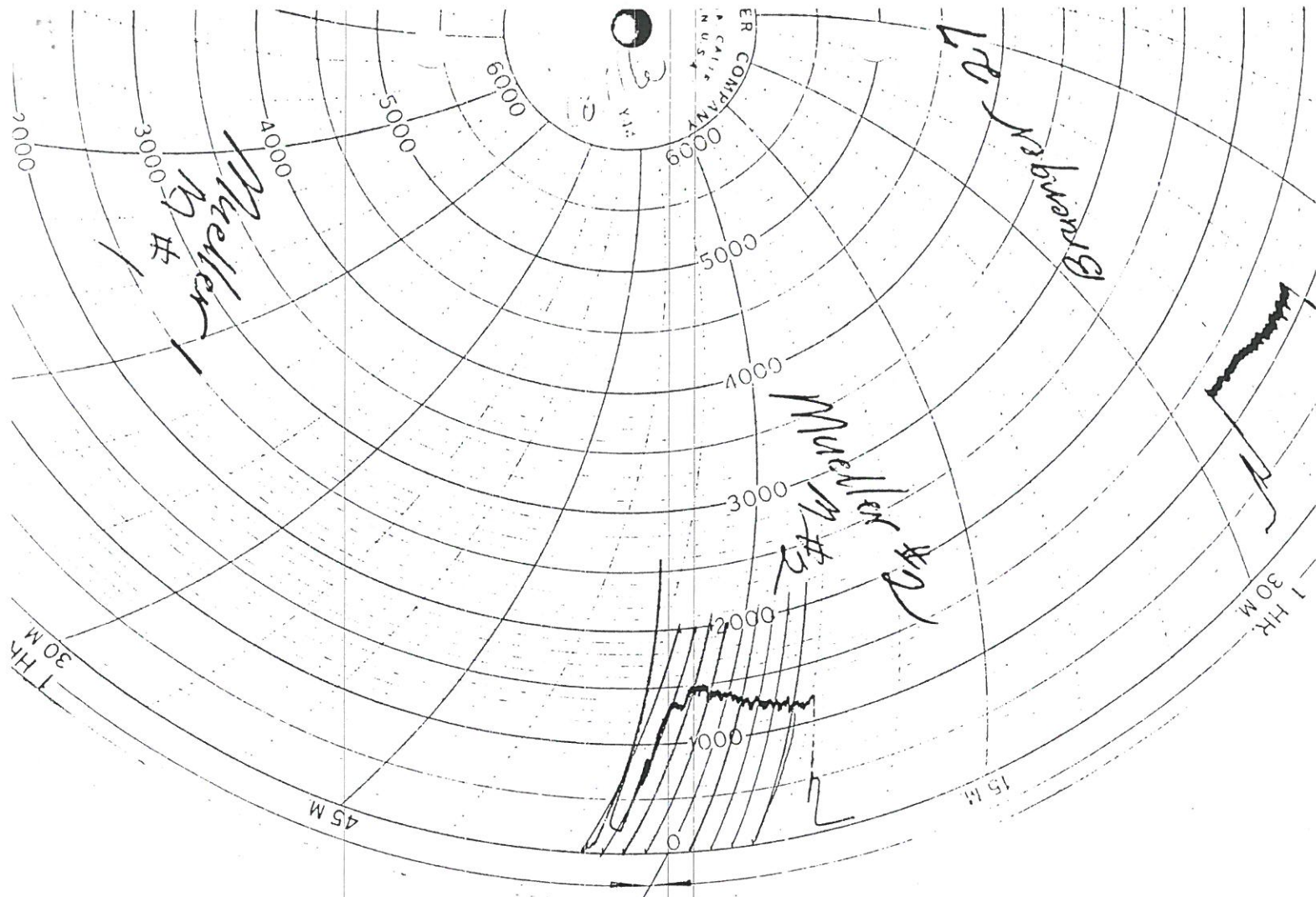
Dropped 200 lbs of rock salt; pressure broke at 2,400 p.s.i.

Pumped 2,000 lbs 16-30 Sand at 1,500 p.s.i.

Pumped 1,000 lbs 10-20 Sand at 1,400 p.s.i.

Pumped 500 lbs 8-12 Sand at 1,400-1,300 p.s.i.

Pumped 20 Bbls of flush and shut in at 200 p.s.i.



MUELLER No. 2 WELL

CATTLEMAN SANDSTONE INTERVAL

Perforations broke at 2,600 p.s.i.

Pumped 3,000 lbs 16-30 Sand at 1,500 p.s.i.

Pumped 1,500 lbs 10-20 Sand at 1,400-1,300 p.s.i.

Pumped 500 lbs 8-12 Sand at 1,250 p.s.i.

No salt dropped on this frac job.

Pumped 20 Bbls of flush; Shut-in pressure of 200 p.s.i.

700

750

MUELLER No. 2

800

850

April 18, 1984

Perforations:

14 -- 2" DML-RTG Jets

Interval: 749.5'-759.5'

9.5'

SEATING NIPPLE at 801.0 Feet

April 17, 1984

Perforations:

28 -- 2" DML-RTG Jets

Interval: 804.0'-824.0'

WIRELINE SERVICE, INC.

DENSITY

165' FNL, 1235' FEL

18 26S 19E

SEC. TWP. RGE.

COMPANY WORLDWIDE EXPLORATION

WELL MUELLER W N NO. 2

COUNTY ALLEN

STATE KANSAS

LOCATION 165' FNL, 1235' FEL

OTHER SERVICES

SEC. 18 TWP. 26S RGE. 19E

Permanent Datum: G.L. Elev.: ft.

Log Measured From: G.L. Above Perm. Datum

Drilling Measured From: G.L.

ELEV: KB 991

CL

CBF

Date 3-8-84

Run No. 1 NW

First Reading 889'

Last Reading 100'

Feet Measured 789'

Depth Reached 890'

Bottom Driller 900'

Csg. PWS

Csg. Driller 21' @ 7"

Mud Nature FRESH WATER

Dens. Visc.

Mud pH

" Water Loss

" Res. @ of (u) of of

" Rmf @ of (u) of of

" " @ BHT @ of (u) of of

" Rmc @ of (u) of of

" ppm-Cl. @ of (u) of of

Bit Size 6 1/4"

Equipment Type CONPROBE

Opr. Rig Time

Truck No. 201

Recorded By HUBER, R.

Witness PEDERSON, S. L.

REMARKS

1st Run Service Order #

Drilling Stopped

Circulation Stopped

Tool on Bottom

B.H.T.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our offices, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

GAMMA RAY
API UNITS

DEPTHS

BULK DENSITY
Pb-gm/cc

Sens.

T.C.

Zero

div. to left

Caliper
hole diameter in inches

6 7 8 9 10 11 12 13 14

2.0

2.5

POROSITY %

30

20

10

0

P_(MA)=(SAND)
2.65density correction
P - gm/cc

0.25

0

NOISE CHARACTERISTICS IN INCHES

6 7 8 9 10 11 12 13 14

$P_{(WA)} = 2.65$

$P_{-gpa} =$

0.25

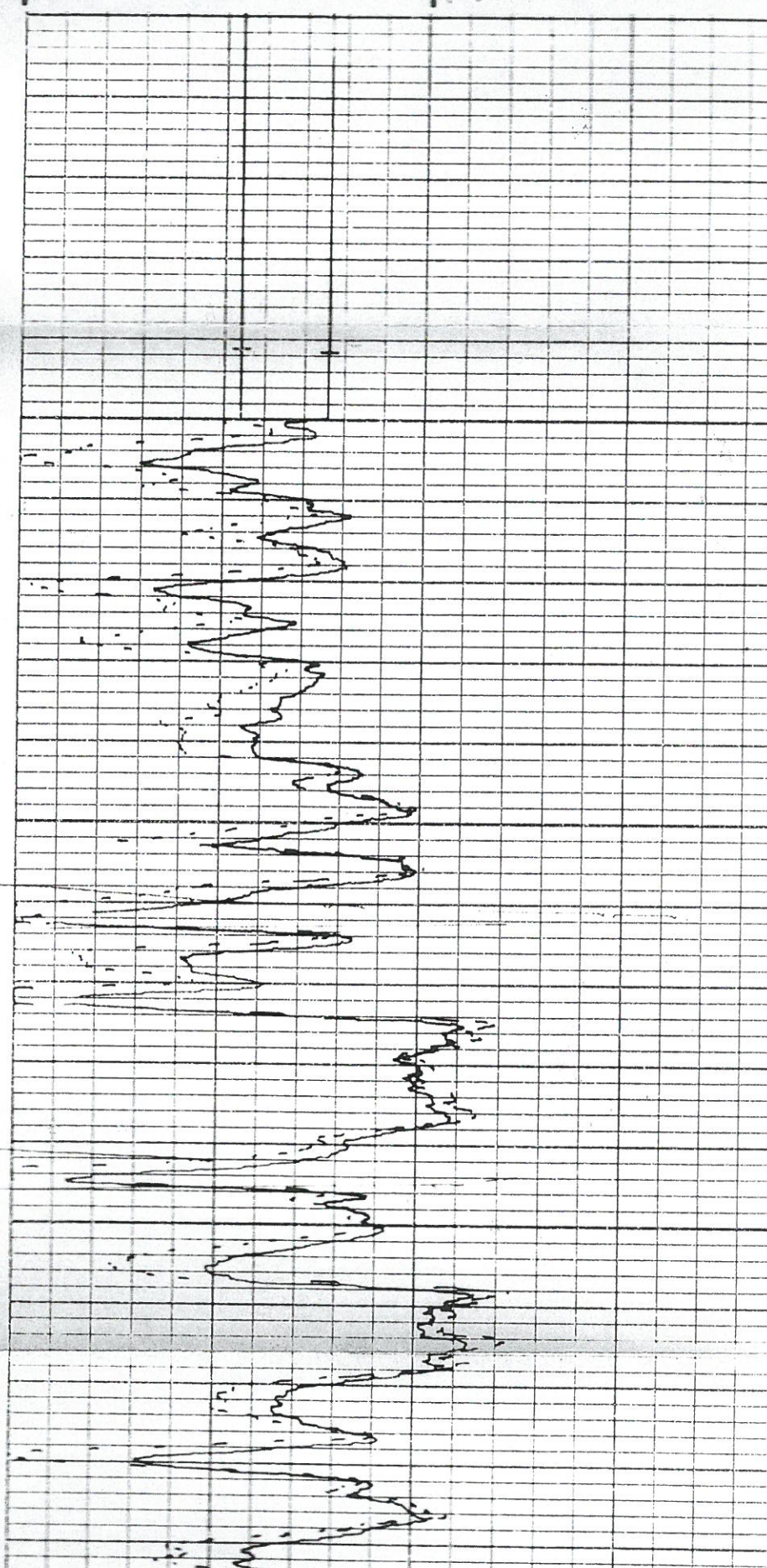
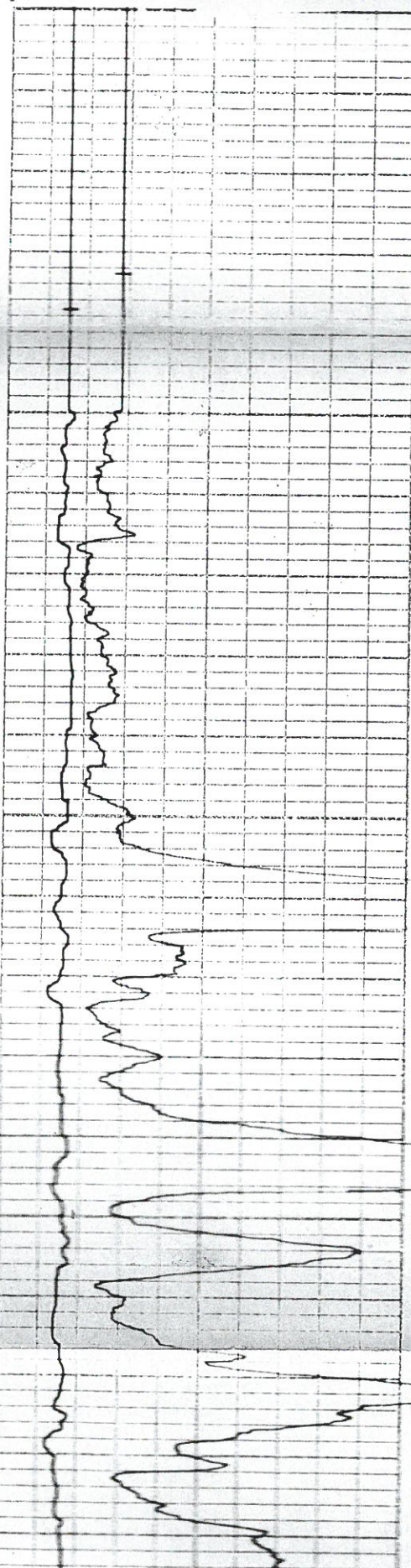
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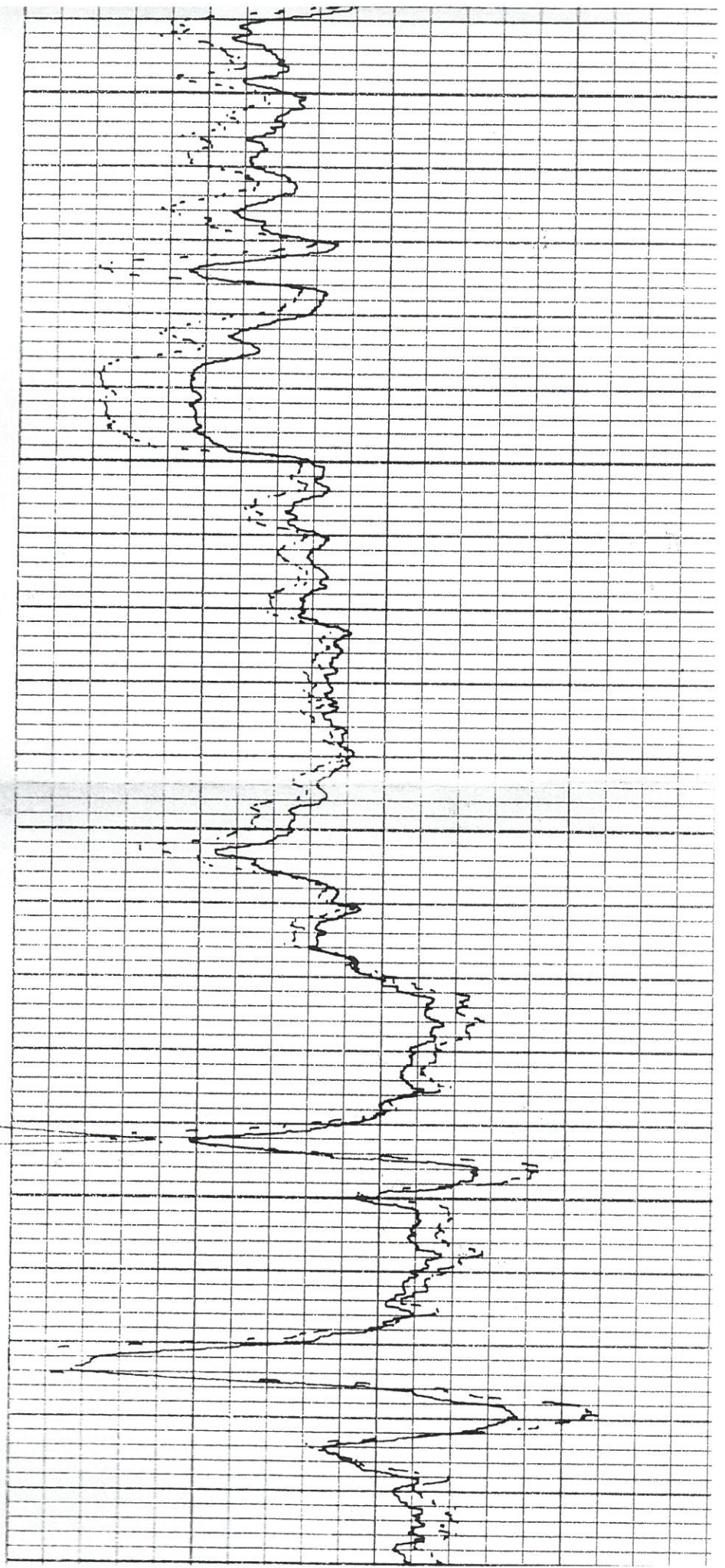
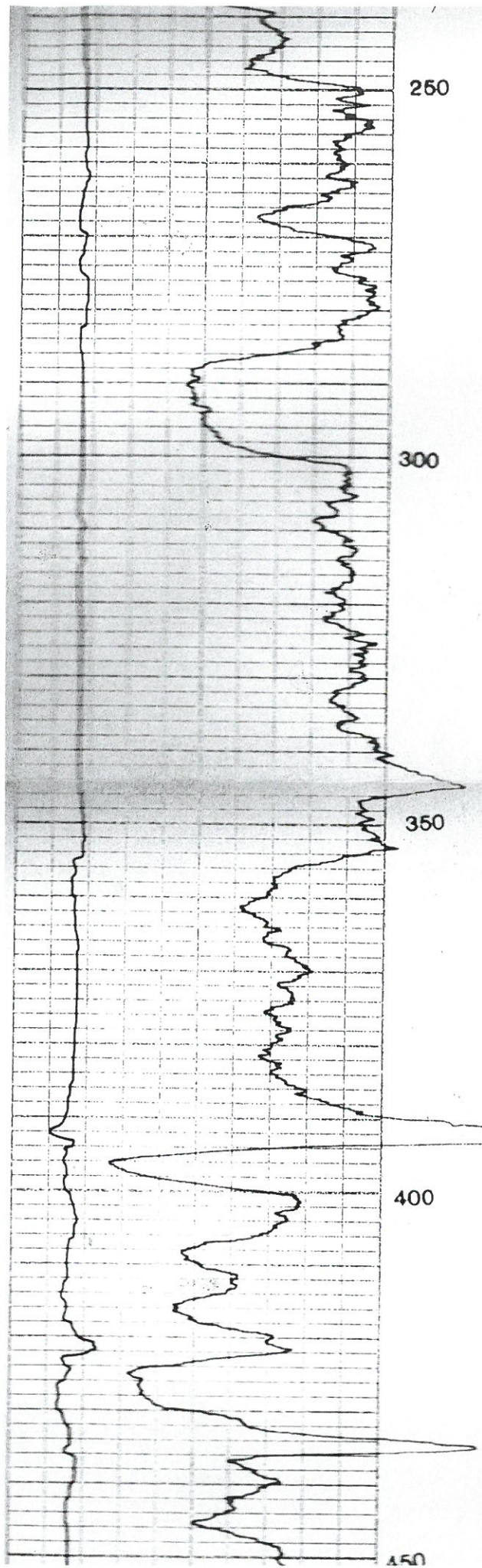
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100

150

200





450

WEISER
Sandstone

500

550

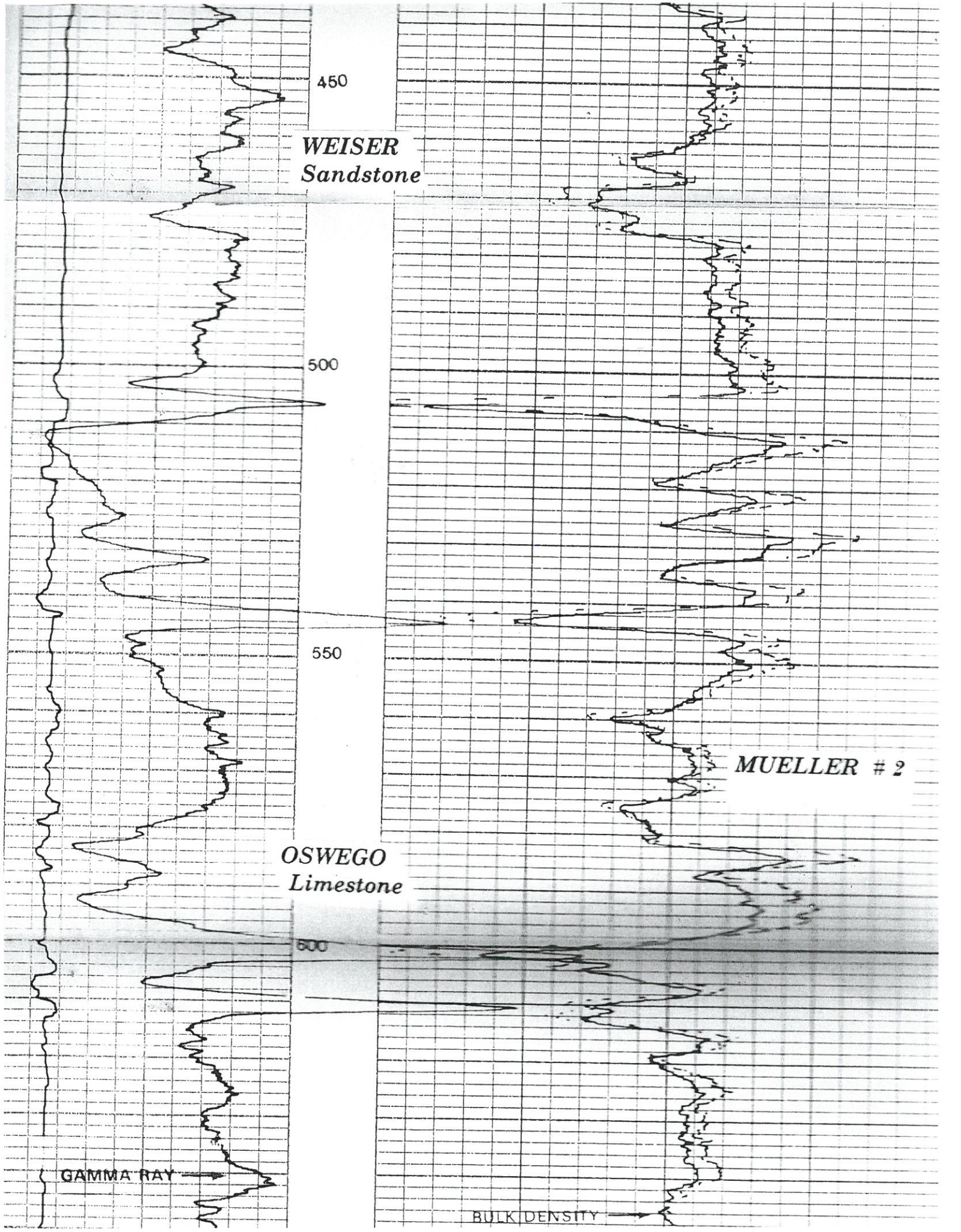
MUELLER # 2

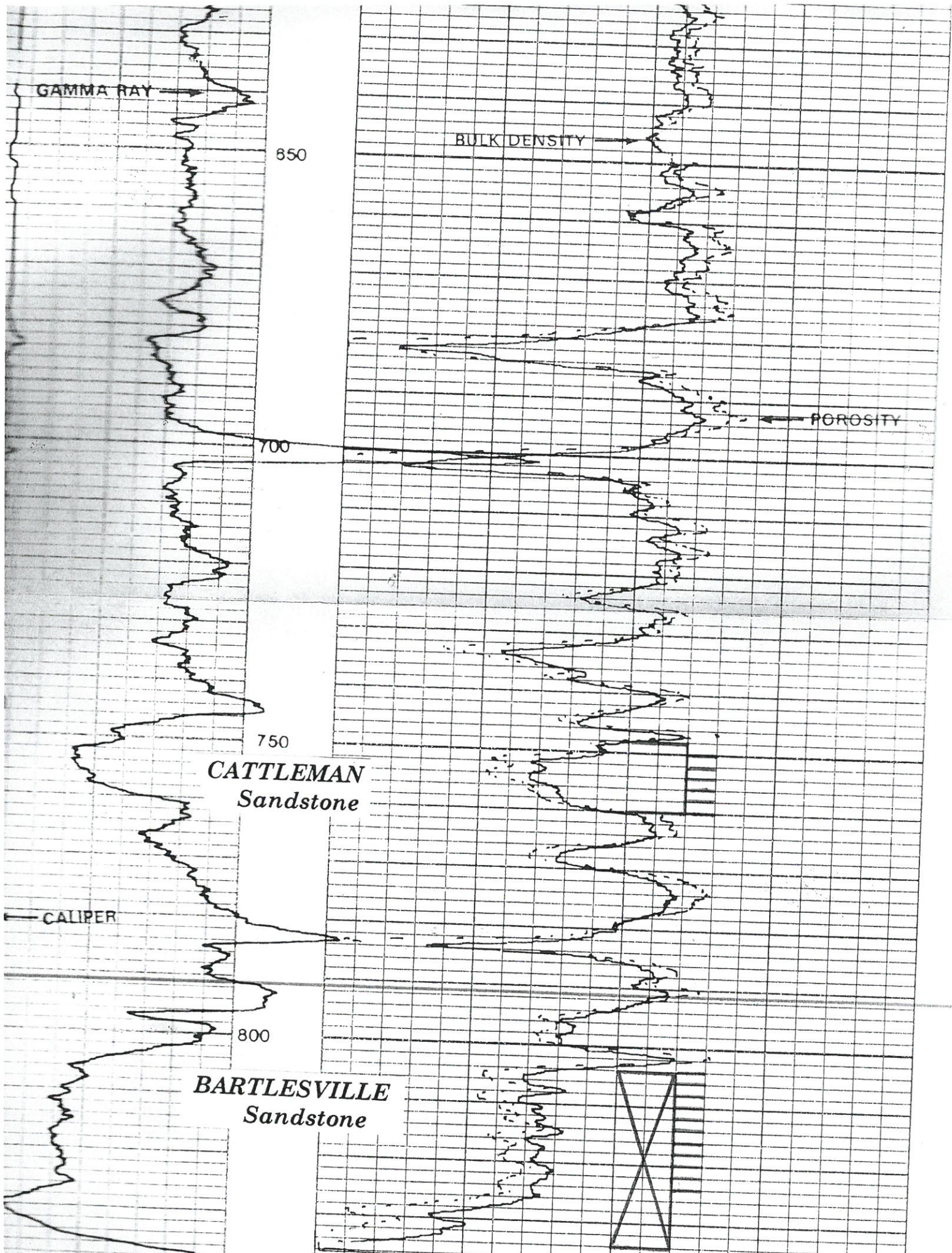
OSWEGO
Limestone

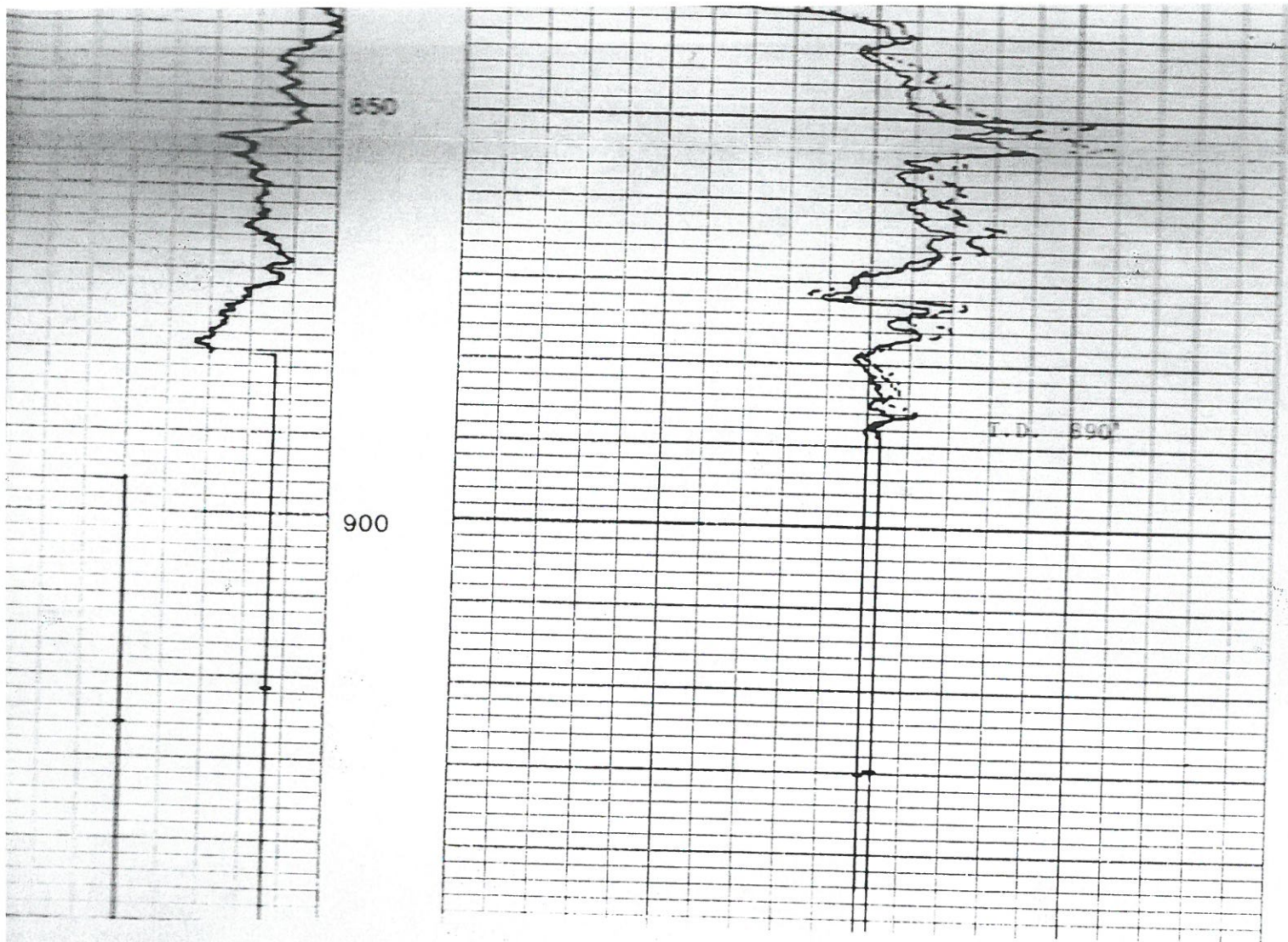
600

GAMMA RAY →

BULK DENSITY →







W. V. W. NO. 2

WIDE EXPLORATION

COUNTY, KANSAS

S, 1984

ASATED DENSITY LOG

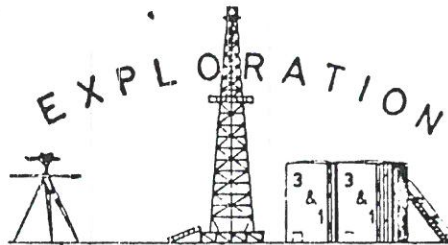
18/268/19E

WORLDWIDE

EXPLORATION

CONSULTANTS

Suite 1244 Penthouse
225 East 16th Avenue
Denver, Colorado 80203



Phone: 303-830-0333
Telex: 4322090 WWCI UI

June 29, 1984

OPERATOR: WORLDWIDE - ET. AL.

WELL: MUELLER No. 3

LOCATION: NE NE NW NE SECTION 18, T. 26 S., R. 19 E.

5,115' FSL; 1,435' FEL OF SE CORNER SECTION 18

ELEVATION: 993'

PROJECTED TOTAL DEPTH: 900'

LOGGING PROGRAM: GAMMARAY - DENSITY LOG

DRILLING CONTRACTOR: M.O.K.A.T. (CANEY, KANSAS)

FIELD OPERATIONS: TEN VENTURES (L. W. WILKINS)

GEOLOGICAL: WORLDWIDE EXPLORATION CONSULTANTS, INC.

SPUD DATE: June 25, 1984 4:00 P.M.; Set 21.5' of 7 1/4" Surface
Casing with 6 sacks of cement.

COMPLETION DATE:

June 26, 1984

10:00 A.M. Drilling out cement

11:00 A.M. Drilling at 110' in shales.

12:-0 noon Drilling at 275'

1:00 P.M. Drilling at 400'

2:00 P.M. Drilling at 550'

2:30 P.M. Drilling at 610' (Fort Scott (Oswego) Limestone

3:00 P.M. Drilling at 680' in shales

3:35 P.M. Drilling at 748; (Cattleman Sandstone, with good
odor, and show on the pit.

4:05 P.M. Drilling at 810' in Bartlesville Sandstone

4:30 P.M. Drilling at 850' in shales -- Bartlesville had
good show on pit, good odor.

- 5:00 P.M. Drilling at 900' (Total Depth)
Blew Hole Clean --Pump truck on location with
water truck mixing Dowell polymer gel
- 5:30 P.M. Pumping gel down drill pipe into well bore
Pulled drill pipe out of hole
- 6:15 P.M. Rigging down -- moved to Mueller No. 4 location.
Logging truck of Cornish not available until 10 PM
at the earliest.
- 11:00 P.M. Logging truck still not available -- have scheduled
logging for 7:30 A.M..

June 27, 1984

- 7:30 A.M. Cornish logging truck on location rigging up.
Ran Gamma Ray--Density log from 150' to 872'.
- 10:00 A.M. Logging completed
Rigging down equipment.
- 10:30 A.M. 2 7/8" Casing on location and running in hole
- 12:00 noon Pipe in hole.

Interval	SAMPLE	DESCRIPTIONS
200-210	Shale, medium to dark gray	
210-220	Limestone, brown to tan, finely crystalline	
220-230	Shale and Limestone as above.	
230-240	Limestone as above.	
240-350	Shale and Siltstone, medium to dark gray.	
350-370	Shale & Siltstone as above, trace Sandstone, white, very fine grained, no shows.	
370-390	Shale as above.	
390-410	Trace coal, black, Limestone, brown, no shows.	
410-430	Shale and Siltstones as above.	
430-440	Limestone- brown to tan, finely crystalline,	

Interval	SAMPLE DESCRIPTIONS
440-470	Siltstone and Shales as above.
470-490	Siltstone and Shales as above, with Sandstone, white, fine grained, good porosity, no shows.
490-520	Siltstone, medium gray, micaceous, carbonaceous material, trace coal, black.
520-550	Limestone, cream to tan, coarsely crystalline, fossiliferous, mineral fluorescence. trace coal, black.
550-580	Shale, dark gray, coal, black.
580-590	Shale, as above, Siltstone, light gray to greenish-gray.
590-610	Limestone, tan, buff, to dark brown, coarsely crystalline, fossiliferous.
610-620	Limestone, dark brown to dark gray, coarsely crystalline; trace Coal, black, vitreous luster.
620-650	Siltstone, light gray to greenish-gray, micaceous.
650-670	Siltstone as above, Sandstone, white to gray, fine grained.
670-690	Siltstone, gray, micaceous.
690-700	Siltstone as above, Coal, black.
700-740	Shale, gray to dark gray, pyritic streaks, trace Coal, black.
740-742	Shale, medium gray, vitreous luster.
742-744	Shale as above.
744-746	Shale as above, trace Coal, black
746-756	Shale as above.
756-762	Shale as above, with <u>Sandstone, brown, fine grained, dull fluorescence, visible oil droplets, instant cut, oil on the pit, good odor.</u>
762-764	<u>Sandstone as above.</u>
764-768	<u>Sandstone as above.</u>
768-770	<u>Sandstone as above.</u>
770-772	<u>Sandstone as above.</u>
772-774	<u>Sandstone as above</u> with Shale, as above.
774-780	Shale, medium to dark gray.

Interval	SAMPLE DESCRIPTIONS
780-800	Shale, as above, Coal, black.
800-802	Shale, medium gray
802-804	Shale as above
804-806	Shale as above, Coal, black
806-808	Shale as above.
808-810	Shale as above.
810-816	Shale as above with interbedded Sandstone, brown to tan, fine grained (laminated).
816-818	<u>Sandstone, brown to tan, fine grained, good odor, visible oil droplets, instant cut, dull fluorescence.</u>
818-820	<u>Sandstone as above.</u>
820-822	<u>Sandstone as above.</u>
822-824	<u>Sandstone as above.</u>
824-826	<u>Sandstone as above.</u>
826-828	<u>Sandstone as above.</u>
828-830	<u>Sandstone as above.</u>
830-832	<u>Sandstone as above.</u>
832-834	<u>Sandstone as above,</u> with shale interbedded, medium gray.
834-842	<u>Laminated Sandstone</u> and shale as above.
842-844	Coal, black
844-850	Shale, medium to dark gray, vitreous luster.
850-900	Shale as above.
900	Total Depth drilled; conditioned hole to run GammaRay-Density log.

WIRELINE SERVICE, INC.

DENSITY

5115' FSL, 1435' FEL

NE/NE/NW/NE/4

18 26S 19E
SEC. TWP. RGE.

COMPANY

WORLDWIDE EXPLORATION

API NO. 15-001-26,913

WELL

MUELLER NO. 3

COUNTY

ALLEN

STATE

KANSAS

LOCATION

5115' FSL, 1435' FEL

NE/NE/NW/NE/4

OTHER SERVICES

GROUND LEVEL

Elev.: 993'

ELEV: KB

GL 993'

CBF

Measured From G.L.

Above Perm. Datum

Drilling Measured From G.L.

Date 6-27-84

Run No. 1 NW

First Reading 870.0'

Last Reading 150.0'

Feet Measured 720.0'

Depth Reached 872.0'

Bottom Driller 900.0'

Csg PWS

Csg Driller

Mud Nature

Dens. Visc.

Mud pH

" Water Loss

" Res.

" Rmf

" " @ BHT

" Rmc

" ppm-Cl.

Bit Size 6 1/2"

Equipment Type

COMPROBE

Op. Rig Time

Truck No.

202

Recorded By

HESTER, S.

Witness

PEDERSON, S.L.

REMARKS

1st Run Service Order #

Drilling Stopped

Circulation Stopped

Tool on Bottom

B.H.T.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our offices, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

GAMMA RAY
API UNITS

DEPTHS

BULK DENSITY
Pb-gm/cc

Sens.

T.C.

Zero

div. to left

2.0

2.5

POROSITY %

30

20

10

0

Caliper
hole diameter in inches

density correction
P - gm/cc

P_(MA) = 2.65

6 7 8 9 10 11 12 13 14

0.25

0

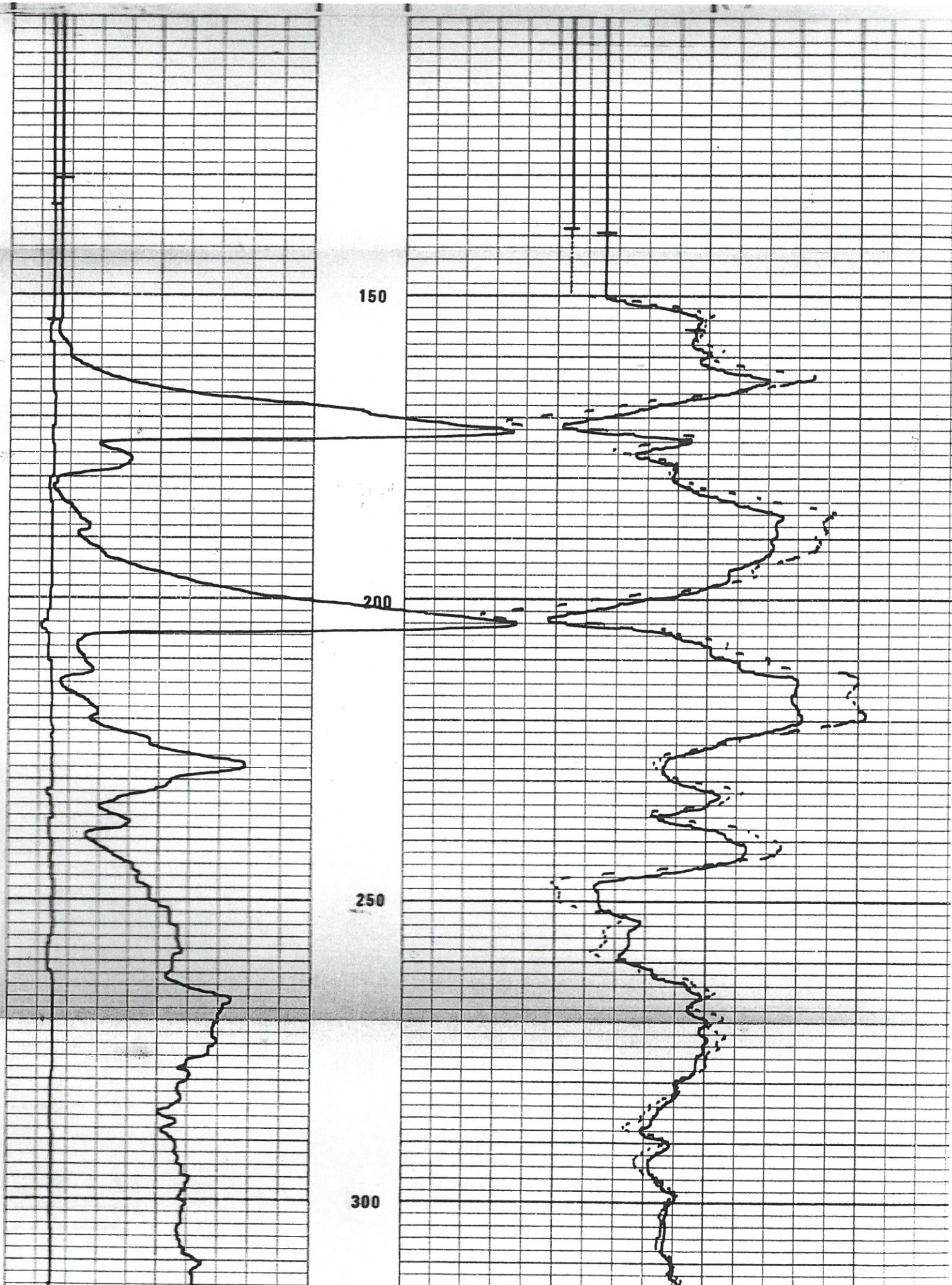
(-)

150

200

250

300



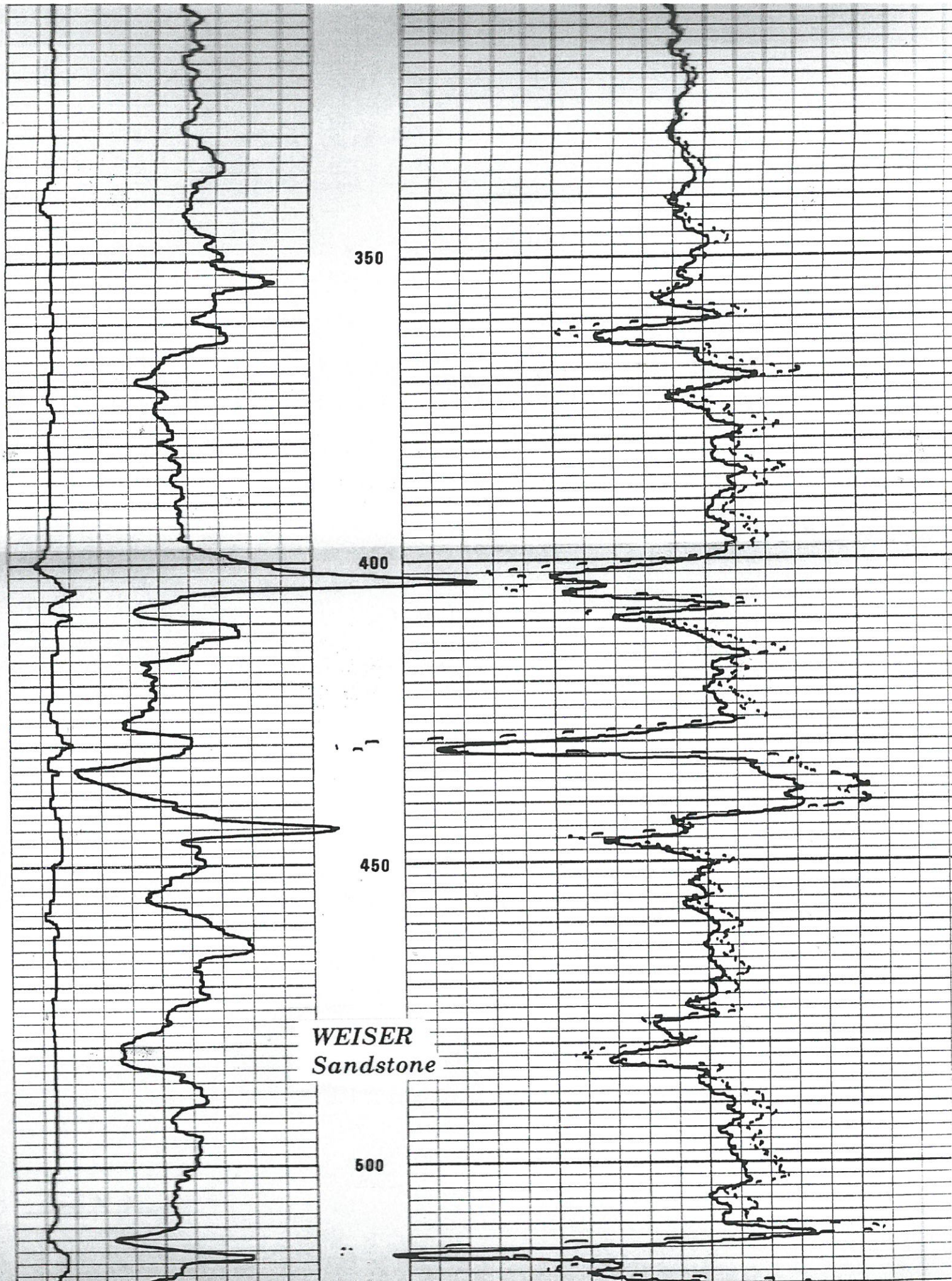
350

400

450

WEISER
Sandstone

500



550

MUELLER #

OSWEGO
Limestone
600

650

700

