OFFICE OF CONSERVATION

IMD REPORTING REQUIREMENTS >> Class V Stratigraphic Test

Drilling and construction of the well must be completed within one (1) year from the date of the permit approval letter, otherwise, the permit will expire. **Before the expiration of the permit, the operator must notify the Injection and Mining Division (IMD) if a time extension will be requested or if well will not be drilled.**

The approved application describes how the well is to be constructed. Changes in the approved construction, such as well surface location, well depth, or casing setting depths, will require prior written approval from IMD. Failure to obtain prior written approval will be cause for revoking the permit.

At least forty-eight (48) hours prior to commencement of work, the appropriate Conservation Enforcement Specialist (CES) identified below must be contacted. If you are unable to reach the CES, please call the Injection and Mining Division at (225) 342-5515 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday.

Application No.	**45457**	Serial No.	**976306**
CES Name	**Eric Gauthreaux**	CES Phone No.	**(209) 406-2727**

Within twenty (20) days after completion of the well, the completion documents listed below must be filed with IMD for review and approval in compliance with the regulations. Please place the well's Serial Number on the log headings.

- A Class V Well History and Work Résumé Report (Form UIC-42 STRAT TEST) with an original signature from an authorized representative of the operating company and two photocopies of the form (front and back). The Form UIC-42 can be saved, filled-out, and printed by going to www.dnr.louisiana.gov/consforms >> Injection & Mining Division >> Form UIC-42.
- Two (2) copies of the wellbore schematic depicting the completed well.
- Two (2) copies of the electric log used to identify the USDW.
- Two (2) copies of the cement bond log for each respective casing string.
- An original AFFIDAVIT OF TEST OF CASING IN WELL (Form CSG-T) signed by a company representative and witnessed by a third party for each casing. Provide a copy of the properly labeled pressure chart if the Form CSG-T does not have a witnessed signature. Include the well name, well serial number, casing size, test start time and stop time, date of test, and signature of company representative. The Form CSG-T can be downloaded from www.dnr.louisiana.gov/consforms >> Injection & Mining Division >> Form CSG-T.

Send the above required documentation together in **ONE PACKAGE** to:

Office of Conservation- 9th Floor
Injection & Mining Division
617 North 3rd Street
Baton Rouge, LA 70802

045457

CLASS V STRAT TEST WELL PERMIT APPLICATION

OFFICE OF CONSERVATION
INJECTION & MINING DIVISION
617 N. Third St., 9th FLOOR
BATON ROUGE, LA 70802

Injection-Mining@la.gov
(225) 342-5515

UIC-25 STRAT TEST **PLEASE READ APPLICATION INSTRUCTIONS** **TYPE ONLY**

1. APPLICATION TYPE: (Check One)

☐ DRILL AND COMPLETE NEW CLASS V WELL ☐ CONVERT AN EXISTING WELL TO CLASS V

☑ OTHER (SPECIFY):

2. IDENTIFY WELL USE

Acquire geotechnical information for reservoir characterization; temporarily abandon pending evaluation for ClassVI monitor well

3. IDENTIFY FUTURE WELL USE (i.e. Conversion to Class VI, monitor well, P&A, etc.)

conversion to monitor well

4. OWNER/OPERATOR NAME	5. OC OPERATOR CODE
Onstream CO2, LLC	60072

6. OWNER/OPERATOR MAILING ADDRESS	7. CITY, STATE, ZIP CODE
333 Clay St., Suite 2900	Houston, TX 77002

8. TELEPHONE NO	9. E-MAIL ADDRESS
281-878-0074	NWaligura@castexenergy.com

10. WELL NAME	11. WELL NO	12. WELL SERIAL NO (Well Conversions Only)
JMB Companies 8	001	

13. FIELD NAME	14. FIELD CODE
Wildcat-SO-LA LAFAYETTE DIST	9727

15. PARISH NAME	16. SECTION	17. TOWNSHIP	18. RANGE
St. Mary	008	14S	07E

19. LOCATION COORDINATES (GCS, NAD 27)				20. STATE PLANE COORDINATES (LAMBERT, NAD 27)	
LATITUDE:	29 °	46 MIN	51.45 SEC	☐ NORTH ZONE	☑ SOUTH ZONE
LONGITUDE:	91 °	43 MIN	50.39 SEC	X: 1,873,954.5	Y: 405,436.86

21. LEGAL LOCATION DESCRIPTION (FROM LOCATION PLAT):

N84° 22' 59" E 6,659.52' from NGS Mon. "L044", falling in Section 8, T14S-R7E, St. Mary Parish, Louisiana.

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MAR 03 2025

045457

22. LIST PERMITS, LICENSES, OR APPROVALS THE APPLICANT HAS RECEIVED OR APPLIED FOR WHICH SPECIFICALLY AFFECT THE APPLICANT'S LEGAL OR TECHNICAL ABILITY TO CARRY OUT THE PROPOSED ACTIVITY. INCLUDE IDENTIFICATION NUMBER OF APPLICATIONS OR, IF ISSUED, THE IDENTIFICATION NUMBER OF THE PERMIT, LICENSE, OR OTHER APPROVALS.

Regulatory Program or Agency	Permits, Licenses, Construction, Project Approval Identification
LADNR Office of Coastal Management	P20240460
St. Mary Parish Government	Letter of no objection
NOD Corps of Engineers	MVN-2024-00666-SG

23. WELL CASING / CEMENT DATA

CASING SIZE (OD-INCHES)	HOLE DIAMETER (INCHES)	CASING WEIGHT (LB/FT)	CASING GRADE	CASING SETTING DEPTHS TOP	CASING SETTING DEPTHS BOTTOM	TOTAL SACKS	SACKS CEMENT (Lead/Tail)	TYPE (Lead/Tail)	YIELD (CU FT/SACK) (Lead/Tail)	CEMENT TOP
16	16	82.85	X-52	0	250'	0	0	Drive to refusal	N/A	N/A
10-3/4	14-1/2	45.5	J-55 BTC	0	3400'	1780	1340/440	Poz-A/A	2.24/1.18	Surface

ALL WELL DEPTHS SHOULD BE GIVEN IN MD

24. BASE OF USDW (FT):	25. REFERENCE E-LOG FOR USDW (SERIAL NUMBER):
922	32194

26. WELL TOTAL DEPTH (FT):	27. PLUGBACK DEPTH (FT):	28. TUBING SIZE & DEPTH:	29. PACKER SIZE & DEPTH:
17,500	17,500	N/A	N/A

INJECTIVITY TEST INFORMATION (IF APPLICABLE)

30. INJECTION ZONE DEPTHS		31. COMPLETION/PERFORATION DEPTHS	
Top: N/A	Bottom: N/A	Top: N/A	Bottom: N/A

32. REFERENCE E-LOG FOR INJECTION ZONE INFO (SERIAL NUMBER):

33. WELL COMPLETION ☑ OPEN HOLE ☐ PERFORATIONS ☐ SCREEN

34. TEST MATERIAL (e.g. nitrogen, brine, etc):	35. MAXIMUM TEST PRESSURE (psi):	36. TOTAL INJECTION VOLUME (bbls):
N/A ***CO_2 is prohibited as a Class V test material***	N/A	N/A

37. Is the Well Located on Indian Lands or Other Lands Owned by or under the Jurisdiction or Protection of the Federal Government?	☐ YES ☑ NO
38. Is the Well Located on State Water Bottoms or Other Lands Owned by or under the Jurisdiction or Protection of the State of Louisiana?	☐ YES ☑ NO
39. If the proposed well is associated with a potential Class VI geologic sequestration project, does the applicant own the mineral rights at the proposed well locations?	☐ YES ☑ NO
40. If no, has written notification been provided to the mineral owner(s)?	☑ YES ☐ NO

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MAR 03 2025

INJECTION & MINING DIVISION

045457 045457

41. AGENT OR CONTACT AUTHORIZED TO ACT ON BEHALF OF THE APPLICANT DURING THE PROCESSING OF THIS APPLICATION

NAME: Jacqueline Gerst

COMPANY: CarbonVert

MAILING ADDRESS: 333 Clay St., Suite 2900, Houston, TX 77002

TELEPHONE NUMBER: 614-625-1690

E-MAIL ADDRESS: jackie@carbonvert.com

42. CERTIFICATION BY WELL OWNER/OPERATOR

I certify that as the owner/operator of the injection well, the person identified in Item No. 37 above is authorized to act on my behalf during the processing of this application, to submit additional information as requested, and to give oral statements in support of this application. I will grant an authorized agent of the Office of Conservation entry onto the property to inspect the injection well and related appurtenances as per LSA-R.S. 30:4. I agree to operate the well in accordance with Office of Conservation guidelines. I further certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment or both (LSA-R.S. 30:17).

Print Name of Well Owner/Operator	Print Title of Company Official (as applicable)
Bryan Saunders/Onstream CO2, LLC	Attorney-in-Fact

Signature of Well Owner/Operator	Date
Bryan Saunders	2/24/2025

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MAR 03 2025

INJECTION & MINING DIVISION

045457

Part 1

UIC-25 STRAT TEST APPLICATION WITH ORIGINAL SIGNATURE AND ADDITIONAL INFORMATION

OnStream CO, LLC
UIC-25 Class V Application Package
Initial submittal August 16, 2024

III. Constitutional Considerations: "IT Decision" Questions:

A. Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

This project avoids the potential and real adverse environmental effects to the maximum extent possible. The drilling plan for the Class V stratigraphic test well (or characterization well) for the St Mary Parish Onstream CO2 storage project will protect Underground Sources of Drinking Water (USDWs). Several wellbore penetrations with well logs are near the test well location present consistent results for the USDW depth. The depth of the USDW is identified in the application and surface casing will be cemented from the base of casing up to surface to cover and protect freshwater zones. Regulatory requirements for plugging will ensure freshwater zones continue to be protected when operations on the test well are completed.

The characterization well site was selected to minimize surface impacts while simultaneously acquiring the required geologic information for the UIC Class VI permit application. The characterization well location was chosen to acquire geologic data that is representative of the carbon sequestration site. Extensive, existing data indicates this site is suitable for that purpose. The location of the characterization well is situated within existing agricultural operations. Because of this, no new roads will be required to access the location. Agricultural operations consist of sugar cane production. Following plugging, restorative measures will be initiated to bring the site back to its prior state.

Drilling operations for the characterization well will be zero-discharge. No cuttings, drill fluids or solids of any kind will be discharged into in-ground pits or on the surface. All cuttings and drilling fluids will be tested and disposed of as required to licensed disposal facilities.

There is also existing, commercially available seismic data covering the characterization well location, therefore a new seismic survey is not needed.

Onstream CO2 LLC also has a well control emergency response plan in place that establishes a framework to manage all steps to regain control of the well in the event of an unexpected incident. Objectives of this plan include prevention of personal injury, minimization of environmental impacts, and notification and communication with all necessary parties. In the event of an unexpected incident, an emergency response plan will be implemented.

By selecting the proposed drill site, the potential and real adverse environmental effects of the proposed facility have been avoided to the maximum extent possible.

B. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

A cost benefit analysis of the environmental impacts costs balanced against the social and economic benefits of the proposed project demonstrates that the latter outweighs the former.

The CO_2 sequestered at the Onstream CO2, LLC site will be captured from existing and proposed greenfield facilities in southern Louisiana along the Mississippi River industrial corridor where the air

quality may be positively impacted. Many of these facilities desire to manage their CO2 emissions via geologic sequestration.

Costs and benefits were also considered when siting and designing the characterization well. The well is designed to gather the geologic and engineering data necessary to evaluate carbon sequestration project, confirm its feasibility and finalize injection targets. The evaluation of the characterization well location considered several factors which include: whether the geology is representative of the storage site, the relative impact of a characterization well site with respect to current usage and the surrounding environment, and the ability to gather the necessary technical data economically.

There are several existing wellbores around the project site which enabled site characterization work prior to drilling the characterization well. Based on existing geologic data, the data from the characterization well is anticipated to be representative of the project storage location. Most of the data required for a carbon sequestration project are not available in the existing wells, due either to limitation in technology at the time of drilling or the nature of oil and gas exploration. The proposed formation evaluation program at the characterization well site will be extensive and the location allows operational flexibility.

Additionally, by drilling the characterization well in this location, Onstream could ultimately complete the wellbore as an in-zone observation well, thus reducing future project impact.

C. Are there alternative projects, which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?

There are no alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits.

CCS can capture significant quantities of CO_2 emissions produced from large industrial sources, allowing for continued operation while significantly reducing their carbon footprints. CCS is an ideal solution for protection to the environment via CO_2 reduction in that many other carbon utilization technologies remain in early research phases, requiring significant advancements. CCS is a proven technology with several projects in operation around the world. For example, the Sleipner Project in Norway has stored over 20 million metric tons of CO_2 in a deep saline aquifer offshore Norway since 1996.

The project is being carefully designed to ensure the safe and secure, long-term storage of CO_2 in alignment with the Louisiana Administrative Code (LAC 43: XVII Chapter 36, Statewide Order No. 29-N-6) and the Code of Federal Regulations (40 CFR Part 146 Subpart H). The other sections of this permit detail the site characterization, engineering design, and monitoring techniques that will be in place to ensure environmental and non-environmental benefits of the project.

D. Are there alternative sites that would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?

Alternative sites, alternative projects or other mitigating measures would not offer more protection for the environment than the project as proposed without unduly curtailing nonenvironmental benefits. Multiple potential CO2 sequestration project sites were evaluated to ensure that adverse environmental effects are minimized. We investigated other potential sites along an existing pipeline route in the area.

and those sites were significantly downgraded relative to the proposed site. Generally, those sites had existing well penetrations in the potential storage areas and/or geologic features that are not favorable for safe, effective, long-term CO2 sequestration. The proposed location has limited existing well penetrations and favorable geologic characteristics for CO2 sequestration (extensive sealing unit, relatively low dip, large storage capacity, normal pressure). Data collected from the test well is crucial to the design of the St. Mary Parish project. A stratigraphic test well, at the proposed location, helps mitigate risk associated with developing a carbon sequestration project with the least environmental impact when compared to other alternatives.

E. Are there mitigating measures that would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?

There are no mitigating measures that would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits.

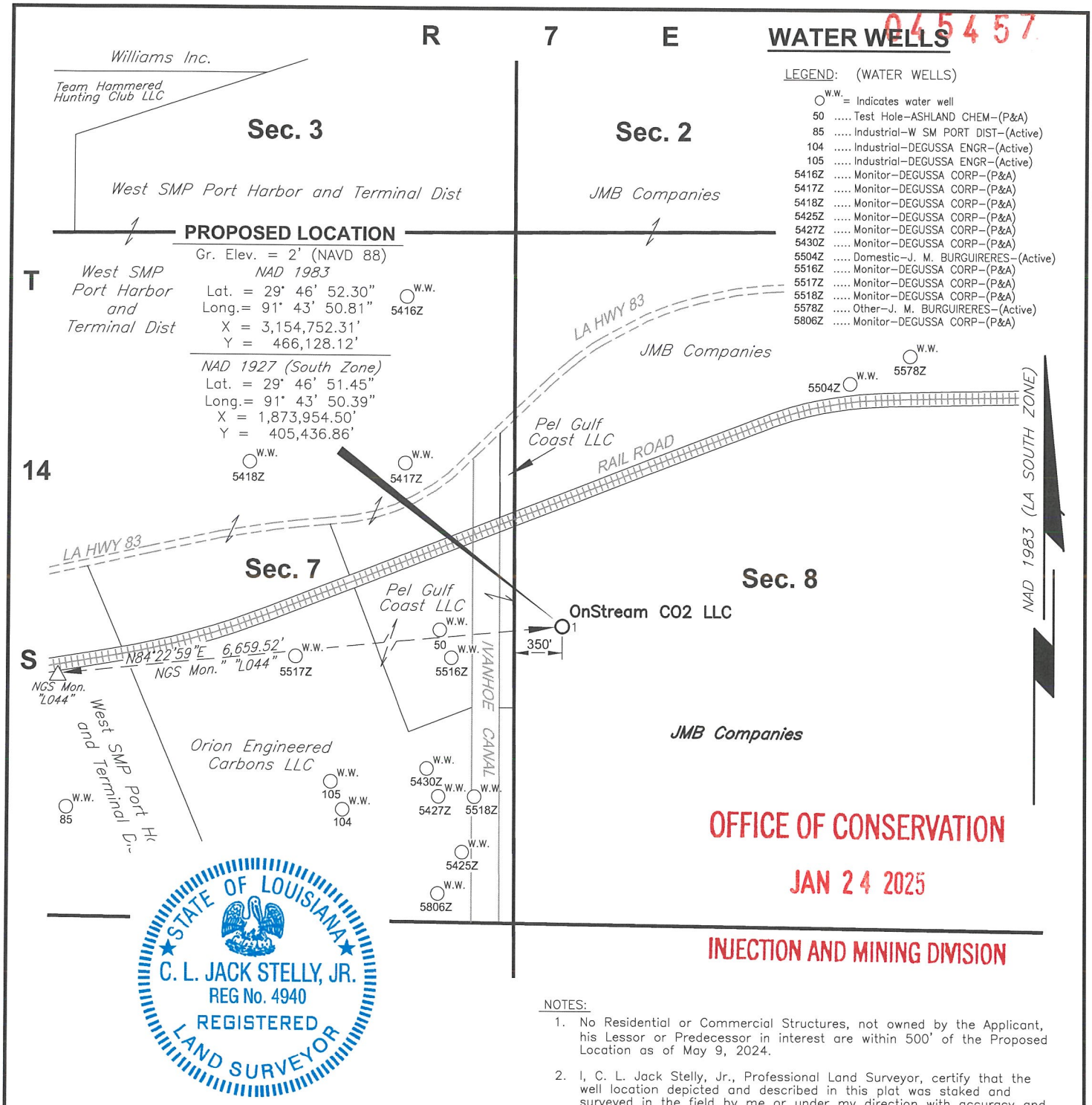
The CCS facility proposed is designed under the UIC program to ensure safe and effective long-term geologic storage of CO_2, instead of its release into the atmosphere. Unlike CCS, many carbon utilization technologies remain in early research phases, requiring significant advancements, making CCS the optimal choice for CO2 reduction. Waste management efforts will be carefully governed to ensure minimal environmental impact during various stages of the project like site preparation, drilling and injection operations, and post-closure activities.

Drilling operations for the characterization well will adhere to a strict zero-discharge policy, ensuring that no drill cuttings, fluids, or solids are released into in-ground pits or onto the surface environment. This policy is designed to eliminate the risk of soil contamination, groundwater pollution, or adverse ecological effects. Once collected, these materials will undergo comprehensive testing to determine their chemical composition and potential environmental risks. Hazardous materials, if identified, will be handled according to regulatory requirements and transported to certified and licensed disposal facilities.

045457

Part 3

ORIGINAL CERTIFIED LOCATION PLAT SHOWING THE LOCATION OF THE PROPOSED STRAT TEST WELL



NOTES:

1. No Residential or Commercial Structures, not owned by the Applicant, his Lessor or Predecessor in interest are within 500' of the Proposed Location as of May 9, 2024.
2. I, C. L. Jack Stelly, Jr., Professional Land Surveyor, certify that the well location depicted and described in this plat was staked and surveyed in the field by me or under my direction with accuracy and precision to the nearest foot. I have properly examined this plat and have determined that it complies with existing local Louisiana codes, and has been properly site adapted to use in this area.

I, C. L. Jack Stelly, Jr., hereby certify that the Loc'n of OnStream CO2 LLC's *JMB Companies 8 No. 1* is as follows: N84°22'59"E 6,659.52' from NGS Mon. "L044", falling in Section 8, T14S-R7E, St. Mary Parish, Louisiana.

C. L. Jack Stelly

C. L. JACK STELLY, JR., P.L.S.
REGISTERED LAND SURVEYOR NO. 4940
STATE OF LOUISIANA
C. L. JACK STELLY & ASSOCIATES, INC.
143 WALL STREET, LAFAYETTE, LA 70506
PH. (337) 237-0746
FILE NO. 16313-18200-L285-R2.DWG

LOUISIANA OFFICE OF CONSERVATION

OnStream CO2 LLC

JMB Companies 8 No.1

ST. MARY PARISH, LOUISIANA

0' 1,000' 2,000'

SCALE : 1" = 1,000'

NOVEMBER 6, 2024

Part 4

INJECTION IS NOT BEING PROPOSED, SO THERE IS NOT A PART 4 ENCLOSED

Part 5

NEAREST OFFSET WELL LOGS SHOWING THE USDW AND STORAGE INTERVALS

245457

Shallow Logs in the proposed JMB Companies 8 #1 area

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Humble-Cote Blanche #1
17-101-00718, SN 32194
2-T15S-7E
Closest well to proposed JMB Companies 8#1 showing USDW depth

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1SN4234060000032194

SCHLUMBERGER
[illegible] CORPORATION

Location of Well
From [illegible] Sta. Cote Blanche
[illegible]

Elevation: D.F. ......
K.B. ......
or G.L. ......

COMPANY: HUMBLE OIL & REFG. COMPANY
WELL: COTE BLANCHE #1
RUN NO.: COMPOSITE 1 - 9
FIELD: COTE BLANCHE ISLAND
LOCATION: TWP. 15s - 7e
COUNTY: ST. MARY
STATE: LOUISIANA #32194
FILING No. L - 109

COMPANY HUMBLE OIL & REFG. CO.
WELL COTE BLANCHE #1
LOCATION TWP. 15s - 7e
FIELD OR COTE BLANCHE ISLAND
COUNTY ST. MARY

RUN	ONE	TWO	THREE	FOUR	FIVE
Date	9/6/46	9/25/46	10/4/46	10/25/46	11/3/46
First Reading	2637	7525	8746	10040	10988
Last Reading	101	2637	7525	8746	10049
Footage Measured	2536	4888	1221		937
Csg Shoe Schlum.	101	2604	2604	8702	8702
Csg Shoe Driller	101	2602	2602	8707	[illegible]
Max. Depth Reached	2637	7525	8746	[illegible]	10988
Bottom Driller	2685	7535	8746	10044	10982
Depth Datum	ONE FOOT ABOVE ROTARY.				
Mud Nature	NATIVE	CAU.QUEB.	CAU.QUEB.	CHEMICAL	CAU.QUE.
" Density	10.3	10.0	10.2	10.4	10.5
" Viscosity	34	40	46	36" API	43
" Resistivity	2.3 @ 84 °F	1.0 @ 82 °F	1.0 @ 72 °F	1.3 @ 88 °F	0.8 @ 85 °F
Maximum Temp. °F	104		150	216	200
Bit Size	12¼"	12¼"	12¼"	(9 7/8" CSG. (8 5/8" TD	8 5/8"
Spacings					
AM	16"	16"	16"	16"	16"
AM'	63"	63"	63"	63"	63"
OA	24'	24'	24'	24'	24'
		BESS	BESS		
Observers	[illegible]	[illegible]	[illegible]	[illegible]	BROUSSARD

RUN	[illegible]	[illegible]	[illegible]	[illegible]	
Date	[illegible]	[illegible]	[illegible]	[illegible]	
First Reading	[illegible]	[illegible]	[illegible]	[illegible]	
Last Reading	10986	11831	12310	12828	
Footage Measured	845	479	518	443	
Csg Shoe Schlum.	8702	8702	8746	8702	
Csg Shoe Driller	8702	8707	8746	[illegible]	
Max. Depth Reached	11831	12310	12828	[illegible]	
Bottom Driller	11829	12311	12823	13280	
Depth Datum	ONE FOOT ABOVE ROTARY.				
Mud Nature	CAUS.QUEB.	CAU.QUEB	IMP.QUEB.	IMPERMEX	
" Density	10.6	10.7	10.9	10.8	
" Viscosity	45	45	46	43	
" Resistivity	0.8 @ 78 °F	0.5 @ 85 °F	2.2 @ 88 °F	0.6 @ 84 °F	"BEST COPY AVAILABLE"
Maximum Temp. °F	248	210	231	200	
Bit Size	8 5/8	8 5/8"	8 5/8"	8 5/8"	
Spacings	16"	16"	16"	16"	
AM	63"	63"	63"	63"	
AM'	24'	24'	24'	24'	
OA					
		BESS			
Observers	STANTON	STANTON	BOWEN	BROUSSARD	

Aug 27 1947 Geological Survey
[illegible] Conservation Division FEB 3 - 1947 [illegible], La.

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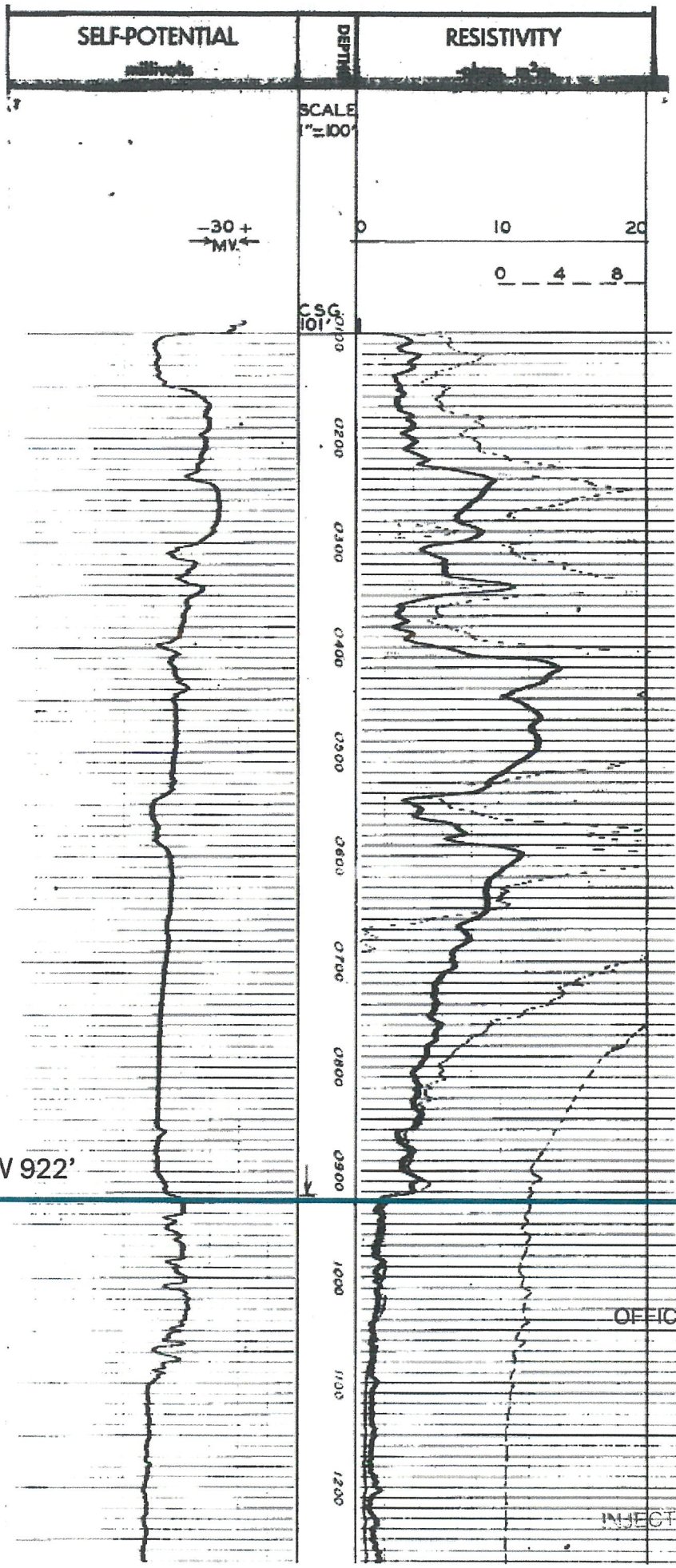
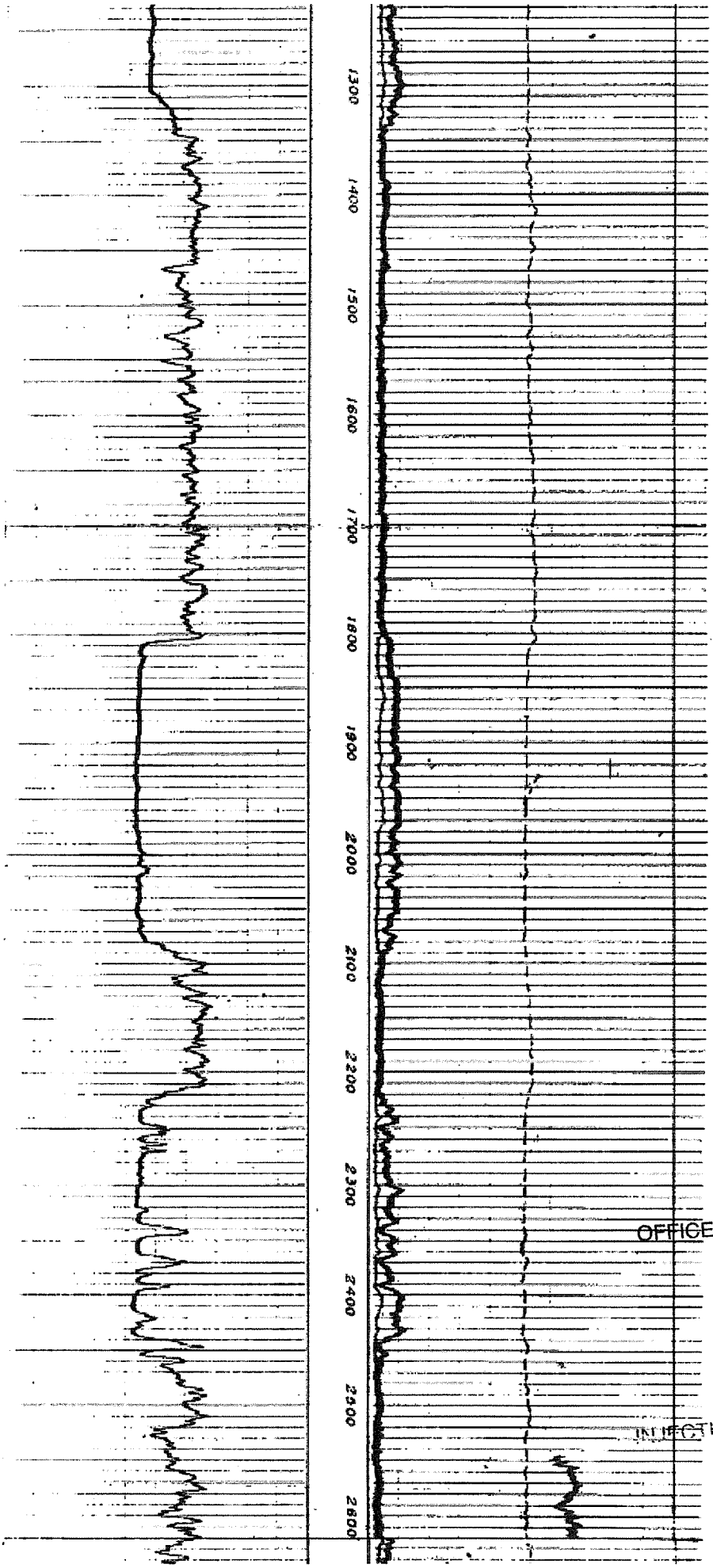


Base of USDW 922'



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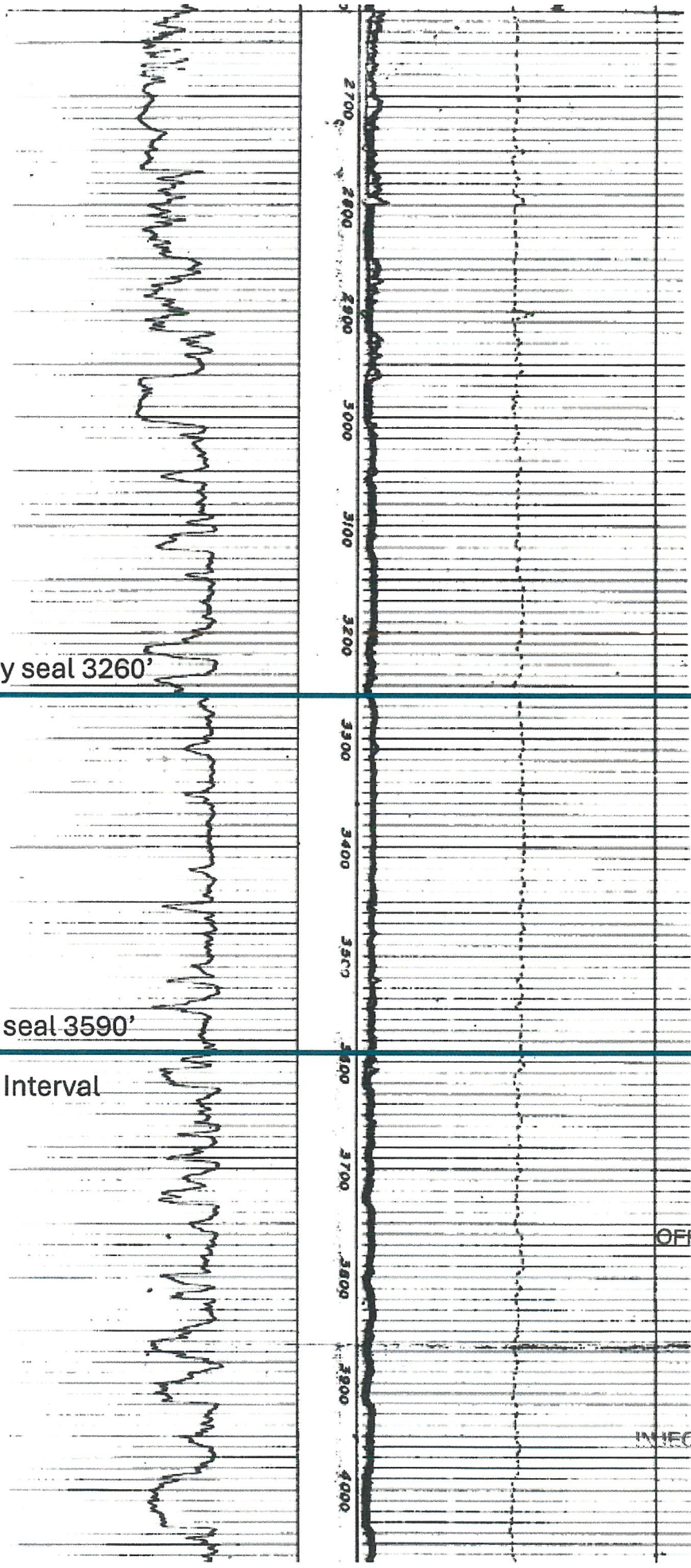
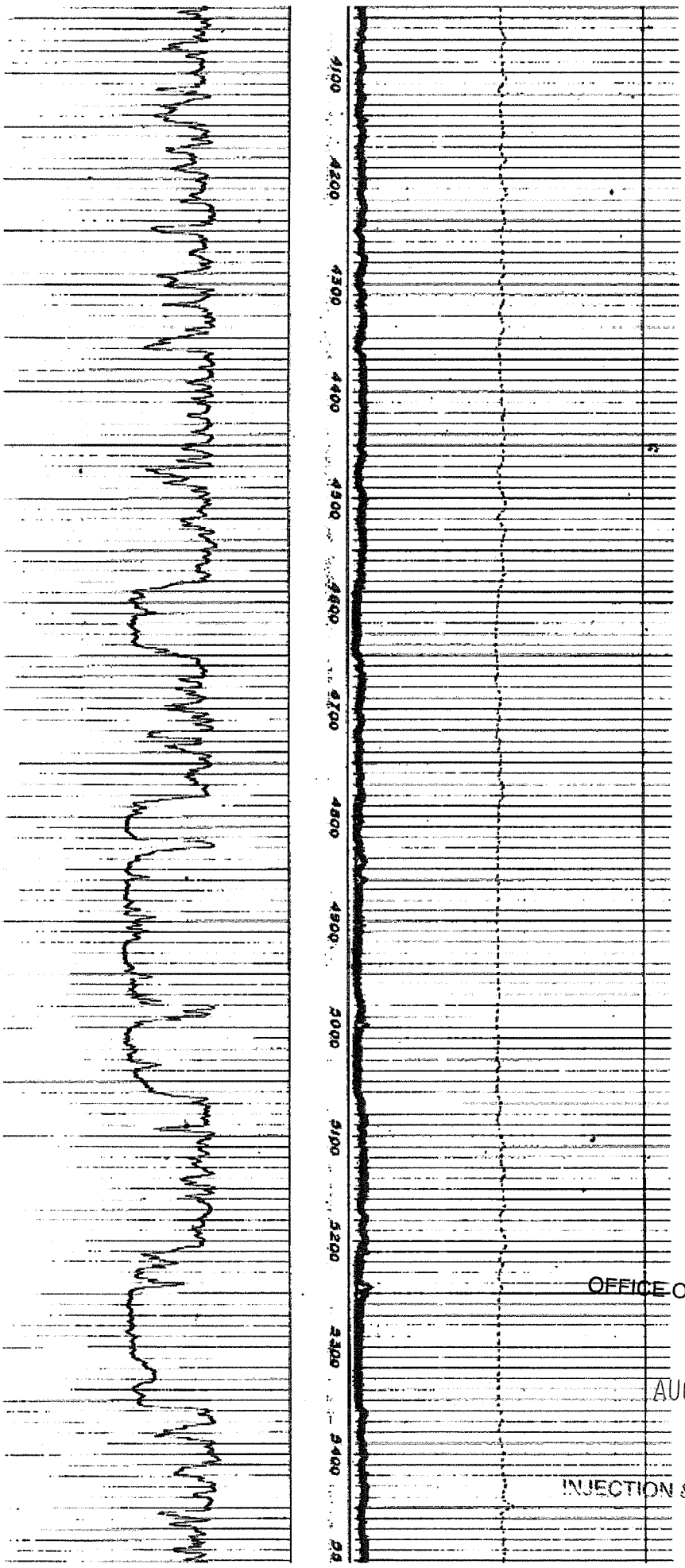


Top of Primary seal 3260'

Base of shale seal 3590'

Begin storage Interval

045457



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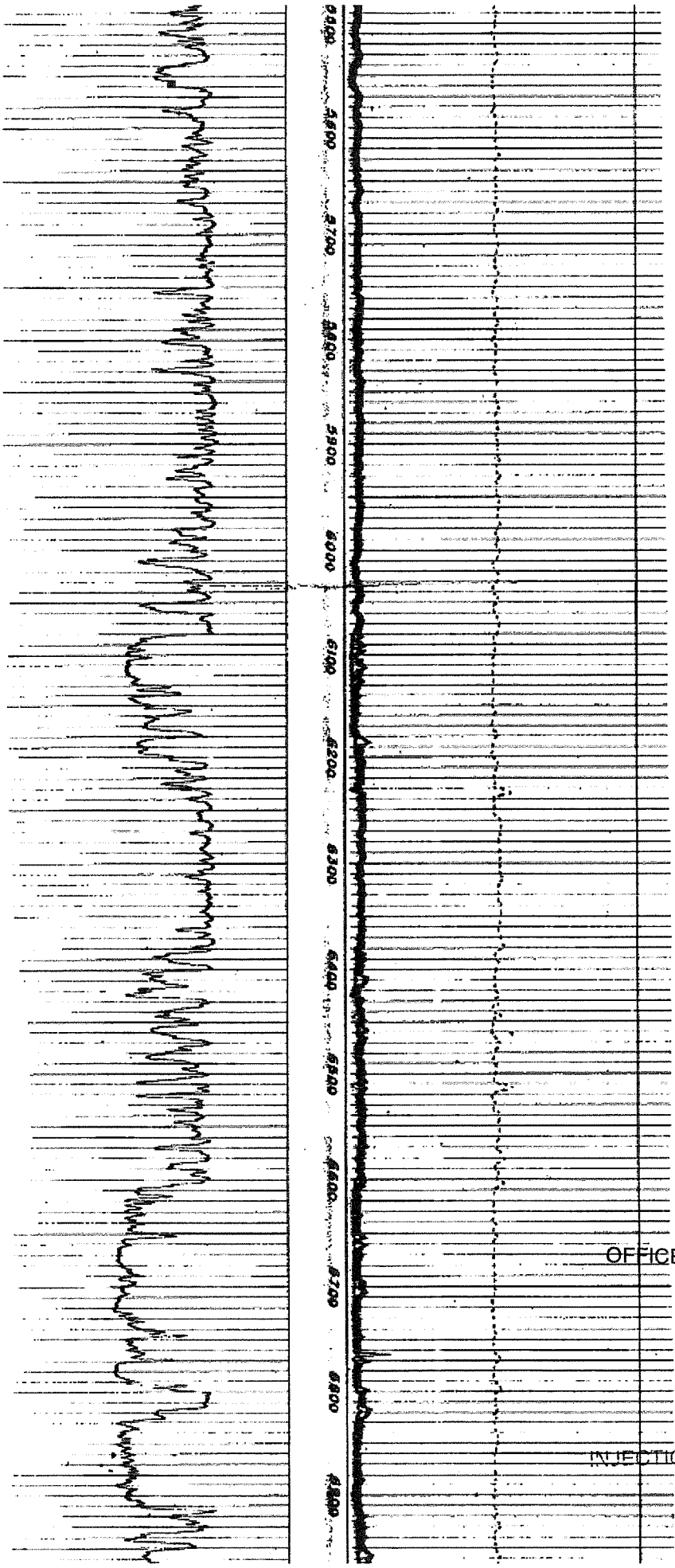

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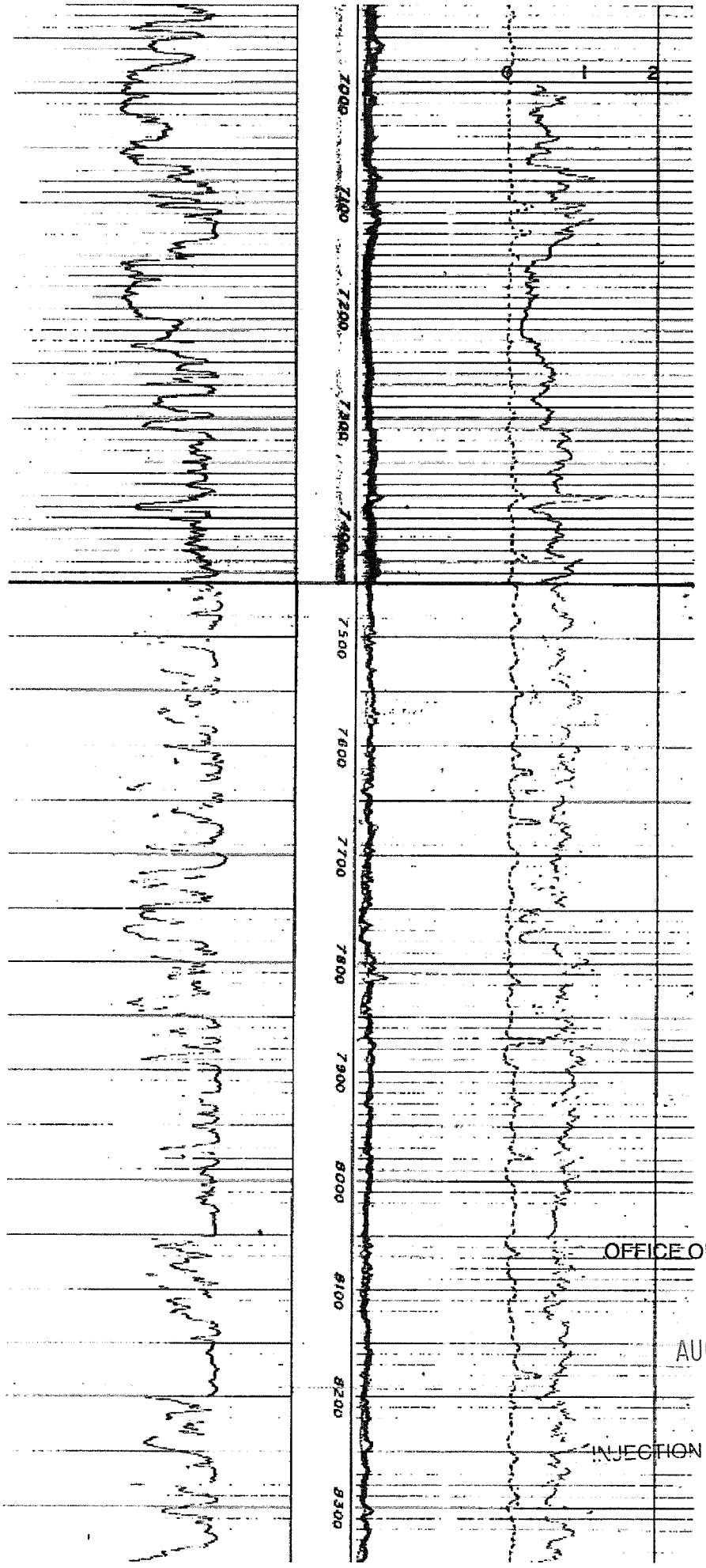

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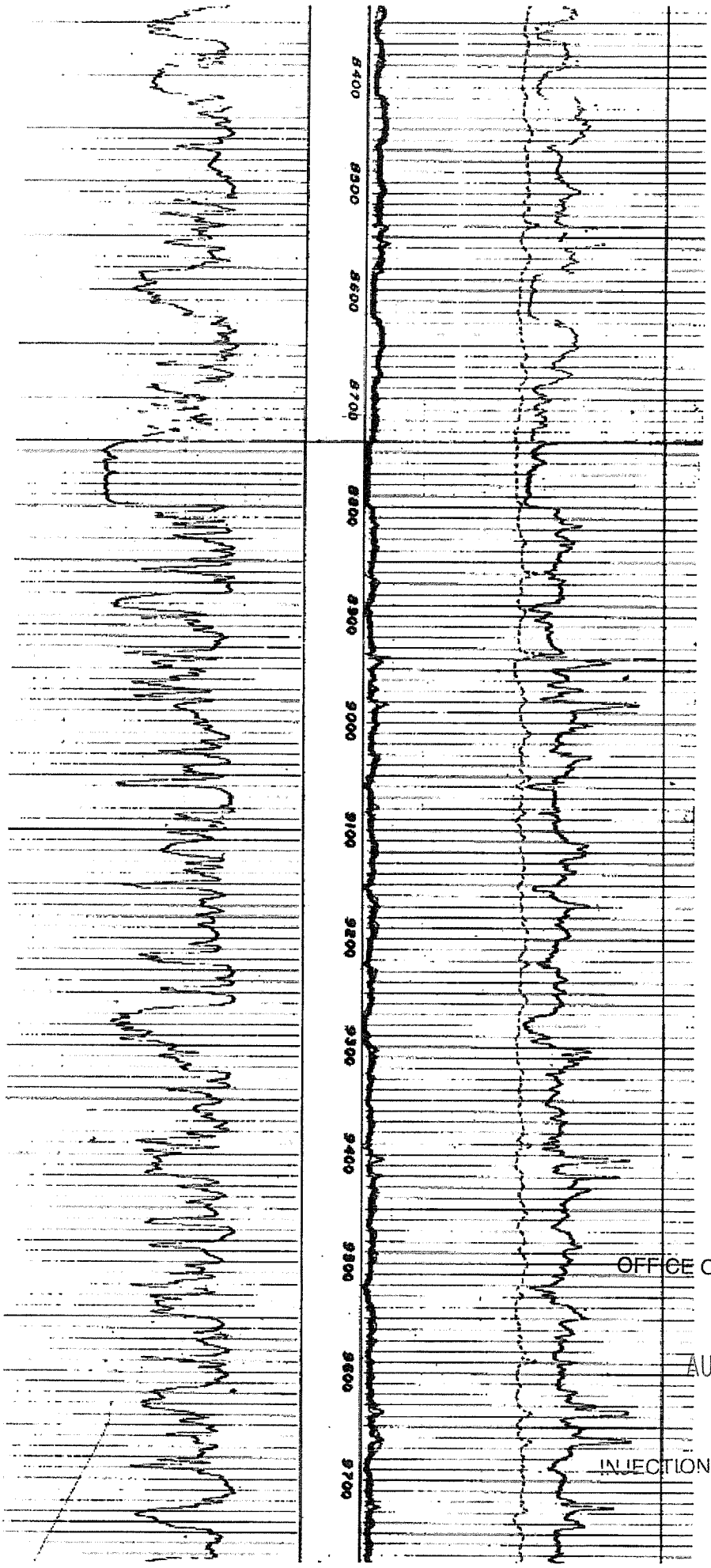

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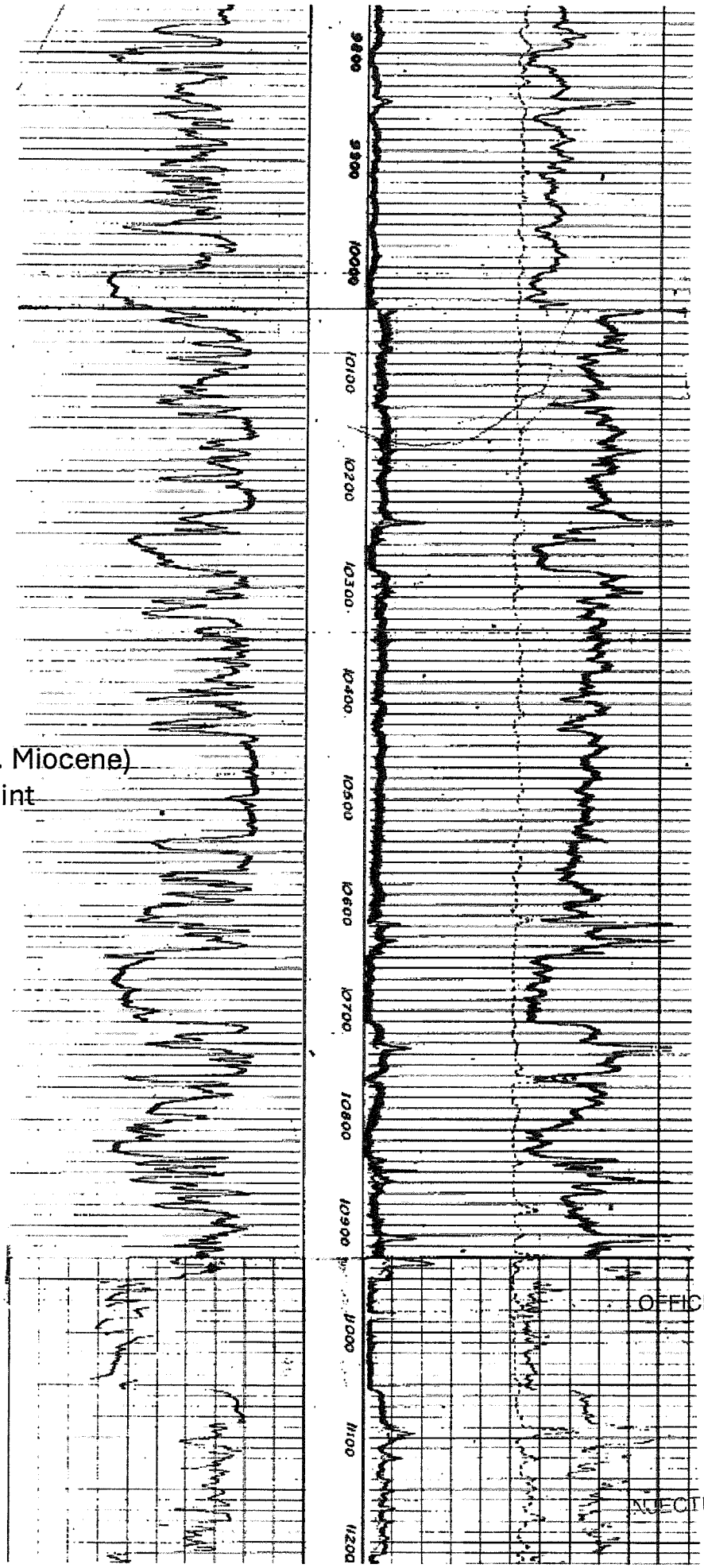
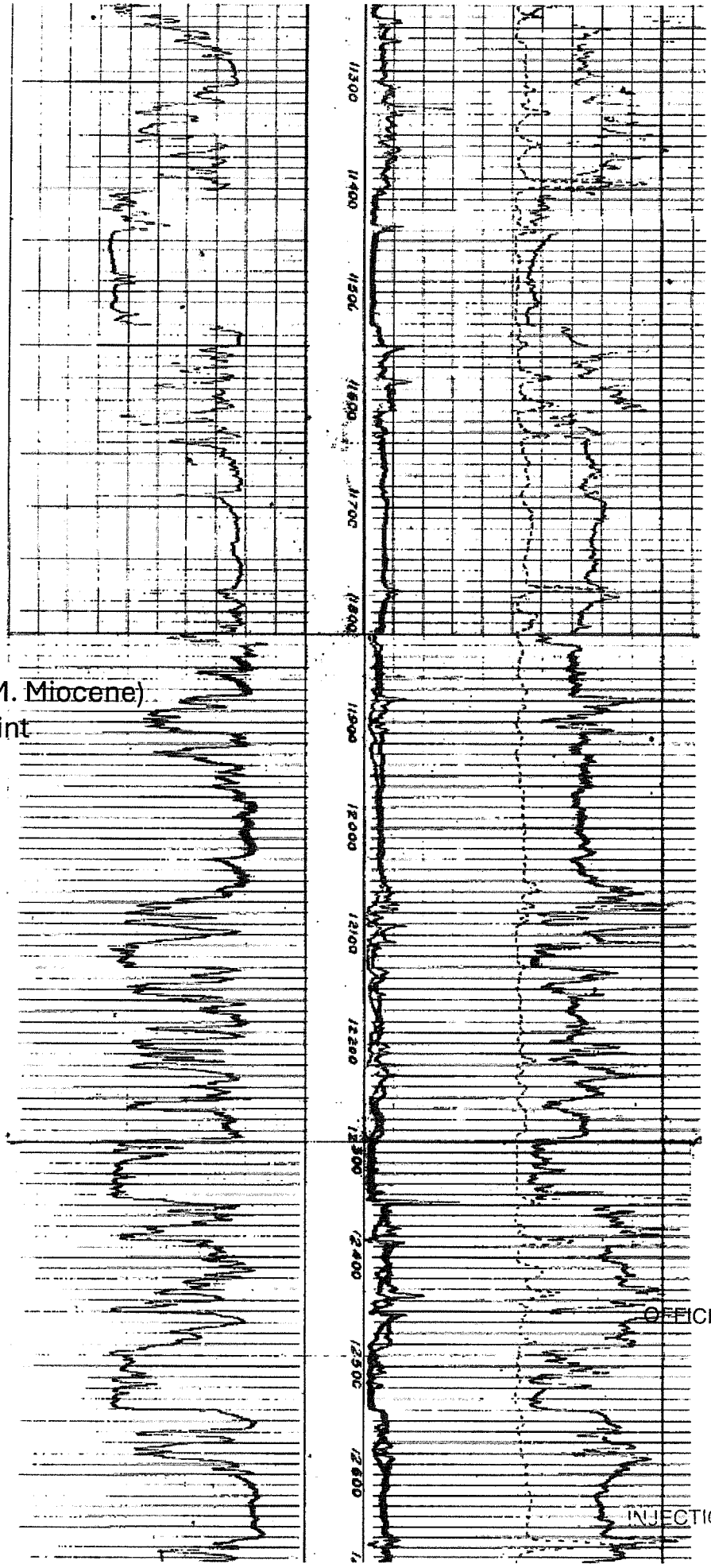


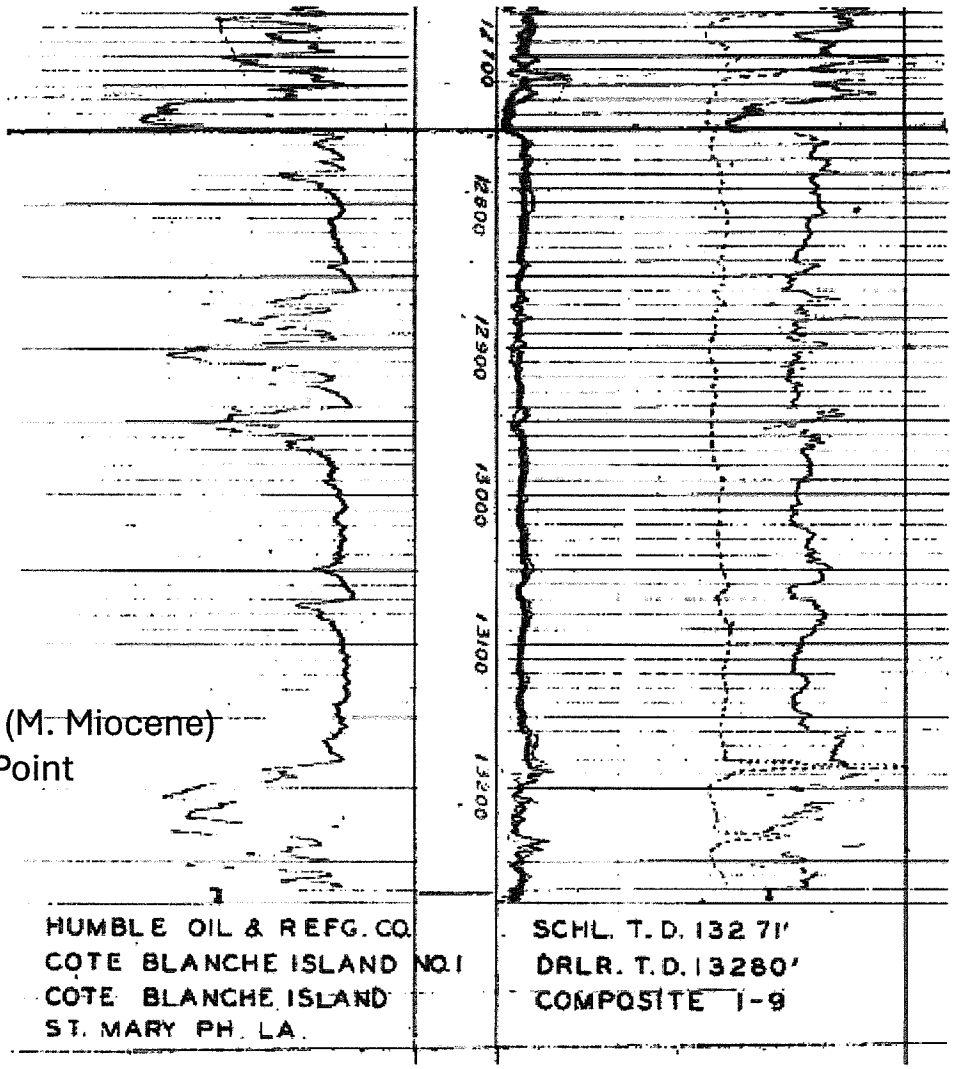
Textularia L (U. Miocene)
Correlation Point

045457



Bigenerina 2 (M. Miocene)
Correlation Point

045457



Textularia W (M. Miocene)
Correlation Point

This well is not deep enough to see the entire storage Interval. The proposed TD of the stratigraphic test well is 17,500'. See Stone-Williams, Inc. #1 (SN: 210367) for the entire storage interval.

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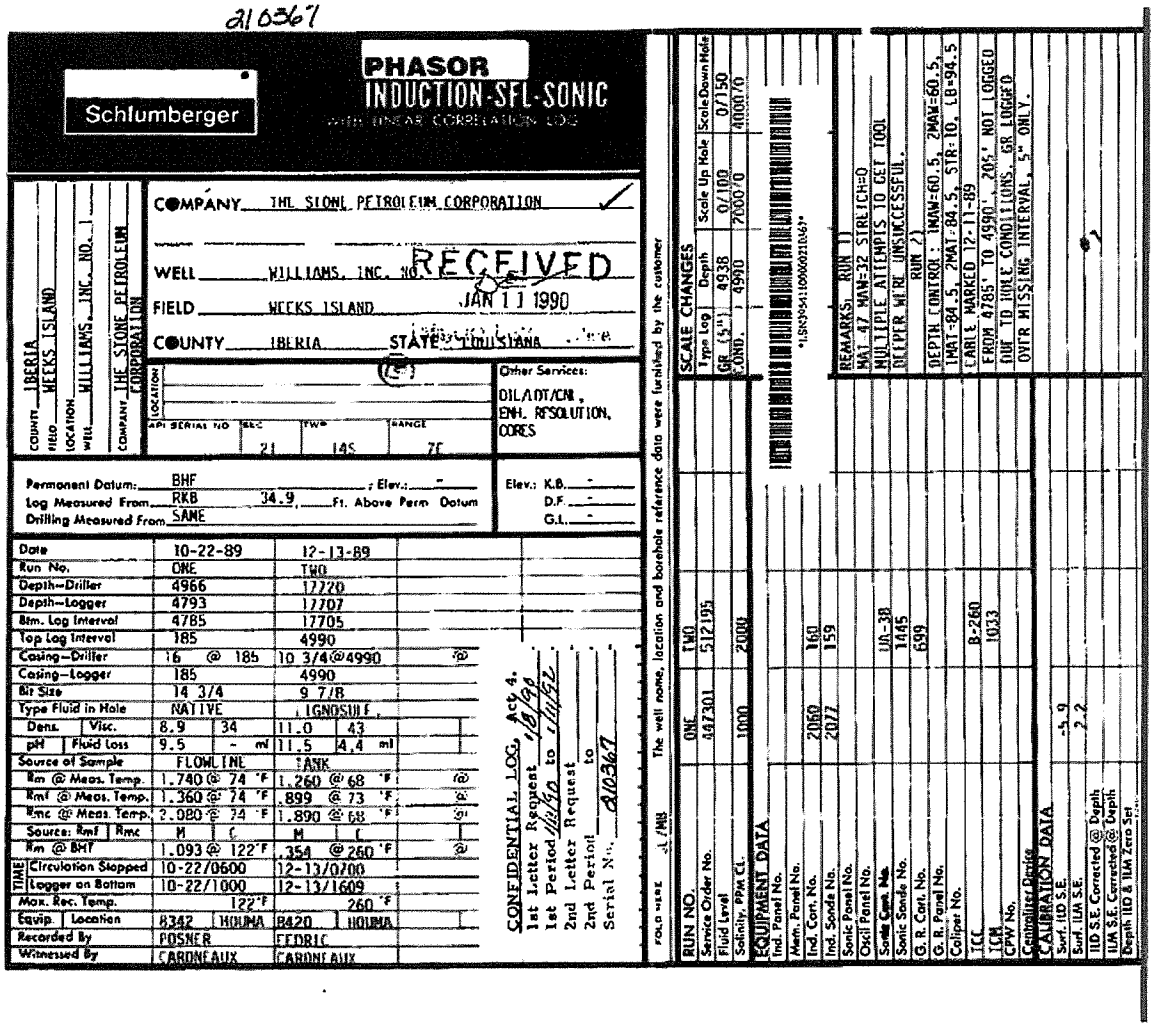
AUG 20 2024

INJECTION & MINING DIVISION

045457

Stone Petroleum Corp-Williams, Inc. #1
17-045-20970, SN 210367
21-14S-7E
Closest Offset with both shallow log and entire storage interval



210367

Schlumberger

PHASOR INDUCTION-SFL-SONIC
WITH LINEAR CORRELATION LOG

COMPANY THE STONE PETROLEUM CORPORATION
WELL WILLIAMS, INC. NO. 1
FIELD WEEKS ISLAND
COUNTY IBERIA STATE LOUISIANA

RECEIVED
JAN 11 1990

COUNTY IBERIA
FIELD WEEKS ISLAND
LOCATION WILLIAMS, INC. NO. 1
WELL
COMPANY THE STONE PETROLEUM CORPORATION
LOCATION
API SERIAL NO. SEC. 21 TWP. 14S RANGE 7E

Other Services:
DIL/LDT/CNL, ENH. RESOLUTION, CORES

Permanent Datum: BHF Elev.: -
Log Measured From RKB 34.9 Ft. Above Perm. Datum
Drilling Measured From SANE
Elev.: K.B. -
D.F. -
G.L. -

Date	10-22-89	12-13-89
Run No.	ONE	TWO
Depth—Driller	4966	17720
Depth—Logger	4793	17707
Btm. Log Interval	4785	17705
Top Log Interval	185	4990
Casing—Driller	16 @ 185	10 3/4 @ 4990 @
Casing—Logger	185	4990
Bit Size	14 3/4	9 7/8
Type Fluid in Hole	NATIVE	LIGNOSULF
Dens. / Visc.	8.9 / 34	11.0 / 43
pH / Fluid Loss	9.5 / - ml	11.5 / 4.4 ml
Source of Sample	FLOWLINE	TANK
Rm @ Meas. Temp.	1.740 @ 74 °F	1.260 @ 68 °F @
Rmf @ Meas. Temp.	1.360 @ 74 °F	.899 @ 73 °F @
Rmc @ Meas. Temp.	2.080 @ 74 °F	1.890 @ 68 °F @
Source: Rmf / Rmc	M / C	M / C
Rm @ BHT	1.093 @ 122°F	.354 @ 260 °F @
TIME Circulation Stopped	10-22/0600	12-13/0700
TIME Logger on Bottom	10-22/1000	12-13/1609
Max. Rec. Temp.	122°F	260 °F
Equip. Location	8342 HOUMA	8420 HOUMA
Recorded By	POSNER	FEDRIC
Witnessed By	CARONEAUX	CARONEAUX

CONFIDENTIAL LOG, Act 4.
1st Letter Request 1/8/90
1st Period 12/90 to 12/91
2nd Letter Request
2nd Period to
Serial No. 210367

FOLD HERE The well name, location and borehole reference data were furnished by the customer

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
GR (5")	4938	0/100	0/150
COND.	4990	2000/0	400070

RUN NO.	ONE	TWO
Service Order No.	947301	512195
Fluid Level		
Salinity, PPM Cl.	1000	2000

EQUIPMENT DATA

Ind. Panel No.		
Mem. Panel No.		
Ind. Cen. No.	2060	160
Ind. Sonde No.	2077	159
Sonic Panel No.		
Oscil Panel No.		
Sonic Cart. No.		UN-3B
Sonic Sonde No.		1445
G. R. Cart. No.		699
G. R. Panel No.		
Caliper No.		
TCC		B-260
TCM		1033
CPW No.		
Controller Panel		

CALIBRATION DATA

Surf. IID S.E.	-5.9	
Surf. IIA S.E.	2.2	
IID S.E. Corrected @ Depth		
IIA S.E. Corrected @ Depth		
Depth IID & IIA Zero Set		

REMARKS: RUN 1)
MAI 47 MAN=32 STRLICH=0
MULTIPLE ATTEMPTS TO GET TOOL DEEPER WERE UNSUCCESSFUL.
RUN 2)
DEPTH CONTROL: INAM=60.5, 2MAM=60.5, 1MAT=84.5, 2MAT=84.5, STR=10, LB=94.5
CARLE MARKED 12-11-89
FROM 4785' TO 4990' 205' NOT LOGGED DUE TO HOLE CONDITIONS. GR LOGGED OVER MISSING INTERVAL, 5" ONLY.

OFFICE OF CONSERVATION

AUG 20 2024

INJECTION & MINING DIVISION

045457

210367

Schlumberger

PHASOR INDUCTION-SFL-SONIC

WITH LINEAR CORRELATION LOG

COMPANY THE STONE PETROLEUM CORPORATION

WELL WILLIAMS, INC. NO. 1

FIELD WEEKS ISLAND

COUNTY IBERIA

STATE LOUISIANA

RECEIVED
JAN 11 1990

COMPANY THE STONE PETROLEUM CORPORATION
WELL WILLIAMS, INC. NO. 1
FIELD WEEKS ISLAND
LOCATION
COUNTY IBERIA
STATE LOUISIANA

LOCATION			
API SERIAL NO	SEC	TWP	RANGE
	21	14S	7E

Other Services: DIL/LDT/CNL, ENH. RESOLUTION, CORES

Permanent Datum: BHF
Log Measured From RKB 34.9 Ft. Above Perm. Datum
Drilling Measured From SAME

Elev.: K.B. –
D.F. –
G.L. –

Date	10-22-89	12-13-89
Run No.	ONE	TWO
Depth—Driller	4966	17720
Depth—Logger	4793	17707
Btm. Log Interval	4785	17705
Top Log Interval	185	4990
Casing—Driller	16 @ 185	10 3/4@4990 @
Casing—Logger	185	4990
Bit Size	14 3/4	9 7/8
Type Fluid in Hole	NATIVE	LIGNOSULF.
Dens. / Visc.	8.9 / 34	11.0 / 43
pH / Fluid Loss	9.5 / - ml	11.5 / 4.4 ml
Source of Sample	FLOWLINE	TANK
Rm @ Meas. Temp.	1.740 @ 74 °F	1.260 @ 68 °F @
Rmf @ Meas. Temp.	1.360 @ 74 °F	.899 @ 73 °F @
Rmc @ Meas. Temp.	2.080 @ 74 °F	1.890 @ 68 °F @
Source: Rmf / Rmc	M / C	M / C
Rm @ BHT	1.093 @ 122°F	.354 @ 260 °F @
TIME Circulation Stopped	10-22/0600	12-13/0700
Logger on Bottom	10-22/1000	12-13/1609
Max. Rec. Temp.	122°F	260 °F
Equip. / Location	8342 HOUMA	8420 HOUMA
Recorded By	POSNER	EEDRLC
Witnessed By	CARDINEAUX	CARDINEAUX

CONFIDENTIAL LOG, Act 4.
1st Letter Request 1/8/90.
1st Period 1/11/90 to 1/11/92.
2nd Letter Request ____.
2nd Period ____ to ____.
Serial No. 210367.

FOLD HERE JL/MB

The well name, location and borehole reference data were furnished by the customer.

RUN NO.	ONE	TWO
Service Order No.	447301	512195
Fluid Level		
Salinity, PPM Cl.	1000	2000
EQUIPMENT DATA		
Ind. Panel No.		
Mem. Panel No.		
Ind. Cart. No.	2060	160
Ind. Sonde No.	2077	159
Sonic Panel No.		
Oscil Panel No.		
Sonic Cart. No.		UA-38
Sonic Sonde No.		1445
G. R. Cart. No.		699
G. R. Panel No.		
Caliper No.		
TCC		B-260
TCM		1033
CPW No.		
Centralizer Device		
CALIBRATION DATA		
Surf. ILD S.E.	-5.9	
Surf. ILM S.E.	2.2	
ILD S.E. Corrected @ Depth		
ILM S.E. Corrected @ Depth		
Depth ILD & ILM Zero Set		

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
GR (5")	4938	0/100	0/150
COND.	4990	2000/0	4000/0

LSN39541100000210367

REMARKS: RUN 1)
MAT=47 MAW=32 STRETCH=0
MULTIPLE ATTEMPTS TO GET TOOL
DEEPER WERE UNSUCCESSFUL.
RUN 2)
DEPTH CONTROL: 1MAW=60.5, 2MAW=60.5,
1MAT=84.5, 2MAT=84.5, STR=10, LB=94.5
CABLE MARKED 12-11-89
FROM 4785' TO 4990', 205' NOT LOGGED
DUE TO HOLE CONDITIONS. GR LOGGED
OVER MISSING INTERVAL, 5" ONLY.

OFFICE OF CONSERVATION

#1

AUG 20 2024

INJECTION & MINING DIVISION

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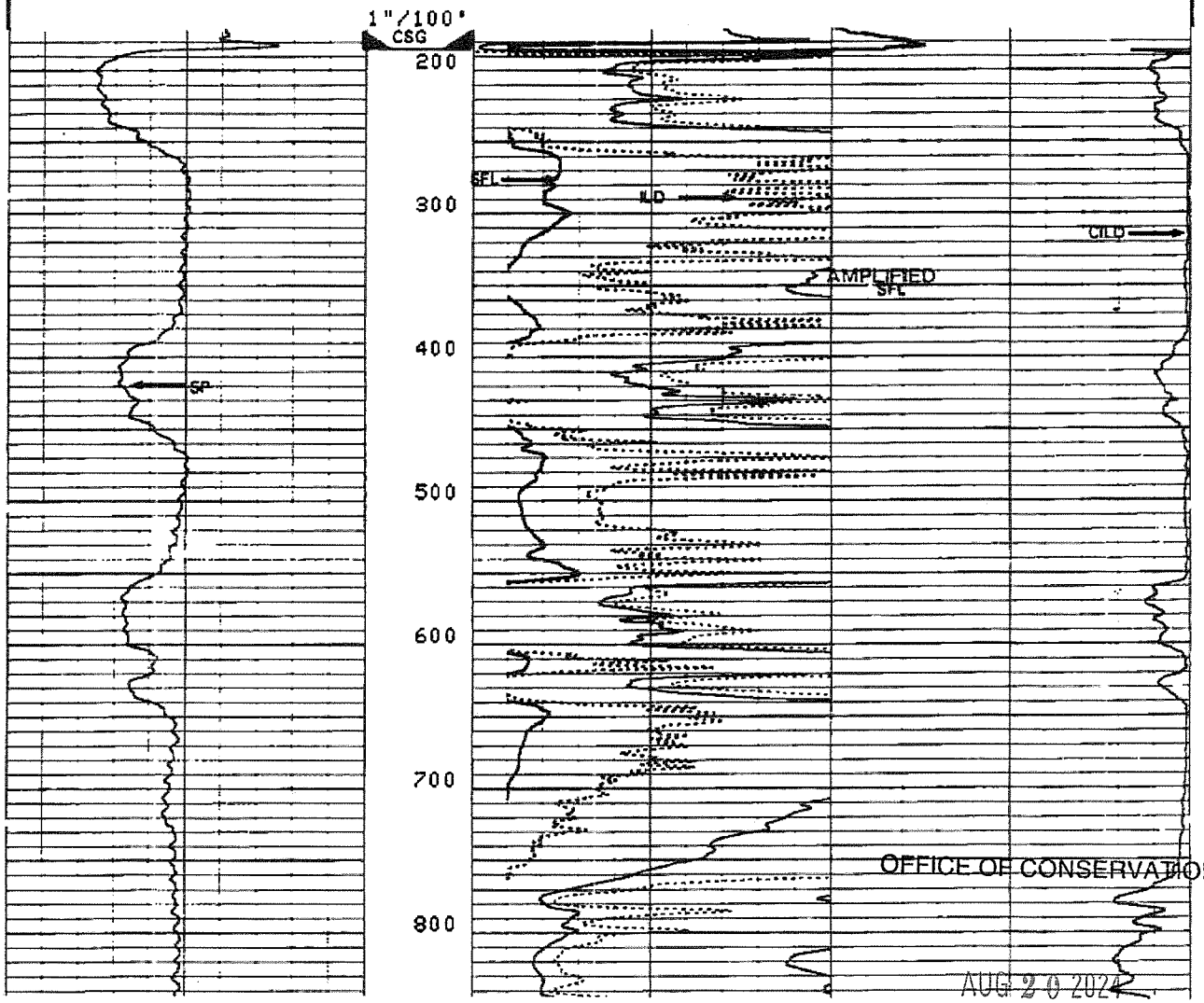
G. R. BKGD CPS.					
G. R. Source CPS.					
G. R. Cal. Sens.					
G. R. T. C. CAL.					
LOGGING DATA					
G. R. Sens.-Log					
G. R. T. C.-Log					
Speed-F.P.M.	3 000 F/HR				

SP(MV)		ILD(OHMM)		CILD(MM/M)	
		0.0	10.000		
		SFLA(OHMM)			
		0.0	2.0000		
-160.0	40.000	SFLA(OHMM) 0.0	10.000	2000.0	0.0

CP 32.2 FILE 12 23-OCT-1989 10:35



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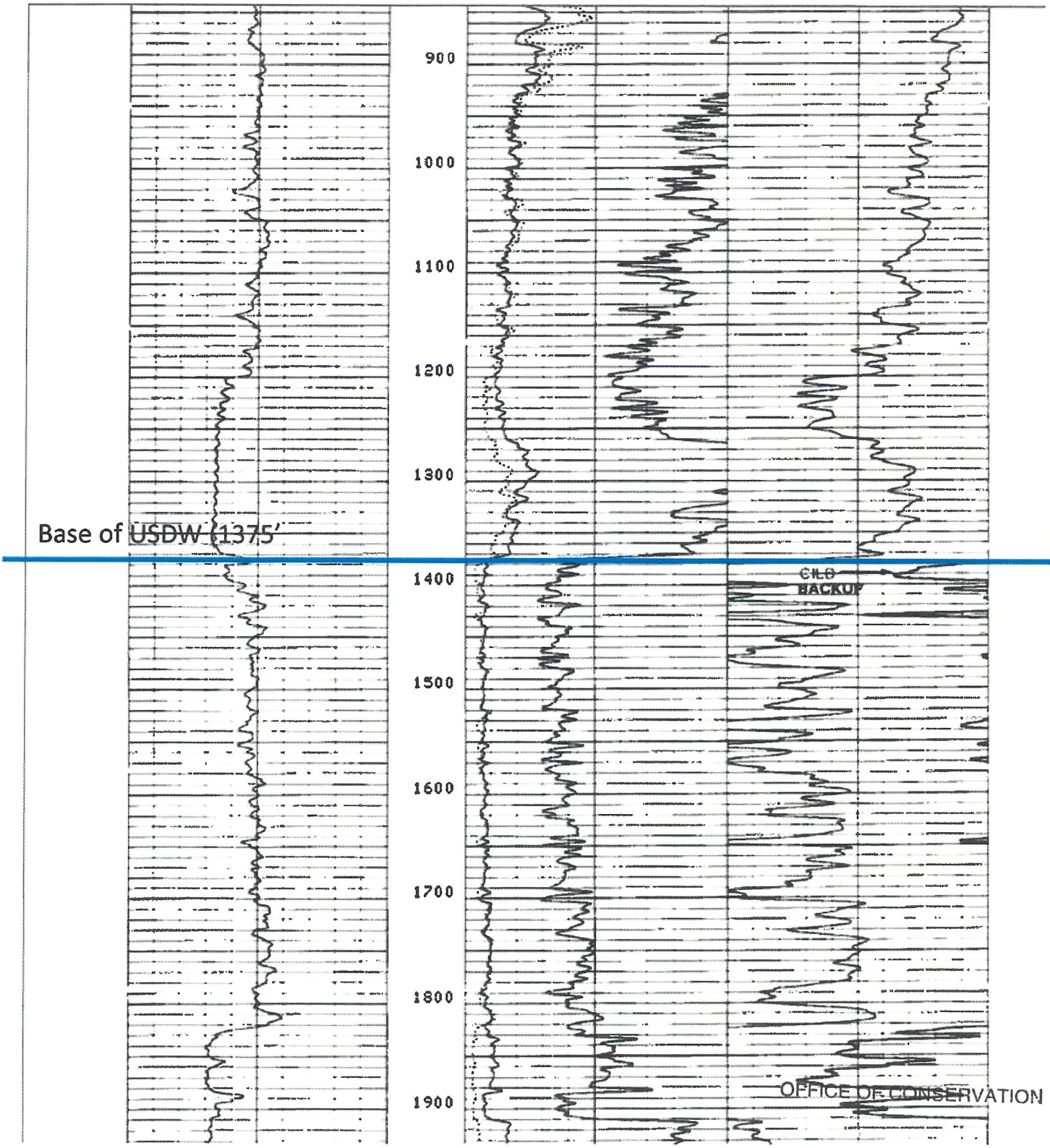

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INJECTION & MINING DIVISION

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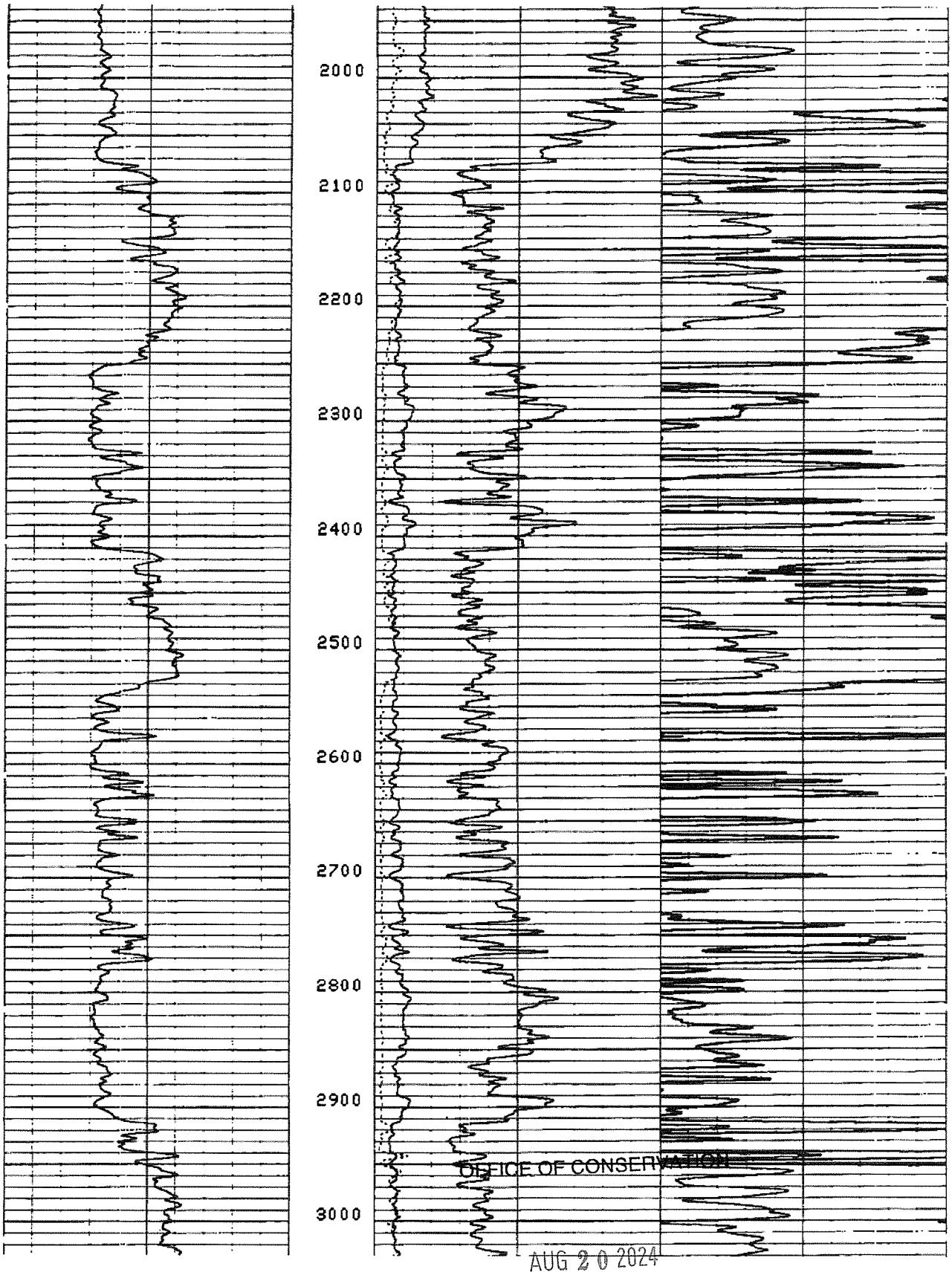

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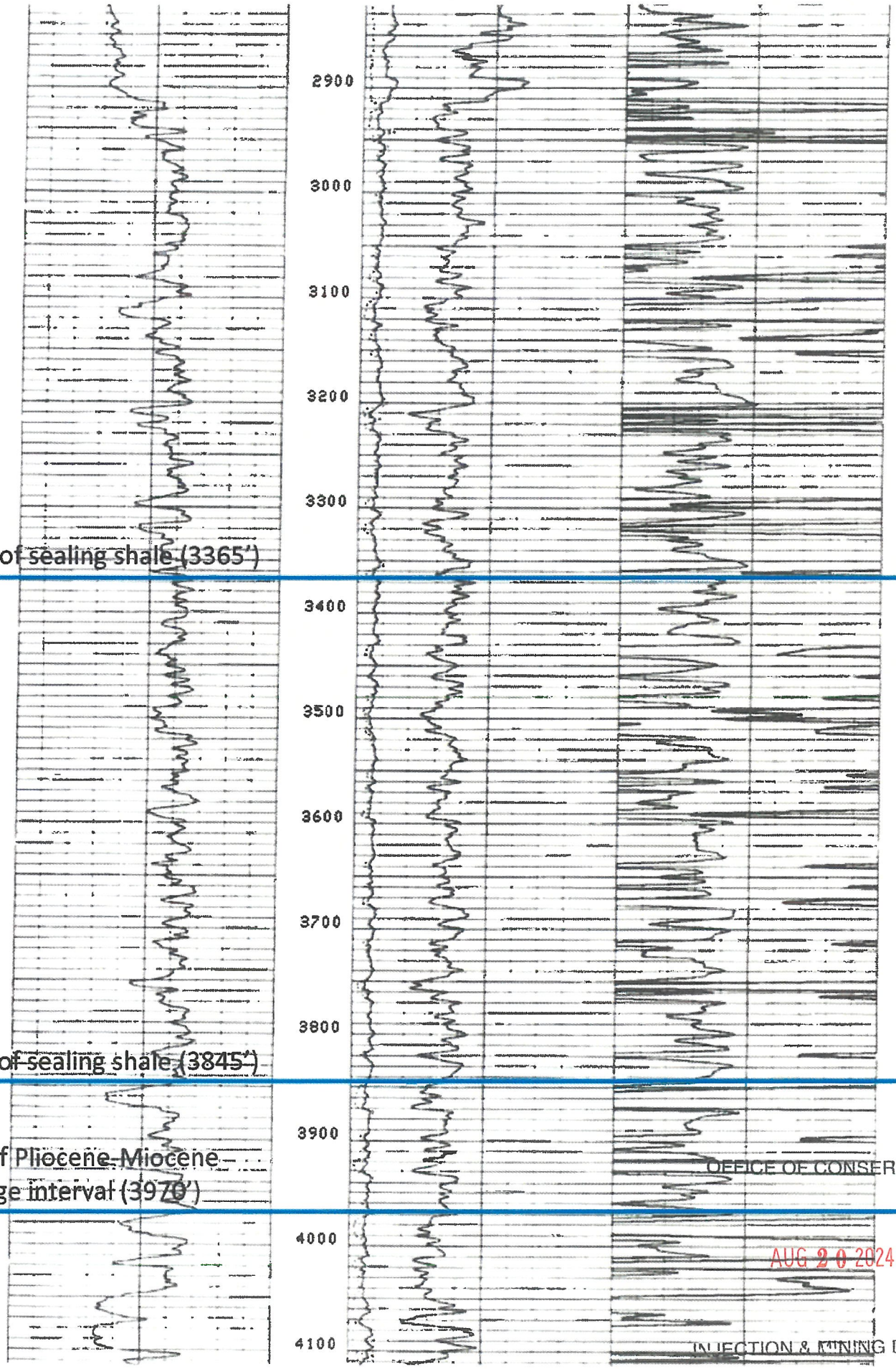

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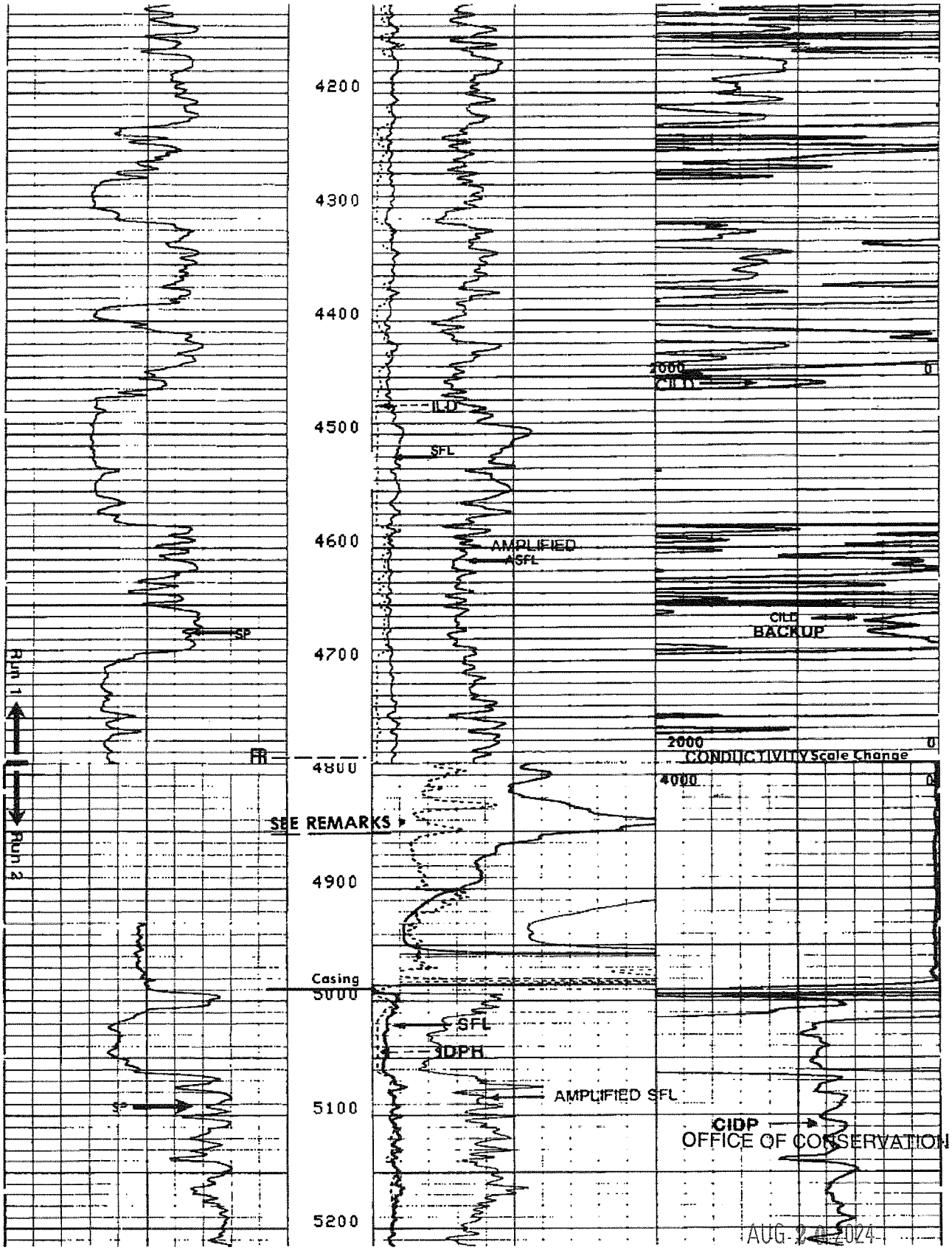

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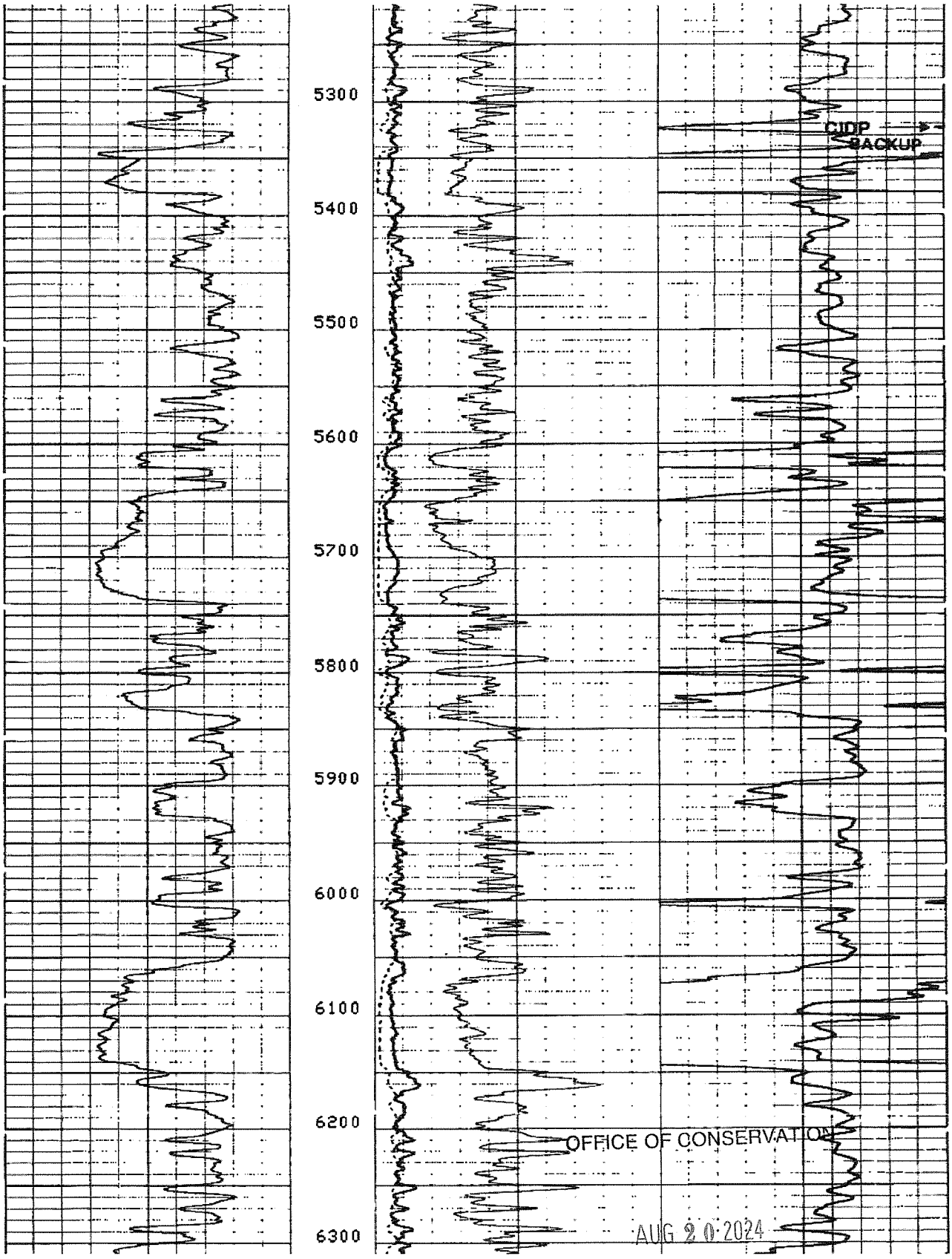

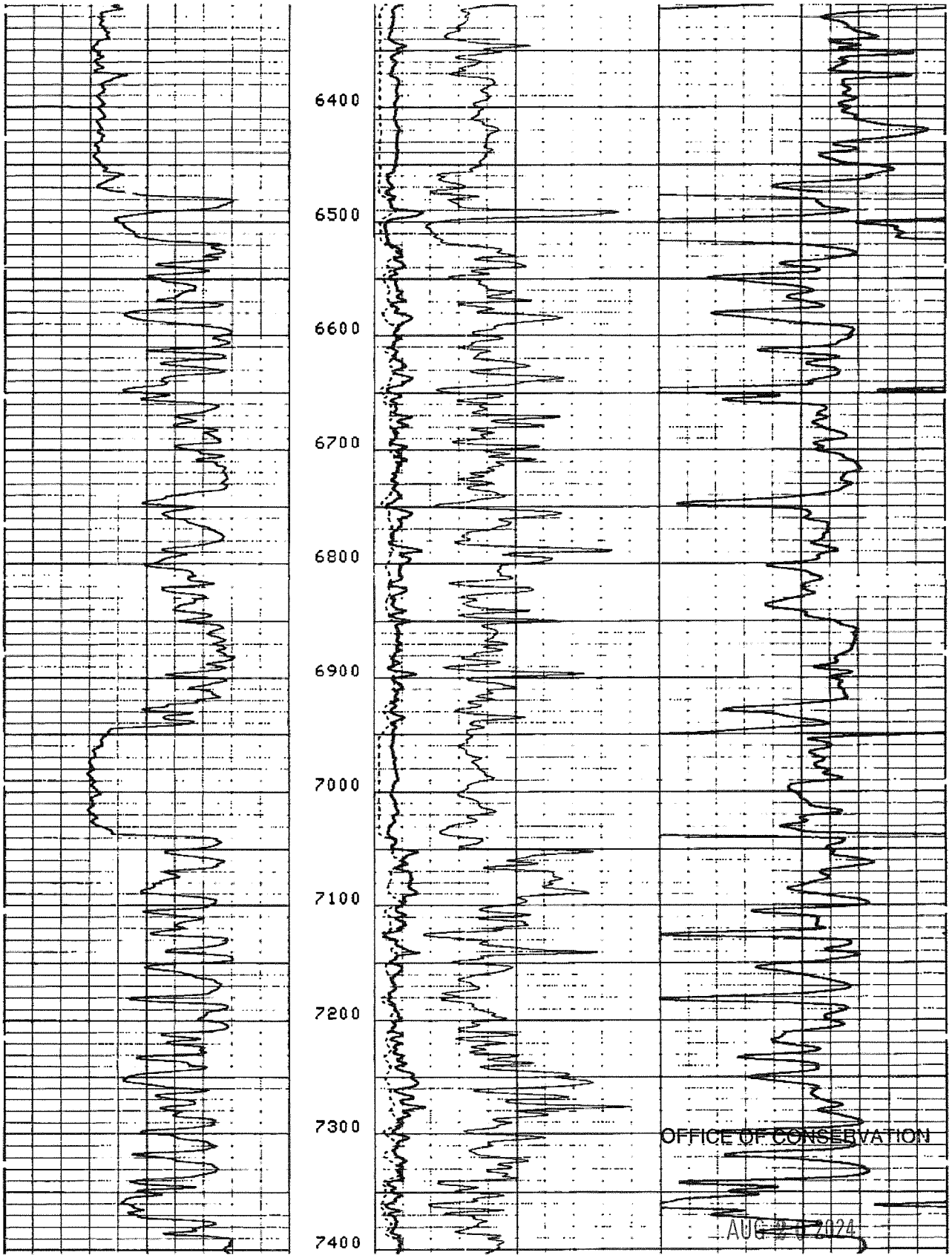

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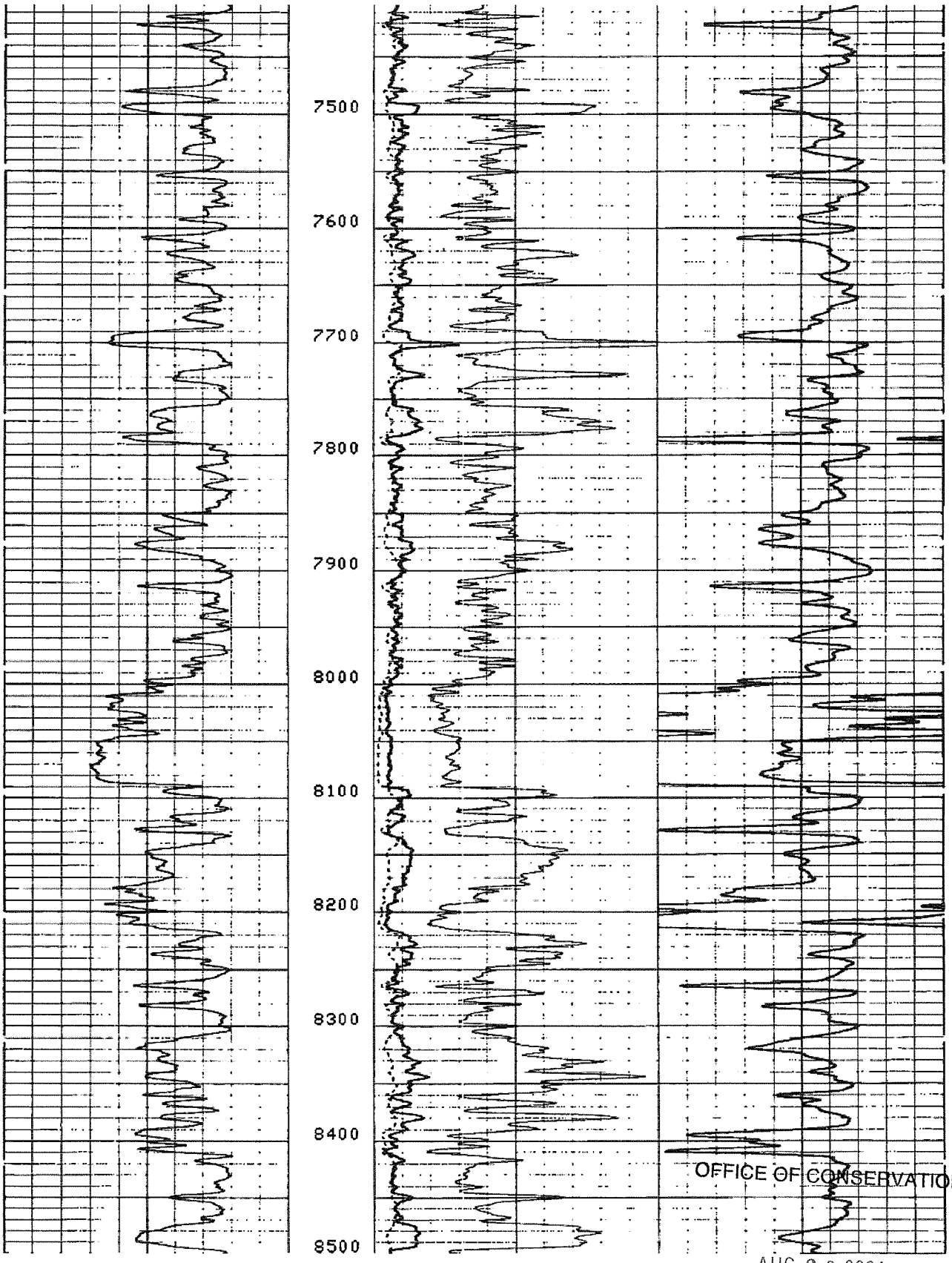

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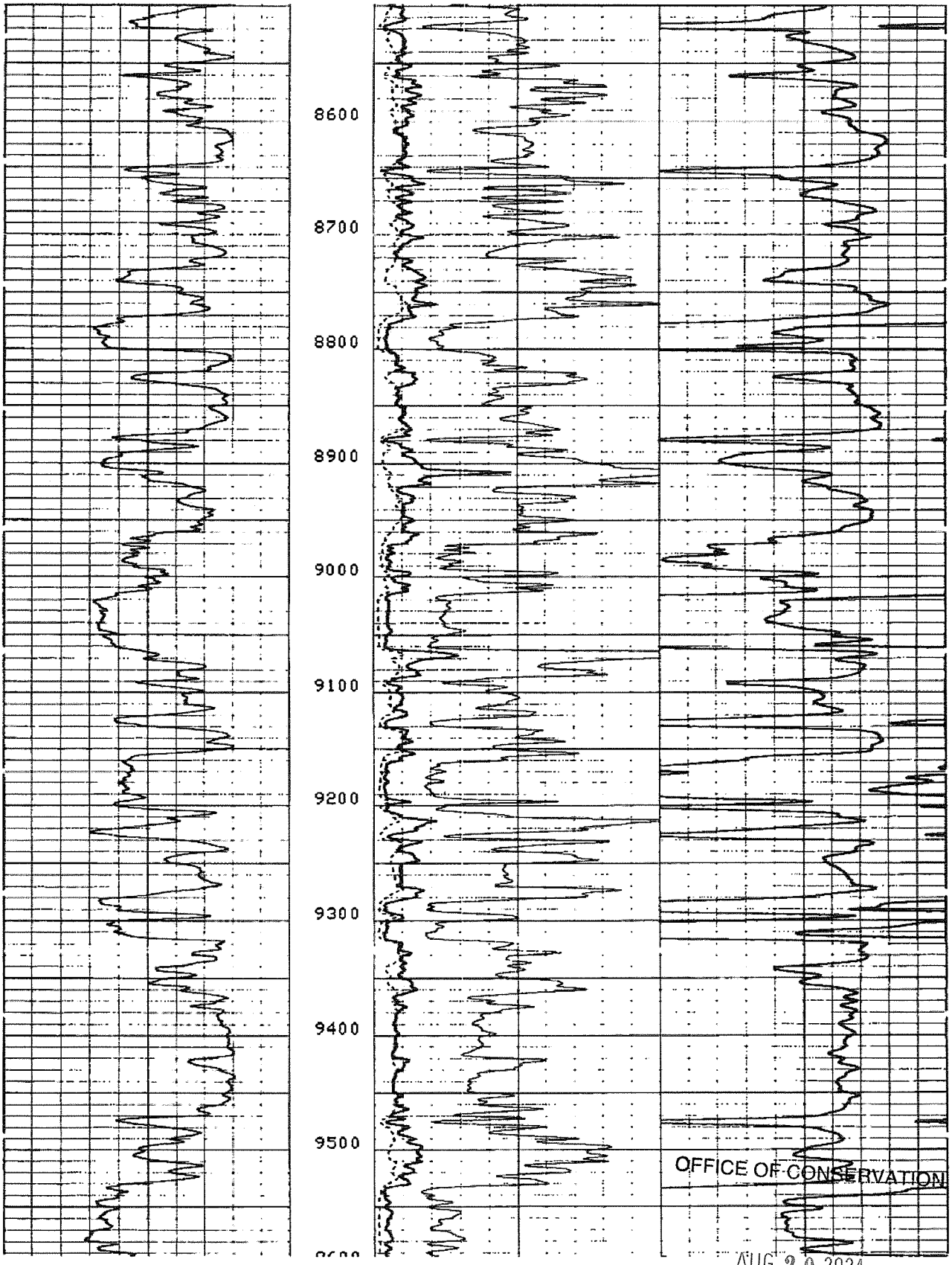

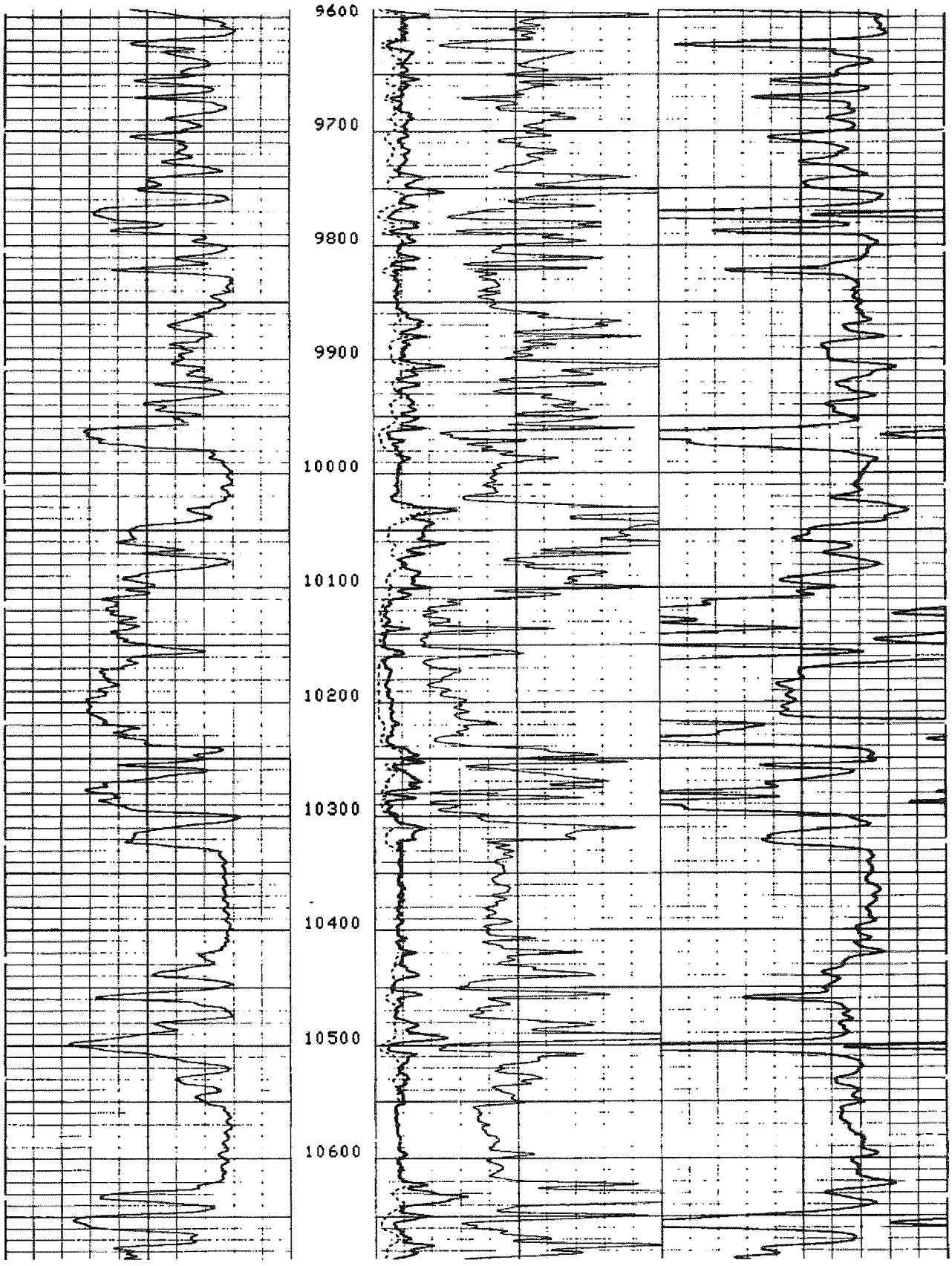
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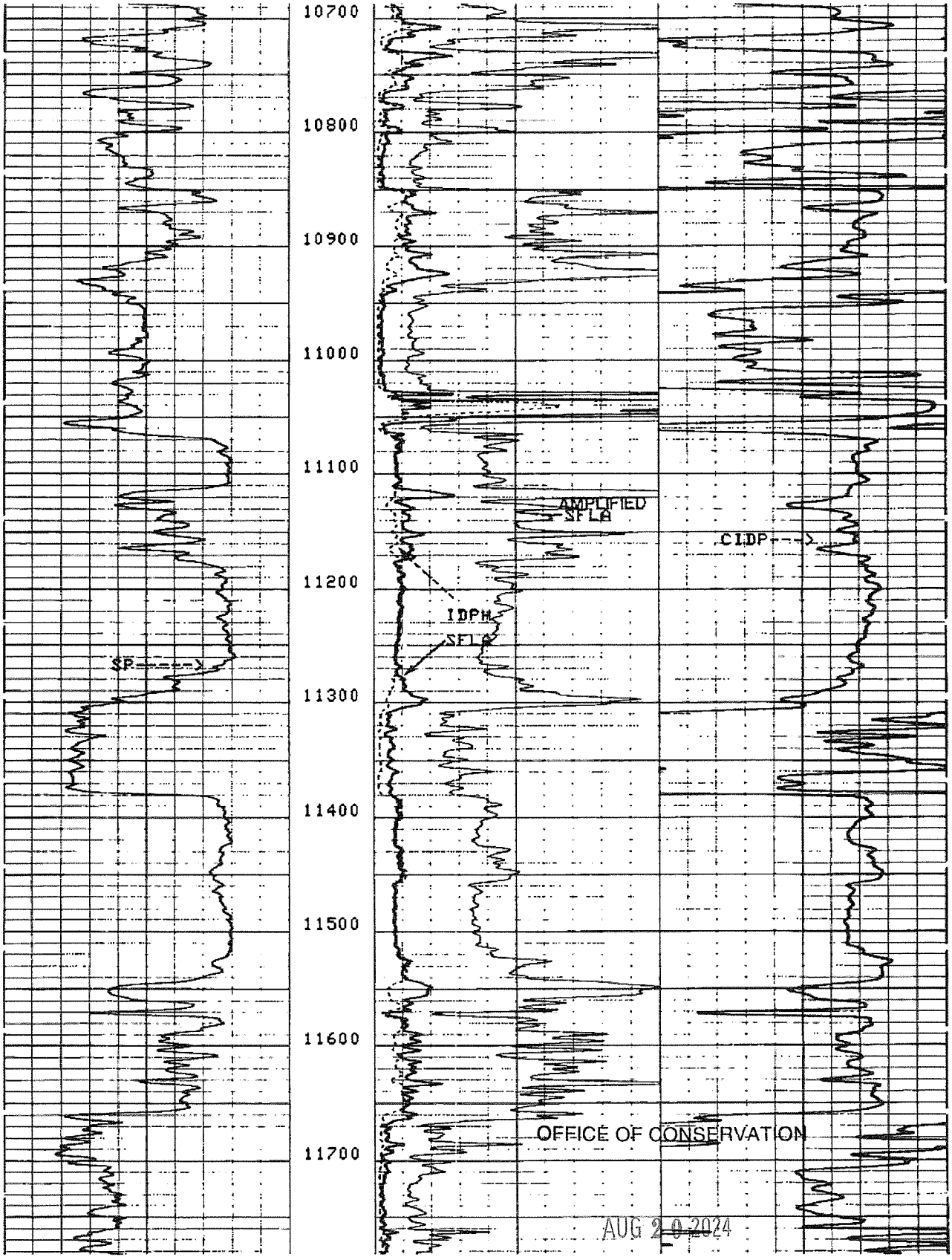

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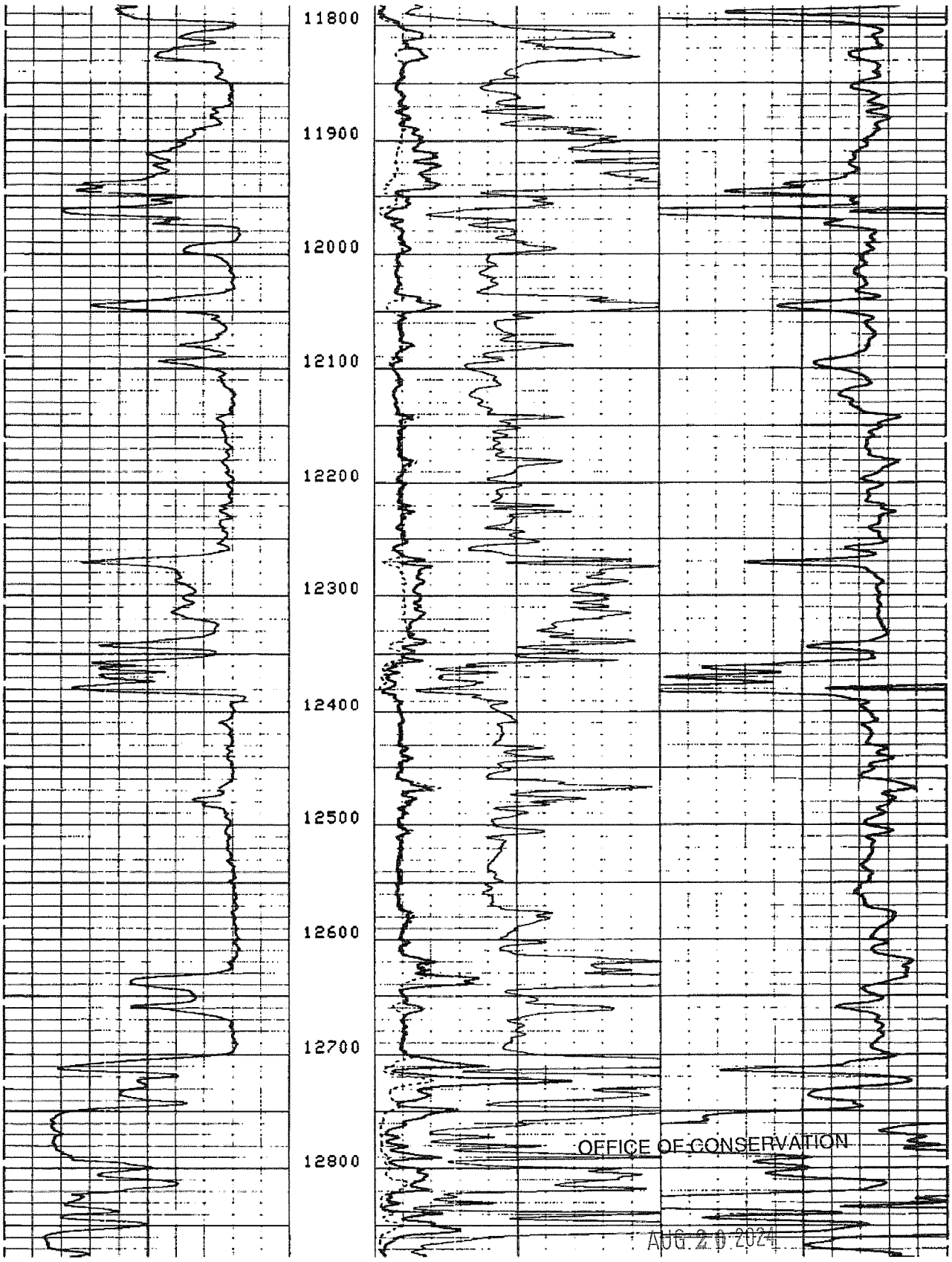

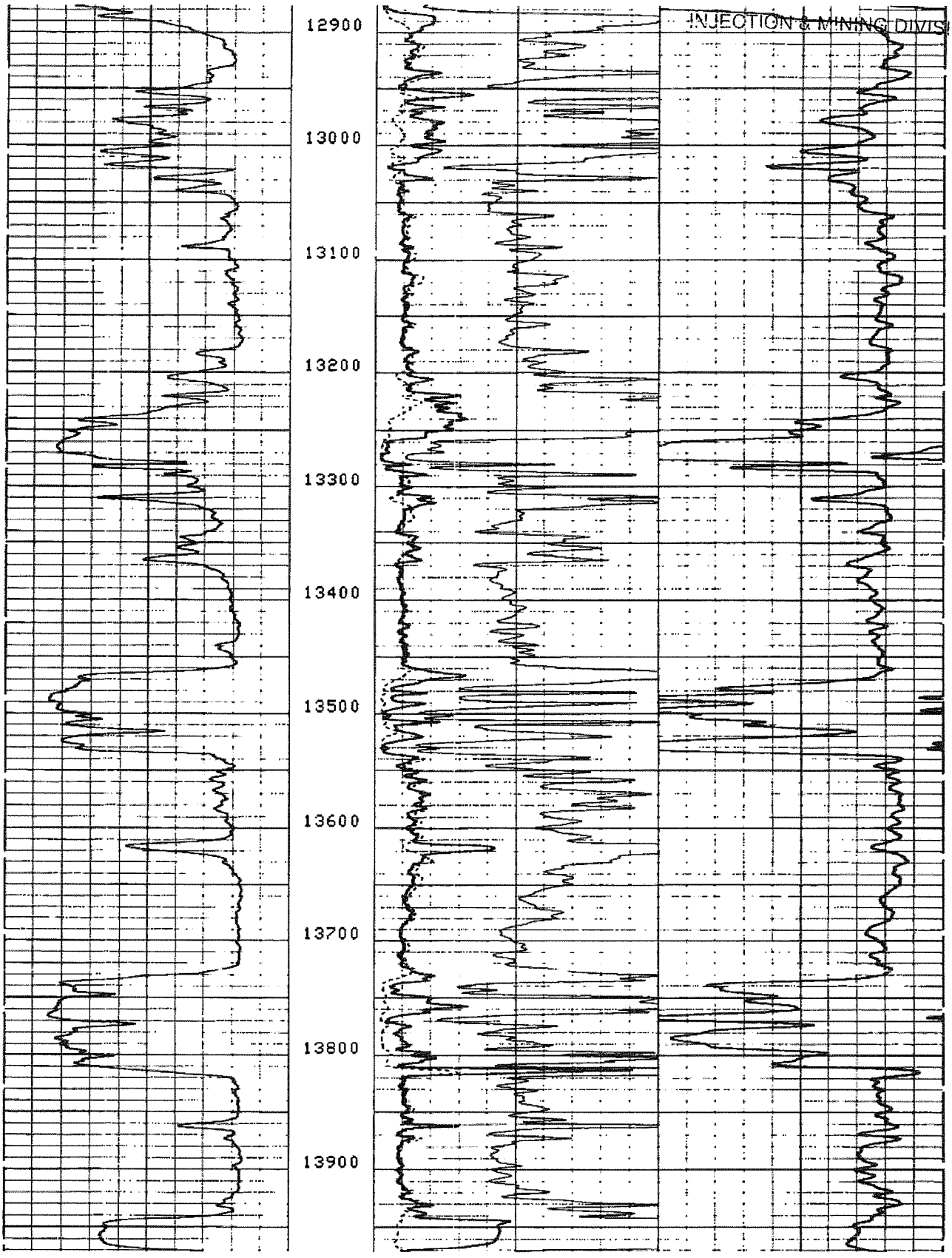

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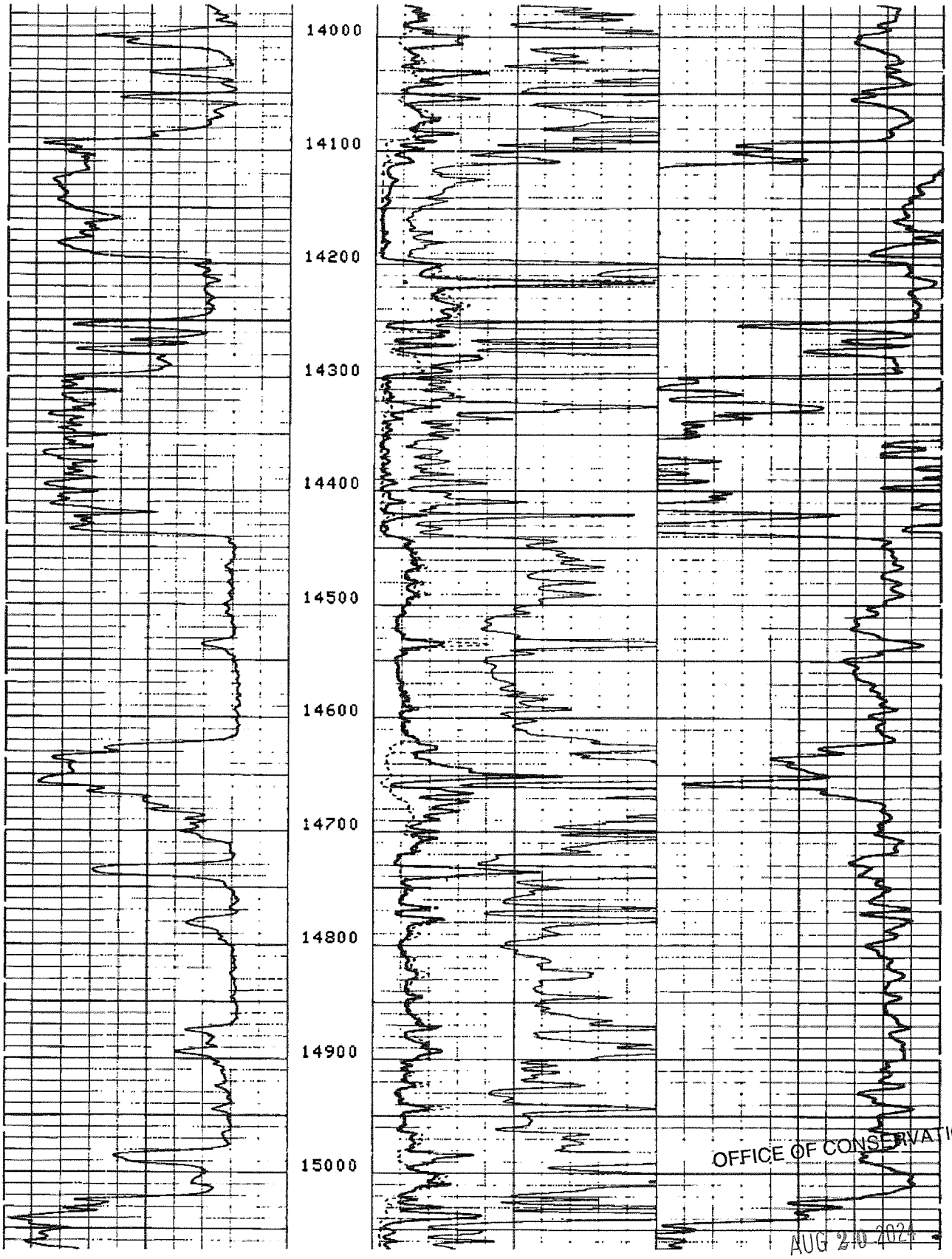

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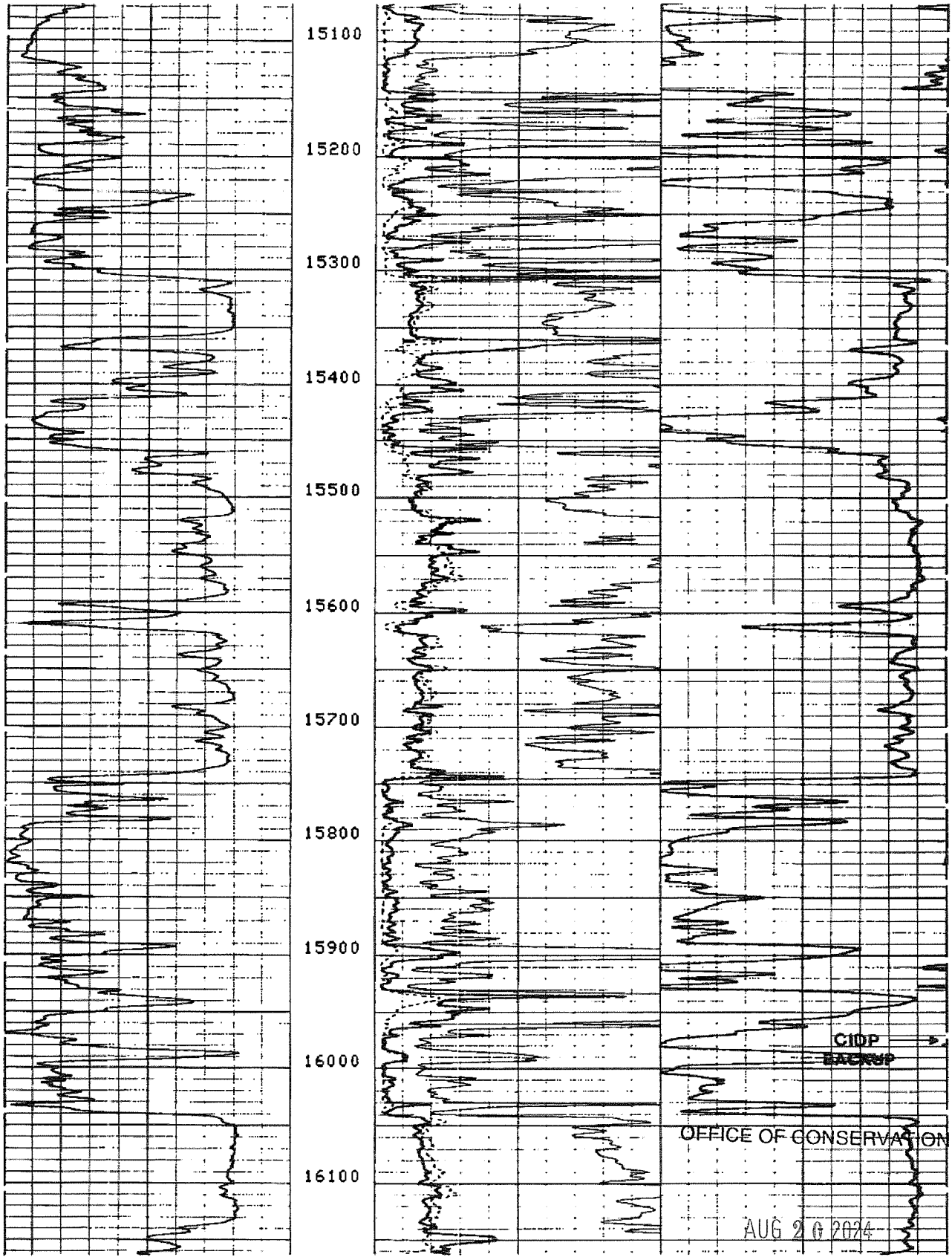
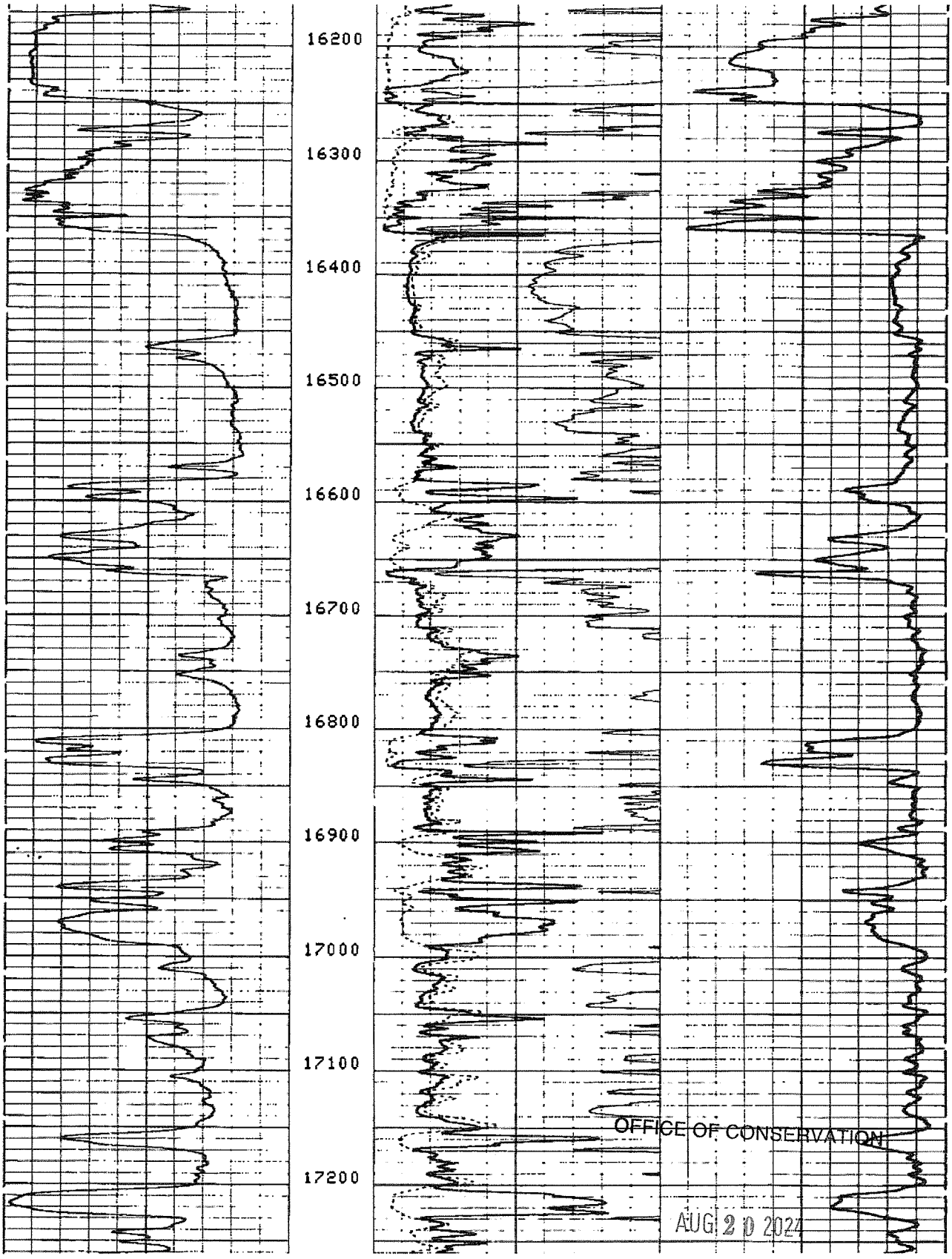
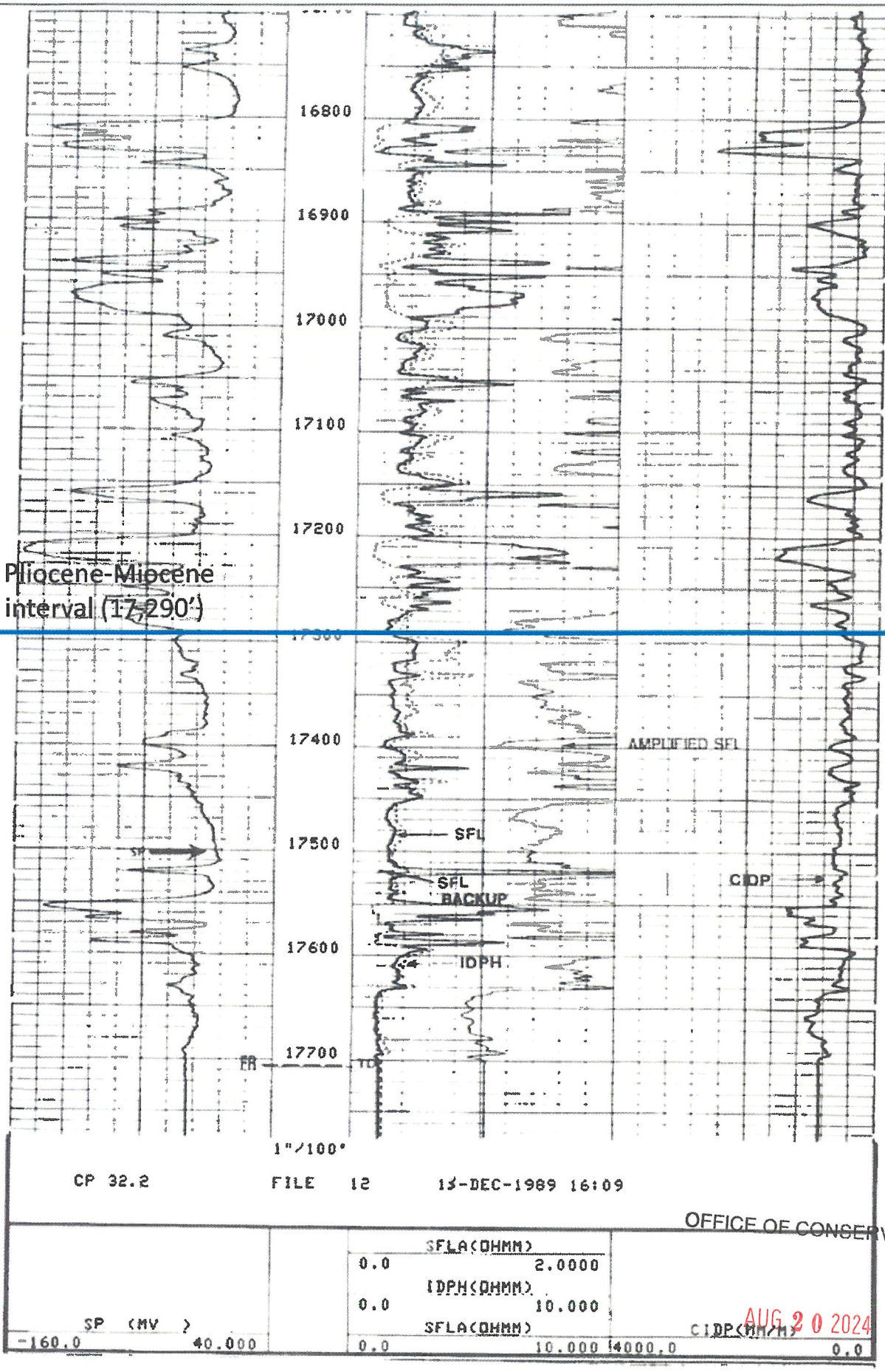


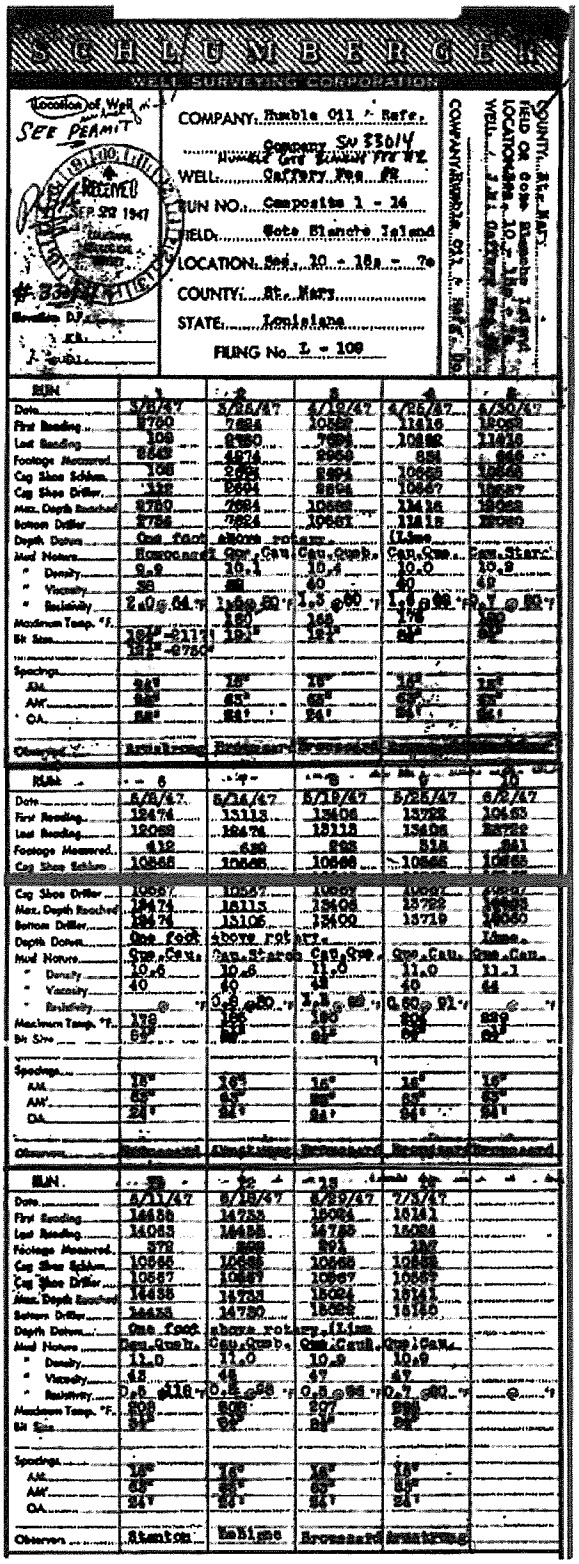




Base of Pliocene-Miocene storage interval (17,290')

045457

Humble Oil-Cote Blanche Fee #2 (fka Caffery Fee #2)
17-101-02256, SN 33014
10-15S-7E
Offset with shallow log and storage interval down to 15,140'



SCHLUMBERGER
WELL SURVEYING CORPORATION

Location of Well: SEE PERMIT

RECEIVED SEP 22 1947

COMPANY: Humble Oil & Refg. Co.
WELL: Caffery Fee #2
RUN NO.: Composite 1 - 16
FIELD: Cote Blanche Island
LOCATION: Sec. 10 - 18s - 7e
COUNTY: St. Mary
STATE: Louisiana
FILING No. 1 - 109

COMPANY Humble Oil & Refg. Co.
WELL Caffery Fee #2
FIELD OR COTE BLANCHE ISLAND
LOCATION Sec. 10 - 18S - 7E
COUNTY St. Mary

RUN	1	2	3	4	5
Date	5/8/47	5/25/47	6/10/47	6/25/47	6/30/47
First Reading	8790	7824	10588	11416	10588
Last Reading	108	8480	7824	10588	11416
Footage Measured	8682	4874	2764	828	828
Csg Shoe Schlm.	708	2824	8824	10588	10588
Csg Shoe Driller	708	2824	8824	10587	10587
Max. Depth Reached	8790	7824	10588	11416	10588
Bottom Driller	8786	7824	10587	11415	10580
Depth Datum	Gnd. floor	above rotary		(Lime	
Mud Nature	Homogenat	Gyp. Cau.	Cau. Quek.	Cau. Cau.	Cau. Star.
" Density	9.9	10.1	10.4	10.0	10.9
" Viscosity	38	38	40	40	42
" Resistivity	2.0 @ 64.7°	1.80 @ 80°	1.5 @ 80°	1.6 @ 88°	1.7 @ 80°
Maximum Temp. °F.		180	188	178	188
Bit Size	10" - 8171 12" - 8786	12"	12"	10"	10"
Spacings					
AM	24'	18'	18'	16'	16'
AM'	64'	65'	65'	65'	65'
OA	88'	84'	84'	81'	81'
Observer	Armstrong	Stedman	Brownscombe	Armstrong	Stedman

RUN	6	7	8	9	10
Date	6/8/47	6/24/47	6/18/47	6/25/47	6/8/47
First Reading	12474	13113	13406	13722	10465
Last Reading	12068	12474	13113	13406	13722
Footage Measured	412	639	293	316	841
Csg Shoe Schlm	10565	10565	10560	10565	10565
Csg Shoe Driller	10567	10567	10567	10567	10567
Max. Depth Reached	12474	13113	13406	13722	13722
Bottom Driller	12474	13106	13400	13719	13650
Depth Datum	Gnd. floor	above rotary			(Lime
Mud Nature	Cau. Cau.	Cau. Starch	Cau. Cau.	Cau. Cau.	Cau. Cau.
" Density	10.6	10.6	11.0	11.0	11.1
" Viscosity	40	40	44	40	44
" Resistivity	@	0.8 @ 80°	2.1 @ 88°	0.80 @ 91°	@
Maximum Temp. °F.	178	186	190	208	208
Bit Size	8½"	8½"	8½"	8½"	8½"
Spacings					
AM	18'	16'	16'	16'	16'
AM'	65'	65'	65'	65'	65'
OA	84'	84'	84'	84'	84'
Observer	Brownscombe	Stedman	Brownscombe	Brownscombe	Brownscombe

RUN	11	12	13	14	15
Date	6/11/47	6/18/47	6/27/47	7/3/47	
First Reading	14458	14753	15084	16141	
Last Reading	14083	14458	14753	15084	
Footage Measured	378	295	331	197	
Csg Shoe Schlm	10565	10565	10565	10565	
Csg Shoe Driller	10567	10567	10567	10567	
Max. Depth Reached	14458	14753	15084	16141	
Bottom Driller	14458	14750	15082	16140	
Depth Datum	Gnd. floor	above rotary	(Lime		
Mud Nature	Cau. Quek.	Cau. Quek.	Cau. Cau.	Cau. Cau.	
" Density	11.0	11.0	10.9	10.9	
" Viscosity	42	42	47	47	
" Resistivity	0.6 @ 110°	0.6 @ 88°	0.6 @ 96°	0.7 @ 80°	@
Maximum Temp. °F.	208	208	207	208	
Bit Size	8½"	8½"	8½"	8½"	
Spacings					
AM	16'	16'	16'	16'	
AM'	65'	65'	65'	65'	
OA	84'	84'	84'	84'	
Observer	Stanton	Eubling	Brownscombe	Armstrong	

OFFICE OF CONSERVATION

AUG 20 2024

INJECTION & MINING DIVISION

SCHLUMBERGER

WELL SURVEYING CORPORATION

Location of Well
SEE PERMIT

RECEIVED
SEP 22 1947
LOUISIANA CONSERVATION SURVEY

#33014

Elevation: D.F.
K.B.
G.L.

COMPANY: Humble Oil & Refg. Company SW 33014 Humble Cote Blanche Fee #2
WELL: Caffery Fee #2
RUN NO.: Composite 1 - 14
FIELD: Cote Blanche Island
LOCATION: Sec. 10 - 18s - 7e
COUNTY: St. Mary
STATE: Louisiana
FILING No. L - 109

COMPANY Humble Oil & Refg. Co.
WELL ... J.M. Caffery Fee #2
LOCATION Sec. 10 - 18s - 7e
FIELD OR Cote Blanche Island
COUNTY ... St. Mary

RUN	1	2	3	4	5
Date	3/8/47	3/26/47	4/12/47	4/25/47	4/30/47
First Reading	2750	7624	10582	11416	12062
Last Reading	108	2750	7624	10582	11416
Footage Measured	2642	4874	2958	834	646
Csg Shoe Schlum	108	2694	2694	10565	10565
Csg Shoe Driller	132	2694	2694	10567	10567
Max. Depth Reached	2750	7624	10582	11416	12062
Bottom Driller	2754	7624	10581	11413	12060
Depth Datum	One foot above rotary.			(Lime	
Mud Nature	Homocaged Que.Cau		Cau.Que.Cau.Que.b.	Cau.Que.	Cau.Starch
" Density	9.9	10.1	10.4	10.0	10.2
" Viscosity	38	38	40	40	42
" Resistivity	2.0@64 °F	1.6@80 °F	1.5 @80 °F	1.6 @86 °F	1.7 @80 °F
Maximum Temp. °F		160	165	176	190
Bit Size	18¾"-2117' 12¼"		12¼"	8¾"	8¾"
	12¼"-2750'				
Spacings					
AM	24'	18"	18"	18"	18"
AM'	24'	65"	63"	65"	65"
OA	24'	24'	24'	24'	24'
Observer	Armstrong	Bringham	Brownell		

RUN	6	7	8	9	10
Date	5/8/47	5/14/47	5/19/47	5/25/47	6/2/47
First Reading	12474	13113	13408	13722	10465
Last Reading	12062	12474	13113	13408	10722
Footage Measured	412	639	295	314	441
Csg Shoe Schlum	10565	10565	10565	10565	10565

045457

Csg Shoe Driller	10567	10567	10567	10567	10567
Max. Depth Reached	12474	13113	13406	13722	13963
Bottom Driller	12474	13106	13400	13719	13960
Depth Datum	One foot above rotary.				Lime.
Mud Nature	Que.Cau.	Cau.Starch	Cau.Que.	Que.Cau.	Que.Cau.
" Density	10.6	10.6	11.0	11.0	11.1
" Viscosity	40	40	42	40	44
" Resistivity	@ °F	0.8 @ 80 °F	1.1 @ 82 °F	0.60 @ 91 °F	@ °F
Maximum Temp. °F.	178	186	190	201	229
Bit Size	8¾"	8¾"	8¾"	8¾"	8¾"
Spacings					
AM	16"	16"	16"	16"	16"
AM'	63"	63"	63"	63"	63"
OA	24'	24'	24'	24'	24'
Observers	Brousseard	Armstrong	Brousseard	Brousseard	Brousseard

RUN	11	12	13	14	
Date	6/11/47	6/18/47	6/29/47	7/3/47	
First Reading	14435	14733	15024	15141	
Last Reading	14065	14455	14733	15024	
Footage Measured	372	278	291	117	
Csg Shoe Schlum.	10565	10565	10565	10565	
Csg Shoe Driller	10567	10567	10567	10567	
Max. Depth Reached	14435	14733	15024	15141	
Bottom Driller	14435	14730	15022	15140	
Depth Datum	One foot above rotary. Lime				
Mud Nature	Cau.Que'r.	Cau.Que'r.	Que.Caus.	Que.Cau.	
" Density	11.0	11.0	10.9	10.9	
" Viscosity	43	46	47	47	
" Resistivity	0.5 @ 118 °F	0.5 @ 98 °F	0.5 @ 96 °F	0.7 @ 90 °F	@ °F
Maximum Temp. °F.	208	205	207	206	
Bit Size	8¾"	8¾"	8¾"	8¾"	
Spacings					
AM	16"	16"	16"	16"	
AM'	63"	63"	63"	63"	
OA	24'	24'	24'	24'	
Observers	Stanton	Bellue	Brousseard	Armstrong	

REMARKS

BEST COPY AVAILABLE

4½"
109

SELF-POTENTIAL

millivolts

RESISTIVITY

-ohms. m²m.

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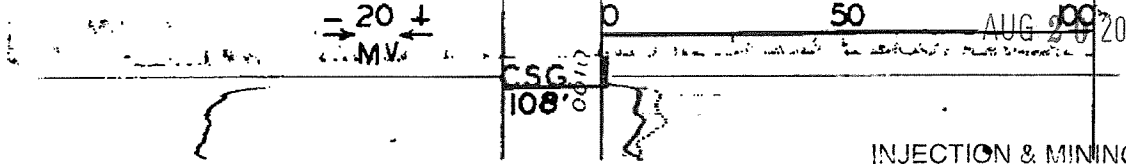

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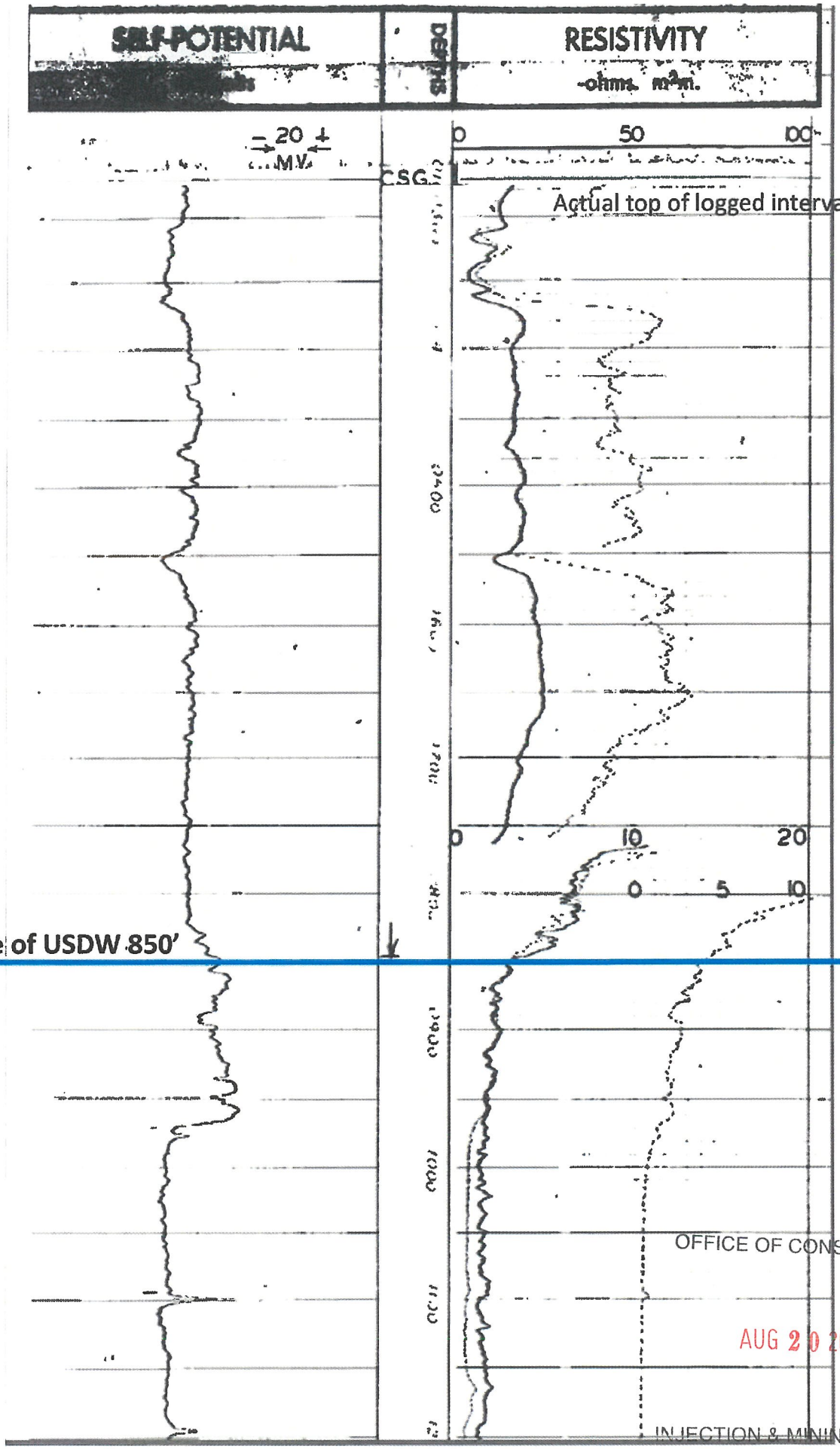

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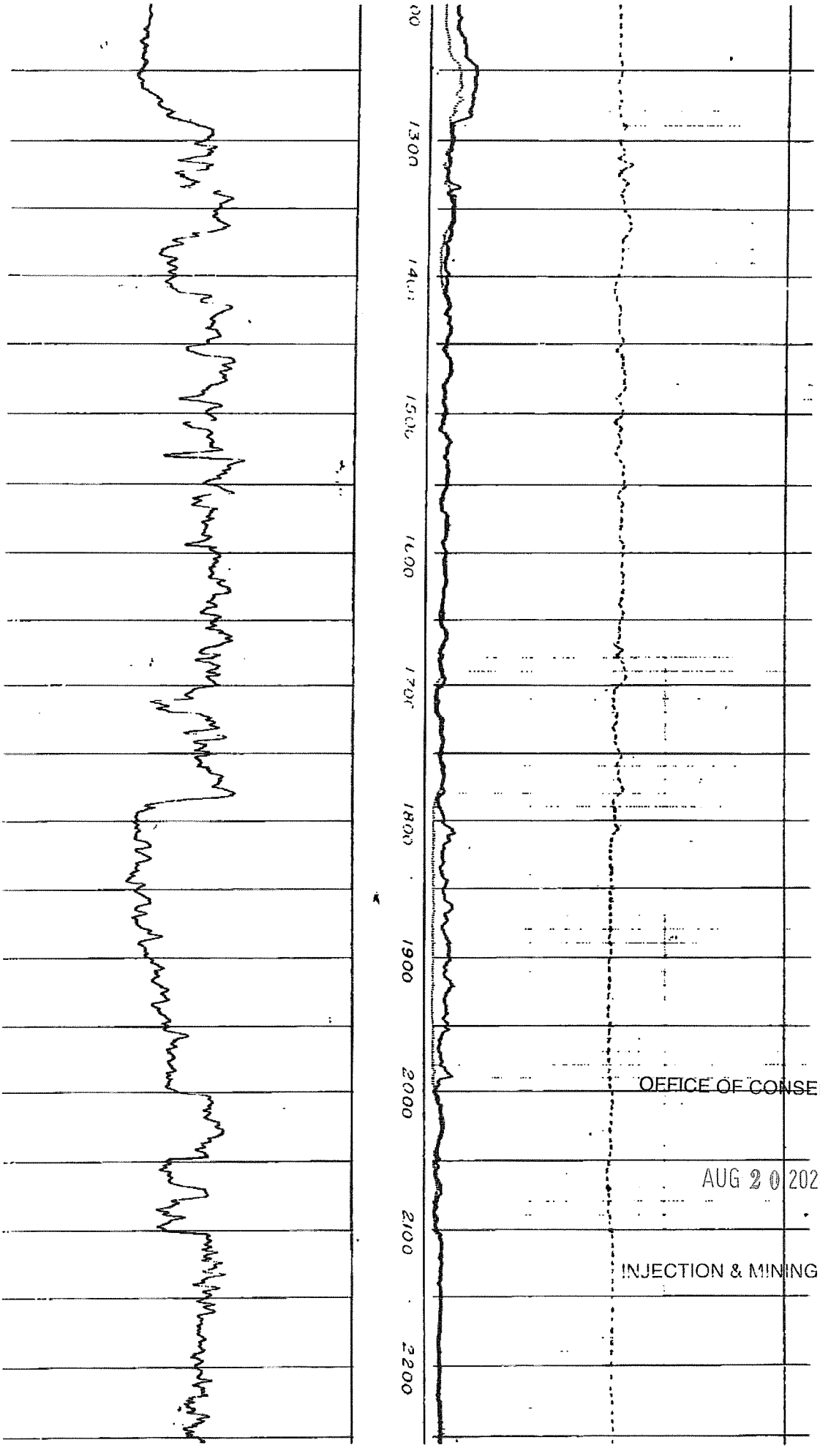

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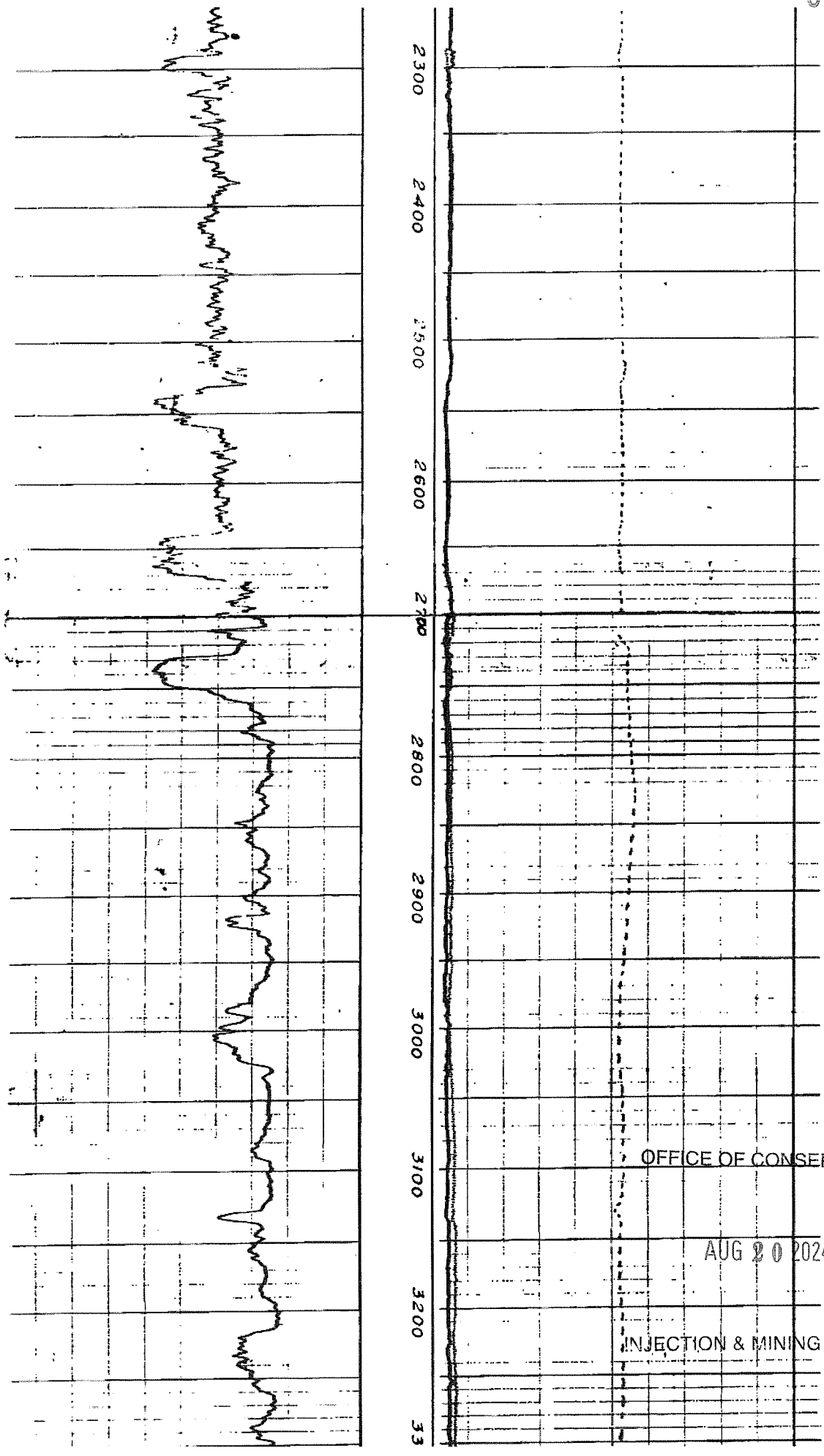

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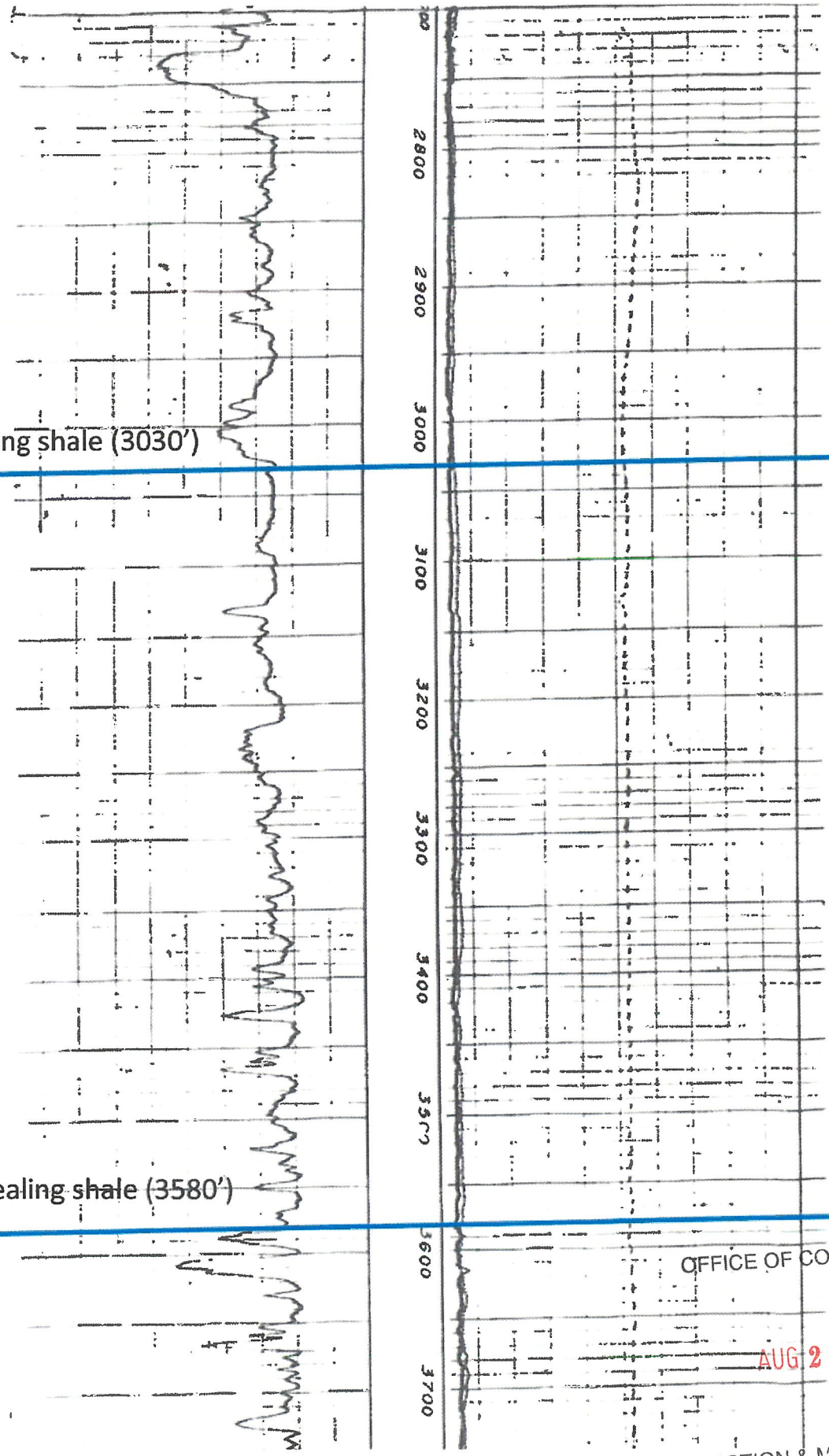

Top of sealing shale (3030')

Base of sealing shale (3580')

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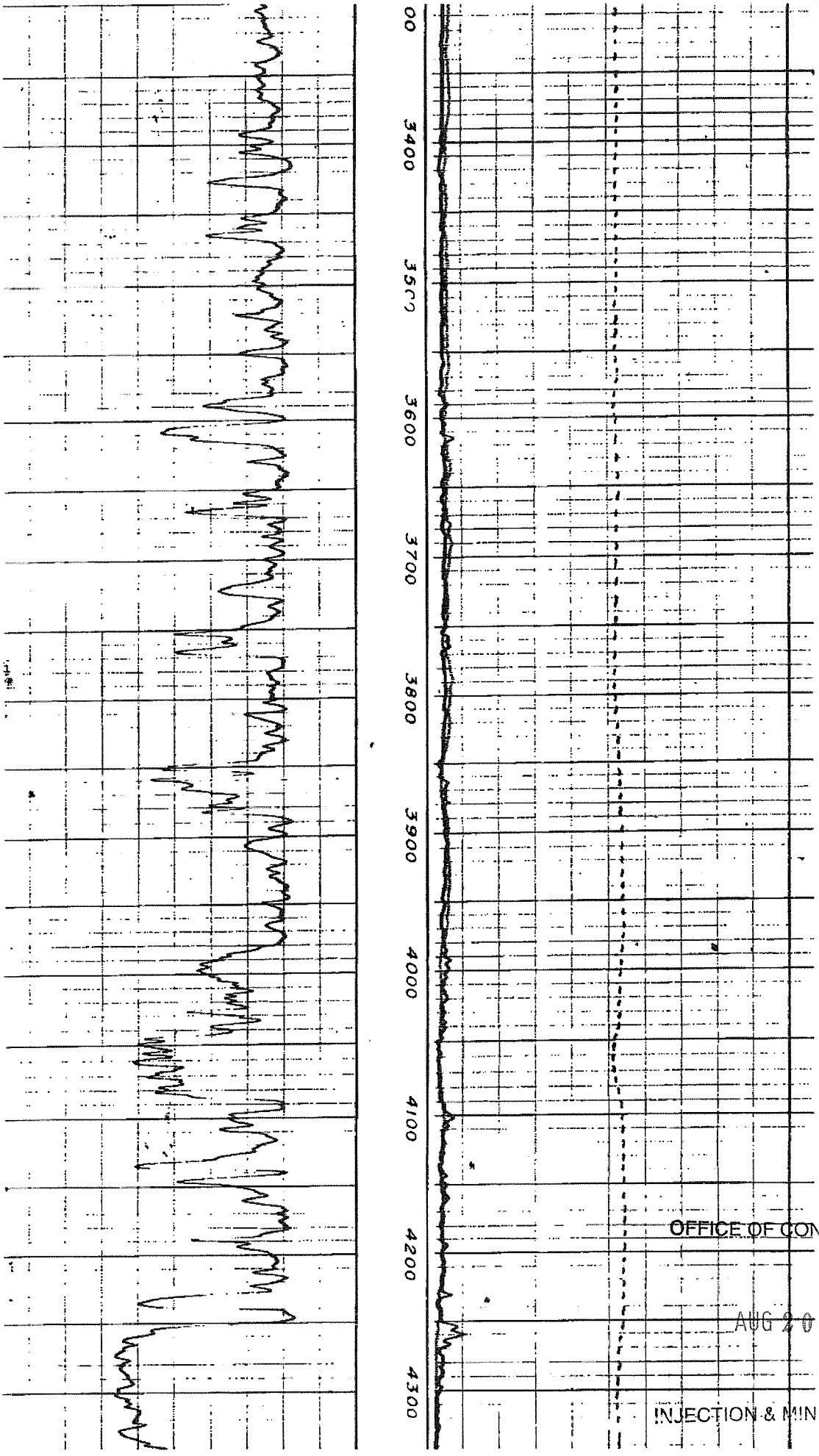

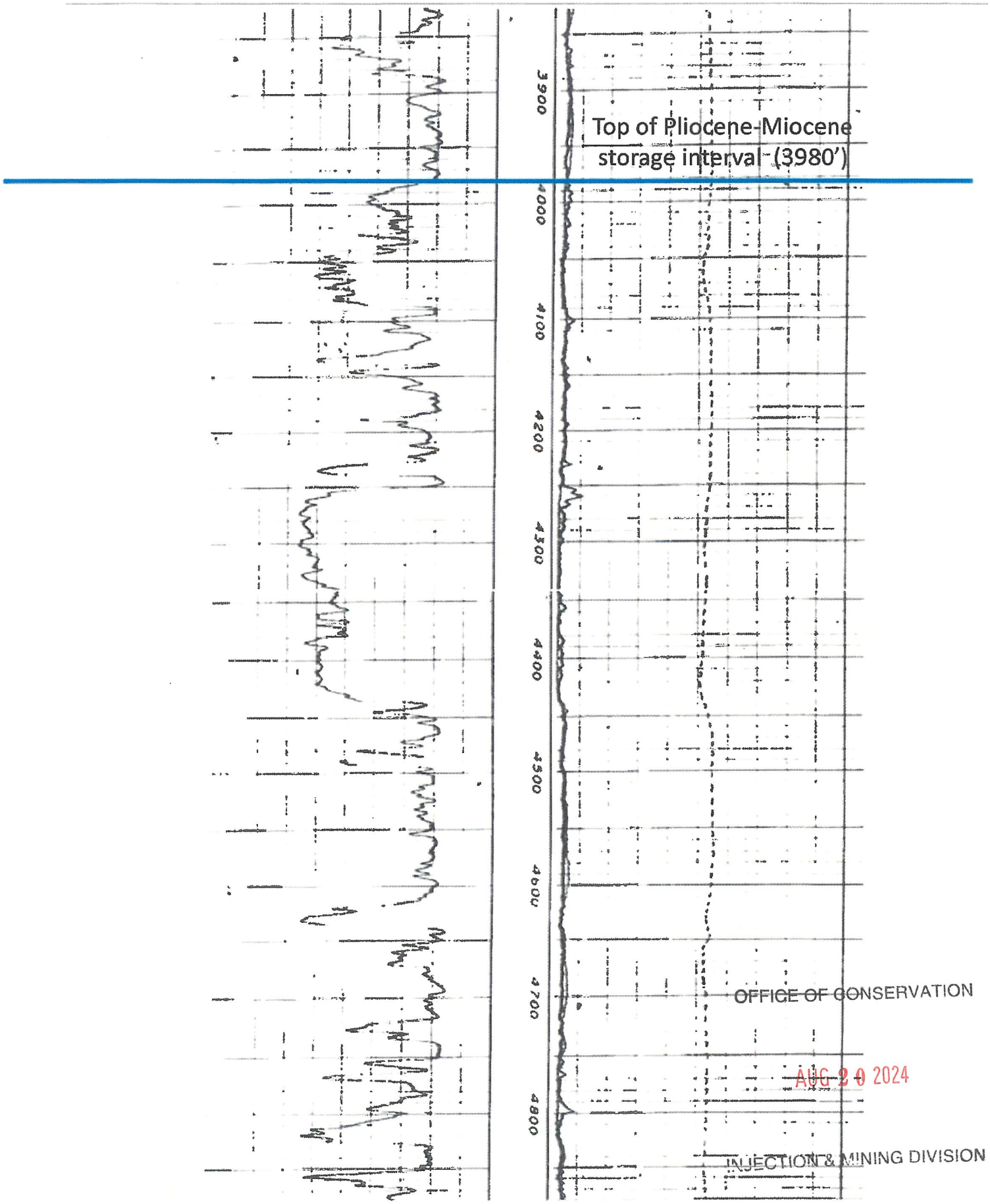

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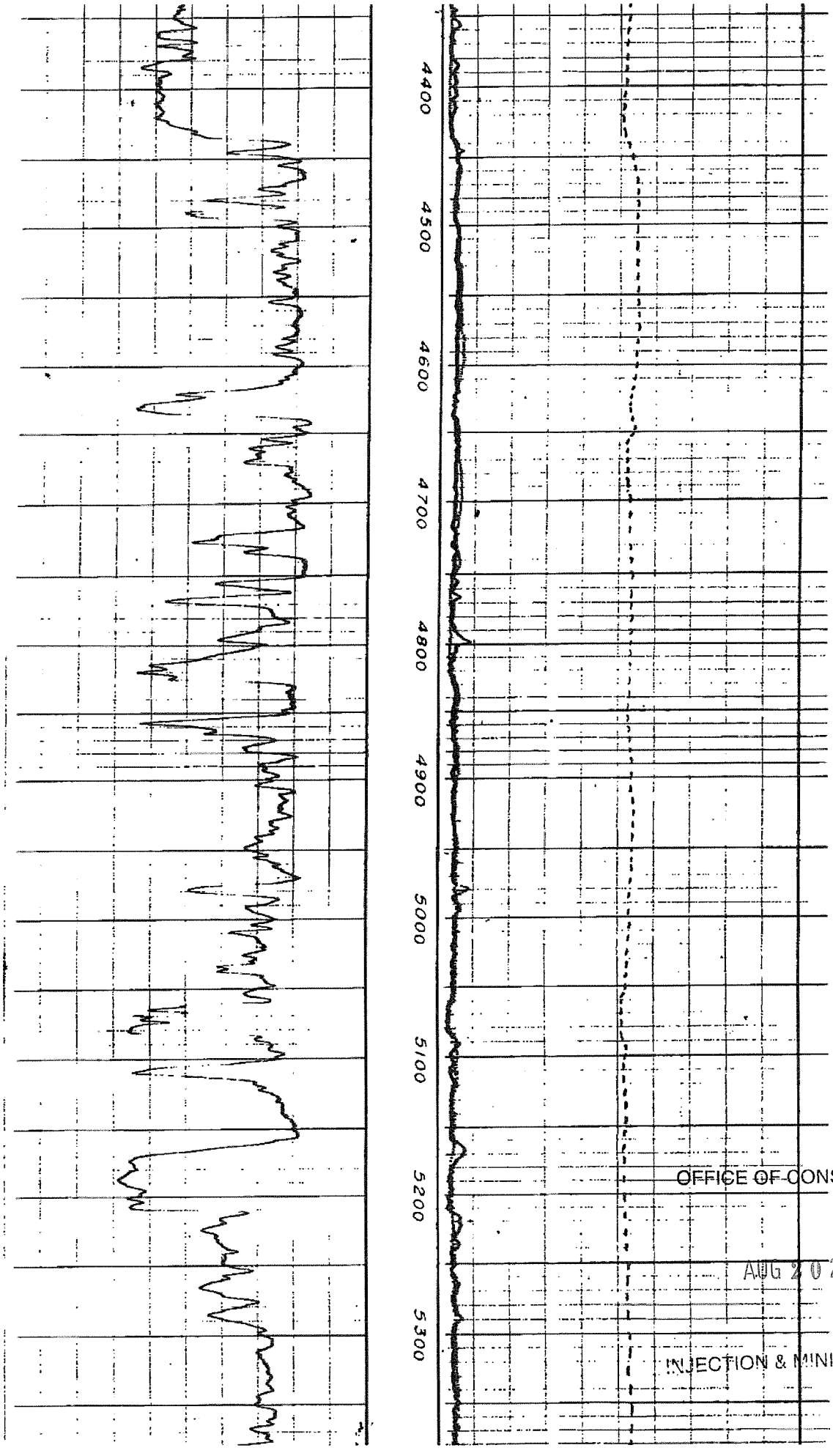

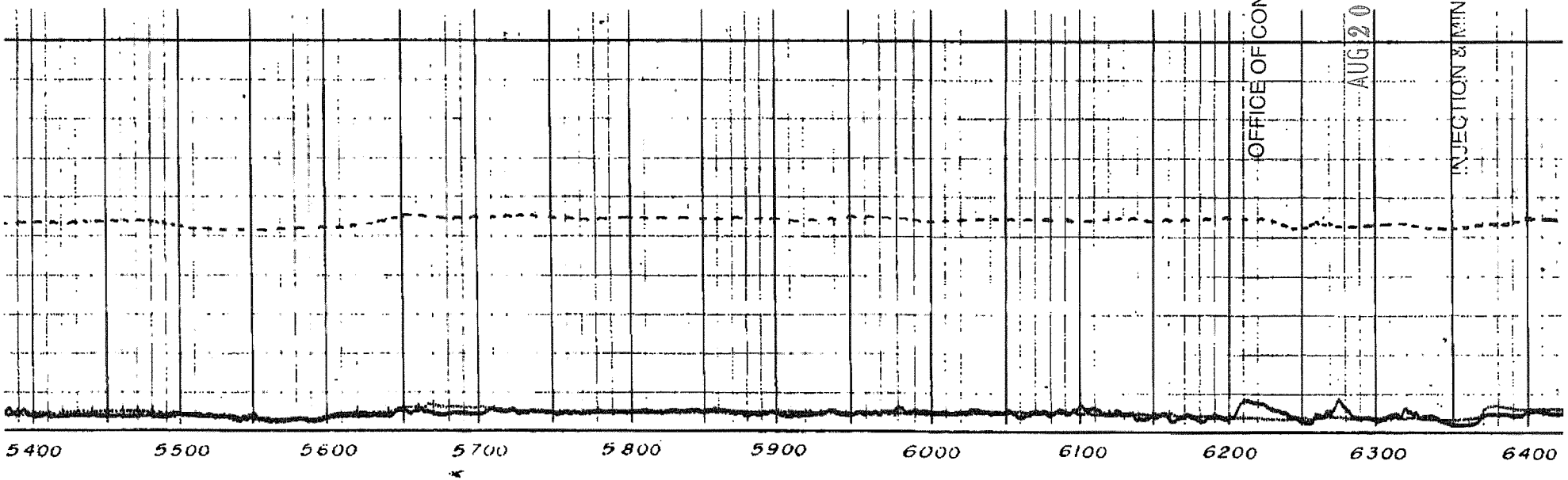

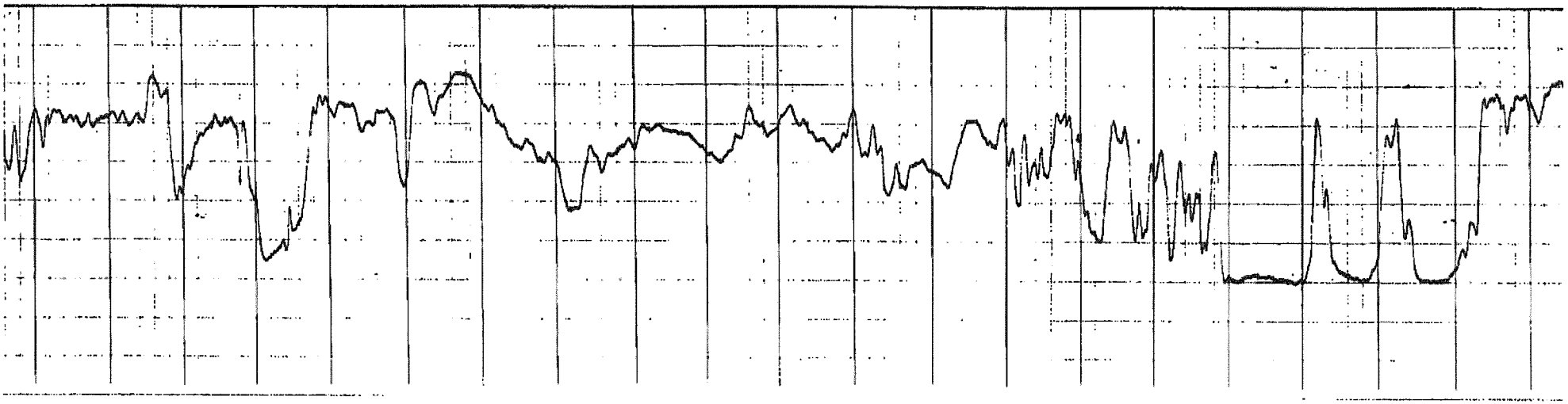

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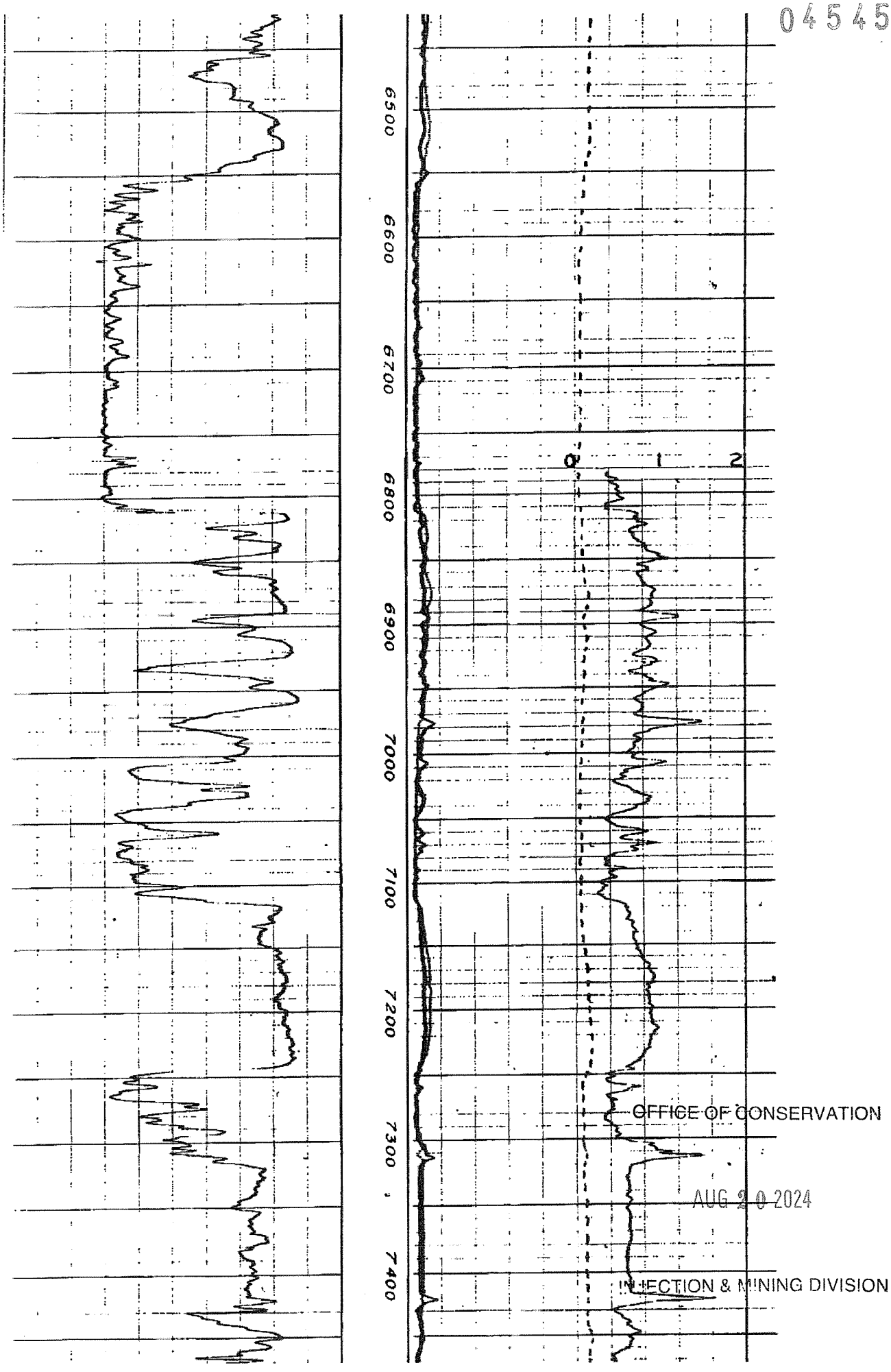

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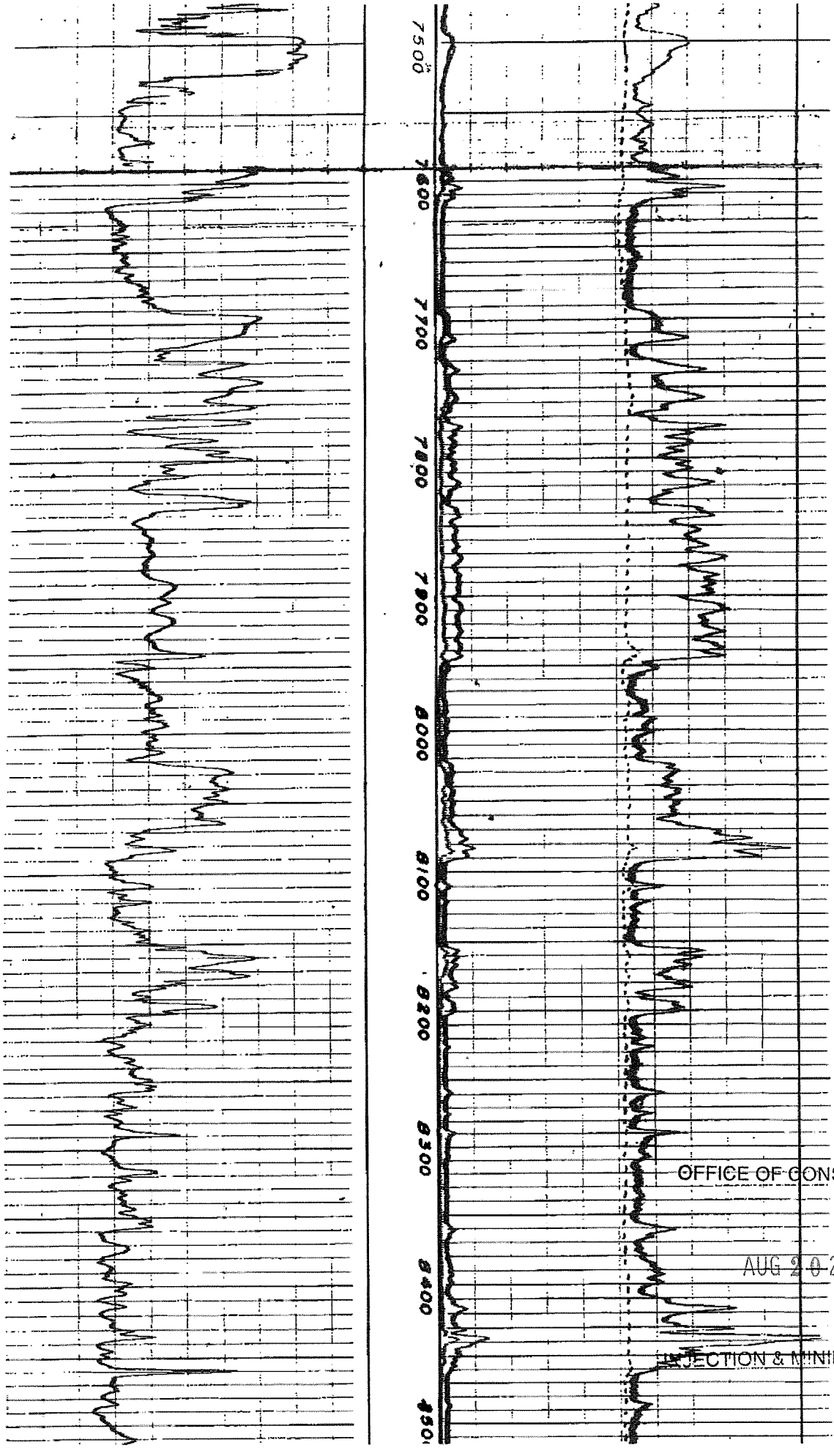

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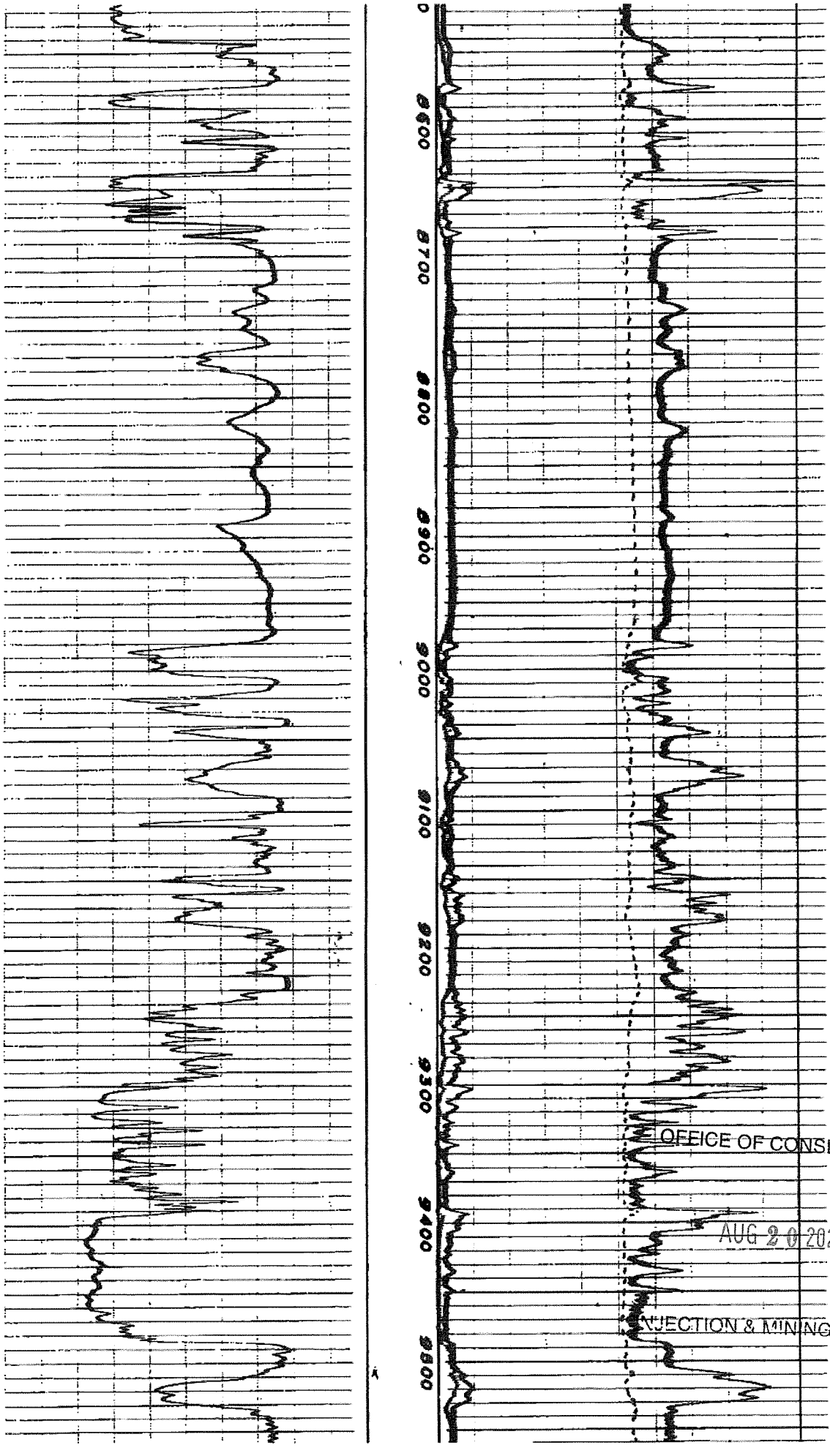

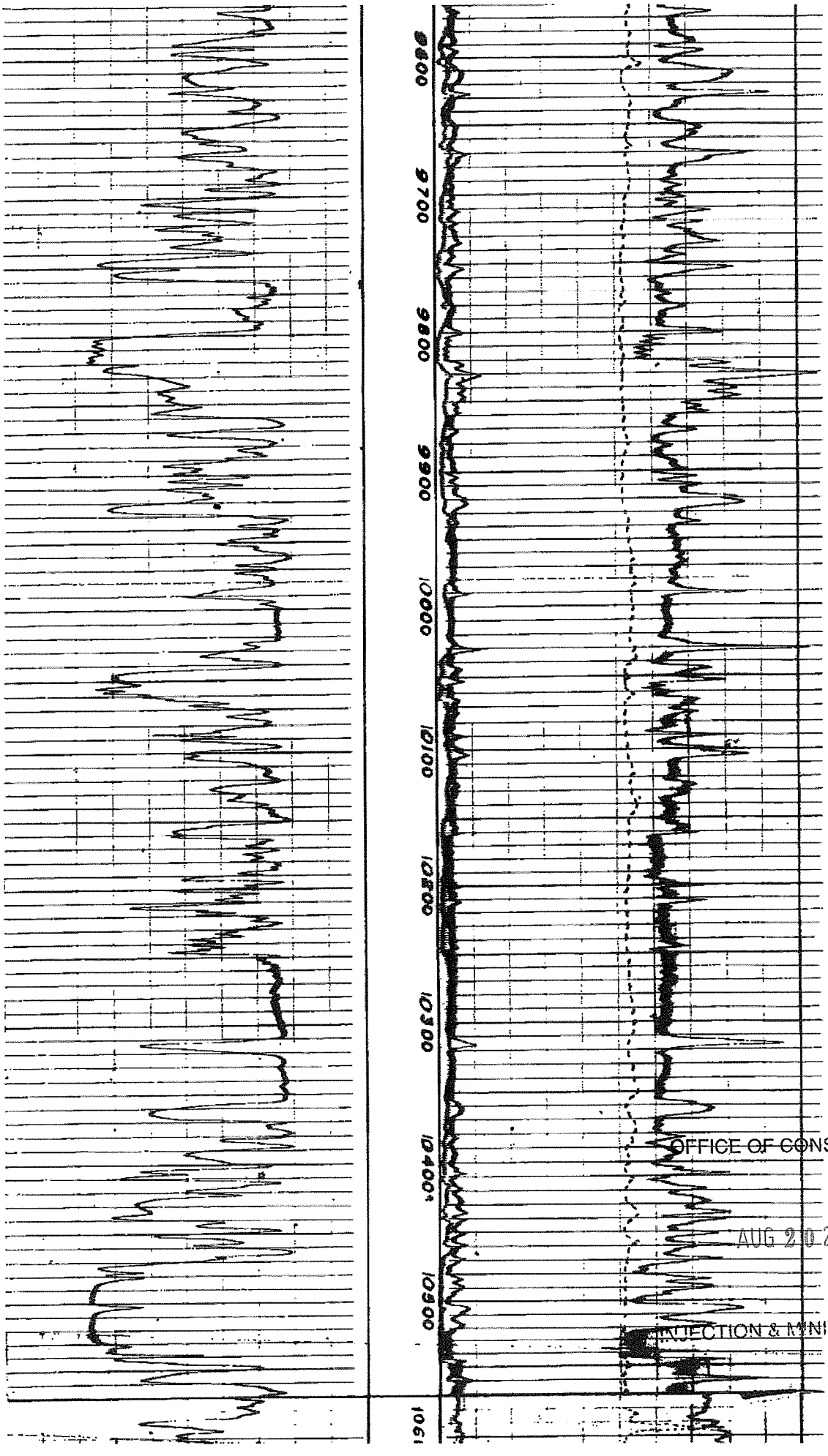

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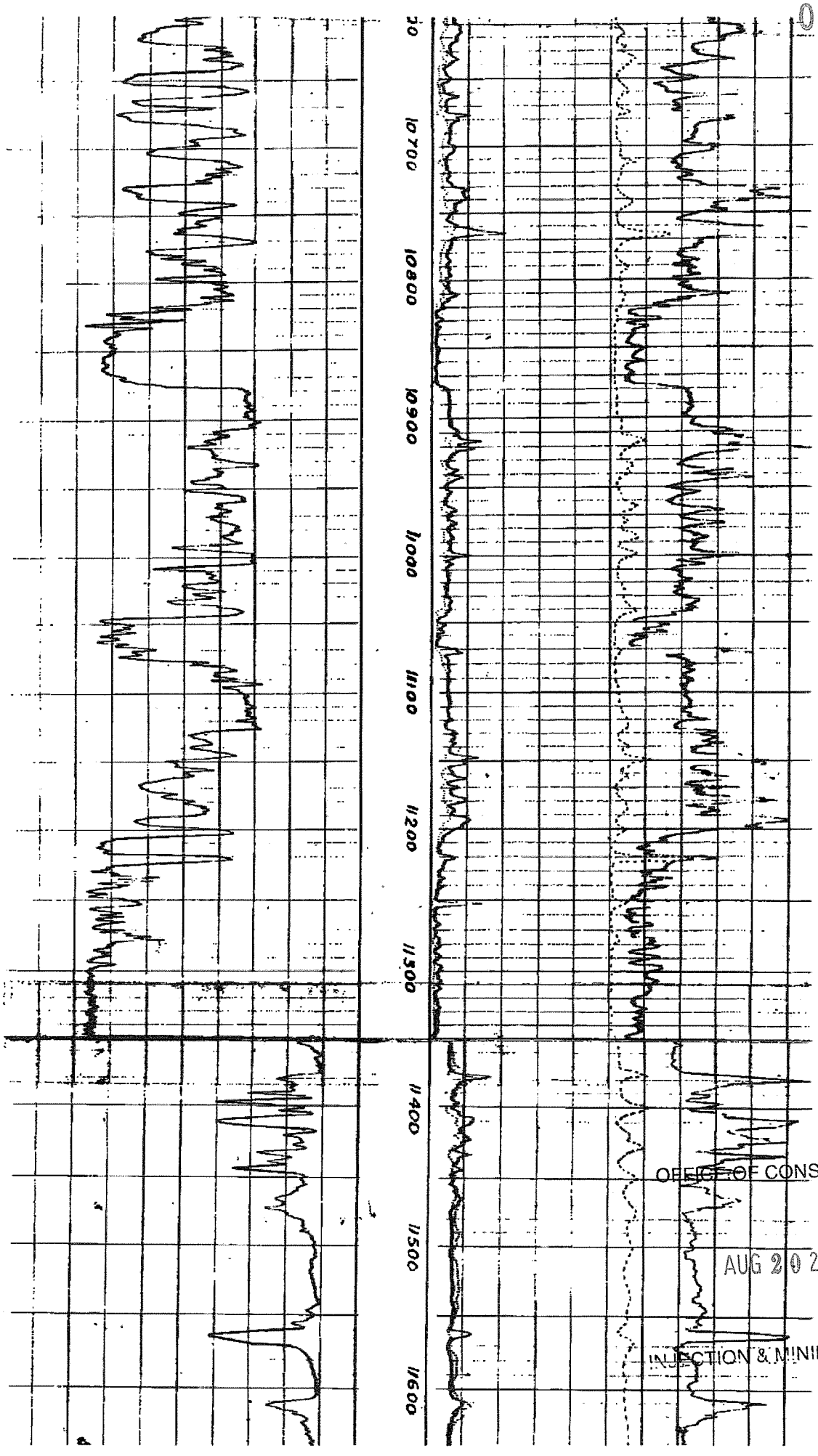

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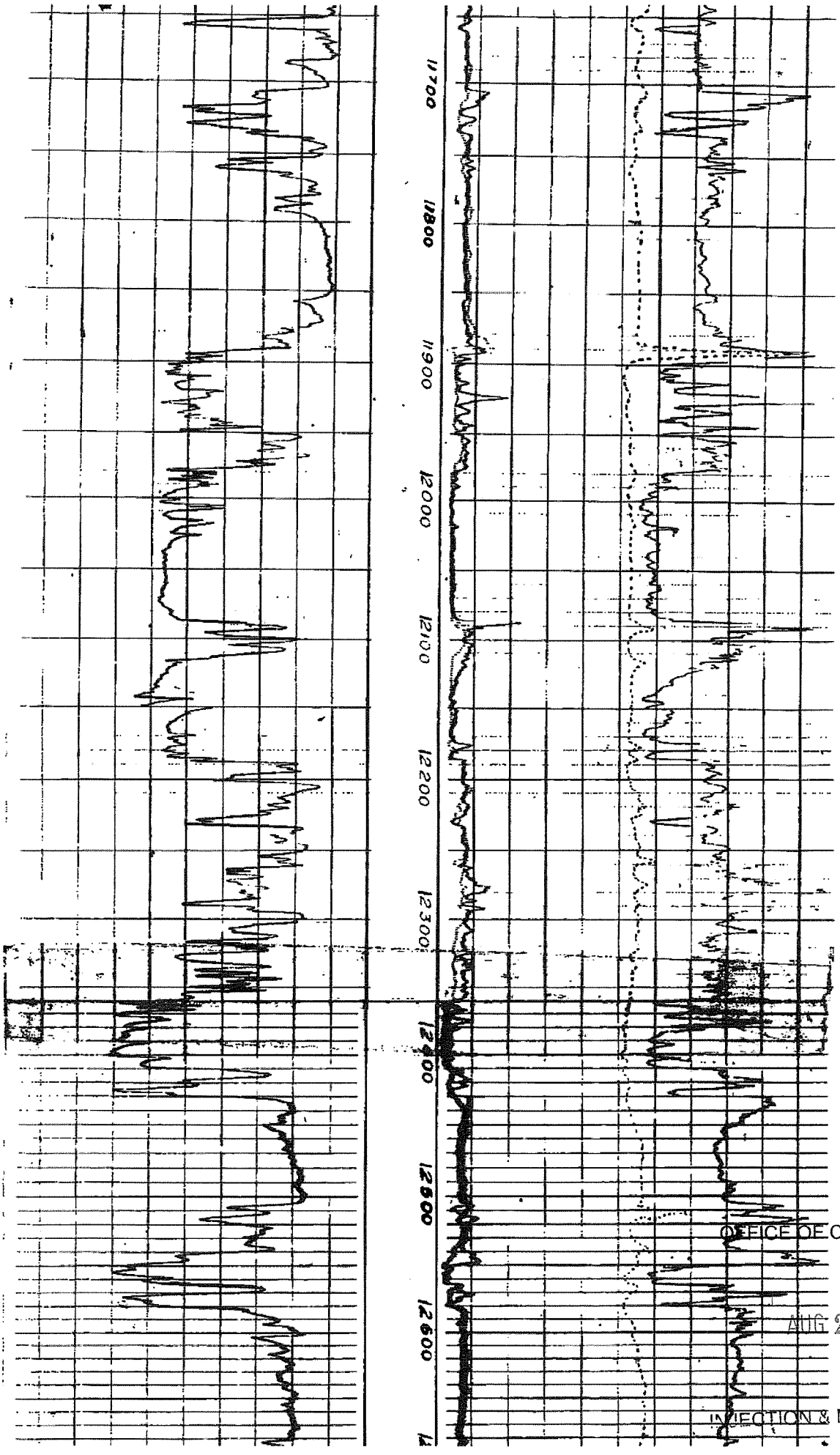

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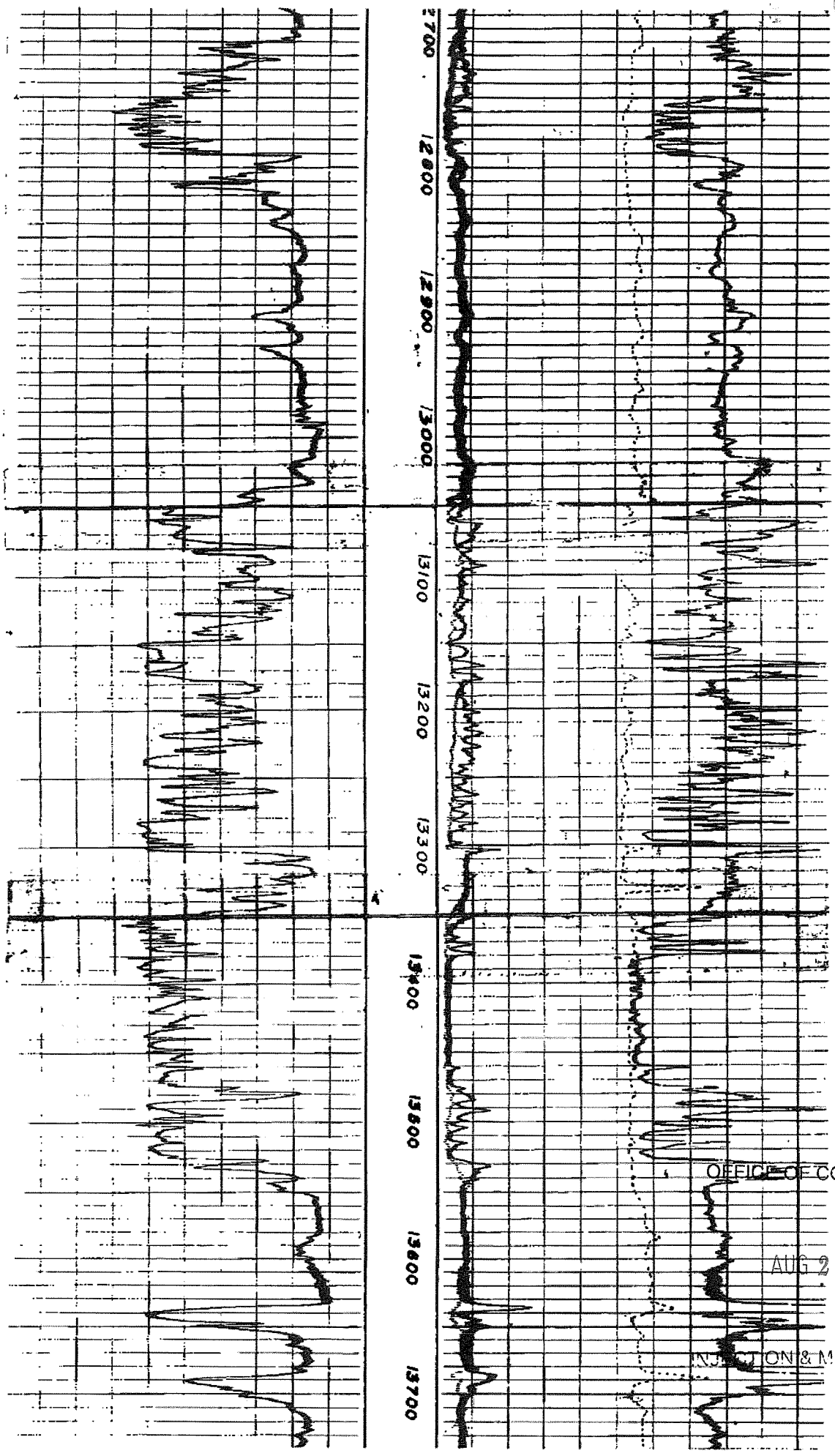

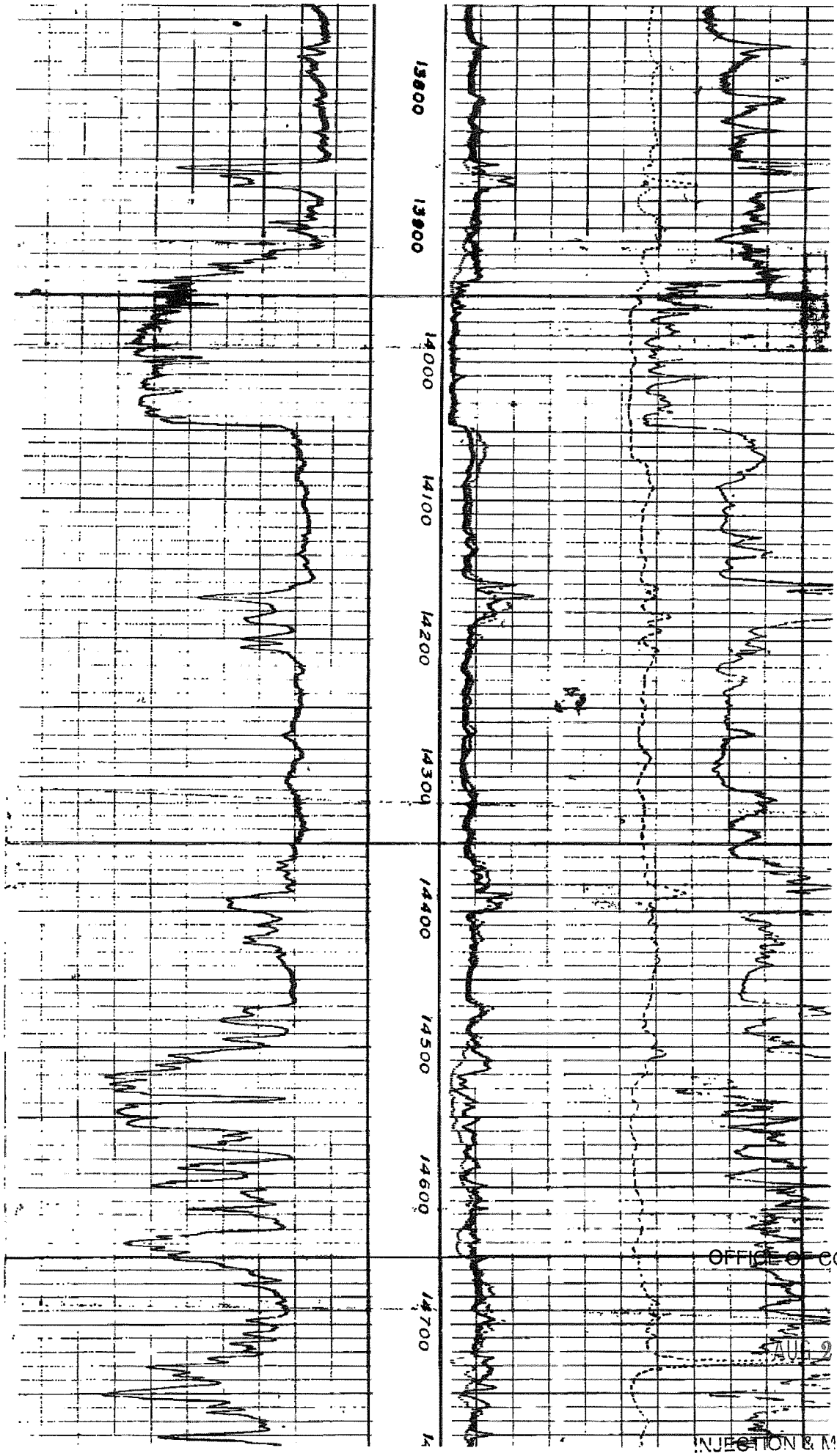

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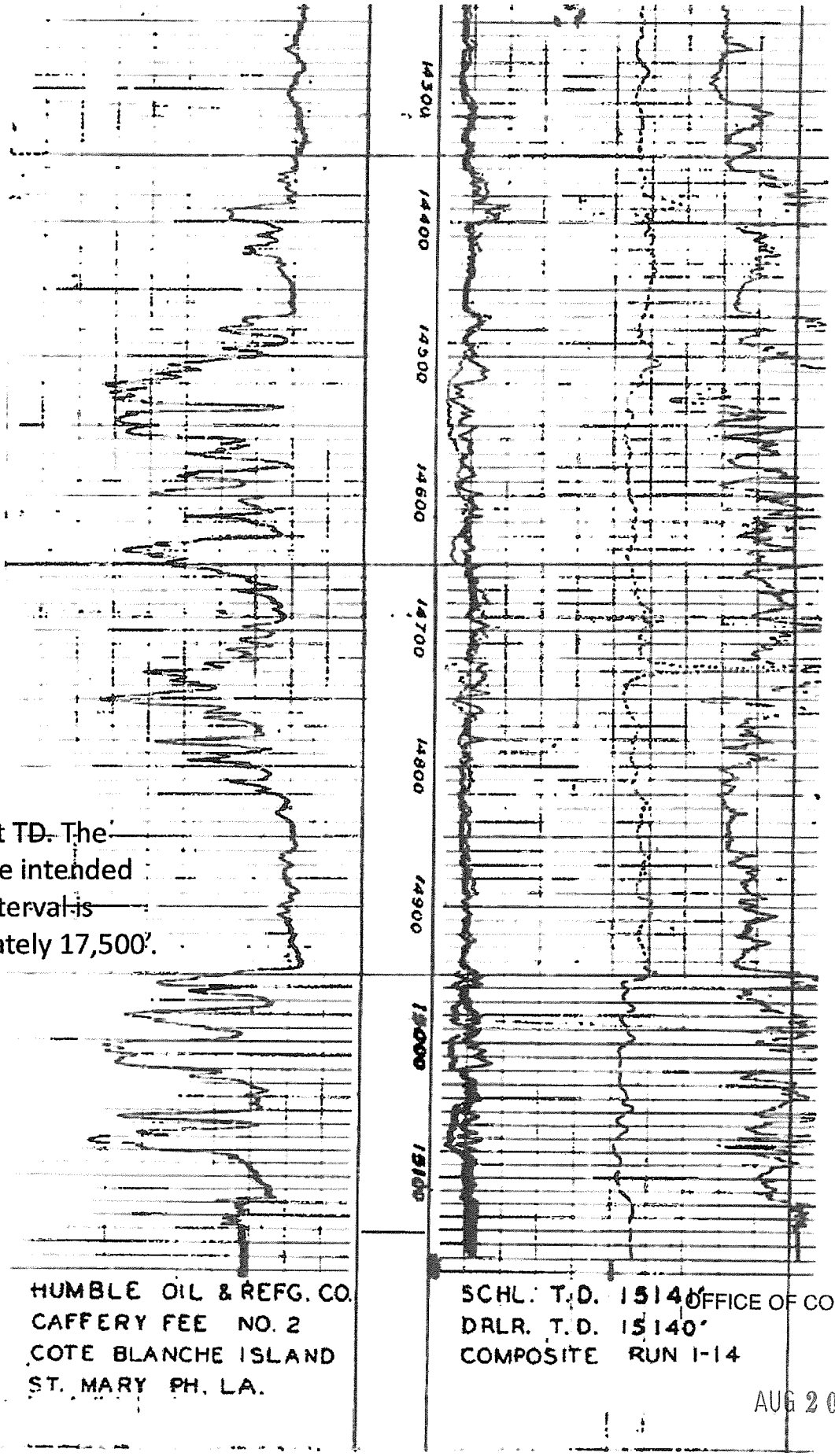

Well log at ~~TD.~~ The base of the intended storage interval is approximately 17,500'.

HUMBLE OIL & REFG. CO.
CAFFERY FEE NO. 2
COTE BLANCHE ISLAND
ST. MARY PH. LA.

SCHL. T.D. 15140'
DRLR. T.D. 15140'
COMPOSITE RUN 1-14

Part 6

WORK PROGNOSIS FOR DRILLING, COMPLETING AND TESTING THE WELL

045457

JMB Companies #1 Stratigraphic Test Well drilling procedure

1. Drive 16" x ½" conductor to refusal (~250')
2. MIRU and Spud well
3. Drill 14-1/2" hole to ~3,400'.
4. CCM and POOH
5. Run open hole logs as per Table 1. Send logs to LDNR for confirmation of USDW base depth.
6. Notify CES at least 48 hours prior to running casing test for opportunity to witness the test.
7. Make a wiper trip to CCM
8. RU and run 10-3/4" casing to hole TD, approximately 3,400'.
9. Cement 10-3/4" casing with cement returns to surface per Table 2
10. Install wellhead
11. NU BOP and test same
12. Run cased hole logs per Table 1 (Can only log down to top of shoe track)
13. PU 9-7/8" BHA and TIH with same.
14. Test casing. Submit CSG-T affidavit to LDNR. See step 6, CES must be notified 48 hours prior to testing.
15. Drill out shoe and 10' formation. Get shoe test.
16. Core 60' of formation from 3410' (starting depth for core 1, Table 3) to 3,470' (TD core 1, Table 3). POOH and laydown core.
17. Drill 9-7/8" hole to 6100' (starting depth for core 2, Table3)
18. CBU. Establish hole is static. POOH
19. Core 60' of formation to 6160' (TD core 2, Table 3). POOH and laydown core.
20. PU 9-7/8" BHA and TIH. Drill to 8300' (starting depth for core 3, Table 3)
21. Core 30' of formation to 8330' (TD core 3, Table 3). POOH and laydown core.
22. PU 9-7/8" BHA and TIH. Drill to 13,400' TD (starting depth for core 4, Table 3)
23. Core 30' of formation to 13,430' (TD core 4, Table 3). POOH and laydown core.
24. PU 9-7/8" BHA and TIH. Drill to 16,940' TD (starting depth for core 5, Table 3)
25. Core 30' of formation to 16970' (TD core 5, Table 3). POOH and laydown core.
26. PU 9-7/8" BHA and TIH. Drill to 17,500' TD
27. C&C mud for logging and testing. POOH.
28. Run open hole logs and testing per Table 1. Perform clean out trips as necessary between logging runs.
29. C&C 12.5 ppg KWM mud to plug back at base of surface casing and TA wellbore.
30. Finish plugging back to surface casing per state requirements.
31. RD MOL
32. Restore location as required.

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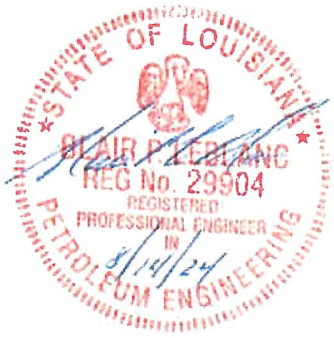

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Table 1 Logging Program

Section	Type	Depth
14-1/2" hole to surface casing depth (3400')	Open hole: Induction resistivity Density Neutron Dipole sonic Gamma ray SP CBL (cased hole)	 Drive pipe depth – 3400' Drive pipe depth – 3400' Drive pipe depth – 3400' Drive pipe depth – 3400' Drive pipe depth – 3400' Drive pipe depth – 3400' Drive pipe depth – Top of Shoe Track
9-7/8" hole to TD (17,500')	Open hole: Induction resistivity Density Neutron Dipole sonic Spectral GR Resistivity-Ultrasonic imaging CMR/NMR Elemental (TBD based on logging results) SWC (TBD pending whole core recovery) Formation tester-samples Formation tester-pressures Injection/Falloff testing program, TBD	3400' – TD 3400' – TD 3400' – TD 3400' – TD 3400' – TD 3400' – TD 3400' – TD 3400' – TD 3400' – TD TBD 4 Max 10 Max

Table 2 Cementing Plan

Hole size	Casing Size	Casing weight	Casing Grade	Casing Depths		Cement Volume	Yield	Excess	Cement type	Est. Cement top
in	in	lb/ft		Top, ft	Bottom, ft	Sacks	cu ft/sk	%		ft
16	16x 1/2"	Conductor		0	~250'	Driven	N/A	N/A	N/A	Driven
14-1/2"	10-3/4"	45.5#	J55 BTC	0	3,400'	Lead:1340 Tail: 440	2.24 1.18	100 100	35/65 Poz A A	Surface

Table 3 Coring Program

Core Number	Formation	Lithology	Core Interval, ft	Barrel Lengths, ft	Start Depth, ft	End Depth, ft
1	Pliocene-Miocene	Shale	60	60	3410	3470
2	Miocene	Sand	60	60	6100	6160
3	Miocene	Sand	30	30	8300	8330
4	Miocene	Sand	30	30	13400	13430
5	Miocene	Sand	30	30	16940	16970

Table 4 Temporary Abandonment Cementing Plan

Plug Information	Plug #1	Plug #2	Plug #3	Plug #4
Hole Diameter (inches)	9.875	9.875	9.875	9.875-9.95
Depth of plug	16,700'-17,000	13,000'-13,300'	8,500'-8,800'	3,300'-3,500'
Sacks of cement	120	155	155	100
Slurry volume pumped (ft^3)	187	183	183	118
Slurry Weight (ppg)	15.6	15.6	15.6	16.4
Type of Cement	Class H + 35% Silica Flour + 0.05 gps CD-33L + 0.13 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.06 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.03 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.01 gps PCFP-90L
Method of Placement	Balanced	Balanced	Balanced	Retainer

Table 5 Cost Estimate Abandonment Cementing Plan (Full plugging& abandonment)

Plug Information	Plug #1	Plug #2	Plug #3	Plug #4	Plug #5	Plug #6
Hole Diameter (inches)	9.875	9.875	9.875	9.875-9.95	9.95	9.95
Depth of plug	16,700'-17,000	13,000'-13,300'	8,500'-8,800'	3,300'-3,500'	822'-1022'	25'-125'
Sacks of cement	120	155	155	100	115	58
Slurry volume pumped (ft^3)	187	183	183	118	123	63
Slurry Weight (ppg)	15.6	15.6	15.6	16.4	16.4	16.4
Type of Cement	Class H + 35% Silica Flour + 0.05 gps CD-33L + 0.13 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.06 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.03 gps PCR-200L + 0.01 gps PCFP-90L	Class H + 0.01 gps PCFP-90L	Class H + 2% CaCl + 0.01 gps PCFP-90L	Class H + 2% CaCl + 0.01 gps PCFP-90L
Method of Placement	Balanced	Balanced	Balanced	Retainer	Balanced	Balanced

Part 7

PROPOSED WELLBORE SCHEMATIC

045457

PROPOSED WELLBORE DIAGRAM

WELL: JMB Companies 8 No.1
WELL TYPE: Stratigraphic Test Well
OPERATOR: Onstream CO_2, LLC
FIELD: Wildcat-SO-LA Lafeyette Dist.
PARISH: St. Mary
STATE: LA

CASTEX

Location: (NAD 27)
Surface X: 1,873,954.50
Surafec Y: 405,436.86
SECTION: 8
TOWNSHIP: 14S
RANGE: 7E
GL ELE: 2 ft

(Drawing not to scale)

GEOLOGIC INFORMATION		DESCRIPTION
		16", 65 lb/ft, H-40, Welded and driven to refusal at ±250'
	14½" Hole	9.5 ppg WBM
	USDW (~922')	
		FIT = 13 ppg EMW
		10¾", 45.5 lb/ft, J-55, BTC set at ± 3,400'
	Core Pliocene-Miocene Sands f/ ±3,410'-3,470' (60')	Lead - 1340 sx Light Weight 12.0 ppg , yield 2.24 ft^3/sk + additives Tail - 440 sx 15.6 ppg, yield 1.18 ft^3/sk cement + additives
	Core Miocene Sand f/ ±6,100'-6,160' (60')	
	9⅞" Hole to TD	12.5 ppg OBM
	Core Miocene Sand f/ ±8,300'- 8,330' (60')	
Upper Miocene Sands		
	Core Miocene Sand f/ ±13,400'-13,430' (60')	
	(Intervals of sidewall cores)-TBD (based on Whole Core recovery)	
	Core Miocene Sand f/ ±16,940'-16,970' (60')	
	BHT: 250 F.	TD: ± 17,500'

STATE OF LOUISIANA
2/28/2025
JOEL RICHARD WARNEKE PH.D
License No. 40673
PROFESSIONAL ENGINEER
IN
ENGINEERING

OFFICE OF CONSERVATION

MAR 03 2025

INJECTION & MINING DIVISION

Part 7a

PROPOSED CASINGHEAD SCHEMATIC

045457 045457

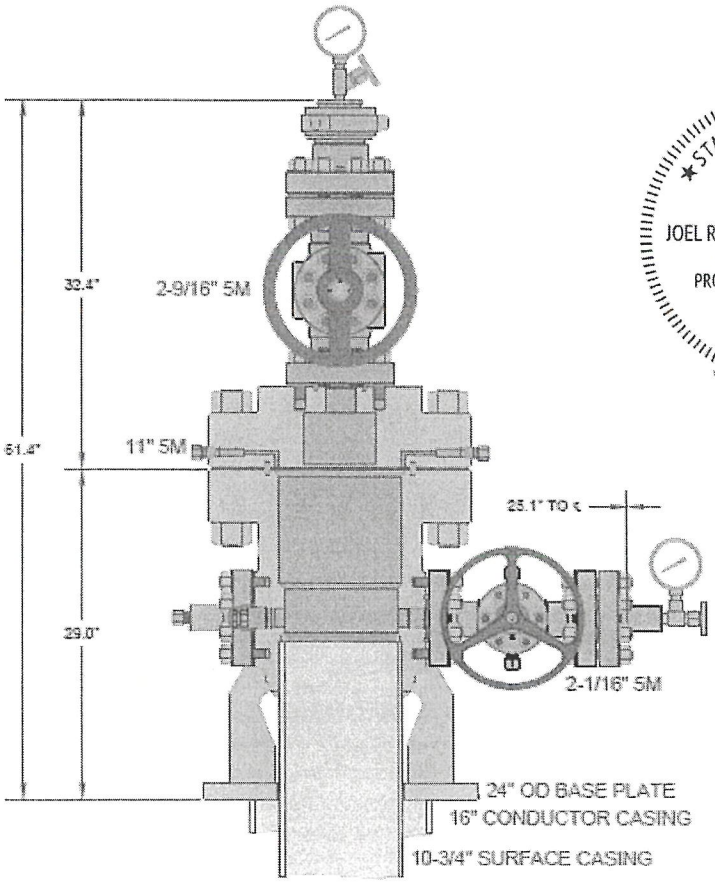
PROPOSED WELLHEAD DIAGRAM

WELL: JMB Companies 8 No.1
WELL TYPE: Stratigraphic Test Well
OPERATOR: Onstream CO_2, LLC
FIELD: Wildcat-SO-LA Lafeyette Dist.
PARISH: St. Mary
STATE: LA

CASTEX

Location: (NAD 27)
Surface X: 1,873,954.50
Surafec Y: 405,436.86
SECTION: 8
TOWNSHIP: 14S
RANGE: 7E
GL ELE: 2 ft

(Drawing not to scale)



STATE OF LOUISIANA
2/28/2025
JOEL RICHARD WARNEKE PH.D
License No. 40673
PROFESSIONAL ENGINEER
IN
ENGINEERING

16 X 10-3/4 5M CONVENTIONAL WELLHEAD ASSY WITH A5PEN ADAPTER AND 2-9/16 5M DRY HOLE TREE

Well JMB COMPANIES 8 No. 1

DRAWN BY:	DO
REVIEWED BY:	JW
APPROVED BY:	JW
DATE:	2/28/2025

ALL DIMENSIONS ARE APPROXIMATE AND NOT FOR MANUFACTURING USE

OFFICE OF CONSERVATION

MAR 03 2025

INJECTION & MINING DIVISION

Part 8

FINANCIAL SECURITY REQUIREMENTS

- Plugging and abandonment Procedure
- Proposed wellbore schematic
- Third party estimate

JMB Companies 8 #1 High-level P&A Procedure

(Detailed procedure will conform with specific State of Louisiana requirements prior to plugging.)

Our intent is to drill the proposed well, acquire the required data, and temporarily abandon the well so that we may determine if the well has future utility in a CO2 sequestration project. In temporarily abandoning the well we will set plugs as required by regulators in the open hole section and a plug at surface casing depth. In this procedure we assume that three open hole plugs will be needed. We recognize that the actual required number of plugs and plug lengths could change based on regulatory or hole conditions at the time of plugging. For temporary abandonment we will also set, as our top plug, an in/out plug at surface casing depth and leave the wellbore with kill weight mud and a dry hole tree.

If, after analysis of the acquired data we determine the well has no future utility, we will return to the well, C&C mud from plug-back TD to surface, set a USDW plug, set surface plugs, cut surface casing below ground level and weld a cover plate on the remaining surface casing.

In part, the stratigraphic test well (test well) location was chosen for its uncomplicated subsurface geology. In this area, the test well is downdip from known production in the area and we do not expect hydrocarbon accumulations at the test well location. Additionally, production in the area is known to be pressure supported by saline aquifers and there are no known EOR projects using water injection to support oil or gas production.

If we do not use this wellbore, then we will have determined that a CO2 sequestration project in this area isn't feasible and there is no need for corrosion-resistant material for plugs. If we determine the wellbore can be used as an observation well, then we will design a wellbore that meets standards for a Class VI CO2 sequestration project and include this in the Class VI Application to Construct. No changes will be made to the wellbore from a temporarily abandoned state without appropriate regulatory approvals.

High-level plugging procedure:

1. Notification of the intent to plug shall be given to the Louisiana DENR Injection and Mining Division in writing via Form UIC-17 prior to performing any P&A work.
2. Ensure that the wellbore is in a pressure balanced condition. C&C 10.5 ppg KWM from TD to surface. The following plugs are typical of approved plugging procedures and will be refined with procedures specifically for this well and approved by state regulatory authority prior to actual plugging.
3. Open hole plugs: 16,700'-17,000'
    a. POOH to 17,000'
    b. Mix and pump 120 sacks 15.6 ppg cement plug.
    c. Spot a 300' open hole plug.

045457

4. 13,000-13,300'
    a. POOH to 13,300'
    b. Mix and pump 155 sacks 15.6 ppg cement plug.
    c. Spot a 300' open hole plug.
5. 8,500'-8,800'
    a. POOH to 8,800'
    b. Mix and pump 155 sacks 15.6 ppg cement plug.
    c. Spot a 300' open hole plug.
6. 3,300'-3,500'
    a. POOH and PU 10.75" cement retainer.
    b. Set retainer at approximately 3,400'.
    c. Mix and pump 100 sacks 16.4 ppg cement.
    d. Squeeze 100' cement below the retainer and spot 100' cement on top of the retainer.
    e. Perform a 30 minute pressure test at 300 psi minimum on the plug.
7. NU dry hole tree and temporarily abandon. If the decision is to permanently plug and abandon without completing, then set USDW and shallower plugs as typically required. USDW plug (822'-1022')
    a. Mix and pump 115 sacks 16.4 ppg cement.
    b. Spot 200' cement plug across the USDW depth from 822' to 1022'.
8. 25'-125'
    a. POOH to 125'.
    b. Mix and pump 58 sacks 16.4 ppg cement.
    c. Spot 100' cement plug
9. Cut and pull 10.75" casing and 16" casing at least 5' below ground level.
10. Weld a steel plate with the well's Serial Number on top.

STATE OF LOUISIANA
BLAIR P LEBLANC
REG No. 29904
REGISTERED
PROFESSIONAL ENGINEER
IN
8/14/24
PETROLEUM ENGINEERING

OFFICE OF CONSERVATION

AUG 20 2024

INJECTION & MINING DIVISION

045457

PROPOSED WELLBORE DIAGRAM

WELL: JMB Companies 8 No.1
WELL TYPE: Stratigraphic Test Well
OPERATOR: Onstream CO_2 LLC
FIELD: Wildcat-SO-LA Lafeyette Dist.
PARISH: St. Mary
STATE: LA

CASTEX

Location: (NAD 27)
Surface X: 1,873,954.50
Surafec Y: 405,436.86
SECTION: 8
TOWNSHIP: 14S
RANGE: 7E
GL ELE: 2 ft

(Drawing not to scale)

Formation	Depth (GL)	GEOLOGIC INFORMATION	DESCRIPTION AND PLUGGING INFORMATION
			16", 65 lb/ft, H-40, Welded and driven to refusal at ±250'
			Cut and pull 10¾" and 16" at least 5' BML (for P&A). Spot 100' Top Plug from 25' - 125'. 58 sacks Class H + 2% CaCl + 0.01 gps PCFP-90L, 16.4 ppg, Yield 1.08.
		14½" Hole	12.5 ppg OBM
		USDW (~922')	Spot 200' Cement Plug across USDW from 822' - 1,022'. 115 sacks Class H + 2% CaCl + 0.01 gps PCFP-90L 16.4 ppg, Yield 1.07.
			12.5 ppg OBM
			FIT = 13 ppg EMW
			10¾", 45.5 lb/ft, J-55, BTC set at ± 3,400'
			Lead - 1340 sx Light Weight 12.0 ppg , yield 2.24 ft^3/sk + additives
			Tail - 440 sx 15.6 ppg, yield 1.18 ft^3/sk cement + additives
			Set Cement Retainer at ±3,500'
			Pump & Squeeze 90 sacks of Class H + 0.01 gps PCFP-90L 15.6 ppg, from 3,300-3,500' below cement retainer. Sting out and spot 10 sacks cement above cement retainer.
			12.5 ppg OBM
		9⅞" Hole to TD	
			Spot 300' Cement Plug from 8,500' - 8,800'. 155 sacks Class H + 0.03 gps PCR-200L + 0.01 gps PCFP-90L 15.6 ppg, Yield 1.18.
		Upper Miocene Sands	
			12.5 ppg OBM
			Spot 300' Cement Plug from 13,000' - 13,300'. 155 sacks Class H + 0.06 gps PCR-200L + 0.01 gps PCFP-90L 15.6 ppg, Yield 1.18.
			12.5 ppg OBM
			Spot 300' Cement Plug from 16,700' - 17,000'. 120 sacks Class H +35% Silica Flour + 0.05 gps CD-33L + 0.13 gps PCR-200L + 0.01 gps PCFP + 0.01 gps PCFP-90L 15.6 ppg, Yield 1.56
			12.5 ppg OBM
		BHT: 250 F.	TD: ± 17,500'

STATE OF LOUISIANA
JOEL RICHARD WARNEKE PH.D
License No. 40673
PROFESSIONAL ENGINEER
IN
ENGINEERING
3/13/25

OFFICE OF CONSERVATION
MAR 13 202
INJECTION AND MINING DIVISION

045457

Castex

Weeks Island Field ~ St Mary Parish
Plug & Abandonment

Shark Bayou (SN 000000)

08/09/24

24 Hour Operations
Land Work
Day Rate Cost Calculations

Line Item Pricing *(Consumables / Expendables)*

No	Item	Qty	Description	Rate	UOM	Totals
1	Plug & Abandonment Spread	9	charge(s) @	$25,235.50	/day	$ 227,120
2	**1 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**168**	**sx @**	**$30.00**	**/sack**	**$ 5,040**
3	**2 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**168**	**sx @**	**$30.00**	**/sack**	**$ 5,040**
4	**3 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**168**	**sx @**	**$30.00**	**/sack**	**$ 5,040**
5	Bit & Scraper Assy *(XO'd back to workstring)*	1	well(s) @	$2,400.00	/well	$ 2,400
	(Price shown is 'per well'. Alternate quote was $5300 per job)					
6	CICR "One-Trip" System & Technician *(3rd Party)*					
	Purchases	1	charge(s) @	$6,569.33	/each	$ 6,569
	Services	1	charge(s) @	$9,401.25	/each	$ 9,401
	Rentals	1	charge(s) @	$10,812.83	/each	$ 10,813
7	**4 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**105**	**sx @**	**$30.00**	**/sack**	**$ 3,150**
8	**5 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**105**	**sx @**	**$30.00**	**/sack**	**$ 3,150**
9	**6 ~ Cement ~ Class H** ***(in Super Sx of 21 std sx)***	**63**	**sx @**	**$30.00**	**/sack**	**$ 1,890**
10						
11	Cement Additive ~ Retarder	4	pail(s) @	$305.00	/5-gal pail	$ 1,220
12	Abrasive Cutting Charge *(10-3/4 x 16)*	1	charge(s) @	$6,180	/cut	$ 6,180
13	Abrasive Cutting ~ Equipment Differential	1	charge(s) @	$1,540	/day	$ 1,540
14						
15	Hotel Travel ~ Time *(1-hour per day per man)*	90	hr(s) @	$56.00	/ per man	$ 5,040
16	Hotel Travel ~ Mileage *(20-miles per day per crew)*	720	miles @	$3.00	/ mile	$ 2,160
17	Crew Travel ~ Time *(Round Trip per 5-man Crew)*	10	hr(s) @	$280.00	/ 5-man crew	$ 2,800
18	Crew Travel ~ Mileage *(Round Trip per 5-man crew)*	544	miles @	$3.00	/ mile	$ 1,632
19	Well Supplies	1	charge(s) @	$2,080.00	/well	$ 2,080
20	Pump Redress Charge	1	charge(s) @	$1,105.00	/well	$ 1,105
21	Environmental Charge	1	charge(s) @	$158.00	/ job	$ 158
22	Slip – Inserts for All Slips (Sale)	2	charge(s) @	$440.05	/ set	$ 880
23						
24	Mobilization/De-mobilization	1	charge(s) @	$1,560.00	/job	$ 1,560
25	Pit Monitor ~ Gas Detection	9	day(s) @	$90.00	/day	$ 810

Anticipated Summary Total ***$ 306,778***

OFFICE OF CONSERVATION

AUG 20 2024

INJECTION & MINING DIVISION