

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

OXY USA Inc.

16696

3a. Address

P.O. Box 50250, Midland, TX 79710-0250

3b. Phone No. (include area code)

432-685-5717

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SL - 2225 FSL 1210 FEL NESE(I) Sec 4 T22S R31E

BHL - 405 FSL 789 FEL SESE(P)

5. Lease Serial No.

NMNM0417696

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Lost Tank 4 #16

Federal

9. API Well No.

30-015-37957

10. Field and Pool, or Exploratory Area

Lost Tank Delaware, West

11. County or Parish, State

Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

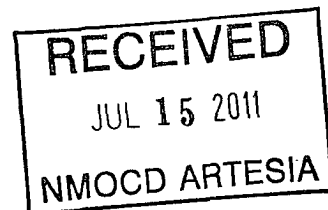
☒ Other Completion

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

See Attached

Accepted for record - NMOCD

DD 7-21-11



14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Elizabeth S. Bush-Ivie, P.E.

Title

Regulatory Team Leader

Date

5/23/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE 15 2011

Approved by

Red M. Meyer

Title

Petroleum Engineer

Office

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Lost Tank 4 Federal #16**

**OXY USA Inc**

**30-015-37957**

**July 14, 2011**

**Conditions of Approval**

**Summary of Current Status:**

- Directional Well drilled to 8942' MD (3031' TVD) Max inclination planned 35°.
- R-111P
- 11-3/4" x 8-5/8" x 5-1/2" casing strings
- 3 stage cement job on 5-1/2" casing was partially completed.
- Stage 1 indicated ok, Stage 2 no cement, Stage 3 partially cemented.
- 2<sup>nd</sup> stage DV tool not indicated closed.

**Requests:**

Oxy proposes to perforate and frac the producing intervals before conducting remedial cementing procedures.

**Conditions of Approval:**

- a) Surface disturbance not to exceed originally approved pad without prior approval.
- b) Closed Loop System to be used.
- c) After frac work is completed and the bridge plug is set at 6200' (Sundry step 10) then BLM approves remedial cement work to be completed on the well. The uncemented interval from 3943'-5994' must be repaired and the BLM must be contacted to review procedures for that purpose. Following are preliminary recommendations from the BLM for Oxy consideration:
  - One alternative is to attempt injection through the DV tool prior to closing it, or to perforate above the DV tool at an uncemented depth, and then attempt injection while determining if simultaneous returns can be received through the annulus wing valve at the surface. All alternatives should be reviewed with BLM, including use of a suicide squeeze procedure, if necessary. The use of tracers during injection tests is also an option.
  - The open sliding sleeve on the DV tool at 5994' will be closed, if this has not already been done. Casing integrity shall be verified by pressure testing according to Onshore Order #2. Should it not be possible to verify the Sliding Sleeve is closed, the BLM must be notified, and alternate procedures reviewed for restoring casing integrity at the sleeve.
  - After repairing the interval 3943'-5994', then an injectivity test can be conducted at the surface on the 8-5/8" x 5-1/2" annulus from 0' – 1260' which was not cemented during the failed 3<sup>rd</sup> stage cement job.
  - If sufficient injectivity is established, then cement will be pumped through the uncemented interval, and a full column of cement will be placed behind the 5-1/2" casing to bring the well in compliance with R-111P casing cementing guidelines. Should it not be possible to establish injectivity, the BLM must be contacted and alternate procedures reviewed for reestablishing cement from 1260' to surface.
  - Oxy is responsible to recommend verification methods for final cement evaluation.

When the remedial work is completed, a subsequent sundry is required listing all details of the completed work, and include the logs run and pressure tests conducted.

TMM 07/15/2011

Attachment 3160-5  
Lost Tank 4 Federal #16  
API No. 30-015-37957

Intent to complete & evaluate remedial cementing requirements.

In the process of cementing the production string difficulties were encountered. The DV tool at 5994' did not close and the third stage could not be pumped. The DV/ECP at 3943' is closed. CBL and USIT logs were run. Log copies and evaluation are attached.

OXY proposes to complete the producing intervals before conducting any remedial cementing.

During all stimulation activities keep 1000 psig on the tubing/casing annulus which is filled with packer fluid. Expected maximum downhole pressure 4250 psi.

1. Perforate 8118 – 8298 (20 shots total)
2. Set pkr @ 8050 on tubing. frac stage 1.
3. Set CIBP @ 8040
4. Perforate 7648 – 7932 (20 shots total) and 7274 – 7355 (20 shots total)
5. Set bottom Pkr @ 7590 and frac stage 2.
6. Set plug in bottom packer and release from same
7. Set top pkr @ 6875 and frac stage 3.
8. POH w/pkr. RIH with retrieving tool for bottom pkr. POH
9. Drill out CIBP @ 8040' and CO sand to PBTD.
10. RIH and set CIBP @ 6200'
11. Conduct remedial cementing as agreed to with BLM
12. CO to PBTD . RIH w/production equipment.



Operator: OXY USA inc.

Well Name: LOST TANK 4 #16

API # 30-015-37957

Loc: 2225' FSL & 1210' FEL

SEC 4 T22S R31E

Deviated Well

11.75" 42# H-40 w/ 1060 sx cmt to surface

680' 14 3/4" hole

Surface - 1260' - logs indicate no cement,  
TS shows TOC @ 700'

1260' - 3890' - adequate cement

3890' - 4600' - excellent cement

8.625" 32# J-55 w/ 248 sx cmt circ to surface

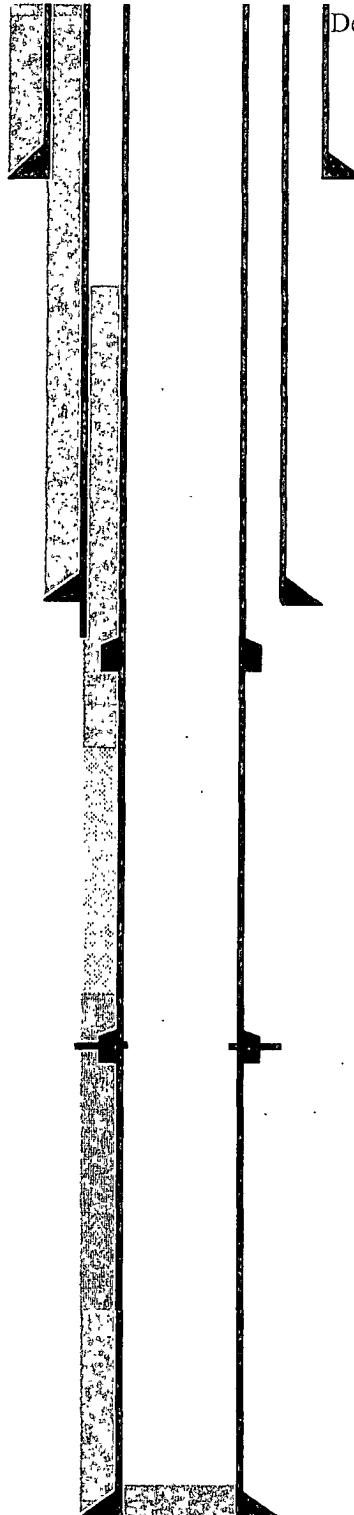
Stage 3 - unable to pump

4600' - 5700' - no or poor cement

5700 - 6800 Marginal/poor cement  
Stage 2 - 670 sx w/ no returns

Stage 1 cmt - 560 sx

5 5" 17# J-55 LTC



3915' 10 5/8" hole

DV TOOL W/ ECP @3943'  
Tool closed

DV TOOL @ 5994' Tool open

6800 - TD - good cement

PBTD: FC @ 8411'  
Csg Shoe @ 8456'

MTD 8492', TVD 8031' ∟

To: Ken Hood  
Fr: Kirk Harris  
Re: Bond Log Analysis – Lost Tank 4 # 16  
Da: January 6, 2011

Summary:

It appears that this well is adequately cemented from TD to 6800 ft with excellent bonding. Above this depth, there are various sections of the bond log that are poorly cemented or uncemented. See below.

- From 6800 ft to 5700 ft, the bonding is marginal to poor, but I believe that the interval is adequately cemented. The main evidences for this are 1) The sonic tool, the CBL, does not show heavy collar rings, and shows good formation signals, and 2) the ultrasonic tool, the USI, shows scattered amounts of cement. I do think that the centralization in this interval is poor. It appears that the casing is lying on bottom and that there is a small cement sheath next to the pipe. See Figure 1.
- From 5700 ft to 4600 ft, there is likely no cement, or very poor cement. The dark channel at the bottom of the USIT in this section is likely the casing lying against the formation. The CBL shows loud echoing collar rings and very high, consistent amplitudes. Note that the CBL also shows strong formation signals (which could be coming from the casing lying against the formation). See Figure 2.
- From 4600 to 3890, there is excellent cement bonding and adequate isolation. The DV tool can be noticed at +/- 3950. See Figure 3.
- From 3890 to 1260 ft, there is adequate cement. See Figure 4.
- The TOC is location at +/- 1260 ft. There is no cement evident in the interval above 1260 ft. See Figure 5.

Scattered sections of higher impedance values indicate that there may be some cement in this interval.

The center channel of dark impedance may actually be the casing laying on the formation. This pattern continues above 5700 ft where there is no apparent cement.

Although this blue area may be a channel, it could also simply be a small cement sheath near the low side of the casing.

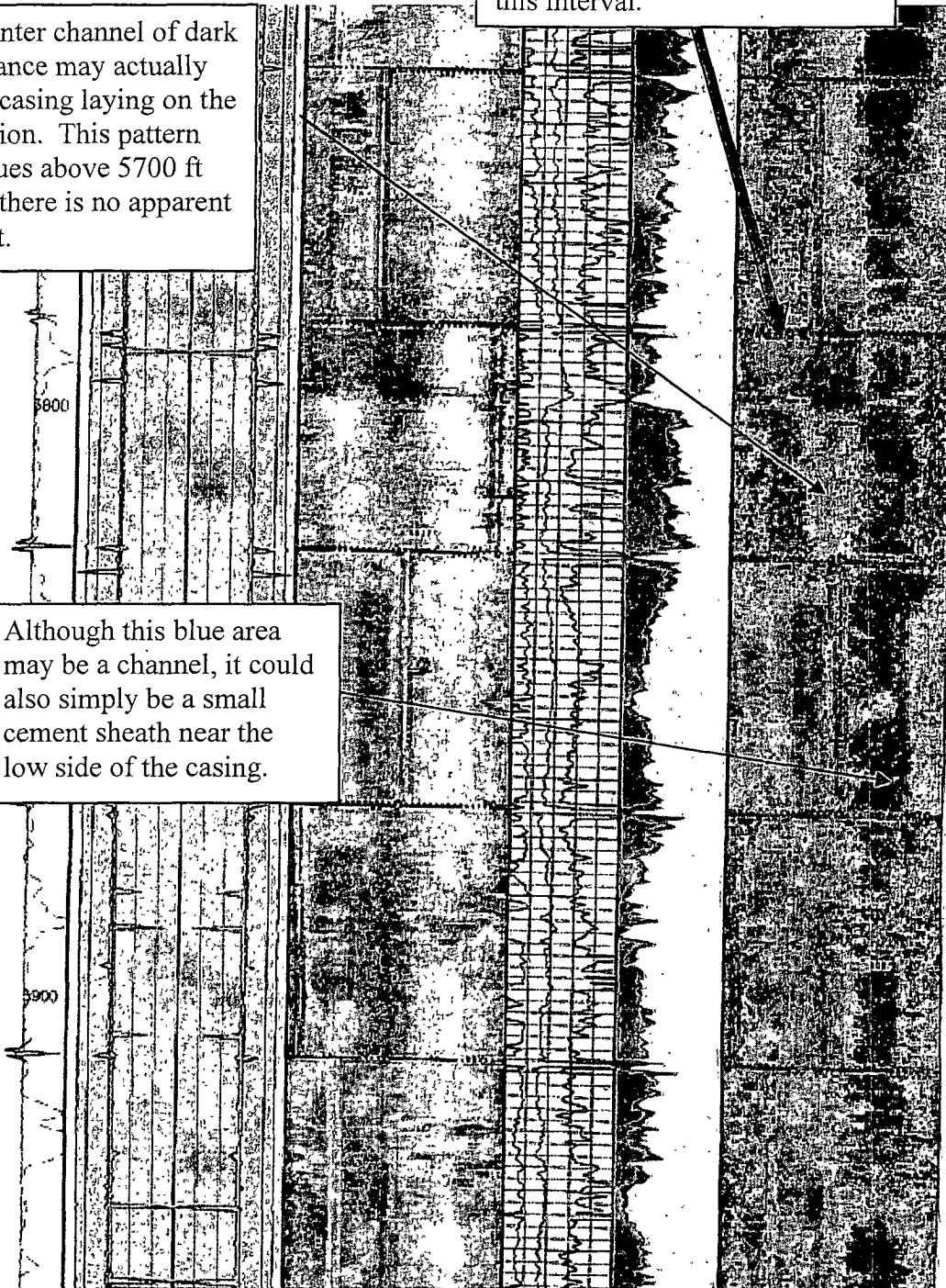


Figure 1 – Ultrasonic Imaging Log 5750 ft – 5950 ft

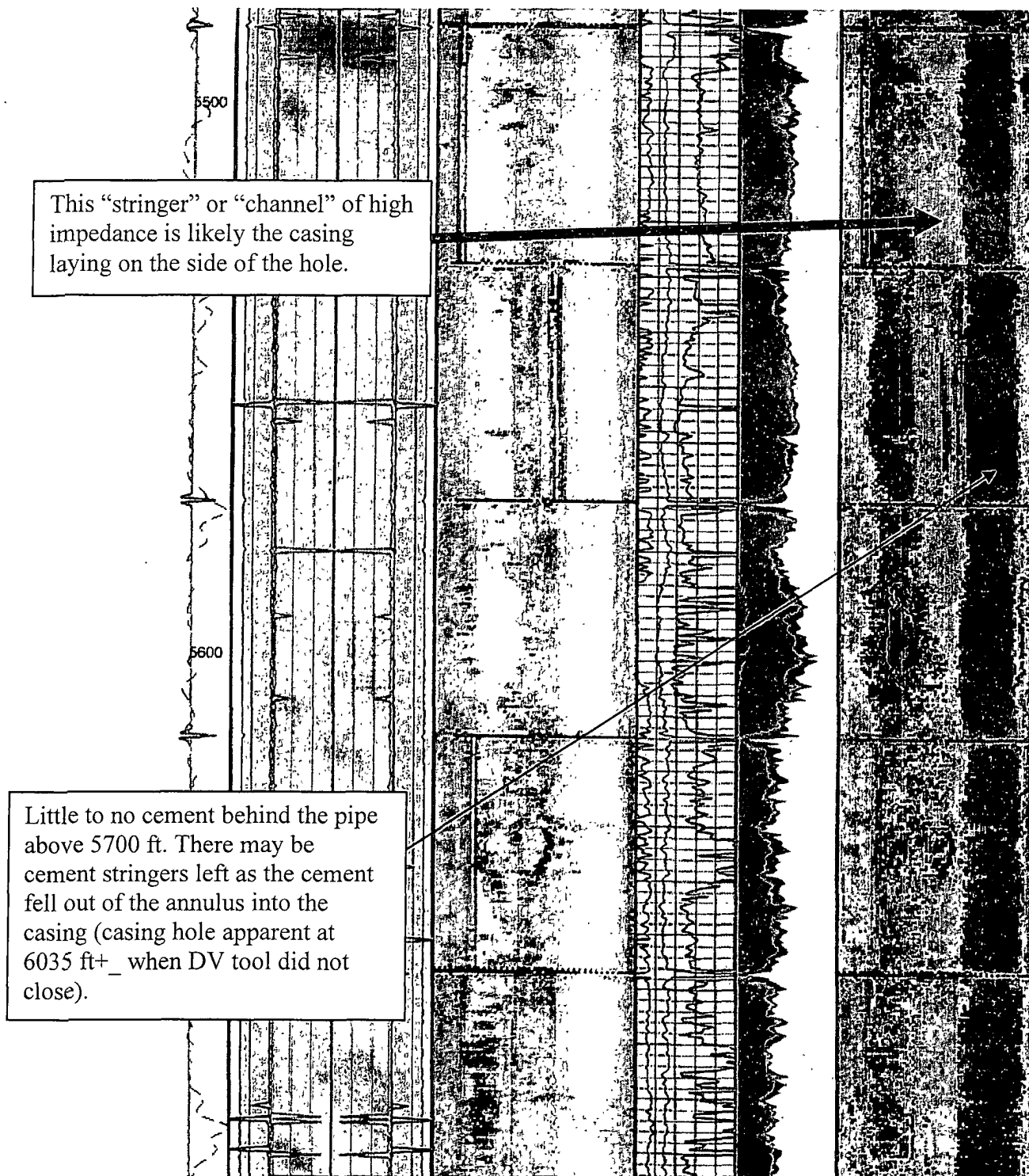


Figure 2 – Ultrasonic Log – 5500 ft – 5700 ft

Large change in impedance value and bonding at a casing collar. This usually means that the casing below (in this case) is different, old, rusty, and is bonding with the cement better than the above joints. This also means that there is probably good cement above this joint too. The bond log confirms this.

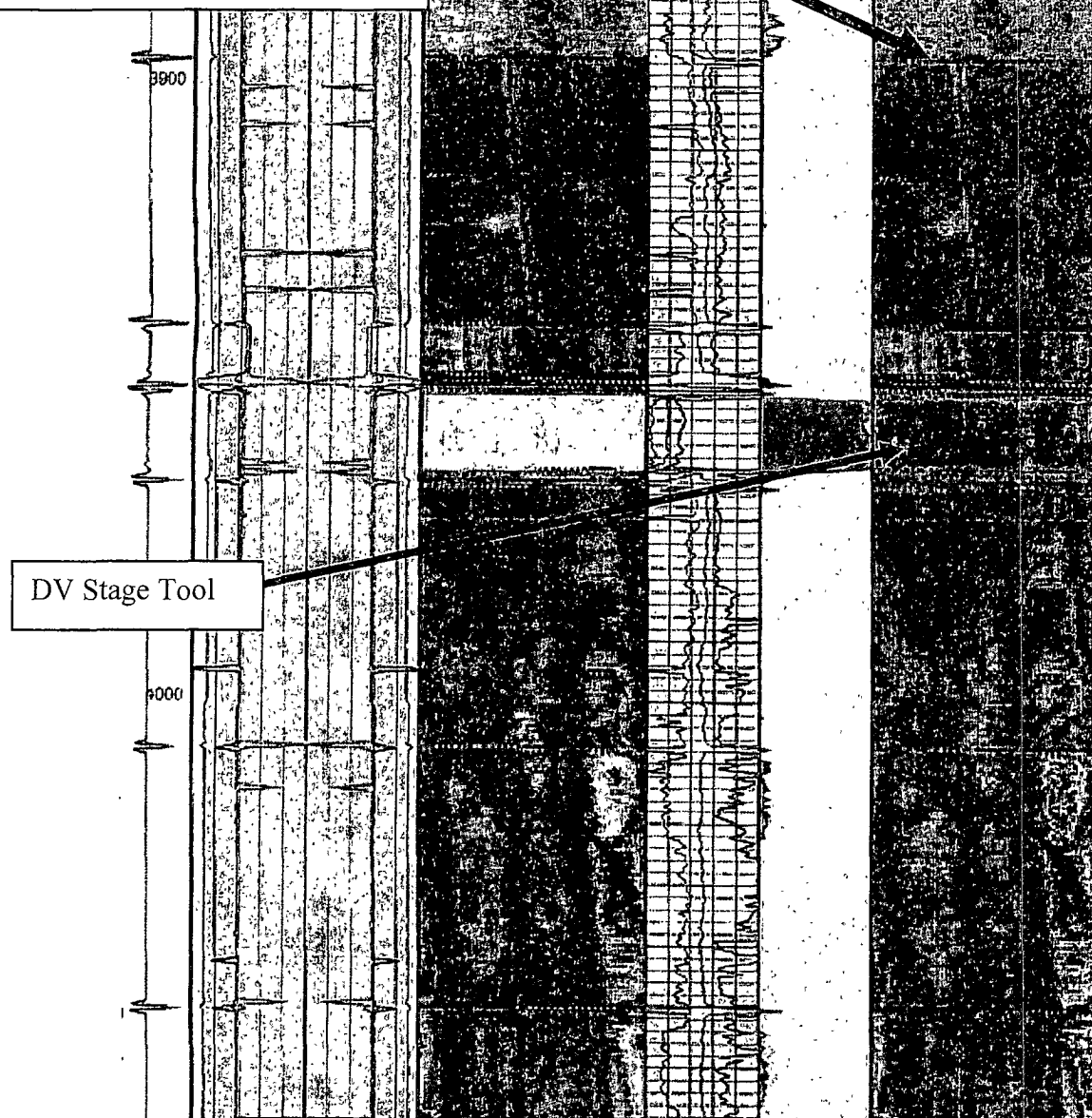


Figure 3 – Ultrasonic Imaging Log @ +/- 3900 ft



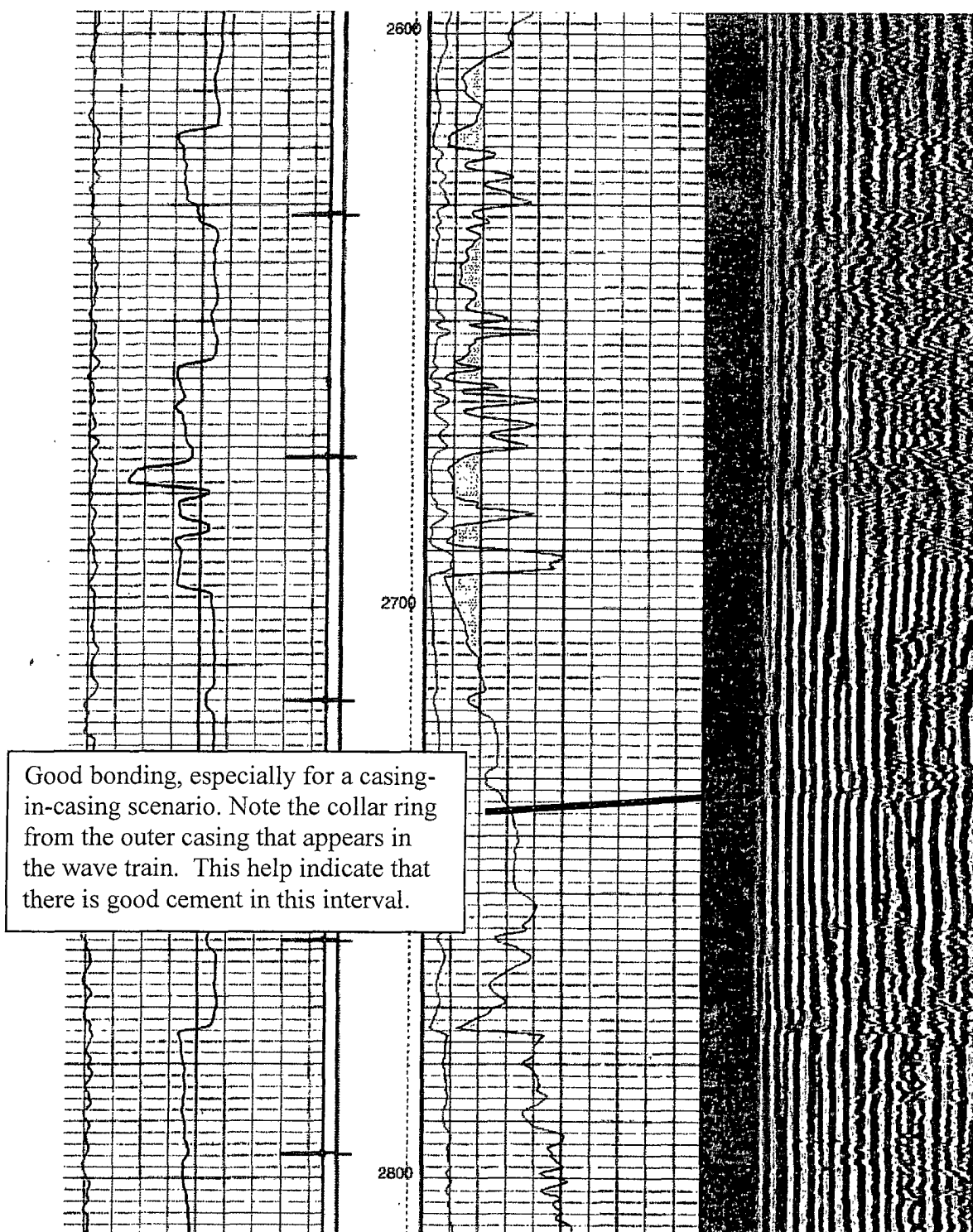


Figure 4 – Bond Log 2600 ft- 2800 ft

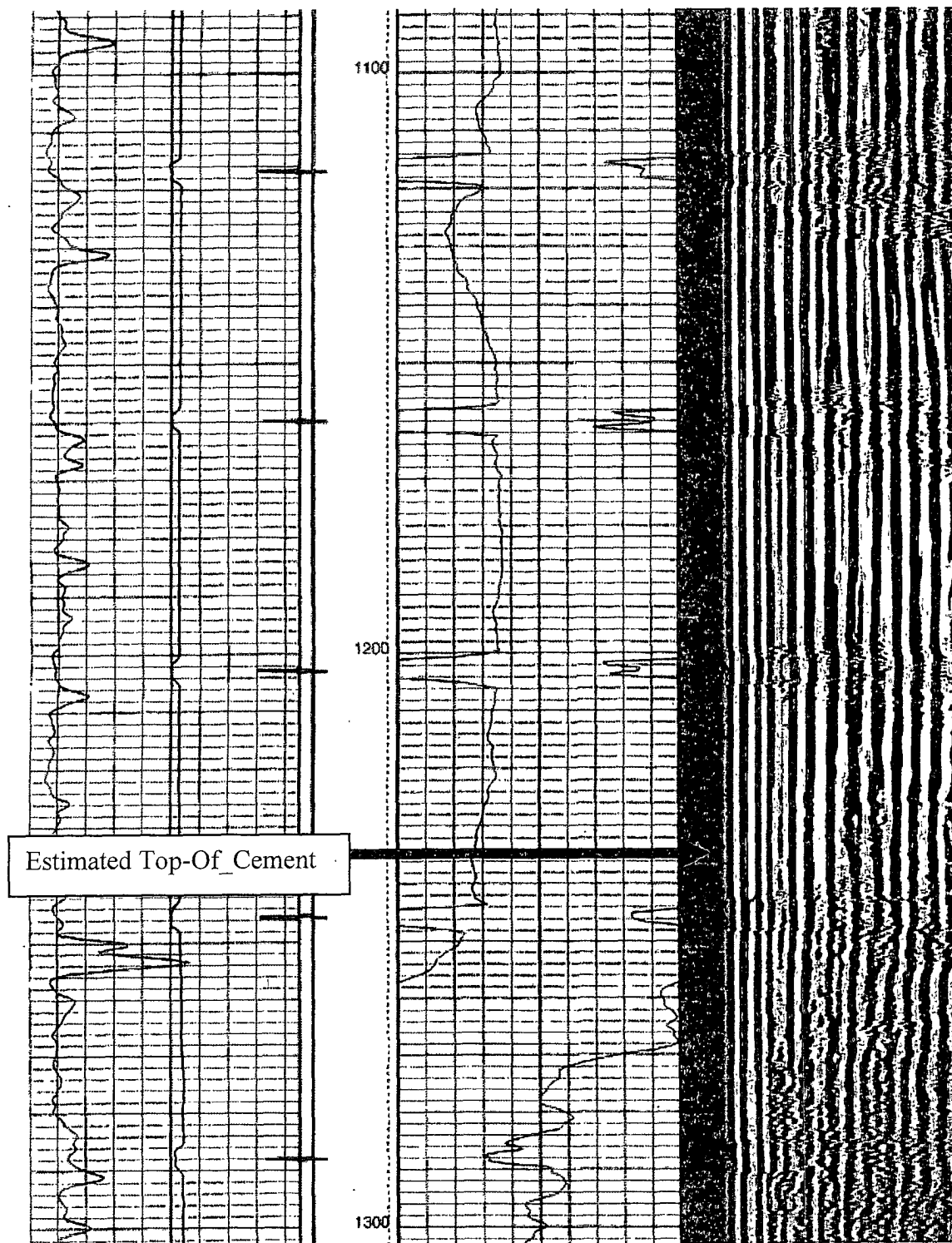


Figure 5 – Bond Log 1100 ft – 1300 ft. Top-Of-Cement