

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 30-13047/85-01

License: 49-17609-01

Docket: 30-13047

Licensee: Oil Well Perforators, Inc. (OWPI)  
Box 399  
Mills, Wyoming 82644

Inspection At: (1) 2414 Nuclear Drive, Casper, Wyoming  
(2) Frontage Road Hwy. 94, East of Glendive, Montana

Inspection Conducted: (1) February 19-20, 1985  
(2) March 27, 1985

Inspector:

D. Blair Spitzberg  
D. Blair Spitzberg, Radiation Specialist

4-4-85  
Date

C. A. Hooker  
C. A. Hooker, Radiation Specialist

4/4/85  
Date

Approved:

R. J. Everett  
R. J. Everett, Acting Chief, Nuclear Materials  
Safety and Safeguards Branch

4/9/85  
Date

Inspection Summary

Inspection Conducted February 19-20, 1985 and March 27, 1985 (Report 30-13047/85-01)

Areas Inspected: Special, unannounced inspection of the radiation safety program for the purpose of investigating six allegations of unsafe practices in this area. The inspection included a review of facilities and equipment, operating procedures, records, interviews of personnel, and observations by the NRC inspectors. The inspection involved 16 inspector-hours onsite by two NRC inspectors.

Results: Of the six specific allegations received, two were substantiated. The four remaining allegations could not be substantiated. As a result of the inspection, three violations (one containing three parts) of NRC requirements were identified as follows: Violation - use of licensed material by

unauthorized individual (Section 3a); Violation - failure to use licensed material in accordance with statements and procedures contained in the license application, a) failure to provide dosimeters for individuals using radioactive materials (Section 3d), b) failure to perform a required bioassay (Section 4), and c) failure to accurately record usage of survey instruments (Section 4); Violation - failure to properly record sealed source inventories (Section 4).

## DETAILS

### 1. Persons Contacted

- \*L. B. Putman, Field Engineer (authorized user)
- \*C. Schroder, Field Engineer (authorized user)
- L. Rush, Field Engineer (authorized user)
- R. Slaymaker, Field Engineer
- L. Grim, Field Engineer
- J. Bailey, Field Engineer
- \*\*B. Branson, Field Engineer

\*Denotes those present at the exit meeting on February 20, 1985.

\*\*Denotes individual contacted at Glendive, Montana, facility.

### 2. Reason for Special Inspection

Region IV received a package of information dated February 4, 1985, from the North Dakota State Department of Health concerning allegations of unsafe practices by OWPI. The State was preparing to take action in regard to those allegations which purportedly took place within North Dakota. The NRC inspectors contacted the alleged by telephone on February 8, 1985, who indicated that many of the allegations also took place in areas under NRC jurisdiction. On February 19-20, 1985, an NRC inspector visited the licensee's base facility in Casper, Wyoming, to review those allegations representing potential violations of NRC requirements, and to interview cognizant licensee personnel. On March 27, 1985, an NRC inspector visited the licensee's Glendive, Montana, facility to interview additional cognizant personnel.

### 3. Inspection Findings

The six allegations were reviewed in detail with the findings as follows:

- a. Allegation - Company employees not authorized by the NRC license to use licensed materials had used and handled licensed material in the field.

Finding - Allegation substantiated. The NRC inspectors reviewed documents dating back to 1980 pertaining to use of licensed materials which included Radiation Contamination Inspection Data Sheets and records of Field Site Surveys. There were several instances where the user of licensed material had not been recorded and, therefore, could not be determined. It was noted, however, that on November 10-11, 1981, and on February 1, 1984, at least two

individuals did use licensed material in the field without having license authorization, and without the supervision of an authorized user. This was found to be a violation of License Condition 12. The individual involved in the second case was determined to be technically qualified, based on training and experience. The individuals involved in the first case could not be located to determine their technical qualifications. The NRC inspectors also determined that two other technically qualified individuals had used material without license authorization on January 26, 1983, and on May 6, 1984. Since these uses were in the agreement states of Colorado and Washington, respectively, this finding will be referred to the states.

- b. Allegation - Employees who used licensed materials had not been trained by the licensee in the safe use and handling of radioactive materials.

Finding - Allegation unsubstantiated. With the exception of the November 10-11, 1981, unauthorized users identified in Section 3a, the NRC inspectors determined that those individuals recorded as having used radioactive materials dating back as far as 1980, had been trained in accordance with license requirements. Licensee representatives described the training program which included formal safety training initially for all employees which incorporated some aspects of radiation safety. Users had been trained as described in the license application and had purportedly received in-house refresher training at approximately 6-month intervals. Although a training manual was submitted with the license application, there are no specific training requirements beyond that required by 10 CFR 19.12 for individuals not named on the license. Records of training were sparse, however, there are no license requirements for maintenance of training records. Employees interviewed who were not named on the license but had been present when radioactive materials had been used described the safety training they had received and showed an acceptable level of radiation safety awareness.

- c. Allegation - The licensee did not follow proper safety precautions in handling contaminated iodine-131 wastes.

Finding - Allegation unsubstantiated. The licensee's representatives stated that only two individuals, both named on the license, had OWPI approval for performing tracer studies using iodine-131. These two individuals were interviewed by the NRC inspectors and were found to be familiar with the approved waste handling procedures. Written statements were obtained from both individuals attesting to their past adherence with these procedures. The NRC inspectors observed bags and containers of contaminated waste in storage at the licensee's facility awaiting decay to background prior to



disposal. Surveys and records of disposals were found to be in order back to the date of the previous inspection.

- d. Allegation - Licensee personnel had used licensed materials without having been supplied with personnel monitoring devices.

Finding - Allegation substantiated. The NRC inspectors reviewed documents which recorded the individuals who had used licensed material since January 1980, and cross-referenced this information with the film badge exposure reports. Based upon this review, it was determined that individuals had used licensed material on November 10-11, 1981, and February 1, 1984, without having been assigned a film badge during that period of time. This was found to be in violation of License Condition 18.

- e. Allegation - Licensee personnel would, at times, handle sealed sources without the use of remote handling tools.

Finding - Allegation unsubstantiated. The NRC inspector obtained written statements from the two senior licensee personnel involved in radioactive material use who denied having observed or being aware of any OWPI personnel using sources without the appropriate handling tools. In addition, all other available OWPI personnel who had been on jobs involving the use of licensed material were individually interviewed during the inspection. All stated that they had never observed the handling of sources without the use of handling tools. The NRC inspectors observed that proper handling tools were available for use with each of the licensee's sealed sources.

- f. Allegation - Survey meters were frequently not used at the well sites when radioactive well logging was performed.

Finding - Allegation unsubstantiated. The NRC inspector reviewed Radioactive Contamination Inspection Data Sheets and records of field site surveys dating back to January 1981. Those sheets recorded the serial number of the survey instruments used on each job. In each case reviewed, there was an entry made in these blocks. The two senior licensee personnel involved in radioactive material use both indicated in their written statements that in their experiences, survey instruments had always been available at the well site and that required surveys had always been performed as indicated in the records. The four other field engineers interviewed all stated that on jobs they had observed, a survey instrument had always been used. The NRC inspectors determined that there was an adequate supply of survey instruments available for the licensee's workload.

4. Inspection Findings Incidental to the Allegation Review

In the course of reviewing documents and procedures related to the specific allegations, the NRC inspector identified other violations of NRC requirements. In reviewing records pertaining to iodine-131 tracer use, it was noted that one individual used 109 millicuries of iodine-131 during the period of September 10-13, 1984. In a letter dated February 3, 1983, to the NRC which is referenced in the license, the licensee committed to perform a urine test on individuals who use iodine-131 in quantities exceeding 50 millicuries in 1 week. No such urine test was performed on this individual. Therefore, this was identified as a violation of License Condition 18.

By cross-referencing records of survey instrument use with the records of instrument calibration, it was determined that two instruments were recorded as having been used on four occasions in 1984 when, in fact, the calibration records showed them to be in Texas undergoing calibration. The licensee engineers stated that this was an error in recording the correct serial numbers, but that surveys with another instrument had been performed in each case. This finding was identified also as a violation of License Condition 18 which references procedures specifying information to be contained on a completed Radioactive Contamination Inspection Data Sheet.

The NRC inspector reviewed records associated with locations of material use during 1984 and determined that material had been used in the agreement states of Washington, Utah, Nebraska, and Colorado without an agreement state license from these states, and without having notified these states prior to using material under reciprocity. This finding will be referred to these respective states.

Records of sealed source inventories required every 6 months were reviewed by the NRC inspectors who noted that prior to the revised inventory format established in January 1985, the licensee had not noted the physical location of the sources at the time of inventory. This was identified as a violation of License Condition 16.

5. Exit Briefing

The NRC inspectors met with the licensee representatives denoted in Section 1 at the conclusion of the visit to discuss the findings of the special inspection. The NRC inspectors explained that a decision would be made by Region IV management as to whether sufficient information was obtained to close out the allegations and that the licensee would be notified concerning enforcement action with respect to the violations identified.