



Materials Inspection Record

1. Licensee Name: Cal Testing Services, Inc.		2. Docket Number(s): 030-10856		3. License Number(s) 13-16347-01	
4. Report Number(s): 2022-001			5. Date(s) of Inspection: February 10, 2022; exit March 24, 2022		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03320	8. Priority: 1	9. Inspection Guidance Used: IP 87121	
10. Licensee Contact Name(s): John Korienek - RSO		11. Licensee E-mail Address: jkorienek@calumettesting.com		12. Licensee Telephone Number(s): 219-923-9800	
13. Inspection Type: <input type="checkbox"/> Routine <input type="checkbox"/> Announced <input checked="" type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		14. Locations Inspected: <input type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input checked="" type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): No Change <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

16. Scope and Observations:

Cal Testing Services, Inc., (d/b/a Calumet Testing Services) was a small non-destructive testing company authorized to use radioactive material for industrial radiography at its shop in Griffith, Indiana, and at temporary job sites in NRC jurisdiction. At the time of the inspection, the licensee had one radiographer and two assistants on staff after losing several employees to a competitor. The scope of this inspection was limited to the observation of licensed activities (radiographic testing on a large steel vessel) on the premises of a welding school and fabrication shop at 59640 Market Street, South Bend, Indiana.

The inspector located the crew at the fabrication shop in South Bend, and, prior to announcing his presence, observed the crew perform radiographic testing. The inspector noted adequate postings and control of restricted area boundaries as well as adherence to physical presence requirements. Independent surveys in the vicinity of the work returned readings of up to 40 mR/hr in unrestricted areas; however, due to short exposure times and low occupancy factors, no members of the public were likely to have received 2 millirem in any one hour in unrestricted areas on the job site. The inspector noted that the crew member operating the camera did not survey the camera or guide tube as required by 10 CFR 34.49(b); rather, he observed readings from a survey meter that remained hanging at his waist when approaching the device or guide tube between exposures and, upon reaching the camera, ceased observing the meter's readings. This was noted as a Severity Level IV violation.

After observing this, the inspector announced his presence to the crew, interviewed them, and inspected their equipment and dosimetry. Both members were knowledgeable of radiation protection principles and had calibrated and operable instrumentation and dosimetry. Independent and confirmatory surveys of the camera returned no unusual readings. The inspector observed additional radiographic testing, and upon conclusion of the work inspected the licensee's disassembled equipment. The inspector found the drive cable to be in poor condition, as the outer spiral winding was worn, the inner core was corroded, and overall remained bent when subjected to a flexibility test. Although the crew confirmed and documented that they had performed visual and operability checks of this associated equipment before use that day, their checks nevertheless failed to ensure that the equipment was in good working condition as required by 10 CFR 34.31(a). This was noted as a Severity Level IV violation.

The root cause of the first violation was a misunderstanding of survey requirements; the root cause of the second a lack of attention to detail. As corrective action, the licensee removed the drive cable from service and the next week performed quarterly maintenance on all radiography equipment in its possession, with no other issues noted. The licensee also committed to provide retraining to staff on performing equipment inspections and surveys. As of the date of the exit, the licensee has not yet provided this training; therefore, a response to the NOV has been required.

Materials Inspection Record (Continued)

The inspector also reviewed the crew's utilization log, source certificate, shipping papers, and operating and emergency procedures. Following the on-site inspection, the inspector also reviewed quarterly equipment maintenance records, DU leak test results, and alarming instrument calibration records for the equipment used at the job site. The inspector also reviewed the latest job performance audits for the crew, as well as personnel dosimetry results for 2021 which included all badged employees (1,529 mrem DDE max).