Entergy

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June 20, 2001

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U. S. Nuclear Regulatory Commission
Document Control Desk
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Subject: Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Drug Testing Laboratory Performance Report

Gentlemen:

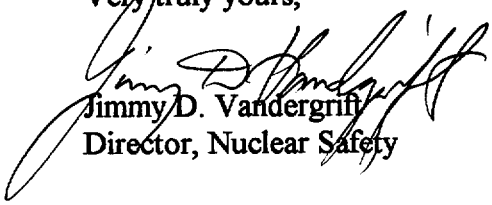
As part of the routine blind performance drug testing program, a sample spiked with codeine was submitted to the NWT Incorporated laboratory on May 14, 2001. The result of this test was faxed to Arkansas Nuclear One (ANO) on Saturday May 19, 2001, and reported to be negative. Upon receipt of this test report, ANO began an investigation. On May 21, 2001, NWT was requested to initiate action to identify and correct the cause of the unsatisfactory performance test result. The supplier of the certified sample reported to ANO that there were no known problems with the implicated lot number. The associated split sample was submitted to a second laboratory and a positive codeine result was reported on May 25, 2001. ANO received from NWT a report of the investigation on May 31, 2001, stating that the incorrect analysis was due to a problem with the gas chromatography/mass spectrometry (GC/MS) instrument. NWT completed an audit of ANO test records from December 1, 2000, and determined that no results were inappropriately reported as negative due to similar circumstances. ANO has provided information concerning this event to other Entergy nuclear plants using NWT. On June 6, 2001, NWT provided a report of their investigation findings and corrective actions.

In accordance with paragraph 2.8(e)(4) of Appendix "A" to 10CFR26, enclosed is the investigation report provided to ANO by NWT concerning the unsatisfactory performance test result. (NDT Laboratory is a division of NWT Incorporated.)

This letter contains no commitments.

A001

Very truly yours,



Jimmy D. Vandergriff
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JDV/tfs
Enclosure

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Laboratory Director
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QUALITY ASSURANCE REPORT

Client: **Entergy/ANO**

Subject: **Blind QC Failure- Specimen E1019297**
NDT Laboratory Accession #: 902845

BACKGROUND:

Steve Kaufmann (Entergy) notified Dr. Kuntz, NDT Laboratory Director on 5-21-01 regarding a failure to identify the correct analyte and concentration contained in specimen E1019297, a known blind quality control specimen. The details of the issue were forwarded to Laurie Tobler, Director or Quality Improvement at NDT for investigation and follow-up documentation. Laurie had a subsequent discussion with Steve and explained that the Laboratory was aware that the above identified specimen contained codeine at a concentration between 2600 ng/ml and 3100 ng/ml; however, could not report the results due to analytical difficulties with the GC/MS confirmation.

INVESTIGATION:

Cause of the Failure to Report Codeine

1. Specimen E1019297 was found to be positive for Opiate 300 in screening batch 14289 on 15 May 2001.
2. This specimen was submitted for GC/MS confirmation in batch 8840 on 15 May 2001. Batch 8840 failed due to unacceptable mass ion ratios for codeine in the "positive" control. Specimen 902845 contained 2708 ng/ml of codeine; however, also exhibited unacceptable mass ion ratios for codeine. This specimen was re-submitted for confirmation.
3. This specimen was re-analyzed in GC/MS batch 8848 on 16 May 2001. This batch failed due to unacceptable codeine chromatography on the "low" control. Specimen 902845 was positive for codeine. This specimen was re-submitted for confirmation.
4. Specimen 902845 was re-analyzed in GC/MS batch 8889 on 17 May 2001. No analytical data was obtained for this specimen due to a laboratory accident during the extraction process. All specimens were re-submitted for confirmation.
5. Specimen 902845 was re-analyzed in GC/MS batch 8901 on 18 May 2001. This batch failed for codeine due to unacceptable mass ion ratios in the "low" control. Specimen 902845 was positive for codeine; however, also exhibited unacceptable mass ion ratios for this analyte.
6. Standard Operating Procedure (VolII.A/GCMS/Intro;pg. 12/F.2.b.) directs that ". . .if a specimen has been analyzed more than once and continues to give unacceptable results, it is indicated as negative and is not further analyzed." This specimen was marked negative on 19 May 2001 and reported to Entergy/ANO.

RESPONSE TO REQUEST FOR CORRECTIVE ACTION:

Subsequent to conversations with Steve Kaufmann, and a letter from Dr. Ezell, Medical Review Officer for Entergy, an in-depth investigation of the GC/MS confirmation opiate assay was initiated. Specimen 902845 was re-submitted for initial screen and submitted for GC/MS analysis of THC, Benzoylecgonine, Amphetamines, PCP, Codeine and Morphine.

Corrective Action:

1. The GC/MS analysis of opiates has been moved to a new GC/MS instrument.
2. This specimen has been re-analyzed and found to contain codeine at a concentration of 3057 ng/ml.
3. Certifying Scientists have been instructed to report specimens that have drug present but fail to satisfy reporting criteria as "Specimen Unsuitable: Cannot obtain valid drug test result".

SUMMARY

It was determined that the GC/MS instrument currently used for the confirmation of opiates was not able to handle the analytical challenge of this assay. The issue of failed mass ion ratios has been resolved by transferring the assay from the existing instrument to the new model GC/MS (installed April 2001). Repeat analysis of the specimen did not identify any analytical difficulties in obtaining the codeine result.

Prepared by:

Laurie Tobler
Director of Quality Improvement

6-05-01
Date

Approved by:

David J. Kuntz, Ph.D.
Laboratory Director

6-6-01
Date

cc: Michael Feldman, Ph.D., General Manager
Todd Bjorklund, Client Service Manager