

# Department of Energy

Washington, DC 20585

QA: L

OCT 06 1997

R. W. Craig, Technical Project Officer  
for Yucca Mountain Site  
Characterization Project  
U.S. Geological Survey  
1261 Town Center Drive  
Building 12, Room 1249, M/S 423  
Las Vegas, NV 89134

## EVALUATION OF RESPONSE TO DEFICIENCY REPORT (DR) USGS-97-D-008

The Office of Quality Assurance staff has evaluated the response to DR USGS-97-D-008. The response has been determined to be satisfactory. Verification of completion of the corrective action will be performed after the effective date provided. Any extension to this date must be requested in writing, with appropriate justification, prior to that date.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or Ardell M. Whiteside at (303) 236-5050.

*James Blaylock*  
Donald G. Horton, Director  
Office of Quality Assurance

OQA:JB-0009

Enclosure:  
DR USGS-97-D-008

cc w/encl:

J. O. Thoma, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
T. H. Chaney, USGS, Denver, CO  
D. J. Sinks, OQA/USGS, Denver, CO  
A. M. Whiteside, OQA/USGS, Denver, CO

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV  
D. G. Sult, OQA/QATSS, Las Vegas, NV  
R. W. Clark, DOE/OQA, Las Vegas, NV

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ORIGINAL

OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

- ☐ Performance Report  
☒ Deficiency Report

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7/16/97

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## YMP-USGS- PERFORMANCE/DEFICIENCY REPORT

<sup>1</sup> Controlling Document: HP-160, R2, M1-M2: Methods for Analysis of  
Samples for Gas Composition by Gas Chromatography.

<sup>2</sup> Related Report No.:  
N/A

<sup>3</sup> Responsible Organization: U.S. Geological Survey  
*Environmental Science Team*

<sup>4</sup> Discussed With: Gordon Ratray

<sup>5</sup> Requirement/Measurement Criteria:

Para. 7.1 - States, "Specific items from this procedure that shall constitute a record are:

Field log book

GC lab book (*Att. 1 of HP-160; format*)

Gas chromatograph log book

Flow meter calibration log book

Gas summary sheet (*Att. 2 of HP-160*)

Water vapor summary sheet (*Att. 3 of HP-160*)

<sup>6</sup> Description of Condition:

Records generated by HP-160 as evidenced in data package, "UZ-1 Data" GS930408312271.013, GS930108312271.004, GS940408312271.001, GS940408312271.006, GS950708312271.001 and GS 950708312271.002 are not the same records as identified in Section 7.1 of HP-160, R2. HP-160 needs to show the GC Lab book/Logbook as the record of analyses; the other records listed in HP-160, R2 are used in the collection of the data, not the analyses, so therefore should not be listed as records generated from this procedure.

<sup>7</sup> Initiator: *Kristi Lewis*  
Kristi L. Lewis

Date *7/7/97*

<sup>9</sup> Is condition an isolated occurrence?

☐ Yes ☒ No ☐ Unknown; Must be Yes if PR

<sup>10</sup> Recommended Action (not required for PR):

- 1. Modify YMP-USGS-HP-160 to accurately reflect which records are generated by implementation of the procedure.*
- 2. Reference this deficiency on appropriate records packages that include data generated by implementation of HP-160.*
- 3. Determine Impact on Data.*
- 4. Investigate to determine if other procedures have a similar deficiency. None*  
*7/12/97*

<sup>11</sup> QA Review: *anne Dittus*

QAR *ARDELL WHITESIDE* Date *7-16-97*

<sup>12</sup> Response Due Date:

*20 working days from issuance*

<sup>13</sup> Affected Organization QA Manager Issuance Approval (QAR for PR)

Printed Name: *D.G. HORTON*

Signature: *James Blaylock Jr*

Date *7/25/97*

<sup>22</sup> Corrective Action Verified:

QAR

Date

<sup>23</sup> Closure Approved by (N/A for PR):

AOQAM

Date

OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

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**PERFORMANCE/DEFICIENCY REPORT RESPONSE****<sup>14</sup>Remedial Actions:**

Modify YMP-USGS-HP-160 to accurately reflect the records that are generated by this procedure. Identify and reference this deficiency on TDIF's within appropriate records packages that include data generated by the implementation of HP-160. And add to the tables of contents of those appropriate records packages a statement referencing this deficiency and how the data were impacted.

**<sup>15</sup>Extent of Condition (not required for PR):**

The EA office will investigate ten percent of the technical procedures currently being implemented by the U.S. Geological Survey on the Yucca Mountain Project to determine if this type of deficiency is prevalent in other procedures. Based upon the results of this investigation, appropriate corrective actions will be outlined in a supplemental response.

**<sup>16</sup>Root Cause Determination (not required for PR):**

Required

☐ Yes ☐ No

To be determined if needed based upon completion of Block 15 actions.

**<sup>17</sup>Action to Preclude Recurrence (not required for PR):**

Required

☐ Yes ☐ No

To be determined if needed based upon completion of Block 15 actions.

**<sup>18</sup>Corrective Action Completion Due Date:**

Block 14 and 15 to be completed by 11/30/97

**<sup>19</sup>Response by:**☒ Initial☐ Amended

R.W. Craig, Chief YMPB

Date 8/22/97 Phone(303)236-5050 x233

**<sup>20</sup>Response Accepted: SEE PAGE 3**

QAR

*Amended*

Date

Sept. 19, 1997

**<sup>21</sup>Response Accepted (N/A for PR):**

DOQA

*James B. Hughes*

Date

10/6/97

**ORIGINAL**

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DEFICIENCY REPORT CONTINUATION PAGE

BLOCK 20 RESPONSE ACCEPTED [CONTINUED FROM PAGE 2]

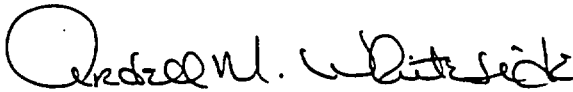
The proposed corrective actions identified on page 2 were evaluated and determined to be acceptable based upon the following:

The proposed actions were discussed with USGS Earth Science Investigations Program (ESIP) and Engineering Assurance (EA) personnel.

ESIP personnel have initiated actions to update HP-160 R2, and will determine and annotate affected records as described in block 14 of the response by the end of November 1997.

EA personnel will complete the investigative actions described in block 15 to evaluate ten percent (10%) of "active" technical procedures to determine if conditions similar to the deficiency stated in block 6 are noted -- that is, do the technical procedures accurately identify the records being generated. If additional deficiencies are noted, specific actions will be taken to correct those procedures, determine impact on data, and annotate affected records.

Based upon the results from the investigative actions, the USGS will determine and identify: 1) the extent of the deficient condition(s), the impact on data, and the corrective actions for any deficient procedure(s) and associated record(s); 2) whether root cause determination is warranted; 3) preventive measures; and 4) a schedule for completing the actions. The results of the investigative actions and additional actions noted will be presented in a supplemental response to OQA by November 30, 1997.



QAR: Ardell M. Whiteside

DATE:

9-19-97

September 19, 1997