



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
Yucca Mountain Site Characterization Office  
P.O. Box 98608  
Las Vegas, NV 89193-8608

NOV 01 1996

R. W. Craig  
Technical Project Officer  
for Yucca Mountain  
Site Characterization Project  
U.S. Geological Survey  
1261 Town Center Drive  
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Las Vegas, NV 89134

**ISSUANCE OF SURVEILLANCE RECORD YMP-SR-96-025 RESULTING FROM YMQA  
SURVEILLANCE OF THE USGS**

Enclosed is the record of Surveillance YMP-SR-96-025 conducted by Yucca Mountain Quality Assurance at the U.S. Geological Survey (USGS) facilities in Denver, Colorado, October 7-9, 1996.

The purpose of the surveillance was to verify the status of three Corrective Action Requests (CAR) and determine the corrective actions taken by the USGS to resolve these CARs.

This surveillance is considered completed and closed as of the date of this letter. A response to this surveillance record and any documented recommendation is not required.

If you have any questions, please contact James Blaylock at (702) 794-1420 or Sam H. Horton at (702) 794-1497.

Richard E. Spence  
Yucca Mountain Quality Assurance

**120044**

YMQA:JB-0210

Enclosure:  
Surveillance Record YMP-SR-96-025

9611140142 961101  
PDR WASTE PDR  
WM-11

NH33/1  
102.7  
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cc w/encl:

D. A. Dreyfus, DOE/HQ (RW-1) FORS  
R. W. Clark, DOE/HQ (RW-3.1) FORS  
J. G. Spraul, NRC, Washington, DC  
W. L. Belke, NRC, Las Vegas, NV  
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Jim Regan, Churchill County, Fallon, NV  
D. A. Bechtel, Clark County, Las Vegas, NV  
Susan Dudley, Esmeralda County, Goldfield, NV  
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R. E. Monks, M&O/LLNL, Livermore, CA  
S. Y. Pickering, M&O/SNL, Albuquerque, NM, M/S 1395  
R. E. Armstrong, M&O, Las Vegas, NV  
T. H. Chaney, USGS, Denver, CO  
Records Processing Center

SH 10/31/96

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

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YMP-SR-96-025

Surveillance No. YMP-96-025 SH 10/23/96

QUALITY ASSURANCE SURVEILLANCE RECORD

SURVEILLANCE DATA

1. ORGANIZATION/LOCATION: USGS/ DENVER, CO	2. SUBJECT: Corrective Action, Procurement, Tech. Reviews	3. DATE: 10 / 07-09 /96
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4. SURVEILLANCE OBJECTIVE:  
To determine the status of the subject activities.

5. SURVEILLANCE SCOPE:  
Examination of the following USGS activities by review of documentation associated with each activity and by interviewing knowledgeable personnel in each area:

- (1) Technical Reviews CAR-96-C002
- (2) Procurement CAR-96-C004
- (3) Corrective Action CAR-96-C005

6. SURVEILLANCE TEAM:

Team Leader: Sam Horton  
Sam Horton

Additional Team Members:  
John A Herien  
Robert F. Keele  
Rob Keele

7. PREPARED BY: Sam Horton <u>Sam Horton</u> 9/23/96 Surveillance Team Leader Date	8. CONCURRENCE: <u>R.C. Sprance</u> 9/23/96 QA Division Director Date
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SURVEILLANCE RESULTS

9. BASIS OF EVALUATION / DESCRIPTION OF OBSERVATIONS:  
See Page (s) 2-7

10. SURVEILLANCE CONCLUSIONS:  
See Page (s) 7 and 8

11. COMPLETED BY: <u>Sam H. Horton</u> Oct. 22-96 Surveillance Team Leader Date	12. APPROVED BY: <u>R.C. Sprance</u> 11/1/96 QA Division Director Date
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**BLOCK 9 BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS:**

Surveillance YMP-SR-96-025 was conducted October 7-9, 1996, at the U.S. Geological Survey (USGS) facilities in Denver, Colorado. The purpose of the surveillance was to review Corrective Action Requests (CARs) YM-96-C002, YM-96-C004 and YM-96-C005 and to verify the corrective action taken in each CAR based on the stated corrective action commitments.

The surveillance was conducted by 3 representatives from the Office of Civilian Radioactive Management's (OCRWM's) Office of Quality Assurance (OQA). The Surveillance Team Leader was S. H. Horton, assisted by R. P. Keele, and J. E. Therien. The surveillance scope was divided up such that each surveillance team member was responsible for the review, status, and verification of the corrective action for a particular CAR. R. P. Keele was responsible for CAR 96-C002; J. E. Therien was responsible for CAR 96-C004, and S. H. Horton was responsible for CAR 96-C005.

A surveillance pre-conference was held on October 7, 1996, where personnel introductions were made and the scope of the surveillance was discussed. A surveillance post-conference was held on October 9, 1996, where the results of the surveillance were discussed in detail (reference the pre and post-conference attendance records, noted as Enclosure 1, 2 pages).

A description of the items/activities examined for each CAR is described herein.

**CAR- 96-C002**

In verification of the corrective actions for this CAR, there were 3 recently completed technical reports submitted by the USGS to the U.S. Department of Energy (DOE) that were selected for review. The review consisted of verifying that the corrective actions committed to in the CAR were satisfactorily implemented and provided adequate justification for closure.

Procedure YM-USGS-QMP-3.04 was revised per corrective actions identified in CAR YM-96-C-002 and the requirements of the procedure (Revision 7) were found to have been implemented as required on all three of the completed review packages sampled during this Surveillance as identified below.

The records package contained in closed CAR YM-96-C-002 was reviewed during this Surveillance for all work accomplished to determine the extent of the deficiencies identified in the CAR. Records and tables provided in the CAR package show the results of an independent, in-depth evaluation of the review process and comment resolution documentation. The CAR actions evaluated 23 of the possible 143 publication documents that were determined to be in the suspect population. The records provided in the CAR package were reviewed and found to provide sufficient basis for closure of this part of the corrective actions. In addition, an additional 12 reports were selected from the 1992 time frame and the results of the independent

re-evaluation of the adequacy of the review process utilized on those reports are also provided in the CAR records package. These records also provide adequate justification for closure of this part of the corrective actions. Those reviews are contained within the CAR records package. Rationale for setting the bounds for the population to be re-reviewed were provided and are justified. Documentation showing the independence and qualifications of those performing the re-reviews were either provided in the CAR records package, or were found to be on file at USGS.

All committed actions to preclude recurrence were found to have been implemented via either Revision 7 of YM-USGS-QMP-3.04 or fully evidenced within the review packages for each of the three review packages sampled during this Surveillance.

The 3 reports selected for review were:

1. "Characteristics of Fractures at Yucca Mountain, Nevada: Synthesis Report," completed review package
2. "Hydrologic Evaluation and Numerical Simulation of the Death Valley Regional Ground Water Flow System, Nevada and California, Using Geoscientific Information Systems," completed review package
3. "Quaternary Faults as Relevant Earthquake Sources in the Yucca Mountain Area," completed review package

Included as part of the review was the USGS procedure that provided the direction on how to perform a technical review, YM-USGS-MP-3.04, Revision 7, titled, "Review and Approval of YMP-USGS Data, Interpretations of Data and Manuscripts."

The results of the review of the corrective actions taken in this CAR revealed that Procedure YM-USGS-QMP-3.04, Revision 7, was revised per the subject CAR and the requirements of the procedure were implemented on all three of the completed review packages sampled as previously noted.

#### Areas of Weakness

1. Procedure YM-USGS-QMP-3.04, Revision 7, requirements on review criteria appear to lack clarity in addressing the Quality Assurance Requirements and Description (QARD) requirement 2.2.10. item A, "compliance with established requirements," as it relates to ensuring that the document is satisfactory for its intended use. Even though no instances of noncompliance were detected, the potential exists for a deficiency to occur if this issue is not clarified in the subject procedure.

2. Procedure YM-USGS-QMP-3.04, Revision 7, currently has the technical reviewer(s) initial acceptance of the author's proposed resolution of the reviewer's comments. At the time each of the reviewers initialed and dated the review form, signifying acceptability of the resolution of the reviewer's mandatory comments, the final document version did not exist. Therefore, the acceptance of the comment resolutions only indicates acceptability of the author's proposed resolution. The reviewer is not required to review the final version of the document to ensure that the comment resolution was acceptably incorporated.

#### CAR-96-C004

This CAR was written against issues/activities dealing with procurement. The verification of the corrective action for this CAR was divided into two phases. These were (1) the remedial actions that were to be taken, and (2) the overall corrective actions to preclude recurrence. In the area of remedial action, there were eight separate and distinct actions committed to be taken by the USGS. The review of these eight actions revealed that:

- Action (1): The USGS procedures Quality Management Plan/Procedure (QMP) 4.01, Revision 8, and QMP 7.04, Revision 3, were approved on September 4, 1996, and issued for implementation on October 1, 1996. These actions adequately addressed the noted remedial corrective actions.
- Action (2): The reason for the finding was that the Quality Assurance (QA) Auditor was not looking at the "official" Record File copy of the subject purchase order. This surveillance verified that the Purchase Order (PO) for Huffman Labs (PO 1434 CR-96-SA-00036) had a Deficiency Report (DR) written against it (reference DR USGS-96-D002), which must be closed prior to having this remedial action completed. In addition, PO 1434 CR-95-SA-0610, for Krueger Enterprises was not made available for verification during this surveillance. Therefore, Remedial Action (2) of this CAR could not be verified as satisfactory.
- Action (3): The commitment by the USGS to determine if the PO to Beta Analytic has been modified to reflect the requirements of QMP 4.01, Revision 8, has not been performed by the USGS. Therefore, Remedial Action (3) of the CAR could not be verified as satisfactory.
- Action (4): It was verified that DR YM-96-D-051 has been written to provide the vehicle to address the noted remedial action. Remedial Action (4) could not be verified as satisfactory at this time due to the fact that the corrective action to the subject DR has not been provided.

- Action (5):** It was verified that the missing certification information was obtained from the State of Colorado Department of Agriculture. All remedial actions concerning this deficiency have been satisfactorily implemented.
- Action (6):** It was verified that all suppliers have had their Supplier Evaluation Reports (SERs) updated. A Qualified Suppliers List (QSL) workshop was held in Las Vegas, Nevada, April 15-16, 1996. This workshop established guidelines to be used as the basis for determining qualification for use of a supplier. USGS revised their procurement procedures to address these guidelines. On May 13-17, 1996, an OQA representative reviewed all USGS open POs and Memorandum of Agreements to determine if appropriate QA requirements had been imposed on the suppliers. Subsequent discussion with the OQA representative that performed the review, revealed that the QARD requirements were used to evaluate if the procurement document had appropriate QA requirements imposed on the supplier. All remedial actions concerning this deficiency have been satisfactorily implemented.
- Action (7):** It was verified that the SER for Beta Analytic dated August 24, 1996, was on file. In addition, it was verified via an electronic mailgram from OQA's Kettell to USGS's Chaney dated May 9, 1996, that Campbell Scientific has been lifted from restrictions. This mailgram was attached to the SER of Campbell Scientific dated May 15, 1996. The remedial actions concerning this deficiency have been satisfactorily implemented.
- Action (8):** It was verified that Revision 3 to USGS procedure QMP 7.04 has corrected the noted problem, based on providing Attachment 1, which provides standard and adequate qualitative and quantitative acceptance criteria.

### **Overall Corrective Action to Preclude Recurrence**

The overall corrective actions taken to prevent recurrence was divided into three areas. These were: (1) Corrective Actions for New or Amended Existing Quality Affecting Procurements, (2) Corrective Actions for Procurements Already in Existence, and (3) Actions for Completed Procurements.

#### **(1) Corrective Actions for New or Amended Existing Quality Affecting Procurements**

Five at random procurement documents were reviewed to evaluate if vendors were identified on the QSL. These were:

<u>Vendor</u>	<u>Procurement Document</u>	<u>Date of PO</u>
Campbell Scientific	96-SA-00200	5/17/96
Certified Balance	96-SA-00452	5/17/96
Ball Aerospace Systems	96-SA-00358	5/17/96

Quality Control Systems  
Paroscientific

96-SA-00951  
96-SA-01056

8/19/96  
7/25/96

It was determined that all of these vendors were on the QSL. In addition, it was noted that SERs have been processed and updated for all USGS vendors with the exception of Campbell Scientific. This SER is in the process of being completed.

As a further part of the corrective action, the OQA committed to the review of new or amended existing quality affecting USGS procurements. The listing of these procurements, which are analytical or calibration services, is contained as Enclosure 2 to this report. In addition and as part of the long term corrective action, the USGS agreed to submit a copy of the PO and associated documentation to OQA for those services received (analytical, calibration, or other), so that OQA can obtain a quality confidence for services procured. This remains an open item to be verified as part of corrective action completion for the subject CAR.

### **(2) Corrective Actions For Procurements Already in Existence**

All in-process quality affecting procurements were identified and classified into three groups:

1. Those suppliers that are listed on the QSL
2. Those suppliers who are not on the QSL and are working directly to the USGS quality program
3. Those suppliers who are not on the QSL nor working directly to the USGS program, but whom USGS has found to be acceptable to perform work by other means

As part of the corrective action commitment, the USGS performed a review of the procurements already in existence with overview from OQA. This review revealed two deficient procurements associated with Huffman Laboratories and University of Colorado and are documented on DRs, USGS-96-D002 and USGS 96-D003, which remain open. In addition, the USGS is to compile more documentation indicating the review of these procurements. This remains an open item to be verified as part of the corrective action of the CAR.

The USGS has a total of 14 vendors that are on the QSL. These 14 vendors have been audited and respective deficiency documentation has been issued and is being tracked. One vendor, University of Saskatchewan, was found to be unsatisfactory and has been removed from the QSL.

### **(3) Actions for Completed Procurements**

The USGS compiled a listing of procurements initiated after September, 1995, and classified them into three categories as follows:

1. Those suppliers who are listed on the QSL or the USGS Approved Vendors List (AVL)
2. Those suppliers who are not on the QSL or the USGS AVL, and who worked directly to the USGS quality program.
3. Those suppliers who are not on the QSL or the USGS AVL, or who did not work directly to the USGS quality Program, but who have been found to be acceptable to perform work by other means.

A total of 19 closed procurements were reviewed with OQA personnel (reference Hudson to Spence letter I 96-042 dated July 3, 1996). Some anomalies were noted and documented on DR USGS-96-D004, which is open and being tracked. USGS has the action to compile additional information to document the review of these procurements. This remains an open item to be verified as part of the corrective action completion for the subject CAR.

#### CAR-96-C005

At the time this CAR was written (April 10, 1996), there were 27 deficiencies that were written internal to the USGS. At the time this surveillance was performed, the number of open deficiencies had been reduced to 9, with a total of 18 being closed. As part of the corrective action commitment, the USGS has hired one YMP-USGS QA Office Full Time Equivalent (FTE) position, solely dedicated to identifying, statusing, tracking, and expediting closure of USGS deficiencies. Attention will be given to this effort until the backlog of the original 27 deficiencies are closed. It is noted that only 3 new deficiencies have been issued since the 27 were first identified. It was verified that USGS has developed a log of deficiencies, both internal and external, and the status of each deficiency was up-to-date (i.e., within a week of any status change), as committed to by the corrective action. This log was shown as a computer print-out. The paper copy logs were examined and were found to be updated and adequately cross-referenced between the original USGS Quality Deficiency Reports (QDRs) and their corresponding Performance Reports or DRs. In addition, it was verified that the role of the Quality Assurance Representative/Verifier (QAR) now includes 3 USGS QA representatives, therefore this role has been expanded as noted as part of the corrective action response. And finally, it was verified that the USGS QA Manager has increased awareness of the responsible managers for overdue responses to deficiencies or overdue corrective actions. Initially, this corrective action commitment could not be verified because weekly meeting agendas or minutes were not kept for all weeks.

Therefore, USGS generated a letter to file (copy enclosed and noted as Enclosure 3), with appropriate management signatures, attesting to the fact that weekly meetings were held. In

addition, the Surveillance Team Leader attended a USGS management meeting and verified that the open deficiencies were discussed in detail; with emphasis being on ones that were considered untimely. The corrective action taken on the subject CAR appears adequate and satisfactory.

## **PERSONS CONTACTED**

In performance of this surveillance, the following USGS persons were contacted to facilitate the verification of corrective action for the noted CARs.

Robert Craig, Branch Chief, YM Technical Project Officer  
Tom Chaney, QA Manager  
Bruce Parks, Associate Chief, Earth Science Investigations Program  
Tim Brady, Technical Products Coordinator  
Martha Mustard, Hydrologist (QA)  
Ardell Whiteside, QA Implementation Specialist  
Emily Reiter, QA Specialist (Pacific Western Technologies)

## **BLOCK 10 SURVEILLANCE CONCLUSIONS:**

### **CAR 96-C002**

Based on the observations made relative to the corrective action taken, there continues to be a need to improve the critical process steps for the review of technical documents. The recommendations made in this area include:

1. Revise procedure YM-USGS-QMP 3.04 to ensure that the established review criteria include the QARD requirements for review criteria to include, "compliance with established requirements."
2. Revise procedure YM-USGS-QMP 3.04 to ensure that a person knowledgeable in the document/data and qualified to be a "technical reviewer," verifies that the final document/data version adequately incorporates the author's proposed resolution of all mandatory comments of technical reviewers.

**NOTE:** Recommendations 1 and 2 have been implemented through a USGS proposed modification to the subject procedure. This proposed modification has been accepted by the OQA as a satisfactory means of ensuring adequate technical review and comment resolution (reference Enclosure 4, 3 pages).

3. The DOE should review the three sample documents used in this Surveillance to ensure that all technical reviewer mandatory comments were properly incorporated into the final document/data versions submitted to the DOE for acceptance.

**NOTE:** Susan B. Jones of the DOE has verbally committed to ensure that this review is performed. This action will be separate from this surveillance, however, the OQA will follow-up on this recommendation to ensure the technical reviews are implemented.

**CAR 96-C004**

It is concluded that the USGS is making positive progress in the area of procurement. However, the corrective actions for the noted CAR have not yet been fully implemented. Based on this observation, the following recommendations are made:

1. OQA should consider lifting procurement restrictions of requiring the USGS to provide procurement documentation to them, once the root cause determination and actions to prevent recurrence have been completed and verified.
2. USGS should continue to give timely attention to the remaining actions needed to resolve the CAR.

**CAR 96-C005**

The USGS has improved their efforts in the timely identification and processing of deficiencies. Based on the corrective actions taken and verified, it is recommended that the subject CAR be closed.

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

Enclosure 1  
Page 1 of 2

ATTENDANCE RECORD

- AUDIT
- SURVEILLANCE
- TRAINING/INDOCTRINATION

SUBJECT  
SURVEILLANCE 96-025

- TEAM BRIEFING
- PRE-CONFERENCE
- POST-CONFERENCE

AUDIT OR SURVEILLANCE LEADER/INSTRUCTOR(S)

Sam Horton DATE October 06-96  
Signature

N/A CLASS LENGTH N/A  
Signature

BRIEF SUMMARY OF MATERIAL COVERED Examination of USGS activities associated with corrective action Requests (CARs) - 96-002; 96004 & 96005.

NAME OF ATTENDEE (PRINTED)	SIGNATURE	ORGANIZATION/ COMPANY	POSITION/TITLE	PHONE NUMBER
SAM HORTON	<i>Sam Horton</i>	QATSS/SALC	Surv. lead	702-794-1497
Bruce Parks	<i>Bruce Parks</i>	USGS/ESIP	Assoc. chief ESIP	303-236-5050-236
John Therien	<i>John Therien</i>	YMQAD/QATS	QA Programs	702/794-5408
ROBERT P. KEENE	<i>Robert P. Keene</i>	QATSS/SALS	QATSS PROGRAM MGR.	702-794-1456
Robert W. Craig	<i>Robert W. Craig</i>	USGS/YMPB	Branch Chief/TPD	702 295-5171
Richard E. Lowe	<i>R. E. Lowe</i>	QATSS/SALC	Sr QA specialist	702/794-1480
TOK SHANEY	<i>Tok Shaney</i>	USGS	QA MANAGER	303-236-0516
Ge. Louis Ducey, Jr	<i>Ge. Louis Ducey, Jr</i>	USGS	Assoc. Branch Chief	303-236-0516 x289
Martha H. Moscard	<i>Martha H. Moscard</i>	USGS	hydrologist (QA)	(303)236-0516 x 301
Emily S. Reiter	<i>Emily S. Reiter</i>	USGS/PWT	QA SPECIALIST	(303)236-0516 x 297

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

Enclosure 1  
Page 2 of 2

**ATTENDANCE RECORD**

<input type="checkbox"/> AUDIT	SUBJECT Surveillance 96-025 of the USGS on Technical Reviews, Procurement and the Corrective Action processes	<input type="checkbox"/> TEAM BRIEFING
<input checked="" type="checkbox"/> SURVEILLANCE		<input type="checkbox"/> PRE-CONFERENCE
<input type="checkbox"/> TRAINING/INDOCTRINATION		<input checked="" type="checkbox"/> POST-CONFERENCE

**AUDIT OR SURVEILLANCE LEADER/INSTRUCTOR(S)**

Sam H. Horton

*Sam Horton*  
Signature

DATE 10/09/96

N/A

Signature

CLASS LENGTH

N/A

BRIEF SUMMARY OF MATERIAL COVERED EXAMINATION OF USGS ACTIVITIES ASSOCIATED WITH CORRECTIVE ACTION REQUESTS (CARs) 96-C002, 96-C004, AND 96-C005.

NAME OF ATTENDEE (PRINTED)	SIGNATURE	ORGANIZATION/ COMPANY	POSITION/TITLE	PHONE NUMBER
SAM HORTON	<i>Sam Horton</i>	QATSS/SAIC	SURV. LEADER	702-794-1497
MARtha MUSTARD	<i>Martha Mustard</i>	USGS	Hydrologist (QA)	(303)236-0516 x301
EMILY S. REITER	<i>Emily S Reiter</i>	USGS/PWT	QA SPECIALIST	(303)236-0516 x297
RICHARD E. POWE	<i>R E Powe</i>	QATSS/SAIC	SR QA SPECIALIST	702/794-1480
BRUCE PARKS	<i>Bruce Parks</i>	USGS-ESIP	Assoc. Chief, ESIP	(303)236-0550-236
ARDELL WHITESIDE	<i>Ardele Whiteside</i>	USGS/ESIP-SAIC	QA IMPLM. SPEC.	303-236-5550 x233
ROBERT P. KEENE	<i>Robert P Keene</i>	QATSS/SAIC	QATSS PRG. MGR.	702-794-1486
TOM CANNEY	<i>Tom Canney</i>	USGS	QA MANAGER	303-236-0516
John Therien	<i>John Therien</i>	YMQAO/QATSI	QA Programs	702/794-5408

## Enclosure to Surveillance Report 96-025

The following Performance Reports (PR) and Purchase Orders (PO) were reviewed by OQA personnel to assure proper inclusion of Quality Assurance requirements

PR 96-4889-6212 PO 1434-CR-96-SA-00951	Calibration Services (Balances), Quality Control Services Portland, OR
PR 6RQ4889-6214 PO 1434-CR-SA-00844	Analytical Services, Woods Hole Oceanographic Institute, National Ocean Sciences AMS Facility, Woods Hole, MA
PR 96-4889-6225 PO 1434-CR-96-SA-00953	Calibration Services (Weights) Colorado Dept. Of Agriculture Denver, CO
PR 7RQ4889-7005 PO 7-4889-23001	Calibration Services, Ball Corporation, Boulder, CO
PR 7RQ4889-7006 PO 7-4889-46004.25.1B	Calibration Services, Ball Corporation, Boulder, CO
PR 7RQ4889-7008 PO 7-4889-46008-269Z	Calibration Services, (Data loggers), Campbell Scientific, Logan, UT
PR 7RQ4889-7009 PO 7-4889-23001.25.1C	Calibration Services, (Data loggers), Campbell Scientific Logan, UT
PR 7RQ4889-7010 PO 7-4889-46004.25.1E	Calibration Services, (Data loggers), Campbell Scientific Logan, UT
PR 7RQ4889-7011 PO 7-4889-24001.251A	Calibration Services, (Balances), Certified Balance Systems, Englewood, CO
PR 7RQ4889-7016 PO 7-4889-15000-251E	Calibration Services (Radiometers & Pyrometers), Eppley Laboratories, Newport, CA
PR 7RQ4889-7032 PO 70-4889-46004-262F	Gas Standards & Specialty Gases, Scott Specialty Gases, Longmont, CA
PR 7RQ4889-7021	Analytical Services, (Cation & anion concentrations), Huffman Laboratories
PR 7RQ4889-7037	Analytical Services, University of Colorado, INSTAAR Stable Isotope Laboratory
PR 96-4889-6224	Calibration Services, (Pressure Transducers), SETRA, Action,

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PO 1434-CR-96-SA-00954 MA

PO 1434-CR-96-SA-00660 Dr. R. Lawrence Edwards

PO 1434-CR-96-SA-00591 University of Minnesota

PR 6RQ-4889-6142

PR 6RQ-4889-6125 Campbell Scientific, Inc.

Contract Modifications:

96-4889-6191MOD1

96-4889-6192MOD2

96-4889-6194MOD2

96-4889-6190MOD1

96-4889-6189MOD1

96-4889-6188MOD1

96-4889-6185MOD1

96-4889-6184MOD1

96-4889-6183MOD1



# United States Department of the Interior



GEOLOGICAL SURVEY  
BOX 25046 M.S. 425  
DENVER FEDERAL CENTER  
DENVER, COLORADO 80225

QA: L

IN REPLY REFER TO:  
Enclosure 3  
Page 1 of 1

October 7, 1996

## MEMORANDUM

TO: THE FILE - YMQAD-96-C005

FROM: T. H. Chaney, *[Signature]*  
YMP-USGS Quality Assurance Manager

SUBJECT: Management Meetings

The purpose of this memorandum is to confirm that there is a standing meeting on Tuesdays at 8:30 am in the office of the Chief, Earth Science Investigation Program (ESIP). The purpose of the meeting is to discuss mutual QA issues indicating the status of open deficiencies. The meeting is used as an opportunity to identify any over due responses, as well as to discuss acceptable responses to new deficiencies. The primary attendees are the QA Manager, Chief, ESIP and Chief, P&P. Also in attendant are any staff members involved in QA implementation and the QA program. The meeting has been scheduled since February, 1996.

*GD*  
*10/8/96*

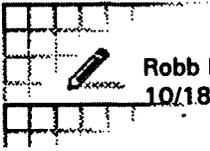
### CONCURRENCE:

*[Signature]*  
\_\_\_\_\_  
Chief, Program and Planning *END 10/8/96*  
*Planning and Support Program*

Date 10/8/96

*[Signature]*  
\_\_\_\_\_  
Chief, Implementation Team

Date 10/8/96



Robb Keele  
10/18/96 10:57 AM

To: Bruce Parks  
cc: (bcc: Sam Horton)  
Subject: Re: QMP 3.04, R7, M3 revised draft of earlier today

Bruce,

Looks good!!

Hope this help improve the reviews/process.

## YMP-USGS MODIFICATION TO YMP-USGS QUALITY MANAGEMENT PROCEDURE

Modification Number: QMP-3.04. R7 - M(10-15-96)

Applies to YMP-USGS-QMP- 3.04, REV. R7

QMP Title: Review and Approval of YMP-USGS Data, Interpretations of Data, and Manuscripts

### REQUIRED MODIFICATIONS:

#### Para. Changed to

- 4.2 Change second sentence to read: **~~The Team Chief also is responsible for selecting the reviewers, ensuring that documentation and quality assurance requirements have been met, and that all mandatory comments have been satisfactorily resolved and incorporated appropriately into the final version submitted by the Chief YMPB to DOE.~~**
- 4.3 Change paragraph to read: **~~The YMP-USGS Quality Assurance (QA) Manager has the responsibility for verifying that reviews of manuscripts and associated data and interpretations of data satisfy selected YMP-USGS QA Program requirements.~~**
- 5.1 Change paragraph to read: **~~Data Review: Data reviews are conducted: 1) before data are formally released for public use; 2) prior to the completion of the review of a manuscript, if appropriate; 3) at any time an investigator determines a data set is ready for review; or 4) when needed to meet scheduled data submittals to DOE. The investigator responsible for the data shall provide the reviewer with the organized data for review along with any supporting information (Para. 3.8), an itemized list of contents, and information identifying the intended use of objectives or established requirements for the data.~~**
- 5.1.2 Add bullet: **~~• Data are technically adequate to meet the stated objectives or established requirements (see paragraph 5.1)~~**
- 5.1.3.1 Change paragraph to read: **~~Data review documentation shall show evidence that the review criteria stated in 5.1.2 have been considered and shall establish that the data are technically adequate and suitable for the intended use as identified by the investigator.~~**
- 5.2 Change third sentence to read: **~~The author, through the YMP-USGS Reports Specialist, shall provide the reviewers with copies of the manuscript accompanied by appropriate documents (documentation will vary depending upon the nature of the manuscript - abstract, journal article, etc.), information identifying the objectives or established requirements for the manuscript, as well as a copy of the data review documentation when the data review is complete.~~**
- 5.2.2.5 Add paragraph: **~~Adequacy and Completeness: Does the manuscript meet the objectives or established requirements (see paragraph 5.2)?~~**

## YMP-USGS MODIFICATION TO YMP-USGS QUALITY MANAGEMENT PROCEDURE CONTINUATION SHEET

Modification Number: OMP-3.04, R7-M2 Applies to YMP-USGS-QMP- 3.04, REV. R7

QMP Title: Review and Approval of YMP-USGS Data, Interpretations of Data, and Manuscripts

**REQUIRED MODIFICATIONS:**

5.2.3 Change paragraph to read: **“MANUSCRIPT REVIEW DOCUMENTATION: Documentation shall show evidence that the review criteria stated in Para 5.2.2 have been considered and that the manuscript is technically adequate and meets the objectives or established requirements. Mandatory comments shall be documented on the DMR/CRF or referenced on the DMR/CRF. Non-mandatory comments should be marked on the reviewed draft of the manuscript. If no comments exist, it shall be noted on the DMR/CRF.”**

10: HISTORY OF CHANGES:

<u>Revision/ Modification No.</u>	<u>Effective Date</u>	<u>Description of Revision</u>
QMP-3.04, R7-M3		Added responsibility for Team Chief to ensure that resolution of reviewer comments have been incorporated appropriately in to the final version of documents being submitted by the Chief, YMPB to DOE. Updated review criteria for data and manuscript/ interpretations of data to include adequacy and completeness.

ATTACHMENT 2 Comment Resolution Form

Add check box:  Final Review

Add sentence at bottom of form: **“Final review by Team Chief certifies that resolution of reviewer comments has been incorporated appropriately into the final version.”**