

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YMP-93-13

OF

RAYTHEON SERVICES NEVADA

LAS VEGAS, NEVADA

JULY 12 -16, 1993

Prepared by:



John S. Martin
Audit Team Leader
Yucca Mountain Quality Assurance Division

Date:

6-4-93

Approved by:



Donald G. Horton
Director
Office of Quality Assurance

Date:

4/8/93

1.0 SCOPE

This audit, to be performed by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD) will evaluate the Raytheon Services Nevada (RSN) Quality Assurance (QA) Program to determine whether it meets the requirements and commitments imposed by the Office of Civilian Radioactive Waste Management. This will be done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

In addition to follow-up on any open Corrective Action Requests, a representative sample of deficiencies identified during previous QA audits and surveillances of RSN will be included in the scope of this audit to determine the effectiveness of RSN corrective actions.

The programmatic elements to be audited, as well as those programmatic elements not included in this audit, are identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

| | |
|---------------------------------|---|
| Pre-audit Team/Observer Meeting | 8:00 a.m., July 12, 1993 Las Vegas, Nevada |
| Pre-audit Conference | 9:00 a.m., July 12, 1993 Las Vegas, Nevada |
| Audit Activities | 10:00 a.m. to 4:00 p.m. July 12, 1993 Las Vegas, Nevada |
| | 8:00 a.m. to 4:00 p.m. July 13-15, 1993 |
| | 8:00 a.m. to 11:30 a.m. July 16, 1993 |
| Post-audit Conference | 2:00 p.m., July 16, 1993 Las Vegas, Nevada |

There will be a daily YMQAD Audit Team/Observer caucus starting at 4:15 p.m. and also a daily Audit Team Leader/Observer/RSN meeting starting at 8:15 a.m., to discuss potential deficiencies and establish needed liaison.

3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES

The requirements to be audited will be contained in the programmatic checklist. This checklist will be developed from the latest available revision of the following documents:

- RSN Quality Assurance Program Description and implementing procedures
- Applicable Yucca Mountain Site Characterization Project Office Administrative Procedures-Quality

The conduct of the audit will be guided by the documents listed below:

- Quality Assurance Administrative Procedure (QAAP) 18.2, "Audit Program"
- QAAP 16.1, "Corrective Action"

4.0 ACTIVITIES TO BE AUDITED

Programmatic Elements

RSN activities associated with the following QA program elements will be audited:

- 1.0 Organization —
- 2.0 Quality Assurance Program
- 3.0 Design Control
- 4.0 Procurement Document Control
- 5.0 Instructions, Procedures, Plans and Drawings
- 6.0 Document Control
- 7.0 Control of Purchased Items and Services
- 10.0 Inspection
- 11.0 Test Control
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Storage, and Shipping
- 14.0 Inspection, Test and Operating Status
- 15.0 Control of Nonconforming Items
- 16.0 Corrective Action
- 17.0 Quality Assurance Records
- 18.0 Audits
- 19.0 Computer Software

The following programmatic elements were considered during development of this audit scope and determined to be not applicable since RSN has no activities for which these elements apply:

- 8.0 Identification and Control of Materials, Parts, and Components
- 9.0 Control of Processes

If the audit team identifies a need to verify additional programmatic areas during the audit, they will be added to the audit scope and verified accordingly.

Technical Elements

None

5.0 AUDIT TEAM MEMBERS

John S. Martin, YMQAD, Las Vegas, Nevada, Audit Team Leader
Cynthia H. Prater, YMQAD, Las Vegas, Nevada, Audit Team Leader-in-Training
Stephen R. Dana, YMQAD, Las Vegas, Nevada, Auditor
Frank J. Kratzinger, YMQAD, Las Vegas, Nevada, Auditor
John R. Matras, YMQAD, Las Vegas, Nevada, Auditor

6.0 AUDIT CHECKLIST

YMP-93-13-01, Programmatic Checklist, will be used during the programmatic portions of this audit.

*Rec'd with letter dtd.
6/4/93*

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Prepared by: 
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Date: 6-4-93

Approved by: 
Donald G. Horton
Director
Office of Quality Assurance

Date: 4/8/93
102.7

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ENCLOSURE

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- 2.0 Quality Assurance Program
- 3.0 Design Control
- 4.0 Procurement Document Control
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- 6.0 Document Control
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- 10.0 Inspection
- 11.0 Test Control
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Storage, and Shipping
- 14.0 Inspection, Test and Operating Status
- 15.0 Control of Nonconforming Items
- 16.0 Corrective Action
- 17.0 Quality Assurance Records
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The following programmatic elements were considered during development of this audit scope and determined to be not applicable since RSN has no activities for which these elements apply:

- 8.0 Identification and Control of Materials, Parts, and Components
- 9.0 Control of Processes

If the audit team identifies a need to verify additional programmatic areas during the audit, they will be added to the audit scope and verified accordingly.

Technical Elements

None

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Cynthia H. Prater, YMQAD, Las Vegas, Nevada, Audit Team Leader-in-Training
Stephen R. Dana, YMQAD, Las Vegas, Nevada, Auditor
Frank J. Kratzinger, YMQAD, Las Vegas, Nevada, Auditor
John R. Matras, YMQAD, Las Vegas, Nevada, Auditor

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT YMP-93-13 OF

RAYTHEON SERVICES NEVADA

LAS VEGAS, NEVADA

JULY 12-16, 1993

AUDIT SCOPE

This audit, to be performed by a team of auditors from the YMQAD, will evaluate the RSN QA Program to determine whether it meets the requirements and commitments imposed by OCRWM. This will be done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

In addition to follow-up on open CARs, a representative sample of deficiencies identified during previous QA audits and surveillances of RSN will be included in the scope of this audit to determine the effectiveness of RSN corrective actions.

QA PROGRAM ELEMENTS TO BE AUDITED

- 1.0 Organization**
- 2.0 Quality Assurance Program**
- 3.0 Design Control**
- 4.0 Procurement Document Control**
- 5.0 Instructions, Procedures, Plans and Drawings**
- 6.0 Document Control**
- 7.0 Control of Purchased Items and Services**
- 10.0 Inspection**
- 11.0 Test Control**
- 12.0 Control of Measuring and Test Equipment**
- 13.0 Handling, Storage, and Shipping**
- 14.0 Inspection, Test and Operating Status**
- 15.0 Control of Nonforming Items**
- 16.0 Correction Action**
- 17.0 Quality Assurance Records**
- 18.0 Audits**
- 19.0 Computer Software**

The following programmatic elements were considered during development of this audit scope and determined to be not applicable since RSN has no activities for which this element applies:

- 8.0 Identification and Control of Materials, Parts, Components, and Samples**
- 9.0 Control of Processes**

If the audit team identifies a need to verify additional program elements during the audit, they will be added to the audit checklist and verified accordingly.

PROCEDURES TO BE UTILIZED TO PERFORM AUDIT

THE CONDUCT OF THE AUDIT WILL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF THE DOCUMENTS LISTED BELOW:

- * QUALITY ASSURANCE ADMINISTRATIVE PROCEDURE (QAAP) 18.2, "AUDIT PROGRAM"**
- * QAAP 16.1, "CORRECTIVE ACTION REQUESTS"**

AUDIT TEAM MEMBERS

JOHN S. MARTIN, AUDIT TEAM LEADER, YMQAD

CYNTHIA H. PRATER, ATL-IN-TRAINING, YMQAD

STEPHEN R. DANA, AUDITOR, YMQAD

RAUL A. HINOJOSA, AUDITOR, YMQAD

FRANK J. KRATZINGER, AUDITOR, YMQAD

JOHN R. MATRAS, AUDITOR, YMQAD

AUDIT SCHEDULE

| | |
|---------------------------------------|---|
| Preaudit Team Observer Meeting | 8:30 a.m., July 12, 1993 Las Vegas, Nevada |
| Preaudit Conference | 9:00 a.m., July 12, 1993 Las Vegas, Nevada |
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There will be daily YMQAD Audit Team/Observer meetings starting at 4:15 p.m. and also a daily Audit Team Leader/Observer/RSN meeting starting at 8:15 a.m., to discuss potential deficiencies and establish needed liaison.

OCRWM AUDIT NO. YMP-93-13 OF RAYTHEON SERVICES NEVADA

| MONDAY, 7/12 | TUESDAY, 7/13 | WEDNESDAY, 7/14 | THURSDAY, 7/15 | FRIDAY, 7/16 |
|--|---|---|--|--|
| 8:00 MANAGEMENT MEETING (AS NEEDED) | | | | |
| 9:30 - 11:30 | 7:30 - 11:30 | 7:30 - 11:30 | 7:30 - 11:30 | 7:30 - 11:30 |
| 1 S. Dana 2 C. Prater 3 F. Kratzinger 4 J. Martin 10 R. Hinojosa 19 J. Matras | 15 S. Dana 2 C. Prater 3 F. Kratzinger 7 J. Martin 10 R. Hinojosa 19 J. Matras | 11 S. Dana 16 C. Prater 3 F. Kratzinger 5 J. Martin 10 R. Hinojosa 3 J. Matras | 12 S. Dana 18 C. Prater 3 F. Kratzinger 6 J. Martin (IV) R. Hinojosa 17 J. Matras | 12 S. Dana 18 C. Prater 3 F. Kratzinger 6 J. Martin (II) R. Hinojosa 17 J. Matras |
| 11:30 - 12:30 LUNCH | | | | |
| 12:30 - 4:00 | 12:30 - 4:00 | 12:30 - 4:00 | 12:30 - 4:00 | 12:30 - 1:30 |
| 1 S. Dana 2 C. Prater 3 F. Kratzinger 4 J. Martin 10 R. Hinojosa 19 J. Matras | 15 S. Dana 2 C. Prater 3 F. Kratzinger 7 J. Martin 10 R. Hinojosa 17 J. Matras | 15 S. Dana 16 C. Prater 3 F. Kratzinger 5 J. Martin 14 R. Hinojosa 3 J. Matras | 12 S. Dana 18 C. Prater 3 F. Kratzinger 6 J. Martin 11 R. Hinojosa 17 J. Matras | OPEN ITEMS |
| 4:15 DAILY DEBRIEFING | | | | 2:00 POST - AUDIT CONFERENCE |

RSN PROCEDURES BY PROGRAM ELEMENT

| AUDITOR | PROGRAM ELEMENT | PRCD NO. | PROCEDURE TITLE |
|-------------------|--|------------|--|
| Dana | 1 | PP-01-01 | Geology/Hydrology Organizational Interface |
| | | PP-01-05 | YMP Organization |
| | | QAP-1.1(Y) | Organization |
| Prater | 2 | PP-02-01 | Indoctrination and Training |
| | | PP-02-02 | Personnel Selection |
| | | PP-02-03 | Managment Assessment |
| | | QAP-2.1(Y) | Development of the Quality Assurance Program Description |
| | | QAP-2.2(Y) | Training and Indoctrination of Quality Assurance Personnel |
| | | QAP-2.7(Y) | Development of the Quality Assurance Program |
| Kratzinger Matras | 3 | PP-02-05 | Selection of Quality Assurance Controls (Grading) for Items and Activities |
| | | PP-02-06 | Determination of the Importance of Items and Activities |
| | | PP-02-09 | Technical Review Board |
| | | PP-03-01 | Design Inputs and Informational Data to Outside Organizations |
| | | PP-03-02 | Design Methodology |
| | | PP-03-03 | Design Analyses |
| | | PP-03-04 | Design Verification |
| | | PP-03-05 | Interface Control |
| | | PP-03-07 | Preparation and Control of Specifications |
| | | PP-03-09 | Interdiscipline Review |
| | | PP-03-12 | Preparation and Control of Drawings |
| | | PP-03-13 | Basis for Design |
| | | PP-03-15 | Configuration Identification and Documentation |
| | | PP-03-16 | Configuration Status Reporting |
| | | PP-03-17 | Configuration Change Control |
| PP-03-18 | Technical Information Flow To and From the YMP Technical Data Base | | |

RSN PROCEDURES BY PROGRAM ELEMENT

| AUDITOR | PROGRAM ELEMENT | PRCD NO. | PROCEDURE TITLE |
|----------------------|-----------------|-------------|---|
| Kratzinger Matras | 3 cont | PP-03-19 | Information Flow Into the Project Reference Information Base |
| | | PP-03-20 | Surface Based Borehole Programs |
| | | PP-03-21 | Management and Independent Technical Reviews |
| | | PP-03-22 | Preparation of As-Built Drawings and Specifications |
| | | PP-03-23 | Field Change Control Process |
| | | QAP-3.1(Y) | QA Review of Design Output Documents |
| Martin | 4 | PP-04-01 | Purchasing (Services) |
| | | QAP-4.1(Y) | QA Review of Procurement Documents |
| Martin | 5 | PP-05-01 | Preparation and Control of Procedures |
| | | QAP-5.1(Y) | Development of Quality Assurance Procedures |
| Martin | 6 | PP-06-01 | Controlled Document Distribution |
| | | PP-06-05 | Submittal Control and Review |
| | | QAP-6.1(Y) | QA Controlled Document Distribution |
| | | QAP-6.2(Y) | Review of Documents |
| Martin | 7 | QAP-7.1(Y) | Supplier Selection |
| | | QAP-7.2(Y) | Source Verification |
| | | QAP-7.4(Y) | Supplier Deviation Report |
| Hinojosa | 10 | PP-10-01 | Field Drilling Engineer Support Activities |
| | | PP-10-02 | Field Logging Operations |
| | | QAP-2.6(Y) | Training, Qualification and Certification of QC Inspection Personnel |
| | | QAP-10.1(Y) | Field Verification |
| | | QAP-10.2(Y) | Quality Control Verification of As-Built Drawing and Specification |
| | | QAP-10.3(Y) | Inspection |
| | | QAP-10.4(Y) | Open Item Tracking |
| Dana | 11 | PP-11-01 | General Testing Procedures For The Materials Testing Laboratory Support |

RSN PROCEDURES BY PROGRAM ELEMENT

| AUDITOR | PROGRAM ELEMENT | PRCD NO. | PROCEDURE TITLE |
|----------|-----------------|-------------|--|
| Dana | 12 | PP-02-08 | Training, Qualification, and Certification of Material Testing Laboratory Personnel |
| | | PP-12-01 | Control of Measuring and Test Equipment |
| Hinojosa | 14 | AP-5.28Q | Management of Field Activities Using Travelers |
| Dana | 15 | QAP-15.1(Y) | Control of Nonconforming Items |
| Prater | 16 | QAP-2.4(Y) | Stop Work Order |
| | | QAP-16.1(Y) | Deficiency Reporting |
| | | QAP-16.2(Y) | Corrective Action |
| | | QAP-16.3(Y) | Trend Analysis |
| Matras | 17 | PP-17-01 | Records Management |
| | | PP-17-07 | Log Data Handling |
| Prater | 18 | QAP-2.3(Y) | Qualification of Audit Personnel |
| | | QAP-18.1(Y) | Audits |
| | | QAP-18.2(Y) | Surveillances |
| Matras | Supp I | PP-19-07 | Certification of Computer Software |
| | | QAP-19.1(Y) | Computer Software |
| Hinojosa | Supp II | AP-6.3Q | Procedure For Requesting Samples For Examination at Yucca Mountain Site Characterization Project SMF |
| Hinojosa | Supp IV | PP-01-02 | Work Initiation |
| | | PP-01-03 | Survey Department Work Functions |
| | | PP-01-04 | Survey Department Document Control and Distribution |

Raytheon Services Nevada

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

PROJECT PROCEDURES MANUAL

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| PROCEDURE NUMBER | PIC NO. | TITLE | REV | EFFECTIVE DATE |
|------------------|---------|-------|-----|----------------|
|------------------|---------|-------|-----|----------------|

PP0 SECTION 1 ORGANIZATION

PP-01-01 Geology/Hydrology Organizational Interface 0 4-29-91

L.E. MARSON PP-01-02 Work Initiation 1 5-7-93

L.E. MARSON PP-01-03 Survey Department Work Functions 1 4-30-93

L.E. MARSON PP-01-04 Survey Department Document Control and Distribution 1 4-30-93

PP0 | PP-01-05 YMP Organization 1 5-10-93

SECTION 2 QUALITY ASSURANCE PROGRAM

D. STUBBS *RAMDY* PP-02-01 Indoctrination and Training 2 4-22-93

RAMDY PP-02-02 Personnel Selection 1 4-22-93

RAMDY PP-02-03 Management Assessment 1 4-7-93

RAMDY PP-02-05 Selection of Quality Assurance Controls (Grading) for Items and Activities 2 4-2-93

RAMDY PP-02-06 Determination of the Importance of Items and Activities 2 4-2-93

RAMDY PP-02-07 Qualification of Existing Data 1 4-2-93

L.E. MARSON PP-02-08 Training, Qualification, and Certification of Materials Testing Laboratory Personnel 1 5-7-93

RAMDY PP-02-09 Technical Review Board 1 4-2-93

SECTION 3 DESIGN CONTROL

RAMDY PP-03-01 Design Inputs and Informational Data to Outside Organizations 2 4-2-93

RAMDY PP-03-02 Design Methodology 1 4-2-93

Raytheon Services Nevada

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

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|---------------------|------------------|---------|--|-----|----------------|
| <i>RALPH</i> | PP-03-03 | | Design Analyses | 1 | 4-2-93 |
| <i>RALPH</i> | PP-03-04 | | Design Verification | 1 | 5-5-93 |
| <i>RALPH</i> | PP-03-05 | | Interface Control | 1 | 4-2-93 |
| | PP-03-06 | | Document Hold Control | 1 | 5-5-93 |
| <i>RALPH</i> | PP-03-07 | | Preparation and Control of Specifications | 2 | 5-5-93 |
| <i>RALPH</i> | PP-03-09 | | Interdiscipline Review | 1 | 4-2-93 |
| | PP-03-10 | 1 | | | 2-7-92 |
| <i>R.</i> | PP-03-10 | | Engineering Plan | 0 | 4-15-91 |
| <i>John R.</i> | PP-03-12 | | Preparation and Control of Drawings | 1 | 5-5-93 |
| <i>RALPH</i> | PP-03-13 | | Basis for Design | 2 | 4-22-93 |
| <i>LARRY</i> | PP-03-15 | | Configuration Identification and Documentation | 2 | 4-23-93 |
| <i>RALPH</i> | PP-03-16 | | Configuration Status Reporting | 2 | 4-23-93 |
| <i>RALPH</i> | PP-03-17 | | Configuration Change Control | 2 | 4-23-93 |
| <i>LARRY</i> | PP-03-18 | | Technical Information Flow To and From The YMP Technical Data Base | 1 | 4-2-93 |
| <i>RALPH</i> | PP-03-19 | | Information Flow Into The Project Reference Information Base | 1 | 4-2-93 |
| <i>ESDIE</i> | PP-03-20 | | Surface Based Borehole Programs | 1 | 4-30-93 |
| <i>LARRY</i> | PP-03-21 | | Management and Independent Technical Reviews | 2 | 4-2-93 |
| <i>RALPH, LARRY</i> | PP-03-22 | | Preparation of As-Built Drawings and Specifications | 1 | 4-22-93 |

Raytheon Services Nevada

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

PROJECT PROCEDURES MANUAL

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| PROCEDURE NUMBER | PIC NO. | TITLE | REV | EFFECTIVE DATE |
|--|---------|--|-----|----------------|
| PP-03-23 | | Field Change Control Process | 1 | 4-30-93 |
| SECTION 4 PROCUREMENT DOCUMENT CONTROL | | | | |
| PP-04-01 | | Purchasing (Services) | 1 | 4-22-93 |
| SECTION 5 IMPLEMENTING DOCUMENTS | | | | |
| PP-05-01 | | Preparation and Control of Procedures | 1 | 5-10-93 |
| PP-05-02 | | Desk Instructions | 0 | 2-15-91 |
| SECTION 6 DOCUMENT CONTROL | | | | |
| PP-06-01 | | Controlled Document Distribution | 1 | 4-22-93 |
| PP-06-02 | 1 | | | 12-20-91 |
| PP-06-02 | | Publications Review, Approval and Distribution | 0 | 10-7-91 |
| PP-06-05 | | Submittals Control and Review | 1 | 4-2-93 |
| SECTION 7 CONTROL OF PURCHASED ITEMS AND SERVICES | | | | |
| SECTION 8 IDENTIFICATION AND CONTROL OF ITEMS | | | | |
| SECTION 9 CONTROL OF SPECIAL PROCESSES | | | | |
| SECTION 10 INSPECTION | | | | |
| PP-10-01 | | Field Drilling Engineer Support Activities | 1 | 4-2-93 |
| PP-10-02 | | Field Logging Operations | 1 | 4-2-93 |
| PP-10-03 | | Construction Management Reporting | 0 | 4-1-92 |
| SECTION 11 TEST CONTROL | | | | |

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H.J. Roberts*

PP-05-01

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Mundy*

Raytheon Services Nevada

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

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| PROCEDURE NUMBER | PIC NO. | TITLE | REV | EFFECTIVE DATE |
|---|---------|--|-----|----------------|
| PP-11-01 | | General Testing Procedure For The Materials Testing Laboratory Support | 1 | 5-7-93 |
| SECTION 12 CONTROL OF MEASURING AND TEST EQUIPMENT | | | | |
| PP-12-01 | | Control of Measuring and Test Equipment | 1 | 5-7-93 |
| SECTION 13 HANDLING, STORAGE, AND SHIPPING | | | | |
| SECTION 14 INSPECTION, TEST, AND OPERATING STATUS | | | | |
| SECTION 15 NONCONFORMANCES | | | | |
| SECTION 16 CORRECTIVE ACTION | | | | |
| SECTION 17 QUALITY ASSURANCE RECORDS | | | | |
| PP-17-01 | | Records Management | 3 | 4-2-93 |
| PP-17-07 | | Log Data Handling | 1 | 4-2-93 |
| SECTION 18 AUDITS | | | | |
| SUPPLEMENT I SOFTWARE | | | | |
| PP-19-07 | | Certification of Computer Software | 0 | 4-7-93 |
| SUPPLEMENT II SAMPLE CONTROL | | | | |
| SUPPLEMENT III SCIENTIFIC INVESTIGATION | | | | |
| SUPPLEMENT IV FIELD SURVEYING | | | | |

4/10/93

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

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AUDIT/SURVEILLANCE
NO YMP-93-13-01

QUALITY ASSURANCE CHECKLIST (continuation sheet)

| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 3-8 | Verify that the transmittal of design input, design input change, or informational data document is authorized by the TPO, or designee. (Para. 6.4) | | |
| 3-9 | Verify that if previously transmitted design input is changed, RSN transmits the changed input to the outside entity noting on the transmittal that the input being transmitted supersedes the input previously transmitted. (Para. 6.5) | | |

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

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AUDIT/SURVEILLANCE
NO YMP-93-13-01

QUALITY ASSURANCE CHECKLIST (continuation sheet)

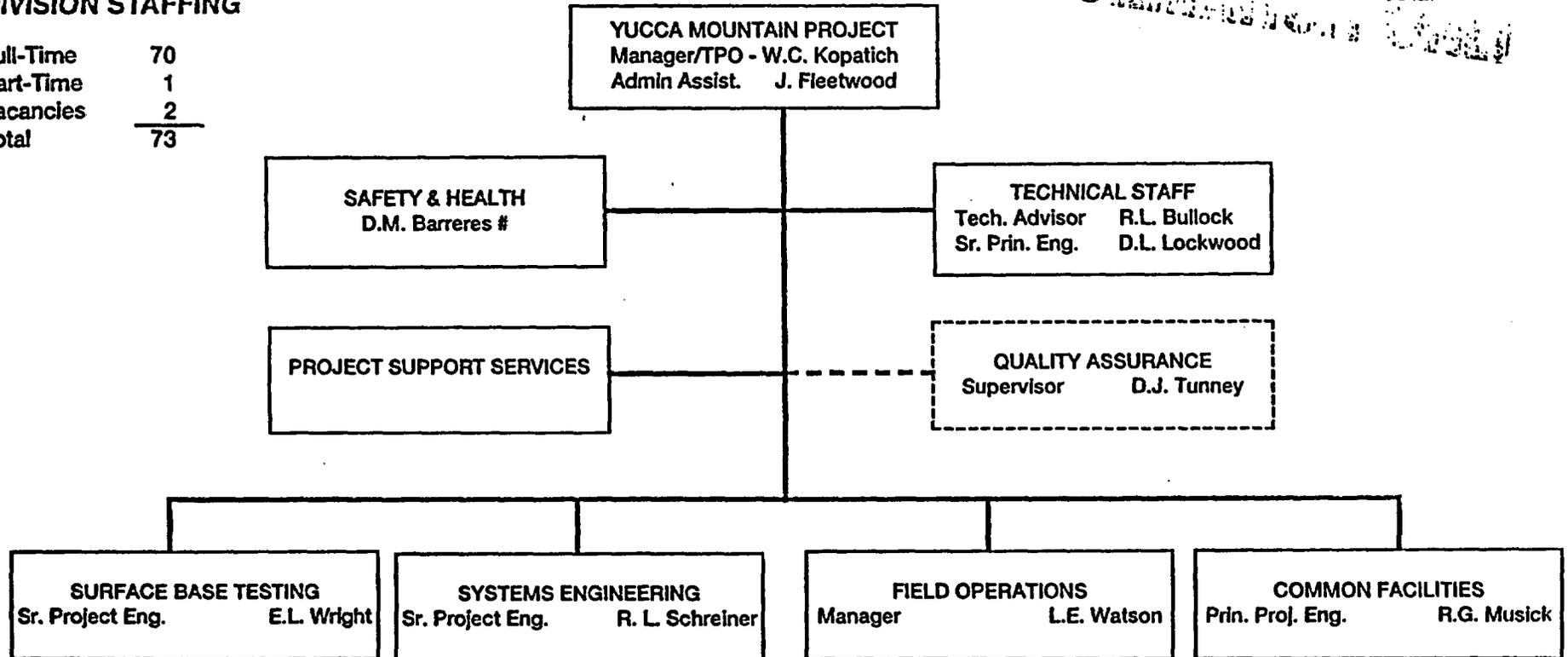
| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 3-10 | <p align="center">PP-03-02, Revision 1 Design Methodology</p> <p>Verify that all verbal inputs, received by RSN personnel, are documented on a YMP Record of Verbal Communication, Form LV-186, and a copy is sent to the communicants for concurrence. (Para. 6.1.2.6)</p> | | |
| 3-11 | <p>Verify that upon completion, the design output documents are issued to the Project Office for review and acceptance. (Para. 6.1.9)</p> | | |
| 3-12 | <p>Verify that when it is necessary to initially transmit design information orally or by other informal means, the transmittal is confirmed promptly by use of the Record of Verbal Communication. (Para. 6.4.2)</p> | | |

Nevada Operations

| | |
|--------------|----------|
| Full-Time | 4 |
| Part-Time | 1 |
| Vacancies | 0 |
| Total | 5 |

DIVISION STAFFING

| | |
|--------------|-----------|
| Full-Time | 70 |
| Part-Time | 1 |
| Vacancies | 2 |
| Total | 73 |



INFORMATION ONLY

+ Matrixed
Part Time

Manager _____

June 1, 1993



Nevada Operations

Yucca Mountain Project

Quality Assurance

| | |
|-----------|----------|
| Full-Time | 9 |
| Part-Time | 0 |
| Vacancies | 0 |
| Total | <u>9</u> |

| | |
|---------------------------|-----------------|
| QUALITY ASSURANCE | |
| Supervisor - D.J. Tunney+ | |
| Secretary II | P.R. Werley+ |
| Audits | |
| Prin. Eng. | A. Ali+ |
| Engineering | |
| Sr. Specialist | P.B. Hale+ |
| Sr. Eng. | H.W. Straight+ |
| Quality Control | |
| Supvr. | C.M. McClaskey+ |
| Sr. Eng. | P.R. Dahlberg+ |
| Sr. Specialist | W.A. Lindquist+ |
| Inspector | S.S. Ricks+ |

INFORMATION ONLY

Manager _____



Nevada Operations

Yucca Mountain Project

Surface Based Testing

| | |
|-----------|----------|
| Full-Time | 9 |
| Part-Time | 0 |
| Vacancies | 0 |
| Total | <u>9</u> |

INFORMATION ONLY

SURFACE BASED TESTING
 Sr. Proj. Eng. E.L. Wright

FIELD EXPLORATION DRILLING
 Prin. Eng. D. F. Putnam
 Prin. Eng. D. M. Cunningham
 Sr. Eng. M. J. Esp
 Project Eng. E. L. Wasson
 Prin. Eng. R. M. Olson
 Sr. Eng. R. W. Wright
 Sr. Eng. J. E. Anthony
 Secretary I C. Cummings

Manager _____



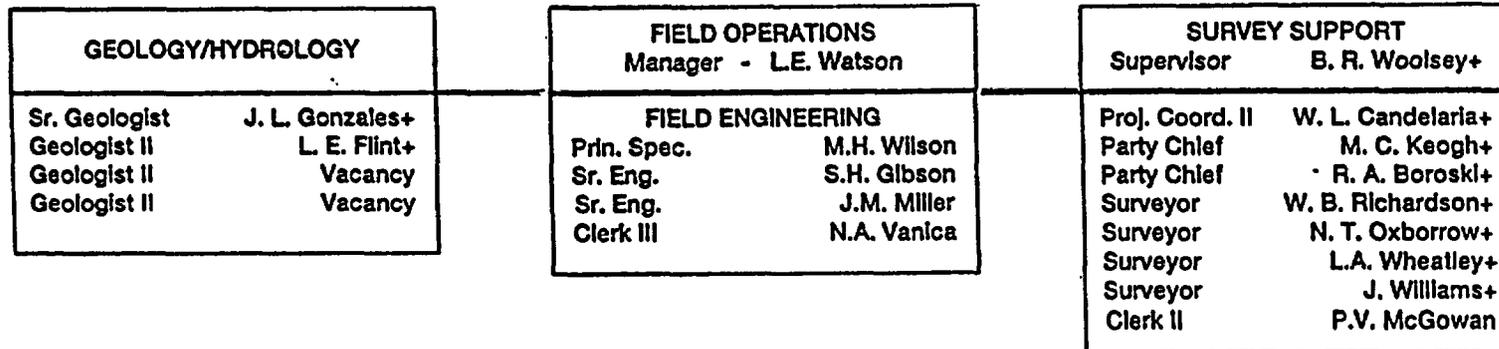
Yucca Mountain Project

Nevada Operations

FIELD OPERATIONS

| | |
|-----------|----------|
| Full-Time | 16 |
| Part-Time | 0 |
| Vacancies | <u>2</u> |
| Total | 18 |

INFORMATION ONLY



Manager _____



Nevada Operations

Yucca Mountain Project

Systems Engineering

| | |
|-----------|---|
| Full-Time | 8 |
| Part-Time | 0 |
| Vacancies | 0 |
| Total | 8 |

| | |
|---------------------------------|-----------------|
| SYSTEMS ENGINEERING | |
| Sr. Project Eng. - | R. L. Schreiner |
| Acting Proj Coord II | R.D. Drake |
| CONFIGURATION MANAGEMENT | |
| Prin. Specialist | H. W. Booth |
| Conf. Control Spec. | R. J. Hilsinger |
| Prin. Spec. | J. L. Rue |
| Clerk III | K. D. Kirwan |
| Sr. Eng. | R. C. DeKlever |
| RECORDS | |
| Sr. Specialist | J.E. Ferguson |

INFORMATION ONLY

Manager _____

June 1, 1993



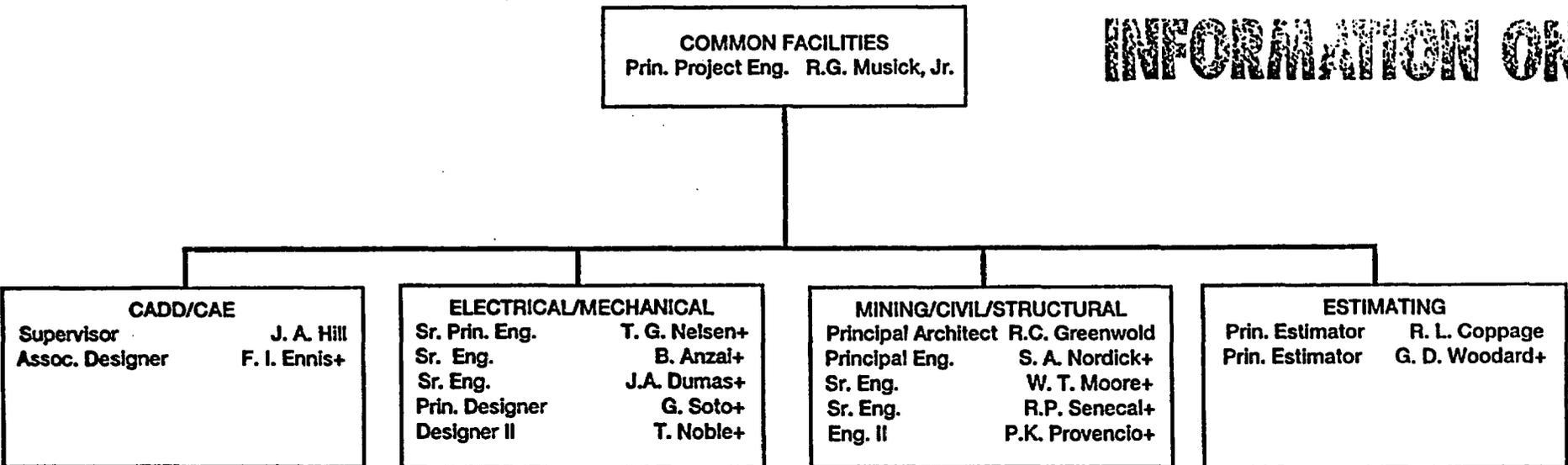
Nevada Operations

Yucca Mountain Project

COMMON FACILITIES

| | |
|-----------|----|
| Full-Time | 15 |
| Part-Time | 0 |
| Vacancies | 0 |
| Total | 15 |

INFORMATION ONLY



Manager _____



Nevada Operations

Yucca Mountain Project

Project Support Services

| | |
|-----------|----------|
| Full-Time | 9 |
| Part-Time | 0 |
| Vacancies | <u>0</u> |
| Total | 9 |

| PROJECT SUPPORT SERVICES | |
|--------------------------|----------------|
| CLERICAL SUPPORT | |
| Clerk III | J. C. Jacoby |
| Clerk II | S. E. Fielder |
| Clerk I | K. S. Johnston |
| Clerk I | G. Poole |
| PROJECT CONTROL SERVICES | |
| Sr. Prin. C&S Eng. | D.W. Thomas |
| C&S Engineer II | J. L. Malcomb |
| C&S Engineer II | A. B. Pruett |
| C&S Engineer I | K. A. Glynn |
| INFORMATION SYSTEMS | |
| Analyst II | R. D. Criddle+ |

INFORMATION ONLY

+ Matrixed

Manager _____

June 1, 1993

**OCRWM
AUDIT OBSERVER INQUIRY**

Audit No. _____

Log No. _____

Name _____ Organization _____

Requirement Reference _____

Question/Concern _____

Response _____

Observer's Acknowledgement

Cleared for Submittal to Participant

Lead Auditor / Lead Technical Specialist

Incorporated in Audit Checklist...Ref

Audit Team Leader

RSN/YMP BANK OF AMERICA CENTER - TELEPHONE NUMBERS

APRIL 13, 1993

| <u>NAME</u> | <u>PHONE</u> | <u>SUITE</u> | <u>NAME</u> | <u>PHONE</u> | <u>SUITE</u> |
|-----------------------------------|--------------|--------------|---------------------------------|--------------|--------------|
| ALI, Arshad 16218 | 794-7506 | 230 | MGCLASKEY, Curtis M. | 295-5803 | A-25 |
| ANTHONY, James E. | 295-4788 | A-25 | MCGOWAN, Patricia V. | 295-6024 | A-25 |
| ANZAI, Bert H. 4 | 794-7050 | 250 | MCKEE, B. Jean | 794-7093 | 230 |
| BOOTH, Henry W. | 794-7093 | 230 | MALCOMB, Jeff L. | 794-7508 | 230 |
| BULLOCK, Richard L. | 794-7012 | 250 | MOORE, Will T. | 794-7092 | 250 |
| CANDELARIA, Walter L. | 295-6024 | A-25 | MUSICK, Ralph G. | 794-7977 | 250 |
| CHESTNEY, Regina D. F. | 794-7057 | 250 | NELSEN, Terry G. | 794-7063 | 250 |
| COPPAGE, Richard L. | 794-7986 | 250 | NOBLE, Thomas A. | 794-7037 | 250 |
| CRIDDLE, Raymon D. | 794-7186 | 250 | NORDICK, Scott A. | 794-7552 | 250 |
| BEEPER | 794-6420 | | OLSON, Roger M. | 794-7988 | 230 |
| CUMMINGS, Cheryl | 794-7064 | 230 | POOLE, Gale | 794-7979 | 250 |
| CUNNINGHAM, Don M. | 295-4787 | A-25 | PROVENCIO, Randy K. | 794-7026 | 250 |
| DAHLBERG, Phillip R. | 794-7101 | 230 | PRUETT, Andrew B. | 794-7017 | 230 |
| DAVIS, Rick E. | 794-5932 | A-25 | PUTNAM, David F. | 295-4789 | A-25 |
| DEVER, Richard C. | 794-7592 | 230 | RICKS, Steven S. | 295-5893 | A-25 |
| DAKE, Rodney D. | 794-7264 | 250 | REGENDA, Michael J. | 794-7226 | 230 |
| ENNIS, Frank I. | 794-7072 | 250 | RUE, Joseph L. | 794-7032 | 230 |
| ESP, Mark J. | 794-7990 | 230 | SCHREINER, Randolph L. | 794-7071 | 230 |
| FERGUSON, J. Earl 17.00 | 794-7512 | 250 | SENECAL, Richard P. | 794-7080 | 250 |
| FIELDER, Sandra E. | 794-7019 | 250 | SOTO, Guillermo E. | 794-7551 | 250 |
| FITCH, Edward E. | 794-7551 | 250 | STANLEY, Bruce T. | 794-7989 | 250 |
| FLEETWOOD, Jan M. | 794-7980 | 250 | STRAIGHT, H. Wayne | 794-7222 | 230 |
| GIBSON, Sid H. | 295-5862 | A-25 | THOMAS, Dennis W. | 794-7507 | 230 |
| GLYNN, Kelly A. | 794-7084 | 230 | TUNNEY, Daniel J. | 794-7227 | 230 |
| GREENWOLD, Richard C. | 794-7204 | 250 | VANICA, Lolly | 295-5800 | A-25 |
| HALE, Paul B. | 794-7505 | 230 | WASSON, Ezra L. | 794-7034 | 230 |
| HILL, John A. | 794-7033 | 250 | WATSON, Lee E. | 295-5804 | A-25 |
| HILSINGER, Russell J. | 794-7511 | 230 | WERLEY, Pam R. | 794-7220 | 230 |
| JACOBY, Jill C. | 794-7017 | 230 | WILSON, Matthew H. | 794-7763 | A-25 |
| JOHNSTON, Kelli S. | 794-7103 | 250 | WOODARD, Gerry D. | 794-7065 | 250 |
| KALIA, Asha | 794-7267 | 230 | WOOLSEY, Brent R. | 295-6027 | A-25 |
| KIRWAN, Kimberly D. | 794-7262 | 230 | WRIGHT, Eddie L. | 794-7549 | 230 |
| KOPATICH, William C. | 794-7014 | 250 | WRIGHT, Richard W. | 295-5892 | A-25 |
| LINDQUIST, William A. | 295-5802 | A-25 | | | |
| LOCKWOOD, Don L. | 794-7079 | 250 | COMPUTER ROOM | 794-7265 | 250 |
| | 794-7018 | 230 | | | |
| | 794-7081 | 250 | | | |

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QUALITY ASSURANCE CHECKLIST

| | | | |
|--|---|--|------------------------------|
| ORGANIZATION EVALUATED | <input checked="" type="checkbox"/> EXTERNAL <input type="checkbox"/> INTERNAL | <input checked="" type="checkbox"/> AUDIT <input type="checkbox"/> SURVEILLANCE | PREPARED BY _____ DATE _____ |
| RSN _____ DATES OF EVALUATION _____ | | | |

| | |
|---|---------------------------|
| CONTROLLING DOCUMENT (Title, Number, Revision) | ACTIVITY EVALUATED |
| | RSN MTL |

| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 1-1 | <p>QAP-1.1(Y), REVISION 3, ORGANIZATION</p> <p>Interview the SQA/QA to determine:</p> <ul style="list-style-type: none"> o Responsibilities (Para. 5.2) o Involvement in disputes (Para. 6.1) o Delegation of Authority (6.3) o Current YMP QA Organization (Attachment 1) <p>NOTE 1: Determine if an organization chart exists with names in the blocks.</p> <p>NOTE 2: Determine reporting relationship of MTL personnel.</p> | | |

* INDICATE RESULTS: SATISFACTORY (SAT), UNSATISFACTORY (UNSAT), NOT APPLICABLE (N/A)

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 1-2 | <p>PP-01-05, REVISION 1, YMP ORGANIZATION</p> <p>Interview the TPO to determine:</p> <ul style="list-style-type: none"> o Responsibilities (Paras. 5.2.1 and 6.1.1) o Current RSN YMP Organization (Para. 6.1.3) <p>NOTE 1: Determine if an organization chart exists with names in the blocks.</p> <p>NOTE 2: Determine reporting relationship of MTL personnel.</p> <ul style="list-style-type: none"> o Delegation of Authority (Para. 6.5) o Resolution of disputes (Para. 6.6) <p>NOTE 3: Not clear how SQA/QA is involved in disputes.</p> | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 2-1 | PP-02-01, Rev. 2, INDOCTRINATION & TRAINING Para. 6.1.2 Verify that employees are indoctrinated and trained to minimum requirements. | | |
| 2-2 | Para. 6.2.2 Verify minimum instructor qualifications. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 2-3 | Para. 6.3.2.1 Verify that qualified instructor/trainer developed a lesson plan or outline for the subject matter to be covered. | | |
| 2-4 | Verify concurrence of the lesson plan. | | |
| 2-5 | Para 6.3.2.2 Verify records for classroom and on-the-job training. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-6 | Para 6.3.2.3 Verify document traceability to subject matter. | | |
| 2-7 | Para. 6.3.3 Verify maintenance of training records. | | |
| 2-8 | Paras 6.3.3.1 - 6.3.3.5 Verify follow-up on self study and OJT requirements and forms. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 2-9 | Para. 6.4 Verify maintenance of training by managers/supervisors and training coordinators. | | |
| 2-10 | Para. 7.0 Verify that QA records are maintained as lifetime records. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-11 | PP-02-02, Rev. 1, PERSONNEL SELECTION Para. 6.1 Verify job descriptions per Para. 6.1 | | |
| 2-12 | Para. 6.2 Verify Personnel Qualification Evaluation per Para. 6.2. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-13 | Para. 6.3 Verify that the manager or supervisor has performed a proficiency evaluation on an annual basis for those applicable positions. | | |
| 2-14 | Para. 7.0 Verify that the following are maintained as lifetime QA records. - Job Descriptions - Personnel Qualification Evaluation forms - Proficiency Evaluation forms | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 2-15 | PP-02-03, Rev. 1, MANAGEMENT ASSESSMENT Para. 5.0 Verify that the TPO has conducted or has had conducted an independent assessment of the QA program annually. | | |
| 2-16 | Para. 6.2 Verify that one of the approved methods was used for the performance of the MA. | | |
| 2-17 | Para. 6.3.1 Verify the composition, independence, and responsibilities of the assessment team. | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-18 | Para. 6.3.2 Verify that the assessment team considered the minimum in planning for the MA. | | |
| 2-19 | Para. 6.3.3 Verify that the results of the MA were documented in a report and approved by the TPO. | | |
| 2-20 | Para. 6.3.4 Verify the contents of the MA report | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-21 | Para. 6.4.1 & 6.4.2 Verify the managers followed-up on the MA report in writing to the TPO and that he tracked the findings until closure. | | |
| 2-22 | Para. 7.0 Verify the records generated by this procedure are held as lifetime QA records. | | |

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|----------|---|--|---------|
| 2-23 | <p>QAP-2.1(Y), Rev. 1, QUALITY ASSURANCE PROGRAM STATUS REPORTING</p> <p>Para. 6.0 Verify that the Supervisor of QA/YMP included the following information in the monthly report:</p> <ul style="list-style-type: none"> - status of the development of the QA Program - status of the resolution of issues, trends, and significant conditions adverse to quality - summary of required management and QA overview results <p>Verify the distribution of the monthly report</p> | | |
| 2-24 | <p>Para. 7.0 Verify that the YMP QA monthly reports are lifetime QA records.</p> | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-25 | <p>QAP-2.2(Y) , Rev. 1, TRAINING & INDOCTRINATION OF QA PERSONNEL</p> <p>Para. 6.1.1.1 Verify that prior to conducting quality-affecting work, QA personnel have read the current version of the documents listed in Section 6.1.1.1</p> <p>Verify that the completion of the reading list is documented.</p> | | |
| 2-26 | <p>Para. 6.1.1.2 Verify the orientation of QA personnel per PP-02-01</p> | | |
| 2-27 | <p>Para. 6.1.2 Verify that prior to performing quality-affecting activities, training, if needed, was given per PP-02-01</p> | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-28 | Para. 6.2 Verify qualifications of auditors. | | |
| 2-29 | Para. 6.3 Verify qualifications and certifications of NDT personnel. | | |

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|----------|---|--|---------|
| 2-30 | Para. 6.4 Verify qualifications and certifications of Inspection personnel. | | |
| 2-31 | Para. 7.0 Verify that required reading lists and completed training forms are lifetime QA records. | | |

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|----------|---|--|---------|
| 2-32 | <p>QAP-2.7(Y), Rev. 0, DEVELOPMENT OF THE QA PROGRAM</p> <p>Step 3. Verify the preparation and issuance of an impact letter to OCRWM/YMP QA included the following:</p> <ul style="list-style-type: none"> a. description of implementing documents required to be developed or revised b. applicability of QARD requirements to RSN with a justifications for exceptions c. indication of whether or not training to the QARD is required. d. a target date for implementing the QARD/revision | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| 2-33 | <p>Step 4. If the RTN matrix has been impacted, verify that as a minimum, the RTN identifies or provides traceability to the following:</p> <ul style="list-style-type: none">a. where the QARD requirements are addressed in RSN implementing documentsb. where QARD requirements are not applicable to RSN including justificationc. where RSN has taken exception to requirements including justification | | |

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| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|---|--|---------|
| 2-34 | Step 7. If OCRWM/YMP QA has comments, verify they have been resolved and steps 4 thru 7 were repeated. | | |
| 2-35 | Para. 7.0 Verify that Impact letters are lifetime QA records. | | |

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|----------|--|--|---------|
| 2-26 | PP-02-06, REVISION 2, SECTION 6.1.3 Verify that the Technical Review Board (TRB) secretary maintains a log of the Classification Analysis (CA) numbers. | | |
| 2-37 | Section 6.1.3.1 Verify that the number is in the format of "CA-XXX-YY-ZZZ." | | |
| 2-38 | Section 6.1.4 Verify that the QA report is completed in accordance with Attachment 1. Select three software related reports. | | |

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|----------|--|--|---------|
| 2-39 | <p>PP-02-05, REVISION 2, SECTION 6.2.4</p> <p>Verify that the TRB secretary maintains a log of the Selection of Quality Assurance Controls Summary Report (SQAC) reports.</p> | | |
| 2-40 | <p>Sections 6.2.4, 6.2.6, and 6.2.7</p> <p>Select from the log three reports (that apply to software and are Q-items) and verify that the reports contain:</p> <ul style="list-style-type: none"> - a unique serial number for each SQAC, - the revision status is defined by a numeric alpha system (0.A, 0.B, 0.C, etc.), - the final report package with the suffix removed (e.g., 0.A, 0.B, or 0.C, etc.), - the final report package was approved by the TPO, and - Attachments 1 and 2 have been completed. | | |

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|----------|---|---|---------|
| 2-41 | PP-02-09, REVISION 1, SECTION 6.2 Verify that status of the three CA reports and the three SQAC packages in the log maintained by the TRB secretary. | | |
| 2-42 | Section 6.2 Verify that the TRB meeting agenda and schedule have been approved for the above packages, by the TRB chairperson. | | |
| 2-43 | Section 6.6.2 Verify that meeting minutes have been approved by the TRB chairperson. | | |

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|----------|--|--|---------|
| 2-44 | Section 6.7.1 Verify that the Manager, Quality Assurance Engineering (MQAE) and the TRB chairperson have signed and dated approved Classification package cover sheets. | | |
| 2-45 | Section 6.7.2 Verify that the MQAE and the TRB chairperson have signed and dated approved SQAC Summary Report form. | | |

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|----------|--|--|---------|
| 3-1 | <p align="center">QAP-3.1(Y), Revision 2 Quality Assurance Review of Design Output Documents</p> <p>Verify that a record of all design output documents reviewed and the status of that review is maintained in a log by QA. (Para. 6.2)</p> | | |
| 3-2 | <p>Verify that the responsible QAR, utilizing the appropriate review checklist, performs the review of the design output document to assure that it is prepared, reviewed, and approved in accordance with the applicable Project Procedure. (Para. 6.3.1)</p> | | |

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|----------|--|--|---------|
| 3-3 | Verify that when a previously disapproved design output document is corrected and resubmitted to QA for review and approval, the QAR verifies that previous QA comments have been resolved and/or incorporated into the design output document. (Para. 6.3.2) | | |
| 3-4 | Verify that the document disapproval is logged and a copy of the QA checklist is retained in the QA working file for use when the document is resubmitted for review and approval. (Para. 6.3.3) | | |
| 3-5 | Verify that after completing a satisfactory QA review, the QAR signs and dates the design output document per the implementing procedure, attaches a copy of the signed QA checklist to the design output document, returns the document or document package to the originator and enters the approval into the log. (Para. 6.3.5) | | |

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|----------|---|--|---------|
| 3-6 | PP-03-01, Revision 2 Design Inputs and Informational Data to Outside Organizations Verify that upon identification of the appropriate design input(s) and/or informational data, the originating discipline engineer completes the Design Input/Informational Data Transmittal, Form LV-306. (Para. 6.2) | | |
| 3-7 | Verify that the design records administrator assigns a number to the transmittal form and records it in the project transmittal log. (Para. 6.3) | | |

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|----------|--|--|---------|
| 3-13 | <p align="center">PP-03-03, Revision 1 Design Analyses</p> <p>Verify that design analyses are documented on cover sheet form LV-308 and include the analysis number, WBS number, revision status and pagination. (Para. 6.3)</p> | | |
| 3-14 | <p>Verify that design analyses contain the following:</p> <ul style="list-style-type: none"> - Purpose - Method - Design Inputs - Codes and Standards - Assumptions - Reference Material - Computer Programs - Units - Calculations - Conclusions - Attachments (Para. 6.5) | | |

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| 3-15 | Verify that the required type of checking is indicated by the Lead Discipline Engineer on the Document Review Notice, form LV-316. (Para. 6.6.1) | | |
| 3-16 | Verify that errors or discrepancies found by the checker are documented on a copy of the design analysis supplied to the checker and form LV-353. (Para. 6.6.2) | | |
| 3-17 | Verify that if all the comment resolutions are satisfactory, the checker signs and dates the Design Analysis cover sheet in the "Checker" space. (Para. 6.6.3) | | |

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|----------|---|--|---------|
| 3-18 | Verify that prior to issuance of the design analysis for the interdiscipline review, the Discipline Engineer signs and dates the cover sheet (form LV-308) and obtains the signatures and dates on the cover sheet for the checker and LDE. (Para. 6.7) | | |
| 3-19 | Verify that the SCDM and QAR sign and date the analysis cover sheet prior to submittal to the RSN Configuration Management Section and Project Office. (Para. 6.9) | | |

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|----------|--|--|---------|
| 3-20 | PP-03-04, Revision 1 Design Verification Verify that design verification is performed in a timely manner and prior to transmitting the design output document to the Yucca Mountain Site Characterization Project Office for acceptance. (Para. 6.1.2) | | |
| 3-21 | Verify that design verification, for the level of design activity accomplished, is performed prior to release for procurement, manufacture, construction, or release to another organization for use in other design activities. (Para. 6.1.3) | | |

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|----------|--|--|---------|
| 3-22 | Verify that RSN documents its method of verifying design input related to waste isolation and safety that it generated. (Para. 6.3.1) | | |
| 3-23 | Verify that the TPO, or designee, assigns the verifiers for the chosen method and enters this information on the Design Verification Record (DVR). (Para. 6.5) | | |

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|----------|--|--|---------|
| 3-24 | <p>Verify that as a minimum, the design verification record packages include the following documentation:</p> <ul style="list-style-type: none">- Design Verification Record, Form LV-311,- Document Review Notices (DRN), Form LV-316, and associated Comment Review and Response Forms, Form LV-353,- An index identifying all documents in the design verification package,- Design package,- Documentation supporting verifier qualifications. (Para. 6.6.1) | | |

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|----------|--|--|---------|
| 3-25 | Verify that the design package includes final design documents such as analyses, drawings and specifications, and revisions thereto, and sources of design inputs that support the final design. (Para. 6.6.2) | | |
| 3-26 | Verify that the results of the review are documented in a Review Record Memoranda and include the comments and resolutions. (Para. 6.7) | | |
| 3-27 | Verify that design verification information transmitted across interfaces is documented and controlled and that transmittals identify the status of the design information or document provided and, where necessary, identify incomplete items which require further evaluation, review, or approval. (Para. 6.8) | | |

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|----------|--|--|---------|
| 3-28 | Verify that changes required to any design output documents as a result of design verification are made and verified prior to transmittal of the changed design output documents to the YMPO for acceptance. (Para. 6.9.3) | | |
| 3-29 | Verify that when verification of a subcontractor design output document is conducted by RSN, the verification is performed independent of the verification of the RSN design output document which will incorporate the subcontractor's document or work product. (Para. 6.10) | | |
| 3-30 | Verify that the TPO, or designee, indicates acceptance of completion of the verification process by signing and dating the DVR. (Para. 6.11) | | |

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|----------|---|--|---------|
| 3-31 | <p>PP-03-05, Revision 1 Interface Control AP-5.19Q, Revision 2, ICN 2 Interface Control</p> <p>Verify that System Engineering has completed the following:</p> <ul style="list-style-type: none">- Engineering data on interface document (SID and/or CID)- Initiated a PIRN- Attached engineering data to the PIRN- Obtained a PIRN identifier number and ICD drawing numbers from the Processor. (AP-5.19Q, Para. 5.0, Step 5) | | |

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|----------|--|--|---------|
| 3-32 | Verify that concurrence signatures from affected organizations and integration. Submit the PIRN to ICWG Chairperson for concurrence/approval signature. (AP-5.19Q, Para. 5.0, Step 21) | | |
| 3-33 | Verify that if the change is approved, an IRN is obtained, and the IRN number is sent to distribution and the LRC. (AP-5.19Q, Para. 5.0, Steps 25, 26, and 27) | | |

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|----------|--|--|---------|
| 3-34 | <p style="text-align: center;">PP-03-07, Revision 2 Preparation and Control of Specifications</p> <p>Verify that each specification contains a Specification Cover Sheet, a Table of Contents, and the specification technical content requirements. (Para. 6.2)</p> | | |
| 3-35 | <p>Verify that specifications are prepared using the following forms:</p> <ul style="list-style-type: none"> - Specification Cover Sheet (Form LV-313), - Submittal and Notification Requirements form (Form LV-370), - Section Cover Sheet (Form LV-2075). (Para. 6.5) | | |

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|----------|---|--|---------|
| 3-36 | Verify that upon successful completion of the intradiscipline check, the LDE initials and dates the Section Cover Sheet in the appropriate space. (Para. 6.9.5.2) | | |
| 3-37 | Verify that following completion of the interdiscipline review, the SCDM initials and dates the Section Cover Sheet in the appropriate space. (Para. 6.10.3) | | |
| 3-38 | Verify that following a successful QA review, the QAR initials and dates the Specification Cover Sheet in the appropriate space. (Para. 6.13.1) | | |

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|----------|---|--|---------|
| 3-39 | Verify that the Specification is approved by the TPO. (Para. 6.14) | | |
| 3-40 | Verify that the Specification Cover Sheet "REMARKS" block is stamped to indicate its status (e.g., "RELEASED FOR CONSTRUCTION," "RELEASED FOR PROCUREMENT", etc.). (Para. 6.16.2) | | |

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|----------|---|--|---------|
| 3-41 | Verify that if the specifications are issued prior to the completion of design verification, they are stamped "UNVERIFIED." (Para. 6.19.1) | | |
| 3-42 | Verify that copies of each specification package, with any subsequent revisions, approved and stamped are retained in the Design Records Center. (Para. 6.19.3) | | |
| 3-43 | Verify that the SE maintains a current Master Specification Log with revision status. (Para. 6.20) | | |

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|----------|--|--|---------|
| 3-44 | PP-03-09, Revision 1 Interdiscipline Review Verify that all resolved comments are signed by both the originating DE and the reviewer on the CRRF form and the applicable corrections incorporated in the technical work product. (Para. 6.2.3.c) | | |
| 3-45 | Verify that when all comments are satisfactorily resolved, the SCDM approves the DRN. (Para. 6.2.4) | | |

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|----------|---|--|---------|
| 3-46 | PP-03-12, Revision 1 Preparation and Control of Drawings Verify that the LDC logs in the DRF prior to drawing initiation. (Para. 6.2.2) | | |
| 3-47 | Verify that the individual responsible for drafting checking initials the drawing block. (Para. 6.4.1.2) | | |
| 3-48 | Verify that individuals responsible for interdiscipline checking initial the drawing title block. (Para. 6.4.2.4) | | |

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|----------|--|--|---------|
| 3-49 | Verify that following completion of the interdiscipline review, the SCDM initials the drawing title block. (Para. 6.5.4) | | |
| 3-50 | Verify that final and/or Title II drawings have been verified and initialed in the design verification block by the individual responsible for the verification. (Para. 6.6) | | |
| 3-51 | Verify that the TPO initials the drawing as the final approval prior to external review and acceptance. (Para. 6.7.2) | | |

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| 3-52 | Verify that following YMP0 acceptance of the drawing, the SCDM submits a list of the drawings to be baselined to the RSN Configuration Management Section. (Para. 6.10) | | |
| 3-53 | Verify that all changes are reviewed and approved in the same manner as the original drawing. (Para. 6.11.2) | | |

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| 3-54 | Verify that if the drawings are issued prior to the completion of design verification, they are stamped "UNVERIFIED", and the incomplete portion(s) are clouded. (Para. 6.13.1) | | |
| 3-55 | Verify that copies of each drawing, with any subsequent revisions, signed, approved, and stamped, are retained in the Project Drafting Files. (Para. 6.13.3) | | |

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| 3-56 | PP-03-13, Revision 2 Basis for Design Verify that after making the necessary changes to the BFD, the originator coordinates the close out of the DRN by obtaining the signature of the reviewers in the "Backcheck" column, and the approval signature of the MSE. (Para. 6.3.5) | | |
| 3-57 | Verify that after the review, the BFD is approved by the MSE and the TPO with QA concurrence indicated on the BFD approval sheet. (Para. 6.4.1) | | |

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| 3-58 | Verify that following approval of the ECR (if the added/modified design input is accepted), Systems Engineering incorporates the additional or modified input into the applicable section, assigns the new section effective date, and issues the updated section to the BFD holders. (Para. 6.5.3) | | |
| 3-59 | Verify that the revised BFD is approved in the same manner as the initial issue. (Para. 6.6.3) | | |

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| 3-60 | FP-03-15, Revision 2 Configuration Identification and Documentation Verify that the TPO's approval or disapproval of a recommended element is indicated on the DBM. (Para. 6.4.5) | | |
| 3-61 | Verify that upon receipt of an approved DBM from the TPO, the CM Section assigns a unique RCI number to those elements designated for baseline control and this information is entered into the RCIS. (Para. 6.4.6) | | |

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| 3-62 | PP-03-17, Revision 2 Configuration Change Control Verify that the CM Section transmits the ECR and its associated documentation along with a request for a Technical Impact Statement, Form LV-359, to each of the DCCB members. (Para. 6.3.5) | | |
| 3-63 | Verify that if the ECR is approved, the Chairperson provides the change disposition by completing ECR Part 3, assigns an implementation due date and an individual or organization responsible for change implementation in ECR Part 4. (Para. 6.4.5.1) | | |

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| 3-64 | Verify that after accomplishing the ECR-mandated actions, the responsible individual or organization indicates implementation completion in ECR Part 4 and submits the ECR to the CM Section. (Para. 6.5.3) | | |
| 3-65 | Verify that following implementation verification, the ECR is submitted to the DCCB Chairperson for closure in ECR Part 5. (Para. 6.6.2) | | |

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| 3-66 | <p align="center">FP-03-20, Revision 1 Surface Based Borehole Programs</p> <p>Verify that a draft of the drilling program is circulated for review to the following personnel: an RSN project engineer, RSN QA Representative, User or Project Participant, REECO drilling representative, and a YMPO representative.</p> <p>Verify that the reviewers document their comments on RSN Review Comment Record Form LV-495. (Para. 6.3.3)</p> | | |
| 3-67 | <p>Verify that the resolution of comments is documented on Form LV-495. (Para. 6.3.4)</p> | | |

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|----------|--|--|---------|
| 3-68 | Verify that copies of the approved drilling program are sent to interested parties in the following organizations: DOE/YMPO, Participating Organizations, User Organization, REECO, RSN, QA, and RMC. (Para. 6.3.6) | | |
| 3-69 | Verify that the completed work order, summary cost estimate, and drilling program package are provided to the TPO, or his designee, for review and signature of the work order. (Para. 6.3.9) | | |
| 3-70 | Verify that following the TPO's approval, the work order package is transmitted to REECO/YMP DOE and Equipment Programs Section where other required Project Participant signatures are obtained on the work order. (Para. 6.3.10) | | |

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|----------|---|--|---------|
| 3-71 | Verify that if a request for change is verbal, and mutual agreement of all concerned parties is obtained, the RSN representative documents the request for revision/change on RSN Form LV-186, YMP Record of Verbal Communication. (Para. 6.4.2) | | |
| 3-72 | Verify that the preparation of a revised drilling program, its review and approval, the preparation of work orders and cost estimates (if applicable), and the distribution of the revised documents, is handled in the same manner as specified for the original drilling program. (Para. 6.4.3) Verify that a history of changes, i.e., work programs including drilling and additional work activities and the reasons for the change, are documented and maintained. (Para. 6.4.3) | | |

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|----------|---|--|---------|
| 3-73 | <p>FP-03-22, Revision 1 Preparation of As-Built Drawings and Specifications</p> <p>Verify that the Field Engineering Supervisor reviews the documents for accuracy and completeness, signs and dates the As-Built stamp, and transmits the documents to the SCDM. (Para. 6.1.5)</p> | | |
| 3-74 | <p>Verify that the DE checks that all outstanding change documents (Field Change Requests, Nonconformances, and Engineering Change Requests, etc.) have been identified and cross-referenced by document number on the documents. (Para. 6.2.1)</p> | | |

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|----------|--|--|---------|
| 3-75 | <p>PP-03-23, Revision 1 Field Change Control Process</p> <p>Verify that the responsible CTI completes the internal Participant Evaluation Checklist, determines which documents require a change, signs and dates the checklist, obtains the QAR's concurrence on the checklist, and forwards the package to the FCCBR with any recommendations. (Para. 6.2.3)</p> | | |
| 3-76 | <p>Verify that the change evaluation form is signed by the cognizant technical evaluator. (Para. 6.3)</p> | | |

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| 3-77 | Verify that the FCCBR signs line 14 of Section II of the FCR on behalf of RSN as the cognizant A/E indicating that all RSN prerequisites have been satisfied. (Para. 6.4) | | |
| 3-78 | Verify that within 60 calendar days following completion of the Job Package or when five changes are posted against a RSN document, an Engineering Change Request is initiated and the document is revised. (Para. 6.5) | | |

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| 3-79 | <p>PP-03-18, REVISION 1, PARAGRAPH 7.0</p> <p>Verify which QA records are identified in Section 8.0 of AP-5.2Q.</p> | | |
| 3-80 | <p>AP-5.2Q, REVISION 4, PARAGRAPH 5.2</p> <p>Verify that for technical information sent to YMSCP Technical DataBase (TDB), the following has occurred:</p> <ul style="list-style-type: none"> a) data set are compiled into a format and scope that was coordinated with the YMP TDB Administrator, b) YMP-023, Technical Data Information Form (TDIF) has been completed, c) TDIF information is entered into the Automated Technical Data Tracking System (ATDT) and quality control checks have been performed, d) A Data Transmittal Package has been prepared in accordance with AP-5.1Q, and e) the Data Transmittal Package was submitted to the LRC. | | |

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| 3-81 | <p>Para. 5.5 b)</p> <p>Verify that written requests for technical data from the TDB contain the following:</p> <ul style="list-style-type: none">- requestor's name,- organization,- address,- telephone number,- scope of the information requested,- format requirements,- a description of the intended use of the data, and- declaration as to whether or not the data will be used for quality-affecting activities. | | |

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| 3-82 | <p>AP-5.3Q, REVISION 1, PARAGRAPH 5.0 1.</p> <p>Verify that a written request is made to initiate a change to the RIB.</p> | | |
| 3-83 | <p>Para. 5.0 7.</p> <p>Verify that information used in the development of the RIB Information Item contains the following:</p> <ul style="list-style-type: none"> - QA information associated with the submittal, - identification and verification of the origin of the information, - constraints, limitations, assumptions, and intended uses of the information, as applicable, and - any other information as specified by the RIB Administrator. | | |

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| 3-84 | Para. 5.0 10. Verify that the TPO identifies qualified reviewers for RIB information items and submits documentation of reviewer's qualifications to the RIB Administrator. | | |

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| 3-85 | PP-03-21, REVISION 2, PARAGRAPH 6.1.2 Verify that the TPO or designee and chairperson have approved a plan for reviews. | | |
| 3-86 | Para. 6.2.1 Verify that the types and numbers of reviewers was assigned in accordance with Attachment 1. | | |
| 3-87 | Para. 6.2.2 Verify that the chairperson has attested to the qualification and independence of reviewers by signing and dating Attachment 2. | | |

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| 3-88 | <p>Paras. 6.10.1 and 6.10.2</p> <p>Verify that the Chairperson has approved the RMR (what is the RMR? This is not defined in the procedure.) which contains:</p> <ul style="list-style-type: none">- Review Notice- Executive Summary- Index of Review Documentation- CRRFs (Attachment 4)- Team Selection Record (Attachment 2)- Review Plan- Summary of Deferred Comments- Verification Documentation (Attachment 5) | | |

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| 4-1 | <p>CRITERIA IV: PROCUREMENT DOCUMENT CONTROL</p> <p>PP-04-01, PURCHASING SERVICES</p> <p>Para. 6.2</p> <p>Verify that Purchase Requisitions (PRs) sent to the Procurement Department contain technical requirements, any known sources, applicable quality requirements, and work order number. In addition, verify that the PR has been reviewed for concurrence by QA, ES&H, and PCS and approval by the TPO.</p> | | |
| 4-2 | <p>Para. 6.4</p> <p>Verify that the Procurement Department reviews PR and technical requirements to ensure that they are accurate, complete and clear.</p> | | |

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| 4-3 | <p>Para. 6.5</p> <p>Verify that Requests for Proposals have had technical reviews performed by QA and the responsible technical department. These reviews are to be documented on a YMP Procurement Document Technical Review Checklist. Changes require the same review and approval except changes that do not have impact on quality or technical requirements.</p> | | |
| 4-4 | <p>Para. 6.6</p> <p>Verify that prior to sub-contract award that all QA issues have been resolved.</p> | | |

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| 4-5 | <p>Para. 6.6.1</p> <p>Verify that the TPO or designee approve all PRs (assure that all designees are delegated in writing).</p> | | |
| 4-6 | <p>Para. 6.6.3</p> <p>Verify that prior to issuance of a subcontract or PO for quality-affecting work, suppliers are qualified in accordance with QAP-7.1.</p> | | |
| 4-7 | <p>Para. 6.10</p> <p>Verify that supplier deviations are reported in accordance with QAP-7.4(Y).</p> | | |

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| 4-8 | Para. 6.11 Verify that when services are performed, a receiving report is submitted by the department receiving the services. | | |
| 4-9 | Para. 6.13 Verify that upon completion of a sub-contract, the TPO notifies the Procurement Department in writing. | | |

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| 4-10 | QAP-4.1(Y), QUALITY ASSURANCE REVIEW OF PROCUREMENT DOCUMENTS Para. 6.2 Verify that QA Procurement Document Review Checklists agree with the procurement document for which the review is performed. | | |
| 4-11 | Paras. 6.3 and 6.4 Verify that the comment resolution process between the QAR and the originator is adequately implemented. | | |

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| 5-1 | PP-05-01, PREPARATION AND CONTROL OF PROCEDURES Para. 6.1.3 Verify that revised portions of procedures are indicated by a vertical line adjacent to the area/text. Exceptions include extensive rewrite and editorial corrections. | | |
| 5-2 | Para. 6.1.4 Verify that when procedures are revised, that all PICs are incorporated. | | |
| 5-3 | Paras. 6.1.6, 6.1.7, 6.1.8, and 6.1.9 Verify that procedures are formatted and prepared in accordance with guidelines detailed within referenced paragraphs. | | |

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| 5-4 | <p>Para. 6.2.2</p> <p>Verify that draft procedures are reviewed by QA and any other affected organization. The reviewers review for applicability of requirements, correctness, technical adequacy, completeness, accuracy, and compliance with established requirements.</p> | | |
| 5-5 | <p>Para. 6.2.3</p> <p>Verify that the resolution of comments is accomplished prior to issuance and approval of procedures.</p> | | |
| 5-6 | <p>Para. 6.2.4</p> <p>Verify that subsequent to the resolution of comments, that procedures are approved by the SQA/YMP and the TPO.</p> | | |

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| 5-7 | <p>General</p> <p>Verify that the effective dates of procedures are such that enough time exists for distribution and training prior to implementation.</p> | | |
| 5-8 | <p>Para. 6.3</p> <p>Verify that a maximum of five PICs are allowed prior to procedure revision.</p> | | |
| 5-9 | <p>Para. 6.3</p> <p>Verify that PICs are reviewed by the same organizations which reviewed the original document. Presently, only review stipulated is by SQA/YMP, TPO and affected organizations. Is there a difference?</p> | | |

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| 5-10 | Para. 6.4 Verify that PICs for editorial corrections are limited to the scope of editorial corrections and do not take liberties. | | |
| 5-11 | Para. 6.6.1 Verify that when a new and/or revised procedure or PIC is issued, that the Table of Contents is updated to reflect the new change. | | |
| 5-12 | Para. 6.7 Verify that when work cannot be accomplished as described in the procedure or accomplishment would result in an undesirable situation, the TPO issues a stop work letter or memorandum. | | |

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| 5-13 | PP-05-02, DESK INSTRUCTIONS Para. 6.1 Verify that Desk Instructions (DIs) do not conflict with the contents or intent of higher level procedure, plan or document. | | |
| 5-14 | Para. 6.1 Verify that DIs do not cross division lines as they are for internal division only. | | |
| 5-15 | General Determine if reviews are required outside of the generating organization for DIs (i.e. why are DIs not reviewed by QA). | | |

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| 5-16 | QAP-5.1, DEVELOPMENT OF QUALITY ASSURANCE PROCEDURES Para. 6.1.3 Verify that revised portions of procedures are indicated by a vertical line adjacent to the area/text changed. | | |
| 5-17 | Para. 6.1.4 Verify that when QAPs are revised, that all outstanding PICs are incorporated. | | |
| 5-18 | Paras. 6.1.6, 6.1.7, 6.1.8, and 6.1.9 Verify that procedures are prepared and formatted in accordance with referenced paragraphs. | | |

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| 5-19 | Para. 6.2.1.3 Verify that draft procedures are reviewed for applicability of requirements, correctness, technical adequacy, completeness, accuracy, and compliance with established requirements. | | |
| 5-20 | Paras. 6.2.2 and 6.2.3 Verify that reviews are coordinated and comments are resolved prior to approval of QAPs. | | |
| 5-21 | Para. 6.2.4 Verify that procedures are approved by the SQA/YMP and the TPO. | | |

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| 5-22 | Para. 6.3 Verify that interim changes are reviewed and approved and handled in the same manner as the original document. | | |
| 5-23 | Para. 6.4 Review PICs and verify that interim changes are classified correctly relative to "Interim Change" and "Editorial Change." | | |

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| 5-24 | Para. 6.5 Verify that forms utilized contain the minimum data/information as those shown in the procedures. | | |
| 5-25 | Para. 6.6.1 Verify that when new and/or revised procedures are issued that a new table of contents is issued. | | |

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| 6-1 | <p>PP-06-01, CONTROLLED DOCUMENT DISTRIBUTION</p> <p>Para. 6.2</p> <p>Verify that Systems Engineering establishes and maintains a controlled distribution list. At a minimum, this list contains the following:</p> <ul style="list-style-type: none">o The title of the documento The name of the individual and organization to whom controlled distribution is to be madeo The quantity and type of material to be distributed to assigned individuals | | |

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| 6-2 | Para. 6.3.1 Verify that controlled documents are distributed via a Document Transmittal form. | | |
| 6-3 | Para. 6.3.2 Verify that documents which require verification are identified. | | |
| 6-4 | Para. 6.3.3 Review documents to assure proper updating and that appropriate documents are available for work activities. | | |

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| 6-5 | Paras. 6.3.3.1 and 6.3.3.2 Verify that follow-up is performed on Document Transmittals which have not been returned within the appropriate time frame. | | |
| 6-6 | Para. 6.4 Verify that an up-to-date listing of controlled documents is maintained. | | |

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| 6-7 | <p>QAP-6.1(Y), QA CONTROLLED DOCUMENT DISTRIBUTION</p> <p>Para. 6.1</p> <p>Verify that QA maintains a current list of correct and updated revisions of documents.</p> | | |
| 6-8 | <p>Para. 6.3</p> <p>Verify that QA maintains a distribution list of controlled documents.</p> | | |
| 6-9 | <p>Para. 6.4</p> <p>Verify that QA documents are distributed via a methodology which requires receipt acknowledgment and that follow-up of delinquent documents is performed.</p> | | |

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| 6-10 | <p>QAP-6.2, REVIEW OF DOCUMENTS</p> <p>Para. 6.2</p> <p>Verify that for review of documents not covered by QAP-3.1(Y) and QAP-4.1(Y) that the following review is accomplished:</p> <ul style="list-style-type: none"> o The title clearly indicates the subject o The purpose and scope of the document are defined clearly and fully o The document is well organized o The document is consistent with references and properly addresses interface documents o The document addresses the applicable requirements the QARD and YMP/APM-1 | | |

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| 6-10 Cont' | <ul style="list-style-type: none"> o The document was prepared, reviewed and approved in accordance with documented procedures o The document is applicable to the work; is correct, technically adequate, complete, and accurate; and complies with established requirements o QA comments have been satisfactorily resolved | | |
| 6-11 | <p>Para. 6.3</p> <p>Verify that the review is documented on form LV-234</p> | | |

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| 7-1 | <p>QAP-7.1(y), SUPPLIER SELECTION</p> <p>Paras. 6.1, 6.1.1, and 6.1.2</p> <p>Verify that suppliers are evaluated relative to the suppliers ability to provide items or services in accordance with requirements of the procurement documents.</p> | | |
| 7-2 | <p>Para. 6.2</p> <p>Verify that suppliers which are evaluated based upon and evaluation of the suppliers history, the QAR with assistance with the technical representative (if necessary) completes form LV-2029.</p> <p>Supplier shall be approved on the basis of history only if the above evaluation indicates that the supplier currently has the capability to provide satisfactory services.</p> | | |

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| 7-3 | Para. 6.2.3 Verify that the QAR notifies the procurement organization, by letter or memo, as to the results of the history evaluation. | | |
| 7-4 | Para. 6.3 Verify that for evaluations which are performed by document evaluation (review) form LV-2026 is correctly completed. | | |
| 7-5 | Para. 6.3.1 Verify that for evaluations which are accomplished by document review that reviews are reaccomplished when revisions are made to the QA Program Plans and/or Procedures. | | |

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| 7-6 | <p>Para. 6.3.4</p> <p>Verify that when document evaluations are performed that the comments section of form LV-219 indicates the documents which were reviewed or the evaluations performed and the results of the review.</p> | | |
| 7-7 | <p>Para. 6.4.3</p> <p>For evaluations performed by supplier survey verify that the QAR develops a supplier survey checklist based upon the requirements of the procurement documents.</p> | | |
| 7-8 | <p>Para. 6.4.4</p> <p>Verify that the survey checklist records objective evidence of the QARs observations.</p> | | |

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| 7-9 | Para. 6.4.6 Verify that a supplier survey report is issued to the supplier within ten working days subsequent to the QARs return. | | |
| 7-10 | Para. 6.5 For suppliers which directly work to the RSN program, verify that education and experience of personnel performing quality-affecting activities is accomplished in accordance with PP-02-02. | | |
| 7-11 | Para. 6.7 Verify that the SQA maintains an approved suppliers list. | | |

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| 7-12 | Para. 6.9 Verify that annual reviews are accomplished for approved suppliers. | | |
| 7-13 | Para. 6.9 Verify how triennial audits are determined, and when they are accomplished. | | |

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| 7-14 | QAP-7.2(Y), SOURCE VERIFICATION Para. 6.1.1 Verify that specifications, drawings, other design documents, or procurement documents specify attributes to be verified. | | |
| 7-15 | Para. 6.1.2 Verify that the QAR prepares a SVP in accordance with procedural guidelines. | | |
| 7-16 | Para. 6.1.3 Verify that the SVP is reviewed for technical adequacy, applicability, compliance with established requirements, completeness, and accuracy by the Technical Representative, SQC and the SQA. | | |

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| 7-17 | Para. 6.1.4 Verify that distribution of the SVP is accomplished via QAP-6.1(Y). | | |
| 7-18 | Para. 6.1.5 Verify that the RSN PR indicates the SVP number. | | |
| 7-19 | Para. 6.1.6 Verify what mechanism is in place for the revision of SVPs and the inter-relation of revised procedures, design documents, corrections, and procurement modifications. | | |

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| 7-20 | Para. 6.2.2 Verify the maintenance and existence of an Open Item Tracking Log. | | |
| 7-21 | Para. 6.2.3 Verify that Document Submittals are performed in accordance with PP-04-01. | | |
| 7-22 | Para. 6.2.4.1 Verify that witness points are waived upon written approval of the Supervisor, QC. | | |

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| 7-23 | Para. 6.2.4.2.1 Verify that the waiver of RSN procurement hold points are documented upon a supplier deviation report. | | |
| 7-24 | Para. 6.2.4.2.2 Verify that the waiver of contractor procurement hold points are documented upon an NCR. | | |
| 7-25 | General Review SVPs for completion of appropriate inspection points relative to the point in time in which this review is performed. | | |

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| 7-26 | <p>Para. 6.13</p> <p>Verify that the QCR prepares a SVP package which contains the following:</p> <ul style="list-style-type: none">o Trip reportso Completed SVPso Source Verification Notification formso The Open Item Tracking Log for the SVPo Copies of completed Inspection Checklists or Verification Activity Reports | | |

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| 7-27 | <p>QAP-7.4(Y), SUPPLIER DEVIATION REPORT</p> <p>Para. 6.1.1</p> <p>Verify that for where appropriate, that the requirements for the reporting of supplier deviations are included in the Procurement Documents.</p> | | |
| 7-28 | <p>Para. 6.1.2</p> <p>Verify that SQA maintains a log to track the status of SDRs.</p> | | |
| 7-29 | <p>Para. 6.5</p> <p>Verify that the manager or supervisor of the affected organization evaluates the SDR for potential effect of the deviation.</p> | | |

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| 7-30 | Para. 6.6.1 Verify that the QAR reviews SDRs for approval. | | |
| 7-31 | Para. 6.8.1 Verify that upon disposition completion by the supplier, a QC representative verifies completion of the disposition. | | |

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| 10-1 | <p>PP-10-01, REVISION 1</p> <p>Para. 6.1</p> <p>Verify that the Field Drilling Engineer (FDE) monitors and reports field activities in accordance with</p> <p>6.1.1 Approved work program...and defined by the job package</p> | | |
| 10-2 | <p>Para. 6.2.2</p> <p>Verify that the FDE reports and initiates any nonconformances to program plans.</p> | | |

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| 10-3 | Para. 6.2.5 Verify that the FDE ensures that the RSN subcontractor's equipment is in compliance with established QA procedures for calibration. | | |
| 10-4 | Para. 6.5 Verify that the FDE maintains the depth control records. | | |
| 10-5 | Para. 6.6 Preparation of Drill Site - Verify that the FDE has verified the suitability of the location for the drill rig. | | |

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| 10-6 | <p>Para. 6.7</p> <p>Verify that the FDE shall:</p> <p>Para. 6.7.2</p> <p>During rig up on each new location the FDE has inspected instruments and completed the YMP Instrument Calibration Checklist and furnished a copy to the contractor.</p> | | |
| 10-7 | <p>Para. 6.7.9</p> <p>Verify that the FDE has monitored and recorded on either the YMP Daily Drilling Report, form LV-2067, Attachment 9, or the YMP Daily Operations Report, form LV-2055, Attachment 10, for the drilling parameters.</p> | | |
| 10-8 | <p>Para. 6.14</p> <p>Records - Verify that all YMP records including QA records generated by this procedure are being handled in accordance with PP-17-01.</p> | | |

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| 10-9 | <p>PP-10-02, REVISION 1, FIELD LOGGING OPERATIONS</p> <p>Para. 6.1.1</p> <p>Verify that after consultation with the Logging Engineer, the logs to be run have been written into the drilling program for the particular hole by the FDE.</p> | | |
| 10-10 | <p>Para. 6.1.4</p> <p>Verify that the FDE or his designee has notified the Logging Subcontractor and Logging Engineer of the logs to be run, the location of the hole to be logged, and the time to be on location with a Logging Call Out Record (Attachment 1) by sending a copy of the Logging Call Out Record.</p> | | |
| 10-11 | <p>Para. 6.3.1</p> <p>Verify that the Logging Engineer checks or has checked procedures to ensure (1) the proper revision, (2) are being followed, and (3) the responsible agency has approved them.</p> | | |

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| 10-12 | <p>QAP-10.1(Y), REVISION 4</p> <p>Para. 6.1.2</p> <p>Preparation of the Field Verificaion Plan (FVP) - Verify that the QA Representative has prepared the FVP as follows:</p> <ol style="list-style-type: none">1. Obtained a sequential FVP number form the FVP Log.2. Reviewed the technical and procurement documents to determine the attributes to be verified. | | |

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| 10-13 | <p>Para. 6.1.3</p> <p>Verify that the responsible representative, the FOM, the SQC, and the SQA have reviewed all aspects of the FVP for technical adequacy, applicability, compliance with established requirements, completeness and accuracy, and that their comments have been documented on form LV-234 and have been resolved.</p> | | |
| 10-14 | <p>Para. 6.2.6</p> <p>Inspection/Verification - Verify that Inspection/Verification (including monitoring) have been accomplished at the points specified by the FVP.</p> | | |

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| 10-15 | QAP-10.2(Y), REVISION 1 Para. 6.3.1 As-built Document Verification - Verify that the responsible QCR utilizing the appropriate verification checklist (Attachment 2 or 3) has performed the verification of the as-built document to assure that it accurately reflects the constructed condition. | | |

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| 10-16 | QAP-10.3(Y), REVISION 1 Para. 6.1.1 Determination of when an Inspection Checklist is required - Verify that an Inspection checklist has been prepared whenever an inspection has been required by a Source or Field Verification Plan. | | |
| 10-17 | Para. 6.2.2.3 Inspection - Verify that the QCR conducted the inspection in accordance with the instructions of the Inspection Checklist. | | |

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| 10-18 | QAP-2.6(Y), REVISION 1 Para. 6.5.1 Verify that personnel considered for QC Inspection have had their relevant experience and education verified in accordance with EP-02-02, have been trained and indoctrinated in accordance with QAP-2.2(Y), and have been indoctrinated to the technical objectives and requirements of the applicable codes and standards. | | |
| 10-19 | Para. 6.6.1 Verify that the Certifying Agent/Quality Control Level III has prepared, administered and evaluated the examinations. | | |

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| 10-20 | Para. 6.6.5 Visual Examination - Verify that all inspection personnel have received and passed an annual eye examination. | | |
| 10-21 | Para. 6.8.3 Verify that the Certifying Agent/Quality Control Level III has completed Record of Certification, Attachment 5, for each QC Inspector certified and for each discipline in which the inspector is certified. | | |

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| 11-1 | <p>PP-11-01, REVISION 1, GENERAL TESTING PROCEDURE FOR THE MATERIALS TESTING LABORATORY SUPPORT</p> <p>Para. 6.2.1</p> <p>Verify that all test work is authorized by the appropriate supervisor.</p> <ul style="list-style-type: none">o Work Instruction (WI) is in accordance with PP-01-02.o Verify WI forms denoted as "quality-affecting." | | |
| 11-2 | <p>Para. 6.2.2</p> <p>Verify that industry standards governing sample collection are listed on the WI form.</p> | | |

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| 11-3 | <p>Para. 6.2.3</p> <p>Verify that MTL personnel initiate a work request completed by the work requester or by MTL personnel prior to initiation of testing.</p> <ul style="list-style-type: none">o Attachment 1 or 2 | | |
| 11-4 | <p>Para. 6.3.1</p> <p>Verify that MTL personnel keep a log of all samples received and that:</p> <ul style="list-style-type: none">o Samples are adequately identified;o Each sample is uniquely numbered;o Sample number is duplicated to any subdivided parts; ando Markings and labels indicate the presence of special environments or controls. | | |

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| 11-5 | <p>Para. 6.3.2</p> <p>Verify that samples are secured in a manner to prevent unauthorized handling.</p> <ul style="list-style-type: none">o Look at sample storage facility and determine if proper controls are maintained as stated in the work request. | | |
| 11-6 | <p>Para. 6.3.3</p> <p>Verify that sample excess is disposed of as required.</p> <ul style="list-style-type: none">o Reference AP-6.3Q | | |

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| 11-7 | <p>Para. 6.3.4</p> <p>Verify that special handling tools and equipment are tested and inspected per the manufacturers recommendations at the specified intervals and time. Also, operators shall be trained or experienced in the use of the tools or equipment.</p> <ul style="list-style-type: none">o Identify special handling tools and equipment.o Determine if PP-02-08 and PP-12-01 are used to implement the requirements stated in Paragraph 6.3.4. | | |

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| 11-8 | <p>Para. 6.4.1</p> <p>Verify if no standard test methods exist, a procedure is written and submitted to the requester for approval prior to testing.</p> <ul style="list-style-type: none">o Determine proper format of the procedure. | | |
| 11-9 | <p>Para. 6.4.2</p> <p>Verify that the specific test procedure or method (including revision and date) and any criteria is identified on the MTL work request form.</p> | | |

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| 11-10 | Para. 6.4.3 Verify that the test procedure (number and revision) is referenced on the test records and final test report. | | |
| 11-11 | Para. 6.4.4 Verify that the test method is available to the personnel conducting the tests. | | |
| 11-12 | Para. 6.4.7 Verify that test records and test reports identify the items listed in Paragraphs 6.4.7.1 through 6.4.7.10. | | |

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| 11-13 | <p>Para. 6.4.8.1</p> <p>Verify that test results are evaluated to acceptance criteria specified by the requester or noted as "No acceptance criteria provided."</p> <ul style="list-style-type: none">o Final acceptance is the responsibility of the requester. | | |
| 11-14 | <p>Para. 6.4.9</p> <p>Verify if samples not meeting the requirements specified in work controlling documents are handled per QAP-15.1(y).</p> | | |

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| 11-15 | <p>Para. 7.1</p> <p>Verify that are following are treated as QA records:</p> <ul style="list-style-type: none">o MTL Work Request formso Test recordso Final test report <p>NOTE: Ask now non-industrial standard test procedures are handled.</p> | | |

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| 11-16 | <p>PP-02-08, REVISION 1, TRAINING, QUALIFICATION, AND CERTIFICATION OF MATERIALS TESTING LABORATORY PERSONNEL</p> <p>Para. 5.1</p> <p>Verify that the examiner for MTL personnel is appointed by the TPO.</p> | | |
| 11-17 | <p>Para. 6.3.1</p> <p>Verify that education and training are documented on Attachments 2 and 3.</p> <ul style="list-style-type: none"> o Select test personnel who are performing quality-affecting activities. | | |

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| 11-18 | <p>Para. 6.5</p> <p>Verify that test personnel receive an annual eye examination.</p> <ul style="list-style-type: none">o Documentation is in the form used by the NTS eye examination facility or the individual's personal physician. | | |
| 11-19 | <p>Para. 6.6.1</p> <p>Verify that the examiner has completed the appropriate Levels I, II, and III checklists (Attachments 4, 5, and 6).</p> <ul style="list-style-type: none">o See Item 11-17 for selection of test personnel. | | |

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| 11-20 | <p>Para. 6.9.1</p> <p>Verify that a Record of Certification (Attachment 1) has been completed and signed and dated by the examiner and the candidate.</p> | | |
| 11-21 | <p>Para. 6.9.1</p> <p>Verify that Levels I, II, and III test personnel are evaluated annually by the examiner.</p> <p>o See Attachment 1 for documentation.</p> | | |
| 11-22 | <p>Para. 6.9.2</p> <p>Verify that all certified test personnel are recertified at least once every three years.</p> <p>o See Attachment 1 for documentation.</p> | | |

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| 11-23 | Para. 6.9.4 Verify that an annual update is made for each candidate. o How does this differ from Paragraph 6.9.1 and where documented? | | |
| 11-24 | Para. 6.10 Verify that a letter of revocation (Attachment 7) is issued at time of removal of test personnel. | | |
| 11-25 | Para. 6.11.1 Verify that current certification records of Levels I, II, and III test personnel are maintained by the examiner. | | |

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| 12-1 | <p>PP-12-01, REVISION 1, CONTROL OF MEASURING AND TEST EQUIPMENT</p> <p>Paras. 6.2.1 and 6.4.2</p> <p>Verify that a Calibration History Log has been established and is maintained by the equipment custodian.</p> <ul style="list-style-type: none">o Look for calibrated equipment used at MTL.o Attachment number in Para. 6.4.2 is not correct. | | |

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| 12-2 | <p>Para. 6.2.2</p> <p>Verify that each N&TE device is tagged or identified to indicate its status.</p> <ul style="list-style-type: none">o Stickers or tags indicating the organization that performed the calibration, date calibrated and date calibration expires,o Calibrate before use,o Indication only, oro Out-of-Calibration, damaged. | | |

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| 12-3 | Para. 6.3.2 Verify that each M&TE device is maintained as required by the Manufacturer's Manual or instructions. | | |
| 12-4 | Para. 6.4.1 Verify that M&TE devices are calibrated against certified equipment having a known, valid relationship to nationally recognized standards or physical constants. | | |

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| 12-5 | <p>Paras. 6.4.3.1 and 6.4.3.2</p> <p>Verify that calibration standards have equal or greater accuracy than required of the equipment being calibrated.</p> <ul style="list-style-type: none">o Basis for acceptance of calibration with standards having the same accuracy must be authorized by management responsible for the test. | | |
| 12-6 | <p>Para. 6.4.4</p> <p>Verify for M&TE used in one-time only applications, the calibration is performed before and after use.</p> | | |

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| 12-7 | <p>Para. 6.4.5</p> <p>Verify if M&TE is found to be consistently out of calibration, it is repaired or replaced.</p> | | |
| 12-8 | <p>Para. 6.4.6.1</p> <p>For M&TE calibration services provided by REECo, verify that a "Calibration Services Request" is completed and forwarded to the calibration facility with a Technical Field Work Request (AP-5.39Q).</p> | | |
| 12-9 | <p>Para. 6.4.6.2</p> <p>For M&TE calibration services not provided by REECo, verify that service is procured per PP-04-01.</p> <p>NOTE: Notify John Martin of any outside calibration services.</p> | | |

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| 12-10 | <p>Para. 6.4.6.3</p> <p>Verify the calibration certification</p> <ul style="list-style-type: none"> o Procedure (includes revision) o Organization and person o Description of M&TE (including unique identification) o Date of calibration o Calibration due date or interval o Tolerance o Initial test results (if previously used) o Final results o Description of standards and whether standards are traceable to NIST or other recognized standards o Statement of acceptability | | |

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| 12-11 | <p>Para. 6.4.6.4</p> <p>Verify that the individual making the Calibration History Log entries verifies the Calibration Certificate includes the correct information prior to using the device.</p> <ul style="list-style-type: none">o Determine where this is documented. | | |
| 12-12 | <p>Para. 6.4.7.1</p> <p>Verify that M&TE scheduled for calibration is recalled prior to the calibration expiration date.</p> <ul style="list-style-type: none">o See Calibration Recall Notice | | |

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| 12-13 | Para. 6.4.7.3 Verify that M&TE is recalibrated before removal from service, if used since the last calibration, and noted on the Calibration History Log. | | |
| 12-14 | Para. 6.5.1.1 Verify that M&TE removed from/returned to service is noted on the Calibration History Log including date and initials. | | |

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| 12-15 | Para. 6.5.1.2 Verify completion of the "Usage Log." | | |
| 12-16 | Para. 6.5.2 Verify the process used for M&TE found to be out of calibration o Tests/Inspections (acceptability/nonacceptability) o NCR o Documentation of evaluation and results (7.0) | | |

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| 14-1 | AP-5.48Q, REVISION 0, MANAGEMENT OF FIELD ACTIVITIES USING TRAVELERS Section 5, Step 4 Verify that the participants have completed the assigned action defined by the Traveler Form. | | |

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| 15-1 | <p>QAP-15.1(Y), Rev. 2, CONTROL OF NONCONFORMING ITEMS</p> <p>Para. 6.1.1 Verify that a Nonconformance Log is maintained by RSN QC and contains the following:</p> <ul style="list-style-type: none"> - NCR number - a brief description of the nonconforming condition - name of initiator - Identification of the organization responsible for determining and implementing the nonconforming disposition - status of each NCR (open or closed) | | |
| 15-2 | <p>Para. 6.1.2 - Verify that when RSN personnel discover a condition not conforming with requirements documents (e.g., job package, specification, drawing, etc.), an NCR is initiated utilizing Form YMP-006 and the steps detailed in paras. 6.1.2 thru 6.1.6.</p> | | |

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| 15-3 | Para. 6.1.6 Inquire as to whether any NCRs have warranted a Deficiency Report or CARs. | | |
| 15-4 | Para. 6.2.1 Verify that QC has forwarded the NCR to the responsible Specifying Organization for disposition; with copies forwarded to the following: - RSN Project Manager - RSN QA - originator | | |

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| 15-5 | <p>Para. 6.2.2 Inquire as to whether any NCRs have been issued to Performing Organizations; if so verify that the distribution is as follows:</p> <ul style="list-style-type: none">- Participants' TPO- YMP Site Manager or YMPO Division Director- YMP Field Operations QA | | |
| 15-6 | <p>Para. 6.3 Verify that nonconforming items have been tagged per Para. 6.3.</p> | | |
| 15-7 | <p>Para. 6.4.1 Verify that nonconforming items have been segregated when practical.</p> | | |

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| 15-8 | Para. 6.4.2 Verify that the identification of these items is legible, easily recognizable, and include the NCR no. | | |
| 15-9 | Para. 6.5 Verify that when expeditious action is need on an NCR, it is documented on an RVC (LV-186) or equivalent. | | |
| 15-10 | Para. 6.6 Verify the work controls associated with NCRs. | | |

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| 15-11 | Para. 6.7 Verify the use of conditional releases used with NCRs. | | |
| 15-12 | Para. 6.8.1 Verify that the person evaluating the NCR for disposition is competent in the specific area under evaluation. | | |
| 15-13 | Para. 6.8.2 Verify that the dispositioner completed Block 6 of the NCR per Attachment 3. | | |

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| 15-14 | Para. 6.8.3 Verify whether a FCR was used in connection with an NCR. | | |
| 15-15 | Para. 6.9 Verify QA approval of the NCR disposition | | |
| 15-16 | Para. 6.10 Verify that the dispositioner has transmitted the NCR to the Performing Organization for action with copies distributed per Section 6.2 | | |

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| 15-17 | Para. 6.11 Verify the responsible managers actions are per Section 6.11 | | |
| 15-18 | Para. 6.12 Verify the verification process of the NCR is per Section 6.12. | | |
| 15-19 | Para. 6.1c Verify that the NCR Log is updated upon closure of the NCR. | | |

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| 15-20 | Para. 6.12d Verify that QC distributed the completed NCR per Section 6.2. | | |
| 15-21 | Para. 6.13 Verify that the NCR records package are lifetime QA records and contain the following: a. completed NCR, including any attachments. b. documented verbal dispositions, if used c. conditional release, if initiated | | |
| 15-22 | Para. 6.13 Verify that the NCR records package was submitted to the DRC for inclusion in the job package record package. QAP-2.4(Y), Rev. 2, STOP WORK ORDER | | |

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| 16-1 | <p>Para. 6.1 Inquire as to whether any SWOs have been issued; if so verify the following steps have been followed:</p> <ol style="list-style-type: none">1. Initiation of the SWO2. Evaluation of the SWO3. Maintenance of the SWO Log4. Preparation and Issuance of SWO5. Distribution of the SWO6. Implementation of the SWO7. Evaluation of the SWO response by SQA/YMP8. Monitoring of the SWO by the QAR9. Verification of the SWO disposition by the QAR.10. Closure of the SWO by the SQA/YMP11. SWO and all related correspondence are retained as lifetime QA records. | | |

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| 16-2 | QAP-16.1(Y), Rev. 1, DEFICIENCY REPORTING Para. 6.1.1 thru 6.1.1.3 Inquire as to how deficiencies are evaluated to determine significance and how it is to be reported. | | |
| 16-3 | Para. 6.1.1.4 Verify the maintenance of a DR Log (Attachment 2) for statusing of DRs. | | |
| 16-4 | Para. 6.2.1.1 Verify that the DR no. is sequential and derived per Section 6.2.1.1. | | |

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| 16-5 | Para. 6.2.1.2 - 6.2.1.5 Verify that QA completed Blocks 1 thru 12 per Attachment and Sections 6.2.1.2 thru 6.2.1.5 | | |
| 16-6 | Para. 6.2.1.5 Verify that a memo was used to forward the DR to the appropriate level of management of the responsible organization for action. | | |
| 16-7 | Para. 6.2.2 Verify that the management of the organization identified in Block 5 evaluated the deficiency and completed Blocks 13 thru 17, as applicable. | | |

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| 16-8 | Para. 6.2.2.2 Verify that requests for extensions of the reponse due date or the effective dates committed by the responding organization is justified to QA. | | |
| 16-9 | Para. 6.2.2.3 Determine whether any responses were not received by the due date; if so, verify that the action taken by QA was per Section 6.2.2.3. | | |
| 16-10 | Para. 6.2.3.1 Verify that QA evaluated the response within 10 working days. | | |

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| 16-11 | Para. 6.2.3.2 Verify that upon completion of the response evaluation, QA completed Block 18 per Section 6.3.2.2 | | |
| 16-12 | Para. 6.2.3.3 Verify that written notification of the results of all response evaluations was provided to the management of the affected organization. | | |
| 16-13 | Para. 6.2.3.4 Verify that the amended responses were documented in Block 19 and approved by the SQA/YMP. | | |

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| 16-14 | Para. 6.2.4.1 Verify that QA initiated verification in a timely manner, normally 15 calendars of the effective date provided by the responding organization in Block 14 & 16. | | |
| 16-15 | Para. 6.2.4.2 Verify that when corrective actions are not completed by the effective dates, actions by QA are documented in Block 20. | | |
| 16-16 | Para. 6.2.4.3 Verify that QA personnel performing the verification documented the results of the verification activities in Block 20 and that signatures and approval was obtained from SQA/YMP. | | |

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| 16-17 | Para. 6.2.5.1 Verify that upon satisfactory verification, the DR was submitted to the SQA/YMP for review and closure. | | |
| 16-18 | Para. 6.2.5.2 Verify that the responsible organization was notified by letter or memo, as appropriate, when a DR is officially issued and closed. | | |
| 16-19 | Para. 7.0 Verify that DRs and all supporting letters and memos relating to responses, evaluations, and extension requests are lifetime QA records. | | |

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| 16-20 | QAP-16.2(Y), Rev. 1, CORRECTIVE ACTION Para. 6.1 Verify that when significant conditions adverse to quality exist, CARs were initiated by QA. | | |
| 16-21 | Para. 6.2.1.1 Verify that QA completed Section A of the CAR per Attachment 2. | | |
| 16-22 | Para. 6.2.1.2 Verify that the CAR no. is the next sequential number was obtained from the CAR Log, per Attachment 3 and is numbered per Section 6.2.1.2. | | |

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| 16-23 | Para. 6.2.1.3 Verify that upon completion of blocks 1, 2, 3, 4, 7, 8 and 9 approval and signatures were obtained from the SQA/YMP. | | |
| 16-24 | Para. 6.2.1.4 Verify that if Block 7 is checked, a SWO was issued. | | |
| 16-25 | Para. 6.2.1.5 Verify that upon completion of blocks 5 & 6 a memo was forward with the CAR to the appropriate level of management of the affected organization. In addition, verify that a copy of the CAR was submitted to the manager above the manager responsible for the corrective action. | | |

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| 16-26 | Para. 6.2.2.1 Verify that the responsible manager of the organization, identified in blocks 2 & 3 evaluated Section A and completed Section B per Attachment 3. | | |
| 16-27 | Para. 6.2.2.2 Verify that when the CAR response was not received by the due date, action was taken per Section 6.2.2.2. | | |
| 16-28 | Para. 6.2.2.3 Verify that requests for extension were per Section 6.2.2.3. | | |

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|----------|---|--|---------|
| 16-29 | Para. 6.2.3.1 & 6.2.3.2 Verify that QA, within 15 days of receipt of the response, evaluated the response and the proposed corrective action and completed Section C blocks 14 & 15. | | |
| 16-30 | Para. 6.2.3.2.2 Verify that a memo was prepared for an unacceptable response by the SQA/YMP identifying the reason and requesting appropriate action (block 14). | | |
| 16-31 | Para. 6.2.3.2.3 Verify receipt and reevaluation of revised response per Sect. 6.2.3. | | |

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| 16-32 | Para. 6.2.4.1 - Verify that verification was within 15 days and that objective evidence is stated on the form closing the CAR (blocks 16 -20). | | |
| 16-33 | Para. 6.2.5 Verify that the affected organization was notified upon closure of the CAR. | | |
| 16-34 | Para. 7.0 Verify that CARs and their supporting documentation are retained as lifetime QA records. | | |

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| 16-35 | <p>QAP-16.3(Y), Rev. 1, TREND ANALYSIS</p> <p>Para. 6.2 Verify that the following were used for conducting trend analyses:</p> <ul style="list-style-type: none"> - Audit and Surveillance Reports - Management Assessment Reports - Inspection Reports - Deficiency documents (both DOE and RSN) | | |
| 16-36 | <p>Para. 6.3 Verify whether or not the QAR determined if adverse to quality trends exist.</p> | | |

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| 16-37 | <p>Para. 6.4 Verify that the trend report identifies the following:</p> <ul style="list-style-type: none">- identification of the verification activity- identification of the deficiencies and the assigned trend codes- charts and/or graphs to display data.- a description of any adverse trends or a statement indicating that there were no adverse trends- time period covered and the date of the report- author of the report- approval by the SQA/YMP- distribution to appropriate management and OQAD | | |

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| 17-1 | <p>AP-1.180, REVISION 1, ICN NO. 1, PARAGRAPH 5.1</p> <p>Verify that the TPO ensures, by review, that design specifications, procurement documents, task plans, test procedures, implementing procedures, instructions, or other documents directing the conduct of quality-affecting activities identify the records and/or records packages to be generated, supplied or maintained.</p> | | |
| 17-2 | <p>Para. 5.2</p> <p>Verify that the TPO ensures that record sources are trained to this procedure and that those individuals are technically qualified before preparing or submitting YMP records to the LRC.</p> | | |

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| 17-3 | <p>Para. 5.3</p> <p>Verify that the TPO ensures that any YMP records that may be contained in working files are submitted to the LRC when an individual is leaving the YMP or changing jobs.</p> | | |
| 17-4 | <p>Para. 5.4</p> <p>Verify that the TPO provides the LRC with a list of personnel authorized to have access to privileged records and update as necessary.</p> | | |
| 17-5 | <p>Paras. 5.5.a and 5.6</p> <p>Verify that sources prepare the individual records in accordance with Appendix A, Pages 13 through 15, once the records have been identified.</p> | | |

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| 17-6 | <p>Para. 5.5.b</p> <p>Verify that record sources do the following if they have records package segments:</p> <ol style="list-style-type: none"> 1. Contact the LRC to obtain a records package tracking number. Provide the LRC with the following information: <ol style="list-style-type: none"> a) A record package title b) A records package identifier c) A Record Source name and organization d) A quality-affecting designation (QA: QA or QA: N/A) e) Configuration item identifier, as applicable | | |
| 17-7 | <p>Paras. 5.5.c and 5.6</p> <p>Verify that record sources prepare records package in accordance with Appendix A, Pages 13 through 15.</p> | | |

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| 17-8 | Para. 5.5.d Verify that record sources prepare the Final Scientific and Technical Reports in accordance with Appendix A, Page 15. | | |
| 17-9 | Para. 5.7 Verify that record sources protect documents that may become records or records packages in accordance with Appendix B, Page 18. | | |
| 17-10 | Para. 5.8 Verify that record sources submit the records or records packages to the LRC in accordance with Appendix D. | | |

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| 17-11 | <p>Para. 5.9</p> <p>Verify that record sources resolve discrepancies with the LRC. Make the necessary corrections as requested, regenerate the record, or refer to Appendix C of this procedure for further guidance on correction of records.</p> | | |
| 17-12 | <p>Para. 5.10</p> <p>Verify that Record Sources return the LRC Record Rejection Notice (if received), along with the corrected records, to the LRC by the designated date.</p> | | |
| 17-13 | <p>Para. 5.11</p> <p>Verify that record sources notify the LRC of any errors in previously processed records, records package segments, or record packages. Submit the corrected, supplemental, or replacement records in accordance with Appendix C and D of this procedure.</p> | | |

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| 17-14 | <p>PP-17-07, REVISION 1, PARAGRAPH 6.5.1</p> <p>Verify that logging tape and floppy disk labels contain:</p> <ul style="list-style-type: none"> - Logging Subcontractor company name - well name - log type - run number - run date - tape number - depths recorded - Logging Subcontractor's engineer's name - raw or edited designation - record density - tape format (BIT or SDUMP) - file names <p>Para. 6.5.1</p> | | |
| 17-15 | <p>Verify that a separate label on the tape contains:</p> <ul style="list-style-type: none"> - read-check or copy verification - initials of Logging Subcontractor's engineer who verified the tape | | |

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| 17-16 | Para. 6.5.2 Verify where "master or copy" is affixed to label. | | |
| 17-17 | Para. 6.9 Verify how the Logging Engineer determines the validity and completeness of the logging tape by interpreting the output of the RSN diagnostic tape program. | | |
| 17-18 | Para. 6.11 Verify that logging prints are processed in accordance with 6.4 through 6.7. | | |

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| 17-19 | <p>Para. 6.15</p> <p>Verify that Logging Data Computer Operator maintains an inventory of:</p> <ul style="list-style-type: none">- logging tapes in storage,- logging video tapes in storage, and- logging floppy disks in storage <p>including data format location.</p> | | |

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| 18-1 | <p>QAP-2.3(Y), Rev.1, QUALIFICATION OF AUDIT PERSONNEL</p> <p>Para. 6.1.2 Verify that Technical Specialists have read the Audit Guide for Technical Specialist and QAP-18.1 and that the cover of the former has been signed and dated by a LA and sent to the LVLRC as part of his training file.</p> | | |
| 18-2 | <p>Para. 6.1.4 Verify that qualified auditors meet the following requirements:</p> <ul style="list-style-type: none"> - education and experience verified - trained or indoctrinated to the requirements of DOE/RW-0333P - have participated in a minimum of 2 audits within RSN or outside audits documented by a previous employer - have participated in an audit training program as detailed in 6.1.4b - documentation for the above | | |

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| 18-3 | Para. 6.2 Verify that LAs meet the requirements of Sect. 6.1.4 and that the skills listed in Sections 6.2.2 thru 6.2.4 and 6.5 have been documented by the candidate's supervisor and/or form LV-216. | | |
| 18-4 | Para. 6.3.1 Verify that LAs have maintained their proficiency per Sect. 6.3.1. | | |
| 18-5 | Para. 6.3.2 Verify that the requalification of LAs was per Sect. 6.3.2. | | |

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| 18-6 | Para. 6.6 Verify that Auditor files contain training/qualification records of auditors and that they are updated annually by the RSN Training Coordinator | | |
| 18-7 | Para. 7.0 Verify that the following are lifetime QA records: <ul style="list-style-type: none">- Audit Guide for Technical Specialists- Form LV-216, Record of IA Qualification- AIT Qualification Letter- Qualified Auditor Qualification Letter- Form LV-217, Audit Participation Letter | | |

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| 18-8 | <p>QAP-18.1(Y), Rev. 1, AUDITS</p> <p>Para. 6.2 Verify that internal and external audit schedule identify the following:</p> <ul style="list-style-type: none"> - Organization to be audited - Audit Number - Date of Audit | | |
| 18-9 | <p>Verify that the schedules were approved by the SQA/YMP and distributed to the appropriate organizations and the YMQADD.</p> | | |

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| 18-10 | Verify that the schedule is reviewed and revised with program changes. | | |
| 18-11 | Verify that Supplier's QA programs are evaluated annually and audited triennially. | | |
| 18-12 | Para. 6.3 Verify that an Audit Log (Attachment 1) is maintained. | | |

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| 18-13 | Para. 6.4 Verify that auditors and technical specialists are qualified and independent from the activity they are auditing. | | |
| 18-14 | Para. 6.4.2 Verify that for a scheduled audit, the SQA approved the Audit Plan and that it was forwarded to the audited manager 10 WDs prior to the audit. | | |
| 18-15 | Para. 6.4.4 Verify that checklists were prepared for items/activities to be audited. | | |

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| 18-16 | Para. 6.4.5 Verify that an Audit Preparation Meeting was held prior to the audit. | | |
| 18-17 | Para. 6.5 Verify that a Pre-Audits Meeting was conducted with the manager(s) of the audited organization prior to the audit. | | |
| 18-18 | Para. 6.6 Verify that objective evidence reviewed and results of investigations by the auditors was recorded on the checklists. | | |

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| 18-19 | Para. 6.7 - 6.9 Verify that deficiencies discovered during the audit were documented on the appropriate form. | | |
| 18-20 | Para. 6.11 Verify that a Post-Audit Conference was held with the management of the audited organization. | | |

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|----------|--|---|---------|
| 18-21 | <p>Para. 6.12 Verify that the audit report contains the following:</p> <ul style="list-style-type: none"> - Description of the audit scope - Identification of audit team members - Identification of persons contacted during the audit - Summary of audit results, including a statement of adequacy and effectiveness of the Technical and QA Program elements that were audited. - Description of each reported adverse deficiency, NCR, and recommendation - The documents reviewed, persons interviewed and the specific results of the reviews and interviews (summary of checklists) | | |

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| 18-22 | Verify that the audit report was approved by the SQA/YMP and transmitted to the audited organization thru appropriate channels. | | |
| 18-23 | Para. 6.13 Verify that the manager(s) responded to any deficiencies reported during the audit and that the responses were evaluated by the ATL or a LA for adequacy. | | |

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| 18-24 | Para. 6.14 Verify that corrective action verification was done per the appropriate procedure. | | |
| 18-25 | Para. 6.15 Verify that the audit was closed upon the completion of corrective action of all deficiencies reported during the audit and that the audited organization was notified in writing by the LA. | | |

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| 18-26 | <p>Para. 6.16 Verify that the Audit File contains the following, as applicable:</p> <ul style="list-style-type: none"> - Audit Plan - Audit Report - Deficiency Reports - CARs - NCRs - Records of DR Completion - Completed Audit Checklists - Letter Closing the Audit - Audit Guide for Technical Specialists | | |
| 18-27 | <p>Para. 7.0 Verify that the Audit File is a lifetime QA record.</p> | | |

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| 18-28 | QAP-18.2(Y), Rev. 1, SURVEILLANCE Para. 6.1.1 Verify that surveillance were conducted by personnel knowledgeable in, and independent of the items/activity surveilled. | | |
| 18-29 | Para. 6.1.3 Verify that a Surveillance Log is maintained and surveillances are numbered appropriately. | | |
| 18-30 | Para. 6.2.1 Verify that a Surveillance Schedule is maintained . | | |

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| 18-31 | Para. 6.2.3 Verify that checklists were used during the surveillance and that objective evidence is recorded on the checklist in sufficient detail. | | |
| 18-32 | Para. 6.3.2 Verify that deficiencies are recorded appropriately. | | |

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| 18-33 | <p>Para. 6.4.1 Verify that the surveillance report contains the following:</p> <ul style="list-style-type: none"> - Date of the surveillance - Objective of the surveillance - Identification of surveillance team members - Personnel contacted during the surveillance - Acceptance/rejection statement concerning item or activity surveilled - Identification of deficiencies, as appropriate - MT&E used during the surveillance | | |
| 18-34 | <p>Para. 6.4.2 Verify that the surveillance report was approved by the SQA/YMP and transmitted to the surveilled organization thru appropriate channels.</p> | | |

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| 18-35 | Para. 6.5 Verify that the manager(s) responded to any deficiencies reported during the surveillance and that the responses were evaluated by the ATL or a LA for adequacy. | | |
| 18-36 | Verify that corrective action verification was done per the appropriate procedure. | | |
| 18-37 | Para. 6.5 Verify that the surveillance was closed upon the completion of corrective action of all deficiencies reported during the surveillance and that the surveilled organization was notified in writing by the LA. | | |

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| 18-38 | <p>Para. 7.0 Verify that the following, as applicable, are lifetime QA records:</p> <ul style="list-style-type: none"> - Surveillance Report - Deficiency Reports - CARs - NCRs - Records of DR Completion - Completed Surveillance Checklists (i.e., Planning Document) - Letter Closing the Surveillance | | |

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| 19-1 | QAP-19.1(y), REVISION 1, SECTION 6.1 Verify that a log is maintained by the QAR of RSN computer documents received by the QA Department. | | |

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| 19-2 | PP-19-07, REVISION 0, SECTION 6.1 Verify that the SCML is filled out in accordance with Attachment 1. Section 6.1.6.2 | | |
| 19-3 | Verify that a DBM was issued in accordance with PP-03-15. Section 6.1.6.2 | | |
| 19-4 | Verify that an ECR was issued in accordance with PP-03-17. | | |

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|----------|---|--|---------|
| 19-5 | Section 6.1.7 Verify that status reporting of qualified software is in accordance with PP-03-16. | | |
| 19-6 | Section 6.2 Verify that an SAR form (Attachment 2) and SRS (Attachment 3) were generated and approved during the Classification and Authorization Phase for Scientific and Engineering Software. | | |

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|----------|--|--|---------|
| 19-7 | <p>Section 6.3</p> <p>Verify that during the Acquisition and Evaluation Phase, the following documents were generated and approved:</p> <ul style="list-style-type: none"> - Computer Receipt Inspection Report (Attachment 4) - User Document Review Report (Attachment 5) - Test Document Review Report (Attachment 6) - Software Verification and Validation Plan (Attachment 7) - Software Validation Waiver (Attachment 8) | | |
| 19-8 | <p>Section 6.4.9.4</p> <p>Verify that the SCML has been inserted in all the documents which exist in the final certified software package (documents generated from the beginning of the software authorization process all the way to the certification process) and are in the Design Record Center (DRC).</p> | | |

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| 19-9 | Section 6.5.1.1 Verify that the Using Department maintains a log documenting the use of released software items. | | |
| 19-10 | Section 6.5.1.1 Verify that the log is sufficient to allow independent repetition of the use of the software. | | |

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| 19-11 | Sections 6.4.7 and 6.4.8 Verify the difference between these steps. | | |
| 19-12 | Sections 6.4.8.2 and 6.4.8.3 Verify the documentation of model validation activities. | | |

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| II-1 | <p>AP-6.3Q, REVISION 1, ICN 1, PROCEDURE FOR REQUESTING SAMPLES FOR EXAMINATION AT YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY</p> <p>Supplement II, Section 5, Step 3</p> <p>Verify that the requester has completed, signed, and submitted a Sample Examination Request (SER) to the SMF curator for approval prior to the sample examination.</p> <p>Verify that the requester has submitted a completed Unqualified Samples Examination Agreement and an SER to the SMF curator for approval prior to examination of unqualified geologic samples.</p> | | |

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| II-2 | <p>AP-6.4Q, REVISION 2, ICN 3, PROCEDURE FOR THE SUBMITTAL, REVIEW, AND APPROVAL OF REQUESTS FOR YMP GEOLOGIC SPECIMENS</p> <p>Section 5, Step 2</p> <p>Verify that the PI/Requester has prepared a Specimen Removal Request (SRR) form or Specimen Transfer Request (STR) form.</p> <p>Verify that the SRR form has been used for new specimen requests.</p> | | |
| II-3 | <p>Verify that the PI/Requester has listed all tests or analyses to be performed on specimens on the applicable SRR or STR form.</p> | | |
| II-4 | <p>Verify that the PI/Requester has submitted the SRR/STR form to the SOC representative of his/her participating organization.</p> | | |

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|----------|---|--|-----------|
| IV-1 | PP-01-02, REVISION 1, WORK INITIATION SUPPLEMENT IV Para. 6.1.1 Verify that the Work Initiation (WI) form has been used to initiate applicable work in support of the YMP. | | |
| IV-2 | Para. 6.2.2 Verify that Design Engineering and System Engineering maintain a single common WI Control Log at the BA Center. Verify that FO maintains a separate WI Control Log at the Area 25 Field Office. | | |

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| IV-3 | <p>Para. 6.3.2</p> <p>Verify that applicable codes, standards, and regulations, if not contained in the criteria documents, are identified with effective dates in Item 15 on the WI form.</p> | | |
| IV-4 | <p>Para. 6.3.3</p> <p>Verify that WI forms issued for surveys contain the appropriate accuracy requirements.</p> | | |
| IV-4 | <p>Para. 5.6.6</p> <p>Verify that when the work has been completed, or needs to be stopped, the department responsible for issuing the WI form issues a final revision indicating the WI form is closed.</p> | | |

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| IV-7 | <p>PP-01-03, REVISION 1, SURVEY DEPARTMENT WORK FUNCTIONS</p> <p>Para. 6.1.1</p> <p>Verify that survey data is reviewed, checked and distributed in accordance with PP-01-04.</p> | | |
| IV-8 | <p>Para. 6.1.2</p> <p>Verify that surveys are performed to Third Order of Accuracy unless otherwise specified by the requester or RSN YMP management.</p> | | |
| IV-9 | <p>Para. 6.2 - Establishment of Horizontal Control Points</p> <p>Para. 6.2.1</p> <p>Verify that the appropriate surveying instrument is positioned over or under an established control point, which has known values such as state plane coordinates.</p> | | |

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| IV-10 | <p>Para. 6.4 - Establishment of Vertical Control Points (Permanent and Temporary Bench Marks)</p> <p>Para. 6.4.1.1</p> <p>Verify that a level circuit is run from an established vertical control point and closed back to the point of beginning or another vertical control point.</p> | | |

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| IV-11 | PP-01-04, REVISION 1 Para. 6.1.1 Verify that all survey data (field notes), is recorded in self duplicating type field book or the following forms or recording module. | | |
| IV-12 | Para. 6.1.1.1 Verify that vertical alignment of borehole as-built survey data is recorded on the Direct Optical Survey forms per PP-01-03. | | |

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| IV-13 | Para. 6.1.1.4 Verify that when electronic data is used in support of the survey field books, data is collected on the Total Station Distance Meter recording module and is published as a data collection file per PP-01-03. | | |
| IV-14 | Para. 6.1.1.3 Verify that a listing of primary control monuments will be maintained by the survey department. | | |