

YMP-007-R2  
10/28/91YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
INTERIM CHANGE NOTICEICN No. 2  
Page 1 of 1

Title: STAGING, PACKAGING, AND DOCUMENTING NEUTRON-ACCESS BOREHOLE SAMPLES	Document No.: BTP-SMF-013	Rev. No.: 0	Effective Date: 1/13/92
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REQUIRED CHANGE(S): ☐ MAJOR ☒ MINOR (only PCB Chief approval required)

Page 2 of 23, section 1.1, after the word requirements add: "for alternative handling of; " delete: "and responsibilities for photographing, staging, selecting, packaging, and documenting"

## Instructions to Document Holders:

1. Place ICN approval page at the beginning of the document.
2. Replace page 2 of 23 with ICN page 2 of 23.

## REASON FOR CHANGE (CAR, NCR, SDR, or other deficiency or commitments)

Changes required in response to Corrective Action Number YM-92-012.

All signatures listed below constitute procedural compliance. I have read, understood, and complied with Procedure OMP-06-04 Rev. 4, ICN # 1, in accomplishing my responsibilities in this procedure.

## APPROVAL

PROJECT MANAGER

N/A

N/A

Signature

Date

DIRECTOR OF QUALITY ASSURANCE

N/A

N/A

Signature

Date

(OTHER, AS REQUIRED)

N/A

N/A

Signature

Date

PCB CHIEF  
(Minor ICNs only)*gm*

Signature

Date

*1/2/92*TRAINING REQUIRED ☐ YES ☒ N/ANUMBER OF DAYS REQUIRED FOR TRAINING N/A

COMMENTS: MINOR CHANGE FOR CLARIFICATION  
NO CHANGE TO INTENT

Training Officer/Training Manager

Date

9204170236 920410  
PDR WASTE  
WM-11 PDR

OMP-06-04  
ENCLOSURE 10

YMP-007-R1  
4/22/91

**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT**  
**INTERIM CHANGE NOTICE**

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Title: Staging, Packaging, and Documenting Neutron-Access Borehole Samples	Document No.: BTP-SMF-013	Rev. No.: 0	Effective Date: 10/29/91
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REQUIRED CHANGE(S): ☒ MAJOR ☐ MINOR (only PCB Chief approval required)

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3.0 Definitions

Add the following definition and renumber the remaining definitions as appropriate:

"3.6 DRIVE-CORE

Drive-core is material collected with a drive sampler, using brass sleeve(s) as the inner barrel."

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Step 2

In Step 2.b, replace "continue with next step" with "complete Steps 3-23, and Step 27." Add Step 2.c as follows:

"c. If drive-core, extrude brass sleeve(s), then complete Step 3, Steps 11-23, and Step 27."

REASON FOR CHANGE (CAR, NCR, SDR, or other deficiency or commitments)

Field work activities have identified the indicated changes as necessary to the procedure.

APPROVAL

PROJECT MANAGER	<u>Maxwell Blanchard</u>	<u>10-25-91</u>
	Signature	Date
DIRECTOR OF QUALITY ASSURANCE	<u>P.C. Spence</u>	<u>10/25/91</u>
	Signature	Date
(OTHER, AS REQUIRED)	<u>W.A. Kirdley FOR US CLANTON</u>	<u>10/25/91</u>
	Signature	Date
PCB CHIEF (Minor ICNs only)	<u>N/A</u>	<u>N/A</u>
	Signature	Date

TRAINING REQUIRED ☒ YES ☐ N/A

NUMBER OF DAYS REQUIRED FOR TRAINING 1

COMMENTS: -SELF. STUDY FOR  
Revised Personnel

W.A. Kirdley 10/28/91  
Training Officer/Training Manager Date

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4/22/91

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REQUIRED CHANGE(S): ( continued )

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Step 6

Add "run interval and amount" after "run number,".

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Step 17

Add "as necessary" at end of last sentence.

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Add the following between Steps 18 and 19:

"NOTE: Complete Steps 19 and 20 only if specimen is to be released directly to PI/designee."

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Step 20

Replace existing text with the following:

"Release specimen and copies of Specimen Log and contract to PI/designee."

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Step 21

Delete "similarly packaged."

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NOTE following Step 24

Replace "Criteria Letter" with "Work Program."

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Step 26

Delete "Complete Specimen Contract for PI specimens, according to instructions on back of contract."

Page 12 of 23 and Page 13 of 23

Figure 1 flowchart

Modify to reflect above changes as appropriate.

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REQUIRED CHANGE(S): ( continued )

INSTRUCTIONS TO DOCUMENT HOLDERS:

1. Place ICN Approval Page at beginning of document.
2. Replace Page 3 of 23 with ICN Page 3 of 23; Page 4 of 23 with ICN Page 4 of 23; Page 5 of 23 with ICN Page 5 of 23; Page 7 of 23 with ICN Page 7 of 23; Page 8 of 23 with ICN Page 8 of 23; Page 12 of 23 with ICN Page 12 of 23; and Page 13 of 23 with ICN Page 13 of 23.

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7/12/91

**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE  
DOCUMENT APPROVAL SHEET**

Title

STAGING, PACKAGING, AND DOCUMENTING NEUTRON-ACCESS  
BOREHOLE SAMPLES

NO. BTP-SMF-013

☒ Q

☐ Non Q

APPROVAL

PROJECT MANAGER:

[Signature]  
Signature

9/19/91

Date

DIRECTOR OF QUALITY ASSURANCE:

[Signature]  
Signature

9-18-91

Date

YMP SIB Chief

(OTHER, AS REQUIRED)

[Signature]  
Signature

9-19-91

Date

REVISION 0 EFFECTIVE DATE: 9/20/91

REVISIONS

INITIAL AND DATE

REVISION 1

REVISION 2

REVISION 3

REVISION 4

PROJECT MANAGER:

\_\_\_\_\_

DIRECTOR, QA:

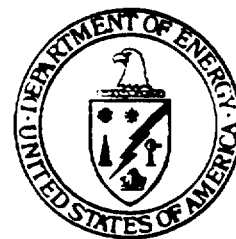
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(OTHER, AS REQUIRED)

\_\_\_\_\_

EFFECTIVE DATE:

\_\_\_\_\_



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TRAINING REQUIRED

☐ YES

☒ N/A

NUMBER OF DAYS REQUIRED FOR TRAINING

N/A

COMMENTS:

NO PERSONNEL BASELINED  
TRAINING WILL BE  
AFFORDED UPON  
REQUEST.

[Signature]  
TRAINING OFFICER/TRAINING MANAGER

9/19/91  
DATE

## YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT INTERIM CHANGE NOTICE

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### 1.0 PURPOSE AND SCOPE

#### 1.1 PURPOSE

The purpose of this procedure is to define the requirements for alternative handling of geologic samples and specimens acquired from Yucca Mountain Site Characterization Project (YMP) neutron-access boreholes.

#### 1.2 SCOPE

The scope of this procedure includes (1) initial sample handling at the neutron-access borehole, (2) videotaping of neutron-access borehole core, (3) removing neutron-access borehole specimens, (4) determining depth intervals of core, (5) boxing specimens, (6) handling cuttings, (7) sample and specimen storage, (8) summary reporting, (9) records, and (10) monitoring of site activities.

### 2.0 APPLICABILITY

This procedure applies to those Field Test Control Department (FTCD) Field Operations (FO) staff who photograph, stage, select, package, and document geologic samples and specimens acquired at YMP neutron-access boreholes.

### 3.0 DEFINITIONS

NOTE: Terms in this procedure are used as defined in the Project Glossary. The following additional definitions are adopted for the purposes of this procedure.

#### 3.1 CORE

Core consists of a cylindrical section of rock, or fragment thereof, taken as a sample of the interval penetrated by a core bit and brought to the surface for examination and/or analysis.

#### 3.2 CORE RUN

A core run is an attempt to drill and recover a length of core. It is also the core recovered from the core barrel after the core run.

#### 3.3 CUTTINGS

Cuttings are chips of rock produced during drilling that are removed from the borehole by circulation of drilling fluids (gas, foam, or liquid).

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### 3.4 DAILY ACTIVITIES LOG (DAL)

The DAL is a daily, chronological record of activities (using a 24-hour timeclock [0000-2400 hours]) that occur during drill site operations. It is kept in a paginated, hardbound notebook.

### 3.5 DISCREPANCY

A discrepancy exists when incorrect documentation or notation is discovered after completion of the immediate activity or form.

### 3.6 DRIVE-CORE

Drive-core is material collected with a drive sampler, using brass sleeve(s) as the inner barrel.

### 3.7 NEUTRON-ACCESS BOREHOLE

A neutron-access borehole is a borehole drilled under Site Characterization Plan (SCP) Section 8.3.1.2.2.1, Characterization of Unsaturated-Zone Infiltration. These boreholes have a prefix of N- (neutron), LPRS- (large plot rainfall simulation), or SPRS- (small plot rainfall simulation).

### 3.8 RUBBLE

Rubble consists of fragments of core from a single interval, the individual diameters of which average less than one-half the diameter of the whole core. They are broken in such a manner that reconstruction between individual pieces is impossible.

### 3.9 SAMPLE

A sample is part of a population whose properties are studied to gain information about the whole or group. Examples of samples include core, cuttings, and fluids collected at YMP borehole sites.

### 3.10 SAMPLE OVERVIEW COMMITTEE (SOC)

The SOC is comprised of representatives from Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratories, United States Geological Survey, the Technical and Management Support Services contractor, Yucca Mountain Site Characterization Project Office (YMPO), and Quality Assurance (QA). The SOC was formed to ensure a balance between YMP sample needs, acquisition, and use, and the need to curate samples for posterity.

### 3.11 SPECIMEN

A specimen is a subsection or portion that has been removed from a sample or remnant and tracked individually.

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### 3.12 UNIQUE IDENTIFIER (ID)

An ID is a designation that sets a documentable object or event apart from similar entities. It may consist of an assigned number, a name, an alphanumeric designation, or a set of data items that collectively serve to specify the entity. Examples of IDs used in this procedure include borehole ID, container ID, sample ID, or specimen ID.

### 4.0 RESPONSIBLE PARTIES

The following YMP individuals or organizations are responsible for activities described in Section 5.0 of this procedure:

1. FO Staff (FO Staff may consist of the FO Manager, FO Shift Supervisor, FO Lead Geologist, and/or FO Geologist)
2. FO Senior Geologist
3. FO Shift Supervisor

### 5.0 PROCEDURE

NOTE: A flowchart of the following processes described in this procedure is attached as Figure 1. All forms in this procedure shall be filled out as the information becomes available.

<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
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#### INITIAL SAMPLE HANDLING

FO Staff

1. Maintain controlled access to logging trailer by maintaining visual contact, locking, or other means, as necessary. Maintain Field Facility Access Log (Attachment 1), according to instructions on back of log.
2. Determine sample type.
  - a. If cuttings, go to Step 24.
  - b. If core, complete Steps 3-23, and Step 27.
  - c. If drive-core, extrude brass sleeve(s), then complete Step 3, Steps 11-23, and Step 27.



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### RESPONSIBLE PARTY

FO Staff

### STEPS

### PROCEDURE

3. Take custody of inner barrel and core at drill rig. Obtain run number and interval from driller or designee. Mark barrel at uphole end. Cap ends of barrel.

NOTE: To preserve moisture content of samples, Steps 4-14 must be performed as quickly as possible. If any of these steps are delayed, the ends of the barrel shall be recapped.

4. Transport inner barrel to logging trailer. Extrude barrel if necessary. Open barrel to expose core. Fill out polystyrene foam (foam) Run Marker with run number and interval, and place it at top of core run.
5. Fit pieces of core together to reconstruct longer sections of core. Fit rubble zones to represent as nearly as possible their in situ intervals.
6. Measure length of core to nearest 0.1 ft (+/- 0.2 ft). Record borehole ID, run number, run interval and amount, and amount of recovered core on Specimen Log (Attachment 2).
7. Use red and blue permanent markers to place parallel orientation stripes on core, red on right, from top to bottom.

### **VIDEOTAPING OF CORE**

8. Place scale marked in 0.1-ft intervals and annotated with the borehole ID beside the core. Ensure that:
  - a. Proper cassette is identified and in video camera
  - b. Markers are visible and legible
  - c. Core is well-lighted

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
FO Staff		d. Camera is set on "Record" mode
		e. Track speed is set correctly
	9.	Videotape the core run with high-resolution video camera. Complete Field Photographic Log (Attachment 3) according to instructions on back of log.
	10.	Write following information on videotape cassette: borehole ID, run number(s), dates, tape number, and total footage interval documented by the cassette. Lock tape in a cool, dark location until transfer to the Sample Management Facility (SMF).

### REMOVING SPECIMENS

11. Select specimens to be removed according to SOC instructions and approval.
12. Remove specimen. Mark all artificial breaks sustained during handling with parallel heavy black lines on both sides of break. Assign specimen a temporary ID and place borehole ID and temporary specimen ID on packaging material. Record temporary specimen ID on Specimen Log.
13. Measure length of specimen to nearest 0.1 ft (+/- 0.2 ft). Record specimen length on Specimen Log.
14. Package specimen according to specifications of principal investigator (PI).

### DETERMINING DEPTH INTERVALS

15. Determine if length of core recovered equals length of core cut.
  - a. If yes, go to Step 17.
  - b. If no, continue with next step.

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### RESPONSIBLE PARTY

FO Staff

### STEPS

### PROCEDURE

16. Determine if length of core recovered is greater than length of core cut.

a. If yes, reconcile interval with last unrecovered core interval. Then go to Step 17.

b. If no, place unrecovered core interval at bottom of run.

NOTE: At the discretion of FO Staff, unrecovered core intervals may be placed elsewhere in the run, based on communication with driller, information from rig floor, previous drilling experience in similar rock, etc.

17. Determine specimen intervals and unrecovered core interval(s). Complete scale on Specimen Log as necessary.

18. Place specimen interval on packaging material containing specimen. Record specimen interval on Specimen Log. Record run number, run interval, and amount of core drilled, recovered, and unrecovered on Shift Drilling Summary (Attachment 4), according to instructions on back of summary.

NOTE: Complete Steps 19 and 20 only if specimen is to be released directly to PI/designee.

19. Complete Field Specimen Removal Checklist and Contract (Specimen Contract; Attachment 5), according to instructions on back of contract. Record permanent specimen ID number on contract, on packaging material containing specimen, and on Specimen Log. Complete Specimen Log Summary, according to instructions on back of log.

20. Release specimen and copies of Specimen Log and contract to PI/designee.

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RESPONSIBLE PARTY

STEPS

PROCEDURE

### BOXING SPECIMENS

FO Staff

21. Place specimens into specimen containers.
22. Affix labels listing borehole ID, sample type, container ID, and interval(s) of specimen(s) in container to downhole end of base and lid of container.
23. Seal each container with nylon filament tape.

### CUTTINGS HANDLING

NOTE: Cuttings shall be collected and packaged for (1) curation at the SMF, and (2) PI use, as necessary.

24. Collect and package cuttings according to instructions from SOC and specifications of PI.

NOTE: SOC instructions are included on the SOC Specimen Removal Request. PI specifications are included in or with the Work Program. These documents will be filed at the logging trailer, per QMP-17-01, Records Management: Record Source Implementation.

25. Mark each sample container with borehole ID, date, and depth interval. If a sample was not collected, place a marker (with uncollected sample information) in place of uncollected sample.
26. Prepare cuttings for shipment, according to specifications of PI.

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
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### TEMPORARY STORAGE OF SAMPLES, SPECIMENS, AND FIELD RECORDS

FO Staff	27.	Temporarily store borehole samples, specimens, and records in access-restricted facility, protected from inclement weather.
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### SUMMARY REPORTING

	28.	Maintain DAL. Entries will be legible, concise, in indelible black ink, and initialled. Incoming FO Staff shall read the day's entries and shall be briefed by outgoing FO Staff, as necessary.
FO Senior Geologist	29.	Complete Shift Drilling Summary, according to instructions on back of summary.
FO Shift Supervisor	30.	Report shift activities to the FO Manager.

### RECORDS

NOTE: Records will be stored in the logging trailer, per QMP-17-01.

FO Staff	31.	Duplicate all original field records prior to transmittal to the SMF.
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### MONITORING OF SITE ACTIVITIES

	32.	Identify discrepancies. Cross through discrepancies, correct original document, and initial and date correction. If correction is not self-explanatory, attach sheet to original describing correction made.
	33.	Identify any nonconformances to this procedure and process in accordance with QMP-15-01, Control of Nonconformances.

## YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

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### 6.0 REFERENCES

NOTE: Refer to the latest version of the documents listed below unless otherwise stated.

#### 6.1 REQUIREMENTS DOCUMENTS

Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance Requirements Document, DOE/RW-0214

OCRWM Quality Assurance Program Description Document, DOE/RW-0215

#### 6.2 INTERFACE DOCUMENTS

Project Glossary, YMP/89-15

QMP-15-01, Control of Nonconformances

QMP-17-01, Records Management: Record Source Implementation

### 7.0 FIGURES AND ATTACHMENTS

Figure 1, BTP-SMF-013 Flowchart

Attachment 1, Field Facility Access Log (YMP-013-R0)

Attachment 2, Specimen Log (YMP-065-R0)

Attachment 3, Field Photographic Log (YMP-014-R0)

Attachment 4, Shift Drilling Summary (YMP-012-R0)

Attachment 5, Field Specimen Removal Checklist and Contract (YMP-010-R0)

### 8.0 RECORDS

Records packages of documentation generated as a result of this procedure shall be assembled and submitted to the appropriate Local Records Center in accordance with requirements specified in approved procedures. Quality Assurance (QA) Records shall be those records so designated by the Yucca Mountain Site Characterization Project Office during the processes described in this procedure.

The following QA Records are generated by this procedure:

1. Specimen Log

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2. Field Photographic Log
3. Shift Drilling Summary
4. Field Specimen Removal Checklist and Contract
5. DAL
6. Core videotape

The following non-QA Records are generated by this procedure:

1. Field Facility Access Log

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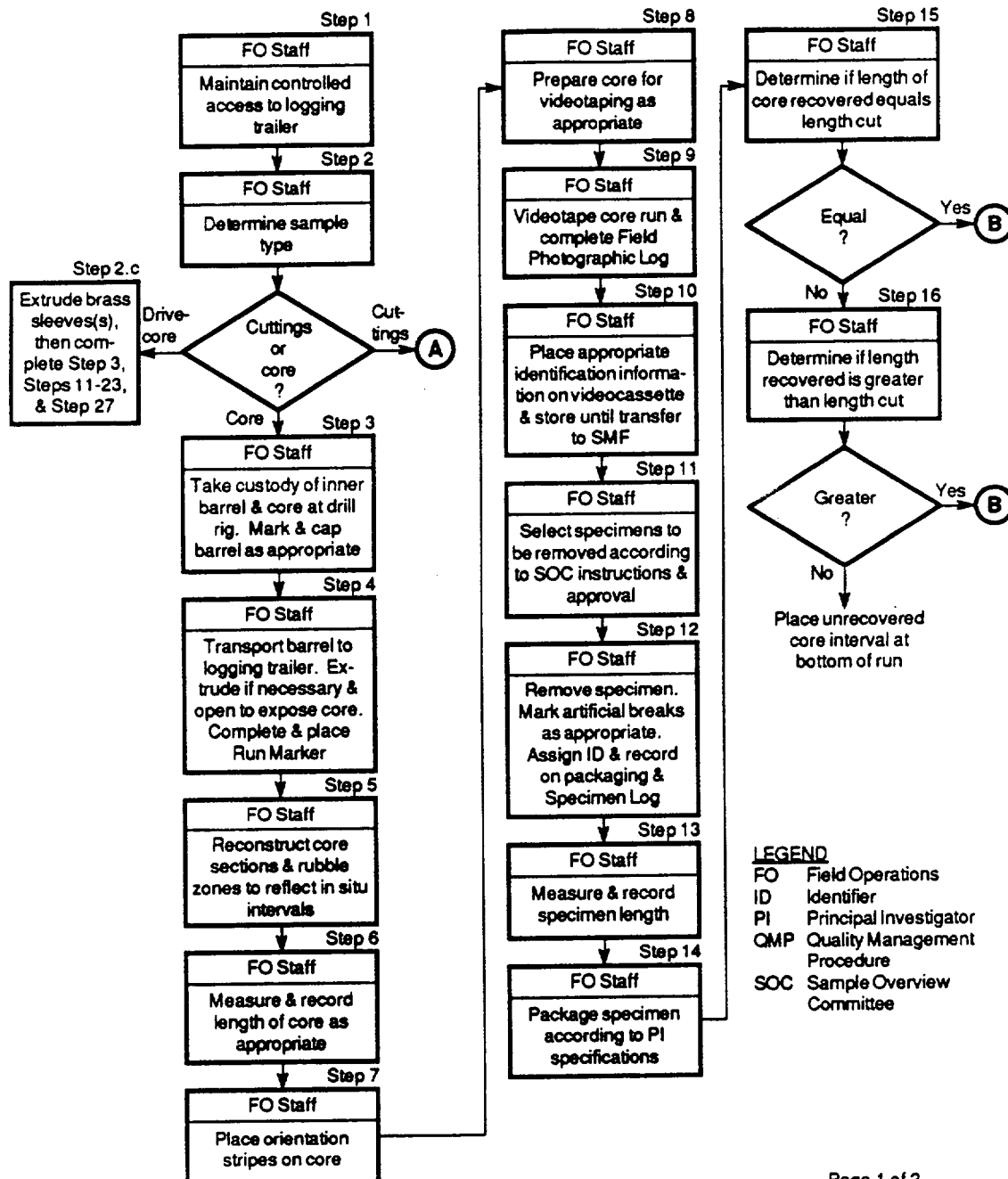


Figure 1. BTP-SMF-013 Flowchart



# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT INTERIM CHANGE NOTICE

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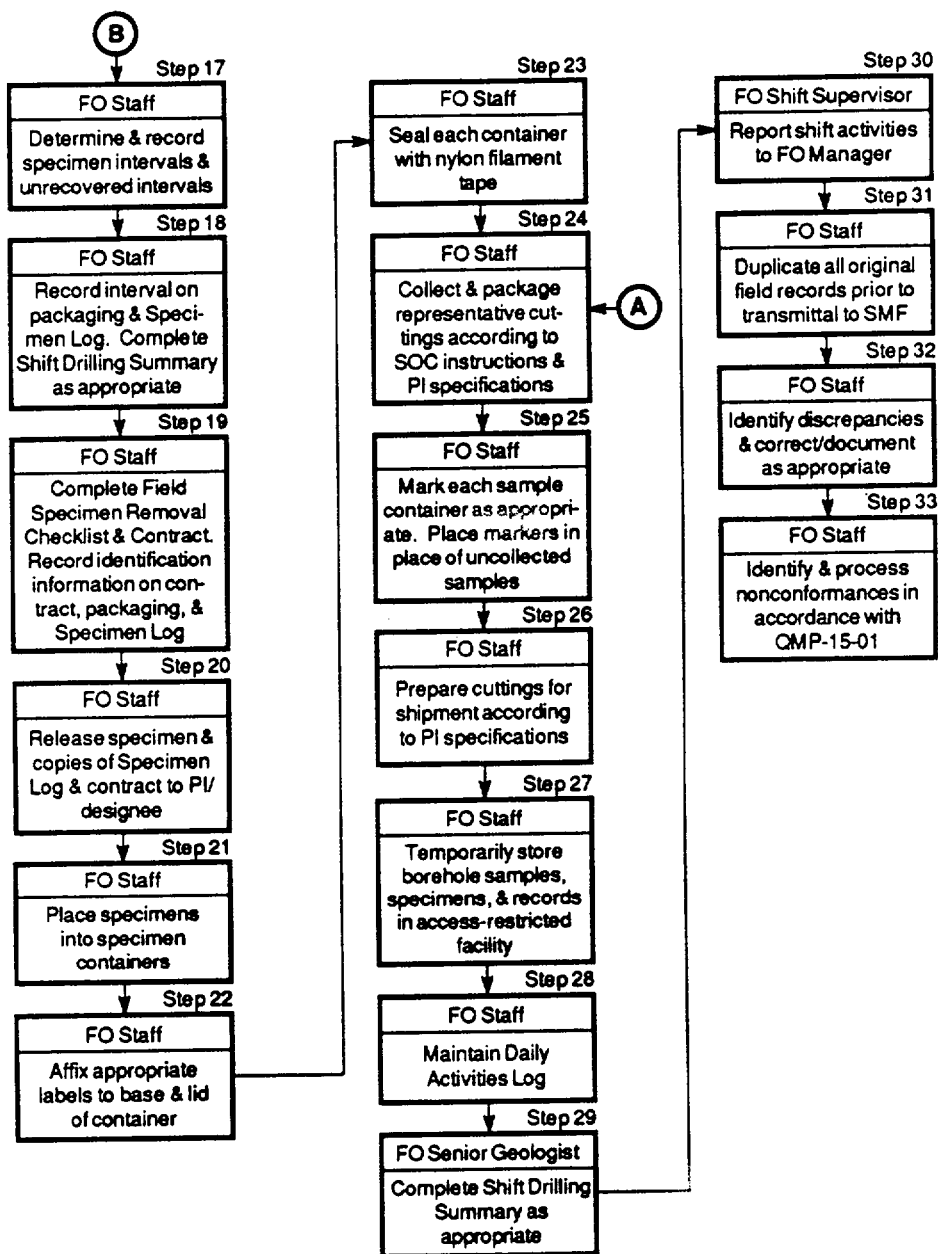


Figure 1. BTP-SMF-013 Flowchart (continued)

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## YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

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4/19/91  
WBS: \_\_\_\_\_  
QA: \_\_\_\_\_

### YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY FIELD FACILITY ACCESS LOG

Borehole ID # \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Shift Start Date \_\_\_\_\_ Shift Time \_\_\_\_\_ (0000 - 2400 clock)

	Name	Organization	Purpose of Visit
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			
Print	-----		
Sign			

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Attachment 1. Field Facility Access Log (YMP-013-R0)

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## INSTRUCTIONS FOR PREPARATION OF YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY FIELD FACILITY ACCESS LOG YMP-013

### HEADER INFORMATION

Borehole ID # Unique alphanumeric designation assigned to borehole

Pagination Numbers sequentially assigned to sheets; first blank contains number of that particular sheet; second blank contains total number of sheets completed for the shift

Shift Start Date Date shift starts

Shift Time From / to; using a 24-hour timeclock (0000 - 2400 hrs)

### COLUMN INFORMATION

Name Name and signature of individual entering the facility; not applicable to FO Staff

Organization Organization of individual

Purpose of Visit Brief description of purpose of visit

NOTE: Individuals only need to sign in the first time they enter the facility during the shift.

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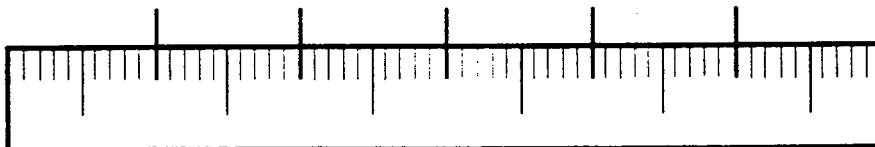
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**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
FIELD TEST CONTROL DEPARTMENT SPECIMEN LOG**

Amt. Unrecovered Core \_\_\_\_\_ Uncovered Core Intvl. \_\_\_\_\_

[illegible]

Comments \_\_\_\_\_



BTP-SMF-013

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## INSTRUCTIONS FOR PREPARATION OF YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY SPECIMEN LOG YMP-065

Borehole ID	Unique alphanumeric designation assigned to each borehole
Run No.	Core run number
Pagination	Number sequentially assigned to sheets; first blank contains number of that particular sheet; second blank contains total number of sheets for the form
Geologist(s)/Date	Name(s) of geologist(s) completing the form, and date
Checked By/Date	FO Staff not directly responsible for completion of form, and date
Time on Floor	Time (by 2400-hour timeclock, 0000-2400 hrs) the core barrel is laid on rig floor
Time Open	Time (by 2400-hour timeclock, 0000-2400 hrs) the core barrel is opened at the logging trailer
Run Interval/Amount	Depth interval of the run and amount of footage cut during the run, as reported by driller
Amount Recovered Core	Amount of core recovered from run
Amount Unrecovered Core	Amount of core unrecovered from run
Unrecovered Interval	Depth interval(s) of each unrecovered core interval from run (if applicable)
Specimen ID/Permanent	Bar code label or unique specimen ID number
Specimen ID/Temporary	Two-digit ID number; first digit is run number and second digit is sequential order of removed specimens. Example: the first specimen removed from Run 1 would be designated "1-1"; the fourth specimen removed from Run 10 would be designated "10-4"
Package Type	"L" if packaged in lexan liner, "C" if packaged in can
Specimen Length	Measured length of removed specimen
Specimen Interval	Interval of removed specimen
Comments	Note weather conditions, extended length of time to process specimens, hydrologic conditions, etc.
Scale	Used to determine specimen and unrecovered core intervals

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FIELD PHOTOGRAPHIC LOG

Checked By \_\_\_\_\_ Date \_\_\_\_\_

[illegible]

BTP-SMF-008

Attachment 3. Field Photographic Log (YMP-014-R0)

# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: BTP-SMF-013 STAGING, PACKAGING, AND  
DOCUMENTING NEUTRON-ACCESS BOREHOLE SAMPLES

Revision:  
0

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## INSTRUCTIONS FOR PREPARATION OF YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY FIELD PHOTOGRAPHIC LOG YMP-014

### HEADER INFORMATION

<u>Borehole ID #</u>	Unique alphanumeric designation for borehole
<u>Cassette #</u>	Number sequentially assigned to each cassette; begin new log when starting new cassette
<u>Pagination</u>	Numbers sequentially assigned to sheets; first blank contains number of that particular sheet; second blank contains total number of sheets completed for the cassette
<u>Checked by/Date</u>	FO Staff's signature and date verifying that information on record is correct; cannot have taken videotape if signing here

### COLUMN INFORMATION

<u>Run Number</u>	Number of run being videotaped
<u>Run Interval</u>	Interval of run being videotaped
<u>Counter Interval</u>	Counter interval (from/to) on video camera
<u>Remarks</u>	Documentation of any other feature being videotaped, including interesting item in core, drilling activity, etc.
<u>Photographer</u>	Photographer's initials and date

# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Revision:  
0

YMP-012-R0  
4/17/91  
WBS: \_\_\_\_\_  
CA: \_\_\_\_\_

# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY SHIFT DRILLING SUMMARY

Completed By \_\_\_\_\_ Date \_\_\_\_\_ Checked By \_\_\_\_\_ Date \_\_\_\_\_

## SUMMARY OF ACTIVITIES

## GEOLOGIC INFORMATION

## RUN INFORMATION

#	INTVL	CUT	RCVRD	UNRCVRD	UNRCVD INT	% REC	VERIFIED BY
TOTAL							

BTP-SMF-008

Attachment 4. Shift Drilling Summary (YMP-012-R0)



## YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: BTP-SMF-013 STAGING, PACKAGING, AND  
DOCUMENTING NEUTRON-ACCESS BOREHOLE SAMPLES

Revision:  
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### INSTRUCTIONS FOR PREPARATION OF YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY SHIFT DRILLING SUMMARY YMP-012

#### HEADER INFORMATION

<u>Borehole ID #</u>	Unique alphanumeric designation assigned to each borehole
<u>Drilled Interval</u>	Total interval drilled during shift
<u>Pagination</u>	Number sequentially assigned to sheets; first blank contains number of that particular sheet; second blank contains total number of sheets for the shift
<u>Shift Start Date</u>	Date of beginning of shift
<u>Shift Time</u>	Expressed in 24-hour timeclock (0000 - 2400 hrs)
<u>Completed by/Date</u>	FO Geologist's signature and date
<u>Checked by/Date</u>	FO Staff not directly responsible for completion of form

#### SUMMARY OF ACTIVITIES

Summary of shift activities may include: drilling, testing, logging, or standby activities; equipment breakdown; unusual features or occurrences encountered; rig changeouts; inspections.

#### GEOLOGIC INFORMATION

Provide gross lithologic description and structural information.

#### RUN INFORMATION (Note: Record all amounts to nearest 0.1 ft)

<u>#</u>	Run number
<u>Interval</u>	Depth interval of run
<u>Cut</u>	Amount of footage cut during run, as reported by driller
<u>Recovered</u>	Amount of core recovered from run
<u>Unrecovered</u>	Amount of core unrecovered from run
<u>Unrecovered Interval</u>	Depth interval(s) of each unrecovered interval of core from run (if applicable)
<u>% Recovered</u>	Total percent of core unrecovered from run
<u>Verified By</u>	FO Staff not directly responsible for completion of this form; verify for each run; verify "Totals" in lower right-hand block
<u>Total</u>	Totals of "cut", "recovered", and "unrecovered" columns; calculate % recovery

YMP-053-R0  
7/12/91

# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: BTP-SMF-013 STAGING, PACKAGING, AND  
DOCUMENTING NEUTRON-ACCESS BOREHOLE SAMPLES

Revision:  
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YMP-010-R0

4/17/91

WBS: \_\_\_\_\_

QA: \_\_\_\_\_

## YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY FIELD SPECIMEN REMOVAL CHECKLIST AND CONTRACT

Recipient \_\_\_\_\_ Address \_\_\_\_\_

Organization \_\_\_\_\_

Telephone ( ) \_\_\_\_\_ (FTS) \_\_\_\_\_

Courier \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_ Borehole ID \_\_\_\_\_

RSED Director Authorization \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

SPECIMEN INFORMATION			CHECKLIST		
Specimen Number	Affixed?	Interval Removed	Foam Mkr?	Mkd/ Tag?	Pkgd? Desc.
		Date Created			

### SPECIMEN TRANSFER

Person Releasing Custody:

Person Accepting Custody:

Date/Time \_\_\_\_\_

Date/Time \_\_\_\_\_

SMF  
Use  
Only

Checked By \_\_\_\_\_ Date \_\_\_\_\_

INSTRUCTIONS ATTACHED

BTP-SMF-008