

**YUCCA MOUNTAIN PROJECT OFFICE
DOCUMENT APPROVAL SHEET**

Y-AD-002
1/22/91

Title
BRANCH TECHNICAL PROCEDURE: REMOVAL OF WHOLE AND OTHER SPECIMENS
FROM SAMPLES BY THE SMF FOR SHIPMENT AND REMNANT RETURN

NO. BTP-SMF-006
[X]
[] Non Q

APPROVAL

PROJECT MANAGER: John E. Shaler 6/28/89
(T&MSS Assistant) Signature Date

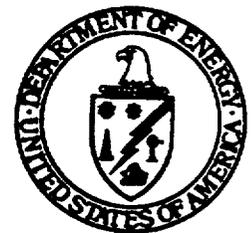
DIRECTOR OF QUALITY ASSURANCE: Edwin L. Wilmot 6/28/89
Signature Date

YMP Branch Chief : D. E. Livingston for M. B. Blanchard 6/28/89
(OTHER, AS REQUIRED) Signature Date

REVISION 0 EFFECTIVE DATE: 7/7/89

REVISIONS

	INITIAL AND DATE			
	REVISION 1	REVISION 2	REVISION 3	REVISION 4
PROJECT MANAGER: for	<u>Edwin L. Wilmot</u> 10/26/90	<u>[Signature]</u> 3/5/91		
DIRECTOR, QA:	<u>D. G. Horton</u> 10/26/90	<u>[Signature]</u> 3/1/91		
YMP Branch Chief (OTHER, AS REQUIRED)	<u>Uel S. Clanton</u> <u>Maxwell Blanchard</u> 10/26/90	<u>[Signature]</u> 3/14/91 3/20/91		
EFFECTIVE DATE:	<u>10/26/90</u>			



TRAINING REQUIRED YES N/A NUMBER OF DAYS REQUIRED FOR TRAINING 105 2-1-91

COMMENTS: SELF-STUDY FOR APPLICABLE PERSONNEL

[Signature] 3/7/91
[Signature] 3/6/91
TRAINING OFFICER/TRAINING MANAGER DATE

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1.0 PURPOSE AND SCOPE

1.1 PURPOSE

The purpose of this procedure is to facilitate the tracking and use of geologic samples collected from Yucca Mountain Site Characterization Project (YMP) boreholes and curated at the Sample Management Facility (SMF). Its goals are to maintain the traceability and identity of all samples collected, processed, and distributed to YMP Participants and other individuals and organizations.

1.2 SCOPE

The scope of this procedure includes 1) instructions for removing, packaging, and shipping specimens from YMP borehole specimens at the request of interacting individuals or organizations, 2) instructions for receipt and curation of specimen remnants returned to the SMF, 3) responsibilities of SMF staff during the requesting, assignment, removal, and shipping of specimens and the return of remnants, and 4) the documentation related to the disposition of those specimens.

2.0 APPLICABILITY

This procedure applies to all SMF personnel involved with the curation, processing, documentation, removal, or transport of borehole samples collected under YMP procedures and curated at the SMF. It also applies to any borehole samples collected under YMP procedures and curated at the SMF.

3.0 DEFINITIONS

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

3.1 CORE

A core is 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 RECIPIENT

A Recipient is an individual from a YMP Participant or outside interest who receives a Sample Overview Committee (SOC)-authorized specimen removed by SMF staff from a YMP sample or remnant.

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3.3 REMNANT

The portion of a specimen that is returned to the SMF by a Recipient after analysis and testing has been performed is a remnant.

3.4 REQUESTOR

The Requestor is an individual from a YMP Participant or outside interest who requests to have a specimen removed from a YMP sample or remnant by SMF staff.

3.5 RUBBLE

Rubble consists of fragments of core from a single interval, the individual diameters of which average less than one-half of the diameter of the whole core.

3.6 SAMPLE

A sample is part of a population whose properties are studied to gain information about the whole or the group.

3.7 SAMPLE MANAGEMENT FACILITY

The SMF is the facility used for the documentation, storage, and control of samples and sample remnants collected and dispersed for analysis and evaluation by users. The SMF consists of a physical facility and equipment designed to effectively process and conserve preserved samples.

3.8 SAMPLE OVERVIEW COMMITTEE

The SOC is a committee comprised of representatives from various Participant Organizations that utilize or have an interest in the use of YMP samples. It was formed to ensure a balance between YMP sample needs, acquisition, and use and the need to curate samples for posterity.

3.9 SHIPMENT

A shipment is a designated group of specimens transferred from the SMF to a Recipient as a single unit.

3.10 SPECIMEN

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

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3.11 UNIQUE IDENTIFIER

A unique identifier is a designation that sets a documentable object or event apart from similar entities. It may consist of an assigned number, a name, an alpha-numeric designation, or a set of data items that collectively serve to specify the entity.

3.12 SAMPLE TYPE

Sample type designates the type of material that makes up a sample, i.e. core and cuttings.

4.0 RESPONSIBLE PARTIES

NOTE: The following Yucca Mountain Site Characterization Project Office (YMPO) individuals are responsible for activities identified in Section 5.0 of this procedure:

1. SMF Curator
2. SMF Staff
3. Technical Staff Assistant
4. SMF Geotechnician
5. Administrative Assistant

5.0 PROCEDURE

NOTE: A flowchart of the following processes described in this procedure is attached as Figure 1.

<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Curator	1.	Review Specimen Requests, and prepare Specimen Availability Analysis, Attachment 1, for SOC.
	2.	In consultation with the SOC and the requestor, designate buffer zones or adjust requested sample intervals to allow for fractures or other significant features in the core.

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Curator	3.	Receive approved Specimen Removal Requests from the Director, RSED, in accordance with AP-6.4Q.
	4.	Assign SMF staff to prepare and remove specimens.

SPECIMEN REMOVAL

SMF Staff	5.	Using data from the request, generate a Specimen Removal Log, Attachment 2. Include the following items: <ol style="list-style-type: none">1. Requestor name and Organization2. The borehole identifier for each specimen requested3. The requested depth interval of each specimen4. The interval reserved after SOC approval5. The type of specimen to be removed6. Information about the specimen's parent sample7. A specimen unique identifier
	6.	Remove the specimen using the appropriate technique. Record the actual depth interval of the specimen on the space provided in the Specimen Removal Log.

ON-SITE MECHANICAL TESTING

7. If vertical orientation of the specimen is desired, mark the specimen using one of the following methods:

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RESPONSIBLE PARTY

STEPS

PROCEDURE

SMF Staff

- a. For whole or split core sections, place red and blue orientation stripes on core with a permanent marker, with red on the right and blue on the left.
 - b. For smaller specimens (i.e., thin section stubs and plugs), cut a notch on the uphole end of the specimen.
8. If all the material in the specimen's assigned interval is to be permanently removed from the container, cut a foam spacer to the same length as the specimen, and label it with the following data:
- a. Borehole identifier
 - b. Depth interval removed
 - c. Requestor name and organization
 - d. Date removed
- Otherwise, affix a label or other permanent mark displaying the same information to the inside of the divider containing the row of core or cuttings samples.
9. If the specimen is used for mechanical or rock properties testing within the SMF, continue with the next step. Otherwise, proceed to Step 15.
10. After the Participant's test is completed, ensure that no chemical contaminant made contact with the core and return the fragments of core to its original location within the container.

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Staff	11.	If any remnant material has been reduced to rubble-sized fragments, package it in clear polyethylene lay-flat tubing cut to match the rubble's original interval. Mark the tubing with the depth interval represented by the rubble.
	12.	Complete the SMF Specimen Removal Log by indicating N/A on the space marked "Shipping Container #:" or by drawing a horizontal line across the space. Initial and date the "Removed:" portion of the log on the lines provided. Submit the SMF Specimen Removal Log to a second qualified SMF staff member.
Second SMF Staff	13.	Check the labels and markings associated with the specimen used. Verify that the information on the SMF Specimen Removal Log is complete and accurate. Initial and date the "Checked:" portion of the log on the lines provided. Submit the SMF Specimen Removal Log to the Technical Staff Assistant.
Technical Staff Assistant	14.	Verify that the SMF Specimen Removal Log is filled out completely and correctly. Sign and date the log in the space provided. Submit the SMF Specimen Removal Log to the Administrative Assistant for inclusion in the records package. Proceed to Step 40.

PACKAGING

SMF Staff	15.	Package the specimen using any combination of polystyrene foam, cardboard liner section, polyethylene lay-flat tubing, or sealed impermeable packaging material sufficient to completely protect the specimen against shock and, if necessary, exposure or fluid loss.
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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Staff	16.	<p>Apply a label or other legible marking to the outside of the packaging displaying the following data:</p> <ul style="list-style-type: none"> a. Borehole identifier b. Depth interval removed c. Requestor name and organization d. Date removed
	17.	<p>Prepare one or more containers to the specifications of the requestor or Curator to receive removed specimens. Ensure that the container has enough structural strength and sufficient dunnage to protect the specimens against accidental damage or spillage. Mark or label each shipping container with a unique Container Identifier.</p>
	18.	<p>Place removed specimens into a prepared shipping container. Record the identity of the container holding a specimen on the SMF Specimen Removal Log in the space marked "Shipping Container #:."</p>
Second SMF Staff	19.	<p>Check the labels and markings associated with the specimen removed. Verify that the information on the SMF Specimen Removal Log is complete and accurate. Initial and date the "Checked:" portion of the log on the lines provided. Submit the SMF Specimen Removal Log to the Technical Staff Assistant.</p>
Technical Staff Assistant	20.	<p>Verify that the SMF Specimen Removal Log is filled out completely and correctly. Sign and date the log in the space provided. Submit the SMF Specimen Removal Log to the Administrative Assistant for inclusion in the records package.</p>

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RESPONSIBLE PARTY STEPS PROCEDURE

SHIPPING

SMF Staff

21. Generate an SMF Specimen Shipment Packaging Log, Attachment 3, for each shipment prepared. Display the following data on the log:
 - a. Requestor Name and Organization
 - b. Each specimen included in the shipment and its container identifier
 - c. The Shipment unique identifier
22. Permanently label or mark each shipping container in at least two locations with the following data:
 - a. The Shipment identifier
 - b. The Requestor Name and Organization
 - c. The shipping container unique identifier

NOTE: Ensure that the labels are arranged so that each half of a two-piece container is labeled or opposite sides of a single-piece container.

23. Inspect the contents of each shipping container against the SMF Specimen Shipment Packaging Log to ensure that each specimen is present, is properly marked and packaged, and is in good condition. Mark the status of each specimen with a check in the spaces provided.
24. If the specimen shipment will not be picked up by the Requestor, and is to be delivered by any courier other than the SMF or a commercial carrier that supplies Bill of Lading or similar documentation, generate a Transfer of Custody form, Attachment 4. This form must display the following information:

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RESPONSIBLE PARTY

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PROCEDURE

- a. Shipment Unique Identifier
 - b. Requestor Name, Organization, Address, and Telephone
 - c. Recipient name and address, if different from above
 - d. The number of containers in the shipment
 - e. Total shipping weight, if applicable
 - f. The Unique identifier of each container in the shipment.
 - g. A description of the contents of the containers
 - h. Any special shipping instructions
25. For each shipment, generate an SMF Specimen Custody Receipt, Attachment 5. Include the following data:
- a. The Shipment Unique Identifier
 - b. The Name and Organization of the Requestor
 - c. A list of each specimen included in the shipment and its container
 - d. The shipping date

SMF Geotechnician

26. Check the shipment against the SMF Specimen Custody Receipt to ensure its accuracy and completeness. Sign and date the form in the space provided.

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Geotechnician	27.	If the recipient will take custody of the shipment at the SMF, continue with the next step. Otherwise, make a photocopy of the SMF Specimen Custody Receipt, and place it inside one of the shipping containers. Submit the original to the Administrative Assistant for mailing to the recipient.
SMF Staff	28.	Close and seal each shipping container. Document this step by signing and dating in the space provided on the SMF Specimen Shipment Packaging Log.
	29.	When the shipper has arrived to take custody of the shipment, if applicable, have the courier sign and date the Transfer of Custody form in the Person Accepting Custody space, then Sign and date the Person Releasing Custody space. Otherwise, complete the shipper's bill of lading.
	30.	Verify that the shipping date on the SMF Specimen Shipment Packaging Log and the Transfer of Custody form, if present, is correct. If not, change it by drawing a line through the existing date, writing in the correct date, and initialing the change. Sign and date the SMF Specimen Shipment Packaging Log in the space provided, and submit it and the Transfer of Custody form, if applicable, to the Technical Staff Assistant.
Technical Staff Assistant	31.	Verify the proper completion of the Transfer of Custody form and the SMF Specimen Shipment Packaging Log, if applicable. Sign and date in the space provided, and submit the completed forms to the Administrative Assistant for inclusion in the records package.

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RESPONSIBLE PARTY	STEPS	PROCEDURE
Administrative Assistant	32.	When custody of the shipment has been transferred to a courier other than the designated recipient, mail the original SMF Specimen Custody Receipt to the recipient. After Participant returns Specimen Custody Receipt, file in the records package.

REMNANT RETURN

SMF Staff	33.	On receipt of remnants, determine that documentation supplied is adequate to track the origin of the material received. If necessary, contact the sender to obtain the proper information. Acknowledge receipt of the remnants on the shipper's documentation.
	34.	Generate an SMF Remnant Return Log, Attachment 6, for each group of remnants received. For each remnant, supply the following data: <ul style="list-style-type: none"> a. The original Specimen Identifier of the remnant b. The Borehole name and depth interval from which the original specimen was removed c. The remnant's original Sample Type d. The Name and Organization of the individual for whom it was removed e. The date of removal of the original specimen f. The date of the remnant's return g. The analyses to which the remnant was subjected h. The condition of the remnant

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RESPONSIBLE PARTY

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PROCEDURE

SMF Staff

35. If necessary, repackage the remnants in such a manner that the identity and integrity of the material is maintained. Label or otherwise mark each package with the following information:
 - a. A Unique identifier
 - b. The borehole and depth interval from which the original specimen was removed
 - c. The Sample Type of the original specimen
 - d. The date of the specimen's removal
 - e. The analyses to which the remnant was subjected
36. Place the remnant in an appropriate box containing other remnants of similar origin. If no appropriate containers are available, continue with the next step. Otherwise, proceed to Step 38.
37. Assign a unique Remnant Container Identifier to a new box. Mark or label the box with the identifier. Document the new box identity, and assign it a storage location in a separate area away from any boxes containing unremoved samples or unshipped specimens.
38. Record the identifier of the box containing the remnant on the SMF Remnant Return Log. Return the box to its assigned storage location. Sign and date the SMF Remnant Return Log in the space provided. Submit the log to the Technical Staff Assistant for review.

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<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
Technical Staff Assistant	39.	Verify that the SMF Remnant Return Log is complete and information is properly entered. Sign and date the form in the space provided. Submit the SMF Remnant Return Log to the Administrative Assistant for inclusion in a records package.

RECORD PACKAGES

Administrative Assistant	40.	Receive all relevant specimen removal, shipping, and remnant records. Create separate records packages for each specimen removal group, specimen shipment, and remnant return group. Photocopy, compile, and submit the records in accordance with QMP-17-01.
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IDENTIFICATION AND RESOLUTION OF DISCREPANCIES

SMF Staff	41.	Identify and resolve any discrepancy upon discovery by crossing through the error, correcting it in the original document, and initialing and dating the correction. If the correction is not self-explanatory, then a. Assign a number to the correction. b. Attach a sheet to the original record that fully describes the problem and the correction performed. c. If the discrepancy is discovered after an activity or form has been completed, then handle according to the procedure outlined in Section 5.7 of BTP-SMF-001, Sample Management for the YMPO.
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RESPONSIBLE PARTY

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SMF Staff

NOTE: Discrepancies covered by this procedure are only those that result from the actions of staff members using the procedure. A discrepancy exists when there is incorrect information that significantly affects documentation of notation and that is beyond the scope of the immediate activity of the form being completed.

42. If there are any nonconformances to this procedure noted during or after associated activities, proceed according to QMP-15-01, Control of Nonconformances.

NOTE: A nonconformance exists when there is a deficiency in characteristics, documentation, or procedures that renders the quality of an activity or an item unacceptable or indeterminant. The intent of nonconformance reporting is to ensure the resolution of the conditions not meeting the requirements or to ensure that undefined conditions are defined.

6.0 REFERENCES

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

6.1 REQUIREMENTS DOCUMENTS

None

6.2 INTERFACE DOCUMENTS

YMP Glossary, YMP/89-15

AP-6.4Q, Procedure for the Submittal, Review, and Approval of Requests for Yucca Mountain Project Geologic Specimens

QMP-15-01, Control of Nonconformances

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

BTP-SMF-001, Sample Management for the Yucca Mountain Site
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7.0 FIGURES AND ATTACHMENTS

Figure 1, BTP-SMF-006 Flowchart

Attachment 1, Specimen Availability Analysis

Attachment 2, SMF Specimen Removal Log

Attachment 3, SMF Specimen Shipment Packaging Log

Attachment 4, Transfer of Custody Form

Attachment 5, SMF Specimen Custody Receipt

Attachment 6, SMF Remnant Return Log

8.0 RECORDS

The following Quality Assurance Documents are generated by this procedure:

1. SMF Specimen Removal Log
2. SMF Specimen Shipment Packaging Log
3. Transfer of Custody Form (If Applicable)
4. SMF Specimen Custody Receipt
5. SMF Remnant Return Log

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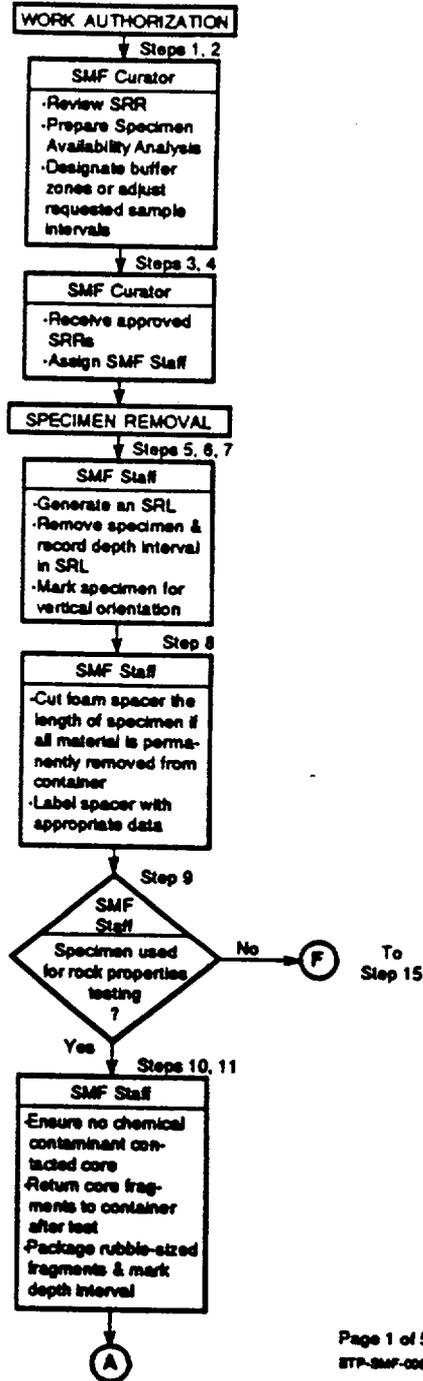
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LEGEND

- AA Administrative Assistant
- FO Field Operations
- RCI Remnant Container Identifier
- RRL Remnant Return Log
- SCR Specimen Custody Receipt
- SMF Sample Management Facility
- SOC Sample Overview Committee
- SRL Specimen Removal Log
- SRR Specimen Removal Request
- SSPL Specimen Shipment Package Log
- TSA Technical Staff Assistant



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Figure 1 - BTP-SMF-006 Flowchart

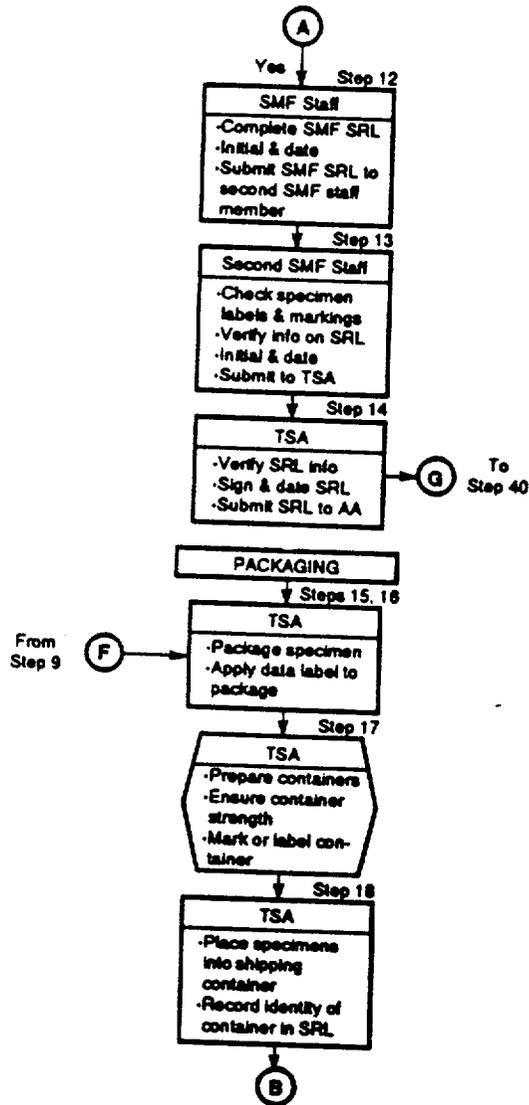
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Figure 1 - BTP-SMF-006 Flowchart (continued)

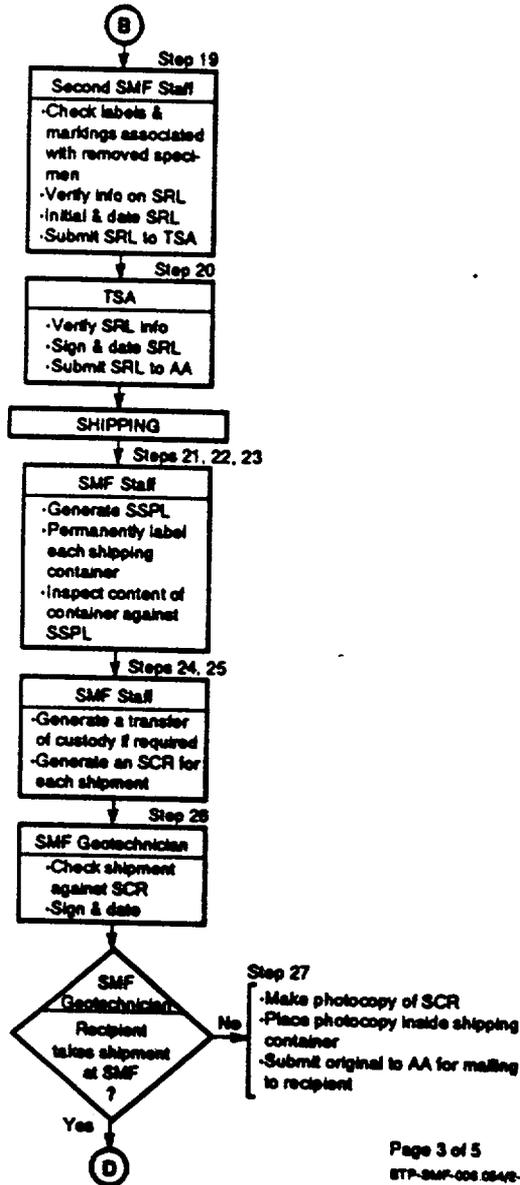
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Figure 1 - BTP-SMF-006 Flowchart (continued)

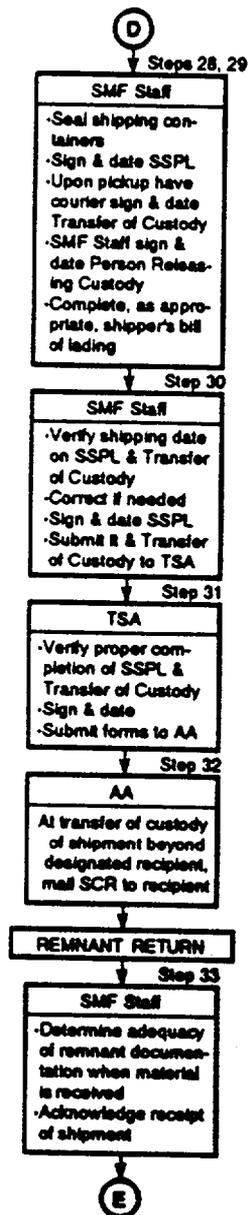
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Figure 1 - BTP-SMF-006 Flowchart (continued)

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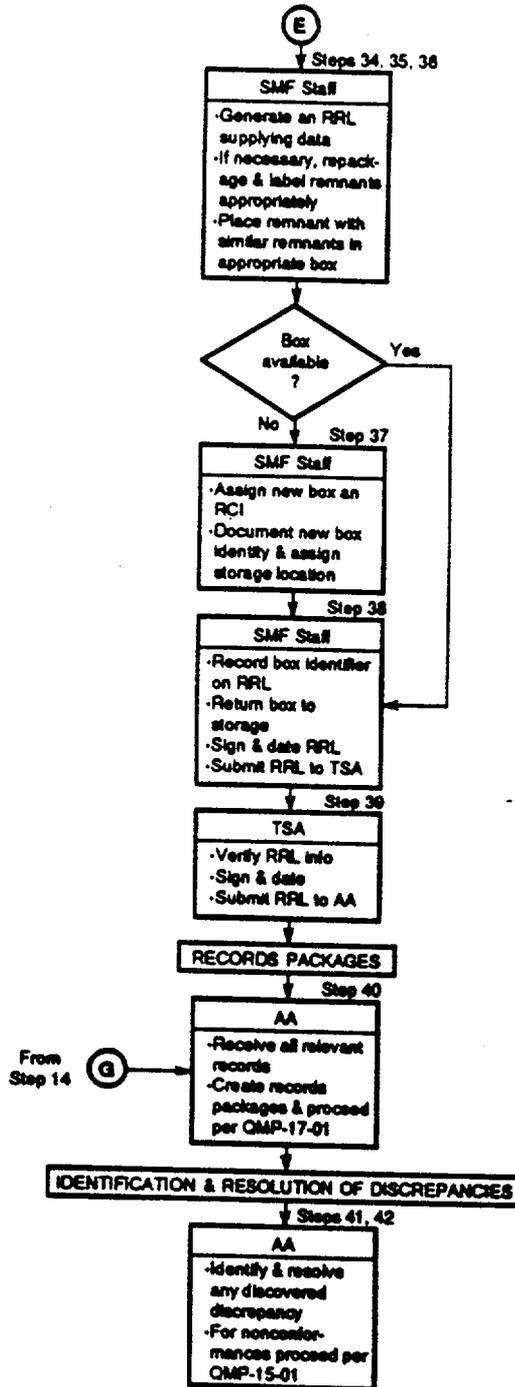


Figure 1 - BTP-SMF-006 Flowchart (continued)

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SPECIMEN AVAILABILITY

Pending Requests For Core Specimens

MacCSITS Proto v. 0

Requestor: Marilyn Ten Brink	Organization LLNL	Borehole: 022 USW16	Box: 005	IOD: 1,147 0	Bottom: 1,154 2
Specimens Already Removed:			Intervals In this Request:		
SpecID:	Type:	Removed By:	Top:	Bottom:	Length:
0015970	WAX		1,147 3	1,148 1	
0015971	ThinSec		1,149 0	1,149 4	
0015972	WCSpec		1,153 5	1,154 2	
			1,151 0	1,152 5	1 5
					0 0

NOTE: Piece Length determinations are made using unbroken whole core segments. Requestor intervals may include continuous sections that do not meet these criteria.

No Pending Requests Conflicts

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MacCSITS Proto v. 0

SMF SPECIMEN REMOVAL LOG

Thursday, January 17, 1991
10:32:49

SPECIMENS RESERVED BY: ID# 020 John Stuchless USGS REQUEST DATE: 1/15/91

SPECIMEN INFO		SPECIMEN TYPE	BY	DATE
016380	IQP Requested: 2,293.5 Reserved: 2,293.3	BOTTOM Parent Date: 002063 Sample: 002063 Box: 250 Borehole 006 USW GU3	REMOVED CHECKED:	
Actual: Shipping Container #				
016381	IQP Requested: 2,365.5 Reserved: 2,365.0	BOTTOM Parent Date: 002071 Sample: 002071 Box: 250 Borehole 006 USW GU3	REMOVED CHECKED:	
Actual: Shipping Container #				
016378	IQP Requested: 2,198.2 Reserved: 2,198.2	BOTTOM Parent Date: 002053 Sample: 002053 Box: 240 Borehole 006 USW GU3	REMOVED CHECKED:	
Actual: Shipping Container #				
016379	IQP Requested: 2,290.8 Reserved: 2,290.8	BOTTOM Parent Date: 002062 Sample: 002062 Box: 240 Borehole 006 USW GU3	REMOVED CHECKED:	
Actual: Shipping Container #				
016382	IQP Requested: 2,531.1 Reserved: 2,531.1	BOTTOM Parent Date: 002064 Sample: 002064 Box: 271 Borehole 006 USW GU3	REMOVED CHECKED:	
Actual: Shipping Container #				

5 records printed of 5 records in document

IS ASSISTANT

Date

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YUCCA MOUNTAIN PROJECT PROCEDURE

Y-AD-001
8/90

Procedure No.: BTP-SMF-006 REMOVAL OF
SPECIMENS FROM SAMPLES BY THE SMF FOR
SHIPMENT AND REMNANT RETURN

Revision: 2

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SMF Specimen Shipment Packaging Log

MacCSITS Print v 0

January 28, 1991 16:06

Shipment ID: 0002 Shipping Date: 12/18/90

Recipient: 041 **Navas:**
Robert Glass

Organization: SNL Phone: (505) 846-5929
Address: Sandia National Laboratories Alt: (505) 846-5929
P.O. Box 5800

City/State/Zip: Albuquerque, NM 87185-0000

Comment: shipped in 2 standard core sample boxes

Container ID	Spec IDs	Of Sample	Spec. Type	Top	Bottom	Specimen Package Sealed?	Labels Correct?
000002	015978	001007	WCSpec	1,559.7	1,561.4		
000002	015977	002253	WCSpec	1,576.0	1,590.9		
000003	015978	002005	WCSpec	1,665.6	1,688.0		
000003	015973	000986	WCSpec	1,343.2	1,344.0		
000003	015975	001004	WCSpec	1,530.0	1,530.4		
000003	015979	002011	WCSpec	1,741.9	1,742.9		
000003	015974	002240	WCSpec	1,469.2	1,470.2		

Geotechnician _____ Date _____ TS Assistant _____ Date _____

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**YUCCA MOUNTAIN PROJECT
PROCEDURE**

Y-AD-001
8/90

Procedure No.: BTP-SMF-006 REMOVAL OF
SPECIMENS FROM SAMPLES BY THE SMF FOR
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YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT TRANSFER OF CUSTODY FORM		Page ____ of ____
REQUESTOR: Robert Glass	SHIPMENT ID: 0002	SHIPPING ADDRESS: _____ _____ _____
SNL Sandia National Laboratories P.O. Box 5800 Albuquerque, NM 87185-0000	SHIPPING INSTRUCTIONS: _____	
NUMBER OF CONTAINERS:	SHIPMENT DESCRIPTION:	CONTAINER IDs:
		TOTAL WEIGHT:
Person Accepting Custody: _____	Date: _____	Time: _____ T.S. Assistant
Person Releasing Custody: _____	Date: _____	Time: _____ Date: _____

BTP-SMF-006

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YUCCA MOUNTAIN PROJECT PROCEDURE

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Procedure No.: BTP-SMF-006 REMOVAL OF
SPECIMENS FROM SAMPLES BY THE SMF FOR
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SMF Specimen Custody Receipt

MacCSITS Proto v 0

Recipient: 041 Name: Robert Glass
 SNL
 Sandia National Laboratories
 P.O. Box 5800
 Albuquerque, NM 87185-0000

Date Received: _____
 Shipment ID 0002 Shipping Date: 12/18/90
 SMF Geotechnician: _____ Date: _____

Container ID	Spec ID's	Of Sample	Of Borehole	Spec. Type	Top	Bottom
000002	015976	001007	USW G1	WCSpec	1,559.7	1,561.4
000002	015977	002253	USW G4	WCSpec	1,578.0	1,580.9
000003	015978	002005	USW GU3	WCSpec	1,685.8	1,688.0
000003	015973	000986	USW G1	WCSpec	1,343.2	1,344.0
000003	015975	001004	USW G1	WCSpec	1,530.0	1,530.4
000003	015979	002011	USW GU3	WCSpec	1,741.9	1,742.9
000003	015974	002240	USW G4	WCSpec	1,469.2	1,470.2

I hereby acknowledge the receipt of the Specimens listed above
I will return this form to the SMF within 10 business days of
receipt.

Recipient _____ Date _____

Please Sign this form and return to:
 Sample Management Facility
 Yucca Mountain Site Characterization Project
 P.O. Box 617
 Mercury, NV 89023-0617

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YUCCA MOUNTAIN PROJECT PROCEDURE

Y-AD-001
8/90

Procedure No.: BTP-SMF-006 REMOVAL OF
SPECIMENS FROM SAMPLES BY THE SMF FOR
SHIPMENT AND REMNANT RETURN

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SMF REMNANT RETURN LOG

Specimen Remnants Returned on January 28, 1991

Mon, Jan 28, 1991

Remnant ID: Date Returned: Condition: Analytical History:

Parent Specimen: Interval: Date Removed: Requestor Data:

From Borehole:

BoxID: Depth Interval:

Remnant ID	Date Returned	Condition	Analytical History	Parent Specimen	Interval	Date Removed	Requestor Data	From Borehole	BoxID	Depth Interval	Stored in Container #	Shelf Location
0000001	1/28/91	Intact	Acid, XRD									
0016273	119.7	119.9	12/13/90	019			Barbara Carlos	008 USW G4	LOS ALAMOS	117.0	123.2	
0000002	1/28/91	Intact	Acid, XRD									
0016274	769.6	769.2	12/13/90	019			Barbara Carlos	008 USW G4	LOS ALAMOS	753.0	761.0	
0000003	1/28/91	Intact	Acid, XRD									
0016275	1,261.8	1,262.6	12/13/90	019			Barbara Carlos	008 USW G4	LOS ALAMOS	1,197.5	1,205.1	
0000004	1/28/91	Crushed	XRD, GeoChem									
0016276	1,259.2	1,259.6	12/13/90	019			Barbara Carlos	008 USW G4	LOS ALAMOS	1,251.8	1,260.0	

Packaged by: _____ Date: _____

Shelved by: _____ Date: _____

TS Assistant: _____ Date: _____

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