

ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL

Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 42
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Effective Date: 05/26/93
Organization: Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET
WHICH INCLUDES:

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VOLUME II: GROUNDWATER (GW)
VOLUME III: GEOTECHNICAL (GT)
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ADMIN REVIEWED

A-SW-001185

DOCUMENT CLASSIFICATION REVIEW WAIVER
PER R.B. HOFFMAN, CLASSIFICATION OFFICE
JUNE 11, 1991

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GT.21	Cone Penetrometer Testing	1	05/12/92
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DCN 93.02	Offsets	1	03/17/93
GT.24	Approval Process for Construction Activities on or Near Individual Hazardous Substance Sites (IHSSs)	0	05/12/92

ENVIRONMENTAL MANAGEMENT DOCUMENT CHANGE NOTICE (DCN)

Procedure Number 5-21000-OPS- GT-2, Rev. 2

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Title Drilling and Sampling Using Hollow-stem Auger Techniques	Date 5/20/93 ^{SPD} 5-27-93 <small>off 5/21/93 SPD</small>	DCN Number 93.03 SPD
Expires 5/20/94 ^{SPD} 5-27-94 <small>off 5/21/93 SPD</small>	Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Scope Limitation <u>Operable Unit Number 5</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	11	5.3.4 5.3.5 <small>off 5/21/93 SPD</small>	Insert following text as Section 5.3.4 5.3.5 <small>off 5/21/93</small> 5.3.4 5.3.5 Kansas Type Sampler <small>off 5/21/93</small> This section contains procedures for collecting soil samples from depth without a drill rig utilizing a Kansas type sampler. The equipment and supplies that are required are as follows: <ul style="list-style-type: none"> • All Terrain Vehicle (Scorpion) with a Stanley sinker drill attached to the rear of the vehicle that is hydraulically powered from the systems mounted power take off or similar rig; • Probe rods; • One or two foot Kansas type sampler constructed of stainless steel with high strength alloy piston and screw-on top and bottom and reverse thread release pin; • Extruder rods, used for releasing piston stop pin on the sampler; and • Appropriate sample liners or containers.

Justification (Reason for Change - Provide Numbers To Reference Corresponding items Above)

1. **New method for obtaining soil samples in areas where drill rigs cannot reach.**

DOCUMENT CLASSIFICATION REVIEW WAIVER
PER R.B. HOFFMAN, CLASSIFICATION OFFICE
JUNE 11, 1991

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	5/25/93	<i>[Signature]</i>	User	X	5/20/93
<i>[Signature]</i>	EOM	X	5-21-93	<i>[Signature]</i>	User		5/21/93
				<i>[Signature]</i>	EOS		5/21/93

Approval of Responsible Manger <i>[Signature]</i>	Date 5-23-93	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date? upon receipt	Date Posted
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DOCUMENT CHANGE NOTICE (DCN)
(Continuation Sheet)

Page 2 of 3
DCN no. 93.03

Procedure no. 5-21000-OPS-GT.2, Rev. 2		Title Drilling and Sampling Using Hollow-stem Auger Techniques	
Scope Limitation Operable Unit Number 5			
Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	11	5.3.4 5.3.5 <i>SW</i> 5/21/93	<p>The following steps are required to obtain soil samples.</p> <ol style="list-style-type: none"> 1. Assemble sampler with appropriate liners, if necessary. 2. Attach probe rods to sampler and hydraulically push and hammer sampler to the top of the desired sampling depth. If depth to first sample interval or depth between samples is more than about two feet, a pilot hole may be driven to the top of the desired sampling depth. 3. Insert extruder rods down the inside of the probe rods and thread it into the piston stop pin. 4. The piston stop pin is made up of two different types of threads. One being right hand thread and the other being a left thread. With this type of thread pattern the result will be that the extruder rods will thread into the piston stop pin. After the extruder rods have snugged up into the piston stop pin, the piston stop pin will then unscrew from the sampler. Once the piston stop pin has been unscrewed from the sampler, it along with the extruder rods will be withdrawn from the probe rods. 5. The sampler will then be pushed and hammered one or two feet depending upon the length of the sampler. 6. The sampler and probe rods are then withdrawn from the hole. 7. The sampler is then taken apart and the sample removed.
Justification (Reason for Change - Provide Numbers To Reference Corresponding items Above)			
1. New method for obtaining soil samples in areas where drill rigs cannot reach.			

DOCUMENT CHANGE NOTICE (DCN)
(Continuation Sheet)

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DCN no. 9303

Procedure no. 5-21000-OPS-GT.2, Rev. 2	Title Drilling and Sampling Using Hollow-stem Auger Techniques
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Scope Limitation Operable Unit Number 5

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	11	5.3.4 5.3.5 <i>DK</i> 6/21/93	<ul style="list-style-type: none"> 8 • The sample will then be screened as specified in the Field Sampling Plan and logged. Note: typically, all the soil removed is sent to the laboratories; therefore, core cannot be logged at a later time and saved for a permanent record as discussed in GT.1 Logging Alluvial and Bedrock Material. 9 • Samples saved for geotechnical testing will consist of 3/4-filled pint-sized glass jars with airtight lids or capped liners. Samples for VOC testing will be saved in capped liners. Samples for additional analyses, will be saved in either the containers described in SOP FO.13, Containerization, Preserving, Handling, and Shipping of Soil and Water Samples or capped liners.

Justification (Reason for Change - Provide Numbers To Reference Corresponding items Above)

1. ***New method for obtaining soil samples in areas where drill rigs cannot reach.***

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