DOCUMENT MODIFICATION REQUEST (DMR)

Refer to 1-A01-PPG-001 for Processing Instructions
***Print or Type** All Information (Except Signatures)*

1 Date	25 DMR No
1/30/95	2-27-95 lm 95-DMR-000105

2 Existing Document Number/Revision	3 New Document Number or Document Number if it is to be changed with this Revision
5-21000-OPS-GT 2/Rev 2	N/A
4 Originator's Name/Phone/Pager/Location	**5 Document Title**
N Elzinga/740-2740/WCFS Denver	Drilling and Sampling Using Hollow-stem Auger Techniques

6 Document Type ☒ Procedure ☐ Other _____

7 Document Modification Type (Check only one) ☐ New ☐ Revision ☐ Intent Change ☒ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8 Item	9 Page	10. Step	11 Proposed Modifications
1	9	5 3 2	Add a new paragraph three at the bottom of the page "As part of the OU-2 Trenches and Mound Site Characterization Program, the auger/probe rig uses a percussion hammer to drive the split spoon sampler Therefore, conventional blow count measurements cannot be obtained "
2	11	5 3 3	Add a new paragraph at the bottom of the page "For the OU-2 Trenches and Mound Site Characterization Program, VOC sample depths and locations will be collected as stated in the project-specific work plan "

12. Justification (Reason for Modification, EJO # TP # etc.)

1 The auger/probe rig does not have a 140 pound hammer
2 Based on the OU-2 Trenches and Mound Site Characterization objectives, specific sample depths and locations have been developed

OU 2 Temporary Limited Scope Expires July 31, 1995

If modification is for a new procedure or a revision list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15 If modification is for any type of change or a cancellation organizations are listed in Block 13 then Concurror prints, and signs in Block 14, and dates in Block 15

13. Organization	14 Print, Sign (if applicable)	15. Date (if applicable)
SME	Timothy P Lovseth	2-27-95
Proj Mgr	P J Laurin	2-23-95
QA	R Stephen Luker	2/24/95

16. Originator's Supervisor (print/sign/date) Peter J Laurin

17 Assigned SME/Phone/Pager/Location	18. Cost Center	19. Charge Number	20. Requested Completion Date	21 Effective Date
Timothy P Lovseth/8706/5734/080	3112			02-28-95

22. Accelerated Review?	23.ORC Review
Yes ☐ No ☒	N/A

24 Responsible Manager (print,sign,date) Peter J Laurin

RF-47940 (5/93)

ADMIN RECORD

REVIEWED FOR CLASSIFICATION / UCNI
BY _____
DATE _____

EG&G ROCKY FLATS PLANT	**Manual:**	**5-21000-OPS**
EMD MANUAL OPERATION SOP	**Procedure No.:**	**GT.2, Rev. 2**
	Page:	**1A of 16**
	Effective Date:	02-28-95
Category 2	**Organization:**	**Environmental Management**

LIST OF EFFECTIVE PAGES

Pages	Effective Date	Change Number
2	03/28/94	94-DMR-000382
3	01/10/94	93-DMR-000955
3A	03/28/94	94-DMR-000382
8-9	03/28/94	94-DMR-000405
9	02/28/95	95-DMR-000105
11	02/28/95	95-DMR-000105
12	01/10/94	93-DMR-000960
12-12A	03/28/94	94-DMR-000382
14	01/10/94	93-DMR-000955
14A	01/10/94	93-DMR-000955
Form GT 2A	01/10/94	93-DMR-000955

TOTAL NUMBER OF PAGES (including forms) 24

intervals and requirements for compositing will be defined in the FSP or project-specific work plan

Sample peeling will involve discarding the portion of sample that was in direct contact with the sampler Once the samples have been peeled, a linear scraping of the peeled samples will be placed in a stainless steel bowl and mixed with a stainless steel instrument. Soil particles (gravels) larger than the jar mouth will be discarded. Peeling and compositing will be conducted with separate decontaminated stainless steel instruments If the core is not coherent, core samples need not be peeled before sampling because it is difficult to be certain what parts of a noncoherent sample were in contact with the sampler

Samples for geotechnical testing will consist of approximately 3/4-filled pint-sized glass jars with air-tight lids placed in compartmented shipping cartons designed to prevent breakage of the jars Sample peeling is not required for geotechnical samples

5 3 2 Drive Sampling

Drive samples will be obtained in general accordance with ASTM Designation D 1586 After drilling to the predetermined depth, the standard split spoon or California sampler will be attached to the end of the drill rod and lowered to the bottom of the boring. The standard 140-pound hammer assembly will then be attached to the top of the drill rod. The depth to the bottom of the sampler will be recorded, and reference marks at 6-inch increments will be placed on the drill rod The test consists of driving the sampler with the standard 140-pound hammer dropped 30 inches

When using the 2-inch-outside-diameter (O D) standard split spoon sampler, drive the sampler through three 6-inch increments (or 100 blows, whichever occurs first), with the sum of the last two increments being the Standard Penetration Count or Blow Count or N-value, and the first 6-inch increment being considered as seating

As part of the OU-2 Trenches and Mound Site Characterization Program, the auger/probe rig uses a percussion hammer to drive the split spoon sampler Therefore, conventional blow count measurements cannot be obtained.

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5 3 3 VOC Sampling

- Three VOC samples will be taken per borehole VOC sampling will be conducted in accordance with the project-specific work plan Additional VOC samples will not be taken for elevated OVA readings

- VOC samples will be collected from the base of every other 2-foot drive sample from the ground surface to the water table

- A VOC sample will be collected in the bottom of the first drive sample below the water table

- A final VOC sample will be collected from the base of the first drive within bedrock immediately below the alluvial material in unsaturated conditions

- Additional VOC samples will be collected as follows

  - If a lithologic feature or OVA reading indicates the possibility that VOC contamination exists, then a sample will be taken at the base of the next drive interval

  - If the sampler is opened, scanned and a color change, free product, or other physical evidence indicating the possibility for contamination is observed in a location other than where a pretargeted VOC sample is located, a 3" section will be immediately cut, pulled, wrapped, placed in a wide mouth jar and sealed The sample will be sent to the lab for subcoring and analysis

For the OU-2 Trenches and Mound Site Characterization Program, VOC sample depths and locations will be collected as stated in the project-specific work plan

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