

~~THIS IS A RED STAMP~~  
**ROCKY FLATS PLANT**  
**EMD OPERATING**  
**PROCEDURES MANUAL**

**Manual No.:** 5-21000-OPS-GT  
**Procedure No.:** Table of Contents, Rev 38  
**Page:** 1 of 3  
**Effective Date:** 03/17/93  
**Organization:** Environmental Management

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

- VOLUME I: FIELD OPERATIONS (FO)
- VOLUME II: GROUNDWATER (GW)
- VOLUME III: GEOTECHNICAL (GT)
- VOLUME IV: SURFACE WATER (SW)
- VOLUME V: ECOLOGY (EE)
- VOLUME VI: AIR (AP)

**TABLE OF CONTENTS  
 FOR VOLUME III: GEOTECHNICAL**

<b>Procedure No.</b>	<b>Title</b>	<b>Rev. No.</b>	<b>Effective Date</b>
GT.01	Logging Alluvial and Bedrock Material	2	05/12/92
DCN 92.01	Specialized Logging Form	2	11/13/92
DCN 93.01	Logging	2	01/15/93
DCN 93.02	Logging Deliverables Standard Practices	2	01/25/93
GT.02	Drilling and Sampling Using Hollow Stem Auger Techniques	2	05/12/92
DCN 92.01	Superseded by DCN 92.03	2	07/27/92
<del>DCN 92.02</del>	Superseded by DCN 92.03	2	07/27/92
<del>DCN 92.03</del>	Addition of the Drum Characterization	2	07/27/92
<del>DCN 92.04</del>	Prevention of Down Hole Contamination	2	08/26/92
DCN 92.05	Field Modification	2	12/04/92
DCN 93.01	Analytical Samples	2	01/25/93
*DCN 93.02	Drum Characterization	2	03/17/93
GT.03	Isolating Bedrock from Alluvium with Grouted Surface Casing	2	05/12/92
DCN 92.03	Expired	2	09/03/92
DCN 93.01	Data Quality Objectives for PLF Investigations	2	02/10/93

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

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<b>Procedure No.</b>	<b>Title</b>	<b>Rev. No.</b>	<b>Effective Date</b>
GT.04	Rotary Drilling and Rock Coring	2	05/12/92
GT.05	Plugging and Abandonment of Boreholes	2	05/12/92
DCN 92.01	Field Modification	2	12/09/92
DCN 93.01	5.2 Revision	2	02/04/93
GT.06	Monitoring Wells and Piezometer Installation	2	05/12/92
DCN 92.05	Schematic Diagram Land Fill Methane Wells	2	06/04/92
DCN 92.06	EXPIRED (replaced with DCN 93.01)	2	
DCN 92.07	Provide Consistency	2	12/17/92
DCN 93.01	Borehole Advancement	2	01/04/93
DCN 93.02	Well Point Installation	2	01/28/93
DCN 93.03	Piezometer Logging Modification	2	02/04/93
DCN 93.04	Wells - 5.3.2.2 Revised	2	02/10/93
DCN 93.05	Temperatures - 5.3.2.3 Revised	2	02/10/93
DCN 93.06	Provide Numbers to Reference Corresponding Items	2	02/23/93
* DCN 93.07	DCN 93.01 Modification	2	03/17/93
GT.07	Logging and Sampling of Test Pits and Trenches	2	05/12/92
GT.08	Surface Soil Sampling	2	05/12/92
DCN 92.01	Clarification of Soil Sampling	2	09/03/92
DCN 92.02	Consistency Change	2	10/12/92
DCN 93.01	Work Plan Consistency	2	01/05/93
DCN 93.02	New Section-Surficial Profiling	2	01/15/93
DCN 93.03	CDH Compliance	2	01/25/93
GT.09	Soil Gas Sampling and Field Analysis	2	05/12/92
GT.10	Borehole Clearing	2	05/12/92
GT.11	Plugging and Abandonment of Wells	2	05/12/92
GT.15	Geophysical Borehole Logging	2	05/12/92

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EG&G - ROCKY FLATS PLANT  
ENVIRONMENTAL MANAGEMENT

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<b>Procedure No.</b>	<b>Title</b>	<b>Rev. No.</b>	<b>Effective Date</b>
GT.17	Land Surveying	2	05/12/92
GT.18	Surface Geophysical Surveys	2	05/12/92
DCN 92.01	Surface Magnetic Surveys Procedure	2	09/30/92
DCN 92.02	Modification to Stacking Requirements	2	10/15/92
DCN 92.03	Modification to Method of Taking Readings	2	10/15/92
DCN 93.01	5.4 Field Procedure Revisions	2	01/25/93
GT.19	Field Gas Chromatographs	2	05/12/92
GT.20	Procedures for Soil Interstitial Water Sampling and Sampler Installation	2	05/12/92
GT.21	Cone Penetrometer Testing	1	05/12/92
DCN 93.01	CPT Rods	1	01/15/93
*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

This is a  
**CONTROLLED DOCUMENT ENVIRONMENTAL MANAGEMENT**  
 EG&G - ROCKY FLATS PLANT ENVIRONMENTAL MANAGEMENT  
**DOCUMENT CHANGE NOTICE (DCN)**

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Procedure Number 5-21000-OPS- GT.21 , Rev. 1

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Title <b>Cone Penetrometer Testing</b>	Date <b>3-17-93</b> <del>25-Feb-93</del> <i>MLB 3-2-93</i>	DCN Number <b>5-21000-OPS-93.02</b>
Expires <del>25-Feb-94</del> <i>MLB 3-2-93</i> <b>3-17-94</b> <i>SURD</i>	Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>dr</i>
Scope Limitation <u>The scope is limited to field investigations within OUs 5 and 7</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	11 of 13	5.5, last paragraph	Change first sentence to read "CPT will not be performed within 3.3 ft (1m) of an existing site whenever possible."

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

Justification (Reason for Change – Provide Numbers To Reference Corresponding Items Above)

Surface obstructions within the landfill limit some offsets to less than 1m at some sites. Monitor wells, cement piles, or other obstructions exist in the field and have to be worked around when encountered. The technical lead for the CPT operation does not feel that this will impact data quality since disturbances from previous CPT holes are minimal.

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	3/16/93	<i>[Signature]</i>	User	X	25-Feb-93
<i>[Signature]</i>	EDM	X	3/8/93	<i>[Signature]</i>	User	X	3 MAR 93
				<i>[Signature]</i>	EQS		3-2-93
Approval of Responsible Manager <i>[Signature]</i>	Date <b>3/24/93</b>	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date? <b>upon receipt</b>	Date Posted			