

EG&G — ROCKY FLATS PLANT
ENVIRONMENTAL MANAGEMENT DEPARTMENT

~~This is a SEP Stamp~~
ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL

Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 36
Page: 1 of 3
Effective Date: 02/11/93
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**

<u>Procedure No.</u>	<u>Title</u>	<u>Rev. No.</u>	<u>Effective Date</u>
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DCN 92.01	Superseded by DCN 92.03	2	07/27/92
DCN 92.02	Superseded by DCN 92.03	2	07/27/92
DCN 92.03	Addition of the Drum Characterization	2	07/27/92
DCN 92.04	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
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

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Page: 2 of 3
Effective Date: 02/11/93
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Procedure No.	Title	Rev. No.	Effective Date
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
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
GT.17	Land Surveying	2	05/12/92

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**Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 36
Page: 3 of 3
Effective Date: 02/11/93
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Procedure No.	Title	Rev. No.	Effective Date
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
GT.24	Approval Process for Construction Activities on or Near Individual Hazardous Substance Sites (IHSSs)	0	05/12/92

2/12/93 This is a #14

CONTROLLED DOCUMENT ENVIRONMENTAL MANAGEMENT DOCUMENT CHANGE NOTICE (DCN)

EG&G - ROCKY FLATS PLANT ENVIRONMENTAL MANAGEMENT DEPARTMENT

This is a RED Stamp

Procedure Number 5-21000-OPS-GT.6 Rev 2

Page 1 of 1

Title Monitoring Wells and Piezometer Installation	Date <u>2/10/93</u> 1-10-93 <i>OK 2/3/93</i>	DCN Number 5-21000-OPS- <u>93.04</u> <i>est</i>
Expires <u>2/10/94</u>	Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Scope Limitation <u>none</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	13 of 18	5.3.2.2	<p>Add a final paragraph to this section as follows:</p> <p>Where wells cannot be completed in an open hole because of stability or other problems and/or the well cannot be completed within augers, the well may be installed through casing. This casing will be of a diameter sufficient to provide a 2" annulus around the well casing and will consist of PVC or stainless steel. The casing will be advanced to the selected depth either using no additional fluids or by circulating RFP potable water down through the casing. After reaching the selected depth, a sand bailer will be used to remove any accumulated fluids until the borehole is bailed clear or until fluids are relatively clear and free of sediment. The well assembly will then be advanced through the casing to the designated depth and the annulus between the casing and the well assembly will be used to tremie well materials. The well will be installed as per the alluvial wells installed through augers except that the casing will be used instead of augers.</p>

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

Open hole completion of bedrock wells is not always possible in wells that were rotary drilled.

**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	2/3/93	<i>[Signature]</i>	User	X	1/13/93
<i>[Signature]</i>	EQS		1-19-93	<i>[Signature]</i>	USER		13-Jan-93
<i>[Signature]</i>	EDM	X	1-24-93	<i>[Signature]</i>	EQS		2/3/93
Approval of Responsible Manager		Date		Is Posting Req'd?	If Yes, By What Date?	Date Posted	
<i>[Signature]</i>		1-14-93		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	upon receipt		